



EN

# Bobcat®

## Operation & Maintenance Manual



### Telescopic Handler

(T35.105A) S/N B41511001 - B41516000, B41516001 & Above  
(T35.105B) S/N B41411001 - B41416000, B41416001 & Above  
(T35.105LA) S/N B41711001 - B41716000, B41716001 & Above  
(T35.105LB) S/N B41611001 - B41616000, B41616001 & Above  
(T36.120SLA) S/N B41911001 - B41916000, B41916001 & Above  
(T36.120SLB) S/N B41811001 - B41816000, B41816001 & Above



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### REFERENCE INFORMATION

Write the correct information for YOUR Bobcat telescopic handler in the spaces below. Always use these numbers when referring to your Bobcat telescopic handler.

Telescopic Handler Serial Number

Engine Serial Number

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NOTES:

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YOUR BOBCAT DEALER:

ADDRESS:

PHONE:

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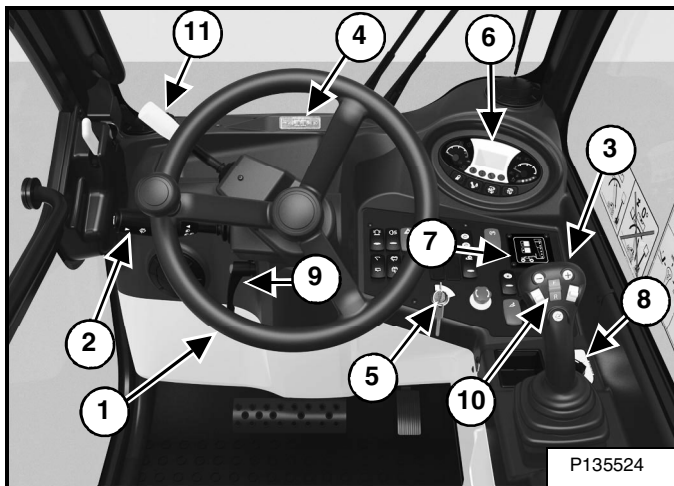
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## OPERATOR CONTROLS IDENTIFICATION

### Operator Components

Figure 9



Steering Wheel (Item 1) [Figure 9] (See Steering Wheel on Page 48.)

Multi-function Lever (Item 2) [Figure 9] (See Multi-function Lever on Page 49.)

Hydraulic Control Lever (Joystick) (Item 3) [Figure 9] (See HYDRAULIC CONTROLS on Page 84.)

Centre Indicator Panel (Item 4) [Figure 9] (See Centre Indicator Panel on Page 51.)

Right Instrument and Indicator Panel (Item 5) [Figure 9] (See Right Instrument And Indicator Panel on Page 50.)

Display Panel (Item 6) [Figure 9] (See Display Panel on Page 54.)

Longitudinal Load Moment Indicator (Item 7) [Figure 9] (See Longitudinal Load Moment Indicator (LLMI) on Page 52.)

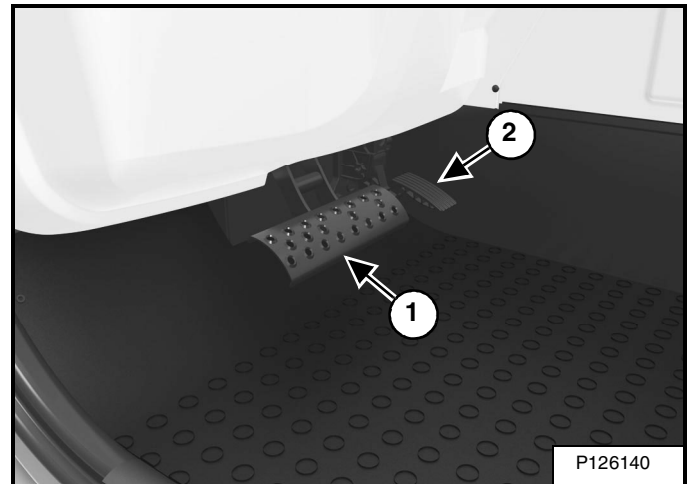
Selection Mode Switch (Item 8) [Figure 9] (See Selection Mode Switch on Page 126.)

Steering Wheel Tilt Adjustment (if equipped) (Item 9) [Figure 9] (See Steering Wheel Tilt Position on Page 49.)

Travel Direction Switch (Item 10) [Figure 9] (See Travel Direction on Page 48.)

