

3-5 PSI
PRESSURE SWITCH
TIG31055

7-10 PSI
PRESSURE SWITCH
TIG31056

RELAY BOX JD331121
ON CHASSIS RAIL

Bendix GEN4&5 frame
X1 (grey) connector PIN 1
(ECU power)

Bendix GEN4&5 FRAME terminal p/n
DEUTSCH #0462-201-16141 (SOLID)
DEUTSCH #1062-16-06 (STAMPED)
NAV #1680205C1

Bendix GEN4&5 frame
X1 (grey) connector PIN 5
(ground during wheel slip)

SPEED SIGNAL ALLISON GEN 4 PIN 25

Allison GEN4 terminal p/n
MOLEX #33001-1004
NAV # 3606047C1

DO NOT CONNECT—PNK 18G

DO NOT CONNECT—PNK 18G

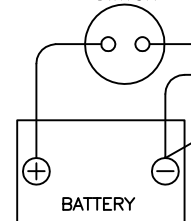
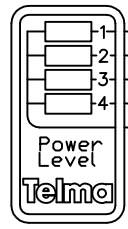
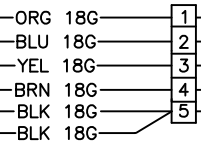
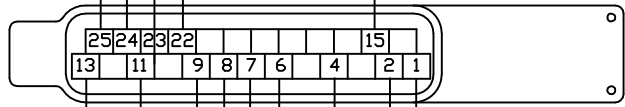
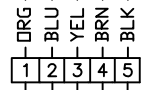
TO IGNITION — RED 18G

TELMA AIR FOOT CONTROL WIRING
BENDIX GEN4&5 FRAME ABS
12oct09

ABS CONTROL

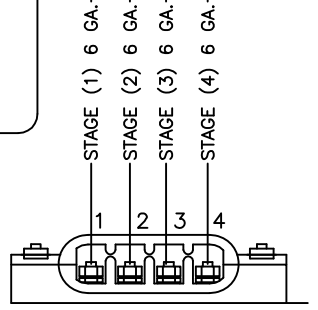
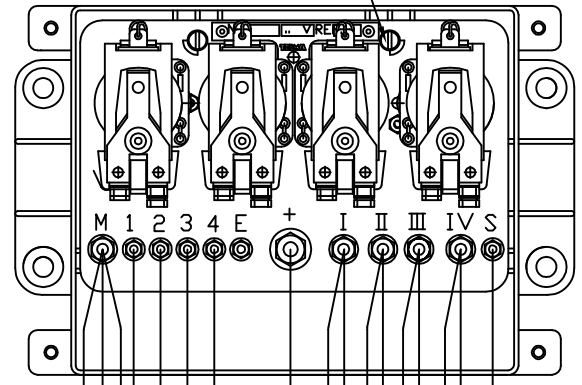
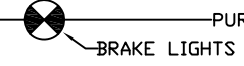
ABS WARNING

10 AMP FUSE



ABS INTERFACE
CONNECTOR FRONT VIEW
JC241105 ALLISON WORLD

DO NOT
CONNECT



POWER CONNECTIONS



Service Data

SD-13-4746

Bendix® Gen 4™ and Gen 5™ ABS for Trucks, Tractors, and Buses



FIGURE 1 - Bendix® ABS Controller Assemblies

GEN 4™ AND GEN 5™ ABS INTRODUCTION

This manual describes both the cab mount and the frame mount versions of the Bendix® Gen 4™ and Gen 5™ Antilock Brake System/Automatic Traction Control (ABS/ATC) systems.

Both cab and frame mount versions are designed for:

- Tractors
- Trucks
- Buses and
- Motor Coaches and
- RVs.

This manual covers:

- ABS/ATC Operation
- System Components
- Service Procedures
- Diagnosis and
- Troubleshooting Procedures.

For information on disassembly, installation, and service of related axle and brake components, refer to their individual Bendix Service Manuals.

For assistance in your area call Bendix at 1-800-247-2725 or RoadRanger® at 1-800-826-4357.

These ABS controllers and systems were originally marketed by Eaton Corporation under the Eaton® brand name. For more information contact Bendix, your local authorized Bendix dealer, or RoadRanger®.

Document Revision Level

This document is subject to revision. For updates, please visit www.bendix.com.

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Electronic Control Units (ECUs)

Identification

Frame mount ECUs are environmentally packaged versions of the related Gen 4™ & Gen 5™ ABS cab-mounted units (Standard, Basic). The circuitry and software is the same. Gen 5™ ABS units incorporate power line carrier (PLC) hardware. ECUs are available in 4 and 6-channel versions with either J1922 or J1939 data links. There is also a 24-volt version. Further service information is available on www.bendix.com.

