

Flexible Auger Feed Delivery System Installation & Operator's Manual

Models 720 (2.25") 725 (3" Pellet) 730 (3.0") 735HM (3.5" High Moisture) 735HV (3.5" High Volume)







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VAL PRODUCTS, INC. WARRANTIES

For Warranty claims information, please see the "Manufactured Products Standard Warranty" form QMS101 available from Val Products, Inc. by:

- Phone: 1-800-998-2526
- Email: marcom@val-co.com
- Online: http://val-co.it/warranty

Conditions and Limitations:

- Products and Systems involved in a warranty claim under the "Manufactured Products Standard Warranty" shall have been properly installed, maintained and operated under competent supervision, according to the instructions provided by Val Products, Inc.
- Malfunction or failure resulting from misuse, abuse, negligence, alteration, accident or lack of proper installation or maintenance shall not be considered a defect under the Warranty.

Symbols

Our concern is for your safety. The safety warnings are included in this manual as a guide to help and encourage the safe operation of your equipment. It is your responsibility to evaluate the hazards of each operation and implement the safest method of protecting yourself as owner and/or operator.



= NOTICE - Important information. Be sure to read.



= WARNING - The safety alert symbol is used on warning signs that describe the importance of a feature or explain a step that one should pay close attention to avoid problems or personal injury.

A DANGER

Hazardous situation, if not avoided, will result in serious injury or death.



Hazardous situation, if not avoided, could result in serious injury or death.



Hazardous situation, if not avoided, could result in minor or moderate injury.

Flexible Auger Feed Delivery Systems - General Specifications

MODEL 720 2.25" (55mm) FLEXIBLE AUGER FILL SYSTEMS

Used to convey dry ground feed and crumble type mash - maximum moisture content 18%. Maximum particle size 1/8" diameter x 1/2" long. System is not recommended for large pellets or shelled corn. PVC tubes are 2.25" (55mm) outside diameter; flexible auger is 1.52" outside diameter. Approximate feed delivery rate is 15 lbs. per minute or 900 lbs. per hour based on 40 lbs./cubic foot feed density and 358 rpm drive unit.

MODEL 725 "PELLET" 3" (75mm) FLEXIBLE AUGER FILL SYSTEMS

Used to convey dry ground feed and crumble type mash - maximum moisture content 18%. Maximum particle size 1/8" diameter x 1/2" long. System is recommended for pellets or shelled corn. PVC tubes are 3" (75mm) outside diameter; flexible auger is 2.25" outside diameter. Approximate feed delivery rate is 35 lbs. per minute or 2100 lbs. per hour based on 40 lbs./cubic foot feed density and 358 rpm drive unit.

MODEL 730 3" (75mm) FLEXIBLE AUGER FILL SYSTEMS

Used to convey dry ground feed and crumble type mash - maximum moisture content 18%. Maximum particle size 1/8" diameter x 1/2" long. System is not recommended for large pellets or shelled corn. PVC tubes are 3" (75mm) outside diameter; flexible auger is 2.38" outside diameter. Approximate feed delivery rate is 50 lbs. per minute or 3000 lbs. per hour based on 40 lbs./cubic foot feed density and 358 rpm drive unit.

MODEL 735 HV 3.5" (90mm) FLEXIBLE AUGER FILL SYSTEMS

Used to convey dry ground feed and crumble type mash - maximum moisture content 18%. Maximum particle size 3/16" diameter x 1/2" long. System is not recommended for large pellets or shelled corn. PVC tubes are 3.5" (90mm) outside diameter; flexible auger is 2.71" outside diameter. Approximate feed delivery rate is 100 lbs. per minute or 6000 lbs. per hour based on 40 lbs./cubic foot feed density and 358 rpm drive unit.

MODEL 735 HM 3.5" (90mm) FLEXIBLE AUGER FILL SYSTEMS

Used to convey dry ground feed and crumble type mash - **maximum moisture content 27%**. Maximum particle size 3/8" diameter x 3/4" long. System is not recommended for large pellets or shelled corn. PVC tubes are 3.5" (90mm) outside diameter; flexible auger is 2.38" outside diameter. Approximate feed delivery rate is 50 lbs. per minute or 3000 lbs. per hour based on 40 lbs./cubic foot feed density and 358 rpm drive unit.

SYSTEM NOTES

- 1. Auger boots, tube hangers, feed drop outlets, downspout tubes, feed control switches and other optional items are not included with the systems listed. Order these items separately.
- 2. Size your system to make the maximum operating time four hours per day. Some applications may require two flexible auger fill systems or possibly a 4" or 6" rigid auger system to meet the desired delivery rate.
- 3. A time clock or other control is recommended with all systems to prevent excess empty auger operation and other malfunctions.
- 4. Multiple bin pass-thru or tandem systems are recommended when extra feed storage or dual rations are required.
- 5. Extended length systems are complete with components to transfer from one feed line to another. These systems are available with direct drive power units only. RECOMMENDATION: Select a drive unit with a faster output rpm for the extended system than for the supply (entrance or pass-thru) system.
- 6. All systems are normally wired for 230V, 60HZ, 1 Phase operation. Additional motors (60HZ 3 Phase, 50HZ 1 Phase, & 50HZ 3 Phase) are also available.
- 7. Standard drive unit (both v-belt and direct drive) is 358 rpm at 60HZ, 368 rpm at 50HZ operation. Alternate speeds (190, 250, & 441 rpm at 60HZ -- 159, 208, & 298 rpm at 50HZ) are also available.

IMPORTANT

WHEN USING ADDITIONAL FORMED TUBES ON A SYSTEM, FOR EACH ADDITIONAL 90° OF FORMED PVC TUBE ADDED TO A LINE DECREASE THE MAXIMUM LINE LENGTH FOR EACH MOTOR SIZE BY 30 FEET.

Installation



Planning Your VAL-CO Feed Delivery System

For the easiest and most trouble free system locate the feed bin in a direct line with the feed delivery system. Refer to the BIN POSITIONING in this instruction manual (page 10, figures 11 & 12) for bin placement according to the height at which the PVC tube enters the building. Locate the bin so that the system does not have to convey feed at an angle of more than 60 degrees. A 45 degree entry should be considered standard.

Whenever possible lay out the system to run straight. Avoid problems with extra elbows and curves by locating the feed bin in line with feeders. One horizontal 90 degree turn is allowed inside the building. A 180 degree turn is NOT recommended by VAL-CO under any circumstances. If additional turns or elbows are needed, use extension hoppers, as shown on pages 8 & 9. NOTE: One (1) 90 degree elbow requires the same power as 30' of straight line; subtract 30' off VAL-CO recommended maximum length for each elbow.

Left hand turns in the system should be avoided at all times. If a left hand turn is the only alternative, be sure to reduce stretch by 1" per 50' at initial installation to reduce wear on the elbow. Reference page 22 for auger stretch procedure.

Plan your feed delivery system so the auger tubes are over the feeders as much as possible. To avoid bridging problems do not angle the drop tubes more than 45 degrees.

The discharge head must be located over a feeder that will require as much or more feed than any of the feeders in the line.

Do not position drop outlets on or just before an elbow. Drops should be located after an elbow to allow feed to cushion the auger through the elbow.

With the use of an extended length system the larger portion of outlet drops should be located on the longest portion of the feed line.

Typical System Installations

While VAL-CO feed delivery systems are available to meet most any need, there are some general guidelines to consider when planning the layout of your system.

On the following pages you will find some of the most common types of installations.

Proper planning to insure the correct installation of your feed delivery system will eliminate many problems that can occur later.

If you are unsure of the system that's correct for your needs, be sure to contact the VAL-CO distributor nearest you for any assistance needed.

System Installations - continued



Systems #1 & #2 represent extended length systems. The power requirements for each part of the system should be equal.

System #3 utilizes two 90 degree right hand turns, making it a much more favorable installation instead of system #4 utilizing two left hand turns.



System #5 represents a circulating feed delivery system with options for bin placement. This system is used where a continuous supply of feed is needed.





System #6 is an extended length system with one additional 90 degree elbow. This system is acceptable but system's #2 & #3 would be recommended to reduce excessive run time.



System Installations - continued

System #7 would not be recommended due to 180 degree left hand turns causing erratic auger operation.



System #8 should not be used because of 180 degree turns causing excessive elbow wear.



System #9 would not be recommended due to 180 degree left hand turns.



System #10 would not be recommended because there are too many elbows causing auger vibration, motor stall, and excessive elbow wear.



Bin Positioning



Installation Procedure

Read All Instructions Before Starting Installation of Feed System

STEP 1. BIN LOCATION

Use the images on pages 8, 9 & 10 to determine the location of your bin. Pour a concrete pad in accordance with the instructions in your bin manual. Attempt to place the bin in a direct line with the auger system to simplify installation, however most entrance requirements can be accommodated.

STEP 2. BOOT INSTALLATION

Refer to pages 14, 15 & 16 in this manual for boot installation. Proper use of hardware and a quality silicone caulking are key ingredients to the correct installation of all boots.

STEP 3. TUBE INSTALLATION (inside the building)

Determine the desired location for auger line in the building. Install hanger bolts every four (4) feet or less. If the building has a rafter spacing of more than four (4) feet some type of bridging should be nailed between the rafters.

Additional support may be necessary at the discharge head and motor drive end of the system. Be CERTAIN that the suspension system is properly secured to the rafters or other structure and will safely support the weight of the feed line during operation.

STEP 4. TUBE INSTALLATION (outside the building)

Line up the auger tubes from the building entrance hole to the boot on the feed bin. If necessary cut a 45 degree elbow to achieve the required angle. Refer to page 10 BIN POSITIONING for standard entrance angles and page 17 TUBE INSTALLATION for the proper cutting of the PVC tubes. Up to this point all tubes are dry-fitted together.

STEP 5. CEMENTING PVC TUBES

Follow the directions on can for safe handling of PVC cement. Be sure to square off all cut ends. Before applying the PVC cement on tubes be sure all surfaces to be joined are cleaned. After joining tubes give them a twist to align them as they are joined to full depth. Hold tube and bell together for 30 seconds to insure proper seal.

STEP 6. OUTLET DROP INSTALLATION

Determine locations where outlet drops are required. Cut openings in tubes and install outlet drops as per directions on page 19, OUTLET DROP INSTALLATION. Outlet drops should NOT be installed ON or JUST BEFORE formed tubes. IF AN OUTLET IS REQUIRED ON A FORMED TUBE FEED CARRYOVER SHOULD BE ALLOWED TO CUSHION THE AUGER THROUGH THE CURVE. Feed carryover can be accomplished by varying the size of the outlet hole in the tube.

