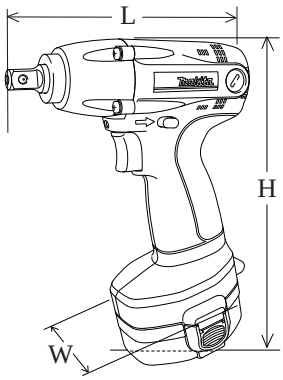
# TECHNICAL INFORMATION



**Models No.** ► 6934FD

**Description** ► Cordless Impact Wrench




## CONCEPT AND MAIN APPLICATIONS

The above product has been developed as a 14.4V version of the existing model 6918D.
Its features and benefits are as follows.

* Increased amount of work with 14.4V battery.
* Max. fastening torque : 140N.m
* Built-in job light

The variation of this model is as listed below.

| Model No. | Battery | | | Charger |
|---|---|---|---|---|
| | Type No. | Cell | Q'ty | |
| 6934FDWAE | 1422 (2.0Ah) | Ni-Cd | 2 pcs. | DC1414 |
| 6934FDWDE | 1434 (2.6Ah) | Ni-Cd | | |
| These 2 models come with battery cover and plastic carrying case in addition to the above charger and battery. | | | | |

| Dimensions : mm ( " ) | |
|---|---|
| Length ( L ) | 173 (6-13/16) |
| Width ( W ) | 94 (3-11/16) |
| Height ( H ) | 238 (9-3/8) |

## ► Specification

| | | |
|---|---|---|
| **Voltage (V)** | | 14 .4 |
| **No load speed (min-1=rpm)** | | 0 - 2,300 |
| **Impact per minute (min-1=bpm)** | | 0 - 3,000 |
| **Square drive : mm ( " )** | | 12.7 (1/2) |
| **Capacities** | **Standard Bolt** | M8 - M16(5/16" - 5/8") |
| | **High Tensile bolt** | M6 - M12(1/4" - 15/32") |
| **Max. fastening torque : N.m (in.lbs)** | | 140 (1,240) |
| **Electric brake** | | Yes |
| **Variable switch** | | Yes |
| **Reverse switch** | | Yes |
| **Net weight: kg (lbs)** | | 1.7 (3.7) |

## ► Standard equipment

* Battery cover ..... 2 pcs.
* Socket 19-38 ..... 1 pc.
* Pin 4 ..... 1 pc.
* O ring 24 ..... 1 pc.

} Comes without these items for North American countries.

< Note > The standard equipment for the tool shown may differ from country to country.

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## ► Optional accessories

* Battery 1420 (Ni-Cd 14.4V, 1.3Ah)
* Battery 1422 (Ni-Cd 14.4V, 2.0Ah)
* Battery 1434 (Ni-MH 14.4V, 2.6Ah)
* Battery 1435 (Ni-MH 14.4V, 3.0Ah)
* Charger DC 1413
* Charger DC 1414
* Charger DC 1439
* Charger DC 1470
* Charger DC 1803
* Charger DC 1804
* Automotive charger CD1422

