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# VOLKSWAGEN AMAROK
# W21-760-3129

## PRELIMINARY INSTALLATION INSTRUCTIONS

All work should be carried out in a properly equipped workshop with due regard to Health and Safety Regulations. No further reference to Health and Safety Regulations will be made, but they must be considered at all times.
The kit should be opened and the contents checked against the parts list provided.
Identify the various components and familiarize yourself with them using pictures and information provided.

**IMPORTANT**

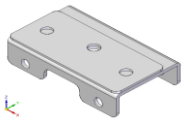
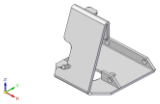
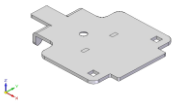
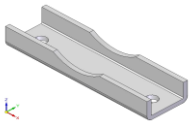
**This kit is not designed to increase the GVW (Gross Vehicle Weight) of your vehicle. For your safety and to prevent possible damage to your vehicle, do not exceed the maximum load recommended by the vehicle manufacturer at any time.**

***WARNING***

*Do not inflate this assembly when it is unrestricted. When installed, a minimum of 0.5 bar should be maintained in the air springs at all times to avoid damage. Do not inflate beyond 6.5 bar.*
*If it is necessary to raise the vehicle by the frame, deflate both air springs completely. Re-inflate the air springs after the vehicle is lowered to the ground.*

*Note: The assembly of this kit should be carried out by trained technical personnel. This is necessary, as auxiliary tools are required for assembly.*

# PART LIST

| Part Name | Quantity | Picture/Description | Part # |
|---|---|---|---|
| Upper Inner Bracket | 2 |  | DRV-7372 |
| Upper Outer Bracket | 2 (Handed) |  | DRV-7373 |
| Lower Bracket | 2 |  | DRV-7374 |
| Axle Strap | 2 |  | DRV-7375 |
| M6 Nyloc Nut | 2 | For P-Clip | |
| M6 Flat Washer | 2 | For P-Clip | |
| M8 x 85 Bolt | 4 | Upper Outer to Inner Bracket | |
| M8 Nyloc | 4 | For M8 Bolt | |
| M8 Flat Washer | 12 | 8 for M8 Bolt,4 for Inflation V | |
| M10 x 120 Carriage Bolt | 4 | Axle Strap to Lower Bracket | |
| M10 Locknuts | 4 | For M10 Carraige Bolt | |
| M10 Flat Washers | 4 | For M10 Carraige Bolt | |
| M10 x 20 Bolt | 2 | Upper Inner Bracket to Incert | |
| M10 Spring Washers | 2 | For M10 x 20 bolt | |
| M10 Insert | 2 | Into vehicle | |
| 3/8 UNC x 3/4" Countersunk Bolt | 2 | Lower Bracket to Air bellow | 6034 |
| Cable Ties | 10 | | |
| P12-Clip | 2 | On Upper Bracket | 0099 |
| 267C 1/4" NPT Air Bellows | 2 | | 6781 |
| 6mm Tubing | 1 | | 1321-1M |
| 3/8-16 Flange Locknut | 4 | Upper Bracket to Air bellow | 3022 |
| 6mm Elbow | 2 | | 3047 |
| 6mm Inflation valve | 2 | | 0155 |
| 6mm Tee piece | 1 | | 3703 |
| 6mm Compression Joiner | 2 | For Metric to Imperial Tubing | 0190 |

***Please note that the Compression Joiners are only needed if a Control kit with ¼" tubing is also being installed. Please retain the joiner for the future if you intend to install a control kit.***

