



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

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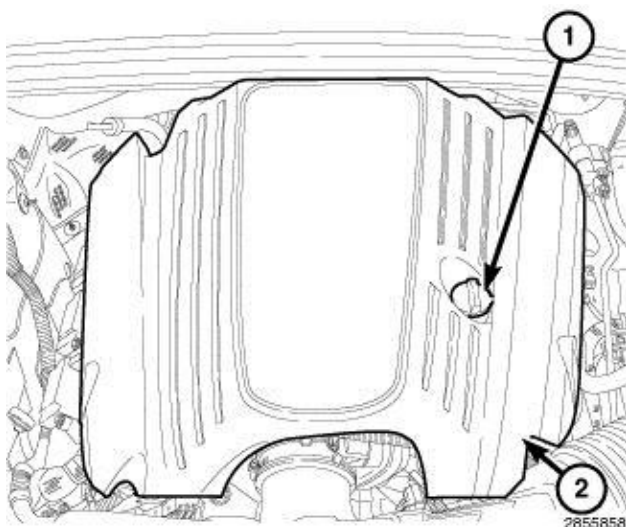
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Stage 3

REMOVAL

09 - Engine, 5.7L/Engine Block/ CYLINDER HEAD, Engine/Removal

1. Perform the fuel system pressure release procedure (Refer to 14 - Fuel System/Fuel Delivery - Standard Procedure).
2. Disconnect and isolate the negative battery cable.
3. Remove the engine cover (2).



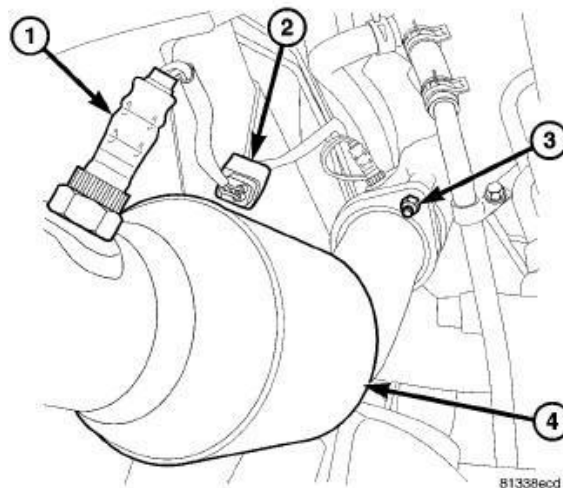
4. Remove the intake manifold (Refer to 09 - Engine/Manifolds/MANIFOLD, Intake - Removal).
5. Raise and support the vehicle (Refer to 04 - Vehicle Quick Reference/Hoisting - Standard Procedure).
6. Remove the belly pan retainers (1) and remove the belly pan.

7. Drain the cooling system (Refer to 07 - Cooling - Standard Procedure).

CAUTION: When separating the catalytic converters from the manifolds, disconnect the oxygen sensor connectors. Allowing the catalytic converters to hang from the oxygen sensor wires damages the harness and/or sensors.

NOTE: Left side shown, right side similar.

8. Disconnect all oxygen sensor wire harness connectors (2).



9. Saturate all exhaust bolts and nuts (3) with Mopar® Rust Penetrant. Allow five minutes for penetration.
10. Remove nuts (3) and separate the catalytic converters (4) from the exhaust manifolds.
11. Remove the front exhaust pipe band clamps (2) on the exhaust pipe/muffler and resonator assembly (1).



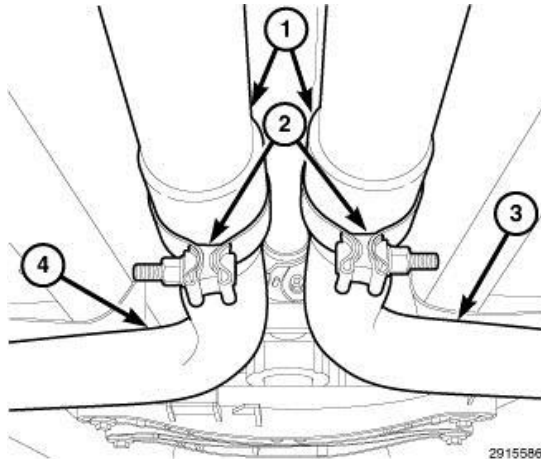
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12. Separate the exhaust pipe/muffler and resonator assembly from the catalytic converters (3 and 4).
13. Remove the catalytic converters.
14. Remove nut and the oil dipstick tube.
15. Remove support and lower the vehicle.
16. Remove the serpentine belt (Refer to 07 - Cooling/Accessory Drive/BELT, Serpentine/Removal).
17. Remove the cylinder head cover (Refer to 09 - Engine/Cylinder Head/COVER(S), Cylinder Head - Removal).

CAUTION: Pushrods and rocker arm assemblies must be installed in their original locations or engine damage could result.

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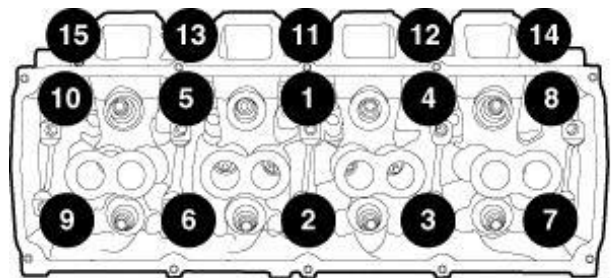
NOTE: Make sure to identify the original location of the rocker arms and push rods for correct assembly.

18. Remove the rocker arms and push rods (Refer to 09 - Engine/Cylinder Head/ROCKER ARM, Valve - Removal)

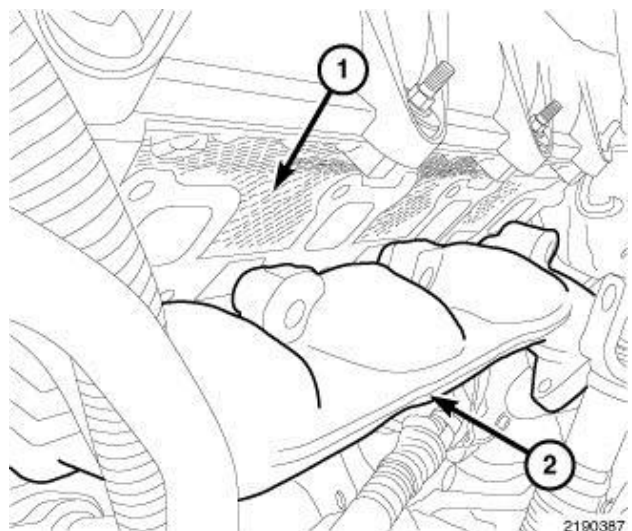
Left side shown, right side similar.

NOTE: It is not necessary to remove the exhaust manifolds to remove the cylinder heads.

19. Using the sequence shown, remove the cylinder head bolts and remove the cylinder head(s).



20. Remove and discard the cylinder head gasket.
21. Inspect and clean the cylinder head (2) mating surface.



22. Remove bolts and the manifold (2).



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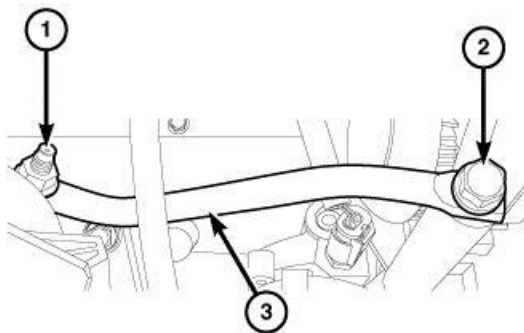
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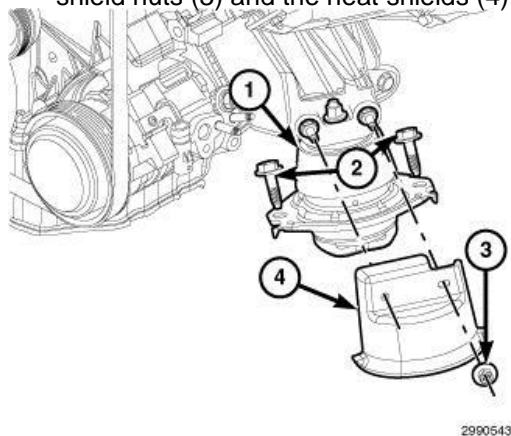
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23. Remove fasteners (1, 2) and the generator support bracket (3).



NOTE: Left side shown, right side similar.

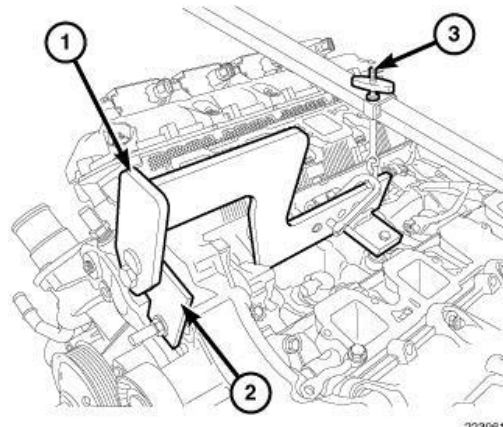
24. Remove both left/right engine mount heat shield nuts (3) and the heat shields (4).



25. Remove both left/right engine mount bolts (2).

NOTE: Do not use air tools to install the engine lift fixture.

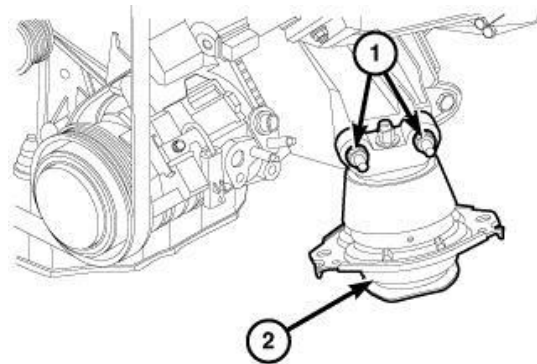
26. Install the Engine Lift Fixture [8984B](#) (1), Engine Lift Adapter [8984-UPD](#) (2) and the Engine Support Fixture [8534B](#) (3).



27. Raise the engine to provide clearance to remove the engine mounts.

NOTE: Left side shown, right side similar.

28. Remove both left/right engine mount bolts (1) and the engine mount(s) (2).



29. Remove bolts (1) and the engine mount bracket(s) (2).



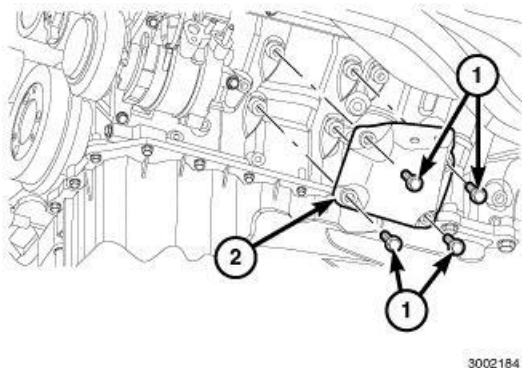
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14 - Fuel System / Fuel Delivery, Gas/Standard Procedure

FUEL SYSTEM PRESSURE RELEASE

WARNING: The fuel system is under constant high pressure even with engine off. Until the fuel pressure has been properly released from the system, do not attempt to open the fuel system. Do not smoke or use open flames/sparks when servicing the fuel system. Wear protective clothing and eye protection. Make sure the area in which the vehicle is being serviced is in a well ventilated area and free of flames/sparks. Failure to comply may result in serious or fatal injury.

1. Remove the fuel pump relay from the Power Distribution Center (PDC) (Refer to 04 - Vehicle Quick Reference/Fuse Locations and Types - Specifications). A relay location label can also be found on the underside of the PDC cover.
2. Start and run the engine until it stalls.
3. Attempt restarting engine until it will no longer run.
4. Turn the ignition to the OFF position.
5. Return fuel pump relay to the Power Distribution Center (PDC).

NOTE: After servicing the fuel system, one or more Diagnostic Trouble Codes (DTC's) may have been stored in the Powertrain Control Module (PCM) memory due to disconnecting the fuel pump module circuit. A diagnostic scan tool must be used to erase a DTC.



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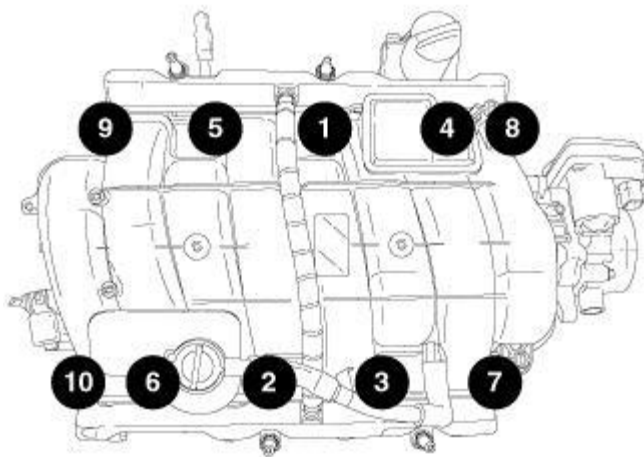
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09 - Engine, 5.7L / Manifolds / MANIFOLD, Intake/Removal

1. Perform the fuel system pressure release procedure (Refer to 14 - Fuel System/Fuel Delivery - Standard Procedure).
2. Disconnect and isolate the negative battery cable.
3. Remove the air cleaner body (Refer to 09 - Engine/Air Intake System/BODY, Air Cleaner/Removal).
4. Disconnect the fuel supply line (Refer to 14 - Fuel System/Fuel Delivery/FITTING, Quick Connect - Standard Procedure).
5. Disconnect the brake booster hose and the EVAP purge line.
6. Disconnect the following components wire harness connectors:
Manifold Absolute Pressure (MAP) Sensor Fuel Injectors
Electronic Throttle Control (ETC).
7. Using the sequence shown, remove bolts and the intake manifold.



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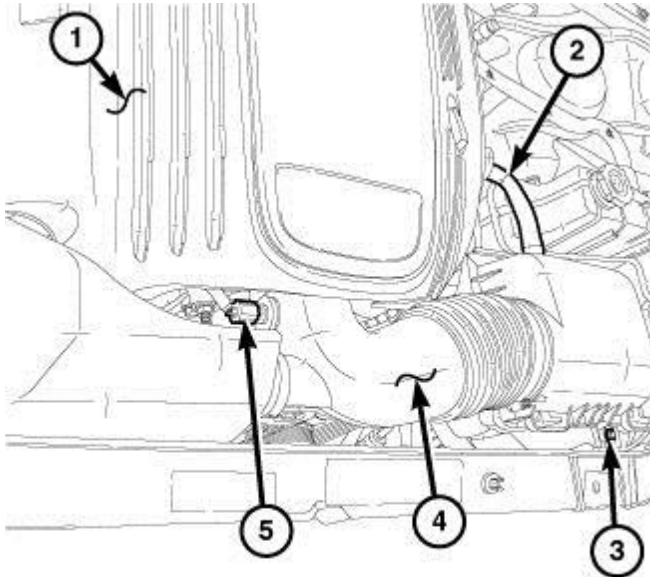
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09 - Engine, 5.7L / Air Intake System / BODY, Air Cleaner/Removal



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1. Lift the engine cover retaining grommets off the ball studs and remove the engine cover (1).
2. Disconnect the intake air temperature (IAT) sensor (5) electrical connector.
3. Loosen the air duct retaining clamps at the throttle body and the air cleaner housing and remove the air duct (4).
4. Disconnect the make up air hose (MUA) (2).
5. Remove the air cleaner housing retaining bolt (3).
6. Remove the air cleaner housing from the vehicle.



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14 - Fuel System / Fuel Delivery, Gas / FITTING, Quick Connect/Standard Procedure

QUICK-CONNECT FITTINGS

Different types of quick-connect fittings are used to attach the various fuel system components, lines and tubes. Some quick-connect fittings require the use of a special tool for disconnection and removal.

These are the quick-connect fittings:

- Redundant Latch Single Button Type Fitting
- Single Button Type Fitting
- Pinch Type Fitting
- Single Tab Type Fitting
- Two Tab Type Fitting
- Plastic Retainer Ring Type Fitting
- Latch Clip Type 1 Fitting
- Latch Clip Type 2 Fitting
- Wing Type Fitting

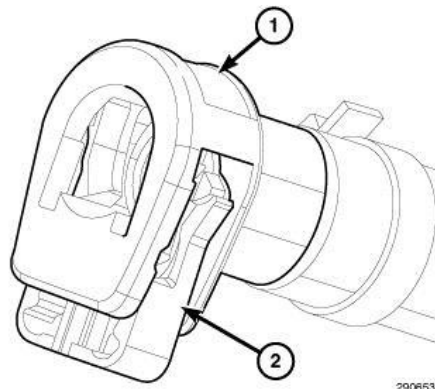
DISCONNECTING

WARNING: The fuel system is under a constant pressure (even with engine off). Before servicing any fuel system hose, fitting or line, fuel system pressure must be released.

