

# TECHNICAL INFORMATION



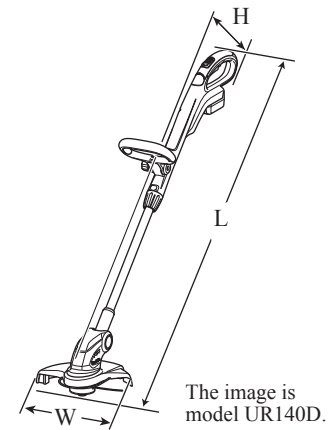
PRODUCT

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**Model No.** ► BUR141/ BUR181/ UR140D/ UR180D  
(LXRU01/ LXRU02/ RU01/ RU02)\*1

**Description** ► 260mm (10-1/4") Cordless String Trimmer

\*1 Model number for North and Central American countries



The image is model UR140D.

## CONCEPT AND MAIN APPLICATIONS

Models BUR141/ BUR181/ UR140D/ UR180D have been developed as lightweight 260mm (10-1/4") Cordless string trimmers for home gardening powered by the following Li-ion batteries:

BUR141 by BL1415/BL1430 (14.4V-1.3/3.0Ah)

BUR181 by BL1815/BL1830 (18V-1.3/3.0Ah)

UR140D by BL1411G (14.4V-1.1Ah)

UR180D by BL1811G (18V-1.1Ah)

And they feature well balanced tool design with angle adjustable cutting head.

These products are available in the variations listed in the next page.

Dimensions: mm (")		
Length (L)	minimum	1,229 (48-1/2)
	maximum	1,433 (56-1/2)
Width (W)		267 (10-1/2)
Height (H)*1	minimum	186 (7-3/8)
	maximum	257 (10-1/8)

\*1 The height varies depending on the angle of the cutting head.

## ► Specification

Specification		Model	BUR141 (LXRU01*1)	BUR181 (LXRU02*1)	UR140D (RU01*1)	UR180D (RU02*1)
Battery	Cell		Li-ion			
	Voltage: V		14.4	18	14.4	18
	Capacity: Ah		1.3/ 3.0		1.1	
	Energy capacity: Wh		19/ 44	24/ 54	16	20
	Charging time: min.		15/ 22 with DC18RC		60 with DC18WA	
Max. output: W		160	230	160	230	
Cutting width: mm (")		260 (10-1/4)				
No load speed: min <sup>-1</sup> =rpm		6,000	7,800	6,000	7,800	
Nylon cutting head	Cord feeding system		Bump & Feed			
	Cutting system		Single cord			
	Nylon cord [diameter x length]		1.65mm x 8m (1/16" x 26ft)			
Length adjust range of pipe shaft: mm (")		190 (7-1/2)				
Edger function		Yes				
Weight according to EPTA-Procedure 01/2003*2: kg (lbs)		2.9 (6.3)/ 3.0 (6.7)	2.9 (6.4)/ 3.1 (6.9)	2.9 (6.3)	2.9 (6.4)	

\*1 Model number for North and Central American countries

\*2 with Battery, Nylon cutting head, Shoulder strap, Guard, Loop handle

## ► Standard equipment

Nylon cutting head ..... 1                      Safety goggles ..... 1  
Shoulder belt ..... 1                              15m Nylon cord ..... 1

**Note:** The standard equipment for the tool shown above may vary by country.

## ► Optional accessories

Shoulder belt	Battery BL1415 (for BUR141)	Fast charger DC18RC (for BUR141, BUR181)
Safety goggles	Battery BL1430 (for BUR141)	Charger DC18SD (for BUR141, BUR181)
15m Nylon cord	Battery BL1815 (for BUR181)	Charger DC24SC (for BUR141, BUR181)
30m Nylon cord	Battery BL1830 (for BUR181)	Automotive charger DC18SE (for BUR141, BUR181)
Spool set	Battery BL1411G (for UR140D)	Charger DC18WA (for UR140D, UR180D)
	Battery BL1811G (for UR180D)	

► **Variation list**

**BUR141 (LXRU01\*1)/ BUR181 (LXRU02\*1)**

Model No.	Compatible Battery	Charger	Battery		Battery cover	Housing color
			Type	Q'ty		
BUR141Z	BL1415/ BL1430	---	---	---	---	black & Makita blue
BUR141RH		DC18RC	BL1415	1		
BUR141SH		DC18SD				
BUR141RF		DC18RC	BL1430	2	1	
BUR141SHE		DC18SD	BL1415			
BUR141RFE		DC18RC	BL1430			
LXRU01C		DC18RA or DC18SD	BL1415			
LXRU01		DC18RA	BL1430			
BUR181Z		BL1815/ BL1830	---	---	---	
BUR181RH	DC18RC		BL1815	1		
BUR181SH	DC18SD					
BUR181SF	DC18RC		BL1830	2	1	
BUR181RF						
BUR181RFE	---		---	---	---	
LXRU02Z	DC18SD		BL1815	1	---	
LXRU021C	DC18RA		BL1830	2	1	
LXRU02C						
LXRU02	---		---	---	---	

**UR140 (RU01\*1)/ UR180 (RU02\*1)**

Model No.	Compatible Battery	Charger	Battery		Battery cover	Housing color
			Type	Q'ty		
UR140DZ	BL1411G	---	---	---	---	white & Makita blue
UR140DW		DC18WA	BL1411G	1		
RU01		---				
UR180DZ	BL1811G	---	---	---	---	
UR180DW		DC18WA	BL1811G	1		
RU02Z		---	---	---		
RU021		DC18WA	BL1811G	1	---	
RU02						
				2	1	

**Note:** All models also include the accessories listed in "Standard equipment" of page 1.

\*1 Model numbers for North and Central American countries

► **Repair**

**CAUTION:** Repair the machine in accordance with “Instruction manual” or “Safety instructions”.

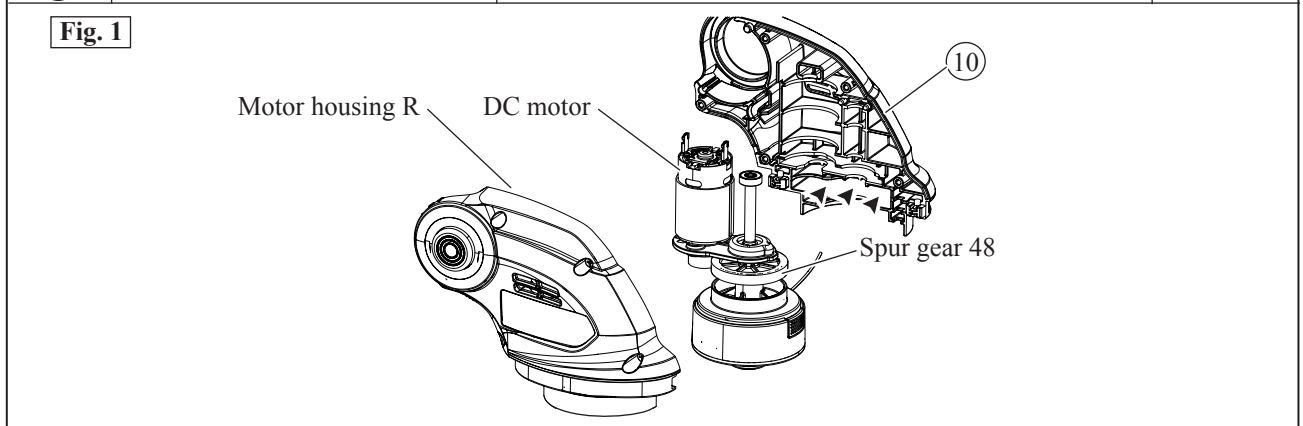
**[1] NECESSARY REPAIRING TOOLS**

Code No.	Description	Use for
1R022	Bearing plate	Supporting Spool holder to remove Spur gear 48
1R217	Ring 22	Supporting Spur gear 48 to remove Gear shaft
1R236	Round Bar for Arbor 7-100	Removing Spool holder
1R286	Round Bar for Arbor 12-50	Supporting Spool holder to press-fit Gear shaft

**[2] LUBRICATION**

Apply **Makita grease N. No.2** to the following portions designated with the black triangle to protect parts and product from unusual abrasion.

