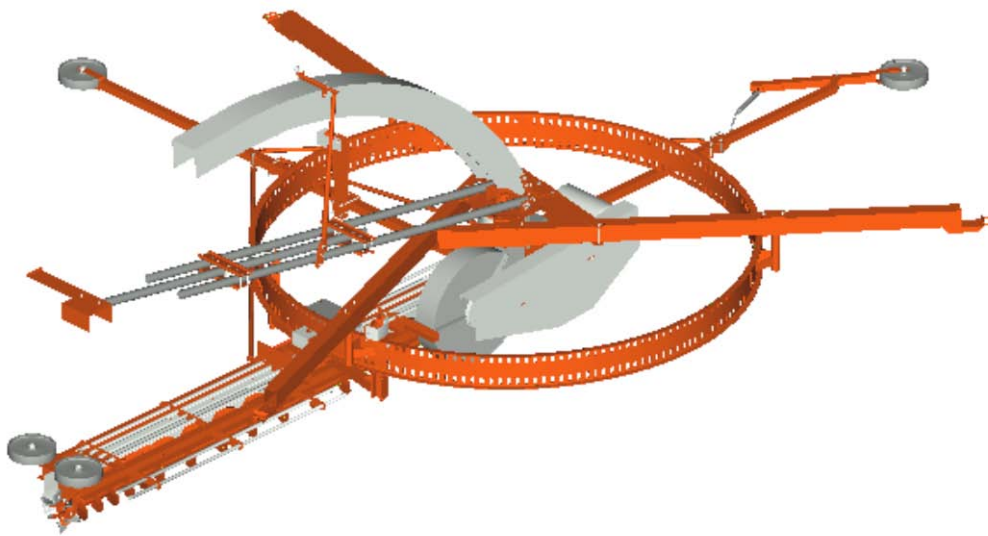


Silo-Matic

R-26 PACESETTER OPERATING INSTRUCTIONS & PARTS MANUAL



Valesco Manufacturing, Inc.
7857 N 1100 E
Loogootee, IN 47553
(812) 636-6001
www.silo-matic.com

REVISION 10-2006

WARRANTY

Valesco Mfg., Inc. (Silo-Matic) warrants new equipment of its manufacture to be free of defects in materials and workmanship under normal use and service.

This warranty applies only to the original purchaser of the equipment.

Under no circumstances will Silo-Matic be responsible for labor charges associated with Product warranty.

Silo-Matic will not be liable for any direct, incidental or consequential damages arising in connection with any use, inability to use, misuse or misapplication of this equipment.

Warranty Period

Silo-Matic will repair or replace, at its option, without charge any parts of the equipment found by Silo-Matic to be defective within (1) one year from sale or installation.

Owner's Obligation

To be covered by warranty, all new equipment must be properly registered with Silo-Matic within 30 days of original purchase date of sale. (A warranty registration card is provided in the Owner's Manual for each machine.)

It is the responsibility of the owner, at owner's expense, to transport the equipment to the place of business of an authorized Silo-Matic dealer or to alternately reimburse the dealer for any travel or transportation expense involved in fulfilling this warranty.

Exceptions

Electronic Scales, submersible pumps, tires, electrical components and motors are warranted by the respective manufacturer and not Silo-Matic. Due to uncontrollable conditions, auger knives and liners are not covered under this warranty.

Conditions that Void Warranty

This limited warranty shall not apply to equipment which:

- *Has had unauthorized repair or modification, gearboxes that have had the covers removed.
- *Has been subject to misuse, negligent handling, improper adjustment, accident, fire damage, or other acts of God.
- *Has had repair or replacement parts not manufactured, supplied or authorized by Silo-Matic.

THIS IS THE ONLY WARRANTY MADE BY SILO-MATIC AS TO THE EQUIPMENT. THIS WARRANTY IS IN LIEU OF ALL WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTIES, EXPRESSED OR IMPLIED.

Supercedes previous subject matter
June 1, 1997

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INTRODUCTION

The R-26 Pacesetter Ring Drive Silo Unloader, manufactured by Valesco Manufacturing, Inc, incorporates many features for safety, easy assembly and quick changeover from unloading to raising after the silo has been emptied. The R-26 Pacesetter is available in sizes from 14'-24'. A 26" rotor is standard on all sizes to provide increased performance.

The instructions in this manual provide procedures for assembly and installation of the suspension, winch and unloader. It also contains information on safety suggestions, operation and repair parts.

A safety precaution section is included in this manual and safety precautions are stated throughout the manual. It is your responsibility to carefully read and understand these safety messages.



This SAFETY ALERT SYMBOL indicates important safety messages. When you see this symbol, be alert to the possibility of PERSONAL INJURY or even DEATH.

Throughout this manual reference is made to front and rear, right and left. When related to rotation, front means leading in the direction of rotation and rear is trailing. The unloader travels counter clockwise around the silo. When not related to rotation, front means closest to the silo wall and rear is inward toward the silo center. Right and left is related to as viewed from the center of the silo and sighting along the augers toward the wall.

Some Common abbreviations used in this manual are as follows:

Assy	Assembly	LW	Lockwasher
Brkt.	Bracket	RH	Right Hand
Crg	Carriage	LH	Left Hand
Chl	Channel	Weld	Weldment
Frnt.	Front	SS	Stainless Steel
Ang	Angle		

Read the instructions carefully to insure the best operation of you new Silo-Matic unloader. If you have any questions contact your dealer or the factory at the address that follows. For information concerning other dependable labor saving Silo-Matic equipment and customized feeding systems, see your nearest Silo-Matic Dealer or write to:

Valesco Manufacturing, Inc.
7857 N 1100 E
Loogootee, IN 47553
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REV 10-2006

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DANGERS ASSOCIATED WITH SILO UNLOADERS

Throughout this manual and on the silo unloader there are symbols used to show important safety messages. Please read these and understand their contents. Failure to follow these safety instructions could lead to personal injury, death or severe damage to the silo unloader.

 <p>This SAFETY ALERT SYMBOL is found throughout this manual and indicates important safety messages. When you see this symbol, be alert to the possibility of personal injury or even death.</p>	 <p>DANGER : Indicates an imminently hazardous situation that if not avoided will result in death or serious injury.</p>
 <p>WARNING: indicates a potentially hazardous situation that if not avoided, could result in death or serious injury and alert against unsafe practices.</p>	 <p>CAUTION: Indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury and alert against unsafe practices.</p>

There are inherent hazards associated with silo unloading equipment. Proper caution will result in safe operation. Carefully read and understand the following safety suggestions. Become familiar with hazards of silo gas and exercise extreme caution whenever there is danger of exposure to this gas. Read "SILO GAS IS DEADLY" which is included in this manual.

⚠️ WARNING! This equipment can be hazardous in the hands of an unfamiliar, untrained, or careless operator. For your safety you must not operate, service, inspect, or otherwise handle this equipment unless you have read the owner's manual and have been properly trained in its intended usage.

1. Do not operate this machinery until all shields and guards are in place.
2. Never attempt to clean, adjust or lubricate machine while it is in motion.
3. Stop machine and lockout power source before adjusting and servicing. Keep hands, feet, and clothing away from moving parts.
4. Make certain everyone is clear of equipment before applying power.
5. Disconnect power before resetting motor overload.
6. Do not allow children to operate machine.

7. Require all personnel who will operate this machinery or perform service to read and understand the safe operating practices and safety precautions in this manual.

8. When going into the silo to make adjustments or change doors, turn the key switch to "OFF", remove the key and take it with you in the silo to prevent accidental starting of the unloader by someone else.

9. Never stand under a suspended silo unloader.

10. Never use a suspended silo unloader as a substitute for a scaffold.

11. Never go into a silo to work on a moving silo unloader.

12. Do not allow anyone in the silo when the unloader is being raised to the silo top or is being lowered from the top.

FAILURE TO HEED MAY RESULT IN DEATH OR PERSONAL INJURY.

 **DANGER**
SILO GAS IS DEADLY

Silage fermentation produces several kinds of gas, including carbon dioxide and nitric oxide which in turn produces nitrogen dioxide. Carbon dioxide is non-poisonous, although it can cause suffocation. Nitrogen Dioxide (NO₂) is poisonous. It kills and injures people as well as livestock. Nitrogen Dioxide is a hazard on the farm because:

1. Exposure can be fatal.
2. Formation of Nitrogen Dioxide from Nitric Oxide may occur whenever silage is made.

WHAT IS THIS GAS?

The lethal gas is yellowish-brown and smells like some laundry bleaches. After more oxidation, it forms Nitric Oxide which then forms highly-corrosive Nitric acid when combined with water. Since oxidation may occur in the body, Nitrogen Dioxide can produce permanent lung damage.

WHERE DOES IT HIDE?

Since Nitrogen Dioxide is heavier than air, it remains beneath the air mass over the silage. It layers on top of the silage below the upper edge of the top door or settles down through the chute. It may also seep through the drain at the base of the silo. It often concentrates in the silo in the silo room and moves into the barn. It will leave a yellow stain on silage, wood or other materials it contacts.

HOW TO MINIMIZE THE DANGER

While Growing the Crop:

1. Apply adequate Nitrogen, but don't over do. As a guide, corn needs 1.2 pounds of Nitrogen per bushel yield. Oats and/or sudangrass used for silage should have no more than 75 pounds of Nitrogen available for each harvest. Since this includes both Nitrogen in the soil and that applied, follow the recommendations on soil analysis reports.
2. After a drought rapid nitrate uptake occurs in plants following rain. So, harvest the crop before fall rains, or wait at least five days after a rain.
3. Plants damaged by hail or frost should be harvested immediately before they take up nitrates.
4. To reduce the amount of Nitrate going into silage, cut higher than normally (10-12.") Most nitrates are in the lower stalk.

While Filling the Silo:

1. Be on the alert for bleach-like odors and/or yellowish-brown fumes in or near the silo. Small amounts of the gas may not be visible or easily detected by smell, but are still dangerous. (Greatest danger is 12 to 60 hours after filling the silo.)
2. If you must enter the silo, run the silage blower for 15 to 20 minutes if the silo is full, longer if the silo is partially full. Never enter the silo alone during the danger period.
3. Remove upper chute doors down to settled silage allowing gases to escape through the chute and not collect in the silo. Be sure to run a blower and ventilate the chute well with fans.
4. Ventilate the silo room adequately for at least two weeks after filling. Open the windows and outside door of the silo room and use fans.
5. Keep the door between the silo room and barn closed to prevent Nitrogen Dioxide gas from killing livestock.

If you experience the slightest throat irritation or cough in the silo, get into fresh air quickly and stay away from the silo area as long as gas may be present. (If exposed to silo gas, call your doctor as soon as possible.)


REMOTE SAFETY SWITCH INSTRUCTIONS

Attention! Your Silo-Matic unloader is equipped with a remote safety switch. For your protection, do not operate or permit anyone to operate the unloader without reading and understanding the following instructions. Failure to do so may lead to serious injury and/or death.

To operate the unloader, first make sure the unloader is free and clear of obstructions and that no one is in the silo or chute.

Turn the key switch (1) clockwise to motor. Push on/off switch (2) to on.

To stop unloader, push on/off switch (2) to off. Turn key switch (1) to off and remove the key.

 **WARNING!** Before entering the silo to inspect or service the unloader, make sure the key switch (1) is turned off. Take the key out of the switch and take it with you in the silo. Do not return the key to the key switch until:

1. All shields are back in place
2. The machine is free and clear of obstructions.
3. No one is in the silo or silo chute.

To operate the Remote Jog Switch:

Make sure all shields are in place. Make sure the machine is free and clear of obstructions. Make sure no one is in the silo or silo-chute. Turn the key switch (1) counter-clockwise to remote. Remove the key and take the key with you.

Take the trouble light/jog switch (3) with you in the silo.

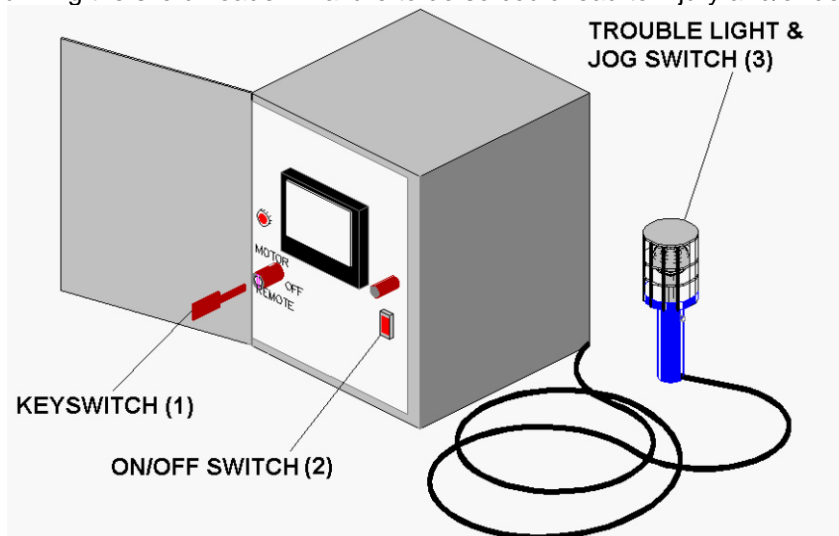
Before operating the remote jog switch:

Be aware that you Silo-Matic silo unloader will rotate counter-clockwise (looking down from the top of the silo.) Position yourself away from the front of the augers so that you will not get caught in any part of the machine.

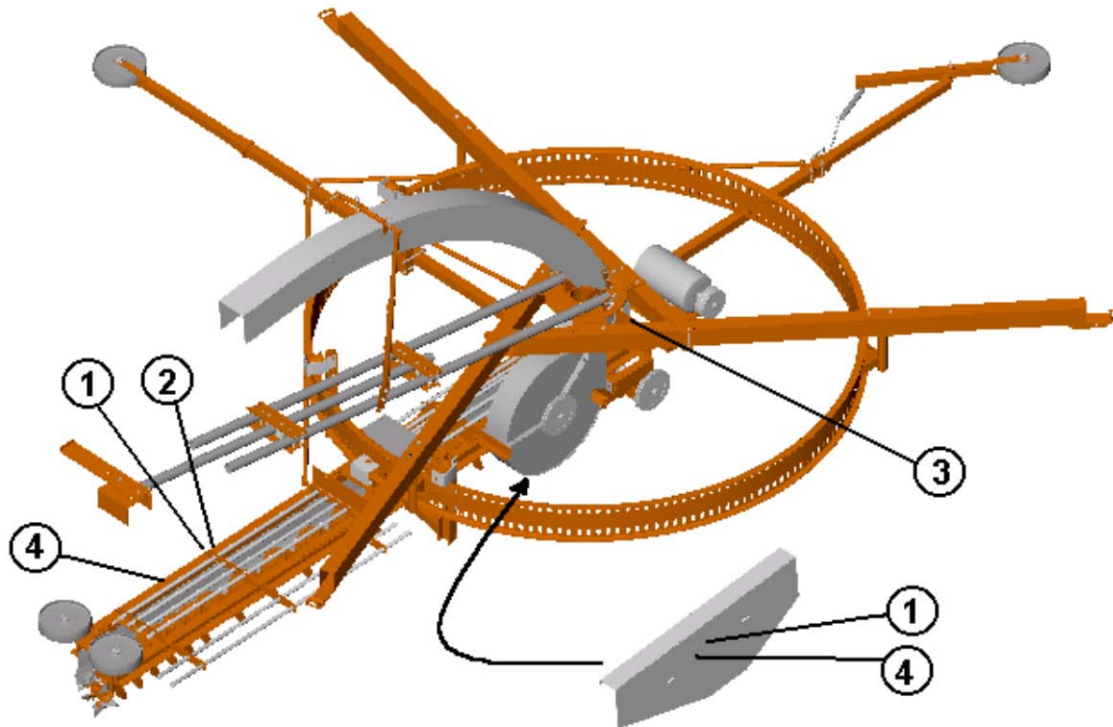
Do not push the safety remote jog switch button (3) on the trouble light until:

1. All shields are back in place
2. The machine is free and clear of obstructions.
3. You or any one else can not get caught in the operating machine.

Remember that the jog switch is not for operating the unloader for long periods of time. Do not step on or ride the machine while running the silo unloader. Failure to do so could lead to injury and/or death.



PLACEMENT OF SAFETY STICKERS



① S0934

⚠ CAUTION	
<ol style="list-style-type: none"> 1. KEEP ALL SHIELDS IN PLACE. 2. DISCONNECT POWER SOURCE TO ADJUST OR SERVICE. 3. MAKE CERTAIN EVERYONE IS CLEAR OF EQUIPMENT BEFORE APPLYING POWER. 4. DISCONNECT POWER BEFORE RESETTING MOTOR OVERLOAD. 5. KEEP HANDS, FEET, AND CLOTHING AWAY FROM POWER DRIVEN PARTS IN MOTION. <p>FAILURE TO HEED MAY RESULT IN PERSONAL INJURY</p> <p style="text-align: right; font-size: small;">5934</p>	

② S0933

KEEP OFF

③ S1035

	<p>⚠ WARNING</p> <p>YOU ARE EXPOSED TO MOVING PARTS THAT CAN CRUSH AND DISMEMBER</p> <p>SHIELD IS OFF</p> <p>DO NOT OPERATE WITHOUT SHIELD IN PLACE.</p> <p>FAILURE TO HEED MAY RESULT IN PERSONAL INJURY OR DEATH.</p>
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④ S0935

⚠ WARNING
<p>KEEP HANDS AND FEET AWAY FROM MOVING PARTS.</p> <p style="text-align: right; font-size: small;">5935</p>

R-26 RING DRIVE OPERATING INSTRUCTIONS

OPERATE THE WINCH

The silo unloader is raised and lowered by the winch. Winches are either manual requiring cranking; or are electric and operated by an electric motor. Crank the manual winch clockwise to raise the unloader.

Approximately 5 cranks equal 1" of cable travel. To speed the unloader raising process, an electric drill adapter can be used in place of the crank. It is recommended that a 3/4" drill be used for raising.

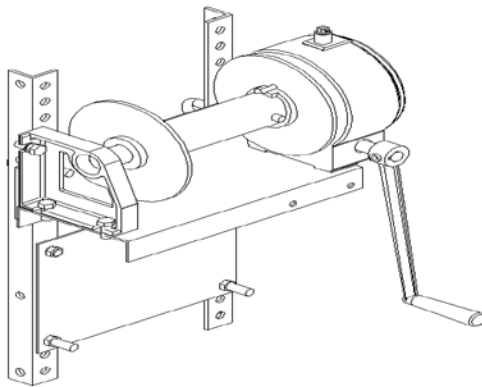
The first layer of cable must be wound making sure all cable layers are wrapped evenly and tight.

IMPORTANT: Check oil level at oil level plug before raising. Otherwise check (4) times annually.

An optional electric winch attachment enables remote controlled lowering and raising of the unloader at low speed.



CAUTION: BE AWARE THAT WITH USING A HIGH SPEED DRILL, THE LARGER THE WRAP ON THE DRUM BECOMES THE GREATER THE LOAD ON THE WINCH BECOMES. THEREFORE AS THE UNLOADER NEARS THE TOP, CHECK THE GEARCASE AND IF IT BECOMES TOO HOT TO TOUCH (120 DEG. F) STOP OPERATION UNTIL IT COOLS DOWN.



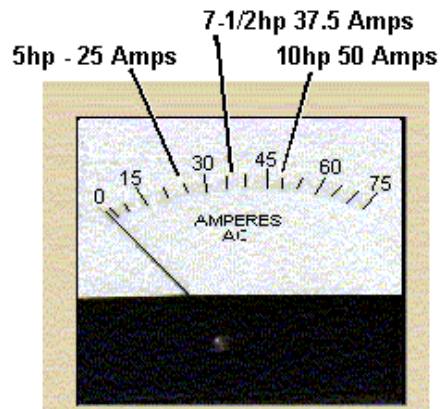
OPERATING THE UNLOADER

Position the Torque Arm on the lower silo door sill opening. Put the gooseneck in position. When starting in any silo for the first time, the surface should be reasonably level. Allow the unloader to level off high spots before operating at full load.

Lower the unloader slowly until the silage flow is constant and the Ammeter "reading" becomes steady for about 3 minutes (one complete unloader revolution).

If using an electric winch, it is best to use a "count" or time system to regulate the winch. The ammeter should be referred to when setting the unloader cutting depth for proper performance of the unloader and to maintain a uniform unloading rate.

The ammeter is provided to help the operator prevent overloading the unloader motor and to aid in maintaining a uniform unloading rate. For maximum motor life, the ammeter reading should not exceed the total full load amperage rate of the motor, shown on the motor name plate.



MOTOR OPERATING CURRENTS

The ammeter reading will normally fluctuate during operation and the average reading should be "read". For more exact amperage check the name plate on the specific motor installed. Turn the unloader on and let the winch down one or two turns LESS than the number of turns it was raised at the end of the previous unloading. Usually the silage surface will "raise" between feedings.

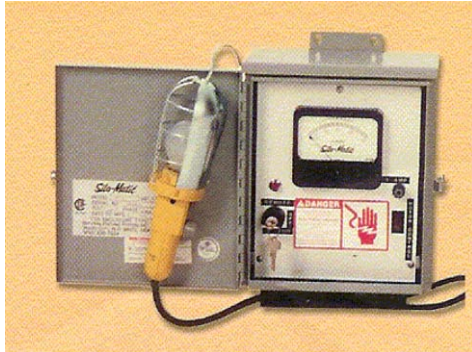
When the amperage drops and silage flow lessens, slowly lower the unloader. Experience will tell you about how often and how much lowering is required. Lowering rates should remain constant from one feeding to the next unless freezing weather or change in stored material occurs.

After unloading, raise the machine about 15 turns of the winch, or sufficiently high to lift it off the silage surface.

Allow the machine to run a couple seconds to completely clear itself of silage and then turn the switch off. When the silo is empty, clear all silage accumulation off the machine and raise it off the silo floor.

OPERATING THE REMOTE SAFETY SWITCH

Your Silo-Matic silo unloader is equipped with a Remote Safety Switch. For your protection, Do not operate or permit anyone to operate the unloader without reading and understanding the REMOTE SAFETY SWITCH instructions found in the safety section of this manual.



REMOTE SAFETY SWITCH

⚠️WARNING: BEFORE ENTERING THE SILO FOR SERVICE OR MAINTENANCE PURPOSES FOLLOW THESE STEPS FOR YOUR PROTECTION. FAILURE TO HEED MAY RESULT IN SERIOUS INJURY OR DEATH.

Make sure the KEY SWITCH is turned OFF. Take the key out of the switch and take it with you in the silo. Do not return the key to the KEY SWITCH until:

1. All shields are back in place.
2. The machine is free and clear of obstructions.
3. No one is in the silo or silo chute.

SETTING ROTOR BLADES FOR SWINGING OR FIXED BLADE MODE

The rotor blades can either be fixed as shipped from the factory or allowed to swing by removing the bolts securing the pawls to the rotor hub.

1. When maximum distance for throwing forage is required, keep them fixed.
2. If gumming or cold weather starting is a problem, then allow them to swing.

There may be conditions of forage where trial and error will be required to determine proper mode for best performance.

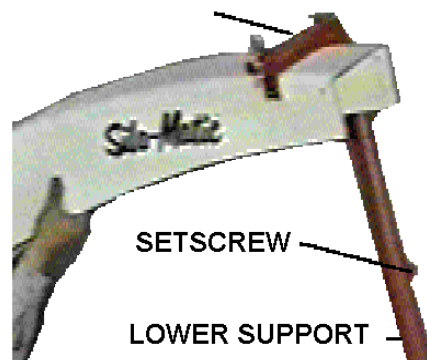


CHANGE SILO DOORS

Move the gooseneck down one door after every removal of 36" (typical of door and sill depth) of silage. Disconnect power plug at transition and unhook power cord hanger from gooseneck and re-hook in silo chute. Open or remove next silo door and move torque arm down to this door frame. Hook the power cord back onto the gooseneck.

IMPORTANT: Be sure there is enough slack in the power cord for the unloader to reach the next door change!

UPPER SUPPORT



APPLICATION OF AUGER KNIVES

More knives are required at the wall end where frozen conditions occur. Space knives increasing further apart from the outer end toward the rotor.

HAYLAGE OR HARD-PACKED SILAGE:

More knives are required if wads of silage form or if augers can not loosen the hard-packed silage.

NOTE: DO NOT INSTALL KNIVES IN A STRAIGHT LINE OR ROUGH OPERATION WILL RESULT! (SEE INSTALLATION SECTION)

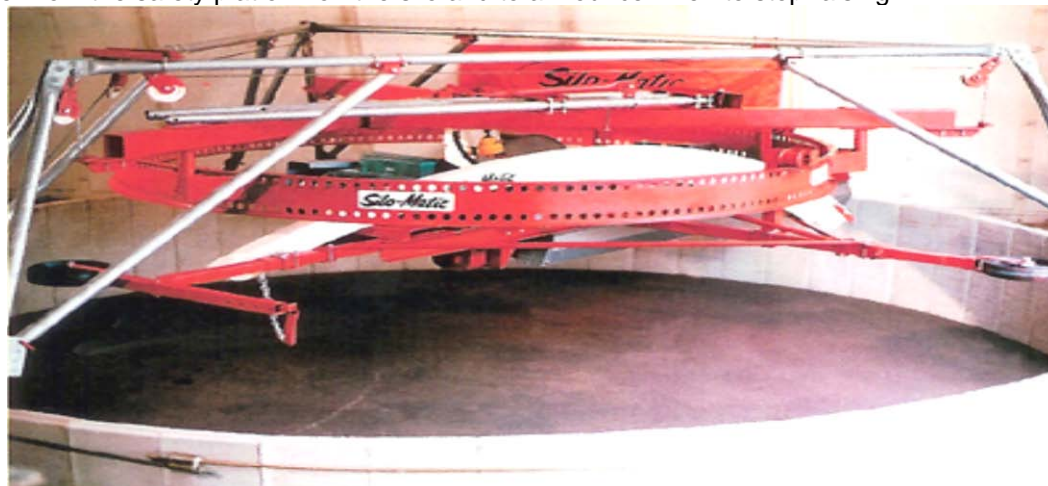


FROZEN SILAGE:

Use knives on augers for the same distance that frost extends in from wall. Do not install knives past forward edge of rotor.


RAISING THE SILO UNLOADER:

1. Park the unloader so the auger is pointing 180 degrees away from the winch and is centered between two hexapod legs.
2. Unplug the power cord connector at the collector ring. Unhook the cord from the gooseneck and store it in the silo chute.
3. Collapse the gooseneck by loosening the set bolt in the lower gooseneck support and telescope the upper support down as far as it will go. Remove the torque arm from the door sill and telescope it inward as far as it will go. Allow it to rest on the drive ring. Telescope the guide wheel caster bracket all the way in.
4. Unhook the pressure wheel spring and telescope the caster bracket all the way in. Flip the wall roller against the wall at the wall end and secure with the button head pin and hairpin.
5. Raise the unloader to the top of the silo. It can be raised until the cable attachment brackets on the suspension arms come right up to the hexapod pulleys. Be sure to wrap cable evenly on the winch so the unloader raises level and will allow maximum height in the silo. It is recommended to have someone observe the unloader from the safety platform on the silo and to announce when to stop raising.



