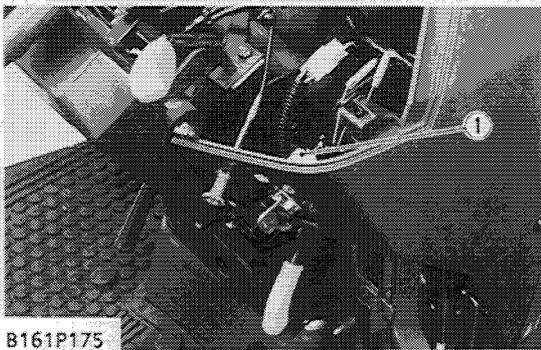
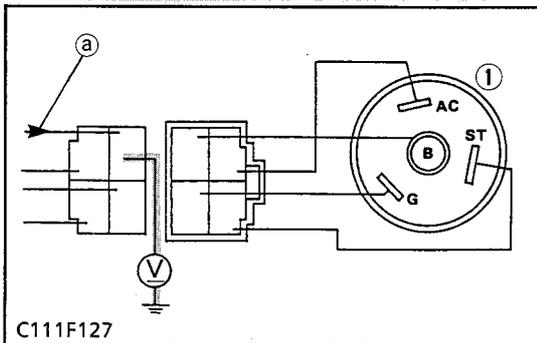


[2] STARTING SYSTEM

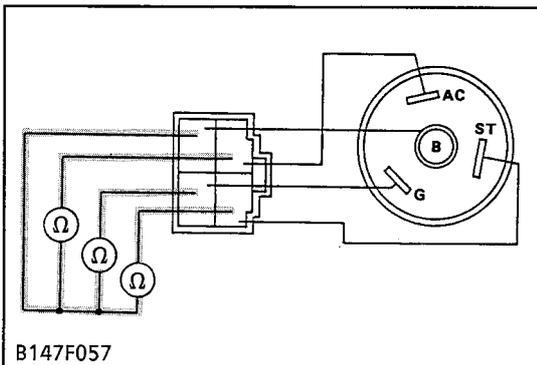
CHECKING



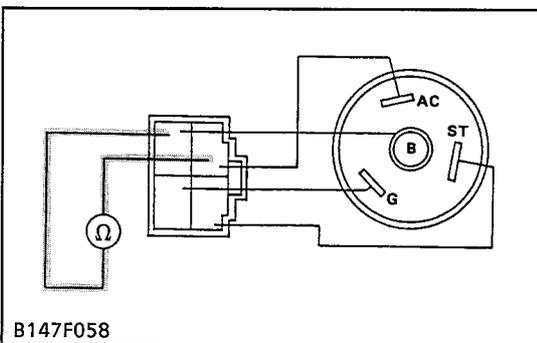
B161P175



C111F127



B147F057



B147F058

Main Switch

1. Remove the meter panel, and disconnect the main switch connectors after turning the main switch off.
2. Perform the following checking.

(1) Main Switch

Connector Voltage

1. Measure the voltage with a voltmeter across the connector B terminal and chassis.
2. If the voltage differs from the battery voltage (11 to 14 V), the wiring harness is faulty.

Voltage	Connector B terminal – Chassis	Approx. battery voltage
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(a) From Battery Positive Terminal

(1) Main Switch

Main Switch Key at OFF Position

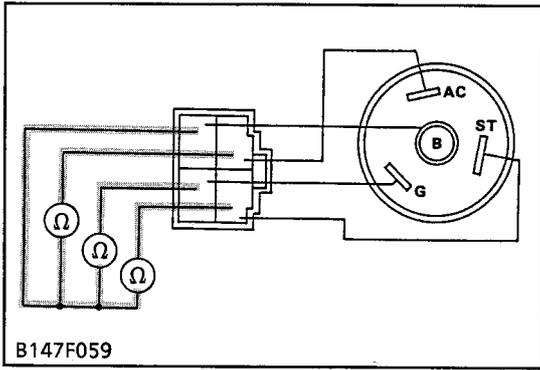
1. Turn the main switch off.
2. Measure the resistances with an ohmmeter across the B terminal and the AC terminal, B terminal and ST terminal, and B terminal and G terminal.
3. If infinity is not indicated, the contacts of the main switch are faulty.

