

SECTION 3. MACHINE CONTROLS AND INDICATORS

3.1 GENERAL

NOTICE

THE MANUFACTURER HAS NO DIRECT CONTROL OVER MACHINE APPLICATION AND OPERATION. THE USER AND OPERATOR ARE RESPONSIBLE FOR CONFORMING WITH GOOD SAFETY PRACTICES.

This section provides the necessary information needed to understand control functions.

3.2 CONTROLS AND INDICATORS

NOTE: This machines is equipped with control panels that use symbols to indicate control functions. On ANSI machines, refer to decal located on the control box guard in front of the control box or by the ground controls for these symbols and the corresponding functions.

Ground Control Station

(See Figure 3-1., Ground Control Station)

NOTE: If equipped, the Function Enable switch must be held down in order to operate Telescope, Swing, Lift, Jib Lift, Platform Level Override, and Platform Rotate functions.

1. Platform Rotate

A three position switch permits rotation of the platform.

⚠ WARNING

ONLY USE THE PLATFORM LEVELING OVERRIDE FUNCTION FOR SLIGHT LEVELING OF THE PLATFORM. INCORRECT USE COULD CAUSE THE LOAD/OCCUPANT TO SHIFT OR FALL. FAILURE TO DO SO COULD RESULT IN DEATH OR SERIOUS INJURY.

2. Platform Leveling Override

A three position switch allows the operator to compensate for any difference in the automatic self leveling system.

3121205

- JLG Lift -

3-1

SECTION 3 - MACHINE CONTROLS AND INDICATORS

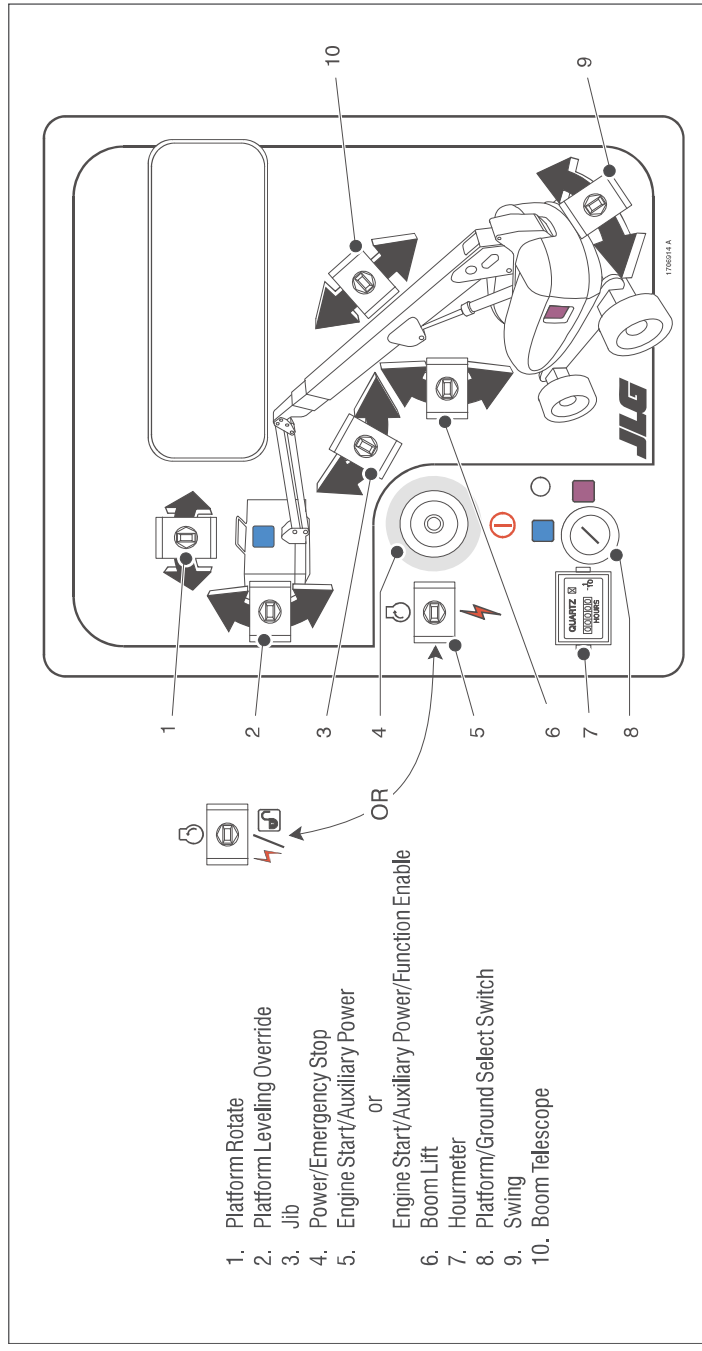


Figure 3-1. Ground Control Station

3-2

- JLG Lift -

3121205

SECTION 3 - MACHINE CONTROLS AND INDICATORS

3. Jib (If Equipped)

This switch provides raising and lowering of the jib.

NOTE: When Power/Emergency Stop switch is in the "ON" position and engine is not running, an alarm will sound, indicating Ignition is "ON".

⚠ CAUTION

WHEN THE MACHINE IS SHUT DOWN THE MASTER/EMERGENCY STOP SWITCH MUST BE POSITIONED TO THE "OFF" POSITION TO PREVENT DRAINING THE BATTERY.

NOTE: On machines with diesel engines, when Glow Plug Indicator is lighted (Yellow), wait until light goes out before cranking engine.

4. Power/Emergency Stop Switch

A two-position red mushroom shaped switch supplies power to PLATFORM/GROUND SELECT switch when pulled out (on). When pushed in (off), power is shut off to the PLATFORM/GROUND SELECT switch.

5. Engine Start/Auxiliary Power Switch
or
Engine Start/ Auxiliary Power Switch /Function Enable

To start the engine, the switch must be held "Up" until the engine starts.



To use auxiliary power, the switch must be held "DOWN" for duration of auxiliary pump use. Aux power can only be used if the engine is not running.



If equipped, the enable switch must be held "DOWN" to enable all boom controls when the engine is running.



⚠ CAUTION

WHEN OPERATING ON AUXILIARY POWER, DO NOT OPERATE MORE THAN ONE FUNCTION AT A TIME. (SIMULTANEOUS OPERATION CAN OVERLOAD THE 12-VOLT AUXILIARY PUMP MOTOR.)

