



February 2018

Dealer Service Instructions for:

Safety Recall T36 / NHTSA 17V-435 Alternator Diode Thermal Fatigue

Models

2011-2014 (LC) Dodge Challenger
2011-2014 (LD) Dodge Charger
2011-2014 (LX) Chrysler 300
2011-2014 (WD) Dodge Durango
2012-2014 (WK) Jeep® Grand Cherokee

NOTE: This recall applies only to the above vehicles equipped with Electro-Hydraulic Power Steering (EHPS) and a 3.6L engine (Sales Code ERB) or 5.7L engine (Sales Code EZH or ECZ) and a 160 Amp alternator (Sales Code BAB) or 180 Amp alternator (Sales Code BAD) or 220 Amp alternator (Sales Code BAJ) built from August 23, 2010 through July 04, 2014 (MDH 082308 through 070423).

IMPORTANT: Some of the involved vehicles may be in dealer used vehicle inventory. Dealers should complete this recall service on these vehicles before retail delivery. Dealers should also perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The alternator on about 442,000 of the above vehicles may experience diode thermal fatigue failure due to cyclical loads induced by EHPS. When the diodes fail, the alternator will no longer supply electrical energy to the vehicle and may lead to a vehicle stall without warning. Failed diodes may also develop a resistive short circuit that can result in heat, smoke and/or fire originating within the alternator.

Repair

The alternator part number must be inspected on all involved vehicles. Vehicles found with the suspect alternator will have it replaced with a new alternator containing improved diodes on all affected vehicles.

Alternate Transportation

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if inspection determines that alternator replacement is required and the vehicle must be held overnight.

Parts Information

<u>Part Number</u>	<u>Description</u>
CSZET361AA	Alternator (160A) LC / LD (5.7L only)
CSZET362AA	Alternator (180A) LD / LX / WD / WK (3.6L only)
CSZET363AA	Alternator (180A) LD / LX (5.7L only)
CSZET364AA	Alternator (220A) WD / WK (3.6L only)

For 2013 and 2014 Model Year LC, LD, LX Vehicles 5.7L Only:

<u>Part Number</u>	<u>Description</u>
68163849AB	Antifreeze/Coolant (premix 50/50) (MS-12106) (NOTE: one gallon can top off approximately 4 vehicles)

For 2011 and 2012 Model Year LC, LD, LX Vehicles 5.7L Only:

68048953AB	Antifreeze/Coolant (concentrate) (MS-9769) (NOTE: one gallon can top off approximately 8 vehicles)
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Parts Return

Core return is required for this campaign for purchases made AFTER December 1, 2017. Return the alternator to MOPAR Core Return Center for core credit.

NOTE: Any dealer purchases prior to December 1, 2017 do not need to be returned because dealers were not assessed core charges.

Special Tools

The following special tools are required to perform this repair:

- NPN wiTECH micro pod II
- NPN Laptop Computer
- NPN wiTECH Software

Service Procedure**A. Inspect Alternator**

1. Open the hood.
2. Use the following procedure to inspect the part number tag on the alternator (Figure 1):
 - If the part number on the part number tag is **421000-0801, 421000-7021, 421000-7041, 421000-7042, 421000-7051, or 421000-7052**, no further action is required. Close hood and return the vehicle to the customer.
 - If the part number on the part number tag is **not 421000-0801, 421000-7021, 421000-7041, 421000-7042, 421000-7051, or 421000-7052**, replace the alternator assembly. Continue with Section B. (LD, LX Models with 3.6L Engine), Section C. (LC, LD, LX Models with 5.7L Engine) or Section D. (WD, WK Models with 3.6L Engine).
 - If the part number tag on the alternator is not legible, missing, or the vehicle has an aftermarket/remanufactured alternator, replace the alternator assembly.

