

MK Diamond Products, Inc.
 1315 Storm Parkway
 Torrance, CA 90509-2803

SPECIFICATION SHEET		Date 06/24/16
MK Part Number 155540	MK Description MTR, 20 AMP 4096-MIL W/CLUTCH	Revision -
Manufacturer P/N MIL-4096	Manufacturer/Vendor Description DIAMOND CORING MOTOR 450/900 RPM, 20 AMP W/ CLUTCH	
Manufacturer Information MILWAUKEE ELECTRIC TOOLS	Vendor Information	Alternate Manufacturer

Specifications:



FEATURES

Two speeds: 450 and 900 rpm
 20 Amp motor
 Clutch protection protects gears and motor
 Built-in water swivel

SPECIFICATIONS

Weight 24.0 lbs
 Voltage 120V
 Tool Warranty 5 Years
 No Load RPM 450-900
 Amps 20
 Spindle 1-1/4"-7
 Max HP 4.8
 Motor Protection Clutch
 Plug Type L5-20P
 Suggested Dia in Med Aggregate 6"-10" / 2"-6"

Rev	Description	Date	Approved
-	INITIAL RELEASE	-	-
-	CREATED SPEC SHEET, ECO# 2280	06/24/16	SSH



SERVICE PARTS LIST

BULLETIN NO.
54-16-4092

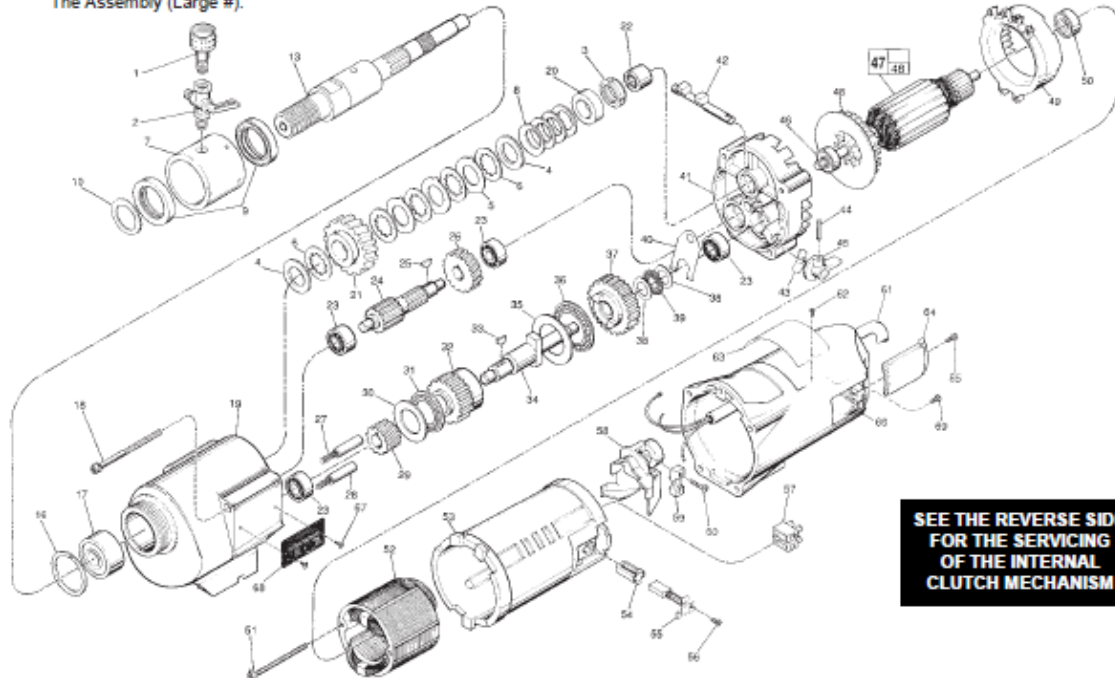
SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS

DYMODRILL with INTERNAL CLUTCH

REVISED BULLETIN 54-16-4091	DATE Jan. 2014
WIRING INSTRUCTION 58-01-0930	

CATALOG NO. 4096	STARTING SERIAL NO. 798B
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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.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	42-04-0800	Water Hose Adapter	(1)	46	02-04-1229	Ball Bearing	(1)
2	45-80-0060	Shut Off Valve	(1)	47	16-70-0320	120 V Armature	(1)
★ 3	06-67-1050	Retaining Nut	(1)	48	22-84-0790	Fan	(1)
★ 4	45-88-1140	Thrust Washer	(2)	49	42-14-0291	Baffle	(1)
★ 5	43-06-0160	Clutch Disc-Outer	(3)	50	02-04-1041	Ball Bearing	(1)
★ 6	43-06-0150	Clutch Disc-Inner	(5)	51	06-82-9152	10-24 x 2-3/4" Pan Hd. Sem. T-25	(2)
★ 7	43-76-0051	Water Swivel Hsg Incl 06-83-2430 Scr	(1)	52	18-70-0290	120 V. Field	(1)
★ 8	40-50-2150	Disc Spring	(4)	53	23-16-1410	Motor Insulator	(1)
★ 9	45-06-0635	Seal	(2)	54	22-20-0880	Brush Tube	(2)
★ 10	45-88-8565	Washer	(1)	55	22-18-0702	Carbon Brush Assembly	(2)
★ 13	38-50-8020	Spindle	(1)	56	06-82-8835	8-32 x 5/16" Pan Hd. Sem.T-20	(2)
★ 16	34-80-3800	Retaining Ring	(1)	57	22-56-0470	Terminal Block	(1)
★ 17	02-20-2515	Ball Bearing	(1)	58	22-38-0140	Wire Trap	(1)
★ 18	06-82-9202	1/4-20 x 4-1/4" Taprite T-30	(4)	59	31-17-0200	Cord Clamp	(1)
★ 19	28-14-1870	Gear Case Assy Incl 06-65-1535 Pin	(1)	60	06-82-7326	8-16 x 1" Pan Hd. Plastite T-20	(2)
★ 20	45-36-1520	Spindle Spacer	(1)	61	22-64-4480	Cord Set (Incl. 23-36-0120 Plug)	(1)
★ 21	32-75-3420	Spindle Gear	(1)	62	06-72-1720	Service Rivet	(2)
★ 22	02-50-4830	Needle Bearing	(1)	63	12-99-1875	Service Nameplate	(1)
★ 23	02-04-1205	Ball Bearing	(4)	64	22-32-0350	Brush Cover	(2)
★ 24	36-66-3751	Pinion Shaft Assy.	(1)	65	06-82-6316	8-32 x 1/2" Pan Hd. Slit. Taprite T-20	(2)
★ 25	06-42-1800	Woodruff Key	(1)	66	28-50-8363	Motor Housing	(1)
★ 26	32-40-1581	Intermediate Gear	(1)	★ 67	06-82-5266	4-40 x 1/4" Pan Hd. Taprite T-10	(2)
★ 27	40-50-6300	Shifting Spring	(2)	★ 68	12-98-2100	Instruction Plate	(1)
★ 28	44-70-0100	Shifting Plunger	(2)	69	06-95-5200	8-32 x 5/16" Slotted Hex Hd. Screw	(1)
★ 29	32-60-1041	Pinion Gear	(1)		49-96-4700	1-3/8" Open End Wrench	(1)
★ 30	45-88-0520	Thrust Bearing Washer	(1)		45-88-0800	Water Hose Washer(For Fig. No. 1)	(1)
★ 31	02-80-1800	Thrust Bearing	(1)	★	61-10-0660	Retaining Nut Spanner Tool	(1)
★ 32	32-10-0061	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.(Inc. 06-65-1155 Pin)	(1)				
★ 42	30-15-0272	Shift Cam	(1)				
★ 43	45-06-0350	Gearcase Seal	(1)				
★ 44	06-65-0840	1/8 x 3/4" Groove Pin	(1)				
★ 45	25-60-0056	Shifting Knob	(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.

