Premium Electronic Gauge Cluster

Operation and Maintenance Manual

Navistar, Inc.

2701 Navistar Drive, Lisle, IL 60532 USA

Premium Electronic Gauge Cluster
- US, Canada

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IMPORTANT

The information, specifications, and illustrations contained in this manual are based on data that was current at the time of publication. Navistar, Inc. reserves the right to make changes and/or improvements at any time without notification, liability, or without applying those changes or improvements to vehicles previously manufactured and/or sold.

NOTICE

Be advised that this motor vehicle may be equipped with computer / recording devices. Their function is to allow an authorized individual to download data or information relating to the operation or performance of this vehicle.

The stored data or information may be neither downloaded nor retrieved except by the vehicle's registered owner, or, in the alternative, by another individual or entity authorized by the registered owner, (e.g., International® dealer) who may need this data or information to properly service or diagnose this vehicle for repair or following an accident.

Any access to this information without the owner's consent may be in violation of law and may subject that person or entity to criminal penalties.

CALIFORNIA
Proposition 65 Warning

WARNING Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel

Battery posts, terminals and other related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Wash hands after handling.

IMPORTANT

It is important that the applicable vehicle identification number (VIN), engine serial number and or component feature codes are recorded. These numbers are required to obtain pertinent information for this vehicle or engine.

VEHICLE IDENTIFICATION NUMBER (VIN)

ENGINE

Feature Code:	Serial Number:

FRONT AXLE

Feature Code:	Serial Number:

REAR AXLE

Feature Code:	Serial Number:

TRANSMISSION

Feature Code:	Serial Number:

CUSTOMER ASSISTANCE CENTER
1-800-44-TRUCK (1-800-448-7825)

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Summary of Changes

Section	Description	Revision Number
All	Initial Release (Supersedes 4328404R8)	1
Section 3 – System Warnings	Addition of Bus-Specific Content	1
Section 6 – System Alerts	Addition of Bus-Specific Content	

Section 1 – Foreword

Section 2 – Overview and Operation

Section 3 – Warning Indicators

Section 4 – Trip Screens

Section 5 – Gauge Displays

Section 6 – System Alerts

Section 7 – Gauge Cluster Setup

Section 8 – Advanced Driver Assist System

Section 9 – Driver Assistance Screen

Section 10 – Vehicle Telematics

Section 11 – PTO Trip Screens

Section 12 – TPMS Display (Optional)

Section 13 – Truck Information (Optional)

Section 14 – Transmission Display

Section 15 – Favorites Screens

Section 16 – Index

SECTION 1 — FOREWORD

Preface

Your vehicle has been engineered and manufactured so that it can provide economical and trouble-free service. However, it is the owner's responsibility to see that the vehicle receives proper care and maintenance.

Making modifications to various parts, components, and systems of your vehicle, including the radio systems, can adversely affect the quality and reliability of your vehicle. Such modifications must be avoided.

Cautions and Warnings

Throughout this manual you will find Cautions and Warnings:

CAUTION

Cautions will advise you of the proper care to be taken to avoid damage to your vehicle or property.

WARNING

Warnings will advise you of the proper care to be taken, not only to avoid damage to your vehicle or property, but to help prevent situations and occurrences that could result in personal injury or death.

Study this manual carefully. Do not operate the Premium Electronic Gauge Cluster until you are completely familiar with the contents of this manual. Always retain this manual in your vehicle for reference. If you sell the vehicle, make sure the manual goes with it.

Assistance Guide

When parts are required, always provide the unit code number, vehicle model, and vehicle serial number. Request the salesperson to assist you in obtaining this information upon delivery.

For information not given in this manual, or if you require services of trained service personnel, we urge you to contact a nearby International dealer, or phone 1-800-44-TRUCK (87825) for assistance and choose Option 1. Or call Pana Pacific Customer Service at 1-800-726-2636.

Navistar believes that every customer is entitled to the best service, both from the product itself and from the firm who sells and services that product.

If, for any reason, you do not feel you are receiving these services in connection with the operation of your vehicle or the sales transaction, you should return to your selling dealer so that these matters can be corrected to your satisfaction. If the matter is not resolved at that time, it is suggested that the following steps be taken.

Contact a Member of Management at the Dealer.

Discuss the details of the primary concern for service. In most instances, any problem can be resolved to your satisfaction by the owner or manager in charge.

Contact Closest Navistar, Inc. Regional Sales Office.

Should you desire to contact any of these offices, it is important to include the following information in your communication:

- Name under which new vehicle was purchased, address and telephone number of purchaser
- Vehicle model, year, vehicle identification number, component code, and serial numbers
- Vehicle delivery date and present mileage
- Location where purchased
- Details of the problem

Component Code Numbers

Code numbers are the basis for identifying the components used on International® trucks. They are used by sales personnel to order the truck, by manufacturing to build that truck, and by parts personnel to service the truck. Many items in this manual are identified by codes.

Code numbers are a combination of numbers and / or alphabetical letters. These codes are listed on the Vehicle Line Set Ticket, which is sometimes known as the vehicle specification card or code sheet.

Line Set Ticket

Each vehicle is provided with a Line Set Ticket (code sheet), which lists identification code numbers of component units used to build the vehicle.

One copy of the line set ticket is included in the literature provided with the vehicle. When replacement parts are required, take this copy with you to positively identify vehicle components and be sure of getting the correct parts.

NOTE: Be sure to return Line Set Ticket to vehicle after obtaining parts.

SECTION 2 — OVERVIEW AND OPERATION

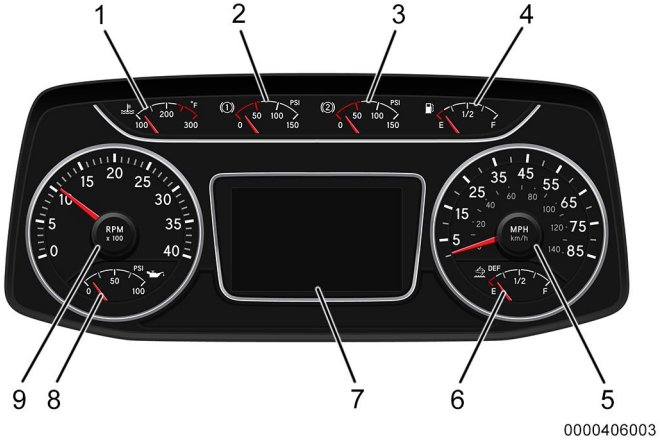
Introduction

This manual contains information about the Liquid Crystal Display (LCD) in the Premium Electronic Gauge Cluster. The purpose of the manual is to outline the functions of the Premium Electronic Gauge Cluster LCD display, and explain how to navigate and operate the various screens and features offered by this unit.

It is important to note that this manual explains all of the features that are available from Navistar. Some of these features and functions may not be installed on your vehicle or may not be included in your instrument cluster based upon the options selected at the time of purchase.

NOTE: Be sure to read and understand this manual before attempting to operate or set up the Premium Electronic Gauge Cluster screens.

Product Description



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Premium Electronic Gauge Cluster

1. Water temperature gauge
2. Primary air brake pressure gauge
3. Secondary air brake pressure gauge
4. Fuel level gauge
5. Speedometer
6. Diesel exhaust fluid level gauge
7. Cluster display
8. Oil pressure gauge
9. Tachometer

The purpose of the Premium Electronic Gauge Cluster is to provide an advanced and comprehensive way of increasing driver productivity, uptime, and safety, while reducing maintenance. The Premium Electronic Gauge Cluster unit has many functions and settings to aid in the operation and safety of the vehicle. The cluster is equipped with the following:

- Cluster display
- Cluster Display Control (CDC)
- Warning indicators
- Gauges

This Premium Electronic Gauge Cluster screen displays the critical operational features and functions of this vehicle. The configuration of the screens in the cluster display is set up to maximize the amount of information that can be provided to the operator of the vehicle.

START-UP

This cluster display screen will power up when the key is inserted and turned to the accessories or start positions. When the display screen receives power, a start-up screen will appear with the International® logo, odometer, and gear position. This screen will appear for approximately 5–6 seconds.

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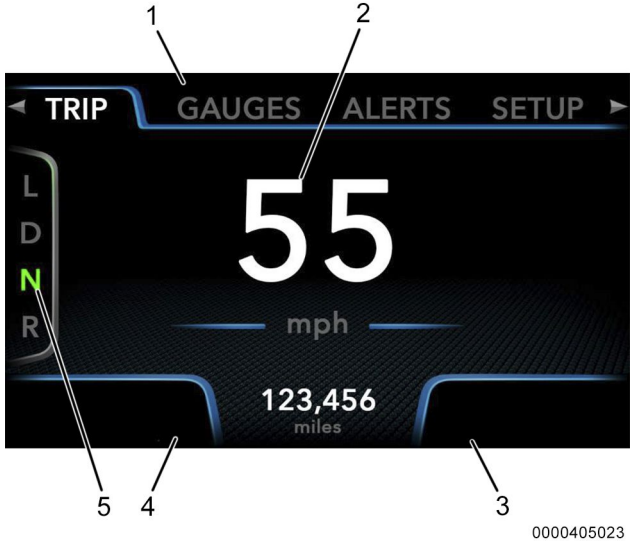
Start-Up Screen

Screen Layout

The screen is laid out in the following way:



Screen Layout

1. Main menu
2. Main information viewer
3. Cruise control information
4. Transmission information
5. Gear indicator (PRNDL)

When the main menu is not active, the top of the screen will display the Top Corner Gauges in the right and left corners.

The screen layout is subject to change depending on the menu option screen selected.

Controller Operation

Cluster Display Control

The Cluster Display Control (CDC) joystick is used to navigate the menus and screens and to select the desired settings. The CDC is located on the right-side of the steering wheel, above the ignition switch. The Main Menu will disappear if the control goes inactive for approximately 3 seconds or longer.

WARNING

To prevent personal injury, and / or death, or damage to property, do not use the CDC joystick while the vehicle is in motion.

The instructions on how to use the CDC are as follows:

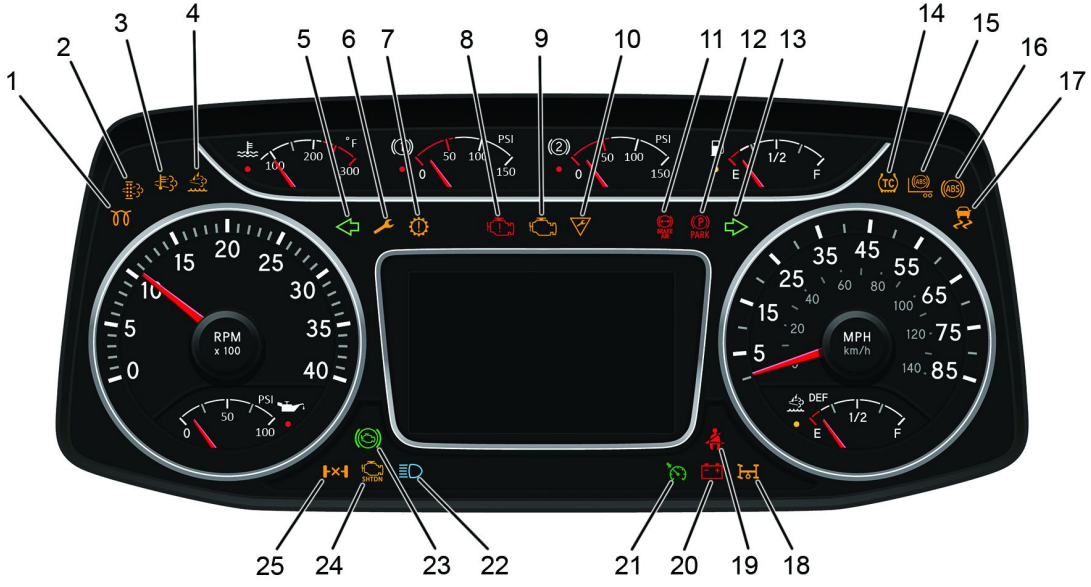
1. To prompt the main menu to appear, push left or right on the CDC joystick.
2. Push right or left on the CDC joystick again to scroll through the menu categories until the desired menu category is highlighted.
3. To scroll through main menu categories, make sure the desired option is highlighted and push the CDC joystick up or down.
4. To scroll through the subcategories, push the CDC joystick down until the desired option is highlighted.
5. Press OK to select.
6. To return to the previous screen or to the main menu, press the RETURN / BACK button (located next to the cluster display control).
7. To reset trip counters and reset options, push the OK button in for 3 seconds or until the confirmation pop-up appears.
8. To confirm the reset, push the CDC joystick to the left, so that the CONFIRM option is highlighted and press / click OK.
9. To cancel a reset, ensure the cancel option is highlighted, and press / click OK.

SECTION 3 — WARNING INDICATORS

Overview

The Premium Electronic Gauge Cluster contains 25 individual LED warning indicators. These indicators are used to monitor vehicle operation and indicate a WARNING or STOP condition. They are driven by the software in the cluster. At ignition, these will illuminate for 8–10 seconds, as part of the vehicle power-up sequence.

