



EMD SPEED REDUCER KIT [A202] INSTALLATION INSTRUCTIONS

These instructions apply to the following models:

WR80 56'-71'

WR100 31'-71'

GHR80 56'-71'

GHR100 31'-71'



Read and understand the safety information in the auger manual before proceeding.



Read and understand the instructions in this manual before attempting to install this product.



Refer to the auger manual for operation instructions.

PRE-INSTALLATION NOTES

The following instructions are for installing the kit during the assembly of a new auger. To install the kit on a used auger, some disassembly will be required. Left hand or right hand is determined by standing at intake end and facing the discharge end.

Westfield | Wheatheart
part of the Ag Growth International group
P.O. Box 39, Rosenort, Manitoba, Canada R0G 1W0 Ph: (866) 467-7207 Fax: (866) 768-4852
Website: www.grainaugers.com | www.wheatheart.com Email: sales@grainaugers.com | sales@wheatheart.com
© Ag Growth International Inc. 2016



PART NUMBER: 31000 R0

REVISED: 18/11/16

INSTALLATION PROCEDURE

Important:

1. Remove the 1/2" x 1" bolts from the top of the gearbox and recycle them.
- In the following steps, the motor mount (1) is positioned behind the gearbox (2), towards the intake end of the auger, as shown in Figure 1.
2. Position the motor mount extension (3) between the jackshaft tower (4) and the gearbox (2), and fasten with:
 - Four 1/2" x 1-1/4" bolts (5) and 1/2" lockwashers (6)
 - Four 1/2" flat washers (7) (use as shims)
3. Attach the motor mount (1) to the motor mount extension (3) using two 1/2" x 1-1/4" bolts (5) and 1/2" locknuts (9).
4. Secure the motor mount supports (10) and tube clamp (11) with 7/16" x 1" bolts (12) and 7/16" locknuts (13).

