### SERVICE PARTS LIST

Milwaukee

Clutch Spring

C-Ring

Spindle

O-Ring

Washer • C-Ring

Washer

Piston

Wrist Pin

Oil Shield

C-Ring

Pinion

Rotor Assembly **Ball Bearing** 

Ground Wire Screw Wobble Shaft Assembly

Striker (Ram)

Crankcase Assembly

O-Ring

O-Ring

Steel Ball

Stop Washer

Striker (Anvil) O-Ring

Sleeve (Ram Catcher)

Spindle Bearing Bearing Bar Mounting Bracket

Spiral Retaining Ring Striker and O-Ring Assembly

M4 x 14mm Pan Hd. Taptite Screw

M4 x 10mm Pan Hd. Taptite T-20 Screw

M4 x 35mm Pan Hd. Plastite T-20 Screw

Motor Housing Support - Left Motor Housing Cover - Right

M4 x 18mm Pan Hd. T-20 Screw

9d 9f

9g

9ħ

9i

9k

9m

9n

9n

9a 9r

95

9t

911 9v

9w

9x

10 10a

10b

11

12

13 14

15

16

17

18

19

20

23

45-56-0037

44-60-5262

05-81-1337

43-44-1376

05-78-0105

16-07-2713

02-04-0033

06-81-5383

06-82-3006

05-81-0530

14-73-1603 44-90-1180

32-60-1611

34-40-1511 • O-Ring 44-62-5263

45-88-5200 ● Washer

43-44-1375 ● Gasket

43-84-0300 ● Felt Plug

2nd Stage Gear

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS

M18™ FUEL™ 1" (2Kg) SDS Plus D-Handle Rotary Hammer

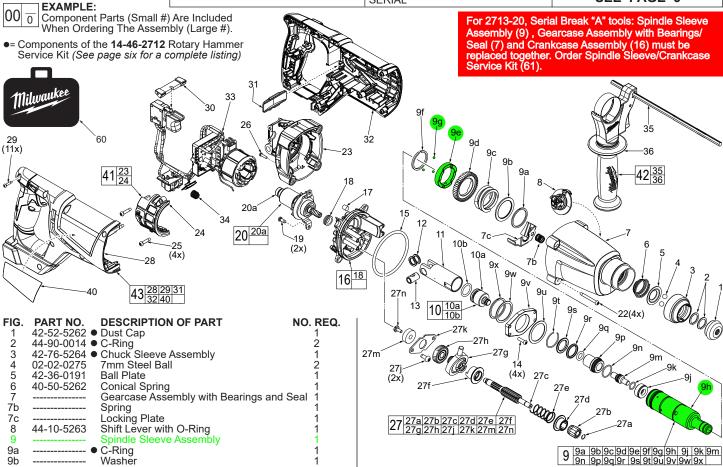
2713-20 CATALOG NO.

**STARTING SERIAL** 

**H19A** 

DATE REVISED BULLETIN Feb. 2022

> WIRING INSTRUCTION SEE PAGE 6

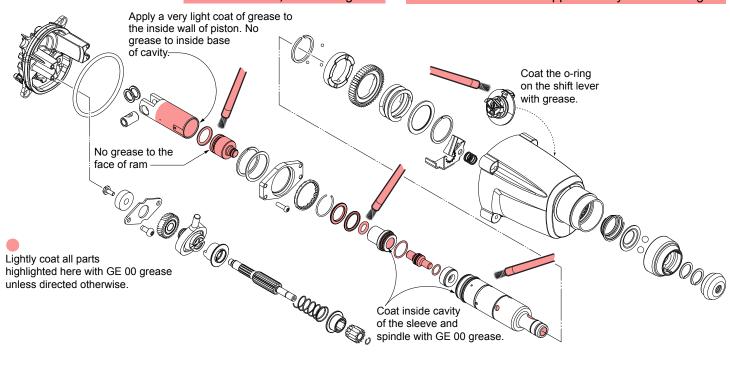


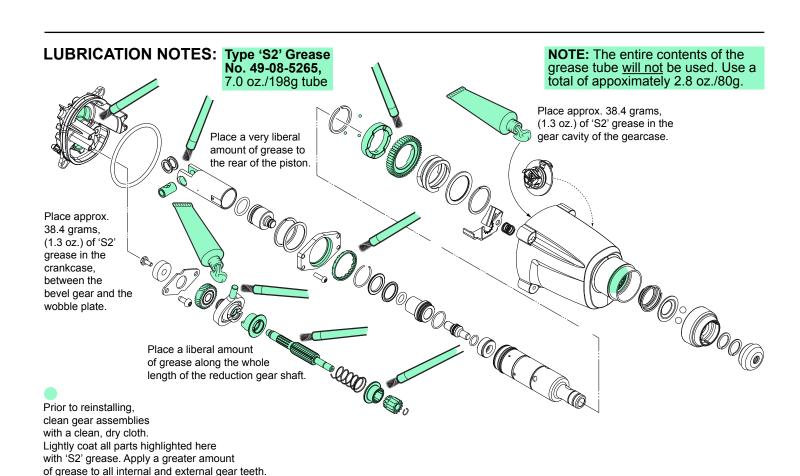
SERVICE NOTE: When installing components of the Rotary Hammer Service Kit (•14-46-2712) please note design differences to the 2713-20. Spindle (9h) and Clutch Plate (9e) will be either a 3 ball or 6 ball design (9g). Illustrations in this service parts list reflect the original 3 ball design.

