

# TECHNICAL INFORMATION

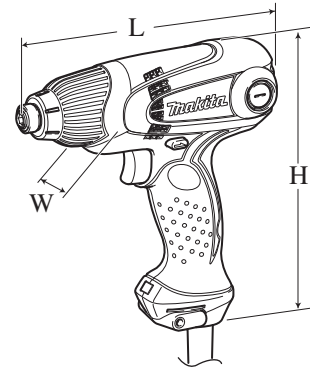


PRODUCT

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**Models No.** ▶ TD0101, TD0101F

**Description** ▶ Impact Driver



## CONCEPT AND MAIN APPLICATIONS

Models TD0101 and TD0101F are cost-competitive 100N.m-class impact driver developed as the entry model of Makita impact driver series.

Its main features are:

- Compact design with an overall length of 184mm (7-1/4")
- Lightweight at only 0.99kg (2.2lbs)

The only difference between TD0101 and TD0101F is:

TD0101: Without LED job light

TD0101F: With LED job light

| Dimensions: mm (") |                        |
|--------------------|------------------------|
|                    | <b>TD0101, TD0101F</b> |
| Length (L)         | 184 (7-1/4)            |
| Width (W)          | 67 (2-5/8)             |
| Height (H)         | 192 (7-9/16)           |

## ► Specification

| Voltage (V) | Current (A) | Cycle (Hz) | Continuous Rating (W) |        | Max. Output (W) |
|-------------|-------------|------------|-----------------------|--------|-----------------|
|             |             |            | Input                 | Output |                 |
| 110         | 2.2         | 50/60      | 230                   | 90     | 140             |
| 120         | 1.7         | 50/60      | ---                   | 90     | 140             |
| 220         | 1.1         | 50/60      | 230                   | 90     | 140             |
| 230         | 1.0         | 50/60      | 230                   | 90     | 140             |
| 240         | 1.0         | 50/60      | 230                   | 90     | 140             |

| Specifications                                | Model               | <b>TD0101/ TD0101F</b>   |
|---|---------------------|--|
| No load speed: min-1 = rpm                    |                     | 0 - 3,600  |
| Impacts per min.: min-1 = ipm                 |                     | 0 - 3,200  |
| Driving shank: mm (")                         |                     | 6.35 (1/4) Hex   |
| Capacities                                    | Machine screw       | M4 - M8 (5/32 - 5/16")   |
|   | Standard bolt       | M5 - M14 (3/16 - 9/16")  |
|   | High tensile bolt   | M5 - M10 (3/16 - 3/8")   |
|   | Coarse thread screw | 22 - 90mm (7/8 - 3-1/2")   |
| Max. fastening torque*: N.m [kgf.cm] (in.lbs) |                     | 100 [1,020] (885)  |
| Electric brake                                |                     | No   |
| Variable speed control by trigger             |                     | Yes  |
| Reverse switch                                |                     | Yes  |
| LED job light                                 |                     | No/ Yes  |
| Protection against electric shock             |                     | Double insulation  |
| Power supply cord: m (ft)                     |                     | Australia, New Zealand, Brazil, Chile: 2.0 (6.6)<br>Other countries: 2.5 (8.2) |
| Net weight: kg (lbs)                          |                     | 0.99 (2.2)   |
| Weight according EPTA-Procedure 01/2003: kg   |                     | 0.99   |

\*torque at 3 seconds after seating when fastening M12 high tensile bolt

## ► Standard equipment

Phillips bit ..... 1 pc

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

## ► Optional accessories

Phillips bits, Square bits, Socket bits, Drill chucks, Hex shank auger bits, Bit piece, Adjustable locator

## ► Repair

**CAUTION: Unplug the tool and remove the bit from the machine for safety before repair/ maintenance in accordance with the instruction manual!**

### [1] NECESSARY REPAIRING TOOLS

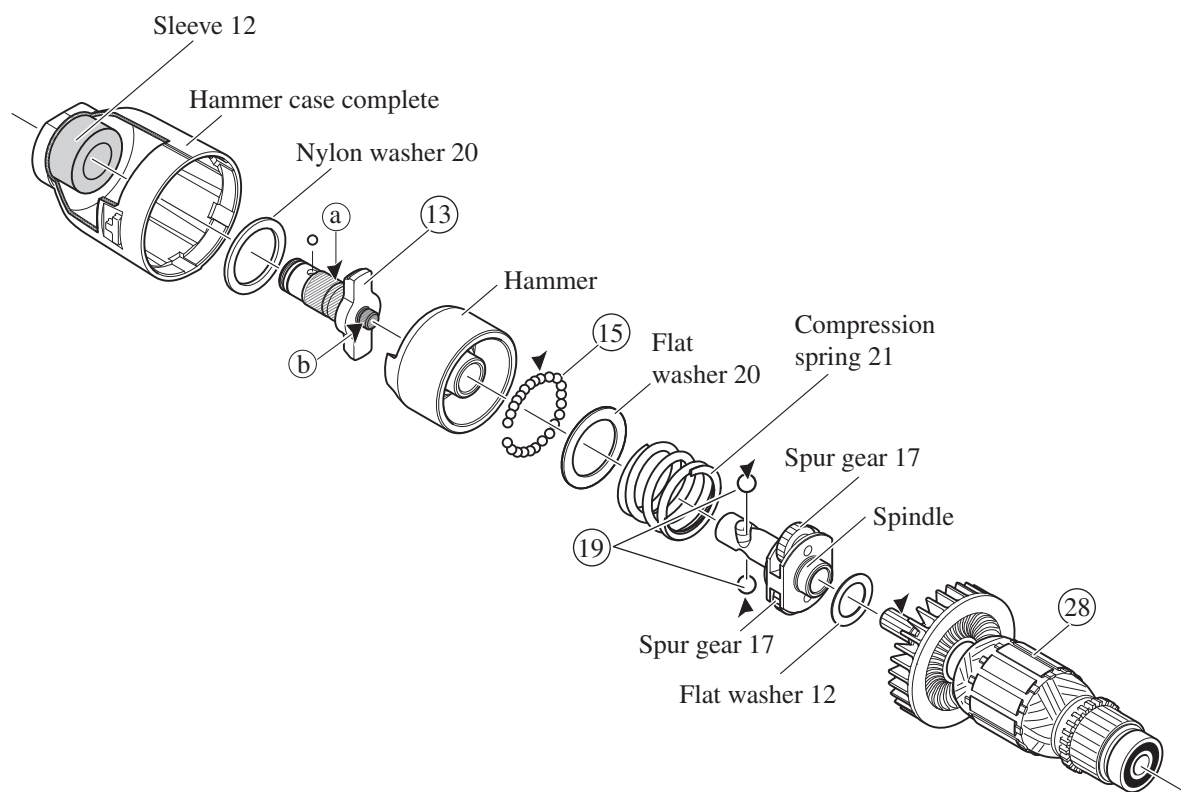
| Code No. | Description                   | Use for  |
|----------|-------------------------------|--|
| 1R041    | Vise plate                    | Disassembling Hammer case complete               |
| 1R045    | Gear Extractor (large)        | Disassembling Hammer                             |
| 1R346    | Center attachment for 1R045   |  |
| 1R223    | Torque wrench shaft 20-90N.m  | Disassembling Hammer case complete               |
| 1R224    | Ratchet head 12.7 for 1R223   |  |
| 1R232    | Pipe 30                       | Supporting jig when disassembling Bit sleeve     |
| 1R288    | Screwdriver magnetizer        | Magnetizing Screwdriver for removing Steel balls |
| 1R291    | Retaining ring S and R pliers | Disassembling / Assembling Ring spring 10        |
| 134844-7 | Socket 27-50                  | Disassembling Hammer case complete               |

