

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

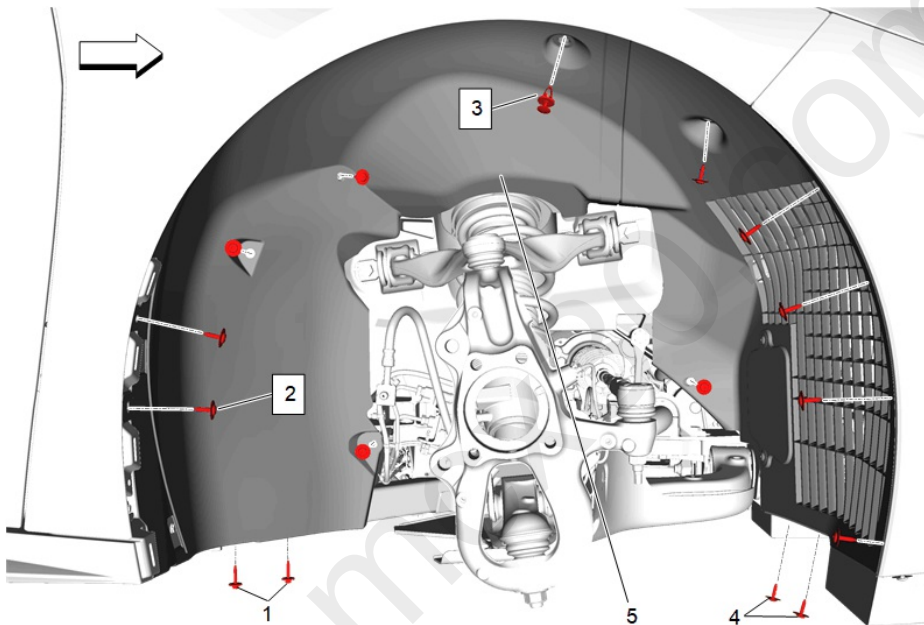
1. **Body Repair**
2. **Frame and Underbody**
3. **Repair Instructions**
- 4.

Drivetrain and Front Suspension Cradle Removal and Installation (Without E60)

Removal Procedure

Note:

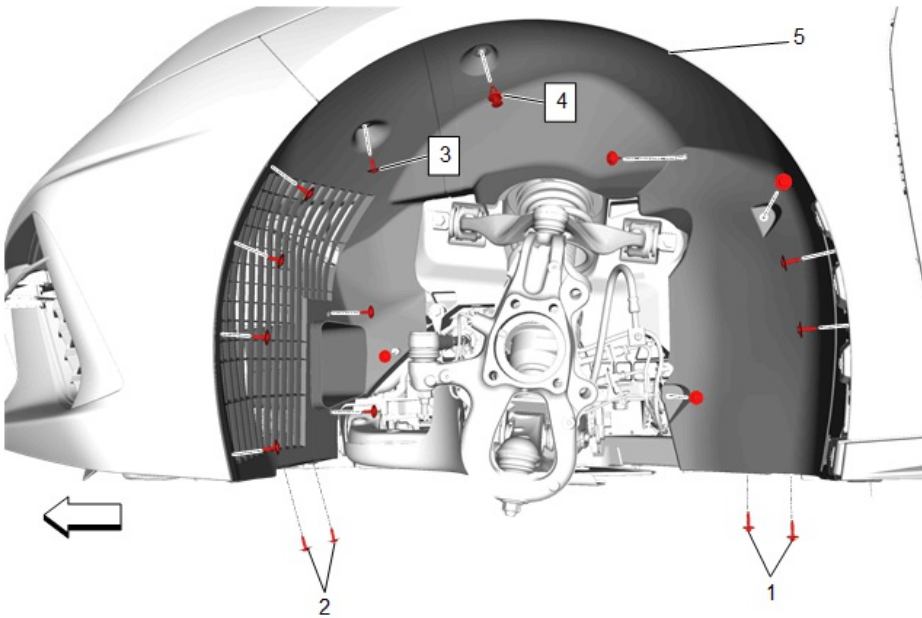
Vehicle alignment is not required if the cradle is being lowered or dropped to perform another procedure. This vehicle is equipped with a cradle to body aligning feature: cradle to body through holes or self-aligning pins that are part of the cradle or body. Only align if replacing the cradle with a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

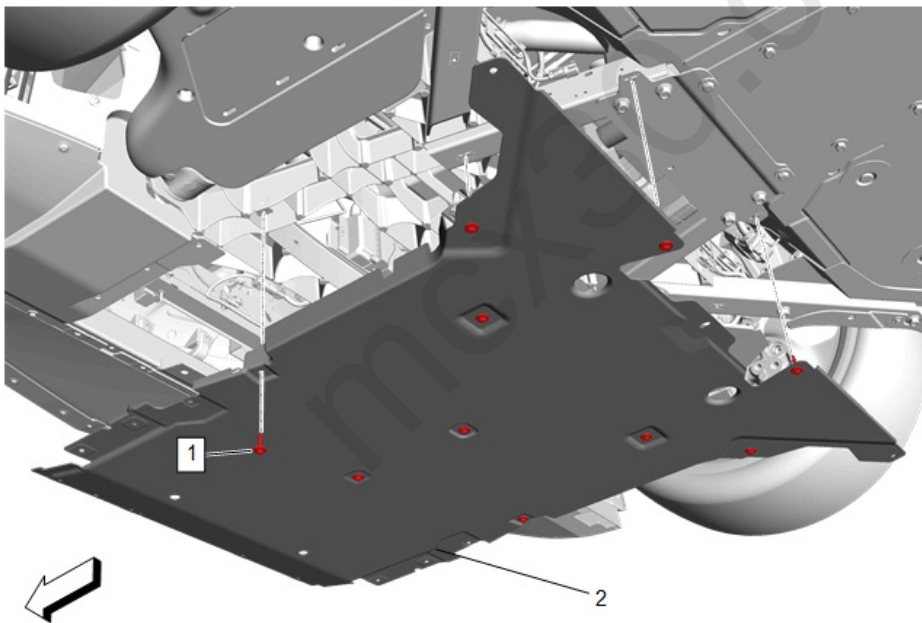


4. [Click here for full size](#)

5. Note:

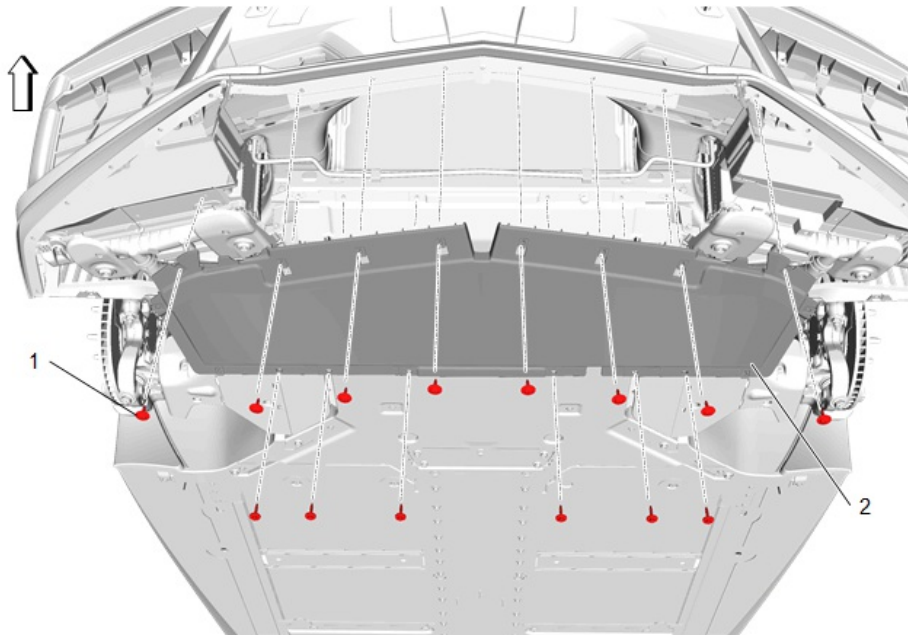
Some components not shown for graphic clarity.

