8” CUSTOM-BUILT AUGER

OWNER’S & OPERATOR’S MANUAL

Effective January 25, 2013 Publication No. 1023203

IMPORTANT! For units using the 3:1 Reducer Gearbox.
The gear box is shipped Without Oil.
Oil must be added before auger operation.
Refer to the Assembly Section in this manual.

Hutchinson | Mayrath
P.O. Box 629 • Clay Center, KS. USA 67432
P 785.632.2161 • F 785.632.5964 • TF 800.523.6993
hutchinson-mayrath.com
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Service Charge: A service charge will be assessed for all past due balances as permitted by state law not to exceed 1-1/2% per month.

Minimum Order: Processing and handling costs necessitate a minimum charge of $15.00 net on all orders.

Back Orders: Back orders will be shipped as they become available. Contact Hutchinson, Mayrath Customer Service for alternative shipping options or if cancellation is desired.

Damaged Goods: It is the consignee’s responsibility to check all shipments thoroughly upon receipt of goods. If any damage is discovered, it must be noted on the freight bill of lading before signing. The consignee must make necessary claims against the respective freight line. All damage claims must be submitted within 30 days of delivery receipt.

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Modifications: It is the policy of Hutchinson, Mayrath to improve its product whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring the obligation to make such changes, improvements and modifications on any equipment sold previously.

Limited Warranty: (a) For a period of (1) year after receipt of goods by the original consumer buyer, Hutchinson, Mayrath will supply free of charge replacement parts for parts that prove defective in workmanship or material. Defective parts must be returned freight prepaid to a specified Hutchinson, Mayrath location. Only Hutchinson, Mayrath original repair parts may be used for warranty repairs.

(b) This limited warranty does not extend to parts designed to wear in normal operation and be replaced periodically; or to damage caused by negligence, accident, abuse or improper installation or operation.

(c) GOODS NOT MANUFACTURED BY HUTCHINSON, MAYRATH CARRY ONLY THE MANUFACTURER’S WARRANTY.

(d) THIS UNDERTAKING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

FAILURE TO FOLLOW THE INSTRUCTIONS CONTAINED IN THE OWNER’S & OPERATOR’S MANUALS AND THE ITEMS LISTED BELOW WILL RESULT IN THE VOIDING OF THIS LIMITED WARRANTY.

(1) Improper assembly, including failure to properly install all safety equipment.

(2) Improper installation.

(3) Unauthorized alternations of goods.

(4) Goods operated when obviously in need of repair.

(5) Use of unauthorized repair parts.

(6) Irresponsible operation.

(7) Used to handle materials other than free flowing, nonabrasive and dry materials, as intended.

(8) Damaged through abusive use or accident.

Limitation of Liability: BUYER AGREES THAT IN NO EVENT SHALL HUTCHINSON, MAYRATH HAVE LIABILITY FOR DIRECT DAMAGES IN EXCESS OF THE CONTRACT PRICE OF THE GOODS IN RESPECT OF WHICH CLAIM IS MADE. BUYER FURTHER AGREES THAT IN NO EVENT SHALL HUTCHINSON, MAYRATH ON ANY CLAIM OF ANY KIND HAVE LIABILITY FOR LOSS OF USE, LOSS OF PROFITS, OR FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.
SAFETY

GENERAL SAFETY STATEMENT

This manual was written with the safety of the operator and others who work with the equipment as our prime concern. The instructions presented will help the reader learn SAFE day to day work practices. We want you as our partner in safety.

It is your responsibility as an owner, operator or supervisor to know what specific safety requirements and precautions exist and to make these known to all other personnel working with the equipment or in the area, so that they too may safely perform their duties and avoid any potentially hazardous situations.

Please remember safety equipment provides important protection for persons around a grain handling system that is in operation. Be sure ALL safety shields and protection devices are installed and properly maintained. If any shields or guards are damaged or missing, contact your dealer to obtain the correct items.

Avoid any alterations of the equipment. Such alterations may create a dangerous situation where serious injury or death may occur.

SAFETY ALERT SYMBOL

The safety symbol shown is used throughout this manual to alert you to information about unsafe actions or situations, and will be followed by the word DANGER, WARNING, or CAUTION.

DANGER - Indicates immediate hazards that may result in severe injury or death. WARNING - Indicates unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage. CAUTION - Indicates unsafe actions or situations that may cause injury, and/or minor property damage.

Watch this symbol - it points out important safety precautions. It means - ATTENTION! Become alert! Your safety and the safety of others is involved! Read the message that follows the symbol when a warning is given, be alert to the possibility of personal injury or death.

SAFETY DECALS

Check to ensure all Safety Decals are present and in good condition. If a decal cannot easily be read for any reason, or has been painted over, replace the decal immediately. Safety decals are offered free of charge, and can be ordered through your Hutchinson/Mayrath dealer or directly from the factory.

These Safety Decals will be found on the various components used for custom-built augers. Decals will vary depending on the components used with your particular application.
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**GENERAL INFORMATION**

**OPERATOR QUALIFICATIONS**

**WARNING**
Anyone who will operate or work around this machine shall first read this manual! This manual must be delivered with the equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

Operation of this auger shall be limited to competent and experienced persons. In addition, anyone who will operate or work around an auger must use good common sense. In order to be qualified, the operator must also know and meet all other requirements, such as:

1. Some regulations specify that no one under the age of 16 may operate power machinery. This includes this auger. It is your responsibility to know what these regulations are in your area or situation.

2. Current OSHA regulations state in part: “At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in safe operation and servicing of all equipment which the employee is, or will be involved with.”

3. Unqualified persons are to stay out of the work area.

4. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

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

**SIGN-OFF SHEET**
As a requirement of OSHA, it is necessary for the employer to train the employee in the safe operation and safety procedures with this auger. We include this sign off sheet for your convenience and personal record keeping.

<table>
<thead>
<tr>
<th>Training Sign-Off Sheet</th>
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<tbody>
<tr>
<td><strong>Date</strong></td>
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</tbody>
</table>
Before filling the bin or storage structure with grain, make sure all slide gates on all wells are closed. If the gates are left open, the wells will fill with grain. Upon start-up, the unload auger would be under load, this can result in damage to the auger, the motor or both. Such damage would be considered abuse of equipment and will void the warranty.
**GENERAL INFORMATION**

**MACHINE INSPECTION**

After delivery of your new auger and/or completion of assembly, and before each use, inspection of the machine is mandatory. This inspection should include, but not be limited to:

1. Read through the manual(s) to become familiar with the operation and assembly of the machine. Verify all parts are accounted for before assembly.
2. Check to see that all guards listed in the assembly instructions are in place, secured and functional.
3. Check all safety signs and replace any that are worn, missing or illegible (safety signs can be ordered free of charge through your dealer or directly from the factory).
4. Make sure all fasteners, nuts, bolts, setscrews, etc. are tight.
5. Ensure drive belts are tightened properly. Check belts for fraying, wear, cuts and other damage.

**DESIGNATED WORK AREA**

Before starting the auger, a designated work area should be established around it. This area shall be marked off with colored rope, or banners, hung as a portable barrier to define the work area.

**WARNING!** Under no circumstances should persons not involved in the operation be allowed to trespass into the work area.

