

Models No. ➤ JR140D, JR180D

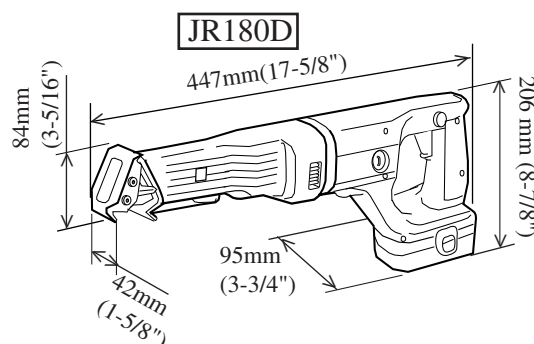
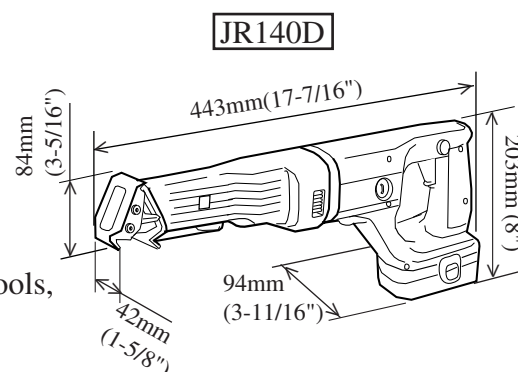
Description ➤ Cordless Recipro Saw

CONCEPTION AND MAIN APPLICATIONS

Model JR140D (14.4V) and JR180D (18V) are the cordless reciprocating saws with tool less features. Namely, without using any tools, the saw blade can be replaced and shoe can be adjusted.

The variations are as follows.

Model No.	Battery Cartridge	Charger	Plastic Case
JR140DWA	1422....1pc.	DC1411	with Plastic Case
JR140DWB	1433....1 pc.	DC1411	with Plastic Case
JR140DWAE	1422....2 pcs.	DC1411	with Plastic Case
JR140DWBE	1433....2 pcs.	DC1411	with Plastic Case
JR180DWA	1822....1pc.	DC1801	with Plastic Case
JR180DWB	1833....1 pc.	DC1801	with Plastic Case
JR180DWAE	1822....2 pcs.	DC1801	with Plastic Case
JR180DWBE	1833....2 pcs.	DC1801	with Plastic Case



Specifications

Model No.		JR140D	JR180D
Power source	NiCd. battery	1422 (14.4V, 2.0Ah)	1822 (18V, 2.0Ah)
	NiMH. battery	1433 (14.4V, 2.2Ah)	1833 (18V, 2.2Ah)
Max.Cutting Capacity	Pipe	90 mm (3-1/2")	
	Wood	90 mm (3-1/2")	
Length of Stroke		23 mm (7/8")	
Strokes per Minute (spm.)		0 - 2,700	
Net Weight		3.3 kg (7.3 lbs)	3.5 kg (7.7 lbs)

Standard equipment

Recipro Saw Blade No.21 (for Steel)
 Recipro Saw Blade No.22 (for Steel)
 Recipro Saw Blade No.23 (for Wood)
 Battery Cover

The standard equipment for the tools shown may differ from country to country

Optional accessories

Recipro Saw Blade No. 21, No. 22, No. 24 (for steel),
 Recipro Saw Blade No.23, 23B (for wood)
 Battery 1422 Battery 1433
 Battery 1822 Battery 1833
 Battery Charger DC1801
 Battery Charger DC1439
 Battery Charger DC1411
 Battery Charger DC1422

► Features and benefits

- 1.High working speed. Especially Mod.JR180D can compete with Mod.JR3000V in the cutting speed.
- 2.Changeable carbon brushes without dismounting the body.
- 3.Big D-form handle for comfortable gripping even with gloved hand.
- 4.Trigger type variable speed control switch
- 5.Lock of button for prevention of accidental switch on, can be operated easily from both left and right side.