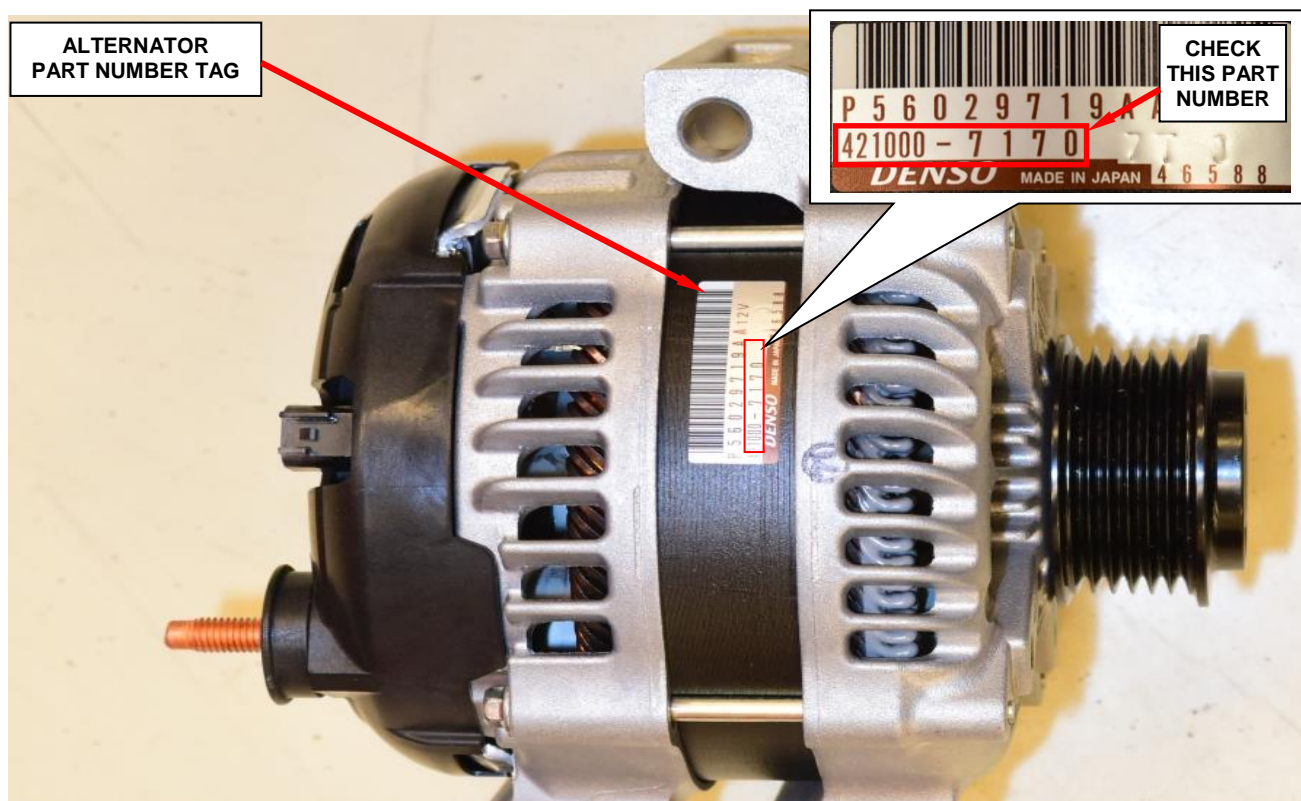


Figure 1 – Alternator Part Number (LD Shown Others Similar)
(Removed From Vehicle for Photographic Purposes Only)

Service Procedure (Continued)**B. Replace Alternator (LD, LX Models with 3.6L Engine)**

1. Disconnect and isolate the negative battery cable.
2. Rotate the accessory drive belt tensioner counterclockwise until it contacts its stop and remove the accessory drive belt, then slowly rotate the tensioner into the free-arm position (Figure 2).

CAUTION: Do not let the tensioner arm snap back to the free-arm position, severe damage may occur to the tensioner.