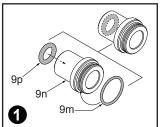
FIG.		DESCRIPTION OF PART	NO. REQ.
	36-66-1621	Reduction Gear Shaft	1
	45-22-0927		1
	40-50-2141	Spring	1
	45-22-0926	Coupling Sleeve	1
	36-92-0800		1
	32-05-0055		1
	05-74-1030		2
	44-66-0022		1
	02-04-0005	3	1
27n	06-82-0017		1
28	00.00.4000	D-Handle Housing Cover	. 44
29			/ 11
30			1
31		FUEL™ Housing Plate	1
32		D-Handle Housing Support	1
	14-20-2713	Electronics Assembly	1
34		Terminal Spring	1
35	44-94-5381	Depth Gauge	1
	14-34-0650	Auxiliary Side Handle	1
	12-20-2713	Service Nameplate	1
41		Motor Housing Assembly	1
	14-46-1450	Side Handle Assembly	1
43		D-Handle Housing Assembly	1
60		Blow Molded Carrying Case	. 1
	14-46-2712	Rotary Hammer Service Kit (See page 6	) 1
61	14-16-0250	Spindle Sleeve/Crankcase Kit	1

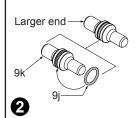
LUBRICATION NOTES: Type GE 00 Urethyn Grease No. 49-08-5355, 2.8 oz./80g tube

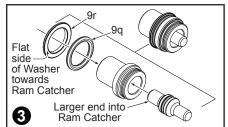
**NOTE:** The entire contents of the grease tube will not be used. Use a total of appoximately 3/16 oz./5.4g.

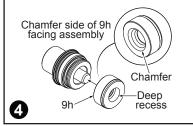


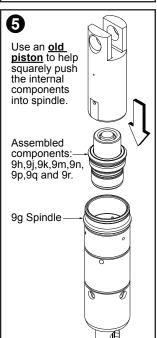


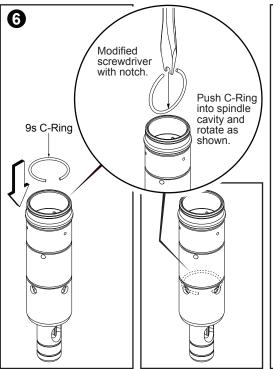












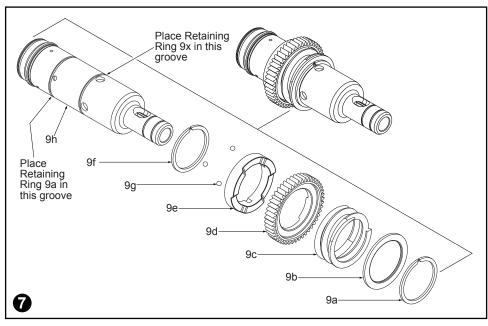


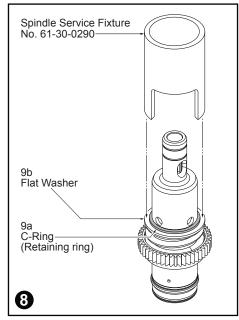
Use the same

old piston to

## Assembly of internal Spindle components:

- Lubricate Ram Catcher and O-Rings. Assemble O-Rings onto and into Ram Catcher.
- Lubricate Striker and O-Ring. Assemble O-Ring onto Striker.
- Assemble Striker Assembly into Ram Catcher Assembly (large end into Ram Catcher as shown).
- Place the chamfered end of the Stop Washer over the small end of the Striker.
- Place the assembled components from step 4 into the cavity of an old piston as shown. Use the old piston as an aid to push the assembled components deep into the Spindle cavity.
- 6. C-Ring (9s) will be used to secure the internal components inside the spindle. It is recommended to modify a flat blade screwdriver by filing or grinding a notch into the blade. Place the C-Ring upright as shown with the opening of the ring straight up. Use the modified screwdriver to push the C-Ring down into the Spindle cavity. Rotate the C-Ring in the spindle cavity as shown. Place the old piston into the Spindle cavity and tap the piston with a mallet to secure the C-Ring in the groove.





