

OWNER'S MANUAL



TRANS-FER

**Models 700, 1200,
1700 & 2100**

PNEUMATIC AIR SYSTEMS

DAVID MANUFACTURING CO

1600 12th Street N.E., Mason City, Iowa USA 50401 641-424-7010

SAFETY GUIDELINES

This manual contains information that is important for you, the owner/operator, to know and understand. This information relates to protecting **personal safety** and **preventing equipment problems**. It is the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of these safety guidelines. To help you recognize this information, we use the symbols that are defined below.

Please read the manual and pay attention to these sections. Failure to read this manual and its safety instructions is a misuse of the equipment and may lead to serious injury or death.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTE

NOTE indicates information about the equipment that you should pay special attention to.

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WARRANTY

The Trans-Fer Pneumatic Air System is guaranteed for one year from date of installation to be free of defects in material or workmanship when properly installed and operated in accordance with the instructions in this booklet. Warranted parts will be exchanged FOB Mason City, Iowa without charge to the user. Damage resulting from negligence voids the warranty. Warranty does not include labor, installation or delivery of replacement parts.

Electric motors are covered by the warranties of the respective manufacturers. Electric service centers are located in all regions. Consult your dealer.

The Trans-Fer Pneumatic Air System Warranty and the liability of David Manufacturing Company, its distributors, dealers and agents is limited to replacement, without charge, of defective parts, as outlined above. DMC makes no other warranties, express or implied except as stated herein, and disclaims all obligations and liabilities other than specified.

The Manufacturer reserves the right to make changes in specifications or prices without incurring obligation on previously produced merchandise.

SAFETY INFORMATION

PLEASE READ



WATCH FOR THIS SYMBOL! IT POINTS OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS, “ATTENTION ----- BECOME ALERT! YOUR SAFETY IS INVOLVED!”



It is recommended that you review the entire contents of this manual, paying particular attention to items preceded by this symbol. FAILURE TO HEED THESE INSTRUCTIONS CAN RESULT IN PERSONAL INJURY!

OPERATOR QUALIFICATIONS

Operation of this farmstead equipment shall be limited to competent and experienced persons. In addition, anyone who will operate or work around power equipment must use good common sense. In order to be qualified, he/she must also know and meet all other requirement, such as:

1. Some regulations specify that no one under the age of 16 may operate power machinery. This includes farmstead equipment. It is your responsibility to know what these regulations are in your own area or situation.
2. Current OSHA regulations state in part: “At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved”.*
3. Unqualified persons are to stay out of the work area. The “Work Area” is defined as any area within the storage bins where this equipment is installed.
4. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

* Federal Occupational Safety & Health Standards for Agriculture Subpart D, Section 1928.57 (a)(6).

CAUTION

BE A SAFE OPERATOR

1. Read and understand the Owner's Manual.
2. Attach all safety decals as required.
3. Keep all safety shields in place.
4. Do not wear loose-fitting clothes while working with equipment in operation.
5. Keep hands and feet away from moving parts. Be sure all people are clear of the equipment before start-up.
6. Disconnect all electrical power before servicing or opening control box, adjusting, lubricating the equipment, or opening the control box inner panel.
7. All electrical hook-ups should be in accordance to the National Electrical Code.
8. If three phase power is used, identify wild leg and wire according to electrical diagram.
9. Ground all electrical equipment as well as bin itself.
10. Only knowledgeable and trained personnel should operate this equipment.
11. Plastic tubings should not be used for any lines carrying grain.
12. Stay clear of air blast from valve.

THE DECALS SHOWN ON THIS PAGE MUST BE DISPLAYED

REPLACEMENTS ARE AVAILABLE UPON REQUEST

Write to: David Manufacturing Company
1600 12th Street N.E.
Mason City, IA 50401

Please note:

1. The decals on this page are not actual size.
2. Keep all decals wiped clean at all times.
3. All decals must be replaced if they are destroyed, missing, painted over, or can no longer be read.



205L0004 (Decal on Drive Belt Shields and inlet of Feed-In Auger)



801L010
(Decal on inside of control box)



104L0014
(Decal at Motor End of Feed-In Auger)

**FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN
PERSONAL INJURY OR PROPERTY DAMAGE.**

MAINTENANCE SCHEDULE

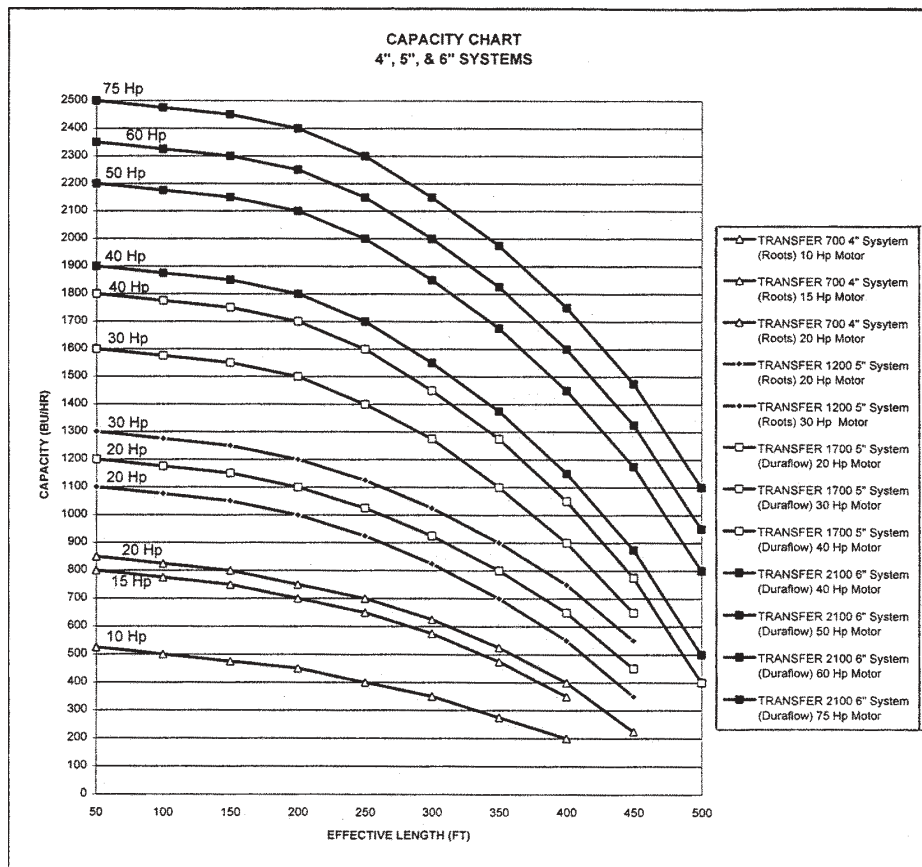
Initial Start-Up 1. Duroflow Blower 2. Roots Blower 3. Gear Reducer 4. Air Filter 5. V-belts 6. Chain 7. Tubing System	1. Oil level with middle of sight glass (DMC #MS5389 synthetic oil.) 2. Oil level to check plug (DMC#MS5389) 3. Oil level to check plug (SAE90) 4. Installed properly 5. Tensioned and aligned 6. Tensioned and aligned 7. All couplers tight All tubing connections have good fit Tubing laid out straight Elbows fitting properly
After 1st 10 Hours and Daily 1. Blowers and Reducer 2. Air Filter 3. V-belts 4. Tubing	1. Check all oil levels 2. Check for excessive dust build-up 3. Check tension alignment 4. Check all connections for leaks and signs of separating
Weekly 1. Roots Blower 2. Chain	1. Grease bearings until grease comes out of relief fitting 2. Oil
500 Hours or 6 Months 1. Duroflow 2. Roots Blower	1. Drain oil and replace with 30 oz. of DMC #MS5389 synthetic oil. (fill to middle of sight glass) 2. Drain oil and replace with 16 oz. Of 10W40 (fill to oil level plug)
Extended Shut Down DISCONNECT MAIN POWER TO UNIT 1. Blower 2. Airlock 3. Chain	1. Remove outlet assembly and spray oil on lobes while rotating by hand, to prevent rust Keep hands and objects out of blower Re-install outlet assembly 2. Coat interior with oil, while rotating by hand, to prevent rust 3. Oil chain to prevent rust

TRANS-FER CAPACITIES (Dry Shelled Corn)

Effective Length (Feet)	Trans-Fer 700 4" System (Roots)			Trans-Fer 1200 5" System (Roots)		Trans-Fer 1700 5" System (DuraFlow)			Trans-Fer 2100 6" System (DuraFlow)			
	10 HP Motor	15 HP Motor	20 HP Motor	20 HP Motor	30 HP Motor	20 HP Motor	30 HP Motor	40 HP Motor	40 HP Motor	50 HP Motor	60 HP Motor	75 HP Motor
50	525	800	850	1100	1300	1200	1600	1800	1900	2200	2350	2500
100	500	775	825	1075	1275	1175	1575	1775	1875	2175	2325	2475
150	475	750	800	1050	1250	1150	1550	1750	1850	2150	2300	2450
200	450	700	750	1000	1200	1100	1500	1700	1800	2100	2250	2400
250	400	650	700	925	1125	1025	1400	1600	1700	2000	2150	2300
300	350	575	625	825	1025	925	1275	1450	1550	1850	2000	2150
350	275	475	525	700	900	800	1100	1275	1375	1675	1825	1975
400	200	350	400	550	750	650	900	1050	1150	1450	1600	1750
450	-	-	225	350	550	450	650	775	875	1175	1325	1475
500	-	-	-	-	-	-	-	400	500	800	950	1100

Effective tube length is determined by adding the horizontal length, twice the vertical height and 10 feet for every elbow of 45° or greater. Add five feet for each elbow less than 45°. Use the horizontal run and add the vertical rise of inclined systems to calculate the effective length.

CAPACITY CHART 4", 5" & 6" Systems



TRANS-FER INSTALLATION INSTRUCTIONS

1. Determine the most convenient location for the airlock and blower. Take into consideration the direction of the prevailing winds. It is important to locate the blower in as clean an environment as possible. This greatly reduces the maintenance requirements on the air filter system. When the distance between the airlock and blower is over 10 feet, it is best to use galvanized pipe with short flex hose on the ends to couple the units together to keep airflow restrictions to a minimum.
2. The noise level of the blower unit can be reduced by placing the unit behind a wall, barrier, or in a small building. If this is done, make sure that the building has adequate ventilation for both air intake and cooling of the blower and motor.
3. The grain discharge chute on the airlock is assembled at the factory so that grain movement is at 90° to the length of the skid. This orientation can be changed by removing the mounting hardware at the base of the airlock and rotating the discharge chute to the preferred direction. Be sure to keep the gasket in place between the skid and the discharge chute. Note that the airlock itself is sealed to the skid surface and does not need to be moved to redirect the discharge chute. NOTE: A minimum of 10 feet is needed between the airlock discharge and the first elbow in the system.
4. Determine the best routing of the galvanized steel pipe from the airlock to the storage areas. Use galvanized elbows for changing the grain direction. This will give better performance and longer life than flexhose.
5. Bolt the tube mounting brackets to the desired location using at least two (2) mounting brackets on the vertical wall and two (2) on the roof of the grain bin. The mounting brackets can be formed to match existing hole patterns in the bin. See Trans-Fer accessories on page 4.
6. Determine the number and degree of arc required in the elbows. The 90° and 60° elbows are standard - different lengths of arc can be cut from these standard elbows. See Drawings on page 5.

NOTE:

A MINIMUM OF EIGHT (8) FEET BETWEEN ELBOWS IS REQUIRED FOR PROPER OPERATION.

7. Cut the steel tubing to the required length and fasten it together with compression couplings. The ends must be cut square to fit properly. Make sure that the stainless steel gasket protecting sleeve is placed over the joint before tightening the coupler. Tighten the three bolts on the coupler evenly or until the coupler flanges butt together. (See page 61)
8. The steel tubing can be laid underground, on top of the ground or placed on blocks. If placed on blocks, the tubing must be supported every 15 feet. If placed underground, the tube should enter and exit the ground at a 45° angle and be coated with a protective tar to prevent corrosion.
9. Measure the distance between the airlock and blower. Use flex hose or a combination of flex hose and galvanized tubing to connect the units together. Note that the grain discharge chute on the airlock is tapered and that grain can discharge in either direction.
10. Determine the length of the flex hose required to reach from the airlock to the steel tubing going to the storage area. This should be kept to a minimum and not used for changing the direction of the grain flow. Cut the length of the flex hose needed, secure the end of the hose to the airlock by use of a 2-bolt clamp. The other end may be attached either directly to the galvanized tube or to a barbed female camlock with a 2-bolt clamp. See Drawing 6 on page 4.

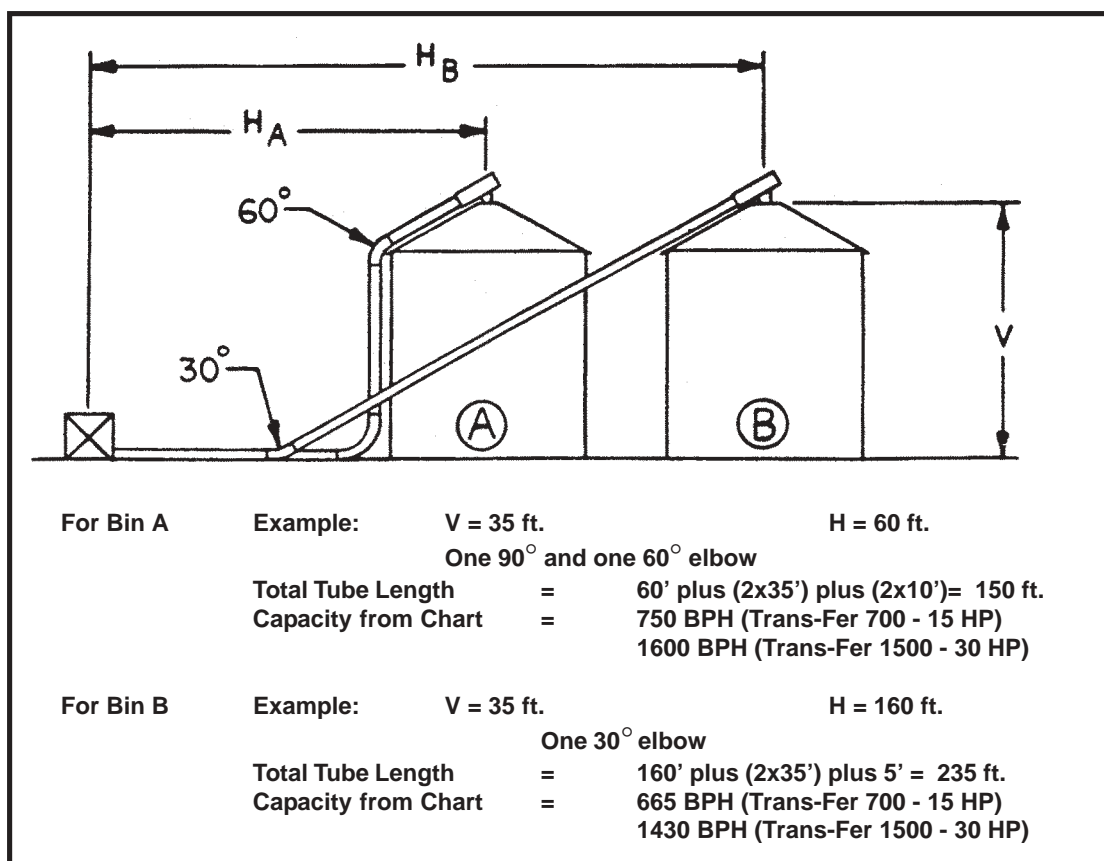
TRANS-FER INSTALLATION (continued)

11. Install all tubing required to transfer grain to your storage areas. See Drawing 6 and 7 on pages 4 and 20.
12. To attach the deadhead deflector to the tubing, simply slide the deadhead deflector onto the tubing and tighten the clamp provided. Flexible galvanized tubing can be attached to the deadhead down spout if needed. If a cyclone is used, an elbow and mounting brackets are needed.
13. Select a location to mount the electrical control box that is accessible and easily reached should shut down of unit be necessary. It should be close enough to the blower to run the 30 feet of rubber pressure hose between the blower and the control box. Otherwise, a longer length of hose must be ordered.

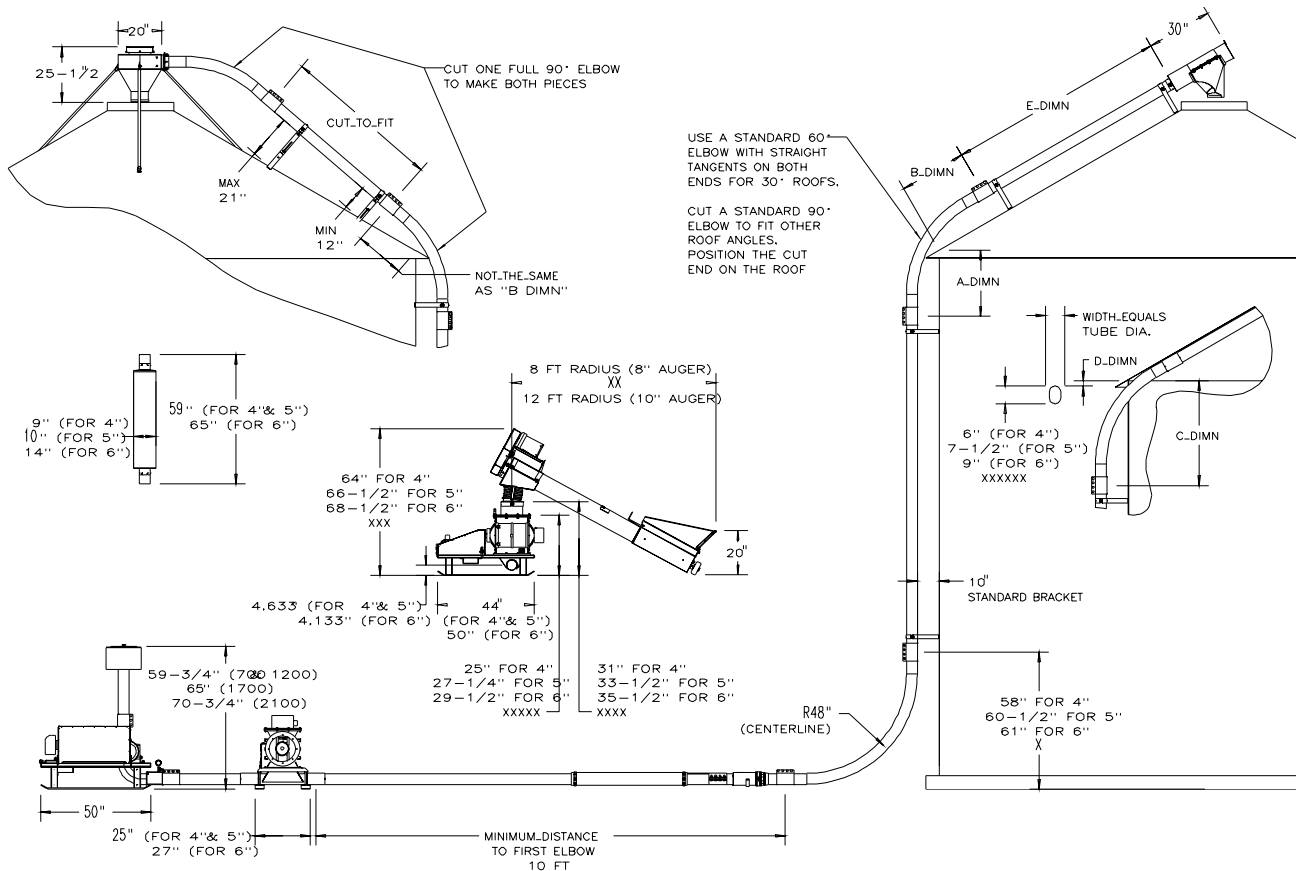
Before wiring or operating the Trans-Fer unit, read the control box description on pages 11 and 12 to understand the operation of the Trans-Fer control box. If the control box is to be wired into another control system such as the Grain Flow, review the wiring diagrams for proper hook-up.

14. See Electrical Hook-Up for a Trans-Fer to a Grain Flow illustration on page 48.

TRANS-FER CAPACITIES (Dry Shelled Corn)



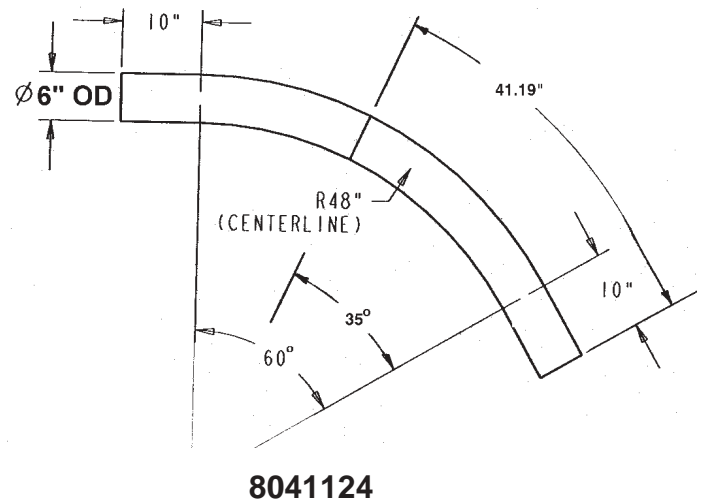
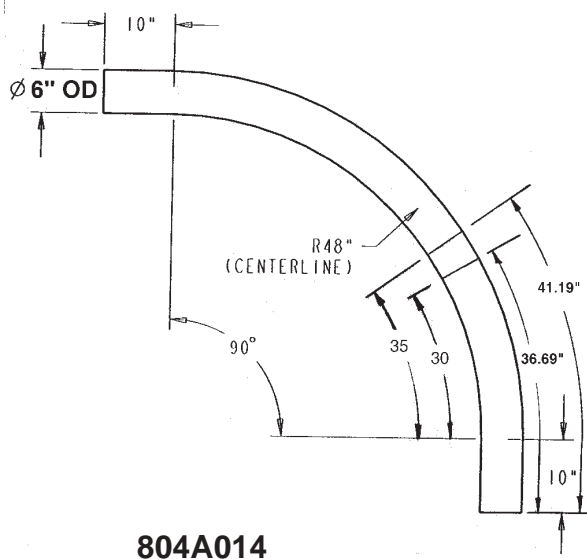
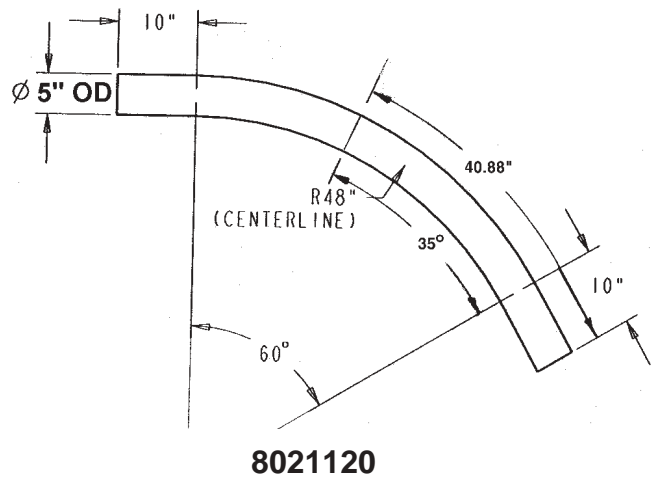
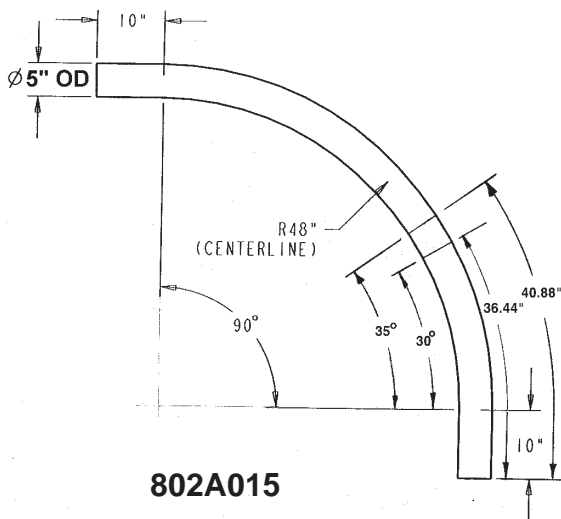
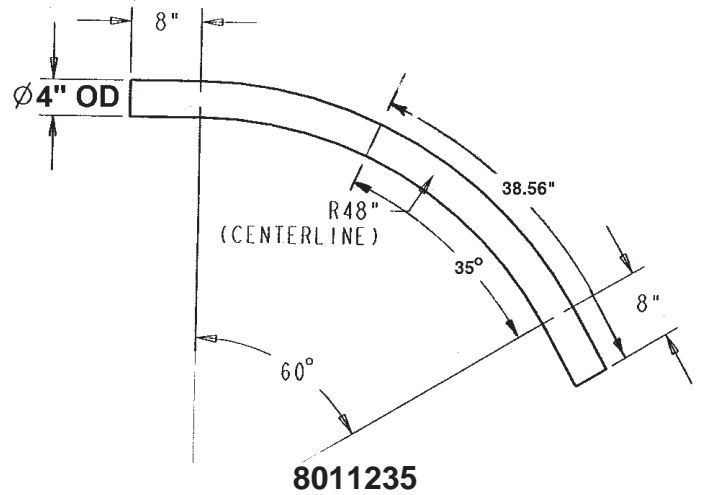
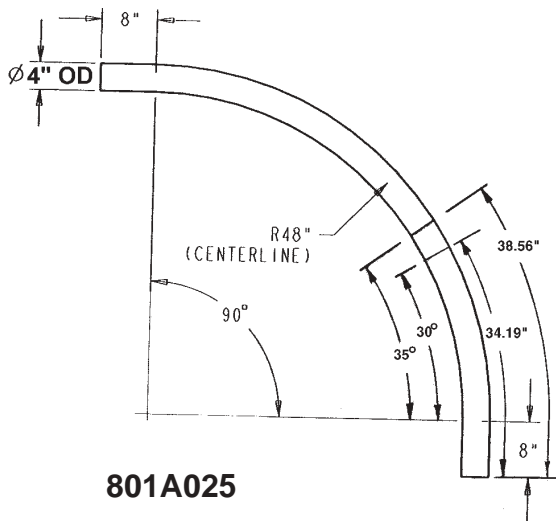
TRANS-FER DIMENSIONS & ACCESSORIES Drawing 6



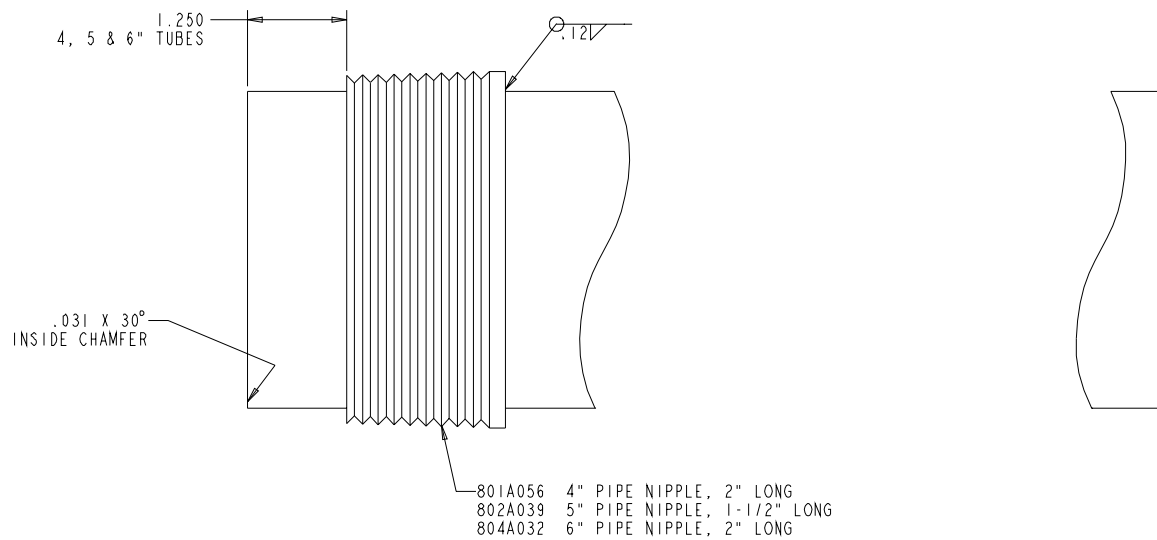
* Add 10" to E dimension if roof elbow has been cut from a Standard 90° Elbow.

