

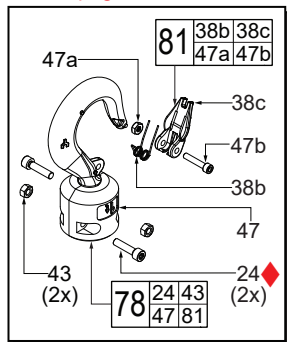


SERVICE PARTS LIST

BULLETIN NO.
54-02-2980

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
M18™ Compact 1 Ton CHAIN HOIST w/One-Key™			Oct. 2024
CATALOG NO.	2983-20	SERIAL NO.	N74A
		WIRING INSTRUCTION SEE PAGES 6 & 7	

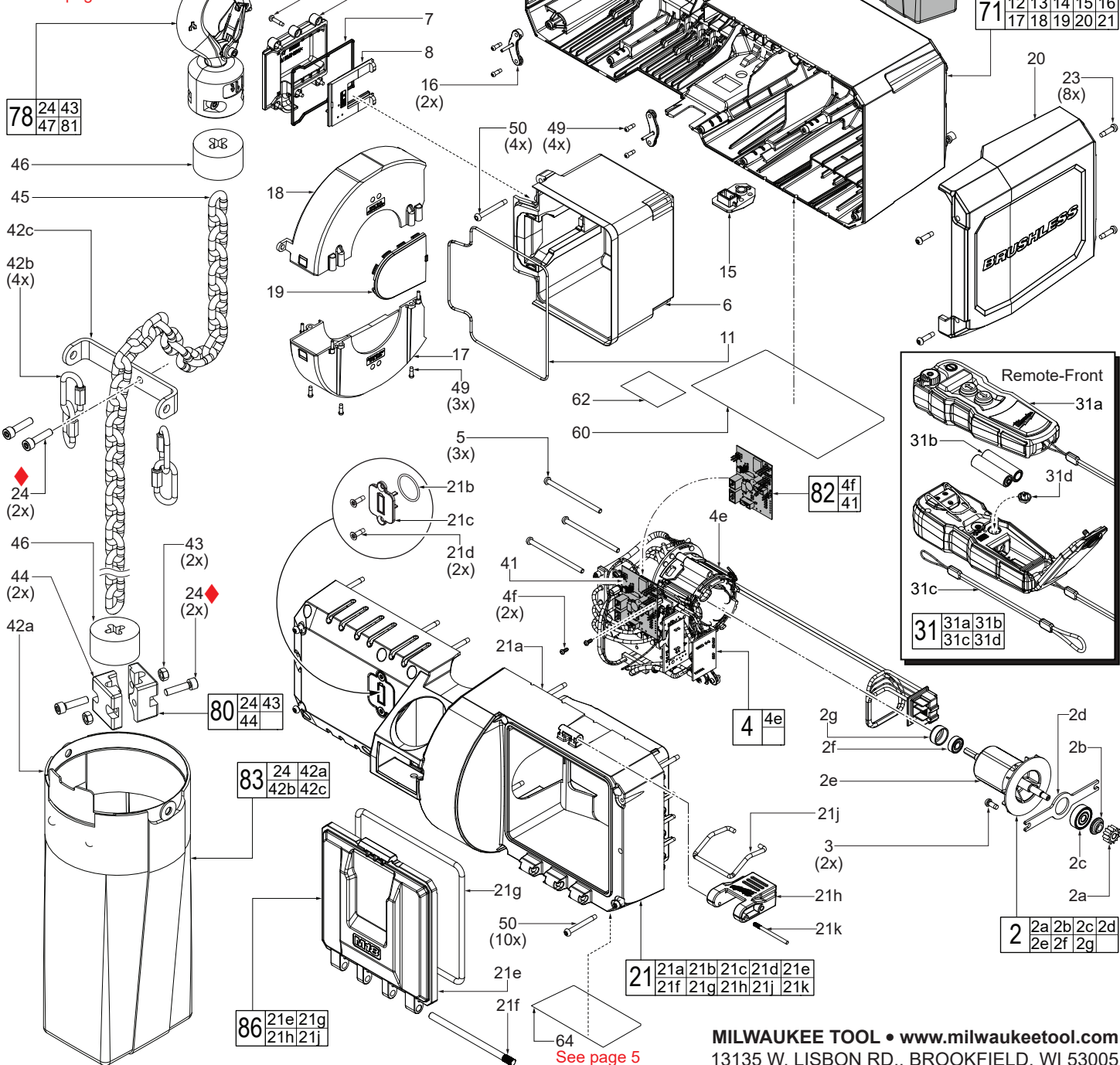
◆=See page 2 for service note



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

NOTE:
Gearcase Plug (15) is secured to
Main Housing (14) by Screw (27),
two places, see next page.

