

## 3-1 Introduction

### Note

All wiring connections between components are shown exactly as they exist in the vehicles. It is important to realize, however, that no attempt has been made on the schematic to represent components and wiring as they physically appear on the vehicle. For example, a 4-foot length of wire is treated no differently in a schematic from one which is only a few inches long. Furthermore, to aid in understanding electrical (electronic) operation, wiring inside complicated components has been simplified.

### Complete Circuit Operation

Each circuit is shown completely and independently in one cell. Other components which are connected to the circuit may not be shown unless they influence the circuit operation.

### Current Flow (1)

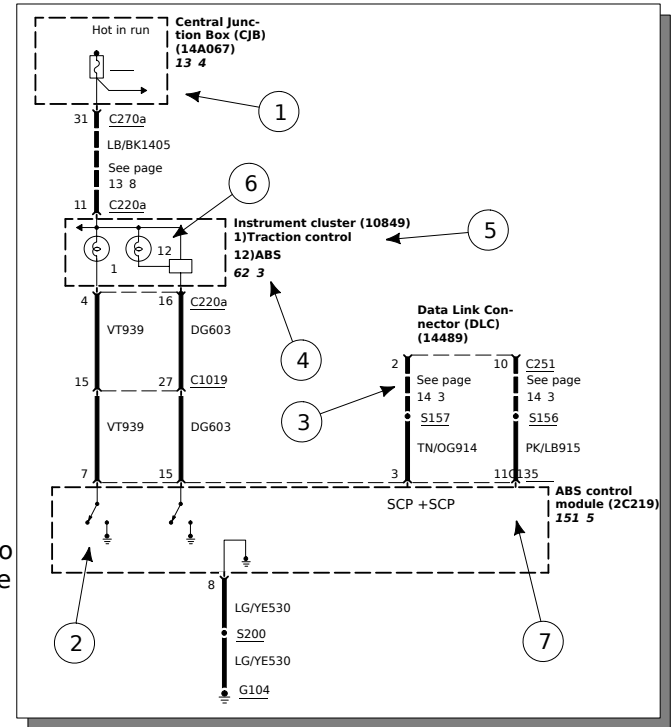
Each cell normally starts with the component that powers the circuit, such as a fuse or the ignition switch. Current flow is shown from the power source at the top of the page to ground at the bottom of the page. In order to concentrate on the essential parts, power supply and ground connections are sometimes simplified by a dashed line in the schematics. A full representation of the power supply of a fuse or the power distribution from a fuse to various components is given in cell 13 Power Distribution . Full representation of the ground connections is given in cell 10 Grounds .

### Switch Positions (2)












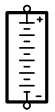

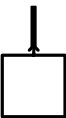


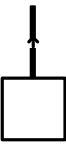




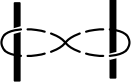
Within the schematic, all switches, sensors and relays are shown at rest (as if the Ignition Switch were OFF).

### Splices (3)

A dashed line indicates that the splice is not shown completely. A reference is given to the page where the splice appears in full. It is also listed in the Index.



# 4-1 Symbols

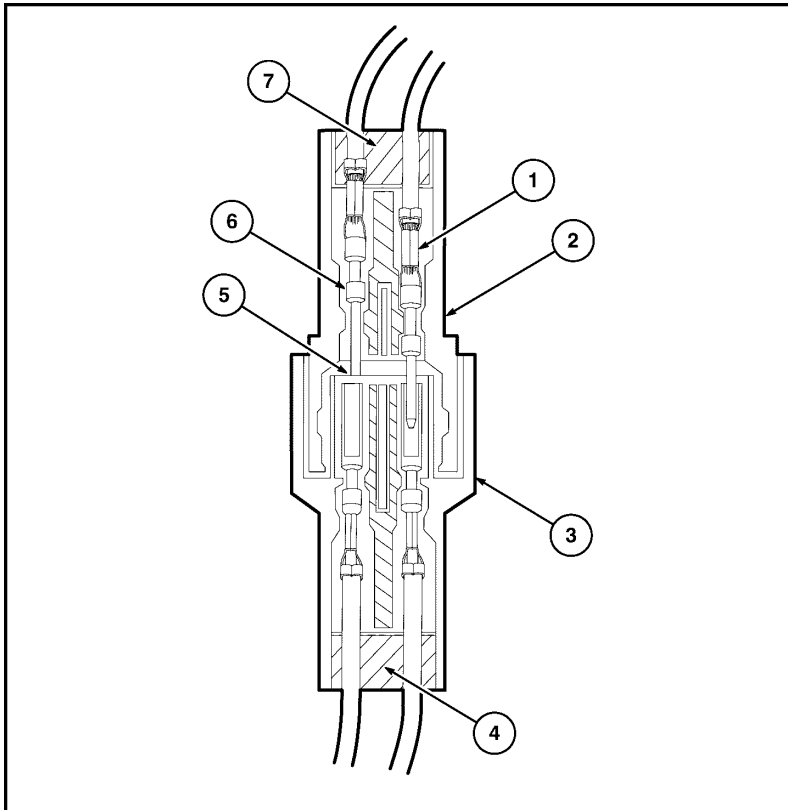
	Distributed splice		Entire component		Resistor
	Crossed wiring without connection		Part of a component		Potentiometer (pressure or temperature)
	Splice		Component case directly attached to metal part of vehicle (ground)		Potentiometer (outside influence)
	Removable connection		Component with screw terminals		Battery
	Ground		Connector attached to component		Fuse
	Female connector		Connector attached to component lead (pigtail)		Circuit breaker
	Male connector		Positive Temperature Coefficient (PTC)		Heating element, Conductor loop
	Twisted pair				

## 5-1 Connector Repair Procedures

### Troubleshooting wiring harness and connector hidden concerns

The following illustrations are known examples of wiring harness, splices and connectors that will create intermittent electrical concerns. The concerns are hidden and can only be discovered by a physical evaluation as shown in each illustration.

NOTE: Several components, such as the PCM, utilize gold plated terminals in their connections to the wiring harness. If those terminals need to be replaced, they must be replaced with a gold plated terminal.

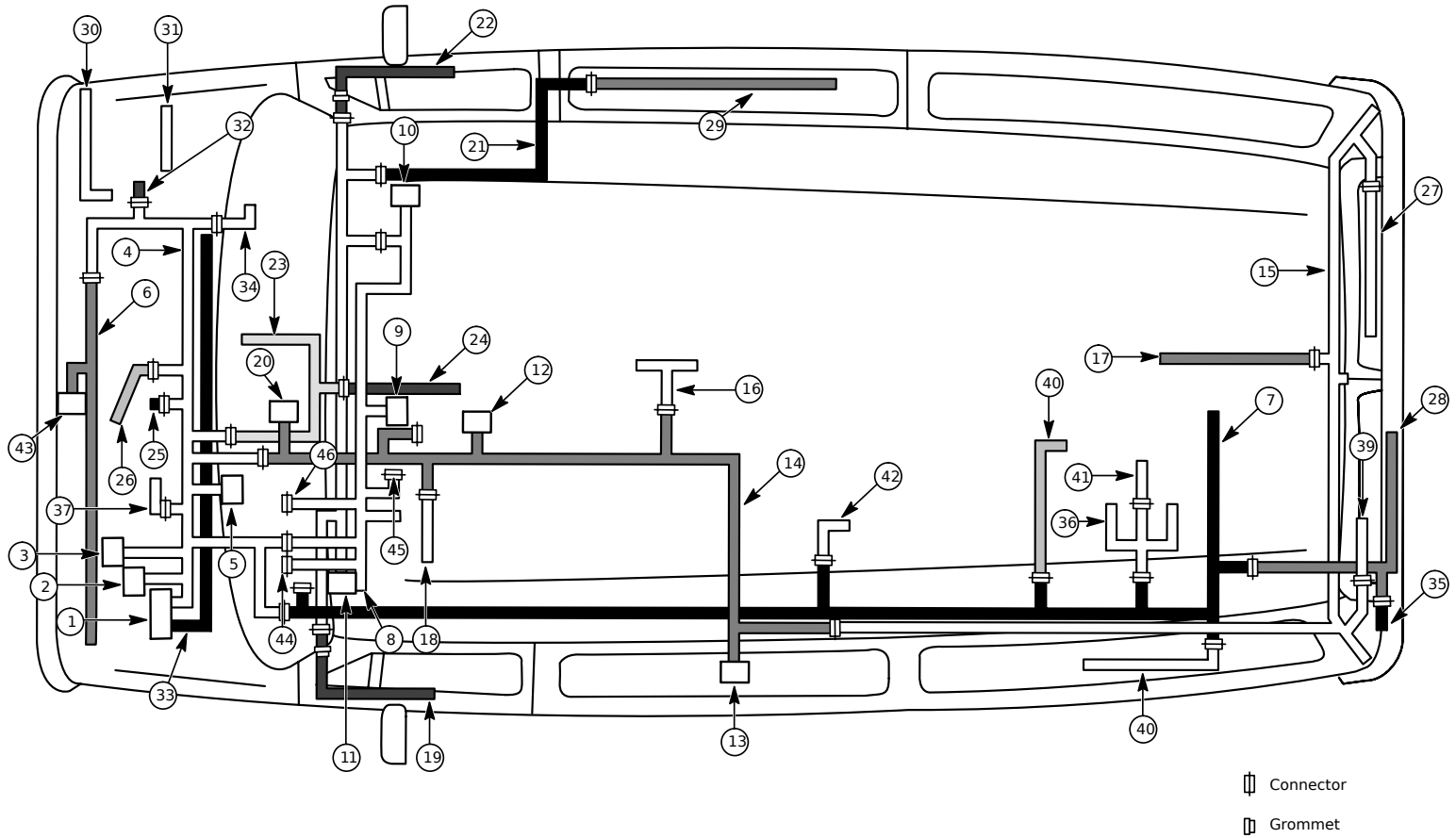


### Terminal not properly seated

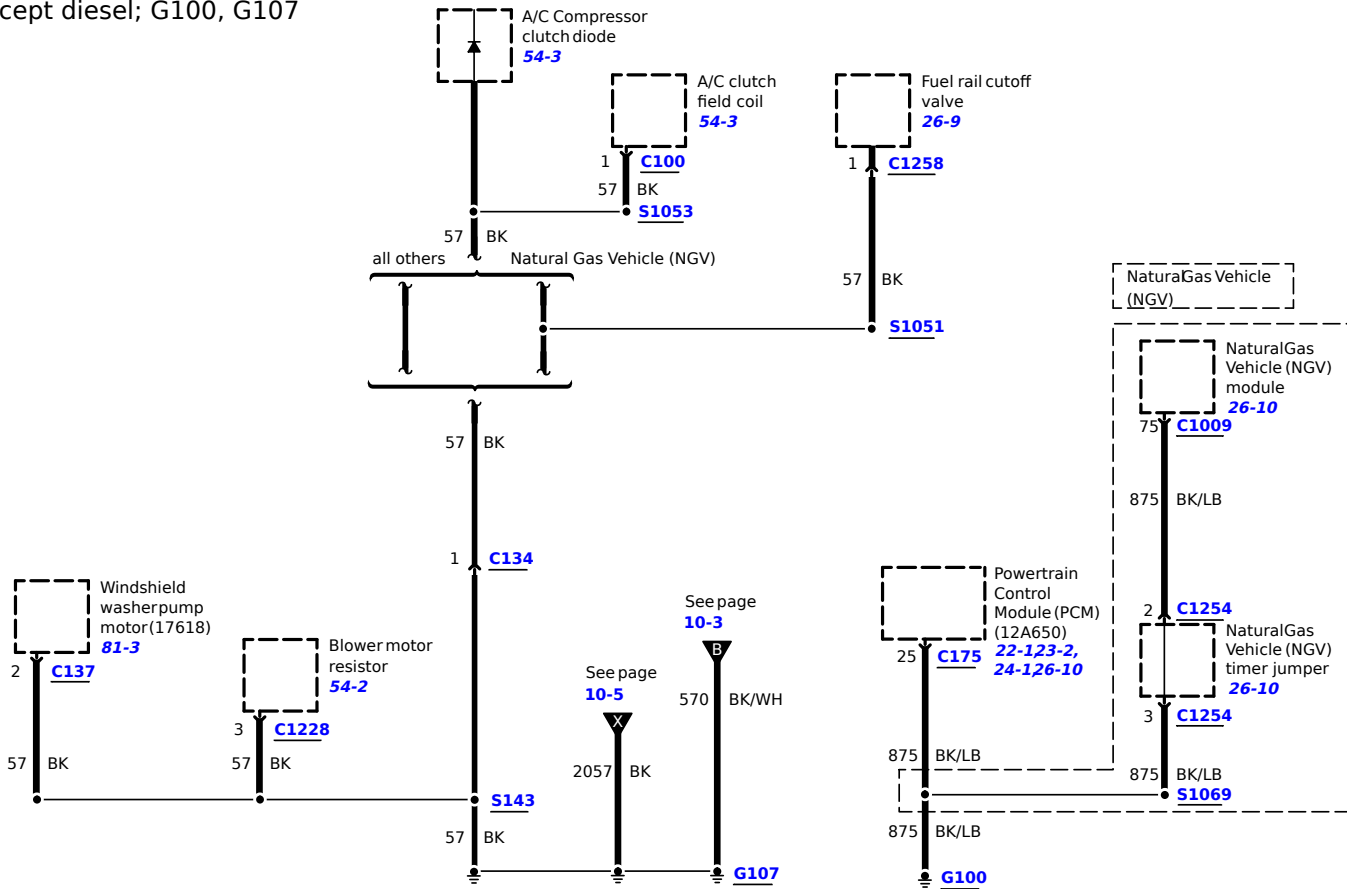
- 1=Locked terminal
- 2=Male half
- 3=Female half
- 4=Seal
- 5=Intermittent contact
- 6=Unlocked terminal (Hidden by wire seal)
- 7=Seal

Check for unlocked terminals by pulling each wire at the end of the connector.

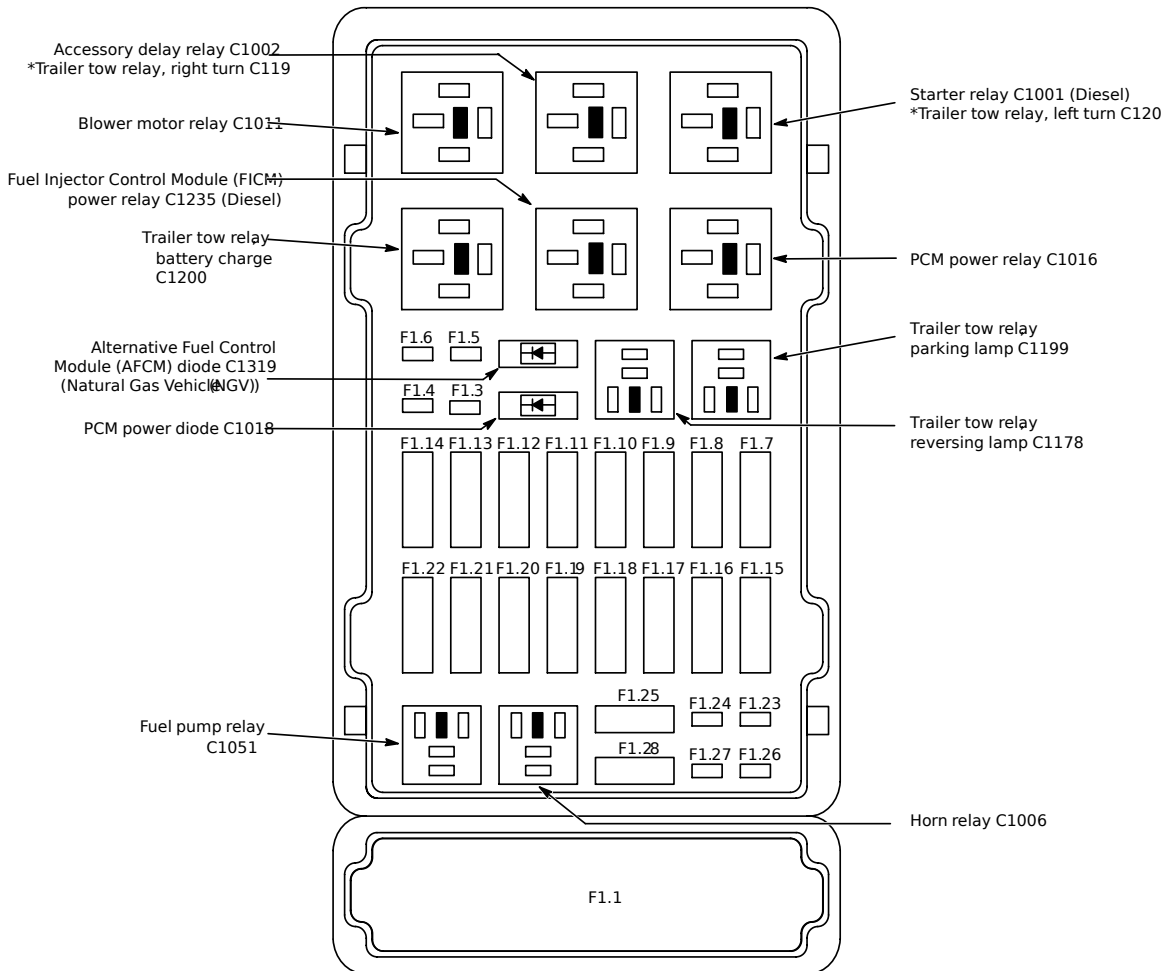
# 9-1 Wiring Harness Overview



Except stripped chassis,  
 Except diesel; G100, G107



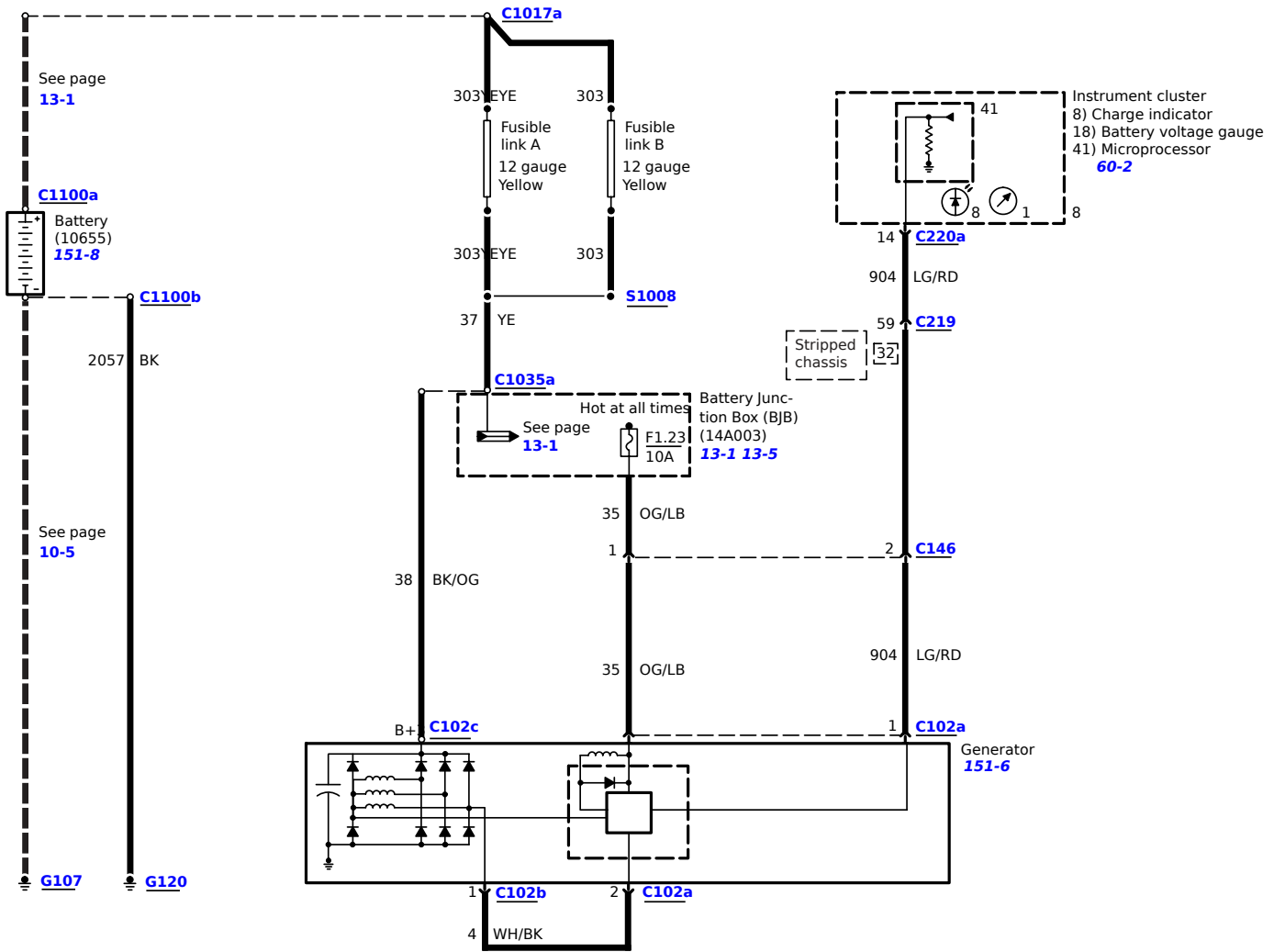
Battery Junction Box (BJB) (14A003)



