

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

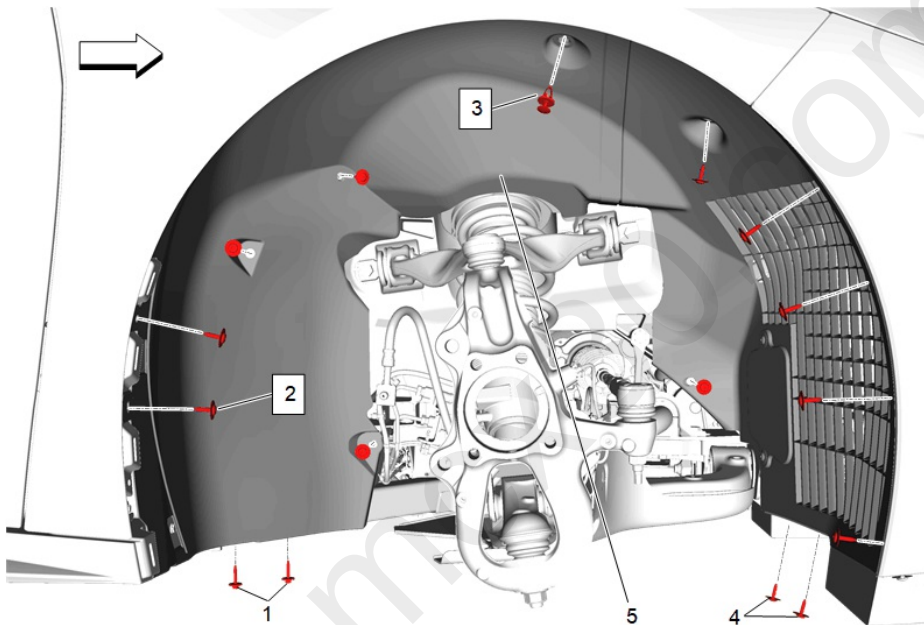
1. **Body Repair**
2. **Frame and Underbody**
3. **Repair Instructions**
- 4.

Drivetrain and Front Suspension Cradle Removal and Installation (With E60)

Removal Procedure

Note:

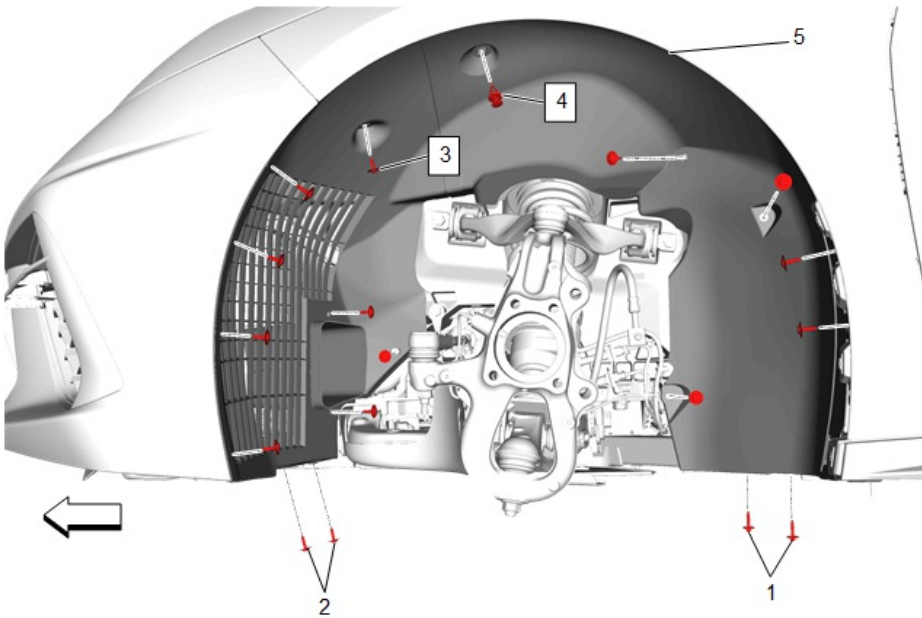
Vehicle alignment is not required if the cradle is being lowered or dropped to perform another procedure. This vehicle is equipped with a cradle to body aligning feature: cradle to body through holes or self-aligning pins that are part of the cradle or body. Only align if replacing the cradle with a NEW part and transferring components.



1. [Click here for full size](#)
2. Note:

Some components not shown for graphic clarity.

3. Front Wheelhouse Liner - Right Side (5) >>> Remove - Front Wheelhouse Liner Replacement - Right Side

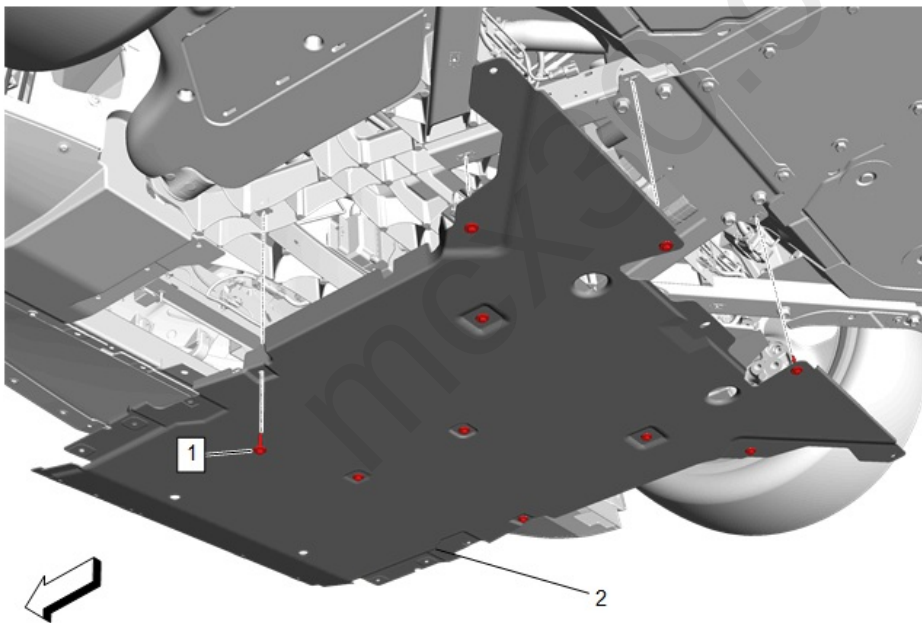


4. [Click here for full size](#)

5. Note:

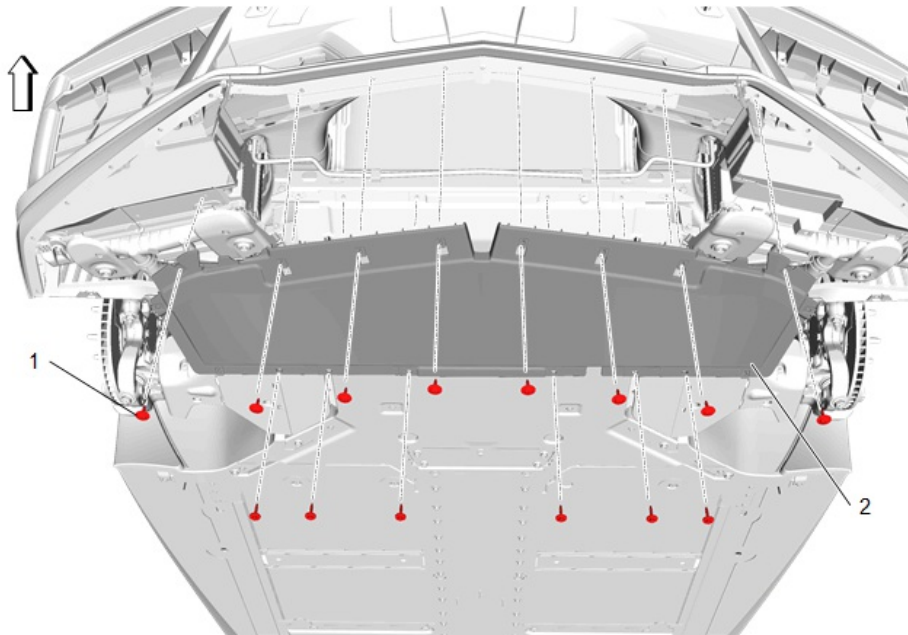
Some components not shown for graphic clarity.