It shall be the duty of the operator to see that children and/or other persons stay out of the work area! Trespass into the work area by anyone not involved in the actual operation, or trespass into a hazard area by anyone, shall result in an immediate shut down by the operator.

It shall be the responsibility of the operator to see that the work area has secure footing, is free of debris and tools that may cause accidental tripping or falling. It shall also be their responsibility to keep the work area clean and orderly during the operation.

**BREAK-IN INFORMATION**

Any screw type auger when it is new or after it sits idle for a season should go through a “break-in” period. The auger should be run at partial capacity until several hundred tons of grain have been augered to polish the flight and housing. Once this is accomplished, the auger can be run at full capacity.

Never operate the auger when empty for any length of time as excessive wear will result. If at all possible, do not stop or start the auger under load, especially before the flight and housing have become well polished, as this may cause the auger to freeze-up.

**OPERATING CAPACITIES**

The results or capacities of screw type augers can vary greatly under varying conditions. Different materials, moisture content, amount of foreign matter, methods of feeding and flight speed all play a role in the performance of the auger.

An auger operating at a 45° incline could operate at a capacity 20% less than an auger operating horizontally. Moisture content at 25% could cut capacity back by as much as 40% under some conditions.

If an inclined auger has one foot of grain over the inlet flight, it will probably get better capacity than if it had only a one inch covering. On the other hand, an auger in the bottom of a cone shaped pit or under a bulk tank with approximately four feet or more of grain on top of it may be overfed.

This overfeeding would be caused from the weight of the grain over the intake forcing more into the auger than it can efficiently move. The result would be an increased horsepower requirement, extra strain on the driveline, and possibly a complete stalling out. Under the “extra” grain pressure conditions a control gate should be used or a short length of 1/2\(^{\text{a}}\) pitch flight.
ELECTRIC DRIVE POWER REQUIREMENTS

The horsepower recommendations are based on clean, dry shelled corn or wheat. High moisture grain, above 15% will require greater power (the maximum possible capacity will be less with high moisture grain than with dry grain).

Always use a motor with the required power recommended in the chart below. Use a 60 Hz motor that operates at 1750 RPM (50 Hz @ 1460 rpm’s).

Electric motors and controls shall be installed by a qualified electrician and must meet the standards set by the National Electric Code and all local and state codes.

A magnetic starter should be used to protect your motor when starting or stopping. It should stop the motor in case of power interruption, conductor fault, low voltage, circuit interruption and/or motor overload. The motor should then be restarted manually.

WARNING! A main power disconnect switch that can be locked in only the “OFF” position shall be provided. This shall be locked whenever work is being done on the auger.

The reset and starting controls must be located so that the operator has full view of the entire operation.

Do Not enter the grain bin unless all power driven equipment has been shut down and locked out.

Make certain electric motor is grounded.

Disconnect power before resetting motor overloads.

Shut off power and lockout whenever cleaning or servicing the auger.

FLIGHT SPEED INFORMATION

Proper auger flight speed is important for efficient operation of the auger.

1. If the flight speed is too fast, excessive wear will result.

2. If the flight speed is too slow and the auger flighting is permitted to “load-up”, high torque will be required to turn the auger flighting, this can result in damage to the auger. Use the center well slide-gate to control the amount of grain fed into the unloading tube.

Capacities will vary according to grain, grain conditions, loading method, etc. Do Not exceed maximum flight speed listed in the chart below. Units with intermediate bearings should run a maximum of 500 RPM.

<table>
<thead>
<tr>
<th>Drive Type</th>
<th>Motor HP</th>
<th>No. of Belts</th>
<th>Belt Size</th>
<th>Motor Pulley Dia.</th>
<th>Driven Pulley Dia.</th>
<th>Flight Speed (RPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Belt Drive</td>
<td>5 hp (4 kW)</td>
<td>2</td>
<td>B57</td>
<td>3.4” O.D (86 mm)</td>
<td>15.0” O.D. (38.1 cm)</td>
<td>443</td>
</tr>
<tr>
<td></td>
<td>7 1/2 hp (5.5 kW)</td>
<td>3</td>
<td>B57</td>
<td>3.4” O.D (86 mm)</td>
<td>15.0” O.D. (38.1 cm)</td>
<td>443</td>
</tr>
<tr>
<td>Heavy Duty Direct Belt Drive</td>
<td>5 hp (4 kW)</td>
<td>2</td>
<td>B60</td>
<td>3.4” O.D (86 mm)</td>
<td>15.0” O.D. (38.1 cm)</td>
<td>443</td>
</tr>
<tr>
<td></td>
<td>10 hp (7.5 kW)</td>
<td>3</td>
<td>B60</td>
<td>3.4” O.D (86 mm)</td>
<td>15.0” O.D. (38.1 cm)</td>
<td>443</td>
</tr>
<tr>
<td>3:1 Reducer Drive</td>
<td>10 hp (7.5 kW)</td>
<td>2</td>
<td>B57</td>
<td>5.0” O.D (12.7 cm)</td>
<td>12.0” O.D. (30.5 cm)</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>15 hp (11 kW)</td>
<td>3</td>
<td>B57</td>
<td>5.0” O.D (12.7 cm)</td>
<td>12.0” O.D. (30.5 cm)</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>5 hp (4 kW)</td>
<td>2</td>
<td>B54</td>
<td>3.5” O.D (89 mm)</td>
<td>12.0” O.D. (30.5 cm)</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>10 hp (7.5 kW)</td>
<td>3</td>
<td>B54</td>
<td>3.5” O.D (89 mm)</td>
<td>12.0” O.D. (30.5 cm)</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>5 hp (4 kW)</td>
<td>2</td>
<td>B60</td>
<td>3.5” O.D (89 mm)</td>
<td>15.0” O.D. (38.1 cm)</td>
<td>136</td>
</tr>
<tr>
<td></td>
<td>10 hp (7.5 kW)</td>
<td>3</td>
<td>B60</td>
<td>3.5” O.D (89 mm)</td>
<td>15.0” O.D. (38.1 cm)</td>
<td>136</td>
</tr>
</tbody>
</table>
START-UP INFORMATION

WARNING! Make certain everyone is clear before operating the equipment.
The operator shall be aware of any unusual vibrations or noises that would indicate the need for service or repair.
Keep all safety shields and devices in place.
Keep hands, feet and clothing away from moving parts.
The operator should have a full view of the entire auger work area and check that all personnel are clear of the designated work area before adding power.

During the operation of the auger, one person shall be in a position to monitor the operation. Inspect the drive before adding power and know how to shutdown in an emergency (See Shutdown/Lockout). Visually inspect the auger periodically during operation.

FULL LOAD OPERATION

WARNING! Observe the work area restrictions.
Make certain everyone is clear of the area before operating the equipment.

To Start Auger
1. Start the electric motor before augering grain.
2. Open the slide gate(s) gradually until desired flow is established, it should not be necessary to open the gate(s) more than 3” to 6” (76 mm to 15.2 cm) to acquire full load.
   Do Not overload the auger. Starting the auger under load may result in damage to the auger.
3. If intermediate wells are being used, they should be opened after grain has stopped flowing into the center well.

To Stop Auger
1. Close the slide gate(s) to allow auger to empty before stopping.
2. Once auger has cleared, shut off electric motor and lockout the power source.

