



# INSTALLATION MANUAL

## MC-2921/MC-2931 Arnott Ultimate Ride Kit 03-Current Victory® Cruiser 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.



Download your TÜV certification here:

[WWW.ARNOTTCYCLES.EU/PAGES/TUV-CERTIFICATES](http://WWW.ARNOTTCYCLES.EU/PAGES/TUV-CERTIFICATES)

According to TÜV regulation, an air pressure gauge must be installed together with the Arnott Motorcycle kit. Arnott recommends using their digital pressure gauge K-3114 or K-3115 with motorcycle kits that have been certified for this purpose.

## 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 200 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-2921 — 03-CURRENT VICTORY CRUISER SERIES — BLACK

| 20-10448 INFLATION KIT |  |     |
|------------------------|--|-----|
| PART NO.               | DESCRIPTION  | QTY |
| 29-13435               | POTTED RELAY   | 1   |
| 21-7268                | 4MM AIRLINE X 6FT. ACCESSORY KIT                     | 1   |
| 21-7715                | 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   |
| 21-11617               | 90 DEGREE PUSH CONNECT MANIFOLD ASSEMBLY, MONO SHOCK | 1   |
| 21-7267                | 1/4" NYLON TUBING ACCESSORY KIT                      | 1   |
| 21-10445               | 2003-PRESENT VICTORY CRUISER, PUMP ASSY.             | 1   |
| 21-10444               | 2003-PRESENT VICTORY CRUISER MOUNTING KIT            | 1   |
| 11-MC-VICT2            | INSTALLATION MANUAL FOR MC-2921 & MC-2931            | 1   |

| 21-10447-B SHOCK KIT |                   |     |
|----------------------|-------------------|-----|
| PART NO.             | DESCRIPTION       | QTY |
| 21-9273              | SHOCK ASSY, BLACK | 1   |

| 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-2931 — 03-CURRENT VICTORY CRUISER SERIES — CHROME

| 20-10448 INFLATION KIT |  |     |
|------------------------|--|-----|
| PART NO.               | DESCRIPTION  | QTY |
| 29-13435               | POTTED RELAY   | 1   |
| 21-7268                | 4MM AIRLINE X 6FT. ACCESSORY KIT                     | 1   |
| 21-7715                | 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   |
| 21-11617               | 90 DEGREE PUSH CONNECT MANIFOLD ASSEMBLY, MONO SHOCK | 1   |
| 21-7267                | 1/4" NYLON TUBING ACCESSORY KIT                      | 1   |
| 21-10445               | 2003-PRESENT VICTORY CRUISER, PUMP ASSY.             | 1   |
| 21-10444               | 2003-PRESENT VICTORY CRUISER MOUNTING KIT            | 1   |
| 11-MC-VICT2            | INSTALLATION MANUAL FOR MC-2921 & MC-2931            | 1   |

| 21-10447-B SHOCK KIT |                   |     |
|----------------------|-------------------|-----|
| PART NO.             | DESCRIPTION       | QTY |
| 21-9273              | SHOCK ASSY, BLACK | 1   |

| 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 battery covers and both fender strips. (Figures 1, 2, 3, 4)