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



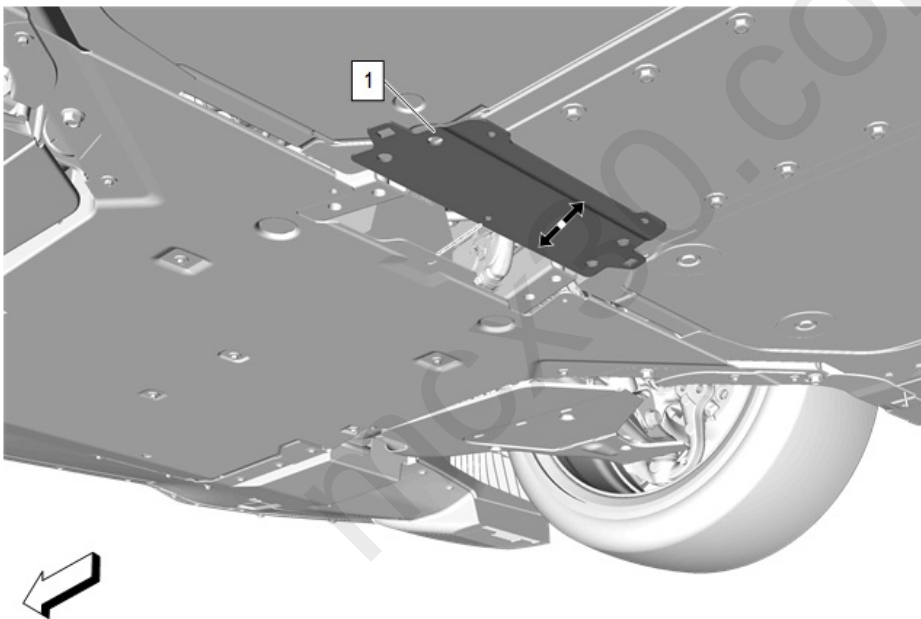
7. [Click here for full size](#)

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](#)

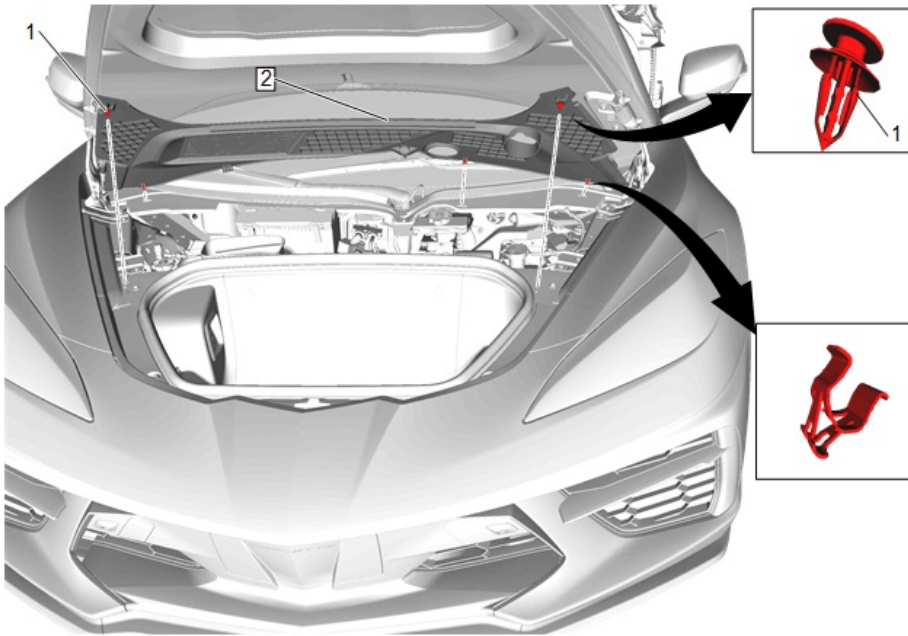
12. Floor Panel Tunnel Panel Front Reinforcement (1) >> Remove - Floor Panel Tunnel Panel Front Reinforcement Replacement - Tunnel Front

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

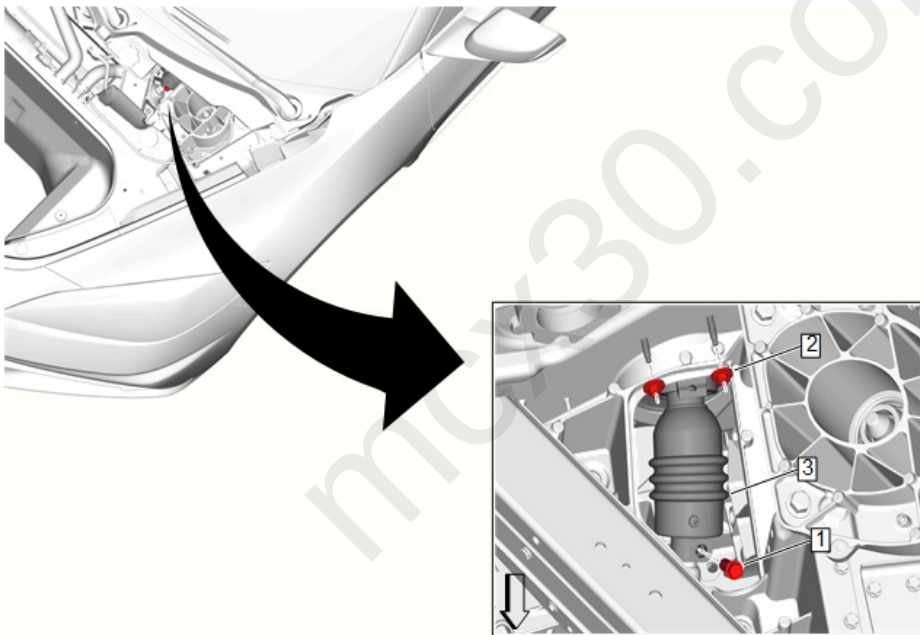
15. [Click here for full size](#)