Toolless system

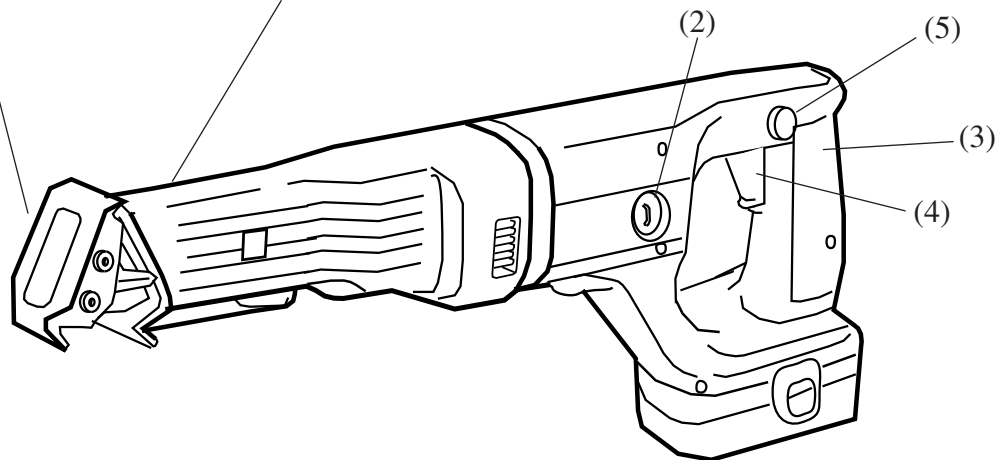
Replacement of saw blade and adjustment of shoe can be made without any tools.

In case of Competitor A, tools are required for replacement of blade.

In case of Competitor B, no tools are required for replacement of blade, however for adjustment of shoe, tools are required.

Dust-proof construction

Dust seal mounted on the front part of slider protect the machine from the intruding dust.



► Comparison chart 1

Spec.		Makita		Competitor 1.		Competitor 2.
Model No.		JR180D	JR140D	Mod. A	Mod. B	Mod. C
Battery	Voltage (V)	18	14.4	18	14.4	18
	Capacity (Ah)	*2.0 / 2.2	*2.0 / 2.2	2.0	1.7	2.0
Stroke per min. (Spm.)		0 - 2,700	0 - 2,700	0 - 2,800	0 - 2,700	0 - 2,000
Length of stroke (mm)		23(7/8")	23(7/8")	22(7/8")	22(7/8")	25 (1")
Toolless system	Blade replacement	Yes	Yes	Hex wrench is needed.		Yes
	Shoe adjustment	Yes	Yes	*** Impossible to adjust		Hex wrench is needed.
Trigger type variable speed control switch		Yes	Yes	Yes	Yes	Yes
Weight (Kg)	weight on catalogue	3.5 (7.7 lbs)		2.9 (6.5 lbs)	2.7(6.0 lbs)	3.7(8.25 lbs)
	actual weight	3.5 (7.7 lbs)	3.3 (7.2 lbs)	3.1 (6.8 lbs)	2.8(6.1 lbs)	3.9(8.6 lbs)
Standard Equipments		**Battery **Charger Set of Blade Plastic Case		Battery Charger (One hour charger) Set of Blade Hex rench Plastic Case		Battery Charger (40 min.charger) Set of Blade Hex rench Steel Case