**Please see page 10 for an image of all of the parts.**

# INSTALLATION PROCEDURE

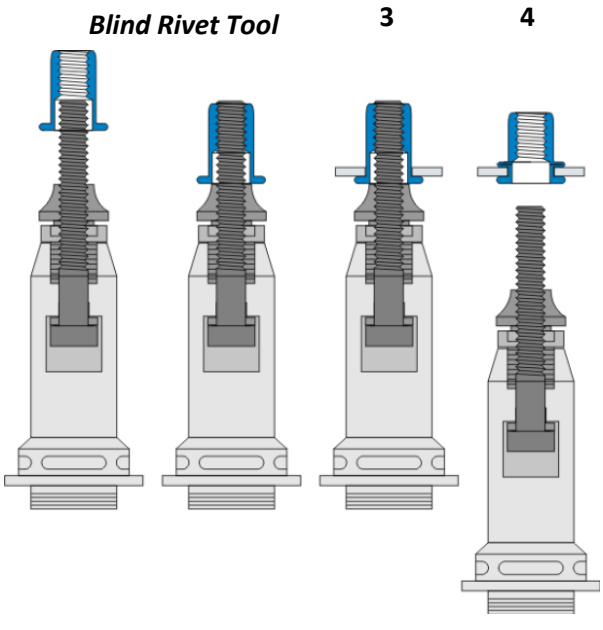
***Step 1-Bump Stop Removal***

Remove the bump stop circled with the broken line. This will reveal a 12mm hole in the chassis circled with a solid line. This hole will be used to locate the upper inner bracket.

**Note:**
*The style 267 airspring used in this kit acts as a bump stop when deflated. The rubber folds in on itself and this prevents metal to metal contact. For this reason the original bump stop is no longer necessary.*

***Step 2-Installing the M10 Insert***

The quickest way to install the M10 insert is by using a "blind rivet stud tool" as shown on the bottom right. However, if you don't have access to this tool then you can still proceed without it.




**<u>Procedure when using a blind rivet tool.</u>**

Place the M10 insert into the hole on the chassis.

1. Thread the M10 connection on the blind rivet tool into the insert.
2. Thread it to the full depth of the insert.
3. Compress the insert until it deforms.
4. Remove the blind rivet tool.

***Step 3-Upper Inner Bracket Installation***

The picture on the right shows the M10 insert riveted in place.

Using an M10 bolt and spring washer bolt the upper inner bracket to the insert as shown in the photo on the bottom right. Ensure the edge of the bracket is running parallel to the chassis.

Note that the cutout (circled) in this bracket should be facing inboard.

There is a 2mm spacer plate welded to the upper inner bracket. The purpose of this is to allow for inconsistency in the weld on the chassis. Ensure the bracket is not resting on the weld as this will cause a stress point on the chassis.

***Step 4- Installing the Air Fittings***

Insert the elbow into the airspring as shown ensuring an air tight seal is achieved.

***Step 5-Airspring Assembly (Upper Brackets)***

Identify the left and right upper inner brackets as shown in the picture on the right

Left

Right

Bolt the airspring to the upper outer bracket using 2 x 3/8" flange nuts (Circled).

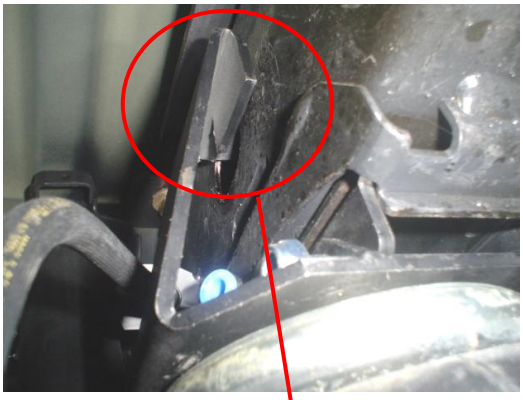
***Step 6-Airspring Assembly (Lower Brackets)***

Bolt the lower bracket to the assembly using the 3/8" countersunk bolt.
Ensure the orientation is correct as shown in the picture right showing the right side assembly.

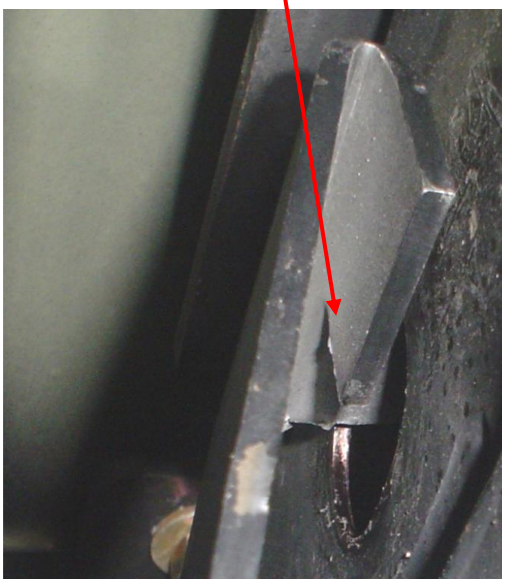
The circled tab on the lower bracket should be facing inboard.

