

Wagner Smart Screen



Figure 2-2-1 Wagner Smart Screen Operator Interface

The Wagner Smart Screen Operator Interface is mounted on the pillar in front of and to the left of the operator's seat. 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.



Figure 2-2-2 Home Screen

Home Screen

Press the Home button icon (item 25) 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. Engine Load

Displays the percentage of available engine HP being used. During normal dozing, the percentage should be near 100%.

8. Tachometer

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

9. 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.

10. 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).

11. Clock

Displays the current time in 24 hour format. Click on the time to set it.

12. Engine Push Start Button (Not available with all engines)

When available, 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.

13. Engine Push Stop Button

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

14. 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, and displays "Auto" when the transmission is in automatic mode, set from the left joystick.

15. Set Throttle

This control sets the throttle to the set point (see item 16). 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).

16. 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.

17. 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.

18. 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.

19. Declutch Indicator

The Declutch function is toggled on or off by a button on the left 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.

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 left joystick, and the transmission will remain in gear when the brakes are applied. This function should be left ON for normal operations.

20. Low Brake Pressure Indicator

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

21. 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.

22. Display

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

23. Float (Optional)

This icon will illuminate when the blade float feature is available and has been activated.

24. 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.

25. Home Button

Press this button anytime to return to this screen.

26. Information Button

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

27. 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.

28. 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.

29. Operator's Menu Screen

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

30. 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.

31. 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.

32. Wiper Delay Timer

Press this button to display a slider that may be used to set the wiper delay times for both the front and rear wipers from 2- 30 seconds.

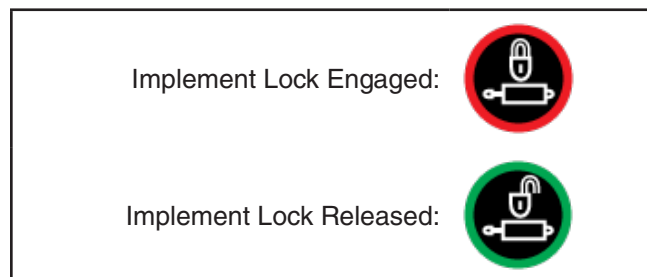


Figure 2-2-3 Implement Lock Button States

33. 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 36) will be illuminated during the entire exhaust system cleaning.

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

34. 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.

35. 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.

36. 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.

37. Grid Heater Indicator

The Grid Heater Indicator will illuminate at startup if the air intake manifold temperature is below 23°F. When illuminated, the grid heater will warm the air intake manifold to aid engine starts in cold temperatures. The "Wait to Start" alert (43) will be visible. Do not start the engine until the indicator turns grey, and the "Wait to Start" alert is not visible.

38. High Coolant Temperature Indicator

When this indicator is illuminated, the coolant

temperature has exceeded the maximum limit. The machine must be shut down as soon as possible to correct the error. Allow the machine to cool completely before servicing the cooling system.



WARNING

Never remove the radiator cap if the engine is hot. The coolant will be under pressure and could flash to steam with explosive force, causing severe burns. Remove the radiator cap only when the engine is cool.

39. Low Coolant Level Indicator

When this indicator is illuminated, the coolant level has dropped below a minimum level. The machine must be shut down as soon as possible to correct the error. Allow the machine to cool completely before servicing the cooling system.

40. Low Engine Oil Pressure

When this indicator is illuminated, the engine oil pressure has dropped below a minimum level. The machine must be shut down as soon as possible to correct the error. Allow the machine to cool completely before servicing the engine.

41. Override Engine Stop Button

If the Imminent Engine Shutdown Alert (42) is visible, but the machine must be moved to a safe area, the operator may use this button to delay the shutdown sequence long enough to move the machine.



CAUTION

This override should be used as little as possible to minimize permanent damage to the engine.

42. Imminent Engine Shutdown Alert

When this text is visible, the engine has reported a serious error, and will automatically shut down unless the operator overrides the shutdown sequence.

43. Wait to Start Alert

The "Wait to Start" alert will be visible when the grid heater indicator (37) is illuminated, or after the starter has been cranked for too long. When this alert is visible, the starter is inhibited. Wait until this alert is turned off before attempting to start the engine.

