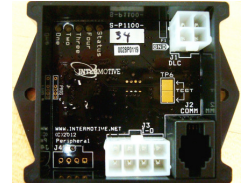


HZF515
2015-2018 Ford Transit
2015-2018 American General MV-1
Contact InterMotive for specific applications



Introduction

The HZF515 system activates the OEM hazard lights whenever the vehicle is in Park and the engine is running.

Installation Instructions

Disconnect vehicle battery before proceeding with installation.



WARNING
Disconnect the battery to
prevent setting a check engine
light.

IMPORTANT—READ BEFORE INSTALLATION

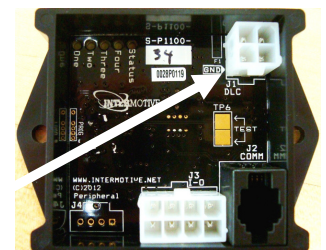
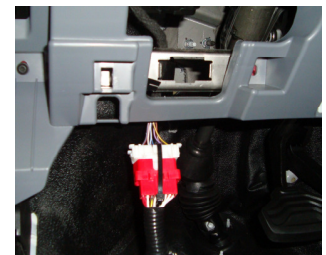
It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers. Avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Avoid radio frequency energy from antennas or inverters next to the module. Avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

HZF515 Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the module. Locate the module in an area away from any high external heat sources (engine heat, heater ducts, etc.). Do not actually mount the module until all wire harnesses are routed and secure. The last step of the installation is to mount the module.

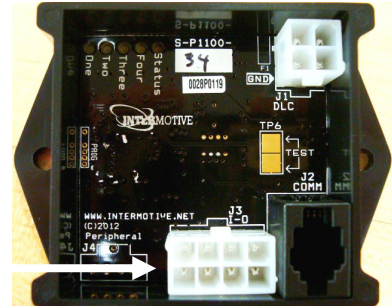
Data Link Harness Installation

1. Locate the vehicle OBDII Data Link Connector, mounted below the lower left dash panel.
2. Remove the White OBDII connector from the dash panel by squeezing both sides of the connector. Plug the red connector from the HZF515 Data Link Harness into the vehicle's OBDII connector. Ensure the connection is fully seated and secure with the supplied wire tie.
3. Mount the White pass through connector from the HZF515 Data Link Harness in the former location of the vehicle's OBDII connector.
4. Secure the HZF515 Data Link harness so that it does not hang below the lower dash panel.
5. Plug the free end of the Data Link harness into the mating 4-pin connector on the HZF515 module.



Installation Instructions (Continued)

- Pin #1 (Yellow) High true HZF515 flashing output
- Pin #2 (Orange) Looped to Pin 8
- Pin #3 (Blue) Reverse Output: 12V Default
- Pin #4 N/C
- Pin #5 N/C
- Pin #6 N/C
- Pin #7 N/C Optional TPP (Third Party Power)
- Pin #8 (Orange) 12V Engage Input. Default looped to Pin 2



External 12V Engage Input

If an external 12V input trigger is desired, cut the Orange wire as close as possible to Pin 2 on the 8 pin connector. Connect the Orange wire from pin 8 of the 8 pin connector to the desired trigger wire. Tape or heat shrink the end of the remaining Orange wire from pin 2.

Post Installation

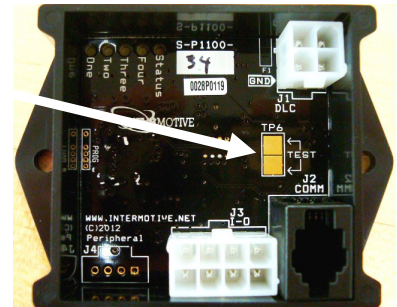
The following checks must be made after installation of the system, to ensure correct and safe operation. If any of the checks do not pass, do not deliver the vehicle. Recheck all connections as per the installation instructions.

1. Start the vehicle.
2. Place the transmission in Park.
3. If Orange wire hasn't been cut, skip to step 5.
4. Ensure that pin 8 on the 8 pin connector (Engage Input) has 12V applied.
5. Verify the hazard lights are flashing.
6. Take the transmission out of Park and verify the hazard lights turn off.
7. Place transmission in Park and turn vehicle off.
8. Verify that the hazard lights are not flashing.

Toggle Reverse Output (Power or Ground)

The Reverse Output (Pin 3 of the 8 pin connector) is defaulted to a 12V output. The following procedure must be performed to toggle the output to a ground output.

