



# INSTALLATION MANUAL

**MC-2918/MC-2919**  
**Arnott Ultimate Ride Kit**  
**09-Current Harley-Davidson®**  
**Tri Glide®/Freewheeler® Series**



***ELEVATE YOUR RIDE.®***

# CONGRATULATIONS ON YOUR PURCHASE OF AN ARNOTT® MOTORCYCLE SUSPENSION SYSTEM

This system provides you with the ability to maintain your bike at a constant level regardless of load, resulting in enhanced vehicle ride, handling, and performance. We at Arnott LLC are proud to offer a high quality product with all the technical support you need. Thank you for your confidence in us and our product.

## GENERAL INFORMATION

Proper installation is essential to experience and appreciate the benefits of this system. Please take a moment to review these installation instructions before you begin to install these components on your motorcycle. The removal and installation of air suspension products should only be performed by a fully qualified, certified motorcycle professional.

It is equally important to be aware of all necessary safety measures while installing your new Air Suspension System. This includes proper lifting and immobilizing of the motorcycle and isolation of any stored energy to prevent personal injury or property damage.

Reading this manual signifies your agreement to the terms of the general release, waiver of liability, and hold harmless agreement, the full text of which is available at [www.arnottcycles.com](http://www.arnottcycles.com) and [www.arnottcycles.eu](http://www.arnottcycles.eu).



### WARNING:

DO NOT inflate the air suspension system until it is installed. Inflation of the air suspension system before both ends are supported by the motorcycle's frame and/or appropriate suspension components may result in serious personal injury and/or damage to the air suspension system. The maximum recommended air spring inflation pressure is 150 psi.

- Avoid damage to air lines and electrical components.
- Removal and installation is only to be performed by fully qualified personnel.

### CAUTION:

This manual is meant to provide basic installation guidelines which can help prevent damage to the motorcycle and air suspension system. Each owner or installer is unique, therefore installation of this system can be done many different ways. The mounting locations of the compressor and inflation switch are suggestions by our engineers. If proper wiring guidelines and instructions are followed, relocation of the compressor or switch will neither affect the system operation nor void your warranty.

To avoid the possibility of short circuits while working with electric components consult your owner's manual on how to disconnect your battery.

Refer to the Owner's Manual for the bike and instructions for the motorcycle lift for all correct lifting procedures. It is also recommended that you protect any chrome or painted surfaces that may be damaged during lifting, removal or installation process.

Adjust air shock pressure as required for desired ride quality to maximize the benefits of your system. Excess pressure will result in a firmer ride, too little pressure will allow the suspension to bottom out.

# COMPONENTS

## MC-2918 — 09-CURRENT HARLEY-DAVIDSON TRI GLIDE/FREEWHEELER SERIES — BLACK

20-10332 INFLATION KIT		
PART NO.	DESCRIPTION	QTY
29-13435	POTTED RELAY	1
21-7268	4MM AIRLINE X 6FT. ACCESSORY KIT	1
21-7269	4MM VOSS AIR FITTING ACCESSORY KIT	1
21-7271	HARNESS CABLE TIES ACCESSORY KIT	1
21-7272	SPLIT LOOM- 1 FT LENGTHS ACCESSORY KIT	1
21-2698	UNIVERSAL FUSE HOLDER ASSEMBLY KIT	1
21-7262	MANIFOLD BRACKET W/ FASTENER ACCESSORY KIT	1
21-9761	90 DEGREE PUSH CONNECT MANIFOLD ASSEMBLY	1
21-7267	1/4" NYLON TUBING ACCESSORY KIT	1
21-10331	2009-PRESENT HARLEY-DAVIDSON TRI-GLIDE, PUMP ASSY.	1
11-MC-HDTRI	MC-2918 & 2919 - INSTALL MANUAL	1

21-10340-B SHOCK KIT		
PART NO.	DESCRIPTION	QTY
21-9265	SHOCK ASSY, BLACK	2

HANDLE BAR SWITCH		
PART NO.	DESCRIPTION	QTY
29-9749	HANDLE BAR SWITCH, BLACK	1

The use and installation of any Arnott Air Suspension product or kit may adversely affect or void your factory warranty. It is the responsibility of the motorcycle owner to check federal, state and local laws and ordinances before modifying or customizing his or her motorcycle. It is the exclusive and total responsibility of the motorcycle owner to determine the suitability of this product for his or her use. The user shall assume all legal obligations, personal injury risk and all liability duties and risk associated with the use of this product. Arnott Air Suspension products are designed and intended for the experienced on-road motorcyclists only and intended for closed course operation. Arnott Air Suspension products and kits are designed exclusively for OEM manufactured and equipped motorcycles with no modifications. Any installation of aftermarket or customized components may adversely affect the operation and performance of Arnott Air suspension kits and components and may void the manufacturer's warranty. These directions are accurate at time of publication. Arnott Inc. reserves the right to revise specifications without notice.

