

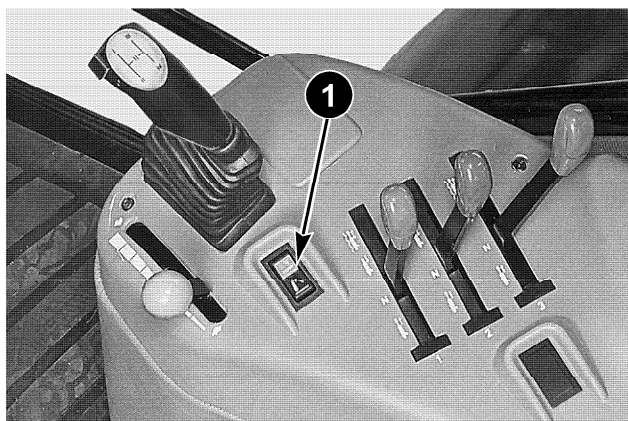
READING AND ERASING ERROR CODES

YES and **NO** are signaled by using the hitch up/down switch as follows:

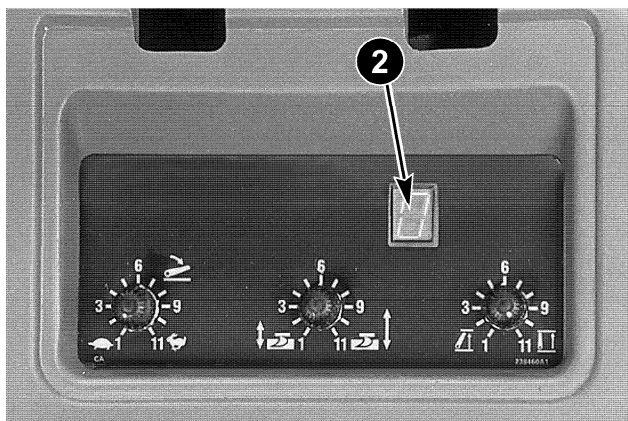
YES = Push hitch up/down switch into the DOWN MOMENTARY position and release.

NO = Push hitch up/down switch into the UP position then back to the DOWN (centre) position.

NOTE: *The DOWN MOMENTARY position is below the centre position and spring loaded to return to the centre position when released. DOWN and UP positions are detented.*



DP99M082



DP98G261

1. HITCH UP/DOWN SWITCH AND HITCH ENABLE LAMP
2. DIAGNOSTIC DISPLAY

STEP 1

Push and hold the hitch up/down switch (1) in the DOWN MOMENTARY position while turning the key switch to the ON position. Release the hitch up/down switch when the first character after the 8 appears in the diagnostic display (2) of the hitch control panel. If the hitch up/down switch is NOT released, the calibration sequence will terminate.

STEP 2

The diagnostic display will read **C**, do you want to calibrate the hitch?

Answer **NO** to display error codes.

STEP 3

If no error codes are recorded the diagnostic display will read **n**. Answer **NO** and go to STEP 5.

If error codes are recorded the first recorded error code will be displayed (for example **c**).

Answer **YES**, the next recorded error code will be displayed (for example **r**). Continue to answer **YES** to display all recorded error codes.

STEP 4

When all recorded error codes have been displayed the diagnostic display will read **n**, do you want to read the error codes again?

Answer **YES** to repeat the error codes or **NO** to continue.

STEP 5

The diagnostic display will read **e**, do you want to ERASE error codes?

Answer **YES** to ERASE ERROR codes in the controller memory.

Answer **NO** to KEEP ERROR codes in the controller memory.

STEP 6

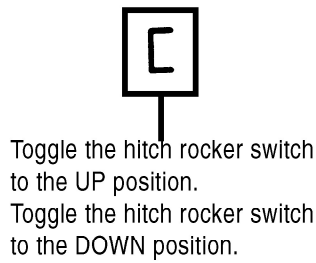
The diagnostic display will return the system normal code **0**.