Item No.	Description	Portion to lubricate	Amount
⑩	Motor housing L	Gear room where Spur gear 48 rotates	3 g



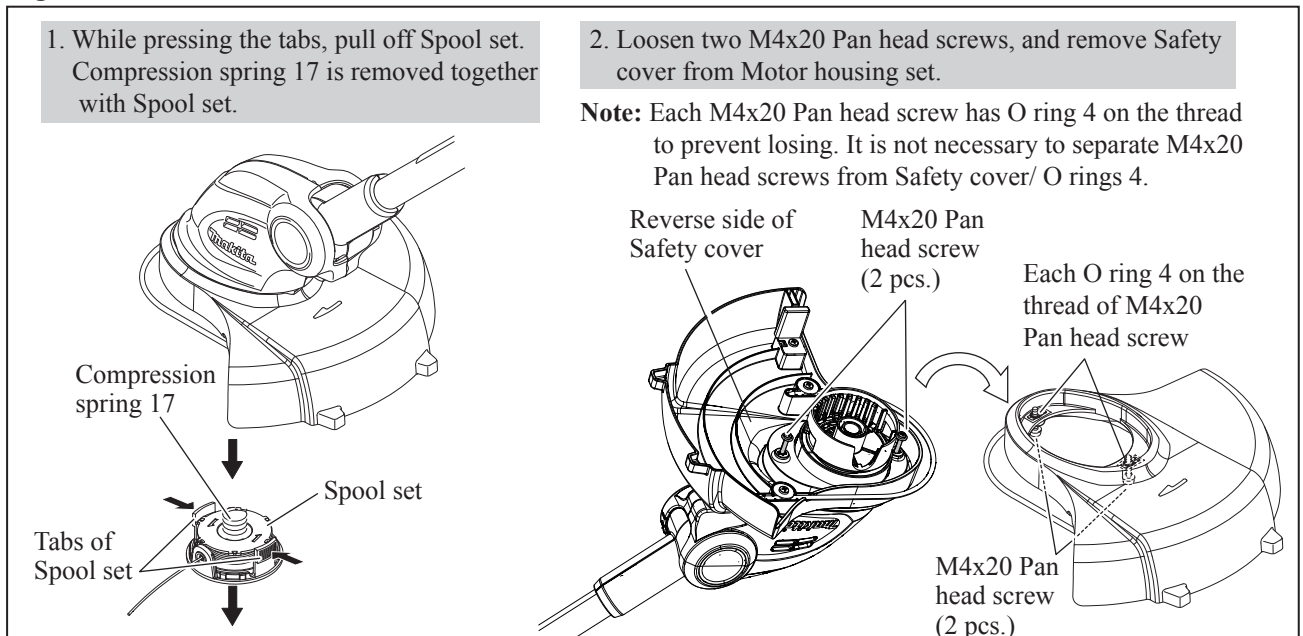
**[3] DISASSEMBLY/ASSEMBLY**

**[3] -1. Gear shaft complete**

**DISASSEMBLING**

(1) Remove Spool set and Safety cover as drawn in **Fig. 2**.