CAUTION: Before separating a Quick-Connect fitting, pay attention to what type of fitting is being used. This will prevent unnecessary fitting or fitting latch breakage.

CAUTION: The interior components (O-rings, clips) of quick-connect fittings are not serviced separately, but new plastic spacers and latches are available for some types. If service parts are not available, do not attempt to repair the damaged fitting or fuel line (tube). If repair is necessary, replace the complete fuel line (tube) assembly.

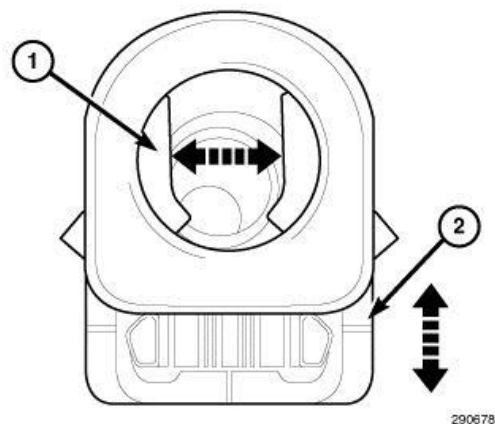
Redundant Latch Single Button Type Fitting:



This type of quick-connect fitting is equipped with a redundant latch (2) and a single push button (1) that releases two internal latches located in the quick-connect fitting. Special tools are not required for removal.

CAUTION: Do not pry or pull up on the push button as damage to the latches of the quick-connect fitting will occur.

1. Pull the redundant latch (2) out, away from the quick-connect fitting.
2. Press on the push button with your thumb, which releases the internal latches (1) and remove the quick-connect fitting from the fuel system component.





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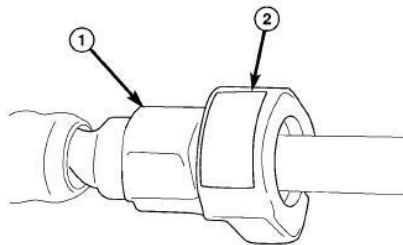
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Single Button Type Fitting:

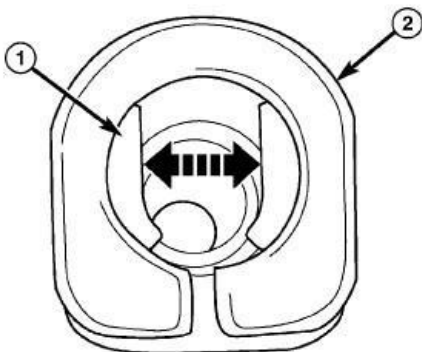


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CAUTION: Do not pry or pull up on the push button as damage to the latches of the quick-connect fitting will occur.

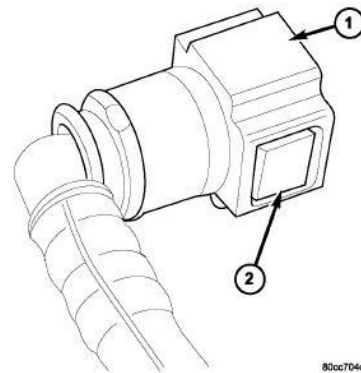
This type of quick-connect fitting is equipped with a single push button (2) that releases two internal latches located in the quick-connect fitting. Special tools are not required for removal.

1. Press on the push button with your thumb, which releases the internal latches (1).



2. Remove the quick-connect fitting from the fuel system component.

2 Button Type Fitting

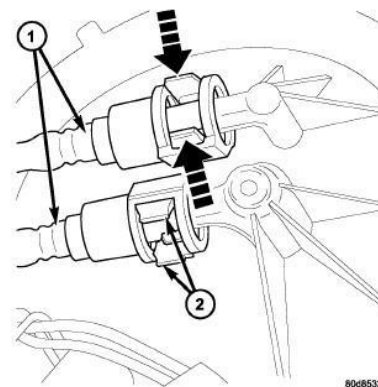


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This type of quick-connect fitting (1) is equipped with two push buttons (2) that releases two internal latches located in the quick-connect fitting. Special tools are not required for removal.

1. Press on both push buttons with your thumb, which releases the internal latches.
2. While holding the two push buttons simultaneously, remove the quick-connect fitting from the fuel system component.

Pinch Type Fitting



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This type of quick-connect fitting (1) is equipped with two finger tabs (2). Special tools are not required for removal.



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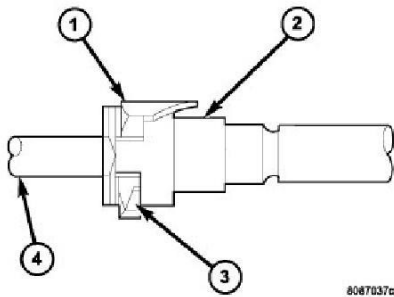
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1. Pinch both tabs (2) together and release the quick-connect fitting.
2. Remove the quick-connect fitting from the fuel system component.
3. Raise the pull tab until it separates from the quick-connect fitting.
4. Remove the quick-connect fitting from the fuel system component.

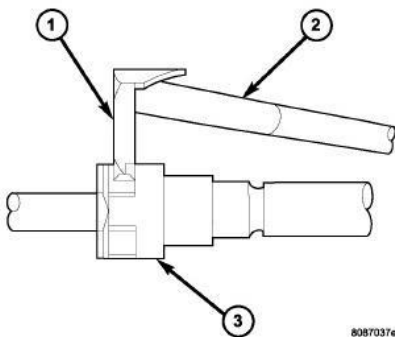
Single Tab Type Fitting



This type of quick-connect fitting (2) is equipped with a single pull tab (1). The tab is removable. After the tab is removed the quick-connect fitting can be separated from the fuel system component. Special tools are not required for removal.

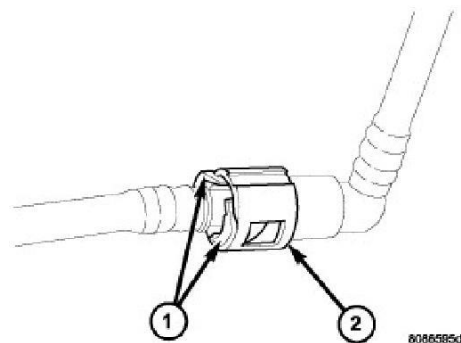
NOTE: If the release tab (3) is not pressed prior to releasing pull tab, the pull tab will be damaged

1. Press the release tab on the side of the fitting (3) to release the pull tab (1).



2. While pressing the release tab on the side of the quick-connect fitting use a screwdriver (2) to pry up the pull tab.

Two Tab Type Fitting



This type of quick-connect fitting (2) is equipped with tabs (1) located on both sides of the fitting (2). These tabs are integral to the fuel system component. The plastic tabs will remain on the component being serviced after the quick-connect fitting is removed. The O-ring and spacer will remain in the quick-connect fitting. Special tools are not required for removal.

1. Squeeze the plastic tabs (1) against the sides of component being serviced with your fingers.
2. Remove the quick-connect fitting from the fuel system component.



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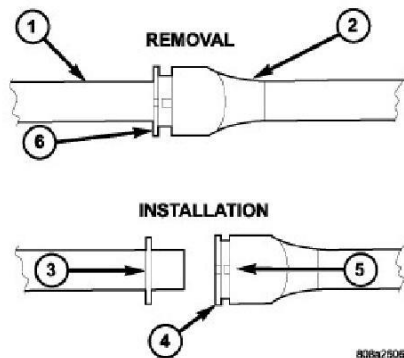
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Plastic Retainer Ring Type Fitting

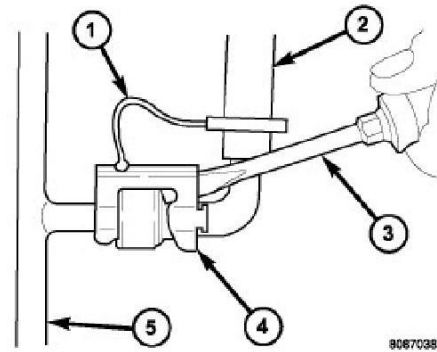


This type of fitting can be identified by the use of a round plastic retainer ring (4,6) usually black in color. Special tools are not required for removal.

NOTE: The round plastic retainer ring must be pressed squarely into the quick-connect fitting body. If this retainer is cocked during removal it will be difficult to disconnect the quick-connect fitting. Use an open-end wrench on the shoulder of the plastic retainer ring to aid in disconnection.

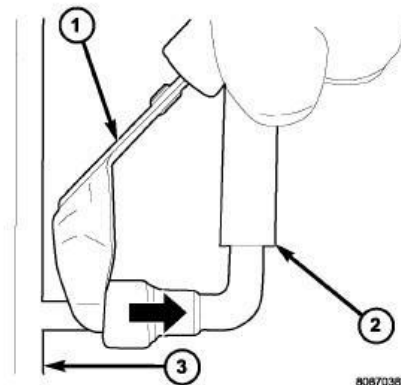
1. Firmly push the quick-connect fitting (5) towards the component being serviced while firmly pushing the round plastic retainer ring into the quick-connect fitting (6). With the round plastic ring depressed, remove the quick-connect fitting from the fuel system component.
2. After removal the plastic retainer ring will remain with the quick-connect fitting.

Latch Clip Type 1 Fitting



Depending on vehicle model and engine, two different types of safety latch clips are used. One is tethered (1) to fuel line and the other is not. A special tool will be necessary to disconnect the fuel line after latch clip is removed. The latch clip may be used on certain fuel line and fuel rail connections or to join fuel lines together.

1. Pry up on the latch clip (4) with a screwdriver (3).
2. Slide the latch clip away from the quick-connect fitting while lifting the screwdriver and position aside.
3. Insert an appropriate fuel line removal tool (1) into the quick-connect fitting and release the internal latches.



NOTE: After removal the internal latches will remain in the quick-connect fitting.



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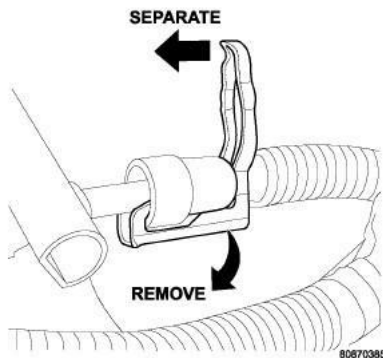
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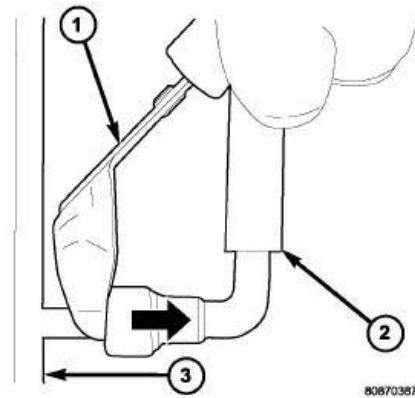
4. With the special tool still inserted, remove the quick-connect fitting from the fuel system component.

Latch Clip Type 2 Fitting



Depending on vehicle model and engine, two different types of safety latch clips are used. One is tethered to the fuel line and the other is not. A special tool will be necessary to disconnect the fuel line after the latch clip is removed. The latch clip may be used on certain fuel line and fuel rail connections or to join fuel lines together.

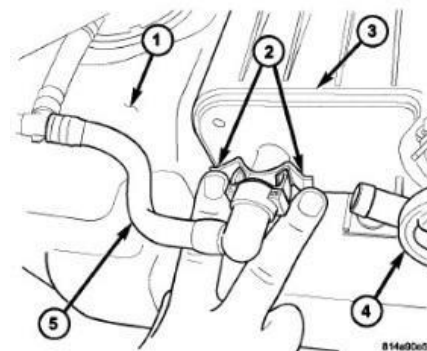
1. Unlatch the small arms on the end of clip, swing away and separate from the fuel system component.
2. Slide the latch clip away from the quick-connect fitting while lifting with a screwdriver and position aside.
3. Insert an appropriate fuel line removal tool (1) into the quick-connect fitting and release the internal latches.



NOTE: After removal the internal latches will remain in the quick-connect fitting.

4. With the special tool still inserted, remove the quick-connect fitting from the fuel system component.

Wing Type Fitting



The wing type fitting is used on fuel system and emission components. The wing type fitting is most commonly used on the EVAP canister (3). Special tools are not required for removal.



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1. Using two fingers, press both wings (2) and release the locking tabs.

NOTE: After removal the locking tabs will remain with the quick-connect fitting.

2. While holding the wings, remove the quick-connect fitting from the fuel system component.

CONNECTING

1. Inspect the quick-connect fitting body and fuel system components for damage. Replace as necessary.
2. Prior to connecting any quick-connect fitting to components, check condition of fitting and components. Clean parts with a lint-free cloth. Lubricate with clean engine oil.
3. Insert the quick-connect fitting onto the fuel tube or fuel system component until the built-in stop on the fuel tube or component rests against the back of fitting.
4. Continue pushing until a click is felt.
5. If Equipped:

Redundant Latch Single Button Type

Fitting: Push redundant latch until it locks into position in the quick-connect fitting.

Single Tab Type Fitting: Push new tab down until it locks into position in the quick-connect fitting.

Latch Clip Type Fitting: Install latch clip (snaps into position). **If latch clip will not snap into position, this indicates the quick-connect fitting is not properly installed onto fuel system component, recheck the connection.**

6. Verify a locked condition by firmly pulling on the quick-connect fitting connection of the fuel system component.



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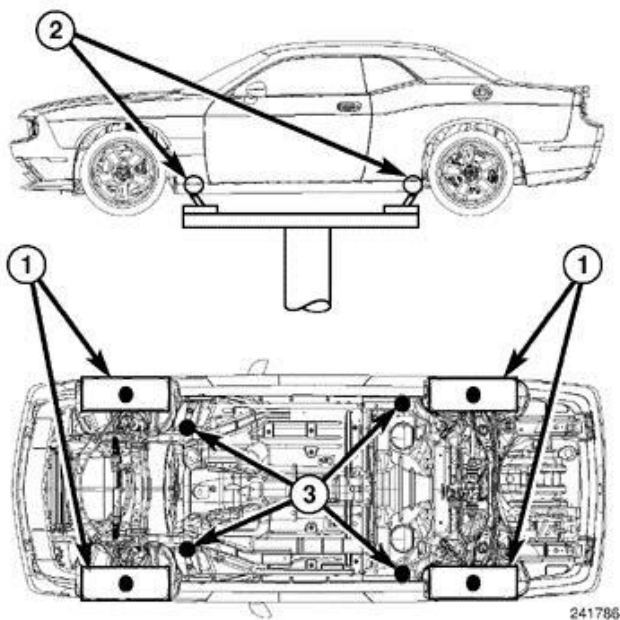
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04 - Vehicle Quick Reference / Hoisting/Standard Procedure STANDARD PROCEDURE – HOISTING



CHALLENGER LIFTING POINTS

Refer to Owner's Manual provided with vehicle for proper emergency jacking procedures.

WARNING: The hoisting and jack lifting points provided are for a complete vehicle. When the engine or rear suspension is removed from a vehicle, the center of gravity is altered making some hoisting conditions unstable. Properly support or secure vehicle to hoisting device when these conditions exist. Failure to follow these instructions may result in serious or fatal injury.

CAUTION: Do not position hoisting device on any suspension component, including the front or rear suspension crossmembers. Do not hoist on the front and rear bumpers, the

lower radiator crossmember, or the front engine mount.

Do not attempt to raise one entire side of the vehicle by placing a floor jack midway between the front and rear wheels. This practice may result in permanent damage to the body.

When properly positioned, a floor jack can be used to lift the vehicle and support the raised vehicle with jack stands.

A floor jack or any lifting device must never be used on any part of the underbody other than the described areas.