MILWAUKEE ELECTRIC TOOL CORPORATION
 13135 W. LISBON RD., BROOKFIELD, WI 53005
 Drwg. 3

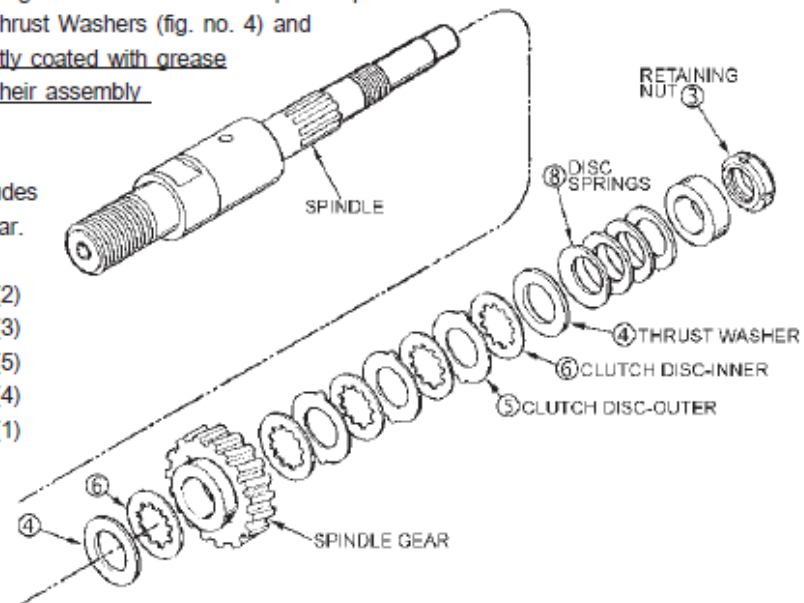
Servicing the Clutch Mechanism-

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.

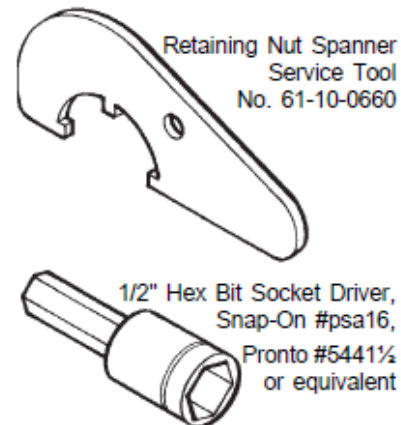
4	45-88-1140	Thrust Washers	(2)
5	43-06-0160	Clutch Discs-Outer	(3)
6	43-06-0150	Clutch Discs-Inner	(5)
8	40-50-2150	Spring Discs	(4)
	32-75-3430	Spindle Gear	(1)



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.