NOTE: If the MIL is illuminated, it is the vehicle owner's responsibility to have the fault repaired or face fines.



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Warning Indicator Locations

Lamp #	Warning	Icon	Description
1	Wait to Start		Engine components are warming up; wait until indicator flashes to start engine.
2	DPF		Diesel Particulate Filter restriction.
3	HEST		High Exhaust System Temperature.
4	DEF		Diesel Exhaust Fluid is low.
5	Left Turn		Left turn signal.
6	Maintenance		Used with other warnings to indicate that maintenance is due.
7	Transmission Warning		Fault in transmission.

Lamp #	Warning	Icon	Description
8	RSL		Red Stop Lamp; a serious problem has occurred; safely pull over, turn hazard flashers ON, stop engine, and do not start the engine until after servicing.
9	MIL		Malfunction Indicator Lamp; service vehicle at the first available opportunity.
10	AWL		Amber Warning Light; may illuminate under certain high load / high ambient temperature conditions. If lamp continues to illuminate, service vehicle at first available opportunity.
11	Brake Failure		Brake failure (English cluster hydraulic brakes).
11	Brake Failure		Brake failure (English cluster air brakes).

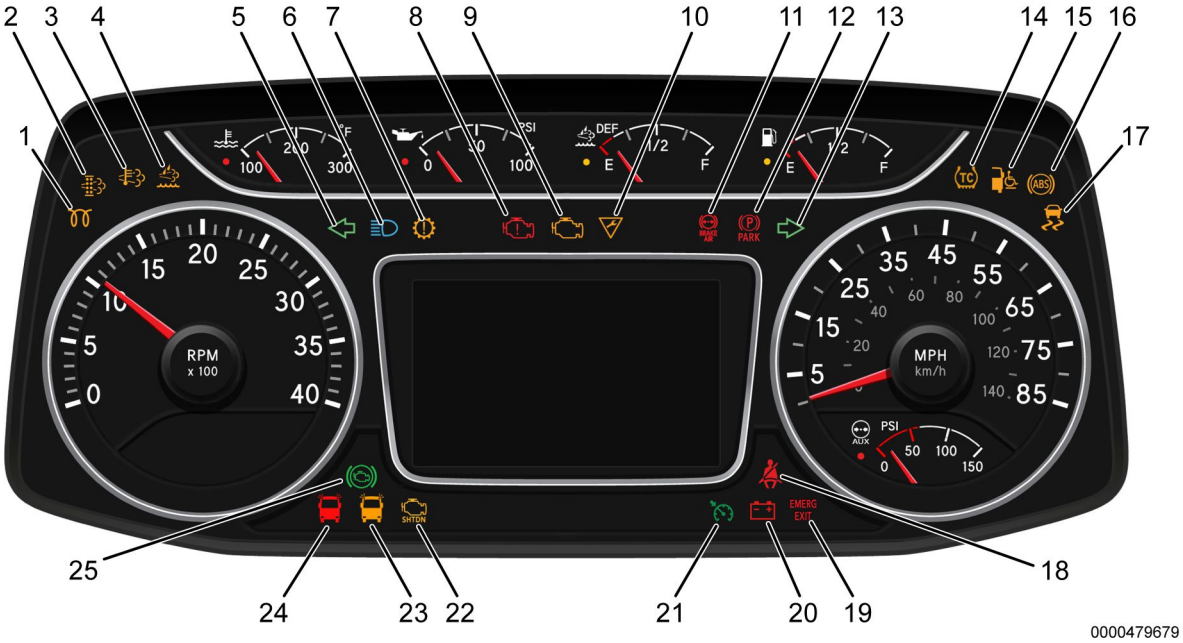
Lamp #	Warning	Icon	Description
11	Brake Failure		Brake failure (Metric cluster).
12	Parking Brake		Parking brake (English cluster).
12	Parking Brake		Parking brake (Metric cluster).
13	Right Turn		Right turn signal.
14	Traction Control (If equipped)		Traction control is active. **NOTE: Some models were equipped with Battery Voltage indicators in this location.**

Lamp #	Warning	Icon	Description
14	Battery Voltage		Battery voltage is low. **NOTE: The battery voltage indicator can be found in location 14 or location 20 depending on cluster model.**
15	Trailer ABS		Trailer antilock brakes.
16	ABS		Antilock brake malfunction; service vehicle immediately.
17	Electronic Stability Control		Electronic stability control; a flashing indicator represents that the electronic stability control is engaged, while a solid indicator represents a fault in the system.
18	PTO		Power Take-Off.

Lamp #	Warning	Icon	Description
19	Seat Belt		Seat belt reminder.
20	Battery Voltage		Battery voltage is low. **NOTE: Some models were equipped with a SET indicator in this location.**
20	Cruise Set (if equipped)		Cruise control speed is set.
21	Cruise Enabled		Cruise control is active / set.

Lamp #	Warning	Icon	Description
22	High Beam		High beam lights are ON.
23	Engine Brake		Engine braking in process.
24	Idle Shutdown		Timer will turn OFF engine in 30 seconds.
25	Differential Lock		Differential lock.
N/A	Airbag Readiness Lamp		Illuminates if there is an electrical problem with the airbag system.

Bus-Specific Warnings



Warning Indicator Locations — Bus Specific

The following warning indicators correspond with the Bus-specific Premium Gauge Cluster.

Lamp #	Warning	Icon	Description
1	Wait to Start		Engine components are warming up; wait until indicator flashes to start engine.
2	DPF		Diesel Particulate Filter restriction.
3	HEST		High Exhaust System Temperature.
4	DEF		Diesel Exhaust Fluid is low.
5	Left Turn		Left turn signal.
6	High Beam		High Beam Lights are ON.
7	Transmission Warning		Fault in transmission.

Lamp #	Warning	Icon	Description
8	RSL		Red Stop Lamp; a serious problem has occurred; safely pull over, turn hazard flashers ON, stop engine, and do not start the engine until after servicing.
9	MIL		Malfunction Indicator Lamp; service vehicle at the first available opportunity.
10	AWL		Amber Warning Light; may illuminate under certain high load / high ambient temperature conditions. If lamp continues to illuminate, service vehicle at first available opportunity.
11	Brake Failure		Brake failure (English cluster air brakes).
12	Parking Brake		Parking brake (English cluster).

Lamp #	Warning	Icon	Description
13	Right Turn		Right turn signal.
14	Traction Control		Traction control is active. **NOTE: Some models were equipped with Battery Voltage indicators in this location.**
15	Wheelchair Lift Inoperable	 0000477195	Illuminates YELLOW when optional wheelchair lift door is not securely closed while in key ON position.
16	ABS		Antilock brake malfunction; service vehicle immediately.
17	Electronic Stability Control		Electronic Stability Control; a flashing indicator represents that the electronic stability control is engaged, while a solid indicator represents a fault in the system.

Lamp #	Warning	Icon	Description
18	Seat Belt		Seat belt reminder.
19	Emergency Exit Warning	 0000477193	Illuminates when the emergency exit is not securely closed when the key switch is in the Accessory (ACC) or ON position.
20	Battery Voltage		Battery voltage is low. **NOTE: Some models were equipped with a SET indicator in this location.**
21	Cruise Enabled		Cruise control is active / set.
22	Idle Shutdown		Timer will turn OFF engine in 30 seconds.
23	Amber Flasher	 0000477194	Illuminates when the AMBER warning flasher lights are activated.

Lamp #	Warning	Icon	Description
24	Red Flasher	 0000477194	Illuminates when the RED warning flasher lights are activated.
25	Engine Brake	 0000476132	Engine braking in process

Direct Drive Warnings

There are eight spaces available for the direct drive warning indicators located in the space between the high beams and cruise control indicators. For more information on the direct drive warning indicators, refer to the appropriate vehicle operation and maintenance manual.

SECTION 4 — TRIP SCREENS

Overview

The purpose of the trip counter is to track progress and to provide information to the driver for a trip involving multiple legs. The trip is started at the initial reset of the counter, and each of the other trip counters is started in the same manner as the first one. When the trip counter is reset, the previous trip is replaced, losing all of the data previously stored.

NOTE: Make sure that the information received by the trip counter is no longer needed before resetting for a new trip, as this information will be lost upon a reset.

The TRIP tab on the main menu allows the operator to view basic information for the vehicle, along with two trip counters for recording information about the vehicle. Trip screens with the option to be reset include both trip counters and fuel economy.

The trip screens that can be viewed under the Trip main menu category include:

- Speedometer
- Fuel Economy
- Trip 1
- Trip 2

The Trip 1 and Trip 2 screens will log the following information:

- Trip distance
- Trip engine hours
- Trip fuel used
- Trip fuel economy
- Trip average speed
- Trip idle fuel
- Trip idle hours

The fuel economy display provides the operator with a reading to monitor extended fuel economy. Instantaneous and average fuel economy will be displayed on this screen.

NOTE: The fuel range screens are estimates and should not be relied on for exact fuel range.

Trip Screens

The trip screens are shown in the table below.

Screen Option	Screen	Description
Speedometer	 0000405437	This screen displays the current speed the vehicle is traveling.
Fuel Economy	 0000405025	This screen displays both the average and instant fuel economy.

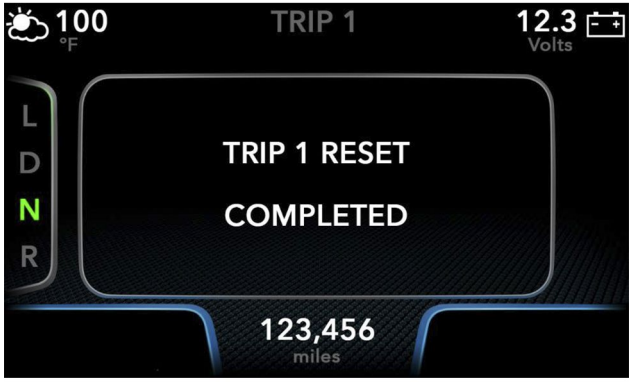
Screen Option	Screen	Description
Trip 1 Screen 1	 0000405035	This screen displays the idle fuel used and run time, as well as engine run time.
Trip 1 Screen 2	 0000405036	This screen displays miles driven along with miles per gallon and miles per hour readings.

Operation

To scroll through the trip screens or reset the trip screens, perform the following steps:

1. Highlight the Trip option in the main menu.
2. Push the CDC joystick up or down until the desired trip screen is reached.
3. In order to reset a trip counter or the fuel economy, hold the OK button in for 3 seconds.
4. A pop-up screen will be displayed, asking for confirmation of the reset.
5. Press the CDC joystick to confirm.

Once this is done, if the reset was carried out, another screen will be display, confirming the reset.



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Reset Screen

SECTION 5 — GAUGE DISPLAYS

Overview

The GAUGES tab in the main menu displays different vehicle information and allows the operator to monitor the vehicle operating conditions. The purpose of the gauge views is to provide real-time vehicle information to the operator. If any of the digital analog gauges are above or below the threshold or out of range, then the gauge will be highlighted in RED.

The subcategories on the GAUGES tab include:

- My Gauges
- Vehicle
- Engine
- Transmission
- Axle

These options contain informational gauges that pertain to the title of the subcategory selected. The My Gauges option is an operator-controlled feature in which the operator selects desired or frequently used gauges to put into the subcategory for easy access.

NOTE: Gauges may vary depending on the options chosen at time of purchase.

My Gauges

The My Gauges subcategory displays selected gauges that will be viewed most frequently. This category has the option of showing two gauges side by side or one gauge by itself. For help with setting up the My Gauges subcategory, see the Display and Gauge Settings information located in Section 7.

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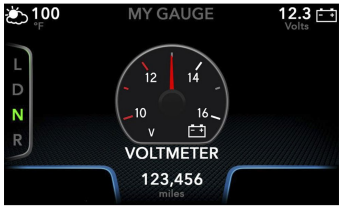
My Gauges

The gauges in the My Gauges subcategory can be set up with any of the gauges from the subcategories, or the operator can also set up the gauges to view speed, range estimates for both fuel and DEF fluid, and rpm.

Vehicle

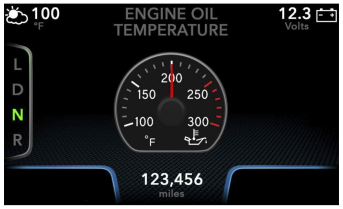
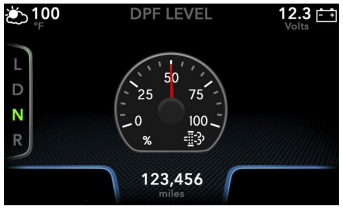
The gauges in the Vehicle subcategory are as follows:

Gauge	Screen	What It Measures
Voltmeter	 0000405027	Battery voltage.

Air Application	 0000405053	Air flow in PSI (pounds per square inch).
Air Suspension	 0000405054	Air suspension in PSI.

