

# FITTING INSTRUCTIONS

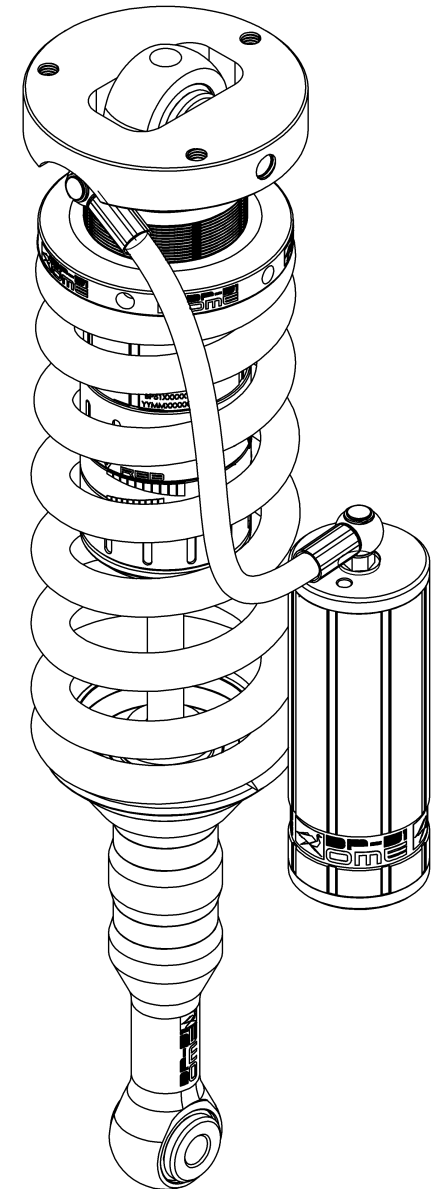
**BP5190002L & BP5190002R**

**TOYOTA PRADO 150/ PRADO 120 / FJ CRUISER**

## WARNING

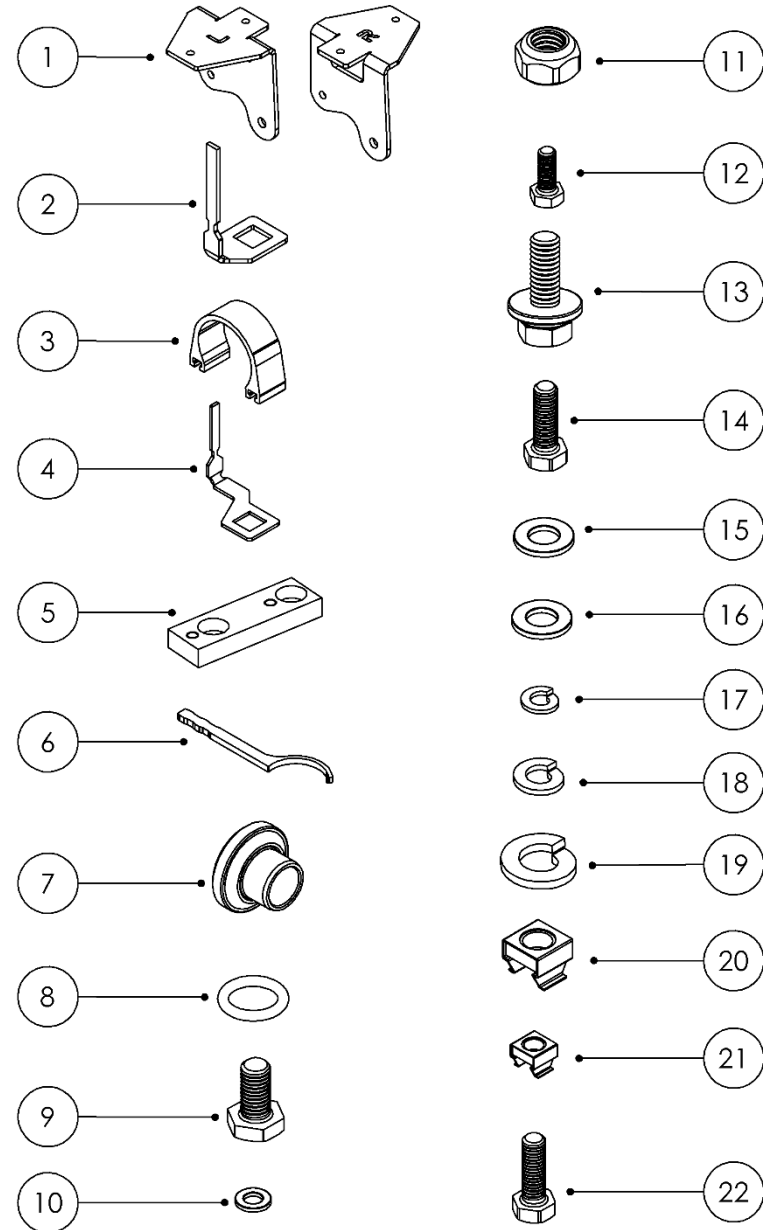
- ◆ This product must be installed exactly as per these instructions using only the hardware supplied.
- ◆ In the event of damage to any suspension component, contact your nearest authorised ARB stockist. Repairs or modifications to the suspension system components must not be attempted.
- ◆ Do not use this product for any vehicle make or model, other than those specified by ARB.
- ◆ Do not remove labels from suspension components.
- ◆ This product or its fixing must not be modified in any way.
- ◆ The installation of this product may require the use of specialized tools and/or techniques
- ◆ It is recommended that this product is only installed by trained personnel
- ◆ These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components
- ◆ Work safely at all times

