

ASSEMBLY INSTRUCTIONS

Publication No. 1033485

ELECTRIC & PTO DRIVE ASSEMBLY FOR 40'-70' MODEL 50 MASS-TER MOVER and STATIONARY MODELS 5-20 HORSEPOWER

GEAR REDUCER

1. IMPORTANT! Reducers are shipped **without OIL**. It is necessary to add the proper amount of oil before running. Use **32 oz. (0.95 l)** of a high grade SAE 90 weight non-foaming, multi-purpose gear oil. If the unit is expected to run in severe conditions, the use of a synthetic lube is recommended. Install the magnetic drain plug in the hole closest to the bottom of the reducer. Discard the tape that covers the fill/ventilation plug in shipment and install plug in top most hole. (This may have been done at the factory.)

Future oil level checks can then be made using a home-made dipstick made from a clean metal material such as a coat hanger or similar device. After the 32 oz. has been added and the reducer installed, determine the angled position the conveyor will most likely be in when the next oil level check is performed.

Remove the plug from the gearbox side (labeled "vent" in the first two illustrations below). Insert the dipstick. Note the level reading on the dipstick, use this same method and reading for future level checks.

Lubrication is extremely important for satisfactory operation. Check oil level regularly. More frequent oil changes are recommended when operating under conditions of extreme dirt or dust. Under these extreme operating conditions, the oil should be changed every 1 to 3 months, depending on severity of conditions.

After an initial operation of about two weeks, the oil should be changed. After the initial break-in period the oil should be drained, magnetic drain plug cleaned, gear case flushed and refilled every 2500 hours of operation or 5 months, whichever comes first.

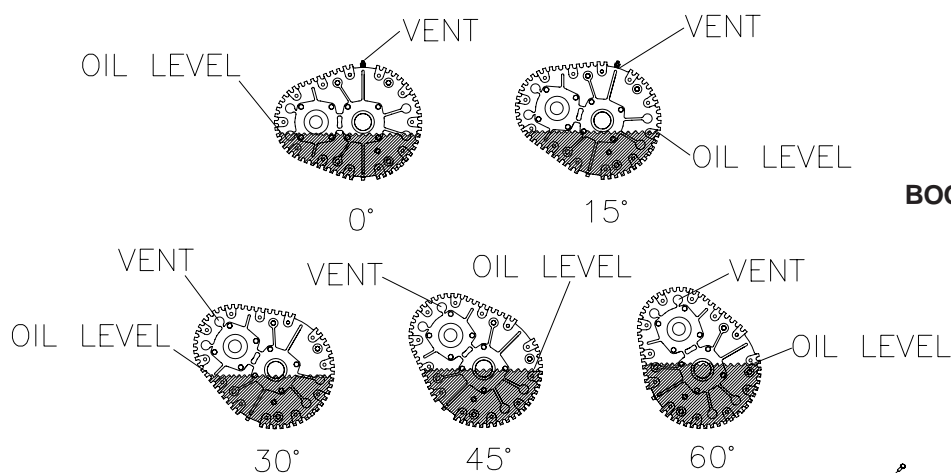


FIG. 1
BOOT DRIVE REDUCER
OIL LEVELS

HOPPER ASSEMBLY

Bolt the bottom hopper plate (Ref. 1) to the boot using two 1/4" x 1" long hex head capscrews, four 1/4" flat washers and two 1/4" nylock nuts. Bolt the side hopper plates (Ref. 2 & 3) to the boot and hopper bottom plate using five 1/4" x 1" long hex head capscrews, ten 1/4" flat washers and five 1/4" nylock nuts on each panel.