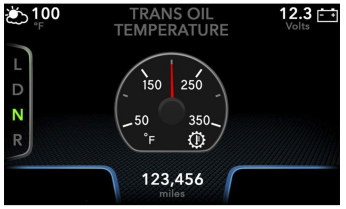
Engine

The gauges in the Engine subcategory are as follows:

Gauge	Screen	What It Measures
Engine Oil Temperature	 0000405057	The temperature of the engine oil.
Boost Pressure	 0000405061	The amount of air forced into the combustion chamber by the turbo; this is measured in pounds per square inch (PSI).
DPF Level	 0000405063	The diesel particulate filter soot load measured as a percentage (%).

Transmission

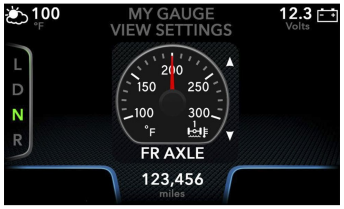
The gauges for the Transmission subcategory are as follows:

Gauge	Screen	What It Measures
Transmission Oil Temperature	 0000405066	The temperature of the transmission oil.

Axle

The gauges for the Axle subcategory are as follows:

Gauge	Screen	What It Measures
Axle 1 Pressure	 0000405070	The pressure on Axle 1 in PSI (pounds per square inch).
Axle 2 Pressure	 0000405071	The pressure on Axle 2 in PSI.
Axle 3 Pressure	Image Not Shown	The pressure on Axle 3 in PSI.

Gauge	Screen	What It Measures
Front Rear Axle Temperature	 0000405228	The temperature of the front rear axle in degrees Fahrenheit.
Rear Rear Axle Temperature	 0000405229	The temperature of the rear rear axle in degrees Fahrenheit.

Operation

To view any of the gauge displays in the Gauges main menu option, use the following process:

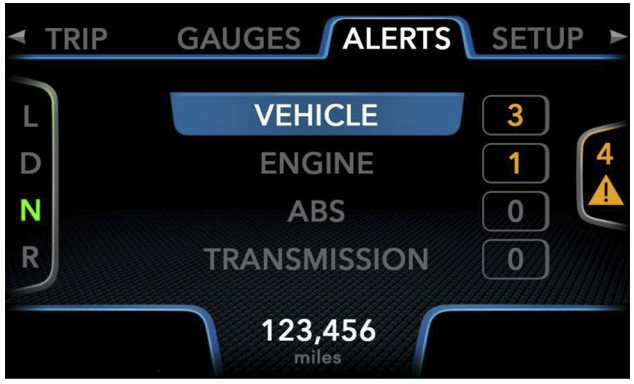
1. Press the CDC joystick right to prompt the main menu to come up and scroll to the right until the Gauges category is highlighted.
2. Push the CDC joystick down to scroll until the desired subcategory is highlighted, and press OK.

3. This will present the option to view the preselected gauges in My Gauges, or to view individual gauges in the other gauge subcategories.

SECTION 6 — SYSTEM ALERTS

Overview

The purpose of the alert system is to make the operator aware of safety concerns, active features, setting changes, severe problems, and maintenance reminders. The system alerts will appear on the screen as a pop-up. After the pop-up disappears, the operator can view it again in the Alerts menu, where the DTCs also may be viewed. Some of the alerts will require operator confirmation, while others will have a time-out process in which they will disappear after a period of time. To confirm an alert requiring operator confirmation, press and hold the OK button until the alert disappears.



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Alerts Menu

WARNING

To prevent personal injury and / or death, or damage to property, read and understand all alerts that pop up as they can provide information on severe problems or upcoming required vehicle maintenance.

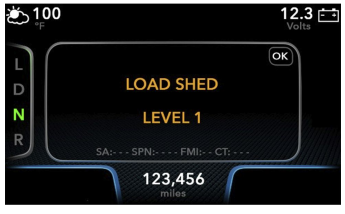
The four numbers to the right of the subcategories represent the number of alerts that are active for each subcategory. The number on the far right with the warning sign indicates the number of total alerts present. To view the alerts, perform the following process:

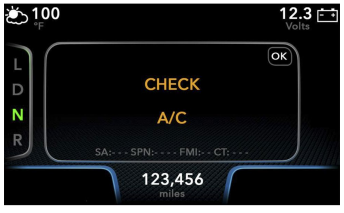
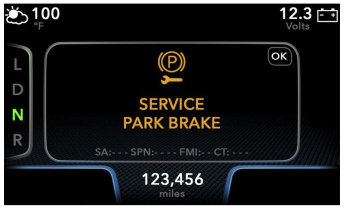
1. Scroll to the ALERTS tab in the main menu.
2. Then select one of the four subcategories, and press OK.
3. This will display the alerts for that subcategory.
4. The alerts will be in the form of a full screen pop-up. To scroll through the different alerts for the chosen subcategory, push up or down on the CDC joystick.

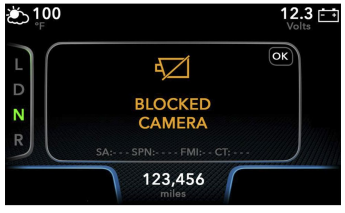
Vehicle

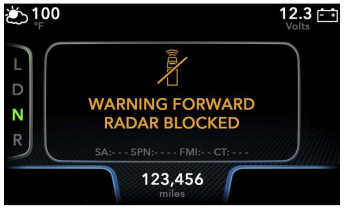
The alerts for the Vehicle subcategory are as follows:

Alert	Screen	Description
Low Battery Voltage	 0000405083	The battery voltage is getting low and service may be required.
High Forward Rear Axle Temperature	 0000405095	The forward rear axle temperature is above threshold. Allow vehicle temperatures to cool down during heavy load conditions. If light stays ON consistently, service is required.

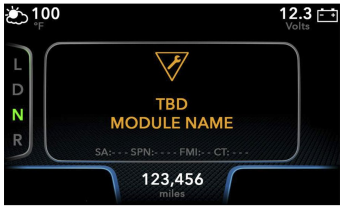
Alert	Screen	Description
High Rear Rear Axle Temperature	 0000405094	The rear rear axle temperature is above the threshold. Allow vehicle temperatures to cool down during heavy load conditions. If light stays ON consistently, service is required.
Load Shed Level 1	 0000406863	This tracks electrical load when the vehicle is not running, or if there is a problem with the charging system.

Alert	Screen	Description
Load Shed Fault	 0000406862	There is a fault in the load control. Service is required.
Check A/C	 0000405099	Check the air conditioning system. Service may be required.
Service Park Brake	 0000405102	The parking brake has a malfunction and needs to be serviced.

Alert	Screen	Description
Low Washer Fluid	 0000405106	The washer fluid needs to be refilled.
Blocked Camera	 0000405107	The forward camera is blocked; inspect for obstructions and direct sunlight conditions.
Excessive Overspeed	 0000405443	The vehicle is in extreme excess of the speed limit.

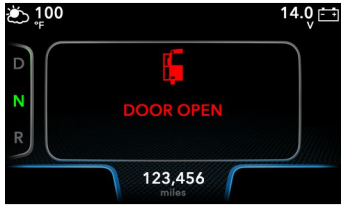
Alert	Screen	Description
Speed Limit Exceeded	 0000405442	The vehicle is currently traveling over the posted speed limit.
Warning Forward Radar Blocked	 0000405463	There is an object blocking the forward radar that could affect the ACC / CMS system.
Icy Road Conditions	 0000405468	Icy road conditions are possible.

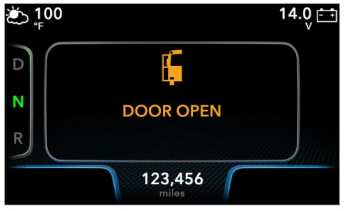
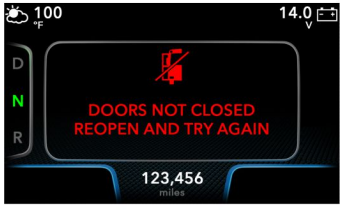
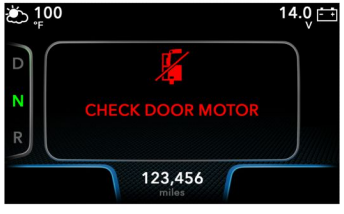
Alert	Screen	Description
Check Body Controller Module	 0000405469	Vehicle service is required.
Communications Fault	 0000405474	Vehicle service is required.
Cluster Fault	 0000405475	Vehicle service is required.

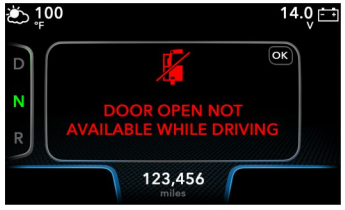
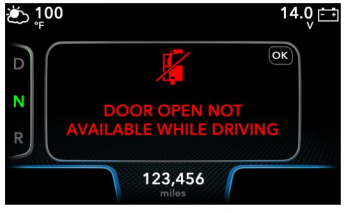
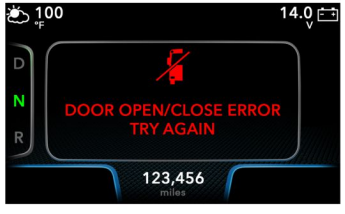
Alert	Screen	Description
Module Addresses	 0000405476	Vehicle service is required.
Check Tire Pressure Monitoring System	 0000405478	Inspect tires for over / under inflation. If the tire pressure is correct, service vehicle soon.
Check ACC / CMS System (Adaptive Cruise Control and Collision Mitigation System)	 0000405479	ACC / CMS systems have faults. Service vehicle soon.

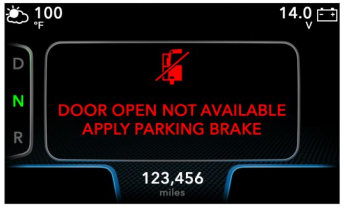
Bus-Specific

The alerts for the Bus-specific subcategory are as follows:

Alert	Screen	Description
Door Unlatched Manually Close Door (Continuous beeps)	 0000479306	Driver should stop the bus and manually ensure the front bus door is closed.
Door Open (Continuous beeps)	 0000479312	Bus continuing to move with front door open. Driver needs to close door or stop vehicle.

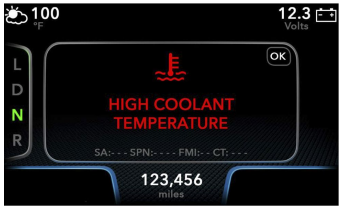
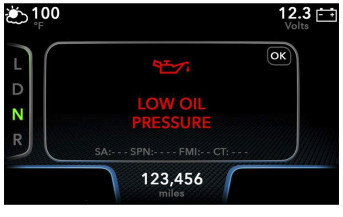
Alert	Screen	Description
Door Open (Single beep)	 0000477136	Bus starting to move with bus front door open. Driver needs to close door or stop vehicle.
Doors Not Closed Reopen and Try Again (Single beep)	 0000479307	Bus front door is closed and rear door is not closed. Driver needs to close door.
Check Door Motor (Three long beeps)	 0000479308	There is a fault in the bus front door motor. The vehicle should be serviced.

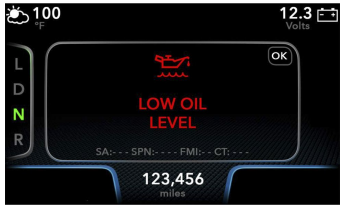
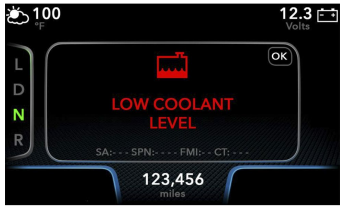
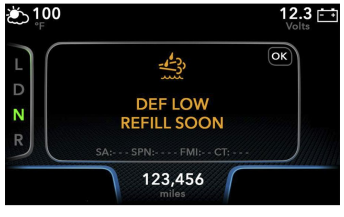
Alert	Screen	Description
Door Open Not Available While Driving (Single beep)	 0000479309	Driver requested to open front door while vehicle is in motion. Move front door switch to closed position.
Door Open Not Available While Driving	 0000479309	Driver requested to open front door while vehicle is in motion.
Door Open / Close Error Try Again	 0000479310	Driver requested to open front door. Check for object blocking door and attempt again in a few seconds.

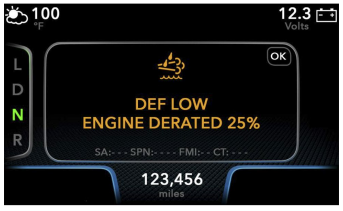
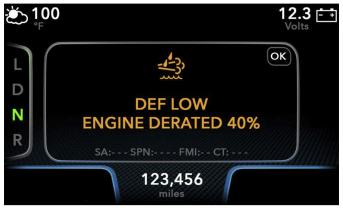
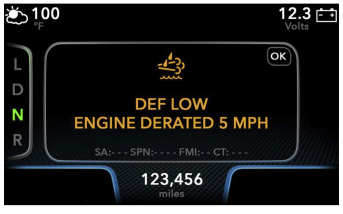
Alert	Screen	Description
Door Motor Overheated Manually Operate Door	 0000479313	Allow bus front door motor to cool down.
Door Open Not Available Apply Parking Brake (Single beep)	 0000479311	Driver requested to open front door while vehicle is stationary and parking brake is not set. Set parking brake.