FNR Lever (Item 11) [Figure 9] (See Travel Direction on Page 48.)

Figure 10



Brake Pedal / Inching Control (Item 1) [Figure 10] (See Brake Pedal And Inching Control on Page 58.)

Accelerator Pedal (Item 2) [Figure 10] (See Accelerator Pedal on Page 58.)

## WARNING

Operate only from operator's seat with seat belt securely fastened. Never carry riders or use attachments, other than an approved man platform, as a man lift or work platform. Keep bystanders away from the work area.

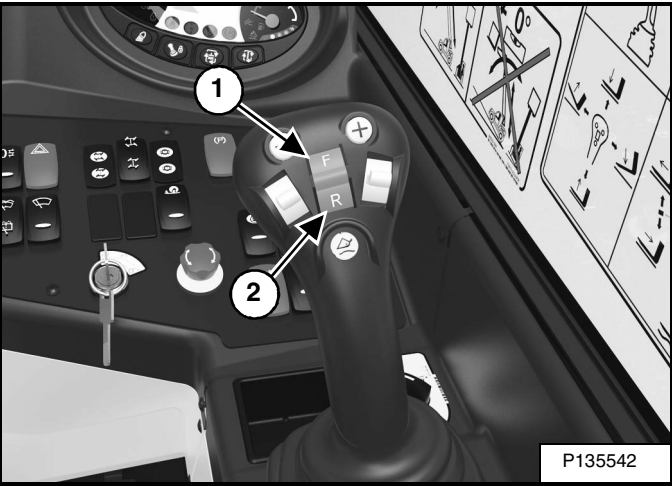
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OPERATOR CONTROLS IDENTIFICATION (CONT'D)

Travel Direction

Travel Direction Switch

Figure 11

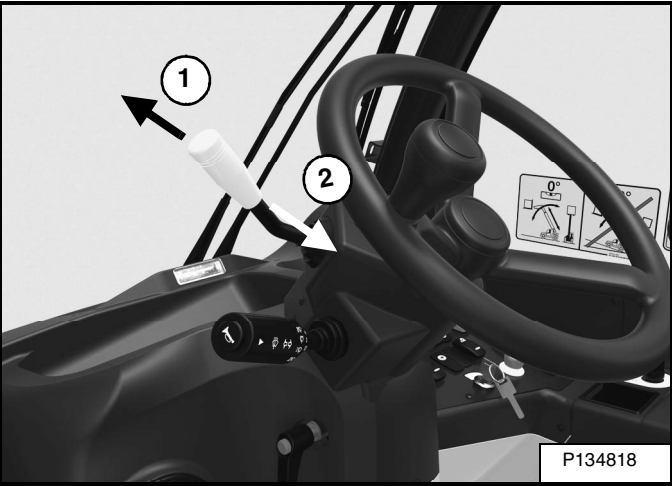


Press the top of the switch (Item 1) for forward travel; the bottom of the switch (Item 2) [Figure 11] for reverse travel.

The back-up alarm will sound when the switch is in the reverse position.

Travel Direction Lever (If Equipped)

Figure 12

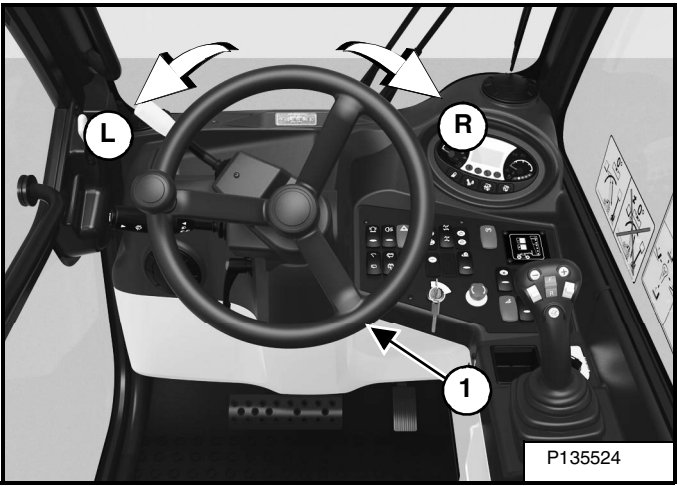


Move the lever forward (Item 1) for forward travel; backward (Item 2) [Figure 12] for reverse travel.

The back-up alarm will sound when the lever is in the reverse position.