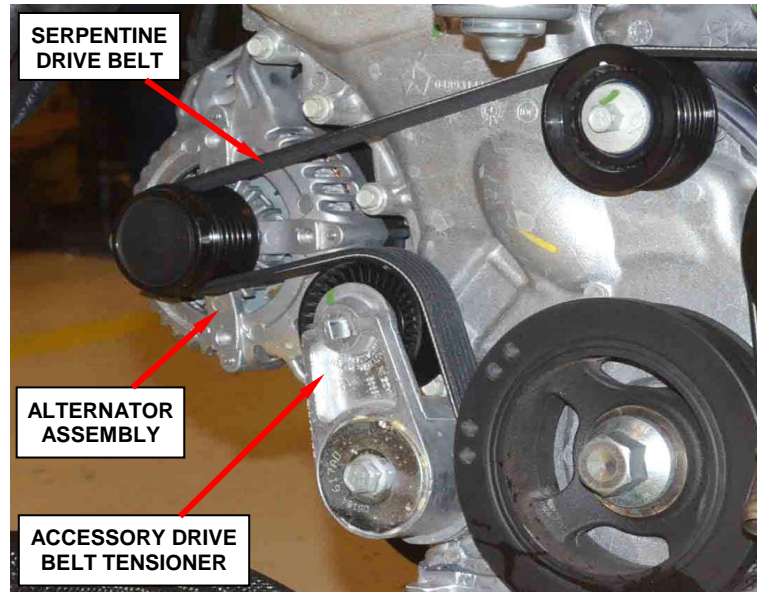


Figure 2 – Accessory Drive Belt Tensioner

3. Remove and save the alternator upper retaining bolts (Figure 3).

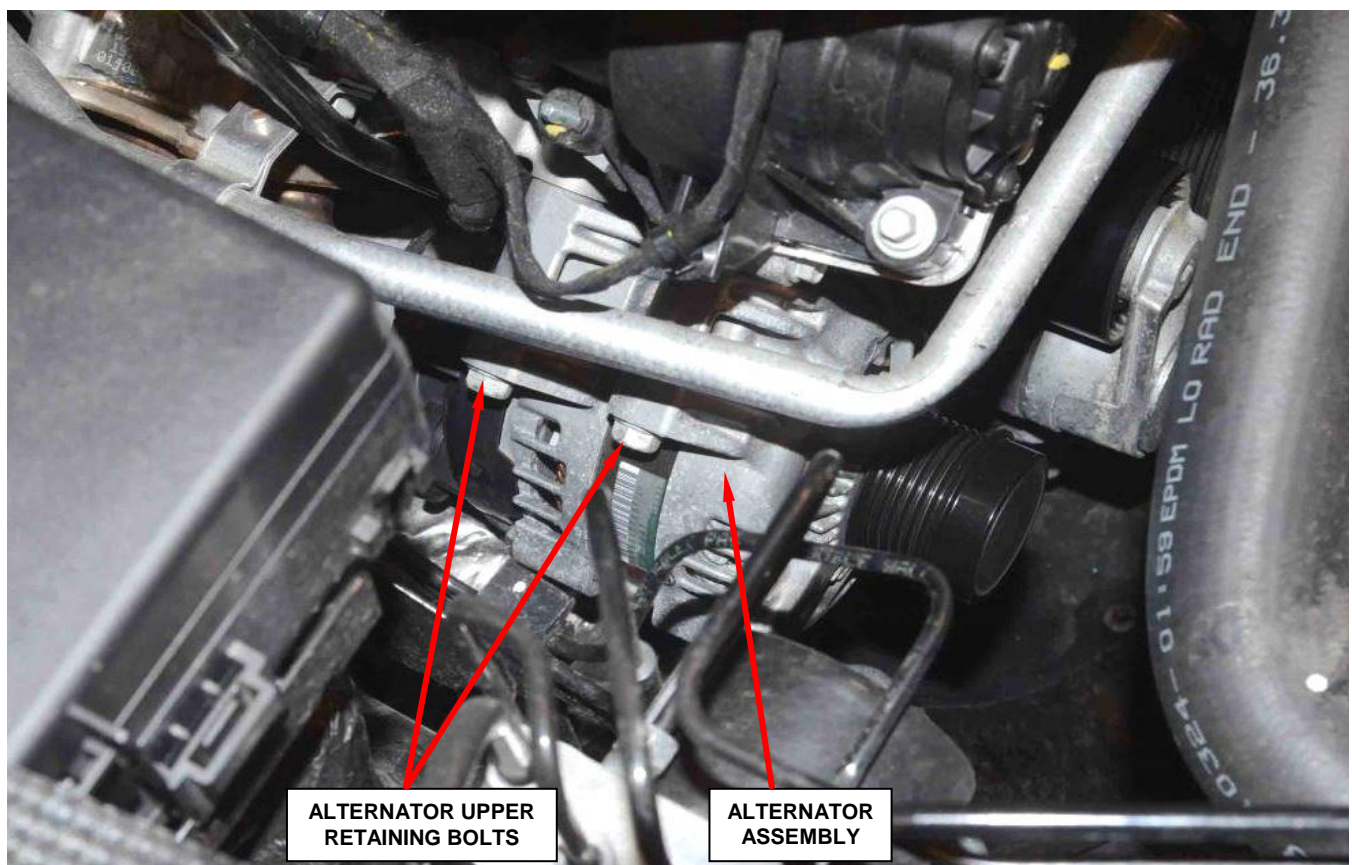
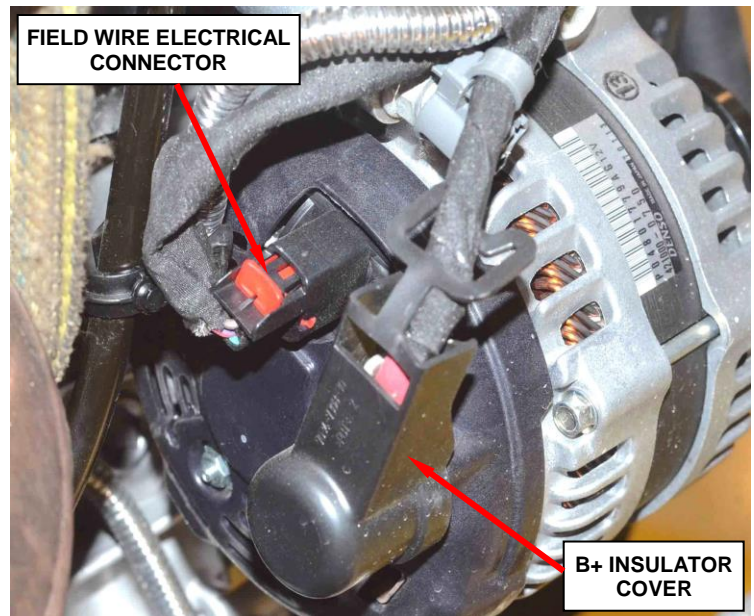


Figure 3 – Alternator Upper Retaining Bolt

Service Procedure (Continued)

4. Remove the insulator cover from the B+ output terminal at the rear of the alternator (Figure 4).
5. Carefully remove and save the B+ terminal retaining nut at the rear of the alternator and remove the B+ terminal.
6. Depress the field wire electrical connector locking tab at the rear of the alternator and disconnect the field wire electrical connector (Figure 4).
7. Raise the vehicle on an appropriate hoist.