- 1 - DRIVE ON HOIST
- 2 - FLOOR JACK, VEHICLE EMERGENCY JACK
- 3 - FRAME CONTACT LIFT (SINGLE POST)
- 3 - CHASSIS LIFT (DUAL LIFT)
- 3 - OUTBOARD LIFT (DUAL LIFT)
- 3 - FLOOR JACK



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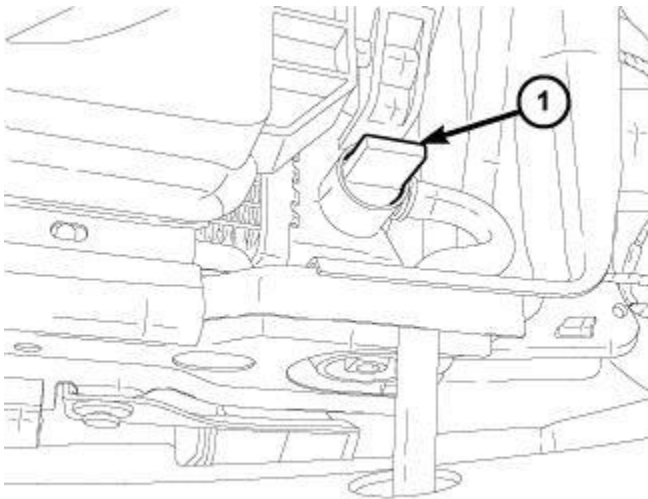
2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

07 - Cooling/Standard Procedure

DRAINING



2688424

5. Drain coolant into a clean container.
6. If necessary, to perform a complete coolant drain of the engine, remove the drain plug from the engine block if equipped.

WARNING: Do not remove cylinder block drain plugs or loosen radiator draincock with system hot and under pressure. Serious burns from coolant can occur.

NOTE: Typical drain plug shown in illustration.

DO NOT WASTE reusable coolant. If solution is clean, drain coolant into a clean container for reuse.

1. Remove radiator pressure cap.
2. Raise and support the vehicle (Refer to 04 - Vehicle Quick Reference/Hoisting/Standard Procedure).
3. If equipped, remove the underbody splash shield.



INSTALLATION INSTRUCTIONS

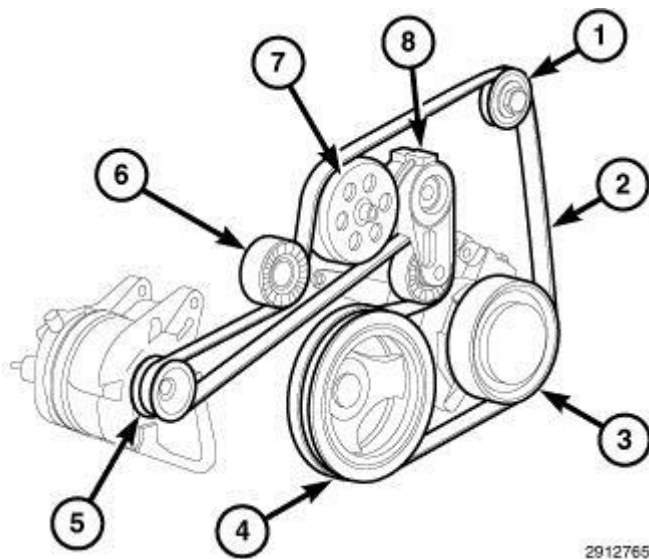
STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

07 - Cooling / Accessory Drive / BELT, Serpentine/Removal



1. Disconnect and isolate the negative battery cable.
2. Remove the air intake tube between intake manifold and air cleaner body.
3. Using a suitable square drive tool, Rotate the belt tensioner (8) clockwise and remove the serpentine belt (2).
4. Gently release the tensioner (8).



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

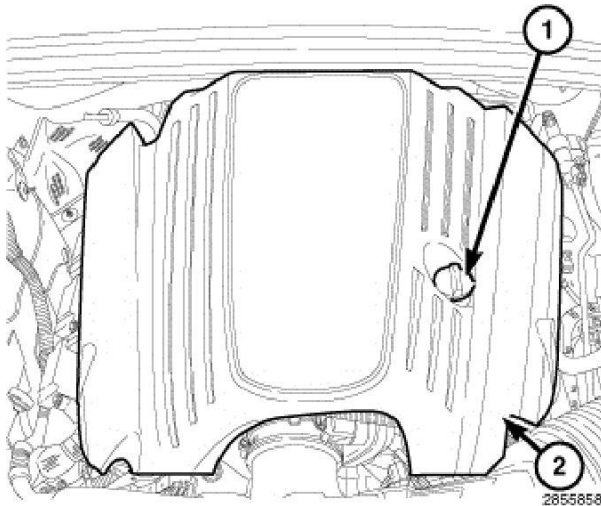
2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

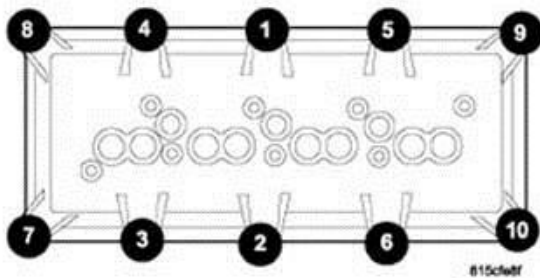
2011-2017 CHRYSLER 300 5.7 HEMI

09 - Engine, 5.7L / Cylinder Head / COVER(S), Cylinder Head/Removal

1. Disconnect and isolate the negative battery cable.
2. Remove the engine cover (2).

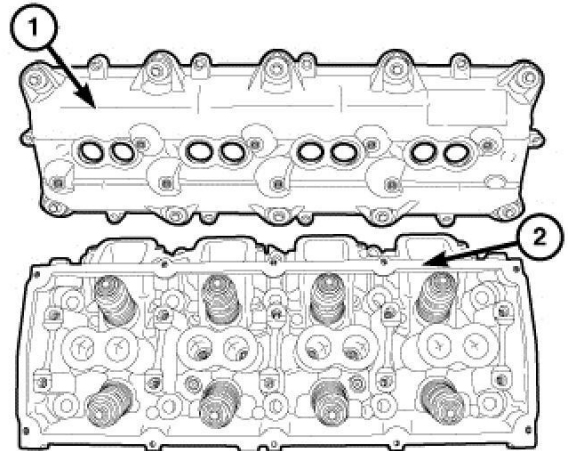


3. Remove the ignition coils (Refer to 08 - Electrical/Ignition Control/COIL, Ignition/Removal).
4. Using the sequence shown, remove the cylinder head cover bolts.



CAUTION: Do not use harsh cleaners to clean the cylinder head covers. Severe damage to covers may occur.

5. Remove the cylinder head cover (1).



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6. Clean the sealing surface of the cylinder head (2) and cover.

NOTE: The cylinder head cover gasket may be used again, provided no cuts, tears, or deformation have occurred.



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

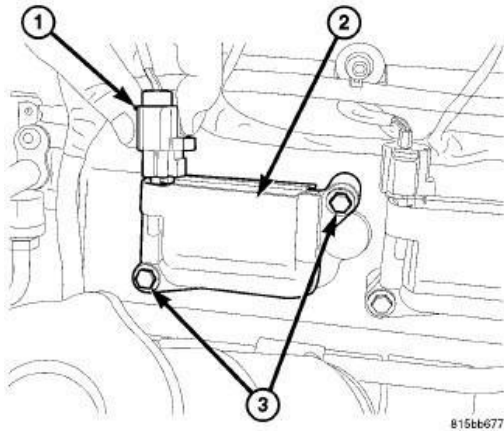
2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

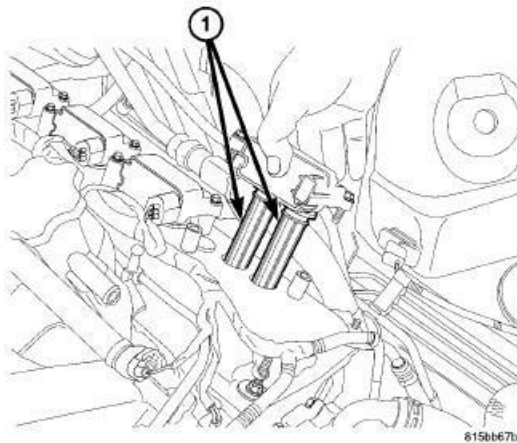
2011-2017 CHRYSLER 300 5.7 HEMI

08 - Electrical / 8I - Ignition Control / COIL, Ignition/Removal

1. Disconnect and isolate the negative battery cable.
2. Remove the engine cover.
3. Disconnect the ignition coil wire harness connector (1).



4. Remove the two ignition coil bolts (3).
5. Using a slight rocking motion, carefully lift the ignition coil (1) from the cylinder head opening.





INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

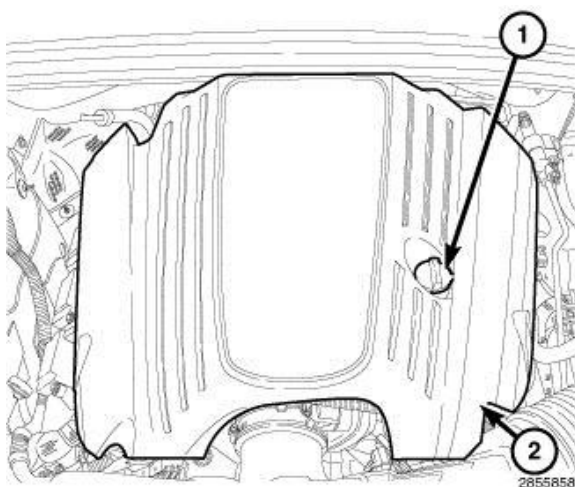
STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

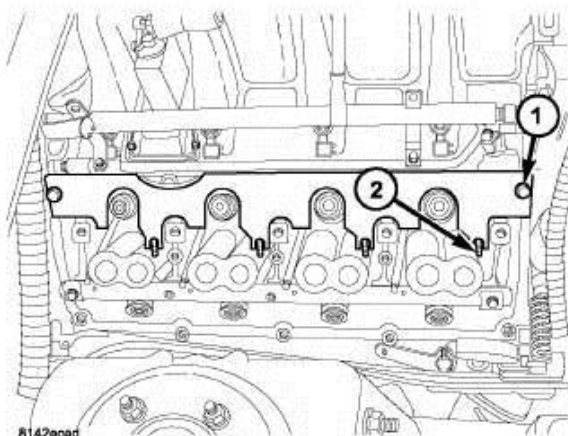
09 - Engine, 5.7L / Cylinder Head / ROCKER ARM, Valve/Removal

Special Tools: 9070 - Retainer, Push Rod

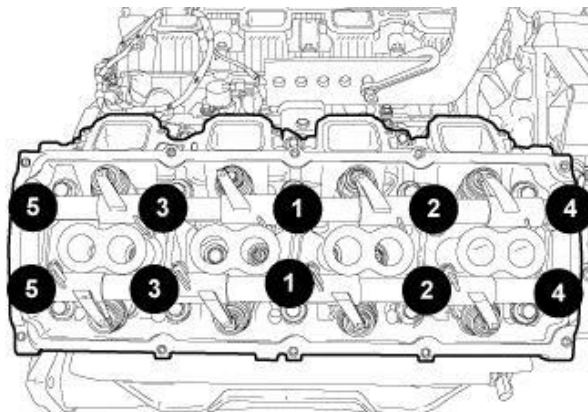
1. Disconnect and isolate the negative battery cable.
2. Remove the engine cover (2).



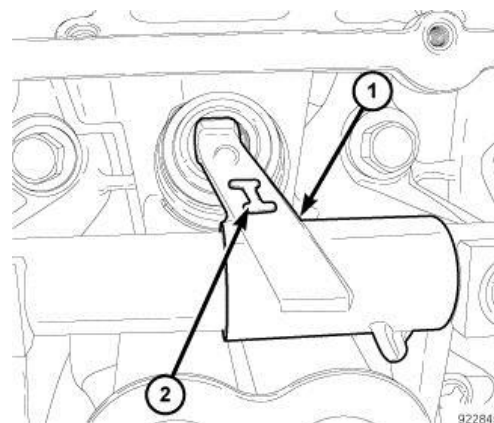
3. Remove the cylinder head cover (Refer to 09 - Engine/Cylinder Head/COVER(S), Cylinder Head - Removal).
4. Install the pushrod retainer 9070 (1).



5. Using the sequence shown, loosen the rocker arm shafts bolts.



CAUTION: The rocker shaft assemblies are not interchangeable between the intake and the exhaust, failure to install them in the correct location could result in engine damage. The intake rocker arms (1) are marked with the letter "I" (2).





INSTALLATION INSTRUCTIONS

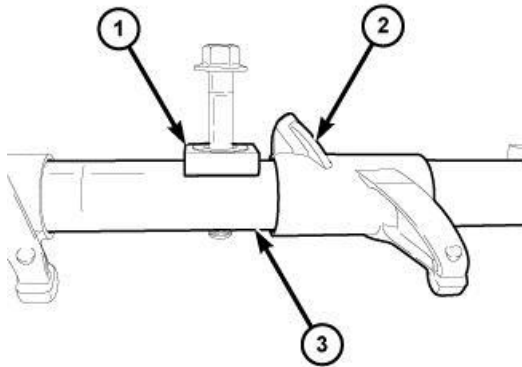
STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

CAUTION: Do not remove the retainers (1) from the rocker shaft (3).



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6. Remove the rocker arm shaft (3) and note the location for reassembly.

CAUTION: The longer pushrods are for the exhaust side and the shorter pushrods are for the intake side.

7. Remove the pushrods and note the location for reassembly.



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

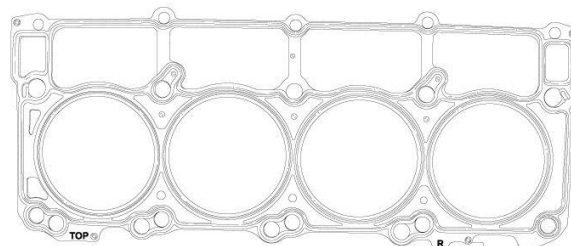
2011-2017 CHRYSLER 300 5.7 HEMI

Stage 3

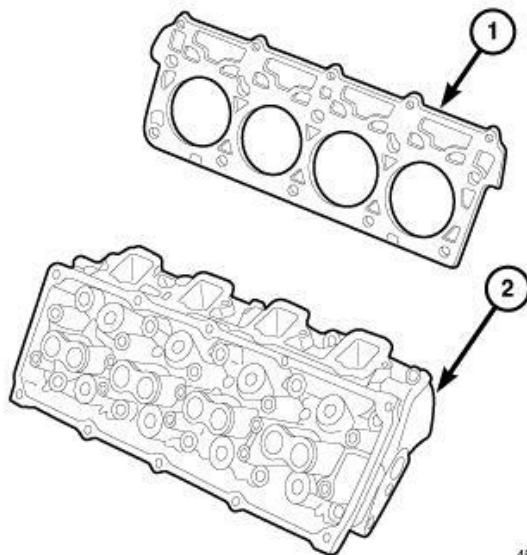
INSTALLATION

09 - Engine, 5.7L / Cylinder Head/Installation

1. If replacing the cylinder head, transfer the valves, valve seals and valve springs to the new cylinder head (Refer to 09 - Engine/Cylinder Head/VALVES, Intake and Exhaust - Installation) , if valve re-facing is necessary (Refer to 09 - Engine/Cylinder Head/VALVES, Intake and Exhaust - Standard Procedure) .
2. If replacing the cylinder head, transfer the spark plugs to the new cylinder head (Refer to 08 - Electrical/8I - Ignition Control/SPARK PLUG - Installation).
3. Using a new gasket, install the new exhaust manifolds. Using the sequence shown, tighten bolts/studs to 25 N·m (18 ft. lbs.).

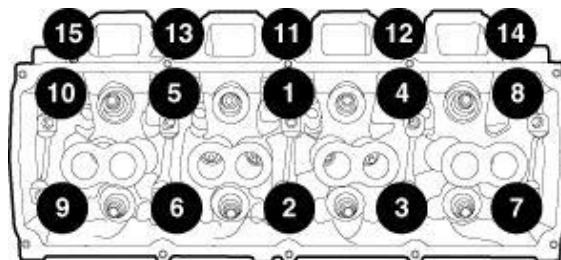


4. Clean all gasket sealing surfaces of the cylinder block and cylinder heads using a suitable solvent.
5. Install the new cylinder head gaskets (1).



Left side shown, right side similar.

6. Install the cylinder heads (2).
7. Using the sequence shown, tighten the cylinder head bolts 1 through 10 to 34 N·m (25 ft. lbs.).



Left side shown, right side similar.

CAUTION: The cylinder head gaskets are not interchangeable between the left and right sides. They are marked with an "L" and "R" to indicate the left or right side and they are marked

"TOP" to indicate which side goes up.