Steering Wheel

Figure 13

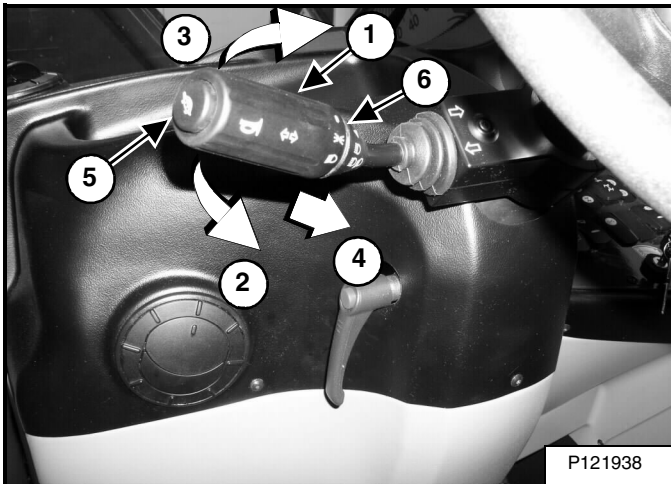


Turn the steering wheel (Item 1) [Figure 13] clockwise (R) to turn right; anticlockwise (L) to turn left. (See DRIVING AND STEERING THE TELESCOPIC HANDLER on Page 75.)

## OPERATOR CONTROLS IDENTIFICATION (CONT'D)

### Multi-function Lever

Figure 14



This lever (Item 1) [Figure 14] has four functions:

- Direction signal
- Horn
- Travel speed
- Parking lights and head lights.

#### Direction Signal

Move the lever backward (Item 2) for left direction signal; forward (Item 3) [Figure 14] for right direction signal.

**NOTE: Be sure to turn the direction signals off after you have completed the turn.**

#### Horn

Push the lever in (Item 4) [Figure 14] to sound the horn.

#### Two-Speed Control

Models T35.105A, T35.105LA and T36.120SLA with S/N 11001 through 16000 and models T35.105B, T35.105LB and T36.120SLB are equipped with the two-speed control.

Press the button (Item 5) [Figure 14] at the end of the lever to toggle between high and low speed. This can be done without stopping first.

When low speed is activated, the low speed light is ON. (See Display Panel on Page 54.)

**NOTE: The speed status (low or high) is kept in memory at the end of each run. The same previous status will be active at the next run.**

### Headlights And Rear Lights

The lever also includes the lights switch (Item 6) [Figure 14] which has three positions. Rotate the lever to select front lights:

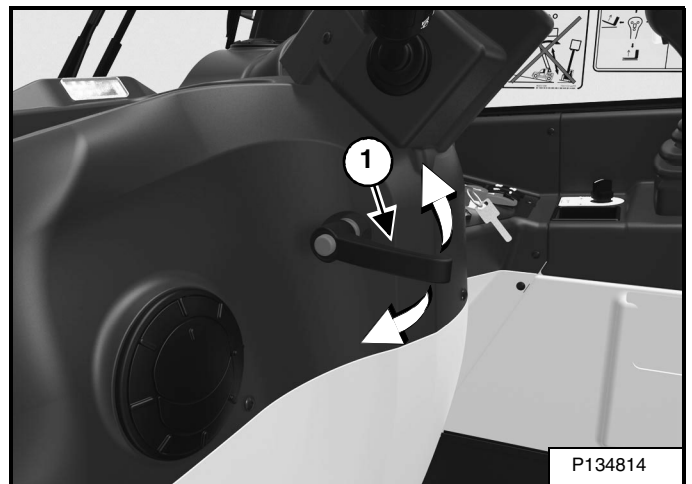
#### OFF

Parking lights and rear lights  
Headlights and rear lights

When the headlights are ON: Push the lever away from the steering wheel and release it to change from high to low or low to high beam headlights.

### Steering Wheel Tilt Position

Figure 15



Turn the lever (if equipped) (Item 1) [Figure 15] anticlockwise to loosen the steering wheel tilt mechanism.

When the steering wheel is in the desired position, turn the lever (Item 1) [Figure 15] clockwise. Tighten firmly to lock position.