# Repair

< 1 > Lubrication

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

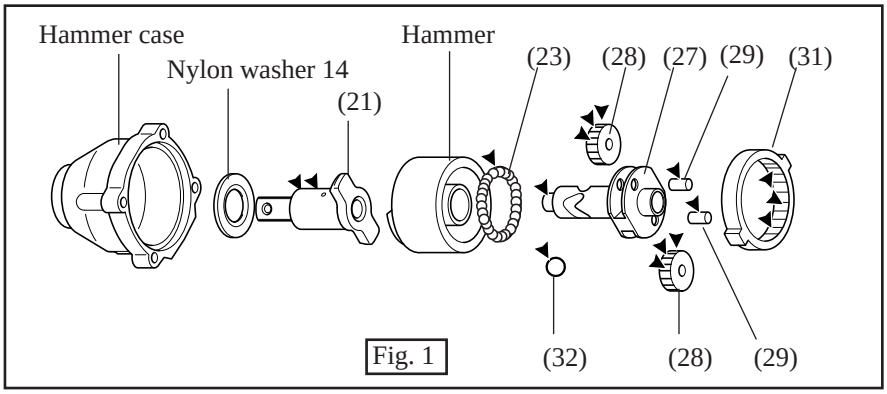



Fig. 1

| Position No. | Parts item | Portion to be lubricated | Amount : g (oz) |
|---|---|---|---|
| 21 | Anvil | Cylindrical portion | 0.5 (0.02) |
| 23 | 26 pcs. of Steel ball 3.5 | | 0.5 (0.02) in total |
| 27 | Spindle | The cylindrical portion where (21) anvil contacts | 0.5 (0.02) in total |
| 28 | Spur gear 22 | Teeth portion | 2.0 (0.07) |
| 29 | Pin 5 | Cylindrical portion | 0.5 (0.02) |
| 31 | Internal gear 51 | The portion where (28) spur gear 22 engages. | 0.5 (0.02) |

< 2 > Removing housing R and L

Remove hammer case from housing R and L.
And then, housing R and L can be removed.

< 3 > Disassembling hammer and spindle section

(1) Press down hammer with 1R045: Large gear extractor by turning the handle.

(2) Adjust the opening for steel ball inserting to the cam groove top of spindle.

(3) Take off 2 pcs. of steel ball 5.6 from spindle. See Fig. 5.

(4) Hold the hammer section as illustrated in Fig. 6. And loose the handle of large gear extractor.

< Caution > Do not hold gear extractor as illustrated in Fig. 5, when loosening the handle of gear extractor. Because, steel balls 3.5 can fall out of hammer unintentionally.

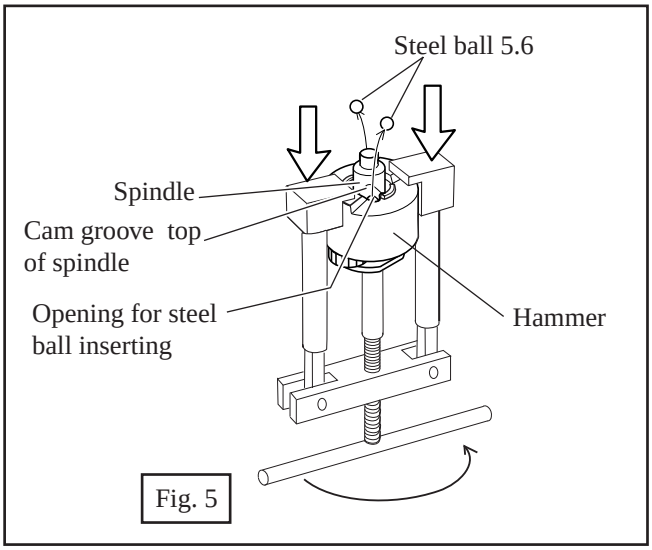



Fig. 5

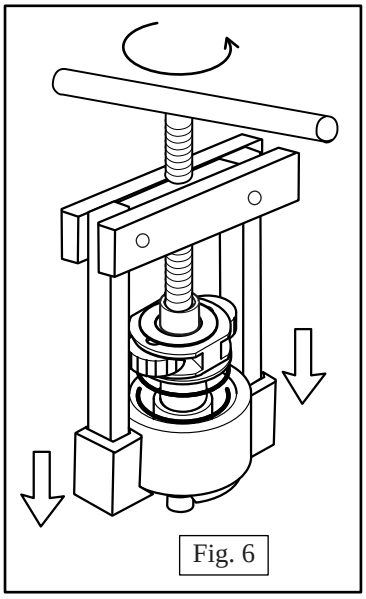


Fig. 6

(5) Now hammer section can be disassembled as illustrated in Fig. 7.