SYSTEM SIZE	ROOF ANGLE	REFERENCE DIMENSION												
		A	B	C	D	E *								
						18' DIA	21' DIA	24' DIA	27' DIA	30' DIA	33' DIA	36' DIA	42' DIA	48' DIA
4"	25	31"	23"	47 1/2"	5 3/4"	7' 1"	8' 9"	10' 5"	12' 1"	13' 9"	15' 5"	17' 1"	20' 5"	23' 9"
	30	29"	29"	46 "	3 1/2"	7' 1"	8' 9"	10' 5"	12' 1"	13' 9"	15' 5"	17' 1"	20' 5"	23' 9"
	35	27"	19"	45"	2 1/2"	8' 6"	10' 2"	11' 10"	13' 6"	15' 2"	16' 10"	18' 6"	21' 10"	25' 2"
5"	25	32 1/2"	22 1/2"	50"	4 1/2"	7'	8' 9"	10' 6"	12' 3"	14'	15' 9"	17' 6"	21'	24' 6"
	30	30 1/2"	30 1/2"	49"	3 1/4"	6' 10"	8' 7"	10' 4"	12' 1"	13' 10"	15' 7"	17' 4"	20' 10"	24' 4"
	35	28 1/2"	18 1/2"	48"	2 1/4"	8' 6"	10' 3"	12'	13' 9"	15' 6"	17' 3"	19'	22' 6"	26'
6"	25	32 1/4"	22 1/4"	51"	4 1/2"	7' 3"	9' 1"	10' 11"	12' 9"	14' 7"	16' 5"	18' 3"	21' 11"	25' 7"
	30	30 1/4"	30"	50"	3"	7' 1"	8' 11"	10' 9"	12' 7"	14' 5"	16' 3"	18' 1"	21' 9"	25' 5"
	35	28 1/4"	18"	49"	2"	8' 8"	10' 6"	12' 4"	14' 2"	16'	17' 10"	19' 9"	22' 4"	27'

ELBOW ANGLE MEASUREMENTS



FIELD WELDING OF PIPE ADAPTORS



Drawing 4A

TRANS-FER SET-UP PROCEDURES

1. The air filter extension tube and housing are connected to the blower inlet by a compression coupler (See Photos 1, 2 & 3). For extended filter life, if the pneumatic system is being operated in extremely dirty conditions, a longer extension tube can be used between the blower inlet and the air filter. BE SURE the air filter is positioned so that routine inspection and service can be performed.
2. Place the air filter element with pre-filter on the base and cover with the filter canister using the 3/8" wing nut and washer. The wing nut does not need to be more than finger tight (See Photos 2 & 3).



Photo 1

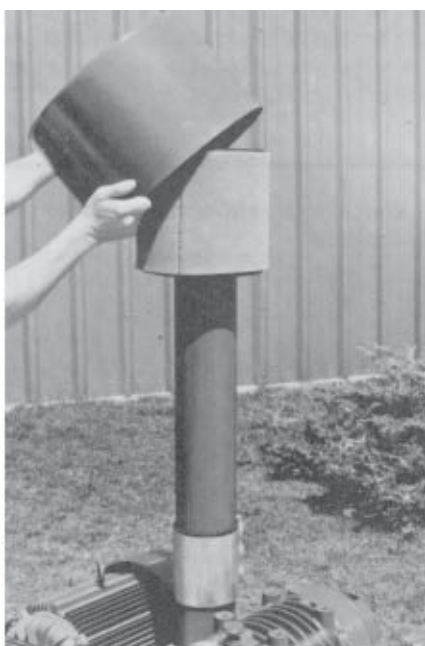


Photo 2

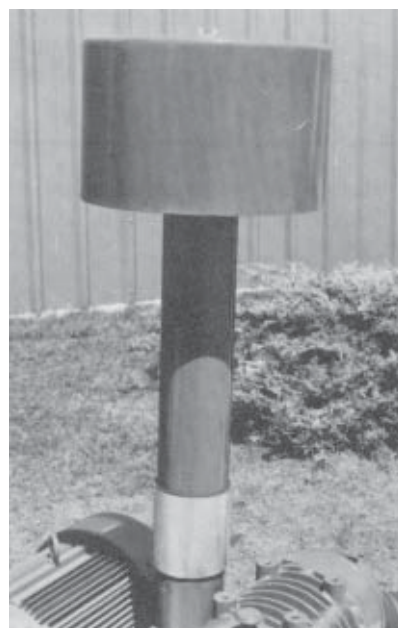
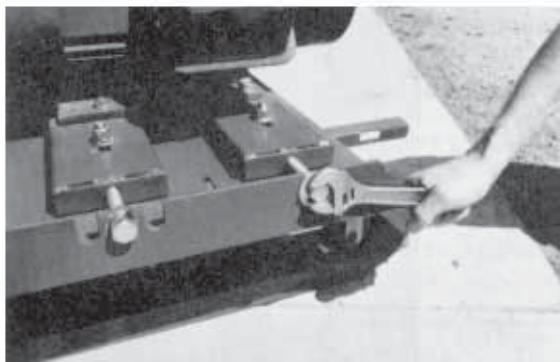
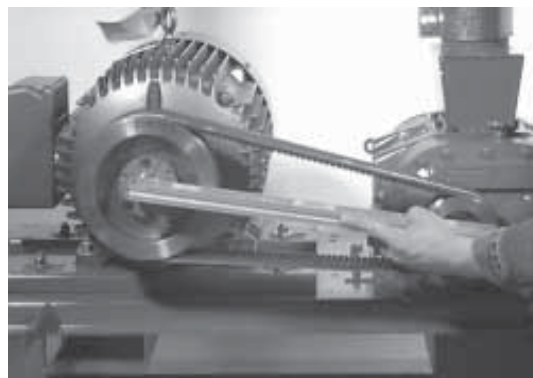


Photo 3

3. Check the motor name plate for the correct motor frame size. Then refer to the Drawing 4 on page 10 to determine proper mounting holes and spacing of the motor mount channel. The spacing of the motor mount channels is changed by moving the channel to the proper notch cut into the main base of the blower platform. See Photo 4 on the next page and the Drawing on page 10. Finish by bolting the motor securely to the channels. Leave the four 1/2" carriage bolts loose, holding the channels to the main frame.
4. Place the 3B - 8-15/16" pulley onto the motor and align it with the blower pulley. See Photo 5 on the next page.

TRANS-FER SET-UP PROCEDURES (continued)**Photo 4****Photo 5**

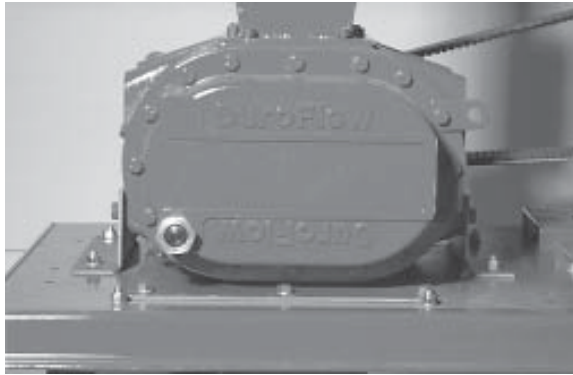
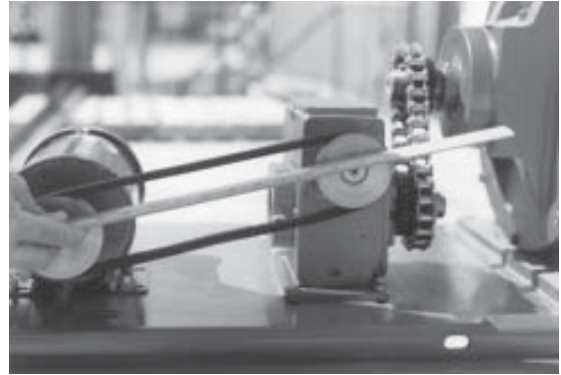
5. Place the matching set of BX-60 V-belts on the pulleys. Tighten the belts by evenly turning the cap screws clockwise. Belts should have 3/8" deflection at ten pounds pressure per belt. See Photo 4.
6. Keeping the motor in proper alignment is necessary and can be accomplished by using an open end wrench to turn the nut on the opposite motor mount channel, moving the channel either direction until proper alignment is achieved. Squaring up the motor can change the tension of the belts. Recheck alignment and tension. Finish Step 4 by tightening the four 1/2" bolts left loose earlier. See Photos 6 & 7.

Rotate the motor by hand and listen for any rubbing or knocking by either the motor or the blower.

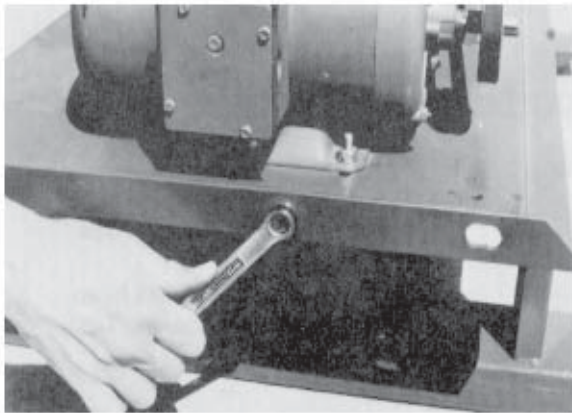
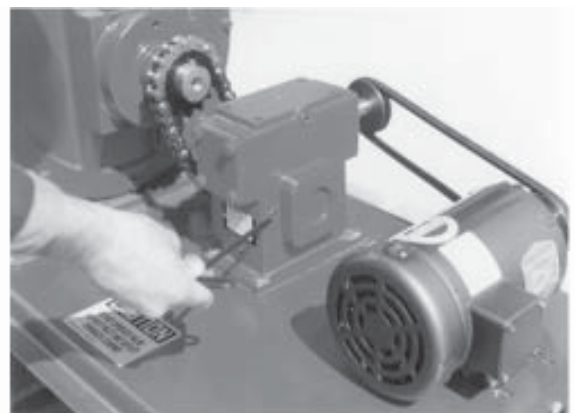
When the motor is wired, it must be checked for CCW rotation.

**Photo 6****Photo 7**

7. Check the oil level of the blower. The oil level should be at the center of the sight glass on Duroflow Blowers. For Roots Blowers, remove the lower level check plug. The oil level should be level to the check plug. Add DMC #MS5389 (Mobil Oil #SHC 630), if required, through the breather plug on top of the blower case. See Photo 8 on the next page. See the Maintenance Schedule on page vi for the frequency of oil changes.
8. Using four (4) 5/16" x 1" carriage bolts, washers, and nuts, mount the motor to the airlock deck. Place the 3-1/4" OD A-Groove Pulley on to the motor shaft and align to pulley on reducer. See Photo 9.

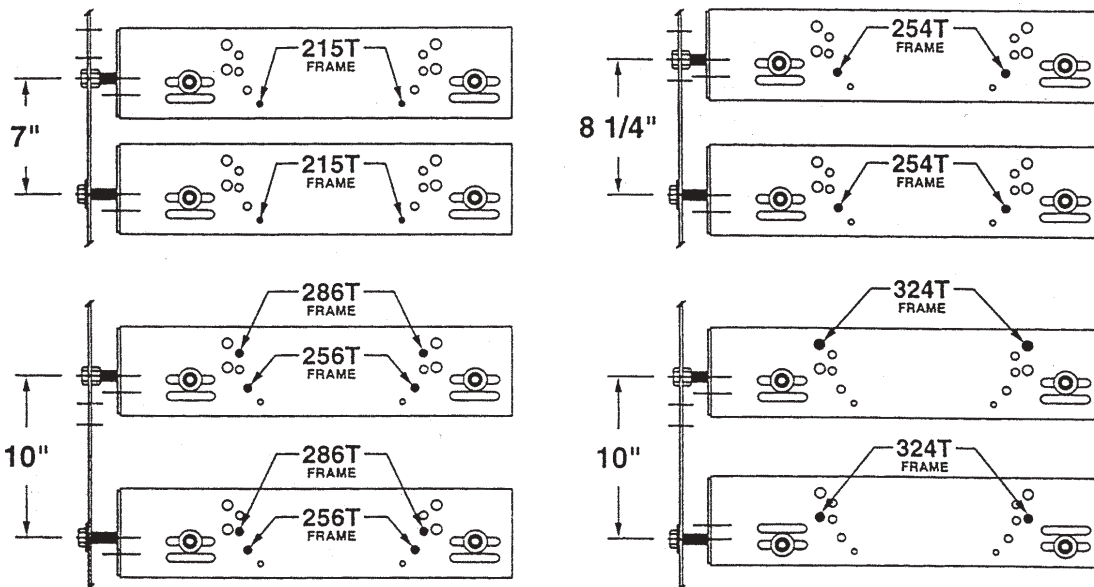
TRANS-FER SET-UP PROCEDURES (continued)**Photo 8****Photo 9**

9. Next, place the A-31 belt onto the pulleys. Tighten the belt to its proper tension of 3 per ten pounds of pressure by turning the 3/8" cap screw as shown in Photo 10. Tighten the four 5/16" nuts on the motor base. Replace the belt shield.
10. Check the oil level in the gearbox by removing the plug and noting if the oil is at this level. Add SAE 80-90 gear lubricant if required. See Photo 11.

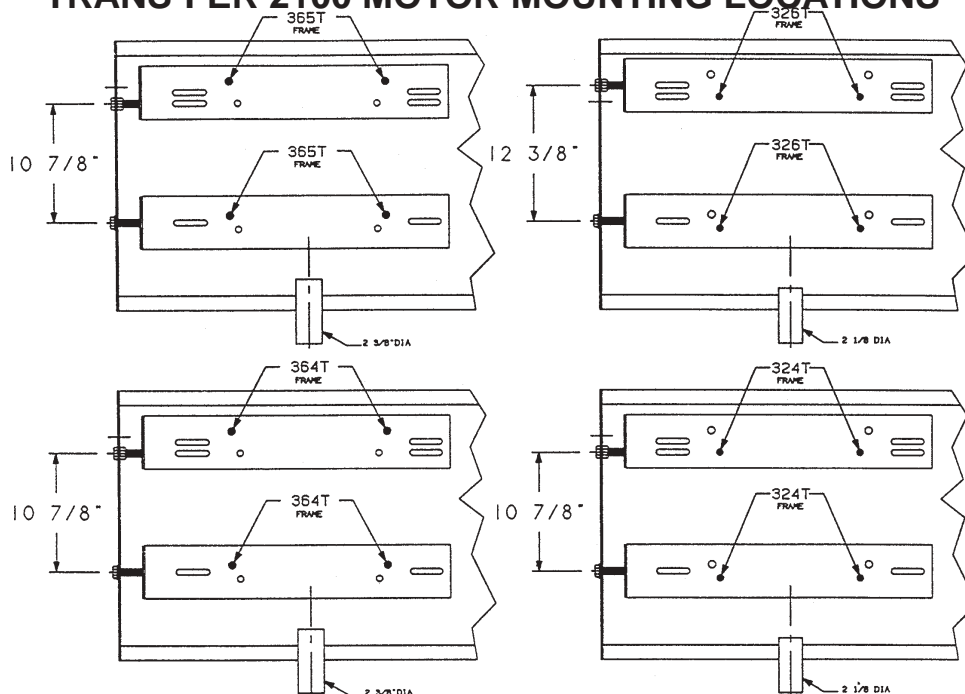
**Photo 10****Photo 11**

**THE SET-UP OF THE TRANS-FER PNEUMATIC AIR SYSTEM
IS NOW COMPLETE.**

TRANS-FER MOTOR MOUNTING LOCATIONS



TRANS-FER 2100 MOTOR MOUNTING LOCATIONS



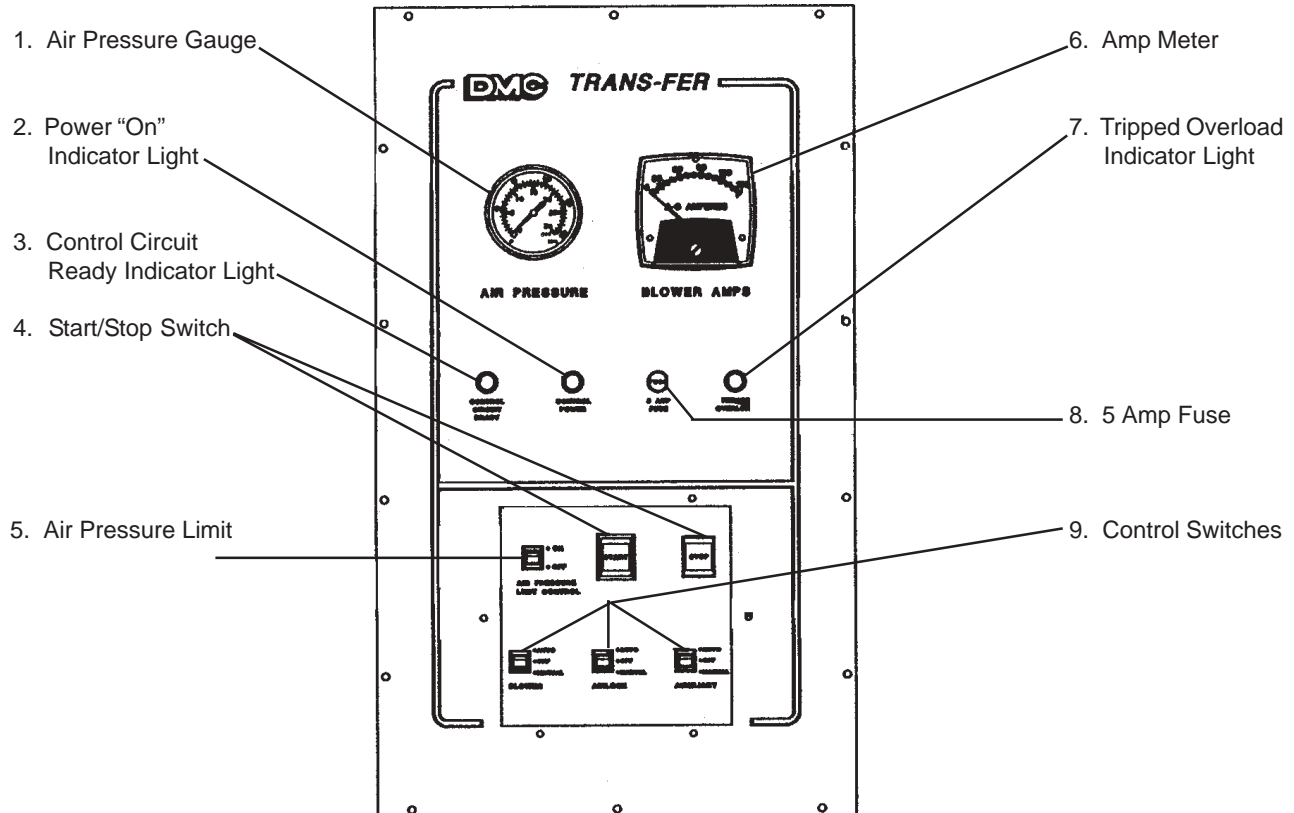
TRANS-FER MOTOR CHART

Motor Part#	Horsepower	Frame Size	Shaft Diam.	Voltage	Phase
FDL3737TM	10	215T	1-3/8	230	1
3EL5119	10	F215T	1-3/8	230/440	3
3EL5069	15	256T	1-5/8	230	1
M2333T	15	254T	1-5/8	230/440	3
M2334T	20	256T	1-5/8	230/440	3
M4104T	30	286T	1-7/8	230/440	3
M4110T	40	324T	2-1/8	230/440	3
M4115T	50	326T	2-1/8	230/440	3
M4314T	60	364T	2-3/8	230/440	3
M4316T	75	365T	2-3/8	230/440	3

NOTE:

Motor rotation is counter-clockwise as viewed from the shaft end.

TRANS-FER CONTROL BOX DEFINITIONS



1. Air Pressure Gauge: This gauge indicates the system air pressure.
2. Power-On Indicator Light: This lamp will light up when power is supplied to the control box.
3. Control Circuit Ready Indicator Light: This lamp will light up when the start button has been pushed and all control circuits are completed. When lit and in the automatic mode, the Trans-Fer system will run whenever it receives a signal to start.
4. Start-Stop Switch: The start button must be pushed before any part of the Trans-Fer can be run. Pushing the stop button will immediately stop all functions of the Trans-Fer system.
5. Air Pressure Limit Control Switch: When in the "On" position, this switch will allow the air pressure switch to immediately shut down the Trans-Fer system whenever the air pressure exceeds preset conditions.
6. Amp Meter: The amp meter measures the current flow to the blower motor. (On 440 Volts, the blower motor amps equal the meter reading divided by two.)
7. Tripped Overload Indicator Light: This lamp will light up when any of the motor thermal overloads in the control box has tripped. The overloads for all three circuits (Aux, Airlock, and Blower) must have thermal overloads installed to operate the system. See Thermal Unit chart on page 13.
8. 5 Amp Fuse: A five (5) amp fuse protects the electrical components in the control box.

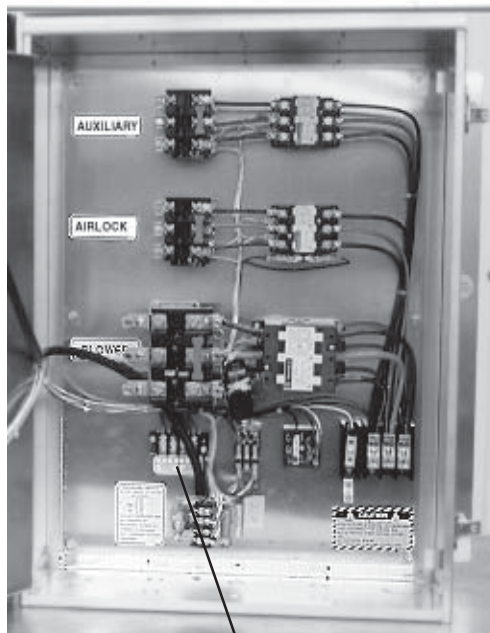
TRANS-FER CONTROL BOX DEFINITIONS (continued)

9. Control Switches: The operation of the blower, airlock and auxiliary equipment of the Trans-Fer system is controlled by placing these switches in the “Auto”, “Manual” or “Off” position.
10. Automatic Control Terminals: When the Trans-Fer system is ready to run (i.e., the control ready light is on), the system can then be started and run by completing the circuit between terminals one (1) and two (2). The blower, airlock or auxiliary equipment will not run in the automatic mode unless terminals one (1) and two (2) are connected. For example, a closing set of contacts in a dryer control box would complete the circuit between terminals one (1) and two (2) and automatically start the Trans-Fer system.

!! CAUTION !!

**No voltage should be supplied to terminals one (1) and two (2).
See the diagram on page 15 and photo below.**

11. Remote Shut-Down Control: A remote piece of equipment can be caused to shutdown with the Trans-Fer system by putting terminals three (3) and four (4) in series with the control circuit of the remote equipment. This circuit has a maximum current rating of 10 amps. The circuit between terminals three (3) and four (4) is closed whenever the control circuit ready light is on, regardless of the position of the control switches. (“AUTO”, “OFF” or “ON”) See the Diagram on page 15 and the Drawing on page 45.



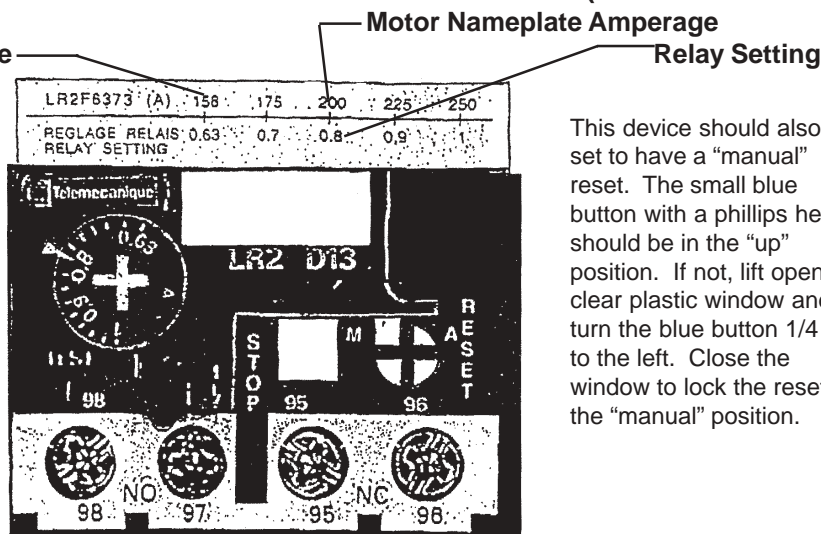
Steps 10 & 11: Automatic Control and Remote Shut-Down Control

Transfer Control Box -- Thermal Unit Chart

SINGLE MOTOR	1EL0861 #B 3.00 THERMAL UNIT	1EL0859 #B 4.15 THERMAL UNIT	1EL0769 #B 6.90 THERMAL UNIT	1EL0762 #B 7.70 THERMAL UNIT	1EL0767 #B 9.10 THERMAL UNIT	1EL0782 #B 10.2 THERMAL UNIT	1EL0763 #B 11.5 THERMAL UNIT	1EL0761 #B 14 THERMAL UNIT	1EL0795 #CC 20.9 THERMAL UNIT	1EL0796 #CC 26.3 THERMAL UNIT	1EL0797 #CC 33.3 THERMAL UNIT	1EL792 #CC 36.4 THERMAL UNIT	1EL0793 #CC 54.5 THERMAL UNIT	1EL0790 #CC 64.3 THERMAL UNIT	1EL0794 #CC 68.5 THERMAL UNIT	1EL0800 #CC 103 THERMAL UNIT	1EL0791 #CC 112 THERMAL UNIT	1EL0808 #CC 143 THERMAL UNIT	1EL0812 #CC 156 THERMAL UNIT	1EL0809 #CC 180 THERMAL UNIT	1EL0804 #CC 74.6 THERMAL UNIT
TRANSFER 700 10HP, 230V, 1PH							3	3						3							
TRANSFER 700 10HP, 230V, 3PH			3		3							3									
TRANSFER 700 10HP, 440V, 3PH	3	3							3												
TRANSFER 700 15HP, 230V, 1PH							3	3													3
TRANSFER 700 15HP, 230V, 3PH			3		3								3								
TRANSFER 700 15HP, 440V, 3PH	3	3								3											
TRANSFER 700 20HP, 230V, 3PH			3		3										3						
TRANSFER 700 20HP, 440V, 3PH	3	3									3										
TRANSFER 1200 20HP, 230V, 3PH			3		3										3						
TRANSFER 1200 20HP, 440V, 3 PH	3	3									3										
TRANSFER 1200 30HP, 230V, 3PH			3		3												3				
TRANSFER 1200 30HP, 440V, 3PH	3	3											3								
TRANSFER 1700 20HP, 230V, 3PH			3		3										3						
TRANSFER 1700 20HP, 440V, 3PH	3	3									3										
TRANSFER 1700 30HP, 230V, 3PH			3		3												3				
TRANSFER 1700 30HP, 440V, 30PH	3	3											3								
TRANSFER 1700 40HP, 230V, 3PH			3		3														3		
TRANSFER 1700 40HP, 440V, 3PH	3	3													3						
TRANSFER 2100 40HP, 230V, 3PH			3		3														3		
TRANSFER 2100 40HP, 440V, 3PH	3	3													3						
TRANSFER 2100 50HP, 230V, 3PH			3					3												3	
TRANSFER 2100 50HP, 440V, 3PH	3			3													3				
TRANSFER 2100 60HP, 230V, 3PH			3					3													
TRANSFER 2100 60HP, 440V, 3PH	3			3												3					
TRANSFER 2100 75HP, 230V, 3PH			3					3													
TRANSFER 2100 75HP, 440V, 3PH	3			3														3			
DUAL MOTOR																					
2 X 7.5 HP 230V, 1 PH							3	3				6									
2 x 10 HP 230V, 1 PH							3	3						6							
2 x 15 HP 230V, 1 PH							3	3												6	
2 x 20 HP 230V, 1 PH							3	3								6					

OVERLOAD RELAY SETTINGS FOR 2EL0284 ADJ. OVERLOAD RELAY (used on 60 & 75 HP - 230 V)

2EL0284 relay must be adjusted to provide protection to the blower motor. The proper relay setting is determined by matching the relay setting with the motor nameplate amperage on the scale that is attached to the overload adjustment block. Use a small screw driver to turn the adjustment dial and align the proper relay setting with the indicator mark. The example above shows a motor with a nameplate amperage of 200 amps protected by using a relay setting of 0.8.



This device should also be set to have a "manual" reset. The small blue button with a phillips head should be in the "up" position. If not, lift open the clear plastic window and turn the blue button 1/4 turn to the left. Close the window to lock the reset in the "manual" position.

THERMAL OVERLOAD INFORMATION

NOTE: When installed correctly, the size printed on the overload will be readable. The Square D overload charts should be used to size the heater to your motor amps.

