

# WIRING INSTRUCTIONS

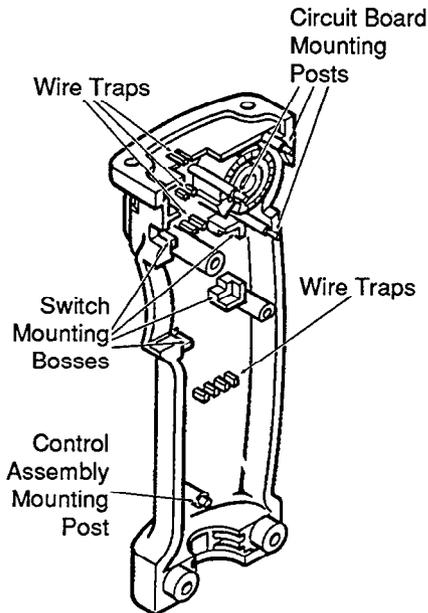
TITLE

**VARIABLE SPEED SUPER HOLE-SHOOTER**

BULLETIN  
58-01-0685

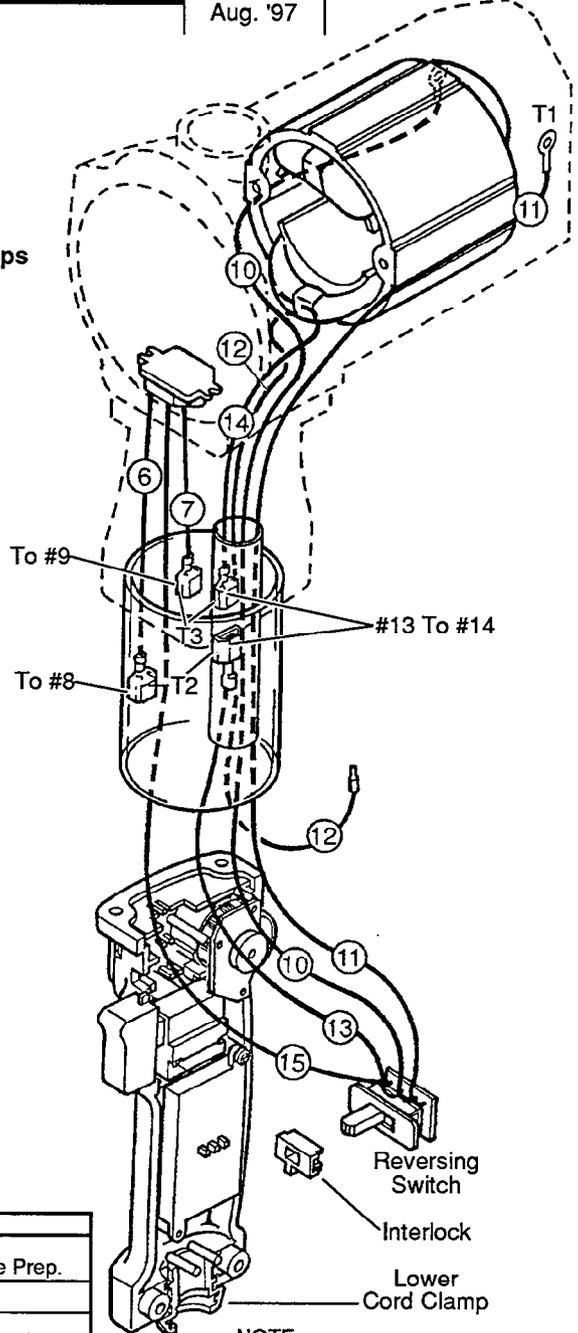
**MILWAUKEE ELECTRIC TOOL CORP. 13135 WEST LISBON RD. BROOKFIELD, WIS.**

DATE  
Aug. '97



As an aid in reassembly, take note of wire routing and position in wire guides and traps while dismantling tools.

**SEE REVERSE SIDE  
FOR ADDITIONAL  
WIRING INFORMATION**



Route red wire #10, white wire #11 and yellow wire #13 up from reversing switch through small insulation sleeve. Route black field wire #12 down through the small insulation sleeve. (Small insulation sleeve is located inside the large insulation sleeve which is positioned inside the spacer). Slide yellow field wire #14 down through the small insulation sleeve and connect to yellow wire #13 from the reversing switch. Route red wire #10 through the motor insulator and along the groove on the right hand side of the field and terminate to the carbon brush assembly with screw No. 06-82-8835. Route white wire #11 through the motor insulator, along the groove on the left hand side of the field and terminate to the carbon brush assembly with screw. Make sure to secure wires #10 and #11 in rear wire traps located by the brush tubes.

Install the motor housing insulator and the field into the motor housing while feeding the triac/reversing switch assembly and small insulator sleeve through handle hole in motor housing. Place triac portion of assembly through the large insulation sleeve in the spacer and attach to the motor housing with two screws No. 06-82-5266. Connect triac blue/black wire #6 to blue/black control assembly wire #8. Connect white/blue #7 triac wire to the white/blue #9 wire from the control assembly.

