

Installation Manual

AS-3346
ARNOTT
NEW FRONT LEFT AIR STRUT
2010-2013 PORSCHE PANAMERA (970.1)



Congratulations on your purchase of an Arnott® air suspension product. We at Arnott Incorporated are proud to offer a high quality product at the industry's most competitive pricing. Thank you for your confidence in us and our product.

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 vehicle. The removal and installation of air suspension products should only be performed by a fully qualified, ASE Certified, 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 vehicle and isolation of any stored energy to prevent personal injury or property damage.

"Engineered to Ride, Built to Last®"



WARNING: *The air suspension system is under pressure (up to 10 bar, or 150 lbf/in). Verify pressure has been relieved and disconnect power to the air suspension system prior to disassembly. Do not allow dirt or grease to enter the system. Always wear standard hand, ear, and eye protection when servicing the air suspension system.*

Arnott® is committed to the quality of its products. If you have a question or problem with any Arnott product, please contact Arnott by calling **800-251-8993** during normal business hours or email techassistance@arnottinc.com. (In the EU please call +31 (0)73 7850 580 or email info@arnotteurope.com)

GENERAL INFORMATION:

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.arnottinc.com.

- Not to be stored below 5°F (-15°C) and above 122°F (50°C).
- Avoid damage to air lines and cables.
- Removal and installation is only to be performed by fully qualified personnel.
- Use car manufacturer's diagnostic software.

CAUTION: Damage to the vehicle and air suspension system can be incurred if work is carried out in a manner other than specified in the instructions or in a different sequence.



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



Consult your vehicle owner's manual, service manual, or car dealer for the correct jacking points on your vehicle and for additional care, safety and maintenance instructions. Under no circumstances should any work be completed underneath the vehicle if it is not adequately supported, as serious injuries and death can occur.

NOTE:

THIS VEHICLE CONTAINS A "CLOSED AIR SUPPLY SYSTEM". REPLACEMENT OF COMPONENTS REQUIRES PROPER ADHERENCE TO PROCEDURES SET FORTH WITHIN OE SERVICING LITERATURE. FAILURE TO COMPLY WITH THE OE PRESCRIBED PROCEDURES CAN RESULT IN COMPONENT DAMAGE AND/OR FAILURE.

DISCLAIMER:

THE PRODUCT SHOWN IN THE INSTALLATION STEPS BELOW MAY LOOK DIFFERENT THAN THE PART YOU ARE INSTALLING. THE INSTALLATION STEPS ARE THE SAME AND ALL NOTICES AND WARNINGS SHOULD BE ADHERED TO IN THE SAME MANNER.