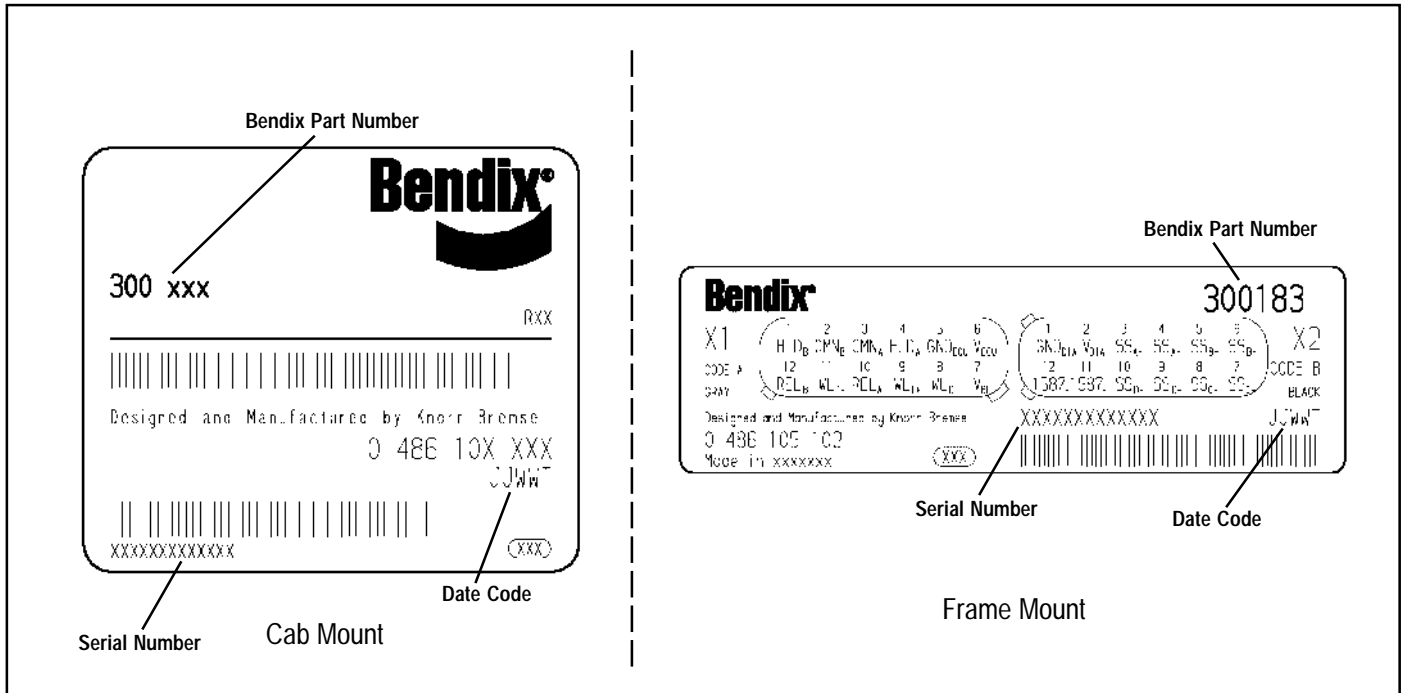
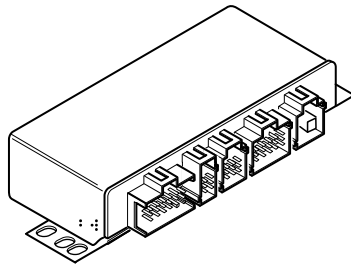
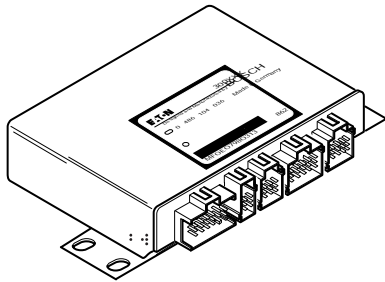


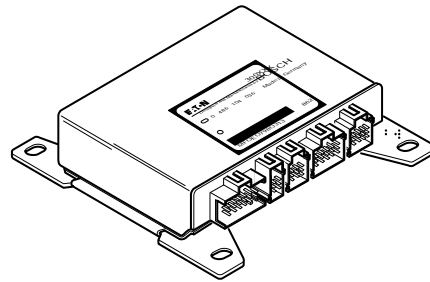
FIGURE 6 - Electronic Control Unit Identification Tags