INSTALLATION INSTRUCTIONS

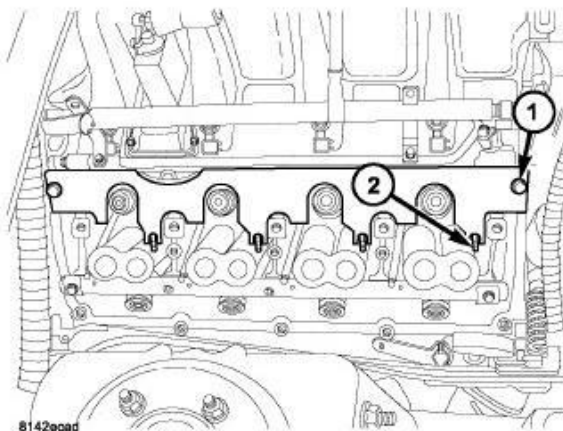
STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

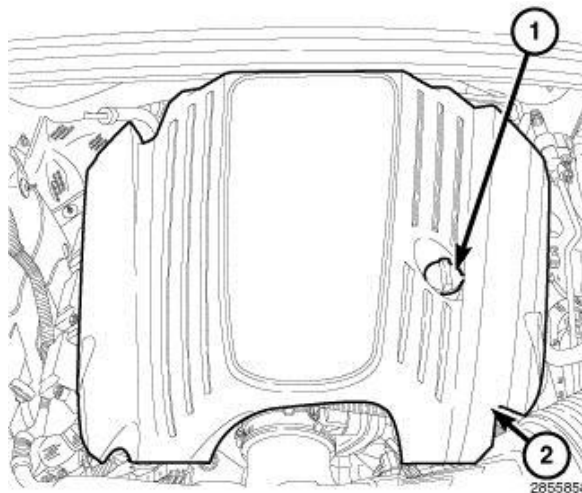
2011-2017 CHRYSLER 300 5.7 HEMI

8. Using the sequence shown, tighten the cylinder head bolts 11 through 15 to 20 N·m (177 in. lbs.).
9. Using the sequence shown, tighten the cylinder head bolts 1 through 10 to 61 N·m (45 ft. lbs.).
10. Using the sequence shown, tighten the cylinder head bolts 11 through 15 to 28 N·m (21 ft. lbs.).
11. Using the sequence shown, rotate the cylinder head bolts 1 through 10 an additional 90° turn.
12. Install the push rods and rocker arm assemblies in their original position, using Pushrod Retainer 9070 (1) (Refer to 09 - Engine/Cylinder Head/ROCKER ARM, Valve - Installation).



13. If Installing the right cylinder head, install the engine oil dip stick tube and nut.
14. Install the cylinder head covers (Refer to 09 - Engine/Cylinder Head/COVER(S), Cylinder Head/Installation).
15. Install the serpentine belt (Refer to 07 - Cooling/Accessory Drive/BELT, Serpentine/Installation).
16. Raise and support the vehicle (Refer to 04 - Vehicle Quick Reference/Hoisting - Standard Procedure).

17. Install the SRT exhaust kit (Refer to SRT Exhaust Installation).
18. Remove support and lower the vehicle.
19. Install the intake manifold (Refer to 09 - Engine/Manifolds/MANIFOLD, Intake - Installation).
20. Change the engine oil and oil filter (Refer to 09 - Engine/Lubrication/OIL/Standard Procedure).
21. Fill the cooling system with the specified type and amount of engine coolant (Refer to 07 - Cooling - Standard Procedure).
22. Install the engine cover (2).



23. Connect the negative battery cable.
24. Start the engine and check for leaks.



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

08 - Electrical / 8I - Ignition Control / SPARK PLUG/Installation

CAUTION: Handle the spark plugs with care. Do not drop or force the spark plugs into the wells, damage to the electrodes and/or porcelain body may occur. Always start each spark plug by hand in order to avoid cross-threading the spark plug in the cylinder head.

Always tighten spark plugs to the specified torque. Too much or not enough torque will cause damage to the cylinder head and/or spark plug and may lead to poor engine performance.

1. To avoid cross threading, start the spark plug(s) into the cylinder head by hand.
2. Tighten the spark plugs as follows:
 - 5.7L Tighten to the proper
(Torque Specifications).
 - 6.4L Tighten to the proper
(Torque Specifications).
3. Install the ignition coil(s) (Refer to 08 -
Electrical/Ignition Control/COIL, Ignition/Installation).
4. Install the engine cover.
5. Connect negative battery cable.



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

08 - Electrical / 8I - Ignition

Control/Specifications

TORQUE

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Camshaft Position Sensor - 5.7L	12	9	-
Crankshaft Position Sensor - 5.7L	12	9	-
Ignition Coil Mounting - 5.7L	12	9	-
* Knock Sensor - 5.7L	20	15	-
Spark Plugs - 5.7L	25 - 30	18.5 - 22	-
Negative Battery Cable Nut	5	-	45
* Do not apply any sealant, thread-locker or adhesive to bolts. Poor sensor performance may result.			
** Torque critical tapered design. Do not exceed 15 ft. lbs.			



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

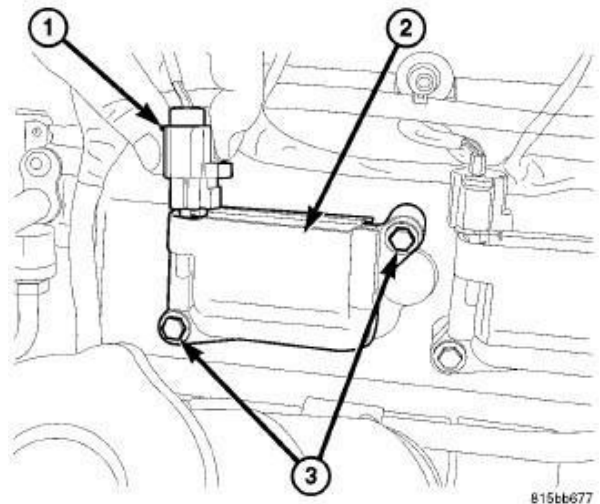
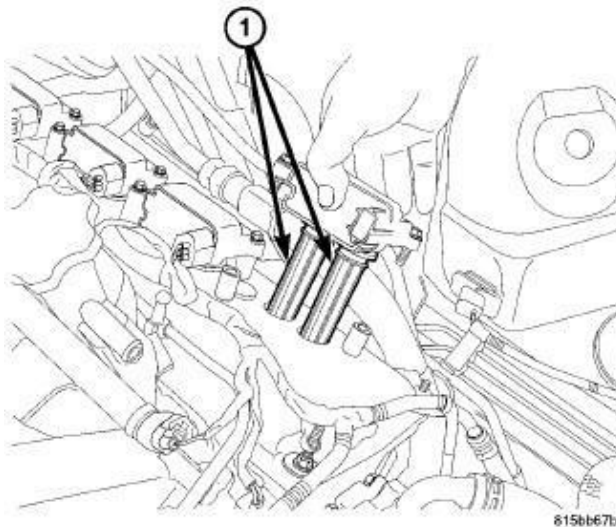
STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

08 - Electrical / 8I - Ignition Control / COIL, Ignition/Installation

CAUTION: Do not apply a silicone based grease such as Mopar® Dielectric Grease to the ignition coil rubber boot. The silicone based grease will absorb into the boot causing it to stick and tear.

1. Before installing coil(s), place a small, 360° bead of **Uniflor 8172** lubricant (1) along the inside opening of the spark plug boots (1).



2. Install the ignition coil into cylinder head and push both spark plug boots onto each spark plug.
3. Install the two coil mounting bolts (3) and tighten to the proper **(Torque Specifications)**.

4. Connect the ignition coil wire harness connector (1) to the coil and lock the connector.
5. Install the engine cover.
6. Connect the negative battery cable.



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

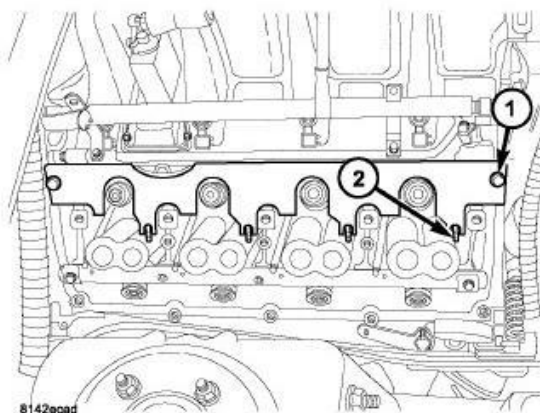
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2011-2017 CHRYSLER 300 5.7 HEMI

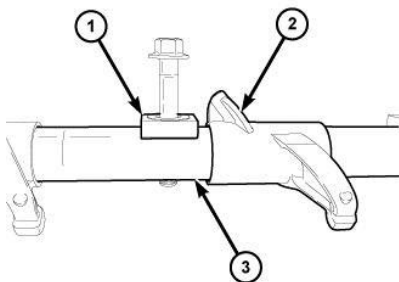
09 - Engine, 5.7L / Cylinder Head / ROCKER ARM, Valve/Installation

CAUTION: The longer pushrods are for the exhaust side and the shorter pushrods are for the intake side.

1. Install the push rods in the same order as removed.
2. Install the push rod retainer 9070 (1).



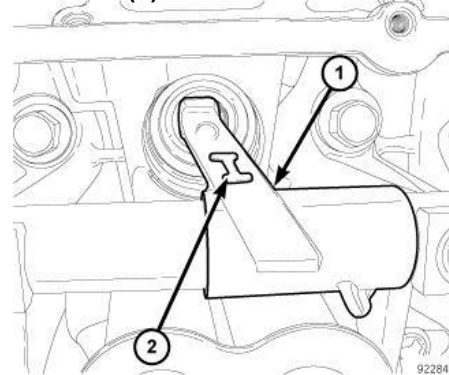
CAUTION: Make sure that the retainers (1) and the rocker arms (2) are not overlapped when tightening bolts or engine damage could result.



CAUTION: Due to the changes in the pushrod clearance holes in the Eagle 5.7L cylinder heads, close attention must be given when installing the pushrod(s) into the tappet(s). Once the pushrod(s) have been installed,

use a suitable light to look down through the pushrod hole(s). This will allow you to verify the pushrod(s) are centered properly in the tappet(s) and avoid engine damage. Recheck after the rocker shaft assembly has been installed and tightened to specification.

CAUTION: The rocker shaft assemblies are not interchangeable between the intake and the exhaust, failure to install them in the correct location could result in engine damage. The intake rocker arms (1) are marked with the letter "I" (2).



3. Install the rocker arm shaft assemblies in the same order as removed.
4. Using the sequence shown, tighten the rocker shaft bolts as follows:
 - Snug to 10 N·m (7 ft. lbs.)
 - Torque to 23 N·m (17 ft. lbs.)
 - Individually loosen by 1/2 turn and re-torque to 23 N·m (17 ft. lbs.)
 - Finally, Rotate 30 degrees



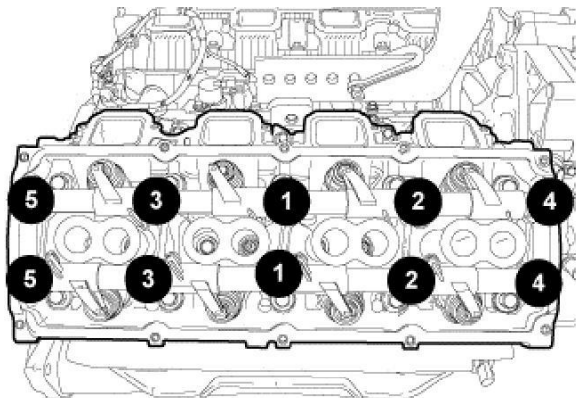
INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

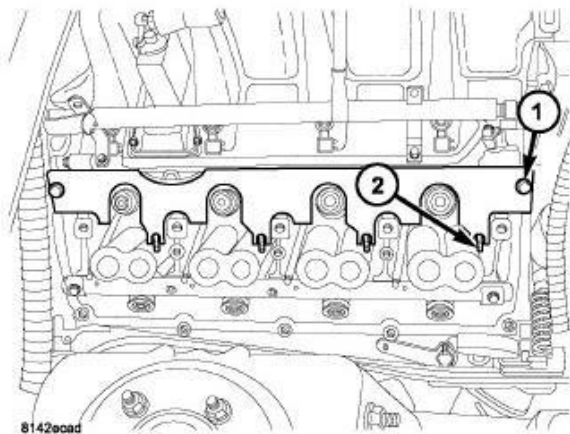
STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

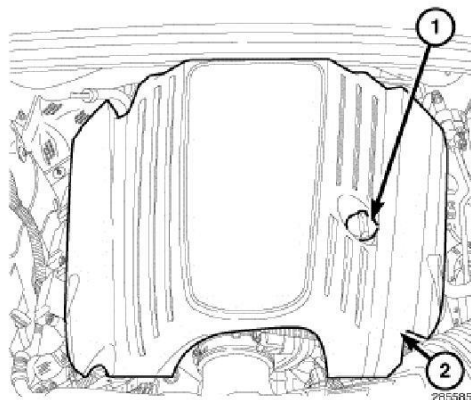


CAUTION: Do Not rotate or crank the engine during or immediately after rocker arm installation. Allow the hydraulic roller tappets adequate time to bleed down (about five minutes).

5. Remove pushrod retainer 9070 (1).



6. Install the cylinder head cover (Refer to 09 - Engine/Cylinder Head/COVER(S) , Cylinder Head - Installation).
7. Install the engine cover (2).



8. Connect the negative battery cable (1).



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

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STAGE 3 KIT PART NUMBER 77072312AB

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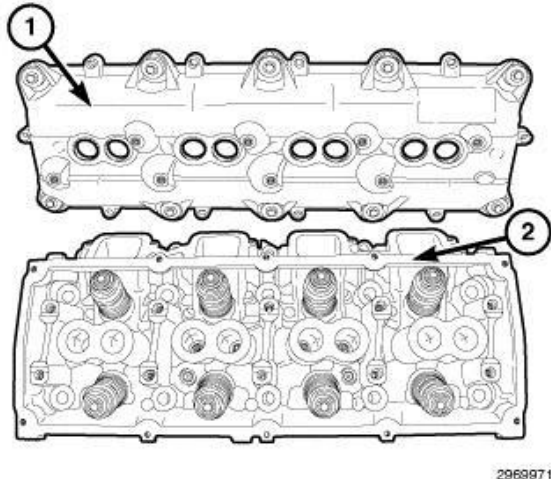
09 - Engine, 5.7L / Cylinder Head / COVER(S), Cylinder Head/Installation

CAUTION: Do not use harsh cleaners to clean the cylinder head covers. Severe damage to covers may occur.

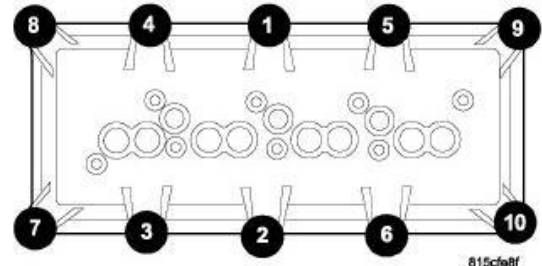
CAUTION: Do not allow other components including the wire harness to rest on or against the engine cylinder head cover. Prolonged contact with other objects may wear a hole in the cylinder head cover.

NOTE: The cylinder head cover gasket may be used again, provided no cuts, tears, or deformation have occurred.

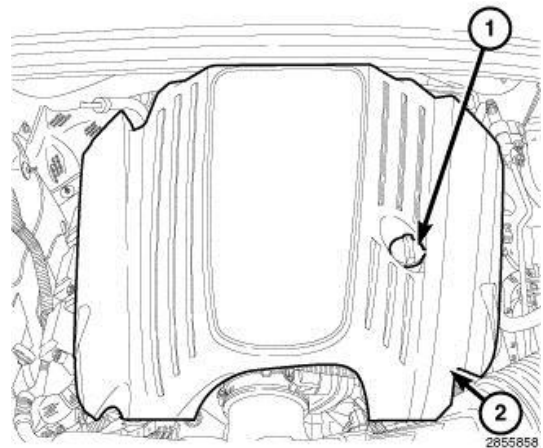
1. Clean the cylinder head cover (1) and the sealing surface of the cylinder head (2). Inspect and replace gasket if necessary.



2. Install the cylinder head cover (1) and tighten bolts finger tight.
3. Using the sequence shown, tighten the cylinder head cover bolts to 8 N·m (71 in. lbs.).



4. Install the ignition coils (Refer to 08 - Electrical/Ignition Control/COIL, Ignition/Installation).
5. Install the engine cover (2).