Information Screen

Press the Information button icon (item 26) to access

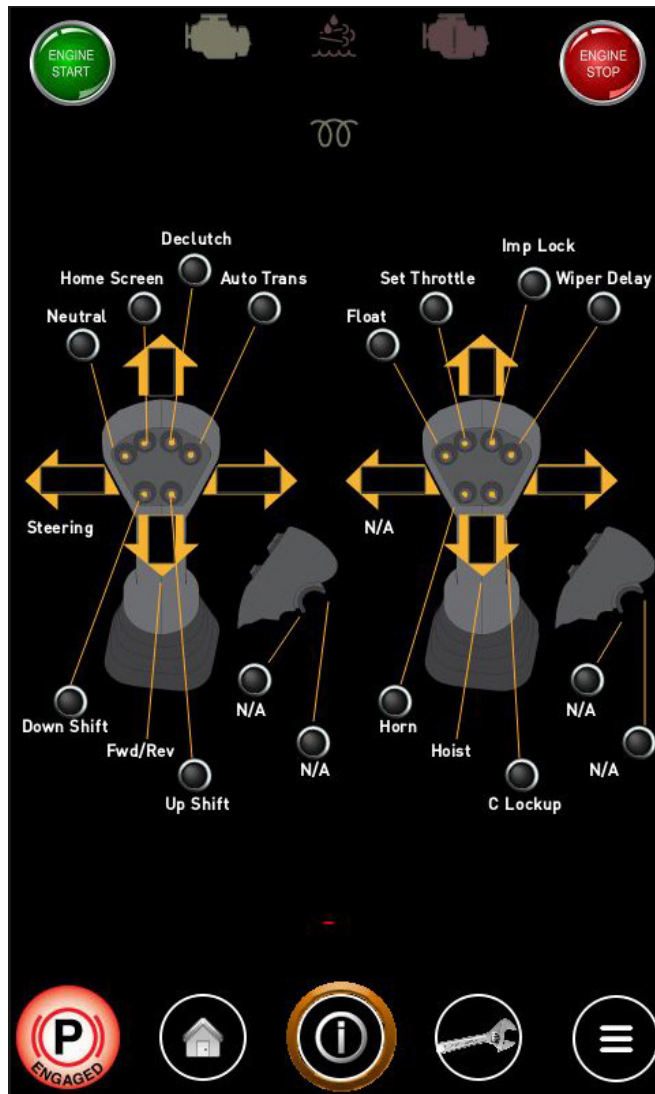


Figure 2-2-4 Information Screen

Note: This screen may show options not installed on your machine, and your joysticks may be programmed differently. See Sections 2-3 and 2-4 for more information.

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 functions.

