

Installation Manual

C-3416
ARNOTT
NEW COIL SPRING CONVERSION KIT
2015-2019 VARIOUS GM SUV'S
(GMT K2xx) SWB only



Congratulations on your purchase of an Arnett® air suspension product. We at Arnett 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.*

Arnett® is committed to the quality of its products. If you have a question or problem with any Arnett product, please contact Arnett 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) or 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.

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.

COIL STRUT REMOVAL

1. RAISE VEHICLE AND REMOVE FRONT WHEELS TO EXPOSE THE FRONT COIL STRUTS.
(FIGURES 1, 2)



FIGURE 1

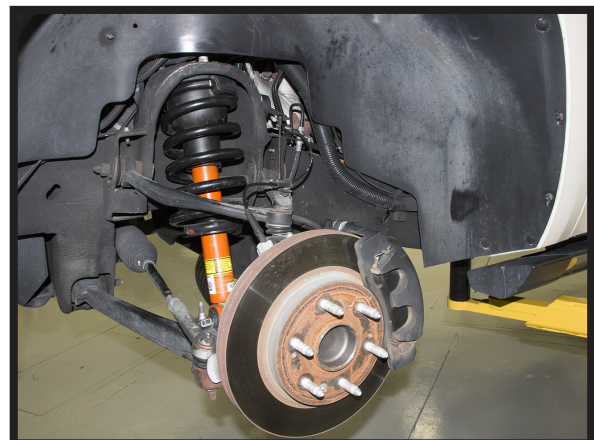


FIGURE 2

2. LIFT THE HOOD TO EXPOSE THE TOP OF THE COIL STRUTS. LOCATE AND DISCONNECT THE ELECTRICAL CONNECTORS. SECURE THE HARNESS IN A WAY NOT TO INTERFERE WITH ANY MOVING PARTS OR COMPONENTS WITH EXCESSIVE HEAT. (FIGURES 3, 4)

