



INSTALLATION INSTRUCTIONS

88378ULT

BELLOWS ULTIMATE KIT

SAFETY TIPS : - It is recommended that our kits be installed by a qualified mechanic.



- Always wear appropriate PPE during installation.
- Ensure the vehicle is secure and supported before starting the installation.
- Be sure to read through the instructions before commencing & follow any kit specific guides.
- Do not attempt to inflate the air bags when they are not secured to the vehicle.
- Any time the vehicle will be worked on or lifted onto a hoist, it is recommended to set the air bags to the minimum 5psi pressure beforehand.
- Keep these fitting instructions in the vehicle at all times and make sure anyone who works on the vehicle is informed of the correct procedure of use.

PRE-INSTALLATION NOTES :

- Installation by a qualified technician is recommended for the installation of this kit.
- x2 heavy-duty G-Clamps are required for the installation process of this kit.

KIT CONTENTS :

- 2x [58437U] - Bellows w/ Internal Bump Stop
- 2x [12-278A] - Upper Bracket "A"
- 2x [12-278B] - Upper Bracket "B"
- 2x [14-278A] - Lower Bracket "A"
- 2x [14-278B] - Lower Bracket "B"
- 2x M8 5mm Sensor Bracket Spacer
- 4x [11951] Roll Plates
- 8x 3/8" Countersunk Bolts
- 2x M10x25 Countersunk Bolts
- 8x M10x30 Hex Head Bolts
- 16x M10 Flat Washers
- 8x M10 nyloc Nuts
- 2x [33606] 90° air line swivel fitting
- 1x [15655] 5m Nylon air line + hardware kit

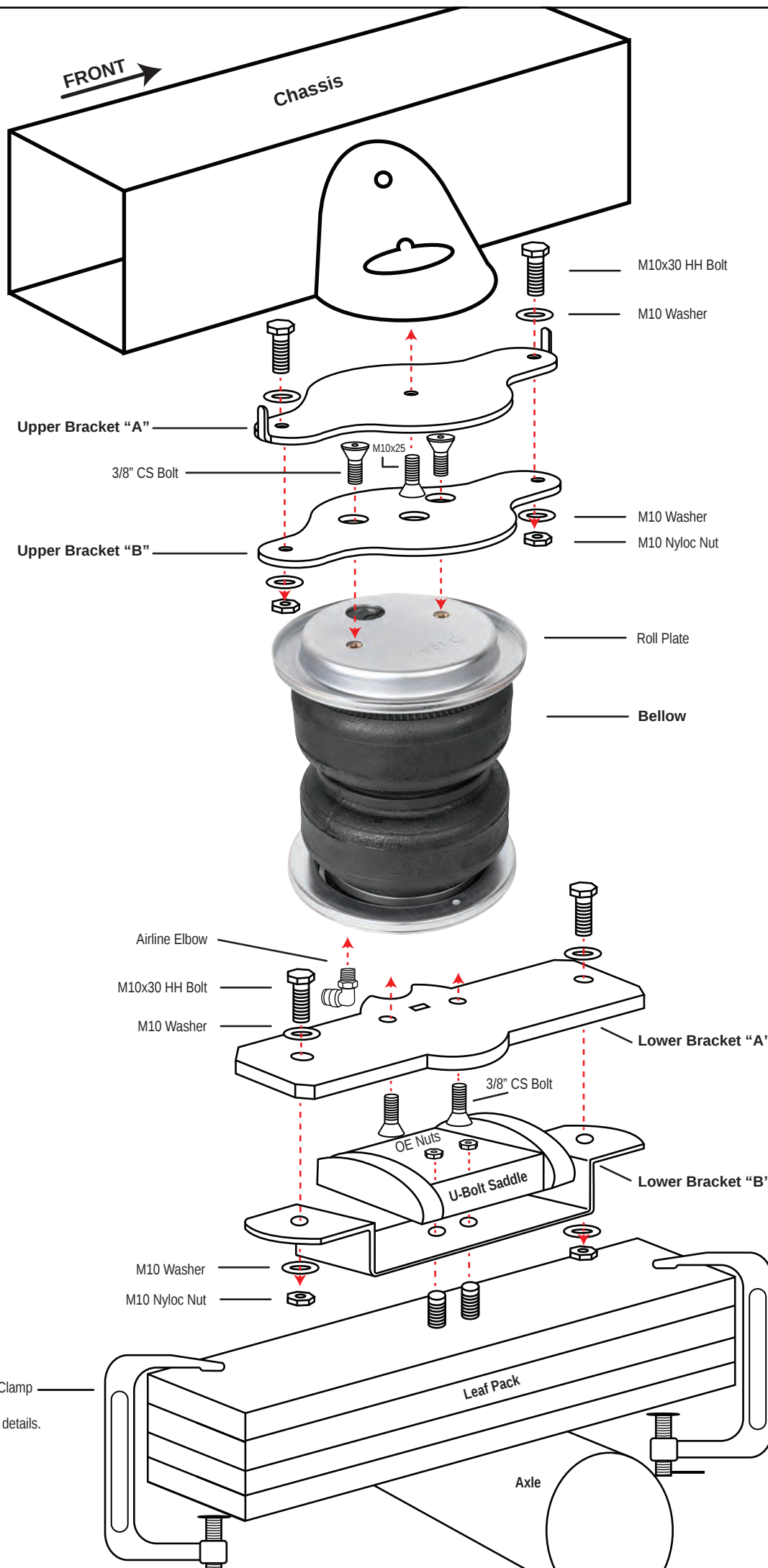
Please contact our team for any issues or concerns you may have.

