

# TECHNICAL INFORMATION

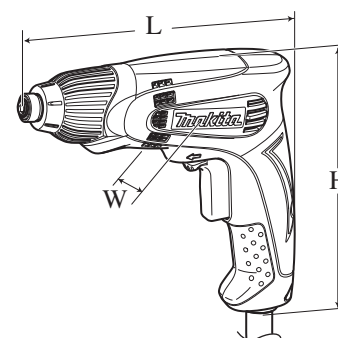


PRODUCT

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**Models No.** ▶ TD0100

**Description** ▶ Impact Driver



| Dimensions: mm (") |             |
|--------------------|-------------|
| Length (L)         | 218 (8-5/8) |
| Width (W)          | 60 (2-3/8)  |
| Height (H)         | 180 (7-1/8) |

## CONCEPT AND MAIN APPLICATIONS

Model TD0100 is a cost-competitive 100N.m-class impact driver developed as the entry model of Makita impact driver series.

Its main features are:

- Compact and lightweight design
- Pistol type design that provides easy handling also to the users accustomed to driving screws with AC drills

## ► 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             |

|  |  |                          |
|--|--|--------------------------|
| No load speed: min <sup>-1</sup> = rpm         | 0 - 3,600  |                          |
| Impacts per min.: min <sup>-1</sup> =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  |                          |
| 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)                           | 0.96 (2.1)   |                          |
| Weight according to EPTA-Procedure 01/2003: kg | 0.96   |                          |

\*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: Remove the bit from the machine and disconnect the plug from the outlet for safety before repair/ maintenance in accordance with the instruction manual!**

**[1] NECESSARY REPAIRING TOOLS**

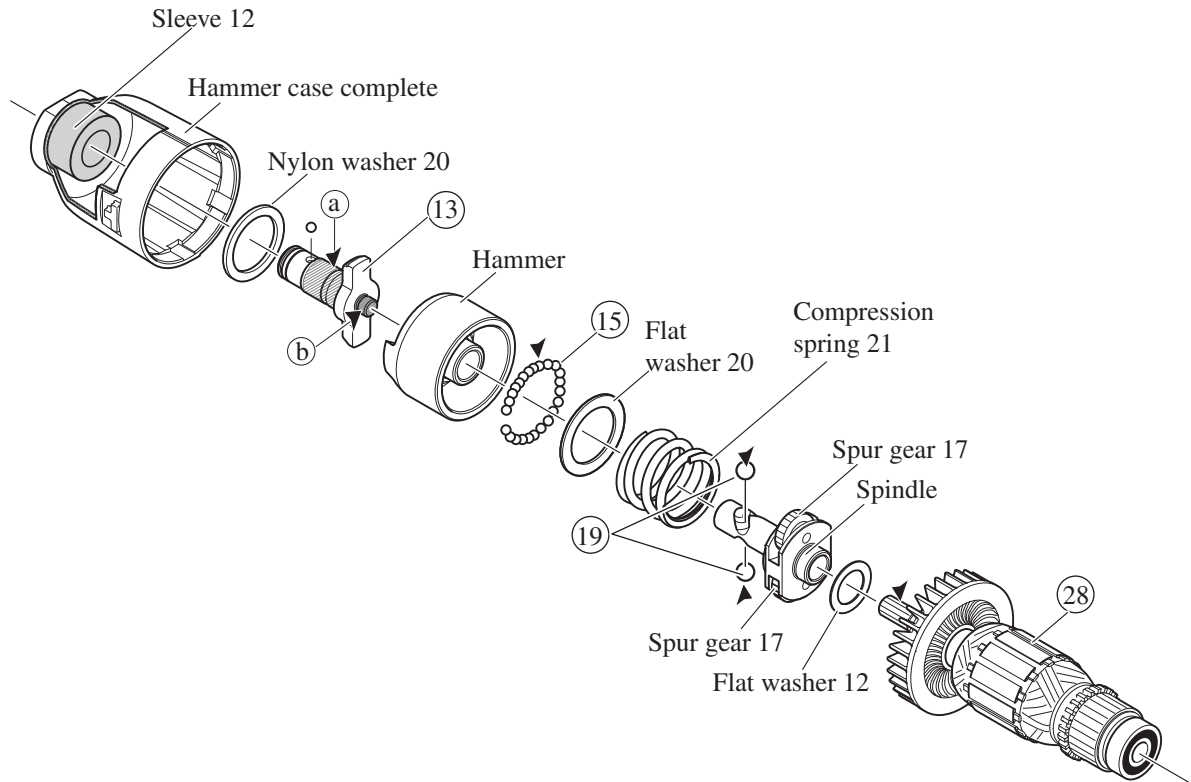
| Code No. | Description                   | Use for                                 |
|----------|-------------------------------|---|
| 1R041    | Vise plate                    | Removing Hammer case complete           |
| 1R045    | Gear extractor (large)        | Removing Hammer                 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

**[2] LUBRICATIONS**

Apply Makita grease N.No.1 to the following portions designated with the black triangle to protect parts and product from unusual abrasion.