**Note:** These fitting instructions should be read in conjunction with the vehicle workshop manual.



**FITTING KIT CONTENTS – VM80010008**

Item	Description	Part No.	Qty.
1	RESI MOUNT: PRADO FRONT	VE10020029LSP	1L
		VE10020029RSP	1R
2	BRKT CAGE NUT PRADO M6	VE10040001SP	2
3	MOUNT: RESERVOIR CLAMP	VE10010003SP	2
4	BRKT CAGE NUT PRADO M8	VE10040002SP	1
5	MOUNT: SWAY BAR RELOC.	VF60060001SP	2
6	TOOL: ADJUSTER TOOL	VC10010071SP	1
7	MOUNT: REDUCERS 14x40	VF50031440SP	4
8	O-RING: 318 BLACK	VE20170318SP	4
9	FASTENER: M10x1.5x20 BOLT	VD60030005SP	4
10	WASHER: M6 BLACK	VE70020005SP	4
11	FASTENER: M6 NYLOC NUT	VD60010003SP	4
12	FASTENER: M6x1.0X16 BOLT	VD60030003SP	4
13	BOLT KIT: M10x1.5x30	6151555SP	6
14	FASTENER: M8x1.25X25 BOLT	6151546Q8SP	2
15	WASHER: M10 BLACK	VE70020003SP	4
16	WASHER: M8 BLACK	VE70020004SP	2
17	SPRING WASHER: M6 BLACK	4581287Q8SP	2
18	SPRING WASHER: M8 BLACK	4581047Q8SP	2
19	SPRING WASHER: M10 BLACK	4581292Q8SP	4
20	FASTENER: M8 CAGE NUT	6151303Q8SP	1
21	FASTENER: M6 CAGE NUT	6151315Q8SP	2
22	FASTENER: M6x1.0X30 BOLT	6151228Q8SP	2



## DAMPER PREPARATION

Before fitment the spring preload may need to be adjusted to suit your front accessory fitment and desired ride height.

