

INSTALLATION & OPERATION MANUAL



- DP & DPSL SERIES
- DPX & DPXSL SERIES
- DPX4T SERIES
- DPX8T SERIES
- DPX12T SERIES
- DPX16GT SERIES



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GENERAL

A. INTRODUCTION

DELUX MFG COMPANY OF KEARNEY, NEBRASKA HAS MANY YEARS OF EXPERIENCE IN PRODUCING ENERGY SAVING, HIGH CAPACITY CONTINUOUS FLOW GRAIN DRYERS FOR BOTH FARM AND COMMERCIAL APPLICATIONS.

DELUX GRAIN DRYERS ARE DESIGNED AND MANUFACTURED TO PRODUCE QUALITY GRAIN AT A PROFIT. AN IDEAL BALANCE OF HOLDING CAPACITY, AIR FLOW, HEAT AND EXPOSURE TIME ARE PROVIDED. ALL DRYERS ARE DESIGNED FOR CONTINUOUS FLOW OPERATION. GRAIN ENTERS THE ROOF SECTION OF THE DRYER WHERE IT IS PREHEATED AS IT FLOWS DOWN INTO THE COLUMNS WHERE THE DRYING PROCESS IS STARTED. TWELVE(12) INCH GRAIN COLUMNS ON EACH SIDE OF THE DRYER PROVIDE FOR MAXIMUM FUEL EFFICIENCY AND MINIMUM GRAIN MOISTURE DIFFERENTIAL ACROSS THE COLUMNS. AS THE GRAIN ENTERS THE COOLING CHAMBER, OUTSIDE AMBIENT AIR IS DRAWN THROUGH THE WARM GRAIN REDUCING THE DRYER FUEL CONSUMPTION OVER COMPETITIVE CONVENTIONAL DRYERS, THUS COMPLETING THE DRYING PROCESS AND CONDITIONING THE GRAIN FOR A LONG SAFE STORAGE LIFE.

B. USE OF MANUAL

THIS MANUAL PROVIDES OPERATION AND SERVICE RECOMMENDATIONS ALONG WITH A REPLACEMENT PARTS LIST FOR YOUR DELUX GRAIN DRYER.

EACH SECTION OF THIS MANUAL IS FULLY ILLUSTRATED FOR FAST, ACCURATE REFERENCE. **IT IS HIGHLY RECOMMENDED THAT THIS MANUAL BE READ THOROUGHLY BY THOSE WHO ARE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THIS MACHINE.** REFER TO THE TABLE OF CONTENTS FOR THE LOCATION OF SPECIFIC INFORMATION.

C. SAFETY CODE-----USE CAUTION IN OPERATING THIS EQUIPMENT.

!!THE DESIGN AND MANUFACTURE OF THIS DRYER IS DIRECTED TOWARD OPERATOR SAFETY!!

USE EXTREME CAUTION IN WORKING AROUND HIGH SPEED FANS, GAS FIRED BURNERS, DISCHARGE AUGERS, AND AUXILIARY AUGERS, WHICH MAY START WITHOUT WARNING WHEN THE DRYER IS OPERATING ON AUTOMATIC CONTROLS.

CONTINUED SAFE, DEPENDABLE OPERATION OF AUTOMATIC EQUIPMENT DEPENDS TO A GREAT DEGREE UPON THE OWNER. FOR A SAFE DEPENDABLE DRYING SYSTEM, FOLLOW THE RECOMMENDATIONS WITHIN THE MANUAL AND MAKE IT A PRACTICE TO REGULARLY INSPECT THE OPERATION OF THE UNIT FOR ANY DEVELOPING PROBLEMS OR UNSAFE CONDITIONS. **KEEP A CLEAN DRYER. DO NOT ALLOW FINE MATERIAL TO ACCUMULATE ON THE PLENUM FLOOR OR A TRASH FIRE CAN RESULT. CHECKING THE DRYER AT LEAST EVERY 24 HOURS AND CLEANING WILL HELP PREVENT PROBLEMS.**

DRYER SHOULD NOT BE LEFT UNATTENDED FOR EXTENDED PERIODS OF TIME!!

D. SERVICE INFORMATION

OUR SERVICE DEPARTMENT WILL PROVIDE CONSULTATION ON THE INSTALLATION, OPERATION, AND MAINTENANCE TO YOU. ALSO, INFORMATION FROM YOU REGARDING ENCOUNTERED OPERATION OR SERVICE PROBLEMS THAT ARE NOT COVERED IN THIS MANUAL WILL BE GREATLY APPRECIATED.

DELUX MFG COMPANY HAS TRAINED SERVICE TECHNICIANS AVAILABLE TO ASSIST YOU IN THE EVENT YOU OR YOUR DEALER CANNOT CORRECT A PROBLEM. A PHONE CALL TO DELUX MFG COMPANY WILL PROVIDE AN ANSWER TO YOUR SERVICE PROBLEMS.

DELUX MFG COMPANY KEEPS A COMPLETE RECORD OF EACH CUSTOMER ORDER. HOWEVER, VALUABLE TIME CAN BE SAVED IF THE INFORMATION BELOW IS PROVIDED WITH YOUR INQUIRY. IT IS SUGGESTED THAT YOU OBTAIN THE MODEL NUMBER AND SERIAL NUMBER LOCATED IN THE ELECTRICAL CONTROL BOX ENCLOSURE AND ENTER IT BELOW FOR YOUR OWN RECORDS:

DEALER: _____

DATE OF PURCHASE: _____

MODEL: _____

SERIAL NUMBER: _____

CALL OR WRITE: DELUX MFG COMPANY
4650 AIRPORT ROAD
P.O. BOX 1027
KEARNEY, NE 68848-1027

PHONE: 308-237-2274 TOLL FREE: 800-658-3240
FAX: 308-234-3765 WEB: <http://www.deluxmfg.com>

E. WARRANTY PROCEDURES:

ALL WARRANTY ISSUES, PARTS AND SERVICE REQUESTS SHOULD BE HANDLED THROUGH YOUR LOCAL DEALER. IN THE CASE NO DEALER OR REPRESENTATIVE EXISTS IN YOUR AREA, OR A CONFLICT OF INTEREST EXISTS WITH YOUR DEALER AND/OR REPRESENTATIVE, PLEASE CONTACT THE DEPARTMENT OF ENGINEERING AND SERVICE AT DELUX MFG. COMPANY FOR PROCEDURES TO FOLLOW.

WARRANTY ON ALL DEFECTIVE PARTS MANUFACTURED BY DELUX MFG COMPANY WILL BE LIMITED TO THE SPECIFICATIONS SET FORTH BY THE INFORMATION PROVIDED BY DELUX MFG COMPANY IN IT'S STANDARD LIMITED WARRANTY POLICY. WARRANTY ON ALL DEFECTIVE PARTS NOT MANUFACTURED BY DELUX MFG COMPANY ARE LIMITED TO THE WARRANTIES PROVIDED BY THAT PART'S MANUFACTURER. THIS INCLUDES, BUT IS NOT LIMITED TO, ELECTRIC MOTORS, GEARHEADS, VALVES, REGULATORS AND OTHER PARTS.

DELUX MFG COMPANY IS NOT RESPONSIBLE FOR DEFECTIVE PARTS NOT OF ITS MANUFACTURE

AUTHORIZATION FOR CREDIT OR REPLACEMENT UNDER WARRANTY FOR DEFECTIVE PARTS OR MATERIAL MANUFACTURED BY DELUX MFG COMPANY WILL NOT BE ISSUED UNLESS STRICT COMPLIANCE IS GIVEN TO THE WARRANTY PARTS RETURN PROCEDURES LISTED BELOW. WHEN CONTACTING DELUX MFG COMPANY IN REGARD TO THE POLICIES

AND PROCEDURES SET FORTH IN THIS MANUAL, DIRECT ALL CORRESPONDENCE AND CALLS TO THE DEPARTMENT OF ENGINEERING AND SERVICE AT DELUX MFG COMPANY.

EXCEPT AS SPECIFIED PREVIOUSLY, REFER ALL WARRANTY CLAIMS TO YOUR DEALER.

WARRANTY PARTS RETURN AND CREDIT PROCEDURE:

1. DELUX MFG COMPANY MUST BE NOTIFIED BY WRITING OR PHONE WITHIN FIFTEEN(15) DAYS AFTER AN ALLEGED FAILURE OF A PART MANUFACTURED BY DELUX MFG COMPANY IS DISCOVERED. FAILURE TO GIVE SUCH NOTICE WITHIN THE TIME SPECIFIED SHALL BE DEEMED AN ADMISSION BY THE PURCHASER THAT THE PRODUCT IS AS REPRESENTED AND WARRANTED BY DELUX MFG COMPANY AND FREE FROM ALL DEFECTS AND DELUX MFG COMPANY SHALL BE RELEASED FROM ANY AND ALL CLAIMS ARISING OUT OF OR IN CONNECTION WITH THE SALE OF THE PART OR PRODUCT.
2. UPON NOTIFICATION FROM PURCHASER THAT A PART MANUFACTURED BY DELUX MFG COMPANY HAS ALLEGEDLY FAILED, THE FAILURE IS COVERED BY THE STANDARD LIMITED WARRANTY AND THE **ORIGINAL WARRANTY REGISTRATION CARD** IS ON FILE WITH DELUX MFG COMPANY AT ITS KEARNEY, NEBRASKA HEADQUARTERS, ARRANGEMENTS WILL BE MADE BY DELUX MFG COMPANY TO SHIP THE REPLACEMENT PART TO PURCHASER WITH FREIGHT CHARGED AT THE STANDARD GROUND SHIPPING RATE.
3. ONCE THE REPLACEMENT PART HAS BEEN SHIPPED, PURCHASER WILL RECEIVE AN INVOICE FOR THE VALUE OF THE EQUIPMENT SHIPPED PLUS THE SHIPPING CHARGES. PURCHASER MUST THEN FULLY COMPLETE A **RETURN PARTS TAG** IDENTIFYING THE ALLEGED PART FAILURE AND RETURN SAID TAG ALONG WITH THE ALLEGEDLY FAILED PART TO DELUX MFG COMPANY WITH FREIGHT PREPAID BY PURCHASER. NO WARRANTY CREDIT SHALL BE GIVEN TO PURCHASER ON ALLEGEDLY FAILED PARTS THAT ARE NOT RETURNED TO DELUX MFG COMPANY WITHIN THIRTY(30) DAYS FROM DATE OF THE DISCOVERY OF THE ALLEGED FAILURE OR WITHIN FIFTEEN(15) DAYS FROM THE SHIPPING DATE INDICATED UPON THE INVOICE SENT WITH THE REPLACEMENT PART, WHICHEVER DATE IS LATER. PURCHASER MUST USE PROPER PACKING MATERIAL TO ENSURE AGAINST DAMAGE DURING SHIPPING. ANY SHIPPING DAMAGE CAUSED BY IMPROPER PACKING IS NOT COVERED UNDER THE STANDARD LIMITED WARRANTY.
4. THE INVOICE FOR THE REPLACEMENT PART PLUS THE FREIGHT CHARGE REMAINS PAYABLE BY PURCHASER UNTIL SUCH TIME AS THE ALLEGEDLY FAILED PART HAS BEEN RETURNED WITH A COMPLETED RETURN PARTS TAG ATTACHED AND THE PART HAS BEEN INSPECTED BY DELUX MFG COMPANY TO DETERMINE IF THE WARRANTY CLAIM IS VALID. PURCHASER WILL THEN RECEIVE NOTIFICATION FROM DELUX MFG COMPANY AS TO THE RECEIPT OF THE DEFECTIVE PART AND DELUX MFG COMPANY'S FINDINGS ON THE WARRANTY CLAIM WITHIN A REASONABLE TIME THEREAFTER.
5. IF THE PART IS FOUND TO BE DEFECTIVE BY DELUX MFG COMPANY, DELUX MFG COMPANY SHALL CREDIT THE AMOUNT OWED UNDER THE INVOICE SENT WITH THE REPLACEMENT PART EXCEPT FOR THE FREIGHT INCURRED IN SHIPPING THE REPLACEMENT PART TO PURCHASER.
6. IF THE PART RETURNED BY PURCHASER IS FOUND BY DELUX MFG COMPANY TO BE FUNCTIONAL AND OPERATIONAL AND IN COMPLIANCE WITH THE MANUFACTURED SPECIFICATIONS, IT WILL BE RETURNED UPON REQUEST TO PURCHASER AT PURCHASER'S COST. IF NO REQUEST IS RECEIVED BY PURCHASER, THE PART SHALL BE DESTROYED AFTER A PERIOD OF TEN(10) DAYS. DELUX MFG

COMPANY'S CHARGES FOR INSPECTION OF A NON-DEFECTIVE DELUX MFG CO PART WILL BE SUBJECT TO THE STANDARD HOURLY RATE AND ZONE CHARGES.

7. NO NON-DELUX MFG COMPANY LABOR OR NON-DELUX MFG COMPANY REPLACEMENT PART WILL BE AUTHORIZED WITHOUT FIRST AN ESTIMATE OF THE COST OF PART AND LABOR PROVIDED TO DELUX MFG COMPANY. DEVIATIONS FROM THIS ESTIMATE WILL BE SOLELY AT THE PURCHASER OR DEALER'S COST.

F. **DELUX MFG COMPANY STANDARD LIMITED WARRANTY:**

DELUX MFG COMPANY'S WARRANTY OBLIGATIONS ARE LIMITED TO THE TERMS SET FORTH BELOW:

DELUX MFG COMPANY WARRANTS TO THE ORIGINAL PURCHASER THAT IF ANY PART MANUFACTURED BY DELUX MFG COMPANY IS PROVEN TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP WITHIN ONE(1) YEAR FROM DATE OF ORIGINAL INVOICE FROM DELUX MFG COMPANY AND PURCHASER FOLLOWS THE ABOVE WARRANTY PARTS AND CREDIT PROCEDURE, DELUX MFG COMPANY WILL, AT ITS OPTION, EITHER REPLACE OR REPAIR SAID PART AT ITS COST. THIS STANDARD LIMITED WARRANTY DOES NOT APPLY TO ANY DAMAGE RESULTING FROM NEGLIGENT USE, MISUSE, ACCIDENTAL DAMAGE, ABNORMAL OR UNUSUALLY HEAVY USE, NORMAL WEAR AND TEAR, NEGLECT, ABUSE, ALTERATION, IMPROPER INSTALLATION, UNAUTHORIZED REPAIR OR MODIFICATION, POOR OR IMPROPER MAINTENANCE OR USE BEYOND RATED CAPACITY.

THIS WARRANTY AND THE REMEDY SET FORTH ABOVE IS EXCLUSIVE AND IN LIEU OF ALL OTHERS, WHETHER ORAL OR WRITTEN, EXPRESSED, IMPLIED OR STATUTORY. DELUX MFG COMPANY SPECIFICALLY DISCLAIMS TO THE MAXIMUM EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES OR CONDITIONS AS TO THE PRODUCTS OR ANY OTHER MATTER WHATSOEVER. IN PARTICULAR, BUT WITHOUT LIMITATION, DELUX MFG COMPANY SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OR CONDITIONS OF SATISFACTORY QUALITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, DESCRIPTION, NON-INFRINGEMENT OF THIRD PARTY RIGHTS, ANY ADVICE, INSTRUCTION, RECOMMENDATION OR SUGGESTION PROVIDED BY AN AGENT, REPRESENTATIVE OR EMPLOYEE OF DELUX MFG COMPANY REGARDING OR RELATED TO THE CONFIGURATION, INSTALLATION, LAYOUT, SUITABILITY FOR A PARTICULAR PURPOSE, OR DESIGN OF SUCH PRODUCT OR PRODUCTS, OR ANY OTHER WARRANTY ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE. DELUX MFG COMPANY RESERVES THE RIGHT TO MAKE DESIGN OR SPECIFICATION CHANGES AT ANY TIME. THIS STANDARD LIMITED WARRANTY DOES NOT APPLY TO, AND DELUX MFG COMPANY MAKES NO WARRANTY TO THE PURCHASER WITH REGARD TO, PARTS AND PRODUCTS NOT MANUFACTURED BY DELUX MFG COMPANY. IN THE EVENT AND TO THE EXTENT THAT APPLICABLE LAW DOES NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, THE ABOVE EXCLUSION WITH REGARD TO IMPLIED WARRANTIES MAY NOT APPLY.

DELUX MFG COMPANY SHALL NOT BE RESPONSIBLE OR LIABLE FOR ANY LOST PROFITS, DIRECT, INDIRECT, UNFORSEEABLE, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES HOWEVER CAUSED AND WHETHER OR NOT DELUX MFG COMPANY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER BASED ON CONTRACT, IN TORT OR ANY OTHER LEGAL THEORY. THE REMEDY STATED HEREIN SHALL BE THE SOLE AND EXCLUSIVE REMEDY AVAILABLE UNDER THIS WARRANTY.

DELUX MFG COMPANY ASSUMES NO RESPONSIBILITY FOR FIELD MODIFICATIONS OR ERECTION DEFECTS WHICH CREATE STRUCTURAL OR STORAGE QUALITY PROBLEMS, MODIFICATIONS TO THE PRODUCT NOT SPECIFICALLY COVERED BY THE CONTENTS OF THE DELUX MFG COMPANY SERVICE MANUAL WILL NULLIFY ANY PRODUCT WARRANTY THAT MIGHT HAVE BEEN AVAILABLE OTHERWISE.

NO DELUX MFG COMPANY DISTRIBUTOR, RESELLER, DEALER, AGENT OR EMPLOYEE IS AUTHORIZED TO MAKE ANY MODIFICATIONS, EXTENSION OR ADDITION TO THIS WARRANTY. DELUX MFG COMPANY SHALL NOT BE RESPONSIBLE FOR ANY CHARGES INCURRED IN THE REPAIRING OR SERVICING OF ANY DELUX MFG COMPANY PRODUCT OR PART EXCEPT AS SUCH REPAIRS ARE MADE BY AUTHORIZED DELUX MFG COMPANY FIELD SERVICE PERSONNEL OR AS APPROVED IN WRITING FROM DELUX MFG COMPANY.

ADDITIONAL DISCLAIMER OF WARRANTY:

NO ELECTRIC MOTOR WARRANTY:

RETURN MERCHANDISE PROCEDURES:

2. AFTER RECEIPT OF THE RETURN PARTS TAG, SHIP THE ITEM(S) WITH PREPAID FREIGHT ALONG WITH THE RETURN PARTS TAG TO DELUX MFG. COMPANY. A 15% RESTOCKING FEE WILL BE CHARGED ON ALL MERCHANDISE RETURNED THIRTY (30) DAYS AFTER THE ORIGINAL DATE OF PURCHASE.
3. ONCE THE MERCHANDISE HAS BEEN RECEIVED AND INSPECTED BY DELUX MFG. COMPANY, IF APPROPRIATE A CREDIT WILL BE ISSUED TO YOUR ACCOUNT.
4. ANY MERCHANDISE RETURNED THAT HAS BEEN USED OR ABUSED WILL NOT RECEIVE A CREDIT TO YOUR ACCOUNT. SHIPMENTS OF INCORRECT MERCHANDISE DUE TO MIS-ORDERING BY THE PURCHASER ARE ALSO SUBJECT TO A 15% RESTOCKING FEE.

OUT OF WARRANTY SERVICE:

DRYERS REQUIRING DELUX MFG COMPANY REPAIR WORK WILL BE REPAIRED AT THE STANDARD SERVICE CHARGES (HOURLY LABOR CHARGE, TRIP CHARGE (INCLUDES COST OF LODGING, MEALS, AND MILEAGE COSTS), PLUS PARTS). THE REPAIRED PARTS WILL CARRY A THIRTY(30) DAY LIMITED WARRANTY. THE SAME EXCLUSIONS AND LIMITATIONS OF THE DELUX MFG COMPANY STANDARD LIMITED WARRANTY POLICY REFERENCED ABOVE ALSO APPLY TO THIS THIRTY(30) DAY LIMITED WARRANTY. REFER TO THE TABLE OF CONTENTS FOR LOCATION OF THE PRESEASON AND REGULAR SEASON RATE CHARGES.

TERMS:

DELUX DRYERS REQUIRING SERVICE FOR CUSTOMERS WHO HAVE AN ESTABLISHED LINE OF CREDIT WILL BE INVOICED FOR SERVICES RENDERED. CUSTOMERS NOT HAVING AN ESTABLISHED LINE OF CREDIT WILL BE ON A CASH IN ADVANCE OR CASH ON COMPLETION OF SERVICE. ALL SERVICE OR REPAIR WORK RENDERED BY AUTHORIZED DELUX SERVICE PERSONNEL MUST BE INVOICED THROUGH AN EXISTING AUTHORIZED DELUX MFG COMPANY DEALER.

INSTALLATION

THE DRYER IS DESIGNED FOR MINIMAL FIELD ERECTION TIME, DEPENDING ON DRYER MODEL AND ASSOCIATED SECTIONS. THIS MAY INCLUDE ASSEMBLY AND INSTALLATION OF THE GARNER BIN.

A. BEFORE DELIVERY

1. SITE SELECTION: THE DRYER IS NOT TO BE OPERATED INSIDE A BUILDING OR ENCLOSURE. SUFFICIENT AREA AROUND THE DRYER MUST BE MAINTAINED TO ALLOW ADEQUATE AIR FLOW TO SUPPLY THE DRYER AND TO ALLOW EXHAUSTED AIR TO ESCAPE FREELY TO ATMOSPHERE. DO NOT OPERATE DRYER IN AN AREA WHERE COMBUSTIBLE MATERIALS CAN BE DRAWN INTO THE FANS. ALSO CONSIDER THE GRAIN HANDLING SYSTEMS AND THE LOCATIONS OF STORAGE BINS AND EXISTING CONVEYORS IN SELECTING THE DRYER SITE. REFER TO BACK PAGE OF BROCHURE FOR GENERAL DIMENSIONS AND SPECIFICATIONS.

2. SUPPLY AND TAKE AWAY SYSTEMS SUCH AS FILL AUGER AND UNLOAD AUGERS SHOULD BE OF SUFFICIENT CAPACITY TO HANDLE MAXIMUM LOAD AND UNLOAD REQUIREMENTS OF EACH DRYER. (APPROXIMATELY TWO (2) TIMES EACH DRYER'S RATED CAPACITY, BASED ON FIVE(5) POINT MOISTURE REMOVAL IS RECOMMENDED.)

3. DRYER IS TO BE SET PERMANENTLY. DELUX MAINTAINS CERTIFIED FOUNDATION DRAWINGS FOR EACH DRYER MODEL THAT SHOULD BE FOLLOWED FOR NEW INSTALLATIONS. IF ANY DOUBT, CONSULT LOCAL CERTIFIED ENGINEER FOR YOUR SEPECIFIC APPLICATION.

IMPORTANT: DRYER MUST BE LEVEL BOTH LENGTHWISE AND CROSSWISE AT ALL TIMES DURING THE DRYING PROCESS OR DAMAGE TO THE DRYER WILL RESULT.

4. CONSULT YOUR LOCAL ELECTRICAL POWER COMPANY FOR PROPER TRANSFORMER SIZING. CONSULT WITH YOUR LOCAL ELECTRICIAN FOR INSTALLATION OF ELECTRICAL SERVICE.

5. CONSULT YOUR PROPANE OR NATURAL GAS SERVICE SUPPLIER FOR LOCATING AND SIZING TANK, METERS AND REGULATORS.

B. SET-UP

1. POSITION DRYER IN SELECTED LOCATION, LEVEL AND SECURE.

2. MAKE SURE ALL BOLTS AND SCREWS ARE IN PLACE AND TIGHT. MAKE SURE METERING ROLLS AND AUGERS ARE FREE OF ANY FOREIGN MATERIAL.

3. ASSEMBLE GARNER BIN PARTS, REFER TO DRAWING FOR PROPER PART ASSEMBLY. GARNER BIN CAN BE ASSEMBLED ON THE GROUND AND HOISTED TO THE TOP OF THE DRYER, OR IT CAN BE ASSEMBLED PIECE BY PIECE ON TOP OF THE DRYER. A HOLE IS PROVIDED IN THE ROOF SECTION OF THE GARNER BIN FOR FILL SPOUTING ATTACHMENT. THE HINGED DOOR IN THE TOP OF THE GARNER BIN ALLOWS ACCESS TO AUGER BEARINGS AND HANGERS FOR ASSEMBLY AND REPAIR.

4. INSTALL CATWALK RAILINGS AS SHOWN ON DRAWING.

5. INSTALL MOTOR AND CONDUIT ASS'Y PLUS HOOK-UP OF HIGH GRAIN SHUTDOWN ASS'Y LOCATED ON THE TOP ROOF SECTION. ATTACH ELECTRICAL WIRING PER DRAWING. (NOTE: MERCURY SWITCH ADJUSTMENT FOR PROPER OPERATION MUST BE DONE AT THE TIME OF INITIAL FILLING).

C. ELECTRICAL

1. **POWER SUPPLY** - AN ADEQUATE POWER SUPPLY AND PROPER WIRING ARE IMPORTANT FACTORS FOR MAXIMUM PERFORMANCE AND LONG DRYER LIFE. ELECTRICAL SERVICE MUST BE OF ADEQUATE SIZE TO PREVENT LOW VOLTAGE DAMAGE TO MOTORS AND CONTROL CIRCUITS. SEE TABLE 5.1 FOR FULL LOAD AMPS PER DRYER MODEL.

NOTE: ALL MOTORS ARE EQUIPPED FOR 230V SINGLE (1)PHASE, 208V, 240V, 380V, 415V, 480V OR 575V THREE (3)PHASE OPERATION. WHEN ONLY 230V SINGLE (1)PHASE POWER IS AVAILABLE, A PHASE CONVERTER MAY BE INSTALLED AHEAD OF DRYER TO OBTAIN THREE (3)PHASE POWER TO OPERATE 240V OR 480V THREE (3)PHASE DRYERS.

2. **POWER SUPPLY DISCONNECT - ALL DRYERS SHOULD BE EQUIPPED WITH A POWER DISCONNECT SWITCH AHEAD OF DRYER CONTROL BOX TO PERMIT TOTAL POWER SHUT DOWN BEFORE OPENING CONTROL BOX, AS REQUIRED FOR INSPECTION AND SERVICE. THE POWER DISCONNECT SWITCH SHOULD ALSO BE LOCATED CLOSE TO THE DRYER FOR QUICK SHUT DOWN.**

3. **ELECTRICAL PHASING** - FOR YOUR CONVENIENCE YOUR DRYER HAS HAD ALL MOTORS PHASED. **IF ONE MOTOR RUNS BACKWARDS, THEY ALL WILL.** SIMPLY CHANGE THE TWO MAIN WIRE LEADS AROUND AT MAIN TERMINAL CONNECTION BLOCK FOR PROPER ROTATION. **(NOTE: CONTROL DESIGN REQUIRES WILD LEG TO BE CONNECTED TO TERMINAL "L2" ON 240V THREE (3)PHASE DRYERS).**

4. **CONNECTING AUXILIARY CONVEYORS** - AUXILIARY STARTING EQUIPMENT IS SUPPLIED AS STANDARD EQUIPMENT. REFER TO DRAWING FOR PROPERLY CONNECTING AND INTERLOCKING WET LOADING AND DRY UNLOADING AUXILIARY STARTING EQUIPMENT LOCATED IN THE ELECTRICAL CONTROL PANEL. MAKE CERTAIN THAT THE MOTOR OVERLOAD PROTECTION MATCHES THE MOTOR BEING USED.

5. **IMPORTANT:**

1. **MAKE SURE DRYER IS PROPERLY GROUNDED.** GROUND LUG IS PROVIDED.
2. **HAVE THE POWER COMPANY OR YOUR LOCAL ELECTRICIAN CHECK LINE VOLTAGE AND AMPERAGE.** MAKE SURE VOLTAGE DROP IS MINIMUM.

D. LP FUEL SYSTEMS

1. CONSULT YOUR LOCAL PROPANE SUPPLIER FOR PROPER LINE SIZING REQUIREMENTS AND LOCAL GAS CODES. PROPER LINE AND PRESSURE REQUIREMENTS SHOULD BE BASED OFF OF MAXIMUM BTU/HR CONSUMPTION PER DRYER MODEL. SEE TABLE 5.2.
2. THE DRYER IS DESIGNED TO OPERATE ON LIQUID PROPANE DRAWN FROM THE SUPPLY TANK, HOWEVER INITIAL START-UP REQUIRES VAPOR TO BE DRAWN FROM THE TANK TO ALLOW THE DRYER WARM UP. ONCE THE TEMPERATURE INSIDE THE DRYER HAS RISEN, YOU MAY SWITCH OVER TO LIQUID. TYPICALLY, A "Y" IS INSTALLED AT THE SUPPLY TANK TO FEED EITHER LIQUID OR VAPOR TO THE LP INLET MANIFOLD OF THE DRYER. IN OTHER INSTANCES RUNNING SEPARATE LINES FOR BOTH LIQUID AND VAPOR MAY BE APPROPRIATE.
3. NORMAL OPERATING VAPOR PRESSURE (ON REGULATOR) IS 10-20 PSI.
4. BEFORE STARTING THE DRYER FOR THE FIRST TIME, MAKE CERTAIN THAT PIPE UNIONS & FITTINGS ARE PROPERLY TIGHTENED BOTH INSIDE AND OUTSIDE OF THE DRYER.
5. IN SOME CASES BURNER ORIFICES MAY NEED TO BE RESIZED TO ACCOMMODATE VARYING DRYING CONDITIONS.

E. NG FUEL SYSTEMS

1. CONSULT YOUR LOCAL GAS SUPPLIER FOR PROPER LINE SIZING REQUIREMENTS AND LOCAL GAS CODES. PROPER LINE SIZE AND PRESSURE REQUIREMENTS SHOULD BE BASED OFF OF MAXIMUM BTU/HR CONSUMPTION PER DRYER MODEL. SEE TABLE 5.2.
2. ALL NATURAL GAS DRYERS REQUIRE A PRESSURE REGULATOR NEAR THE BASE OF THE DRYER TO MINIMIZE PRESSURE FLUCTUATIONS.
3. **SUPPLIED PRESSURE TO DRYER FUEL SYSTEM SHOULD NOT EXCEED 20 PSI.**
4. BEFORE STARTING THE DRYER FOR THE FIRST TIME, MAKE CERTAIN THAT ALL PIPE UNIONS BOTH INSIDE AND OUTSIDE THE DRYER ARE PROPERLY TIGHTENED.
5. IN SOME CASES BURNER ORIFICES MAY NEED TO BE RESIZED TO ACCOMADATE VARYING DRYING CONDITIONS.

TABLE 5.1

MODEL	FT	FULL LOAD AMPS (DRYER ONLY)					
		230V 1P	208V 3P	240V 3P	380V 3P	480V 3P	575V 3P
MSF-31010	10	72.1	N/A	N/A	N/A	N/A	N/A
MSF-41515	10	90.1	61.5	56.5	35.6	27.4	22.0
MSF-62520	15	N/A	77.6	71.1	44.6	35.2	28.5
MSF-72525	15	N/A	93.0	85.1	54.6	42.2	33.5
DP 2510	10	64.1	N/A	N/A	N/A	N/A	N/A
DP 3015	10	82.1	N/A	N/A	N/A	N/A	N/A
DP 4020	15	126.1	N/A	N/A	N/A	N/A	N/A
DP 5020	20	126.1	N/A	N/A	N/A	N/A	N/A
DP 7530	30	185.1	N/A	N/A	N/A	N/A	N/A
DP 10040	40	251.1	N/A	N/A	N/A	N/A	N/A
DP 3015	10	N/A	56.9	52.3	33.3	25.8	20.8
DP 4025	15	N/A	93.0	85.1	54.6	42.2	33.5
DP 6030	20	N/A	110.6	101.1	64.6	50.2	40.5
DP 7550	25	N/A	173.8	158.5	102.4	79.4	63.2
DP 9045	30	N/A	162.8	148.5	95.4	74.4	60.2
DP 12060	40	N/A	218.2	198.9	127.8	99.6	80.6
DPSL 3520	10	N/A	70.1	64.3	40.3	31.8	25.8
DPSL 4530	15	N/A	106.2	97.1	61.6	48.2	38.5
DPSL 7040	20	N/A	137.0	125.1	78.6	62.2	50.5
DPSL 8560	25	N/A	200.2	182.5	116.4	91.4	73.2
DPSL 10560	30	N/A	202.4	184.5	116.4	92.4	75.2
DPSL 14080	40	N/A	271.0	246.9	155.8	123.6	100.6
DPX 4525	10	N/A	90.1	82.5	52.6	40.4	32.0
DPX 7040	15	N/A	137.0	125.1	78.6	62.2	50.5
DPX 9050	20	N/A	167.8	153.1	98.6	76.2	60.5
DPX 13575	30	N/A	251.7	229.3	148.2	114.8	91.4
DPX 180100	40	N/A	346.7	315.7	204.1	158.0	125.5
DPXSL 5030	10	N/A	103.3	94.5	59.6	46.4	37.0
DPXSL 8050	15	N/A	167.8	153.1	98.6	76.2	60.5
DPXSL 10060	20	N/A	194.2	177.1	112.6	88.2	70.5
DPXSL 12560	25	N/A	203.3	185.3	118.2	92.8	74.4
DPXSL 15090	30	N/A	291.3	265.3	169.2	132.8	106.4
DPXSL 200120	40	N/A	399.5	363.7	232.1	182.0	145.5

** FULL LOAD AMPS BASED ON UL 508A TABLE 50.1 AND 50.6

** FULL LOAD AMPS DOES NOT INCLUDE ANY AUX. HANDLING EQUIPMENT.

TABLE 5.1 - CONT'D

MODEL	FT	FULL LOAD AMPS (DRYER ONLY)					
		230V 1P	208V 3P	240V 3P	380V 3P	480V 3P	575V 3P
DPX4T 5630	10	N/A	106.2	97.1	61.6	48.2	38.5
DPX4T 8460	15	N/A	190.1	173.7	115.6	87.0	70.0
DPX4T 11260	20	N/A	200.2	182.5	116.4	91.4	73.2
DPX4T 140100	25	N/A	313.3	285.3	182.2	142.8	114.4
DPX4T 16890	30	N/A	297.4	270.9	172.8	135.6	108.6
DPX4T 224120	40	N/A	399.5	363.7	232.1	182.0	145.5
DPX8T 6440	10	N/A	132.2	121.1	76.6	60.2	47.5
DPX8T 12880	20	N/A	252.2	230.5	146.4	115.4	91.2
DPX8T 160120	25	N/A	371.4	338.9	225.8	169.6	136.6
DPX8T 192120	30	N/A	375.4	342.9	217.8	171.6	135.6
DPX8T 256160	40	N/A	503.5	459.7	292.1	230.0	181.5
DPX12T 7250	10	N/A	161.2	147.1	93.6	73.2	58.5
DPX12T 10860	15	N/A	197.1	179.7	114.6	90.0	72.0
DPX12T 144100	20	N/A	310.2	282.5	180.4	141.4	113.2
DPX12T 175120	25	N/A	371.4	338.9	225.8	169.6	136.6
DPX12T 216150	30	N/A	462.4	420.9	268.8	210.6	168.6
DPX12T 288200	40	N/A	625.6	569.3	363.7	284.8	227.7
DPX16GT 8250	10	N/A	161.2	147.1	93.6	73.2	58.5
DPX16GT 12360	15	N/A	197.1	179.7	114.6	90.0	72.0
DPX16GT 164100	20	N/A	310.2	282.5	180.4	141.4	113.2
DPX16GT 210120	25	N/A	371.4	338.9	225.8	169.6	136.6
DPX16GT 246150	30	N/A	462.4	420.9	268.8	210.6	168.6
DPX16GT 328200	40	N/A	625.6	569.3	363.7	284.8	227.7

**** FULL LOAD AMPS BASED ON UL 508A TABLE 50.1 AND 50.6**

**** FULL LOAD AMPS DOES NOT INCLUDE ANY AUX. HANDLING EQUIPMENT.**

TABLE 5.2

MODEL	(FT)	TOTAL CFM	MINIMUM		MAXIMUM		MAX. w/ OPT. RECLAIM	
			TEMP. RISE (F)	BTU/HR (MILLION)	TEMP. RISE (F)	BTU/HR (MILLION)	TEMP. RISE (F)	BTU/HR (MILLION)
MSF-31010	(10)	13,435	50	0.7	200	2.9		na
MSF-41515	(10)	19,150	50	1.0	200	4.1		na
MSF-62520	(15)	21,863	50	1.2	200	4.7		na
MSF-72525	(15)	24,804	50	1.3	200	5.4		na
DP 2510	(10)	10,077	50	0.5	170	1.9	140	1.5
DP 3015	(10)	14,985	50	0.8	170	2.8	140	2.3
DP 4020	(15)	20,154	50	1.1	170	3.7	140	3.0
DP 5020	(20)	20,154	50	1.1	170	3.7	140	3.0
DP 7530	(30)	30,231	50	1.6	170	5.6	140	4.6
DP 10040	(40)	40,308	50	2.2	170	7.4	140	6.1
DP 3015	(10)	14,985	50	0.8	170	2.8	140	2.3
DP 4025	(15)	20,511	50	1.1	170	3.8	140	3.1
DP 6030	(20)	29,970	50	1.6	170	5.5	140	4.5
DP 7550	(25)	41,022	50	2.2	170	7.5	140	6.2
DP 9045	(30)	44,955	50	2.4	170	8.3	140	6.8
DP 12060	(40)	59,940	50	3.2	170	11.0	140	9.1
DPSL 3520	(10)	17,808	50	1.0	170	3.3	140	2.7
DPSL 4530	(15)	22,896	50	1.2	170	4.2	140	3.5
DPSL 7040	(20)	35,616	50	1.9	170	6.5	140	5.4
DPSL 8560	(25)	45,792	50	2.5	170	8.4	140	6.9
DPSL 10560	(30)	53,424	50	2.9	170	9.8	140	8.1
DPSL 14080	(40)	71,232	50	3.8	170	13.1	140	10.8
DPX 4525	(10)	20,511	50	1.1	170	3.8	140	3.1
DPX 7040	(15)	35,616	50	1.9	170	6.5	140	5.4
DPX 9050	(20)	41,022	50	2.2	170	7.5	140	6.2
DPX 13575	(30)	61,533	50	3.3	170	11.3	140	9.3
DPX 180100	(40)	82,044	50	4.4	170	15.1	140	12.4
DPXSL 5030	(10)	22,896	50	1.2	170	4.2	140	3.5
DPXSL 8050	(15)	41,022	50	2.2	170	7.5	140	6.2
DPXSL 10060	(20)	45,792	50	2.5	170	8.4	140	6.9
DPXSL 12560	(25)	57,876	50	3.1	170	10.6	140	8.7
DPXSL 15090	(30)	68,688	50	3.7	170	12.6	140	10.4
DPXSL 200120	(40)	91,584	50	4.9	170	16.8	140	13.8

**** OPERATING FUEL CONSUMPTION WILL FALL BETWEEN THE MINIMUM AND MAXIMUM VALUES, AND IS DEPENDENT UPON AMBIENT CONDITIONS AND HEAT RECAPTURE FROM COOLING GRAIN.**

TABLE 5.2 - CONT'D

MODEL	(FT)	TOTAL CFM	MINIMUM		MAXIMUM		MAX. w/ OPT. RECLAIM	
			TEMP. RISE (F)	BTU/HR (MILLION)	TEMP. RISE (F)	BTU/HR (MILLION)	TEMP. RISE (F)	BTU/HR (MILLION)
DPX4T 5630	(10)	28,938	50	1.6	170	5.3	140	4.4
DPX4T 8460	(15)	44,043	50	2.4	170	8.1	140	6.7
DPX4T 11260	(20)	57,876	50	3.1	170	10.6	140	8.7
DPX4T 140100	(25)	79,500	50	4.3	170	14.6	140	12.0
DPX4T 16890	(30)	86,814	50	4.7	170	15.9	140	13.1
DPX4T 224120	(40)	115,752	50	6.3	170	21.3	140	17.5
DPX8T 6440	(10)	34,201	50	1.8	170	6.3	140	5.2
DPX8T 12880	(20)	68,402	50	3.7	170	12.6	140	10.3
DPX8T 160120	(25)	88,086	50	4.8	170	16.2	140	13.3
DPX8T 192120	(30)	102,603	50	5.5	170	18.8	140	15.5
DPX8T 256160	(40)	136,804	50	7.4	170	25.1	140	20.7
DPX12T 7250	(10)	39,750	50	2.1	170	7.3	140	6.0
DPX12T 10860	(15)	57,876	50	3.1	170	10.6	140	8.7
DPX12T 144100	(20)	79,500	50	4.3	170	14.6	140	12.0
DPX12T 175120	(25)	88,086	50	4.8	170	16.2	140	13.3
DPX12T 216150	(30)	119,250	50	6.4	170	21.9	140	18.0
DPX12T 288200	(40)	159,000	50	8.6	170	29.2	140	24.0
DPX16GT 8250	(10)	39,750	50	2.1	170	7.3	140	6.0
DPX16GT 12360	(15)	57,876	50	3.1	170	10.6	140	8.7
DPX16GT 164100	(20)	79,500	50	4.3	170	14.6	140	12.0
DPX16GT 210120	(25)	88,086	50	4.8	170	16.2	140	13.3
DPX16GT 246150	(30)	119,250	50	6.4	170	21.9	140	18.0
DPX16GT 328200	(40)	159,000	50	8.6	170	29.2	140	24.0

**** OPERATING FUEL CONSUMPTION WILL FALL BETWEEN THE MINIMUM AND MAXIMUM VALUES, AND IS DEPENDENT UPON AMBIENT CONDITIONS AND HEAT RECAPTURE FROM COOLING GRAIN.**

ELECTRICAL - FUEL HOOK-UP AND CHECKOUT**1. POWER SUPPLY**

AN ADEQUATE POWER SUPPLY AND PROPER WIRING ARE IMPORTANT FOR MAXIMUM PERFORMANCE AND LONG DRYER LIFE. **ELECTRICAL SERVICE MUST BE ADEQUATE IN SIZE TO PREVENT LOW VOLTAGE DAMAGE TO MOTORS AND CONTROL CIRCUITS.** PROPER LINE PHASING MUST ALSO BE OBSERVED.

2. POWER SUPPLY CIRCUIT BREAKER

ALL DELUX GRAIN DRYERS SHOULD BE EQUIPPED WITH A MASTER CIRCUIT DISCONNECT TO PERMIT TOTAL SHUT-DOWN OF THE DRYING SYSTEM. IT IS SUGGESTED THAT ALL WET AND DRY HANDLING EQUIPMENT BE INTERLOCKED THROUGH MASTER CIRCUIT DISCONNECT. CALCULATE TOTAL AMP. LOAD OF SYSTEM TO MAKE SURE LOAD DOES NOT EXCEED DISCONNECT RATING.

3. TRANSFORMERS - WIRE - VOLTAGE DROP

CONTACT THE SERVICE REPRESENTATIVE OF YOUR LOCAL POWER COMPANY TO ADVISE OF ADDITIONAL LOAD TO BE PLACED ON THE LINE. CHECK ON KVA RATING OF TRANSFORMERS, CONSIDERING TOTAL H.P. LOAD. THE POWER SUPPLY WIRING AND TRANSFORMERS MUST BE CAPABLE OF PROVIDING ADEQUATE MOTOR STARTING AND OPERATING VOLTAGE.

4. CONSIDERING TOTAL H.P. LOAD AND DISTANCE FROM TRANSFORMER. SIZE AND INSTALL WIRE AND CONDUIT BETWEEN TRANSFORMERS AND DRYER ELECTRICAL SERVICE CENTER.

***NOTE: MAKE SURE DRYER IS ADEQUATELY GROUNDED.**

5. CONDUIT INSTALLATION

GARNER BIN HIGH GRAIN SHUTDOWN, LOW GRAIN SHUTDOWN CONTROLS AND THE LEVELING AUGER MOTOR ARE SUPPLIED WITH CONDUIT AND WIRING, REFER TO DRAWING OF GARNER.

6. INTERNAL FUEL LINE HOOK-UP

THE DRYER IS EQUIPPED WITH A PLUMBING TRAIN CONTAINING SAFETY CONTROLS. REFER TO DRAWINGS OF FUEL LINE HOOK-UP FOR ALL MODELS.

7. FUEL SUPPLY

(REFER TO SECTION 5 OF SERVICE MANUAL FOR "FUEL SUPPLY RECOMMENDED"). **CONTACT YOUR LOCAL FUEL SUPPLIER FOR PROPER SIZING OF REGULATORS AND PLUMBING.**

8. FLAME ROD(S) AND SPARK IGNITER ADJUSTMENT

CHECK BURNER FLAME ROD(S) AND SPARK IGNITER ADJUSTMENT.

- A. THE FLAME ROD(S) SHOULD BE CHECKED TO SEE THAT THE CERAMIC BASE HAS NOT BEEN CRACKED. CHECK SPARK IGNITER: (SHOULD HAVE 1/8" TO 3/16" GAP).

9. **INSPECT INSIDE OF DRYER**

CHECK INSIDE OF DRYER SECTION FOR FOREIGN MATERIAL AND REMOVE. CHECK METERING ROLLS FOR FOREIGN OBJECTS SUCH AS BOLTS, ETC.

10. **MOTOR ROTATION**

A. **FAN ROTATION:** LOOKING INTO FAN OUTLET, ROTATION SHOULD BE CLOCKWISE. WHEN ELECTRICAL SERVICE IS INSTALLED, ATTENTION MUST BE PAID TO PROPER PHASING. ALL MOTORS HAVE BEEN PHASED AT FACTORY. IN THE EVENT PHASES ARE REVERSED, SHUT OFF POWER ON MAIN BREAKER, REVERSE T1 AND T2 AT MAIN BREAKER. **CHECK BACKSIDE OF FAN HUBS FOR FOREIGN OBJECTS THAT WILL THROW FAN OUT OF BALANCE.** FAN CURRENT SHOULD BE CHECKED TO BE SURE AMPERAGE IS WITHIN LIMITS ON NAMEPLATE.

B. **DISCHARGE CONVEYOR:**

1. **SCREW CONVEYOR** - CHECK ROTATION BY OBSERVING AUGER FLIGHT WHILE IN OPERATION. IF ROTATION IS INCORRECT, REVERSE T1 AND T2 MOTOR LEADS AT CONVEYOR STARTER.
2. **METERING ROLL DIRECTION** - THIS SHOULD BE CORRECT FROM THE FACTORY. ROTATION SHOULD ALLOW GRAIN TO FLOW OVER FEED ROLL. IF DIRECTION IS INCORRECT, REVERSE LEADS A1 AND A2 ON SCR CONTROL UNIT.

STARTUP PROCEDURE**ALL MODEL SERIES DRYERS****1. CHECK DRYER THOROUGHLY BEFORE STARTING**

- A. CHECK AND CLEAN SCREENS IN PLENUM CHAMBER.
- B. CHECK METERING SYSTEM FOR FOREIGN MATERIAL AND CLEAN.
- C. CHECK AUGERS AND AUXILIARY EQUIPMENT FOR CORRECT ROTATION.

2. FRESH-AIR INTAKE DOORS

- A. FRESH-AIR INTAKE DOORS ARE PROVIDED TO ALLOW FRESH AIR TO FLOW DIRECTLY TO THE FAN(S). THE FAN(S) CANNOT RECEIVE ENOUGH AIR DIRECTLY THROUGH THE GRAIN BEING COOLED SO FRESH-AIR INTAKE PORTS ARE PROVIDED. THESE PORTS ALLOW THE OPERATOR TO HAVE MORE CONTROL OVER THE OUT GOING TEMPERATURE OF THE PRODUCT BEING DRIED.
- B. **SETTINGS:** OPEN THE DOORS THAT ARE LOCATED DIRECTLY ON THE FAN(S) FULL OPEN. OPEN OTHER DOORS AS NEEDED BUT NOT LESS THAN ONE INCH. WHEN THE GRAIN IS NOT COOL ENOUGH CLOSE THE DOORS DOWN THAT ARE NOT LOCATED DIRECTLY ON THE FAN(S) - WHEN GRAIN IS TOO COOL OPEN THESE DOORS. KEEP ALL DOORS THAT ARE BEING ADJUSTED THE SAME AS EACH OTHER. WHEN DRYING LOW MOISTURE PRODUCTS, TO OBTAIN A COOL PRODUCT IT MAY BE NECESSARY TO ALSO ADJUST THE PLENUM TEMPERATURE DOWN.
- C. **CAUTION: HAVING THE FRESH AIR INTAKE PORTS CLOSED TOO FAR CAN DECREASE CAPACITY AND CAUSE EXCESSIVE HEAT WHICH COULD RESULT IN UNEVEN MOISTURE CONTENT OF DISCHARGE GRAIN AND IN EXTREME CONDITIONS, FIRES ON THE HEAT DECK.**

3. ALL SWITCHES IN "OFF" POSITION**4. TURN "ON" MAIN POWER**

- A. MAIN POWER LIGHT WILL COME "ON".

5. TURN "ON" PANEL POWER

- A. MOVE POWER SWITCH TO "ON" POSITION. THIS WILL ENERGIZE PANEL POWER RELAY AND PROVIDE 120VAC TO CONTROL SYSTEM. SAFETY CIRCUIT MONITOR LIGHTS WILL COME "ON" AND SAFETY CIRCUIT LIGHT WILL COME "ON".

6. TO FILL WITH WET GRAIN

- A. MOVE LOAD SWITCH TO "ON" POSITION. LOADING SYSTEM WILL BE ACTIVATED AND WILL FILL DRYER. WHEN DRYER IS FULL OF GRAIN, HIGH GRAIN SHUTDOWN WILL SHUT OFF ALL LOADING EQUIPMENT AUTOMATICALLY. (LEAVE LOAD SWITCH IN "ON" POSITION.) GRAIN LOADING LIGHT WILL COME "ON" DURING FILLING - LOW GRAIN LIGHT WILL COME "ON" UNTIL DRYER IS FULL OF GRAIN THEN GO "OUT".

7. TO START FAN(S)

- A. MOVE FAN START SWITCH TO "ON" POSITION UNTIL ALL FAN(S) START. FAN PROVEN LIGHT(S) WILL COME "ON" AS FAN(S) PROVE. PURGING LIGHT WILL COME "ON" AFTER FAN(S) PROVE.

- B. DRYERS WITH TWO (2) OR MORE FANS ARE EQUIPPED WITH DELAY TIMERS, WHICH ALLOW ONLY ONE(1) FAN TO START AT A TIME.

8. TO START BURNER(S)

- A. TURN "ON" FUEL SUPPLY TO DRYER.

1. **NATURAL GAS** - "OPEN" MANUAL VALVE.
2. **LP GAS** - OPEN AT SUPPLY TANK. OPEN QUICK ACTING VALVE AND BALL VALVE ON DRYER.

DRYER MUST BE STARTED ON VAPOR UNTIL INTERNAL VAPORIZER IS WARM, THEN SWITCHED TO LIQUID. TANK MUST HAVE BOTH VAPOR AND LIQUID DRAW AVAILABLE TO DRYER.

- B. WHEN BURNER READY LIGHT COMES "ON", A 60 SECOND PURGE CYCLE HAS BEEN COMPLETED.
- C. MOVE BURNER SWITCH TO "ON" POSITION.
- D. AFTER A SHORT TIME DELAY, THE IGNITION FIRING LIGHT(S) WILL COME "ON".
- E. WITHIN A FEW SECONDS THE BURNER PROVEN LIGHT(S) WILL COME "ON" SHOWING BURNER(S) HAVE PROVEN FLAME. AS BURNER PROVEN LIGHT(S) COME "ON" THE IGNITION FIRING LIGHT(S) WILL GO "OFF".
- F. ADJUST FUEL PRESSURE
1. **NATURAL GAS** - 2# TO 6# NORMAL - 10 # MAXIMUM
 2. **LP GAS** - 10# TO 12# NORMAL - 20 # MAXIMUM
- G. ADJUST PLENUM SETPOINT FOR DESIRED OPERATING TEMPERATURE.
1. **TO INCREASE HEAT**, USE THE "UP" ARROW KEY OF THE TEMPERATURE CONTROLLER TO INCREASE THE SETPOINT TO THE DESIRED OPERATING TEMPERATURE.

SEE FIGURE 7-A FOR PLENUM TEMPERATURES FOR VARIOUS CROPS.

**NOTE: RECOMMENDED PLENUM HIGH LIMIT SETTING: 30 TO 50°F ABOVE PLENUM TEMPERATURE.
MAXIMUM SETTING ALLOWED: 260°F**

SUGGESTED PLENUM TEMPERATURES

BARLEY	120-140 F
CORN	190-210 F
FLAX	120-130 F
MILO	160-180 F
MUSTARD SEED	110-130 F
OATS	120-140 F
RICE	115-125 F
RYE	120-140 F
SOYBEANS	140-160 F
SUNFLOWER	120-130 F
WHEAT	160-180 F

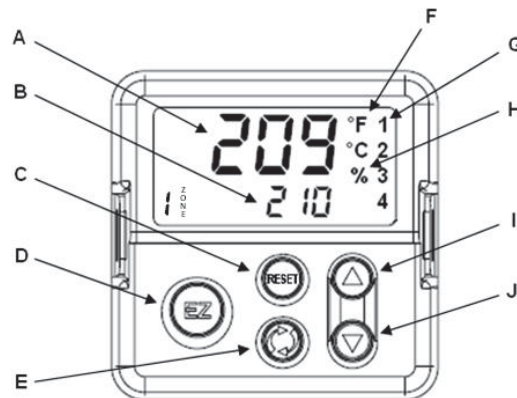
FIGURE 7-A

2. TO DECREASE HEAT, USE THE "DOWN" ARROW KEY OF THE TEMPERATURE CONTROLLER TO DECREASE THE SETPOINT TO THE DESIRED OPERATING TEMPERATURE.
- H. WHEN TEMPERATURE HAS REACHED DESIRED SET POINT IN PLENUM CHAMBER AND DRYER HAS HAD SUFFICIENT TIME TO WARM UP, "OPEN" LIQUID VALVE AT PROPANE TANK AND SHUT "OFF" VAPOR SUPPLY.
- I. ADJUST MODULATING CONTROL FOR DESIRED OPERATING TEMPERATURE.

Watlow EZ-ZONE Automatic Temperature Controller

Introduction

Your Delux grain dryer is equipped with an automatic temperature control system that is simple and takes the hassle out of continually watching the dryer for temperature fluctuations. Simply set your target plenum temperature and the controller will maintain that temperature. To better understand the controller and how to use it, please spend a little time to familiarize yourself with common keys and the display.



- A) **Upper Display (Process Value)** – In the home page this is the current plenum temperature. Otherwise it is the upper display parameter in other menus.
- B) **Lower Display (Set Point)** – In the home page this is the user-defined value that sets the desired operating temperature (plenum temperature). Use the “UP” & “DOWN” buttons (I & J) to increase or decrease the setpoint. Otherwise it is the lower display parameter in other menus.
- C) **Reset Key** – This key is essentially a “BACKSPACE” key to any of the programming menus. Press and hold for two seconds to return to the Home Page. From the Home Page it can clear alarms and errors if clearable.
- D) **EZ Key** – This key can be programmed to do a variety of functions. Shipped from factory (DELUX) this key has no programmed functions.
- E) **Advance Key** – This key advances through parameter prompts.
- F) **Temperature Units** – Indicates whether the temperature is displayed in Fahrenheit or Celsius.
- G) **Output Activity** – Numbered LEDs indicate activity of outputs. A flashing light indicates output activity and systems are normal.
- H) **Percent Units** – Lights when the controller is displaying values as a percentage or when the open-loop set point is displayed (manual mode).
- I, J) **Up & Down Key** – In the Home Page, adjusts the set point in the lower display (B). In other menus, changes the upper display (A) to a higher or lower value, or changes a parameter selection.

*Note: ZONE 1 does not refer to anything relevant to dryer operation.

Initial Start-Up From Factory (Auto-Tuning)

THIS PROCEDURE **MUST** BE DONE DURING INITIAL START-UP FROM FACTORY

The temperature controller must be auto-tuned after shipping from the factory to the customer. Not performing the auto-tune may result in the plenum temperature becoming unstable during operation. To perform the auto-tune, follow the steps below:

- 1) Must have power & fuel to the dryer.
- 2) The dryer must be full of grain.
- 3) Adjust the target plenum temperature on the controller to 180 °F (60 °C).
- 4) Turn main panel power "ON".
- 5) Hold momentary fan switch "ON" until all fans have started.
- 6) Turn burner switch to "ON"
- 7) To start the auto-tuning process, press the advance (green) key 4 (four) times to reach the following screen:



- 8) Use the UP or DOWN key to change the upper display to "YES". Press the RESET key to return to the main screen. The controller will begin to flash "Auto 1" in the lower display and "Auto 1" in the upper display, indicating that the auto-tuning is in progress.
- 9) The temperature will cycle both above and below the temperature setpoint (180 °F) to check the responsiveness of the system. This process may last several minutes. Once the controller has stopped flashing "Auto 1" in the lower display and "Auto 1" in the upper display the auto-tuning process is complete (Note: It is important that the controller is not disturbed until the process is complete). The temperature should increase slowly up to the setpoint (180 °F) and become stable (as long as the temperature seems stable, you may now adjust the set point to the desired drying temperature).
- 10) At this time the modulating motor (located on the valve train to the left of the panel box) should be moving in small increments, advancing slowly to the target plenum temperature.
- 11) Give the system ample time to zero in on the desired plenum temperature (minimum of 20 minutes).

12) It may be necessary to repeat the process with changing variables outside the system, but not needed every time starting the dryer.

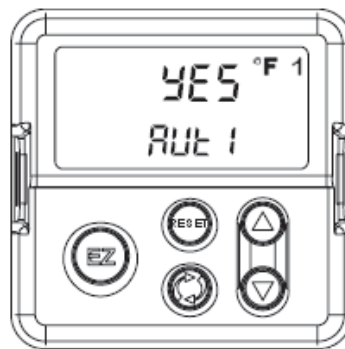
Micro-Tuning

From the factory, this mode is enabled. By enabling this, it allows the controller to constantly change its parameters that control the stability of the temperature system.

For example: A change in gas pressure can reduce the stability of the system, but by having this enabled it can change its calculations accordingly to compensate for the difference.

To change this parameter:

With main panel power "ON", press the ADVANCE (green) key 5 times to reach the following screen:



This Is Factory Default

Use the UP or DOWN key to change the upper display to "no". Press the RESET key to return to exit and return to the main screen.

"no" - feature disabled

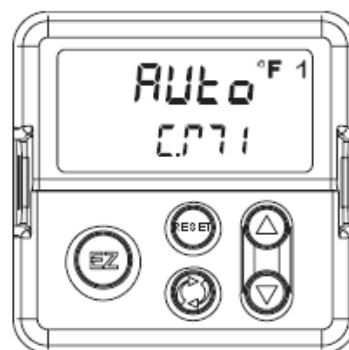
"YES" - feature enabled

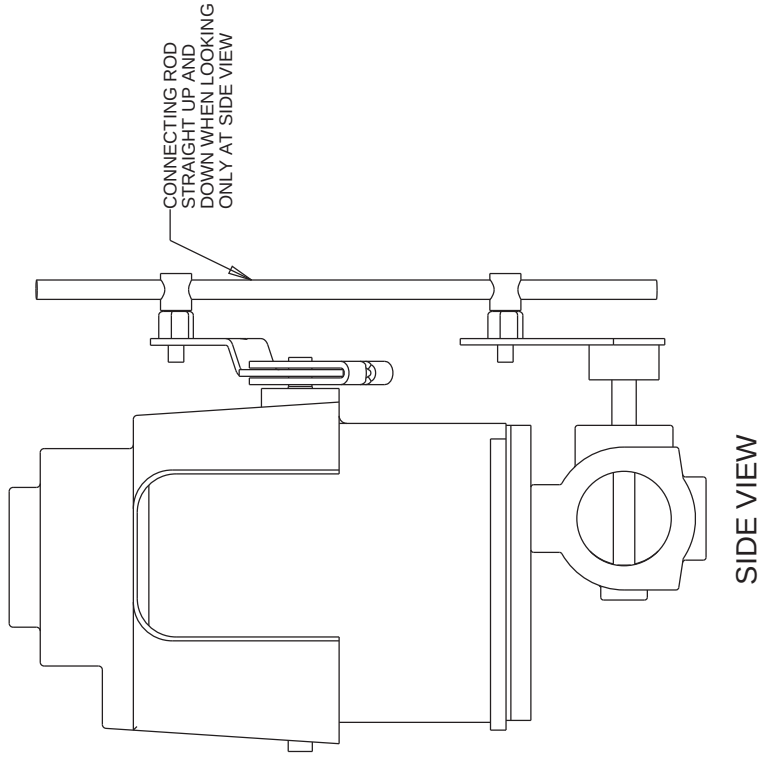
Linkage and Modulating Motor Calibration

THIS PROCEDURE IS PERFORMED AT THE FACTORY AND SHOULD NOT BE REQUIRED DURING INITIAL SETUP

To calibrate the modulating motor to the controller, follow the steps below closely:

- 1) **The linkage must be set EXACTLY as the drawing (No.: 900-009214) on the next page shows. Errors in the linkage setup will cause temperature stability problems.**
- 2) With all the switches in the "OFF" position and power locked out from the Dryer Control Center, place a jumper wire between terminals #20 and #22 located on the insert panel of the Dryer Control Center. Once the jumper is in place return power to the Control Center.
- 3) The dryer **should not** be running during this procedure, but main panel power must be present and the safety circuit proven.
- 4) From the Home Screen press the ADVANCE (green) key 2 times to reach the screen shown on right of page.
- 5) Use the UP key to change the upper display to "77.7". Press the RESET once key to return to the Home Screen. The controller is now in manual mode.
- 6) On the controller, use the UP or DOWN key to change the lower display to "0.0".
- 7) Remove the blue weather cover from modulating motor.
- 8) Remove top motor cover from modulating motor.
- 9) Find the turn dial potentiometer labeled "ZERO" on the circuit board and with a small screwdriver, increase to its maximum. Find the turn dial potentiometer labeled "SPAN" and decrease it to its minimum.
- 10) Wait for modulating motor to stop (if any movement).
- 11) Slowly decrease the "ZERO" until the actuator begins to respond. The modulating motor should start and run clockwise approximately two degrees.
- 12) Slowly increase the zero just enough to return the modulating motor back to its full counter-clockwise position.
- 13) On the controller use the UP or DOWN key to change the lower display to "100.0".
- 14) Slowly increase the "SPAN" until there is a slight counter-clockwise movement of the modulating motor. The modulating motor should start and run counter-clockwise approximately two degrees.
- 15) Slowly decrease the "SPAN" just enough to return the modulating motor back to its full clockwise position.
- 16) Repeat step 4, and use the DOWN arrow key to change the upper display to back to "Auto" like figure above. Press the RESET key to return to the Home Screen. The controller has now returned to automatic mode (**Note: In normal dryer operation the dryer must be in automatic mode to function properly.**)
- 17) Remove the jumper that was put in place in step 2.



[illegible]

Minimum Flame Adjustment

The minimum flame adjustment is programmed from the factory, and under normal circumstances should not have to be adjusted.

- 1) Hold the UP or DOWN arrow keys together for 6 seconds. "R1" should be in upper display and "SEt" in lower display.
- 2) Press the DOWN arrow key 3 times. "dPt" should be in upper display and "SEt" in lower display.
- 3) Press the ADVANCE (green) key 5 times. "4.75" should be in upper display and "SLo" in lower display.
- 4) Use the UP or DOWN arrow keys to adjust the upper display parameter from "4.75" (factory default) Scale: 4.00-MIN - 8.00-MAX. **Do not go above or below this scale, even if it allows you to do so.**

High Limit

The controller is equipped with an integrated high limit control. Should the operating temperature rise above the high limit set point, the dryer will shut down automatically. To change the high limit temperature set point:

- 1) From the Home Page press the ADVANCE (green) key 6 times. "250" (factory default) should appear in the upper display and "SPS1" in the lower display.
- 2) Use the UP or DOWN key to adjust the high limit set point.
- 3) Hold the RESET key until you return to the Home Page.

If under normal operation, the high limit set point is reached the dryer will shut down, and prevent the dryer from being restarted until the dryer has had sufficient time to cool down. Reset the panel power after the dryer has had time to cool to clear high limit error. Error message: "L11" in the upper display and "RtLn" in the lower display.

The integrated system has its own sensor that monitors the temperature inside the plenum, separate from the sensor that controls the actual temperature. However these sensors are located in the same junction box. Should the high limit sensor fail, it will automatically shut control circuit power to the dryer and prevent it from being started until the problem with the high limit sensor is fixed. Error messages: "L11" ; "Err2" in the upper display and "RtLn" in the lower display.

If the temperature control sensor fails, the system is designed to flash a warning message that indicates that there is a sensor error. The dryer will still operate under this condition, but it is advised the temperature control sensor be fixed. Error message: "Err1" in the upper display and "RtLn" in the lower display

Alarm, Limit, Indication & Error Messages

Indication	Description	Possible Cause(s)	Corrective Action
Alarm won't clear or reset	Alarm will not clear or reset with keypad or digital input	- Alarm latching is active - Alarm set to incorrect output - Alarm is set to incorrect source - Sensor input is out of alarm set point range - Alarm set point is incorrect - Alarm is set to incorrect type - Digital input function is incorrect	- Reset alarm when process is within range or disable latching - Set output to correct alarm source instance - Set alarm source to correct input instance - Correct cause of sensor input out of alarm range - Set alarm set point to correct trip point - Set alarm to correct type: process, deviation or power - Set digital input function and source instance
Alarm won't occur	Alarm will not activate output	- Alarm silencing is active - Alarm blocking is active - Alarm is set to incorrect output - Alarm is set to incorrect source - Alarm set point is incorrect - Alarm is set to incorrect type	- Disable alarm silencing, if required - Disable alarm blocking, if required - Set output to correct alarm source instance - Set alarm source to correct input instance - Set alarm set point to correct trip point - Set alarm to correct type: process, deviation or power
[ALF1] Alarm Error [ALF2] [ALF3] [ALF4]	Alarm state cannot be determined due to lack of sensor input	- Sensor improperly wired or open - Incorrect setting of sensor type - Calibration corrupt	- Correct wiring or replace sensor - Match setting to sensor used - Check calibration of controller
[ALL1] Alarm Low [ALL2] [ALL3] [ALL4]	Sensor input below low alarm set point	- Temperature is less than alarm set point - Alarm is set to latching and an alarm occurred in the past - Incorrect alarm set point - Incorrect alarm source	- Check cause of under temperature - Clear latched alarm - Establish correct alarm set point - Set alarm source to proper setting
[ALH1] Alarm High [ALH2] [ALH3] [ALH4]	Sensor input above high alarm set point	- Temperature is greater than alarm set point - Alarm is set to latching and an alarm occurred in the past - Incorrect alarm set point - Incorrect alarm source	- Check cause of over temperature - Clear latched alarm - Establish correct alarm set point - Set alarm source to proper setting
[EPI1] Error Input [EPI2]	Sensor does not provide a valid signal to controller	- Sensor improperly wired or open - Incorrect setting of sensor type - Calibration corrupt	- Correct wiring or replace sensor - Match setting to sensor used - Check calibration of controller
Limit won't clear or reset	Limit will not clear or reset with keypad or digital input	- Sensor input is out of limit set point range - Limit set point is incorrect - Digital input function is incorrect	- Correct cause of sensor input out of limit range - Set limit set point to correct trip point - Set digital input function and source instance
[LEF] Limit Error	Limit state cannot be determined due to lack of sensor input, limit will trip	- Sensor improperly wired or open - Incorrect setting of sensor type - Calibration corrupt	- Correct wiring or replace sensor - Match setting to sensor used - Check calibration of controller
[LL1] Limit Low	Sensor input below low limit set point	- Temperature is less than limit set point - Limit outputs latch and require reset - Incorrect alarm set point	- Check cause of under temperature - Clear limit - Establish correct limit set point

Indication	Description	Possible Cause(s)	Corrective Action
 Limit High	Sensor input above high limit set point	• Temperature is greater than limit set point • Limit outputs latch and require reset • Incorrect alarm set point	• Check cause of over temperature • Clear limit • Establish correct limit set point
 Loop Open Error	Open Loop Detect is active and the process value did not deviate by a user-selected value in a user specified period with PID power at 100%.	• Setting of Open Loop Detect Time incorrect • Setting of Open Loop Detect Deviation incorrect • Thermal loop is open • Open Loop Detect function not required but activated	• Set correct Open Loop Detect Time for application • Set correct Open Loop Deviation value for application • Determine cause of open thermal loop: misplaced sensors, load failure, loss of power to load, etc. • Deactivate Open Loop Detect feature
 Loop Reversed Error	Open Loop Detect is active and the process value is headed in the wrong direction when the output is activated based on deviation value and user-selected value.	• Setting of Open Loop Detect Time incorrect • Setting of Open Loop Detect Deviation incorrect • Output programmed for incorrect function • Thermocouple sensor wired in reverse polarity	• Set correct Open Loop Detect Time for application • Set correct Open Loop Deviation value for application • Set output function correctly • Wire thermocouple correctly, (red wire is negative)
 Ramping 1  Ramping 2	Controller is ramping to new set point	• Ramping feature is activated	• Disable ramping feature if not required
 Autotuning 1  Autotuning 2	Controller is autotuning the control loop	• User started the autotune function • Digital input is set to start autotune	• Wait until autotune completes or disable autotune feature • Set digital input to function other than autotune, if desired
No heat/cool action	Output does not activate load	• Output function is incorrectly set • Control mode is incorrectly set • Output is incorrectly wired • Load, power or fuse is open • Control set point is incorrect • Incorrect controller model for application	• Set output function correctly • Set control mode appropriately (Open vs Closed Loop) • Correct output wiring • Correct fault in system • Set control set point in appropriate control mode and check source of set point: remote, idle, profile, closed loop, open loop • Obtain correct controller model for application
No Display	No display indication or LED illumination	• Power to controller is off • Fuse open • Breaker tripped • Safety interlock switch open • Separate system limit control activated • Wiring error • Incorrect voltage to controller	• Turn on power • Replace fuse • Reset breaker • Close interlock switch • Reset limit • Correct wiring issue • Apply correct voltage, check part number
No Serial Communication	Cannot establish serial communications with the controller	• Address parameter incorrect • Incorrect protocol selected • Baud rate incorrect • Parity incorrect • Wiring error • EIA-485 converter issue • Incorrect computer or PLC communications port • Incorrect software setup • Wires routed with power cables • Termination resistor may be required	• Set unique addresses on network • Match protocol between devices • Match baud rate between devices • Match parity between devices • Correct wiring issue • Check settings or replace converter • Set correct communication port • Correct software setup to match controller • Route communications wires away from power wires • Place 120 Ω resistor across EIA-485 on last controller

Indication	Description	Possible Cause(s)	Corrective Action
Process doesn't control to set point	Process is unstable or never reaches set point	• Controller not tuned correctly • Control mode is incorrectly set • Control set point is incorrect	• Perform autotune or manually tune system • Set control mode appropriately (Open vs Closed Loop) • Set control set point in appropriate control mode and check source of set point: remote, idle, profile, closed loop, open loop
Temperature runaway	Process value continues to increase or decrease past set point.	• Controller output incorrectly programmed • Thermocouple reverse wired • Controller output wired incorrectly • Short in heater • Power controller connection to controller defective • Controller output defective	• Verify output function is correct (heat or cool) • Correct sensor wiring (red wire negative) • Verify and correct wiring • Replace heater • Replace or repair power controller • Replace or repair controller
 Device Error	Controller displays internal malfunction message at power up.	• Controller defective • Sensor input over driven	• Replace or repair controller
 Heater Error	Heater Error	• Current through load is above current trip set point • Current through load is below current trip set point	• Check that the load current is proper. Correct cause of overcurrent and/or ensure current trip set point is correct. • Check that the load current is proper. Correct cause of undercurrent and/or ensure current trip set point is correct.
 Current Error	Load current incorrect.	• Shorted solid-state or mechanical relay • Open solid-state or mechanical relay • Current transformer load wire associated to wrong output • Defective current transformer or controller • Noisy electrical lines	• Replace relay • Replace relay • Route load wire through current transformer from correct output, and go to the  Source Output Instance parameter (Setup Page, Current Menu) to select the output that is driving the load. • Replace or repair sensor or controller • Route wires appropriately, check for loose connections, add line filters
Menus inaccessible	Unable to access  ,  ,  , or  menus or particular prompts in Home Page	• Security set to incorrect level • Digital input set to lockout keypad • Custom parameters incorrect	• Check  settings in Factory Page • Enter appropriate password in  setting in Factory Page • Change state of digital input • Change custom parameters in Factory Page
EZ-Key/s don't work	EZ-Key/s does not activate required function	• EZ-Key function incorrect • EZ-Key function instance not incorrect • Keypad malfunction	• Verify EZ-Key function in Setup Menu • Check that the function instance is correct • Replace or repair controller

Clearing Errors & Limit Messages

To clear error or limit messages press the RESET key. You may also turn main panel power “OFF” and back “ON” again. Error or Limit messages will not clear until the cause or reason for the error has been addressed.