⚠️ WARNING: DO NOT ALLOW ANYONE IN THE SILO WHEN THE UNLOADER IS BEING RAISED TO THE SILO TOP OR BEING LOWERED FROM THE TOP. NEVER STAND UNDER A SUSPENDED SILO UNLOADER! SEVERE INJURY OR DEATH COULD RESULT.

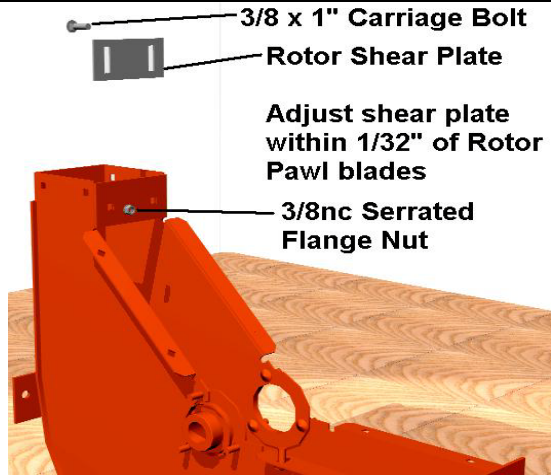
ADJUSTMENTS

	<p>WARNING: NEVER ATTEMPT TO CLEAN, ADJUST OR LUBRICATE MACHINE WHILE IT IS IN MOTION. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.</p>
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ADJUST ROTOR CUTOFF PLATE AND BLADES

Remove the rotor housing cover and adjust each rotor blade to within 1/32" of the housing rim sheet.

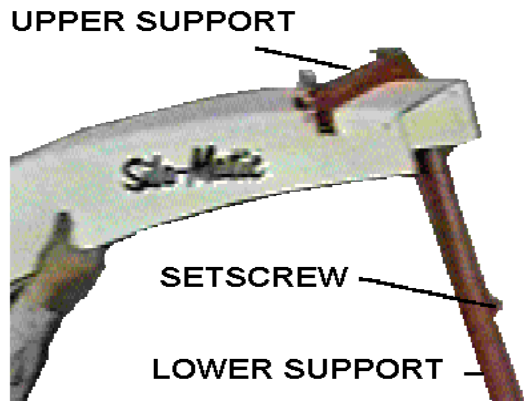
Before adjusting the cutoff plate, adjust the plates as described. The cutoff plate is adjusted by loosening the whiz nuts and moving the edge of the plate to within 1/32" of the rotor blades.



ADJUST SHEAR PLATE

ADJUST THE GOOSENECK

When the gooseneck is lowered to the next open silo door, the height of the gooseneck should be adjusted by telescoping the upper and lower support so the material flow off the gooseneck just clears the upper door sill.

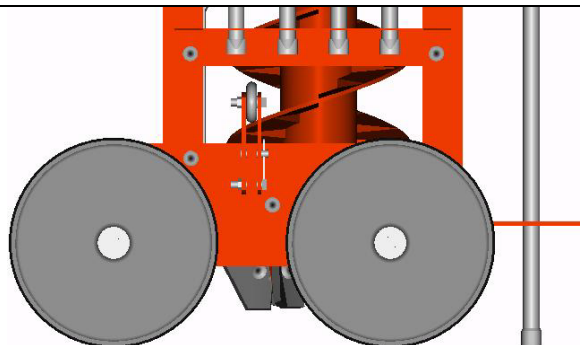


ADJUST GOOSENECK

ADJUST WALL WHEELS

The Wall Wheels are adjusted by loosening the 5/8" Hex nut on the wheel bolt enough so the serrated washer will slide on the support bracket. Adjust the Trailing Wheel to hold the Wall Cleaner Blades 1/2" to 1/4" from the silo wall during non-frozen conditions.

When freezing begins, move the Trailing Wheel back so the Wall cleaner Blades are 1/4" to 1/8" away from the wall.



Rear Wheel
 Makes contact with silo wall. Normally adjusted to hold wall cleaner blades 1/8" away from silo wall.

Lead Wheel
 Normally adjusted to only make contact when going across a flat silo door or other irregularity in the silo.

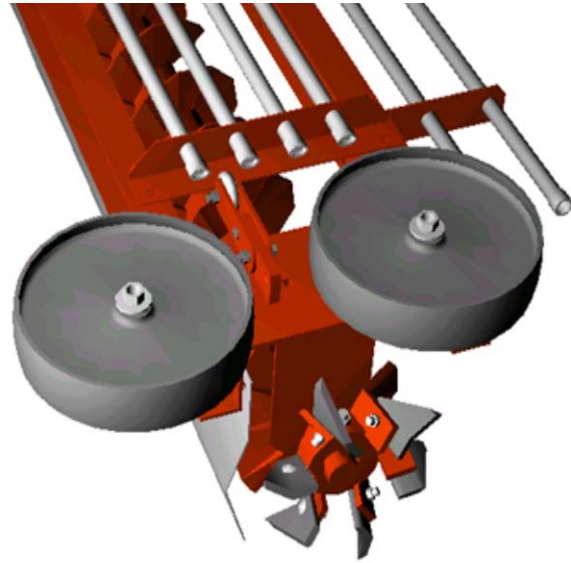
ADJUST WALL WHEELS

After the Trailing Wheel is adjusted, the Leading Wheel should be adjusted so it only makes contact when going across a flat silo door or other irregularity in the silo. Typically this wheel will be about 1/2" off the wall.

During operation if the Wall Cleaners interfere with the silo doors then the Leading Wheel must be moved closer to the wall until the wall cleaner clears the doors.

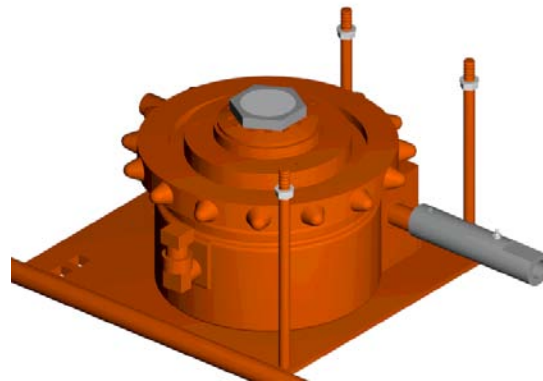
During freezing weather if frozen silage begins to build up at the edges of the doors or on the doors then it is likely that the Leading Wheel is too close to the wall and should be moved back.

NOTE: Adjust the Leading Wheel after adjusting the Trailing Wheel.



SLIP CLUTCH

The ring drive slip clutch is factory adjusted. This setting should not be changed unless the machine will not rotate and no other reason can be found to be the cause. To adjust slip clutch: **BE SURE TO BEND DOWN THE TAB ON THE STAR-LOCK WASHER AND TIGHTEN ADJUSTING THE ADJUSTER NUT 1/2 TURN.**



ADJUST TENSION & SPREADER WHEELS

Telescope the tension wheel extension into the tension arm so the tension wheel can pivot without hitting the silo wall at the end where the spring attaches. Set in position with set bolt. Hook chain from spring so it stretches spring with about 50 lbs. of force. Set the spreader wheel so it just touches the silo wall when the unloader is hanging freely from the cable.



Chain should be adjusted to put 50 lbs of force on spring

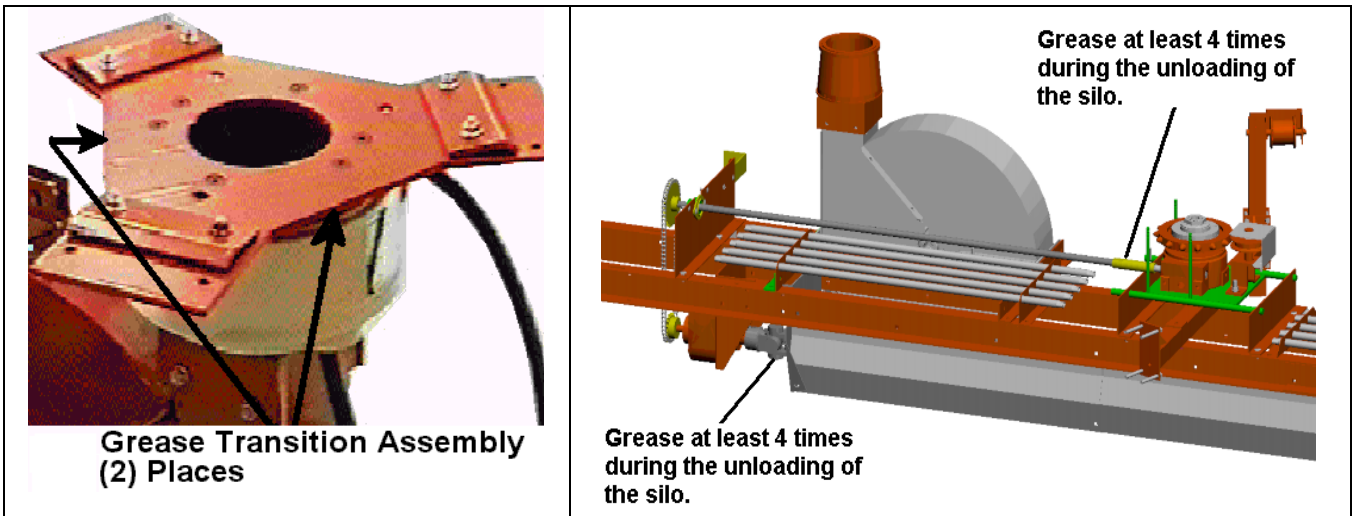
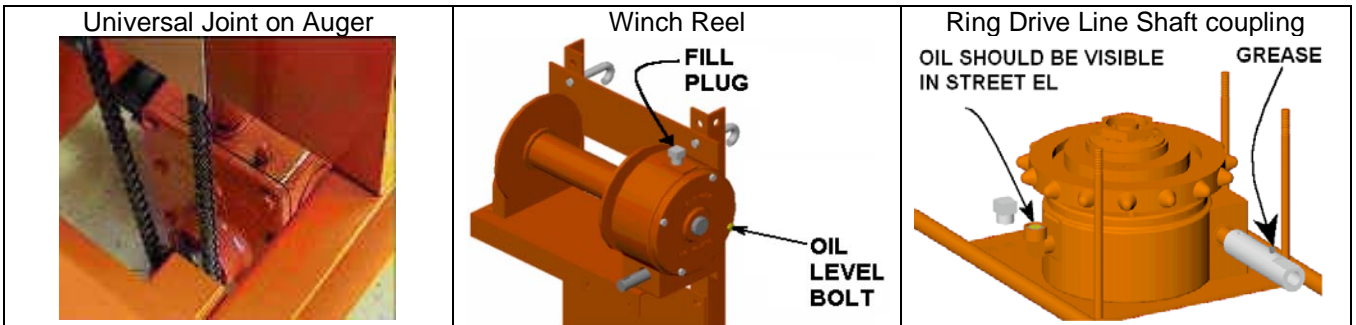
ADJUST TENSION ARM

LUBRICATION

⚠️ WARNING: NEVER ATTEMPT TO CLEAN, ADJUST OR LUBRICATE MACHINE WHILE IT IS IN MOTION. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Before operating the unloader for the first time, be sure to lubricate all grease fittings and check the gear housing grease level. Proceed as follows:

1. Check gear housing grease level at the level plug. Use multi-purpose gear lube 80/90 weight for summer and winter operations under normal conditions. If extremely cold weather is encountered, drain the gear housing and refill with transmission lubricant equivalent to Mobil AFT 200 (not recommended for use in temperatures above 55F or one pint of automatic transmission oil may be added to 80/90 weight oil so oil remains fluid at lower temperatures. NEVER use kerosene or distillate to thin oil. The gear housing should be flushed out and fresh oil put in at the end of each season.
2. Lubricate the unloader about 4 times during unloading of a silo with a grease gun at the locations indicated:



3. Check four times annually and prior to raising unloader, oil level in winch gearbox. Fill to level plug. Use No. 90 gear oil
4. Annually pour motor oil on the suspension cable when it is wrapped on the winch drum. Lubricate the pulleys and wall roller of the tripod whenever the silo is full and the tripod can be reached.
5. Lubricate the rotor pawls with oil annually.
6. Maintain oil level in Ring Drive Gearbox so it is visible in the street el. Some oil leakage around seal is normal but if it becomes excessive, repair.

TROUBLESHOOTING



WARNING: NEVER ATTEMPT TO CLEAN, OIL, OR ADJUST MACHINE WHILE IT IS IN MOTION. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

TROUBLE	POSSIBLE CAUSE/REMEDY
Motor hums or does not start	Check fuses. Check & reset motor thermal protector. Check for loose electrical connections. Check for low voltage. Check unloader for jammed or frozen material.
Unloader operating off center	Adjust guide wheel farther out. See Adjustments Section. Check for jammed or frozen silage. Check rotation of the unloader. Check condition and tension of drive belts. Add auger knives if needed to dig. Check position of gooseneck, if slip clutch slipping, adjust.
Silage build-up on walls	Trailing wall wheel set too far out. Wall cleaner too far away from wall. Wall cleaner blades worn. Not enough tension on pressure wheel. Silo excessively "out of round."
Silage build-up at edges or on doors	Leading wheel set too close to silo wall.
Silage falls short at gooseneck	Belts loose or in poor condition. Feeding too heavy, motor loses speed. Poorly cut or ensiled forage. Set rotor blades in fixed mode.
Plugging at rotor throat	Feeding too heavy. Motor losing speed. Belts loose or in poor condition. Poorly cut or ensiled forage. Change the current mode of the rotor blades.
Motor fails to reach full RPM	Defective motor. Motor improperly wired.
Loss of capacity	Belts loose or in poor condition. Low voltage. Knives turned wrong on auger or spaced in straight rows. Poorly cut or ensiled forage. Motor incorrectly wired. Bolts loose at transition to rotor throat connection (forage catches on loose bolt heads in throat).
Fuses burn out or circuit breakers kick off excessively	Feeding too heavy. Low voltage. Motor incorrectly wired.
Slip clutch slipping	Silo undersized. Feeding too heavy for conditions. Wall cleaners dull. Knives turned wrong, or too many on rear auger. Counter weights not adjusted properly.



DANGER! DISCONNECT AND LOCK OUT POWER SOURCE BEFORE SERVICING ELECTRICAL COMPONENTS.

R-26 INSTALLATION INSTRUCTIONS UNLOADER SUSPENSION

SPECIAL INSTRUCTION FOR CABLE INSTALLATION IN A PARTIALLY EMPTY SILO

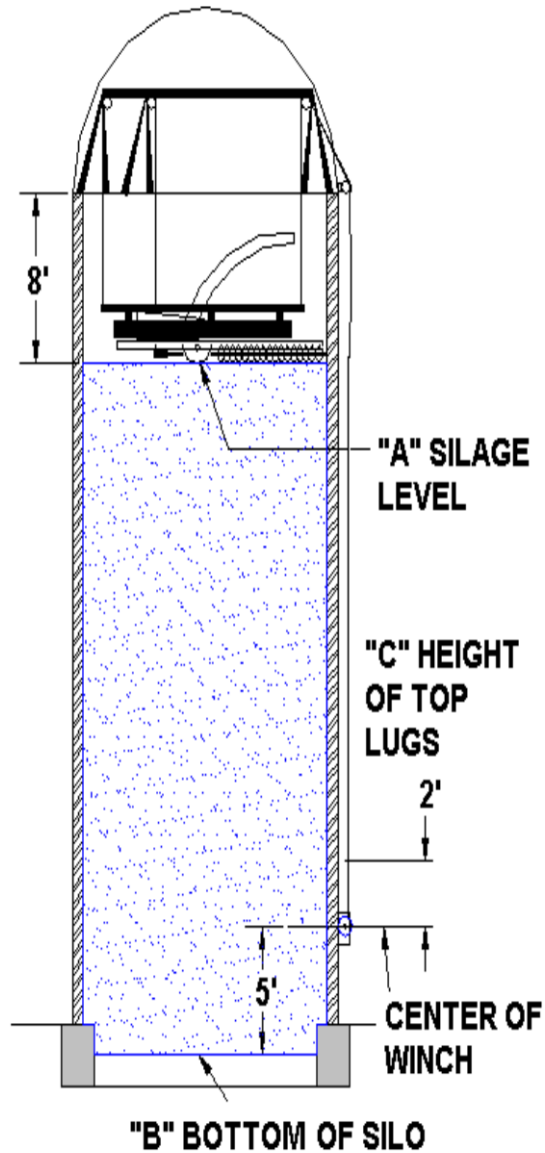
When installing unloader in a silo that is not completely empty the following method should be used to install the suspension cable.

Also refer to section titled CONNECT SUSPENSION CABLE AND LEVEL.

1. Measure the distance from the top of the silo staves to the silage level. Dimension "A."
2. Measure the distance from the bottom of the silo (include pit if one exists) to the center of the winch spool. Dimension "B."
3. Subtract "B" from "A" and subtract an additional (1) ft. This equals the distance "C" which is from the top lug on the cable assembly to the center of the winch. If "C" is a negative value then it indicates that this amount of cable lug length should be wrapped onto the winch spool.

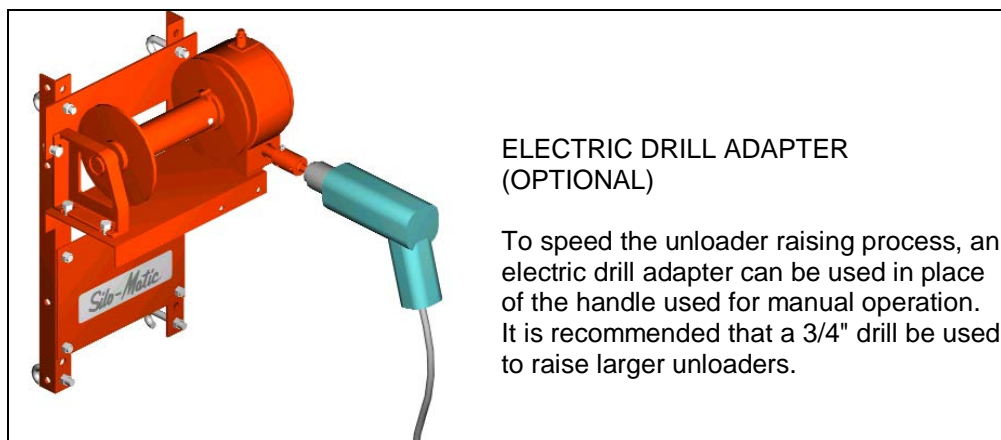
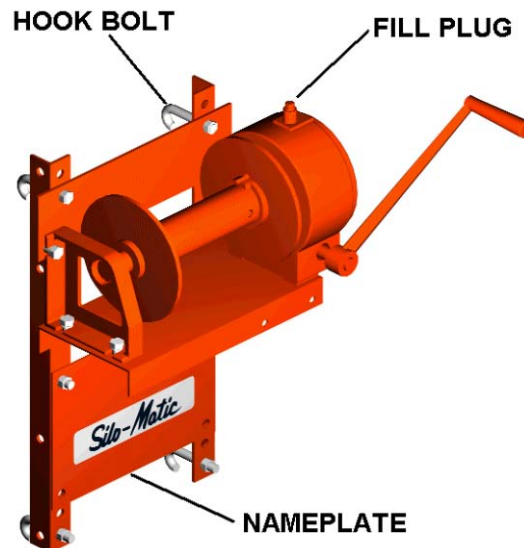
EXAMPLE: "A" - "B" - 1 = "C"

8ft - 5ft - 1ft = 2ft



WINCH

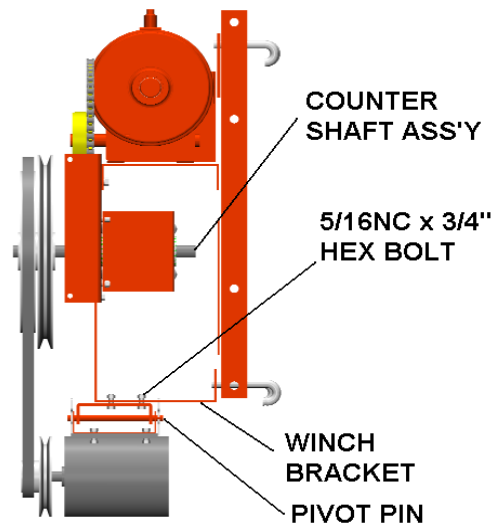
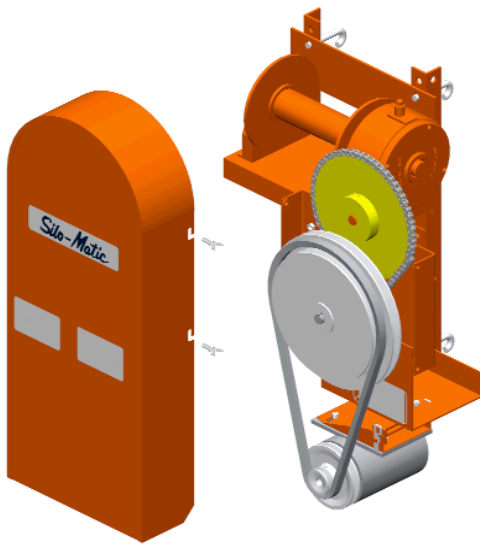
1. Attach winch angles to winch assembly with two 1/2" x 1" HHCS, nuts and lock washers at the bottom and with two hook bolts at the top of vertical mounting plates on rear of winch.
2. Attach name plate to winch angles with four 1/2" x 1" HHCS, nuts and lock washers.
3. If necessary, loosen two silo hoops enough to insert four hook bolts.
4. Attach winch assembly to silo hoops with hook bolts in the holes matching the silo hoop spacing. hooks can be turned up or down as required. Note: make sure center of winch is located directly under pulley on tripod leg. Tighten all bolts securely.
5. A socket head capscrew located between the gearbox and right hand winch drum flange is provided to secure the end of the suspension cable. Loosen setscrew and thread cable end through hole in winch flange, then tighten setscrew to clamp cable end securely. Caution: the first layer of cable must be wound making sure all cable layers are wrapped evenly and tightly.
6. Check oil level in winch gear housing at oil level plug. If necessary add no. 90 all-purpose gear lube oil until oil flows from oil level hole. Replace plugs making sure vent in filler plug is open.



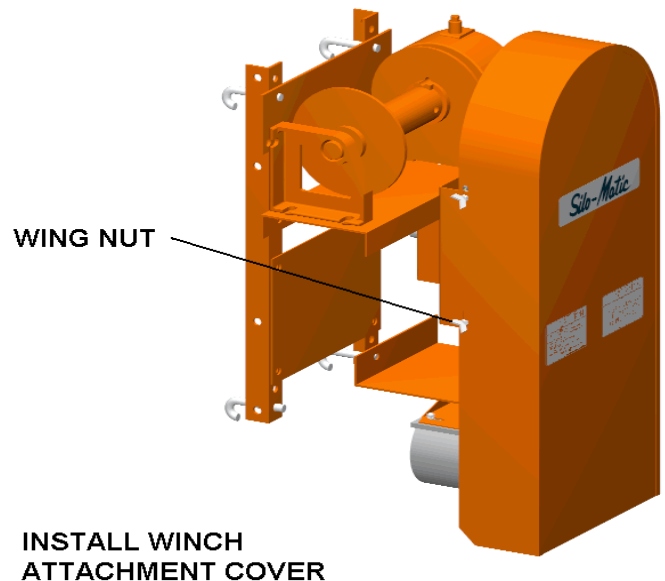
TWO SPEED POWER ATTACHMENT (OPTIONAL)

The following figure shows the optional 2-speed power attachment completely assembled on the winch.

- 1.) To install the unit, first bolt the mounting plate to the winch base with two 3/8" x 3/4" HHCS, Nuts & Lockwashers.
- 2.) Attach the counter shaft assembly to the mounting plate with four 5/16" x 3/4" Carriage bolts, nuts & lockwashers. Make sure notch in the front flange of the countershaft assembly is facing down.
- 3.) Attach bracket to mounting plate with four 5/16" x 3/4" HHCS, Nuts & Lockwashers.



- 4.) Attach motor support bracket to bracket with two 5/16" x 3/4" HHCS, Nuts & Lockwashers.
- 5.) Attach the motor mount plate to the motor with four 5/16" x 3/4" HHCS, flat washers, lockwashers & Nuts. Tighten securely.
- 6.) Assemble the motor and mount plate assembly onto the motor support bracket with pin and (2) 1/8" x 1" cotter pins.
- 7.) Place the large diameter sprocket on the winch stub shaft with the hub in. Position the sprocket so that the face of the sprocket is flush with the end of the shaft. Tighten setscrew. Position the countershaft sheaves and motor sheaves as shown on figure. Install V-belt (outer sheaves for feeding, inner sheaves for raising).
- 8.) Fasten shield to winch assembly with wing bolts as shown on the figure at right.



INSTALL HEXAPOD

1. Bolt the angle bracket to the base of a hexapod leg with (2) 1/2" x 1-1/4" hex bolts and whiz nuts. See figure 1.

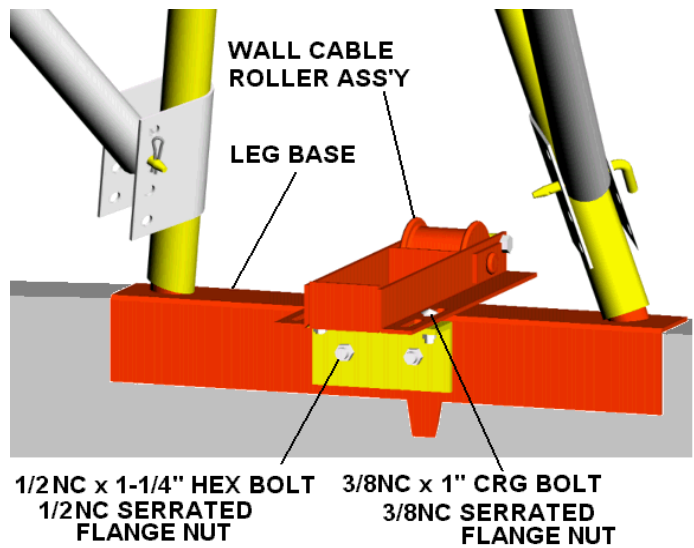


FIGURE 1

2. Locate this leg on the silo rim directly over the winch location. Insert a 1/2" x 2" hex bolt through the lower hole on the flattened (top) ends of the leg assembly and thread on a whiz nut but do not tighten. Allow space between the flattened ends to insert the ends of the tie tubes. Assemble this bolt to the other (2) leg assemblies also. See figure 2.

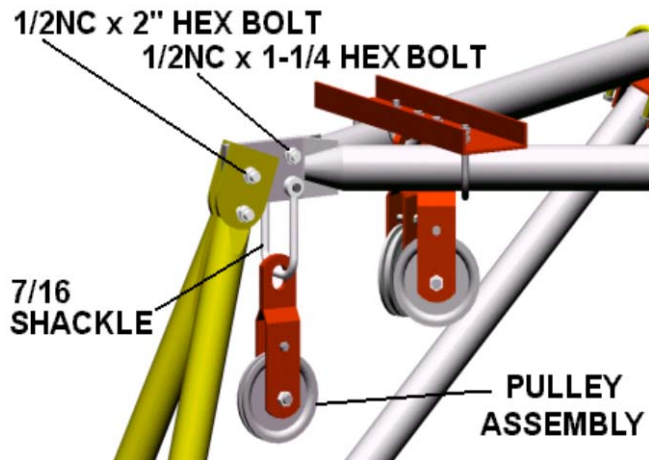


FIGURE 2

3. Drive the tapered plate on the wall cable roller assembly behind a silo hoop and centered on the base of a leg. Bolt this roller assembly to the angle bracket using (2) 3/8" x 1" hex bolts, flat washers, and whiz nuts. There are two sets of slots in the roller assembly to accommodate variations of silo wall thickness.

