

FITTING INSTRUCTIONS

(AIRBAG OPERATING HEIGHT & MAXIMUM PRESSURE)

TA4TAJ

THIS KIT REQUIRES WELDING.
DO NOT EXPOSE THE AIRBAG ASSEMBLIES TO HEAT OR WELDING FLASH DURING INSTALLATION.

NOTICE

Fitting of this product may affect the original manufacturer's warranty, and other components or parts on the vehicle.



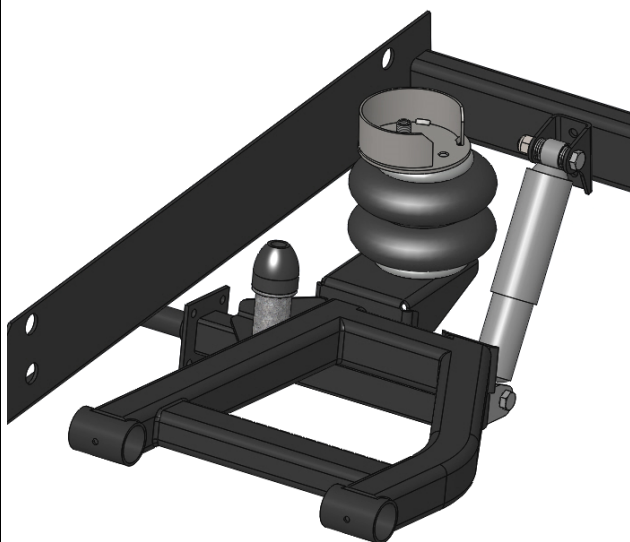
This system can be used to raise and lower a camper or caravan from the manufacturers recommended ride height, to allow levelling and trimming of the suspension height

Never exceed the axle capacities, ATM or GTM of the camper or caravan.

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

With the trailer secure on a level surface, remove the negative battery cable (**THIS IS IMPORTANT- CHECK BEFORE WELDING**).

Level out the chassis using the jockey wheel then measure the trailers height from the ground at a convenient position close to the wheels. Also measure the wheel distance from the centre of the axle (centre of the wheel) to the bottom of the body/spat above the Wheel. Record the heights:

STARTING TRAILER HEIGHTS (mm / inch)		AXLE HEIGHTS (mm / inch)	
LHS:	RHS:	LHS:	RHS:

It will be necessary to raise the trailer on to chassis stands to fit this kit. Ensuring that it is stable, use stands rated to the trailers weight and position them under chassis both in front of and behind the axle.

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:

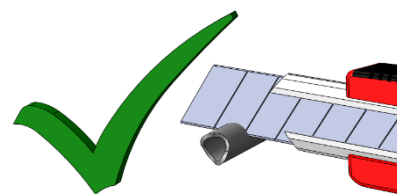
Push the freshly trimmed tubing into the fitting as far as possible.

To remove:

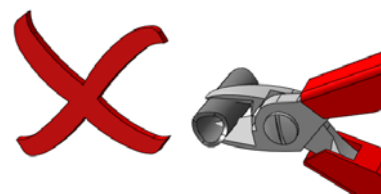
First release the air pressure from the system. To withdraw the tubing, push and hold the collar on the fitting away from the tube and pull out the tubing.

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**



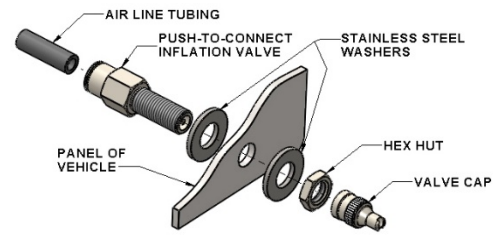
**DO NOT USE
PLIERS, SIDE
CUTTERS OR
PIPE CUTTERS**



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

The air line tubing is supplied in two rolls with split protector tube pre-fitted to shield the air line during and after installation. 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. Once routed, the protector tube is pulled back later to prepare the protected air line.



DO NOT CONNECT OR SECURE THE AIR LINE AT THIS POINT

STEP 5 - PREPARE CHASSIS

Jack the chassis up and support securely on suitably rated stands, then remove the wheels, shock absorbers, coil springs, bump stops and lower coil retainers; only the road wheels and shock absorber bolts will be re-used. Ensure that the negative terminal of the battery has been removed before beginning welding process.

