

## FITTING INSTRUCTIONS

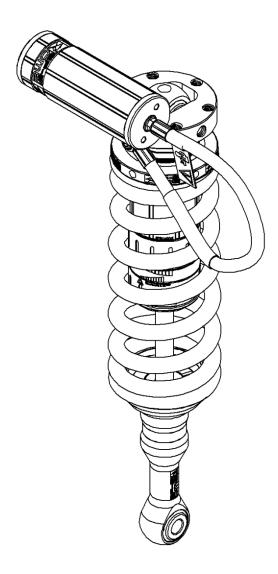
### BP5190014L & BP5190014R

# SUITS MAZDA BT-50 2020- ONWARDS & ISUZU DMAX 2020 - ONWARDS FRONT

### **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.

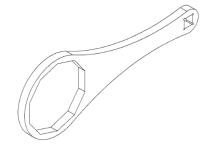


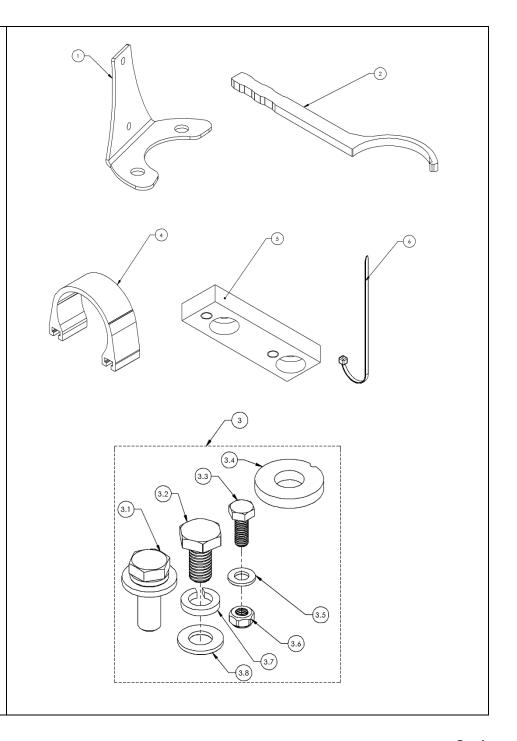
### FITTING KIT CONTENTS - VM80010044

Item	Description	Qty.	Part No.
1	BRKT MAZDA BT-50 RESI FRONT	2	VE10020041
2	ADJUSTER TOOL	1	VC10010071
3	BP51 FASTENER KIT   MAZDA BT50 FRONT	1	VM60010037
3.1	BOLT: HXHD M10 X 1.5 X 30	6	6151555
3.2	BOLT: M10 X 1.5 X 20	4	VD60030005
3.3	BOLT: M6 X 1.0 X16	4	VD60030003
3.4	WASHER: M12 X 30 X 5	2	5484377
3.5	WASHER: M6	4	VE70020005
3.6	NUT: M6 NYLOC	4	VD60010003
3.7	WASHER: SPRING M10	4	4581292
3.8	WASHER: M10	4	VE70020003
4	RESERVOIR CLAMP	2	VE10010003
5	MOUNT: SWAY BAR RELOCATION	2	VF60060001
6	CABLE TIE 4.8MM X 140MM	2	6821178
7	F/INST BP-51 MAZDA BT-50 FRONT	1	VM90010054
8	MANUAL: OWNERS MANUAL	1	VM90020001

#### **OPTIONAL WORKSHOP TOOL**

VC10010096 (for bump stop removal)





## **DAMPER PREPARATION** (SPRING PRE-LOAD ADJUSTMENT)

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.

Refer to BP-51 Service and Parts Manual 1.2\_Coilover Spring Adjustment for more detail.

The preload is set at the factory to 5mm as shown by the diagram. This aims to achieve around 35mm increase in ride height over OE with no accessories fitted to the vehicle.

Preload must be set before the strut assembly is fitted to the vehicle. Use a spring compressor to compress the spring, loosen the pinch bolt (1) on the preload ring and adjust (2) to the desired setting (See table below).

