

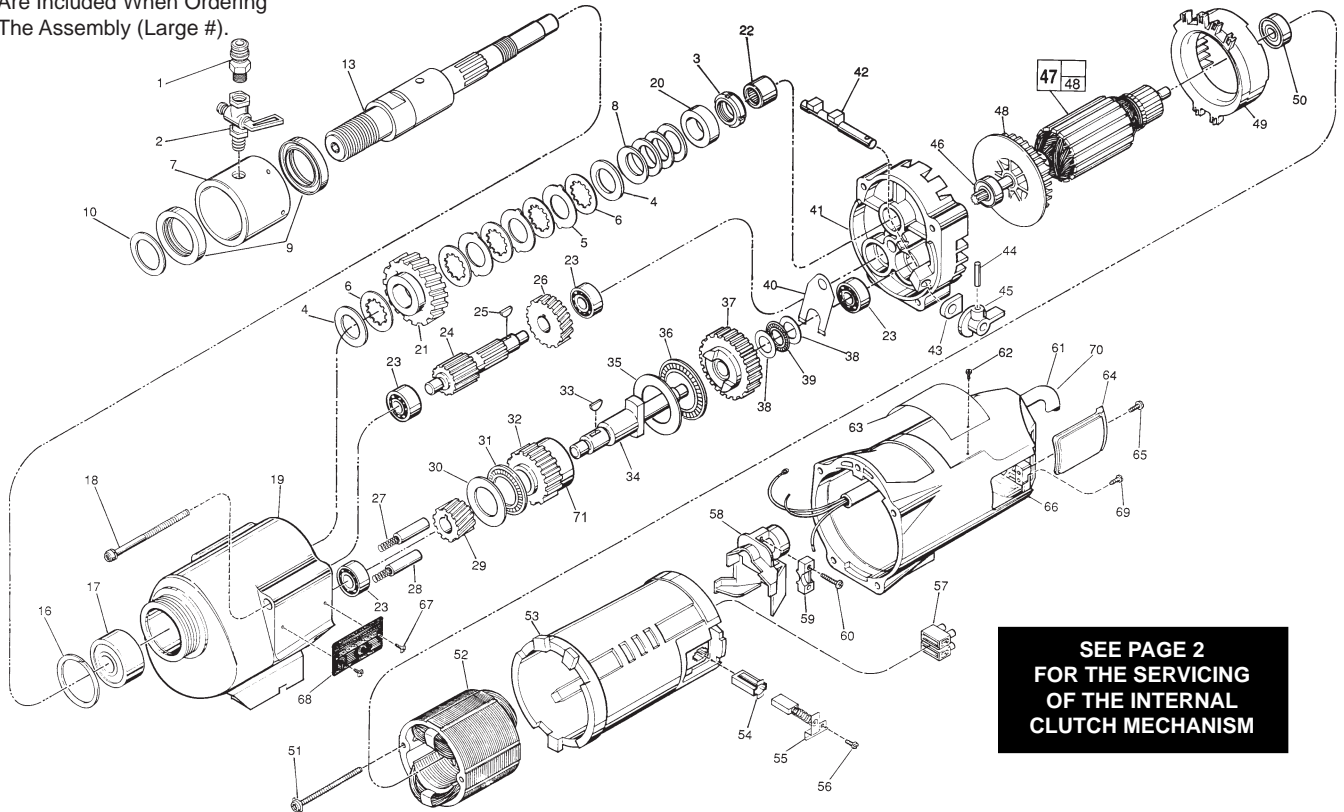


SERVICE PARTS LIST

BULLETIN NO.
55-16-0140

| | | | |
|--|---------------------------------|--|-----------|
| SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS | | REVISED BULLETIN | DATE |
| DYMODRILL with INTERNAL CLUTCH | | | Jan. 2012 |
| CATALOG NO. 4096-59A | STARTING SERIAL NO. D87A | WIRING INSTRUCTION See Pages 3 and 4 | |

EXAMPLE:
Component Parts (Small #)
Are Included When Ordering
The Assembly (Large #).



