



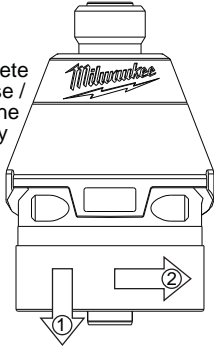
# SERVICE PARTS LIST

**BULLETIN NO.**  
54-26-2481

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
<b>M12™ Brushless 1/4" Hex Impact Driver</b>		54-26-2480	Feb. 2014
<b>CATALOG NO.</b>	<b>2453-20</b>	<b>WIRING INSTRUCTION</b>	
<b>STARTING SERIAL NO.</b>	<b>E51B</b>	<b>SEE PAGE 3</b>	

**IMPORTANT NOTE: Gearcase end cap #25 is LEFT HAND THREAD!**

As an aid to assembly, carefully lower the complete front end of tool (gearcase/impacting system) onto the gearcase end cap. Gently hand tighten front end assembly onto gearcase end cap. Be careful not to cross-thread! Once installed by hand, seat gearcase end cap with a good adjustable wrench using light pressure. Do not over tighten!



LEFT HAND THREAD

**Torque to 260 in/lbs ±24 in/lbs  
(300 kgf-cm ±27 kgf-cm)**

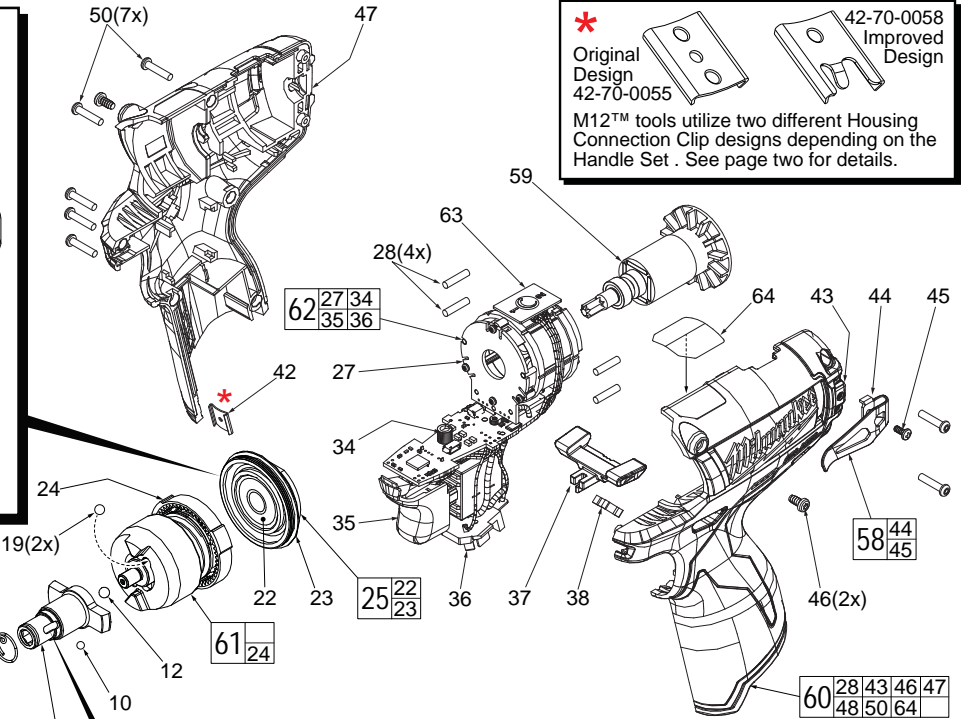
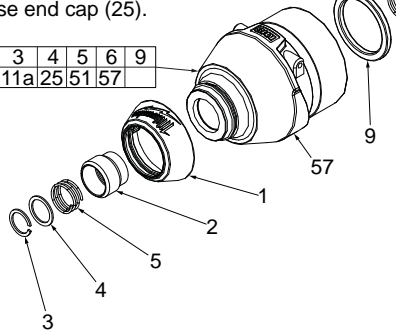
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Original Design 42-70-0055  
Improved Design 42-70-0058

M12™ tools utilize two different Housing Connection Clip designs depending on the Handle Set. See page two for details.