STEP 6 - DRILL UPPER BUMP STOP/ SPRING MOUNT

Drill a 20-30mm diameter hole in the center of the upper bump stop plate. This will allow the airbag air fitting to pass through into the top spring seat.



STEP 7 - WELD UPPER AIRBAG MOUNTS ON

Weld the upper airbag mounts to the upper spring seats as shown, note that the portion of the airbag mount tube that is cut out will be hard up against the inside edge of the existing upper spring seat, and hard up to the underside of both the bump stop mount and upper spring seat. Paint over the welds and heat affected areas with corrosion protecting paint.

NOTE: When aligning the upper bracket ensure adequate clearance for the airbag mounting nut to be fitted.



STEP 8 - WELD BUMP STOP MOUNTS ON

Weld the bump stop mounts to the trailing arms, on top of the gusset that is in front of the axle, and align so that the bump stop will strike the bottom of the chassis rail on its center line. Paint over the welds and heat affected areas with corrosion protecting paint.

FROM REAR OF AXLE



FROM FRONT OF AXLE



STEP 9 - DRILL TRAILING ARM

If required, drill the trailing arm platform for the airbag bottom plate to bolt through. Positioning of this hole is confirmed by mocking the airbag into the upper mount and bringing the suspension to bump stop contact. Align the airbag in this compressed position then mark and drill accordingly.

NOTE: If the trailing arm already has a hole within 10mm of the position found above then the existing hole can be used.



STEP 10 - WELD SHOCK MOUNTS ON

Position and weld the lower shock mounts to the axle as shown. Paint over the welds and heat affected areas with corrosion protecting paint.



STEP 11 - INSTALL THE AIR FITTINGS

Install the supplied 1/4" x 1/4" straight air fitting in the air entrance hole in the large stud on the airbag and tighten until sealed. No additional thread Sealant needed.

NOTE: If these fittings are re-fitted many times they will degrade their sealing ability.

STEP 12 - FASTEN AIRBAG TO UPPER BRACKET

Attach the airbag to the top bracket using the supplied 5/8" lock-nut.

IMPORTANT – ENSURE THE LOCATING PIP FEEDS IN TO ITS HOLE DURING THIS PROCESS. IF THIS DOES NOT HAPPEN, THE AIRBAG WILL BE DAMAGED IN USE & IS NOT COVERED UNDER WARRANTY.

STEP 13 - FASTEN AIRBAG TO TRAILING ARM

Attach the bottom of the airbag to the trailing arm with the supplied 3/8" self-locking hex bolt.



STEP 14 - FIT SUPPLIED SHOCK ABSORBERS

Bolt the supplied shock absorbers to the existing upper shock mount and to the new lower shock mount using the supplied washers and original fasteners, as shown.

NOTE: The washers can be arranged to compensate for upper and lower shock mount alignment and allow adjustment for future suspension alignment.



ADD WASHERS TO ALIGN SHOCK UPPER AND LOWER



STEP 15 - CONNECT AIRLINE TUBING

Route airline tubing and connect to airbag air fittings and inflation valves. The supplied tee pieces will be connected to allow each inflation valve to supply to both airbags down one side of the suspension. Secure with supplied nylon ties.

STEP 16 - 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 17 - FITMENT COMPLETION

Reconnect the battery and reattach all 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 18 - AIRBAG HEIGHT AND ALIGNMENT

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

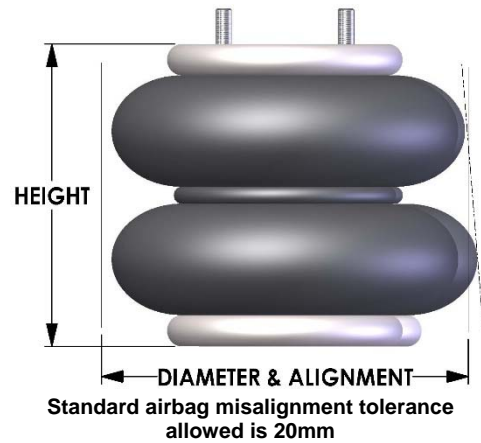
INFLATE the airbags until a level vehicle height is reached and measure the bag height between the mounting plates.

The AB0121-1A airbag in this kit requires a height of 6.5" to 7.5" 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 19 - 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 **AB0131** airbag in this kit requires a height of **6.5" to 7.5"** 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

100PSI (7 bar)

**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 Operating Height at all times and never exceed the Maximum Pressure.