# COMPONENTS

## MC-2919 — 09-CURRENT HARLEY-DAVIDSON TRI GLIDE/FREEWHEELER SERIES — CHROME

20-10332 INFLATION KIT		
PART NO.	DESCRIPTION	QTY
29-13435	POTTED RELAY	1
21-7268	4MM AIRLINE X 6FT. ACCESSORY KIT	1
21-7269	4MM VOSS AIR FITTING ACCESSORY KIT	1
21-7271	HARNESS CABLE TIES ACCESSORY KIT	1
21-7272	SPLIT LOOM- 1 FT LENGTHS ACCESSORY KIT	1
21-2698	UNIVERSAL FUSE HOLDER ASSEMBLY KIT	1
21-7262	MANIFOLD BRACKET W/ FASTENER ACCESSORY KIT	1
21-9761	90 DEGREE PUSH CONNECT MANIFOLD ASSEMBLY	1
21-7267	1/4" NYLON TUBING ACCESSORY KIT	1
21-10331	2009-PRESENT HARLEY-DAVIDSON TRI-GLIDE, PUMP ASSY.	1
11-MC-HDTRI	MC-2918 & 2919 - INSTALL MANUAL	1

21-10340-B SHOCK KIT		
PART NO.	DESCRIPTION	QTY
21-9265	SHOCK ASSY, BLACK	2

HANDLE BAR SWITCH		
PART NO.	DESCRIPTION	QTY
29-9750	HANDLE BAR SWITCH, CHROME	1

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Use a solid, level surface to position the bike on a motorcycle lift and use all recommended safety techniques. Lift the bike so the rear wheel is just slightly off the ground.

1. Remove the seat, both side covers and the passenger handles. (Figures 1, 2, 3, 4)



**FIGURE 1**



**FIGURE 2**



**FIGURE 3**



**FIGURE 4**



- 2. Unplug all of the electrical connectors running to the rear of the motorcycle. (Figures 5, 6, 7, 8)**



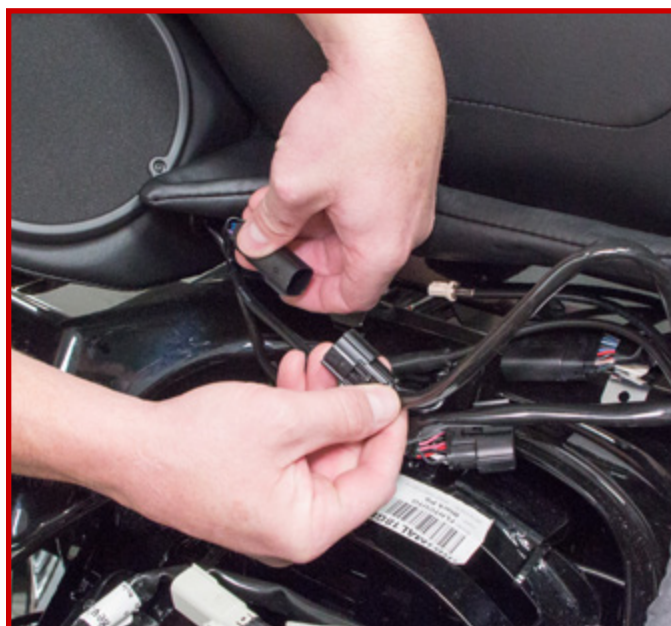
**FIGURE 5**



**FIGURE 6**



**FIGURE 7**



**FIGURE 8**



3. Remove the screws near the front of the rear fender on either side of the motorcycle. (Figures 9, 10)



**FIGURE 9**

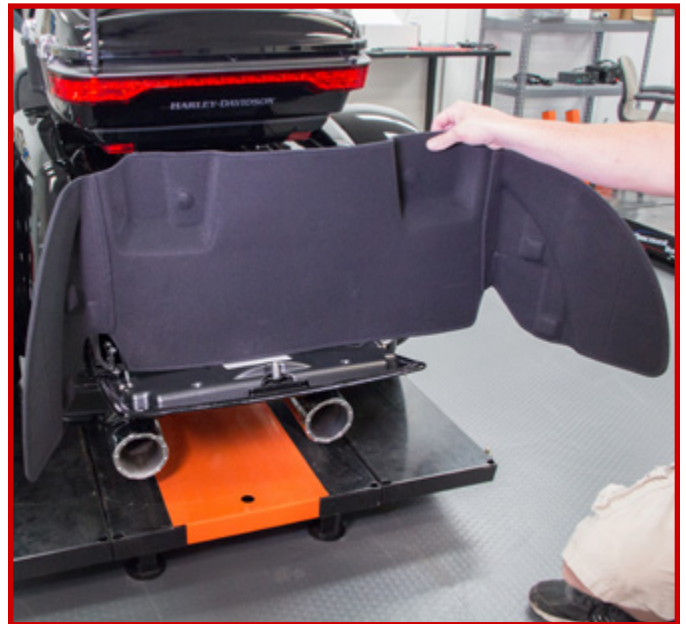


**FIGURE 10**

4. Remove the liners from the rear trunk. (Figures 11, 12)



**FIGURE 11**



**FIGURE 12**

5. Remove the 4 bolts on the bottom of the trunk. Then the 2 bolts on the upper back wall. Lift and remove the rear fenders and trunk assembly. (Figures 13, 14, 15, 16)