**NOTE:** Components of the impacting assembly (61) can drop out of the gearcase (57). Care must be taken to hold those elements in place when assembling onto the gearcase end cap (25).

56	2	3	4	5	6	9
	10	11a	25	51	57	



**NOTE:** Place anvil spring (51) onto anvil (11a) with curled end inserted in slot of anvil as shown. Place ball (10) in anvil slot in front of spring.

**EXAMPLE:**  
00 0  
Component Parts (Small #) Are Included When Ordering The Assembly (Large #).

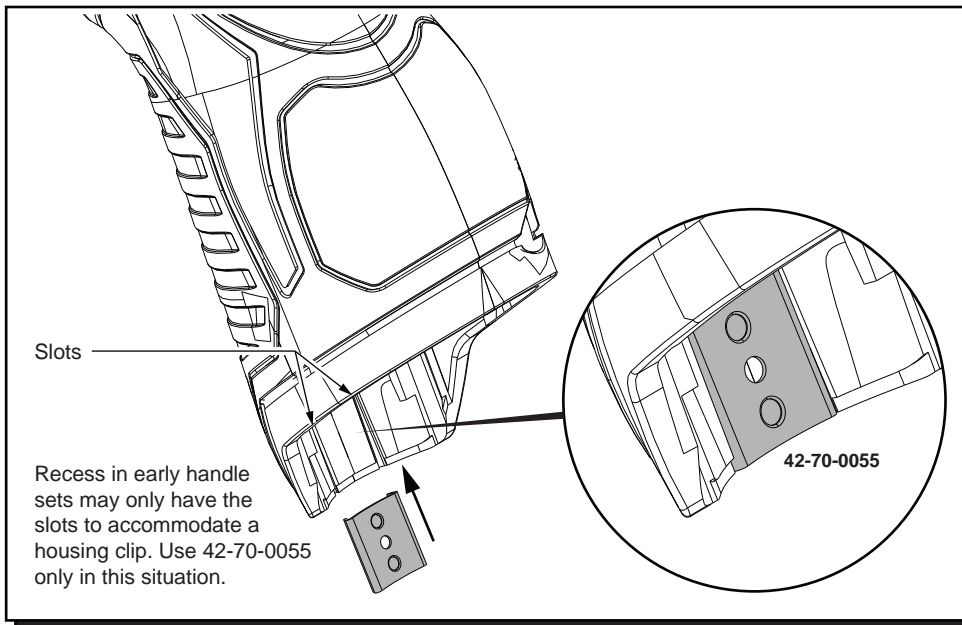


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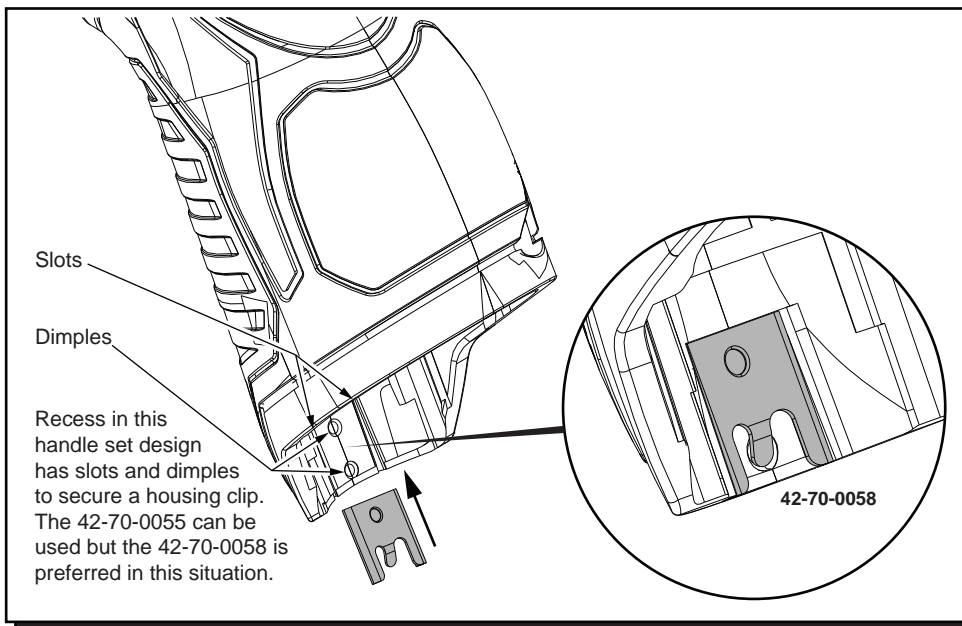
FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	31-12-0575	Rubber Cap	(1)
2	45-22-2653	Sleeve	(1)
3	34-60-0725	Retaining Ring	(1)
4	45-88-1880	Washer	(1)
5	40-50-1470	Spring	(1)
6	-----	Anvil Bushing (Not Shown)	(1)
9	45-88-2135	Plastic Washer	(1)
10	02-02-0170	3.5mm Steel Ball	(1)
11a	42-06-0720	1/4" Hex Anvil	(1)
12	02-02-1300	5mm Steel Ball	(1)
19	02-02-0180	4.7mm Steel Ball	(2)
22	-----	Ball Bearing	(1)
23	-----	Gearcase End Cap	(1)
24	-----	Ring Gear	(1)
25	44-66-1065	Gearcase End Cap Assembly	(1)
27	-----	Stator Assembly	(1)
28	45-30-0300	Rubber Slug	(4)
34	-----	PCBA	(1)
35	-----	On-Off Switch	(1)
36	-----	Terminal Block Assembly	(1)