Watlow EZ-ZONE Temperature Controller / High Limit - Config. Record

Operations Page



To reach the Operations page hold the "up" and "down" arrow keys together for **3 seconds**.

Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
AI		Analog Input 1 (PID)			
1		AIN	**	**	View the process value
		IER	**	**	View the cause of the most recent error
		ICA	0	0	Defines calibration offset
2		Analog Input 2 (High Limit)			
		AIN	**	**	View the process value
		IER	**	**	View the cause of the most recent error
		ICA	0	0	Defines calibration offset
Limit		Limit			
		LhS	100	260	Defines the high process value that will trigger the limit
Mon		Monitor			
		CPRA	**	**	View the active control mode
		hPr	**	**	View the current heat output level
		CSP	**	**	View the set point currently in effect
		PwA	**	**	View the current filtered process value using the control input
Loop		Loop			
		CP1	AUTO	AUTO	Selects the method that this loop will use to control
		ALSP	90	90	Defines the the setpoint autotune will use as % of current setpoint
		AUT	no	no	Initiates the autotune process
		CSP	75	100	Defines the setpoint the controller will use in PID funtion
		idS	75	100	Defines a new PID setpoint if high limit is reached
		hPb	25	*35	Defines the proportionl band for the heat output
		ti	180	*56	Defines the PID intergral for the output
		td	0	*9	Defines the PID derivative time for the output
		db	0	0	Defines the offset to the proportional band
		aSP	0	0	Defines a fixed level of output power when in manual mode
ALPT		Alarm 1			
1		ALo	320	320	Defines the low range of alarm instance
		AHi	3000	3000	Defines the high range of the alarm instance
2		Alarm 2			
		ALo	320	320	Defines the low range of alarm instance
		AHi	3000	3000	Defines the high range of the alarm instance
3		Alarm 3			
		ALo	320	320	Defines the low range of alarm instance
		AHi	3000	3000	Defines the high range of the alarm instance
4		Alarm 4			
		ALo	320	320	Defines the low range of alarm instance
		AHi	3000	3000	Defines the high range of the alarm instance

Watlow EZ-ZONE Temperature Controller / High Limit - Config. Record

Setup Page



To reach the Setup page hold the "up" and "down" arrow keys together for **6 seconds**.

Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
Analog Input 1 (PID)					
RI	1	SEn	EC	rD. IH	Selects the type of sensor used
		rEL	2	3	Selects the leads in sensor
		FIL	0.5	3	Filters erratic signal, for smoother PID calculations
		IEr	oFF	on	Forces manual clear of input errors
		dEC	0	0	Selects precision of displayed units
		SbA	oFF	on	Enables or disables sensor backup
Analog Input 2 (High Limit)					
RI	2	SEn	EC	rD. IH	Selects the type of sensor used
		rEL	2	3	Selects the leads in sensor
		FIL	0.5	3	Filters erratic signal, for smoother PID calculations
		IEr	oFF	on	Forces manual clear of input errors
		dEC	0	0	Selects precision of displayed units
Limit Function					
LIP7		LSd	both	h 19h	Selects which instance limit function will trip
		LhY	3	20	Defines the high limit hysteresis band
		SPLh	9999	260	Defines the upper range of the high limit set point
		SPLL	- 1999	0	Defines the lower range of the high limit set point
		Lit	no	YES	Selects whether output and autotune are terminated when in limit state
PID Loop 1					
Loop	1	hAG	Pid	Pid	Selects the heat control method
		LAG	oFF	oFF	Selects the cool control method
		ELUn	no	no	Enables or disable TRU-TUNE+ adaptive tune automatically
		LAGr	Cr it	Cr it	Selects the aggressiveness of the autotune function
		UFR	USEr	USEr	Selects what output will do when user switches to manual mode
		FRIL	USEr	oFF	Selects what output will do when an input error switches control to manual mode
		LdE	no	no	Enables or disables open-loop detection feature to monitor closed-loop operations
		rP	oFF	oFF	Selects when controller will ramp to setpoint
		LSP	- 1999	50	Defines the lower range of the PID setpoint (temperature in automatic mode)
		hSP	9999	250	Defines the upper range of the PID setpoint (temperature in automatic mode)
		SPLo	- 100	0	Defines the lower range of the PID setpoint (% output in manual mode)
		SPHi	100	100	Defines the upper range of the PID setpoint (% output in manual mode)
Output 1					
oEPt	1	oLY	oLEt	r7R	Selects the type of output
		Fn	hERt	hERt	Selects which function will drive output
		Fi	1	1	Selects the instance of the function selected above
		SLo	0.00	4.75	Defines the lower range of the scale for the universal process output
		Shi	10.00	20.00	Defines the upper range of the scale for the universal process output
		aLo	0	0	Defines the low power scale, output will never be less than the value specified
		aHi	100	100	Defines the high power scale, output will never be less than the value specified
		aCR	0.0	0.0	Defines an offset value to the process output
Output 3					
	3	Fn	oFF	oFF	Selects which function will drive output
Output 4					
	4	Fn	L 111	L 111	Selects which function will drive output
Alarm 1					
ALP7	1	ALY	oFF	oFF	Selects whether the alarm trigger is a fixed value or will track set point
Alarm 2					
	2				

Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
		REL3	OFF	OFF	Selects whether the alarm trigger is a fixed value or will track set point
	3				Alarm 3
		REL4	OFF	OFF	Selects whether the alarm trigger is a fixed value or will track set point
	4				Alarm 4
		REL5	OFF	OFF	Selects whether the alarm trigger is a fixed value or will track set point
Fun					Function
		LEU	high	high	Selects the state in which the EZ key is in when powered up
		Fn	none	none	Selects the function of the EZ key
		Fi	0	0	Selects which instance the EZ key will affect
gLBL					Global
		CF	F	F	Selects the unit of measurement
		ACLF	60	60	Selects the AC line frequency
Com					Communications
		AdS	1	1	Sets the network address of this controller
		CF	F	F	Selects UOM in which this communications channel will display
		WLS	YES	YES	Determines whether all values written to control will be saved in EEPROM

Watlow EZ-ZONE Temperature Controller / High Limit - Config. Record

Factory Page



To reach the Factory page hold the "RESET" and "Advance" arrow keys together for **6 seconds**.

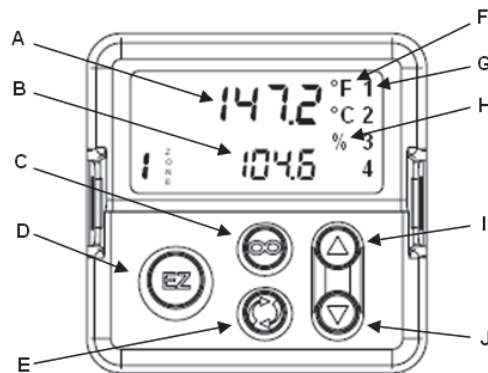
Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
CUST	1				Custom 1
		PAR	ALPU	ALPU	Defines custom parameter to home page
	2				Custom 2
		PAR	ALSP	ALSP	Defines custom parameter to home page
	3				Custom 3
		PAR	PRO	PRO	Defines custom parameter to home page
	4				Custom 4
		PAR	LSL	LSL	Defines custom parameter to home page
	5				Custom 5
		PAR	CP7	CP8	Defines custom parameter to home page
	6				Custom 6
		PAR	hPr	hPr	Defines custom parameter to home page
	7				Custom 7
		PAR	CPr	CPr	Defines custom parameter to home page
	8				Custom 8
		PAR	AUL	AUL	Defines custom parameter to home page
	9				Custom 9
		PAR	idLE	ttUn	Defines custom parameter to home page
	10				Custom 10
		PAR	CP7	CP8	Defines custom parameter to home page
	11				Custom 11
		PAR	hPr	hPr	Defines custom parameter to home page
	12				Custom 12
		PAR	CPr	CPr	Defines custom parameter to home page
	13				Custom 13
		PAR	AUL	AUL	Defines custom parameter to home page
	14				Custom 14
		PAR	idLE	idLE	Defines custom parameter to home page
	15				Custom 15
		PAR	LLS	LLS	Defines custom parameter to home page
	16				Custom 16
		PAR	LhS	LhS	Defines custom parameter to home page
	17				Custom 17
		PAR	nonE	nonE	Defines custom parameter to home page
	18				Custom 18
		PAR	nonE	nonE	Defines custom parameter to home page
	19				Custom 19
		PAR	nonE	nonE	Defines custom parameter to home page
	20				Custom 20
		PAR	nonE	nonE	Defines custom parameter to home page
LoC					Lock
		LoCo	2	2	Changes the security level of the operations page
		PRSE	oFF	oFF	Enables or disables security features
		rLoC	5	5	Sets the read security clearance level
		SLoC	5	5	Sets the write security clearance level
d IAG					
		Pn	**	**	Part number of device
		rEu	**	**	Software revision number
		SbLd	**	**	Software build number

Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
		Sn	**	**	Serial number of device
		dAtE	**	**	Date of manufacture
		USr.r	<i>nonE</i>	<i>nonE</i>	Restore user/default settings
		USr.S	<i>nonE</i>	<i>nonE</i>	Save current user settings
		CLed	<i>both</i>	<i>both</i>	Turns communications LED on or off for selected ports
		ZonE	<i>on</i>	<i>on</i>	Turns zone LED on or off based on selection
		chAn	<i>on</i>	<i>on</i>	Turns channel LED on or off based on selection
		dPrS	<i>2</i>	<i>2</i>	Defines the number of display pairs
CRL	1	Calibration			
		r<u>g</u>	**	**	View the raw electrical value for this input in units of sensor
		EL<u>lo</u>	<i>1.000</i>	<i>1.000</i>	Defines the value to calibrate the low end of the input range
		EL<u>oo</u>	<i>0.000</i>	<i>0.000</i>	Defines the value to calibrate the low end of the output range
		EL<u>o5</u>	<i>1.000</i>	<i>1.000</i>	Defines the value to calibrate the slope of the output value
	2				
		r<u>g</u>	**	**	View the raw electrical value for this input in units of sensor
		EL<u>lo</u>	<i>1.000</i>	<i>1.000</i>	Defines the value to calibrate the low end of the input range
		EL<u>oo</u>	<i>0.000</i>	<i>0.000</i>	Defines the value to calibrate the low end of the output range
		EL<u>o5</u>	<i>1.000</i>	<i>1.000</i>	Defines the value to calibrate the slope of the output value

Watlow EZ-ZONE Automatic Moisture Controller

Introduction

Your Delux grain dryer is equipped with an automatic moisture control system that is simple and takes the hassle out of continually monitoring incoming grain for changes in moisture. To better understand the controller and how to use it, please spend a little time to familiarize yourself with common keys and the display.



- A) **Upper Display (Process Value)** – In the home page this is the current air temperature passing through the grain column (changes with fluctuations in grain moisture). Otherwise it is the upper display parameter in other menus.
- B) **Lower Display (Set Point)** – This number will change when the user is adjusting the voltage on the voltmeter (using the UP or DOWN arrow keys) to match the output (DC voltage) that was present in the calibration (manual) mode.
- C) **Infinity Key** – This key is essentially a “BACKSPACE” key to any of the programming menus. Press and hold for two seconds to return to the Home Page. From the Home Page it can clear alarms and errors if clearable.
- D) **EZ Key** – This key can be programmed to do a variety of functions. Shipped from factory (DELUX) this key has no programmed functions.
- E) **Advance Key** – This key advances through parameter prompts.
- F) **Temperature Units** – Indicates whether the temperature is displayed in Fahrenheit or Celsius.
- G) **Output Activity** – Numbered LEDs indicate activity of outputs. A flashing light indicates output activity and systems are normal.
- H) **Percent Units** – Lights when the controller is displaying values as a percentage or when the open-loop set point is displayed (manual mode).
- I,J) **Up & Down Key** – In the Home Page, adjusts the set point in the lower display (B). In other menus, changes the upper display (A) to a higher or lower value, or changes a parameter selection.

*Note: ZONE 1 does not refer to anything relevant to dryer operation.

Automatic Moisture Set-Up Guide

- 1) On initial start-up with wet grain, it is advisable to let the dryer run at operating temperature for 10-20 minutes before starting the discharge process.
- 2) Move unload switch to “ON” position (grain unloading light will come on) to start discharge auger system. Note: Metering rolls will not operate unless all auger systems are on.
- 3) Move metering selector switch to “MANUAL” position and adjust the manual metering control potentiometer for desired discharge rate (see formula & charts below for determining initial unloading rate)

a. Metering Roll Adjustment

The dry grain discharge rate is adjusted by rotating the manual metering control potentiometer. This is located on the control panel.

Clockwise –	Will increase the grain discharge rate & DC volts
Counter-Clockwise –	Will decrease the grain discharge rate & DC volts

- 4) **Wait at least one (1) hour** – until a complete cycle of grain through the dryer has been completed. One cycle consists from the time the grain enters the top of the dryer to the time it is discharge from the metering rolls, and the dryer has stabilized. Then check grain moisture. Note: With wetter grain it may be necessary to wait longer to check samples.
- 5) **If grain is too wet, decrease** manual metering control potentiometer (decrease DC voltage) and repeat step 4, allowing grain to stabilize.
- 6) **If grain is too dry, increase** manual metering control potentiometer (increase DC voltage) and repeat step 4, allowing grain to stabilize.
- 7) Repeat the steps above until final moisture content has been established and dryer has completely stabilize
- 8) With the moisture now stabilized in manual mode, **note the voltage present on the DC voltmeter.**
- 9) Switch the metering selector switch from MANUAL to AUTOMATIC. This gives control of the system to the automatic metering controller.
 - a. There is an automatic/manual mode within the controller itself. This is always left in the automatic mode. All automatic /manual switching that is referred to in these instructions is the metering selector switch and **not** the controller.
- 10) **Set the voltage on the DC voltmeter to match what it was in manual mode.** Using the UP or DOWN arrow keys on the controller; change the set point on the controller to a number lower than the current temperature reading to bring it into operating range. Then ignore the temperature readings on the controller and watch the voltage readings on the DC voltmeter only.

- a. UP arrow key – Decreases DC voltage
- b. DOWN arrow key – Increases DC voltage

- 11) Adjust slowly so that the drive has time to react. DC voltage will not change until the UP or DOWN key is released.
- 12) If final moisture content is within 1 or 2 points of target moisture, minor adjustments can be made while in automatic mode. Be cautious not to make too much change too often. Let the system have ample time to process and adjust. If the variance is too great or not consistent, it may be necessary to return to manual mode and establish a new set point.
- 13) Proportional Band (h.pb) – The proportional band is factory set for each model of dryer. It can be changed by pressing the ADVANCE key until reaching “h.pb” in the lower display. It can be adjusted up or down depending on what the moisture of the discharged grain is doing.
- a. **Decrease** PB if it seems the dryer isn’t reacting quickly enough to changes in incoming grain moisture.
 - b. **Increase** PB if it seems the dryer is reacting too quickly to changes in incoming grain moisture.
- Note: it is the moisture of your discharging grain over a period of time that is important. Do not make changes too soon because the system appears to be changing speeds too quickly. Sometimes it takes aggressive action to maintain the desired results.*
- 14) Moisture samples should be taken at regular intervals. At this time, a visual inspection of the dryer should be made, checking the temperature and feedroll operation. Make sure all columns are flowing by observing grain flow on each side.
- 15) For further information regarding the automatic metering system refer to Section 9, Sequence 7B.

GRAIN DRYER PERFORMANCE CHART
CHART # 1

DRYING CAPACITY WET
BPH PER 1000 BPH-RATED
CAPACITY ON YELLOW CORN

IN	MOISTURE OF DRIED GRAIN %								
	10	11	12	13	14	15	16	17	18
13	870	1200	1900	-	-	-	-	-	-
14	740	930	1250	-	-	-	-	-	-
15	640	780	1000	1550	-	-	-	-	-
16	550	690	850	1200	1900	-	-	-	-
17	500	600	730	960	1400	-	-	-	-
18	450	530	650	800	1100	1600	-	-	-
19	410	480	570	710	910	1250	1800	-	-
20	380	440	510	630	770	1000	1350	1900	-
21	360	410	480	560	690	880	1100	1450	1900
22	340	380	440	510	620	760	920	1150	1450
23	320	360	410	470	560	680	800	1000	1200
24	300	340	390	440	510	610	720	850	1000
25	-	320	370	410	480	560	640	740	870
26	-	-	350	390	440	510	590	670	770
27	-	-	340	370	420	480	540	610	700
28	-	-	320	360	400	450	500	570	630
29	-	-	-	350	390	430	480	530	590
30	-	-	-	340	380	420	460	510	560

PLENUM TEMP	F2	WET GRAIN TEMP	F3	GRAIN	F4
140 F	.46	20 F	.74	CORN	1.0
150 F	.50	30 F	.78	SOYBEANS	1.0
160 F	.55	40 F	.82	MILO	.9
170 F	.61	50 F	.86	WHEAT	.8
180 F	.69	60 F	.91		
190 F	.77	70 F	1.00		
200 F	.88				
210 F	1.00				

HOW TO USE CHARTS TO FIGURE YOUR CAPACITY

(DRYER RATED CAPACITY @ 20-15%)

$$\frac{\text{-----}}{1000} \times (\text{BPH IN CHART 1}) \times F2 \times F3 \times F4$$

DRY GRAIN UNLOADING RATE – DP AND DPSL SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL :		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.
D.C. VOLTS	RPM	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR
10.0	1.22	64.15	96.23	128.30	160.38	192.46	256.61
11.0	1.34	70.57	105.85	141.13	176.42	211.71	282.27
12.0	1.46	76.98	115.47	153.96	192.46	230.95	307.93
13.0	1.58	83.40	125.10	166.80	208.49	250.20	333.59
14.0	1.70	89.81	134.72	179.63	224.53	269.44	359.25
15.0	1.82	96.23	144.34	192.46	240.57	288.69	384.91
16.0	1.94	102.64	153.96	205.29	256.61	307.93	410.57
17.0	2.07	109.06	163.59	218.12	272.65	327.18	436.23
18.0	2.19	115.47	173.21	230.95	288.68	346.42	461.89
19.0	2.31	121.89	182.83	243.78	304.72	365.67	487.56
20.0	2.43	128.30	192.46	256.61	320.76	384.92	513.22
21.0	2.55	134.72	202.08	269.44	336.80	404.16	538.88
22.0	2.67	141.13	211.70	282.27	352.84	423.41	564.54
23.0	2.79	147.55	221.32	295.10	368.87	442.65	590.20
24.0	2.92	153.96	230.95	307.93	384.91	461.90	615.86
25.0	3.04	160.38	240.57	320.76	400.95	481.14	641.52
26.0	3.16	166.80	250.19	333.59	416.99	500.39	667.18
27.0	3.28	173.21	259.82	346.42	433.03	519.64	692.84
28.0	3.40	179.63	269.44	359.25	449.06	538.88	718.55
29.0	3.52	186.04	279.06	372.08	465.10	558.13	744.16
30.0	3.65	192.46	288.68	384.91	481.14	577.37	769.82
31.0	3.77	198.87	298.31	397.74	497.18	596.62	795.48
32.0	3.89	205.29	307.93	410.57	513.22	615.86	821.15
33.0	4.01	211.70	317.55	423.40	529.25	635.11	846.81
34.0	4.13	218.12	324.18	436.23	545.29	654.35	872.47
35.0	4.25	224.53	336.80	449.06	561.33	673.60	898.13
36.0	4.37	230.95	346.42	461.89	577.37	692.85	923.79
37.0	4.50	237.36	356.04	474.72	593.41	712.09	949.45
38.0	4.62	243.78	365.67	487.56	609.44	731.34	975.11
39.0	4.74	250.19	375.29	500.39	625.48	750.58	1000.77
40.0	4.86	256.61	384.91	513.22	641.52	769.83	1026.43

DRY GRAIN UNLOADING RATE – DP AND DPSL SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL :		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.
D.C. VOLTS	RPM	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR
41.0	4.98	263.02	394.53	526.05	657.56	789.07	1052.09
42.0	5.10	269.44	404.16	538.88	673.60	808.32	1077.75
43.0	5.22	275.85	413.78	551.71	689.63	827.56	1103.41
44.0	5.35	282.27	423.40	564.54	705.67	846.81	1129.08
45.0	5.47	288.68	433.03	577.37	721.71	866.06	1154.74
46.0	5.59	295.10	442.65	590.20	737.75	885.30	1180.40
47.0	5.71	301.51	452.27	603.03	753.79	904.55	1206.06
48.0	5.83	307.93	461.89	615.86	769.82	923.79	1231.72
49.0	5.95	314.34	471.52	628.69	785.86	943.04	1257.38
50.0	6.08	320.76	481.14	641.52	801.90	962.28	1283.04
51.0	6.20	327.18	490.76	654.35	817.94	981.53	1308.70
52.0	6.32	333.59	500.39	667.18	833.98	1000.78	1334.36
53.0	6.44	340.01	510.01	680.01	850.01	1020.02	1360.02
54.0	6.56	346.42	519.63	692.84	866.05	1039.27	1385.68
55.0	6.68	352.84	529.25	705.67	882.09	1058.51	1411.34
56.0	6.80	359.25	538.88	718.50	898.13	1077.76	1437.00
57.0	6.93	365.67	548.50	731.33	914.17	1097.00	1462.67
58.0	7.05	372.08	558.12	744.16	930.20	1116.25	1488.83
59.0	7.17	378.50	567.75	756.99	946.24	1135.49	1513.99
60.0	7.29	384.91	577.37	769.82	962.28	1154.74	1539.65
61.0	7.41	391.33	586.99	782.65	978.32	1173.99	1565.31
62.0	7.53	397.74	596.61	795.48	994.36	1193.23	1590.97
63.0	7.65	404.16	606.24	808.32	1010.39	1212.48	1616.63
64.0	7.78	410.57	615.86	821.15	1026.43	1231.72	1642.29
65.0	7.90	416.99	625.48	833.98	1042.47	1250.97	1667.95
66.0	8.02	423.40	635.10	846.81	1058.51	1270.21	1693.61
67.0	8.14	429.82	644.73	859.64	1074.55	1289.46	1719.27
68.0	8.26	436.23	654.35	872.47	1090.58	1308.75	1744.93
69.0	8.38	442.65	663.97	885.30	1106.62	1327.95	1770.60
70.0	8.51	449.06	673.60	898.13	1122.66	1347.20	1796.26

DRY GRAIN UNLOADING RATE – DP AND DPSL SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL :		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.
D.C. VOLTS	RPM	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR
71.0	8.63	455.48	683.22	910.96	1138.70	1366.44	1821.92
72.0	8.75	461.89	692.84	923.79	1154.74	1385.69	1847.58
73.0	8.87	468.31	702.46	936.62	1170.77	1404.93	1873.24
74.0	8.99	474.72	712.09	949.45	1186.81	1424.18	1898.90
75.0	9.11	481.14	721.71	962.28	1202.85	1443.42	1924.56
76.0	9.23	487.56	731.33	975.11	1218.89	1462.67	1950.22
77.0	9.36	493.97	740.96	987.94	1234.93	1481.92	1975.88
78.0	9.48	500.39	750.58	1000.77	1250.96	1501.16	2001.54
79.0	9.60	506.80	760.20	1013.60	1267.00	1520.41	2027.20
80.0	9.72	513.22	769.82	1026.43	1283.04	1539.65	2052.86
81.0	9.84	519.63	779.45	1039.26	1299.08	1558.90	2078.52
82.0	9.96	526.05	789.07	1052.09	1315.12	1578.14	2104.19
83.0	10.08	532.46	798.69	1064.92	1331.15	1597.39	2129.85
84.0	10.21	538.88	808.32	1077.75	1347.19	1616.63	2155.51
85.0	10.33	545.29	817.97	1090.58	1363.23	1635.88	2181.17
86.0	10.45	551.71	827.56	1103.41	1379.27	1655.13	2206.83
87.0	10.57	558.12	837.18	1116.24	1395.31	1674.37	2232.49
88.0	10.69	564.54	846.81	1129.08	1411.34	1693.62	2258.15
89.0	10.81	570.95	856.43	1141.91	1427.38	1712.86	2283.81
90.0	10.94	577.37	866.05	1154.74	1443.42	1732.11	2309.47

SPECIAL CHART: DRIVE SPROCKET: 4012

DRIVEN SPROCKET: 4032

MODEL	VOLT	(=)	RPM	DRY BU. / MIN.	DRY BU. / HR
10 FT.	1	(=)	.1215	.1069	6.4150
15 FT.	1	(=)	.1215	.1604	9.6230
20 FT.	1	(=)	.1215	.2138	12.8300
25 FT.	1	(=)	.1215	.2673	16.0380
30 FT.	1	(=)	.1215	.3208	19.2460
40 FT.	1	(=)	.1215	.4277	25.6610

DRY GRAIN UNLOADING RATE – DPX AND DPXSL SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL:		10FT.	15FT.	20FT.	25FT.	30FT.	40FT
D.C. VOLTS	RPM	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRU BU/HR	DRY BU/HR	DRY BU/HR
10.0	1.62	85.50	128.30	171.60	223.20	256.80	357.00
11.0	1.78	94.10	141.10	188.20	235.20	282.30	376.40
12.0	1.94	102.60	154.00	205.30	256.20	307.90	410.60
13.0	2.11	111.20	166.80	222.40	279.00	333.60	444.80
14.0	2.27	119.70	179.60	239.50	300.00	359.30	479.00
15.0	2.43	128.30	192.50	256.60	321.00	384.90	513.20
16.0	2.54	136.80	205.30	273.70	335.00	410.60	547.40
17.0	2.75	145.40	218.10	290.80	363.00	436.20	581.60
18.0	2.92	153.90	230.90	307.90	385.80	461.90	615.90
19.0	3.08	162.59	243.80	325.00	406.80	487.60	650.00
20.0	3.24	171.00	256.60	342.10	427.80	513.20	684.30
21.0	3.40	179.60	269.40	359.30	448.80	538.90	718.50
22.0	3.56	188.10	282.30	376.40	470.40	564.50	752.70
23.0	3.73	196.70	295.10	393.50	492.60	590.20	786.90
24.0	3.89	205.30	307.90	410.60	513.60	615.90	821.10
25.0	4.05	213.80	320.80	427.70	534.60	641.50	855.40
26.0	4.21	222.40	333.60	444.80	556.20	667.20	889.60
27.0	4.37	230.90	346.40	461.90	577.20	692.80	923.80
28.0	4.54	239.50	359.30	479.00	599.40	718.50	958.00
29.0	4.70	248.00	372.10	496.10	620.40	744.20	992.20
30.0	4.86	256.60	384.90	513.20	642.00	769.80	1026.40
31.0	5.02	265.10	397.70	530.30	663.00	795.50	1060.60
32.0	5.18	273.70	410.60	547.40	684.00	821.10	1094.90
33.0	5.35	282.20	423.40	564.50	706.20	846.80	1129.10
34.0	5.51	290.80	436.20	581.60	727.80	872.50	1163.30
35.0	5.67	299.30	449.10	598.80	748.80	898.10	1197.50
36.0	5.83	307.90	461.90	615.90	769.80	923.80	1231.70
37.0	5.99	316.40	474.70	633.00	790.80	949.40	1265.90
38.0	6.16	325.00	487.60	650.10	813.60	975.10	1300.10
39.0	6.32	333.60	500.40	667.20	834.60	1000.80	1334.40
40.0	6.48	342.10	513.20	684.30	855.60	1026.40	1368.60

DRY GRAIN UNLOADING RATE - DPX AND DPXSL SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL :		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.
D.C. VOLTS	RPM	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRU BU/HR	DRY BU/HR	DRY BU/HR
41.0	6.64	350.70	526.00	701.40	876.48	1052.10	1402.80
42.0	6.80	359.20	538.90	718.50	897.60	1077.80	1437.00
43.0	6.97	367.80	551.70	735.60	920.40	1103.40	1471.20
44.0	7.13	376.30	564.50	752.70	941.40	1129.10	1505.40
45.0	7.29	384.90	577.40	769.80	962.40	1154.70	1539.60
46.0	7.45	393.40	590.20	786.90	983.40	1180.40	1573.90
47.0	7.61	402.00	603.00	804.00	1005.00	1206.10	1608.10
48.0	7.78	410.50	615.90	821.10	1027.20	1231.70	1642.30
49.0	7.94	419.10	628.70	838.30	1048.20	1257.40	1676.50
50.0	8.10	427.60	641.50	855.40	1069.20	1283.00	1710.70
51.0	8.26	436.20	654.40	872.50	1090.80	1308.70	1744.90
52.0	8.42	444.80	667.20	889.60	1111.80	1334.40	1779.10
53.0	8.59	453.30	680.00	906.70	1134.00	1360.00	1813.40
54.0	8.75	461.90	692.80	923.80	1155.00	1385.70	1847.60
55.0	8.91	470.40	705.70	940.90	1176.60	1411.30	1881.80
56.0	9.07	479.00	718.50	958.00	1197.60	1437.00	1916.00
57.0	9.23	487.50	731.30	975.10	1218.60	1462.70	1950.20
58.0	9.40	496.10	744.20	992.20	1240.80	1488.30	1984.40
59.0	9.56	504.60	757.00	1009.30	1262.40	1514.00	2018.60
60.0	9.72	513.20	769.80	1026.40	1283.40	1539.60	2052.90
61.0	9.88	521.70	782.70	1043.50	1304.40	1565.30	2087.10
62.0	10.04	530.30	795.50	1060.60	1325.40	1591.00	2121.30
63.0	10.21	538.80	808.30	1077.80	1348.20	1616.60	2155.50
64.0	10.37	547.40	821.10	1094.90	1369.20	1642.30	2189.70
65.0	10.53	555.90	834.00	1112.00	1390.20	1668.00	2223.90
66.0	10.69	564.50	846.80	1129.10	1411.20	1693.60	2258.20
67.0	10.85	573.10	859.60	1146.20	1432.20	1719.30	2292.40
68.0	11.02	581.60	872.50	1163.30	1455.00	1744.90	2326.60
69.0	11.18	590.20	885.30	1180.40	1476.00	1770.60	2360.80
70.0	11.34	598.70	898.10	1197.50	1497.00	1796.30	2395.00

DRY GRAIN UNLOADING RATE - DPX AND DPXSL SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL:		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.
D.C. VOLTS	RPM	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRU BU/HR	DRY BU/HR	DRY BU/HR
71.0	11.50	607.30	911.00	1214.60	1518.00	1821.90	2429.20
72.0	11.66	615.80	923.80	1231.70	1539.60	1847.60	2463.40
73.0	11.83	624.40	936.60	1248.80	1561.80	1873.20	2497.70
74.0	11.99	632.90	949.40	1265.90	1582.80	1898.90	2531.90
75.0	12.15	641.50	962.30	1283.00	1603.08	1924.60	2566.10
76.0	12.31	650.00	975.10	1300.10	1625.40	1950.20	2600.30
77.0	12.47	658.60	987.90	1317.30	1646.40	1975.90	2634.50
78.0	12.64	667.10	1000.80	1334.40	1668.60	2001.50	2668.70
79.0	12.80	675.70	1013.60	1351.50	1689.60	2027.20	2702.90
80.0	12.96	684.30	1026.40	1368.60	1711.20	2052.90	2737.20
81.0	13.12	692.80	1039.30	1385.70	1732.20	2078.50	2771.40
82.0	13.28	701.40	1052.10	1402.80	1753.20	2104.20	2805.60
83.0	13.45	709.90	1064.90	1419.90	1775.00	2129.80	2839.80
84.0	13.61	718.50	1077.80	1437.00	1797.00	2155.50	2874.00
85.0	13.77	727.00	1090.60	1454.10	1818.00	2181.20	2908.20
86.0	13.93	735.60	1103.40	1471.20	1839.00	2206.80	2942.40
87.0	14.09	744.10	1116.20	1488.30	1860.00	2232.50	2976.70
88.0	14.26	752.70	1129.10	1505.40	1882.80	2258.20	3010.90
89.0	14.42	761.20	1141.90	1522.50	1903.80	2283.80	3045.10
90.0	14.58	769.80	1154.70	1539.60	1924.80	2309.50	3079.30

SPECIAL CHART: DRIVE SPROCKET: 4016

DRIVEN SPROCKET: 4032

MODEL	VOLT	(=)	RPM	DRY BU. / MIN.	DRY BU. / HR
10 FT.	1	(=)	.1620	.1426	8.5536
15 FT.	1	(=)	.1620	.2138	12.8304
20 FT.	1	(=)	.1620	.2851	17.1072
30 FT.	1	(=)	.1620	.4277	25.6608
40 FT.	1	(=)	.1620	.5702	34.2144

DRY GRAIN UNLOADING RATE - DPX4T AND DPX8T SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL :		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.	
D.C. RPM	BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRU BU/HR	DRY BU/HR	DRY	VOLTS
10.0	2.43	128.30	192.50	256.60	320.80	385.00	513.40	
11.0	2.67	141.13	211.75	282.26	352.88	423.50	564.74	
12.0	2.92	153.96	231.00	307.92	384.96	462.00	616.08	
13.0	3.16	166.79	250.25	333.58	417.04	500.50	667.42	
14.0	3.40	179.62	269.50	359.24	449.12	539.00	718.76	
15.0	3.65	192.45	288.75	384.90	481.20	577.50	770.10	
16.0	3.89	205.28	308.00	410.56	513.28	616.00	821.44	
17.0	4.13	218.11	327.25	436.22	545.36	654.50	872.78	
18.0	4.38	230.94	346.50	461.88	577.44	693.00	924.12	
19.0	4.62	243.77	365.75	487.54	609.52	731.50	975.46	
20.0	4.68	256.60	385.00	513.20	641.60	770.00	1026.80	
21.0	5.11	269.43	404.25	538.86	673.68	808.50	1078.14	
22.0	5.35	282.26	423.50	564.52	705.76	847.00	1129.48	
23.0	5.59	295.09	442.75	590.18	737.84	885.50	1180.82	
24.0	5.83	307.92	462.00	615.84	769.92	924.00	1232.16	
25.0	6.08	320.75	481.25	641.50	802.00	962.50	1283.50	
26.0	6.32	333.58	500.50	667.16	834.08	1001.00	1334.84	
27.0	6.56	346.41	519.75	692.82	866.16	1039.50	1386.18	
28.0	6.81	359.24	539.00	718.48	898.24	1078.00	1437.52	
29.0	7.05	372.07	558.25	744.14	930.32	1116.50	1488.86	
30.0	7.29	384.90	577.50	769.80	962.40	1155.00	1540.20	
31.0	7.51	397.73	596.75	795.46	994.48	1193.50	1591.54	
32.0	7.78	410.56	616.00	821.12	1026.56	1232.00	1642.88	
33.0	8.02	423.39	635.25	846.78	1058.64	1270.50	1694.22	
34.0	8.27	436.22	654.00	872.44	1090.72	1309.00	1745.56	
35.0	8.51	449.05	673.75	898.10	1122.80	1347.50	1796.90	
36.0	8.75	461.88	693.00	923.76	1154.88	1386.00	1848.24	
37.0	8.99	474.71	712.25	949.42	1186.96	1424.50	1899.58	
38.0	9.24	487.54	731.50	975.08	1219.04	1463.00	1950.92	
39.0	9.48	500.37	750.75	1000.74	1251.12	1501.50	2002.26	
40.0	9.72	513.20	770.00	1026.40	1283.20	1540.00	2053.60	

DRY GRAIN UNLOADING RATE - DPX4T AND DPX8T SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL :		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.	
D.C.	BU/HR	DRY	DRY	DRY	DRU	DRY	DRY	VOLTS
RPM		BU/HR	BU/HR	BU/HR	BU/HR	BU/HR		
41.0	9.97	526.03	789.25	1052.06	1315.28	1578.50	2104.94	
42.0	10.21	538.86	808.50	1077.72	1347.36	1617.00	2156.28	
43.0	10.45	551.69	827.75	1033.38	1379.44	1655.50	2207.62	
44.0	10.70	564.52	847.00	1129.04	1411.52	1694.00	2258.96	
45.0	10.94	577.35	866.25	1154.70	1443.60	1732.50	2310.30	
46.0	11.18	590.18	885.50	1180.36	1475.68	1771.00	2361.64	
47.0	11.43	603.01	904.75	1206.02	1507.76	1809.50	2412.98	
48.0	11.67	615.84	924.00	1231.68	1539.84	1848.00	2464.32	
49.0	11.91	628.67	943.25	1257.34	1571.92	1886.50	2515.66	
50.0	12.16	641.50	962.50	1283.00	1604.00	1925.00	2567.00	
51.0	12.40	654.33	981.75	1308.66	1636.08	1963.50	2618.34	
52.0	12.64	667.16	1001.00	1334.32	1668.16	2002.00	2669.68	
53.0	12.88	679.99	1020.25	1359.98	1700.24	2040.50	2721.02	
54.0	13.13	692.82	1039.50	1385.64	1732.32	2079.00	2772.36	
55.0	13.37	705.65	1058.75	1411.30	1764.40	2117.50	2823.70	
56.0	13.61	718.48	1078.00	1436.96	1796.48	2156.00	2875.04	
57.0	13.86	731.31	1097.25	1462.62	1828.56	2194.50	2926.38	
58.0	14.10	744.14	1116.50	1488.28	1860.64	2233.00	2977.72	
59.0	14.34	756.97	1135.75	1513.94	1892.72	2271.50	3029.06	
60.0	14.59	769.80	1155.00	1539.60	1924.80	2310.00	3080.40	
61.0	14.83	782.63	1174.25	1565.26	1956.88	2348.50	3131.74	
62.0	15.07	795.46	1193.50	1590.92	1988.96	2387.00	3183.08	
63.0	15.32	808.29	1212.75	1616.58	2021.04	2425.50	3234.42	
64.0	15.56	821.12	1232.00	1642.24	2053.12	2464.00	3285.76	
65.0	15.80	833.95	1251.25	1667.90	2085.20	2502.50	3337.10	
66.0	16.04	846.78	1270.50	1693.56	2117.28	2541.00	3388.44	
67.0	16.29	859.61	1289.75	1719.22	2149.36	2579.50	3439.78	
68.0	16.53	872.44	1309.00	1744.88	2181.44	2618.00	3491.12	
69.0	16.77	885.27	1328.25	1770.54	2213.52	2656.50	3542.46	
70.0	17.02	898.10	1347.50	1796.20	2245.60	2695.00	3593.80	

DRY GRAIN UNLOADING RATE - DPX4T AND DPX8T SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL :	10FT.	15FT.	20FT.	25FT.	30FT.	40FT.	
D.C. RPM	BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRU BU/HR	DRY BU/HR	DRY VOLTS
71.0	17.26	910.93	1366.75	1821.86	2277.68	2733.50	3645.14
72.0	17.50	923.76	1386.00	1847.52	2309.76	2772.00	3696.48
73.0	17.75	936.59	1405.25	1873.18	2341.84	2810.50	3747.82
74.0	17.99	949.42	1424.50	1898.84	2373.92	2849.00	3799.16
75.0	18.23	962.25	1443.75	1924.50	2406.00	2887.50	3850.50
76.0	18.48	975.08	1463.00	1950.16	2438.08	2926.00	3901.84
77.0	18.72	987.91	1482.25	1975.82	2470.16	2964.50	3953.18
78.0	18.96	1000.74	1501.50	2001.48	2502.24	3003.00	4004.52
79.0	19.20	1013.57	1520.75	2027.14	2534.32	3041.50	4055.86
80.0	19.45	1026.40	1540.00	2052.80	2566.40	3080.00	4107.20
81.0	19.69	1039.23	1559.25	2078.46	2598.48	3118.50	4158.54
82.0	19.93	1052.06	1578.50	2104.12	2630.56	3157.00	4209.88
83.0	20.18	1064.89	1597.75	2129.78	2662.64	3195.50	4261.22
84.0	20.42	1077.72	1617.00	2155.44	2694.72	3234.00	4312.56
85.0	20.66	1090.55	1636.25	2181.10	2726.80	3272.50	4363.90
86.0	20.91	1103.38	1655.50	2206.76	2758.88	3311.00	4415.24
87.0	21.15	1116.21	1674.75	2232.42	2790.96	3349.50	4466.58
88.0	21.39	1129.04	1694.00	2258.08	2823.04	3388.00	4517.92
89.0	21.64	1141.87	1713.25	2283.74	2855.12	3426.50	4569.26
90.0	21.88	1154.70	1732.50	2309.40	2887.20	3465.00	4620.60

SPECIAL CHART: DRIVE SPROCKET: 4024 DRIVEN SPROCKET: 4032

MODEL	VOLT	(=)	RPM	DRY BU. / MIN.	DRY BU. / HR
10 FT.	1	(=)	.2431	.2139	12.83
15 FT.	1	(=)	.2431	.3209	19.25
20 FT.	1	(=)	.2431	.4278	25.66
25 FT.	1	(=)	.2431	.5348	32.08
30 FT.	1	(=)	.2431	.6418	38.50
40 FT.	1	(=)	.2431	.8557	51.34

DRY GRAIN UNLOADING RATE – DPX12T & DPX16GT SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL :		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.
D.C. VOLTS	RPM	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR
0.0	2.63	139.00	208.50	278.00	347.60	417.10	556.10
11.0	2.90	152.90	229.35	305.80	382.36	458.81	611.71
12.0	3.16	166.80	250.20	333.60	417.12	500.52	667.32
13.0	3.42	180.70	271.05	361.40	451.88	542.23	722.93
14.0	3.69	194.60	291.90	389.20	486.64	583.94	778.54
15.0	3.95	208.50	312.75	417.00	521.40	625.65	834.15
16.0	4.21	222.40	333.60	444.80	556.16	667.36	889.76
17.0	4.48	236.30	354.45	472.60	590.92	709.07	945.37
18.0	4.74	250.20	375.30	500.40	625.68	750.78	1000.98
19.0	5.00	264.10	396.15	528.20	660.44	792.49	1056.59
20.0	5.27	278.00	417.00	556.00	695.20	834.20	1112.20
21.0	5.53	291.90	437.85	583.80	729.96	875.91	1167.81
22.0	5.79	305.80	458.70	611.60	764.72	917.62	1223.42
23.0	6.06	319.70	479.55	639.40	799.48	959.33	1279.03
24.0	6.32	333.60	500.40	667.20	834.24	1001.04	1334.64
25.0	6.58	347.50	521.25	695.00	869.00	1042.75	1390.25
26.0	6.85	361.40	542.10	722.80	903.76	1084.46	1445.86
27.0	7.11	375.30	562.95	750.60	938.52	1126.17	1501.47
28.0	7.37	389.20	583.80	778.40	973.28	1167.88	1557.08
29.0	7.64	403.10	604.65	806.20	1008.04	1209.59	1612.69
30.0	7.90	417.00	625.50	834.00	1042.80	1251.30	1668.30
31.0	8.16	430.90	646.35	861.80	1077.56	1293.01	1723.91
32.0	8.43	444.80	667.20	889.60	1112.32	1334.72	1779.52
33.0	8.69	458.70	688.05	917.40	1147.08	1376.43	1835.13
34.0	8.95	472.60	708.90	945.20	1181.84	1418.14	1890.74
35.0	9.22	486.50	729.75	973.00	1216.60	1459.85	1946.35
36.0	9.48	500.40	750.60	1000.80	1251.36	1501.56	2001.96
37.0	9.74	514.30	771.45	1028.60	1286.12	1543.27	2057.57
38.0	10.01	528.20	792.30	1056.40	1320.88	1584.98	2113.18
39.0	10.27	542.10	813.15	1084.20	1355.64	1626.69	2168.79
40.0	10.53	556.00	834.00	1112.00	1390.40	1668.40	2224.40

DRY GRAIN UNLOADING RATE – DPX12T & DPX16GT SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL:		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.
D.C. VOLTS	RPM	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR	DRY BU/HR
41.0	10.80	569.90	854.85	1139.80	1425.16	1710.11	2280.01
42.0	11.06	583.80	875.70	1167.60	1459.92	1751.82	2335.62
43.0	11.32	597.70	896.55	1195.40	1494.68	1793.53	2391.23
44.0	11.59	611.60	917.40	1223.20	1529.44	1835.24	2446.84
45.0	11.85	625.50	938.25	1251.00	1564.20	1876.95	2502.45
46.0	12.11	639.40	959.10	1278.80	1598.96	1918.66	2558.06
47.0	12.38	653.30	979.95	1306.60	1633.72	1960.37	2613.67
48.0	12.64	667.20	1000.80	1334.40	1668.48	2002.08	2669.28
49.0	12.90	681.10	1021.65	1362.20	1703.24	2043.79	2724.89
50.0	13.17	695.00	1042.50	1390.00	1738.00	2085.50	2780.50
51.0	13.43	708.90	1063.35	1417.80	1772.76	2127.21	2836.11
52.0	13.69	722.80	1084.20	1445.60	1807.52	2168.92	2891.72
53.0	13.95	736.70	1105.05	1473.40	1842.28	2210.63	2947.33
54.0	14.22	750.60	1125.90	1501.20	1877.04	2252.34	3002.94
55.0	14.48	764.50	1146.75	1529.00	1911.80	2294.05	3058.55
56.0	14.74	778.40	1167.60	1556.80	1946.56	2335.76	3114.16
57.0	15.01	792.30	1188.45	1584.60	1981.32	2377.47	3169.77
58.0	15.27	806.20	1209.30	1612.40	2016.08	2419.18	3225.38
59.0	15.53	820.10	1230.15	1640.20	2050.84	2460.89	3280.99
60.0	15.80	834.00	1251.00	1668.00	2085.60	2502.60	3336.60
61.0	16.06	847.90	1271.85	1695.80	2120.36	2544.31	3392.21
62.0	16.32	861.80	1292.70	1723.60	2155.12	2586.02	3447.82
63.0	16.59	875.70	1313.55	1751.40	2189.88	2627.73	3503.43
64.0	16.85	889.60	1334.40	1779.20	2224.64	2669.44	3559.04
65.0	17.11	903.50	1355.25	1807.00	2259.40	2711.15	3614.65
66.0	17.38	917.40	1376.10	1834.80	2294.16	2752.86	3670.26
67.0	17.64	931.30	1396.95	1862.60	2328.92	2794.57	3725.87
68.0	17.90	945.20	1417.80	1890.40	2363.68	2836.28	3781.48
69.0	18.17	959.10	1438.65	1918.20	2398.44	2877.99	3837.09
70.0	18.43	973.00	1459.50	1946.00	2433.20	2919.70	3892.70

DRY GRAIN UNLOADING RATE – DPX12T & DPX16GT SERIES DRYERS

D.C. VOLTS = DRY UNLOAD RATE PER HOUR

MODEL:		10FT.	15FT.	20FT.	25FT.	30FT.	40FT.
D.C.		DRY	DRY	DRY	DRY	DRY	DRY
VOLTS	RPM	BU/HR	BU/HR	BU/HR	BU/HR	BU/HR	BU/HR
71.0	18.69	986.90	1480.35	1973.80	2467.96	2961.41	3948.31
72.0	18.96	1000.80	1501.20	2001.60	2502.72	3003.12	4003.92
73.0	19.22	1014.70	1522.05	2029.40	2537.48	3044.83	4059.53
74.0	19.48	1028.60	1542.90	2057.20	2572.24	3086.54	4115.14
75.0	19.75	1042.50	1563.75	2085.00	2607.00	3128.25	4170.75
76.0	20.01	1056.40	1584.60	2112.80	2641.76	3169.96	4226.36
77.0	20.27	1070.30	1605.45	2140.60	2676.52	3211.67	4281.97
78.0	20.54	1084.20	1626.30	2168.40	2711.28	3253.38	4337.58
79.0	20.80	1098.10	1647.15	2196.20	2746.04	3295.09	4393.19
80.0	21.06	1112.00	1668.00	2224.00	2780.80	3336.80	4448.80
81.0	21.33	1125.90	1688.85	2251.80	2815.56	3378.51	4504.41
82.0	21.59	1139.80	1709.70	2279.60	2850.32	3420.22	4560.02
83.0	21.85	1153.70	1730.55	2307.40	2885.08	3461.93	4615.63
84.0	22.12	1167.60	1751.40	2335.20	2919.84	3503.64	4671.24
85.0	22.38	1181.50	1772.25	2363.00	2954.60	3545.35	4726.85
86.0	22.64	1195.40	1793.10	2390.80	2989.36	3587.06	4782.46
87.0	22.91	1209.30	1813.95	2418.60	3024.12	3628.77	4838.07
88.0	23.17	1223.20	1834.80	2446.40	3058.88	3670.48	4893.68
89.0	23.43	1237.10	1855.65	2474.20	3093.64	3712.19	4949.29
90.0	23.70	1251.00	1876.50	2502.00	3128.40	3753.90	5004.90

SPECIAL CHART: DRIVE SPROCKET: 4026 DRIVEN SPROCKET: 4032

MODEL	VOLT	(=)	RPM	DRY BU. / MIN.	DRY BU. / HR
10 FT.	1	(=)	.2633	.2317	13.90
15 FT.	1	(=)	.2633	.3476	20.85
20 FT.	1	(=)	.2633	.4634	27.80
25 FT.	1	(=)	.2633	.5793	34.76
30 FT.	1	(=)	.2633	.6951	41.71
40 FT.	1	(=)	.2633	.9268	55.61

Alarm, Limit, Indication & Error Messages

Indication	Description	Possible Causes	Corrective Action
Alarm won't clear or reset	Alarm will not clear or reset with keypad or digital input	- Alarm latching is active - Alarm set to incorrect output - Alarm is set to incorrect source - Sensor input is out of alarm set point range - Alarm set point is incorrect - Alarm is set to incorrect type - Digital input function is incorrect	- Reset alarm when process is within range or disable latching - Set output to correct alarm source instance - Set alarm source to correct input instance - Correct cause of sensor input out of alarm range - Set alarm set point to correct trip point - Set alarm to correct type: process, deviation or power - Set digital input function and source instance
Alarm won't occur	Alarm will not activate output	- Alarm silencing is active - Alarm blocking is active - Alarm is set to incorrect output - Alarm is set to incorrect source - Alarm set point is incorrect - Alarm is set to incorrect type	- Disable alarm silencing, if required - Disable alarm blocking, if required - Set output to correct alarm source instance - Set alarm source to correct input instance - Set alarm set point to correct trip point - Set alarm to correct type: process, deviation or power
[ALF] Alarm Error [ALF2] [ALF3] [ALF4]	Alarm state cannot be determined due to lack of sensor input	- Sensor improperly wired or open - Incorrect setting of sensor type - Calibration corrupt	- Correct wiring or replace sensor - Match setting to sensor used - Check calibration of controller
[ALL] Alarm Low [ALL2] [ALL3] [ALL4]	Sensor input below low alarm set point	- Temperature is less than alarm set point - Alarm is set to latching and an alarm occurred in the past - Incorrect alarm set point - Incorrect alarm source	- Check cause of under temperature - Clear latched alarm - Establish correct alarm set point - Set alarm source to proper setting
[ALH] Alarm High [ALH2] [ALH3] [ALH4]	Sensor input above high alarm set point	- Temperature is greater than alarm set point - Alarm is set to latching and an alarm occurred in the past - Incorrect alarm set point - Incorrect alarm source	- Check cause of over temperature - Clear latched alarm - Establish correct alarm set point - Set alarm source to proper setting
[EPI] Error Input	Sensor does not provide a valid signal to controller	- Sensor improperly wired or open - Incorrect setting of sensor type - Calibration corrupt	- Correct wiring or replace sensor - Match setting to sensor used - Check calibration of controller

 Loop Open Error	Open Loop Detect is active and the process value did not deviate by a user-selected value in a user specified period.	• Setting of Open Loop Detect Time incorrect • Setting of Open Loop Detect Deviation incorrect • Thermal loop is open • Open Loop Detect function not required but activated	• Set correct Open Loop Detect Time for application • Set correct Open Loop Deviation value for application • Determine cause of open thermal loop: misplaced sensors, load failure, loss of power to load, etc. • Deactivate Open Loop Detect feature
 Loop Reversed Error	Open Loop Detect is active and the process value is headed in the wrong direction when the output is activated based on deviation value and user-selected value.	• Setting of Open Loop Detect Time incorrect • Setting of Open Loop Detect Deviation incorrect • Output programmed for incorrect function • Thermocouple sensor wired in reverse polarity	• Set correct Open Loop Detect Time for application • Set correct Open Loop Deviation value for application • Set output function correctly • Wire thermocouple correctly, (red wire is negative)
 Ramping 1	Controller is ramping to new set point	• Ramping feature is activated	• Disable ramping feature if not required
 Autotuning 1	Controller is autotuning the control loop	• User started the autotune function • Digital input is set to start autotune	• Wait until autotune completes or disable autotune feature • Set digital input to function other than autotune, if desired
No heat/cool action	Output does not activate load	• Output function is incorrectly set • Control mode is incorrectly set • Output is incorrectly wired • Load, power or fuse is open • Control set point is incorrect • Incorrect controller model for application	• Set output function correctly • Set control mode appropriately (Open vs Closed Loop) • Correct output wiring • Correct fault in system • Set control set point in appropriate control mode and check source of set point: remote, idle, profile, closed loop, open loop • Obtain correct controller model for application
No Display	No display indication or LED illumination	• Power to controller is off • Fuse open • Breaker tripped • Safety interlock switch open • Separate system limit control activated • Wiring error • Incorrect voltage to controller	• Turn on power • Replace fuse • Reset breaker • Close interlock switch • Reset limit • Correct wiring issue • Apply correct voltage, check part number
No Serial Communication	Cannot establish serial communications with the controller	• Address parameter incorrect • Incorrect protocol selected • Baud rate incorrect • Parity incorrect • Wiring error • EIA-485 converter issue • Incorrect computer or PLC communications port • Incorrect software setup • Termination resistor may be required	• Set unique addresses on network • Match protocol between devices • Match baud rate between devices • Match parity between devices • Correct wiring issue • Check settings or replace converter • Set correct communication port • Correct software setup to match controller • Place 120 Ω resistor across EIA-485 on last controller

Indication	Description	Possible Causes	Corrective Action
Process doesn't control to set point	Process is unstable or never reaches set point	• Controller not tuned correctly • Control mode is incorrectly set • Control set point is incorrect	• Perform autotune or manually tune system • Set control mode appropriately (Open vs Closed Loop) • Set control set point in appropriate control mode and check source of set point: remote, idle, profile, closed loop, open loop
Temperature runaway	Process value continues to increase or decrease past set point.	• Controller output incorrectly programmed • Thermocouple reverse wired • Controller output wired incorrectly • Short in heater • Power controller connection to controller defective • Controller output defective	• Verify output function is correct (heat or cool) • Correct sensor wiring (red wire negative) • Verify and correct wiring • Replace heater • Replace or repair power controller • Replace or repair controller
 Device Error	Controller displays internal malfunction message at power up.	• Controller defective	• Replace or repair controller
Menus inaccessible	Unable to access  ,  ,  or  menus or particular prompts in Home Page	• Security set to incorrect level • Digital input set to lockout keypad • Custom parameters incorrect	• Check lockout setting in Factory Page • Change state of digital input • Change custom parameters in Factory Page
EZ-Key doesn't work	EZ-Key does not activate required function	• EZ-Key function incorrect • EZ-Key function instance not correct • Keypad malfunction	• Verify EZ-Key function in Setup Menu • Check that the function instance is correct • Replace or repair controller

Clearing Errors & Limit Messages

To clear error or limit messages press the RESET key. You may also turn main panel power “OFF” and back “ON” again. Error or Limit messages will not clear until the cause or reason for the error has been addressed.

Watlow EZ-ZONE Moisture Controller - Configuration Record

Operations Page



To reach the Operations page hold the "up" and "down" arrow keys together for **3 seconds**.

Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
RI					Analog Input
		Pin	**	**	View the process value
		IEr	**	**	View the cause of the most recent error
		ICH	0	0	Defines calibration offset
Mon					Monitor
		CPr	**	**	View the active control mode
		CPf	**	**	View the current cool output level
		CSP	**	**	View the set point currently in effect
		PwA	**	**	View the current filtered process value using the control input
Loop					Loop
		CPr	Auto	Auto	Selects the method that this loop will use to control
		ALSP	90	90	Defines the the setpoint autotune will use as % of current setpoint
		Aut	no	no	Initiates the autotune process
		CSP	75	75	Defines the setpoint the controller will use in PID funtion
		idS	75	115	Defines a new PID setpoint if high limit is reached
		CPb	25	*55	Defines the proportianl band for the cool output
		ti	180	0	Defines the PID intergral for the output
		td	0	0	Defines the PID derivative time for the output
		db	0	0	Defines the offset to the proportional band
		oSP	0	-270	Defines a fixed level of output power when in manual mode
ALP1					Alarm 1
	1	ALo	320	320	Defines the low range of alarm instance
		AHi	3000	3000	Defines the high range of the alarm instance
2					Alarm 2
		ALo	320	320	Defines the low range of alarm instance
		AHi	3000	3000	Defines the high range of the alarm instance
3					Alarm 3
		ALo	320	320	Defines the low range of alarm instance
		AHi	3000	3000	Defines the high range of the alarm instance
4					Alarm 4
		ALo	320	320	Defines the low range of alarm instance
		AHi	3000	3000	Defines the high range of the alarm instance

Watlow EZ-ZONE Moisture Controller - Configuration Record

Setup Page



To reach the Setup page hold the "up" and "down" arrow keys together for **6 seconds**.

Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
Analog Input					
Hi		SEN	EE	rD.1H	Selects the type of sensor used
		rEL	2	3	Selects the leads in sensor
		FiL	05	10	Filters erratic signal, for smoother PID calculations
		IEr	oFF	oFF	Forces manual clear of input errors
		dEC	0	00	Selects precision of displayed units
PID Loop					
Loop		hAG	Pid	oFF	Selects the heat control method
		LAG	oFF	Pid	Selects the cool control method
		CCr	oFF	oFF	Enables or disables cool output curve
		tEUn	no	no	Enables or disable TRU-TUNE+ adaptive tune automatically
		tAGr	CrIt	CrIt	Selects the aggressiveness of the autotune function
		UFR	USER	rTRn	Selects what output will do when user switches to manual mode
		FRIL	USER	rTRn	Selects what output will do when an input error switches control to manual mode
		rTRn	00	-270	Defines the default manual output power if user switches control or fault
		LdE	no	no	Enables or disables open-loop detection feature to monitor closed-loop operations
		rP	oFF	oFF	Selects when controller will ramp to setpoint
		LSP	-1999	00	Defines the lower range of the PID setpoint (temperature in automatic mode)
		hSP	9999	3000	Defines the upper range of the PID setpoint (temperature in automatic mode)
		SPLo	-100	-100	Defines the lower range of the PID setpoint (% output in manual mode)
		SPHi	100	100	Defines the upper range of the PID setpoint (% output in manual mode)
Output					
oEPl		oEY	uolt	uolt	Selects the type of output
		Fn	hERt	CoOL	Selects which function will drive output
		Fi	1	1	Selects the instance of the function selected above
		SLo	000	000	Defines the lower range of the scale for the universal process output
		Shi	1000	800	Defines the upper range of the scale for the universal process output
		oLo	0	0	Defines the low power scale, output will never be less than the value specified
		oHi	100	100	Defines the high power scale, output will never be less than the value specified
		oCR	00	00	Defines an offset value to the process output
Alarm 1					
ALP1	1	ALY	oFF	oFF	Selects whether the alarm trigger is a fixed value or will track set point
Alarm 2					
	2	ALY	oFF	oFF	Selects whether the alarm trigger is a fixed value or will track set point
Alarm 3					
	3	ALY	oFF	oFF	Selects whether the alarm trigger is a fixed value or will track set point
Alarm 4					
	4	ALY	oFF	oFF	Selects whether the alarm trigger is a fixed value or will track set point
Function					
Fun		LEu	h19h	h19h	Selects the state in which the EZ key is in when powered up
		Fn	nonE	nonE	Selects the function of the EZ key
		Fi	0	0	Selects which instance the EZ key will affect
Global					
GLbL		CF	F	F	Selects the unit of measurement
		ACLF	60	60	Selects the AC line frequency
Communications					
CoP1		AdS	1	1	Sets the network address of this controller
		CF	F	F	Selects UOM in which this communications channel will display
		nUS	YES	YES	Determines whether all values written to control will be saved in EEPROM

Watlow EZ-ZONE Moisture Controller - Configuration Record

Factory Page



To reach the Factory page hold the "RESET" and "Advance" arrow keys together for **6 seconds**.

Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
CUST	1				Custom 1
		PAR	ACPU	ACPU	Defines custom parameter to home page
	2				Custom 2
		PAR	ACSP	ACSP	Defines custom parameter to home page
	3				Custom 3
		PAR	ACPU	CP7	Defines custom parameter to home page
	4				Custom 4
		PAR	ACSP	CPb	Defines custom parameter to home page
	5				Custom 5
		PAR	CP7	CPc	Defines custom parameter to home page
	6				Custom 6
		PAR	hPr	nonE	Defines custom parameter to home page
	7				Custom 7
		PAR	CPc	nonE	Defines custom parameter to home page
	8				Custom 8
		PAR	RUt	nonE	Defines custom parameter to home page
	9				Custom 9
		PAR	idLE	nonE	Defines custom parameter to home page
	10				Custom 10
		PAR	CP7	nonE	Defines custom parameter to home page
	11				Custom 11
		PAR	hPr	nonE	Defines custom parameter to home page
	12				Custom 12
		PAR	CPc	nonE	Defines custom parameter to home page
	13				Custom 13
		PAR	RUt	nonE	Defines custom parameter to home page
	14				Custom 14
		PAR	idLE	nonE	Defines custom parameter to home page
	15				Custom 15
		PAR	nonE	nonE	Defines custom parameter to home page
	16				Custom 16
		PAR	nonE	nonE	Defines custom parameter to home page
	17				Custom 17
		PAR	nonE	nonE	Defines custom parameter to home page
	18				Custom 18
		PAR	nonE	nonE	Defines custom parameter to home page
	19				Custom 19
		PAR	nonE	nonE	Defines custom parameter to home page
	20				Custom 20
		PAR	nonE	nonE	Defines custom parameter to home page
LoC					Lock
		LoCo	2	2	Changes the security level of the operations page
		PRSE	oFF	oFF	Enables or disables security features
		rLoC	5	5	Sets the read security clearance level
d IRE					
		Pn	**	**	Part number of device
		rEu	**	**	Software revision number
		SbLd	**	**	Software build number

Menu	Instance	Parameter	Factory Setting	DELUX Setting	Parameter Description
		Sn	**	**	Serial number of device
		dAtE	**	**	Date of manufacture
		USr.r	<i>nonE</i>	<i>nonE</i>	Restore user/default settings
		USr.S	<i>nonE</i>	<i>nonE</i>	Save current user settings
		CLed	<i>both</i>	<i>both</i>	Turns communications LED on or off for selected ports
		ZonE	<i>on</i>	<i>on</i>	Turns zone LED on or off based on selection
		chAn	<i>on</i>	<i>on</i>	Turns channel LED on or off based on selection
		dPrS	<i>2</i>	<i>2</i>	Defines the number of display pairs
CRL					Calibration
		rAw	**	**	View the raw electrical value for this input in units of sensor
		ELLo	<i>1.000</i>	<i>1.000</i>	Defines the value to calibrate the low end of the input range
		ELLoS	<i>0.000</i>	<i>0.000</i>	Defines the value to calibrate the low end of the output range
		ELoS	<i>1.000</i>	<i>1.000</i>	Defines the value to calibrate the slope of the output value

SYSTEM OPERATION

1. **A CLEAN DRYER IS AN EFFICIENT DRYER. THOROUGH INSPECTION AND CLEANING, IF NECESSARY, OF THE PLENUM HEAT CHAMBER AND VACUUM COOLING CHAMBER IS RECOMMENDED EVERY 24 HOURS OF OPERATION.** INSTALL BURNER COVERS PROVIDED WITH DRYER BEFORE CLEANING TO REDUCE AMOUNT OF DUST AND FOREIGN MATERIAL FALLING INTO FAN HUBS AND BURNERS. CLEAN SCREENS ON INSIDE OF PLENUM HEAT CHAMBER, THEN REMOVE DUST AND FOREIGN MATERIAL FROM PLENUM FLOOR. CHECK THE OUTSIDE SCREENS OF THE COOLING SECTION AND CLEAN IF NECESSARY. INSPECT AND CLEAN COOLING CHAMBER IF NECESSARY. THE AREA AROUND DRYER SHOULD ALSO BE KEPT CLEAN.
2. FOR BEST CAPACITY, FRESH-AIR DOORS SHOULD BE OPENED TO THE MAXIMUM OPENING THAT ACHIEVES THE DESIRED DISCHARGE GRAIN TEMPERATURE. IF THE GRAIN IS WARMER THAN DESIRED AS IT DISCHARGES FROM THE DRYER, THE DOOR OPENINGS MAY BE DECREASED UNTIL DESIRED GRAIN TEMPERATURE IS ACHIEVED. THE GREATEST FUEL ECONOMY OCCURS WHEN FRESH-AIR DOORS ARE SET TO COOL THE GRAIN, THEREFORE RECAPTURING THE HEAT FROM THE COOLING PROCESS. **NEVER CLOSE TO LESS THAN A ONE (1) INCH OPENING DURING OPERATION. ALL DOORS SHOULD BE SET WITH APPROXIMATELY THE SAME SIZE OPENING.**

ALL FRESH-AIR DOORS SHOULD BE CLOSED AT THE END OF EACH DRYING SEASON.
3. **FUEL SUPPLY TO DRYER SHOULD BE "SHUT OFF" AFTER EACH DRYING SEASON.**
4. **THE MASTER CIRCUIT BREAKER WHICH SUPPLIES POWER FOR ALL DRYER OPERATIONS SHOULD BE "OFF" WHEN SERVICING AND CLEANING DRYER.**
5. WHEN A DRYER HAVING MORE THAN ONE(1) FAN MOTOR IS STARTED, THERE IS A 3 TO 4 SECOND DELAY BETWEEN EACH MOTOR. THIS DELAY IS TO MINIMIZE STARTING LOAD. AFTER ALL FANS ARE STARTED, POWER IS APPLIED TO THE PURGE TIMER.
6. THE 60 SECOND PURGE CYCLE ASSURES THAT A FLAME CANNOT BE IGNITED BEFORE THE AIR IN THE PLENUM CHAMBER HAS BEEN THOROUGHLY PURGED OF GAS. AT THE END OF THE 60 SECOND PURGE CYCLE, A BURNER READY LIGHT WILL APPEAR AND THE BURNER(S) CAN BE STARTED.
7. IF FLAME IS NOT DETECTED IN FIFTEEN(15) SECONDS, THE FLAME CONTROL WILL SHUTDOWN ALL SYSTEMS, INCLUDING THE PANEL POWER INTERLOCK. IT WILL THEN BE NECESSARY TO RESTART COMPLETE SYSTEM.
8. THE BURNER(S) NOW BRINGS THE PLENUM TEMPERATURE TO DESIRED THERMOSTAT SETTING. THE TEMPERATURE CONTROLLER WILL MODULATE THE FUEL SUPPLY TO THE BURNER(S) TO MAINTAIN TEMPERATURE AT SET POINT. THIS PREVENTS OVERHEATING OF THE PLENUM CHAMBER **(CHECK HIGH LIMIT SETTING BEFORE EACH DRYING SEASON)**.
9. **PLENUM TEMPERATURE THERMOSTAT AND "MOISTURE CONTROL THERMOSTAT" SETTINGS WILL VARY ACCORDING TO THE TYPE OF GRAIN BEING DRIED.**
10. **THE MOISTURE SYSTEM BECOMES FULLY AUTOMATIC AFTER INITIAL CALIBRATION. AS PERCENT OF MOISTURE IN THE GRAIN VARIES, SO DOES THE SPEED OF DISCHARGE. HIGHER MOISTURE RESULTS IN LOWER EXHAUST TEMPERATURE AND DECREASES DISCHARGE SPEED. LOWER MOISTURE RESULTS IN HIGHER EXHAUST TEMPERATURE AND INCREASES DISCHARGE SPEED.**

GRAIN DRYER PERFORMANCE CHART
CHART # 1

DRYING CAPACITY WET
BPH PER 1000 BPH-RATED
CAPACITY ON YELLOW CORN

IN	MOISTURE OF DRIED GRAIN %								
	10	11	12	13	14	15	16	17	18
13	870	1200	1900	-	-	-	-	-	-
14	740	930	1250	-	-	-	-	-	-
15	640	780	1000	1550	-	-	-	-	-
16	550	690	850	1200	1900	-	-	-	-
17	500	600	730	960	1400	-	-	-	-
18	450	530	650	800	1100	1600	-	-	-
19	410	480	570	710	910	1250	1800	-	-
20	380	440	510	630	770	1000	1350	1900	-
21	360	410	480	560	690	880	1100	1450	1900
22	340	380	440	510	620	760	920	1150	1450
23	320	360	410	470	560	680	800	1000	1200
24	300	340	390	440	510	610	720	850	1000
25	-	320	370	410	480	560	640	740	870
26	-	-	350	390	440	510	590	670	770
27	-	-	340	370	420	480	540	610	700
28	-	-	320	360	400	450	500	570	630
29	-	-	-	350	390	430	480	530	590
30	-	-	-	340	380	420	460	510	560

PLENUM TEMP	F2	WET GRAIN TEMP	F3	GRAIN	F4
140 F	.46	20 F	.74	CORN	1.0
150 F	.50	30 F	.78	SOYBEANS	1.0
160 F	.55	40 F	.82	MILO	.9
170 F	.61	50 F	.86	WHEAT	.8
180 F	.69	60 F	.91		
190 F	.77	70 F	1.00		
200 F	.88				
210 F	1.00				

HOW TO USE CHARTS TO FIGURE YOUR CAPACITY

(DRYER RATED CAPACITY @ 20-15%)
----- X (BPH IN CHART 1) X F2 X F3 X F4
1000

GRAIN SHRINKAGE TABLE

SHRINKAGE WHEN GRAIN IS DRIED TO THESE LEVELS

INITIAL MOISTURE PERCENT	12.0	12.5%	13.0%	13.5%	14.0%	14.5%	15.0%	15.5%	16.0%	16.5%	17.0%	17.5%	18.0%	18.5%	19.0%
	(PERCENT OF SHRINKAGE)														
15.5	4.48	3.93	3.37	2.81	2.24	1.67	1.09	-	-	-	-	-	-	-	-
16.0	5.05	4.50	3.95	3.39	2.83	2.25	1.68	1.09	-	-	-	-	-	-	-
16.5	5.61	5.07	4.52	3.97	3.41	2.84	2.26	1.68	1.10	-	-	-	-	-	-
17.0	6.18	5.64	5.10	4.55	3.99	3.42	2.85	2.28	1.70	1.10	-	-	-	-	-
17.5	6.75	6.21	5.67	5.12	4.57	4.01	3.44	2.87	2.29	1.70	1.11	-	-	-	-
18.0	7.32	6.79	6.25	5.70	5.15	4.59	4.03	3.46	2.88	2.30	1.71	1.11	-	-	-
18.5	7.89	7.36	6.82	6.28	5.73	5.18	4.62	4.05	3.48	2.90	2.31	1.72	1.11	-	-
19.0	8.45	7.92	7.40	6.86	6.31	5.76	5.21	4.64	4.08	3.50	2.91	2.32	1.72	1.12	-
19.5	9.02	8.50	7.97	7.44	6.90	6.35	5.79	5.23	4.67	4.09	3.52	2.93	2.33	1.73	1.12
20.0	9.59	9.07	8.55	8.01	7.48	6.93	6.38	5.83	5.27	4.70	4.12	3.54	2.94	2.35	1.74
20.5	10.16	9.64	9.12	8.59	8.06	7.52	6.97	6.42	5.86	5.30	4.72	4.14	3.55	2.96	2.36
21.0	10.73	10.24	9.70	9.17	8.64	8.10	7.56	7.01	6.46	5.89	5.32	4.75	4.16	3.57	2.97
21.5	11.30	10.79	10.27	9.75	9.22	8.69	8.15	7.60	7.05	6.49	5.93	5.35	4.77	4.19	3.59
22.0	11.86	11.362	10.84	10.33	9.80	9.27	8.74	8.19	7.63	7.09	6.53	5.96	5.38	4.80	4.21
22.5	12.43	11.93	11.42	10.90	10.38	9.86	9.32	8.78	8.24	7.69	7.13	6.57	5.99	5.40	4.83
23.0	13.00	12.50	11.99	11.48	10.97	10.44	9.91	9.38	8.84	8.29	7.73	7.17	6.60	6.03	5.44
23.5	13.57	13.07	12.57	12.06	11.55	11.03	10.50	9.97	9.43	8.89	8.34	7.78	7.21	6.64	6.06
24.0	14.14	13.64	13.14	12.64	12.13	11.61	11.09	10.56	10.03	9.49	8.94	8.38	7.82	7.25	6.68
24.5	14.701	14.21	13.72	13.22	12.71	12.20	11.68	11.15	10.62	10.09	9.54	8.99	8.43	7.87	7.30
25.0	15.28	14.79	14.29	13.79	13.29	12.78	12.26	11.74	11.22	10.68	10.14	9.60	9.04	8.48	7.91
25.5	15.84	15.35	14.87	14.37	13.87	13.37	12.85	12.33	11.81	11.28	10.75	10.20	9.65	9.09	8.53
26.0	16.41	15.93	15.44	14.95	14.45	13.95	13.44	12.93	12.41	11.88	11.35	10.81	10.26	9.71	9.15
26.5	16.98	16.50	16.02	15.53	15.03	14.54	14.03	13.52	13.00	12.48	11.95	11.41	10.87	10.32	9.76
27.0	17.55	17.07	16.60	16.11	15.62	15.12	14.62	14.11	13.60	13.08	12.55	12.02	11.48	10.93	10.38
27.5	18.11	17.64	17.17	16.69	16.20	15.71	15.21	14.71	14.20	13.68	13.16	12.63	12.09	11.55	11.00
28.0	18.68	18.21	17.74	17.26	16.78	16.29	15.79	15.29	14.79	14.27	13.75	13.23	12.70	12.16	11.61
28.5	19.25	18.79	18.32	17.84	17.36	16.87	16.38	15.88	15.38	14.87	14.36	13.83	13.30	12.77	12.23
29.0	19.82	19.36	18.89	18.42	17.94	17.46	16.97	16.48	15.98	15.47	14.96	14.44	13.91	13.38	12.85
29.5	20.39	19.93	19.47	19.00	18.52	18.04	17.56	17.07	16.57	16.07	15.56	15.05	14.52	14.00	13.46
30.0	20.95	20.50	20.04	19.58	19.10	18.63	18.15	17.66	17.17	16.67	16.16	15.65	15.13	14.61	14.08

$$\% \text{ DRY MATTER IN WET GRAIN}$$

$$\text{FORMULAS} \quad (1) \text{ SHRINKAGE} = (100\% - \% \text{ DRY MATTER IN DRY GRAIN} \times 100) + .05\% \text{ HANDLING SHRINK}$$

$$(2) \text{ VALUE OF SHRINK} = \text{PRICE BASIS GRADE} \times \text{SHRINKAGE}$$

$$(3) \text{ RETURNS TO DRYING} = \text{DISCOUNT} - \text{VALUE OF SHRINKAGE}$$

DRYER OPERATING LOG

DATE _____

PAGE _____ OF _____

DRYER_____

ELEVATOR	LOCATION
----------	----------

GRAIN	REMARKS, CONDITION OR GRADE
-------	-----------------------------

TIME OF DAY	AIR TEMPERATURES, F AMBIENT DRYING VOLT	WET GRAIN %MOISTURE	DRY GRAIN TEMP %MOISTURE	MOISTURE REMOVED
AVERAGES :				

SUMMARY (USE ONE OR MORE PAGES FOR A BIN, A SHIPMENT, OR A TOTAL RUN)

GRAIN DESTINATION_____TOTAL WET GRAIN DRIED_____BU.

FINAL MOISTURE_____ & TEMP. _____ F AVG. DRYING CAPACITY _____ BU/HR.

WET GRAIN _____, F.M. _____% TOTAL FUEL COST \$ _____

DRY GRAIN GRADE_____, F.M.____% AVG. FUEL COST BU. \$_____

SYSTEM SEQUENCE ANALYSIS AND TROUBLESHOOTING

DP/DPSL, DPX/DPXSL, DPX4T, DPX8T, DPX12T AND DPX16GT SERIES MODELS

2012 MODELS

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SYSTEM SEQUENCE ANALYSIS AND TROUBLESHOOTING

DP/DPSL, DPX/DPXSL, DPX4T, DPX8T, DPX12T AND DPX16GT SERIES MODELS

2012 MODELS

(GENERIC SCHEMATIC-STANDARD: 900-010042)
(GENERIC SCHEMATIC-WITH MOISTURELINK: 900-010045)

1A. SEQUENCE: MAIN CIRCUIT BREAKER "ON" * (230V-1P, 240V-3P SYSTEMS) *

ACTION: MAIN POWER LIGHT "ON", APPLIES POWER TO HIGH VOLTAGE CIRCUITS AND 120V CONTROL CIRCUIT BREAKER (CB1).

SYMPTOMS: A. NO MAIN POWER LIGHT (DS1).
B. CONTROL CIRCUIT BREAKER (CB1) HAS TRIPPED.

POSSIBLE CAUSES: A1. DEFECTIVE MAIN POWER LIGHT (DS1).
A2. DEFECTIVE CONTROL CIRCUIT BREAKER (CB1).
A3. DEFECTIVE FUSE IN MAIN PANEL DISCONNECT.
A4. MISSING 120 VOLT WIRE.

B1. SHORT CIRCUIT.
B2. OVERLOAD CONDITION HAS OCCURED.
B3. DEFECTIVE CONTROL CIRCUIT BREAKER (CB1).

CORRECTIVE ACTION: A1. CHECK TERMINAL #25 FOR 120 VOLTS. IF POWER IS PRESENT THE MAIN POWER LIGHT (DS1) IS DEFECTIVE, REPLACE.

A2. CHECK CIRCUIT BREAKER (CB1) FOR FAULT.

A3. CHECK ACROSS L1 & L3 (L2 ON 1P) ON THE MAIN POWER DISTRIBUTION BLOCK. IF 240 VOLTS IS NOT PRESENT, CHECK MAIN PANEL DISCONNECT FOR POWER AND IF FUSES ARE DEFECTIVE, REPLACE. (WILD LEG IS ON L2 - 3P ONLY)

A4. IF VOLTAGE IS PRESENT ACROSS L1 & L3 (L2 ON 1P) ON THE MAIN POWER DISTRIBUTION BLOCK, CHECK TO SEE IF THE BLACK WIRE IS CONNECTED FROM L1 ON THE MAIN POWER DISTRIBUTION BLOCK TO THE POSITIVE SIDE ON THE 120V PANEL POWER DISTRIBUTION BLOCK (TB2). ALSO CHECK TO SEE THAT THE GROUND LEAD (GREEN WIRE) IS CONNECTED TO CHASSIS GROUND AND THE COMMON LEAD OF THE INCOMING POWER SOURCE IS CONNECTED TO CHASSIS GROUND.

B1. REPAIR OR REPLACE BURNED OR BARE WIRING IN CONTACT WITH CHASSIS OR OTHER WIRING.

B2. CHECK CURRENT FOR ANY OVERLOAD CONDITIONS AND CORRECT.

B3. INSPECT CIRCUIT BREAKER (CB1) FOR DEFECT. REPLACE.

1B. SEQUENCE: MAIN CIRCUIT BREAKER "ON" *(380V,480V,575V-3P SYSTEMS)*

ACTION: MAIN POWER LIGHT "ON", APPLIES POWER TO HIGH VOLTAGE CIRCUITS, STEP DOWN TRANSFORMER (XMFR5) AND 120V CONTROL CIRCUIT BREAKER (CB1).

SYMPTOMS: A. NO MAIN POWER LIGHT (DS1).
B. CONTROL CIRCUIT BREAKER (CB1) HAS TRIPPED.

POSSIBLE CAUSES: A1. DEFECTIVE MAIN POWER LIGHT (DS1).
A2. DEFECTIVE CONTROL CIRCUIT BREAKER (CB1).
A3. DEFECTIVE FUSE IN MAIN PANEL DISCONNECT.
A4. DEFECTIVE FUSES F1 AND/OR F2.
A5. DEFECTIVE TRANSFORMER (XMFR5).

B1. SHORT CIRCUIT.
B2. OVERLOAD CONDITION.
B3. DEFECTIVE CIRCUIT BREAKER (CB1).

CORRECTIVE ACTION:

A1. CHECK TERMINAL #25 FOR 120 VOLTS. IF POWER IS PRESENT THE MAIN POWER LIGHT (DS1) IS DEFECTIVE, REPLACE.

A2. CHECK CONTROL CIRCUIT BREAKER (CB1), IF DEFECTIVE, REPLACE.

A3. CHECK ACROSS L1 & L3 ON THE MAIN POWER DISTRIBUTION BLOCK. IF LINE VOLTAGE IS NOT PRESENT, CHECK MAIN PANEL DISCONNECT FOR POWER. IF FUSES ARE DEFECTIVE, REPLACE.

A4. CHECK TO SEE IF VOLTAGE IS PRESENT ON L1-POS AND L2-NEU (120 VOLTS) ON THE 120 VOLT PANEL POWER DISTRIBUTION BLOCK (TB2). IF POWER IS NOT PRESENT, CHECK FUSE F1 AND F2. IF DEFECTIVE, REPLACE.

A5. IF FUSE F1 AND F2 ARE OKAY AND NO VOLTAGE IS PRESENT ON L1-POS AND L2-NEU (120 VOLTS) ON THE 120 VOLT PANEL POWER DISTRIBUTION BLOCK (TB2) THE STEP DOWN TRANSFORMER (XMFR 5) IS DEFECTIVE, REPLACE.

B1. REPAIR OR REPLACE BURNED OR BARE WIRING IN CONTACT WITH CHASSIS OR OTHER WIRING.

B2. CHECK CURRENT FOR ANY OVERLOAD CONDITIONS AND CORRECT.

B3. INSPECT CIRCUIT BREAKER (CB1) FOR DEFECT. REPLACE.

2. SEQUENCE: POWER SWITCH (SW1) TO "ON", ENERGIZING SAFETY CIRCUIT.

ACTION: SAFETY CIRCUIT PROVEN LIGHT "ON" (DS11), ALL SAFETY CIRCUIT MONITOR LIGHTS "ON" (DS2 - DS8), APPLIES POWER TO ENTIRE 120 VOLT CIRCUIT AND ENERGIZES POWER RELAY (K8).

SAFETY CIRCUIT MONITOR LIGHTS

HOW THEY WORK!

SAFETY CIRCUIT MONITOR LIGHTS (DS2 - DS8) INDICATE WHAT PART OF THE SAFETY CIRCUIT IS WORKING. TO FIND THE PROBLEM, PRESS THE POWER SWITCH (SW1) TO THE "ON" POSITION AND HOLD. FIND THE FIRST LIGHT THAT IS NOT "ON". THAT WILL SHOW THE DEVICE THAT IS NOT ALLOWING THE SAFETY CIRCUIT TO LOCK IN.

*** PLACE ALL SWITCHES IN "OFF" POSITION BEFORE TROUBLE SHOOTING ***

- SYMPTOMS:
- A. NO SAFETY CIRCUIT PROVEN LIGHT (DS11) WHEN THE POWER SWITCH (SW1) IS ENGAGED, BUT SOME OF THE SAFETY CIRCUIT MONITOR LIGHTS (DS2 - DS8) WILL LIGHT WHEN THE POWER SWITCH (SW1) IS ENGAGED BUT WILL GO "OFF" WHEN THE POWER SWITCH (SW1) IS RELEASED.
 - B. SAFETY CIRCUIT PROVEN LIGHT (DS11) "ON" WHEN THE POWER SWITCH (SW1) IS ENGAGED BUT WILL GO "OFF" WHEN THE POWER SWITCH (SW1) IS RELEASED.

- POSSIBLE CAUSES:
- A1. DEFECTIVE POWER SWITCH (SW1).
 - A2. NO PLENUM HIGH LIMIT LIGHT (DS2), DEFECTIVE HIGH LIMIT OR HIGH LIMIT TRIPPED FROM EXCESSIVE HEAT IN PLENUM CHAMBER.
 - A3. NO FAN OVERLOAD LIGHT (DS3), DEFECTIVE FAN OVERLOAD DEVICE (S2, S3, S4, S4), OR STARTER OVERLOAD TRIPPED FROM A FAN MOTOR DRAWING HIGH AMPERAGE.
 - A4. NO CONVEYOR OVERLOAD LIGHT (DS4), DEFECTIVE CONVEYOR OVERLOAD DEVICE (S5, S6, S7, S8), OR STARTER OVERLOAD TRIPPED FROM AN AUGER DRAWING HIGH AMPERAGE.
 - A5. NO FEEDROLL MONITOR LIGHT (DS5), DEFECTIVE FEEDROLL MONITOR SWITCH (SW8) OR CAM NUT, TIMER RELAY (K10, K11), OR ON/OFF SELECTOR SWITCH (SW7).
 - A6. NO DISCHARGE OVERFLOW LIGHT (DS6), DEFECTIVE DISCHARGE OVERFLOW SWITCH OR OVERFLOW CONDITION HAS TRIPPED SWITCH.
 - A7. NO EXHAUST TEMPERATURE LIMIT LIGHT (DS7), DEFECTIVE EXHAUST LIMIT OR LIMIT HAS TRIPPED BECAUSE OF EXCESSIVE EXHAUST AIR TEMPERATURE.
 - A8. NO AUXILIARY SAFETY LIGHT (DS8), *CUSTOMER INSTALLED.*
 - A9. DEFECTIVE BURNER SWITCH (SW3).
 - A10. DEFECTIVE POWER RELAY (K8).
 - A11. DEFECTIVE SAFETY CIRCUIT PROVEN LIGHT (DS11).
 - B. DEFECTIVE FLAME SYSTEM BYPASS DELAY RELAY (K5).

- CORRECTIVE ACTION:
- A1. IF VOLTAGE IS PRESENT ON TERMINAL #25 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #28 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT, THE POWER SWITCH (SW1) IS DEFECTIVE, REPLACE.

- A2. IF VOLTAGE IS PRESENT ON TERMINAL #28 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #29 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT, THE PLENUM HIGH LIMIT MAY HAVE TRIPPED FROM EXCESSIVE HEAT IN THE PLENUM CHAMBER, RESET. IF VOLTAGE IS PRESENT ON TERMINAL #29 (120 VOLTS) THE PLENUM HIGH LIMIT LIGHT (DS2) IS DEFECTIVE, REPLACE. *(FOR ALL MODELS, REFER TO THE "AUTOMATIC TEMPERATURE CONTROL" SECTION FOR OPERATION AND A TROUBLE SHOOTING GUIDE FOR THE TEMPERATURE/HIGH LIMIT SYSTEM)*
- A3. IF VOLTAGE IS PRESENT ON TERMINAL #29 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #30 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT, ONE OR MORE FAN STARTER OVERLOADS (S1 THRU S4) MAY HAVE TRIPPED FROM A MOTOR DRAWING HIGH AMPERAGE. DETERMINE WHICH ONE IS OPEN. RESET TRIPPED OVERLOAD. *IT WILL BE NECESSARY TO DETERMINE IF A SHORT CIRCUIT OR OVERLOAD CONDITION EXISTS IN THIS SYSTEM AND WHAT CORRECTIVE STEPS NEED TO BE TAKEN TO RESOLVE THIS CONDITION.* IF VOLTAGE IS PRESENT ON TERMINAL #30 (120 VOLTS) THE FAN OVERLOAD LIGHT (DS3) IS DEFECTIVE, REPLACE.
- A4. IF VOLTAGE IS PRESENT ON TERMINAL #30 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #31 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT, ONE OR MORE CONVEYOR STARTER OVERLOADS (S5 THRU S8) MAY HAVE TRIPPED FROM A MOTOR DRAWING HIGH AMPERAGE. DETERMINE WHICH ONE IS OPEN. RESET TRIPPED OVERLOAD. *IT WILL BE NECESSARY TO DETERMINE IF A SHORT CIRCUIT OR OVERLOAD CONDITION EXISTS IN THIS SYSTEM AND WHAT CORRECTIVE STEPS NEED TO BE TAKEN TO RESOLVE THIS CONDITION.* IF VOLTAGE IS PRESENT ON TERMINAL #31 (120 VOLTS) THE CONVEYOR OVERLOAD LIGHT (DS4) IS DEFECTIVE, REPLACE.
- A5. *(NOTE: THE FEEDROLL MONITOR IS MEANT TO OPERATE WHILE THE METERING SYSTEM IS OPERATING. IF NOT, THE FEEDROLL MONITOR SELECTOR SWITCH (SW7) SHOULD BE IN THE "OFF" POSITION. ALSO, POWER IS NOT SUPPLIED TO THE FEEDROLL MONITOR SELECTOR SWITCH (SW7) UNTIL THE UNLOAD LOAD SWITCH (SW5) IS "ON".)* WITH THE FEEDROLL SELECTOR SWITCH IN THE "OFF" POSITION, IF VOLTAGE IS PRESENT ON TERMINAL #31 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #32 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT, ONE OR BOTH OF THE TIME DELAY RELAYS (K10 & K11) ARE DEFECTIVE. REPLACE. WITH THE METERING SYSTEM OPERATING AND THE FEEDROLL MONITOR SELECTOR SWITCH (SW7) "ON", IF DRYER SHUTS DOWN WITHIN 60 SECONDS, CHECK VOLTAGE (120 VOLTS) ON TERMINALS #62 AND #63. VOLTAGE SHOULD BE PRESENT ON EACH TERMINAL ABOUT EVERY 2 TO

4 SECONDS WHILE THE FEEDROLLS ARE TURNING. IF VOLTAGE IS NOT PRESENT ON BOTH TERMINALS CHECK FEEDROLL MONITOR SWITCH (SW8) FOR CORRECT OPERATION AND CAM NUT ADJUSTMENT LOCATED ON FEEDROLL SPROCKET. ADJUST CAM NUT OR REPLACE FEEDROLL MONITOR SWITCH (SW8). IF VOLTAGE IS PRESENT, CHECK THE TIME DELAY RELAYS (K10 & K11) FOR PROPER OPERATION AND SETTING (60 SEC.). SET TO 60 SECONDS OR REPLACE IF DEFECTIVE.

- A6. IF VOLTAGE IS PRESENT ON TERMINAL #32 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #33 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT, CHECK THE DISCHARGE OVERFLOW SWITCH FOR CORRECT OPERATION OR IF AN OVERFLOW CONDITION HAS TRIPPED THE SWITCH. CLEAR THE OVERFLOW OR REPLACE THE SWITCH. IF VOLTAGE IS PRESENT ON TERMINAL #33 (120 VOLTS) THE DISCHARGE OVERFLOW LIGHT (DS6) IS DEFECTIVE, REPLACE.
- A7. IF VOLTAGE IS PRESENT ON TERMINAL #33 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #34 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT ONE OF THE EXHAUST TEMPERATURE LIMITS HAS TRIPPED BECAUSE OF EXCESSIVE EXHAUST AIR TEMPERATURE OR IS DEFECTIVE. WITH THE POWER SWITCH (SW1) HELD IN THE "ON" POSITION GO AROUND THE DRYER AND FIND WHICH IS THE FIRST LIGHT ON THE EXHAUST LIMIT BOXES THAT IS NOT LIT. THIS IS THE EXHAUST LIMIT OPENING THE CIRCUIT. CHECK VOLTAGE AT EXHAUST LIMIT. IF DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT ON TERMINAL #34 (120 VOLTS) THE EXHAUST TEMPERATURE LIMIT LIGHT (DS7) IS DEFECTIVE, REPLACE.
- A8. THE AUXILIARY SAFETY LIGHT WOULD BE INSTALLED AS A SPECIAL OPTION AT THE CUSTOMERS REQUEST. IF VOLTAGE IS PRESENT ON TERMINAL #35 (120 VOLTS) THE AUXILIARY SAFETY LIGHT (DS8) IS DEFECTIVE, REPLACE.
- A9. IF VOLTAGE IS PRESENT ON TERMINAL #35 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #39 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION AND WITH THE BURNER SWITCH (SW3) IN THE "OFF" POSITION. IF NO VOLTAGE IS PRESENT, THE BURNER SWITCH (SW3) IS DEFECTIVE, REPLACE.
- A10. IF VOLTAGE IS PRESENT ON TERMINAL #39 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #41 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT AND THE BURNER SWITCH (SW3) IS IN THE "OFF" POSITION, THE POWER RELAY (K8) IS DEFECTIVE, REPLACE.
- A11. IF VOLTAGE IS PRESENT ON TERMINAL #41 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION AND THE BURNER SWITCH (SW3) IS IN THE

"OFF" POSITION, THE SAFETY CIRCUIT PROVEN LIGHT IS DEFECTIVE, REPLACE.

- B. IF VOLTAGE IS PRESENT ON TERMINAL #41 (120 VOLTS) CHECK VOLTAGE AT TERMINAL #27 WITH POWER SWITCH (SW1) ENGAGED (CENTER POSITION). IF POWER IS NOT PRESENT ON TERMINAL #27 THE FLAME SYSTEM BYPASS DELAY RELAY IS DEFECTIVE, REPLACE.

NOTE: DELUX PROVIDES THREE (3) TYPES OF LOADING SYSTEMS.

- A. LEVELING SYSTEM.(STANDARD) (AUGER STANDARD) (DRAG CONVEYOR OPTIONAL)
B. GRAVITY FLOW WITHOUT HIGH AND LOW BIN SWITCHES. (OPTIONAL)
C. GRAVITY FLOW WITH HIGH AND LOW BIN SWITCHES. (OPTIONAL)

3A. SEQUENCE: LOAD SWITCH (SW4) TO "ON", ENERGIZING LOAD CIRCUIT. LEVELING SYSTEM (STANDARD)

ACTION: LOAD SWITCH (SW4) "ON", GRAIN LOADING LIGHT (DS12) "ON" STARTS LEVELING AUGER (CONVEYOR) ON DRYER AND WET AUXILIARY LOADING. LOADS DRYER AUTOMATICALLY AS REQUIRED. GRAIN LOADING LIGHT (DS12) "ON" UNTIL HIGH / LOW GRAIN MONITOR SHUTS LOAD AUGER "OFF". LOW GRAIN LIGHT(S) (DS9, DS10) "ON" UNTIL GRAIN ENGAGES PADDLE(S) ON LOW GRAIN SWITCH(S) (SW9, SW10).

SYMPTOMS: A. NO GRAIN LOADING LIGHT (DS12).
B. GRAIN LOADING LIGHT (DS12) "ON" BUT LOADING SYSTEM NOT RUNNING.
C. DRYER SHUTS DOWN IMMEDIATELY OR DURING LOADING OPERATION.
D. LOW GRAIN LIGHT(S) (DS9, DS10) STAY LIT.
E. LEVELING AUGER AND AUXILIARY LOADING RUN CONTINUALLY.
F. DRYER OVERLOADS (TOO FULL).

POSSIBLE CAUSES: A1. DEFECTIVE LOAD SWITCH (SW4).
A2. DEFECTIVE SWITCH (LOW) IN HIGH / LOW GRAIN MONITOR.
A3. DEFECTIVE GRAIN LOADING LIGHT (DS12).

B1. DEFECTIVE LOAD AUGER STARTER COIL (S5).
B2. DEFECTIVE LOAD AUGER STARTER INTERLOCK (SW19).
B3. DEFECTIVE AUXILIARY LOAD STARTER COIL (S6).

C. OVERLOAD(S) ON LOAD AUGER AND/OR AUXILIARY LOAD STARTER(S) (S5, S6) TRIPPED.

D1. GRAIN HAS NOT ENGAGED PADDLES PROPERLY ON LOW GRAIN SWITCH(S) (SW9, SW10).
D2. DEFECTIVE LOW GRAIN SWITCH(S) (SW9, SW10).

E. IMPROPER GRAIN LOADING RATE.

F. IMPROPER ADJUSTMENT OF HIGH / LOW GRAIN MONITOR.

CORRECTIVE
ACTION:

- A1. IF VOLTAGE IS PRESENT ON TERMINAL #39 (120 VOLTS), TURN LOAD SWITCH (SW4) TO "ON" THEN CHECK FOR VOLTAGE ON TERMINAL #46. IF VOLTAGE IS NOT PRESENT THE LOAD SWITCH (SW4) IS DEFECTIVE, REPLACE.
- A2. IF VOLTAGE IS PRESENT ON TERMINAL #46 (120 VOLTS), THEN CHECK FOR VOLTAGE ON TERMINAL #47. NOTE: MAKE SURE HIGH / LOW GRAIN MONITOR PADDLE IS HANGING IN THE DOWN POSITION. IF VOLTAGE IS NOT PRESENT THE SWITCH (LOW) IS DEFECTIVE, REPLACE.
- A3. IF VOLTAGE IS PRESENT ON TERMINAL #47 (120 VOLTS), THE GRAIN LOADING LIGHT (DS12) IS DEFECTIVE, REPLACE.
- B1. IF LOAD AUGER STARTER (S5) DOES NOT PULL-IN AND VOLTAGE IS PRESENT AT LOAD SIDE OF COIL, THE HOLDING COIL IS DEFECTIVE, REPLACE.
- B2. IF LOAD AUGER STARTER (S5) DOES PULL-IN, CHECK LOAD SIDE OF INTERLOCK (SW19) ON LOAD AUGER STARTER (S5) FOR PRESENCE OF VOLTAGE (120 VOLTS). IF VOLTAGE IS PRESENT AT LOAD SIDE OF INTERLOCK (SW19), CHECK OPPOSITE SIDE OF INTERLOCK (SW19). IF NO POWER IS PRESENT, THE INTERLOCK (SW19) IS DEFECTIVE, REPLACE.
- B3. IF AUXILIARY LOAD STARTER (S6) DOES NOT PULL-IN AND VOLTAGE IS PRESENT AT LOAD SIDE OF COIL, THE HOLDING COIL IS DEFECTIVE, REPLACE.
- C. OVERLOADS ON LOAD AUGER AND/OR AUXILIARY LOAD STARTERS (S5, S6) MAY HAVE TRIPPED FROM A MOTOR DRAWING HIGH AMPERAGE. DETERMINE WHICH ONE IS OPEN. RESET DEFECTIVE OVERLOAD. IT WILL BE NECESSARY TO DETERMINE IF A SHORT CIRCUIT OR EXCESSIVE OVERLOAD CONDITION EXISTS IN THIS ISOLATED SYSTEM AND WHAT CORRECTIVE STEPS NEED TO BE TAKEN TO RESOLVE THIS CONDITION. OTHER POSSIBLE CAUSES COULD BE (1) BAD MOTOR, REPLACE. (2) JAMMED AUXILIARY LOAD SYSTEM, CORRECT. (3) LOOSE WIRING CONNECTIONS ON TERMINALS, TIGHTEN. (4) DEFECTIVE OVERLOAD, REPLACE. (5) IMPROPER ADJUSTMENT OF HIGH / LOW GRAIN MONITOR, (AUGER ONLY) ADJUST TILT SWITCHES (LOW AND/OR HIGH) IN HIGH / LOW GRAIN MONITOR BOX. ADJUST LOW TILT SWITCH SO THAT THE LOAD SYSTEM WILL TURN "ON" JUST BEFORE THE GRAIN PADDLE SWINGS TO A STRAIGHT DOWN POSITION. ADJUST HIGH TILT SWITCH SO THAT THE LOAD SYSTEM WILL TURN "OFF" WHEN THE GRAIN PUSHES THE PADDLE FORWARD TO 40° ANGLE.
- D1. TRASH AND PLUGGING PROBLEM - CHECK LOW GRAIN SWITCH(S) (SW9, SW10) FOR TRASH BUILDUP BEHIND PADDLE.
- D2A. FRONT LOW GRAIN SWITCH (SW9). IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #35 CHECK VOLTAGE ON

TERMINAL #37 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE LOW GRAIN SWITCH FRONT (SW9) IS DEFECTIVE, REPLACE.

D2B. REAR LOW GRAIN SWITCH (SW10). IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #37 CHECK VOLTAGE ON TERMINAL #39 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE LOW GRAIN SWITCH REAR (SW10) IS DEFECTIVE, REPLACE.

E. CHECK FOR EMPTY WET GRAIN SUPPLY. CHECK AUXILIARY LOAD SYSTEM FOR PLUGGING, BROKEN BELT, IMPROPER FLOW RATE, UNDERSIZED LOAD SYSTEM, ETC. THAT MAY RESTRICT GRAIN FLOW TO DRYER.

F. ADJUST TILT SWITCHES (LOW AND/OR HIGH) IN HIGH / LOW GRAIN MONITOR BOX (AUGER ONLY). ADJUST LOW TILT SWITCH SO THAT THE LOAD SYSTEM WILL TURN "ON" JUST BEFORE THE GRAIN PADDLE SWINGS TO A STRAIGHT DOWN POSITION. ADJUST HIGH TILT SWITCH SO THAT THE LOAD SYSTEM WILL TURN "OFF" WHEN THE GRAIN PUSHES THE PADDLE FORWARD TO 40° ANGLE.

3B. SEQUENCE: LOAD SWITCH (SW4) TO "ON", ENERGIZING LOAD CIRCUIT. GRAVITY FLOW WITHOUT HIGH AND LOW BIN SWITCHS. (OPTIONAL)

ACTION: LOAD SWITCH (SW4) "ON", GRAIN LOADING LIGHT (DS12) "ON" STARTS WET AUXILIARY LOADING. LOW GRAIN LIGHT(S) (DS9, DS10) "ON" UNTIL GRAIN ENGAGES PADDLE(S) ON LOW GRAIN SWITCH(S) (SW9, SW10)

SYMPTOMS: A. NO GRAIN LOADING LIGHT (DS12).
B. GRAIN LOADING LIGHT (DS12) "ON" BUT LOADING SYSTEM NOT RUNNING.
C. DRYER SHUTS DOWN IMMEDIATELY OR DURING LOADING OPERATION.
D. LOW GRAIN LIGHT(S) (DS9, DS10) STAY LIT.

POSSIBLE CAUSES: A1. DEFECTIVE LOAD SWITCH (SW4).
A2. DEFECTIVE GRAIN LOADING LIGHT (DS12).
B. DEFECTIVE AUXILIARY LOAD STARTER COIL (S6).
C. OVERLOAD ON AUXILIARY LOAD STARTER (S6) TRIPPED.
D1. GRAIN HAS NOT ENGAGED PADDLES PROPERLY ON LOW GRAIN SWITCH(S) (SW9, SW10).
D2. DEFECTIVE LOW GRAIN SWITCH(S) (SW9, SW10).
D3. IMPROPER GRAIN LOADING RATE.

CORRECTIVE ACTION: A1. IF VOLTAGE IS PRESENT ON TERMINAL #39 (120 VOLTS), TURN LOAD SWITCH (SW4) TO "ON" THEN CHECK FOR VOLTAGE ON TERMINAL #46. IF VOLTAGE IS NOT PRESENT THE LOAD SWITCH (SW4) IS DEFECTIVE, REPLACE.

- A2. IF VOLTAGE IS PRESENT ON TERMINAL #47 (120 VOLTS), THE GRAIN LOADING LIGHT (DS12) IS DEFECTIVE, REPLACE.
 - B. IF AUXILIARY LOAD STARTER (S6) DOES NOT PULL IN AND VOLTAGE IS PRESENT AT LOAD SIDE OF COIL, THE HOLDING COIL IS DEFECTIVE, REPLACE.
 - C. OVERLOAD ON AUXILIARY LOAD STARTER (S6) MAY HAVE TRIPPED FROM A MOTOR DRAWING HIGH AMPERAGE. RESET DEFECTIVE OVERLOAD. IT WILL BE NECESSARY TO DETERMINE IF A SHORT CIRCUIT OR EXCESSIVE OVERLOAD CONDITION EXISTS IN THIS ISOLATED SYSTEM AND WHAT CORRECTIVE STEPS NEED TO BE TAKEN TO RESOLVE THIS CONDITION. OTHER POSSIBLE CAUSES COULD BE (1) BAD MOTOR, REPLACE. (2) JAMMED AUXILIARY LOAD SYSTEM, CORRECT. (3) LOOSE WIRING CONNECTIONS ON TERMINALS, TIGHTEN. (4) DEFECTIVE OVERLOAD, REPLACE.
 - D1. TRASH AND PLUGGING PROBLEM - CHECK LOW GRAIN SWITCH(S) (SW9, SW10) FOR TRASH BUILDUP BEHIND PADDLE.
 - D2A. FRONT LOW GRAIN SWITCH (SW9). IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #35 CHECK VOLTAGE ON TERMINAL #37 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE LOW GRAIN SWITCH FRONT (SW9) IS DEFECTIVE, REPLACE.
 - D2B. REAR LOW GRAIN SWITCH (SW10). IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #37 CHECK VOLTAGE ON TERMINAL #39 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE LOW GRAIN SWITCH REAR (SW10) IS DEFECTIVE, REPLACE.
 - D3. CHECK FOR EMPTY WET GRAIN SUPPLY. CHECK AUXILIARY LOAD SYSTEM FOR PLUGGING, BROKEN BELT, IMPROPER FLOW RATE, UNDERSIZED LOAD SYSTEM, ETC. THAT MAY RESTRICT GRAIN FLOW TO DRYER.
- 3C. SEQUENCE: LOAD SWITCH (SW4) TO "ON", ENERGIZING LOAD CIRCUIT. GRAVITY FLOW WITH HIGH AND LOW BIN SWITCHES. (OPTIONAL)**
- ACTION: LOAD SWITCH (SW4) "ON", GRAIN LOADING LIGHT (DS12) "ON" STARTS WET AUXILIARY LOADING. LOADS DRYER AUTOMATICALLY AS REQUIRED. GRAIN LOADING LIGHT (DS12) "ON" UNTIL GRAIN LEVEL CONTROL SWITCH(S) (HIGH) SHUTS AUXILIARY LOAD SYSTEM "OFF" . LOW GRAIN LIGHT(S) (DS9, DS10) "ON" UNTIL GRAIN ENGAGES PADDLE(S) ON LOW GRAIN SWITCH(S) (SW9, SW10). NOTE: OPERATION OF GRAIN LEVEL CONTROL LIGHTS (1) LOW LIGHT (DS31) "OFF" UNTIL GRAIN ENGAGES PADDLE. (2) HIGH LIGHT(S) (DS29, DS30) "OFF" UNTIL GRAIN ENGAGES PADDLES SHUTTING "OFF" LOAD SYSTEM.
- SYMPTOMS: A. NO GRAIN LOADING LIGHT (DS12).

- B. GRAIN LOADING LIGHT (DS12) "ON" BUT LOADING SYSTEM NOT RUNNING.
- C. DRYER SHUTS DOWN IMMEDIATELY OR DURING LOADING OPERATION.
- D. LOW GRAIN LIGHT(S) (DS9, DS10) STAY LIT.
- E. NO (LOW) GRAIN LOADING LIGHT (DS31).
- F. NO (HIGH) GRAIN LOADING LIGHT(S) (DS29, DS30).
- G. AUXILIARY LOADING RUNNING CONTINUALLY.

POSSIBLE
CAUSES:

- A1. DEFECTIVE LOAD SWITCH (SW4).
- A2. DEFECTIVE (LOW) GRAIN LEVEL CONTROL SWITCH (SW13).
- A3. DEFECTIVE GRAIN LOADING LIGHT (DS12).

- B. DEFECTIVE AUXILIARY LOAD STARTER(S) COIL.

- C1. DEFECTIVE LOAD AUGER STARTER INTERLOCK.
- C2. OVERLOAD(S) ON AUXILIARY LOAD STARTER(S) TRIPPED.

- D1. GRAIN HAS NOT ENGAGED PADDLES PROPERLY ON LOW GRAIN SWITCH(S) (SW9, SW10).
- D2. DEFECTIVE LOW GRAIN SWITCH(S) (SW9, SW10).
- D3. IMPROPER GRAIN LOADING RATE.

- E1. GRAIN HAS NOT ENGAGED PADDLE PROPERLY ON (LOW) GRAIN LEVEL CONTROL SWITCH (SW13).
- E2. DEFECTIVE (LOW) GRAIN LEVEL CONTROL SWITCH (SW13).
- E3. IMPROPER GRAIN LOADING RATE.

- F1. GRAIN HAS NOT ENGAGED PADDLES PROPERLY ON (HIGH) GRAIN LEVEL CONTROL SWITCH(S) (SW11, SW12).
- F2. DEFECTIVE (HIGH) GRAIN LEVEL CONTROL SWITCH(S) (SW11, SW12). DEFECTIVE (HIGH) GRAIN LEVEL CONTROL LIGHT(S) (DS29, DS30).
- F3. IMPROPER GRAIN LOADING RATE.

- G. IMPROPER GRAIN LOADING RATE.

CORRECTIVE
ACTION:

- A1. IF VOLTAGE IS PRESENT ON TERMINAL #39 (120 VOLTS), TURN LOAD SWITCH (SW4) TO "ON" THEN CHECK FOR VOLTAGE ON TERMINAL #46. IF VOLTAGE IS NOT PRESENT THE LOAD SWITCH (SW4) IS DEFECTIVE, REPLACE.

- A2. IF VOLTAGE IS PRESENT ON TERMINAL #46 (120 VOLTS), THEN CHECK FOR VOLTAGE ON TERMINAL #47, WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE (LOW) GRAIN LEVEL CONTROL SWITCH (SW13) IS DEFECTIVE, REPLACE.

- A3. IF VOLTAGE IS PRESENT ON TERMINAL #47 (120 VOLTS), THE GRAIN LOADING LIGHT (DS12) IS DEFECTIVE, REPLACE.

- B. IF AUXILIARY LOAD STARTER(S) DOES NOT PULL IN AND VOLTAGE IS PRESENT AT LOAD SIDE OF COIL, THE HOLDING COIL IS DEFECTIVE, REPLACE.

- C1. IF AUXILIARY LOAD STARTER(S) DOES PULL IN, CHECK LOAD SIDE OF INTERLOCK ON AUXILIARY LOAD STARTER FOR PRESENCE OF VOLTAGE (120 VOLTS). IF VOLTAGE IS PRESENT AT LOAD SIDE OF INTERLOCK, CHECK OPPOSITE SIDE OF INTERLOCK. IF NO VOLTAGE IS PRESENT, THE INTERLOCK IS DEFECTIVE, REPLACE.
- C2. OVERLOADS ON AUXILIARY LOAD STARTER(S) MAY HAVE TRIPPED FROM A MOTOR DRAWING HIGH AMPERAGE. DETERMINE WHICH ONE IS OPEN. RESET DEFECTIVE OVERLOAD. IT WILL BE NECESSARY TO DETERMINE IF A SHORT CIRCUIT OR EXCESSIVE OVERLOAD CONDITION EXISTS IN THIS ISOLATED SYSTEM AND WHAT CORRECTIVE STEPS NEED TO BE TAKEN TO RESOLVE THIS CONDITION. OTHER POSSIBLE CAUSES COULD BE (1) BAD MOTOR, REPLACE. (2) JAMMED AUXILIARY LOAD SYSTEM, CORRECT. (3) LOOSE WIRING CONNECTIONS ON TERMINALS, TIGHTEN. (4) DEFECTIVE OVERLOAD, REPLACE.
- D1. TRASH AND PLUGGING PROBLEM - CHECK LOW GRAIN SWITCH(S) (SW9, SW10) FOR TRASH BUILDUP BEHIND PADDLE.
- D2A. FRONT LOW GRAIN SWITCH (SW9). IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #35 CHECK VOLTAGE ON TERMINAL #37 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE LOW GRAIN SWITCH FRONT (SW9) IS DEFECTIVE, REPLACE.
- D2B. REAR LOW GRAIN SWITCH (SW10). IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #37 CHECK VOLTAGE ON TERMINAL #39 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE LOW GRAIN SWITCH REAR (SW10) IS DEFECTIVE, REPLACE.
- D3. CHECK FOR EMPTY WET GRAIN SUPPLY. CHECK AUXILIARY LOAD SYSTEM FOR PLUGGING, BROKEN BELT, IMPROPER FLOW RATE, UNDERSIZED LOAD SYSTEM, ETC. THAT MAY RESTRICT GRAIN FLOW TO DRYER.
- E1. TRASH AND PLUGGING PROBLEM - CHECK (LOW) GRAIN LEVEL CONTROL SWITCH (SW13) FOR TRASH BUILDUP BEHIND PADDLE.
- E2. IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #46, CHECK VOLTAGE ON TERMINAL #52 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE (LOW) GRAIN LEVEL CONTROL SWITCH (SW13) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT, (LOW) GRAIN LEVEL CONTROL LIGHT (DS31) IS DEFECTIVE, REPLACE.
- E3. CHECK FOR EMPTY WET GRAIN SUPPLY. CHECK AUXILIARY LOAD SYSTEM FOR PLUGGING, BROKEN BELT, IMPROPER FLOW RATE, UNDERSIZED LOAD SYSTEM, ETC. THAT MAY RESTRICT GRAIN FLOW TO DRYER.

- F1. TRASH AND PLUGGING PROBLEM - CHECK (HIGH) GRAIN LEVEL CONTROL SWITCH(S) (SW11, SW12) FOR TRASH BUILDUP BEHIND PADDLE.
- F2A. (HIGH - FRONT) GRAIN LEVEL CONTROL SWITCH. IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #46, CHECK VOLTAGE ON TERMINAL #50 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE (HIGH - FRONT) GRAIN LEVEL CONTROL SWITCH (SW11) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT, (HIGH - FRONT) GRAIN LEVEL CONTROL LIGHT (DS29) IS DEFECTIVE, REPLACE.
- F2B. (HIGH - REAR) GRAIN LEVEL CONTROL SWITCH. IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #46, CHECK VOLTAGE ON TERMINAL #51 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE (HIGH - REAR) GRAIN LEVEL CONTROL SWITCH (SW12) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT, (HIGH - REAR) GRAIN LEVEL CONTROL LIGHT (DS30) IS DEFECTIVE, REPLACE.
- F3. CHECK FOR EMPTY WET GRAIN SUPPLY. CHECK AUXILIARY LOAD SYSTEM FOR PLUGGING, BROKEN BELT, IMPROPER FLOW RATE, UNDERSIZED LOAD SYSTEM, ETC. THAT MAY RESTRICT GRAIN FLOW TO DRYER.
- G. CHECK FOR EMPTY WET GRAIN SUPPLY. CHECK AUXILIARY LOAD SYSTEM FOR PLUGGING, BROKEN BELT, IMPROPER FLOW RATE, UNDERSIZED LOAD SYSTEM, ETC. THAT MAY RESTRICT GRAIN FLOW TO DRYER.
4. **SEQUENCE:** **FAN SWITCH (SW2) TO "ON", HOLD UNTIL ALL FANS ARE OPERATIONAL.**
- ACTION:** FAN STARTER(S) (S1, S2, S3, S4) START AND LOCK INTO OPERATION (5 SECONDS DELAY BETWEEN FANS ON MULTI FAN UNITS). ALL FAN PROVEN LIGHT(S) "ON" (DS13, DS14, DS15, DS16), AFTER A 10 SECOND DELAY THE PURGING LIGHT (DS17) WILL LIGHT AND AFTER 60 SECONDS THE BURNER READY LIGHT (DS18) WILL LIGHT.
- NOTE:** FAN NUMBER ONE (# 1) IS CLOSEST TO CONTROL PANEL.
- SYMPTOMS:**
- A. DRYER SHUTS DOWN IMMEDIATELY OR DURING FAN(S) (S1, S2, S3, S4) STARTUP.
 - B. FAN STARTER(S) (S1, S2, S3, S4) WILL NOT LOCK INTO OPERATION WHEN FAN SWITCH (SW2) IS RELEASED.
 - C. SOME OR NONE OF THE FAN PROVEN LIGHT(S) (DS13, DS14, DS15, DS16) STAY LIT, AFTER THE FAN STARTER(S) (S1, S2, S3, S4) LOCK INTO OPERATION.
 - D. PURGING LIGHT (DS17) WILL NOT LIGHT.
 - E. BURNER READY LIGHT (DS18) WILL NOT LIGHT.
- POSSIBLE CAUSES:**
- A1. OVERLOAD(S) ON FAN STARTER(S) (S1, S2, S3, S4), TRIPPED.

A2. FAN AIR SENSOR(S) (AS1, AS2, AS3, AS4), SHORTED.
A3. MISC. SHORT CIRCUIT(S) IN SYSTEM.

B1. DEFECTIVE FAN SWITCH (SW2).
B2. DEFECTIVE STARTER COIL (S1, S2, S3, S4).
B3. DEFECTIVE STARTER INTERLOCK (SW14, SW15, SW16, SW17).
B4. DEFECTIVE FAN TIMER (K13, K14, K15).

C1. INCORRECT FAN ROTATION.
C2. DEFECTIVE FAN AIR SENSOR (AS1).
DEFECTIVE FAN PROVEN LIGHT (DS13).
C3. DEFECTIVE FAN AIR SENSOR (AS2).
DEFECTIVE FAN PROVEN LIGHT (DS14).
C4. DEFECTIVE FAN AIR SENSOR (AS3).
DEFECTIVE FAN PROVEN LIGHT (DS15).
C5. DEFECTIVE FAN AIR SENSOR (AS4).
DEFECTIVE FAN PROVEN LIGHT (DS16).

D1. DEFECTIVE FAN SENSOR RELAY (K7).
DEFECTIVE PURGING LIGHT (DS17).

E1. DEFECTIVE PURGE RELAY (K9).
DEFECTIVE BURNER READY LIGHT (DS18).

CORRECTIVE
ACTION:

NOTE: THE BURNER SWITCH (SW3) MUST BE IN "OFF" POSITION

A1. ONE OR MORE STARTER OVERLOADS (S1, S2, S3, S4) HAVE TRIPPED FROM A MOTOR DRAWING HIGH AMPERAGE. DETERMINE WHICH ONE IS OPEN. RESET TRIPPED OVERLOAD. IT WILL BE NECESSARY TO DETERMINE IF A SHORT CIRCUIT OR OVERLOAD CONDITION EXISTS IN THIS ISOLATED SYSTEM AND WHAT CORRECTIVE STEPS NEED TO BE TAKEN TO RESOLVE THIS CONDITION. OTHER POSSIBLE CAUSES COULD BE (1) BAD FAN STARTER OVERLOAD MODULE, REPLACE. (2) FAN PITCH SET TO HIGH, REPITCH TO CORRECT SETTING. (3) INCORRECT SETTING ON OVERLOAD, SET OVERLOAD TO MOTOR FULL LOAD AMPS. (4) LOOSE WIRING CONNECTIONS ON TERMINALS, TIGHTEN.

A2. CHECK THE TERMINATIONS INSIDE THE FAN AIR SENSOR(S) (AS1, AS2, AS3, AS4) TO INSURE THE SWITCH HAS NOT COME LOOSE OR THE TERMINALS ARE TIGHT AND A WIRE IS NOT SHORTING AGAINST THE CASE. THE FAN AIR SENSOR(S) (AS1, AS2, AS3, AS4) ARE LOCATED IN THE COOLING CHAMBER ON THE SIDE OF THE FAN DRUM.

A3. REPAIR OR REPLACE BURNED OR BARE WIRING IN CONTACT WITH CHASSIS OR OTHER WIRING.

B1. IF VOLTAGE IS PRESENT ON TERMINAL #39 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #53 (120 VOLTS) WHILE HOLDING THE FAN SWITCH (SW2) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT THE FAN SWITCH (SW2) IS DEFECTIVE, REPLACE. THE BURNER SWITCH (SW3) MUST BE IN "OFF" POSITION.

- B2. IF FAN #1 DOES NOT PULL IN AND VOLTAGE IS PRESENT AT TERMINAL #53 (120 VOLTS), CHECK LOAD SIDE OF STARTER COIL FOR PRESENCE OF VOLTAGE WHEN FAN SWITCH (SW2) IS DEPRESSED. IF VOLTAGE IS PRESENT AT LOAD SIDE OF COIL ON STARTER (S1), THE HOLDING COIL IS DEFECTIVE AND MUST BE REPLACED. CHECK ALL COILS ON OTHER FAN STARTER(S) (S2, S3, S4) IN SEQUENCE TO FIND DEFECTIVE COIL AND REPLACE. NOTE: WHEN CHECKING COILS ON FAN STARTER(S) (S2, S3, S4) THE STARTER INTERLOCK(S) (SW15, SW16, SW17) ON THE PREVIOUS STARTER MUST PULL IN AND THE FAN TIMER(S) (K13, K14, K15) MUST TIME OUT TO SEE VOLTAGE PRESENT ON THE NEXT STARTER.
- B3. IF FAN #1 PULLS IN, CHECK LOAD SIDE OF INTERLOCK (SW14) FOR PRESENCE OF VOLTAGE WHEN FAN SWITCH (SW2) IS DEPRESSED. IF VOLTAGE IS PRESENT AT LOAD SIDE OF INTERLOCK (SW14) CHECK OPPOSITE SIDE OF INTERLOCK (SW14). IF NO POWER IS PRESENT THE INTERLOCK (SW14) IS DEFECTIVE, REPLACE. CHECK ALL INTERLOCKS ON OTHER FAN STARTER(S) (S2, S3, S4) IN SEQUENCE TO FIND DEFECTIVE INTERLOCK AND REPLACE. NOTE: TO CHECK INTERLOCK(S) (SW15, SW16, SW17) ON OTHER FAN STARTER(S) (S2, S3, S4) STARTERS MUST BE PULLED IN.
- B4. IF FAN #1 PULLS IN, CHECK LOAD SIDE OF FAN TIMER (K13) ON TERMINAL #2 (A1) LOCATED ON FAN TIMER PLUG-IN BASE. IF VOLTAGE IS PRESENT (120 VOLTS) THEN CHECK TERMINAL #3 LOCATED ON FAN TIMER (K13) PLUG-IN BASE, REMEMBER TO ALLOW THE TIMER TO TIME OUT BEFORE CHECKING VOLTAGE ON TERMINAL #3, IF VOLTAGE IS NOT PRESENT THE FAN TIMER (K13) IS DEFECTIVE, REPLACE. NOTE: TO CHECK OTHER TIMER(S) (K14, K15) FOLLOW THE SAME PROCEDURE.
- C1. IF SOME OR NONE OF THE FAN PROVEN LIGHTS STAY LIT CHECK TO SEE IF THE FAN(S) ARE ROTATING IN THE CORRECT DIRECTION. WHEN ELECTRICAL SERVICE IS INSTALLED, ATTENTION MUST BE PAID TO PROPER PHASING. ALL MOTORS HAVE BEEN PHASED AT THE FACTORY. IN THE EVENT PHASES ARE REVERSED, SHUTOFF POWER ON MAIN BREAKER, REVERSE L1 AND L3 AT MAIN BREAKER. (WILD LEG MUST BE ON L2)
- C2. IF VOLTAGE IS PRESENT ON TERMINAL #53 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #54 (120 VOLTS) WHILE THE FAN(S) ARE LOCKED INTO OPERATION. IF NO VOLTAGE IS PRESENT THE FAN AIR SENSOR (AS1) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT ON TERMINAL #54 THE FAN PROVEN LIGHT (DS13) IS DEFECTIVE, REPLACE.
- C3. IF VOLTAGE IS PRESENT ON TERMINAL #54 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #55 (120 VOLTS) WHILE THE FAN(S) ARE LOCKED INTO OPERATION. IF NO VOLTAGE IS PRESENT THE FAN AIR SENSOR (AS2) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT ON

TERMINAL #55 THE FAN PROVEN LIGHT (DS14) IS DEFECTIVE, REPLACE.

- C4. IF VOLTAGE IS PRESENT ON TERMINAL #55 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #56 (120 VOLTS) WHILE THE FAN(S) ARE LOCKED INTO OPERATION. IF NO VOLTAGE IS PRESENT THE FAN AIR SENSOR (AS3) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT ON TERMINAL #56 THE FAN PROVEN LIGHT (DS15) IS DEFECTIVE, REPLACE.
- C5. IF VOLTAGE IS PRESENT ON TERMINAL #56 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #57 (120 VOLTS) WHILE THE FAN(S) ARE LOCKED INTO OPERATION. IF NO VOLTAGE IS PRESENT THE FAN AIR SENSOR (AS4) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT ON TERMINAL #57 THE FAN PROVEN LIGHT (DS16) IS DEFECTIVE, REPLACE.
- D1. WITH FAN(S) RUNNING CHECK TO SEE IF VOLTAGE IS PRESENT ON TERMINAL #57 (120 VOLTS), THEN CHECK FOR VOLTAGE (120 VOLTS) ON TERMINAL #A1 (2) ON THE PURGE RELAY (K9), REMEMBER TO ALLOW THE FAN SENSOR RELAY (K7) TO TIME OUT (10 SEC) BEFORE CHECKING VOLTAGE ON TERMINAL #A1 (2) OF THE PURGE RELAY (K9), IF VOLTAGE IS NOT PRESENT THE FAN SENSOR RELAY (K7) IS DEFECTIVE, REPLACE. IF VOLTAGE (120 VOLTS) IS NOT PRESENT ON TERMINAL #59, AND PRESENT ON TERMINAL #A1 (2) OF THE PURGE RELAY (K9), PURGE RELAY IS DEFECTIVE, REPLACE. IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #59 BUT PURGING LIGHT (DS17) IS NOT LIT, PURGING LIGHT (DS17) IS DEFECTIVE, REPLACE.
- E1. WITH FAN(S) RUNNING CHECK TO SEE IF VOLTAGE IS PRESENT ON TERMINAL #59 (120 VOLTS) BEFORE THE PURGE RELAY (K9) HAS TIMED OUT (60 SEC). THEN AFTER 60 SECONDS, CHECK FOR VOLTAGE ON TERMINAL #42 (120 VOLT). IF VOLTAGE IS NOT PRESENT, THE PURGE RELAY (K9) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT, THE BURNER READY LIGHT (DS18) IS DEFECTIVE, REPLACE.

5. SEQUENCE: BURNER SWITCH (SW3) TO "ON", ENERGIZING BURNER CIRCUIT.

NOTE: REFER TO SCHEMATIC NUMBER: 900-010043 FOR BURNER CIRCUIT.

ACTION: FUEL SUPPLIED TO BURNERS. IGNITION FIRING LIGHT(S) (DS24, DS25, DS26, DS27) "ON" FOR 3-5 SECONDS, BURNER PROVEN LIGHT(S) (DS20, DS21, DS22, DS23) "ON".

- SYMPTOMS:
- A. DRYER SHUTS DOWN IMMEDIATELY UPON ENGAGING BURNER SWITCH (SW3).
 - B. RESET FLAME CONTROL LIGHT (DS28) "ON".
 - C. SOME OR NONE OF THE IGNITION FIRING LIGHT(S) (DS24, DS25, DS26, DS27) LIGHT.

- D. SOME OR NONE OF THE BURNER PROVEN LIGHT(S) (DS20, DS21, DS22, DS23) STAY LIT.
- E. ALL BURNER PROVEN LIGHT(S) (DS20, DS21, DS22, DS23) COME "ON" MOMENTARILY THEN DRYER SHUTS DOWN.

POSSIBLE
CAUSES:

- A1. LOW GRAIN SITUATION (LOW GRAIN LIGHT(S) (DS9, DS10) "ON" INDICATING LOW GRAIN). NOTE: BURNERS WILL NOT FIRE WIHTOUT DRYER BEING FULL OF GRAIN.
- A2. DEFECTIVE LOW GRAIN SWITCH(S) (SW9, SW10).
- A3. FLAME SYSTEM BYPASS DELAY RELAY (K5) IS SET TOO LOW (15 SEC).
- A4. VAPOR CUTOFF VALVE COIL (SOL1) OR LIQUID CUTOFF VALVE COIL (SOL2) SHORTED.
- B. FLAME FAILURE, SAFTEY LOCKOUT ON FLAME CONTROL(S) (FC1, FC2, FC3, FC4).
- C1. DEFECTIVE FLAME CONTROL (FC1).
- DEFECTIVE IGNITION FIRING LIGHT (DS24).
- C2. DEFECTIVE FLAME CONTROL (FC2).
- DEFECTIVE IGNITION FIRING LIGHT (DS25).
- C3. DEFECTIVE FLAME CONTROL (FC3).
- DEFECTIVE IGNITION FIRING LIGHT (DS26).
- C4. DEFECTIVE FLAME CONTROL (FC4).
- DEFECTIVE IGNITION FIRING LIGHT (DS27).
- D1. NO FUEL TO DRYER.
- D2. PLUGGED FUEL LINE STRAINER.
- D3. DEEFECTIVE VAPOR CUTOFF VALVE COIL (SOL1) OR LIQUID CUTOFF VALVE COIL (SOL2).
- D4. DEFECTIVE PRESSURE REGULATOR.
- D5. PLUGGED BURNER HOLES.
- D6. LEAK IN GAS LINE TO BURNERS.
- D7. DEFECTIVE IGNITION TRANSFORMER (XMFR 1), IGNITION PLUG, AND/OR IGNITION WIRE
- D8. DEFECTIVE IGNITION TRANSFORMER (XMFR 2), IGNITION PLUG, AND/OR IGNITION WIRE
- D9. DEFECTIVE IGNITION TRANSFORMER (XMFR 3), IGNITION PLUG, AND/OR IGNITION WIRE
- D10. DEFECTIVE IGNITION TRANSFORMER (XMFR 4), IGNITION PLUG, AND/OR IGNITION WIRE
- D11. DEFECTIVE BURNER PROVEN LIGHT (DS20), FLAME CONTROL (FC1), FLAME SENSOR, FLAME SENSOR WIRE, AND/OR BURNER GROUND WIRE.
- D12. DEFECTIVE BURNER PROVEN LIGHT (DS21), FLAME CONTROL (FC2), FLAME SENSOR, FLAME SENSOR WIRE, AND/OR BURNER GROUND WIRE.
- D13. DEFECTIVE BURNER PROVEN LIGHT (DS22), FLAME CONTROL (FC3), FLAME SENSOR, FLAME SENSOR WIRE, AND/OR BURNER GROUND WIRE.
- D14. DEFECTIVE BURNER PROVEN LIGHT (DS23), FLAME CONTROL (FC4), FLAME SENSOR, FLAME SENSOR WIRE, AND/OR BURNER GROUND WIRE.
- E1. DEFECTIVE FLAME RELAY (K1).
- E2. DEFECTIVE FLAME RELAY (K2).
- E3. DEFECTIVE FLAME RELAY (K3).

E4. DEFECTIVE BURNER RELAY (K6).

CORRECTIVE
ACTION:

A1A. FILL DRYER FULL OF GRAIN.

A1B. TRASH AND PLUGGING PROBLEM - CHECK LOW GRAIN SWITCH(S) (SW9, SW10) FOR TRASH BUILDUP BEHIND PADDLE.

A2A. FRONT LOW GRAIN SWITCH (SW9). IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #35 CHECK VOLTAGE ON TERMINAL #37 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE LOW GRAIN SWITCH FRONT (SW9) IS DEFECTIVE, REPLACE.

A2B. REAR LOW GRAIN SWITCH (SW10). IF VOLTAGE (120 VOLTS) IS PRESENT ON TERMINAL #37 CHECK VOLTAGE ON TERMINAL #39 WITH SWITCH PADDLE ENGAGED. IF VOLTAGE IS NOT PRESENT THE LOW GRAIN SWITCH REAR (SW10) IS DEFECTIVE, REPLACE.

A3. SET FLAME SYSTEM BYPASS DELAY RELAY (K5) TO 15 SECONDS.

A4. INSPECT COILS (SOL1, SOL2) FOR BAD CONNECTIONS INSIDE COIL CASES OR DISCONNECT EACH COIL SEPARATELY AND CONNECT TO AN OUTSIDE 120 VOLT SOURCE AND LISTEN FOR THE VALVE TO PULL IN, IF NOT PULLING IN THE COIL IS DEFECTIVE, REPLACE. NOTE: TEST SHOULD BE PERFORMED WITH ALL POWER "OFF" TO DRYER.

B. MANUAL RESET IS REQUIRED, PUSH RESET BUTTON (BLACK) ON FLAME CONTROL(S) (FC1, FC2, FC3, FC4). FLAME CONTROLS ARE LOCATED ON INSIDE OF LARGE PANEL BOX DOOR. NOTE: WHEN RESETING FIREYE MODEL MicroM, FANS MUST BE RUNNING AND PROVEN, SENDING 120V TO TERMINAL #60.

C1A. IF VOLTAGE IS NOT PRESENT ON TERMINAL #1 (120 VOLTS), WITH BURNER SWITCH (SW3) "ON" THE BURNER SWITCH (SW3) IS DEFECTIVE, REPLACE.

C1B. IF VOLTAGE IS PRESENT ON TERMINAL #1 (120 VOLTS) WITH BURNER SWITCH (SW3) "ON" THEN CHECK FOR VOLTAGE ON TERMINAL #4 (THERE WILL BE A 4 TO 5 SECOND DELAY BEFORE VOLTAGE WILL BE PRESENT ON TERMINAL #4). IF VOLTAGE IS NOT PRESENT ON TERMINAL #4 THE FLAME CONTROL (FC1) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT THE IGNITION FIRING LIGHT (DS24) IS DEFECTIVE, REPLACE.

C2. IF VOLTAGE IS PRESENT ON TERMINAL #1 (120 VOLTS) WITH BURNER SWITCH (SW3) "ON" THEN CHECK FOR VOLTAGE ON TERMINAL #5 (THERE WILL BE A 4 TO 5 SECOND DELAY BEFORE VOLTAGE WILL BE PRESENT ON TERMINAL #5). IF VOLTAGE IS NOT PRESENT ON TERMINAL #5 THE FLAME CONTROL (FC2) IS DEFECTIVE, REPLACE.

IF VOLTAGE IS PRESENT THE IGNITION FIRING LIGHT (DS25) IS DEFECTIVE, REPLACE.

- C3. IF VOLTAGE IS PRESENT ON TERMINAL #1 (120 VOLTS) WITH BURNER SWITCH (SW3) "ON" THEN CHECK FOR VOLTAGE ON TERMINAL #6 (THERE WILL BE A 4 TO 5 SECOND DELAY BEFORE VOLTAGE WILL BE PRESENT ON TERMINAL #6). IF VOLTAGE IS NOT PRESENT ON TERMINAL #6 THE FLAME CONTROL (FC3) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT THE IGNITION FIRING LIGHT (DS26) IS DEFECTIVE, REPLACE.
- C4. IF VOLTAGE IS PRESENT ON TERMINAL #1 (120 VOLTS) WITH BURNER SWITCH (SW3) "ON" THEN CHECK FOR VOLTAGE ON TERMINAL #7 (THERE WILL BE A 4 TO 5 SECOND DELAY BEFORE VOLTAGE WILL BE PRESENT ON TERMINAL #7). IF VOLTAGE IS NOT PRESENT ON TERMINAL #7 THE FLAME CONTROL (FC4) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT THE IGNITION FIRING LIGHT (DS27) IS DEFECTIVE, REPLACE.
- D1. CHECK FUEL SUPPLY TO DRYER, CHECK GAS PRESSURE, AND MANUAL VALVES "OPEN" ON DRYER. NOTE: ON L.P. UNITS ARE MANUAL VALVES OPEN AT TANK?
- D2. REMOVE STRAINER AND CLEAN. (L.P. UNITS ONLY)
- D3. **TEST SHOULD BE PERFORMED WITH POWER "OFF" TO DRYER.** INSPECT COILS (SOL1, SOL2) FOR BAD CONNECTIONS INSIDE COIL CASES OR DISCONNECT EACH COIL SEPARATELY AND CONNECT TO AN OUTSIDE 120 VOLT SOURCE AND LISTEN FOR THE VALVE TO PULL IN, IF NOT PULLING IN, THE COIL IS DEFECTIVE, REPLACE.
- D4. ADJUST REGULATOR FOR 12 POUNDS OF GAS PRESSURE ON L.P. UNITS AND 10 POUNDS ON NATURAL GAS UNITS. IF NO PRESSURE IS PRESENT CALL YOUR LOCAL SUPPLIER.
- D5A. INSPECT BURNER(S) FOR PLUGGED HOLES AND CLEAN. (BURNER HOLES ARE 5/64" DIAMETER). IF BURNER HOLES ARE OPEN IT MAY BE NECESSARY TO REMOVE AND VACCUM INSIDE OF BURNER USING A SHOPVAC CONNECTED TO FUEL INLET HOLE.
- D5B. WATER IN BURNER(S) - IT'S POSSIBLE OVER THE OFF SEASON THAT WATER HAS GOTTEN INTO THE BURNER RING. REMOVE PIPE PLUG LOCATED ON FUEL TRAIN OUTSIDE BURNER DRUM.
- D6. CHECK FOR LOOSE OR BROKEN FITTINGS AND PIPE FROM VALVE ASSEMBLY TO BURNERS.
- D7A. TO D10A. INSPECT IGNITION PLUG FOR CARBON BUILDUP ON ELECTRODES, CHECK GAP 1/8" TO 3/16", AND INSPECT IGNITION WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. IF DEFECTIVE, REPLACE AS REQUIRED.
- D7B. TO D10B. REMOVE TRANSFORMER, IGNITION WIRE AND IGNITION

PLUG FROM DRYER. CONNECT 120 VOLTS TO IGNITION TRANSFORMER WITH IGNITION PLUG AND WIRE CONNECTED. IF NO SPARK ON IGNITION PLUG, TRANSFORMER IS DEFECTIVE, REPLACE.