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INSTALLING THE AIR BAGS

1. Raise & Support Vehicle

- Raise the vehicle by the chassis using a hoist or suitable jack stands.
- Ensure the vehicle is stable, secure and properly supported before commencing installation.

Note: The rear axle will need to be raised later during this installation.

2. Remove Factory Bump Stops

- Remove the factory bump stops from both chassis rails. (Fig.1)



FIG.1

3. CLAMP LEAF PACK

- **WARNING:** Before removing or loosening any leaf spring components in the following steps, securely clamp the entire leaf pack together using suitably rated heavy-duty G-Clamps on both sides. The leaf pack must remain clamped throughout these steps to prevent the individual leaves from separating or shifting.(Fig.2)

Failure to securely clamp the leaf pack, or the use of an inadequate or incorrectly rated G-clamp, may result in sudden spring movement, causing damage to the vehicle or components and could lead to serious personal injury.



FIG.2

4. Remove Strike Plates

- Remove the strike plate cover, then unbolt and remove the factory strike plate. (Fig.3)



FIG.3

5. Remove U-Bolts

- Remove the factory U-bolts securing the leaf spring pack.
- Also remove the U-bolt saddle plate located on top of the leaf spring pack.

6. Install Upper & Lower Mounting Brackets

Upper Bracket "A"

- Position Upper Bracket "A" against the chassis, aligning the mounting hole with the original bump stop mounting hole.
- Ensure the two locating tabs sit against the outer edge of the chassis and the bracket is orientated as shown in Fig. 4.
- Secure using the supplied M10×25 Countersunk Bolt. (Fig.5)

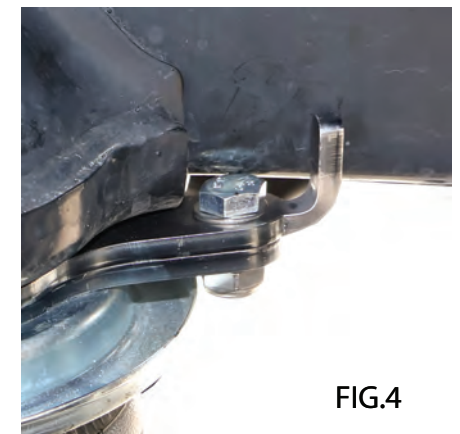


FIG.4

Lower Bracket "B"

- Position Lower Bracket "B" on top of the leaf spring pack.
- Reinstall the factory U-bolt saddle over the lower bracket and secure using the original U-bolt nuts. (Fig.6)



FIG.5

7. Reinstall U-Bolts

- Reinstall the factory U-bolts.
- Torque the U-bolts to the vehicle manufacturer's specifications.

8. REMOVE G-CLAMP

- With the leaf pack tightened and torqued, it is now safe to undo & remove the G-Clamps holding the leaf pack together.

9. Install Airline Fitting (Part No. 33606)

- Thread the airline fitting into the air spring by hand until finger tight. Using a spanner, tighten the fitting a further 1½ turns only.

Important: Do not over-tighten. Excessive tightening may damage the fitting, cause air leaks and void the warranty.