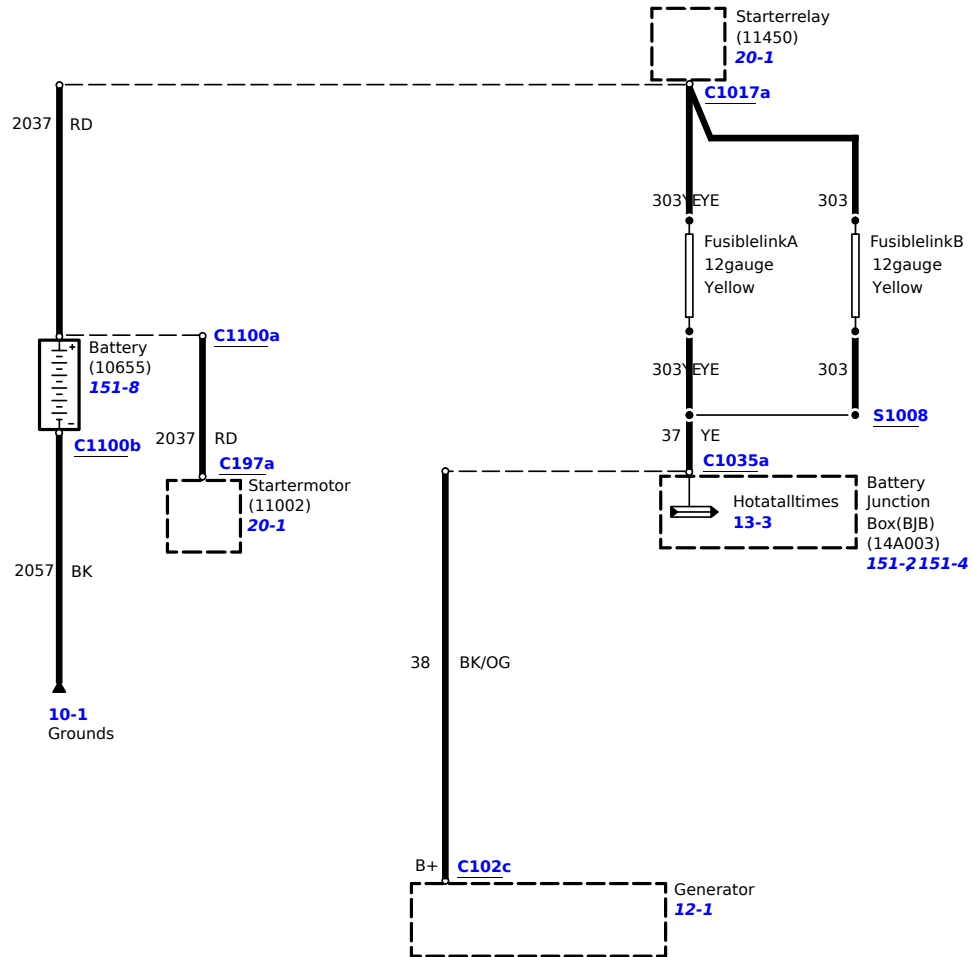
\*Stripped chassis

# 12-1 Charging System

Except Diesel



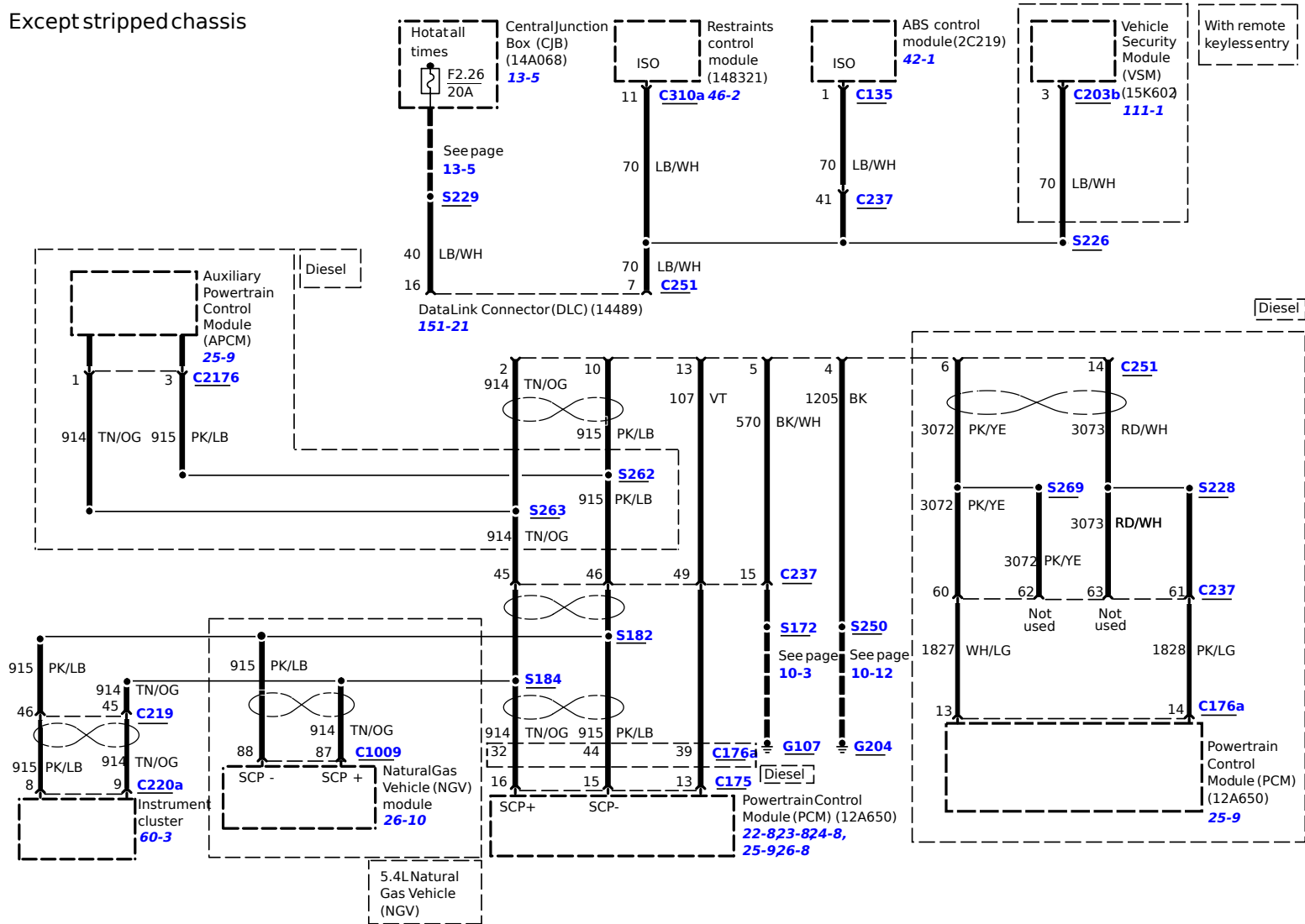
ExceptDiesel



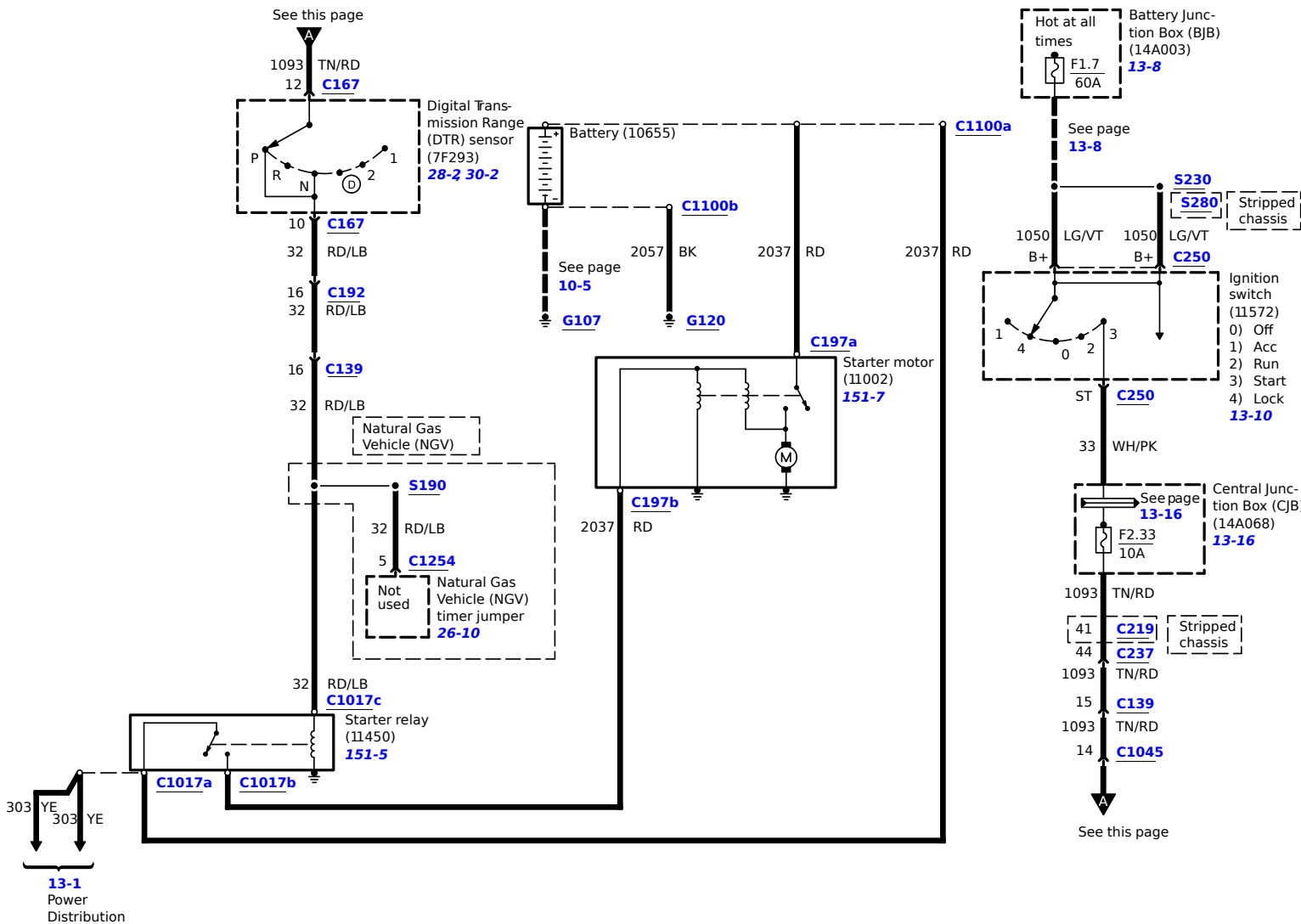


# 14-1 Module Communications Network

Except stripped chassis

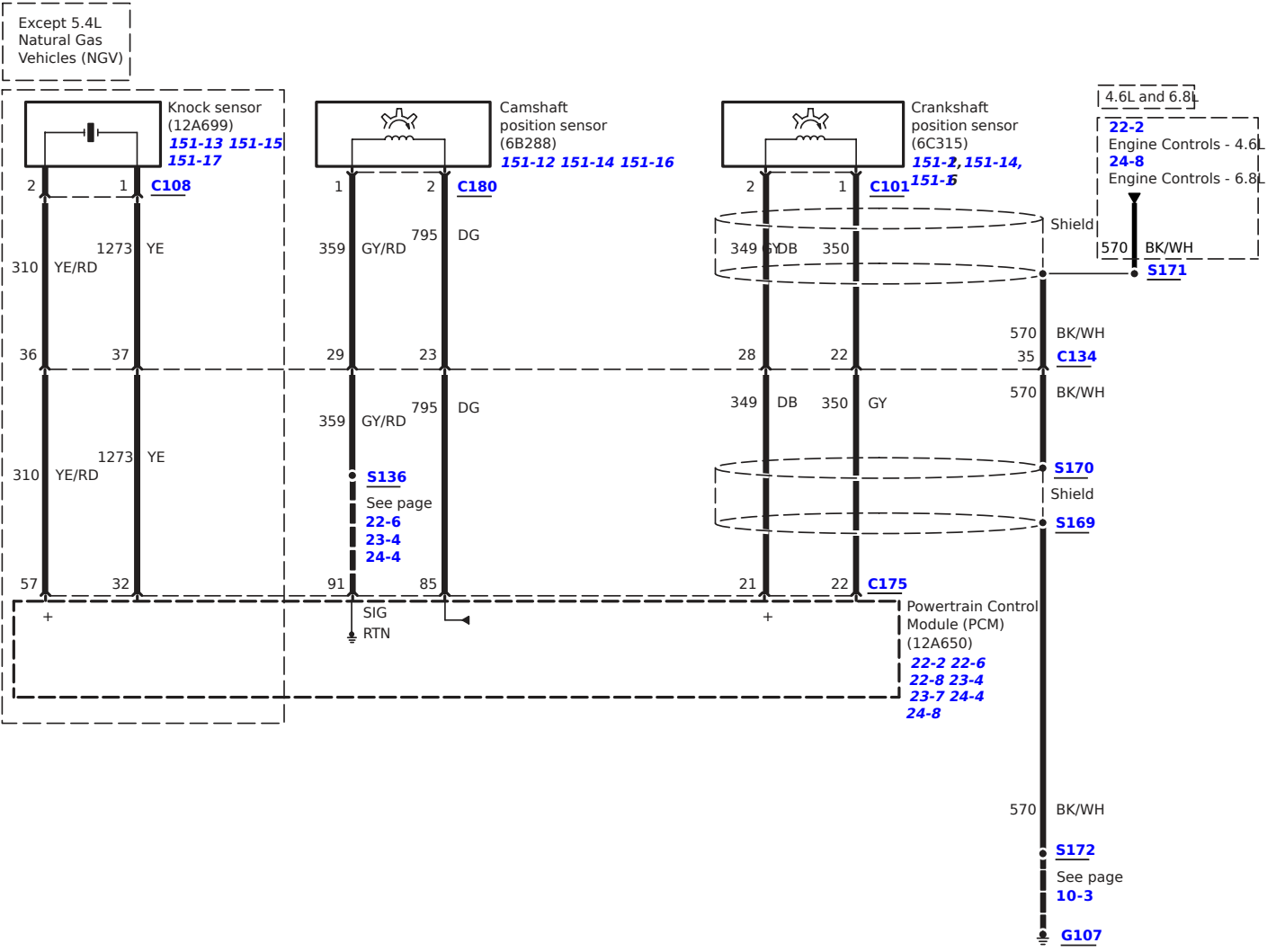


except diesel

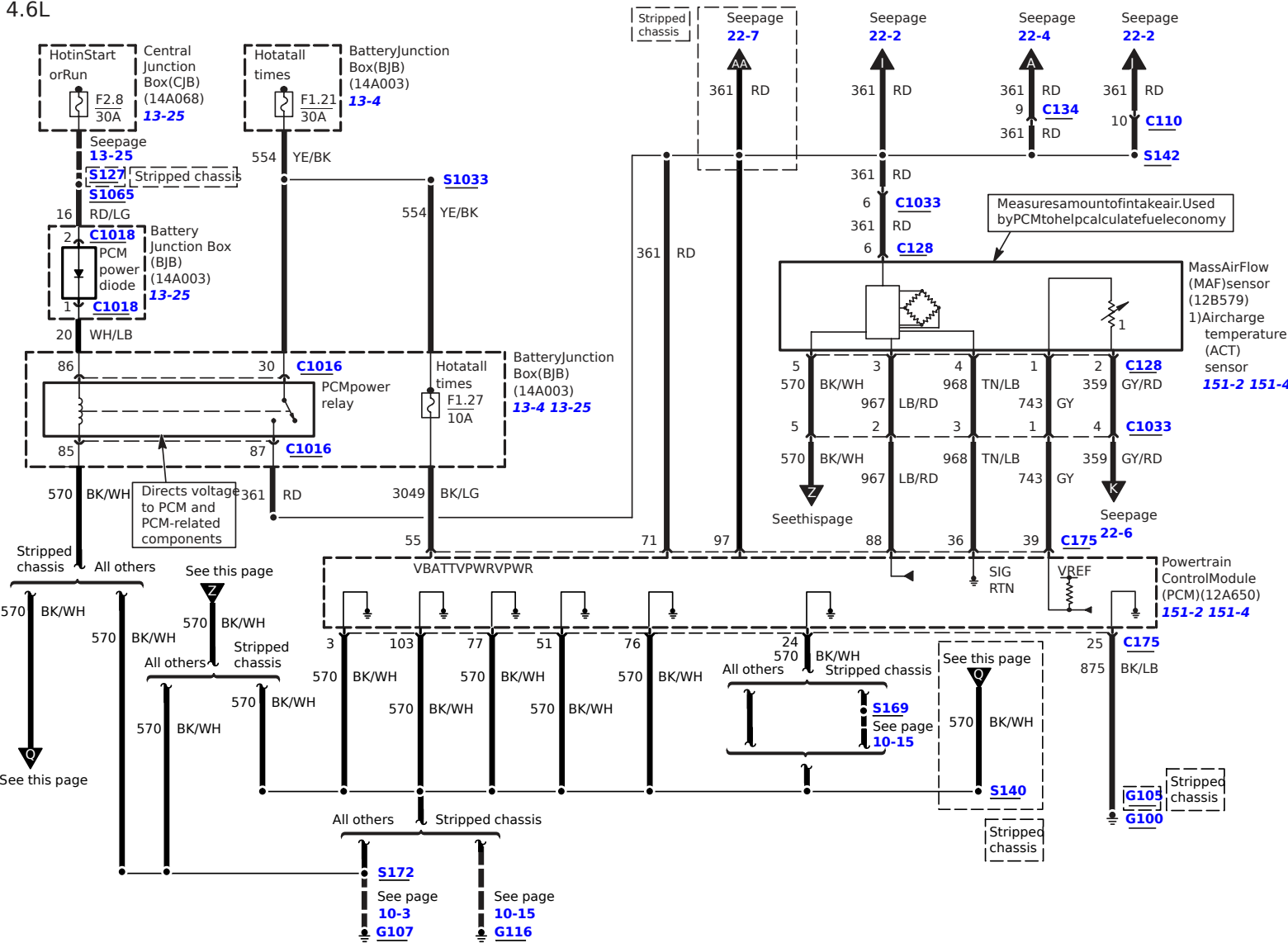


# 21-1 Engine Ignition

4.6L, 5.4L, 6.8L

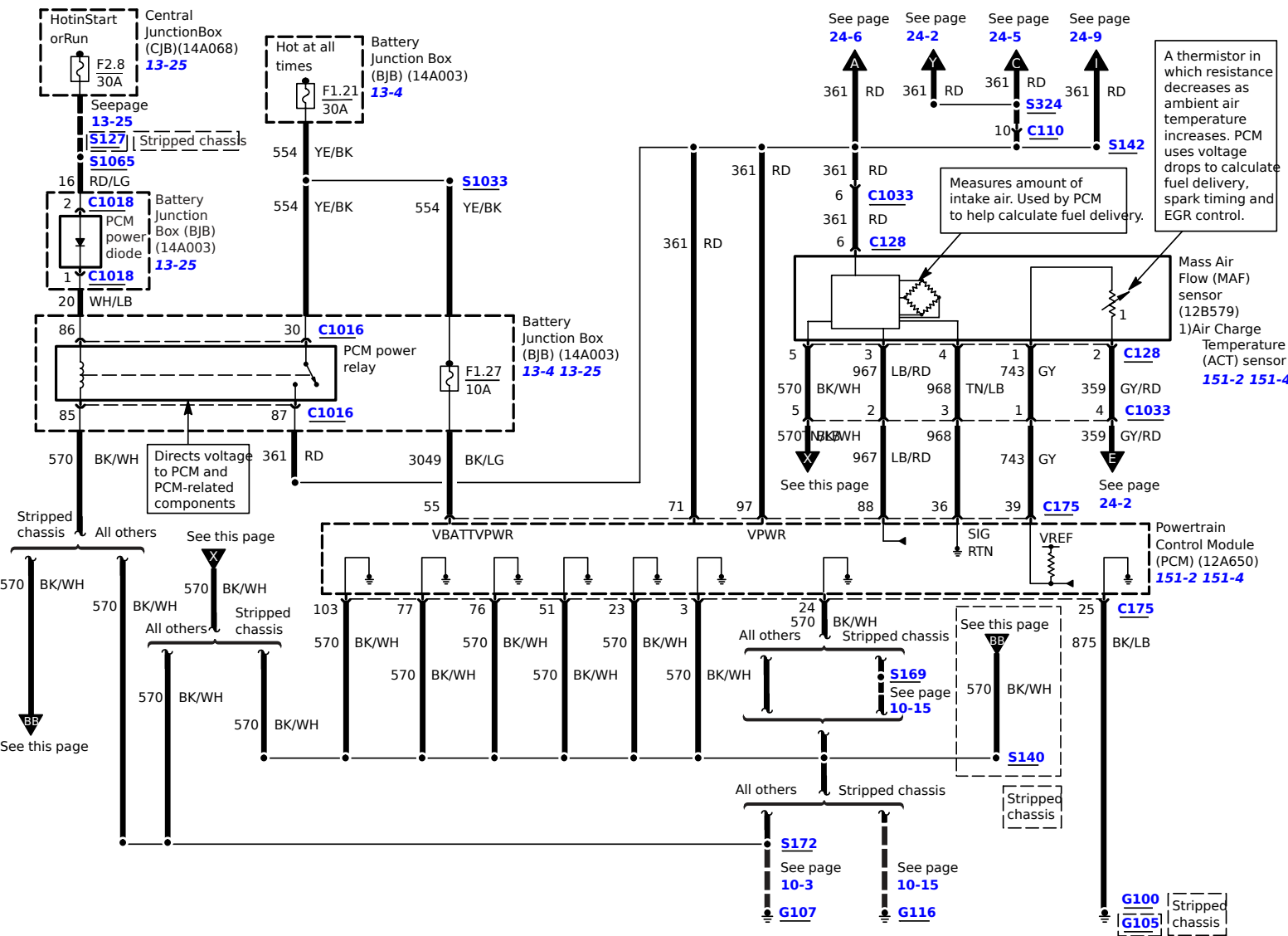


4.6L

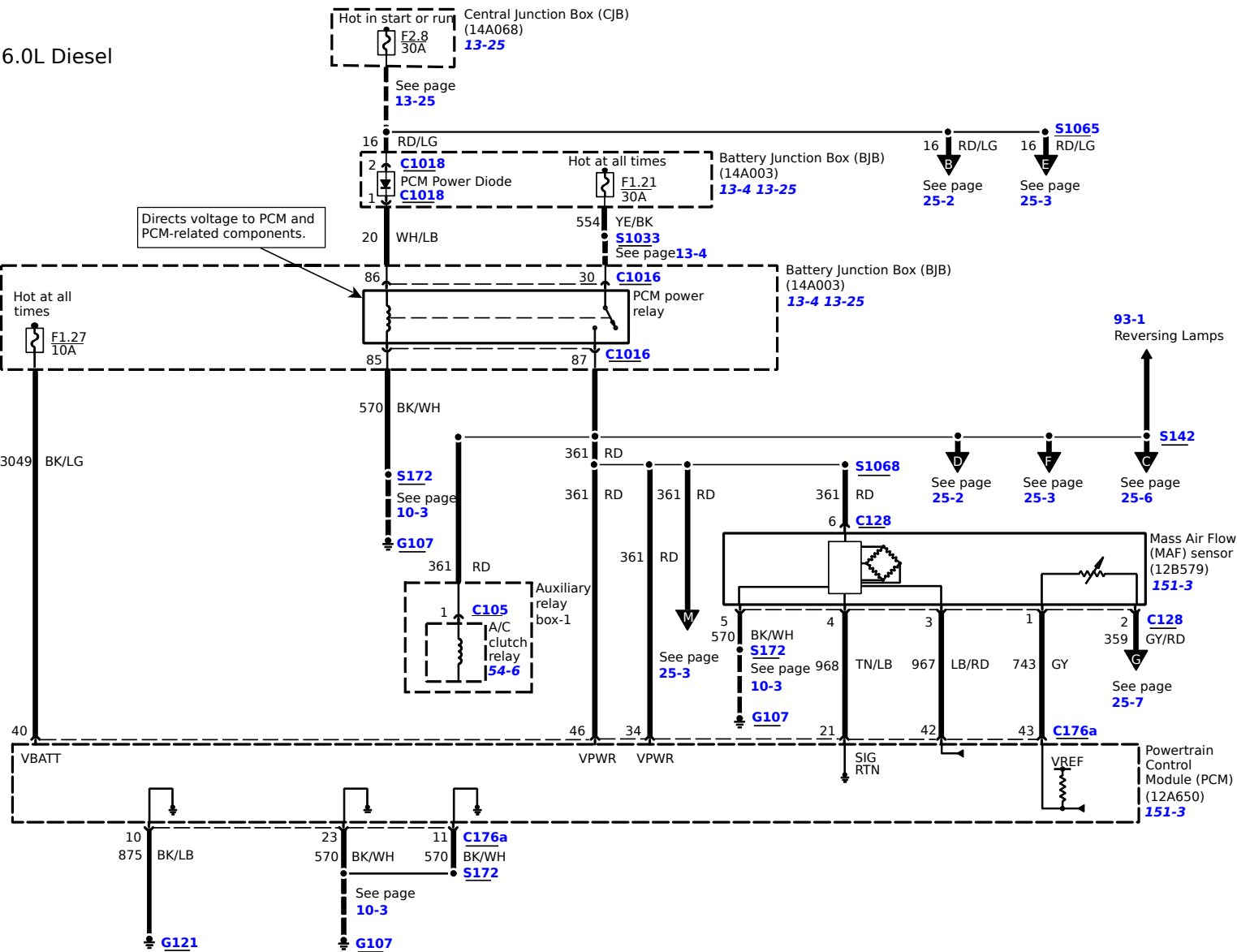




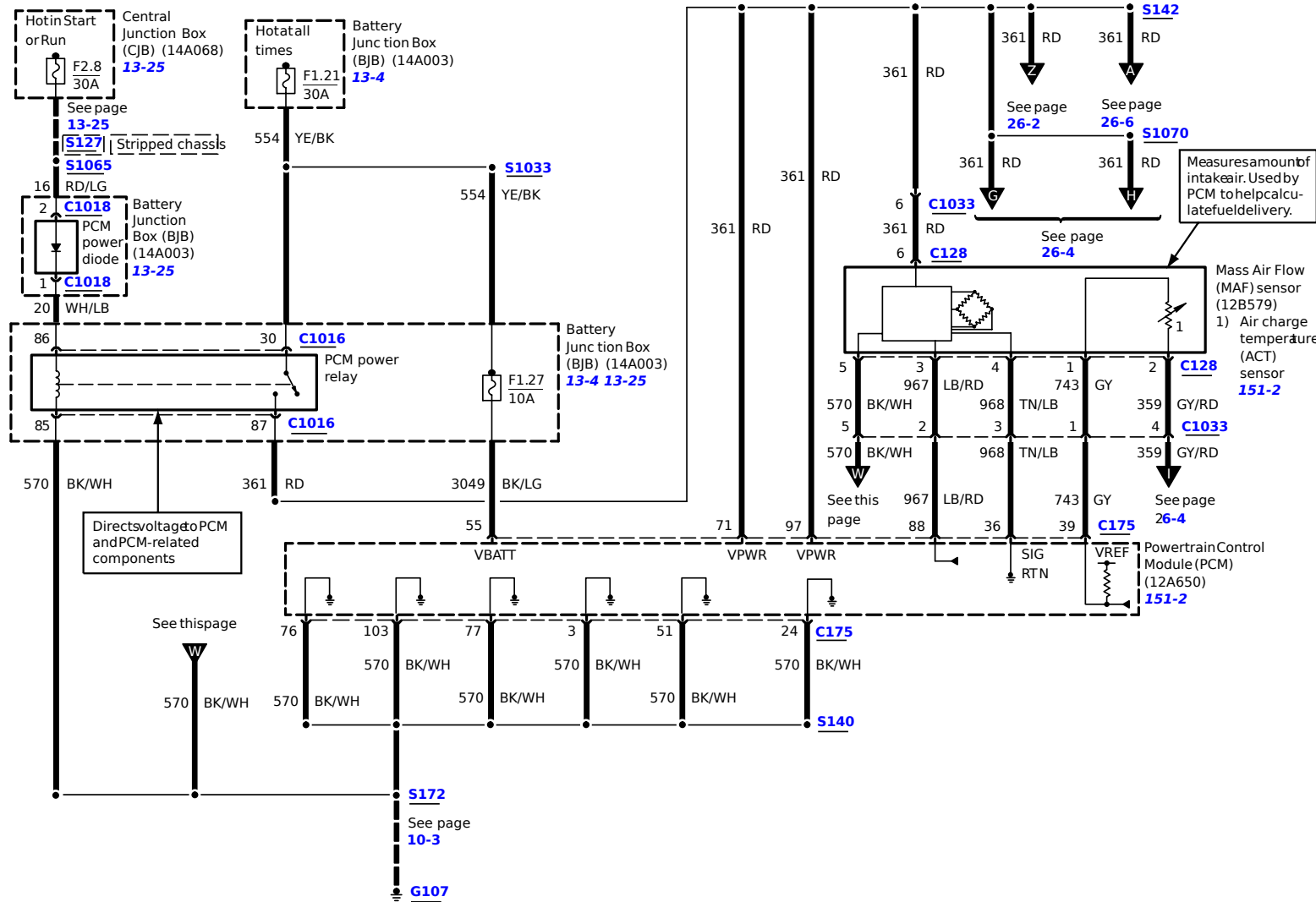
6.8L



6.0L Diesel

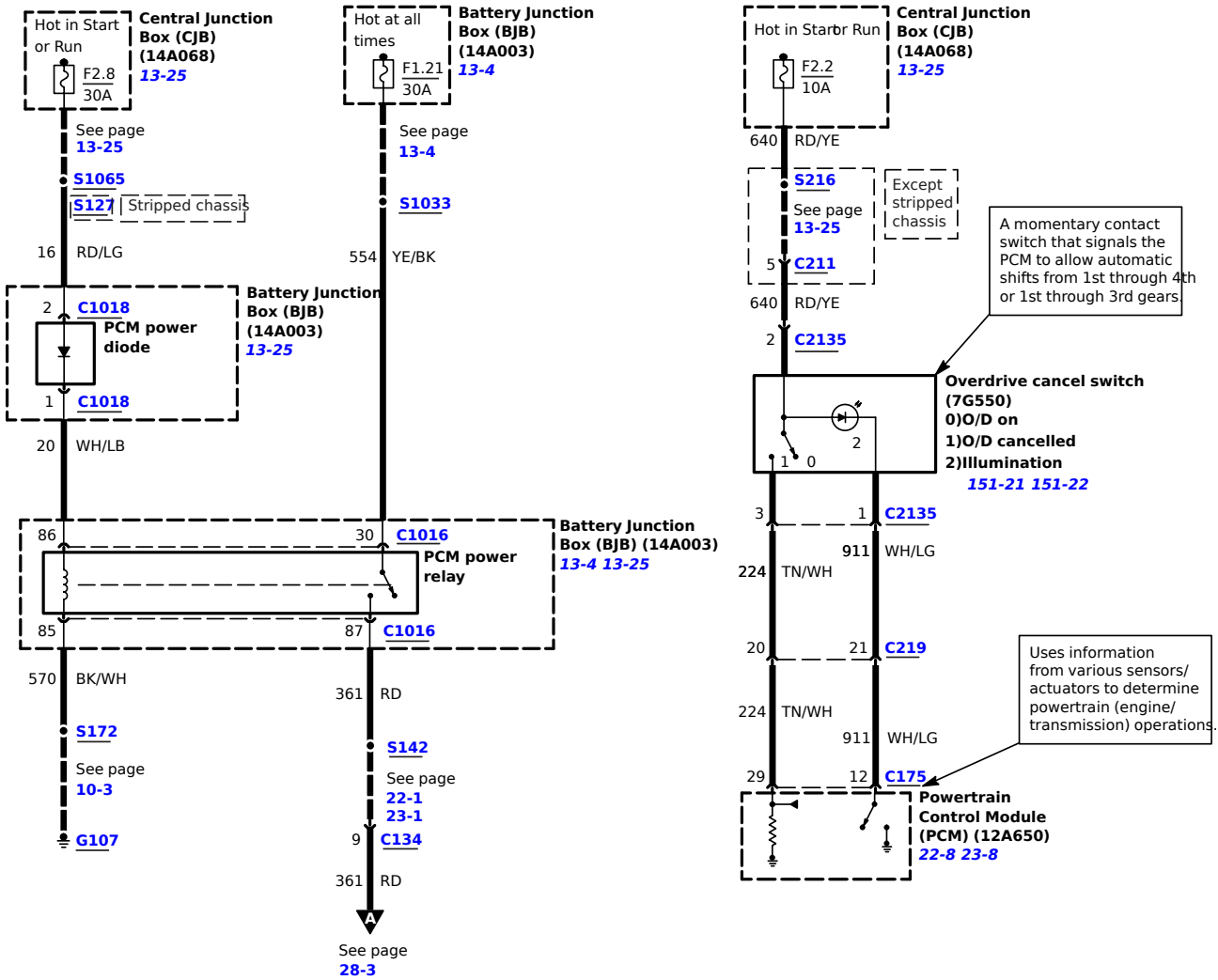


5.4L Natural Gas Vehicle (NGV)