- D11. IF VOLTAGE IS PRESENT ON TERMINAL #12 (120 VOLTS), BURNER PROVEN LIGHT (DS20) IS DEFECTIVE, REPLACE. IF VOLTAGE IS NOT PRESENT ON TERMINAL #12, REFER TO FIREYE BULLETIN LOCATED IN SECTION 14, COMPONENT LITERATURE. CHECK FOR FLAME SIGNAL PER BULLETIN INSTRUCTIONS. IF FLAME SIGNAL IS NOT PRESENT, INSPECT FLAME SENSOR FOR CRACKED PORCELAIN, BROKEN ROD, LOOSE FLAME ROD, AND INSPECT FLAME SENSOR WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. ALSO INSPECT GREEN BURNER GROUND WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. REPLACE AS REQUIRED. IF FLAME SIGNAL IS PRESENT, FLAME CONTROL (FC1) IS DEFECTIVE, REPLACE.
- D12. IF VOLTAGE IS PRESENT ON TERMINAL #13 (120 VOLTS), BURNER PROVEN LIGHT (DS21) IS DEFECTIVE, REPLACE. IF VOLTAGE IS NOT PRESENT ON TERMINAL #13, REFER TO FIREYE BULLETIN LOCATED IN SECTION 14, COMPONENT LITERATURE. CHECK FOR FLAME SIGNAL PER BULLETIN INSTRUCTIONS. IF FLAME SIGNAL IS NOT PRESENT, INSPECT FLAME SENSOR FOR CRACKED PORCELAIN, BROKEN ROD, LOOSE FLAME WIRE, AND INSPECT FLAME SENSOR WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. ALSO INSPECT GREEN BURNER GROUND WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. REPLACE AS REQUIRED. IF FLAME SIGNAL IS PRESENT, FLAME CONTROL (FC2) IS DEFECTIVE, REPLACE.
- D13. IF VOLTAGE IS PRESENT ON TERMINAL #14 (120 VOLTS), BURNER PROVEN LIGHT (DS22) IS DEFECTIVE, REPLACE. IF VOLTAGE IS NOT PRESENT ON TERMINAL #14, REFER TO FIREYE BULLETIN LOCATED IN SECTION 14, COMPONENT LITERATURE. CHECK FOR FLAME SIGNAL PER BULLETIN INSTRUCTIONS. IF FLAME SIGNAL IS NOT PRESENT, INSPECT FLAME SENSOR FOR CRACKED PORCELAIN, BROKEN ROD, LOOSE FLAME ROD, AND INSPECT FLAME SENSOR WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. ALSO INSPECT GREEN BURNER GROUND WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. REPLACE AS REQUIRED. IF FLAME SIGNAL IS PRESENT, FLAME CONTROL (FC3) IS DEFECTIVE, REPLACE.
- D14. IF VOLTAGE IS PRESENT ON TERMINAL #15 (120 VOLTS), BURNER PROVEN LIGHT (DS23) IS DEFECTIVE, REPLACE. IF VOLTAGE IS NOT PRESENT ON TERMINAL #15, REFER TO FIREYE BULLETIN LOCATED IN SECTION 14, COMPONENT LITERATURE. CHECK FOR FLAME SIGNAL PER BULLETIN INSTRUCTIONS. IF FLAME SIGNAL IS NOT PRESENT, INSPECT FLAME SENSOR FOR CRACKED PORCELAIN, BROKEN ROD, LOOSE FLAME ROD, AND INSPECT FLAME SENSOR WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. ALSO INSPECT GREEN BURNER GROUND WIRE FOR TIGHT CONNECTIONS AND CONDITION OF WIRE. REPLACE AS

REQUIRED. IF FLAME SIGNAL IS PRESENT, FLAME CONTROL (FC4) IS DEFECTIVE, REPLACE.

- E1. WITH FLAME SYSTEM "ON", BURNER PROVEN LIGHTS (DS20, DS21) "ON", CHECK TERMINAL #14(3) (120 VOLTS) LOCATED ON THE FLAME RELAY (K1) PLUG-IN BASE. IF NO VOLTAGE IS PRESENT THE FLAME RELAY (K1) IS DEFECTIVE, REPLACE.
- E2. WITH FLAME SYSTEM "ON", BURNER PROVEN LIGHTS (DS20, DS21, DS22) "ON", CHECK TERMINAL #14(3) (120 VOLTS) LOCATED ON THE FLAME RELAY (K2) PLUG-IN BASE. IF NO VOLTAGE IS PRESENT THE FLAME RELAY (K2) IS DEFECTIVE, REPLACE.
- E3. WITH FLAME SYSTEM "ON", BURNER PROVEN LIGHTS (DS20, DS21, DS22, DS23) "ON", CHECK TERMINAL #14(3) (120 VOLTS) LOCATED ON THE FLAME RELAY (K3) PLUG-IN BASE. IF NO VOLTAGE IS PRESENT THE FLAME RELAY (K3) IS DEFECTIVE, REPLACE.
- E4. WITH FLAME SYSTEM "ON", BURNER PROVEN LIGHT(S) (DS20, DS21, DS22, DS23) "ON". VISUALLY INSPECT THE CONTACTS IN THE FLAME RELAY (K6) TO SEE IF THEY ARE CLOSING. IF NOT, THE FLAME RELAY (K6) IS DEFECTIVE, REPLACE.

6. SEQUENCE: UNLOAD SWITCH (SW5) TO "ON", ENERGIZING UNLOAD CIRCUIT.

ACTION: UNLOAD SWITCH (SW5) "ON", GRAIN UNLOADING LIGHT (DS19) "ON", STARTS UNLOAD AUGER AND DRY AUXILIARY UNLOADING. UNLOADS DRY GRAIN FROM THE DRYER AT A PRE-SELECTED RATE.

SYMPTOMS:

- A. NO GRAIN UNLOADING LIGHT (DS19).
- B. GRAIN UNLOADING LIGHT (DS19) "ON" BUT UNLOADING SYSTEM NOT RUNNING.
- C. DRYER SHUTS DOWN IMMEDIATELY OR DURING UNLOADING OPERATION.

POSSIBLE CAUSES:

- A. DEFECTIVE GRAIN UNLOADING SWITCH (SW5).
DEFECTIVE GRAIN UNLOADING LIGHT (DS19).
- B1. DEFECTIVE AUXILIARY UNLOAD STARTER COIL (S8).
- B2. DEFECTIVE AUXILIARY UNLOAD STARTER INTERLOCK (SW20).
- B3. DEFECTIVE UNLOAD AUGER STARTER COIL (S7).
- C1. OVERLOAD(S) ON UNLOAD AUGER AND/OR AUXILIARY UNLOAD STARTER(S) (S7, S8) TRIPPED.
- C2. OPEN DISCHARGE OVERFLOW SWITCH (OPTIONAL ON SOME MODELS).

CORRECTIVE ACTION:

- A. IF VOLTAGE IS PRESENT ON TERMINAL #39 (120 VOLTS), TURN UNLOAD SWITCH (SW5) TO "ON". THEN CHECK FOR

VOLTAGE ON TERMINAL #49. IF VOLTAGE IS NOT PRESENT THE UNLOAD SWITCH (SW5) IS DEFECTIVE, REPLACE. IF VOLTAGE IS PRESENT, THE GRAIN UNLOADING LIGHT (DS19) IS DEFECTIVE, REPLACE.

- B1. IF AUXILIARY UNLOAD STARTER (S8) DOES NOT PULL IN AND VOLTAGE IS PRESENT AT LOAD SIDE OF COIL, THE HOLDING COIL IS DEFECTIVE, REPLACE.
- B2. IF AUXILIARY UNLOAD STARTER (S8) DOES PULL IN, CHECK LOAD SIDE OF INTERLOCK (SW20) ON AUXILIARY UNLOAD STARTER (S8) FOR PRESENCE OF VOLTAGE (120 VOLTS). IF VOLTAGE IS PRESENT AT LOAD SIDE OF INTERLOCK (SW20), CHECK OPPOSITE SIDE OF INTERLOCK (SW20). IF NO VOLTAGE IS PRESENT, THE INTERLOCK (SW20) IS DEFECTIVE, REPLACE.
- B3. IF UNLOAD AUGER STARTER (S7) DOES NOT PULL IN AND VOLTAGE IS PRESENT AT LOAD SIDE OF COIL, THE HOLDING COIL IS DEFECTIVE, REPLACE.
- C1. OVERLOADS ON UNLOAD AUGER AND/OR AUXILIARY UNLOAD STARTER(S) (S7, S8) MAY HAVE TRIPPED FROM A MOTOR DRAWING HIGH AMPERAGE. DETERMINE WHICH ONE IS OPEN. RESET DEFECTIVE OVERLOAD. IT WILL BE NECESSARY TO DETERMINE IF A SHORT CIRCUIT OR EXCESSIVE OVERLOAD CONDITION EXISTS IN THIS ISOLATED SYSTEM AND WHAT CORRECTIVE STEPS NEED TO BE TAKEN TO RESOLVE THIS CONDITION. OTHER POSSIBLE CAUSES COULD BE (1) BAD MOTOR, REPLACE. (2) JAMMED UNLOAD SYSTEM, CORRECT. (3) LOOSE WIRING CONNECTIONS ON TERMINALS, TIGHTEN. (4) DEFECTIVE OVERLOAD, REPLACE.
- C2. CHECK FOR OVERFLOW CONDITION, CORRECT.

7A. SEQUENCE: METERING SELECTOR SWITCH (SW6) TO "MAN", ENERGIZING METERING SYSTEM CIRCUIT.

ACTION: METERING SELECTOR SWITCH (SW6) TO "MAN" POSITION, STARTS METERING ROLLS AND DISCHARGES AT VARIABLE RATE CONTROLLED BY SETTING OF MANUAL METERING CONTROL (RV1).

NOTE: UNLOAD AUGER AND AUXILIARY UNLOAD SYSTEM MUST BE "ON" BEFORE METERING SYSTEM IS ENERGIZED.

SYMPTOMS:

- A. METERING ROLLS DO NOT START.
- B. DRYER SHUTS DOWN IMMEDIATELY OR DURING UNLOADING OPERATION.
- C. RATE OF DISCHARGE CANNOT BE CONTROLLED.

POSSIBLE CAUSE:

- A1. DEFECTIVE UNLOAD STARTER INTERLOCK (SW21).
- A2. DEFECTIVE FUSE(S) - DC MOTOR DRIVE (SCR1).
- A3. DEFECTIVE METERING ROLL SELECTOR SWITCH (SW6).
- A4. DEFECTIVE DC MOTOR DRIVE (SCR1).

- A5. DEFECTIVE DC MOTOR AND/OR BRUSHES.
- A6. DEFECTIVE MANUAL SPEED CONTROL (RV1).

- B1. SHORT CIRCUIT IN DC MOTOR AND/OR BRUSHES.
- B2. SHORT CIRCUIT IN DC MOTOR DRIVE (SCR1).
- B3. FEEDROLL MONITOR SYSTEM "OPEN" DUE TO: DEFECTIVE FEEDROLL MONITOR SWITCH (SW8) OR CAM NUT, TIMER RELAY(S) (K10, K11), OR METERING ROLLS STOPPING BECAUSE OF JAMMED METERING ROLLS OR BROKEN CHAIN.

- C1. DEFECTIVE MANUAL SPEED CONTROL (RV1).
- C2. DEFECTIVE DC MOTOR DRIVE (SCR1).
- C3. DC MOTOR DRIVE (SCR1) OUT OF CALIBRATION.

CORRECTIVE
ACTION:

- A1. IF UNLOAD AUGER STARTER (S7) DOES PULL IN, CHECK LOAD SIDE OF INTERLOCK (SW21) ON UNLOAD AUGER STARTER (S7) FOR PRESENCE OF VOLTAGE (120 VOLTS). IF VOLTAGE IS PRESENT AT LOAD SIDE OF INTERLOCK (SW21), CHECK OPPOSITE SIDE OF INTERLOCK (SW21). IF NO VOLTAGE IS PRESENT, THE INTERLOCK (SW21) IS DEFECTIVE, REPLACE.

- A2. CHECK FUSE(S) LOCATED ON DC DRIVE (SCR1) IF DEFECTIVE, REPLACE.

- A3. IF VOLTAGE IS PRESENT ON TERMINAL #64 (120 VOLTS) WITH METERING ROLL SELECTOR SWITCH (SW6) "ON" THEN CHECK FOR VOLTAGE ON TERMINAL #75. IF VOLTAGE IS NOT PRESENT THE METERING ROLL SELECTOR SWITCH (SW6) IS DEFECTIVE, REPLACE.

- A4. IF VOLTAGE IS PRESENT ON TERMINAL #75 (120 VOLTS) WITH METERING ROLL SELECTOR SWITCH (SW6) "ON" THEN CHECK FOR VOLTAGE (0 TO 90 VOLTS DC) ON TERMINALS #73 (+) & #74 (-), IF VOLTAGE IS NOT PRESENT THE SCR CONTROL IS DEFECTIVE, REPLACE. NOTE: IF THE MOTOR IS DEFECTIVE THE DC DRIVE (SCR1) WILL SHOW NO VOLTAGE ON TERMINALS #73 & #74, THERE MUST BE A LOAD ON TERMINALS #73 & #74 TO COMPLETE THE TEST. A DEFECTIVE MOTOR OR BRUSHES CAN RESULT IN DAMAGE TO THE DC DRIVE (SCR1).

- A5. DISCONNECT MOTOR WIRES AND CHECK FOR CONTINUITY. IF NO CONTINUITY, CHECK BRUSHES TO INSURE BOTH BRUSHES ARE MAKING CONTACT WITH THE ROTOR. IF THEY ARE NOT, CLEAN OR REPLACE. IF BOTH BRUSHES ARE MAKING CONTACT THE MOTOR IS DEFECTIVE, REPAIR OR REPLACE. NOTE: A DEFECTIVE MOTOR OR BRUSHES CAN RESULT IN DAMAGE TO THE DC DRIVE (SCR1).

- A6. DISCONNECT WIRES FROM THE MANUAL METERING CONTROL (RV1) AND CHECK RESISTANCE OF CONTROL (0 TO 5K OHMS), TURNING CONTROL KNOB 270 DEGREES. IF FULL SPAN DOES NOT OCCUR OR SPIKES OCCUR REPLACE MANUAL METERING CONTROL (RV1).

- B1. DISCONNECT MOTOR WIRES AND CHECK FOR CONTINUITY. IF CONTINUITY IS PRESENT CHECK EACH WIRE TO GROUND FOR A SHORT CIRCUIT. IF A SHORT CIRCUIT IS PRESENT REPAIR OR REPLACE MOTOR.
- B2. WITH POWER "OFF" AND D.C. MOTOR WIRE DISCONNECTED CHECK TERMINAL #75 TO GROUND FOR A SHORT CIRCUIT, IF A SHORT CIRCUIT IS PRESENT THE DC DRIVE (SCR1) NEEDS TO BE REPAIRED OR REPLACED.
- B3A. IF VOLTAGE IS PRESENT ON TERMINAL #31 (120 VOLTS) THEN CHECK FOR VOLTAGE ON TERMINAL #32 (120 VOLTS) WHILE HOLDING THE POWER SWITCH (SW1) IN THE "ON" POSITION. IF NO VOLTAGE IS PRESENT THE FEEDROLL MONITOR CIRCUIT IS OPEN. FIRST, CHECK TO SEE IF THE SELECTOR SWITCH (SW7) IS IN THE "OFF" POSITION. IF SELECTOR SWITCH (SW7) IS IN THE "ON" POSITION, RETURN TO "OFF" POSITION.
- B3B. IF DRYER SHUTS DOWN WITHIN 60 SECONDS WHEN FEEDROLL MONITOR SELECTOR SWITCH (SW7) IS "ON" AND METERING SYSTEM IS OPERATING, CHECK VOLTAGE (120 VOLTS) ON TERMINALS #62 AND #63. VOLTAGE SHOULD BE PRESENT ON EACH TERMINAL ABOUT EVERY 2 TO 4 SECONDS WHILE THE FEEDROLLS ARE TURNING. IF VOLTAGE IS NOT PRESENT ON BOTH TERMINALS CHECK FEEDROLL MONITOR SWITCH (SW8) FOR CORRECT OPERATION AND CAM NUT ADJUSTMENT LOCATED ON FEEDROLL SPROCKET. ADJUST CAM NUT OR REPLACE FEEDROLL MONITOR SWITCH (SW8). IF VOLTAGE IS PRESENT, CHECK THE TIME DELAY RELAYS (K10 & K11) FOR PROPER OPERATION AND SETTING (60 SEC.). SET TO 60 SECONDS OR REPLACE IF DEFECTIVE.
- B3C. CHECK FOR JAMMED METERING ROLL(S), CORRECT, OR CHECK BROKEN CHAIN, REPAIR OR REPLACE.
- C1. DISCONNECT WIRES FROM THE MANUAL METERING CONTROL (RV1) AND CHECK RESISTANCE OF CONTROL (0 TO 5K OHMS), TURNING CONTROL KNOB 270 DEGREES. IF FULL SPAN DOES NOT OCCUR OR SPIKES OCCUR, REPLACE MANUAL METERING CONTROL (RV1).
- C2. IF VOLTAGE IS PRESENT ON TERMINAL #75 (120 VOLTS) WITH METERING SELECTOR SWITCH (SW6) "ON" THEN CHECK FOR VOLTAGE (0 TO 90 VOLTS DC) ON TERMINALS #73 (+) & #74 (-), IF VOLTAGE IS NOT PRESENT THE SCR CONTROL IS DEFECTIVE, REPLACE. NOTE: IF THE MOTOR IS DEFECTIVE THE DC DRIVE (SCR1) WILL SHOW NO VOLTAGE ON TERMINALS #73 & #74, THERE MUST BE A LOAD ON TERMINALS #73 & #74 TO COMPLETE THE TEST. A DEFECTIVE MOTOR OR BRUSHES CAN RESULT IN DAMAGE TO THE DC DRIVE (SCR1).
- C3. STEP 1: REMOVE THE COVER OF THE DC DRIVE (SCR1) AND LOCATE THE "MIN", "MAX" AND "IR COMP" POTS ON THE CIRCUIT BOARD.

STEP 2: SET THE METERING SELECTOR SWITCH (SW6) TO THE "MAN" POSITION.

STEP 3: IR COMPENSATION ADJUSTMENT:

- (a.) IR COMPENSATION IS PROVIDED TO OVERCOME THE MOTOR'S NATURAL TENDENCY TO SLOW DOWN AS LOAD INCREASES. IF THE MOTOR SLOWS DOWN EXCESSIVELY AS IT IS LOADED, THE POT MARKED "IR COMP" SHOULD BE ADJUSTED CLOCKWISE.
- (b.) IF THE IR COMP IS ADJUSTED TOO FAR CLOCKWISE, THE MOTOR WILL BEGIN TO OSCILLATE IN SPEED OR "HUNT". IF THIS PULSING OF SPEED OCCURS, ADJUST THE IR COMP COUNTERCLOCKWISE UNTIL THE MOTOR SPEED STABILIZES.

STEP 4: MINIMUM SPEED ADJUSTMENT:

- (a.) ADJUST THE MANUAL SPEED CONTROL (RV1) FULLY COUNTERCLOCKWISE.
- (b.) ADJUST THE "MIN" SPEED POT ON DC DRIVE (SCR1) WITH A SCREWDRIVER UNTIL YOU READ 8 VDC ON THE DC VOLTMETER (M1).

STEP 5: MAXIMUM SPEED ADJUSTMENT:

- (a.) ADJUST THE MANUAL SPEED CONTROL (RV1) FULLY CLOCKWISE.
- (b.) ADJUST THE "MAX" SPEED POT ON THE DC DRIVE (SCR1) WITH A SCREWDRIVER UNTIL YOU READ 85 VDC ON THE DC VOLTMETER (M1). NOTE: DO NOT EXCEED 90 VDC IN MANUAL OR AUTOMATIC MODE. THIS WILL CAUSE DAMAGE TO THE DC MOTOR.

STEP 6: MAKE SURE YOUR TAKE AWAY SYSTEM CAN HANDLE 90 VDC OUTPUT OF GRAIN. IF NOT, YOU CAN ADJUST THE "MAX" SPEED POT ON THE DC DRIVE (SCR1) DOWN TO MEET YOUR SYSTEM CAPACITY. (EX. 75 VDC).

STEP 7: RECHECK THE UNLOADING RATE BY STARTING AT STEP 4 AND VERIFY THAT THE MINIMUM AND MAXIMUM VOLTAGES HAVE BEEN PROPERLY SET.

STEP 8: PLACE COVER ON THE DC DRIVE (SCR1).

NOTE: FOR MORE INFORMATION ON THE DC DRIVE (SCR1), REFER TO SECTION 14 "COMPONENT LITERATURE".

7B. SEQUENCE: METERING SELECTOR SWITCH (SW6) TO "AUTO", ENERGIZING AUTOMATIC METERING SYSTEM CIRCUIT.

NOTE: BEFORE TROUBLE SHOOTING AUTOMATIC METERING SYSTEM, MANUAL METERING SYSTEM MUST BE OPERATIONAL. IF NOT, REFER TO SEQUENCE "7A".

ACTION: METERING SELECTOR SWITCH (SW6) TO "AUTO" POSITION, STARTS METERING ROLLS AND DISCHARGES AT VARIABLE RATE CONTROLLED BY SETTING OF AUTOMATIC METERING CONTROL (TC2). THE

AUTOMATIC SYSTEM SENSES GRAIN TEMPERATURE IN THE GRAIN COLUMN AND ADJUSTS THE DISCHARGE RATE AS NECESSARY TO AID IN MAINTAINING A CONSISTENT GRAIN MOISTURE LEVEL.

NOTE: UNLOAD AUGER AND AUXILIARY UNLOAD SYSTEM MUST BE "ON" BEFORE METERING SYSTEM IS ENERGIZED.

SYMPTOMS: A. RATE OF DISCHARGE CANNOT BE ADJUSTED.
 B. NOT MAINTAINING A CONSISTENT GRAIN MOISTURE LEVEL.

POSSIBLE
CAUSES: A1. DEFECTIVE METERING SELECTOR SWITCH (SW6).
 A2. DEFECTIVE AUTOMATIC MOISTURE RELAY (K12).
 A3. DEFECTIVE MOISTURE SENSOR OR SENSOR WIRING.
 A4. DEFECTIVE AUTOMATIC METERING CONTROL (TC2).

 B1. IMPROPER SETTING OF MOISTURE CONTROL SYSTEM.
 B2. INCORRECT CONFIGURATION OF AUTOMATIC METERING
 CONTROL (TC2).

CORRECTIVE
ACTION: A1. IF VOLTAGE IS PRESENT ON TERMINAL #64 (120 VOLTS)
 WITH METERING SELECTOR SWITCH (SW6) "ON" - "AUTO"
 POSITION, THEN CHECK FOR VOLTAGE ON TERMINAL #76.
 IF VOLTAGE IS NOT PRESENT THE METERING SELECTOR
 SWITCH (SW6) IS DEFECTIVE, REPLACE.

 A2. IF VOLTAGE IS PRESENT ON TERMINAL #76 (120 VOLTS)
 WITH METERING SELECTOR SWITCH (SW6) "ON" - "AUTO"
 POSITION, CHECK AUTOMATIC MOISTURE RELAY (K12) TO
 ENSURE CONTACTS ARE CLOSING. IF NOT, RELAY IS
 DEFECTIVE, REPLACE.

 A3. REFER TO ERROR MESSAGES CHART ON PAGE 9-29.

 A4. CHECK AUTOMATIC METERING CONTROL AS FOLLOWS:

 STEP 1: CHECK SUPPLY VOLTAGE (120 VOLTS) WITH A
 VOLT METER BETWEEN TERMINALS 98 AND 99 ON
 THE CONTROL. IF THE SUPPLY VOLTAGE IS NOT
 PRESENT, CHECK THE POWER SOURCE FOR
 PROBLEMS.

 STEP 2: CHECK THE 0-10 VDC OUTPUT BY MEASURING
 WITH A VOM BETWEEN THE F1(+) AND G1(-)
 TERMINALS. IF 0-10 VDC IS NOT PRESENT OR
 IS OUT OF TOLERANCE, CONSIDER THE CONTROL
 TO BE DEFECTIVE AND REPLACE.

 B1A. FINAL GRAIN MOISTURE LEVEL WAS NOT STABILIZED IN
 MANUAL MODE BEFORE SWITCHING TO AUTOMATIC MODE.
 RETURN TO MANUAL MODE AND STABILIZE MOISTURE LEVEL.

NOTE: A COMPLETE CYCLE OF GRAIN FLOW THROUGH THE DRYER MUST OCCUR BEFORE SEEING AN ACCURATE GRAIN MOISTURE LEVEL. THIS TIME IS DETERMINED BY THE MOISTURE CONTENT OF THE GRAIN ENTERING THE DRYER AND THE DESIRED

DISCHARGE MOISTURE LEVEL. THIS TIME CAN VARY FROM APPROXIMATELY ONE (1) HOUR TO TWO (2) HOURS. CHANGING THE MANUAL MODE BEFORE STABILIZING WILL GIVE IMPROPER GRAIN MOISTURE LEVEL OUTPUTS IN THE AUTOMATIC MODE.

(TIME + PATIENCE = DESIRED FINAL MOISTURE LEVEL).

B1B. WHEN ONLY ONE (1) TO TWO (2) POINTS OF MOISTURE ARE BEING REMOVED FROM THE GRAIN BEING DRIED, THE MANUAL MODE IS RECOMMENDED.

B2A. AUTOMATIC METERING CONTROL
CONFIGURATION SETTINGS: PAGES 9-29 THROUGH 9-31
PROVIDE THE INFORMATION NEEDED TO CHECK OR CHANGE THE CONFIGURATION SETTINGS.
SETUP IS NORMALLY DONE AT THE FACTORY AND SHOULD ONLY BE DONE BY A QUALIFIED TECHNICIAN OR UNDER INSTRUCTION FROM THE FACTORY.

B2B. THE PROPORTIONAL BAND (PB) SETTING ON THE CONTROLLER AFFECTS HOW FAST THE CONTROL REACTS TO CHANGES IN THE GRAIN MOISTURE. THE PB SHOULD ALREADY BE SET TO THE DESIRED VALUE FOR YOUR DRYER (SEE *NOTE ON PAGE 9-30). THE PB CAN BE SET BY PRESSING THE 'ADVANCE' KEY UNTIL "Pb1" APPEARS IN THE LOWER DISPLAY, THEN PRESS 'UP' OR 'DOWN' KEY TO ACHIEVE DESIRED SET POINT WHICH IS SHOWN IN THE UPPER DISPLAY. IF IT SEEMS THAT THE SYSTEM IS NOT RESPONDING ENOUGH TO CHANGES IN MOISTURE CONTENT OF YOUR INCOMING GRAIN, CHANGE THE PB VALUE TO A LOWER NUMBER. IF THE SYSTEM SEEMS TO REACT TOO MUCH AND HUNTS BACK AND FORTH, CHANGE THE PB VALUE TO A HIGHER NUMBER. PRESS THE 'INFINITY' KEY AND TEMPERATURE AND SET POINT WILL RETURN TO THE DISPLAY.

NOTE: IT IS THE MOISTURE OF YOUR DISCHARGE GRAIN OVER A PERIOD OF TIME THAT IS IMPORTANT. DO NOT MAKE CHANGES TOO SOON BECAUSE THE SYSTEM APPEARS TO BE CHANGING SPEEDS TOO QUICKLY. SOMETIMES IT TAKES A LOT OF REACTION TO MAINTAIN THE DESIRED RESULTS.

8. DRYER VIBRATION CAUSE AND PREVENTION.

SYMPTOMS: A. FAN(S) VIBRATING. (SEE FAN VIBRATION:, PAGE 9-29).
 B. DISCHARGE AUGER AND/OR LEVELING AUGER VIBRATING.
 C. DRYER NOT LEVEL.

POSSIBLE
CAUSES: A1. DIRT IN FAN HUB.
 A2. LOOSE FAN HUB.
 A3. LOOSE FAN BLADE(S).
 A4. BLADE(S) DAMAGED.
 A5. LOOSE OR BROKEN MOTOR MOUNTS.
 A6. DEFECTIVE FAN MOTOR BEARING(S).

 B1. AUGER(S) OUT OF BALANCE.
 B2. DEFECTIVE AUGER BEARING(S).
 B3. BENT AUGER SHAFT(S).
 B4. LOOSE OR BROKEN BEARING HANGER(S).

 C1. NOT LEVELED WHEN INSTALLED.
 C2. INADEQUATE DRYER SUPPORT.

CORRECTIVE
ACTION: A1. CLEAN FAN HUB.

 A2. TIGHTEN AND ALIGN HUB BOLTS.

 A3. RESET BLADE PITCH TO PROPER SETTING AND TIGHTEN.

 A4. REPLACE FAN OR HAVE FAN REPAIRED AND REBALANCED.

 A5. REPAIR AND CHECK FAN FOR VIBRATION CAUSE AND
 CORRECT.

 A6. REPLACE MOTOR BEARING(S) OR REPLACE MOTOR.

 B1. INSPECT FOR PROBLEM, REPAIR OR REPLACE.
 (1) BENT AUGER TUBE
 (2) FLIGHTING NOT WEARING EVEN.

 B2. REPLACE BEARING(S).

 B3. REPLACE SHAFT(S).

 B4. REPLACE HANGER(S).

 C1. LEVEL DRYER PROPERLY.

 C2. SUPPORT DRYER PER FOUNDATION PRINT.

FAN VIBRATION: CAUSE AND PREVENTION

EXTREME DAMAGE CAN OCCUR FROM FAN VIBRATION. THE MAJOR CAUSE OF VIBRATION IS RELATED TO DUST ACCUMULATION AND IMPROPER MAINTENANCE OF THE FAN ASSEMBLY AND FAN MOTOR.

DURING THE DRYING PROCESS, A CONSIDERABLE AMOUNT OF DUST IS DISPERSED INTO THE AIR. THIS AIR IS CHANNELED ACROSS THE MOTOR AND FAN INTO THE PLENUM CHAMBER. THE DUST CAN COLLECT ON THE MOTOR AND ON THE INSIDE OF THE FAN HUB OR THE CENTER PORTION OF THE FAN. THE AMOUNT OF DUST VARIES FROM THE TYPE AND QUALITY OF PRODUCT BEING DRIED. WHEN A DRYER IS SHUT DOWN, DUST MAY FALL OFF THE FAN HUB UNEVENLY. UPON RESTARTING, THIS ACCUMULATION OF DUST WILL ACT AS EXTRA WEIGHT ON THE FAN, CAUSING THE FAN TO BE OUT OF BALANCE. PREVENTIVE MAINTENANCE PROCEDURES TO ELIMINATE VIBRATION CAUSES ARE AS FOLLOWS: **INSPECT THE FAN HUB FOR DIRT, CHECK THE FAN BLADES FOR CHIPS, CRACKS AND PROPER SETTING, MAKE SURE ALL BOLTS ON THE BUSHING ARE TIGHT. CHECK THE FAN MOTOR MAKING SURE MOTOR MOUNT BOLTS ARE SECURE, MOTOR BEARINGS RUNNING COOL AND NOT NOISY.** MAJOR MOTOR MANUFACTURERS RECOMMEND THAT MOTORS BE ROTATED A MINIMUM OF FIVE REVOLUTIONS EVERY THIRTY DAYS TO PROVIDE PROPER LUBRICATION OF BEARINGS AND PREVENT MOISTURE CONTAMINATION IN THE MOTOR HOUSING. INSPECT MOTOR AND FAN ASSEMBLY ENSURING FREE TURNING OF FAN BLADES AND TO ENSURE PROPER CLEARANCE BETWEEN BLADES AND FAN DRUM.

FAN AND/OR MOTOR VIBRATION OVER A LONG PERIOD OF TIME WILL EVENTUALLY CAUSE PROBLEMS. CHECK YOUR DRYER!

SHUTDOWN PROCEDURE

1. MOVE METERING ROLL DRYING SELECTOR SWITCH TO "OFF" POSITION.
2. MOVE UNLOAD SWITCH TO "OFF" POSITION.
3. MOVE LOAD SWITCH TO "OFF" POSITION.
4. MOVE BURNER SWITCH TO "OFF" POSITION.

NOTE: MOVING BURNER SWITCH TO "OFF" POSITION WILL SHUTDOWN ENTIRE DRYER. RESTART OF FANS WILL BE NECESSARY TO COOL GRAIN.

SPECIAL NOTE: MOVING THE POWER SWITCH TO "ON" POSITION MOMENTARILY WHILE MOVING THE BURNER SWITCH TO THE "OFF" POSITION WILL ALLOW FANS TO CONTINUE TO RUN.

5. AFTER DRYER HAS COOLED APPROXIMATELY 30 MINUTES AND PLENUM THERMOMETER READS AMBIENT TEMPERATURE CONDITIONS, SWITCH FAN SWITCH TO "OFF".
6. MOVE POWER SWITCH TO "OFF" POSITION.
7. TURN "OFF" MANUAL FUEL SUPPLY TO DRYER.
8. RETURN ALL SWITCHES TO "OFF" POSITION.

EMERGENCY SHUTDOWN

1. **MOVE POWER SWITCH TO "OFF"**, LOCATED ON LOWER PANEL IN THE ELECTRICAL CONTROL BOX OF THE DRYER. ALL SYSTEMS, ELECTRICAL AND FUEL WILL SHUTDOWN.
2. **TURN "OFF" MANUAL FUEL SUPPLY** TO DRYER.
3. **TURN "OFF" MAIN DISCONNECT** TO DRYER.
4. **RETURN ALL SWITCHES TO "OFF"** POSITION.

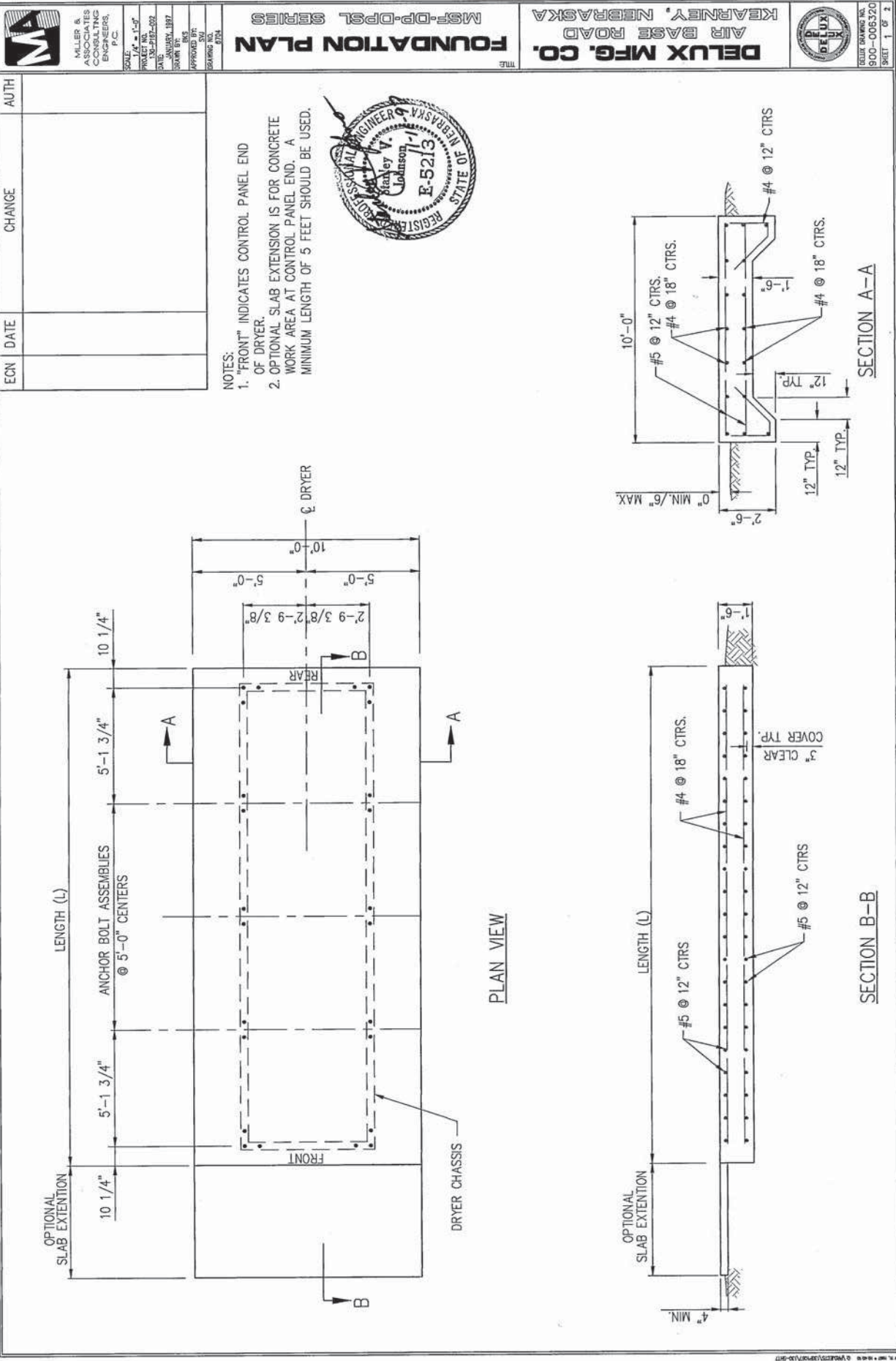
** FUEL BURN OUT - TURN "OFF" FUEL SUPPLY AT TANK OR DRYER WITH BURNER SWITCH IN "ON" POSITION. AS SOON AS PRESSURE GAUGE ON DRYER DROPS TO ZERO, IMMEDIATELY SWITCH BURNER SWITCH TO "OFF" TO AVOID BURNER SAFETY LOCKOUT.

DRAWINGS**STARTING WITH 2012 MODELS**

PART NUMBER	DRAWINGS
900-006320	FOUNDATION LAYOUT DP AND DPSL SERIES
900-006321	FOUNDATION LAYOUT DPX/SL SERIES
900-006322	FOUNDATION LAYOUT DPX4T SERIES
900-006323	FOUNDATION LAYOUT DPX8T SERIES
900-007220	FOUNDATION LAYOUT DPX12T SERIES
900-006327	ANCHORS - DPX4T-8T SERIES
900-007221	ANCHORS - DPX12T SERIES
900-006328	LEG EXTENSION DESIGN (SIDE AND CORNER)
900-009194	GARNER (ROOF)
900-009193	GARNER WIRING ILLUSTRATION
900-010042	SCHEMATIC - STANDARD (2012)
900-010045	SCHEMATIC - WITH MoistureLink (2012)
900-010046	SCHEMATIC - MoistureLink SYSTEM (2012)
900-010043	SCHEMATIC - FLAME CONTROL (2012)
900-010044	WIRING DIAGRAM FIREYE BASE (2012)
900-009215	PLUMBING SCHEMATIC - NON-CSA LIQUID PROPANE
900-009216	PLUMBING SCHEMATIC - NON-CSA NATURAL GAS
900-009217	PLUMBING SCHEMATIC - CSA LIQUID PROPANE
900-009218	PLUMBING SCHEMATIC - CSA NATURAL GAS
400-008618	PLENUM WALKWAY-ALL; GARNER WALKWAY-DP/DPSL
400-008624	GARNER WALKWAY-DPX/SL, DPX4T-8T-12T-16GT
900-008640	ILLUSTRATION SIDE WALKWAYS
900-008667	ILLUSTRATION WALKWAYS-45DEG SLOPE
900-005526	ILLUSTRATION - ERECTION DPX THRU 16GT
900-005404	RECLAIM - DP/DPSL - (OPTIONAL)
900-005527	RECLAIM - DPX/DPXSL - (OPTIONAL)

ALL SHIPPING LISTS BELOW LOCATED IN SECTION 13

S-DPX-SL	SHIPPING LIST - ERECTION - DPX/DPXSL SERIES
S-DPX4T	SHIPPING LIST - ERECTION - DPX4T SERIES
S-DPX8T	SHIPPING LIST - ERECTION - DPX8T SERIES
S-DPX12T-16GT	SHIPPING LIST - ERECTION - DPX12T/DPX16GT SERIES
S-G-DP-1P	GARNER - DP/DPSL SERIES 230V 1PH
S-G-MSDP-240-480V	GARNER - DP/DPSL SERIES 240/480V
S-G-MSDP-380V	GARNER - DP/DPSL SERIES 380V (50Hz)
S-G-MSDP-575V	GARNER - DP/DPSL SERIES 575V
S-G-DPX-240-480V	GARNER - DPX/DPXSL SERIES 240/480V
S-G-DPX-380V	GARNER - DPX/DPXSL SERIES 380V (50Hz)
S-G-DPX-575V	GARNER - DPX/DPXSL SERIES 575V
S-G-DPX4T-8T-240-480V	GARNER - DPX4T/DPX8T SERIES 240/480V
S-G-DPX4T-8T-380V	GARNER - DPX4T/DPX8T SERIES 380V (50Hz)
S-G-DPX4T-8T-575V	GARNER - DPX4T/DPX8T SERIES 575V
S-G-DPX12T-16GT-240-480V	GARNER - DPX12T/DPX16GT SERIES 240/480V
S-G-DPX12T-16GT-380V	GARNER - DPX12T/DPX16GT SERIES 380V (50Hz)
S-G-DPX12T-16GT-575V	GARNER - DPX12T/DPX16GT SERIES 575V



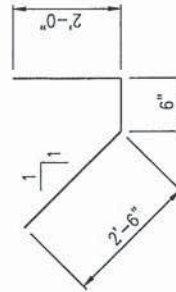
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NOTES:
 1. "FRONT" INDICATES CONTROL PANEL END OF DRYER.
 2. OPTIONAL SLAB EXTENSION IS FOR CONCRETE WORK AREA AT CONTROL PANEL END. A MINIMUM LENGTH OF 5 FEET SHOULD BE USED.



MODEL NO.	FOOTING LENGTH (L)	CONCRETE C.Y.	REINF. STEEL
DP 3015	12'	8.0	26-#5x 9'-6"
DP5L 3520			14-#4x 11'-6"
MSF 31010			26-#4x 5'-0" BENT
MSF 41515			
DP 4025	17'	11.3	36-#5x 9'-6"
DP5L 4530			16-#4x 16'-6"
MSF 62520			36-#4x 5'-0" BENT
MSF 72525			
DP 6030	22'	14.7	46-#5x 9'-6"
DP5L 7040			16-#4x 21'-6"
			46-#4x 5'-0" BENT
DP 7550	27'	18.0	56-#5x 9'-6"
DP5L 8560			16-#4x 26'-6"
			56-#4x 5'-0" BENT
DP 9045	32'	21.3	66-#5x 9'-6"
DP5L 10560			16-#4x 31'-6"
			66-#4x 5'-0" BENT
DP 12060	42'	28.0	86-#5x 9'-6"
DP5L 14080			16-#4x 41'-6"
			86-#4x 5'-0" BENT

NOTES:
 QUANTITY CONCRETE SHOWN IN THIS TABLE IS BASED ON THE NEAT FOOTING DIMENSIONS AND IS PROVIDED FOR INFORMATION ONLY. ACTUAL QUANTITY REQUIRED MAY VARY BASED ON EXCAVATION DIMENSIONS, OPTIONAL SLAB EXTENSION AND YIELD OF CONCRETE SUPPLIED.



BENDING DIAGRAM
 FOR #4 REBAR

ECN	DATE	CHANGE	AUTH
	9/30/98	ADDED MODEL No.s DP5L & MSF	SK

GENERAL NOTES

1. THIS FOOTING IS DESIGNED IN ACCORDANCE WITH THE 1994 UNIFORM BUILDING CODE. BASIC WIND SPEED IS 80 MPH, EXPOSURE C.
2. FOOTINGS ARE DESIGNED FOR THE SPECIFIC MODEL NUMBER LISTED WITH A 4 FOOT MAXIMUM LEG EXTENSION.
3. ANCHORS SHALL BE 5/8" DOUBLE CONE ANCHORS AS MANUFACTURED BY RAWPLUG CO. INC. OR EQUAL. HOLES FOR ANCHORS WILL BE DRILLED AFTER DRYER IS SET. PROVIDE 2"x 2"x 1/4" PLATE WASHERS FOR EACH ANCHOR.
4. DRYER MUST BE LEVEL ALONG LENGTH AND WIDTH AT ALL TIMES DURING DRYING PROCESS.
5. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI.
6. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
7. MINIMUM SOIL BEARING CAPACITY SHALL BE 1000 PSF.

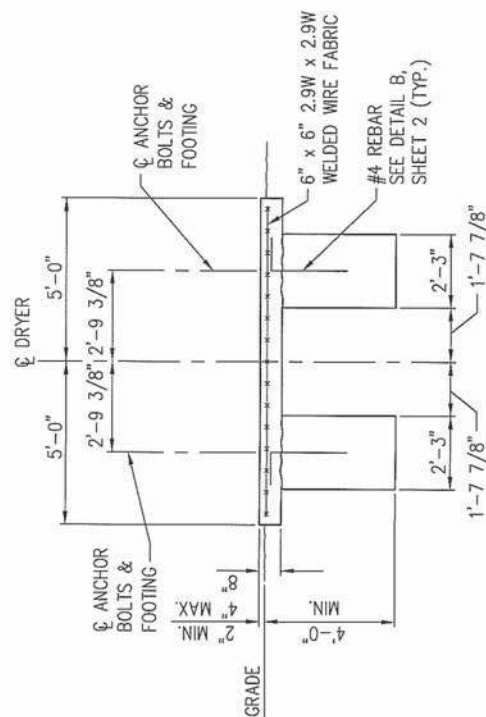
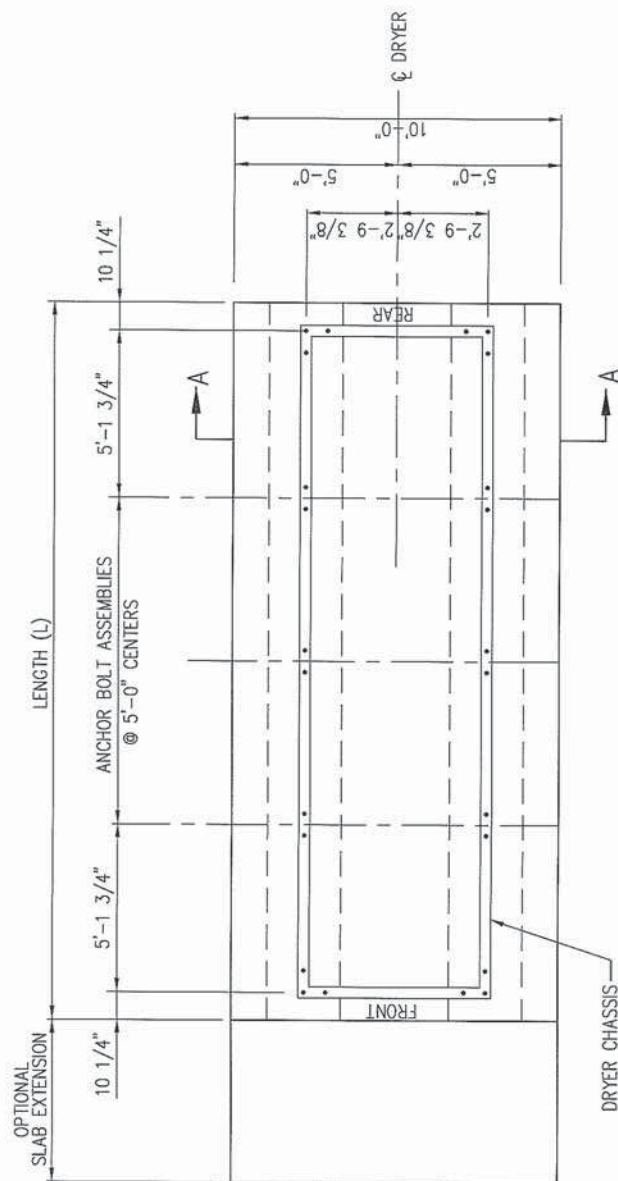


MA
 MILLER &
 ASSOCIATES
 CONSULTING
 ENGINEERS
 P.C.
 SCALE:
 PROJECT NO.
 155-103-302
 DATE:
 JANUARY, 1997
 DRAWN BY:
 APPROVED BY:
 DRAWING NO.
 6031

FOUNDATION PLAN
 MSF-DP-DP5L 8560

DELUX MFG. CO.
 AIR BASE ROAD
 KEARNEY, NEBRASKA

DELUX
 DELUX DRAWING NO.
 900-006320
 SHEET 2 OF 2



GENERAL NOTES

1. THIS FOOTING IS DESIGNED IN ACCORDANCE WITH THE 2004 INTERNATIONAL BUILDING CODE. BASIC WIND SPEED IS 90 MPH, EXPOSURE C.
2. FOOTINGS ARE DESIGNED FOR THE SPECIFIC MODEL NUMBER LISTED WITH A 4 FOOT MAXIMUM LEG EXTENSION.
3. DYER MUST BE LEVEL ALONG LENGTH AND WIDTH AT ALL TIMES DURING DRYING PROCESS.
4. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI.
5. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
6. ANCHOR BOLTS SHALL BE 5/8"x 6" ALL THREAD RODS WITH HEX NUT AND WASHER MEETING THE REQUIREMENTS OF ASTM A307. DRILL 3/4"x 6" HOLES IN CONCRETE THROUGH DRYER BASE PLATE. USE SIMPSON EPOXY-TIE ADHESIVE OR EQUAL TO BOND ANCHOR BOLTS IN CONCRETE.
7. MINIMUM SOIL BEARING CAPACITY SHALL BE 1800 PSF.
8. THE 8" REINFORCED SLAB MAY BE EXTENDED BEYOND THE LIMITS SHOWN FOR ADDITIONAL SERVICE AREA.

ECN	DATE	CHANGE	AUTH

NOTES:

- NOTES:
1. "FRONT" INDICATES CONTROL PANEL END OF DRYER.
2. OPTIONAL SLAB EXTENSION IS FOR CONCRETE WORK AREA AT CONTROL PANEL END. A MINIMUM LENGTH OF 5 FEET SHOULD BE USED.

2. OPTIONAL SLAB EXTENSION IS FOR CONCRETE WORK AREA AT CONTROL PANEL END. A MINIMUM LENGTH OF 5 FEET SHOULD BE USED

FOUNDATION PLAN

DELUX MFG. CO.
AIR BASE ROAD
KEARNY, NEBRASKA

KEARNEY, NEBRASKA

KEARNEY, NEBRASKA

LUX DRAWING NO.
00-006321

321 NO.

250 133

ECN	DATE	CHANGE	AUTH



MILLER & ASSOCIATES
 CONSULTING ENGINEERS, P.C.
 SCALE: 1/4" = 1'-0"
 PROJECT: 100-PR17-009
 DATE: JANUARY 1997
 DRAWN BY: BJS
 APPROVED BY: [Signature]
 GRANTING NO. 600

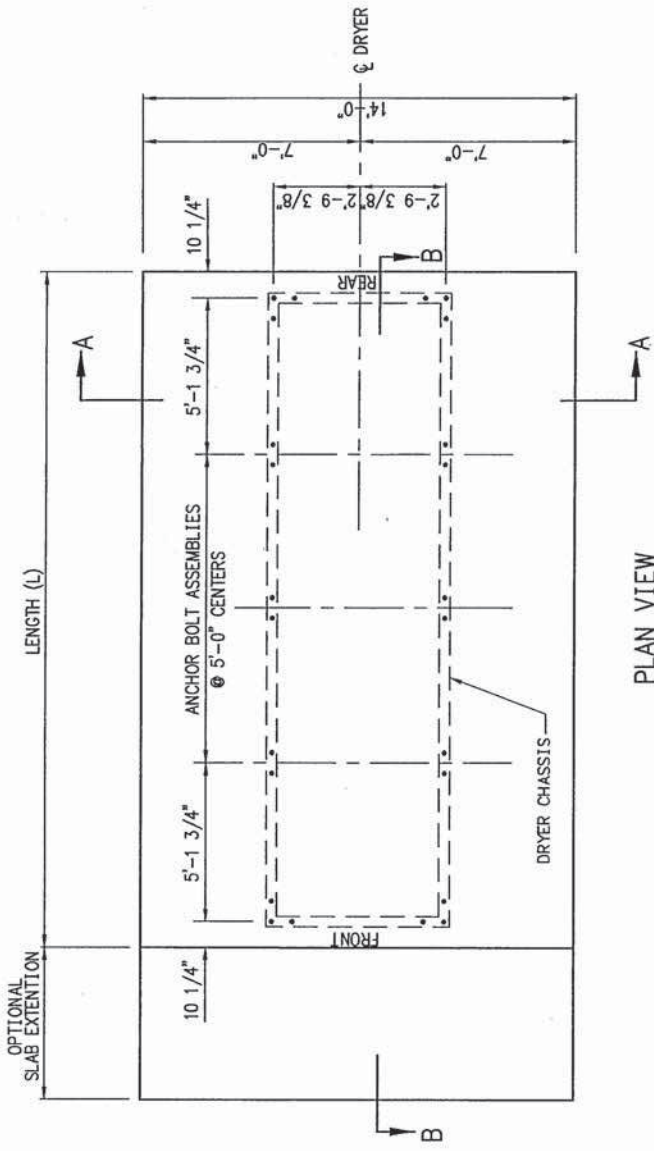
FOUNDATION PLAN DPX4T SERIES

DELUX MFG. CO.
 AIR BASE ROAD
 KEARNY, NEBRASKA

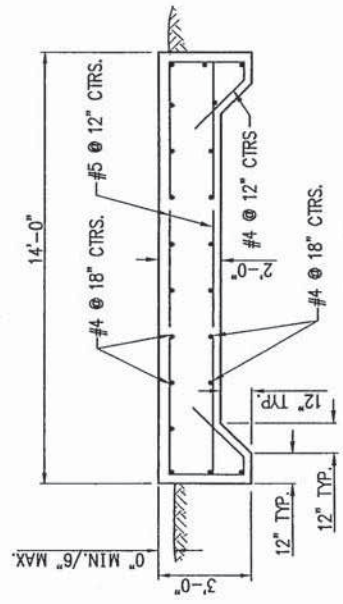


DELUX DRAWING NO.
 900-006322
 SHEET 1 OF 2

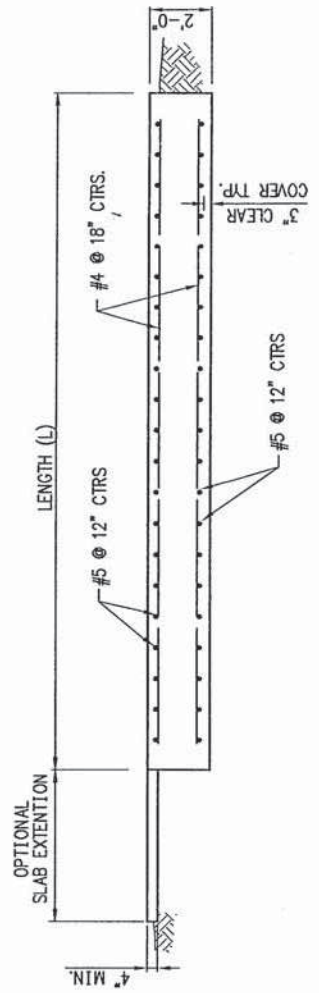
- NOTES:
1. "FRONT" INDICATES CONTROL PANEL END OF DRYER.
 2. OPTIONAL SLAB EXTENSION IS FOR CONCRETE WORK AREA AT CONTROL PANEL END. A MINIMUM LENGTH OF 5 FEET SHOULD BE USED.



PLAN VIEW



SECTION A-A



SECTION B-B

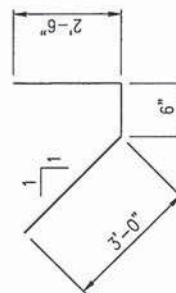
ECN	DATE	CHANGE	AUTH
	9/30/98	REVISE MODEL No. w/ DPX4T	

GENERAL NOTES

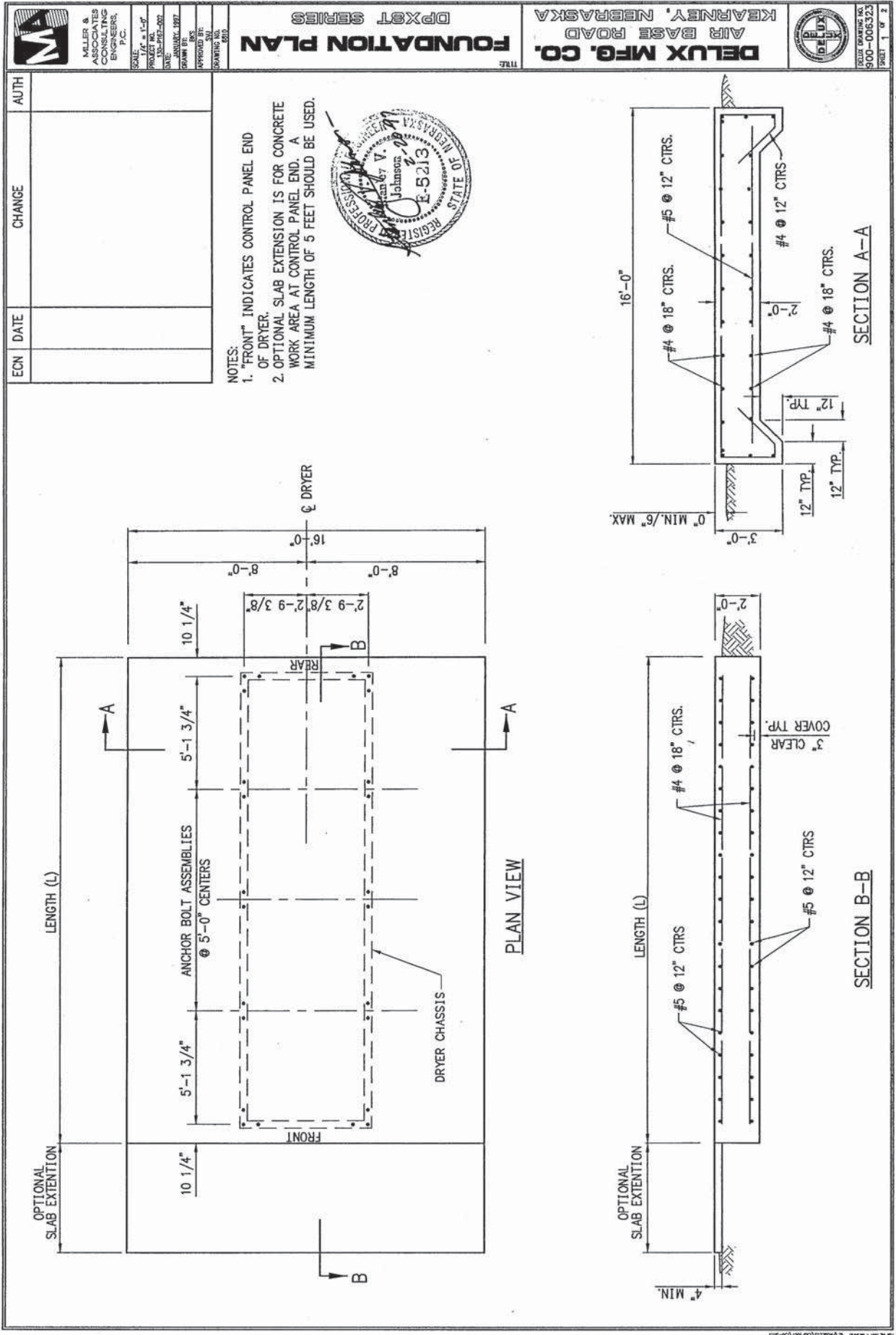
- THIS FOOTING IS DESIGNED IN ACCORDANCE WITH THE 1994 UNIFORM BUILDING CODE. BASIC WIND SPEED IS 80 MPH, EXPOSURE C.
- FOOTINGS ARE DESIGNED FOR THE SPECIFIC MODEL NUMBER LISTED WITH A 4 FOOT MAXIMUM LEG EXTENSION.
- ANCHORS SHALL BE 3-3/4" ϕ ANCHOR BOLTS FOR EACH CORNER LEG EXTENSION AND 2-3/4" ϕ ANCHOR BOLT FOR EACH SIDE LEG EXTENSION. PROVIDE 2" x 2" x 1/4" PLATE WASHER FOR EACH ANCHOR BOLT.
- DRYER MUST BE LEVEL ALONG LENGTH AND WIDTH AT ALL TIMES DURING DRYING PROCESS.
- CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI.
- REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
- MINIMUM SOIL BEARING CAPACITY SHALL BE 1300 PSF.

MODEL NO.	FOOTING LENGTH (L)	CONCRETE C.Y.	REINF. STEEL	ANCHOR BOLT ASSEMBLIES	
				CORNER	SIDE
DPX4T 5630	12'	13.8	26-#5x 13'-6" 22-#4x 11'-6" 26-#4x 6'-0" BENT	4	2
DPX4T 8460	17'	19.5	36-#5x 13'-6" 22-#4x 16'-6" 36-#4x 6'-0" BENT	4	4
DPX4T 11260	22'	25.3	46-#5x 13'-6" 22-#4x 21'-6" 46-#4x 6'-0" BENT	4	6
DPX4T 140100	27'	31.0	56-#5x 13'-6" 22-#4x 26'-6" 56-#4x 6'-0" BENT	4	8
DPX4T 16890	32'	37.4	66-#5x 13'-6" 22-#4x 31'-6" 66-#4x 6'-0" BENT	4	10
DPX4T 224120	42'	48.2	86-#5x 13'-6" 22-#4x 41'-6" 86-#4x 6'-0" BENT	4	14

NOTES:
QUANTITY OF CONCRETE SHOWN IN THIS TABLE IS BASED ON THE NEAT FOOTING DIMENSIONS AND IS PROVIDED FOR INFORMATION ONLY. ACTUAL QUANTITY REQUIRED MAY VARY BASED ON EXCAVATION DIMENSIONS, OPTIONAL SLAB EXTENSION AND YIELD OF CONCRETE SUPPLIED.



**BENDING DIAGRAM
FOR #4 REBAR**



ECN	DATE	CHANGE	AUTH

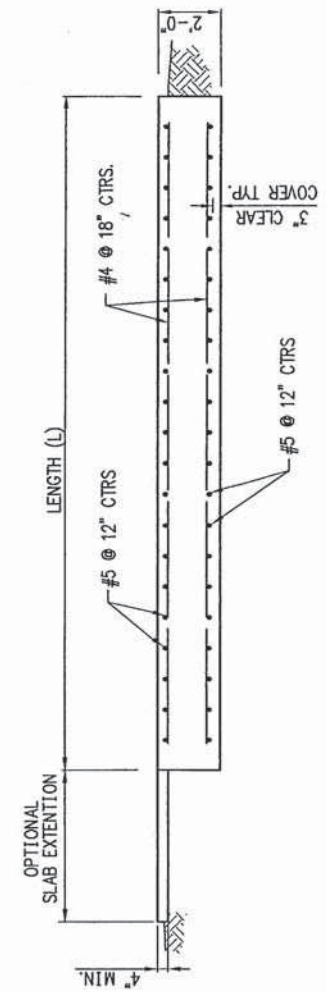
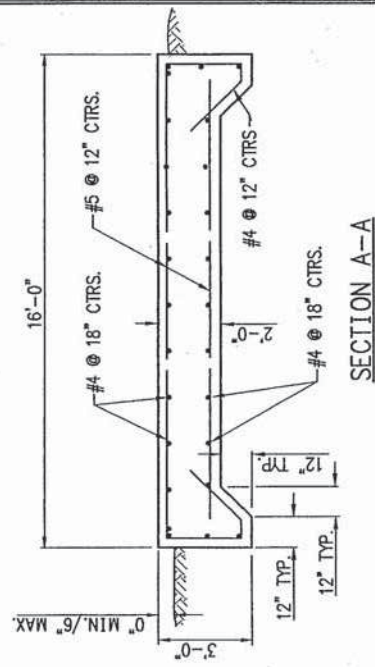
NOTES:
 1. "FRONT" INDICATES CONTROL PANEL END OF DRYER.
 2. OPTIONAL SLAB EXTENSION IS FOR CONCRETE WORK AREA AT CONTROL PANEL END. A MINIMUM LENGTH OF 5 FEET SHOULD BE USED.



FOUNDATION PLAN
 DPX8T SERIES

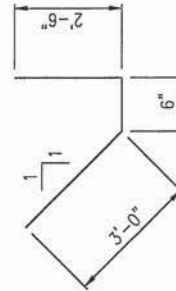
DELUX MFG. CO.
 AIR BASE ROAD
 KEARNEY, NEBRASKA

DELUX
 1001 BOWLING BLVD.
 68101-0083
 SHEET 1 OF 2



MODEL NO.	FOOTING LENGTH (L)	CONCRETE C.Y.	REIN. STEEL	ANCHOR BOLT ASSEMBLIES	
				CORNER	SIDE
DPX8T 6440	12'	15.6	26-#5x 15'-6" 24-#4x 11'-6" 26-#4x 6'-0" BENT	4	2
DPX8T 12880	22'	28.5	46-#5x 15'-6" 24-#4x 21'-6" 46-#4x 6'-0" BENT	4	6
DPX8T 160120	27'	35.1	56-#5x 15'-6" 24-#4x 31'-6" 56-#4x 6'-0" BENT	4	8
DPX8T 192120	32'	41.5	66-#5x 15'-6" 24-#4x 31'-6" 66-#4x 6'-0" BENT	4	10
DPX8T 256160	42'	54.4	86-#5x 15'-6" 24-#4x 41'-6" 86-#4x 6'-0" BENT	4	14

NOTES:
QUANTITY OF CONCRETE SHOWN IN THIS TABLE IS BASED ON THE NEAT FOOTING DIMENSIONS AND IS PROVIDED FOR INFORMATION ONLY. ACTUAL QUANTITY REQUIRED MAY VARY BASED ON EXCAVATION DIMENSIONS, OPTIONAL SLAB EXTENSION AND YIELD OF CONCRETE SUPPLIED.



BENDING DIAGRAM
FOR #4 REBAR

ECN	DATE	CHANGE	AUTH
	9/30/98	REVISED MODEL No.s w/ DPX8T ADDED MODEL No. DPX8T 160120	

GENERAL NOTES

1. THIS FOOTING IS DESIGNED IN ACCORDANCE WITH THE 1994 UNIFORM BUILDING CODE. BASIC WIND SPEED IS 80 MPH, EXPOSURE C.
2. FOOTINGS ARE DESIGNED FOR THE SPECIFIC MODEL NUMBER LISTED WITH A 4 FOOT MAXIMUM LEG EXTENSION.
3. ANCHORS SHALL BE 3-3/4" ϕ ANCHOR BOLTS FOR EACH CORNER LEG EXTENSION AND 2-3/4" ϕ ANCHOR BOLT FOR EACH SIDE LEG EXTENSION. PROVIDE 2" x 2" x 1/4" PLATE WASHERS FOR EACH ANCHOR BOLT.
4. DRYER MUST BE LEVEL ALONG LENGTH AND WIDTH AT ALL TIMES DURING DRYING PROCESS.
5. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI.
6. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
7. MINIMUM SOIL BEARING CAPACITY SHALL BE 1250 PSF.



DELUX MFG. CO.
AIR BASE ROAD
KEARNEY, NEBRASKA

FOUNDATION PLAN
DPX8T SERIES

DELLER & ASSOCIATES
CONSULTING ENGINEERS, P.C.