CLEAN-UP
1. Check to see that all guards listed in the assembly instructions are in place, secured and functional.
2. Check all safety signs and replace any that are worn, missing or illegible. Safety signs may be obtained free of charge from your dealer or ordered directly from the factory.
3. Check that all fasteners are tight. This includes, nuts and bolts, setscrews, cotter pins, etc.
4. Check drive belts for proper tightness. Check belts for cuts, fraying or other damage and replace as necessary.
SHUTDOWN/LOCKOUT

EMERGENCY SHUTDOWN
Should the auger be immediately shutdown under load, disconnect and lockout the power source.
Close the center and intermediate slide gates. Clear grain away from the discharge opening.
Reconnect the power source and run the auger to clear the grain. Never attempt to start when under load.

CAUTION! Starting the unit under load may result in damage to the auger. Such damage is considered abuse of the equipment and will not be covered by the warranty.

NORMAL SHUTDOWN
When shutting down the auger, close all slide gates and allow the unloading auger to clean out before stopping the unit.
Before the operator leaves the work area, the power source shall be locked-out (See “Lockout”).

INTERMITTENT SHUTDOWN
When an auger is stopped and restarted while under full load, it may result in damage to the auger. Therefore, if intermittent operation is to be carried out, it is advisable to reduce the load level.
If an auger is kept from absolute filling, it will make start-up easier and will convey grain more efficiently.

WARNING! If the operator must leave the work area, or whenever servicing or adjusting, the auger must be stopped and the power source turned off and locked out.
Precaution should be made to prevent anyone from starting or operating the auger when the operator is absent from the work area.

LOCKOUT
The power source shall have a main disconnect box that can be locked only in the “Off” position. This is what “shutdown and lockout” refers to, shut off the main power source and lock the handle or breaker switch in the “Off” position.

TROUBLE SHOOTING

LOW CAPACITY
• The auger may not be getting enough grain. Check to see that the slide gates are opened.
• Check auger speed. Speeds slower than the recommended RPM’s will result in low capacity.

AUGER VIBRATION
• Drive belt may be over tightened, putting head stub and flight in bind, thus causing the noise. Damage usually occurs because of foreign material having been run through the auger. It may be necessary to remove the flighting for inspection.

AUGER PLUGGING
• The auger may be getting too much grain, causing “jamming” inside the housing.
• The motor may be too small or wired improperly.
• Is the auger free of foreign material such as sacks, tarp corners etc.? A plug at the discharge end will cause the auger to plug.
• Grain is high in moisture. Excessive feeding of high moisture grain can cause plugging. If wet grain or hard to move material is being augered, use a larger size motor than what is recommended for normal use (See power requirement chart on Page 6).
**ASSEMBLY INSTRUCTIONS**

Assembly of a custom auger system is unique with each and every situation. Some systems may be comprised of a number of tube/flight assemblies with a variety of inlets and outlets including hoppers, spouts, valves, dead heads and elbows with accompanying hardware and supports.

Other systems may be extremely simple, comprised of only a hopper, one tube/flighting section and a discharge. The assembly instructions in this manual offer information as to how to assemble all possible components in any given system, comprised of only a hopper, one tube/flighting section and a discharge.

The assembly instructions in this manual also offer information as to how to assemble many of the possible components in any given system, simple or complex.

Specific, detailed instructions are given for motor mounts due to the many variations in their assembly.

**AUGER HOUSING & FLIGHT**

Note: A custom auger may not have an extension, or it may have more than one extension. Regardless of the number of housing extensions the auger may have all sections connect in the same manner. Use an anti-seize compound on all connecting stubs as well as in areas where there is a metal-to-metal connection.

1. Bolt the tail stub into the end of the flight (apply anti-seize compound to the stub before installing). The stubs and flight are typically secured with two 7/16” bolts and locknuts. Depending on the auger system, bolts will vary in length from 7/16” x 2 1/2” up to 7/16” x 3” in length.

2. After the stub has been installed, slide the extension flight out of the housing and connect to the head flight using the bolts provided.

3. Loosen the bolts in the connecting band enough to allow it to slide over the head section housing. Slide the extension housing up until it contacts the head auger housing. Position the connecting band so it is centered on the two housings. Tighten the bolts in the connecting band.
ASSEMBLY PROCEDURES

AUGER HOUSING & FLIGHT
W/ INTERMEDIATE BEARINGS

1. Remove the bolt, lock washer & mounting plate (located on top of the housing sections) in all of the auger extension sections, **but not in the head section**.

2. **Note**: The flights are indexed to achieve a timed connection (a timed connection is where the flight pitch does not change across a connection, See Fig. 3 below). Slide extension out of housing far enough to allow connection to the head flight. Apply anti-seize compound to the connecting stub and secure to head flight using the 7/16" bolts and locknuts provided.

3. The intermediate bearings can now be secured to the extension housing(s). A special tool (bearing positioning bar) has been provided to position the bearing hangers for assembly.

4. Insert the end of the positioning bar with the "double bend" through the slot in top of the housing and hook the hanger bearing stem. Rotate the stem upward as far as possible (See Fig. 4). Remove positioning bar and insert the "L" shaped end into the slot (See Fig. 4). Hook the hanger stem and pull upward to place hanger in an upright position.

5. Position bearing hanger so the mounting hole is visible through the slot in the housing. Adjust the hanger so it is centered between the ends of the flights (See Fig. 5). Hanger can slide back-and-forth in the slot to achieve equal distance between each end of flight and bearing.

Fig. 3

On a “timed” connection, an imaginary line would make the pitch continuous from one flight to the next.

Timed Flight at 90° from each other

Timed Flight at 180° from each other

Shown as Reference Only

Fig. 4

Fig. 5
OUTLETS

The location of all outlets (drops) should have been predetermined before ordering your system. Openings should not occur where there is a connecting band, as the connection would be severely weakened.

When an opening is cut, that section of the tube loses much of its strength. You should determine if additional support is necessary (See truss information).

Openings may be cut below internal bearings, but a hole must be located in the outlet’s backband to allow clearance for the internal bearing’s attachment bolt (See Fig. 7).

For best results, the flight should be removed from tubes before cutting. If flight is left in tube, minor damage will occur (flight will be notched and/or rough edges will be created). This will not affect the performance of the auger greatly, but burrs or molten metal should be removed or abnormal wear will result.

Likewise, rough edges on tubing should be ground for a tighter fit and smoother operation.

When cutting the opening, make sure the opening for any given outlet is the correct size. There should be about 1” (25 mm) of tubing left around each side of the outlet and a minimum of 1/2” (13 mm) along the top edge where the flange on the outlet connects to the backband (See Fig. 6).

Use these guidelines when cutting the openings for all outlets and for all inlets.

![Fig. 6](image)

It is very important that the opening be large enough so the capacity of the outlet is not reduced, but small enough so the outlet can be mounted securely.

Figure 7 shows a 90° discharge spout (outlet) on the auger as a reference only.

OUTLETS (con’t.)

Enclosed Slide Gate w/ Rack & Pinion Control

Cut the opening for the outlet using the procedures outlined in the previous column and shown in Fig. 6.