| Item No. | Description             | Portion to lubricate                                | Lubricant                  | Amount   |
|----------|-------------------------|---|----------------------------|----------|
| ⑬        | Anvil                   | Ⓐ Drum portion where Sleeve 12 contacts             | Makita grease<br>N. No.1 ▼ | 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 engaging with Spur gear 17           |                            | 1g       |

**Fig. 1**



► **Repair**

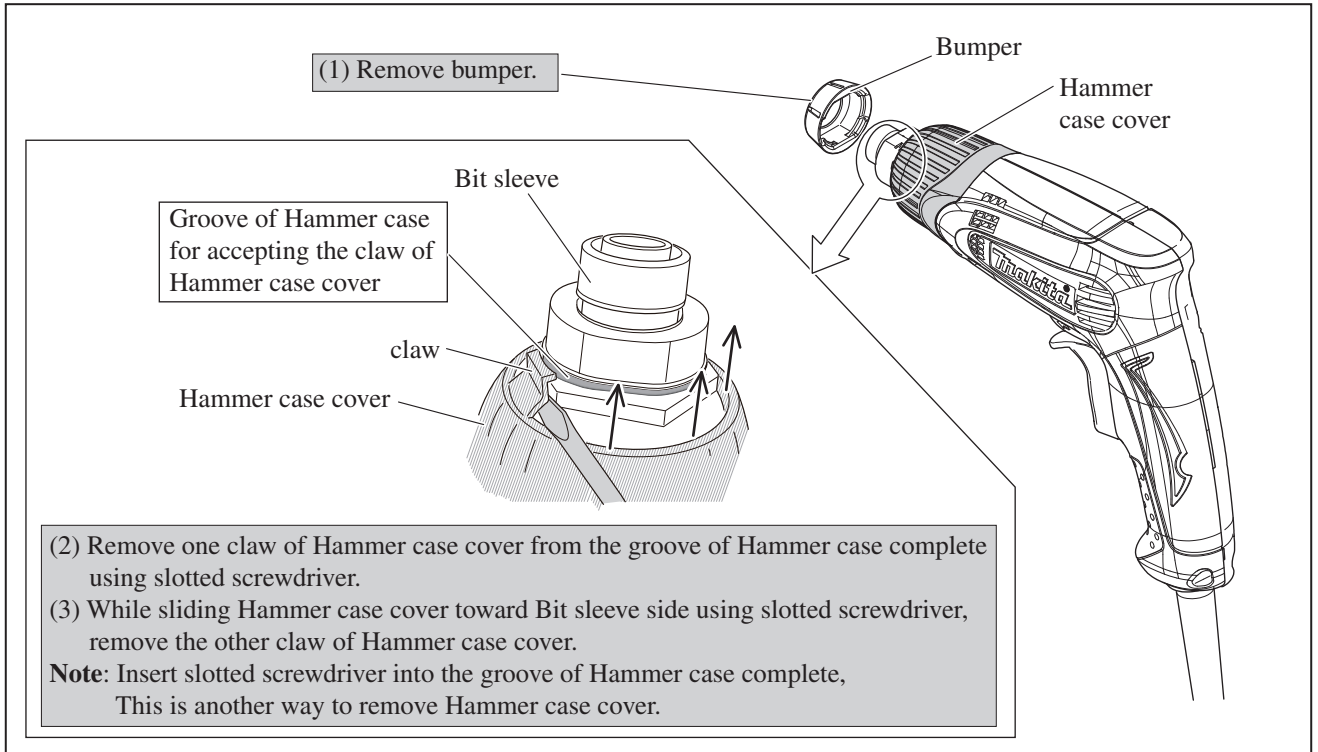
[3] **DISASSEMBLY/ASSEMBLY**

[3]-1. **Hammer case section**

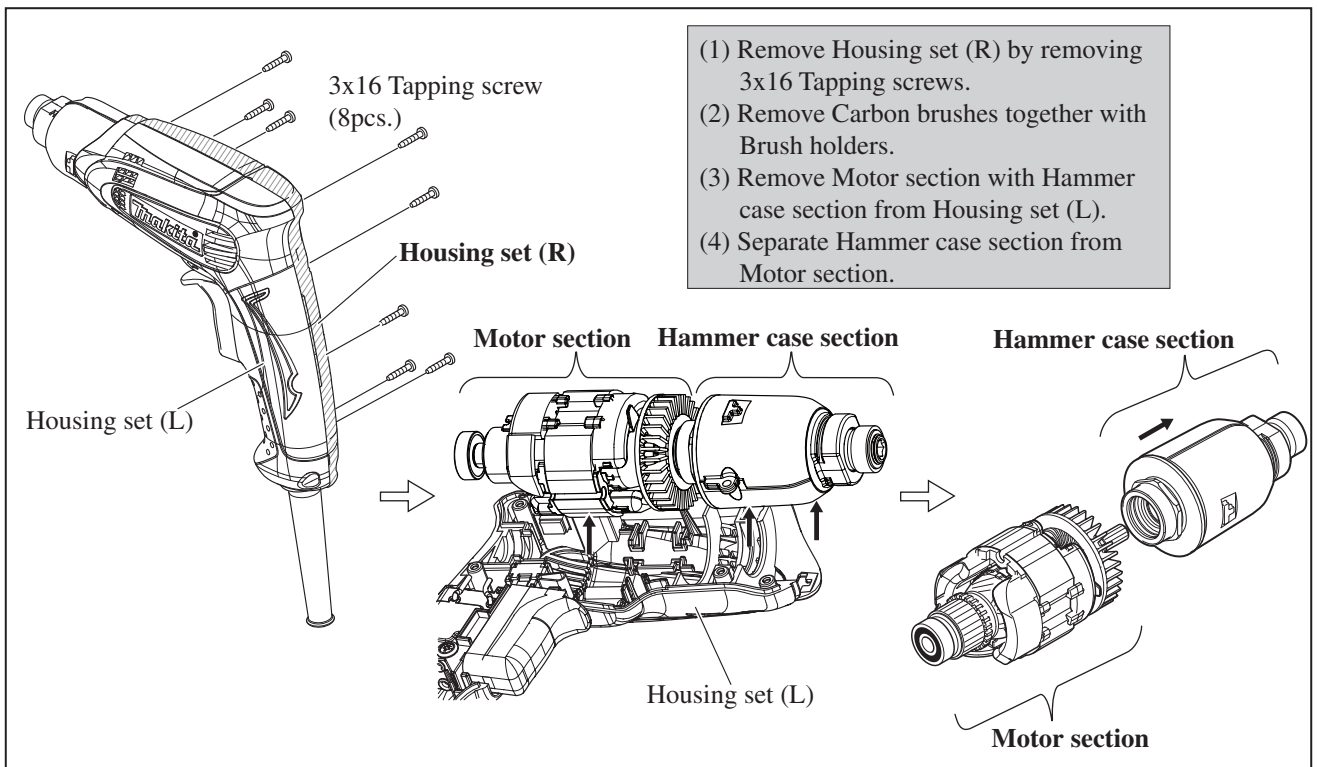
DISASSEMBLING

Remove Hammer case section from the machine as illustrated in **Figs. 2, 3.**

**Fig. 2**



**Fig. 3**



► **Repair**

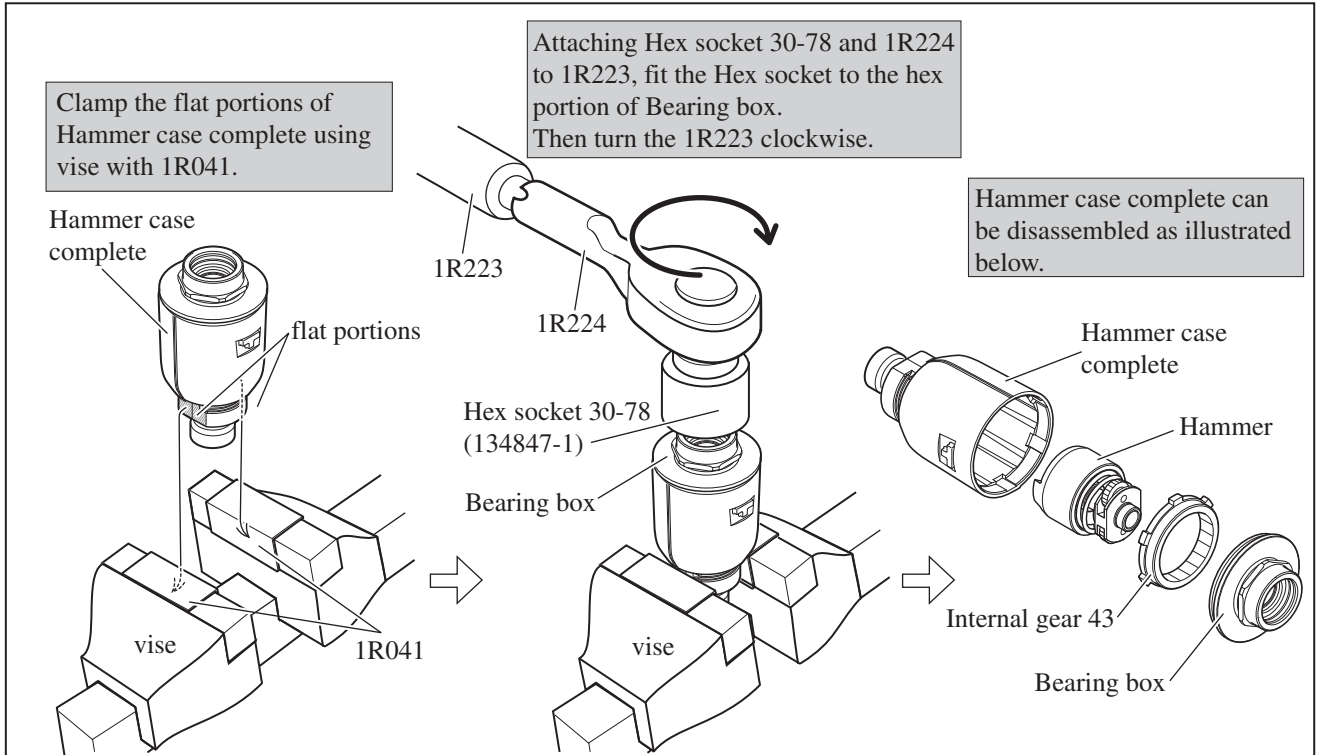
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Hammer case complete**