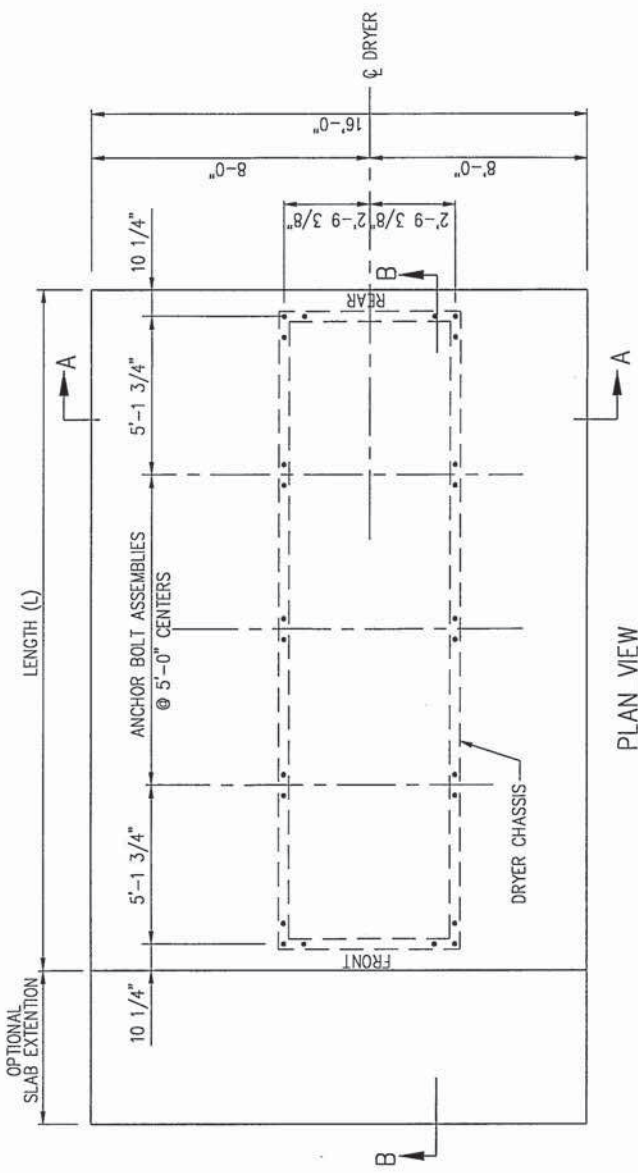
SCALE: NONE
PROJECT NO.: 15-157-02
DATE: JANUARY, 1997
DRAWN BY: [Signature]
APPROVED BY: [Signature]
DRAWING NO.: 160120

DELUX MFG. CO.
AIR BASE ROAD
KEARNEY, NEBRASKA

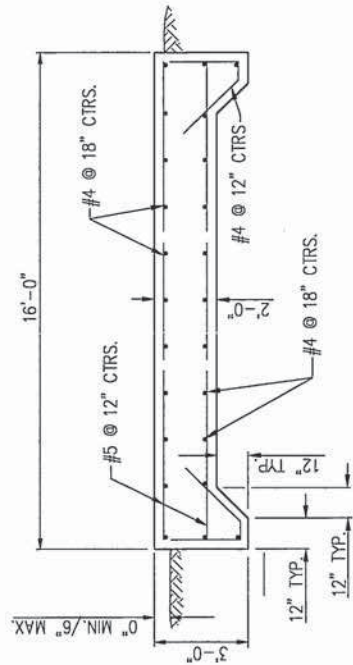
DELUX DRAWING NO.
900-006323
SHEET 2 OF 2

ECN	DATE	CHANGE	AUTH

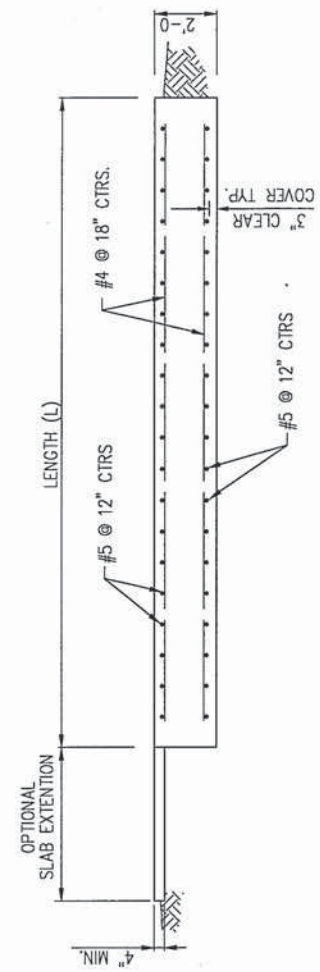
NOTES:
1. "FRONT" INDICATES CONTROL PANEL END OF DRYER.
2. OPTIONAL SLAB EXTENSION IS FOR CONCRETE WORK AREA AT CONTROL PANEL END. A MINIMUM LENGTH OF 5 FEET SHOULD BE USED.



PLAN VIEW



SECTION A-A



SECTION B-B

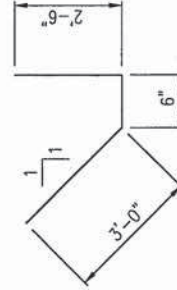
ECN	DATE	CHANGE	AUTH

GENERAL NOTES

1. THIS FOOTING IS DESIGNED IN ACCORDANCE WITH THE 1994 UNIFORM BUILDING CODE. BASIC WIND SPEED IS 80 MPH, EXPOSURE C.
2. FOOTINGS ARE DESIGNED FOR THE SPECIFIC MODEL NUMBER LISTED WITH A 4 FOOT MAXIMUM LEG EXTENSION.
3. ANCHORS SHALL BE 3-3/4" ϕ ANCHOR BOLTS FOR EACH CORNER LEG EXTENSION AND 2-3/4" ϕ ANCHOR BOLT FOR EACH SIDE LEG EXTENSION. PROVIDE 2" x 2" x 1/4" PLATE WASHERS FOR EACH ANCHOR BOLT.
4. DRYER MUST BE LEVEL ALONG LENGTH AND WIDTH AT ALL TIMES DURING DRYING PROCESS.
5. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI.
6. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
7. MINIMUM SOIL BEARING CAPACITY SHALL BE 1250 PSF.

MODEL NO.	FOOTING LENGTH (L)	CONCRETE C.Y.	REIN. STEEL	ANCHOR BOLT ASSEMBLIES	
				CORNER	SIDE
DPX12T 7250	12'	15.6	26-#5x 15'-6" 24-#4x 11'-6" 26-#4x 6'-0" BENT	4	2
DPX12T 10860	17'	22.0	36-#5x 15'-6" 24-#4x 16'-6" 36-#4x 6'-0" BENT	4	4
DPX12T 144100	22'	28.5	46-#5x 15'-6" 24-#4x 21'-6" 46-#4x 6'-0" BENT	4	6
DPX12T 175120	27'	35.1	56-#5x 15'-6" 24-#4x 26'-6" 56-#4x 6'-0" BENT	4	8
DPX12T 216150	32'	41.5	66-#5x 15'-6" 24-#4x 31'-6" 66-#4x 6'-0" BENT	4	10
DPX12T 288200	42'	54.4	86-#5x 15'-6" 24-#4x 41'-6" 86-#4x 6'-0" BENT	4	14

NOTES:
QUANTITY OF CONCRETE SHOWN IN THIS TABLE IS BASED ON THE NEAT FOOTING DIMENSIONS AND IS PROVIDED FOR INFORMATION ONLY. ACTUAL QUANTITY REQUIRED MAY VARY BASED ON EXCAVATION DIMENSIONS, OPTIONAL SLAB EXTENSION AND YIELD OF CONCRETE SUPPLIED.



BENDING DIAGRAM
FOR #4 REBAR



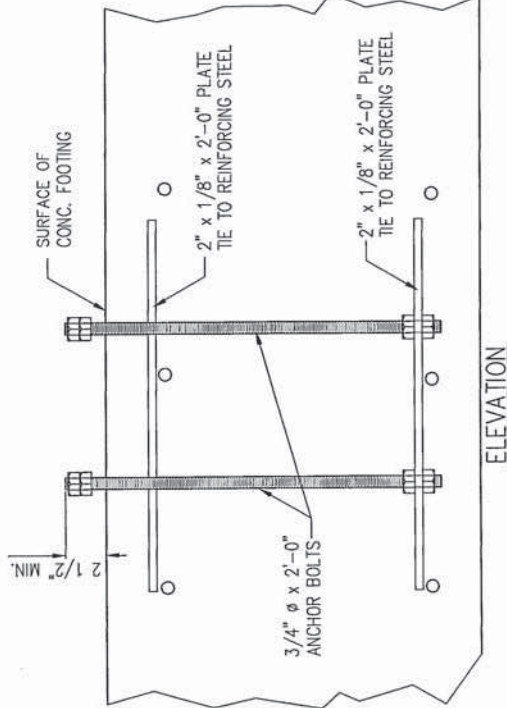
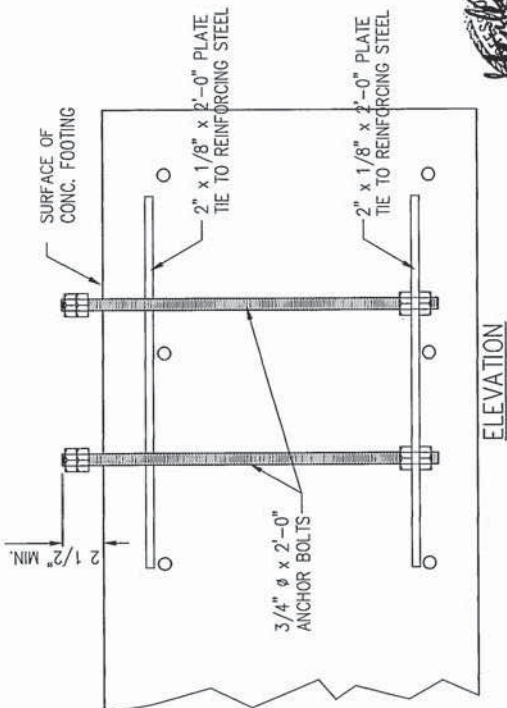
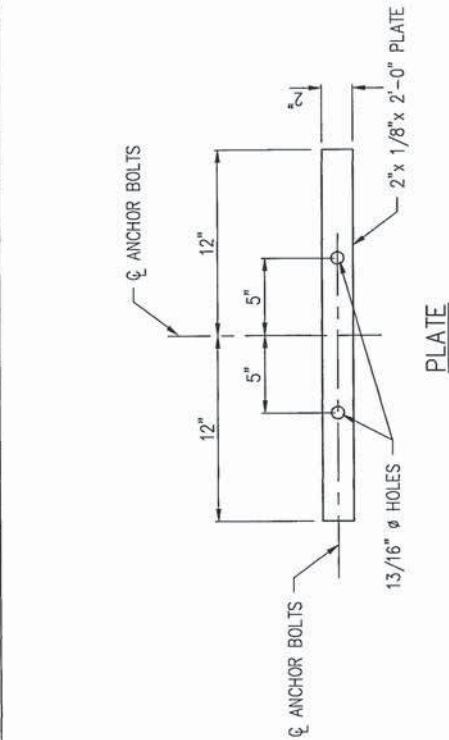
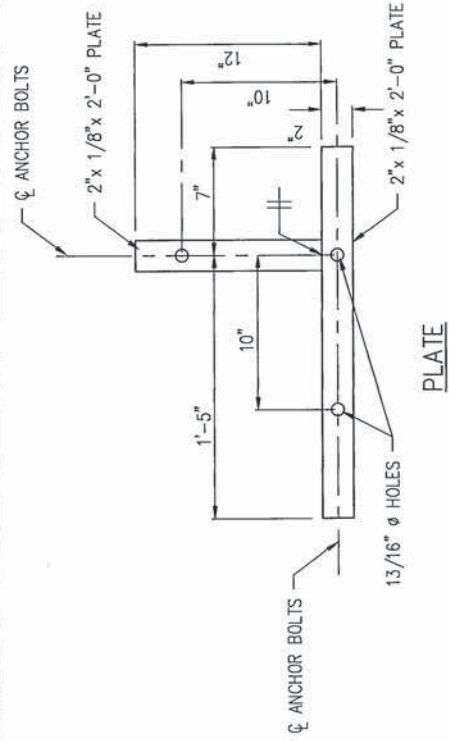
MILLER &
ASSOCIATES
CONSULTING
ENGINEERS,
P.C.

PROJECT NO.
130-2187-002
DATE
JANUARY 1997
DRAWN BY
BKS
APPROVED BY
[Signature]
DRAWING NO.
60039

DPX4T AND DPX8T SERIES
ANCHORS

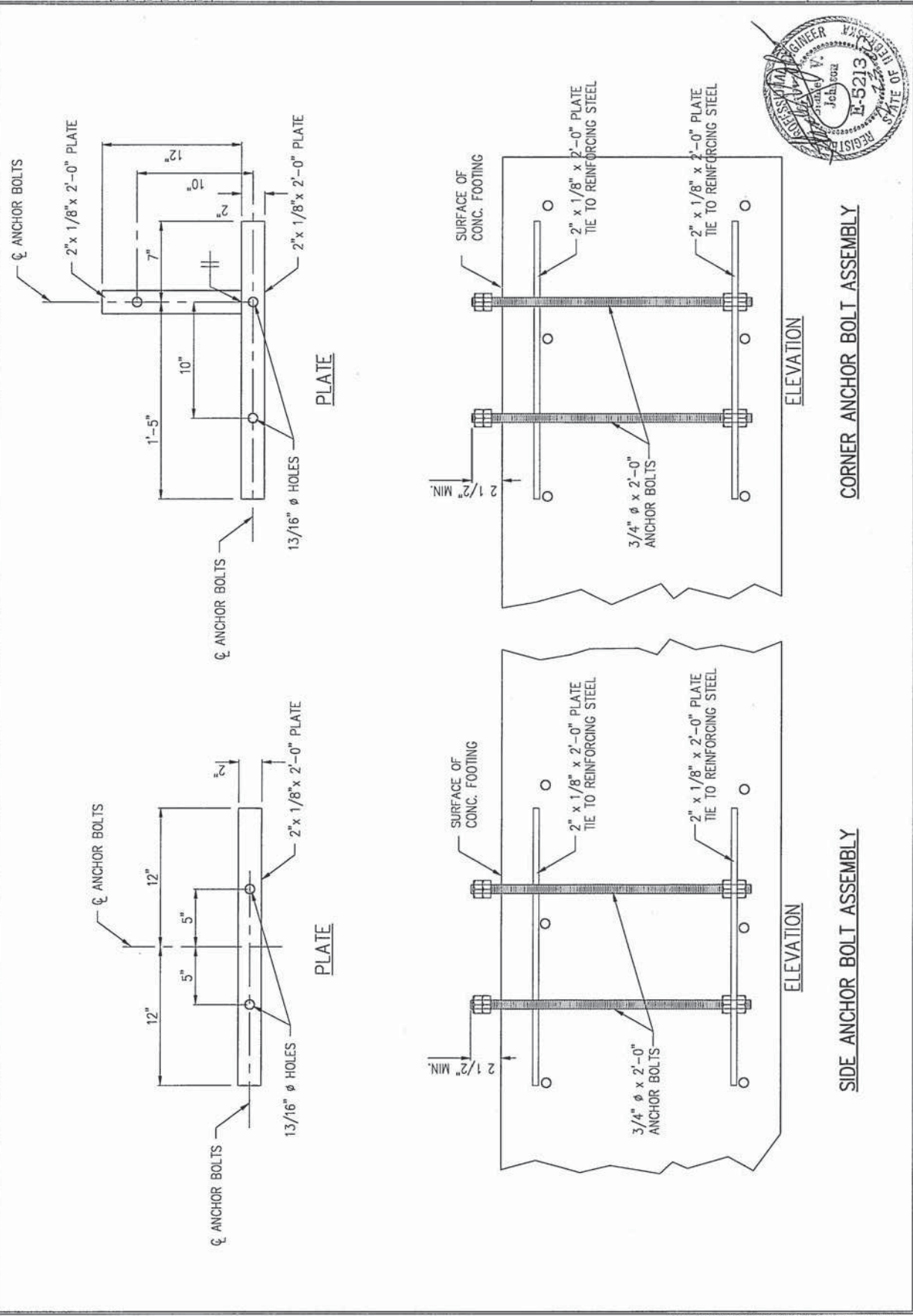
DELUX MFG. CO.
AIR BASE ROAD
KEARNEY, NEBRASKA

DELUX
DRAWING NO.
900-006327
SHEET 1 OF 1

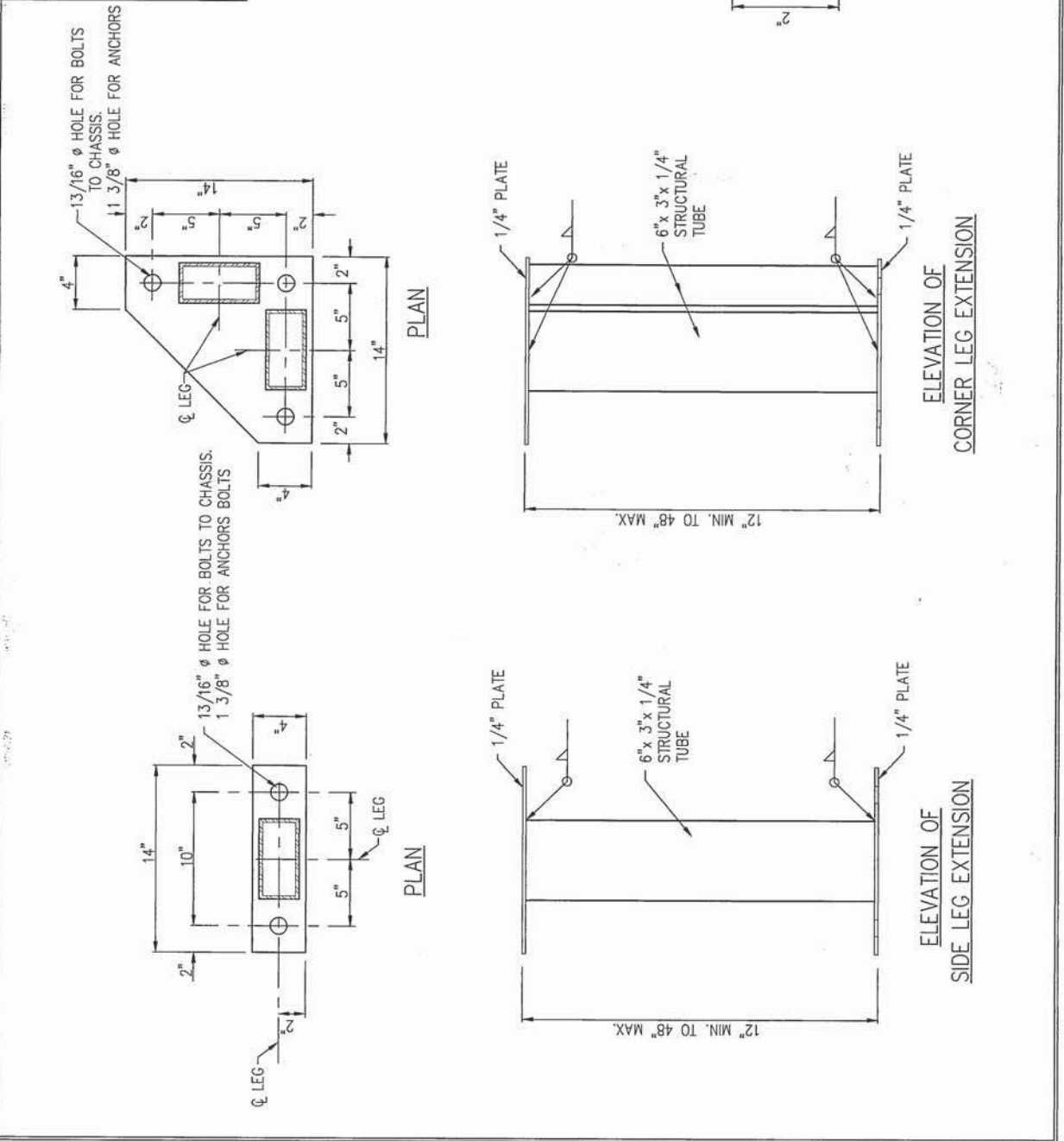


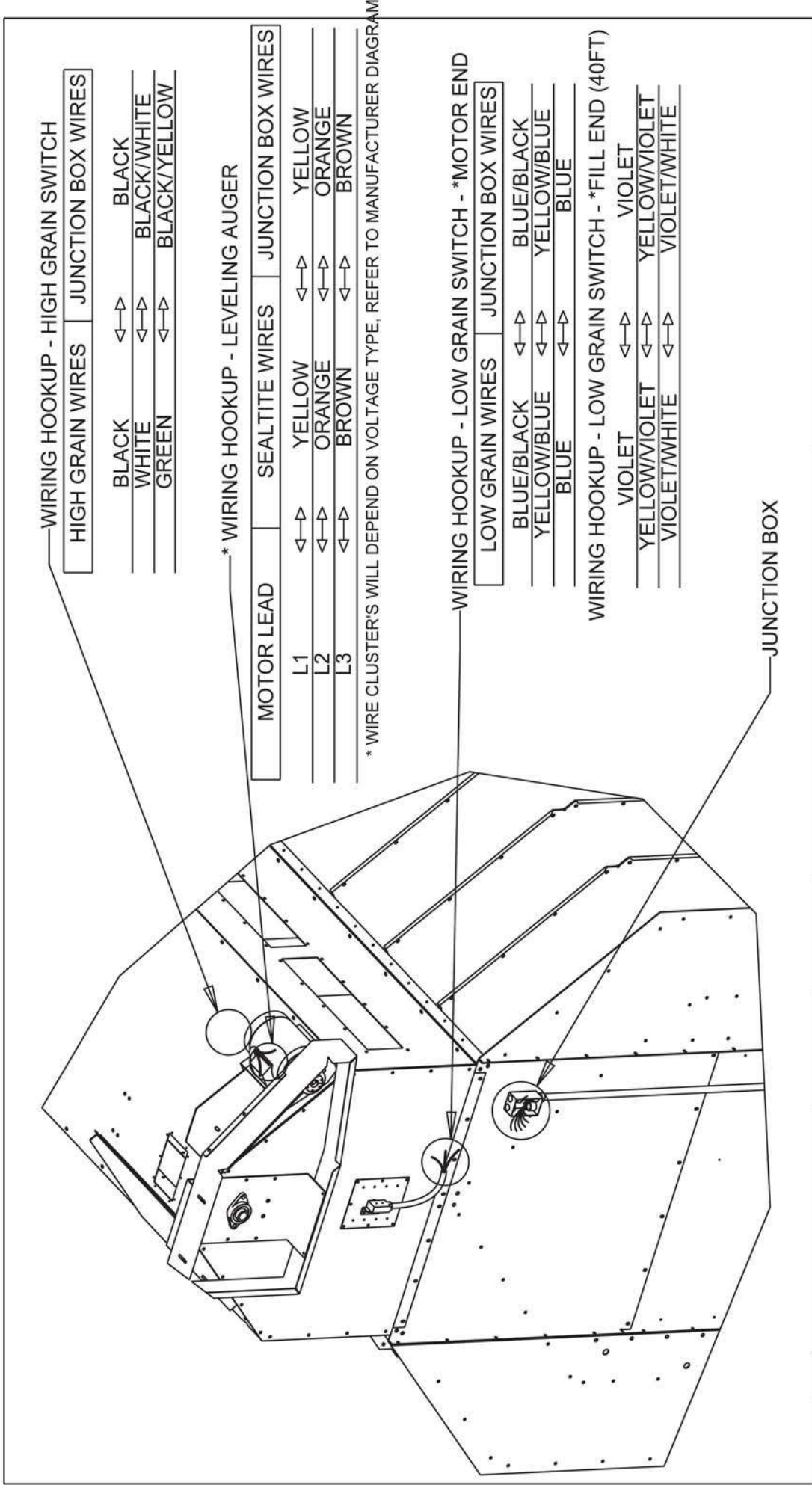
CORNER ANCHOR BOLT ASSEMBLY

SIDE ANCHOR BOLT ASSEMBLY



ECN	DATE	CHANGE	AUTH





DRAWN BY JGW		DATE 12/12/09		CHK'D		SCALE .050		TOLERANCE: DECIMAL #10		FRACTION #1/32		ANGLE #1		UNLESS OTHERWISE SPECIFIED	
DESCRIPTION		DATE		USED ON:		NEXT ASSY:		MATERIAL		SHEAR SIZE		DRAWING NO.		900-009193	
ECO#		LET		DELUX MFG. CO. KEARNEY, NE		TITLE:		GARNER WIRING ILLUSTRATION DP/DPSL/DPXSL/4T/8T/12T STARTING WITH 2010 MODELS							

WIRING HOOKUP - HIGH GRAIN SWITCH

HIGH GRAIN WIRES	JUNCTION BOX WIRES
BLACK	BLACK
WHITE	BLACK/WHITE
GREEN	BLACK/YELLOW

* WIRING HOOKUP - LEVELING AUGER

MOTOR LEAD	SEALTITE WIRES	JUNCTION BOX WIRES
L1	YELLOW	YELLOW
L2	ORANGE	ORANGE
L3	BROWN	BROWN

* WIRE CLUSTER'S WILL DEPEND ON VOLTAGE TYPE, REFER TO MANUFACTURER DIAGRAM

WIRING HOOKUP - LOW GRAIN SWITCH - *MOTOR END

LOW GRAIN WIRES	JUNCTION BOX WIRES
BLUE/BLACK	BLUE/BLACK
YELLOW/BLUE	YELLOW/BLUE
BLUE	BLUE

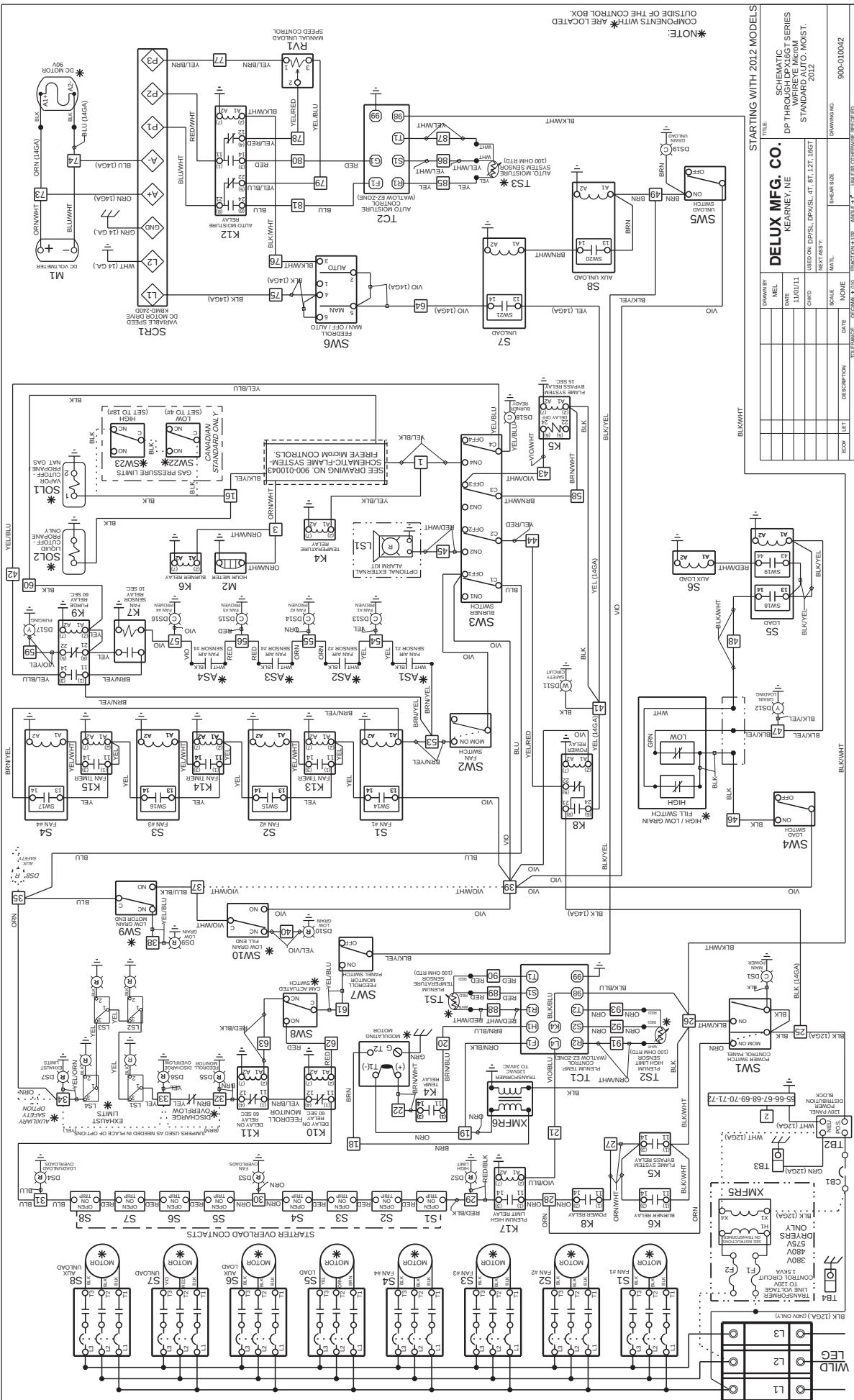
WIRING HOOKUP - LOW GRAIN SWITCH - *FILL END (40FT)

VIOLET	VIOLET
YELLOW/VIOLET	YELLOW/VIOLET
VIOLET/WHITE	VIOLET/WHITE

JUNCTION BOX

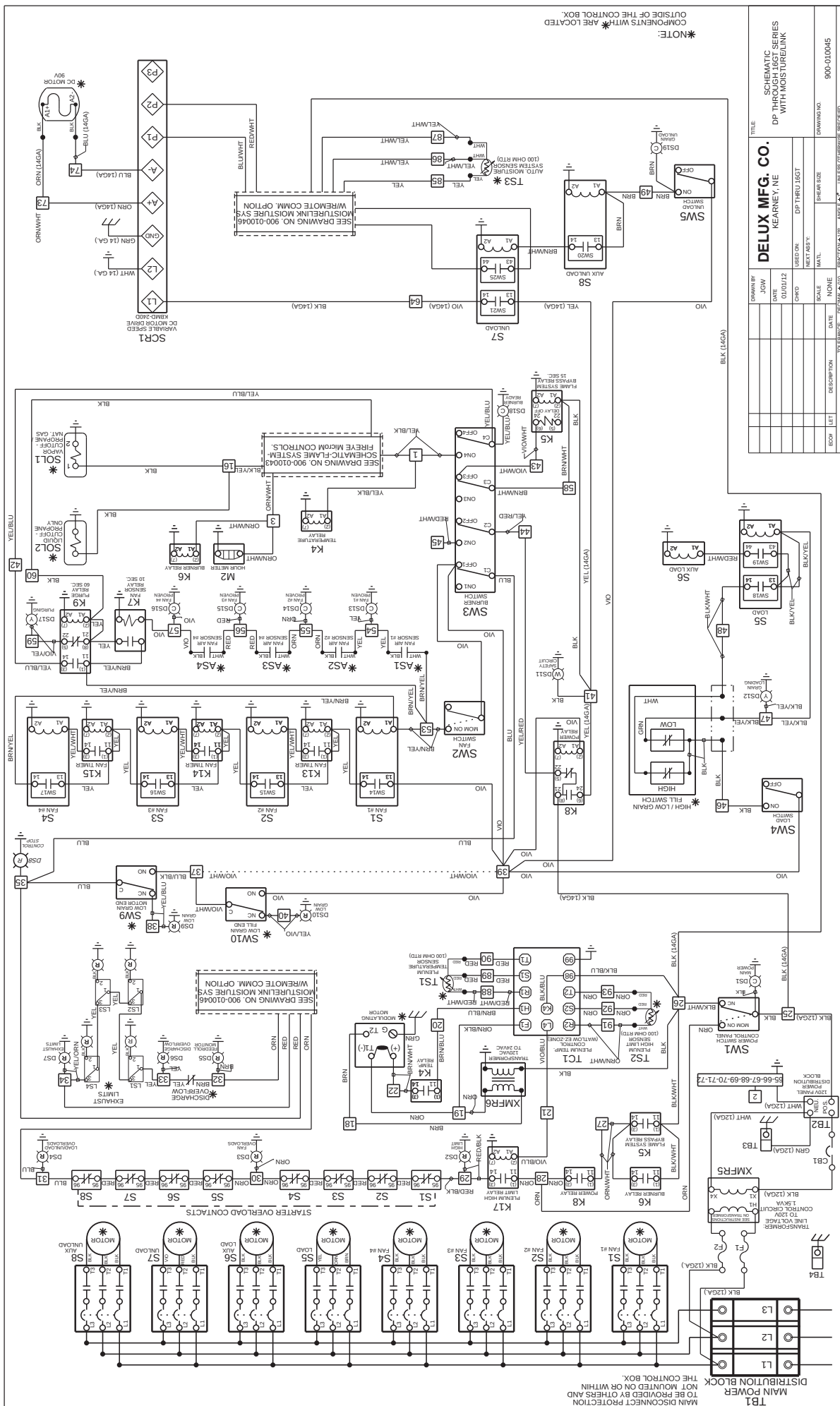
MAIN POWER
TO BE PROVIDED BY OTHERS AND
NOT MOUNTED ON OR WITHIN
THE CONTROL BOX.

CANADA:
THE EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT INSTALLATION CODES FOR GAS BURNING APPLIANCES
AND EQUIPMENT, CAN/CSA-B149.2 AND CAN/CSA-B149.2 OR APPLICABLE PROVINCIAL REGULATIONS, WHICH SHOULD BE CAREFULLY
FOLLOWED IN ALL CASES. AUTHORITIES HAVING JURISDICTION SHOULD BE CONSULTED BEFORE INSTALLATIONS ARE MADE.



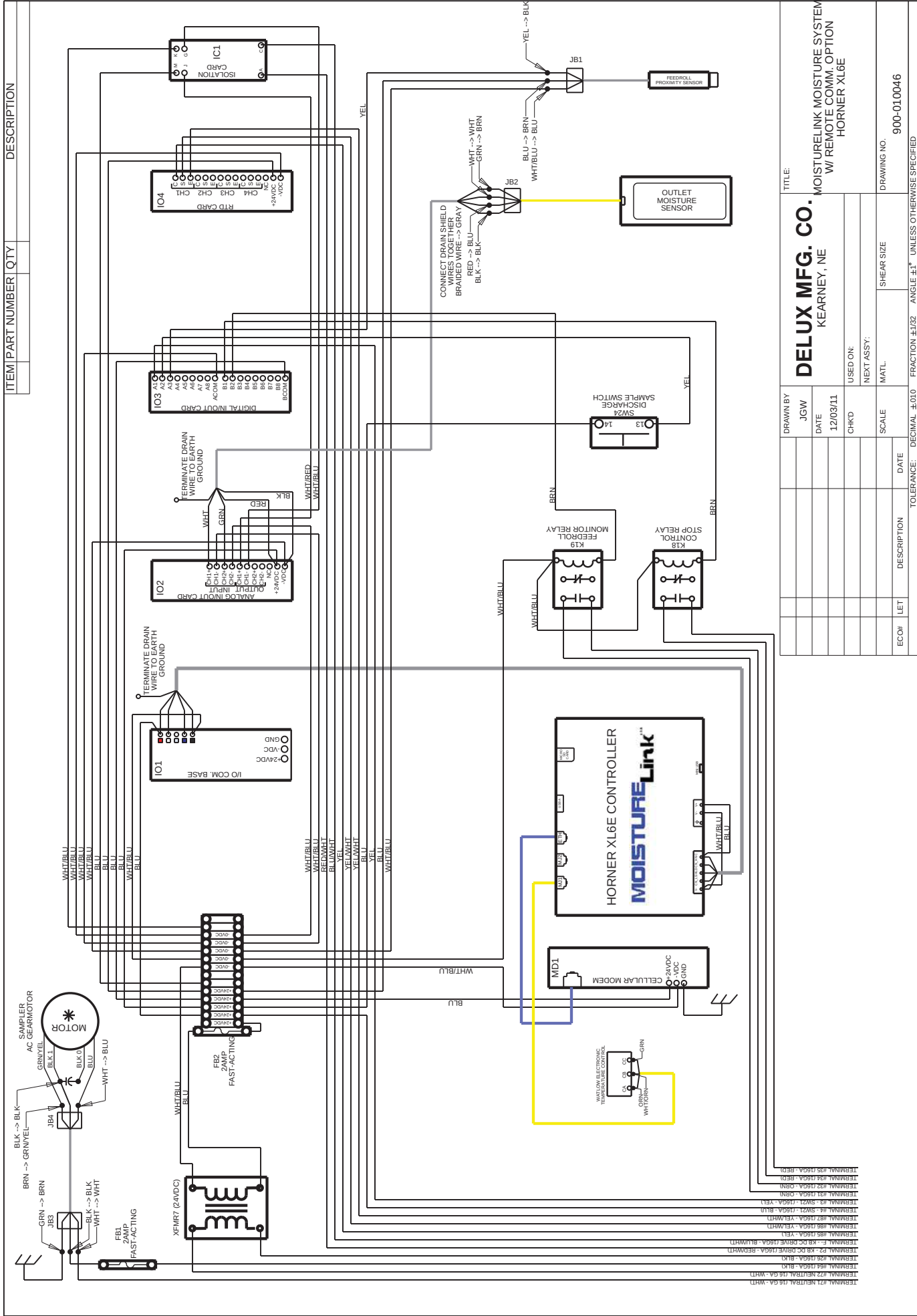
STARTING WITH 2012 MODELS

DRAWN BY		DATE		DESCRIPTION		TOLERANCE		SCALE		SHEET NO.		SHEET TOTAL	
MEL		11/01/11		SCHEMATIC		NONE		1:1		900-010042		900-010042	
DELUX MFG. CO. SCHEMATIC DP THROUGHPUT SERIES WIREWELDING KEANNEY, NE STANDARD AUTO. MOIST. 2012 USED ON DP/SIL, DP/SIL, AT, RT, LT, 16GT, NET ASBY													

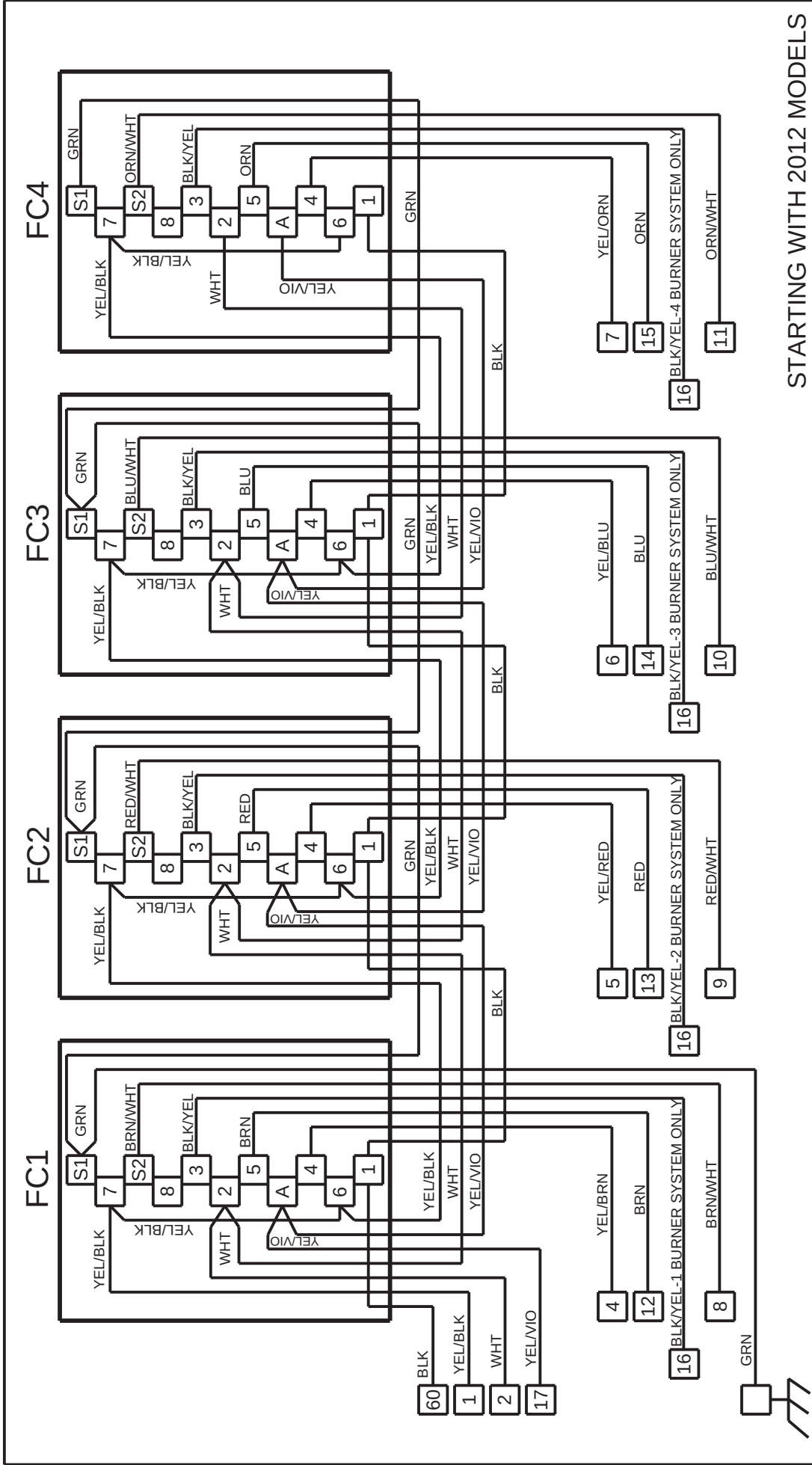


DELUX MFG. CO.		TITLE	
KEARNEY, NE		SCHEMATIC DP THROUGH 16GT SERIES WITH MOISTURELINK	
DESIGNED ON: DP THRU 16GT		DRAWING NO. 900-010045	
NEXT ASBY:			
WALL	SHRINK SIZE		

ECOF	LET	DESCRIPTION	DATE	SCALE	DRAWN BY
					JGW
					DATE
					01/01/12
					CHKD
					U
					N
					NONE
					TO CLEARANCE



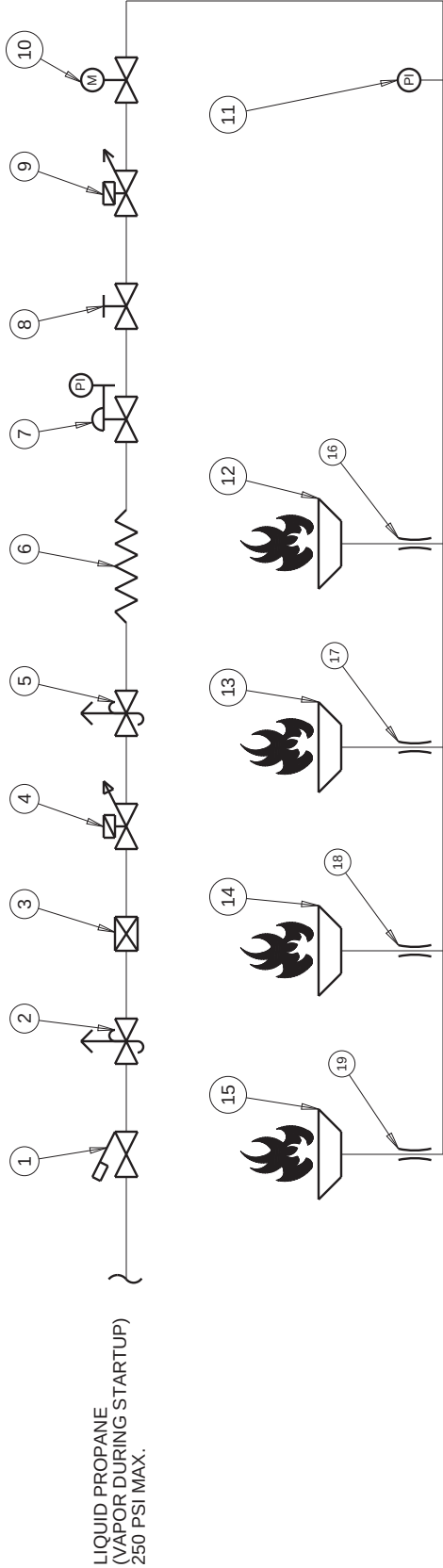
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STARTING WITH 2012 MODELS

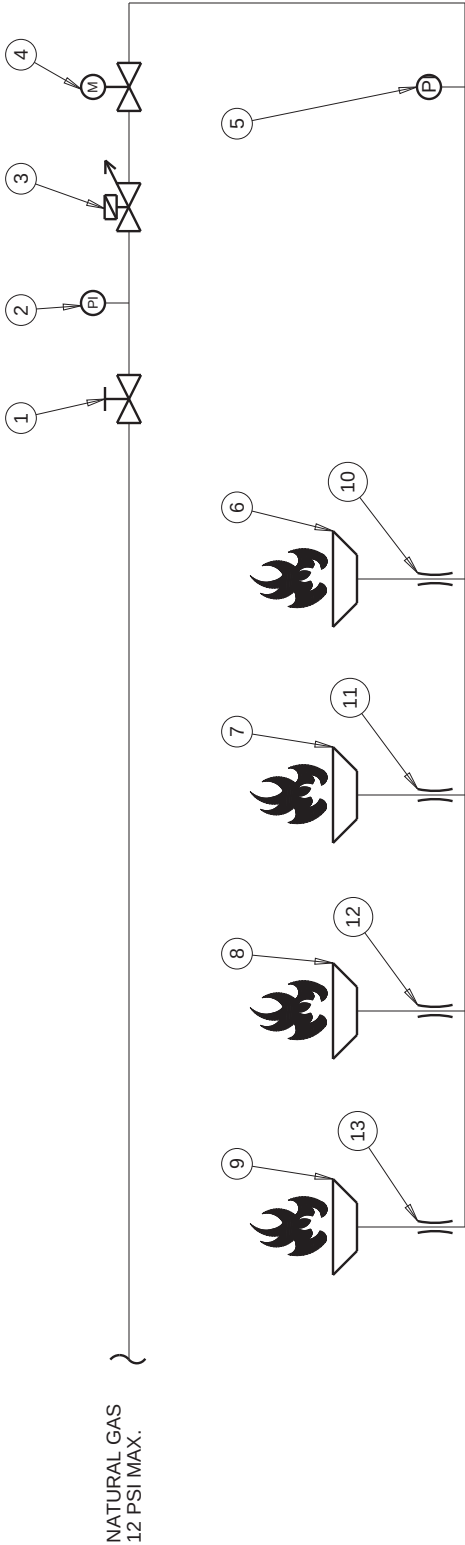
DRAWN BY		TITLE:	
MEL		DELUX MFG. CO.	
DATE		WIRING DIAGRAM	
07/17/12		FIREYE SYSTEM BASE	
CHK'D		MicroM SERIES	
		REF: 900-010043 - SCHEMATIC	
USED ON:			
NEXT ASSY:			
SCALE			
NONE			
DATE			
DESCRIPTION			
LET			
ECO#			
TOLERANCE:	DECIMAL ±.010	FRACTION ±1/32	ANGLE ±1°
			UNLESS OTHERWISE SPECIFIED
		DRAWING NO.	900-010044

ITEM	DESCRIPTION
1	QUICK ACTING CUT-OFF
2	PRESSURE RELIEF VALVE
3	STRAINER
4	ELECTRIC SOLENOID VALVE (LIQUID)
5	PRESSURE RELIEF VALVE
6	INTERNAL VAPORIZER
7	PRESSURE REGULATOR WITH GAUGE
8	MANUAL BALL VALVE
9	ELECTRIC SOLENOID VALVE (VAPOR)
10	ELECTRIC BUTTERFLY VALVE (TEMP. CONTROL)
11	PRESSURE GAUGE
12	BURNER #1
13	BURNER #2
14	BURNER #3
15	BURNER #4
16	ORIFICE - BURNER #1
17	ORIFICE - BURNER #2
18	ORIFICE - BURNER #3
19	ORIFICE - BURNER #4



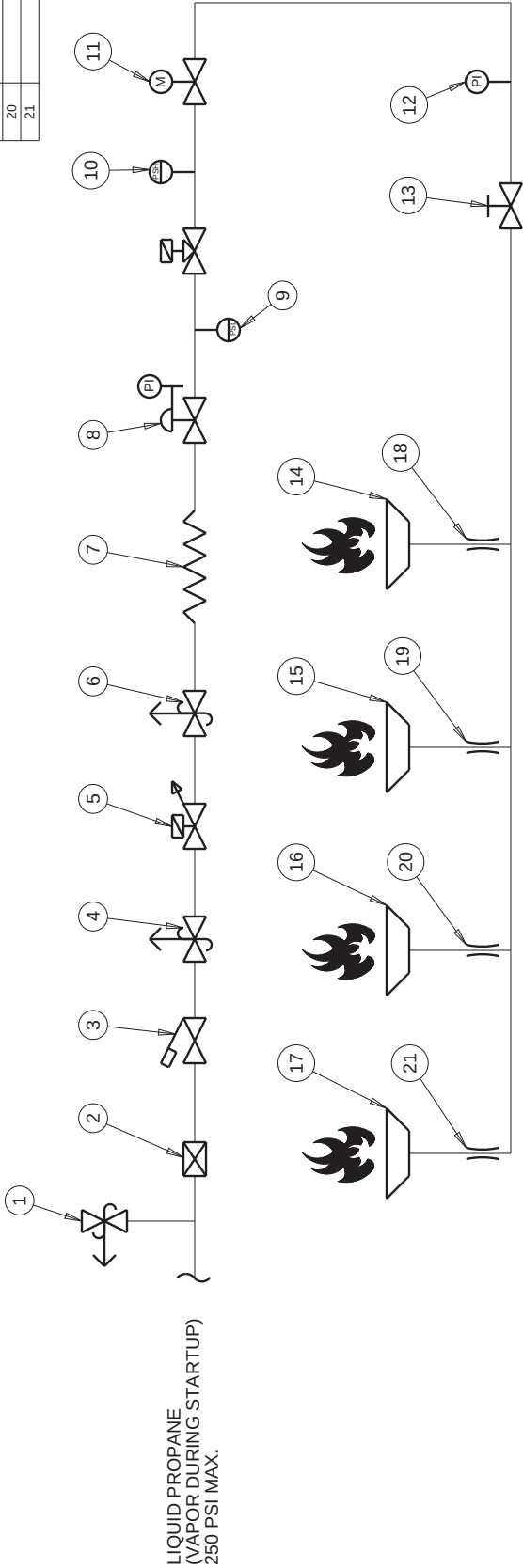
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ITEM	DESCRIPTION
1	MANUAL BALL VALVE
2	PRESSURE GAUGE
3	ELECTRIC SOLENOID VALVE
4	ELECTRIC BUTTERFLY VALVE (TEMP. CONTROL)
5	PRESSURE GAUGE
6	BURNER #1
7	BURNER #2
8	BURNER #3
9	BURNER #4
10	ORIFICE - BURNER #1
11	ORIFICE - BURNER #2
12	ORIFICE - BURNER #3
13	ORIFICE - BURNER #4



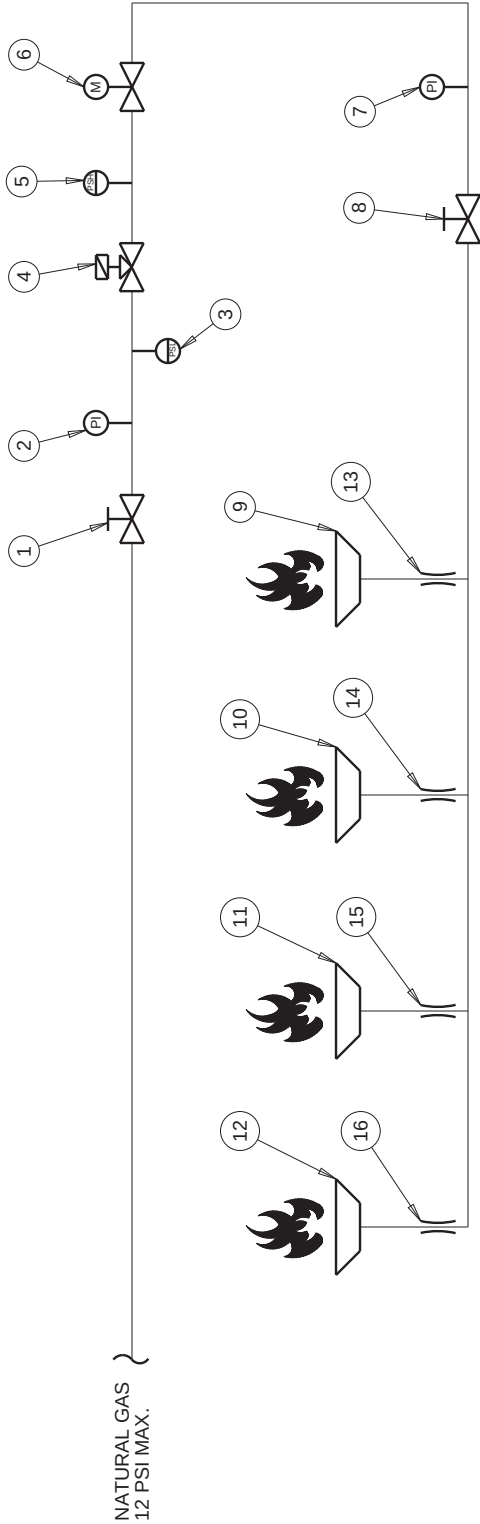
DRAWN BY		TITLE:	
	JGW	DELUX MFG. CO.	
	DATE	KEARNEY, NE	
	03/11/10	PLUMBING SCHEMATIC	
	CHKD	NATURAL GAS - NON-CSA	
		DP/DPSL, DPX/SL, 4T, 8T, 12T	
		USED ON:	
		NEXT ASSY:	
		MATL	
ECO#	LET	DESCRIPTION	DRAWING NO.
			900-009216
TOLERANCE:		DECIMAL 1/100	ANGLE 1/16
		FRACTION 1/32	UNLESS OTHERWISE SPECIFIED

ITEM	DESCRIPTION
1	PRESSURE RELIEF VALVE
2	STRAINER
3	QUICK ACTING CUT-OFF
4	PRESSURE RELIEF VALVE
5	ELECTRIC SOLENOID VALVE (VAPOR)
6	PRESSURE RELIEF VALVE
7	INTERNAL VAPORIZER
8	PRESSURE REGULATOR WITH GAUGE
9	PRESSURE SWITCH - LOW
10	PRESSURE SWITCH - HIGH
11	ELECTRIC BUTTERFLY VALVE (TEMP. CONTROL)
12	PRESSURE GAUGE
13	MANUAL BALL VALVE
14	BURNER #1
15	BURNER #2
16	BURNER #3
17	BURNER #4
18	ORIFICE - BURNER #1
19	ORIFICE - BURNER #2
20	ORIFICE - BURNER #3
21	ORIFICE - BURNER #4



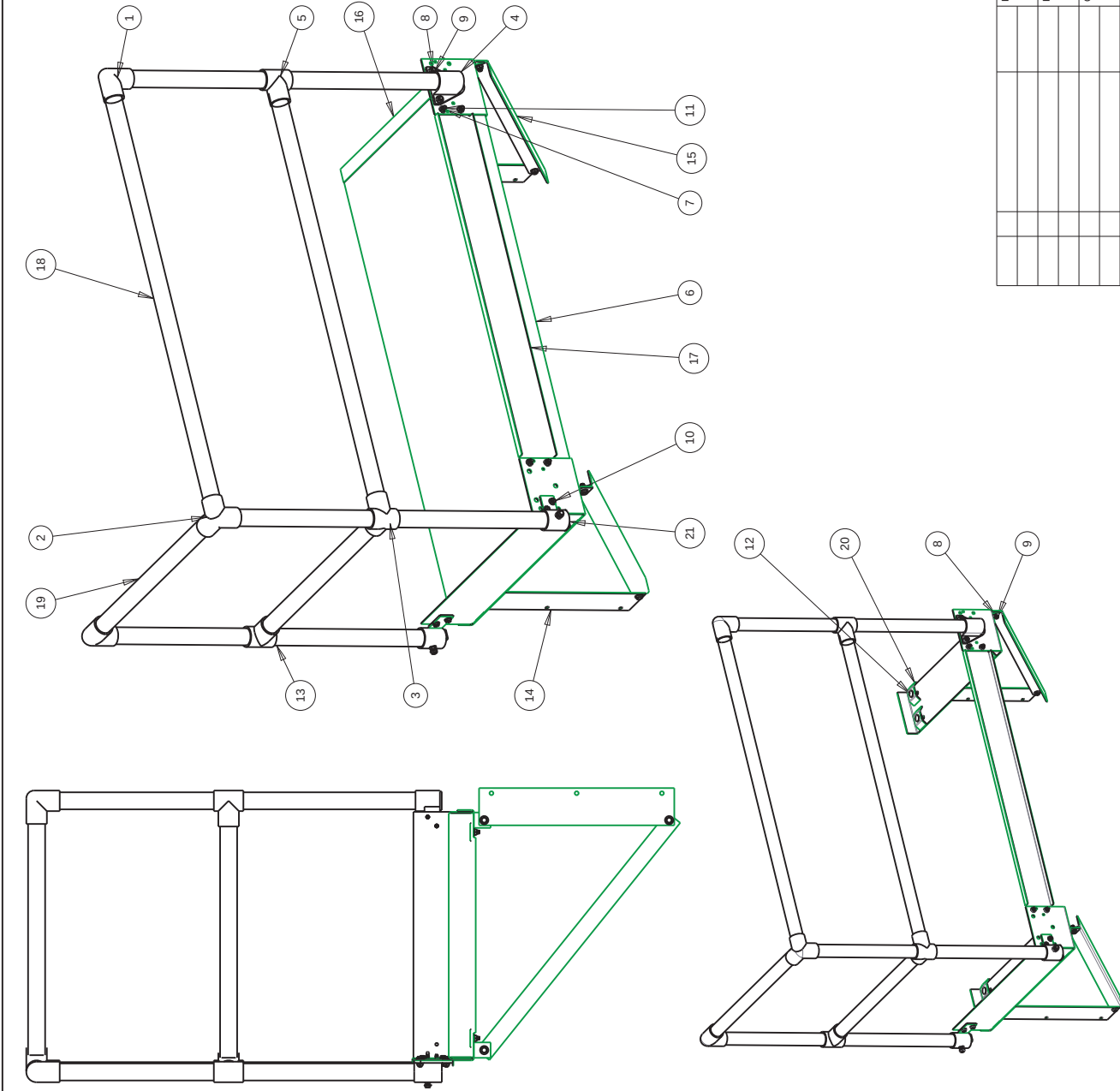
DRAWN BY		TITLE:	
	JGW	DELUX MFG. CO.	
DATE	03/11/10	PLUMBING SCHEMATIC	
CHKD		LIQUID PROPANE - CSA	
SCALE		DP/DPSL, DPX/SL, 4T, 8T, 12T	
DESCRIPTION	DATE	USED ON:	
LET		NEXT ASSY:	
ECO#		MATL	
		SHEAR SIZE	
		DRAWING NO.	900-009217
TOLERANCE:		UNLESS OTHERWISE SPECIFIED	
		DECIMAL: 1/32	ANGLE: 1/16

ITEM	DESCRIPTION
1	MANUAL BALL VALVE
2	PRESSURE GAUGE
3	PRESSURE SWITCH - LOW
4	ELECTRONIC SOLENOID VALVE (FAIL SAFE)
5	PRESSURE GAUGE - HIGH
6	ELECTRIC BUTTERFLY VALVE (TEMP. CONTROL)
7	PRESSURE GAUGE
8	MANUAL BALL VALVE
9	BURNER #1
10	BURNER #2
11	BURNER #3
12	BURNER #4
13	ORIFICE - BURNER #1
14	ORIFICE - BURNER #2
15	ORIFICE - BURNER #3
16	ORIFICE - BURNER #4



DRAWN BY		TITLE:	
JGW		DELUX MFG. CO.	
DATE		PLUMBING SCHEMATIC	
01/11/10		NATURAL GAS - CSA	
CHKD		DP/DPSL, DPX/SL, 4T, 8T, 12T	
SCALE		USED ON:	
		NEXT ASSY:	
DESCRIPTION		MATERIAL	
LET		SHEAR SIZE	
ECO#		DRAWING NO.	
		900-009218	
TOLERANCE:		UNLESS OTHERWISE SPECIFIED	
DECIMAL	1/32	FRACTION	1/16
ANGLE	1/2		

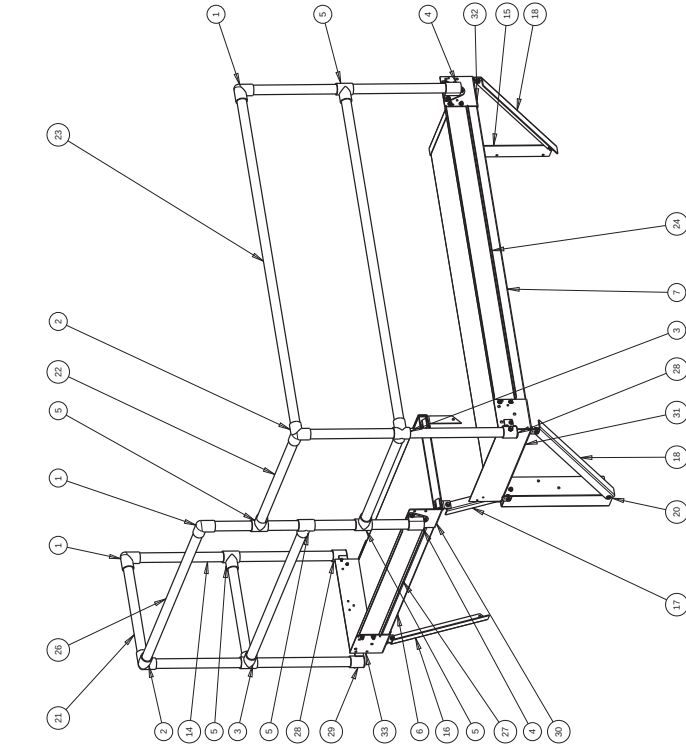
ITEM	PART NUMBER	QTY	DESCRIPTION
1	034-001397	2	PIPE FITTING - ELL
2	034-001399	1	PIPE FITTING - S/O ELBOW
3	034-001400	1	PIPE FITTING - S/O TEE
4	034-001404	1	PIPE FITTING - BASE
5	034-001782	2	PIPE FITTING - TEE
6	038-001412-48000	1	GRIP STRUT - 2" X 24" X 48"
7	040-001459	4	NUT - WHIZ LOCK - 5/16-18UNC
8	040-001460	17	NUT - WHIZ LOCK - 3/8-16UNC
9	040-002193	9	BOLT - WHIZ LOCK - 3/8-16UNC X 3/4
10	040-002739	4	SCREW - TCS - HEX - 5/16-18UNC X 3/4
11	040-005321	4	BOLT - WHIZ LOCK - 5/16-18UNC X 3/4"
12	040-008665	8	BOLT - CARRIAGE - 3/8-18UNC X 1-1/4
13	100-000122	3	PIPE RAILING - 38"
14	100-003133	2	CATWALK SPRT BRKT - ENDWALL
15	100-007345	2	CATWALK ANGLE BRACE - END CATWALK
16	100-007376	1	END COVER - 24" GRIP STRUT
17	100-008617	1	CATWALK TOE GUARD - END CATWALK - GARNER/PLNM
18	100-008620	2	PIPE RAILING - 45"
19	100-008621	2	PIPE RAILING - 23-1/2"
20	100-008623	8	WALKWAY CLAMP
21	200-002274	2	W.A. - HANDRAILING BRACKET - RIGHT
22	200-008493	1	W.A. - CATWALK SPRT BRKT 24" - END CATWALK - TAB RIGHT
23	200-008626	1	W.A. - CATWALK SPRT BRKT 24" - TOE GUARD - TAB MID



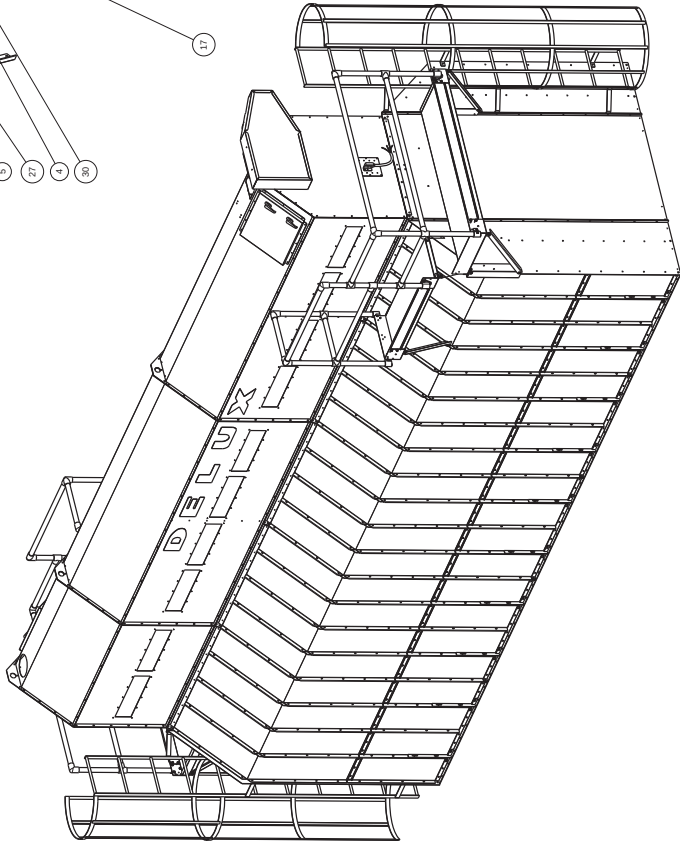
DRAWN BY JGW		DATE 09/04/07		CHKD		SCALE 09/04/07		TOLERANCE: DECIMAL .010		FRACTION 1/32		ANGLE ±1°		UNLESS OTHERWISE SPECIFIED	
RE-DRAWN		DESCRIPTION		LET		DATE		A		RE-DRAWN		SCALE		.125	
ECON		RE-DRAWN		LET		DATE		A		RE-DRAWN		SCALE		.125	
USED ON:		NEXT ASSY:		MTRL		SHEAR SIZE		DRAWING NO.		400-008618		TITLE:		ASSEMBLY	
CATWALK & RAILINGS		GARNER WALKWAY - DP/DPXL		PLENUM WALKWAY - DPX/DPXSL		DPX4T-8T-12T		DRAWING NO.		400-008618		TITLE:		ASSEMBLY	
CATWALK & RAILINGS		GARNER WALKWAY - DP/DPXL		PLENUM WALKWAY - DPX/DPXSL		DPX4T-8T-12T		DRAWING NO.		400-008618		TITLE:		ASSEMBLY	

SCALE 0.093
*GRIPSTRUT REMOVED FOR ILLUSTRATION

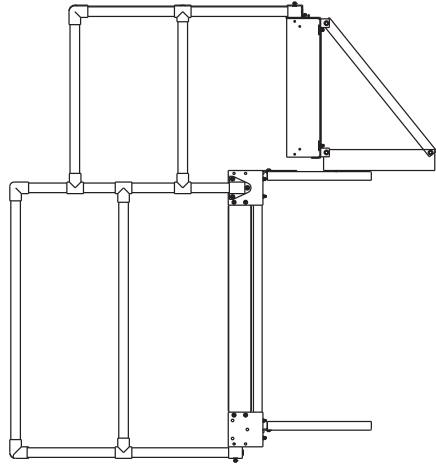
ITEM	PART NUMBER	QTY	DESCRIPTION
1	034-001397	3	PIPE FITTING - ELL
2	034-001399	2	PIPE FITTING - 90° ELBOW
3	034-001400	2	PIPE FITTING - 90° TEE
4	034-001398	2	PIPE FITTING - 45° ELBOW
5	034-001392	6	PIPE FITTING - TEE
6	038-001411	40000	GRIP STRUT - 1.12" X 1.8" X .48"
7	038-001412	11000	GRIP STRUT - 2" X 2" X .71"
8	040-001459	9	NUT - WHEZ LOCK - 5/16-18UNC
9	040-001460	9	WASHER - 5/16-18UNC
10	040-002193	14	BOLT - WHEZ LOCK - 3/8-16UNC X 3/4"
11	040-002739	6	SCREW - TCS - HEX - 5/16-18UNC X 3/4"
12	040-005521	9	BOLT - CATWALK - 5/16-18UNC X 1 1/4"
13	040-005522	5	PIPE RAILING - 30"
14	100-000122	5	PIPE RAILING - 60"
15	100-000133	1	CATWALK SPRT BRKT - ENDWALL
16	100-005281	1	CATWALK ANGLE BRACE 45° - LEFT
17	100-005282	1	CATWALK ANGLE BRACE 45° - RIGHT
18	100-005283	2	CATWALK ANGLE BRACE 90° - LEFT
19	100-007776	1	END COVER - 24" GRIP STRUT
20	100-008478	1	CATWALK SPRT BRKT - END CATWALK EXT
21	100-008479	2	PIPE RAILING - 19.12"
22	100-008480	2	PIPE RAILING - 30"
23	100-008486	2	PIPE RAILING - 60"
24	100-008503	1	CATWALK TOE GUARD - END CATWALK EXT
25	100-008523	16	WALKWAY CLAMP
26	100-008529	2	PIPE RAILING - 25.12"
27	100-008530	2	CATWALK - 18" X 24" X .48"
28	200-002274	2	W.A. - HANDRAILING BRACKET - RIGHT
29	200-007787	1	W.A. - HANDRAILING BRACKET - LEFT
30	200-008491	1	W.A. - CATWALK SPRT BRKT 18" - 48" - TAB RIGHT
31	200-008492	1	W.A. - CATWALK SPRT BRKT 18" - 48" - TAB LEFT
32	200-008493	1	W.A. - CATWALK SPRT BRKT 24" - END CATWALK - TAB RIGHT
33	200-008522	1	W.A. - CATWALK SPRT BRKT 18" - 48" - TOE GRD - TAB MID



*GRIPSTRUT REMOVED FOR ILLUSTRATION
SCALE 0.078



SCALE 0.046



DRAWN BY		TITLE	
JCW		ASSEMBLY ILLUSTRATION	
DATE		DRAWING	
09/05/07		CATWALK WALKWAY	
CHD		DPXDPXSL, DPX478712T	
UNTD ON			
NEXT ASBY			
SCALE		DRAWING NO.	
09/05/07		400-008624	
DATE			
DESCRIPTION			
REDRAWN			
ECOPI			
LET			
A			
TOLERANCE		FRACTION 3/32" ANGLE 3/4"	
DECIMAL .003		UNLESS OTHERWISE SPECIFIED	

100-006356
 SPLICE PLATE-INTERMEDIATE
 (WHEN PLENUM DOOR SPLITS SECTIONS)



100-005262
 SPLICE PLATE-INTERMEDIATE

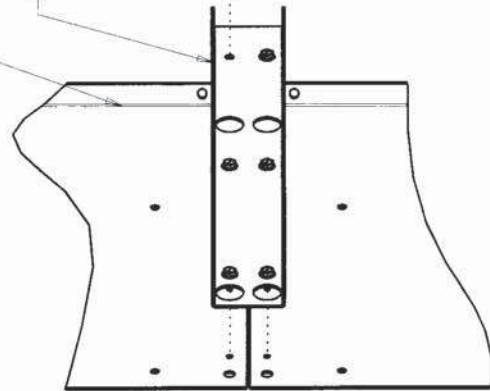
100-005261
 SPLICE PLATES-LEFT AND RIGHT

DRYER END WALL

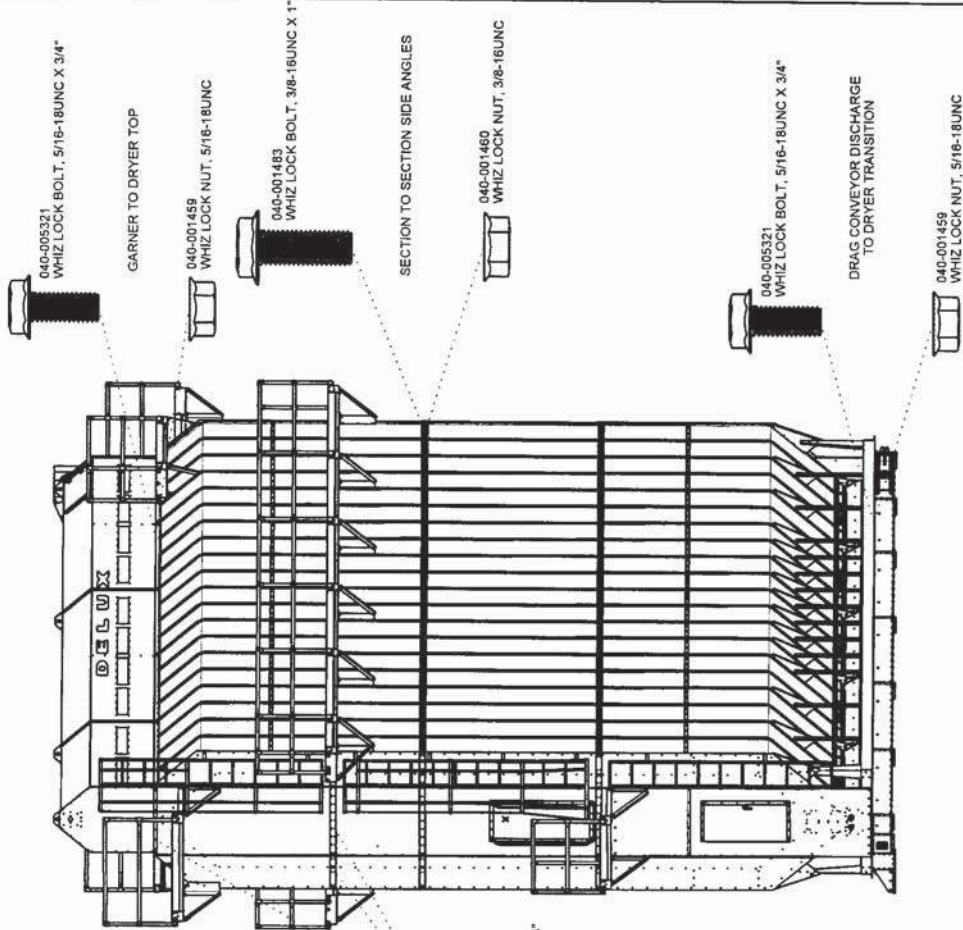
SPLICE PLATE

040-002739
 THREAD CUTTING SCREW, 5/16-18UNC X 3/4"

SECTION SPLICES TO END WALLS;
 GARNER END WALLS TO DRYER END WALLS



END WALL / SPLICE PLATE
 SCALE 0.250



SECTION TO SECTION SIDE ANGLES

DRAG CONVEYOR DISCHARGE
 TO DRYER TRANSITION

DRAWN BY				TITLE			
MEL		DATE		DELUX MFG. CO.			
12/28/04		12/28/04		ILLUSTRATION			
CHKD		SCALE		ERECTOR			
07/25/12		12/28/04		DPX/DPXSL; 4T; 8T; 12T; 16GT			
C		B		USED ON			
UPDATE FOR		REDAWN		NEXT ASSY.			
ECON		LET		MATERIAL			
DESCRIPTION		DATE		SHEAR SIZE			
12/28/04		12/28/04		DRAWING NO.			
12/28/04		12/28/04		900-005526			
12/28/04		12/28/04		FRACTION ±1/32 ANGLE ±1° UNLESS OTHERWISE SPECIFIED			

GENERAL OPERATOR MAINTENANCE

SAFETY CODE-----USE CAUTION IN OPERATING THIS EQUIPMENT.