6. Front Wheelhouse Liner - Left Side (5) >> Remove - Front Wheelhouse Liner Replacement - Left Side



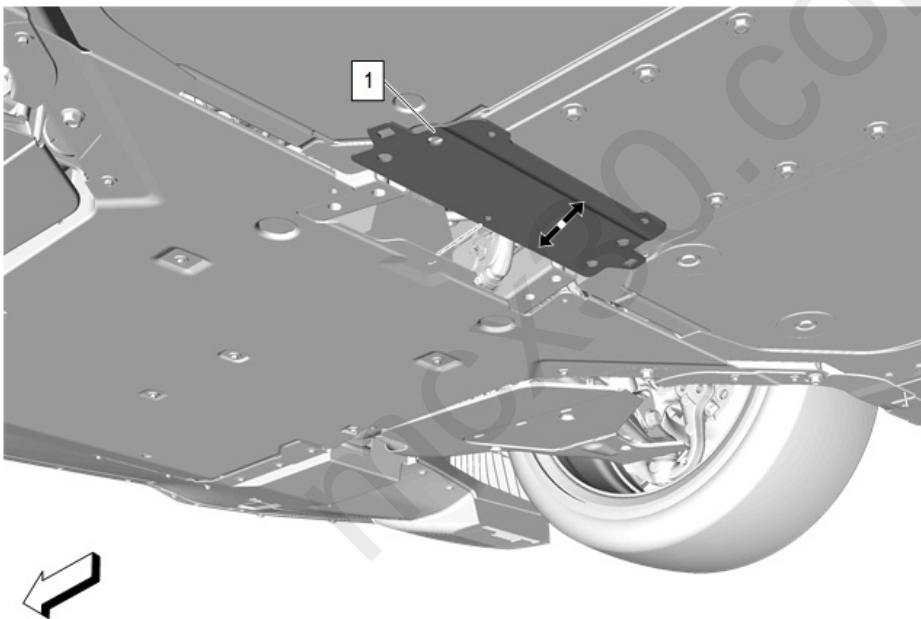
7. [Click here for full size](#)

8. Front Compartment Insulator (2) >> Remove - Front Compartment Insulator Replacement



9.
[Click here for full size](#)

10. Front Bumper Fascia Lower Stiffener (2) >> Remove - Front Bumper Fascia Lower Stiffener Replacement



11.
[Click here for full size](#)

12. Floor Panel Tunnel Panel Front Reinforcement (1) >> Remove - Floor Panel Tunnel Panel Front Reinforcement Replacement - Tunnel Front

13. [Click here for full size](#)

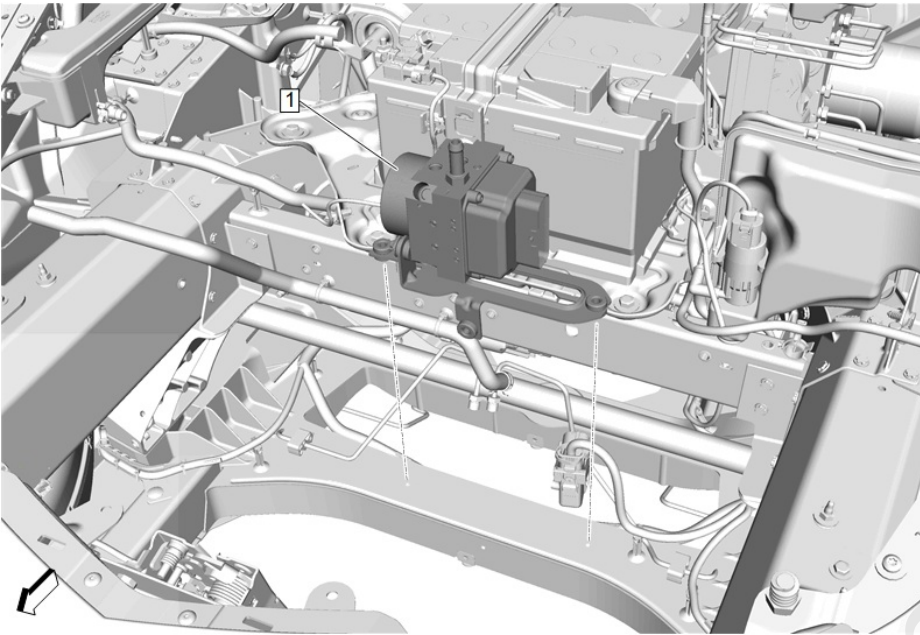
14. Floor Panel Number 1 Cross Bar Extension - Left Side (4>) >> Remove - Floor Panel Number 1 Cross Bar Extension Replacement - Left Side

15. [Click here for full size](#)

16. Floor Panel Number 1 Cross Bar Extension - Right Side (4>) >> Remove - Floor Panel Number 1 Cross Bar Extension Replacement - Right Side

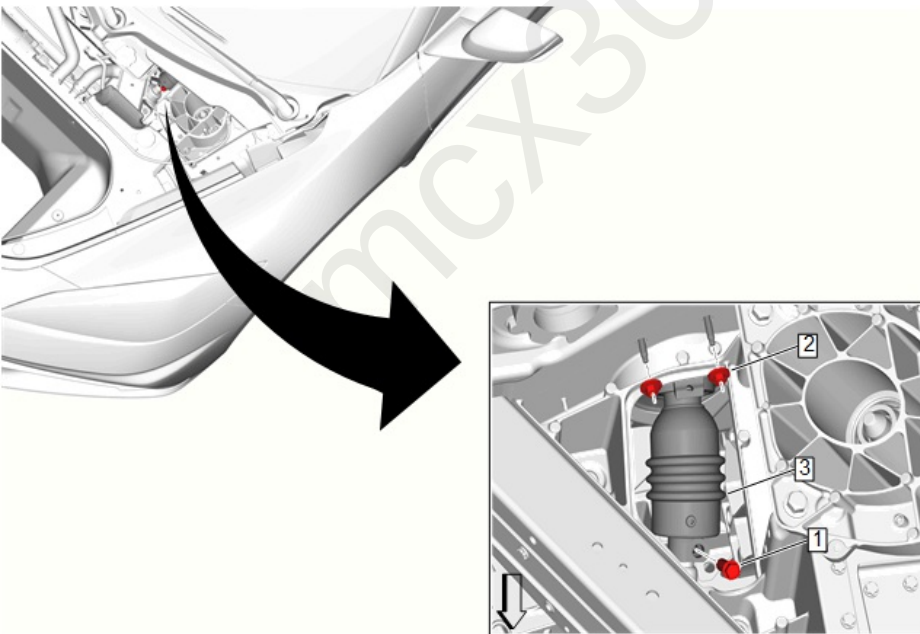


17. [Click here for full size](#)
18. Front Compartment Front Panel (1) >> Remove - Front Compartment Front Panel Replacement
19. [Click here for full size](#)
20. Note:
Some components not shown for graphic clarity.
21. Body Front Wiring Harness Ground Bolt (1) >> Remove [2>x]
22. Crossbody Front Wiring Harness (2) >> Reposition



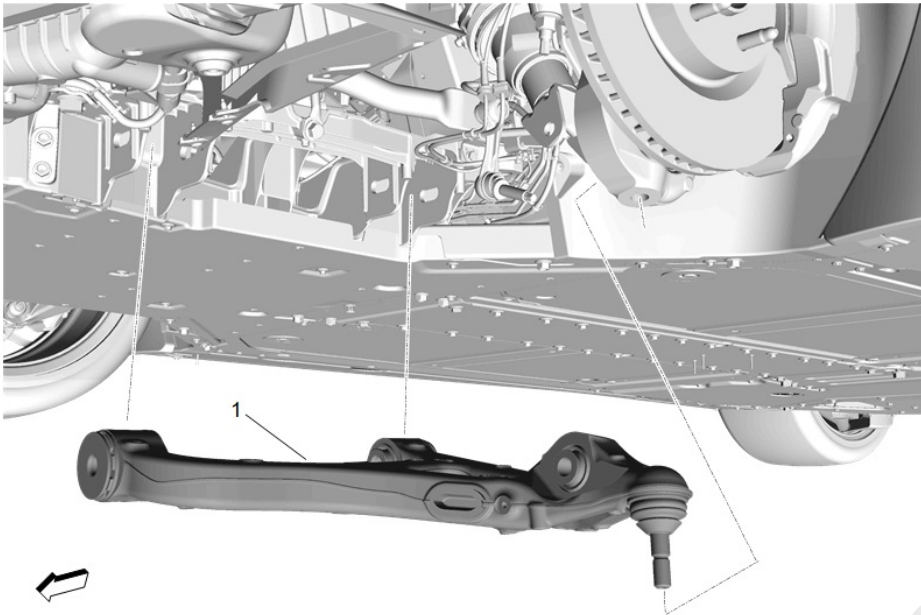
23.
[Click here for full size](#)

24. Front Suspension Leveling/Lifting Hydraulic Power Pack Module (1) >> Remove - Front Suspension Leveling/Lifting Hydraulic Power Pack Module Replacement