**DISASSEMBLING**

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

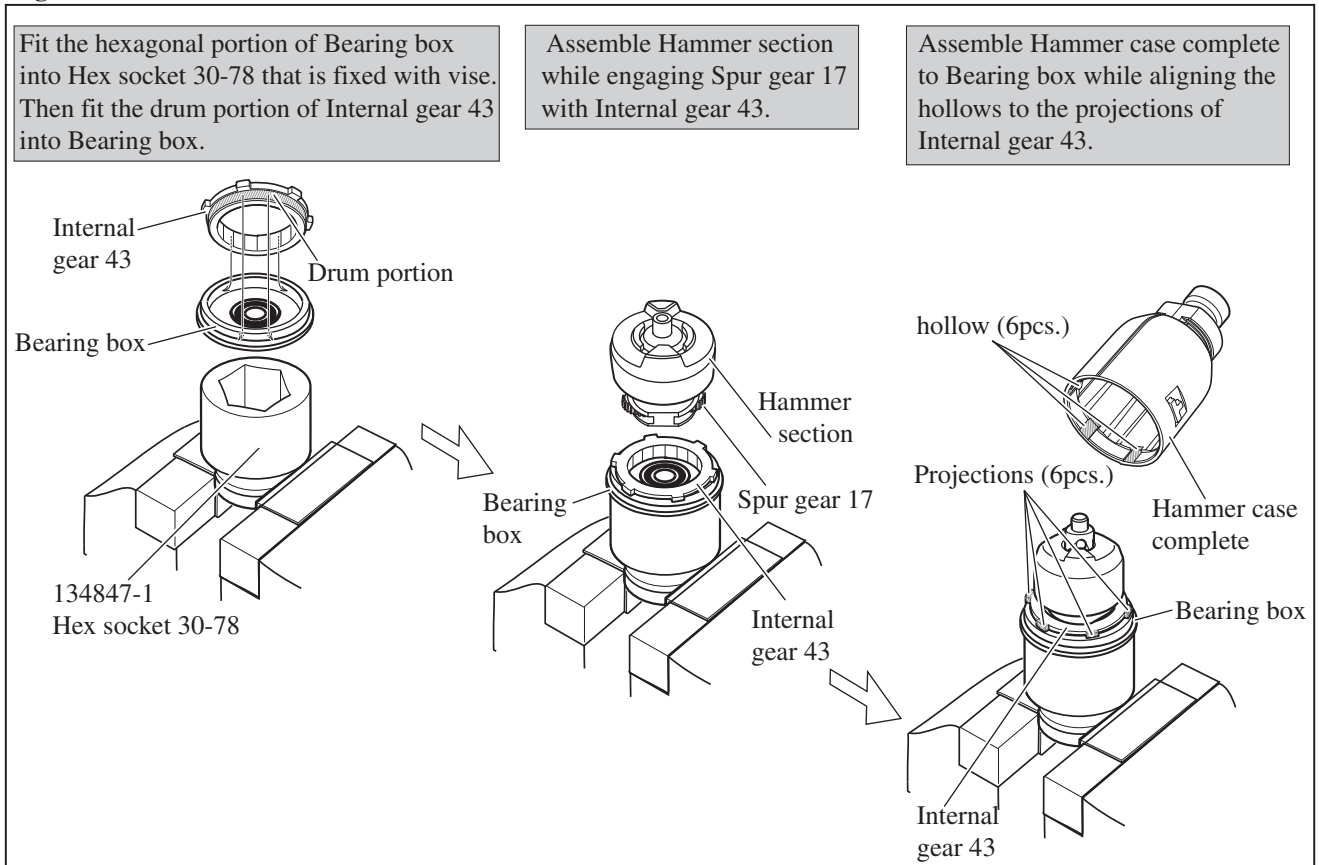
**Fig. 4**



**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**

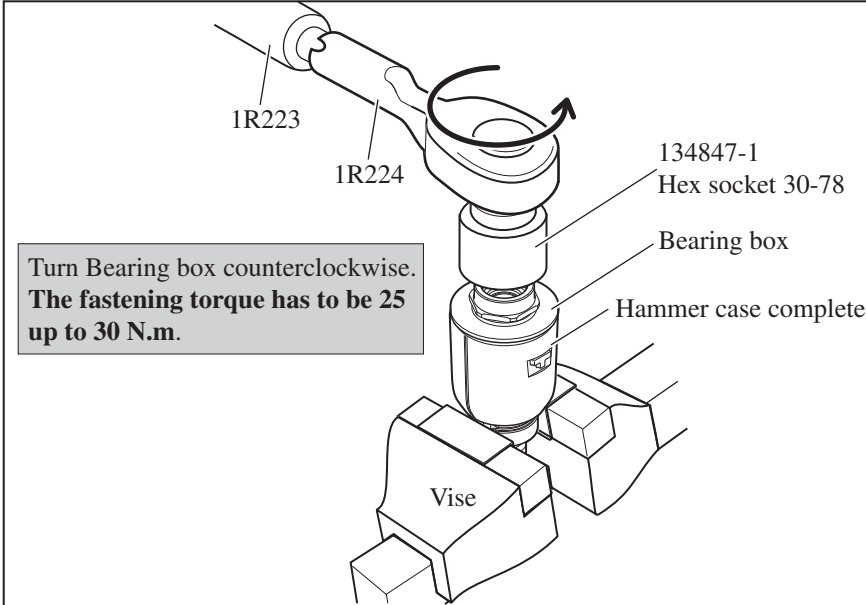
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Hammer case complete (cont.)**