### [2] LUBRICATIONS

Apply Makita grease FA.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     |
|----------|-------------------------|---|------------|
| ⑬        | Anvil                   | Ⓐ Drum portion where Sleeve 12 contacts             | a little   |
|          |                         | Ⓑ Small drum portion which is inserted into Spindle |            |
| ⑮        | Steel ball 3 (24 pcs.)  | whole portion                                       |            |
| ⑲        | Steel ball 4.8 (2 pcs.) | whole portion                                       |            |
| ⑳        | Armature                | Gear teeth for smooth engaging with Spur gear 17    | approx. 1g |

**Fig. 1**



► **Repair**

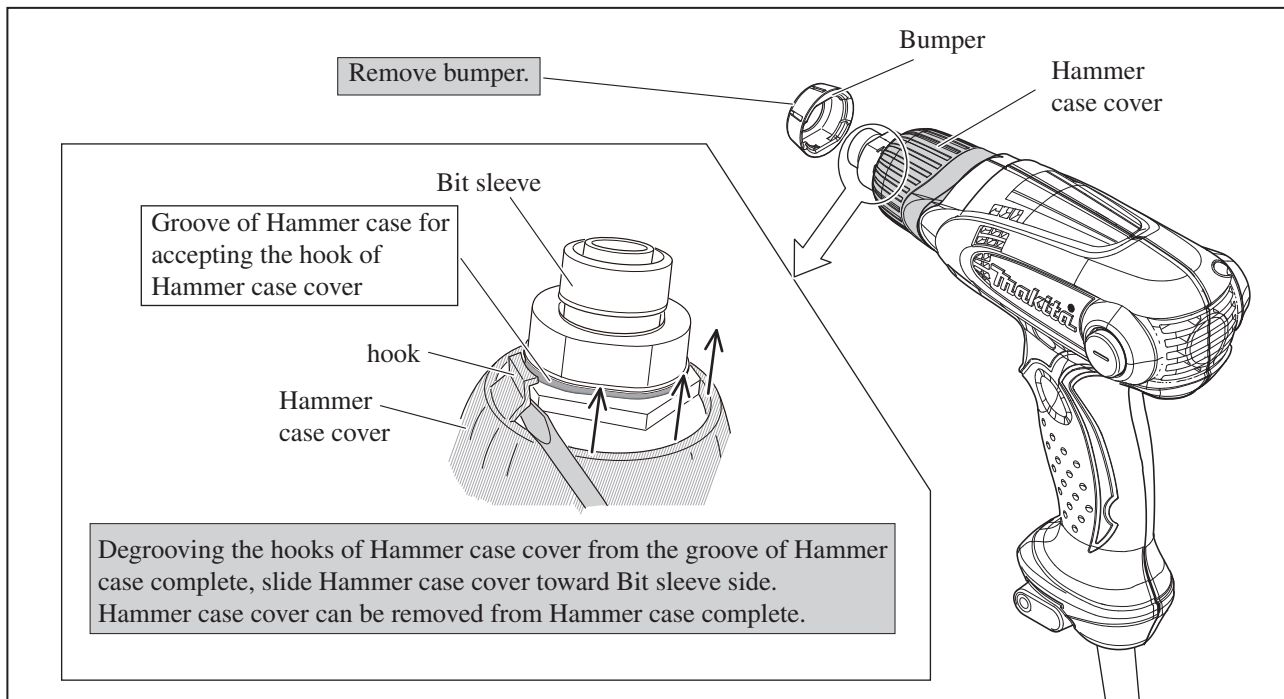
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Hammer Case Section**

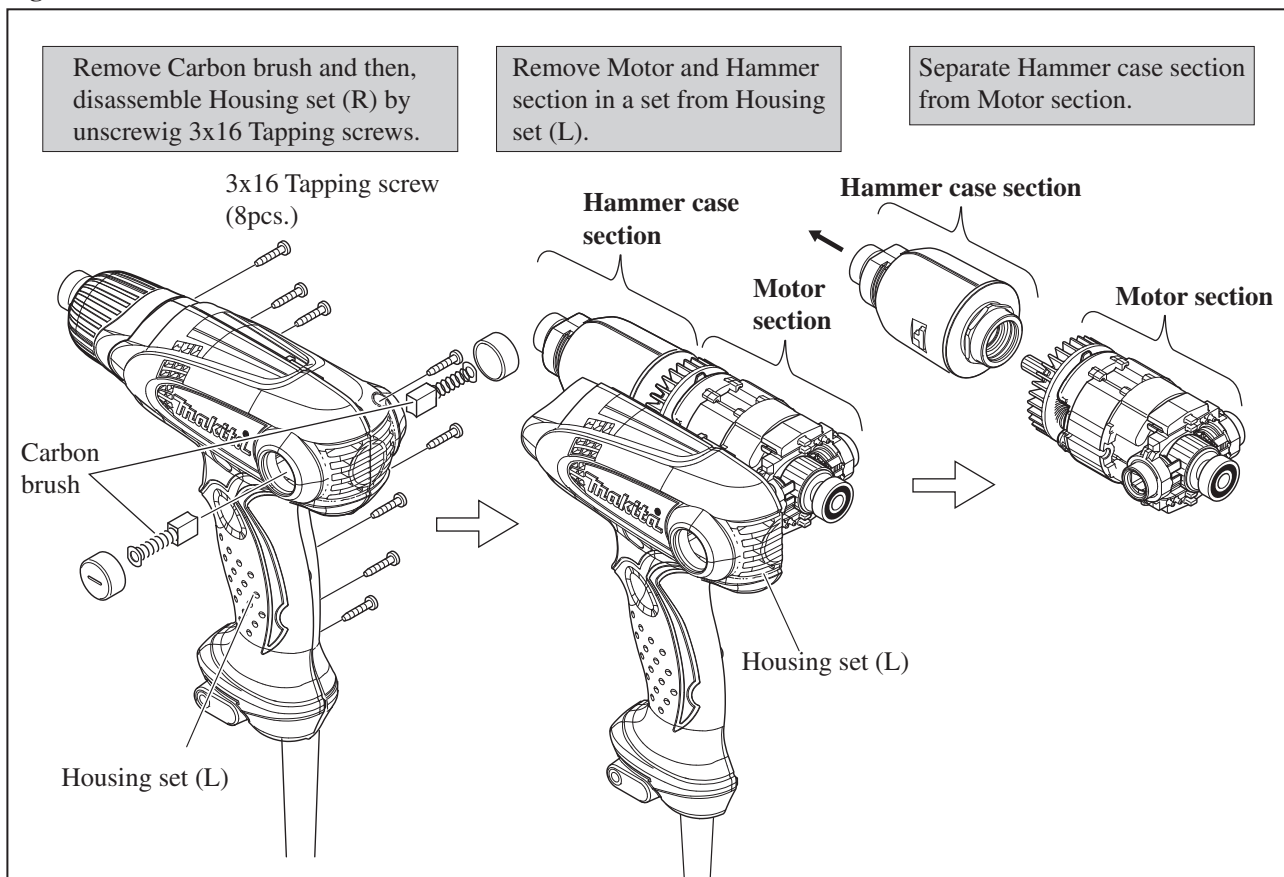
**DISASSEMBLING**

(1) Remove Hammer case section from the machine as illustrated in Figs. 2, 3.

