



# BENDIX ULTIMATE 4WD BRAKE BOOSTER UPGRADE FITTING INSTRUCTIONS

PRJ-08382

## FOR VEHICLES NOT FITTED WITH ABS



**BENDIX ULTIMATE 4WD BRAKE BOOSTER UPGRADE, ONLY TO BE FITTED BY AUTHORISED/QUALIFIED FITTER OR TECHNICIANS.**



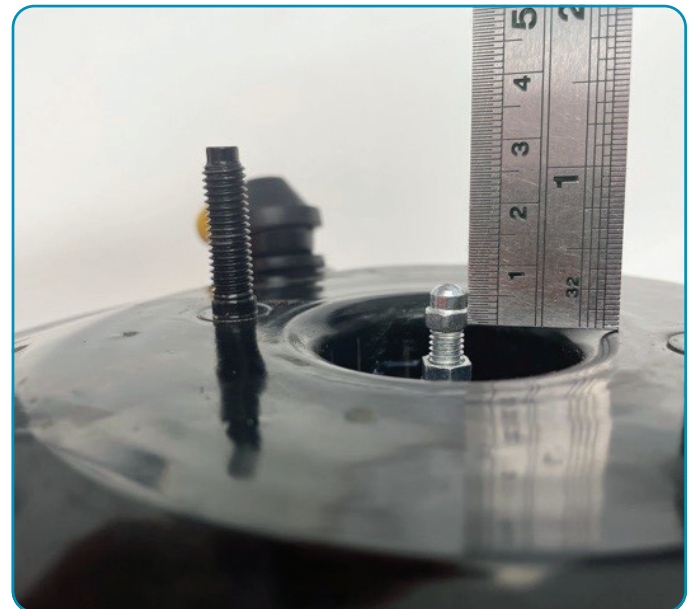
All brake components must be in good working condition to gain maximum benefit from installing a dual diaphragm booster. We recommend upgrading rubber brake lines with steel braided versions.

The vehicle must be driven by the same person before and after installation. Noting: brake pedal effort and travel before brakes start to apply, both with the engine running and not running.

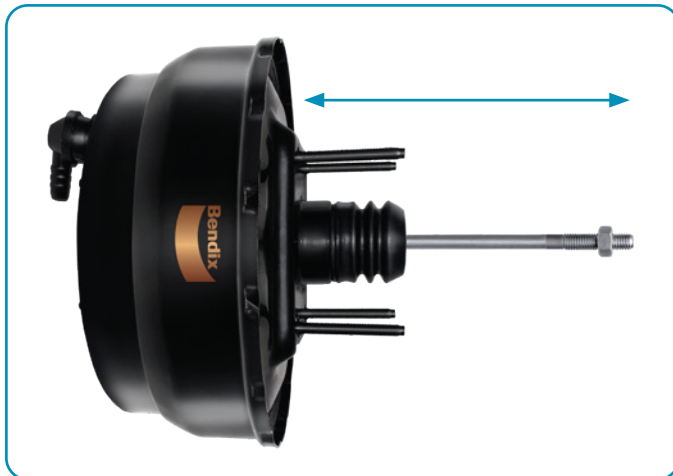
### DISASSEMBLY

- 1 Remove the brake pipes at the master cylinder using the correct pipe spanner, try to minimise fluid loss by plugging the ports on the master and placing blockers on the brake lines. Keeping the master and brake lines charged with brake fluid will assist the bleeding process on assembly. Once the master cylinder is removed inspect the plunger seal and replace the master cylinder on any sign of leakage.
- 2 Unbolt the master cylinder, remove the vacuum hose and disconnect the pushrod from brake pedal.
- 3 Then unbolt the booster from the firewall of the vehicle.
- 4 On the original booster, measure the distance from the fire wall face to the pedal mount and adjust the new booster to the same length.

- 5 Also on the original booster, measure the distance from the master cylinder face to the pushrod end. Check that new booster pushrod has been locked into the correct position and adjust if necessary.



- 6 Clean any old gasket material from the master cylinder and firewall faces.



## ASSEMBLY

- 1 When installing booster pushrod through firewall, inside the vehicle, ensure the pushrod is correctly guided onto the pedal. Ensure supplied gasket AND original spacer is fitted to the booster before assembly.



- 2 Place the supplied gasket onto the booster. Guide the pushrod through the firewall, inside the vehicle, ensure the pushrod is correctly guided onto the pedal.

- 3 Be sure to align the push rod in the booster into the extended piston of the master cylinder as you are installing it. Failure to correctly fit will cause breakage and failure of the unit.
- 4 Install the master cylinder, brake pipe and vacuum hose.
- 5 Top up the brake fluid reservoir to the correct level.
- 6 Bleed the brake hydraulics and be sure to remove any air in the system.
- 7 When installation is complete confirm pedal height and operation is the same or better than original without engine running.
- 8 With ignition on, check that the brake lights work as soon as pedal is applied.
- 9 Then test with engine running before road testing vehicle. Due to the light control valve and higher output of unit, installers tend to apply substantially more pedal pressure than they realise they are.

## COMMON INSTALLATION PROBLEMS

Fault	Cause
Soft Brake Pedal + Excessive Pedal Travel	Air in system.
Excessive Pedal Travel Only	Incorrect push rod adjustment, confirm pedal side adjustment against original booster, if correct – confirm push rod end adjustment.
Brake Lights Stay On	Incorrect push rod adjustment, pedal side (Too short).
Insufficient Length in Push Rod Adjustment	OEM spacer block not fitted.
Brakes Dragging	Incorrect push rod adjustment, confirm pedal side adjustment against original booster, if correct – confirm push rod end adjustment.
Hard Pedal	Low Vacuum – test for vacuum leaks in hoses and 1 way valve.