

Frame and Underbody

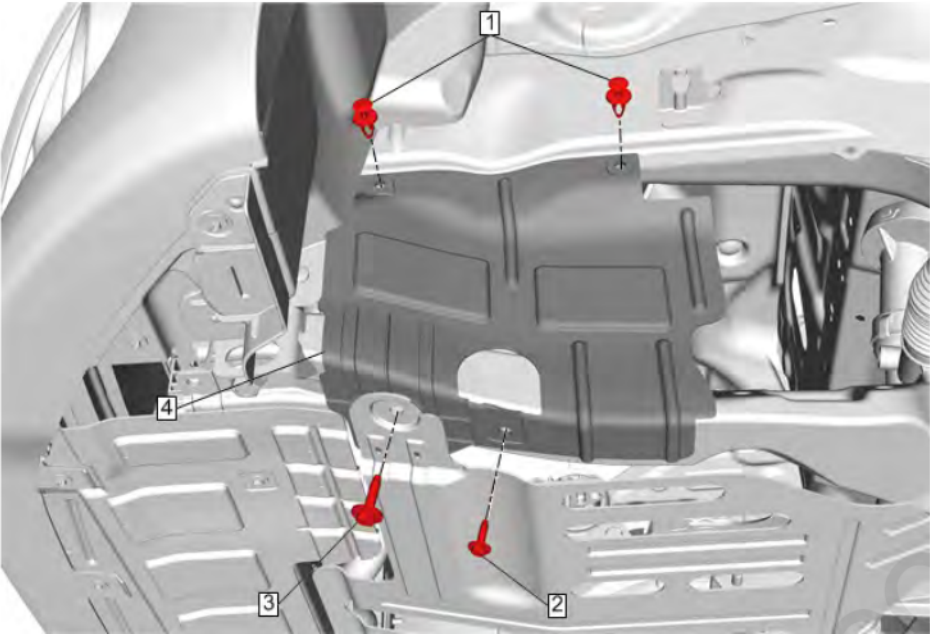
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Repair Instructions

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- 1. BODY REPAIR
- 2. FRAME AND UNDERBODY
- 3. REPAIR INSTRUCTIONS
- 4.

Front Compartment Splash Shield Replacement



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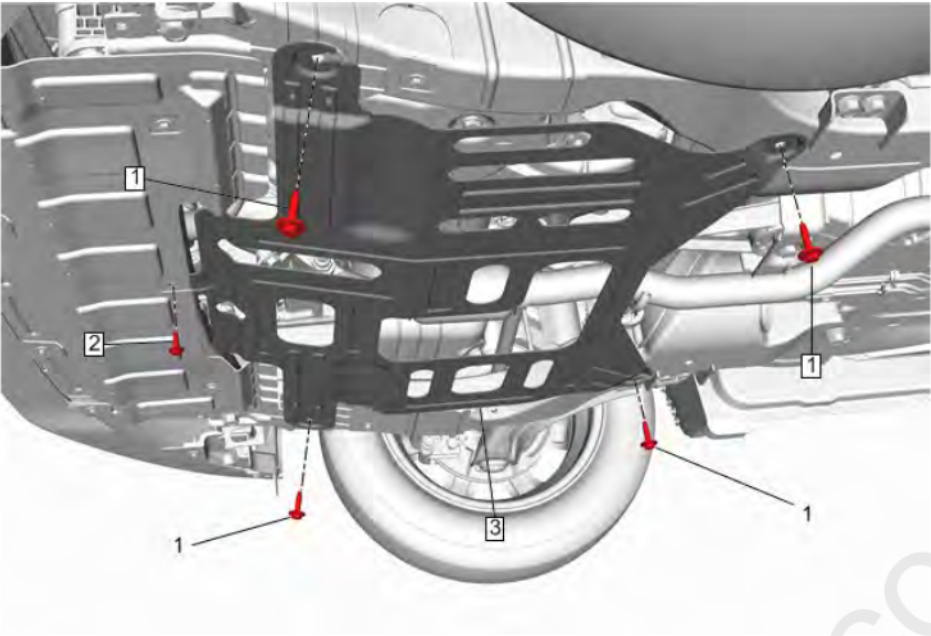
Callout	Component Name
1	Front Compartment Splash Shield Retainer (Qtyâ€™%02)
2	Front Compartment Splash Shield Bolt
	Caution:
	Refer to Fastener Caution .
3	Tighten
	9â€™%00N-m (80â€™%0lbâ€™%0in)
	Drivetrain and Front Suspension Frame Skid Plate Bolt (Qtyâ€™%01) {If equipped}
4	Tighten
	22â€™%00N-m (16â€™%0lbâ€™%0ft)
	Front Compartment Splash Shield

Related Part Information

Part Name	Catalog Name	Part Code
Front Compartment Splash Shield SHIELD,F/CMPT SPH 5460B		

- 1. BODY REPAIR
- 2. FRAME AND UNDERBODY
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Drivetrain and Front Suspension Frame Skid Plate Replacement



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Callout	Component Name
Preliminary Procedure	
Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .	
	Drivetrain and Front Suspension Frame Skid Plate Bolt [4x]
1	Caution:
	Refer to Fastener Caution .
	Tighten 22â€%N-m (16â€%lbâ€%ft)
2	Drivetrain and Front Suspension Frame Skid Plate Bolt
	Tighten 9â€%N-m (80â€%lbâ€%in)
3	Drivetrain and Front Suspension Frame Skid Plate

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Drivetrain and Front Suspension Frame Replacement (Electric Power Steering)