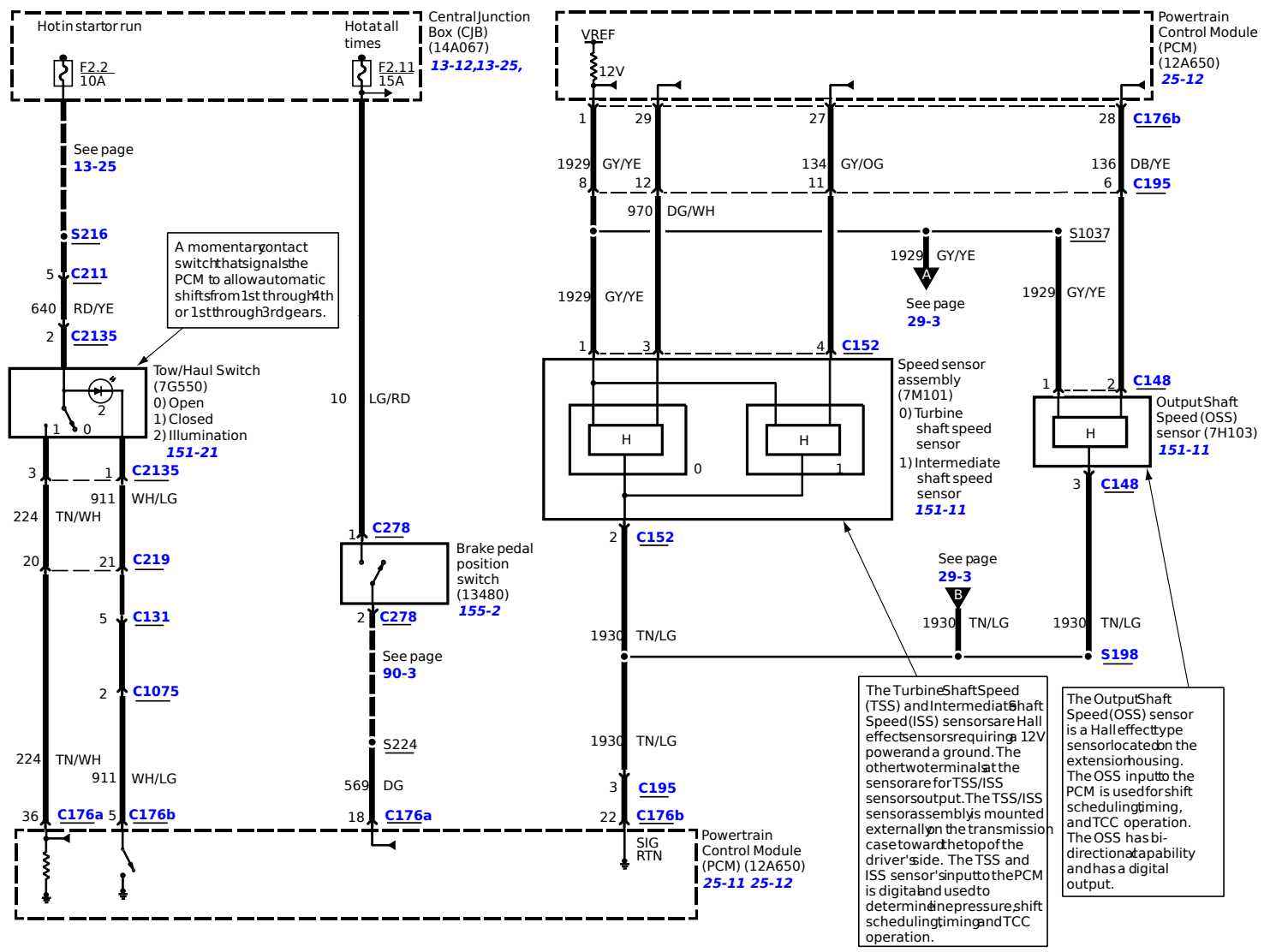




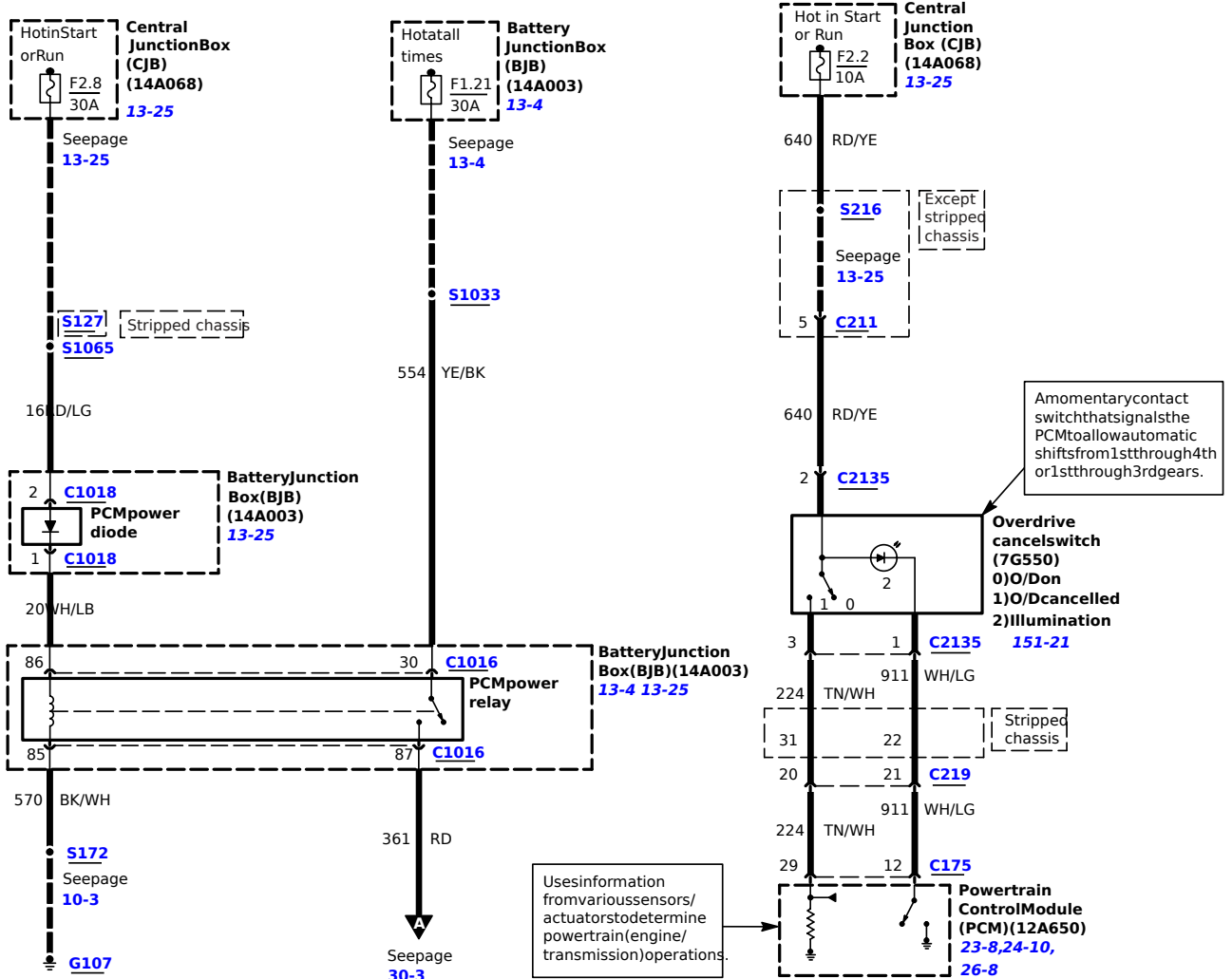
## 4R70E/ 4R75E



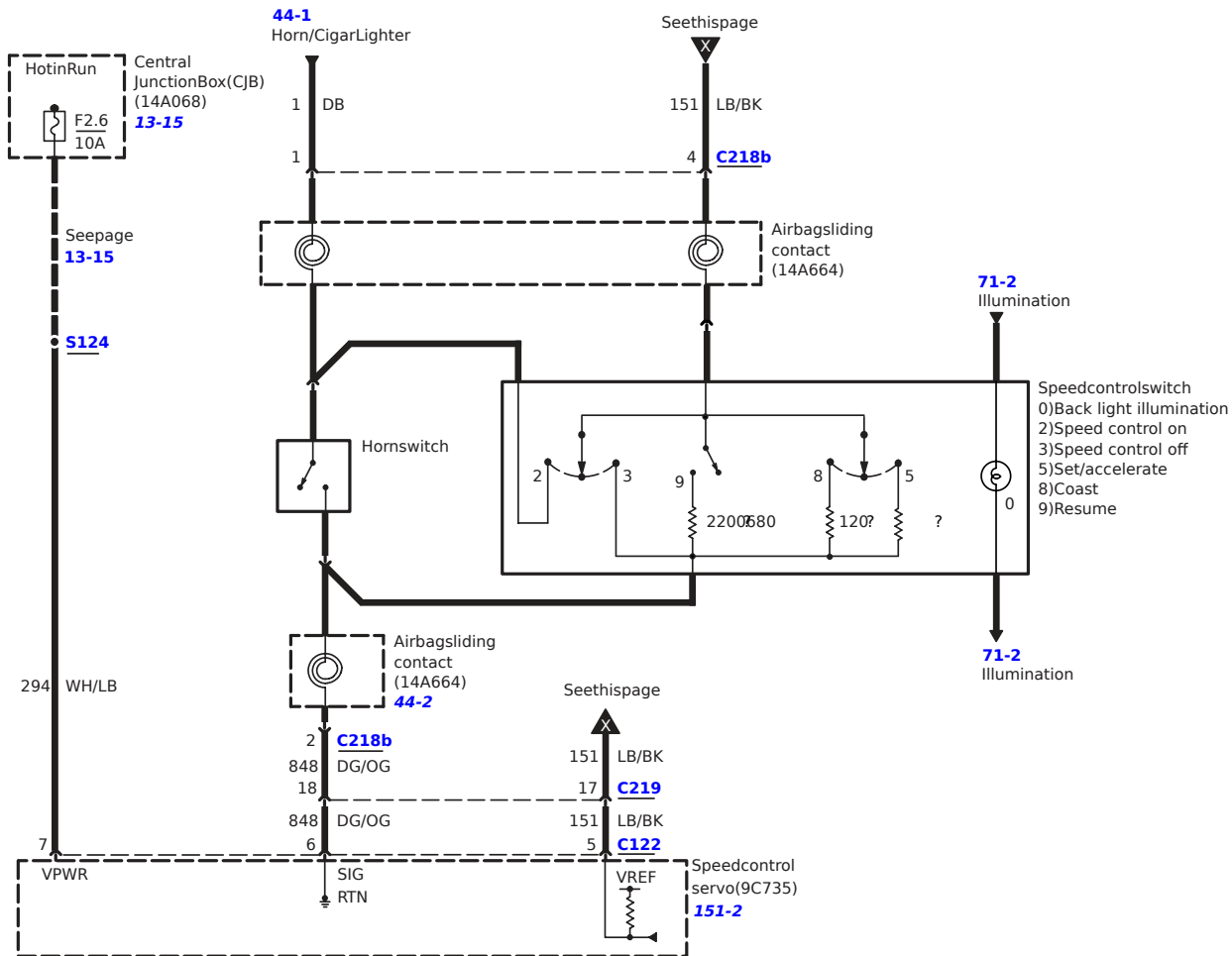
TorqShift



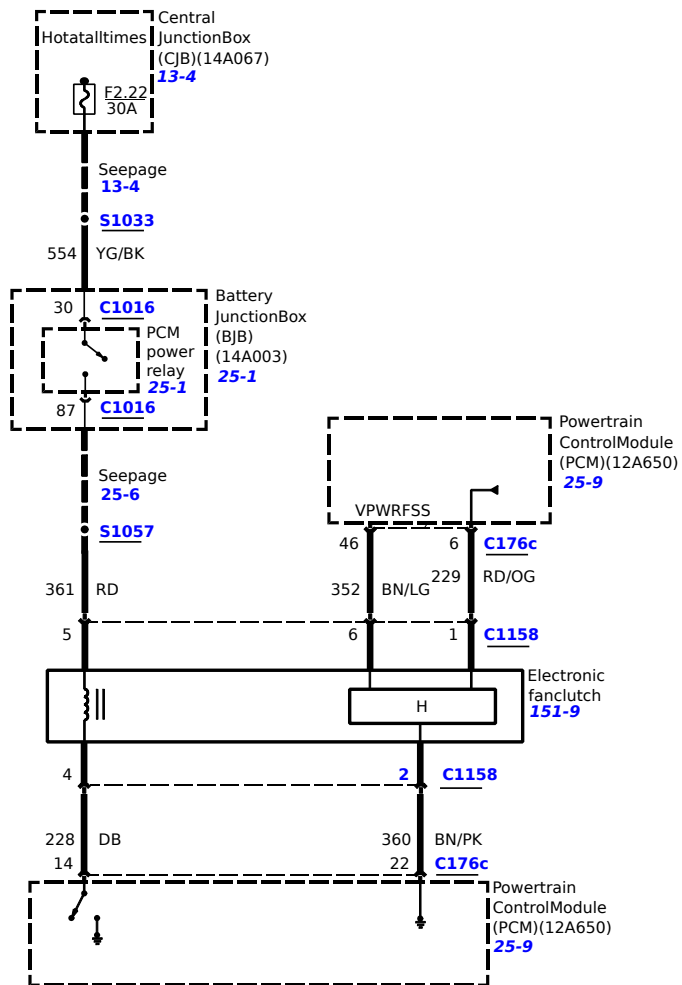
## 4R100

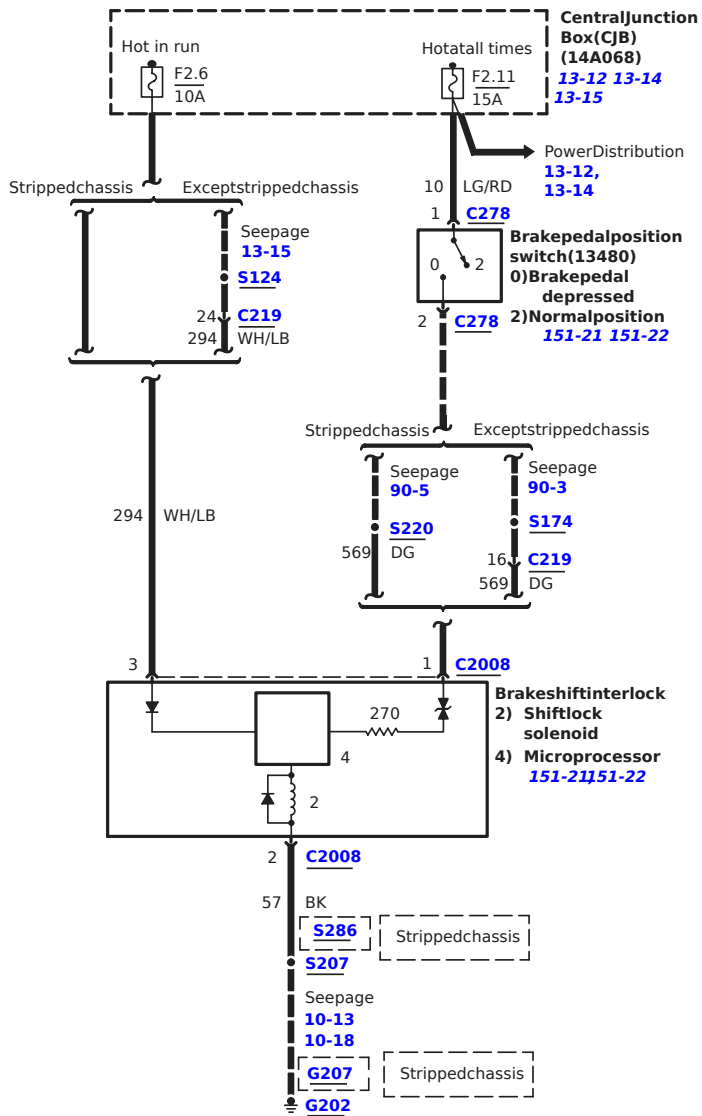


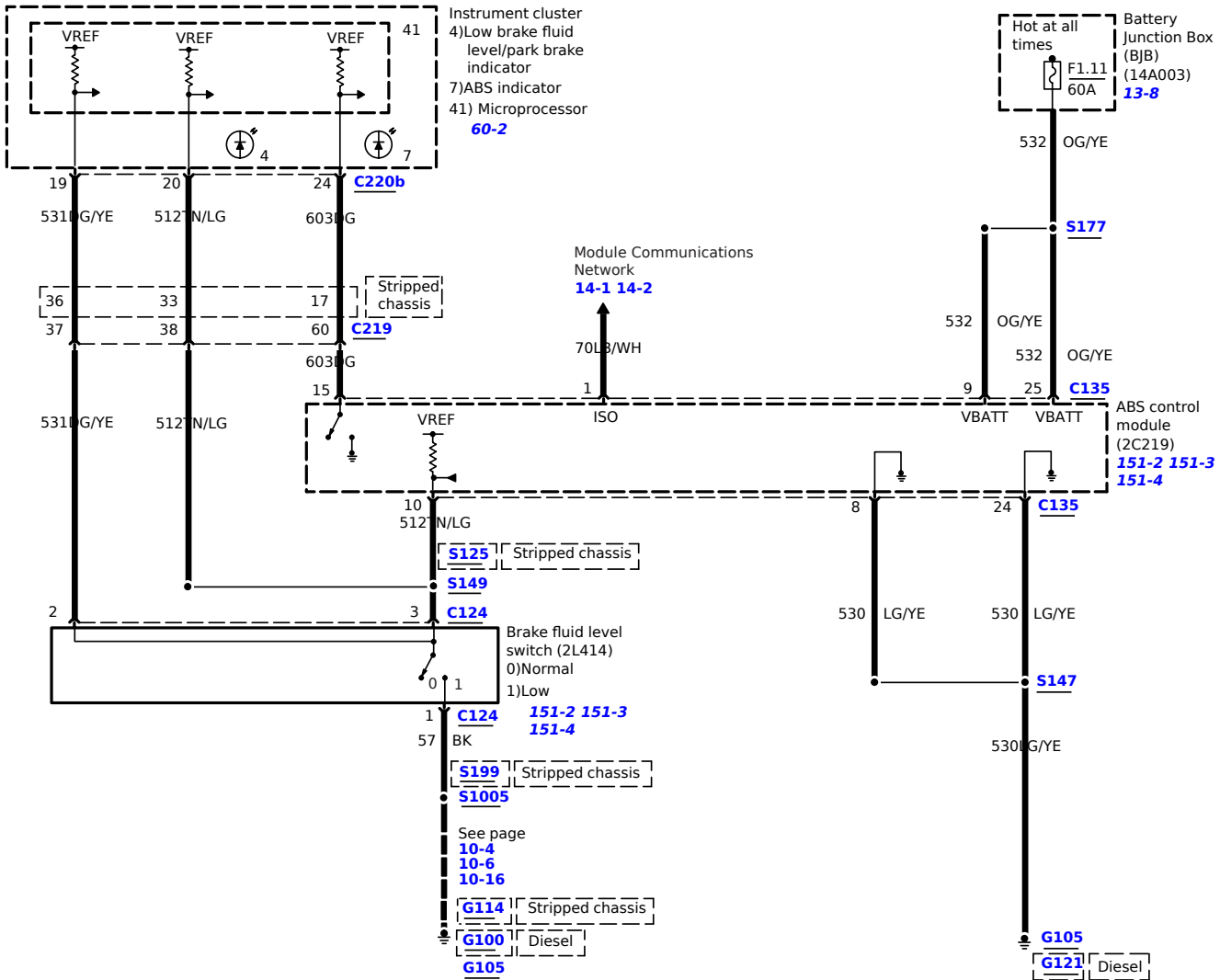
Exceptdiesel

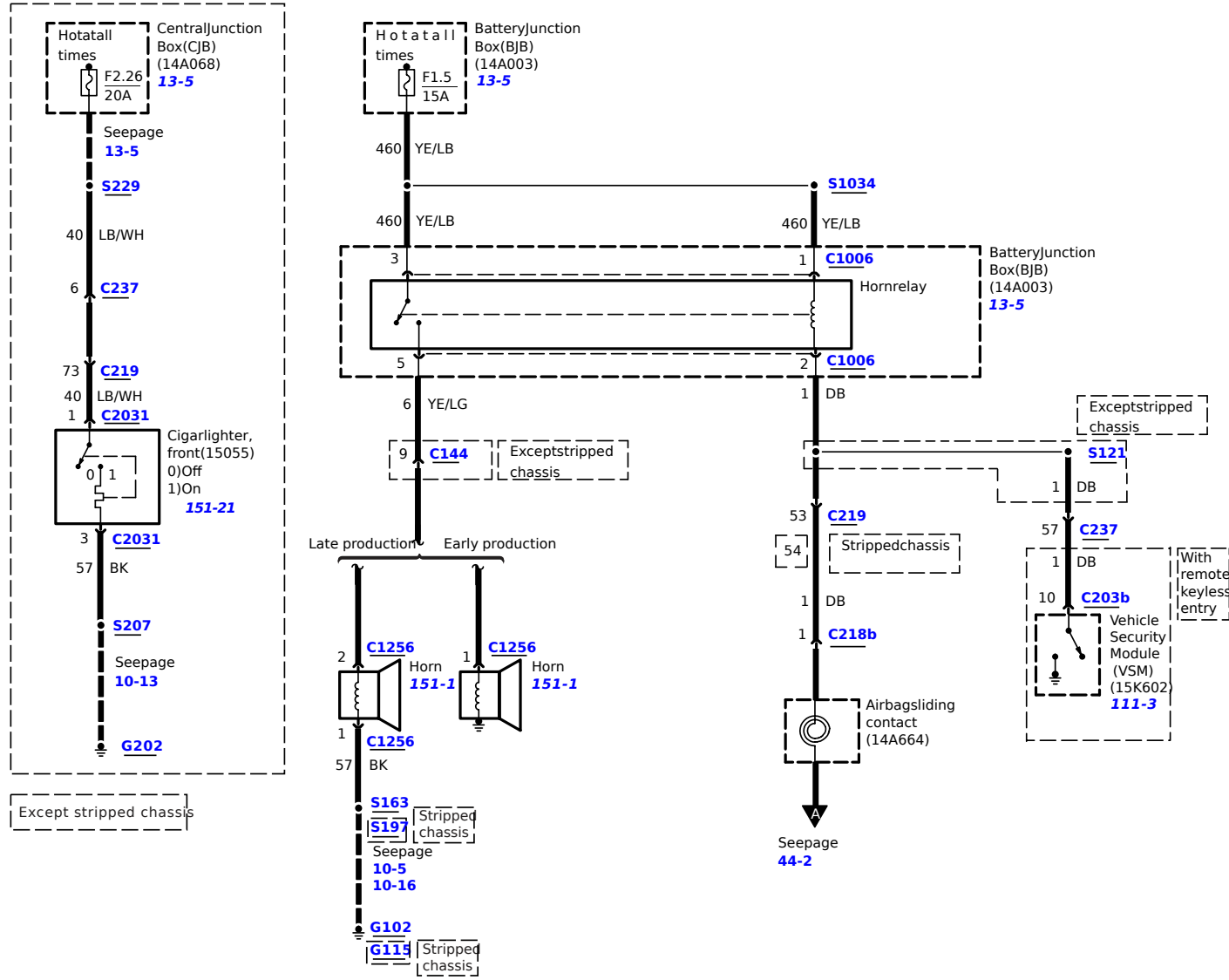


Diesel



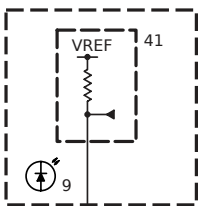




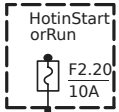




# 46-1 AirBags

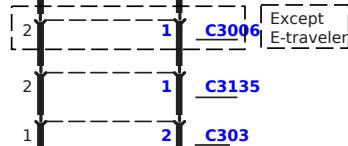
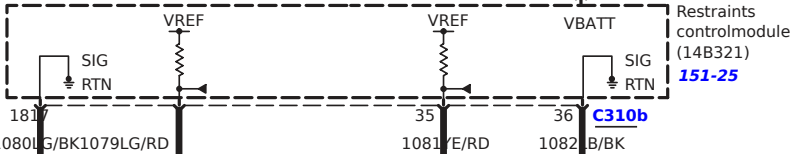
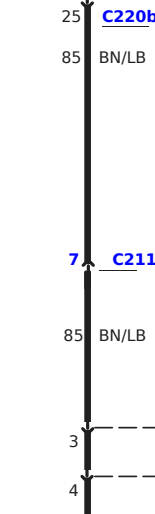


**Warning**  
 Do not attempt to diagnose or troubleshoot air bag circuitry without consulting the Workshop Manual. Improper troubleshooting could cause the air bags to deploy inadvertently, causing injury.



Central Junction Box (CJB) (14A068)  
**13-25**

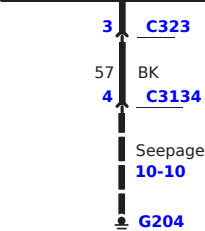
**Warning**  
 The belt and buckle assembly pretensioner is a pyrotechnic device. Never probe the connectors on the belt and buckle pretensioners. Doing so could result in belt and buckle assembly pretensioner or air bag deployment and could result in personal injury. Always wear safety glasses when servicing an air bag equipped vehicle and when handling a belt and buckle assembly pretensioner.