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



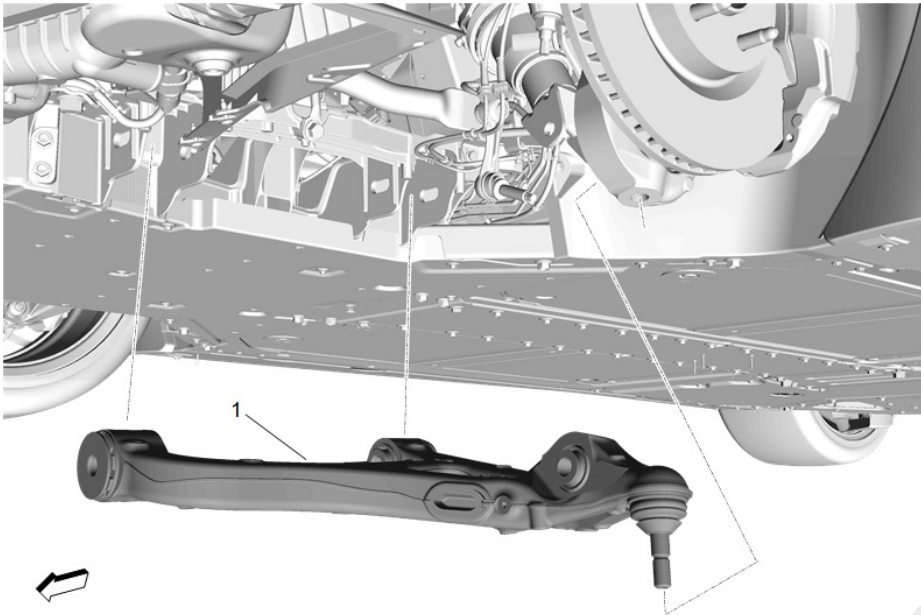
17.
[Click here for full size](#)

18. Front Compartment Rear Access Cover (2) >>> Remove - Front Compartment Rear Access Cover Replacement



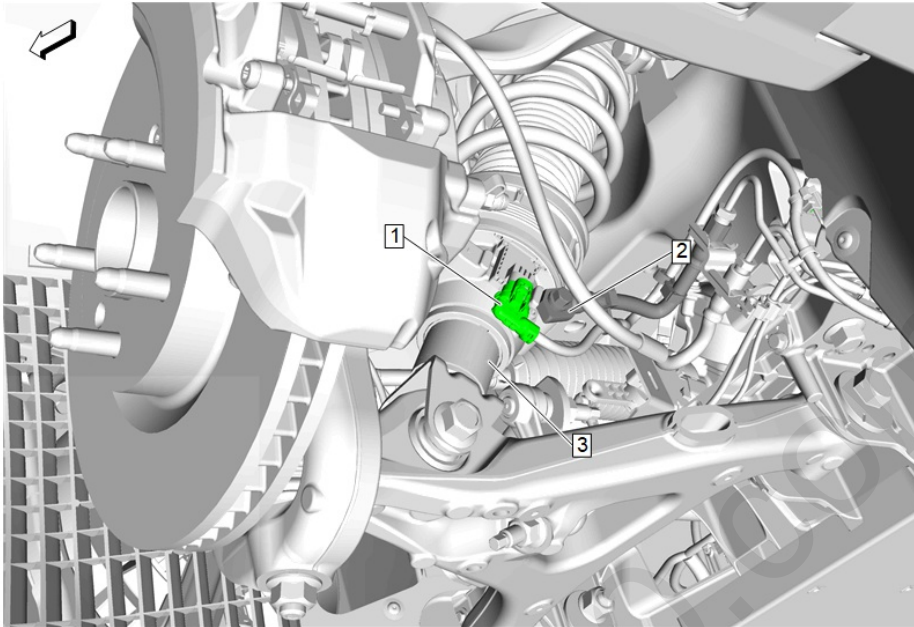
19.
[Click here for full size](#)

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

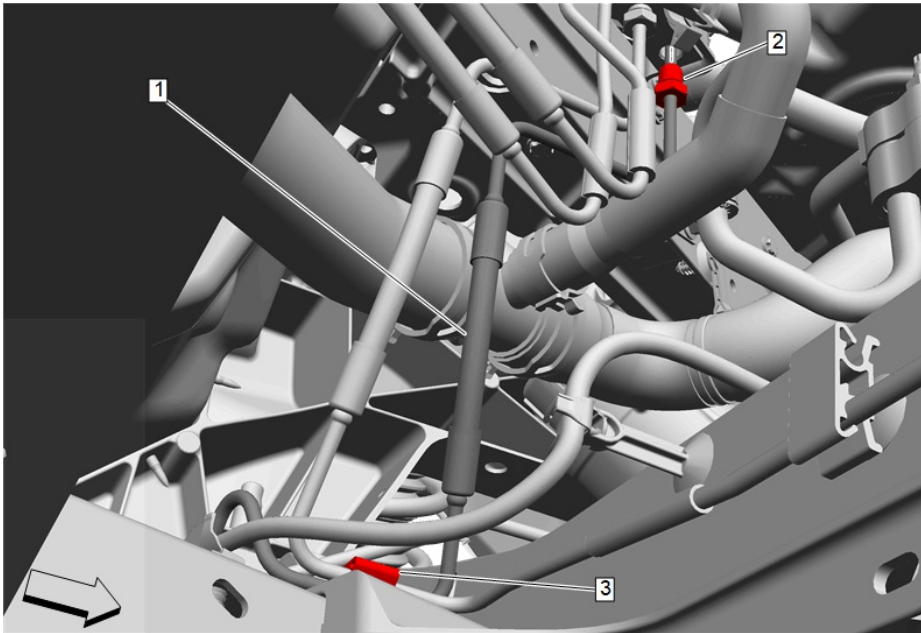


21. [Click here for full size](#)
22. Note:
Left side shown, right side similar.
23. Front Lower Control Arm - Left Side and Right Side (1) >> Remove [2>x] - Front Lower Control Arm Replacement
24. [Click here for full size](#)
25. Note:
Left side shown, right side similar.
26. Steering Linkage Outer Tie Rod - Left Side and Right Side (1) >> Remove [2>x] - Steering Linkage Outer Tie Rod Replacement
27. [Click here for full size](#)
28. Note:
Some components not shown for graphic clarity.
29. Body Front Wiring Harness Ground Bolt (1) >> Remove [2>x]
30. Crossbody Front Wiring Harness (2) >> Reposition
31. [Click here for full size](#)
32. Radiator Support Brace Bolt - Right Side (1) @ Drivetrain and Front Suspension Cradle >> Remove - Radiator Support Brace Replacement - Right Side
33. [Click here for full size](#)
34. Radiator Support Brace Bolt - Left Side (1) @ Drivetrain and Front Suspension Cradle >> Remove - Radiator Support Brace Replacement - Left Side
35. [Click here for full size](#)
36. Note:
Left side shown, right side similar.
37. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Nut (1) @ Front Brake Hose - Left Side and Right Side >> Remove [2>x]

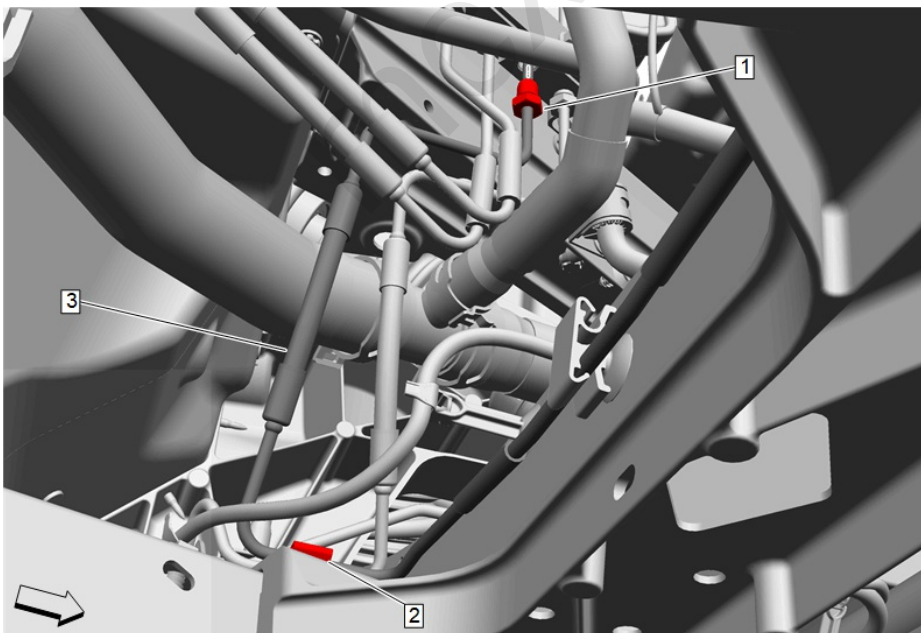
- 38.
- Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Left Side
 - Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Right Side
39. Plug the left and right front brake hose inlet (3) to prevent brake fluid loss and contamination.
40. Cap the left and right brake pressure modulator valve master cylinder reservoir front pipe (2) to prevent brake fluid loss and contamination.