**ASSEMBLING**

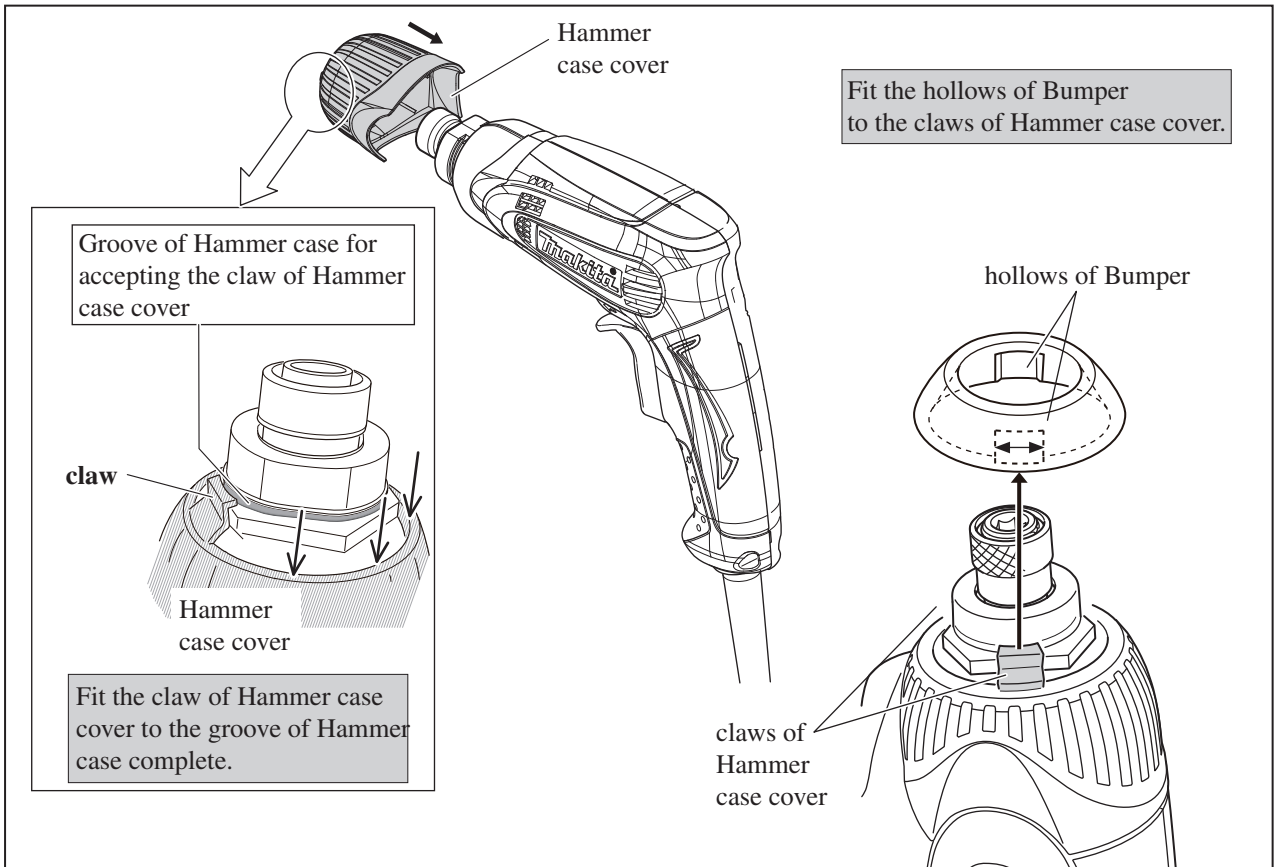
- (2) Set the assembled Hammer case complete in the same position as disassembling.  
Then fasten Bearing box to Hammer case complete as illustrated in **Fig 6**.