***Step 7-Airspring Assembly Installation (upper Brackets)***

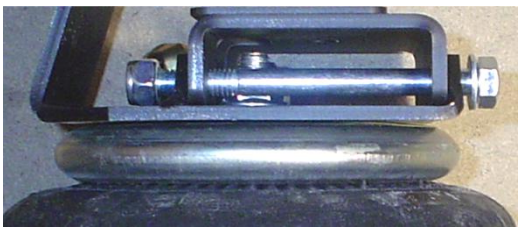
Place the tab on the upper outer bracket (circled) into the oblong hole in the chassis.



The angled flange on the upper outer bracket should be resting against the chassis as shown.



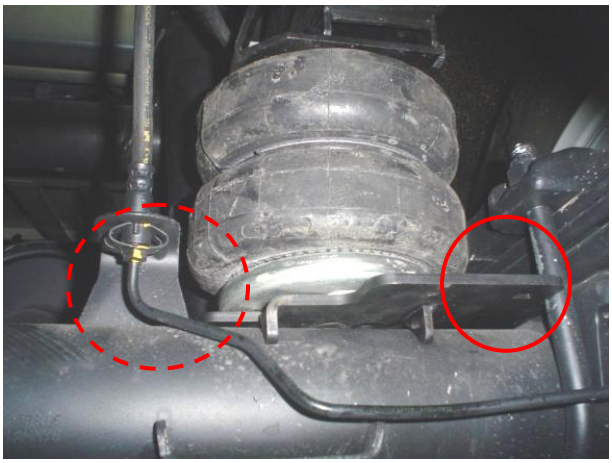
Locate the outer bracket over the inner bracket and bolt in place using the M8 bolts,l washers and nyloc nuts.

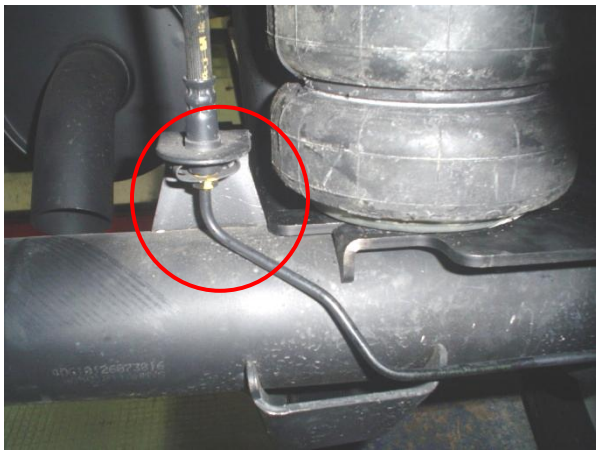


When in place the top face of the support tab should be resting against the top of the oblong hole in the chassis.

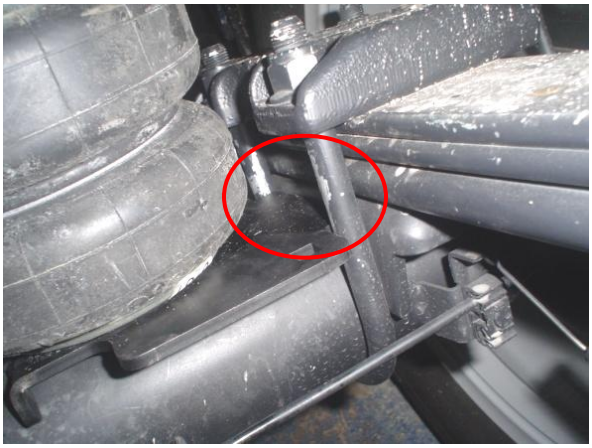
***Step 8-Airspring Assembly Installation (Lower Bracket)***

The lower bracket is situated between the brake line bracket (Circled with the broken line) and leaf-spring stack (Circled with the solid line). This prevents side to side movement of the bracket.





The lower bracket rests in between the U-Bolts. This prevents the bracket from twisting on the axle.