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4



2. Remove the battery. (Figures 5, 6)



FIGURE 5

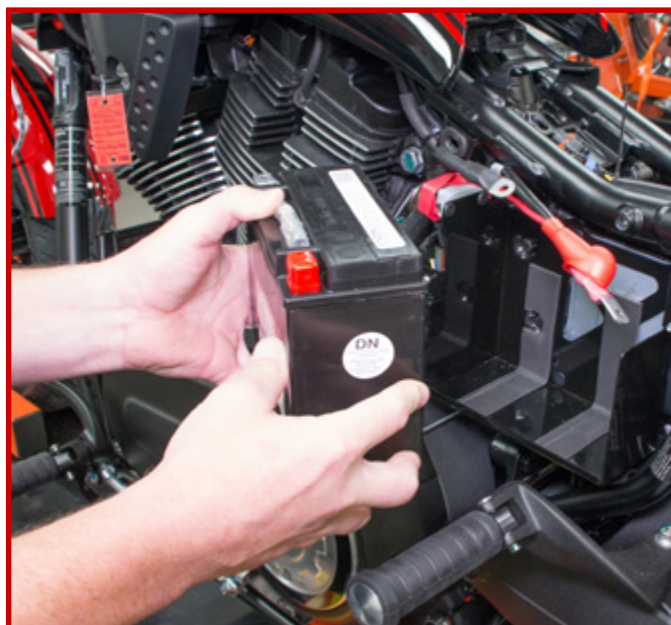


FIGURE 6

3. Remove the 3 bolts mounting the battery box and pull it out of the frame as far as possible. (Figures 7, 8)

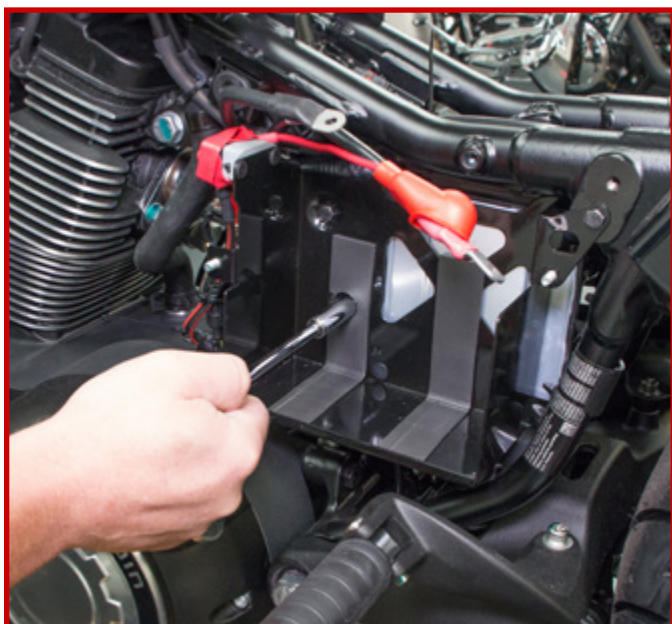


FIGURE 7



FIGURE 8

4. Remove the 3 bolts holding the relay panel to the frame. Pull it away from the frame to expose the OE shock and wire harness connectors. Unplug all of the connectors and pull out of the frame to expose the shock. (9, 10, 11)



FIGURE 9



FIGURE 10



FIGURE 11



5. Remove the upper shock bolt. (Figures 12, 13)



FIGURE 12



FIGURE 13

6. Remove the linkage bolt shown below and push out the bushing. (14, 15)



FIGURE 14



FIGURE 15



7. Remove the lower shock bolt, jack up the motorcycle until the rear tire almost leaves the ground and pull the shock out of the top of the frame. (Figures 16, 17)



**FIGURE 16**



**FIGURE 17**

8. Install the air shock through the right side of the frame with the air port facing toward the rear of the motorcycle. Install and tighten the upper mounting bolt and nut. Install and tighten the lower shock bolt and nut. (Figures 18, 19, 20, 21)



**FIGURE 18**



**FIGURE 19**





FIGURE 20



FIGURE 21

9. Remove the bolt shown below. Install the pump assembly as shown. Reinsert the bolt and tighten. (Figures 22, 23, 24)



FIGURE 22



FIGURE 23



FIGURE 24

10. Reinsert the linkage bushing, then the linkage bolt and tighten. (Figures 25, 26)



FIGURE 25



FIGURE 26



11. Feed the 1/4" hose in front of the swing arm down to the pump and plug into the pump air fitting. Pull the pump wires through the same route as the hose toward the top of the frame. Start to wrap the split loom around the wires and hose. (Figures 27, 28)