Resistance	B terminal – AC terminal	Infinity
	B terminal – ST terminal	Infinity
	B terminal – G terminal	Infinity

Main Switch Key at ON Position

1. Turn the main switch on.
2. Measure the resistances with an ohmmeter across the B terminal and the AC terminal.
3. If 0 ohm is not indicated, the B – AC contacts of the main switch are faulty.

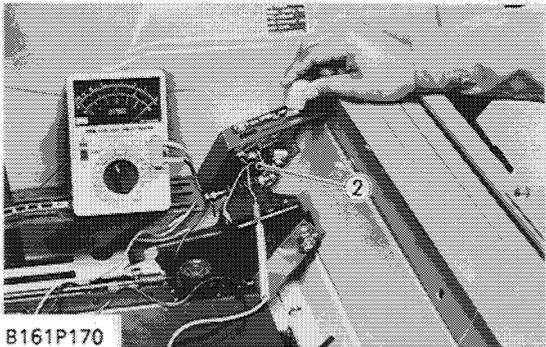
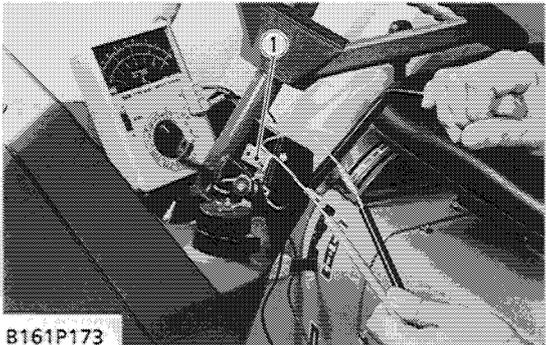
Resistance	B terminal – AC terminal	0 ohm
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Main Switch Key at START Position

1. Turn and hold the main switch key at the **START** position.
2. Measure the resistances with an ohmmeter across the **B** terminal and the **G** terminal, across the **B** terminal and the **ST** terminal and across the **B** terminal and the **AC** terminal.
3. If 0 ohm is not indicated, these contacts of the main switch are faulty.

Resistance	B terminal – G terminal	0 ohm
	B terminal – ST terminal	0 ohm
	B terminal – AC terminal	0 ohm

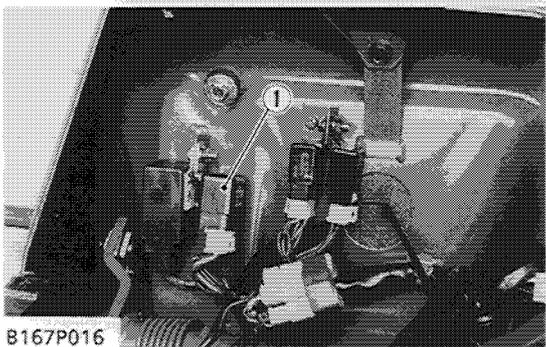


Check for Mismatching of the Shuttle and PTO Limit Switches

1. Disconnect the leads from shuttle and PTO limit switches.
2. Measure the resistance with an ohmmeter across the limit switch wiring lead and lead.
3. If the ohmmeter reads 0 ohm when the shift lever is in neutral, and infinity when the lever is in other positions, it is an indication that the switch is normal.

(1) Shuttle Limit Switch

(2) PTO Limit Switch



Checking Starter Relay

1. Turn the main switch **OFF**.
2. Remove the starter relay (1) and then disconnect the 4P connector from it.
3. Connect the jumper leads across terminals 2 of starter relay and 4P connector, and across terminals 4 of starter relay and 4P connector.
4. Set the shuttle shift lever to **"NEUTRAL"** and PTO shift lever to **"OFF"** after that turn the main switch **ON**.
5. Check for continuity across terminals 1 and 3 of the starter relay.
6. If continuity is not established across terminal 1 and 3, renew the starter relay.

(1) Starter Relay