3121205

– JLG Lift –

3-3

SECTION 3 - MACHINE CONTROLS AND INDICATORS

6. Lift Control

Provides raising and lowering of the main boom.

7. Hourmeter

Registers the amount of time the machine has been in use, with engine running. By connecting into the oil pressure circuit of the engine, only engine run hours are recorded. The hourmeter registers up to 9,999.9 hours and cannot be reset.

8. Platform/Ground Select

A three position, key operated switch supplies power to the platform control console when positioned to PLATFORM. With the switch in GROUND position, power is shut off to the platform control console, and only the controls on the ground control panel are operable.

NOTE: With the Platform/Ground Select Switch in the center position, power is shut off to controls at both operating stations.

NOTE: Lift, Swing, Platform Level, Telescope, Platform Rotator and Auxiliary control switches are spring-loaded and will automatically return to neutral (off) when released.

⚠ WARNING

WHEN OPERATING THE BOOM ENSURE THERE ARE NO PERSONNEL AROUND OR UNDER PLATFORM.

⚠ WARNING

TO AVOID SERIOUS INJURY, DO NOT OPERATE MACHINE IF ANY CONTROL LEVERS OR TOGGLE SWITCHES CONTROLLING PLATFORM MOVEMENT DO NOT RETURN TO THE OFF POSITION WHEN RELEASED.

9. Swing Control

Provides 360 degrees continuous turntable rotation.

10. Telescope Control

Provides extension and retraction of the boom, when positioned to IN or OUT.

3-4

– JLG Lift –

3121205

Ground Control Indicator Panel

(See Figure 3-2. and Figure 3-3.)

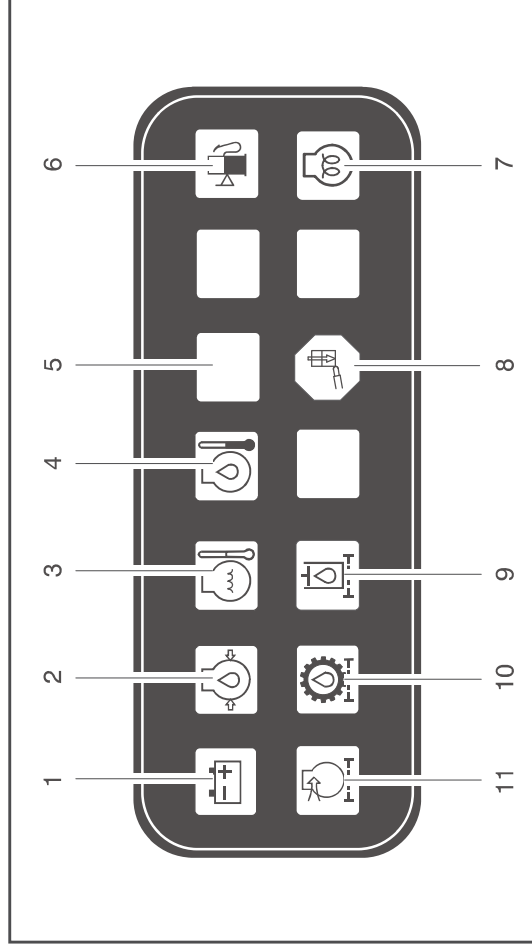
1. Battery Charging Indicator
Indicates a problem in the battery or charging circuit, and service is required.
2. Low Engine Oil Pressure Indicator
Indicates that engine oil pressure is below normal and service is required.
3. High Engine Coolant Temperature (Ford and Continental) Indicator
Indicates that engine coolant temperature is abnormally high and service is required.
4. High Engine Oil Temperature Indicator (Deutz)
Indicates the temperature of the engine oil, which also serves as engine coolant, is abnormally high and service is required.

5. Engine Malfunction Indicator Light (Ford Engines S/N 48907 to S/N 61927 - refer to ADE System Identification page at the front of the book)
Indicates that the Engine Control Module has detected a malfunction in the Electronic Fuel Injection System and a Diagnostic Trouble Code has been set in the ECM. Refer to the Service Manual for instructions concerning the trouble codes and trouble code retrieval.

The malfunction indicator light will illuminate for 2-3 seconds when the key is positioned to the on position to act as a self test.

6. Low Fuel Level Indicator
Indicates that the fuel level is 1/8 full or less. When the light first turns on, there are approximately four usable gallons of fuel remaining.
7. Glow Plug Indicator (Diesel)
Indicates glow plugs are on. The glow plugs are automatically turned on with the ignition circuit and remain on for approximately about seven seconds. Start the engine only after the light goes out.

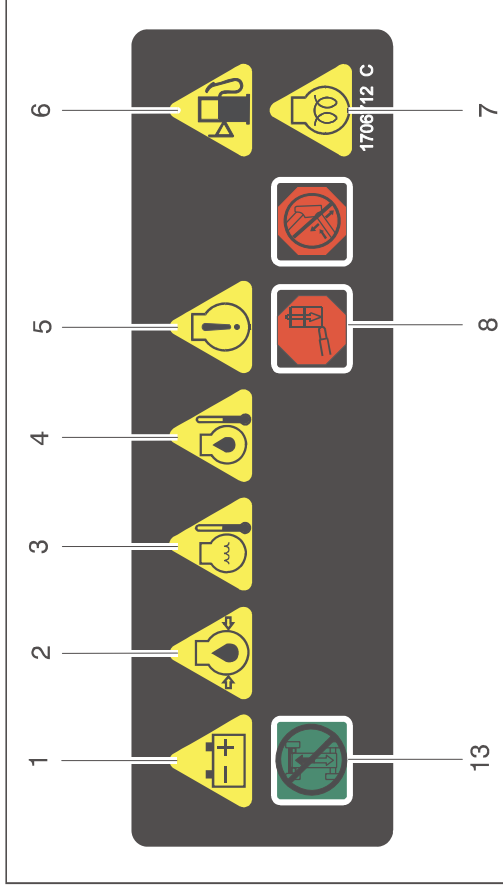
SECTION 3 - MACHINE CONTROLS AND INDICATORS



Prior to S/N 0300099060

1. Battery Charging
2. Engine Oil Pressure
3. Engine Water Temp.
4. Engine Oil Temp.
5. Engine Malfunction Indicator
6. Low Fuel
7. Glow Plug
8. Platform Overload
9. Hyd. Filter Bypass
10. Transmission Filter By-Pass
11. Engine Air Filter By-Pass