**Fig. 2**



► **Repair**

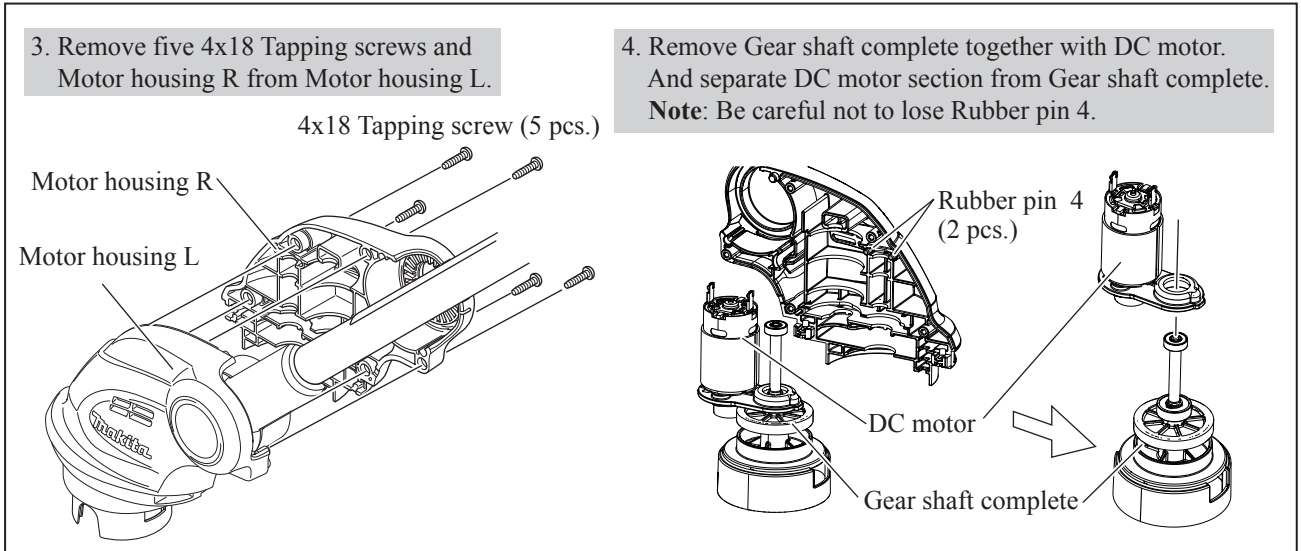
**[3] DISASSEMBLY/ASSEMBLY**

**[3] -1. Gear shaft complete (cont.)**

DISASSEMBLING

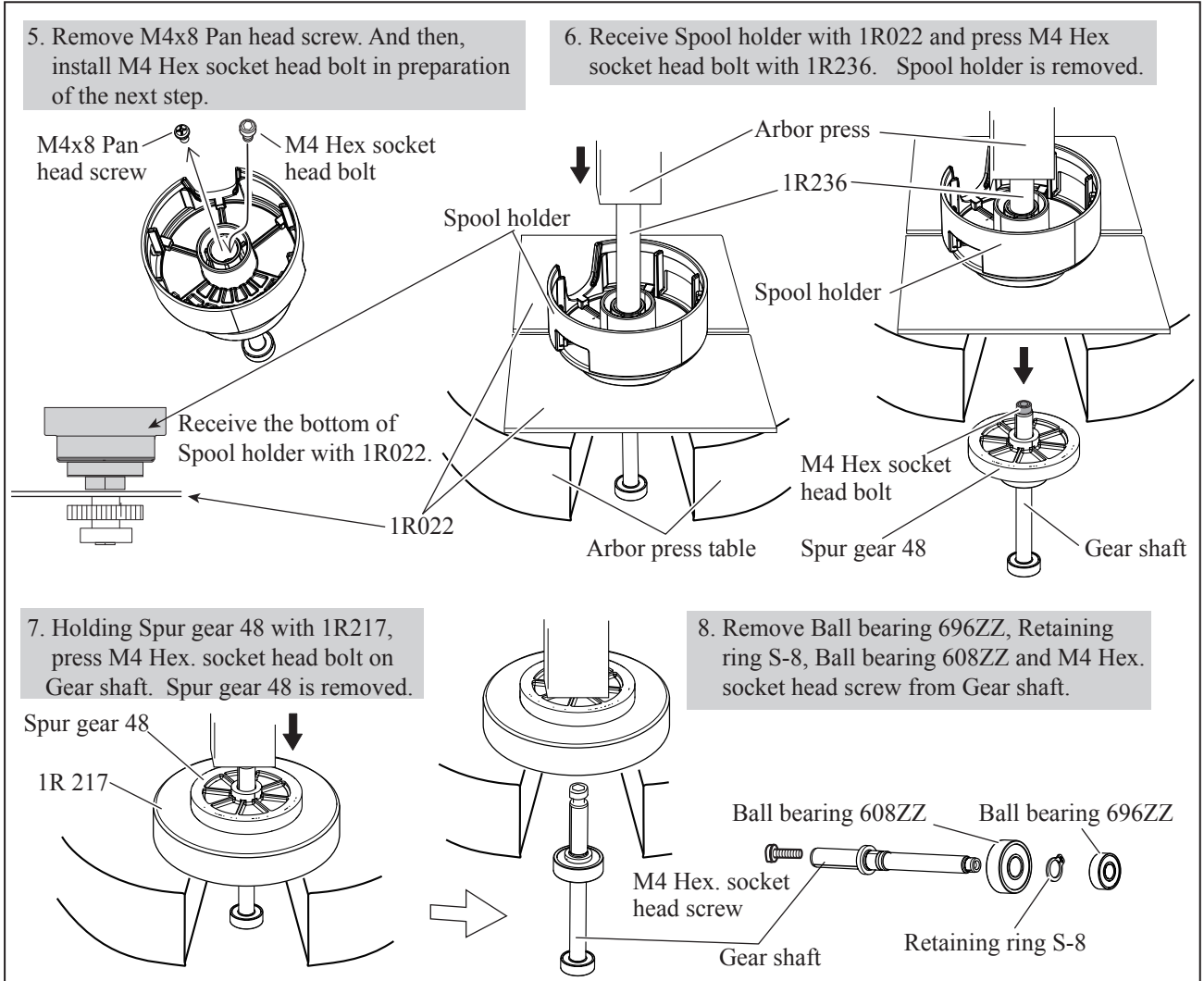
(2) After removing Motor housing R, Remove DC motor and Gear shaft complete as drawn in **Fig. 3**.

**Fig. 3**



(3) Disassemble Gear shaft complete as drawn in **Fig. 4**.

**Fig. 4**



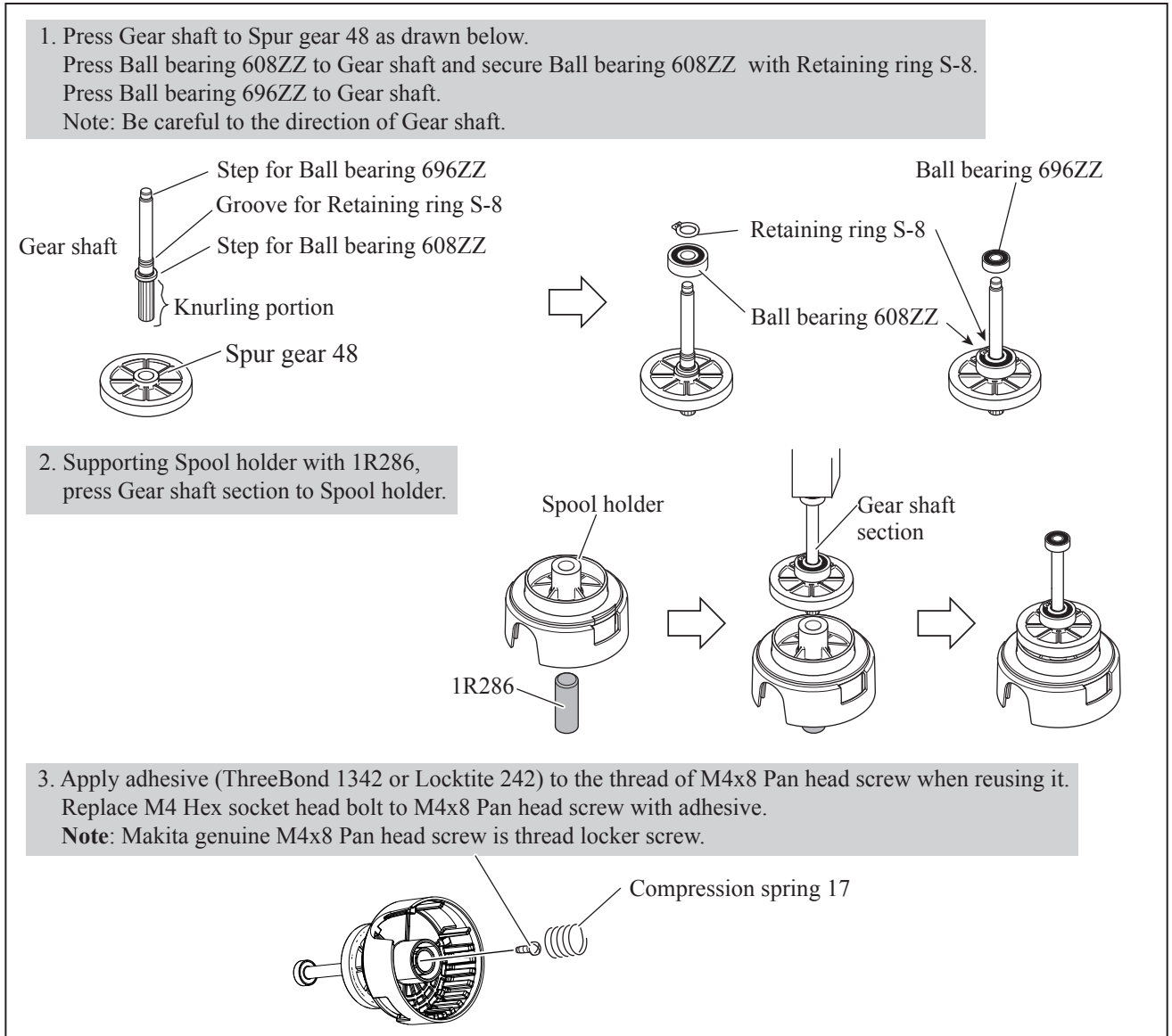
► **Repair**

**[3] DISASSEMBLY/ASSEMBLY**  
**[3] -1. Gear shaft complete (cont.)**

ASSEMBLING

(1) Assemble Gear shaft complete as drawn in **Fig. 5**.

**Fig. 5**



(2) Assemble Gear shaft complete to Motor housing in the reverse order of Disassembly. (refer to **Fig. 3**)

**Note:** Make sure that 2 pcs. of Rubber pin 4 are mounted to Motor housing (L).

**[3] -2. DC motor**

DISASSEMBLING

DC motor can be removed as drawn in **Fig. 3**.