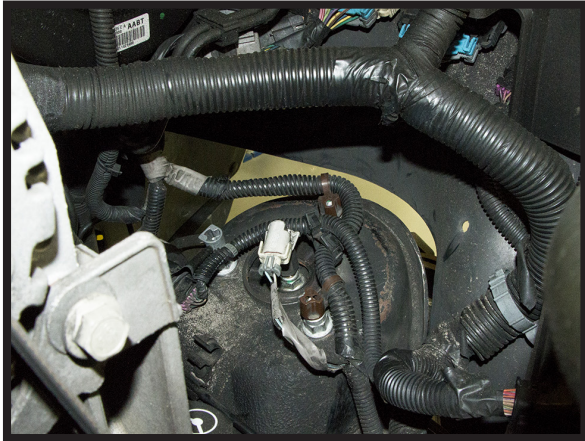


FIGURE 3



FIGURE 4

3. REMOVE THE WIRE CLIPS AND TOP MOUNTING NUTS. (FIGURES 5, 6, 7)

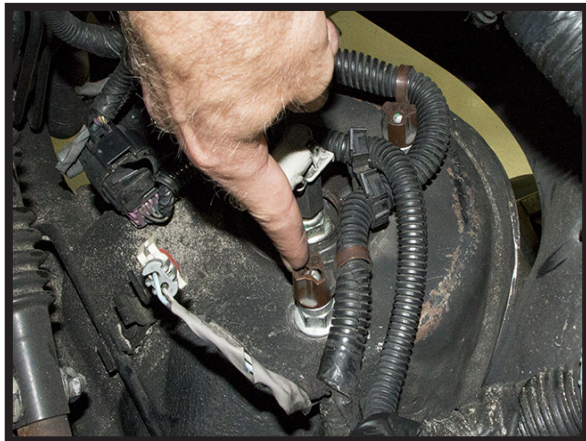


FIGURE 5

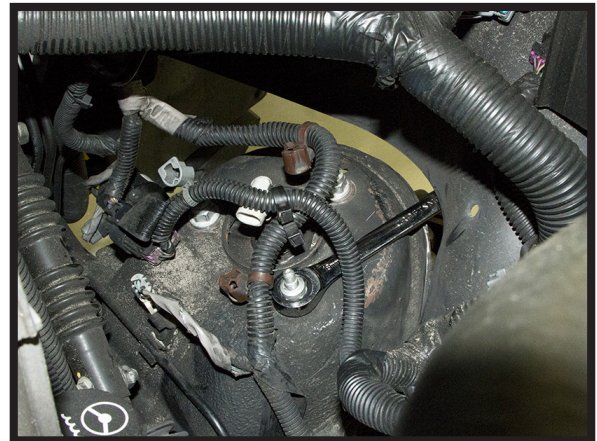


FIGURE 6

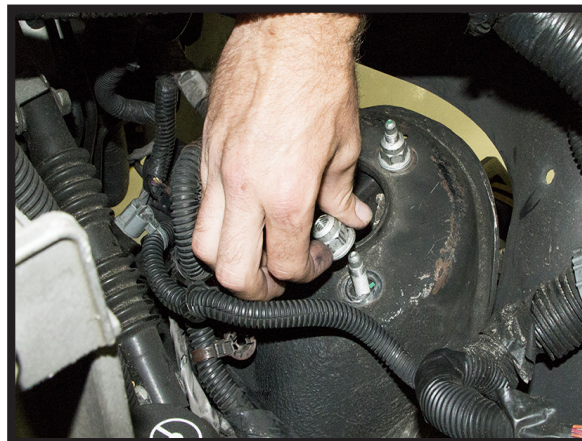


FIGURE 7

4. REMOVE THE LOWER MOUNTING BOLTS. (FIGURES 8, 9)



FIGURE 8



FIGURE 9

5. LOOSEN, DO NOT REMOVE, THE SWAY BAR END LINK HARDWARE. (FIGURE 10)



FIGURE 10

6. CAREFULLY REMOVE COIL STRUTS FROM THE VEHICLE. (FIGURE 11)

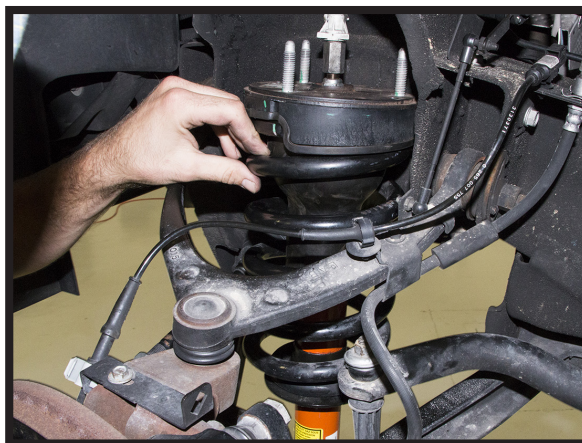


FIGURE 11



Use a spring compressor tool for the following removal steps.