FIGURE 27



FIGURE 28

12. Feed the split loom down to the pump and secure with included zip ties. (Figure 29)

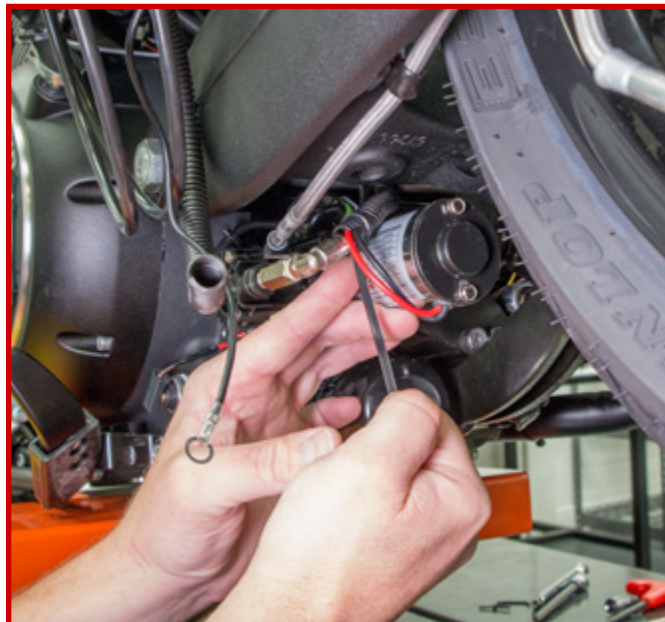


FIGURE 29

13. Cover the pump wires and hose with the split loom until you reach the end of the red pump wire. At this point, follow the wiring diagram at the end of this manual and plug the single red relay wire into the red pump wire. Also at this point, pull the hose out of the loom. (Figures 30, 31)



FIGURE 30

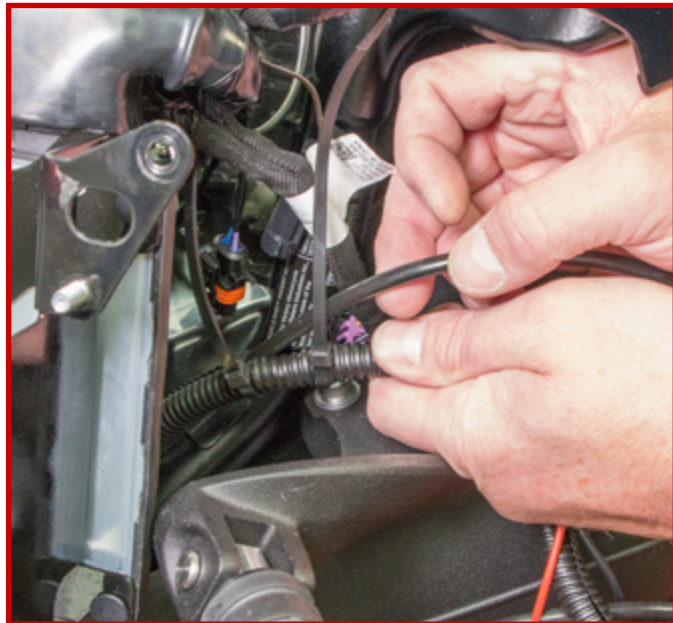


FIGURE 31

14. Screw a VOSS fitting into the air shock, finger tight. Remove the white plug. Insert the 4mm hose into the fitting until you feel it seat. Remove the fitting from the shock and confirm the keeper is on the hose. Screw the fitting back into the shock and snug with a 10mm wrench. (Figures 32, 33, 34, 35)