**Figure 4 – Alternator Electrical Connections**

8. Remove and save the underbody splash shield retainers then remove the underbody splash shield (Figure 5).

**Figure 5 – Underbody Splash Shield**

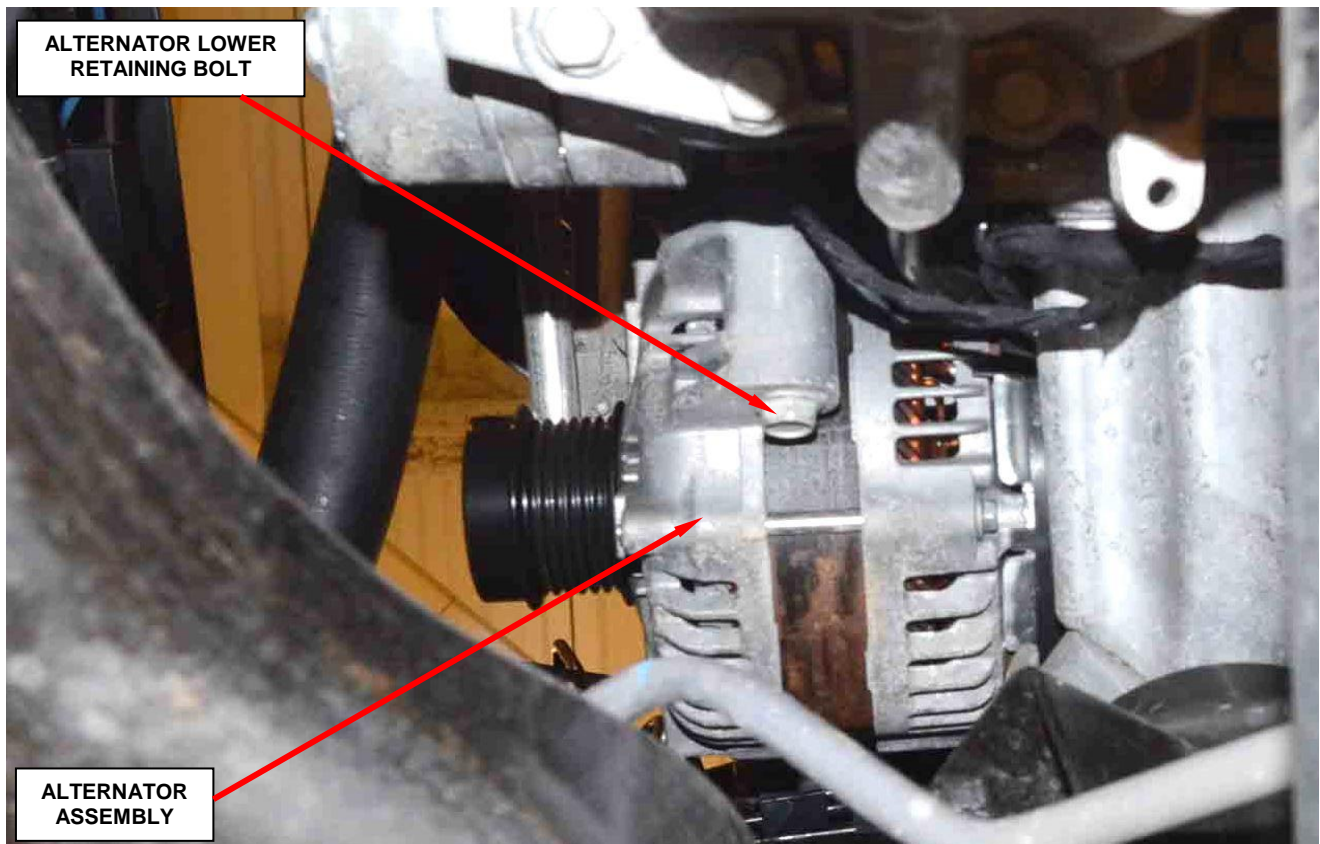
Service Procedure (Continued)

Figure 6 – Lower Alternator Retaining Bolt (viewed from under vehicle)

9. Remove and save the alternator lower retaining bolt (Figure 6).
10. **For Rear Wheel Drive (RWD) vehicles**, separate the alternator from the engine mounting bracket then remove the alternator from the engine compartment.
11. **For All Wheel Drive (AWD) vehicles**, perform the following steps to remove the alternator from the engine compartment:
 - a. Lower the vehicle on the hoist.
 - b. Loosen the radiator cap on the coolant bottle.
 - c. Push the upper radiator hose aside while removing the alternator from the engine compartment.

Service Procedure (Continued)

12. **For All Wheel Drive (AWD) vehicles**, perform the following steps to install the alternator to the engine compartment:
 - a. Push the upper radiator hose aside while placing the new alternator into position in the engine compartment.
 - b. Tighten the radiator cap on the coolant bottle.
13. **For Rear Wheel Drive (RWD) vehicles**, perform the following steps to install the alternator to the engine compartment:
 - a. Position the new alternator to the engine and install the alternator lower retaining bolt finger tight.
 - b. Lower the vehicle on the hoist.
14. Install the alternator upper retaining bolts and tighten the bolts to 25 N·m (18 ft. lbs.).
15. Connect the field wire electrical connector to the rear of the alternator.
16. Position the generator B+ terminal eyelet to the alternator output stud, install the retaining nut and tighten to 13 N·m (115 in. lbs.).
17. Install the insulator cover onto the B+ output terminal.
18. Raise the vehicle on the hoist.
19. Tighten the lower alternator retaining bolt to 25 N·m (19 ft. lbs.).
20. Position the underbody splash shield and install the underbody splash shield retainers.

Service Procedure (Continued)

21. Lower the vehicle from the hoist.
22. Rotate the accessory drive belt tensioner counterclockwise until it contacts the stop and install the accessory drive belt onto the pulleys and slowly release the tensioner.

CAUTION: When installing the accessory drive belt, be sure the belt is routed correctly. The water pump may rotate in the wrong direction if the belt is installed incorrectly. This will cause the engine to overheat. Refer to belt routing label located in engine compartment for proper accessory drive belt routing.

Also, never force an accessory drive belt over a pulley rim using a screwdriver. The synthetic fiber of the accessory drive belt could be damaged.

