

Arnott[®]

Motorcycle Suspension

INSTALLATION MANUAL

MC-2908/MC-2909
Arnott Ultimate Ride Kit
01-17 Harley-Davidson[®] Softail[®] 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

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 and 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-2908 — 01-17 HARLEY-DAVIDSON SOFTAIL SERIES — BLACK

20-9894-B INFLATION KIT		
PART NO.	DESCRIPTION	QTY
29-13435	POTTED RELAY	1
21-7268	4MM AIRLINE X 6FT. ACCESSORY KIT	1
21-7271	ZIP TIES ACCESSORY KIT	1
21-7272	SPLIT LOOM	1
21-2698	UNIVERSAL FUSE HOLDER ASSEMBLY KIT	1
21-9723	Softail PUMP ASSEMBLY	1
21-10592	Softail PUMP COVER ASSY., BLACK	1
21-7715	4MM VOSS FITTING ACCESSORY KIT	1
20-9914	MOUNT KIT	1
21-9913	EXTRA WIRE & ENDS KIT	1
11-MC-Softail	INSTALLATION MANUAL FOR MC-2908 & 2909	1

21-9895 SHOCK KIT		
PART NO.	DESCRIPTION	QTY
21-9259	FOX SOFTAIL DAMPER ASSY.	1
21-9261	SOFTAIL AIR SPRING ASSY.	1

HANDLE BAR SWITCH		
PART NO.	DESCRIPTION	QTY
29-9749	PUSH BUTTON SWITCH ASSEMBLY, 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-2909 — 01-17 HARLEY-DAVIDSON SOFTAIL SERIES — CHROME

20-9894-C INFLATION KIT		
PART NO.	DESCRIPTION	QTY
29-13435	POTTED RELAY	1
21-7268	4MM AIRLINE X 6FT. ACCESSORY KIT	1
21-7271	ZIP TIES ACCESSORY KIT	1
21-7272	SPLIT LOOM	1
21-2698	UNIVERSAL FUSE HOLDER ASSEMBLY KIT	1
21-9723	SOFTAIL PUMP ASSEMBLY	1
21-10593	SOFTAIL PUMP COVER ASSY., CHROME	1
21-7715	4MM VOSS FITTING ACCESSORY KIT	1
20-9914	MOUNT KIT	1
21-9913	EXTRA WIRE & ENDS KIT	1
11-MC-Softail	INSTALLATION MANUAL FOR MC-2908 & 2909	1

21-9895 SHOCK KIT		
PART NO.	DESCRIPTION	QTY
21-9259	FOX SOFTAIL DAMPER ASSY.	1
21-9261	SOFTAIL AIR SPRING ASSY.	1

HANDLE BAR SWITCH		
PART NO.	DESCRIPTION	QTY
29-9750	PUSH BUTTON SWITCH ASSEMBLY, CHROME	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.

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.



WARNING:

DO NOT REMOVE ZIP TIE FROM THE DAMPER UNTIL **STEP 9**. (FIGURE 1)