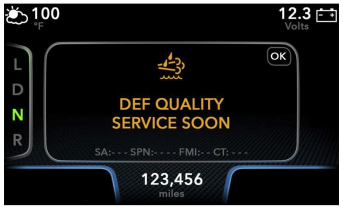
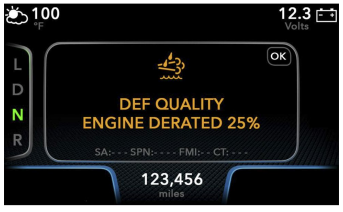
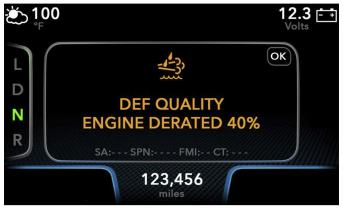
Engine

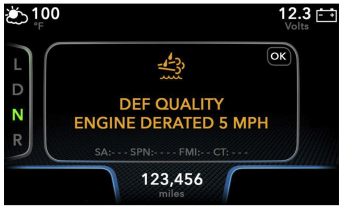
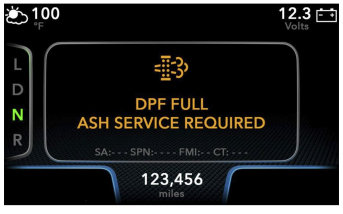
The alerts for the Engine subcategory are as follows:

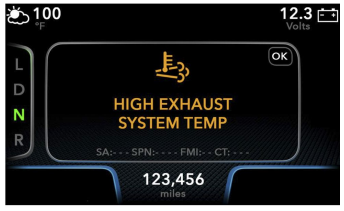
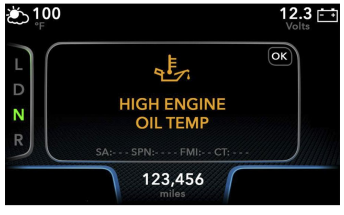
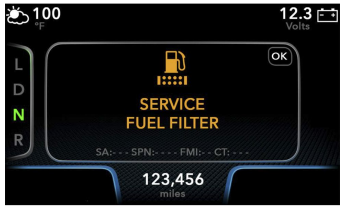
Alerts	Screens	Description
High Coolant Temperature	 0000405110	Coolant temperature is getting too hot; inspect coolant level and fill to proper level if needed. If level is correct, immediate vehicle service is required; do not operate for extended period of time.
Low Oil Pressure	 0000405111	Oil pressure is below specification; inspect oil level and fill to proper level if needed. If level is correct, immediate vehicle service is required; do not operate for extended period of time.

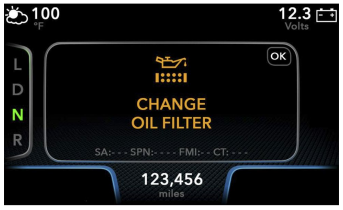
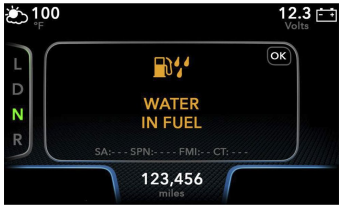
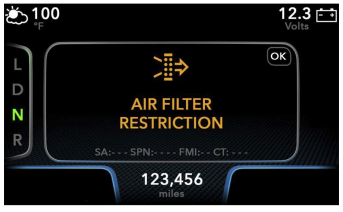
Alerts	Screens	Description
Low Oil Level	 0000405112	Oil level is below specification; inspect oil level and fill to proper level if needed. If level is correct, vehicle service is required.
Low Coolant Level	 0000405113	Coolant level is below specification; inspect coolant level and fill to proper level if needed. If level is correct, vehicle service is required.
DEF Low Refill Soon	 0000405114	Diesel Exhaust Fluid (DEF) is below specification; refill soon.

Alerts	Screens	Description
DEF Low Engine Derated 25%	 0000405115	Diesel exhaust fluid is below specification; refill DEF tank. Engine performance is decreased by 25%.
DEF Low Engine Derated 40%	 0000405116	Diesel exhaust fluid is below specification; refill DEF tank. Engine performance is decreased by 40%.
DEF Low Engine Derated to 5 MPH	 0000405118	Diesel exhaust fluid is below specification; refill DEF tank. Engine performance is limited to 5 mph (8 km/h).

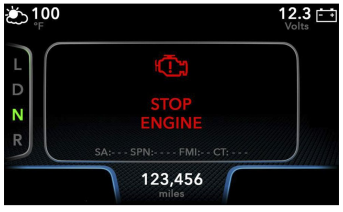
Alerts	Screens	Description
DEF Quality Service Soon	 0000405119	The diesel exhaust fluid quality is below threshold; service DEF system soon.
DEF Quality Engine Derated 25%	 0000405120	The diesel exhaust fluid quality is below threshold; the engine performance will decrease by 25%. Service DEF system soon.
DEF Quality Engine Derated 40%	 0000405121	The diesel exhaust fluid quality is below threshold; the engine performance will decrease by 40%. Service DEF system soon.

Alerts	Screens	Description
DEF Quality Engine Derated to 5 MPH	 0000405122	The diesel exhaust fluid quality is below threshold; the engine performance will decrease to 5 mph (8 km/h). Service DEF system soon.
DPF Full Ash Service Required	 0000405472	The diesel particulate filter (DPF) is full of ash; vehicle service is required.
Change Engine Oil	 0000405484	Engine oil change is required.

Alerts	Screens	Description
High Exhaust System Temperature	 0000405092	This is normal operation when vehicle is under regeneration at low speeds.
High Oil Temperature	 0000405084	Oil temperature is above specification; allow vehicle temperature to cool down during heavy engine load conditions. If light stays ON consistently, service is required.
Service Fuel Filter	 0000405100	The fuel filter needs to be changed; vehicle service is required.

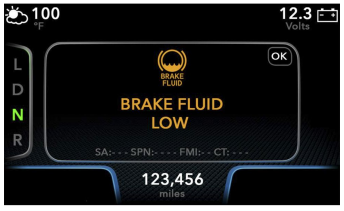
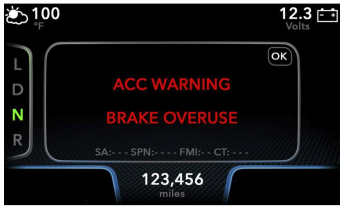
Alerts	Screens	Description
Change Oil Filter	 0000405101	The oil filter needs to be changed; vehicle service is required.
Water in Fuel	 0000405723	There is water in the fuel system; vehicle service is required.
Air Filter Restriction	 0000405103	Inspect the air filter for restriction; if restriction is not identified, vehicle service is required.

Alerts	Screens	Description
Park Regen Needed	 0000405471	Park the vehicle; exhaust regeneration is needed.
Park Regeneration Active	 0000473766	Message displayed after the PARKD REGEN switch is pressed. Park the vehicle away from flammable materials, structures, or vapors. Set the parking brake and leave the engine running. For automatic transmissions, put the vehicle in Park. For manual transmissions, put the vehicle in Neutral.

Alerts	Screens	Description
Stop Vehicle	 0000405450	Bring the vehicle to a stop; there is a severe problem; service vehicle immediately.
Stop Engine	 0000405449	Stop the vehicle and turn the engine OFF; service vehicle immediately.
Check Engine	 0000405467	System fault in the engine; vehicle service is required.

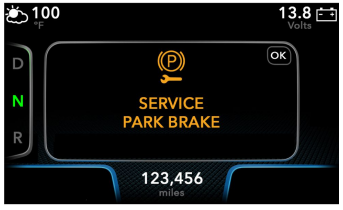
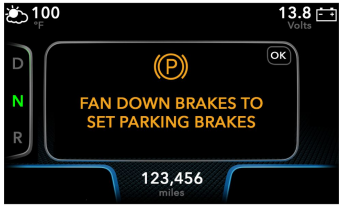
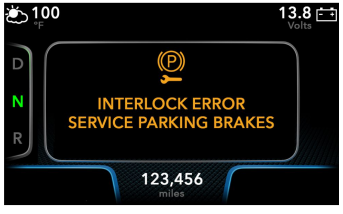
Antilock Brake System

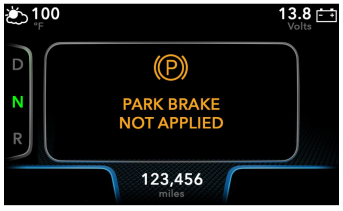
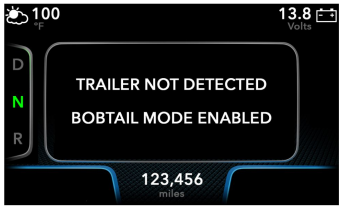
Alerts for the Antilock Brake System (ABS) are as follows:

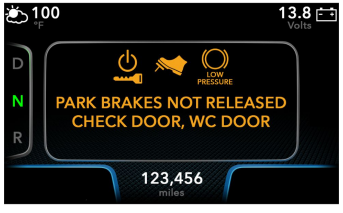
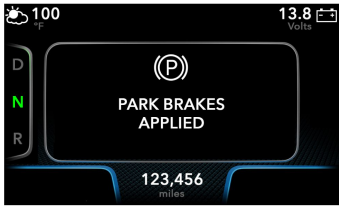
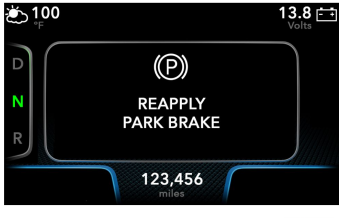
Alert	Screen	Description
Brake Fluid Low	 0000405125	Brake fluid is below specification; service vehicle soon.
ACC Warning: Brake Overuse	 0000405126	The adaptive cruise control system is having to engage the brakes too often.
Check ABS	 0000405489	Check for faults in the ABS system. Service vehicle soon.

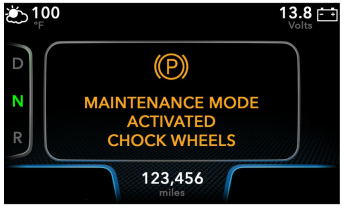
Bendix® Intellipark™

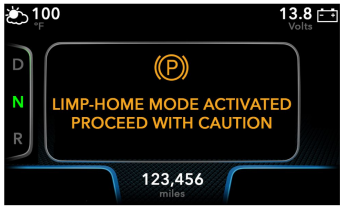
Alerts for the Bendix® Intellipark™ parking brake technology.

Alert	Screen	Description
Service Park Brake		The parking brake has a malfunction and needs to be serviced.
Fan Down Brakes To Set Parking Brakes		Pump service brakes to exhaust reservoir pressure to engage the parking brakes.
Interlock Error Service Parking Brakes		An interlock with brake system is malfunctioning. Service the parking brake system.

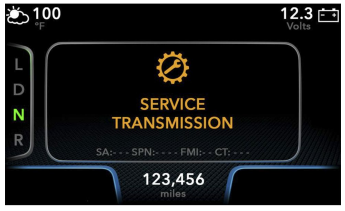
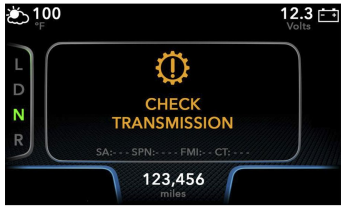
Alert	Screen	Description
Park Brake Not Applied		Park brake has not applied warning. Pull and release PARKING BRAKE rocker switch to set park brake. Service park brake if it continues to not set.
Trailer Not Detected Bobtail Mode Enabled		Trailer not detected. System entering bobtail mode. Trailer rocker switch LEDs turned off.
Trailer Brake Released		Trailer is detected while driving. System automatically released trailer parking brakes.

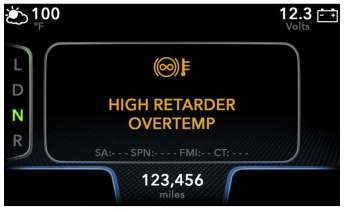
Alert	Screen	Description
Park Brakes Not Released Check Door, WC Door	 0000473760	Park brake system interlock is not met. Check main access door and / or wheel chair access door (if equipped).
Park Brakes Applied	 0000473761	Intellipark™ interlock has triggered the setting of the park brakes.
Reapply Park Brake	 0000473762	Pull and release PARKING BRAKE rocker switch to ensure that the brake is fully engaged.