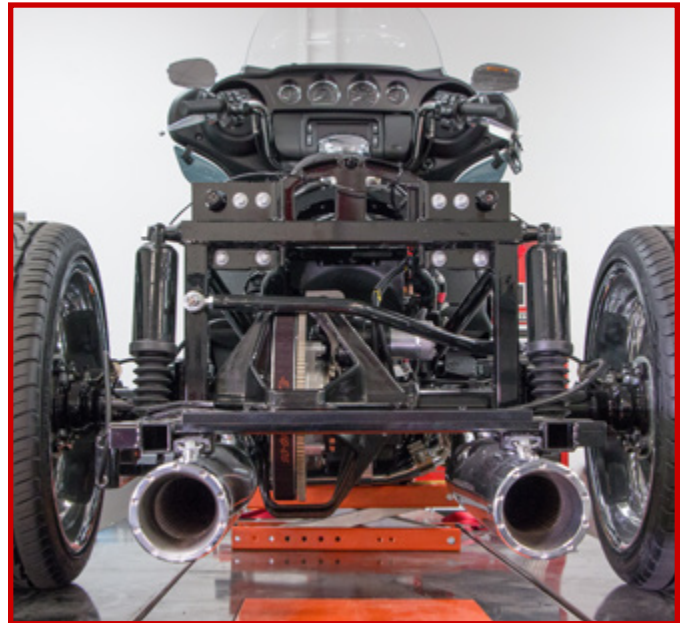
**FIGURE 13**



**FIGURE 14**



**FIGURE 15**



**FIGURE 16**



6. Remove the air lines to the OE shocks and remove the upper shock mounting bolt. (Figures 17, 18)



FIGURE 17

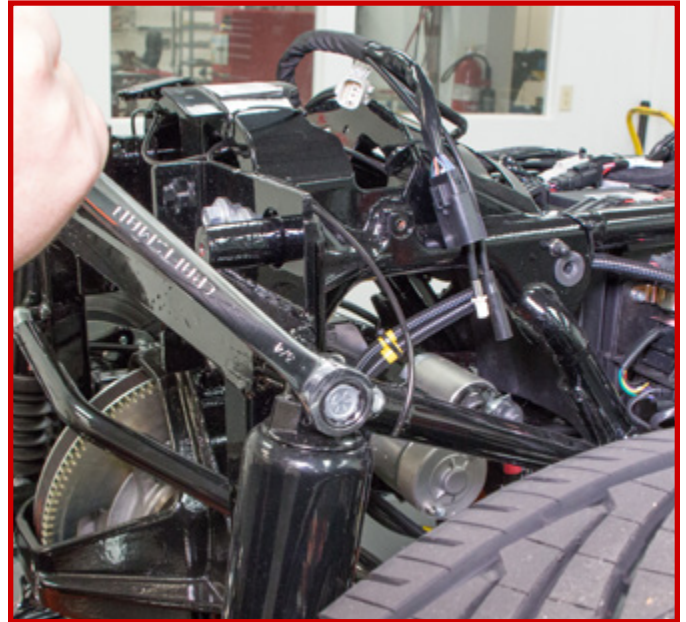


FIGURE 18

7. Lower the motorcycle then remove the lower shock bolts. (Figures 19, 20)

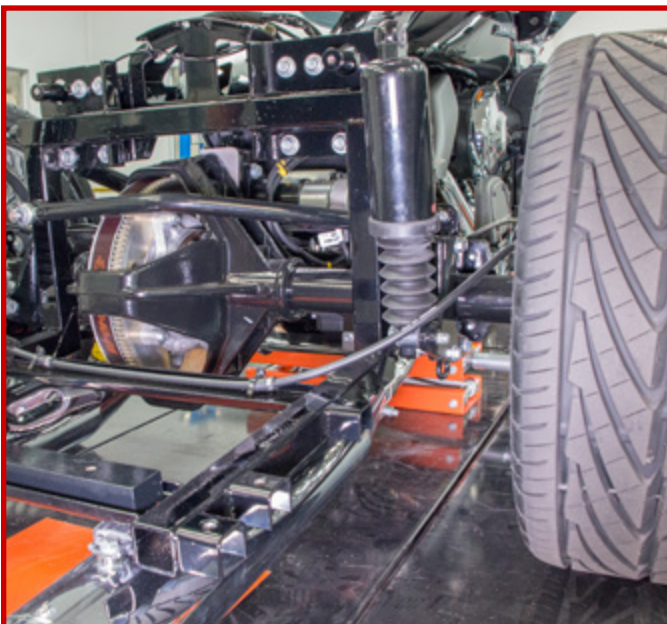


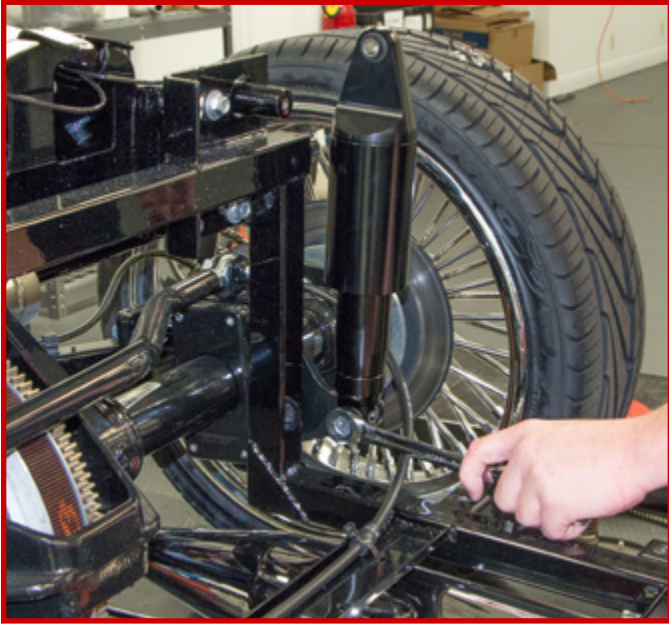
FIGURE 19



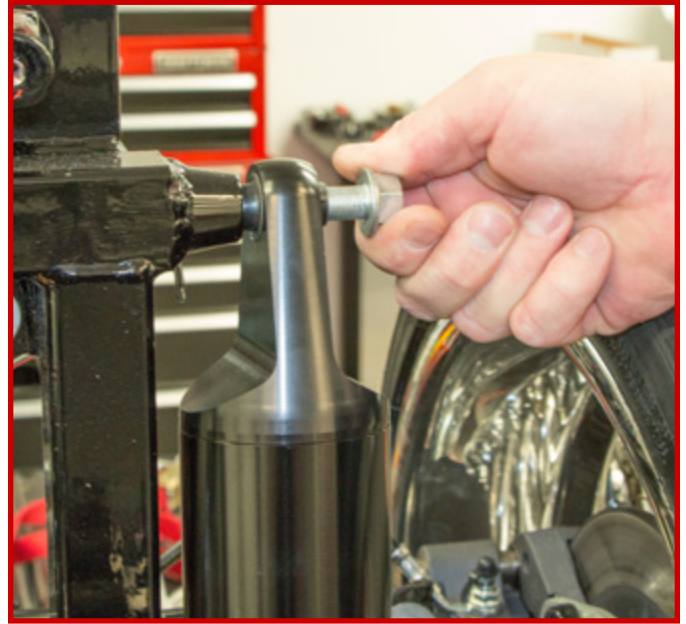
FIGURE 20