**Fig. 2**



**Fig. 3**



► **Repair**

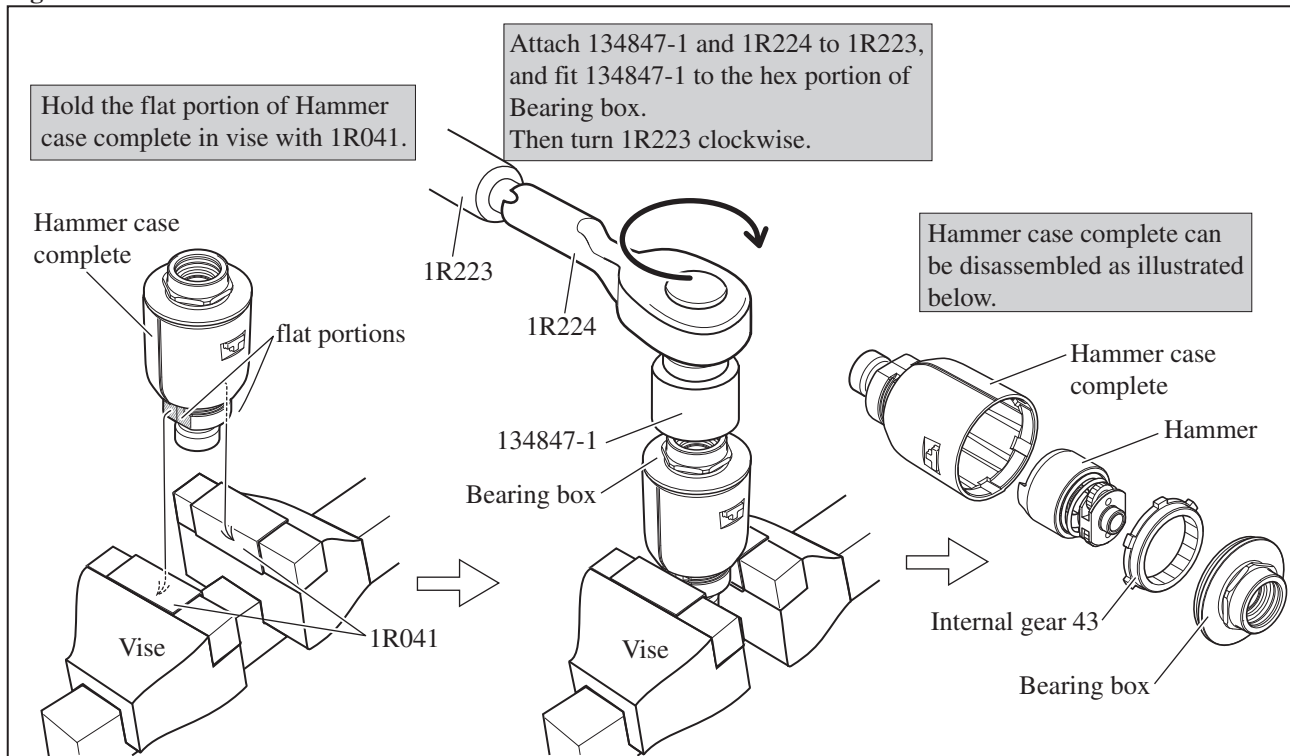
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Hammer Case Complete**

**DISASSEMBLING**

(2) The removed Hammer case section is disassembled as illustrated in **Fig. 4**.

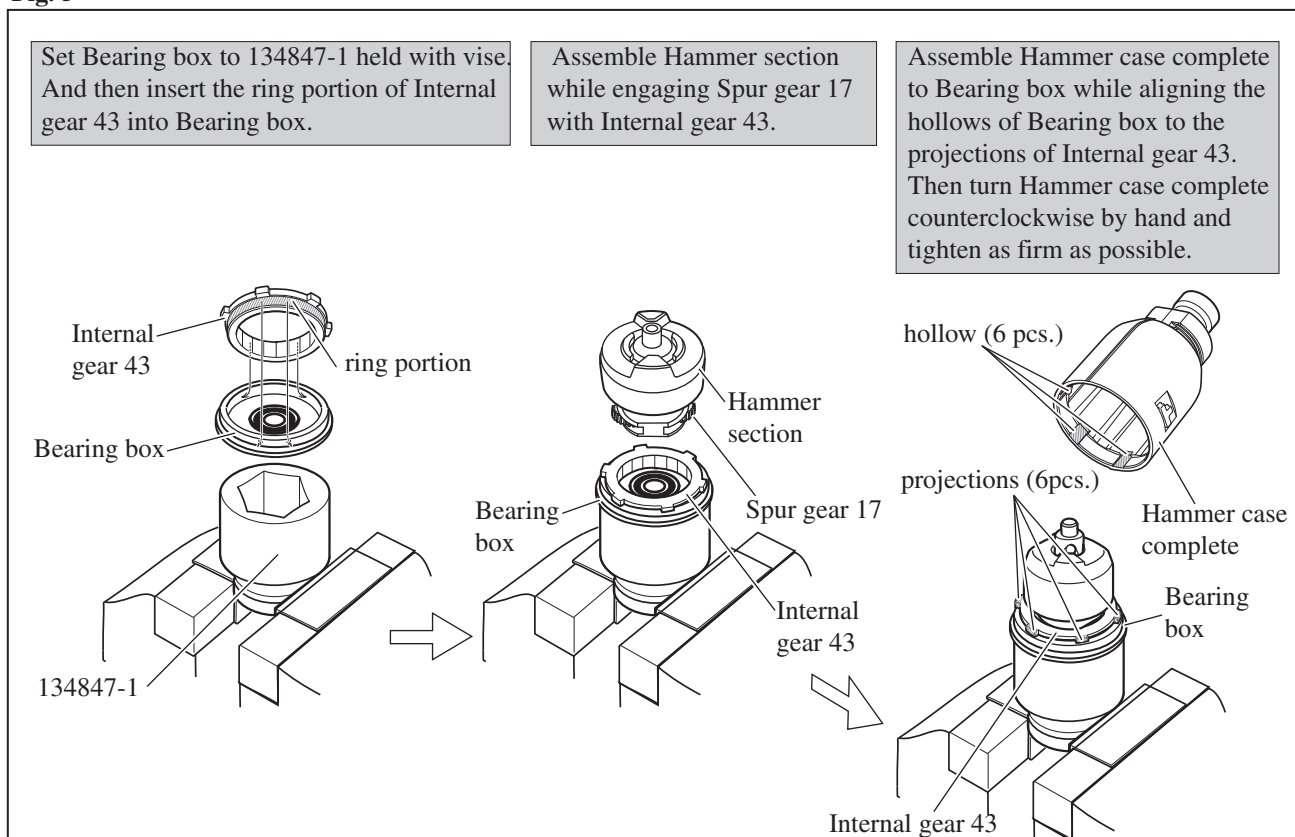
**Fig. 4**



**ASSEMBLING**

(1) Use 134847-1 as a supporting jig for Bearing box and assemble Hammer case complete as illustrated in **Fig. 5**.