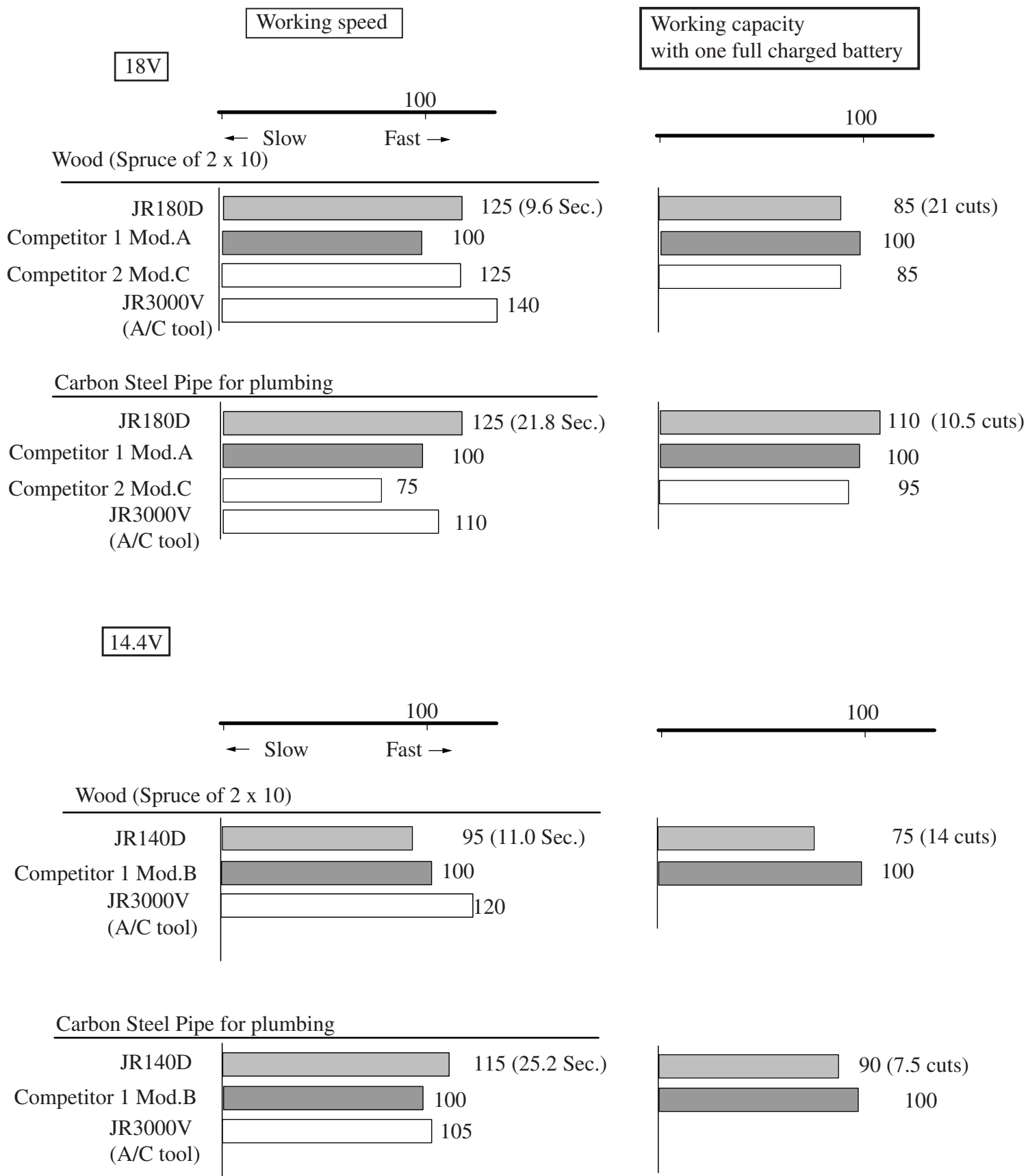
* The number of Ah is dieffrent from model to model which are mentioned on the first page.

** The type of charger and battery cartridge are different from model to model which are mentioned on the first page.

*** Impossible to adjust, because the shoe is fixed in the machine.

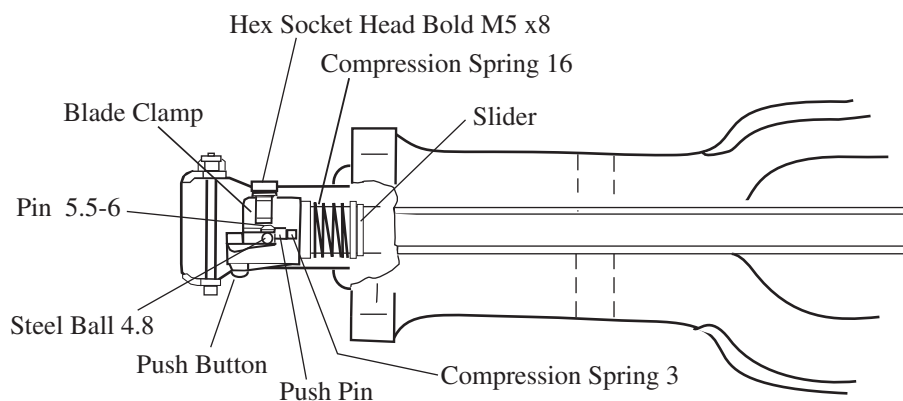
► Comparison chart 2

The data of Competitor Mod.A and B are indexed for 100.