10. Assemble Air Spring

- Place a roll plate & attach Lower Bracket "A" to the end of the air spring containing the airline fitting, ensuring the cut-out in the bracket aligns with the airline fitting (see Page 2).
- Secure using 2× 3/8" Countersunk Bolts.
- Place a roll plate & attach Upper Bracket "B" to the opposite end of the air spring using 2× 3/8" Countersunk Bolts. (If installing a Cradle Kit, discard upper roll plates and attach Upper Bracket "B" to the Cradle.)

11. Install Air Spring Assembly

- Position the assembled air spring onto Lower Bracket "B", ensuring the airline fitting is facing inboard of the axle.
- Secure the assembly using the supplied M10×30 Hex Head Bolts, M10 Nyloc Nuts and washers on both sides.

If installing a Cradle Kit, skip the following step.

- Raise the rear axle until the upper mounting brackets align.
- Install the supplied M10×30 Hex Head Bolts, M10 Nyloc Nuts and washers to secure the upper brackets together. (Fig.7)

12. Sensor Arm Spacer

- Remove the upper bolt on the height sensor arm bracket (Fig.8), Place the 5mm spacer between the bracket and chassis, then reinstall and tighten the bolt.

13. Final Alignment & Tightening

- Check that the air spring assembly is sitting as close to perpendicular (vertical) as possible.
- Fully tighten all remaining fasteners.
- Torque the U-bolts to the vehicle manufacturer's specifications.

Airline Installation

- Proceed to the next page for airline installation instructions.

FIG.6



FIG.7



FIG.8

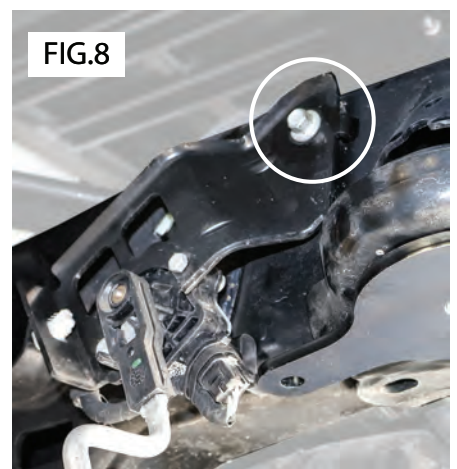
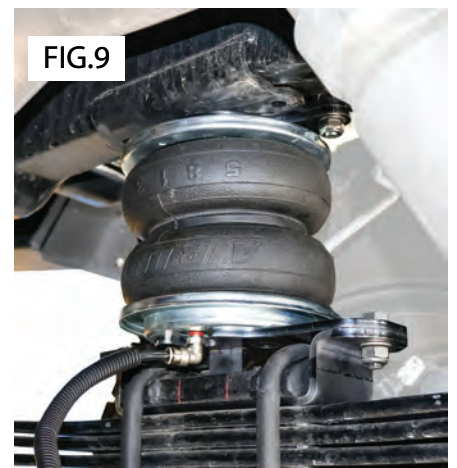


FIG.9

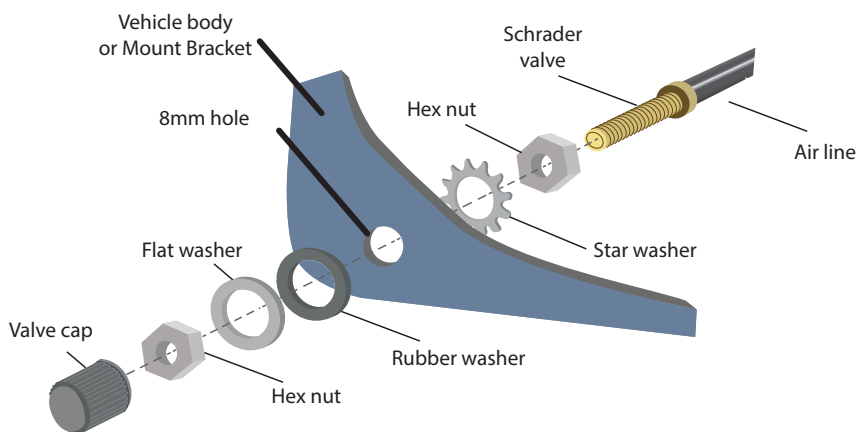


INSTALLING THE AIR LINES

If you are fitting a Polyair compressor kit, follow those instructions from here.

