

# FITTING INSTRUCTIONS

(AIRBAG OPERATING HEIGHT & MAXIMUM PRESSURE)

## RR4564



**⚠** This air suspension system is designed to assist the original vehicle manufacturer's suspension – it is not meant to carry the entire rated load. We do not recommend that leaves be removed, or other changes be made from the OEM suspension unless an applicable commercially available suspension kit is fitted.

**⚠** 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 THE PRODUCT MANUAL**

**LHS = LEFT SIDE OF THE VEHICLE WHEN FACING FORWARD**

### STEP 1 – PREPARE THE VEHICLE

Please note that we recommend the vehicle be un-laden when fitting this kit as you may need to create additional clearance between the axle and chassis. Ensure this is carried out according to the vehicle manufacturers instructions.

### STEP 2 – AIRLINE TUBING & FITTINGS - GENERAL NOTES

#### CUTTING

Only cut the airline tubing with a sharp blade making the cut as square as possible.

Always trim the tubing before re-inserting into the fitting.

**⚠** 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.

#### CONNECTING & REMOVING

##### To connect:

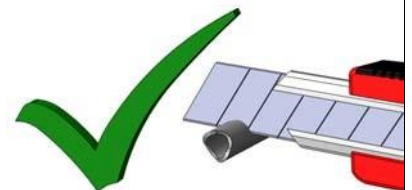
Push the freshly trimmed tubing into the fitting as far as possible.

##### To remove:

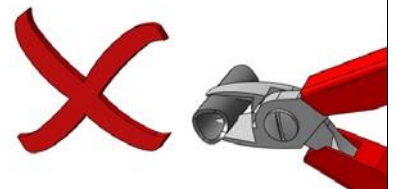
First release the air pressure from the system. To withdraw the tubing, push and hold the collar on the fitting away from the tube and pull out the tubing.

**Hint** In confined spaces an open ended spanner can be used to evenly depress the collar and remove the airline tubing.

**CUT TUBING SQUARE WITH SHARP BLADE OR TUBE CUTTER**



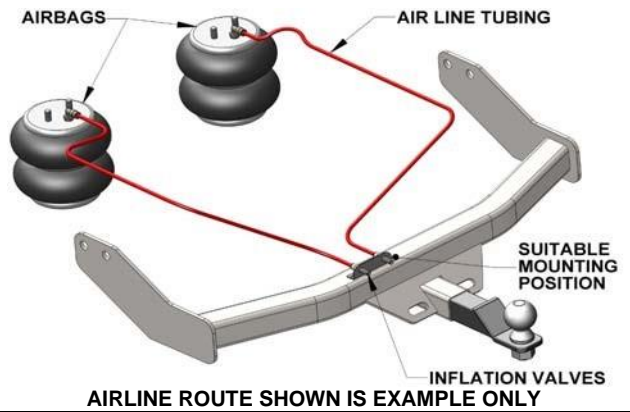
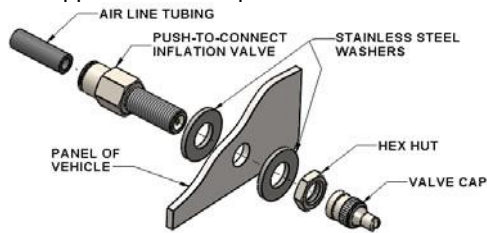
**DO NOT USE PLIERS, SIDE CUTTERS OR PIPE CUTTERS**



### STEP 3 – POSITION YOUR INFLATION VALVES

Select a convenient location for the air inflation valves such as the bumper or 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.



### STEP 4 – PREPARE THE 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)

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.

**DO NOT CONNECT OR SECURE THE AIR LINE AT THIS POINT**



### STEP 5 – REMOVE BUMP STOP

Un-bolt the bump stop from the chassis, retain the bolts as they are used to mount the upper bracket, the bump stop's may be discarded.



### STEP 6 – INSTALL ELBOW AIR FITTING

Install the supplied 1/4" x 1/4" elbow air fitting in the air entrance hole on the top plate (stud end) of the airbag and tighten 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 7 – INSTAL HEAT SHIELD (RHS ONLY)

Select the heat shield kit from the kit, fit the shield between the airbag and B2048 top bracket, as shown. Angle the shield to provide **maximum airbag protection**; this can be adjusted once the assembly is installed.



