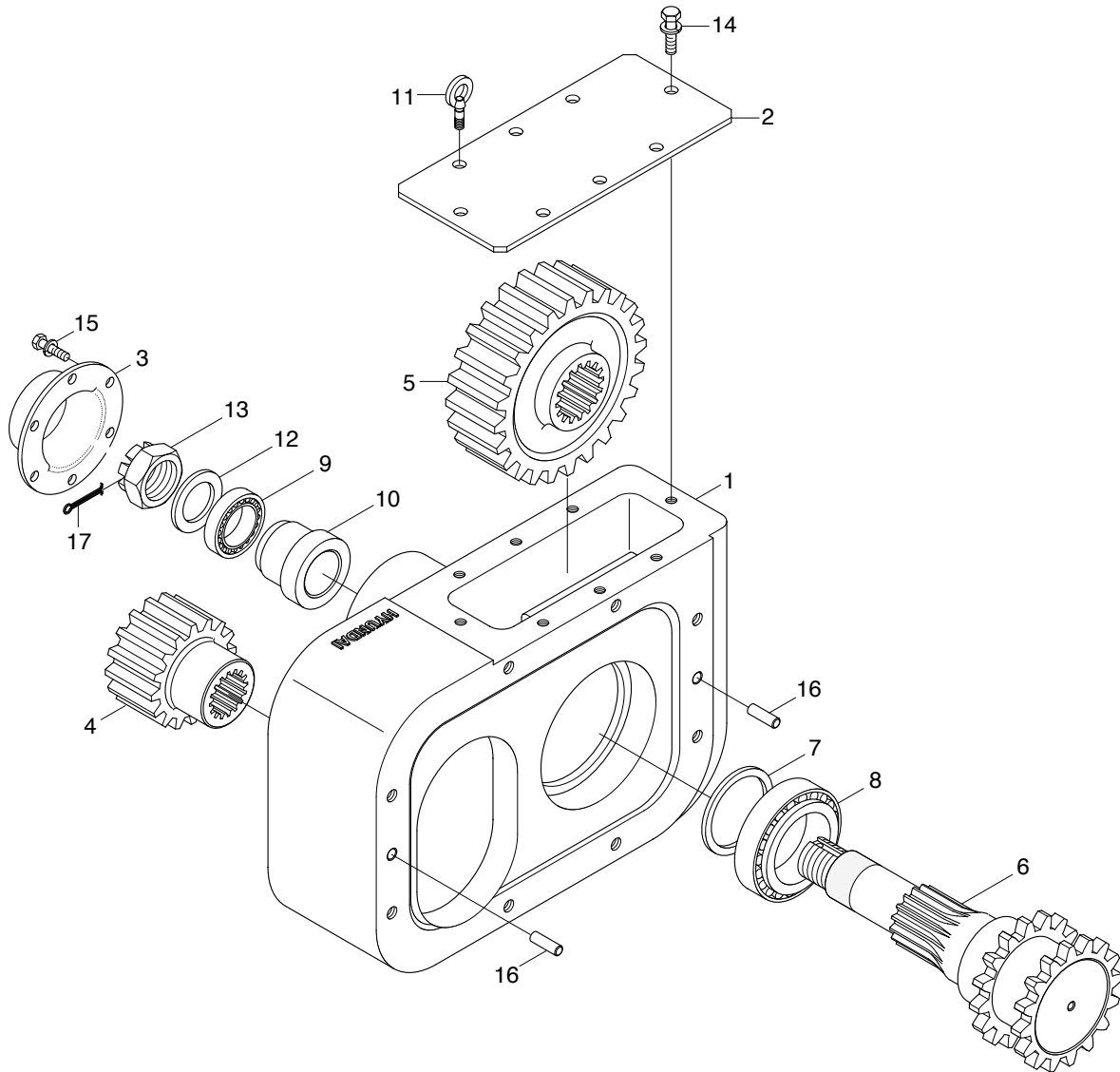


GROUP 3 GEAR BOX

1. STRUCTURE

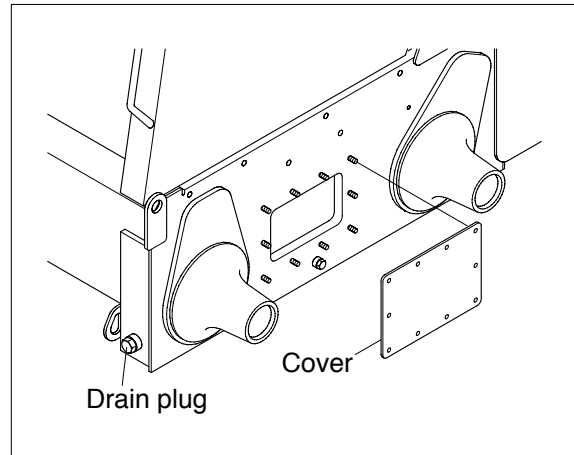


- | | | | | | |
|---|----------------|----|----------------------|----|---------------------|
| 1 | Case | 7 | Spacer | 13 | Slotted hexagon nut |
| 2 | Side cover | 8 | Taper roller bearing | 14 | With washer bolt |
| 3 | Cover | 9 | Taper roller bearing | 15 | With washer bolt |
| 4 | Input gear | 10 | Collar | 16 | Dowel pin |
| 5 | Gear | 11 | Eye bolt | 17 | Split pin |
| 6 | Sprocket shaft | 12 | Hardened washer | | |