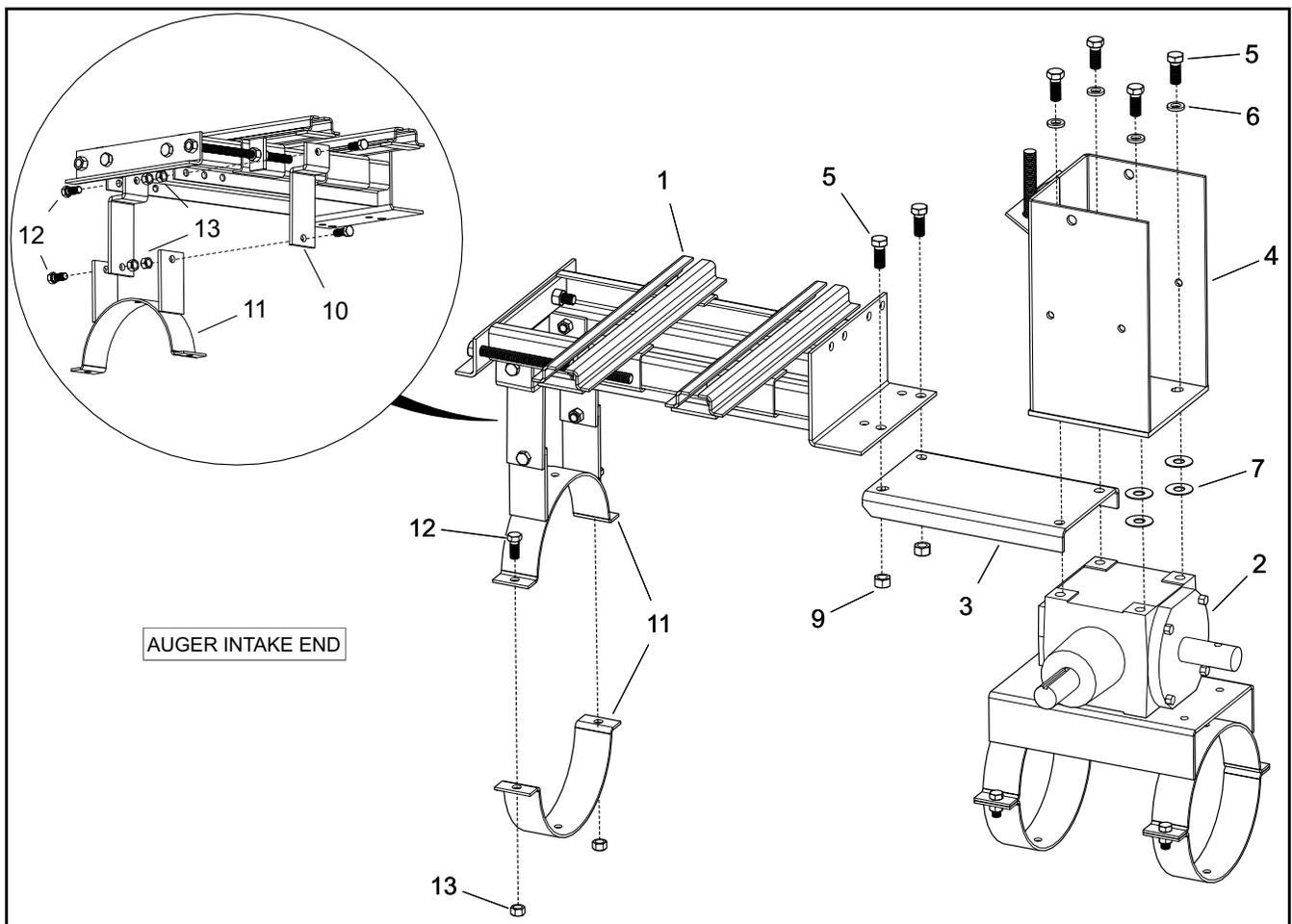


Figure 1 Installing Jackshaft Tower, Motor Mount, and Extension

5. Attach the jackshaft assembly (14) to the jackshaft tower (4) using two 1/2" x 1-1/4" bolts (5) and 1/2" locknuts (9) as shown in Figure 2.
6. Install the right-hand pulley guard bracket (15) to right side of the jackshaft tower (4) using two 3/8" x 3/4" bolts (16) and 3/8" whiz nuts (17).
7. Install the left-hand pulley guard bracket (18) to end of the jackshaft tower (4) using two 7/16" x 1" bolts (12) and 7/16" locknuts (13).