**Fig. 5**



► **Repair**

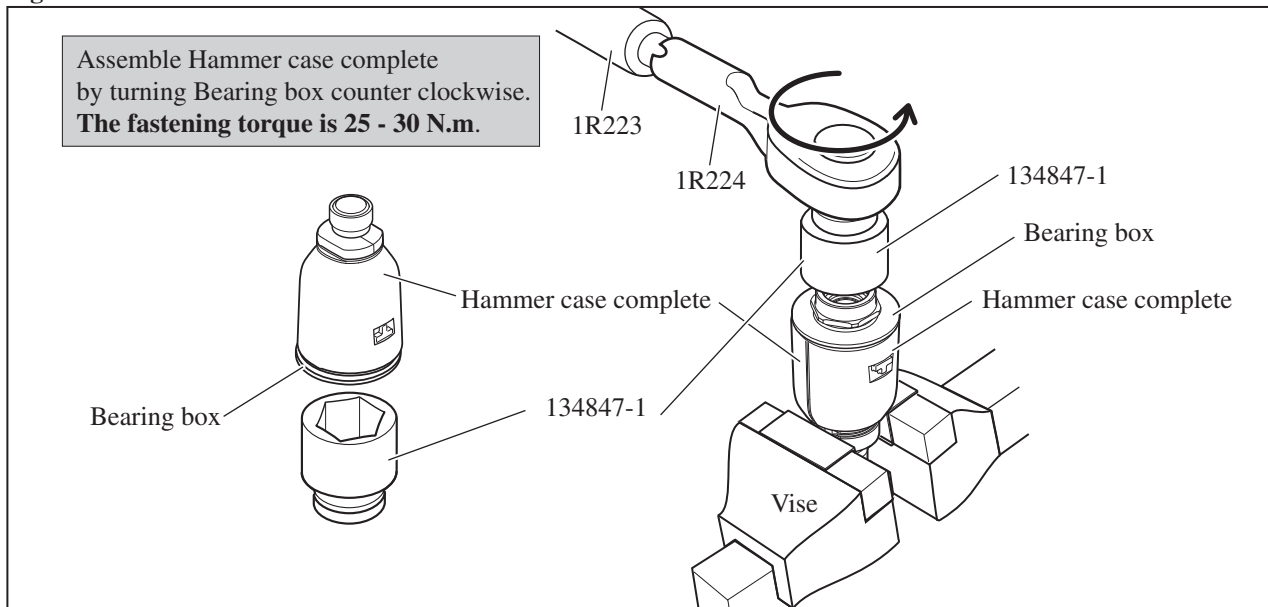
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Hammer Case Complete**

**ASSEMBLING**

(2) Set the assembled Hammer case complete in the same position as disassembling. And assemble as illustrated in Fig 6.

**Fig 6**

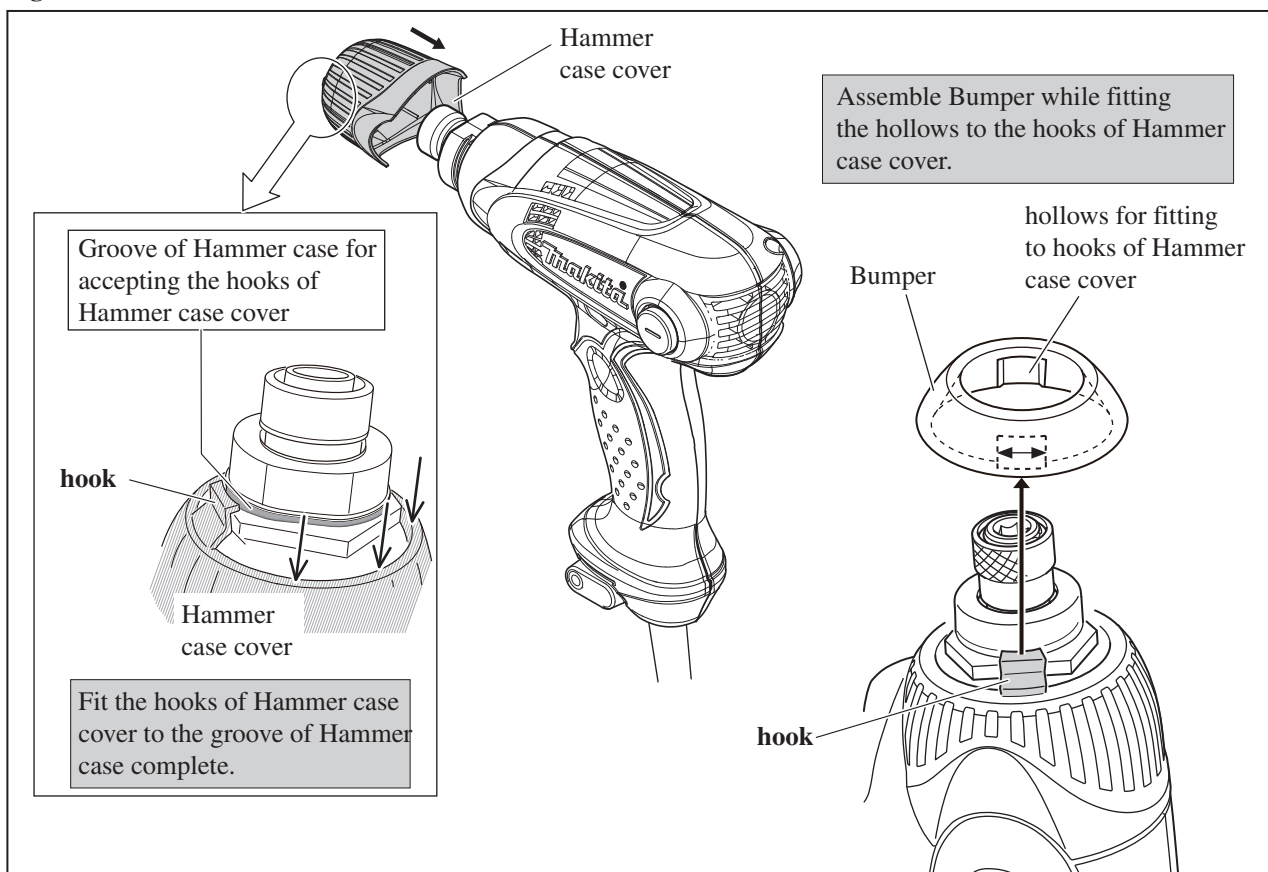


(3) Join Motor section with Hammer case complete. And assemble them to Housing set (L). Refer to Fig. 3.

(4) Assemble Brush holder and Carbon brush. And then, assemble Housing set (R). Refer to Fig. 3.

(5) Assemble Hammer case cover and Bumper as illustrated in Fig. 7.

**Fig. 7**



## ► Repair

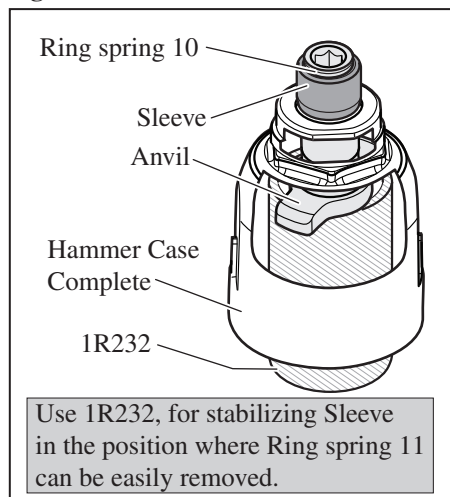
### [3] DISASSEMBLY/ASSEMBLY

#### [3]-2. Anvil and Bit holding Mechanism

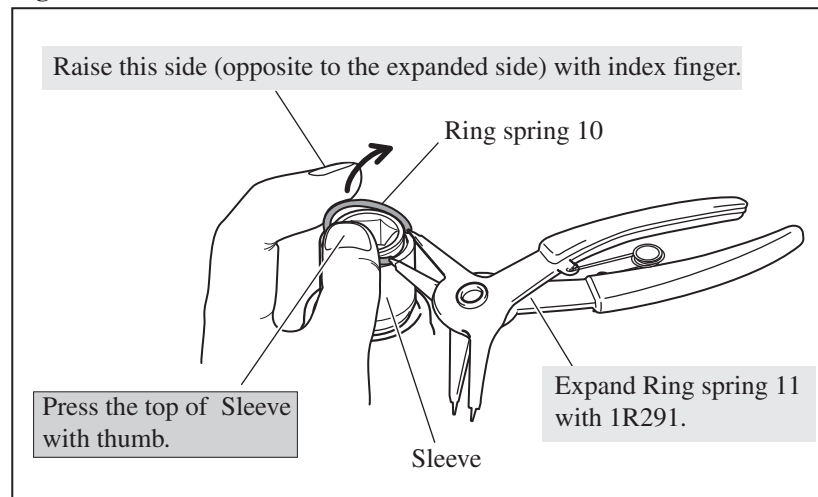
##### DISASSEMBLING

- (1) Remove Hammer case section as illustrated in **Figs. 2 and 3**.
- (2) Remove Bearing box, Internal gear 43 and Hammer section from Hammer case complete as illustrated in **Fig. 4**.