8. Reusing the OE hardware, install the new air shocks in the reverse order of removal with the air ports facing toward the outside of the bike. (Figures 21, 22)



**FIGURE 21**



**FIGURE 22**

9. Mount the universal bracket to the air manifold as depicted in the image below. (Figure 23)



**FIGURE 23**

10. Remove the screw from the pump bracket and place the assembly in the frame as shown below. (Figures 24, 25)

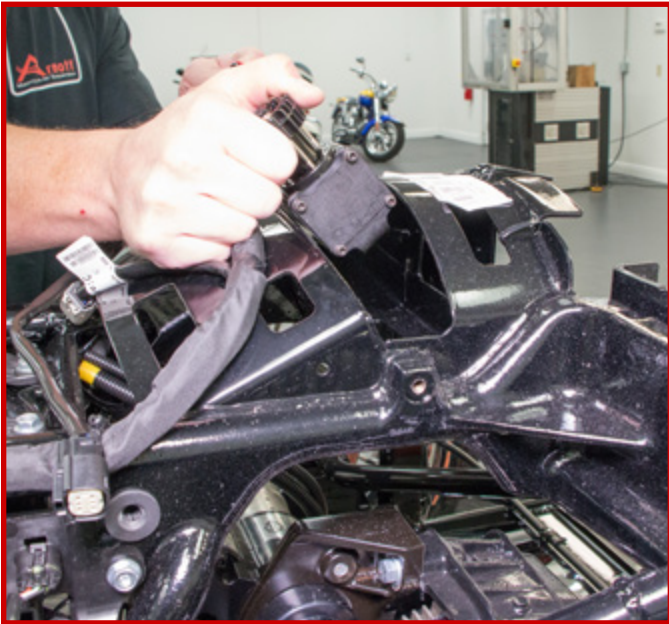


FIGURE 24

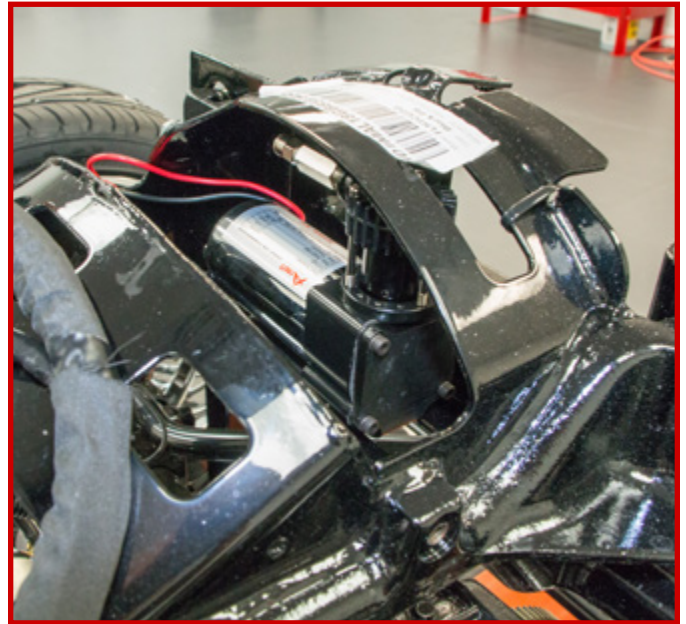


FIGURE 25

11. Using the screw from the pump bracket mount the pump assembly and the air manifold to the frame as shown below. (Figures 26, 27)