STEP 7. AUGER SPLICING

The recommended method for splicing or lengthening the auger is by welding with a bronze, flux-coated rod. Lay the auger in an angle iron for alignment. Butt 3/4" to 1" of the ends of the auger to be joined and weld on both sides of the joint; DO NOT weld the flighting tips. Allow the weld to air cool, then file smooth to avoid auger tube wear. Refer to page 22 for further instruction. AN AUGER WELD JOINT SHOULD NOT BE INSTALLED IN A FORMED TUBE OR IN AN INCLINED TUBE. THE WELD JOINT SHOULD BE INSTALLED CLOSER TO THE DRIVE UNIT TO MINIMIZE FEED FLOW RESTRICTIONS.

Installation Procedure - continued

STEP 8. AUGER INSERTION

With the bearing and shaft off of the back of the boot, insert the auger through the boot and auger tubing. Work the auger up to the discharge head end of the suspended tubing. The excess auger length at the boot end should NOT be cut off at this time. Handle the auger carefully. Dropping the auger may cause it to kink. DO NOT install auger that has been kinked as it will wear a hole in the auger tubing at the spot of the kink.



USE EXTREME CAUTION WHEN HANDLING AUGER. THE AUGER IS UNDER TENSION AND MAY SPRING CAUSING SERIOUS INJURY. ALWAYS WEAR PROTECTIVE CLOTHING AND SAFETY GLASSES WHEN HANDLING THE AUGER.

STEP 9. DRIVE UNIT INSTALLATION

See page 20 for detailed instructions.

STEP 10. CUTTING AUGER (at boot end)

Auger must already be attached to the drive unit end. Auger should be stretched 2" for every 50' of length. Measure the stretch from the rear edge of the boot and cut at that point. See pages 21 & 22 for detailed instructions.

STEP 11. SHUTOFF SWITCHES

See page 23 for detailed instructions concerning VAL-CO shutoff switches.

STEP 12. START PROCEDURES

Reference page 27. New auger is coated with oil for protection against rust. The auger must be cleaned and polished before the system can handle a full load of feed. To clean and polish the auger turn the system on and let it run empty for several minutes. Then cycle 1/4 bushel of feed through the system; repeat this cycle several times, gradually increasing feed amount to one (1) bushel. Slowly increase the amount of feed into the system until the auger carries its full load.

STEP 13. TROUBLESHOOTING

See page 28 for TROUBLESHOOTING guide.

STEP 14. MAINTENANCE

See page 27 for MAINTENANCE instructions.

Boot Installation - Overview

The following pages describe instructions for the installation of slide valves for Straight End Boots, Straight Pass-Thru Boots, and 30 Degree Boots, as shown in Figure 13. Please read the entire manual to learn about slide valve orientation, hardware orientation, caulking instructions and replacement part numbers. It is very important all directions are followed for proper operation and weather resistance.

Proper use of hardware and silicone caulking is critical to the correct installation of VAL-CO boots and plastic transitions. Refer to pages 15 & 16 for proper hardware installation and caulking points. USE ONLY 100% SILICONE OUTDOOR CAULKING.



4" RIGID AUGER - 6" RIGID AUGER - 2.25"/3"/3.5"/4.25" FLEXIBLE AUGER

Slide Valve & Hardware Installation





Caulking Instructions:

- To ensure moisture does not seep inside boot, all joints and hardware holes must be caulked properly.
- Clean the locations where caulking is to be applied.
- Use rope caulk supplied with feed bin between collars.
- Use UV resistant silicone caulk and apply between all mating parts as shown.
- There must be bead of caulk sealing each hardware hole as shown in Figure 16, detail view.
- Reference Feed Bin & Flexible Auger Manuals for more information.



Hardware Instructions:

- All tapered sections of the feed bin should be secured with round head truss bolts.
- It is very important to install the round head inside the bin so feed will flow over. This includes the hardware of the collar to the bin, the bottom collar to the boot transition, and the slide value to the lower boot, as shown in the detail views of Figure 17.
- Insert the slide into the transfer plate slot so that it is in working order before bolting the slide shield in place.
- Bolt the lower boot to the transfer plate using the hardware provided, as shown in Figure 17.





Agitator ball is ONLY supposed to be used in feed loads where feed bridging is a problem (hot feed, high moisture, high fat). Remove ball when feed is freely flowing. Leaving ball inside bin will result in premature wear!

NOTE: Straight, End Boot shown for reference. All hardware and slide valve instructions apply to all boots.

Auger Tube Installation

Use Chart A and Figure 18 to help determine where to cut an elbow according to the desired degree turn. Each elbow will turn 45 degrees at full length. All dimensions are measured along the long outside curve of the elbow and DO NOT include the belled end of the elbow in measurement.

DEGREE	720	725	730	735HM	735HV
15	16-9/32"	16-1/2"	16-1/2"	16-5/8″	16-5/8"
22.5	24-7/16"	24-3/4"	24-3/4"	24-15/16"	24-15/16"
30	32-9/16"	33"	33″	33-1/4″	33-1/4"
45	48-7/8″	49-1/2"	49-1/2"	49-7/8"	49-7/8"
		Char	t A		





Figure 18

Be sure to cut ends square. Remove burrs and clean thoroughly before applying PVC cement. For proper use of PVC cement, follow directions on can.

All tube joints that are exposed to moisture and weather must be caulked with 100% silicone outdoor caulking to waterproof them in addition to cementing the joint.







Supporting The System



Figure 20

Figure 21

When the auger tube passes through a wall or partition the opening must be made large enough so that the auger tube can be supported without resting on any part of the wall (every 4 feet). If the auger tube rests on a wall or partition it may flatten out or become kinked causing excessive wear. (Figure 20)

Drive units will require extra support to handle the twisting encountered when the motor starts and stops. Be sure to use the suspension points provided on the drive unit and on the discharge head to avoid problems caused by motor twist. (Figure 21)

Support the auger tubing every 4 feet using chain and "S" hooks fastened to the rafters in a building. If rafter spacing is over 4 feet some type of bridging must be used. (example: 2" x 4" nailed between rafters.)

It is important to allow for thermal expansion and contraction of auger tubes. Do not rigidly mount ends of system or damage will occur. Chain and "S" hooks are the best means of support to allow for expansion and contraction of the auger tubes.

The feed system should be restrained from swinging by wrapping chain completely around tubing and securing the chain with "S" hooks, as shown in Figure 22, or the tube can be suspended with formed tube hangers as shown in Figure 23. Reference page 37 for part numbers.

If drop feeders, extension hoppers, outlet drops, or any other loads will be imposed on the system, additional support should be added at that point.

Horizontal elbows need to be supported in at least two (2) places and some cases three (3), keep the line as straight and level as possible to avoid premature tube wear.

Outside the building the auger tube should be supported at least every 5 feet. The supports must be adequate to support the weight of the auger tubes when they are filled with feed.

Supports on the outside of the building must be designed to prevent weight loads from being transferred back onto the lower boot assembly. Chain or cable from either the building or the feed bin will not necessarily accomplish this.

When suspending a Poly Discharge Head with a boot attached below, the weight of the boot must not hang from the plastic discharge head. The boot must be suspended from the ceiling as shown in Figure 24, or damage to the Discharge Head will occur.





Figure 22



Outlet Drop Installation

Cut the outlet hole in the auger tube. A saber saw or hacksaw should be used when total feed dropout is desired. Use a hole saw and drill to cut round carry over hole. NOTICE: Deburr all holes to ensure proper slide valve function. See Figure 25 and Chart B below for appropriate hole sizes for specific auger tube sizes. IMPORTANT: THESE HOLE SIZES DO NOT APPLY TO DROP FEEDER INSTALLATIONS. Refer to the volumetric drop manual (shipped with 770500 control drop) for appropriate drop feeder hole sizes.



KEY	720	725	730	735HM	735HV
Α	4	4	4	4	4
В	.625	.625	.625	.625	.625
С	1.5	2.5	2.5	3.0	3.0



*Outlet hole when carry-over is acceptable.

Figure 25

Insert the cord through the hole in the Rotary Feed Gate. Pull cord until it is centered and knot it on both sides of the tab. Slip cord through the holes located on either side of the Drop Housing. Slide the Indicator Balls on the cord ends, and knot the ends to ensure that the Indicator Balls will not fall off, as shown in Figure 26. The location of the colored balls should indicate if the gate is open or closed. If the green ball is lower than the red ball, the gate is open. If the red ball is lower than the green ball, the gate is closed.

Attach the Rotary Feed Gate assembly to the tube as shown in Figure 27. Affix the Drop Housing to the tube as indicated in Figure 28 and secure with stainless steel clamps.



Drive Unit Installation

- Bolt the tube port to the discharge head with a 5/16" flat washer and 5/16" nut on each of the four 5/16" x 3/4" bolts.
- Mount the discharge head to the motor and gearbox assembly with four 5/16" x 3/4" bolts and four 5/16" flat washers provided.
- **CAUTION:** Gear reducer must be filled with oil before starting motor or serious and unwarranted damage will occur. Check to ensure oil level is up to oil level port, on side of gearbox.
- Remove plug from top of gearbox and install vent plug received in hardware bag with gearbox. Failure to install vent plug will cause unwarranted damage to occur.
- Oil: Use one of the following equivalents: Mobil-lube HD 80w 90, Shell-Spirax HD 80w 90.
- The discharge head and motor are typically wired at 220 volts. All wiring should be done by a qualified electrician. Refer to the wiring diagrams in this manual.
- Slide and clamp the VAL-CO tubing on the tube port.
- Suspend the discharge head and motor and gearbox assembly from the ceiling . Support holes are provided on the units.
- NOTE: The safety switch on the discharge head is provided as a back-up switch in case the hopper level switch does not operate properly. This switch is not intended to be used for controlling the auger system, but as a safety back-up switch only.



Auger Installation

- 1. Place the auger coil approximately 6-10 ft. (1.8mm-3.1m) away from the end of boot, as shown in Figure 30.
- 2. Uncoil the auger from the outside of the roll. Inspect the auger carefully as it is installed. Kinks must be removed and the auger brazed back together. Push the auger into the boot being careful not to kink the auger.
- 3. Attach the auger to the drive end. Be sure to butt the auger all the way up against drive washer.
- 4. From the boot end, pull and release the free end of the auger a few times. This will ensure the auger is in its natural position. Place a mark at the end of the boot as shown in Figure 31.
- 5. Stretch the auger the correct amount by pulling out of the boot tube:
 - Single feed bin: 2" (5cm) per 50' (15m) of auger length
 - Tandem feed bin: 4" (10cm) per 50' (15m) of auger length

Make the cut mark at the proper stretch length, as shown in Figure 32. Stretch the auger an additional 8" for working room. Secure auger temporarily by clamping auger with

Vise-Grips directly before boot entrance. Then cut the auger at cut mark with hacksaw, grinder, or bolt cutters.