READING AND ERASING ERROR CODES

Push and hold the hitch rocker switch in the DOWN MOMENTARY position while starting the engine. Release the rocker switch after **C** and a letter appear on the hitch module display. If the rocker switch is not released, the calibration sequence will terminate.

NOTE: The calibration procedure may be exited at any time by toggling the hitch position rocker switch UP then DOWN. Repeat until **0** appears, procedure is finished.

n will appear if no errors have been recorded.



If any error codes have been recorded, first code will appear now.



Toggle the hitch rocker switch to the UP position.
Toggle the hitch rocker switch to the DOWN position.



First error code-
Example only.

Push the hitch rocker switch into the DOWN MOMENTARY position and release.



Next error code-
Example only

Repeatedly push the hitch rocker switch into the DOWN MOMENTARY position until **e** or **n** appears.

Do you want to erase all error codes or keep in memory.



Toggle the hitch rocker switch to the UP position.
Toggle the hitch rocker switch to the DOWN position.



Push the hitch rocker switch into the DOWN MOMENTARY position and release. The module will repeat error scan for the second time.

KEEP

Toggle the hitch rocker switch to the UP position.
Toggle the hitch rocker switch to the DOWN position.

ERASE



















Push the hitch rocker switch into the DOWN MOMENTARY position and release.






















Finished.










HITCH SYSTEM PERFORMANCE CODE CHART

These are error codes and corrective actions used in troubleshooting the electronic hitch system. The codes are listed from the highest priority to the lowest priority. When more than one failure exists simultaneously, the highest priority failure will be displayed. All failures are recorded in the control module memory and can be retrieved in order of priority.

ERROR CODE	CAUSE	FAILURE MODE	CORRECTIVE ACTION
  336L96A	Open circuit or short to ground of lower coil or lower coil circuit.	HALT	<ol style="list-style-type: none"> 1. Test wire harness for continuity. 2. Test coil resistance (6.4 to 6.8 ohms). 3. Replace the control module.
  336L96B	Open circuit or short to 12 volts DC, of lower coil or lower coil circuit.	HALT	<ol style="list-style-type: none"> 1. Test wire harness for continuity. 2. Test coil resistance (6.4 to 6.8 ohms). 3. Replace the control module.
  336L96C	Open circuit or short to ground of raise coil or raise coil circuit.	HALT	<ol style="list-style-type: none"> 1. Test wire harness for continuity. 2. Test coil resistance (6.4 to 6.8 ohms). 3. Replace the control module.
  336L96D	Open circuit or short to ground of both raise and lower coils or both raise and lower coil circuits.	HALT	<ol style="list-style-type: none"> 1. Test wire harness for continuity. 2. Test coil resistance (6.4 to 6.8 ohms). 3. Replace the control module.
  336L96E	Control module memory failure. The system cannot read calibration values.	HALT	<ol style="list-style-type: none"> 1. Recalibrate the hitch. 2. Replace the control module.
  336L96F	Short to 12 volts DC of raise coil or raise coil circuit failure.	HALT	<ol style="list-style-type: none"> 1. Test wire harness for continuity. 2. Test coil resistance (6.4 to 6.8 ohms). 3. Replace the control module.
  336L96G	Short to 12 volts DC of the raise coil driver circuit.	HALT	<ol style="list-style-type: none"> 1. Replace the control module.
  336L96H	Short to 12 volts DC of the raise coil driver circuit.	HALT	<ol style="list-style-type: none"> 1. Replace the control module.
 338L96A	Tractor has never been calibrated.	HALT	<ol style="list-style-type: none"> 1. Calibrate the hitch.
 338L96B	Open or shorted hitch position circuit. Misadjusted hitch position potentiometer.	LIMP	<ol style="list-style-type: none"> 1. Adjust the hitch position potentiometer to 4.85 ± 0.1 volts DC. Replace position potentiometer if required. 2. Test wire harness for continuity. 3. Replace the control module.

