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REDUCER PLATE WITH INBOARD BEARING INSTALLATION FOR MODEL 50 MASS-TER MOVER

1. Remove existing reducer, sprocket and reducer mounting plate for the Mass-ter Mover boot assembly. Disassemble the sprocket, key, reducer and drive mounting brackets from the reducer mounting plate. Inspect all parts for wear and replace any badly worn parts. The removed reducer mounting plate will be discarded. The drive guard mounting brackets will be reassembled to the reducer. NOTE: The cover plate, which faces the turnbuckle anchor on the trunk of the Mass-ter Mover will also be removed and discarded.

2. Inspect, clean and "polish" the output shaft of the reducer, the drive key, and the internal bore of the sprocket. Be sure and remove any burrs or rust that will make re-assembly difficult. Coat the output shaft and the internal bore of the sprocket liberally with anti-seize compound.

3. Install the reducer and sprocket to the supplied reducer mounting plate. It will be necessary to thread the output shaft of the reducer through the new mounting plate, then into the sprocket and finally out the inboard bearing hole. (See Fig. 1 for assembly of the reducer with the PTO drive and Fig. 2 for the assembly of the reducer with the electric drive). Be sure the hub side of the sprocket faces the reducer and that the drive key has been installed into the output shaft keyway. **DO NOT** tighten the setscrews on the sprocket at this point. Leave the sprocket loose on the output shaft.

4. Install the reducer retaining bolts to hold the reducer in place on the mounting plate. **DO NOT** tighten these bolts; just snug them in place.

5. Slide the sprocket over against the reducer mounting plate. Install the supplied 2" bearing onto the end of the output shaft as shown in Fig. 1 & Fig. 2. The bearing is installed with the lock collar facing in, adjacent to the sprocket. The end of the output shaft will be flush or slightly recessed into this bearing. Install the 1/2" x 1 1/4" carriage bolts through the bearing flangettes and tighten them in place to retain the 2" bearing in the reducer mounting plate. NOTE: The 1/2" nylock nuts for the carriage bolts are assembled inside the reducer assembly. Next, lock the bearing collar to the shaft.

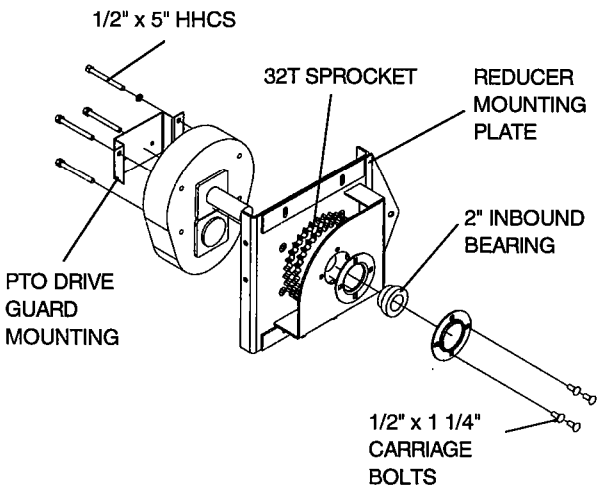

FIG. 1
PTO DRIVE

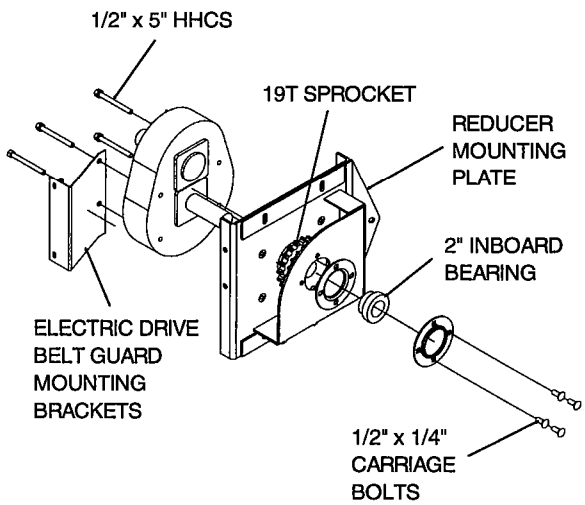

FIG. 2
ELECTRIC DRIVE

6. Loosen all the bolts that retain the reducer. Remove and reinstall the 1/2" x 5" HHCS, as needed to install the necessary drive shield mounting brackets. Once all the retaining bolts have been loosened, and the necessary mounting brackets installed, fully tighten the 1/2" x 5" HHCS to retain the reducer. By loosening the 1/2" x 5" HHCS, as described in this step, the reducer will be aligned with the inboard bearing. Failure to perform this step may cause an unnecessary stress being placed on the reducer and inboard bearing.

7. Next, slide the output shaft sprocket up against the lock collar of the inboard bearing. Tighten the sprocket setscrews down against the output shaft.

8. Perform a trial assembly of the reducer assembly to the Mass-ter Mover boot. Check the clearance between the new assembly and the existing bolt ends and angle iron bars in the area where the assembly is installed. On most units, it will be necessary to trim 1/8" to 1/4" off the lower support angle iron the length of the provided reducer travel for chain tightening. It may also be necessary to trim some off the upper angle and the end off one of the protruding bolts. Once the reducer can be installed and moved freely the entire length of provided travel, final assembly of the reducer can begin.

9. Install the drive chain around the output sprocket of the reducer. Install the reducer assembly onto the Mass-ter Mover boot. Install the drive chain around the lower sprocket. Tighten the drive chain, reinstall, all drive components guards and chain drive covers.