23. Connect the negative battery cable and tighten the retaining nut to 13 N·m (115 in. lbs.).
24. Connect the wiTECH scan tool and start a session.
25. Using the wiTECH scan tool, verify that the new alternator is charging properly.
26. Check for Diagnostic Trouble Codes (DTCs).
27. Clear all DTCs.
28. Remove the wiTECH scan tool from the vehicle.
29. Close hood and return the vehicle to the customer.

Service Procedure (Continued)**C. Replace Alternator (LC, LD, LX Models with 5.7L Engine)**

1. Disconnect and isolate the negative battery cable.
2. Rotate the accessory drive belt tensioner clockwise until it contacts the stop and remove the accessory drive belt, then slowly rotate the tensioner to the free-arm position.

CAUTION: Do not let the tensioner arm snap back to the free-arm position, severe damage may occur to the tensioner.

3. Using an appropriate hoist, raise and support the vehicle.
4. Remove and save the front underbody splash shield retainers then remove and save the underbody splash shield (Figure 7).



Figure 7 – Underbody Splash Shield

Service Procedure (Continued)

5. Remove the transmission cooler tube retaining clamp at the right crossmember and position the transmission cooler tube aside.
6. Remove and save the nut from the alternator support bracket (Figure 8).
7. Loosen the alternator support bracket retaining bolt completely.

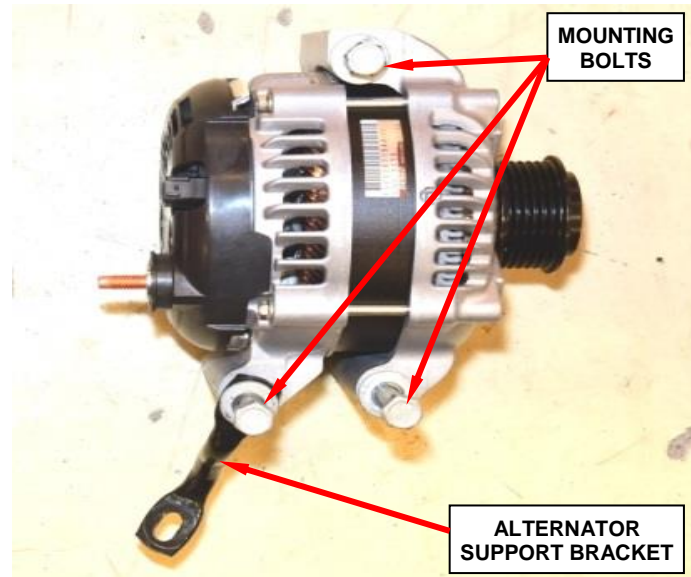
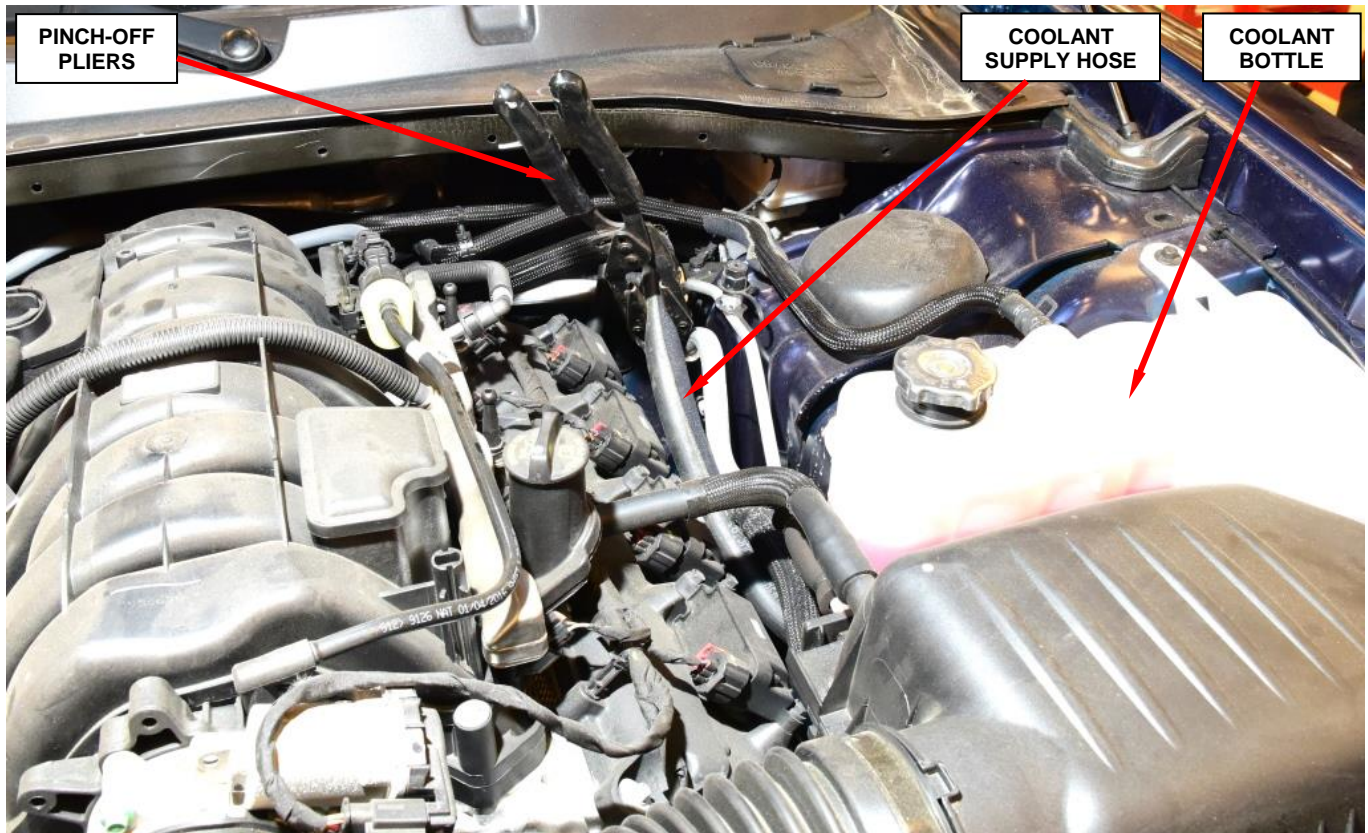
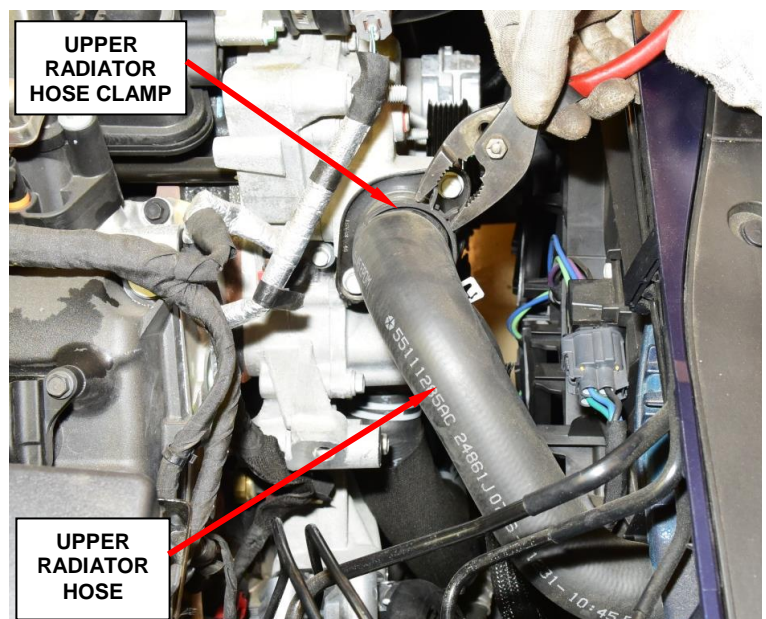