ERROR CODE	CAUSE	FAILURE MODE	CORRECTIVE ACTION
 338L96C	Open or shorted hitch position control circuit. Misadjusted hitch position control potentiometer.	LIMP	<ol style="list-style-type: none"> 1. Adjust position control lever potentiometer to 4.85 ± 0.10 volts DC. Replace position potentiometer if required. 2. Test wire harness for continuity. 3. Replace the control module.
 338L96D	Loss of 5 volt regulator.	LIMP	<ol style="list-style-type: none"> 1. Replace the control module.
 338L96E	Low battery voltage (less than 9.8 volts DC).	LIMP	<ol style="list-style-type: none"> 1. Test battery circuit output.
 338L96G	Watchdog circuit problem.	LIMP	<ol style="list-style-type: none"> 1. Replace the control module.
 338L96H	High battery voltage (greater than 14.7 volts DC).	LIMP	<ol style="list-style-type: none"> 1. Test battery circuit output.
 338L96J	Upper limit circuit failed. Upper limit will be the last value during operation, or minimum (50% of hitch travel) if the failure is detected during start up.	LIMP	<ol style="list-style-type: none"> 1. Test the resistance of the upper limit potentiometer. <ol style="list-style-type: none"> A. From pin "A" to pin "C" (9000-11000 ohms). B. From pin "A" to pin "B" ($0-10000 \pm 10\%$ ohms). C. From pin "B" to pin "C" ($0-10000 \pm 10\%$ ohms). 2. Test wire harness for continuity.
 340L96A	Load control circuit has failed.	DEGRADED 2	<ol style="list-style-type: none"> 1. Test the resistance of the load control potentiometer. <ol style="list-style-type: none"> A. From pin "A" to pin "C" (9000-11000 ohms). B. From pin "A" to pin "B" ($0-10000 \pm 10\%$ ohms). C. From pin "B" to pin "C" ($0-10000 \pm 10\%$ ohms). 2. Test wire harness for continuity. 3. Replace the control module.
 340L96B	2 draft pin sensors failed, or 1 draft pin sensor failed when tractor is configured for one draft pin sensor.	DEGRADED 2	<ol style="list-style-type: none"> 1. Test the resistance of the draft pin sensor. <ol style="list-style-type: none"> A. Pin "A" to pin "C" (270-330 ohms). B. Pin "B" to pin "C" (175000 to 195000 ohms). C. Pin "A" to pin "B" (175000 to 195000 ohms). 2. Test wire harness for continuity.
  340L96C	Left draft pin sensor has failed. System will use other draft pin to operate in the draft mode.	DEGRADED 1	<ol style="list-style-type: none"> 1. Test the resistance of the draft pin sensor. <ol style="list-style-type: none"> A. Pin "A" to pin "C" (270-330 ohms). B. Pin "B" to pin "C" (175000 to 195000 ohms). C. Pin "A" to pin "B" (175000 to 195000 ohms). 2. Test wire harness for continuity.
  339L96A	Right draft pin sensor has failed. System will use other draft pin to operate in the draft mode.	DEGRADED 1	<ol style="list-style-type: none"> 1. Test the resistance of the draft pin sensor. <ol style="list-style-type: none"> A. Pin "A" to pin "C" (270-330 ohms). B. Pin "B" to pin "C" (175000 to 195000 ohms). C. Pin "A" to pin "B" (175000 to 195000 ohms). 2. Test wire harness for continuity.

