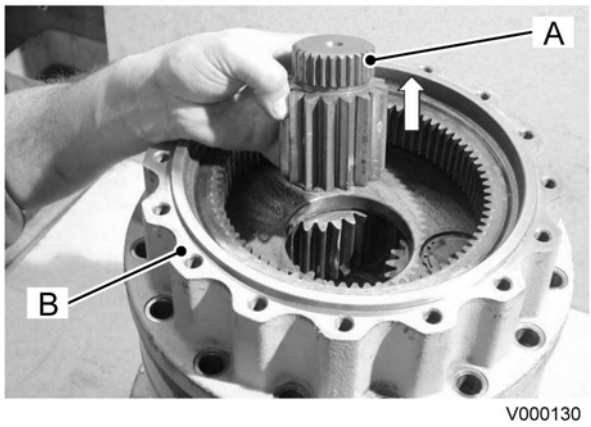

Fig 205.

d Take out the 2nd reduction sun gear **205-A**.

e Lift and remove the gearbox top section **205-B.**

3 Remove ring gear.

a Remove the O-ring seal **206-A** from the ring gear.

b Take out the 2nd reduction planet gear **206-B**

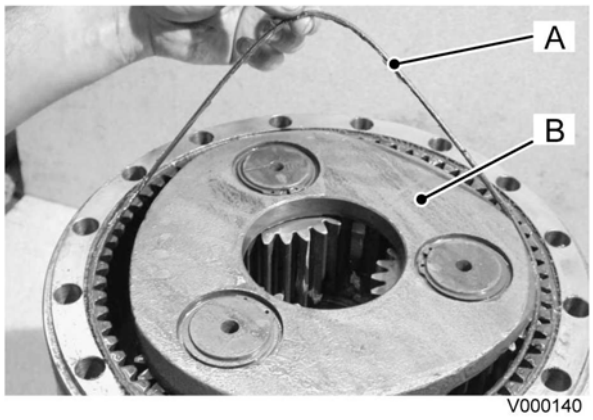

Fig 206.

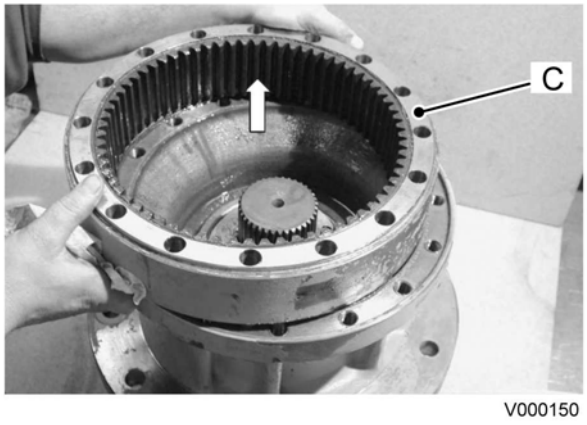

Fig 207.

c Remove the ring gear **207-C**

d Remove the O-ring seal from the under side of ring gear.

Note: *In order to proceed with the gearbox disassembly, it is now necessary to remove it from the machine and take it to a properly equipped workshop.*

4 Remove gearbox housing.

a Fit socket box wrench **208-A** and nut adapter tools **208B *see Service Tools,*** onto the ring nut **208-C** and using a torque multiplier (1:25) ⇨ ***Fig 209. (E-165)***, unscrew the ring nut.

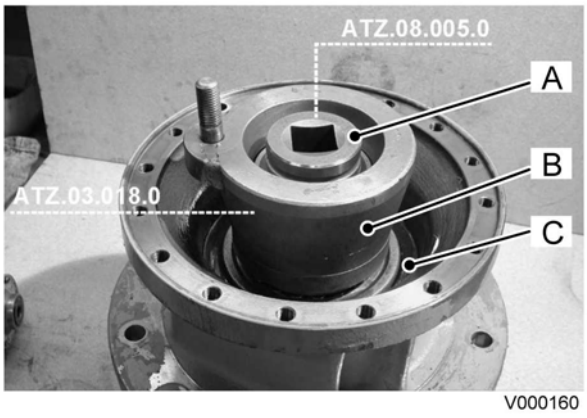

Fig 208.

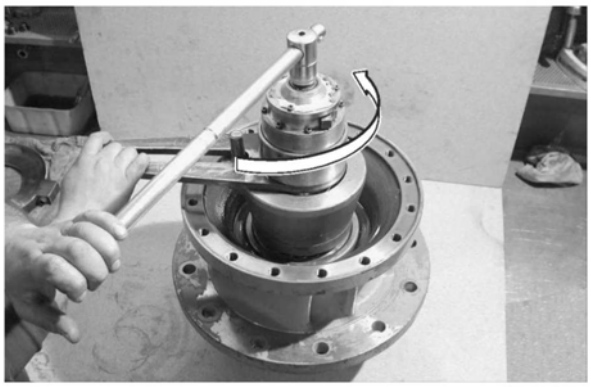

Fig 209.

b Remove the ring nut **210-A**

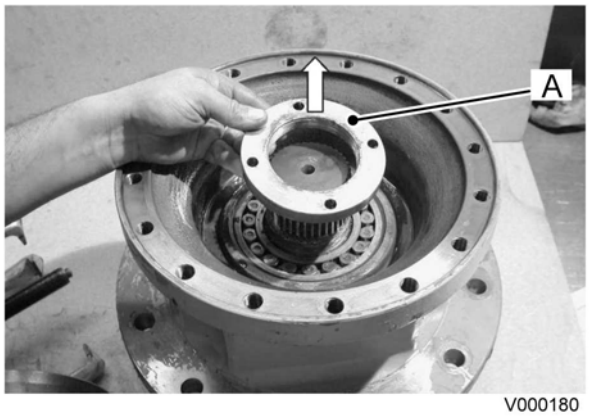

Fig 210.

c Attach a puller/extractor **211-A** to the gearbox housing **211-B** and apply pressure to separate the pinion shaft and lower bearing from the gearbox housing. After separation, use suitable lifting tackle to raise and remove the gearbox housing.