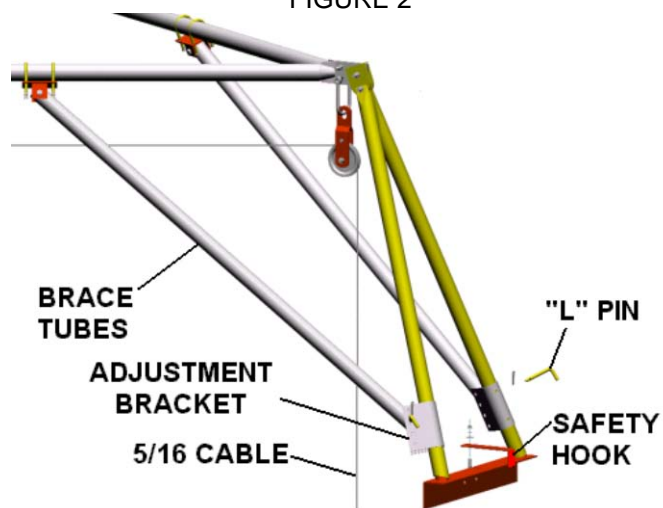


FIGURE 3

4. Locate the other (2) hexapod legs at 1/3 points from the first leg. Check these locations by measuring between the centers of the leg base plates and adjust as necessary so all (3) measurements are equal. Secure these legs to the wall using a safety hook driven behind the silo hoop and bolted to the leg bases with a 3/8 x 1" Carriage bolt, flat washer and whiz nut. See figure 3. Note: head of carriage bolt slides into "keyhole" in leg base plate.

5. Assemble the (3) tie tubes into a triangle with the flattened ends fitting together and with the brace tubes on the bottom side. Bolt the tubes together with a 1/2" x 1-1/4" hex bolt and whiz nut at the top hole location at each corner of the triangle.

6. Assemble each corner of this triangle between the flattened legs of each hexapod leg assembly using a 1/2" x 2" hex bolt with whiz nut. DO NOT TIGHTEN. See Figure 2.

7. Cut the brace tubes free from the tie tubes and allow them to swing down to the adjustment bracket (has 4 holes in it) welded to each leg of the leg assemblies. Connect the brace tube to these brackets using "L" pin and cotter. See Figure 3. All brace tubes should connect at the same set of holes in the adjustment brackets if the hexapod assembly is centered. They must be in the same holes on the same leg assembly. Having someone push upward at the midspan on the tie tubes will aid getting the "L" pins inserted. Do not move the attachment of the brace tubes along the tie tubes. This is factory assembled at the correct location.

IMPORTANT: When assembly is completed, shake the leg assemblies to be certain the hexapod is firmly installed to silo rim without any clearance to the wall. If it feels loose then move the brace tubes to a higher hole in the adjustment brackets until the hexapod is tight on the silo.

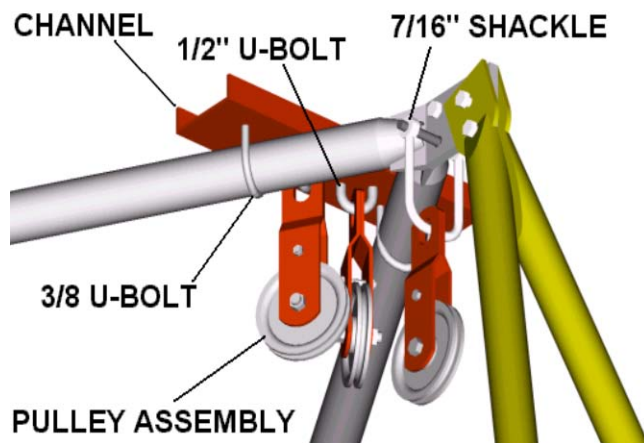


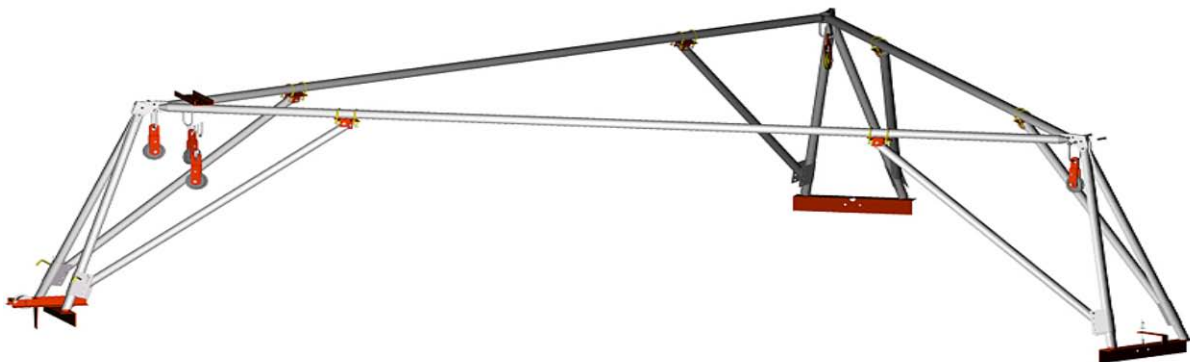
FIGURE 4

8. Insert this U-bolt through the holes in the channel from the bottom side of the channel (channel legs to point up) and secure to channel with 1/2" hex lock nuts. See Figure 4.

9. Tighten the (2) 1/2" x 2" bolts at the top of each leg assembly. Attach a pulley assembly to the lower hole in the flattened ends of the tie tubes at each corner of the triangle using a clevis. See Figure 2.

10. Assemble (2) Pulley assemblies to the channel. Insert a 1/2" U-bolt through the slot of the pulley hanger and thread 1/2" hex nuts onto the U-bolts as far as they will go.

11. Assemble the channel with the (2) pulley assemblies to the top side of the tie tubes at the corner of the triangle adjacent to the leg with the wall cable roller assembled to it. Secure the channel to the tie tubes with (2) 3/8" U-bolts and (4) whiz nuts. Before tightening adjust the channel so it is about parallel with the base on the leg assembly.



INSTALL SUSPENSION CABLE

1. The suspension cable is bundled into (4) coils. One coil is labeled for the winch and this leg of the cable is routed down to the winch. Another coil is labeled for the main leg and this leg of the cable assembly is to be routed through the pulley assembly (between retainer bolt & pulley) attached at the leg over the winch and straight down the inside of the silo wall. The remaining (2) legs are each routed through one of the assemblies on the channel, over to the pulley on each of the distant leg assemblies and down the inside of the silo wall.
2. Immediately secure the (3) legs of the cable assembly inside the silo with a weight or pull over to the silo chute to anchor and prevent them from pulling out of the pulleys. Secure the winch cable to a silo hoop.

ASSEMBLE TRI-ARMS AND DRIVE RING

Assembly of these items is explained and illustrated at this point. It is convenient to assemble the arms and rings now and hoist them up and out of the way until the rest of the unloader is assembled. You may elect to complete this assembly after the rest of the unloader is assembled but it will be less convenient since you will be working around the rest of the machine.

CAUTION: IF YOU WORK UNDER THE ASSEMBLED ARMS AND RING YOU MUST OBSERVE PRECAUTIONS INCLUDING THE FOLLOWING:

- Before raising assembly, be sure all connections and bolted joints are tight.
- Be sure (2) cable clamps are installed on each cable connection and that they are installed properly with the U-bolt part of the clamp around the unloaded cable leg and are tight.
- Cable is securely connected and wound on the winch spool.
- Winch is securely mounted to the silo.
- Wear hard hats when working around equipment as approved by construction industry.

NOTE: From this point on, assemble as instructed, but do not tighten bolts until indicated to do so.

Lay the (3) drive ring segments in a circle and join the ends together with a ring connector weldment on the outside and a stiffener plate on the inside. There are (4) rows of bolt holes punched in the ring. Assemble using the first and third row of the holes from the top edge of the rings. See Figure 11. Use (4) 3/8" x 1" carriage bolts and whiz nuts to bolt through each stiffener plate, ring and ring connector. Insert carriage bolts from inside the rings.

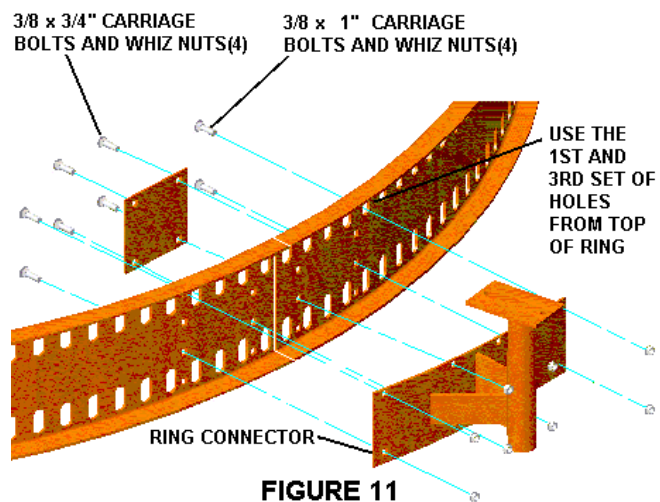


FIGURE 11

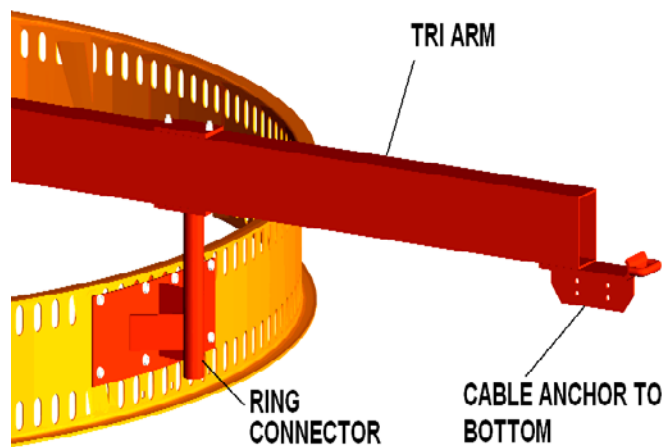


FIGURE 12

2. Bolt a tri-arm to the top of each ring connector using (2) 3/8" x 5" hex bolts and whiz nuts for each. See Figure 12. The arms are to be installed with the cable anchor at the outer end on the bottom side.

3. Lap the welded plates on the inner end of each arm over the next arm and secure with 3/8" x 5" HHCS and Whiz Nuts. Figure 13.

Note: If assembling the (3) tri-arms separate from the drive rings, it is possible to assemble them incorrectly such that they will not match the angle of the ring connectors. The arms must angle forward in the same direction the unloader will rotate and as shown on Fig. 14.

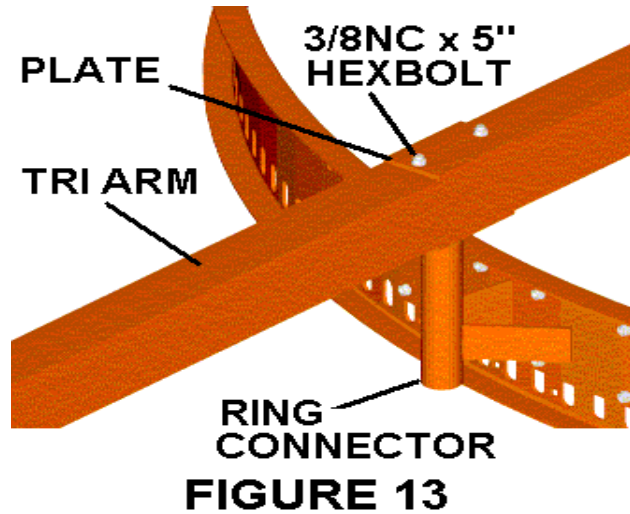


FIGURE 13

INSTALL TRANSITION ASSEMBLY

1. Position the transition assembly inside the triangle formed by the tri-arms. Bolt one corner of the transition assembly top plate to an arm with (2) 3/8" x 5" hex bolts. Bolt the other two corners to the other arms using a drift punch to line up the holes. It may be necessary to bump the ends of the arms in or out where they overlap each other. See Figure 15.

NOTE: Position the transition assembly so that the power cord with plug will be convenient to hook to the power cord that will be routed from the silo chute and along the gooseneck.

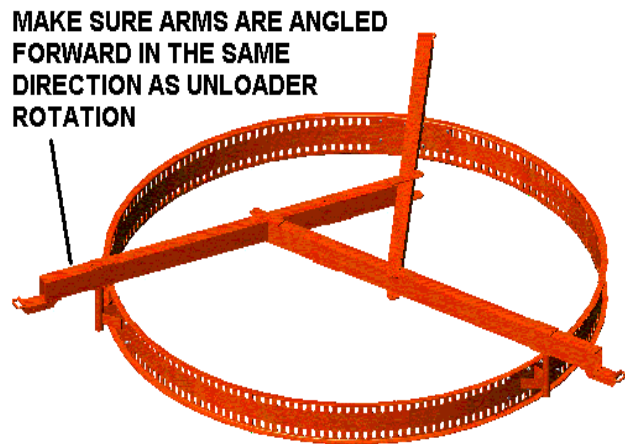


FIGURE 14

2. At this time tighten all bolts on the unloader.

3. Attach the (3) clamps to the tri-arm plate with (2) 3/8" x 1" bolts each and whiz nuts.

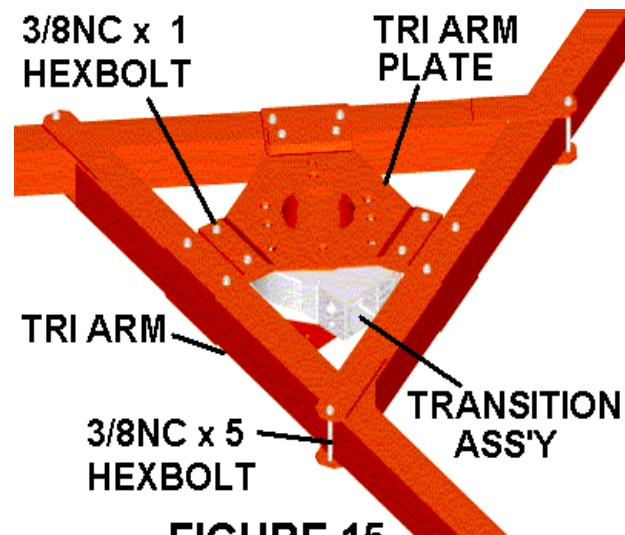


FIGURE 15

CONNECT SUSPENSION CABLE AND LEVEL

1. Loosely assemble (2) 5/16" Cable Clamps to the bracket welded to the bottom side of each of the tri-arms. Assemble with the clamp casting against the bracket. Route the cable through the loop on the ends of the arms and through the (2) cable clamps. Snug the clamps tight enough to hold the weight of the arms and rings. See Figure 16.

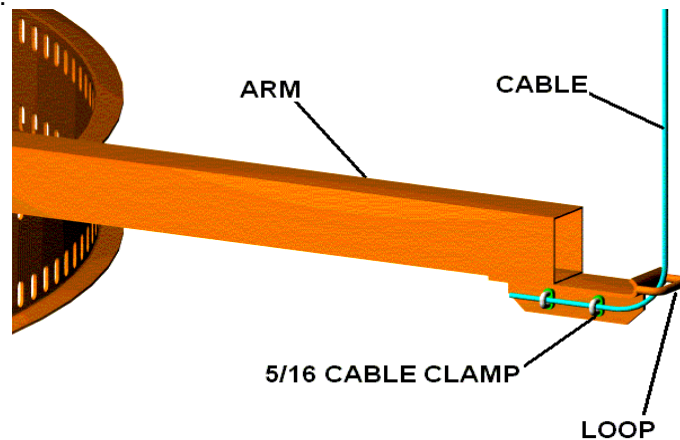


FIGURE 16

2. Attach the Cable to the arms so that the swaged cable splices are just below the wall roller on the hexapod when the unloader auger will be resting on the floor of the silo. If the silo is not empty then see separate instructions on Page 16. Cut off excess cable and tape ends so it does not unravel.
3. Connect the winch end of the cable to the winch drum. A socket head setscrew located between the gearbox and RH winch drum flange is provided to secure the end of the suspension cable. Loosen the setscrew and thread cable end through hole in winch flange. Extend cable 3/8" beyond flange, then tighten setscrew to clamp cable end securely.

IMPORTANT: The first layer of cable must be wound making sure all cable layers are wrapped evenly and tight.

4. Level each of the tri-arms and tighten cable clamps.

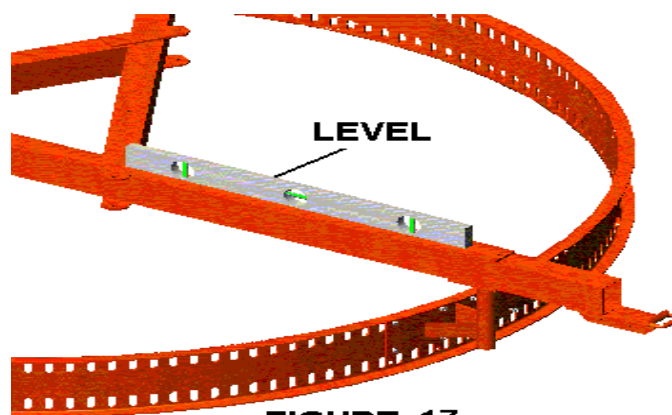


FIGURE 17

5. Raise the tri-arms and drive ring assembly out of the way to assemble main unloader assembly.

CAUTION: BE SURE CABLE CLAMPS, CABLE ATTACHMENT TO WINCH, AND WINCH MOUNTING IS SECURE TO PREVENT SUB ASSEMBLY FROM FALLING DURING INSTALLATION.

ASSEMBLE OUTER WALL ASSEMBLY, AUGER GEARBOX AND AUGER

1. Assemble bearing casting assembly into the bearing plate from the auger side. Secure with a cotter pin on the wall side. See Figure 18.

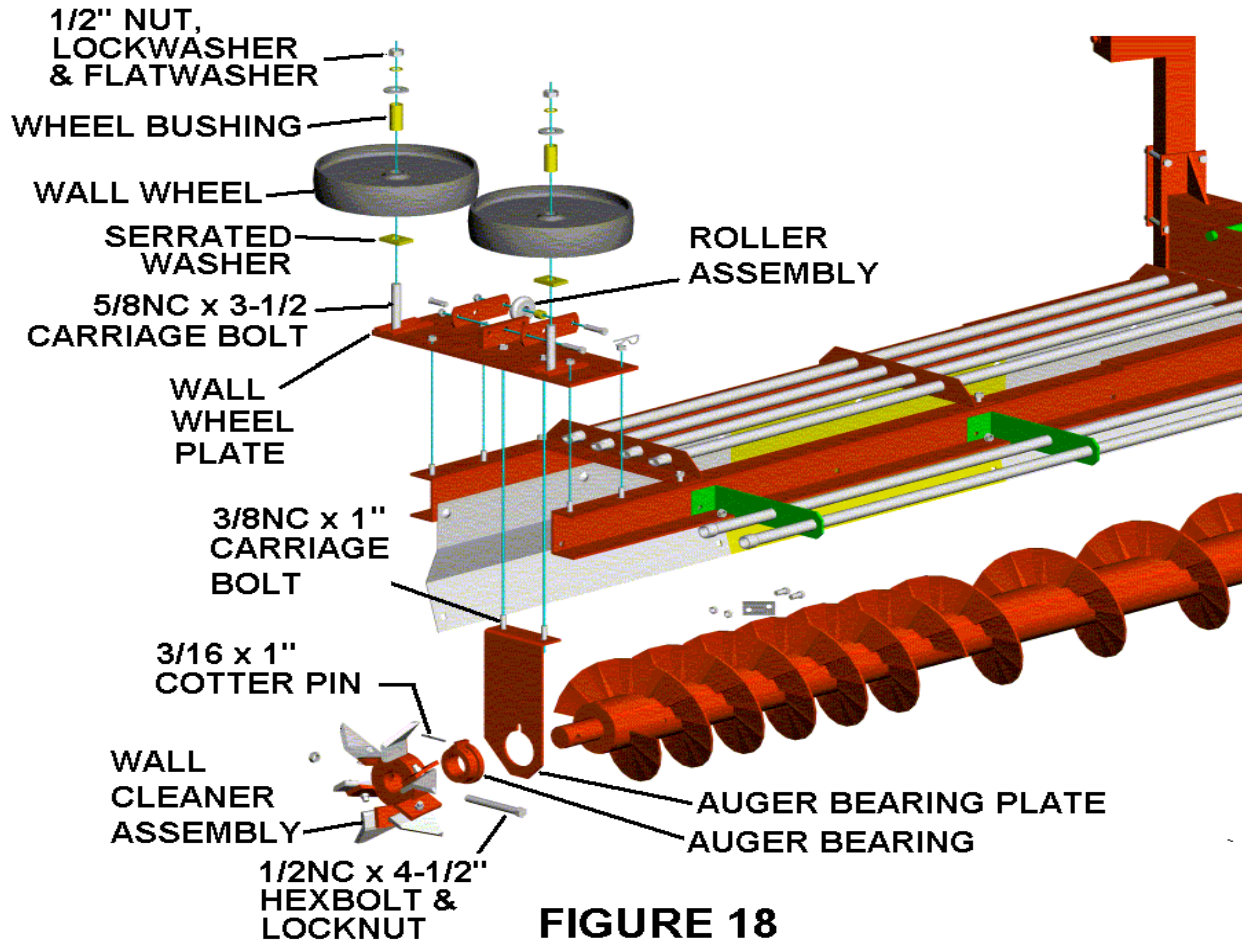


FIGURE 18

2. Bolt the bearing side plate (bend in plate points away from wall) to the bottom side of the wall wheel plate with (2) 3/8" x 1" carriage bolts. Flip the nylon roller assembly away from the wall and lock in place with a button head pin inserted through the side bars of the roller assembly and the bar welded to the wall wheel plate. Secure with hair pin.

See Fig. 19.

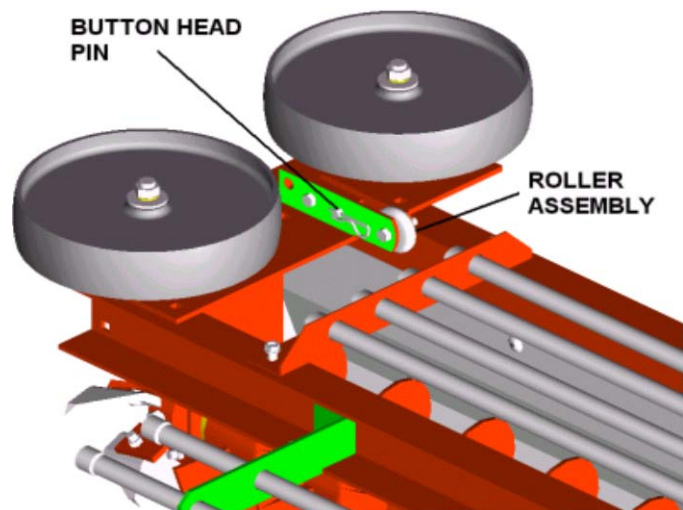


FIGURE 19

- Slide the assembly onto the outer auger shaft (outer end of auger has double flighting). Assemble (2) Wall cleaner casting halves with blades to the auger shaft using a 1/2" x 4-1/2" hex bolt and hex lock nut.
- Assemble gearbox to the gearbox mount plate with (4) 3/8 x 1" hex bolts and lock washers. See Figure 20.

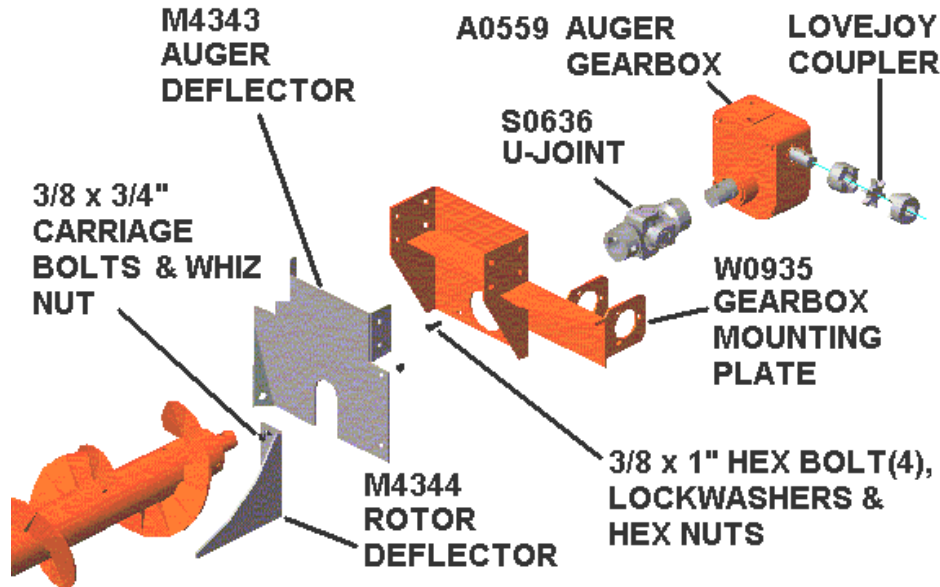


FIGURE 20

- Join the input shaft of the gearbox to the shaft extension with the shaft coupling and (2) 5/16 x 1-3/4" bolts with hex lock nuts.
- Connect the output shaft of the gearbox to the inner auger shaft (inner end of auger has reverse flighting) with the universal joint and (2) 1/2" x 3" bolts and hex locknuts.
- Bolt the rotor deflector to the rear auger deflector with (2) 3/8" x 3/4" carriage bolts and whiz nuts. Place assembly into position over the rear auger shaft.
- Remove the pipe plug located on the top side of the gearbox and replace it with a vent plug. See Fig. 21.
- If a 40B18 sprocket has not been factory assembled to the output shaft opposite from the auger side on the gearbox, do so with a #9 woodruff key and tighten setscrew in sprocket.

INSTALL FRAME CHANNELS

- Identify the main frame channels by the motor mount slots at the rear end. These slots are assembled to the top side with the legs of the RH and LH channels facing away from each other.
- Identify the RH and LH channel extensions such that when they are installed with the legs of the channels facing away from each other, there will be no holes in the bottom legs.
- Lap the channel extensions inside the main channels and bolt together with (2) 1/2" x 1" carriage bolts and whiz nuts in the top row of holes. Do not put bolts in lower row of holes until installing auger shields later. See Fig. 22.
- Bolt the RH and LH channels to the sides of the gearbox mounting plate with (4) 3/8" x 3/4" carriage bolts and whiz nuts on each side. Before tightening, align the top edge of the mounting plate flush and parallel with the top edge of the main channels. Bolt the rear auger deflector to the channels with (2) 3/8" x 3/4" carriage bolts and whiz nuts on both sides. See Figure 21.