FIGURE 1

1. Disconnect battery and remove from motorcycle. (Figures 2, 3)

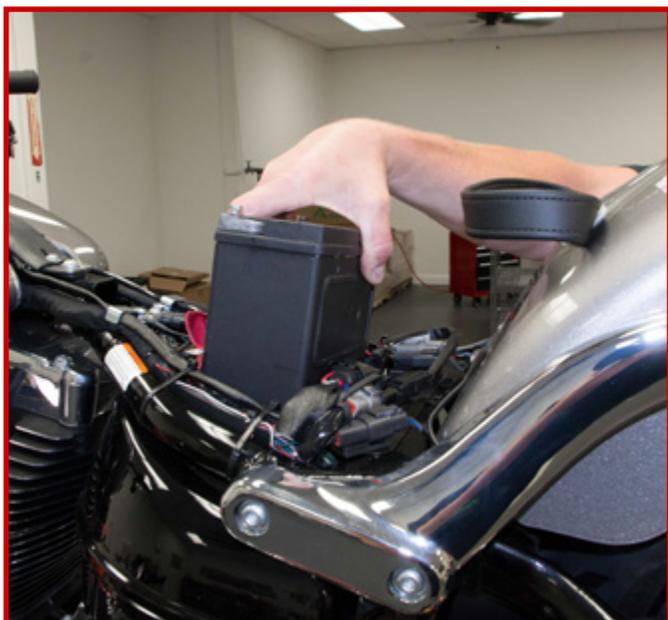


FIGURE 2

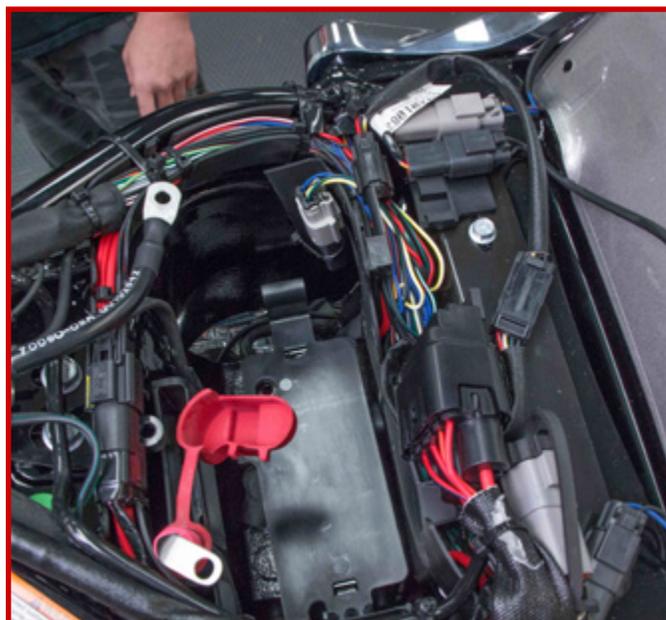


FIGURE 3

2. Remove the two OE shocks from under the bike, saving all of the mounting hardware and bushings. (Figures 4, 5)

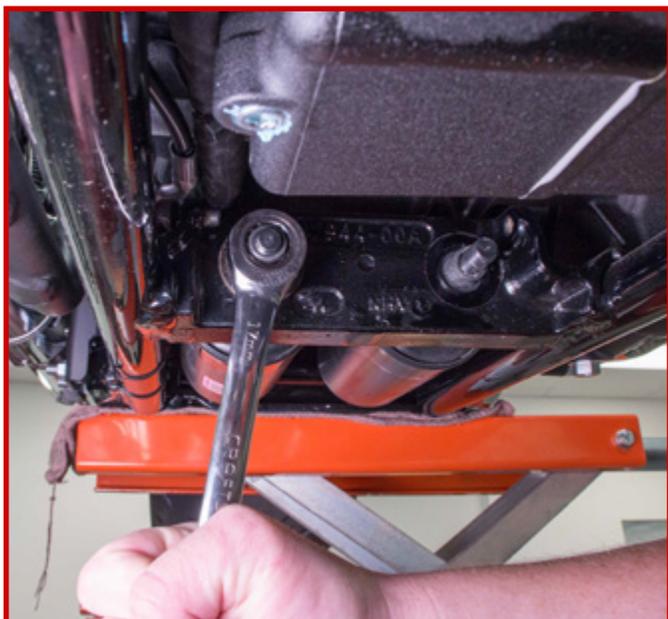


FIGURE 4

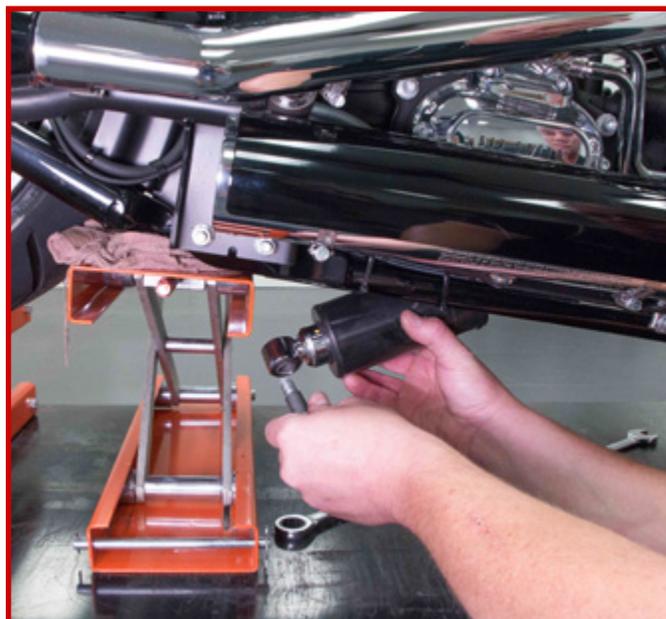


FIGURE 5

3. Screw one of the VOSS fittings into the air spring just until the O-ring seats. Then pull off the white plug. (Figures 6, 7)



FIGURE 6



FIGURE 7

4. Push the 4mm air line into the fitting until you feel it seat. Unscrew the fitting and confirm the keeper is attached to the air line. Reinstall in the air spring then snug tight with a 10mm wrench. (Figures 8, 9)



FIGURE 8



FIGURE 9

5. Route the 4mm air line along the right frame rail toward the front of the bike. Then put one of the OE bushings on the air spring. (Figures 10, 11)



FIGURE 10



FIGURE 11

6. Using the OE bushings and nut, mount the air spring to the left side of the frame. Start the nut on the thread so that the rear eyelet can be easily located on the swing arm mounting hole. (Figures 12, 13)



FIGURE 12



FIGURE 13

7. Apply grease to the shoulder of the OE shock bolt and blue loctite to the threads. Attach the air spring to the swing arm using the factory recommend torque. (Figures 14, 15)



WARNING:

THE OE WASHER AND BOLT (FIGURE 14) **MUST** BE INSTALLED TOGETHER TO AVOID CATASTROPHIC DAMAGE.