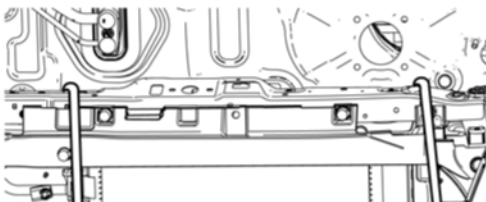
Special Tools

EN-49802 Cradle Supporter

For equivalent regional tools refer to [Special Tools](#)

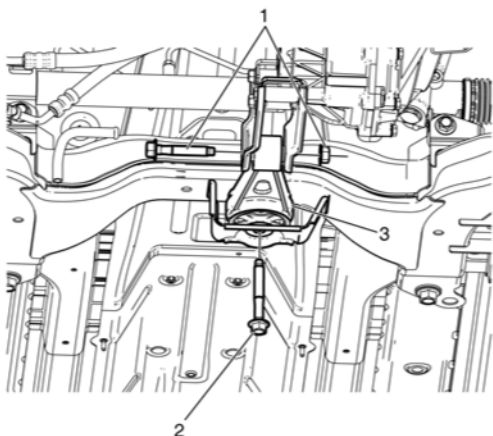
Removal Procedure

1. Disconnect the intermediate steering shaft from the steering gear. Refer to [Intermediate Steering Shaft Replacement](#).
2. Raise and support the vehicle. Refer to [Vehicle Lifting and Jacking Caution](#).
3. Remove the front wheel and wheel assemblies. Refer to [Tire and Wheel Removal and Installation](#).
4. Remove the drivetrain and front suspension frame skid plate, if equipped. Refer to [Drivetrain and Front Suspension Frame Skid Plate Replacement](#).
5. Remove both front compartment splash shields. Refer to [Front Compartment Splash Shield Replacement](#).
6. Remove the front under cover.
7. Remove both of the front wheel house linings.
8. Remove the front bumper fascia. Refer to [Front Bumper Fascia Replacement](#).
9. Remove the lower wind guard.





10. [Click here for full size](#)
11. Secure the cooling module to the left and right of the upper body structure with a wire.
12. Separate both of the steering linkage outer tie rod ends from the steering knuckles. Refer to [Steering Linkage Outer Tie Rod Replacement](#).
13. Separate both of the control arm ball joints from the steering knuckles. Refer to [Lower Control Arm Replacement](#).
14. Remove both of the upper stabilizer shaft link nuts and separate the left and right stabilizer shaft link from the strut. Refer to [Stabilizer Shaft Link Replacement](#).
15. Remove the exhaust pipe. Refer to [Exhaust Pipe Replacement](#).

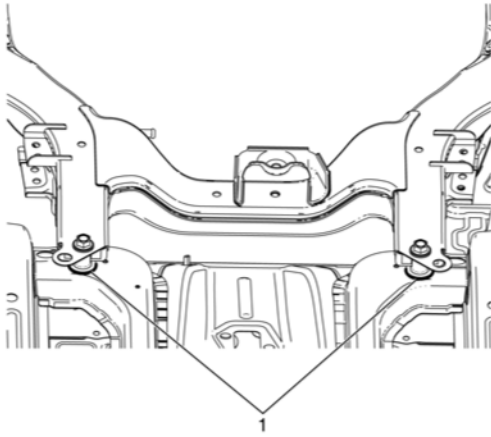


16.

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17. Remove the torque strut to transmission mounting bracket bolt and nut(1) and the torque strut to frame bolt(2).

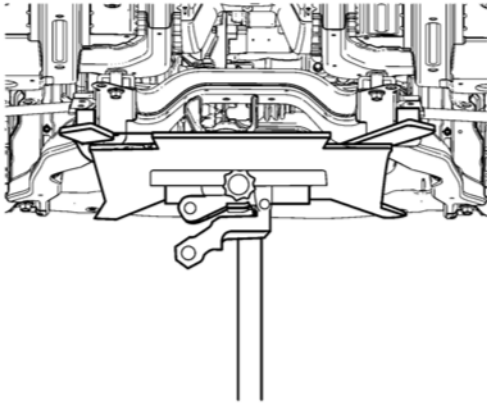
18. Remove the torque strut(3) from the frame.



19.

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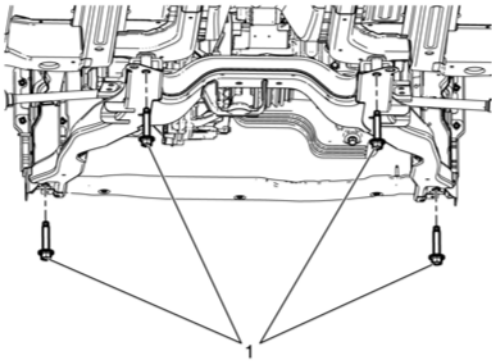
20. Mark the frame to body positions (1) with a paint pen or permanent marker.



21.

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22. Install the *EN-49802* cradle supporter to a hydraulic jack stand and support the frame.



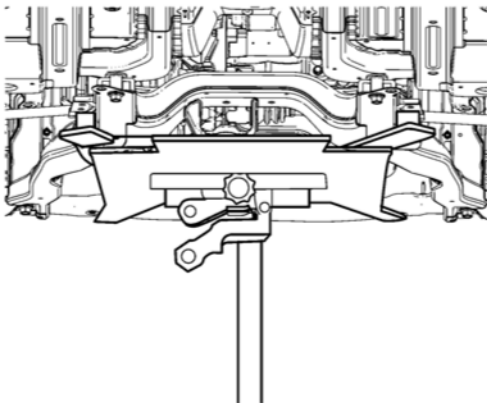
23. [Click here for full size](#)
24. Remove the frame to body bolts (1).
25. Slowly lower the jack stand and remove the frame from the vehicle.
26. Remove the following components if replacing the frame:

27.