AIR STRUT REMOVAL

1. SET STEERING TO STRAIGHT AHEAD.
2. RAISE VEHICLE.
3. REMOVE FRONT RIGHT WHEEL. (FIGURE 1)

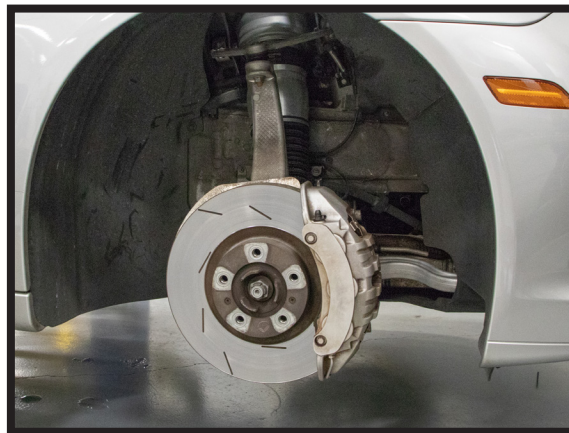


FIGURE 1

4. REMOVE THE UPPER PLASTIC COVER THAT SITS ABOVE THE AIR STRUT. (FIGURE 2)



FIGURE 2

5. DISCONNECT THE STRUT CONNECTOR RETAINING CLIP AND ELECTRICAL CONNECTION. (FIGURES 3, 4)



FIGURE 3



FIGURE 4

6. DISCONNECT THE AIR LINE AND REMOVE THE AIR FITTING USING THE FIGURE ON THE NEXT PAGE AS AN EXAMPLE. (FIGURES 5, 6)

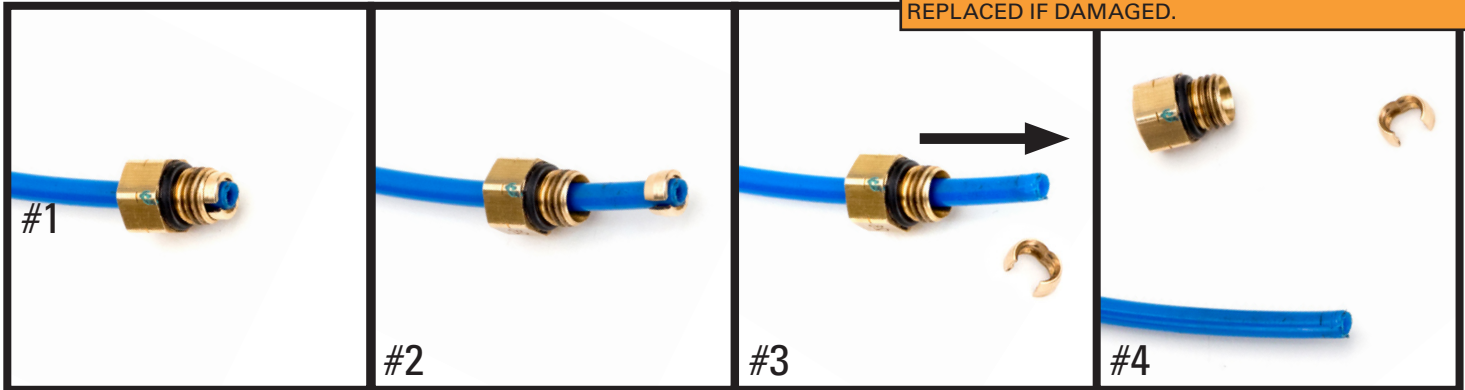


FIGURE 5



PRIOR TO INSERTING THE EXISTING AIR LINE INTO THE NEW AIR FITTING YOU WILL NEED TO REMOVE THE OLD ORIGINAL EQUIPMENT AIR LINE FITTING.

NOTE: SCRATCHES AND/OR DEEP CUTS IN THE AIR LINE CAN RESULT IN POSSIBLE LEAKS. INSPECT THE AIR LINE BEFORE INSERTION. AIR LINE NEEDS TO BE REPLACED IF DAMAGED.



OE AIR LINE FITTING.

#2
SLIDE THE THREADED PORTION UP THE LINE AND SPREAD THE COLLET OPEN TO REMOVE.

#3
SLIDE THE AIR FITTING OFF OF THE AIR LINE.

#4
AIR LINE IS READY FOR INSTALLATION.