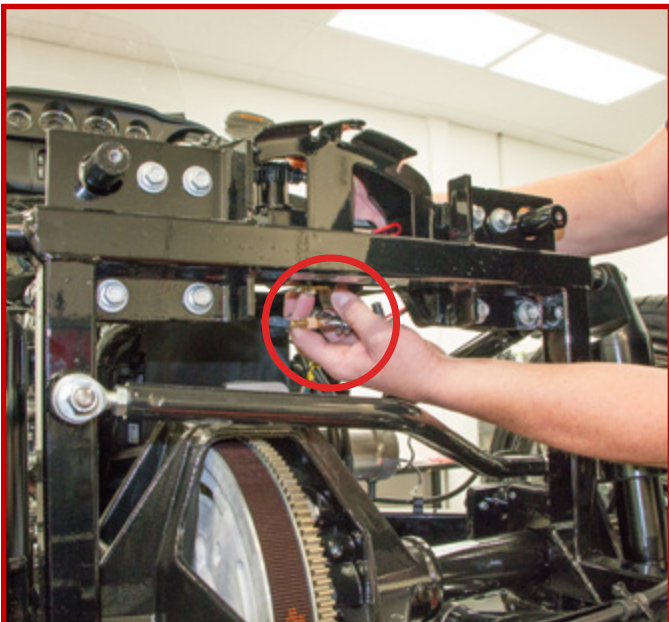


FIGURE 26

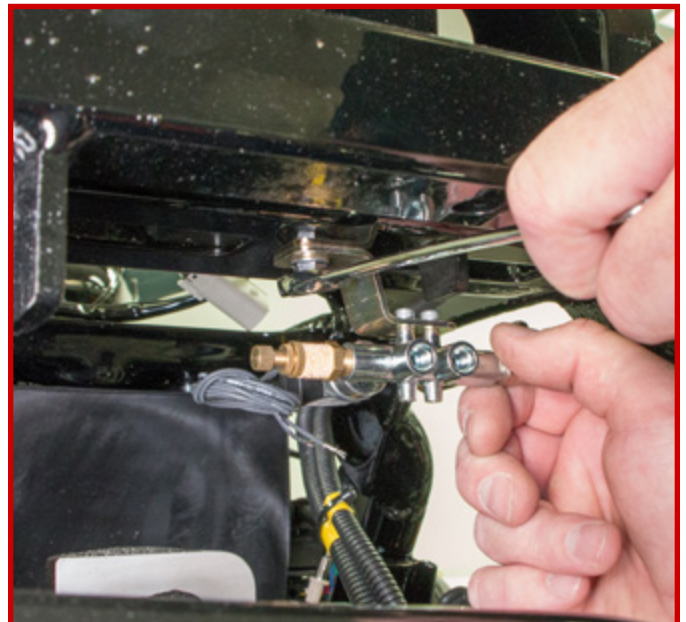


FIGURE 27



12. Cut the ¼" air hose to length & route it from the pump to the manifold. (Figures 28, 29)

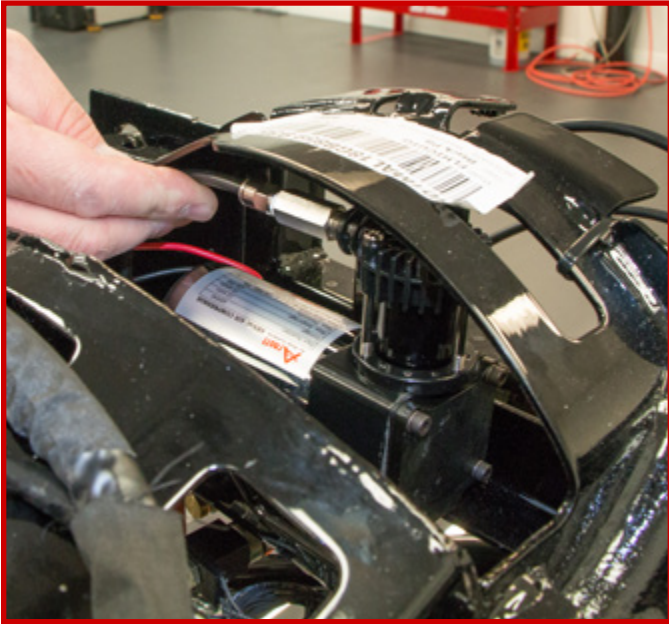


FIGURE 28



FIGURE 29

13. Screw a VOSS fitting into the air shocks. Remove the white plug then insert the 4mm air line until you feel it seat. Remove the fitting from the shock and confirm that the keep is on the air line. Screw the fitting back into the shock then snug tight. (Figures 30, 31, 32, 33)