41. [Click here for full size](#)
42. Note:
- Left side shown, right side similar.
43. Electrical Connector - Left Side and Right Side (1) @ Front Shock Absorber (3) >> Disconnect [2>x]



44. [Click here for full size](#)
45. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Nut (2) @ Front Brake Crossover Pipe Connector - Left Side >> Remove
46. Cap the left brake pressure modulator valve master cylinder reservoir front pipe (1) to prevent brake fluid loss and contamination.



47. [Click here for full size](#)
48. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Nut (1) @ Front Brake Crossover Pipe Connector - Right Side >> Remove

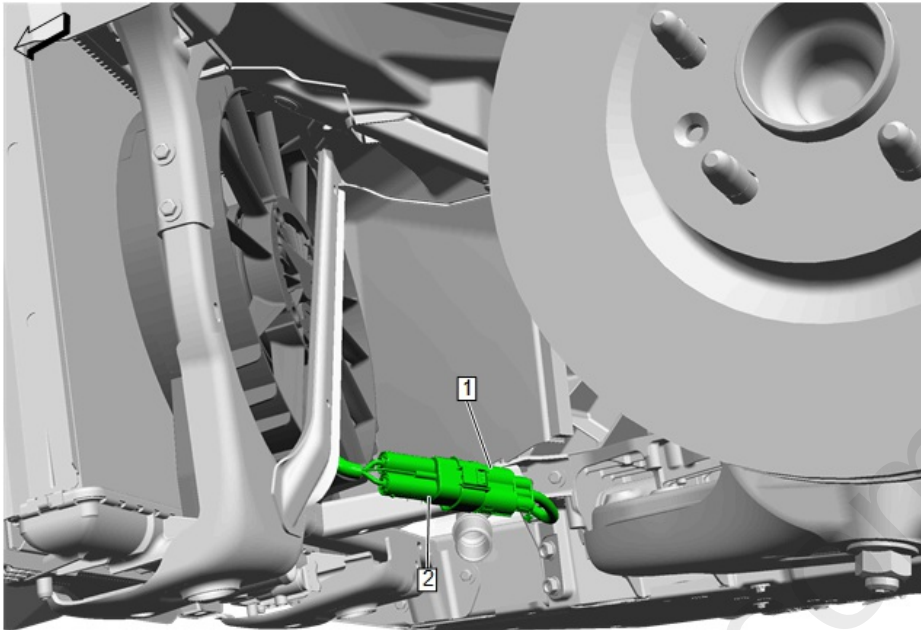
49. Cap the right brake pressure modulator valve master cylinder reservoir front pipe (3) to prevent brake fluid loss and contamination.

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

51. Note:

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

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



53.

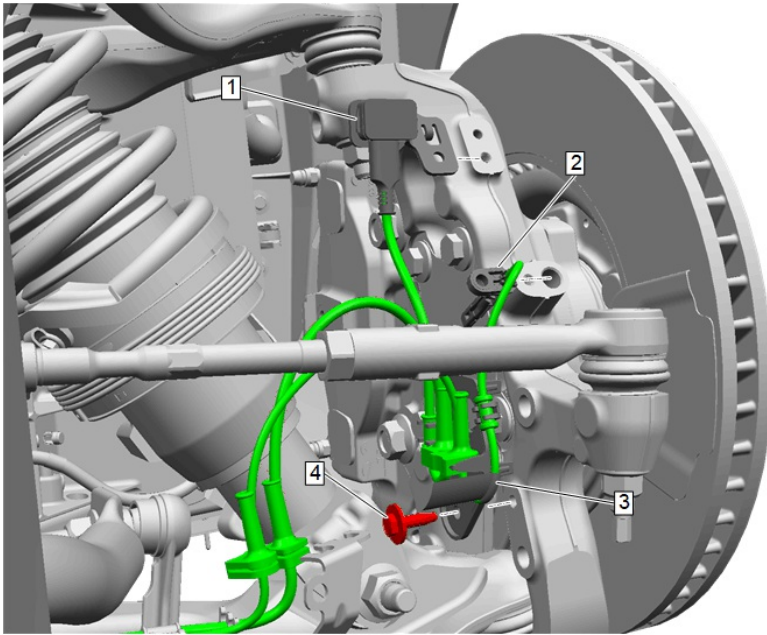
[Click here for full size](#)

54. Note:

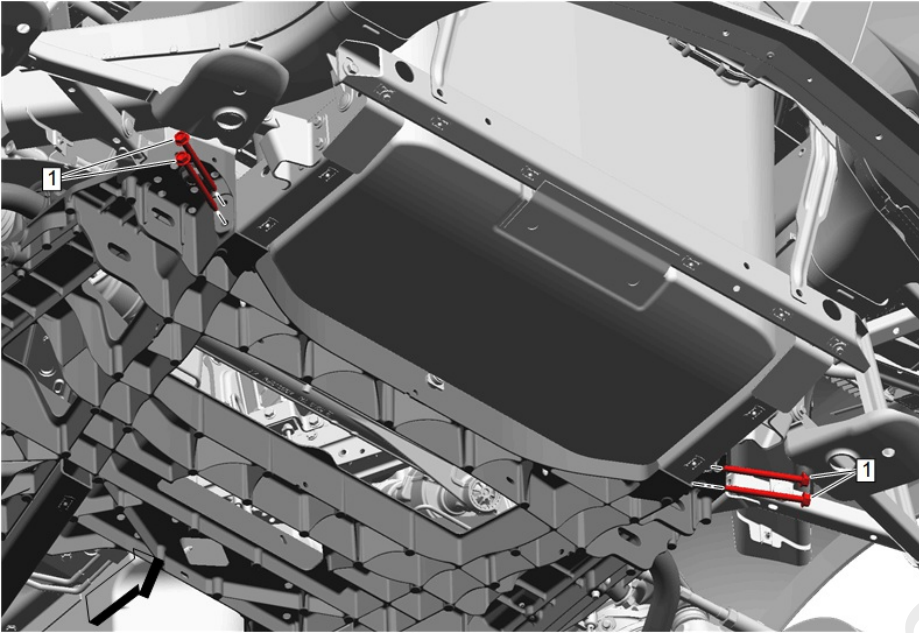
Left side shown, right side similar.