- 6. Slide the boot bearing shaft onto the auger and thread the auger inside the anchor, as shown in Figure 33. Tighten the square head set screw to secure auger.
- 7. Pull auger out of boot slightly to relieve pressure on Vise-Grip clamp. Release clamp from auger and carefully guide the bearing shaft into the boot tube.
- 8. Secure bearing in boot tube with tube clamp provided.

WHEN HANDLING THE AUGER.





cut mark

Figure 33

USE EXTREME CAUTION WHEN HANDLING AUGER. THE AUGER IS UNDER TENSION AND MAY SPRING CAUSING SERIOUS INJURY. ALWAYS WEAR PROTECTIVE CLOTHING AND SAFETY GLASSES

Tighten set screw to secure auger.





Auger Splicing

The recommended method for splicing or lengthening the auger is by welding with a bronze, flux-coated rod. Lay the auger in an angle iron for alignment, as shown in Figure 34. Butt 3/4" to 1" of the ends of the auger to be joined and weld on both sides of the joint, as shown in Figure 35. DO NOT weld the flighting tips. Allow the weld to air cool, then file smooth to avoid auger tube wear. Be sure to weld the auger together so the two pieces are aligned in a very straight line.

NOTICE: AUGER WELD JOINT SHOULD NOT BE INSTALLED IN A FORMED TUBE OR IN AN INCLINED TUBE. THE WELD JOINT SHOULD BE INSTALLED CLOSER TO THE DRIVE UNIT TO MINIMIZE FEED FLOW RESTRICTIONS.



Feed Level Controls

Feed level controls should be installed below the discharge head to stop the auger when the last feeder is full.

- The proximity sensor should be installed in the downspout funnel below the discharge head, as shown • in Figure 36.
- The hopper level switch should be installed in the hopper below the discharge head, as shown in Figure ٠ 37 (refer to the instructions packed with the hopper level switch for proper placement).



730465 Proximity Discharge Head Sensor



Hopper Level Sensor

Figure 37

Hopper Level Switch

Pass-Thru Systems & Extended Length Systems



A pass-thru bin must have a restrictor plate installed in the boot, as shown in Figure 38.

The boots must be in alignment to prevent premature wearing on the system tubes. Install the auger starting at the first bin and through the second bin until it reaches the discharge head.

In pass-thru systems, do not have more than one bin open at the same time while the auger is running. If more than one slide valve is open at the same time, the auger will be overloaded and could jam.

Follow the instructions under the **AUGER INSTALLATION** section of this manual.

Pass-Thru Bin Restrictor Plates

The baffle shield must be mounted on the bearing end of the housing when installed into the boot housing.



Flag Systems & Extended Length Systems



441 RPM Gearbox

An extended length system installation is shown in Figure 39. Suspend the extended system the same way as a standard system at the discharge head. The auger should be installed using the instructions under the **AUGER INSTALLATION** section of this manual. Failure to cut back restrictor tube or use the correct gearbox can result in auger jamming. The line can be turned 90 degrees left or right using an extension hopper, as shown in Figure 40.



- A transfer plate is needed to connect the discharge head to the last flag line.
- Secure the transfer plate to the discharge head using the hardware supplied for the funnel.

Flag Systems (continued)

Alternate Layouts





Twin Boot Flag System Layout

Return Flag System Layout





Return-to-Bin Flag System Layout

Circulating Flag System Layout

Start-Up Procedures

- It is important to allow the inside of the tubes and the auger to be polished by the moving feed before opening the slide valve the entire way. Otherwise the auger could overload and jam. New auger is coated with oil for protection against rust. The auger must be cleaned and polished before the system can handle a full load of feed. To clean the auger turn the system on and let it run empty for several minutes. Then cycle 1/4 bushel of feed through the system; repeat this cycle several times, gradually increasing feed amount to one (1) bushel. Slowly increase the amount of feed into the system until the auger carries its full load.
- Before turning the auger on, grease tailshaft bearings/bushings.
- In pass-thru systems, do not have more than one bin open at the same time while the auger is running. If more than one slide valve is open at the same time, the auger will be overloaded and could jam.
- Do not allow the auger to run empty. Premature wear and damage to components could result.
- After the system is broken-in and polished, slide the valve at least once a week will ensure the valve remains operable and free from feed debris.

Maintenance & Operating Recommendations

- Grease bearing at boot end every 30 days.
- Regularly check the system for loose hardware and tighten if necessary.
- Direct drive units periodically check the oil level in the motor gear reducer. If necessary add lubricant so that the oil level reaches up to the side of the reducer and/or the bottom of the pipe plug.
- V-Belt drive units periodically apply grease lubricant to the grease fitting on the bearing housing.
- The system tubes should be kept level. Sagging tubes will cause wearing at these points.
- Empty the feed from the system if the system is to set for a long period of time.

DANGER - HIGH VOLTAGE ELECTRICAL COMPONENTS

- Disconnect power source before servicing automatic system.
- May start or stop at any time.
- Failure to do so will result in serious injury or death.







🛦 DANGER

ROTATING FLIGHTING This equipment uses augers which can kill or dismember LOCK OUT POWER BEFORE REMOVING COVER OR GUARD Failure to do so will result in death or serious injury

Danger - Rotating Auger

Disconnect power before working on system. Auger starts automatically and severe personal injury will result.

USE CAUTION when servicing or repairing your system. Follow all instructions and warnings when working with your fill system.

Troubleshooting Guide

Problem	Possible Cause	Corrective Action		
		Check motor reset button, (if furnished on motor)		
	No power supplied to motor.	Check all circuits, wired joints, fuses, and on-off		
		switches.		
	Motor is overloaded and will not run.	Check for foreign material in system (nuts, bolts, etc.)		
Motor on	Shutoff switch in boot is in off position	Check bin for feed supply and for feed bridging.		
drive unit will	due to lack of feed in boot.			
not run	Discharge head safety switch is packed	Remove packed feed. Verify switch operation and		
	with feed and stuck in off position.	replace if necessary.		
	Hopper shutoff switch is misadjusted	check its operation and response and readjust in		
	or stuck in off position.	necessary. Replace defective switch.		
	Notor Wired for Wrong Voltage.	Check motor wiring diagram.		
	Motor borsonower too small for	Replace motor.		
	system	of system		
	Motor is wired for 230 VAC and is			
	running on 115 VAC.	See motor wiring diagram for correct wiring.		
	Motor running in wrong direction	Check motor wiring diagram for changing direction of		
Motor	(motor runs, stops, no feed moved).	motor.		
overloads	Foreign object in system (motor runs,	Remove foreign object (auger may have to be		
after short	binds, stops, auger spins backwards).	removed).		
Tun	Defective motor.	Replace motor.		
	High moisture feed in system.	Avoid conveying wet feed. Clean auger and tubes.		
	Pass thru bin does not have restrictor	Install restrictor plates in all pass thru hins		
	plates installed.			
	End bin restrictor tube is cut too short.	Check/replace restrictor tube in end bin.		
		Cut auger to correct length. After the first 1 to 6 months		
System	Auger too long.	of operation, the auger may stretch. Excess auger		
does not run		length should be removed as described.		
smoothly	Augeric kinked or poorly brozed	see AUGER SPLICING II brazing seems to be the		
(excessive	Auger is kinked of poorly brazed.	problem. If auger is kinked, replace kinked section, (do		
vibration and	Tubes are not straight and level	Support auger tubes every 4 feet or less		
noise)	Food drop placed pear corpor	Do not place drops directly before a corpor		
	Peed drop placed field correl.	Poplace heat hearing		
	Auger runs dry too often	Install switch in boot to shut system off when empty		
Tubes wear		Check ALIGER SPLICING procedures Never place		
through	Auger kinked or poorly brazed	a hrazed section in a corner. If the auger is kinked		
	Auger kinked of poorty brazed.	replace kinked section.		
		Replace pinion and examine gears in gear reducer: if		
	Pinion in direct drive motor is broken.	worn, replace gear reducer also. Refer to lubrication		
		and maintenance instructions for direct drive.		
	Worn out bearings in V-belt drive	Lubricate grease fitting at bearing housing periodically.		
Motor runs	bearing housing from lack of lubricant.	Replace worn out bearings.		
but auger does not turn		Readjust belt for proper tension.		
		Replace old worn out belt.		
	Belt slips in belt drive.	New belt should be inspected for tightness after the		
		first 2 or 3 weeks of operation, since most belt stretch		
		will occur when the belts are new.		
	Pin sheared in flighting driver.	Replace roll pin.		





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Discharge Head 1P, with Relay - Proximity Sensor



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Discharge Head 1P, No Relay - Proximity Sensor











SYMBOLS

USE SCHEMATIC FOR



Discharge Head, with Relay





Factory Wiring

Discharge Head, No Relay




Feed Delivery System



KEY	DESCRIPTION	720	725	725 SS	730	730 SS	735HM	735HV
Α	Plastic Transition	See page 38.						
В	Slide Valve & Boot Assembly		Slide Valve on page 39, Boots on pages 40-49					
С	45 Degree PVC Elbow	720498	730499	730499	730499	730499	735499	735499
	Cover Plate	72301	2 - Steel C	over Plate	/ 731065	- Stainless	Steel Cove	r Plate
U	Universal Tube Gasket				735605			
Ε	Plastic Drop w/ Shutoff	720550	730550	730550	730550	730550	735550	735550
F	Transfer Plate	500517 – Steel Discharge Head 500590 – Poly Discharge Head 501560 – Stainless Steel Discharge Head						
	Suspension Components:							
G	5/16" x 3-1/2" Screw Hook	730441						
G	Formed Hanger	720220	713220	713220	713220	713220	735220	735220
	2/0 Double Loop Chain (foot)	820099						
Н	Translucent Plastic Downspout Tube	730615	730615	730615	730615	730615	735615	735615
Т	I Telescoping Translucent Plastic Downspout Tube		730421	730421	730421	730421	730421	735421
J	J Discharge Head		See Discharge head on pages 54-55, Port Tubes on pages 58-67					58-67
К	Motor & Gearbox Assembly	See pages 68-71						
L	10' Straight PVC Tube	720434	730434	730434	730434	730434	735434	735434
N/S	Flexible Auger	720440	725440	725440	730440	725440	730440	735440