**SEE PAGE 2
FOR THE SERVICING
OF THE INTERNAL
CLUTCH MECHANISM**

| FIG. | PART NO. | DESCRIPTION OF PART | NO. REQ. |
|------|------------|--------------------------------------|----------|
| 1 | 42-90-0210 | Water Hose Fitting | (1) |
| 2 | 45-80-0060 | Shut Off Valve | (1) |
| 3 | 06-57-1050 | Retaining Nut | (1) |
| 4 | 45-88-1140 | Thrust Washer | (2) |
| 5 | 43-06-0160 | Clutch Disc-Outer | (3) |
| 6 | 43-06-0150 | Clutch Disc-Inner | (5) |
| 7 | 43-76-0051 | Water Swivel Hsg. w/ 06-83-2430 Scr. | (1) |
| 8 | 40-50-2150 | Disc Spring | (4) |
| 9 | 45-06-0635 | Seal | (2) |
| 10 | 45-88-8565 | Washer (Bag of 2) | (1) |
| 13 | 38-50-6020 | Spindle | (1) |
| 16 | 34-80-3800 | Retaining Ring | (1) |
| 17 | 02-20-2515 | Ball Bearing | (1) |
| 18 | 06-82-9202 | 1/4-20 x 4-1/4" Taptite T-30 | (4) |
| 19 | 28-14-1870 | Gear Case Assy.(Inc. 06-65-1535 Pin) | (1) |
| 20 | 45-36-1520 | Spindle Spacer | (1) |
| 21 | 32-75-3420 | Spindle Gear | (1) |
| 22 | 02-50-4830 | Needle Bearing | (1) |
| 23 | 02-04-1205 | Ball Bearing | (4) |
| 24 | 36-66-3751 | Pinion Shaft Assy. | (1) |
| 25 | 06-42-1600 | Woodruff Key | (1) |
| 26 | 32-40-1581 | Intermediate Gear | (1) |
| 27 | 40-50-6300 | Shifting Spring | (2) |
| 28 | 44-70-0100 | Shifting Plunger | (2) |
| 29 | 32-60-1041 | Pinion Gear | (1) |
| 30 | 45-88-0520 | Thrust Bearing Washer | (1) |
| 31 | 02-80-1800 | Thrust Bearing | (1) |
| 32 | 32-10-0060 | Clutch Gear | (1) |
| 33 | 06-42-2000 | Woodruff Key | (1) |
| 34 | 36-14-0061 | Clutch Shaft | (1) |
| 35 | 45-88-0530 | Thrust Bearing Washer | (1) |
| 36 | 02-80-5000 | Thrust Bearing | (1) |
| 37 | 32-10-0051 | Clutch Gear Assembly | (1) |
| 38 | 45-88-0510 | Thrust Bearing Washer | (2) |
| 39 | 02-80-1200 | Thrust Bearing | (1) |
| 40 | 45-98-0090 | Shifting Yoke | (1) |
| 41 | 14-13-0210 | Diaphragm Assy.(Inc. 06-65-1155 Pin) | (1) |
| 42 | 30-15-0272 | Shift Cam | (1) |
| 43 | 43-44-0580 | Foam Gasket | (2) |
| 44 | 06-65-0840 | 1/8 x 3/4" Groove Pin | (1) |
| 45 | 25-60-0056 | Shifting Knob | (1) |
| 46 | 02-04-1229 | Ball Bearing | (1) |

| FIG. | PART NO. | DESCRIPTION OF PART | NO. REQ. |
|------|------------|--|----------|
| 47 | 16-76-0325 | 230 V Armature | (1) |
| 48 | 22-84-0790 | Fan | (1) |
| 49 | 42-14-0291 | Baffle | (1) |
| 50 | 02-04-1041 | Ball Bearing | (1) |
| 51 | 06-82-9152 | 10-24 x 2-3/4" Pan Hd. Sem. T-25 | (2) |
| 52 | 18-74-0120 | 220 V. Field | (1) |
| 53 | 23-16-1410 | Motor Insulator | (1) |
| 54 | 22-20-0680 | Brush Tube | (2) |
| 55 | 22-18-0706 | Carbon Brush Assembly | (2) |
| 56 | 06-82-8835 | 8-32 x 5/16" Pan Hd. Sem.T-20 | (2) |
| 57 | 22-56-0470 | Terminal Block | (1) |
| 58 | 22-38-0140 | Wire Trap | (1) |
| 59 | 31-17-0200 | Cord Clamp | (1) |
| 60 | 06-82-7326 | 8-16 x 1" Pan Hd. Plastite T-20 | (2) |
| 61 | 23-37-4096 | Control Assy. (See Page 4) | (1) |
| 62 | 06-72-1720 | Service Rivet | (2) |
| 63 | ----- | Service Nameplate | (1) |
| 64 | 22-32-0350 | Brush Cover | (2) |
| 65 | 06-82-5316 | 8-32 x 1/2" Pan Hd. Slit. Taptite T-20 | (2) |
| 66 | 28-50-6363 | Motor Housing | (1) |
| 67 | 06-82-5266 | 4-40 x 1/4" Pan Hd. Taptite T-10 | (2) |
| 68 | 12-98-3060 | Instruction Plate | (1) |
| 69 | 06-95-5200 | 8-32 x 5/16" Slit. Hex Hd. Screw | (1) |
| 70 | 22-36-0090 | PRCD (See Page 4) | (1) |
| 71 | 45-36-0225 | Gear Spacer | (1) |
| | 49-96-4705 | 1-3/8" Open End Wrench | (1) |
| | 49-96-0050 | 3/32" Hex Socket Wrench | (1) |
| | 49-96-0080 | 3/16" Hex Socket Wrench | (1) |
| | 45-56-0210 | Strap And Buckle | (1) |
| | 61-10-0660 | Retaining Nut Spanner Tool | (1) |
| | 61-30-0061 | Water Seal Jig | (1) |