#### Assembly of external Spindle components:

Place C-Ring 9f onto Spindle. With the aid of a snap ring pliers, work the C-Ring into the rear most spindle groove and snap into place.

As an aid, put a dab of grease on your finger to pick up and place the three Steel Balls 9g into the three small holes on the Spindle just above the previously installed C-Ring.

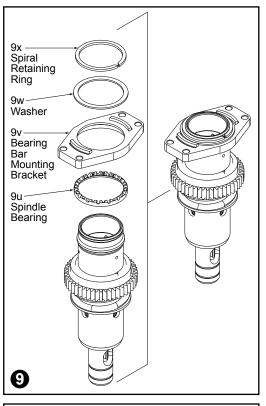
Lubricate and install the Clutch Plate 9e onto the Spindle. Be sure to orient the part as shown and position with the three notches on the back of the plate over the three steel balls.

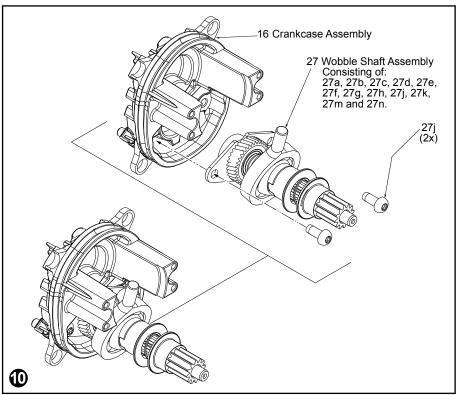
Lubricate and install the Clutch Gear 9d. Place the Clutch Spring 9c over the Clutch Gear and the Washer 9b over the Spring.

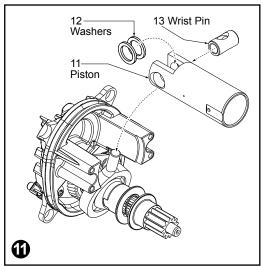
Place C-Ring 9a onto Spindle. With the aid of a snap ring pliers, work the C-Ring down to the other parts assembled onto spindle.

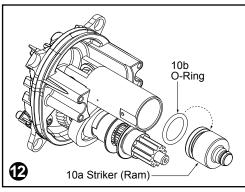
8. Place Spindle Service Fixture 61-30-0290 over the assembled parts and the spindle. Position so the fixture rests on Flat Washer 9b. Place the fixture and spindle assembly in an arbor press and carefully compress the Clutch Spring enough to expose the spindle groove for C-Ring 9a.

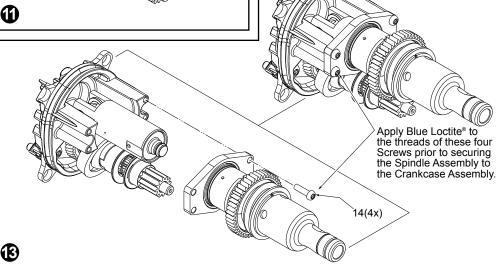
While compressed, use a screwdriver to work C-Ring 9a into the groove.







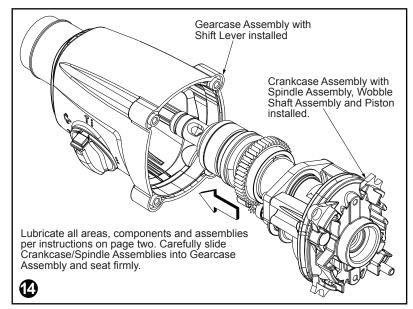


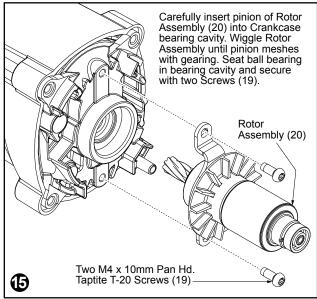


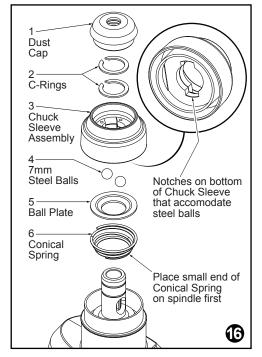
9. The flat side of the Bearing Bar 9v has a rounded recess area that will recieve the Spindle Bearing 9u. Coat the recess area and place the Spindle Bearing in the recess. Place the two parts onto the Spindle Assembly as shown. Next place the Washer 9w on top of the Bearing Bar and secure with Spiral Retaining Ring 9x.