No need to disassemble Spool set.

**Note:** Be careful not to lose Rubber pin 4.

ASSEMBLING

Assemble DC motor to Motor housing in the reverse order of disassembly. (Refer to **Fig. 3**)

**Note:** Make sure that 2 pcs. of Rubber pin 4 are mounted to Motor housing (L).

► **Repair**

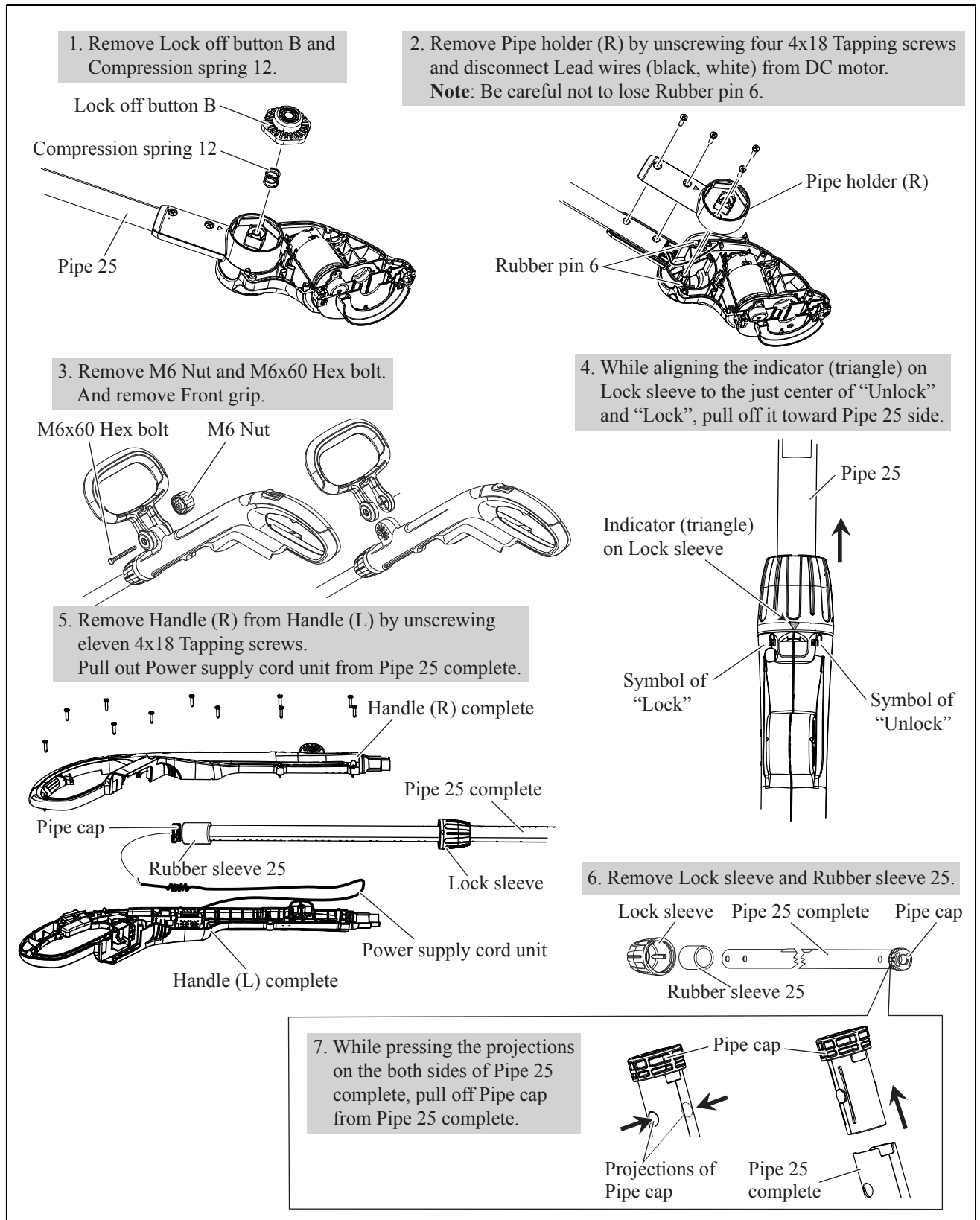
**[3] DISASSEMBLY/ASSEMBLY**

**[3] -3. Pipe section**

DISASSEMBLING

- (1) Remove Spool set and Safety cover as drawn in **Fig. 2**.
- (2) Separate Motor housing (R) from Motor housing (L) as drawn in **Fig. 3**.
- (3) Disassemble Pipe 25 complete as drawn in **Fig. 6**.