37	45-24-0810	Fwd/Rev Shuttle	(1)
38	40-50-1135	Spring	(1)
42	42-70-0055	Housing Connection Clip	(1)
43	-----	Left Handle Halve with Fuel Gauge	(1)
44	42-70-0580	Belt Clip	(1)
45	-----	Belt Hook Screw	(1)
46	06-82-1090	M3 x 7mm Pan Hd. Plastite Screw	(2)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
47	-----	Right Handle Halve	(1)
48	12-20-2435	Service Nameplate (Not Shown)	(1)
49	42-55-1060	Carrying Case	(1)
50	06-82-7236	4-20 x 5/8" Pan Hd. Plastite T-10 Scr	(7)
51	40-50-0012	Anvil Spring	(1)
56	14-30-1170	Gearcase Assembly	(1)
57	28-50-0920	Front Gearcase with Bushing	(1)
58	42-70-0490	Belt Clip Assembly	(1)
59	16-07-0420	Rotor Assembly	(1)
60	31-44-2453	Handle Assembly	(1)
61	14-30-1200	Impacting Assembly	(1)
62	14-20-1520	Electronics Assembly	(1)
63	23-66-2455	POP Switch	(1)
64	10-20-2845	Spanish/French Warning Label	(1)

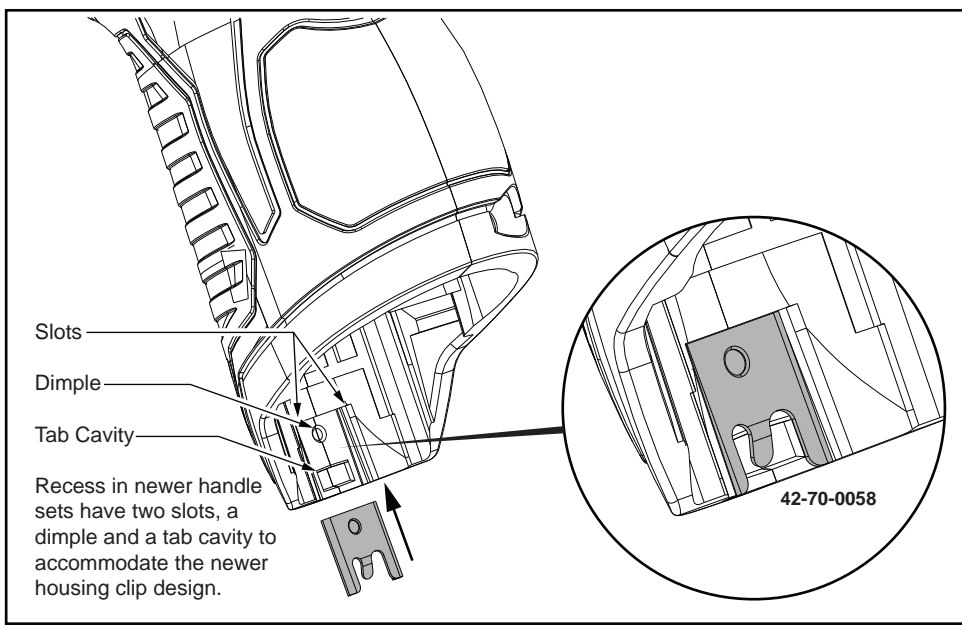
- FIG. LUBRICATION (Type 'J' Grease, No. 49-08-4220):**
- 10,11a Lightly coat front washer surface of anvil (11a) with grease, place a dab in the ball slot of anvil.
  - 24,61 Lightly coat the I.D. of the ring gear (24) and the center of the planet gears of impacting assembly with grease.
  - 57 Coat inside of bushing inside front gearcase with grease.
  - 59 Coat pinion of rotor assembly (59) with grease.