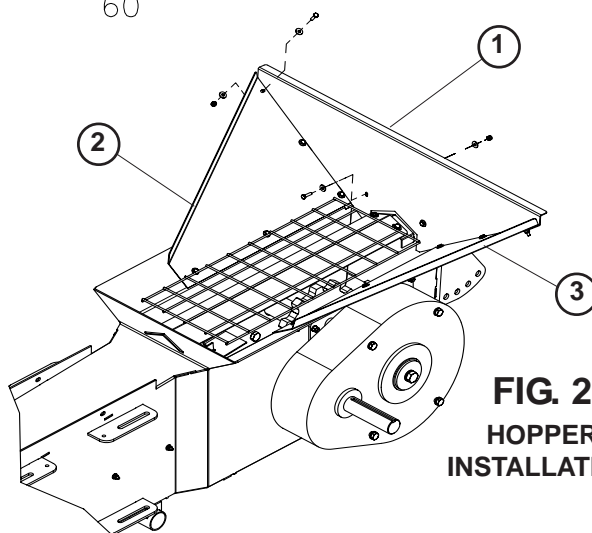


FIG. 2
HOPPER
INSTALLATION

ASSEMBLY INSTRUCTIONS

ELECTRIC DRIVE ASSEMBLY

1. Bolt the motor mount tightener bracket (Ref. 4) to the boot using two 3/8" x 1-1/4" long hex head capscrews, two 3/8" flat washers and two 3/8" nylock nuts.
2. Bolt the motor mount tightener (Ref. 5) to the motor mount plate (Ref. 6) using two 1/2" x 1-1/2" long hex head capscrews, two 1/2" flat washers and two 1/2" nylock nuts.
3. Thread one 3/4" non-lock nut onto the motor mount tightener, followed by a 3/4" flat washer.
4. Slide the motor mount tightener rod into the slot on the motor mount tightener bracket and set the feet of the motor mount plate on the brackets welded to the inlet sides.
5. Loosely bolt the motor mount plate (Ref. 6) to the boot, using four 1/2" x 1-1/4" carriage bolts, four 1/2" flat washers and four 1/2" nylock nuts.
6. Put the remaining 3/4" flat washer on the motor mount tightener rod and loosely thread on the 3/4" non-lock nut.
7. Bolt the upper belt guard bracket (Ref. 7) to the boot as shown, using a 5/16" x 1" long hex head capscrew and a 5/16" nylock nut.

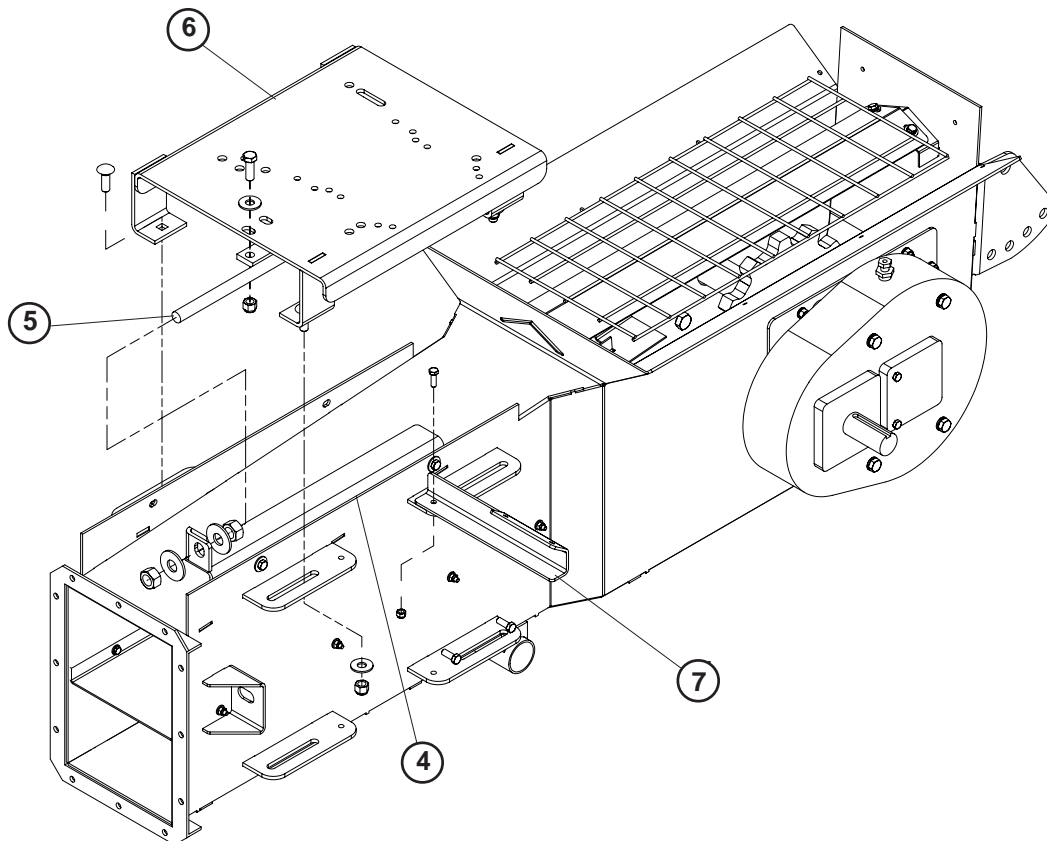


FIG. 3
ELECTRIC DRIVE
ASSEMBLY

ASSEMBLY INSTRUCTIONS

ELECTRIC DRIVE ASSEMBLY - CONT.

