# Wagner Smart Screen

*Figure 2-2-1 Wagner Smart Screen*

The Wagner Smart Screen is mounted on the left side A-Pillar. It is a touchscreen device, and a multi-purpose tool that provides information and feedback to the operator.

There are three screens intended for use by the operator; the **Home** screen, the **Information** screen, and the **Operator's Menu** screen. Other screens and settings are available to maintenance/service personnel, accessible only with a PIN. Consult the service manual for your machine for more information.

## Home Screen

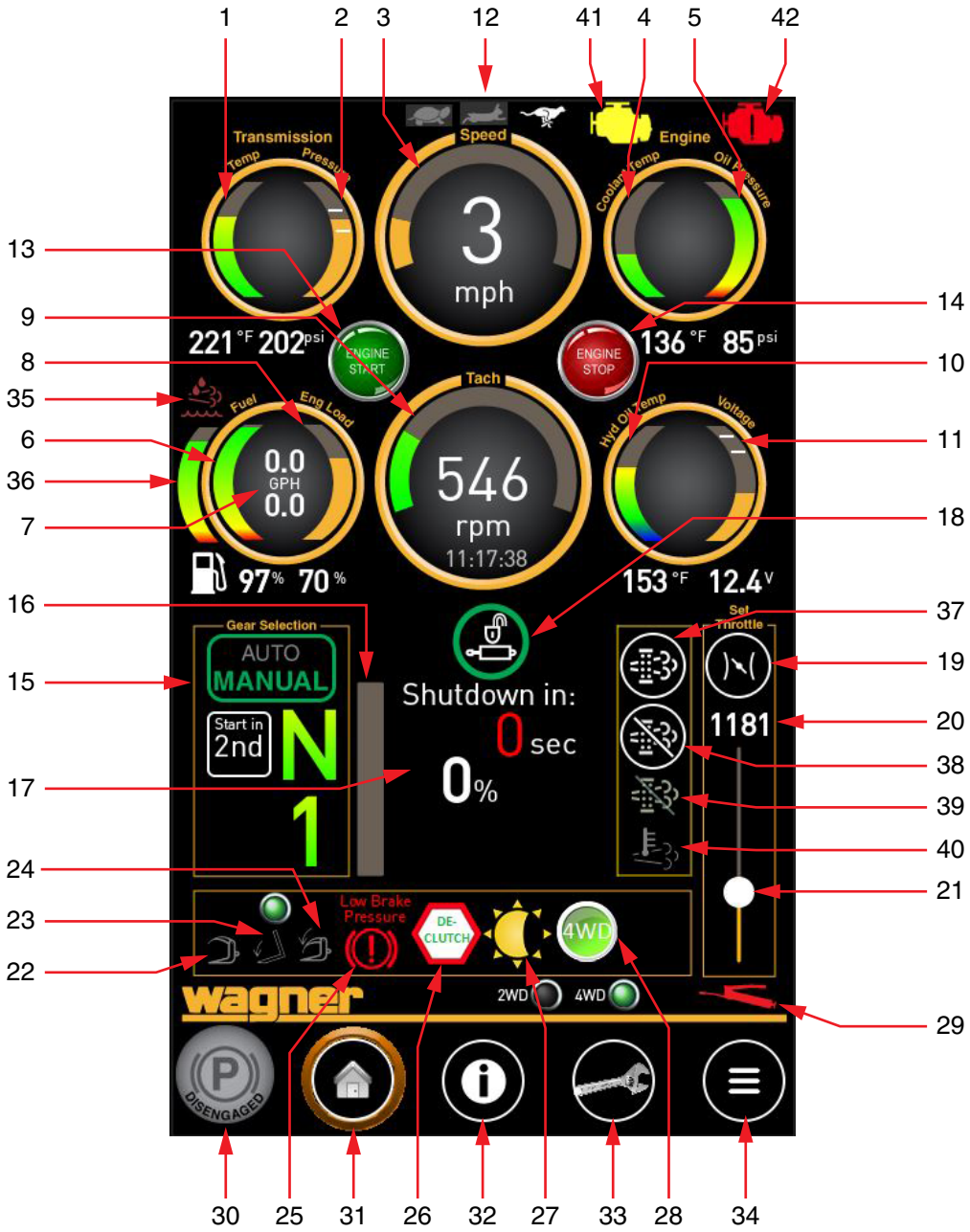


*Figure 2-2-2 Home Screen, Smart Screen Operator Interface*

Press the Home button icon (item 31) to access the Home Screen. The home screen contains several gauges and indicators useful to the operator. See Figure 2-2-2.