***Step 9-Fixing the Lower Bracket.***

Place an axle strap under the axle in line with the square cutouts on the lower bracket and fix the lower bracket to the axle strap using the M10 carriage bolts, flat washers and nyloc nuts.
Tighten the carriage bolts evenly. Do not over tighten as this will cause the lower bracket to distort. When tightened the length of thread on the left bolt below the nyloc nut should be the same as the thread length on the right bolt below the nyloc nut.

Ensure the brake line does not come into contact with the carriage bolt.

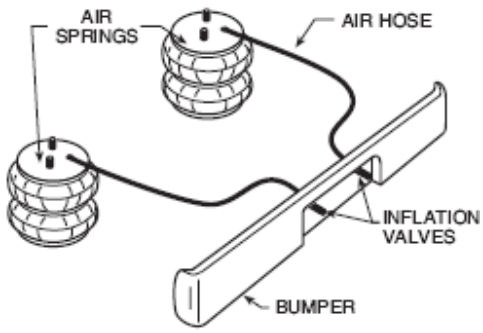
***Step 10-Relocating the brake lines.***

The brake line cannot come into contact with any of the brackets. In order to prevent contact the brake line should be located in the P-clip which is bolted to the upper outer brackets. The M6 nut should be on the bottom as shown in the picture on the right.

**<u>Repeat the above steps for the opposite side.</u>**

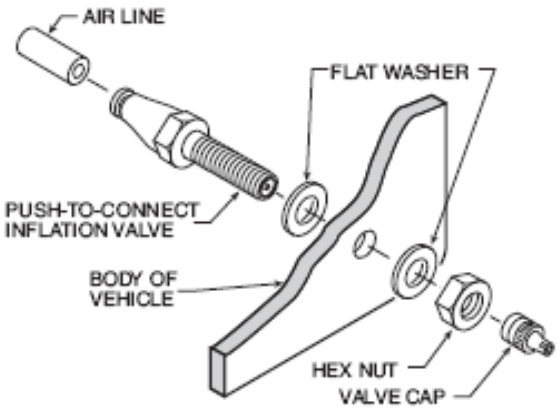
***Step 11-Connecting the Tubing***

Uncoil the air tubing and cut it into two equal lengths. ***DO NOT FOLD OR KINK THE TUBING***. The air line tubing should not be bent or curved sharply as it may buckle with age.
Make the cut as square as possible. Insert one end of the tubing into the elbow fitting installed in the top of the air helper spring.




***Step 12-Installing the Air Lines***

Select a location on the vehicle for the inflation valves. The locations can be on the bumper or the body of the vehicle but be sure that it is in a protected location so the valve will not be damaged yet still be accessible for the inflation wand. Drill an 8mm hole or use an existing hole and install the air inflation valve using two 8mm flat washers per valve as supports. Run the tubing from the air spring to the inflation valve, routing it to avoid direct heat from the exhaust, and away from sharp edges.
Thermal sleeves have been provided for these conditions. Push the end of the air line tubing into the inflation valve. Secure the tubing in place with the nylon ties provided.




***Step 13-Checking the System***

Once the inflation valves are installed, inflate the air springs and check the fittings for air leaks with an applied solution of soap and water. If a leak is detected at a tubing connection then check to make sure that the tube is cut as square as possible and that it is pushed completely into the fitting. The tubing can easily be removed from the fittings by pushing the collar towards the body of the fitting and then pulling out the tube. If a leak is detected where the fitting screws into the spring, screw the elbow into the spring until the leak stops.
Re-inflate the air springs and check for leaks as noted above.

***NOTE:***
Once the air helper springs are installed, it is recommended that the vehicle not be lifted by the frame, as over-extension may occur, resulting in damage to the air springs. However, should it become necessary to raise the vehicle by the frame, deflate both air helper springs completely.
This now completes the installation. Before proceeding, check once again to be sure you have proper clearance around the airsprings. ***With a load on the vehicle and the helper air springs inflated, there must have at least 10mm clearance around the air springs.***