FIGURE 14



FIGURE 15

8. Without removing the zip tie, repeat steps 6 & 7 to the damper on right side of the frame. (Figures 16, 17)



FIGURE 16



FIGURE 17

9. Cut and remove the zip tie from the damper. Torque all of the mounting nuts and bolts, for both the air spring and damper, to the factory recommended torque spec. (Figures 18, 19)



FIGURE 18



FIGURE 19

10. Route the 4mm hose under the engine from the air spring and zip tie it along the right frame rail. (Figures 20, 21)



FIGURE 20

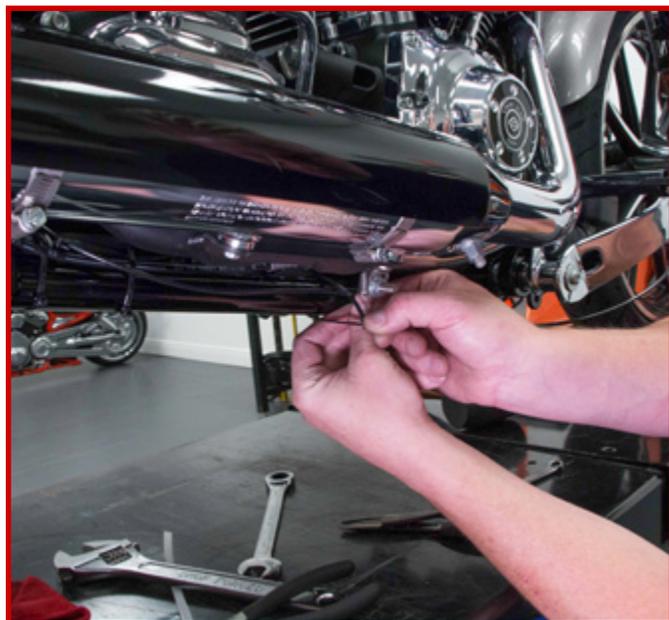


FIGURE 21

11. Remove the regulator/rectifier & the bracket from the front of the motorcycle. (Figures 22, 23)



FIGURE 22



FIGURE 23

12. Unplug the connectors from the regulator/rectifier. This is only applicable for newer Softail models. (Figures 24, 25)



FIGURE 24

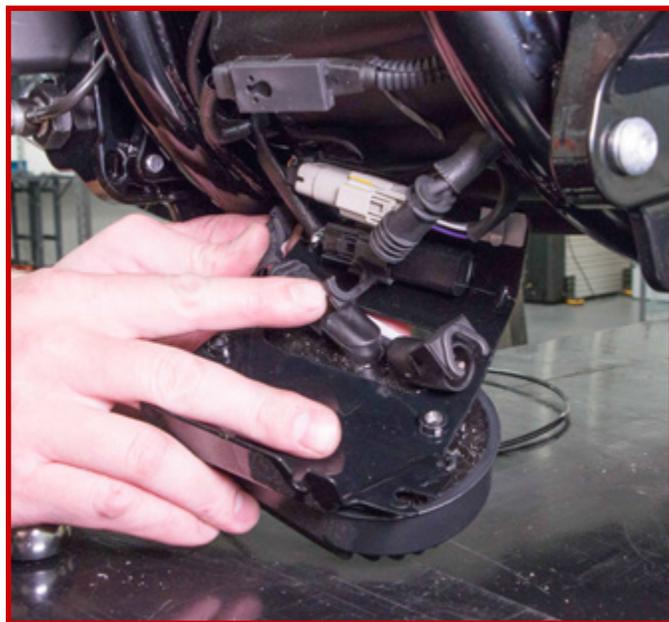


FIGURE 25

13. Pull the other connectors out of the OE mounting bracket. Plug these into the pump bracket. (Figures 26, 27)



FIGURE 26

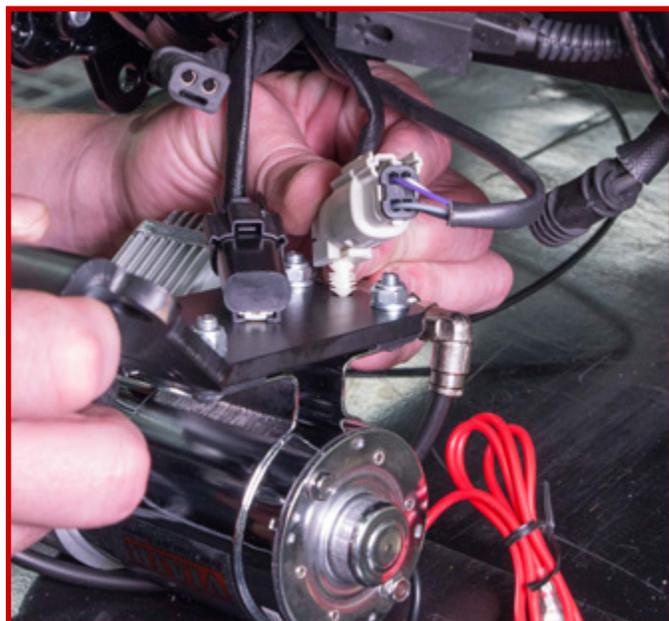


FIGURE 27

14. Pull the regulator/rectifier plugs around either side of the pump bracket. Then screw the pump bracket to the motor using the supplied cap screws and washers. Ground the black pump wire and one of the solenoid wires with the left screw. (Figures 28, 29)