### 1. Transmission Oil Temperature Gauge

Displays transmission oil temperature. Temperature will vary depending on drive-train loading and ambient conditions. Do not continuously operate at temperatures above 250° F.

### 2. Transmission Oil Pressure Gauge

Displays transmission oil pressure. Normal pressure range at operating temperature is 180-220 psi.

### 3. Speedometer

Displays the vehicle speed.

### 4. Engine Coolant Temperature

Displays engine coolant temperature. If the temperature holds steady at 220° F or higher, discontinue operation, allow the engine to idle for 3 to 5 minutes, and shut it down. Determine the cause before continuing operation. If a coolant hose failure occurs, shut the engine down immediately. Loss of coolant will result in an incorrect temperature reading.

### 5. Engine Oil Pressure Gauge

Displays engine lubricating oil pressure; refer to engine manufacturer for normal operating range. Check engine oil level using dipstick according to manufacturer's recommended practices.

**⚠ CAUTION**

**Should this pressure drop below engine manufacturer's specifications during operation, STOP THE ENGINE IMMEDIATELY AND DETERMINE THE CAUSE.**

### 6. Fuel Level Gauge

The fuel level gauge indicates how much fuel is remaining in the tank.

### 7. Fuel Efficiency

This displays the current fuel efficiency of the machine in gallons per hour. The top value is an instantaneous value, and the bottom value is the average fuel efficiency since the last key cycle.

### 8. Engine Load

Displays the percentage of available engine HP being used.

### 9. Tachometer

An electrical tachometer indicating engine revolutions per minute (RPM).

### 10. Hydraulic Oil Temperature Gauge

Displays hydraulic oil temperature. **Do Not** operate machine until hydraulic oil temperature has reached a minimum operating temperature of 85°F (29° C).

See Normal Engine Start-Up in Section 4.

### 11. Voltmeter

The voltmeter indicates the voltage condition of the electrical system - whether the alternator is or isn't charging. The numbers indicate volts (acceptable range is 24-28 volts).

### 12. Hydraulic Speed Indicators

These indicate the current hydraulic speed setting, which is set from the Operator's Menu (see Figure 2-2-5).

### 13. Engine Push Start Button

This push button may be used to start the engine. The key must be in the "Run" position.

When pressed, the starter motor will turn for up to 8 seconds. During this time, the button will temporarily read "Stop", in the event that auto start needs to be cancelled while the starter motor is turning.

Once the engine starts, this control will disappear.

### 14. Engine Push Stop Button

This button allows the operator to manually and immediately shut down the engine in an emergency.

### 15. Transmission Direction and Gear

Displays transmission direction:

- **F** - Forward
- **N** - Neutral
- **R** - Reverse

Also displays current gear when the transmission is in either Forward or Reverse.

Press the button to toggle the transmission mode between automatic and manual shifting, or to engage the "Start in Second Gear" function.

### 16. Estimated Load (Graph)

This bar graph is a visual indicator of the load in the carriage relative to capacity.

### 17. Estimated Load (Text)

This text displays a value of the estimated load in the carriage. Units may be set to percentage of capacity, weight in kilopounds, or weight in kilotons.

### 18. Implement Lock

This control both displays the current state of the implement lock, and allows the operator to engage or release implement lock. When engaged, the implement controls are shut off. To change the state, press and briefly hold. See Figure 2-2-3.

Engage implement lock when there is any danger of inadvertently moving the implement control levers during service or repair while the engine is running.

**⚠ WARNING**

**Always engage implement lock while the engine is running before leaving the cab and performing any service work.**

### 19. Set Throttle

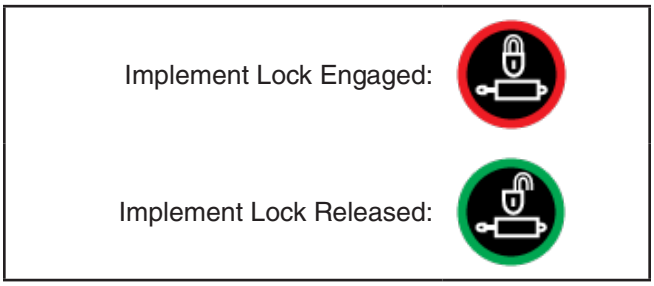


*Figure 2-2-3 Implement Lock Button States*

This control sets the throttle to the set point (see item 20). The engine RPM will be set to this value. The accelerator pedal is recalibrated; the range will now be between the set point (the new lowest RPM) and high free idle (~2205 RPM).

