

the body; remove and discard the top ball race assembly from the pinion when it is well worn.

6. Withdraw the damper pad, pressure plate and belle-ville washers through the closure cap aperture; hold the locknut and remove the damper screw by applying a screwdriver, through the closure cap aperture to its slotted inner end, remove the locknut, washer and seal from outside the body.
7. Withdraw the rack through the pinion end of the body, thus the rack teeth will not score the bush in the opposite end of the body.
8. When it is necessary to remove the pinion bottom ball race assembly, heat the body around that area and the ball race assembly will drop out when the body is "turned over" and the pinion end tapped on a wooden block.
9. Reassembly is the reverse of the dismantling sequence but particular attention must be given to the following:
  - i. When either of the studs are loose or have been renewed, they must be tightened to a torque of 3.5 lbs. ft. (50 kg. cm.).
  - ii. All parts are reassembled with a liberal coating of the recommended oil, see under "Recommended Lubricants, Section P".
  - iii. The pinion ball race assemblies are a light press fit on the pinion and in the body.
  - iv. Preload the pinion bearings .000 to .002 in. (.00 to .05 mm.) by pressing the pinion and top ball race assembly into the empty body followed by the original shim pack and cover plate but without a paper joint and breaking the oil film by gently tapping its splined end with a mallet; measure the gap between the cover plate and body, calculate the thickness of the shim pack to produce the specified preload and the thickness of one paper joint, remove the cover plate, shim pack and top ball race assembly from the body.
- v. The rack is fed into the body plain end first, so the groove aligns with the damper screw tapping and until the end is just clear of the damper pad housing.
- vi. Locate the pressure plate followed by two belle-ville washers, with their raised centre edges together, inside the damper pad with a smear of grease.
- vii. Coat the paper joint with a non-hardening sealing compound, fit beneath the end cover and secure with two nuts tightened to a torque of 3.5 lbs. ft. (50 kg. cm.); coat the edge of the closure cap similarly and press in, recessed side first until it becomes flush with the body.
- viii. The bolt heads of the metal bands securing the conical and convolute covers are positioned vertically downward and behind the body when the steering unit is in its fitted position, the centre line of the pinion is inclined rearward approximately 40°, the conical cover at the pinion end is left slack until the track rods have been fitted and the steering filled with oil.
- ix. Check the starting torque to rotate the pinion to the full lock position in both directions does not exceed 14 lbs. in. (15 kg. cm.).
- x. The adjustable track rod is fitted to the right hand side of the steering unit and both track rods are set parallel to the centre line of the steering unit and the bolts tightened to the torque given in the "General Data Section".
- xi. The steering unit is filled with oil through the pinion end and the conical cover fitted, see under "To refill—oil".
- xii. The steering unit is stored flat with the pinion pointing upwards, thus minimising oil leakage.