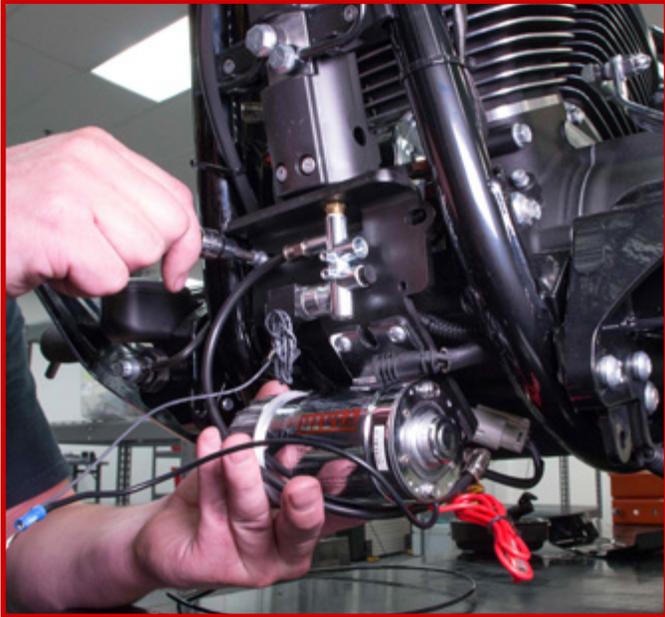


FIGURE 28

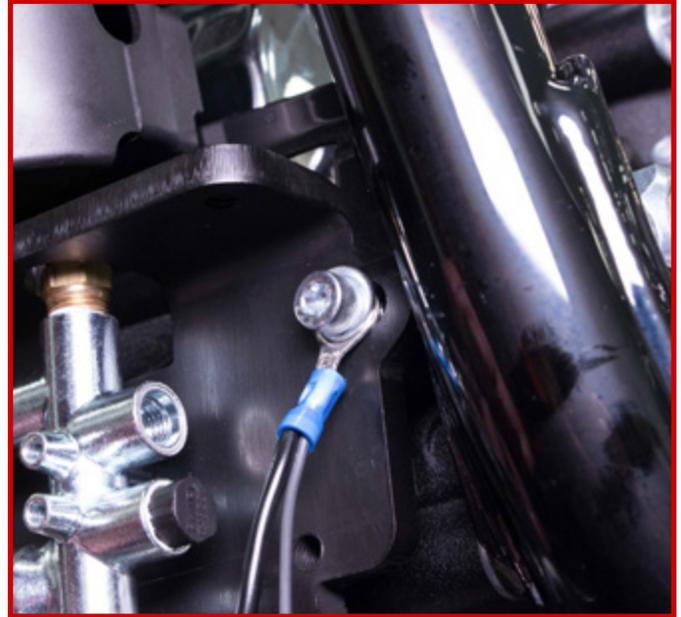


FIGURE 29

15. Route the 4mm air hose from the frame and under the engine to the air manifold. Trim the hose to length. Then following the same procedure as before attach the VOSS fitting to the hose and screw it into the air manifold. (Figures 30, 31)



