

FITTING INSTRUCTIONS 496021 INCLUDING AIRBAG OPERATING HEIGHT & MAXIMUM PRESSURE

- This air suspension system is designed to replace the original vehicle manufacturer's suspension – it is not designed to carry more load than the original OEM suspension.
- The kit is designed to suit a standard vehicle configuration modifications to the vehicle outside the kit design parameters may adversely affect fitment and operation such as:
 - Height changes outside any noted in the kit specification.
 - Larger dampers (Shock Absorbers)
 - Wheel and tyre changes
 - Exhaust changes.
- If your vehicle is fitted with a brake proportioning valve or stability control system it is important to ensure this is maintained and adjusted according to the vehicle manufacturer's instructions.
- It is recommended that only a properly qualified person installs the product and carries out maintenance. If you are not qualified and attempt to carry out such work ensure that all safety equipment is used and safety standards are met.
- Ensure that you have read the full Product Manual before attempting to fit the product.
- Ensure the Product Manual is kept with the vehicle and that any vehicle owner and/or operator is fully advised on the system and its operation before attempting to drive or operate it.



SEE OTHER WARNINGS AND IMPORTANT INFORMATION IN THIS DOCUMENT

LHS = LEFT SIDE OF THE VEHICLE WHEN FACING FORWARD

STEP 1 – PREPARE THE VEHICLE

In order to fit this kit, the coil springs need to be removed. Ensure this operation is carried out according to the vehicle manufacturers instructions.

STEP 2 – INSTALL THE UPPER BRACKET

Select one of the B2662 upper brackets, $2 \times M8 \times 25$ mm allen head bolts, $4 \times M8$ flat washers and $2 \times n$ yloc nuts from your kit. Then Secure the upper bracket to the top spring seat tower using the selected hardware.

NOTE: There are several holes in the upper spring seat tower. Ensure the bracket is positioned for best airbag alignment and clearance to the chassis rail. For easier access to the upper spring tower you can remove the wheel arch inner liner.



STEP 3 – MOUNT PISTON TO AIRBAG

Using the supplied $\frac{1}{2}$ " x 1" hex bolt and flat washer, secure the piston to the airbag leaving this bolt finger tight.

It is recommended to use thread locker on this bolt also.

This will be fully tightened once piston alignment has been confirmed later in step 6.

STEP 4 – INSTALL STRAIGHT AIR FITTING

Install the supplied 1/4" x 1/4" straight air fitting in the air entrance hole on the top plate of the airbag and tighten using a 9/16" spanner until the nylon ring contacts the top plate then tighten a further 1/4 turn to snug the fitting.

No additional thread sealant needed. If these fittings are re-fitted many times, they will degrade their sealing ability.

STEP 5 – AIRBAG ASSEMBLY TO UPPER BRACKET FITMENT

The airbags are to be fastened to the upper brackets using the 3/8" x $\frac{3}{4}$ " flange hex bolts supplied; the air fitting will pass through the large hole in the bracket.

NOTE: There are two large air inlet holes in the upper bracket. Ensure the airbag assembly is positioned for best alignment and clearance to the chassis rail.







STEP 6 – AIRBAG PISTON TO SPRING SEAT

Lower suspension to align the piston onto the lower spring seat.

Within the lower spring seat there is one hole forward and one hole rearward which line up with the piston nut inserts.

Once the alignment is confirmed mark the piston and spring seat with a paint pen.

Then compress the assembly to allow final tightening of the $\frac{1}{2}$ " bolt into the base of the piston and airbag.

Select 2 x M6 x 20 Cap head bolts and spring washers to secure the piston to the lower spring seat. The Forward fastener can be tricky to line up due to limited access by the lower shock mount. However, the use of a ball point hex allen key can make this much easier.