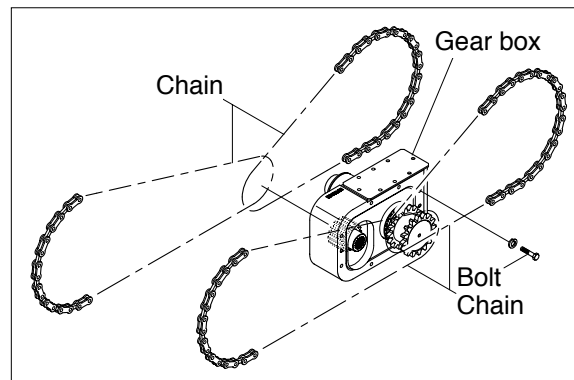
2. REMOVAL

1) PREPARATION

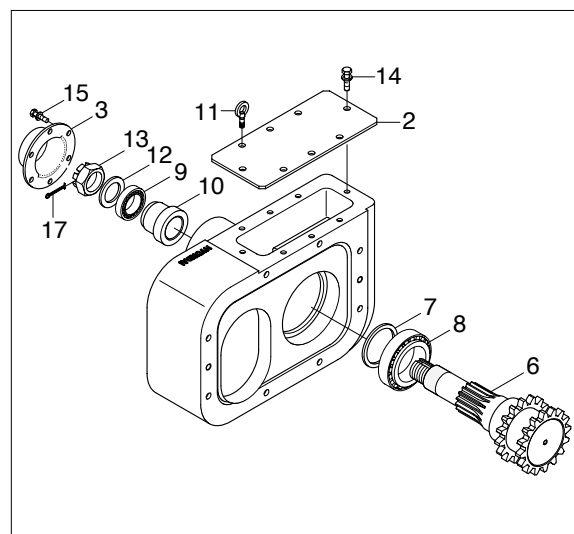
- (1) Clean the area of dirt and debris.
- (2) Block the loader securely with four wheels clear of the ground.
- (3) Remove the wheels on the side of the machine that the travel motor is to be removed on.
- (4) Remove the final drive lubricating oil drain plug at the front of the final drive housing and allow the oil drain completely.
- (5) Remove the final drive inspection plate cover between the axles on the final drive housing.