► Repair

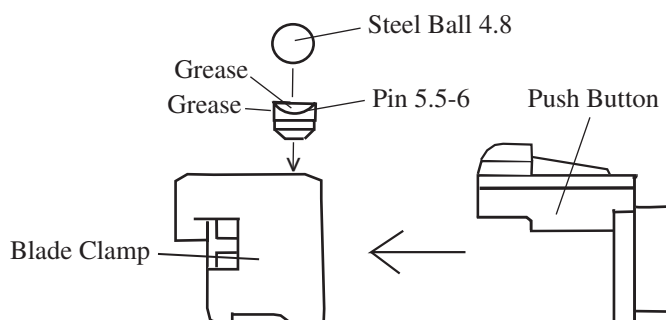
Dismounting of Blade Clamp



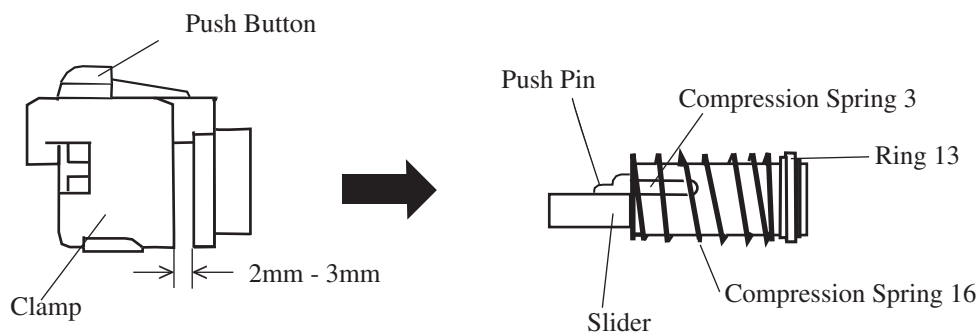
Press the push button, however, not too strong, and then hex socket head bolt can be dismantled. However, be so carefull that the hex socket head bolt does not spring out.

Mounting of Blade Clamp

Paint Makita Grease No.1 on the Steel Ball and Pin, and then install them into Blade Clamp. Mount the Push Button on the above Blade Clamp.



At the mounting of clamp and push button on the slider, keep the distance 2 - 3mm between clamp and push button. so, they can be installed on the slider soothly.



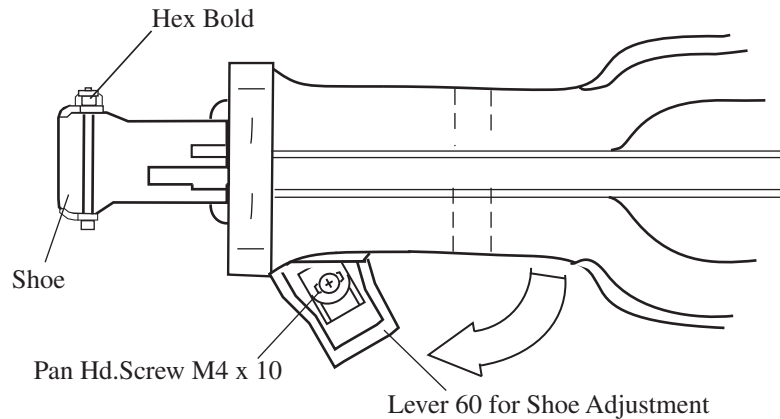
Dismounting of Slider

Dismount the Pan Hd.Screw from the back side of the Lever 60 for shoe adjustment.

And then, dismount the Lever 60.

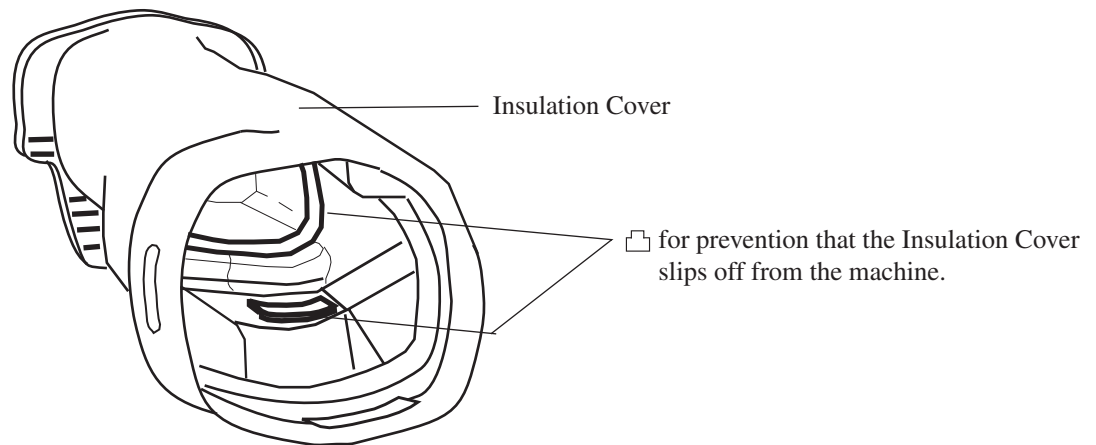
Dismount the Hex Bolt fastening the Shoe, and then Shoe can be pull out .