**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**

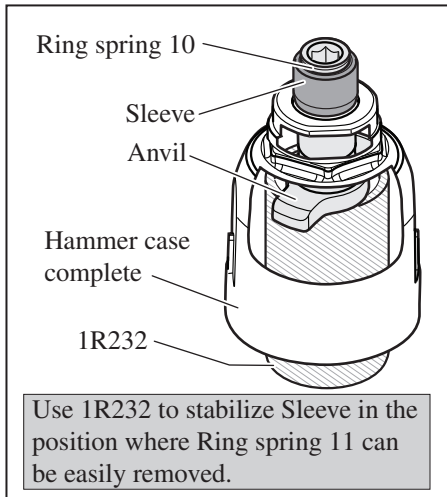
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-2. Anvil and Bit holding mechanism**

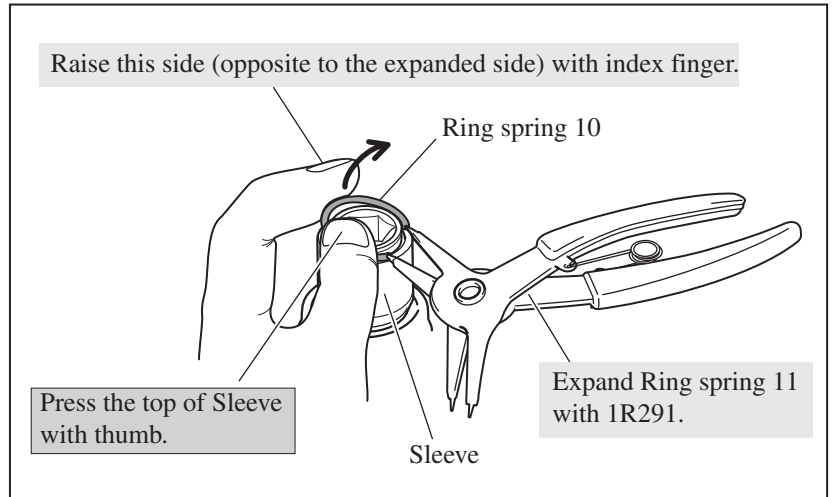
**DISASSEMBLING**

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

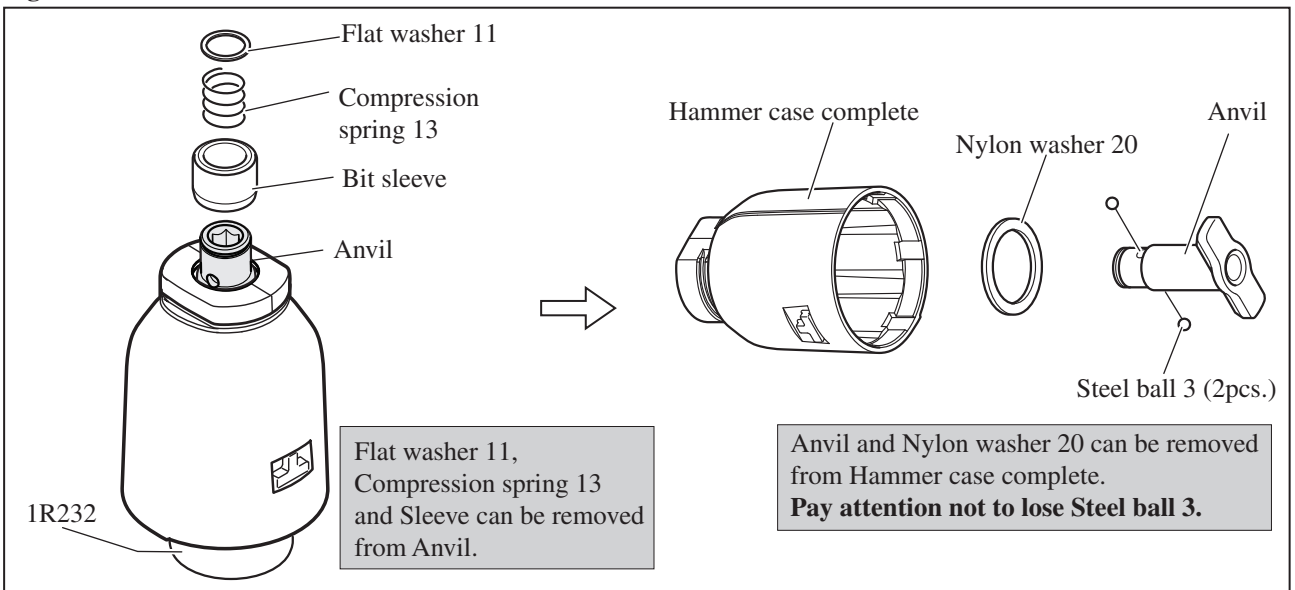
**Fig. 8**



**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**

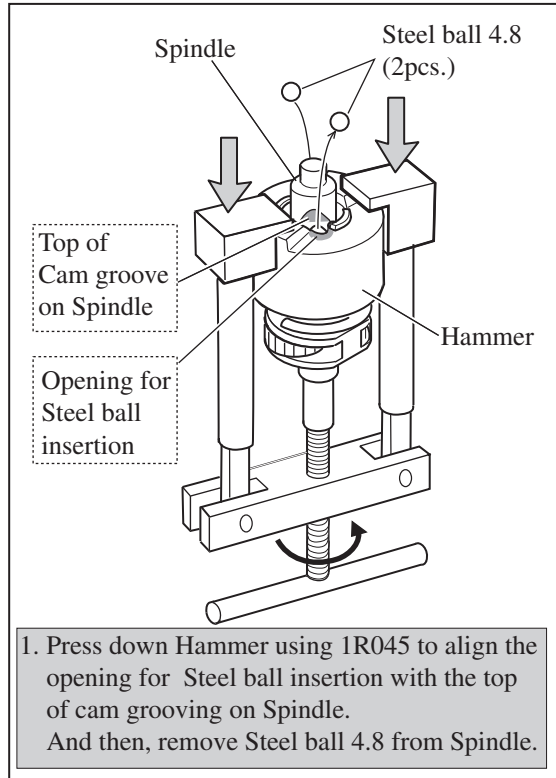
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-3. Hammer section**

