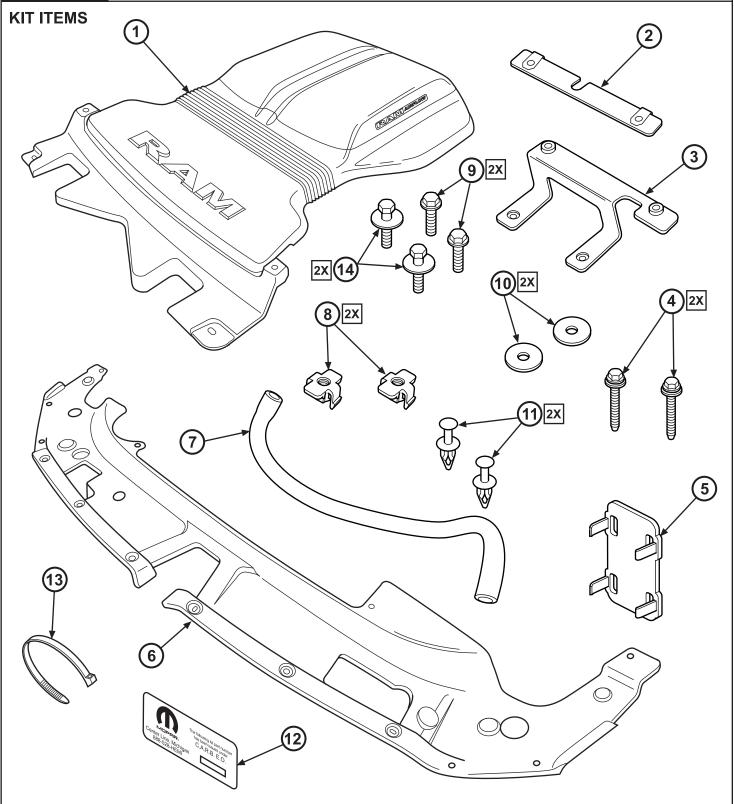
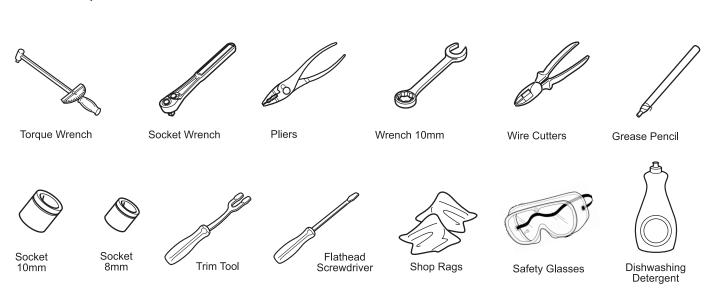
# MOPAR.

## **DODGE RAM - AIR FLOW KIT**



### **TOOLS REQUIRED**



#### **PARTS LIST**

Callout	Description	Parts	Quantity
1	RAM Air Induction Assembly	Supplied in kit	1
2	"J" Nut Mounting Bracket	Supplied in kit	1
3	Rear Bracket	Supplied in kit	1
4	M6 x 1.0 X 39mm - Bracket to Cowl Bolts w/Washer	Supplied in kit	2
5	Inlet Close Out Cover	Supplied in kit	1
6	Front Beauty Cover	Supplied in kit	1
7	MUA Hose	Supplied in kit	1
8	Snap In Clips	Supplied in kit	2
9	M6 x 1.0 x 25mm Hex Flange Head Bolts	Supplied in kit	2
10	Compression Washers	Supplied in kit	2
11	Push Pins	Supplied in kit	2
12	EO Label	Supplied in kit	1
13	Zip Tie	Supplied in kit	1
14	M6 X 1.0 X 25MM Hex Head w/Conical Washer Bolts	Supplied in kit	2

## PROCEDURAL STEPS

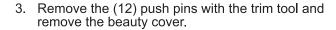
NOTE: When disconnecting and isolating the negative battery cable for the 12 volt system, this will also power down the 48 volt battery system. No extra steps will be needed for a power down of the 48 volt system.

1. Disconnect the Intelligent Battery Sensor (IBS) wire harness connector (A).

NOTE: Failure to disconnect the IBS wire harness can lead to damage of the IBS wire harness connector.