### 20. Throttle Set Point

This displays the RPM the engine is set to when "Set Throttle" is engaged. This will represent the lowest RPM in the range that may be set by the accelerator pedal.

### 21. Throttle Set Slider

Use this slider to set the throttle set point. The bottom of the scale corresponds to engine idle, 750 RPM, and the top of the scale corresponds to high free idle, ~2205 RPM.

### 22. Auto Level

When active, this icon indicates that "Auto Level" has been engaged. When engaged, the carriage will move into a position so that the tines are roughly parallel to the ground.

### 23. Tine Position Memory

When active, this icon indicates that "Tine Position Memory" has been engaged. When engaged, the carriage will return to a pre-set position (such as tine tips on the ground for retrieving scaled logs).

### 24. Load Holding

When active, this icon indicates that "Load Holding" has been engaged. When engaged, the hold-down arms will continue to apply pressure as required, even after the HD function has been released.

### 25. Low Brake Pressure Indicator

This warning indicator will illuminate if there is low brake pressure after the parking brake has been released.

### 26. Declutch Indicator

The Declutch function is toggled on or off by a button on the right joystick. When Declutch is turned ON and the service brakes are applied, the declutch system automatically shifts the transmission into neutral and the Declutch icon illuminates. When the service brake is released, the transmission will reengage, and the Declutch icon will dim.

***NOTICE***

*Declutch will only disengage the transmission below the adjustable "declutch speed", typically set at about 3 mph.*

Declutch allows you to perform all hydraulic functions at any RPM smoothly, without causing converter stall or other unnecessary strains on the brake or drivetrain components.

If downgrades are encountered, the function may be turned OFF at the right joystick, and the transmission will remain in gear when the brakes are applied. This function should be left ON for normal operations.

### 27. Display

Press this button to set the backlight display, and to activate/deactivate the screen saver.

### 28. 4WD Button

Press this button to engage/disengage 4WD. Lights below this control indicate whether the machine is in 2WD or 4WD.

### 29. Low Lube Indicator

This indicator will turn red when the automatic lubrication reservoir needs to be refilled.

### 30. Parking Brake Button

Press this button to activate/deactivate the parking brake. When the machine is first turned on, the parking brake is automatically applied. Press this button while depressing the service brake to deactivate the parking brake.

### 31. Home Button

Press this button anytime to return to this screen.

### 32. Information Button

Press this button to display the information screen. See Figure 2-2-4.

### 33. Operator's Menu

Press this button to display the Operator's Menu screen. See Figure 2-2-5.

### 34. Menu Button

Maintenance or service personnel may press this button to access machine settings. A PIN code is necessary to access machine settings. See the service manual for this machine for details.

### 35. DEF Tank Level Warning Indicator

The DEF Tank Level Warning Indicator will illuminate when the diesel exhaust fluid is low and MUST soon be replenished.

Press this Indicator when filling the DEF tank. When the tank is 95% full, the reverse alarm will sound with a slow "chirp". As the tank approaches full, the "chirp" rate will increase. At that point, stop filling the tank.

### 36. DEF Tank Level Gauge

The DEF Tank Level Gauge indicates how much diesel exhaust fluid is remaining in the tank. The tank level must be checked daily and refilled as required.

### 37. Cleaning/Regen Initiate Button

This momentary button will initiate a manual exhaust system cleaning of the aftertreatment system when the machine is in non-mission condition. The Exhaust System High Temp Indicator (item 40) will be illuminated during the entire exhaust system cleaning.

*Note: the exhaust system cleaning will not be initiated if conditions are not met.*

### 38. Cleaning/Regen Disabled Button

The Exhaust System Cleaning/Regeneration Disabled (Inhibit) switch disallows any automatic or manual (non-mission) exhaust system cleaning. This may be used by operator to prevent exhaust system cleaning when the machine is operating in a hazardous environment and the operator is concerned about high temperature. The automatic exhaust system cleaning is initiated by the ECM only if it is beneficial for the aftertreatment system. If the Exhaust System Cleaning/ Regeneration Disabled (Inhibit) switch is activated, the automatic exhaust system cleaning will be prevented. In most cases, the automatic exhaust system cleaning can be performed while the machine is performing its normal functions and will remain unnoticeable to the operator. The automatic exhaust system cleaning provides the least disruption to the productivity of the machine. Therefore, it is strongly recommended that the Exhaust System Cleaning/Regeneration Disabled (Inhibit) switch is only activated when high exhaust temperatures may cause a hazardous condition.