FIGURE 30



FIGURE 31

16. Plug the connectors back into the regulator/rectifier. (Figures 32, 33)



FIGURE 32

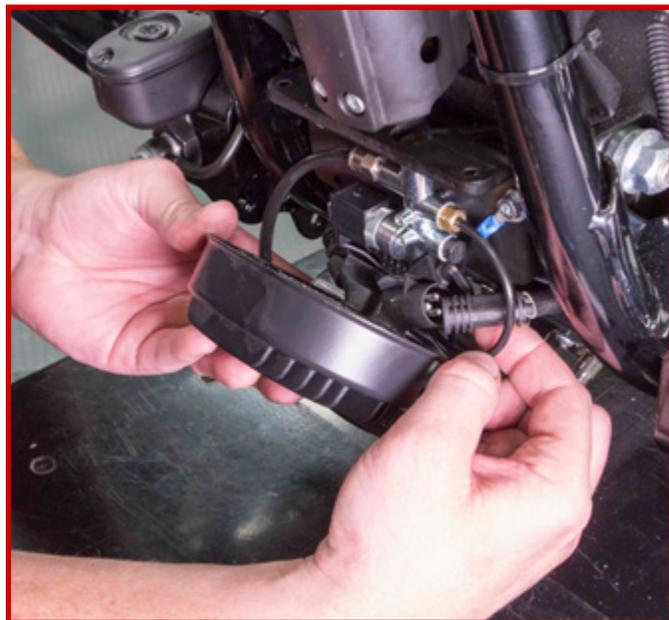


FIGURE 33

17. Using the included cap screws and spacers, mount the regulator/rectifier to the pump bracket. (Figures 34, 35)



FIGURE 34



FIGURE 35

18. Using the included wire and connectors, make extensions for the pump & solenoid wire. (Figures 36, 37)

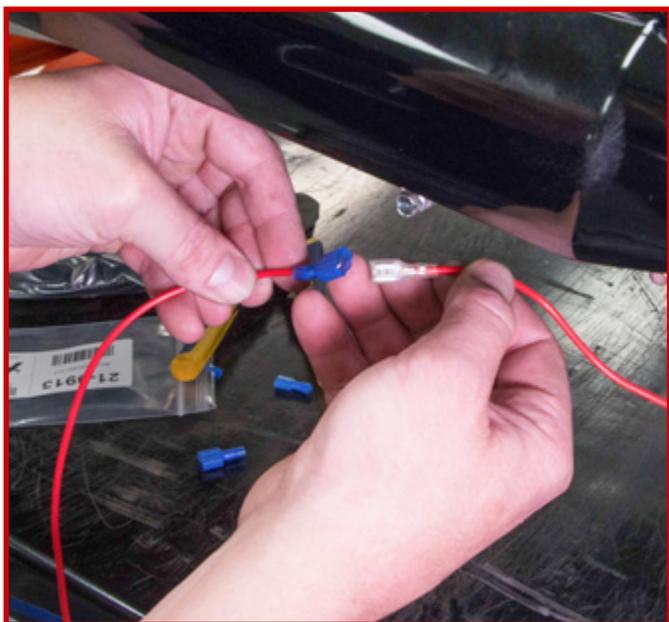


FIGURE 36

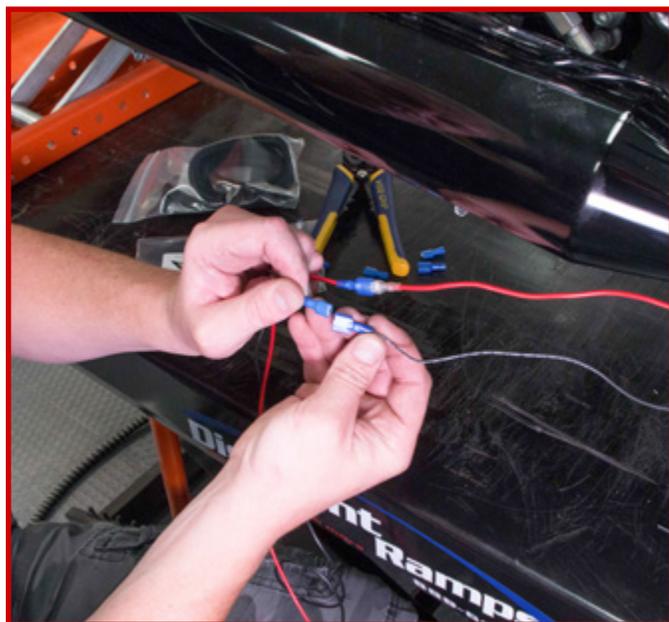


FIGURE 37

19. Cover the wires with the included split loom. Attach them with the included zip ties to the frame. (Figures 38, 39)

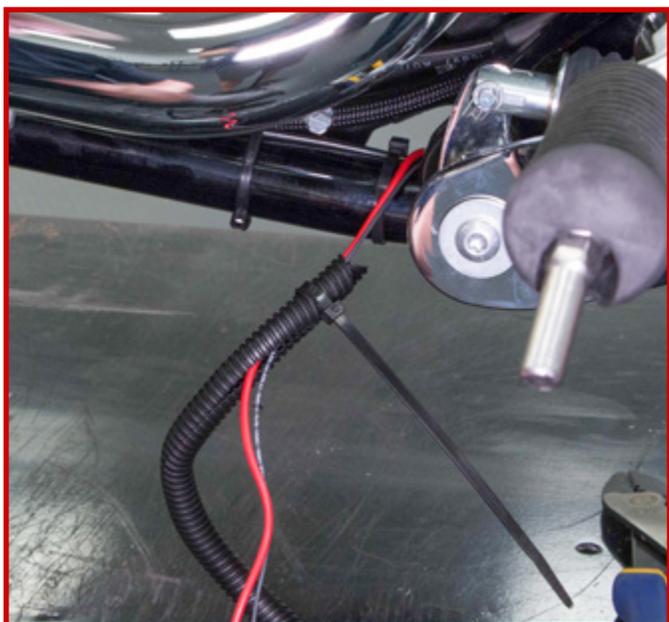


FIGURE 38

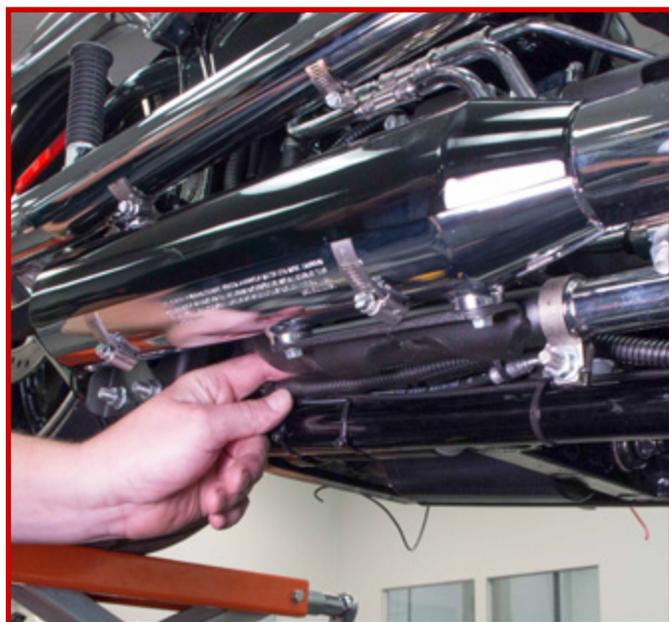


FIGURE 39

20. Route the wires up into the battery box. (Figures 40, 41)



FIGURE 40

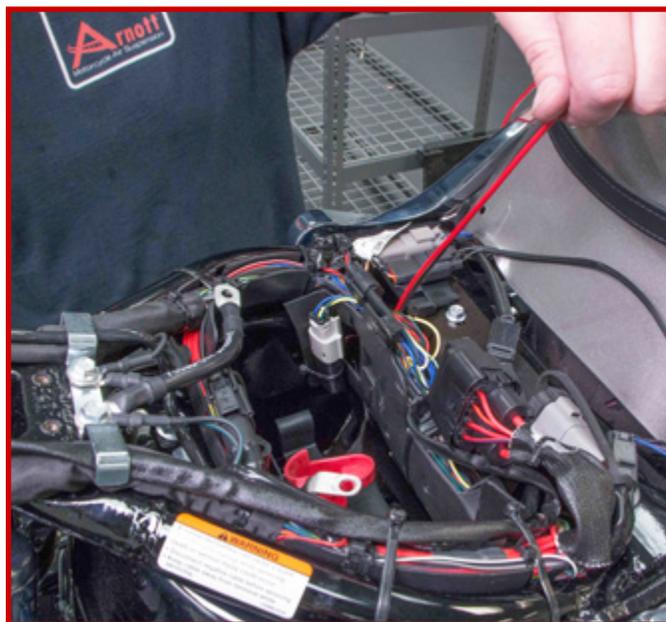


FIGURE 41