(6) After removing flat washer 24, steel balls 3.5 can be taken out from hammer. See Fig. 8.

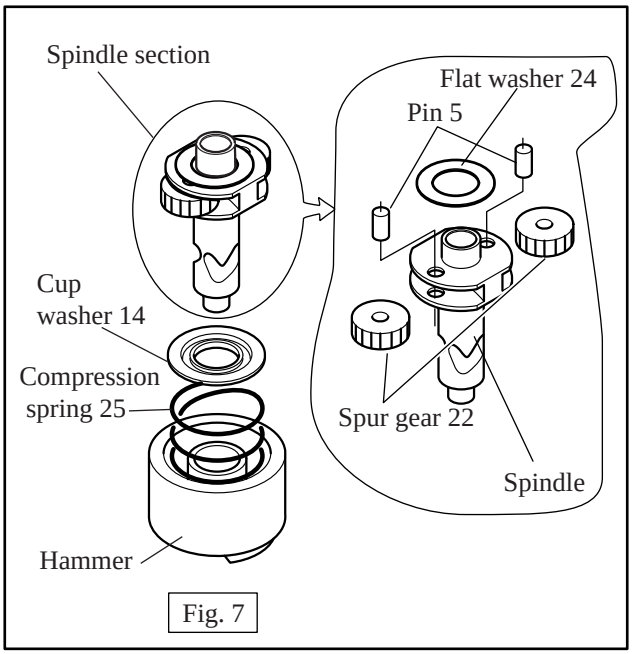


Fig. 7

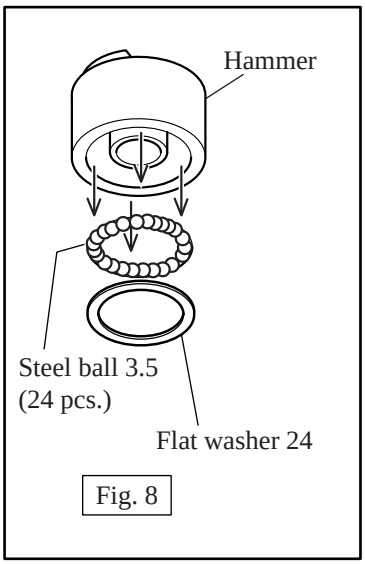


Fig. 8

< 4 > Assembling hammer and spindle section

(1) Put 24 pcs. of steel ball 3.5 into hammer, and cover them with flat washer 24. See Fig. 9.

(2) Mount 2 pcs. of spur gear 22 to spindle and pass 2 pcs. of pin 5 (as a gear shaft) through spindle and spur gears 22. Mount flat washer 24 to the spindle. Now the spindle section has been completed. See Fig. 10.
Put compression spring 25 and cup washer 14 on the hammer. Mount the spindle section to the hammer as illustrated in Fig. 10.