COIL STRUT DISASSEMBLY

1. RELEASE CLIP AND REMOVE THE TOP ELECTRICAL CONNECTOR AND SHOCK ROD STEM.
(FIGURES 12, 13, 14 ,15)

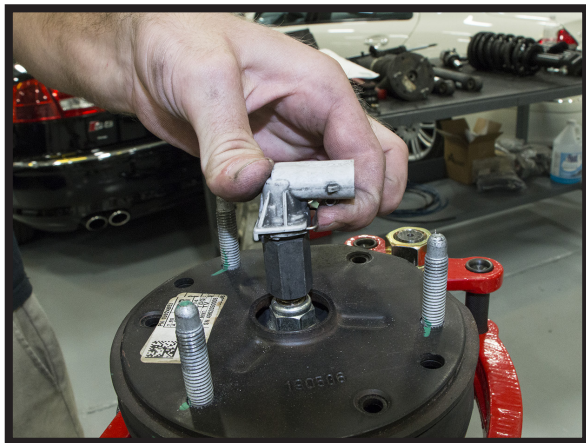


FIGURE 12

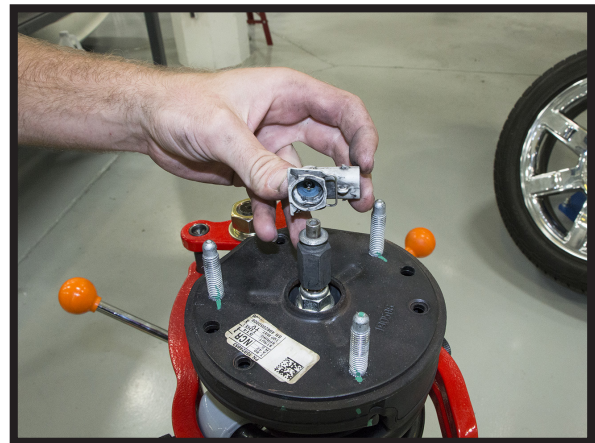


FIGURE 13

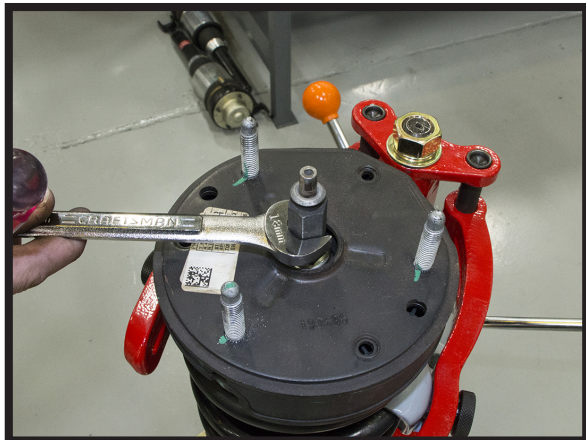


FIGURE 14



FIGURE 15

2. COMPRESS THE COIL SPRING AND REMOVE THE TOP SHOCK ROD NUT. (FIGURES 16, 17)



FIGURE 16

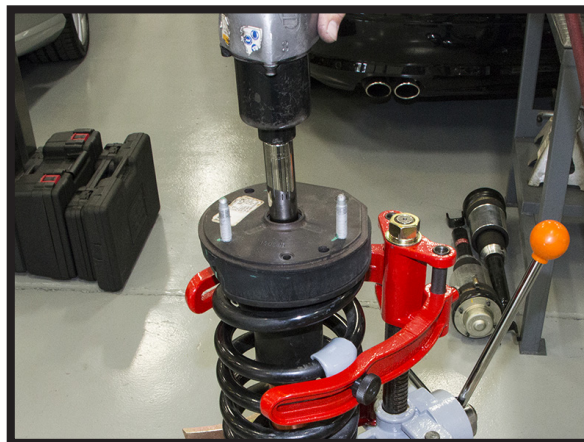


FIGURE 17

3. REMOVE TOP MOUNT PLATE, OFFSET PLATE AND RUBBER ISOLATOR. (FIGURES 18, 19)



FIGURE 18



FIGURE 19

4. CAREFULLY RELEASE SPRING PRESSURE AND REMOVE THE COIL SPRING, SPACER WASHER, BUMP STOP, BUMP STOP CAP, AND SPRING SEAT. (FIGURES 20, 21)



FIGURE 20

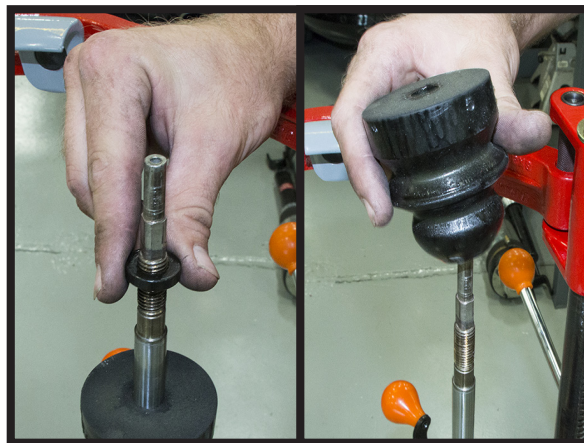


FIGURE 21

5. CAREFULLY REMOVE THE BOTTOM MOUNT CLIPS FROM THE STRUT AND SAVE FOR REASSEMBLY. (FIGURES 22, 23)



FIGURE 22



FIGURE 23

6. DISSASSEMBLY COMPLETE.

COIL STRUT REASSEMBLY



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

NOTE: THIS ASSEMBLY WILL UTILIZE THE SAVED HARDWARE TAKEN FROM PREVIOUS STRUT.

