# ECHNICAL INFORMATION

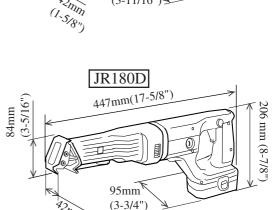




#### CONCEPTION AND MAIN APPLICATIONS

Model JR140D (14.4V) and JR180D (18V) are the cordless recipro 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.

	Battery		
Model No.	Cartridge	Charger	Plastic Case
JR140DWA	14221pc.	DC1411	with Plastic Case
JR140DWB	14331 pc.	DC1411	with Plastic Case
JR140DWAE	14222 pcs.	DC1411	with Plastic Case
JR140DWBE	14332 pcs.	DC1411	with Plastic Case
JR180DWA	18221pc.	DC1801	with Plastic Case
JR180DWB	18331 pc.	DC1801	with Plastic Case
JR180DWAE	18222 pcs.	DC1801	with Plastic Case
JR180DWBE	18332 pcs.	DC1801	with Plastic Case



(1-5/8")

JR140D

443mm(17-7/16'

94mm (3-11/16")

84mm (3-5/16"

# Specifications

Model No.		JR140D	JR180D	
Power source N	NiCd. batttery		1422 (14.4V, 2.0Ah)	1822 (18V, 2.0Ah)
1 ower source	NiMH.	batttery	1433 (14.4V, 2.2Ah)	1833 (18V, 2.2Ah)
Max.Cutting Capacity		Pipe	90 mm (3-1/2")	
wiax.Cutting Ca	apacity	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 Covrer** 

The standard equipment for the tools shown may differ form 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

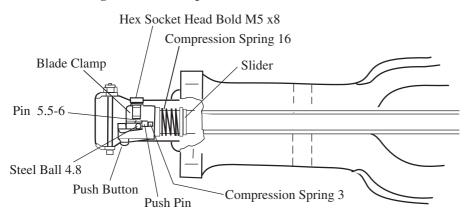
Battery Charger DC1439

Battery Charger DC1411

Battery Charger DC1422

### Repair

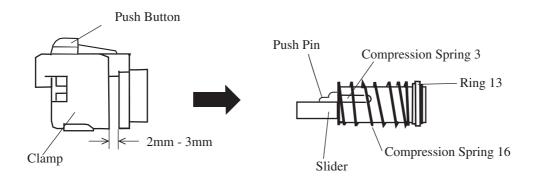
#### **Dismounting of Blade Clamp**



Press the push button, however, not too strong, and then hex socket head bolt can be dismounted. 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. 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.

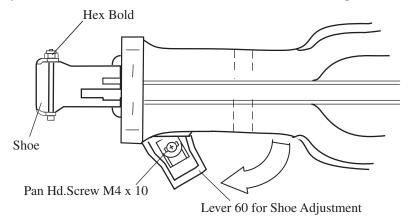


#### Dismounting of Slider

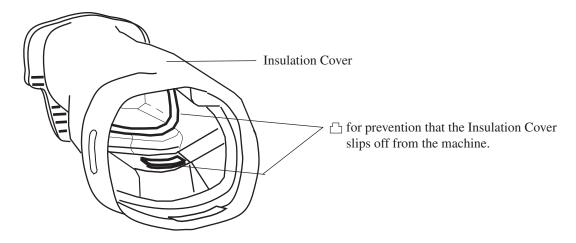
Dismount the Pan Hd.Screw from the back side of the Lever 60 for shoe adjustment. And then, dismount the Lever 60.

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

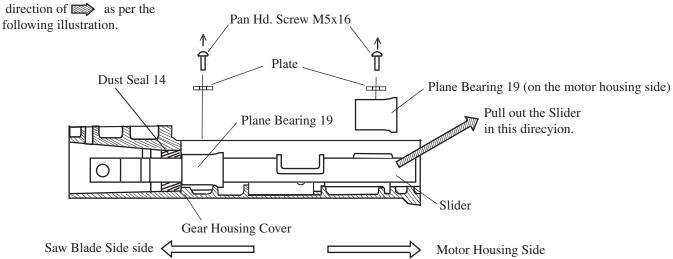
(Pay attention not to lose the Hex Nut installed in the lever in this process.)



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  $\Box$  on the Insulation Cover illustrated below.