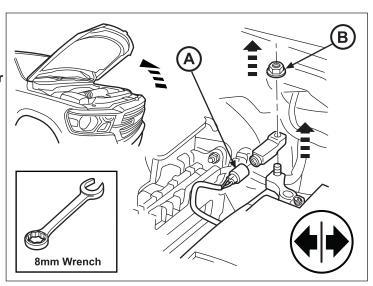
2. Remove the ground terminal M8 nut (B) with a 8mm wrench, and remove the negative battery cable eyelet from the IBS.

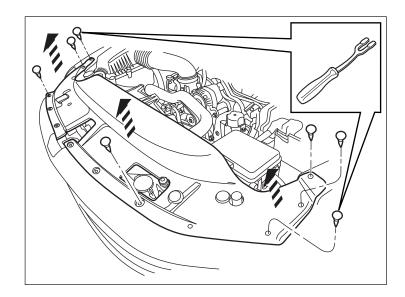
Save hardware for reinstallation.



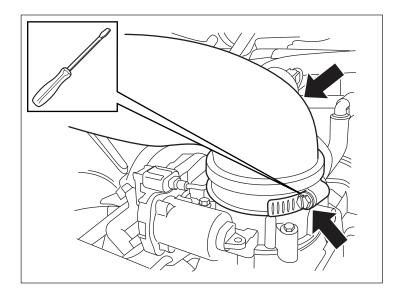
Save push pins for installation of new beauty cover.

Discard old beauty cover.



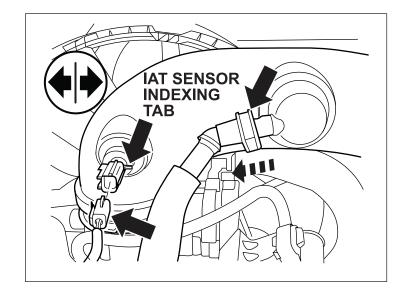


4. Loosen clean air duct clamp at the throttle body.

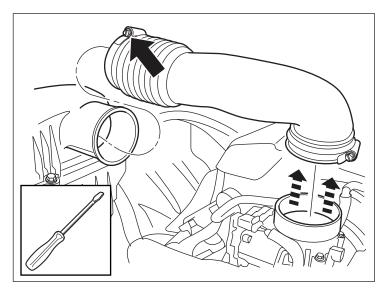


5. Disconnect the wire harness connector from the inlet air temperature (IAT) sensor.

Then disconnect the (MUA) make up air hose from the clean air duct.

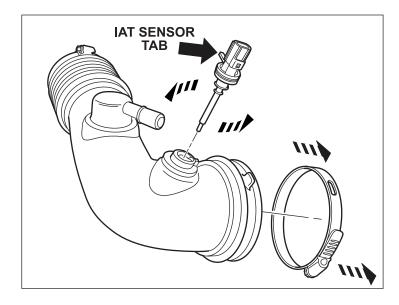


6. Loosen the clamp at the air cleaner and remove the clean air duct assembly.

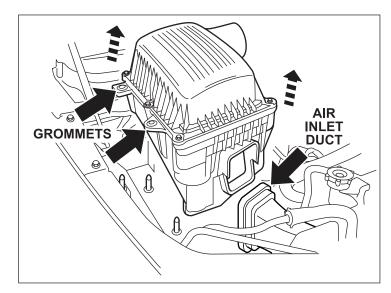


7. Lift tab slightly and twist counter-clockwise to remove the IAT sensor from the air in take tube. And remove the air intake hose clamp.

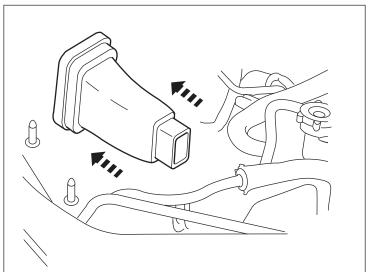
Save all for reinstallation.