See lubrication note
on page 2 for #78.



DO NOT REUSE SCREW (36)!
ALWAYS USE A NEW SCREW
CONTAINING A FRESH THREAD
LOCKING PATCH. TORQUE TO
89 LB-IN / 102 KGF-CM

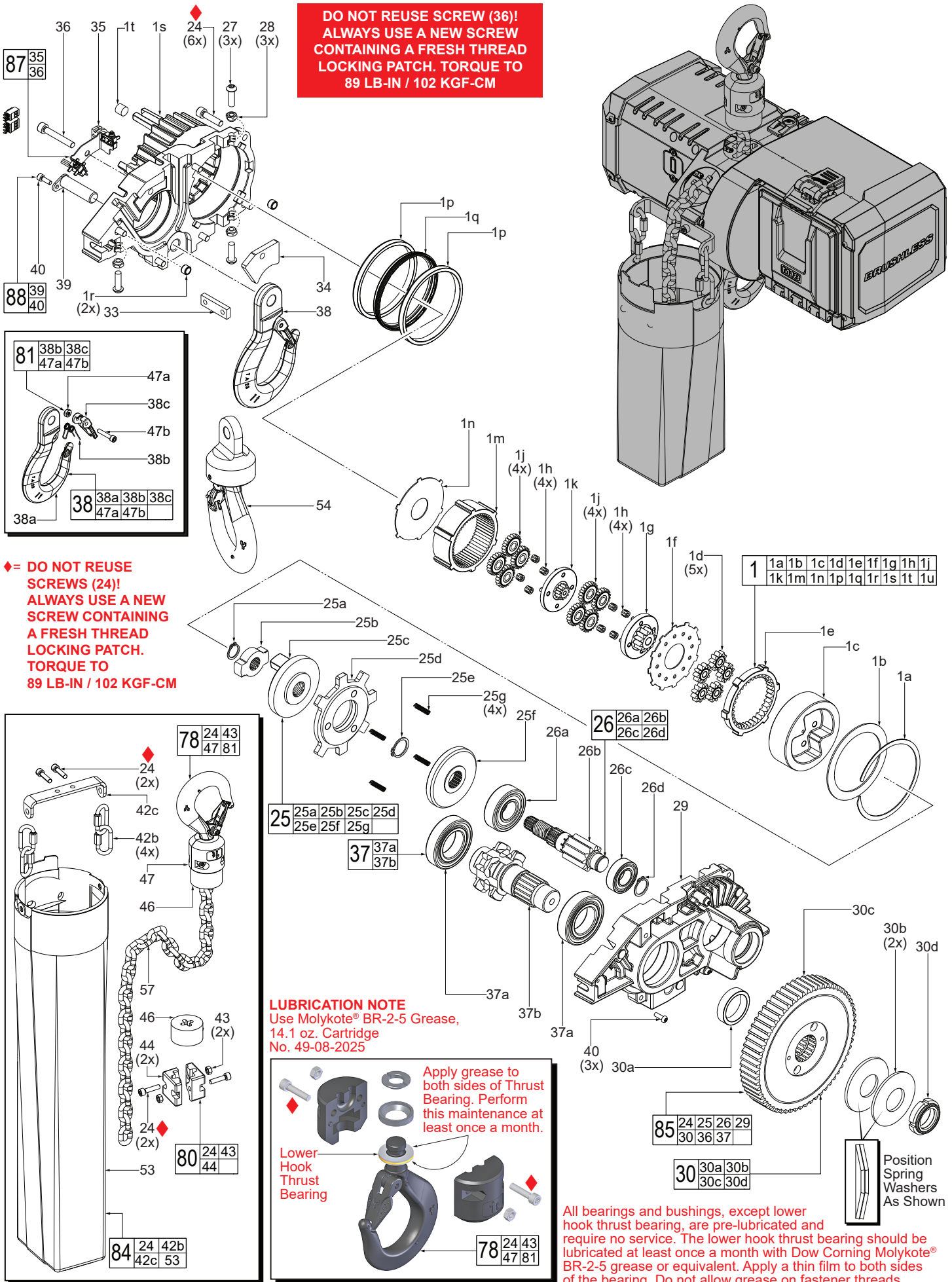


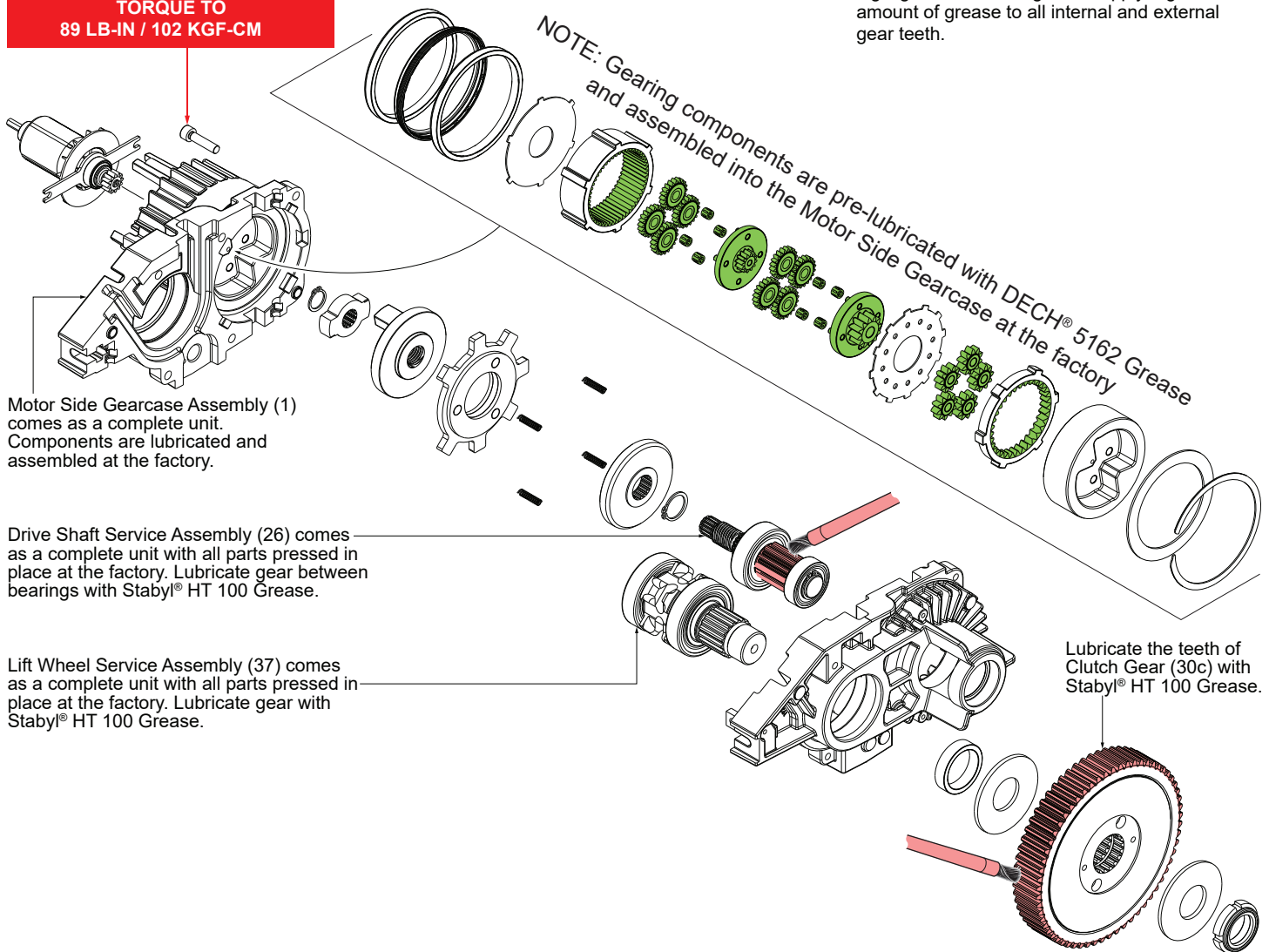
FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	14-29-5400	Motor Side Gearcase Assembly	(1)	30	_____	Clutch Service Kit	(1)
1a	_____	Internal Retaining Ring	(1)	30a	_____	Spacer Ring	(1)
1b	_____	Flat Washer	(1)	30b	_____	Belleville Spring	(2)
1c	_____	Carrier Coupler	(1)	30c	_____	Clutch Gear	(1)
1d	_____	3rd Planet Gear	(5)	30d	_____	Grooved Nut	(1)
1e	_____	3rd Ring Gear	(1)	31	14-46-8575	Remote Service Assembly	(1)
1f	_____	3rd Washer	(1)	31a	_____	Remote Unit	(1)
1g	_____	3rd Sun Gear	(1)	31b	_____	AA Battery	(2)
1h	_____	Needle Bearing	(8)	31c	_____	Wrist Strap	(1)
1j	_____	1st and 2nd Planet Gear	(8)	31d	22-80-0650	Lockout Button	(1)
1k	_____	2nd Sun Gear	(1)	33	23-56-0060	Slide Nut	(1)
1m	_____	1st and 2nd Ring Gear	(1)	34	43-56-2700	Chain Stripper	(1)
1n	_____	1st Washer	(1)	35	14-78-0115	Limit Switch Assembly	(1)
1p	_____	Bushing	(2)	36	05-81-5470	M6 x 40 Cap Hd. Torx Screw	(1)
1q	_____	Oil Shield	(1)	37	_____	Lift Wheel Service Assembly	(1)
1r	_____	Center Bushing	(2)	37a	_____	Ball Bearing	(2)
1s	_____	Motor Side Gearcase	(1)	37b	_____	Load Sheave	(1)
1t	43-84-0300	Felt Plug	(1)	38	14-34-5400	Top Hook Assembly	(1)
2	14-46-8565	Rotor Assembly	(1)	38a	_____	Top Hook	(1)
2a	_____	Rotor Pinion	(1)	38b	_____	Latch Spring	(1)
2b	_____	Plastic Plate	(1)	38c	_____	Safety Latch	(1)
2c	_____	Ball Bearing	(1)	38d	_____	Latch Pin	(1)
2d	_____	Bearing Plate	(1)	39	_____	Suspension Bolt	(1)
2e	_____	Rotor	(1)	40	05-74-7200	M4 x 12mm Cap Hd. Hex Drive Screw	(4)
2f	_____	Deep Groove Ball Bearing	(1)	41	_____	Driver Board	(1)