Figure 8 – Alternator Support Bracket

8. Loosen the remaining lower alternator retaining bolt completely (Figure 8).
9. Lower the vehicle.
10. Depress the field wire connector locking tab at the rear of the alternator and disconnect the field wire connector.
11. Remove the insulator cover from B+ output terminal at the rear of the alternator.
12. Remove the B+ terminal retaining nut at the rear of the alternator and remove the B+ terminal.

Service Procedure (Continued)**Figure 9 – Pinch-Off Coolant Bottle Coolant Supply Hose**

13. Pinch-off the coolant bottle coolant supply hose (Figure 9).
14. Remove the upper radiator hose clamp at the thermostat housing (Figure 10).
15. Disconnect the upper radiator hose from the thermostat housing hose fitting.

**Figure 2 – Radiator Hose Clamp**

Service Procedure (Continued)

16. Loosen the upper alternator retaining bolt completely then remove the alternator with bolts and bracket from the vehicle.

CAUTION: Use extreme care not to scratch the black anticorrosion coating on the brake tubes located at the antilock brake pump.

17. Clean any spilled coolant from the vehicle.
18. Transfer the mounting bolts and bracket to the new alternator (Figure 8).
19. Place the new alternator with bolts and bracket into position and install the upper alternator retaining bolt finger tight.
20. Install upper radiator hose and clamp.
21. Raise and support the vehicle.
22. Position the alternator support bracket (Figure 8) to the engine mount, install the retaining nut finger tight.
23. Tighten both lower alternator retaining bolts to 54 N·m (40 ft. lbs.).
24. Tighten the alternator support bracket to engine mount retaining nut to 28 N·m (21 ft. lbs.).
25. Position transmission cooler line and install the transmission cooler line retainer clamp to the right crossmember.
26. Position the underbody splash shield and install the retainers.
27. Lower the vehicle.
28. Tighten the alternator upper retaining bolt to 54 N·m (40 ft. lbs.).
29. Position the alternator B+ terminal eyelet to the alternator output stud, install the retaining nut and tighten to 14 N·m (10 ft. lbs.).
30. Install the insulator cover onto the B+ output terminal.

Service Procedure (Continued)

31. Connect the field wire connector to the rear of the alternator.
32. Rotate the accessory drive belt tensioner clockwise until it contacts the stop, install the accessory drive belt onto the pulleys and slowly release the tensioner.