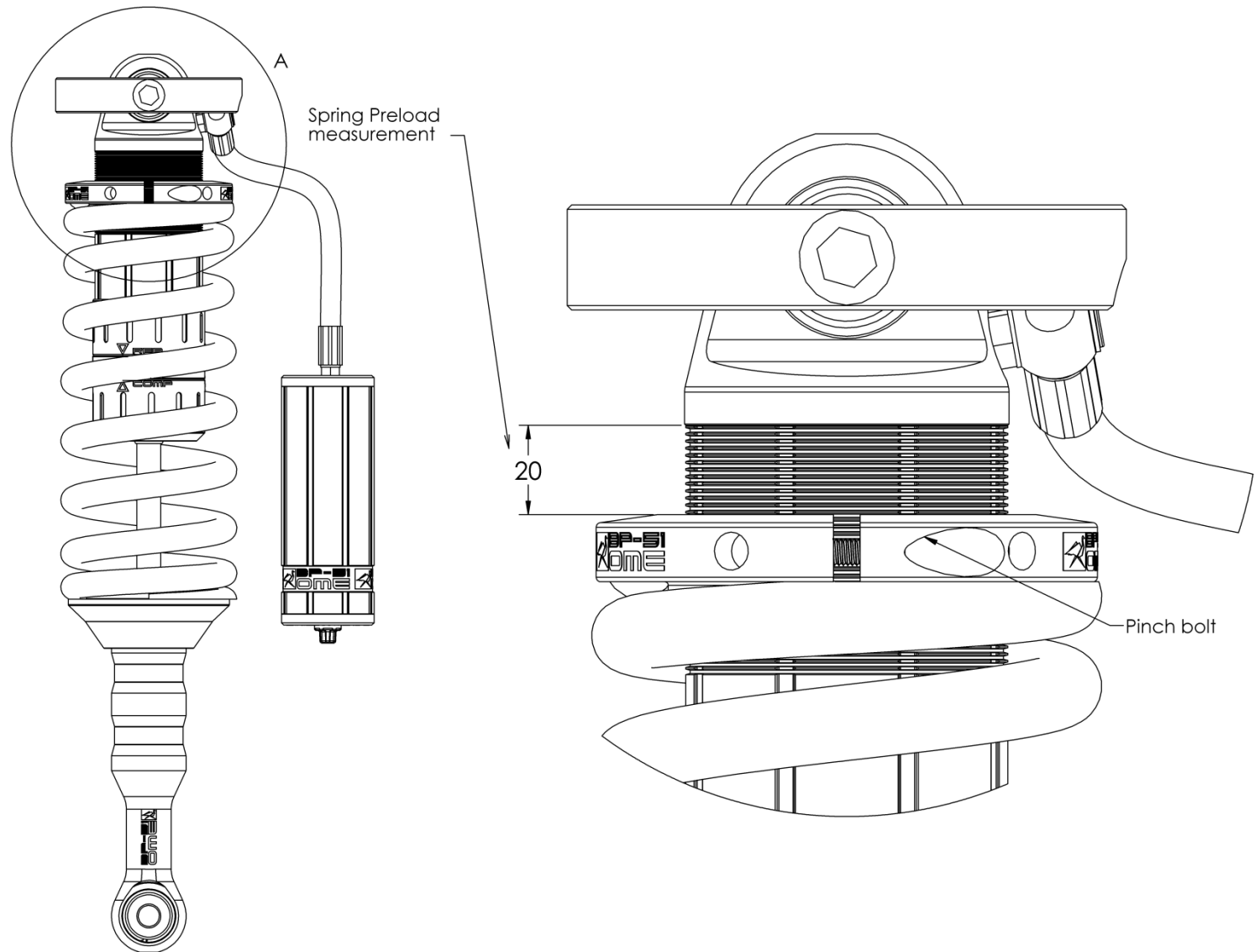
**Use workshop tool kit VM80020001 to aid spring adjustment.**

The preload is set at the factory to 20mm as shown by the diagram. This aims to achieve 30-40mm increase in ride height over OE when a Bull Bar and winch are fitted.