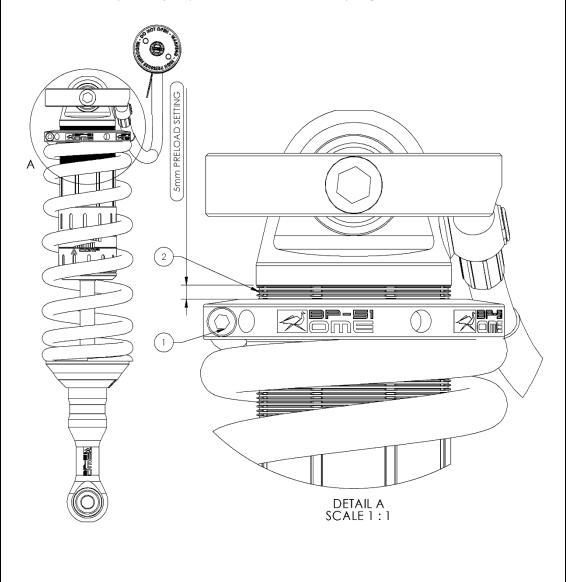
Tighten the pinch bolt and remove the strut assembly from the spring compressor.

As a guide, set the preload as specified below to achieve around 35mm increase in ride height over OE.

Front Accessories	Preload (mm)	
Bar, Winch, UVP +	20	
Bar & Winch	15	
Bar only	10	
No accessories	5	

## Spring preload must only be adjusted when a spring compressor is used to take load off the preload ring.

<u>DO NOT</u> attempt to adjust preload with load on the spring when fitted to the vehicle.

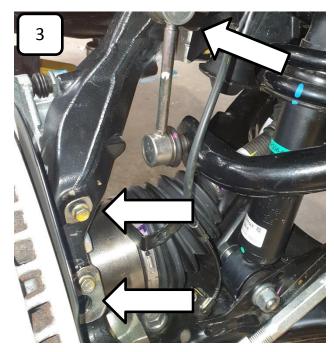


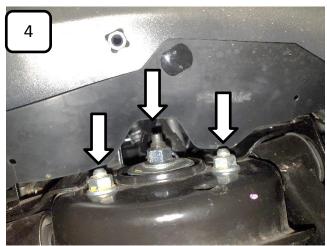
# **VEHICLE PREPARATION** (REMOVING STRUT)

Use the following steps as a guide to remove strut. Ford P375U Ranger workshop manual may also be used where available to remove the strut.

- 1. Remove wheel.
- 2. Support the Lower Control Arm with a jack stand or similar.
- 3. Detach ESC line.
- 4. Remove top mounting nuts (X3).
- 5. Loosen the lower mounting nut, do not remove.





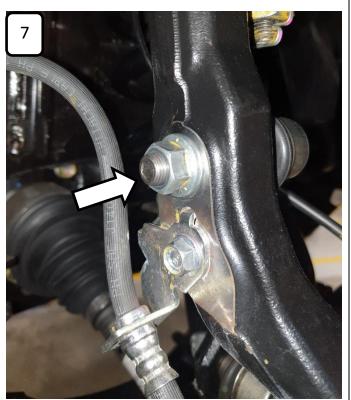


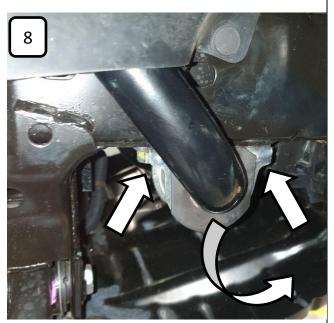


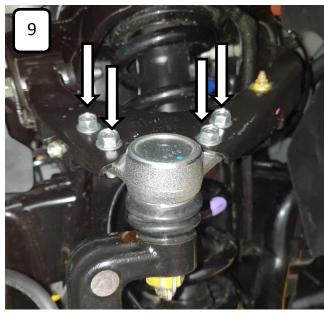
# **VEHICLE PREPARATION** CONTINUED...

- 6. Detach the steering rack ball joint from the upright.
- 7. Detach the sway bar link from the upright.
- 8. Detach the sway bar from the chassis and move it away to allow room for the BP-51 install
- 9. Detach the upright from the upper control arm (UCA) by removing the 4 bolts. Take care to prevent the drive shaft from dropping out.