### 39. Cleaning/Regen Indicator

The Exhaust System Cleaning/Regeneration Indicator notifies the operator that the aftertreatment system has not auto regenerated at the required time limit and requires an exhaust system cleaning.

### 40. Exhaust System High Temp Indicator

The Exhaust System High Temp Indicator will illuminate during manual (non-mission) exhaust system cleaning. In addition, the Exhaust System High Temp Indicator will also illuminate if the exhaust temperature exceeds the calibrated temperature threshold.

### 41. Amber Engine Warning Indicator

This indicator will illuminate with active emission fault codes, low DEF, and required (but inhibited) regen cycle. When illuminated, the machine should be taken out of service until the source of the warning is identified and corrected. The machine may be driven to a convenient location for service.

### 42. Red Engine Warning Indicator

This will illuminate with extremely low DEF levels and other engine shut-down conditions. When illuminated, the engine should be shut down immediately, and the source of the warning must be identified and corrected before the engine is restarted.

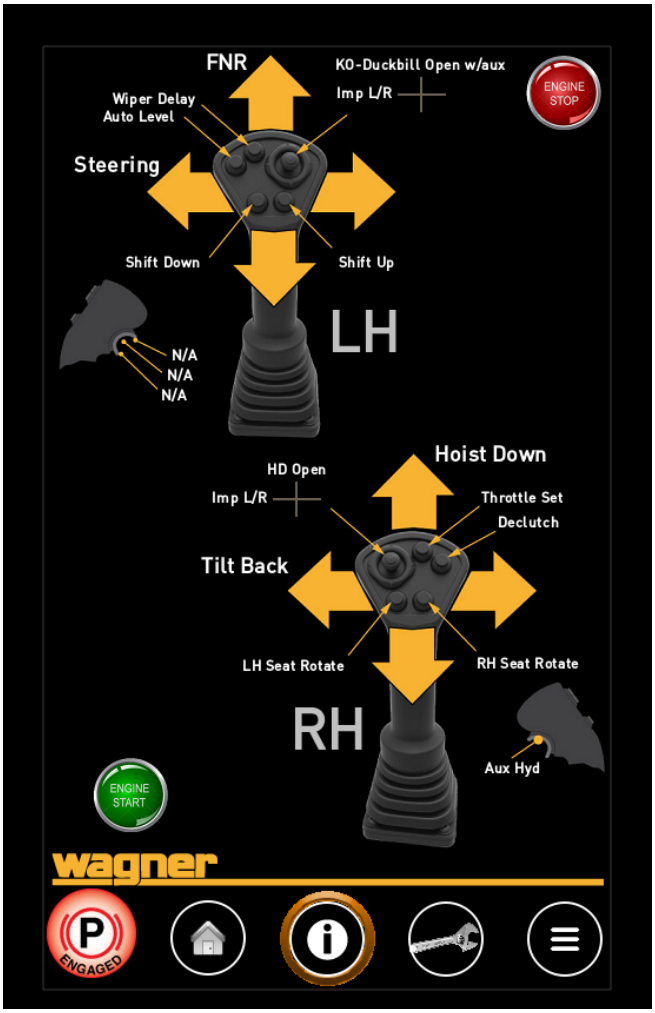


*Figure 2-2-4 Information Screen*

## Information Screen

Press the Information button icon (item 32) to access the Information Screen. The Information screen contains reference information for the operator. The functions of the joysticks are listed for reference. See Figure 2-2-4.

See Sections 2-3 and 2-4 in this manual for detailed instructions of the joystick and overhead buttons functions.