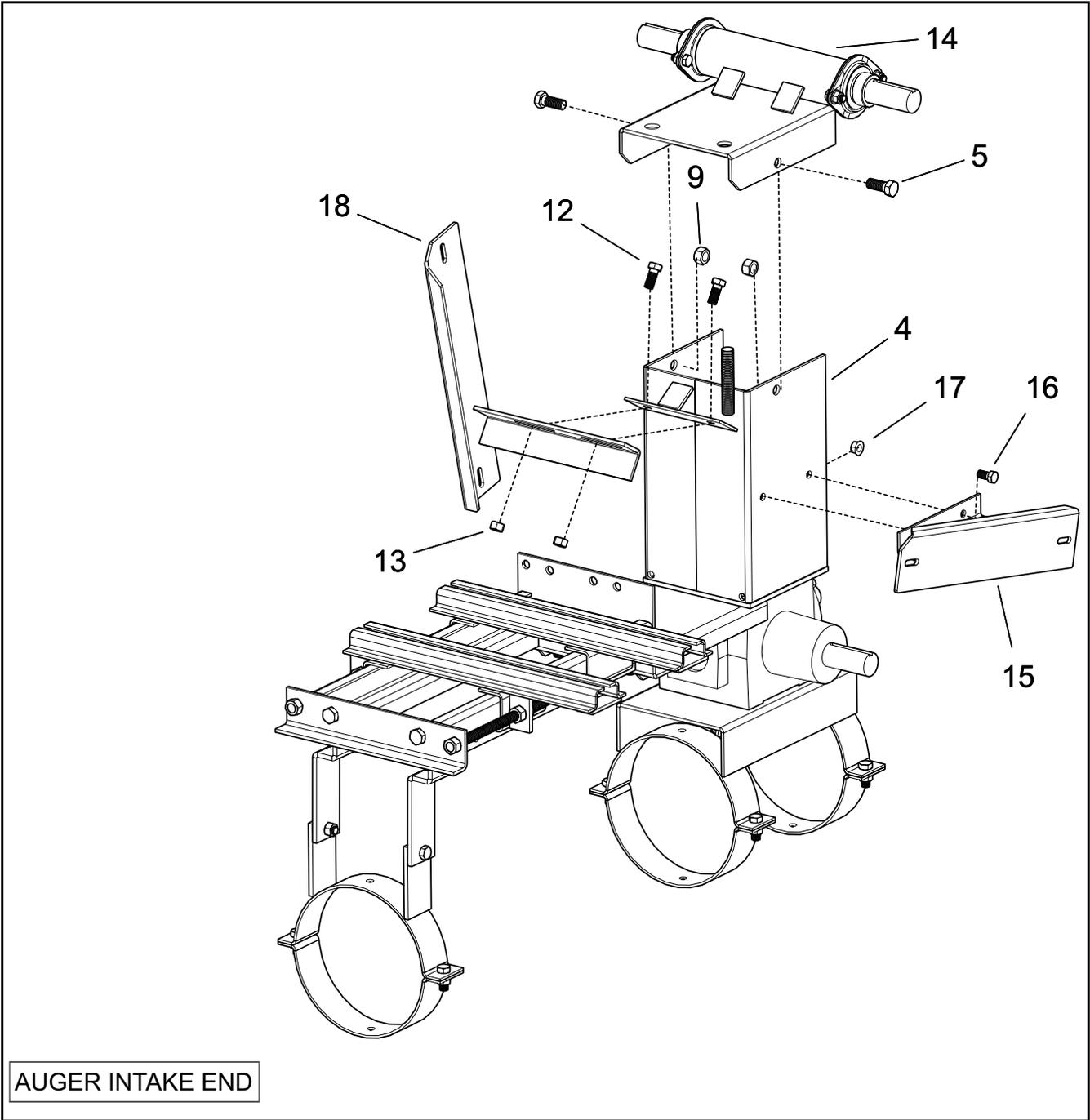


Figure 2 Installing Jackshaft and Pulley Guard Brackets

8. Attach the pulley guard backplate (19) to the right-hand pulley guard bracket (15) with two 1/4" x 1/2" bolts (20) and 1/4" whiz nuts (21) as shown in Figure 3, but do not tighten them until later.
9. Slide the 1/4" x 1-1/2" square key (22) and 15" pulley (23) onto the gearbox shaft.
10. Slide the 1/4" x 1-1/2" square key (22) and 6-1/2" pulley (24) onto the jackshaft (hubs facing auger tube as shown).
11. Use a straight edge to align the pulleys, and tighten the set-screws.