8. Pull the air cleaner body straight upward to disengage it from the grommets and the air inlet duct.

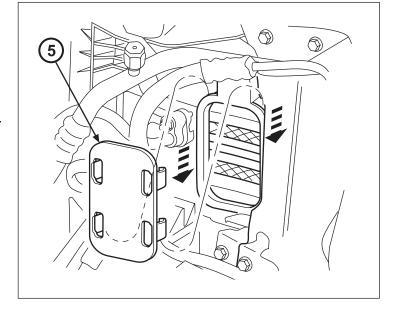


9. Remove the air inlet duct and discard.

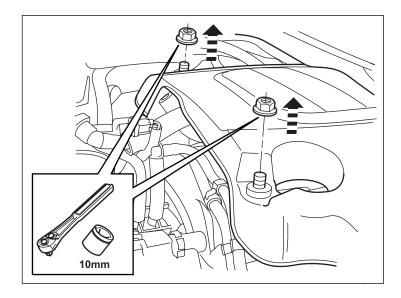


NOTE: Ensure that the tabs on the inlet close out cover (5) face the "front" of the vehicle before installing. Ensure the cover snaps down over the bottom lip.

10. Slide inlet close out cover (5), over the flange of the vehicle duct and slide tabs down until it snaps in place.

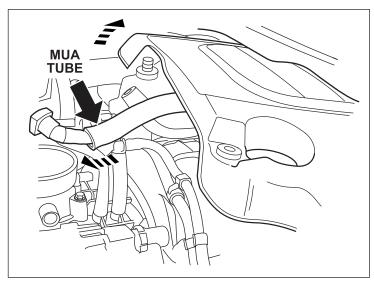


11. Remove the two front nuts with a 10mm socket from the engine cover and save for reinstallation.



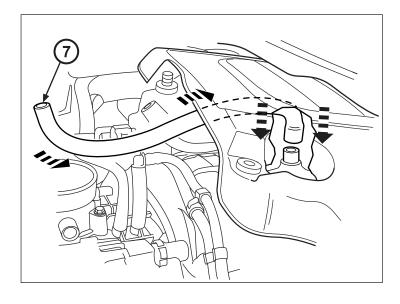
12. Lift the engine cover and remove the MUA tube.

Discard the MUA tube.



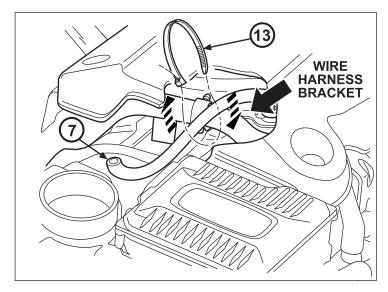
NOTE: Flared end of MUA Tube (7), goes to intake.