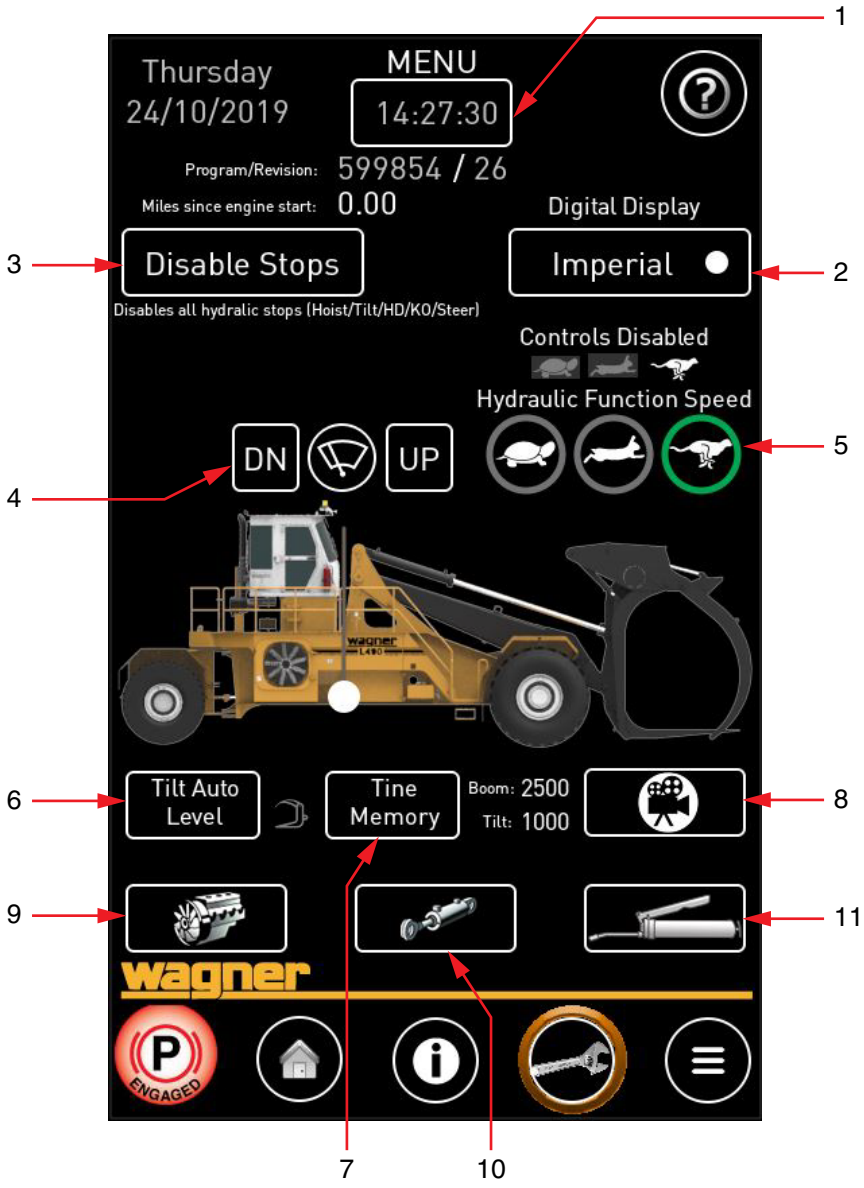


*Figure 2-2-5 Operator's Menu Screen (4WD Model Shown)*

## Operator's Menu Screen

Press the Operator's Menu button (Wrench) to access the Operator's Menu Screen. This screen provides the operator with additional information, and provides links to other screens.

### 1. Set Date/Time

Press this button to set the date and time.

### 2. Display Units

Press this button to select either Imperial or Metric units for the display.

### 3. Disable Stops

Press this button to disable all hydraulic soft stops (Hoist, Tilt, HD, KO, and Steering).

### 4. Wiper Delay

Press these buttons to set the wiper delay times for both the front and rear wipers from 2- 30 seconds.

### 5. Hydraulic Function Speed

Select the hydraulic function speed.

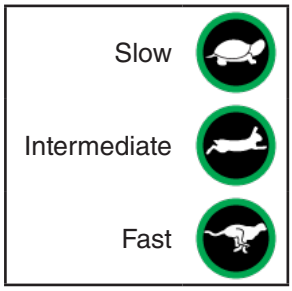


*Figure 2-2-6 Hydraulic Speeds*

### 6. Auto Level

Press this button to engage "Auto Level". When engaged, the carriage will move into a position so that the tines are roughly parallel to the ground.

### 7. Tine Memory

Press this button to engage "Tine Position Memory". When engaged, the carriage will return to a pre-set position.

### 8. Camera Setup

Press this button to display the Camera Setup Screen (see Figure 2-2-7).

### 9. Engine

Press this button to display the Engine Screen (see Figure 2-2-8).

### 10. Hydraulics

Press this button to display the Hydraulics Screen (see Figure 2-2-9).