Figure 3-2. Ground Control Indicator Panel - Sheet 1 of 2



S/N 0300099060 to Present

1. Battery Charging
2. Engine Oil Pressure
3. Engine Water Temp.
4. Engine Oil Temp.
5. Engine Malfunction Indicator
6. Low Fuel
7. Glow Plug
8. Platform Overload
9. Not Used
10. Not Used
11. Not Used
12. Not Used
13. Drive and Steer Disable

Figure 3-3. Ground Control Indicator Panel - Sheet 2 of 2

SECTION 3 - MACHINE CONTROLS AND INDICATORS

8. Platform Overload (If equipped)
Indicates the platform has been overloaded.
9. Hydraulic Oil Filter Indicator (Prior to S/N 84827).
Indicates the return oil filter is too restrictive and in the bypass mode and needs to be replaced.
10. Transmission Pump Oil Filter Indicator (Prior to S/N 84827)
Indicates that charge pump filter is too restrictive and needs to be replaced. This indicator has an integral temperature sensor (70° F [21° C]) so that false signals are not generated when the hydraulic oil is below normal operating temperature.
11. Engine Air Filter Indicator (Prior to S/N 84827)
Indicates that the air filter is too restrictive and needs to be replaced.
12. EFI System Test Button (Ford Engines S/N 48907 to S/N 61927 - refer to ADE System Identification page at the front of the book)
By pushing and holding the system test button on the side of the ground control box, the Diagnostic Trouble

Codes will be displayed on the Malfunction Indicator Light. Refer to the Service Manual for instructions concerning the trouble codes and trouble code retrieval.

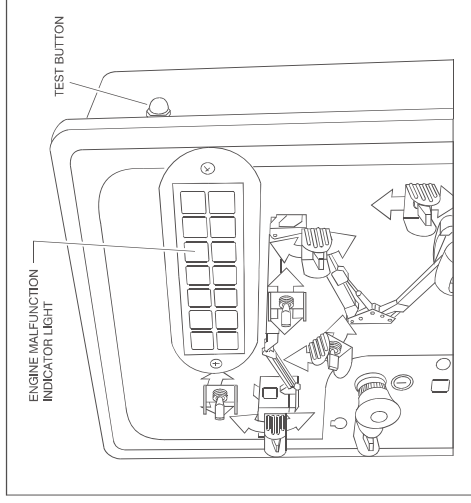


Figure 3-4. Malfunction Indicator Light and Test Button

13. Drive and Steer Disable Indicator (If equipped)

Indicates the Drive and Steer Disable function has been activated.

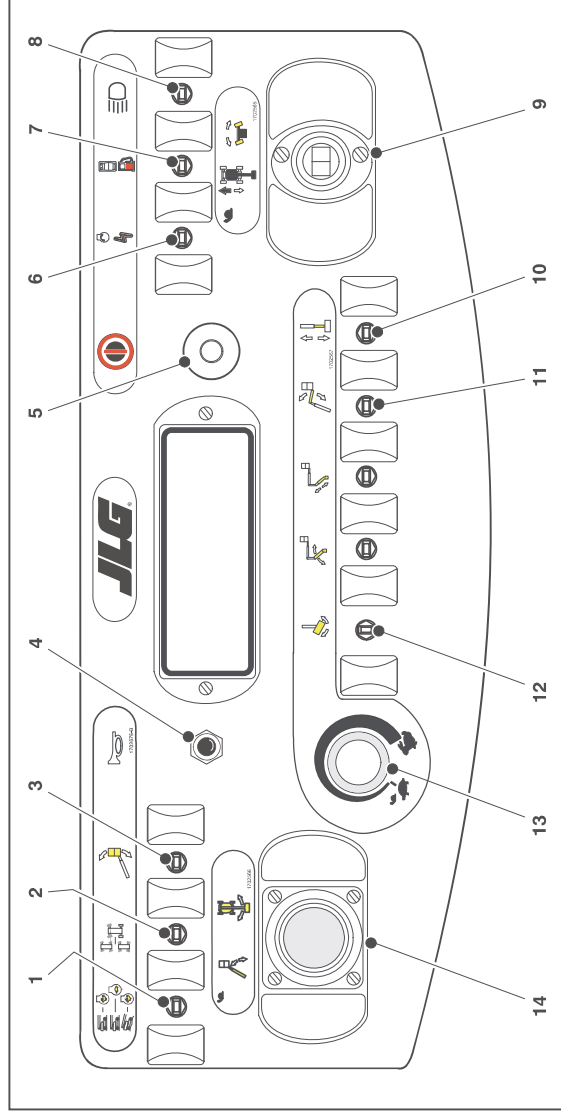
Platform Station

(See Figure 3-6., Platform Control Console - w/Drive Orientation)

1. Drive Speed/Torque Select

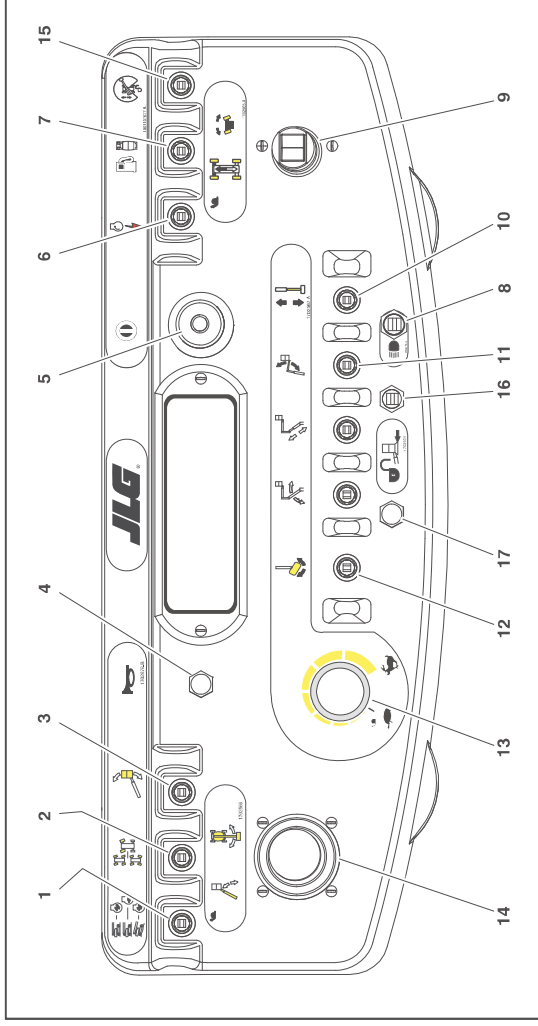
The machine has a three position switch - The forward position gives maximum drive speed by shifting the drive motors to minimum the displacement and giving high engine when drive controller is moved. The back position gives maximum torque for rough terrain and climbing grades by shifting the wheel motors to maximum displacement and giving high engine speed when drive controller is moved. The center position allows the machine to be driven as quietly as possible by leaving the engine at mid speed and the drive motors in maximum displacement.