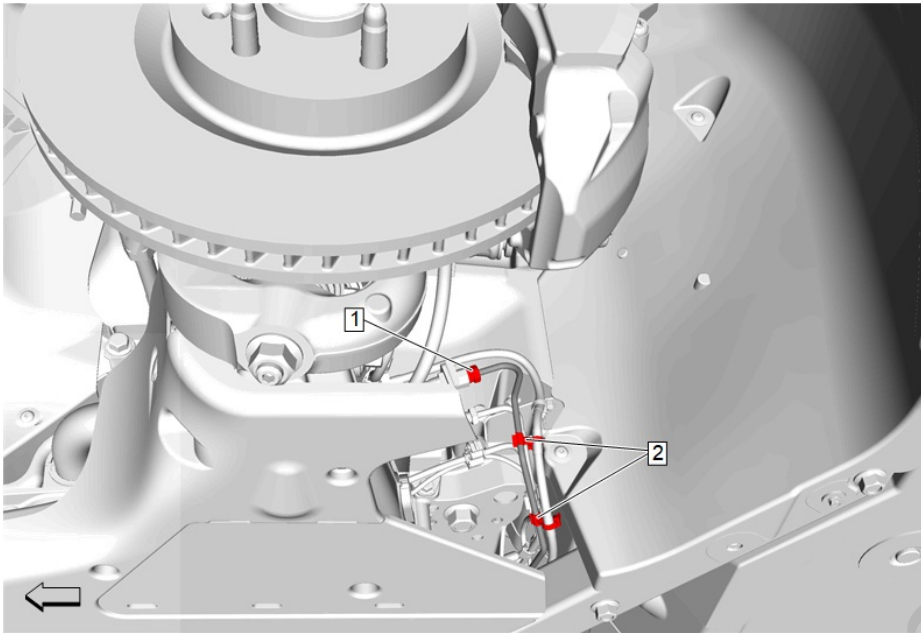


25.
[Click here for full size](#)

26. Intermediate Steering Shaft (3) @ Steering Gear >> Separate - Intermediate Steering Shaft Replacement



27. [Click here for full size](#)
28. Note:
Left side shown, right side similar.
29. Front Lower Control Arm - Left Side and Right Side (1) >> Remove [2>x] - Front Lower Control Arm Replacement
30. [Click here for full size](#)
31. Note:
Left side shown, right side similar.
32. Steering Linkage Outer Tie Rod - Left Side and Right Side (1) >> Remove [2>x] - Steering Linkage Outer Tie Rod Replacement
33. [Click here for full size](#)
34. Radiator Support Brace Bolt - Right Side (1) @ Drivetrain and Front Suspension Cradle >> Remove - Radiator Support Brace Replacement - Right Side
35. [Click here for full size](#)
36. Radiator Support Brace Bolt - Left Side (1) @ Drivetrain and Front Suspension Cradle >> Remove - Radiator Support Brace Replacement - Left Side
37. [Click here for full size](#)
38. Note:
Left side shown, right side similar.
39. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Nut (1) @ Front Brake Hose - Left Side and Right Side >> Remove [2>x]
40.
 - Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Left Side
 - Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Right Side
41. Cap the left and right brake pressure modulator valve master cylinder reservoir front pipe (2) to prevent brake fluid loss and contamination.
42. Plug the left and right front brake hose inlet (3) to prevent brake fluid loss and contamination.

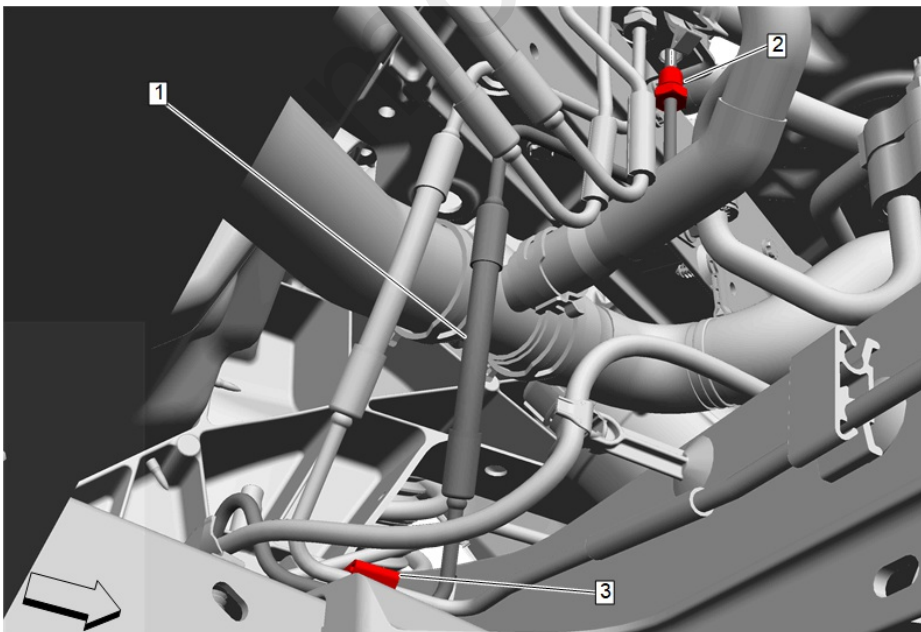


43. [Click here for full size](#)

44. Note:

Left side shown, right side similar.

45. Remove the left and right front hydraulic suspension actuator inlet pipe fitting (1) at the front hydraulic suspension actuator inlet hose.
46. Cap the left and right front hydraulic suspension actuator inlet pipe and hose to prevent fluid loss and contamination.

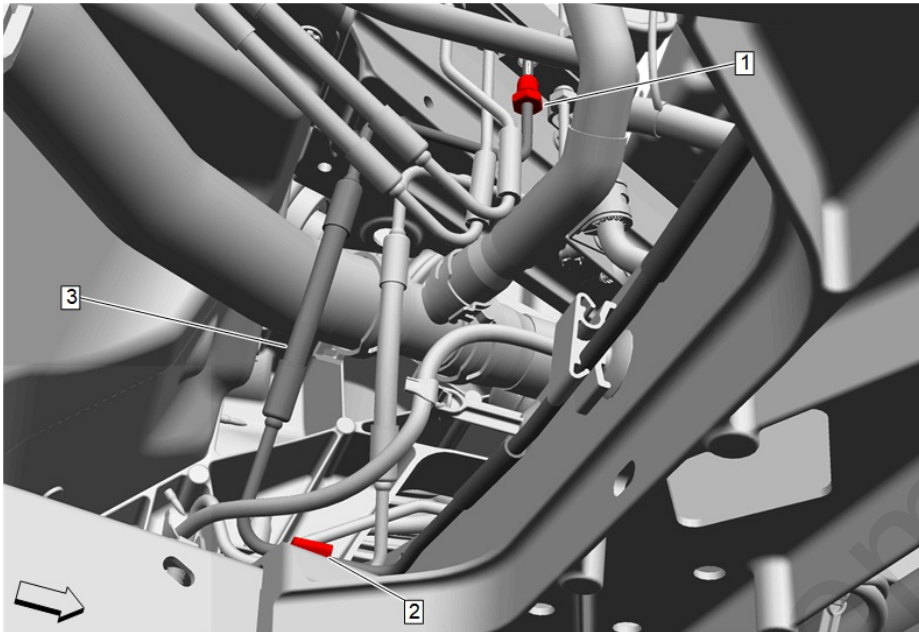


47. [Click here for full size](#)

48. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Nut (2) @ Front Brake Crossover Pipe Connector - Left Side >>

48. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Nut (2) @ Front Brake Crossover Pipe Connector - Left Side >>> Remove

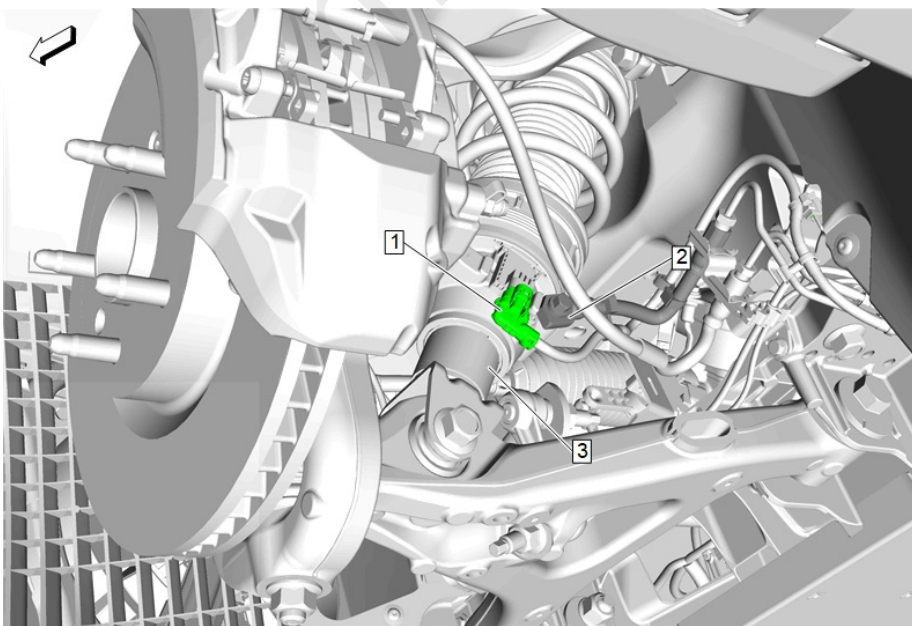
49. Cap the left brake pressure modulator valve master cylinder reservoir front pipe (1) to prevent brake fluid loss and contamination.