2g	22-32-0102	Bearing Cap	(1)	42a	_____	20' Chain Bag	(1)
3	05-78-0105	M4 x 10mm Pan Hd. Tapt. T-20 Screw	(2)	42b	_____	Connecting Link	(4)
4	14-20-5390	Stator/Electronics Service Assembly	(1)	42c	_____	Chain Bag Bracket	(1)
4e	_____	Stator/PCBA	(1)	43	05-55-3180	M6 Hex Nut	(4)
4f	05-88-0080	M2.5 x 6mm Pan Hd. TP T-8 Screw	(2)	44	_____	1/4 Chain Stop	(2)
5	05-74-0516	M4 x 67mm Pan Hd. T-20 Mach. Screw	(3)	45	42-60-0570	20' Load Chain	(1)
6	31-50-6155	Battery Housing	(1)	46	42-38-2480	Chain Stop Bumper	(2)
7	_____	Battery Terminal Gasket	(1)	47	_____	Bottom Block Assembly	(1)
8	_____	Battery Terminal Support	(1)	47a	_____	#10 Hex Nut	(1)
9	_____	Battery Terminal Cover	(1)	47b	_____	#10 Screw	(1)
10	06-82-1080	M3 x 14mm Pan Hd. ST T-10 Screw	(6)	49	06-82-0151	M3 x 9mm Pan Hd. ST T-8 Screw	(7)
11	_____	Battery Housing Gasket	(1)	50	06-82-4002	M4 x 35mm Pan Hd. ST T-20 Screw	(14)
12	14-38-7090	End Cap - Motor Side	(1)	53	_____	60' Chain Bag (Accessory)	(1)
13	_____	Motor Shaft Cover	(1)	54	52-77-2205	Swivel Hook Assembly	(1)
14	14-38-7095	Main Housing - A Side (Logo Side)	(1)	57	42-60-0575	60' Load Chain	(1)
15	28-14-9040	Gearcase Plug	(2)	60	12-20-0591	Service Nameplate	(1)
16	_____	Wire Cover	(2)	61	10-15-8255	1 Tonne Label	(1)
17	_____	Gear Cover - A Side	(1)	62	10-22-3065	Hot Surface Warning Label	(2)
18	_____	Gear Cover - B Side	(1)	63	12-20-9015	Remote Control Service Nameplate (Not Shown)	(1)
19	14-08-0270	Clutch Door	(1)	64	_____	Proof of Inspection Label	(1)
20	14-38-7086	End Cap - Battery Side	(1)	65	_____	20' Capacity Chain Label (Not Shown)	(1)
21	14-38-7100	Main Housing - B Side Service Kit	(1)	66	_____	60' Capacity Chain Label (Not Shown)	(1)
21a	_____	Main Housing - Side B	(1)	71	14-20-5400	A Side Housing Service Kit	(1)
21b	_____	O-Ring	(1)	78	14-36-2380	Bottom Block Service Kit	(1)