10. Remove lower mounting bolts and remove the strut from the vehicle.

#### **DAMPER MOUNTING SEQUENCE**

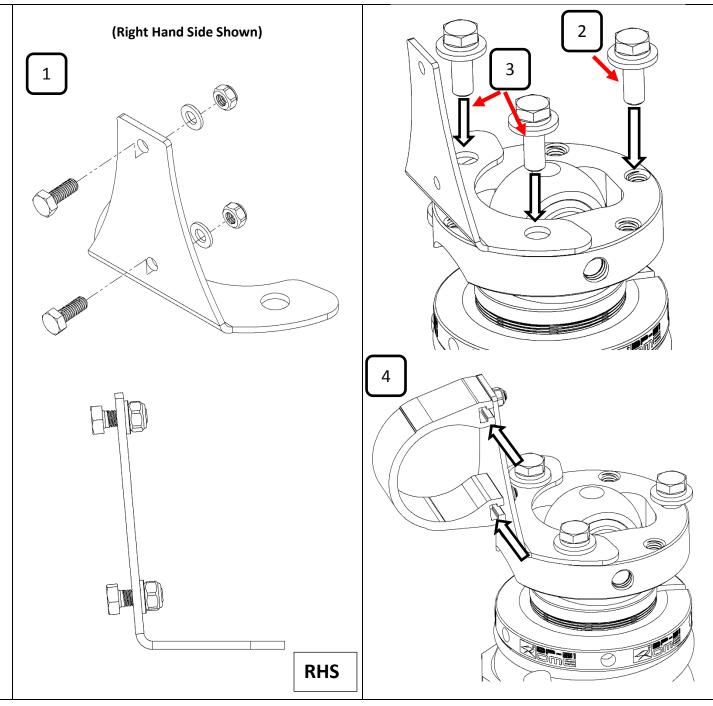
The Left and Right Hand sides are the same with the exception of the way the hose exits the damper.

L and R is etched on the damper part number.

When mounted in the vehicle the hose should be routed forward of the strut tower and the reservoir above the strut tower.

#### **Top Mount:**

- 1. Pre assemble the reservoir bracket as shown
- 2. Install the damper and secure the top mount with the rear bolt. Finger tight only.
- 3. Secure the Reservoir bracket to the top mount using the remaining M10 bolts (6151555). Finger tight only
- 4. Install the reservoir clamp to the bracket but do not lock into place



### **DAMPER MOUNTING SEQUENCE**

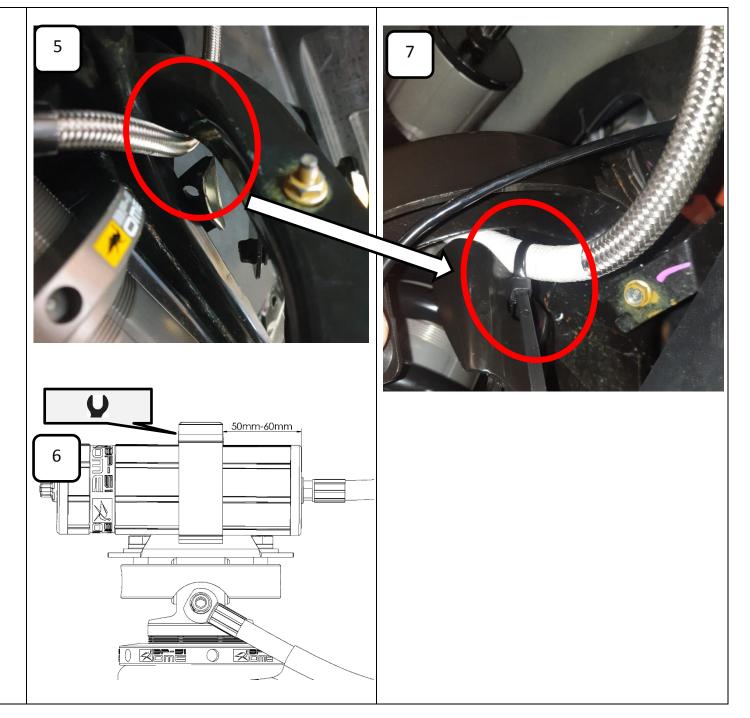
5. Route the hose below upper control arm and behind the droop stop