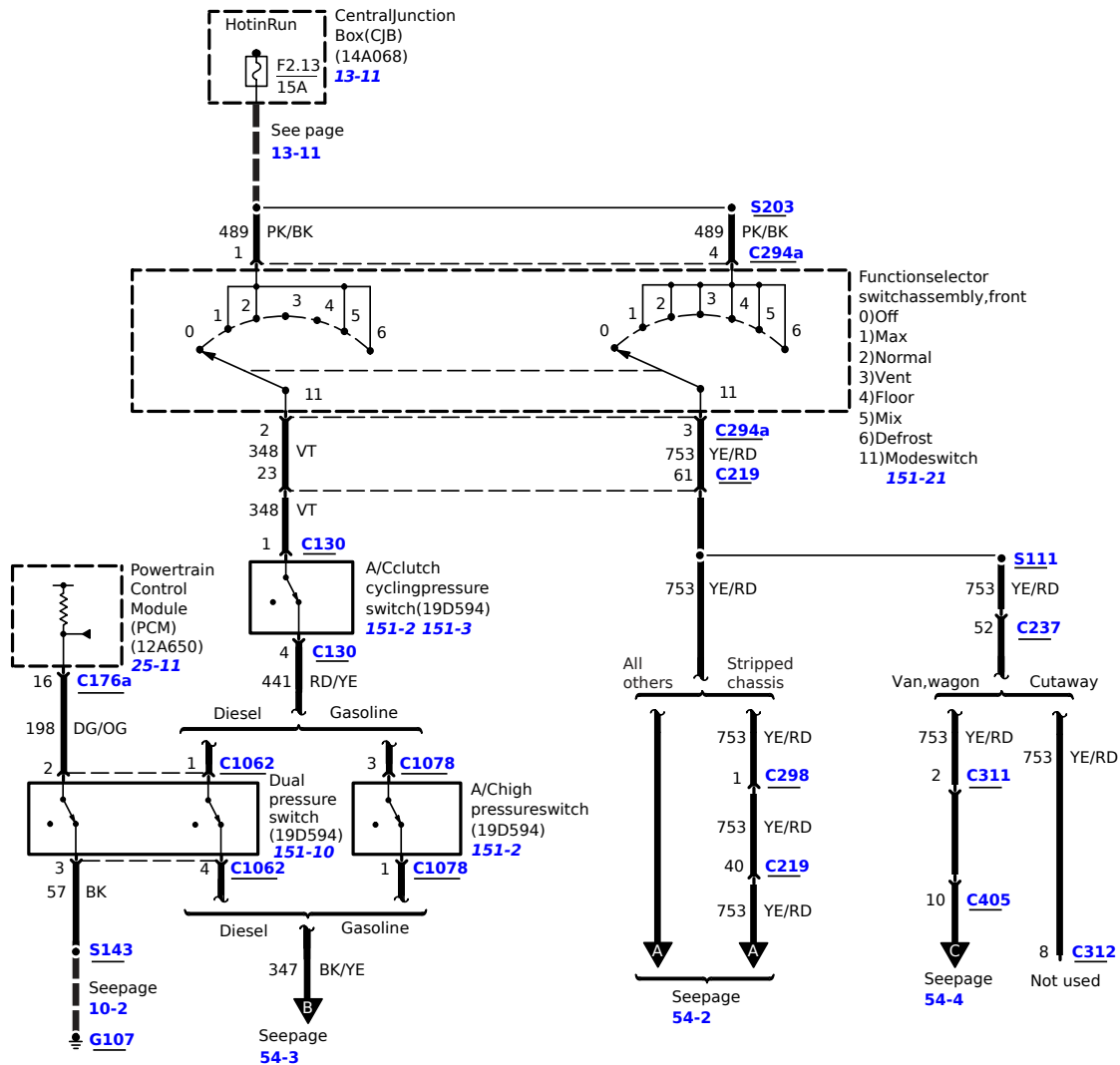


Driver safety belt retractor pretensioner  
**151-24**

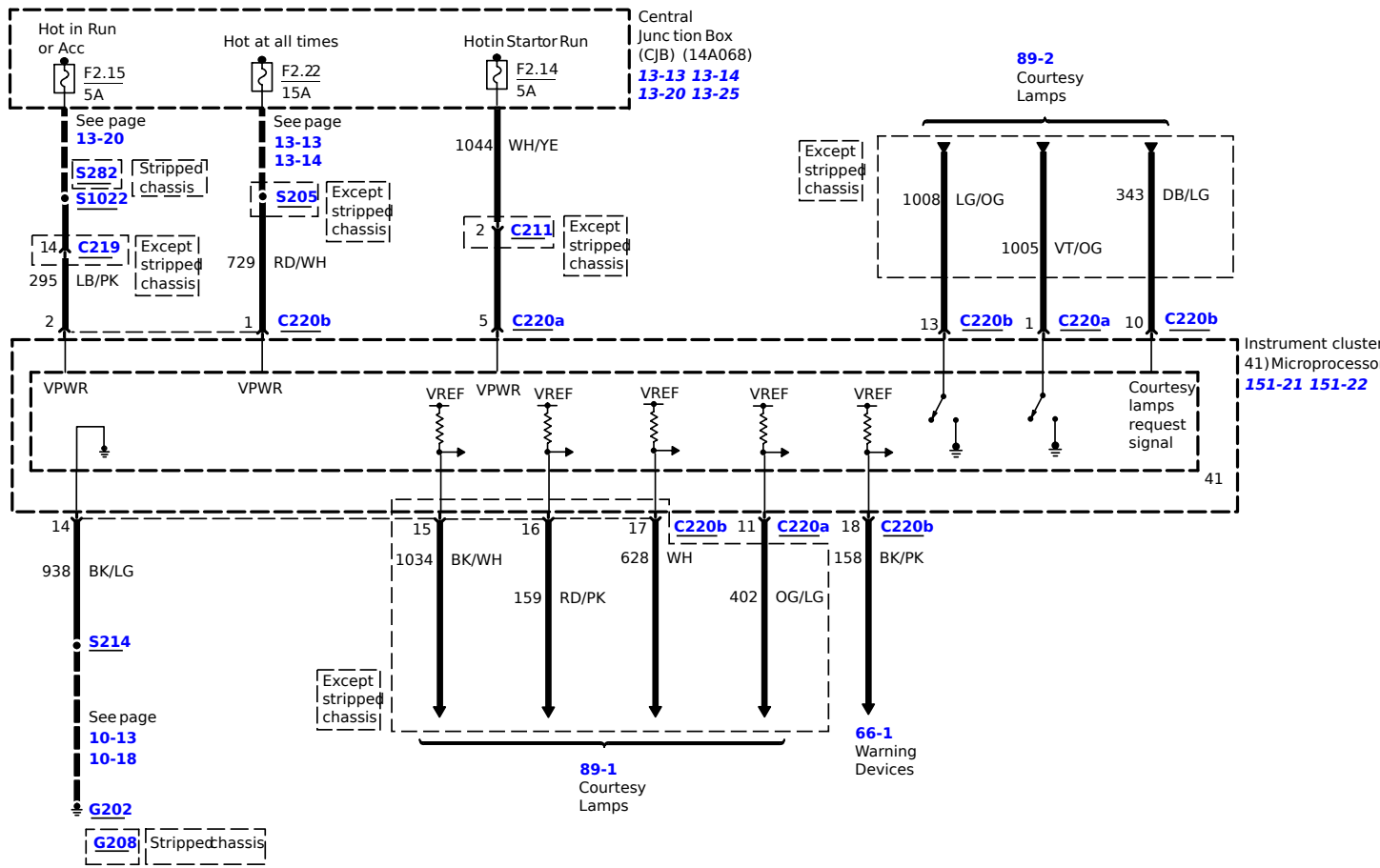


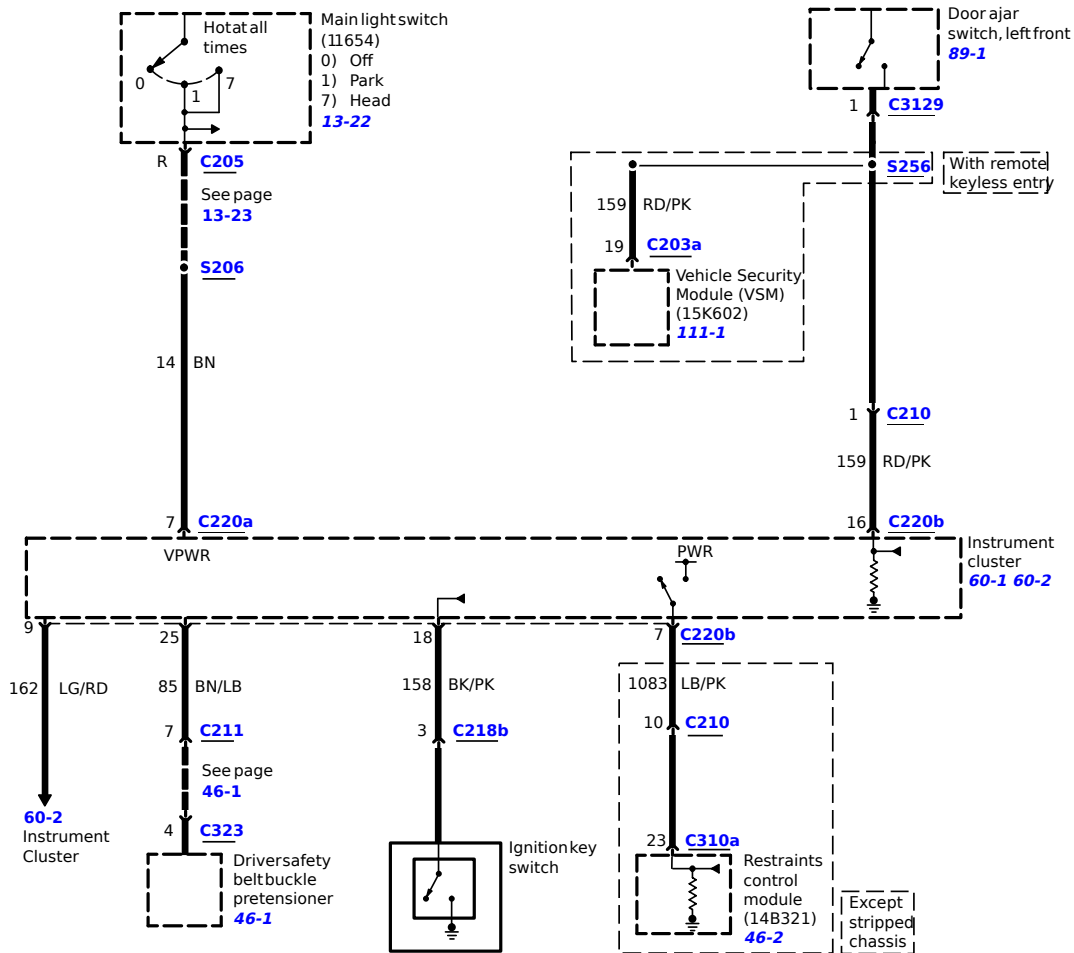
Passenger safety belt retractor pretensioner  
**151-24**