1. Remove the stabilizer shaft from the frame. Refer to [Stabilizer Shaft Replacement](#).
2. Remove the control arms from the frame. Refer to [Lower Control Arm Replacement](#).
3. Remove the radiator brackets from the frame.
4. Remove the front lower impact bar.

Installation Procedure

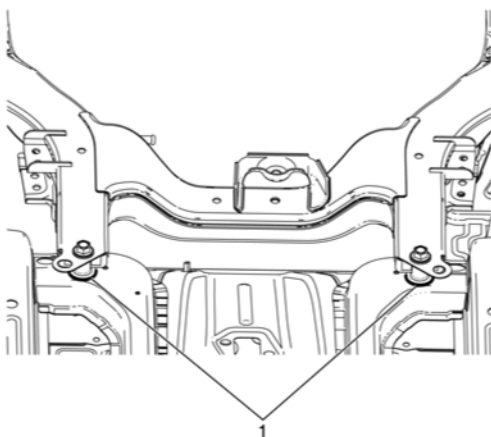
1. Install the following components to the frame if removed:
2.
 1. Install the front lower impact bar to the frame.
 2. Install the radiator brackets to the frame.
 3. Install the control arms to the frame. Refer to [Lower Control Arm Replacement](#).
 4. Install the stabilizer shaft to the frame. Refer to [Stabilizer Shaft Replacement](#).



3.

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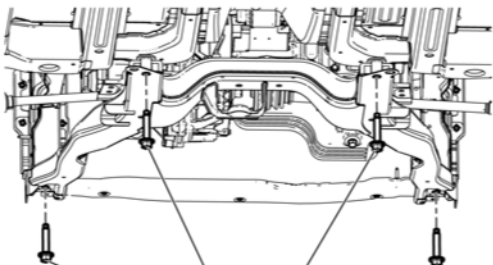
4. With the frame on the *EN-49802* cradle supporter and hydraulic jack stand, raise the frame to the vehicle.



5.

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6. Hand start all the frame to body retaining bolts while aligning the frame to the paint marks(1).





7.

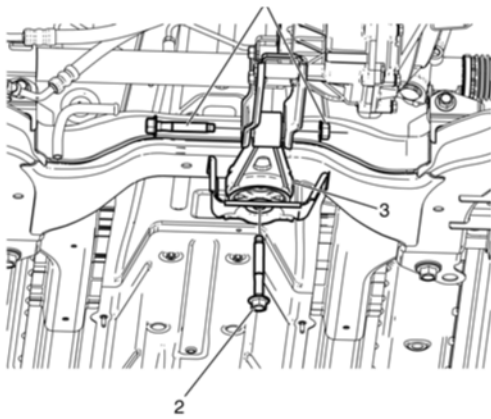
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8. Caution:

Refer to [Fastener Caution](#).

9. Tighten the frame to body retaining bolts (1) to 170 N-m (125 lb-ft).

10. Lower the jack stand and remove the *EN-49802* cradle supporter.



11. [Click here for full size](#)
12. Install the torque strut(3) from the frame.
13. Install the torque strut to the frame bolt(2) and tighten to 100â€‰N-m (74â€‰lbâ€‰ft).
14. Install the torque strut to the transmission mounting bracket bolt and nut(1) and tighten to 80â€‰N-m (59â€‰lbâ€‰ft).
15. Install the exhaust pipe. Refer to [Exhaust Pipe Replacement](#).
16. Connect both of the stabilizer shaft links to the struts and tighten the upper stabilizer shaft link nuts. Refer to [Stabilizer Shaft Link Replacement](#).
17. Install both of the control arm ball joints to the steering knuckles. Refer to [Lower Control Arm Replacement](#).
18. Install both of the steering linkage outer tie rod ends to the steering knuckles. Refer to [Steering Linkage Outer Tie Rod Replacement](#).
19. Remove the wires which secure the cooling module to the upper body structure.
20. Install the lower wind guard.
21. Install the front bumper fascia. Refer to [Front Bumper Fascia Replacement](#).
22. Install both of the front wheel house linings.
23. Install the front under cover.
24. Install both of the front compartment splash shields. Refer to [Front Compartment Splash Shield Replacement](#).

25. Install the drivetrain and front suspension frame skid plate, if equipped. Refer to [Drivetrain and Front Suspension Frame Skid Plate Replacement](#).
26. Install the front wheel and wheel assemblies. Refer to [Tire and Wheel Removal and Installation](#).
27. Lower the vehicle.
28. Connect the intermediate steering shaft to the steering gear. Refer to [Intermediate Steering Shaft Replacement](#).
29. Road test the vehicle in order to test for the following conditions:
30.
 - Steering leads or pulls—Refer to [Wheel Alignment Measurement](#).
 - Abnormal powertrain noise or vibration at idle—Inspect the engine and transmission mounts for proper alignment and torque.

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1. BODY REPAIR
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Drivetrain and Front Suspension Frame Replacement (Hydraulic Power Steering)

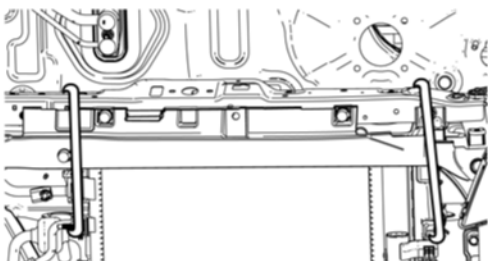
Special Tools

EN-49802 Cradle Supporter

For equivalent regional tools refer to [Special Tools](#)