6. Connect the negative battery cable.



INSTALLATION INSTRUCTIONS

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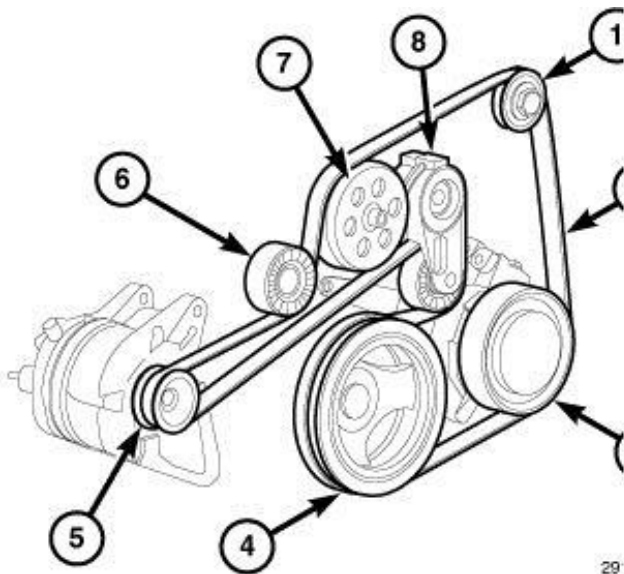
STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

07 - Cooling / Accessory Drive / BELT, Serpentine/Installation **5.7L/6.4L ELECTRONIC POWER STEERING**

NOTE: When installing accessory drive belt onto pulleys, make sure that belt is properly routed and all V-grooves make proper contact with pulleys.

1. Position the drive belt (2) over all pulleys except for the water pump pulley (7).



2. Rotate the tensioner (8) **clockwise** and slip the belt (2) over the water pump pulley (7).
3. Gently release tensioner (8).
4. Install the air intake tube between intake manifold and the air cleaner body.
5. Connect the negative battery cable.



INSTALLATION INSTRUCTIONS

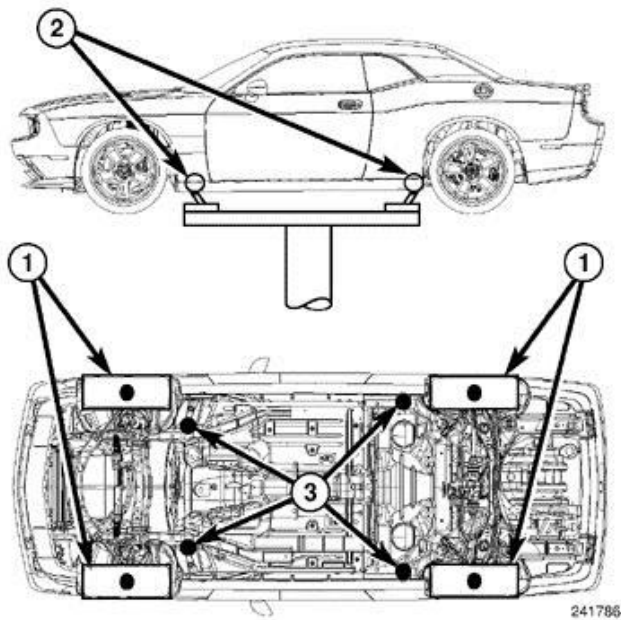
STAGE 3 KIT PART NUMBER 77072310AB

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2011-2017 CHRYSLER 300 5.7 HEMI

04 - Vehicle Quick Reference / Hoisting/Standard Procedure STANDARD PROCEDURE – HOISTING



CHALLENGER LIFTING POINTS

Refer to Owner's Manual provided with vehicle for proper emergency jacking procedures.

WARNING: The hoisting and jack lifting points provided are for a complete vehicle. When the engine or rear suspension is removed from a vehicle, the center of gravity is altered making some hoisting conditions unstable. Properly support or secure vehicle to hoisting device when these conditions exist. Failure to follow these instructions may result in serious or fatal injury.

CAUTION: Do not position hoisting device on any suspension component, including the front or rear suspension crossmembers. Do not hoist on the front and rear bumpers, the lower radiator crossmember, or the front

engine mount.

Do not attempt to raise one entire side of the vehicle by placing a floor jack midway between the front and rear wheels. This practice may result in permanent damage to the body.

When properly positioned, a floor jack can be used to lift the vehicle and support the raised vehicle with jack stands.

A floor jack or any lifting device must never be used on any part of the underbody other than the described areas.

- 1 - DRIVE ON HOIST
- 2 - FLOOR JACK, VEHICLE EMERGENCY JACK
- 3 - FRAME CONTACT LIFT (SINGLE POST)
- 3 - CHASSIS LIFT (DUAL LIFT)
- 3 - OUTBOARD LIFT (DUAL LIFT)
- 3 - FLOOR JACK



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

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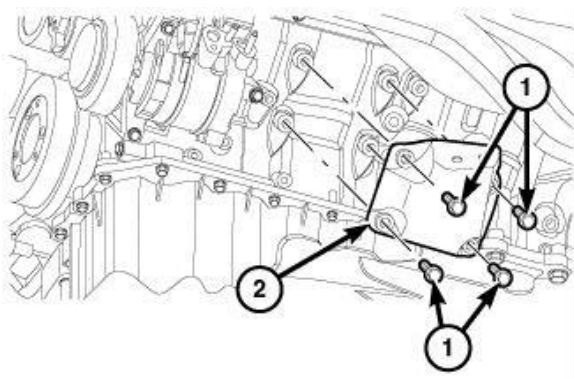
STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

SRT Exhaust Installation

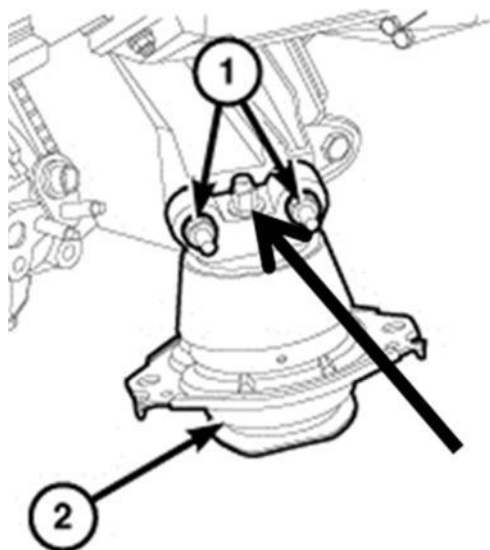
NOTE: Left side shown, right side similar.

1. Install the new 6.4 engine mount bracket(s).
Tighten bolts (1) to 45 ft-lbs.



Note: Install the 6.4 engine mount brackets using the carry-over bolts except for the one stud on the 5.7 that is different which is replaced by a common stud.

2. With both 5.7 engine mounts off the vehicle, remove the top metal component (nicknamed "Mickey Mouse") that is held on with a single nut.

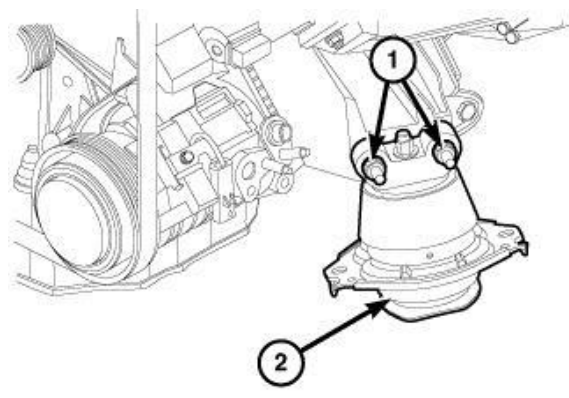


3. Cut the orientation pins off of both engine mounts.

4. Replace the removed component with the new adapter piece (nicknamed "Coffin") that is included with the kit and reinstall the retaining nut but do not tighten the nut yet.



5. Position the engine mounts (2), Install the retainers (1) and tighten to 44 ft-lbs.



Note: 5.7 mounts are shown above but yours will have the new adapter piece ("Coffin") installed.



INSTALLATION INSTRUCTIONS

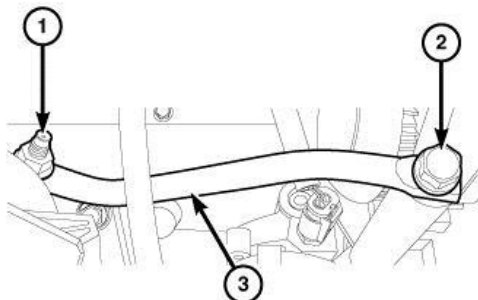
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2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

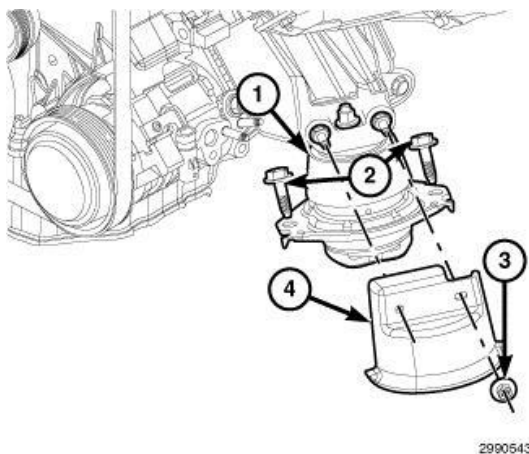
STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

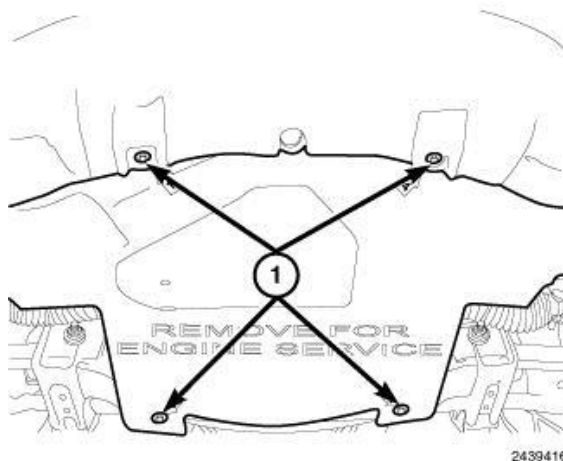
6. Position the generator support bracket (3) to the engine mount, install the retaining nut (1) and tighten finger tight.



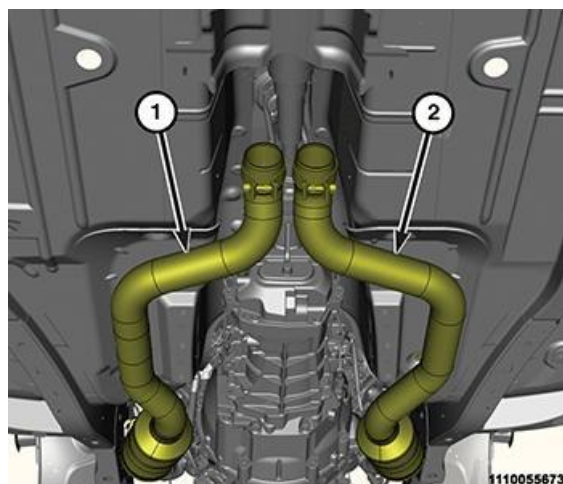
7. Position the generator support bracket to the generator, install the retaining bolt (2) and tighten to 40 ft-lbs.
8. Tighten the generator support bracket to engine mount retaining nut to 18 ft-lbs.
9. Lower the Engine Support Fixture 8534B (3) until the engine mounts are seated in the engine cradle.
10. Remove the Engine Lift Fixture 8984B (1), Engine Lift Adapter 8984-UPD (2) and the Engine Support Fixture 8534B (3).
11. Install both left/right engine mount lower retaining bolts (2) and tighten to 45 ft-lbs.



12. Tighten the top mount adapter retaining nut that was previously left loose to 44 ft-lbs.
13. Position both left/right engine mount heat shields (4), install the retaining nuts (3) and tighten to 18 ft-lbs.
14. Position the belly pan and install the belly pan retainers (1).



15. Position the engine oil dipstick tube, install the retaining nut at the right exhaust manifold.
16. Position the left (1) and/or right (2) catalytic converter onto the exhaust manifold flange, and install the flange nuts finger tight.





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17. Connect the oxygen sensor wire harness connectors.
18. Insert the muffler and resonator assembly onto the front exhaust pipe, without tightening the band clamps (1) at this time.



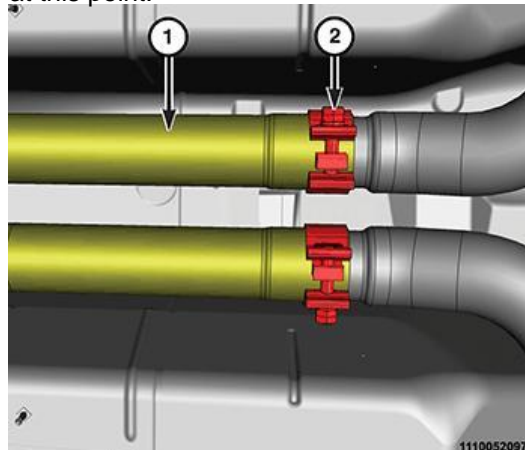
19. Tighten the catalytic converter (1) to exhaust manifold flange nuts (2) to the proper ([Torque Specifications](#)).



20. Tighten the band clamps to the proper ([Torque Specifications](#)).

21. Apply penetrating oil to band clamps.

22. Install the exhaust pipe assembly (1) into the catalytic converters, leaving the clamps (2) loose at this point.



23. Install the two rear isolator mounting bolts (1).



24. Install the front isolator mounting bolt (1).



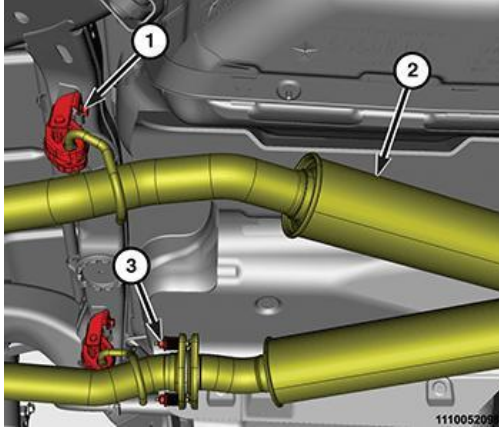
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25. Install left side resonator and tailpipe assembly flange nuts (3).
26. Check for proper alignment and clearance to underbody and engine compartment components before tightening clamps.
27. Check the clearance between muffler and resonator assembly and fuel tank. Clearance is 14mm (.55 in.) for V8 engine.
28. Check the clearance at rear tunnel reinforcement. Clearance is 15 - 20mm (.59 - .78 in.).
29. The tailpipe should be centered in the rear fascia opening.
30. Tighten the band clamps to the proper ([Torque Specifications](#)).
31. Start the engine and inspect for exhaust leaks. Repair exhaust leaks as necessary.
32. Lower the vehicle.
33. Connect the negative battery cable.
34. Start the engine and check for exhaust leaks.



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11 - Exhaust System/Specifications

SPECIFICATIONS

DESCRIPTION	N-m	Ft. Lbs.	In. Lbs.
Nut - Catalytic Converter to Ball Flange Snug fit	12	9	-
Nut - Catalytic Converter to Ball Flange	41	30	-
Band Clamp	50	36	-
Nut - Catalytic Converter to Support Bracket	55	40	-
Fasteners - Exhaust Support Bracket	25	18	-
Retainers - Heat Shield	10	7	98
Nuts - Tunnel Reinforcement	25	18	-
Fastener - Exhaust tips	30	22	-



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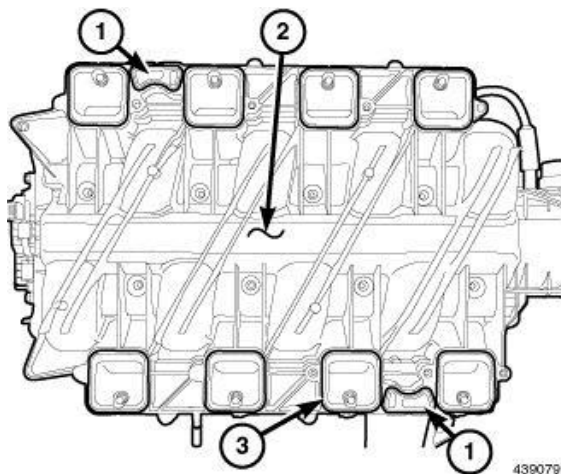
STAGE 3 KIT PART NUMBER 77072312AB

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09 - Engine, 5.7L / Manifolds / MANIFOLD, Intake/Installation

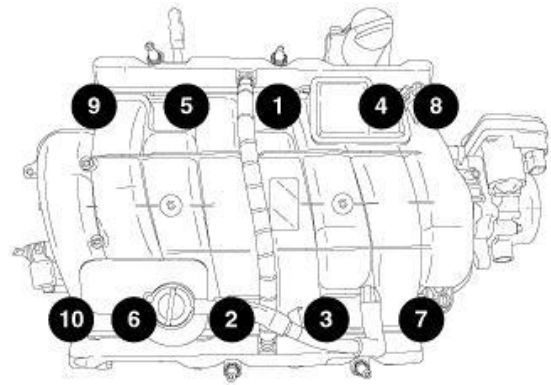
NOTE: The intake manifold seals (1,3) may be used again, provided no cuts, tears, or deformation have occurred.