SECTION 3 - MACHINE CONTROLS AND INDICATORS



- | | | | |
|-------------------------------|-------------------------|----------------|---------------------|
| 1. Drive Speed | 5. Power/Emergency Stop | 9. Drive/Steer | 12. Platform Rotate |
| 2. Steer Select | 6. Aux. Power | 10. Telescope | 13. Function Speed |
| 3. Platform Leveling Override | 7. Fuel Select | 11. Jib | 14. Main Lift/Swing |
| 4. Horn | 8. Lights | | |

Figure 3-5. Platform Control Console



- | | | | |
|-------------------------------|----------------|--------------------------------|--------------------------|
| 1. Drive Speed | 6. Aux. Power | 11. Jib | 16. Soft Touch Override |
| 2. Steer Select | 7. Fuel Select | 12. Platform Rotate | 17. Soft Touch Indicator |
| 3. Platform Leveling Override | 8. Lights | 13. Function Speed | |
| 4. Horn | 9. Drive/Steer | 14. Main Lift/Swing | |
| 5. Power/Emergency Stop | 10. Telescope | 15. Drive Orientation Override | |

Figure 3-6. Platform Control Console - w/Drive Orientation

3121205

- JLG Lift -

3-11

SECTION 3 - MACHINE CONTROLS AND INDICATORS

2. Steer Select (If Equipped)

When equipped with four wheel steering, the action of the steering system is operator selectable. The center switch position gives conventional front wheel steering with the rear wheels unaffected. This is for normal driving at maximum speeds. The forward position is for "crab" steering. When in this mode both front and rear axles steer in the same direction, which allows the chassis to move sideways as it goes forward. This can be used for positioning the machine in aisle ways or against buildings. The back switch position is for "coordinated" steering. In this mode the front and rear axles steer in the opposite directions to produce the tightest turning circle for maneuvering in confined areas.

To re-synchronize the front and rear axles, position the rear drive wheels to the forward drive position by selecting either crab or compound steer, then select front steer (center switch position) to operate the normal steering function.

⚠ WARNING

ONLY USE THE PLATFORM LEVELING OVERRIDE FUNCTION FOR SLIGHT LEVELING OF THE PLATFORM. INCORRECT USE COULD CAUSE THE LOAD/OCCUPANT TO SHIFT OR FALL. FAILURE TO DO SO COULD RESULT IN DEATH OR SERIOUS INJURY.

3. Platform Leveling Override

This switch allows the operator to adjust the level of the platform.

4. Travel Warning Horn

Supplies electrical power to an audible warning device when pressed.

5. Power/Emergency Stop

An ON-OFF POWER/EMERGENCY STOP switch and a separate ENGINE START/AUXILIARY POWER toggle switch on the platform console supply electrical power to the starter solenoid, when the ignition switch is placed in the "ON" position and the ENGINE START switch is push forward.

SECTION 3 - MACHINE CONTROLS AND INDICATORS

6. Auxiliary Power

Energizes the electrically operated hydraulic pump, when actuated. (Switch must be held ON for duration of auxiliary pump use.)

The auxiliary pump functions to provide sufficient oil flow to operate the basic machine functions should the main pump or engine fail. The auxiliary pump will operate tower boom lift, tower telescope, main boom lift, main telescope and swing.

7. Fuel Select (Dual Fuel Engine Only) (If Equipped)

Gasoline or liquid propane fuel may be selected by moving the switch to the appropriate position. It is unnecessary to purge the fuel system before switching fuels, so there is no waiting period when switching fuels while the engine is running.

8. Lights (If Equipped)

This switch operates control console panel lights and head lights if the machine is so equipped. The ignition switch does not have to be on to operate the lights, so care must be taken to avoid draining the battery if left unattended. The master switch and / or the ignition switch at the ground control will turn off power to all lights.

NOTE: *LIFT, SWING, and DRIVE control levers are spring-loaded and will automatically return to neutral (OFF) position when released.*

⚠ WARNING

TO AVOID SERIOUS INJURY, DO NOT OPERATE MACHINE IF ANY CONTROL LEVERS OR TOGGLE SWITCHES CONTROLLING PLATFORM MOVEMENT DO NOT RETURN TO THE OFF OR NEUTRAL POSITION WHEN RELEASED.

9. Drive/Steer

The DRIVE joystick provides for driving either forward or backward. The controller is 'ramped' to allow variable drive speed.

Steering is controlled by a thumb operated switch on top of the joystick.

10. Telescope Control

This control allows extension and retraction of the main boom.

3121205

– JLG Lift –

3-13

SECTION 3 - MACHINE CONTROLS AND INDICATORS

11. Jib (If Equipped)

Push forward to lift up, pull back to lift down. Variable lift speed is using the Function Speed Control.

12. Platform Rotate

This switch allows the operator to rotate the basket to the left or right.

⚠ CAUTION

DO NOT OPERATE MACHINE IF DRIVE SPEED /TORQUE SELECT OR FUNCTION SPEED SWITCHES OPERATE WHEN BOOM IS ABOVE HORIZONTAL.

13. Function Speed

Controls the speed of Boom and Swing Functions. Rotate CCW for slower speed and CW for faster speed. To adjust to creep, turn knob fully CCW until it clicks.

14. Main Lift/Swing Controller

An infinitely proportional dual axis joystick is provided for main lift and swing. Push forward to lift up, pull backward to lift down. Move right to swing right, move left to swing left. When boom is positioned above horizontal and any of the following switches, DRIVE SPEED/TORQUE SELECT or FUNCTION SPEED, are positioned to HIGH, high function speeds are automatically cut out and the machine continues to operate at a lower speed.

3-14

– JLG Lift –

3121205

15. Drive Orientation Override

When the boom is swung over the rear tires or further in either direction, the Drive Orientation indicator will illuminate when the drive function is selected. Push and release the switch, and within 3 seconds move the Drive/Steer control to activate drive or steer. Before driving, locate the black/white orientation arrows on both the chassis and the platform controls and match the control direction arrow to the intended chassis direction.