21. Using the included button head cap screws and washers, attach the pump cover to the pump bracket and secure it to the frame with the included zip ties. (Figures 42, 43)



FIGURE 42

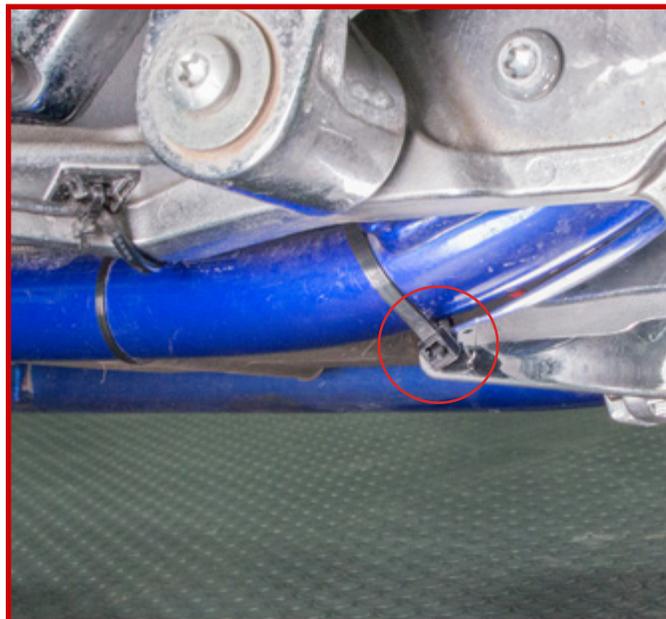


FIGURE 43

22. Remove the lower clutch mount bolt. Reusing the bolt, attach the handle bar switch to the mount. Run the wire down the handle bar securing it with the included small zip ties. (Figures 44, 45)



FIGURE 44

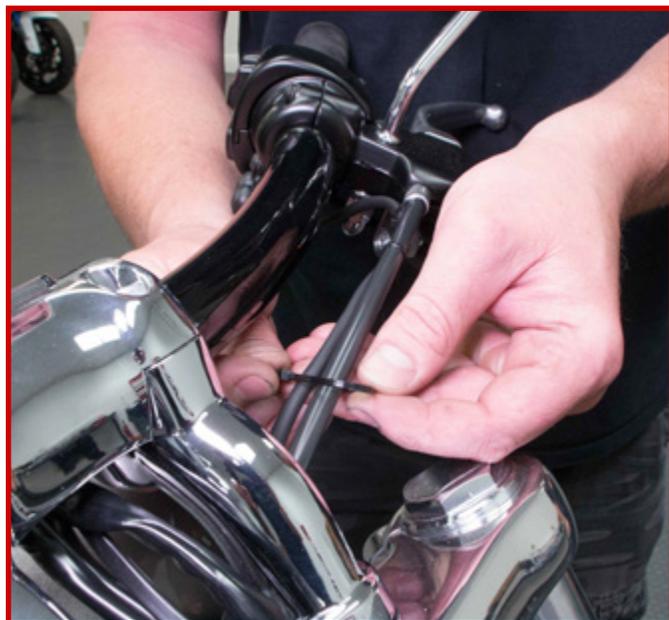


FIGURE 45

23. Run the wire under the fuel tank or under the tank cover toward the battery box. (Figures 46, 47)



FIGURE 46



FIGURE 47

24. Trim the wires to the desired lengths and finish all connections following the wiring diagrams in the back of this manual. Bundle the wires with the supplied zip ties and tuck them into the pocket next to the battery. Install the battery. (Figures 48, 49)

