SECTION I

THE STEERING GEAR

To Remove the Steering Wheel and Telescopic Extension.

Remove the clamping nut from the telescopic adjustment clamp and extract the clamping bolt. This will permit the wheel to be withdrawn to its full extent and enable the plated helical sleeve to be contracted towards the wheel to reveal the key at the upper end of the column which engages the long keyway in the splined adjustable shaft.

Remove the key from the column.

This will release the steering wheel and telescopic column assembly which can then be removed to a bench for further dismantling.

Take off the M.G. medallion at the wheel boss. There is a countersunk locating screw which enters from the side.

Undo the large nut holding the wheel to the shaft.

Support the hub of the wheel and with a shouldered copper drift carefully drive the splined shaft out of the wheel, taking care of the flat key locating the wheel to the splined shaft. Alternatively an extractor can be used to part the two components.

To Replace the Top and Bottom Steering Wheel Bushes.

Top:

Remove the wheel and extension and pick out the old felt bush and feed in the new one which should be coated with graphite grease on the face which contacts the inner column.

Bottom:

Remove the thin cover-plate by undoing the three small screws. Then pick out the old felt bush and insert a new one after first coating it with graphite grease on its inner face.

To Take Out the Steering Column.

Remove the steering wheel and take out the bolt and nut from the support clip under the dash. Then take out the bolt and nut holding the steering column to the body steady bracket (this is on the engine side of the bulkhead).

Remove the split pins, take off the nuts and unscrew the three bolts at the universal joint. Do not lose the rubber inserts.

This will free the inner and outer columns, which may be pulled out towards the front in the space between the radiator and the wing.

When reassembling note that the screws on the universal joint should be tightened fully against their shoulders.

Removal and Replacement of the Steering Gearbox.

Raise the car at the front and block up under the chassis. Remove the wheels and disconnect the two track rods at their outer ends.

Detach all electric cables which, it will be found, are secured to the unit by means of clips.

Remove the outer ball joint on the same side as the steering column, taking care not to lose its position for reassembly.

Undo the engine steady rod and remove its mounting bracket from the chassis.

Remove the three screws and nuts at the universal joint on the steering column and then detach the steering gearbox from the frame (four bolts and nuts).

By sliding the complete unit to one side it will be possible to pull the track rod, from which the ball end has bten removed, through the large hole in the chassis and then the whole unit may be lifted away to the front.

Replacement is a reversal of this process.

Dismantling the Steering Gearbox.

Undo the clips and remove the concertina rubber dust excluders.

Unscrew the rack damper pad cap and the damper spring. The pressure pad can then be lifted away. A number of shims will be found under the cap.

Remove the pinion shaft cap bolts and cap. Then remove the coupling nut and slide off the coupling.

Take off the circlip against which the coupling locates.

Withdraw the pinion shaft holding the gear with the pinion upwards and leaving behind the thrust washer. This thrust washer is trapped behind the rack teeth.

Hold the rack bar in suitable clamps in a vice, knock back the lock washers and undo the ball joint caps with the special spanner, Tool No. T.114. The ball seat and shims should now drop out.

Screw out the ball seat housing with a special claw spanner, Tool No. T.113.

NOTE: Should the ball joint caps come away complete with the ball seat housing it will be necessary to dsimantle them with the use of Tool No. T.122.

Remove the rack damper and shims and withdraw the rack bar from the housing.

Examination.

Fractures in the teeth, hollows or any roughness on the surfaces of the teeth will render the parts unserviceable.

Check the rack bar and pinion shaft in the housing for wear or scoring.