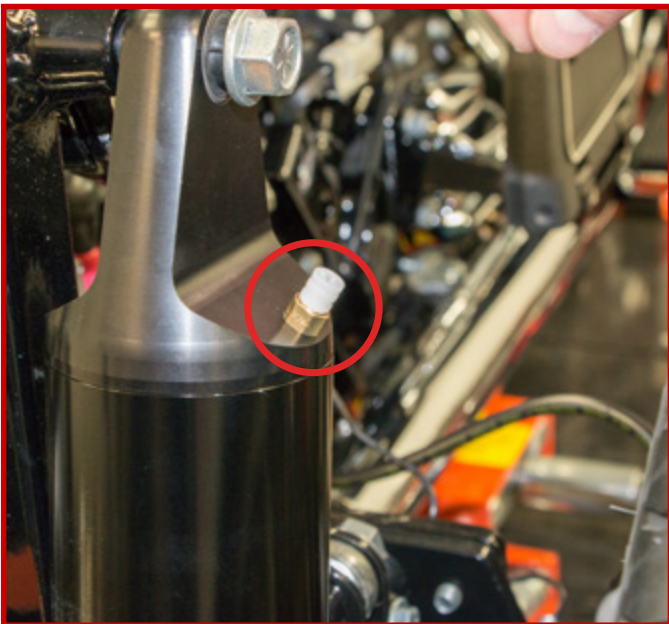


FIGURE 30



FIGURE 31



FIGURE 32



FIGURE 33

14. Route the air lines from the shocks to the air manifold, trim then repeat step #13 to put the VOSS fittings into the manifold. (Figure 34)

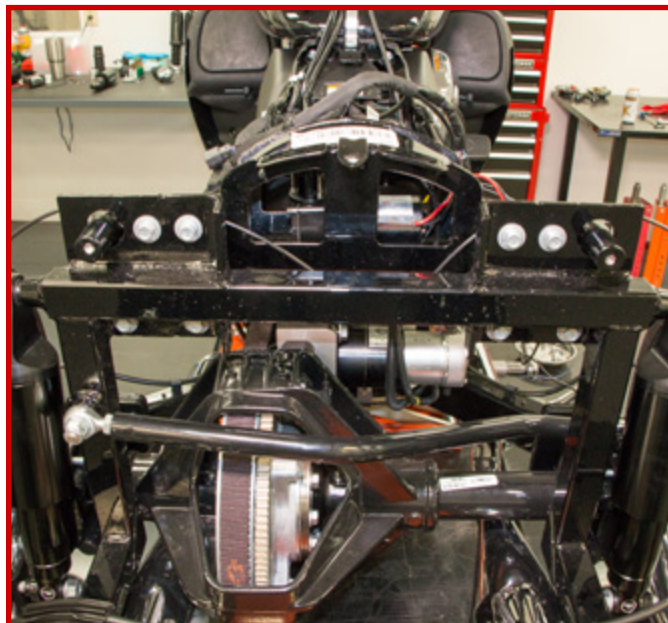


FIGURE 34



- 15.** Mount the handle bar switch to the clutch perch using the OE screw. (Figures 35, 36)



**FIGURE 35**



**FIGURE 36**

- 16.** Remove the fuel tank and wire harness cover, then route the switch wire down the frame toward the battery. (Figures 37, 38, 39)

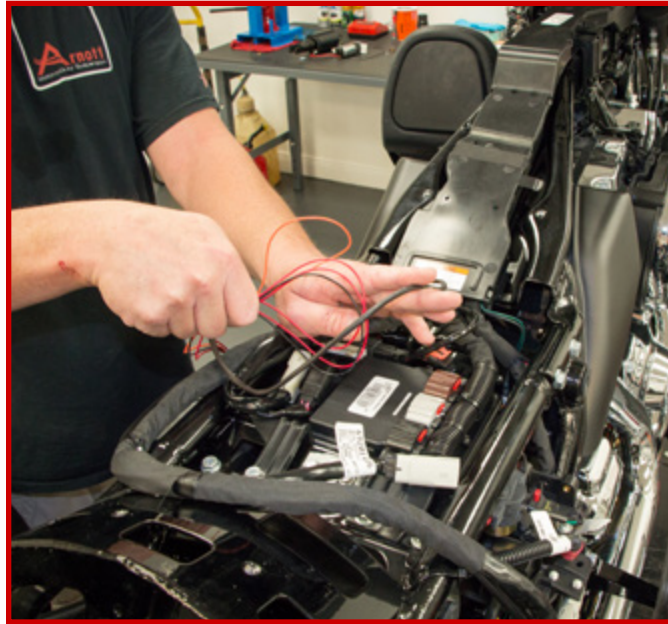


**FIGURE 37**



**FIGURE 38**





**FIGURE 39**

- 17.** Follow the wiring diagrams in the back of this manual to complete the electrical connections.