50.
[Click here for full size](#)

51. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Nut (1) @ Front Brake Crossover Pipe Connector - Right Side >>> Remove

52. Cap the right brake pressure modulator valve master cylinder reservoir front pipe (3) to prevent brake fluid loss and contamination.



53.

[Click here for full size](#)

54. Note:

Left side shown, right side similar.

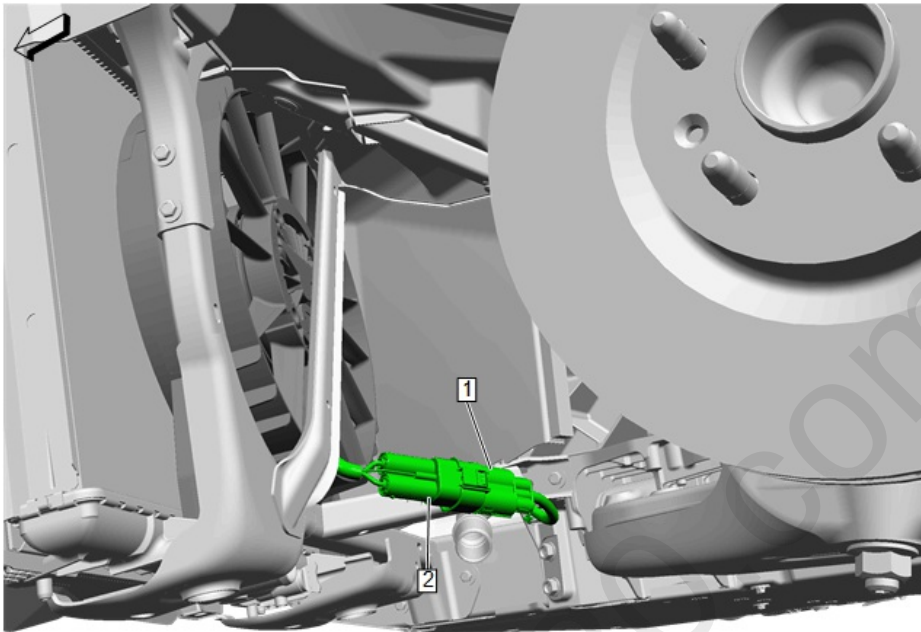
55. Electrical Connector - Left Side and Right Side (1) @ Front Shock Absorber (3) >> Disconnect [2>x]

56. [Click here for full size](#)

57. Note:

The crossbody front wiring harness will be removed with the drivetrain and front suspension cradle.

58. Crossbody Front Wiring Harness (1) >> Disconnect



59.

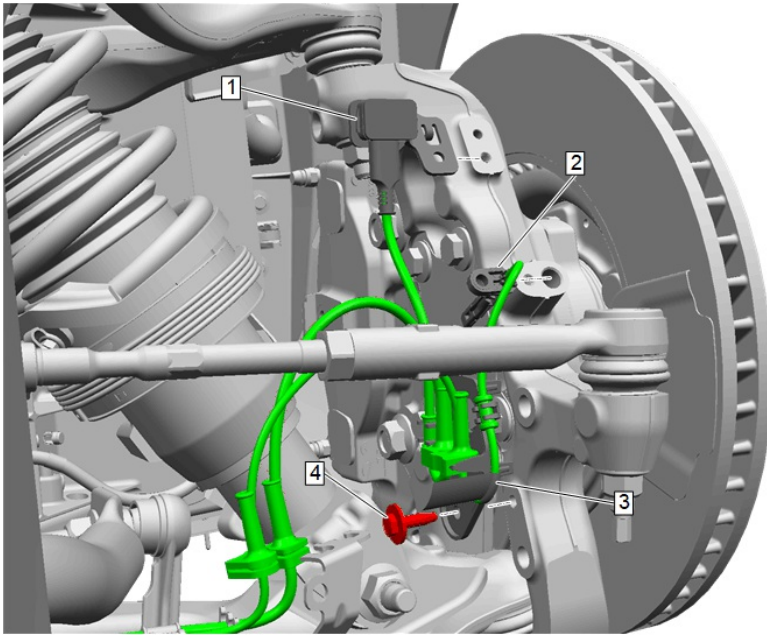
[Click here for full size](#)

60. Note:

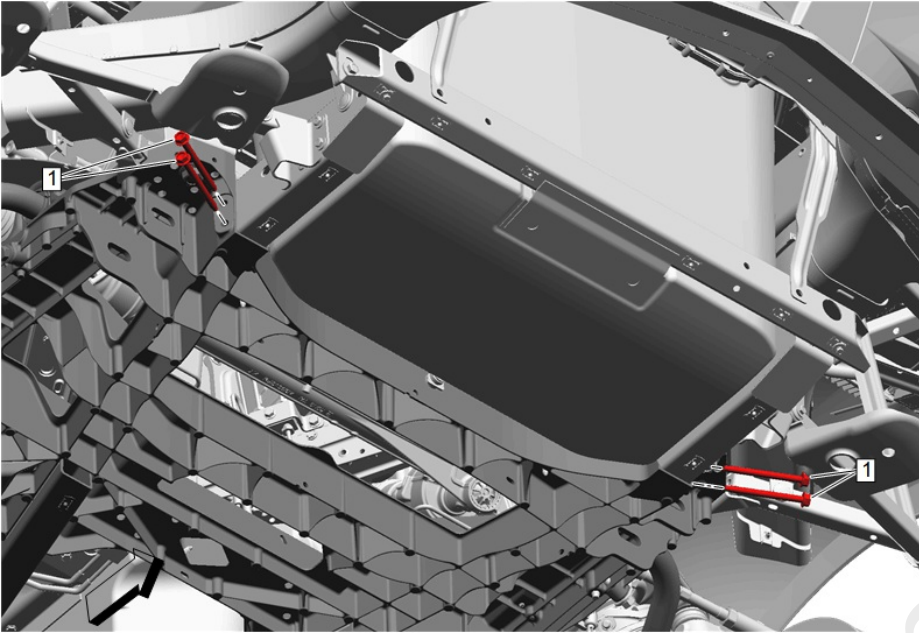
Left side shown, right side similar.

61. Disconnect the left side and right side electrical connector (1) from the left side and right side engine cooler fan electrical connector (2).

62. Reposition the harness away from the front end upper tie bar.



63. [Click here for full size](#)
64. Note:
- Left side shown, right side similar.
65. { If equipped } Electronic Suspension Wheel Front Vertical Accelerometer - Left Side and Right Side (1) @ Steering Knuckle >> Remove [2>x] - Electronic Suspension Wheel Front Vertical Accelerometer Replacement
66. Front Wheel Speed Sensor - Left Side and Right Side (2) @ Steering Knuckle >> Remove [2>x]
- 67.
- Front Wheel Speed Sensor Replacement - Left Side
 - Front Wheel Speed Sensor Replacement - Right Side
68. Front Wheel Speed Sensor Bracket Bolt (4) @ Steering Knuckle >> Remove
69. Wheel Speed Sensor Bracket - Left Side and Right Side (3) >> Reposition [2>x]



70. [Click here for full size](#)
71. Radiator Support Bolt (1) >> Remove [4x]
72. [Click here for full size](#)
73. Note:
- Left side shown, right side similar.
74. Front Cradle Brace - Left Side and Right Side (2>) >> Remove [2>x] - Front Cradle Brace Replacement
75. Using suitable jack stands, support the drivetrain and front suspension frame.
76. Lower the vehicle until the drivetrain and front suspension frame is resting lightly on the jackstands.
77. [Click here for full size](#)
78. Drivetrain and Front Suspension Cradle Bolt (1) >> Remove [4x]
79. Front Compartment Side Rail Bolt (3) >> Remove [2>x]
80. [Click here for full size](#)
81. With the aid of an assistant, carefully raise the body removing the drivetrain and front suspension cradle (1) from the vehicle.
82. Ensure when raising the body the following items are clear from the drivetrain and front suspension cradle (1):
- 83.
- Steering knuckles
 - Electrical wiring harnesses
 - Brake hoses

Installation Procedure

1. Position the drivetrain and front suspension cradle on suitable jack stands beneath the body of the vehicle.
2. [Click here for full size](#)
3. With the aid of an assistant, carefully lower the body to the drivetrain and front suspension cradle (1).