Operator's Menu Screen

Press the Operator's Menu button icon (item 29 on

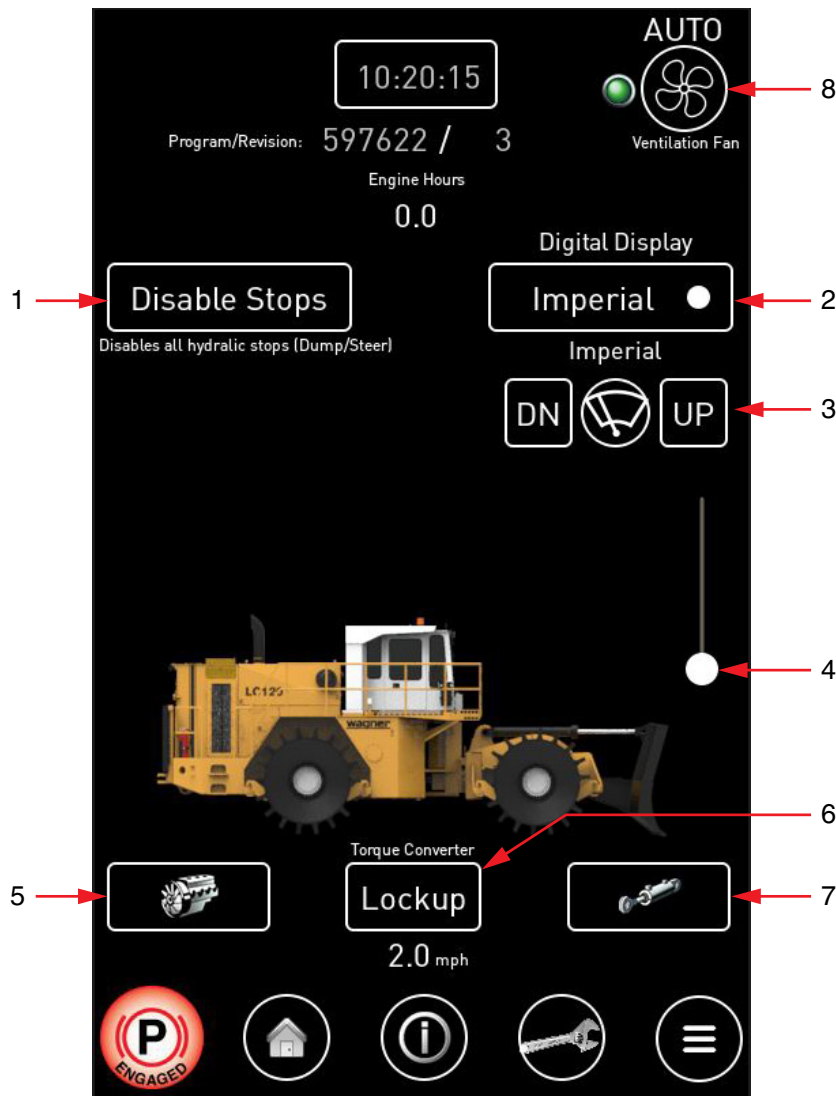


Figure 2-2-5 Operator's Menu Screen

Figure 2-2-2) to access the Operator's Menu Screen.

1. Disable Stops

Press this button to disable all cylinder stops (hoist and steering).

2. Digital Display

Press this button to set the units displayed to either Imperial or Metric.

3. Wiper Delay

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

4. Wiper Delay Slider

Move this slider up or down to set the wiper delay times for both the front and rear wipers from 2- 30 seconds.

5. Engine

Press this button to display the Engine Screen (see

Figure 2-2-6).

6. Torque Converter Lockup

Press this button to engage Torque Converter Lockup (if so equipped).

7. Hydraulics

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

8. Ventilation Fan Switch

The ventilation fan for the engine compartment can be turned on, off, or set to automatically turn on when exhaust and/or coolant temperature thresholds are reached with this switch.

Engine Screen

The Engine page contains more specific engine



Figure 2-2-6 Engine Screen

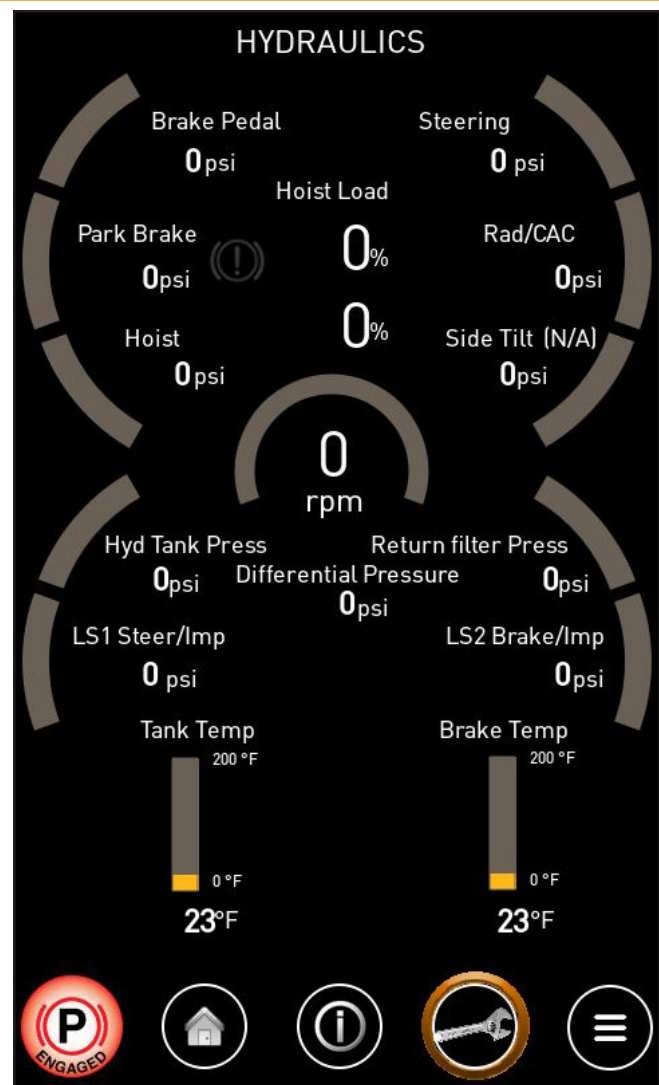


Figure 2-2-7 Hydraulics Screen

gauges.

Hydraulics Screen

The Hydraulics screen displays hydraulic pressures

and temperatures.