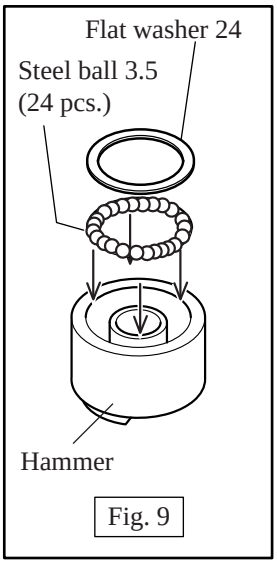


Fig. 9

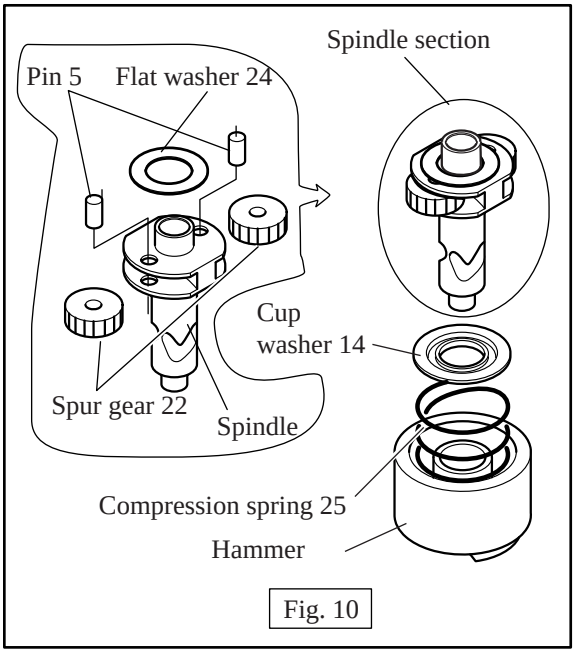


Fig. 10

(4) Mount 2 pcs. of steel ball 5.6 to the cam groove top which has been aligned with the opening of hammer, wheel holding the large gear extractor as illustrated in Fig. 11A.

(3) Press the hammer toward the spur gear 22 side with No.1R045 "Large Gear Extractor" in order to reserve the opening for mounting steel balls 5.6. See Fig. 11.

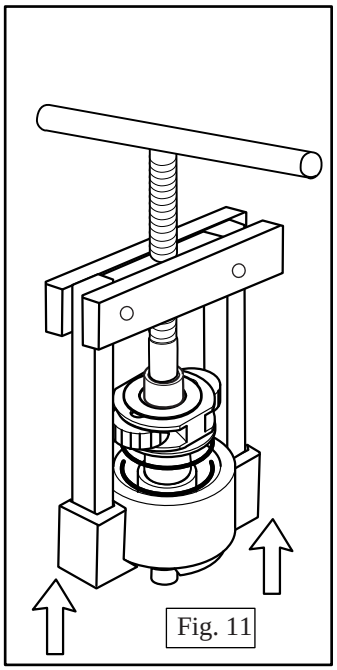


Fig. 11

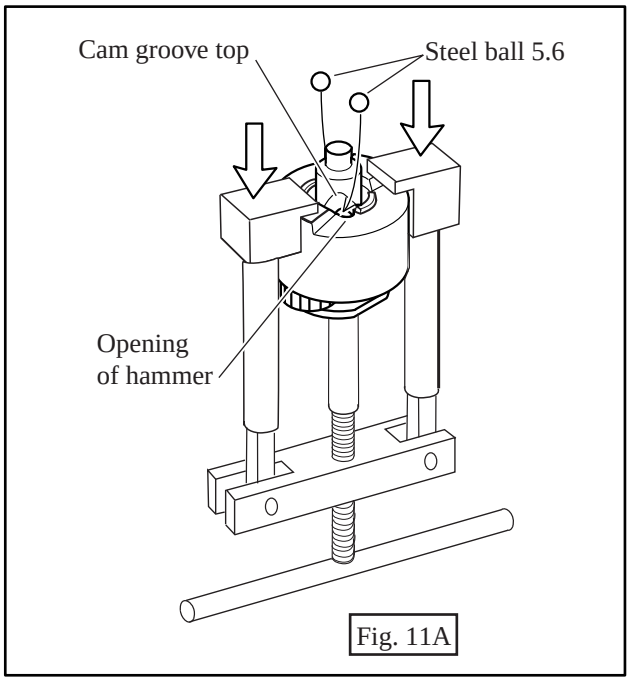



Fig. 11A

## Repair

< 5 > Assembling the body

(1) Mount a rubber pin 4 to housing R, and another rubber pin 4 to housing L. See Fig. 12A

(2) When securing housing R and L with 8 pcs. of tapping screw bind PT3x16, fasten the screws with the fastening torque of 1.1 - 1.3N.m (11 - 13 kgf.cm).