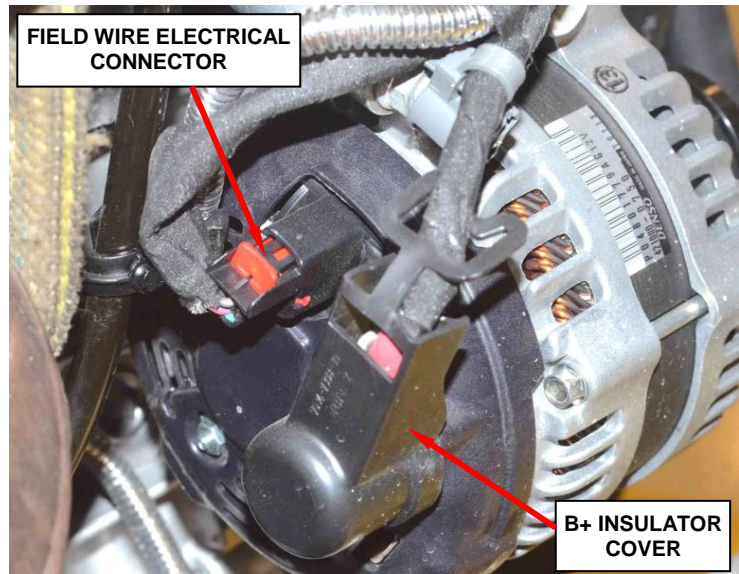
CAUTION: When installing the accessory drive belt, be sure the belt is routed correctly. The water pump may rotate in the wrong direction if the belt is installed incorrectly. This will cause the engine to overheat. Refer to belt routing label located in engine compartment for proper accessory drive belt routing.

Also, never force an accessory drive belt over a pulley rim using a screwdriver. The synthetic fiber of the accessory drive belt could be damaged.

33. Remove the hose pinch-off pliers.
34. Fill the engine cooling system.
35. Connect the negative battery cable and tighten the nut to 5 N·m (45 in. lbs.)
36. Start the engine with the radiator cap removed from the hot bottle.
37. Allow the engine to fully warm up and then add additional coolant as required.
38. Install hot bottle radiator cap.
39. Connect the wiTECH scan tool and start a session.
40. Using the wiTECH scan tool, verify that the new alternator is charging properly.
41. Check for Diagnostic Trouble Codes (DTCs).
42. Clear all DTCs.
43. Remove the wiTECH scan tool from the vehicle.
44. Close the hood and return the vehicle to the customer.

Service Procedure (Continued)**D. Replace Alternator (WD, WK Models with 3.6L Engine)**

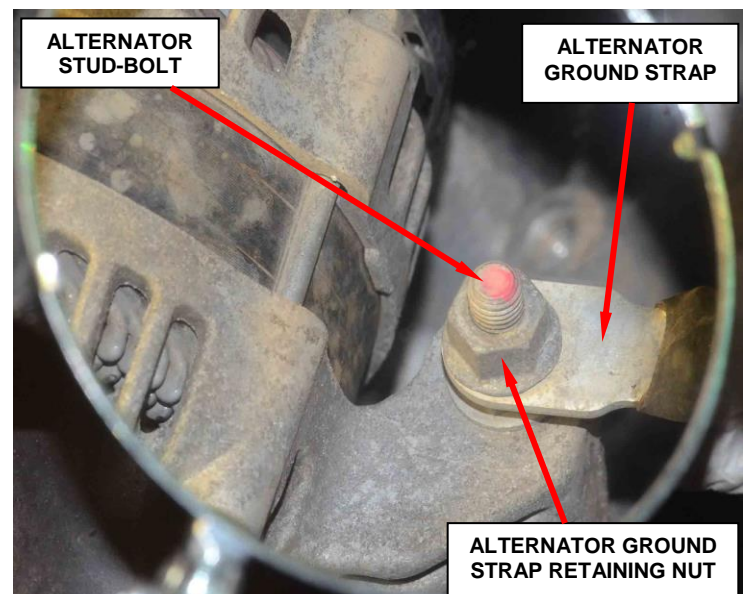
1. Move the passenger seat fully forward.
2. Disconnect and isolate the negative battery cable.
3. Depress the field wire connector locking tab at the rear of the alternator and disconnect the field wire connector (Figure 11).

**Figure 11 - Alternator Electrical Connections**

4. Remove and save the insulator cover from the B+ output terminal at the rear of the alternator (Figure 11).

5. Remove and save the B+ terminal retaining nut and wire.

6. Rotate the accessory drive belt tensioner counterclockwise until it contacts its stop and remove the accessory drive belt, then slowly rotate the tensioner into the free-arm position (Figure 2).

**Figure 12 – Alternator Ground Strap**

7. Remove and save the alternator ground strap retaining nut (Figure 12).
8. Remove the ground strap from the stud-bolt.

Service Procedure (Continued)

9. Remove and save the lower alternator mounting stud-bolt (Figure 13).
10. Remove and save the two alternator upper mounting bolts.
11. Remove the alternator from the engine compartment.
12. Install the new alternator into the engine compartment.
13. Install the two alternator upper mounting bolts and the lower alternator mounting stud-bolt finger tight.
14. After all alternator mounting bolts are finger tight, tighten all fasteners to 25 N·m (19 ft. lbs.).
15. Install the ground wire on the mounting stud-bolt (Figure 12).
16. Install the lower front alternator ground strap retaining nut. Tighten the nut to 23 N·m (17 ft. lbs.).
17. Rotate the accessory drive belt tensioner counterclockwise until it contacts the stop and install the accessory drive belt onto the pulleys and slowly release the tensioner.
18. Install the B+ terminal to the alternator stud. Tighten the retaining nut to 13 N·m (115 in. lbs.) (Figure 11).
19. Install the insulator cover over the alternator B+ terminal (Figure 11).
20. Connect the field wire electrical connector to the rear of the alternator (Figure 11).
21. Connect the negative battery cable.
22. Return the passenger seat to the original position.