1. Assemble the Rack & Pinion control according to the instructions included with the rack & pinion kit.

2. Attach the outlet and secure using the backband provided (if outlet is below an internal bearing connection, cut an opening in the backband to allow clearance for the hanger bolt, See Fig. 7).

3. Loosely mount the rack & pinion control so the threaded end of the connecting arm faces the slide gate on the outlet assembly.

4. Remove the nut from the end of the connecting arm and attach the threaded portion of the arm to the slide gate.

Position the rack & pinion so that when the slide gate is open, the connecting arm is in the full back position. Verify the gate will open and close completely before tightening into position.

5. Secure the rope or cable around the rack & pinion pulley, wrapping it twice to prevent slippage.

![Fig. 7](image)
INLET HOPPERS

Basic Hopper
Whether used as an intermediate inlet or end inlet, follow the cutting procedures outlined on Page 11 and shown in Fig. 6 when cutting the opening for inlets.

1. After opening(s) have been cut, attach the hopper(s) to the auger tube and secure with the backbands provided.

When a hopper is to be placed at the end of an auger, most auger tubes have the end plate and bearing already installed. If you have ordered separate components, follow the assembly procedures below.

1. To ensure the end plate is mounted squarely, temporarily attach it to the ring flange (you only need to attach it with a couple bolts).
   Slide the ring flange and end plate over the tube end and position end plate until square. Place a mark on the ring flange and auger tube to help with alignment for welding flange to tube.
   Remove the endplate and reposition the ring flange aligning the mark on the flange with the mark on the auger tube. Weld flange into place.

2. Bolt the end plate to the flange (See illustration below).

3. Bolt bearing to end plate.

4. Guide intake stub through the bearing and lock collar. Secure lock collar and tighten setscrews.

5. Install hopper covers where applicable.
Hopper w/ Bearing

Some hoppers will differ when mounting the bearing to the hopper. The bolts used to mount the bearing may already be welded to the rear of the hopper and some may not. Mount the bearing according to your application.

1. Bolt the bearing to the rear side of the hopper as shown in the illustration below.
2. Guide the tube and flight assembly through the connecting band welded to the front side of the hopper. Guide the flight through the hopper and insert intake stub through the bearing and lock collar.
3. Tighten the bolts in the connecting band. Secure lock collar and tighten setscrews to lock into place.
4. Install hopper cover where applicable.

INTAKE GUARD/CONTROL GATE

1. If an optional control gate is being used, slide control gate sleeve over flight and inside of auger tube.
2. For units with or without control gate, slide the intake guard over the auger tube. Inset stub through the bronze bearing and clamp the guard to the auger tube using halfbands provided. Do Not slide intake guard on so far that the auger flight is in contact with the bronze bearing, leave about 1/2" (13 mm) clearance between the flight and bearing (See illustration below).
3. For units with control gates, insert handle through the small tube mounted on the halfband. Clamp halfband to tube after adjusting handle to desired position (directly on top of tube or to either side).
4. Insert the 5/16” x 1” bolt through the hole in the handle and into the square nut on the control gate sleeve. Bolt should be tightened until it is in firm contact with sleeve, then tightened one-half turn more to lock into place, Do Not overtighten.
**TRUSSING**

Trussing cable kits are designed to provide support for spouting and certain auger sections. The two different kits provide trussing for three span groupings.  

20’ and 30’ (6.10 m and 9.14 m)  
Span Kits for Auger and Spouting  
30’ to 40’ (9.14 m to 12.19 m)  
Span Kits for Spouting Only  

These kits include four truss cables, two anchor brackets, one center support bracket and three half-bands. Install truss rods according to the instructions included with the truss kits.  

Make sure trussing is on the underside of the auger or spouting section.  

**WARNING:** A permanent rigid type support should be used instead of truss kits for supporting auger units with over 25’ (7.62 m) spans. If not, auger may sag.  

**SPOUTING & FITTINGS**

To connect sections of spouting, or to connect fittings to spouting, it is necessary to utilize one or all of the following procedures.  

1. **Spouting to Spouting:** Slide flange rings over ends of spouting to be joined and weld into place. Make sure flanges are mounted squarely. Join flanges and bolt together.  
2. **Spouting to Fitting:** Install ring flange on spouting as detailed in Step 1 above. Join to the flange on the fitting (i.e., valve, dead head, slip joints etc.).  
3. **Flange Clamps:** Fit each half over flanges and tighten with bolts provided.  
4. **Quick Connect Flange Clamps:** Fit each half over flanges and tighten bolt. Do Not use in locations where permanent unions are required.  

---  

**8” STANDARD DUTY MOTOR MOUNT**  
**DIRECT BELT DRIVE**  

The assembly instructions will show a number in parenthesis ( ), this number refers to the item shown in the assembly illustration below.  

1. Bolt the head bearing (2) to the head plate (1) using two 7/16” x 1 1/4” bolts and nylon locknuts.  
2. Install the head stub (4) into the end of the head flight and secure using two 7/16” x 2 1/2” bolts and nylon locknuts.  

---  

![Diagram of assembly procedure](image-url)
3. Insert the head flight and shaft into the housing and through the bearing (previously attached to the head plate). Make sure the lock collar (3) is on the shaft as well, but Do Not tighten the lock collar at this time.

4. Secure the head plate (1) to the flange on the housing using eight 5/16” x 1” bolts, flat washers and non-lock nuts.

5. Attach the belt guard back (6) to the head plate using the four square holes in the belt guard that are farthest from the large round hole in the center of the guard. Secure the belt guard back using four 3/8” x 3/4” carriage bolts and nylon locknuts.

6. Install the 1/4” (5) key into the keyway on the end of the head stub. Slide the sheave (7) onto the shaft until the sheave is as close to the head bearing without contacting the bearing. Once properly set, tighten the lock collar and tighten the setscrews in the sheave.

7. Attach the motor mount support plate (10) to the head plate using four 1/2” x 1” bolts and nylon locknuts (make sure the bolts are on the inside with the nuts on the outside).

8. Thread a 5/8” nut (13) onto the threaded adjustment rod (12) until the nut contacts the head of the rod. Install the threaded rod into the nut welded on the support plate (10) until the threaded rod is all the way down.

9. Attach the motor mount (14) to the support plate using the 5/8” x 13 1/8” (16 mm dia. x 33.3 cm) long rod (11) and cotter pins provided.

10. Use the chart below to determine the mounting location for the electric motor (the motor and motor pulley are not furnished).

<table>
<thead>
<tr>
<th>Motor Size</th>
<th>Motor Frame Size</th>
<th>Bolt Dia. Req’d.</th>
<th>Mount in Holes Marked (•)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP (kW)</td>
<td></td>
<td>A1</td>
<td>A2</td>
</tr>
<tr>
<td>5 hp (4 kW)</td>
<td>184T</td>
<td>3/8”</td>
<td></td>
</tr>
<tr>
<td>7.5 hp (5.5 kW)</td>
<td>213T</td>
<td>3/8”</td>
<td></td>
</tr>
<tr>
<td>10 hp (7.5 kW)</td>
<td>215T</td>
<td>3/8”</td>
<td></td>
</tr>
</tbody>
</table>

   Install the motor and the motor pulley [the 8” models use a 3” O.D. (89 mm O.D.) motor pulley]. Install the belts (8) around the sheave and motor pulley and tighten the belts using the 5/8” threaded adjustment rod. Once the belts are tight, use the 5/8” nut to lock the adjustment rod into place. Belts should deflect approx. 1/2” (13 mm) when firmly pressed at the center of the span between the pulley and sheave.