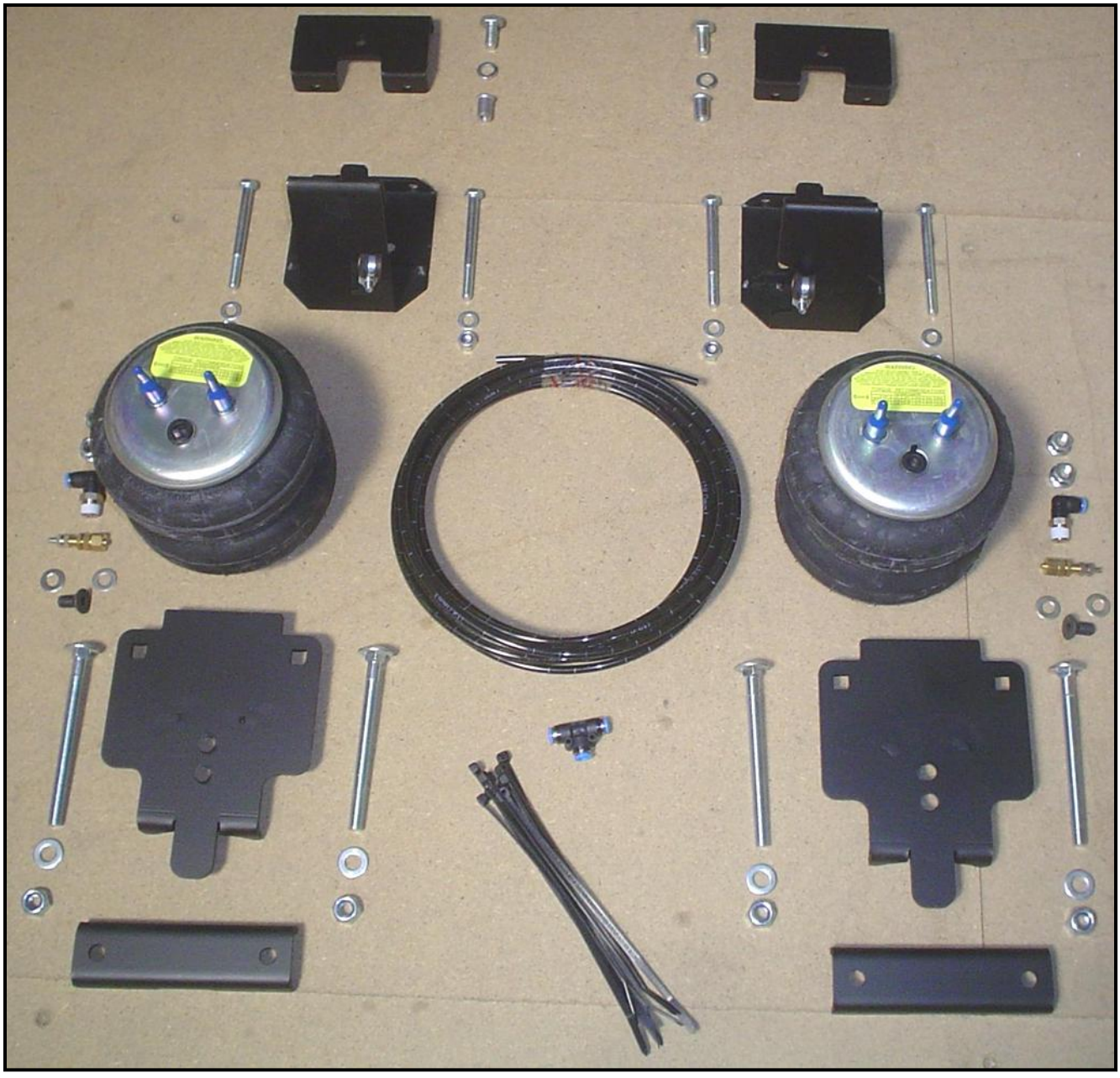
For best comfort use only enough air pressure in the air springs to level the vehicle when viewed from the side (front to rear). This amount will vary depending on the load, location of load, condition of

existing suspension and personal preference.

***NOTE:*** Too much air pressure in the air springs will result in a stiffer suspension, while too little air pressure will allow the air spring to bottom out over rough conditions. Too little air pressure will also not provide the improvement in handling that is possible.

***TO PREVENT POSSIBLE DAMAGE MAINTAIN A MINIMUM OF 0.5 BAR IN THE AIR SPRINGS AT ALL TIMES.***

## KIT CONTENTS IMAGE



# Imperial to Metric Adaptor Kit

Some air suspensions kits are available with metric air fittings. Please follow the procedures outlined in this document if combining a metric air spring kit with an imperial compressor and gauge kit (Control kit).

