

TECHNICAL INFORMATION



PRODUCT

Models No. ▶ 6207D, 6217D, 6237D
6317D, 6337D, 6347D

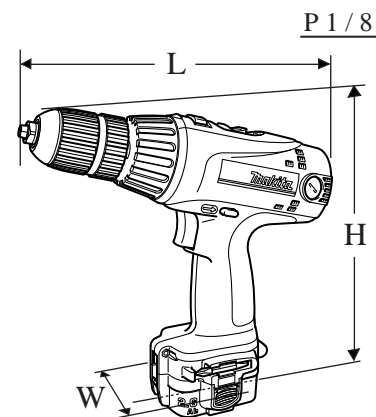
Description ▶ 9.6V, 12V, 14.4V Cordless Driver Drills 10mm (3/8")
12V, 14.4V, 18V Cordless Driver Drills 13mm (1/2")

CONCEPT AND MAIN APPLICATIONS

These six tools have been developed as upgraded successors to the existing Makita tools of Model 6203D series, and features increased power and enhanced mechanical parts.

One of the remarkable features is the replaceable armature for reduced repair cost.

Listed below are variations of these new models.



Model No.	Battery	Battery Type	Charger
10mm (3/8")	6207DWDE	9134 (9.6V, 2.6Ah) / 2pcs	Ni-MH DC1413
	6217DWDE	1234 (12V, 2.6Ah) / 2pcs	Ni-MH DC1413
	6237DWDE	1434 (14.4V, 2.6Ah) / 2pcs	Ni-MH DC1413
13mm (1/2")	6317DWAE	1222 (12V, 2.0Ah) / 2pcs	Ni-Cd DC1413
	6317DWDE	1234 (12V, 2.6Ah) / 2pcs	Ni-MH DC1413
	6317DWFE	1235 (12V, 3.0Ah) / 2pcs	Ni-MH DC1413
	6337DWAE	1422 (14.4V, 2.0Ah) / 2pcs	Ni-Cd DC1413
	6337DWDE	1434 (14.4V, 2.6Ah) / 2pcs	Ni-MH DC1413
	6337DWFE	1435 (14.4V, 3.0Ah) / 2pcs	Ni-MH DC1413
	6347DWAE	1822 (18V, 2.0Ah) / 2pcs	Ni-Cd DC1803
	6347DWDE	1834 (18V, 2.6Ah) / 2pcs	Ni-MH DC1803
	6347DWFE	1835 (18V, 3.0Ah) / 2pcs	Ni-MH DC1803

Dimensions: mm (")

10mm (3/8")			
Model No.	6207D	6217D	6237D
Length (L)	233 (9-1/8)	233 (9-1/8)	233 (9-1/8)
Width (W)	77 (3)	94 (3-11/16)	94 (3-11/16)
Height (H)	243 (9-9/16)	243 (9-9/16)	247 (9-3/4)

13mm (1/2")			
Model No.	6317D	6337D	6347D
Length (L)	243 (9-9/16)	243 (9-9/16)	243 (9-9/16)
Width (W)	94 (3-11/16)	94 (3-11/16)	95 (3-3/4)
Height (H)	243 (9-9/16)	247 (9-3/4)	251 (9-7/8)

► Specification

See page 2.

► Standard equipment

- * Battery cover 2 pcs.
- * + - Bit 2-45 1 pc.
- * Plastic carrying case 1 pc.

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

► Optional accessories

Model No.	Battery	Charger
6207D	9120, 9122, 9133, 9134, 9135, 9135A	DC1413, DC1439, DC1803, DC1822, DC9711
6217D	1220, 1222, 1233, 1234, 1235, 1235A	DC1413, DC1439, DC1803, DC1822
6237D	1420, 1422, 1433, 1434, 1435	DC1413, DC1439, DC1803, DC1822
6317D	1220, 1222, 1233, 1234, 1235, 1235A	DC1413, DC1439, DC1803, DC1822
6337D	1420, 1422, 1433, 1434, 1435	DC1413, DC1439, DC1803, DC1822
6347D	1822, 1833, 1834, 1835	DC1803, DC1822