Auxiliary Auger and Air Lock

SQUARE D®

OVERLOAD RELAY
Class 9065, Type S
3 Element Melting Alloy
86 Amp. Max. Motor Rating

Suitable For Use On A Circuit Capable of Delivering Not More Than 5000 rms Symmetrical Amperes, 600 Volts Maximum.

OVERLOAD — RELAY THERMAL UNITS

WARNING:

If burnout of an overload relay thermal unit occurs, the thermal unit must be replaced to provide continued protection against fire and shock hazard.

AVERTISSEMENT:

Si un élément thermique brûle, il doit être remplacé.

For continuous-rated motors having service factors of 1.15 to 1.25, select thermal units directly from table using 100% of full-load current shown on motor nameplate. For continuous-rated motors having a service factor of 1.0, select thermal units from table using 90% of full-load current shown on motor nameplate.

MOTOR FULL LOAD CURRENT (AMP.)	THERMAL UNIT NO.	MAXIMUM FUSE RATING (AMP.)	MOTOR FULL LOAD CURRENT (AMP.)	THERMAL UNIT NO.	MAXIMUM FUSE RATING (AMP.)
16.5-17.4	CC 20.9	35	40.8-43.7	CC 54.5	90
17.5-18.9	CC 22.8	35	43.8-47.0	CC 56.4	90
19.0-20.5	CC 24.6	40	47.1-50.3	CC 64.3	100
20.6-22.0	CC 26.3	45			
22.1-23.8	CC 28.8	45			
23.9-25.6	CC 31.0	50			
25.7-27.7	CC 33.3	50	60.4-64.5	CC 88.5	100
27.8-29.7	CC 36.4	60	64.6-68.3	CC 91.5	100
29.8-32.2	CC 39.6	60	68.4-72.8	CC 97.7	100
32.3-34.7	CC 42.7	70	72.9-78.9	CC 103	100
34.8-37.3	CC 46.8	70	79.0-86.0	CC 112	100
37.4-40.5	CC 50.1	80			

Branch-circuit fuse rating must comply with applicable electrical codes and must not exceed the maximum fuse rating shown opposite the thermal unit selected. Fuses may need to be of the time delay type to permit motor starting. Class K5 or Class R fuses are recommended.

Non-time delay fuses whose rating does not exceed 300 percent of motor full-load current may also be used. Maximum allowable thermal-magnetic (inverse time) circuit breaker rating is 200 percent of motor full-load current unless a lower rating is required by applicable electrical codes.

Trip current rating in a 40°C (104°F) ambient temperature is 1.25 times the minimum full-load current shown for the thermal unit selected. Instructions given above assume that the motor and the overload relay are located in approximately the same ambient temperature. For other conditions consult Square D.

Blower 133A Max

75 HP 440 V

40 & 50 HP 230V 3 phase

SQUARE D®
OVERLOAD RELAY
Class 9065, Type S
3 Element Melting Alloy
45 Amp. Max. Motor Rating

Suitable For Use On A Circuit Capable of Delivering Not More Than 5000 rms Symmetrical Amperes, 600 Volts Maximum.

OVERLOAD — RELAY THERMAL UNITS

WARNING:

If burnout of an overload relay thermal unit occurs, the complete overload relay must be replaced to provide continued protection against fire and shock hazard.

AVERTISSEMENT:

Si un élément thermique brûle, il doit être remplacé.

For continuous-rated motors having service factors of 1.15 to 1.25, select thermal units directly from table using 100% of full-load current shown on motor nameplate. For continuous-rated motors having a service factor of 1.0, select thermal units from table using 90% of full-load current shown on motor nameplate.

MOTOR FULL LOAD CURRENT (AMP.)	THERMAL UNIT NO.	MAXIMUM FUSE RATING (AMP.)	MOTOR FULL LOAD CURRENT (AMP.)	THERMAL UNIT NO.	MAXIMUM FUSE RATING (AMP.)
3.38-3.85	8 4.85	7	12.1-13.5	8 17.5	25
3.86-4.07	8 5.50	8	13.6-14.5	8 19.5	30
4.08-4.36	8 6.25	9	14.7-15.7	8 22	30
4.37-5.19	8 6.90	9	16.8-18.9	8 25	35
5.20-5.59	8 7.74	10	19.0-21.8	8 28.0	40
5.60-5.98	8 8.20	12	21.7-24.1	8 32	45
5.99-6.78	8 9.10	12	24.2-27.6	8 36	50
6.79-7.91	8 10.2	15	27.7-31.2	8 40	60
7.92-9.12	8 11.5	17.5	31.3-35.5	8 45	60
9.13-10.0	8 12.8	20	36.6-37.8	8 50	60
10.1-10.7	8 14	20	37.9-41.5	8 55	60
10.8-12.0	8 15.5	26	41.6-45.0	8 62	60

Branch-circuit fuse rating must comply with applicable electrical codes and must not exceed the maximum fuse rating shown opposite the thermal unit selected. Fuses may need to be of the time delay type to permit motor starting. Class K5 or Class R fuses are recommended.

Non-time delay fuses whose rating does not exceed 300 percent of motor full-load current may also be used. Maximum allowable thermal-magnetic (inverse time) circuit breaker rating is 225 percent of motor full-load current unless a lower rating is required by applicable electrical codes. For full-load currents below 6.67 amperes, a 15 ampere circuit breaker may be used.

Trip current rating in a 40°C (104°F) ambient temperature is 1.25 times the minimum full-load current shown for the thermal unit selected. Instructions given above assume that the motor and the overload relay are located in approximately the same ambient temperature. For other conditions consult Square D.

Blower 86A Max

40,50 & 60 HP 440 V 3 phase and

all 230V motors under 40 HP

SQUARE D®
OVERLOAD RELAY
Class 9065, Type S
3 Element Melting Alloy
26 Amp. Max. Motor Rating

Suitable For Use On A Circuit Capable of Delivering Not More Than 5000 rms Symmetrical Amperes, 600 Volts Maximum.

OVERLOAD — RELAY THERMAL UNITS

WARNING:

If burnout of an overload relay thermal unit occurs, the thermal unit must be replaced to provide continued protection against fire and shock hazard.

AVERTISSEMENT:

Si un élément thermique brûle, il doit être remplacé.

For continuous-rated motors having service factors of 1.15 to 1.25, select thermal units directly from table using 100% of full-load current shown on motor nameplate. For continuous-rated motors having a service factor of 1.0, select thermal units from table using 90% of full-load current shown on motor nameplate.

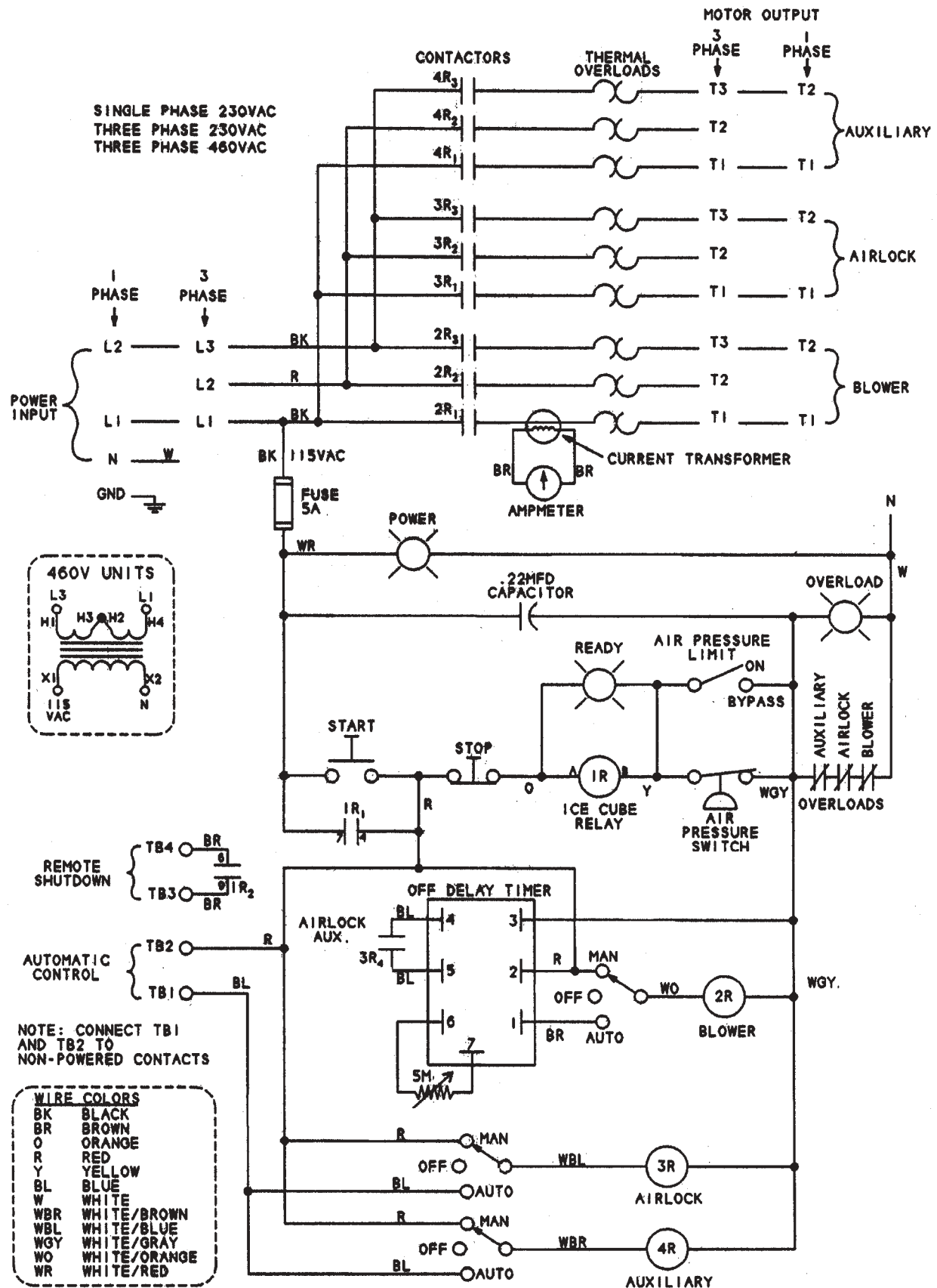
MOTOR FULL LOAD CURRENT (AMP.)	THERMAL UNIT NO.	MAXIMUM FUSE RATING (AMP.)	MOTOR FULL LOAD CURRENT (AMP.)	THERMAL UNIT NO.	MAXIMUM FUSE RATING (AMP.)
0.29-0.31	8 0.44	0.6	3.49-3.87	8 5.50	7
0.32-0.35	8 0.51	0.6	3.88-4.14	8 6.25	8
0.36-0.38	8 0.57	0.8	4.15-4.73	8 6.90	9
0.39-0.46	8 0.63	0.8	4.74-5.28	8 7.70	10
0.47-0.55	8 0.71	1	5.29-5.64	8 8.20	10
0.56-0.62	8 0.81	1.25	5.65-6.39	8 9.10	12
0.63-0.67	8 0.92	1.4	6.40-7.43	8 10.2	12
0.68-0.75	8 1.03	1.4	7.44-8.55	8 11.5	15
0.76-0.84	8 1.16	1.6	8.56-9.40	8 12.8	17.5
0.85-0.95	8 1.30	1.8	9.41-10.0	8 14	20
0.96-1.09	8 1.45	2	10.1-11.2	8 15.5	20
1.10-1.21	8 1.67	2.25	11.3-12.5	8 17.5	25
1.22-1.35	8 1.88	2.5	12.6-13.5	8 19.5	25
1.36-1.53	8 2.10	2.8	13.6-15.4	8 22	30
1.54-1.73	8 2.40	3.2	15.5-17.5	8 25	30
1.74-1.90	8 2.65	3.5			
1.91-2.14	8 3.00	4			
2.15-2.34	8 3.30	4.5	17.6-19.9	8 28.0	30
			20.0-22.2	8 32	30
			22.3-25.7	8 36	30
			25.8-32.2	8 41.5	30
			32.3-34.8	8 45	30

Branch-circuit fuse rating must comply with applicable electrical codes and must not exceed the maximum fuse rating shown opposite the thermal unit selected. Fuses may need to be of the time delay type to permit motor starting. Class K5 or Class R fuses are recommended.

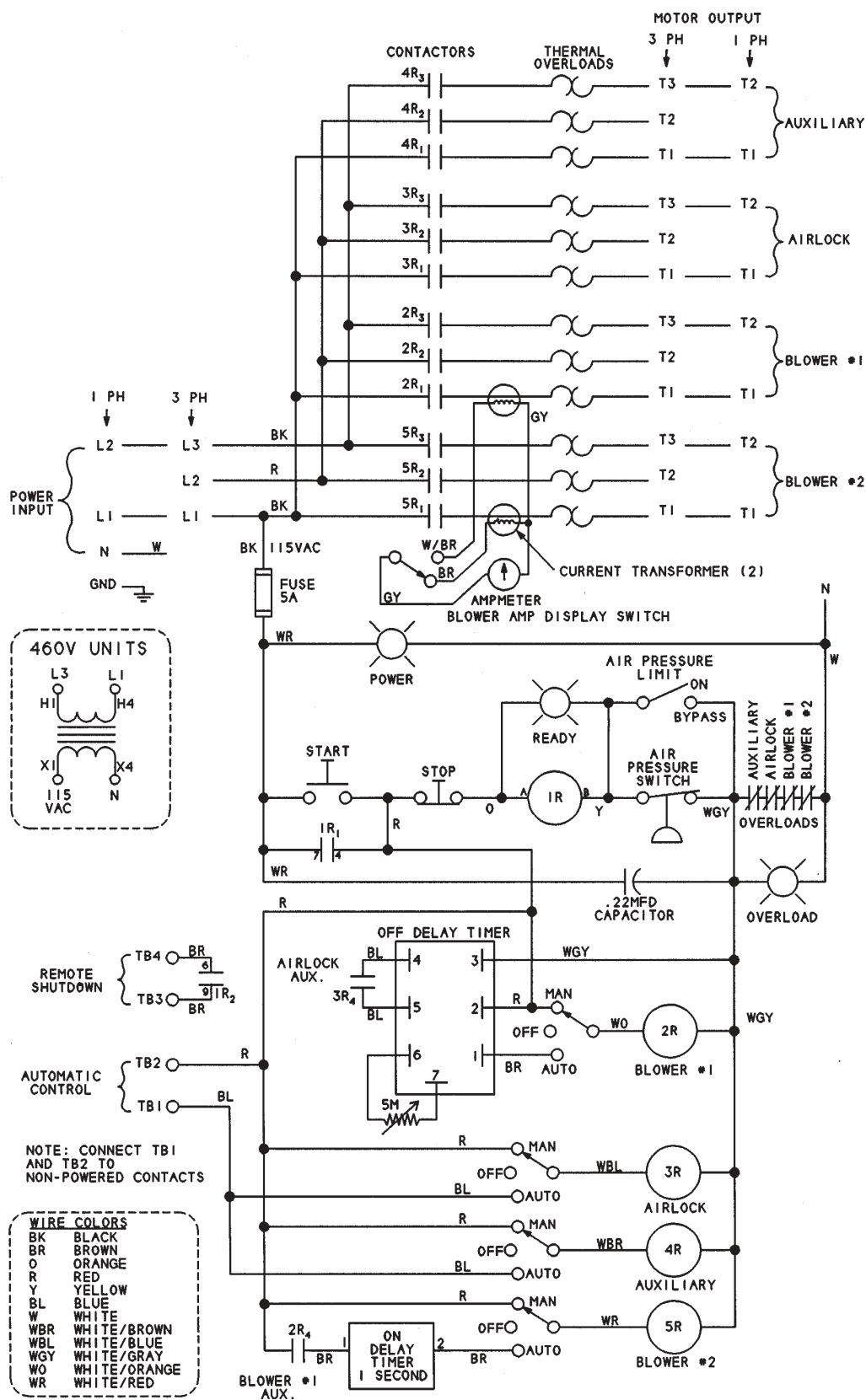
Non-time delay fuses whose rating does not exceed 300 percent of motor full-load current may also be used. Maximum allowable thermal-magnetic (inverse time) circuit breaker rating is 225 percent of motor full-load current unless a lower rating is required by applicable electrical codes.

Trip current rating in a 40°C (104°F) ambient temperature is 1.25 times the minimum full-load current shown for the thermal unit selected. Instructions given above assume that the motor and the overload relay are located in approximately the same ambient temperature. For other conditions consult Square D.

STANDARD TRANS-FER WIRING DIAGRAM



DUAL MOTOR TRANS-FER WIRING DIAGRAM



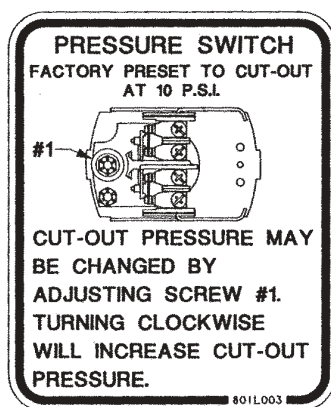
CONTROL BOX OPERATIONAL PROCEDURES

I. Automatic operation using the Automatic Controller Unit tied to terminals one (1) and two (2).

1. Place the Blower, Airlock and Auxiliary Control Switches in the "Off" position.
2. Place the Air Pressure Limit Control Switch in the "On" position (unit will stop when the air pressure reaches 10 PSI).
3. Turn on the power to the Trans-Fer Control Box. The power light should come on.
4. Push the Start button; the Control Circuit Ready Light should come on.
5. Place the Blower, Airlock and Auxiliary Switch in the "Auto" position.
6. The complete Trans-Fer system will now run when the Automatic Controller completes the circuit between terminals one (1) and two (2). When this circuit is broken, the airlock and auxiliary equipment will stop immediately, but the blower will continue to run for an additional 15 seconds to blow the tubing system clean.
7. The airlock, auxiliary equipment, and blower will run when the control switches are placed in the "manual" mode. The airlock, auxiliary equipment and blower will stop immediately when switched "off".
8. Pushing the Stop button will immediately stop all Trans-Fer functions as well as any equipment tied to terminals three (3) and four (4).

II. Operation of the Trans-Fer system WITHOUT an Automatic Controller tied to terminals one (1) and two (2).

1. Place the Blower, Airlock and Auxiliary Control Switches in the "Off" position.
2. Place the Air Pressure Limit Control Switch in the "On" position (unit will stop when the air pressure reaches 10 PSI).
3. Turn on the power to the Trans-Fer Control Box; the power light should come on.
4. Push the Start button. The Control Circuit Ready Light should come on.
5. The blower, airlock and auxiliary equipment can now be run by placing them in the "manual" position. The airlock, auxiliary equipment and blower will stop immediately when switched off.
6. Pushing the stop button will immediately stop all Trans-Fer system functions as well as any remote equipment tied to terminals three (3) and four (4).



Drawing 2

TRANSFER OPERATION GUIDELINES

1. Be aware of the quality of grain that is entering and leaving the Trans-Fer system. Grain damage can occur with any pneumatic system unless care is taken to adjust the velocity of the grain. This can be done by opening or closing the outlet gate valve on the blower outlet of the Trans-Fer. Opening the valve will let air out of the tubing system which will slow the velocity of the air and grain in the tubing system. A recommended procedure is to open the valve slowly until the line pressure begins to surge and then to close it by 1/2 turn. This will provide the slowest possible grain velocity for any tubing system. This procedure for adjusting the air velocity should be repeated for each different tubing layout and capacity change. The use of a sight glass is recommended to provide a visual observation of the grain velocity.
2. If the tubing system should become plugged, place the air pressure limit switch to the "Off" position, switch the airlock and auxiliary equipment to "Off" and the blower to "Manual". Note the opening of the outlet gate valve, then open it completely so all the air is exhausted when the blower is started.



!!CAUTION!! Do not stand next to the exhausted air.

Push the start button and the blower will start. Slowly close the outlet gate valve until the grain starts moving and clears the tube. Adjust the valve as explained in Step 1. It should be the same as noted before adjusting. Operate the airlock and auxiliary equipment in "Manual" until all grain is out of the system.

3. The air pressure limit switch should always be in the "On" position during routine operation to provide protection to the blower against overload conditions. The air pressure limit is set at the factory to shut down the system at 10 p.s.i. If adjustment is needed, rotate the adjusting screw counterclockwise to lower the pressure limit, or clockwise to increase the pressure limit. A one-half (1/2) turn of the screw will change the pressure limit one (1) p.s.i. NOTE: If the pressure limit is set below five (5) p.s.i., the switch may not reset and allow the Trans-Fer to run. See Drawing 2 on page 16.
4. The air filter element should be inspected daily and cleaned when required. Both the poly-foam pre-filter and the filter element can be cleaned by blowing air through them or washing them with mild detergent and water. A restricted air filter will cause a system to become plugged. It should always be inspected whenever plugging occurs.
5. The airlock is provided with a housing that incorporates grain shear protection. This housing can be removed if Desired, but another form of grain shear protection should be provided to prevent grain damage.
6. **GUIDELINES FOR OPERATION OF AIR SYSTEMS**
 - a) Grain in a Trans-Fer system running at full capacity will move at about 60% of the air speed. A system operating at low capacities will move grain at 80-90% of the air speed.
 - b) Decreasing the amount of air in the system (opening the hand gate valve) will cause the grain to move slower and also cause the air pressure to rise. (Essentially, the grain is causing the air to "pile up".)
 - c) Increasing the air in a system (closing the gate valve) will increase the grain velocity and lower the pressure.
 - d) **TYPICAL RUNNING CONDITIONS ARE:**
 - A 4" system running full with 15 HP will have a system pressure of 4-5 psi.
 - A 5" system running full with 30 HP will have a system pressure of 5-6 psi.
 - A 5" system running full with 40 HP will have a system pressure of 6-7 psi.

TRANS-FER OPERATION GUIDELINES (continued)**7. OPERATION OF TWIN MOTOR TRANSFER OPTION**

The Twin Motor Option allows an air system to use two single phase motors to provide extra power when 3 phase electricity is not available.

The Twin Motor Control box is different from the standard control box because it has an additional magnetic contactor and an "On-Delay" timer for stagger starting the second motor to minimize voltage drop during the starting operation. It also has a selection switch to display the amperage of each motor.

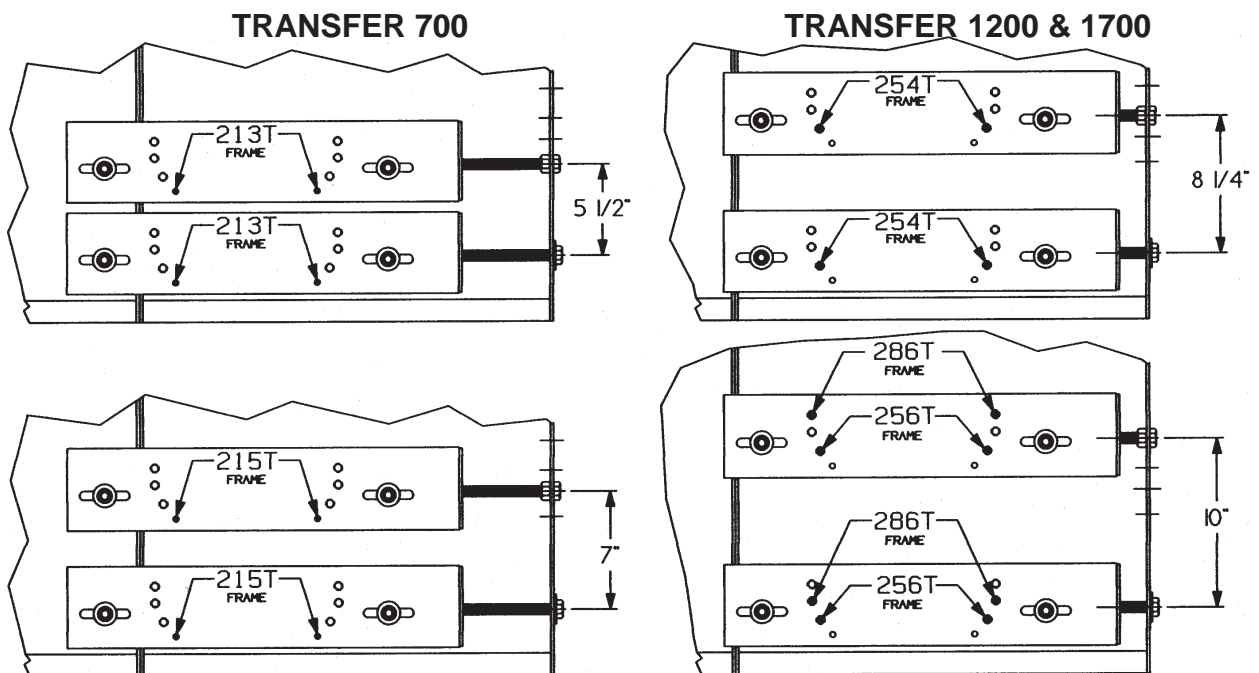
It is important to use two motors of similar model and size because it is normal for motors to run at slightly different amperages and for one to be more heavily loaded than the other. Using similar motors will minimize this condition.

Check the amperage of each motor periodically by using the selection switch on the control panel. Leave the switch in position to monitor the motor with the highest amperage. It is important to periodically check both motor amperages to insure that they are sharing the load. For example, if the belts for one motor would start to slip, then the other motor would take on the additional load and become overloaded.

8. RECOMMENDATIONS FOR OFF-SEASON STORAGE

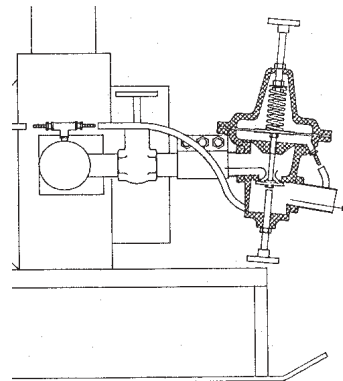
The blower and airlock have precision machined components and must be protected to prevent corrosion and rust from forming on the blower lobes and airlock vanes. These parts should be coated with motor oil after each drying season. (Spray lubricants such as WD-40 do not usually provide adequate protection.)

Both the airlock and blower skids should be stored in a dry building with all the openings covered or plugged. If it is not possible to remove the skids from the bin sites, then they should be carefully protected from the weather and the piping system disconnected from the blower and airlock. This is important to prevent condensation from collecting in the airlock and blower. **NOTE:** The feed-in auger is not rain tight and will allow water to collect in the airlock. It should be covered when not in operation.

MOTOR MOUNTING LOCATIONS FOR TWIN MOTOR TRANSFERS

REGULATOR VALVE INSTALLATION

1. Thread the 4" long pipe nipple into the outlet of the gate valve. Make sure that the gate valve is completely open.
2. Secure the regulator valve to the pipe nipple with the compression clamp. The valve should be mounted in a nearly vertical position.
3. Remove the brass fitting from the discharge tube. Assemble the pipe nipple and both brass fittings to the pipe tee and thread into the discharge tube.
4. Use a short piece of hose to connect the fitting in the valve with one of the fittings in the discharge tube.
5. Connect the other fitting in the valve with the air pressure limit switch located in the Trans-Fer control box.