**Fig. 6**





► **Repair**

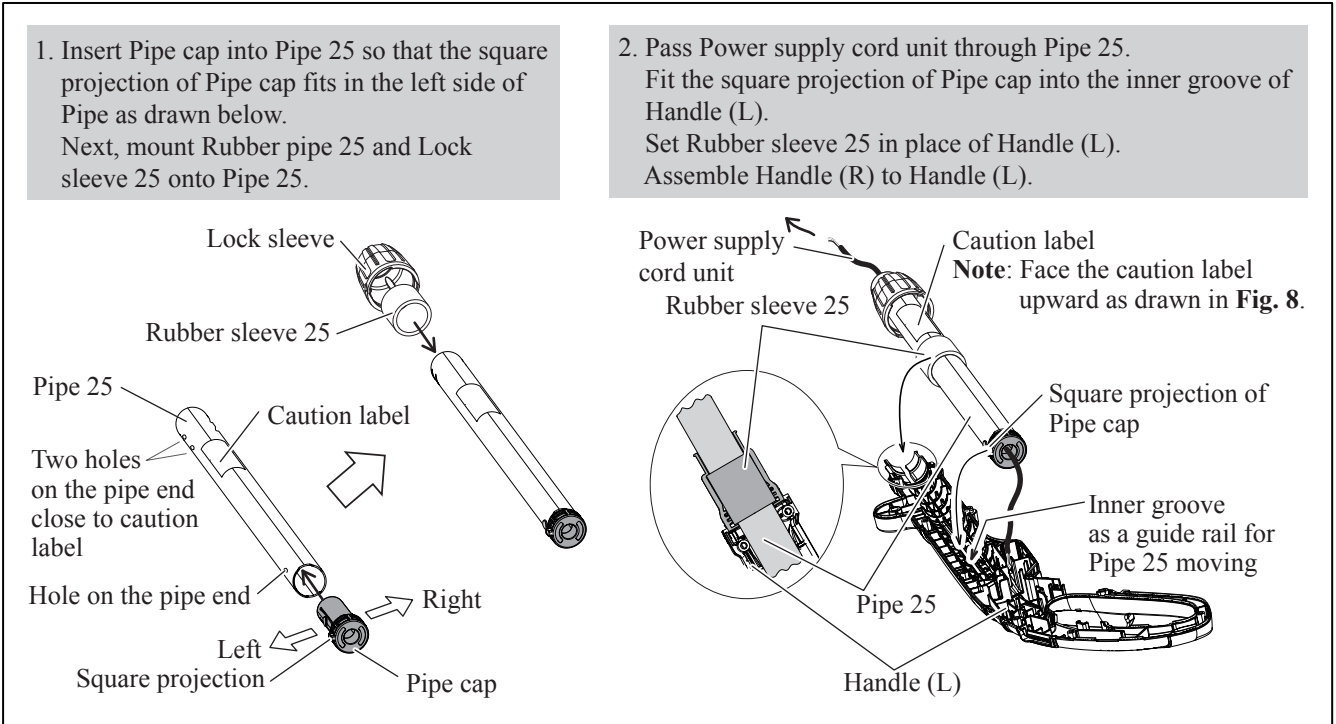
**[3] DISASSEMBLY/ASSEMBLY**

**[3] -3. Pipe section (cont.)**

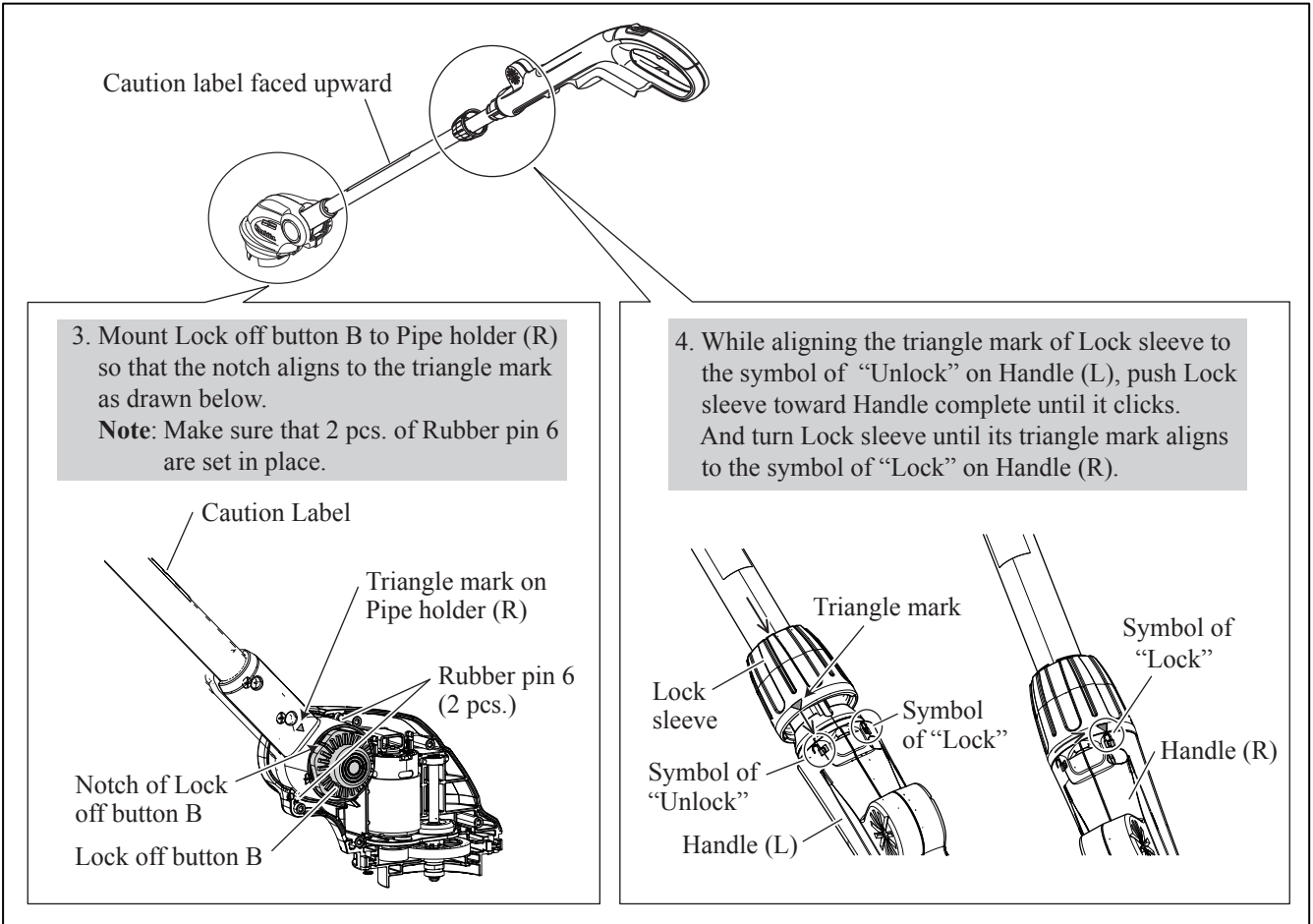
ASSEMBLING

Assemble Pipe section as drawn in **Figs. 7 and 8.**