FIGURE 32

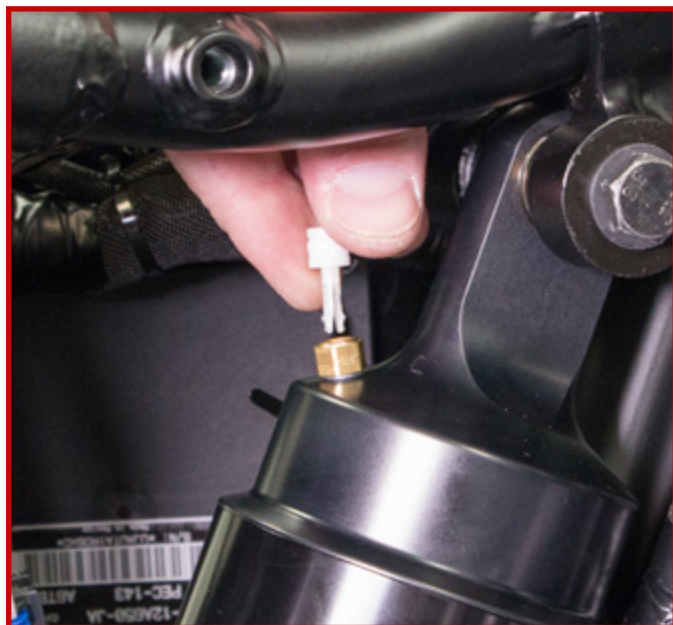


FIGURE 33



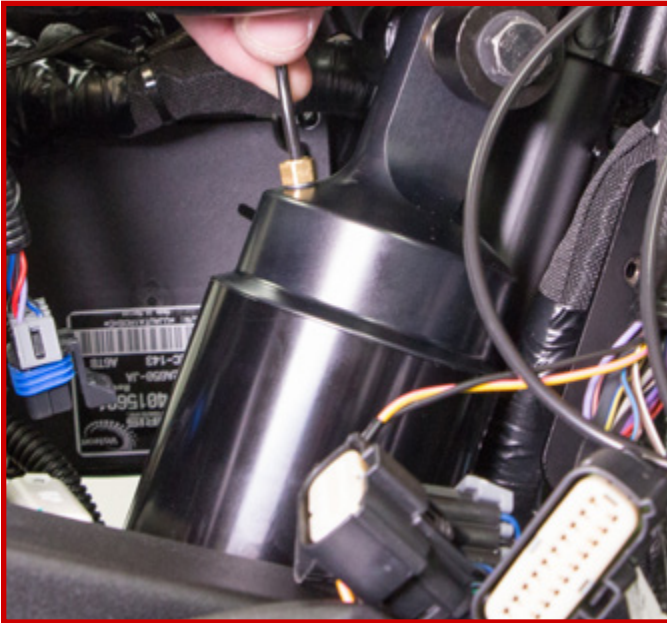


FIGURE 34

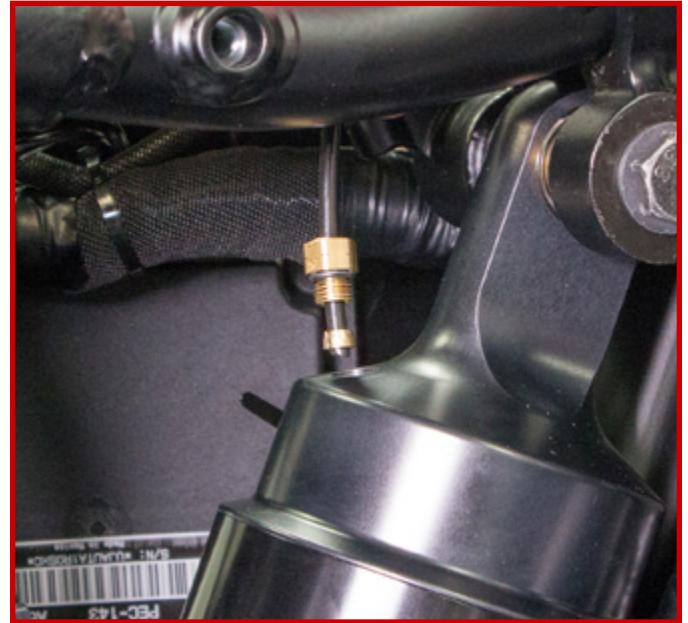


FIGURE 35

15. Attach the air manifold to the mounting bracket as shown below. Also, insert the aluminum air plug and snug tight. Using the included m6 nut, attach the manifold to the bottom of the battery box. (Figures 36, 37)