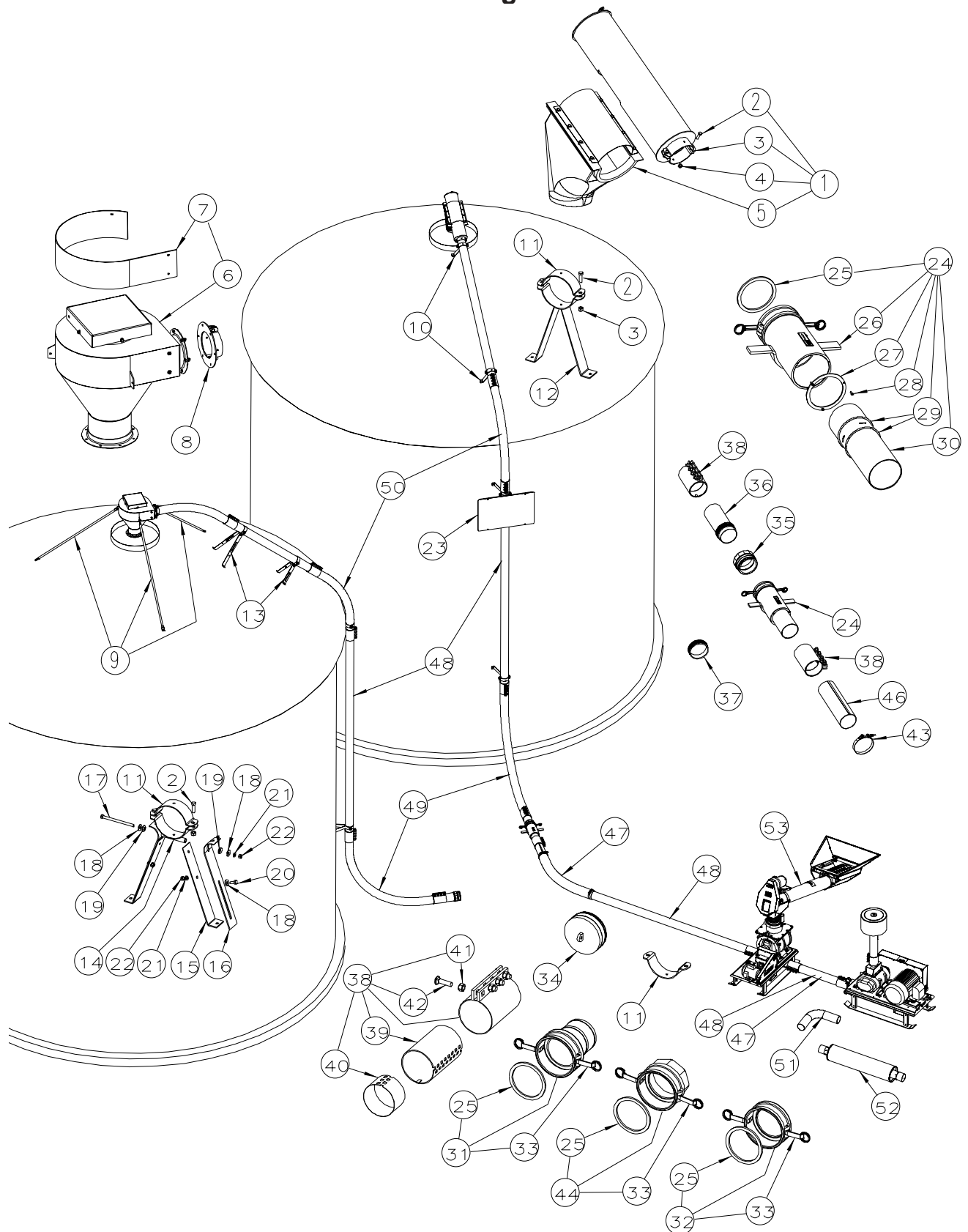


REGULATOR VALVE OPERATING INSTRUCTIONS

1. Loosen the locking nut on the top threaded rod and turn the handle counter-clockwise (loosen it) until no spring pressure can be felt on the valve diaphragm.
2. Loosen the locking nut on the bottom threaded rod and turn the handle clockwise until it stops. The valve is now completely closed.
3. Loosen the bottom threaded rod 2 complete turns and lock in place with the locking nut. This sets the maximum amount that the valve can open.
4. Start the air system and manually set the feed rate at the expected medium rate of discharge from the dryer.
5. Turn the top adjusting rod clockwise (tighten) until air starts to be discharged from the valve.
6. Continue to slowly tighten the top rod and increase the volume of discharged air until the grain is being discharged at a low enough rate to prevent grain damage. Adjust the valve a small amount and then wait for the system to respond to that change before making further adjustments.
7. If the line pressure cycles between too high and too low, then the amount that the valve can open should be decreased. Loosen the locking nut on the bottom adjusting rod and tighten the rod in small increments until the oscillation stops.
8. Check the valve operation by setting the feed rate from the dryer to the lowest expected discharge rate.
9. As the line pressure decreases due to the lower feed rate, the valve will open and discharge more air to slow the velocity of the grain.
10. If surging occurs then more air is required. Turn the top adjusting rod counter-clockwise (loosen) to decrease the amount of air being discharged.
11. If the grain velocity is too fast, then turn the top adjusting rod clockwise (tighten) to increase the volume of discharged air and slow the grain velocity.
12. Secure the position of the top and bottom rods with the locking nuts after the valve has been adjusted.
13. Use the manual gate valve to clean a plugged system to avoid having to readjust the compensating valve.

ACCESSORY PARTS

Drawing 7



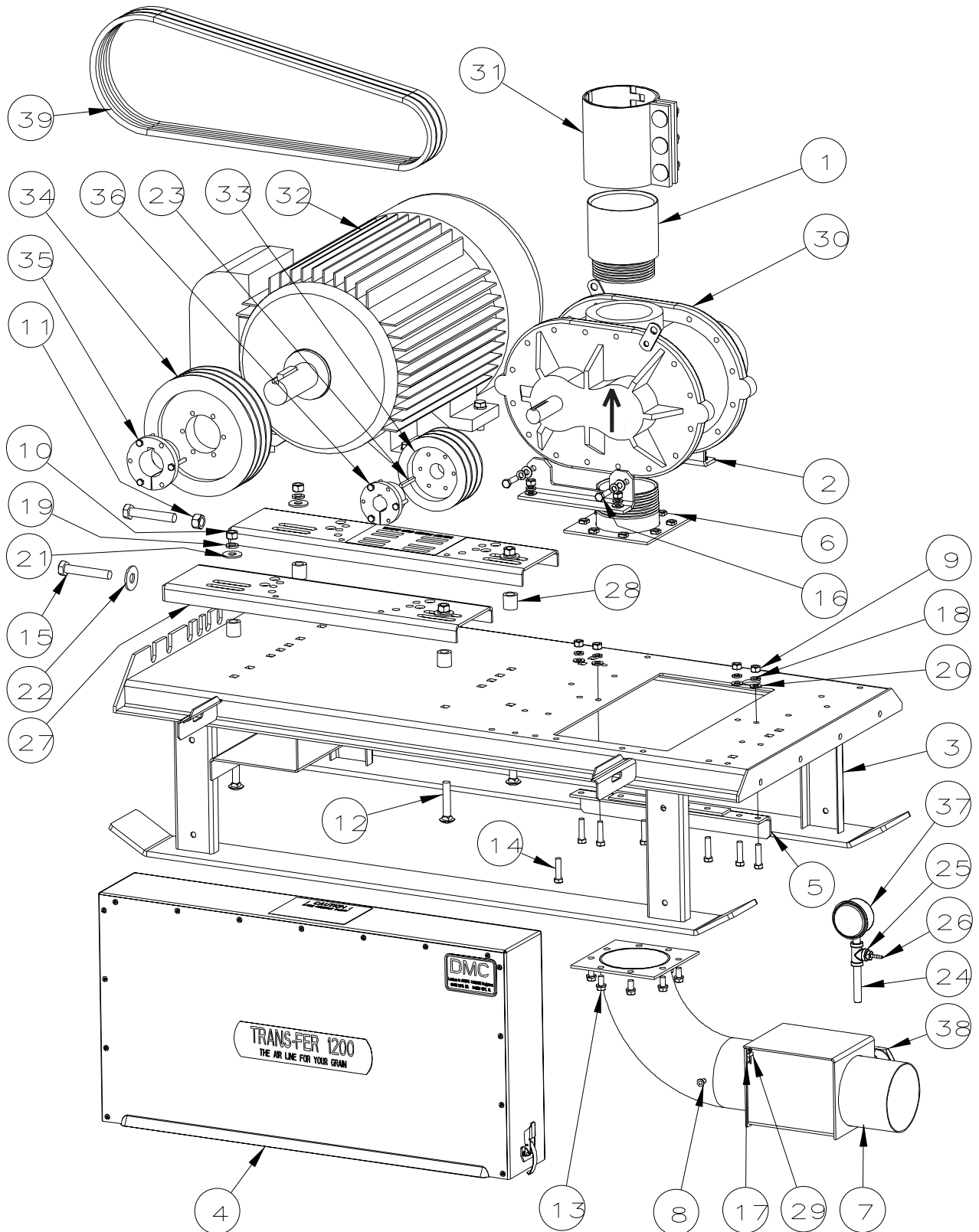
ACCESSORY PARTS LIST (continued on next page)

Index	700 (4")	1200 (5")	1700 (5")	2100 (6")	Description
1	801A062	802A025	802A025	804A027	DEADHEAD DEFLECTOR ASSEMBLY
2	2FH0856	2FH0856	2FH0856	2FH0856	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1-1/4,PLTD
3	1FH0765	1FH0765	1FH0765	1FH0765	NUT- HEX, 3/8-16 UNC FINISHED, PLTD, GRADE 2
4	801A057	802A033	802A033	804A028	DEADHEAD DEFLECTOR TUBE ZINC PLATED
5	GK2513	GK1503	GK1503	GK1504	SPOUT- PLASTIC, 60 DEGREE
6	801A031	801A031	801A031	801A031	CYCLONE ASSEMBLY
7	8011267	8011267	8011267	8011267	WEAR STRIP- CYCLONE, ABRASION RESISTING STEEL
8	801A160	802A089	802A089	804A054	CYCLONE ADAPTOR ASSEMBLY
9	801N037	801N037	801N037	801N037	CYCLONE MOUNTING BRACKET BUNDLE OF 3 LEGS
10	801A032	802A023	802A023	804A023	TUBE SUPPORT BRACKET ASSEMBLY
11	201C0002	206C0086	206C0086	601B0003	CLAMP- BAND (GALVANIZED)
12	801A033	802A029	802A029	804A024	TUBE SUPPORT BRACKET ZINC PLATED
13	801A068	802A024	802A024	804A025	TUBE SUPPORT BRACKET ASSEMBLY (ADJUSTABLE)
14	801A073	802A031	802A031	804A026	CLAMP- BAND, W/TUBE ZINC PLTD(ADJ TUBE SPRT)
15	801A071	801A071	801A071	801A071	SUPPORT- LEG INSIDE
16	801A072	801A072	801A072	801A072	SUPPORT- LEG OUTSIDE
17	2FH0844	2FH0844	2FH0844	2FH0844	BOLT- HEX,STD THRD-GRD 2 5/16-18 UNC X 5", PLTD
18	3FH0864	3FH0864	3FH0864	3FH0864	WASHER- FLAT, STANDARD 5/16, PLTD
19	3FH0977	3FH0977	3FH0977	3FH0977	WASHER- CUPPED,(SPECIAL) 7/8 OD X 11/32 ID X 3/16 THICK
20	2FH0828	2FH0828	2FH0828	2FH0828	BOLT- HEX,STD THRD-GRD 2 5/16-18 UNC X 3/4, PLTD
21	3FH0790	3FH0790	3FH0790	3FH0790	WASHER- LOCK, REGULAR 5/16, PLTD
22	1FH0764	1FH0764	1FH0764	1FH0764	NUT- HEX, 5/16-18 UNC FINISHED, PLTD, GRADE 2
23	8019043	8029019	8029019	8049023	AIR SYSTEM SIGN WITH MOUNTING BRACKETS
24	8011275	8021162	8021162	8041157	TELESCOPING FEMALE CAMLOCK ASSEMBLY
25	801A086	802A048	802A048	804A111	GASKET FOR FEMALE CAMLOCKS AND CAPS
26	8011272	8021165	8021165	8041160	TELESCOPING CAMLOCK BODY WELDMENT
27	8011271	8021164	8021164	8041159	RING- TELESCOPING CAMLOCK
28	2FH0532	2FH0532	2FH0532	2FH0532	SCREW- MACH, FILLIST, HD #10-32 UNC X 1/2, PLTD
29	PT0849	PT0853	PT0853	PT0850	O-RING
30	8011308	8021231	8021231	8041296	TUBE- W/STOP, WELDMENT TELESCOPING CAMLOCK

ACCESSORY PARTS LIST (continued from previous page)

Index	700 (4")	1200 (5")	1700 (5")	2100 (6")	Description
31	801A029	802A020	802A020	804A021	FEMALE CAMLOCK (MACHINED)
32	801A030	802A021	802A021	804A020	FEMALE CAMLOCK CAP
33	801A201	801A201	801A201	804A112	CAMLOCK LEVER— RING & PIN FOR FEMALE CAMLOCK & CAP
34	801A028	802A019	802A019	80AA019	MALE CAMLOCK PLUG
35	801A027	802A018	802A018	804A018	MALE CAMLOCK (MACHINED)
36	801A054	802A026	802A026	804A030	THREADED ADAPTOR ZINC PLATED
37	801A056	802A039	802A039	804A032	PIPE NIPPLE
38	80A026	802A017	802A017	-----	COMPRESSION COUPLER 3 BOLT
	801A211	802A107	802A107	-----	COMPRESSION COUPLER 4 BOLT
	-----	-----	-----	804A015	COMPRESSION COUPLER 5 BOLT
39	801A158	802A075	802A075	-----	COUPLER RUBBER GASKET 3 BOLT
	801A212	802A108	802A108	-----	COUPLER RUBBER GASKET 4 BOLT
	-----	-----	-----	80A016	COUPLER RUBBER GASKET 5 BOLT
40	801A157	802A074	802A074	804A017	COUPLER GASKET PROTECTOR
41	1FH0769	1FH0769	1FH0769	1FH0769	NUT— HEX, 5/8—11 UNC FINISHED, PLTD, GRADE 2
42	2FH5906	2FH5906	2FH5906	2FH5906	BOLT— CAR, STD THRD—GRD 5 5/8—11 UNC X 2—1/4, PL
43	MS0365	MS0366	MS0366	MS5387	HOSE CLAMP HEAVY DUTY T—BOLT
44	8011236	8021121	8021121	8041125	CAMLOCK—"D" ALUM. COUPLER (MACHINED)
46	801A202	802A094	802A094	804A057	SIGHT GLASS CLEAR TUBE W/COPPER STRIP
47	MS0047	MS0061	MS0061	MS5386	FLEXIBLE RUBBER HOSE (ORDER PER FOOT)
48	MS0214	MS0213	MS0213	MS0212	14 GA GALVANIZED TUBING (20 FT LONG)
	MS0215	MS0217	MS0217	MS0221	14 GA GALVANIZED TUBING (40 FT LONG)
49	801A025	802A015	802A015	804A014	90° ELBOW 11 GA GALV, 4 FT R.
50	8011235	8021120	8021120	8041124	60° ELBOW 11 GA GALV, 4 FT R.
51	8011281	8021203	8021203	8041164	90° ELBOW (SMALL RADIUS) FOR USE ON AIR SIDE LINES ONLY
52	801B034	802B009	802B009	804B001	SILENCER
53	801N004	801N004	801N004	801N004	8" X 8' FEED—IN AUGER WITH HOPPER
	-----	-----	-----	804N015	10" X 12' FEED—IN AUGER WITH HOPPER
	801N017	801N017	801N017	-----	8" X 8' FEED—IN AUGER (GIMBAL OR STRAIGHTOUT SWIVEL)

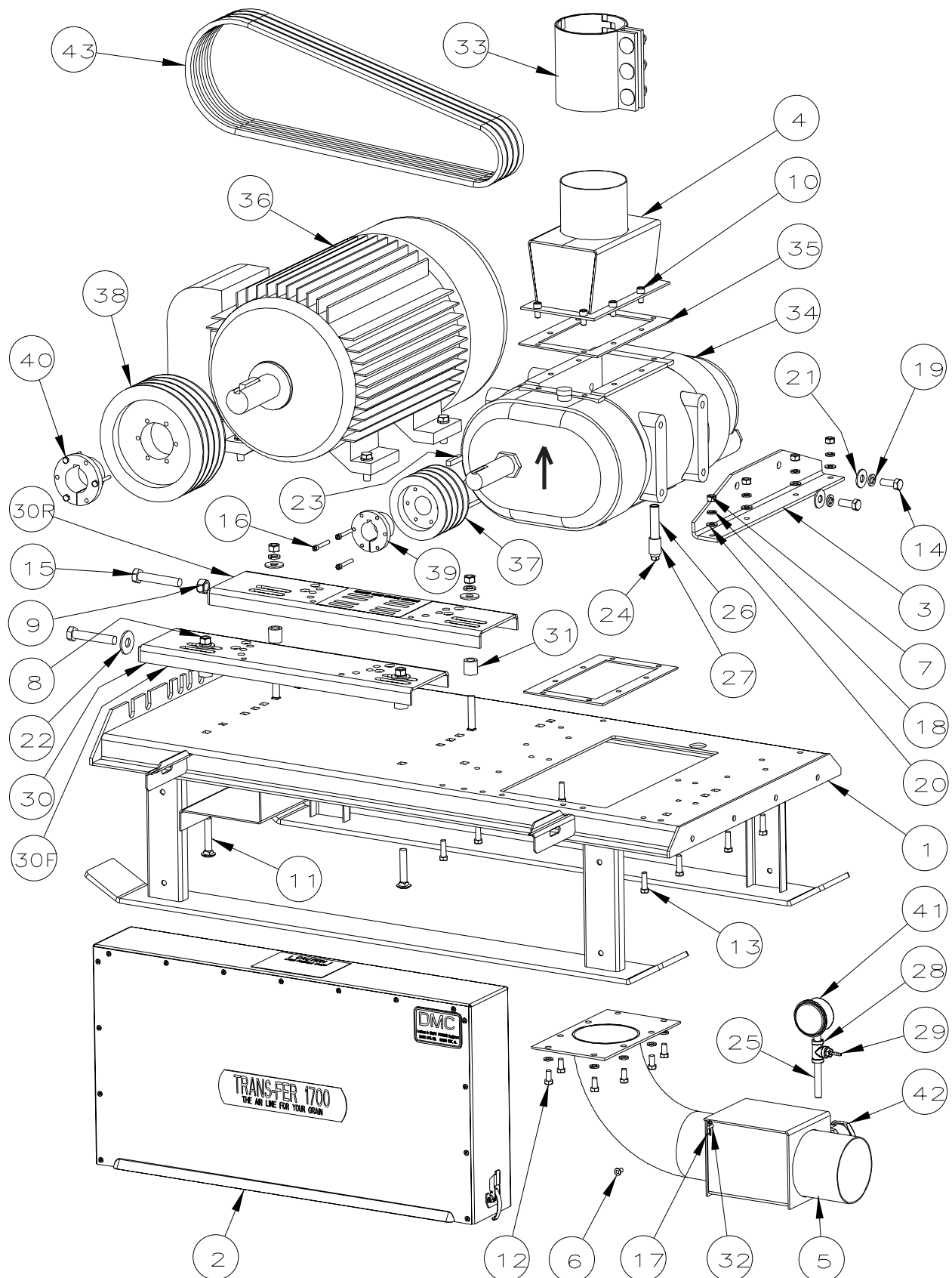
TRANS-FER 700 & 1200 BLOWER



TRANS-FER 700 & 1200 BLOWER - Parts List

INDEX	PART	DESCRIPTION	QTY	INDEX	PART	DESCRIPTION	QTY
1	8011246	BLOWER INLET- 5" THREADED WELDMENT (700 & 1200)	1	25	4FH0581	FITTING- TEE, PIPE, 1/4 FPT, (GALV)	1
2	8011247	ANGLE- BLOWER, (T.F. 700 & 1200)	2	26	4FH0971	FIT- HOSE BARB, 1/4 X 1/4 MPT, (BRASS)	1
3	8011250	SKID- BLOWER, WELDMENT (700,1200,1700,2100)	1	27	801A113	MOTOR MOUNT- BLOWER WELDMENT (700 TO 1700)	2
4	8011256	SHIELD- BLOWER, ASSEMBLY (700,1200,1700,2100)	1	28	801A116	SPACER- MOTOR MOUNT	4
5	8021173	ANGLE- BLOWER OUTLET, WELDMENT, (T.F.700 AND 1200)	1	29	8011315	ROD- CHECK VALVE PILOT T F 700	1
6	8021181	ADAPTOR- BLOWER OUTLET, WELDMENT, (T.F.700 & 1200)	1		801A190	ROD- CHECK VALVE PILOT T F 1200, 1700	1
7	8011284	ELBOW- BLOWER OUTLET, WELDMENT, (T.F. 700, 4")	1	30	801A196	BLOWER- (T.F. 700 & 1200) ASSEMBLY/STORAGE(MF 8011276)	1
	8021184	ELBOW- BLOWER OUTLET, WELDMENT, (T.F. 1200, 5")	1	31	802A017	COUPLER- COMPRESSION, 5" 3 BOLT, W/GSKT & PROTECTOR	1
8	1EL2003	INSULATOR- SCREW .26 ID X .51 FLG X .75 L	2	32	FDL3737TM (FOR 700)	MOTOR- 10HP, 1PH 230V, TEFC, (1-3/8" SHAFT)	1
9	1FH0765	NUT- HEX, 3/8-16 UNC FINISHED, PLTD, GRADE 2	8		3EL5119 (FOR 700)	MOTOR- 10HP, 3PH 230/440V, TEFC, (1-3/8" SHAFT)	1
10	1FH0767	NUT- HEX, 1/2-13 UNC FINISHED, PLTD, GRADE 2	4		3EL5069 (FOR 700)	MOTOR- 15HP, 1PH 230V, TEFC, (1-5/8" SHAFT)	1
11	1FH0769	NUT- HEX, 5/8-11 UNC FINISHED, PLTD, GRADE 2	1		M2333T (FOR 700)	MOTOR- 15HP, 3PH 230/440V, TEFC, (1-5/8" SHAFT)	1
12	2FH0677	BOLT- CAR,STD THRD-GRD 2 1/2-13 UNC X 2-1/2, PLTD	4		M2334T (FOR 700 OR 1200)	MOTOR- 20HP, 3PH 230/440V, TEFC, (1-5/8" SHAFT)	1
13	2FH0853	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 3/4, PLTD	8		M4104T (FOR 1200)	MOTOR- 30HP, 3PH 230/440V, TEFC,	1
14	2FH0857	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1-1/2,PLTD	8	33	PT0664 (FOR 700)	PULLEY-(ARM) QD STYLE 7.75" OD X SK BUSH-3AB	1
15	2FH1043	BOLT- HEX,STD THRD-GRD 2 5/8-11 UNC X 3-1/2, PLTD	2		PT0602 (FOR 1200)	PULLEY-(SOLID) QD STYLE 5.50" OD X SD BUSH-3AB	1
16	2FH5293	BOLT- HEX,STD THRD-GRD 5 3/8-16 UNC X 1-1/4,PLTD	4	34	PT0666	PULLEY- (ARM) QD STYLE 8.95" OD X SK BUSH-3AB	1
17	3FH0712	PIN-COTTER, STANDARD 1/8" X 3/4" LONG,	1	35	PT0778	BUSHING- (QD STYLE) SK, 1-3/8" BORE	1
18	3FH0791	WASHER- LOCK, REGULAR 3/8", PLTD	20		PT0780	BUSHING- (QD STYLE) SK, 1-5/8" BORE	1
19	3FH0793	WASHER- LOCK, REGULAR 1/2", PLTD	8		PT0782	BUSHING- (QD STYLE) SK, 1-7/8" BORE	1
20	3FH0865	WASHER- FLAT, STANDARD 3/8", PLTD	12	36	PT0772 (FOR 700)	BUSHING- (QD STYLE) SK, 1-1/8" BORE	1
21	3FH0867	WASHER- FLAT, STANDARD 1/2", PLTD.	4		PT0794 (FOR 1200)	BUSHING- (QD STYLE) SD, 1-1/8" BORE	1
22	3FH0869	WASHER- FLAT, STANDARD 5/8", PLTD.	1	37	PT1127	GAUGE- (PRESSURE) 2-1/2" 0 TO 15 PSI	1
23	3FH1030	KEY- SQUARE 1/4" X 2"	1	38	PT1132	VALVE- (GATE) 1-1/2 NPT, NONRISE STEM	1
24	4FH0509	FITTING- NIPPLE, PIPE 1/4 X 3", GALV	1	39	PT0535	BELT-V, (COGGED) BX60 .66" TOP, .41" THICK	3