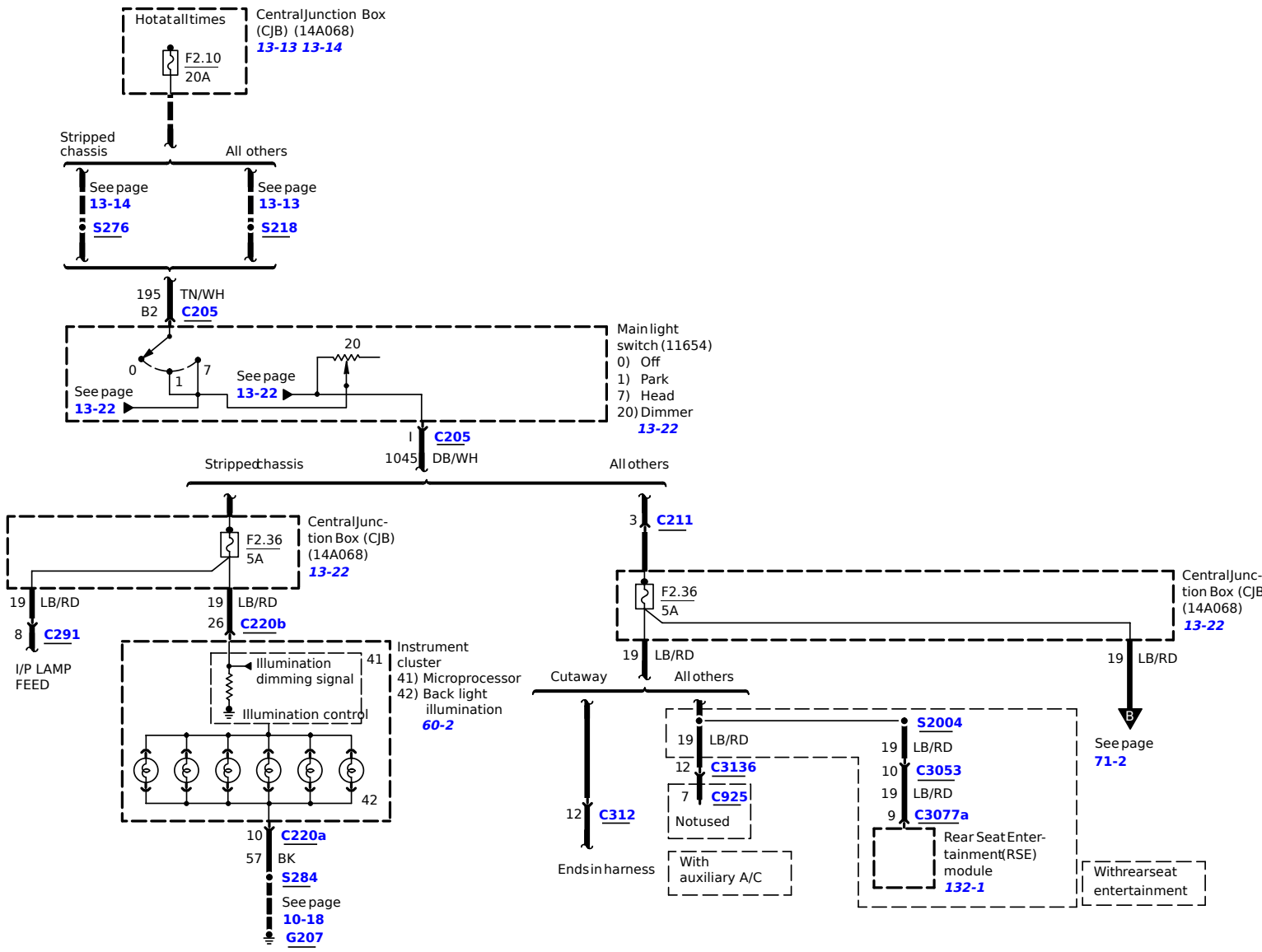


# 60-1 InstrumentCluster

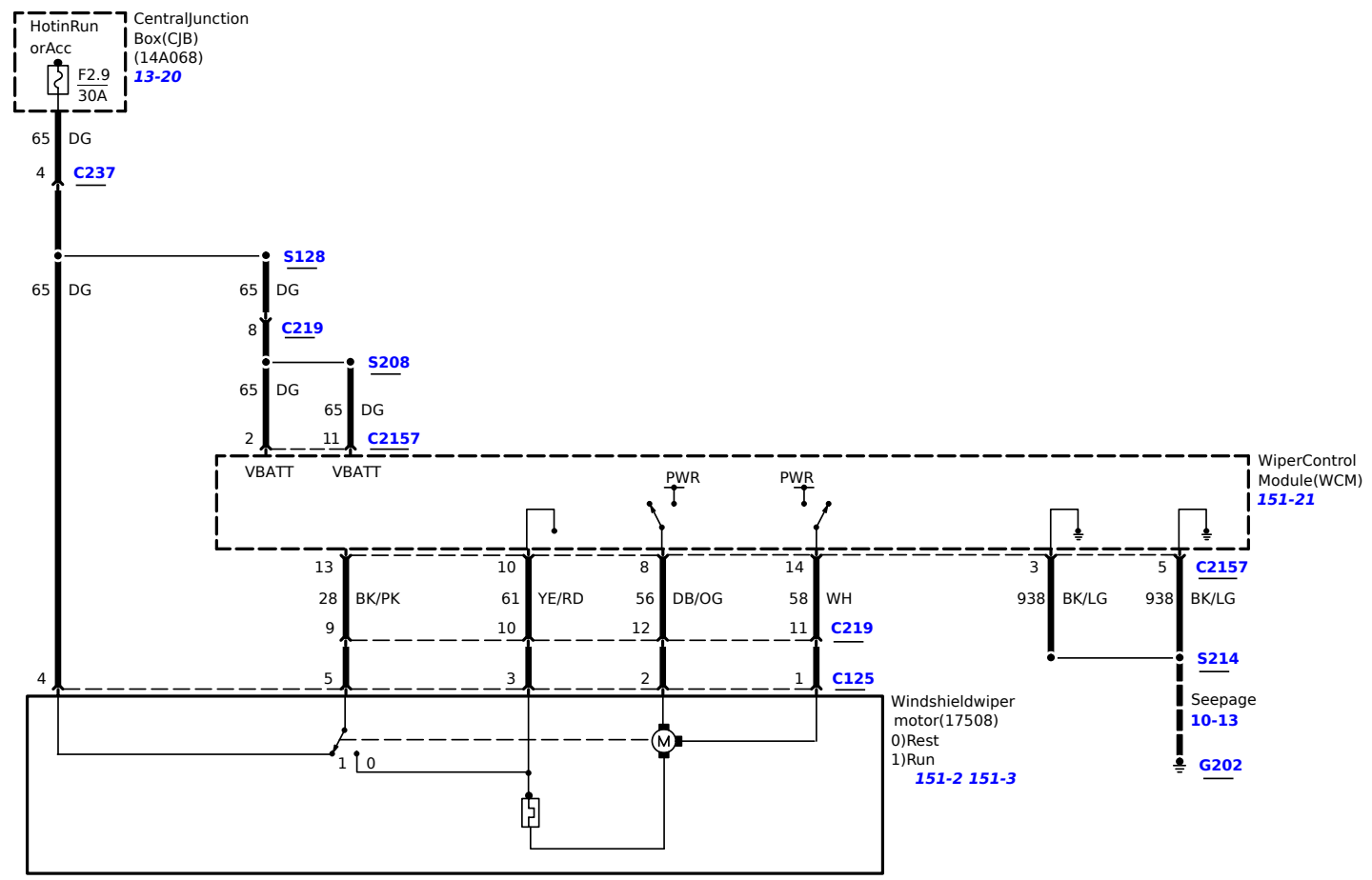




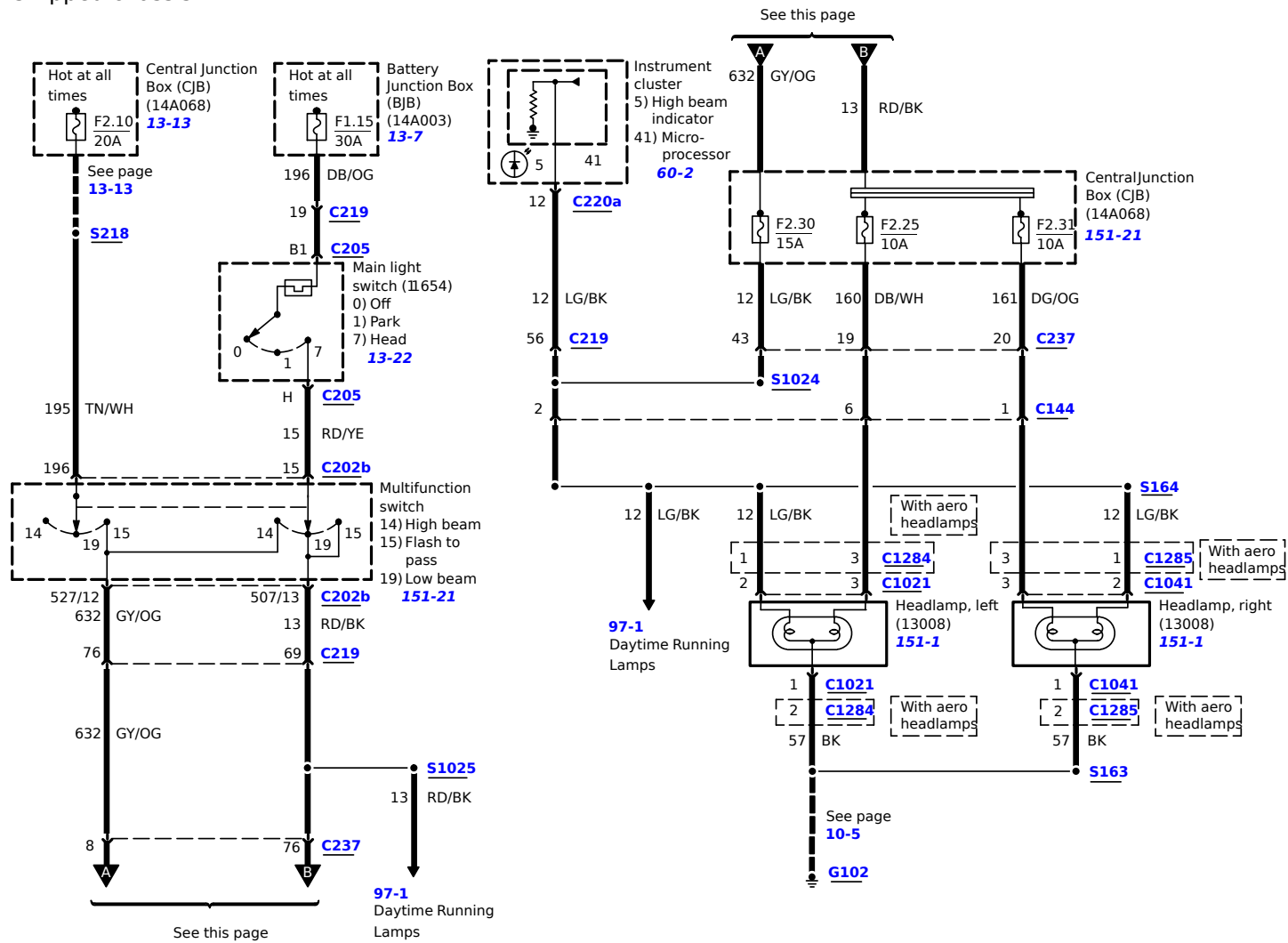
# 71-1 Illumination



Exceptstrippedchassis



Except stripped chassis



See this page

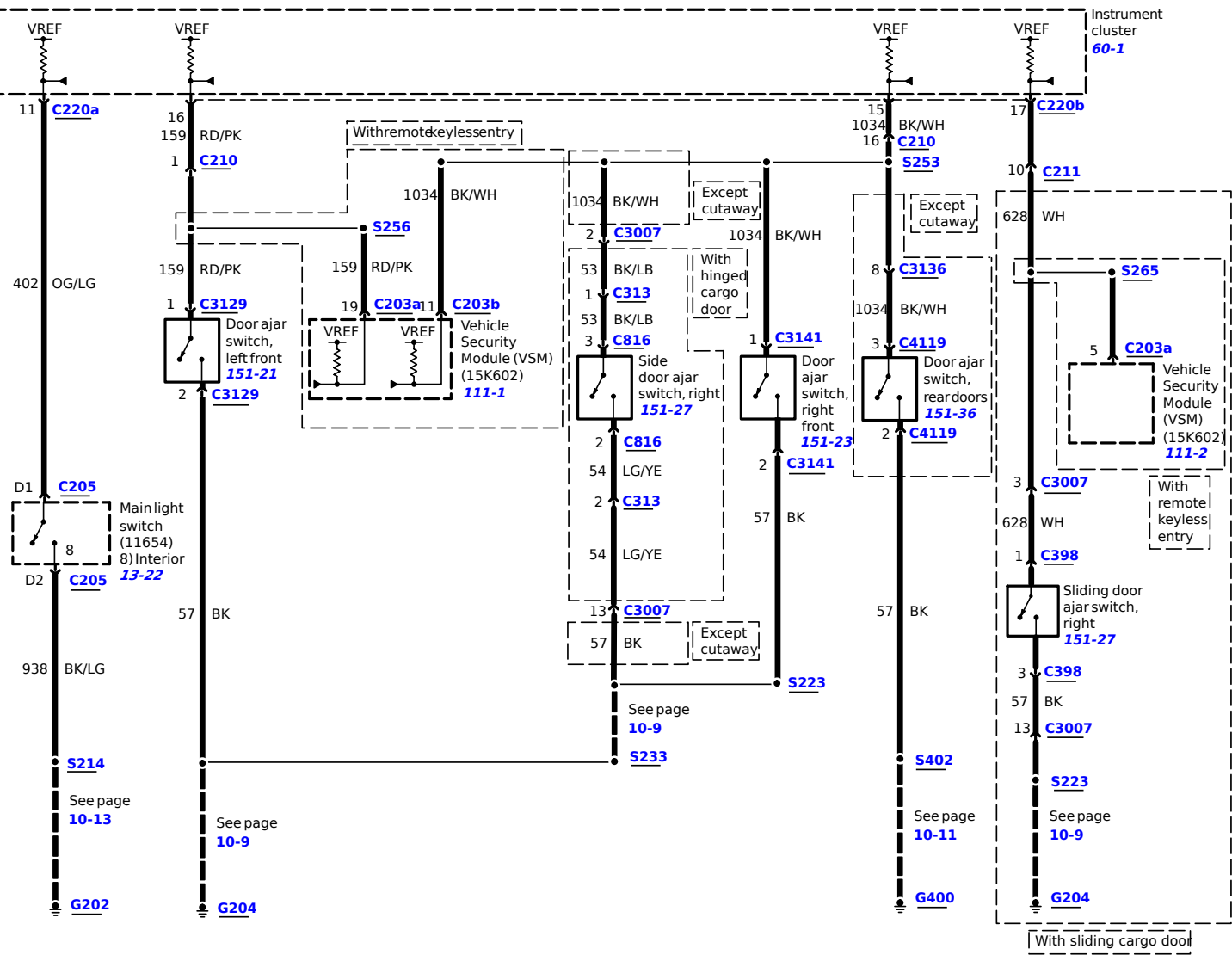
97-1 Daytime Running Lamps

See this page

See page 10-5

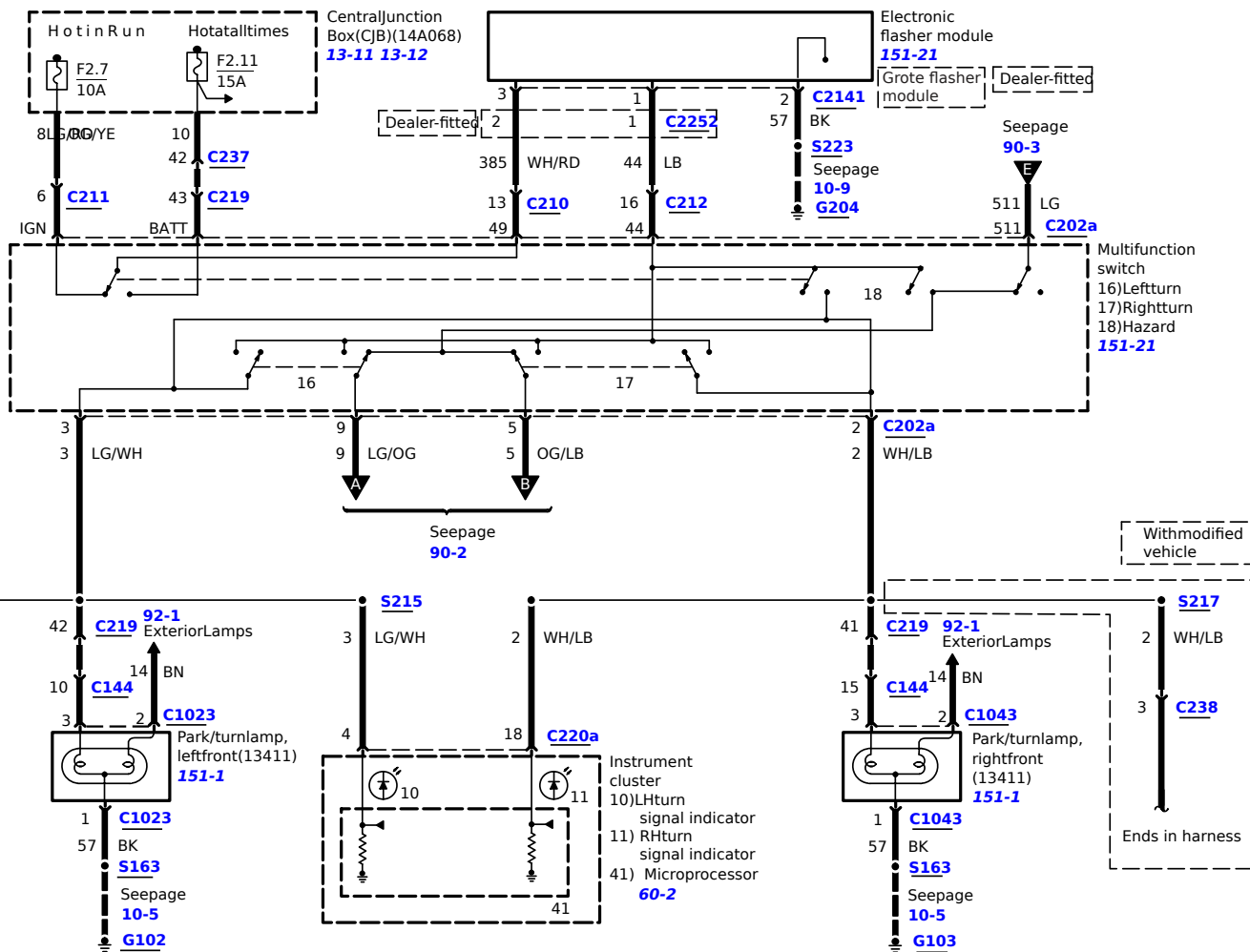
G102