16. Soft Touch Override Switch (If equipped)

This switch enables the functions that were cut out by the Soft Touch system to operate again at creep speed, allowing the operator to move the platform away from the obstacle that caused the shutdown situation.

17. Soft Touch Indicator (If Equipped)

Indicates the Soft Touch bumper is against an object. All controls are cut out until the override button is pushed, at which time controls are active in the Creep Mode.

3121205

– JLG Lift –

3-15

SECTION 3 - MACHINE CONTROLS AND INDICATORS**Platform Control Indicator Panel**

(See Figure 3-7., Platform Control Indicator Panel)

NOTE: The platform control indicator panel uses different shaped symbols to alert the operator to different types of operational situations that could arise. The meaning of those symbols are explained below.



Indicates a potentially hazardous situation, which if not corrected, could result in serious injury or death. This indicator will be red.



Indicates an abnormal operating condition, which if not corrected, may result in machine interruption or damage. This indicator will be yellow.



Indicates important information regarding the operating condition, i.e. procedures essential for safe operation. This indicator will be green with the exception of the capacity indicator which will be green or yellow depending upon platform position.

1. Tilt Alarm Warning Light and Alarm

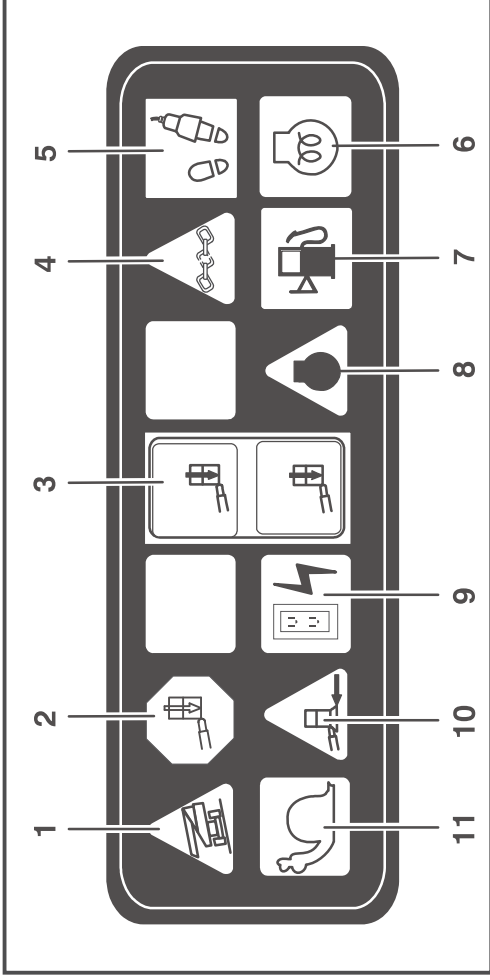
This orange illuminator indicates that the chassis is on a slope. An alarm will also sound when the chassis is on a slope and the boom is above horizontal. If lit when boom is raised or extended, retract and lower to below horizontal then reposition machine so that it is level before continuing operation. If the boom is above horizontal and the machine is on a slope, the tilt alarm warning light will illuminate and an alarm will sound and CREEP is automatically activated.

⚠ WARNING

IF TILT WARNING LIGHT IS ILLUMINATED WHEN BOOM IS RAISED OR EXTENDED, RETRACT AND LOWER TO BELOW HORIZONTAL THEN REPOSITION MACHINE SO THAT IT IS LEVEL BEFORE EXTENDING BOOM OR RAISING BOOM ABOVE HORIZONTAL.

2. Platform Overload (If equipped)

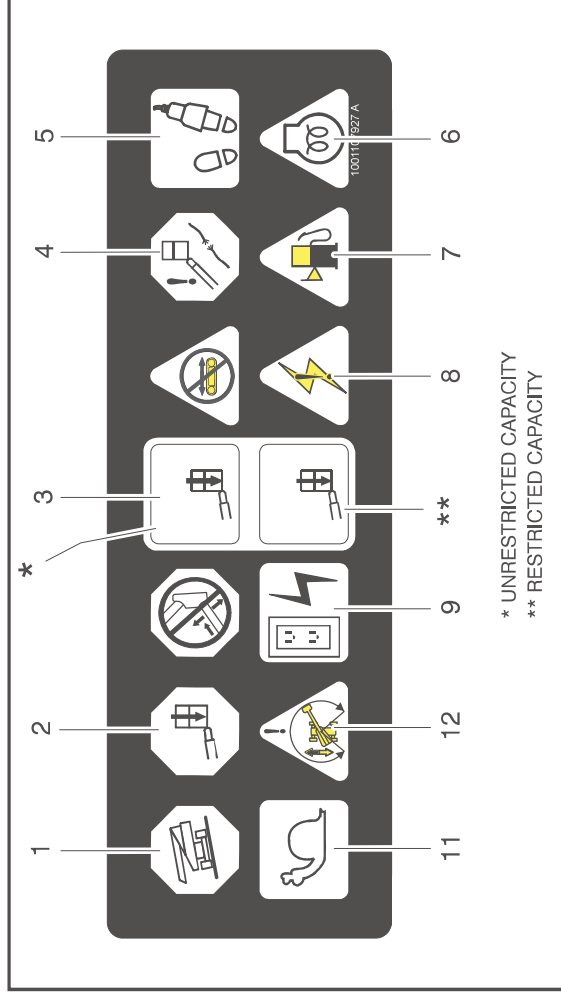
Indicates the platform has been overloaded.



- 1. Tilt
- 2. Overload
- 3. Capacity
- 4. Cable Service
- 5. Enable
- 6. Glow Plug
- 7. Low Fuel
- 8. Engine Malfunction
- 9. AC Generator
- 10. Soft Touch
- 11. Creep

Figure 3-7. Platform Control Indicator Panel

SECTION 3 - MACHINE CONTROLS AND INDICATORS



- 1. Tilt
- 2. Overload
- 3. Capacity
- 4. Cable Service
- 5. Enable
- 6. Glow Plug
- 7. Low Fuel
- 8. Malfunction
- 9. AC Generator
- 10. Not Used
- 11. Creep
- 12. Drive Orientation

* UNRESTRICTED CAPACITY

** RESTRICTED CAPACITY

Figure 3-8. Platform Control Indicator Panel - w/Drive Orientation

SECTION 3 - MACHINE CONTROLS AND INDICATORS

3. Capacity Indicator

Indicates the maximum platform capacity for the current position of the platform. Restricted capacities are permitted at restricted platform positions (shorter boom lengths and higher boom angles).