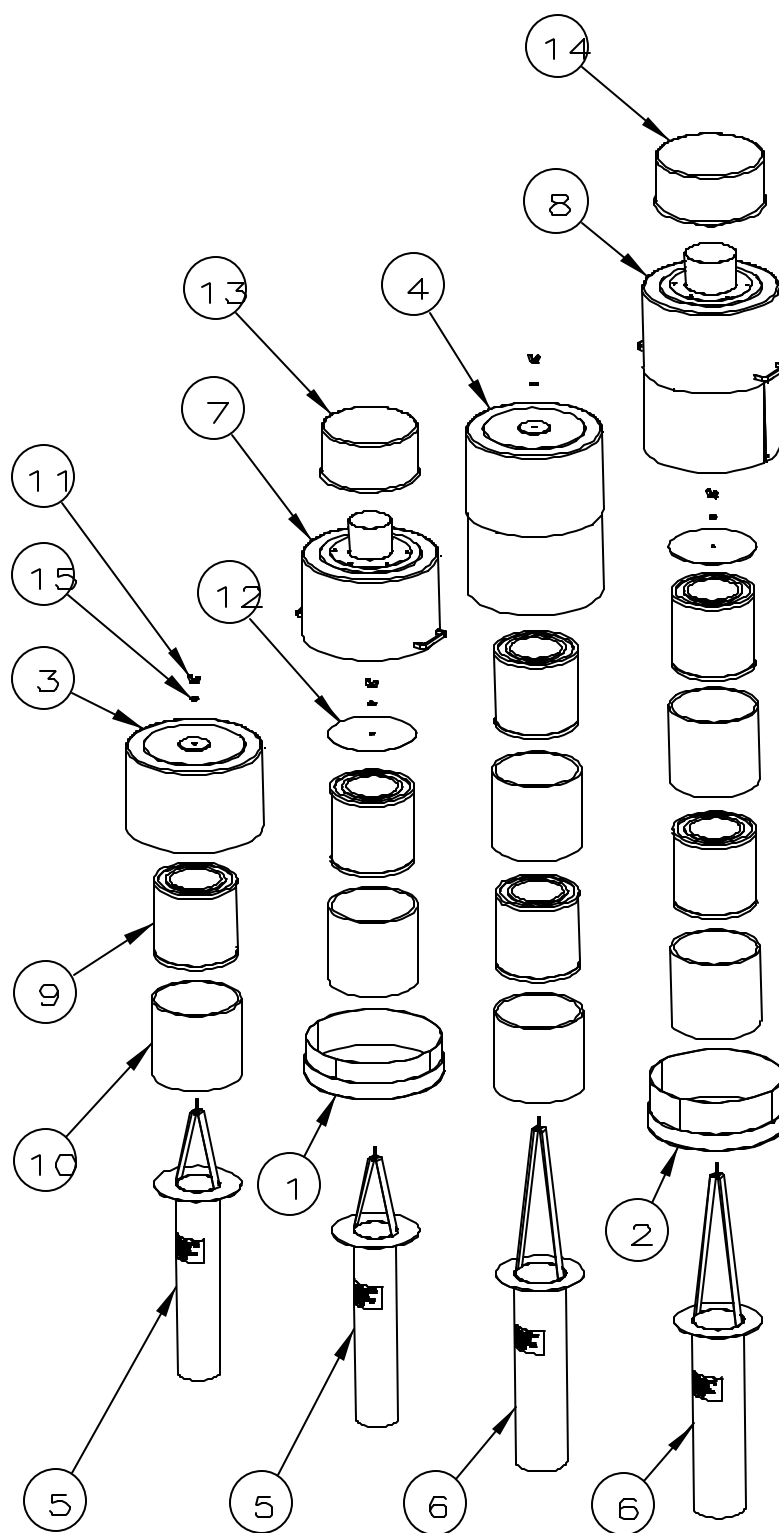
TRANS-FER 1700 & 2100 BLOWER



TRANS-FER 1700 & 2100 BLOWER - Parts List

INDEX	PART	DESCRIPTION	QTY	INDEX	PART	DESCRIPTION	QTY
1	8011250	SKID- BLOWER, WELDMENT (700,1200,1700,2100)	1	30	801A113	MOTOR MOUNT- BLOWER WELDMENT (700 TO 1700)	2
2	8011256	SHIELD- BLOWER, ASSEMBLY (700,1200,1700,2100)	1	30F	804A066	MOTOR MOUNT- BLOWER WELDMENT (2100) (FRONT)	1
3	8021127	ANGLE- BLOWER, (4509) (T.F. 1700)	2	30R	804A068	MOTOR MOUNT- BLOWER WELDMENT (2100) (REAR)	1
	8041173	BLOWER MOUNT- WELDMENT (T.F. 2100)	2	31	801A116	SPACER- MOTOR MOUNT	4
4	8021130	BLOWER INLET- 5" WELDMENT (1700)	1	32	801A190	ROD- CHECK VALVE PIVOT T.F. 1200, 1700	1
	8041144	BLOWER INLET- 6" WELDMENT (2100)	1		8041203	ROD- CHECK VALVE PIVOT T.F. 2100	1
5	8021185	ELBOW- BLOWER OUTLET, WELDMENT, (T.F. 1700, 5"OD)	1	33	802A017	COUPLER- COMPRESSION, 5" 3 BOLT, W/GSKT & PROTECTOR	1
	8041166	ELBOW- BLOWER OUTLET, WELDMENT, (T.F. 2100, 6")	1		804A015	COUPLER- COMPRESSION, 6" 5 BOLT, W/GSKT & PROTECTOR	1
6	1EL2003	INSULATOR- SCREW .26 ID X .51 FLG X .75 L	2	34	802A056	BLOWER- (TF. 1700) ASSEMBLY/STORAGE(MF 8021161)	1
7	1FH0765	NUT- HEX, 3/8-16 UNC FINISHED, PLTD, GRADE 2	8		804A012	BLOWER- (TF. 2100) ASSEMBLY \STORAGE (MF 8041156)	1
8	1FH0767	NUT- HEX, 1/2-13 UNC FINISHED, PLTD, GRADE 2	4	35	802B006	GASKET- TF1700/DUROFLOW	2
9	1FH0769	NUT- HEX, 5/8-11 UNC FINISHED, PLTD, GRADE 2	1		804A114	GASKET- TF 2100/DUROFLOW	2
10	2FH0444	SCREW- CAP, SOCKET HEAD 3/8-16 UNC X 3/4, GRD 2	8	36	M2334T (FOR 1700)	MOTOR- 20HP, 3PH 230/440V, TEFC,	1
11	2FH0677	BOLT- CAR,STD THRD-GRD 2 1/2-13 UNC X 2-1/2, PLTD	4		M4104T (FOR 1700)	MOTOR- 30HP, 3PH 230/440V, TEFC,	1
12	2FH0853	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 3/4, PLTD	8		M4110T (FOR 1700 & 2100)	MOTOR- 40HP, 3PH 230/440V, TEFC,	1
13	2FH0856	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1-1/4,PLTD	8		M4115T (FOR 2100)	MOTOR- 50HP, 3PH 230/440V, TEFC,	1
14	2FH0904	BOLT- HEX,STD THRD-GRD 2 1/2-13 UNC X 1-1/4,PLTD	4		M4314T (FOR 2100)	MOTOR- 60HP, 3PH 230/440V, TEFC,	1
15	2FH1043	BOLT- HEX,STD THRD-GRD 2 5/8-11 UNC X 3-1/2, PLTD	2		M4316T (FOR 2100)	MOTOR- 75HP, 3PH 230/440V, TEFC,	1
16	2FH5055	SCREW- CAP, SOCKET HEAD 1-4-20 UNC X 1-3/4,GRD8	3	37	PT0736 (1700 & 40HP 2100)	PULLEY-(SOLID) QD STYLE 4.95" OD X SD BUSH-4AB	1
17	3FH0712	PIN- COTTER, STANDARD 1/8" X 3/4" LONG	1		PT0668 (FOR 50 & 60HP 2100)	PULLEY-(SOLID) QD STYLE 4.95" OD X SD BUSH-5AB	1
18	3FH0791	WASHER- LOCK, REGULAR 3/8", PLTD	16		PT0669 (FOR 75HP 2100)	PULLEY-(SOLID) QD STYLE 4.95" OD X SD BUSH-6AB	1
19	3FH0793	WASHER- LOCK, REGULAR 1/2", PLTD	12	38	PT0737 (1700 & 40HP 2100)	PULLEY- (ARM) QD STYLE 8.95" OD X SK BUSH-4AB	1
20	3FH0865	WASHER- FLAT, STANDARD 3/8", PLTD	8		PT0671 (FOR 50 & 60HP 2100)	PULLEY- (WEB) QD STYLE 8.95" OD X SF BUSH-5AB	1
21	3FH0867	WASHER- FLAT, STANDARD 1/2", PLTD.	8		PT0672 (FOR 75HP 2100)	PULLEY- (WEB) QD STYLE 8.95" OD X SF BUSH-6AB	1
22	3FH0869	WASHER- FLAT, STANDARD 5/8", PLTD.	1		PT0779	BUSHING- (QD STYLE) SD, 1-7/16" BORE,	1
23	3FH1040	KEY- SQUARE, 3/8" X 1-3/4"	1	40	PT0780	BUSHING- (QD STYLE) SK, 1-5/8" BORE	1
24	4FH0295	FIT- PLUG, PIPE (SQUARE) 3/8, SCH 80	1		PT0782	BUSHING- (QD STYLE) SK, 1-7/8" BORE	1
25	4FH0509	FIT- NIPPLE, PIPE 1/4 X 3", GALV	1		PT0784	BUSHING- (QD STYLE) SK, 2-1/8" BORE	1
26	4FH0511	FIT- NIPPLE, PIPE 3/8 X 3, (SCH 80)	1		PT0774	BUSHING- (QD STYLE) SF, 2-1/8" BORE	1
27	4FH0565	FIT- COUPLER, PIPE 3/8 FPT (SCH 80)	1		PT0786	BUSHING- (QD STYLE) SF, 2-3/8" BORE	1
28	4FH0581	FIT- TEE, PIPE, 1/4 FPT, (GALV)	1	41	PT1127	GAUGE- (PRESSURE) 2-1/2" 0 TO 15 PSI	1
29	4FH0971	FIT- HOSE BARB, 1/4 X 1/4 MPT, (BRASS)	1	42	PT1132	VALVE- (GATE) 1-1/2 NPT, NONRISE STEM	1
				43	PT0535	BELT-V, (COGGED) BX60 .66" TOP, .41" THICK	A/R

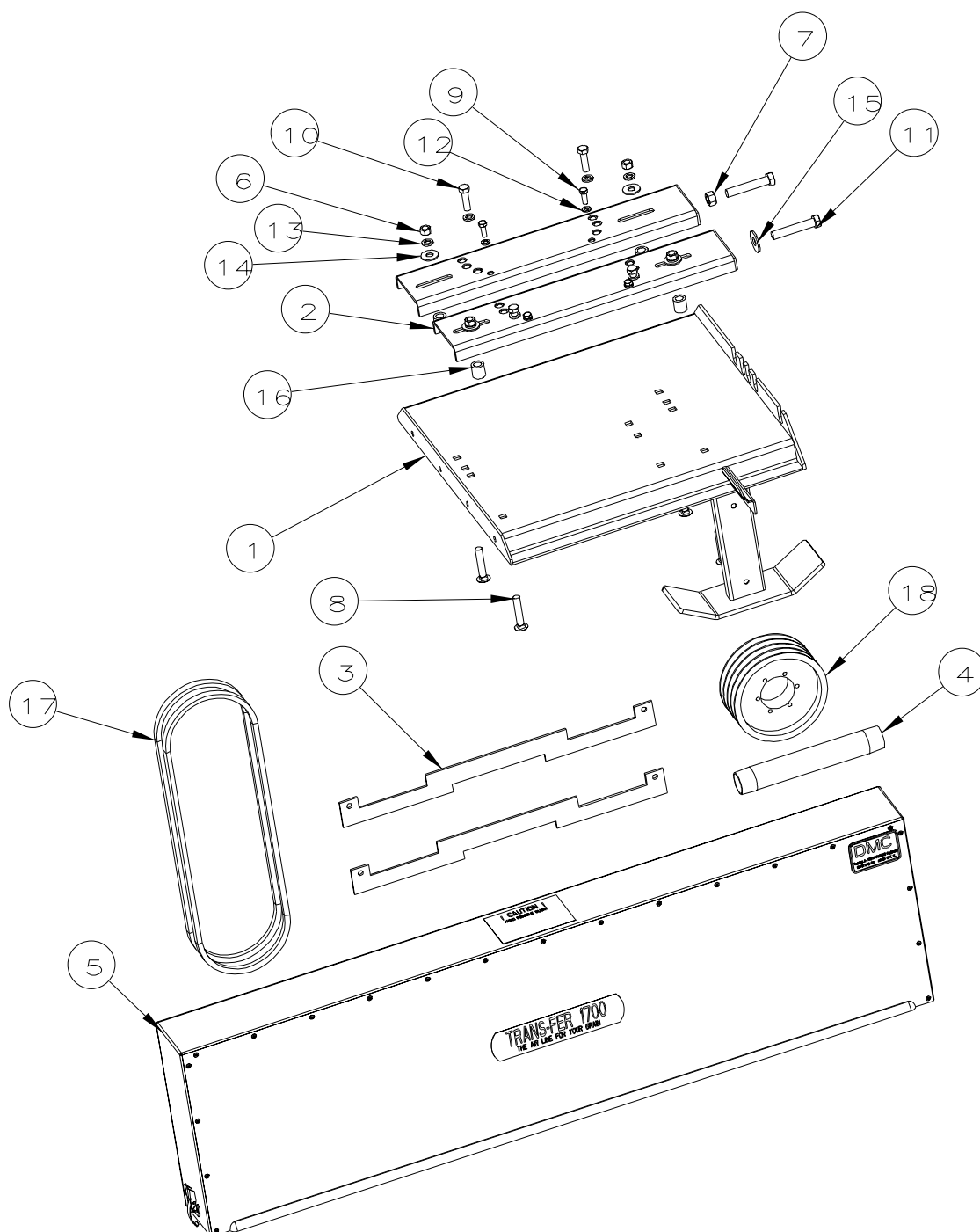
TRANS-FER BLOWER FILTER



TRANS-FER BLOWER FILTER - Parts List

INDEX	PART	DESCRIPTION	QTY
1	8021224	BASE- PREFILTER, 5" WELDMENT PRECLEANER 700, 1200, 1700	1
2	8041190	BASE- PREFILTER, 6" WELDMENT PRECLEANER (2100)	1
3	801A104	CANISTER- AIR FILTER 16" DIA X 10.50" X 19GA	1
4	804A086	CANISTER- AIR FILTER WELDMENT (FOR 6" T.F.)	1
5	802A072	FILTER BASE- 5 ASSEMBLY (TF 700 TO 1700)	2
6	804A110	FILTER BASE- 6 ASSEMBLY (TF 2100)	2
7	8021219	FILTER CANISTER-W/INLET-ASS'Y PRECLEANER 700, 1200, 1700	1
8	8041187	FILTER CANISTER-W/INLET,ASS'Y PRECLEANER (2100)	1
9	801A154	FILTER- INNER, 10 MICRON (PART OF 801A152)	6
10	801A156	FILTER- OUTER, (PRE) (PART OF 801A152)	6
11	1FH0581	NUT- WING, 3/8 -16 UNF PLATED	2
12	8021228	PLATE- FILTER TOP PRECLEANER- 700 THRU 2100	2
13	MS5466	PRECLEANER- 5" INLET CENTRI #EX-50 (350-700 CFM)	1
14	MS5467	PRECLEANER- 6" INLET CENTRI #EX-60 (500-950 CFM)	1
15	3FH0865	WASHER- FLAT, STANDARD 3/8", PLTD	2

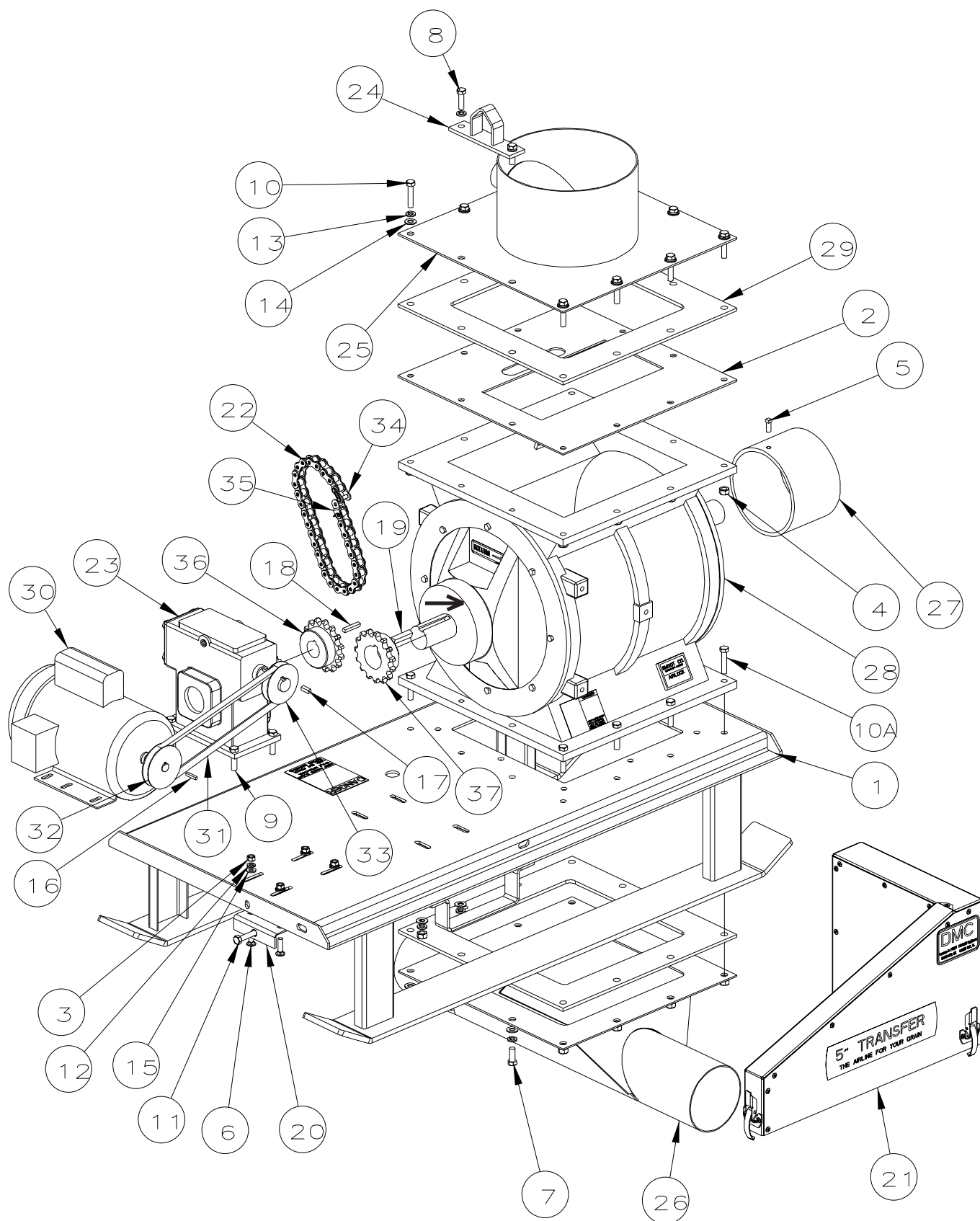
DUAL MOTOR OPTION



DUAL MOTOR OPTION Parts List

INDEX	PART	DESCRIPTION	QTY
1	8021189	DUAL BLOWER MOTOR SKID- WELDMENT,T.F. 700,1200,&1700	1
2	8021192	DUAL MOTOR MOUNT- WELDMENT(T.F. 700 & 1200)	2
3	8021200	BRACE- SKID CROSS, DUAL BLOWER MOTOR OPTION	2
4	8021205	PIPE- EXTENSION, 12" LONG MADE FROM 4FH0561	1
5	8011291	SHIELD- W/DECALS(T.F. 700) DUAL BLOWER MOTOR OPTION	1
	8021207	SHIELD- W/DECALS(T.F. 1200) DUAL BLOWER MOTOR OPTION	1
	8021206	SHIELD- W/DECALS(T.F. 1700) DUAL BLOWER MOTOR OPTION	1
6	1FH0767	NUT- HEX, 1/2-13 UNC FINISHED, PLTD. GRADE 2	4
7	1FH0769	NUT- HEX, 5/8-11 UNC FINISHED, PLTD, GRADE 2	1
8	2FH0677	BOLT- CAR,STD THRD-GRD 2 1/2-13 UNC X 2-1/2, PLTD	4
9	2FH0855	BOLT- HEX, STD THRD-GRD 2 3/8-16 UNC X 1, PLTD	4
10	2FH0906	BOLT- HEX,STD THRD-GRD 2 1/2-13 UNC X 1-3/4,PLTD	4
11	8011318 (FOR 700)	ADJUSTING SCREW, WELDMENT 5/8-11 UNC X 8.62, PLTD	2
	2FH1043 (FOR 1200& 1700)	BOLT- HEX,STD THRD-GRD 2 5/8-11 UNC X 3-1/2, PLTD	2
12	3FH0791	WASHER- LOCK, REGULAR 3/8", PLTD	4
13	3FH0793	WASHER- LOCK, REGULAR 1/2", PLTD	8
14	3FH0867	WASHER- FLAT, STANDARD 1/2", PLTD.	4
15	3FH0869	WASHER- FLAT, STANDARD 5/8", PLTD.	1
16	801A116	SPACER- MOTOR MOUNT	4
17	PT0536	BELT-V, (COGGED) BX68 .66" TOP, .41" THICK	2
18	PT0741 (FOR 1200)	PULLEY- (SOLID) QD STYLE 5.50" OD X SK BUSH-4AB	1
	PT0742 (FOR 700)	PULLEY- (ARM) QD STYLE 7.75" OD X SK BUSH-4AB	1

TRANS-FER 700, 1200, 1700 & 2100 AIRLOCK

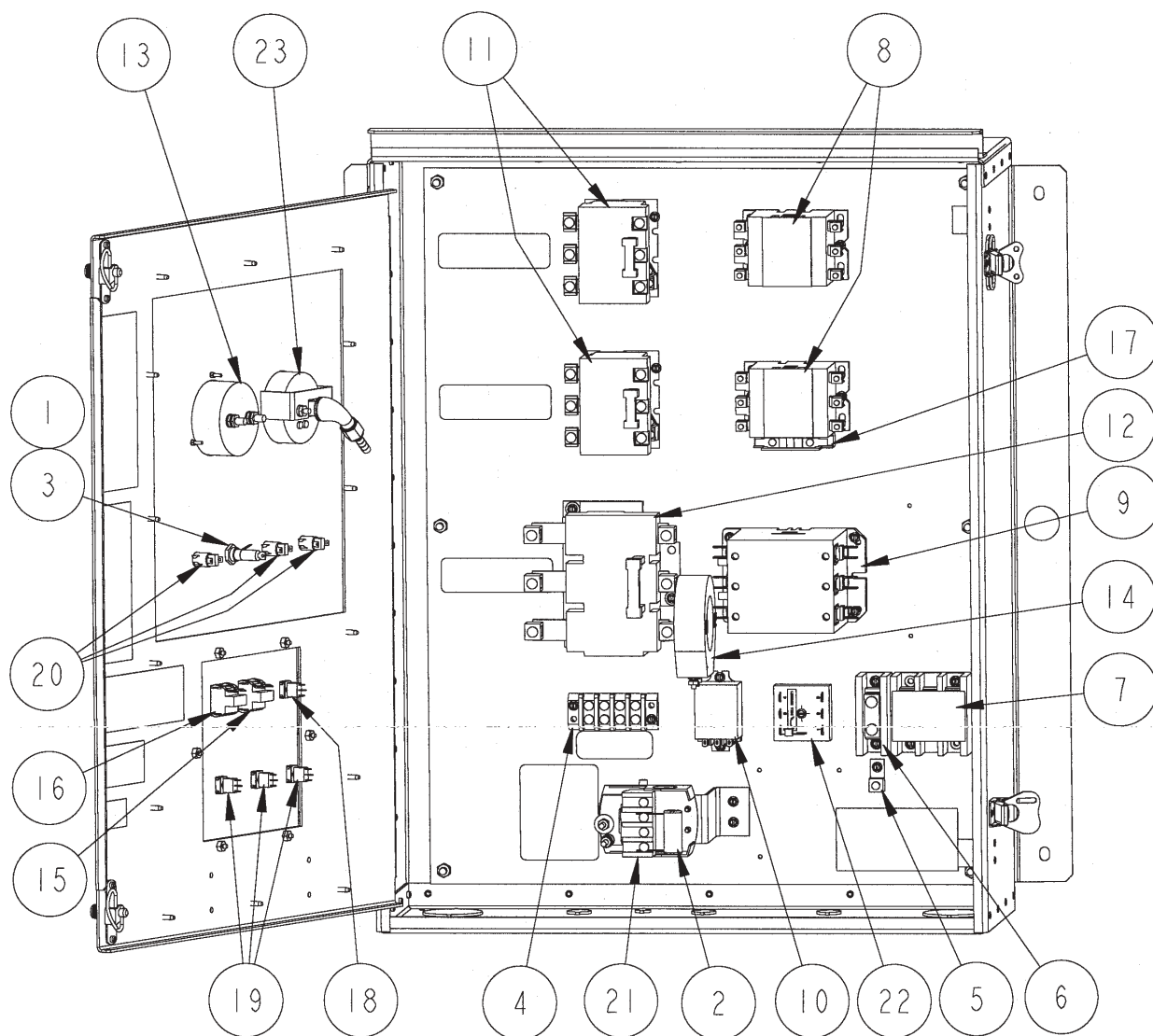


TRANS-FER 700, 1200, 1700 & 2100 AIRLOCK - Parts List

INDEX	PART	DESCRIPTION	QTY
1	8011265	SKID- AIRLOCK WELDMENT (700,1200,1700)	1
	8041150	SKID- AIRLOCK WELDMENT (2100)	1
2	8011292	SHEAR BRACKET & WIPER- ASSEMBLY (T.F. 700)	1
	8021208	SHEAR BRACKET & WIPER- ASSEMBLY (T.F. 1200 & 1700)	1
	8041176	SHEAR BRACKET & WIPER- ASSEMBLY (T.F. 2100, 40 HP)	1
	8041177	SHEAR BRACKET & WIPER- ASSEMBLY (T.F.2100, 50,60,75HP)	1
3	1FH0764	NUT- HEX, 5/16-18 UNC FINISHED, PLTD, GRADE 2	4
4	1FH0765	NUT- HEX, 3/8-16 UNC FINISHED, PLTD, GRADE 2	20
5	2FH0604	SCREW- SET, SQUARE HEAD 5/16-18 UNC X 3/4, PLTD	1
6	2FH0646	BOLT-CAR,STD THRD-GRD 2 5/16-18 UNC X 1, PLTD	4
7	2FH0855	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1, PLTD	4
8	2FH0859	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 2,PLTD (T.F. 700)	2
	2FH0856	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1-1/4,PLTD (T.F. 1200 & 1700)	4
	2FH0855	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1, PLTD (T.F. 2100)	8
9	2FH0857	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1-1/2,PLTD (T.F. 700, 1200, 1700)	4
	2FH0856	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1-1/4,PLTD (T.F. 2100)	4
10	2FH0858	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1-3/4,PLTD (T.F. 700, 1200, 1700, 2100)	8
10A	2FH0858	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 1-3/4,PLTD (T.F. 700, 1200, 1700)	8
	2FH0859	BOLT- HEX,STD THRD-GRD 2 3/8-16 UNC X 2,PLTD (T.F. 2100)	8
11	2FH1035	BOLT- HEX, FULL THRD-GRD 2 3/8-16 UNC X 3	1
12	3FH0790	WASHER- LOCK, REGULAR 5/16, PLTD	4
13	3FH0791	WASHER- LOCK, REGULAR 3/8", PLTD	28
14	3FH0865	WASHER- FLAT, STANDARD 3/8", PLTD	26
15	3FH0947	WASHER- FLAT, SAE 5/16, PLTD	4
16	3FH1015	KEY- SQUARE, 3/16" X 1"	1
17	3FH1024	KEY- SQUARE, 1/4" X 3/4"	1
18	3FH1028	KEY- SQUARE, 1/4" X 1-1/2"	1
19	3FH1040	KEY- SQUARE, 3/8" X 1-3/4"	1
20	801A136	PLATE- MOTOR TIGHTENER WELDMENT (AIRLOCK)	1
21	801A138	SHIELD- AIRLOCK ASSEMBLY (T.F.700, 1200, 1700)	1
	804A074	SHIELD- AIRLOCK ASSEMBLY (T.F. 2100)	1

INDEX	PART	DESCRIPTION	QTY
22	801A205	CHAIN- ROLLER(4"AIRLOCK) (M/F PT1020, 20.25"LONG)	1
	801A148	CHAIN- ROLLER(5"AIRLOCK) (M/F PT1020, 21.75"LONG)	1
	804A053	CHAIN- ROLLER(6"AIRLOCK) (M/F PT1020, 24.75"LONG)	1
23	801A151	WORM GEAR DRIVE BOX- (WINSMITH #926-DT)	1
24	801A018	LIFT HOOK- 4" AIRLOCK WELDMENT	1
	802A057	LIFT HOOK- 5" AIRLOCK WELDMENT	1
	804A042	LIFT HOOK- 6" AIRLOCK WELDMENT	1
25	801A020	INTAKE SPOUT- 4" AIRLOCK WELDMENT (T.F. 700)	1
	802A059	INTAKE SPOUT- 5" AIRLOCK WELDMENT (T.F. 1200, 1700)	1
	804A044	INTAKE SPOUT- 6" AIRLOCK WELDMENT (T.F. 2100, 40 HP)	1
	804A104	INTAKE SPOUT- 6" AIRLOCK WELDMENT(T.F.2100, 50,60,75HP)	1
26	801A130	ADAPTOR- DISCHARGE, 4" WELDMENT (T.F. 700)	1
	802A061	ADAPTOR- DISCHARGE, 5" WELDMENT (T.F. 1200, 1700)	1
	804A047	ADAPTOR- DISCHARGE, 6" WELDMENT (T.F. 2100)	1
27	802A066	SHIELD- SHAFT, 4",5" & 6" AIRLOCK	1
28	801A214	AIRLOCK- 5" (TF. 700) (SMOOT #FT-12, 1-1/2")	1
	802A071	AIRLOCK- 5" (TF. 1200, 1700) (SMOOT #FT-14, 1-3/4")	1
	804A013	AIRLOCK- 6" (TF. 2100) (SMOOT #FT-16, 1-3/4")	1
29	801C008	GASKET- (FOR FT-12) T.F. 700/SMOOT	2
	802C008	GASKET- (FOR FT-14) T.F. 1200, 1700/SMOOT	2
	804A113	GASKET- (FOR FT-16) T.F. 2100/SMOOT	2
30	FDL3510M	MOTOR- 1HP, 1PH 115/220/440V, 60 HZ,	1
31	PT0483	BELT-V, A31 .50" TOP, .31" THICK,	1
32	PT0618	PULLEY- (FLAT) FIXED BORE 3.25" OD X .62" ID -1A	1
33	PT0622	PULLEY- (FLAT) FIXED BORE 3.00" OD X 1.00" ID -1A	1
34	PT1051	LINK- CONNECTING, #60 3/4" PITCH, SPRING CLIP	1
35	PT1054	LINK- OFFSET, #60 3/4" PITCH, SLIP FIT (T.F. 700, 1200, 1700 ONLY)	1
36	PT1106	SPROCKET- (HUB TYPE) 15 TOOTH, 1-1/4"ID, #60	1
37	PT1083	SPROCKET- (HUB TYPE) 15 TOOTH, 1-1/2"ID, #60 (T.F. 700)	1
	PT1107	SPROCKET- (HUB TYPE) 15 TOOTH, 1-3/4"ID, #60 (T.F 1200, 1700, 2100)	1

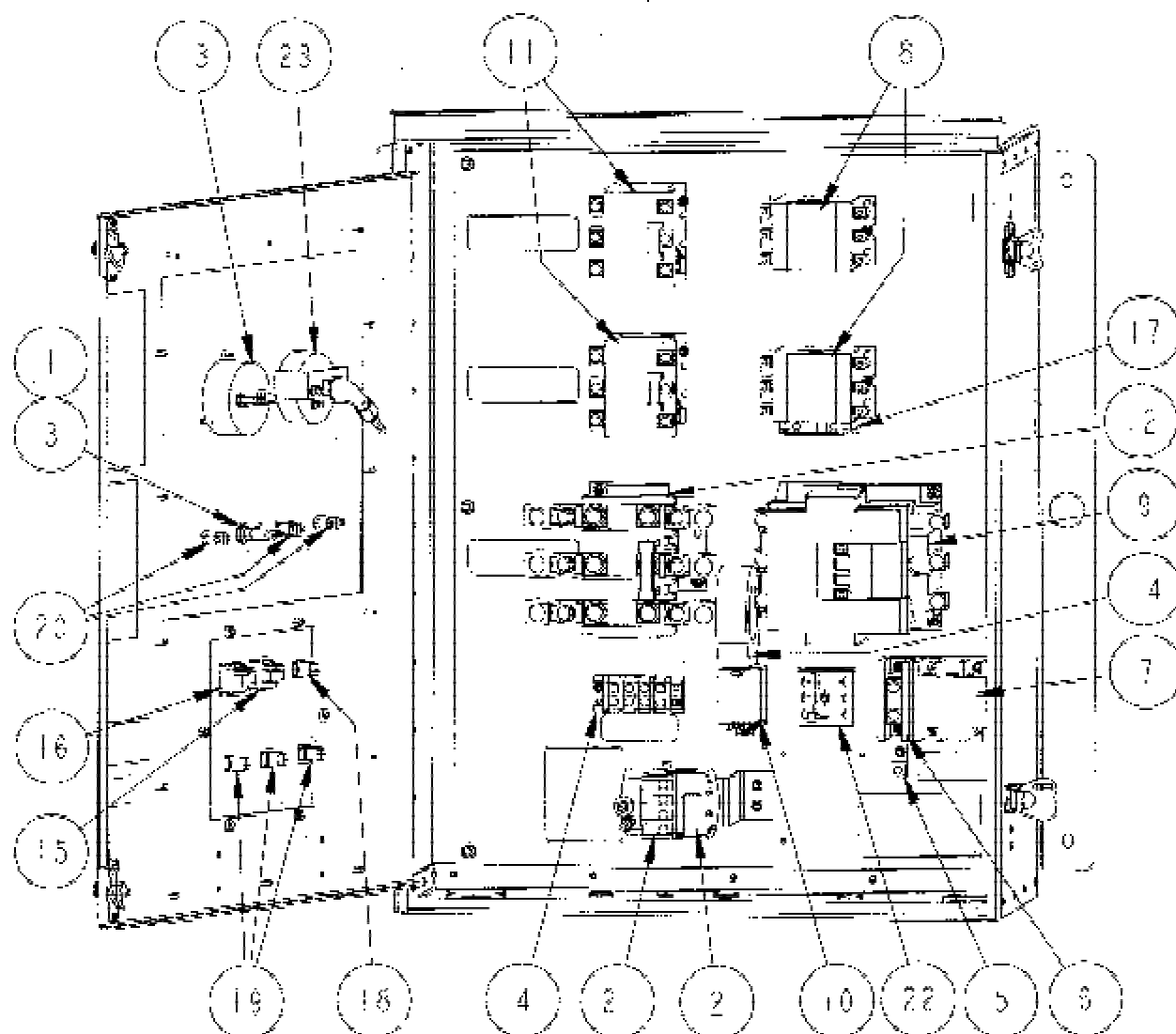
**SINGLE & DUAL MOTOR
TRANS-FER CONTROL BOX 230V, 1 & 3 PH**