**NOTE: Always keep the steering wheel tilt mechanism in the lock position when operating the machine.**

## OPERATOR CONTROLS IDENTIFICATION (CONT'D)

### Right Instrument And Indicator Panel

Figure 16



Figure 17



Right Instrument And Indicator Panel [Figure 16] and [Figure 17]

1. **Rotating Beacon (Green Light) (If Equipped)** - Press the bottom of the switch to turn the rotating beacon (if equipped) ON; press the top to turn OFF.
2. **Rear Fog Lights (Orange Light)** - Press bottom of the switch to turn rear fog lights ON; press top to turn OFF.
3. **Hazard Lights (Red Light)** - Press the bottom of the switch to turn the Hazard Lights ON; press the top to turn OFF. Switch light flashes when Hazard Lights are ON.
4. **Roof Wiper / Rear Wiper (Green Light)** - Press the top of the switch to turn the roof wiper ON. Press the bottom of the switch to turn the rear wiper (if equipped) ON. Move switch to the centre position to turn both wipers OFF.
5. **Washer** - Press and hold the top of the switch to turn the front washer and the top washer ON; press and hold the bottom to turn the rear washer ON.
6. **Front Wiper (Green Light)** - Press the bottom of the switch to turn the front wiper ON; press the top to turn OFF.
7. **Steering Mode Indicator (Orange Light)** - Indicates the active steering mode.
8. **Steering Mode Switch** - To change steering modes (4-Wheel, 2-Wheel, Crab). (See STEERING MODE SELECTION on Page 62.)
9. **Brake Pressure Indicator (Red / Orange Light) (If Equipped)** - Red light comes ON when brake pressure is too low. Orange light comes ON when there is a braking system malfunction.
10. **NOT USED**
11. **NOT USED**
12. **Speed Management (Yellow Light)** - (See SPEED MANAGEMENT on Page 81.)
13. **Parking Brake** - Press the bottom of the switch to engage or disengage the Parking Brake. (See PARKING BRAKE on Page 73.)
14. **Auto Reverse Cooling Fan Switch (White Light) (If Equipped)** - Press bottom of the switch once to clean debris from radiator. Fan resumes normal operation after 80 seconds.
15. **ECO Mode** - Press the bottom of the switch to limit the engine RPM when full RPM is not needed in order to save fuel; press again to turn OFF. (See ECO MODE on Page 98.)
16. **DeSox Switch** - Press the top of the switch to force DeSox. Press the bottom of the switch to inhibit DeSox.
17. **NOT USED**
18. **Hydraulic Quick-Tach Switch (If Equipped)** - Press and hold the top of the switch to unlock the quick-tach. When released, the quick-tach pins will automatically lock at a slow speed. Press and hold the bottom of the switch to speed up locking of the quick-tach.
19. **Stabiliser Lock Switch (Blue Light) (If Equipped)** - For models with S/N 11001 through 16000, press once to activate (unlock) the left and right stabiliser switches (light is ON). Press a second time to lock the left and right stabiliser switches (light is OFF).
20. **NOT USED**
21. **NOT USED**

## OPERATOR CONTROLS IDENTIFICATION (CONT'D)

### Right Instrument And Indicator Panel (Cont'd)

22. **Longitudinal Load Moment Indicator** - (See Longitudinal Load Moment Indicator (LLMI) on Page 52.) Indicates the successive levels of machine longitudinal stability. (See Longitudinal Load Moment Controller (LLMC) on Page 126.)
23. **Emergency Stop** - Push to immediately shut down the engine and its fuel supply. The display screen shows "STOP". Pull to unlock from pressed position.
24. **Key Switch (If Equipped)** - Used to turn the electrical system on and off, and to start and stop the engine. (See Standard Key Panel on Page 95.)
25. **Start Switch (Keyless) (If Equipped)** - Used to turn the electrical system on and off, and to start and stop the engine. (See Keypad Panel (If Equipped) on Page 96.)
26. **Keypad (Keys 0 through 9) (If Equipped)** - Used to enter a number code (password) to allow starting the engine. An asterisk will show in the display screen for each key press.
27. **LOCK Key (If Equipped)** - Used to lock keypad. The lock key will display a red light to indicate a password is required to start the telescopic handler. (See Password Lockout Feature on Page 241.)
28. **UNLOCK Key (If Equipped)** - Used to unlock keypad. The unlock key will display a green light to indicate the telescopic handler can be started without a password. (See Password Lockout Feature on Page 241.)