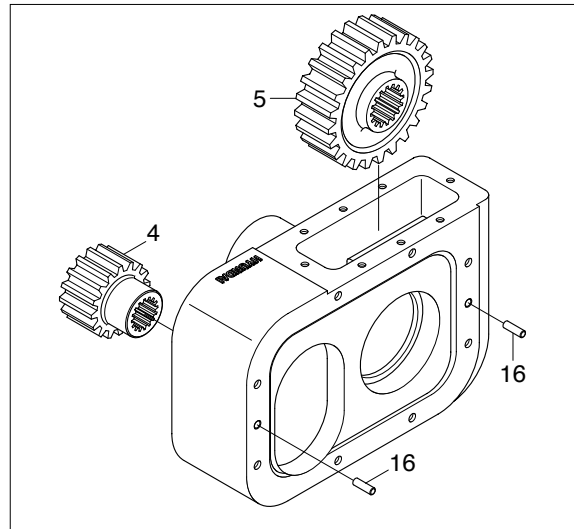
- 2) Remove the front and rear drive chains.
- 3) Remove the travel motor and input gear.
- 4) Remove the eight mounting bolts from power train case.



- 5) Remove the cover(3) and side cover(2).
- 6) Remove the split pin(17), nut(13) and washer(12) from sprocket shaft(6).
- 7) Remove the sprocket shaft(6) and the outer bearing cone(8).
The cone will come along with sprocket shaft(6).
The outer bearing cup(8), collar(10), inner bearing cup(9) and gear will remain inside the case



- 8) Remove the gears(4,5), inner bearing cone and collar.
- 9) Remove the dowel pin(16).
- 10) Remove the outer bearing cup(8) with an inside bearing puller or brass punch. Use care if using the brass punch.
- 11) Carefully punch out the inner bearing cup (9).
- 12) Using a bearing puller, remove the outer bearing cone(8) from the sprocket shaft(6).



3. CLEANING AND INSPECTION

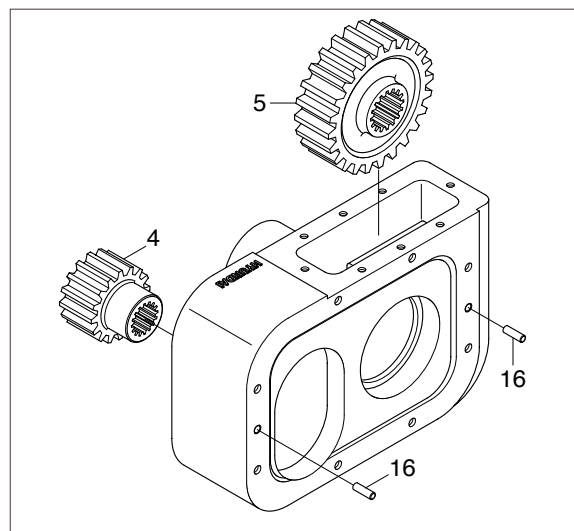
- 1) Clean the gears, bearing cones and cups in a cleaning solvent.
- 2) Inspect the bearing cones and cups for flat areas, pitting, scoring and other damage.
- 3) Inspect the gears for flat areas, pitting, scoring and other damage.

4. REPLACEMENT

- 1) Replace the gears if they are pitted, scored or damaged.
- 2) Replace the bearing cones and cups if they are pitted, scored or damaged.

5. INSTALL

- 1) Shrink fit bearing cups(8,9) into the case by refrigerating or cooling before pressing them into place.
- 2) Heater or press the outer bearing cone(8) onto the sprocket shaft(6). If the bearing cone needs heating, use an induction type heater(Hot plate).
- 3) When the bearing has cooled, pack it with multi purpose lithium base grease.
- 4) Install the gears(4,5), collar(10) and sprocket shaft(6) in the case.



- 5) Pack the inner bearing cone(9) with bearing grease.
- 6) Install the inner bearing cone(9) on the sprocket shaft(6). Be sure it is seated properly in the cup.
- 7) Install washer(12) and nut(13).
- 8) Torque nut(13) as close to 101lb · ft(137Nm) as possible without backing off the nut to align the split pin(17) hole. Do not back off the nut(13).
- 9) Install a split pin(17) through torque nut(13).
- 10) Install the covers(2,3) with three bond (#1104) and bolts(11,14,15).
- 11) Install the dowel pins(16).
- 12) Install the gear box on the power train case.
- 13) Install the travel motor and input gear(4) with loctite.