(3) When securing hammer case with 4 pcs. of tapping screw 4x25, fasten the screws with the fastening torque of 1.76 - 2.16N.m (18 - 22 kgf.cm). The 4 pcs. of tapping screw 4x25 have to be fasened diagonally. See Fig. 12C.

(4) When securing FET and FET spacer with tapping screw ST3x8, fasten the screw with the fastening torque of 1.1 - 1.5N.m (11 - 15 kgf.cm). See Fig. 12B

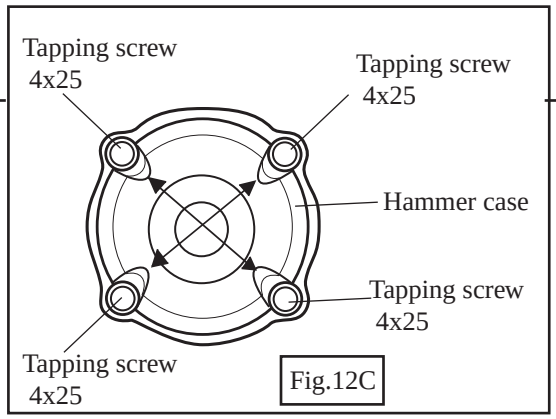



Fig.12C

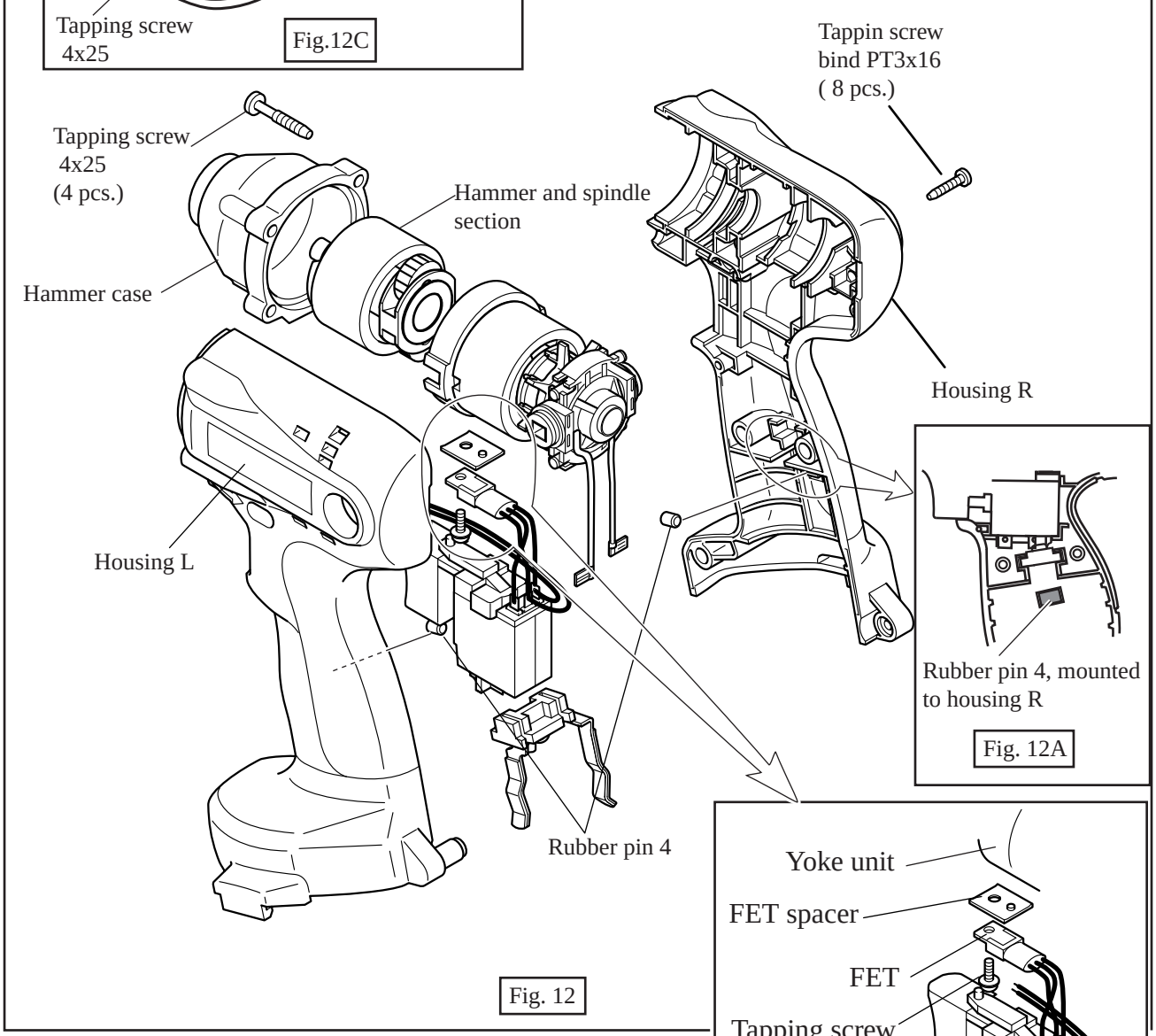



Fig. 12




Fig. 12A

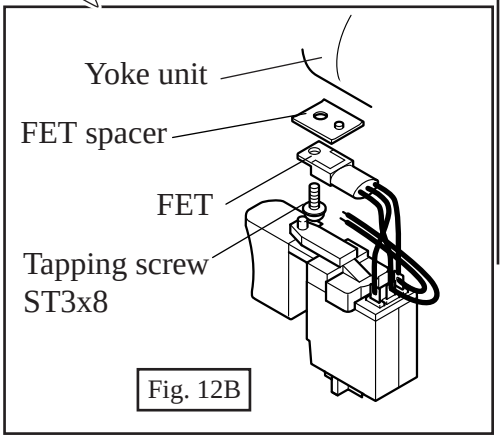
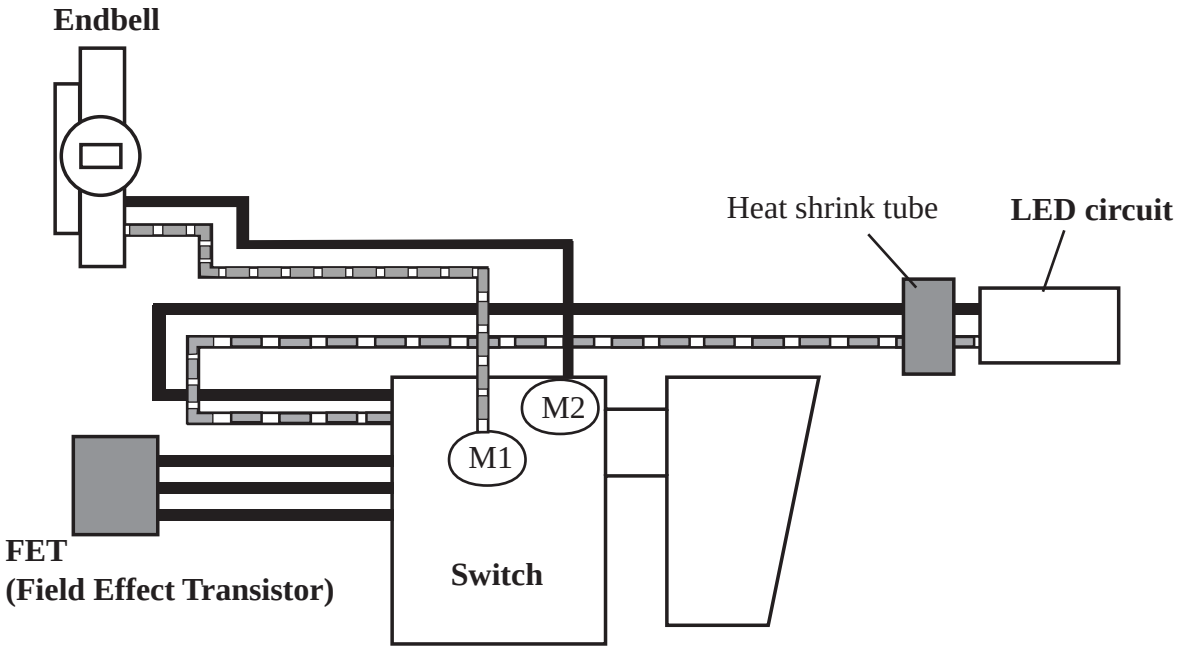