FIGURE 36

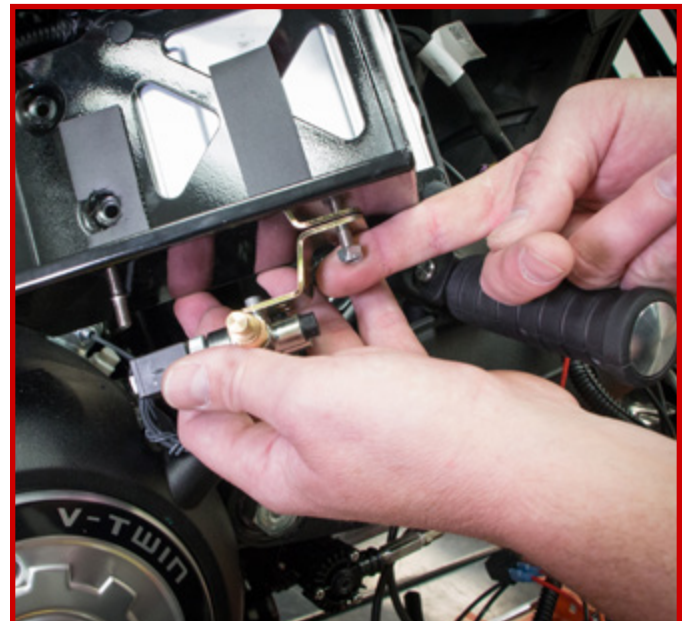


FIGURE 37



16. Trim the 1/4" hose to length then plug into the manifold air fitting. Trim the 4mm hose to length and following the same procedure as in step 14, insert into the air manifold. Mount the battery box back to the frame. (Figures 38, 39, 40, 41)

