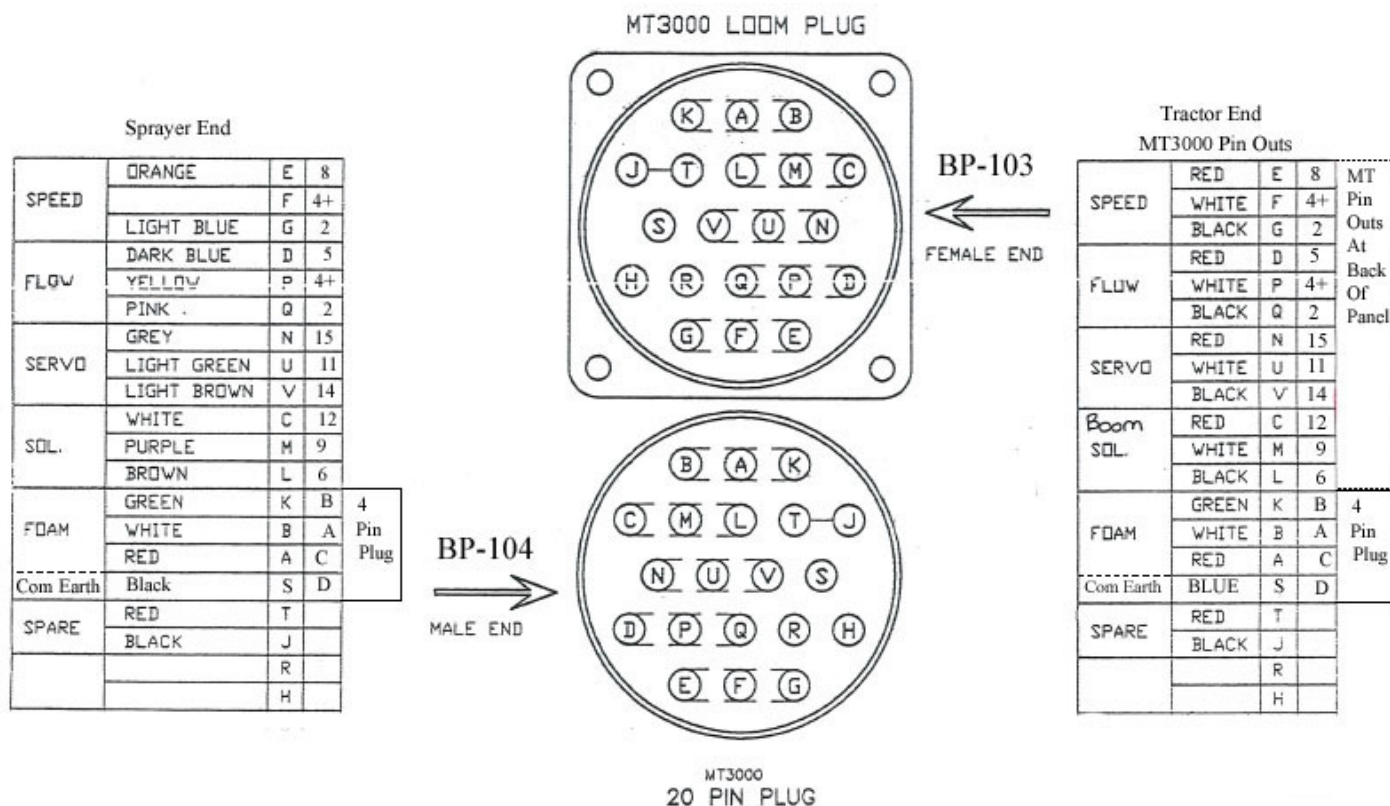


## MT3000 Looms & Pin Outs



The MT3000 suits the following Looms:

- **MTLOOMKIT**                      MT3000 Loom Complete
- **MTLOOMKIT1**                    MT3000 Tractor End Loom
- **MTLOOMEXT-4MTR**            MT3000 4 Metre Extension Loom M/F

**The Loom mentioned above are no longer available.**

The 20 Pin Plug as shown above, are available under the following part numbers:

- BP-103**            Canon Plug Female  
**BP-104**            Canon Plug Male

Dust caps are available for the 20 Pin Plugs, under the following part numbers:

- BP-105**            Canon Dust Cap for Male Plug  
**BP-106**            Canon Duct Cap for Female Plug

## 6-3 INDIVIDUAL COMPONENT TEST PROCEDURES

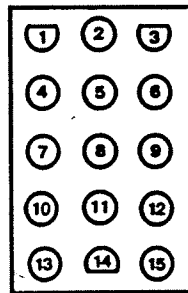
### 6-3.01 Console

The only way to field test a console is to connect it to a harness on a vehicle with a known working MT-3000 system or install it on an EPOP (electronic point of purchase) display stand. **NEVER** try to direct wire the connector of an MT-3000 console.