Upper Boot Transitions

ITEM #	PART #	DESCRIPTION	
UPPER BOOT TRANSITIONS - PART NUMBERS			
	500475	30 DEGREE PLASTIC UPPER BOOT TRANSITION - GREEN	
1	500575	30 DEGREE PLASTIC UPPER BOOT TRANSITION - CLEAR	
	500857	30 DEGREE PLASTIC UPPER BOOT TRANSITION - TRANSLUCENT	
	500485	STRAIGHT PLASTIC UPPER BOOT TRANSITION - GREEN	
2	500585	STRAIGHT PLASTIC UPPER BOOT TRANSITION - CLEAR	
	500855	STRAIGHT PLASTIC UPPER BOOT TRANSITION - TRANSLUCENT	
3	700010	STRAIGHT DOUBLE PLASTIC UPPER BOOT TRANSITION - GREEN	



Single & Twin Slide Valves

SLIDE VALVE PART #			500471	500371	731074		
ITEM #	ITEM # DESCRIPTION QTY			PART #			
1	5/16" X 1" TRUSS HEAD BOLT	18	010544	010544	-		
	5/16" X 1" TRUSS HEAD BOLT, STAINLESS STEEL	18	-	-	010545		
2	5/16" HEX NUT	6	010603	010603	-		
2	5/16" HEX NUT, STAINLESS STEEL	6	-	-	MH8056		
2	5/16" X 3/4" HEX BOLT	6	010643	010643	-		
	5/16" X 3/4" HEX BOLT, STAINLESS STEEL	6	-	-	010431		
4	7/64" X 3/4" COTTER PIN	1	012660	012660	012660		
5	5/16" NYLON HEX NUT	18	012781	012781	012781		
6	5/16" NYLON WASHER	18	012782	012782	012782		
7	12" ZINC PLATED CHAIN	1	500305	500305	500305		
8	CHAIN RING	1	500306	500306	500306		
9	WEATHER STRIPPING, PER FT.	1.25 ft	500487	500487	500487		
10	SINGLE SLIDE PLATE	1	500301	-	-		
10	SINGLE SLIDE PLATE, STAINLESS STEEL	1	-	-	731071		
11	SINGLE SLIDE WEATHER SHIELD	1	500302	-	-		
	SINGLE SLIDE WEATHER SHIELD, STAINLESS STEEL	1	-	-	731072		
12	SINGLE TRANSFER PLATE	1	500309	-	-		
12	SINGLE TRANSFER PLATE, STAINLESS STEEL	1	-	-	731070		
13	TWIN SLIDE PLATE	1	-	500324	-		
14	TWIN TRANSFER PLATE (contains (2) 500324)	1	-	500374	-		
15	TWIN SLIDE WEATHER SHIELD	2	-	500587	-		



Exploded View: Model 720 Boots For 2.25" (55mm) Fill Systems



Parts List: Model 720 Boots For 2.25" (55mm) Fill Systems

PART #	DESCRIPTION
	MODEL 720 BOOTS FOR 2.25" (55MM) FILL SYSTEMS - COMPLETE KITS
720940	2.25" SINGLE OUTLET PASS-THRU LOWER BOOT - W/ P-T KIT, BAFFLE/RESTRICTOR & SINGLE SV
720960	2.25" TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS, BAFFLE/RESTRICTOR & SINGLE SV
720961	2.25" TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS, BAFFLE/RESTRICTOR & SPLIT SV
720963	2.25" SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT & SINGLE SV
720964	2.25" SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT - WITHOUT SV
720965	2.25" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SINGLE SV
720966	2.25" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SPLIT SV
720967	2.25" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS - WITHOUT SV
720968	2.25" COMB. TWIN OUTLET LOWER BOOT - W/ (1) ANCHOR & BEARING KIT, (1) P-T KIT, BAFFLE/RESTRICTOR & SPLIT SV

ITEM #	PART #	DESCRIPTION	
	MODEL 720 BOOTS FOR 2.25" (55MM) FILL SYSTEMS - PARTS LIST		
1	500371	16" SPLIT BOOT SLIDE VALVE (see page 39 for components)	
2	500471	16" BOOT SLIDE VALVE WITH HARDWARE (see page 39 for components)	
3	704303	BOOT ACCESS DOOR ASSEMBLY	
4	720785	2-1/4" AUGER SHAFT & BEARING KIT	
4.1	713414	5/8" LOCKING COLLAR	
4.2	720004	2-1/4" TUBE CLAMP ASSEMBLY	
4.3	720412	FLIGHTING ANCHOR	
4.4	720467	2-1/2" TUBE CLAMP ASSEMBLY	
4.5	720833	3" PLASTIC BEARING CAP	
4.6	730414	5/16-18 X 3/8" CAP SCREW (QTY. 2)	
4.7	731003	2-1/4" AUGER DRIVE SHAFT WELD ASSEMBLY	
4.8	731004	2-1/4" AUGER DRIVE BEARING ASSEMBLY	
5	720807	2-1/4" SINGLE BOOT HOUSING	
6	720848	2-1/4" TWIN BOOT HOUSING	
7	723012	COVER PLATE FOR UNIVERSAL TUBE ENTRY GASKET	
8	724020	AGITATOR BALL	
9	735605	UNIVERSAL TUBE ENTRY GASKET	

Exploded View: Model 725 Boots For Pellet 3" (75mm) Fill Systems



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Parts List: Model 725 Boots For Pellet 3" (75mm) Fill Systems

PART #	DESCRIPTION
	MODEL 725 BOOTS FOR PELLET 3" (75MM) FILL SYSTEMS - COMPLETE KITS
725931	3" SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT & SINGLE SV
725932	3" SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT - WITHOUT SV
725933	3" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SINGLE SV
725934	3" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SPLIT SV
725935	3" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS - WITHOUT SV
725936	3" COMB. TWIN OUTLET LOWER BOOT - W/ (1) ANCHOR & BEARING KIT, (1) P-T KIT & SPLIT SV
725937	3" SINGLE OUTLET LOWER BOOT, STAINLESS STEEL - W/ ANCHOR & BEARING KIT & SINGLE SV
725938	3" SINGLE OUTLET LOWER BOOT, STAINLESS STEEL - W/ ANCHOR & BEARING KIT - WITHOUT SV
730940	3" SINGLE OUTLET PASS-THRU LOWER BOOT - W/ P-T KIT & SINGLE SV
730960	3" TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS & SINGLE SV
730961	3" TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS & SPLIT SV

ITEM #	PART #	DESCRIPTION		
MODEL 725 BOOTS FOR PELLET 3" (75MM) FILL SYSTEMS - PARTS LIST				
1	500371	16" SPLIT BOOT SLIDE VALVE (see page 39 for components)		
2	500471	16" BOOT SLIDE VALVE WITH HARDWARE (see page 39 for components)		
	731074	16" BOOT SLIDE VALVE WITH HARDWARE, STAINLESS STEEL (see page 39)		
2	704303	BOOT ACCESS DOOR ASSEMBLY		
3	731059	BOOT ACCESS DOOR ASSEMBLY, STAINLESS STEEL		
4	723012	COVER PLATE FOR UNIVERSAL TUBE ENTRY GASKET		
4	731065	COVER PLATE FOR UNIVERSAL TUBE ENTRY GASKET, STAINLESS STEEL		
5	724020	AGITATOR BALL		
6	730807	3" SINGLE BOOT HOUSING		
0	731052	3" SINGLE BOOT HOUSING, STAINLESS STEEL		
7	730850	3" TWIN BOOT HOUSING		
8	731023	725 AUGER SHAFT & BEARING KIT		
8.1	713197	3-1/4" TUBE CLAMP ASSEMBLY		
8.2	713414	5/8" LOCKING COLLAR		
8.3	713422	5/16-18 X 1/2" SET SCREW		
8.4	720833	3" PLASTIC BEARING CAP		
8.5	730821	FLIGHTING ANCHOR		
8.6	730953	3" TUBE CLAMP ASSEMBLY		
8.7	730994	3" AUGER DRIVE BEARING ASSEMBLY		
8.8	731022	725 AUGER DRIVE SHAFT WELD ASSEMBLY		
9	735605	UNIVERSAL TUBE ENTRY GASKET		

Exploded View: Model 730 Boots For 3" (75mm) Fill Systems



Parts List: Model 730 Boots For 3" (75mm) Fill Systems

PART #	DESCRIPTION
	MODEL 730 BOOTS FOR 3" (75MM) FILL SYSTEMS - COMPLETE KITS
730940	3" SINGLE OUTLET PASS-THRU LOWER BOOT - W/ P-T KIT, BAFFLE/RESTRICTOR & SINGLE SV
730943	3" SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT & SINGLE SV
730944	3" SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT - WITHOUT SV
730945	3" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SINGLE SV
730946	3" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SPLIT SV
730947	3" TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS - WITHOUT SV
730948	3" COMB. TWIN OUTLET LOWER BOOT - W/ (1) ANCHOR & BEARING KIT, (1) P-T KIT, BAFFLE/RESTRICTOR & SPLIT SV
730960	3" TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS, BAFFLE/RESTRICTOR & SINGLE SV"
730961	3" TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS (2), BAFFLE/RESTRICTOR & SPLIT SV"
731050	3" SINGLE OUTLET LOWER BOOT, STAINLESS STEEL - W/ ANCHOR & BEARING KIT & SINGLE SV
731076	3" SINGLE OUTLET LOWER BOOT, STAINLESS STEEL - W/ ANCHOR & BEARING KIT - WITHOUT SV

	ITEM #	PART #	DESCRIPTION
			MODEL 730 BOOTS FOR 3" (75MM) FILL SYSTEMS - PARTS LIST
	1	500371	16" SPLIT BOOT SLIDE VALVE (see page 39 for components)
	2	500471	16" BOOT SLIDE VALVE WITH HARDWARE (see page 39 for components)
	Z	731074	16" BOOT SLIDE VALVE WITH HARDWARE, STAINLESS STEEL (see page 39)
	2	704303	BOOT ACCESS DOOR ASSEMBLY
	3	731059	BOOT ACCESS DOOR ASSEMBLY, STAINLESS STEEL
	4	723012	COVER PLATE FOR UNIVERSAL TUBE ENTRY GASKET
	4	731065	COVER PLATE FOR UNIVERSAL TUBE ENTRY GASKET, STAINLESS STEEL
	5	724020	AGITATOR BALL
	C	730807	3" SINGLE BOOT HOUSING
	б	731052	3" SINGLE BOOT HOUSING, STAINLESS STEEL
	7	730850	3" TWIN BOOT HOUSING
	8	731008	3" AUGER SHAFT & BEARING KIT
	8.1	713197	3-1/4" TUBE CLAMP ASSEMBLY
	8.2	713414	5/8" LOCKING COLLAR
	8.3	713422	5/16-18 X 1/2" SET SCREW
	8.4	720833	3" PLASTIC BEARING CAP
	8.5	730821	FLIGHTING ANCHOR
	8.6	730953	3" TUBE CLAMP ASSEMBLY
	8.7	730993	3" AUGER DRIVE SHAFT WELD ASSEMBLY
	8.8	730994	3" AUGER DRIVE BEARING ASSEMBLY
	9	735605	UNIVERSAL TUBE ENTRY GASKET