(Pay attention not to lose the Hex Nut installed in the lever in this process.)

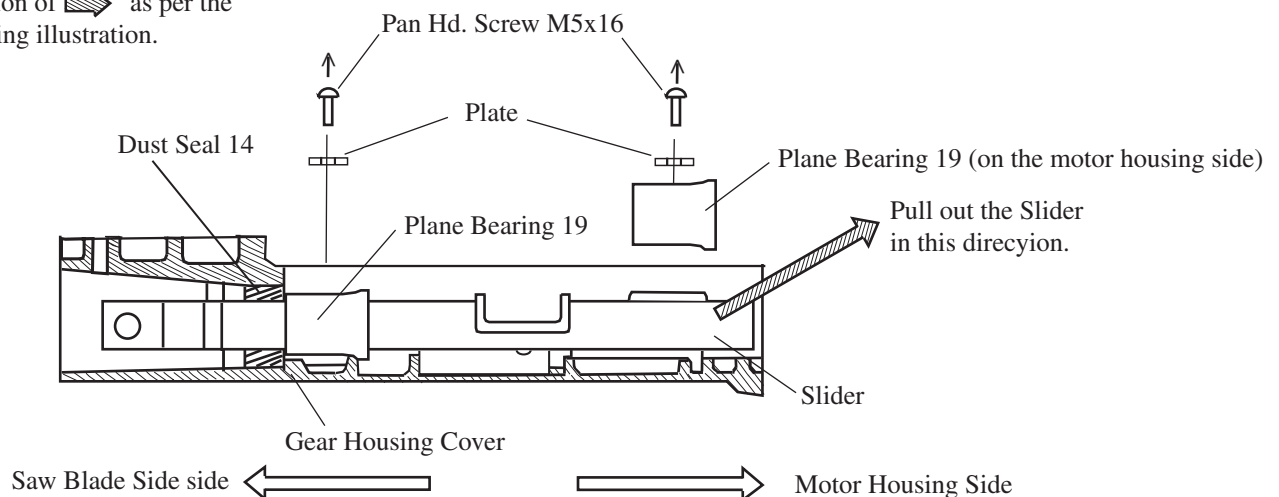


Loosen 4 pcs.of Pan H.Screw M5x18. and dismount the Gear Housing Cover after taken off the Insulation Cover.

At dismounting of the Insulation Cover , pay attention to ☐ on the Insulation Cover illustrated below.



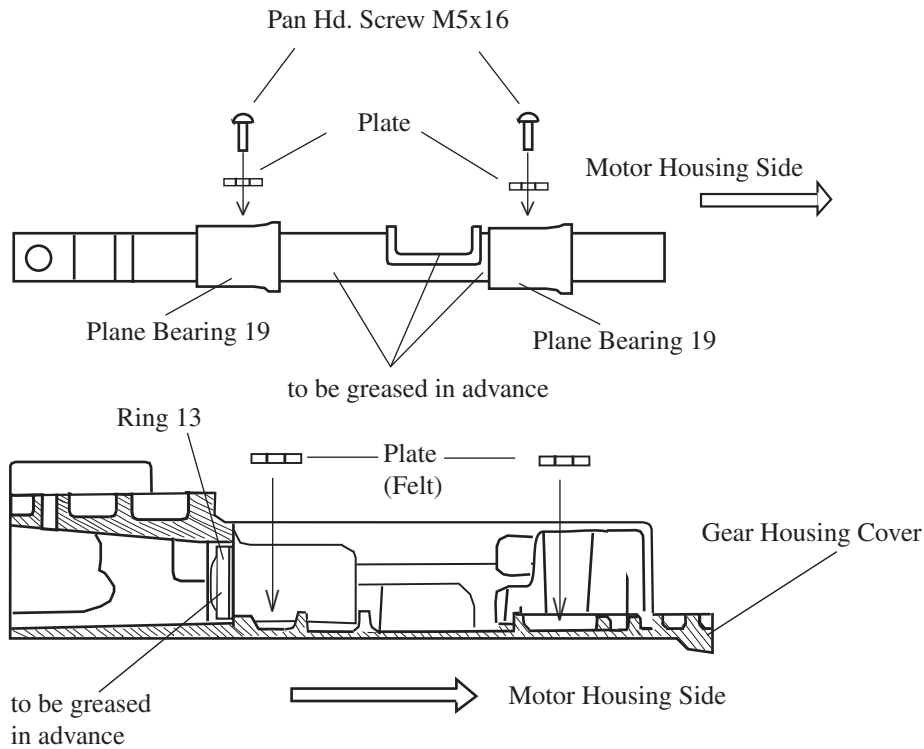
Take off the Pan Hd.Screw fastening the Plane Bearings, and dismount the Plane Bearing on the Motor Housing side from the Slider. After pushing the Slider in the direction of the Motor Housing, pull out the Slider in the direction of ➡ as per the following illustration.



