

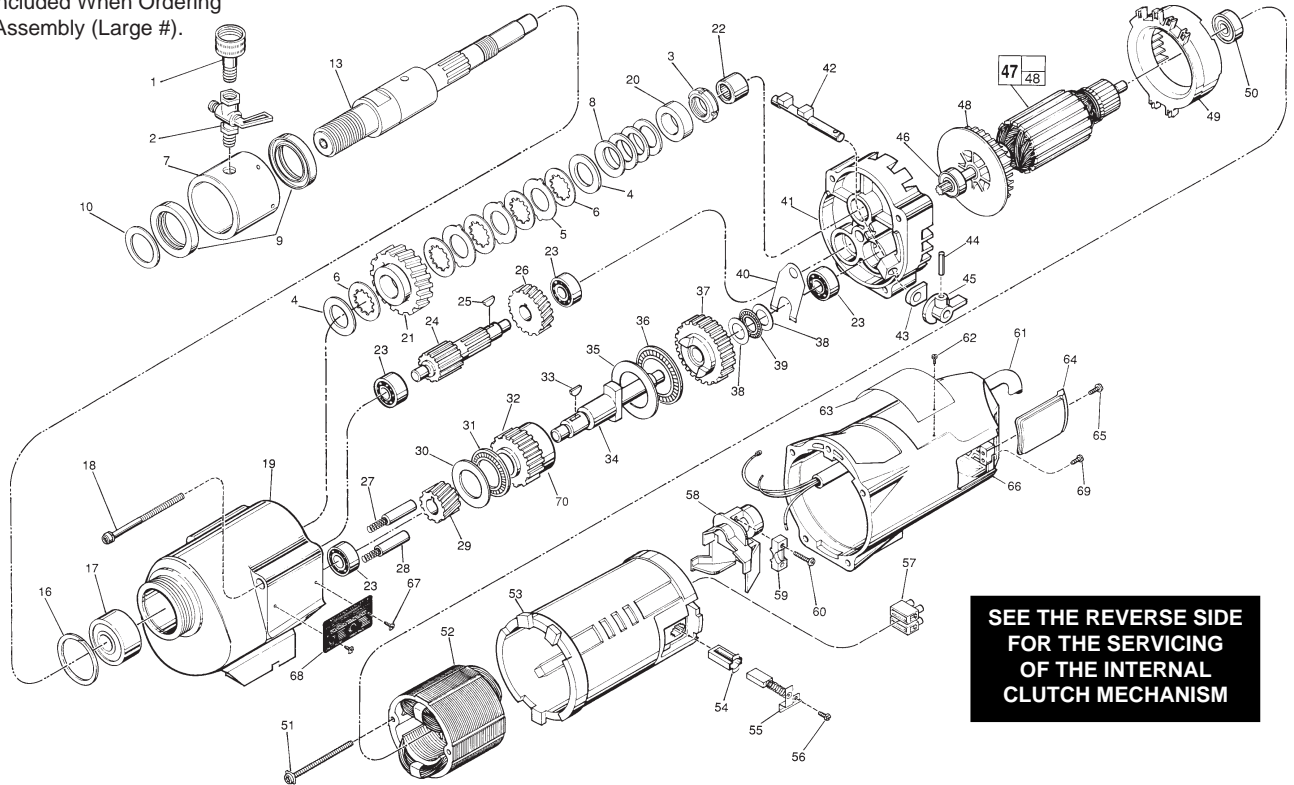


SERVICE PARTS LIST

BULLETIN NO.
54-16-5180

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
DYMODRILL with INTERNAL CLUTCH			Mar. 2008
CATALOG NO. 4005	STARTING SERIAL NO. 865A or 865B	WIRING INSTRUCTION 58-01-0930	