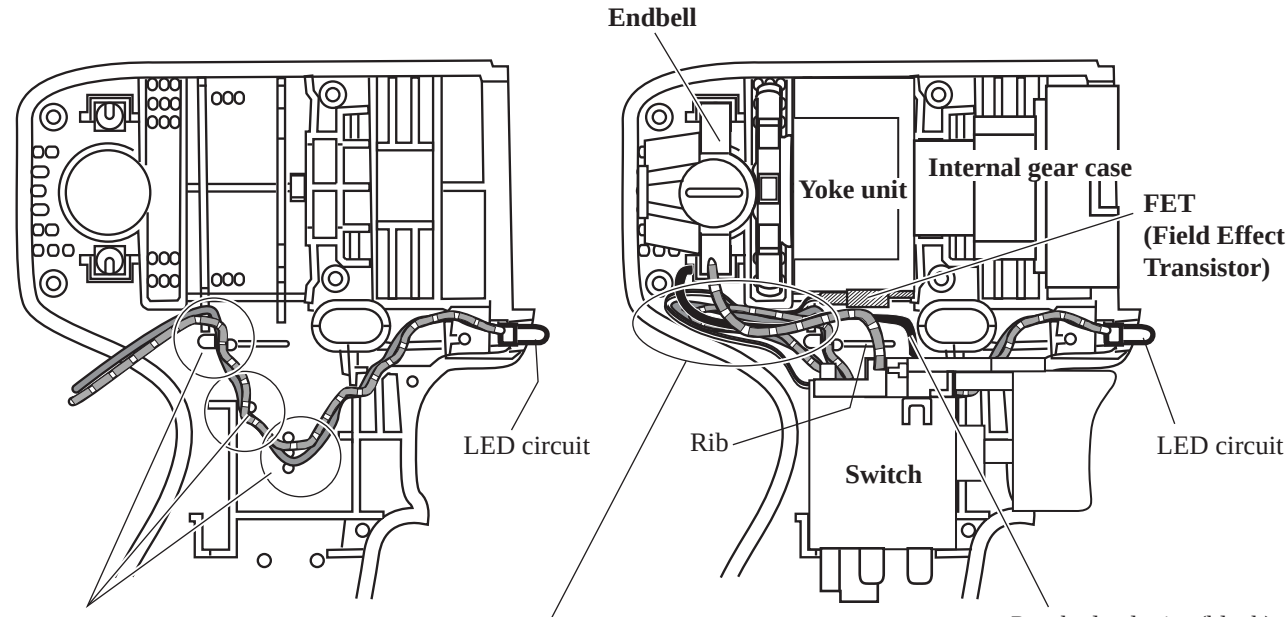

Fig. 12B

## Circuit diagram

| Color index of lead wires' sheath | |
|---|---|
| Black | |
| Red | |




## Wiring diagram




Push the following lead wires deep into the lead holders as illustrated above.
* LED lead wire (black)
* LED lead wire (red)

Put the slack portion of the following lead wires in this space.
* FET lead wires (black)
* LED lead wire (red)
* LED lead wire (black)

Put the lead wire (black), connecting endbell and switch, under the same lead wire (red) and pass it through the space between rib and FET.