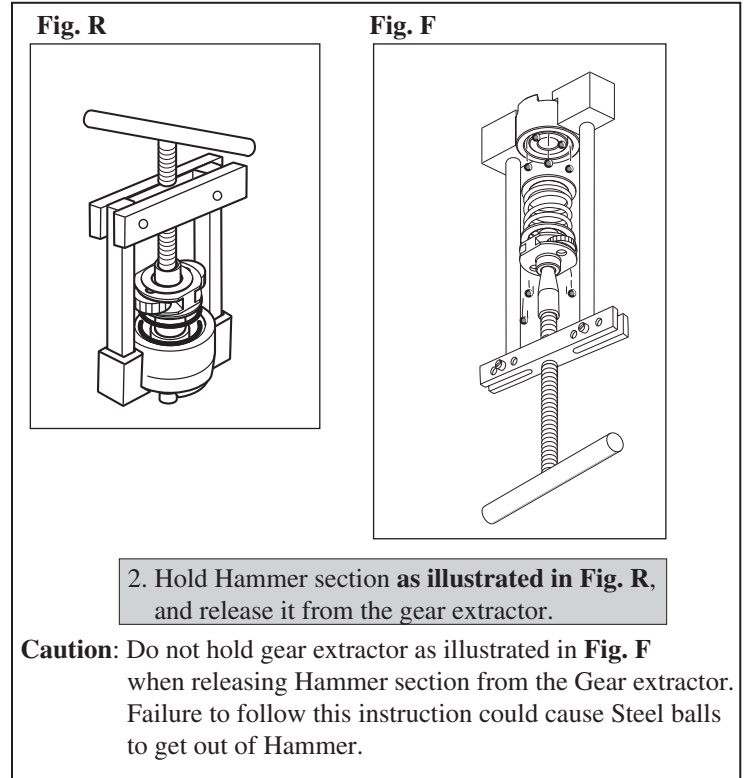
**DISASSEMBLING**

- (1) Disassemble Hammer case section from the machine. (Fig. 2, Fig. 3 )
- (2) Remove Hammer from Hammer case complete. (Fig. 4)
- (3) Disassemble Hammer section as illustrated in Figs. 11, 12, 13, 14.