1. REMOVE THE UPPER MOUNT HARDWARE FROM THE SHOCK SHAFT (AS SHIPPED). (FIGURE 24)

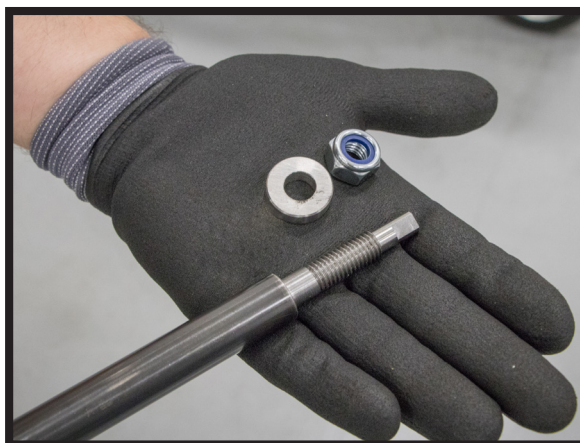


FIGURE 24

2. CAREFULLY INSTALL THE SPRING SEAT ONTO THE STRUT. (FIGURE 25)

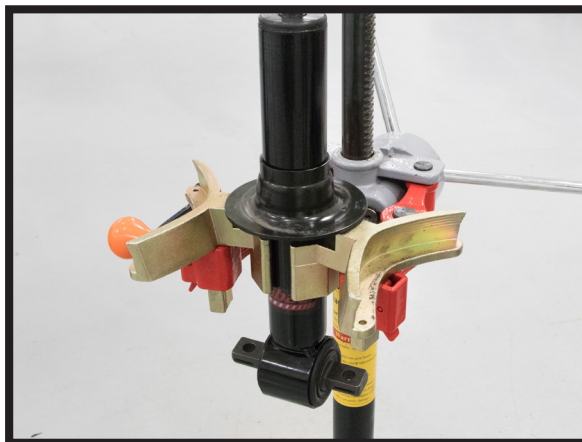


FIGURE 25

3. INSTALL THE BUMP STOP FOLLOWED BY THE LOWER MOUNT SPACER IN THE ORIENTATION SHOWN BELOW. (FIGURE 26)



FIGURE 26

4. INSTALL THE COIL SPRING ONTO THE STRUT AND CAREFULLY COMPRESS THE COIL SPRING. (FIGURES 27, 28)



FIGURE 27



FIGURE 28

5. INSTALL RUBBER ISOLATOR, OFFSET PLATE, AND TOP MOUNT PLATE. (FIGURES 29, 30)



FIGURE 29



FIGURE 30

6. INSTALL THE SPACER WASHER AND TOP SHOCK ROD NUT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 31, 32)



FIGURE 31



FIGURE 32

7. PROPERLY ALIGN THE STRUT BEFORE INSTALLING IT ON THE VEHICLE, MAKING SURE THE BOLT MOUNTS ARE FACING DOWNWARD AS SHOWN BELOW. (FIGURES 33, 34)