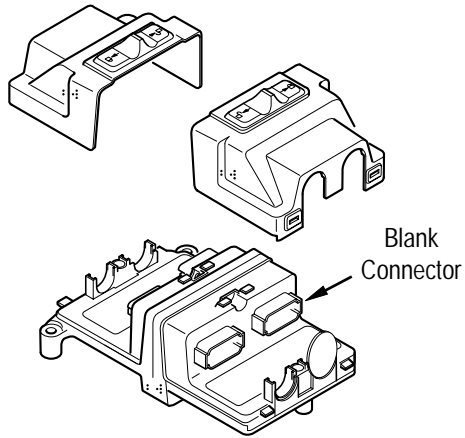
Gen 4™ & Gen 5™ ABS - Basic Cab Mount



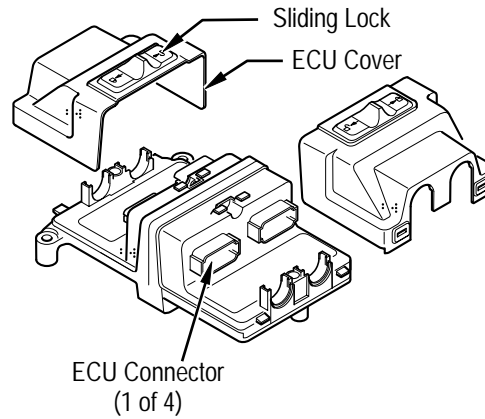
Gen 5™ ABS - Standard Cab Mount



Gen 4™ ABS - Standard Cab Mount



Gen 5™ ABS (PLC - Basic Frame Mount)



Gen 4™ & Gen 5™ ABS - Standard Frame Mount

FIGURE 7 - Available Bendix ABS Electronic Control Units

Frame Mount ECU Pin Identification

This section shows how to identify Frame Mount ECU harness connectors and pin locations. The charts provide a brief description of the signal carried by each pin.

