







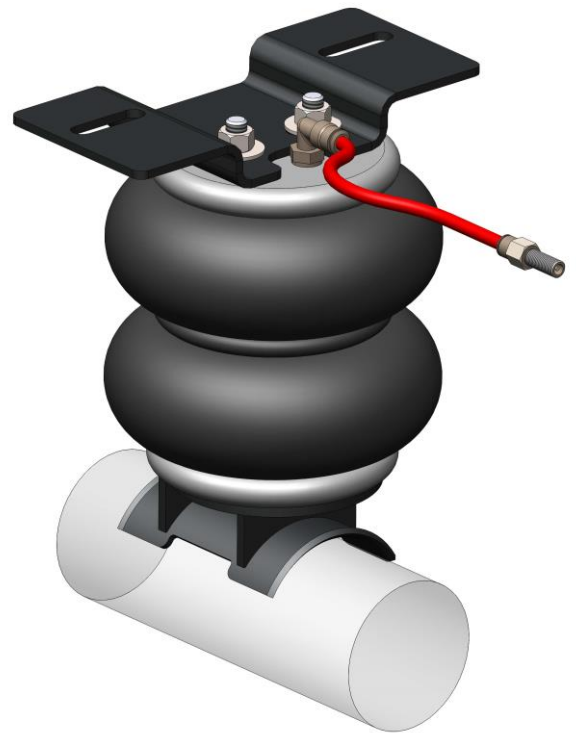
FITTING INSTRUCTIONS

(AIRBAG OPERATING HEIGHT & MAXIMUM PRESSURE)

RR4599



-  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 manufacturer's 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:

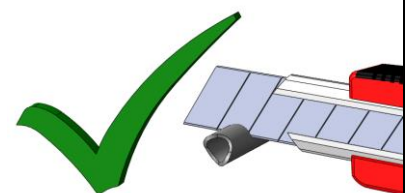
Push the freshly trimmed tubing into the fitting as far as possible.

To remove:

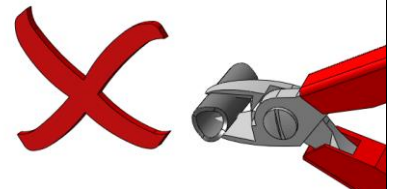
First release the air pressure from the system. To withdraw the tubing, push and hold the collar on the fitting away from the tube and pull out the tubing.

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**



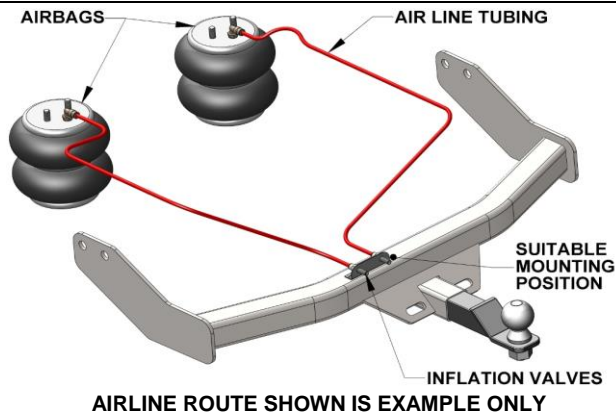
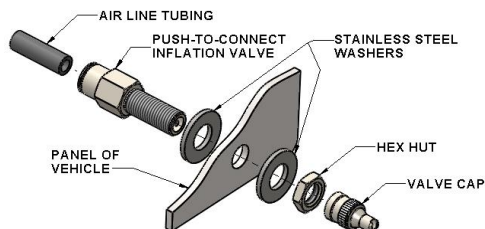
**DO NOT USE
PLIERS, SIDE
CUTTERS OR
PIPE CUTTERS**



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)

DO NOT CONNECT OR SECURE THE AIR LINE AT THIS POINT



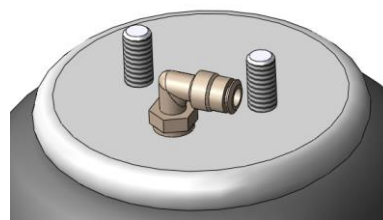
STEP 5 – REMOVE THE BUMP STOP

Remove the bump stop from the underside of the chassis, the original bolts and mounting points are re-used to mount the airbag upper mounting bracket.

STEP 6 – FIT 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 airbag and tighten until the nylon ring contacts the top plate then tighten a further 3/4 turn to snug the fitting.