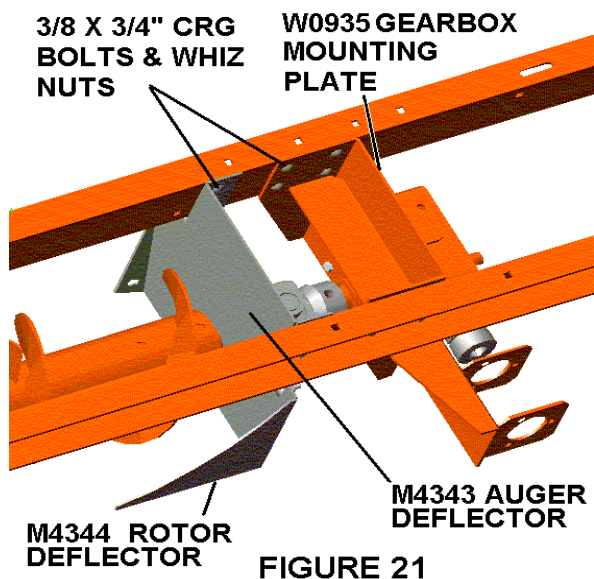


FIGURE 21

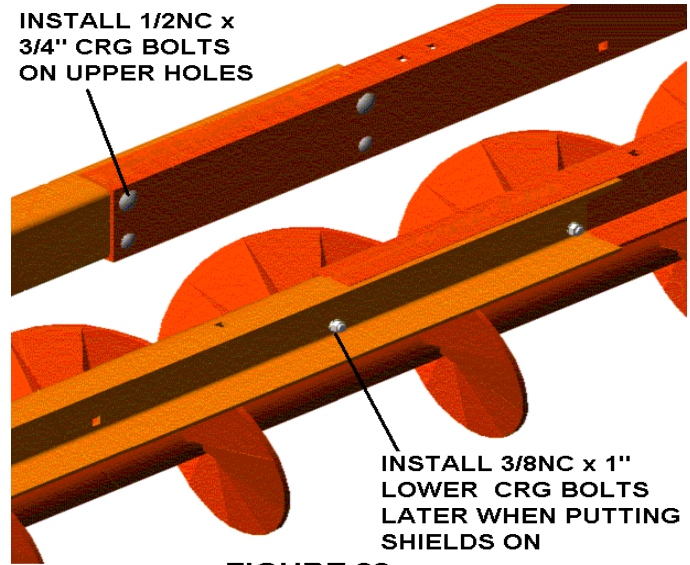


FIGURE 22

5. Bolt the top leg of the channel extension to the bottom side of the wall wheel plate at the outer end using (4) 3/8" x 3/4" carriage bolts with whiz nuts.
6. Assemble the wall wheels to the wall wheel plate. Insert a 5/8" x 3-1/2" carriage bolt through the slot in the plate from the bottom. Slide a serrated washer onto the carriage bolt so the serrations engage the serrations on the plate, assemble a wheel bushing onto the bolt, the wheel, flat & lock washers and hex nut.

INSTALL ROTOR ASSEMBLY

1. Bolt the (2) rotor mounting angles to the housing brackets at the front and rear of the rotor assembly using (4) 3/8" x 3/4" carriage bolts and whiz nuts. The angles are assembled with the legs facing away from each other. The rear mounting angle can be identified by an extra hole in the flat leg. See Figure 23.

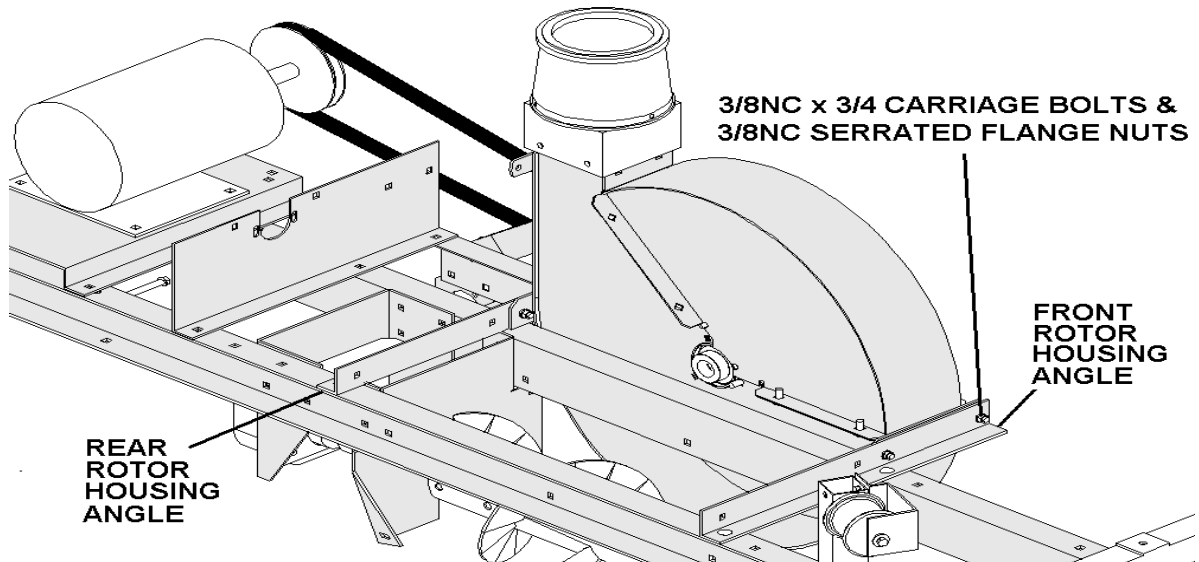


FIGURE 23

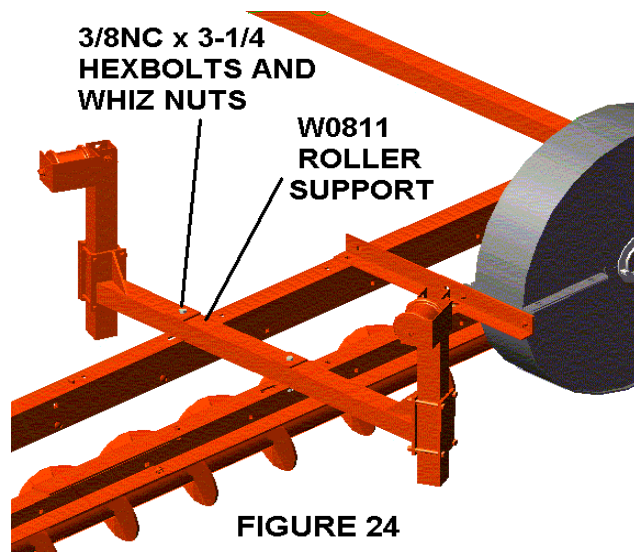
2. Lift the rotor with angles into position and bolt the angles across the top of the frame channels with (4) 3/8" x 3/4" carriage bolts and whiz nuts.

INSTALL RING DRIVE

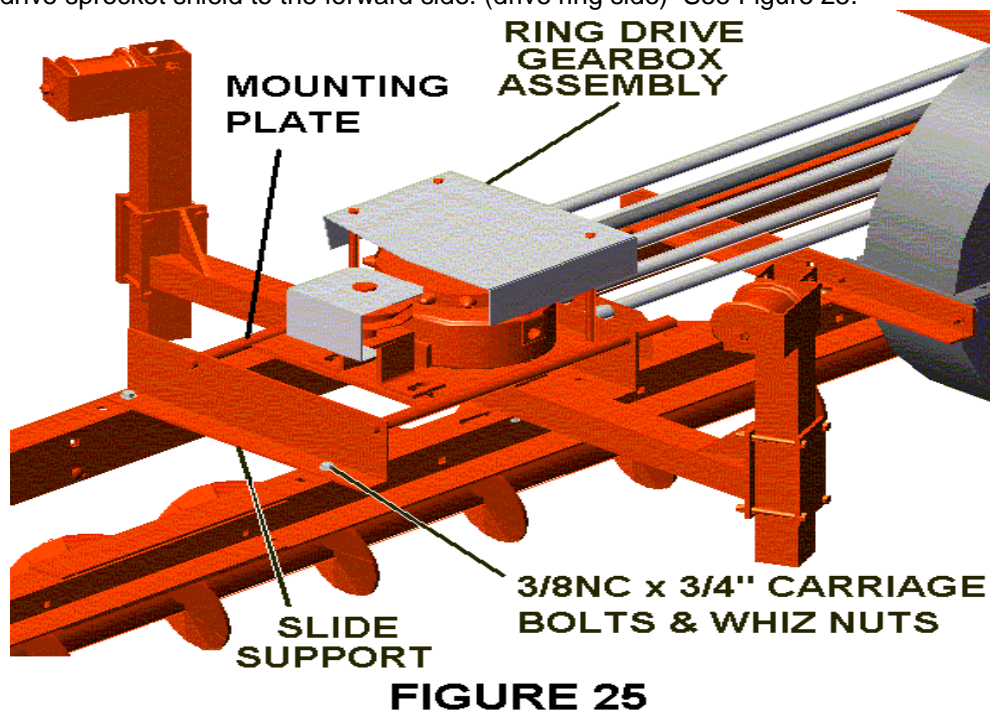
1. Bolt the roller support across the top of the main frame channels using (2) 3/8" x 3-1/4" Hex Bolts and Whiz Nuts. Slots are provided in the top leg of the channels where the bar is to be assembled.
2. Place a reinforcing pad over the slots before inserting the bolts. Gussets on the support bar go to the top and the bar extends further beyond the LH channel than the RH channel.

DO NOT TIGHTEN AT THIS TIME.

See Figure 24.



3. Bolt a ring drive slide support across the frame channels behind the roller support with (2) 3/8" x 3/4" carriage bolts and whiz nuts. Assemble with flat leg of angle pointing away from rotor. Insert the round bars on the ring gearbox mounting plate into the holes of the slide support. Assemble with the angled edge of the drive sprocket shield to the forward side. (drive ring side) See Figure 25.



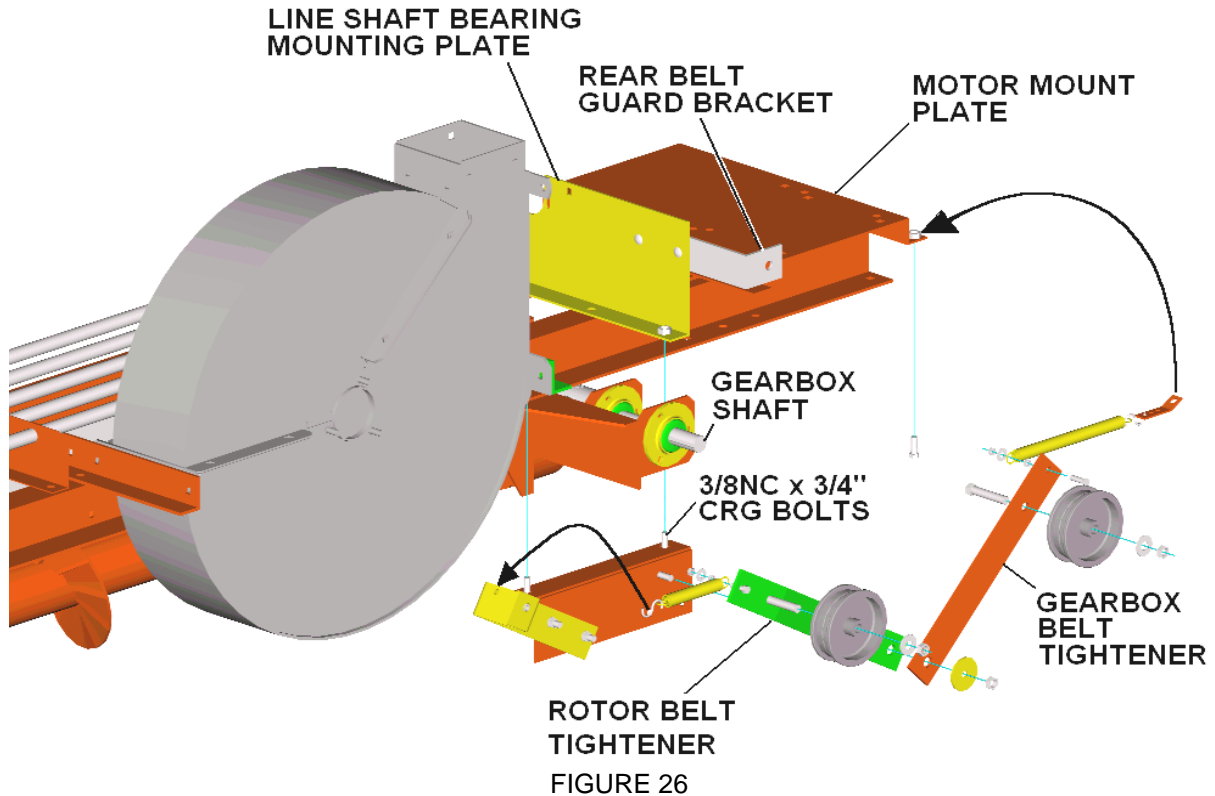
4. Assemble the forward slide support over the round bars of the mounting plate and bolt to the frame channels.

NOTE: To avoid disassembly later, bolt an angle for the grill covers to the forward slide support at this time with the flat leg of this angle pointing toward the rotor. See Figure 35

5. Remove the pipe plug from the street el on the gearbox and replace it with a vent plug.

ASSEMBLING MOTOR MOUNT AND BELT TIGHTENER ASSEMBLY

1. Bolt the line shaft bearing mounting bracket across the frame channels behind the rotor assembly. Use (2) 3/8" x 3/4" carriage bolts and whiz nuts. Flat leg on bracket points forward. Figure 26.



2. Bolt the rear belt guard bracket to back side of bearing mounting with (2) 3/8" x 3/4" carriage bolts and whiz nuts.
3. Bolt the motor mount plate across the rear channels at the slots in the channels. Use (4) 3/8" x 3/4" carriage bolts & whiz nuts. Motor mounting holes should be offset toward the left side.
4. To the rear left corner of the motor mount plate bolt a spring anchor strap with 3/8" x 3/4" carriage bolt and whiz nut. This strap has (3) small holes in it for hooking "S" hook into.
5. Slide the bearing of the belt tightener assembly onto the input shaft of the auger gearbox. Bolt this assembly to the bottom side of the rotor mounting angle at the front and to the line shaft bearing bracket at the rear using (2) 3/8" x 3/4" carriage bolts and whiz nuts. See Figure 26.

IMPORTANT: The bearing plate has vertical slots and the bracket of the tightener assembly has horizontal slots where they bolt to each other. Adjust the bearing both vertically and horizontally to remove any stress on the gearbox shaft before tightening this connection.

6. Install bearing locking collar and tighten in direction of shaft rotation.

INSTALL MOTOR DRIVE

1. Mount the motor to the motor mount plate using (4) carriage bolts. Mount a 2BK62 sheave with a H-taper hub on the motor shaft as close to the motor as possible. Mount a BK85 sheave to the auger gearbox shaft with a H 1" taper hub and 1/4" square key. Align this sheave with the inside groove on the motor sheave above. Mount a BK85 with a H 1-1/4" taper hub and 3/16" x 1/4" rectangular key on the rotor shaft. Align this sheave with the outside groove of the motor sheave. See Figure 27.

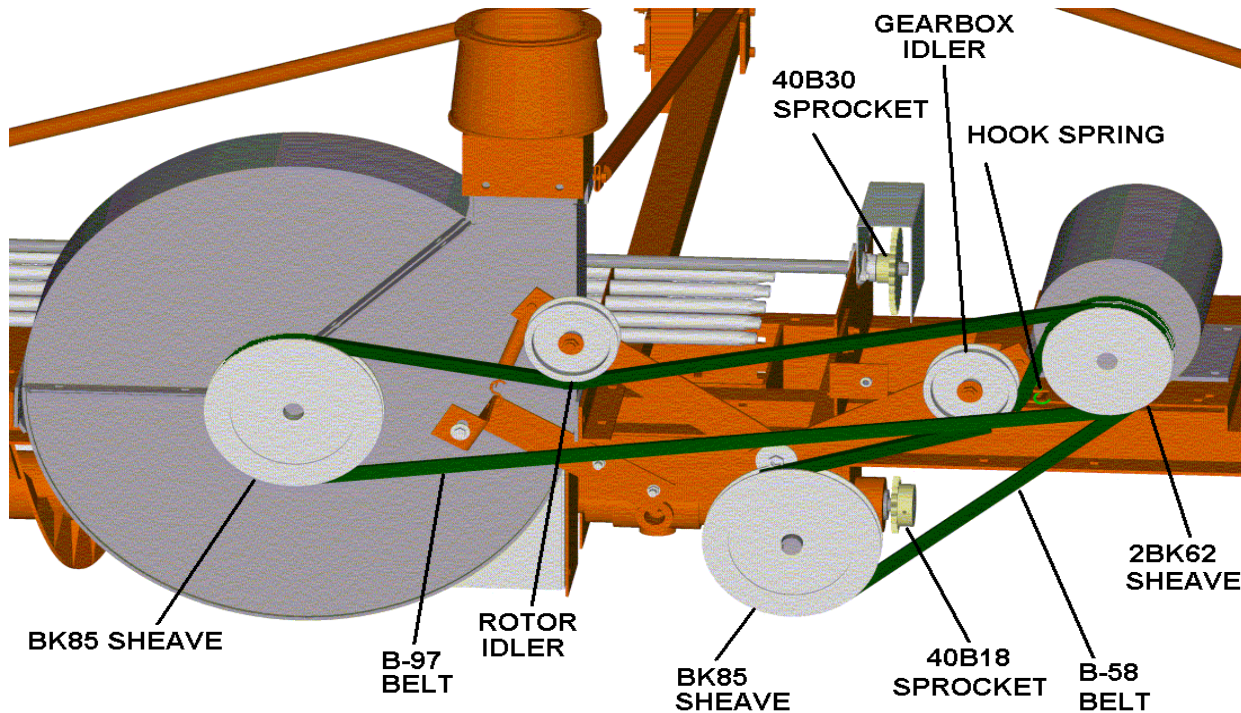


FIGURE 27

2. Install a B-58 belt on the gearbox drive. Lift the rear idler pulley over the top of this belt and hook the tension spring to the spring anchor strap on the motor mount plate with "S" Hook. Install a B-97 on the rotor drive. Lift the front idler pulley over this belt and hook the tension spring to the anchor hole in the front belt shield bracket with "S" hook.
3. Route the power cord from the remote safety switch and wire per wiring instructions. (See Wiring Diagram in parts section.) Install the belt shield using (2) 3/8" x 1" hex bolts, flat washers and lock washers.

INSTALL LINE SHAFT DRIVE

1. Slide a bearing locking collar and bearing with flanges onto the keyed end of the line shaft. Insert the opposite end (has flat machined on it) into the coupler on the ring drive gearbox.
2. Position the flange bearing in the slot on the line shaft bearing bracket with the flanges on the side nearest the ring drive gearbox and bolt to the bracket with (2) 5/16" x 3/4" carriage bolts and whiz nuts. **DO NOT TIGHTEN AT THIS TIME.** See Figure 28.

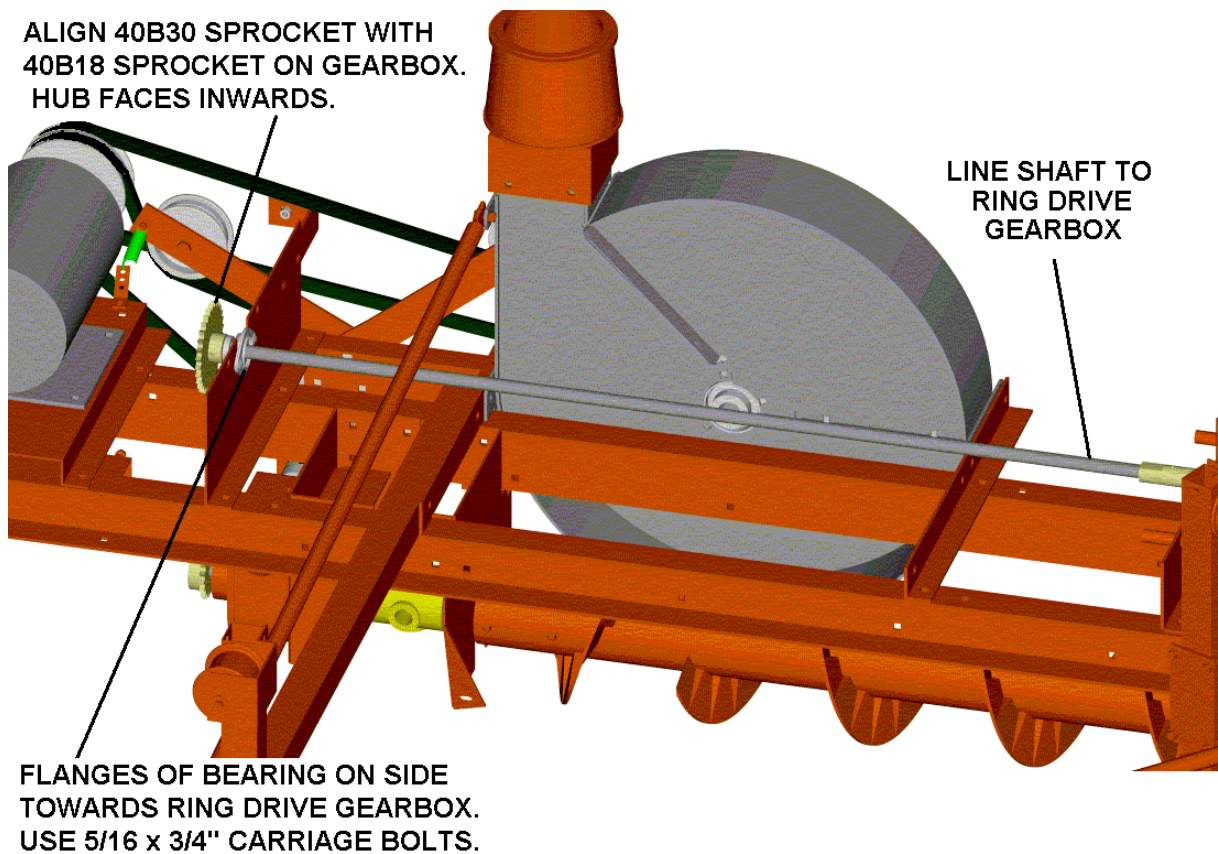


FIGURE 28

3. Assemble a 40B30 sprocket on the end of the line shaft and align with the sprocket on the auger gearbox below. Hub should point towards the ring drive gearbox as shown in Figure 28.
4. Assemble roller chain around the (2) sprockets and tighten chain by raising the bearing in the slots of the bearing bracket. Tighten bolts. The chain guard attaches to the motor side of this bracket with (2) carriage bolts and whiz nuts.

HANG UNLOADER FROM DRIVE RING

1. Lower the (3) tri-arms and drive ring sub-assembly down to the main unloader assembly.
2. Lower the transition assembly over the throat of the rotor housing. Bolt together with (4) 3/8" x 1" carriage bolts and whiz nuts. Insert bolts from inside.
3. Clamp a roller support assembly to each end of the roller bar. Use a clamp plate and (4) 3/8" x 3" hex bolts with whiz nuts. For an initial setting, clamp the vertical square tube of the roller support assembly with 5/8" extending below the clamp plate. See Figure 29.

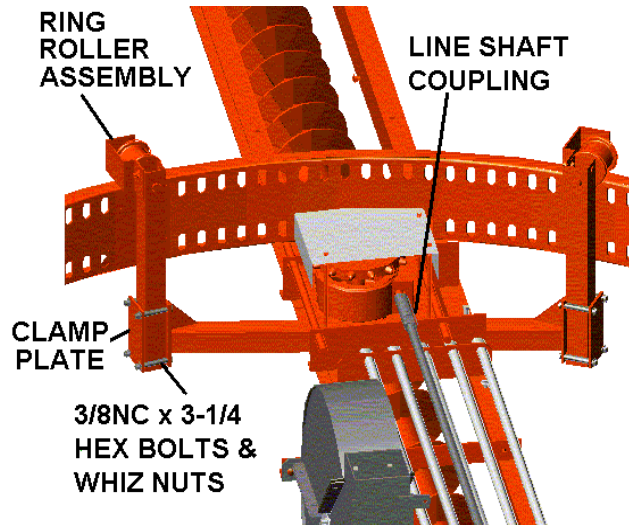


FIGURE 29

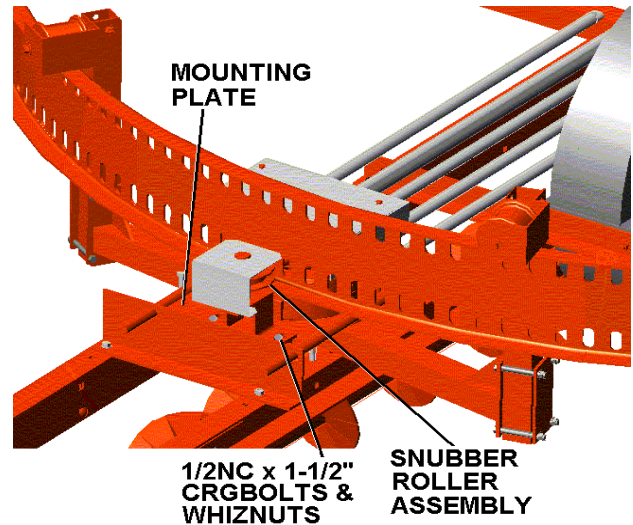


FIGURE 30

4. Tap the roller support bar in or out where it is bolted to the slots in the frame channels so that the roller support assemblies hang straight up and down. Tighten the bolts.
5. With the weight of the unloader totally supported from the cable, check that the drive sprocket is aligned on the center of the drive ring slots. If not, lower the machine and make appropriate adjustment where the roller supports are clamped to the roller support bar.
6. Bolt the snubber roller assembly to the mounting plate of the ring drive gearbox with (2) 1/2" x 1-1/2" carriage bolts and whiz nuts. Adjust the snubber roller so that only about 1/8" of clearance exists between the sprocket and drive ring. See Figure 30.

INSTALL AUGER KNIVES

1. Bolt knives to the auger flighting with (2) 1/4" x 5/8" bolts each and nuts. Bolt the knives on the side of the flighting closest to the silo wall. The beveled edge faces in the direction of auger rotation which is clockwise when viewed from the center of the silo. Do not extend knives past the front edge of the rotor. For extremely hard packed or frozen material, put knives at all holes in the flighting. If normal application, then skip every other set of holes starting at the wall to the middle of the auger and then skip two sets of holes. See Figure 31.

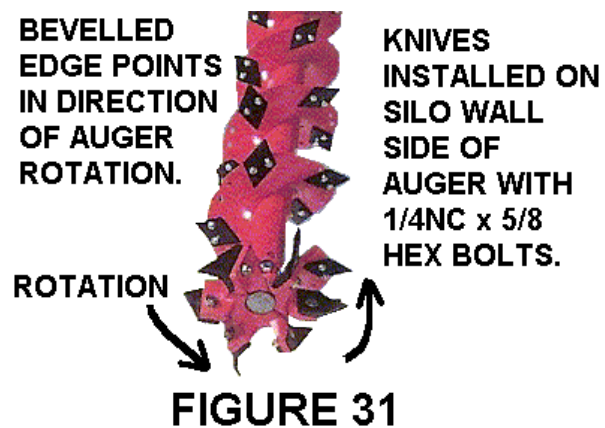


FIGURE 31

INSTALL SHIELDS

1. Starting at the rear auger deflector, assemble the rear auger shields. The following is the amount of length of shields used on each size.
2. Assemble shields with the longest lengths at the rear and the shortest lengths at the front. The shields bolt to the inside of the RH frame channels. At the auger deflector the lower edge of the shield bolts to the bent corner of the deflector. The shields are overlapped with each rear shield on the outside of the next shield, offering no obstruction to feed flow. The lapped joints are joined with a bolt through the channel and a bolt through the lower edge of the lapped shields. See Fig 32. Use 3/8" x 3/4" carriage bolts and whiz nuts. NOTE: At this time install (2) 3/8" x 1" carriage bolts in the lower splice holes of the front extension and main channels. These bolts will also go through the auger shields.
3. Starting just ahead of the rotor, assemble the front bumper assembly with 3/8" x 3/4" carriage bolts. See Figure 33.