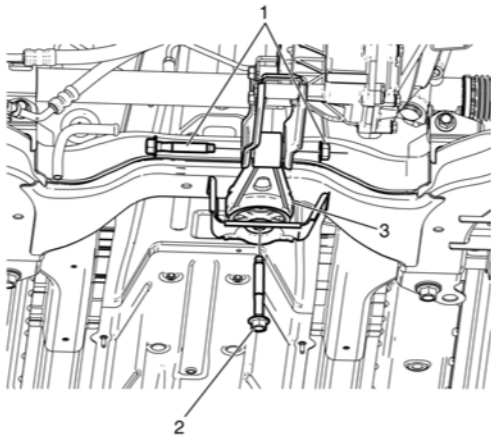
Removal Procedure

1. Raise and support the vehicle. Refer to [Vehicle Lifting and Jacking Caution](#).
2. Remove the front wheel and wheel assemblies. Refer to [Tire and Wheel Removal and Installation](#).
3. Remove the drivetrain and front suspension frame skid plate, if equipped. Refer to [Drivetrain and Front Suspension Frame Skid Plate Replacement](#).
4. Remove both front compartment splash shields. Refer to [Front Compartment Splash Shield Replacement](#).
5. Remove the front under cover.
6. Remove both of the front wheel house linings.
7. Remove the front bumper fascia. Refer to [Front Bumper Fascia Replacement](#).
8. Remove the lower wind guard.





9. [Click here for full size](#)
10. Secure the cooling module to the left and right of the upper body structure with a wire.
11. Separate both of the control arm ball joints from the steering knuckles. Refer to [Lower Control Arm Replacement](#).
12. Remove both of the upper stabilizer shaft link nuts and separate the left and right stabilizer shaft link from the strut. Refer to [Stabilizer Shaft Link Replacement](#).
13. Remove the exhaust pipe. Refer to [Exhaust Pipe Replacement](#).

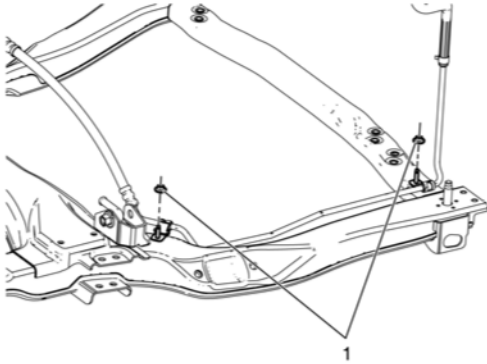


14.

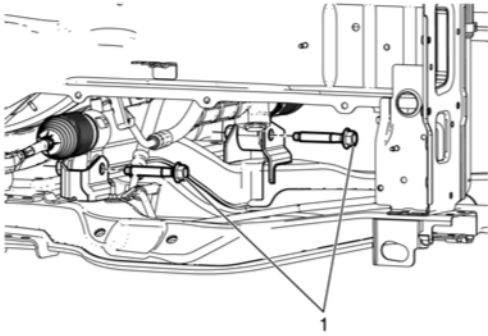
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15. Remove the torque strut to transmission mounting bracket bolt and nut(1) and the torque strut to frame bolt(2).

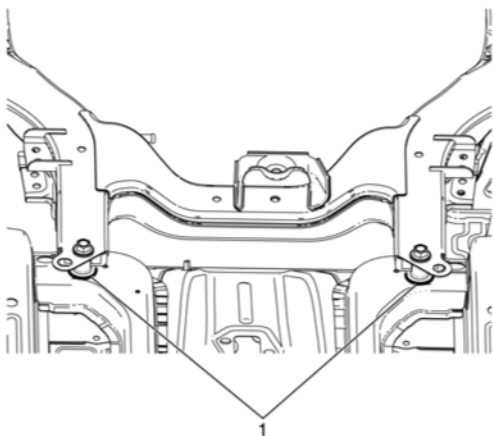
16. Remove the torque strut(3) from the frame.



17. [Click here for full size](#)
18. Remove the power steering pipe/hose retaining nuts (1) and separate the pipe from the frame. Refer to [Power Steering Gear Outlet Pipe/Hose Replacement](#).



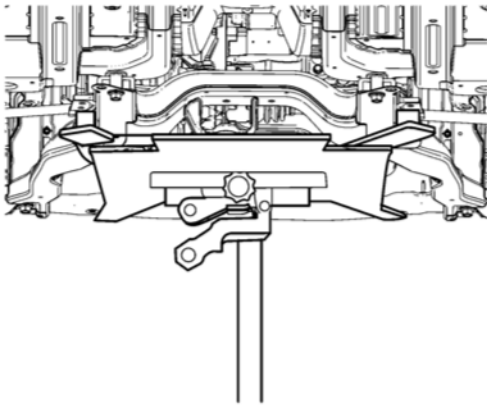
19. [Click here for full size](#)
20. Remove the steering gear assembly to the frame retaining bolts (1) and separate the steering gear assembly from the frame. Refer to [Steering Gear Replacement](#).



21.

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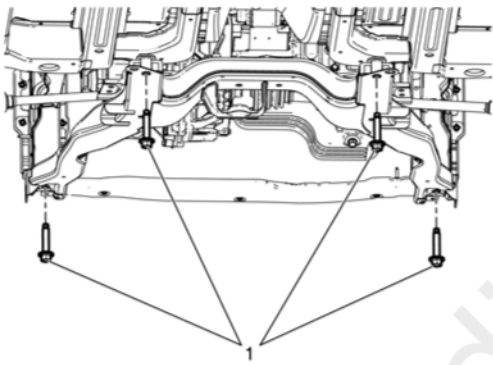
22. Mark the frame to body positions (1) with a paint pen or permanent marker.



23.