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

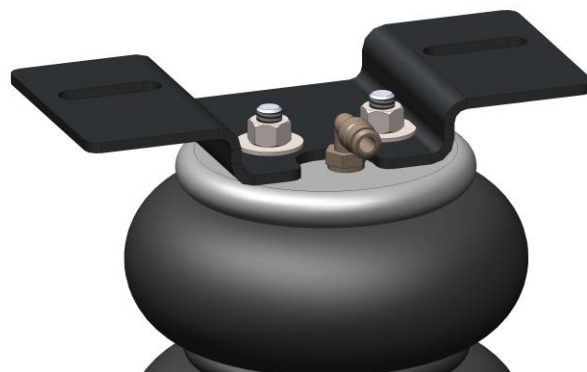


STEP 7 – FIT THE UPPER BRACKET

Select one airbag and one upper bracket from your kit.

Align the studs and air fitting of the airbag with the mounting holes as shown.

Fasten the upper bracket to the airbag using two of the supplied 3/8" UNC self locking hex nuts and flat washers supplied.



STEP 8 – FIT THE LOWER BRACKET

Select one lower bracket and loosely fasten this to the airbag using one 3/8" x 3/4" UNC flange lock bolt provided.

The orientation of the lower bracket will depend on the vehicle setup, so tightening of this bolt is best carried out once the assembly is fitted to the vehicle.

STEP 9 – FIT LHS ASSEMBLY

In order to fit this kit the u-bolts need to be loosened. Ensure this operation is carried out according to the vehicle manufacturers' instructions.

Release the u-bolts nuts so that the u-bolts can be lifted up about 10mm above the axle, then compress the assembly and set it in place on the axle by passing the lower bracket under the u-bolts. The u-bolts should be re-aligned to sit over the lower bracket as shown.

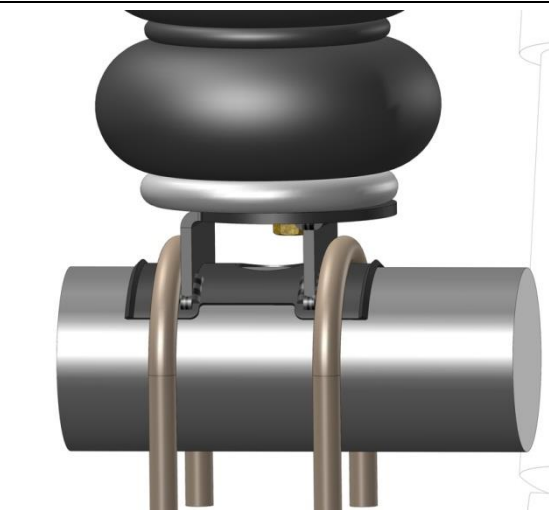
Allow the assembly to extend to its natural position, check that the top bracket is orientated so that the air inlet elbow is facing toward the centre of the vehicle.

Now, using the bump stop bolts removed earlier, secure the upper bracket to the chassis, re-using the bump stop mounting holes.

Check the orientation of the Lower bracket, if may need to be turned around 180° for a better fit.

NOTE: For Great Wall SA220: - The brake lines will need to be bent to allow airbag clearance. Carefully bend them down toward the axle at the first bend from the hub (see photo right).

Re-tension the u-bolts to the manufacturer's instructions. Check the alignment and adjust if necessary. The airbags can now be tightened fully to the lower brackets.



STEP 10 – FIT RHS ASSEMBLY

Follow steps 5-9 for the opposing side of the vehicle, reversing any orientations.

STEP 11– CONNECT AIRLINE TUBING

Route airline tubing and connect to airbag air fittings and inflation valves. Secure with supplied nylon ties.

STEP 12 – 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 13 – FITMENT COMPLETION

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.

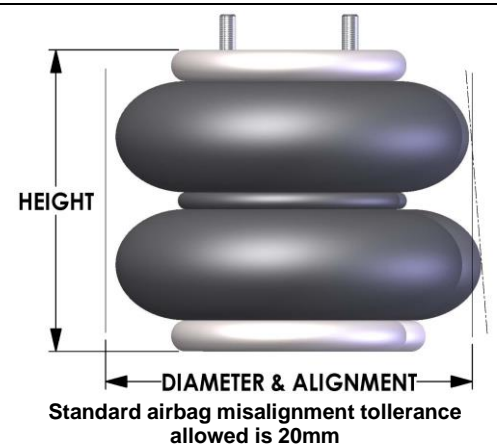
INFLATE the airbags until a level vehicle height is reached and measure the bag height between the mounting plates.

The 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



50PSI (3.5bar)

**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.**