### 11. Lube Settings

Press this button to display the Lube Settings Screen (see Figure 2-2-10).

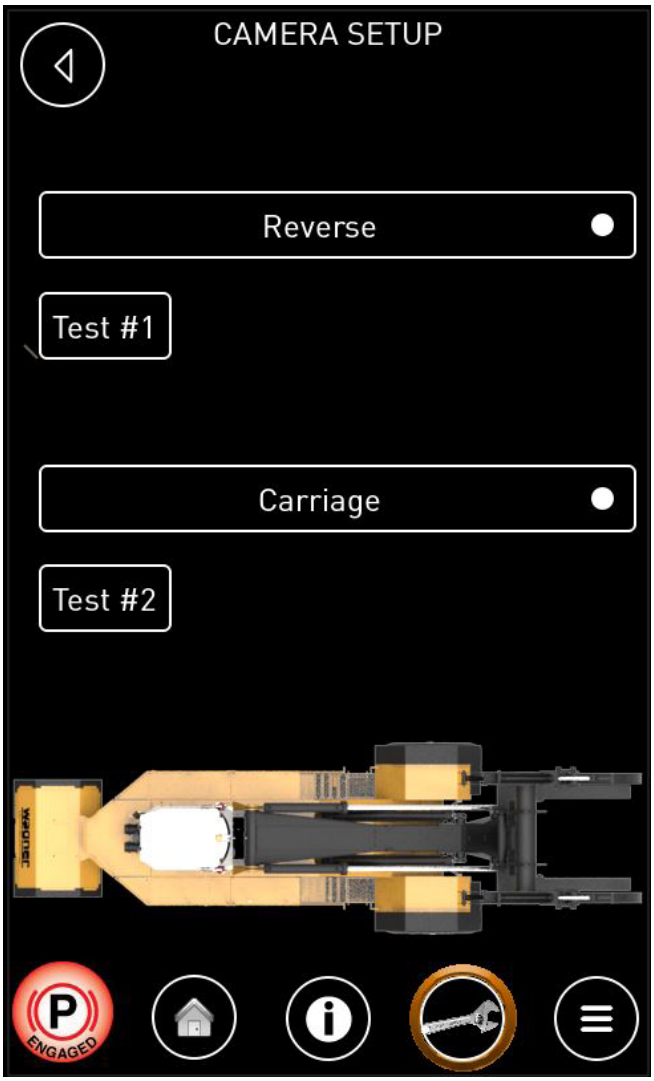


*Figure 2-2-7 Camera Setup Screen (4WD Shown)*

## Camera Setup Screen

The Camera Setup Screen allows the user to define and test the functionality of the cameras on the machine. You will be able to have two of the cameras go full screen upon a set trigger.

Push and hold the "Test #1" and "Test #2" buttons to see which cameras are set up as Camera #1 and Camera #2. Then you may select one of four triggers to activate that camera. The available triggers are:

- **Reverse** - Selected camera will go full screen when the transmission is put in reverse.
- **Hoist** - Selected camera will go full screen whenever you activate the hoist function.
- **Button** - Selected camera will go full screen when a button on the right joystick is pressed (joystick must be configured by your maintenance department so that one of the buttons is set as "Camera").
- **Carriage** - Selected camera will go full screen whenever the holddown or kickoff arms are operated.

## Engine Screen

The Engine page contains more specific engine gauges.

If Ether start is installed, it may be injected from this screen.

## Hydraulics Screen

The Hydraulics screen displays all the hydraulic pressures and temperatures.