Early M12™ Handle Sets utilize **Housing Connection Clip No. 42-70-0055**. Install this clip design by aligning the side rails of the clip with the two slots in the handle set. Gently push into place with the aid of a small flat blade screwdriver or a similar instrument. Be sure that the clip is properly seated in both slots and that the clip is flush to sub-flush to the end of the handle set. To remove the clip, use the same small flat blade screwdriver or a similar instrument and push the clip out of the handle set. If the clip is loose or will not stay in place, a needle nose pliers can be used to gently bend/pinch the side rails of the clip. If the clip is damaged do not use, replace with a new 42-70-0055 housing clip.



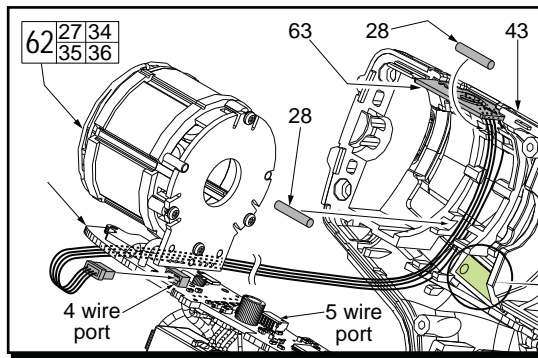
Updated M12™ Handle Sets utilize **Housing Connection Clips No. 42-70-0055 and 42-70-0058. (The 42-70-0058 is a preferred upgrade)**. Install this clip design by aligning the side rails of the clip with the two slots in the handle set. Gently push into place with the aid of a small flat blade screwdriver or a similar instrument. Be sure that the clip is properly seated in both slots and that the tab of the clip snaps down in the round dimpled cavity of the handle set. Be sure that the clip is flush to sub-flush to the end of the handle set. To remove the clip, use the same small flat blade screwdriver or a similar instrument and lift up on the clip tab while pushing the clip out of the handle set. Use a needle nose pliers to gently rebend the clip tab if necessary. If the tab on the clip is damaged during this process and is loose or will not stay in place, replace with a new 42-70-0058 clip.



Newer M12™ Handle Sets utilize **Housing Connection Clip No. 42-70-0058**. Install this clip design by aligning the side rails of the clip with the two slots in the handle set. Gently push into place with the aid of a small flat blade screwdriver or a similar instrument. Be sure that the clip is properly seated in both slots and that the tab of the clip snaps down in the rectangular cavity of the handle set. Be sure that the clip is flush to sub-flush to the end of the handle set. To remove the clip, use the same small flat blade screwdriver or a similar instrument and lift the clip tab out of the cavity while pushing the clip out of the handle set. Use a needle nose pliers to gently rebend the clip tab if necessary. If the tab on the clip is damaged during this process and is loose or will not stay in place, replace with a new 42-70-0058 clip.