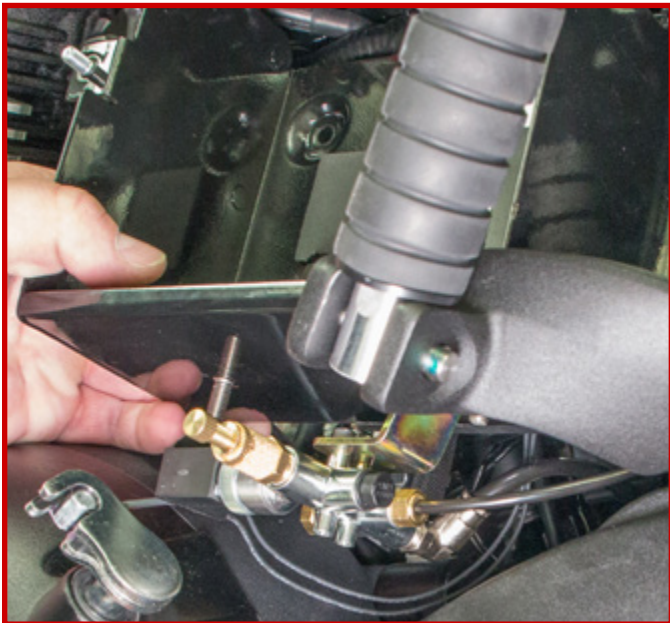


FIGURE 38

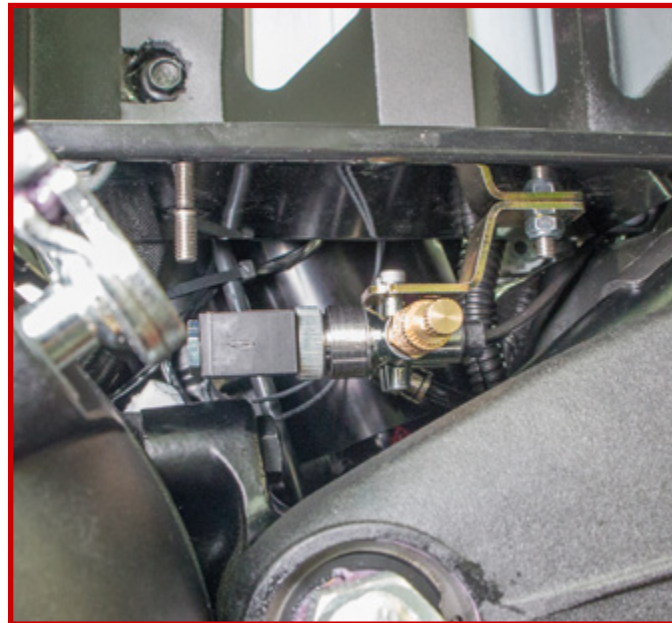


FIGURE 39

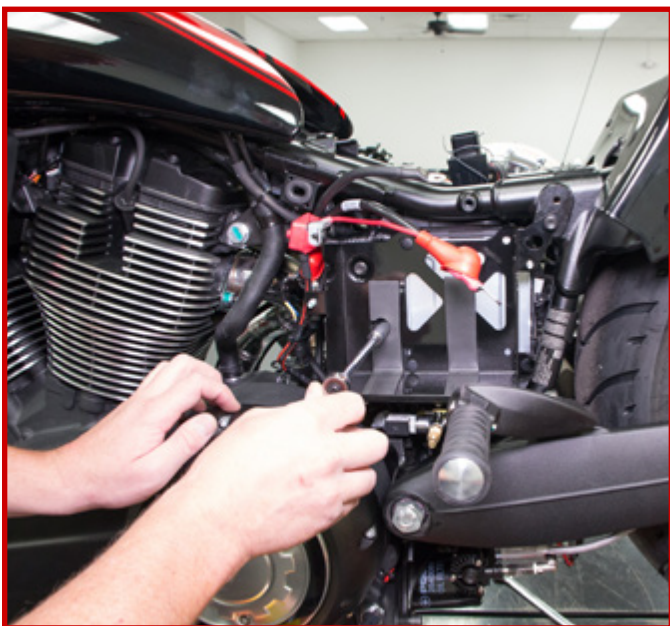


FIGURE 40

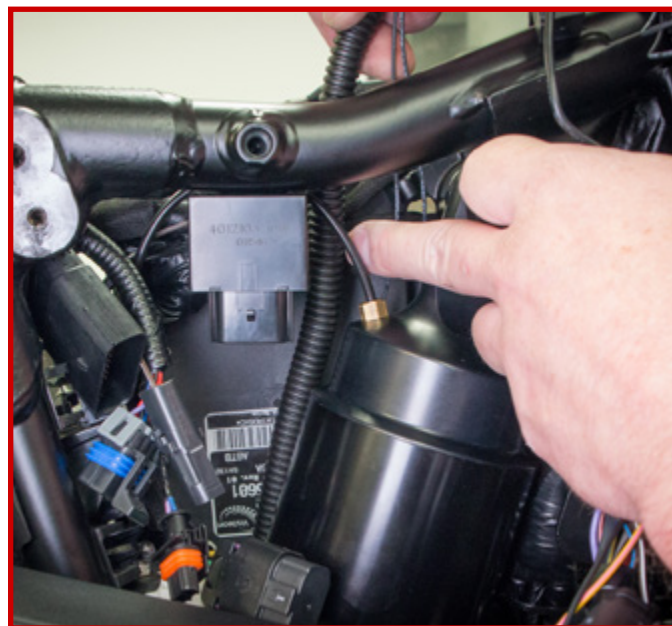


FIGURE 41

17. Remove the front and rear fuel tank mounting bolts. (Figures 42, 43)



FIGURE 42



FIGURE 43

18. Remove the OE clutch perch bolt and discard. Using the supplied hardware, mount the handlebar switch. Route the wires under the fuel tank toward the battery. Following the wiring diagrams in the back of this manual, complete the wiring connections. (Figures 44, 45, 46)



FIGURE 44



FIGURE 45





FIGURE 46

19. 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 47, 48)