### STEP 8 – PREASSEMBLE AIRBAG AND UPPER BRACKET

Select one airbag and the B2047 upper bracket from your kit. Align the studs and air fitting of the airbag with the mounting holes so that the air fitting will face rearward on the vehicle. Fasten the upper bracket to the airbag using two of the supplied 3/8" UNC self locking hex nuts. This assembly will be using the LHS of the vehicle.

**IMPORTANT: CAPTURE THE JOUNCE BUMPER BOLTS BETWEEN THE AIRBAG AND UPPER BRACKETS BEFORE FASTENING AIRBAG.**

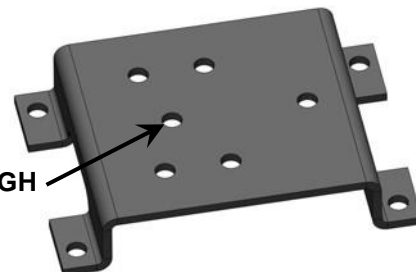


### STEP 9 – FIT LOWER BRACKET TO ASSEMBLY

Select one lower bracket and fasten to the airbag using a 3/8" x 1" UNC flange lock bolt provided. The bracket is to be positioned so that the airbag overhangs the outer edge of the bracket.

The lower bracket is positioned on the axle with the outer tabs positioned inside the factory outboard u-bolt. To achieve this, it is easiest to thread one supplied u-bolt around the axle, between the factory outer u-bolt and spring pad on the axle before positioning the lower bracket. This lower bracket orientation will ensure correct alignment of the airbag.

**BOLT THROUGH THIS HOLE**



### STEP 10 – FIT ASSEMBLY TO VEHICLE

Compress the assembly and set it in place on the axle, taking care not to natural position. Using the jounce bumper bolts removed earlier, secure the upper bracket to the chassis, re-using the jounce bumper mounting holes.

The lower bracket can now be secured to the axle tube using the u-bolts and lock nuts supplied, tighten the nuts until they contact the bracket then further several turns, until the nut tightens noticeably.

**Note:** Ensure the heat shield is positioned so that it will not contact the movement.

Tighten the 3/8" hex bolt that fastens the lower bracket to the airbag, if not damage the brake lines. Allow the assembly to extend to its axle or any other components through the full suspension done so already.

### STEP 11 – FIT RIGHT HAND SIDE ASSEMBLY

Follow Steps 5 - 10 for the right hand side of the vehicle, reversing any orientations.

### STEP 12 – CONNECT AIRLINE TUBING

Check and connect the pre-routed airline tubing.

### STEP 13 – LEAK TEST

**INFLATE** the airbag to the maximum allowed pressure (see Airbag Operating Height & Maximum Pressure attached) and check for leaks at the connections using soapy water spray. We recommend a soapy water spray solution of 25% soap to 75% water.

**DEFLATE** airbag. If no leaks, continue. If leak detected, check and tighten the airbag fittings (if required), remove the airline tubing, re-cut and re-test.

#### 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.

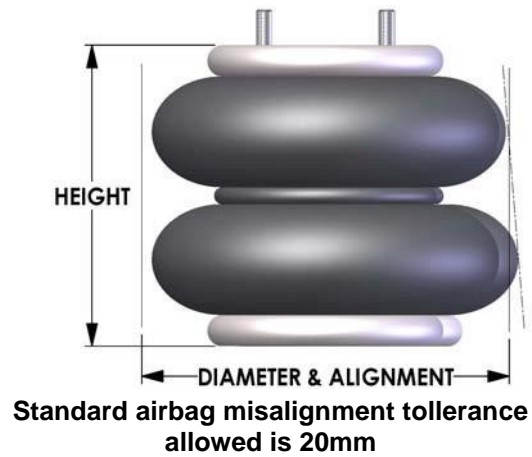
**INFLATE** the airbags until a level vehicle height is reached and measure the bag height between the mounting plates.

The AB0121 airbag in this kit requires a height of 5.5” to 6.5” 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 are misaligned in any direction more than the amount shown to the right, please contact Airbag Man on 1800 247 224 for further technical support.**

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



#### STEP 15 – TO FINISH

Ensure the **WARNING** 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 & MAXIMUM PRESSURE**

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

### **OPERATING HEIGHT**

The **AB0121** airbag in this kit requires a height of **5.5” to 6.5”** 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**

**40 PSI (2.75bar)**

**IF MORE PRESSURE IS REQUIRED TO MAINTAIN THE OPERATING HEIGHT CALL AIRBAG MAN ON 1800 247 224 FOR FURTHER TECHNICAL ADVICE**



**FREECALL 1800 247 224**



**⚠️ 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.**