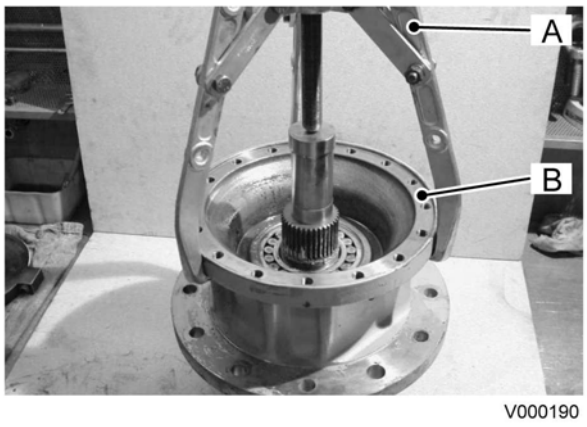

Fig 211.

5 Seperate pinion shaft from bearing.

a Use suitable lifting tackle to raise and suspend the pinion shaft and bearing **212-A** and fit the collar **212-B** of separation tool, ***see Service Tools,*** over the pinion and up against the bearing.

b Position the tubular spacer **212-C** of separation tool, ***see Service Tools,*** beneath the pinion shaft and bearing and lower the pinion shaft and bearing complete with collar onto the spacer.

c Use a press to separate the pinion shaft from the bearing.

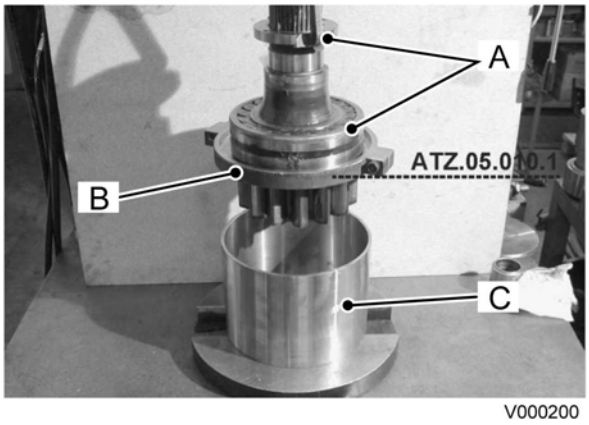

Fig 212.

6 Remove the bearing **213-A** from the gearbox housing.

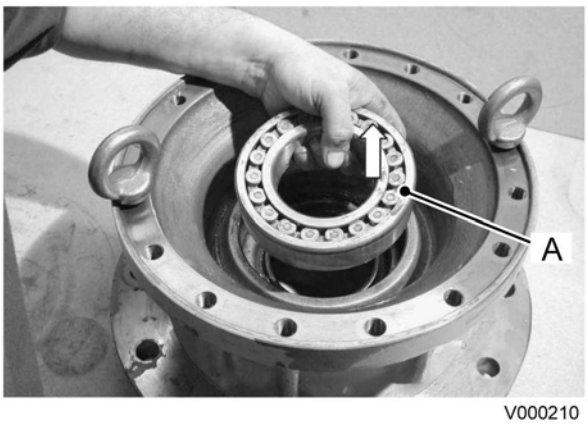

Fig 213.

7 Use stopper **214-A,** ***see Service Tools*** to remove the ring seal from the gearbox housing.

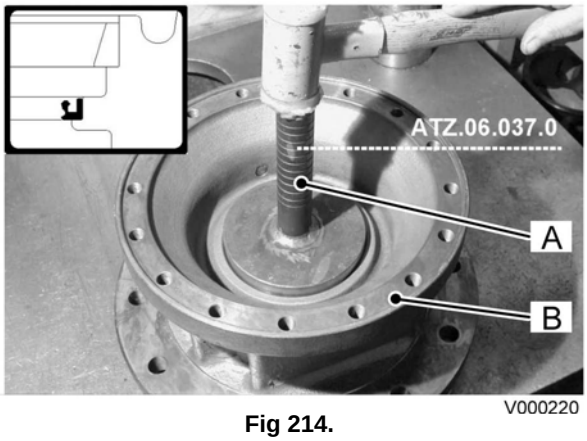

Fig 214.

Gearbox Inspection

Before assembling the gear box make sure that a thorough inspection of all the components is carried out. Remember that although a failed component may be easy to identify, the cause may be less easy to trace. It is also possible that a failed component may have caused damage to other areas of the gearbox.

Components that are subject to general wear and tear are the following:

Gears

Pinion shaft

Bearings

Seals

1 Carefully clean all components using a suitable degreasing agent.

2 Carefully inspect all gears, bearings and shafts for signs of excessive wear or damage. If wear or damage is evident, components must be renewed.

3 In the case of damaged gears, for example a planetary gear, do not proceed to replace the individual gears but the entire assembly.