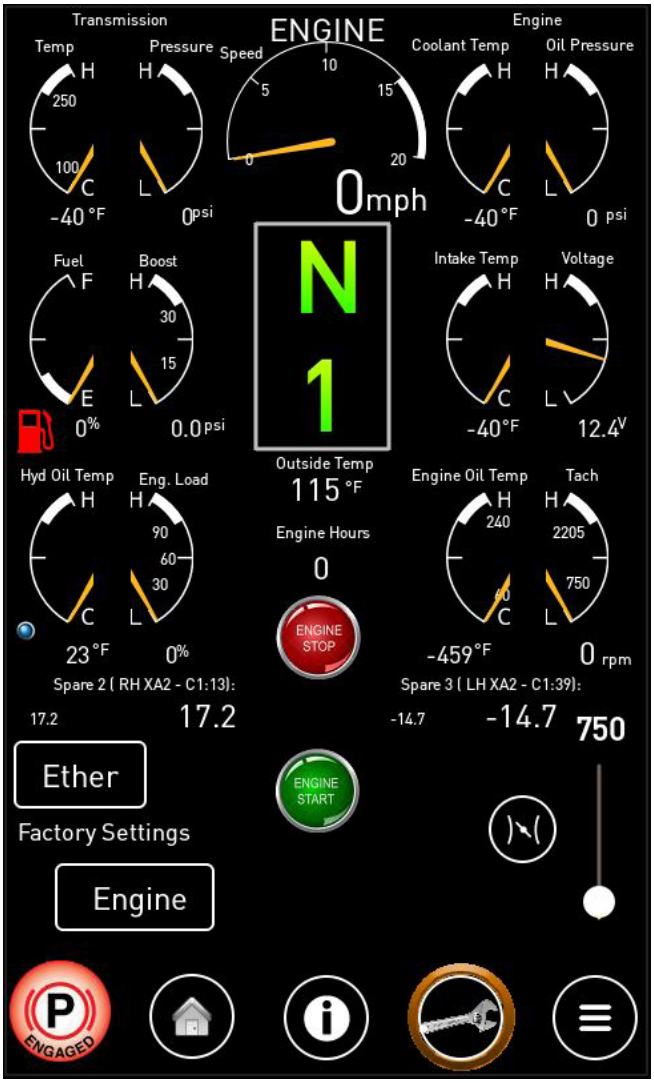


*Figure 2-2-8 Engine Screen*

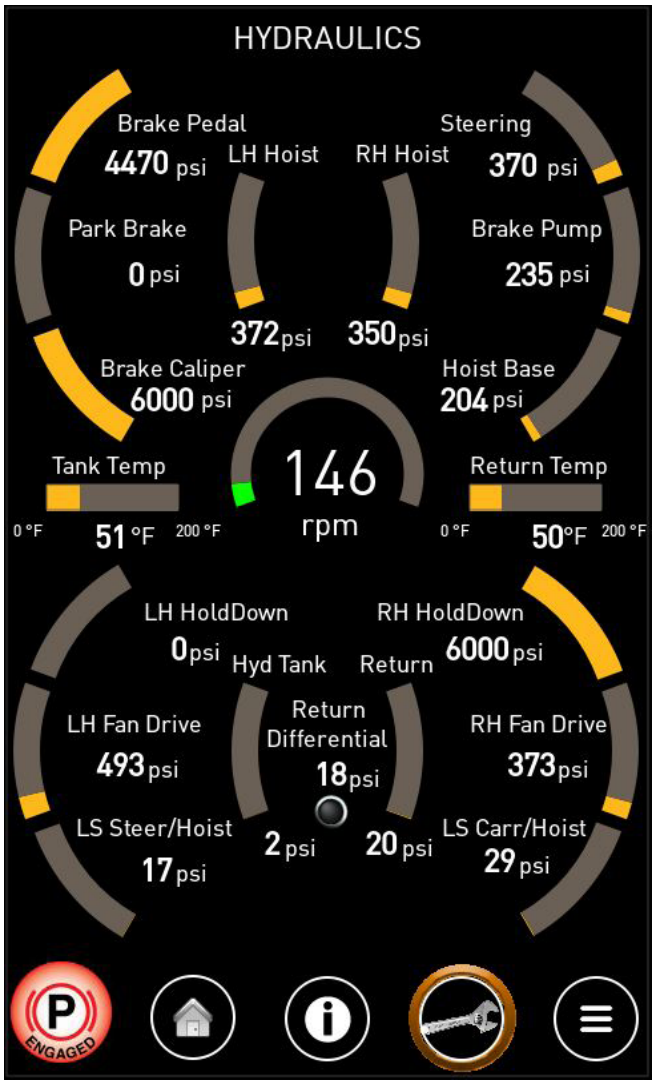


*Figure 2-2-9 Hydraulics Screen*

## Lube Settings Screen

The Lube Settings screen displays various modes, and allows service technicians to perform various tests of the automatic lubrication system.

**Lock** - Press this button to prevent modifications to the lubrication mode (i.e. any changes between light, standard, and heavy duty).

**Test #1** - This test cycles through one sequence of the lubrication system. This is often used to check the lube system.

**Test #2** - This test cycles continuously through the lubrication system sequence until turned off. This is often used to prime the lube system.