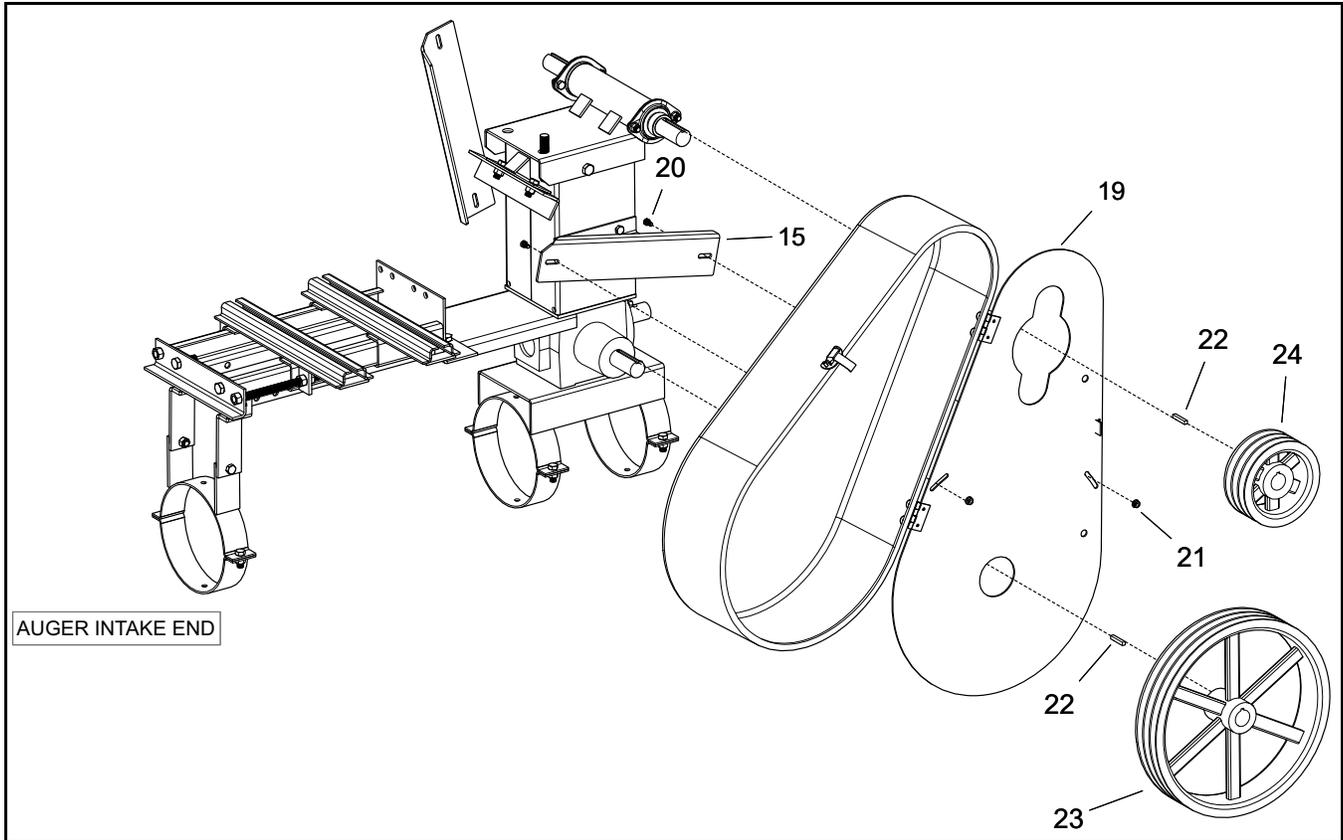


Figure 3 Installing Pulley Guard Backplate and Pulleys

12. Slide the 1/4" x 1-1/2" square key (22) and 15" pulley (23) onto the left side of the jackshaft, with the hub towards the jackshaft as shown in Figure 4, and tighten the set-screws.
13. Slide the square key (22) and drive pulley (25) onto electric motor shaft, and tighten set-screws.

Note: *The auger speed will be 50 rpm per motor pulley inch diameter, based on 1750 rpm motor. For example:*

$$4\text{-}1/2\text{'' pulley} \times 50 \text{ rpm} = 225 \text{ rpm auger speed}$$

14. Place the electric motor (26) onto the mount and secure with the motor mounting hardware, but do not tighten them until step 17. Have a qualified electrician perform the electrical connections and wiring to the electric motor, ensuring the requirements on page 8 are met.
15. Install the B67 belts (27) on the gearbox pulley (23) and 6-1/2" jackshaft pulley (24) and tighten them using the 5/8" washer (28) and 5/8" locknut (29) on the threaded rod attached to the jackshaft tower (4).
16. Place the B82 belts (30) on the motor pulley (25) and the 15" pulley (23), align the pulleys using a straight edge, and tighten the set-screws.
17. Tighten the belts so that a 1" (25 mm) deflection is obtained when a 5 lb (22 N) force is applied at the belt center. Tighten the motor bolts.