► Specification

Specification		10 mm			13 mm		
		6207D	6217D	6237D	6317D	6337D	6347D
Voltage (V)		9.6	12	14.4	12	14.4	18
Chuck capacity (mm [inch])		1 - 10 [1/32 - 3/8]			1.5 - 13 [1/16 - 1/2]		
Drilling capacity (mm [inch])	Steel	10 [3/8]			13 [1/2]		
	Wood	25.4 [1]	32 [1-1/4]		25.4 [1]	32 [1-1/4]	38 [1-1/2]
No load speed (rpm = min -1)	High	0 - 1,300			0 - 1,300		
	Low	0 - 400			0 - 400		
Declutching torque (N.m [kgf.cm / ft.lbs])		1 - 6 [10 - 60 / 0.7 - 4.4]			1 - 6 [10 - 60 / 0.7 - 4.4]		
Max. fastening torque (N.m [kgf.cm/ in.lbs])	Hard joint	50 [500/ 440]	60 [600/ 530]	65 [650/ 580]	60 [600/ 530]	65 [650/ 580]	80 [800/ 710]
	Soft joint	20 [200/ 180]	25 [250/ 220]	30 [300/ 270]	25 [250/ 220]	30 [300/ 270]	35 [350/ 310]
Electric brake		Yes			Yes		
Torque settings		16 stages (+ drill mode)			16 stages (+ drill mode)		
Variable speed control		Yes			Yes		
Mechanical 2-speed		Yes			Yes		
Reverse switch		Yes			Yes		
Net weight with battery: Kg [lbs]		1.7 [3.7]	1.9 [4.2]	2.0 [4.4]	2.0 [4.4]	2.1 [4.6]	2.4 [5.3]

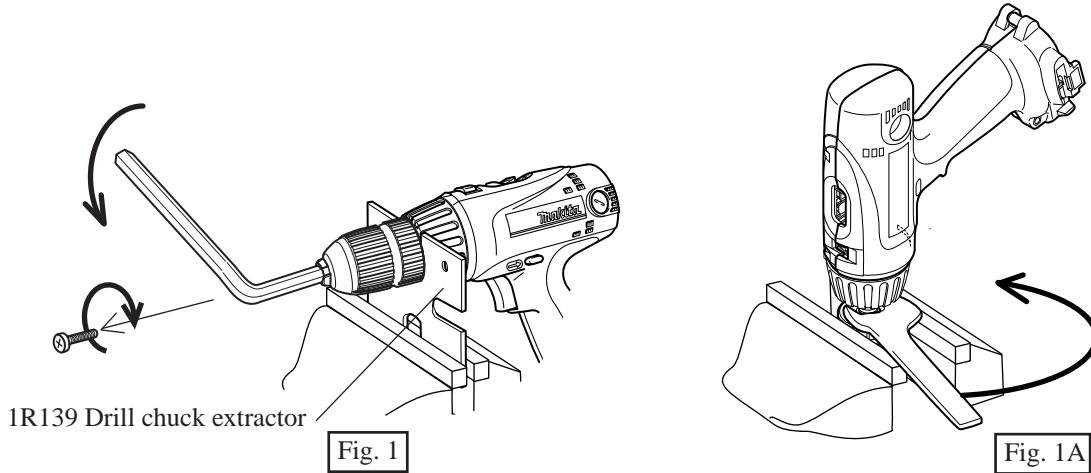
< 1 > Disassembling of drill chuck See Fig. 1.

For replacing gear assembly, drill chuck has to be disassembled.

Take the following steps.

1. Firmly hold No.1R139 "Drill chuck extractor" with vise. And lock spindle with the drill chuck extractor.
2. Open the jaws of drill chuck fully and take off flat head screw M6 x 22 by turning clockwise.
3. Disassemble drill chuck with hex wrench inserted into drill chuck by turning the hex wrench anti-clockwise.

If drill chuck is damaged, firmly hold the drill chuck with vise and turn spindle with wrench anti-clockwise as illustrated in fig. 1A.