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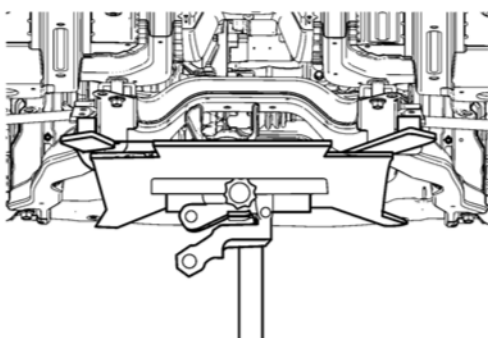
24. Install the *EN-49802* cradle supporter to a hydraulic jack stand and support the frame.



26. Remove the frame to body bolts (1).
27. Slowly lower the jack stand and remove the frame from the vehicle.
28. Remove the following components if replacing the frame:
29.
 1. Remove the stabilizer shaft from the frame. Refer to [Stabilizer Shaft Replacement](#).
 2. Remove the control arms from the frame. Refer to [Lower Control Arm Replacement](#).
 3. Remove the radiator brackets from the frame.
 4. Remove the front lower impact bar.

Installation Procedure

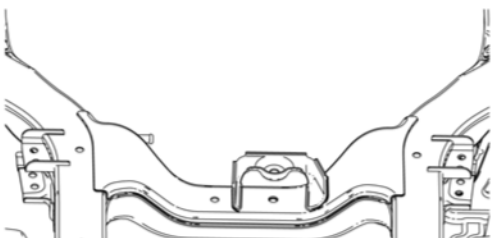
1. Install the following components to the frame if removed:
2.
 1. Install the front lower impact bar to the frame.
 2. Install the radiator brackets to the frame.
 3. Install the control arms to the frame. Refer to [Lower Control Arm Replacement](#).
 4. Install the stabilizer shaft to the frame. Refer to [Stabilizer Shaft Replacement](#).

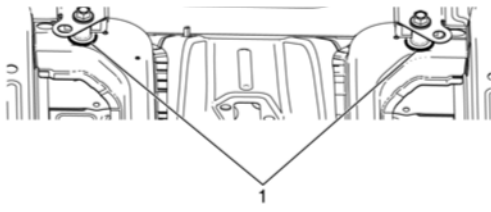


3.

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4. With the frame on the *EN-49802* cradle supporter and hydraulic jack stand, raise the frame to the vehicle.



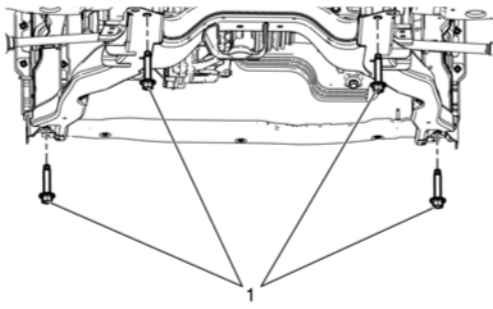


5.

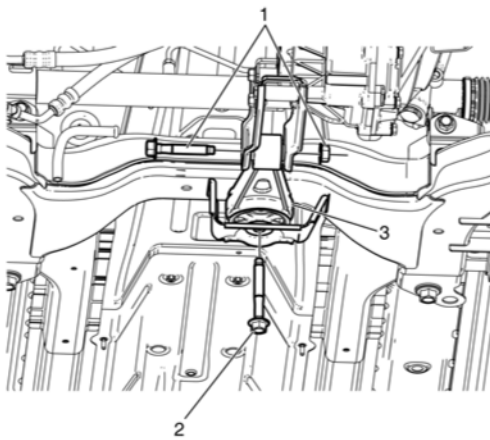
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6. Hand start all the frame to body retaining bolts while aligning the frame to the paint marks(1).





7. [Click here for full size](#)
8. Caution:
Refer to [Fastener Caution](#).
9. Tighten the frame to body retaining bolts (1) to 170 N-m (125 lb-ft).
10. Lower the jack stand and remove the EN-49802 cradle supporter.
11. Install the steering gear assembly to the frame retaining bolts. Refer to [Steering Gear Replacement](#).
12. Install the power steering pipe to the frame and tighten the pipe retaining nuts. Refer to [Power Steering Gear Outlet Pipe/Hose Replacement](#)



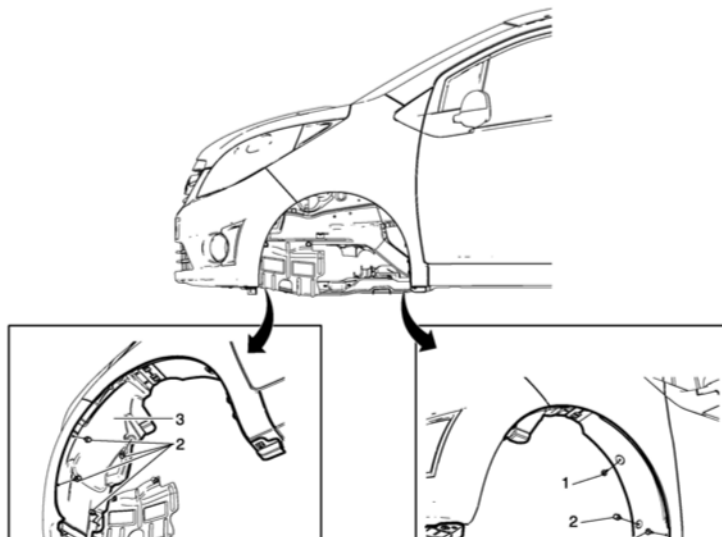
13. [Click here for full size](#)
14. Install the torque strut(3) from the frame.
15. Install the torque strut to the frame bolt(2) and tighten to 100â€‰N-m (74â€‰lbâ€‰ft).
16. Install the torque strut to the transmission mounting bracket bolt and nut(1) and tighten to 80â€‰N-m (59â€‰lbâ€‰ft).
17. Install the exhaust pipe. Refer to [Exhaust Pipe Replacement](#).
18. Connect both of the stabilizer shaft links to the struts and tighten the upper stabilizer shaft link nuts. Refer to [Stabilizer Shaft Link Replacement](#).
19. Install both of the control arm ball joints to the steering knuckles. Refer to [Lower Control Arm Replacement](#).
20. Remove the wires which secure the cooling module to the upper body structure.
21. Install the lower wind guard.