Exploded View: Model 735HV Boots For High Volume 3.5" (90mm) Fill Systems



Parts List: Model 735HV Boots For High Volume 3.5" (90mm) Fill Systems

PART #	DESCRIPTION
	MODEL 735HV BOOTS FOR HIGH VOLUME 3.5" (90MM) FILL SYSTEMS - COMPLETE KITS
735940	3.5" HV/HM SINGLE OUTLET PASS-THRU LOWER BOOT - W/ P-T KIT, BAFFLE/RESTRICTOR & SINGLE SV
735960	3.5" HV/HM TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS, BAFFLE/RESTRICTOR & SINGLE SV
735961	3.5" HV/HM TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS, BAFFLE/RESTRICTOR & SPLIT SV
735993	3.5" HV SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT & SINGLE SV
735994	3.5" HV SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT - WITHOUT SV
735995	3.5" HV TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SINGLE SV
735996	3.5" HV TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SPLIT SV
735997	3.5" HV TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS - WITHOUT SV
735998	3.5" HV COMB. TWIN OUTLET LOWER BOOT - W/ (1) ANCHOR & BEARING KIT, (1) P-T KIT, BAFFLE/RESTRICTOR & SPLIT SV

ITEM #	PART #	DESCRIPTION
MODEL 735HV BOOTS FOR HIGH VOLUME 3.5" (90MM) FILL SYSTEMS - PARTS LIST		
1	500371	16" SPLIT BOOT SLIDE VALVE (see page 39 for components)
2	500471	16" BOOT SLIDE VALVE WITH HARDWARE (see page 39 for components)
3	704303	BOOT ACCESS DOOR ASSEMBLY
4	723012	COVER PLATE FOR UNIVERSAL TUBE ENTRY GASKET
5	724020	AGITATOR BALL
6	735605	UNIVERSAL TUBE ENTRY GASKET
7	735814	3-1/2" SINGLE BOOT HOUSING
8	735850	3-1/2" TWIN BOOT HOUSING
9	735878	3-1/2" AUGER SHAFT & BEARING KIT
9.1	713414	5/8" LOCKING COLLAR
9.2	713422	5/16-18 X 1/2" SET SCREW
9.3	724401	3-1/2" TUBE CLAMP ASSEMBLY
9.4	724403	3-3/4" TUBE CLAMP ASSEMBLY
9.5	730821	FLIGHTING ANCHOR
9.6	730998	3-1/2" AUGER DRIVE SHAFT WELD ASSEMBLY
9.7	730999	3-1/2" AUGER DRIVE BEARING ASSEMBLY
9.8	735830	3-1/2" PLASTIC BEARING CAP

Exploded View: Model 735HM Boots For High Moisture3.5" (90mm) Fill Systems



Parts List: Model 735HM Boots For High Moisture 3.5" (90mm) Fill Systems

PART #	DESCRIPTION
Ν	/ODEL 735HM BOOTS FOR HIGH MOISTURE 3.5" (90MM) FILL SYSTEMS - COMPLETE KITS
735940	3.5" HV/HM SINGLE OUTLET PASS-THRU LOWER BOOT - W/ P-T KIT, BAFFLE/RESTRICTOR & SINGLE SV
735960	3.5" HV/HMTWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS, BAFFLE/RESTRICTOR & SINGLE SV
735961	3.5" HV/HM TWIN OUTLET PASS-THRU LOWER BOOT - W/ (2) P-T KITS, BAFFLE/RESTRICTOR & SPLIT SV
735984	3.5" HM SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT & SINGLE SV
735985	3.5" HM SINGLE OUTLET LOWER BOOT - W/ ANCHOR & BEARING KIT - WITHOUT SV
735986	3.5" HM TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SINGLE SV
735987	3.5" HM TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS & SPLIT SV
735988	3.5" HM TWIN OUTLET LOWER BOOT - W/ (2) ANCHOR & BEARING KITS - WITHOUT SV
735989	3.5" HM COMB. TWIN OUTLET LOWER BOOT - W/ (1) ANCHOR & BEARING KIT, (1) P-T KIT, BAFFLE/RESTRICTOR & SPLIT SV

ITEM #	PART #	DESCRIPTION		
MODEL 735HM BOOTS FOR HIGH MOISTURE 3.5" (90MM) FILL SYSTEMS - PARTS LIST				
1	500371	16" SPLIT BOOT SLIDE VALVE (see page 39 for components)		
2	500471	16" BOOT SLIDE VALVE WITH HARDWARE (see page 39 for components)		
3	704303	BOOT ACCESS DOOR ASSEMBLY		
4	723012	COVER PLATE FOR UNIVERSAL TUBE ENTRY GASKET		
5	724020	AGITATOR BALL		
6	735605	UNIVERSAL TUBE ENTRY GASKET		
7	735814	3-1/2" SINGLE BOOT HOUSING		
8	735850	3-1/2" TWIN BOOT HOUSING		
9	735880	3-1/2" HM AUGER SHAFT & BEARING KIT		
9.1	713414	5/8" LOCKING COLLAR		
9.2	713422	5/16-18 X 1/2" SET SCREW		
9.3	724401	3-1/2" TUBE CLAMP ASSEMBLY		
9.4	724403	3-3/4" TUBE CLAMP ASSEMBLY		
9.5	730821	FLIGHTING ANCHOR		
9.6	730993	3" AUGER DRIVE SHAFT WELD ASSEMBLY		
9.7	730999	3-1/2" AUGER DRIVE BEARING ASSEMBLY		
9.8	735830	3-1/2" PLASTIC BEARING CAP		

Boot Baffles / Restrictors

PART #	DESCRIPTION
	BOOT BAFFLES / RESTRICTORS - PART NUMBERS
720861	2.25" TWIN BOOT BAFFLE (contains QTY 2)
730869	3.00" TWIN BOOT BAFFLE (contains QTY 2)
730875	SINGLE BOOT BAFFLE / RESTRICTOR (for 2.25", 3.00", 3.50")
735857	3.50" TWIN BOOT BAFFLE (contains QTY 2)



Lower Boot Adapter

PART #	DESCRIPTION
	LOWER BOOT ADAPTER - PART NUMBERS
730375	FEED HOPPER ADAPTER ASSEMBLY



PVC Tubes

ITEM #	PART #	DESCRIPTION
		MODEL 720 - 2-1/4" PVC TUBES
2	720434	2-1/4" 10' STRAIGHT PVC TUBE
-	720434-222	BUNDLE OF 222 - 720434 TUBES
3	720435	2-1/4" PVC TUBE SPLICE
-	720435-070	CARTON OF 70 - 720435 SPLICES
4	720498	2-1/4" 45 DEGREE FORMED PVC TUBE
-	720498-065	BUNDLE OF 65 - 720498 TUBES
		MODEL 725 / 730 - 3" PVC TUBES
1	730426	3″ 45D STEEL FORMED TUBE
2	730434	3" 10' STRAIGHT PVC TUBE
-	730434-116	BUNDLE OF 116 - 723434 TUBES
3	730435	3" PVC TUBE SPLICE
-	730435-080	CARTON OF 80 - 730435 SPLICES
4	730499	3" 45 DEGREE FORMED PVC TUBE
-	730499-050	BUNDLE OF 50 - 730499 TUBES
5	730908	STEEL TO PVC ADAPTER 3"
	M	ODEL 735 HV / HM - 3-1/2" PVC TUBES
1	735426	STEEL ELBOW, 735 X 45 DEG, NO BELL, COUPLER REQUIRED
2	735434	3-1/2" 10' STRAIGHT PVC TUBE
-	735434-092	BUNDLE OF 92 - 723434 TUBES
3	735435	3-1/2" PVC TUBE SPLICE
-	735435-050	CARTON OF 50 - 735435 SPLICES
4	735499	3-1/2" 45 DEGREE FORMED PVC TUBE
-	735499-040	BUNDLE OF 40 - 735499 TUBES

735 tube can interchange between PVC and steel. Due to tight fitment, it may be required to cut slots in the belled end of PVC/PVC splice to fit overtop of the steel 735 tube. Use 724401 for clamping steel bell/coupler. Use 724402 for clamping the PVC bell/PVC splice.



Augers

PART #	DESCRIPTION
	AUGER - PART NUMBERS
720440	FLEXIBLE AUGER, 1.52" OD
725440	FLEXIBLE AUGER, 2.25" OD
730440	FLEXIBLE AUGER, 2.38" OD
735440	FLEXIBLE AUGER, 2.71" OD

Auger is available in 10 ft. increments, from 40 ft. to 300 ft. To order, add a suffix to the base part number listed above of "-0000," specifying the desired auger length. For example: a 220 ft. roll of 730 auger would be 730440-0220. Augers are available in longer lengths. Please contact customer service for more info.