SINGLE & DUAL MOTOR TRANS-FER CONTROL BOX 230V, 1 & 3 PH Parts List

INDEX	PART	DESCRIPTION	SINGLE QTY	DUAL QTY
1	1EL0754	FUSE— AGC,CARTRIDGE(CSA) 5 AMP, 32 VOLT	1	1
2	1EL0780	CAPACITOR— .22 uf, 400V, ORANGE DROP	1	1
3	1EL0826	FUSEHOLDER— PAN MNT(CSA) 30 AMP, 250 VOLT, (HKP)	1	1
4	1EL0882	TERMINAL BLOCK— DBL(CSA) 4 TERM, 30 AMP, 300 V.	1	1
5	1EL0891	LUG— GROUND, #TA-2(CSA) 600 VOLT, #2-14 WIRE.	1	1
6	1EL0909	POWER DIST. BLOCK (CSA) ONE CIRCUIT, 600 VOLT,	1	1
7	1EL0911	POWER DIST. BLOCK— (CSA) THREE CIRCUIT, 600 VOLT,	1	1
7A	1EL0911	POWER DIST. BLOCK— (CSA) THREE CIRCUIT, 600 VOLT,760AMP	1	1
8	2EL0243	CONTACTOR— MAGNETIC(CSA) 40 AMP, 120V COIL,	2	2
9	2EL0248	CONTACTOR— MAGNETIC (CSA) 90 AMP, 120V COIL,	1	2
10	2EL0273	RELAY— GEN. PURPOSE(CSA) 3PDT, 5A, 120V (DELTR0L)	1	1
11	2EL0281	RELAY— THRML OVERLD(CSA) SIZE 1, 28 AMP, (SEO-5)	2	2
12	2EL0282	RELAY— THERMAL OVERLOAD (CSA) SIZE 3, 88 AMP, (SEO-12)	1	2
13	2EL0290	PANEL METER— AC, (0 TO 150 AMP READING)	1	1
14	2EL0307	TRANSFORMER— CURRENT (CSA) 50-400 HZ, 150:5 RATIO	1	2
15	2EL0618	SWITCH— PUSHB, SPST(CSA) MOM, NORM, OPEN, GREEN	1	1
16	2EL0619	SWITCH— PUSHB, SPST(CSA) MOM, NORM, CLOSED, RED	1	1
17	2EL0648	CONTACT— AUXILIARY, (FOR 2EL0243, 248, 255)	1	2
18	2EL0659	SW—LVR,SPDT, ON-NONE-ON #UL11L5S5ZQEJ4J80-22/CSA	1	2
19	2EL0668	SW—LVR,SPDT, ON-OFF-ON #UL12L5S5ZQEJ4J80-22/CSA	3	4
20	2EL1161	LIGHT— INDICATOR,RED(CSA) (IDI #1050QC1)	3	3
21	B01E019	SWITCH— PRESSURE,PRESET (MADE FROM 2EL0610)	1	1
22	B01E047	TIMER— OFF DELAY, 15 SEC ASSEMBLY, (ADJUSTABLE)	1	1
23	PT1125	GAUGE— (PRESSURE) 2-1/2 30 PSI, PANEL MOUNT	1	1
24	B01A149	HOSE— PRESSURE GAUGE, 18" (MADE FROM MS0740, 18")	1	1
	MS0740-30FT (NOT SHOWN)	HOSE— AIR& WATER, BLACK 1/4" ID, 200 PSI (30FT)	1	1
	THERMAL UNITS (NOT SHOWN)	SEE THERMAL UNIT CHART FOR REQUIRED SIZES	A/R	A/R
	2EL1221 (NOT SHOWN)	TIMER— ON DELAY— .5 TO 60 SECONDS		1
	2EL1223 (NOT SHOWN)	TIMER MODULE, .5-20 SEC		1

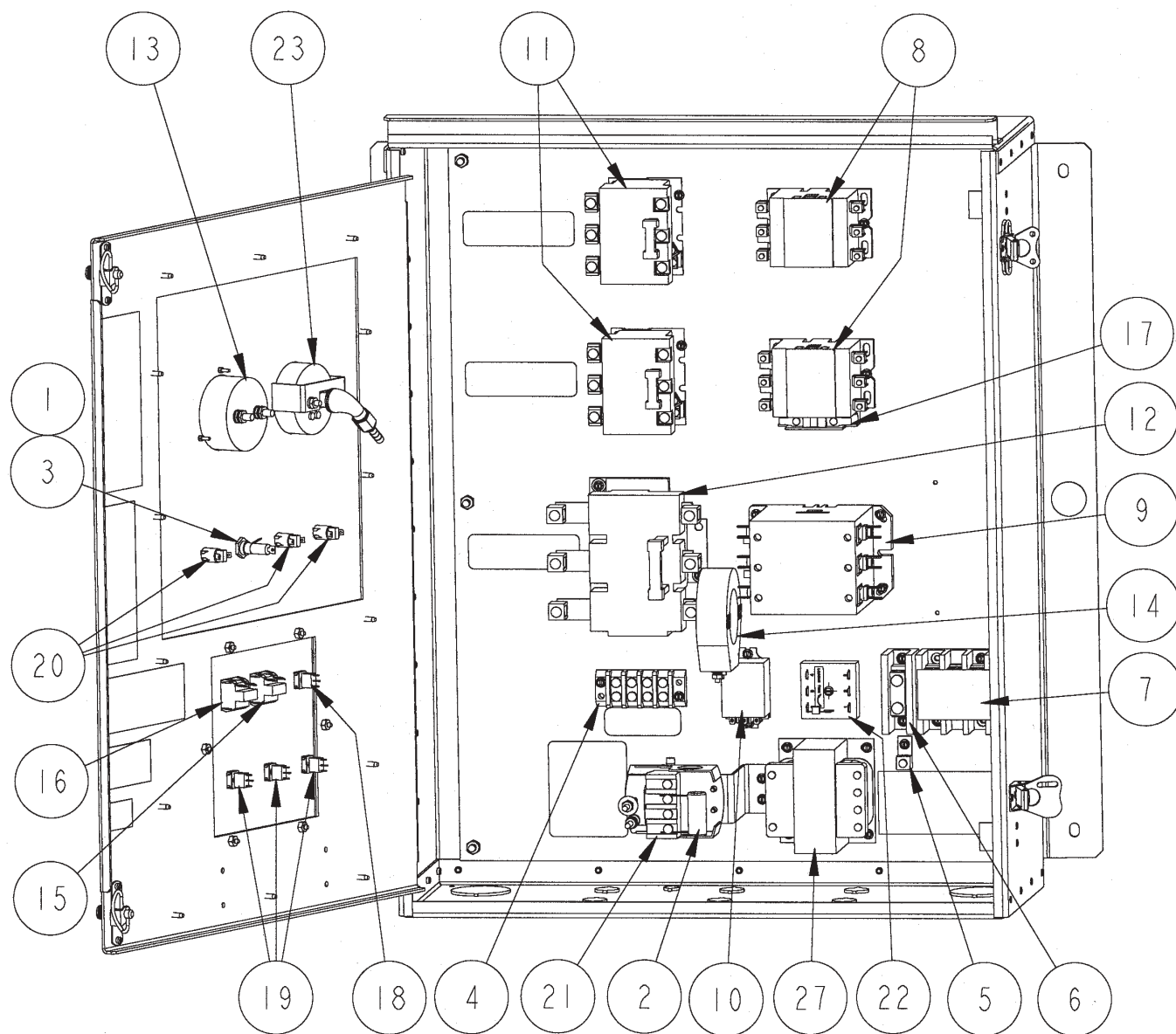
TRANS-FER CONTROL BOX 230 V, 3 PH (40 HP)



TRANS-FER CONTROL BOX 230 V, 3 PH (40 HP) - Parts List

INDEX	PART	DESCRIPTION	QTY
1	1EL0754	FUSE- AGC,CARTRIDGE(CSA) 5 AMP, 32 VOLT	1
2	1EL0780	CAPACITOR- .22 uf, 400V, ORANGE DROP	1
3	1EL0826	FUSEHOLDER- PAN MNT(CSA) 30 AMP, 250 VOLT, (HKP)	1
4	1EL0882	TERMINAL BLOCK- DBL(CSA) 4 TERM, 30 AMP, 300 V.	1
5	1EL0891	LUG- GROUND, #TA-2(CSA) 600 VOLT, #2-14 WIRE,	1
6	1EL0909	POWER DIST. BLOCK (CSA) ONE CIRCUIT, 600 VOLT,	1
7	1EL0911	POWER DIST. BLOCK- (CSA) THREE CIRCUIT, 600 VOLT,	1
8	2EL0243	CONTACTOR- MAGNETIC(CSA) 40 AMP, 120V COIL,	2
9	2EL0249	CONTACTOR- MAGNETIC 120 AMP, 120V COIL,	1
10	2EL0273	RELAY- GEN. PURPOSE(CSA) 3PDT, 5A, 120V (DELTROL)	1
11	2EL0281	RELAY- THRLM OVERLD(CSA) SIZE 1, 26 AMP, (SEO-5)	2
12	2EL0271	RELAY- THERMAL OVERLOAD (CSA) SIZE 3, 113 AMP, (SEO-15)	1
13	2EL0290	PANEL METER- AC, (0 TO 150 AMP READING)	1
14	2EL0307	TRANSFORMER- CURRENT (CSA) 50-400 HZ, 150:5 RATIO	1
15	2EL0618	SWITCH- PUSHB, SPST(CSA) MOM, NORM, OPEN, GREEN	1
16	2EL0619	SWITCH- PUSHB, SPST(CSA) MOM, NORM, CLOSED, RED	1
17	2EL0648	CONTACT- AUXILIARY, (FOR 2EL0243, 248, 255)	1
18	2EL0659	SW-LVR,SPDT, ON-NONE-ON #UL11L5S5ZQEJ4J90-22/CSA	1
19	2EL0668	SW-LVR,SPDT, ON-OFF-ON #UL12L5S5ZQEJ4J90-22/CSA	3
20	2EL1161	LIGHT- INDICATOR,RED(CSA) (1DI #1050QCI)	3
21	801E019	SWITCH- PRESSURE,PRESET (MADE FROM 2EL0610)	1
22	801E047	TIMER- OFF DELAY, 15 SEC ASSEMBLY, (ADJUSTABLE)	1
23	PT1125	GAUGE- (PRESSURE) 2-1/2 30 PSI, PANEL MOUNT	1
24	801A149	HOSE- PRESSURE GAUGE, 19" (MADE FROM MS0740, 19")	1
25	MS0740-30FT (NOT SHOWN)	HOSE- AIR & WATER, BLACK 1/4" ID, 200 PSI (30FT)	1
26	THERMAL UNITS (NOT SHOWN)	SEE THERMAL UNIT CHART FOR REQUIRED SIZES	A/R

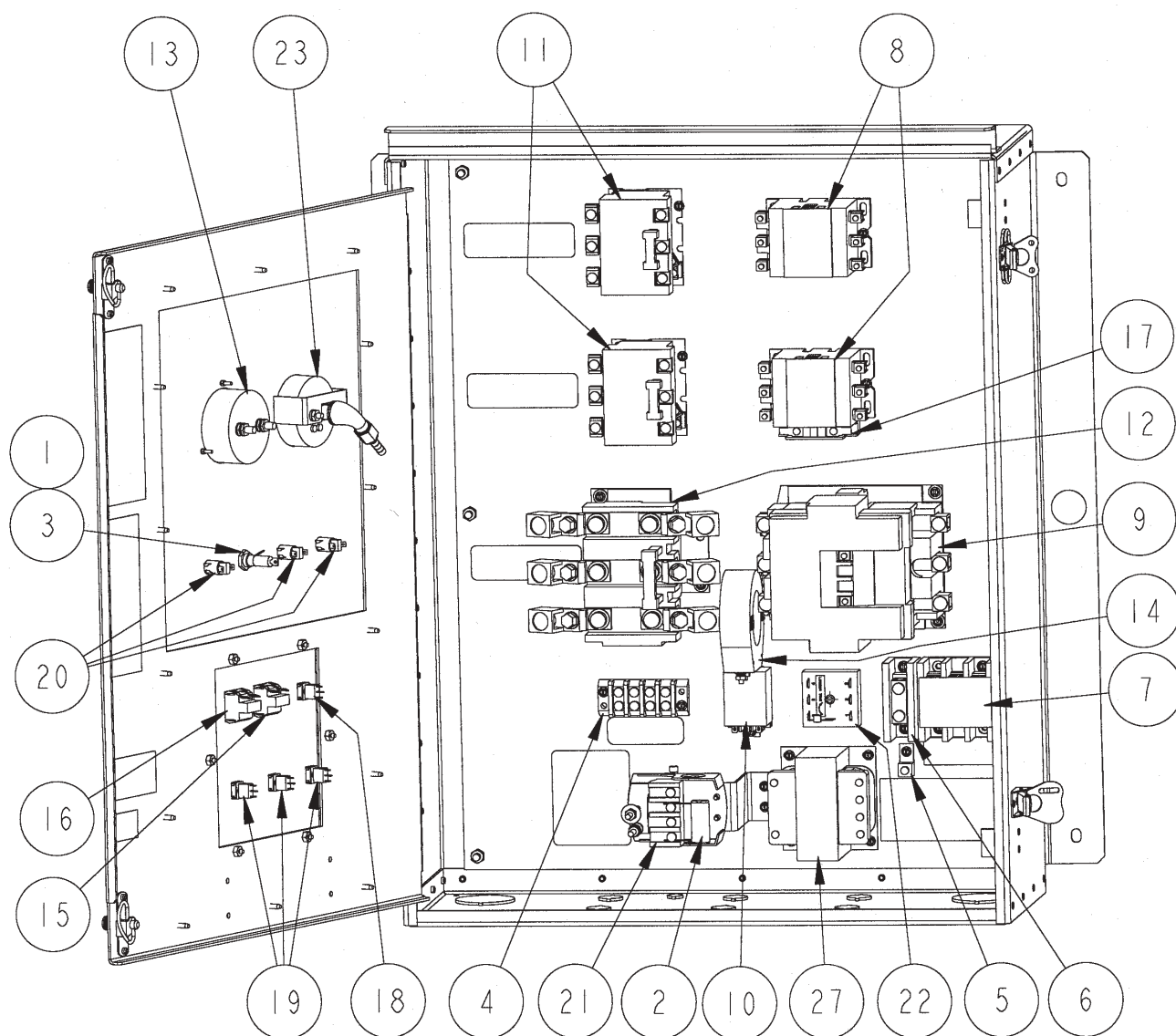
TRANS-FER CONTROL BOX 440V, 3 PH



TRANS-FER CONTROL BOX 440 V, 3 PH - Parts List

INDEX	PART	DESCRIPTION	QTY
1	1EL0754	FUSE- AGC,CARTRIDGE(CSA) 5 AMP, 32 VOLT	1
2	1EL0780	CAPACITOR- .22 uf, 400V, ORANGE DROP	1
3	1EL0826	FUSEHOLDER- PAN MNT(CSA) 30 AMP, 250 VOLT, (HKP)	1
4	1EL0882	TERMINAL BLOCK- DBL(CSA) 4 TERM, 30 AMP, 300 V.	1
5	1EL0891	LUG- GROUND, #TA-2(CSA) 600 VOLT, #2-14 WIRE,	1
6	1EL0909	POWER DIST. BLOCK (CSA) ONE CIRCUIT, 600 VOLT,	1
7	1EL0911	POWER DIST. BLOCK- (CSA) THREE CIRCUIT, 600 VOLT,	1
8	2EL0243	CONTACTOR- MAGNETIC(CSA) 40 AMP, 120V COIL,	2
9	2EL0248	CONTACTOR- MAGNETIC (CSA) 90 AMP, 120V COIL,	1
10	2EL0273	RELAY- GEN. PURPOSE(CSA) 3PDT, 5A, 120V (DELTROL)	1
11	2EL0281	RELAY- THRLM OVERLD(CSA) SIZE 1, 26 AMP, (SEO-5)	2
12	2EL0282	RELAY- THERMAL OVERLOAD (CSA) SIZE 3, 86 AMP, (SEO-12)	1
13	2EL0290	PANEL METER- AC, (0 TO 150 AMP READING)	1
14	2EL0307	TRANSFORMER- CURRENT (CSA) 50-400 HZ, 150:5 RATIO	1
15	2EL0618	SWITCH- PUSHB, SPST(CSA) MOM, NORM, OPEN, GREEN	1
16	2EL0619	SWITCH- PUSHB, SPST(CSA) MOM, NORM, CLOSED, RED	1
17	2EL0648	CONTACT- AUXILIARY, (FOR 2EL0243, 248, 255)	1
18	2EL0659	SW-LVR,SPDT, ON-NONE-ON #UL11L5S5ZQEJ4J90-22/CSA	1
19	2EL0668	SW-LVR,SPDT, ON-OFF-ON #UL12L5S5ZQEJ4J90-22/CSA	3
20	2EL1161	LIGHT- INDICATOR,RED(CSA) (1DI #1050QCI)	3
21	801E019	SWITCH- PRESSURE,PRESET (MADE FROM 2EL0610)	1
22	801E047	TIMER- OFF DELAY, 15 SEC ASSEMBLY, (ADJUSTABLE)	1
23	PT1125	GAUGE- (PRESSURE) 2-1/2 30 PSI, PANEL MOUNT	1
24	801A149	HOSE- PRESSURE GAUGE, 1/2" (MADE FROM MS0740, 1/2")	1
25	MS0740-30FT (NOT SHOWN)	HOSE- AIR & WATER, BLACK 1/4" ID, 200 PSI (30FT)	1
26	THERMAL UNITS (NOT SHOWN)	SEE THERMAL UNIT CHART FOR REQUIRED SIZES	A/R
27	2EL0308	TRANSFORMER- 9070 (CSA) 240/480-120V, K150, 100VA	1

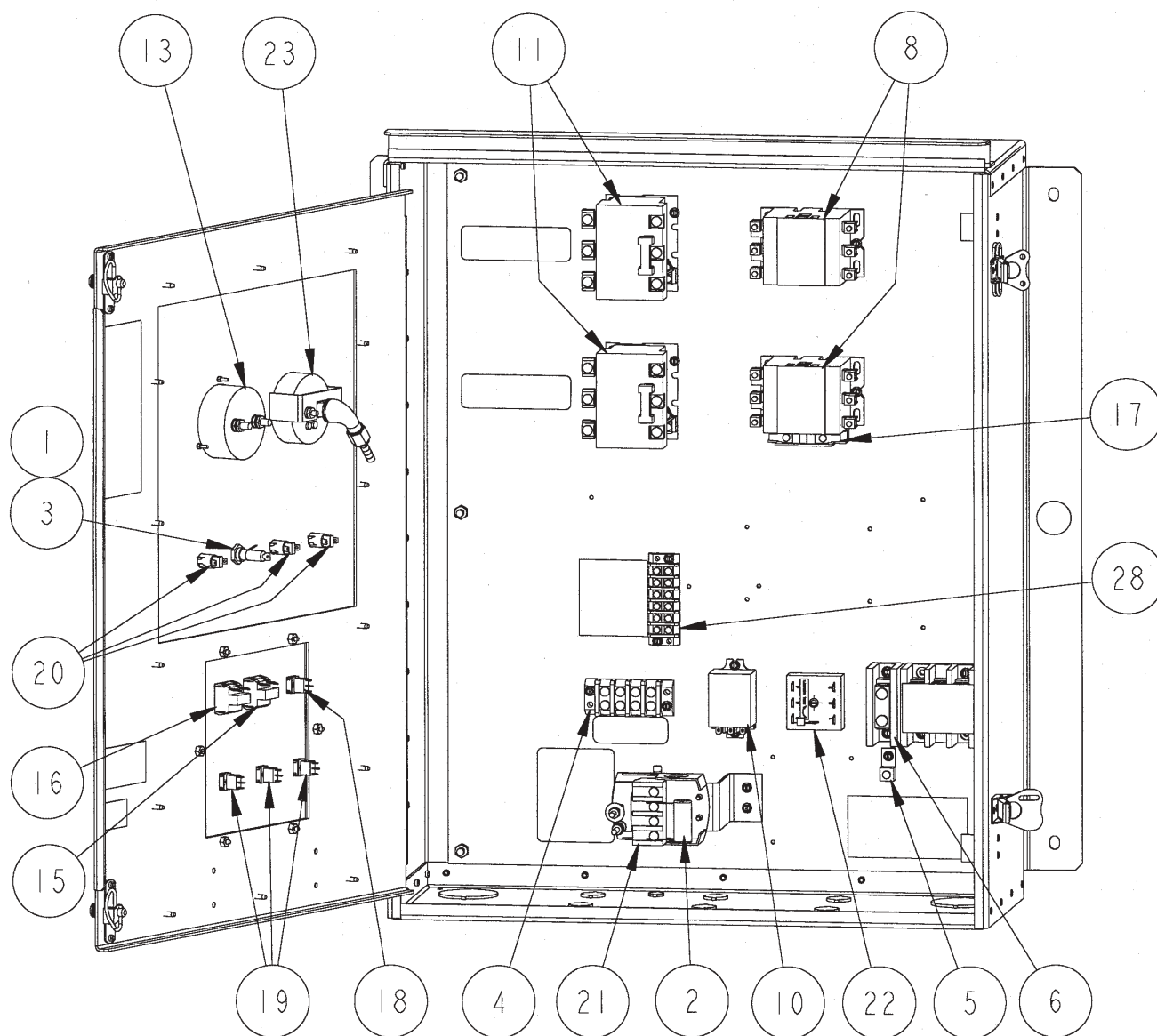
TRANS-FER CONTROL BOX 440 V, 3 PH, 75 HP



TRANS-FER CONTROL BOX 440 V, 3 PH, (75 HP) - PARTS LIST

INDEX	PART	DESCRIPTION	QTY
1	1EL0754	FUSE- AGC,CARTRIDGE(CSA) 5 AMP, 32 VOLT	1
2	1EL0780	CAPACITOR- .22 uf, 400V, ORANGE DROP	1
3	1EL0826	FUSEHOLDER- PAN MNT(CSA) 30 AMP, 250 VOLT, (HKP)	1
4	1EL0882	TERMINAL BLOCK- DBL(CSA) 4 TERM, 30 AMP, 300 V.	1
5	1EL0891	LUG- GROUND, #TA-2(CSA) 600 VOLT, #2-14 WIRE,	1
6	1EL0909	POWER DIST. BLOCK (CSA) ONE CIRCUIT, 600 VOLT,	1
7	1EL0911	POWER DIST. BLOCK- (CSA) THREE CIRCUIT, 600 VOLT,	1
8	2EL0243	CONTACTOR- MAGNETIC(CSA) 40 AMP, 120V COIL,	2
9	2EL0249	CONTACTOR- MAGNETIC 120 AMP, 120V COIL,	1
10	2EL0273	RELAY- GEN. PURPOSE(CSA) 3PDT, 5A, 120V (DELTROL)	1
11	2EL0281	RELAY- THRLM OVERLD(CSA) SIZE 1, 26 AMP, (SEO-5)	2
12	2EL0271	RELAY- THERMAL OVERLOAD (CSA) SIZE 3, 113 AMP, (SEO-15)	1
13	2EL0290	PANEL METER- AC, (0 TO 150 AMP READING)	1
14	2EL0307	TRANSFORMER- CURRENT (CSA) 50-400 HZ, 150:5 RATIO	1
15	2EL0618	SWITCH- PUSHB, SPST(CSA) MOM, NORM, OPEN, GREEN	1
16	2EL0619	SWITCH- PUSHB, SPST(CSA) MOM, NORM, CLOSED, RED	1
17	2EL0648	CONTACT- AUXILIARY, (FOR 2EL0243, 248, 255)	1
18	2EL0659	SW-LVR,SPDT, ON-NONE-ON #UL11L5S5ZQEJ4J90-22/CSA	1
19	2EL0668	SW-LVR,SPDT, ON-OFF-ON #UL12L5S5ZQEJ4J90-22/CSA	3
20	2EL1161	LIGHT- INDICATOR,RED(CSA) (IDI #1050QC1)	3
21	801E019	SWITCH- PRESSURE,PRESET (MADE FROM 2EL0610)	1
22	801E047	TIMER- OFF DELAY, 15 SEC ASSEMBLY, (ADJUSTABLE)	1
23	PT1125	GAUGE- (PRESSURE) 2-1/2 30 PSI, PANEL MOUNT	1
24	801A149	HOSE- PRESSURE GUAGE, 19" (MADE FROM MS0740, 19")	1
25	MS0740-30FT (NOT SHOWN)	HOSE- AIR & WATER, BLACK 1/4" ID, 200 PSI (30FT)	1
26	THERMAL UNITS (NOT SHOWN)	SEE THERMAL UNIT CHART FOR REQUIRED SIZES	A/R
27	2EL0308	TRANSFORMER- 9070 (CSA) 240/480-120V, K150, 100VA	1

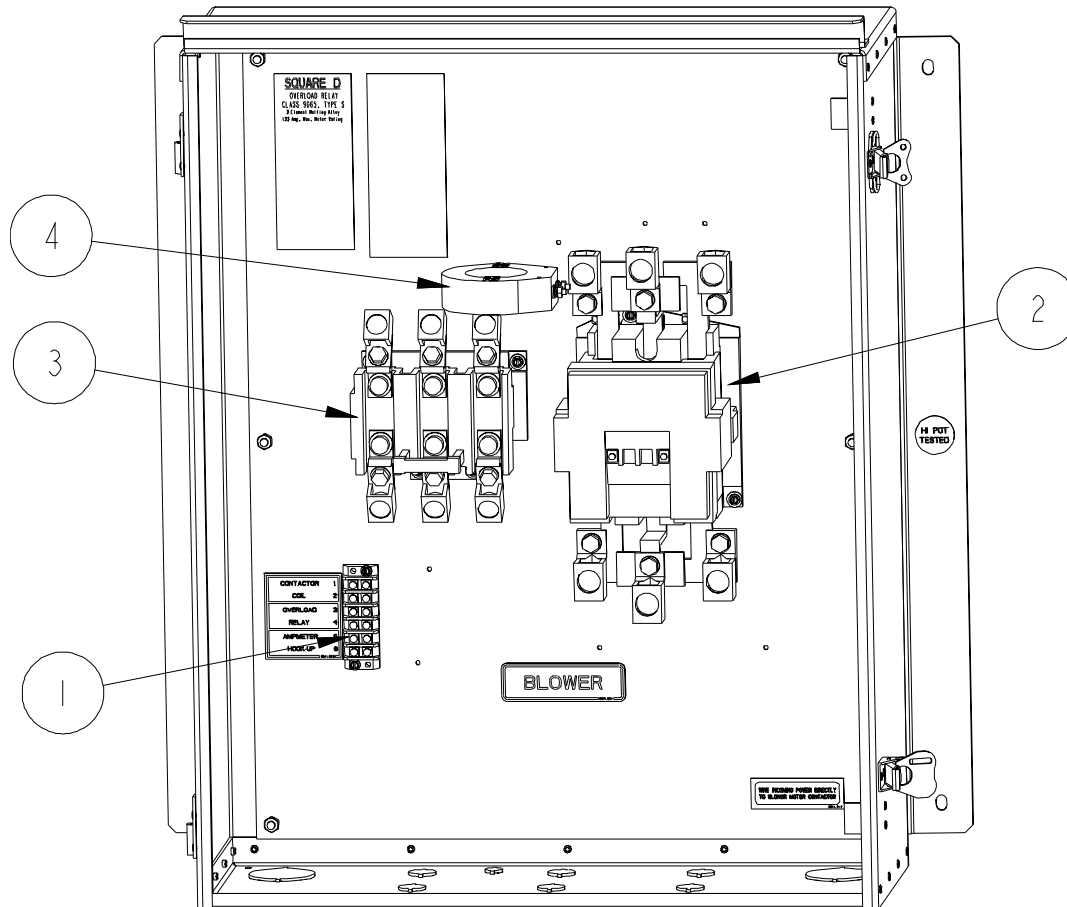
TRANS-FER CONTROL BOX 230V, 3 PH, (W/O BLOWER)