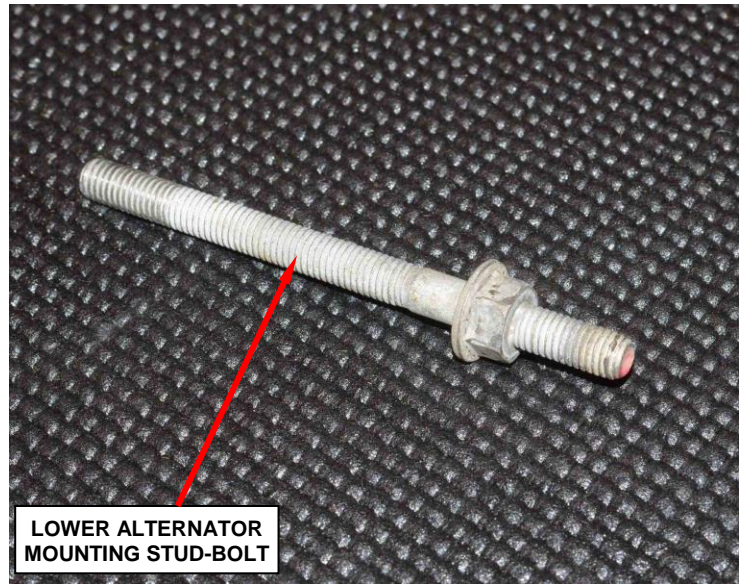


Figure 13 – Lower Alternator Mounting Stud-Bolt

Service Procedure (Continued)

23. Connect the wiTECH scan tool and start a session.
24. Using the wiTECH scan tool, verify that the new alternator is charging properly.
25. Check for Diagnostic Trouble Codes (DTCs).
26. Clear all DTCs.
27. Remove the wiTECH scan tool from the vehicle.
28. Close the hood and return the vehicle to the customer.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims paid will be used by FCA to record recall service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

	<u>Labor Operation Number</u>	<u>Time Allowance</u>
Inspect alternator part number	08-T3-61-81	0.2 hours
Inspect alternator part number and replace the alternator:		
LD, LX model with 3.6L engine	08-T3-61-82	0.6 hours
LC, LD, LX model with 5.7L engine	08-T3-61-83	1.1 hours
WD, WK model with 3.6L engine	08-T3-61-84	0.5 hours

Optional Equipment

LD models with All Wheel Drive (AWD) (with 3.6L engine)	08-T3-61-60	0.2 hours
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Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations
FCA US LLC

This notice applies to your vehicle,

[Model Year and Model]

VIN XXXXXXXXXX

T36/NHTSA 17V-435

LOGO

VEHICLE PICTURE

YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION**
Call your authorized Chrysler / Dodge / Jeep® / RAM Dealership
2. Call the FCA Recall Assistance Center at **1-800-853-1403**. An agent can confirm part availability and help schedule an appointment
3. Visit our Recall Website, recalls.mopar.com or scan below.

QR Code

You can find your nearest dealer and review all your scheduling options from this website. You will be asked to provide your Vehicle Identification Number (VIN) to protect and verify your identity. The last eight characters of your VIN are provided above.

DEALERSHIP INSTRUCTIONS

Please reference Safety Recall T36.

IMPORTANT SAFETY RECALL

Alternator Diode Thermal Fatigue

Dear [Name],

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain [2011-2014 model year (LC) Dodge Challenger, (LD) Dodge Charger, (LX) Chrysler 300, (WD) Dodge Durango and 2012-2014 model year (WK) Jeep Grand Cherokee] vehicles equipped with electro-hydraulic power steering (EHPS) and a 3.6L engine (Sales Code ERB) or 5.7L engine (Sales Code EZH or ECZ) and a 160 Amp alternator (Sales Code BAB) or 180 Amp alternator (Sales Code BAD) or 220 Amp alternator (Sales Code BAJ).

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

WHY DOES MY VEHICLE NEED REPAIRS?

The alternator on your vehicle ^[1] may experience diode thermal fatigue failure due to cyclical loads induced by EHPS. When the diodes fail, the alternator will no longer supply electrical energy to the vehicle and may lead to a vehicle stall without warning, increasing the risk of a crash. **Failed diodes may also develop a resistive short circuit that can result in heat, smoke and/or fire originating within the alternator.**

HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA will repair your vehicle ^[2] free of charge (parts and labor). To do this, your dealer will replace the suspect alternator with a new alternator containing improved diodes. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit. Your time is important to us; please be aware that these steps may require more time. The estimated repair time is two hours. We recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

**TO SCHEDULE YOUR FREE REPAIR CALL 1-800-853-1403
OR YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY**

WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?

If you have already experienced this specific condition and have paid to have it repaired, you may visit www.fcarecallreimbursement.com to submit your reimbursement request online. ^[3] Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you have had previous repairs performed and/or already received reimbursement, you may still need to have the recall repair performed.

We apologize for any inconvenience, but are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Assistance/Field Operations
Fiat Chrysler Automobiles US LLC



Mr. Mrs. Customer
1234 Main Street
Hometown, MI 48371

[1] If you no longer own this vehicle, please help us update our records. Call the FCA Recall Assistance Center at 1-800-853-1403 to update your information.

[2] If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to safercar.gov.

[3] You can also mail in your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement.

Note to lessors receiving this recall notice: Federal regulation requires that you forward this recall notice to the lessee within 10 days.