21c	_____	Coin Cell Door	(1)	80	14-03-0200	Stop Block Service Kit	(1)
21d	05-70-0010	M4 x 14mm Flat Hd. ST T-20 Screw	(2)	81	14-47-1285	Bottom Hook Latch Service Kit	(1)
21e	_____	Battery Door	(1)	82	14-20-5395	Driver Board Service Kit	(1)
21f	_____	Battery Door Pin	(1)	83	14-46-8580	20' Chain Bag Service Kit	(1)
21g	_____	Battery Door Gasket	(1)	84	14-47-1290	60' Chain Bag Kit	(1)
21h	_____	Battery Door Latch	(1)	85	14-46-8585	Output Side Gearcase Service Assy.	(1)
21j	_____	Battery Door Latch Hook	(1)	86	14-20-3195	Battery Door/Latch Service Kit	(1)
21k	_____	Battery Door Latch Pin	(1)	87	14-78-0115	Limit Switch Service Assembly	(1)
22	_____	Nylon Cable Tie (Not Shown)	(1)	88	44-60-5435	Hook Pin with Screw Service Kit	(1)
23	06-82-4003	M4 x 16mm Pan Hd. ST T-20 Screw	(10)	49-08-2015	_____	Molykote® 41 Grease, 5.3 oz. tube	(1)
24	05-81-5465	M6 x 25mm Cap Hd. Torx Drive Screw	(12)	_____	_____	(See application on page 5)	
25	14-46-8570	Brake Service Kit	(1)	49-08-2020	_____	Stabyl® HT 100 Grease, 14 oz. Cartridge	(1)
25a	_____	Retaining Ring	(1)	_____	_____	(See application on page 4)	
25b	_____	Driver	(1)	49-08-2025	_____	Molykote® BR-2-5 Grease, 14 oz. Cartridge	(1)
25c	_____	Brake Hub	(1)	_____	_____	(See application on page 2)	
25d	_____	Lock Disc	(1)	49-08-2030	_____	Lubriplate L0847-057, Gallon Jug	(1)
25e	_____	Retaining Ring	(1)	_____	_____	(Used to re-lubricate the chain when sending back out to the customer, when applicable)	
25f	_____	Counter Disc	(1)				
25g	_____	Brake Spring	(4)				
26	_____	Drive Shaft Service Assembly	(1)				
26a	_____	Ball Bearing	(1)				
26b	_____	Drive Shaft	(1)				
26c	_____	Ball Bearing	(1)				
26d	_____	Retaining Ring	(1)				
27	05-74-0516	M6 x 20mm Pan Hd. T-27 Mach. Screw	(3)				
28	06-57-0625	Nylok Hex Nut	(3)				
29	_____	Center Housing - Gear Side	(1)				