8. Bolt the electric motor (not supplied) to the motor mount plate.
9. Remove the two bolts and lockwashers closest to the input shaft that hold the reducer to the boot and reinstall through the belt guard, (Ref. 14), using two 1/2" flat washers and original lockwashers.
10. Bolt the electric belt guard (Ref. 14) to the upper belt guard bracket, using two 5/16" x 1" long hex head capscrews, four 5/16" flat washers and two 5/16" nylock nuts.
11. Bolt the 15.4" pitch diameter sheave (Ref. 8) to the input shaft of the reducer using the 1-1/2" bushing (Ref. 9) and 3/8" x 2" long key (Ref. 10). Install the sheave as close to the reducer as space allows to minimize overhung loads on the reducer input shaft.
12. Bolt the 4.2" pitch diameter sheave (Ref. 11) to the motor shaft, using the 1-5/8" bushing (Ref. 12) and 3/8" x 2" key (Ref. 13).
13. Install the 105" B-Belts over the sheaves and use the motor mount tightener rod to tension the belts. Tighten the motor mount plate bolts at this time and check all other fasteners to ensure they are secure.

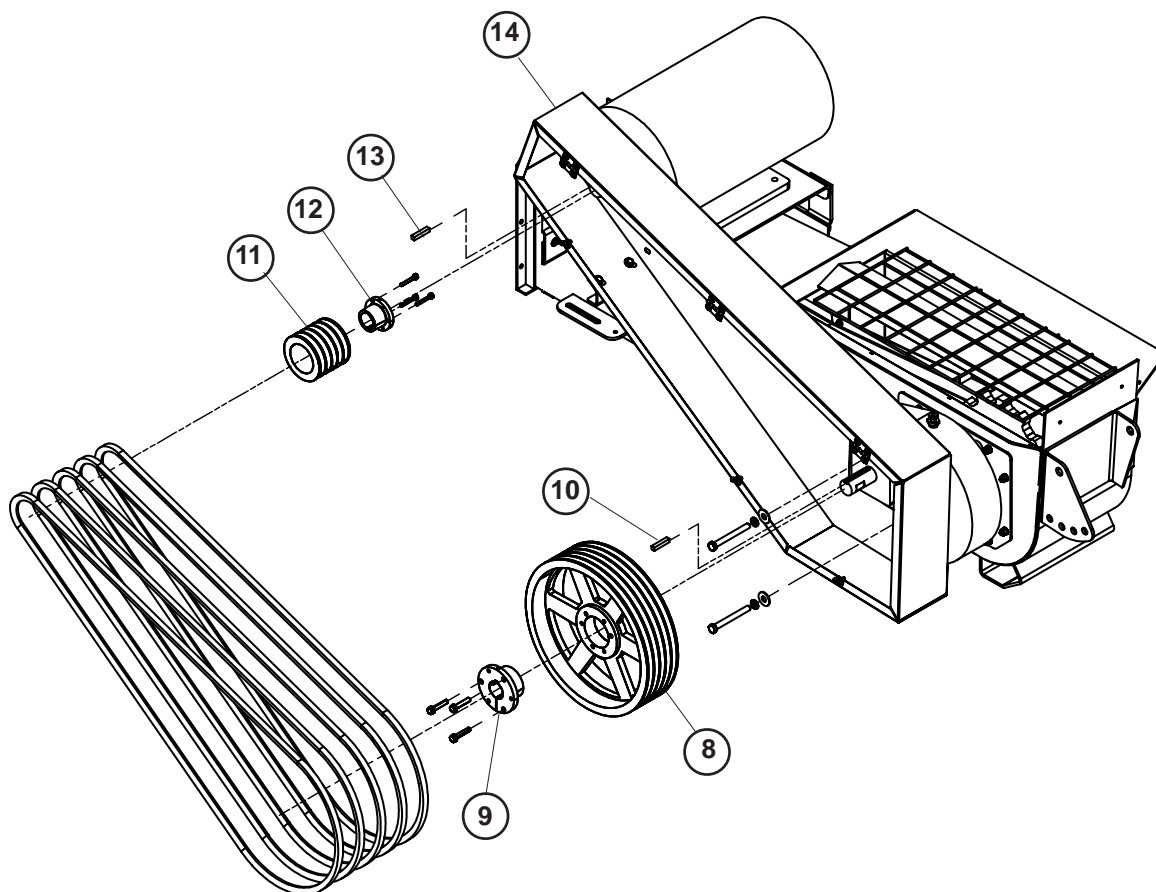


FIG. 4
ELECTRIC DRIVE
ASSEMBLY - CONT.