FOR MOUNTING DRILL MOTOR USE:
06-75-3100 1/4-20 x 1" Socket Hd. Screw (4)
06-97-4050 1/4" Split Ring Lock Washer (4)

FIG. LUBRICATION
19 18 Oz. Type "J" Grease, No. 49-08-4220.

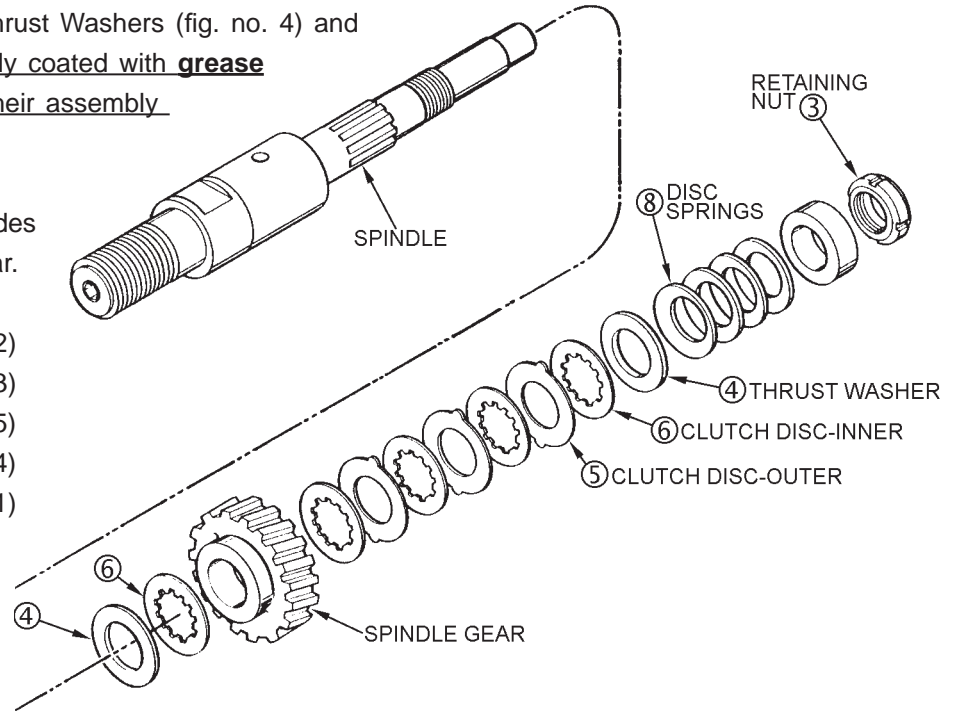
Servicing the Clutch Mechanism-

Torque Value for the Clutch Mechanism Retaining Nut (fig. no. 3).

Grease / Lubrication — when assembling the internal clutch component parts: the Clutch Discs (fig. nos. 5 and 6), Thrust Washers (fig. no. 4) and Disc Springs (fig. no. 8) are to be lightly coated with grease (Cat. No. 49-08-4220 type 'J') during their assembly into the spindle gear.

Grease / Lubrication specification includes coating internal bore of the spindle gear.