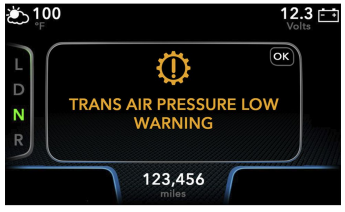
Alert	Screen	Description
Parking Brake Will be Applied Soon	 0000473763	Intellipark™ will set park brake very soon. To cancel brake application, press the accelerator pedal or brake pedal.
Maintenance Mode Activated Chock Wheels	 0000473764	Maintenance Mode has been activated. Install wheel chocks.

Alert	Screen	Description
Limp-Home Mode Activated Proceed With Caution	 0000473765	Limp-Home mode has been activated. Proceed with caution to the nearest authorized service center

Transmission

Alert	Screen	Description
Service Transmission	 0000405477	Transmission service is required; service vehicle soon.
Check Transmission	 0000405470	Check the transmission for faults; service vehicle soon.
Change Transmission Oil Soon	 0000405485	Transmission oil change is about to be due; service is required soon.

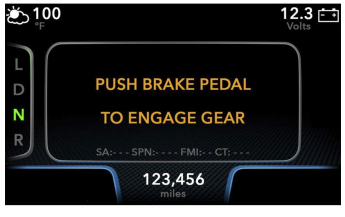
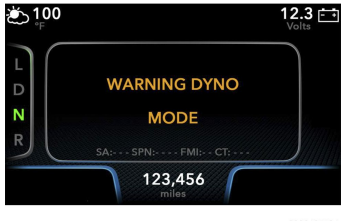
Alert	Screen	Description
High Retarder Overtemp	 0000405462	The retarder brake assist is over the threshold operating temperature. Allow vehicle temperature to cool down during heavy load conditions. If light stays ON consistently, service is required.
Retarder Failed	 0000405487	The retarder brake assist has failed. Vehicle service is required.

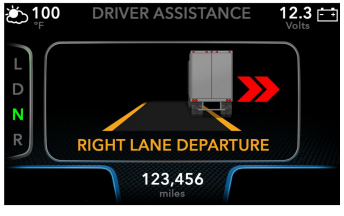
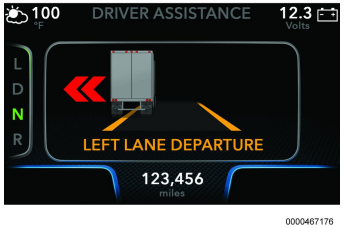
Alert	Screen	Description
Clutch Abuse	 0000405465	Warning the clutch is being abused and could cause damage.
Trans Air Pressure Low Warning	 0000433080	The transmission air tank pressure is low and may affect forward and reverse gear engagement. Let air pressure build and press the OK button to clear the alert.

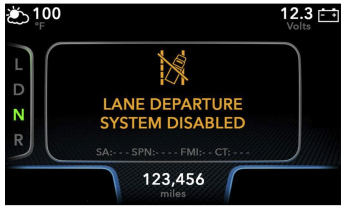
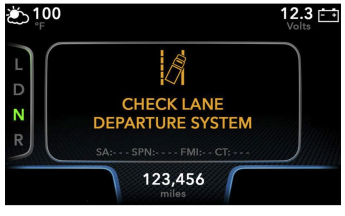
Caution, Warning, and Other Pop-Ups

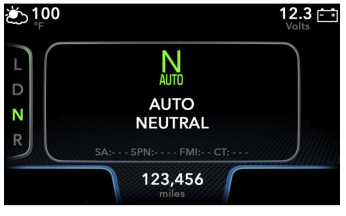
The vehicle is equipped with warning and caution screens. These screens pop up to alert the operator that there is a problem, or that there are potential hazardous conditions. Some of these pop-ups may require driver confirmations. There are also other non-caution / warning screens that give information on active or inactive systems. The screens are shown in the table below. These pop-ups may not be visible in the Alerts category.

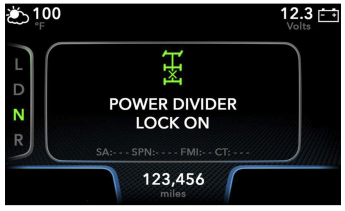
Pop-up	Screen	Description
Collision Imminent	 0000405447	A collision is highly likely under current driving conditions.
CMS System Braking	 0000405448	The Collision Mitigation System is braking the vehicle.

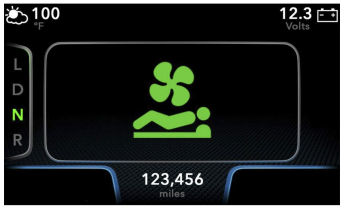
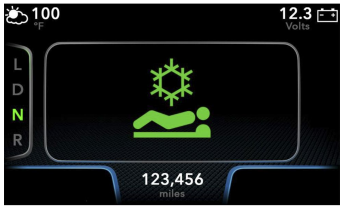
Pop-up	Screen	Description
Wait for Transmission to Warm Up	 0000405451	Wait for the transmission to warm up before putting the vehicle in motion.
Push Brake Pedal to Engage Gear	 0000405452	In order for the gear to be engaged, push the brake pedal.
Warning Dyno Mode	 0000405464	The vehicle is in dyno mode.

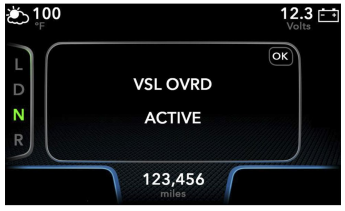
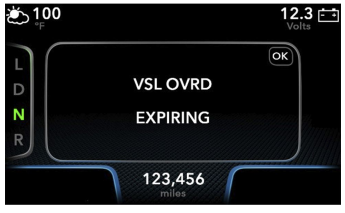
Pop-up	Screen	Description
Check Tire Pressure	 0000405466	Fill tire to proper PSI and inspect tire for damage.
Right Lane Departure	 0000467156	The vehicle is veering right without the use of a turn signal. On older vehicles, this warning says OUT OF LANE.
Left Lane Departure	 0000467176	The vehicle is veering left without the use of a turn signal. On older vehicles, this warning says OUT OF LANE.

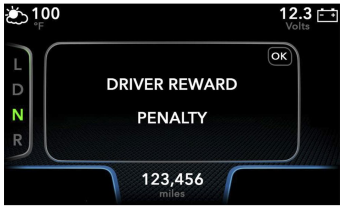
Pop-up	Screen	Description
Lane Departure System Disabled		The lane departure system is turned OFF.
Lane Departure System Enabled		The lane departure system is ON.
Check Lane Departure System		Check the lane departure system for faults; service vehicle soon.

Pop-up	Screen	Description
Roadway Departure Imminent		Vehicle is veering off the roadway.
Roadway Departure Braking		Vehicle is veering off the roadway and emergency braking applied.
Auto Neutral		This applies to Eaton® transmissions only.

Pop-up	Screen	Description
Retarder On	 0000405461	The brake retarder is turned ON.
Power Divider Lock On	 0000405456	The power divider lock is engaged.
Front Axle Engaged	 0000405457	The front steer axle 4 x 4 is engaged.

Pop-up	Screen	Description
Sleeper Fan On	 0000405458	The fan in the sleeper is turned ON.
A/C Sleeper Fan On	 0000405459	The A/C in the sleeper is turned ON.
PTO Engaged	 0000405460	The Power Take-Off is engaged.

Pop-up	Screen	Description
Vehicle Speed Limit Override Active	 0000405091	The vehicle speed limit override has been activated.
Vehicle Speed Limit Override Expiring	 0000406864	The vehicle speed limit override is about to turn OFF.
Driver Reward Expected	 0000405085	This is a reward indication that results in higher vehicle speed limits.

Pop-up	Screen	Description
Driver Reward Good	 0000405086	This is a reward indication that results in higher vehicle speed limits.
Driver Reward Excellent	 0000405087	This is a reward indication that results in higher vehicle speed limits.
Driver Reward Penalty	 0000405088	This is a penalty indication that results in lower vehicle speed limits.

Pop-up	Screen	Description
Driver Reward Increasing	 0000405089	This informs the operator that vehicle speed limit will increase soon.
Driver Reward Decreasing	 0000405090	This informs the operator that vehicle speed limit will decrease soon.

Pop-up	Screen	Description
Rear HVAC Fan Speed	Image Not Shown	This indicates the fan speed of the rear HVAC system.
Rear HVAC Temperature	Image Not Shown	This indicates the rear HVAC temperature.

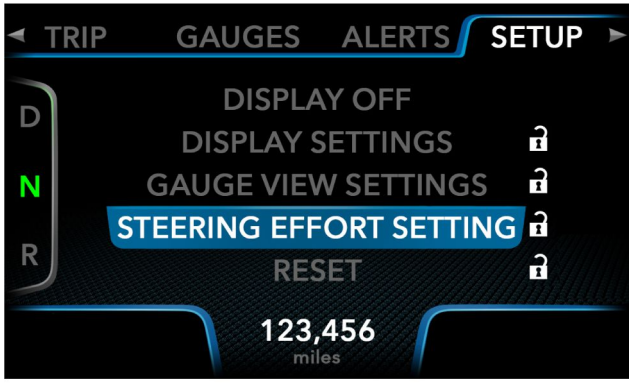
SECTION 7 — GAUGE CLUSTER SETUP

Overview

The options on the SETUP tab allow the operator to configure the following:

- Display Settings
- Gauge View Settings
- Steering Effort Setting
- Reset (return to default settings)

Some settings on this tab cannot be adjusted when the vehicle is in motion. The lock icon to the right side of each category indicates whether it is possible to adjust this setting at the moment. If the icon shows as unlocked, the setting can be adjusted. If the icon shows as locked, the setting cannot be adjusted.



0000467532

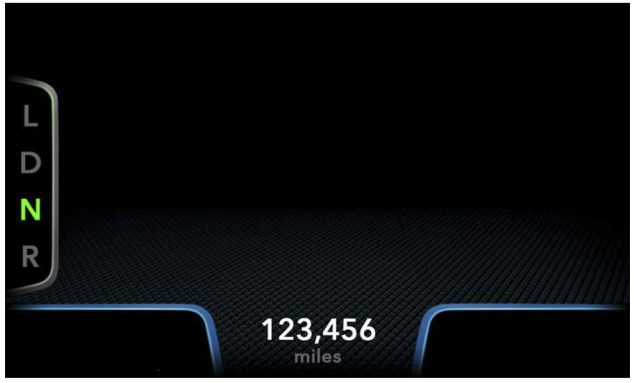
Setup Menu

CAUTION

To prevent damage to property, the cluster settings cannot be adjusted while the vehicle is in motion.

Display OFF

Selecting the display OFF function will put the screen into a minimal display mode. The gear selection indicator will be displayed along with the odometer while the rest of the screen is blank. The screen display will reactivate upon any motion of the pagination control.



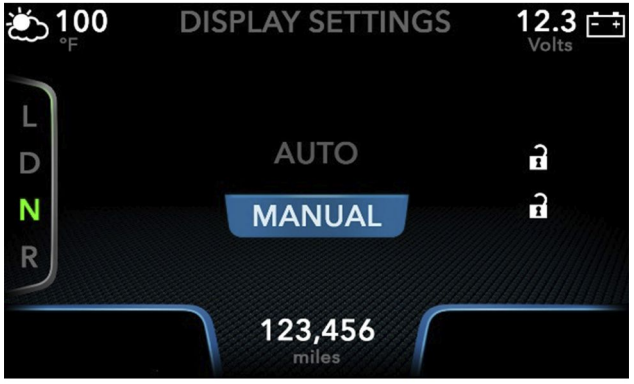
0000405136

Display OFF

Display Settings

The Display Settings subcategory allows for the adjustment and setup of the backlight, units of measurement, and language.

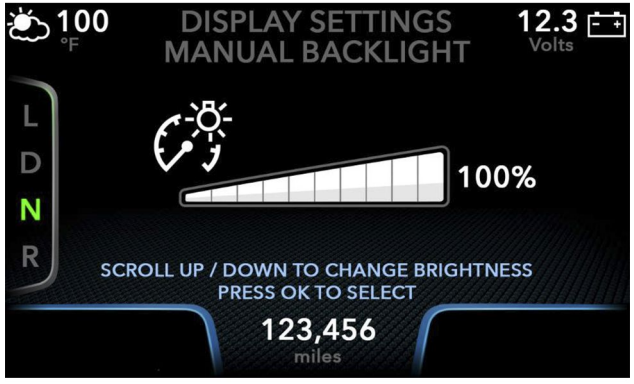
BACKLIGHT DISPLAY



0000406861

Backlight Menu

The screen backlighting option adjusts the brightness of the screen and gauges on the instrument cluster. The AUTO option adjusts the backlighting automatically according to ambient lighting.