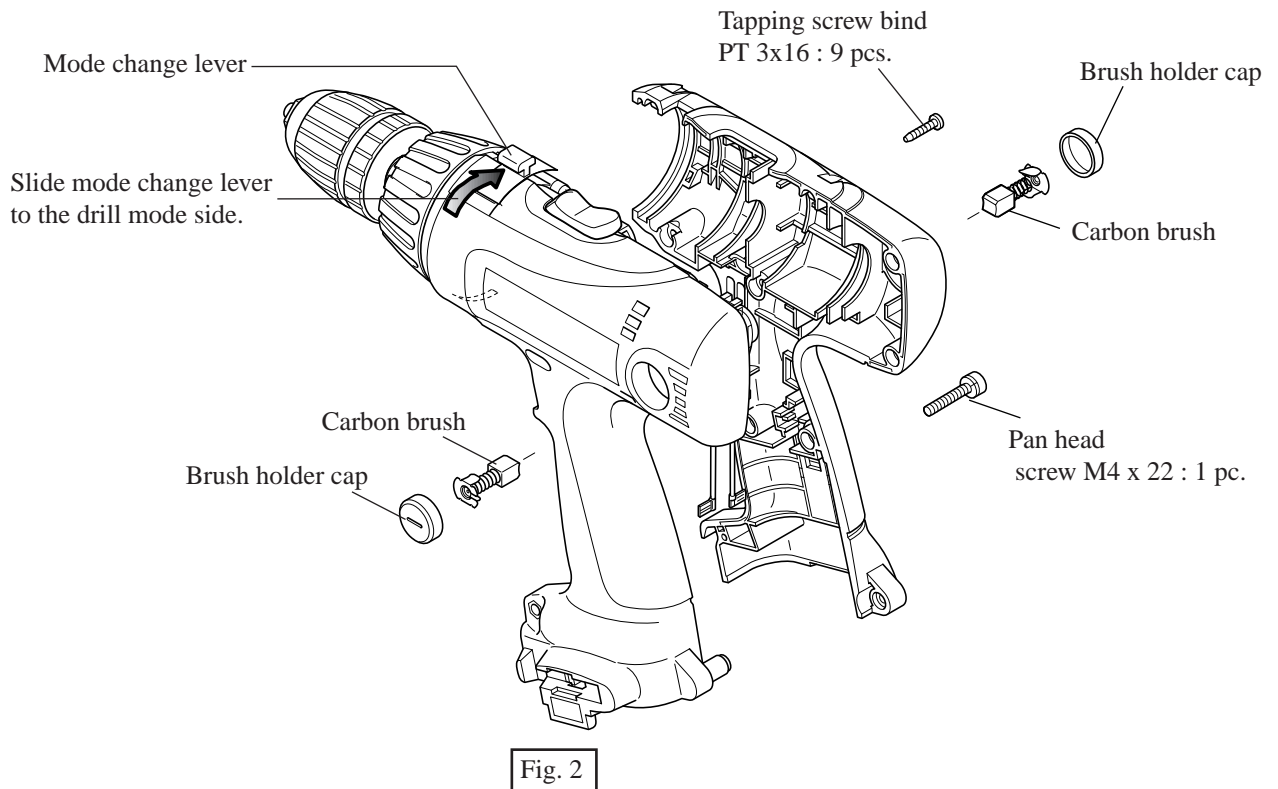


< Note >

For replacing other than gear assembly, it is not necessary to disassemble drill chuck.

< 2 > Disassembling housing See Fig. 2.

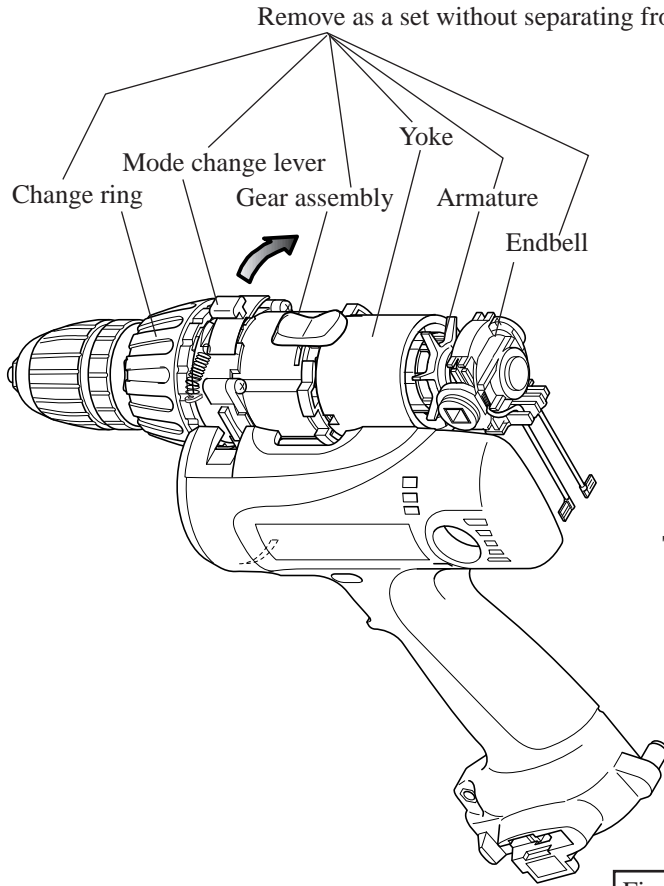
1. Take off brush holder caps and carbon brushes.
2. Slide mode change lever to the drill mode side.
3. Unscrew the following screws.
 - * Tapping screw PT 3 x 16 : 9 pcs.
 - * Pan head screw M 4 x 22 : 1 pc.