**SCREW (24) IS USED IN 6 PLACES
ON MOTOR SIDE GEARCASE.
DO NOT REUSE THESE SCREWS!
ALWAYS USE NEW SCREWS
CONTAINING A FRESH
THREAD LOCKING PATCH.
TORQUE TO
89 LB-IN / 102 KGF-CM**

LUBRICATION NOTES:

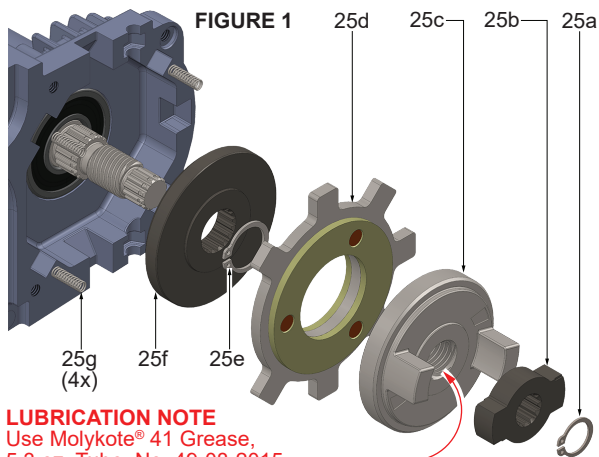
● = Stabyl® HT 100 Grease, 14oz. Cartridge
No. 49-08-2020

Prior to reinstalling, clean gear assemblies with a clean, dry cloth. Lightly coat all individual parts highlighted here with grease. Apply a greater amount of grease to all internal and external gear teeth.