**Fig. 7**



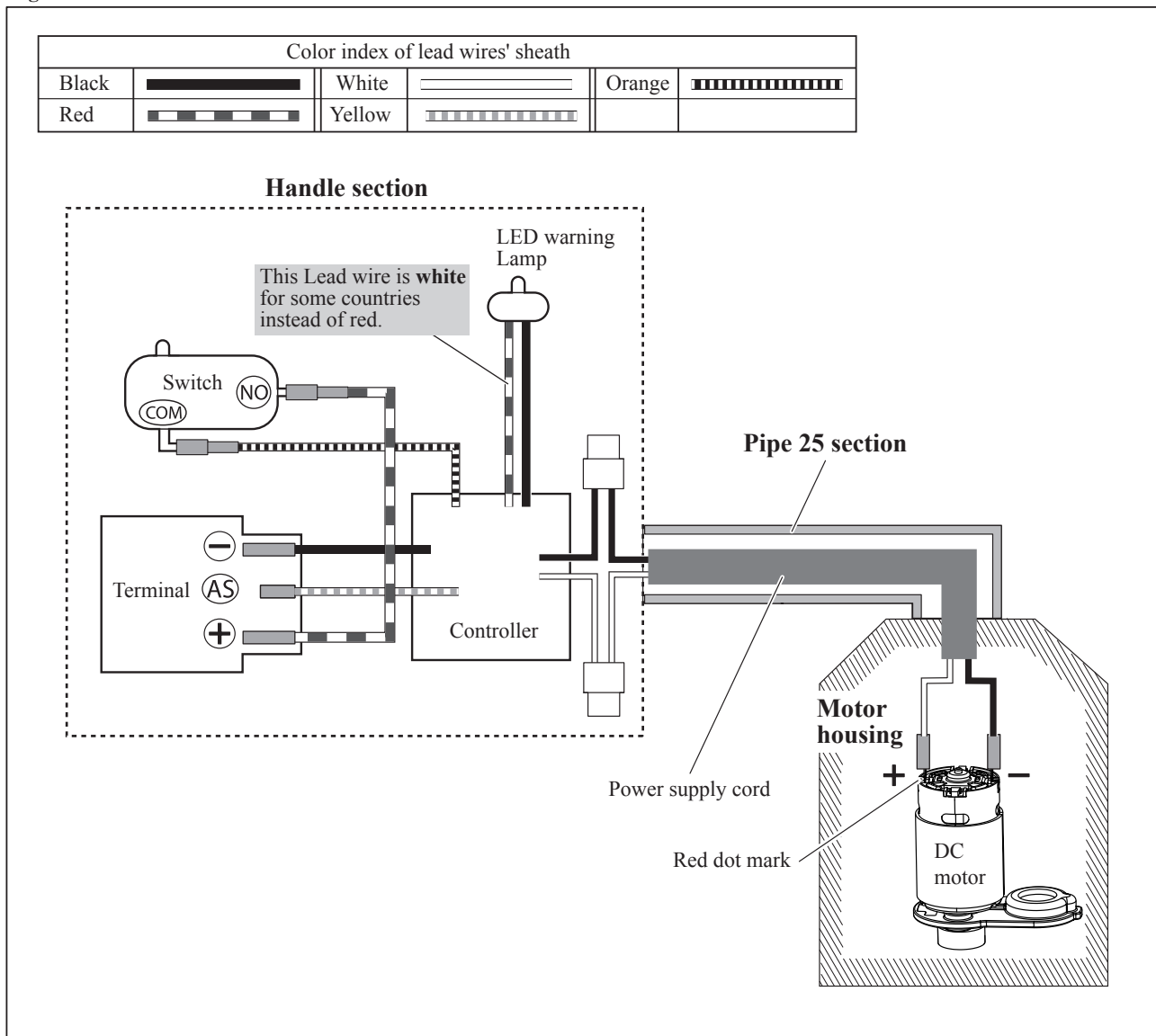
**Fig. 8**



► **Circuit diagram**

**UR140D, UR180D, BUR141, BUR181**

Fig. D-1





► **Wiring diagram**

**UR140D, UR180D, BUR141, BUR181**

Fig. D-2

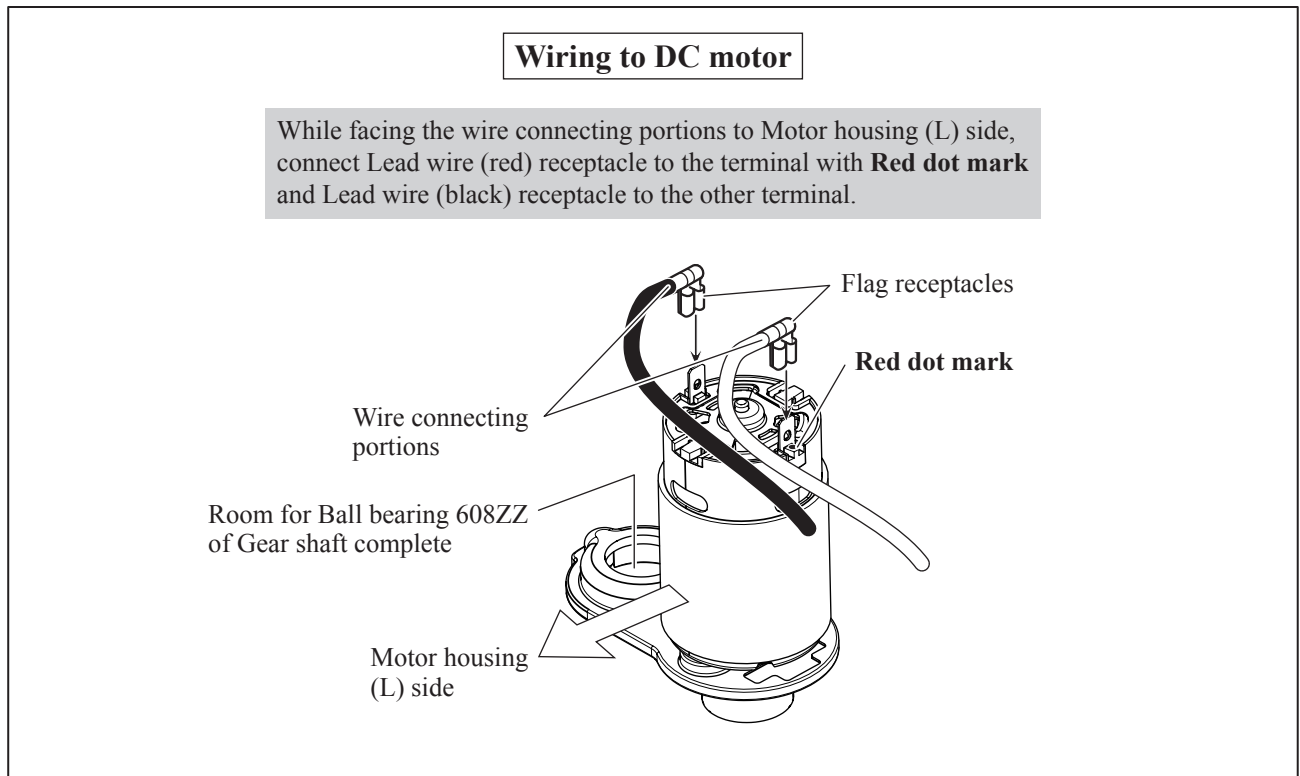
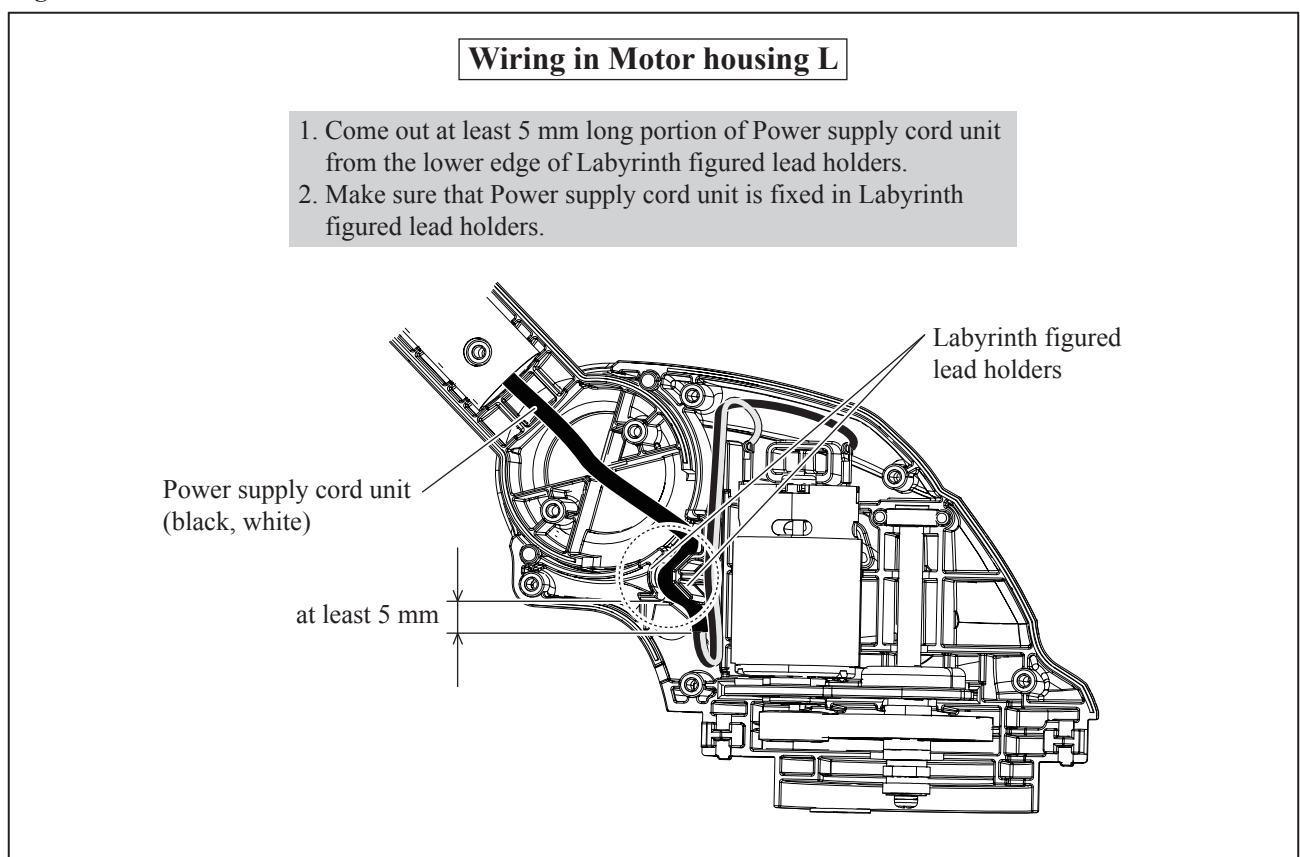