THE DESIGN AND MANUFACTURE OF THIS DRYER IS DIRECTED TOWARD OPERATOR SAFETY.

USE EXTREME CAUTION IN WORKING AROUND HIGH SPEED FANS, GAS FIRED BURNERS, DISCHARGE AUGERS, AND AUXILIARY AUGERS, WHICH MAY START WITHOUT WARNING WHEN THE DRYER IS OPERATING ON AUTOMATIC CONTROLS.

CONTINUED SAFE, DEPENDABLE OPERATION OF AUTOMATIC EQUIPMENT DEPENDS TO A GREAT DEGREE UPON THE OWNER. FOR A SAFE DEPENDABLE DRYING SYSTEM, FOLLOW THE RECOMMENDATIONS WITHIN THE MANUAL AND MAKE IT A PRACTICE TO REGULARLY INSPECT THE OPERATION OF THE UNIT FOR ANY DEVELOPING PROBLEMS OR UNSAFE CONDITIONS.

KEEP A CLEAN DRYER

DO NOT ALLOW FINE MATERIAL TO ACCUMULATE ON THE PLENUM FLOOR OR A TRASH FIRE CAN RESULT

CHECKING THE DRYER EVERY 24 HOURS AND CLEANING WILL HELP PREVENT PROBLEMS. THE DRYER SHOULD NOT BE LEFT UNATTENDED FOR EXTENDED PERIODS OF TIME.

SAFETY FIRST!

USE ONLY APPROVED LADDERS AND WALKWAYS TO GAIN ACCESS TO THE DRYER.

DISCONNECT AND LOCKOUT ALL ENERGY SOURCES TO THE DRYER BEFORE REPAIR OR MAINTENANCE IS PERFORMED.

BE SURE ALL GUARDS AND SHIELDS ARE IN PLACE BEFORE OPERATING THE DRYER.

PREPARING DRYER FOR OPERATION

CHECK ALL SAFETY CONTROLS FOR PROPER OPERATION.

CHECK FOR WORN OR BROKEN PARTS THAT NEED TO BE REPLACED.

LUBRICATE PER INSTRUCTION LITERATURE LOCATED IN SECTION 14.

OPEN AIR INTAKES DOORS.

CHECK BELTS FOR WEAR AND TENSION.

CHECK CHAIN TENSION AND SPROCKET ALIGNMENT.

RUN FANS AND DISCHARGE SYSTEM TO ASSURE PROPER FUNCTION.

CLEAN FUEL STRAINER-DRAIN FUEL LINES.

DURING SEASON

INSPECT PLENUM AND COOLING CHAMBERS DAILY. CLEAN OUT ANY ACCUMULATION OF DIRT, CHAFF, FINES, ETC.

CHECK FEEDROLLS FOR PROPER GRAIN FLOW.

CHECK CHAIN AND BELT ALIGNMENT DAILY.

INSPECT EXTERIOR SCREENS FOR PLUGGING--CLEAN FOR EFFECTIVE DRYING.

POST SEASON SERVICE

TURN OFF ALL FUEL AND POWER TO THE DRYER.

CLEAN OUT PLENUM AND COOLING CHAMBERS, GRAIN COLUMNS AND AUGERS.

CLEAN EXTERIOR OF DRYER.

LEAVE AUGER SLIDE GATES OPEN FOR DRAINAGE.

CLEAN FUEL STRAINER-DRAIN FUEL LINES.

LUBRICATE PER INSTRUCTIONS - SECTION 14.

APPLY PROTECTIVE COATING TO CHAIN AND SPROCKETS.

INSPECT FOR WORN/DAMAGED PARTS THAT SHOULD BE REPLACED.

KEEP ALL ACCESS DOORS CLOSED.

GENERAL LUBRICATION**1. GEAR DRIVES**

- A. LUBRICATION LEVELS TO BE CHECKED ON INITIAL STARTUP.
- B. LUBRICATE PER INSTRUCTION PLATE ON GEAR HEAD.

2. AUGER BEARINGS

- A. BEARINGS USED ARE OF THE PERMANENTLY LUBRICATED TYPE.

3. AUGER HANGER BEARINGS

- A. BEARINGS USED ARE OF THE PERMANENTLY LUBRICATED TYPE.

4. ROLLER CHAIN

- A. SPRAY WITH RUST PREVENTATIVE LUBRICANT AT THE END OF EACH SEASON.

5. FAN MOTOR

- A. FOLLOW MANUFACTURER'S INSTRUCTIONS.

REPLACEMENT PARTS

- DP & DPSL SERIES
- DPX & DPXSL SERIES
- DPX4T SERIES
- DPX8T SERIES
- DPX12T SERIES
- DPX16GT SERIES

MODEL NO: _____ LENGTH: _____ FT SERIAL NO: _____

PARTS - SPECIFICATIONS

DP/DPXL/DPX/DPXSL/DPX4T/DPX8T/DPX12T/DPX16GT

SCHEMATIC: 900-010042 DP-SL/DPX-SL/DPX4-8-12T-16GT (2012- UP)

SCHEMATIC: 900-010045 W/MOISTURE-LINK (2012- UP)

CONTROL CIRCUIT

<u>PART DESCRIPTION - INFORMATION</u>	<u>DELUX PART NUMBER</u>
DISTRIBUTION BLOCK: 2 POLE 350 MCM	005-004765
DISTRIBUTION BLOCK: 3 POLE 350 MCM	005-003090
DISTRIBUTION BLOCK: 3 POLE 500 MCM	005-005724
DISTRIBUTION BLOCK: 3 POLE 500 MCMX2	005-006018
STEP DOWN TRANSFORMER: GE - 1.5 KVA - 380V	008-006351
STEP DOWN TRANSFORMER: GE - 1.5 KVA - 480V	008-001928
STEP DOWN TRANSFORMER: GE - 1.5 KVA - 575V	008-007420
FUSE BLOCK: 2P - 600V - 30A	005-000683
FUSE: STEP DOWN TRANSFORMER: FRS 7 - 380V & 480V	000-000553
FUSE: STEP DOWN TRANSFORMER: FRS 5 - 575V	000-001862
CONTROL CIRCUIT BREAKER	015-010136
MAIN POWER LIGHT: NEON - CLEAR	019-005684
POWER SWITCH: TOGGLE - MOM-ON OFF	010-005474
HOUR METER (LOWER PANEL): HOBBS - 20001-18	016-006717
POWER RELAY: 8 PIN - DPDT - 120V	007-000725
RELAY SOCKET: 8 PIN 120V - POWER	007-008938
SAFETY CIRCUIT PROVEN LIGHT: NEON - WHITE	019-005685
TERMINAL STRIP: 3 POLE	016-004761
MARKER STRIP 1 TO 3	016-004762
TERMINAL STRIP: 12 POLE	016-004224
MARKER STRIP 1 TO 12	016-004225
MARKER STRIP 13 TO 24	016-006386
MARKER STRIP 25 TO 36	016-006387
MARKER STRIP 37 TO 48	016-006388
MARKER STRIP 49 TO 60	016-006389
MARKER STRIP 61 TO 72	016-006390
MARKER STRIP 73 TO 84	016-006391
MARKER STRIP 85 TO 96	016-009189

FAN CONTROL CIRCUIT

FAN SWITCH: TOGGLE - MOM-ON	010-005681
FAN PROVEN LIGHT(S): NEON - CLEAR	019-005684
FAN TIMER(S): (8) PIN - DPDT - 120V - 0 TO 60 SEC.	007-009166
RELAY SOCKET: 8 PIN 120V - FAN TIMER	007-008938
FAN SAIL SENSOR ASS'Y - SENSOR AND WIDE ALUM. PADDLE ASS'Y	400-009148
FAN SAIL SENSOR ASS'Y - SENSOR AND SOLID PADDLE ASS'Y	400-007230
FAN SAIL SENSOR ASS'Y - SENSOR AND PERF PADDLE ASS'Y	400-008700
FAN SAIL SENSOR WIDE ALUM. PADDLE W/ ARM ASS'Y:	400-009147
FAN SAIL SENSOR SOLID PADDLE W/ ARM ASS'Y:	400-007229
FAN SAIL SENSOR PERFORATED PADDLE W/ ASS'Y:	400-008699
FAN SAIL SENSOR(S): HONEYWELL - S437A 1009	009-005213
FAN SAIL SENSOR WIDE ALUM. PADDLE:	100-009039
FAN SAIL SENSOR SOLID PADDLE:	100-007228
FAN SAIL SENSOR PERFORATED PADDLE:	100-008698
FAN SENSOR RELAY: SURFACE MOUNT - SPST - 120V - 10 SEC.	007-005315
FAN SENSOR REALY BASE:	007-005315-01
PURGE RELAY: (8)PIN - DPDT - 120V - 60 SEC.	007-009166
RELAY SOCKET: 8 PIN 120V - PURGE	007-008938
PURGING LIGHT: NEON - YELLOW	019-005687
BURNER READY LIGHT: NEON - CLEAR	019-005684
FAN GREENHECK - 38" - ADJUSTABLE PITCH:	038-008298
FAN GREENHECK - 43" - ADJUSTABLE PITCH:	038-008299
SPINNER DOMED - FAN GREENHECK 21" (HUB)	038-008300
SPLIT TAPER BUSHING- QD-E X 1 3/8: 38" FAN - 10HP	056-008704
SPLIT TAPER BUSHING- QD-E X 1 5/8: 38" FAN - 15/20HP	056-008705
SPLIT TAPER BUSHING- QD-E X 1 7/8: 38" FAN - 25/30HP	056-008706
SPLIT TAPER BUSHING- QD-E X 2 1/8: 43" FAN - 40/50HP	056-008707
SPLIT TAPER BUSHING- QD-E X 2 3/8: 43" FAN - 60HP	056-008708

NOTE: FOR MOTORS, FAN PITCH, STARTER SIZES, AND WIRE SIZES REFER TO CHARTS.

BURNER AND IGNITION SYSTEM

BURNER SWITCH: TOGGLE - 4PDT ON/ON	010-005682
IGNITION FIRING LIGHT(S): NEON - YELLOW	019-005687
BURNER PROVEN LIGHT(S): NEON - RED	019-003410
FLAME CONTROL(S): FIREYE - MicroM (TOTAL ASSEMBLY)	400-009858
CHASSIS MEC 120	007-009334
PROGRAMMER MODULE MEP 100	007-009335
AMPLIFIER MODULE MERT 4	007-009336
WIRING BASE: FLAME CONTROL	007-000741
RESET FLAME CONTROL LIGHT: NEON - RED	019-003410
FLAME SENSOR(S) ROD: AUBURN - FRS-4-6	031-001384
WIRE ASS'Y-FLAME SENSOR - 102"	400-006303
WIRE ASS'Y - GND BURNER - 102"	400-006304
IGNITION TRANSFORMER(S): ALLANSON - 120V	008-000755
IGNITION SPARK PLUG(S): CHAMPION - W95D	031-001955
WIRE ASS'Y-IGNITION TRANSFORMER TO SPARK PLUG - 109"	400-006302
IGNITION WIRE: (PER FOOT)	031-001366
FLAME RELAY: (8)PIN - DPDT - 120V	007-000725
RELAY SOCKET: 8 PIN 120V - FLAME RELAY	007-008938
BURNER RELAY: (8)PIN - DPDT - 120V	007-000725
RELAY SOCKET: 8 PIN 120V - BURNER	007-008938
BURNER DELAY OFF RELAY: (8)PIN - SPST - 120V	007-009167
RELAY SOCKET: 8 PIN 120V - BURNER DELAY OFF	007-008938
BURNER (OCTAGON SHAPE) W/ ROUND TUBING	200-002951
PIPE PLUG 1" -FOR CLEAN-OUT (INCLUDED WITH 200-002951)	026-001289
PIPE STREET-ELL 1" 90 DEGREE	021-001116
ORFICE PIPE 1" X 12"	100-003138
FLAME ROD MOUNTING TAB: USED TO MTG. FLAME ROD FRS-4-6	100-005080
SPARK PLUG MOUNTING TAB: USED TO MTG. SPARK PLUG W95D	100-003111
BURNER STANDOFF BRACKET 38": USED W/ 38" FANS 4 REQ'D	100-007362
BURNER STANDOFF BRACKET 43": USED W/ 43" FANS 4 REQ'D	100-003341
<u>HARDWARE FOR BURNER STANDOFFS</u>	
BOLT-WHIZ 3/8-16UNC X 1" (FOUR -4 PER STANDOFF)	040-001483
NUT -WHIZ 3/8-16UNC X 1" (FOUR -4 PER STANDOFF)	040-001460
BURNER COVER ASS'Y 38": USED W/ 38" & 43" FANS	400-003371

WET LOAD SYSTEM (LEVELING AUGER OR DRAG CONVEYOR)

LOAD SWITCH: TOGGLE - SPST - OFF/ON	010-005475
GRAIN LOADING LIGHT: NEON - YELLOW	019-005687
FILL 8" AUGER LEVEL CONTROL: HI-LO SWITCH DELUX	400-004198
FILL 10" AUGER LEVEL CONTROL: HI-LO SWITCH DELUX	400-006737
FILL AUGER LEVEL CONTROL SWITCH: TILT SWITCH	010-003392
LOW GRAIN SHUTDOWN CONTROL: DELUX - ASS'Y -PADDLE MOTOR END	400-009196
LOW GRAIN SHUTDOWN CONTROL: DELUX - ASS'Y -PADDLE FILL END (40')	400-009197
LOW GRAIN SHUTDOWN CONTROL SWITCH: SIDE PLUNGER SWITCH(BZE6-2RN)	010-003386
LOW GRAIN LIGHT(S): NEON - RED	019-003410

LEVELING 8" AND 10" AUGER KITS W/ 1 1/4" SHAFTS (SUPER EDGE FLIGHTING)**INCLUDES: AUGER(S), SHAFTS 1 1/4" W/BOLTS-SPLIT BEARING(S)-END BEARINGS**

LEVELING 8" AUGER SET W/1 1/4" SHAFTS 10FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-006861
LEVELING 8" AUGER SET W/1 1/4" SHAFTS 15FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-006862
LEVELING 8" AUGER SET W/1 1/4" SHAFTS 20FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-006863
LEVELING 8" AUGER SET W/1 1/4" SHAFTS 25FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-006864
LEVELING 8" AUGER SET W/1 1/4" SHAFTS 30FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-006865
LEVELING 8" AUGER SET W/1 1/4" SHAFTS 40FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-006866
LEVELING 10" AUGER SET W/1 1/4" SHAFTS 10FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-007410
LEVELING 10" AUGER SET W/1 1/4" SHAFTS 15FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-007411
LEVELING 10" AUGER SET W/1 1/4" SHAFTS 20FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-007412
LEVELING 10" AUGER SET W/1 1/4" SHAFTS 25FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-007413
LEVELING 10" AUGER SET W/1 1/4" SHAFTS 30FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-007414
LEVELING 10" AUGER SET W/1 1/4" SHAFTS 40FT:	<u>(SUPER EDGE FLIGHTING)</u>	035-006867

LEVELING 8" AUGER SECTIONS FOR 1 1/4" SHAFTS (SUPER EDGE FLIGHTING)**INCLUDES: AUGER ONLY - NO 1 1/4" SHAFTS OR BOLTS**

LEVELING 8" AUGER SECTION FOR 1 1/4" SHAFTS 10FT:	200-006834
USE ON 10FT DRYERS ONLY	<u>(SUPER EDGE FLIGHTING)</u>
LEVELING 8" AUGER SECTION FOR 1 1/4" SHAFTS FRONT 10FT	200-006723
MOTOR END	<u>(SUPER EDGE FLIGHTING)</u>
LEVELING 8" AUGER SECTION FOR 1 1/4" SHAFTS	200-006724
DISCHARGE INTERMEDIATE 10FT:	<u>(SUPER EDGE FLIGHTING)</u>
LEVELING 8" AUGER SECTION FOR 1 1/4" SHAFTS REAR 5FT:	200-006721
NON MOTOR END	<u>(SUPER EDGE FLIGHTING)</u>
LEVELING 8" AUGER SECTION FOR 1 1/4" SHAFTS REAR 10FT:	200-006720
NON MOTOR END	<u>(SUPER EDGE FLIGHTING)</u>

LEVELING 10" AUGER SECTIONS FOR 1 1/4" SHAFTS (SUPER EDGE FLIGHTING)**INCLUDES: AUGER ONLY - NO 1 1/4" SHAFTS OR BOLTS**

LEVELING 10" AUGER SECTION FOR 1 1/4" SHAFTS 10FT:	200-007639
USE ON 10FT DRYERS ONLY <u>(SUPER EDGE FLIGHTING)</u>	
LEVELING 10" AUGER SECTION FOR 1 1/4" SHAFTS FRONT 10FT	200-006794
MOTOR END <u>(SUPER EDGE FLIGHTING)</u>	
LEVELING 10" AUGER SECTION FOR 1 1/4" SHAFTS	200-006793
INTERMEDIATE 10FT: <u>(SUPER EDGE FLIGHTING)</u>	
LEVELING 10" AUGER SECTION FOR 1 1/4" SHAFTS REAR 5FT:	200-007640
NON MOTOR END <u>(SUPER EDGE FLIGHTING)</u>	
LEVELING 10" AUGER SECTION FOR 1 1/4" SHAFTS REAR 10FT:	200-006792
NON MOTOR END <u>(SUPER EDGE FLIGHTING)</u>	

LEVELING 8" AND 10" AUGER PARTS FOR 1 1/4" SHAFTS

LEVELING AUGER SHAFT 1 1/4" FRONT: KEYED - MOTOR END	100-006727
LEVELING AUGER SHAFT 1 1/4" INTERMEDIATE:	100-006726
LEVELING AUGER SHAFT 1 1/4" REAR: NON-KEYED	100-006728

END BEARING - 2-BOLT FLANGE - 1 1/4" BORE:	044-001510
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INTERMEDIATE HANGER ASS'Y- 8" LEVELING AUGER/TROUGH W/HARDWARE	400-006827
W/ 1-1/4" SPLIT BEARING	
INTERMEDIATE HANGER ASS'Y- 8" LEVELING AUGER/TROUGH W/HARDWARE	200-007319
<u>W/OUT</u> 1-1/4" SPLIT BEARING	
INTERMEDIATE HANGER ASS'Y-10" LEVELING AUGER/TROUGH W/HARDWARE	400-006829
W/ 1-1/4" SPLIT BEARING	
INTERMEDIATE HANGER ASS'Y-10" LEVELING AUGER/TROUGH W/HARDWARE	200-007320
<u>W/OUT</u> 1-1/4" SPLIT BEARING	

HARDWARE NEEDED WITH EACH HANGER ASS'Y: (2) 042-001495 WASHER 5/16
 (2) 040-001436 BOLT-HEX 5/16-18UNC X 1" (2) 040-004068 NUT- LOCK 5/16-18UNC

HANGER BEARING-SPLIT WOOD-TOP HALF 1 1/4":	044-006714
HANGER BEARING-SPLIT WOOD-BOTTOM HALF 1 1/4":	044-006713
HANGER BEARING SADDLE 1 1/4":	044-006715

LEVELING AUGER BELT: B82	049-003364
LEVLEING AUGER BELT: B76	049-007874

LEVELING AUGER SHEAVE SINGLE GROOVE: 1-B18.4-QD	056-005370
LEVELING AUGER SHEAVE DOUBLE GROOVE: 2-B18.4-QD	056-005372
LEVELING AUGER SHEAVE TRIPLE GROOVE: 3-B18.4-QD	056-006832
LEVELING AUGER SHEAVE SINGLE GROOVE: 1-B15.4-QD	056-007871
LEVELING AUGER SHEAVE DOUBLE GROOVE: 2-B15.4-QD	056-007872
LEVELING AUGER SHEAVE TRIPLE GROOVE: 3-B15.4-QD	056-007873

LEVELING AUGER BUSHING: SK-1 1/4" BORE	056-006830
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LEVELING MOTOR SHEAVE SINGLE GROOVE: 1-B3.4QD	056-005371
LEVELING MOTOR SHEAVE DOUBLE GROOVE: 2-B3.4QD	056-005373
LEVELING MOTOR SHEAVE TRIPLE GROOVE: 3-B3.4QD	056-006833

BUSHING LEVELING AUGER MOTOR: SH- 7/8" BORE	056-005375
BUSHING LEVELING AUGER MOTOR: SH-1 1/8" BORE	056-005376
BUSHING LEVELING AUGER MOTOR: SH-1 3/8" BORE	056-006344

LEVELING 8" AND 10" AUGER TROUGH SECTIONS (STANDARD FLIGHTING)

INCLUDES: TROUGH ONLY, NO HARDWARE.

LEVELING 8" AUGER TROUGH 5FT:10FT DRYER ONLY	200-007002
LEVELING 8" AUGER TROUGH INTERMEDIATE 10FT:	200-006992
LEVELING 8" AUGER TROUGH REAR 5FT:	200-007002
LEVELING 8" AUGER TROUGH REAR 10FT:	200-006993
 LEVELING 10" AUGER TROUGH FRONT 5FT:10FT DRYER ONLY	 200-007000
LEVELING 10" AUGER TROUGH INTERMEDIATE 10FT:	200-006999
LEVELING 10" AUGER TROUGH REAR 5FT:	200-007000
LEVELING 10" AUGER TROUGH REAR 10FT:	200-007379
 INTERMEDIATE HANGER ASS'Y- 8" LEVELING AUGER/TROUGH W/HARDWARE W/ 1-1/4" SPLIT BEARING	 400-006827
INTERMEDIATE HANGER ASS'Y- 8" LEVELING AUGER/TROUGH W/HARDWARE <u>W/OUT</u> 1-1/4" SPLIT BEARING	200-007319
INTERMEDIATE HANGER ASS'Y-10" LEVELING AUGER/TROUGH W/HARDWARE W/ 1-1/4" SPLIT BEARING	400-006829
INTERMEDIATE HANGER ASS'Y-10" LEVELING AUGER/TROUGH W/HARDWARE <u>W/OUT</u> 1-1/4" SPLIT BEARING	200-007320

HARDWARE NEEDED WITH EACH HANGER ASS'Y: (2) 042-001495 WASHER 5/16
(2) 040-001436 BOLT-HEX 5/16-18UNC X 1" (2) 040-004068 NUT- LOCK 5/16-18UNC

LEVELING DRAG CONVEYOR (OPTIONAL)

DRAG CHAIN: SIZE 8" (STRAIGHT W/UHMW PADS (PER FOOT)	054-006838
DRAG CHAIN: CONNECTING LINK FOR 8" CHAIN STRAIGHT PADS	054-006836
DRAG CHAIN: SPROCKET 9 TOOTH, 1 15/16" BORE (PITCH	054-006837
 DRAG CHAIN: ROLLER RETURN ASS'Y FOR 8" CHAIN	 054-004508
 DRAG SHAFT BEARINGS: FOUR(4) BOLT, 1 15/16" BORE	 044-002067
DRAG SHAFT: HEAD - NON MOTOR END	100-004527
DRAG SHAFT: TAIL - MOTOR END	100-004546

LEVELING DRAG CONVEYOR

COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 15/16" BORE DRAG SHAFT - TAIL - MOTOR END	047-001931
 COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 3/8" BORE REDUCER SHAFT - TAIL - MOTOR END	 047-006144
 COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 1/2" BORE REDUCER SHAFT - TAIL - MOTOR END	 047-002779
 COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 5/8" BORE REDUCER SHAFT - TAIL - MOTOR END	 047-001932

COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 3/4" BORE REDUCER SHAFT - TAIL - MOTOR END	047-006145
COUPLING CHAIN: DOUBLE WIDTH: SIZE # 6018	036-001930

WET LOAD SYSTEMS (OPTIONAL)

GRAVITY FLOW GARNER CONTROL SYSTEM W HIGH / LOW SWITCHES

GRAIN LEVEL CONTROL SWITCH: ROTARY BINDICATOR	010-002655
GRAIN LEVEL CONTROL LIGHTS: NEON - WHITE	019-005685

METERING ROLLS

MOTOR: 1 HP DC - 1750 RPM - 56C FR - 5/8" SH	004-001985
BRUSH KIT: 1HP DC BALDOR	004-006859
NOTE: CONTACT MOTOR MANUFACTURER FOR MOTOR WARRANTY OR SERVICE.	

GEAR REDUCER: 1 HP DC 60:1 RATIO - 1" SH - 56C FR	052-003962
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SPROCKET METERING ROLLS: 40 CHAIN - 32 TOOTH - 1" BORE	200-003035
IDLER SPROCKET: 40 CHAIN - 17 TOOTH - 1/2" BORE	047-002982

ROLLER CHAIN: SIZE # 40 (PER FOOT)	046-001548
ROLLER CHAIN: CONNECTING LINK # 40	046-001552
ROLLER CHAIN: OFFSET LINK # 40	046-001556

FEEDROLLS: TWO REQ'D PER FIVE(5) FOOT COLUMN (P/N = ONE)	100-000099
BOLT -HEX 1/4-20UNC X 2" (4 PER FIVE(5) FOOT COLUMN)	040-002178
NUT -HEX 1/4-20UNC (4 PER FIVE(5) FOOT COLUMN)	040-001455
WASHER -LOCK 1/4 (4 PER FIVE(5) FOOT COLUMN)	042-001498

FEEDROLL SHAFT 1" DIA - FRONT (KEYED)	100-000098
FEEDROLL SHAFT 1" DIA - INTERMEDIATE	100-000097
FEEDROLL SHAFT 1" DIA - REAR (NOT KEYED)	100-007990

FEEDROLL SHAFT BEARINGS: INSERT 1" W/O LOCK	044-001514
FEEDROLL SHAFT BEARINGS: 1" SPLIT-WOOD	PR. 044-009102
BEARING HOLDERS: FLANGETTE TWO REQ'D PER BEARING	EA. 044-001957
BOLT CARRIAGE 5/16-18UNC X 3/4" (3 PER INSERT BEARING)	040-005439
BOLT WHIZ LOCK 5/16-18UNC X 1/2" (3 PER WOOD BEARING)	040-006791
NUT WHIZ LOCK 5/16-18UNC (3 PER BEARING)	040-001459

FEEDROLL SHELF PLATE (GALV)	100-009065
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FEEDROLL MONITOR CONTROL

FEEDROLL MONITOR COMPLETE ASS'Y (10FT ONLY)	400-009202
FEEDROLL MONITOR COMPLETE ASS'Y	400-009195

FEEDROLL MONITOR PANEL SWITCH: TOGGLE - SPST - OFF/ON	010-005475
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FEEDROLL TIME DELAY RELAY: (8)PIN DPDT - 120V - 15 SEC.	007-009166
RELAY SOCKET: (8) PIN 120V - FEEDROLL MONITOR TIME DELAY	007-008938

FEEDROLL MONITOR SENSOR SWITCH: SWITCH - ROLLER	010-005767
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FEED ROLL MONITOR CAM: DELUX	200-006019
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DRY UNLOAD SYSTEM (DISCHARGE 8" AUGER OR DRAG CONVEYOR)

UNLOAD SWITCH: TOGGLE - SPST - OFF/ON

010-005475

GRAIN UNLOADING LIGHT: NEON - CLEAR

019-005684

DISCHARGE 8" AUGER KITS W/ 1 1/4" SHAFTS (SUPER EDGE FLIGHTING)

INCLUDES: AUGER(S), SHAFTS 1 1/4" W/BOLTS-SPLIT & END BEARING(S)

(NO DISCHARGE EXTENSION AUGER)

YOU MUST ORDER AUGER EXTENSIONS SEPERATE

DISCHARGE 8" AUGER SET W/1 1/4" SHAFTS 10FT: **(SUPER EDGE FLIGHTING)** 035-006869
 DISCHARGE 8" AUGER SET W/1 1/4" SHAFTS 15FT: **(SUPER EDGE FLIGHTING)** 035-006870
 DISCHARGE 8" AUGER SET W/1 1/4" SHAFTS 20FT: **(SUPER EDGE FLIGHTING)** 035-006871
 DISCHARGE 8" AUGER SET W/1 1/4" SHAFTS 25FT: **(SUPER EDGE FLIGHTING)** 035-006872
 DISCHARGE 8" AUGER SET W/1 1/4" SHAFTS 30FT: **(SUPER EDGE FLIGHTING)** 035-006873
 DISCHARGE 8" AUGER SET W/1 1/4" SHAFTS 40FT: **(SUPER EDGE FLIGHTING)** 035-006874

DISCHARGE AUGERS EXTENSION W/ 1 1/4" SHAFTS (SUPER EDGE FLIGHTING)

INCLUDES: AUGER ONLY NO SHAFTS OR HARDWARE

YOU MUST ORDER AUGER TROUGHS, TOPS AND HANGER BRACKETS SEPERATE

DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 1' 200-006875
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 1'6" 200-006876
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 2' 200-006877
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 2'6" 200-008597
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 3' 200-006878
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 4' 200-006879
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 5' 200-006880
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 6' 200-006881
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 7' 200-006882
 DISCHARGE 8" AUGER EXT FOR/1 1/4" SHAFTS **(SUPER EDGE FLIGHT)** 8' 200-006883

DISCHARGE 8" AUGER SECTIONS FOR 1 1/4" SHAFTS (SUPER EDGE FLIGHTING)

INCLUDES: AUGER ONLY NO SHAFTS OR BOLTS

DISCHARGE 8" AUGER SECTION FOR 1 1/4" SHAFTS 5FT: 200-006725
 DISCHARGE 8" AUGER SECTION FOR 1 1/4" SHAFTS 10FT: 200-006724
 LEVELING

DISCHARGE 8" AUGER PARTS FOR 1 1/4" SHAFTS

DISCHARGE AUGER SHAFT 1 1/4" FRONT: KEYED - MOTOR END: 100-006727
 DISCHARGE AUGER SHAFT 1 1/4" INTERMEDIATE: 100-006726
 DISCHARGE AUGER SHAFT 1 1/4" REAR: NON-KEYED 100-006728

END BEARING - 2-BOLT FLANGE - 1 1/4" BORE: 044-001510

HANGER ASS'Y - DISCHARGE 8" AUGER FOR 1 1/4" SHAFTS 400-006852
 INTERMEDIATE & REAR **WITH** SPLIT BEARING:

HANGER ASS'Y - DISCHARGE 8" AUGER FOR 1 1/4" SHAFTS 200-007322
 INTERMEDIATE & REAR **W/OUT** SPLIT BEARING:

HANGER BEARING-SPLIT WOOD-TOP HALF 1 1/4": 044-006714
 HANGER BEARING-SPLIT WOOD-BOTTOM HALF 1 1/4": 044-006713
 HANGER BEARING SADDLE 1 1/4": 044-006715

ROLLER CHAIN: SIZE # 40 (PER FOOT) 046-001548
 ROLLER CHAIN: CONNECTING LINK # 40 046-001552
 ROLLER CHAIN: OFFSET LINK # 40 046-001556

DISCHARGE 8" AUGER EXTENSION TROUGHS

INCLUDES: ONLY THE TROUGH - NO TOP/AUGERS OR HARDWARE
YOU MUST ORDER AUGER TROUGH (TOP) EXTENSIONS SEPERATE

DISCHARGE	8" AUGER TROUGH EXTENSION: 1'	200-005396
DISCHARGE	8" AUGER TROUGH EXTENSION: 1' 6" (18")	200-005848
DISCHARGE	8" AUGER TROUGH EXTENSION: 2'	200-005413
DISCHARGE	8" AUGER TROUGH EXTENSION: 2' 6" (30")	200-008600
DISCHARGE	8" AUGER TROUGH EXTENSION: 3'	200-005408
DISCHARGE	8" AUGER TROUGH EXTENSION: 4	200-005414
DISCHARGE	8" AUGER TROUGH EXTENSION: 5'	200-005854
DISCHARGE	8" AUGER TROUGH EXTENSION: 6'	200-005861
DISCHARGE	8" AUGER TROUGH EXTENSION: 7'	200-005867
DISCHARGE	8" AUGER TROUGH EXTENSION: 8'	200-005873

DISCHARGE 8" AUGER EXTENSION TOPS

INCLUDES: ONLY THE TOP - NO TROUGH/AUGER OR HARDWARE
YOU MUST ORDER AUGER TROUGH EXTENSIONS SEPERATE

DISCHARGE	8" AUGER TROUGH TOP: 1'	100-005399
DISCHARGE	8" AUGER TROUGH TOP: 1' 6" (18")	100-005850
DISCHARGE	8" AUGER TROUGH TOP: 2'	100-005409
DISCHARGE	8" AUGER TROUGH TOP: 2' 6" (30")	100-008599
DISCHARGE	8" AUGER TROUGH TOP: 3'	100-005406
DISCHARGE	8" AUGER TROUGH TOP: 4	100-005410
DISCHARGE	8" AUGER TROUGH TOP: 5'	100-005856
DISCHARGE	8" AUGER TROUGH TOP: 6'	100-005863
DISCHARGE	8" AUGER TROUGH TOP: 7'	100-005869
DISCHARGE	8" AUGER TROUGH TOP: 8'	100-005875

DISCHARGE 8" AUGER TROUGH SECTIONS W/ SLIDE GATES

INCLUDES: ONLY THE TROUGH W/ SLIDE GATES, NO HARDWARE

DISCHARGE	8" AUGER TROUGH SECTION 5FT FOR ALL DRYERS:	400-005496
DISCHARGE	8" AUGER TROUGH SECTION 10FT FOR ALL DRYERS:	400-005495

DISCHARGE 8" AUGER TROUGH SECTIONS W/OUT SLIDE GATES

INCLUDES: ONLY THE TROUGH NO SLIDE GATES, NO HARDWARE

DISCHARGE	8" AUGER TROUGH SECTION 5FT FOR ALL DRYERS:	200-005499
DISCHARGE	8" AUGER TROUGH SECTION 10FT FOR ALL DRYERS:	200-005498

DISCHARGE 8" AUGER TROUGH PARTS

SLIDE GATE: DISCHARGE 8" AUGER TROUGH:	100-005503
SLIDE GATE RAIL: DISCHARGE 8" AUGER TROUGH (TWO REQ'D)	100-005502
AUGER TROUGH DOOR ASS'Y:	400-007643
AUGER TROUGH COVER ANGLE:	100-005912

NOTE: P/N 040-001449 TCS 1/4" X 1/2" USED TO MTG. AUGER TROUGH
COVER ANGLE TO AUGER DOOR (QT'Y. PER DOOR 6).

DISCHARGE OVERFLOW MONITOR (AUGERS ONLY)

DISCHARGE OVERFLOW SWITCH: SELECTASWITCH W/COIL FEELER	010-006716
PADDLE - DISCHARGE OVERFLOW SWITCH (COIL FEELER)	100-008308
BRACKET - DISCHARGE OVERFLOW SWITCH (COIL FEELER)	100-003374

DISCHARGE DRAG CONVEYOR

DRAG CHAIN: SIZE 8" 2-5/8" PITCH (<u>STRAIGHT</u> W/UHMW PADDLES-PER FT)	054-006838
DRAG CHAIN: CONNECTING LINK FOR 8" CHAIN STRAIGHT PADS	054-006836
DRAG CHAIN: SPROCKET 9 TOOTH, 1 15/16" BORE (2-5/8" PITCH)	054-006837
DRAG CHAIN: SPROCKET 14 TOOTH, 1 15/16" BORE (2-5/8" PITCH)	054-008206
UHMW PADDLE REPLACEMENT 2-5/8" PITCH <u>STRAIGHT PADDLES</u>	054-008743

DRAG CHAIN: ROLLER RETURN ASS'Y FOR 8" CHAIN	054-004508
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DRAG SHAFT BEARINGS: FOUR(4) BOLT, 1 15/16" BORE	044-002067
DRAG SHAFT: HEAD - NON MOTOR END	100-004527
DRAG SHAFT: TAIL - MOTOR END	100-004546

COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 15/16" BORE DRAG SHAFT - TAIL - MOTOR END	047-001931
COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 1/8" BORE REDUCER - TAIL - MOTOR	047-008281
COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 1/4" BORE REDUCER - TAIL - MOTOR	047-008282
COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 3/8" BORE REDUCER - TAIL - MOTOR	047-006144
COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 1/2" BORE REDUCER - TAIL - MOTOR	047-002779
COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 5/8" BORE REDUCER - TAIL - MOTOR	047-001932
COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 3/4" BORE REDUCER - TAIL - MOTOR	047-006145
COUPLING SPROCKET: 60 CHAIN, 18 TOOTH, 1 7/8" BORE REDUCER - TAIL - MOTOR	047-008929
COUPLING CHAIN: DOUBLE WIDTH: SIZE # 6018	036-001930

NOTE: FOR MOTORS, GEAR REDUCERS, STARTER SIZES AND WIRE SIZES REFER TO THE CHARTS.

BOTTOM COVER - INT. 5FT SECTION	- 8" DRAG CONVEYOR	100-004531
BOTTOM COVER - INT. 4FT SECTION	- 8" DRAG CONVEYOR	100-004562
BOTTOM COVER - 18" HEAD SECTION	- 8" DRAG CONVEYOR	100-008730
BOTTOM COVER - TAIL SECTION	- 8" DRAG CONVEYOR	100-008558

AUTOMATIC MOISTURE CONTROL SYSTEM

SCR CONTROL: KB DC DRIVE - MODIFIED	006-009080
FUSE: 15 AMP - SCR CONTROL (KB DC DRIVE)	000-004705
FUSE: 20 AMP - SCR CONTROL (KB DC DRIVE)	000-009326
MOISTURE CONTROL PID: WATLOW EZ-ZONE (PM6C1FA-AAAAAAA)	006-009168
MOISTURE SENSOR:(ONLY) MINCO - 100 OHM-RTD 3-WIRE LENGTH 9FT	009-007200
MOISTURE SENSOR ASS'Y MINCO - 100 OHM-RTD 3-WIRE LENGTH 9FT	400-008027
MOISTURE SENSOR:(ONLY) MINCO - 100 OHM-RTD 3-WIRE LENGTH 19FT	009-007201
MOISTURE SENSOR ASS'Y MINCO - 100 OHM-RTD 3-WIRE LENGTH 19FT	400-008028
MOISTURE SENSOR:(ONLY) MINCO - 100 OHM-RTD 3-WIRE LENGTH 29FT	009-007202
MOISTURE SENSOR ASS'Y MINCO - 100 OHM-RTD 3-WIRE LENGTH 29FT	400-008029
POT MANUAL SPEED CONTROL SCR: 5K W/WIRES	400-009072
KNOB: POT MANUAL SPEED CONTROL SCR	006-000713
SCR SELECTOR SWITCH MAN/AUTO: TOGGLE - DPDT ON/OFF/ON	010-003132
DC VOLTMETER: SIMPSON MODEL 1227 0 TO 100VDC	017-007946
MOISTURE RELAY: (8)PIN - DPDT - 120V	007-000725
RELAY SOCKET: 8 PIN 120V - MOISTURE	007-008938

AUTOMATIC TEMPERATURE CONTROL SYSTEM

AUTOMATIC TEMP CONT. /H. LIMIT: WATLOW EZ-ZONE (PM6CFA-ALEJAAA)	006-009149
TEMPERATURE CONROL SENSOR: WATLOW 100Ω RTD STEM	009-007199
HIGH LIMIT SENSOR: WATLOW 100Ω RTD STEM	009-007199
SENSOR BOX: 4X4X2 PVC W/COVER	016-003537
SENSOR CORD GRIP:	016-000976
HIGH LIMIT RELAY: 8 PIN-DPDT-120V	007-000725
RELAY SOCKET: 8 PIN 120V - HIGH LIMIT	007-008938
QUICK ACTING VALVE: 1/2"	028-003013
QUICK ACTING VALVE: 3/4"	028-005529
RELIEF VALVE W/ RAIN CAP: POP ACTION	028-003014
RAIN CAP: RELIEF VALVE	028-003015
LIQUID VALVE: ASCO 1/2"	028-003097
LIQUID VALVE: ASCO 3/4"	028-005482
REPLACEMENT COIL LIQUID VALVE: ASCO 1/2" & 3/4"	014-006291
REPLACEMENT DIAPHRAGM KIT LIQUID VALVE: ASCO 1/2"	028-005206
REPLACEMENT DIAPHRAGM KIT LIQUID VALVE: ASCO 3/4"	028-007150
VAPORIZER: 8" ROUND FIN (4-ROW)	031-003093
VAPORIZER: 16" ROUND FIN (8-ROW)	031-003094
VAPORIZER: 24" ROUND FIN (12-ROW)	031-003095
LIQUID PROPANE REGULATOR: REGO 1/2" MAX 30#	028-003012
LIQUID PROPANE REGULATOR: REGO 2" MAX 500# (BIG JOE)	028-006316

TEMPERATURE CONTROL BUTTERFLY VALVE: ECLIPSE 1-1/4"	028-008957
TEMPERATURE CONTROL BUTTERFLY VALVE: ECLIPSE 2"	028-005933
BUTTERFLY VALVE MOTOR MOUNT KIT: ECLIPSE	028-005936
TEMPERATURE CONTROL MODULATING MOTOR: JOHNSON CONTROL M150X	004-005418
TEMPERATURE CONTROL INTERFACE BOARD: JOHNSON R81GAA-2	006-005421
TEMPERATURE CONTROL MOTOR LINKAGE ARM:	028-008958
TEMPERATURE CONTROL MOTOR WEATHER COVER	004-005931
TEMPERATURE CONTROL TRANSFORMER: 24VAC	008-000754
PRESSURE GAUGE: MAX 30#	017-001033
PRESSURE GAUGE: MAX 60#	017-008459
BALL VALVE: 1/2" FULL PORT	028-003026
BALL VALVE: 1 1/4" FULL PORT	028-003027
BALL VALVE: 2" FULL PORT	028-005362
MANUAL SHUTOFF VALVE: MAXON 1 1/4"	028-001309
REPLACEMENT COIL MANUAL SHUTOFF VALVE: MAXON 1 1/4"	014-000853
MANUAL SHUTOFF VALVE: MAXON 2"	028-001311
REPLACEMENT COIL MANUAL SHUTOFF VALVE: MAXON 2"	014-000854
NOTE: FOR ORIFICE SIZES, MANIFOLD PIPE SIZES, LIQUID PIPE SIZES, VAPOR PIPE SIZES, SOLENOID VALVE SIZES, BUTTERFLY VALVE SIZES, LIQUID VALVE SIZES AND VAPORIZERS REFER TO CHARTS.	

CANADIAN STANDARD ASSEMBLY (OPTIONAL)

AUTOMATIC SHUTOFF VALVE: MAXON 1 1/4" (SLOW OPENING)	028-007558
REPLACEMENT COIL SHUTOFF VALVE: MAXON 1 1/4"	014-000853
AUTOMATIC SHUTOFF VALVE: MAXON 2" (SLOW OPENING)	028-007778
REPLACEMENT COIL SHUTOFF VALVE: MAXON 2"	014-000854
SWITCH - HIGH/LOW PRESSURE LIMIT: ASCO	010-007559
PRESSURE TRANSDUCER: 0- 9 PSI - ASCO	010-007736
PRESSURE TRANSDUCER: 4-36 PSI - ASCO	010-007738

LABELS AND DECALS

DECAL: "DELUX" - 6" HIGH - BLUE	018-006813
LABEL: "CAUTION DO NOT ENTER"	018-002407
LABEL: "DANGER HIGH VOLAGE"	018-001070
LABEL: "START-UP PROCEDURE"	018-007949
LABEL: "FACTORY - SALES * SERVICE * PARTS	018-006254
LABEL: "WARNING "STOP"	018-004742
LABEL: "POWER BELT WARNING"	018-004743
LABEL: "WARNING POWER AUGER"	018-004744
LABEL: "CAUTION KEEP HANDS CLEAR"	018-001071
LABEL: "BURNER COVER"	018-003401
LABEL: "EMERGENCY SLIDE GATES"	018-006806
LABEL: "DO NOT WALK ON GARNER (ROOF)"	018-006809
LABEL: "OPEN FRESH AIR DOOR "FULL OPEN"	018-006808
LABEL: "OPEN FRESH AIR DOOR AS NEEDED" NOT LESS THAN.."	018-006807

DOOR HANDLES, LATCHES, HINGES AND MISC. ITEMS

DOOR HANDLE: LOCKING - PANEL BOX	040-001476
BRAND: AUSTIN KEY # BP112	
CAM LATCH: UPPER DOOR - PANEL BOX	040-006707
CAM LATCH: LOWER DOOR - PANEL BOX	040-006848
DOOR LATCH: SPRING - SWITCH PANEL - PANEL BOX	040-002941
DOOR HANDLE: NON-LOCKING - COOLING CHAMBER	040-004822
CAM LATCH: COOLING CHAMBER	200-004058
DOOR LATCH: PLENUM DOOR	040-002934
HINGE: PLENUM DOOR	043-001507
DOOR LATCH: RECLAIM DOOR	043-001503
VIEWING WINDOW - PLENUM	100-006167
VIEWING WINDOW HOLDER - PLENUM	100-006168

(OPTIONAL FEATURE) EXHAUST AIR COLUMN CONTROLS

SENSOR ONLY: 10FT	006-006148
SENSOR ONLY: 15FT	006-006149
SENSOR ONLY: 20FT	006-006925

(OPTIONAL FEATURE) ALARM KIT

HORN: 120V SURFACE MOUNT	016-008037
LIGHT FIXTURE ASS'Y: 90 DEGREE	016-005975
LIGHT: RED BULB	019-001091

SPECIFICATION CHARTS

- DP & DPSL SERIES
- DPX & DPXSL SERIES
- DPX4T SERIES
- DPX8T SERIES
- DPX12T SERIES
- DPX16GT SERIES

STARTER COMPONENTS - TELEMECANIQUE
TELEMECANIQUE PART NUMBER / DELUX PART NUMBER

240V 3P				480V 3P			
HP	ITEM 1	ITEM 2	AUX. CONT.	HP	ITEM 1	ITEM 2	AUX. CONT.
1	LUB12	LUCA05FU	LUA1C11	1	LUB12	LUCA05FU	LUA1C11
	001-008907	001-008909	001-008928		001-008907	001-008909	001-008928
2	LUB12	LUCA12FU	LUA1C11	2	LUB12	LUCA05FU	LUA1C11
	001-008907	001-008910	001-008928		001-008907	001-008909	001-008928
3	LUB12	LUCA12FU	LUA1C11	3	LUB12	LUCA12FU	LUA1C11
	001-008907	001-008910	001-008928		001-008907	001-008910	001-008928
5	LUB32	LUCA32FU	LUA1C11	5	LUB12	LUCA12FU	LUA1C11
	001-008908	001-008911	001-008928		001-008907	001-008910	001-008928
7.5	LUB32	LUCA32FU	LUA1C11	7.5	LUB12	LUCA12FU	LUA1C11
	001-008908	001-008911	001-008928		001-008907	001-008910	001-008928
10	LUB32	LUCA32FU	LUA1C11	10	LUB32	LUCA32FU	LUA1C11
	001-008908	001-008911	001-008928		001-008908	001-008911	001-008928
15	GV3P50	LC1D50AG7	GVAD0110	15	LUB32	LUCA32FU	LUA1C11
	001-009861	001-008921	001-009232		001-008908	001-008911	001-008928
20	GV3P65	LC1D65AG7	GVAD0110	20	LUB32	LUCA32FU	LUA1C11
	001-008915	001-008922	001-009232		001-008908	001-008911	001-008928
25	GV7RE80	LC1D80G7	GV7AE11	25	GV3P40	LC1D40AG7	GVAD0110
	001-008916	001-008923	001-008931		001-008914	001-008920	001-009232
30	GV7RE80	LC1D80G7	GV7AE11	30	GV3P40	LC1D40AG7	GVAD0110
	001-008916	001-008923	001-008931		001-008914	001-008920	001-009232
40	GV7RE150	LC1D115G7	GV7AE11	40	GV3P50	LC1D50AG7	GVAD0110
	001-008918	001-008924	001-008931		001-009861	001-008921	001-009232
50	GV7RE150	LC1D150G7	GV7AE11	50	GV7RE80	LC1D80G7	GV7AE11
	001-008918	001-008925	001-008931		001-008916	001-008923	001-008931
60	GV7RE220	LC1D150G7	GV7AE11	60	GV7RE80	LC1D80G7	GV7AE11
	001-008919	001-008925	001-008931		001-008916	001-008923	001-008931
575V 3P				380V 3P			
HP	ITEM 1	ITEM 2	AUX. CONT.	HP	ITEM 1	ITEM 2	AUX. CONT.
1	LUB12	LUCA05FU	LUA1C11	1	LUB12	LUCA05FU	LUA1C11
	001-008907	001-008909	001-008928		001-008907	001-008909	001-008928
2	LUB12	LUCA05FU	LUA1C11	2	LUB12	LUCA05FU	LUA1C11
	001-008907	001-008909	001-008928		001-008907	001-008909	001-008928
3	LUB12	LUCA12FU	LUA1C11	3	LUB12	LUCA12FU	LUA1C11
	001-008907	001-008910	001-008928		001-008907	001-008910	001-008928
5	LUB12	LUCA12FU	LUA1C11	5	LUB12	LUCA12FU	LUA1C11
	001-008907	001-008910	001-008928		001-008907	001-008910	001-008928
7.5	LUB12	LUCA12FU	LUA1C11	7.5	LUB32	LUCA32FU	LUA1C11
	001-008907	001-008910	001-008928		001-008908	001-008911	001-008928
10	LUB12	LUCA12FU	LUA1C11	10	LUB32	LUCA32FU	LUA1C11
	001-008907	001-008910	001-008928		001-008908	001-008911	001-008928
15	LUB32	LUCA32FU	LUA1C11	15	LUB32	LUCA32FU	LUA1C11
	001-008908	001-008911	001-008928		001-008908	001-008911	001-008928
20	LUB32	LUCA32FU	LUA1C11	20	GV3P40	LC1D40AG7	GVAD0110
	001-008908	001-008911	001-008928		001-008914	001-008920	001-009232
25	LUB32	LUCA32FU	LUA1C11	25	GV3P40	LC1D40AG7	GVAD0110
	001-008908	001-008911	001-008928		001-008914	001-008920	001-009232
30	GV3P40	LC1D40AG7	GVAD0110	30	GV3P50	LC1D50AG7	GVAD0110
	001-008914	001-008920	001-009232		001-009861	001-008921	001-009232
40	GV3P50	LC1D50AG7	GVAD0110	40	GV3P65	LC1D65AG7	GVAD0110
	001-009861	001-008921	001-009232		001-008915	001-008922	001-009232
50	GV3P65	LC1D65AG7	GVAD0110	50	GV7RE80	LC1D80G7	GV7AE11
	001-008915	001-008922	001-009232		001-008916	001-008923	001-008931
60	GV7RE80	LC1D80G7	GV7AE11	60	GV7RE100	LC1D115G7	GV7AE11
	001-008916	001-008923	001-008931		001-008917	001-008924	001-008931

230V 1P			
HP	ITEM 1	ITEM 2	AUX. CONT.
1	LUB12	LUCC12FU	LUA1C11
	001-008907	001-008912	001-008928
2	LUB12	LUCC12FU	LUA1C11
	001-008907	001-008912	001-008928
3	LUB32	LUCC32FU	LUA1C11
	001-008908	001-008913	001-008928
5	LUB32	LUCC32FU	LUA1C11
	001-008908	001-008913	001-008928
7.5	GV3P40	LC1D50AG7	GVAD0110
	001-008914	001-008921	001-009232
10	GV3P50	LC1D65AG7	GVAD0110
	001-009861	001-008922	001-009232
15	GV3ME80	LC1D80G7	GV3A08
	001-009052	001-008923	001-008930

208V 3P			
HP	ITEM 1	ITEM 2	AUX. CONT.
1	LUB12	LUCA12FU	LUA1C11
	001-008907	001-008910	001-008928
2	LUB12	LUCA12FU	LUA1C11
	001-008907	001-008910	001-008928
3	LUB12	LUCA12FU	LUA1C11
	001-008907	001-008910	001-008928
5	LUB32	LUCA32FU	LUA1C11
	001-008908	001-008911	001-008928
7.5	LUB32	LUCA32FU	LUA1C11
	001-008908	001-008911	001-008928
10	LUB32	LUCA32FU	LUA1C11
	001-008908	001-008911	001-008928
15	GV3P50	LC1D50AG7	GVAD0110
	001-009861	001-008921	001-009232
20	GV3P65	LC1D65AG7	GVAD0110
	001-008915	001-008922	001-009232
25	GV7RE80	LC1D80G7	GV7AE11
	001-008916	001-008923	001-008931
30	GV7RE100	LC1D115G7	GV7AE11
	001-008917	001-008924	001-008931
40	GV7RE150	LC1D150G7	GV7AE11
	001-008918	001-008925	001-008931
50	GV7RE150	LC1D150G7	GV7AE11
	001-008918	001-008925	001-008931
60	N/A	N/A	N/A
	N/A	N/A	N/A

NOTES:

- 1) **GV7RE80** STARTERS REQUIRE **6 LUGS; GV7AC021 [001-008926]**.
GV7RE100, GV7RE150 AND GV7RE220 REQUIRE **6 LUGS; GV7AC022 [001-008927]**.
- 2) ALL AUXILIARY STARTERS USE AT *LEAST* AN **LUB32** SIZE STARTER BASE, EVEN IF OVERLOAD REQUIREMENTS ARE LESS.
- 3) USE **(1) LUFN20 [001-008936]** AUX. CONT. ON EACH LOAD MOTOR STARTER.

COMBINATON STARTERS – SIEMENS

SIEMENS CATALOG NUMBER

DELUX PART NUMBER

240V 3P						
HP	COMBINATION STARTER	TERM. BLOCK (FOR UL508 TYPE E)	OVERLOAD CONTACT	* ADDITIONAL AUX. CONTACT	FLA RANGE	MOTOR AMPS
1	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	2.82
2	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	5.22
3	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	7.76
5	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	12.9
7.5	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	18.0
10	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	24.8
15	3RA1135-4FB35-1AK6 001-010067	NA	INCL.	3RH1921-1EA11 001-010086	28 – 40	36.0
20	3RA1135-4HB36-1AK6 001-010069	NA	INCL.	3RH1921-1EA11 001-010086	40 - 50	48.2
25	3RA1145-4JB44-1AK6 001-010070	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	45 – 63	59.0
30	3RA1145-4KB45-1AK6 001-010071	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	57 – 75	70.2
40	3RA1145-4MB46-1AK6 001-010073	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	80 - 100	96.2
HP	BREAKER	CONTACTOR	OVERLOAD	TERMINAL BLOCK (x 2)	OVERLOAD RANGE	MOTOR AMPS
50	FXD63A150L 015-010089	3RT1055-6AF36 (150A) 001-008692	3RB2056-1FW2 001-010088	3RT1956-4G 001-008695	50 - 200	118.0
60	FXD63A250L 015-010090	3RT1055-6AF36 (150A) 001-008692	3RB2056-1FW2 001-010088	3RT1956-4G 001-008695	50 - 200	137.0

* ADDITIONAL AUX. CONTACT REQUIRED FOR LOAD STARTER ONLY.

480V 3P						
HP	COMBINATION STARTER	TERM. BLOCK (FOR UL508 TYPE E)	OVERLOAD CONTACT	* ADDITIONAL AUX. CONTACT	FLA RANGE	MOTOR AMPS
1	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	1.41
2	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	2.61
3	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	3.88
5	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	6.45
7.5	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	9.0
10	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	12.4
15	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	18.0
20	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	24.1
25	3RA1135-4FB35-1AK6 001-010067	NA	INCL.	3RH1921-1EA11 001-010086	28 – 40	29.5
30	3RA1135-4FB35-1AK6 001-010067	NA	INCL.	3RH1921-1EA11 001-010086	28 – 40	35.1
40	3RA1135-4HB36-1AK6 001-010069	NA	INCL.	3RH1921-1EA11 001-010086	40 – 50	48.2
50	3RA1145-4JB44-1AK6 001-010070	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	45 – 63	59.2
60	3RA1145-4KB45-1AK6 001-010071	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	57 – 75	68.3

* ADDITIONAL AUX. CONTACT REQUIRED FOR LOAD STARTER ONLY.

575V 3P						
HP	COMBINATION STARTER	TERM. BLOCK (FOR UL508 TYPE E)	OVERLOAD CONTACT	* ADDITIONAL AUX. CONTACT	FLA RANGE	MOTOR AMPS
1	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	1.13
2	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	2.09
3	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	3.1
5	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	5.16
7.5	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	7.2
10	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	9.92
15	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	14.4
20	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	19.3
25	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	23.6
30	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	28.1
40	3RA1135-4FB35-1AK6 001-010067	NA	INCL.	3RH1921-1EA11 001-010086	28 – 40	38.6
50	3RA1135-4HB36-1AK6 001-010069	NA	INCL.	3RH1921-1EA11 001-010086	40 – 50	47.4
60	3RA1145-4JB44-1AK6 001-010070	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	45 – 63	54.6

* ADDITIONAL AUX. CONTACT REQUIRED FOR LOAD STARTER ONLY.

380V 3P						
HP	COMBINATION STARTER	TERM. BLOCK (FOR UL508 TYPE E)	OVERLOAD CONTACT	* ADDITIONAL AUX. CONTACT	FLA RANGE	MOTOR AMPS
1	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	1.66
2	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	3.14
3	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	4.6
5	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	7.74
7.5	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	10.7
10	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	15.0
15	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	21.5
20	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	29.4
25	3RA1135-4FB35-1AK6 001-010067	NA	INCL.	3RH1921-1EA11 001-010086	28 – 40	35.6
30	3RA1135-4HB36-1AK6 001-010069	NA	INCL.	3RH1921-1EA11 001-010086	40 - 50	42.4
40	3RA1145-4JB44-1AK6 001-010070	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	45 – 63	58.0
50	3RA1145-4KB45-1AK6 001-010071	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	57 – 75	71.1
60	3RA1145-4LB46-1AK6 001-010072	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	70 - 90	83.5

* ADDITIONAL AUX. CONTACT REQUIRED FOR LOAD STARTER ONLY.

208V 3P						
HP	COMBINATION STARTER	TERM. BLOCK (FOR UL508 TYPE E)	OVERLOAD CONTACT	* ADDITIONAL AUX. CONTACT	FLA RANGE	MOTOR AMPS
1	3RA61201CP32 001-010064	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	1.0 – 4.0	3.12
2	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	5.77
3	3RA61201DP32 001-010065	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	3.0 – 12.0	8.56
5	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	14.3
7.5	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	19.9
10	3RA61201EP32 001-010066	3RV2925-5EB 001-010074	INCL.	3RA6911-1A 001-010076	8.0 – 32.0	27.4
15	3RA1135-4GB36-1AK6 001-010068	NA	INCL.	3RH1921-1EA11 001-010086	36 – 45	39.8
20	3RA1145-4IB44-1AK6 001-010070	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	45 – 63	53.3
25	3RA1145-4KB45-1AK6 001-010071	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	57 – 75	65.2
30	3RA1145-4LB46-1AK6 001-010072	3RT1946-4GA07 001-010075	3RV1901-1A 001-010137	3RH1921-1EA11 001-010086	70 - 90	77.6
HP	BREAKER	CONTACTOR	OVERLOAD	TERMINAL BLOCK (x 2)	OVERLOAD RANGE	MOTOR AMPS
40	FXD63A150L 015-010089	3RT1054-6AF36 (115A) 001-008691	3RB2056-1FW2 001-010088	3RT1956-4G 001-008695	50 - 200	107.0
50	FXD63A250L 015-010090	3RT1055-6AF36 (150A) 001-008692	3RB2056-1FW2 001-010088	3RT1956-4G 001-008695	50 - 200	131.0
60	FXD63A250L 015-010090	3RT1056-6AF36 (185A) 001-010087	3RB2056-1FW2 001-010088	3RT1956-4G 001-008695	50 - 200	151.0

* ADDITIONAL AUX. CONTACT REQUIRED FOR LOAD STARTER ONLY.

230V 1 Phase						
HP	COMBINATION STARTER	TERM. BLOCK (FOR UL508 TYPE E)	OVERLOAD CONTACT	*ADDITIONAL AUX. CONTACT	FLA RANGE	MOTOR AMPS
1	3RA2120-1HA24-0AK6	3RV2928-1H	3RV2901-1A	3RH2921-1DA11	5.5 - 8	7.0
	001-010081	001-010079	001-010078	001-010080		
2	3RA2120-1KA24-0AK6	3RV2928-1H	3RV2901-1A	3RH2921-1DA11	9 - 12.5	10.8
	001-010082	001-010079	001-010078	001-010080		
3	3RA2120-4AA26-0AK6	3RV2928-1H	3RV2901-1A	3RH2921-1DA11	11 - 16	14.0
	001-010083	001-010079	001-010078	001-010080		
5	3RA2120-4CA27-0AK6	3RV2928-1H	3RV2901-1A	3RH2921-1DA11	17 - 22	21.0
	001-010084	001-010079	001-010078	001-010080		
7.5	3RA1135-4FB35-1AK6	NA	INCL.	3RH1921-1EA11	28 - 40	34.0
	001-010067			001-010086		
10	3RA1135-4GB36-1AK6	NA	INCL.	3RH1921-1EA11	36 - 45	40.0
	001-010068			001-010086		
15	3RA1145-4KB45-1AK6	3RT1946-4GA07	3RV1901-1A	3RH1921-1EA11	57 - 75	68.0
	001-010071	001-010075	001-010137	001-010086		

* ADDITIONAL AUX. CONTACT REQUIRED FOR LOAD STARTER ONLY.