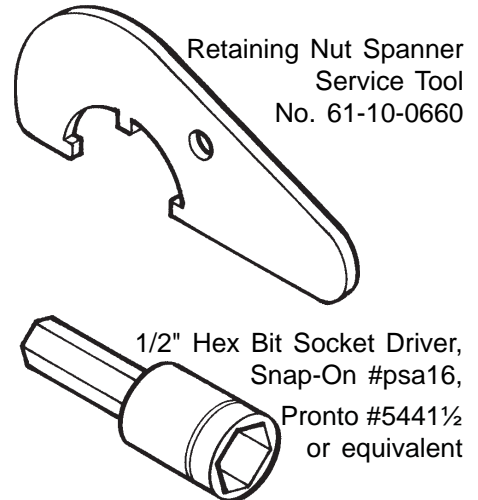
| | | | |
|---|------------|--------------------|-----|
| 4 | 45-88-1140 | Thrust Washers | (2) |
| 5 | 43-06-0160 | Clutch Discs-Outer | (3) |
| 6 | 43-06-0150 | Clutch Discs-Inner | (5) |
| 8 | 40-50-2150 | Spring Discs | (4) |
| | 32-75-3430 | Spindle Gear | (1) |



Service note: the assembly torque for the Clutch Mechanism Retaining Nut, No. 06-57-1050 (fig. no. 3), which insures the static torque required to slip the clutch mechanism, as lubricated, should be **40-45 ft-lbs (54-61 Nm)**.

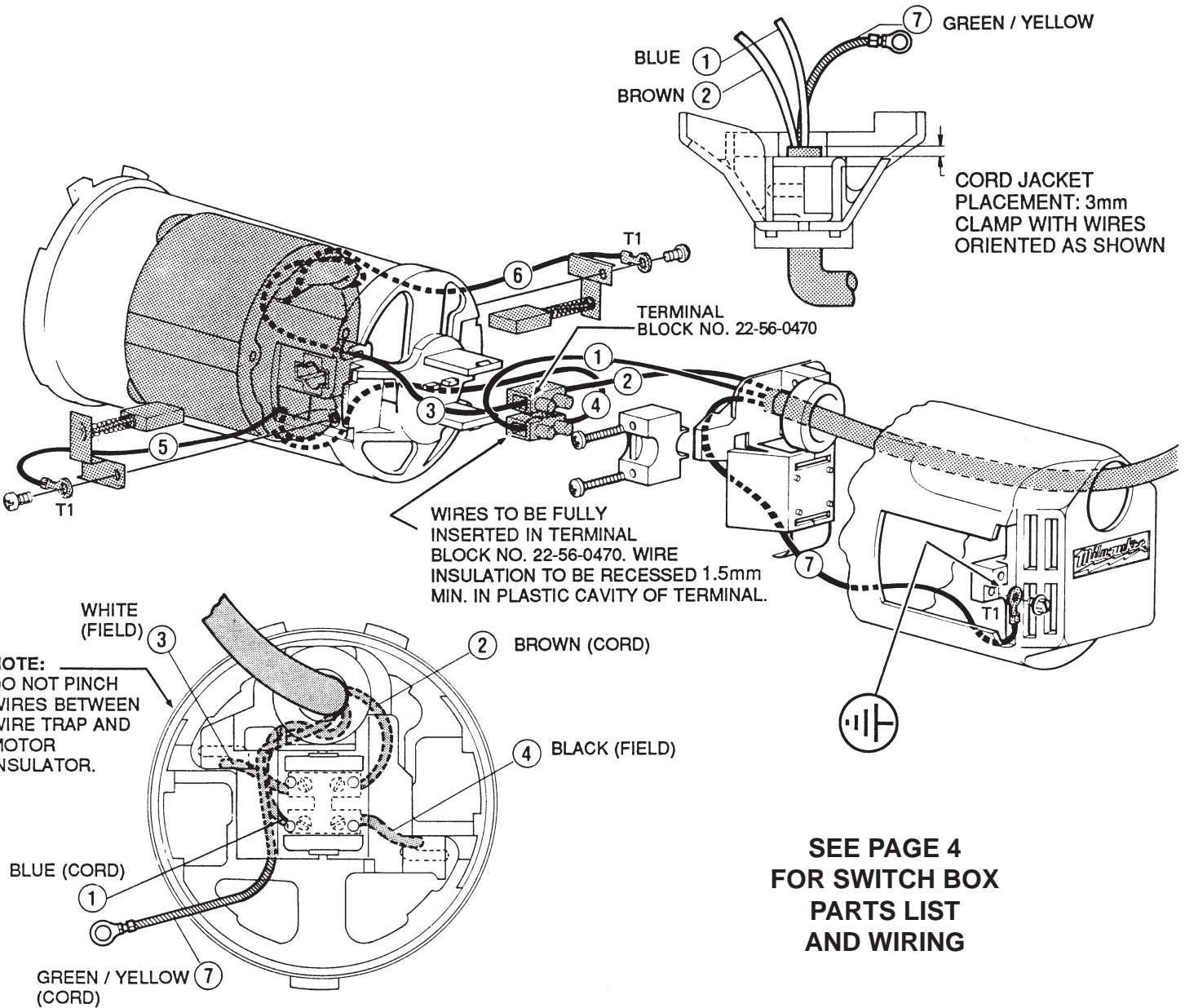
With the gear case separated from the diaphragm & motor housing of the Clutch Dymo-Drill motor —

