



Install Instructions

Fitment	Part Number
Nissan Navara D23 / NP300 / D40	MRA45-A642
Mercedes X-class	

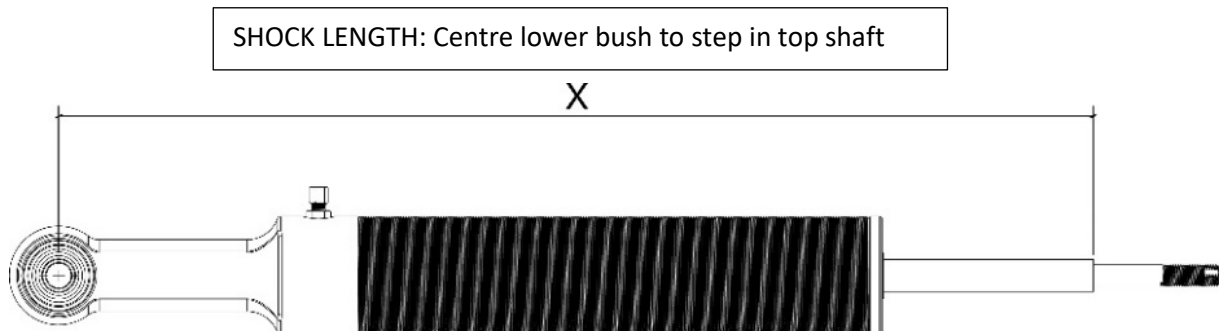
NOTE – Installation is always recommended by a competent technician. Failure to properly install may result in reservoir fouling on components and voiding warranty.

WARNING:

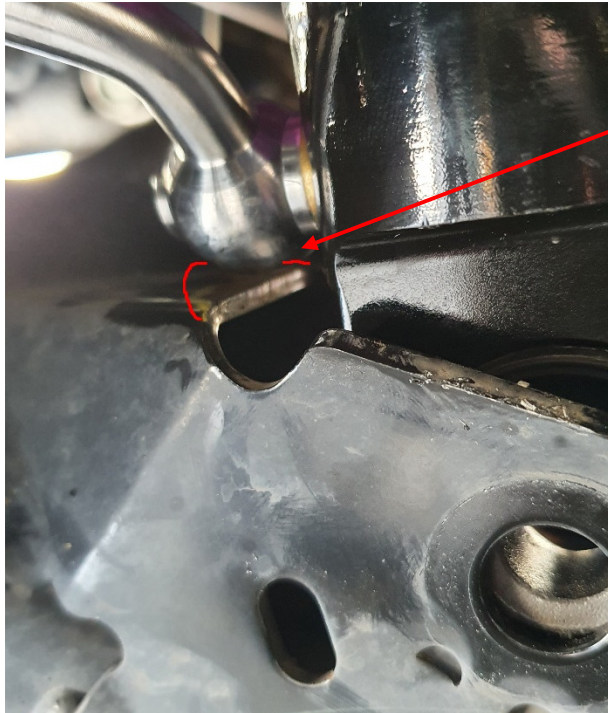
- Do not let gas out of shocks unless you have the ability to re-charge the shocks.
- Care must be taken to ensure the external oil reservoir does not foul on any components over the full travel and with the steering wheel at full lock in both directions.

Instructions

1. When assembling the shock absorber with the coil spring – there is a 5mm stepped spacer supplied. This is to be used only on Nissan Navara NP300/D23 and Mercedes X Class (NOT D40 Navara) with the smaller diameter down, sitting on top of the dust cover. Also when fitting 3” lifts the shocks should be made longer by removing internal spacers – the length can vary depending on the arms fitted.
 - A). When fitting with Dobinsons Aluminium UCA’s the extended length can be 420-422mm (do not use the external spacer)
 - B). With SPC/PSR UCA’s the extended length can be 420-422mm (do not use the external spacer)
 - C). With Roadsafe UCA’s the extended length can be 410mm, the external spacer can be added.



2. With the new shock installed, ensure the hose is routed forward under the steering arm but over the sway bar. For later models 2020 on that have additional inner bracing on the lower shock mount clevis – double check the clearance on the bottom banjo to the clevis brace – ground a small bit of material to allow the shock absorber hose banjo to clear – see below



Grind clearance on top inner
brace in a half circle fashion to
clear banjo on shock body

3. Ensure you have the correct bracket for each side (3 bolts holes toward the rear and plate with 2 holes towards the front and upwards).
4. Clamp the bracket to the front side of the coil tower and ensure it sits around the welded plate on the tower – it will be a few mm in from the folded edge of the tower. Dummy fit the reservoir in place and ensure it does not contact the chassis or other components OR engine bay components. (FIG 1/2)



FIG 1



FIG 2

5. Once happy with alignment place a board or similar in between the coil and the tower so that you do not drill into the spring. Drilling into the spring or shock will void warranty. Drill the 3 holes to around 8.5mm to clear the 8mm bolts. Remove all drill shavings and rust proof the holes with paint. (FIG 2)
6. Place the sticker on the reservoir and bolt the reservoir to the bracket using the D-Bracket provided and tighten. Bolt the U- bracket to the tower and tighten. Ensure there is no contact to any vehicle or engine bay components or hoses. the reservoir banjo fitting rotates on 2 axis to allow the reservoir

and banjo to rotate. For these shocks the adjuster will generally go toward the bottom with the HOSE fitting either inward between the chassis rail and bracket or forward and the hose looped upward.

7. Secure the hose to the chassis with the P-Clamp provided – aligning it so that with the vehicle at full droop, turn the steering wheel left to right and ensure that at each ends of the steering travel the hose has 5mm clearance to the steering arm and steering arm boot. This may require reposition of the reservoir in the bracket. On the right side there is an existing bolt and bracket you can fix to but on the left side this may require tapping of the existing hole to 6x1mm.
8. Complete remaining suspension install and double check final clearances. If required slot the holes where the U-Bracket mounts to the main bracket, and grind the rear edge a little on the U bracket to allow the reservoir to move closer to the tower.