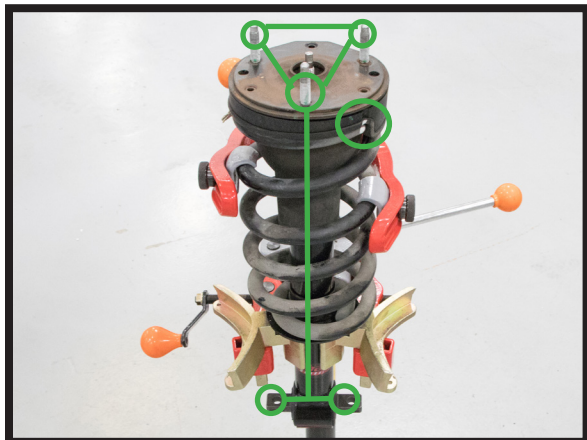


FIGURE 33

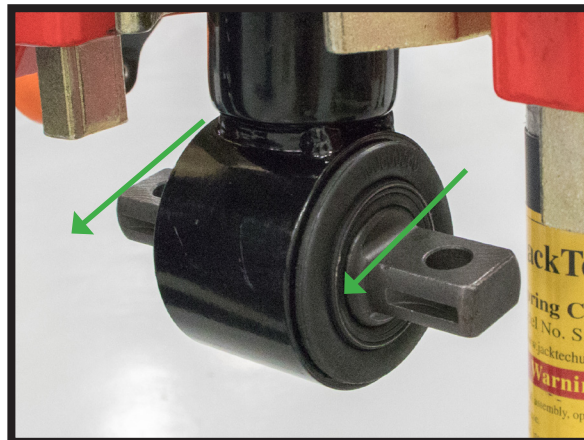


FIGURE 34

8. INSTALL THE SAVED BOTTOM MOUNT CLIPS ONTO THE STRUT. (FIGURES 35, 36)



FIGURE 35



FIGURE 36

9. COIL STRUT REASSEMBLY COMPLETE.

COIL STRUT INSTALLATION



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

1. INSTALL THE COIL STRUT INTO THE VEHICLE. (FIGURE 37)



FIGURE 37

2. BE SURE TO POSITION THE T-BAR ON TOP OF THE CONTROL ARM TO ENSURE PROPER MOUNTING. (FIGURE 38)

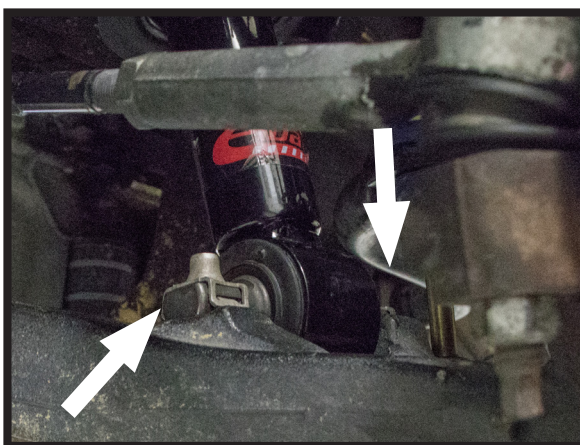


FIGURE 38

3. REINSTALL THE BOTTOM MOUNTING BOLTS AND NUTS AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 39, 40)



FIGURE 39



FIGURE 40

4. INSTALL THE THREE TOP MOUNTING NUTS AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 41)



FIGURE 41

5. TIGHTEN THE SWAY BAR END LINK HARDWARE TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 42)



FIGURE 42

6. REINSTALL THE WIRE CLIPS AND RECONNECT THE ELECTRICAL CONNECTOR, BEING SURE TO SECURE THE HARNESS IN A WAY NOT TO INTERFERE WITH ANY MOVING PARTS OR COMPONENTS WITH EXCESSIVE HEAT. (FIGURES 43, 44)



FIGURE 43



FIGURE 44

7. INSTALLATION COMPLETE.

REAR AIR SHOCK/COIL SPRING REMOVAL

1. SET STEERING TO STRAIGHT.
2. RAISE VEHICLE.
3. REMOVE THE REAR WHEELS. (FIGURE 45)

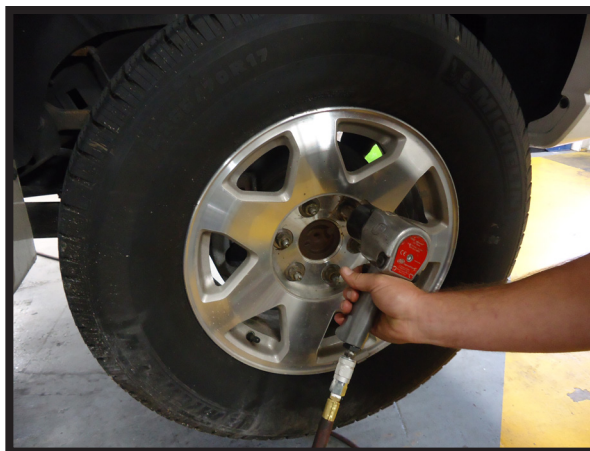


FIGURE 45

4. LOCATE AND REMOVE THE AIR LINES TO DEFLATE THE AIR SHOCKS. TURN THE METAL CLIP APPROXIMATELY 90° TO REMOVE THE AIR LINE FITTING FROM THE AIR SHOCK. (FIGURE 46)



FIGURE 46

5. LOCATE AND REMOVE THE ELECTRICAL CONNECTORS FROM THE TOP OF THE AIR SHOCKS. (FIGURE 47)



FIGURE 47

6. LOOSEN AND REMOVE THE UPPER AND LOWER SHOCK MOUNTING NUTS. (FIGURES 48, 49)



FIGURE 48



FIGURE 49

7. SUPPORT THE AXLE TO RELIEVE PRESSURE FROM THE AIR SHOCKS MOUNTING POINTS. REMOVE THE UPPER AND LOWER AIR SHOCK MOUNTING BOLTS. (FIGURE 50)



