

Adding the Daytime Running Lights (DRL) Option to Business Class M2 Vehicles

54-218

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**

Description of Revisions: *This bulletin replaces the version dated March 2012. The bulletin is revised to clarify that DRLs cannot be converted from turn signals to low beams, or vice versa, because they may not meet regulatory requirements.*

General Information

There are two configurations for daytime running lights (DRL) on Business Class M2 vehicles, depending on the type of vehicle. Most Business Class M2 vehicles use the front turn signals for DRL. Vocational vehicles (M2 106V), with round headlights and built prior to the release of EPA 2010 engines, have DRL on the low-beam headlights. On these vehicles, the low-beam headlight circuit uses a pulse-width-modulated (PWM) signal.

NOTICE

The DRLs are compliant with regulatory requirements as they leave the factory. Do not convert DRLs from turn signals to low beams, or vice versa. Converting the DRLs from turn signals to low beams, or vice versa, may result in the DRLs not meeting regulatory requirements.

When adding DRL to a vehicle, try using the low-beam headlights first. Using the low-beam headlights requires no new parts, but does require the bulkhead module to have software version 6.4 or higher, and chassis module 06-34530-004 or newer.

Parts Required

NOTE: These parts are only required for DRL on the front turn signals. Do not use these parts for DRL on low-beam headlights.

The parts (except for the diagrams) are available from the PDCs.

Part Number	Description	Qty.
A06-45686-001	Wiring Harness, DRL Overlay	1
D06-53191-001	Installation, Headlight Harness	As Needed
D06-64914-000	Installation, Forward Chassis Module	As Needed
D06-79989-000	Installation, forward Chassis Harness, M2-2010	As Needed
G06-43140-000	Wiring, Daytime Running Lights	As Needed
23-09796-629	Tie Strap, Nylon	As Needed

Table 1, Parts Required

Procedure

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Open the hood.
3. Connect ServiceLink to the vehicle. Go to the BHM feature list and locate the current parameter that influences the DRL. This will be either 26-01020-xxx or 26-01077-xxx (with "xxx" designating the current programming on the vehicle).

Using **Table 2**, select the applicable existing vehicle parameter (Without DRL) and the corresponding "With DRL" parameter.

NOTE: If the parameter is 26-01020-014 or greater, use the 26-01077-xxx parameter (with "xxx" designating the current programming on the vehicle).

4. If a cross reference in **Table 2** does not match the vehicle, contact Technical Support at 1-855-253-0422.

Parameter Cross-Reference from Non-DRL to DRL		
Parameter Without DRL	Parameter With DRL	Description
26-01020-000	26-01020-002	Combination Stop/Turn Signal*
26-01020-004	26-01020-003	Separate Stop/Turn Signal*
26-01020-010	26-01020-006	Combination Stop/Turn Signal*
26-01020-009	26-01020-007	Separate Stop/Turn Signal*
26-01020-011	26-01020-012	Combination Stop/Turn Signal*
26-01077-004	26-01077-005	All M2 vehicles with teardrop headlights, no plow lights, and with no DRL-interrupt switch. Do not use with M2 106V with round headlights mounted in the hood.*
	26-01077-009	All M2 vehicles, including M2 106V with single round headlights mounted in the hood (which requires this parameter), no plow lights, and no DRL-interrupt switch. †
26-01077-015	26-01077-016	All M2 vehicles with teardrop headlights, with plow lights, and with no DRL-interrupt switch. Do not use with M2 106V with round headlights mounted in the hood.*
	26-01077-017	All M2 vehicles, including M2 106V with single round headlights mounted in the hood (which require this parameter), with plow lights, and no DRL-interrupt switch. †

* DRL on turn signals.

† DRL on low-beam headlights.

Table 2, Parameter Cross-Reference from Non-DRL to DRL

5. Using ServiceLink, enter the "With DRL" parameter in the "Enter New Reference Parameter" field, located near the bottom of the screen. Press the "Add to List" button, then press the "Apply Changes" button.
Verify that the new parameter appears in the "Features" field. The programming portion of this procedure is now complete.
6. If the vehicle is a Business Class M2 106V with round headlights mounted in the hood, or an M2 vehicle being programmed for DRL on the low-beam headlight circuit, no further action is necessary. The DRL should function on the low-beam circuits when the ignition switch is on, headlights are off, and parking brake is released.
For vehicles using turn signal DRL, go to the next step.
7. Install the DRL overlay wiring harness, A06-45686-001:
 - 7.1 Using "Chassis Module" icon, and "Configuration" screen, find the correct cavity locations in the CHM to connect the overlay harness. Locate circuits 379R and 379L. Note the connector and the pin locations. See **Fig. 1**. Typically, the connection for circuit 379R is in C3-K, and the connection for 379L is in C4-F.
 - 7.2 Disconnect the batteries at the negative terminals.