ASSEMBLY INSTRUCTIONS

PTO DRIVE ASSEMBLY

1. Thread one 3/4" non-lock nut onto the PTO tightener, followed by a 3/4" flat washer.
2. Guide the tightener rod into the bracket on the boot and set the top of the PTO housing (Ref. 16) on the upper mounting brackets. Loosely bolt the PTO housing to the boot, using four 1/2" x 1-1/2" long carriage bolts, four 1/2" washers and four 1/2" nylock nuts.
3. Remove the two bolts and lockwashers closest to the hitch that hold the reducer on and reinstall through the PTO shaft holder (Ref. 15).

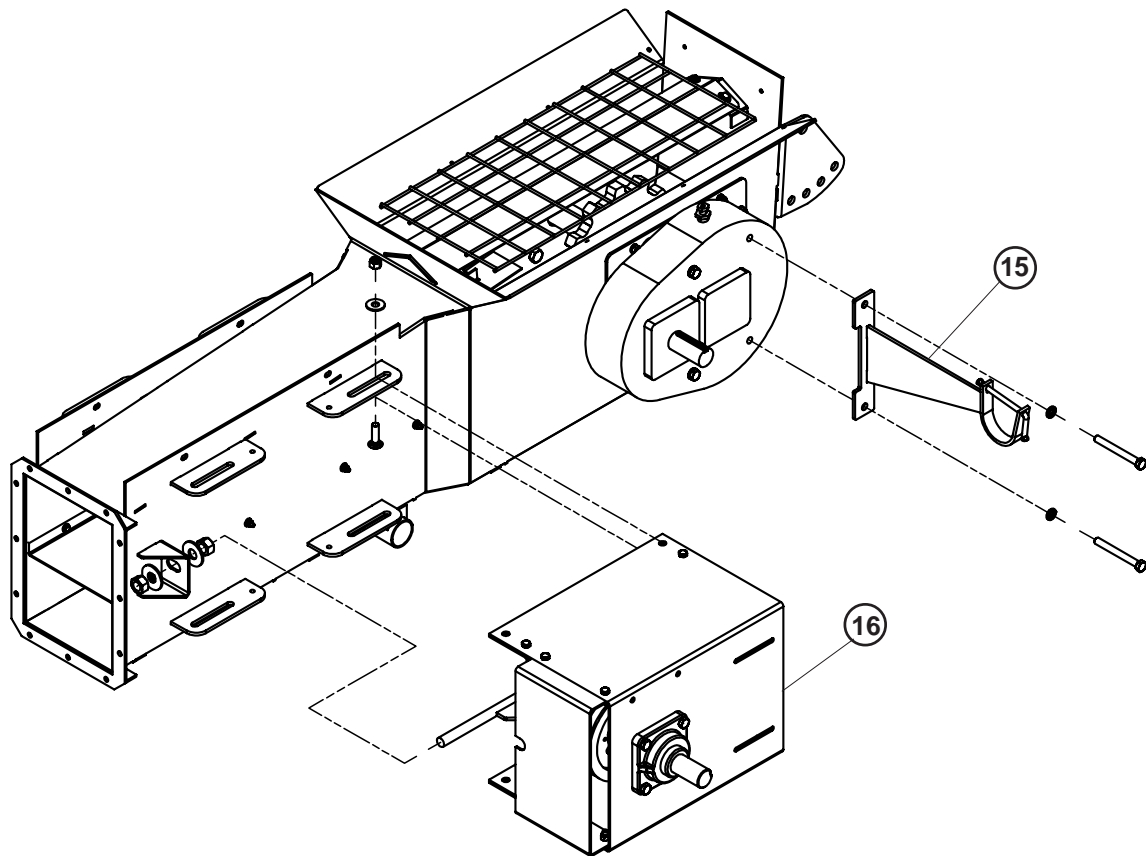


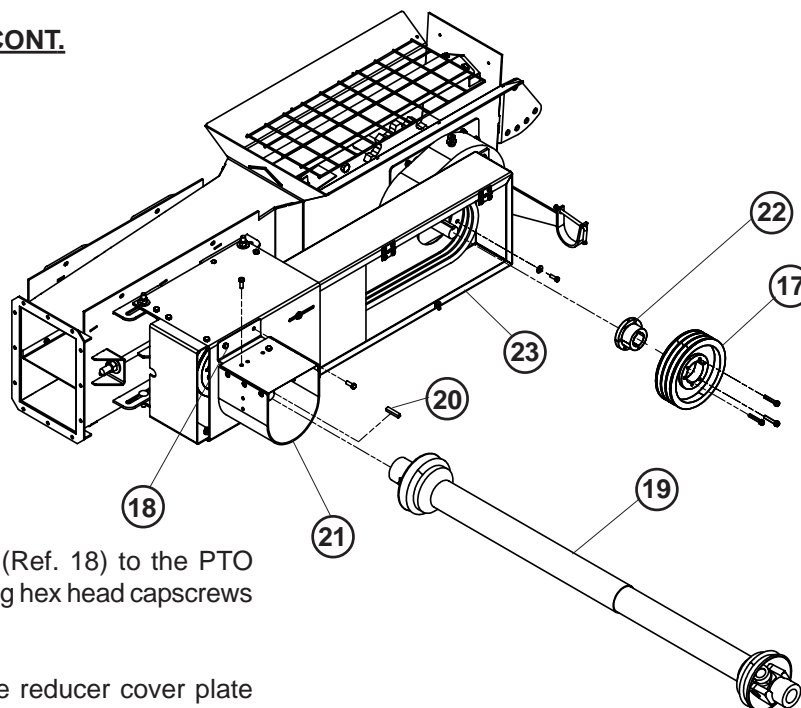
FIG. 5
PTO DRIVE
ASSEMBLY

ASSEMBLY INSTRUCTIONS

Page 5

PTO DRIVE ASSEMBLY - CONT.

FIG. 6
PTO DRIVE
ASSEMBLY - CONT.



4. Bolt the PTO shield hanger (Ref. 18) to the PTO housing using two 3/8" x 1" long hex head capscrews and two 3/8" nylock nuts.

5. Remove the two bolts on the reducer cover plate next to the input shaft.

6. Slide the PTO belt guard (Ref. 23) into the PTO housing and loosely bolt together using two 5/16" x 1" long hex head capscrews, four 5/16" flat washers and two 5/16" nylock nuts.

7. Bolt the belt guard to the reducer using the two bolts that were removed, with two 5/16" flat washers.

8. Bolt the 8.6" sheave (Ref. 17) to the reducer, using the 1-1/2" bushing (Ref. 22) and 3/8" x 2" long key, making sure the sheave is aligned with the sheave in the PTO housing.

9. Pull the belts inside the PTO housing to the reducer and install over sheaves. Put the other 3/4" flat washer and 3/4" nut over the PTO tightener rod and use to tighten belt. Tighten all bolts that were left loose for adjustment purposes.

10. Mount the u-joint shield to the mounting bracket on the PTO housing directly above the PTO housing input shaft, using two 3/8" x 1" long hex head capscrews, two 3/8" washers and two 3/8" nylock nuts.

11. Connect the 1-1/2" bore diameter end of the PTO driveline (Ref. 19) to the PTO housing input shaft. Use the 3/8" x 2" long square key (Ref. 20).

12. Set the PTO driveline into the PTO shaft holder.

IMPORTANT: For the setscrew in the PTO driveline yoke to be properly engaged on the input shaft, slide the yoke onto the shaft until the setscrew will sit on the flat portion of the input shaft. See FIG. 7. **DO NOT extend the gearbox input shaft beyond the inside edge of the yoke.**