IMPORTANT!- ensure the hose is secured behind the droop stop with cable tie provided

6. Install the reservoir central to the bracket.

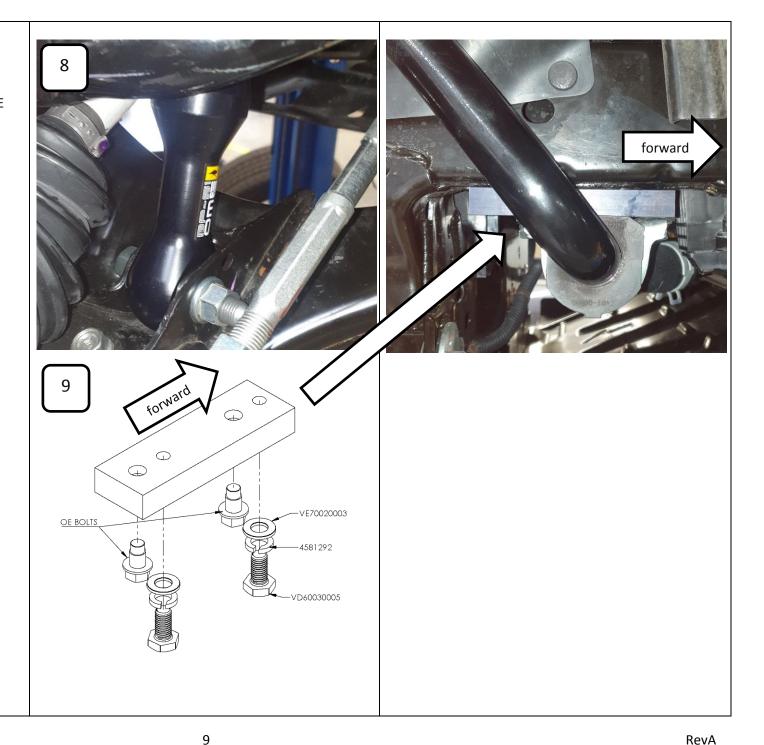
Reservior clamp 12 N.m (9 ft.lbf)

7. Secure the hose behind the droop stop bracket using the cable tie provided



- 8. Install the OE bolt and torque to specifications.
- 9. Install the sway bar relocation spacer **VF60060001**, secure to the chassis using the OE bolts and secure the sway bar mount to the spacer using the bolts provided (VD60030005, 4581292, VE70020003)

Sway bar relocator 40 N.m (30 ft.lbf)

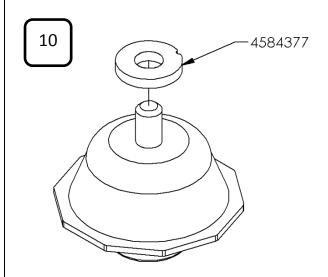


10. Remove bump stop using VC10010096 workshop tool, place 5mm washer (5484377) behind the bump stop and re-install.

### **DAMPER MOUNTING SEQUENCE**

- 11. Reattach all the components to the vehicle in the reverse way of detaching them.
  - Lower strut bolts
  - Upper control arm
  - Sway bark link
  - Tie rod to steering knuckle
  - Top strut turret
  - Esc cable

Fastener Torque settings				
Fastener	Torque N.m (ft.lbf)			
Upper Control Arm 4xM10	31 (23)			
Sway Bar Link	97 (72)			
ESC bracket	6 (4)			
Strut to Lower Control Arm	152 (112)			
Steering tie rod end to upright	63(46)			
Top Shock Tower	44 (32)			
Lower Shock Mount Pin	100 (73)			
Resi Bracket to Tower	44(32)			
Sway bar spacer and bracket to chassis	40 (30)			







#### **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 and Rebound adjuster settings.

Refer to the Owner's Manual for more information.

Front Accessories	Compression	Rebound
Factory setting	0	5
Bar & winch	4-8	6-10
Bar only	2-6	5-9
No accessories	0-4	4-8

### **SPECIFICATIONS**

1	Extended Length	521 mm
2	Compressed Length	415 mm

#### **SPARE PARTS**

Refer to Service And Part manual, section: BP-51 S&P 3.1-BP5190014L&R.