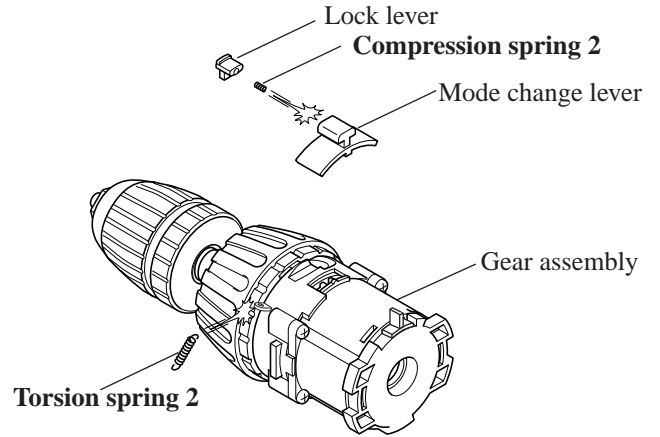
► Repair

< 3 > Disassembling gear assembly and motor section See Fig. 3.

Lifting up mode change lever, separated change ring, gear assembly, yoke, armature and endbell from housing as a set.



< Note in disassembling >



Remove so careful that the following springs do not spring out.

Compression spring 2: installed in mode change lever.

Torsion spring 2: fixing mode change lever on gear assembly

Fig. 3

< 4 > Assembling leaf spring See Fig. 5.

Assemble leaf spring to housing L as illustrated in Fig. 4.

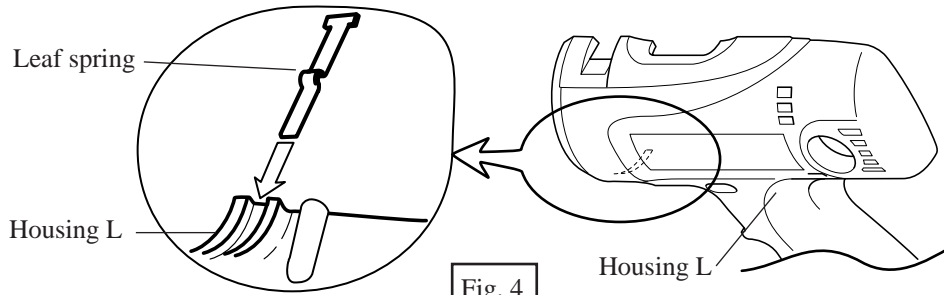


Fig. 4

< 5 > Assembling change ring

When separating gear assembly from housing, change ring can easily slip off from gear assembly.

Re-assemble change ring to gear assembly as follows.

1. Align the widest bulge of spring holder to the bulge of gear assembly by turning spring holder.
2. Assemble change ring by aligning the bulge of change ring's edge to the portion of gear assembly marked with circle by the bulge of gear assembly.