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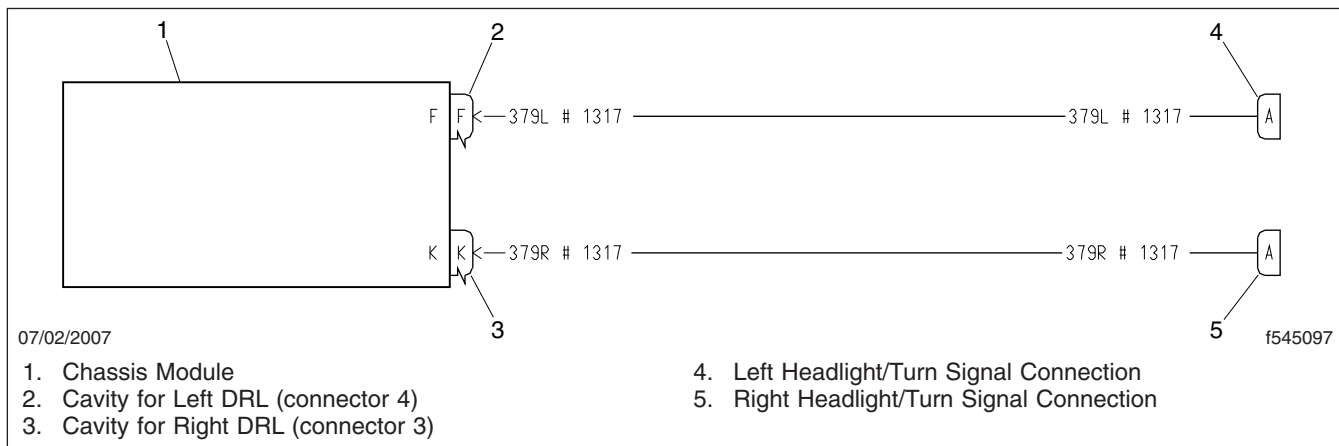


Fig. 1, Basic Wiring Diagram for DRL

7.3 Using diagram D06-53191-001 as a general reference, route the wire harness from the CHM to the turn-signal connections near the headlights. See [Fig. 2](#). Disconnect the turn-signal wires (circuits 38R and 38L) and connect the wires for circuits 379R and 379L to the corresponding left- and right-side turn signal wires.

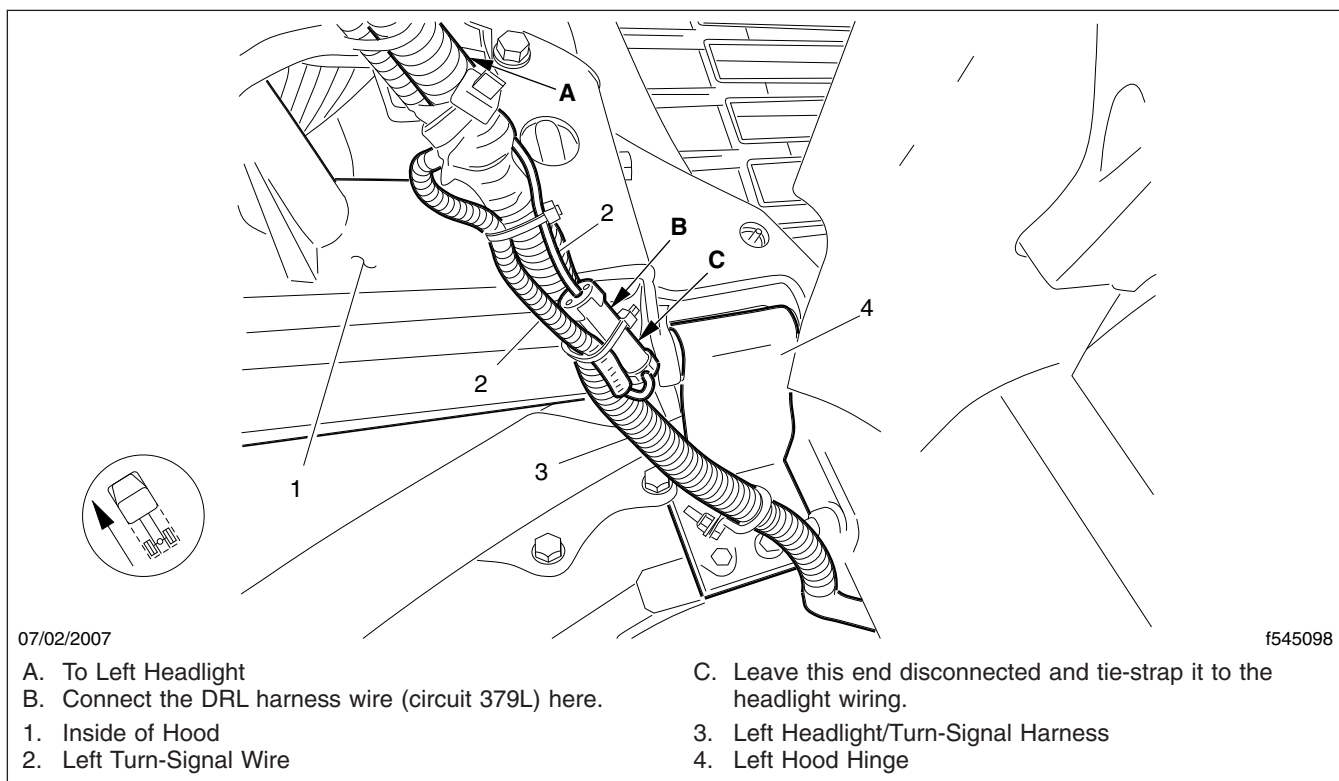


Fig. 2, Left Turn-Signal Connection for DRL (hood raised)

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- 7.4 Secure the overlay harness as needed with tie straps. It may be necessary to fold a section of the harness upon itself to take up any extra length.
8. Connect the batteries, then test the function of both turn signals and the DRL. Note that the parking brake must be released and the headlights off for the DRL to function.
9. Close the hood and remove the chocks.

Warranty

This is an informational bulletin only; warranty does not apply.