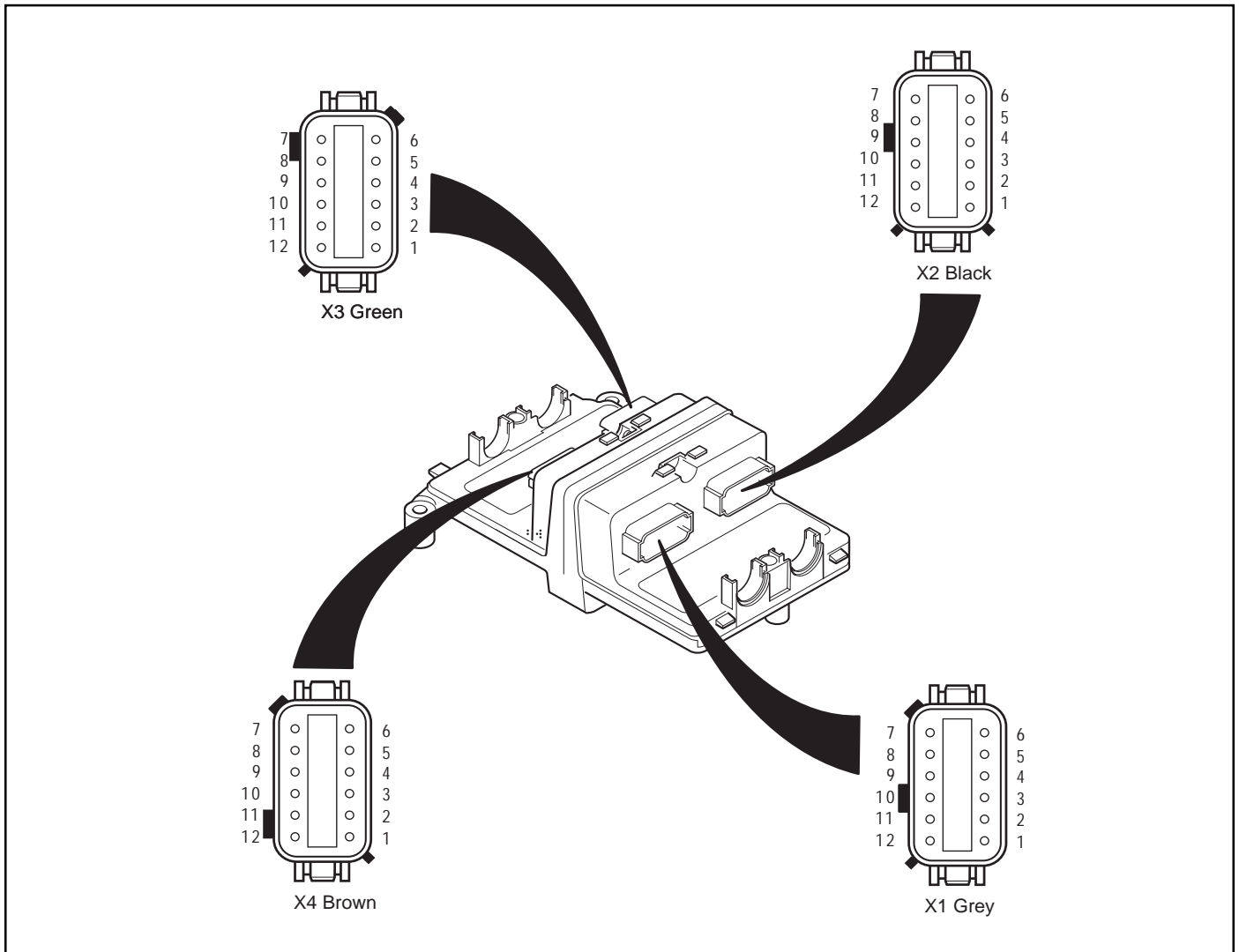


FIGURE 44 - Cab Mount ECU – Pin Identification Chart

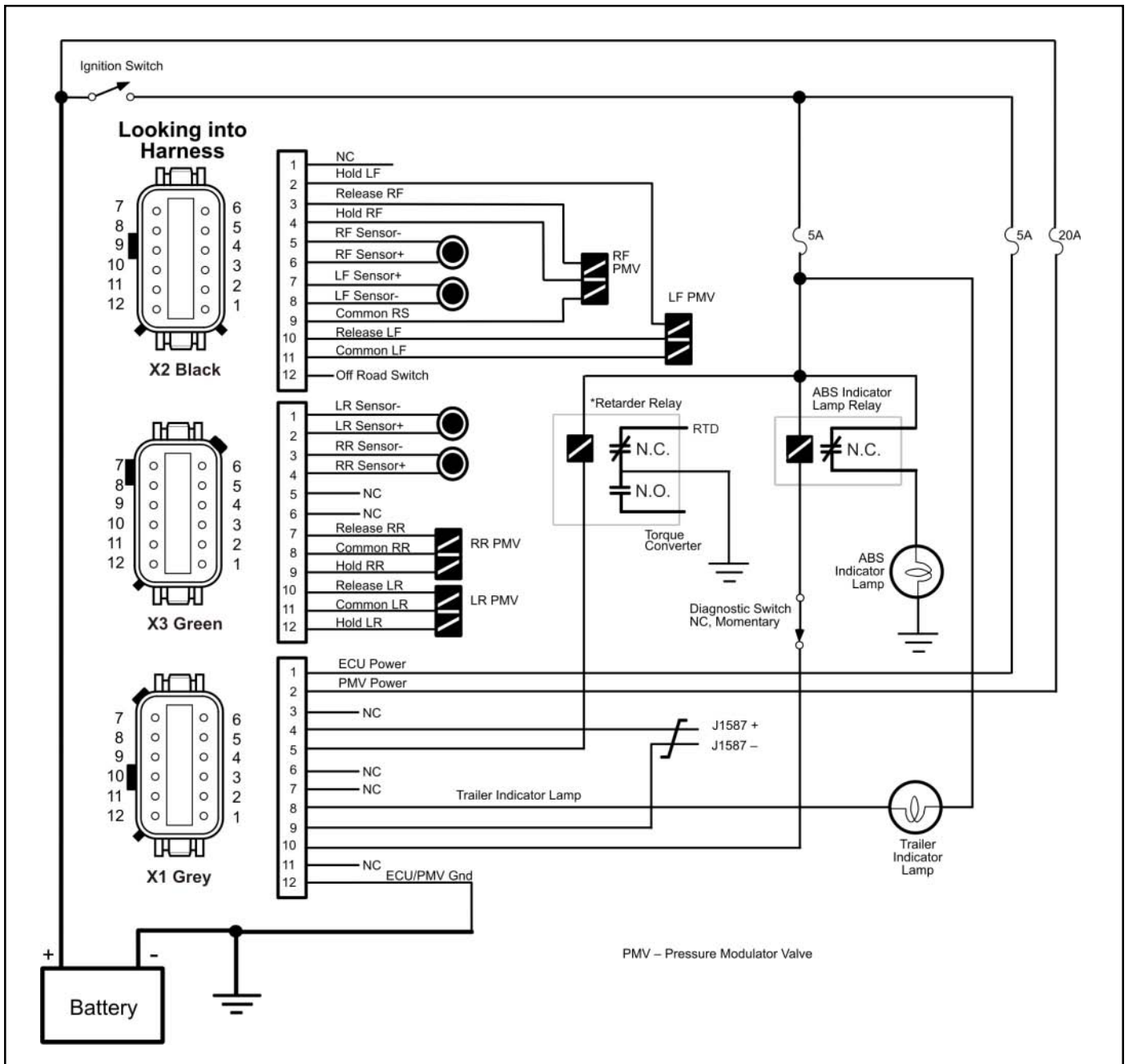