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

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



57.
Click here for full size
58. { 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
59. Front Wheel Speed Sensor - Left Side and Right Side (2) @ Steering Knuckle >> Remove [2>x]
- 60.
- Front Wheel Speed Sensor Replacement - Left Side
 - Front Wheel Speed Sensor Replacement - Right Side
61. Front Wheel Speed Sensor Bracket Bolt (4) @ Steering Knuckle >> Remove
62. Wheel Speed Sensor Bracket - Left Side and Right Side (3) >> Reposition [2>x]



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

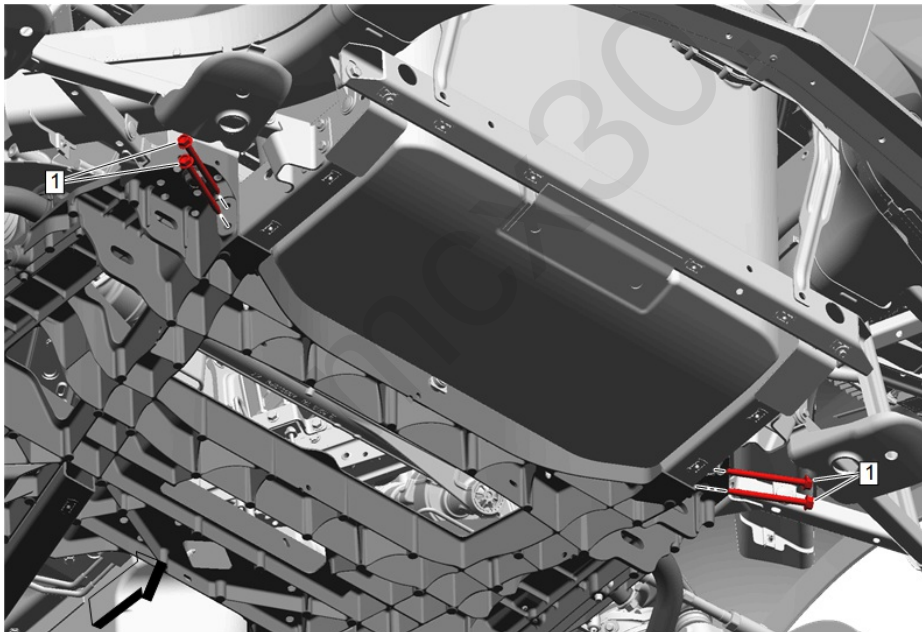
10. Remove jack stands from beneath vehicle.

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

12. Note:

Left side shown, right side similar.

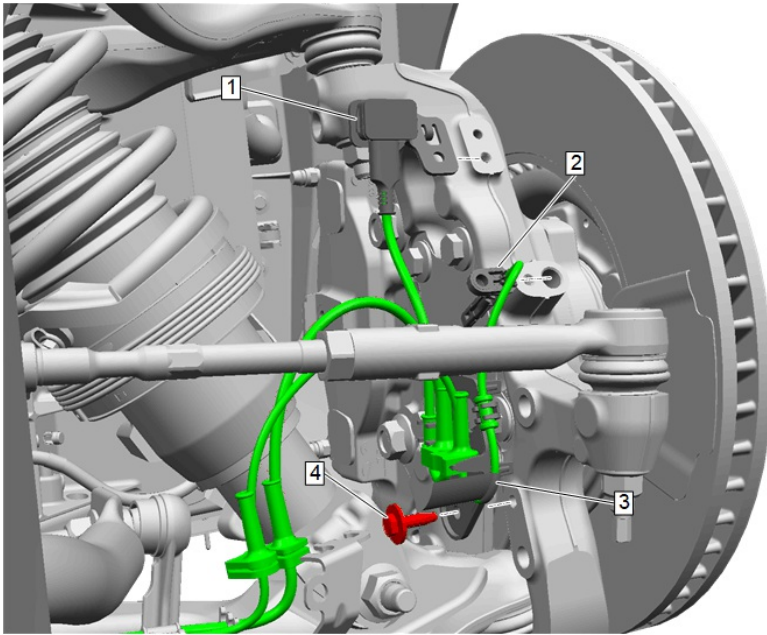
13. Front Cradle Brace - Left Side and Right Side (2>) >> Install [2>x] - Front Cradle Brace Replacement



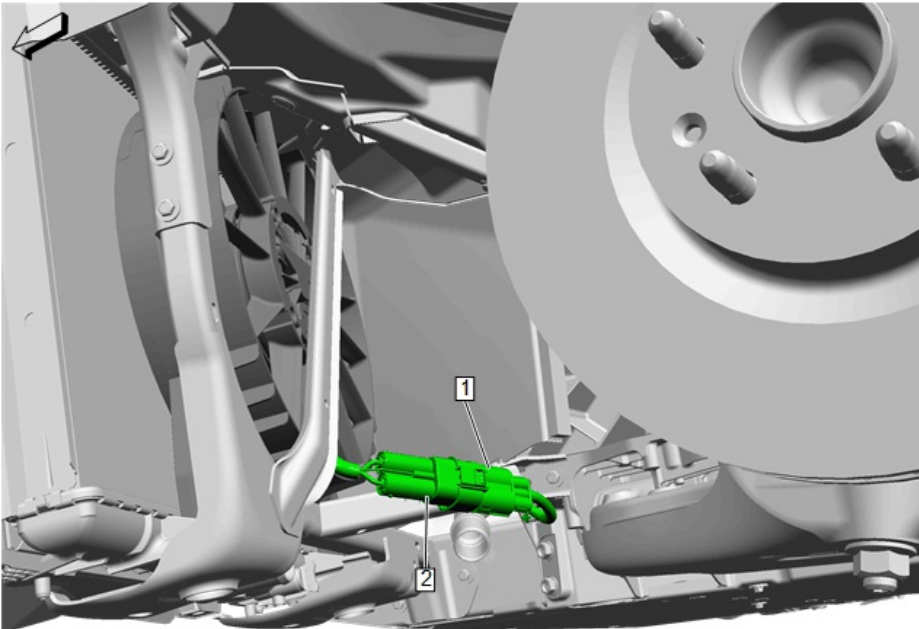
14.

[Click here for full size](#)

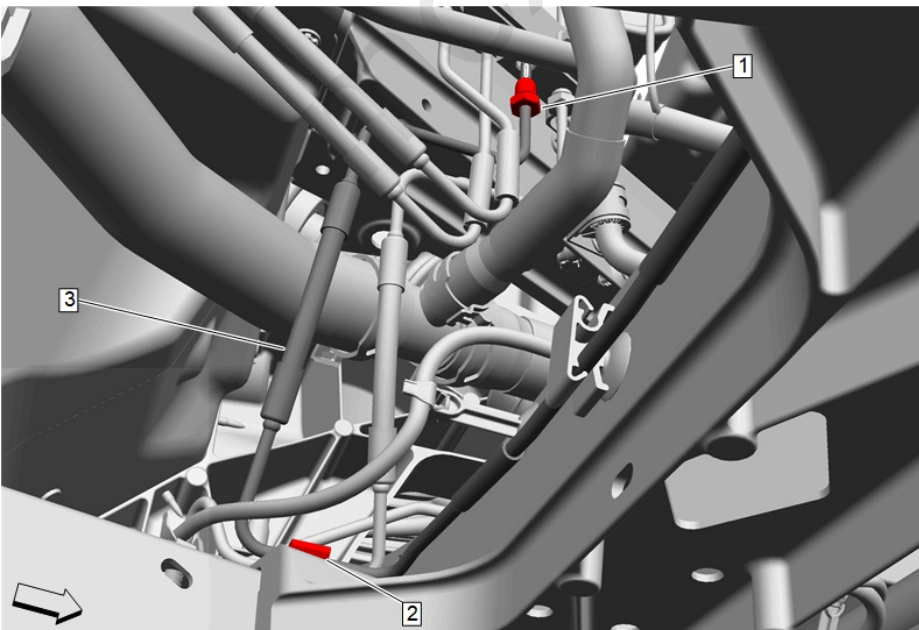
15. Radiator Support Bolt (1) >> Install and tighten [4x]22 N-m (16 lb ft)