| STEP 7 – BUMP STOP SPACER INSTALL | |
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| Install the bump stop spacer onto the axle striker plate using 2x M8 flange bolts and 2x M8 Flange nuts, as shown. | |
| Check the spacer alignment to ensure clearance to the airbag piston. | |
| STEP 8 – AIRLINE TUBING & FITTINGS - GENERAL NOTES | CUT |
| CUTTING | TUBING |
| Only cut the airline tubing with a sharp blade making the cut as square as possible. | WITH |
| Always trim the tubing before re-inserting into the fitting. | BLADE OR |
| If you use a sharp utility knife or razor blade great care must be taken in all cases not to cut yourself during this operation. | TUBE CUTTER |
| To connect: | |
| Push the freshly trimmed tubing into the fitting as far as possible. | |
| To remove: | |
| and hold the collar on the fitting away from the tube and pull out the tubing. | |
| In confined spaces an open-ended spanner can be used to evenly depress the collar and remove the airline tubing. | PLIERS, |
| | SIDE |
| | |
| | CUTTERS |
| | |
| STEP 9 – POSITION YOUR INFLATION VALVES | |
| the body of the vehicle. It must be protected from road damage and be accessible for air inflation equipment. | |
| Drill a 5/16" hole and install the air inflation valve using two 5/16" stainless steel washers as supports where required | |
| | |
| PUSH-TO-CONNECT STAINLESS STEEL INFLATION VALVE WASHERS | SUITABLE MOUNTING |
| | POSITION |
| PANEL OF HEX HUT | |
| | INFLATION VALVES |
| | AIRLINE ROUTE SHOWN IS EXAMPLE ONLY |
| STEP 10 – FIT AIR LINE TUBING | |
| Decide on a suitable route for the air line from the airbag to the inflation valve location to avoid direct heat from engine, exhaust pipe, and away from sharp edges. | |
| Uncoil the air line tubing being careful not to fold or kink it and cut to length to suit the chosen route. Next cut a suitable length of protector tube and feed over the air line tubing (See opposite). | And a state of the |
| Insert the tube at one end and route as above securing in place with the nylon ties provided. Trim and insert the other end as required. | |
| STEP 11 – FIT THE ASSEMBLY TO OTHER SIDE | |
| Repeat Steps 1 - 10 to complete the other side of the vehicle. | |
| STEP 12 – LEAK TEST | |
| Once the inflation valves are installed, inflate the airbag to 50 psi (3.5 Bar) and check the fittings for air leaks with an applied solution of soap and water. If a leak is detected at a tubing connection then check to make sure that the tube is cut as square as possible and that it is pushed completely into the fitting. The tubing can be easily removed from the fittings by pushing the collar towards the body of the fitting and then pulling out the tube. If a leak is detected where the air fitting screws into the airbag, tighten the fitting slightly, | |
| until the leak stops. | |

STEP 13 – FITMENT COMPLETION

Reattach all required suspension components removed earlier and return the vehicle to driving position. Ensure this operation is carried out according to the vehicle manufacturer's instructions.

STEP 14 – AIRBAG HEIGHT AND ALIGNMENT

The airbag must be checked for the correct installed height, vertical alignment and clearances with the vehicle levelled out.

INFLATE the airbags until a level vehicle height is reached and measure the bag height between the mounting plates.

The AB0212 airbag in this kit requires a height of 9.0" to 11.0" to be maintained under all loads.

It is important to ensure that the airbag does not make contact with any other components in all load and height conditions.

If the centreline of the airbag end plates is misaligned in any direction more than the amount shown to the right, please contact your nearest Pedders outlet for further technical support.

Please note: Misalignment and angled installation at ride height is often required to ensure correct alignment through the suspension travel. travel.

HEIGHT **DIAMETER & ALIGNMENT** Standard airbag misalignment tolerance allowed is 20mm

STEP 15 – TO FINISH

Ensure the **CAUTION** label is fixed in a prominent position in sight of the vehicle operator.

Ensure the Product Information Wallet is given to the vehicle owner/operator.

Ensure the vehicle owner/operator fully understands how to use the product.

All fixings should be checked for tightness after the first laden run and thereafter as per the original manufacturer's recommendations.

AIRBAG OPERATING HEIGHT

0

& MAXIMUM PRESSURE

See operating instructions section for proper use and maintain the specific height below:

OPERATING HEIGHT

The AB0055 airbag in this kit requires a height of 9.5" to 11.0" under all loads.

Adjust and retain pressure up to the stated maximum to maintain the airbag operating height.

Failure to do so may result in product or vehicle damage not covered under warranty.

MAXIMUM PRESSURE

80PSI (5.5bar)

IF MORE PRESSURE IS REQUIRED TO MAINTAIN THE OPERATING HEIGHT CONTACT YOUR NEAREST PEDDERS OUTLET FOR FURTHER TECHNICAL ADVICE

Incorrect use of this air suspension product can result in damage to the airbag, associated parts and/or the vehicle, which is not covered under warranty.

Ensure the airbags are maintained at the stated ride height at all times and the maximum pressure is never exceeded.



DO NOT: exceed recommended air pressure advic