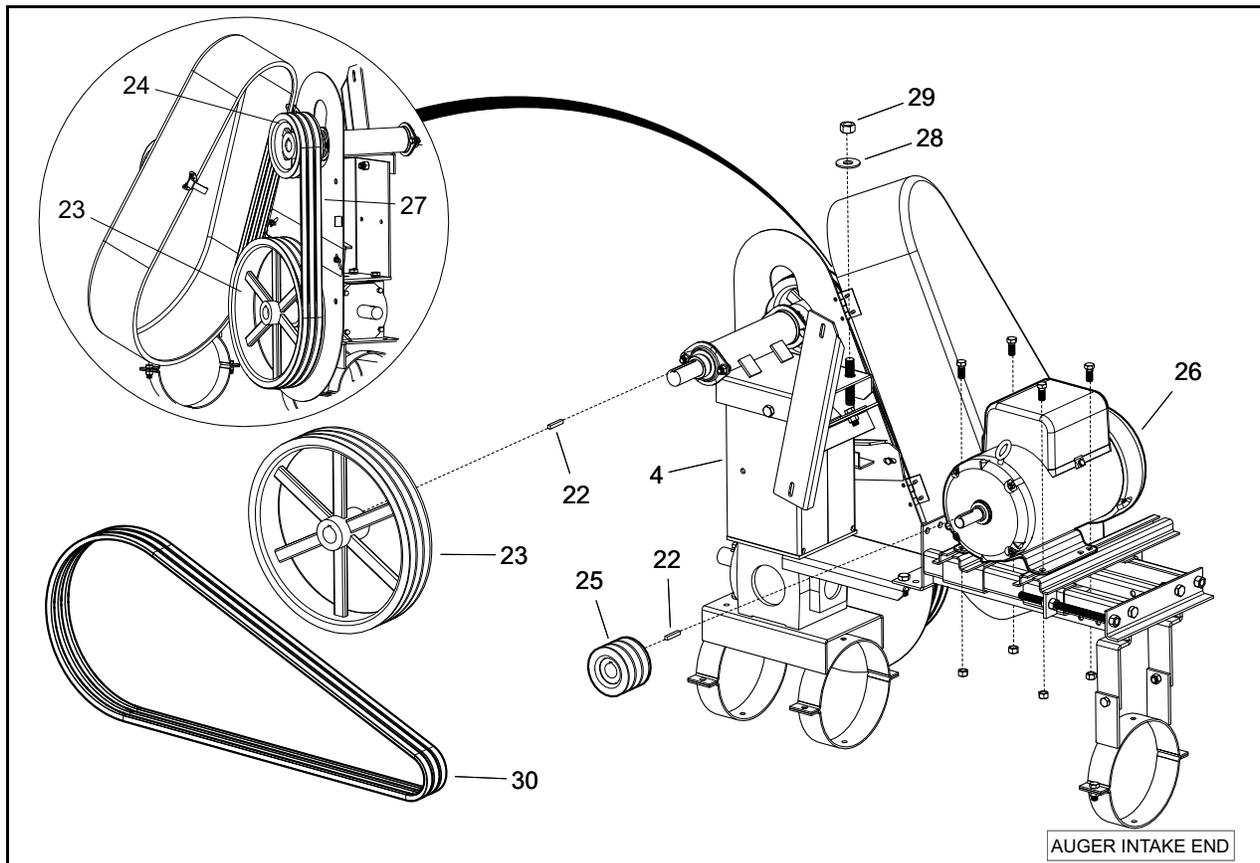


Figure 4 Installing Electric Motor, Pulleys, and Belts

Note: *Once all bolts and set screws are tightened, re-check pulley alignment. Proper alignment will prolong belt life.*

18. Adjust the pulley backplate (19) to make sure it will not rub on the electric motor shaft. Tighten the backplate mount bolts/nuts securely.
19. Close and lock the plastic pulley guard using the quick-clip.
20. Assemble the adjustable two-piece pulley guard (31) and guard extension (32) using four 1/4" x 1/2" bolts (20) and 1/4" whiz nuts (21) as shown in Figure 5.
21. Attach the pulley guard to the left-hand pulley guard bracket (18) with a flat iron strap (33) and 5/16" x 6" bolts (34) and 5/16" locknuts (35).