SILO DIAMETER	# of 37-1/2" Shields needed	# of 25-1/2" Shields needed
14'	1	2
16'	3	1
18'	3	0
20'	2	2
22'	3	1
24'	4	0

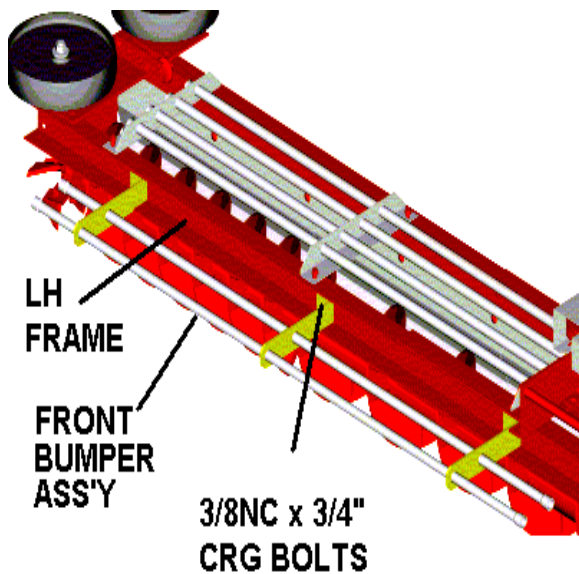
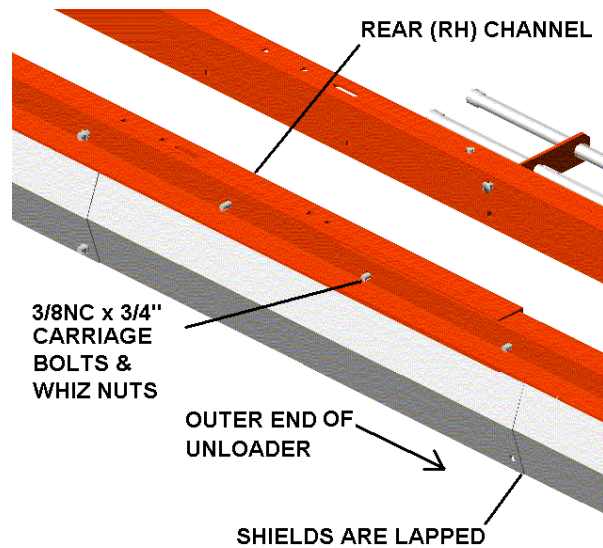


FIGURE 33

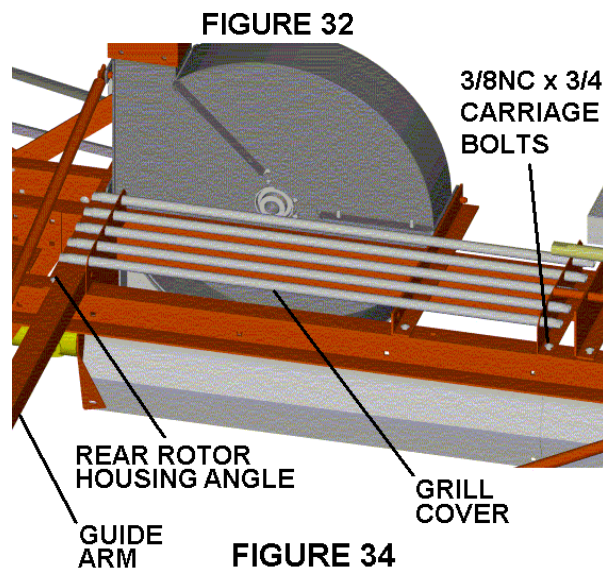


FIGURE 34

3. Bolt the top grill cover assembly across frame channels between the rear rotor mounting angle and the front ring drive support with 3/8" x 3/4" carriage bolts and whiz nuts. See Figure 34.

ASSEMBLE TENSION + SPREADER ARMS

1. Bolt the spreader arm tube between the rear rotor mounting angle and auger top cover using (2) 3/8" x 3" hex bolts and whiz nuts. Install wheel tube so the threaded end of the longer bolt on the inner sandwich clamp is on the top side and pointing toward the rear (attachment point for brace from rotor housing.)
NOTE: If the caster bracket assembly is not factory installed to the spreader arm tube then do so before mounting the spreader arm tube.
2. Install a rotor support assembly onto the top drive ring flange and connect the vertical tube of this assembly to the front side of the guide wheel tube using (2) clamp plates and (4) 3/8" x 5" bolts and whiz nuts. Position so the vertical tube extends straight down and perpendicular to the spreader arm tube. Spreader arm tube to be supported level. See Figure 35.
3. Attach one end of the 67" long brace to the tab on the throat of the rotor housing with a 3/4" x 1" carriage bolt and whiz nut. Attach the opposite end to the top bolt on the first sandwich clamp on the spreader arm tube with a whiz nut.
4. With a whiz nut attach the shorter of the (2) remaining wheel tube braces to the lower end of the front bolt on the second sandwich clamp on the spreader arm tube. See Figure 35. Attach the opposite end to the bottom leg of the LH frame channel nearly directly below the front ring drive slide support with a 3/8" x 1" carriage bolt and whiz nut.
5. Bolt the tension arm tube to the inside of the RH main frame channel directly beneath the motor mounting plate with (2) 3/8" x 3" hex bolts and whiz nuts. Install so the longer bolts on the sandwich clamps for attaching braces are on the front side. NOTE: If the tension wheel caster bracket is not factory assembled to the tension arm tube then do so before mounting the wheel tube.
6. Attach the remaining wheel tube brace to the long bolt on the outer sandwich clamp of the tension arm tube and the same on the spreader arm tube using (2) whiz nuts. See Figure 35 + 36.
7. Bolt the spring anchor to the caster arm on the tension wheel with a 3/8" x 1" hex bolt and whiz nut. Hook the spring to this angle and the chain to the other end of the spring. Attach the "S" hook to the bolt on the inner sandwich clamp using a whiz nut. See Figure 36. Hook the chain to this "S" hook as required to adjust pressure on the wheel.

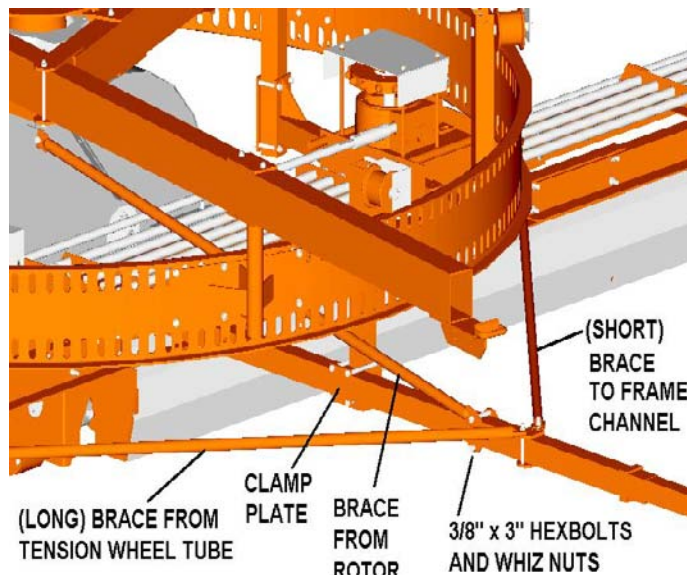


FIGURE 35

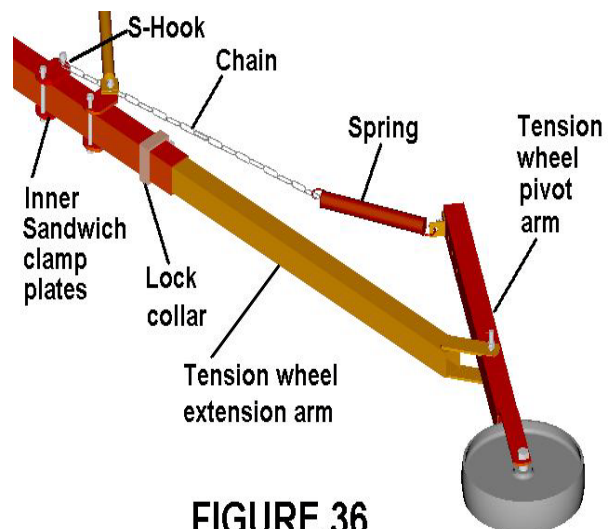
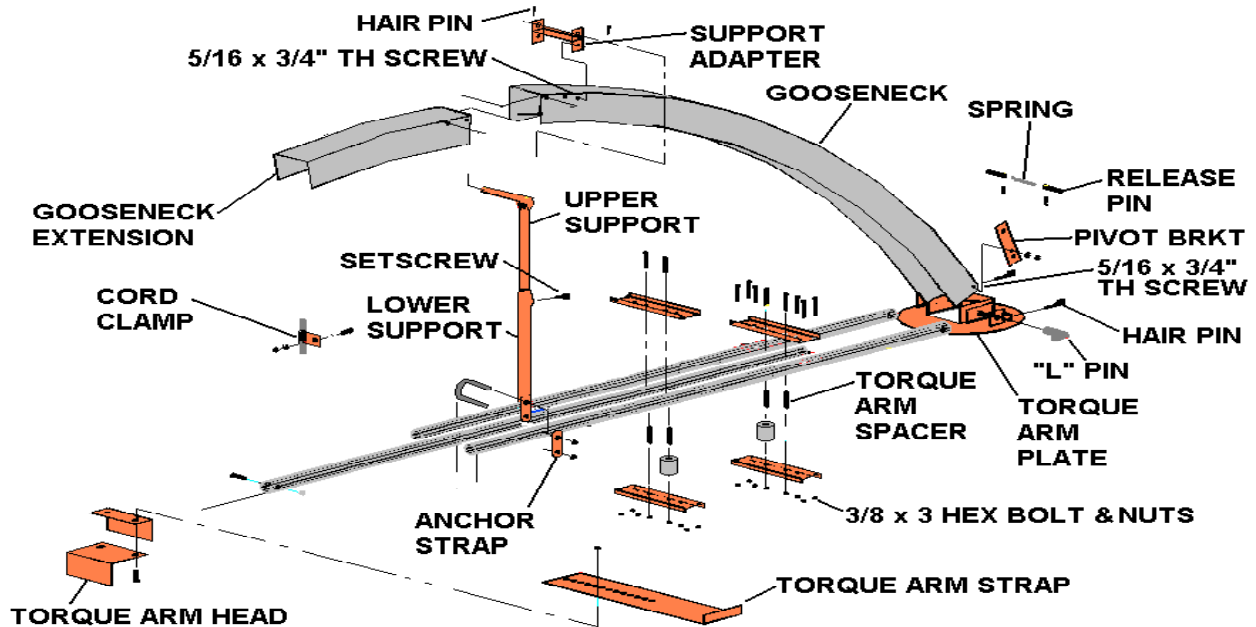


FIGURE 36

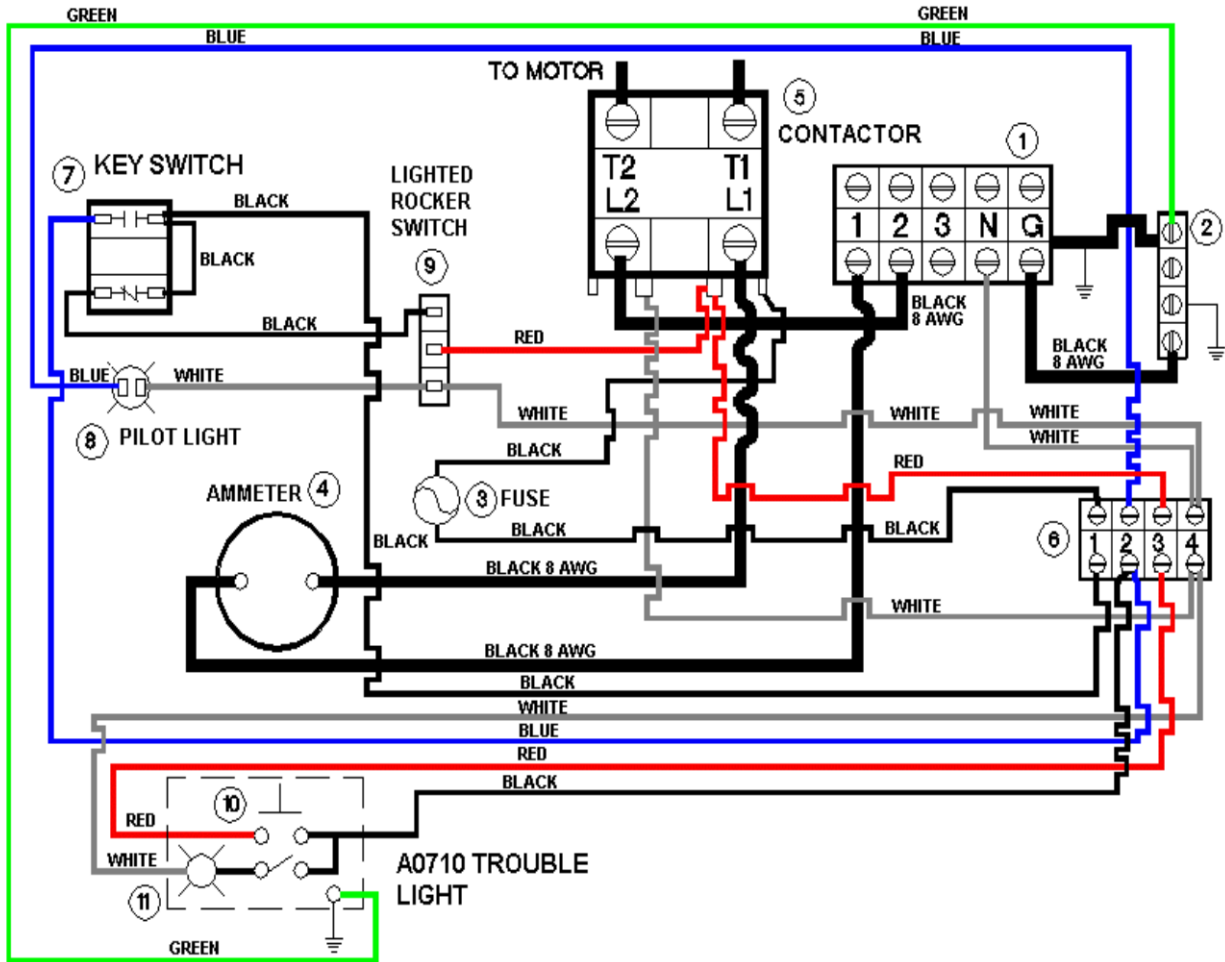
ASSEMBLE TORQUE ARM AND GOOSENECK

1. If the torque arm plate is not assembled to the top plate of the collector ring, do so now by assembling under clamps. Install with the open side of the (3) sided box facing directly toward the silo chute.
2. Hook the door clamp of the torque arm assembly over a silo door sill. Connect the opposite end of the assembly to the brackets on the collector ring torque arm plate with "L" pins. Insert hairpins through the retaining angle and the "L" pin to secure.



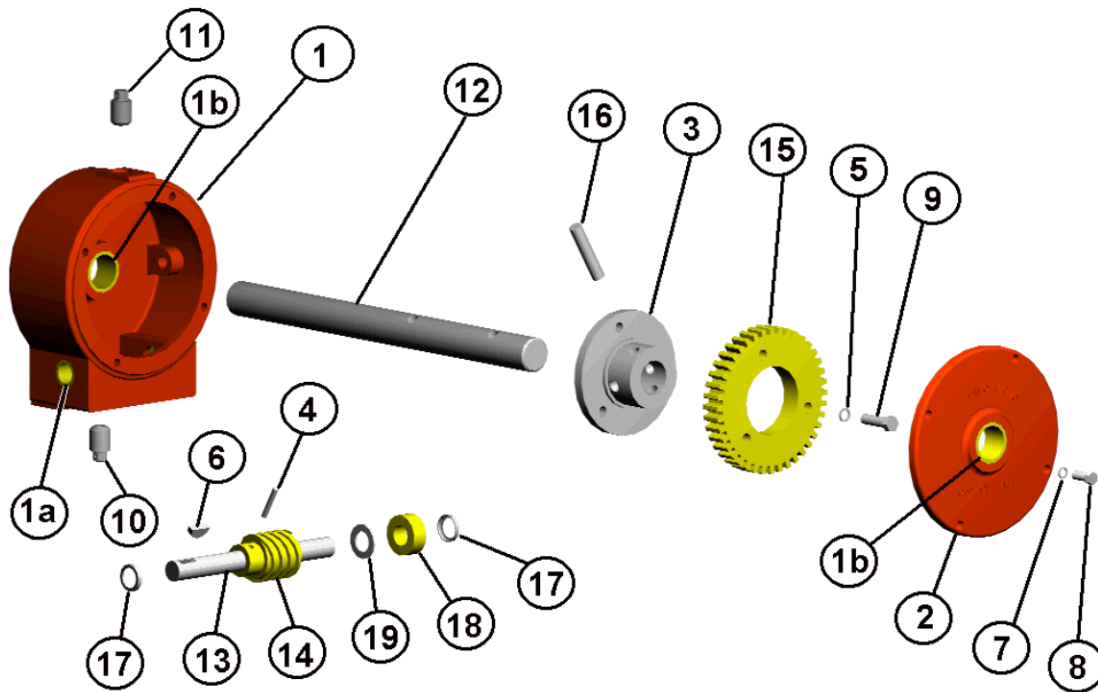
3. To each side of the base on the gooseneck attach a pivot bracket using (2) 5/16" x 3/4" truss head screws each and lockwashers with hex nuts. (larger hole in brackets is at the bottom end).
4. Insert a spring release pin into each end of the hold spring. Compress the pins together and insert between the two ferrules welded to the back of the torque arm plate.
5. Slide the pivot brackets on the gooseneck base over these ferrules and secure to the bracket with the release pins.
6. Bolt the support adapter to the end of the gooseneck at either set of holes with (2) 5/16" x 3/4" Truss Head Screws.
7. Insert the upper support through the holes on the support adapter and secure with hairpin.
8. Telescope Lower support over the upper support. Bolt the flattened (lower) end of the lower support to the anchor strap (attached to LH torque arm tube with U-bolt) using (1) 1/2" x 1-1/4" hex bolt and hex lock nut.
9. Clamp the (2) halves of the power cord clamp around the power cord using a 5/16" x 1-1/4" carriage bolt, flat washer and wing nut. Bolt the large "S" hook to this same bolt. Locate the clamp on the power cord so that when the "S" hook is hooked to the top of the upper gooseneck support, the end of the power cord will reach to the plug connector at the collector ring.
10. Install a female connector plug to the end of the main power cord. Be sure to connect green conductor to the ground terminal in the connector.

WIRING DIAGRAM FOR CONTROL BOX\SAFETY SWITCH



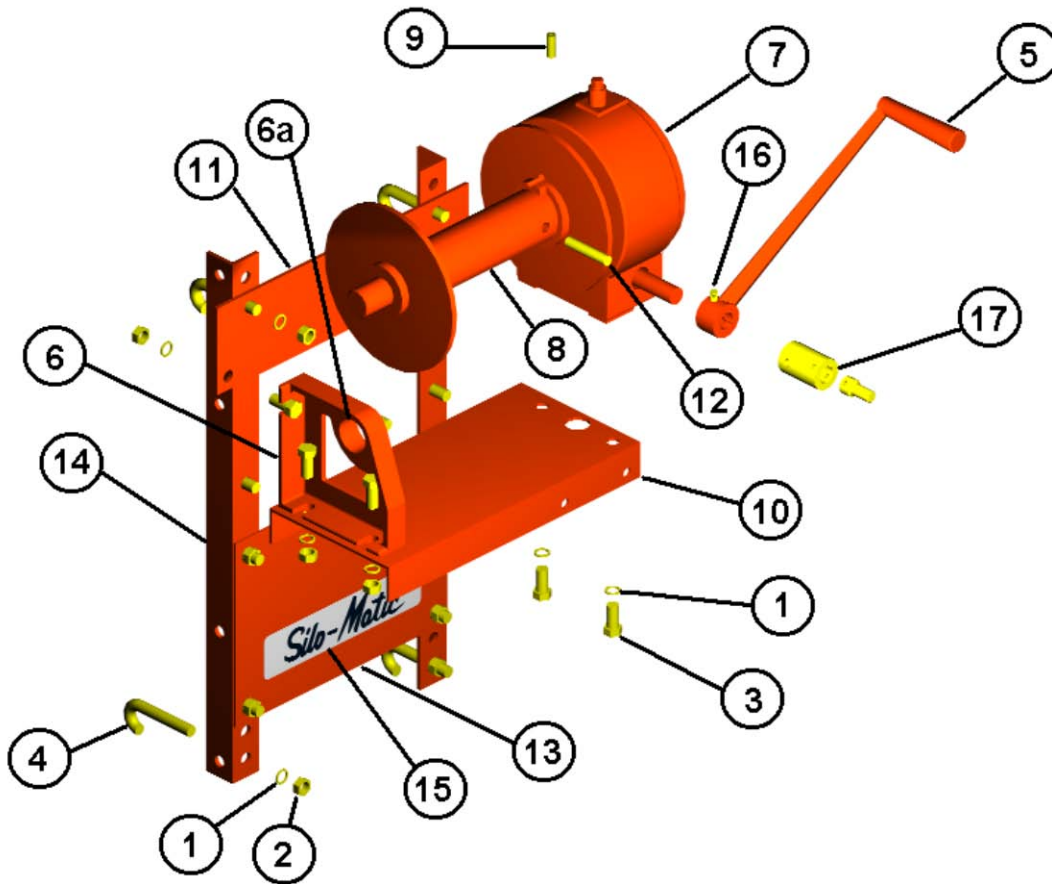
ITEM #	DESCRIPTION	PART #
1	Terminal Block #1	(5) S6207, (2) S6214, (1) S6215
2	Ground Bar	S0477
3	Fuse Holder	S0454
4	Ammeter	S0398
5	Contactor- 3 Phase Contactor- 1 Phase	S6201-02 S6201-01
6	Terminal Block #2	S1029
7	Keyed Switch	S6221
8	Pilot Light	S0397
9	Switch/Pilot Light	S6209
10	Momentary Switch Weatherproof Cover Guard	S6203 S6204 S6210
11	Trouble Light Handle Trouble Light Guard Enclosure	S6202 S6216 S6200

Silo-Matic A0156 WINCH GEARBOX ASSEMBLY



PC#	PART #	DESCRIPTION	QTY.
1	A0165	Gear Housing & Bushing	1
1A	S0225	Sleeve, .752 X 1.0025 X .750	2
1B	S0034	Bushing, 1.252 X 1.502 X 1"	2
2	A0166	Winch Housing Cover & Bushing	1
3	C0053	Worm Gear Hub-Oil Bath Winch	1
4	G273336	Spring Pin, 3/16" X 1-1/4"	1
5	G103321	Washer, Lock 3/8" ZP	3
6	G106751	Woodruff Key, #9 (3/16x3/4)	1
7	G120214	Washer, Lock 5/16" ZP	4
8	G180077	HHCS 5/16nc X 3/4 G5 ZP	4
9	G180124	HHCS 3/8nc X 1 1/4" G5 ZP	3
10	G444588	Plug, Pipe, Square 1/2" NPT	1
11	M0320	Vented Pipe Plug, 1/2"	1
12	M0394	Spool Shaft-Oil Bath Winch	1
13	M0397	Worm Shaft-Oil Bath Winch	1
14	S0076	Worm, RH, Single Thread	1
15	S0077	Worm Gear, RH Single Thread Winch	1
16	S0214	Spring Pin, 7/16 X 2 1/4	1
17	S0226	Seal, 3/4" Grease-Input	2
18	S0603	Bearing, Thrust 3/4"	1
19	S0059	Machinery Bushing	AR

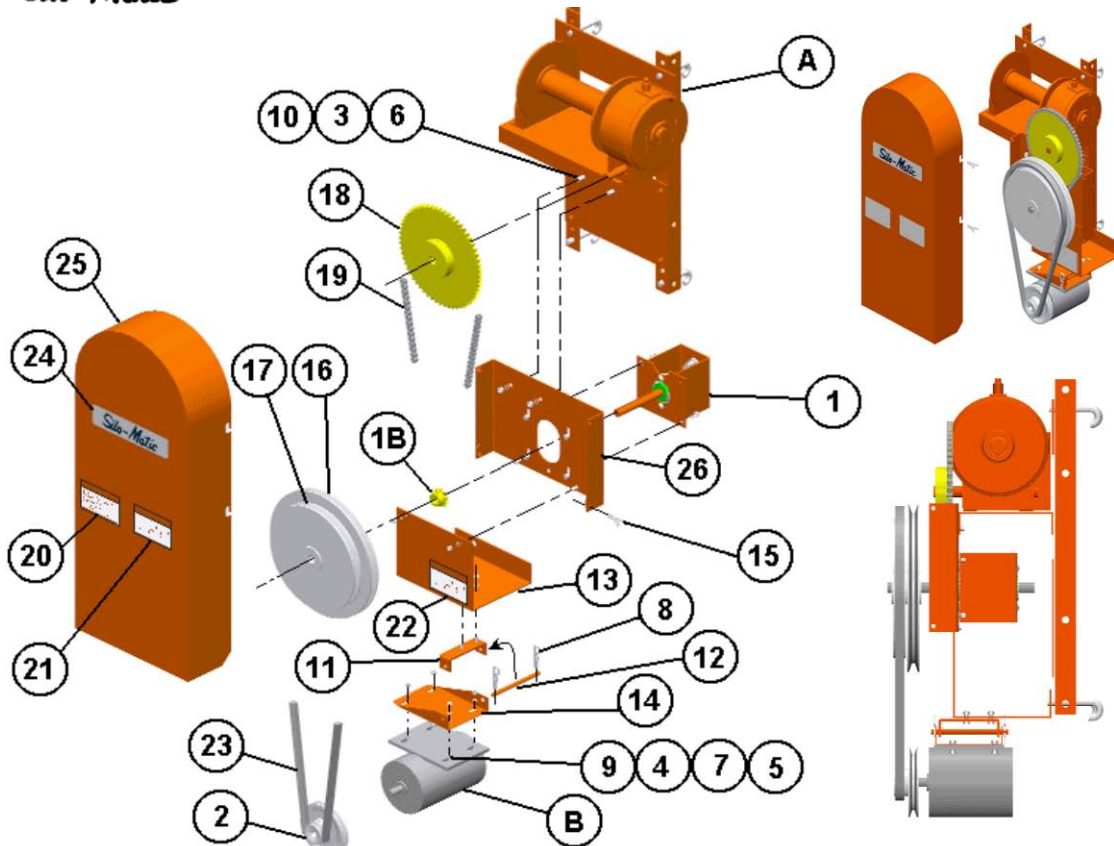
Silo-Matic 1335X OIL BATH WINCH ASSEMBLY



