

FLA COE
FLB COE
FLD Conventional
Business Class

FLC 112 Conventional
> Century Class Conventional
Argosy COE
Cargo

> Columbia
Coronado
Business Class M2
> Cascadia

Freightliner
Service Bulletin

General Information

Certain failure modes of an absorbed glass mat (AGM) battery require that a load be applied for proper diagnosis. In these special cases, a carbon pile tester must be used in addition to the DTNA standard Midtronics EXP-1000 HD TA.

A carbon pile test is not always necessary. The test should only be performed for the following reasons:

- The vehicle required multiple jump starts
- Batteries draw down too quickly
- Weak or low cranking RPM

These symptoms indicate that the positive battery plates may have softened. This failure still allows the battery to give off good initial open circuit voltage, but there is not enough reserve capacity to effectively crank the engine, supply sleeper loads, or run a parked electrical A/C system. A battery with this type of failure may pass the conductance test of the Midtronics EXP-1000 HD TA, so a carbon pile test must be used.

Testing the AGM battery

NOTE: Never charge an AGM battery over 15.4v.

The battery must be at a minimum of 12.6 volts before testing. If the battery is below 12.6 volts, charge the battery.

Lead adapters must be installed over the threaded studs for testing or charging batteries.

Testing with a Midtronics EXP-1000 HD TA

1. Remove the surface charge. For instance, turn on the headlights for 2 to 3 minutes.
2. If the battery is bad, replace it with the same model battery.
3. If the battery is good, continue with the carbon pile test.

Performing a Carbon Pile Test

NOTE: Load test 9A31s model batteries at 460 amps, and 8A31s model batteries at 400 amps, regardless of the CCA label on the battery.

1. Apply a load for 30 seconds and record voltage at the end with the load on.
2. If the battery is above 9.6 volts at 70°F (21°C), it is a good battery. **Recharge the battery and install it in the vehicle.**

IMPORTANT: A good battery must be recharged because of the significant loads applied during the test.

3. If the battery is bad (below 9.6v), replace it with the same model battery. Retest the failed battery using the Midtronics EXP-1000 HD TA and make note of the test code for warranty claim submittal, if applicable.

Fully charge all batteries with an AGM compatible charger. Voltage must never exceed 15.4 volts.

Warranty

Normal warranty applies. See [Table 1](#) for damage code and labor allowance information, and refer to this bulletin by number in the story of the claim.

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NOTE: Batteries can be damaged if inverters are wired directly to the batteries. Battery damage caused by this scenario is not warrantable. The SRT below is just for carbon pile testing up to 4 batteries. Regular 292- SRTs should be claimed to account for the standard Midtronics test or battery replacement time.

Damage Code and Labor Allowance					
VMRS CK33	VMRS CK18	Damage Code	SRT Code	Description	Time: hours
032-001-001	08	292-101084102	292-5005A	AGM battery, up to 4, carbon pile test	0.2

Table 1, Damage Code and Labor Allowance