Except stripped chassis

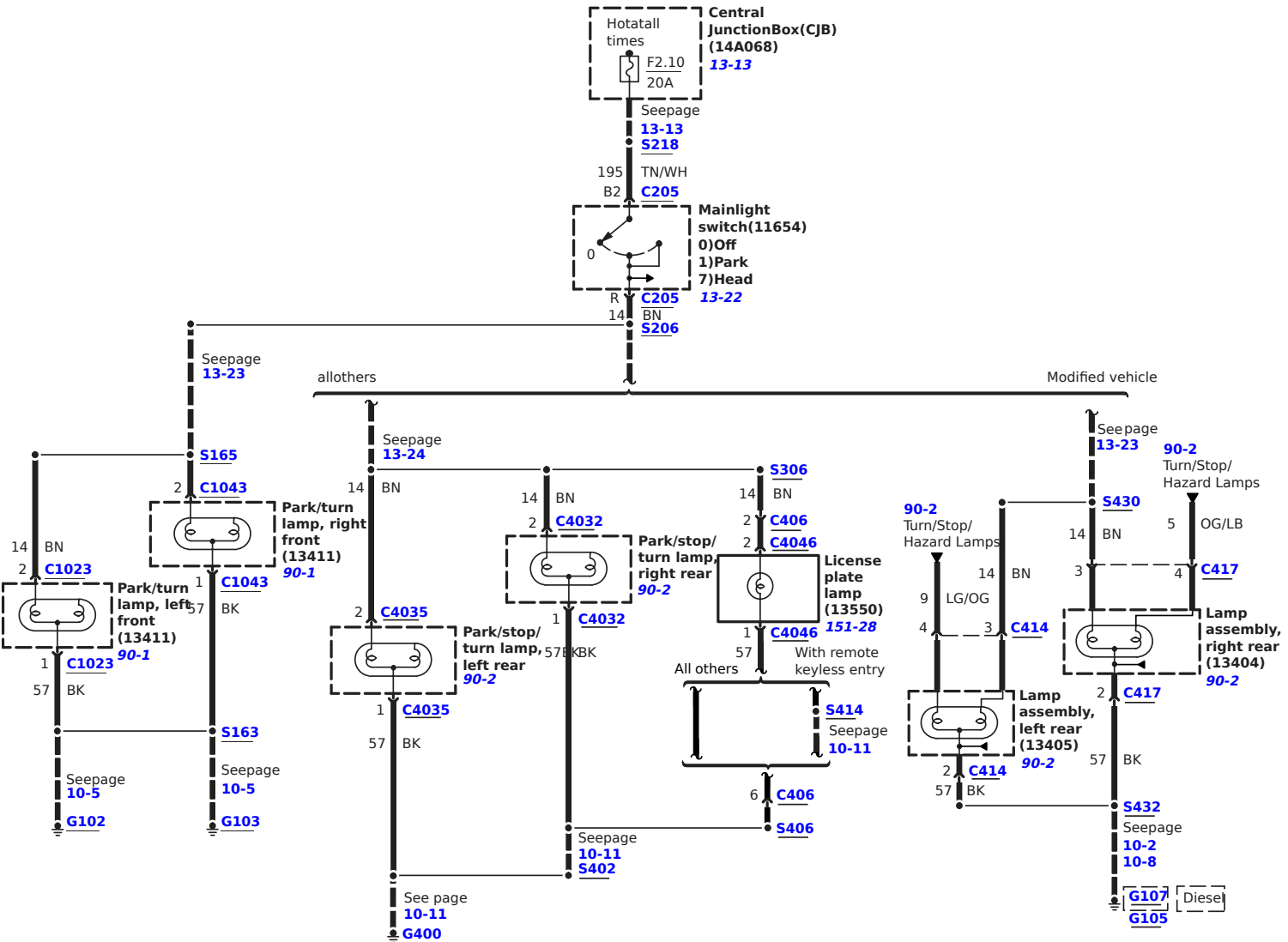


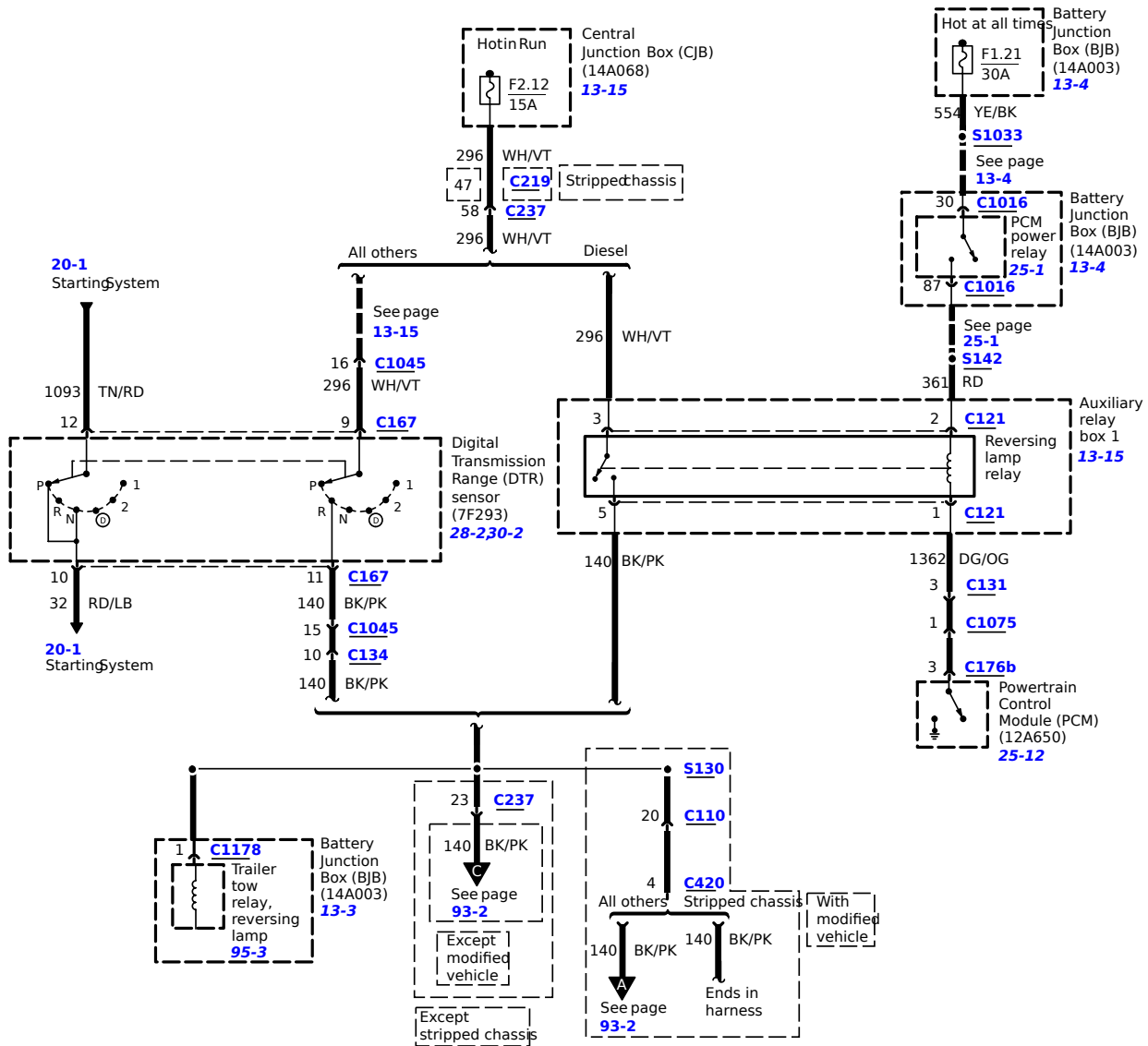


Exceptstrippedchassis



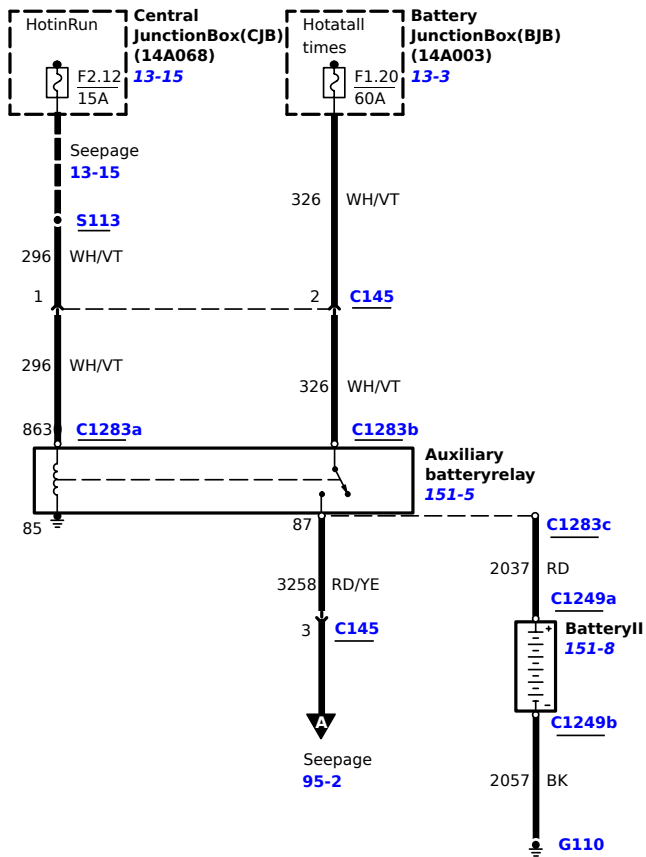
Exceptstrippedchassis



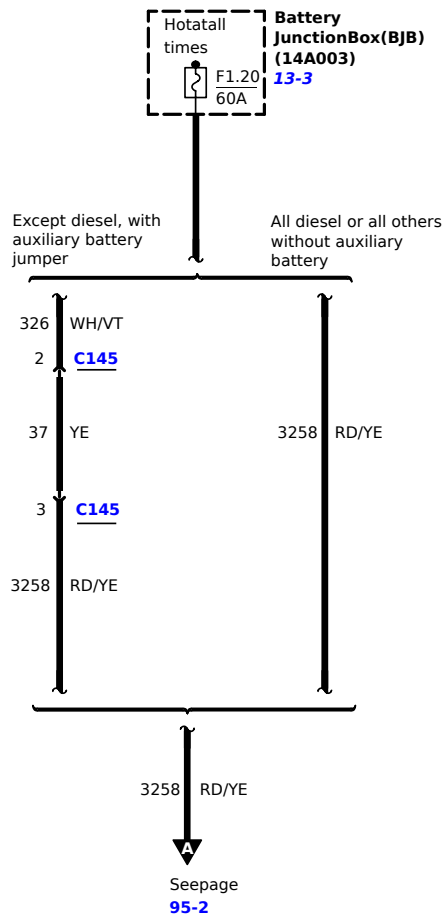


# 95-1 Trailer/CamperAdapter

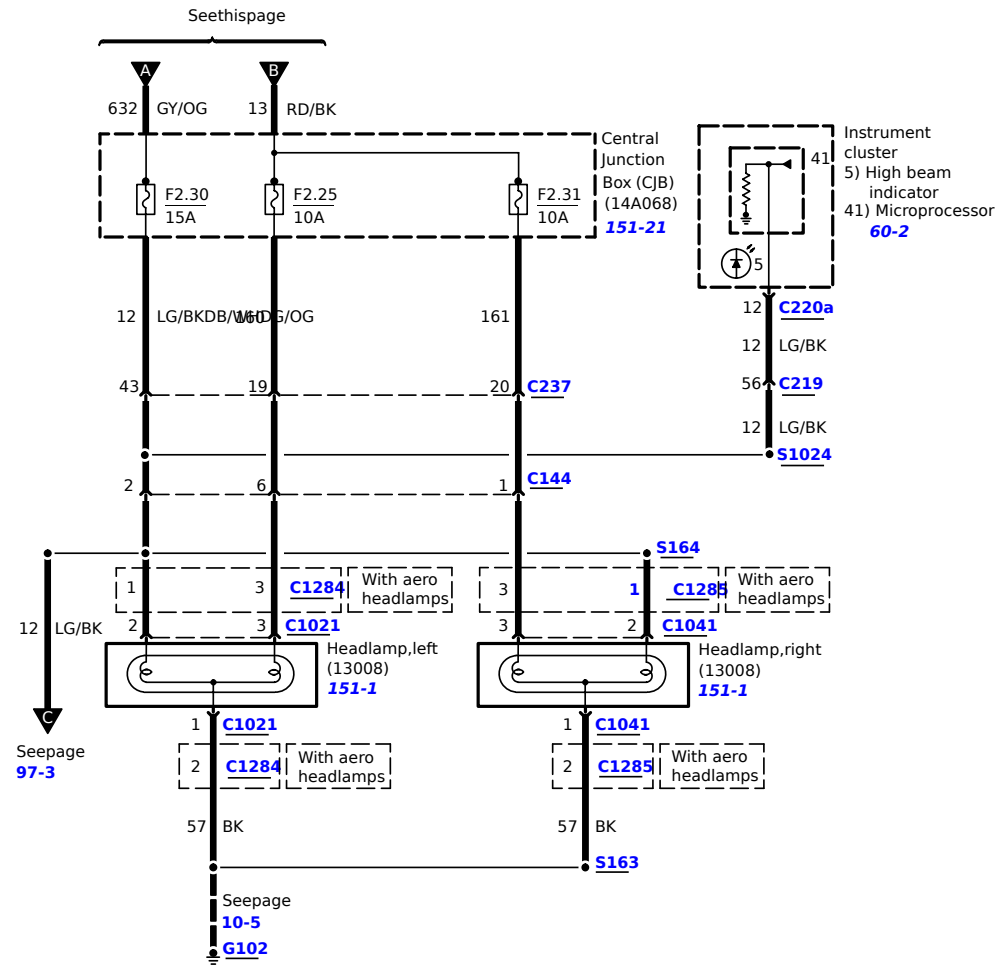
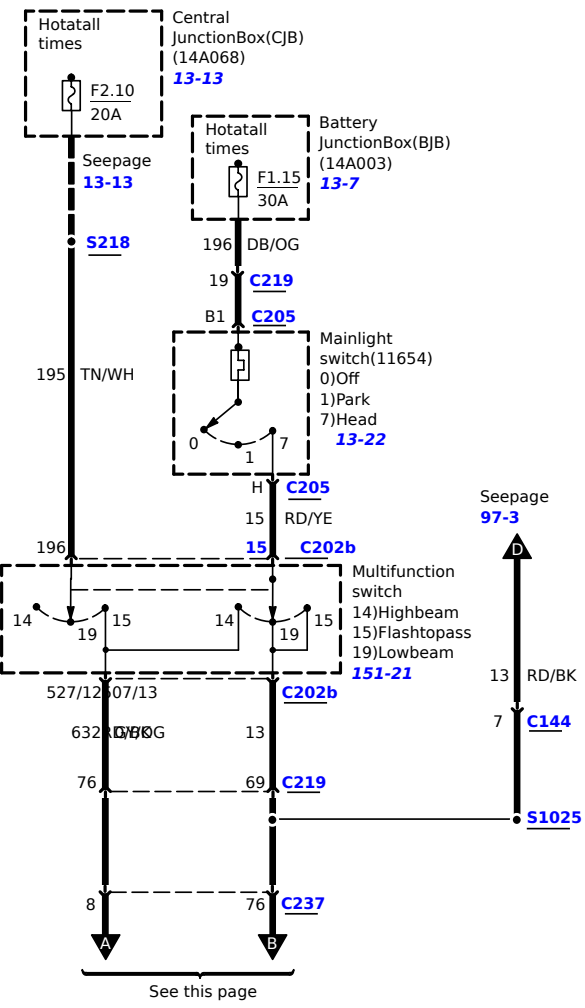
Except diesel,  
with auxiliary battery