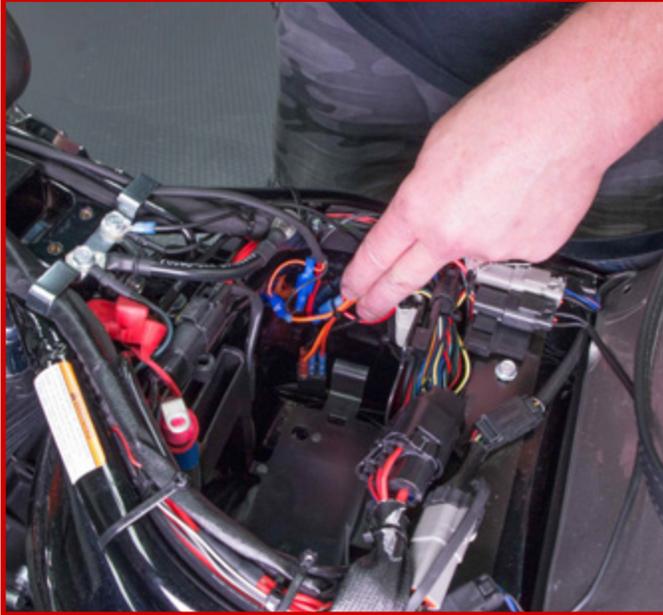
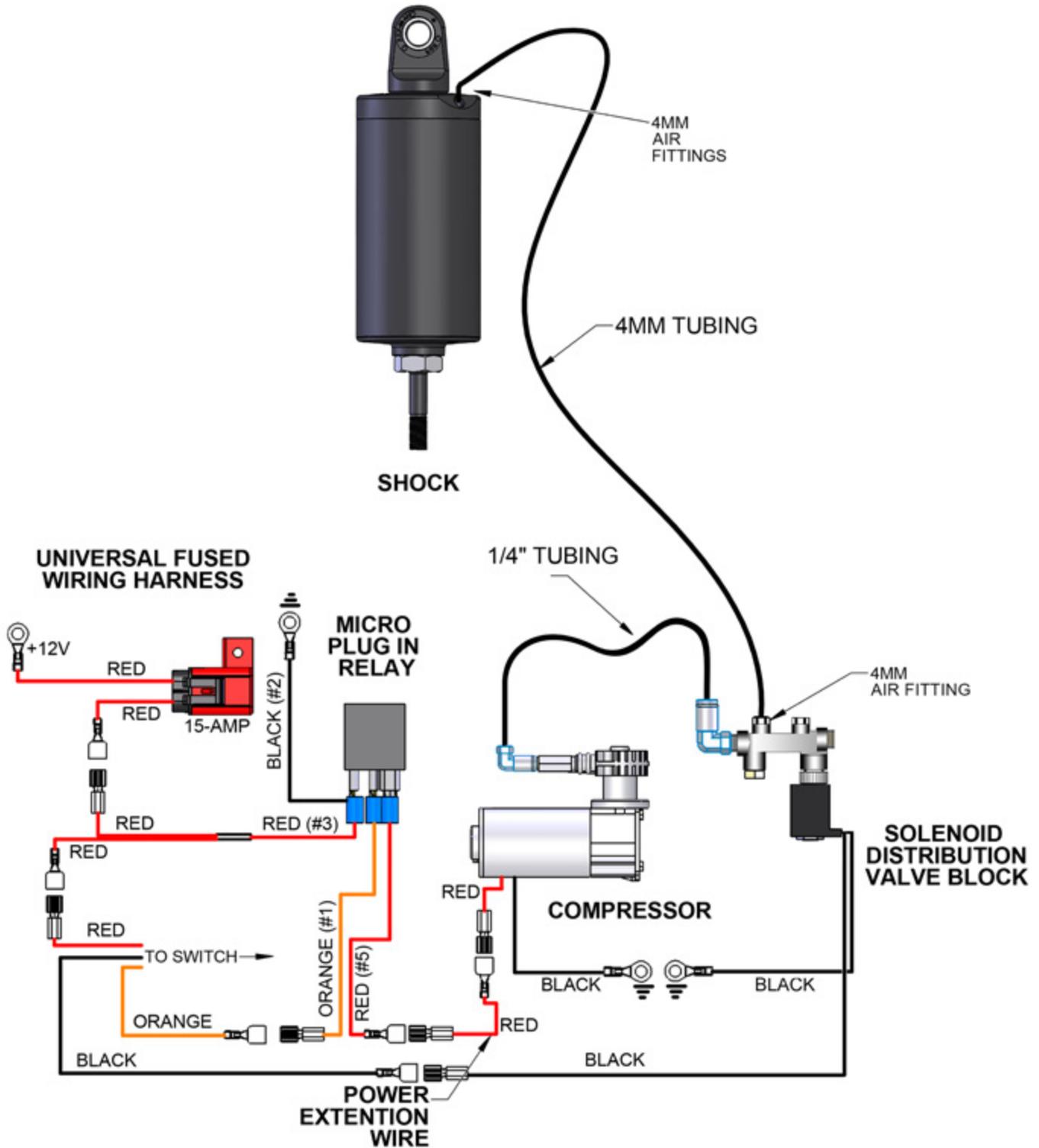