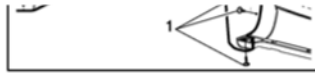
22. Install the front bumper fascia. Refer to [Front Bumper Fascia Replacement](#).
23. Install both of the front wheel house linings.
24. Install the front under cover.
25. Install both of the front compartment splash shields. Refer to [Front Compartment Splash Shield Replacement](#).
26. Install the drivetrain and front suspension frame skid plate, if equipped. Refer to [Drivetrain and Front Suspension Frame Skid Plate Replacement](#).
27. Install the front wheel and wheel assemblies. Refer to [Tire and Wheel Removal and Installation](#).
28. Lower the vehicle.
29. Road test the vehicle in order to test for the following conditions:
30.
 - Steering leads or pulls—Refer to [Wheel Alignment Measurement](#).
 - Abnormal powertrain noise or vibration at idle—Inspect the engine and transmission mounts for proper alignment and torque.

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1. BODY REPAIR
2. FRAME AND UNDERBODY
3. REPAIR INSTRUCTIONS
- 4.

Front Wheelhouse Liner Replacement



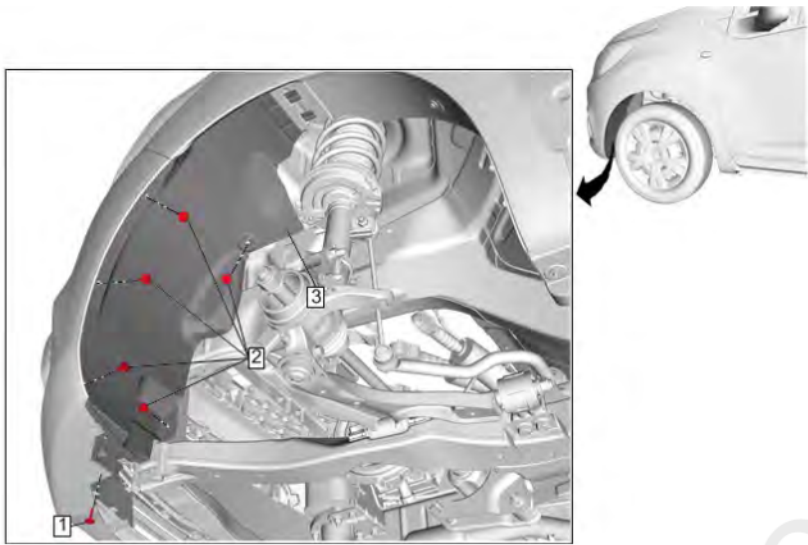


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Callout	Component Name
Preliminary Procedure	
Tire and Wheel Removal and Installation	
1	Front Wheelhouse Liner Screw (Qty: 6) Caution: Refer to Fastener Caution . Tighten 1.5 N-m (13 lb-in)
2	Front Wheelhouse Liner Plastic Retainer (Qty: 5)
3	Front Wheelhouse Liner

- 1. BODY REPAIR
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Front Wheelhouse Liner Replacement (Front with PMC)



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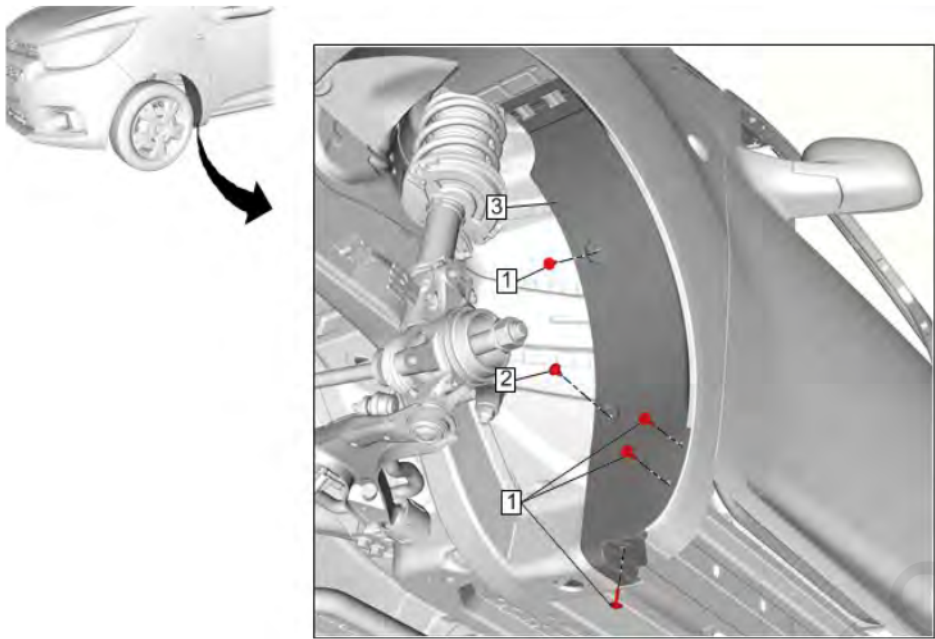
Callout	Component Name
Preliminary Procedure	
Front Bumper Fascia Air Deflector Replacement - Outer	
1	Front Wheelhouse Liner Bolt Caution: Refer to Fastener Caution . Tighten 1.5N-m (13 lb in)
2	Front Wheelhouse Liner Retainer [5>x]
3	Front Wheelhouse Front Liner Procedure Itâ€™s not necessary to remove wheel and tire.