1. Inspect the intake manifold seals and replace if necessary.



NOTE: If reinstalling the original manifold, apply Mopar® Lock & Seal Adhesive to the intake manifold bolts. Not required when installing a new manifold.

2. If required, apply Mopar® Lock & Seal Adhesive to the intake manifold bolts.
3. Position the intake manifold (2).
4. Using the sequence shown, tighten the bolts to 12 N·m (9 ft. lbs.).



5. Connect the fuel supply line (Refer to 14 - Fuel System/Fuel Delivery/FITTING, Quick Connect - Standard Procedure).
6. Connect the brake booster hose and the EVAP purge line.
7. Connect the following components wire harness connectors:
 - Manifold Absolute Pressure (MAP)
 - Sensor Fuel Injectors
 - Electronic Throttle Control (ETC).
8. Install the air cleaner body (Refer to 09 - Engine/Air Intake System/BODY, Air Cleaner/Installation).
9. Connect the negative battery cable.
10. Start the engine and check for leaks.



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14 - Fuel System / Fuel Delivery, Gas / FITTING, Quick Connect/Standard Procedure QUICK-CONNECT FITTINGS

Different types of quick-connect fittings are used to attach the various fuel system components, lines and tubes. Some quick-connect fittings require the use of a special tool for disconnection and removal.

These are the quick-connect fittings:

- Redundant Latch Single Button Type Fitting
- Single Button Type Fitting
- Pinch Type Fitting
- Single Tab Type Fitting
- Two Tab Type Fitting
- Plastic Retainer Ring Type Fitting
- Latch Clip Type 1 Fitting
- Latch Clip Type 2 Fitting
- Wing Type Fitting

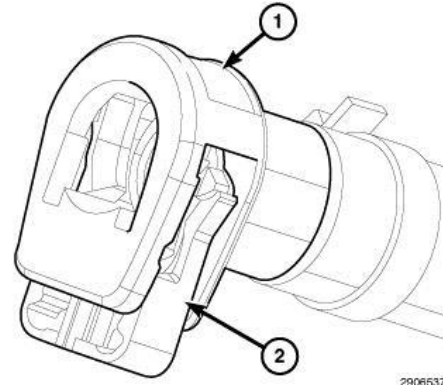
DISCONNECTING

WARNING: The fuel system is under a constant pressure (even with engine off). Before servicing any fuel system hose, fitting or line, fuel system pressure must be released.

CAUTION: Before separating a Quick-Connect fitting, pay attention to what type of fitting is being used. This will prevent unnecessary fitting or fitting latch breakage.

CAUTION: The interior components (O-rings, clips) of quick-connect fittings are not serviced separately, but new plastic spacers and latches are available for some types. If service parts are not available, do not attempt to repair the damaged fitting or fuel line (tube). If repair is necessary, replace the complete fuel line (tube) assembly.

Redundant Latch Single Button Type Fitting:

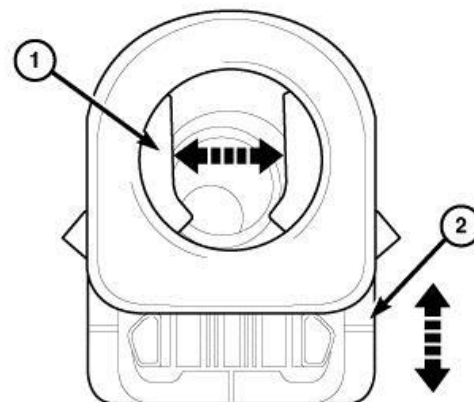


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This type of quick-connect fitting is equipped with a redundant latch (2) and a single push button (1) that releases two internal latches located in the quick-connect fitting. Special tools are not required for removal.

CAUTION: Do not pry or pull up on the push button as damage to the latches of the quick-connect fitting will occur.

3. Pull the redundant latch (2) out, away from the quick-connect fitting.
4. Press on the push button with your thumb, which releases the internal latches (1) and remove the quick-connect fitting from the fuel system component.



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Single Button Type Fitting:



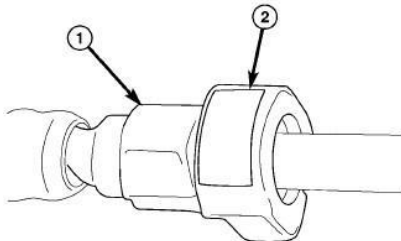
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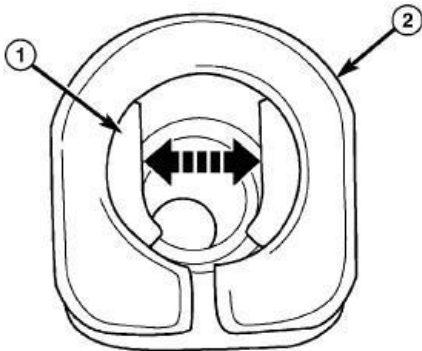
2011-2017 CHRYSLER 300 5.7 HEMI



CAUTION: Do not pry or pull up on the push button as damage to the latches of the quick-connect fitting will occur.

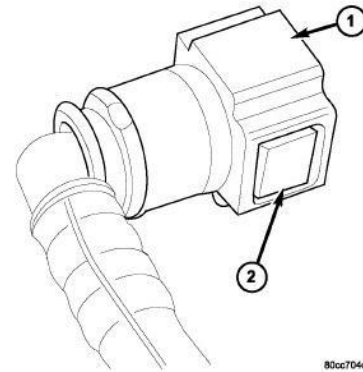
This type of quick-connect fitting is equipped with a single push button (2) that releases two internal latches located in the quick-connect fitting. Special tools are not required for removal.

3. Press on the push button with your thumb, which releases the internal latches (1).



4. Remove the quick-connect fitting from the fuel system component.

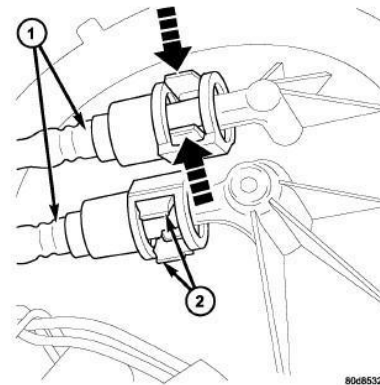
2 Button Type Fitting



This type of quick-connect fitting (1) is equipped with two push buttons (2) that releases two internal latches located in the quick-connect fitting. Special tools are not required for removal.

3. Press on both push buttons with your thumb, which releases the internal latches.
4. While holding the two push buttons simultaneously, remove the quick-connect fitting from the fuel system component.

Pinch Type Fitting



This type of quick-connect fitting (1) is equipped with two finger tabs (2). Special tools are not required for removal.

3. Pinch both tabs (2) together and release the quick-connect fitting.



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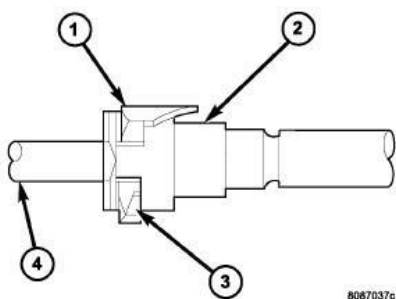
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4. Remove the quick-connect fitting from the fuel system component.

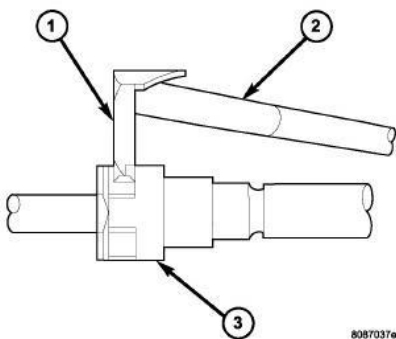
Single Tab Type Fitting



This type of quick-connect fitting (2) is equipped with a single pull tab (1). The tab is removable. After the tab is removed the quick-connect fitting can be separated from the fuel system component. Special tools are not required for removal.

NOTE: If the release tab (3) is not pressed prior to releasing pull tab, the pull tab will be damaged

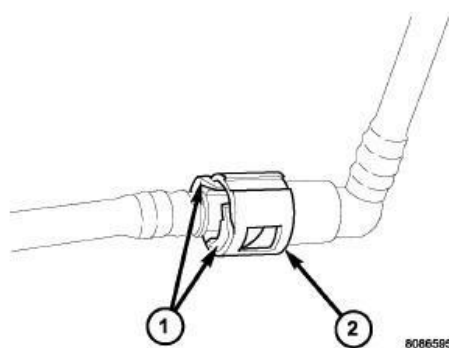
5. Press the release tab on the side of the fitting (3) to release the pull tab (1).



6. While pressing the release tab on the side of the quick-connect fitting use a screwdriver (2) to pry up the pull tab.
7. Raise the pull tab until it separates from the quick-connect fitting.

8. Remove the quick-connect fitting from the fuel system component.

Two Tab Type Fitting



This type of quick-connect fitting (2) is equipped with tabs (1) located on both sides of the fitting (2). These tabs are integral to the fuel system component. The plastic tabs will remain on the component being serviced after the quick-connect fitting is removed. The O-ring and spacer will remain in the quick-connect fitting. Special tools are not required for removal.

3. Squeeze the plastic tabs (1) against the sides of component being serviced with your fingers.
4. Remove the quick-connect fitting from the fuel system component.

Plastic Retainer Ring Type Fitting



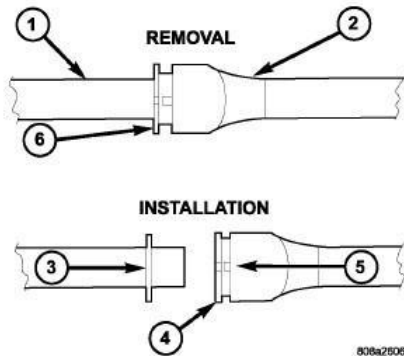
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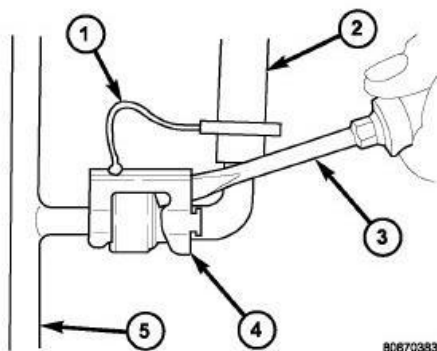


This type of fitting can be identified by the use of a round plastic retainer ring (4,6) usually black in color. Special tools are not required for removal.

NOTE: The round plastic retainer ring must be pressed squarely into the quick-connect fitting body. If this retainer is cocked during removal it will be difficult to disconnect the quick-connect fitting. Use an open-end wrench on the shoulder of the plastic retainer ring to aid in disconnection.

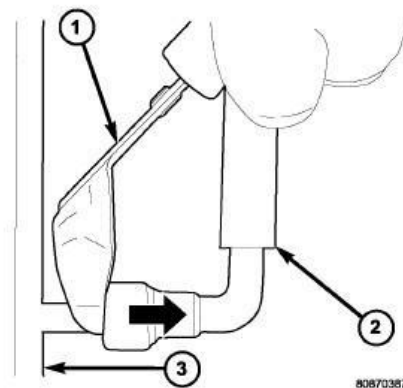
3. Firmly push the quick-connect fitting (5) towards the component being serviced while firmly pushing the round plastic retainer ring into the quick-connect fitting (6). With the round plastic ring depressed, remove the quick-connect fitting from the fuel system component.
4. After removal the plastic retainer ring will remain with the quick-connect fitting.

Latch Clip Type 1 Fitting



Depending on vehicle model and engine, two different types of safety latch clips are used. One is tethered (1) to fuel line and the other is not. A special tool will be necessary to disconnect the fuel line after latch clip is removed. The latch clip may be used on certain fuel line and fuel rail connections or to join fuel lines together.

5. Pry up on the latch clip (4) with a screwdriver (3).
6. Slide the latch clip away from the quick-connect fitting while lifting the screwdriver and position aside.
7. Insert an appropriate fuel line removal tool (1) into the quick-connect fitting and release the internal latches.



NOTE: After removal the internal latches will remain in the quick-connect fitting.

8. With the special tool still inserted, remove the quick-connect fitting from the fuel system component.

Latch Clip Type 2 Fitting



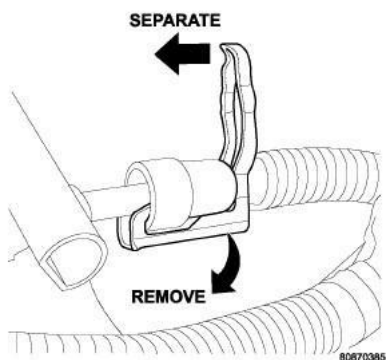
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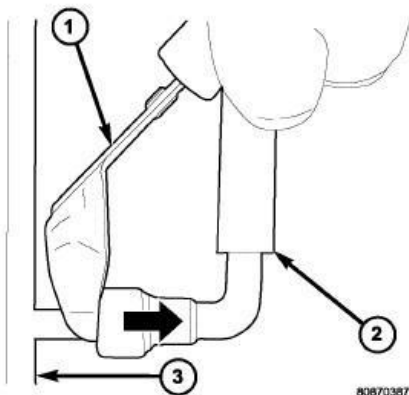
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Depending on vehicle model and engine, two different types of safety latch clips are used. One is tethered to the fuel line and the other is not. A special tool will be necessary to disconnect the fuel line after the latch clip is removed. The latch clip may be used on certain fuel line and fuel rail connections or to join fuel lines together.

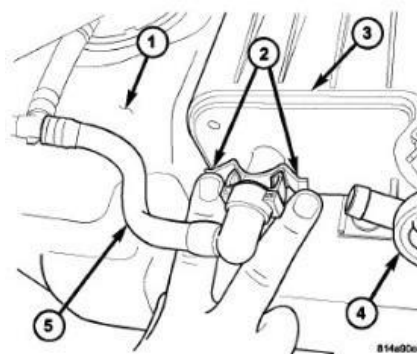
5. Unlatch the small arms on the end of clip, swing away and separate from the fuel system component.
6. Slide the latch clip away from the quick-connect fitting while lifting with a screwdriver and position aside.
7. Insert an appropriate fuel line removal tool (1) into the quick-connect fitting and release the internal latches.



NOTE: After removal the internal latches will remain in the quick-connect fitting.

8. With the special tool still inserted, remove the quick-connect fitting from the fuel system component.

Wing Type Fitting



The wing type fitting is used on fuel system and emission components. The wing type fitting is most commonly used on the EVAP canister (3). Special tools are not required for removal.

3. Using two fingers, press both wings (2) and release the locking tabs.

NOTE: After removal the locking tabs will remain with the quick-connect fitting.

4. While holding the wings, remove the quick-connect fitting from the fuel system component.

CONNECTING

7. Inspect the quick-connect fitting body and fuel system components for damage. Replace as necessary.
8. Prior to connecting any quick-connect fitting to components, check condition of fitting and components. Clean parts with a lint-free cloth. Lubricate with clean engine oil.



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9. Insert the quick-connect fitting onto the fuel tube or fuel system component until the built-in stop on the fuel tube or component rests against the back of fitting.

10. Continue pushing until a click is felt.

11. If Equipped:

Redundant Latch Single Button Type

Fitting: Push redundant latch until it locks into position in the quick-connect fitting.

Single Tab Type Fitting: Push new tab down until it locks into position in the quick-connect fitting.