3. With the aid of an assistant, carefully lower the body to the drivetrain and front suspension cradle (1).

4. Ensure the following components are clear from the drivetrain and front suspension cradle (1):

5.

- Steering knuckles
- Electrical wiring harnesses
- Brake hoses

6. [Click here for full size](#)

7. Caution:

Refer to Fastener Caution

8. Drivetrain and Front Suspension Cradle Bolt (1) >> Install and tighten [4x]160 N-m (118 lb ft)

9. Front Compartment Side Rail Bolt >> (3) Install and tighten [2>x]58 N-m (43 lb ft)

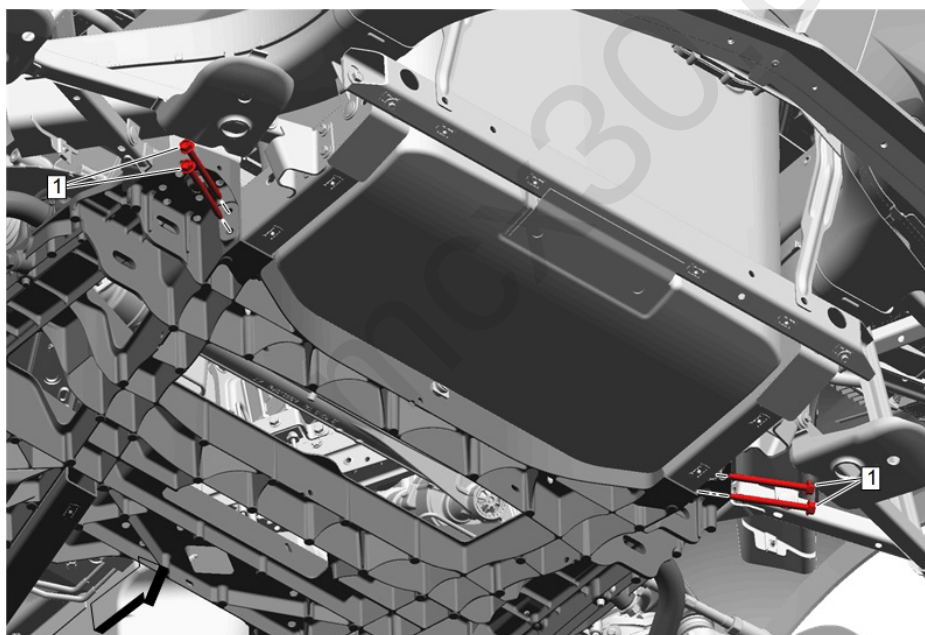
10. Remove jack stands from beneath vehicle.

11. [Click here for full size](#)

12. Note:

Left side shown, right side similar.

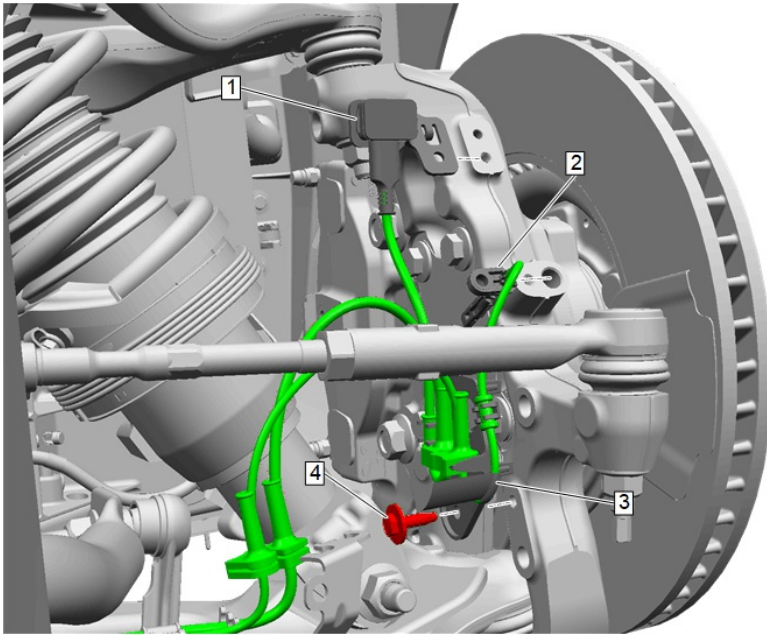
13. Front Cradle Brace - Left Side and Right Side (2>) >> Install [2>x] - Front Cradle Brace Replacement



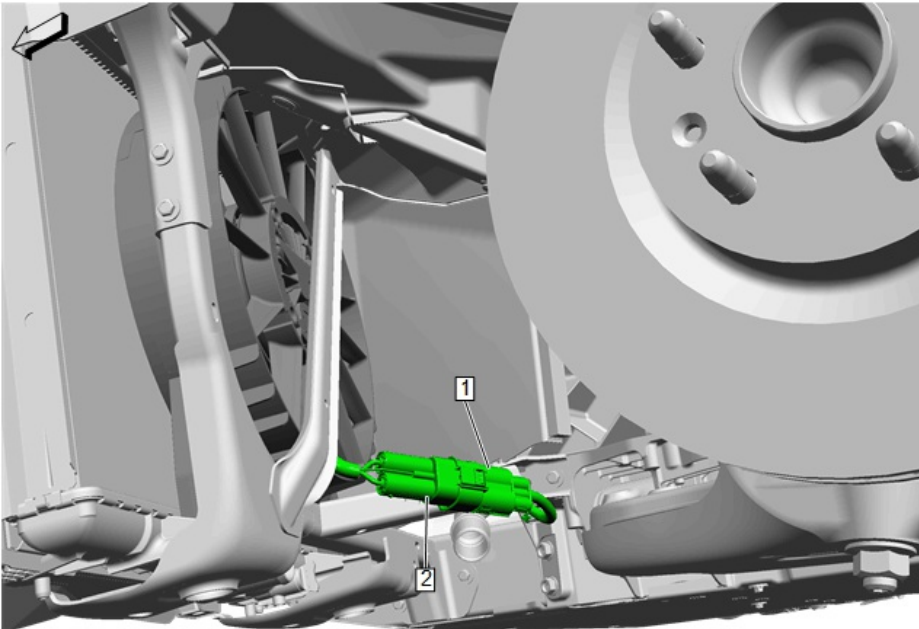
14.

[Click here for full size](#)

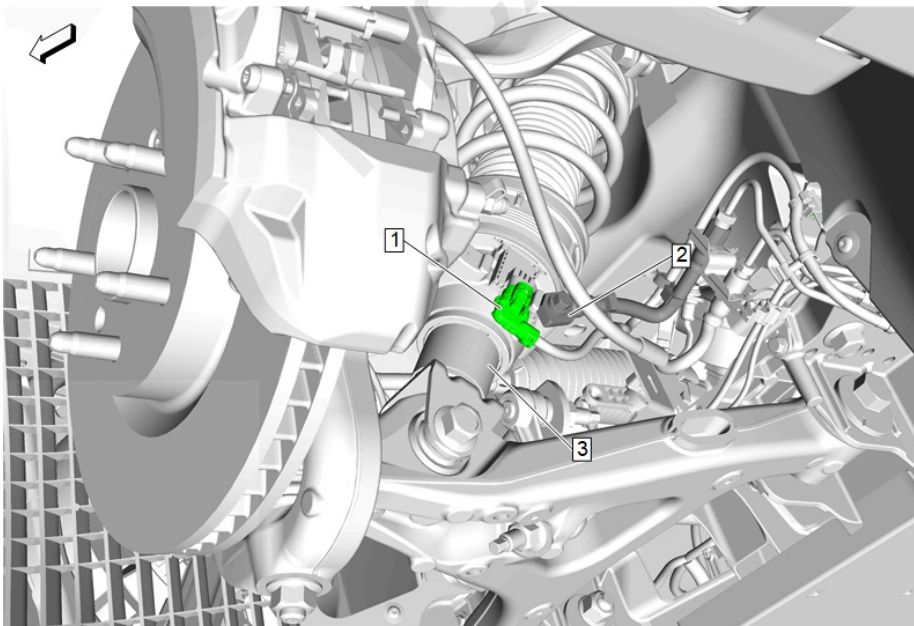
15. Radiator Support Bolt (1) >> Install and tighten [4x]22 N-m (16 lb ft)