18. The clocking of the shock eyes can be adjusted. Simply fix the lower eye in a vise to keep it from moving. Then grasp the damper sleeve as shown below. Twist the sleeve on the shock body. (Figures 40, 41)

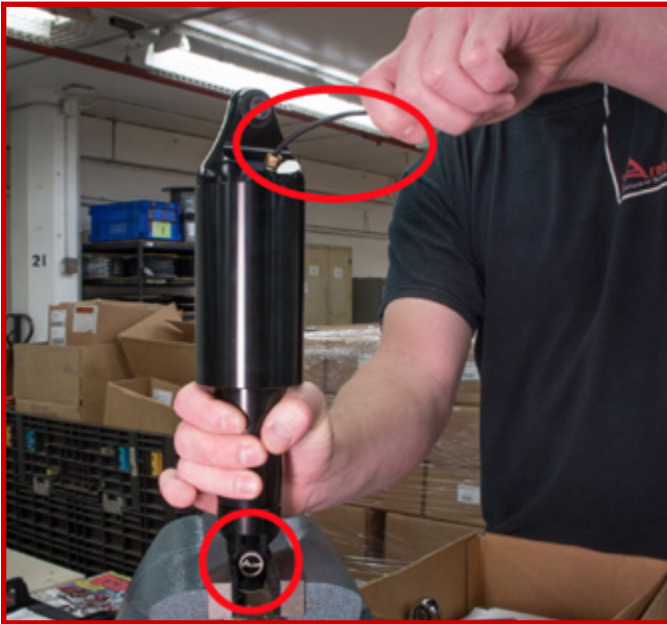
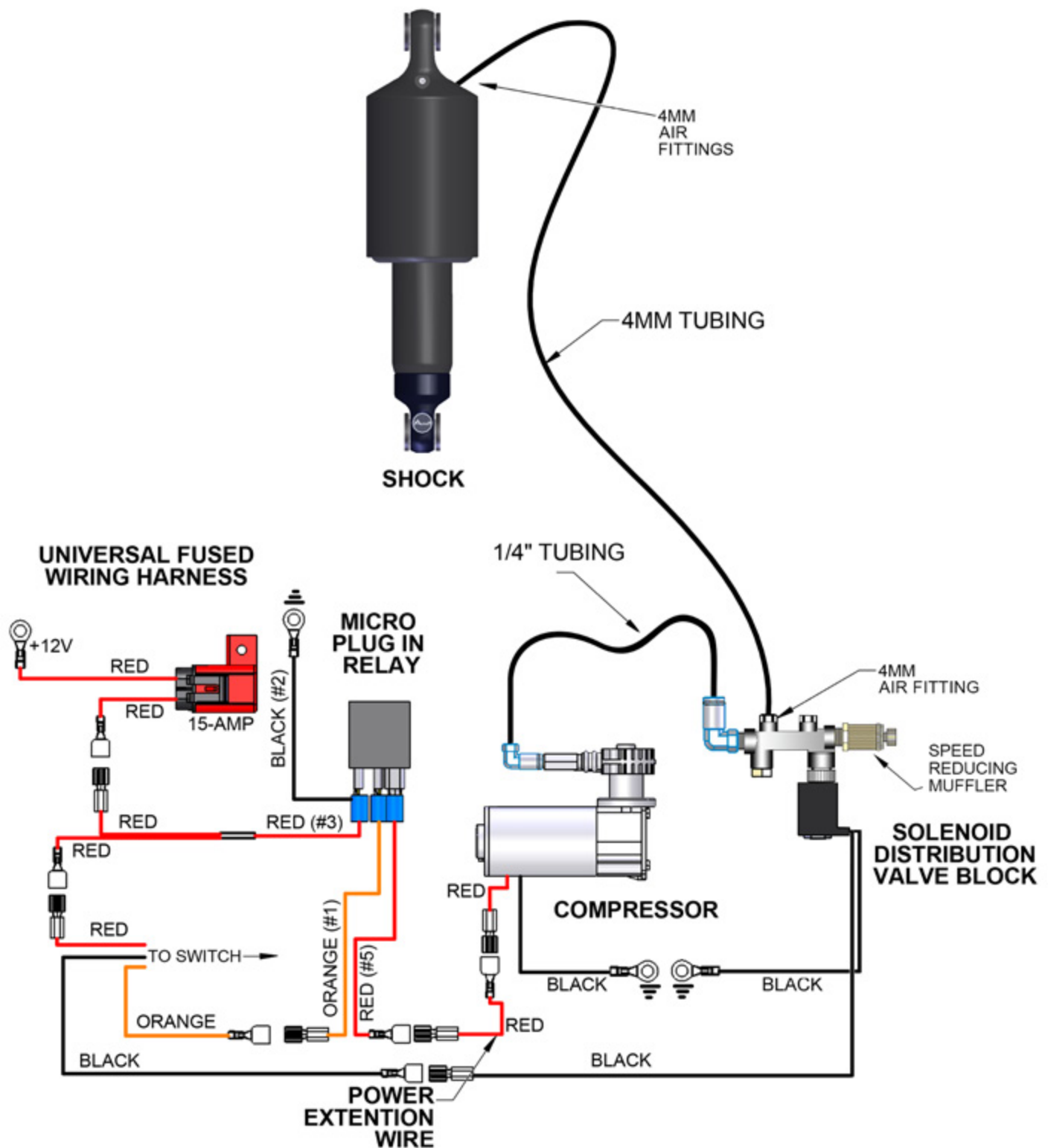