PC#	PART#	DESCRIPTION	QTY.
1	G103323	Washer, Lock 1/2" ZP	6
2	G120378	Nut, 1/2nc Hex ZP	10
3	G180173	HHCS 1/2nc X 1" G5 ZP	6
4	M0081	Bolt, "J" (Winch Mounting)	4
5	A0051	Crank	1
6	A0155	Winch End Bearing Assembly	1
6A	S0034	Bushing, 1-1/4 X 1-1/2 X 1"	1
7	A0156	Winch Gear Box-Oil Bath	1
8	C0051	Winch Spool-Oil Bath Winch	1
9	G102597	Setscrew, 3/8nc X 1" Socket, Knurl Point	1
10	M0387	Main Support Channel-Oil Winch	1
11	M0388	Back Plate-Oil Bath Winch	1
12	S0214	Spring Pin, 7/16" X 2 1/4	1
13	M0324	Winch Plate, Tie	1
14	M0386	Vertical Angle-Oil Bath Winch	2
15	S1195	Decal, Silo-Matic (3.25 X 11.5)	1
16	G102581	Setscrew, 5/16nc X 3/8" Socket, Knurl Point	1
17	A0167	Electric Drill Adapter	1



1356X TWO-SPEED POWER WINCH ATTACHMENT



S0934 #20



S0935 #21

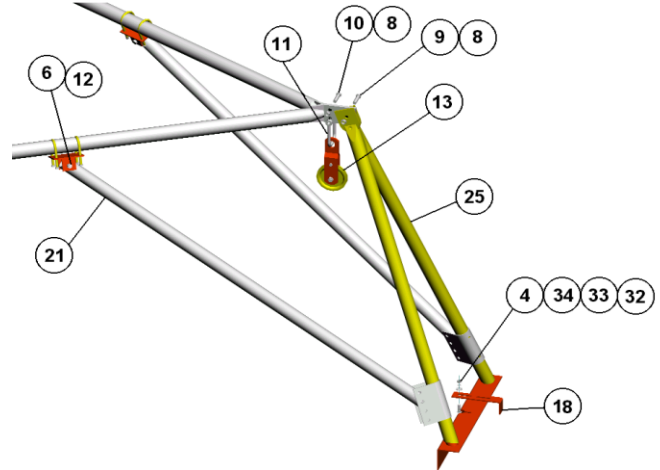
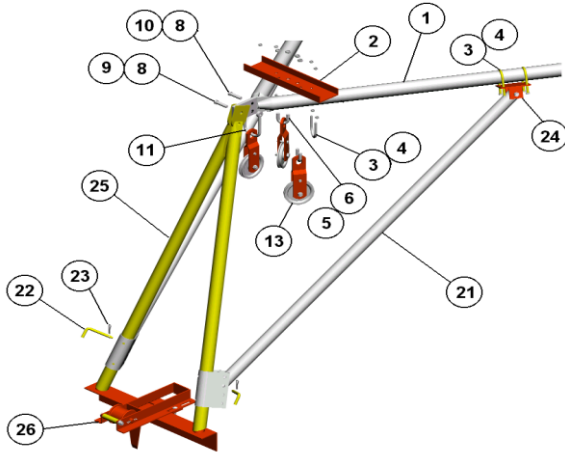


S1035 #22

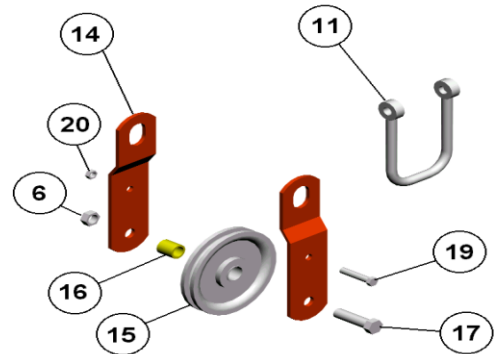
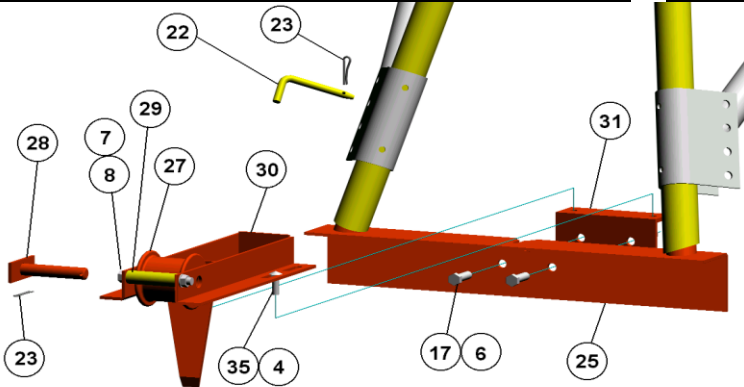
Pc	PART#	DESCRIPTION	QTY
1	A0160	Jackshaft Assembly	1
1B	S0219	40B10 Sprocket, 3/4" Bore	1
2	C0054	Sheave, 2 Groove	1
3	G103321	Washer, Lock 3/8" ZP	2
4	G120214	Washer, 5/16" Lock	12
5	G120376	Nut, 5/16nc Hex	12
6	G120377	Nut, 3/8nc Hex ZP	2
7	G120393	Washer, 5/16" Flat	8
8	G137185	Pin, 1/8" X 1" Cotter	2
9	G180077	Bolt, 5/16nc X 3/4" Hex	8
10	G180120	HHCS 3/8nc X 3/4" G5 ZP	2
11	M1979	Motor Support Bracket	1
12	M1980	Motor Bracket Pin	1
13	M1981	Bracket, 2 Speed Drive	1
14	M1982	Motor Mount Plate	1

PC	PART#	DESCRIPTION	QTY
15	S0108	Thumb Screw, 1/4nc X 3/4"	4
16	S0215	Sheave, 12" OD 3/4" Bore	1
17	S0216	Sheave, 10" OD 3/4" Bore	1
18	S0222	40b60 Sprocket, Bore	1
19	S0223	#40 Roller Chain	1
20	S0934	Decal:"Caution Keep"	1
21	S0935	Decal, Keep Hands ...	1
22	S1035	Decal:Shield Is Off	1
23	S1064	Belt	1
24	S1195	Decal, Silo-Matic	1
25	W0237	Drive Shield W/Decals	1
26	W0238	Mounting Plate	1
A	1335X	Winch Gearbox (Ref.)	
B		Electric Motor (Ref.)	

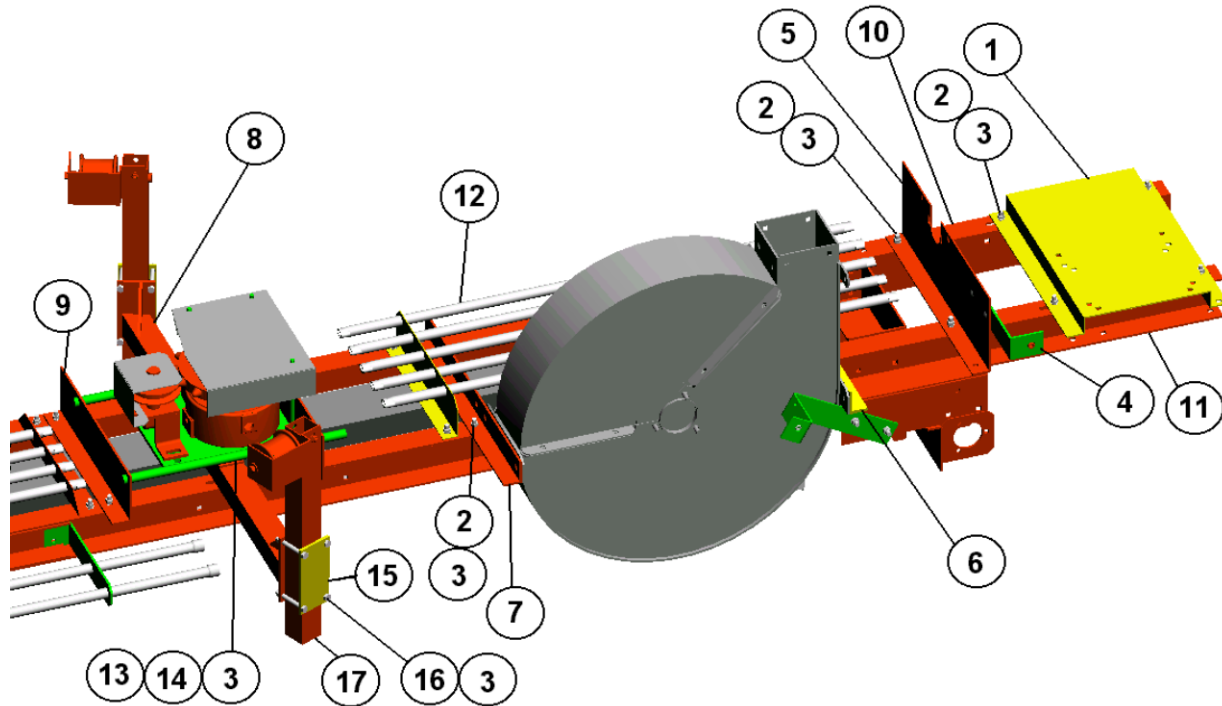
Silo-Matic HEXAPOD TRIANGLE TUBE AND PULLEYS



PC#	PART #	DESCRIPTION	QTY	PC #	PART #	DESCRIPTION	QTY	
1		Triangle Tube:	3	16	M4394	Pulley Bushing	5	
		M4386		For 14' Silo	17	G180179	Bolt, 1/2 X 1-3/4"	3
		M4387		For 16' Silo	18	M4413	Safety Hook	2
		M4388		For 18' Silo	19	G122040	Bolt, 5/16" X 1-1/2' Hex	5
		M4389		For 20' Silo	20	G9415987	Nut, 5/16' Hex Lock	5
		M4390		For 22' Silo	21	M4415	Brace Tube	6
	M4391	For 24' Silo		22	M4317	Pin	6	
2	M4414	Clevis Mount Bracket	1	23	G103409	Cotter Pin, 3/16' X 1-1/2"	7	
3	S0647	U-Bolt 3/8 x 2 x 2-5/8	14	24	W0844	Brace Tube Bracket	6	
4	G9411507	Nut, 3/8" Whiz	36	25	W0845	Hexapod Leg	3	
5	S0774	U-Bolt, 1/2" X 1 X 2-1/8	2	26	A0571	Cable Roller Assembly	1	
6	G9416450	1/2" Hex Locknut	17	27	A0540	Cable Roller(W/S0280)	1	
7	G122513	Bolt, 1/2" X 4" Hex	1		S0280	Oilite Bearing	7	
8	G9415187	Nut, 1/2" Whiz	11	28	W0820	Roller Pin	1	
9	G180181	Bolt, 1/2" X 2" Hex G5	6	29	M4272	Cable Roller Spacer	1	
10	G180175	1/2"x1-1/4" Hex Bolt G5	5	30	W0821	Cable Roller Bracket	1	
11	S0648	Shackle, 7/16 Galv.	3	31	M4271	Angle Bracket	1	
12	G180190	Hex Bolt, 1/2" X 3" G5	6	32	G180122	3/8" X 1" Hex Bolt	2	
13	A0564	Pulley Assembly	5	33	G120394	3/8" Flat Washer	4	
14	M4366	Pulley Clevis	10	34	G103321	Washer, Lock 3/8" Zp	2	
15	A0582	Pulley (With Oilite)	5	35	G120915	3/8" X 1" Carriage Bolt	2	

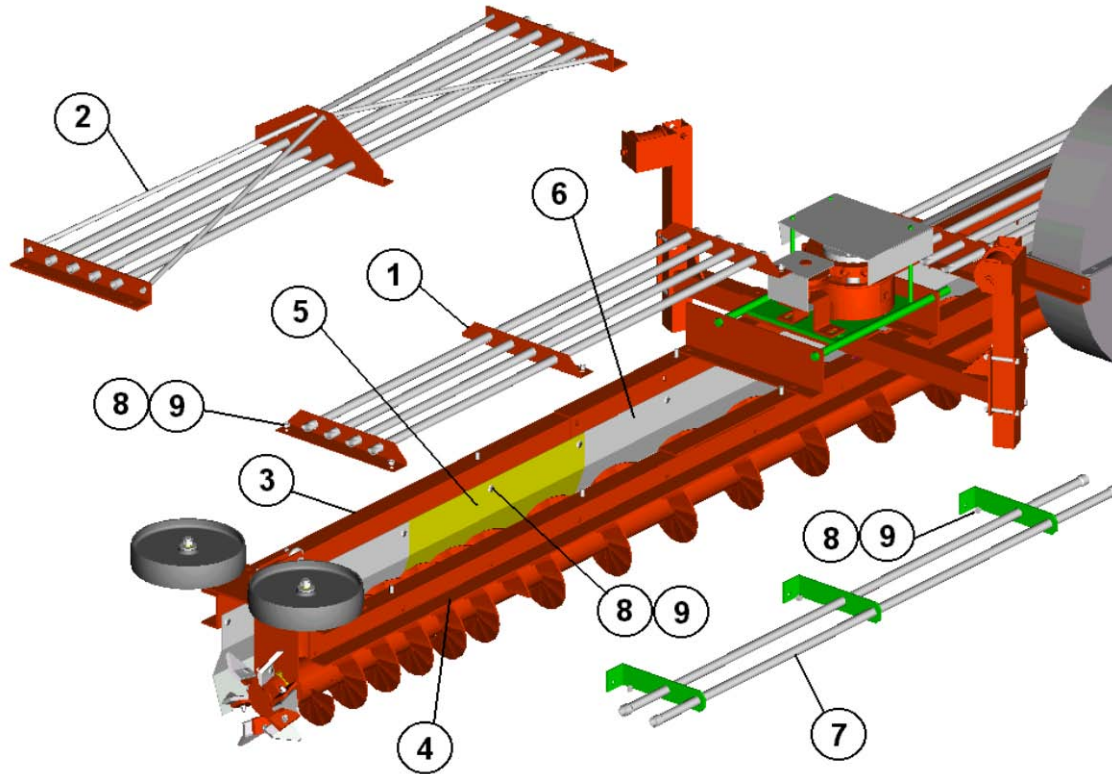


Silo-Matic R-26 FRAME, SUPPORTS & COVERS



PC #	PART	DESCRIPTION	QTY
1	M4294	Motor Mount Plate	1
2	G126227	3/8" X 3/4" Carriage Bolt	23
3	G9411507	3/8" Whiz Nut	23
4	M4283	Rear Belt Guard Bracket	1
5	M4212	Bearing Mounting	1
6	M4293	Rear Mounting Angle	1
7	M4292	Front Mounting Angle	1
8	W0811	Roller Support	1
9	M4353	Ring Drive Slide Supt.	2
10	M4250	Rear Frame Channel	1
11	M4249	Front Frame Channel	1
12	A0632	Grill Cover	1
13	M4217	Reinforcing Pad	2
14	G125973	3/8" X 3-1/4" Hex	2
15	M4218	Clamp Plate	2
16	G122207	3/8" X 3" Hex Bolt	8
17	A0581	Roller Support Assembly	2

Silo-Matic R-26 FRAME EXTENSIONS & AUGER SHIELDS

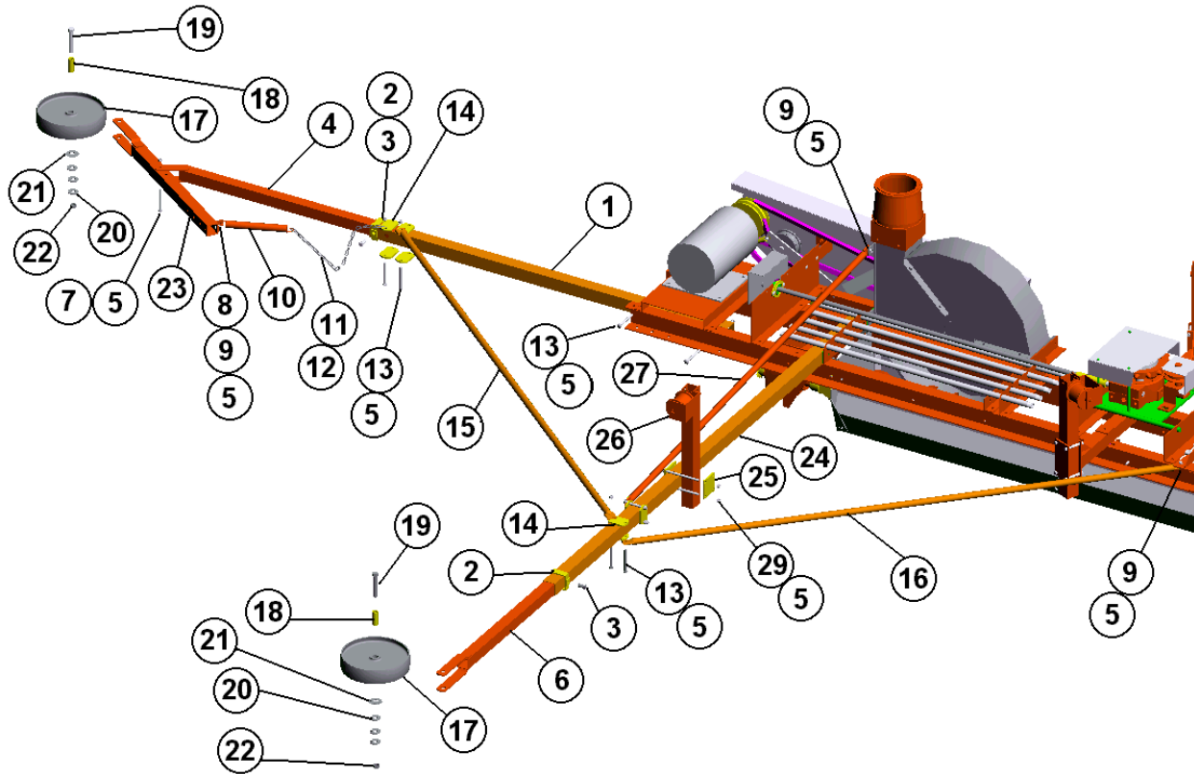


PC	PART	DESCRIPTION	QTY
1	A0634	Outer Grill Cover For 14'	1
	A0653	Outer Grill Cover For 16'	
	A0633	Outer Grill Cover For 18'	
	A0654	Outer Grill Cover For 20'	
2	A0637-22	Truss Rod Ass'y For 22'	1
	A0637-24	Truss Rod Ass'y For 24'	
3	M4253	Rear Exten. Channel 14'	1
	M4255	Rear Exten. Channel 16'	
	M4257	Rear Exten. Channel 18'	
	M4259	Rear Exten. Channel 20'	
	M4261	Rear Exten. Channel 22'	
	M4263	Rear Exten. Channel 24'	
4	M4252	Front Exten. Channel 14'	1
	M4254	Front Exten. Channel 16'	
	M4256	Front Exten. Channel 18'	
	M4258	Front Exten. Channel 20'	
	M4260	Front Exten. Channel 22'	
	M4262	Front Exten. Channel 24'	

PC	PART	DESCRIPTION	QTY
5	M4374	See Chart Below	AR
6	M4375	See Chart Below	AR
7	A0635	Front Bumper Ass'y 14'	1
	A0655	Front Bumper Ass'y 16'	
	A0636	Front Bumper Ass'y 18'	
	A0656	Front Bumper Ass'y 20'	
	A0657	Front Bumper Ass'y 22'	
	A0658	Front Bumper Ass'y 24'	
8	G126227	3/8" x 3/4" Carriage Bolt	AR
9	G9411507	3/8nc Whiz Nut	AR

REAR AUGER SHIELD REQUIREMENTS		
SILO SIZE	# OF 25-1/2" (M4374) SHIELDS NEEDED	# OF 37-1/2" (M4375) SHIELDS NEEDED
14'	2	1
16'	1	2
18'	0	3
20'	2	2
22'	1	3
24'	0	4

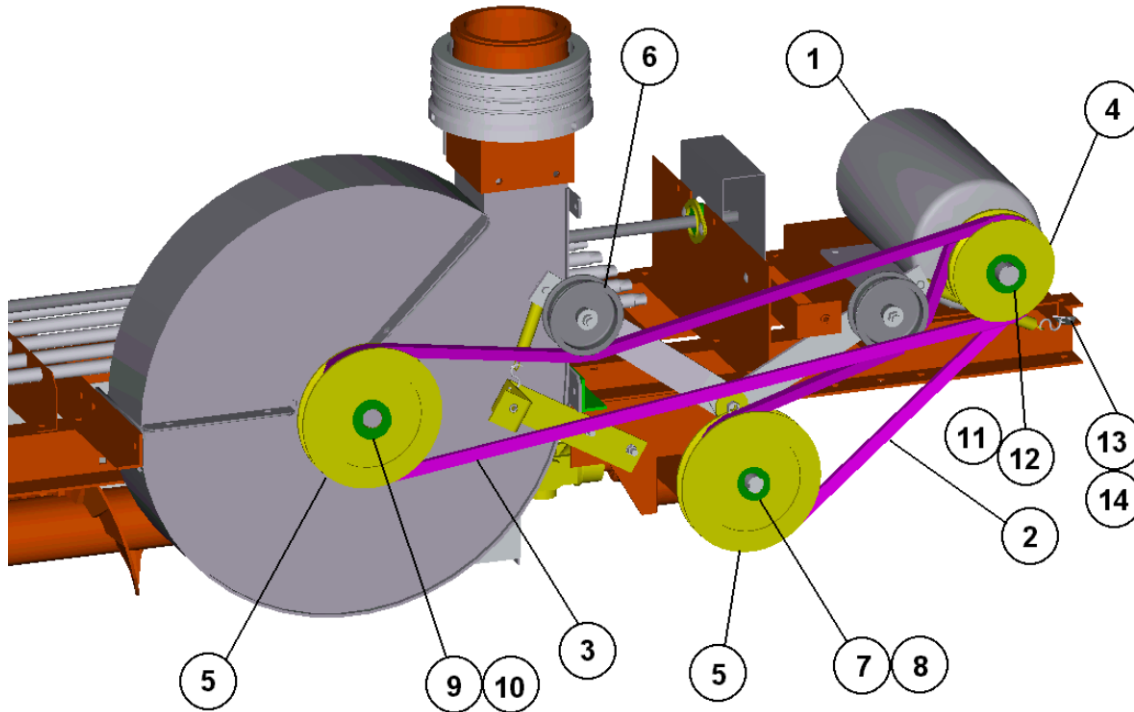
Silo-Matic TENSION AND SPREADER ARMS



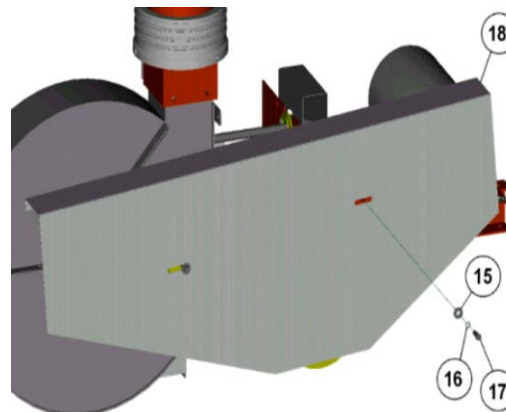
PC	PART #	DESCRIPTION	QTY
1	M4297	36" Tension Arm For 14/16'	1
	M4268	60" Tension Arm For 18/20'	
	M4269	84" Tension Arm For 22/24'	
2	W0807	Lock Collar	2
3	G110450	Setscrew 1/2" X 1"	2
4	W0812	Tension Wheel Extension.	1
5	G9411507	Nut, 3/8nc Whiz	21
6	W0813	Spreader Arm Extension	1
7	G122207	3/8nc X 3" Hex Bolt	9
8	M4216	Spring Clip	1
9	G180120	3/8nc X 3/4" Hex Bolt G5	1
10	S0649	Extension Spring	1
11	M4473	Chain, Tension Wheel	1
12	S0089	"S"-Hook	1
13	G125973	3/8nc X 3-1/2" Hex Bolt	5
14	M4284	Clamp Plate	8
15	M4363	60" Rear Brace Arm 14/16'	1
	M4364	92" Rear Brace Arm 18/20'	
	M4365	120" Rear Brace Arm 22/24'	

P C	PART #	DESCRIPTION	QTY
16	M4360	76" Front Brace Arm 14/16'	1
	M4361	84" Front Brace Arm 18/20'	
	M4362	96" Front Brace Arm 22/24'	
17	M4194	Wall Wheel	2
18	M0078	Wheel Bushing	2
19	G428709	5/8" X 3-1/2" Hex Bolt	2
20	G130999	5/8" Flat Washer	8
21	G131018	7/8" Flat Washer	2
22	G124589	5/8" Hex Nut	2
23	W0814	Tension Wheel Pivot Arm	1
24	M4264	66" Spreader Arm 14'-16'	1
	M4265	90" Spreader Arm 18'-20'	
	M4266	114" Spreader Arm 22'-24'	
25	M4432	Clamp Plate	2
26	A0581	Roller Support	1
27	M4367	Guide Arm Brace	1
28	G9414201	3/8nc Centerlock Nut	1
29	G189306	3/8NC X 5" Hexbolt	4

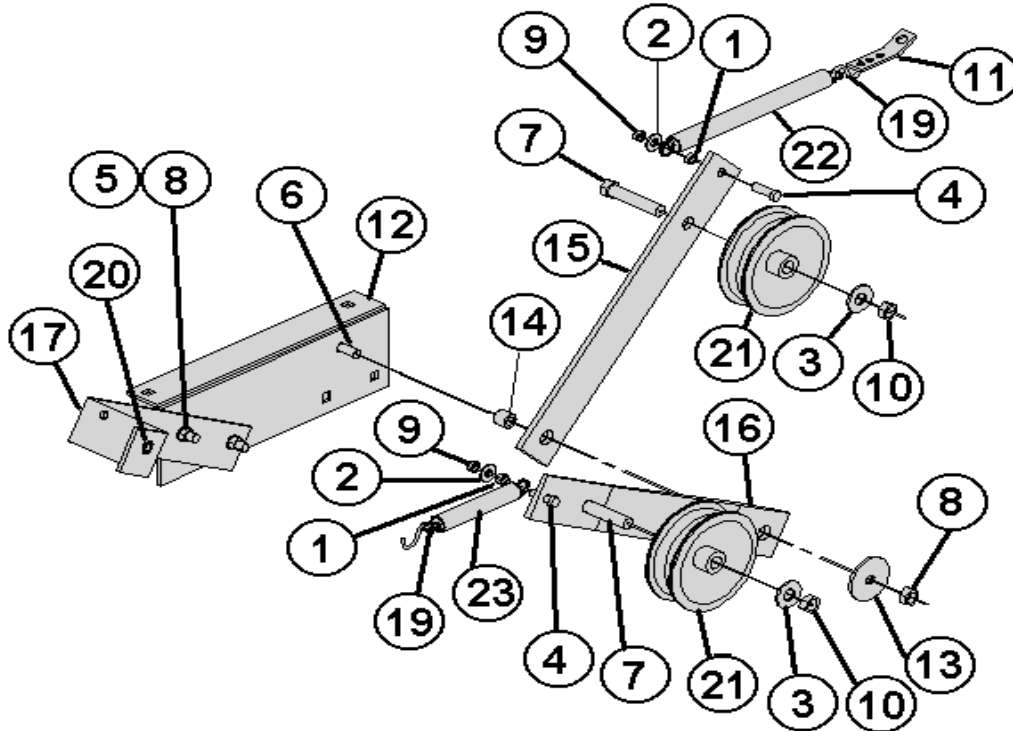
Silo-Matic MOTOR AND BELT DRIVE



PC	PART#	DESCRIPTION	QTY
1		Motor	1
2	S0660	Gearbox Drive Belt B-58	1
3	S0641	Rotor Drive Belt B-97	1
4	S0408	Motor Sheave 2BK62H	1
5	S0315	Bk85H Sheave	2
6	A0560	R26 Belt Tightener Ass'y	1
7	S0263-2	Taper Hub, 1"	1
8	S0690	1/4" X 1/4" X 1-1/2" Key	1
9	S0263-4	Taper Hub, 1-1/4"	1
10	S0689	3/16" X 1/4" X 1-1/2" Key	1
11	S0263-XX	Taper Hub, Specify Bore	1
12	S0689	3/16" X 1/4" X 1-1/2" Key	1
13	G126227	3/8" X 3/4" Carriage Bolt	1
14	G9411507	3/8" Whiz Nut	1
15	G120394	3/8" Flat Washer	2
16	G103321	3/8" Lockwasher	2
17	G120238	3/8" X 1" Hex Bolt	2
18	M4322	Belt Shield	1