13. Install new MUA Tube (7).

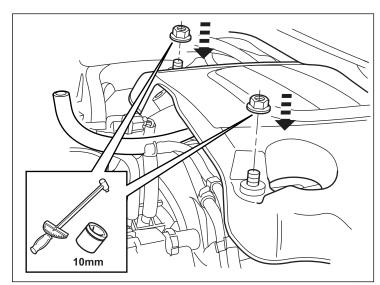


#### FOR BSG NODELS ONLY:

14. MUA hose (7) is secured to the wiring harness bracket with a zip tie (13).

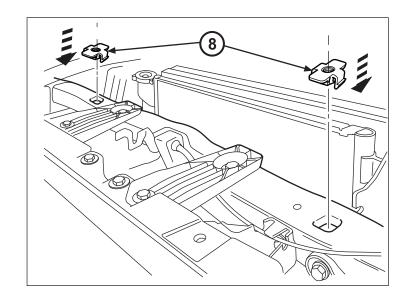


15. Reinstall engine cover nuts with a 10mm socket and torque to 6 N.m.

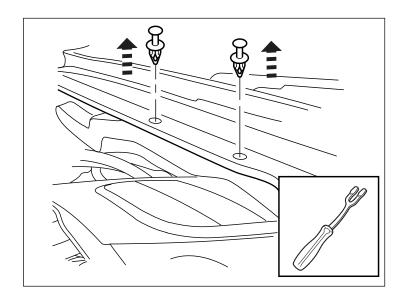


# NOTE: Ensure snap in clips (8) locking tangs face down.

16. Install two snap in clips (8) into front cross member existing retangular openings.

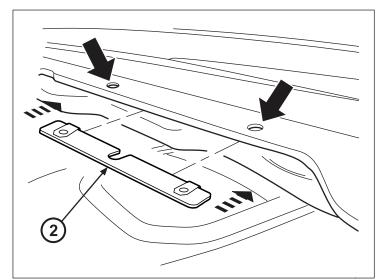


17. Remove the two center cowl push pins and save as spares.



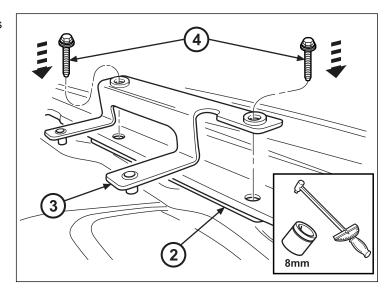
18. Slide "J" Nut mounting bracket (2) under cowl frame ensuring mounting bracket holes are aligned with cowl holes.

NOTE: Hold "J" nut mounting bracket (2) in place while installing the rear bracket (3) in step 17.

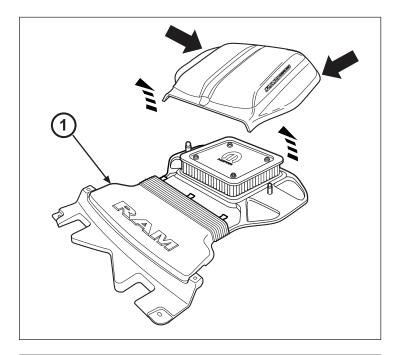


19. Install rear bracket (3) with two M6 x 1.0 x 39mm bolts (4) through cowl holes and into "J" nut bracket (2).

Torque bolts to 4 N.m.



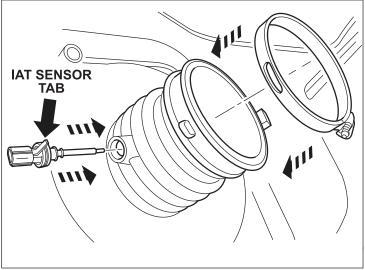
20. Remove rear cover assembly by lifting the rear two corners and pivoting forward and separating it from the front inlet cover, save for reinstallation.



# NOTE: Ensure the tab on the IAT sensor faces down or toward the throttle body clamp when installing.

21. Attach the air intake hose clamp to the air intake hose. Then install the IAT sensor into the air intake hose.

Push the IAT sensor until it snaps through and the tab is flush on the boss surface.

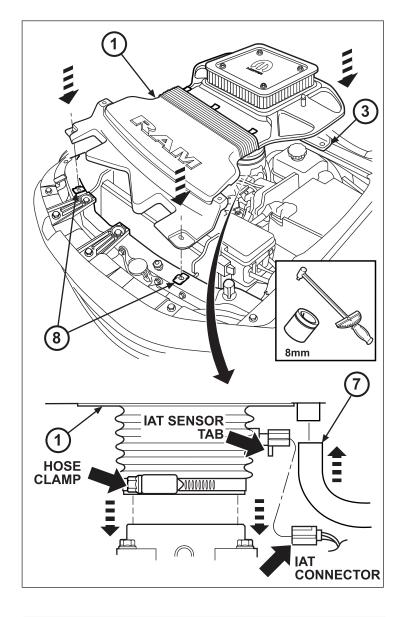


22. Place the Air Flow assemby (1) over the air intake inlet and slide the inlet tube onto the air intake manifold and torque hose clamp with a 8mm socket to 4 N.m.

Slide the new MUA tube (7) on under the air flow assembly (1).

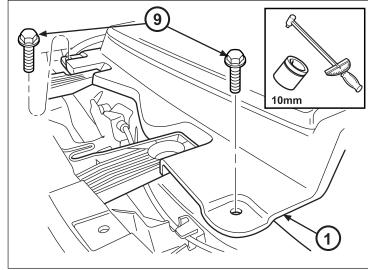
Connect the IAT sensor connector on the side of the air inlet tube.

Align air flow assembly (1) with the front snap in clips (8) and the back mounting holes with the rear bracket (3).