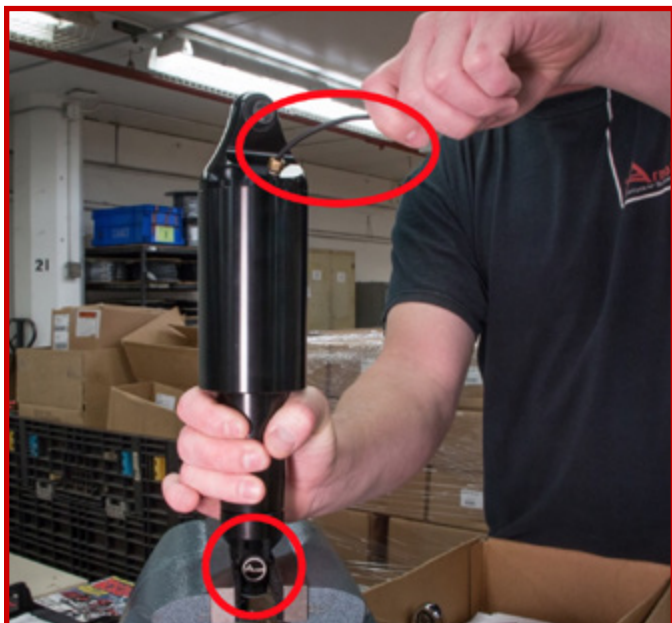
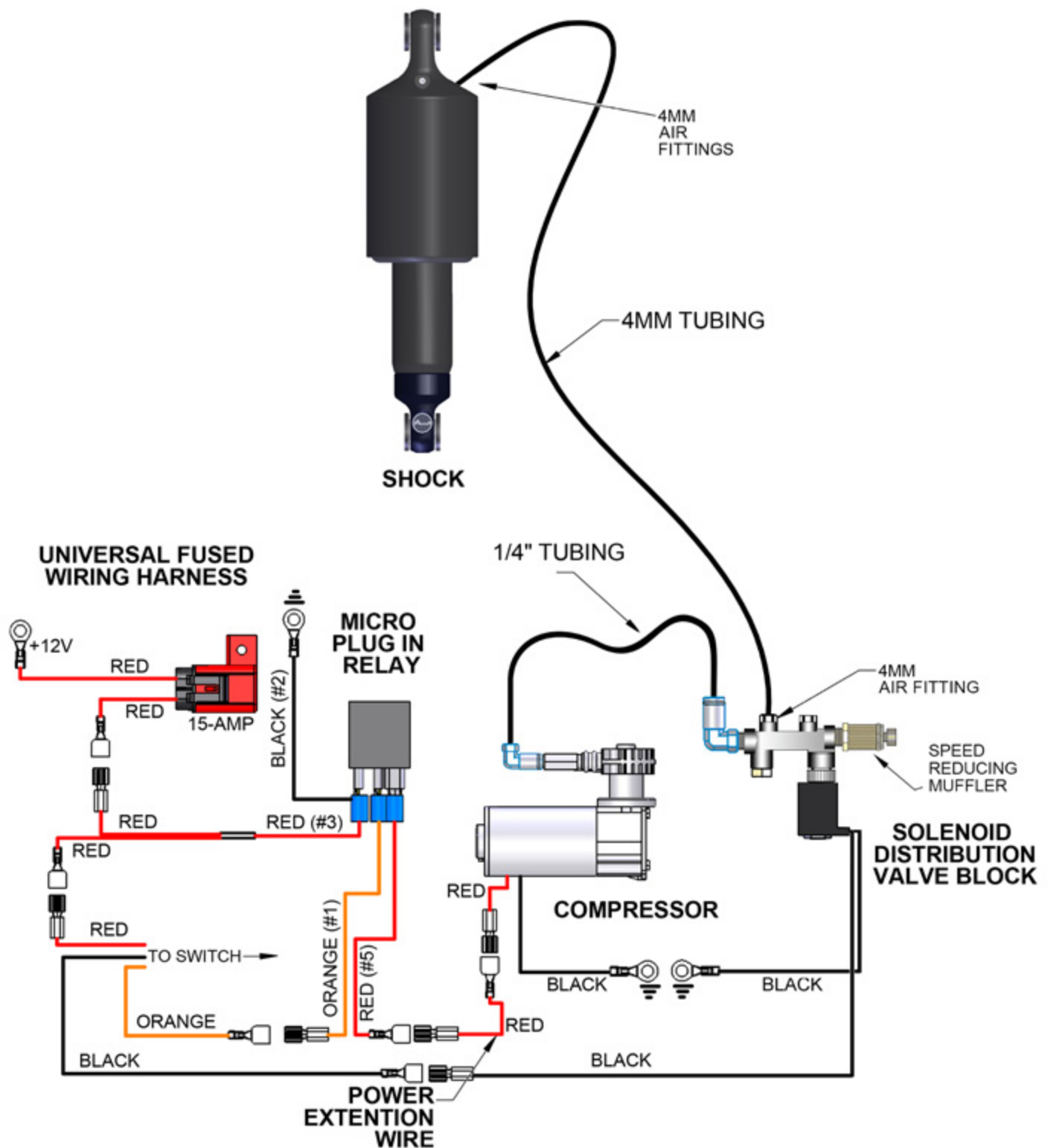