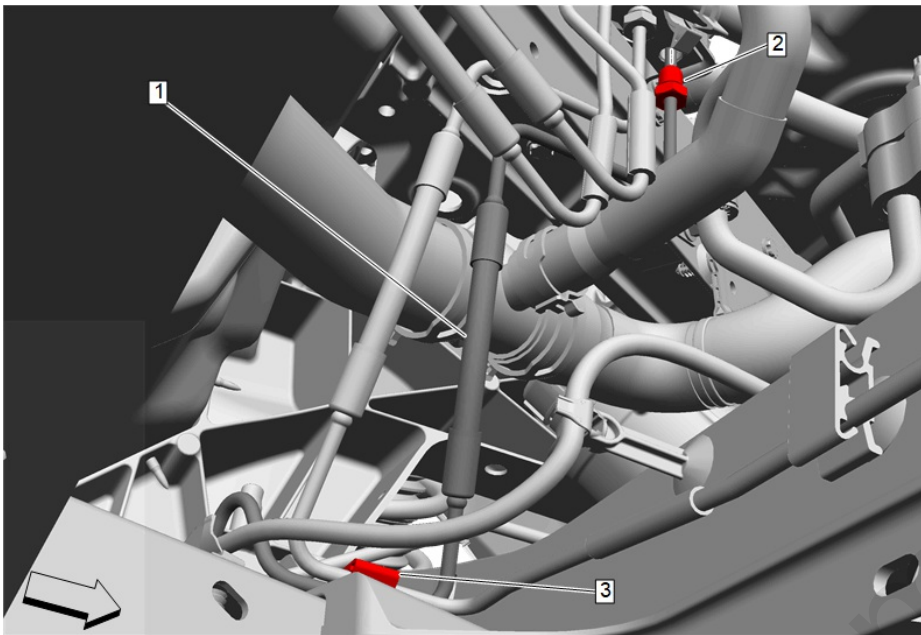
16. [Click here for full size](#)
17. Note:
Left side shown, right side similar.
18. Wheel Speed Sensor Bracket - Left Side and Right Side (3) >> Install [2>x]
19. Front Wheel Speed Sensor Bracket Bolt - Left Side and Right Side (4) @ Steering Knuckle >> Install and tighten [2>x]5 N-m (44 lb in)
20.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



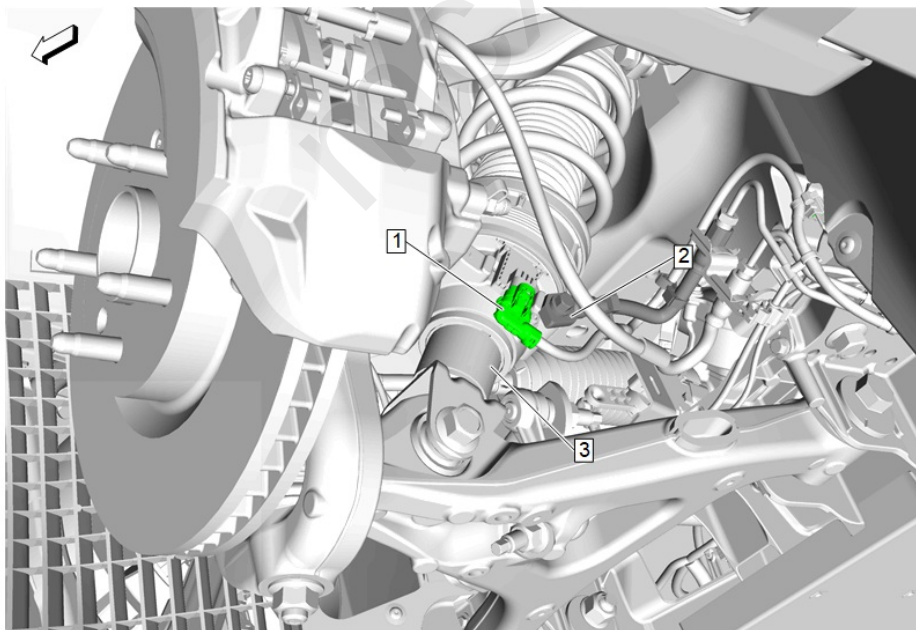
23. [Click here for full size](#)
24. Note:
- Left side shown, right side similar.
25. Connect the left side and right side electrical connector (1) to the left side and right side electrical engine cooler fan electrical connector (2).
26. [Click here for full size](#)
27. Note:
- The crossbody front 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. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe - Right Side (3) @ Front Brake Crossover Pipe Connector >>



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



33. [Click here for full size](#)
34. Note:
Left side shown, right side similar.

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

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

37. Note:

Left side shown, right side similar.

38. Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe - Left Side and Right Side (2) >> Install [2>x]

39.

- Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Left Side
- Brake Pressure Modulator Valve Master Cylinder Reservoir Front Pipe Replacement - Right Side

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

41. Radiator Support Brace Bolt - Left Side (1) @ Drivetrain and Front Suspension Cradle >> Install - Radiator Support Brace Replacement - Left Side

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

43. Radiator Support Brace Bolt - Right Side (1) @ Drivetrain and Front Suspension Cradle >> Install - Radiator Support Brace Replacement - Right Side

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

45. Note:

Some components not shown for graphic clarity.

46. Crossbody Front Wiring Harness (2) >> Move into position

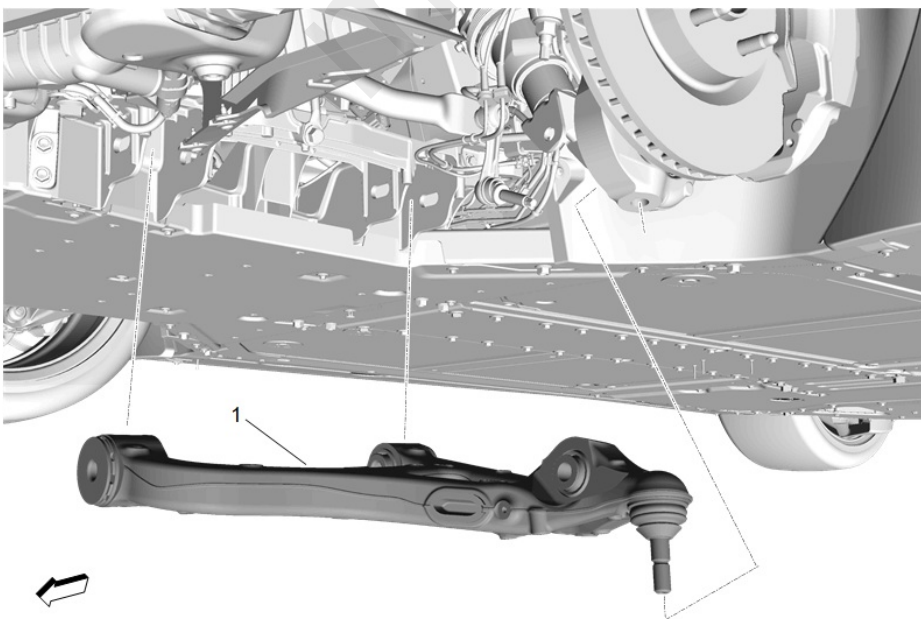
47. Body Front Wiring Harness Ground Bolt (1) >> Install and tighten [2>x] - Ground Repair