FAN PITCH SETTINGS - ALL MODELS
GREENHECK FANS

60Hz 1750 RPM
230V-1P; 208V-3P; 240V-3P; 480V-3P; 575V-3P

MODEL		FAN HP	FAN DIA.	FAN PITCH (DEG.)		MODEL		FAN HP	FAN DIA.	FAN PITCH (DEG.)
MSF-31010	10FT	10	38"	5		DPXSL 5030	10FT	30	38"	17
MSF-41515	10FT	15	38"	10		DPXSL 8050	15FT	25	38"	14
MSF-62520	15FT	20	38"	12		DPXSL 10060	20FT	30	38"	17
MSF-72525	15FT	25	38"	16		DPXSL 12560	25FT	30	43"	9
						DPXSL 15090	30FT	30	38"	17
DP 2510	10FT	10	38"	3 1/2		DPXSL 200120	40FT	30	38"	17
DP 3015 (1P)	10FT	15	38"	8						
DP 4020	15FT	10	38"	3 1/2		DPX4T 5630	10FT	30	43"	9
DP 5020	20FT	10	38"	3 1/2		DPX4T 8460	15FT	60	43"	21
DP 7530	30FT	10	38"	3 1/2		DPX4T 11260	20FT	30	43"	9
DP 10040	40FT	10	38"	3 1/2		DPX4T 140100	25FT	50	43"	16
						DPX4T 16890	30FT	30	43"	9
DP 3015 (3P)	10FT	15	38"	8		DPX4T 224120	40FT	30	43"	9
DP 4025	15FT	25	38"	14						
DP 6030	20FT	15	38"	8		DPX8T 6440	10FT	40	43"	13
DP 7550	25FT	25	38"	14		DPX8T 12880	20FT	40	43"	13
DP 9045	30FT	15	38"	8		DPX8T 160120	25FT	60	43"	21
DP 12060	40FT	15	38"	8		DPX8T 192120	30FT	40	43"	13
						DPX8T 256160	40FT	40	43"	13
DPSL 3520	10FT	20	38"	10						
DPSL 4530	15FT	30	38"	17		DPX12T 7250	10FT	50	43"	16
DPSL 7040	20FT	20	38"	10		DPX12T 10860	15FT	30	43"	9
DPSL 8560	25FT	30	38"	17		DPX12T 144100	20FT	50	43"	16
DPSL 10560	30FT	20	38"	10		DPX12T 175120	25FT	60	43"	21
DPSL 14080	40FT	20	38"	10		DPX12T 216150	30FT	50	43"	16
						DPX12T 288200	40FT	50	43"	16
DPX 4525	10FT	25	38"	14						
DPX 7040	15FT	20	38"	10		DPX16GT 8250	10FT	50	43"	16
DPX 9050	20FT	25	38"	14		DPX16GT 12360	15FT	30	43"	9
DPX 13575	30FT	25	38"	14		DPX16GT 164100	20FT	50	43"	16
DPX 180100	40FT	25	38"	14		DPX16GT 210120	25FT	60	43"	21
						DPX16GT 246150	30FT	50	43"	16
						DPX16GT 328200	40FT	50	43"	16

AIR AND HEAT SPECIFICATIONS

MODEL	FT	DRYING AIRFLOW CFM	NUMBER OF BURNERS	BTU - MILLION 210 OPERATING TEMP. AMBIENT TEMPERATURE					
				0°	10°	20°	40°	60°	70°
MSF-31010-CF	10	13435	1	3.05	2.90	2.76	2.47	2.18	2.03
MSF-31010-AB	10	13435	1	3.05	2.90	2.76	2.47	2.18	2.03
MSF-41515-CF	10	19150	1	4.34	4.14	3.93	3.52	3.10	2.90
MSF-41515-AB	10	19150	1	4.34	4.14	3.93	3.52	3.10	2.90
MSF-62520-CF	15	21863	1	4.96	4.72	4.49	4.01	3.54	3.31
MSF-62520-AB	15	21863	1	4.96	4.72	4.49	4.01	3.54	3.31
MSF-72525-CF	15	24804	1	5.63	5.36	5.09	4.55	4.02	3.75
MSF-72525-AB	15	24804	1	5.63	5.36	5.09	4.55	4.02	3.75
DP 2510 1P	10	10077	1	1.96	1.85	1.74	1.52	1.31	1.20
DP 3015 1P	10	14985	1	2.91	2.75	2.59	2.27	1.94	1.78
DP 4020 1P	15	20154	2	3.92	3.70	3.48	3.05	2.61	2.39
DP 5020 1P	20	20154	2	3.92	3.70	3.48	3.05	2.61	2.39
DP 7530 1P	30	30231	3	5.88	5.55	5.22	4.57	3.92	3.59
DP 10040 1P	40	40308	4	7.84	7.40	6.97	6.09	5.22	4.88
DP 3015 3P	10	14985	1	2.91	2.75	2.59	2.27	1.94	1.78
DP 4025 3P	15	20511	1	3.99	3.77	3.54	3.10	2.66	2.44
DP 6030 3P	20	29970	2	5.83	5.50	5.18	4.53	3.88	3.56
DP 7550 3P	25	41022	2	7.97	7.53	7.9	6.20	5.32	4.87
DP 9045 3P	30	44955	3	8.74	8.25	7.77	6.80	5.83	5.34
DP 12060 3P	40	59940	4	11.65	11.00	10.36	9.06	7.77	7.12
DP-SL 3520	10	17808	1	3.46	3.27	3.08	2.70	2.31	2.12
DP-SL 4530	15	22896	1	4.45	4.20	3.96	3.46	2.97	2.72
DP-SL 7040	20	35616	2	6.92	6.54	6.15	5.39	4.62	4.23
DP-SL 8560	25	45792	2	8.90	8.41	7.91	6.92	5.93	5.44
DP-SL 10560	30	53424	3	10.39	9.81	9.23	8.08	6.92	6.35
DP-SL 14080	40	71232	4	13.85	13.08	12.31	10.77	9.23	8.46
DPX 4525	10	20511	1	3.99	3.77	3.54	3.10	2.66	2.44
DPX 7040	15	35616	2	6.92	6.54	6.15	5.39	4.62	4.23
DPX 9050	20	41022	2	7.97	7.53	7.09	6.20	5.32	4.87
DPX 13575	30	61533	3	11.96	11.30	10.63	9.30	7.97	7.31
DPX 180100	40	82044	4	15.95	15.06	14.18	12.41	10.63	9.75

AIR AND HEAT SPECIFICATIONS

MODEL	FT	DRYING AIRFLOW CFM	NUMBER OF BURNERS	BTU - MILLION 210 OPERATING TEMP. AMBIENT TEMPERATURE					
				0°	10°	20°	40°	60°	70°
DPX-SL 5030	10	22896	1	4.45	4.20	3.96	3.46	2.97	2.72
DPX-SL 8050	15	41022	2	7.97	7.53	7.09	6.20	5.32	4.87
DPX-SL 10060	20	45792	2	8.90	8.41	7.91	6.92	5.93	5.44
DPX-SL 12560	25	57876	2	11.25	10.63	10.00	8.75	7.50	6.88
DPX-SL 15090	30	68688	3	13.35	12.61	11.87	10.39	8.90	8.16
DPX-SL 200120	40	91584	4	17.80	16.81	15.83	13.85	11.87	10.88
DPX4T 5630	10	28938	1	5.63	5.31	5.00	4.38	3.75	3.44
DPX4T 8460	15	44043	1	8.56	8.09	7.61	6.66	5.71	5.23
DPX4T 11260	20	57876	2	11.25	10.63	10.00	8.75	7.50	6.88
DPX4T 140100	25	79500	2	15.45	14.60	13.74	12.02	10.30	9.44
DPX4T 16890	30	86814	3	16.88	15.94	15.00	13.13	11.25	10.31
DPX4T 224120	40	115752	4	22.50	21.25	20.00	17.50	15.00	13.75
DPX8T 6440	10	34201	1	6.65	6.28	5.91	5.17	4.43	4.06
DPX8T 9660	15	N/A							
DPX8T 12880	20	68402	2	13.30	12.56	11.82	10.34	8.86	8.13
DPX8T 160120	25	88036	2	17.11	16.16	15.21	13.31	11.41	10.46
DPX8T 192120	30	102603	3	19.95	18.84	17.73	15.51	13.30	12.19
DPX8T 256160	40	136804	4	26.60	25.12	23.64	20.68	17.73	16.25
DPX12T 7250	10	39750	1	7.73	7.30	6.87	6.01	5.15	4.72
DPX12T 10860	15	57876	2	11.25	10.63	10.00	8.75	7.50	6.88
DPX12T 144100	20	79500	2	15.46	14.60	13.74	12.02	10.30	9.45
DPX12T 175120	25	88086	2	17.12	16.17	15.22	13.32	11.42	10.47
DPX12T 216150	30	119250	3	23.18	21.89	20.61	18.03	15.46	14.17
DPX12T 288200	40	159000	4	30.91	29.19	27.48	24.04	20.61	18.89
DPX16GT 8250	10	39750	1	7.73	7.30	6.87	6.01	5.15	4.72
DPX16GT 12360	15	57876	2	11.25	10.63	10.00	8.75	7.50	6.88
DPX16GT 164100	20	79500	2	15.46	14.60	13.74	12.02	10.30	9.45
DPX16GT 210120	25	88086	2	17.12	16.17	15.22	13.32	11.42	10.47
DPX16GT 246150	30	119250	3	23.18	21.89	20.61	18.03	15.46	14.17
DPX16GT 328200	40	159000	4	30.91	29.19	27.48	24.04	20.61	18.89

ORIFICE CHART

MODEL		DIA FAN	---NATURAL GAS---	DIA	-LIQUID PROPANE--	DIA	QTY
MSF-31010-CF	10FT	38"	100-003146	3/8	100-003145	9/32	1
MSF-31010-AB	10FT	38"	100-003146	3/8	100-003145	9/32	1
MSF-41515-CF	10FT	38"	100-003146	3/8	100-003145	9/32	1
MSF-41515-AB	10FT	38"	100-003146	3/8	100-003145	9/32	1
MSF-62520-CF	15FT	38"	100-006961	29/64	100-006953	5/16	1
MSF-62520-AB	15FT	38"	100-006961	29/64	100-006953	5/16	1
MSF-72525-CF	15FT	38"	100-006962	15/32	100-006955	11/32	1
MSF-72525-AB	15FT	38"	100-006962	15/32	100-006955	11/32	1
MSF2	5217 TOP	10FT 36"	100-006953	5/16	100-006961	29/64	1
MSF2	5217 BOT	10FT 30"	100-003145	9/32	100-003146	3/8	1
MSF2	7825 TOP	15FT 36"	100-003146	3/8	100-006963	31/64	1
MSF2	7825 BOT	15FT 30"	100-003145	9/32	100-003146	3/8	1
MSF2	10435 TOP	20FT 42"	100-006957	25/64	100-003808	1/2	1
MSF2	10435 BOT	20FT 30"	100-003146	3/8	100-006962	15/32	1
MSF2	13050 TOP	25FT 42"	100-006958	13/32	100-006964	33/64	1
MSF2	13050 BOT	25FT 30"	100-003146	3/8	100-006963	31/64	1
DP	2510	10FT 38"	100-003146	3/8	100-003145	9/32	1
DP	3015	10FT 38"	100-003146	3/8	100-003145	9/32	1
DP	4020	15FT 38"	100-003146	3/8	100-003145	9/32	2
DP	5020	20FT 38"	100-003146	3/8	100-003145	9/32	2
DP	7530	30FT 38"	100-003146	3/8	100-003145	9/32	3
DP	10040	40FT 38"	100-003146	3/8	100-003145	9/32	4
DP	3015	10FT 38"	100-003146	3/8	100-003145	9/32	1
DP	4025	15FT 38"	100-006962	15/32	100-006955	11/32	1
DP	6030	20FT 38"	100-003146	3/8	100-003145	9/32	2
DP	7550	25FT 38"	100-006962	15/32	100-006955	11/32	2
DP	9045	30FT 38"	100-003146	3/8	100-003145	9/32	3
DP	12060	40FT 38"	100-003146	3/8	100-003145	9/32	4
DPSL	3520	10FT 38"	100-006961	29/64	100-006953	5/16	1
DPSL	4530	15FT 38"	100-006963	31/64	100-006956	23/64	1
DPSL	7040	20FT 38"	100-006961	29/64	100-006953	5/16	2
DPSL	8560	25FT 38"	100-006963	31/64	100-006956	23/64	2
DPSL	10560	30FT 38"	100-006961	29/64	100-006953	5/16	3
DPSL	14080	40FT 38"	100-006961	29/64	100-006953	5/16	4

ORIFICE CHART

MODEL		DIA FAN	---NATURAL GAS---	DIA	-LIQUID PROPANE--	DIA	QTY
			PART NUMBER		PART NUMBER		
DPX	4525	10FT 38"	100-006962	15/32	100-006955	11/32	1
DPX	7040	15FT 38"	100-006961	29/64	100-006953	5/16	2
DPX	9050	20FT 38"	100-006962	15/32	100-006955	11/32	2
DPX	13575	30FT 38"	100-006962	15/32	100-006955	11/32	3
DPX	180100	40FT 38"	100-006962	15/32	100-006955	11/32	4
DPXSL	5030	10FT 38"	100-006963	31/64	100-006956	23/64	1
DPXSL	8050	15FT 38"	100-006962	15/32	100-006955	11/32	2
DPXSL	10060	20FT 38"	100-006963	31/64	100-006956	23/64	2
DPXSL	12560	25FT 43"	100-006963	31/64	100-006956	23/64	2
DPXSL	15090	30FT 38"	100-006963	31/64	100-006956	23/64	3
DPXSL	200120	40FT 38"	100-006963	31/64	100-006956	23/64	4
DPX4T	5630	10FT 43"	100-006963	31/64	100-003146	3/8	1
DPX4T	8460	15FT 43"	100-006962	15/32	100-006959	27/64	1
DPX4T	11260	20FT 43"	100-006963	31/64	100-003146	3/8	2
DPX4T	140100	25FT 43"	100-006964	33/64	100-006958	13/32	2
DPX4T	16890	30FT 43"	100-006963	31/64	100-003146	3/8	3
DPX4T	224120	40FT 43"	100-006963	31/64	100-003146	3/8	4
DPX8T	6440	10FT 43"	100-003808	1/2	100-006957	25/64	1
DPX8T	9660	15FT 43"	N/A	N/A	N/A	N/A	N/A
DPX8T	12880	20FT 43"	100-003808	1/2	100-006957	25/64	2
DPX8T	160120	25FT 43"	100-003809	5/8	100-003808	1/2	2
DPX8T	192120	30FT 43"	100-003808	1/2	100-006957	25/64	3
DPX8T	256160	40FT 43"	100-003808	1/2	100-006957	25/64	4
DPX12T	7250	10FT 43"	100-006964	33/64	100-006958	13/32	1
DPX12T	10860	15FT 43"	100-006963	31/64	100-003146	3/8	2
DPX12T	144100	20FT 43"	100-006964	33/64	100-006958	13/32	2
DPX12T	175120	25FT 43"	100-003809	5/8	100-003808	1/2	2
DPX12T	216150	30FT 43"	100-006964	33/64	100-006958	13/32	3
DPX12T	288200	40FT 43"	100-006964	33/64	100-006958	13/32	4
DPX16GT	8250	10FT 43"	100-006964	33/64	100-006958	13/32	1
DPX16GT	12360	15FT 43"	100-006963	31/64	100-003146	3/8	2
DPX16GT	164100	20FT 43"	100-006964	33/64	100-006958	13/32	2
DPX16GT	210120	25FT 43"	100-003809	5/8	100-003808	1/2	2
DPX16GT	246150	30FT 43"	100-006964	33/64	100-006958	13/32	3
DPX16GT	328200	40FT 43"	100-006964	33/64	100-006958	13/32	4

NOTE:

1. ORIFICE SIZE: OCCASIONALLY CONDITIONS MAY EXIST THAT REQUIRES ORIFICE SIZE TO BE MODIFIED ON EVERY MODEL.

ORIFICE PART NUMBERS

ORIFICE DIA	PART NUMBER	ORIFICE DIA	PART NUMBER
1/8 (.125)	031-002168	7/16 (.421)	100-006960
1/4 (.250)	100-006950	29/64 (.453)	100-006961
17/64 (.265)	100-006951	15/32 (.468)	100-006962
9/32 (.281)	100-003145	31/64 (.484)	100-006963
19/64 (.296)	100-006952	1/2 (.500)	100-003808
5/16 (.312)	100-006953	33/64 (.515)	100-006964
21/64 (.328)	100-006954	17/32 (.531)	100-006965
11/32 (.343)	100-006955	35/64 (.546)	100-006966
23/64 (.359)	100-006956	9/16 (.562)	100-006967
3/8 (.375)	100-003146	37/64 (.578)	100-006968
25/64 (.390)	100-006957	19/32 (.593)	100-006969
13/32 (.406)	100-006958	39/64 (.609)	100-006970
27/64 (.421)	100-006959	5/8 (.625)	100-003809

FUEL TRAIN W/MODULATING SYSTEM & ROUND FIN VAPORIZER PIPE SIZES

MODEL	FT	<u>L.P.</u> LIQUID VALVES & PIPE	<u>L.P.</u> VAPORIZER SIZES ROUND FIN	<u>L.P.</u> VAPOR REGULATOR, VALVES & PIPE	<u>MANIFOLD</u> SOLENOID VALVE & PIPE	<u>MANIFOLD</u> BUTTERFLY VALVE
MSF-31010-CF	10	1/2	24 1/2"	1/2	1 1/4	1 1/4
MSF-31010-AB	10	1/2	24 1/2"	1/2	1 1/4	1 1/4
MSF-41515-CF	10	1/2	24 1/2"	1/2	1 1/4	1 1/4
MSF-41515-AB	10	1/2	24 1/2"	1/2	1 1/4	1 1/4
MSF-62520-CF	15	1/2	24 1/2"	1/2	1 1/4	1 1/4
MSF-62520-AB	15	1/2	24 1/2"	1/2	1 1/4	1 1/4
MSF-72525-CF	15	1/2	24 1/2"	1/2	1 1/4	1 1/4
MSF-72525-AB	15	1/2	24 1/2"	1/2	1 1/4	1 1/4
DP 2510	10	1/2	4R	1/2	1 1/4	1 1/4
DP 3015	10	1/2	4R	1/2	1 1/4	1 1/4
DP 4020	15	1/2	8R	1/2	1 1/4	1 1/4
DP 5020	20	1/2	8R	1/2	1 1/4	1 1/4
DP 7530	30	1/2	12R	1/2	1 1/4	1 1/4
DP 10040	40	3/4	8R/8R	2	2	2
DP 3015	10	1/2	4R	1/2	1 1/4	1 1/4
DP 4025	15	1/2	8R	1/2	1 1/4	1 1/4
DP 6030	20	1/2	8R	1/2	1 1/4	1 1/4
DP 7550	25	1/2	12R	1/2	1 1/4	1 1/4
DP 9045	30	1/2	12R	1/2	1 1/4	1 1/4
DP 12060	40	3/4	8R/8R	2	2	2
DPSL 3520	10	1/2	4R	1/2	1 1/4	1 1/4
DPSL 4530	15	1/2	8R	1/2	1 1/4	1 1/4
DPSL 7040	20	1/2	8R	1/2	1 1/4	1 1/4
DPSL 8560	25	1/2	12R	1/2	1 1/4	1 1/4
DPSL 10560	30	1/2	12R	1/2	1 1/4	1 1/4
DPSL 14080	40	3/4	8R/8R	2	2	2

FUEL TRAIN W/MODULATING SYSTEM & ROUND FIN VAPORIZER PIPE SIZES

MODEL	FT	<u>L.P.</u> LIQUID VALVE S & PIPE	<u>L.P.</u> VAPORIZER SIZES ROUND FIN	<u>L.P.</u> VAPOR REGULATOR, VALVES & PIPE	<u>MANIFOLD</u> SOLENOID VALVE & PIPE	<u>MANIFOLD</u> BUTTERFLY VALVE
DPX 4525	10	1/2	8R	1/2	1 1/4	1 1/4
DPX 7040	15	1/2	12R	1/2	1 1/4	1 1/4
DPX 9050	20	1/2	12R	1/2	1 1/4	1 1/4
DPX 13575	30	3/4	8R/8R	2	2	2
DPX 180100	40	3/4	12R/12R	2	2	2
DPXSL 5030	10	1/2	8R	1/2	1 1/4	1 1/4
DPXSL 8050	15	1/2	12R	1/2	1 1/4	1 1/4
DPXSL 10060	20	1/2	12R	1/2	1 1/4	1 1/4
DPXSL 12560	25	3/4	8R/8R	2	2	2
DPXSL 15090	30	3/4	8R/8R	2	2	2
DPXSL 200120	40	3/4	12R/12R	2	2	2
DPX4T 5630	10	1/2	8R	1/2	1 1/4	1 1/4
DPX4T 8460	15	1/2	12R	1/2	1 1/4	1 1/4
DPX4T 11260	20	3/4	8R/8R	2	2	2
DPX4T 140100	25	3/4	8R/12R	2	2	2
DPX4T 16890	30	3/4	8R/12R	2	2	2
DPX4T 224120	40	3/4	8R/8R/12R	2	2	2
DPX8T 6440	10	1/2	8R	1/2	1 1/4	1 1/4
DPX8T 9660	15	N/A	-	-	-	-
DPX8T 12880	20	3/4	8R/8R	2	2	2
DPX8T 160120	25	3/4	8R/12R	2	2	2
DPX8T 192120	30	3/4	12R/12R	2	2	2
DPX8T 256160	40	3/4	8R/12R/12R	2	2	2
DPX12T 7250	10	1/2	12R	1/2	1 1/4	1 1/4
DPX12T 10860	15	3/4	8R/8R	2	2	2
DPX12T 144100	20	3/4	8R/12R	2	2	2
DPX12T 175120	25	3/4	8R/12R	2	2	2
DPX12T 216150	30	3/4	8R/8R/12R	2	2	2
DPX12T 288200	40	3/4	12R/12R/12R	2	2	2
DPX16GT 8250	10	1/2	12R	1/2	1 1/4	1 1/4
DPX16GT 12360	15	3/4	8R/8R	2	2	2
DPX16GT 164100	20	3/4	8R/12R	2	2	2
DPX16GT 210120	25	3/4	8R/12R	2	2	2
DPX16GT 246150	30	3/4	8R/8R/12R	2	2	2
DPX16GT 328200	40	3/4	12R/12R/12R	2	2	2

STANDARD DISCHARGE SYSTEM
(FOR LEESON/OHIO GEAR GEAR REDUCERS)
ALL MOTORS - 230V-1P - 240V-3P - 480V-3P

MODEL	FT	TYPE	MOTOR	MOTOR PART NUMBER	GEAR REDUCER	GEAR REDUCER PART NUMBER
MSF-31010-CF 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P 143TC- 7/8-CLASS B	004-006471	5:1 140TC-7/8	052-008861
MSF-31010-AB 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P 143TC- 7/8-CLASS B	004-006471	5:1 140TC-7/8	052-008861
MSF-41515-CF 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P 143TC- 7/8-CLASS B	004-006471	5:1 140TC-7/8	052-008861
MSF-41515-AB 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P 143TC- 7/8-CLASS B	004-006471	5:1 140TC-7/8	052-008861
MSF-41515-CF	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
MSF-41515-AB	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
MSF-62520-CF	15	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
MSF-62520-AB	15	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
MSF-72525-CF	15	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
MSF-72525-AB	15	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DP 2510 1P	10	AUGER-8"	DRIVES FROM DC			
DP 3015 1P	10	AUGER-8"	DRIVES FROM DC			
DP 4020 1P	15	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P 143TC- 7/8-CLASS B	004-006471	5:1 140TC-7/8	052-008861
DP 5020 1P	20	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P 143TC- 7/8-CLASS B	004-006471	5:1 140TC-7/8	052-008861
DP 7530 1P	30	AUGER-8"	2HP-1750RPM-60HZ-115/230V-1P 145TC- 7/8-CLASS B	004-006472	5:1 140TC-7/8	052-008861
DP 10040 1P	40	AUGER-8"	3HP-1750RPM-60HZ-230V-1P 184TC-1-1/8-CLASS B	004-006473	5:1 180TC-1 1/8	052-008862
DP 3015	10	AUGER-8"	DRIVES FROM DC			
DP 4025	15	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DP 6030	20	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DP 7550	25	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DP 9045	30	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DP 12060	40	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	5:1 180TC-1 1/8	052-008862
DP-SL 3520	10	AUGER-8"	DRIVES FROM DC			
DP-SL 4530	15	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DP-SL 7040	20	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DP-SL 8560	25	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DP-SL 10560	30	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DP-SL 14080	40	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	5:1 180TC-1 1/8	052-008862

NOTE: 1. ALL MOTORS SHOWN 240V/480V-3P UNLESS STATED (1P) INDICATING 230V-1P

2. DRAG CAPACITIES @ 5 POINTS

30:1 UP TO 1200 BU/HR DRYER MAX. 2310 BU 2HP (DRAG 8" WIDE X 10" HIGH)
20:1 UP TO 1900 BU/HR DRYER MAX. 3465 BU 3HP (DRAG 8" WIDE X 10" HIGH)
15:1 UP TO 2560 BU HR DRYER MAX. 4620 BU 3HP (DRAG 8" WIDE X 10" HIGH)
30:1 UP TO 2880 BU/HR DRYER MAX. 5355 BU 5HP (DRAG 8" WIDE X 14" HIGH) - DPX12T ONLY

3. WHEN ORDERING GEAR REDUCERS STATE: BRAND - RATIO - FRAME - SHAFT DIAMETER.

STANDARD DISCHARGE SYSTEM
(FOR *LEESON/OHIO GEAR* GEAR REDUCERS)
ALL MOTORS - 230V-1P - 240V-3P - 480V-3P

MODEL	FT	TYPE	MOTOR	MOTOR PART NUMBER	GEAR REDUCER	GEAR REDUCER PART NUMBER
DPX 4525	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DPX 7040	15	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DPX 9050	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DPX 13575	30	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	5:1 180TC-1 1/8	052-008862
DPX 180100	40	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	20:1-180TC-1-1/4	052-008864
DPX-SL 5030	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DPX-SL 8050	15	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DPX-SL 10060	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DPX-SL 12560	25	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	5:1 180TC-1 1/8	052-008862
DPX-SL 15090	30	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	5:1 180TC-1 1/4	052-008862
DPX-SL 200120	40	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	20:1-180TC-1-1/4	052-008864
DPX4T 5630	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DPX4T 8460	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DPX4T 11260	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DPX4T 140100	25	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	5:1 180TC-1 1/8	052-008862
DPX4T 16890	30	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	20:1-180TC-1-1/4	052-008864
DPX4T 224120	40	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	15:1 180TC-1 1/8	052-008865

NOTE: 1. ALL MOTORS SHOWN 240V/480V-3P UNLESS STATED (1P) INDICATING 230V-1P

2. DRAG CAPACITIES @ 5 POINTS

30:1 UP TO 1200 BU/HR DRYER	MAX. 2310 BU	2HP	(DRAG 8" WIDE X 10" HIGH)
20:1 UP TO 1900 BU/HR DRYER	MAX. 3465 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
15:1 UP TO 2560 BU HR DRYER	MAX. 4620 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
30:1 UP TO 2880 BU/HR DRYER	MAX. 5355 BU	5HP	(DRAG 8" WIDE X 14" HIGH) - DPX12T ONLY

3. WHEN ORDERING GEAR REDUCERS STATE: BRAND - RATIO - FRAME - SHAFT DIAMETER.

STANDARD DISCHARGE SYSTEM
(FOR LEESON/OHIO GEAR GEAR REDUCERS)
ALL MOTORS - 230V-1P - 240V-3P - 480V-3P

MODEL	FT	TYPE	MOTOR	MOTOR PART NUMBER	GEAR REDUCER	GEAR REDUCER PART NUMBER
DPX8T 6440	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DPX8T 12880	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DPX8T 160120	25	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	20:1-180TC-1-1/4	052-008864
DPX8T 192120	30	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	20:1-180TC-1-1/4	052-008864
DPX8T 256160	40	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	15:1 180TC-1 1/8	052-008865
DPX12T 7250	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DPX12T 10860	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DPX12T 144100	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DPX12T 175120	25	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	20:1-180TC-1-1/4	052-008864
DPX12T 216150	30	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	15:1 180TC-1 1/8	052-008865
DPX12T 288200	40	DRAG-8"	5HP-1750RPM-60HZ-240/480V-3P 184TC-1-1/8-CLASS B	004-001982	30:1 180TC-1-7/8	052-008866
DPX16GT 8250	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P 143TC- 7/8-CLASS B	004-005415	5:1 140TC-7/8	052-008861
DPX16GT 12360	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P 145TC- 7/8-CLASS B	004-005416	5:1 140TC-7/8	052-008861
DPX16GT 164100	20	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	20:1-180TC-1-1/4	052-008864
DPX16GT 210120	25	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	20:1-180TC-1-1/4	052-008864
DPX16GT 246150	30	DRAG-8"	3HP-1750RPM-60HZ-240/480V-3P 182TC-1-1/8-CLASS B	004-001980	15:1 180TC-1 1/8	052-008865
DPX16GT 328200	40	DRAG-8"	5HP-1750RPM-60HZ-240/480V-3P 184TC-1-1/8-CLASS B	004-001982	30:1 180TC-1-7/8	052-008866

NOTE: 1. ALL MOTORS SHOWN 240V/480V-3P UNLESS STATED (1P) INDICATING 230V-1P

2. DRAG CAPACITIES @ 5 POINTS

30:1 UP TO 1200 BU/HR DRYER MAX. 2310 BU 2HP (DRAG 8" WIDE X 10" HIGH)
 20:1 UP TO 1900 BU/HR DRYER MAX. 3465 BU 3HP (DRAG 8" WIDE X 10" HIGH)
 15:1 UP TO 2560 BU HR DRYER MAX. 4620 BU 3HP (DRAG 8" WIDE X 10" HIGH)
 30:1 UP TO 2880 BU/HR DRYER MAX. 5355 BU 5HP (DRAG 8" WIDE X 14" HIGH) - DPX12T ONLY

3. WHEN ORDERING GEAR REDUCERS STATE: BRAND - RATIO - FRAME - SHAFT DIAMETER.

STANDARD DISCHARGE SYSTEM
(FOR *LEESON/OHIO GEAR* GEAR REDUCERS)
ALL MOTORS - 380V-3P

MODEL	FT	TYPE	MOTOR	MOTOR PART NUMBER	GEAR REDUCER	GEAR REDUCER PART NUMBER
MSF-41515-CF	10	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
MSF-41515-AB	10	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
MSF-62520-CF	15	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
MSF-62520-AB	15	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
MSF-72525-CF	15	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
MSF-72525-AB	15	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DP 3015	10	AUGER-8"	DRIVES FROM DC			
DP 4025	15	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DP 6030	20	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DP 7550	25	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DP 9045	30	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DP 12060	40	AUGER-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	5:1 180TC-1 1/8	052-008862
DP-SL 3520	10	AUGER-8"	DRIVES FROM DC			
DP-SL 4530	15	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DP-SL 7040	20	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DP-SL 8560	25	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DP-SL 10560	30	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DP-SL 14080	40	AUGER-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	5:1 180TC-1 1/8	052-008862
DPX 4525	10	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DPX 7040	15	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DPX 9050	20	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DPX 13575	30	AUGER-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	5:1 180TC-1 1/8	052-008862
DPX 180100	40	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	20:1-180TC-1-1/4	052-008864
DPX-SL 5030	10	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DPX-SL 8050	15	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DPX-SL 10060	20	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DPX-SL 12560	25	AUGER-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	5:1 180TC-1 1/8	052-008862
DPX-SL 15090	30	AUGER-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	5:1 180TC-1 1/8	052-008862
DPX-SL 200120	40	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	20:1-180TC-1-1/4	052-008864

NOTE: 1. ALL MOTORS SHOWN 380V-3P.

2. DRAG CAPACITIES @ 5 POINTS

30:1 UP TO 1200 BU/HR DRYER	MAX. 2310 BU	2HP	(DRAG 8" WIDE X 10" HIGH)
20:1 UP TO 1900 BU/HR DRYER	MAX. 3465 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
15:1 UP TO 2560 BU HR DRYER	MAX. 4620 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
30:1 UP TO 2880 BU/HR DRYER	MAX. 5355 BU	5HP	(DRAG 8" WIDE X 14" HIGH) - DPX12T ONLY

3. WHEN ORDERING GEAR REDUCERS STATE: BRAND - RATIO - FRAME - SHAFT DIAMETER.

STANDARD DISCHARGE SYSTEM
(FOR *LEESON/OHIO* GEAR GEAR REDUCERS)
ALL MOTORS - 380V-3P

MODEL	FT	TYPE	MOTOR	MOTOR PART NUMBER	GEAR REDUCER	GEAR REDUCER PART NUMBER
DPX4T 5630	10	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DPX4T 8460	15	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DPX4T 11260	20	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DPX4T 140100	25	AUGER-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	5:1 180TC-1 1/8	052-008862
DPX4T 16890	30	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	20:1-180TC-1-1/4	052-008864
DPX4T 224120	40	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	15:1 180TC-1 1/8	052-008865
DPX8T 6440	10	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DPX8T 9660	15	N/A				
DPX8T 12880	20	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DPX8T 160120	25	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	20:1-180TC-1-1/4	052-008864
DPX8T 192120	30	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	20:1-180TC-1-1/4	052-008864
DPX8T 256160	40	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	15:1 180TC-1 1/8	052-008865
DPX12T 7250	10	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DPX12T 10860	15	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DPX12T 144100	20	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DPX12T 175120	25	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	20:1-180TC-1-1/4	052-008864
DPX12T 216150	30	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	15:1 180TC-1 1/8	052-008865
DPX12T 288200	40	DRAG-8"	5HP-1450RPM-50HZ- 380V-3P 184TC-1-1/8-CLASS B	004-007868	30:1 180TC-1-7/8	052-008866
DPX16GT 8250	10	AUGER-8"	1HP-1450RPM-50HZ- 380V-3P 143TC- 7/8-CLASS B	004-007865	5:1 140TC-7/8	052-008861
DPX16GT 12360	15	AUGER-8"	2HP-1450RPM-50HZ- 380V-3P 145TC- 7/8-CLASS B	004-007866	5:1 140TC-7/8	052-008861
DPX16GT 164100	20	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	20:1-180TC-1-1/4	052-008864
DPX16GT 210120	25	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	20:1-180TC-1-1/4	052-008864
DPX16GT 246150	30	DRAG-8"	3HP-1450RPM-50HZ- 380V-3P 182TC-1-1/8-CLASS B	004-007867	15:1 180TC-1 1/8	052-008865
DPX16GT 328200	40	DRAG-8"	5HP-1450RPM-50HZ- 380V-3P 184TC-1-1/8-CLASS B	004-007868	30:1 180TC-1-7/8	052-008866

NOTE: 1. ALL MOTORS SHOWN 380V-3P.

2. DRAG CAPACITIES @ 5 POINTS

30:1 UP TO 1200 BU/HR DRYER	MAX. 2310 BU	2HP	(DRAG 8" WIDE X 10" HIGH)
20:1 UP TO 1900 BU/HR DRYER	MAX. 3465 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
15:1 UP TO 2560 BU HR DRYER	MAX. 4620 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
30:1 UP TO 2880 BU/HR DRYER	MAX. 5355 BU	5HP	(DRAG 8" WIDE X 14" HIGH) - DPX12T ONLY

3. WHEN ORDERING GEAR REDUCERS STATE: BRAND - RATIO - FRAME - SHAFT DIAMETER.

STANDARD DISCHARGE SYSTEM
(FOR *LEESON/OHIO GEAR* GEAR REDUCERS)
ALL MOTORS - 575V-3P

MODEL	FT	TYPE	MOTOR	MOTOR PART NUMBER	GEAR REDUCER	GEAR REDUCER PART NUMBER
MSF-41515-CF	10	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
MSF-41515-AB	10	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
MSF-62520-CF	15	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
MSF-62520-AB	15	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
MSF-72525-CF	15	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
MSF-72525-AB	15	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DP 3015	10	AUGER-8"	DRIVES FROM DC			
DP 4025	15	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DP 6030	20	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DP 7550	25	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DP 9045	30	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DP 12060	40	AUGER-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	5:1 180TC-1 1/8	052-008862
DP-SL 3520	10	AUGER-8"	DRIVES FROM DC			
DP-SL 4530	15	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DP-SL 7040	20	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DP-SL 8560	25	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DP-SL 10560	30	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DP-SL 14080	40	AUGER-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	5:1 180TC-1 1/8	052-008862
DPX 4525	10	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DPX 7040	15	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DPX 9050	20	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DPX 13575	30	AUGER-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	5:1 180TC-1 1/8	052-008862
DPX 180100	40	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	20:1-180TC-1-1/4	052-008864
DPX-SL 5030	10	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DPX-SL 8050	15	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DPX-SL 10060	20	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DPX-SL 12560	25	AUGER-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	5:1 180TC-1 1/8	052-008862
DPX-SL 15090	30	AUGER-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	5:1 180TC-1 1/8	052-008862
DPX-SL 200120	40	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	20:1-180TC-1-1/4	052-008864

NOTE: 1. ALL MOTORS SHOWN 575V-3P.

2. DRAG CAPACITIES @ 5 POINTS

30:1 UP TO 1200 BU/HR DRYER	MAX. 2310 BU	2HP	(DRAG 8" WIDE X 10" HIGH)
20:1 UP TO 1900 BU/HR DRYER	MAX. 3465 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
15:1 UP TO 2560 BU HR DRYER	MAX. 4620 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
30:1 UP TO 2880 BU/HR DRYER	MAX. 5355 BU	5HP	(DRAG 8" WIDE X 14" HIGH) - DPX12T ONLY

3. WHEN ORDERING GEAR REDUCERS STATE: BRAND - RATIO - FRAME - SHAFT DIAMETER.

STANDARD DISCHARGE SYSTEM
(FOR *LEESON/OHIO* GEAR GEAR REDUCERS)
ALL MOTORS - 575V-3P

MODEL	FT	TYPE	MOTOR	MOTOR PART NUMBER	GEAR REDUCER	GEAR REDUCER PART NUMBER
DPX4T 5630	10	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DPX4T 8460	15	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DPX4T 11260	20	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DPX4T 140100	25	AUGER-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	5:1 180TC-1 1/8	052-008862
DPX4T 16890	30	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	20:1-180TC-1-1/4	052-008864
DPX4T 224120	40	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	15:1 180TC-1 1/8	052-008865
DPX8T 6440	10	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DPX8T 9660	15	N/A				
DPX8T 12880	20	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DPX8T 160120	25	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	20:1-180TC-1-1/4	052-008864
DPX8T 192120	30	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	20:1-180TC-1-1/4	052-008864
DPX8T 256160	40	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	15:1 180TC-1 1/8	052-008865
DPX12T 7250	10	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DPX12T 10860	15	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DPX12T 144100	20	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DPX12T 175120	25	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	20:1-180TC-1-1/4	052-008864
DPX12T 216150	30	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	15:1 180TC-1 1/8	052-008865
DPX12T 288200	40	DRAG-8"	5HP-1750RPM-60HZ- 575V-3P 184TC-1-1/8-CLASS B	004-007631	30:1 180TC-1-7/8	052-008866
DPX16GT 8250	10	AUGER-8"	1HP-1750RPM-60HZ- 575V-3P 143TC- 7/8-CLASS B	004-007424	5:1 140TC-7/8	052-008861
DPX16GT 12360	15	AUGER-8"	2HP-1750RPM-60HZ- 575V-3P 145TC- 7/8-CLASS B	004-007616	5:1 140TC-7/8	052-008861
DPX16GT 164100	20	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	20:1-180TC-1-1/4	052-008864
DPX16GT 210120	25	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	20:1-180TC-1-1/4	052-008864
DPX16GT 246150	30	DRAG-8"	3HP-1750RPM-60HZ- 575V-3P 182TC-1-1/8-CLASS B	004-007571	15:1 180TC-1 1/8	052-008865
DPX16GT 328200	40	DRAG-8"	5HP-1750RPM-60HZ- 575V-3P 184TC-1-1/8-CLASS B	004-007631	30:1 180TC-1-7/8	052-008866

NOTE: 1. ALL MOTORS SHOWN 575V-3P.

2. DRAG DISCHARGE CAPACITIES @ 5 POINTS

30:1 UP TO 1200 BU/HR DRYER	MAX. 2310 BU	2HP	(DRAG 8" WIDE X 10" HIGH)
20:1 UP TO 1900 BU/HR DRYER	MAX. 3465 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
15:1 UP TO 2560 BU HR DRYER	MAX. 4620 BU	3HP	(DRAG 8" WIDE X 10" HIGH)
30:1 UP TO 2880 BU/HR DRYER	MAX. 5355 BU	5HP	(DRAG 8" WIDE X 14" HIGH) - DPX12T ONLY

3. WHEN ORDERING GEAR REDUCERS STATE: BRAND - RATIO - FRAME - SHAFT DIAMETER.

SPROCKET CHART FOR 1 1/4" AUGER SHAFTS

230V-1P - 240V-3P - 480V-3P - 575V-3P

MODEL	FT	METERING ROLLS	DC GEAR REDUCER	AUGER REDUCER	AUGER SHAFT
MSF 31010-CF 1P	10	4016-1	4012-1	4016-7/8	4016-1 1/4
MSF 31010-AB 1P	10	4016-1	4012-1	4016-7/8	4016-1 1/4
MSF 41515-CF 1P	10	4016-1	4012-1	4016-7/8	4016-1 1/4
MSF 41515-AB 1P	10	4016-1	4012-1	4016-7/8	4016-1 1/4
MSF 62520-CF	15	4016-1	4012-1	4016-7/8	4016-1 1/4
MSF 62520-AB	15	4016-1	4012-1	4016-7/8	4016-1 1/4
MSF 72525-CF	15	4016-1	4012-1	4016-7/8	4016-1 1/4
MSF 72525-AB	15	4016-1	4012-1	4016-7/8	4016-1 1/4
DP 2510 1P	10	4032-1	4012-1 & 4060-1	NONE	4015-1 1/4
DP 3015 1P	10	4032-1	4012-1 & 4060-1	NONE	4015-1 1/4
DP 4020 1P	15	4032-1	4012-1	4016-7/8	4024-1 1/4
DP 5020 1P	20	4032-1	4012-1	4016-7/8	4024-1 1/4
DP 7530 1P	30	4032-1	4012-1	4016-7/8	4016-1 1/4
DP 10040 1P	40	4032-1	4012-1	4024-1 1/8	4024-1 1/4
DP 3015	10	4032-1	4012-1 & 4060-1	NONE	4015-1 1/4
DP 4025	15	4032-1	4012-1	4016-7/8	4024-1 1/4
DP 6030	20	4032-1	4012-1	4016-7/8	4024-1 1/4
DP 7550	25	4032-1	4012-1	4016-7/8	4016-1 1/4
DP 9045	30	4032-1	4012-1	4016-7/8	4016-1 1/4
DP 12060	40	4032-1	4012-1	4024-1 1/8	4024-1 1/4
DPSL 3520	10	4032-1	4012-1 & 4060-1	NONE	4015-1 1/4
DPSL 4530	15	4032-1	4012-1	4016-7/8	4024-1 1/4
DPSL 7040	20	4032-1	4012-1	4016-7/8	4024-1 1/4
DPSL 8560	25	4032-1	4012-1	4016-7/8	4016-1 1/4
DPSL 10560	30	4032-1	4012-1	4016-7/8	4016-1 1/4
DPSL 14080	40	4032-1	4012-1	4024-1 1/8	4024-1 1/4

NOTE: 1.THE METERING IDLER SPROCKET 4017-1/2 IS THE SAME FOR ALL DRYERS.

2.REFER TO SPROCKET PAGE FOR PART NUMBERS.

SPROCKET CHART FOR 1 1/4" AUGER SHAFTS

230V-1P - 240V-3P - 480V-3P - 575V-3P

MODEL	FT	METERING ROLLS	DC GEAR REDUCER	AUGER REDUCER	AUGER SHAFT
DPX 4525	10	4032-1	4016-1	4016-7/8	4024-1 1/4
DPX 7040	15	4032-1	4016-1	4016-7/8	4024-1 1/4
DPX 9050	20	4032-1	4016-1	4016-7/8	4016-1 1/4
DPX 13575	30	4032-1	4016-1	4024-1 1/8	4024-1 1/4
DPX 180100	40	4032-1	4016-1	REFER TO DRAG CONVEYOR PARTS	
DPXSL 5030	10	4032-1	4016-1	4016-7/8	4024-1 1/4
DPXSL 8050	15	4032-1	4016-1	4016-7/8	4024-1 1/4
DPXSL 10060	20	4032-1	4016-1	4016-7/8	4016-1 1/4
DPXSL 12560	25	4032-1	4016-1	4024-1 1/8	4024-1 1/4
DPXSL 15090	30	4032-1	4016-1	4024-1 1/8	4024-1 1/4
DPXSL 200120	40	4032-1	4016-1	REFER TO DRAG CONVEYOR PARTS	
DPX4T 5630	10	4032-1	4024-1	4016-7/8	4024-1 1/4
DPX4T 8460	15	4032-1	4024-1	4016-7/8	4016-1 1/4
DPX4T 11260	20	4032-1	4024-1	4016-7/8	4016-1 1/4
DPX4T 140100	25	4032-1	4024-1	4024-1 1/8	4024-1 1/4
DPX4T 16890	30	4032-1	4024-1	REFER TO DRAG CONVEYOR PARTS	
DPX4T 224120	40	4032-1	4024-1	REFER TO DRAG CONVEYOR PARTS	
DPX8T 6440	10	4032-1	4024-1	4016-7/8	4024-1 1/4
DPX8T 9660	15	4032-1	4024-1	4016-7/8	4016-1 1/4
DPX8T 12880	20	4032-1	4024-1	4024-7/8	4024-1 1/4
DPX8T 160120	25	4032-1	4024-1	REFER TO DRAG CONVEYOR PARTS	
DPX8T 192120	30	4032-1	4024-1	REFER TO DRAG CONVEYOR PARTS	
DPX8T 256160	40	4032-1	4024-1	REFER TO DRAG CONVEYOR PARTS	
DPX12T 7250	10	4032-1	4026-1	4016-7/8	4016-1 1/4
DPX12T 10860	15	4032-1	4026-1	4016-7/8	4016-1 1/4
DPX12T 144100	20	4032-1	4026-1	4024-7/8	4024-1 1/4
DPX12T 175120	25	4032-1	4026-1	REFER TO DRAG CONVEYOR PARTS	
DPX12T 216150	30	4032-1	4026-1	REFER TO DRAG CONVEYOR PARTS	
DPX12T 288200	40	4032-1	4026-1	REFER TO DRAG CONVEYOR PARTS	
DPX16GT 8250	10	4032-1	4026-1	4016-7/8	4016-1 1/4
DPX16GT 12360	15	4032-1	4026-1	4016-7/8	4016-1 1/4
DPX16GT 164100	20	4032-1	4026-1	REFER TO DRAG CONVEYOR PARTS	
DPX16GT 210120	25	4032-1	4026-1	REFER TO DRAG CONVEYOR PARTS	
DPX16GT 246150	30	4032-1	4026-1	REFER TO DRAG CONVEYOR PARTS	
DPX16GT 328200	40	4032-1	4026-1	REFER TO DRAG CONVEYOR PARTS	

NOTE: 1. THE METERING IDLER SPROCKET 4017-1/2 IS THE SAME FOR ALL DRYERS.

2. REFER TO SPROCKET PAGE FOR PART NUMBERS.

SPROCKET CHART FOR 1 1/4" AUGER SHAFTS

380V-3P

MODEL	FT	METERING ROLLS	DC GEAR REDUCER	AUGER REDUCER	AUGER SHAFT
MSF 41515-CF	10	4016-1	4012-1	4020-7/8	4016-1 1/4
MSF 41515-AB	10	4016-1	4012-1	4020-7/8	4016-1 1/4
MSF 62520-CF	15	4016-1	4012-1	4020-7/8	4016-1 1/4
MSF 62520-AB	15	4016-1	4012-1	4020-7/8	4016-1 1/4
MSF 72525-CF	15	4016-1	4012-1	4020-7/8	4016-1 1/4
MSF 72525-AB	15	4016-1	4012-1	4020-7/8	4016-1 1/4
DP 3015	10	4032-1	4012-1 & 4060-1	NONE	4015-1 1/4
DP 4025	15	4032-1	4012-1	4016-7/8	4020-1 1/4
DP 6030	20	4032-1	4012-1	4016-7/8	4020-1 1/4
DP 7550	25	4032-1	4012-1	4020-7/8	4016-1 1/4
DP 9045	30	4032-1	4012-1	4020-7/8	4016-1 1/4
DP 12060	40	4032-1	4012-1	4024-1 1/8	4020-1 1/4
DPSL 3520	10	4032-1	4012-1 & 4060-1	NONE	4015-1 1/4
DPSL 4530	15	4032-1	4012-1	4016-7/8	4020-1 1/4
DPSL 7040	20	4032-1	4012-1	4016-7/8	4020-1 1/4
DPSL 8560	25	4032-1	4012-1	4020-7/8	4016-1 1/4
DPSL 10560	30	4032-1	4012-1	4020-7/8	4016-1 1/4
DPSL 14080	40	4032-1	4012-1	4024-1 1/8	4020-1 1/4
DPX 4525	10	4032-1	4016-1	4016-7/8	4020-1 1/4
DPX 7040	15	4032-1	4016-1	4016-7/8	4020-1 1/4
DPX 9050	20	4032-1	4016-1	4020-7/8	4016-1 1/4
DPX 13575	30	4032-1	4016-1	4024-1 1/8	4020-1 1/4
DPX 180100	40	4032-1	4016-1	REFER TO DRAG CONVEYOR PARTS	
DPXSL 5030	10	4032-1	4016-1	4016-7/8	4020-1 1/4
DPXSL 8050	15	4032-1	4016-1	4016-7/8	4020-1 1/4
DPXSL 10060	20	4032-1	4016-1	4020-7/8	4020-1 1/4
DPXSL 12560	25	4032-1	4016-1	4024-1 1/8	4020-1 1/4
DPXSL 15090	30	4032-1	4016-1	4024-1 1/8	4020-1 1/4
DPXSL 200120	40	4032-1	4016-1	REFER TO DRAG CONVEYOR PARTS	

NOTE: 1.THE METERING IDLER SPROCKET 4017-1/2 IS THE SAME FOR ALL DRYERS.

2.REFER TO SPROCKET PAGE FOR PART NUMBERS.

SPROCKET CHART FOR 1 1/4" AUGER SHAFTS

380V-3P

MODEL		FT	METERING ROLLS	DC GEAR REDUCER	AUGER REDUCER	AUGER SHAFT
DPX4T	5630	10	4032-1	4024-1	4016-7/8	4020-1 1/4
DPX4T	8460	15	4032-1	4024-1	4020-7/8	4016-1 1/4
DPX4T	11260	20	4032-1	4024-1	4020-7/8	4016-1 1/4
DPX4T	140100	25	4032-1	4024-1	4024-1 1/8	4020-1 1/4
DPX4T	16890	30	4032-1	4024-1	REFER TO DRAG	CONVEYOR PARTS
DPX4T	224120	40	4032-1	4024-1	REFER TO DRAG	CONVEYOR PARTS
DPX8T	6440	10	4032-1	4024-1	4016-7/8	4016-1 1/4
DPX8T	9660	15	4032-1	4024-1	4020-7/8	4016-1 1/4
DPX8T	12880	20	4032-1	4024-1	4020-7/8	4020-1 1/4
DPX8T	160120	25	4032-1	4024-1	REFER TO DRAG	CONVEYOR PARTS
DPX8T	192120	30	4032-1	4024-1	REFER TO DRAG	CONVEYOR PARTS
DPX8T	256160	40	4032-1	4024-1	REFER TO DRAG	CONVEYOR PARTS
DPX12T	7250	10	4032-1	4026-1	4016-7/8	4024-1 1/4
DPX12T	10860	15	4032-1	4026-1	4016-7/8	4024-1 1/4
DPX12T	144100	20	4032-1	4026-1	4016-7/8	4024-1 1/4
DPX12T	175120	25	4032-1	4026-1	REFER TO DRAG	CONVEYOR PARTS
DPX12T	216150	30	4032-1	4026-1	REFER TO DRAG	CONVEYOR PARTS
DPX12T	288200	40	4032-1	4026-1	REFER TO DRAG	CONVEYOR PARTS
DPX16GT	8250	10	4032-1	4026-1	4016-7/8	4024-1 1/4
DPX16GT	12360	15	4032-1	4026-1	4016-7/8	4024-1 1/4
DPX16GT	164100	20	4032-1	4026-1	REFER TO DRAG	CONVEYOR PARTS
DPX16GT	210120	25	4032-1	4026-1	REFER TO DRAG	CONVEYOR PARTS
DPX16GT	246150	30	4032-1	4026-1	REFER TO DRAG	CONVEYOR PARTS
DPX16GT	328200	40	4032-1	4026-1	REFER TO DRAG	CONVEYOR PARTS

NOTE: 1.THE METERING IDLER SPROCKET 4017-1/2 IS THE SAME FOR ALL DRYERS.

2.REFER TO SPROCKET PAGE FOR PART NUMBERS.

STANDARD LEVELING (AUGER) SYSTEM

ALL MOTORS - 230V-1P - 240V-3P - 480V-3P

MODEL		FT	TYPE	MOTOR DESCRIPTION			DELUX MOTOR P/N.
MSF	31010-CF 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P-143T-	7/8-CLASS	B	004-003236
MSF	31010-AB 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P-143T-	7/8-CLASS	B	004-003236
MSF	41515-CF 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P-143T-	7/8-CLASS	B	004-003236
MSF	41515-AB 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-1P-143T-	7/8-CLASS	B	004-003236
MSF	41515-CF	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P-143T-	7/8-CLASS	B	004-002355
MSF	41515-AB	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P-143T-	7/8-CLASS	B	004-002355
MSF	62520-CF	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B	004-002673
MSF	62520-AB	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B	004-002673
MSF	72525-CF	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B	004-002673
MSF	72525-AB	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B	004-002673
DP	2510 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-3P-143T-	7/8-CLASS	B	004-003236
DP	3015 1P	10	AUGER-8"	1HP-1750RPM-60HZ-115/230V-3P-143T-	7/8-CLASS	B	004-003236
DP	4020 1P	15	AUGER-8"	2HP-1750RPM-60HZ-115/230V-1P-182T-1	1/8-CLASS	B	004-007779
DP	5020 1P	20	AUGER-8"	2HP-1750RPM-60HZ-115/230V-1P-182T-1	1/8-CLASS	B	004-007779
DP	7530 1P	30	AUGER-8"	3HP-1750RPM-60HZ-230V-1P-184T-1	1/8-CLASS	B	004-005417
DP	10040 1P	40	AUGER-8"	5HP-1750RPM-60HZ-230V-1P-184T-1	1/8-CLASS	B	004-004869
DP	3015	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P-143T-	7/8-CLASS	B	004-002355
DP	4025	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B	004-002673
DP	6030	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B	004-002673
DP	7550	25	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B	004-002671
DP	9045	30	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B	004-002671
DP	12060	40	AUGER-8"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B	004-002672
DP-SL	3520	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P-143T-	7/8-CLASS	B	004-002355
DP-SL	4530	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B	004-002673
DP-SL	7040	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B	004-002673
DP-SL	8560	25	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B	004-002671
DP-SL	10560	30	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B	004-002671
DP-SL	14080	40	AUGER-8"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B	004-002672

NOTE: 1. ALL MOTORS SHOWN 240V/480V-3P UNLESS STATED (1P) INDICATING 230V-1P.

STANDARD LEVELING (AUGER) SYSTEM

ALL MOTORS - 230V-1P - 240V-3P - 480V-3P

MODEL	FT	TYPE	MOTOR DESCRIPTION				DELUX MOTOR P/N.
DPX 4525	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P-143T-	7/8-CLASS	B		004-002355
DPX 7040	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX 9050	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX 13575	30	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B		004-002671
DPX 180100	40	AUGER-10"	10HP-1750RPM-60HZ-240/480V-3P-215T-1	3/8-CLASS	B		004-002675
.							
DPX-SL 5030	10	AUGER-8"	1HP-1750RPM-60HZ-240/480V-3P-143T-	7/8-CLASS	B		004-002355
DPX-SL 8050	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX-SL 10060	20	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX-SL 12560	25	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B		004-002671
DPX-SL 15090	30	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B		004-002671
DPX-SL 200120	40	AUGER-10"	10HP-1750RPM-60HZ-240/480V-3P-215T-1	3/8-CLASS	B		004-002675
.							
DPX4T 5630	10	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX4T 8460	15	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX4T 11260	20	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B		004-002671
DPX4T 140100	25	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B		004-002671
DPX4T 16890	30	AUGER-8"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B		004-002672
DPX4T 224120	40	AUGER-10"	10HP-1750RPM-60HZ-240/480V-3P-215T-1	3/8-CLASS	B		004-002675
.							
DPX8T 6440	10	AUGER-8"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX8T 9660	15	N/A					
DPX8T 12880	20	AUGER-8"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B		004-002671
DPX8T 160120	25	AUGER-8"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B		004-002672
DPX8T 192120	30	AUGER-8"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B		004-002672
DPX8T 256160	40	AUGER-10"	10HP-1750RPM-60HZ-240/480V-3P-215T-1	3/8-CLASS	B		004-002675
.							
DPX12T 7250	10	AUGER-10"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX12T 10860	15	AUGER-10"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX12T 144100	20	AUGER-10"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B		004-002671
DPX12T 175120	25	AUGER-10"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B		004-002672
DPX12T 216150	30	AUGER-10"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B		004-002672
DPX12T 288200	40	AUGER-10"	10HP-1750RPM-60HZ-240/480V-3P-215T-1	3/8-CLASS	B		004-002675
.							
DPX16GT 8250	10	AUGER-10"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX16GT 12360	15	AUGER-10"	2HP-1750RPM-60HZ-240/480V-3P-145T-	7/8-CLASS	B		004-002673
DPX16GT 164100	20	AUGER-10"	3HP-1750RPM-60HZ-240/480V-3P-182T-1	1/8-CLASS	B		004-002671
DPX16GT 210120	25	AUGER-10"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B		004-002672
DPX16GT 246150	30	AUGER-10"	5HP-1750RPM-60HZ-240/480V-3P-184T-1	1/8-CLASS	B		004-002672
DPX16GT 328200	40	AUGER-10"	10HP-1750RPM-60HZ-240/480V-3P-215T-1	3/8-CLASS	B		004-002675
.							

NOTE: 1. ALL MOTORS SHOWN 240V/480V-3P UNLESS STATED (1P) INDICATING 230V-1P.

STANDARD LEVELING (AUGER) SYSTEM

ALL MOTORS - 380V-3P

MODEL		FT	TYPE	MOTOR DESCRIPTION			DELUX MOTOR P/N.
MSF	41515-CF	10	AUGER-8"	1HP-1450RPM-50HZ-	380V-3P-143T-	7/8-CLASS B	004-007853
MSF	41515-AB	10	AUGER-8"	1HP-1450RPM-50HZ-	380V-3P-143T-	7/8-CLASS B	004-007853
MSF	62520-CF	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
MSF	62520-AB	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
MSF	72525-CF	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
MSF	72525-AB	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DP	3015	10	AUGER-8"	1HP-1450RPM-50HZ-	380V-3P-143T-	7/8-CLASS B	004-007853
DP	4025	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DP	6030	20	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DP	7550	25	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DP	9045	30	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DP	12060	40	AUGER-8"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-007856
DP-SL	3520	10	AUGER-8"	1HP-1450RPM-50HZ-	380V-3P-143T-	7/8-CLASS B	004-007853
DP-SL	4530	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DP-SL	7040	20	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DP-SL	8560	25	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DP-SL	10560	30	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DP-SL	14080	40	AUGER-8"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-007856

NOTE: 1. ALL MOTORS SHOWN 380V-3P.

STANDARD LEVELING (AUGER) SYSTEM

ALL MOTORS - 380V-3P

MODEL		FT	TYPE	MOTOR DESCRIPTION			DELUX MOTOR P/N.
DPX	4525	10	AUGER-8"	1HP-1450RPM-50HZ-	380V-3P-143T-	7/8-CLASS B	004-007853
DPX	7040	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX	9050	20	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX	13575	30	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DPX	180100	40	AUGER-10"	10HP-1450RPM-50HZ-	380V-3P-215T-1	3/8-CLASS B	004-007857
DPX-SL	5030	10	AUGER-8"	1HP-1450RPM-50HZ-	380V-3P-143T-	7/8-CLASS B	004-007853
DPX-SL	8050	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX-SL	10060	20	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX-SL	12560	25	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DPX-SL	15090	30	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DPX-SL	200120	40	AUGER-10"	10HP-1450RPM-50HZ-	380V-3P-215T-1	3/8-CLASS B	004-007857
DPX4T	5630	10	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX4T	8460	15	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX4T	11260	20	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DPX4T	140100	25	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DPX4T	16890	30	AUGER-8"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-007856
DPX4T	224120	40	AUGER-10"	10HP-1450RPM-50HZ-	380V-3P-215T-1	3/8-CLASS B	004-007857
DPX8T	6440	10	AUGER-8"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX8T	9660	15	N/A				
DPX8T	12880	20	AUGER-8"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DPX8T	160120	25	AUGER-8"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-007856
DPX8T	192120	30	AUGER-8"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-002656
DPX8T	256160	40	AUGER-10"	10HP-1450RPM-50HZ-	380V-3P-215T-1	3/8-CLASS B	004-007857
DPX12T	7250	10	AUGER-10"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX12T	10860	15	AUGER-10"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX12T	144100	20	AUGER-10"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DPX12T	175120	25	AUGER-10"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-007856
DPX12T	216150	30	AUGER-10"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-007856
DPX12T	288200	40	AUGER-10"	10HP-1450RPM-50HZ-	380V-3P-215T-1	3/8-CLASS B	004-007857
DPX16GT	8250	10	AUGER-10"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX16GT	12360	15	AUGER-10"	2HP-1450RPM-50HZ-	380V-3P-145T-	7/8-CLASS B	004-007854
DPX16GT	164100	20	AUGER-10"	3HP-1450RPM-50HZ-	380V-3P-182T-1	1/8-CLASS B	004-007855
DPX16GT	210120	25	AUGER-10"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-007856
DPX16GT	246150	30	AUGER-10"	5HP-1450RPM-50HZ-	380V-3P-184T-1	1/8-CLASS B	004-007856
DPX16GT	328200	40	AUGER-10"	10HP-1450RPM-50HZ-	380V-3P-215T-1	3/8-CLASS B	004-007857

NOTE: 1. ALL MOTORS SHOWN 380V-3P.

STANDARD LEVELING (AUGER) SYSTEM

ALL MOTOR - 575V-3P

MODEL		FT	TYPE	MOTOR DESCRIPTION			DELUX MOTOR P/N.
MSF	41515-CF	10	AUGER-8"	1HP-1750RPM-60HZ-	575V-3P-143T-	7/8-CLASS B	004-007630
MSF	41515-AB	10	AUGER-8"	1HP-1750RPM-60HZ-	575V-3P-143T-	7/8-CLASS B	004-007630
MSF	62520-CF	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS B	004-007425
MSF	62520-AB	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS B	004-007425
MSF	72525-CF	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS B	004-007425
MSF	72525-AB	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS B	004-007425
DP	3015	10	AUGER-8"	1HP-1750RPM-60HZ-	575V-3P-143T-	7/8-CLASS B	004-007630
DP	4025	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS B	004-007425
DP	6030	20	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS B	004-007425
DP	7550	25	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS B	004-007615
DP	9045	30	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS B	004-007615
DP	12060	40	AUGER-8"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS B	004-007629
DP-SL	3520	10	AUGER-8"	1HP-1750RPM-60HZ-	575V-3P-143T-	7/8-CLASS B	004-007630
DP-SL	4530	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS B	004-007425
DP-SL	7040	20	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS B	004-007425
DP-SL	8560	25	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS B	004-007615
DP-SL	10560	30	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS B	004-007615
DP-SL	14080	40	AUGER-8"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS B	004-007629

NOTE: 1 ALL MOTORS SHOWN 575V-3P.

STANDARD LEVELING (AUGER) SYSTEM

ALL MOTOR - 575V-3P

MODEL	FT	TYPE	MOTOR DESCRIPTION				DELUX MOTOR P/N.
DPX 4525	10	AUGER-8"	1HP-1750RPM-60HZ-	575V-3P-143T-	7/8-CLASS	B	004-007630
DPX 7040	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX 9050	20	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX 13575	30	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS	B	004-007615
DPX 180100	40	AUGER-10"	10HP-1750RPM-60HZ-	575V-3P-215T-1	3/8-CLASS	B	004-007570
DPX-SL 5030	10	AUGER-8"	1HP-1750RPM-60HZ-	575V-3P-143T-	7/8-CLASS	B	004-007630
DPX-SL 8050	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX-SL 10060	20	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX-SL 12560	25	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS	B	004-007615
DPX-SL 15090	30	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS	B	004-007615
DPX-SL 200120	40	AUGER-10"	10HP-1750RPM-60HZ-	575V-3P-215T-1	3/8-CLASS	B	004-007570
DPX4T 5630	10	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX4T 8460	15	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX4T 11260	20	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS	B	004-007615
DPX4T 140100	25	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS	B	004-007615
DPX4T 16890	30	AUGER-8"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS	B	004-007629
DPX4T 224120	40	AUGER-10"	10HP-1750RPM-60HZ-	575V-3P-215T-1	3/8-CLASS	B	004-007570
DPX8T 6440	10	AUGER-8"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX8T 9660	15	N/A					
DPX8T 12880	20	AUGER-8"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS	B	004-007615
DPX8T 160120	25	AUGER-8"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS	B	004-007629
DPX8T 192120	30	AUGER-8"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS	B	004-007629
DPX8T 256160	40	AUGER-10"	10HP-1750RPM-60HZ-	575V-3P-215T-1	3/8-CLASS	B	004-007570
DPX12T 7250	10	AUGER-10"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX12T 10860	15	AUGER-10"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX12T 144100	20	AUGER-10"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS	B	004-007615
DPX12T 175120	25	AUGER-10"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS	B	004-007629
DPX12T 216150	30	AUGER-10"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS	B	004-007629
DPX12T 288200	40	AUGER-10"	10HP-1750RPM-60HZ-	575V-3P-215T-1	3/8-CLASS	B	004-007570
DPX16GT 8250	10	AUGER-10"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX16GT 12360	15	AUGER-10"	2HP-1750RPM-60HZ-	575V-3P-145T-	7/8-CLASS	B	004-007425
DPX16GT 164100	20	AUGER-10"	3HP-1750RPM-60HZ-	575V-3P-182T-1	1/8-CLASS	B	004-007615
DPX16GT 210120	25	AUGER-10"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS	B	004-007629
DPX16GT 246150	30	AUGER-10"	5HP-1750RPM-60HZ-	575V-3P-184T-1	1/8-CLASS	B	004-007629
DPX16GT 328200	40	AUGER-10"	10HP-1750RPM-60HZ-	575V-3P-215T-1	3/8-CLASS	B	004-007570

NOTE: 1 ALL MOTORS SHOWN 575V-3P.

SHEAVES & BUSHINGS
STANDARD LEVELING SYSTEM
(AUGER)
230V-1P 240/480/575V-3P

MODEL			FT	MOTOR		AUGER	
				SHEAVE	BUSHING	SHEAVE	BUSHING
MSF-31010-CF	1P	10		1B3.4	SH 7/8	1B18.4	SK 1-1/4
MSF-31010-AB	1P	10		1B3.4	SH 7/8	1B18.4	SK 1-1/4
MSF-41515-CF	1P	10		1B3.4	SH 7/8	1B18.4	SK 1-1/4
MSF-41515-AB	1P	10		1B3.4	SH 7/8	1B18.4	SK 1-1/4
MSF-62520-CF		15		2B3.4	SH 7/8	2B18.4	SK 1-1/4
MSF-62520-AB		15		2B3.4	SH 7/8	2B18.4	SK 1-1/4
MSF-72525-CF		15		2B3.4	SH 7/8	2B18.4	SK 1-1/4
MSF-72525-AB		15		2B3.4	SH 7/8	2B18.4	SK 1-1/4
DP	2510 1P	10		1B3.4	SH 7/8	1B18.4	SK 1-1/4
DP	3015 1P	10		1B3.4	SH 7/8	1B18.4	SK 1-1/4
DP	4020 1P	15		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DP	5020 1P	20		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DP	7530 1P	30		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DP	10040 1P	40		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DP	3015	10		1B3.4	SH 7/8	1B18.4	SK 1-1/4
DP	4025	15		2B3.4	SH 7/8	2B18.4	SK 1-1/4
DP	6030	20		2B3.4	SH 7/8	2B18.4	SK 1-1/4
DP	7550	25		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DP	9045	30		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DP	12060	40		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPSL	3520	10		1B3.4	SH 7/8	1B18.4	SK 1-1/4
DPSL	4530	15		2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPSL	7040	20		2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPSL	8560	25		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPSL	10560	30		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPSL	14080	40		2B3.4	SH 1-1/8	2B18.4	SK 1-1/4

NOTE: 1. USE BELT P/N: 049-003364 (B82).
2. REFER TO SHEAVE-BUSHING-BELT PAGE FOR PART NUMBERS.

SHEAVES & BUSHINGS
STANDARD LEVELING SYSTEM
(AUGER)
230V-1P 240/480/575V-3P

MODEL		FT	MOTOR		AUGER	
			SHEAVE	BUSHING	SHEAVE	BUSHING
DPX	4525	10	1B3.4	SH 7/8	1B18.4	SK 1-1/4
DPX	7040	15	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX	9050	20	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX	13575	30	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX	180100	40	3B3.4	SH 1-3/8	3B18.4	SK 1-1/4
DPXSL	5030	10	1B3.4	SH 7/8	1B18.4	SK 1-1/4
DPXSL	8050	15	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPXSL	10060	20	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPXSL	12560	25	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPXSL	15090	30	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPXSL	200120	40	3B3.4	SH 1-3/8	3B18.4	SK 1-1/4
DPX4T	5630	10	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX4T	8460	15	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX4T	11260	20	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX4T	140100	25	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX4T	16890	30	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX4T	224120	40	3B3.4	SH 1-3/8	3B18.4	SK 1-1/4
DPX8T	6440	10	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX8T	9660	15	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX8T	12880	20	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX8T	160120	25	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX8T	192120	30	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX8T	256160	40	3B3.4	SH 1-3/8	3B18.4	SK 1-1/4
DPX12T	7250	10	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX12T	10860	15	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX12T	144100	20	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX12T	175120	25	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX12T	216150	30	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX12T	288200	40	3B3.4	SH 1-3/8	3B18.4	SK 1-1/4
DPX16GT	8250	10	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX16GT	12360	15	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX16GT	164100	20	2B3.4	SH 7/8	2B18.4	SK 1-1/4
DPX16GT	210120	25	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX16GT	246150	30	2B3.4	SH 1-1/8	2B18.4	SK 1-1/4
DPX16GT	328200	40	3B3.4	SH 1-3/8	3B18.4	SK 1-1/4

NOTE: 1. USE BELT P/N: 049-003364 (B82).
2. REFER TO SHEAVE-BUSHING-BELT PAGE FOR PART NUMBERS.

SHEAVES & BUSHINGS
STANDARD LEVELING SYSTEM
(AUGER)
380V-3P

MODEL		FT	MOTOR		AUGER	
			SHEAVE	BUSHING	SHEAVE	BUSHING
MSF-41515-CF		10	1B3.4	SH 7/8	1B15.4	SK 1-1/4
MSF-41515-AB		10	1B3.4	SH 7/8	1B15.4	SK 1-1/4
MSF-62520-CF		15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
MSF-62520-AB		15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
MSF-72525-CF		15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
MSF-72525-AB		15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DP	3015	10	1B3.4	SH 7/8	1B15.4	SK 1-1/4
DP	4025	15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DP	6030	20	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DP	7550	25	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DP	9045	30	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DP	12060	40	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPXL	3520	10	1B3.4	SH 7/8	1B15.4	SK 1-1/4
DPXL	4530	15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPXL	7040	20	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPXL	8560	25	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPXL	10560	30	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPXL	14080	40	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPX	4525	10	1B3.4	SH 7/8	1B15.4	SK 1-1/4
DPX	7040	15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPX	9050	20	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPX	13575	30	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPX	180100	40	3B3.4	SH 1-3/8	3B15.4	SK 1-1/4
DPXSL	5030	10	1B3.4	SH 7/8	1B15.4	SK 1-1/4
DPXSL	8050	15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPXSL	10060	20	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPXSL	12560	25	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPXSL	15090	30	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPXSL	200120	40	3B3.4	SH 1-3/8	3B15.4	SK 1-1/4

NOTE: 1. USE BELT P/N: 049-007874 (B76).
2. REFER TO SHEAVE-BUSHING-BELT PAGE FOR PART NUMBERS.

