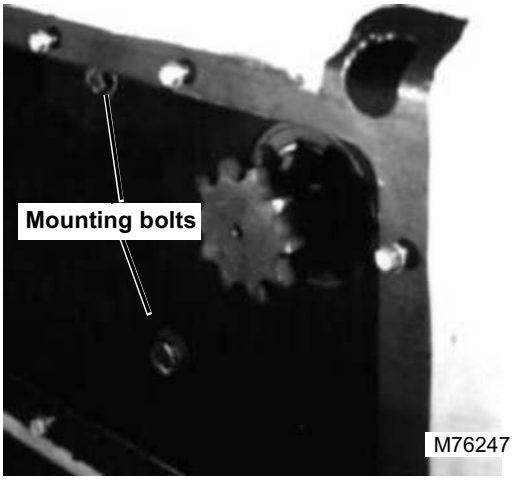
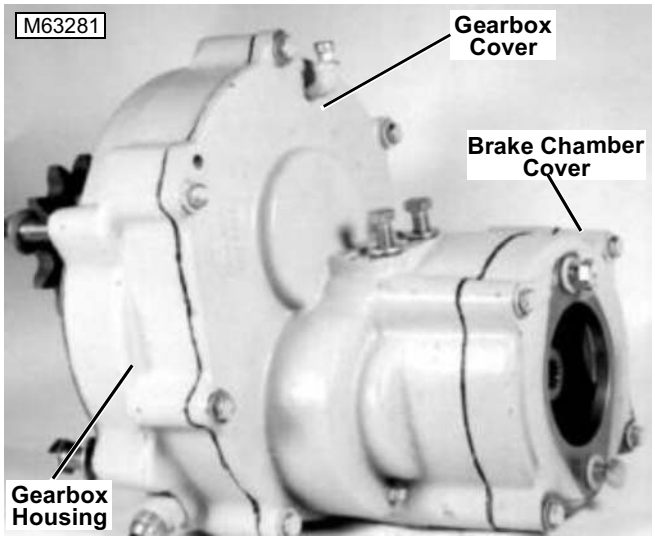


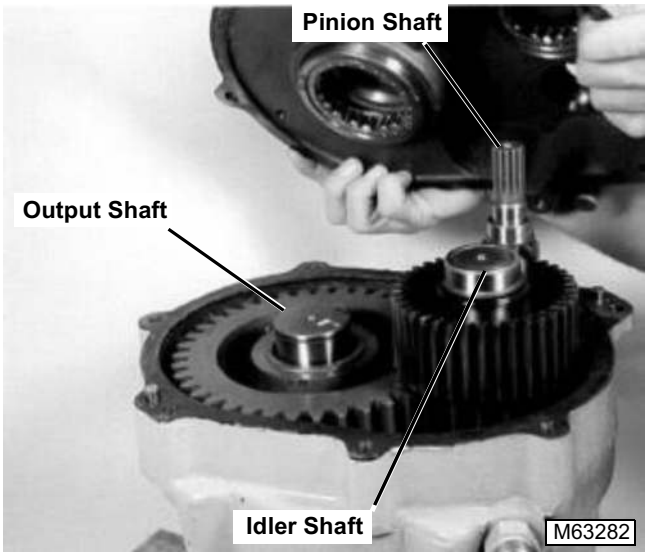
14. Remove the four (4) gearbox mounting bolts inside the chain case.
15. Pry gearbox away from chain case to break silicone seal at mating surfaces.
16. Pull gearbox away from side frame until double chain sprocket will clear the side frame. Remove gearbox from loader.