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.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	42-04-0600	Water Hose Adapter	(1)	48	22-84-0790	Fan	(1)
2	45-80-0060	Shut Off Valve	(1)	49	42-14-0291	Baffle	(1)
3	06-57-1050	Retaining Nut	(1)	50	02-04-1041	Ball Bearing	(1)
4	45-88-1140	Thrust Washer	(2)	51	06-82-9152	10-24 x 2-3/4" Pan Hd. Sem. T-25	(2)
5	43-06-0160	Clutch Disc-Outer	(3)	52	18-70-0290	120 V. Field	(1)
6	43-06-0150	Clutch Disc-Inner	(5)	53	23-16-1410	Motor Insulator	(1)
7	43-76-0051	Water Swivel Hsg Incl 06-83-2430 Scr	(1)	54	22-20-0680	Brush Tube	(2)
8	40-50-2150	Disc Spring	(4)	55	22-18-0702	Carbon Brush Assembly	(2)
9	45-06-0635	Seal	(2)	56	06-82-8835	8-32 x 5/16" Pan Hd. Sem.T-20	(2)
10	45-88-8565	Washer	(1)	57	22-56-0470	Terminal Block	(1)
13	38-50-6020	Spindle	(1)	58	22-38-0140	Wire Trap	(1)
16	34-80-3800	Retaining Ring	(1)	59	31-17-0200	Cord Clamp	(1)
17	02-20-2515	Ball Bearing	(1)	60	06-82-7326	8-16 x 1" Pan Hd. Plastite T-20	(2)
18	06-82-9202	1/4-20 x 4-1/4" Taptite T-30	(4)	61	22-64-0300	Cord Set	(1)
19	28-14-1870	Gear Case Assy., Incl 06-65-1535 Pin	(1)	62	06-72-1720	Service Rivet	(2)
20	45-36-1520	Spindle Spacer	(1)	63	12-99-1875	Service Nameplate	(1)
21	32-75-3440	Spindle Gear	(1)	★ 64	22-32-0350	Brush Cover	(2)
22	02-50-4830	Needle Bearing	(1)	65	06-82-5316	8-32 x 1/2" Pan Hd. Slit. Taptite T-20	(2)
23	02-04-1205	Ball Bearing	(4)	66	28-50-6363	Motor Housing	(1)
24	36-66-3751	Pinion Shaft Assy.	(1)	67	06-82-5266	4-40 x 1/4" Pan Hd. Taptite T-10	(2)
25	06-42-1600	Woodruff Key	(1)	68	12-98-2100	Instruction Plate	(1)
26	32-40-1581	Intermediate Gear	(1)	69	06-95-5200	8-32 x 5/16" Slotted Hex Hd. Screw	(1)
27	40-50-6300	Shifting Spring	(2)	70	45-36-0225	Gear Spacer	(1)
28	44-70-0100	Shifting Plunger	(2)		49-96-4700	1-3/8" Open End Wrench	(1)
29	32-60-2011	Pinion Gear	(1)		45-88-0800	Water Hose Washer (For Fig. No. 1)	(1)
30	45-88-0520	Thrust Bearing Washer	(1)		61-10-0660	Retaining Nut Spanner Tool	(1)
31	02-80-1800	Thrust Bearing	(1)		61-30-0061	Water Seal Jig	(1)
★ 32	32-10-0060	Clutch Gear Assembly	(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., Incl 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)				

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

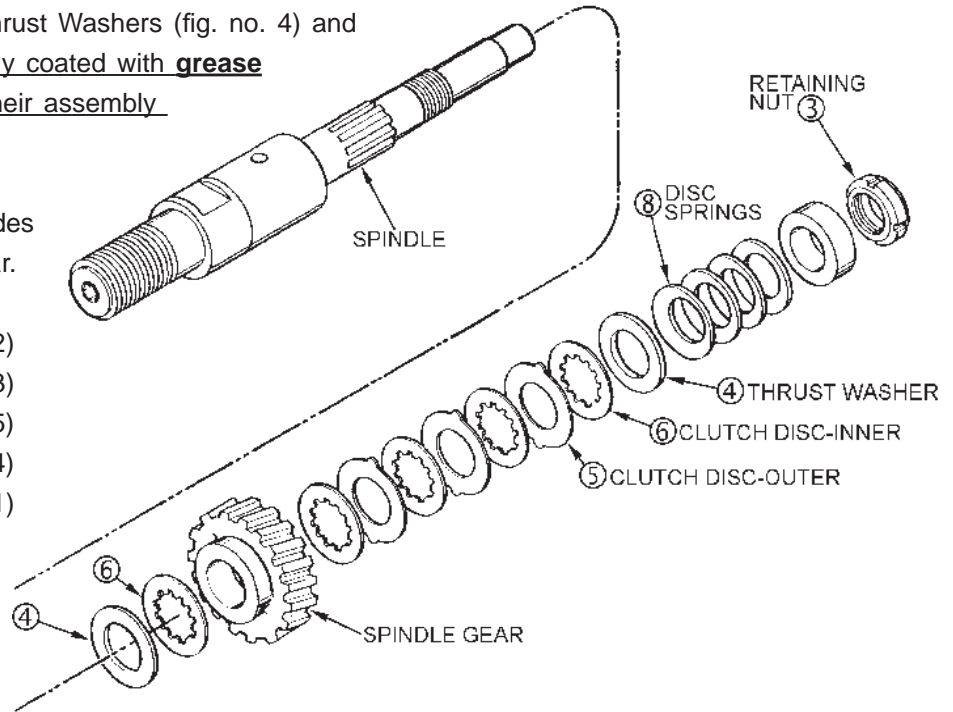
Servicing the Clutch Mechanism-

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 **25-30 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 **25-30 ft-lbs** is obtained.

