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## FITTING INSTRUCTIONS PART NUMBER – MRA59-A660

**FRONT STRUT** 

**TO SUIT TOYOTA PRADO 250/GX550** 

NOTE – Installation is always recommended by a competent technician. Height not to be adjusted on vehicle.

## **Fitment**

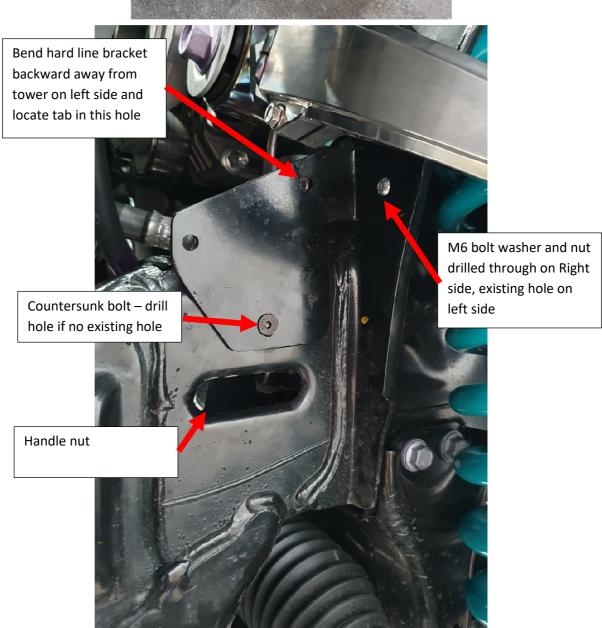
- 1. Raise the front end of the vehicle off the ground using a certified jacking system.
- 2. Support the vehicle using properly rated jack stands. The jack stands should be on the chassis rails of the body. Check the jack stands are locked in place and can handle the weight of the vehicle when it is lowered onto them. Check the vehicle will also not move. The wheels may need chocks to stop them moving.
- 3. Remove the front wheels.
- 4. Remove the Sway bar link from the spindle
- 5. Remove the abs/brake line bracket from the spindle
- 6. Remove the abs/brake line brackets from the Upper control arm
- 7. Support the lower control arm with a jack.
- 8. Remove the circlip and nut from the UCA ball joint leaving the nut still a few threads on the ball joint, hit the spindle with a hammer to pop the ball joint, hold the UCA downward carefully with a lever bar and remove the nut and gently allow the UCA to come up.
- 9. Remove the top 4 nuts on the strut cap. It is important to NOT loosen the middle nut as this is part of the shock absorber.
- 10. Remove the lower bolt from the shock absorber eye holding it to the lower control arm. Keep note of the direction this bolt is going as it will need to be put back in the same direction.
- 11. Remove the strut assembly from the vehicle. It is important to not damage any lines or cv boots. Sometimes you may need to use a lever bar to get it out as the lengths of the shocks may only just fit into the whole suspension setup.
- 12. Use a spring compressor and dismantle the struts.
- 13. Set the spring seat heights on the new struts for 2" Set the seat to 237mm (centre of lower bush to the top side of the lowest part of the step in the spring seat set to the steal seat not the rubber seat) and 251mm for 3" and lock off both locking rings
- 14. Install the spring and dustcover with bump stop inside
- 15. IMPORTANT: There is a 24 X 16 X 13mm spacer supplied in a separate bag. This MUST be used.
  - For 2 inch lifts place the spacer above the strut top cap below the nut
  - For 3 inch lifts Ensure that high clearance upper control arms are fitted (such as Dobinsons UCA59-212k) to prevent the UCA contacting the coil spring at full droop, and install the spacer below strut top cap.
- 16. Use a spring compressor to assemble and install the top nut. Locate and install the rebound adjuster nut.
- 17. Re-install the new strut assembly into the vehicle carefully taking care not to scratch it the hose fitting must be towards the chassis side and the reservoir must go under the rack end steering arm and forward.
- 18. Re install all removed components do not tighten the lower shock bush yet this is tightened at ride height once the vehicle is completed, lowered to the ground, rolled back and forth to settle.
- 19. Mount the reservoirs as below, lower vehicle to ground, roll back and forth and tighten lower shock bolts.

## **Mount the Reservoir Brackets**

1. There are 2 types of chassis variants within the prado 250 and GX550 and will require slightly different fitment.

- 2. Locate the countersunk hole into the existing chassis hole if there is no chassis hole you will have to drill a hole.
- 3. **RIGHT SIDE:** Hold the bracket against this hole and against the coil tower and mark the hole on the coil tower. Drill a 7mm hole through the tower, put a piece of wood or similar against the coil spring so you do not drill into it. Remove drill shavings and rust proof hole.
- 4. **LEFT SIDE:** there may be a small hard line bracket, the locating tab on this needs to be bent backward. This will allow the bracket to be fitted and the hole on the coil tower side of the supplied bracket to align with the existing hole in the tower
- 5. Mount the brackets to the vehicle using the Countersunk bolt and the 90mm long handle nut on the chassis rail and the M6 bolt washers and nut on the coil tower side. The handle nut will need to be bent as shown below to allow access. This may have to be bent and inserted differently from the inside of the chassis if there are no holes to allow access.





- 6. Install the reservoir use the P clamps supplied. Slide it up as high as possible so that at full droop it just clears the upper control arm leave a few mm gap. NOTE: there is spacers supplied to go between the reservoir and mounting bracket if the chassis has an external bulge that requires clearance for the reservoir.
- 7. Fix the hose to the chassis hole using the handle nut supplied instialled through the front hole of the chassis the hose should be orientated so that at full droop it is not tight under the steering arm rack end and running more forward then looped upward.



8. Trim the plastic covers as shown below, reinstall and cable tie in place.