FIGURE 50

8. REMOVE THE AIR SHOCKS FROM THE VEHICLE. (FIGURE 51)



FIGURE 51

9. REMOVE THE BOLTS AND RIDE HEIGHT SENSORS FROM THE UPPER CONTROL ARMS. (FIGURES 52, 53)



FIGURE 52



FIGURE 53

10. REMOVE THE BOLT AND BRACKET HOLDING THE BRAKE LINE TO THE REAR DIFFERENTIAL. (FIGURES 54, 55)



FIGURE 54



FIGURE 55

11. REMOVE THE NUTS ON THE UPPER SWAY BAR END LINKS. (FIGURE 56)



FIGURE 56

12. USING A JACK OR OTHER SUITABLE DEVICE, SUPPORT THE AXLE TO RELEASE PRESSURE FROM THE SWAY BAR END LINKS. REMOVE THE SWAY BAR END LINK BOLTS. (FIGURES 57, 58)



FIGURE 57



FIGURE 58

13. SLOWLY LOWER THE AXLE AND REMOVE THE COIL SPRINGS. (FIGURE 59)



FIGURE 59

14. REMOVAL COMPLETE.

REAR COIL SPRING INSTALLATION



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

NOTE:

Secure the air lines and electrical connectors in suitable locations as they are not used for this kit.

1. PLACE THE RUBBER ISOLATOR ONTO THE AXLE AND INSTALL THE COIL SPRING INTO THE VEHICLE. BE SURE TO KEEP THE ISOLATOR PROPERLY ALIGNED WITH THE COIL STRUT. (FIGURES 60, 61)



FIGURE 60



FIGURE 61

2. USING A JACK OR OTHER SUITABLE DEVICE, RAISE THE AXLE UNTIL THE SWAY BAR END LINK IS REALIGNED WITH THE BOLT HOLES. REINSTALL THE SWAY BAR END LINK BOLTS. (FIGURES 62, 63)

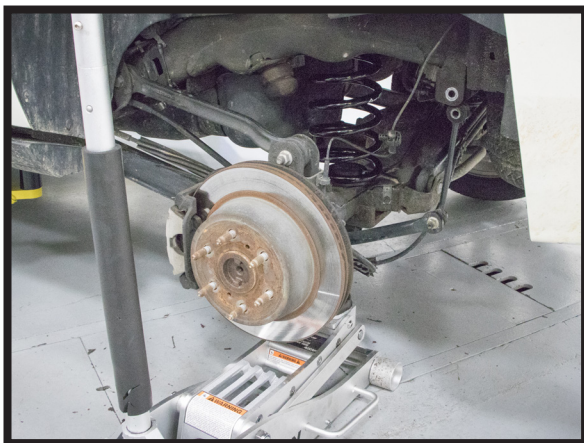


FIGURE 62



FIGURE 63

3. INSTALL THE SHOCK INTO THE VEHICLE. (FIGURE 64)

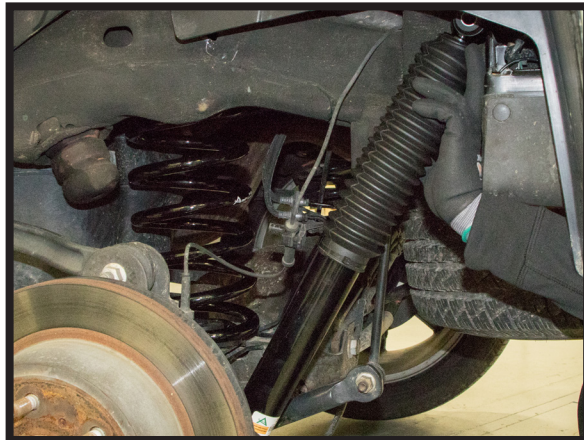


FIGURE 64

4. INSTALL THE UPPER AND LOWER SHOCK MOUNTING HARDWARE AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 65, 66)



FIGURE 65



FIGURE 66

5. REINSTALL THE BRAKE LINE BRACKET AND RIDE HEIGHT SENSORS, TIGHTENING TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 67, 68, 69)



