



Service Bulletin No. 3127

MODEL: J4500, D-CRT	TYPE: Service Information	SECTION/GROUP: 07-Electrical	DATE: 10/07/2019
SUBJECT: Delco Alternator Cleaning Procedure			
CONDITIONS: Service Information Only			

Description:

Motor Coach Industries ("MCI") is instructing customers operating J4500 or D-CRT coaches equipped with a Delco 55 alternator MCI P/N: 07-03-1322, to clean the alternators and reapply corrosion inhibitor every 6000 miles, using the following procedure as recommended by Delco.

This procedure is applicable to coaches starting MY19 and later.



Read this entire procedure before beginning work.

Use Safe Shop Practices At All Times.

To avoid personal injury:

- a. **Proper Personal Protective Equipment (PPE) must be worn. Safety glasses and protective gloves are required for working with DEF Fluid.**
- b. **Turn the main battery disconnect switch to the OFF position.**
- c. **Ensure that both the front and the rear wheels are chocked.**
- d. **Position the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the OFF position.**
- e. **Allow enough time for components to cool down prior to working in the engine compartment**

1.0 Material requirements

No material required.

2.0 Special Tools

Coil Cleaning gun, MCI P/N: 20-00-0079.

Simple Green 1:1 solution.

CRC SP-400 corrosion inhibitor, MCI P/N: 23-02-0119, or the equivalent CRC Heavy duty corrosion inhibitor, VPN: 06026.

3.0 Instructions

Water and common engine fluids are not harmful to the alternator or starter, but corrosives and contaminants from road treatments can lead to premature failure if left to attack the alternator, cables, and connections. Care should be taken to wash the chassis and engine components that may be impacted by the contact. This procedure should be completed every 6000 miles, especially during periods of anti-icing applications to the roadways.

This cleaning procedure needs to be completed with the engine running, allowing the hot water and steam/water to be drawn into the alternator and flushing out the dirt, debris, as well as any corrosives and contaminants from road treatment agents from the internal components of the alternator.



When working around a running engine, ensure no loose clothing and you are aware of all rotating components.

When using a pressure washer or steam cleaner, wear a full-face shield and protective clothing.

1- Open the Engine door. Turn the Main Disconnect Switch and IGN "ON" and start the engine from the rear engine control box and allow the engine to stabilize engine idle.



2- Wash down the alternators to remove any contaminants from the body, terminal studs, and internal components. Using MCI P/N (20-00-0079) connected to a hot water source, use a mild detergent/cleaner such as simple green 1:1 solution (1-part water and 1-part simple green) and wash down the alternators. Do not use Zep formula 50 or Zep formula 940e as detergent. MCI P/N (20-00-0079) is an automatic metering device which will ensure the correct concentration of detergent/cleaner allowed to enter the hot water stream.

NOTICE

CAUTIONS

Avoid the use of harsh/abrasive chemicals as these cleaners can be very difficult to rinse out and can accelerate the corrosion attack on the components.

3- Steam clean both alternators to remove any residual detergent/cleaner from the exterior electrical studs and internal mechanisms.