11. Slide four tinnerman nuts (16) over the holes around the lip of the belt guard back (6). Thread a 1/4” x 3/4” wing-bolt (15) into each of the tinnerman nuts, [Do Not tighten completely, leave about a 1/4” (7 mm) space between the bolt and the nut].

12. Install the belt guard (9) by holding the bottom part of the guard away from the belt guard back while sliding the slots on the top part of the guard between the wing-bolt and the tinnerman nut. Once the top of the guard is in position, swing the bottom of the guard down, align the slots between the wing-bolts and tinnerman nuts and push into position. Tighten all wing-bolts.


8’’ HEAVY DUTY MOTOR MOUNT,
DIRECT BELT DRIVE

The assembly instructions will show a number in parenthesis ( ), this number refers to the item shown in the assembly illustration.

1. Bolt the head bearing (2) to the head plate (1) using two 7/16” x 1 1/4” bolts and nylon locknuts.

2. Install the head stub (3) into the end of the head flight and secure using two 7/16” x 2 3/4” bolts and nylon locknuts.

3. Secure the head plate (1) to the flange on the housing using eight 5/16” x 1” bolts, lock washers and non-lock nuts.

4. Slide head stub (3) through the head bearing (2) with enough extended out to mount the sheave. Be sure there is at least 1/2” (13 mm) to 3/4” (14 mm) of clearance from end of the flight shaft and the inside of the head plate. Secure lock collar and tighten setscrews to lock stub into place.

5. Attach the motor mount support plate (4) and belt guard brackets (8) to the front pair of holes on the head plate. Secure using four 1/2” x 1 1/4” bolts, lock washers and non-lock nuts.

   Note: Guard brackets (8) go on outside of motor mount support (4). Make certain motor mount support is positioned so the pivot shaft holes are on the right hand side as seen when looking from the intake end of the auger towards the discharge end.

6. Thread the adjusting rod (7) down through the nut on top of the motor mount support until it extends about two to three inches (51 mm to 76 mm) above the top of the support (final adjustment will be made after installation of the motor and belts).

7. Attach the motor mount (5) to the support plate aligning the pivot holes. Install the pivot pin and secure using the 3/16” x 1 1/2” cotter pins provided.

8. Install the belt guard (9) and secure to brackets (8) with four 5/16” x 1” bolts, flat washers, lock washers and non-lock nuts. Use the top slotted holes in the guard when mounting to the brackets.

9. Mount the driven sheave (10 or 11) onto the head stub (3) using the square drive key.

   The drives are designed for using either a 15” (10) or 18.4” (11) sheave. The 18.4” sheaves are secured to the head stub with a QD type bushing (12).

10. Use the chart on Page 17 to determine the mounting location for the electric motor (the motor and motor pulley are not furnished).

   IMPORTANT! Use the proper size and speed motor to ensure satisfactory auger operation. Too small of a motor will not supply the horsepower (kw) required to achieve capacity and possible damage to the motor can occur. Too large of a motor may cause high stress on auger components resulting in shorter life and failure for those components.

   Install the motor and the motor pulley. Use a straight edge to align the motor pulley and driven sheave.

   Note: With 15” driven sheave, use a 3.4” P.D. motor pulley to achieve 405 RPM auger speed.

   With the 18.4” driven sheave, use a 3.4” P.D. motor pulley to achieve 325 RPM auger speed.

11. Install the belts (13) around the sheave and motor pulley and tighten the belts using the 5/8” threaded adjustment rod. Once the belts are tensioned properly, use the 5/8” nut to lock the adjustment rod into place.

   Belts should deflect approx. 1/2” (13 mm) when firmly pressed at the center of the span between the pulley and sheave.

   Do Not overtighten the belts, as this puts unnecessary load on the bearing. It will be necessary to check belt tension as part of the periodic maintenance schedule.
## Motor Mount Detail (Heavy Duty Direct Belt Drive)

<table>
<thead>
<tr>
<th>Motor Size HP (kW)</th>
<th>Motor Frame Size</th>
<th>Bolt Dia. Req'd.</th>
<th>Mount in Holes Marked (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hp (4 kW)</td>
<td>184T</td>
<td>3/8&quot;</td>
<td>B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 C1 C2 C3 C4</td>
</tr>
<tr>
<td>7.5 hp (5.5 kW)</td>
<td>213T</td>
<td>3/8&quot;</td>
<td>B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 C1 C2 C3 C4</td>
</tr>
<tr>
<td>10 hp (7.5 kW)</td>
<td>215T</td>
<td>3/8&quot;</td>
<td>B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 C1 C2 C3 C4</td>
</tr>
<tr>
<td>15 HP (11 kW)</td>
<td>254T</td>
<td>1/2&quot;</td>
<td>B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 C1 C2 C3 C4</td>
</tr>
</tbody>
</table>

- 1/2" x 1 1/2" Bolt, Lock Washer & Non-Lock Nut
- 5/16" x 1" Bolt, Flat Washer, Lock Washer & Non-Lock Nut
- 7/16" x 1 1/4" Bolt & Nylon Locknut
- 7/16" x 2 3/4" Bolts & Nylon Locknuts
- 5/16" x 1" Bolt, Lock Washer & Non-Lock Nut

---

**ASSEMBLY PROCEDURES**

8" HEAVY DUTY MOTOR MOUNT, DIRECT BELT DRIVE (con't.)

Motor Mount Detail (Heavy Duty Direct Belt Drive)
**8” HEAVY DUTY MOTOR MOUNT.**

**3:1 REDUCER DRIVE**

**IMPORTANT!** The reducer is shipped **without oil. Oil must be added during assembly.**

Remove the vent/fill plug from the top of the reducer. Add 64 oz. (1.89 L) of oil. Replace the vent/fill plug.

Check oil periodically by removing the level check plug on the side of the reducer (See Fig. 8). Oil should leak from the opening when the plug is removed. If necessary add more oil, **Do Not add more oil than what is needed.** Additional oil can damage the seals or be forced out the vent/fill plug.

Use an SAE 90W non-foaming, multi-purpose gear oil for normal operating temperatures between 40°F (4.5°C) to 120°F (48.9°C). Use an SAE 80W oil for temperatures below 40°F (4.5°C).

Use grades commercially available for automotive differentials. Extra pressure additives may be of value in severe applications.

---

<table>
<thead>
<tr>
<th>3:1 Reducer</th>
<th>Reducer Capacity 64 oz. (1.89 L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill</td>
<td>Vent Plug</td>
</tr>
<tr>
<td>Oil Level Check Port</td>
<td>Oil Level</td>
</tr>
</tbody>
</table>

**Motor Mount Assembly for 3:1 Reducer**

The assembly instructions will show a number in parenthesis ( ), this number refers to the item shown in the assembly illustration on Page 19.