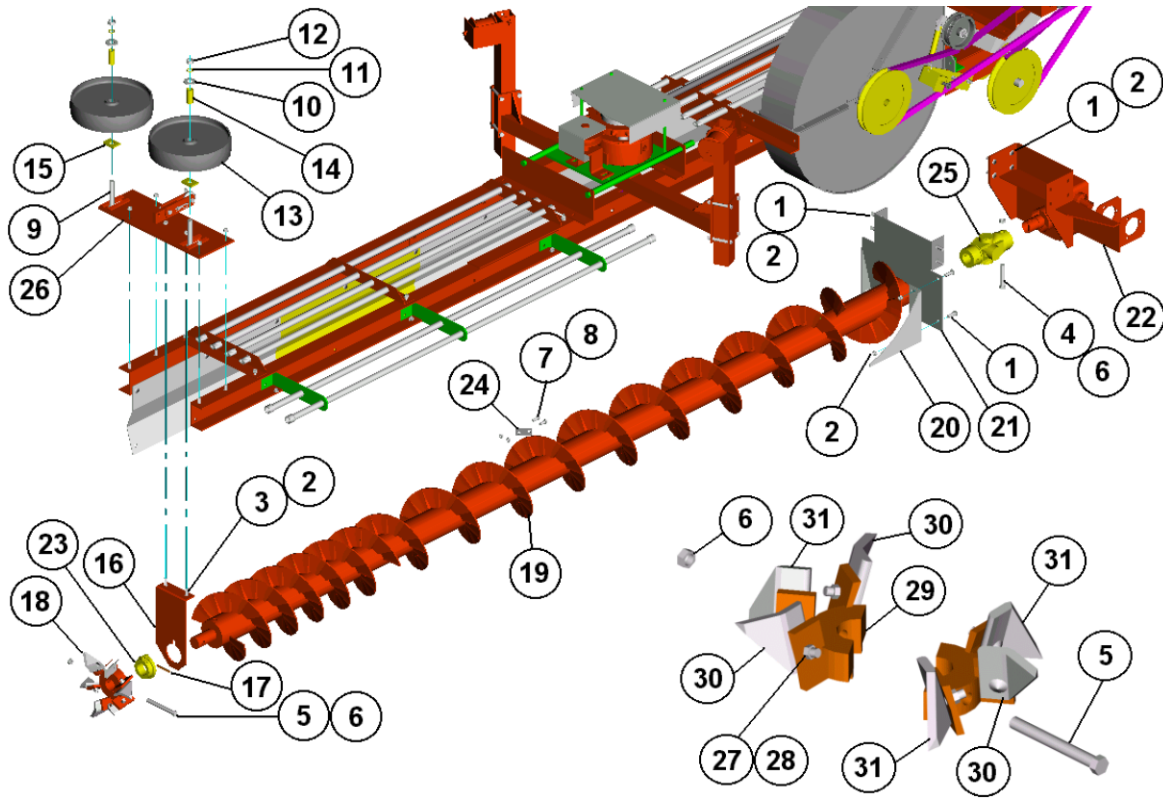


Silo-Matic A0560 R-26 BELT TIGHTENER



PC#	PART#	DESCRIPTION	QTY
1	G120376	Nut, 5/16NC Hex ZP	2
2	G120393	Washer, Flat 5/16" ZP	2
3	G120396	Washer, 1/2" FLAT	2
4	G122017	HHCS 5/16NC x 1" G5 ZP	2
5	G126227	Carriage Bolt, 3/8NC x 3/4" ZP	5
6	G180124	HHCS 3/8NC x 1 1/4" G5 ZP	1
7	G180185	HHCS 1/2NC x 2 1/2" G5 ZP	2
8	G9411507	Nut, 3/8NC Serrated Flange ZP	6
9	G9415987	Nut, 5/16NC Hex Centerlock	2
10	G9416450	Nut, 1/2NC Hex Centerlock	2
11	M2294	Spring Holder - Adj. Belt Tightener	1
12	M4208	Mounting Bearing R26	1
13	M4232	Washer, Belt Tightener-R26	1
14	M4233	Sleeve, Belt Tightener-R26	1
15	M4234	Rear Belt Tension Arm-R26	1
16	M4235	Front Belt Tension Arm-R26	1
17	M4295	Front Belt Guard Support-R26	1
18	M4653	Spacer, Idler Bushing	2
19	S0089	S Hook	2
20	S0440	Nutsert, 3/8NC	1
21	S0792	Pulley Idler	2
22	S0800	Spring, Belt Tightener, Long	1

Silo-Matic R-26 AUGER AND OUTER END

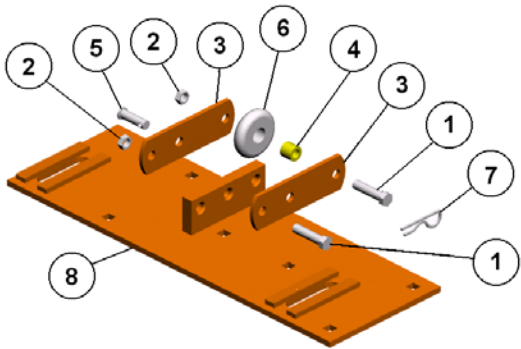


PC	PART#	DESCRIPTION	QTY
1	G126227	Bolt, 3/8NC X 3/4" Crg.	14
2	G9411507	Nut, 3/8NC Whiz	16
3	G120915	Bolt, 3/8NC X 1" Carriage	2
4	G120237	Bolt, 1/2NC X 3" Hex	2
5	G111300	Bolt, 1/2NC X 4-1/2" Hex	1
6	G120378	1/2nc Hex Locknut	3
7	G120854	Bolt, 1/4" X 5/8" Hex	AR
8	G120375	1/4" Hex Nut	AR
9	G126849	5/8nc X 3-1/2" Crg. Bolt	2
10	G130999	5/8 Flat Washer	2
11	G121574	5/8" Lock Washer	2
12	G124589	5/8nc Hex Nut	2
13	M4194	Wall Wheel	2
14	M0078	Wall Wheel Bushing	2
15	M1875	Serrated Washer	2
16	M4248	Auger Bearing Hanger	1
17	G103407	3/16" X 1" Cotter Pin	1
18	A0556	Wall Cleaner Assembly	1
19	W0823	Auger For 14' (82.50")	1
	W0824	Auger For 16' (94.50")	
	W0825	Auger For 18' (106.50")	
	W0826	Auger For 20' (118.50")	
	W0827	Auger For 22' (130.50")	
	W0828	Auger For 24' (142.50")	

PC	PART #	DESCRIPTION	QTY
20	M4344	Rotor Deflector	1
21	M4343	Auger Deflector Plate	1
22	W0935	Gearbox Mounting Plate	1
23	A0032	Bearing Assembly w/Oilite	1
	S0033	Oilite Bearing For A0032	
24	1007R	50 Knife Kit W\ Fasteners	1
25	S0636	Universal Joint	1
26	A0554	Wall Wheel Plate Assembly	1
27	G126402	3/8nc X 1-1/4" G5 Crg. Bolt	6
28	G9414201	3/8nc Hex Centerlock Nut	6
29	C0139	Rear Wall Cleaner (1/2)	2
30	C0206	Wall Cleaner Blade Lh	3
31	C0205	Wall Cleaner Blade RH	3

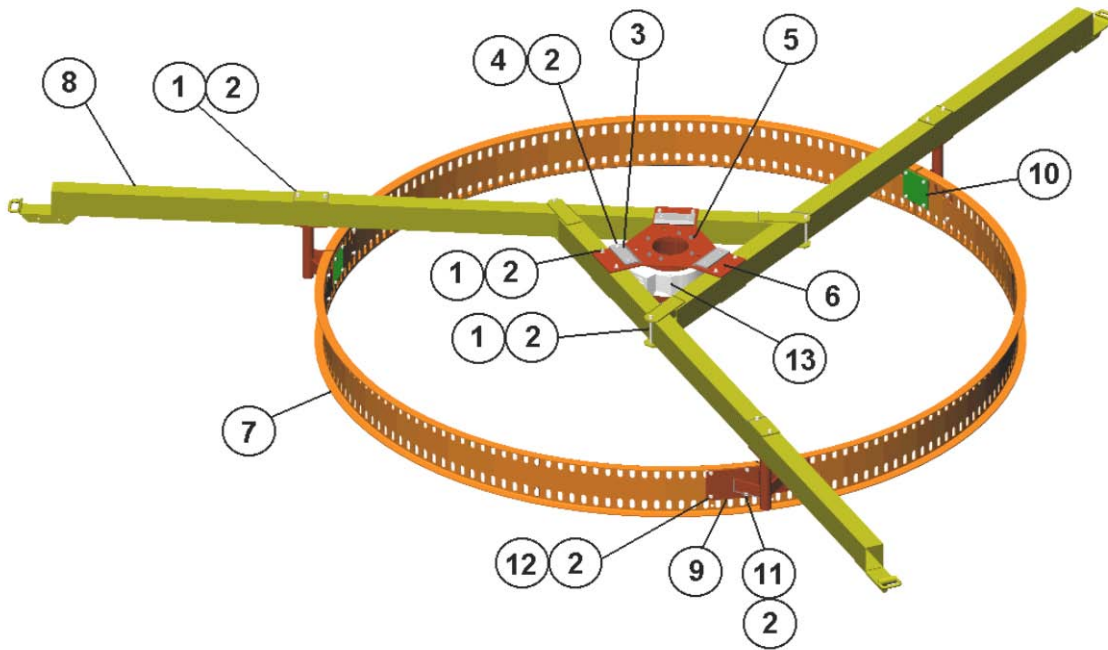
1010R	Wall Cleaner Blade Kit (Knives And Fasteners)
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Silo-Matic A0554 WALL WHEEL PLATE ASSEMBLY



PC	PART#	DESCRIPTION	QTY
1	G120918	HHCS 3/8nc X 1 1/2" G2	2
2	G9414201	3/8" Centerlock Hexnut	2
3	M4215	Strap, Guide Roller	2
4	M4233	Sleeve, Belt Tightener	1
5	M4474	Clevis, Pin 3/8 X 1 1/4	1
6	M4743	Wall Roller	1
7	S0673	Hitch Pin Clip #9	1
8	W0810	Plate, Wall Wheel	1

Silo-Matic R-26 TRI-ARMS AND DRIVE RING

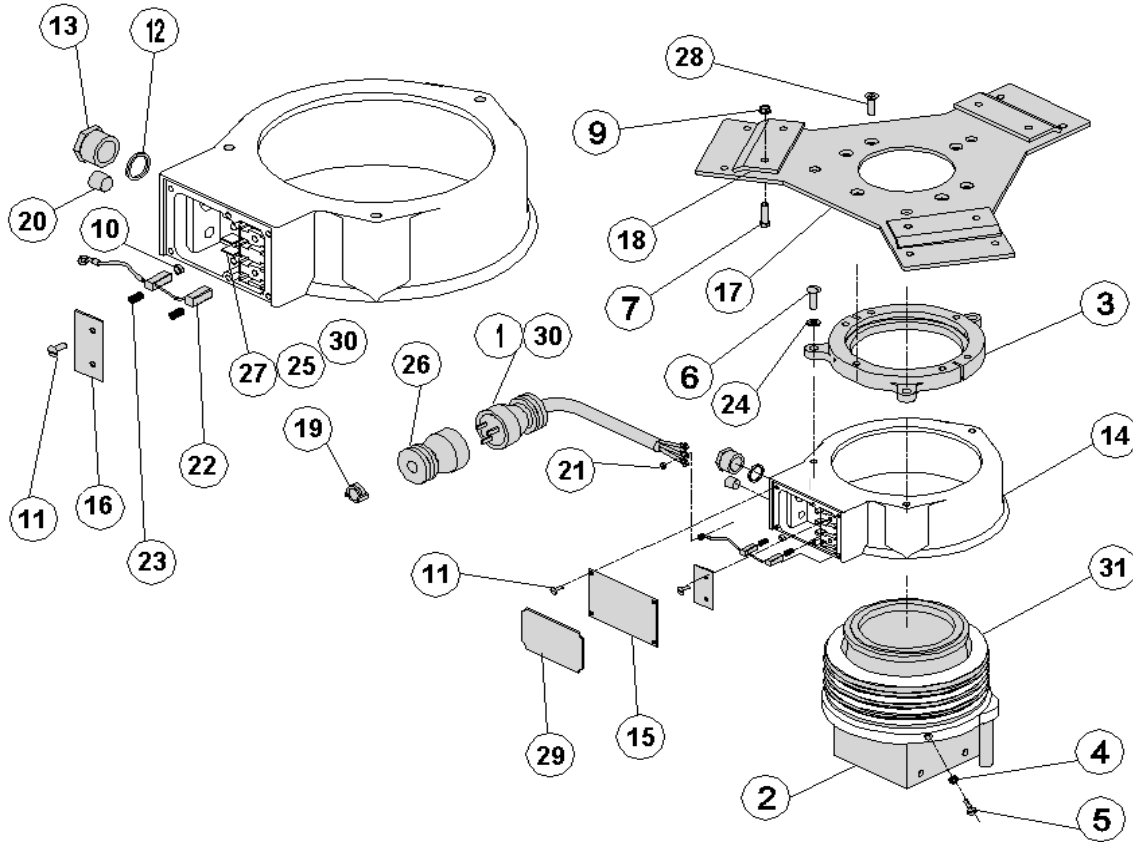


PC	PART #	DESCRIPTION	QTY
1	G126227	Bolt, 3/8nc X 5" Hex Bolt	15
2	G9411507	Nut, 3/8nc Whiz	30
3	M4285	Clamp Plate	3
4	G120433	Bolt, 3/8nc X 1" Hex	6
5	S0654	3/8" x 1" Flat Hd Allen Bolt	6
6	M4246	Tri Arm Plate	1
7	M4247	Drive Ring Segment	3
8	W0847-14	Tri Arm For 14' Unloader	3
	W0847-16	Tri Arm For 16' Unloader	
	W0847-18	Tri Arm For 18' Unloader	

P C	PART #	DESCRIPTION	QTY
8	W0847-20	Tri Arm For 20' Unloader	3
	W0847-22	Tri Arm For 22' Unloader	
	W0847-24	Tri Arm For 24' Unloader	
9	W0805	Ring Connector	3
10	M4198	Stiffener Plate	3
11	G120915	3/8nc X 1" Carriage Bolt	12
12	G126227	3/8nc x 3/4" Carriage Bolt	12
13	A0584	Collector Ring , 1 Phase	1
	A0585	Collector Ring, 3 Phase	

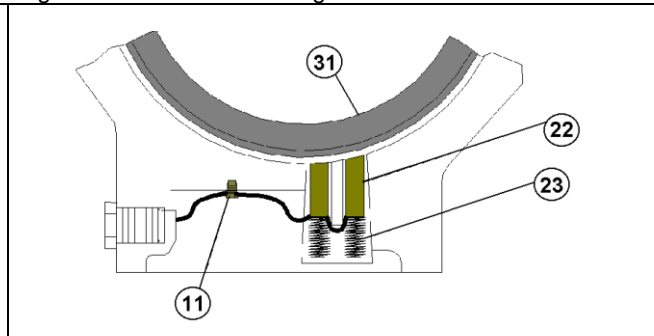
Silo-Matic

A0584 TRANSITION 1 PHASE + A0585 TRANSITION 3 PHASE



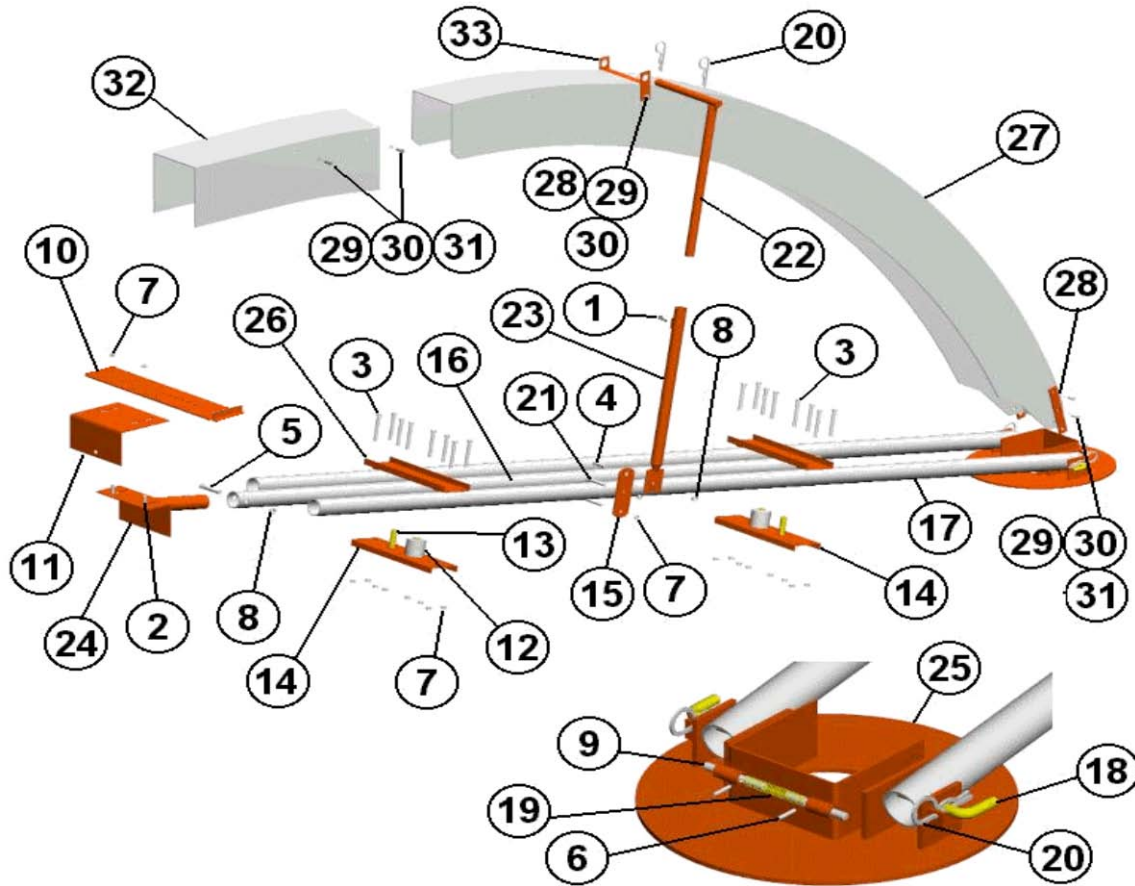
Note: The collector ring for single phase has 3 rings and the collector ring for 3 Phase has 4 copper rings. The Second ring from the bottom is internally grounded and marked "G." Green is the grounded connector throughout the unloader circuit.

PC	PART #	DESCRIPTION	QTY
1	A0713	Cord, Power Assembly, 1ph	1
2	C0010	Lower Transition	1
3	C0012	Support Ring	1
4	G120423	Washer, 1/4" Internal	6
5	G132281	Machscrew 1/4nc x 1-1/4"	3
6	G133167	Machscrew, 3/8nc X 1 1/4	3
7	G180124	HHCS 3/8nc X 1 1/4" G5	6
8	G271291	Grease Fitting, 1/4-28	2
9	G9411507	Nut, 3/8nc Serrated Flange	6
10	G422976	Nut, 1/4nc Hex Jam Brass	3
11	G488325	#10-24 X 5/8 PAN PHIL	6
12	M0254	Rubber Washer 29/32"	1
13	M0255	Alum. Bushing, 1.25"	1
14	M0336	Outer Collector Ring	1
15	M0351	Terminal Cover	1
16	M0352	Brush Cover	1
17	M4246	Tri Arm Plate	1
18	M4285	Clamp Plate, Torque Arm	3
19	S0052	Romex Connector, 1"	1
20	S0088	#8 Cap-Plug	1
21	S0137	Wire Nut, Blue	1



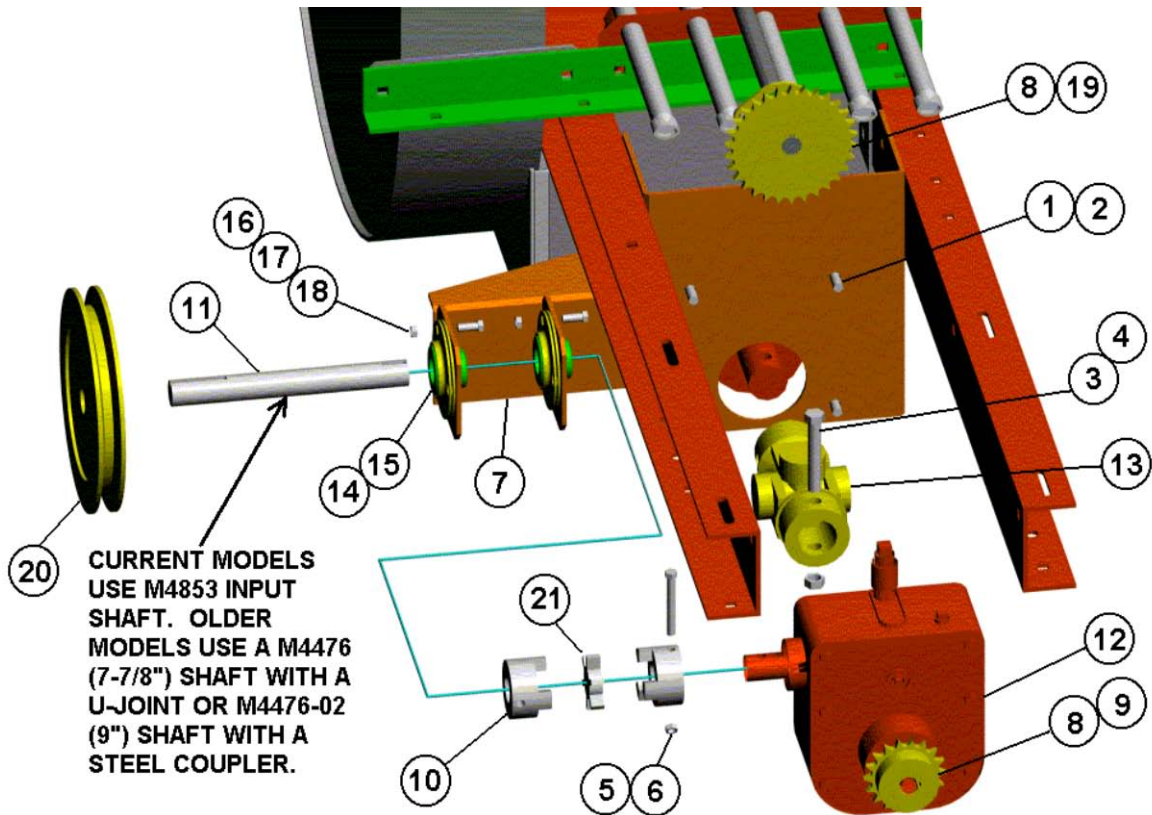
P C	PART #	DESCRIPTION	QTY
22	S0160	Dual Brush	3
23	S0180	Spring, #39	6
24	S0327	Washer, Rubber	3
25	S0388	Wire Connector, Insulated	2
26	S0469	Connector Female 50A/2	1
27	S0576	Insulator Strip	1
28	S0654	Socket Capscrew 3/8nc x 1	6
29	S1188	Decal, Unloader Serial#	1
30	S1204	Decal, Tag Green Ground	1
31	W0090-C	Inner Collector 1 Phase	1
	W0090-D	Inner Collector 3 Phase	1