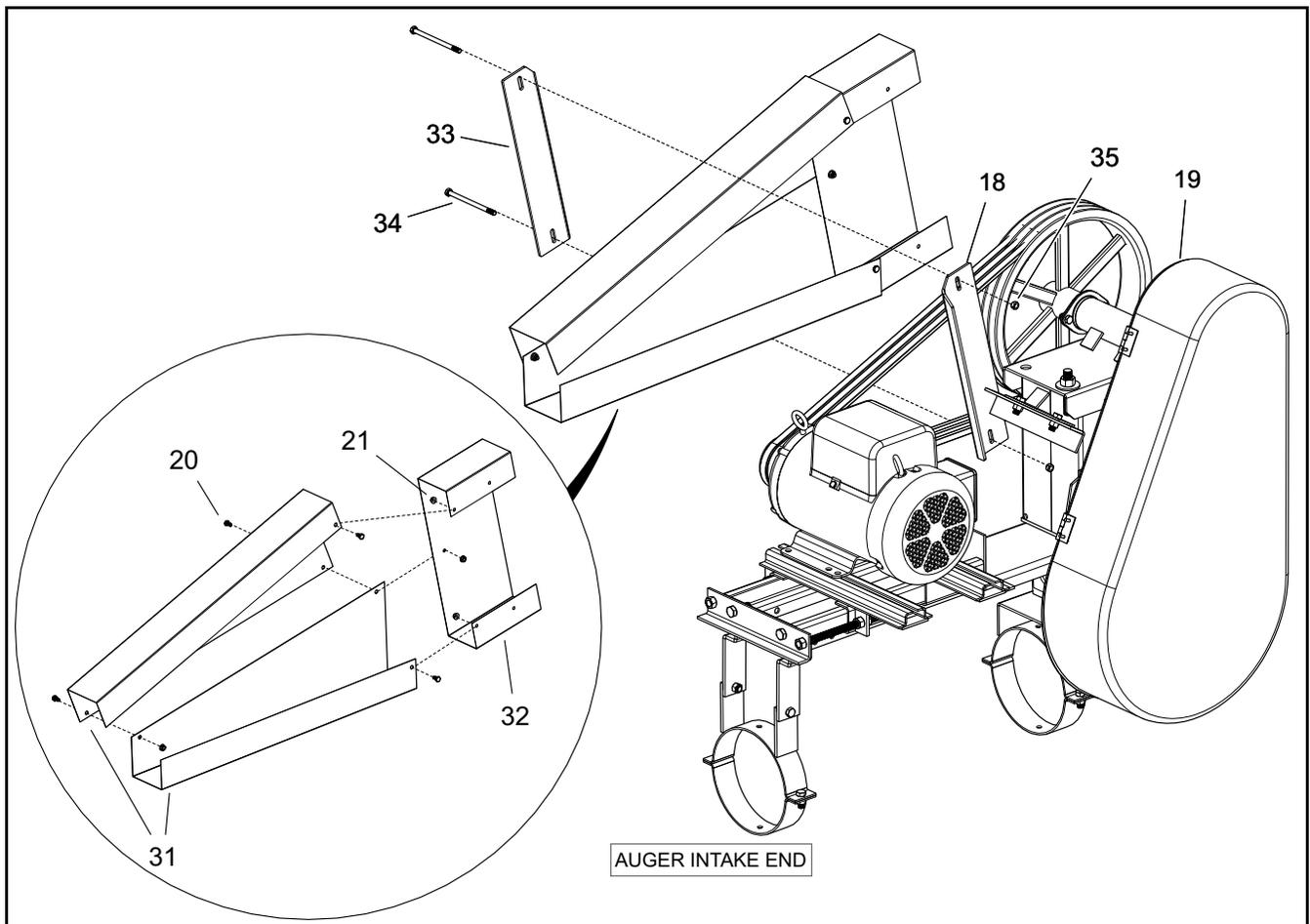


Figure 5 Installing Two-Piece Pulley Guard and Extension

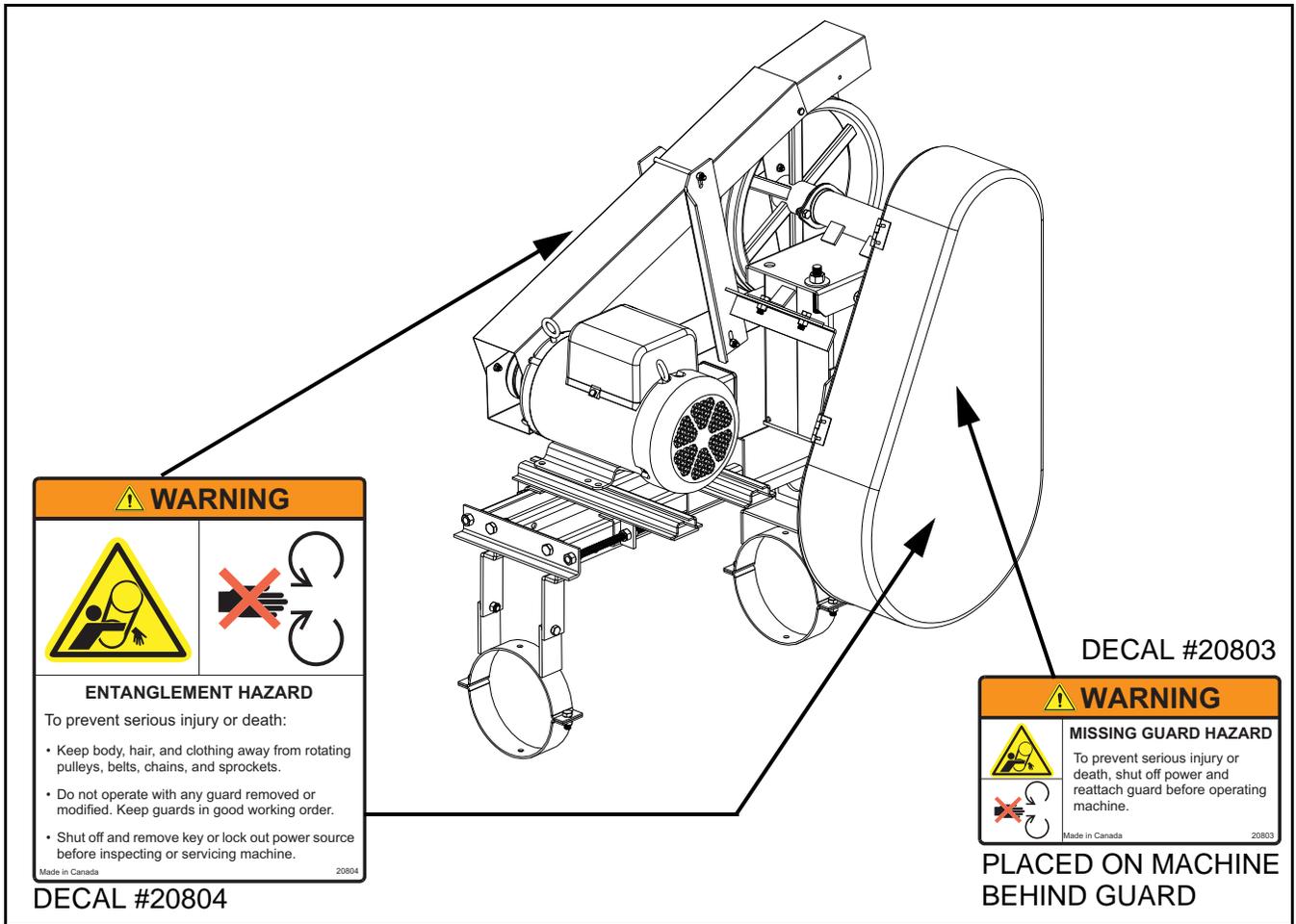


Figure 6 Safety Decal Location Reference

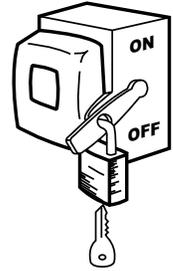
ELECTRIC MOTOR SAFETY

WARNING

Power Source

- Electric motors and controls shall be installed and serviced by a qualified electrician and must meet all local codes and standards.
- A magnetic starter should be used to protect your motor.
- You must have a manual reset button.
- Reset and motor starting controls must be located so that the operator has full view of the entire operation.
- Locate main power disconnect switch within reach from ground level to permit ready access in case of an emergency.
- Motor must be properly grounded.
- Guards must be in place and secure.
- Ensure electrical wiring and cords remain in good condition; replace if necessary.
- Use a totally enclosed electric motor if operating in extremely dusty conditions.

SERVICE DISCONNECT



Lockout

- The main power disconnect switch should be in the locked position during shutdown or whenever maintenance is performed.
- If reset is required, disconnect all power **before** resetting motor.