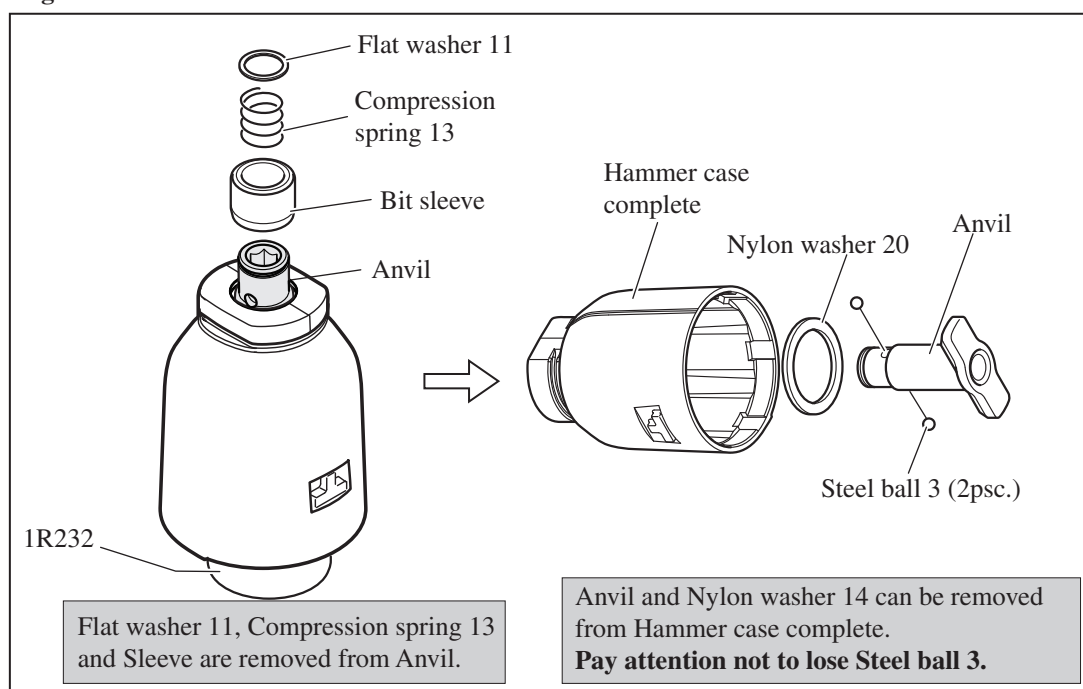
**Fig. 8**



**Fig. 9**



**Fig. 10**



Note: In case of repairing exclusively for Bit holding mechanism (Bit sleeve, Compression spring 13, Flat washer 11), it is not necessary to disassemble Hammer case complete from the machine.

##### ASSEMBLING

Take the disassembling step in reverse.

► **Repair**

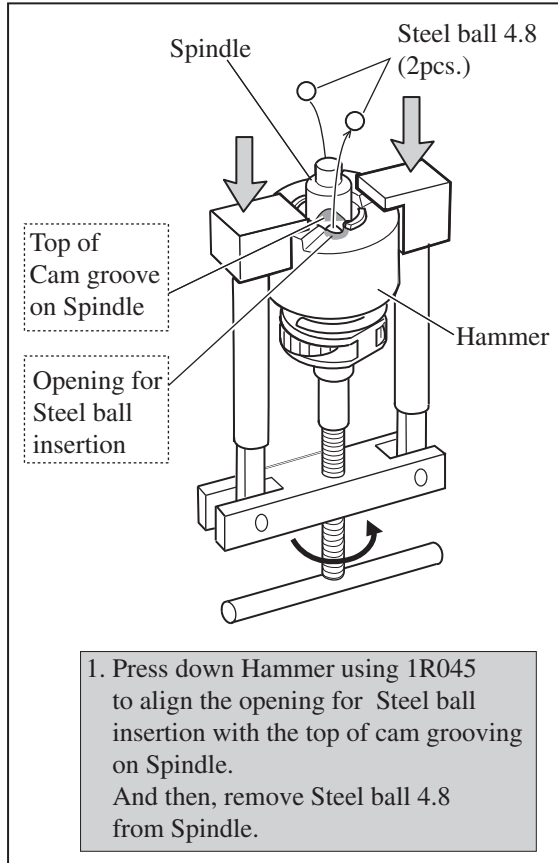
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-3. Hammer Section**

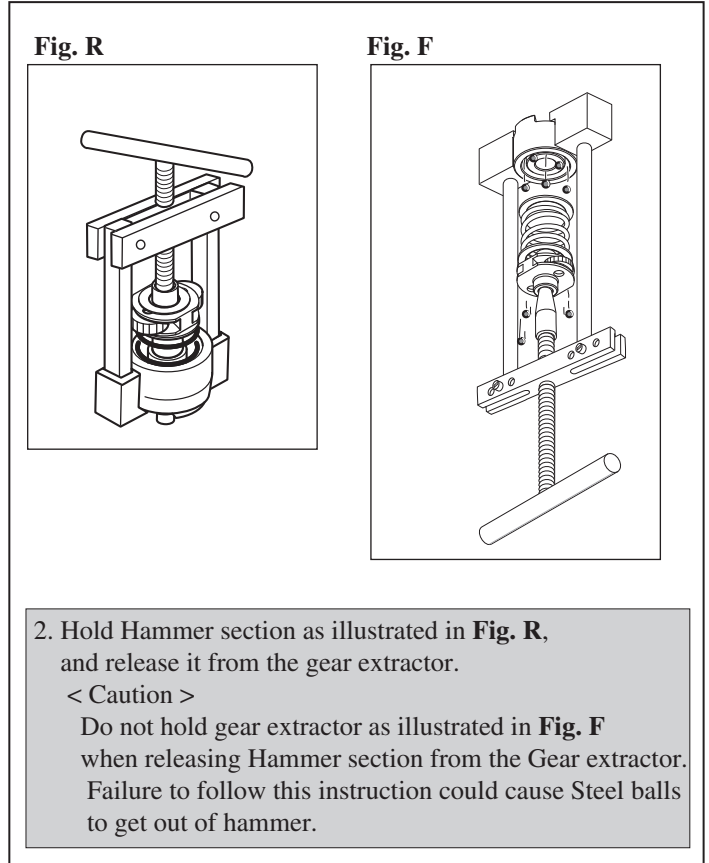
**DISASSEMBLING**

- (1) Disassemble Hammer case section from the machine. (Figs. 2 and 3)
- (2) Remove Hammer from Hammer case complete. (Fig. 4)
- (3) Disassemble Hammer section as illustrated in Figs. 11 to 14.