Silo-Matic GOOSENECK & TORQUE ARM, R-26 RING DRIVE



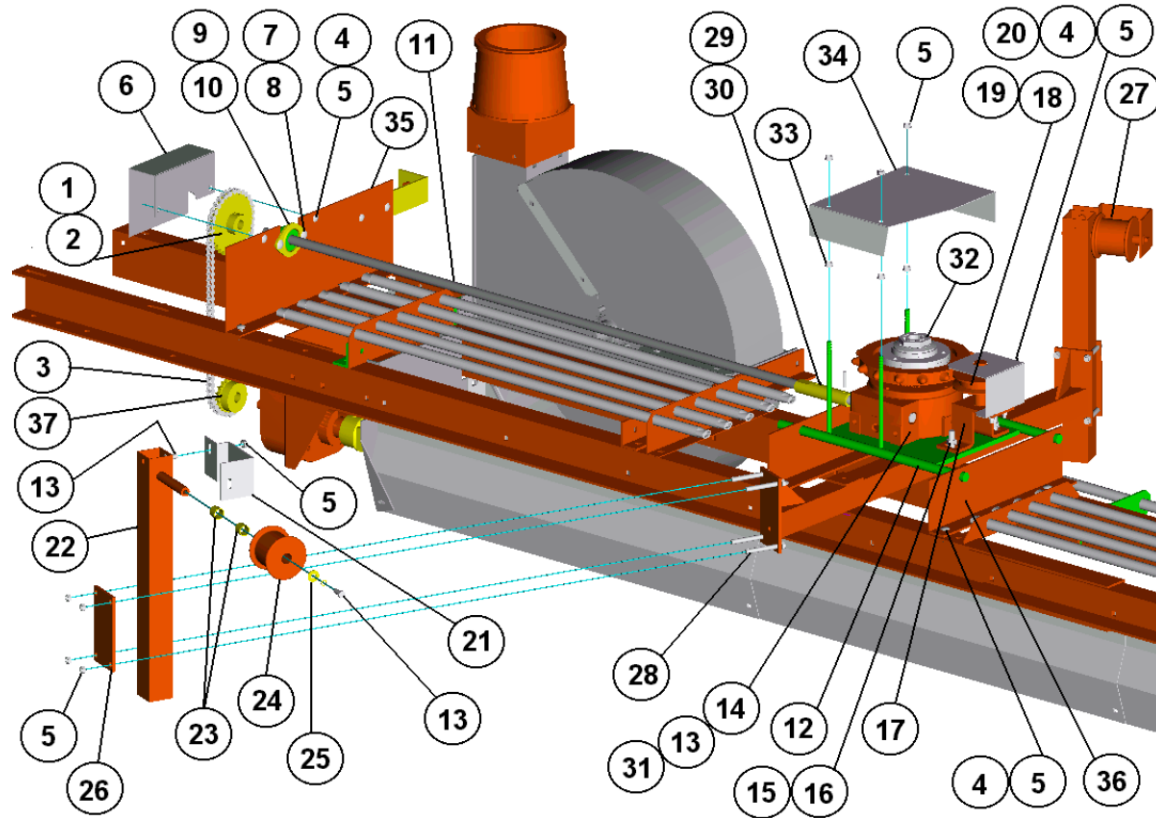
PC	PART#	DESCRIPTION	QTY	P	PART#	DESCRIPTION	QTY
	1	G102894	SetScrew 3/8NC x 3/4" Sq.	1			
	2	G120915	Crg Bolt, 3/8NC x 1" ZP G2	2	17	M4348	Pipe, Torque Arm, 20' 102"
	3	G122207	HHCS 3/8NC x 3" G2 ZP	16		M4349	Pipe, Torque Arm, 22' 114"
	4	G180175	HHCS 1/2NC x 1 1/4" G5	1		M4350	Pipe, Torque Arm, 24' 102"
	5	G180185	HHCS 1/2NC x 2 1/2" G5	1	18	M4393	Pin, Torque Arm Pivot
	6	G273336	Pin, Spring 3/16 x 1 1/4"	2	19	S0411	Spring, #316 Stainless Steel
	7	G9411507	Nut, 3/8NC Serrated Flange	20	20	S0415	Hitch Pin Clip #8
	8	G9416450	Nut, 1/2NC Hex Centerlock	2	21	S0647	U Bolt 3/8 x 2 x 2 5/8"
	9	M1848	Gooseneck Release Pin	2	22	W0265	Upper Support
	10	M2269	Strap, T. A. Extension	1	23	W0267	Adjustable Support
	11	M4211	Adj. Torque Arm Head	1	24	W0809	Adj. Torque Arm Head
	12	M4221	Torque Arm Roller	2	25	W0815	Plate, Torque Arm
	13	M4222	Torque Arm Spacer	4	26	W0854	Upper Torque Arm Bracket
	14	M4223	Torque Arm Bracket	2	27	M0462	Gooseneck Long 16-24'
	15	M4286	Bracket, Gooseneck Support	1	28	M1863	Gooseneck Pivot Bracket
	16a	M4345-14	66" Center Pipe 14/16'	1	29	G125655	5/16NC x 3/4" Mach. Screw
	16b	M4346	78" Center Pipe 18-24'	1	30	G120214	Washer, Lock 5/16" ZP
17	M4345-14	66" Torque Arm Pipe 14'	2	31	G120376	Nut, 5/16NC Hex ZP	
	M4346	78" Torque Arm Pipe 16'		32	M0492-36	Gooseneck Extension 36"	
	M4347	90" Torque Arm Pipe 18'		33	W0264	Support Adapter	

Silo-Matic R-26 AUGER DRIVE



PC#	PART #	DESCRIPTION	QTY
1	G120233	Bolt, 3/8nc X 1" Hex	4
2	G103321	3/8" Lock Washer	4
3	G120237	Bolt, 1/2nc X 3" Hex	2
4	G120378	1/2nc Hex Locknut	3
5	G122077	Bolt, 5/16" X 2-1/2" Hex	2
6	G442825	5/16nc Hex Locknut	2
7	W0935	Gearbox Mounting Plate	1
8	G106751	#9 Woodruff Key	2
9	S0645	Sprocket 40b18	1
10	A0694	Love Joy Coupler	1
11	M4853	Input Shaft (See Note)	1
12	A0559	Auger Gearbox	1
13	S0636	Universal Joint	1
14	S0009	Bearing Flange	4
15	S0010	1" Bearing	2
16	G126216	5/16" X 3/4" Hex Bolt	2
17	G120214	5/16" Lock Washer	6
18	G120376	5/16" Hex Nut	6
19	S0220	Sprocket 40b30	1
20	S0315	Bk85h Sheave	1
21	S0872	Insert For Lovejoy Coupler	1

Silo-Matic RING DRIVE & LINE SHAFT ASSEMBLY



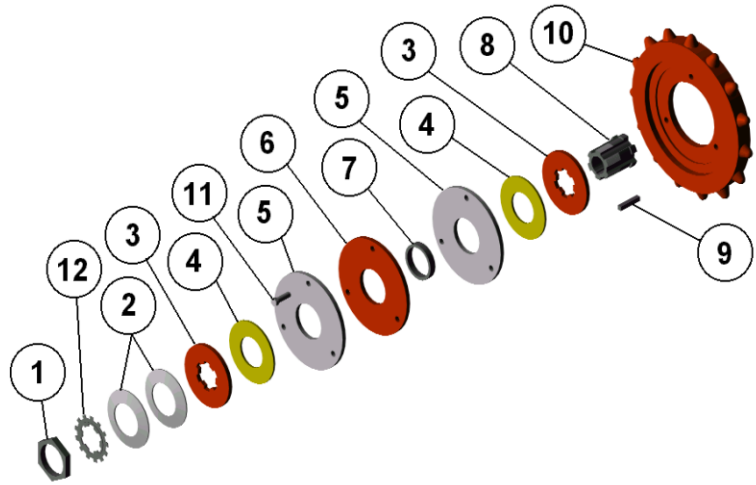
PC	PART #	DESCRIPTION	QTY
1	S0220	Sprocket 40B30	1
2	G106751	#9 Woodruff Key	1
3	M4401	Roller Chain #40	1
4	G126227	Bolt, 3/8" X 3/4" Carriage	2
5	G9411507	Nut, 3/8" Whiz	1
6	M4282	Chain Shield	1
7	G126216	Bolt 5/16" X 3/4"	2
8	G273802	Nut, 5/16" Whiz	2
9	S0218	Bearing Flange	2
10	S0217	Bearing Assembly	1
11	M4304	Line Shaft	1
12	W0808	Ring Gear Box Mounting	1
13	G122119	Bolt, 3/8nc X 3/4" Hex	10
14	G103321	3/8" Lock Washer	4
15	G109136	1/2nc X 1-1/2" Carriage Bolt	2
16	G9415187	Nut, 1/2nc Whiz	2
17	W0831	Spindle	1
18	S0035	Oilite Bearing	1
19	C0209	Snubber Roller	1

P C	PART #	DESCRIPTION	QTY
20	M4400	Snubber Roller Shield	1
21	M4288	Roller Guard	2
22	W0806	Vertical Roller Support	2
23	S0280	Oilite Bearing	2
24	A0540	Ring Roller With Oilite	2
25	G120394	Washer, 3/8" Flat	2
26	M4218	Roller Support Clamp	2
27	A0581	Roller Support	2
28	G122207	3/8nc X 3" Hex Bolt	8
29	M4302	Slide Sleeve	1
30	G454565	Pin, 1/4" X 1-1/4"	1
31	A0562	Ring Drive Gearbox	1
32	A0586	Sprocket & Clutch	1
33	G120377	3/8nc Hex Nut	3
34	M4399	Ring Drive Shield	1
35	M4212	Bearing Mounting	1
36	M4353	Ring Drive Slide Support	2
37	S0645	40B18 Sprocket	1

Silo-Matic

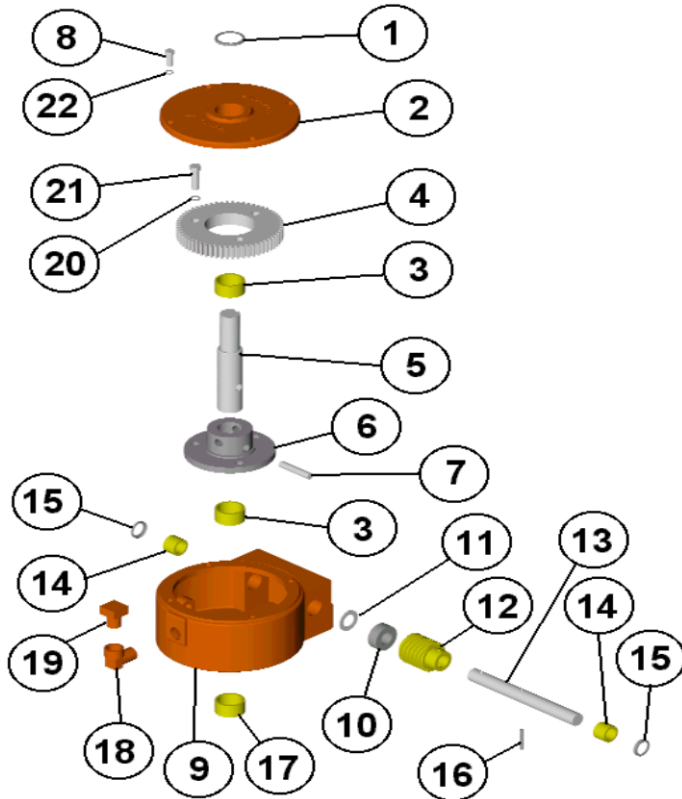
A0586 SLIP CLUTCH ASSEMBLY

PC	PART #	DESCRIPTION	QTY
1	S0691	Adjuster Nut	1
2	S0646	Belleville Spring	2
3	S0692	Pressure Plate	2
4	S0693	Friction Disk	2
5	M4430	SS Clutch Plate	2
6	M4431	HR Clutch Plate	1
7	M4845	Spacer, Slip Clutch	1
8	S0695	Slip Clutch Hub	1
9	S0690	Key, 1/4" X 1/4" X 1-1/2"	1
10	C0207	Drive Sprocket	1
11	G122017	Bolt, 5/16nc X 1"	3
12	S0691-1	Locking Ring	1



Silo-Matic

A0562 RING BOX ASSEMBLY



PC	PART #	DESCRIPTION	QTY
1	S0256	1-1/4" Oil Seal	1
2	A0575	Cover Assembly	1
3	S0652	1-1/2" OD Bearing Sleeve	2
4	S0650	Worm Gear	1
5	M4328	Output Shaft	1
6	C0053	Gear Hub	1
7	S0214	Spring Pin, 7/16 X 2 1/4	1
8	G122017	5/16nc X 3/4" Hex Bolt	4
9	A0574	Gear Housing	1
10	S0603	Thrust Bearing	1
11	S0059	Machinery Bushing	AR
12	S0651	Worm	1
13	M4303	Input Shaft	1
14	S0225	Sleeve Bearing	2
15	S0226	3/4" Grease Seal	2
16	G273336	3/16" X 1-1/4" Spring Pin	1
17	S0653	Expansion Plug	1
18	S0696	Street El 1/2npt X 1-1/2	1
19	M0320	Vented Pipe Plug, 1/2npt	1
20	G103321	Washer, 3/8" Lock	3
21	G122145	Bolt, 3/8nc X 1-1/4"	3
22	G120214	Washer, 5/16" Hex Lock	4

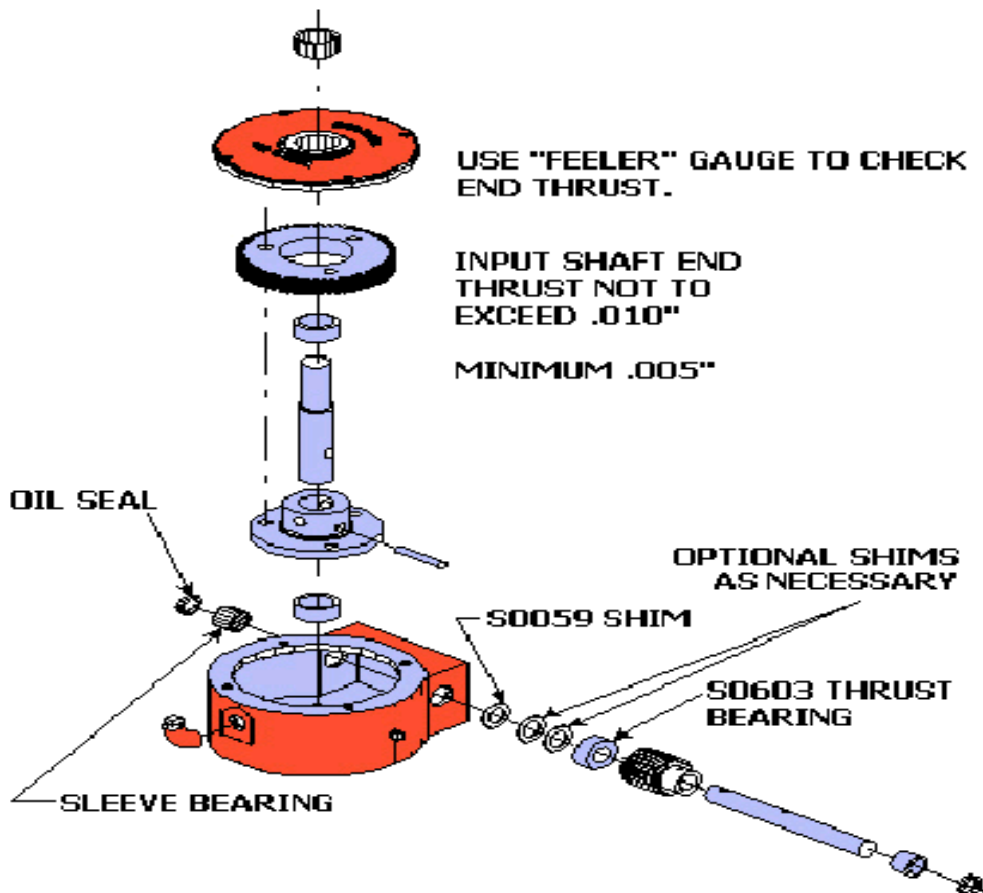
SEE SERVICE BULLETIN ON NEXT PAGE FOR SPECIAL INSTRUCTIONS WHEN REBUILDING.

Bulletin 01-99

January 25, 1999

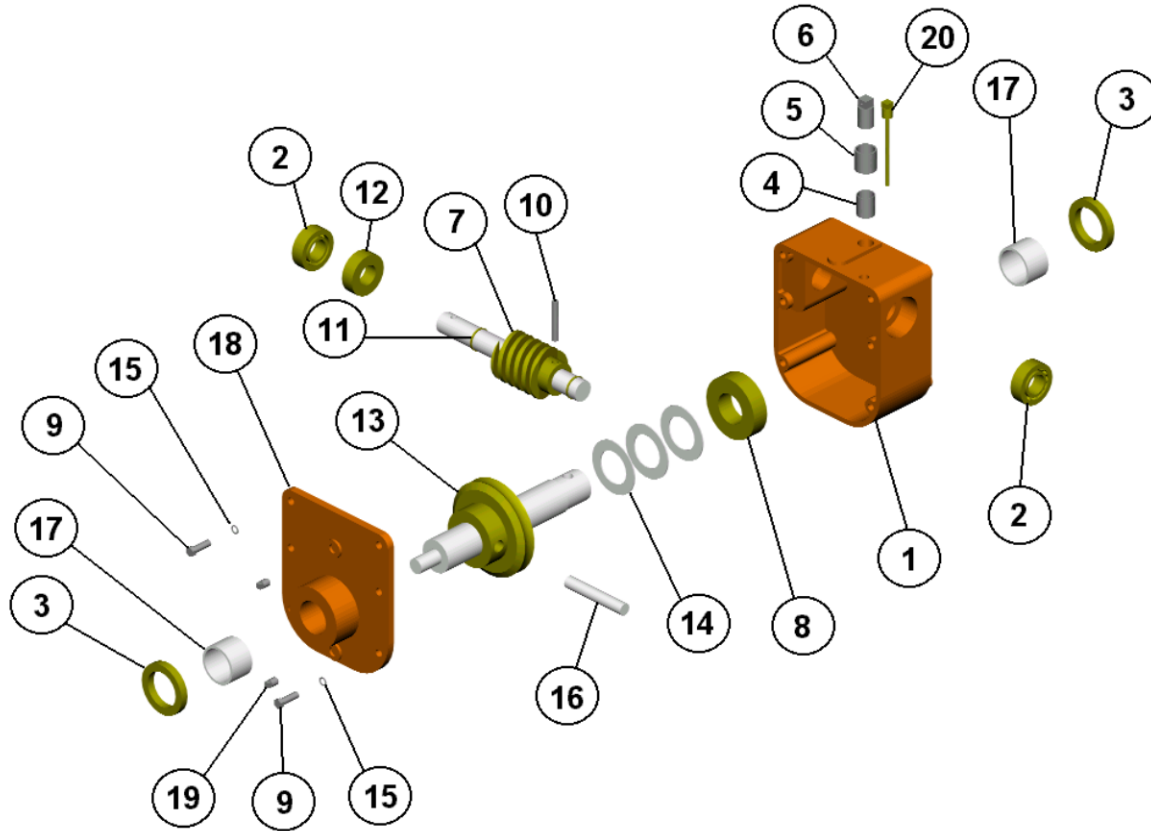
REBUILDING A0562 GEARBOX TO FACTORY SPECIFICATIONS

It has been reported that A0562 Gearboxes that have been rebuilt in the field have been having S0650 Gears and S0651 Worm gears fail prematurely. Upon inspection of certain gearboxes it has been determined that end thrust on the input shaft was excessive after rebuild. In rebuilding A0580 Worm & Shaft Assembly it may be necessary to add or remove S0059 shims between S0603 Thrust bearings and housing to achieve proper end thrust. Input shaft end thrust should not exceed .010" but at least be .005" as measured with a "feeler" gauge.



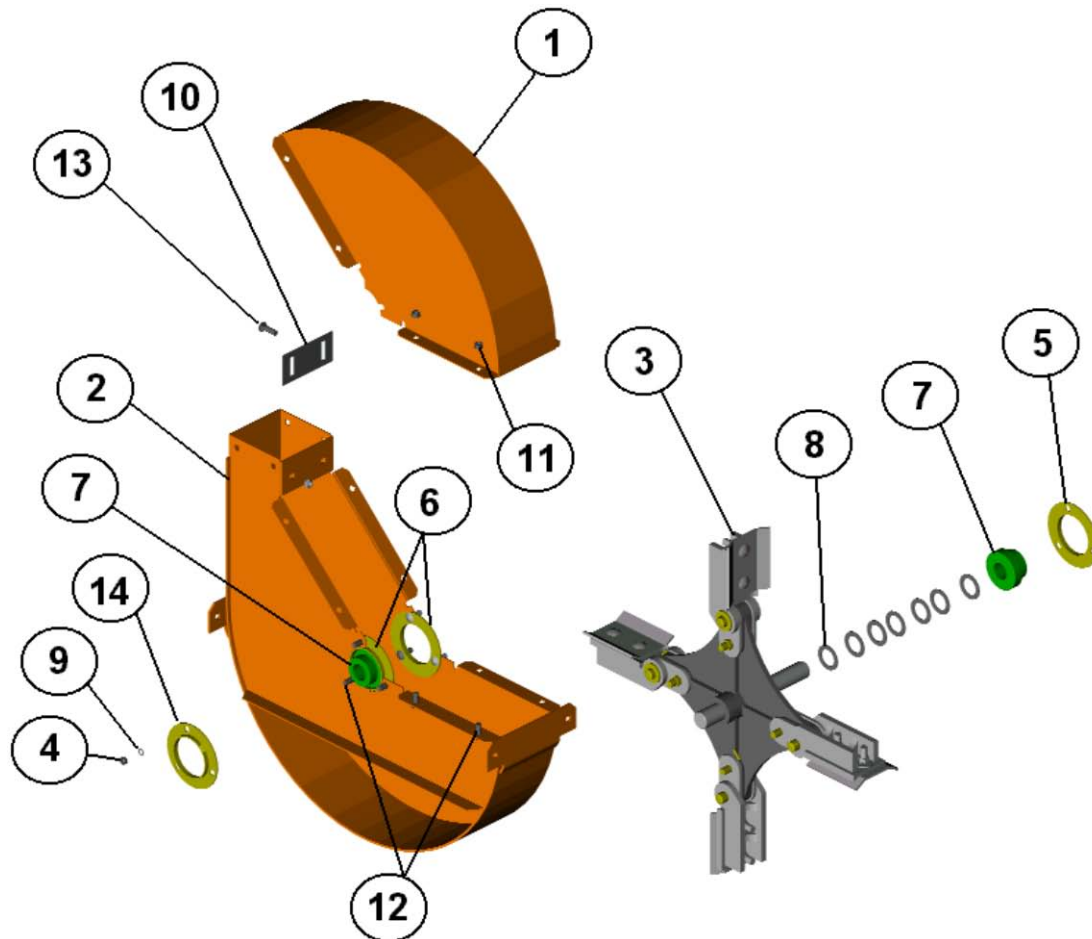
Valesco Manufacturing, Inc. | 7857 N 1100 E | Loogootee, IN 47553 | (812) 636-6001

Silo-Matic R-26 AUGER GEARBOX



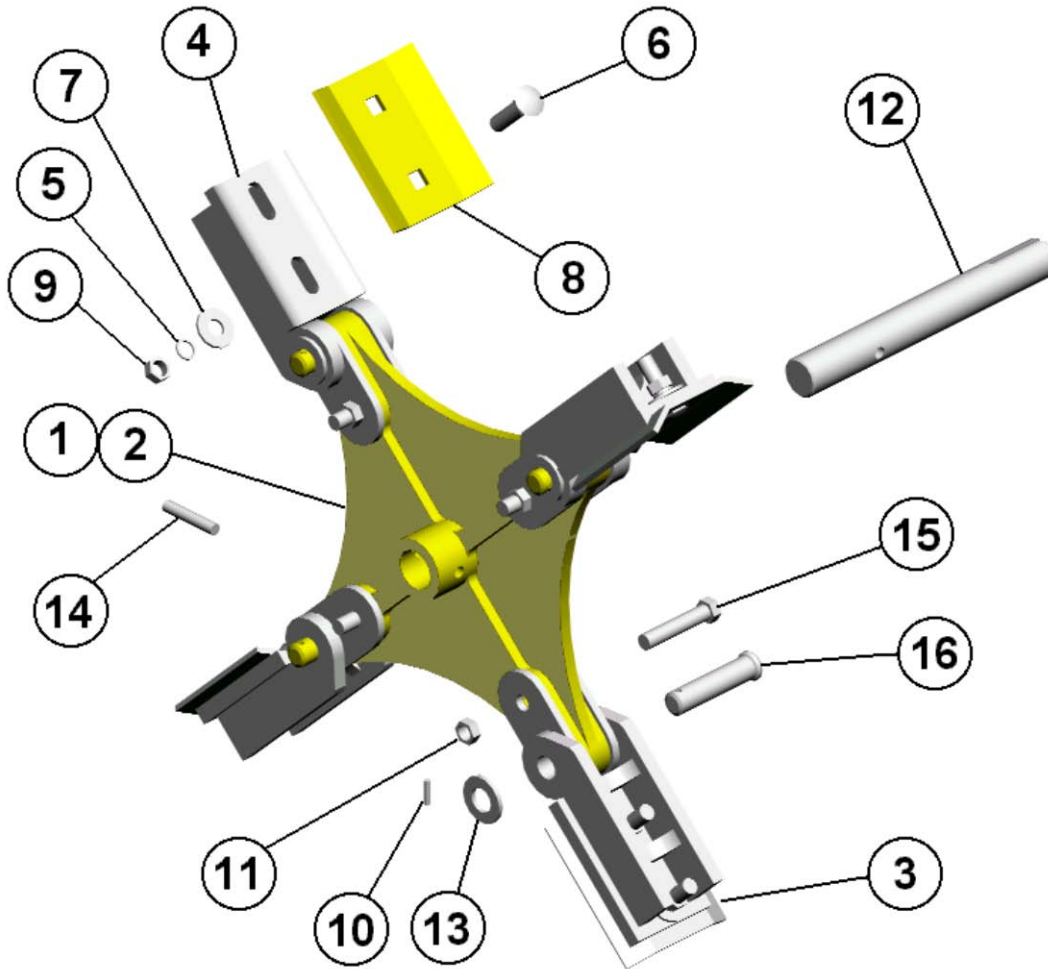
PC	PART #	DESCRIPTION	QTY	P C	PART #	DESCRIPTION	QTY
1	A0576	Housing, Bearing+Seals	1	11	S0684	"O"-Ring	2
2	S0655	Ball Bearing	2	12	S0040	Thrust Bearing	1
3	S0036	Grease Seal 1-5/8"	2	13	A0578	Worm Gear Shaft Ass'y	1
4	S0686	1/2NPT Nipple	1	14	S0987	Shim	3
5	S0687	1/2NPT Coupling	1	15	G103320	5/16" Lock Washer	6
6	M0320	1/2NPT Vented Pipe Plug	1	16	G221386	#9 X 3-1/2" Taper Pin	1
7	A0579	Worm Shaft Assembly	1	17	S0032	1-5/8" Bushing	2
8	S0039	Thrust Bearing	1	18	A0577	Cover, Gear Box	1
9	G122017	5/16nc X 1" Hex Bolt	6	19	G444567	Pipe Plug, 1/4NPT	2
10	G103627	#6 X 1-3/4" Taper Pin	1	20	W0892	Dipstick Weldment	1

Silo-Matic A0704/5159X R-26 ROTOR ASSEMBLY



PC#	PART #	DESCRIPTION	QTY
1	W0829 W0960	Upper Rotor Housing Stainless Steel Upper Rotor Housing Combination Steel	1
2	W0830 W0959	Lower Rotor Housing Stainless Steel Lower Rotor Housing Combination Steel	1
3	A0551	Rotor & Pawl Assembly	1
4	G120377	Nut, 3/8nc Hex ZP	6
5	S0787	Flange W/ Grease Fitting	1
6	S0503	Bearing Flange	2
7	S0502	Bearing Assembly	2
8	S0061	14 Gauge Washer	6
9	G103321	3/8" Lock Washer	10
10	M4320	Shear Plate	1
11	G9411507	3/8nc Whiz Nut	10
12	G126228	Carriage Bolt, 3/8nc X 3/4" SS	10
13	G120915-S	Carriage Bolt, 3/8nc X 1 Stainless Steel	6
14	S0787-01	Flange W/ 45 Degree Grease Fitting	1

Silo-Matic A0551 R-26 ROTOR ASSEMBLY



PC	PART#	DESCRIPTION	QTY.
1	C0202	Rotor 26", 4 Pawl	1
2	S0476	Bushing, .760 x .879 x 15/16	4
3	A0553	Pawl Assembly, 26" 4 pawl	4
4	C0208	Pawl Casting	1
5	G103323	Washer, Lock 1/2" ZP	2
6	G109136	Carriage Bolt, 1/2 x 1 1/2 Stainless	2
7	G120396	Washer, 1/2" Flat USS ZP	2
8	M4281	Pawl Face	1
9	S0857	Nut, 1/2NC Hex Stainless Steel	2
10	G273336	Pin, Spring 3/16 x 1 1/4"	4
11	G9416450	Nut, 1/2NC Hex Centerlock	4
12	M4276	Shaft, Rotor	1
13	S0059	Bushing, Machine 3/4" x 18 Gauge Narrow	4
14	S0224	Pin, Spring 3/8 x 2"	1
15	S0804-01	HHCS 1/2NCx 2 1/2 Stainless Steel	4
16	S1056	Pin, Pawl 3/4 x 3-1/16	4