Basic Steel Discharge Head

	730462	730750		
ITEM #	DESCRIPTION	PART #		
1	#10-24 X 3/4" SELF TAP SCREW	4	011382	-
	#10-24 X 3/4" SELF TAP SCREW, STAINLESS STEEL	4	-	690376
2	#10-24 X 1/2" HEX SCREW	8	012675	-
2	#10-24 X 1/2" HEX SCREW, STAINLESS STEEL	8	-	780275
3	DISCHARGE HEAD GASKET	1	730046	730046
4	DISCHARGE HEAD HOUSING	1	730569	-
4	DISCHARGE HEAD HOUSING, STAINLESS STEEL	1	-	730735
-	ENCLOSURE MOUNTING PLATE	1	730570	-
5	ENCLOSURE MOUNTING PLATE, STAINLESS STEEL	1	-	730740
6	ACCESS DOOR ASSY	1	730572	-
0	ACCESS DOOR ASSY, STAINLESS STEEL	1	-	730737
-	DIAPHRAGM RETAINER	1	730573	-
	DIAPHRAGM RETAINER, STAINLESS STEEL	1	-	730741
8	PLASTIC FUNNEL	1	730634	730634
9	DIAPHRAGM CONTACT ASSEMBLY	1	730765	730765



Basic Poly Discharge Head

	POLY DISCHARGE HEAD PART #	730463	730575		
ITEM #	DESCRIPTION	QTY	PAF	PART #	
1	1/4" FLAT WASHER	14	010424	-	
	1/4" LOCK WASHER, STAINLESS STEEL		-	010409	
2	1/4-20 X 3/4" BOLT	4	010617	-	
2	1/4-20 X 3/4" BOLT, STAINLESS STEEL	4	-	011426	
2	#10-24 X 3/4" SELF TAP SCREW	4	011382	-	
5	#10-24 X 3/4" SELF TAP SCREW, STAINLESS STEEL	4	-	690376	
4	#6 BALL CHAIN	2.5	011431	011431	
5	#6 BALL CHAIN CONNECTOR	4	011432	011432	
c	1/4" X 1" CARRIAGE BOLT	14	011434	-	
0	1/4" X 1" CARRIAGE BOLT, STAINLESS STEEL	14	-	012001	
7	1/4-20 NYLOCK NUT	18	012793	-	
/	1/4-20 NYLOCK NUT, STAINLESS STEEL	18	-	012679	
8	DISCHARGE HEAD GASKET	1	730046	730046	
9	POLY DISCHARGE HEAD	1	730267	730267	
10	POLY ELECTRIC BOX MOUNT	1	730271	730271	
11	POLY ACCESS DOOR	1	730294	-	
11	POLY ACCESS DOOR, STAINLESS STEEL	1	-	730272	
12	POLY FUNNEL	1	730273	730273	
12	GEARBOX MOUNT	1	730274	-	
15	GEARBOX MOUNT, STAINLESS STEEL	1	-	730581	
14	DIAPHRAGM RETAINER	1	730573	-	
	DIAPHRAGM RETAINER, STAINLESS STEEL	1	-	730580	
15	DIAPHRAGM CONTACT ASSEMBLY	1	730765	730765	
16	POLY FLAG HOPPER DOOR STRAP	1	730783	-	
10	POLY FLAG HOPPER DOOR STRAP, STAINLESS STEEL	1	-	730582	



Discharge Head Control Box With Backup Mechanical Switch

ITEM #	PART #	QTY	DESCRIPTION	ITEM #	PART #	QTY	DESCRIPTION		
730501 & 730505 CONTROL BOXES - COMMON PARTS			730501 CONTROL BOX W/RELAY						
1	011165	1	3/16OD X 3/4L SOLID SS RIVET	20	730044	1	DPST 25A, 240V POWER RELAY		
2	011380	4	8-32 X 3/8 PH SCREW	21	730514	5	6-32 X 1/4 PPH TRS ZP SCREW		
3	420473	3	1/2" CONDUIT NUT	22	730521	8	16-14AWG, #6 BLUE SPADE TERMINAL		
4	450484	1	GROUND BLOCK						
5	723424	1	TOGGLE SWITCH, DPST, 10A, 250V		7305	05 COI	NTROL BOX WITHOUT RELAY		
6	730043	1	RED LIGHT, 250V, 1/2W	21	730514	3	6-32 X 1/4 PPH TRS ZP SCREW		
7	730236	4	ENCLOSURE SCREW	22	730521	3	16-14AWG, #6 BLUE SPADE TERMINAL		
8	730453	1	ENCLOSURE ASSY, DH CONTROL BOX						
9	730502	1	3/8ID X 1/2OD BUNA-N O-RING						
10	730503	1	MICRO SWITCH BRACKET						
11	730513	4	16-14AWG, #6 BLUE RING TERMINAL						
12	730516	1	10-32 X 1/4 PPH TRS ZP SCREW						
13	730527	1	MOUNTING PLATE, DH CTRL BOX						
14	730528	2	TERMINAL BLOCK, 3 POLE, 300V, 20A AWG 20-12, 4 CONN./POLE						
15	730558	6	6-32 X 1" PPH TRS ZP SCREW						
16	730989	1	MICRO SWITCH, SPDT 20A, 250VAC						
17	750030	3	1/2" NPT STRAIGHT CORDGRIP						
18	750657	1	TOGGLE SWITCH BOOT						
19	HW-71-204	3	11/16 ID, 13/16 OD O-RING						



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730549 Proximity Sensor & Mount

ITEM #	PART #	QTY	DESCRIPTION					
	730465 PROXIMITY SENSOR & MOUNT - PARTS LIST							
1	010408	4	#10-24 KEP NUT					
2	012795	4	#10-24 X 1/2" UNSLOTTED HEX SCREW					
3	730282	1	1-1/2" SS HOSE CLAMP					
4	750438	1	PROXIMITY SWITCH, 44R-33, 90-265V					
5	780055	1	PROXIMITY SENSOR BASE					

Note: Proximity Sensor shown in context, assembled to Steel Discharge Head (also used on Poly Discharge Head). Discharge Head, Motor & Gearbox shown for reference only.



720304 - 720 Steel Port & Driver

ITEM #	PART #	QTY	DESCRIPTION
72030			4 - 720 STEEL PORT & DRIVER - PARTS LIST
1	713195	1	DH TUBE HARDWARE BAG (bag not shown)
1.1	010252	8	5/16" SPLIT LOCKWASHER
1.2	010426	8	5/16" X 11/16" FLAT WASHER
1.3	010463	8	5/16-18 X 3/4" HEX BOLT
1.4	011114	4	5/16-18 HEX NUT
2	720004	1	2-1/4" TUBE CLAMP
3	720034	1	2-1/4" TUBE & PORT PLATE
4	720305	1	2-1/4" STEEL DH PORT TUBE SHIM
5	720412	1	FLIGHTING ANCHOR
6	720435	1	2-1/4" PVC TUBE SPLICE
7	720611	1	FLIGHTING DRIVER
8	730303	1	5/16-18 X 1-1/2" SOCKET HEAD SCREW
9	730403	1	1" KNURLED SET SCREW
10	730414	2	5/16-18 X 3/8" SOCKET HEAD SCREW



730 Steel Port & 725 Driver

	725304	725320			
ITEM #	DESCRIPTION	QTY	PAF	PART #	
1	5/16-18 NYLOCK NUT	1	012789	-	
	5/16-18 NYLOCK NUT, STAINLESS STEEL	1	-	MH90044	
2	DH TUBE HARDWARE BAG (bag not shown)	1	713195	-	
2	DH TUBE HARDWARE BAG, STAINLESS STEEL (bag not shown)	1	-	731039	
2.1	5/16" SPLIT LOCKWASHER	8	010252	-	
2.1	5/16" SPLIT LOCKWASHER, STAINLESS STEEL	8	-	010750	
2.2	5/16" X 11/16" FLAT WASHER	8	010426	-	
2.2	5/16" X 11/16" FLAT WASHER, STAINLESS STEEL	8	-	MH8033	
2.2	5/16-18 X 3/4" HEX BOLT	8	010643	-	
2.3	5/16-18 X 3/4" HEX BOLT, STAINLESS STEEL	8	-	MH90172	
2.4	5/16-18 HEX NUT	4	011114	-	
2.4	5/16-18 HEX NUT, STAINLESS STEEL	4	-	00052539	
3	DRIVER, WELD ASSEMBLY	1	725300	725300	
	3" TUBE & PORT PLATE	1	730034	-	
4	3" TUBE & PORT PLATE, STAINLESS STEEL	1	-	731034	
	3" TUBE CLAMP	1	730234	-	
5	3" TUBE CLAMP, STAINLESS STEEL	1	-	731036	
	5/16-18 X 1/2" SOCKET HEAD SCREW	2	730371	-	
0	5/16-18 X 1/2" SOCKET HEAD SCREW, STAINLESS STEEL	2	-	010440	
7	12GA FLIGHTING ANCHOR	1	730417	730417	
	5/16-18 X 1-3/4" SOCKET HEAD SCREW	1	735303	-	
8	5/16-18 X 1-3/4" SOCKET HEAD SCREW, STAINLESS STEEL	1	-	010261	



730 Steel Port & Driver

	730 STEEL PORT & DRIVER PART #		730304	731035
ITEM #	DESCRIPTION	PART #		
1	DH TUBE HARDWARE BAG (bag not shown)		713195	-
1	DH TUBE HARDWARE BAG, STAINLESS STEEL (bag not shown)	1	-	731039
1 1	5/16" SPLIT LOCKWASHER	8	010252	-
1.1	5/16" SPLIT LOCKWASHER, STAINLESS STEEL	8	-	010750
1.2	5/16" X 11/16" FLAT WASHER	8	010426	-
1.2	5/16" X 11/16" FLAT WASHER, STAINLESS STEEL	8	-	MH8033
4.2	5/16-18 X 3/4" HEX BOLT	8	010643	-
1.3	5/16-18 X 3/4" HEX BOLT, STAINLESS STEEL	8	-	MH90172
	5/16-18 HEX NUT		011114	-
1.4	5/16-18 HEX NUT, STAINLESS STEEL	4	-	00052539
2	3" TUBE & PORT PLATE		730034	-
2	3" TUBE & PORT PLATE, STAINLESS STEEL	1	-	731034
2	3" TUBE CLAMP	1	730234	-
3	3" TUBE CLAMP, STAINLESS STEEL	1	-	731036
4	3" FLIGHTING DRIVER	1	730300	730300
-	5/16-18 X 1-1/2" SOCKET HEAD SCREW	1	730303	-
5	5/16-18 X 1-1/2" SOCKET HEAD SCREW, STAINLESS STEEL	1	-	010263
6	5/16-18 X 1/2" SOCKET HEAD SCREW	1	730371	-
б	5/16-18 X 1/2" SOCKET HEAD SCREW, STAINLESS STEEL	1	-	010440
7	12GA FLIGHTING ANCHOR	1	730417	730417



steel hardware when assembling.

