



# Installation Instructions

## BENDIX® DLMU™ MONITORING UNIT

The Bendix® DLMU™ (Data Links Monitoring Unit) is a diagnostic tool providing the technician with a visual indication of various components that are active on the J1708 and J1939 communication links.

When working on or around vehicles, follow all standard industry safety practices. Bendix's standard safety warnings are shown on page 2 of these instructions.

### DEVICE FEATURES

The DLMU™ unit attaches to the 9-pin off board diagnostic connector located in the cab of the vehicle.

The data links monitoring unit indicates the following components:

Component	Data Link	
	Engine Controller	J1708
Transmission Controller	J1708	J1939
Brake Controller	J1708	J1939
IP Cluster	J1708	N/A
Cluster	N/A	J1939
Body Controller	N/A	J1939

### OPERATION

When DLMU™ unit is first plugged into the 9 pin diagnostic connector, and receives power, the green VLT LED is illuminated (indicating the data links monitoring tool is receiving power).

The DLMU™ unit will then monitor the various electronic components and illuminate red LEDs to indicate which components responded to the request or are broadcasting on the data links.

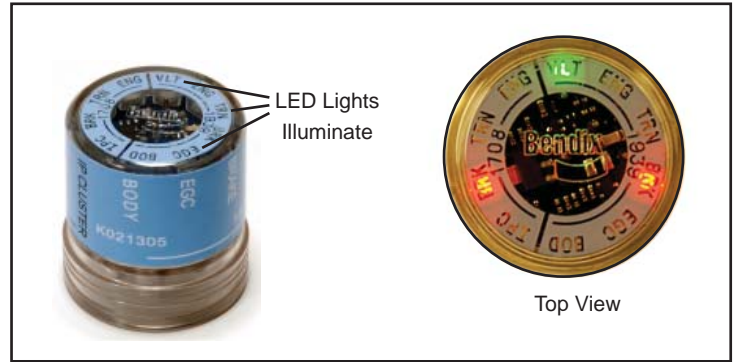


FIGURE 1 - THE BENDIX® DLMU™ UNIT

Data Link	LED Nomenclature	Component
J1939	ENG	Engine Controller
	TRN	Transmission Controller
	BRK	ABS Brake Controller
	EGC	Electronic Gauge Cluster
	BOD	Body Controller
J1708	IPC	Instrument Panel Controller
	BRK	ABS Brake Controller
	TRN	Transmission Controller
N A	ENG	Engine Controller
	VLT	Voltage for Tool

### NO COMMUNICATION

If the DLMU™ unit does not detect any devices on either the J1939 or J1708 link, it will indicate this by illuminating each red LED individually in a clockwise pattern. This pattern indicates no response from any of the requested devices and will continue until a device responds or the tool is disconnected from the 9-pin diagnostic connector.

Possible sources of communication issues are:

1. J1708 or J1939 communication is not present at the diagnostic connector.
2. ECU or the diagnostic connector has no power.
3. The DLMU™ monitoring unit can not arbitrate bus access.
4. Malfunctioning DLMU™ unit.

**WARNING! PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:**

When working on or around a vehicle, the following general precautions should be observed at all times.

1. Park the vehicle on a level surface, apply the parking brakes, and always block the wheels. Always wear safety glasses.
2. Stop the engine and remove ignition key when working under or around the vehicle. When working in the engine compartment, the engine should be shut off and the ignition key should be removed. Where circumstances require that the engine be in operation, **EXTREME CAUTION** should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated or electrically charged components.
3. Do not attempt to install, remove, disassemble or assemble a component until you have read and thoroughly understand the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.
4. If the work is being performed on the vehicle's air brake system, or any auxiliary pressurized air systems, make certain to drain the air pressure from all reservoirs before beginning **ANY** work on the vehicle. If the vehicle is equipped with an AD-IS<sup>®</sup> air dryer system or a dryer reservoir module, be sure to drain the purge reservoir.
5. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
6. Never exceed manufacturer's recommended pressures.
7. Never connect or disconnect a hose or line containing pressure; it may whip. Never remove a component or plug unless you are certain all system pressure has been depleted.
8. Use only genuine Bendix<sup>®</sup> replacement parts, components and kits. Replacement hardware, tubing, hose, fittings, etc. must be of equivalent size, type and strength as original equipment and be designed specifically for such applications and systems.
9. Components with stripped threads or damaged parts should be replaced rather than repaired. Do not attempt repairs requiring machining or welding unless specifically stated and approved by the vehicle and component manufacturer.
10. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
11. For vehicles with Antilock Traction Control (ATC), the ATC function must be disabled (ATC indication lamp should be ON) prior to performing any vehicle maintenance where one or more wheels on a drive axle are lifted off the ground and moving.

