



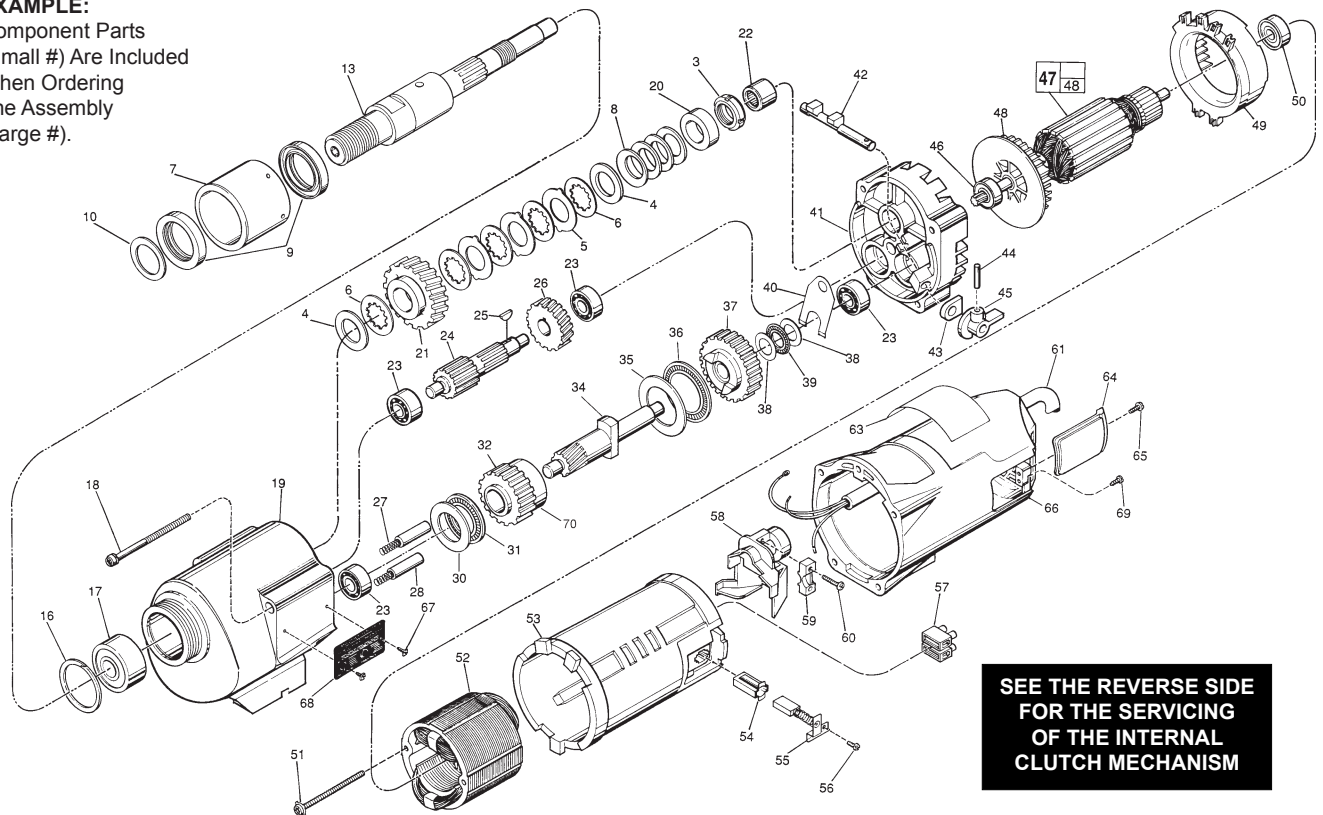
SERVICE PARTS LIST

BULLETIN NO.
54-16-4000

| | | | |
|--|---------------------------------|---|-----------|
| SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS | | REVISED BULLETIN | DATE |
| POWER UNIT | | | Apr. 2015 |
| CATALOG NO. 4004-20LC | STARTING SERIAL NO. G70A | WIRING INSTRUCTION 58-01-0930 | |