SHEAVES & BUSHINGS
STANDARD LEVELING SYSTEM
(AUGER)
380V-3P

MODEL	FT	MOTOR		AUGER	
		SHEAVE	BUSHING	SHEAVE	BUSHING
DPX4T 5630	10	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPX4T 8460	15	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPX4T 11260	20	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPX4T 140100	25	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPX4T 16890	30	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPX4T 224120	40	3B3.4	SH 1-3/8	3B15.4	SK 1-1/4
DPX8T 6440	10	2B3.4	SH 7/8	2B15.4	SK 1-1/4
DPX8T 9660	15	N/A	N/A	2B15.4	N/A
DPX8T 12880	20	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPX8T 160120	25	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPX8T 192120	30	2B3.4	SH 1-1/8	2B15.4	SK 1-1/4
DPX8T 256160	40	3B3.4	SH 1-3/8	3B15.4	SK 1-1/4
DPX12T 7250	10	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX12T 10860	15	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX12T 144100	20	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX12T 175120	25	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX12T 216150	30	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX12T 288200	40	3B3.4	SH 1-3/8	3B15.4	SK 1-1/4
DPX16GT 8250	10	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX16GT 12360	15	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX16GT 164100	20	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX16GT 210120	25	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX16GT 246150	30	2B3.4	SH 1-3/8	2B15.4	SK 1-1/4
DPX16GT 328200	40	3B3.4	SH 1-3/8	3B15.4	SK 1-1/4

NOTE: 1. USE BELT P/N: 049-007874 (B76).
2. REFER TO SHEAVE-BUSHING-BELT PAGE FOR PART NUMBERS.

SHIPPING LISTS

- DP & DPSL SERIES
- DPX & DPXSL SERIES
- DPX4T SERIES
- DPX8T SERIES
- DPX12T SERIES
- DPX16GT SERIES

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - ERECTION - SPLICE PLATES AND HARDWARE

DPX AND DPXSL MODELS

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ITEM	PART NUMBER	PART DESCRIPTION	10	15	20	25	30	40
1.	100-005261	SPLICE PLATE SHORT	4	4	4	4	4	4
2.	100-005262	SPLICE PLATE LONG	1	1	1	1	1	1
3.	100-006356	SPLICE PLATE PLENUM	2	2	2	2	2	2
4.	040-002739	TCS 5/16-18UNC X 3/4	50	50	50	50	50	50
5.	040-001483	BOLT 3/8-16UNC X 1	64	98	128	160	192	256
6.	040-001460	NUT 3/8-16UNC	64	98	128	160	192	256
7.	040-005321	BOLT 5/16-18UNC X 3/4	20	20	20	20	20	20
8.	040-001459	NUT 5/16-18UNC	20	20	20	20	20	20
9.	400-007555	PLENUM DOOR ASS'Y	1	1	1	1	1	1

-
- * HARDWARE INCLUDED FOR ROOF TO BASE ONLY (USE BOLTS 3/8-16UNC X 1)
 - * GARNER IS ASSEMBLED ON ROOF.
 - * SPLICE PLATES (USE TCS 5/16-18UNC X 3/4)
 - * PLENUM DOOR MUST BE INSTALLED IN FIELD,
HARDWARE INCLUDED (USE BOLTS 5/16-18UNC X 3/4).
 - * REFER TO ILLUSTRATION DRAWING P/N 900-005526 FOR LOCATION OF PARTS.

ADDITIONAL SHIPPING LIST FOR MODELS WITH DISCHARGE DRAG CONVEYORS

ITEM	PART NUMBER	PART DESCRIPTION	10	15	20	25	30	40
1.	040-005321	BOLT 5/16-16UNC-3/4	32	42	52	62	72	82
2.	040-001459	NUT 5/16-18UNC	32	42	52	62	72	82

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - ERECTION - SPLICE PLATES AND HARDWARE

DPX4T MODELS

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ITEM	PART NUMBER	PART DESCRIPTION	10	15	20	25	30	40
1.	100-005261	SPLICE PLATE SHORT	4	4	4	4	4	4
2.	100-005262	SPLICE PLATE LONG	1	1	1	1	1	1
3.	100-006356	SPLICE PLATE PLENUM	2	2	2	2	2	2
4.	040-002739	TCS 5/16-18UNC X 3/4	50	50	50	50	50	50
5.	040-001483	BOLT 3/8-16UNC X 1	64	98	128	160	192	256
6.	040-001460	NUT 3/8-16UNC	64	98	128	160	192	256
7.	040-005321	BOLT 5/16-18UNC X 3/4	24	24	24	24	24	24
8.	040-001459	NUT 5/16-18UNC	24	24	24	24	24	24
9.	400-007555	PLENUM DOOR ASS'Y	1	1	1	1	1	1

- * HARDWARE INCLUDED FOR ROOF TO BASE ONLY, (USE BOLTS 3/8-16UNC X 1)
- * FOUR FOOT EMPTY AND ROOF SHIPPED AS ONE SECTION.
- * GARNER IS SHIPPED NOT ASSEMBLED.
- * SPLICE PLATES (USE TCS 5/16-18UNC X 3/4)
- * PLENUM DOOR MUST BE INSTALLED IN FIELD,
HARDWARE INCLUDED (USE BOLTS 5/16-18UNC X 3/4)
- * REFER TO ILLUSTRATION DRAWING P/N 900-005526 FOR LOCATION OF PARTS.

ADDITIONAL SHIPPING LIST FOR MODELS WITH DISCHARGE DRAG CONVEYORS

ITEM	PART NUMBER	PART DESCRIPTION	10	15	20	25	30	40
1.	040-005321	BOLT 5/16-16UNC-3/4	32	42	52	62	72	82
2.	040-001459	NUT 5/16-18UNC	32	42	52	62	72	82

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - ERECTION - SPLICE PLATES AND HARDWARE

DPX8T MODELS

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ITEM	PART NUMBER	PART DESCRIPTION	10	15	20	25	30	40
1.	100-005261	SPLICE PLATE SHORT	8	8	8	8	8	8
2.	100-005262	SPLICE PLATE LONG	3	3	3	3	3	3
3.	100-006356	SPLICE PLATE PLENUM	2	2	2	2	2	2
4.	040-002739	TCS 5/16-18UNC X 3/4	110	110	110	110	110	110
4.	040-002193	BOLT 3/8-16UNC X 3/4	8	16	16	16	24	32
6.	040-001483	BOLT 3/8-16UNC X 1	128	192	256	320	384	512
7.	040-001460	NUT 3/8-16UNC	136	192	272	336	408	544
8.	040-005321	BOLT 5/16-18UNC X 3/4	24	24	24	24	24	24
9.	040-001459	NUT 5/16-18UNC	24	24	24	24	24	24
10.	400-007555	PLENUM DOOR ASS'Y	1	1	1	1	1	1

* HARDWARE INCLUDED FOR ROOF TO TWELVE FOOT SECTION AND TWELVE FOOT SECTION TO BASE. (USE BOLTS 3/8-16UNC X 1)

* GARNER IS SHIPPED ASSEMBLED ON ROOF.

* SPLICE PLATES (USE TCS 5/16-18UNC X 3/4)

* BURNER DRUMS MUST BE INSTALLED IN FIELD, HARDWARE INCLUDED (USE BOLTS 3/8-16UNC X 3/4)

* REFER TO ILLUSTRATION DRAWING P/N 900-005526 FOR LOCATION OF PARTS.

ADDITIONAL SHIPPING LIST FOR MODELS WITH DISCHARGE DRAG CONVEYORS

ITEM	PART NUMBER	PART DESCRIPTION	10	15	20	25	30	40
1.	040-005321	BOLT 5/16-16UNC-3/4	32	42	52	62	72	82
2.	040-001459	NUT 5/16-18UNC	32	42	52	62	72	82

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - ERECTION - SPLICE PLATES AND HARDWARE

DPX12T/DPX16GT MODELS

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ITEM	PART NUMBER	PART DESCRIPTION	10	15	20	25	30	40
1.	100-005261	SPLICE PLATE SHORT	8	8	8	8	8	8
2.	100-005262	SPLICE PLATE LONG	4	4	4	4	4	4
3.	040-002739	TCS 5/16-18UNC X 3/4	120	120	120	120	120	120
4.	040-002193	BOLT 3/8-16UNC X 3/4	8	16	16	16	24	32
5.	040-001483	BOLT 3/8-16UNC X 1	128	192	256	320	384	512
6.	040-001460	NUT 3/8-16UNC	136	192	272	336	408	544

* HARDWARE INCLUDED FOR ROOF TO TWELVE FOOT SECTION AND
TWELVE FOOT SECTION TO BASE. (USE BOLTS 3/8-16UNC X 1)

* DPX12T: GARNER IS SHIPPED ASSEMBLED ON ROOF.

* DPX16GT: GARNER IS SHIPPED **NOT** ASSEMBLED.

* SPLICE PLATES (USE TCS 5/16-18UNC X 3/4)

* BURNER DRUMS MUST BE INSTALLED IN FIELD,
HARDWARE INCLUDED (USE BOLTS 3/8-16UNC X 3/4)

* REFER TO ILLUSTRATION DRAWING P/N 900-005526 FOR LOCATION OF PARTS.

ADDITIONAL SHIPPING LIST FOR MODELS WITH DISCHARGE DRAG CONVEYORS

ITEM	PART NUMBER	PART DESCRIPTION	10	15	20	25	30	40
1.	040-005321	BOLT 5/16-16UNC-3/4	32	42	52	62	72	82
2.	040-001459	NUT 5/16-18UNC	32	42	52	62	72	82

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - MSF/DP MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

1P - DENOTES 230V-1P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	1P (FT)10	1P 15	1P 20	1P 30	1P 40
400-009208	TOP ASS'Y 10FT W/ONE DOOR W/ 8"	1	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1
200-002976	TOP ASS'Y 10FT INTERMEDIATE	-	-	-	1	2
200-005516	TOP ASS'Y 5FT REAR W/ 8"	-	1	-	-	-
200-002978	TOP ASS'Y 10FT REAR W/ 8"	-	-	1	1	1
400-007623	GARNER SIDE ASS'Y 5FT - 22"	-	2	-	-	-
400-007624	GARNER SIDE ASS'Y 10FT - 22"	2	2	4	6	8
100-002599	CROSS STRAP	2	2	4	6	8
100-002589	TOP GARNER SIDE STIFFENING BRACKET	2	2	4	6	8
100-007641	LADDER SUPPORT BRACKET	1	1	1	1	1
100-002852	END PLATE FRONT W/SWITCH	1	1	1	1	1
100-006819	END PLATE REAR STANDARD	1	1	1	1	-
100-006820	END PLATE REAR W/SWITCH 40FT	-	-	-	-	1
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	1
100-006824	AUGER HEAD PLATE FRONT	1	1	1	1	1
100-006825	AUGER HEAD PLATE REAR	1	1	1	1	1
200-006834	AUGER ONLY 10FT ONLY - 8"	1	-	-	-	-
200-006723	AUGER ONLY FRONT 10FT - 8"	-	1	1	1	1
200-006724	AUGER ONLY INTER 10FT - 8"	-	-	-	1	2
200-006721	AUGER ONLY REAR 5FT - 8"	-	1	-	-	-
200-006720	AUGER ONLY REAR 10FT - 8"	-	-	1	1	1
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	3
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1
040-005324	BOLT HEX 7/16-14UNC X 3"	4	8	8	12	16
040-006732	NUT -LOCK 7/16-14UNC	4	8	8	12	16
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"	-	1	1	2	3
200-006992	AUGER TROUGH INTER 10FT - 8"	-	-	-	1	2
200-007002	AUGER TROUGH REAR 5FT - 8"	1	1	-	-	-
200-006993	AUGER TROUGH REAR 10FT - 8"	-	-	1	1	1

MODEL: _____LENGTH_____FT

SERIAL NO: _____-_____-_____-_____-_____

SHIPPING LIST - GARNER ASSEMBLY - MSF/DP MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

1P - DENOTES 230V-1P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	1P (FT)10	1P 15	1P 20	1P 30	1P 40
200-005388	BELT GUARD	1	1	1	1	1
100-003343	BELT GUARD BACK PLATE	1	1	1	1	1
049-003364	BELT "B82" 83.3PITCH	1	2	2	2	2
056-005370	SHEAVE AUGER 1B18.4	1	-	-	-	-
056-005372	SHEAVE AUGER 2B18.4	-	1	1	1	1
056-006830	BUSHING QD-SK 1-1/4	1	1	1	1	1
056-005371	SHEAVE MOTOR 1B3.4	1	-	-	-	-
056-005373	SHEAVE MOTOR 2B3.4	-	1	1	1	1
056-005375	BUSHING QD-SH 7/8	1	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8	-	1	1	1	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"	2	2	2	2	2
004-003236	MOTOR 1HP 1750RPM 230V-1P 143T 7/8	1	-	-	-	-
004-007779	MOTOR 2HP 1750RPM 230V-1P 182T 1-1/8	-	1	1	-	-
004-005417	MOTOR 3HP 1750RPM 230V-1P 182T 1-1/8	-	-	-	1	-
004-004869	MOTOR 5HP 1750RPM 230V-1P 184T 1-1/8	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE	1	-	-	-	-
100-007396	MOTOR PLATE TOP	1	1	1	1	1
100-002855	MOTOR PLATE BOT	1	1	1	1	1
040-002739	TCS 5/16-18UNC X 3/4	29	29	29	29	29
040-005321	BOLT WHIZ 5/16-18UNC X 3/4	120	150	190	300	375
040-001459	NUT WHIZ 5/16-18UNC	120	150	190	300	375
040-001483	BOLT WHIZ 3/8 -16UNC X 1	23	25	27	32	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC	27	29	31	36	40

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - MSF/DP/DPSL MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 240V/480V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	3P 10	3P 15	3P 20	3P 25	3P 30	3P 40
400-009208	TOP ASS'Y 10FT W/ONE DOOR W/ 8"		1	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"		-	1	1	1	1	1
200-002976	TOP ASS'Y 10FT INTERMEDIATE		-	-	-	1	1	2
200-005516	TOP ASS'Y 5FT REAR W/ 8"		-	1	-	1	-	-
200-002978	TOP ASS'Y 10FT REAR W/ 8"		-	-	1	-	1	1
400-007623	GARNER SIDE ASS'Y 5FT - 22"		-	2	-	2	-	-
400-007624	GARNER SIDE ASS'Y 10FT - 22"		2	2	4	4	6	8
100-002599	CROSS STRAP		2	2	4	4	6	8
100-002589	TOP GARNER SIDE STIFFENING BRACKET		2	2	4	4	6	8
100-007641	LADDER SUPPORT BRACKET		1	1	1	1	1	1
100-002852	END PLATE FRONT W/SWITCH		1	1	1	1	1	1
100-006819	END PLATE REAR STANDARD		1	1	1	1	1	-
100-006820	END PLATE REAR W/SWITCH 40FT		-	-	-	-	-	1
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)		1	1	1	1	1	1
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)		1	1	1	1	1	1
100-006824	AUGER HEAD PLATE FRONT		1	1	1	1	1	1
100-006825	AUGER HEAD PLATE REAR		1	1	1	1	1	1
200-006834	AUGER ONLY 10FT ONLY - 8"		1	-	-	-	-	-
200-006723	AUGER ONLY FRONT 10FT - 8"		-	1	1	1	1	1
200-006724	AUGER ONLY INTER 10FT - 8"		-	-	-	1	1	2
200-006721	AUGER ONLY REAR 5FT - 8"		-	1	-	1	-	-
200-006720	AUGER ONLY REAR 10FT - 8"		-	-	1	-	1	1
100-006727	AUGER SHAFT 1 1/4" FT-KEYED		1	1	1	1	1	1
100-006726	AUGER SHAFT 1 1/4" INTER		-	1	1	2	2	3
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED		1	1	1	1	1	1
040-005324	BOLT HEX 7/16-14UNC X 3"		4	8	8	12	12	16
040-006732	NUT -LOCK 7/16-14UNC		4	8	8	12	12	16
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"		-	1	1	2	2	3

MODEL : _____LENGTH_____FT

SERIAL NO: _____-_____-_____-_____-_____

SHIPPING LIST - GARNER ASSEMBLY - MSF/DP/DPSL MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 240V/480V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	3P 10	3P 15	3P 20	3P 25	3P 30	3P 40
200-006992	AUGER TROUGH INTER	10FT - 8"	-	-	1	1	1	2
200-007002	AUGER TROUGH REAR	5FT - 8"	1	1	-	1	-	-
200-006993	AUGER TROUGH REAR	10FT - 8"	-	-	1	-	1	1
200-005388	BELT GUARD		1	1	1	1	1	1
100-003343	BELT GUARD BACK PLATE		1	1	1	1	1	1
049-003364	BELT "B82" 83.3PITCH		1	2	2	2	2	2
056-005370	SHEAVE AUGER 1B18.4		1	-	-	-	-	-
056-005372	SHEAVE AUGER 2B18.4		-	1	1	1	1	1
056-006830	BUSHING QD-SK 1-1/4		1	1	1	1	1	1
056-005371	SHEAVE MOTOR 1B3.4		1	-	-	-	-	-
056-005373	SHEAVE MOTOR 2B3.4		-	1	1	1	1	1
056-005375	BUSHING QD-SH 7/8		1	1	1	-	-	-
056-005376	BUSHING QD-SH 1-1/8		-	-	-	1	1	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"		2	2	2	2	2	2
004-002355	MOTOR 1HP 1750RPM 240/480V-3P	143T 7/8	1	-	-	-	-	-
004-002673	MOTOR 2HP 1750RPM 240/480V-3P	145T 7/8	-	1	1	-	-	-
004-002671	MOTOR 3HP 1750RPM 240/480V-3P	182T 1-1/8	-	-	-	1	1	-
004-002672	MOTOR 5HP 1750RPM 240/480V-3P	184T 1-1/8	-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"		1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE		1	1	1	-	-	-
100-007396	MOTOR PLATE TOP		1	1	1	1	1	1
100-002855	MOTOR PLATE BOT		1	1	1	1	1	1
040-002739	TCS 5/16-18UNC X 3/4		29	29	29	29	29	29
040-005321	BOLT WHIZ 5/16-18UNC X 3/4		120	150	190	230	300	375
040-001459	NUT WHIZ 5/16-18UNC		120	150	190	230	300	375
040-001483	BOLT WHIZ 3/8 -16UNC X 1		23	25	27	28	32	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4		4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC		27	29	31	32	36	40

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - MSF/DP/DPSL MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 380V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	3P 10	3P 15	3P 20	3P 25	3P 30	3P 40
400-009208	TOP ASS'Y 10FT W/ONE DOOR W/ 8"		1	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"		-	1	1	1	1	1
200-002976	TOP ASS'Y 10FT INTERMEDIATE		-	-	-	1	1	2
200-005516	TOP ASS'Y 5FT REAR W/ 8"		-	1	-	1	-	-
200-002978	TOP ASS'Y 10FT REAR W/ 8"		-	-	1	-	1	1
400-007623	GARNER SIDE ASS'Y 5FT - 22"		-	2	-	2	-	-
400-007624	GARNER SIDE ASS'Y 10FT - 22"		2	2	4	4	6	8
100-002599	CROSS STRAP		2	2	4	4	6	8
100-002589	TOP GARNER SIDE STIFFENING BRACKET		2	2	4	4	6	8
100-007641	LADDER SUPPORT BRACKET		1	1	1	1	1	1
100-002852	END PLATE FRONT W/SWITCH		1	1	1	1	1	1
100-006819	END PLATE REAR STANDARD		1	1	1	1	1	-
100-006820	END PLATE REAR W/SWITCH 40FT		-	-	-	-	-	1
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)		1	1	1	1	1	2
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)		1	1	1	1	1	2
100-006824	AUGER HEAD PLATE FRONT		1	1	1	1	1	1
100-006825	AUGER HEAD PLATE REAR		1	1	1	1	1	1
200-006834	AUGER ONLY 10FT ONLY - 8"		1	-	-	-	-	-
200-006723	AUGER ONLY FRONT 10FT - 8"		-	1	1	1	1	1
200-006724	AUGER ONLY INTER 10FT - 8"		-	-	-	1	1	2
200-006721	AUGER ONLY REAR 5FT - 8"		-	1	-	1	-	-
200-006720	AUGER ONLY REAR 10FT - 8"		-	-	1	-	1	1
100-006727	AUGER SHAFT 1 1/4" FT-KEYED		1	1	1	1	1	1
100-006726	AUGER SHAFT 1 1/4" INTER		-	1	1	2	2	3
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED		1	1	1	1	1	1
040-005324	BOLT HEX 7/16-14UNC X 3"		4	8	8	12	12	16
040-006732	NUT -LOCK 7/16-14UNC		4	8	8	12	12	16
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"		-	1	1	2	2	3

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - MSF/DP/DPSL MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 380V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	3P 10	3P 15	3P 20	3P 25	3P 30	3P 40
200-006992	AUGER TROUGH INTER 10FT - 8"		-	-	1	1	1	2
200-007002	AUGER TROUGH REAR 5FT - 8"		1	1	-	1	-	-
200-006993	AUGER TROUGH REAR 10FT - 8"		-	-	1	-	1	1
200-005388	BELT GUARD		1	1	1	1	1	1
100-003343	BELT GUARD BACK PLATE		1	1	1	1	1	1
049-007874	BELT "B76" 77.8PITCH		1	2	2	2	2	2
056-007871	SHEAVE AUGER 1B15.4		1	-	-	-	-	-
056-007872	SHEAVE AUGER 2B15.4		-	1	1	1	1	1
056-006830	BUSHING QD-SK 1-1/4		1	1	1	1	1	1
056-005371	SHEAVE MOTOR 1B3.4		1	-	-	-	-	-
056-005373	SHEAVE MOTOR 2B3.4		-	1	1	1	1	1
056-005375	BUSHING QD-SH 7/8		1	1	1	-	-	-
056-005376	BUSHING QD-SH 1-1/8		-	-	-	1	1	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"		2	2	2	2	2	2
004-007853	MOTOR 1HP 1450RPM 380V-3P 143T 7/8		1	-	-	-	-	-
004-007854	MOTOR 2HP 1450RPM 380V-3P 145T 7/8		-	1	1	-	-	-
004-007855	MOTOR 3HP 1450RPM 380V-3P 182T 1-1/8		-	-	-	1	1	-
004-007629	MOTOR 5HP 1450RPM 380V-3P 184T 1-1/8		-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"		1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE		1	1	1	-	-	-
100-007396	MOTOR PLATE TOP		1	1	1	1	1	1
100-002855	MOTOR PLATE BOT		1	1	1	1	1	1
040-002739	TCS 5/16-18UNC X 3/4		29	29	29	29	29	29
040-005321	BOLT WHIZ 5/16-18UNC X 3/4		120	150	190	230	300	375
040-001459	NUT WHIZ 5/16-18UNC		120	150	190	230	300	375
040-001483	BOLT WHIZ 3/8 -16UNC X 1		23	25	27	28	32	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4		4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC		27	29	31	32	36	40

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - MSF/DP/DPSL MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 575V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	3P 10	3P 15	3P 20	3P 25	3P 30	3P 40
400-009208	TOP ASS'Y 10FT W/ONE DOOR W/ 8"		1	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"		-	1	1	1	1	1
200-002976	TOP ASS'Y 10FT INTERMEDIATE		-	-	-	1	1	2
200-005516	TOP ASS'Y 5FT REAR W/ 8"		-	1	-	1	-	-
200-002978	TOP ASS'Y 10FT REAR W/ 8"		-	-	1	-	1	1
400-007623	GARNER SIDE ASS'Y 5FT - 22"		-	2	-	2	-	-
400-007624	GARNER SIDE ASS'Y 10FT - 22"		2	2	4	4	6	8
100-002599	CROSS STRAP		2	2	4	4	6	8
100-002589	TOP GARNER SIDE STIFFENING BRACKET		2	2	4	4	6	8
100-007641	LADDER SUPPORT BRACKET		1	1	1	1	1	1
100-002852	END PLATE FRONT W/SWITCH		1	1	1	1	1	1
100-006819	END PLATE REAR STANDARD		1	1	1	1	1	-
100-006820	END PLATE REAR W/SWITCH 40FT		-	-	-	-	-	1
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)		1	1	1	1	1	2
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)		-	-	-	-	-	1
100-006824	AUGER HEAD PLATE FRONT		1	1	1	1	1	1
100-006825	AUGER HEAD PLATE REAR		1	1	1	1	1	1
200-006834	AUGER ONLY 10FT ONLY - 8"		1	-	-	-	-	-
200-006723	AUGER ONLY FRONT 10FT - 8"		-	1	1	1	1	1
200-006724	AUGER ONLY INTER 10FT - 8"		-	-	-	1	1	2
200-006721	AUGER ONLY REAR 5FT - 8"		-	1	-	1	-	-
200-006720	AUGER ONLY REAR 10FT - 8"		-	-	1	-	1	1
100-006727	AUGER SHAFT 1 1/4" FT-KEYED		1	1	1	1	1	1
100-006726	AUGER SHAFT 1 1/4" INTER		-	1	1	2	2	3
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED		1	1	1	1	1	1
040-005324	BOLT HEX 7/16-14UNC X 3"		4	8	8	12	12	16
040-006732	NUT -LOCK 7/16-14UNC		4	8	8	12	12	16
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"		-	1	1	2	2	3

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - MSF/DP/DPSL MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 575V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	3P 10	3P 15	3P 20	3P 25	3P 30	3P 40
200-006992	AUGER TROUGH INTER 10FT - 8"		-	-	1	1	1	2
200-007002	AUGER TROUGH REAR 5FT - 8"		1	1	-	1	-	-
200-006993	AUGER TROUGH REAR 10FT - 8"		-	-	1	-	1	1
200-005388	BELT GUARD		1	1	1	1	1	1
100-003343	BELT GUARD BACK PLATE		1	1	1	1	1	1
049-003364	BELT "B82" 83.3PITCH		1	2	2	2	2	2
056-005370	SHEAVE AUGER 1B18.4		1	-	-	-	-	-
056-005372	SHEAVE AUGER 2B18.4		-	1	1	1	1	1
056-006830	BUSHING QD-SK 1-1/4		1	1	1	1	1	1
056-005371	SHEAVE MOTOR 1B3.4		1	-	-	-	-	-
056-005373	SHEAVE MOTOR 2B3.4		-	1	1	1	1	1
056-005375	BUSHING QD-SH 7/8		1	1	1	-	-	-
056-005376	BUSHING QD-SH 1-1/8		-	-	-	1	1	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"		2	2	2	2	2	2
004-007630	MOTOR 1HP 1750RPM 575V-3P 143T 7/8		1	-	-	-	-	-
004-007425	MOTOR 2HP 1750RPM 575V-3P 145T 7/8		-	1	1	-	-	-
004-007615	MOTOR 3HP 1750RPM 575V-3P 182T 1-1/8		-	-	-	1	1	-
004-007629	MOTOR 5HP 1750RPM 575V-3P 184T 1-1/8		-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"		1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE		1	1	1	-	-	-
100-007396	MOTOR PLATE TOP		1	1	1	1	1	1
100-002855	MOTOR PLATE BOT		1	1	1	1	1	1
040-002739	TCS 5/16-18UNC X 3/4		29	29	29	29	29	29
040-005321	BOLT WHIZ 5/16-18UNC X 3/4		120	150	190	230	300	375
040-001459	NUT WHIZ 5/16-18UNC		120	150	190	230	300	375
040-001483	BOLT WHIZ 3/8 -16UNC X 1		23	25	27	28	32	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4		4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC		27	29	31	32	36	40

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX/DPXSL MODELS
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 240V/480V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOORS W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y 10FT INTERMEDIATE	-	-	-	1	1	2	2
400-009220	TOP ASS'Y 5FT W/REAR DOOR W/ 8"	-	1	-	1	-	-	-
400-009221	TOP ASS'Y 10FT W/REAR DOOR W/ 8"	-	-	1	-	1	1	1
400-007623	GARNER SIDE ASS'Y 5FT - 22"	-	2	-	2	-	-	-
400-007624	GARNER SIDE ASS'Y 10FT - 22"	2	2	4	4	6	8	8
100-002599	CROSS STRAP	2	2	4	4	6	8	8
100-002589	TOP GARNER SIDE STIFFENING BRACKET	2	2	4	4	6	8	8
100-002852	END PLATE FRONT W/SWITCH	1	1	1	1	1	-	-
100-006819	END PLATE REAR STANDARD	1	1	1	1	1	-	-
100-006821	END PLATE FRONT W/SWITCH 40FT	-	-	-	-	-	1	1
100-006822	END PLATE REAR W/SWITCH 40FT	-	-	-	-	-	1	1
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1	1	1
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	-	1	1
100-006824	AUGER HEAD PLATE FRONT - 8"	1	1	1	1	1	-	-
100-006825	AUGER HEAD PLATE REAR - 8"	1	1	1	1	1	-	-
100-006770	AUGER HEAD PLATE FRONT - 10"	-	-	-	-	-	1	1
100-006771	AUGER HEAD PLATE REAR - 10"	-	-	-	-	-	1	1
200-006834	AUGER ONLY 10FT ONLY - 8"	1	-	-	-	-	-	-
200-006723	AUGER ONLY FRONT 10FT - 8"	-	1	1	1	1	-	-
200-006724	AUGER ONLY INTER 10FT - 8"	-	-	-	1	1	-	-
200-006721	AUGER ONLY REAR 5FT - 8"	-	1	-	1	-	-	-
200-006720	AUGER ONLY REAR 10FT - 8"	-	-	-	-	1	-	-
200-006794	AUGER ONLY FRONT 10FT - 10"	-	-	-	-	-	1	1
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	-	-	2	2
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	-	-	-	1	1
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	1
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	3
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	1
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	16
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	16
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"	-	1	1	2	2	-	-
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	-	-	-	-	3	3

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX/DPXSL MODELS

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 240V/480V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006992	AUGER TROUGH INTER 10FT - 8"	-	-	1	1	1	-	-
200-007002	AUGER TROUGH REAR 5FT - 8"	1	1	-	1	-	-	-
200-006993	AUGER TROUGH REAR 10FT - 8"	-	-	1	-	1	-	-
200-006999	AUGER TROUGH INTER 10FT - 10"	-	-	-	-	-	-	2
200-007000	AUGER TROUGH REAR 10FT - 10"	-	-	-	-	-	-	1
200-005388	BELT GUARD - 8"	1	1	1	1	1	-	-
100-003343	BELT GUARD BACK PLATE - 8"	1	1	1	1	1	-	-
200-006817	BELT GUARD - 10"	-	-	-	-	-	-	1
100-006818	BELT GUARD BACK PLATE - 10"	-	-	-	-	-	-	1
049-003364	BELT "B82" 83.3PITCH	1	2	2	2	2	2	3
056-005370	SHEAVE AUGER 1B18.4	1	-	-	-	-	-	-
056-005372	SHEAVE AUGER 2B18.4	-	1	1	1	1	-	-
056-006832	SHEAVE AUGER 3B18.4	-	-	-	-	-	-	1
056-006830	BUSHING QD-SK 1 1/4	1	1	1	1	1	1	1
056-005371	SHEAVE MOTOR 1B3.4	1	-	-	-	-	-	-
056-005373	SHEAVE MOTOR 2B3.4	-	1	1	1	1	-	-
056-006833	SHEAVE MOTOR 3B3.4	-	-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8	1	1	1	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8	-	-	-	1	1	-	-
056-006344	BUSHING QD-SH 1-3/8	-	-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"	2	2	2	2	2	2	2
004-002355	MOTOR 1HP 1750RPM 240/480V-3P 143T 7/8	1	-	-	-	-	-	-
004-002673	MOTOR 2HP 1750RPM 240/480V-3P 145T 7/8	-	1	1	-	-	-	-
004-002671	MOTOR 3HP 1750RPM 240/480V-3P 182T 1-1/8	-	-	-	1	1	-	-
004-002675	MOTOR 10HP 1750RPM 240/480V-3P 215T 1-3/8	-	-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"	1	1	1	1	1	-	-
100-007397	MOTOR ADAPTER PLATE	1	1	1	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP	1	1	1	1	1	-	-
100-002855	MOTOR PLATE BOT 1-5HP	1	1	1	1	1	-	-
100-006740	MOTOR PLATE TOP 10HP	-	-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP	-	-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4	22	22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4	114	144	184	224	294	364	364
040-001459	NUT WHIZ 5/16-18UNC	114	144	184	224	294	364	364
040-001483	BOLT WHIZ 3/8 -16UNC X 1	20	22	24	28	32	36	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4	4	4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC	24	26	28	32	36	40	40

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX/DPXSL MODELS
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 380V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOORS W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y 10FT INTERMEDIATE	-	-	-	1	1	2	
400-009220	TOP ASS'Y 5FT W/REAR DOOR W/ 8"	-	1	-	1	-	-	
400-009221	TOP ASS'Y 10FT W/REAR DOOR W/ 8"	-	-	1	-	1	1	
400-007623	GARNER SIDE ASS'Y 5FT - 22"	-	2	-	2	-	-	
400-007624	GARNER SIDE ASS'Y 10FT - 22"	2	2	4	4	6	8	
100-002599	CROSS STRAP	2	2	4	4	6	8	
100-002589	TOP GARNER SIDE STIFFENING BRACKET	2	2	4	4	6	8	
100-002852	END PLATE FRONT W/SWITCH	1	1	1	1	1	-	
100-006819	END PLATE REAR STANDARD	1	1	1	1	1	-	
100-006821	END PLATE FRONT W/SWITCH 40FT	-	-	-	-	-	1	
100-006822	END PLATE REAR W/SWITCH 40FT	-	-	-	-	-	1	
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1	1	
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	-	1	
100-006824	AUGER HEAD PLATE FRONT - 8"	1	1	1	1	1	-	
100-006825	AUGER HEAD PLATE REAR - 8"	1	1	1	1	1	-	
100-006770	AUGER HEAD PLATE FRONT - 10"	-	-	-	-	-	1	
100-006771	AUGER HEAD PLATE REAR - 10"	-	-	-	-	-	1	
200-006834	AUGER ONLY 10FT ONLY - 8"	1	-	-	-	-	-	
200-006723	AUGER ONLY FRONT 10FT - 8"	-	1	1	1	1	-	
200-006724	AUGER ONLY INTER 10FT - 8"	-	-	-	1	1	-	
200-006721	AUGER ONLY REAR 5FT - 8"	-	1	-	1	-	-	
200-006720	AUGER ONLY REAR 10FT - 8"	-	-	-	-	1	-	
200-006794	AUGER ONLY FRONT 10FT - 10"	-	-	-	-	-	1	
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	-	-	2	
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	-	-	-	1	
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"	-	1	1	2	2	-	
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	-	-	-	-	3	

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX/DPXSL MODELS
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 380V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006992	AUGER TROUGH INTER 10FT - 8"	-	-	1	1	1	-	-
200-007002	AUGER TROUGH REAR 5FT - 8"	1	1	-	1	-	-	-
200-006993	AUGER TROUGH REAR 10FT - 8"	-	-	1	-	1	-	-
200-006999	AUGER TROUGH INTER 10FT - 10"	-	-	-	-	-	-	2
200-007000	AUGER TROUGH REAR 10FT - 10"	-	-	-	-	-	-	1
200-005388	BELT GUARD - 8"	1	1	1	1	1	-	-
100-003343	BELT GUARD BACK PLATE - 8"	1	1	1	1	1	-	-
200-006817	BELT GUARD - 10"	-	-	-	-	-	-	1
100-006818	BELT GUARD BACK PLATE - 10"	-	-	-	-	-	-	1
049-007874	BELT "B76" 77.8PITCH	1	2	2	2	2	3	-
056-007871	SHEAVE AUGER 1B15.4	1	-	-	-	-	-	-
056-007872	SHEAVE AUGER 2B15.4	-	1	1	1	1	-	-
056-007873	SHEAVE AUGER 3B15.4	-	-	-	-	-	-	1
056-006830	BUSHING QD-SK 1-1/4	1	1	1	1	1	1	1
056-005371	SHEAVE MOTOR 1B3.4	1	-	-	-	-	-	-
056-005373	SHEAVE MOTOR 2B3.4	-	1	1	1	1	-	-
056-006833	SHEAVE MOTOR 3B3.4	-	-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8	1	1	1	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8	-	-	-	1	1	-	-
056-006344	BUSHING QD-SH 1-3/8	-	-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"	2	2	2	2	2	2	2
004-007853	MOTOR 1HP 1450RPM 380V-3P 143T 7/8	1	-	-	-	-	-	-
004-007854	MOTOR 2HP 1450RPM 380V-3P 145T 7/8	-	1	1	-	-	-	-
004-007855	MOTOR 3HP 1450RPM 380V-3P 182T 1-1/8	-	-	-	1	1	-	-
004-007857	MOTOR 10HP 1450RPM 380V-3P 215T 1-3/8	-	-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"	1	1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE	1	1	1	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP	1	1	1	1	1	-	-
100-002855	MOTOR PLATE BOT 1-5HP	1	1	1	1	1	-	-
100-006740	MOTOR PLATE TOP 10HP	-	-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP	-	-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4	22	22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4	114	144	184	224	294	364	-
040-001459	NUT WHIZ 5/16-18UNC	114	144	184	224	294	364	-
040-001483	BOLT WHIZ 3/8 -16UNC X 1	20	22	24	28	34	40	-
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4	4	4	4	4	4	4	-
040-001460	NUT WHIZ 3/8 -16UNC	24	26	28	32	36	40	-

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX/DPXSL MODELS
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 575V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOORS W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y 10FT INTERMEDIATE	-	-	-	1	1	2	
400-009220	TOP ASS'Y 5FT W/REAR DOOR W/ 8"	-	1	-	1	-	-	
400-009221	TOP ASS'Y 10FT W/REAR DOOR W/ 8"	-	-	1	-	1	1	
400-007623	GARNER SIDE ASS'Y 5FT - 22"	-	2	-	2	-	-	
400-007624	GARNER SIDE ASS'Y 10FT - 22"	2	2	4	4	6	8	
100-002599	CROSS STRAP	2	2	4	4	6	8	
100-002589	TOP GARNER SIDE STIFFENING BRACKET	2	2	4	4	6	8	
100-002852	END PLATE FRONT W/SWITCH	1	1	1	1	1	-	
100-006819	END PLATE REAR STANDARD	1	1	1	1	1	-	
100-006821	END PLATE FRONT W/SWITCH 40FT	-	-	-	-	-	1	
100-006822	END PLATE REAR W/SWITCH 40FT	-	-	-	-	-	1	
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1	1	
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	-	1	
100-006824	AUGER HEAD PLATE FRONT - 8"	1	1	1	1	1	-	
100-006825	AUGER HEAD PLATE REAR - 8"	1	1	1	1	1	-	
100-006770	AUGER HEAD PLATE FRONT - 10"	-	-	-	-	-	1	
100-006771	AUGER HEAD PLATE REAR - 10"	-	-	-	-	-	1	
200-006834	AUGER ONLY 10FT ONLY - 8"	1	-	-	-	-	-	
200-006723	AUGER ONLY FRONT 10FT - 8"	-	1	1	1	1	-	
200-006724	AUGER ONLY INTER 10FT - 8"	-	-	-	1	1	-	
200-006721	AUGER ONLY REAR 5FT - 8"	-	1	-	1	-	-	
200-006720	AUGER ONLY REAR 10FT - 8"	-	-	-	-	1	-	
200-006794	AUGER ONLY FRONT 10FT - 10"	-	-	-	-	-	1	
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	-	-	2	
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	-	-	-	1	
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"	-	1	1	2	2	-	
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	-	-	-	-	3	

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX/DPXSL MODELS
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 575V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006992	AUGER TROUGH INTER 10FT - 8"	-	-	1	1	1	-	-
200-007002	AUGER TROUGH REAR 5FT - 8"	1	1	-	1	-	-	-
200-006993	AUGER TROUGH REAR 10FT - 8"	-	-	1	-	1	-	-
200-006999	AUGER TROUGH INTER 10FT - 10"	-	-	-	-	-	-	2
200-007000	AUGER TROUGH REAR 10FT - 10"	-	-	-	-	-	-	1
200-005388	BELT GUARD - 8"	1	1	1	1	1	-	-
100-003343	BELT GUARD BACK PLATE - 8"	1	1	1	1	1	-	-
200-006817	BELT GUARD - 10"	-	-	-	-	-	-	1
100-006818	BELT GUARD BACK PLATE - 10"	-	-	-	-	-	-	1
049-003364	BELT "B82" 83.3PITCH	1	2	2	2	2	3	-
056-005370	SHEAVE AUGER 1B18.4	1	-	-	-	-	-	-
056-005372	SHEAVE AUGER 2B18.4	-	1	1	1	1	-	-
056-006832	SHEAVE AUGER 3B18.4	-	-	-	-	-	-	1
056-006830	BUSHING QD-SK 1 1/4	1	1	1	1	1	1	1
056-005371	SHEAVE MOTOR 1B3.4	1	-	-	-	-	-	-
056-005373	SHEAVE MOTOR 2B3.4	-	1	1	1	1	-	-
056-006833	SHEAVE MOTOR 3B3.4	-	-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8	1	1	1	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8	-	-	-	1	1	-	-
056-006344	BUSHING QD-SH 1-3/8	-	-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"	2	2	2	2	2	2	2
004-007630	MOTOR 1HP 1750RPM 575V-3P 143T 7/8	1	-	-	-	-	-	-
004-007425	MOTOR 2HP 1750RPM 575V-3P 145T 7/8	-	1	1	-	-	-	-
004-007615	MOTOR 3HP 1750RPM 575V-3P 182T 1-1/8	-	-	-	1	1	-	-
004-007570	MOTOR 10HP 1750RPM 575V-3P 215T 1-3/8	-	-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"	1	1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE	1	1	1	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP	1	1	1	1	1	-	-
100-002855	MOTOR PLATE BOT 1-5HP	1	1	1	1	1	-	-
100-006740	MOTOR PLATE TOP 10HP	-	-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP	-	-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4	22	22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4	114	144	184	224	294	364	-
040-001459	NUT WHIZ 5/16-18UNC	114	144	184	224	294	364	-
040-001483	BOLT WHIZ 3/8 -16UNC X 1	20	22	24	28	34	40	-
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4	4	4	4	4	4	4	-
040-001460	NUT WHIZ 3/8 -16UNC	24	26	28	32	36	40	-

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX4T/DPX8T
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 240V/480V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOOR W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y INTERMEDIATE	-	-	-	1	1	2	
400-009220	TOP ASS'Y 5FT REAR ONE DOOR W/ 8"	-	1	-	1	-	-	
400-009221	TOP ASS'Y 10FT REAR ONE DOOR W/ 8"	-	-	1	-	1	1	
400-006579	GARNER SIDE ASS'Y 5FT - 34"	-	2	-	2	-	-	
400-006578	GARNER SIDE ASS'Y 10FT - 34"	2	2	4	4	6	8	
100-002599	CROSS STRAP	3	3	6	6	9	12	
100-007363	TOP GARNER SIDE STIFFENING BRACKET 34"	2	2	4	4	6	8	
100-006580	END PLATE FRONT W/SWITCH - 34"	1	1	1	1	1	-	
100-006823	END PLATE REAR STANDARD - 34"	1	1	1	1	1	-	
100-006772	END PLATE FRONT W/SWITCH 40FT	-	-	-	-	-	1	
100-006773	END PLATE REAR W/SWITCH 40FT	-	-	-	-	-	1	
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1	1	
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	-	1	
100-006824	AUGER HEAD PLATE FRONT 8"	1	1	1	1	1	-	
100-006825	AUGER HEAD PLATE REAR 8"	1	1	1	1	1	-	
100-006770	AUGER HEAD PLATE FRONT 10"	-	-	-	-	-	1	
100-006771	AUGER HEAD PLATE REAR 10"	-	-	-	-	-	1	
200-006834	AUGER ONLY 10FT ONLY - 8"	1	-	-	-	-	-	
200-006723	AUGER ONLY FRONT 10FT - 8"	-	1	1	1	1	-	
200-006724	AUGER ONLY INTER 10FT - 8"	-	-	-	1	1	-	
200-006721	AUGER ONLY REAR 5FT - 8"	-	1	-	1	-	-	
200-006720	AUGER ONLY REAR 10FT - 8"	-	-	1	-	1	-	
200-006794	AUGER ONLY FRONT 10FT - 10"	-	-	-	-	-	1	
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	-	-	2	
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	-	-	-	1	
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"	-	1	1	2	2	-	
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	-	-	-	-	3	

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX4T/DPX8T
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 240V/480V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006992	AUGER TROUGH INTER 10FT - 8	-	-	-	-	1	1	-
200-007002	AUGER TROUGH REAR 5FT - 8	-	1	-	-	1	-	-
200-006993	AUGER TROUGH REAR 10FT - 8	-	-	1	-	-	1	-
200-006999	AUGER TROUGH INTER 10FT - 10"	-	-	-	-	-	-	2
200-007000	AUGER TROUGH REAR 10FT - 10"	-	-	-	-	-	-	1
200-005388	BELT GUARD - 8"	1	1	1	1	1	1	-
100-003343	BELT GUARD BACK PLATE - 8"	1	1	1	1	1	1	-
200-006817	BELT GUARD - 10"	-	-	-	-	-	-	1
100-006818	BELT GUARD BACK PLATE - 10"	-	-	-	-	-	-	1
049-003364	BELT "B82" 83.3PITCH	2	2	2	2	2	2	3
056-005372	SHEAVE AUGER 2B18.4	1	1	1	1	1	1	-
056-006832	SHEAVE AUGER 3B18.4	-	-	-	-	-	-	1
056-006830	BUSHING QD-SK 1-1/4	1	1	1	1	1	1	1
056-005373	SHEAVE MOTOR 2B3.4	1	1	1	1	1	1	-
056-006833	SHEAVE MOTOR 3B3.4	-	-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8	1	1	-	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8	-	-	1	1	1	1	-
056-006344	BUSHING QD-SH 1-3/8	-	-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"	2	2	2	2	2	2	2
004-002673	MOTOR 2HP 1750RPM 240/480V-3P 145T 7/8	1	1	-	-	-	-	-
004-002671	MOTOR 3HP 1750RPM 240/480V-3P 182T 1-1/8	-	-	1	*	-	-	-
004-002672	MOTOR 5HP 1750RPM 240/480V-3P 184T 1-1/8	-	-	-	*	1	-	-
004-002675	MOTOR 10HP 1750RPM 240/480V-3P 215T 1-3/8	-	-	-	-	-	-	1
(*) NOTE: DPX4T USE A 3HP MOTOR - - - - - DPX8T USE A 5HP MOTOR								
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"	1	1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE	1	1	-	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP	1	1	1	1	1	1	-
100-002855	MOTOR PLATE BOT 1-5HP	1	1	1	1	1	1	-
100-006740	MOTOR PLATE TOP 10HP	-	-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP	-	-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4	22	22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4	156	156	196	240	310	384	
040-001459	NUT WHIZ 5/16-18UNC	156	156	196	240	310	384	
040-001483	BOLT WHIZ 3/8 -16UNC X 1	22	22	24	28	32	36	
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4	4	4	4	4	4	4	
040-001460	NUT WHIZ 3/8 -16UNC	26	26	30	32	36	40	

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX4T/DPX8T
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 380V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOOR W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y INTERMEDIATE	-	-	-	1	1	2	
400-009220	TOP ASS'Y 5FT REAR ONE DOOR W/ 8"	-	1	-	1	-	-	
400-009221	TOP ASS'Y 10FT REAR ONE DOOR W/ 8"	-	-	1	-	1	1	
400-006579	GARNER SIDE ASS'Y 5FT - 34"	-	2	-	2	-	-	
400-006578	GARNER SIDE ASS'Y 10FT - 34"	2	2	4	4	6	8	
100-002599	CROSS STRAP	3	3	6	6	9	12	
100-007363	TOP GARNER SIDE STIFFENING BRACKET 34"	2	2	4	4	6	8	
100-006580	END PLATE FRONT W/SWITCH - 34"	1	1	1	1	1	-	
100-006823	END PLATE REAR STANDARD - 34"	1	1	1	1	1	-	
100-006772	END PLATE FRONT W/SWITCH 40FT	-	-	-	-	-	1	
100-006773	END PLATE REAR W/SWITCH 40FT	-	-	-	-	-	1	
400-009196	ASS'Y LOW GRAIN SWITCH (FILL END)	1	1	1	1	1	1	
400-009197	ASS'Y LOW GRAIN SWITCH (MOTOR END)	-	-	-	-	-	1	
100-006824	AUGER HEAD PLATE FRONT 8"	1	1	1	1	1	-	
100-006825	AUGER HEAD PLATE REAR 8"	1	1	1	1	1	-	
100-006770	AUGER HEAD PLATE FRONT 10"	-	-	-	-	-	1	
100-006771	AUGER HEAD PLATE REAR 10"	-	-	-	-	-	1	
200-006834	AUGER ONLY 10FT ONLY - 8"	1	-	-	-	-	-	
200-006723	AUGER ONLY FRONT 10FT - 8"	-	1	1	1	1	-	
200-006724	AUGER ONLY INTER 10FT - 8"	-	-	-	1	1	-	
200-006721	AUGER ONLY REAR 5FT - 8"	-	1	-	1	-	-	
200-006720	AUGER ONLY REAR 10FT - 8"	-	-	1	-	1	-	
200-006794	AUGER ONLY FRONT 10FT - 10"	-	-	-	-	-	1	
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	-	-	2	
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	-	-	-	1	
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"	-	1	1	2	2	-	
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	-	-	-	-	3	

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX4T/DPX8T
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 380V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006992	AUGER TROUGH INTER 10FT - 8	-	-	-	-	1	1	-
200-007002	AUGER TROUGH REAR 5FT - 8	1	1	-	-	1	-	-
200-006993	AUGER TROUGH REAR 10FT - 8	-	-	1	-	-	1	-
200-006999	AUGER TROUGH INTER 10FT - 10"	-	-	-	-	-	-	2
200-007000	AUGER TROUGH REAR 10FT - 10"	-	-	-	-	-	-	1
200-005388	BELT GUARD - 8"	1	1	1	1	1	1	-
100-003343	BELT GUARD BACK PLATE - 8"	1	1	1	1	1	1	-
200-006817	BELT GUARD - 10"	-	-	-	-	-	-	1
100-006818	BELT GUARD BACK PLATE - 10"	-	-	-	-	-	-	1
049-007874	BELT "B76" 77.8PITCH	2	2	2	2	2	2	3
056-007872	SHEAVE AUGER 2B15.4	1	1	1	1	1	1	-
056-007873	SHEAVE AUGER 3B15.4	-	-	-	-	-	-	1
056-006830	BUSHING QD-SK 1-1/4	1	1	1	1	1	1	1
056-005373	SHEAVE MOTOR 2B3.4	1	1	1	1	1	1	-
056-006833	SHEAVE MOTOR 3B3.4	-	-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8	1	1	-	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8	-	-	1	1	1	1	-
056-006344	BUSHING QD-SH 1/3/8	-	-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"	2	2	2	2	2	2	2
004-007854	MOTOR 2HP 1450RPM 380V-3P 145T 7/8	1	1	-	-	-	-	-
004-007855	MOTOR 3HP 1450RPM 380V-3P 182T 1-1/8	-	-	1	*	-	-	-
004-007629	MOTOR 5HP 1450RPM 380V-3P 184T 1-1/8	-	-	-	*	1	-	-
004-007857	MOTOR 10HP 1450RPM 380V-3P 215T 1-3/8	-	-	-	-	-	-	1
(*) NOTE: DPX4T USE A 3HP MOTOR ----- DPX8T USE A 5HP MOTOR								
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"	1	1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE	1	1	-	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP	1	1	1	1	1	1	-
100-002855	MOTOR PLATE BOT 1-5HP	1	1	1	1	1	1	-
100-006740	MOTOR PLATE TOP 10HP	-	-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP	-	-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4	22	22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4	156	156	196	240	310	384	
040-001459	NUT WHIZ 5/16-18UNC	156	156	196	240	310	384	
040-001483	BOLT WHIZ 3/8 -16UNC X 1	22	22	24	28	32	36	
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4	4	4	4	4	4	4	
040-001460	NUT WHIZ 3/8 -16UNC	26	26	30	32	36	40	

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX4T/DPX8T
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 575V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOOR W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y INTERMEDIATE	-	-	-	1	1	2	
400-009220	TOP ASS'Y 5FT REAR ONE DOOR W/ 8"	-	1	-	1	-	-	
400-009221	TOP ASS'Y 10FT REAR ONE DOOR W/ 8"	-	-	1	-	1	1	
400-006579	GARNER SIDE ASS'Y 5FT - 34"	-	2	-	2	-	-	
400-006578	GARNER SIDE ASS'Y 10FT - 34"	2	2	4	4	6	8	
100-002599	CROSS STRAP	3	3	6	6	9	12	
100-007363	TOP GARNER SIDE STIFFENING BRACKET 34"	2	2	4	4	6	8	
100-006580	END PLATE FRONT W/SWITCH - 34"	1	1	1	1	1	-	
100-006823	END PLATE REAR STANDARD - 34"	1	1	1	1	1	-	
100-006772	END PLATE FRONT W/SWITCH 40FT	-	-	-	-	-	1	
100-006773	END PLATE REAR W/SWITCH 40FT	-	-	-	-	-	1	
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1	1	
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	-	1	
100-006824	AUGER HEAD PLATE FRONT - 8"	1	1	1	1	1	-	
100-006825	AUGER HEAD PLATE REAR - 8"	1	1	1	1	1	-	
100-006770	AUGER HEAD PLATE FRONT - 10"	-	-	-	-	-	1	
100-006771	AUGER HEAD PLATE REAR - 10"	-	-	-	-	-	1	
200-006834	AUGER ONLY 10FT ONLY - 8"	1	-	-	-	-	-	
200-006723	AUGER ONLY FRONT 10FT - 8"	-	1	1	1	1	-	
200-006724	AUGER ONLY INTER 10FT - 8"	-	-	-	1	1	-	
200-006721	AUGER ONLY REAR 5FT - 8"	-	1	-	1	-	-	
200-006720	AUGER ONLY REAR 10FT - 8"	-	-	1	-	1	-	
200-006794	AUGER ONLY FRONT 10FT - 10"	-	-	-	-	-	1	
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	-	-	2	
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	-	-	-	1	
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	
400-006827	AUGER SUPPORT HANGER ASS'Y - 8"	-	1	1	2	2	-	
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	-	-	-	-	3	

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX4T/DPX8T
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 575V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006992	AUGER TROUGH INTER 10FT - 8		-	-	-	1	1	-
200-007002	AUGER TROUGH REAR 5FT - 8		1	1	-	1	-	-
200-006993	AUGER TROUGH REAR 10FT - 8		-	-	1	-	1	-
200-006999	AUGER TROUGH INTER 10FT - 10"		-	-	-	-	-	2
200-007000	AUGER TROUGH REAR 10FT - 10"		-	-	-	-	-	1
200-005388	BELT GUARD - 8"		1	1	1	1	1	-
100-003343	BELT GUARD BACK PLATE - 8"		1	1	1	1	1	-
200-006817	BELT GUARD - 10"		-	-	-	-	-	1
100-006818	BELT GUARD BACK PLATE - 10"		-	-	-	-	-	1
049-003364	BELT "B82" 83.3PITCH		2	2	2	2	2	3
056-005372	SHEAVE AUGER 2B18.4		1	1	1	1	1	-
056-006832	SHEAVE AUGER 3B18.4		-	-	-	-	-	1
056-006830	BUSHING QD-SK 1-1/4		1	1	1	1	1	1
056-005373	SHEAVE MOTOR 2B3.4		1	1	1	1	1	-
056-006833	SHEAVE MOTOR 3B3.4		-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8		1	1	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8		-	-	1	1	1	-
056-006344	BUSHING QD-SH 1-3/8		-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"		2	2	2	2	2	2
004-007425	MOTOR 2HP 1750RPM 575V-3P 145T 7/8		1	1	-	-	-	-
004-007615	MOTOR 3HP 1750RPM 575V-3P 182T 1-1/8		-	-	1	*	-	-
004-007629	MOTOR 5HP 1750RPM 575V-3P 184T 1-1/8		-	-	-	*	1	-
004-007570	MOTOR 10HP 1750RPM 575V-3P 213T 1-3/8		-	-	-	-	-	1
(*) NOTE: DPX4T USE A 3HP MOTOR ----- DPX8T USE A 5HP MOTOR								
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"		1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE		1	1	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP		1	1	1	1	1	-
100-002855	MOTOR PLATE BOT 1-5HP		1	1	1	1	1	-
100-006740	MOTOR PLATE TOP 10HP		-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP		-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4		22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4		156	156	196	240	310	384
040-001459	NUT WHIZ 5/16-18UNC		156	156	196	240	310	384
040-001483	BOLT WHIZ 3/8 -16UNC X 1		22	22	24	28	32	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4		4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC		26	26	30	32	36	40

MODEL : _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX12T & DPX16GT

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 240V/480V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOOR W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y INTERMEDIATE	-	-	-	1	1	2	
400-009220	TOP ASS'Y 5FT REAR ONE DOOR W/ 8"	-	1	-	1	-	-	
400-009221	TOP ASS'Y 10FT REAR ONE DOOR W/ 8"	-	-	1	-	1	1	
400-006579	GARNER SIDE ASS'Y 5FT - 34"	-	2	-	2	-	-	
400-006578	GARNER SIDE ASS'Y 10FT - 34"	2	2	4	4	6	8	
100-002599	CROSS STRAP	3	3	6	6	9	12	
100-007363	TOP GARNER SIDE STIFFENING BRACKET 34"	3	3	6	6	9	12	
100-006772	END PLATE FRONT W/SWITCH - 34",10"	1	1	1	1	1	1	
100-007383	END PLATE REAR W/O SWITCH - 34",10"	1	1	1	1	1	-	
100-006773	END PLATE REAR W/SWITCH - 34",10"	-	-	-	-	-	1	
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1	1	
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	-	1	
100-006770	AUGER HEAD PLATE FRONT 10"	1	1	1	1	1	1	
100-006771	AUGER HEAD PLATE REAR 10"	1	1	1	1	1	1	
200-007381	AUGER ONLY 10FT ONLY - 10"	1	-	-	-	-	-	
200-006794	AUGER ONLY FRONT 10FT - 10"	-	1	1	1	1	1	
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	1	1	2	
200-007382	AUGER ONLY REAR 5FT - 10"	-	1	-	1	-	-	
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	1	-	1	1	
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	1	1	2	2	3	
200-006999	AUGER TROUGH INTER 10FT - 10"	-	-	-	1	1	2	
200-007379	AUGER TROUGH REAR 5FT - 10"	1	1	-	1	-	-	
200-007000	AUGER TROUGH REAR 10FT - 10"	-	-	1	-	1	1	

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX12T & DPX16GT
PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 240V/480V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006817	BELT GUARD 10" AUGER	1	1	1	1	1	1	1
100-006818	BELT GUARD BACK PLATE 10" AUGER	1	1	1	1	1	1	1
049-003364	BELT "B82" 83.3PITCH	2	2	2	2	2	2	3
056-005372	SHEAVE AUGER 2B18.4	1	1	1	1	1	-	-
056-006832	SHEAVE AUGER 3B18.4	-	-	-	-	-	-	1
056-006830	BUSHING QD-SK 1-1/4	1	1	1	1	1	1	1
056-005373	SHEAVE MOTOR 2B3.4	1	1	1	1	1	-	-
056-006833	SHEAVE MOTOR 3B3.4	-	-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8	1	1	-	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8	-	-	1	1	1	-	-
056-006344	BUSHING QD-SH 1-3/8	-	-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"	2	2	2	2	2	2	2
004-002673	MOTOR 2HP 1750RPM 240/480V-3P 145T 7/8	1	1	-	-	-	-	-
004-002671	MOTOR 3HP 1750RPM 240/480V-3P 182T 1-1/8	-	-	1	-	-	-	-
004-002672	MOTOR 5HP 1750RPM 240/480V-3P 184T 1-1/8	-	-	-	1	1	-	-
004-002675	MOTOR 10HP 1750RPM 240/480V-3P 215T 1-3/8	-	-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"	1	1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE	1	1	-	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP	1	1	1	1	1	1	-
100-002855	MOTOR PLATE BOT 1-5HP	1	1	1	1	1	1	-
100-006740	MOTOR PLATE TOP 10HP	-	-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP	-	-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4	22	22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4	156	156	196	240	310	384	384
040-001459	NUT WHIZ 5/16-18UNC	156	156	196	240	310	384	384
040-001483	BOLT WHIZ 3/8 -16UNC X 1	22	22	24	28	32	36	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4	4	4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC	26	26	28	32	36	40	40

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX12T & DPX16GT

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 380V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOOR W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y INTERMEDIATE	-	-	-	1	1	2	
400-009220	TOP ASS'Y 5FT REAR ONE DOOR W/ 8"	-	1	-	1	-	-	
400-009221	TOP ASS'Y 10FT REAR ONE DOOR W/ 8"	-	-	1	-	1	1	
400-006579	GARNER SIDE ASS'Y 5FT - 34"	-	2	-	2	-	-	
400-006578	GARNER SIDE ASS'Y 10FT - 34"	2	2	4	4	6	8	
100-002599	CROSS STRAP	3	3	6	6	9	12	
100-007363	TOP GARNER SIDE STIFFENING BRACKET 34"	3	3	6	6	9	12	
100-006772	END PLATE FRONT W/SWITCH - 34",10"	1	1	1	1	1	1	
100-007383	END PLATE REAR W/O SWITCH - 34",10"	1	1	1	1	1	-	
100-006773	END PLATE REAR W/SWITCH - 34",10"	-	-	-	-	-	1	
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1	1	
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	-	1	
100-006770	AUGER HEAD PLATE FRONT 10"	1	1	1	1	1	1	
100-006771	AUGER HEAD PLATE REAR 10"	1	1	1	1	1	1	
200-007381	AUGER ONLY 10FT ONLY - 10"	1	-	-	-	-	-	
200-006794	AUGER ONLY FRONT 10FT - 10"	-	1	1	1	1	1	
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	1	1	2	
200-007382	AUGER ONLY REAR 5FT - 10"	-	1	-	1	-	-	
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	1	-	1	1	
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	1	1	2	2	3	
200-006999	AUGER TROUGH INTER 10FT - 10"	-	-	-	1	1	2	
200-007379	AUGER TROUGH REAR 5FT - 10"	1	1	-	1	-	-	
200-007000	AUGER TROUGH REAR 10FT - 10"	-	-	1	-	1	1	

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX12T & DPX16GT

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 380V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006817	BELT GUARD 10" AUGER		1	1	1	1	1	1
100-006818	BELT GUARD BACK PLATE 10" AUGER		1	1	1	1	1	1
049-007874	BELT "B76" 83.3PITCH		2	2	2	2	2	3
056-007872	SHEAVE AUGER 2B15.4		1	1	1	1	1	-
056-007873	SHEAVE AUGER 3B15.4		-	-	-	-	-	1
056-006830	BUSHING QD-SK 1-1/4		1	1	1	1	1	1
056-005373	SHEAVE MOTOR 2B3.4		1	1	1	1	1	-
056-006833	SHEAVE MOTOR 3B3.4		-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8		1	1	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8		-	-	1	1	1	-
056-006344	BUSHING QD-SH 1-3/8		-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"		2	2	2	2	2	2
004-007854	MOTOR 2HP 1450RPM 380V-3P 145T 7/8		1	1	-	-	-	-
004-007855	MOTOR 3HP 1450RPM 380V-3P 182T 1-1/8		-	-	1	-	-	-
004-007856	MOTOR 5HP 1450RPM 380V-3P 184T 1-1/8		-	-	-	1	1	-
004-007857	MOTOR 10HP 1450RPM 380V-3P 215T 1-3/8		-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"		1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE		1	1	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP		1	1	1	1	1	-
100-002855	MOTOR PLATE BOT 1-5HP		1	1	1	1	1	-
100-006740	MOTOR PLATE TOP 10HP		-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP		-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4		22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4		156	156	196	240	310	384
040-001459	NUT WHIZ 5/16-18UNC		156	156	196	240	310	384
040-001483	BOLT WHIZ 3/8 -16UNC X 1		22	22	24	28	32	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4		4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC		26	26	28	32	36	40

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX12T & DPX16GT

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 575V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
400-009211	TOP ASS'Y 10FT W/TWO DOOR W/ 8"	1	-	-	-	-	-	-
400-009205	TOP ASS'Y 10FT W/ONE DOOR W/O 8"	-	1	1	1	1	1	1
200-002976	TOP ASS'Y INTERMEDIATE	-	-	-	1	1	2	
400-009220	TOP ASS'Y 5FT REAR ONE DOOR W/ 8"	-	1	-	1	-	-	
400-009221	TOP ASS'Y 10FT REAR ONE DOOR W/ 8"	-	-	1	-	1	1	
400-006579	GARNER SIDE ASS'Y 5FT - 34"	-	2	-	2	-	-	
400-006578	GARNER SIDE ASS'Y 10FT - 34"	2	2	4	4	6	8	
100-002599	CROSS STRAP	3	3	6	6	9	12	
100-007363	TOP GARNER SIDE STIFFENING BRACKET 34"	2	2	4	4	6	8	
100-006772	END PLATE FRONT W/SWITCH - 34",10"	1	1	1	1	1	1	
100-007383	END PLATE REAR W/O SWITCH - 34",10"	1	1	1	1	1	-	
100-006773	END PLATE REAR W/SWITCH - 34",10"	-	-	-	-	-	1	
400-009196	ASS'Y LOW GRAIN SWITCH (MOTOR END)	1	1	1	1	1	1	
400-009197	ASS'Y LOW GRAIN SWITCH (FILL END)	-	-	-	-	-	1	
100-006770	AUGER HEAD PLATE FRONT 10"	1	1	1	1	1	1	
100-006771	AUGER HEAD PLATE REAR 10"	1	1	1	1	1	1	
200-007381	AUGER ONLY 10FT ONLY - 10"	1	-	-	-	-	-	
200-006794	AUGER ONLY FRONT 10FT - 10"	-	1	1	1	1	1	
200-006793	AUGER ONLY INTER 10FT - 10"	-	-	-	1	1	2	
200-007382	AUGER ONLY REAR 5FT - 10"	-	1	-	1	-	-	
200-006792	AUGER ONLY REAR 10FT - 10"	-	-	1	-	1	1	
100-006727	AUGER SHAFT 1 1/4" FT-KEYED	1	1	1	1	1	1	
100-006726	AUGER SHAFT 1 1/4" INTER	-	1	1	2	2	3	
100-006728	AUGER SHAFT 1 1/4" RE-NON-KEYED	1	1	1	1	1	1	
040-005324	BOLT-HEX 7/16-14UNC X 3"	4	6	8	12	12	16	
040-006732	NUT -LOCK 7/16-14UNC	4	6	8	12	12	16	
400-006829	AUGER SUPPORT HANGER ASS'Y - 10"	-	1	1	2	2	3	
200-006999	AUGER TROUGH INTER 10FT - 10"	-	-	-	1	1	2	
200-007379	AUGER TROUGH REAR 5FT - 10"	1	1	-	1	-	-	
200-007000	AUGER TROUGH REAR 10FT - 10"	-	-	1	-	1	1	

MODEL: _____ LENGTH _____ FT

SERIAL NO: _____ - _____ - _____ - _____

SHIPPING LIST - GARNER ASSEMBLY - DPX12T & DPX16GT

PARTS LISTED ARE FOR AUGERS W/ 1 1/4" SHAFTS

3P - DENOTES 575V-3P DRYERS

W/ 8" OR W/O 8" INDICATES WITH OR WITHOUT 8" DIA FILLING HOLE

PART NUMBER	PART DESCRIPTION	(FT)	10	15	20	25	30	40
200-006817	BELT GUARD 10" AUGER	1	1	1	1	1	1	1
100-006818	BELT GUARD BACK PLATE 10" AUGER	1	1	1	1	1	1	1
049-003364	BELT "B82" 83.3PITCH	2	2	2	2	2	2	3
056-005372	SHEAVE AUGER 2B18.4	1	1	1	1	1	-	-
056-006832	SHEAVE AUGER 3B18.4	-	-	-	-	-	-	1
056-006830	BUSHING QD-SK 1-1/4	1	1	1	1	1	1	1
056-005373	SHEAVE MOTOR 2B3.4	1	1	1	1	1	-	-
056-006833	SHEAVE MOTOR 3B3.4	-	-	-	-	-	-	1
056-005375	BUSHING QD-SH 7/8	1	1	-	-	-	-	-
056-005376	BUSHING QD-SH 1-1/8	-	-	1	1	1	-	-
056-006344	BUSHING QD-SH 1-3/8	-	-	-	-	-	-	1
044-001510	AUGER BEARING W/FLANGE 1 1/4"	2	2	2	2	2	2	2
004-007425	MOTOR 2HP 1750RPM 575V-3P 145T 7/8	1	1	-	-	-	-	-
004-007615	MOTOR 3HP 1750RPM 575V-3P 182T 1-1/8	-	-	1	-	-	-	-
004-007629	MOTOR 5HP 1750RPM 575V-3P 184T 1-1/8	-	-	-	1	1	-	-
004-007570	MOTOR 10HP 1750RPM 575V-3P 213T 1-3/8	-	-	-	-	-	-	1
100-002486	KEY-MOTOR 1/4" X 1/4" X 1"	1	1	1	1	1	1	1
100-007397	MOTOR ADAPTER PLATE	1	1	-	-	-	-	-
100-007396	MOTOR PLATE TOP 1-5HP	1	1	1	1	1	-	-
100-002855	MOTOR PLATE BOT 1-5HP	1	1	1	1	1	-	-
100-006740	MOTOR PLATE TOP 10HP	-	-	-	-	-	-	1
100-006741	MOTOR PLATE BOT 10HP	-	-	-	-	-	-	1
040-002739	TCS 5/16-18UNC X 3/4	22	22	22	22	22	22	22
040-005321	BOLT WHIZ 5/16-18UNC X 3/4	156	156	196	240	310	384	384
040-001459	NUT WHIZ 5/16-18UNC	156	156	196	240	310	384	384
040-001483	BOLT WHIZ 3/8 -16UNC X 1	22	22	24	28	32	36	36
040-001440	BOLT WHIZ 3/8 -16UNC X 1 1/4	4	4	4	4	4	4	4
040-001460	NUT WHIZ 3/8 -16UNC	26	26	28	32	36	40	40