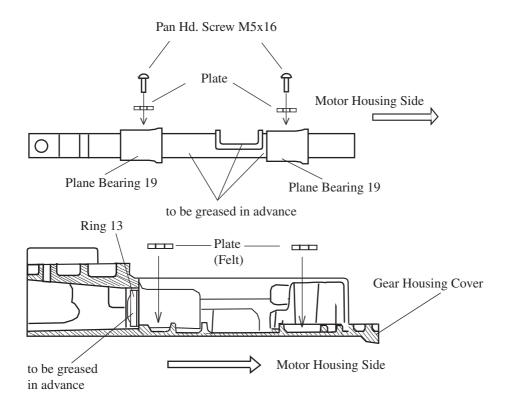
Take off the Pan Hd.Screw fastening the Plane Bearings, and dismount the Plane Bearing on the Motor Housing side from the Slider. After pushing the Slider in the direction of the Motor Housing, pull out the Slider in the



#### Mounting of Slider

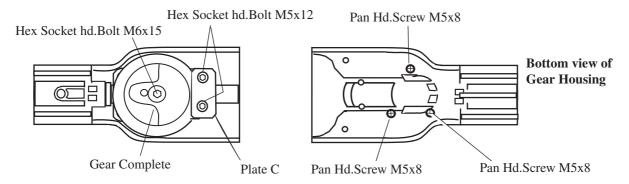
Set the Plate which has been dunked in the machien oil in advance, into the Gear Housing Cover. Install the Slider on which the Plane Bearings are instlled in advance, on the Gear Housing Cover, and Fasten it with Pan Hd.Screws together with Plate.

Adhesive is painted on the Pan Hd.Srew 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 secstion 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.

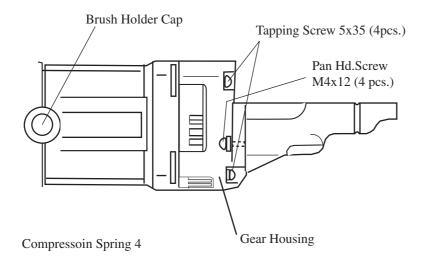
Hex Socket Head Bolt M6 x 15 is faced with adhesive. The repairing tool (Hex Wrench) has to be set in the hex socket precisely to prevent the damage on the bolt head.

#### **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 dismaounted from the machine.

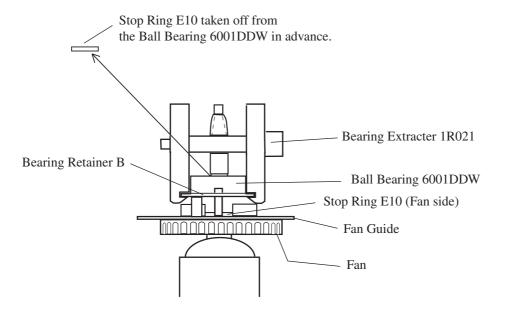
Not lose Compression Spring 4 installed between Switch and Switch Lever, at dismounting of Handle section.



#### 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 Extracter), and then dismount Ball Bearing 6001DDW together with Bearing Retainer B.



#### Mounting of Spiral Bevel Gear 48 and Armature

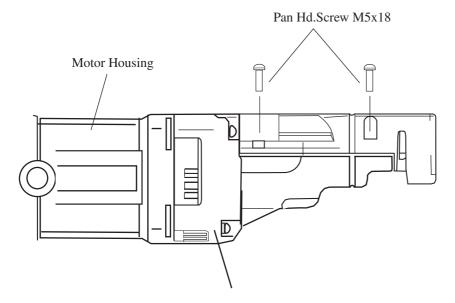
Spiral Bevel Gear 48 and Armature can be mounted by taking reverse steps.

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**

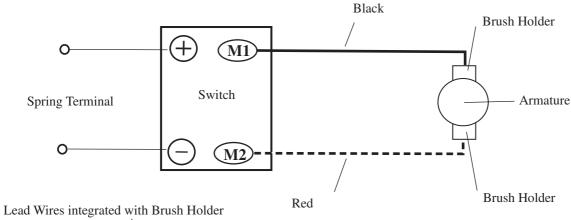
Fasten Gear Housing Cover with Pan Hd.Screw M5 x 18 pressing it in the direction of motor housing for sealing.

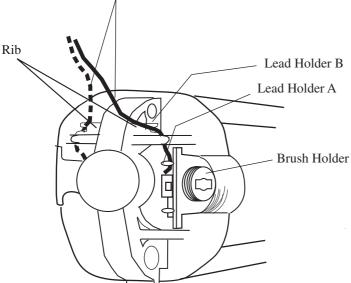


#### **Mounting of Insulation Cover**

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

# **►** Circuit Diagram





Lead Wires integrated with Brush Holder has to be set asper 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.