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



**SEE THE REVERSE SIDE
FOR THE SERVICING
OF THE INTERNAL
CLUTCH MECHANISM**

| FIG. | PART NO. | DESCRIPTION OF PART | NO. REQ. |
|------|------------|--|----------|
| 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 | (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 | 32-75-3430 | 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) |
| 30 | 45-88-0520 | Thrust Bearing Washer | (1) |
| 31 | 02-80-1800 | Thrust Bearing | (1) |
| 32 | 32-10-0060 | High Speed Gear | (1) |
| 34 | 36-14-0720 | Clutch Pinion 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) |
| 47 | 16-70-0320 | 120 V Armature | (1) |

| FIG. | PART NO. | DESCRIPTION OF PART | NO. REQ. |
|------|------------|--|----------|
| 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 | 18-70-0290 | 120 V. Field | (1) |
| 53 | 23-16-1410 | Motor Insulator | (1) |
| 54 | 22-20-0680 | Brush Tube | (2) |
| 55 | 22-18-0702 | 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 | 22-64-0302 | Cord Set | (1) |
| 63 | 12-20-4003 | 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 | 12-98-2100 | Instruction Plate | (1) |
| 69 | 06-95-5200 | 8-32 x 5/16" Slotted Hex Hd. Screw | (1) |
| 70 | 45-36-0225 | Gear Spacer | (1) |
| | 49-96-4700 | 1-3/8" Open End Wrench | (1) |
| | 45-88-0800 | Water Hose Washer (For Fig. No. 1) | (1) |
| | 61-10-0660 | Retaining Nut Spanner Tool | (1) |
| | 61-30-0061 | Water Seal Jig | (1) |

FOR MOUNTING DRILL MOTOR USE:

| | | |
|------------|--------------------------------|-----|
| 06-75-3090 | 1/4-20 x 7/8" 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.

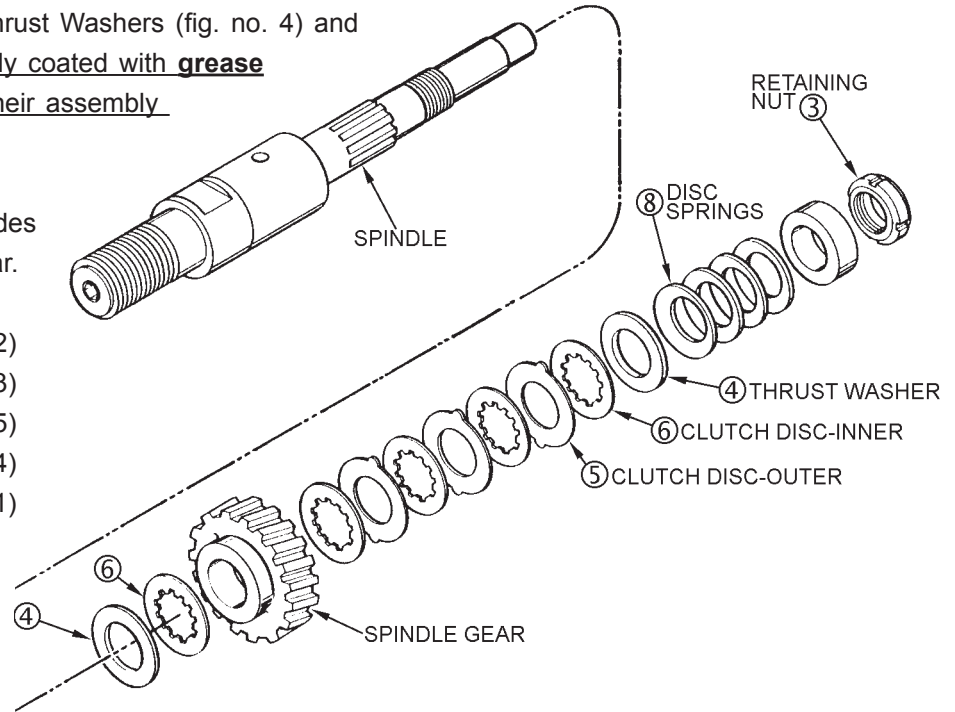
Servicing the Clutch Mechanism-

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 **45-50 ft-lbs.**

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 **45-50 ft-lbs** is obtained.