SCREW TORQUE SPECIFICATIONS

FIG.	PART NO.	DESCRIPTION OF FASTENER	WHERE USED	SEAT TORQUE	
				(lb-in)	(kgf-cm)
3	05-78-0105	M4 x 10mm Pan Hd. Tapt. T-20 Screw	Rotor Bearing Plate to Gearcase	13.8±1.7	16±2
4f	05-88-0080	M2.5 x 6mm Pan Hd. TP T-8 Screw	Driver Board to Control Board	3.4±0.8	4±1
5	05-74-0516	M4 x 67mm Pan Hd. T-20 Mach. Screw	Stator to Motor Side Gearcase	15.6±1.7	18±2
10	06-82-1080	M3 x 14mm Pan Hd. ST T-10 Screw	Batt. Term. Cover to Batt. Housing	5.2±0.8	6±1
21d	05-70-0010	M4 x 14mm Flat Hd. ST T-20 Screw	Coin Cell Door to Main Hsg.- B Side	8.6±0.8	10±1
23	06-82-4003	M4 x 16mm Pan Hd. ST T-20 Screw	Mtr. Shaft Cover to Main Hsg.- A Side	6.9±0.8	8±1
23	06-82-4003	M4 x 16mm Pan Hd. ST T-20 Screw	End Caps to Main Housings - A & B	6.9±0.8	8±1
24	05-81-5465	M6 x 25mm Cap Hd. Torx Drive Screw	Chain Bag Bracket to Slide Nut	89	102
24	05-81-5465	M6 x 25mm Cap Hd. Torx Drive Screw	Motor Side & Center Hsg. Gearcases	89	102
24	05-81-5465	M6 x 25mm Cap Hd. Torx Drive Screw	1/4 Chain Stop Halves	89	102
24	05-81-5465	M6 x 25mm Cap Hd. Torx Drive Screw	Bottom Block Assembly	89	102
27	05-74-0516	M6 x 20mm Pan Hd. T-27 Mach. Screw	Gearcase Plugs to Main Hsg.- A Side	7	8.0
36	05-81-5470	M6 x 40 Cap Hd. Torx Screw	Limit Switch Assy. to Gearcase	89	102
40	05-74-7200	M4 x 12mm Cap Hd. Hex Drive Screw	Suspension Bolt to Gearcase	30	34
40	05-74-7200	M4 x 12mm Cap Hd. Hex Drive Screw	Motor Side & Center Hsg. Gearcases	89	102
47b	-----	#10 Screw	Bottom Hook Latch to Bottom Block	89	102
49	06-82-0151	M3 x 9mm Pan Hd. ST T-8 Screw	Gear Cover A to Gear Cover B	3.4±0.8	4±1
49	06-82-0151	M3 x 9mm Pan Hd. ST T-8 Screw	Wire Covers to Main Housing A	3.4±0.8	4±1
50	06-82-4002	M4 x 35mm Pan Hd. ST T-20 Screw	Main Housing A to Main Housing B	17.3±1.7	20±2



LUBRICATION NOTE

Use Molykote® 41 Grease, 5.3 oz. Tube, No. 49-08-2015. Carefully apply a thin coat of grease to the threads of the Brake Hub (25c). Make sure no grease comes in contact with the friction surfaces.

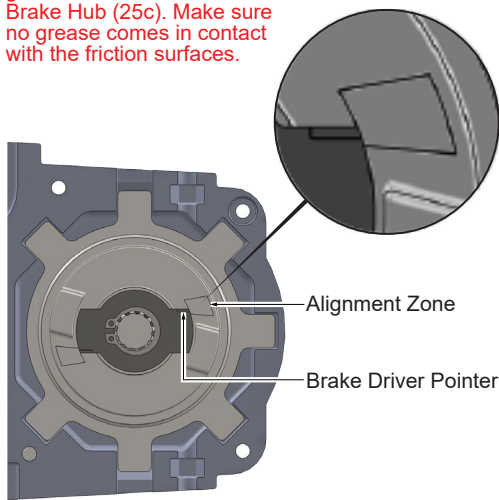


FIGURE 2

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
25a	_____	Retaining Ring	(1)
25b	_____	Driver	(1)
25c	_____	Brake Hub	(1)
25d	_____	Lock Disc	(1)
25e	_____	Retaining Ring	(1)
25f	_____	Counter Disc	(1)
25g	_____	Brake Spring	(4)

BRAKE CLEANING AND REPLACEMENT

BRAKE CLEANING

To prevent excess buildup of brake dust, follow the procedure below every 20 hours of operation.

Remove dust caps from the outer housing and use a suitable vacuum to remove excess brake dust.

NOTE Use a suitable dust extraction device with a minimum of a HEPA filter and appropriate PPE to avoid exposure to dust particles.