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



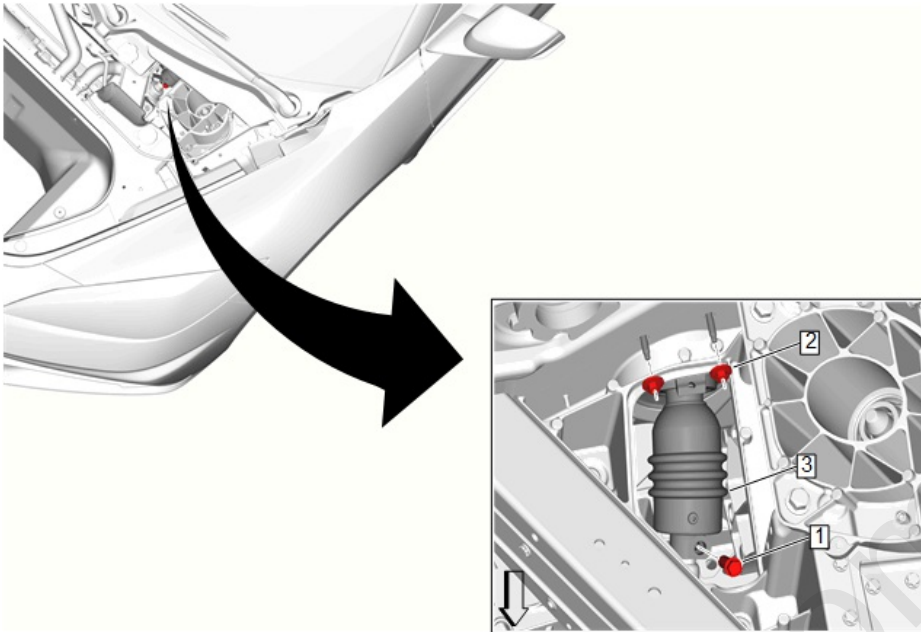
51.

[Click here for full size](#)

52. Note:

Left side shown, right side similar.

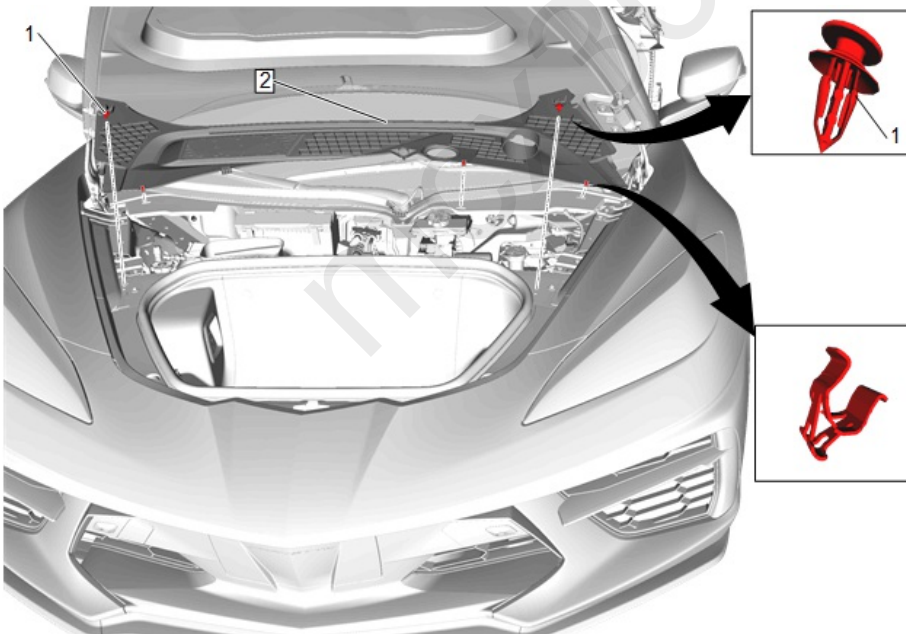
53. Front Lower Control Arm - Left Side and Right Side (1) >> Install [2>x] - Front Lower Control Arm Replacement



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 Compartment Rear Access Cover (2) >> Install - Front Compartment Rear Access Cover Replacement

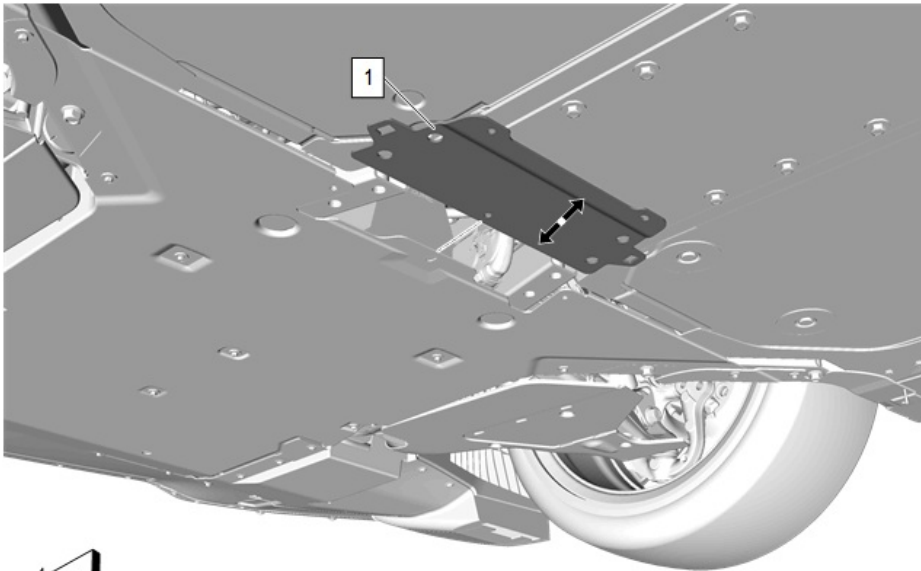
58. [Click here for full size](#)

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

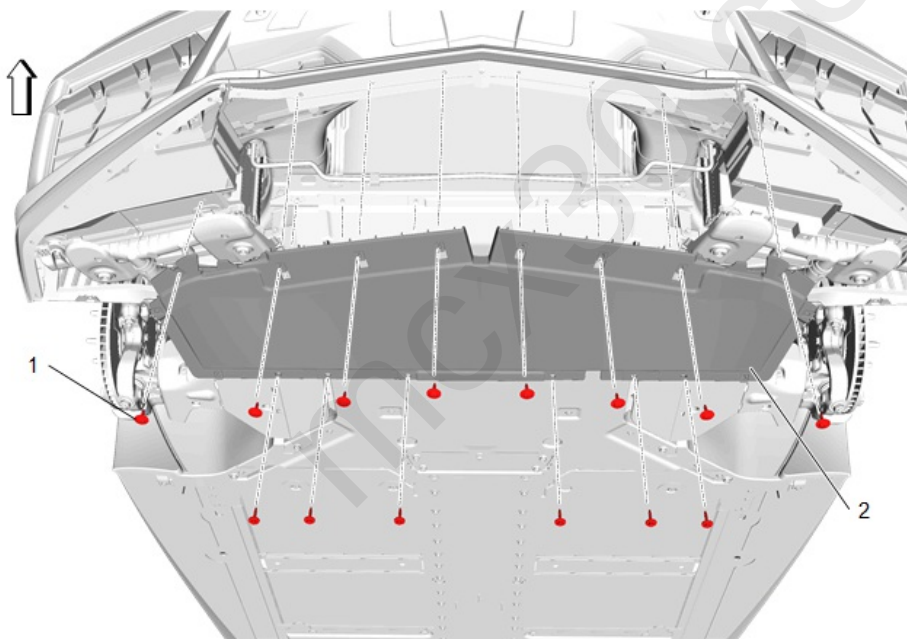
60. [Click here for full size](#)

