

To adjust new Manufacture RevingtonTR Steering Rack pinion torque

This technical instruction had been written to assist users of our new manufacture steering racks to adjust pinon to rack load thus adjust the torque needed to turn the pinion and therefore the steering wheel.

Please do be aware that the steering will seem stiff to start with, this should not be a surprise as the steering rack is brand new and will certainly appear stiff compared with the previous steering system which is likely to have covered many tens of thousands of miles and is likely being replaces because the old system was worn out and sloppy. Customer experience tells us that the steering will ease up after 100 miles or so and that when two to three hundred miles have been covered the steering rack will have bedded in nicely.

Each user will have a different opinion about what is acceptable in terms force required to turn the steering wheel, however before deciding something needs to be done about the steering rack, it is important to ensure the swivel components in the suspension are not causing the problem. We have created this Technical Instruction which shows how the steering rack can be adjusted to reduce the torque required to turn the pinion. This should, after adequate running in, never be necessary but is offered should a user feel it is something they wish to do. The information here can be used to tighten up a steering rack that has become loose in operation.

1. Remove the steering rack from the car
2. Check the torque required to turn the pinion. See figure1. Compare with the manufacturers specification. The torque must be: 15-25 kg cm / 17-29 lb inch



Figure 1 Checking the pinion torque

To alter the torque setting within this range proceed as follows: -

3. Release the plug by knocking back the outer casing where it has been deformed into the plug. See figure 2

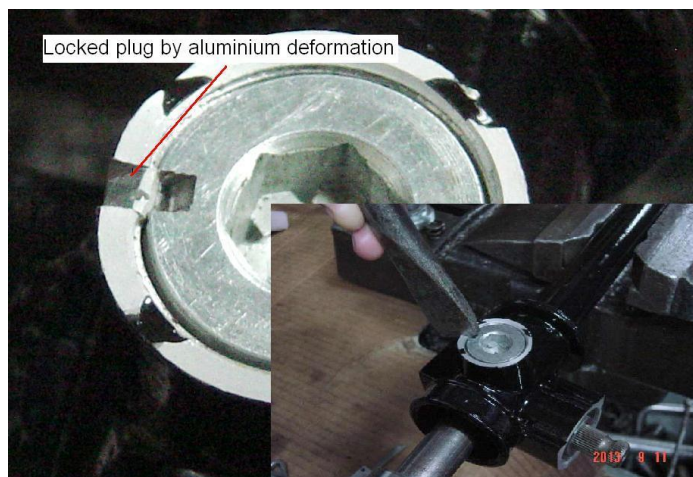


Figure 2 Unlocking and relocking the plug

4. Turn the plug 1/8 of a turn up to 1/4 of a turn maximum. See figure 3

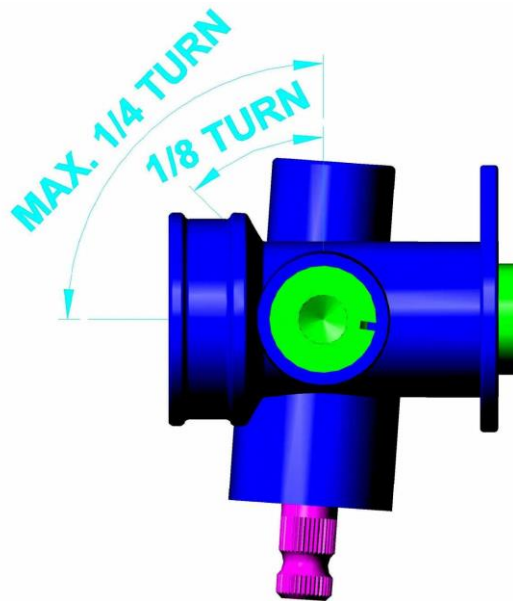


Figure 3 Direction to reduce Torque

5. Check the pinion torque, The torque must be: 15-25 kg cm / 17-29 lb inch
6. After adjustment and with the torque in the correct range, reset the plug by deforming the casing into the slot.
7. In the event that the torque needs adjusting on a rack that has been in service, and the torque is too low, turn the plug in the opposite direction until the correct torque is set.