BRAKE ADJUSTMENT/REPLACEMENT

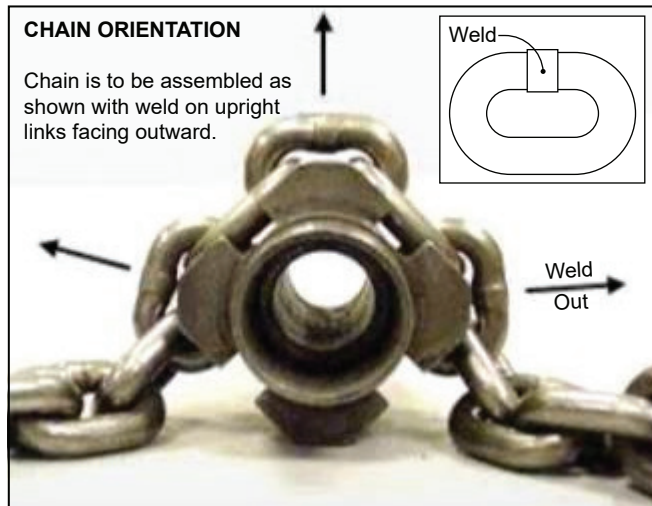
The hoist brake may require periodic adjustment over the life of unit.

The distance the load drifts downward immediately after lifting is referred to as rollback. If the rollback when lifting rated load exceeds two inches, a brake adjustment is necessary. A qualified technician can follow the steps below to disassemble and adjust the brake assembly to restore performance.

Disassemble the unit to access the brake components. Refer to Fig. 1, and remove the snap ring and the brake hub driver. For adjustment, hand tighten the brake hub to fully seat all components. Re-install the hub driver, making sure the hub driver pointer is inside the alignment zone as shown below in Fig. 2. The brake hub must remain tight during the alignment process for proper orientation.

For replacement, remove all existing brake parts shown in Fig. 1. Ensure all parts are clean, and all four springs are installed in the frame during reassembly. **Carefully apply a thin coat of Molykote® 41 Extreme High Temperature Grease to the threads of the Brake Hub (item 25c). Make sure no grease comes in contact with the friction surfaces.** Follow the brake adjustment procedure outlined above after installing the remaining brake parts. Reassemble the hoist and load test per B30.16

5



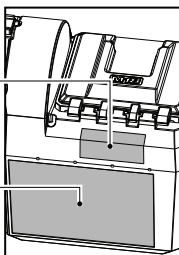
WARNING

Before using, all altered, repaired, or used hoists that have not been operated for the previous 12 months shall be tested by the user for proper operation. First, test the unit without a load, and then with a light load of 50 pounds (22.7 kg) to be sure that the hoist operates properly, and that the brake holds the load when the control is released. Next, test with a load of *125% of rated capacity. In addition, hoists in which load-sustaining parts have been replaced should be tested with *125% of rated capacity by or under the direction of an appointed person, and written report prepared for record purposes. After this test, check that the load limiter functions. *If load limiter prevents lifting of a load of 125% of rated capacity, reduce load to rated capacity and continue test.

NOTE: For additional information on inspection and testing, refer to Code B30.16 "Overhead Hoists" obtainable from ASME Order Department, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300, U.S.A.