NOTICE

CAUTIONS

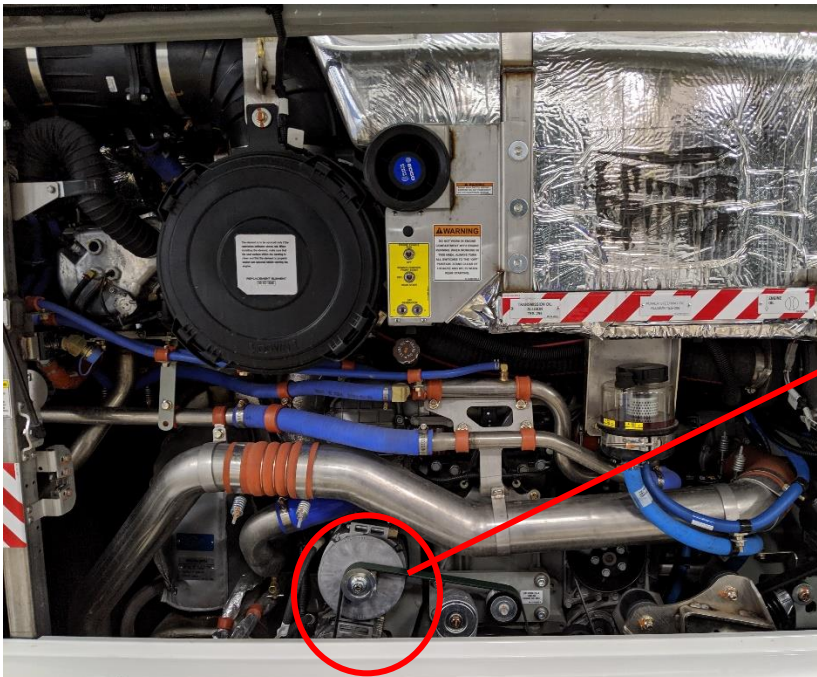
Avoid direct contact to the alternator from the high-pressure steam.

Ensure no ingress of chemicals, solvents or hot water/steam to the engine's air induction system, as internal engine damage may occur.

Protect other electrical components, openings, and wiring from the full force of the hot water and steam.

4- Allow the engine to run for another 5 minutes to remove any remaining water within the alternators. Then shut down the engine using the rear engine control box.

5- Access the alternators through the engine door.



Alternators on coaches equipped with DD13 engine



Alternators on coaches equipped with ISX engine



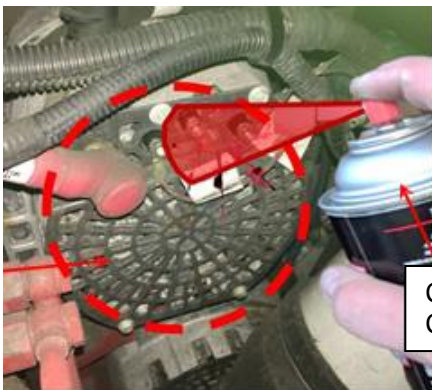
Alternators on coaches equipped with X12 engine

6- Temporarily slide back the protective boots off the main power and ground cables.



Slide back the protective cover

Allow the alternators to fully dry, then apply corrosion inhibitor CRC SP400 (MCI P/N:23-02-0119) or the equivalent, CRC Heavy duty corrosion inhibitor VPN: 06026, liberally to the backside of the alternators, ensuring the connections and grille are coated.

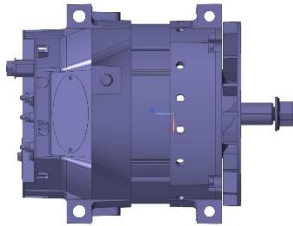


Corrosion inhibitor
CRC SP400

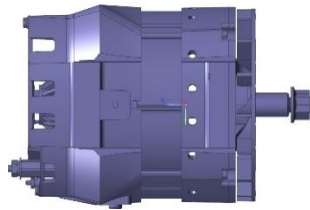


CRC SP400. VPN:
03282, MCI P/N:
23-02-0119

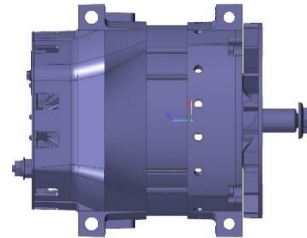
Liberally spray the corrosion inhibitor on the openings on the side of the top alternator (highlighted in the pictures below).



LH view of the alternator



Top view of the alternator



RH view of the alternator

After the corrosion inhibitor is dry, slide the protective boots back over the main power and ground cable connections, taking care not to rub-off the corrosion inhibitor.

7- Then return the "Engine Start" and "Engine Run" switches back to their normal positions and close the engine access and driver side service doors.

End of the procedure