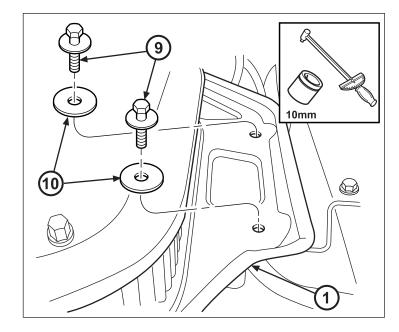
23. Install two M6 x 1.0 x 25 bolts (9) at the front of the air flow assembly (1), to the snap clips in the lower crossover with a 10mm socket.

Torque bolts to 5 N.m.

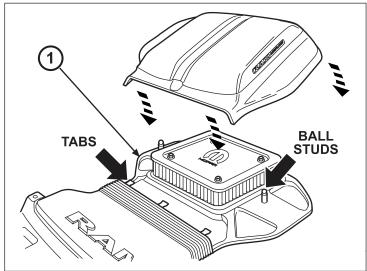


24. Install two compression washers (10) at the back of the air flow assembly (1), with two M6 x 1.0 x 25 bolts with washers (14) and a 10mm socket.

Torque bolts to 5 N.m.

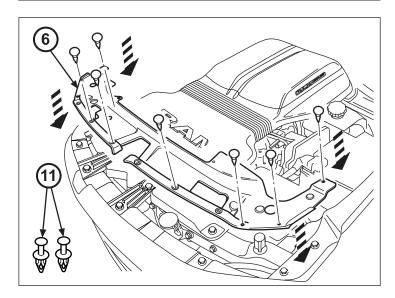


25. Locate rear cover assembly onto tabs on inlet front cover of induction assembly base (1) and, rotate rearward and down and snap to rear ball studs.



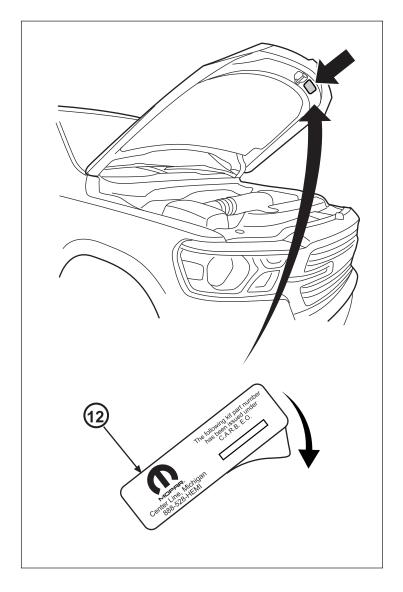
26. Install beauty cover (6) using all remaining push pins saved from the removal of the original beauty cover.

NOTE: There will be two additional new push pins (11) to be installed, use these for the two mounting holes on the base of the new Air Induction system.

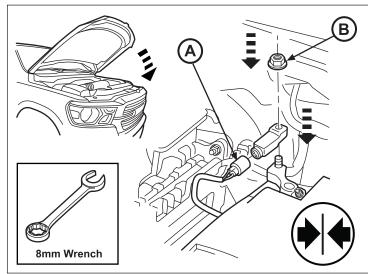


# NOTE: PRODUCT INFORMATION LABEL IS REQUIRED TO AID IN PASSING THE CALIFORNIA SMOG CHECK PROGRAM.

- 27. Locate area for E.O. label (12) under the front edge of the hood as shown. Thoroughly clean the surface and let dry.
- 28. Peel backing off E.O. label (12), and place in desired location.
- 29. Ensure E.O. label (12) is visible to the average person when hood is opened.

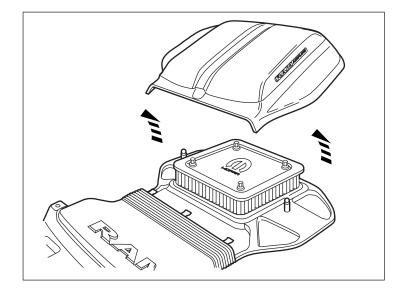


- 30. Connect the ground terminal M8 nut (B) with a 8mm wrench, and install the negative battery cable eyelet from the IBS.
- 31. Connect the Intelligent Battery Sensor (IBS) wire harness connector (A).
- 32. Close vehicle hood.