**WIRING SPECIFICATIONS**

Wire No.	Wire Color	Origin or Part No.	Gauge	Length	Terminals, Connectors and End Wire Prep.
1	White	Control Assy.	18	2-1/4"	Component of control assembly
2	Black	Control Assy.	18	2-1/4"	Component of control assembly
3	Green	Cord Set	18	8-1/4"	Component of cord set / Strip 3/16" for T4
4	White	Cord Set	18	3-5/8"	Component of cord set
5	Black	Cord Set	18	3-5/8"	Component of cord set
6	Blue/Black	Triac	18	3-1/4"	Component of triac assembly / Strip 3/16" for T2
7	White/Blue	Triac	18	3-1/4"	Component of triac assembly / Strip 3/16" for T3
8	Blue/Black	Control Assy.	18	9-1/2"	Component of control assembly / Strip 3/16" for T3
9	White/Blue	Control Assy.	18	9-1/2"	Component of control assembly / Strip 3/16" for T2
10	Red	Rev. Switch	18	13-1/4"	Component of reversing switch / Strip 3/16" for T1
11	White	Rev. Switch	18	11-1/4"	Component of reversing switch / Strip 3/16" for T1
12	Black	Field	18	10"	Component of field
13	Yellow	Rev. Switch	18	2"	Component of reversing switch / Strip 3/16" for T2
14	Yellow	Field	18	6-1/4"	Component of field / Strip 3/16" for T3
15	Black	Triac/Rev. Switch	18	5"	Component of triac/reversing switch assembly

**NOTE:**  
All leads must be held to ± 1/8".  
All lead lengths are before stripping.

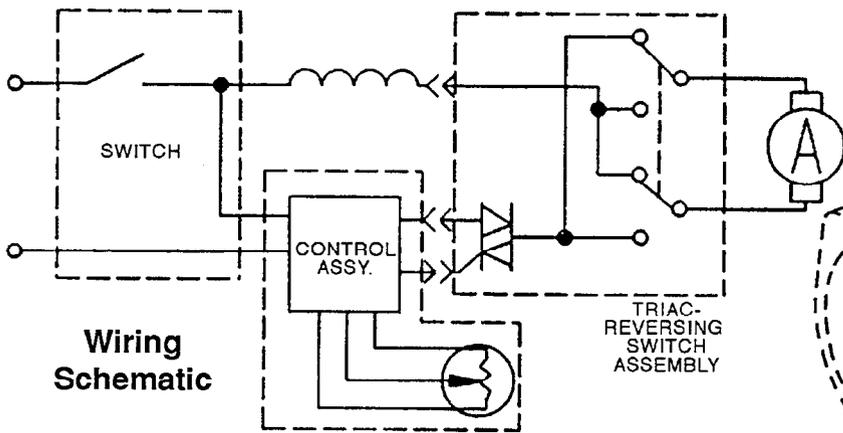
**TERMINAL DESCRIPTION**

Code	Part No.	Qty.
T1	23-74-0800	2
T2	23-74-0440	3
T3	23-74-0430	3
T4	23-74-0851	1

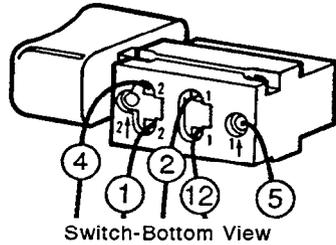
**CONNECTOR DESCRIPTION**

Code	Part No.	Qty.

**BULK LEAD WIRE - BULLETIN 58-01-0003**



**Wiring Schematic**



Switch-Bottom View

As an aid in reassembly, take note of wire routing and position in wire guides and traps while dismantling tools.

Place lower cord clamp into right handle half. Assemble cord/cord protector onto the lower cord clamp with approximately 1/8" to 1/4" of the cord jacket extending beyond the clamp posts. Position green ground wire #3 to the back. Route green wire #3 in handle wire traps, out past the top of the handle. Route #3 through the large insulation sleeve in the spacer and fasten ground terminal to the bottom of the spacer with ground screw No. 06-95-5200.

Position control assembly between the green wire #3 and white wire #4 and black wire #5 of the cord set (Green wire in the back and white and black wires in the front). Mount lower left tab of control assembly to post on the right handle half and secure the top right tab with screw No. 06-82-7240. Route all the wires from the back of the control assembly upward. Position blue/black wire #8 and white/blue wire #9 from the control assembly in wire traps of handle in any order and route out past the top of the handle. (Note: Care should be taken when routing wires #8 and #9, along with the three thin black wires that go to the circuit board, to make sure wires are placed in-between the switch mounting bosses so that they will not interfere with the mounting of the switch).

Properly position thumbwheel on the circuit board portion of the control assembly with a foam washer on the opposite side of the circuit board from the thumbwheel. Align the notch of the thumbwheel in the same direction as the notch on the speed control wheel (potentiometer) on the circuit board for the correct orientation and full range on the speed dial. Mount the circuit board on the 3 posts located at the top of the right handle half.

Insert the reversing switch, with the interlock attached, into slotted area in the right handle half with wires facing upward. Place white wire #4 and black wire #5 from the cord set in the wire traps on the front face of the control assembly. Connect wire #4 to the bottom front of the switch (In the top #2 position, as shown above) and wire #5 to the bottom back of the switch and fasten with switch screw. Connect white wire #1 and black wire #2 from the control assembly to the switch. Place wire #12 into wire traps of the handle half taking care to route the wire under the switch before connecting. Once wires #1, #2, #4, #5 and #12 are properly connected, position switch into place being sure that the switch is seated correctly and not pinching wires in the back.