**Do not attempt to connect imperial fittings to metric tubing (or vice versa) as leaks will occur.**

The airsprings should be connected to the control kit using the supplied adaptors.

**Step 1**

Unscrew the two caps off the air fitting adaptor.

**Step 2**

Insert the cap over the 6mm and 1/4" tubing.

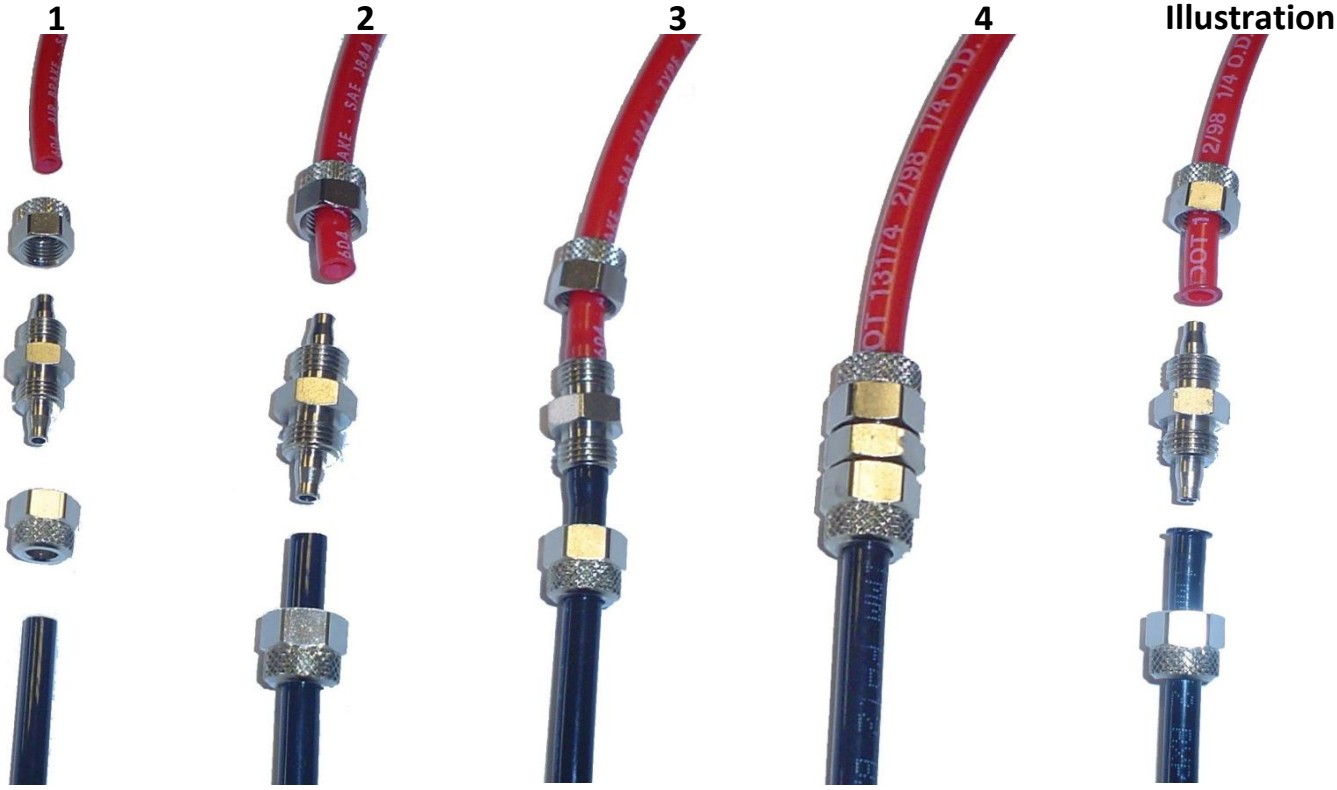
**Step 3**

Force the tubing over the air fitting collar. Ensure the tubing is fully inserted over the collar. Do not use a flame to soften the tubing as this can damage it and cause leaks.

**Step 4**

Tighten the two caps over the air fitting. This step forces the tubing against the fitting creating an air tight flange. This is the final step. The illustration on the bottom right shows

**1/4" Imperial Tubing**




**6mm Metric Tubing**