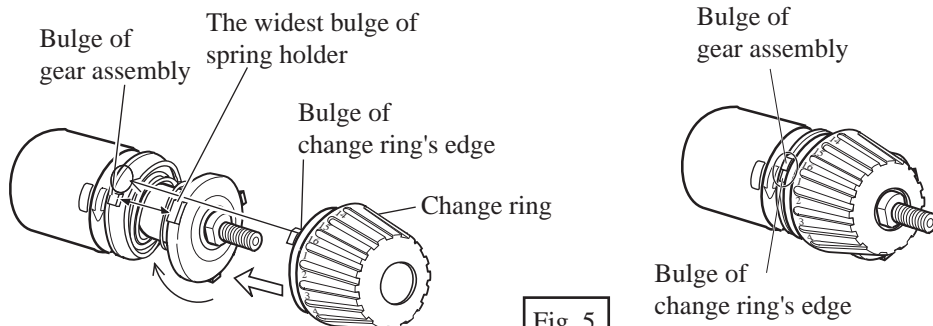
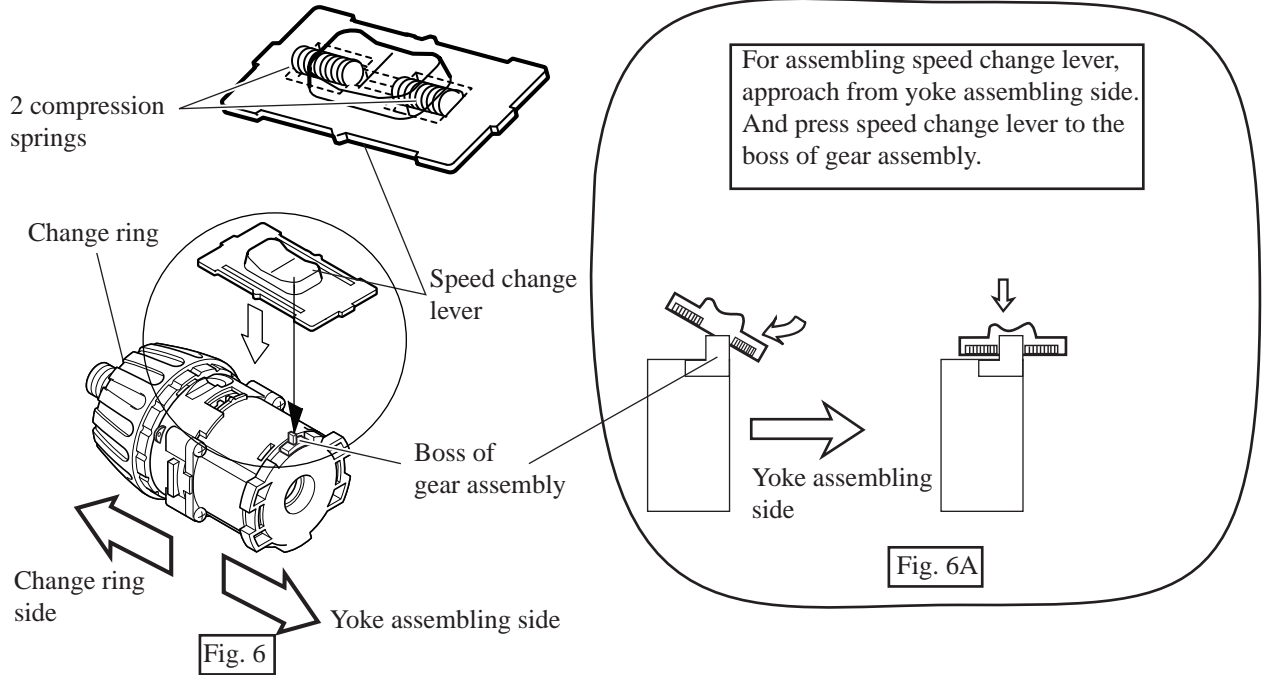