Mounting of Slider

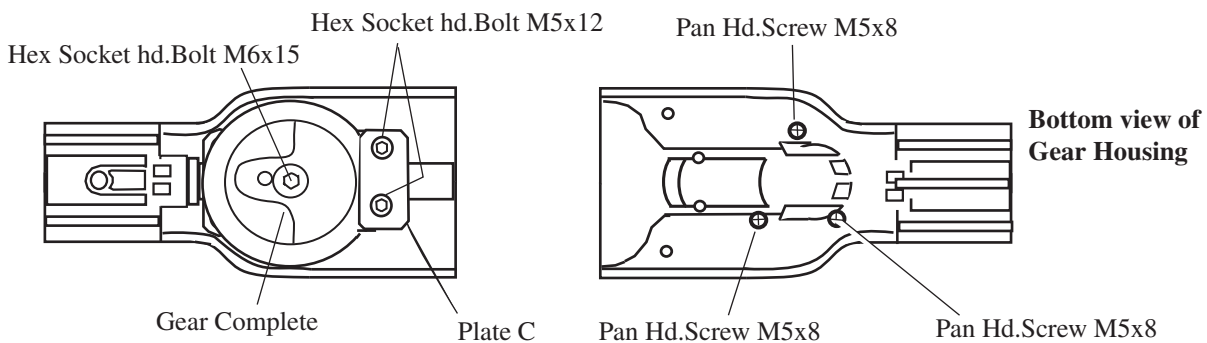
Set the Plate which has been dunked in the machine oil in advance, into the Gear Housing Cover. Install the Slider on which the Plane Bearings are installed in advance, on the Gear Housing Cover, and Fasten it with Pan Hd.Screws together with Plate.

Adhesive is painted on the Pan Hd.Screw M5x16 in advance for prevention against loosening. Use the new one with adhesive. If you do not replace with the new Pan Hd.Screw M5x16, paint the adhesive on it. . Paint the grease No.1 by approx. 7 g on the slider.



Dismounting of Bevel Gear 48

Take off Plate (C) by loosening Hex Socket Hd.Bolt M5 x 12. And then dismount the Gear Complete from Gear Housing by loosening 3 pcs.of Pan Hd.Screw M5 x 8 which are installed on the bottom side of Gear Housing.



Hold the flat section on the Gear Shaft end, and loosen Hex Socket Hd.Bolt M6 x 15. And then, Bevel Gear 48 can be separated from Gear Shaft.

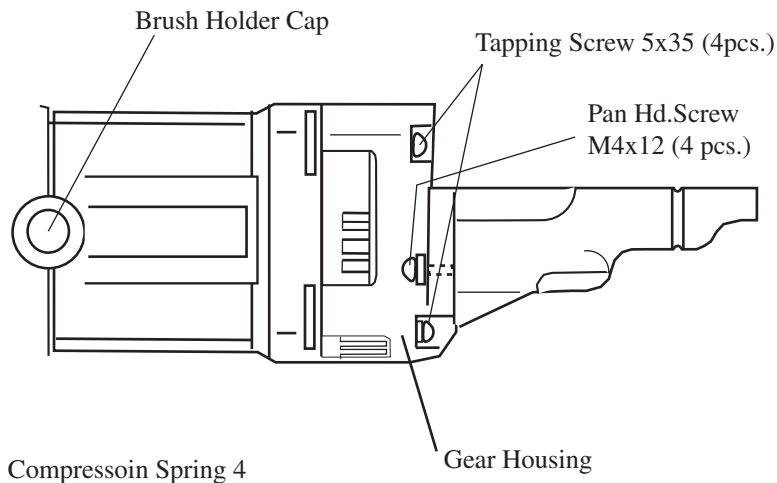
Hex Socket Head Bolt M6 x 15 is faced with adhesive. The repairing tool (Hex Wrench) has to be set in the hex socket precisely to prevent the damage on the bolt head.