### 6-3.02 Harness

The main harness can be checked using a dc volt meter or test light. Unplug the main harness from the console. Disconnect all three-pin connectors (speed, flow, remote run/hold, servo and boom solenoids). Connect all power wires (see Section 2-4).

Connect one test probe to a good frame ground. Touch the other test probe to pin 13 of the main harness connector. Power should be present (meter reads about 12 v or test light lights). If no power, check the large orange wire to battery. Now touch one probe to pin 13 and the other to pin 7. If no power, check the large blue wire to the battery.

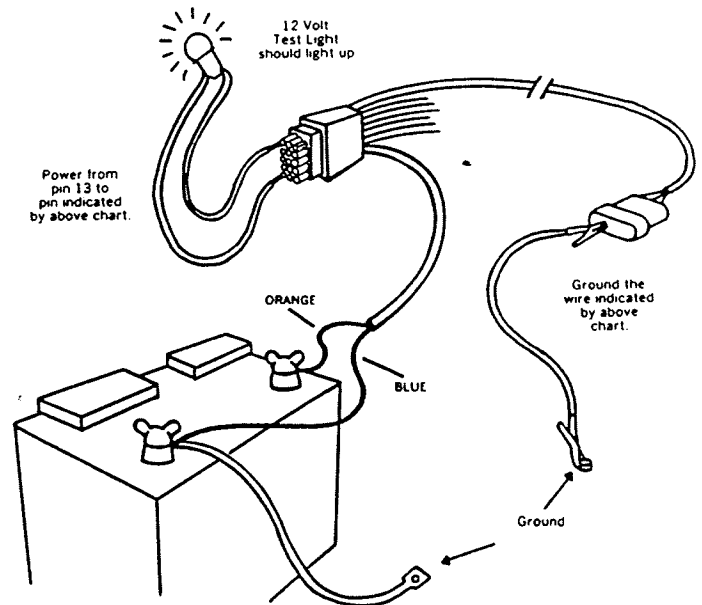


Pins 1, 3 & 14 have flat sides.

Now touch one probe to pin 10 and the other to pin 7. Power should be present when the ignition switch is turned on. If not, check the small orange power wire.

To test the rest of the harness, use a clip lead or other jumper wire to ground the pin indicated by the following chart. Connect one test probe to pin 13 and touch the other probe to all the other pins one at a time. The chart shows which pins should have power. If too many pins have power, there is a short in the harness. If the indicated pins do not have power, there is a poor connection at the large orange battery wire or the grounding jumper or a break in the harness. There should always be power between pins 13 and 7.

GROUND THIS PIN		POWER AT PIN
Remote Run/Hold (Shortest cable)	Red	1
	White	4
	Black	2
Speed Input (Yellow tie)	Red	8
	White	4
	Black	2
Flow Input (Green tie)	Red	5
	White	4
	Black	2
Boom Solenoids (Black tie)	Red	12
	White	9
	Black	6
Servo Valve (Reversed connector)	Red	15
	White	11
	Black	14
Small Brown Wire		3



### 6-3.03 Electrical Interference

Erratic operation may be a result of electrical interference from ignition wires or inductive loads (electric clutch, fan, solenoid, etc.). You may need to relocate console and/or wiring, or install noise suppressor and/or resistor spark plugs or wires.

### 6-3.04 Accessory Power

The white wire of the main harness speed, flow, and remote R/H cables supplies 12 volt power to optional accessories such as the Trak-Star Ultrasonic Speed Sensor. If this wire shorts to ground, the console's thermal overload will trip and shut down the entire MT-3000 system. Remove short and turn power off for 30 seconds to reset.

### 6-3.05 Inputs

Provided the main harness checks ok, the console's speed and flow inputs can be checked as follows: If checking speed, turn to speed and disconnect the speed sensor (yellow tie). If checking flow, turn to flow rate and disconnect the flow sensor (green tie). Using a clip lead or other jumper wire (paperclip bent in a "U") short together several times rapidly, the two outside pins of the appropriate connector of the main harness. If the monitor responds, the monitor and harness are ok. If the monitor does not respond, the monitor or the main harness is defective.