64
Proof of
Inspection Label

60
Service
Nameplate

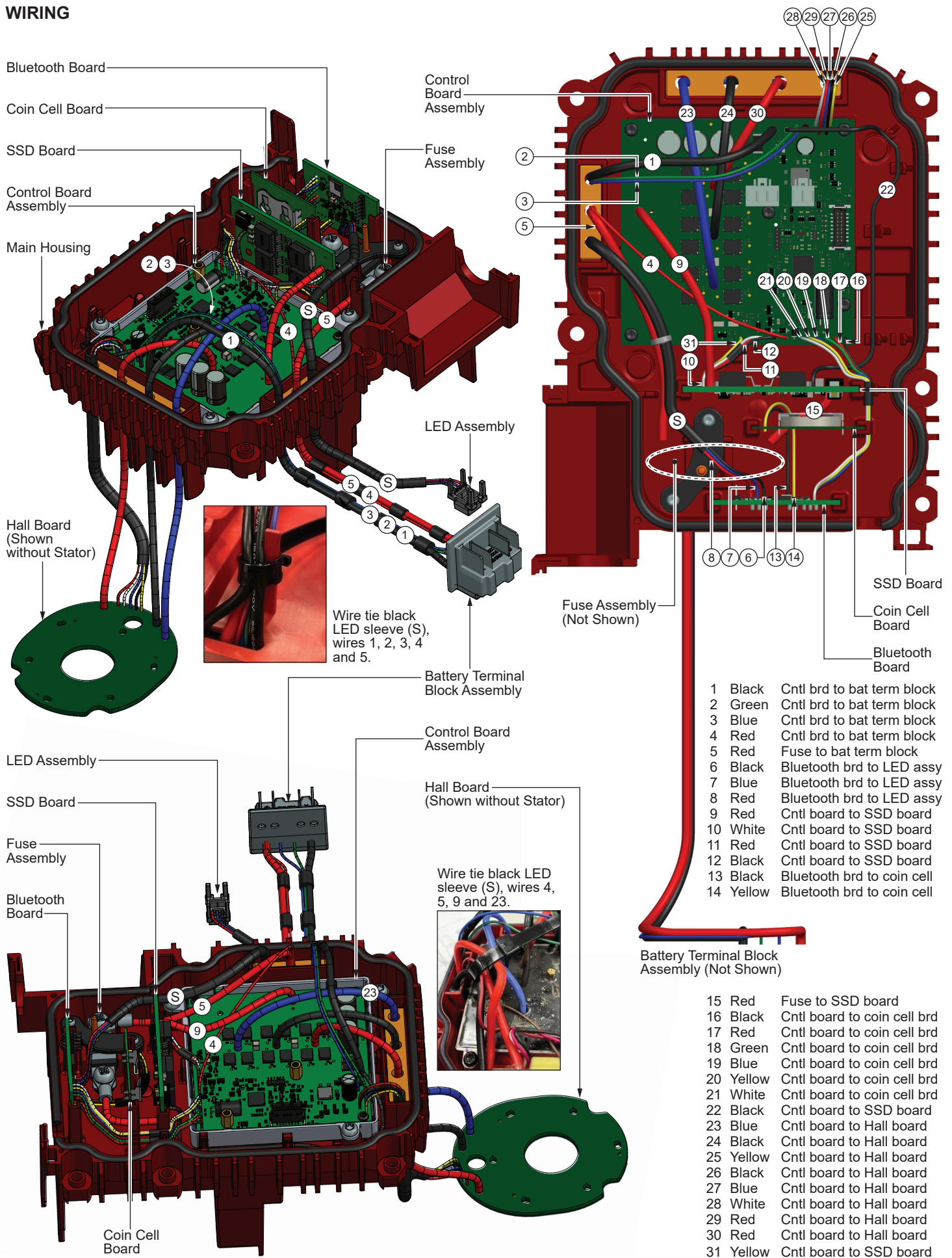


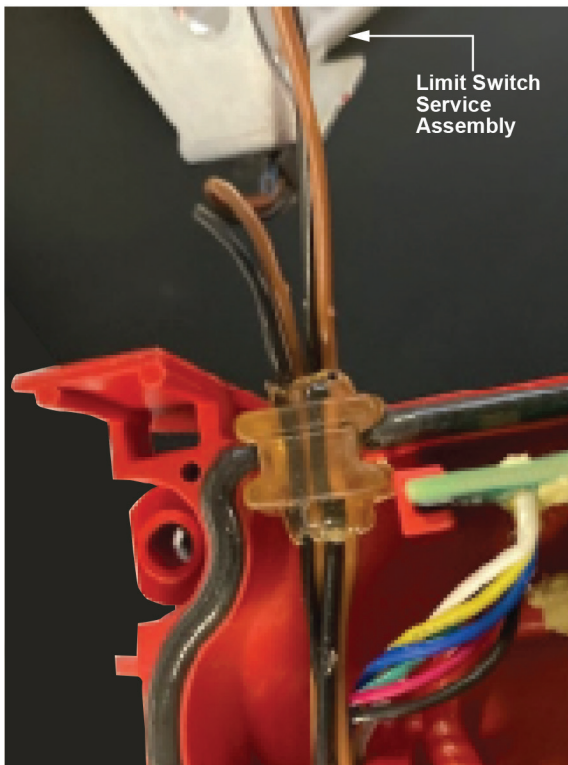
#64 Proof of Inspection Label

Proof of Inspection Hoist Labels are not user replaceable. Return your tool to a Milwaukee Service Hub for replacement.

Locate the Proof of Inspection Label right above the Service Nameplate on the right hand side (See illustration to the left).

WIRING





As an aid to reassembly, take notice of wire routings and position in wire guides and traps while dismantling tool.

Be sure that all components of the electronics assembly are seated firmly and squarely in housing recesses.

Avoid pinched wires, be sure that all wires and sleeves are pressed completely down in wire traps.

Prior to securing housings together be sure that there are no interferences.

Before installing the battery, check for proper functionality of shuttles, buttons and triggers.