NOTE: Refer to the capacity decals on the machine for restricted and unrestricted platform capacities.

4. Cable Service Indicator (If Equipped)

When illuminated, the light indicates the boom cables are loose or broken and must be repaired or adjusted immediately.

▲ WARNING

IF THE CABLE SERVICE INDICATOR IS ILLUMINATED, RETURN THE PLATFORM TO THE STOWED POSITION, SHUT DOWN THE MACHINE, AND HAVE THE BOOM CABLES INSPECTED.

5. Enable Indicator/Footswitch

To operate any function, the footswitch must be depressed and the function selected within seven seconds. The enable indicator shows that the controls are enabled. If a function is not selected within seven seconds, or if a seven second lapse between ending one function and beginning the next function, the enable light will go out and the footswitch must be released and depressed again to enable the controls.

Releasing the footswitch removes power from all controls and applies the drive brakes.

▲ WARNING

TO AVOID SERIOUS INJURY, DO NOT REMOVE, MODIFY OR DISABLE THE FOOTSWITCH BY BLOCKING OR ANY OTHER MEANS.

▲ WARNING

FOOTSWITCH MUST BE ADJUSTED IF FUNCTIONS ACTIVATE WHEN SWITCH ONLY OPERATES WITHIN LAST 1/4" OF TRAVEL, TOP OR BOTTOM.

3121205

– JLG Lift –

3-19

SECTION 3 - MACHINE CONTROLS AND INDICATORS

6. Glow Plug Indicator (Diesel Only)

When illuminated the glow plugs are operating. After turning on ignition, wait until light goes out before cranking engine.

7. Low Fuel Indicator (Yellow)

Indicates the fuel tank is 1/8 full or less. When the light first turns on, there are approximately four usable gallons of fuel remaining.

8. Malfunction Indicator

On all machines prior to S/N 48907 and machines with a Deutz engine prior to S/N 61927, the light turns on and an alarm sounds when machine's power system requires immediate service. Any of the following conditions will turn on light and alarm: low engine oil pressure, high engine coolant temperature, clogged engine air filter, low alternator output, clogged hydraulic oil return filter, or clogged charge pump filter.

On machines with Ford engines from S/N 48907 to S/N 61927, the light indicates that the Engine Control System has detected a malfunction and a Diagnostic Trouble Code has been set in the system memory.

On machines after S/N 6T1927, the light indicates that the JLG Control System has detected an abnormal condition and a Diagnostic Trouble Code has been set in the system memory.

Refer to the Service Manual for instructions concerning the trouble codes and trouble code retrieval.

The malfunction indicator light will illuminate for 2-3 seconds when the key is positioned to the on position to act as a self test.

3-20

– JLG Lift –

3121205

SECTION 4. MACHINE OPERATION

4.1 DESCRIPTION

This machine is a self-propelled hydraulic personnel lift equipped with a work platform on the end of an elevating and rotating boom.

The primary operator control station is in the platform. From this control station, the operator can drive and steer the machine in both forward and reverse directions. The operator can raise or lower the main or tower boom or swing the boom to the left or right. Standard boom swing is 360 degree continuous left and right of the stowed position. The machine has a Ground Control Station which will override the Platform Control Station. Ground Controls operate Boom Lift and Swing, and are to be used in an emergency to lower the platform to the ground should the operator in the platform be unable to do so.

4.2 OPERATING CHARACTERISTICS AND LIMITATIONS

Capacities

The boom can be raised above horizontal with or without any load in platform, if:

1. Machine is positioned on a smooth, firm and level surface.
2. Load is within manufacturer's rated capacity.
3. All machine systems are functioning properly.
4. Proper tire pressure.
5. Machine is as originally equipped from JLG.

3121205

- JLG Lift -

4-1

SECTION 4 - MACHINE OPERATION

Stability

Machine stability is based on two positions which are called FORWARD and BACKWARD stability. The machines position of least FORWARD stability is shown in Figure 4-2., Position of Least Forward Stability, and its position of least BACKWARD stability is shown in Figure 4-1., Position of Least Backward Stability.

⚠ WARNING

TO AVOID FORWARD OR BACKWARD TIPPING, DO NOT OVERLOAD MACHINE OR OPERATE THE MACHINE ON AN OUT-OF-LEVEL SURFACE.

4.3 ENGINE OPERATION

NOTE: *Initial starting should always be performed from the Ground Control station.*

Starting Procedure

⚠ CAUTION

IF ENGINE FAILS TO START PROMPTLY, DO NOT CRANK FOR AN EXTENDED TIME. SHOULD ENGINE FAIL TO START AGAIN, ALLOW STARTER TO "COOL OFF" FOR 2-3 MINUTES. IF ENGINE FAILS AFTER SEVERAL ATTEMPTS, REFER TO ENGINE MAINTENANCE MANUAL.

NOTE: *Diesel engines only: After turning on ignition, operator must wait until glow plug indicator light goes out before cranking engine.*

1. Turn key of SELECT switch to GROUND. Position POWER/EMERGENCY STOP switch to ON, then push the ENGINE START switch until engine starts.

⚠ CAUTION

ALLOW ENGINE TO WARM-UP FOR A FEW MINUTES AT LOW SPEED BEFORE APPLYING ANY LOAD.

2. After engine has had sufficient time to warm up, shut engine off.
3. Turn SELECT switch to PLATFORM.

4-2

- JLG Lift -

3121205

- From Platform, pull POWER/EMERGENCY STOP switch out, then push the ENGINE START switch until engine starts.

NOTE: Footswitch must be in released (up) position before starter will operate. If starter operates with footswitch in the depressed position, DO NOT OPERATE MACHINE.

Shutdown Procedure

⚠ CAUTION

IF AN ENGINE MALFUNCTION CAUSES AN UNSCHEDULED SHUTDOWN, DETERMINE THE CAUSE AND CORRECT IT BEFORE RESTARTING THE ENGINE.

- Remove all load and allow engine to operate at low speed for 3-5 minutes; this allows further reduction of internal engine temperature.
- Push POWER/EMERGENCY STOP switch in.
- Turn Select switch to Off.

Refer to Engine Manufacturer's manual for detailed information.