Fig. 5

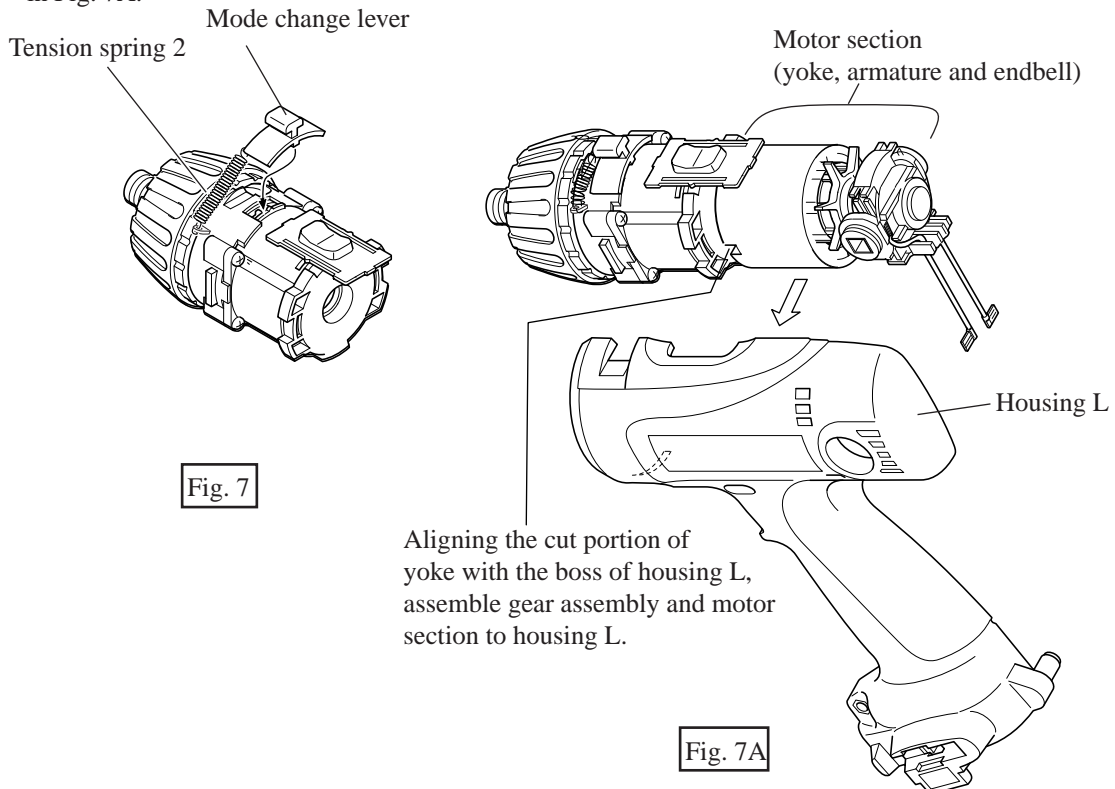
< 6 > Assembling speed change lever

1. Before assembling, make sure that 2 compression springs are installed in the speed change lever. See fig. 6.
2. Assemble speed change lever to the boss of gear assembly as illustrated in Fig. 6A.
3. After assembling, slide the speed change lever to the change ring side or yoke assembling side and keep its slid position.