It is required to set the preload before the strut assembly is fitted to the vehicle. Use a spring compressor to compress the spring, loosen the pinch bolt on the preload ring and adjust to the desired setting. Tighten the pinch bolt and remove the strut assembly from the spring compressor.

As a guide, set the preload as specified below to achieve 30-40mm increase in ride height.

Front accessories	Preload	
	Diesel	Petrol
Bar & winch	20 mm	15 mm
Bar only	15 mm	10 mm
No accessories	10 mm	5 mm

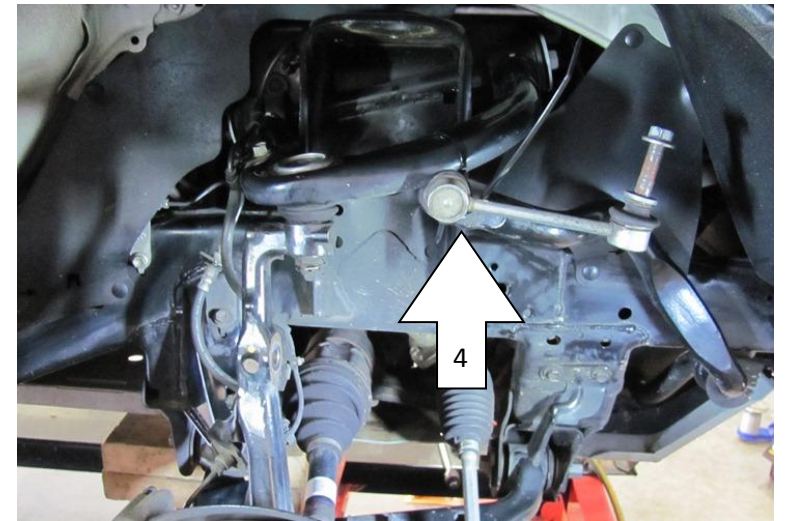
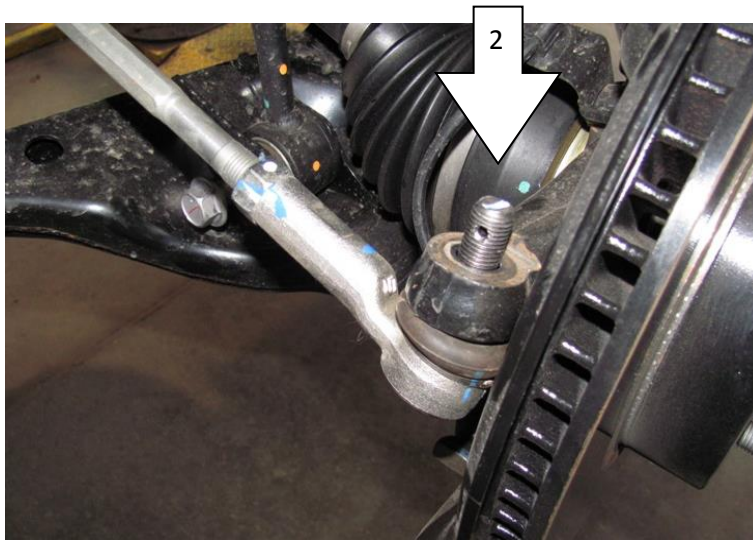
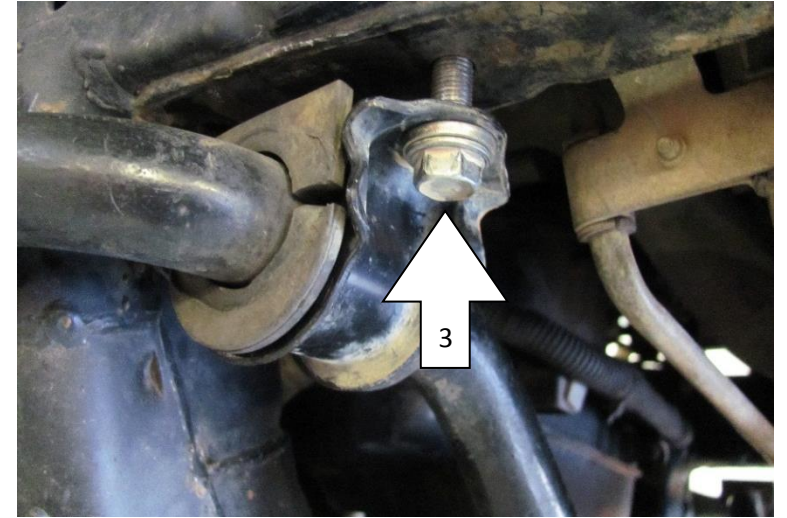
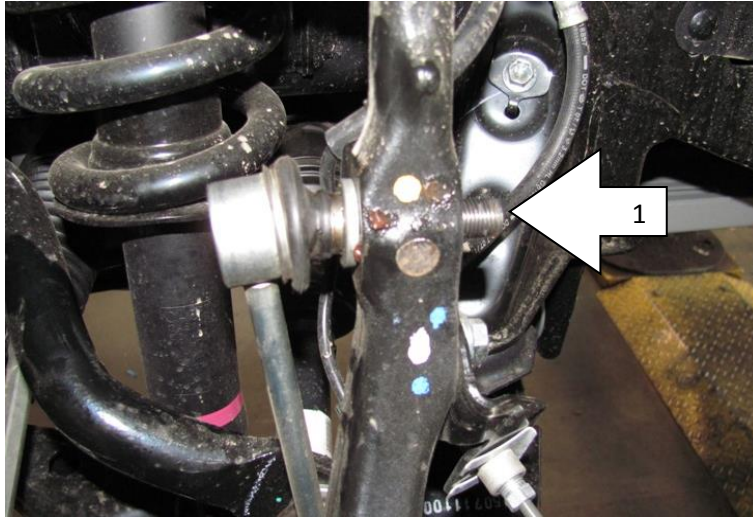