1. Bolt the head plate (1) to the ring flange at discharge end of auger housing using eight 5/16” x 7/8” bolts, flat washers and nylon locknuts.
2. Fasten adapter plate (7) to head plate using eight 3/8” x 1” bolts and nylon locknuts.
3. Secure 3:1 chain reducer (8) to ring of adapter plate (7) using four 3/8” x 1” bolts and nylon locknuts.
4. Fasten the output shaft from the reducer (8) to the head flight using two 7/16” x 3” bolts and nylon locknuts.
5. Attach the motor mount support plate (2) and belt guard brackets (6) to the back pair of holes on the head plate. Secure using four 1/2” x 1 1/4” bolts, lock washers and non-lock nuts.

**Note:** Guard brackets (6) go on outside of motor mount support (2). Make certain motor mount support is positioned so the pivot shaft holes are on the right hand side as seen when looking from the intake end of the auger towards the discharge end.

6. Thread the adjusting rod (5) down through the nut on top of the motor mount support until it extends about two to three inches (51 mm to 76 mm) above the top of the support (final adjustment will be made after installation of the motor and belts).

7. Attach the motor mount (3) to the support plate aligning the pivot holes. Install the pivot pin and secure using the 3/16” x 1 1/2” cotter pins provided.

8. Install the belt guard (9) and secure to brackets (6) with four 5/16” x 1” bolts, flat washers, lock washers and non-lock nuts. Use the bottom slotted holes in the guard when mounting to the brackets.

9. Mount the driven sheave (10) onto the reducer input shaft (8) using the square drive key.

The drives are designed for using either a 12” O.D. or 15” O.D. sheave. **IMPORTANT!** Use the proper size and speed motor to ensure satisfactory auger operation. Too small of a motor will not supply the horsepower (kw) required to achieve capacity and possible damage to the motor can occur. Too large of a motor may cause high stress on auger components resulting in shorter life and failure for these components.
10. Use the chart on Page 20 to determine the mounting location for the electric motor (the motor and motor pulley are not furnished).
Install the motor and the motor pulley. Use a straight edge to align the motor pulley and driven sheave.
Note: With 12” O.D. driven sheave, use a 3 1/2” O.D. motor pulley to achieve 170 RPM auger speed.
With 12” O.D. driven sheave, use a 5” O.D. motor pulley to achieve 245 RPM auger speed.
With the 15” O.D. driven sheave, use a 3 1/2” O.D. motor pulley to achieve 140 RPM auger speed.
11. Install the belts (12) around the sheave and motor pulley and tighten the belts using the 5/8” threaded adjustment rod. Once the belts are tensioned properly, use the 5/8” nut to lock the adjustment rod into place.
Belts should deflect approx. 1/2” (13 mm) when firmly pressed at the center of the span between the pulley and sheave. Do Not overtighten the belts, as this puts unnecessary load on the bearing. It will be necessary to check belt tension as part of the periodic maintenance schedule.
8” HEAVY DUTY MOTOR MOUNT,
3:1 REDUCER DRIVE

Motor Pulley (not furnished)

Motor Mount Support

Motor Mount Support to Head Plate using Back Set of Holes

Install Motor Mount Support to Head Plate

Motor Mount Support (not furnished)

Belt Guard Bracket

Driven Sheave

Motor Mount Plate

Chain Reducer

Belt Guard

Adjusting Rod for Belt Tension

Drive Belts

Electric Motor

Motor

Mount in Holes Marked (•)

<table>
<thead>
<tr>
<th>Motor Size HP (kW)</th>
<th>Motor Frame Size</th>
<th>Bolt Dia. Req’d.</th>
<th>Mount in Holes Marked (•)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hp (4 kW)</td>
<td>184T</td>
<td>3/8”</td>
<td>• • • •</td>
</tr>
<tr>
<td>7.5 hp (5.5 kW)</td>
<td>213T</td>
<td>3/8”</td>
<td>• • • •</td>
</tr>
<tr>
<td>10 hp (7.5 kW)</td>
<td>215T</td>
<td>3/8”</td>
<td>• • • • •</td>
</tr>
<tr>
<td>15 HP (11 kW)</td>
<td>254T</td>
<td>1/2”</td>
<td>• • • • •</td>
</tr>
</tbody>
</table>

Motor mount hardware, motor pulley and motor are not furnished.

End View

Side View

Head Plate

Belt Guard

ASSEMBLY PROCEDURES
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SAFETY DECALS & SIGNS
Check to ensure all Safety decals are present and in good condition. If a decal cannot be read for any reason, or has been painted over, replace the decal immediately. Safety decals are offered free of charge and can be ordered through your Hutchinson/Mayrath dealer or directly from the factory.

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1001985</td>
<td>Decal, Danger: Rotating Auger</td>
</tr>
<tr>
<td>2</td>
<td>1001128</td>
<td>Decal, Hutchinson</td>
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<tr>
<td>3</td>
<td>1001987</td>
<td>Decal, Danger: Do Not Operate with...</td>
</tr>
<tr>
<td>4</td>
<td>1002301</td>
<td>Decal, Caution: Read and Understand...</td>
</tr>
</tbody>
</table>
## 8" Custom Standard Duty
### Direct Belt Drive

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1027804</td>
<td>Head Plate f/ 8&quot; Standard Duty</td>
</tr>
<tr>
<td>2</td>
<td>8325A</td>
<td>Bearing, 1 1/4&quot; 2-hole Flange w/ lock collar</td>
</tr>
<tr>
<td>3</td>
<td>- - -</td>
<td>Lock Collar f/ Bearing</td>
</tr>
<tr>
<td>4</td>
<td>8326A</td>
<td>Head Stub, 1-1/4&quot; dia. x 10-1/2&quot; long (f/ 2 groove sheave)</td>
</tr>
<tr>
<td>(4)</td>
<td>8319A</td>
<td>Head Stub, 1-1/4&quot; dia. 11-1/2&quot; long (f/ 3 groove sheave)</td>
</tr>
<tr>
<td>5</td>
<td>4045A1</td>
<td>Key, 1/4&quot; Square x 2&quot; long (f/ 2 groove sheave)</td>
</tr>
<tr>
<td>(5)</td>
<td>4046A1</td>
<td>Key, 1/4&quot; Square x 3&quot; long (f/ 3 groove sheave)</td>
</tr>
<tr>
<td>6</td>
<td>1027782</td>
<td>Belt Guard Back</td>
</tr>
<tr>
<td>7</td>
<td>40158</td>
<td>Sheave, 2-Groove 15&quot; O.D. 1-1/4&quot; Bore</td>
</tr>
<tr>
<td>(7)</td>
<td>40161</td>
<td>Sheave, 3-Groove 15&quot; O.D. 1-1/4&quot; Bore</td>
</tr>
<tr>
<td>8</td>
<td>40121</td>
<td>Belt, B-60</td>
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<td>9</td>
<td>1027801</td>
<td>Belt Guard - Plastic</td>
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<tr>
<td>10</td>
<td>1042262</td>
<td>Motor Mount Support Bracket</td>
</tr>
<tr>
<td>11</td>
<td>1042145</td>
<td>Pin, 5/8&quot; Dia. x 13-1/8&quot; long</td>
</tr>
<tr>
<td>12</td>
<td>1027780</td>
<td>Adjusting Rod</td>
</tr>
<tr>
<td>13</td>
<td>D1170</td>
<td>Nut, 5/8&quot; Non-lock</td>
</tr>
<tr>
<td>14</td>
<td>1042260</td>
<td>Motor Mount Plate</td>
</tr>
<tr>
<td>15</td>
<td>1013133</td>
<td>Nut, Tinnerman - 1/4-20</td>
</tr>
<tr>
<td>16</td>
<td>1013131</td>
<td>Bolt, Wing -1/4-20</td>
</tr>
<tr>
<td>17</td>
<td>33161</td>
<td>Cotter Pin, 1/8&quot; x 1&quot;</td>
</tr>
</tbody>
</table>
PARTS LIST