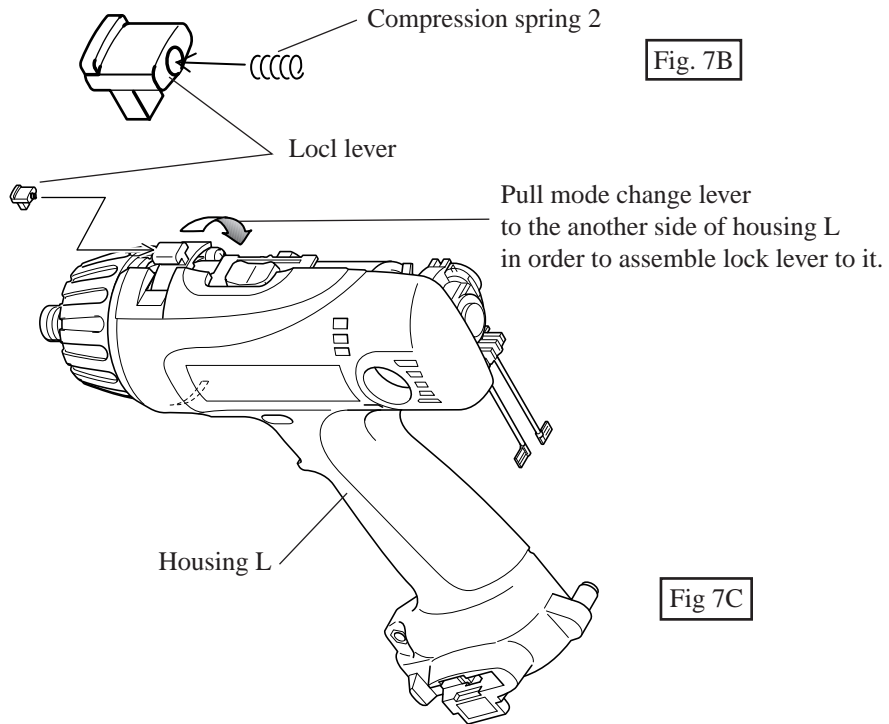


< 7 > Assembling mode change lever and housing

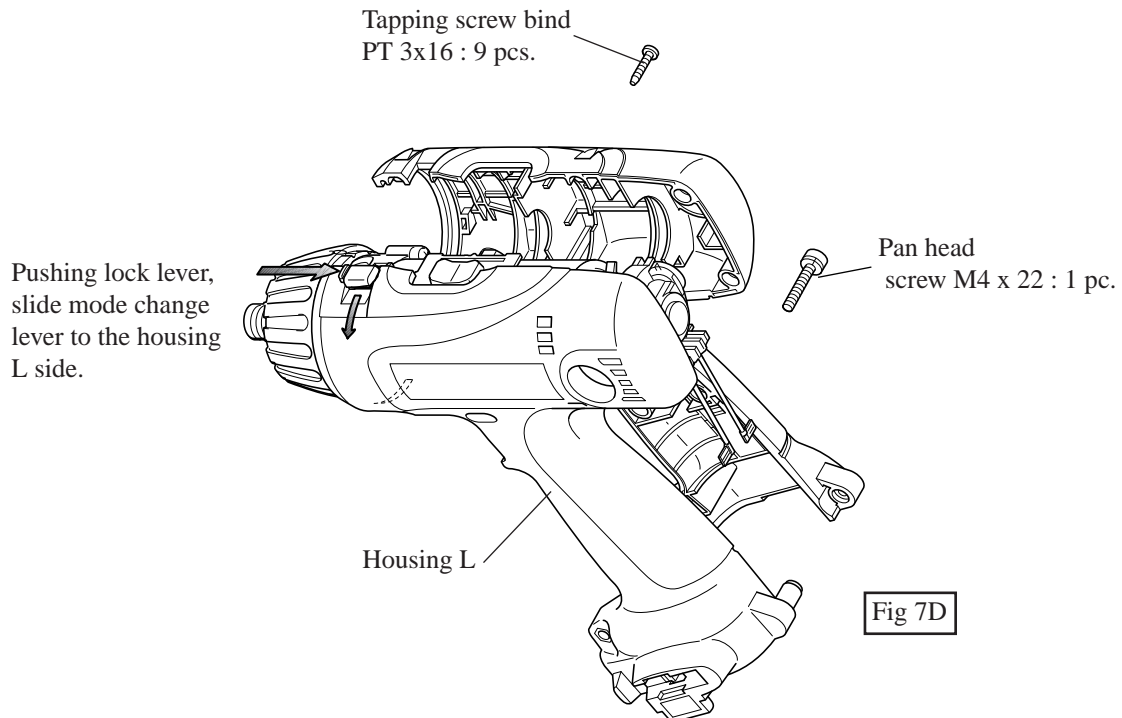
1. Hitch the hook of tension spring 2 to gear assembly and another hook to mode change lever as illustrated in Fig. 7.
2. Assemble mode change lever to gear assembly by inserting the boss of mode change lever into the groove of gear assembly as illustrated in Fig. 7.
3. Assemble motor section (yoke, armature and endbell) to gear assembly. Assemble them to housing L as illustrated in Fig. 7A.



4. Assemble compression spring 2 to lock lever as illustrated in Fig. 7B. Pulling mode change lever to the another side of housing L along the surface of gear assembly, insert the lock lever into mode change lever as illustrated in Fig 7C.



5. Pushing lock lever, slide mode change lever to the another side of housing L, and assemble housing R to housing L by fastening screws as illustrated in Fig 7D.



▶ Repair

< 8 > Assembling drill chuck See Fig. 8.

1. Firmly hold No.1R139 "Drill chuck extractor" with vise. And lock spindle with the drill chuck extractor.
2. Hold No.1R298 "Hex socket" with the jaws of drill chuck firmly and turn the hex socket with No.1R223 "Torque wrench" clock wise.