Dismounting of Armature

Dismount Carbon Brushes.

Separate the Motor Housing from the Gear Housing by loosening the Tapping Screw 5x35 (4pcs.) and 5x45 (2 pcs.). Take off Pan Hd.Screw M4x12 (2pcs.). So, Armature can be dismounted from the machine.

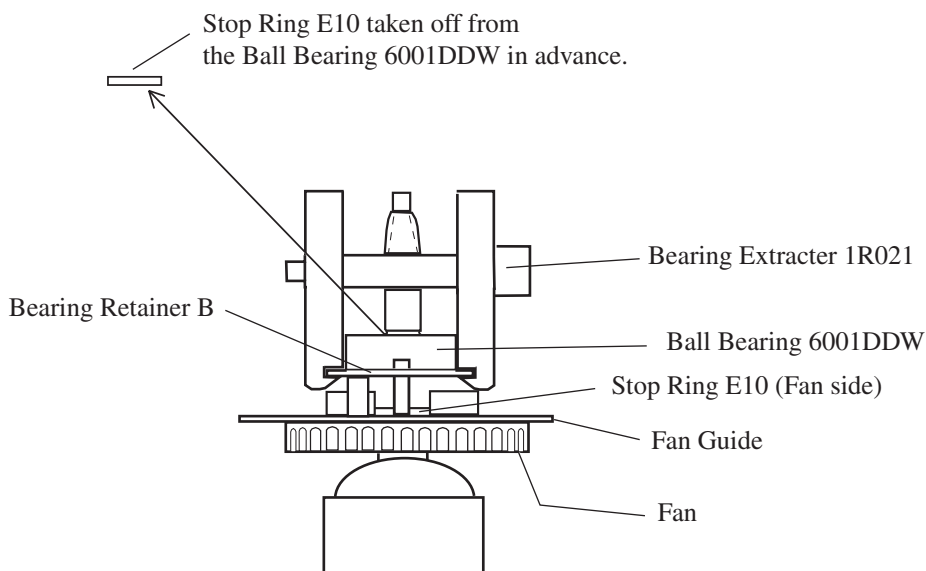
Not lose Compression Spring 4 installed between Switch and Switch Lever, at dismounting of Handle section.



Dismounting of Ball Bearing installed on the fan side of armature

Take off the Stop Ring E10, mounted on Ball Bearing 6001DDW (however, not mounted on the Fan side.) in advance.

Hook Bearing Retainer B with the Repairing Tool (No.1R021:Bearing Extractor), and then dismount Ball Bearing 6001DDW together with Bearing Retainer B.



Mounting of Spiral Bevel Gear 48 and Armature

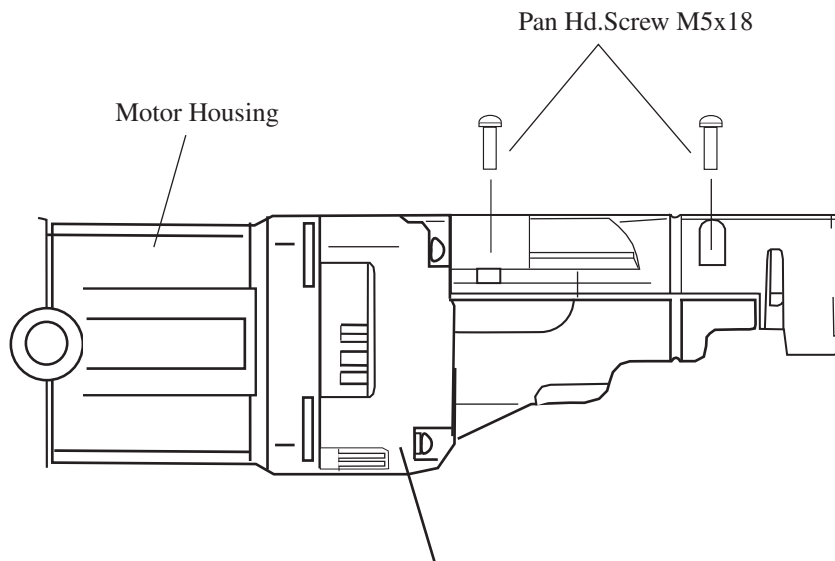
Spiral Bevel Gear 48 and Armature can be mounted by taking reverse steps.