- insert & engage a **61-10-0660** retaining nut spanner with the notches in the **06-57-1050** clutch adjustment retaining nut.
- with a **1/2" hex socket bit driver** attached to a torque wrench, interlock the male hex with the female hex found in the threaded end of the dymo-drill spindle.
- turn the torque wrench clockwise ⤵, observing the torque reading and tighten the clutch adjustment retaining nut on the rear of the spindle shaft until a value of **40-45 ft-lbs (54-61 Nm)** is obtained.



WIRING INSTRUCTIONS

| | | |
|--------------|--|-----------------|
| TITLE | DYMODRILL and SWITCH BOX | BULLETIN |
| | MILWAUKEE ELECTRIC TOOL CORP. 13135 WEST LISBON RD. BROOKFIELD, WIS. | DATE |

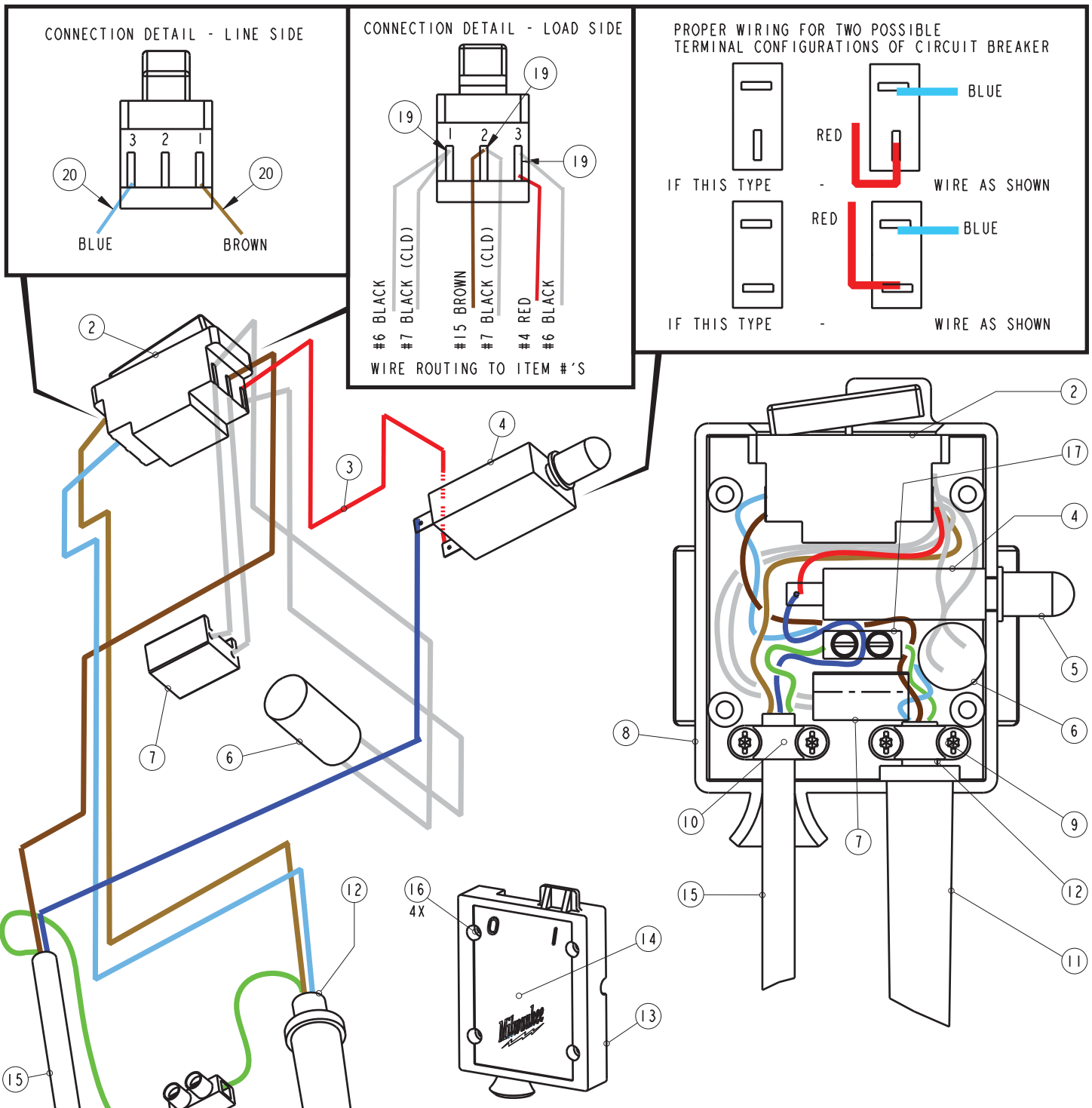


WIRING SPECIFICATIONS

| Wire No. | Wire Color | Origin or Gauge | Length | Terminals, Connectors and 1 or 2 End Wire Preparation |
|----------|--------------|-----------------|--------|---|
| 1 | Blue | Cord | 70mm | As received, apply with #8. |
| 2 | Brown | Cord | 70mm | As received, apply with #9. |
| 3 | White | Field | ----- | As received. |
| 4 | Black | Field | ----- | As received. |
| 5 | White | Field | ----- | Strip 5mm for T1. |
| 6 | White | Field | ----- | Strip 5mm for T1. |
| 7 | Green/Yellow | Cord | ----- | Strip 5mm for T1. |
| | | | | |
| | | | | |

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

| TERMINAL DESCRIPTION | | |
|-----------------------|------------|------|
| Code | Part No. | Qty. |
| T1 | 23-74-0840 | 3 |
| CONNECTOR DESCRIPTION | | |