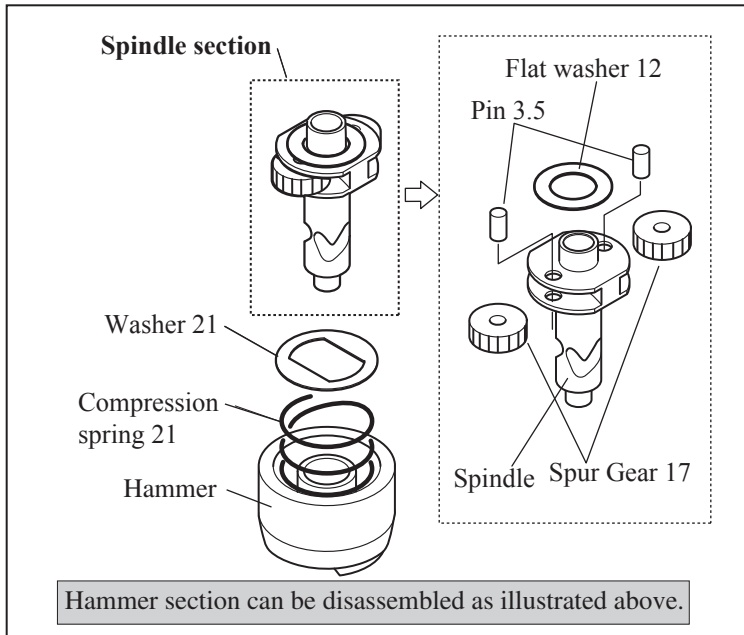
**Fig. 11**



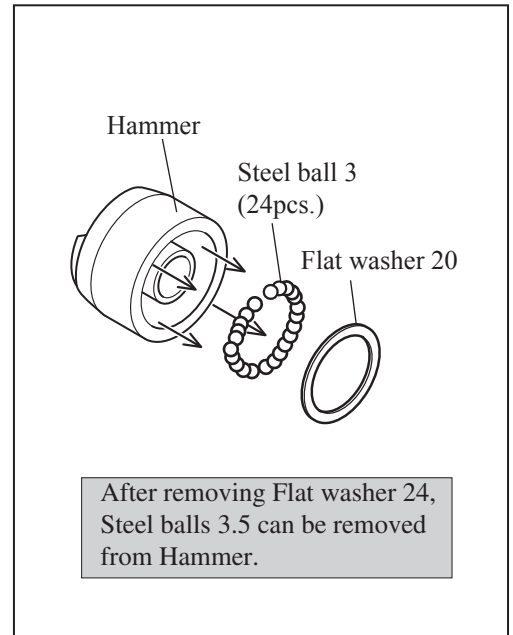
**Fig. 12**



**Fig. 13**



**Fig. 14**



## ▶ Repair

### [3] DISASSEMBLY/ASSEMBLY

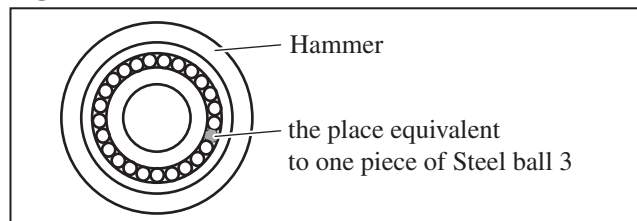
#### [3]-3. Hammer Section (cont.)

##### ASSEMBLING

Take the disassembling step in reverse.

Note: Make sure that the place equivalent to one piece of Steel ball 3 has to be in Hammer when all 24 pieces of Steel ball 3 are set in place. Refer to **Fig. 15**.