16. [Click here for full size](#)
17. Note:
Left side shown, right side similar.
18. Wheel Speed Sensor Bracket - Left Side and Right Side (3) >> Install [2>x]
19. Front Wheel Speed Sensor Bracket Bolt - Left Side and Right Side (4) @ Steering Knuckle >> Install and tighten [2>x]5 N-m (44 lb in)
20. Front Wheel Speed Sensor - Left Side and Right Side (2) @ Steering Knuckle >> Install [2>x]
21.
 - Front Wheel Speed Sensor Replacement - Left Side
 - Front Wheel Speed Sensor Replacement - Right Side
22. { If equipped } Electronic Suspension Wheel Front Vertical Accelerometer - Left Side and Right Side (1) @ Steering Knuckle >> Install [2>x] - Electronic Suspension Wheel Front Vertical Accelerometer Replacement



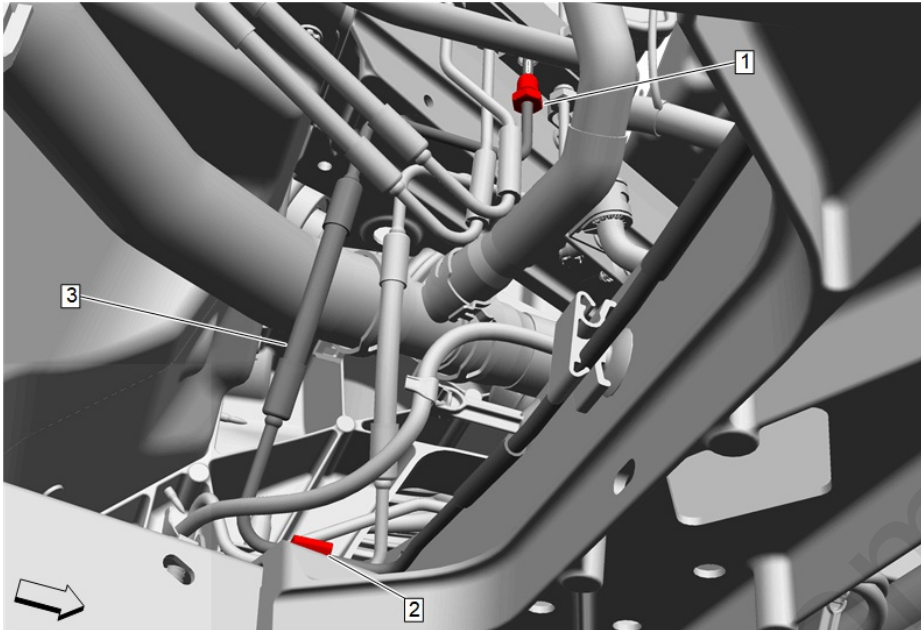
23. [Click here for full size](#)
24. Note:
Left side shown, right side similar.
25. Connect the left side and right side electrical connector (1) to the left side and right side electrical engine cooler fan electrical connector (2).
26. [Click here for full size](#)
27. Note:
The crossbody front wiring harness will be installed with the drivetrain and front suspension cradle.
28. Crossbody Front Wiring Harness (1) Connect



29. [Click here for full size](#)
30. Note:

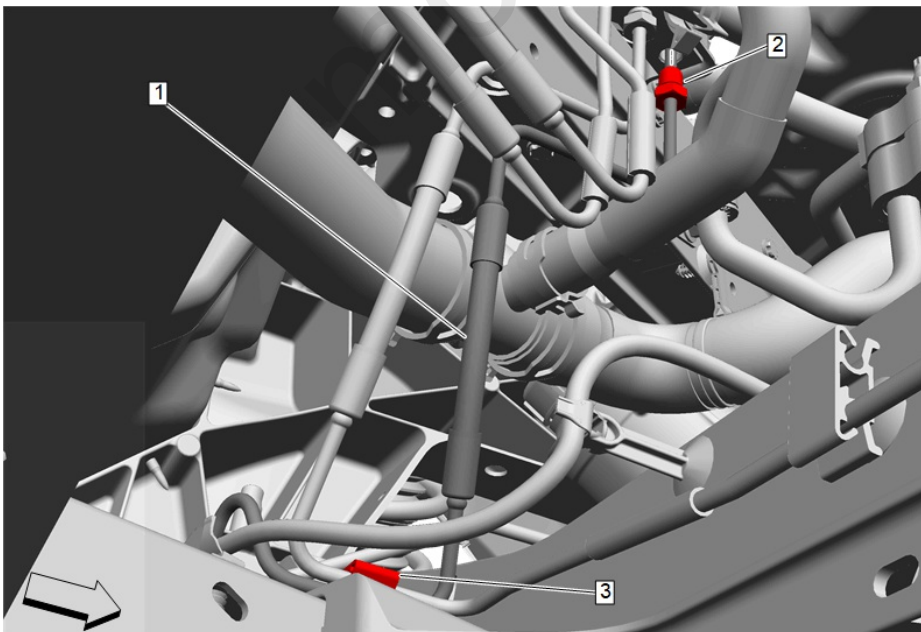
Left side shown, right side similar.

31. Electrical Connector - Left Side and Right Side (1) @ Front Shock Absorber (3) >> Connect [2>x]



32. [Click here for full size](#)

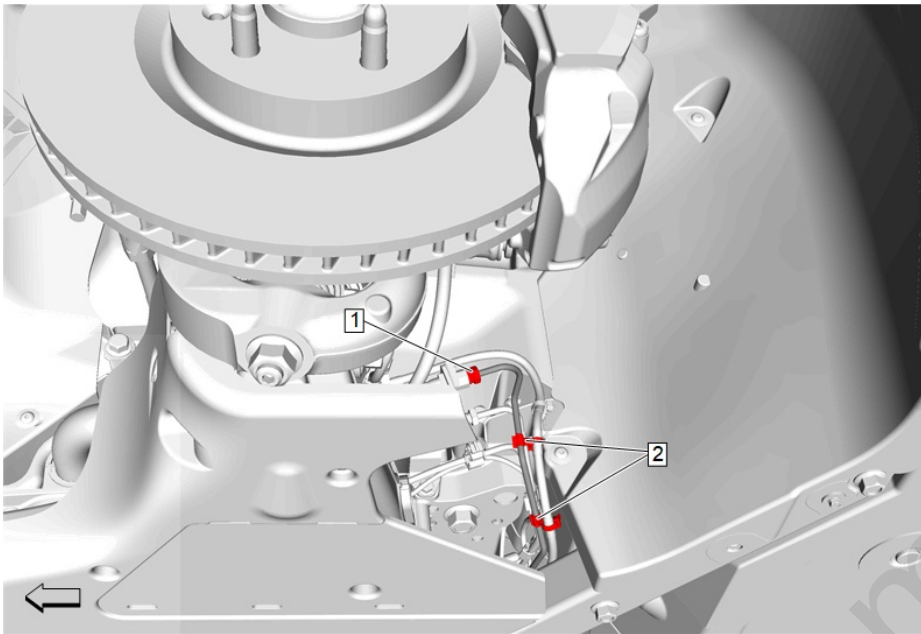
33. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe - Right Side (3) @ Front Brake Crossover Pipe Connector >> Install - Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Right Side



34. [Click here for full size](#)

35. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe - Left Side (1) @ Front Brake Crossover Pipe Connector >>

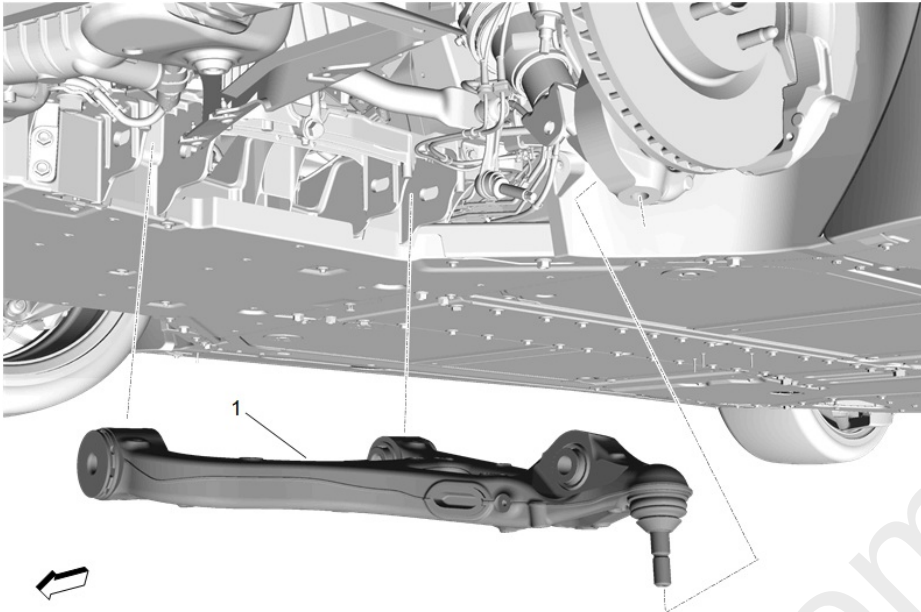
35. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe - Left Side (1) @ Front Brake Crossover Pipe Connector >> Install - Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Left Side