| | | |



SERVICE NOTES:

- Screws can use either a flat blade or T-20 screwdriver.
- Cover (13) should mate flush with enclosure (8) before securing with cover screws (16). A gap indicates a misplaced wire or component.
- Tighten breaker boot (5) after installing cover (13).
- Cord jackets (12 and 15) are to extend a minimum of .125" beyond cord clamps (10), 2 places. Cord set (12) is shown inside cord protector (11).
- Ground label (18) is to be applied to the inside of the enclosure (8), under the terminal block (17).
- Tuck the red leadwire assembly (3) down below pegs.

| ITEM | PART NUMBER | DESCRIPTION | QTY. |
|------|-------------|---------------------------|------|
| 1 | 22-68-0200 | SWITCH BOOT (Not Shown) | (1) |
| 2 | 23-66-1430 | SWITCH - DELAY TYPE | (1) |
| 3 | 23-94-9915 | LEADWIRE ASSEMBLY - RED | (1) |
| 4 | 22-36-0150 | BREAKER | (1) |
| 5 | 22-68-0210 | BREAKER BOOT | (1) |
| 6 | 22-33-0430 | SUPPRESSOR | (1) |
| 7 | 22-74-0053 | CURRENT LIMIT DEVICE | (1) |
| 8 | 22-12-0200 | ENCLOSURE | (1) |
| 9 | 06-82-7299 | SCREW | (4) |
| 10 | 31-17-0155 | CLAMP | (2) |
| 11 | 44-76-0140 | CORD PROTECTOR | (1) |
| 12 | 22-64-0201 | CORD SET ASSEMBLY | (1) |
| 13 | 22-68-0190 | COVER | (1) |
| 14 | 12-98-3080 | INSTRUCTION PLATE | (1) |
| 15 | 22-64-5050 | CORD SET | (1) |
| 16 | 06-82-7326 | SCREW | (4) |
| 17 | 22-56-0480 | TERMINAL BLOCK | (1) |
| 18 | 10-98-3030 | GROUND LABEL (Not Shown) | (1) |
| 19 | 23-74-2005 | 1.5MM FERRULE (Not Shown) | (3) |
| 20 | 23-74-2000 | 1.0MM FERRULE (Not Shown) | (2) |