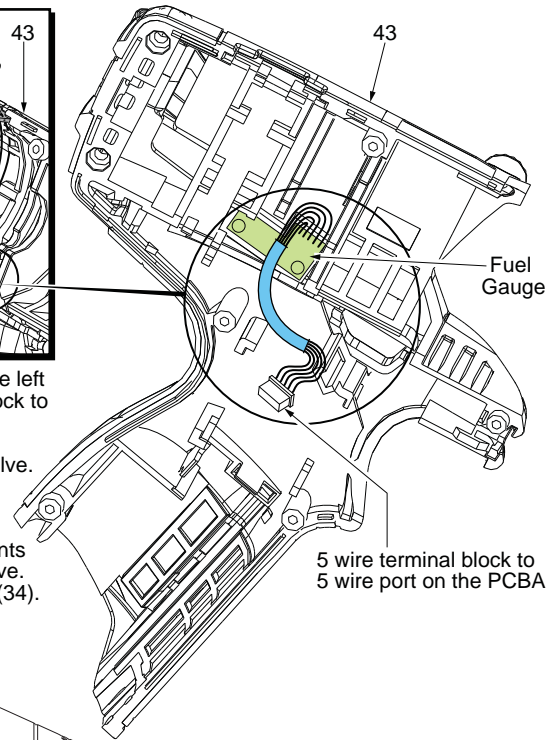
**AS AN AID TO REASSEMBLY, TAKE NOTICE OF WIRE ROUTING AND POSITION IN WIRE GUIDES AND TRAPS WHILE DISMANTLING TOOL.**