36. [Click here for full size](#)
37. Note:
- Left side shown, right side similar.
38. Front Hydraulic Suspension Actuator Inlet Pipe - Left Side and Right Side (1) @ Front Hydraulic Suspension Actuator Inlet Hose >> Connect [2>x]
- 39.
- Front Hydraulic Suspension Actuator Inlet Pipe Replacement - Left Side
 - Front Hydraulic Suspension Actuator Inlet Pipe Replacement - Right Side
40. [Click here for full size](#)
41. Note:
- Left side shown, right side similar.
42. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe - Left Side and Right Side (2) >> Install [2>x]
- 43.
- Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Left Side
 - Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Right Side
44. [Click here for full size](#)
45. Radiator Support Brace Bolt - Right Side (1) @ Drivetrain and Front Suspension Cradle >> Install - Radiator Support Brace Replacement - Right Side
46. [Click here for full size](#)
47. Radiator Support Brace Bolt - Left Side (1) @ Drivetrain and Front Suspension Cradle >> Install - Radiator Support Brace Replacement - Left Side
48. [Click here for full size](#)
49. Note:

Left side shown, right side similar.

50. Steering Linkage Outer Tie Rod - Left Side and Right Side (1) >> Install [2>x] - Steering Linkage Outer Tie Rod Replacement

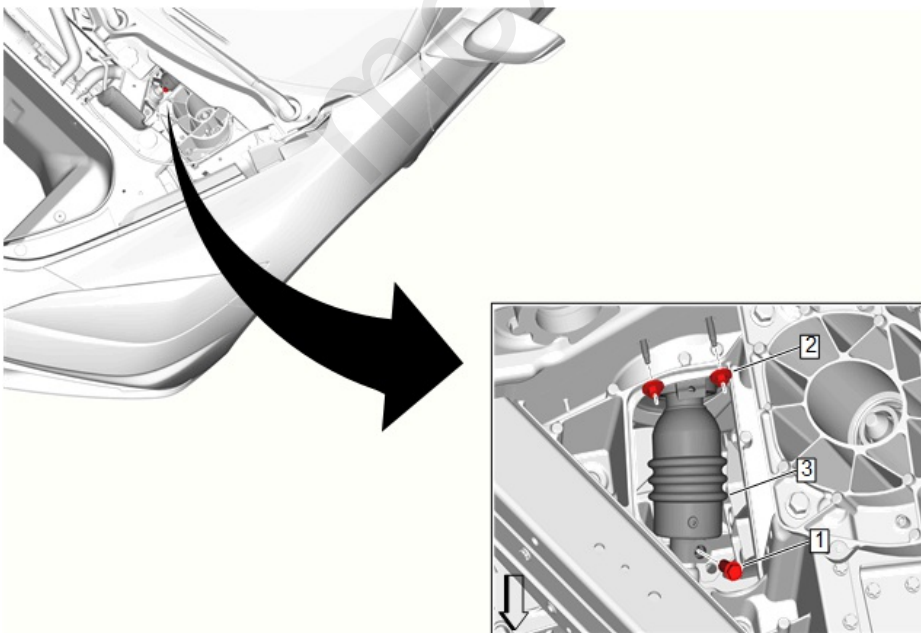


51. [Click here for full size](#)

52. Note:

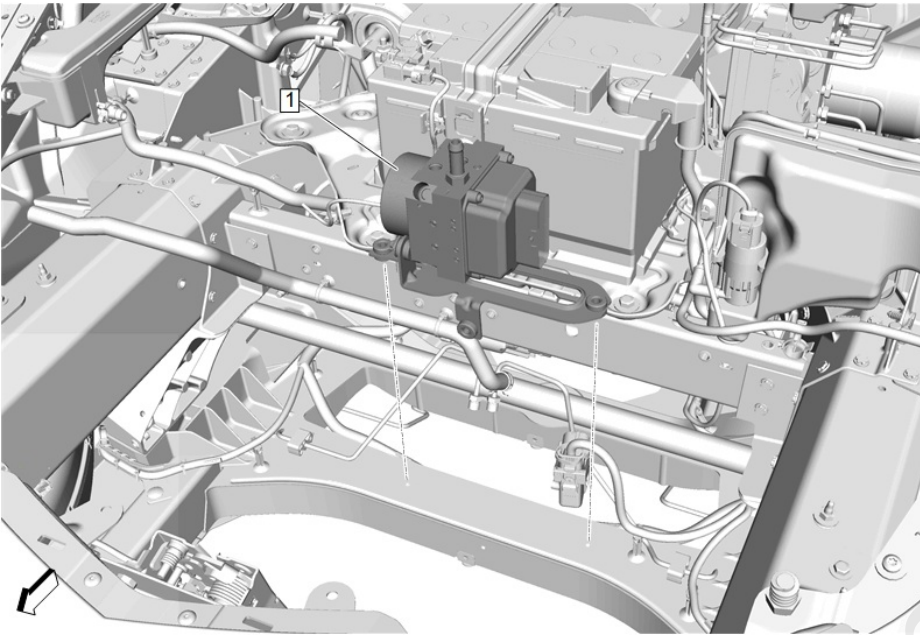
Left side shown, right side similar.

53. Front Lower Control Arm - Left Side and Right Side (1) >> Install [2>x] - Front Lower Control Arm Replacement



54. [Click here for full size](#)

55. Intermediate Steering Shaft (3) @ Steering Gear >> Install - Intermediate Steering Shaft Replacement



56. [Click here for full size](#)
57. Front Suspension Leveling/Lifting Hydraulic Power Pack Module (1) >> Install - Front Suspension Leveling/Lifting Hydraulic Power Pack Module Replacement
58. [Click here for full size](#)
59. Crossbody Front Wiring Harness (2) >> Move into position
60. Body Front Wiring Harness Ground Bolt (1) >> Install and tighten [2>x]Ground Repair



- 61.

[Click here for full size](#)

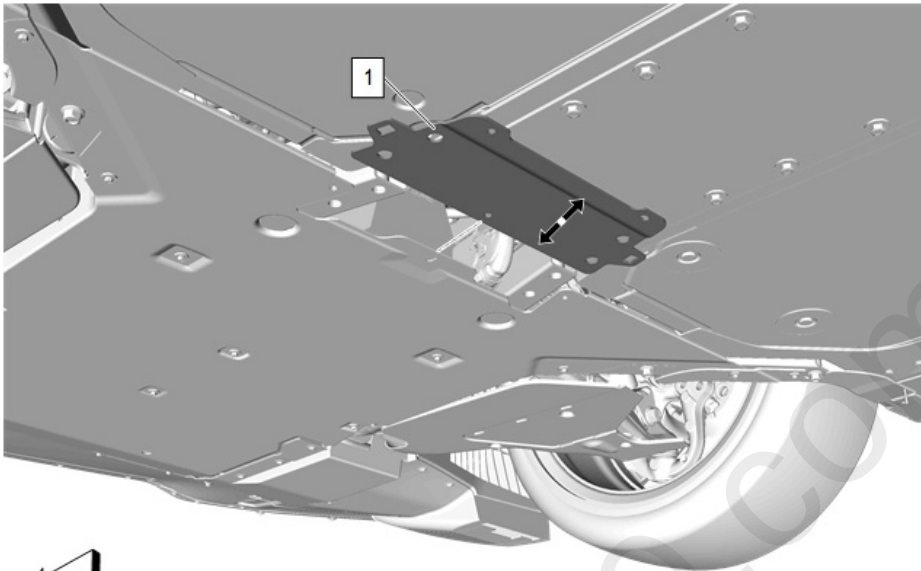
62. Front Compartment Front Panel (1) >> Install - Front Compartment Front Panel Replacement

63. [Click here for full size](#)

64. Floor Panel Number 1 Cross Bar Extension - Right Side (4>) >> Install - Floor Panel Number 1 Cross Bar Extension Replacement - Right Side