FIGURE 6

7. LOOSEN AND REMOVE THE THREE (3) TOP SHOCK MOUNT NUTS. (FIGURE 7)

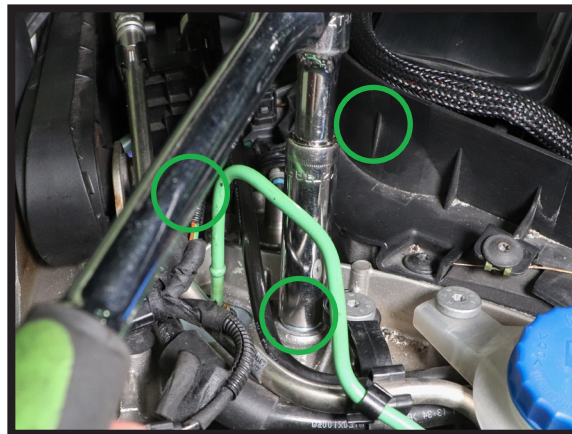


FIGURE 7

8. DISCONNECT THE WHEEL SPEED SENSOR. (FIGURE 8)



FIGURE 8

9. DETACH THE WHEEL SPEED SENSOR WIRES FROM THEIR RETENTION BRACKETS. (FIGURES 9, 10, 11)

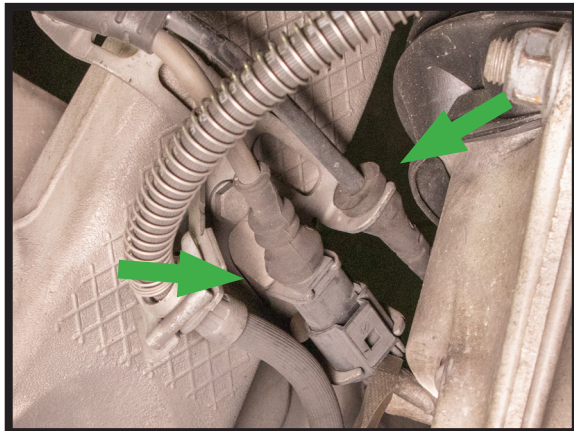


FIGURE 9

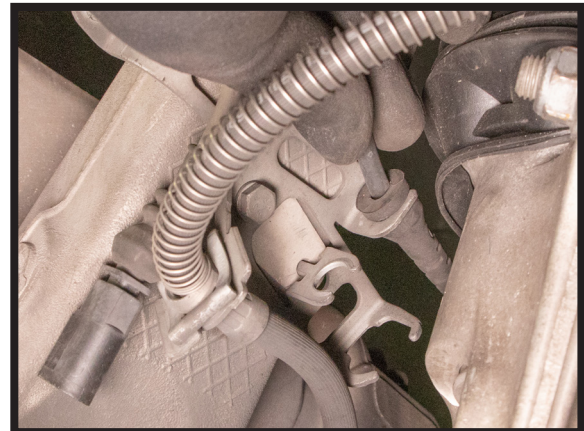


FIGURE 10

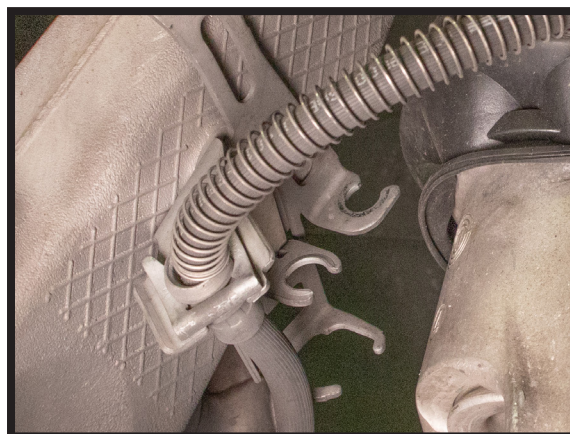


FIGURE 11

10. LOOSEN AND REMOVE THE SWAY BAR END LINK NUT AND SEPERATE FROM THE STRUT. (FIGURE 12)

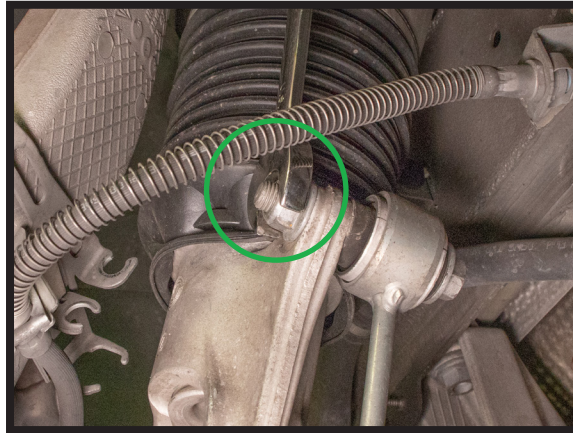


FIGURE 12

11. LOOSEN AND REMOVE THE BOTTOM MOUNT NUT AND BOLT. (FIGURE 13)

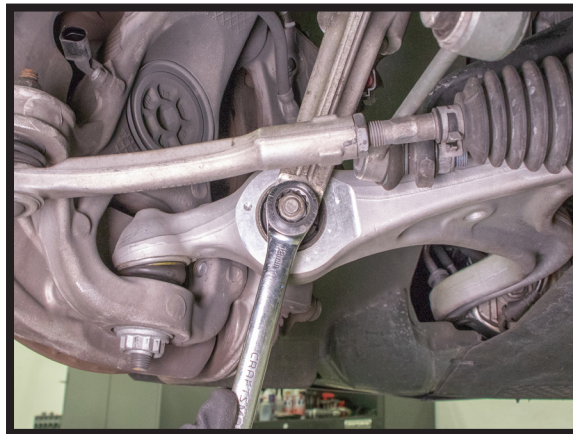


FIGURE 13

12. LOOSEN AND REMOVE THE UPPER BALL JOINT NUT AND SEPERATE THE BALL JOINT FROM THE SPINDLE ASSEMBLY. (FIGURE 14)



FIGURE 14

13. REMOVE THE AIR STRUT FROM THE VEHICLE. (FIGURE 15)



FIGURE 15

14. REMOVAL COMPLETE.

AIR STRUT INSTALLATION



Tighten all nuts and bolts to manufacturer's specifications during the installation process.