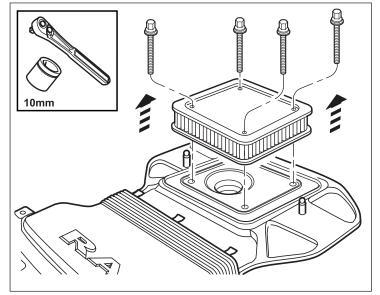
# SERVICING THE AIR FLOW AIR FILTER

1. Remove the Rear Cover Assembly (As described in Step 20).



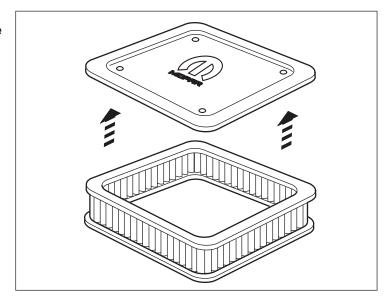
NOTE: Ensure the rubber washers stay on the filter mounting studs when installing the air filter assembly.

2. Remove four mounting bolts with a 10mm socket and, save for reinstallation.



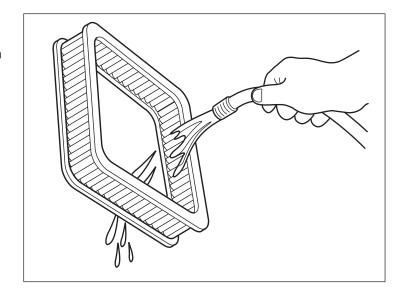
NOTE: The air filter is a dry washable media. You have the option of washing the filter or discarding it and purchasing a new air filter.

3. Remove air filter cover and remove old air filter.



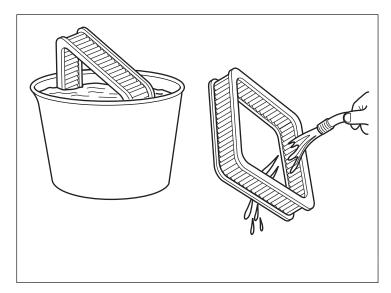
#### TO CLEAN AND REUSE THE AIR FILTER

A. Flush air filter with a hose and force the water through the filter, from inside to out.

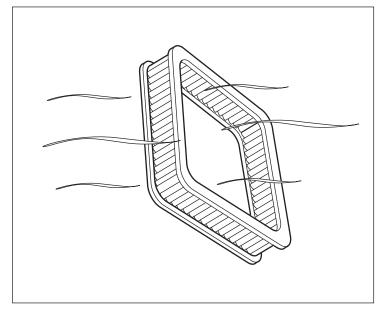


B. For areas of heavy dirt build up and grease, soak the air filter in a solution of mild dishwashing detergent and water.

Then flush with clean water thoroughly.



C. Allow the air filter to air dry after shaking out any excess water. Reinstall the air filter.

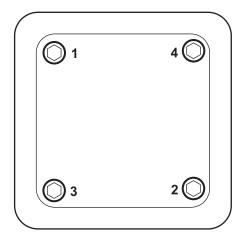


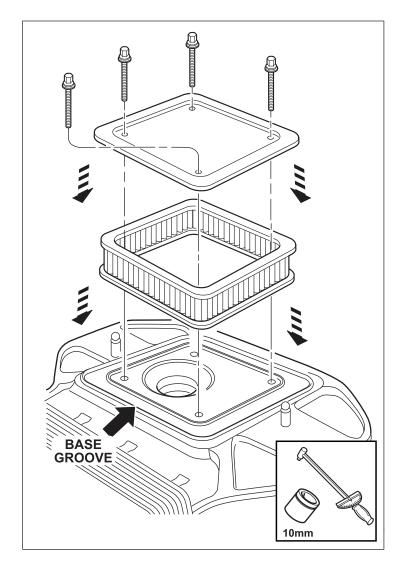
NOTE: Ensure the rubber washers stay on the filter mounting studs when installing the air filter assembly.

NOTE: Ensure the new air filter is fitted in the groove in the base and in the groove in the cover.

CAUTION: Do not over tighten bolts as the air filter may collapse.

- 4. Install air filter cover, new air filter and, four mounting bolts with a 10mm socket and snug to approx. 1 N.m.
- 5. Hand tighten bolts in a cross pattern to apply even loading on the cover. See tightening sequence below.





 Reinstall rear cover assembly as described in Step 24. Ensure to snap the grommets onto the ball studs on each side.