## DAMPER MOUNTING SEQUENCE

Remove old dampers from vehicle.

For LH and RH detach sway bar link from spindle (1) and ball joint from steering arm (2) and remove sway bar saddles (3).

To provide good access for inserting the new strut assembly it helps to cable tie the sway bar to the upper arm (4).



## DAMPER MOUNTING SEQUENCE

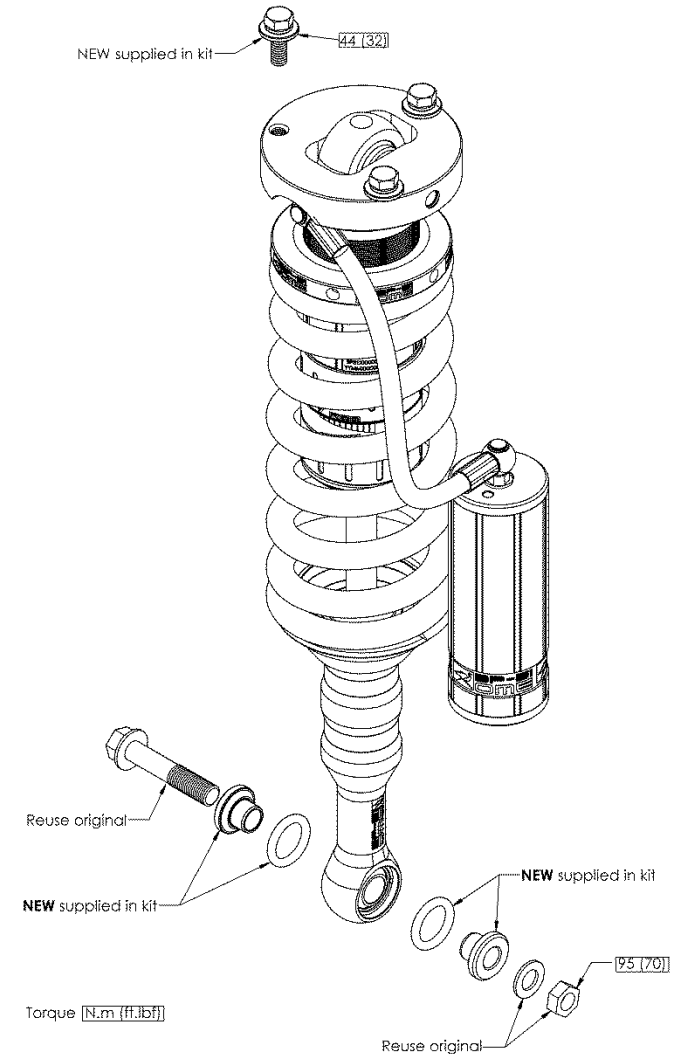
Left and Right Hand sides are the same with the exception of the way the hose exits the damper. L and R should be etched on the damper part number. When mounted in the vehicle the hose and reservoir should be towards the front.