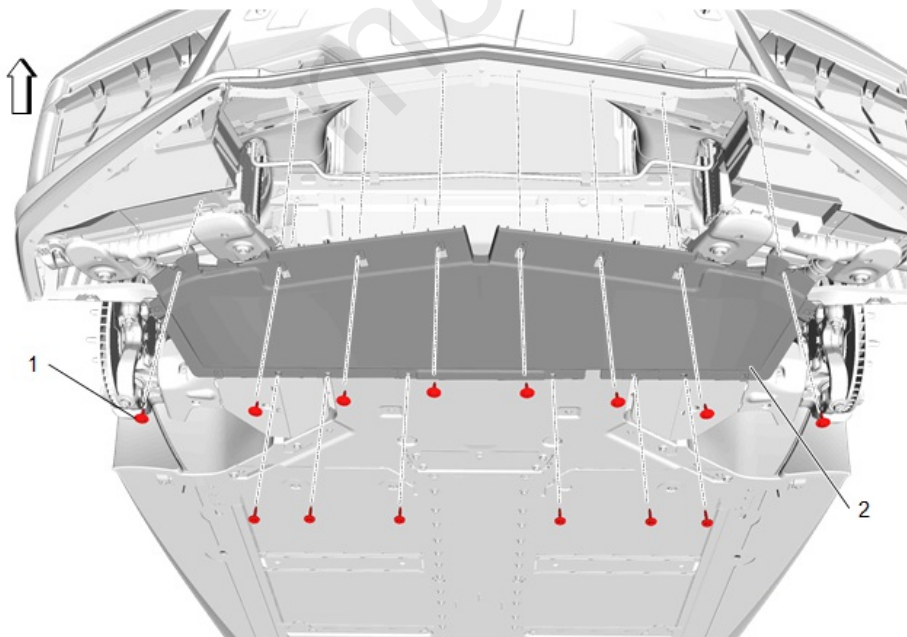
65. [Click here for full size](#)

66. Floor Panel Number 1 Cross Bar Extension - Left Side (4>) >> Install - Floor Panel Number 1 Cross Bar Extension Replacement - Left Side



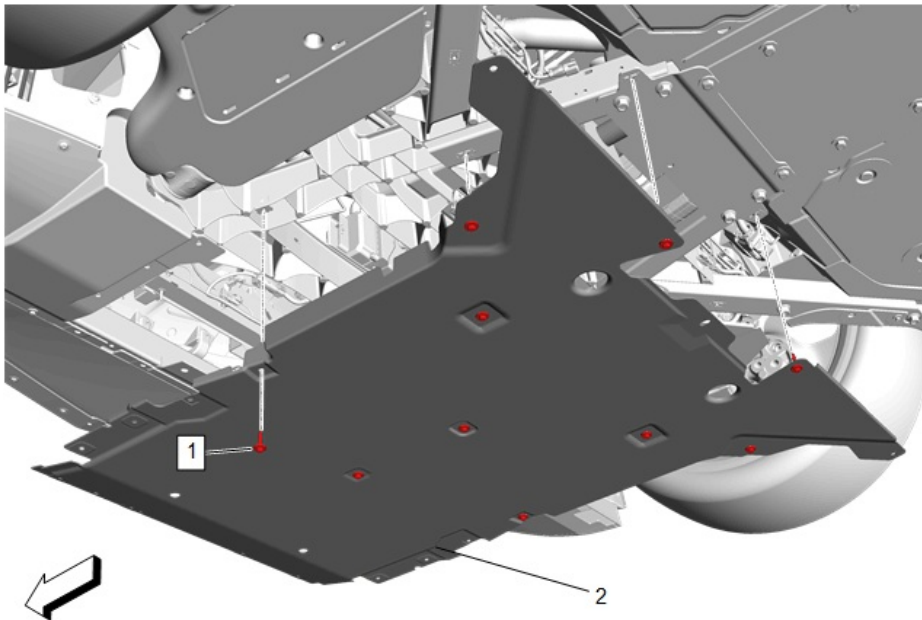
67. [Click here for full size](#)

68. Floor Panel Tunnel Panel Front Reinforcement (1) >> Install - Floor Panel Tunnel Panel Front Reinforcement Replacement - Tunnel Front



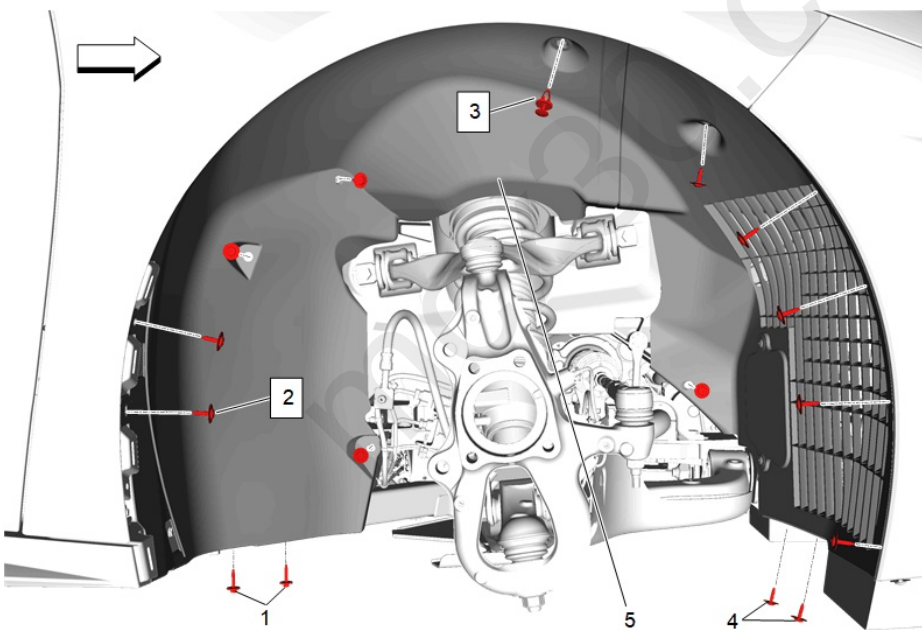
69. [Click here for full size](#)

70. Front Bumper Fascia Lower Stiffener (2) >> Install - Front Bumper Fascia Lower Stiffener Replacement



71.
[Click here for full size](#)

72. Front Compartment Insulator (2) >> Install - Front Compartment Insulator Replacement

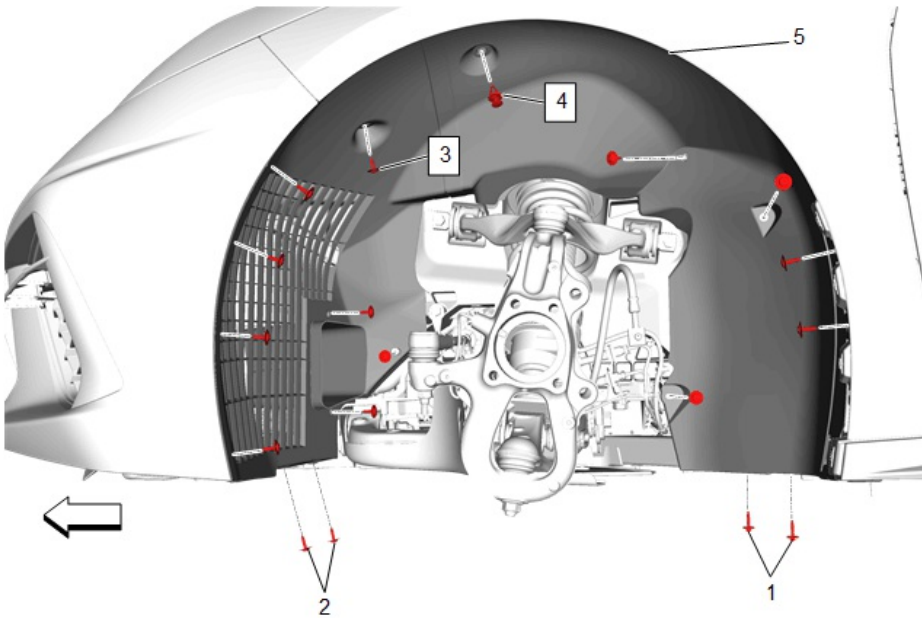


73.
[Click here for full size](#)

74. Note:

Some components not shown for graphic clarity.

75. Front Wheelhouse Liner - Right Side (5) >> Install - Front Wheelhouse Liner Replacement - Right Side



76. [Click here for full size](#)
77. Note:

Some components not shown for graphic clarity.

78. Front Wheelhouse Liner - Left Side (5) >> Install - Front Wheelhouse Liner Replacement - Left Side
79. Bleed the front hydraulic suspension. Front Hydraulic Suspension Bleeding
80. Bleed the brake system. Hydraulic Brake System Bleeding
81. Inspect for fluid leaks.
82. Align the vehicle only if replacing the drivetrain and front suspension cradle. Wheel Alignment Measurement