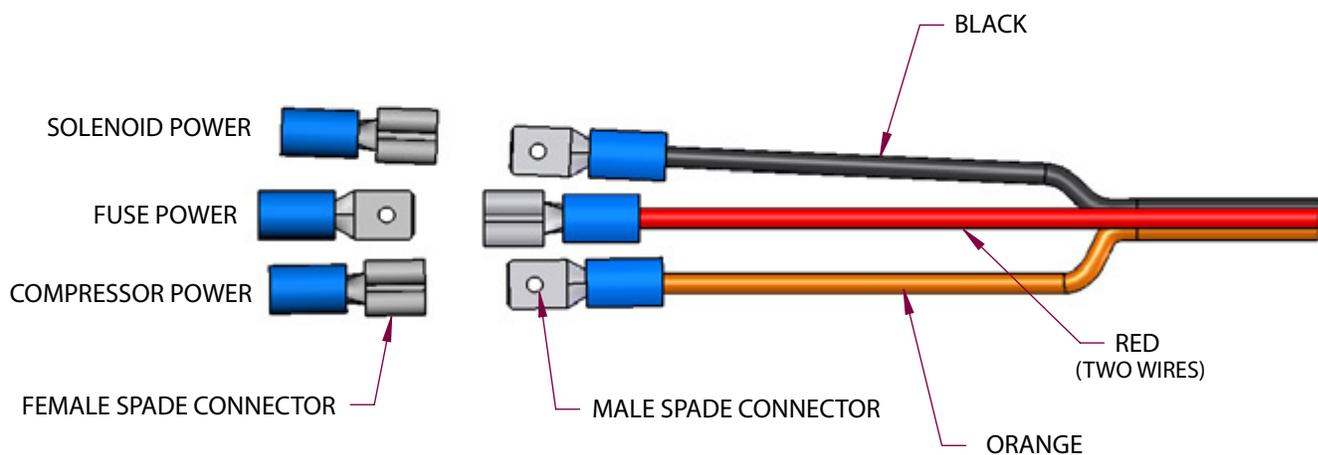
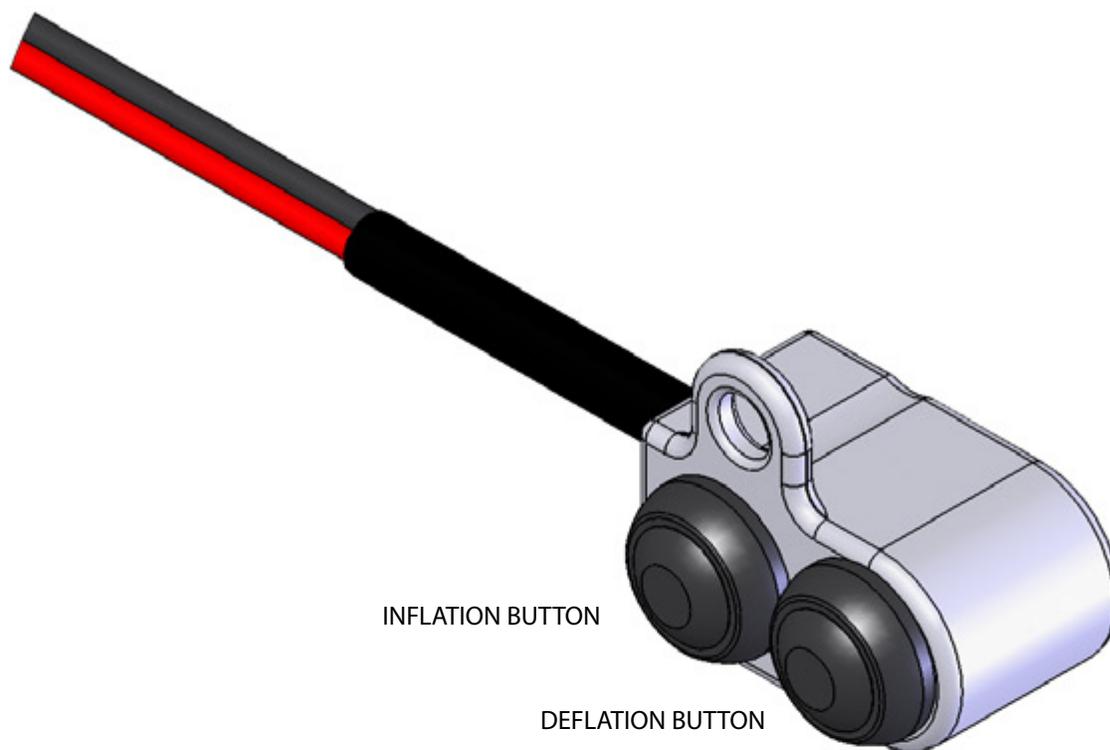
FIGURE 48



FIGURE 49

The terms Harley-Davidson®, Harley®, H-D®, Buell®, Softail®, Dyna®, V-Rod®, Tri-Glide®, and Sportster® are used for reference only. Arnott Air Suspension products are in no way authorized by nor associated with the Harley-Davidson Motor Company. All references to Harley-Davidson terms and models are for reference and identification purposes only. The use and installation of any Arnott Air Suspension product or kit may adversely affect or void your Harley-Davidson® 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.





- 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

Arnott US Business Office:

www.arnottinc.com

100 Sea Ray Drive
Merritt Island, FL 32953

Call: 800.251.8993

321.868.3016

Fax: 321.868.3703

Email: techassistance@arnottinc.com

Arnott Europe Business Office:

www.arnotteurope.com

Industrieweg 19
5145 PD, Waalwijk (NL)

NL Phone: +31 73 7850 580

DE Phone: +31 85 2087 438

UK Phone: +44 203 3186 124

BE Phone: +32 258 846 90

ES Phone: +34 91 901 10 56

FR Phone: +32 78 48 46 93

Email: info@arnotteurope.com



**Exceptional
Ride Comfort**



**Easy
Installation**



**Designed for
Motorcycles**



**TruAIR[®]
Technology**



**Rest
Flat-Footed**



**Reduced
Painful
Bottoming**



**Rigorously
Tested**



**Prevent
Dangerous
Tire Wear**



**Prevent Extra
Drivetrain
Stress**



**Global,
Multilingual
Tech Support**