TRANS-FER CONTROL BOX 230V, 3 PH, (W/O BLOWER) - PARTS LIST

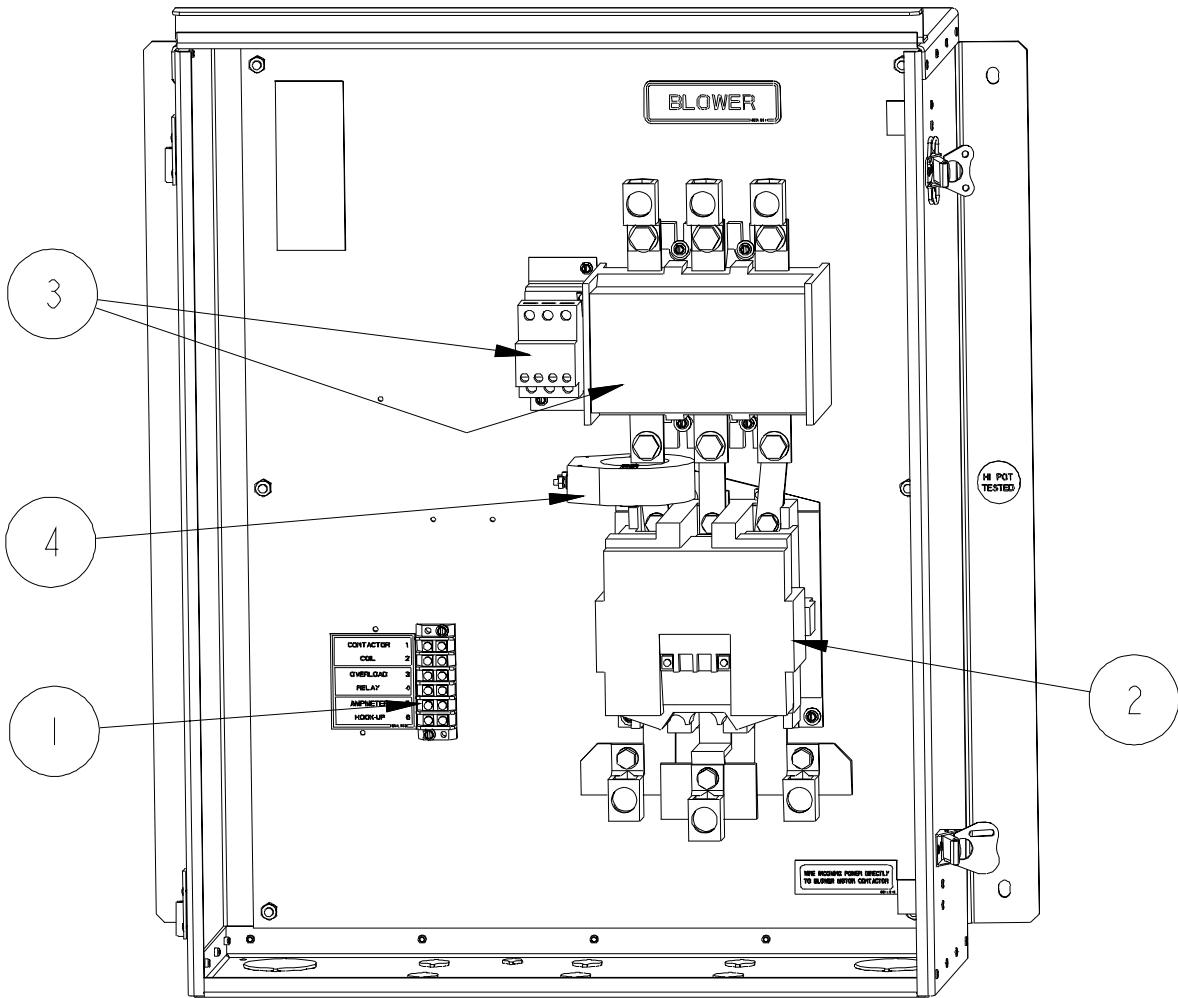
INDEX	PART	DESCRIPTION	QTY
1	1EL0754	FUSE- AGC,CARTRIDGE(CSA) 5 AMP, 32 VOLT	1
2	1EL0780	CAPACITOR- .22 uf, 400V, ORANGE DROP	1
3	1EL0826	FUSEHOLDER- PAN MNT(CSA) 30 AMP, 250 VOLT, (HKP)	1
4	1EL0882	TERMINAL BLOCK- DBL(CSA) 4 TERM, 30 AMP, 300 V.	1
5	1EL0891	LUG- GROUND, #TA-2(CSA) 600 VOLT, #2-14 WIRE,	1
6	1EL0909	POWER DIST. BLOCK (CSA) ONE CIRCUIT, 600 VOLT,	1
7	1EL0911	POWER DIST. BLOCK- (CSA) THREE CIRCUIT, 600 VOLT,	1
8	2EL0243	CONTACTOR- MAGNETIC(CSA) 40 AMP, 120V COIL,	2
10	2EL0273	RELAY- GEN. PURPOSE(CSA) 3PDT, 5A, 120V (DELTROL)	1
11	2EL0281	RELAY- THRLM OVERLDC(CSA) SIZE 1, 26 AMP, (SEO-5)	2
13	2EL0687	PANEL METER- AC, (0 TO 200 AMP READING)	1
15	2EL0618	SWITCH- PUSHB, SPST(CSA) MOM, NORM, OPEN, GREEN	1
16	2EL0619	SWITCH- PUSHB, SPST(CSA) MOM, NORM, CLOSED, RED	1
17	2EL0648	CONTACT- AUXILIARY, (FOR 2EL0243, 248, 255)	1
18	2EL0659	SW-LVR,SPDT, ON-NONE-ON #UL11L5S5ZQEJ4J90-22/CSA	1
19	2EL0668	SW-LVR,SPDT, ON-OFF-ON #UL12L5S5ZQEJ4J90-22/CSA	3
20	2EL1161	LIGHT- INDICATOR,RED(CSA) (1DI #1050QCI)	3
21	801E019	SWITCH- PRESSURE,PRESET (MADE FROM 2EL0610)	1
22	801E047	TIMER- OFF DELAY, 15 SEC ASSEMBLY, (ADJUSTABLE)	1
23	PT1125	GAUGE- (PRESSURE) 2-1/2 30 PSI, PANEL MOUNT	1
24	801A149 (NOT SHOWN)	HOSE- PRESSURE GUAGE, 19" 30 PSI, PANEL MOUNT	1
25	MS0740-30FT (NOT SHOWN)	HOSE- AIR & WATER, BLACK 1/4" ID, 200 PSI (30FT)	1
26	THERMAL UNITS (NOT SHOWN)	SEE THERMAL UNIT CHART FOR REQUIRED SIZES	A/R
28	1EL0877	TERMINAL BLOCK- DBL (CSA) 6 TERM, 30 AMP, 250V	1

TRANS-FER CONTROL BOX 50 HP CONTACTOR & OVERLOAD



INDEX	PART	DESCRIPTION	QTY
1	1EL0877	TERMINAL BLOCK- DBL(CSA) 6 TERM, 30 AMP, 250 V.	1
2	2EL0257	CONTACTOR- MAGNETIC 138 AMP, 120V COIL,	1
3	2EL0271	RELAY- THERMAL OVERLOAD (CSA) SIZE 3, 113 AMP, (SEO-15)	1
4	2EL0368	TRANSFORMER- CURRENT (CSA) 50-400 HZ, 200:5 RATIO	1
5	THERMAL UNITS (NOT SHOWN)	SEE THERMAL UNIT CHART FOR REQUIRED SIZES	A/R

**TRANS-FER CONTROL BOX
60 / 75 HP CONTACTOR & OVERLOAD**



INDEX	PART	DESCRIPTION	QTY
1	1EL0877	TERMINAL BLOCK- DBL(CSA) 6 TERM, 30 AMP, 250 V.	1
2	2EL0258	CONTACTOR- MAGNETIC, 230 AMP, 120V COIL, QUICK	1
3	2EL0284	RELAY- IEC STYLE OVERLOAD 3 PH, 160-250 AMPS,	1
4	2EL0368	TRANSFORMER- CURRENT (CSA) 50-400 HZ, 200:5 RATIO	1

See Page 14 for Overload Settings

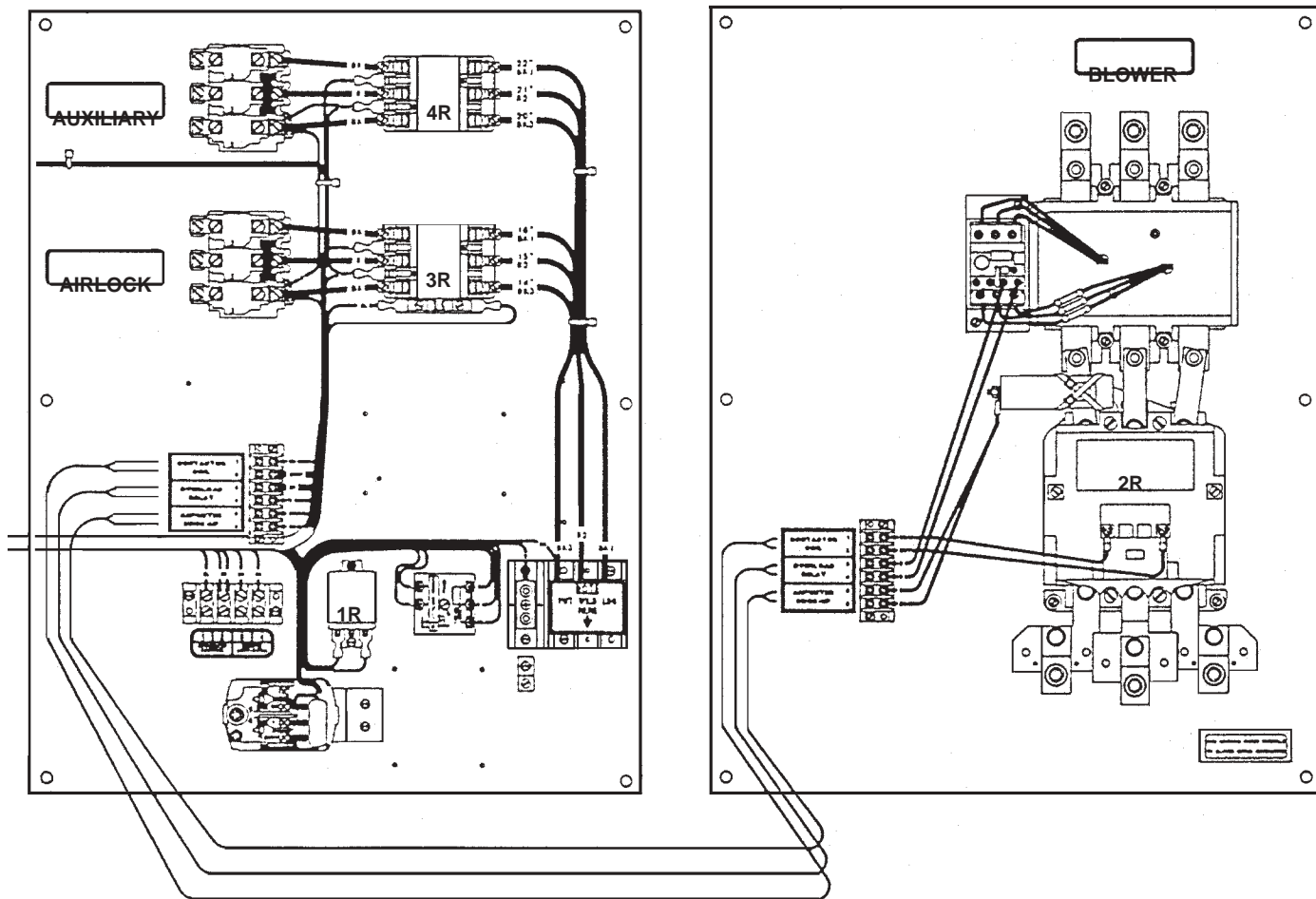
ELECTRICAL HOOK-UP FOR 50, 60 & 75 HP - 230 VOLT SYSTEMS - 8047006

IMPORTANT NOTE

A fused disconnect or equivalent must be provided on the incoming power supply to meet the National Electric Code. Consult a qualified electrician for local code requirements.

The Trans-Fer control box for 50, 60 and 75 HP 230 volt motors does not include the overload protection or contactor for the blower motor; these are located in a separate enclosure. Separate main power should be connected the blower contactor in this Control Box according to the National Electric Code.

The Trans-Fer control box controls the blower contactor. Use 18 GA. wire to connect the Contactor Coil (terminals #1 & 2), the Overload Relay (terminals #3 & 4) and the Ampmeter Hook-Up (terminals #5 & 6) located by a decal on the back panel of the control box with a similar terminal strip located in the blower contactor enclosure. See the drawing below.



WIRING FOR A SURGE TANK HOOKED TO A TRANS-FER

The Trans-Fer will start when both P1 and P2 are closed. As it empties, P1 will open but will not stop the unit due to 4R4 being closed. When P2 opens, the unit will stop.

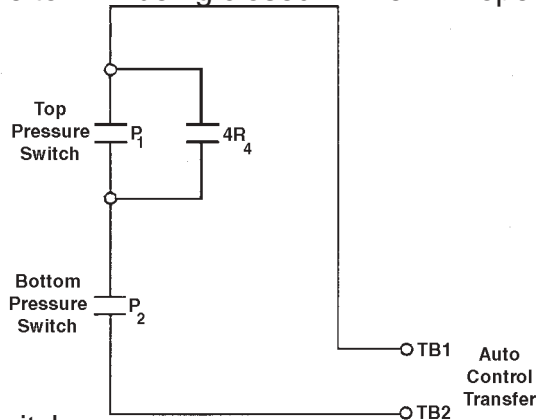


Diagram B

P1 and P2 are Pressure Switches.
4R4 is an Auxiliary Switch (2EL0639 or 2EL0638)
attached to the Top Contactor 4R4.

HOW TO HOOK UP A GRAIN FLOW TO A TRANS-FER OR ANY OTHER CONTROL UNIT

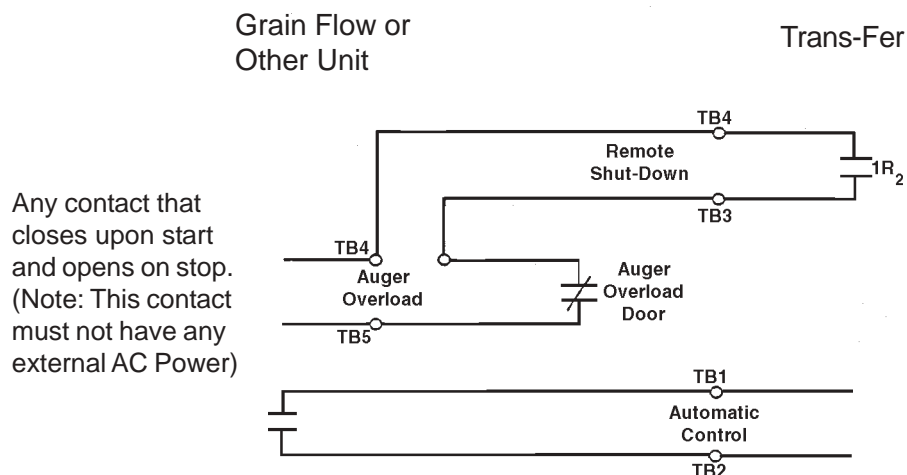


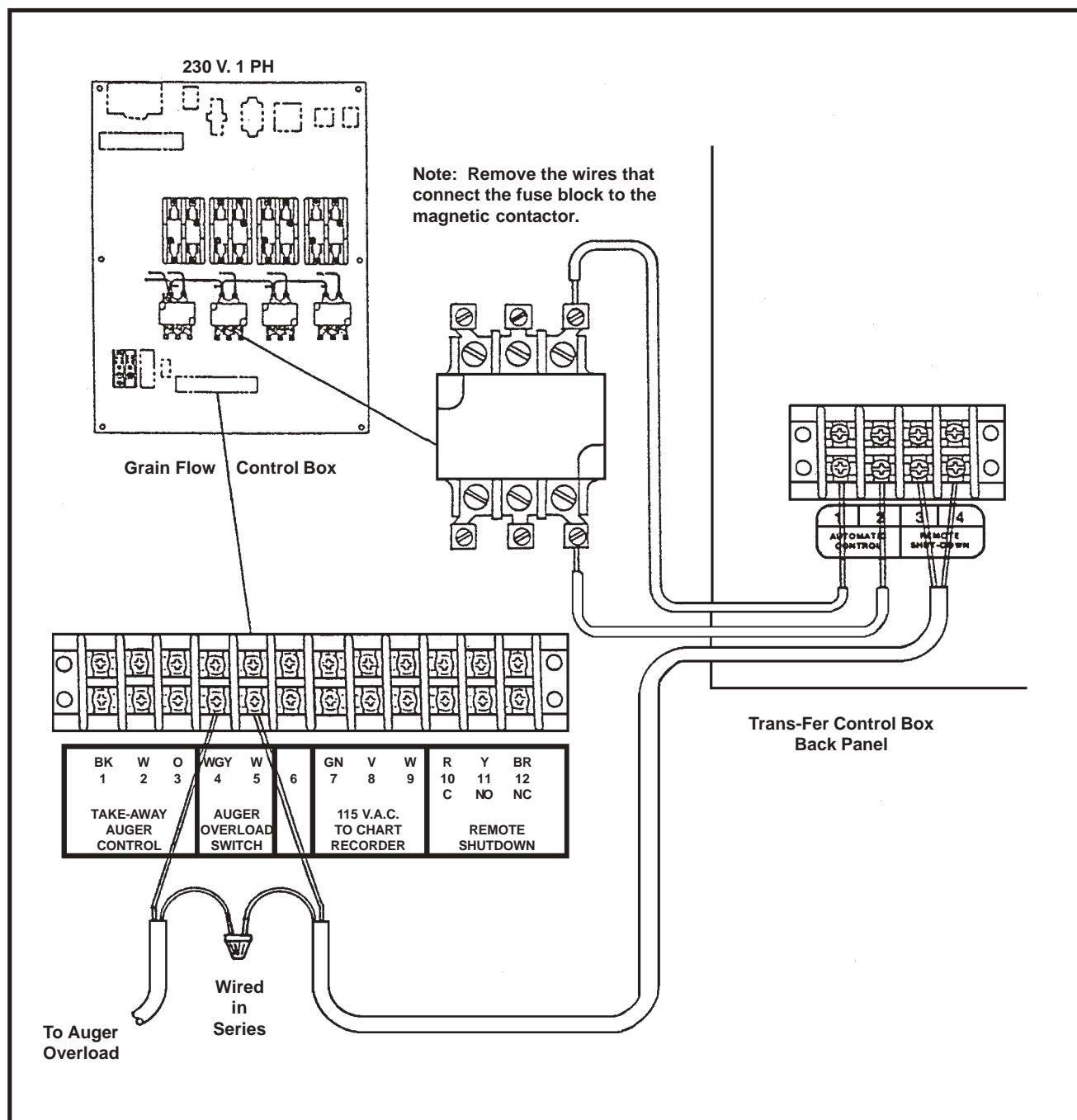
Diagram C

Any contact that closes upon start and opens on stop. (Note: This contact must not have any external AC Power)

With the above hook up, the Trans-Fer must be started before the Grain Flow. If the Trans-Fer is manually turned off or turned off from high pressure or an overload, the Grain Flow will also turn off.

TB3 and TB4 will have a closed contact (1R2) as long as the Trans-Fer has the "ready" indicator (located in the Trans-Fer control box) on. The automatic control TB1 and TB2 requires a closed contact across them to start the Trans-Fer unit.

ELECTRICAL HOOK-UP FOR A TRANS-FER TO A GRAIN FLOW



FEED-IN AUGER ASSEMBLY INSTRUCTIONS

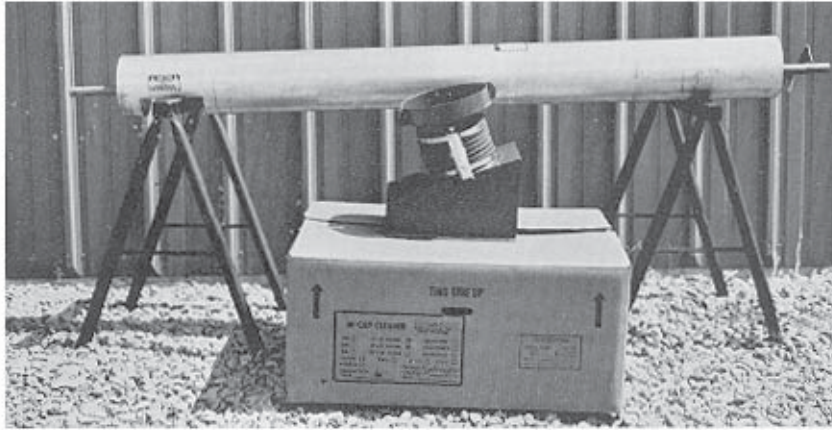


Photo 12

COMPONENT PARTS FOR 8" FEED-IN AUGER

1. Place the sealed bearing between the bearing flanges and bolt the set to the auger head. BE SURE the eccentric lock is to the outside. Use two 5/16" x 3/4" carriage bolts, lock washers and nuts. See Photo 13. Leave the bolts loose so the bearing can self-align on the shaft.
2. Slide the stub shaft into the upper end of the auger flighting. BE SURE the keyway is left exposed. Fasten with two 3/8" x 1-3/4" Grade 5 bolts, and 3/8" lock nuts. See Photo 14.
3. Place the auger head over the auger tube, sliding the stub shaft through the bearing. See Photo 15.

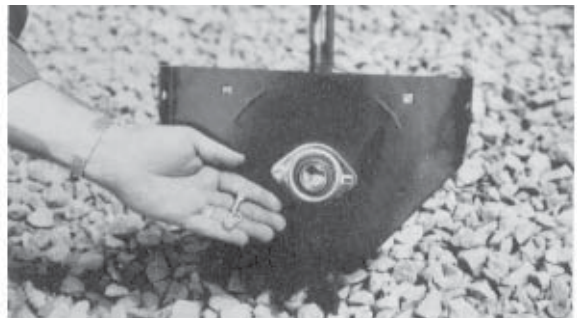


Photo 13



Photo 14

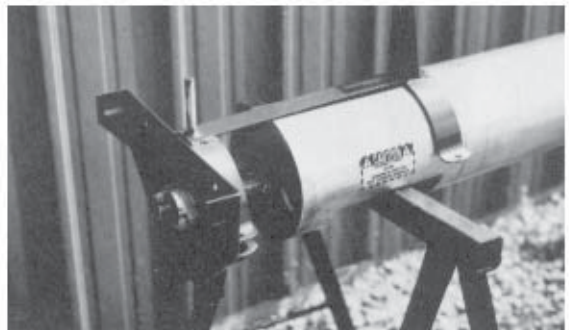


Photo 15

FEED-IN AUGER ASSEMBLY (continued)

4. Install the locking collar onto the bearing. BE SURE to lock the collar with the rotation of the shaft, clockwisewhen looking at the auger head. The auger shaft should stick through the locking collar 1-5/8". Securely tighten the locking collar and set screw. Tighten the two (2) 5/16" carriage bolts. See Photos 16 & 17.

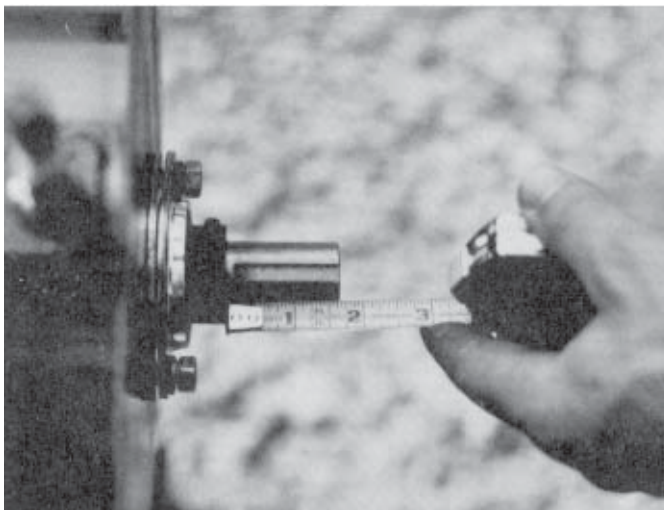


Photo 16

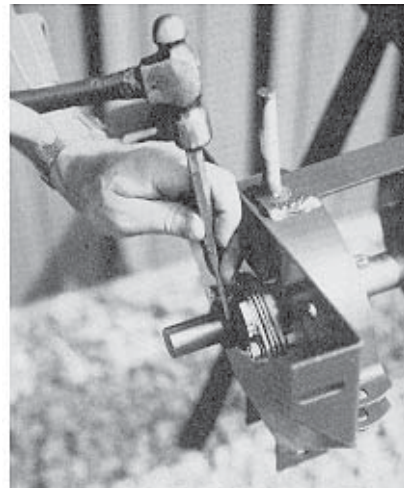


Photo 17

5. Slide one two (2) inch strap bracket under the top strap of the auger head, then fasten the auger head and the discharge securely to the auger tube with 3/8" x 1-1/4" bolts and nuts. Be sure the head is straight with the discharge opening on the tube, then tighten to the tube. See Photos 18 & 19.

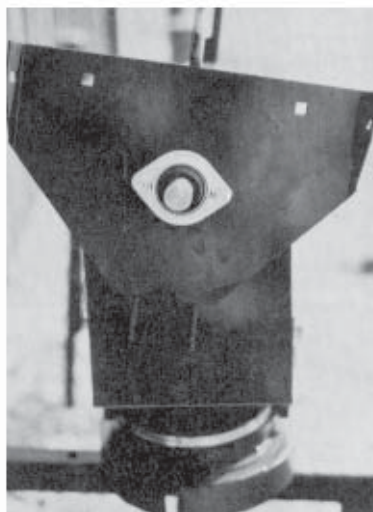


Photo 18 - Incorrect

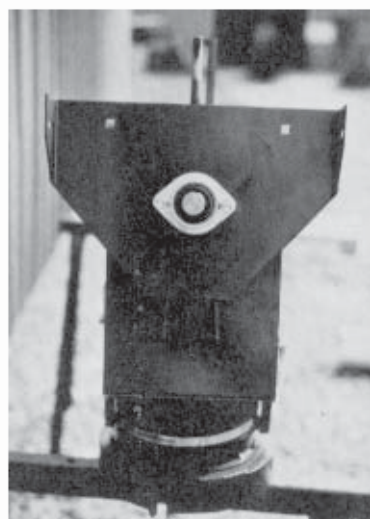
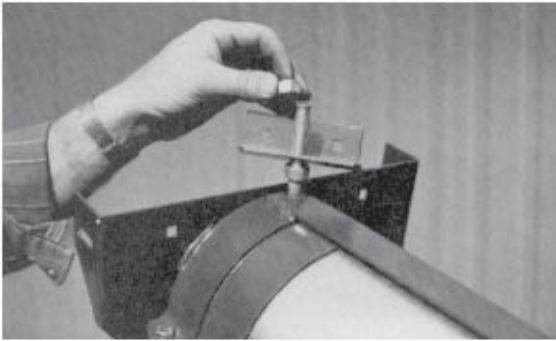
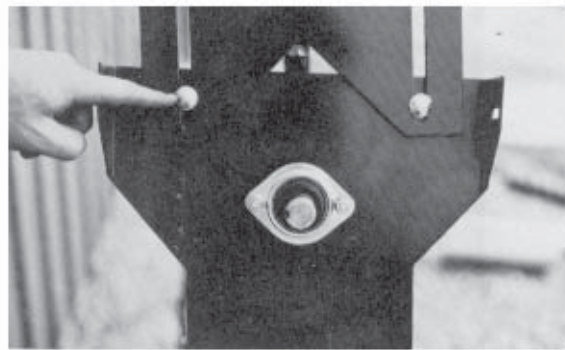
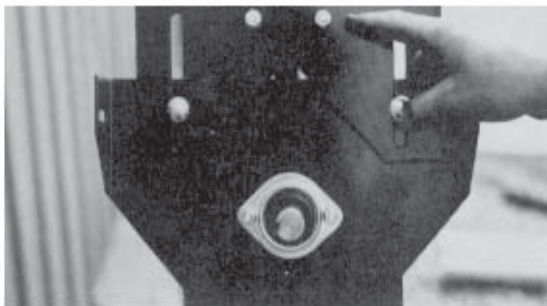
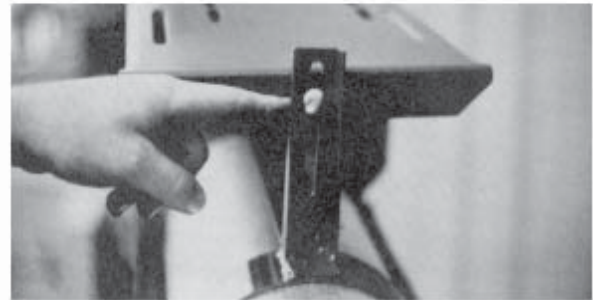


Photo 19 - Correct

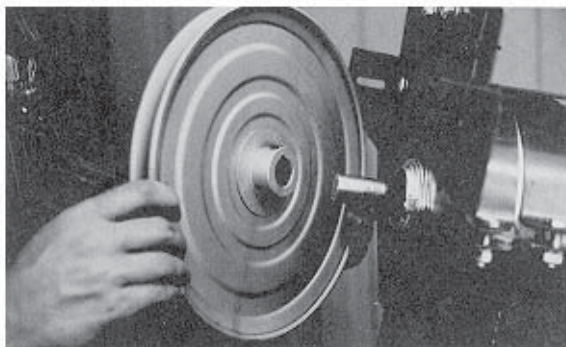
6. Thread a 1/2" nut onto the threaded stub bolt on the auger head. Slide the motor mount angle over the stub bolt and thread another 1/2" nut over the angle. Install the motor mount base plate to the auger head using two (2) 3/8" x 3/4" carriage bolts, lock washers and nuts. DO NOT TIGHTEN AT THIS TIME. See Photos 20 & 21 on the next page.