Related Part Information

Part Name	Catalog Name	Part Code
Front Wheelhouse Liner	LINER KIT,FRT W/H	4907Z
Front Wheelhouse Liner	LINER,FRT W/H	4908A
Front Wheelhouse Liner	LINER,FRT W/H	4908B

1. BODY REPAIR
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Front Wheelhouse Liner Replacement (Rear with PMC)



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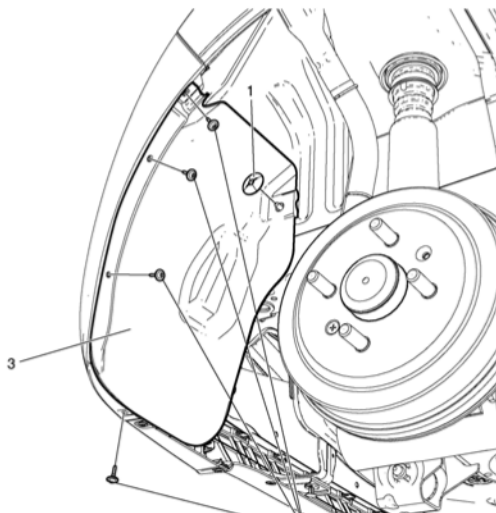
Callout	Component Name
	Front Wheelhouse Liner Bolt [4>x]
1	Caution: Refer to Fastener Caution . Tighten 1.5N-m (13 lb in)
2	Front Wheelhouse Liner Retainer
3	Front Wheelhouse Rear Liner Procedure Itâ€™s not necessary to remove wheel and tire.

Related Part Information

Part Name	Catalog Name	Part Code
Front Wheelhouse Liner	LINER KIT,FRT W/H 4907Z	
Front Wheelhouse Liner	LINER,FRT W/H	4908A
Front Wheelhouse Liner	LINER,FRT W/H	4908B

1. BODY REPAIR
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Rear Wheelhouse Liner Replacement (Hatchback)



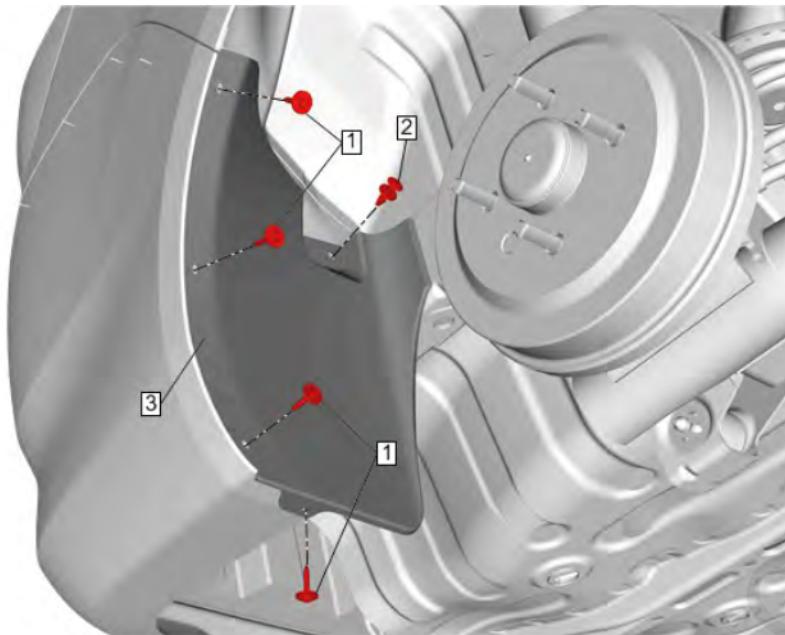
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Callout	Component Name
1	Rear Wheelhouse Liner Retainer (Qty: 1)
2	Rear Wheelhouse Liner Screw (Qty: 4) Caution: Refer to Fastener Caution . Tighten 2.5 N-m (22 lb-in)
3	Rear Wheelhouse Liner

- 1. BODY REPAIR
- 2. FRAME AND UNDERBODY
- 3. REPAIR INSTRUCTIONS
- 4.

Rear Wheelhouse Liner Replacement (Notchback)



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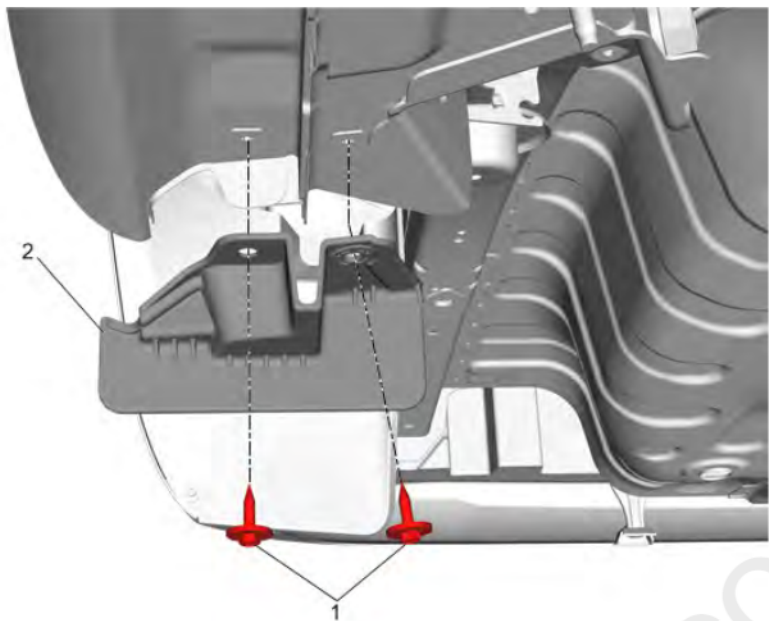
Callout	Component Name
1	Rear Wheelhouse Liner Bolt [4>x]
	Caution:
	Refer to Fastener Caution .
	Tighten 1.5N-m (13 lb in)
2	Rear Wheelhouse Liner Retainer
3	Rear Wheelhouse Liner