FIGURE 67

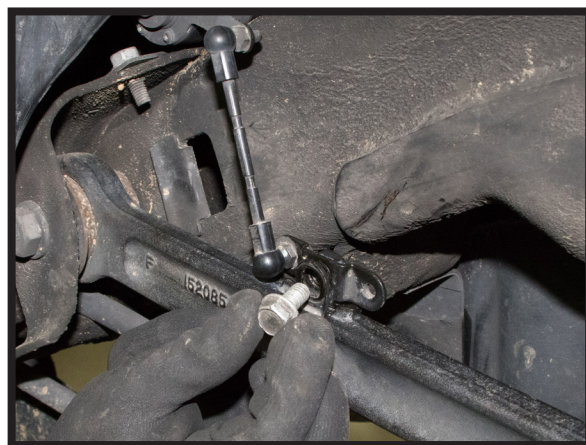


FIGURE 68



FIGURE 69

6. REINSTALL THE WHEEL.
7. LOWER THE VEHICLE.
8. INSTALLATION COMPLETE.



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.

ELECTRONIC BYPASS MODULE INSTALLATION

1. LOCATE BCM BENEATH THE DRIVER'S SIDE OF THE DASH BEHIND THE OBD CONNECTOR. (FIGURE 70)

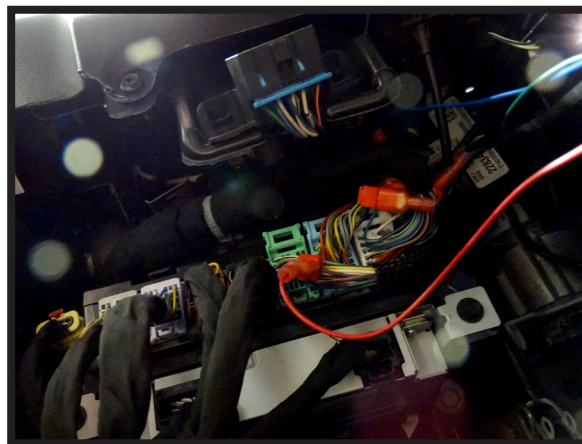


FIGURE 70

2. USING THE WIRING DIAGRAM, MATCH THE WIRES AND SPLICE THEM TOGETHER WITH THE T-TAP CONNECTORS. (FIGURES 71, 72)

ELECTRONIC BYPASS MODULE	BCM PLUG	BCM PIN#	BCM WIRE/COLOR
RED	GREEN	6	VIOLET/BLACK
BLACK	BLUE	2	BLACK
BLUE	NATURAL	25	BLUE
GREEN	NATURAL	24	WHITE

FIGURE 71



FIGURE 72

3. ONCE ALL THE WIRES HAVE BEEN CONNECTED YOU WILL NEED TO SECURE THE EBM UNDER THE DASH AND AWAY FROM ANY SOURCE OF HEAT AND/OR ANY MOVING PARTS.
4. EBM INSTALLATION COMPLETE.
5. REMOVE THE COVER FROM THE FUSE BOX IN THE ENGINE COMPARTMENT. (FIGURE 73)



FIGURE 73

6. REMOVE THE 30-AMP FUSE IN LOCATION #24 LABELED AS "RTD". (FIGURES 74, 75)

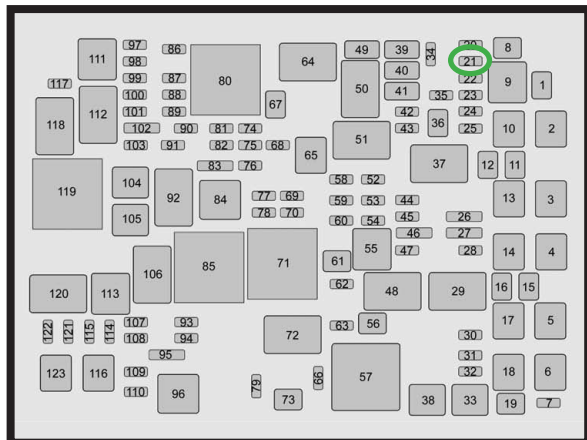


FIGURE 74



FIGURE 75

NOTE:

If the fuse is not removed a warning light will be displayed in the instrument cluster.

7. REINSTALL THE FUSE BOX COVER.
8. INSTALLATION COMPLETE.