FIGURE 46 - Gen 5™ Basic Frame Mount ABS Electrical Schematic

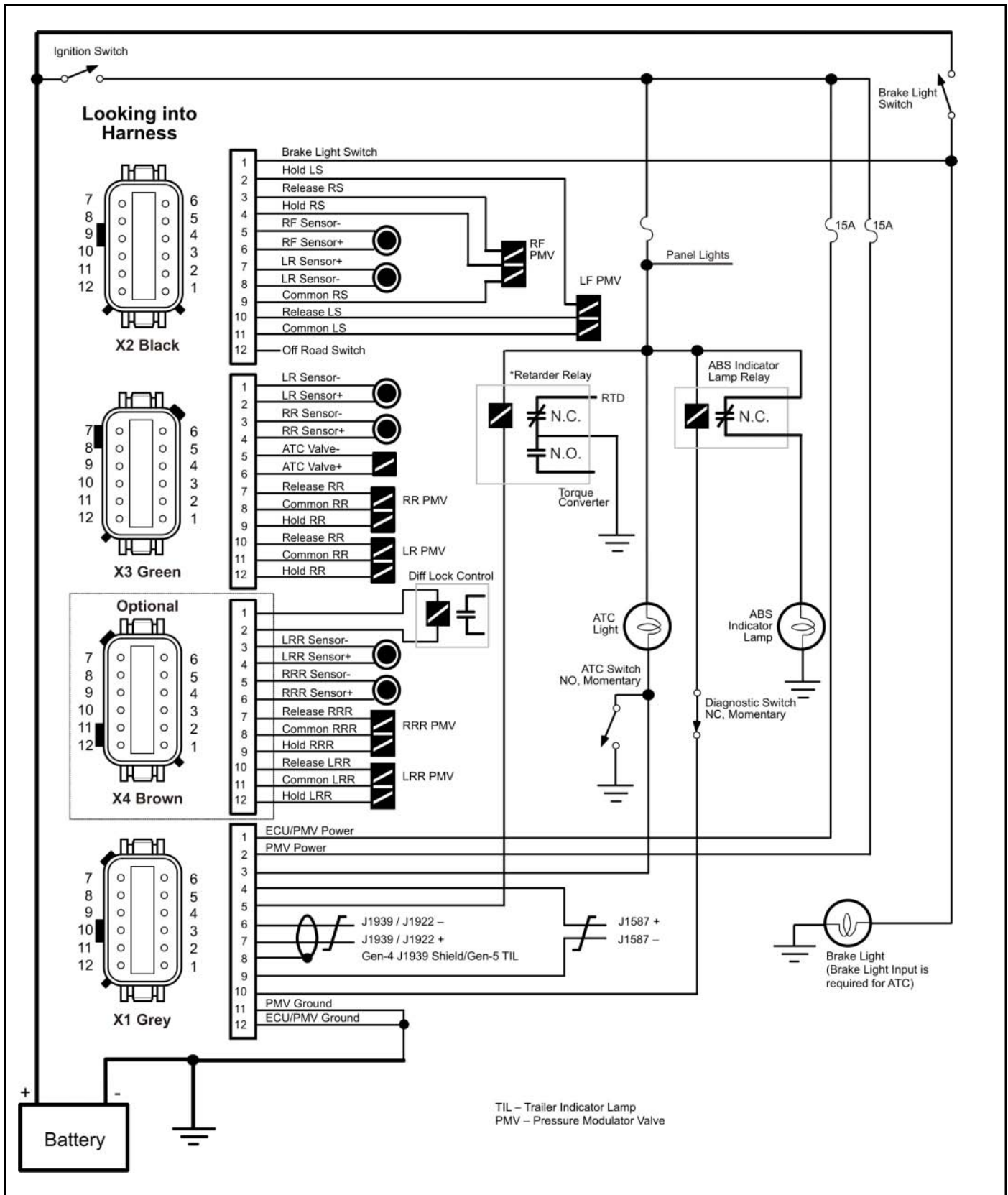


FIGURE 47 - Gen 4™ and Gen 5™ Standard Frame Mount ABS Electrical Schematic