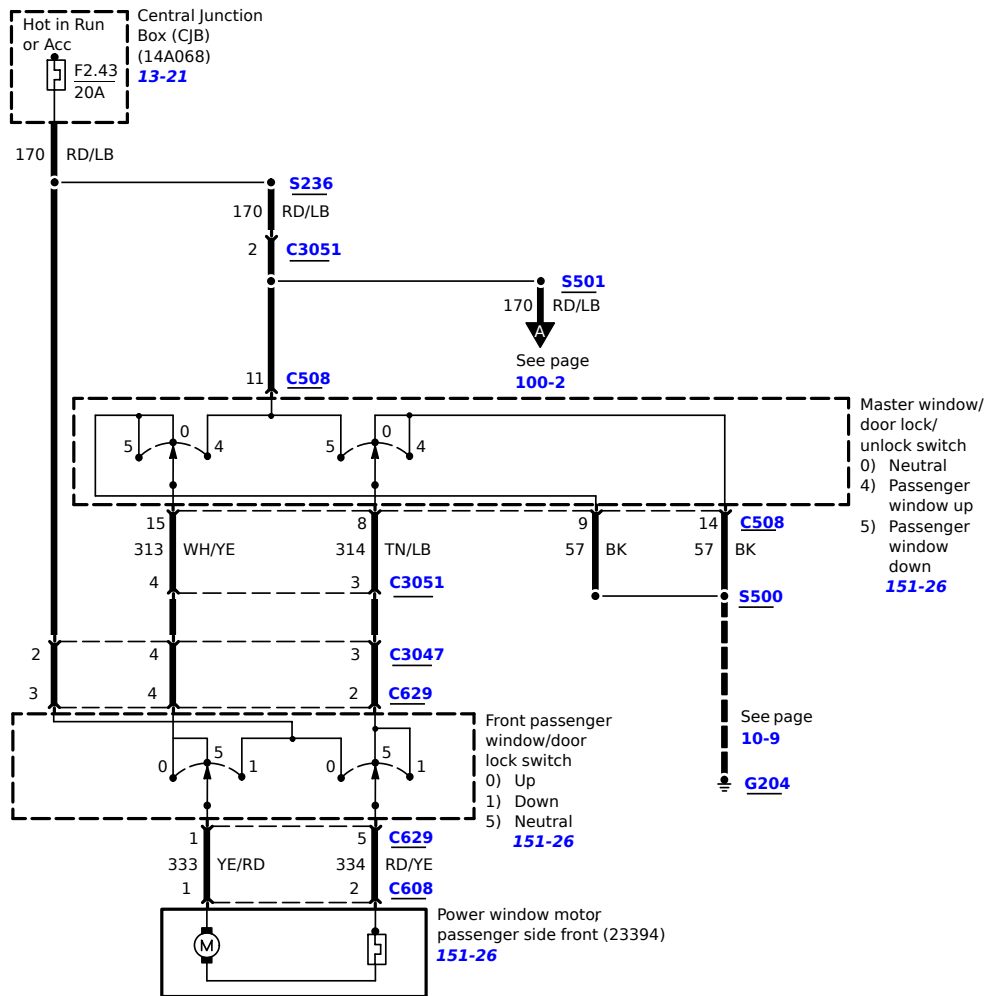


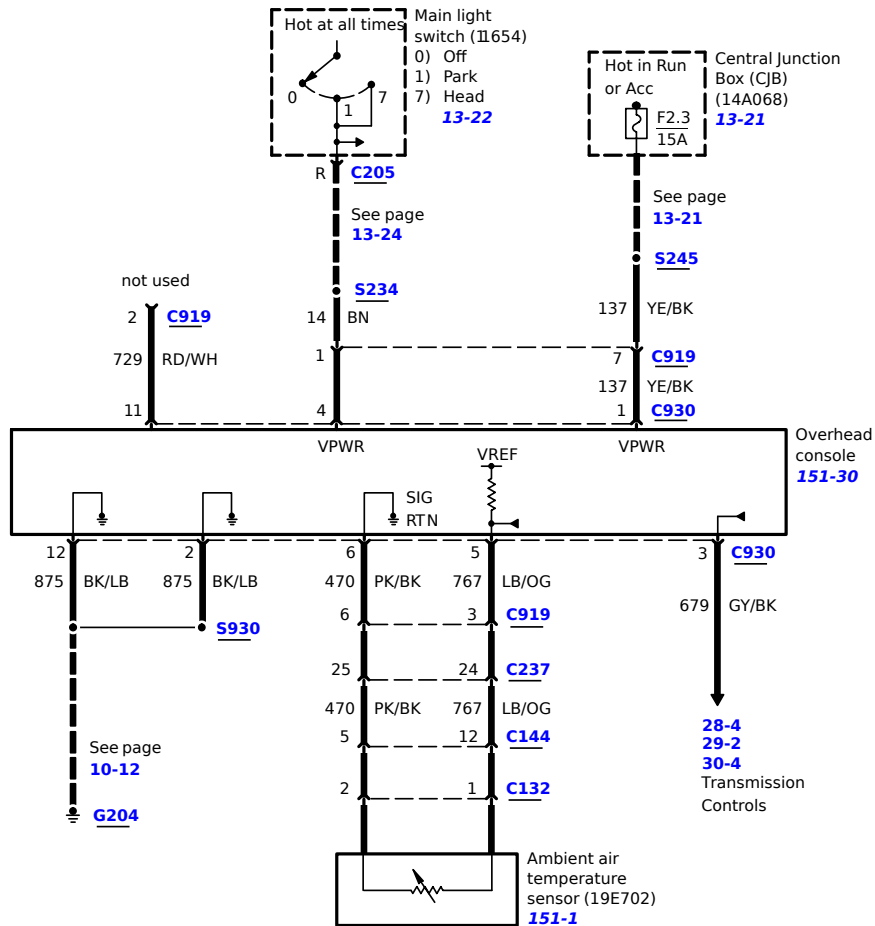
Without auxiliary battery



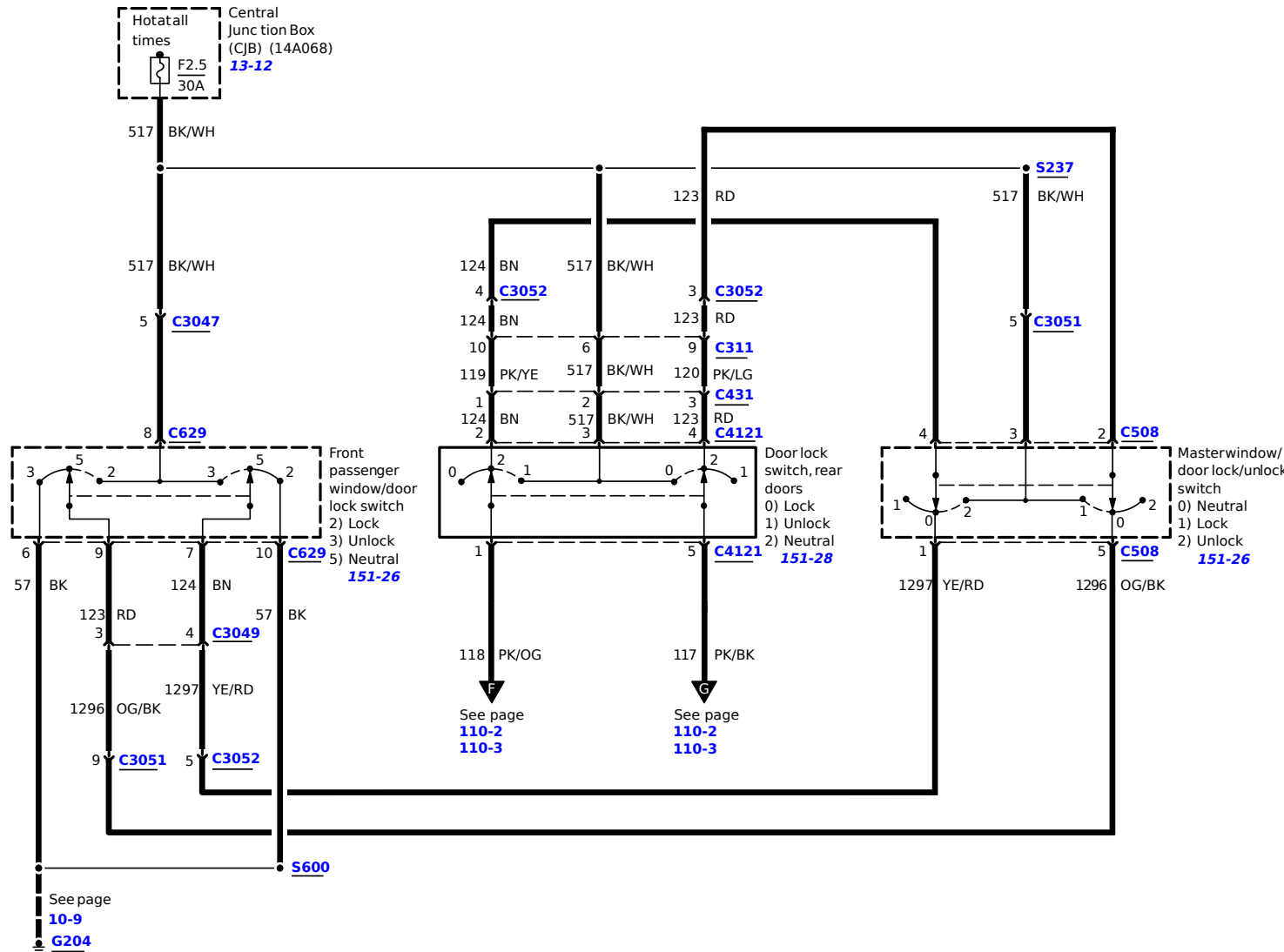
Exceptstrippedchassis





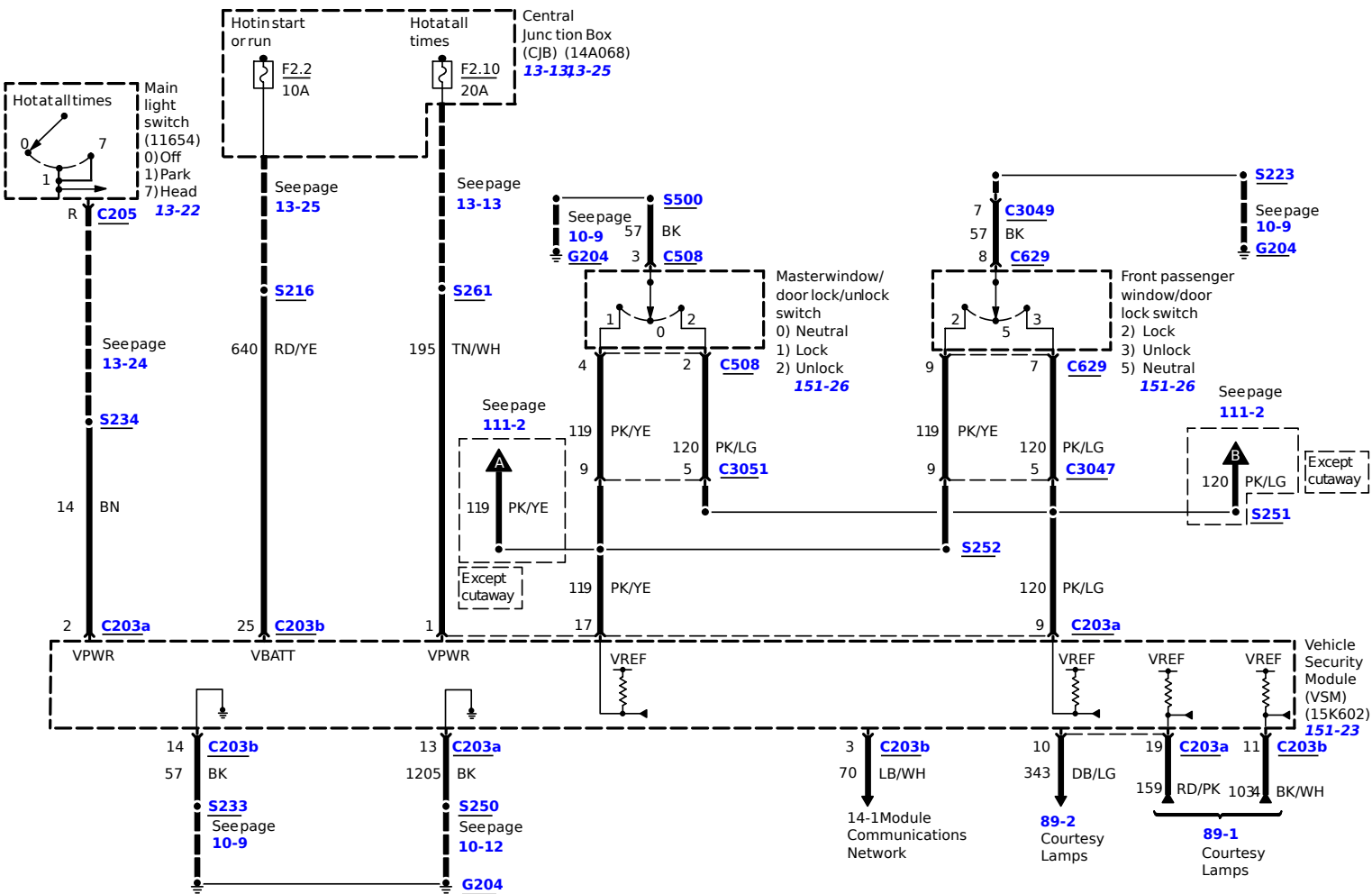


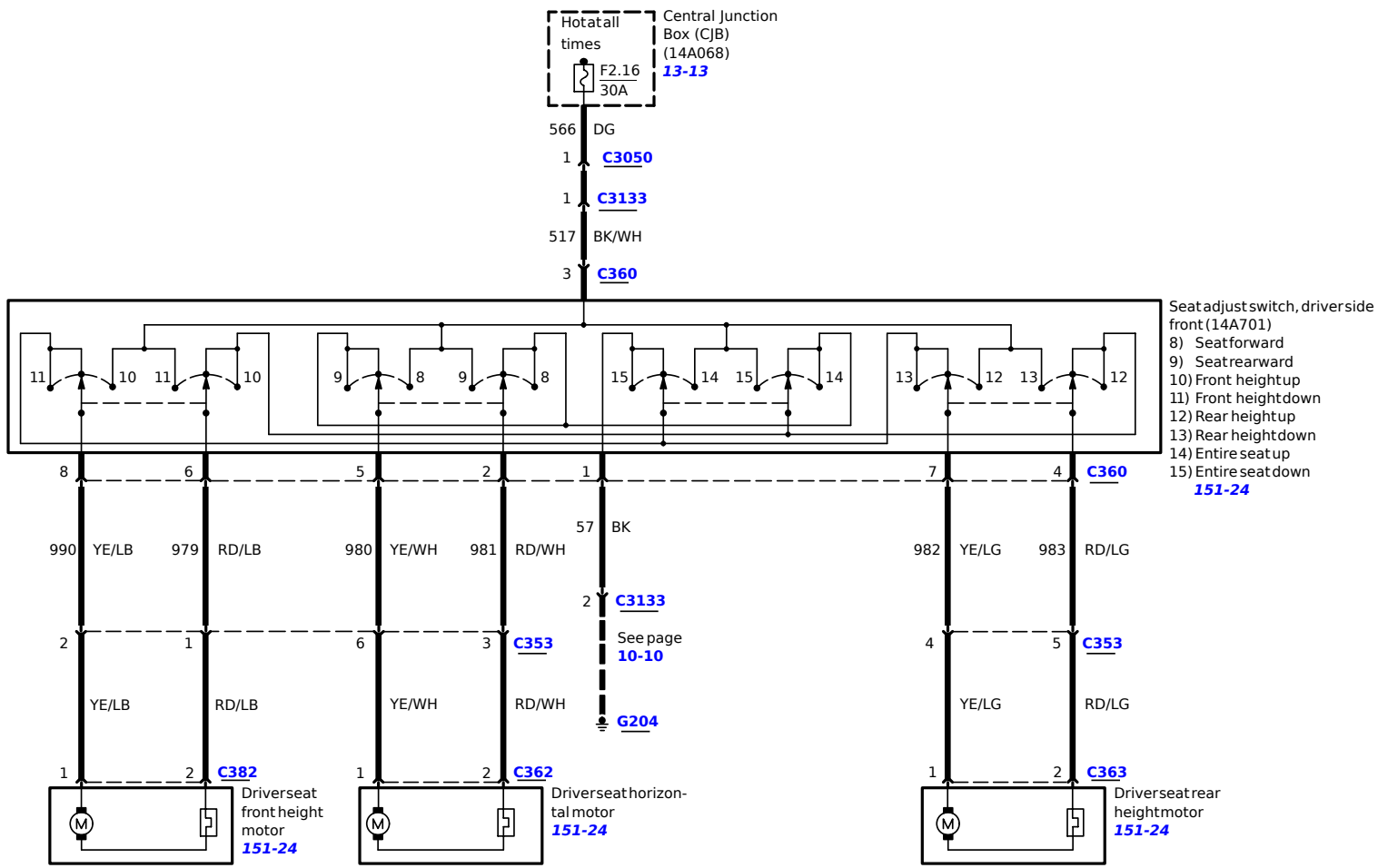
Except cutaway

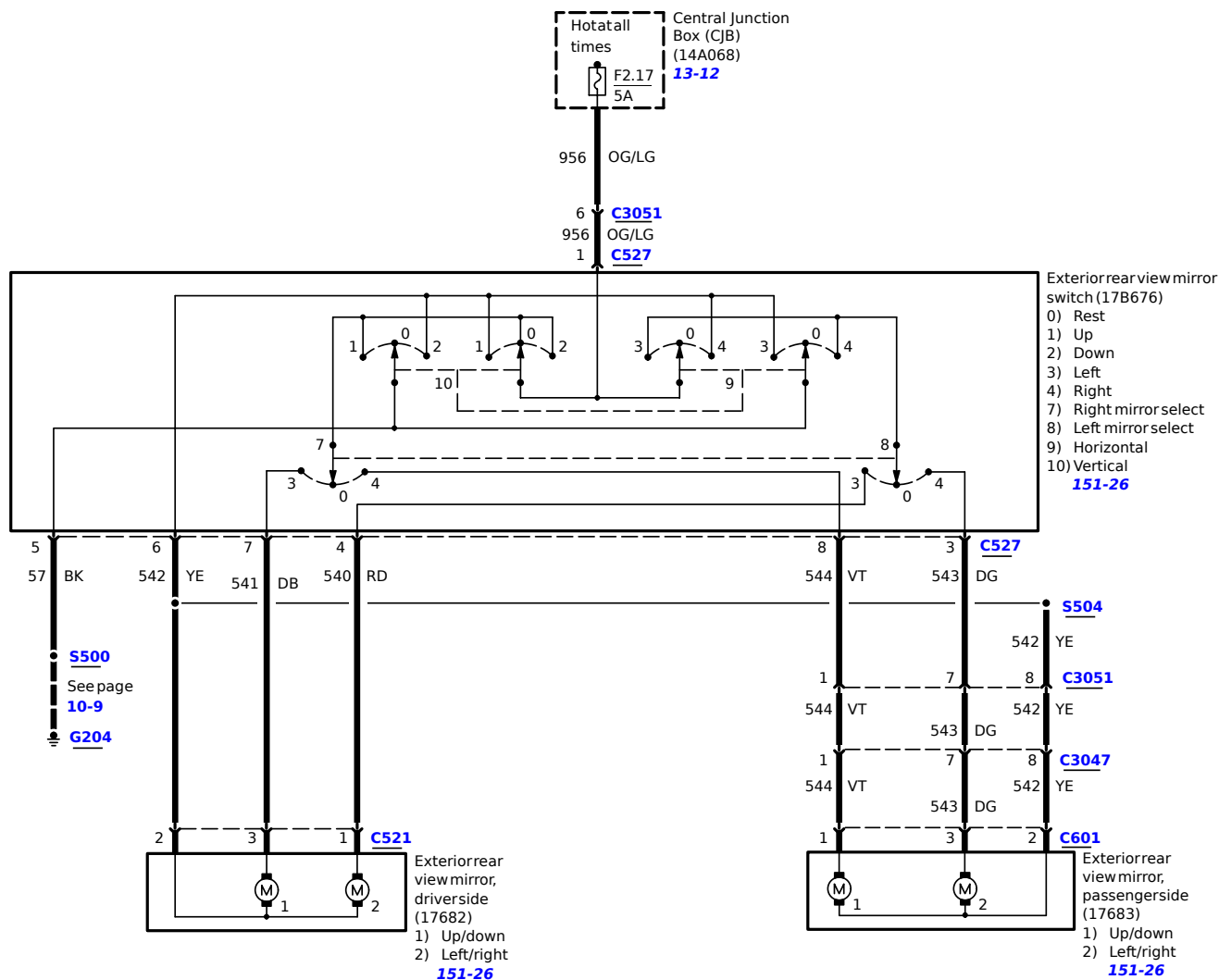


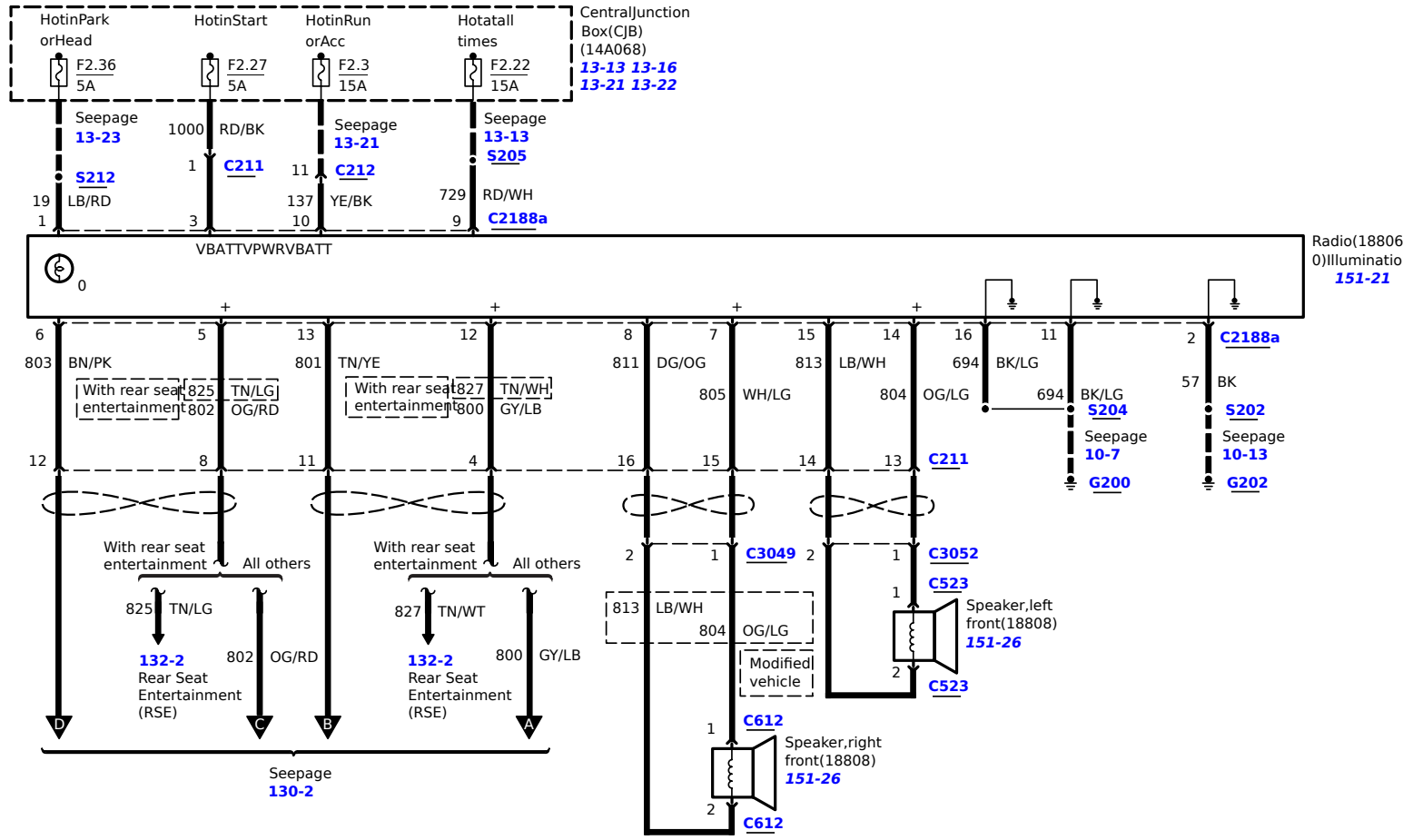


# 111-1 Remote Keyless Entry (RKE)



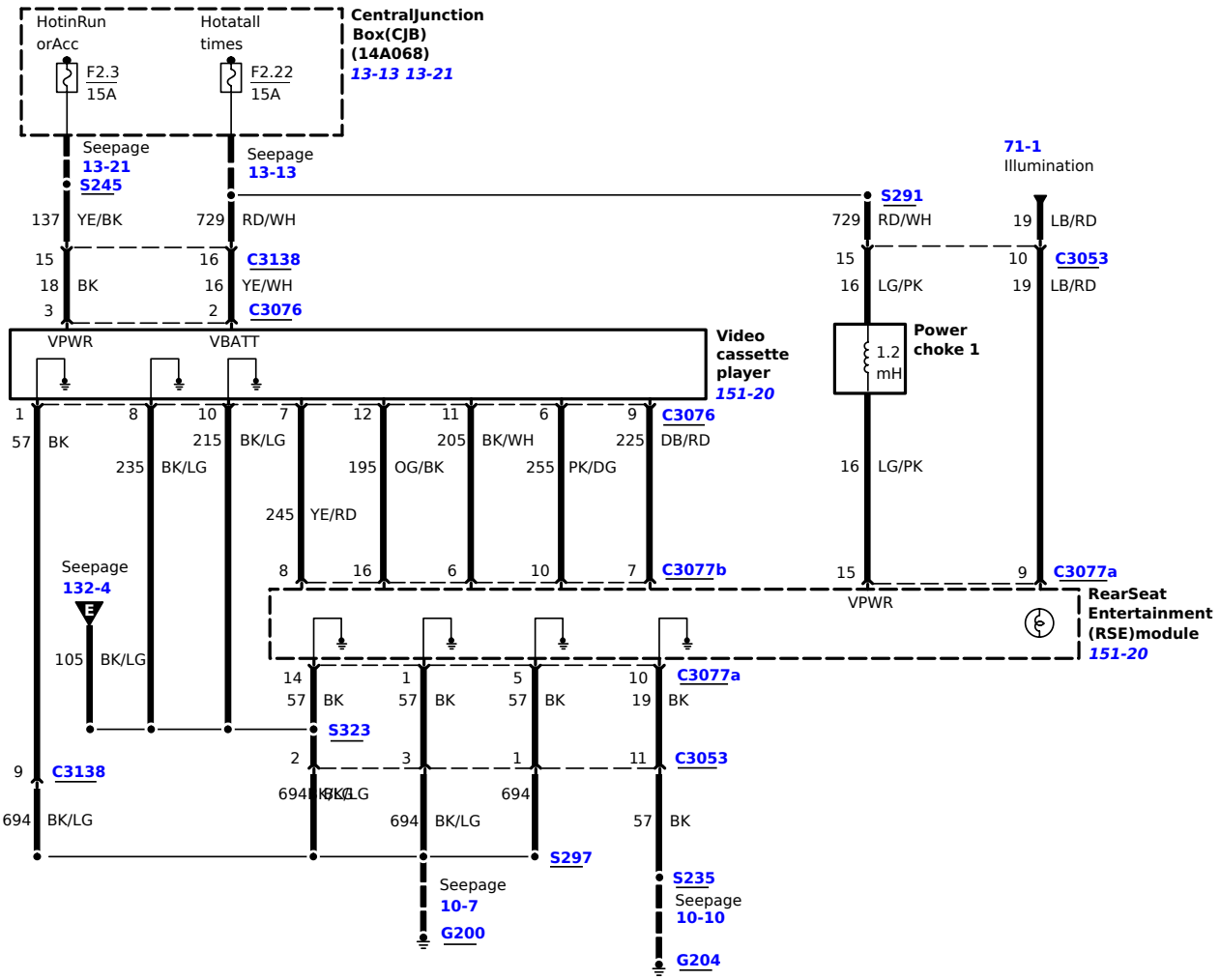






Radio(18806)  
Illumination  
151-21

# 132-1 RearSeat Entertainment(RSE)

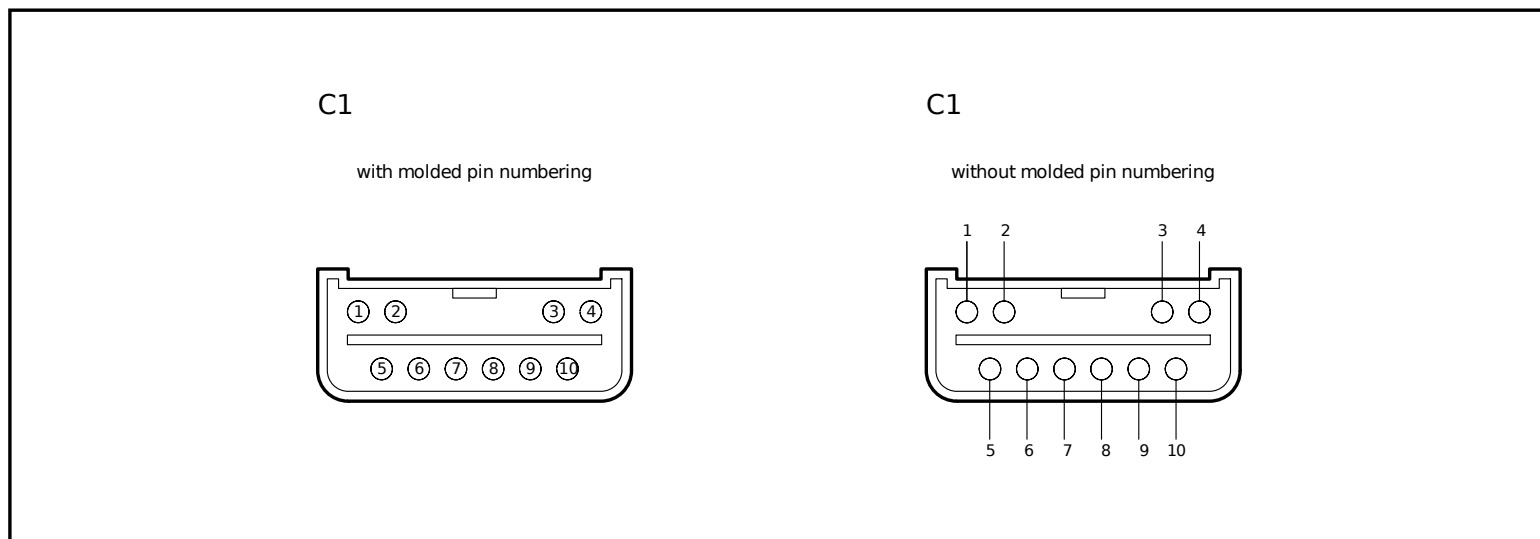


## Introduction

Component testing procedures are provided to determine whether a component is good or bad.

Testing information for each component includes a schematic, a view of the terminal locations and step-by-step test procedures. Terminal locations are identified by numbers or letters that may be on the component or next to it.