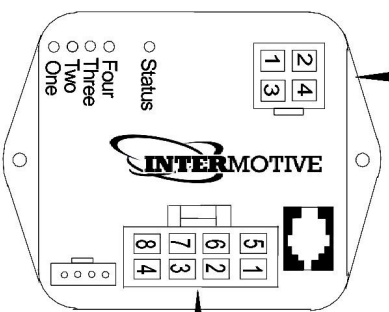
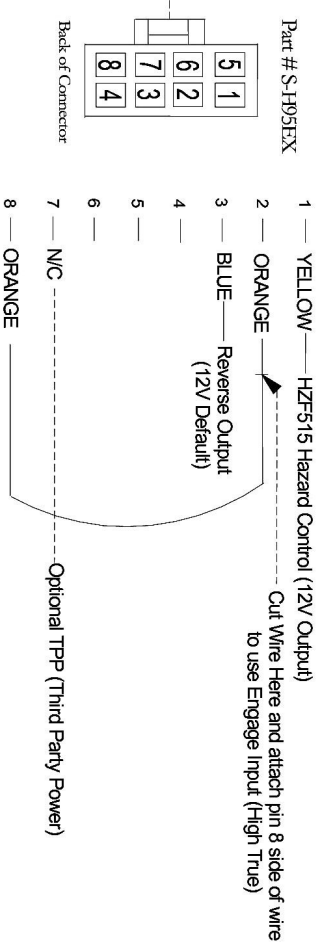
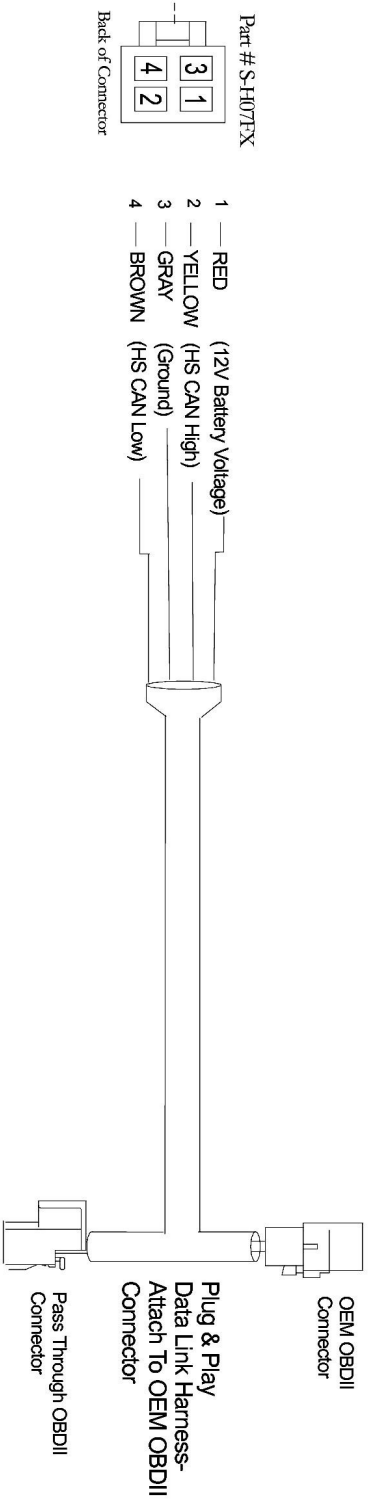
1. Make sure the vehicle is in Park, engine Off and key in Run.
2. Short the test pads on the module (see photo) and verify LED2 illuminates indicating the vehicle is in Park.
3. Apply the Service Brake and place the transmission in Neutral.
4. Apply and release the Parking Brake 3 times in 5 seconds to toggle the Reverse Output to a ground output from the default power output.
5. Verify that the LED's flash and the Status LED will turn ON when set to Ground.
6. Verify that the output is a ground output. (Repeat procedure to change.)



Diagnostics

Diagnostic mode is entered by shorting the two "Test" pads together on the module while the Key is in Run. The module provides diagnostic LED's which illuminate according to the following table.

Settings	LED	ON	OFF
Engage Input	LED1	Active	Inactive
Park	LED2	TR = Park	Not in Park
Reverse	LED3	TR = Reverse	Not in Reverse
RPM	LED4	RPM > 300	RPM < 300
Reverse Output	STATUS	GROUND	POWER



HZF515
Part # S-M1100-86

If the HZF515 fails any step in the Post Installation Test, review the installation instructions and check all connections. If necessary, call InterMotive Technical Support at (530) 823-1048.