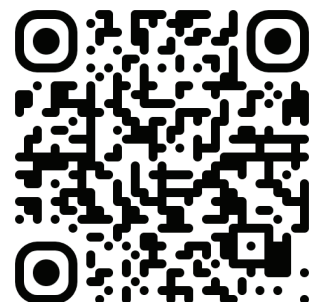
- A. Choose an ideal location for the Schrader valves. This location is best to be somewhere easy to reach.
- B. Roughly guide the air hose from your valve location to the air bags to check the length will be adequate. If more is needed, please contact us to purchase additional air hose.
- C. Drill an 8mm hole in your chosen location Or mount the Tow Mount Bracket if this was optioned.
- D. Cut the air hose into two equal lengths with a hose cutter or any sharp, flat blade that will provide a clean, square cut.
- E. Mount the Schrader valves in the orientation shown in Fig.A
- F. Route the air hose from the Schrader valves along the frame of the vehicle to the air bags.
Note:
 - Make sure to leave slack in the air line for any suspension movement.
 - Do not run the air line against any sharp edges.
 - Do not run the air line in a bend tighter than 90 degrees.
 - Keep air line minimum 75-100mm clear of any heat source.
- G. Secure the air hose with the cable ties provided.
- H. Inflate the air bags to 25psi and check all connections and air bags for leaks with soapy water. (Make sure air bags are secure in the vehicle, never inflate unrestrained air bags).
- I. If any leaks are detected, address the leak or contact Polyair for further assistance.
- J. If no leaks appear, tighten or check over any parts that may have been loosened or removed during the installation process. Then place the vehicle back on the ground.
- K. Adjust air pressure so the vehicle is sitting at correct ride height.

Sufficient air pressure must be maintained to prevent bottoming out and prolong the life of the air bags. A minimum of 5psi must be maintained at any time for unloaded vehicles. A vehicle with added weight may require additional pressure to maintain a "standard height". Contact Polyair for further advice if needed.



(Fig.A)

Follow the QR link below to view installation tips on our YouTube channel.



QUICK USAGE GUIDE

Please refer to the user guide included in this kit for detailed usage and maintenance.

POLYAIR LOAD ASSIST AIR BAGS DO NOT INCREASE THE VEHICLE’S GVM OR GCM

POLYAIR SYSTEMS ARE DESIGNED TO WORK ALONG SIDE THE VEHICLE’S EXISTING SUSPENSION AND IS NOT INTENDED TO BE A REPLACEMENT FOR SHOCK ABSORBERS OR LEAF / COIL SPRINGS.

IT IS STRONGLY RECOMMENDED THAT ANY POLYAIR KIT BE USED TO LEVEL VARYING OR TEMPORARY LOADS AND NOT SOLELY RELIED UPON FOR ANY HEAVY, PERMANENT WEIGHT. ANY PERMANENT WEIGHT SHOULD BE LEVELED WITH THE CORRECT SHOCK & SPRING COMBINATION, THEN THE POLYAIR KIT USED FOR ADDITIONAL WEIGHT ABOVE THIS.

IF THE VEHICLE WILL BE RAISED ONTO A HOIST, IT IS ADVISED TO DEFLATE THE AIR BAGS TO THE MINIMUM 5PSI BEFORE HAND. THIS WILL PREVENT ANY HARM THAT MAY HAPPEN WITH THE AIR BAGS UNDER PRESSURE, PREVENT ANY UNDUE STRESS ON SUSPENSION COMPONENTS AND PREVENT DAMAGE TO THE AIR BAGS.

		MINIMUM PSI (UNLOADED)	MAXIMUM PSI		
	RED SERIES	5 PSI	30 PSI		
	ULTIMATE SERIES	5 PSI	60 PSI		
	BELLOWS (ALL)	5 PSI	100 PSI		

AIR UP, THEN LOAD UP!

For in-coil air bag kits; It is highly recommended to inflate the air bags before loading the vehicle. E.g. Inflate air bag to maximum pressure (listed above), then load the vehicle or attach accessory to the tow hitch. Once everything is loaded up, deflate the pressure until the suspension sits at the correct height. This height can be measured before hand for reference. Best practice is to measure center of wheel to guard on level ground when the vehicle has no load.



- Incorrect use of Polyair systems or failure to adhere to warnings & guidelines can result in damage to the air bags, various components or the vehicle itself and will not be covered by warranty.
- Never exceed the vehicle’s GVM or GCM.

Head to our website to register your details to complete the product warranty. polyair.com.au/warranty