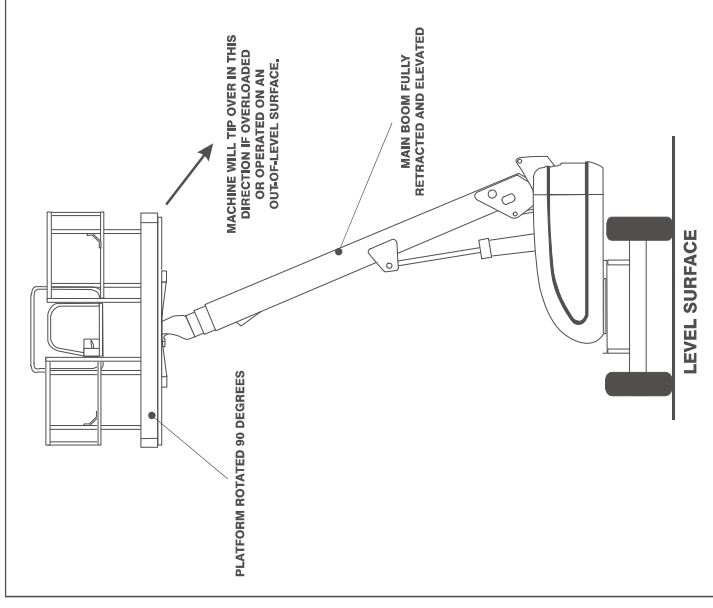


Figure 4-1. Position of Least Backward Stability

3121205

– JLG Lift –

4-3

SECTION 4 - MACHINE OPERATION

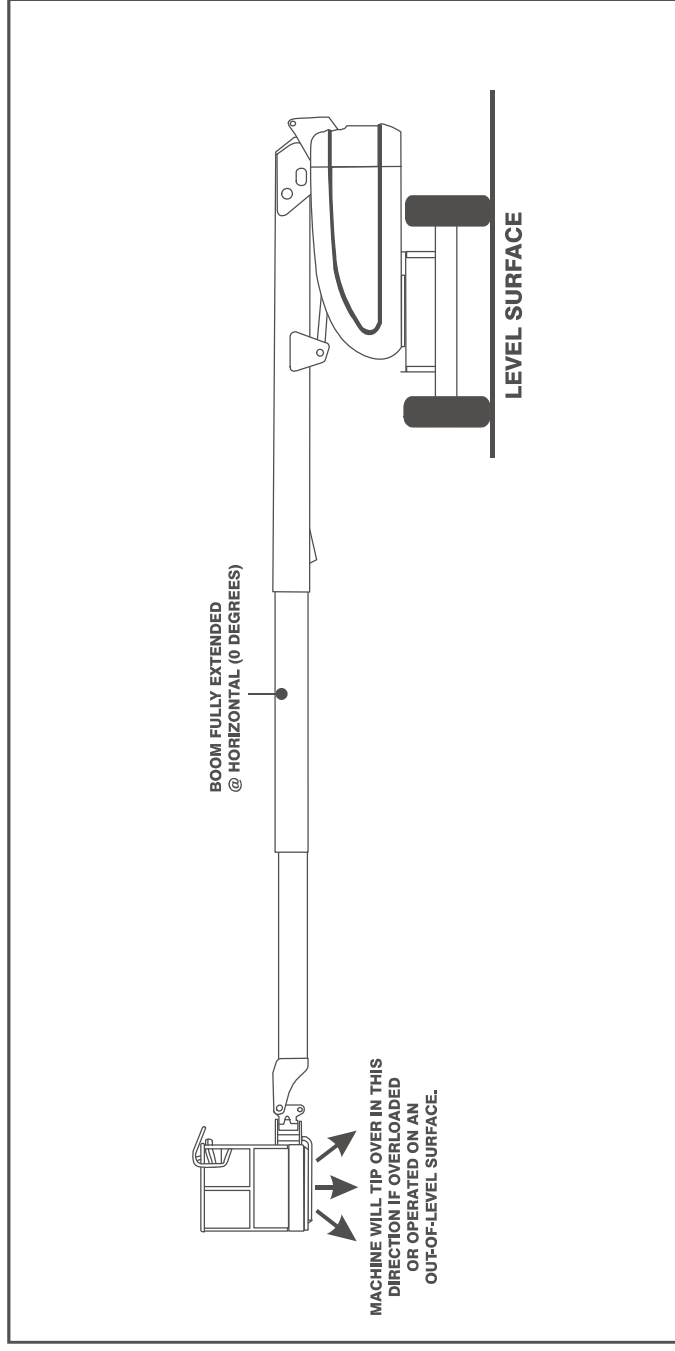


Figure 4-2. Position of Least Forward Stability

4-4

– JLG Lift –

3121205

4.4 TRAVELING (DRIVING)

▲ WARNING

DO NOT DRIVE WITH BOOM ABOVE HORIZONTAL EXCEPT ON A SMOOTH, FIRM AND LEVEL SURFACE.

TO AVOID LOSS OF TRAVEL CONTROL OR "TIP OVER", DO NOT DRIVE MACHINE ON GRADES EXCEEDING THOSE SPECIFIED ON THE SERIAL NUMBER PLATE.

BE SURE THE TURNTABLE LOCK IS ENGAGED BEFORE ANY EXTENDED TRAVELING.

DO NOT DRIVE ON SIDESLOPES WHICH EXCEED 5 DEGREES.

USE EXTREME CAUTION WHEN DRIVING IN REVERSE AND AT ALL TIMES WHEN THE PLATFORM IS ELEVATED.

BEFORE DRIVING, MAKE SURE BOOM IS POSITIONED OVER REAR DRIVE AXLE. IF BOOM IS OVER FRONT WHEELS, STEER AND DRIVE CONTROLS WILL BE REVERSED.

Traveling Forward and Reverse

1. At Platform Controls, pull out Emergency Stop switch and activate footswitch.
2. Position Drive controller to FORWARD or REVERSE as desired.