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

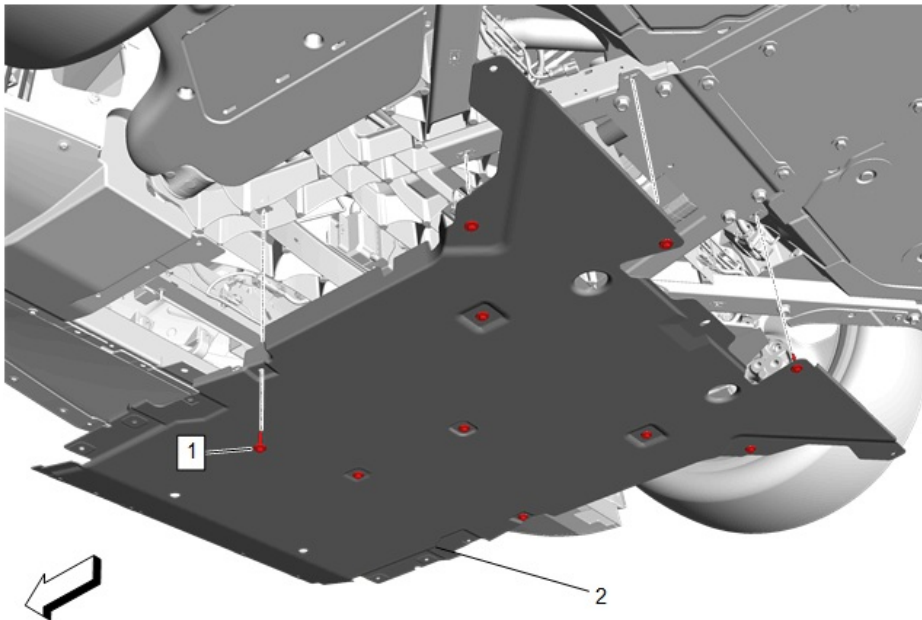
Side



62. [Click here for full size](#)
63. Floor Panel Tunnel Panel Front Reinforcement (1) >> Install - Floor Panel Tunnel Panel Front Reinforcement Replacement - Tunnel Front

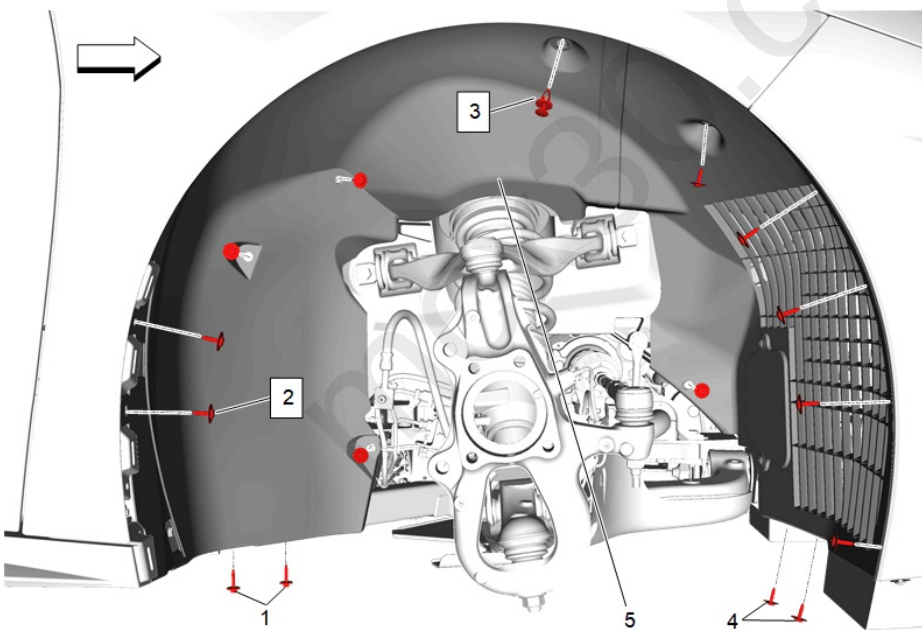


64. [Click here for full size](#)
65. Front Bumper Fascia Lower Stiffener (2) >> Install - Front Bumper Fascia Lower Stiffener Replacement



66.
[Click here for full size](#)

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

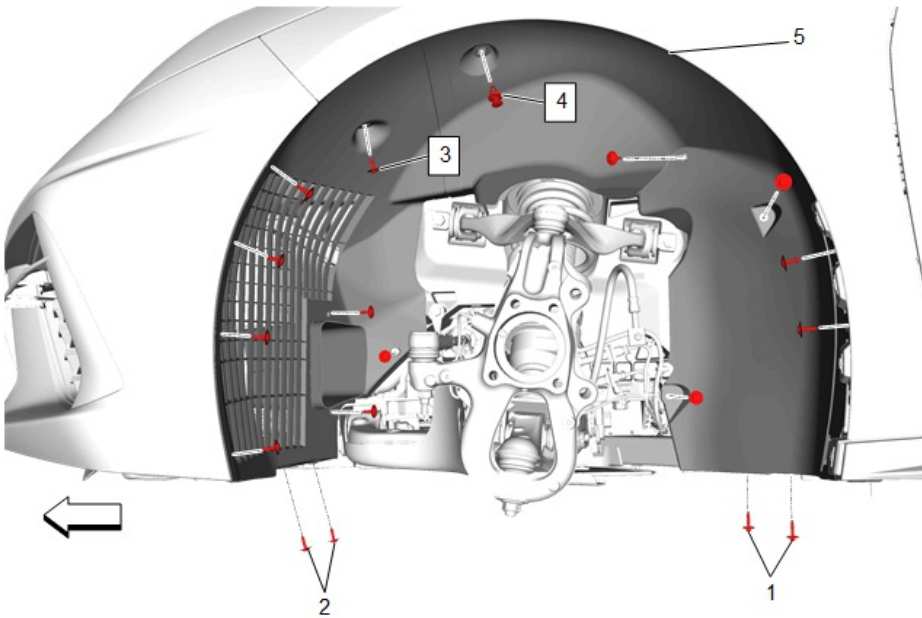


68.
[Click here for full size](#)

69. Note:

Some components not shown for graphic clarity.

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



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

72. Note:

Some components not shown for graphic clarity.

73. Front Wheelhouse Liner - Left Side (5) >> Install - Front Wheelhouse Liner Replacement - Left Side

74. Bleed the brake system. Hydraulic Brake System Bleeding

75. Inspect for fluid leaks.

76. Align the vehicle only if replacing the drivetrain and front suspension cradle. Wheel Alignment Measurement