8” CUSTOM HEAVY DUTY,
DIRECT BELT DRIVE

Ref. No. Part No. Description
1 1022150 Head Plate f/ 8” Heavy Duty
2 8370C Bearing, 1 1/4” 4-Bolt
   w/ lock collar
3 8326A Head Stub, 1-1/4” dia. x 10-1/2” long
4 1022139 Motor Mount Support Bracket
5 1022136 Motor Mount Plate
6 1018789 Pivot Pin
7 1022381 Adjusting Rod
8 1022154 Bracket, Belt Guard
9 1009101 Belt Guard f/ 12” or 15” Sheaves
(9) 1009102 Belt Guard f/ 18.4” Sheaves

Ref. No. Part No. Description
10 40158 Sheave, 2-Groove 15” O.D.
11 3238A1 Sheave, 18.4” P.D. 2-Belt
(10) 40161 Sheave, 3-Groove 15” O.D.
(11) 3247A1 Sheave, 18.4” P.D. 3-Belt
12 3072A1 Bushing, QD SK, 1 1/4”
   (used w/ Item 11)
13 40121 Belt, B-60 (used w/ Item 10)
14 40125 Belt, B-68 (used w/ Item 11)
15 3337A1 Cotter Pin, 3/16” x 1 1/2” long
16 4046A1 Key, 1/4” square x 3” long

See Auger Housing and Flight Components
### 8" CUSTOM HEAVY DUTY,
3:1 REDUCER DRIVE

See Auger Housing and Flight Components

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1022991</td>
<td>Head Plate f/ 8&quot; 3:1 Reducer Drive</td>
</tr>
<tr>
<td>2</td>
<td>1022141</td>
<td>Motor Mount Support Bracket</td>
</tr>
<tr>
<td>3</td>
<td>1022136</td>
<td>Motor Mount Plate</td>
</tr>
<tr>
<td>4</td>
<td>1018789</td>
<td>Pivot Pin</td>
</tr>
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<td>5</td>
<td>1022381</td>
<td>Adjusting Rod</td>
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<td>(5)</td>
<td>6676A1</td>
<td>Adjusting Rod f/ 2-Belt 15&quot; drives</td>
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<td>6</td>
<td>1015737</td>
<td>Bracket, Belt Guard</td>
</tr>
<tr>
<td>7</td>
<td>1015747</td>
<td>Adapter Plate</td>
</tr>
<tr>
<td>8</td>
<td>1015746</td>
<td>3:1 Reducer, Enclosed Chain Drive</td>
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<tr>
<td>9</td>
<td>1009101</td>
<td>Belt Guard</td>
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<td>40152</td>
<td>Sheave, 2-Groove 12&quot; O.D.</td>
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<tr>
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<td>Sheave, 3-Groove 12&quot; O.D.</td>
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<thead>
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<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>(10)</td>
<td>40158</td>
<td>Sheave, 15&quot; O.D. 2-Belt</td>
</tr>
<tr>
<td>(10)</td>
<td>40161</td>
<td>Sheave, 15&quot; O.D. 3-Belt</td>
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<tr>
<td>11</td>
<td>4046A1</td>
<td>Key, 1/4&quot; square x 3&quot; long</td>
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<tr>
<td>12</td>
<td>40119</td>
<td>Belt, B-54, f/ 12&quot; Sheave (w/ 3.5&quot; motor pulley)</td>
</tr>
<tr>
<td>(12)</td>
<td>40120</td>
<td>Belt, B-57 f/ 12&quot; Sheave (w/ 5&quot; motor pulley)</td>
</tr>
<tr>
<td>(12)</td>
<td>40121</td>
<td>Belt, B-60 f/ 15&quot; Sheave (w/ 3.5&quot; motor pulley)</td>
</tr>
<tr>
<td>13</td>
<td>3337A1</td>
<td>Cotter Pin, 3/16&quot; x 1 1/2&quot; long</td>
</tr>
</tbody>
</table>
## PARTS LIST

### 3:1 REDUCER, 1/8” CUSTOM AUGER

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1001523</td>
<td>Aluminum Casting (inside)</td>
</tr>
<tr>
<td>2</td>
<td>1003044</td>
<td>Aluminum Casting (outside)</td>
</tr>
<tr>
<td>3</td>
<td>1001847</td>
<td>Roller Chain, #80, 36 pitch (includes connecting link)</td>
</tr>
<tr>
<td>4</td>
<td>1001573</td>
<td>Gasket</td>
</tr>
<tr>
<td>5</td>
<td>106322</td>
<td>Bearing, 1 1/4” Cone (Timken No. 15123)</td>
</tr>
<tr>
<td>6</td>
<td>035439</td>
<td>Bearing, 1 1/2” Cone (Timken No. LM19749)</td>
</tr>
<tr>
<td>7</td>
<td>1001841</td>
<td>Sprocket, 1 1/2” bore, 27 tooth</td>
</tr>
<tr>
<td>8</td>
<td>1015743</td>
<td>Stub, Output Shaft, 1 1/2”</td>
</tr>
<tr>
<td>9</td>
<td>1001850</td>
<td>Stub, Input Shaft, 1 1/4”</td>
</tr>
<tr>
<td>10</td>
<td>1001840</td>
<td>Sprocket, 1 1/4” bore, 9 tooth</td>
</tr>
<tr>
<td>11</td>
<td>4757-1</td>
<td>Bolt, 5/16-18 x 1 1/4”</td>
</tr>
<tr>
<td>12</td>
<td>33144</td>
<td>Lock Washer, 5/16”</td>
</tr>
<tr>
<td>13</td>
<td>33151</td>
<td>Nut, 5/16” Lock</td>
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<tr>
<td>14</td>
<td>33190</td>
<td>Roll Pin, 5/16” x 2 1/2”</td>
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<tr>
<td>15</td>
<td>035860</td>
<td>Seal, Output Shaft, 1 1/2”</td>
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<tr>
<td>16</td>
<td>835168</td>
<td>Seal, Input Shaft, 1 1/4”</td>
</tr>
<tr>
<td>17</td>
<td>4020A1</td>
<td>Key, 1/4” square x 1” long</td>
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<tr>
<td>18</td>
<td>1002276</td>
<td>Key, 3/8” square x 1” long</td>
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<tr>
<td>19</td>
<td>458026</td>
<td>Drain Plug, 3/8”</td>
</tr>
<tr>
<td>20</td>
<td>106323</td>
<td>Bearing Cup, 1 1/4” (Timken No. 15245)</td>
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<tr>
<td>21</td>
<td>035440</td>
<td>Bearing Cup, 1 1/2” (Timken No. LM29710)</td>
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<tr>
<td>22</td>
<td>1001438</td>
<td>Plug, Vented Pipe, 3/8”</td>
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<tr>
<td>23</td>
<td>1001851</td>
<td>Cap</td>
</tr>
<tr>
<td>24</td>
<td>1001852</td>
<td>Cap</td>
</tr>
<tr>
<td>25</td>
<td>33193</td>
<td>Roll Pin, 5/16” x 2”</td>
</tr>
<tr>
<td>26*</td>
<td>1002275</td>
<td>Decal, “Fill with Oil”</td>
</tr>
</tbody>
</table>