Latch Clip Type Fitting: Install latch clip (snaps into position). **If latch clip will not snap into position, this indicates the quick-connect fitting is not properly installed onto fuel system component, recheck the connection.**

12. Verify a locked condition by firmly pulling on the quick-connect fitting connection of the fuel system component.



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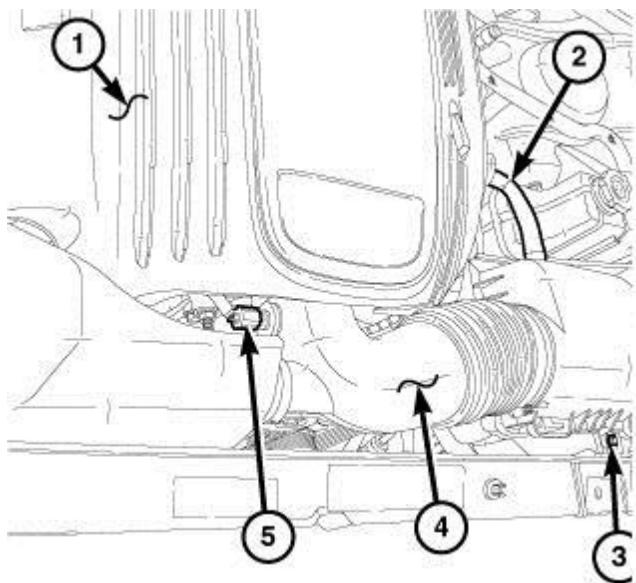
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09 - Engine, 5.7L / Air Intake System / BODY, Air Cleaner/Installation

1. Position the air cleaner housing into the engine compartment.
2. Install the air cleaner housing retaining bolt (3) and tighten to 5 N·m (44 in. lbs.).



3. Connect the air duct to the throttle body and the air cleaner housing and tighten clamps to 3 N·m (30 in. lbs.).
4. Connect the make up air hose (MUA) (2).
5. Connect the intake air temperature (IAT) sensor (5) electrical connector.
6. Position the engine cover (1) and secure the retaining grommets onto the ball studs.



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09 - Engine, 5.7L / Lubrication / OIL/Standard Procedure

STANDARD PROCEDURE - ENGINE OIL SERVICE

The engine oil level indicator is located at the left hand of the engine on the 5.7L engines.

CRANKCASE OIL LEVEL INSPECTION

CAUTION: Do not overfill crankcase with engine oil, pressure loss or oil foaming can result.

Inspect engine oil level approximately every 800 kilometers (500 miles). Unless the engine has exhibited loss of oil pressure, run the engine for about ten minutes before checking oil level. Checking engine oil level on a cold engine is not accurate.

To ensure proper lubrication of an engine, the engine oil must be maintained at an acceptable level. The acceptable levels are indicated between the ADD and SAFE marks on the engine oil dipstick.

It is recommended that the engine oil level should be checked when the engine is at operating temperature.

1. Position vehicle on level surface.
2. With engine OFF, allow approximately five minutes for oil to settle to bottom of crankcase, remove engine oil dipstick.
3. Wipe dipstick clean.
4. Install dipstick and verify it is seated in the tube.
5. Remove dipstick, with handle held above the tip, take oil level reading.
6. Verify the oil level to be at the top of the "SAFE" range +/- 1/4 of the total distance of the range.
7. Add oil only if level is below the ADD mark on dipstick.

ENGINE OIL CHANGE

Change engine oil at mileage and time intervals described in Maintenance Schedules (Refer to 04 - Vehicle Quick Reference/Maintenance Schedules - Description).

Run engine until achieving normal operating temperature.

1. Position the vehicle on a level surface and turn engine off.
2. Hoist and support vehicle on safety stands.
3. Remove oil fill cap.
4. Place a suitable drain pan under crankcase drain.
5. Remove drain plug from crankcase and allow oil to drain into pan. Inspect drain plug threads for stretching or other damage. Replace drain plug if damaged.
6. Install drain plug in crankcase. Torque to 34 N·m (25 ft. lbs.).
7. Lower vehicle and fill crankcase with specified type and amount of engine oil described in this section.
8. Install oil fill cap.
9. Start engine and inspect for leaks.
10. Stop engine and inspect oil level.

NOTE: Care should be exercised when disposing used engine oil after it has been drained from a vehicle engine. Refer to the WARNING at beginning of this section.



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07 - Cooling/Standard Procedure

ADDING ADDITIONAL COOLANT

When additional coolant is needed, it should be added to the Pressurized Coolant Bottle. With the engine cold, add enough coolant to set the level between the add and full indicators on the bottle.

For the proper type of coolant (Refer to 04 - Vehicle Quick Reference/Capacities and Recommended Fluids - Description).

CAUTION: Do not use coolant additives that are claimed to improve engine cooling.



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04 - Vehicle Quick Reference / Capacities and Recommended Fluids/Description ENGINE COOLANT

WARNING: Antifreeze is an ethylene-glycol base coolant and is harmful if swallowed or inhaled. If swallowed, drink two glasses of water and induce vomiting. If inhaled, move to fresh air area. Seek medical attention immediately. Do not store in open or unmarked containers. Wash skin and clothing thoroughly after coming in contact with ethylene-glycol. Keep out of reach of children. Dispose of glycol base coolant properly, contact your dealer or government agency for location of collection center in your area. Do not open a cooling system when the engine is at operating temperature or hot under pressure, personal injury can result. Avoid radiator cooling fan when engine compartment related service is performed, personal injury can result.

CAUTION: Mixing of engine coolant (antifreeze) other than specified Organic Additive Technology (OAT) engine coolant (antifreeze), may result in engine damage and may decrease corrosion protection. Organic Additive Technology (OAT) engine coolant is different and should not be mixed with Hybrid Organic Additive Technology (HOAT) engine coolant (antifreeze). If a non-OAT engine coolant (antifreeze) is introduced into the cooling system in an emergency, it should be replaced with the specified engine coolant (antifreeze) as soon as possible.

The cooling system is designed around the coolant. The coolant must accept heat from engine metal, in the cylinder head area near the exhaust valves and engine block. Then coolant carries the heat to the radiator where the tube/fin radiator can transfer the heat to the air.

The use of aluminum cylinder blocks, cylinder heads, and water pumps requires special corrosion protection. Mopar® Antifreeze/Coolant, or the equivalent ethylene-glycol base

coolant with organic corrosion inhibitors (called OAT, for Organic Additive Technology) is recommended. This coolant offers the best engine cooling without corrosion when mixed with 50% ethylene-glycol and 50% distilled water to obtain a freeze point of -37°C (-35°F). If it loses color or becomes contaminated, drain, flush, and replace with fresh properly mixed coolant solution.

COOLANT PERFORMANCE

The required ethylene-glycol and water mixture depends upon climate and vehicle operating conditions. The coolant performance of various mixtures follows:

Pure Water- Water can absorb more heat than a mixture of water and ethylene-glycol. This is for purpose of heat transfer only. Water also freezes at a higher temperature and allows corrosion.

100 percent Ethylene-Glycol - The corrosion inhibiting additives in ethylene-glycol need the presence of water to dissolve. Without water, additives form deposits in system. These act as insulation causing temperature to rise to as high as 149°C (300°F). This temperature is hot enough to melt plastic. The increased temperature can result in severe engine damage. In addition, 100 percent ethylene-glycol freezes at -22°C (-8°F).

50/50 Ethylene-Glycol and Water - Is the recommended mixture, it provides protection against freezing to -37°C (-34°F). The antifreeze concentration **must always** be a minimum of 44 percent, year-round in all climates. If percentage is lower, engine parts may be eroded by cavitation. Maximum protection against freezing is provided with a 68 percent antifreeze concentration, which prevents freezing down to -67.7°C (-90°F). A higher percentage will freeze at a warmer temperature. Also, a higher percentage of antifreeze can cause the engine to overheat because specific heat of antifreeze is lower than that of water.

OAT coolant is purple in color. It cannot be mixed with other types of coolant including Chrysler's existing HOAT coolant and only should only be mixed with approved OAT coolant of the same color. Maintenance of the cooling system is not required unless a repair has been made with loss of coolant or the coolant has been contaminated.

CAUTION: Richer antifreeze mixtures cannot be measured with normal field equipment and



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can cause problems associated with
100 percent ethylene-glycol.

CAUTION: Do not use coolant additives that are
claimed to improve engine cooling.



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09 - Engine, 5.7L/Specifications

TORQUE SPECIFICATIONS

TORQUE CHART 5.7L ENGINE

DESCRIPTION	N-m	Ft. Lbs.	In. Lbs.
Block Pipe Plugs			
(1/4 – 18 NPT) Oil gallery Plug	20	15	—
(1/4 – 18 NPT) Coolant Drain Plug	34	25	—
(3/8 NPT)	27	20	—
Camshaft Phaser Bolt	98	72	—
Camshaft Tensioner Plate Bolts	28	21	—
Coil to Cylinder Head Cover Bolts	7	-	62
Timing Chain Case Cover Bolts	28	21	—
Lifting Stud	55	41	—
Connecting Rod Cap Bolts	21 plus 90° Turn	15 plus 90° Turn	—
Main Bearing Cap Bolts	(Refer to 09 - Engine/Engine Block/CRANKSHAFT - Installation)		
Cylinder Head Bolts	(Refer to 09 - Engine/Cylinder Head - Installation)		
Cylinder Head Cover Bolts	8	—	71
Exhaust Manifold-to-Cylinder Head	25	18	—

DESCRIPTION	N-m	Ft. Lbs.	In. Lbs.
Flexplate-to-Crankshaft Bolts	95	70	—
Front Engine Mount Bracket to Block	61	45	—
Flywheel-to-Crankshaft Bolts	75	55	—
Front Insulator Through Bolt/Nut	95	70	—
Through Bolt/Nut (4WD)	102	75	—
Stud Nut (4WD)	41	30	—
Front Insulator-to-Block Bolts (2WD)	61	45	—
Intake Manifold Bolts	(Refer to 09 - Engine/Manifolds/MANIFOLD, Intake - Installation)		
Lifter Guide Holder	12	9	—
Oil Pan Bolts	12	9	—
Oil Dipstick Tube	12	9	—
Oil Filter Adapter	12	9	—
Oil Pan Drain Plug	34	25	—
Oil Pump Attaching Bolts	28	21	—
Oil Pump Pickup Tube Bolt/Nut	28	21	—
Rear Seal Retainer Attaching Bolts	15	11	—
Rear Insulator-to-Bracket Bolt	68	50	—



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2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

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2011-2017 CHRYSLER 300 5.7 HEMI

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Rear Insulator-to-Crossmember	41	30	—
Rear Insulator-to-Crossmember Bolt	68	50	—
Rear Insulator-to-Transmission Bolt	68	50	—
Rear Insulator Bracket Bolts	68	50	—
Rear Support Bracket Bolt	41	30	—
Rear Support Plate-to-Transfer Case Bolts	41	30	—
Rocker Arm Bolts	22	16	—
Thermostat Housing Bolts	28	21	—
Throttle Body Bolts	12	9	—
Transfer Case-to-Insulator Bolt	204	150	—
Transmission Support Bracket Bolt	68	50	—
Vibration Damper Bolt	180	133	—
Water Pump-to-Timing Chain Case Cover Bolts	28	21	—



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09 - Engine, 5.7L/Specifications

SPECIFICATIONS

Eagle Engine - 90° V-8 OHV

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Displacement	5.7 Liters	348 CID
Bore	99.5 mm	3.92 in.
Stroke	90.9 mm	3.58 in.
Compression Ratio	10.5:1	
Max. Variation Between Cylinders	25%	
Firing Order	1-8-4-3-6-5-7-2	
Lubrication	Pressure Feed - Full Flow Filtration	
Cooling System	Liquid Cooled	
Cylinder Block	Cast Iron	
Cylinder Head	Aluminum	
Crankshaft	Nodular Iron	
Camshaft	Cast Iron	
Pistons	Aluminum Alloy	
Connecting Rods	Powdered Metal	

CYLINDER BLOCK

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Cylinder Bore Diameter	99.50 mm	3.92 in.
Out of Round (MAX)	0.0076 mm	0.0003 in.
Taper (MAX)	0.0127 mm	0.0005 in.
Lifter Bore Diameter	21.45 - 21.425 mm	0.8444 - 0.8435 in.

PISTONS

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Clearance Measured at 38.0 mm (1.5 in.) Below Deck	0.031 - 0.058 mm	0.0012 - 0.0023 in.
Ring Groove Diameter		
Top Groove	90.4 - 90.6 mm	3.56 - 3.57 in.
Second Groove	88.4 - 88.7 mm	3.48 - 3.49 in.
Weight	413 grams	14.56 oz
Piston Length	53.3 mm	2.10 in.
Ring Groove Width		
No. 1	1.23 - 1.26 mm	0.048 - 0.0496 in.
No. 2	1.23 - 1.25 mm	0.048 - 0.0492 in.
No. 3	2.03 - 2.05 mm	0.079 - 0.080 in.



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PISTON PINS

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Clearance In Piston	0.005 - 0.014 mm	0.0001 - 0.0005 in.
Diameter	24.004 - 24.007 mm	0.945 - 0.9451 in.
Length	62.99 - 63.21 mm	2.47 - 2.48 in.

CONNECTING RODS

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Piston Pin Bore Diameter	24.014 - 24.024 mm	0.9454 - 0.9458 in.
Side Clearance	0.10 - 0.35 mm	0.003 - 0.0137 in.

PISTON RINGS

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Ring Gap		
Top Compression Ring	0.40 - 0.55 mm	0.015 - 0.021 in.
Second Compression Ring	0.24 - 0.51 mm	0.009 - 0.020 in.
Oil Control Rails	0.15 - 0.66 mm	0.0059 - 0.0259 in.
Side Clearance		
Top Compression Ring	0.04 - 0.09 mm	0.002 - 0.004 in.
Second Compression Ring	0.04 - .08 mm	0.001 - 0.003 in.
Oil Control Rails	0.06 - 0.21 mm	0.002 - 0.008 in.
Ring Width		
Top Compression Ring	1.17 - 1.19 mm	0.0461 - 0.0469 in.
Second Compression Ring	1.17 - 1.19 mm	0.0461 - 0.0469 in.
Oil Control Rails	0.387 - 0.413 mm	0.015 - 0.016 in.

CRANKSHAFT

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Main Bearing Journal Diameter	64.988 - 65.012 mm	2.5585 - 2.5595 in.
Bearing Clearance	0.023 - 0.051 mm	0.0009 - 0.002 in.
Out of Round (MAX)	0.005 mm	0.0002 in.
Taper (MAX)	0.003 mm	0.0001 in.
End Play	0.052 - 0.282 mm	0.002 - 0.011 in.
End Play (MAX)	0.282 mm	0.0111 in.
Connecting Rod Journal Diameter	53.992 - 54.008 mm	2.126 in.
Bearing Clearance	0.020 - 0.060 mm	0.0007 - 0.0023 in.
Out of Round (MAX)	0.005 mm	0.0002 in.
Taper (MAX)	0.003 mm	0.0001 in.



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CAMSHAFT

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Bearing Journal Diameter		
No. 1	58.2 mm	2.29 in.
No. 2	57.8 mm	2.28 in.
No. 3	57.4 mm	2.26 in.
No. 4	57.0 mm	2.24 in.
No. 5	43.633 mm	1.72 in.
Bearing To Journal Clearance Standard		
No. 1	0.040 - 0.080 mm	.0015 - .003 in.
No. 2	0.050 - 0.090 mm	0.0019 - .0035 in.
No. 3	0.040 - 0.080 mm	.0015 - .003 in.
No. 4	0.050 - 0.090 mm	0.0019 - .0035 in.
No. 5	0.040 - 0.080 mm	.0015 - .003 in.
Camshaft End Play	.080 - 0.290mm	0.0031 - 0.0114 in.

VALVE TIMING

DESCRIPTION	SPECIFICATION
Intake	
Opens (BTDC)	21.7°
Closes (ATDC)	236.3°
Duration	258°
Exhaust	
Opens (BTDC)	270.2°
Closes (ATDC)	17.8°
Duration	288°
Valve Overlap	39.5°

CYLINDER HEAD

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Valve Seat Angle	44.5° - 45.0°	
Valve Seat Runout (MAX)	0.05 mm	0.0019 in.
Valve Seat Width (finish)		
Intake	1.18 - 1.62 mm	0.0465 - 0.0638 in.
Exhaust	1.48 - 1.92 mm	0.0583 - 0.0756 in.
Guide Bore Diameter (Std.)	7.975 - 8.00 mm	0.314 - 0.315 in.