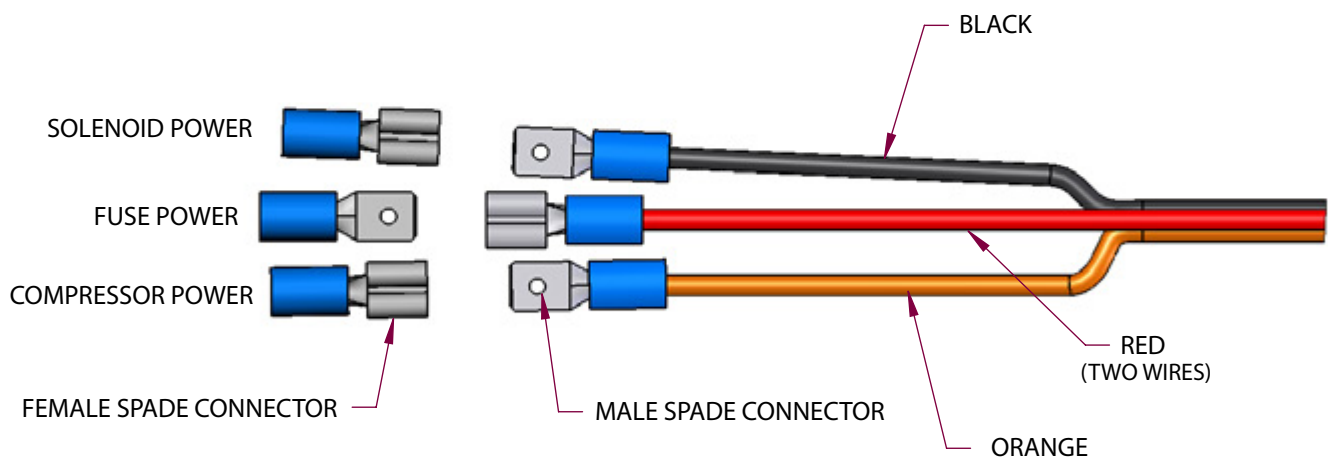
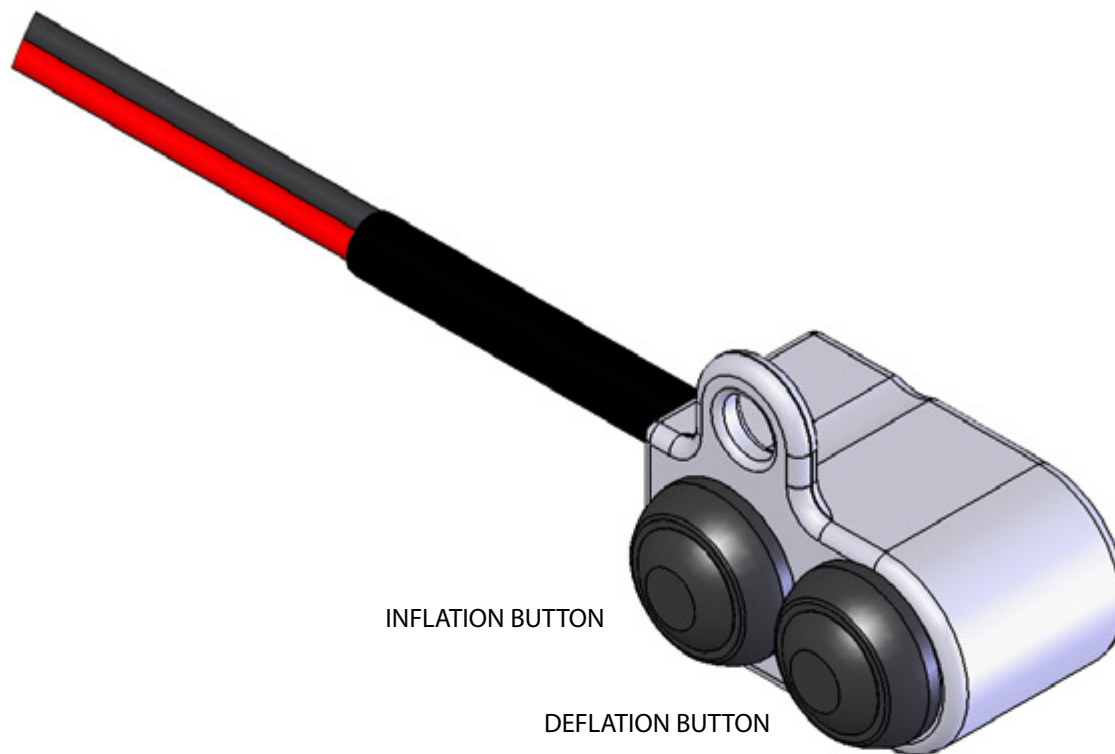
FIGURE 47



FIGURE 48







- 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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