735305 - 735HV Steel Port & Driver

ITEM #	PART #	QTY	DESCRIPTION	
735305			- 735HV STEEL PORT & DRIVER - PARTS LIST	
1	713195	1	DH TUBE HARDWARE BAG (bag not shown)	
1.1	010252	8	5/16" SPLIT LOCKWASHER	
1.2	010426	8	5/16" X 11/16" FLAT WASHER	
1.3	010463	8	5/16-18 X 3/4" HEX BOLT	
1.4	011114	4	5/16-18 HEX NUT	
2	724401	1	3-1/2" TUBE CLAMP	
3	730371	1	5/16-18 X 1/2" SOCKET HEAD SCREW	
4	730417	1	12GA FLIGHTING ANCHOR	
5	735035	1	3-1/2" TUBE & PORT PLATE	
6	735300	1	3-1/2" FLIGHTING DRIVER	
7	735303	1	5/16-18 X 1-3/4" SOCKET HEAD SCREW	



735304 - 735HM Steel Port & Driver

ITEM #	PART #	QTY	DESCRIPTION	
735304			735HM STEEL PORT & DRIVER - PARTS LIST	
1	713195	1	DH TUBE HARDWARE BAG (bag not shown)	
1.1	010252	8	5/16" SPLIT LOCKWASHER	
1.2	010426	8	5/16" X 11/16" FLAT WASHER	
1.3	010463	8	5/16-18 X 3/4" HEX BOLT	
1.4	011114	4	5/16-18 HEX NUT	
2	724401	1	3-1/2" TUBE CLAMP	
3	730300	1	3" FLIGHTING DRIVER	
4	730303	1	5/16-18 X 1-1/2" SOCKET HEAD SCREW	
5	730371	1	5/16-18 X 1/2" SOCKET HEAD SCREW	
6	730417	1	12GA FLIGHTING ANCHOR	
7	735035	1	3-1/2" TUBE & PORT PLATE	



720464 - 720 Poly Port & Driver

ITEM #	PART #	QTY	DESCRIPTION	
		72046	4 - 720 POLY PORT & DRIVER - PARTS LIST	
1	720412	1	FLIGHTING ANCHOR	
2	720467	1	2-1/2" TUBE CLAMP	
3	720611	1	720 FLIGHTING DRIVER	
4	730270	1	2-1/4" POLY PORT TUBE	
5	730303	1	5/16-18 X 1-1/2" SOCKET HEAD SCREW	
6	730403	1	1" KNURLED SET CREW	
7	730414	2	5/16-18 X 3/8" SOCKET HEAD SCREW	



725464 - 730 Poly Port & 725 Driver

ITEM #	PART #	QTY	DESCRIPTION	
	7	725464	- 730 POLY PORT & 725 DRIVER - PARTS LIST	
1	012789	1	5/16-18 NYLOCK NUT	
2	713197	1	3-1/4" TUBE CLAMP	
3	725300	1	DRIVER WELD ASSEMBLY	
4	730269	1	3" POLY PORT TUBE	
5	730371	2	5/16-18 X 1/2" SOCKET HEAD SCREW	
6	730417	1	12GA FLIGHTING ANCHOR	
7	735303	1	5/16-18 X 1-3/4" SOCKET HEAD SCREW	



730464 - 730 Poly Port & Driver

ITEM #	PART #	QTY	DESCRIPTION		
	730464 - 730 POLY PORT & DRIVER - PARTS LIST				
1	713197	1	3-1/4" TUBE CLAMP		
2	730269	1	3" POLY PORT TUBE		
3	730300	1	3" FLIGHTING DRIVER		
4	730303	1	5/16-18 X 1-1/2" SOCKET HEAD SCREW		
5	730371	2	5/16-18 X 1/2" SOCKET HEAD SCREW		
6	730417	1	12GA FLIGHTING ANCHOR		



735466 - 735HV Poly Port & Driver

ITEM #	PART #	QTY	DESCRIPTION			
	735466 - 735HV POLY PORT & DRIVER - PARTS LIST					
1	724402	1	4" TUBE CLAMP			
2	730268	1	3-1/2" POLY PORT TUBE			
3	730371	2	5/16-18 X 1/2" SOCKET HEAD SCREW			
4	730417	1	12GA FLIGHTING ANCHOR			
5	735300	1	3-1/2" FLIGHTING DRIVER			
6	735303	1	5/16-18 X 1-3/4" SOCKET HEAD SCREW			



735480 - 735HM Poly Port & Driver

ITEM #	PART #	QTY	DESCRIPTION	
		735480	- 735HM POLY PORT & DRIVER - PARTS LIST	
1	724402	1	4" TUBE CLAMP	
2	730268	1	3-1/2" POLY PORT TUBE	
3	730300	1	3" FLIGHTING DRIVER	
4	730303	1	5/16-18 X 1-1/2" SOCKET HEAD SCREW	
5	730371	2	5/16-18 X 1/2" SOCKET HEAD SCREW	
6	730417	1	12GA FLIGHTING ANCHOR	



Single Phase Direct Drive Units

ITEM #	PART #	DESCRIPTION				
SINGLE PHASE DIRECT DRIVE UNITS - PARTS LIST						
GEAR RED	GEAR REDUCERS - DIE CAST ALUMINUM (DCA)					
	730089	358 RPM GEAR REDUCER - DCA 7/8" OUTPUT SHAFT (296 RPM @ 50HZ)				
1	730093	266 RPM GEAR REDUCER - DCA 7/8" OUTPUT SHAFT (220 RPM @ 50HZ)				
T	730123	189 RPM GEAR REDUCER - DCA 7/8" OUTPUT SHAFT (156 RPM @ 50HZ)				
	730124	441 RPM GEAR REDUCER - DCA 7/8" OUTPUT SHAFT (365 RPM @ 50HZ)				
PINIONS -	DIE CAST ALI	JMINUM (DCA) GEARBOXES				
n	450366	1/2" BORE PINION - DCA GEARBOX 2-1/8" LONG - 14 TEETH				
Z	730094	5/8" BORE PINION - DCA GEARBOX 2-1/2" LONG - 14 TEETH				
SINGLE PHASE MOTORS						
	735390	1P MOTOR, .50HP, 115/230V, 50/60HZ, 1425/1725 RPM				
	735391	1P MOTOR, .75HP, 115/230V, 50/60HZ, 1425/1725 RPM				
	735392	1P MOTOR, 1.0HP, 115/208-230V, 50/60HZ, 1425/1725 RPM				
3	735486	1P MOTOR, 1.5HP, 115/208-230V, 60HZ, 1725 RPM				
	735464	1P MOTOR, 1.0HP, 110/220V, 50HZ, 1500 RPM				
	735465	1P MOTOR, 1.5HP, 110/220V, 50HZ, 1500 RPM				
HARDWARE TO INSTALL GEAR REDUCER						
4	010252	5/16" SPLIT LOCK WASHER (QTY 2)				
5	010647	5/16" X 1-1/4" HEX BOLT (QTY 2)				
6	690339	3/16" X 3/4" LONG SQUARE KEY				



Single Phase Direct Drive Units - Parts Index

PART #	DESCRIPTION	GEARBOX	PINION	MOTOR	KEY
720325	DRIVE, .50HP,156/189RPM,7/8SH,115/230V,50/60H,1P	730123	450366	735390	-
720326	DRIVE,.75HP,156/189RPM,7/8SH,115/230V,50/60H,1P	730123	450366	735391	-
720327	DRIVE,1.0HP,189RPM,7/8SH,115/208-230V,60H,1P	730123	730094	735392	690339
720328	DRIVE,1.5HP,189RPM,7/8SH,115/230V,60H,1P	730123	730094	735486	690339
730315	DRIVE,.50HP,220/266RPM,7/8SH,115/230V,50/60H,1P	730093	450366	735390	-
730316	DRIVE,.75HP,220/266RPM,7/8SH,115/230V,50/60H,1P	730093	450366	735391	-
730317	DRIVE,1.0HP,266RPM,7/8SH,115/208-230V,60H,1P	730093	730094	735392	690339
730318	DRIVE,1.5HP,266RPM,7/8SH,115/230V,60H,1P	730093	730094	735486	690339
735342	DRIVE,1.0HP,365RPM,7/8SH,110/220V,50H,1P	730124	730094	735464	690339
735343	DRIVE,1.5HP,365RPM,7/8SH,110/220V,50H,1P	730124	730094	735465	690339
735360	DRIVE,.50HP,365/441RPM,7/8SH,115/230V,50/60H,1P	730124	450366	735390	-
735361	DRIVE,.75HP,365/441RPM,7/8SH,115/230V,50/60H,1P	730124	450366	735391	-
735362	DRIVE,1.0HP,441RPM,7/8SH,115/208-230V,60H,1P	730124	730094	735392	690339
735363	DRIVE,1.5HP,441RPM,7/8SH,115/230V,60H,1P	730124	730094	735486	690339
735380	DRIVE,.50HP,296/358RPM,7/8SH,115/230V,50/60H,1P	730089	450366	735390	-
735381	DRIVE,.75HP,296/358RPM,7/8SH,115/230V,50/60H,1P	730089	450366	735391	-
735382	DRIVE,1.0HP,358RPM,7/8SH,115/208-230V,60H,1P	730089	730094	735392	690339
735383	DRIVE,1.5HP,358RPM,7/8SH,115/230V,60H,1P	730089	730094	735486	690339
735527	DRIVE,1.0HP,296RPM,7/8SH,110/220V,50H,1P	730089	450366	735464	690339
735528	DRIVE,1.5HP,296RPM,7/8SH,110/220V,50H,1P	730089	450366	735465	690339
735532	DRIVE,1.0HP,220RPM,7/8SH,110/220V,50H,1P	730093	730094	735464	690339
735533	DRIVE,1.5HP,220RPM,7/8SH,110/220V,50H,1P	730093	730094	735465	690339



Three Phase Direct Drive Units

ITEM #	PART #	DESCRIPTION				
	THREE PHASE DIRECT DRIVE UNITS - PARTS LIST					
GEAR RED	GEAR REDUCERS - DIE CAST ALUMINUM (DCA)					
	730089	358 RPM GEAR REDUCER - DCA 7/8" OUTPUT SHAFT (296 RPM @ 50HZ)				
1	730093	266 RPM GEAR REDUCER - DCA 7/8" OUTPUT SHAFT (220 RPM @ 50HZ)				
T	730123	189 RPM GEAR REDUCER - DCA 7/8" OUTPUT SHAFT (156 RPM @ 50HZ)				
	730124	441 RPM GEAR REDUCER - DCA 7/8" OUTPUT SHAFT (365 RPM @ 50HZ)				
PINIONS -	DIE CAST ALI	JMINUM (DCA) GEARBOXES				
n	450366	1/2" BORE PINION - DCA GEARBOX 2-1/8" LONG - 14 TEETH				
Z	730094	5/8" BORE PINION - DCA GEARBOX 2-1/2" LONG - 14 TEETH				
THREE PHASE MOTORS						
	735460	3P MOTOR, .50HP, 190/380&208-230/460V, 50&60HZ, 1425/1725 RPM				
2	735461	3P MOTOR, .75HP, 190/380&208-230/460V, 50&60HZ, 1425/1725 RPM				
5	735462	3P MOTOR, 1.0HP, 190/380&208-230/460V, 50&60HZ, 1425/1725 RPM				
	735463	3P MOTOR, 1.5HP, 190/380&208-230/460V, 50&60HZ, 1425/1725 RPM				
HARDWARE TO INSTALL GEAR REDUCER						
4	010252	5/16" SPLIT LOCK WASHER (QTY 2)				
5	010647	5/16" X 1-1/4" HEX BOLT (QTY 2)				
6	690339	3/16" X 3/4" LONG SQUARE KEY				