**BE CAREFUL AND AVOID PINCHING WIRES BETWEEN HANDLE HALVES WHEN ASSEMBLING.**

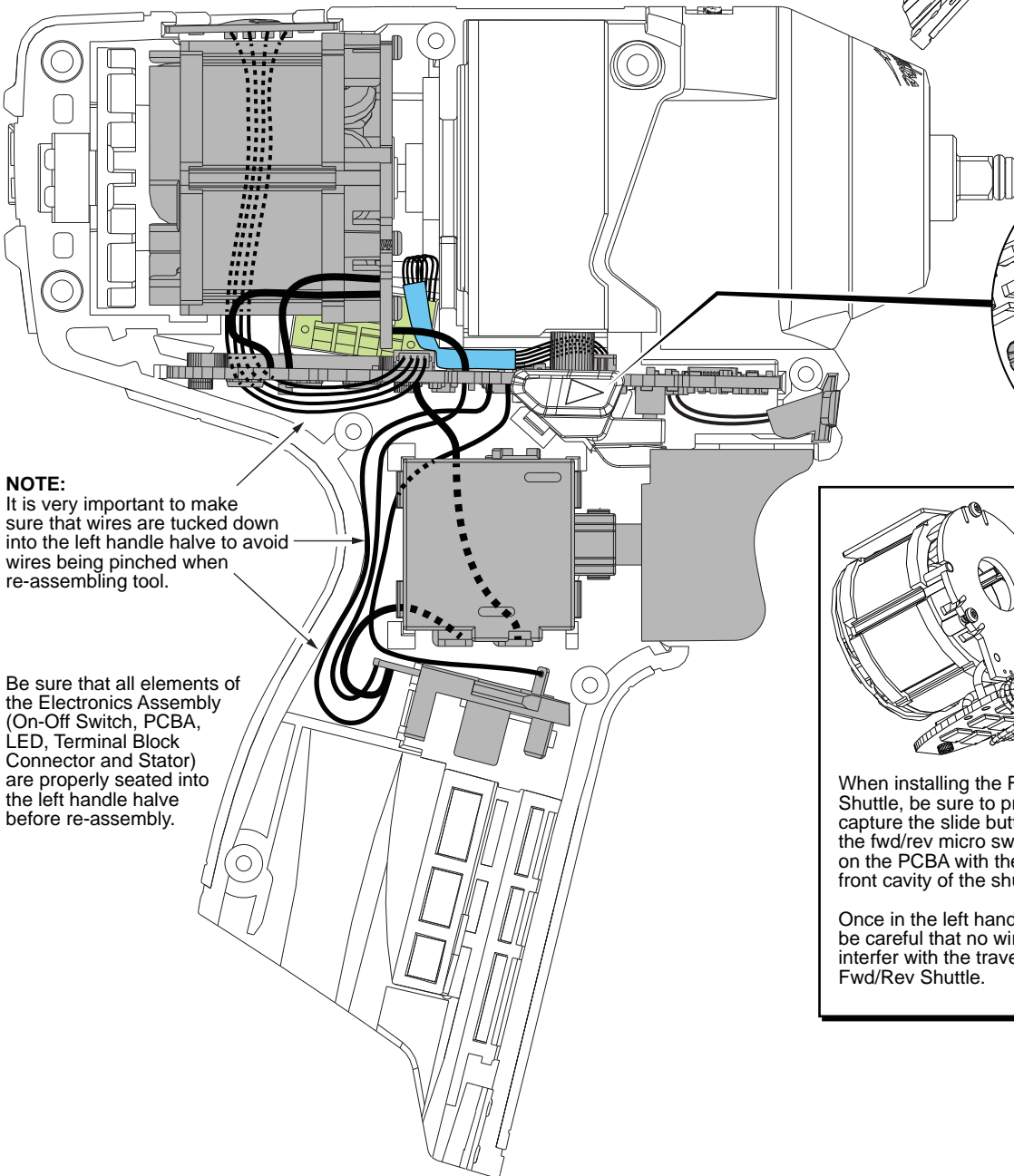


The fuel gauge assembly is a fixed component of the left handle halve (43). Connect the five wire terminal block to the corresponding five wire port on the PCBA.

Place POP Switch (63) into top slot of left handle halve. Be sure that the '2' is positioned to the back of tool. Route the four wires through the channel along the inside wall as shown. Trap the wires in place using two Rubber Slugs (28). Carefully place all components of the Electronics Assembly (62) into the handle halve. Connect the four wire terminal to the port on PCBA (34).

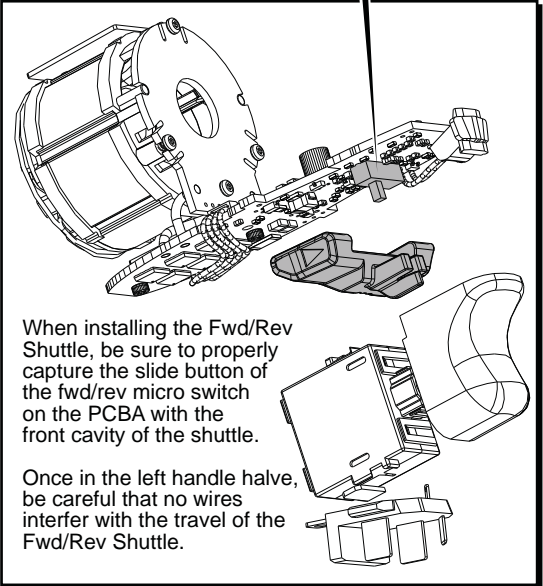
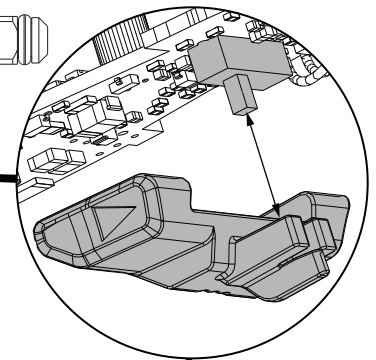


5 wire terminal block to 5 wire port on the PCBA



**NOTE:**  
It is very important to make sure that wires are tucked down into the left handle halve to avoid wires being pinched when re-assembling tool.

Be sure that all elements of the Electronics Assembly (On-Off Switch, PCBA, LED, Terminal Block Connector and Stator) are properly seated into the left handle halve before re-assembly.



When installing the Fwd/Rev Shuttle, be sure to properly capture the slide button of the fwd/rev micro switch on the PCBA with the front cavity of the shuttle.

Once in the left handle halve, be careful that no wires interfere with the travel of the Fwd/Rev Shuttle.