Fitting Instructions for Air Bag Load Assist Kit

LA30

Make sure your work area is safe and that you do not get under a car that is not properly supported by jack stands etc. Make sure that when undoing suspension components such as U bolts that the axle is supported and cannot fall.

Read these instructions prior to commencing and learn the tricks the easy way before you need to undo your work.

Air Bag assembly

- **The rings on the bags do rotate and you will need to align the top and bottom brackets by rotating the rings to ensure there is no twist in the air bag.** With very loose bolts securing each of the top and bottom end plate brackets, it is easiest to rotate the rings by twisting the brackets while there is virtually no clamping pressure. In most cases the chassis and axle run at 90 degrees.
- There are 6 bolts and washers which clamp the bag rings to the end plates. Do NOT tighten 1 bolt all the way up and then the next as the bags won't sit straight inside the rings. Start by doing every second bolt to finger tight, then the alternate bolts. Then tighten the first 3 to semi tight, then the alternate 3, then tighten each set 2-3 more times, alternating so even pressure is applied as you go. The rubber of the bag acts just like an O'Ring and should never leak when tight enough. No sealant, lube or anything is needed to seal the ends of the bags.
- Once tightened any curves or waves in the end of the bags are flattened out and do not cause leaks.
- Most kits come with the air fittings already seated into the end plates. If you need to fit air fittings a sealant is needed, despite there being what appears to be a white or grey thread seal on the fitting. We recommend liquid sealant as bits of plumber's tape eventually make its way to valves and create leaks.
- When cutting air lines, make sure you do not squash the air line in the process. You must not use side cutters, pliers or scissors. The best cutting device is the hose cutter we provided for free. Make sure ends are straight 90 degrees.
- The best way to check for leaks is submerge air bag with bracket assembly in water (refer to trouble shooting below) – doing this now before fitting to car can save a lot of time later when looking for a leak.

Fitting brackets to vehicle – do ONE side at a time.

1. Remove the rubber bump stop on the chassis and reposition the original bolt back in its original hole but leave approx. 10mm
2. Pry off the lower bump stop strike pad plate on the spring pack – it is only clipped on.
3. Un bolt and remove the strike pad from the spring pad – leave the strike pad bolts in place and tighten the factory nuts as these hold the spring pack together.
4. Position The bag roughly in place sliding the upper bracket slot over that bump stop bolt in step 1. The lower bracket can slide backwards / forwards clearing the strike pad nuts. Make sure the bag sits straight and vertical. Handy tip – compress bag on work bench then insert air line with Schrader valve so remains compressed by suction during fitment. To expand later, remove air line from air bag.
5. Once happy the bag is in place reposition U bolts over lower bracket wings and tighten U-bolts.
6. Tighten upper bump stop bolt in chassis.
7. Run air lines to Schrader valves making sure not exposed to hot or moving parts.

Trouble shooting

You should not have leaks and can expect air to remain in the bags for a few weeks without refilling. It is near impossible to find a leak if it takes more than 3 days to leak out and only replacing fittings or refitting bags until the leak stops can solve such slow leaks. But if you have a bag that deflates in say less than 2 days then we stand a good chance of finding the leak.

The easiest but less successful method is temporarily pump up the bags until compressor will pump no more and spray soapy water on all air fittings including Schrader valve, end plates etc. It could take a few minutes for a small bubble to appear.

The most successful method of finding a leak requires more work and we suggest new instals to do this step before fitting to car to save removing the kit afterwards. Inflate a bag and bracket assembly on the bench until it no longer expands any further. Submerse it all in a bucket of water including the air line and Schrader valve and any leak no matter how slow will present itself as a bubble.

Most common fault is the end plate bolts not being tight enough. Tighten them to 20 Nm or as tight as you can go with a 6" spanner (11mm) but tighten when there is no air in the bag. We use grade 8 Hi Tensile bolts so you will not break them with a spanner.

Other areas to check for leaks is the thread where the fitting goes into the end plate, where the hose goes into the air fittings or the Schrader valve. It is super rare that bag itself leaks. If bubbles appear between ring and inside edge of bag that is because the end bolts are not tight enough – and not the bag itself.

By the way AAA Suspension use 6mm air hose and all threads are BSP type.

The air fitting in the end plate is in the same location on every kit and even as it overlaps the rubber of the bag still works fine and even if the fitting protrudes through the end plate it still does not present a problem.

The air bags and brackets in this kit are built to be super strong. In some cases stronger than your car. Do not carry extreme loads and travel at high speeds with high pressure as hitting holes and dips at speed with extreme loads could result in damage to your vehicle. This is an overloading issue and by being sensible you will avoid damage.