FIGURE 40

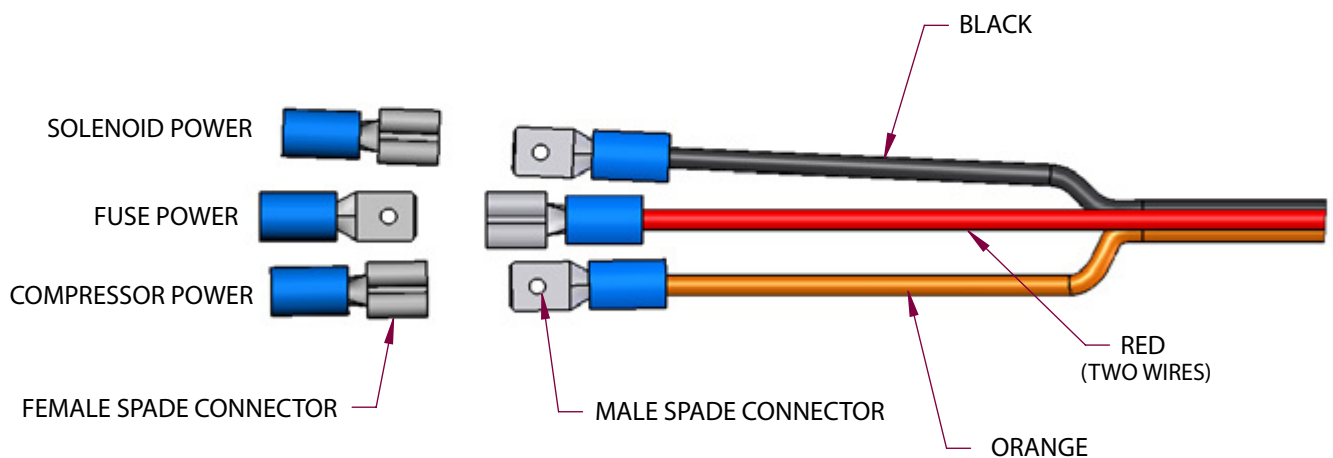
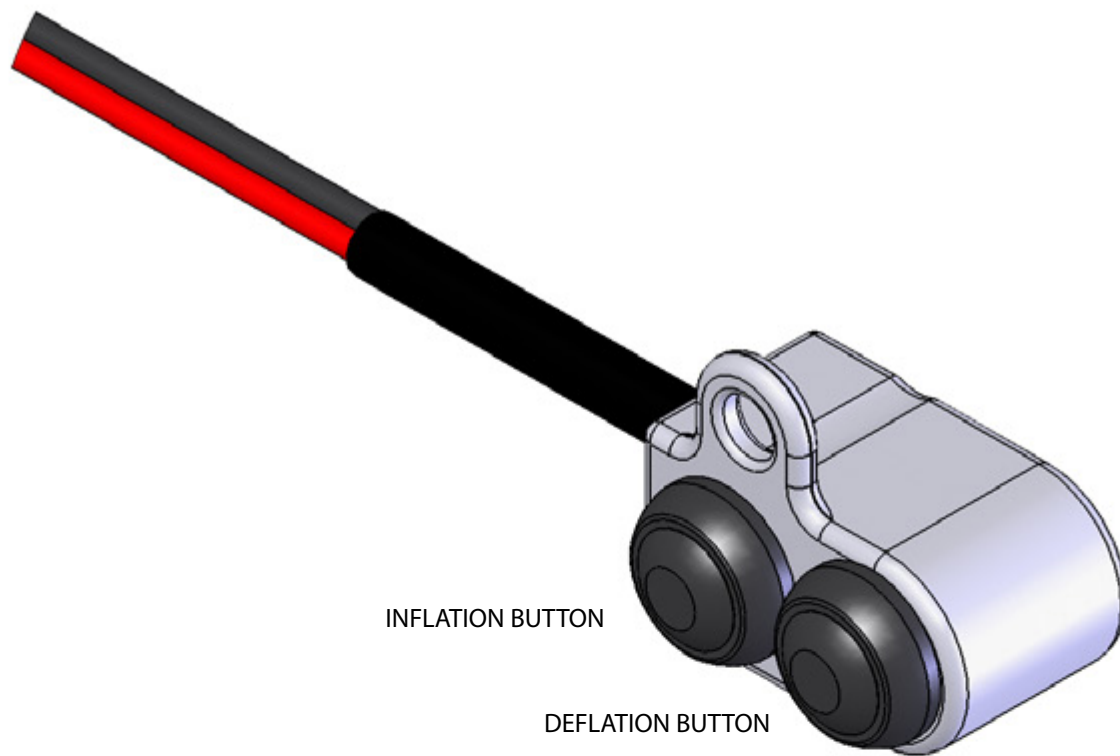


FIGURE 41

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- AS SHOWN IN ILLUSTRATION ABOVE;
1. CUT SWITCH WIRING TO APPROPRIATE LENGTH.
  2. CRIMP THE TWO MALE SPADE CONNECTORS TO THE ORANGE WIRE AND TO THE BLACK WIRE.
  3. CRIMP THE FEMALE SPADE CONNECTOR TO THE DOUBLE RED WIRE.

# Arnott®

## Motorcycle Suspension

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