This machine is equipped with a Drive Orientation Indicator. The yellow light on the platform control console indicates that the boom is swung beyond the rear drive tires and the machine may Drive/Steer in the opposite direction from the movement of the controls. If the indicator is illuminated, operate the Drive function in the following manner:

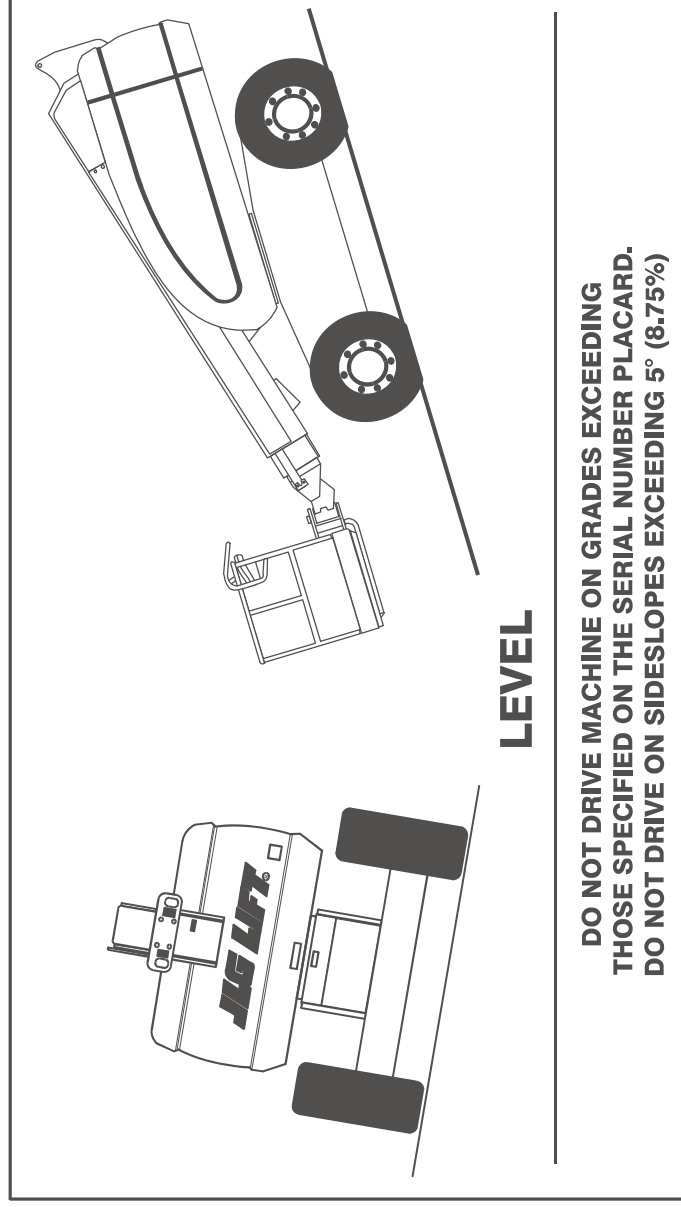
1. Match the black and white direction arrows on both platform control panel and the chassis to determine the direction the machine will travel.
2. Push and release the Drive Orientation Override switch. Within 3 seconds, slowly move the Drive control toward the arrow matching the intended direction of machine travel. The indicator light will flash during the 3 second interval until the drive function is selected.

3121205

– JLG Lift –

4-5

SECTION 4 - MACHINE OPERATION



DO NOT DRIVE MACHINE ON GRADES EXCEEDING THOSE SPECIFIED ON THE SERIAL NUMBER PLACARD. DO NOT DRIVE ON SIDESLOPES EXCEEDING 5° (8.75%)

Figure 4-3. Grade and Sideslope

4.5 STEERING

Position thumb switch on Drive/Steer controller to RIGHT for steering right, or to LEFT for steering left.

4.6 PLATFORM

Platform Level Adjustment

To Level Up or Down - Position the Platform/Level control switch Up or Down and hold until the platform is level.

▲ WARNING

ONLY USE THE PLATFORM LEVELING OVERRIDE FUNCTION FOR SLIGHT LEVELING OF THE PLATFORM. INCORRECT USE COULD CAUSE THE LOAD/OCCUPANT TO SHIFT OR FALL. FAILURE TO DO SO COULD RESULT IN DEATH OR SERIOUS INJURY.

Platform Rotation

To rotate the platform to the left or right, use the Platform Rotate control switch to select the direction and hold until desired position is reached.

4.7 BOOM

▲ WARNING

DO NOT SWING OR RAISE BOOM ABOVE HORIZONTAL WHEN MACHINE IS OUT OF LEVEL.

DO NOT DEPEND ON TILT ALARM AS A LEVEL INDICATOR FOR THE CHASSIS.

TO AVOID TIP OVER, LOWER PLATFORM TO GROUND LEVEL. THEN DRIVE MACHINE TO A LEVEL SURFACE BEFORE RAISING BOOM.

TO AVOID SERIOUS INJURY, DO NOT OPERATE MACHINE IF ANY CONTROL LEVER OR TOGGLE SWITCH CONTROLLING PLATFORM MOVEMENT DOES NOT RETURN TO THE 'OFF' OR NEUTRAL POSITION WHEN RELEASED.

IF THE PLATFORM DOES NOT STOP WHEN A CONTROL SWITCH OR LEVER IS RELEASED, REMOVE FOOT FROM FOOTSWITCH OR USE EMERGENCY STOP SWITCH TO STOP THE MACHINE.

3121205

- JLG Lift -

4-7

SECTION 4 - MACHINE OPERATION

Swinging the Boom

To swing boom, use SWING control switch to select RIGHT or LEFT direction.

NOTICE

WHEN SWINGING THE BOOM MAKE SURE THERE IS AMPLE ROOM FOR THE BOOM TO CLEAR SURROUNDING WALLS, PARTITIONS AND EQUIPMENT.

NOTE: When boom functions are being operated there is an interlock that prevents the use of DRIVE and STEER functions.

Raising and Lowering the Boom

To raise and lower the Boom, position LIFT control switch or controller to UP or DOWN and hold until desired height is reached.

Telescoping the Boom

To extend or retract the Boom, position MAIN TELESCOPE control switch to IN or OUT and hold until platform reaches desired position.

4.8 SHUT DOWN AND PARK

1. Drive machine to a protected area.
2. Assure boom is fully retracted and lowered over rear (Drive) axle; all access panels and doors closed and secured.
3. Remove all load and allow engine to operate 3-5 minutes at LOW setting to permit reduction of engine internal temperatures.
4. At Ground Controls, turn KEY SELECT switch to (center) OFF. Position, POWER/EMERGENCY STOP switch (down) to OFF. Remove key.
5. Cover Platform Control console to protect instruction placards, warning decals and operating controls from hostile environment.

4-8

- JLG Lift -

3121205