## Terminals

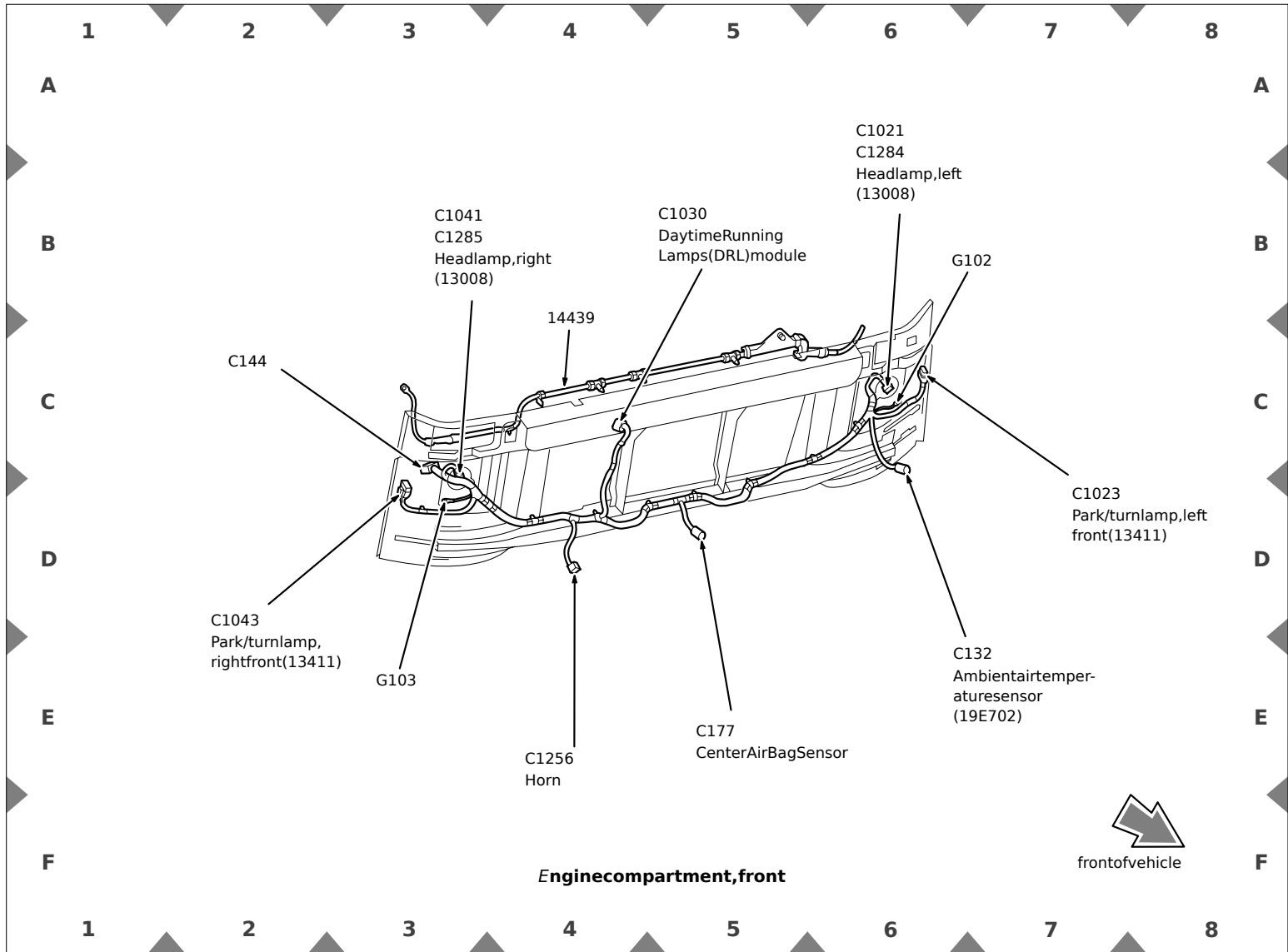


The component connector **MUST BE REMOVED** before testing. To test a single circuit within the component, select that circuit under column "Circuit to test". If you wish to test the complete component, perform all tests.

Connect the tester to the terminals shown in the second column and operate the component as shown in the third column.

Numbers molded on the component do not necessarily reflect harness side connector

# 151-1 ComponentLocationViews

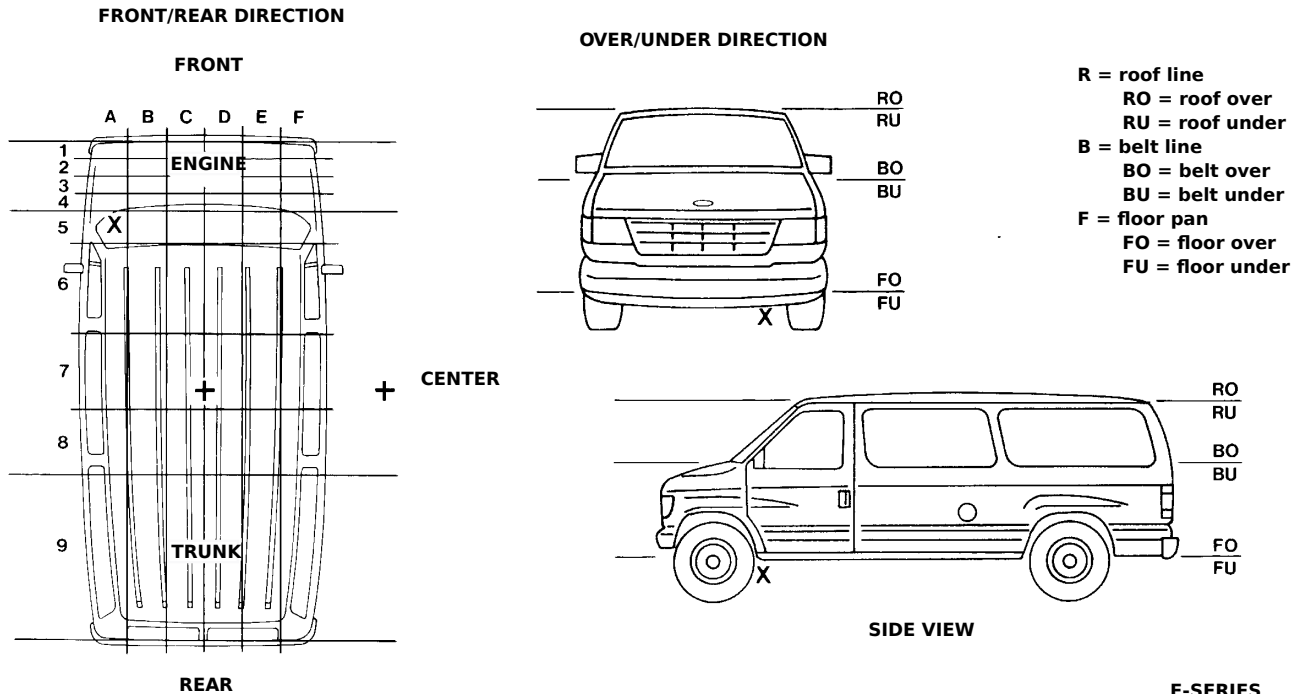


## Vehicle Repair Location Codes

TO PINPOINT THE ACTUAL VEHICLE LOCATION OF A REPAIR, THE VEHICLE REPAIR LOCATION CODE IS REQUIRED.

For example, #X" has been placed in the quadrant of the vehicle diagrams indicating the location of the repair. See diagrams.

LOCATION CODE, FOR THE EXAMPLE: A5/R(UNDER THE FLOOR OF DRIVER LEFT FOOT.)



E-SERIES  
FCS-12128-0