Hex Socket Hd.Bolt M6x15 on Spiral Bevel Gear 48 is faced with adhesive for prevention of loosening. It has to be replaced with new one faced with adhesive. Not fasten Spiral Bevel Gear 48 with the used Hex Socket Hd.Bolt M6x15.

The Pan Hd.Screws for fastening Gear Section and Armature, have to be replaced with new one faced with adhesive. In case that the used ones are installed, adhesive has to be painted on the used screws for prevention of loosening.

Mounting of Gear Housing Cover

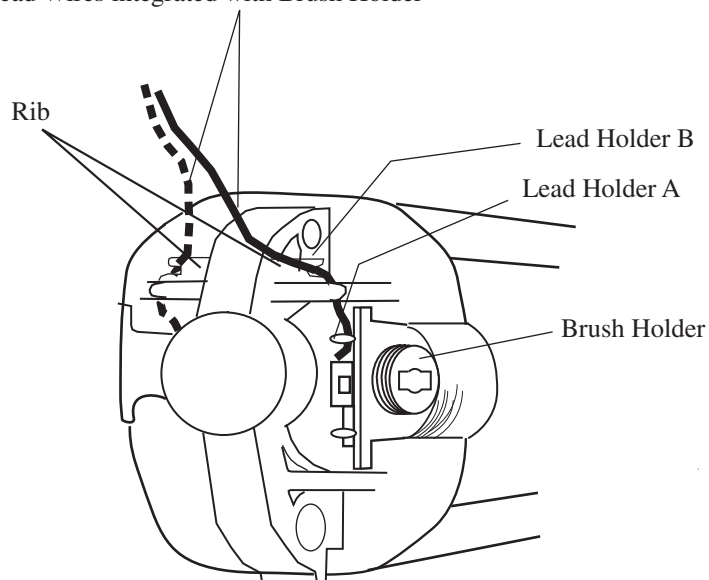
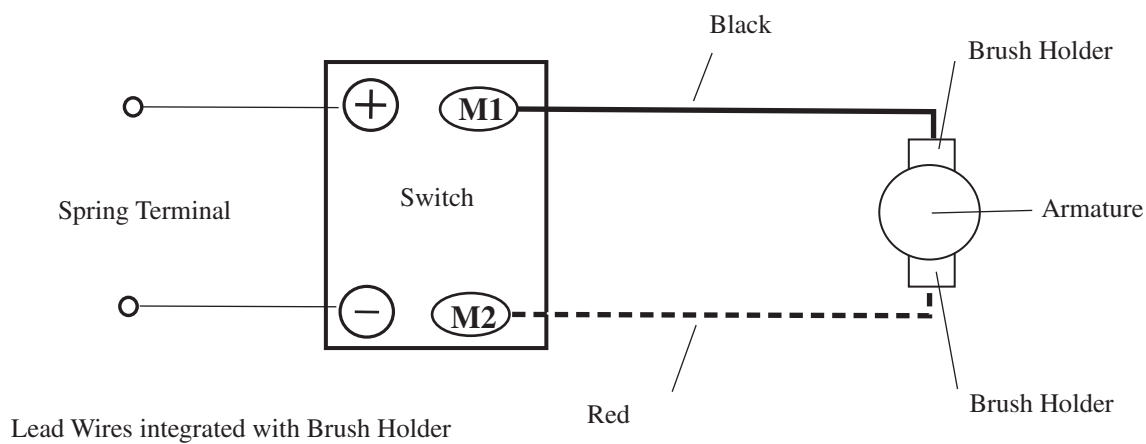
Fasten Gear Housing Cover with Pan Hd.Screw M5 x 18 pressing it in the direction of motor housing for sealing.



Mounting of Insulation Cover

Insulation Cover can be mounted smoothly by moistening inside of it.

► Circuit Diagram



Lead Wires integrated with Brush Holder has to be set as per the left illustration.

- * Fix the lead wire with lead holder A.
- * and then, fix with lead holder B through rib.

► Circuit Diagram

Lead Wires have to be set through Lead Holder and Boss firmly as per the following illustration.