Related Part Information

Part Name	Catalog Name	Part Code
Rear Wheelhouse Liner	LINER,RR W/H 3411A	
Rear Wheelhouse Liner	LINER,RR W/H 3411B	

- 1. BODY REPAIR
- 2. FRAME AND UNDERBODY
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Rear Wheelhouse Inner Panel Extension Replacement (PMC)



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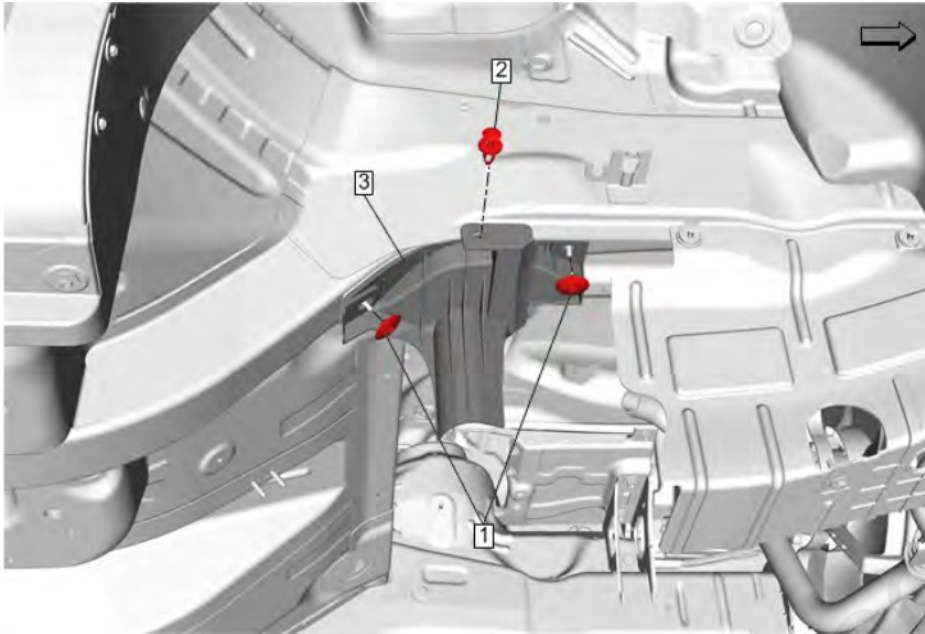
Callout	Component Name
Preliminary Procedure	
Raise and support the vehicle. Lifting and Jacking the Vehicle	
1	Rear Mud Guard Bolt [2>x] Caution: Refer to Fastener Caution . Tighten 2.5N-m (22 lb in)
2	Rear Wheelhouse Inner Panel Extension Procedure Lower the vehicle. Lifting and Jacking the Vehicle

Related Part Information

Part Name	Catalog Name	Part Code
Rear Wheelhouse Inner Panel Extension	EXTENSION,RR W/H INR PNL 3460A	
Rear Wheelhouse Inner Panel Extension	EXTENSION,RR W/H INR PNL 3460B	
Rear Wheelhouse Inner Panel Extension	EXTENSION,RR W/H INR PNL 3404B	

1. BODY REPAIR
2. FRAME AND UNDERBODY
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Front Wheelhouse Splash Shield Replacement



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Callout	Component Name
Preliminary Procedure	
Raise and support the vehicle. Lifting and Jacking the Vehicle	
1	Front Wheelhouse Splash Shield Clip [2>x]
2	Front Wheelhouse Splash Shield Retainer
3	Front Wheelhouse Splash Shield
	Procedure
	Lower the vehicle. Lifting and Jacking the Vehicle

Specifications

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- 1. BODY REPAIR
- 2. FRAME AND UNDERBODY
- 3. SPECIFICATIONS
- 4.

Fastener Specifications

Reusable Threaded Fastener Tightening Specifications

Application	Specification
	Metric (English)
Note:	
All fasteners listed in this table can be reused after removal.	
Drivetrain and Front Suspension Frame Skid Plate Bolt	22â€%N-mâ€%(16â€%lbâ€%ft)
Frame to Body Retaining Bolt	135â€%N-mâ€%(100â€%lbâ€%ft)
Front Compartment Splash Shield Bolt	9â€%N-mâ€%(80â€%lbâ€%in)
Front Wheelhouse Liner Screw	1.5â€%N-mâ€%(13â€%lbâ€%in)
Rear Wheelhouse Liner Screw	2.5â€%N-mâ€%(22â€%lbâ€%in)
Torque Strut to Frame Retaining Bolt	100â€%N-mâ€%(74â€%lbâ€%ft)
Torque Strut to Transmission Mounting Bracket Bolt and Nut	80â€%N-mâ€%(59â€%lbâ€%ft)

Special Tools and Equipment

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1. BODY REPAIR
2. FRAME AND UNDERBODY
3. SPECIAL TOOLS AND EQUIPMENT
- 4.

Special Tools

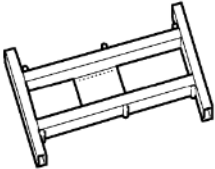
Illustration	Tool Number/ Description
	CH-904 KM-904 Base Frame
Click here for full size	

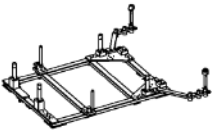
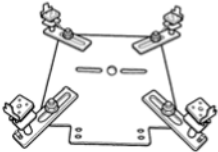
Illustration	Tool Number/ Description
	CH-49289 Centering Frame Click here for full size

Illustration	Tool Number/ Description
	EN-49802 Cradle Supporter

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