## WARNING

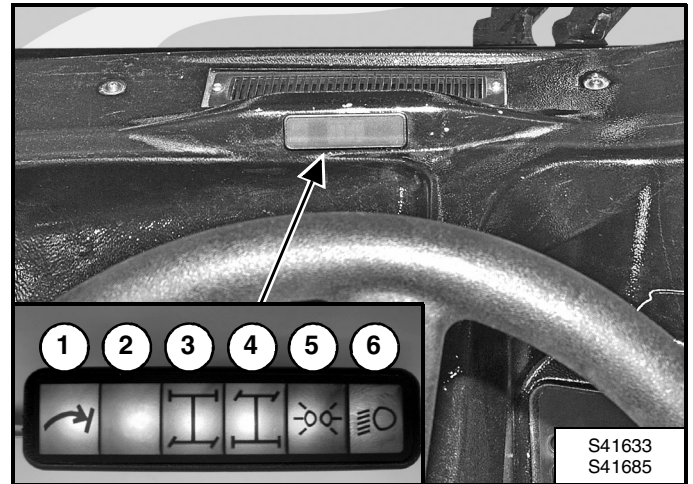
Before you exit the operator's position:

- Put the Travel Direction Control and the Joystick in neutral.
- Engage the parking brake.
- Retract and lower the boom and attachment flat on the ground.
- Stop the engine.

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### Centre Indicator Panel

Figure 18



Centre Indicator Panel [Figure 18]

1. **Frame-Levelling Angle Indicator** - The light comes ON when frame-levelling angle limit (left or right) is reached. (See Using Frame-Levelling (If Equipped) on Page 132.)
2. **NOT USED**
3. **Front Wheel Alignment Indicator (Orange Light).**
4. **Rear Wheel Alignment Indicator (Orange Light).**
5. **Parking Light Indicator (Green Light).**
6. **Low Beam Headlights Indicator (Green Light).**

## OPERATOR CONTROLS IDENTIFICATION (CONT'D)

### Longitudinal Load Moment Indicator (LLMI)

The LLMI warns the operator about inadequate stability in the longitudinal plane (forward direction).

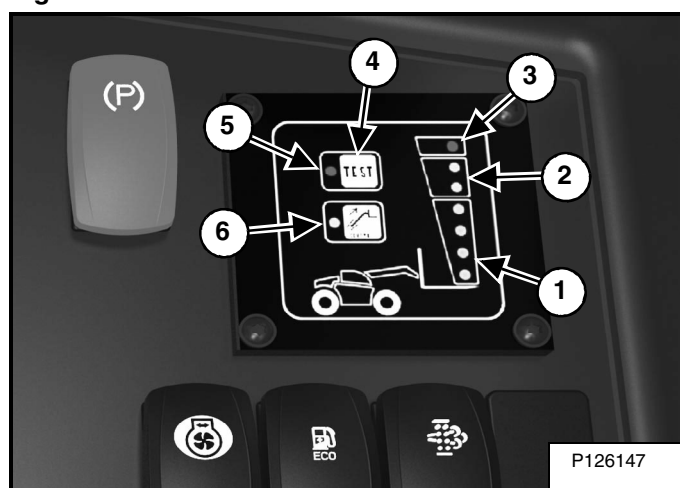
The LLMI is intended to warn for tipping over in the case of:

- The machine is stationary on consolidated, stable and level ground
- The machine is performing load picking, carrying, loading and unloading
- The telescopic boom is not fully retracted.

The LLMI is not intended to warn for tipping over in the case of:

- A sudden overload
- Travelling with a lifted load
- Travelling on rough terrain or on grounds with obstacles and holes
- Travelling across a slope or turning on a slope
- Turning corners too fast or too sharp.

**Figure 19**



The indicator lights (Items 1, 2 and 3) [Figure 19] sequentially illuminate as the machine's longitudinal stability decreases. They identify three zones of the machine's longitudinal stability level:

**NOTE:** All hydraulic movements are functional if the boom is fully retracted, regardless of the machine's stability level.

**NOTE:** When the longitudinal stability level reaches a critical level (Critical zone) with the boom not fully retracted and the boom angle below 5°, only hazardous movements are disabled (tilt and boom lowering are reduced in speed). It is still possible to retract and lift the boom.

**NOTE:** Regardless the longitudinal stability level some boom functions can be disabled depending on the frame angle and stabiliser (if equipped) status. (See Using Frame-Levelling (If Equipped) on Page 132.) and (See Using Stabilisers (If Equipped) on Page 133.)

#### Secure Zone:

Green indicator lights (Item 1) [Figure 19] (four lights). The operator works in a secure zone.