GEARBOX DISASSEMBLY AND REASSEMBLY



Gearbox Cover Removal

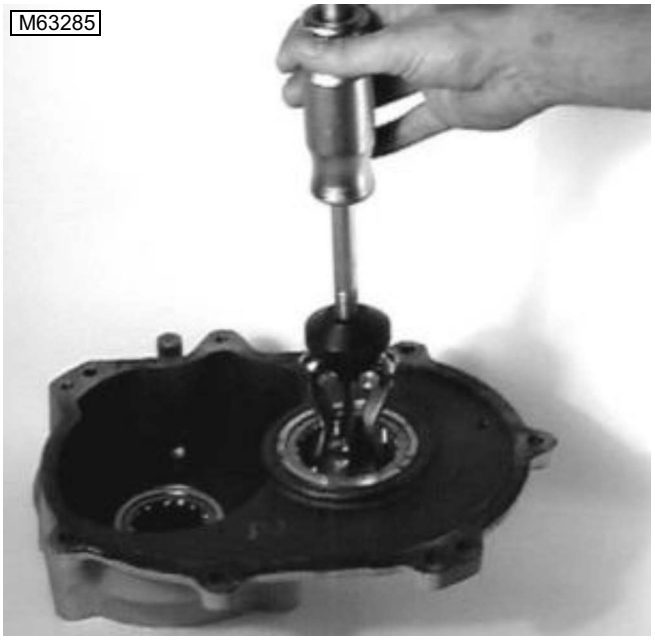
1. Remove gearbox from loader *(see Gearbox Removal And Installation).*
2. Remove four (4) cap screws holding park brake chamber cover to gearbox cover.
3. Gently tap park brake cover with a plastic or wood mallet until it is loosened from the gearbox cover.
4. Remove the brake discs, friction disc, and coupler from the end of the gearbox pinion shaft.
5. Remove brake pucks from park brake cover and gearbox cover.
6. Inspect brake pucks for wear *(see Brake Section).*
7. Remove the seven (7) capscrews that fasten the gearbox cover to the gearbox housing.



8. With the gearbox supported on bench and the cover facing up, gently tap the edge of the cover until the silicone seal has been broken and the cover can be removed. When removing cover, some of the shaft bearings may stay on the end of the shaft or they may separate from the shaft and stay in the cover.

Bearing And Seal Replacement

1. Inspect the bearings on the cover side of the shaft. If they appear to be warn, replace them.



NOTE: If puller is used to remove bearings, they will likely be damaged in the process. Be prepared to replace them.

2. If bearings do not readily come out of cover, a slide hammer type puller with inside jaws can be used as shown.

IMPORTANT: Bearings and races should always be replaced as a set.

3. To install bearings, apply a thin layer of 80W90 gear lube to the outside of the bearing race.
4. Place the bearing into position in the cover or housing. If necessary a plastic hammer can be used to tap the race until it reaches the bottom of the bore.
5. Inspect the pinion shaft seal in the gearbox cover.
6. To remove seal, pry out of cover from the outside.
7. Inspect and clean sealing surface in cover.
8. Install seal with the flat side out using the correct size driver. Push seal in until flat side is flush with housing.

NOTE: The output shaft seal can only be changed after the output shaft has been removed from the gear box (see Shaft Removal And Disassembly).

Shaft Removal And Disassembly

1. Remove the retaining ring at the end of the output shaft.

The gearbox output shaft must be removed before the pinion or idler shaft can be removed.

2. To remove the gearbox shaft, place it in a hydraulic press in such a manner that will allow the shaft to be pressed out the side of the housing as shown. When pressing the shaft it is important to know that the bearing races on both ends of the shaft will be pressed off at the same time.

IMPORTANT: Make certain that when pressing the output shaft, the side of the housing is properly supported as close to the chain sprockets as possible.

3. Press the output shaft until it releases and can be removed out the side of the housing.
4. Remove the pinion shaft from the housing.
5. Remove the Idler shaft from the housing.
6. Examine the sealing surfaces of the output shaft and the pinion. Check for wear or grooves.
7. Remove the thirty nine tooth output shaft gear from the gearbox housing. Only after the output shaft and output gear have been removed can the output shaft seal be serviced.
8. Inspect the seal for damage.
9. If the output shaft bearing has been removed, the seal can be driven out from the inside of the gearbox. If not, it can be pried out from the outside or removed with a slide hammer.
10. Drive the new seal in until the flat portion of the seal is flush with the outside of the gearbox.

IMPORTANT: After removing the output shaft examine the outer bearing to see that it was not damaged during removal of the shaft.

11. Inspect the housing side bearings for wear or damage. If necessary, replace *(see Bearing And Seal Replacement)*. If any of the pinion or idler bearings were replaced, the associated races will need to be pressed off the respective shaft.