Fit the damper and secure the top mount with bolts and washers finger tight (1).

Fit reducers and o-rings to eye as shown by exploded view and fit bottom mount to arm (2).

Secure bottom mount using original bolt and nut.

Fasten top three bolts and bottom bolt securely.



## RESERVOIR MOUNTING SEQUENCE (RH SHOWN)

Fit M6 bolts to mounting bracket and secure with nyloc nut and flat washer (1).

Secure finger tight only at this stage.

Bend the new nut plates (2) by hand 90 degrees and assemble with 2 x M6 and 1 x M8 cage nuts.

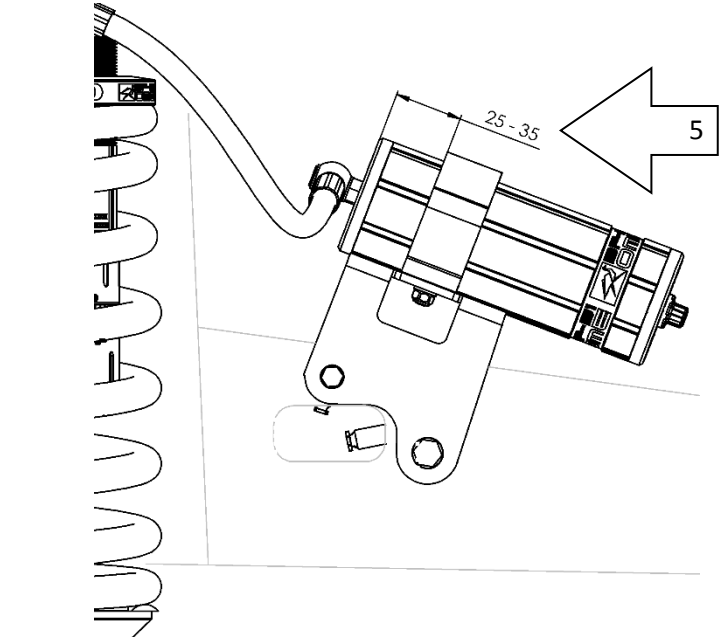
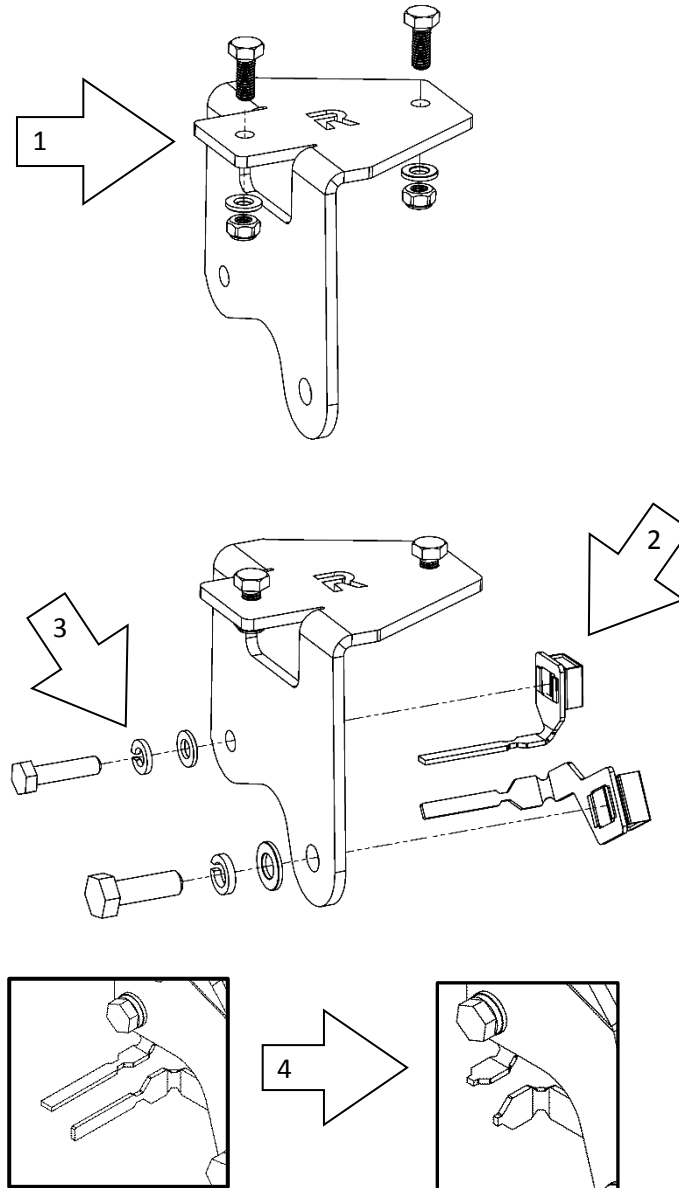
Fit the reservoir mounting plate to the **outside of the chassis rail**. Insert plates through opening in chassis rail and secure with new M8 and M6 bolt, flat and spring washer (3). Insert plates through opening on chassis rail.

A threaded hole is present for new M8 bolt on LH chassis rail, no cage nut required.

When bolts are secured, break the tabs away from the nut plate (4).

Fit the mounting saddle to the reservoir and slide over the heads of the bolts in the mounting plate. Centralise the saddle on the plate and adjust the position of the reservoir as shown (5).

Reservoir should not make contact with any engine components or vehicle body. Securely fasten M6 nuts.



## SWAY BAR SPACER FITMENT

The sway bar spacer is designed to move the sway bar forward and down to provide more clearance around the spring and spring seat.