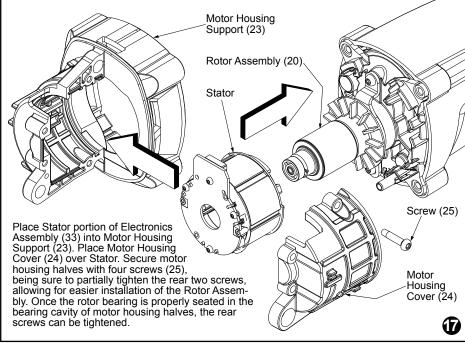
# Mounting the Spindle Assembly onto the Crankcase Assembly

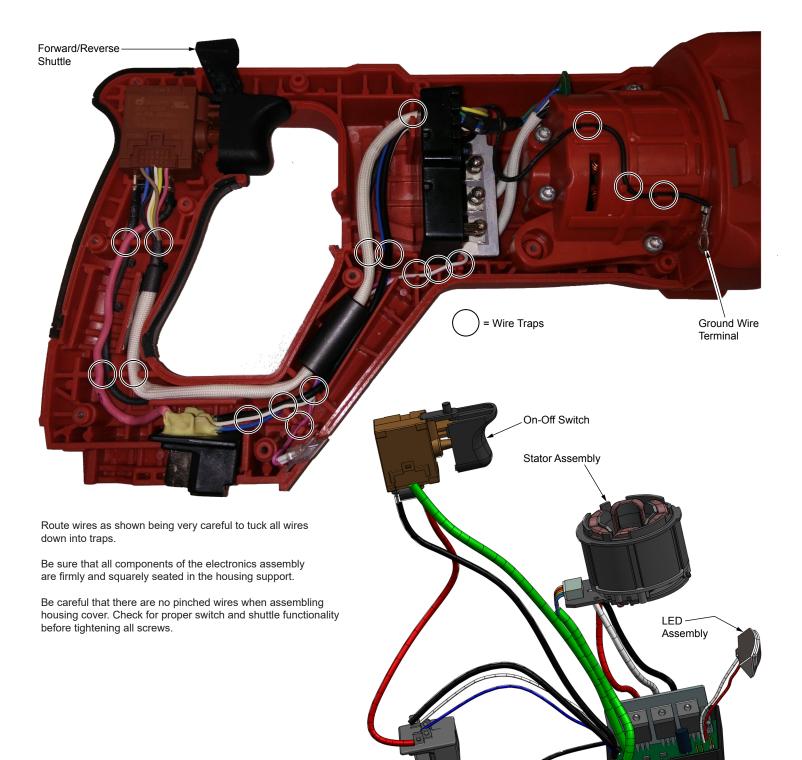
- Lubricate the inside cavity of the Crankcase Assembly 16 with grease. Place Wobble Shaft Assembly into Crankcase Assembly as shown. Secure assembly with screws 27j.
- 11. Place Washers 12 and Wrist Pin 13 into rear area of Piston 11. While holding those parts in place, be sure the Washers are separated, one on each side of the hole in the Wrist Pin. Connect the Piston Assembly to the Wobble Shaft Assembly by sliding the hole on the Wrist Pin over the arm on the wobble bearing.
- 12. Lubricate O-Ring 10b and Striker (Ram) 10a. Be sure not to have any lubrication on the rear (flat side) of Striker. Place O-Ring onto Striker 10a. Insert assembled parts into Piston 11 as shown.
- 13. Mount the Spindle Assembly onto The Crankcase Assembly by inserting the Piston into the Spindle. Use four Screws to secure the Spindle Assembly to the Crankcase Assembly. **NOTE**: Prior to installing screws, place a few drops of Blue Loctite® thread locking sealant to the threads.











●14-46-2712 —								
Rotary Hammer Service Kit								
1 2 3 9a 9k 9n 9r 9t 10b 12 15 17 27n	42-52-5262 44-90-0014 42-76-5264 44-90-0216 34-40-1410 34-40-1450 34-40-1450 34-40-1511 45-88-5200 43-44-1375 43-84-0300 06-82-0017 49-08-5265	Dust Cap C-Ring C-Ring C-Ring O-Ring O-Ring O-Ring O-Ring O-Ring C-Ring O-Ring Washer Gasket Felt Plug Screw Type GE 00 Urethyn Grease 2.8 oz Tube Type S2 Grease 7.0 oz Tube	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					

SCREW TORQUE SPECIFICATIONS						
			SEAT TORQUE			
FIG.	PART NO.	WHERE USED	(KG/CM)	(IN/LBS)		
14	05-81-1337	Motor Housing Assembly	35-40	30-34		
14	05-81-1337	Bearing Bar Mounting Bracket	35-40	30-34		
20	05-74-1020	Crankcase Assembly	18-23	15-20		
22	05-81-1338	Bearing Retainer	35-40	30-34		
24	05-88-1525	Gear Housing Cover	15	13		
26	06-82-3006	Motor Housing Assembly	35-40	30-34		
31	06-82-3007	Rotor Assembly	25-30	21-26		
39	06-82-1080	Handle Cover - Right Halve	14-17	12-14		

PCBA

Ground Wire

Battery Terminal Connector Block