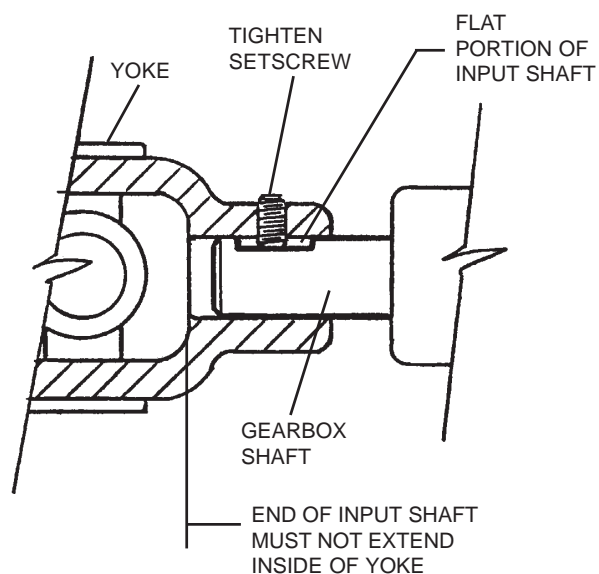
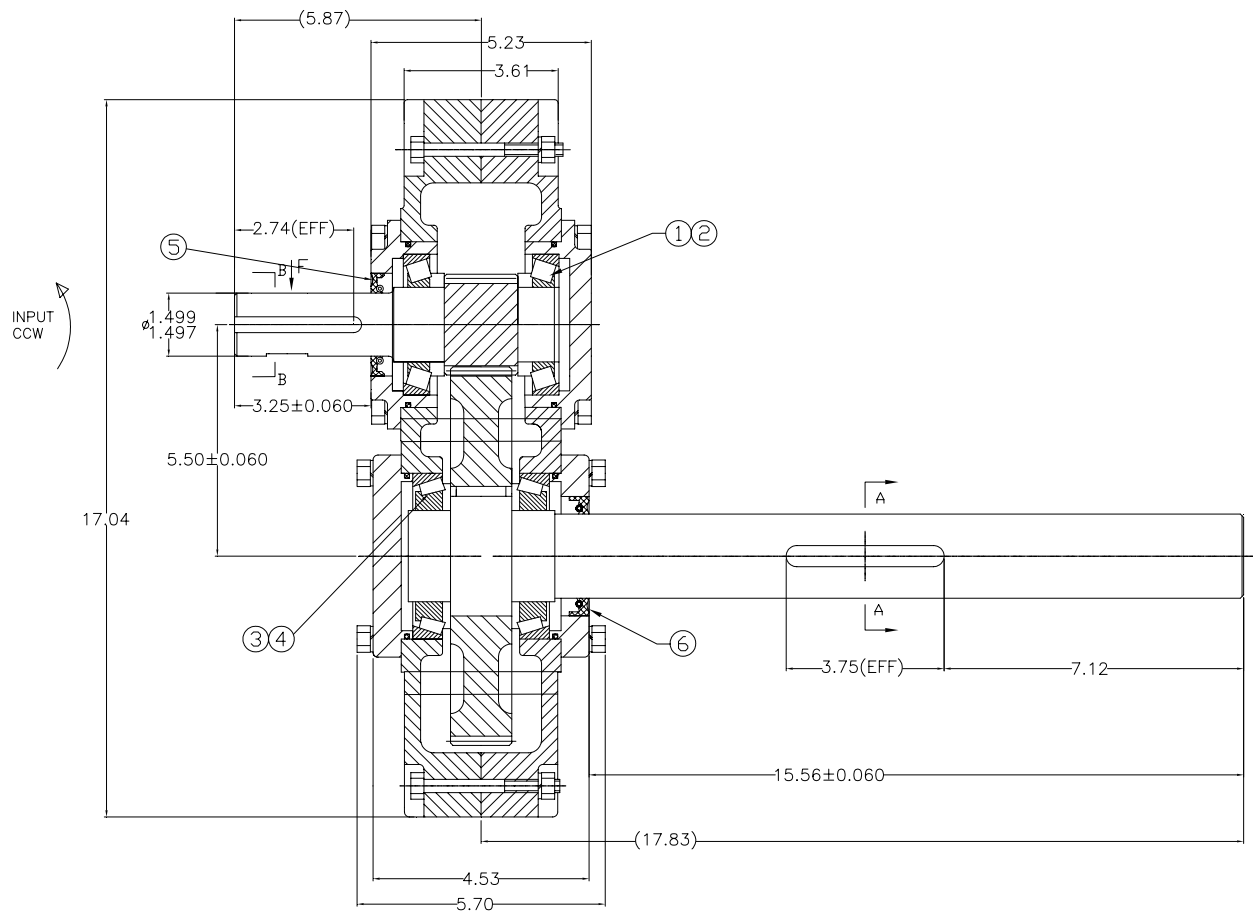


FIG. 7
PTO DRIVELINE TO PTO HOUSING
INPUT SHAFT DETAIL

ASSEMBLY INSTRUCTIONS

4:1 REDUCER

PART NO. 1028204



REF. NO.	PART NO.	DESCRIPTION
1	1026473	Bearing Cone 25590
2	1021344	Bearing Cup 25520
3	1026474	Bearing Cone 390A
4	1026475	Bearing Cup 394A
5	1026476	Seal f/1.50" Input Shaft
6	1026477	Seal f/2.00" Output Shaft