Do not remove the air fitting from the air strut. Doing so may cause damage and/or void warranty. Remove the white shipping pin from the new air fitting and insert the air line until fully seated.

1. INSTALL THE NEW ARNOTT AIR STRUT INTO THE VEHICLE. (FIGURE 16)



FIGURE 16

2. INSTALL THE BOTTOM MOUNTING BOLT AND NUT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 17, 18)



FIGURE 17



FIGURE 18

3. REATTACH THE SWAY BAR END LINK. REINSTALL THE SWAY BAR END LINK NUT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 19)



FIGURE 19

4. REATTACH THE UPPER BALL JOINT TO THE SPINDLE ASSEMBLY. INSTALL THE NUT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 20)



FIGURE 20

5. REINSTALL THE TOP SHOCK MOUNTING NUTS AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 21)



FIGURE 21

6. REINSTALL THE AIR LINE. PRESS LINE IN UNTIL FULLY SEATED. (FIGURE 22)

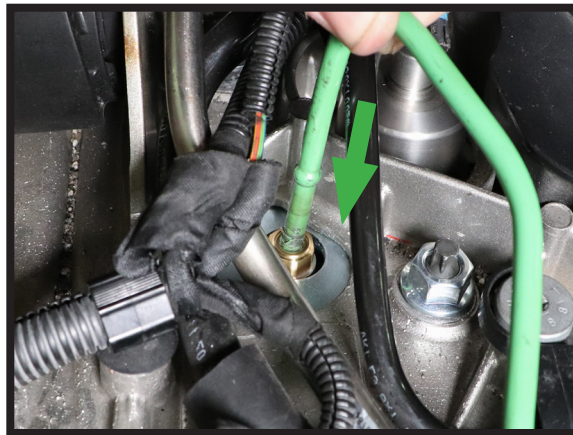
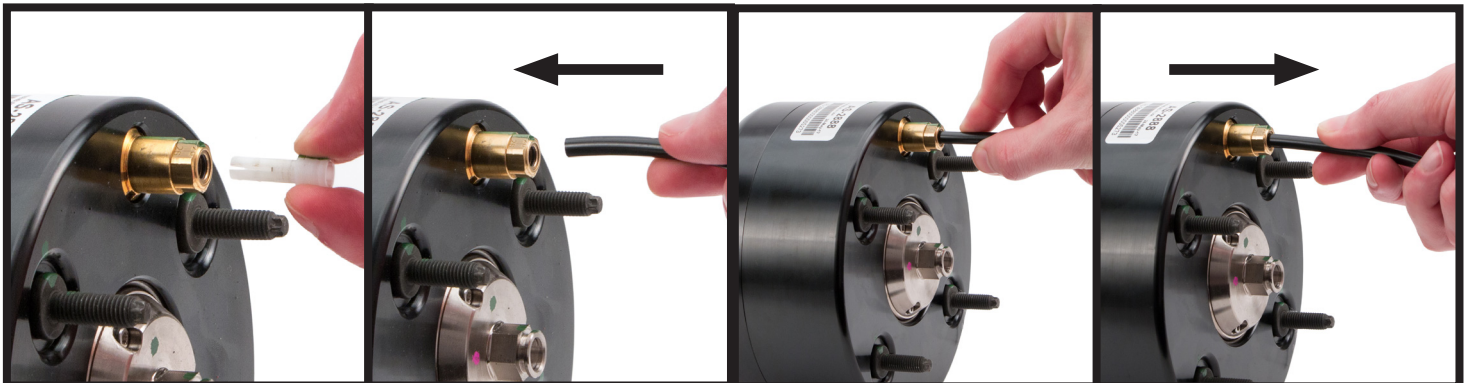


FIGURE 22



REMOVE AND DISPOSE
OF THE SHIPPING
PIN.