* Not Shown
8" CUSTOM AUGER HOUSING
and FLIGHT COMPONENTS
# PARTS LIST

## 8" CUSTOM AUGER HOUSING and FLIGHT COMPONENTS (con’t.)

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1920C</td>
<td>Head Housing w/ Flange, 20' (6.10 m) long, 14 ga.</td>
</tr>
<tr>
<td>1</td>
<td>62846</td>
<td>Extension Housing, 5' (1.52 m) long, 14 ga.</td>
</tr>
<tr>
<td>1</td>
<td>62847</td>
<td>Extension Housing, 10' (3.05 m) long, 14 ga.</td>
</tr>
<tr>
<td>1</td>
<td>62848</td>
<td>Extension Housing, 15' (4.57 m) long, 14 ga.</td>
</tr>
<tr>
<td>1</td>
<td>62849</td>
<td>Extension Housing, 20' (6.10 m) long, 14 ga.</td>
</tr>
<tr>
<td>2</td>
<td>8309A</td>
<td>Connecting Band</td>
</tr>
<tr>
<td>3</td>
<td>1016601</td>
<td>Head Flight, 10'-11&quot; (3.31 m) long (7 ga. on 1.9&quot; tube)</td>
</tr>
<tr>
<td>3</td>
<td>1016497</td>
<td>Head Flight, 20'-11&quot; (6.10 m) long (7 ga. on 1.9&quot; tube)</td>
</tr>
<tr>
<td>4</td>
<td>6309A1</td>
<td>Extension Flight w/ Stub, 5' (1.52 m) long (7 ga. on 1.9&quot; tube)</td>
</tr>
<tr>
<td>5</td>
<td>6311A1</td>
<td>Extension Flight w/ Stub, 10' (3.05 m) long (7 ga. on 1.9&quot; tube)</td>
</tr>
<tr>
<td>5</td>
<td>6312A1</td>
<td>Extension Flight w/ Stub, 15' (4.57 m) long (7 ga. on 1.9&quot; tube)</td>
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<tr>
<td>5</td>
<td>6313A1</td>
<td>Extension Flight w/ Stub, 20' (6.10 m) long (7 ga. on 1.9&quot; tube)</td>
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<tr>
<td>6</td>
<td>8320A</td>
<td>Stub, Flight Connecting, 1 1/4&quot; (32 mm) x 9 1/2&quot; (24.1 cm) long</td>
</tr>
<tr>
<td>7</td>
<td>8321A</td>
<td>Tail Stub, 1 1/4&quot; (32 mm) x 9&quot; (22.9 cm) long</td>
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<tr>
<td>8</td>
<td>1930C</td>
<td>End Plate</td>
</tr>
<tr>
<td>9</td>
<td>1850A</td>
<td>Flange, Bring Angle (galv.)</td>
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<tr>
<td>10</td>
<td>8370C</td>
<td>Bearing, 4-Hole Flange</td>
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</tbody>
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## AUGERS w/ INTERNAL BEARINGS

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>11</td>
<td>1015344-OF</td>
<td>Head Housing w/ Flange, 10' (3.05 m) long, 14 ga.</td>
</tr>
<tr>
<td>11</td>
<td>1015344-OR</td>
<td>Head Housing w/ Flange, 20' (6.10 m) long, 14 ga.</td>
</tr>
<tr>
<td>12</td>
<td>1015360-OA</td>
<td>Extension Housing, 5' (1.52 m) long, 14 ga.</td>
</tr>
<tr>
<td>12</td>
<td>1015360-OF</td>
<td>Extension Housing, 10' (3.05 m) long, 14 ga.</td>
</tr>
<tr>
<td>12</td>
<td>1015346-OL</td>
<td>Extension Housing, 15' (4.57 m) long, 14 ga.</td>
</tr>
<tr>
<td>12</td>
<td>1015346-OR</td>
<td>Extension Housing, 20' (6.10 m) long, 14 ga.</td>
</tr>
<tr>
<td>13</td>
<td>6306A1</td>
<td>Head Flight, 10'-10 1/2&quot; (3.31 m) long (7 ga. on 1.9&quot; tube)</td>
</tr>
<tr>
<td>13</td>
<td>1015416</td>
<td>Head Flight, 10'-10 1/2&quot; (3.31 m) long (1/4&quot; on 1.9&quot; tube)</td>
</tr>
<tr>
<td>14</td>
<td>6308A1</td>
<td>Extension Flight w/ Stub, 5' (1.52 m) long (1/4&quot; on 1.9&quot; tube)</td>
</tr>
<tr>
<td>14</td>
<td>1012308</td>
<td>Extension Flight, 4'-9 3/4&quot; (1.47 m) long (7 ga. on 1.9&quot; tube)</td>
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<tr>
<td>14</td>
<td>6310A1</td>
<td>Extension Flight, 9'-9 3/4&quot; (2.99 m) long (7 ga. on 1.9&quot; tube)</td>
</tr>
<tr>
<td>14</td>
<td>1009640</td>
<td>Extension Flight, 9'-9 3/4&quot; (2.99 m) long (1/4&quot; on 1.9&quot; tube)</td>
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<tr>
<td>15</td>
<td>52806</td>
<td>Bushing, Weld-In f/ Flight w/ 1.9&quot; tubing (1&quot; I.D.)</td>
</tr>
<tr>
<td>16</td>
<td>8393C</td>
<td>Stub, Flight Connecting, 1 1/4&quot; x 11 1/2&quot; (32 mm x 29.2 cm) long</td>
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<tr>
<td>17</td>
<td>60522</td>
<td>Hanger, Internal Bearing w/ Bronze Bushing</td>
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<tr>
<td>17</td>
<td>8379C</td>
<td>Bronze Bushing only (1 1/4&quot; I.D.)</td>
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<tr>
<td>18</td>
<td>1012295</td>
<td>Plate, Internal Bearing Mount, 7 1/4&quot; (18.4 cm) long</td>
</tr>
<tr>
<td>18</td>
<td>1013767</td>
<td>Plate, Internal Bearing Mount, 4 3/8&quot; (11.1 cm) long</td>
</tr>
<tr>
<td>19</td>
<td>33226</td>
<td>Bolt, 5/8-11 x 1 1/2&quot;</td>
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<tr>
<td>20</td>
<td>D1171</td>
<td>Washer, 5/8&quot; Lock</td>
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<tr>
<td>21</td>
<td>1001985</td>
<td>Decal, Danger, Rotating Auger</td>
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<td>22</td>
<td>1002301</td>
<td>Decal, Caution, Read and Understand...</td>
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<td>23</td>
<td>1001128</td>
<td>Decal, Hutchinson</td>
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<tr>
<td>24</td>
<td>1012297</td>
<td>Bar Positioning, f/ Internal Bearing Hanger</td>
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