Three Phase Direct Drive Units - Parts Index

PART #	DESCRIPTION	GEARBOX	PINION	MOTOR	KEY
735330	DRIVE,.50HP,296/358RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730089	450366	735460	-
735331	DRIVE,.75HP,296/358RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730089	450366	735461	-
735332	DRIVE,1.0HP,296/358RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730089	730094	735462	690339
735333	DRIVE,1.5HP,296/358RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730089	730094	735463	690339
735510	DRIVE,.50HP,365/441RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730124	450366	735460	-
735511	DRIVE,.75HP,365/441RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730124	450366	735461	-
735512	DRIVE,1.0HP,365/441RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730124	730094	735462	690339
735513	DRIVE,1.5HP,365/441RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730124	730094	735463	690339
735515	DRIVE,.50HP,220/266RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730093	450366	735460	-
735516	DRIVE,.75HP,220/266RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730093	450366	735461	-
735517	DRIVE,1.0HP,220/266RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730093	730094	735462	690339
735518	DRIVE,1.5HP,220/266RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730093	730094	735463	690339
735520	DRIVE,.50HP,156/189RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730123	450366	735460	-
735521	DRIVE,.75HP,156/189RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730123	450366	735461	-
735522	DRIVE,1.0HP,156/189RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730123	730094	735462	690339
735523	DRIVE,1.5HP,156/189RPM,7/8SH,190/380&208-230/460V,50&60H,3P	730123	730094	735463	690339



C56 Face Adapter To VAL-CO Gearbox

ITEM #	PART #	QTY	DESCRIPTION		
C56 FACE ADAPTER TO VAL-CO GEARBOX - PART NUMBERS					
1	010252	2	5/16" SPLIT LOCK WASHER		
2	010647	2	5/16" X 1-1/4" HEX BOLT		
3	690347	4	3/8-16 X 1, FLAT HEAD BOLT		
4	730126	1	3-PHASE ADAPTER FACE PLATE		



(Gearbox shown for reference)
Transfer Plate For Steel Discharge Head

	TRANSFER PLATE FOR STEEL DISCHARGE HEAD PART #	500517	501560	
ITEM #	DESCRIPTION	PART #		
1	TRANSFER PLATE ASSEMBLY (contains 500532)	1	500517	-
	TRANSFER PLATE ASSEMBLY, STAINLESS STEEL (contains 501563)	1	-	501560
2	TRANSFER PLATE HARDWARE BAG	1	500532	-
2	TRANSFER PLATE HARDWARE BAG, STAINLESS STEEL	1	-	501563
2.1	5/16" SPLIT LOCK WASHER	4	010252	-
	5/16" SPLIT LOCK WASHER, STAINLESS STEEL	4	-	010750
2.2	3/16" FLAT WASHER	4	010421	-
2.2	3/16" FLAT WASHER, STAINLESS STEEL	4	-	690064
2.2	#10-24 X 1/2" SLOTTED SCREW	4	010502	-
2.3	#10-24 X 3/8" SLOTTED SCREW, STAINLESS STEEL	4	-	012690
2.4	5/16-18 HEX NUT	4	010603	-
	5/16-18 HEX NUT, STAINLESS STEEL	4	-	00052539



Transfer Plate For Poly Discharge Head

	TRANSFER PLATE FOR POLY DISCHARGE HEAD PART #	500590	501650	
ITEM #	DESCRIPTION	PART #		
1	TRANSFER PLATE ASSEMBLY 1		500591	-
	TRANSFER PLATE ASSEMBLY, STAINLESS STEEL	1	-	501651
2	TRANSFER PLATE ADAPTER	1	500592	-
2	TRANSFER PLATE ADAPTER, STAINLESS STEEL	1	-	501652
2	TRANSFER HARDWARE BAG	1	500598	-
5	TRANSFER HARDWARE BAG, STAINLESS STEEL	1	-	501656
2.1	1/4" SPLIT LOCK WASHER 4		010251	-
3.1	1/4" SPLIT LOCK WASHER, STAINLESS STEEL	4	-	010409
3.2	5/16" SPLIT LOCK WASHER 4		010252	-
	5/16" SPLIT LOCK WASHER, STAINLESS STEEL	4	-	010750
2.2	1/4" FLAT WASHER	4	010424	-
5.5	1/4" FLAT WASHER, STAINLESS STEEL	4	-	010410
2.4	1/4-20 HEX NUT		010602	-
3.4	1/4-20 HEX NUT, STAINLESS STEEL	4	-	012679
2 5	5/16-18 HEX NUT	4	010603	-
3.5	5/16-18 HEX NUT, STAINLESS STEEL	4	_	00052539



Transfer Plate For All-Out Drop

ITEM #	PART #	QTY	DESCRIPTION			
TRANSFER PLATE FOR ALL-OUT DROP - PART NUMBERS						
1	010603	4	5/16-18 HEX NUT			
2	010643	4	5/16-18 X 3/4" HEX BOLT			
2	730085	1	TRANSFER PLATE WITH HOLE			
3	731078	1	TRANSFER PLATE WITH HOLE, STAINLESS STEEL			



All-Out Drops

ITEM #	PART #	QTY	DESCRIPTION			
	ALL-OUT DROPS - COMMON PARTS					
1	720556	1	PARTS BAG - FOR ALL MODELS (bag not shown)			
1.1	713110	1	10' DROP CORD			
1.2	730490	1	GREEN SHUTOFF BALL			
1.3	730492	1	RED SHUTOFF BALL			
1.4	730622	2	#8 X 1/2" PANHEAD SCREW			
Model 720: 2-1/4" ALL OUT DROP OUTLET & 720555 - CARTON OF (10) 720550						
2	720551	1	2-1/4" FEED DROP SHUTOFF GATE			
3	720552	1	2-1/4" FEED DROP HOUSING			
4	775095	2	2-1/2" SS HOSE CLAMP			
M	Models 725 & 730: 3" ALL OUT DROP OUTLET & 730555 - CARTON OF (10) 730550					
2	730551	1	3" FEED DROP SHUTOFF GATE			
3	730552	1	3" FEED DROP HOUSING			
4	730431	2	3" SS HOSE CLAMP			
Models 735HV & 735HM: 3-1/2" ALL OUT DROP OUTLET & 735555 - CARTON OF (10) 735550						
2	735551	1	3-1/2" FEED DROP SHUTOFF GATE			
3	735552	1	3-1/2" FEED DROP HOUSING			
4	730445	2	3-1/2" SS HOSE CLAMP			



720/725/730 Drop Outlets & Downspout Tubes

ITEM #	PART #	DESCRIPTION				
72	720/725/730 DROP OUTLETS - PARTS LIST					
1	690291	10-16 X 3/4" TEK SCREW				
2	730201	DROP TUBE CLIP				
3	730289	3-1/4" I.D. X 12' DROP TUBE				
4	730431	3" SS DOWNSPOUT CLAMP				
5	730437	3" "Y" FITTING				
6	730438	3" 45 DEGREE FITTING				
7	730439	3" SLEEVE CONNECTOR				
8	730449	3" I.D. X 18" PVC FLEXIBLE TUBE				
9	730480	3" I.D. X 25' PVC FLEXIBLE TUBE				
10	730485	3" SUR-FIT ADAPTER (Optional)				
11	730615	3" I.D. X 12' DROP TUBE				

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735HV/735HM Discharge Head Drop Outlets & Downspout Tubes

ITEM #	PART #	DESCRIPTION					
7	735HV/735HM DROP OUTLETS - PARTS LIST						
1	690291	10-16 X 3/4" TEK SCREW					
2	730201	DROP TUBE CLIP					
3	735289	3-3/4" I.D. X 12' DROP TUBE					
4	735431	3-1/2" SS DOWNSPOUT CLAMP					
5	735439	3-1/2" SLEEVE CONNECTOR					
6	735485	3-1/2" SUR-FIT ADAPTER (Optional)					
7	735615	3-1/2" I.D. X 12' DROP TUBE					
8	735680	3-1/2" I.D. X 25' PVC FLEXIBLE TUBE					
9	735682	3-1/2" I.D. X 18" PVC FLEXIBLE TUBE					

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720097 Mechanical Hopper Level Switch

ITEM #	PART #	QTY	DESCRIPTION	ITEM #	PART #	QTY	DESCRIPTION	
720097 MECH. HOPPER LEVEL SWITCH - PARTS LIST					720097 MECH. HOPPER LEVEL SWITCH - PARTS LIST			
1	010424	2	1/4" SAE FLAT WASHER	14	720020	1	90 DEG HANGER BRACKET	
2	010602	1	1/4-20 FINISHED HEX NUT	15	720023	1	MOUNTING BRACKET	
3	010617	2	1/4-20 X 3/4" HEX HEAD BOLT	16	720092	1	BODY ASSY, ADJ SWITCH	
4	012408	4	#10-24 HEX KEP NUT	17	720093	1	TENSIONER BRACKET	
5	012570	2	#6-32 X 1" RD HD SCREW	18	720094	1	ELECTRIC BOX, ADJ SWITCH	
6	012731	2	#6-32 MACHINE NUT	19	720095	1	SWITCH PLATE, ADJ SWITCH	
7	012732	2	#6 LOCKWASHER	20	720096	1	TENSIONER COVER	
8	012793	4	1/4-20 NYLOCK NUT	21	720098	1	.028 X .437 X .75 SPRING	
9	412381	8	14/3 BLACK SJTOW WIRE	22	720100	1	STRAIN RELIEF, 90 DEG FOR 14/3	
10	451017	1	67 DEG HANGER BRACKET	23	730058	1	16-14AWG, #10 BLUE RING TERMINAL	
11	690159	1	1/4-20 X 2-1/4 HHTB SCREW	24	730516	8	10-32 X 1/4 PPH SCREW	
12	720015	1	SWITCH SHIELD	24	730521	2	16-14AWG, #6 BLUE SPADE TERMINAL	
13	720018	1	7" X 6.5" DIAPHRAM	26	730989	1	MICRO SWITCH, SPDT 20A, 250VAC	



460057 Proximity Hopper Level Control Switch

ITEM #	PART #	DESCRIPTION					
46	460057 PROXIMITY HOPPER LEVEL CONTROL SWITCH - PART NUMBERS						
1	010252	5/16" SPLIT LOCK WASHER					
2	010426	5/16" FLAT WASHER					
3	010944	5/16-18 WING NUT					
4	102019	5/16-18 X 3/4"THUMBSCREW					
5	460023	PROXIMITY SWITCH BRACKET					
6	750418	PROXIMITY SENSOR, DOL 33R 220V					
7	750419	PLASTIC GLAND FOR PROXIMITY SWITCH					



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