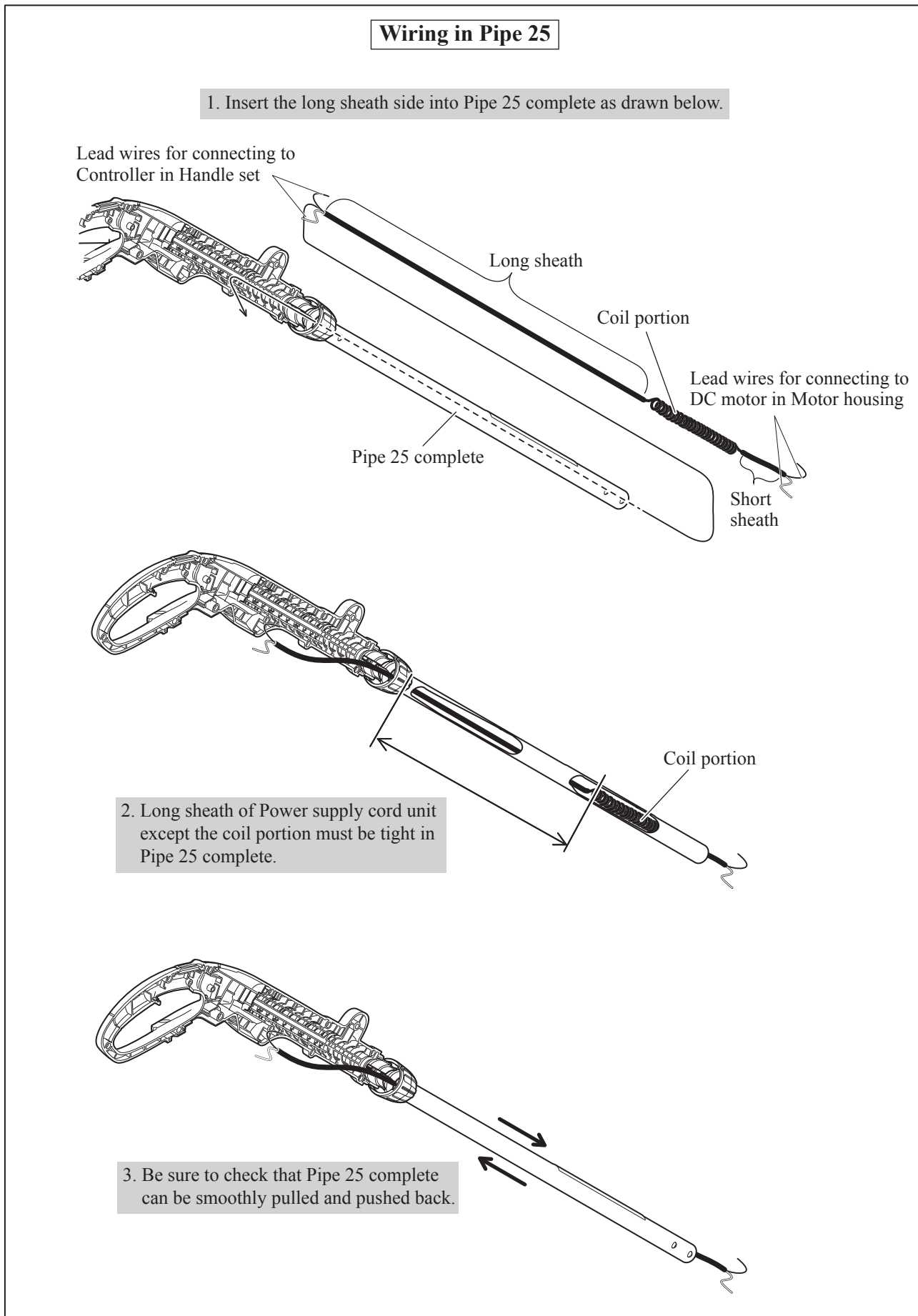
Fig. D-3



► **Wiring diagram**

**UR140D, UR180, BUR141, BUR181**

Fig. D-4



► **Wiring diagram**

**UR140D, UR180D**

Fig. D-5