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HYDRAULIC TAPPETS

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Body Diameter	21.387 - 21.405 mm	0.8420 - 0.8427 in.
Clearance (to bore)	0.020 - 0.063 mm	0.0008 - 0.0025 in.
Dry Lash	3.0 mm (at the valve)	0.1181 in. (at the valve)

VALVES

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Face Angle	45.0° - 45.5°	
Head Diameter		
Intake	51.94 - 52.20 mm	2.04 - 2.06 in.
Exhaust	39.27 - 39.53 mm	1.55 - 1.56 in.
Length (overall)		
Intake	130.87 - 131.51 mm	5.152 - 5.178 in.
Exhaust	130.101 - 130.741 mm	5.122 - 5.147 in.
Stem Diameter		
Intake	7.935 - 7.953 mm	0.312 - 0.313 in.
Exhaust	7.932 - 7.950 mm	0.312 - 0.313 in.
Stem - to - Guide Clearance		
Intake	0.022 - 0.062 mm	0.0009 - 0.0024 in.
Exhaust	0.025 - 0.058 mm	0.0010 - 0.0023 in.
Valve Lift (@ zero lash)		
Intake	12.0 mm	0.472 in.
Exhaust	11.70 mm	0.461 in.



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VALVE SPRING

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Spring Force (valve closed)	435.0 N +/- 22.0 N @ 45 mm	97.8 lbs +/- 5.0 lbs. @ 1.771 in.
Spring Force (valve open)	1077.0 N +/- 48.0 N @ 32.6 mm.	242.0 lbs. +/- 11 lbs. @ 1.283 in.
Free Length (approx).	55.6 mm	2.189 in.
Number of Coils	7.95	
Wire Diameter	4.95 x 4.1 mm	0.194 - 0.161 in.
Installed Height (spring seat to bottom of retainer)	46.0 mm	1.81 in.

OIL PUMP

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Clearance Over Rotors (MAX)	0.095 mm	0.0037 in.

DESCRIPTION	SPECIFICATION	
	Metric	Standard
Outer Rotor to Pump Body Clearance (MAX)	.235 mm	0.0093 in.
Tip Clearance Between Rotors (MAX)	0.150 mm	0.006 in.

OIL PRESSURE

DESCRIPTION	SPECIFICATION	
	Metric	Standard
At Curb Idle Speed (MIN)*	25 kPa	4 psi
@ 3000 rpm	170 - 758 kPa	25 - 110 psi
* CAUTION: If pressure is zero at curb idle, DO NOT run engine.		



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04 - Vehicle Quick Reference / Capacities and Recommended Fluids/Specifications SPECIFICATIONS

ENGINE

Description	Type	Part Number	Capacities	
			U.S.	Metric
Cooling System				
♦ Engine Coolant (5.7L Engine)	MOPAR® Antifreeze/Coolant 10 Year/150,000 Mile Formula OAT (Organic Additive Technology) meeting the requirements of Chrysler Material Standard MS-12106	1 Gallon - 68163848AA (concentrate) 68163849AA (50/50)	14.7 Quarts	13.9 Liters
Engine Oil with Filter				
Engine Oil (5.7L Engines - Non ACEA Categories)	We recommend you use API Certified SAE 5W-20 engine oil, meeting the requirements of Chrysler Material Standard MS- 6395. Refer to your engine oil filler cap for correct SAE grade. SAE 5W-30 engine oil approved to FIAT 9.55535–S1 or FIAT 9.55535–S3 may be used when SAE 5W-20 engine oil is not available.	1 Quart - 04761872PA	7 Quarts	6.6 Liters
		5 Quarts- 04761851PA		
Engine Oil Filter (5.7L and 6.4L Engines)	MOPAR® Engine Oil Filter	04884 899AB	N/A	N/A
Fuel (approximate)				
Fuel Selection (5.7L Engine - Manual Transmission)	91 Octane	N/A	18.5 Gallons	70 Liters
A/C Refrigerant System				
A/C Refrigerant System	R-134a	82300101AB	1.50 Pounds	681 Grams
	R-1234yf	—	1.56 Pounds	709 Grams
♦ System fill capacity includes heater and coolant recovery bottle filled to MAX level.				
CAUTION: Nominal refill capacities are shown. A variation may be observed from vehicle to vehicle due to manufacturing tolerance and refill procedure.				



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SPARK PLUGS

Description	Type	Part Number	Gap	
			U.S.	Metric
Spark Plugs (3.6L ERB Engine)	We recommend you use MOPAR® Spark Plugs.	SP149125AD	0.043 in	1.10 mm
Spark Plugs (5.7L EZC; EZH Engine)	We recommend you use MOPAR® Spark Plugs.	SP143877AA	0.043 in	1.10 mm
Spark Plugs (6.4L ESG; ESH Engine)	We recommend you use MOPAR® Spark Plugs.	SP149212AC	0.043 in	1.10 mm

TRANSMISSION

Description	Type	Part Number	Capacities	
			U.S.	Metric
Automatic				
NAG 1 - Service Fill	MOPAR® ATF+4 Automatic Transmission Fluid	1 Quart - 05013457AA	5.3 Quarts	5.0 Liters
		1 Gallon - 05013458AA		
♦ NAG 1 - Overhaul Fill	MOPAR® ATF+4 Automatic Transmission Fluid	1 Quart - 05013457AA	8.1 Quarts	7.7 Liters
		1 Gallon - 05013458AA		
Manual				
♦♦ TREMEC TR6060	MOPAR® ATF+4 Automatic Transmission Fluid	1 Quart - 05013457AA	N/A	N/A
		1 Gallon - 05013458AA		
♦ Dry fill capacity. Depending on type and size of internal cooler, length and inside diameter of cooler lines, or use of an auxiliary cooler, these figures may vary. Refer to the appropriate service information for the correct procedures.				
♦♦ Approximate dry fill or fill to bottom edge of fill plug hole.				
CAUTION: Nominal refill capacities are shown. A variation may be observed from vehicle to vehicle due to manufacturing tolerance and refill procedure.				



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CHASSIS

Description	Type	Part Number	Capacities	
			U.S.	Metric
Axles (Rear)				
200mm RII Rear Axle	MOPAR® Synthetic Gear Lubricant SAE 75W-140	1 Quart - 04874469	1.2 Quarts	1.1 Liters
215MM RII Rear Axle	MOPAR® Synthetic Gear Lubricant SAE 75W-140	1 Quart - 04874469	1.3 Quarts	1.2 Liters
♦ 226mm RII Rear Axle	MOPAR® Synthetic Gear Lubricant SAE 75W-90	1 Quart - 05010320AA	1.4 Quarts	1.3 Liters
Chassis Systems				
♦♦ Brake Master Cylinder	MOPAR® Brake Fluid DOT 3, SAE J1703.	12 oz. Bottle - 04318080AB	N/A	N/A
		32 oz. Bottle - 04318081AB		
♦♦♦ Power Steering Reservoir (Belt Driven Pump)	MOPAR® Power Steering Fluid +4	1 Quart - 05013457AA	N/A	N/A
♦♦♦♦ Electro Hydraulic Power Steering (EHPS) Reservoir	We recommend you use MOPAR® Hydraulic Fluid or equivalent meeting MS-11655, such as Fuchs EG ZH 3044 or Pentosin CHF 11s	1 Quart - 68088485AA or 05127381AB	N/A	N/A
♦ Limited-Slip Rear Axles require the addition of 118 ml (4 oz.) MOPAR® Limited Slip Additive.				
♦♦ If MOPAR® Brake Fluid DOT 3 is not available, then MOPAR® Brake and Clutch Fluid DOT 4 (P/N 04549625AC), is acceptable.				
♦♦♦ If MOPAR® Power Steering Fluid +4 is not available, then MOPAR® ATF +4 Automatic Transmission Fluid (P/N 05166226AA), is acceptable.				
♦♦♦♦ CAUTION: There is an Electro Hydraulic Power Steering (EHPS) pump on Non-SRT vehicles which requires a different power steering fluid. Do not mix power steering fluid types. Damage may result to the power steering pump and system if any other fluid is used. The EHPS system uses fluid which meets material specification MS-11655 or equivalent. The mechanical power steering pump systems on SRT vehicles require the use of Power Steering Fluid +4, which meets material specification MS-9602 or equivalent. Do not overfill.				
CAUTION: Nominal refill capacities are shown. A variation may be observed from vehicle to vehicle due to manufacturing tolerance and refill procedure.				



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04 - Vehicle Quick Reference / Maintenance Schedules/Description

MAINTENANCE SCHEDULE

OIL CHANGE INDICATOR SYSTEM

This vehicle is equipped with an automatic oil change indicator system. The oil change indicator system reminds you that it is time to take your vehicle in for scheduled maintenance.

Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures, and E85 fuel usage will influence when the "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate as early as 3,500 miles (5,600 km) since last reset. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

On the Electronic Vehicle Information Center (EVIC) equipped vehicles "Oil Change Required" is displayed in the EVIC and a single chime sounds indicating that an oil change is necessary.

On non-EVIC equipped vehicles "Change Oil" flashes in the instrument cluster odometer and a single chime sounds indicating that an oil change is necessary.

NOTE: Under no circumstances should oil change intervals exceed 10,000 miles (16 000 km) or twelve months, whichever comes first.

Severe Duty All Models

Change Engine Oil at 4000 miles (6,500 km) if the vehicle is operated in a dusty and off road environment. This type of vehicle use is considered Severe Duty.

Once A Month Or Before A Long Trip:

- Check engine oil level
- Check windshield washer fluid level
- Check the tire inflation pressures and look for unusual wear or damage
- Check the fluid levels of the coolant reservoir, brake master cylinder, power steering and transmission as needed
- Check function of all interior and exterior lights

At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Rotate the tires. **Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.**
- Inspect battery and clean and tighten terminals as required.
- Inspect automatic transmission fluid if equipped with dipstick.
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner if using in dusty or off-road conditions.

CAUTION: Failure to perform the required maintenance items may result in damage to the vehicle.



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OIL CHANGE INDICATOR – RESET

Your vehicle is equipped with an engine oil change indicator system. The “Oil Change Required” message will display in the EVIC for five seconds after a single chime has sounded, to indicate the next scheduled oil change interval. The engine oil change indicator system is duty cycle based, which means the engine oil change interval may fluctuate, dependent upon your personal driving style.

Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the OK button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:

1. Without pressing the brake pedal, press the ENGINE START/STOP button **or** turn the ignition switch to the ON/RUN position (do not start the engine).
2. Fully depress the accelerator pedal, slowly, three times within 10 seconds.
3. Without pressing the brake pedal, press the ENGINE START/STOP button once **or** turn the ignition switch to the OFF/LOCK position.

NOTE: If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

REQUIRED MAINTENANCE INTERVALS

Mileage or time passed (whichever comes first) in thousands	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Additional Inspections														
Inspect the CV joints.		X			X			X			X			X
Inspect front suspension, tie rod ends, boot seals and replace if necessary.	X		X		X		X		X		X		X	
Inspect the rear axle fluid.	X				X				X				X	
Inspect the manual transmission fluid (if equipped), add as necessary.	X				X				X				X	
Inspect the brake linings, parking brake function.	X		X		X		X		X		X		X	
Adjust park brake on vehicles equipped with four wheel disc brakes.	X		X		X		X		X		X		X	
Additional Maintenance														
Replace engine air filter.		X			X			X			X			X



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Mileage or time passed (whichever comes first) in thousands	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Replace cabin/air conditioning filter.	X		X		X		X		X		X		X	
Replace spark plugs (3.6L engine). **									X					
Replace spark plugs (5.7L engine). **									X					
Flush and replace the engine coolant at 10 years or 150,000 miles whichever comes first.									X					X
Change the manual transmission fluid (if equipped) if using your vehicle for any of the following: Most of your driving is at sustained speeds during hot weather, above 90°F (32°C), driving in dusty conditions, or stop and go driving.			X				X				X			
Change the automatic transmission fluid and filter if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.					X									
Change automatic transmission fluid and filter.											X			
Change the rear axle fluid if using your vehicle for any of the following: police, taxi, fleet, off-road, or frequent trailer towing.			X				X				X			
Inspect and replace PCV valve if necessary.									X					

** The spark plug change interval is mileage based only, yearly intervals do not apply.



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04 - Vehicle Quick Reference / Fuse - Relay Locations and Types/Specifications

Integrated Power Module

The Integrated Power Module is located in the engine compartment. This module contains fuses and relays.

Cavity	Cartridge Fuse	Mini-Fuse	Description
1	—	15 Amp Blue	Washer Motor
2	—	25 Amp Natural	Powertrain Control Module (PCM)/NGS Module Feed (Batt)
3	—	25 Amp Natural	Ignition Run/Start
4	—	25 Amp Natural	EGR Solenoid/Alternator
5	—	15 Amp Blue	Powertrain Control Module
6	—	25 Amp Natural	Ignition Coils/Injectors
7	—	25 Amp Natural	Headlamp Washer Relay – If Equipped
8	—	30 Amp Green	Starter
9	—	—	—
10	30 Amp Pink	—	Windshield Wiper
11	30 Amp Pink	—	Anti-Lock Brake System (ABS) Valves
12	40 Amp Green	—	Radiator Fan Lo/High
13	50 Amp Red	—	Anti-Lock Brake System (ABS) Pump Motor
14	—	—	—
15	50 Amp Red	—	Radiator Fan
16	—	—	—
17	—	—	—
18	—	—	—
19	—	—	—



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Cavity	Cartridge Fuse	Mini-Fuse	Description
20	—	—	—
21	—	—	—
22	—	—	—

There is also a power distribution center located in the trunk under the spare tire access panel. This center contains fuses and relays.

Rear Power Distribution Center			
Cavity	Cartridge Fuse	Mini-Fuse	Description
1	60 Amp Yellow	—	Ignition Off Draw (IOD) Cavity 1 of the Rear Power Distribution Center contains a black IOD fuse needed for vehicle processing during assembly. The service replacement part is a 60 Amp yellow cartridge fuse.
2	40 Amp Green	—	Integrated Power Module (IPM)
3	—	—	—
4	40 Amp Green	—	Integrated Power Module (IPM)
5	30 Amp Pink	—	Heated Seats – If Equipped
6	—	20 Amp Yellow	Fuel Pump
7	—	15 Amp Blue	Audio Amplifier – If Equipped
8	—	15 Amp Blue	Diagnostic Link Connector (DLC)/Wireless Control Module (WCM)/Wireless Ignition Node (WIN)
9	—	20 Amp Yellow	Power Outlet
10	—	25 Amp Natural	Vacuum Pump – If Equipped
11 *	—	—	—



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2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

Rear Power Distribution Center			
Cavity	Cartridge Fuse	Mini-Fuse	Description
12 *	—	—	—
13 *	—	—	—
14	—	10 Amp Red	AC Heater Control/Cluster/Security Module – If Equipped
15	—	20 Amp Yellow	Active Damper – If Equipped
16	—	20 Amp Yellow	Heated Seat Module – If Equipped
17	—	20 Amp Yellow	Instrument Cluster
18	—	20 Amp Yellow	Cigar Lighter (Instrument Panel)
19	—	10 Amp Red	Stop Lights
20	—	—	—
21	—	—	—
22	—	—	—
23	—	—	—
24	—	—	—
25	—	—	—
26	—	—	—
27	—	10 Amp Red	Occupant Restraint Controller (ORC)
28	—	15 Amp Blue	Ignition Run, AC Heater Control/Occupant Restraint Controller (ORC)
29	—	5 Amp Tan	Cluster/Electronic Stability Control (ESC)/Powertrain Control Module (PCM)/STOP LIGHT Switch



INSTALLATION INSTRUCTIONS

STAGE 3 KIT PART NUMBER 77072310AB

2011-2017 DODGE CHARGER/CHALLENGER 5.7 HEMI

STAGE 3 KIT PART NUMBER 77072312AB

2011-2017 CHRYSLER 300 5.7 HEMI

Rear Power Distribution Center			
Cavity	Cartridge Fuse	Mini-Fuse	Description
30	—	10 Amp Red	Door Modules/Power Mirrors/Steering Control Module (SCM)
31	—	—	—
32	—	—	—
33	—	—	—
34	—	—	—
35	—	5 Amp Tan	Antenna Module – If Equipped/Power Mirrors
36	—	25 Amp Natural	Hands-Free Phone – If Equipped/Radio/Amplifier Feed
37	—	15 Amp Blue	Transmission
38	—	10 Amp Red	Cargo Light/Vehicle Information Module – If Equipped
39	—	10 Amp Red	Heated Mirrors – If Equipped
40	—	5 Amp Orange	Auto Inside Rearview Mirror/Heated Seats – If Equipped/Switch Bank
41	—	—	—
42	30 Amp Pink	—	Front Blower Motor
43	30 Amp Pink	—	Rear Window Defroster
44	20 Amp Blue	—	Amplifier/Sunroof – If Equipped