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Section J (Steering)

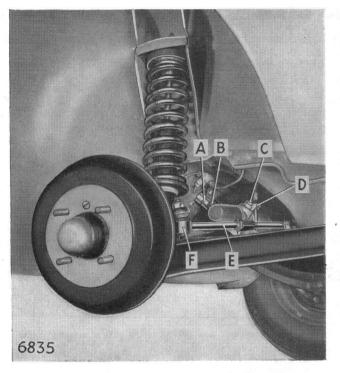


Fig. 2. Right hand front view of right hand drive steering layout

- A INNER COLUMN
- B PINCH BOLT
- C DAMPER PAD ADJUSTING SCREW E ADJUSTABLE TRACK ROD
 - F BALL JOINT

STEERING UNIT

The rack and pinion steering unit is mounted on the rear support bracket of the front suspension beneath the car.

The steering unit consists of a steering rack housed in a die cast aluminium body. The steering rack has skew cut teeth and mates with a pinion gear fitted at one side of the body, according to the drive of the car. A groove machined in the steering rack directly opposite the skew teeth accommodates the tongue of the plastic damper which eliminates any backlash that may develop between the rack and pinion. A bush bearing, pressed into the body at the opposite end to the pinion, supports the plain end of the steering rack. Pinion endfloat is controlled by the disposition of shims between the mounting flange of the upper pinion bearing and the body.

A convolute cover in the centre of the body and two conical covers, one at each end, make the steering unit oil and weather tight.



Fig. 3. The track rod being removed with special tool RG.284, after the ball pin nut has been removed

Movement of the steering wheel causes the pinion to rotate and move the steering rack along inside the body. The movement of the rack is transferred to the front wheels by the two track rods attached directly to the steering rack and the steering arms included in the stub axle assemblies.

Movement of the steering rack is limited by two metal bushes incorporated in the convolute cover contacting the ends of the slot cast in the steering unit body. These two bushes accommodate the bolts which secure the inner ends of the track rods to the steering rack.

To remove and refit (See Figs. 1, 2 and 3)

- 1. Apply the handbrake and jack up the front of the car.
- 2. Detach the pawl unit from the steering column by withdrawing two screws and washers and a clip, stow away on the parcel tray.
- 3. Slacken off the two nuts on the binnacle bracket "U" bolt, roll the floor covering aside and withdraw the two bolts and washers from the outer column flange followed by the pinch bolt and washer from the bottom end of the inner column beneath the car floor.
- 4. Detach the inner column from the steering unit pinion by lifting and sliding the outer column through the binnacle "U" bolt approximately 2 in. (50 mm.). IT IS INADVISABLE TO LIFT THE INNER COLUMN