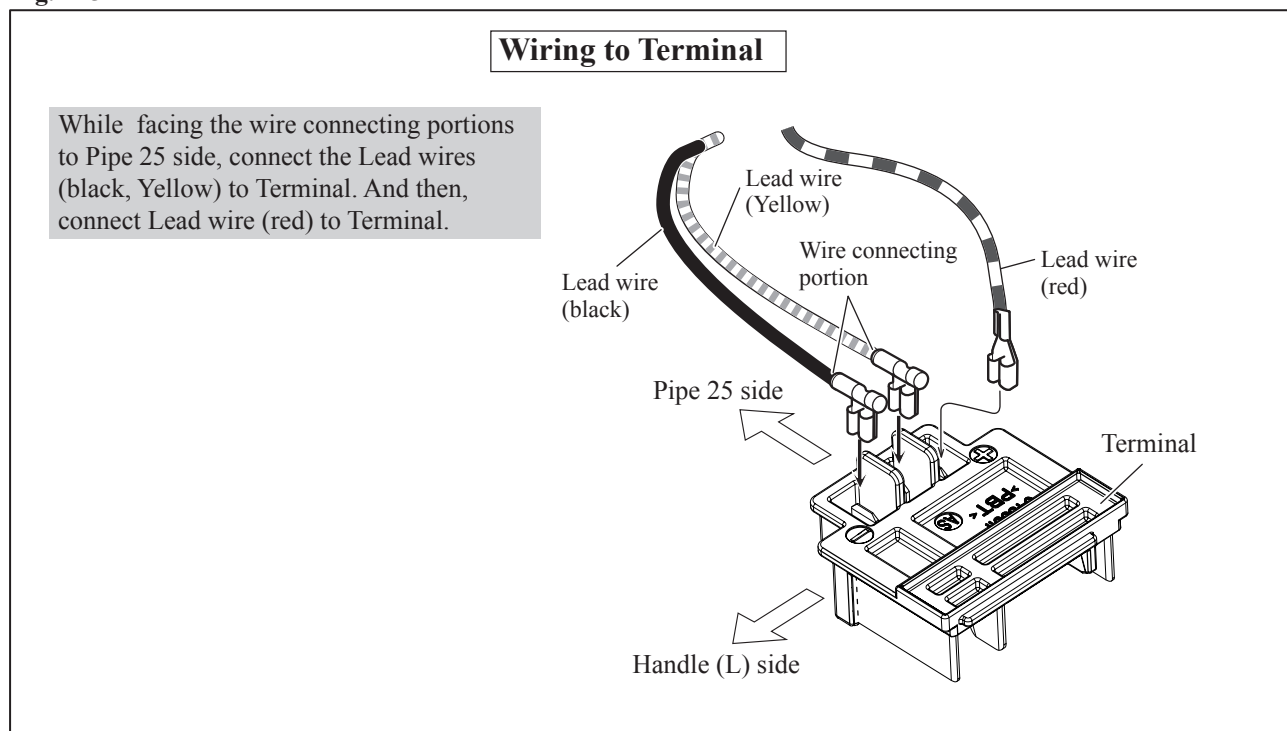
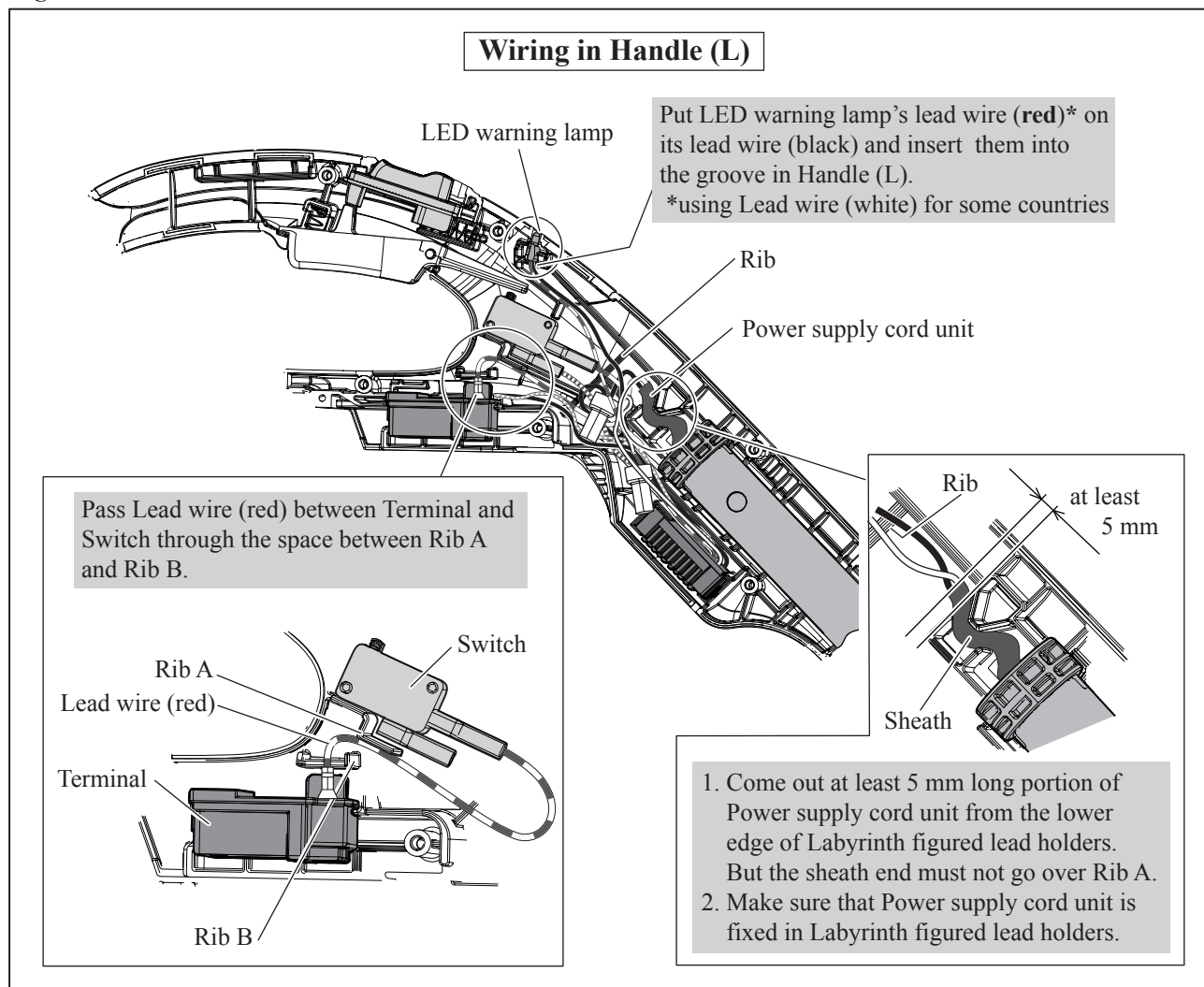


Fig. D-6



► **Wiring diagram**

**UR141D, UR181D**

Fig. D-7

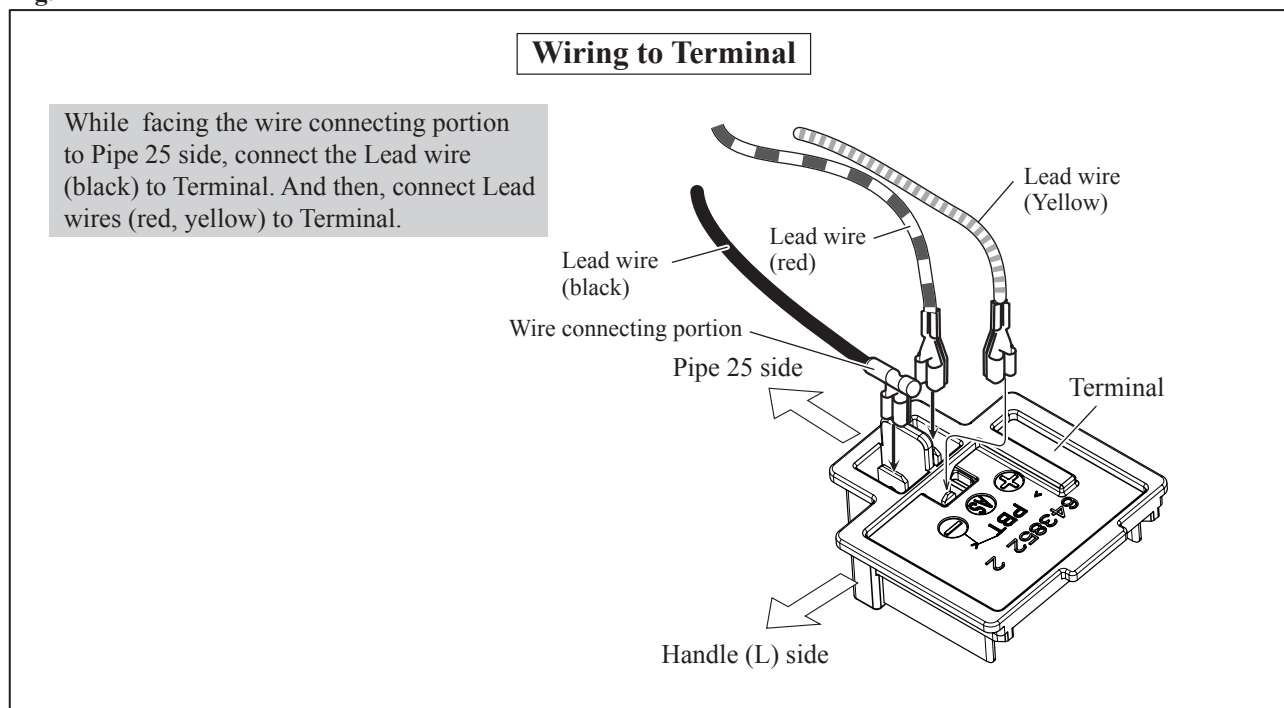


Fig. D-8