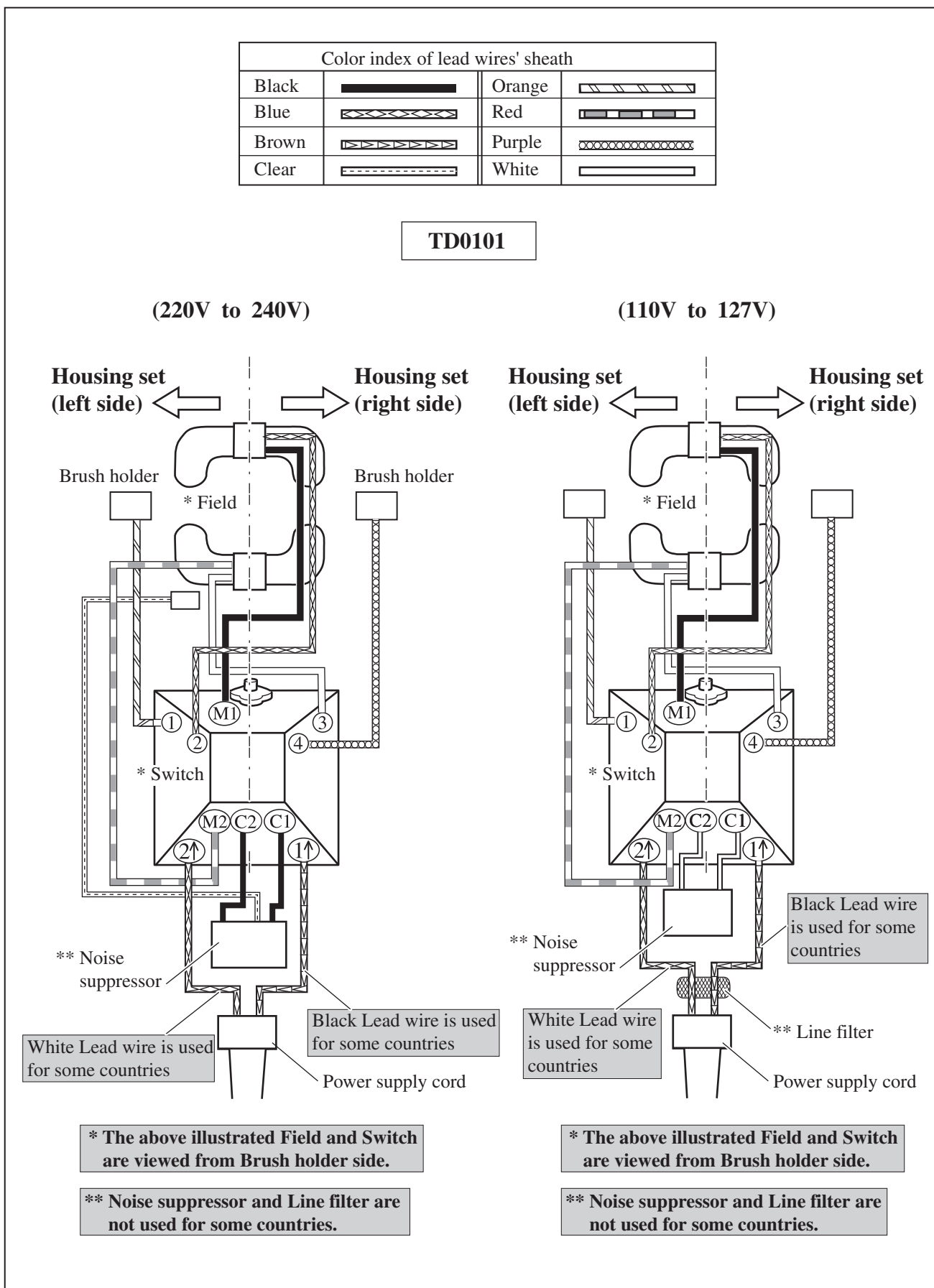
**Fig. 15**





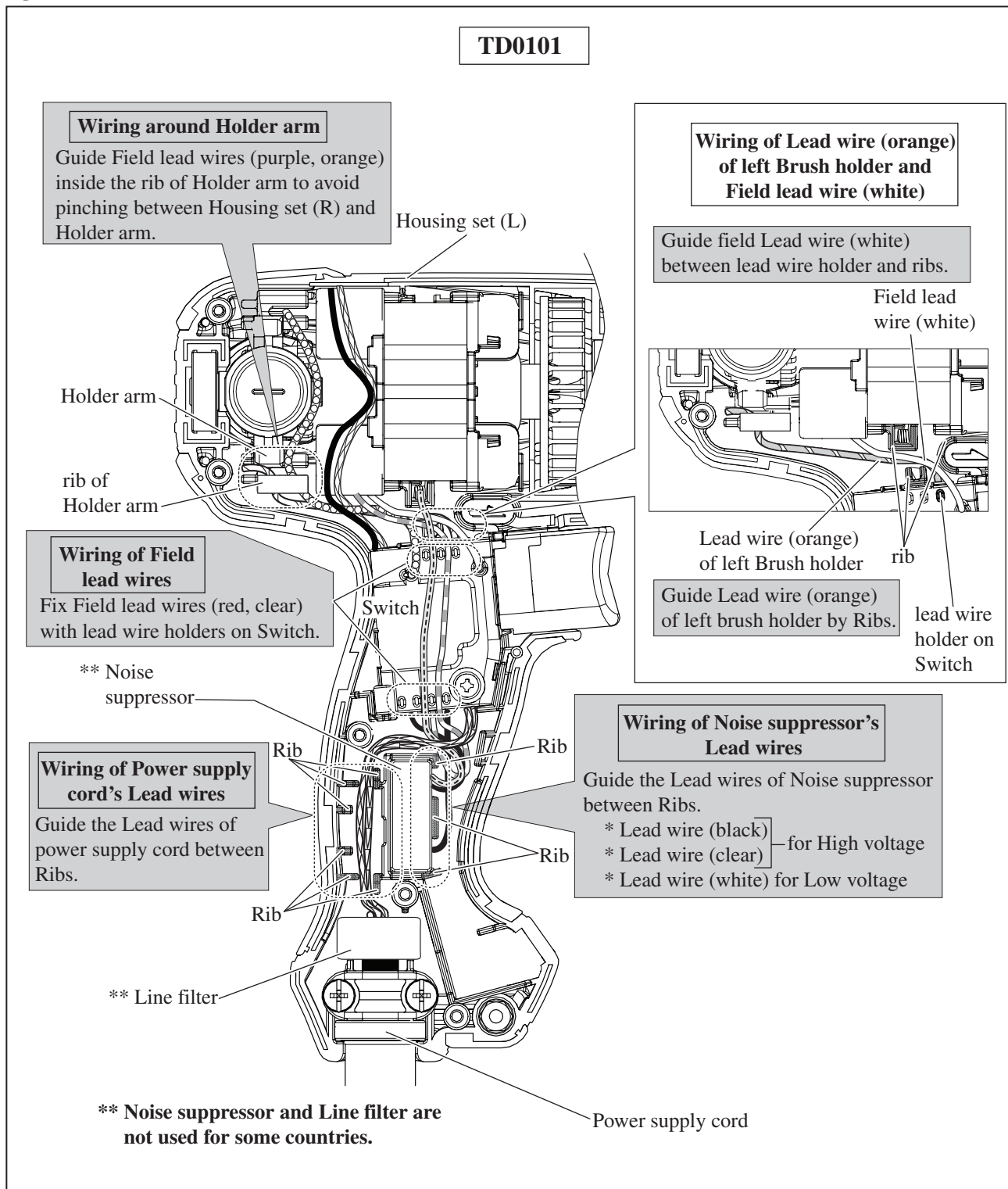
► **Circuit diagram**

Fig. D-1



► **Wiring diagram**

Fig. D-2



► **Circuit diagram**

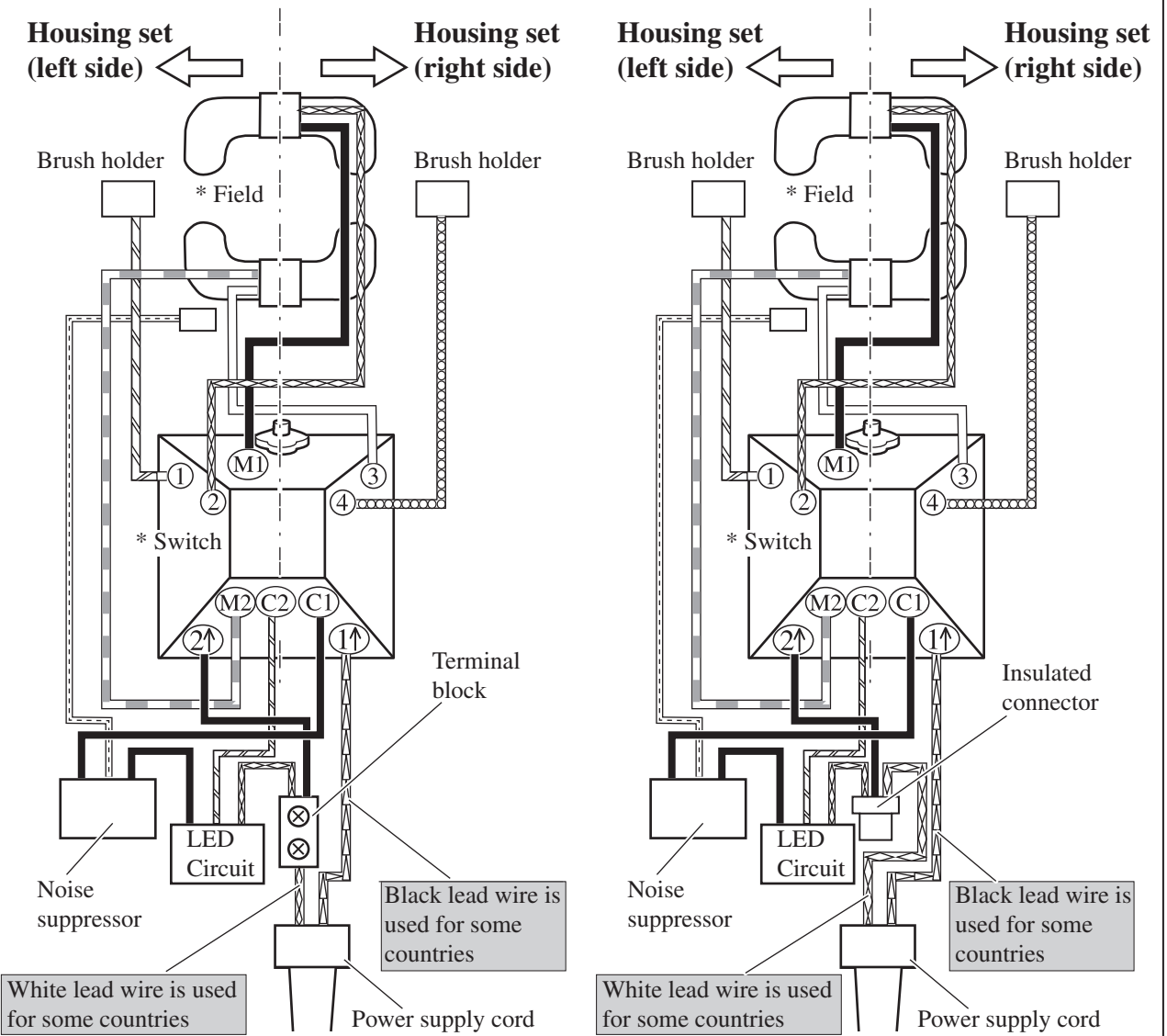
**Fig. D-3**

| Color index of lead wires' sheath |  |        |  |
|-----------------------------------|--|--------|--|
| Black                             |  | Orange |  |
| Blue                              |  | Red    |  |
| Brown                             |  | Purple |  |
| Clear                             |  | White  |  |

**TD0101F**

(Argentina, Chile etc. 220-240V area where Noise suppression is required.)

(220-240V area except Argentina and Chile etc. where Noise suppression is required.)