INSERT AIR LINE INTO
THE AIR LINE FITTING
UNTIL IT STOPS.

AIR LINE INSERTED.

GENTLY PULL ON AIR LINE
TO CONFIRM IT IS FULLY
SECURED BY THE AIR LINE
FITTING.

7. REINSTALL TOP ELECTRICAL PLUG, BEING CAREFUL TO APPROPRIATELY ORIENT THE ELECTRICAL CONNECTION TO ALIGN THE PINS. (FIGURE 23)



FIGURE 23

8. REINSTALL THE STRUT CONNECTOR RETAINING CLIP. (FIGURE 24)

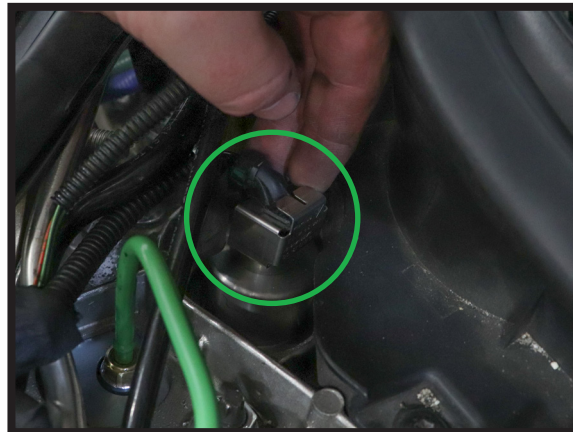


FIGURE 24

9. REATTACH THE WHEEL SPEED SENSOR WIRES TO THE MOUNTING BRACKETS. (FIGURES 25, 26, 27)

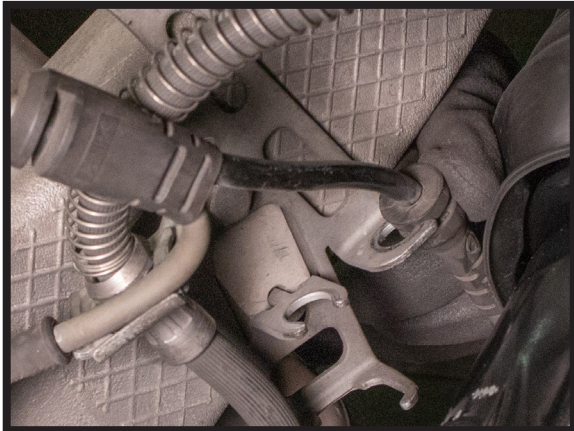


FIGURE 25

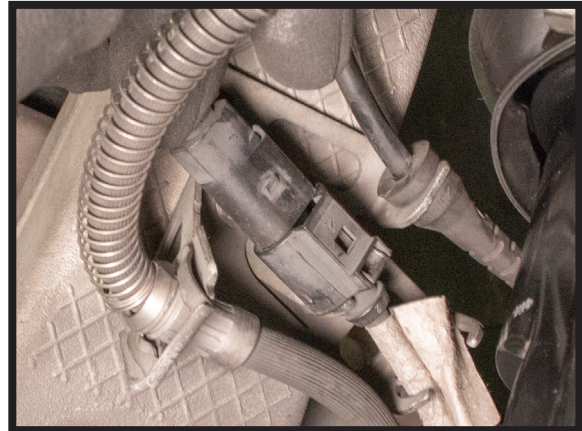


FIGURE 26



FIGURE 27

10. RECONNECT THE WHEEL SPEED SENSOR. (FIGURE 28)



FIGURE 28

11. REINSTALL THE UPPER PLASTIC COVER. (FIGURE 29)



FIGURE 29

12. REINSTALL THE WHEEL.
13. LOWER THE VEHICLE.
14. INSTALLATION COMPLETE.

NOTE: THIS VEHICLE CONTAINS A "CLOSED AIR SUPPLY SYSTEM". REPLACEMENT OF COMPONENTS REQUIRES PROPER ADHERENCE TO PROCEDURES SET FORTH WITHIN OE SERVICING LITERATURE. FAILURE TO COMPLY WITH THE OE PRESCRIBED PROCEDURES CAN RESULT IN COMPONENT DAMAGE AND/OR FAILURE.