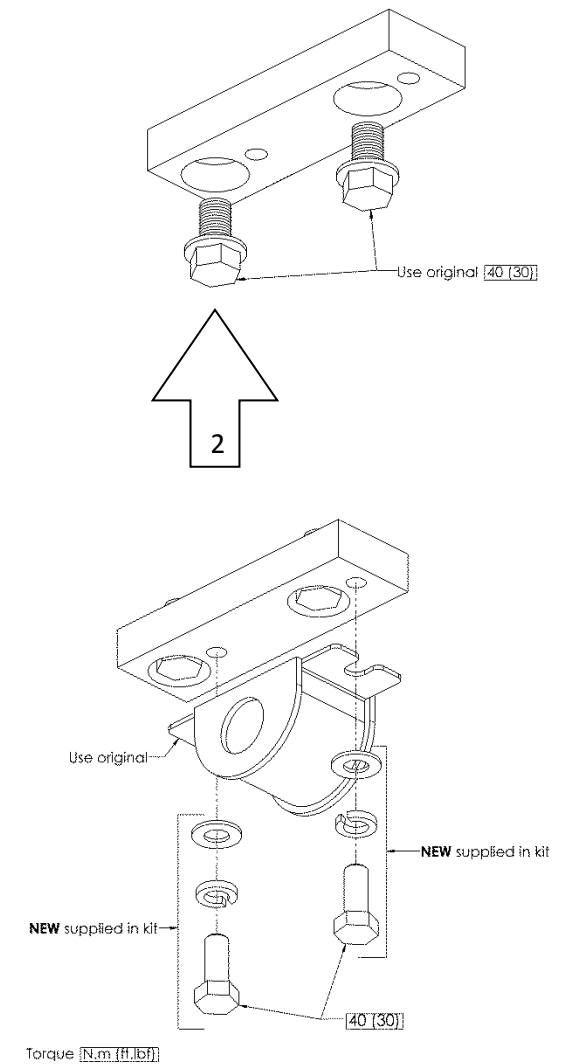
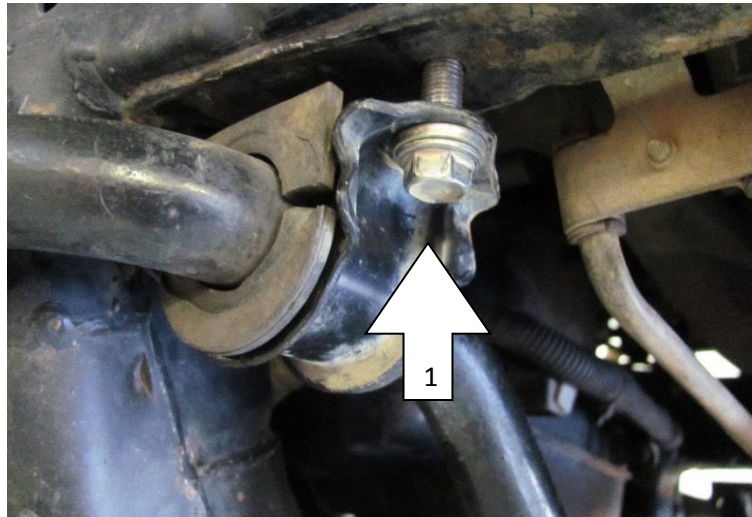
Remove the sway bar saddle on both sides of the vehicle (1).

Fit new sway bar spacer block as shown and secure with the original bolts (2).

Fit the original sway bar saddle to the spacer block using the M10 bolts supplied and torque same as original bolts.

Check all fasteners are tightened securely as per table below.

Fastener	Torque N.m (ft.lb)
Sway bar link to upright	70 (52)
Steering tie rod end to upright	88 (65)
Sway bar spacer & brkt to chassis	40 (30)
Strut top hat	44 (32)
Strut to lower control arm	95 (70)



## SPECIFICATIONS AND SPARE PARTS

1	Spare Part: Spherical Bearing	VD10010018SP
2	Specification: Preload Setting	20 mm
3	Spare Part: Hose	VD81033240SP
4	Spare Part: Oil	VC30040001SP
5	Specification: Factory Rebound Setting	6
6	Specification: Factory Compression Setting	4
7	Specification: Nitrogen Pressure	2000 kPa
8	Spare Part: Valve Cap	VD30020003SP
9	Spare Part: Spherical Bearing	VD10010019SP
10	Spare Part: Damper Mounting Kit	VM80010008

## DAMPING ADJUSTMENT

These dampers have been set in the factory to be used for a vehicle with Bull Bar and winch fitted. If your accessory fitment differs, use the table below as a guide for recommended compression (Comp) and rebound (Reb) adjuster settings. Refer to the Owners' Manual for more information.

Front accessories	Comp	Reb
Bar & winch	4-8	6-10
Bar only	2-6	5-9
No accessories	0-4	4-8