<u>ERROR CODE</u>	<u>CAUSE</u>	<u>FAILURE MODE</u>	<u>CORRECTIVE ACTION</u>
 338L96K	UP/DOWN, DOWN MOMENTARY switch circuit failed. If the problem is intermittent, the function is disabled until the next engine start up.	DEGRADED 1	1. Test the UP/DOWN, DOWN MOMENTARY switch. 2. Test wire harness for continuity.
 338L96L	Hitch drop speed circuit has failed. Drop speed will be set to midrange. Place the UP/DOWN switch in the down momentary position for maximum hitch drop rate.	DEGRADED 1	1. Test the resistance of the drop speed control potentiometer. A. From pin "A" to pin "C" 9000-11000 ohms). B. From pin "A" to pin "B" (0-10000 ± 10% ohms). C. From pin "B" to pin "C" (0-10000 ± 10% ohms). 2. Test wire harness for continuity.
 339L96D	Hitch travel circuit has failed.	DEGRADED 1	1. Test the resistance of the travel control potentiometer. A. From pin "A" to pin "C" 9000-11000 ohms). B. From pin "A" to pin "B" (0-10000 ± 10% ohms). C. From pin "B" to pin "C" (0-10000 ± 10% ohms). 2. Test wire harness for continuity.
 335L96A	Lamp circuit failure.	DEGRADED 1	1. Replace lamp. 2. Test wire harness for continuity.
 335L96B	Hitch position is above upper limit.	DEGRADED 1	1. Lower the hitch by pushing and holding the DOWN MOMENTARY switch until the hitch upper limit is reached.
 335L96D	DOWN MOMENTARY switch has failed. 1. Pushed before start up. 2. Switch is pushed before start up and UP/DOWN switch is UP. Hitch is enabled and tractor is moving is not LIMP.	DEGRADED 1	1. Error code will stop when switch is released. 2. Test UP/DOWN, DOWN MOMENTARY switch. 3. Test wire harness for continuity.
 335L96C	Fender remote switch has failed. 1. Both remote switches are pushed together. 2. Any remote switch is pushed during start. 3. Any remote switch is pushed while tractor is moving. 4. Remote down is pushed with hitch at the lower travel limit. 5. Remote up is pushed with hitch at the upper travel limit.	DEGRADED 1	1. Error code will stop when remote switch is released. 2. Test fender remote switch. 3. Test wire harness for continuity.

<u>ERROR CODE</u>	<u>CAUSE</u>	<u>FAILURE MODE</u>	<u>CORRECTIVE ACTION</u>
 341L96C	Slip switch failure when the slip set is ON and the slip select is OFF.	DEGRADED 1	1. Test slip switch. 2. Test wire harness for continuity.
 341L96B	Slip lamp has failed.	DEGRADED 1	1. Replace slip lamp. 2. Test wire harness for continuity. 3. Replace the control module.
 341L96A	Radar (true ground speed sensor) is not present.	DEGRADED 1	1. Test wire harness for continuity. 2. Troubleshoot true ground speed sensor.
	Display is blank or LED segments are missing. Display circuit failure.	DEGRADED 1	1. Test the LED's, by observing the display while you turn the key switch to the OFF position and then back to the ON position, but do not start the tractor. All seven LED segments should illuminate for two seconds. 2. Make sure the display has power and is properly grounded. 3. Test wire harness for continuity. 4. Replace the display. 5. Replace the control module.
	Both AUTO MFD and MFD ON switches are ON.	MFD DISABLED *	1. Turn the AUTO MFD or the MFD ON switch OFF. 2. Test wire harness for continuity. 3. Test AUTO MFD and MFD ON switches. 4. Replace the control module.
	Both AUTO DIFF and DIFF ON switches are ON.	DIFFERENTIAL DISABLED *	1. Turn the AUTO DIFF or the DIFF ON switch OFF. 2. Test wire harness for continuity. 3. Test AUTO DIFF and DIFF ON switches. 4. Replace the control module.
	MFD driver circuit failed.	MFD DISABLED *	1. Test wire harness for continuity. 2. Replace the control module.
	DIFF Driver failed.	DIFFERENTIAL DISABLED *	1. Test wire harness for continuity. 2. Replace the control module.
	DIFF enabled lamp circuit failed.	DIFFERENTIAL ENABLED LAMP DISABLED *	1. Test wire harness for continuity. 2. Test lamp. 3. Replace the control module.

NOTE: All items marked with an asterisk (*) are shown on the display but do not affect the hitch.

NOTE: Case Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.