Do not exceed your vehicle's GVM (Gross Vehicle Mass). Your GVM will be detailed on your vehicle compliance plate. Know your limits with regard to loads carried or towed.

If you remain within your load limits, drive at a safe speed for the conditions and run your air bags at an ideal working pressure below 60 psi you will have trouble free travelling.

The good thing about air bag suspension is you can just keep adding more air to suit your preferred ride height and loads carried. Typically a good working pressure is 25 to 50 psi per bag. The bags become your bump stops. When unloaded you may run the bags empty but a few psi will cushion your bump stop and offer a bit of added stability to your handling. If you experience a firm bump then increase pressure to prevent that.

AAA kit come with a 10 year new for old parts replacement warranty on bags, brackets and air fittings. Electronic components come with a 12 month warranty. Keep a copy of your invoice or online purchase so you can show us later when you purchased your kit.

Warranties are parts replacement only and exclude postage, labour and any other incidental cost or damage.

Warranties also exclude corrosion or damage caused by external influences such as road hazards, heat, chemicals, salt or fuel spills.

The brackets in this kit are proudly made in Australia

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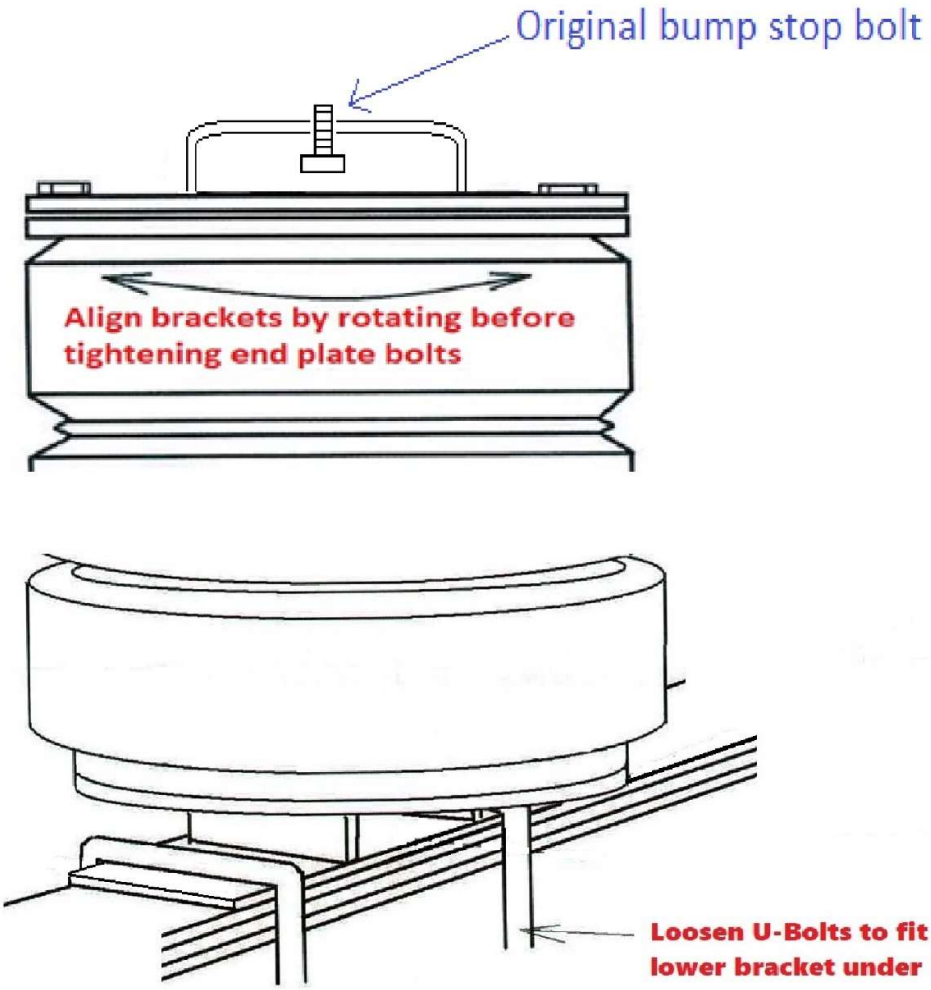

One thing we really struggle with is obtaining photos of our kits out in the real world. If you can send us some pics of your kit fitted and maybe some pics of your vehicle carrying a load with and without air in your bags to demonstrate their effectiveness, we would most certainly appreciate that.

And you know we also just like seeing all the varied places and applications our bags are used.

Please email all pics to support@aaasuspension.com.au

Feel free to call or email us at any time for support –

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