<Note> Pre-setting the fastening torque for torque wrench : 49 N.m - 58.8 N.m

3. Fasten flat head screw M6 x 22 by turning it anti-clockwise.

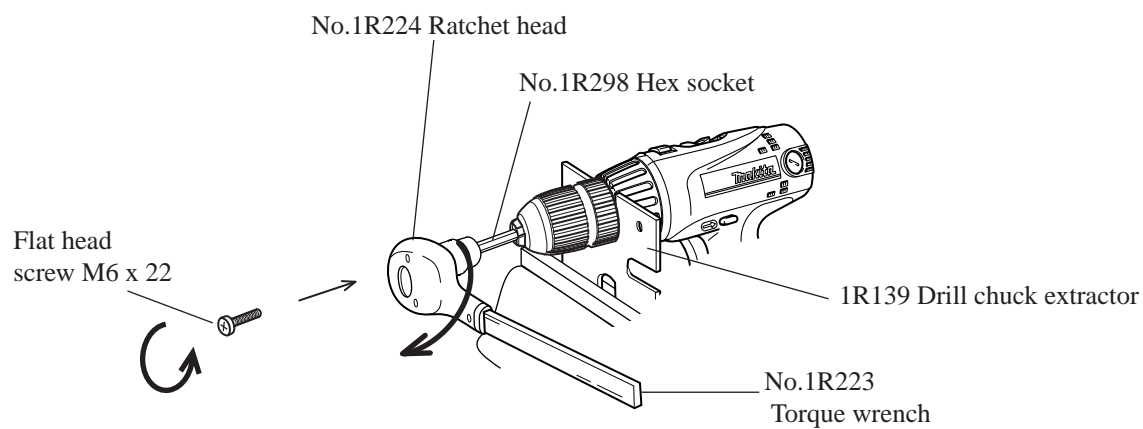
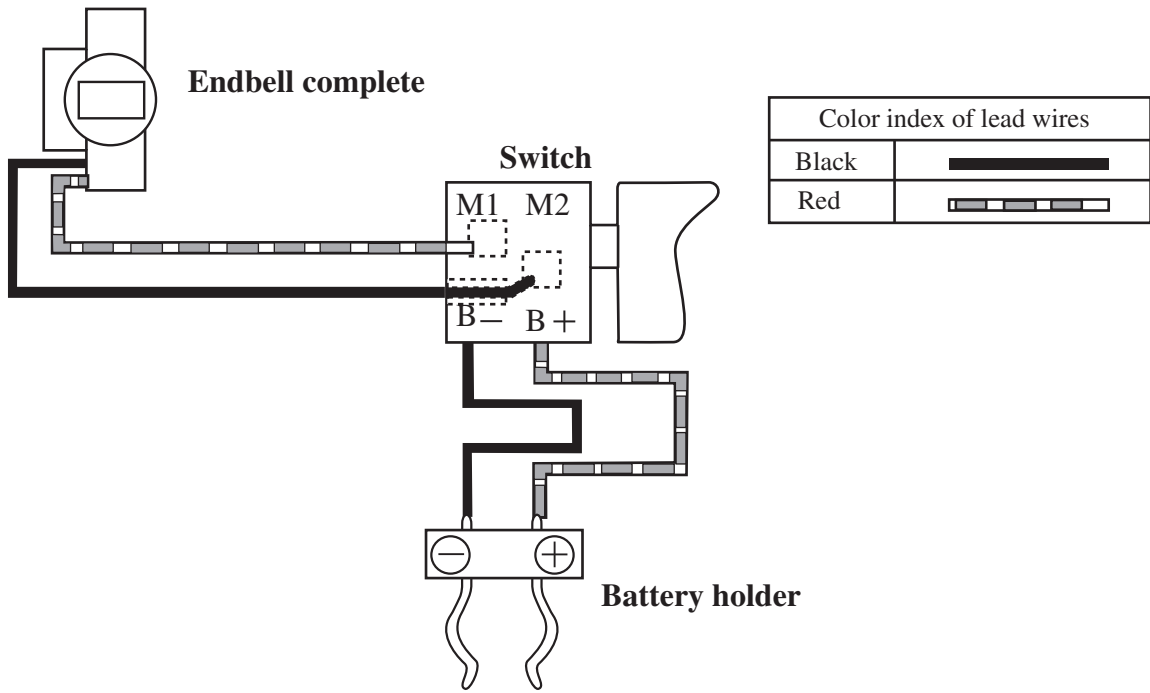


Fig. 8

► **Circuit diagram**



► **Wiring diagram**

