ADVANCED CONTROL SYSTEM (ACS) SELECTABLE HAND/FOOT CONTROL (CONT’D)

Handle Lock Solenoid Connector

Figure 60-123-35

The wire connector (Item 1) [Figure 60-123-35] can be removed from the solenoid, use the following procedure.

Figure 60-123-36

With a pointed tool, lift the tab (Item 1) [Figure 60-123-37] and pull the wire from the connector.

Installation: Install the wires into the connector as listed below [Figure 60-123-37].

1 - Terminal - Black
2 - Terminal - Open
3 - Terminal - Black

Remove the wedge (Item 1) [Figure 60-123-36] from the connector.
ADVANCED CONTROL SYSTEM (ACS) SELECTABLE HAND/FOOT CONTROL (CONT’D)

Calibration Of The ACS System

Figure 60-123-38

The new controller uses a calibration sequence to optimize the control system. The optimizing ensures full spool stroke (full flow) while preventing over stroke (Loading) of the actuator.

NOTE: This calibration procedure must be followed when replacing a handle sensor, foot pedal sensor, actuator or ACS controller. Failure to calibrate after component replacement may result in poor performance or reduced life of actuator(s).

Switchable Hand/Foot Controls Calibration Procedure

Switch the rocker switch (Item 1) [Figure 60-123-38] to the hand control mode.

Figure 60-123-39

Then Turn Key On

or

Press RUN/ENTER

Figure 60-123-40

With the seat bar down, turn the ignition key on (keyless panel choose RUN/ENTER) [Figure 60-123-39] and push the PRESS TO OPERATE button (Item 1) [Figure 60-123-40] to unlock the hand controls.

NOTE: Do not start the engine.

Figure 60-123-41

Fully stroke both control handles in toward the center of the cab and hold the handles there [Figure 60-123-41].

Turn the ignition key off (keyless panel power off).
NOTE: During the calibration cycle, the system will beep three times. The calibration process generates two codes 32-35 (Tilt handle not calibrated) and 32-40 (lift handle not calibrated). Ignore these two codes, this is normal during the calibration procedure.

Release the control handles.

NOTE: After pushing the PRESS TO OPERATE button, the handle position does not affect the calibration process.

NOTE: The ACS controller cycles the actuators, records the values and optimizes the system automatically in approximately 5 seconds.

Calibration is complete.

Hand Controls Only Calibration Procedure

Figure 60-123-44

With the seat bar down and the ignition key off (keyless panel power off), fully stroke both control handles in toward the center of the cab and hold the handles there [Figure 60-123-44].

Push the PRESS TO OPERATE button (Item 1) [Figure 60-123-43] to begin the calibration.

NOTE: The ACS icon will light up and if you listen closely the cycling of the actuators can be heard. The ACS icon will stay lit until the ignition key is cycled or the loader is started and a function is operated.
ADVANCED CONTROL SYSTEM (ACS) SELECTABLE
HAND/FOOT CONTROL (CONT’D)

Hand Controls Only Calibration Procedure (Cont’d)

Figure 60-123-45

Then Turn Key On
or
Press RUN/ENTER

Turn the ignition key on (keyless panel choose RUN/ENTER) [Figure 60-123-45]. Do not start the engine.

Figure 60-123-46

Push the PRESS TO OPERATE button (Item 1) [Figure 60-123-46] to begin the calibration.

NOTE: The ACS icon will light up and if you listen closely the cycling of the actuators can be heard. The ACS icon will stay lit until the ignition key is cycled or the loader is started and a function is operated.

NOTE: During the calibration cycle, the system will beep three times. The calibration process generates two codes 32-35 (tilt handle not calibrated) and 32-40 (lift handle not calibrated). Ignore these two codes, this is normal during the calibration procedure.

Release the control handles.

NOTE: After pushing the PRESS TO OPERATE button, the handle position does not affect the calibration process.

NOTE: The ACS controller cycles the actuators, records the values and optimizes the system automatically in approximately 5 seconds.

Calibration is complete.
Foot Sensor Disassembly And Assembly

**Figure 60-123-47**

Remove the two bolts (Item 1) [Figure 60-123-47] from the end of the foot sensor.

**Installation:** Tighten the bolts to 90 in.-lbs. (10.2 Nm) torque. Apply LOCTITE 242 to the threads.

**Figure 60-123-48**

Remove the boot retainer (Item 1), boot (Item 2), spool stop plate (Item 3), O-ring (Item 4) [Figure 60-123-48].

**NOTE:** Do not disassemble the sensor assembly (Item 5) [Figure 60-123-48]. The sensor assembly is a calibrated assembly and cannot be serviced. Order through Bobcat Parts.

**Figure 60-123-49**

The wire connector (Item 1) [Figure 60-123-49] can be removed from the sensor wires, use the following procedure.

**Figure 60-123-50**

Remove the wedge (Item 1) [Figure 60-123-50] from the connector.
ADVANCED CONTROL SYSTEM (ACS) SELECTABLE HAND/FOOT CONTROL (CONT’D)

Foot Sensor Connector (Cont’d)

Figure 60-123-51

With a pointed tool, lift the tab (Item 1) [Figure 60-123-51] and pull the wire from the connector.

Installation: Install the wires into the connector as listed below [Figure 60-123-51]:
1 - Terminal - Red
2 - Terminal - Black
3 - Terminal - Green

Foot Lock Solenoid Removal And Installation

Figure 60-123-52

Remove the two bolts (Item 1) [Figure 60-123-52] from the foot sensor shield.

Installation: Tighten the bolts to 80-90 in.-lbs. (9,0-10,2 Nm) torque.

Figure 60-123-53

Disconnect the foot lock solenoid connector (Item 1) [Figure 60-123-53] from the harness.

Remove foot lock solenoid (Item 2) [Figure 60-123-53].

Installation: Apply a drop of oil on the solenoid threads and tighten the solenoid to 35-40 ft.-lbs. (47-54 Nm) lubed torque.

Figure 60-123-54

Check the O-ring (Item 1) [Figure 60-123-54] for damage. Replace as necessary.

Foot Lock Solenoid Connector

The wire connector (Item 2) [Figure 60-123-54] can be removed from the solenoid wires, use the following procedure.