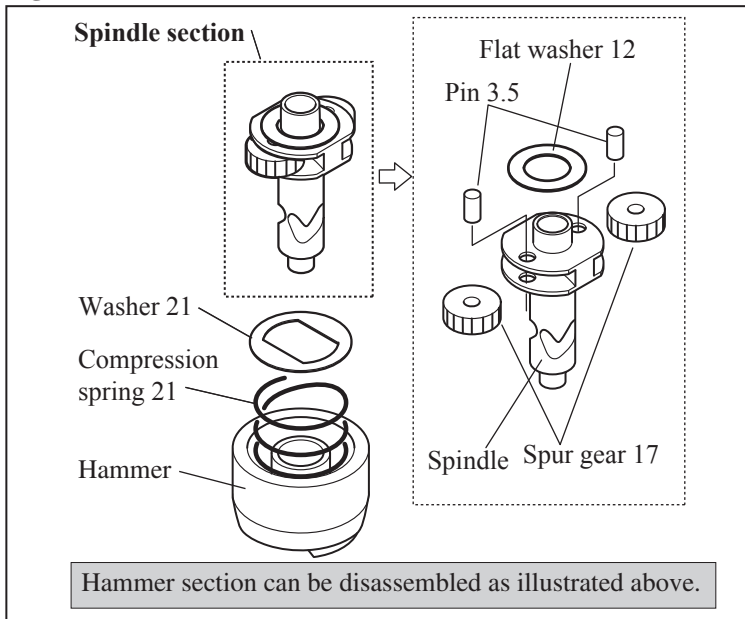
**Fig. 11**



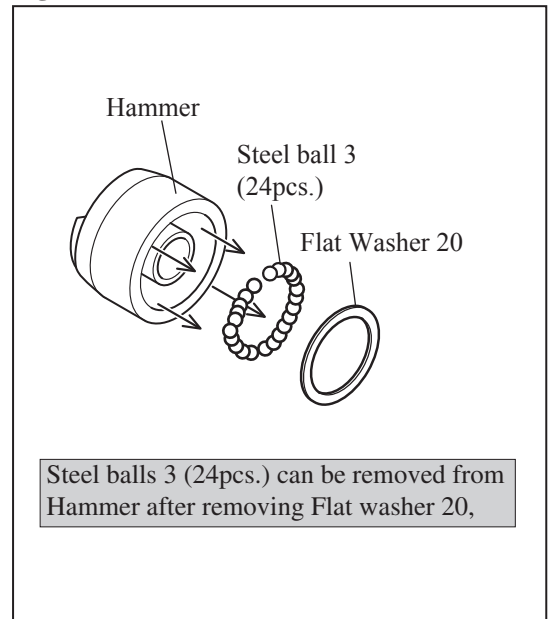
**Fig. 12**



**Fig. 13**



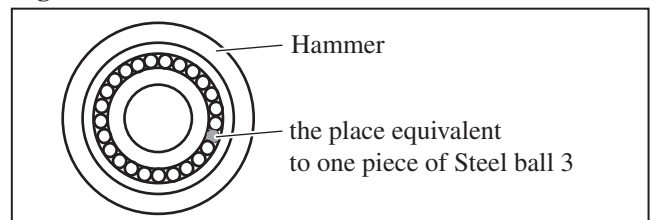
**Fig. 14**



**ASSEMBLING**

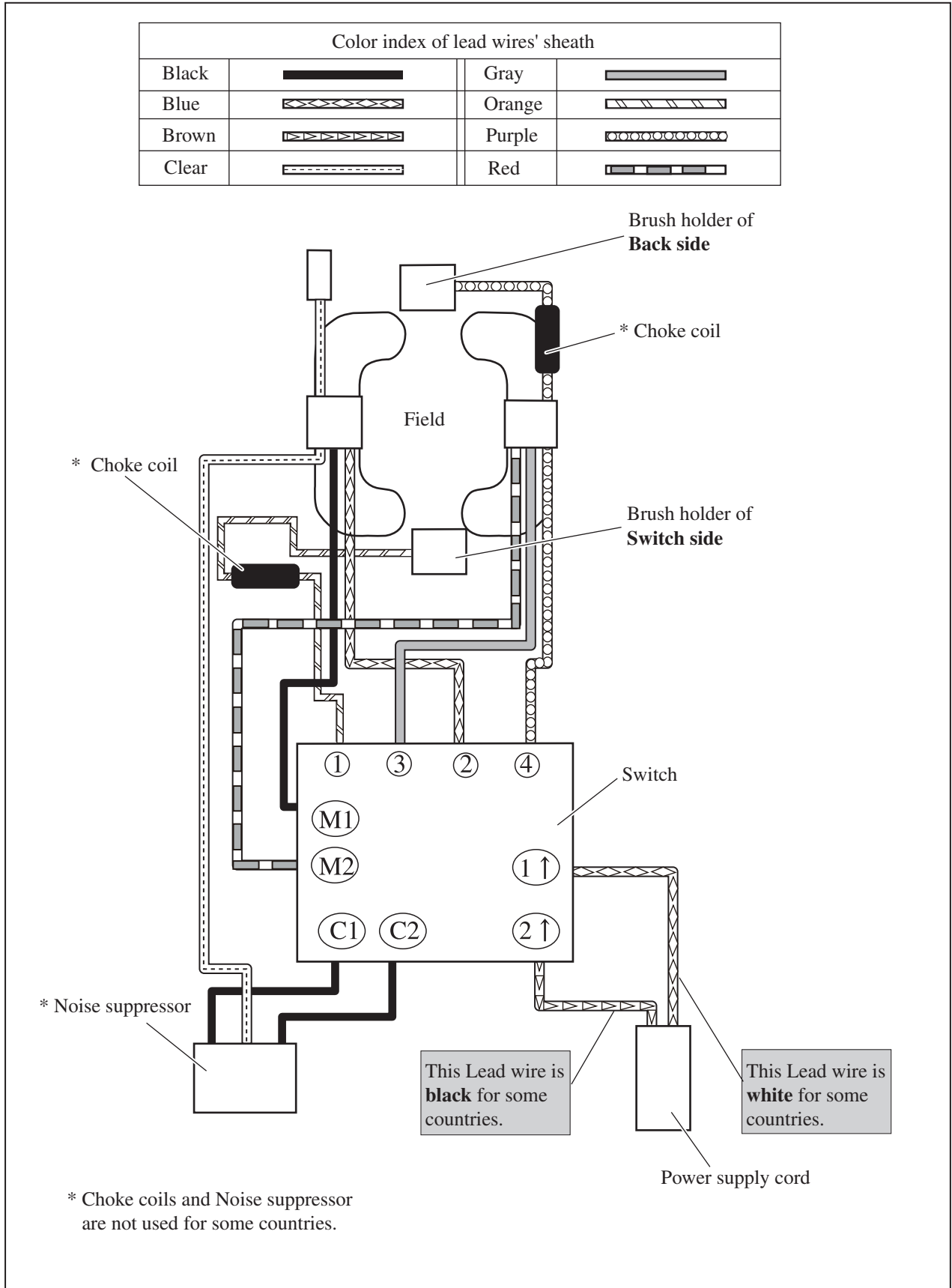
Take the disassembling step in reverse.  
 Note: Make sure that the place equivalent to one piece of Steel ball 3 has to be in Hammer when all 24 pieces of Steel ball 3 are set in place. Refer to Fig. 15.

**Fig. 15**



► **Circuit diagram**

**Fig. D-1**





# ▶ Wiring diagram

Fig. D-2