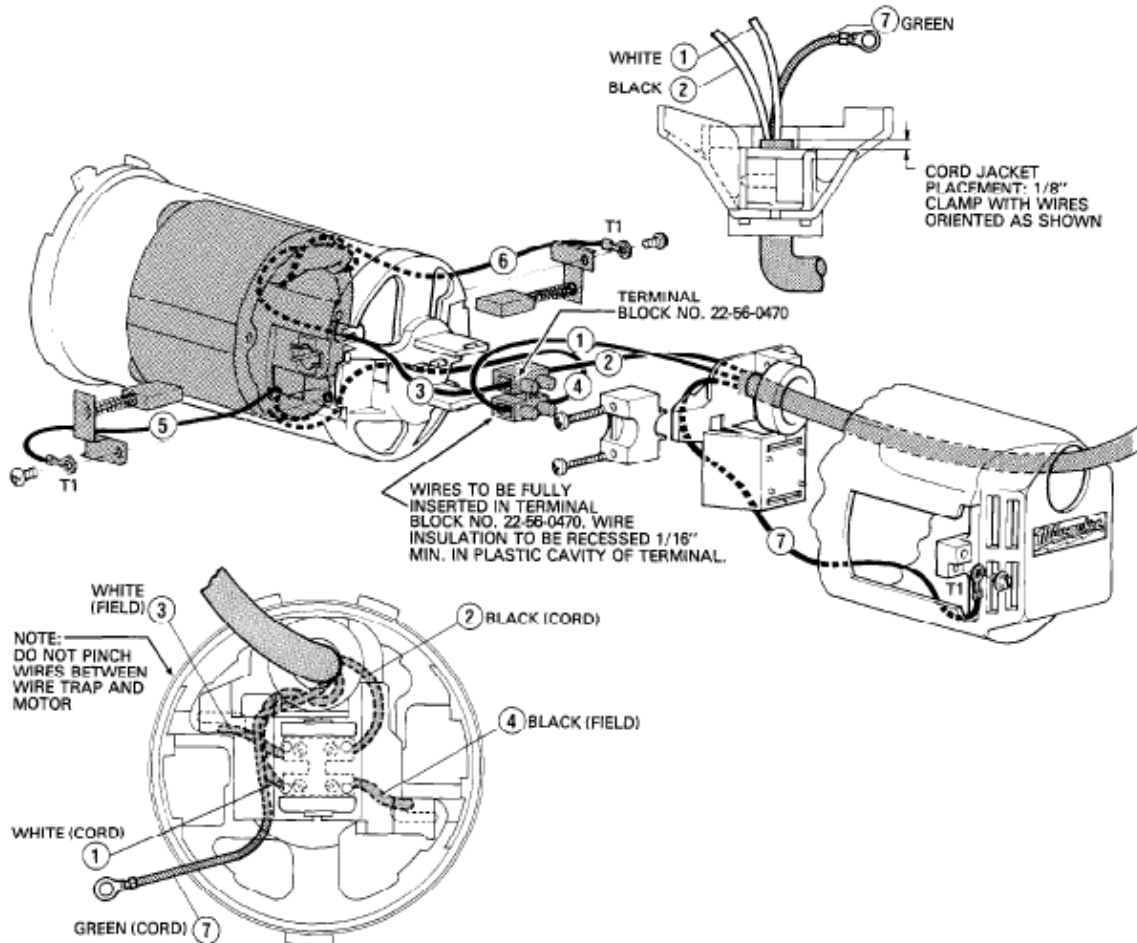
With the gear case separated from the diaphragm & motor housing of the Clutch Dymo-Drill motor —

- 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 is obtained.



WIRING INSTRUCTIONS

TITLE	120 VOLT DYMODRILL	BULLETIN
	MILWAUKEE ELECTRIC TOOL CORP. 13135 WEST LISBON RD. BROOKFIELD, WIS.	58-01-0930
	DATE March '88	



WIRING SPECIFICATIONS				
Wire No.	Wire Color	Origin or Gauge	Length	Terminals, Connectors and 1 or 2 End Wire Preparation
1	WHITE	CORD	2-3/4"	STRIP 1/4" AND TIN
2	BLACK	CORD	2-1/4"	STRIP 1/4" AND TIN
3	WHITE	FIELD	-----	STRIP 1/4" AND TIN
4	BLACK	FIELD	-----	STRIP 1/4" AND TIN
5	WHITE	FIELD	-----	STRIP 3/16" FOR T1
6	WHITE	FIELD	-----	STRIP 3/16" FOR T1
7	GREEN	CORD	-----	STRIP 3/16" FOR T1

NOTE:
All leads must be held to $\pm 1/8"$.
All field leads to be measured from and perpendicular to laminations.
All lead lengths are before stripping.

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