In this zone, the following machine functions are progressively reduced in speed as the machine's longitudinal stability decreases:

- Boom lowering
- Boom extend
- Tilting of attachment
- Auxiliary hydraulic functions.

#### Warning Zone:

Orange indicator lights (Item 2) [Figure 19] (two lights). The longitudinal stability level gets close to the critical zone.

In this zone, the following machine functions are progressively reduced in speed as the machine's longitudinal stability decreases:

- Boom lowering
- Boom extend
- Tilting of attachment
- Auxiliary hydraulic functions.



## OPERATOR CONTROLS IDENTIFICATION (CONT'D)

### Longitudinal Load Moment Indicator (LLMI) (Cont'd)

#### *Critical Zone:*

Red indicator light (Item 3) **[Figure 19]** (one light). The machine's longitudinal stability reaches a critical level. A warning horn is activated along with the red indicator light.

In this zone, the following machine functions are reduced in speed or disabled:

- Boom lowering (disabled with boom angle above 5°, reduced in speed when below 5°)
- Boom extend (disabled)
- Tilt (reduced in speed)
- Auxiliary hydraulic functions (reduced in speed)
- Stabilisers (if equipped) (disabled)
- Frame-levelling (if equipped) (disabled to increase frame angle).

Use the remaining active functions to bring the machine back to a safe level of stability. If necessary, activate the LLMC override mode to enable a disabled function such that the machine can be brought back to a safe level of stability. (See Selection Mode Switch on Page 126.)

**NOTE: The LLMC override mode should only be activated when necessary and is automatically deactivated after a running period of 60 seconds.**

**NOTE: The warning horn cannot be deactivated.**

#### *Test Button:*

The test button (Item 4) **[Figure 19]** has two functions:

- Testing the correct functioning of the LLMI and LLMC. (See LLMC CALIBRATION TEST on Page 165.)
- Calibrating the LLMC (See your Bobcat dealer for calibration).

The test indicator light (RED) (Item 5) **[Figure 19]** is used for the test procedure and the LLMI / LLMC system calibration. The light flashes when the LLMC is in fault mode.

The control indicator light (ORANGE) (Item 6) **[Figure 19]** indicates that the machine is under control of the LLMC. The light flashes when the LLMC override mode is activated. (See Selection Mode Switch on Page 126.)

## OPERATOR CONTROLS IDENTIFICATION (CONT'D)

### Display Panel

Figure 20



1. **Direction Signal (Green Light)** - The light will flash when a direction signal is activated or when the hazard lights are activated.
2. **General Warning (Red Light)** - The light comes on when a general error is present. (See Service Codes\* and "MONITORING THE DISPLAY PANEL" on page 99.)
3. **Low Speed (Yellow Light)** - The light comes on when low speed is activated.
4. **Engine Coolant Temperature (Red Light)** - The light comes on if the engine coolant temperature is high. The light will flash if the engine coolant temperature is extremely high.
5. **Engine Malfunction (Red Light)** - The light comes on when there is an engine malfunction or failure. (See Service Codes\* and "MONITORING THE DISPLAY PANEL" on page 99.)
6. **Engine Temperature Gauge** - Shows the engine coolant temperature.
7. **Display Screen** - Displays information. (See Display Screen on Page 56.)
8. **Seat Belt (Red Light)** - Instructs operator to fasten seat belt. Remains lit for 45 seconds.
9. **Forward - Neutral - Reverse - F-N-R (Yellow Light)** - The light will flash when attempting to start the engine when the Travel Direction Control (Travel Direction Switch and / or Lever) is not in NEUTRAL position. (See Travel Direction on Page 48.)
10. **Joystick Lockout (Red Light)** - The light comes on when the joystick lockout is activated. The light will flash when there is a joystick malfunction or failure. (See Service Codes\*.)
11. **Parking Brake And Operator Position (Red Light)** - The light comes on when the parking brake is engaged. (See PARKING BRAKE on Page 73.) The light will flash and a warning horn is activated when the parking brake pressure is too low OR when the operator leaves the operator seat while the parking brake is not engaged.
12. **Headlights High Beam (Blue Light)** - The light comes on when high beam is activated. (See Multi-function Lever on Page 49.)
13. **NOT USED**
14. **Fuel Level (Red Light)** - The light comes on when the fuel level is low.

\* See SYSTEM SETUP AND ANALYSIS for Service Code description. (See DIAGNOSTIC SERVICE CODES on Page 215.)