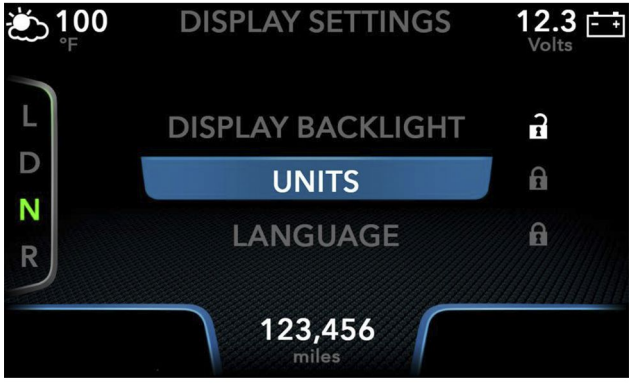
0000405161

Manual Backlight

The MANUAL option allows the operator to adjust the backlight to any brightness desired within the setting limits.

NOTE: The factory setting for instrument cluster backlight is the AUTO setting.

UNITS



0000405165

Display Settings

The UNITS option adjusts the units of measurement between English and metric.

0000405167

Units Settings

The ENGLISH option will adjust all values into the standard units used in the United States of America (miles / gallons / Fahrenheit). The METRIC option will adjust all of the values into kilometers / liters / Celsius.

LANGUAGE

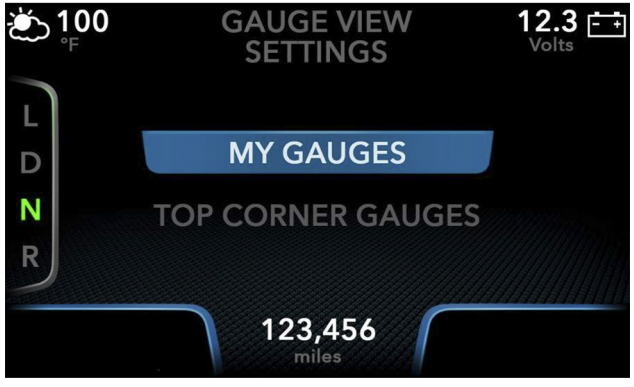
The Language option allows the operator to choose what language the Premium Electronic Gauge Cluster screen will be displayed in. The default language is English. The other languages offered are French, Spanish, and an Other option for any additional programmed languages.

0000405181

Language Settings

Gauge View Settings

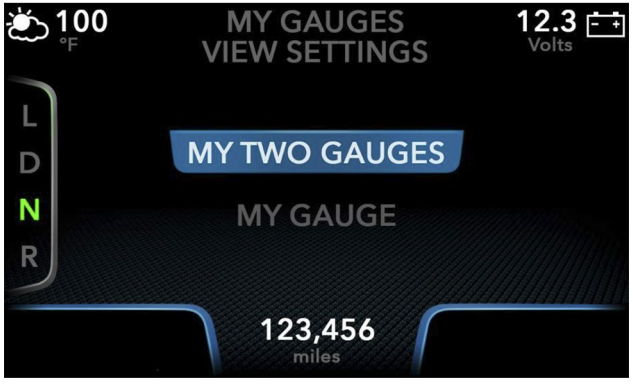
The Gauge View Settings option is where the operator can either set up the gauges displayed in the My Gauges subcategory or set up what information is displayed in the top corners of the cluster display screen.



0000405193

Gauge View Settings

My Gauges Setup



0000405215

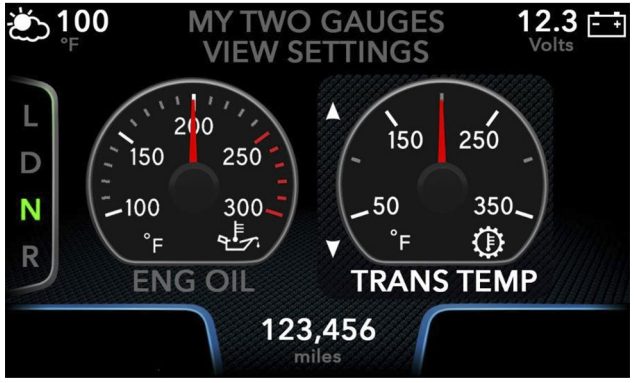
My Gauges View Settings

To program the gauges in the My Gauges subcategory, perform the following process:

1. Select the SETUP tab in the main menu.
2. Use the CDC joystick to scroll down and highlight the GAUGE VIEW SETTINGS category, and press OK.
3. Highlight the MY GAUGES category, and press OK.
4. Select either MY TWO GAUGES or MY GAUGE.
5. Scroll up or down through the gauge options and choose the desired gauge(s).

6. If selecting two gauges, select the first desired gauge on the left and the second desired gauge on the right.
7. Once the desired gauge(s) are selected, press OK to save.
8. The My Gauge is set up in the same manner.

After setting up the gauges, you can go back to the MY GAUGES subcategory on the GAUGES tab of the main menu and confirm that the gauges are correct.



0000405195

My Two Gauges View Settings

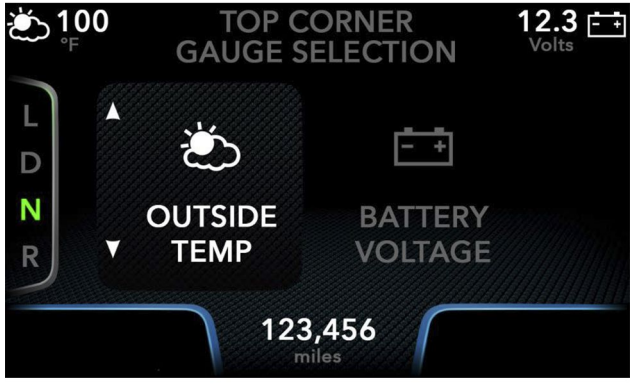
Top Corner Gauge Setup

The left and right top corner gauges are displayed when the main menu is not being used.

NOTE: The Top Corner Gauges may vary depending upon the vehicle model and the options chosen at time of purchase.

The top corner gauges give information on the following:

- Outside Temperature (Standard)
- Battery Voltage (Standard)
- Engine Oil Temperature (Optional)
- Boost Pressure (Optional)
- Fuel Range (Optional)
- Front Rear Axle Temperature (Optional)
- Rear Rear Axle Temperature (Optional)
- Transmission Temperature (Optional)
- Air App Pressure (Optional)
- DEF Range (Optional)
- Axle 1 Pressure (Optional)
- Axle 2 Pressure (Optional)
- Tire Pressure (Optional)



0000405237

Top Gauge Selection

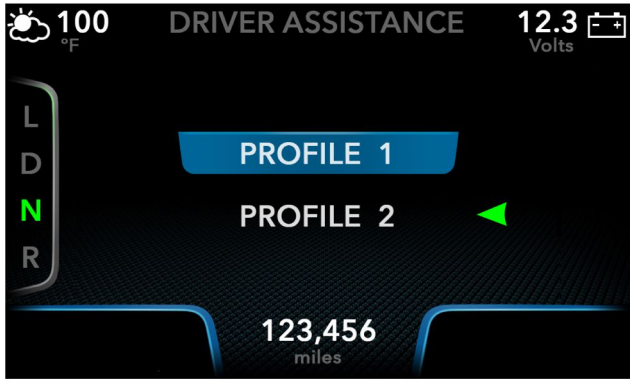
To program the top corner gauges, perform the following process:

1. Highlight the TOP CORNER GAUGES option and press OK.
2. To select the gauges, push the CDC joystick up or down to scroll through the gauge options until the desired gauge is highlighted.
3. Press the CDC joystick to the right to set up the second gauge, and scroll through the gauges until the desired option is reached.
4. To set the gauges, press OK.
5. This will set the highlighted choices as the top corner gauges.

Steering Effort Setting

The STEERING EFFORT SETTING option allows you to choose between two preconfigured steering effort profiles:

- Profile 1: Provides heavier (firmer) steering to help maintain control of the vehicle at higher speeds.
- Profile 2: Provides lighter (easier) steering to increase control at low speeds.



0000467533

Steering Effort Profiles

Follow these steps to select a profile:

1. Scroll right in the main menu until the SETUP tab is highlighted.
2. Select STEERING EFFORT SETTING. A screen that lists the available profiles appears. The GREEN arrow indicates the currently active profile.
3. Highlight the profile you wish to select by pressing up or down on the CDC joystick.
4. Press OK to select the highlighted profile.

Reset

0000405291

Reset Screen

The reset function will return all of the features of the cluster display to the factory settings. If this option is selected, a pop-up will appear asking to confirm the reset to default settings. From there, the operator can choose to accept the reset by pressing YES or cancel the reset by pressing CANCEL.

SECTION 8 — ADVANCED DRIVER ASSIST SYSTEM

Overview

The advanced driver assist system enables the vehicle to keep a constant speed without the driver's foot on the accelerator; the system can also change vehicle speed based upon objects ahead of the vehicle. This system is comprised of the Collision Mitigation System (CMS) and Adaptive Cruise Control (ACC). The CMS is a system that can slow down the truck in an attempt to avoid collisions; this works while the vehicle is in cruise control mode as well as when the driver is operating the accelerator. The system will monitor the operator's truck speed as well as vehicles ahead. It uses the CMS in order to slow the truck in conditions that warrant speed reductions.

Advanced driver assist systems include: **Bendix® Wingman® Fusion™ system**, **Bendix® Wingman® Advanced™ Collision Warning System**, and **Meritor Wabco® OnGuard™ Collision Safety System**. For more information on these systems, refer to the appropriate Operation and Maintenance Manual.

WARNING

To prevent personal injury and / or death, or damage to property, always maintain safe operating procedures such as remaining in the appropriate lane, operating at safe speed, and maintaining safe distance between the vehicle and other vehicles on the road. The driver assistance system does not replace the need for a skilled, alert professional driver, reacting appropriately and in a timely manner.

Configuring Speed Limit Detection

0000467179

Speed Limit Sign / Country Screen

Driver assistance systems may also monitor posted speed limits and provide warnings when you exceed those limits. To work correctly, these systems must be configured to respond to the correct road sign format for the country in which the vehicle is being driven.

1. Scroll right in the main menu until the ACC tab is highlighted.
2. Select SPEED LIMIT SIGN / COUNTRY.
3. Select the type of speed limit sign that is appropriate for the country in which the vehicle will be operating.

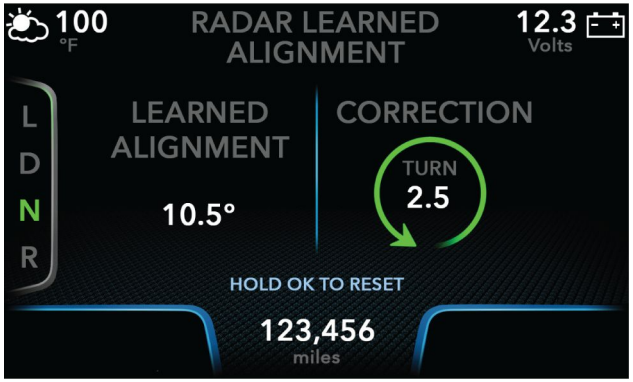
Bendix® Wingman® Fusion™ Radar Alignment

The radar sensor at the front of the vehicle must be properly calibrated to ensure proper operation of the Driver Assist System. If the sensor is out of the acceptable range, it may need to be adjusted or serviced. There are two ways of determining the amount of adjustment required:

- Radar Learned Alignment is the preferred method. It uses data gathered over many hours of actual driving to produce a suggested alignment correction.
- Dynamic Radar Alignment should be used only in rare cases when there is no learned alignment data available. It suggests an alignment correction based on radar data it is seeing for a vehicle the truck is currently following. Since the vehicle must be in motion to determine this value, an assistant will be required to make the actual adjustment while the operator controls the vehicle safely and within local regulations.

NOTE: Radar alignment is a task for qualified service technicians only. An outline of these procedures is provided here to show how the Premium Electronic Gauge Cluster may be used as part of these procedures. Consult the service documentation for the Bendix® Wingman® Fusion™ system for detailed instructions.

Radar Learned Alignment

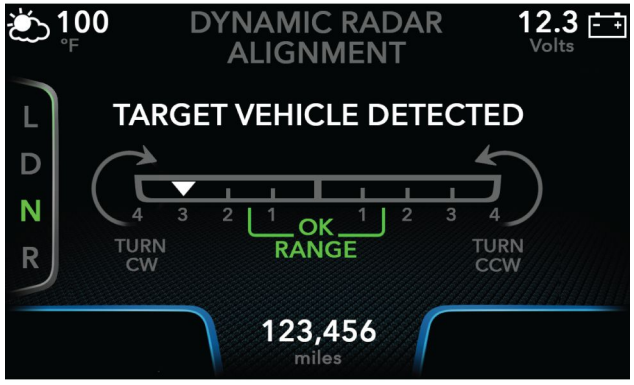


0000467178

Radar Learned Alignment Screen

1. Scroll right in the main menu until the ACC tab is highlighted.
2. Select RADAR LEARNED ALIGNMENT. A suggested alignment correction will be displayed.
3. Perform the suggested alignment correction according to the instructions in Bendix Wingman service documentation.
4. When alignment correction is finished, press and hold the OK button until the confirmation message appears.
5. Highlight the YES option by pressing right on the CDC joystick.
6. Press OK to confirm.