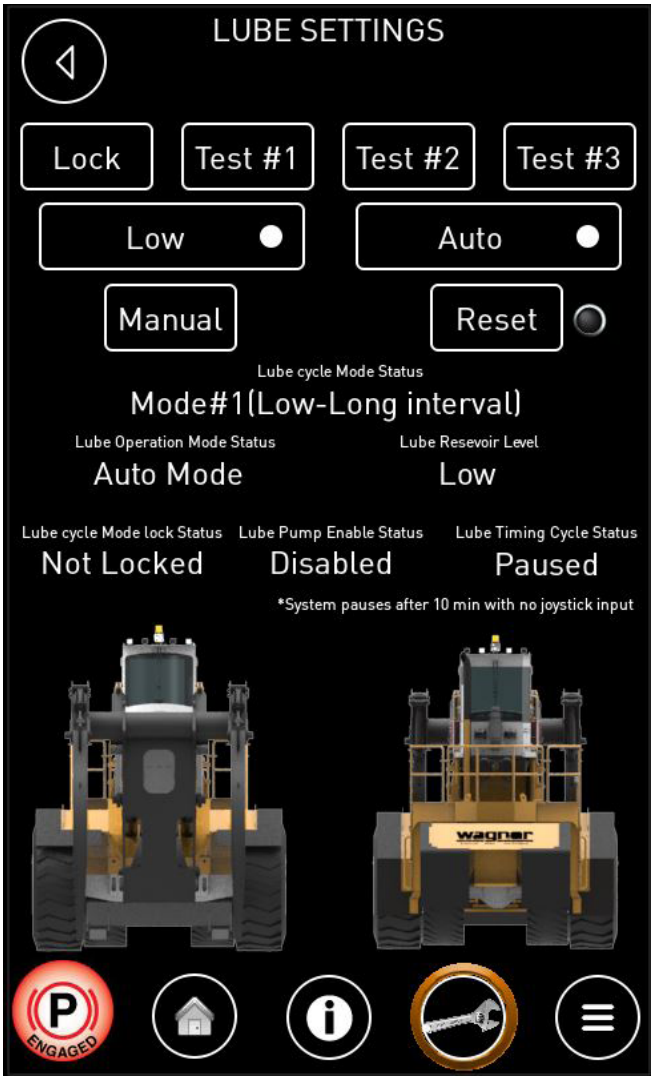


*Figure 2-2-10 Lube Settings Screen (4WD Shown)*

**Test #3** - Not used.

### Lube Interval

Use this button to set the lube interval. Select:

**Low -** Long interval, greased less often for light duty.

**Med -** Standard duty.

**High -** Short interval, greased more often for heavy duty.

### Pump Enable

Use this button to set the pump state. Select:

**Auto -** Pauses the pump if joysticks or throttle have not been activated for more than 10 minutes. This is to prevent over greasing during low duty-cycle conditions.

**Enable -** Enables the pump regardless of condition.

**Disable -** Disables the pump regardless of condition

### Manual

Not used.

### Reset

Press this button if the pump has disabled itself, and the problem has been corrected.

### Lube Cycle Mode Status

This displays the current Lube Interval.

**Mode#1 -** Low-Long Interval

**Mode#2 -** Med Interval

**Mode#3 -** High-Short Interval

### Lube Operation Mode Status

This displays the current Lube Operation Mode.

**Auto Mode -** This is the normal mode where each interval a lubrication cycle is started automatically.

**Manual Mode -** The normal lubrication is aborted. This mode is used to directly set the output of the control board inside the pump. (Not used)

**Test#1 -** The pump is currently executing a single lubrication test cycle.

**Test#2 -** The pump is currently executing multiple lubrication test cycles.

**Test#3 -** Not used.

**Lube Reservoir Level**

Displays the actual status of the grease reservoir.

**Lube Cycle Mode Lock Status**

This indicates whether it is allowed to modify the lubrication mode (i.e. any change between Heavy, Medium and Light duty).

**Lube Pump Enable Status**

This indicates whether the pump is capable to perform the normal lubrication or that is has stopped due to an error.

The state can be:

**Disabled**. The lubrication has stopped due to an error

**Enabled**. The lubrication has not stopped due to an error

**Lube Timing Cycle Status.**

This indicates the state of the interval clock.

This can be:

**Paused**. The interval clock is stopped. The result is that the next lubrication cycle is delayed until the clock is enabled and the interval has expired.

**Enabled**. The interval clock is running. The next lubrication cycle will be started when the interval has expired.

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