FEED-IN AUGER ASSEMBLY (continued)**Photo 20****Photo 21**

7. Put two (2) 5/16" x 3/4" carriage bolts, lock washers and nuts through the motor mount angle, and the motor mount base plate. See Photo 22.
8. Using a 5/16" carriage bolt, lock washer and nut, bolt the rear of the motor mount base plate to the rear support on the auger head. See Photo 23.

**Photo 22****Photo 23**

9. Install the 1/4" key and the 12" pulley onto the shaft, hub first. Have the shaft flush with the outer edge of the pulley. Tighten the set screws. See Photos 24 & 25.

**Photo 24****Photo 25**

FEED-IN AUGER ASSEMBLY (continued)

10. Bolt the motor to the motor mount base plate using four (4) 5/16" x 1" hex bolts, flat washers, lock washers, and hex nuts. NOTE: These bolts are not supplied. See Photo 26.



Photo 26

11. Put the 3/16-inch key and 7/8" x 3-1/2" pulley onto the motor shaft. Align the motor pulley with the 12-inch auger pulley, tighten the set screw and install the belt. Adjust the belt tension by raising the 1/2 inch nuts on the threaded stub bolts. After the belt adjustment has been made, tighten all bolts left loose during the motor mounting assembly. See Photos 27 & 28.

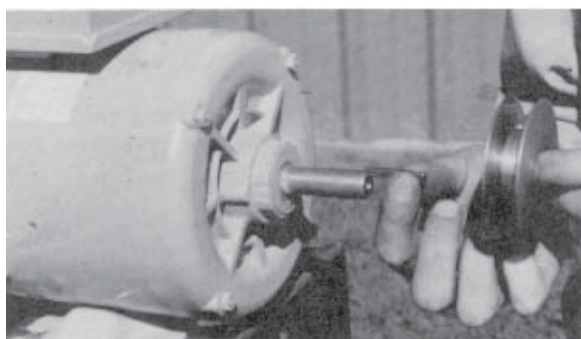


Photo 27

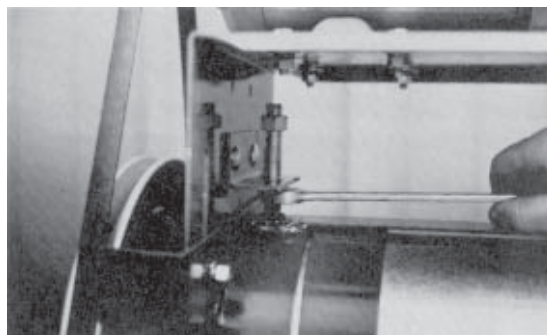


Photo 28

!!CAUTION!!

The auger motor must be wired for the same voltage as the Trans-Fer control box and checked for proper rotation of the auger. HAVE A QUALIFIED ELECTRICIAN DO THE MOTOR WIRING. KEEP PEOPLE AND CLOTHING AWAY FROM THE AUGER WHEN TESTING FOR PROPER ROTATION.

12. Using two 5/16" carriage bolts, lock washers and nuts, bolt the belt shield to the tabs on the auger head. See Photo 29.



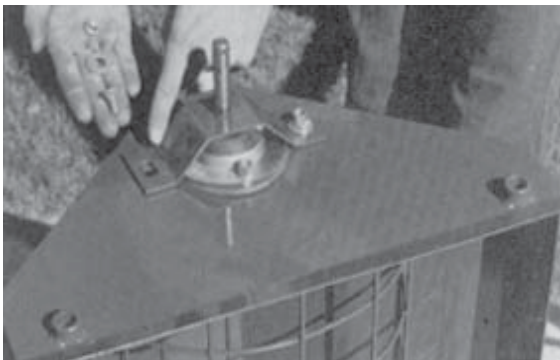
Photo 29

FEED-IN AUGER ASSEMBLY (continued)

13. Put the wooden bearing between the bearing flanges and bolt it to the tail cage hopper with three (3) 3/8" x 3/4" carriage bolts, lock washers and nuts. See Photo 30.

**Photo 30**

14. Install the hopper wheel bracket, using two (2) 3/8" x 3/4" carriage bolts, flat washers, lock washers and nuts. Slide two (2) 5/8" SAE washers on to the shaft, then the wheel, and another 5/8" SAE washer. Finish by installing a 1-1/4" cotter pin. See Photos 31 & 32.

**Photo 31****Photo 32**

15. Slide the flow restrictor tube into the intake end of the auger tube with the nut welded on to the restrictor tube on the outer end. See Photo 33.

**Photo 33****Photo 34**

FEED-IN AUGER ASSEMBLY (continued)

16. Put the tail cage hopper assembly onto the auger tube. Insert the end of auger shaft into the wooden bearing. Secure the tail cage hopper assembly to the auger tube by using two (2)- 2 inch strap brackets. Put the two (2) inch strap bracket with the pipe and threaded nut toward the top of the tail cage assembly as shown in Photo 34 & 35. Securely fasten with four (4) 3/8" x 1-1/4" hex head bolts as shown in Photo 36.



Photo 35



Photo 36

17. Put the blunt end of the guide rods into the bushings provided at the back of the hopper. Align the holes in the rod with those in the bushing and secure with 1/8" x 1-1/4" cotter pins as shown in Photos 37 & 38.

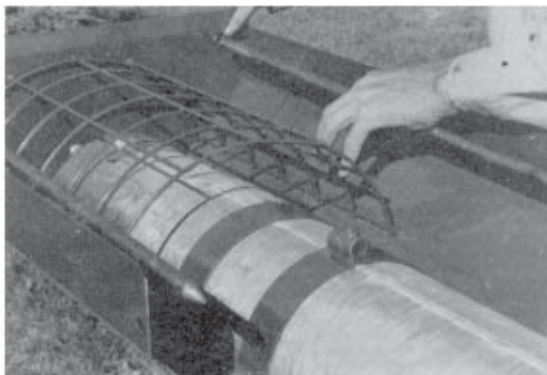


Photo 37

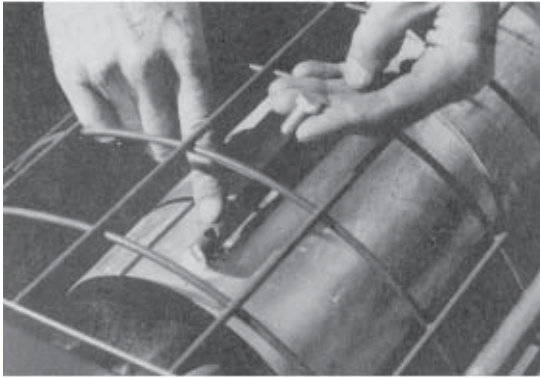
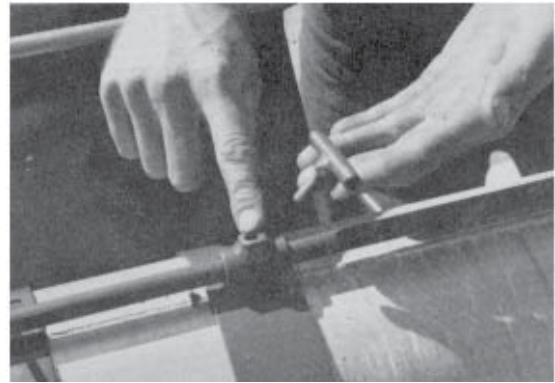


Photo 38

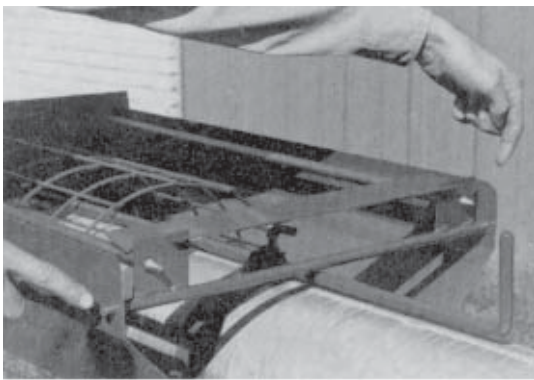
18. Place the flow restrictor adjustment handle through the bushing welded to the two (2) inch strap brackets and bolt it onto the flow restrictor tube with a 5/16" x 3/4" hex head bolt and lock washer. Finish by turning the wing bolt into the nut welded on the bushing of the strap bracket. See Photos 39, 40 & 41.



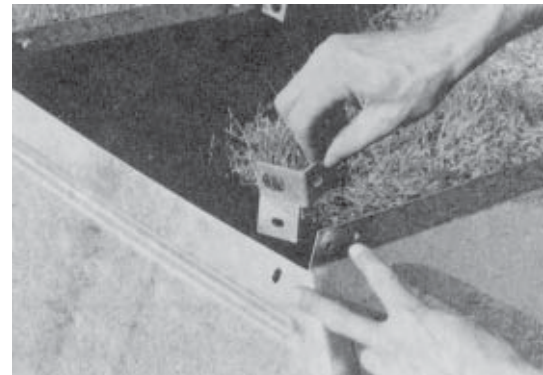
Photo 39

FEED-IN AUGER ASSEMBLY (continued)**Photo 40****Photo 41**

19. Install the hopper latch and upper glide rod support bracket by placing the ends of the glide rod support bracket through the holes in the hopper and onto the pointed guide rod ends. Fasten the latch to the hopper with the two 3/8" flat washers and two cotter pins. See Photos 42 and 43.

**Photo 42****Photo 43**

20. Assemble the hopper extensions using six 1/4" x 1/2" pan head machine screws and 1/4" hex head flanged whiz lock nuts. Once the upper extensions are assembled, fasten the glide rod guides to the upper extensions using ten 1/4" x 1/2" pan head machine screws. See Photos 44 and 45. BE SURE to install bolts as shown in the photo.

**Photo 44****Photo 45**

FEED-IN AUGER ASSEMBLY (continued)

21. Slide the hopper extension assembly onto the guide rods. Lift up the latch and finish the assembly by placing hair pin clips through the holes of the guide rods. See Photos 46 and 47.

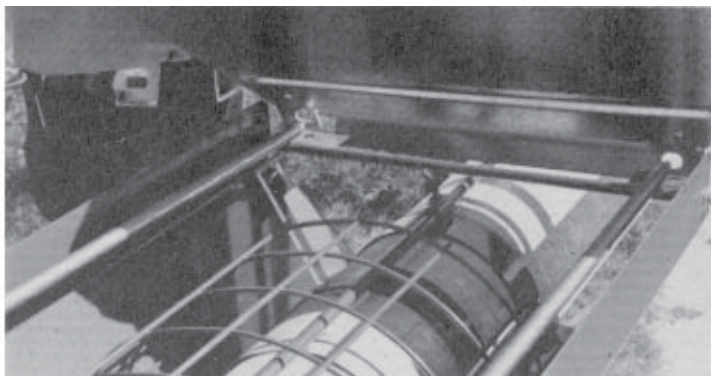
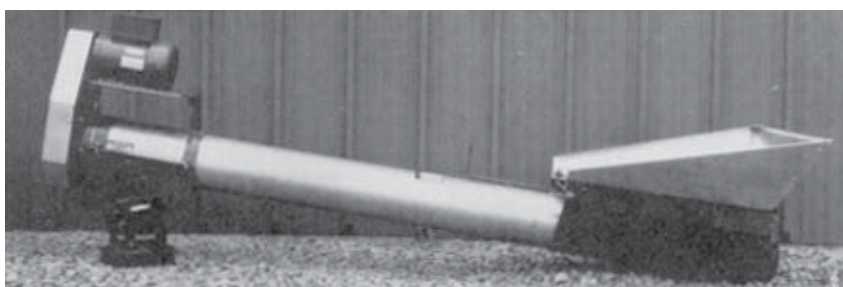


Photo 46



Photo 47



Completed Auger - Photo 48

OPERATE AUGER BRIEFLY AND OBSERVE FOR PROPER ROTATION.
Change wires in motor if rotation correction is needed.



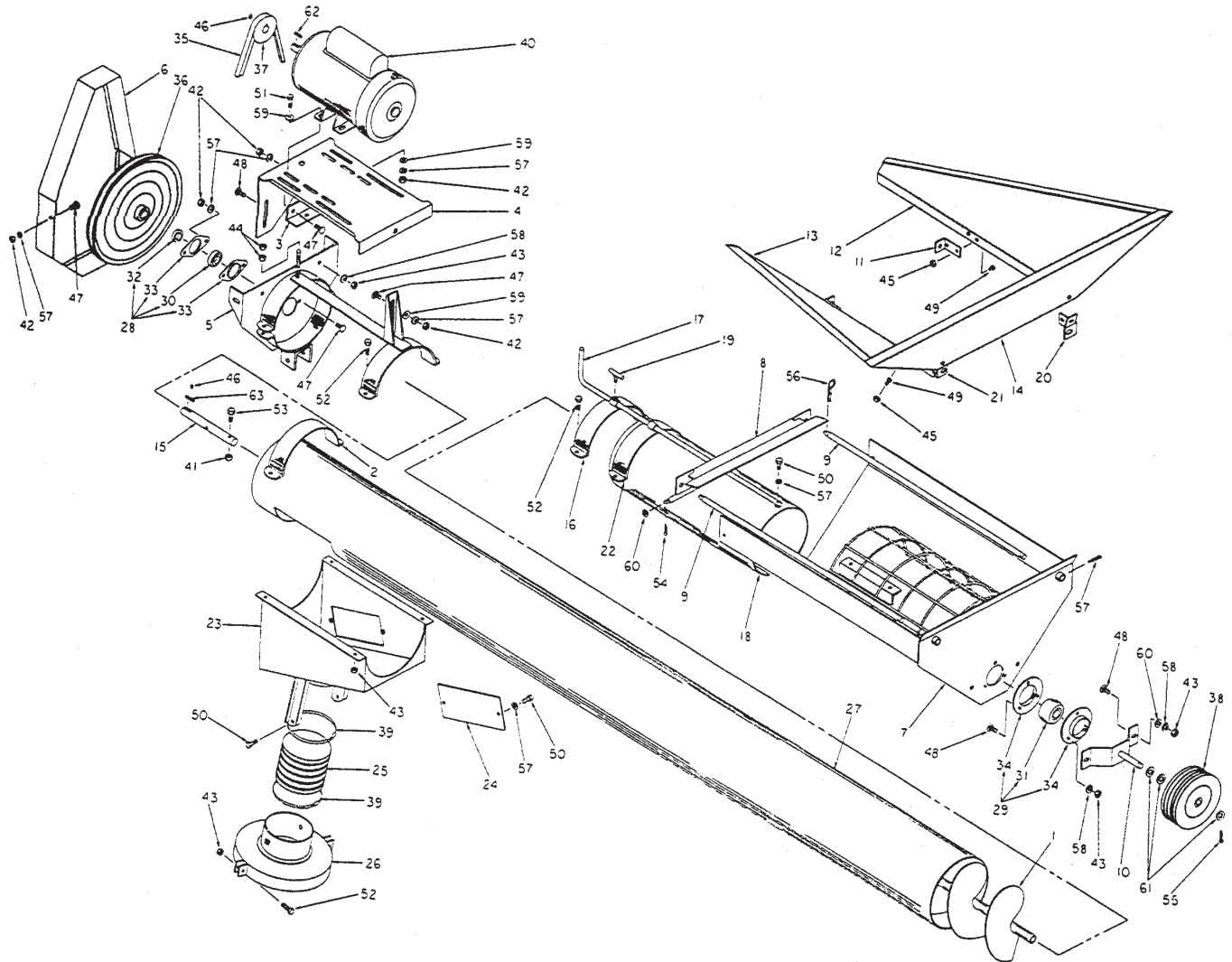
!!CAUTION!!



KEEP HANDS, FEET AND LOOSE CLOTHING CLEAR OF ROTATION PARTS!

The auger assembly is now complete.

TRANS-FER 8" x 8' FEED-IN AUGER



Drawing 10

TRANS-FER FEED-IN AUGER 8" x 8' and 10" x 12' PARTS LIST

Ref. #	8" x 8' Part #	10" x 10' Part #	# Required	Description
1.	202C0140	206C0022	1	7" OD Auger, 8"
2.	205C0002	206C0007	1	2" Strap Bracket
3.	205C0003	205C0003	1	Motor Mount Angle
4.	205C0005	205C0005	1	Motor Mount Base Plate
5.	205C0008	804A115	1	Auger Head
6.	205C0012	205C0012	1	Motor Belt Shield
7.	205C0016	206C0015	1	Tail Cage Hopper
8.	205C0022	205C0022	1	Latch and Glide Rod Support
9.	205C0025	205C0025	2	Glide Rod
10.	205C0027	205C0027	1	Hopper Wheel Bracket
11.	205C0030	205C0030	2	Glide Rod Guide
12.	205C0031	205C0031	1	Right Sliding Hopper Sheet
13.	205C0032	205C0032	1	Left Sliding Hopper Sheet
14.	205C0038	205C0038	1	Sliding Hopper End Sheet
15.	205C0039	206C0089	1	Stub Shaft
16.	205C0040	206C0008	1	Flow Restrictor Strap Bracket
17.	205C0043	206C0030	1	Flow Restrictor Adjustment Handle
18.	205C0044	206C0016	1	Flow Restrictor Tube
19.	205C0054	2FH0428	1	Wing Bolt
20.	205C0056	205C0056	1	Right End Glide Rod Guide
21.	205C0057	205C0057	1	Left End Glide Rod Guide
22.	205C0060	206C0032	1	Flow Restrictor Strap Bracket, Without Nut
23.	802A077	804A091	1	Discharge Hopper
24.	801A043	801A043	1	Access Hole Cover
25.	802A083	804A103	1	Flexible Connecting Tube
26.	802A084	804A097	1	Airlock Grain Intake Cover
27.	801C001	206C0018	1	Auger Tube, 8" x 7'
28.	PT0115	PT0115	1	Eccentric Lock Bearing, 1" (Complete)
29.	PT0124	PT0129	1	Wood Bearing, 1-1/4" (Complete)
30.	PT0203	PT0203	1	Bearing, Sealed with Eccentric Locking Collar, 1"
31.	PT0219	PT0229	1	Wood Bearing, 1-1/4" bore
32.	PT0401	PT0401	1	Collar, Eccentric Lock, 1"
33.	PT0420	PT0420	2	2 Hole Bearing Mounting Flange
34.	PT0424	PT0424	2	3 Hole Center Flange Mount
35.	PT0490	PT0490	1	B-48 V-Belt
36.	PT0681	PT0684	1	Pulley, 1" x 12", B Section
37.	PT0706	—	1	Pulley, 3" x 5/8" - 1B (for 3EL5097)
	PT0627	—	1	Pulley, 3" x 7/8" - 1B (for 3EL5100)
	—	PT0708	2	Pulley, 3" x 1-1/8" - 1B
38.	MS0021	MS0021	1	6" Rubber Wheel
39.	MS0368	—	2	Worm Gear Clamp 6-1/2" - 8-1/2"
	—	MS0309	2	Worm Gear Clamp 12 5/6" OD
40.	3EL5097	—	1	Motor, 1-1/2 HP, 1 PH
	3EL5100	—	1	Motor, 1-1/2 HP, 3 PH
	—	M3611T	1	Electric Motor 3 HP-230/440V- 3PH-182T frame
41.	1FH0736	1FH0736	2	Lock Nut, 3/8"
42.	1FH0764	1FH0764	11	Hex Nut, 5/16"
43.	1FH0765	1FH0765	15	Hex Nut, 3/8"
44.	1FH0767	1FH0767	2	Hex Nut, 1/2"
45.	1FH0995	1FH0995	16	Hex Flange Whiz Lock Nut, 1/4"
46.	2FH0512	2FH0512	3	Socket Head Set Screw, 5/16" x 5/16"
47.	2FH0645	2FH0645	7	Carriage Bolt, 5/16" x 3/4"
48.	2FH0659	2FH0659	7	Carriage Bolt, 3/8" x 3/4"
49.	2FH0747	2FH0747	16	Pan Head Machine Screw, 1/4" x 1/2"
50.	2FH0828	2FH0828	5	Hex Bolt, 5/16" x 3/4"
51.	2FH0830	—	4	Hex Bolt, 5/16" x 1"
52.	2FH0856	2FH0856	12	Hex Bolt, 3/8" x 1-1/4"
53.	2FH1057	—	2	Hex Bolt, 3/8" x 1-3/4", Grade 5
	—	2FD1058	2	3/8" x 2" Hex hd grade 5 bolt
54.	3FH0712	3FH0712	2	Cotter Pin, 1/8" x 3/4"
55.	3FH0714	3FH0714	3	Cotter Pin, 1/8" x 1-1/4"
56.	3FH0770	3FH0770	2	Cotter Hair Pin, 1/8" x 2-3/8"
57.	3FH0790	3FH0790	14	Lock Washer, 5/16"
58.	3FH0791	3FH0791	7	Lock Washer, 3/8"
59.	3FH0864	3FH0864	9	Flat Washer, 5/16"
60.	3FH0865	3FH0865	4	Flat Washer, 3/8"
61.	3FH0952	3FH0952	3	Flat Washer, 5/8" SAE
62.	3FH1015	—	1	Square Key, 3/16" x 1"
63.	3FH1026	—	1	Square Key, 1/4" x 1"
	—	3FH1030	2	1/4" x 2" square key

TROUBLE SHOOTING

PROBLEM	SOLUTION
System Plugs Up	<ol style="list-style-type: none"> 1. Check belt tension on air blower and tighten if loose. 2. Check air filter and clean out. Locate in a place where there is less dust. 3. Check tubing system for any obstructions. 4. Reduce feed-in rate. 5. Air pressure switch setting may be too low. 6. Outlet gate valve too far open.
Excessive Grain Damage	<ol style="list-style-type: none"> 1. Feed-in auger may be overfeeding airlock, causing vanes to shear off grain. Reduce feed rate. 2. Air velocity may be excessive. Slow air blower by changing pulleys or by opening gate valve. 3. Damage can occur if system is running at less than full capacity. Increase feed rate. 4. Rubber hose used to change grain direction, or used for extended lengths. 5. Airlock shear protector installed wrong.
Airlock Stops or is Noisy	<ol style="list-style-type: none"> 1. A foreign object may have become lodged in the airlock vanes. 2. Check belt tension. 3. Check gearbox drive. 4. The rotor vanes may be rubbing on the ends of the airlock. Check clearance at both ends of rotor and center in housing by loosening the set screws in the bearings on both ends of the rotor shaft and moving rotor. Tighten set screws after repositioning. 5. The rotor vanes may have become rusted to the airlock housing. The airlock can be broken loose by using a pipe wrench on the exposed rotor shaft. CAUTION: The worm drive gearbox cannot be driven in reverse and can be damaged. Remove the airlock drive chain before attempting to turn the airlock by hand. 6. "U" cup packings on rotor too tight. (Contact DMC)

ELECTRICAL TROUBLE SHOOTING

PROBLEM	SOLUTION
Unit will not start, “ready light” is not on .	<ol style="list-style-type: none"> 1. Check AC power supply. 2. Check control box fuses. 3. Thermal overload tripped (overload indicator is on). 4. Air pressure limit switch may be misadjusted (less than 5 PSI). If pressure switch is not reset, turn pressure adjustment clockwise until switch resets. 5. Be sure “start” switch is pushed.
Unit will not start, the “ready light” is on.	<ol style="list-style-type: none"> 1. Blower, airlock and auxiliary switches must be in either “Auto” or Manual” to operate. 2. The automatic control not wired correctly or not working. (Requires a closed contact across TB1 and TB2 to auto start).
Blower Motor Trips Thermal Overload	<ol style="list-style-type: none"> 1. Check current draw using amp meter. The motor should not be pulling more current than the name plate specifies. Reduce feed rate if excessive. 2. Check heater sizes. 3. Check for loose connections and/or too small gauge wire. 4. Wrong voltage (either high or low). 5. Too much load due to obstructions, bad bearings or dry gears.
No Control Voltage	<ol style="list-style-type: none"> 1. Control Fuse inside the control box is down. 2. Check main power for proper voltage.

How to Handle Handling Couplings

1. Couplings are shipped ready-to-install... do not disassemble. To prevent gasket from slipping out of proper position, always grasp coupling as shown in Figure 1. This will save time by maintaining proper position of gasket and sleeve in relation to shell and flange.

Installing Couplings

1. Confirm pipe O.D. size you intend joining. Each compression coupling has been factory inspected for proper O.D. size before shipment.
2. Be sure outside surface of pipe is dry, and free of dirt, grease or external burrs. (Burr & jagged pipe ends can cut gasket; dirt & grease can cause coupling slippage.)
3. Grasp coupling as shown in Figure 1 to keep gasket and sleeve (and gasket protector when used) in separate quadrants, as shown in Figure 2. Be sure gasket teeth mesh and do not overlap.
4. Slide coupling over one pipe past end, then butt pipe ends (a small gap 1/16 maximum at butt joint will not reduce coupling performance). Slide coupling back until coupling (and gasket protector when used) is centered over joint. Use care when sliding coupling into place ...avoid wrinkling or overlapping gasket (or gasket protector when used).
5. When static electricity bleed path is required, then a grounding strip should be used.
6. Partially tighten bolts evenly as follows:
 - 5/16 bolt size - 12 ft. lbs. torque
 - 1/2 bolt size - 45 ft. lbs. torque
 - 5/8 bolt size - 65 ft. lbs. torque
 - 3/4 bolt size - 95 ft. lbs. torque

(Where SAE GR 5 5/8 bolts are specified tighten to 95 ft. lbs. For couplings with aluminum shell and inner sleeve do not exceed 40 ft. lbs.)

8. When properly and evenly tightened to the recommended torque the coupling installation is complete. The top edges of the flanges will touch and flanges appear as a vee when viewed from the end, as shown in Figure 3. **DO NOT** attempt tightening bolts to flatten flange faces together, as this exceeds recommended limits.



Grasp as shown.

Figure 1

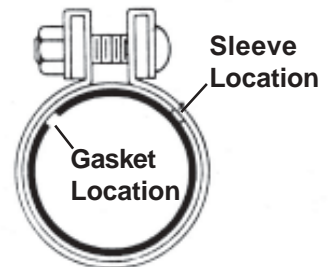


Figure 2

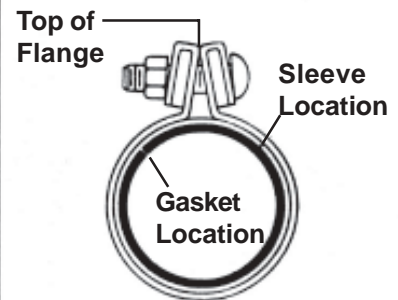


Figure 3



TRANS-FER 700, 1200, 1700 & 2100 PNEUMATIC AIR SYSTEMS OWNER'S MANUAL

DMC markets across the U.S. and around the world.

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