Dynamic Radar Alignment



0000467177

Dynamic Radar Screen

1. On a long stretch of straight road, follow a cooperating vehicle, maintaining a speed above 35 mph (56 km/h) and a following distance of 50–300 feet (15–91 meters). Both vehicles should stay in the center of the lane.
2. Scroll right in the main menu until the ACC tab is highlighted.
3. Select DYNAMIC RADAR ALIGNMENT.
4. When speed and range requirements are met, a triangle indicating the adjustment needed will appear on the gauge displayed in the Dynamic Radar Alignment screen. Because this is a dynamic measurement, the indicator will move left and right. Observe the position of this indicator long enough to determine the range of movement and then choose the average value. Use this value as the suggested adjustment.
5. If the suggested adjustment is NOT within the OK RANGE, perform the suggested alignment correction according to the instructions in Bendix Wingman service documentation.
6. When alignment correction is finished, press and hold the OK button until the confirmation message appears.
7. Highlight the YES option by pressing right on the CDC joystick.
8. Press OK to confirm.

Adaptive Cruise Control Display

The Adaptive Cruise Control (ACC) display is located in the bottom right of the display screen. This feature aids in the safety of the operator. Using sensors in the front of the vehicle, this system will alert the operator of vehicles ahead and how fast they are traveling.

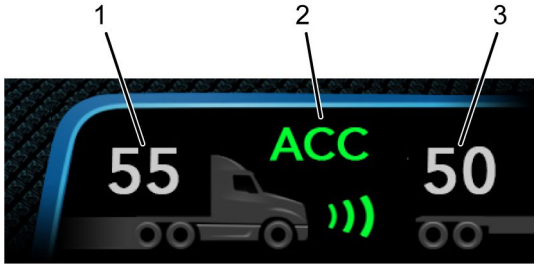
Alerts will pop up if the operator's vehicle is getting too close to the vehicle ahead. When the vehicle is too close to the vehicle ahead, the CMS will activate to slow down the truck to avoid collision.

WARNING

To prevent personal injury and / or death, or damage to property, do not rely on the CMS system to slow the vehicle. Operator intervention should occur prior to the activation of the collision mitigation system.

WARNING

To prevent personal injury and / or death, or damage to property, always be aware of the ACC and CMS system statuses to avoid possible collisions.



0000467169

Viewer Layout

Item	Name	Description	
1	ACC Set Speed	The ACC set speed to which your vehicle is set.	
2	ACC Status	The color here indicates whether the vehicle ahead is too close.	
		GREEN	Safe distance
		YELLOW	Vehicle is getting too close; driver intervention suggested
		RED	Vehicle is too close; driver intervention required
3	Target Vehicle Speed	The speed (in mph or km/h) of the vehicle in front of you.	

Adaptive Cruise Control Display Examples

Examples of the ACC display are shown in the following table:

Example	Screen	Description
Cruise or ACC / CMS is OFF	Image Not Shown	The cruise control section will be blank due to inactive cruise control.
ACC is Set But is Not Tracking a Forward Vehicle	 0000405374	There is no vehicle detected ahead.
ACC Vehicle Distance is OK	 0000405375	The ACC is active and the vehicle ahead is at a safe distance.
ACC Vehicle Distance is Getting Too Close	 0000405376	The ACC is active and the vehicle ahead is beginning to get too close.

Example	Screen	Description
ACC Vehicle Distance is Too Close	 0000405377	The ACC is active and the vehicle ahead is too close; the operator should take action by pressing on the brakes to avoid collision.
CMS Active	 0000406866	The CMS is active and the distance of the vehicle ahead is OK.
CMS Vehicle is Getting Too Close	 0000406865	The CMS system is active and the vehicle ahead is getting too close; driver intervention is suggested.
CMS Vehicle is Too Close	 0000405378	The CMS is active and the vehicle ahead is too close; the CMS is actively braking to avoid collision.

Example	Screen	Description
Cruise Enabled		The cruise control is ON (optional).
Cruise Enabled, Speed is Set		The cruise control is ON and vehicle speed is set (optional).

Engaging and Disengaging Cruise Control

WARNING

To prevent personal injury and / or death, or damage to property, do not use the cruise control system when unpredictable driving conditions are present. Such conditions include: heavy traffic, roads that are winding, icy, snow covered, slippery, or with a loose surface. These conditions may cause wheel slippage and loss of vehicle control.

Engaging Cruise Control

1. Press the cruise control ON button on the left-side steering wheel control.
2. Bring the vehicle to the desired operating speed (above 35 mph [56 km/h])
3. Press SET - (Set / Decelerate).

Increasing or Decreasing the Set Speed

With cruise control engaged:

- Press RES + (Resume / Accelerate) to increase set speed
- Press and hold SET - (Set / Decelerate) to decrease vehicle speed.

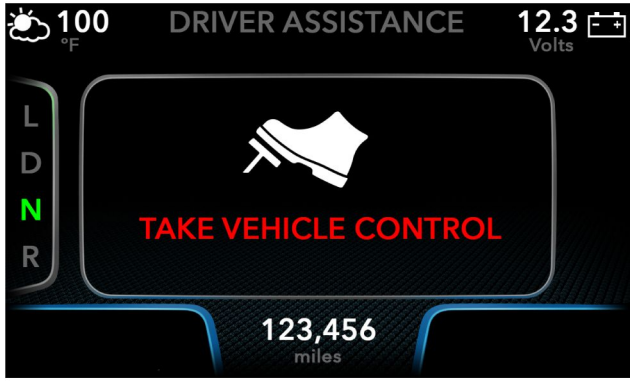
Disengaging Cruise Control

Tapping lightly on the brake or clutch pedal will disengage cruise control but hold the selected speed in memory. To return to the preselected speed, press RES + (Resume / Accelerate).

To cancel a selected speed setting, press the OFF button on the left-side steering wheel control. Turning the ignition switch OFF will also cancel the speed setting. Both actions will remove the speed setting from memory.

ACC with Stop and Driver Go

If equipped, this feature allows adaptive cruise control to slow the vehicle to a complete stop when necessary and then wait for the operator to take action. When this occurs, a prompt is displayed on screen. The text of this prompt first appears in AMBER. If the operator does not respond, it becomes RED and is accompanied by an audible tone.



0000467155

Stop and Driver Go Prompt

The operator can respond either by pressing the brake pedal or by pressing the accelerator pedal.

If the operator presses the brake pedal, cruise control is disengaged normally. To re-engage ACC, the operator would have to accelerate to at least 25 mph (40 km/h) and press the RES + (Resume / Accelerate) button on the left-side steering wheel control.

If the operator presses the accelerator pedal, the vehicle will automatically resume cruise control once the vehicle reaches 6 mph (9.7 km/h). However, if the brake pedal is pressed before the vehicle resumes, cruise control will be disengaged.

Lane Departure System

WARNING

To prevent personal injury and / or death, or damage to property, avoid disabling the lane departure system.

The lane departure system is a safety feature designed to alert the operator when the vehicle starts to veer into a different lane. When the vehicle starts to cross visible lane markings without the turn signal engaged, the radio will mute and an audible alert will come through the vehicle's speakers to inform the driver that they are drifting out of the lane. This system also has a feature that recognizes the speed limit and alerts the driver when the vehicle is in excess of the speed limit.

0000467156

Lane Departure Warning

When viewing the Driver Assistance screen, the lane departure is indicated by the displayed lane boundaries. The boundary crossed will turn RED. See Driver Assistance Screen (Overview, page 67).

When viewing any other screen, a lane departure warning pop-up will be displayed.

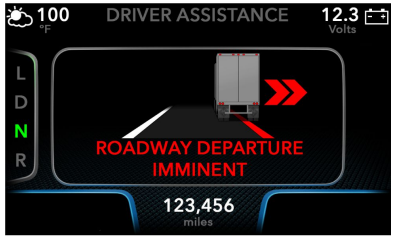
NOTE: The LDW disable switch on the instrument panel will temporarily disable both the Lane Departure Warning feature and the Roadway Departure System. The switch will also disable LKAS (if equipped).

These systems will also be disabled if an issue with the camera or the radar prevents them from operating correctly.

Roadway Departure System

If equipped, the roadway departure system alerts the operator if the vehicle is leaving the roadway. This alert has two stages:

1. When the vehicle starts to depart the roadway (its center line crosses the lane boundary), a warning pop-up is displayed and an audible tone sounds.



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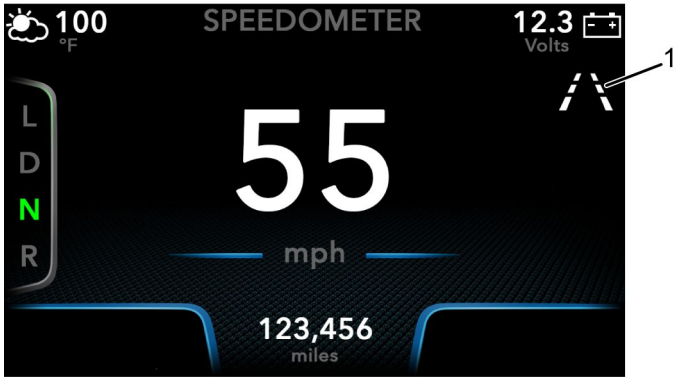
2. If the vehicle departs the roadway (is completely over the line), the vehicle will engage emergency braking, which triggers a second warning and audible tone.

0000467160

Lane Keep Assist System (LKAS)

If the vehicle is traveling above a minimum speed and able to detect the lane boundaries, the Lane Keep Assist System (if equipped) is capable of taking corrective steering action to help keep the vehicle in the lane.

Lane Keep Assist Symbol



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Gauge Cluster with LKAS Equipped

1. Lane Keep Assist Symbol

When the Lane Keep Assist System is equipped and enabled, its status is indicated by a symbol on the right side of the screen.

The symbol does not appear if:

- LKAS has been turned off using the LDW disable switch
- LKAS is not functional (due to a fault)

The colors in this symbol indicate status. Left and right lane boundary markers are independent. The left may have a different color than the right.

Color	Status
 0000467180 WHITE	Standby. Either the vehicle is below the speed threshold or the system cannot detect this lane marker.
 0000467182 GREEN	Active. The system is capable of assisting steering should you get too close to this lane boundary.
 0000467181 AMBER	Actuating. The system is taking corrective steering action for the lane boundary indicated. For example, if the vehicle is drifting toward the left lane marker, the system will input steering to help keep the vehicle in the lane, and the left lane marker will display in AMBER.

SECTION 9 — DRIVER ASSISTANCE SCREEN

Overview

If your vehicle is equipped with a driver assistance system such as CMS or ACC, a Driver Assistance screen can be selected. Images shown depict truck messaging.

To reach this screen, scroll right in the main menu until the ADAS tab is selected.

Images shown depict truck messaging.

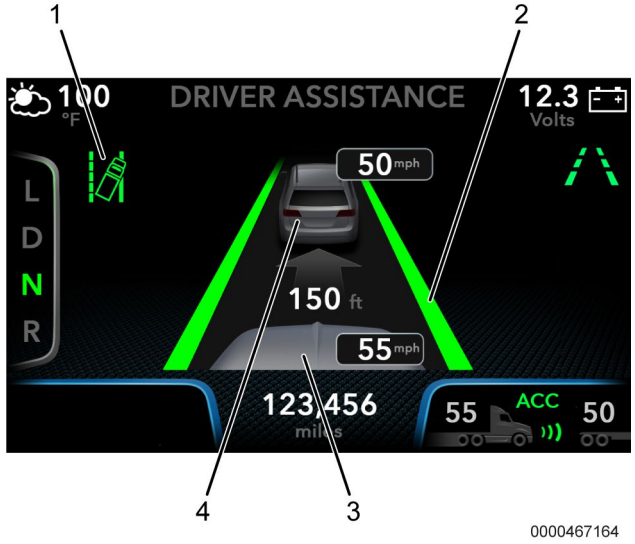
This screen graphically displays information provided by:

- Adaptive Cruise Control
- Lane Keep Assist
- Lane Departure Warnings

Lane Departure System Status Icon

The color of this icon near the upper-left corner indicates whether the lane departure system is enabled.

Color	Status
GREEN	Lane departure system is enabled.
GRAY	Lane departure system is disabled.