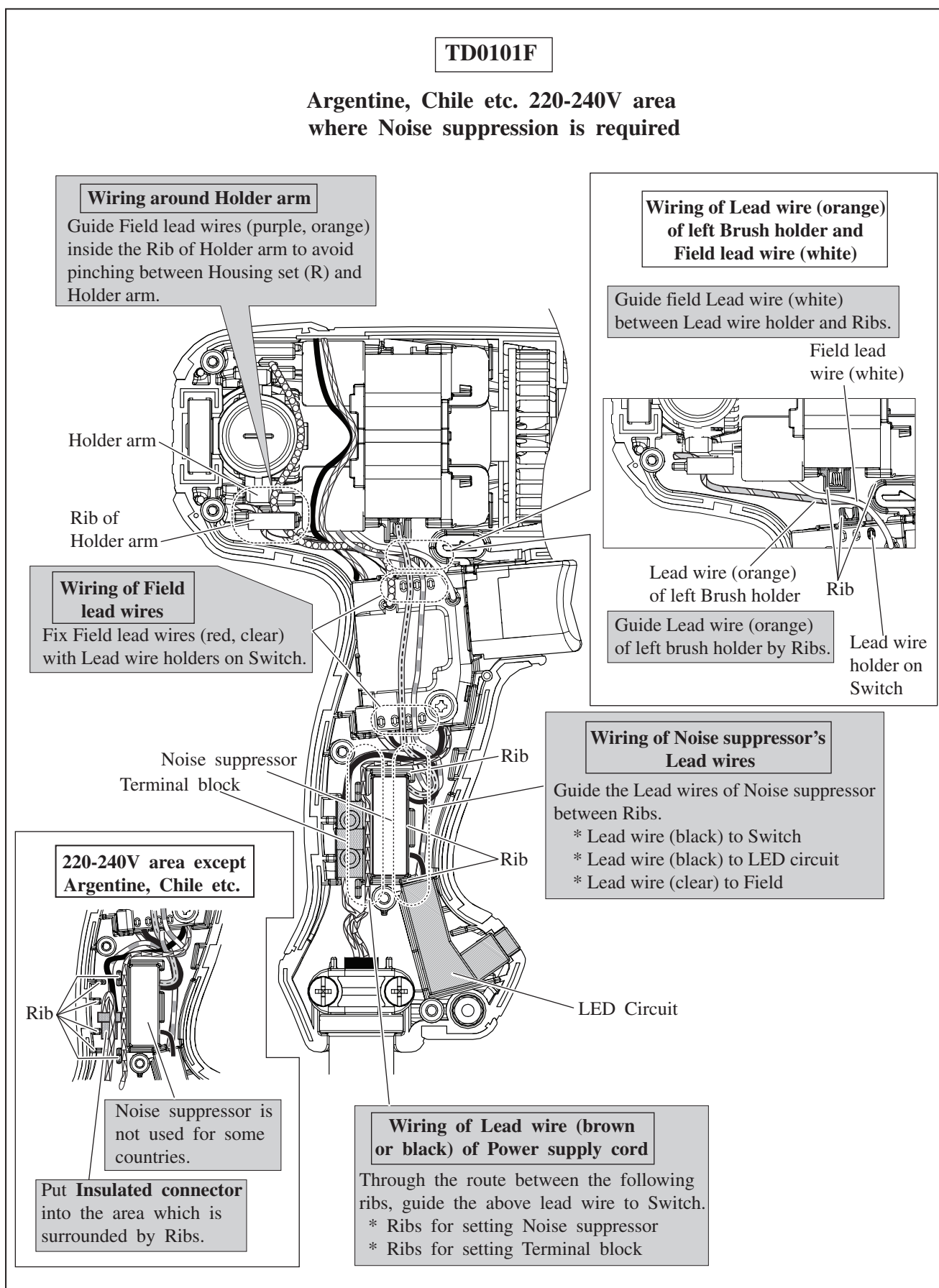


**\* The above illustrated Field and Switch are viewed from Brush holder side.**

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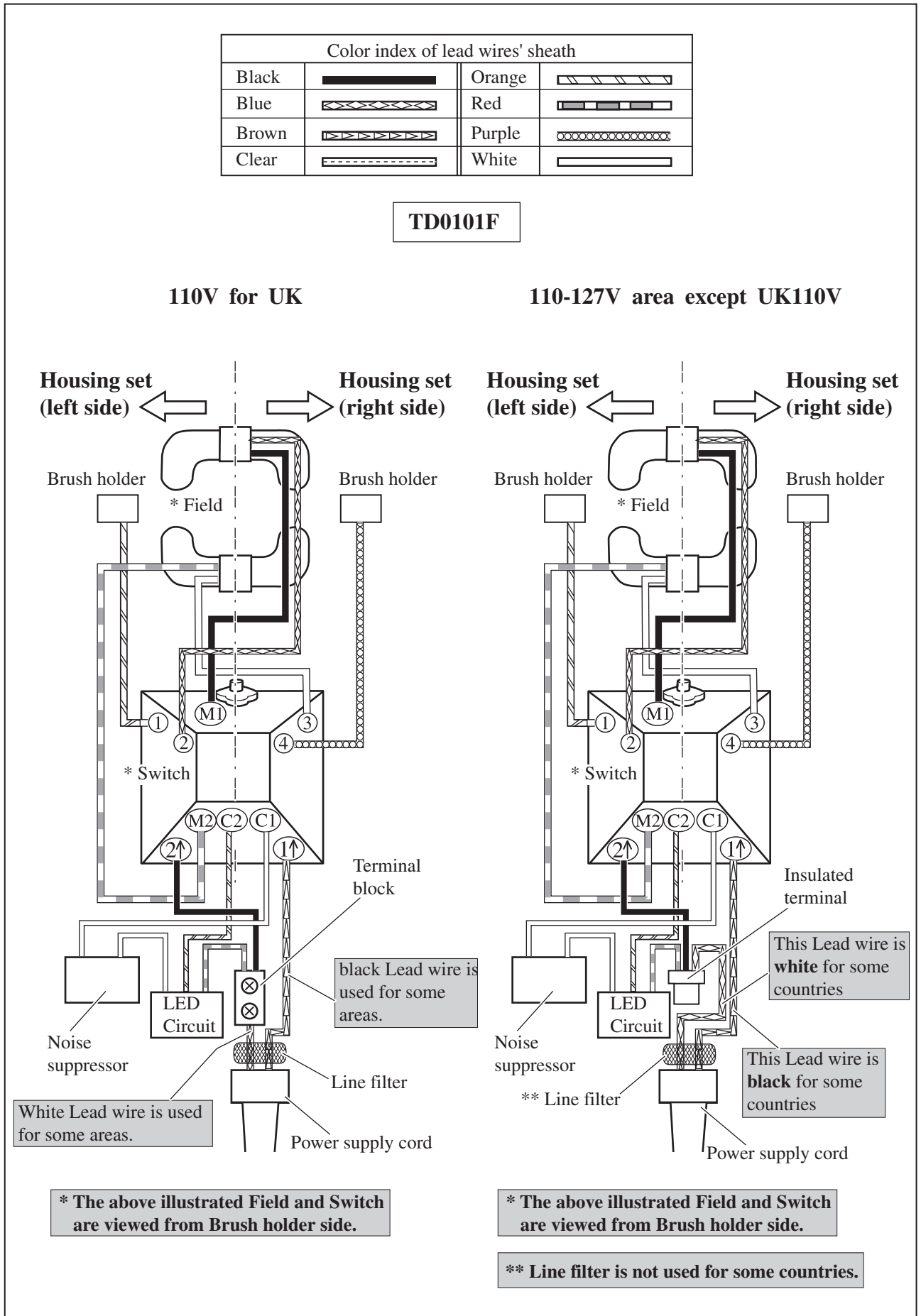
► **Wiring diagram**

Fig. D-4



► **Circuit diagram**

Fig. D-5



► **Wiring diagram**

Fig. D-6