Driver Assistance Screen

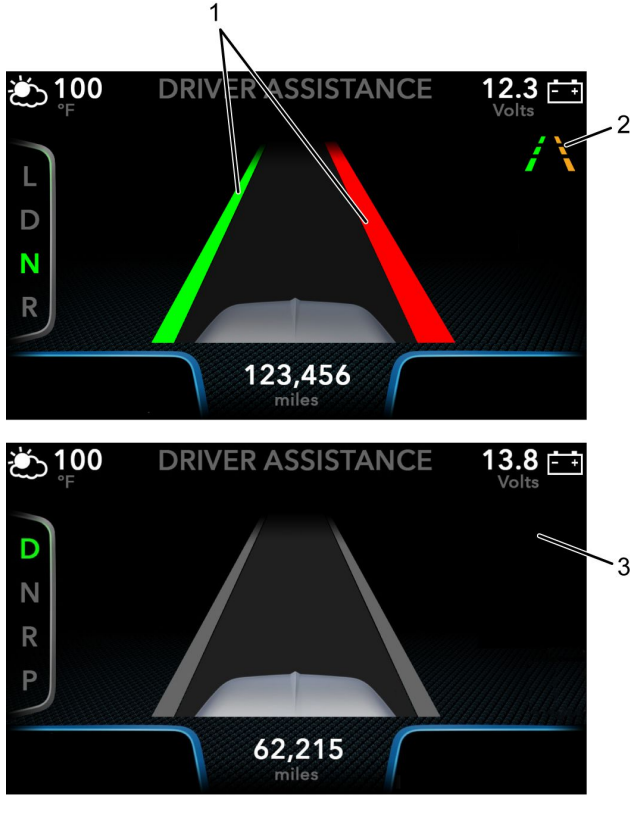
1. Lane departure system status
2. Lane boundary marker
3. Vehicle front
4. Leading vehicle (if detected)

Lane Boundary Markers

The lane boundary markers show status from the Lane Keep Assist System. They are similar to the lane boundaries in the Lane Keep Assist Icon. However, the lane boundaries on the Driver Assistance screen display more information.

Color	Meaning
GRAY	Disabled. Lane Keep Assist is not equipped or has been turned OFF.
WHITE	Standby. Either the vehicle is below the speed threshold or the system cannot detect this lane marker.
GREEN	Active. The system is capable of assisting steering should you approach this lane boundary.
AMBER	Actuating. The system is taking corrective steering action for the lane boundary indicated.
RED	Lane Departure Warning. The vehicle is departing the lane.*

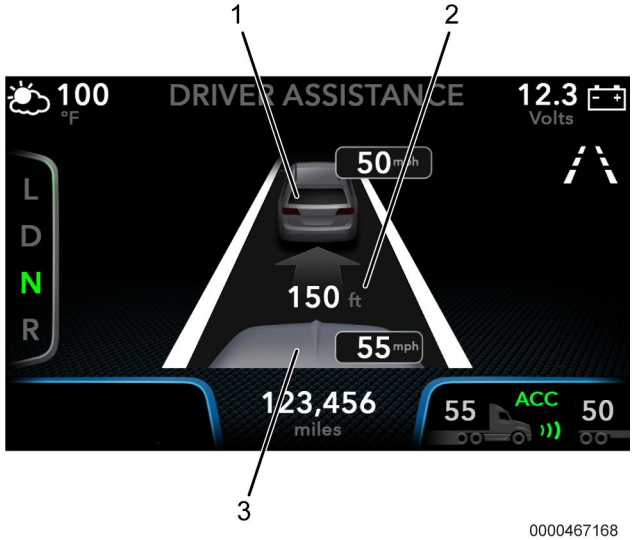
* In the Driver Assistance screen, the Lane Departure pop-up does not appear. The RED lane boundary provides the same information.



Driver Assistance: LKAS Features

1. Lane boundary markers
2. Lane Keep Assist icon
3. Driver Assistance with LKAS disabled

Lead Vehicle Indication



Driver Assistance (ACC Features)

1. Lead vehicle and lead vehicle speed
2. Distance to lead vehicle
3. Front of your vehicle and your speed

When a lead vehicle is detected and ACC is equipped, the Driver Assistance screen will display a representation of the lead vehicle, along with its speed and the distance to that vehicle.

An image representing the front of your own vehicle and your own speed will be displayed at all times (even if no lead vehicle is present).

NOTE: The speed displayed on your vehicle is the actual speed of the vehicle. This may differ from the speed displayed in the ACC status panel, which is the speed at which cruise control is currently set.

SECTION 10 — VEHICLE TELEMATICS

Telematics Module Overview (If Equipped)

The vehicle telematics module allows the dealer and user to obtain information and update vehicle systems over the air. For more information on the telematics module, refer to the appropriate Operation and Maintenance Manual.

Telematics Messages

The vehicle telematics module (if equipped) displays messages to the operator using the Premium Electronic Gauge Cluster. These cluster messages may require driver confirmation. Messages can be confirmed by pushing the OK button on the cluster display control. Refer to the following example of a common telematics module message. For more information about telematics module cluster messages, please refer to www.internationaltrucks.com/support/oncommand-connection.

NOTE: The following image identifies a typical vehicle telematics cluster message layout.

0000450822

Vehicle Telematics Message

SECTION 11 — PTO TRIP SCREENS

PTO Overview

The Power Take-Off (PTO) screens provide the operator with a trip counter for the Power Take-Off unit. These trip counters keep track of how much fuel is being used and how long the PTO has been running.

There are screens for machine PTO and screens for engine PTO. Move the CDC joystick up or down to switch between them.

Each PTO has two screens:

- PTO Trip Time and Fuel
- PTO Total Time and Fuel

PTO Time and Fuel

The first PTO trip screen shows the trip time and trip fuel. The PTO trip time keeps track of how many hours the PTO has been running. The PTO fuel indicates how many gallons are in the PTO fuel tank.

0000405324

Machine PTO Trip Screen

The PTO trip counters work the same way that the vehicle trip counters work. To reset the counters, press and hold the OK button for 3 seconds or until the confirmation pop-up appears.

Total PTO Time and Fuel

The Total PTO time and fuel screens indicate the total amount of time and fuel used by the unit.

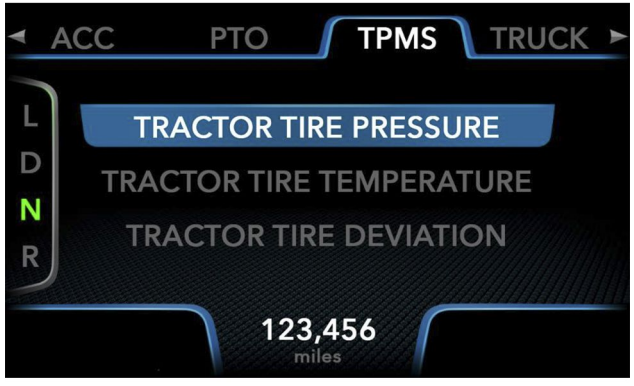
0000405325

Machine PTO Total Screen

SECTION 12 — TPMS DISPLAY (OPTIONAL)

Overview

The purpose of the Tire Pressure Monitoring System (TPMS) is to keep track of the tire pressures, temperatures, and deviations in each tire on the tractor portion of the vehicle. The TPMS can be displayed in PSI (pounds per square inch) or kPa (kilopascals). In order for the information to be displayed, the vehicle may require driving for a few minutes.



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TPMS Menu

Tire Pressure

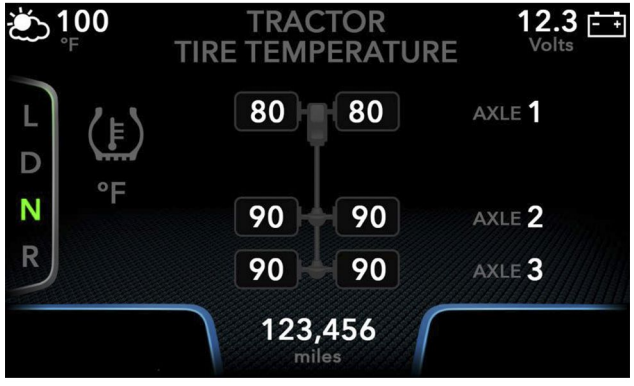
The TPMS displays a reading for the tire pressure in each of the tires in the tractor of the truck. If the pressure falls below a certain threshold, then a caution alert will come up notifying the operator of the under pressured or deflated tire.

0000405332

Tractor Tire Pressure

Tire Temperature

The tire temperature displays individual tire temperatures on the tractor.



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Tractor Tire Temperature

Deviation

The tire deviation screen displays the decreased air pressure in the tire(s).

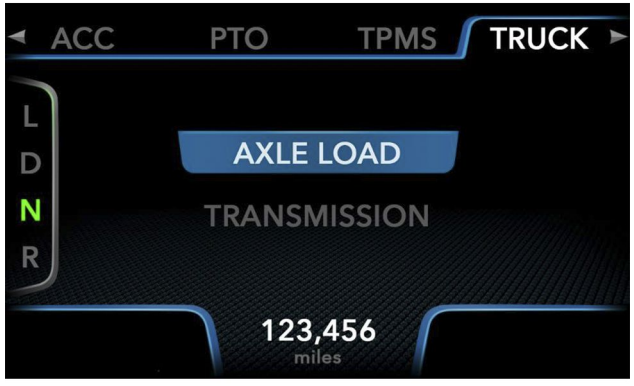
0000405341

Tractor Tire Deviation

SECTION 13 — TRUCK INFORMATION (OPTIONAL)

Overview

The truck information section displays axle load and transmission service information. This information can be used to determine how much weight is on the axles and when the transmission needs regular maintenance.



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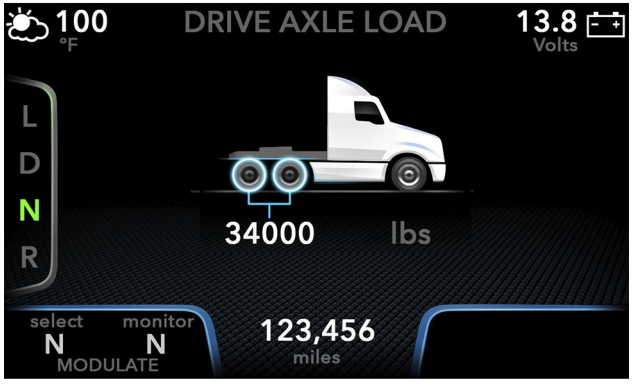
Truck Information Menu

Axle Load

The Axle Load option allows the operator to view how much weight is on each of the rear axles. The screen displays a reading for the weight on an individual axle or the total weight on both axles.



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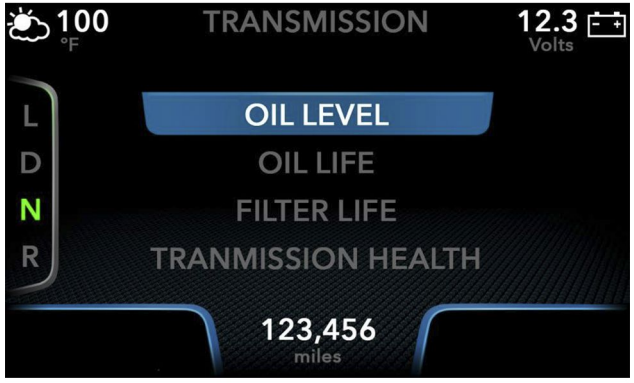
Axle Load

Transmission

The Transmission subcategory contains information for transmission service.



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Transmission Menu

This service information includes:

- Oil Level
- Oil Life
- Filter Life
- Transmission Health

The Oil Level option provides a reading on transmission fluid level.

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Transmission Oil Level

The Oil Life option provides a reading on the quality of the oil as a percentage (%); a fresh fluid change will show as 100%.

0000405419

Oil Life

The Oil Filter Life option provides information on the condition of the transmission oil filter.

0000405422

Oil Filter

The Transmission Health option relays information on the service condition of the transmission.

0000405428

Transmission Health

SECTION 14 — TRANSMISSION DISPLAY

Overview

The transmission information is located in the bottom left of the screen. The transmission information in this location will pertain to the type of transmission selected at the time of order. This information includes:

- Gear information
- Service indicators
- Transmission messages

Allison®

The information for the Allison® transmission will appear in the lower left corner of the screen where the transmission information is located. The main types of information given in this section of the screen are the selected gear, the monitored gear, and the mode of the transmission. If there should be a problem concerning the transmission, an alert message will pop up in this location of the cluster display.

The list of common transmission messages includes:

- Trans Oil OK
- Trans Oil # of Quarts Low
- Trans Oil # of Quarts High
- Settling Time
- Engine RPM Too Low
- Engine RPM Too High
- Must Be In Neutral
- Oil Temp Too Low
- Oil Temp Too High
- Vehicle Speed Too High
- Sensor Error
- Oil Life __ %
- Oil Filters OK
- Trans Health Low
- #### Inactive
- #### Active

Eaton®

The Eaton® transmission information is located in the bottom left of the viewer screen. For more information, see the Eaton® Transmission Operation and Maintenance manual.

SECTION 15 — FAVORITES SCREENS

Overview

The Favorites screens are informational screens that are frequently used. These screens are part of the home screen; in order to scroll through them, press the BACK button. Keep hitting the BACK button to pull up the different Favorites screens.

Screens

The Favorites screen options are as follows:

- Speedometer
- Miles Till Empty
- Fuel Economy
- My Gauges

SECTION 16 — INDEX