



# BUILDERS HOIST

## OPERATOR'S MANUAL

**THIS MANUAL MUST BE READ BY EVERY PERSON BEFORE  
INSTALLING, OPERATING OR MAINTAINING THE PRODUCT.**



Part No:  
TM9006-30030 300KG  
TM9006-36060 360KG  
TM9006-50030 500KG

**Ver: 1.0**

**Serial: \_\_\_\_\_**

Buyer to record serial number above



**This electric wire rope hoist should not be installed, operated or  
maintained by any person who has not read all the contents of these  
general instructions. Failure to read and comply with these instructions  
or any of the limitations noted herein can result in bodily injury and/or**



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## 1. Warranty

Industrial Tool & Machinery Sales (hereinafter referred to as ITM) will, within twelve (12) months from the original date of purchase, repair or replace any goods found to be defective in materials or workmanship.

This warranty is void if the item has been damaged by accident, neglect, improper service or other causes not arising out of defects in materials or workmanship. This warranty does not apply to machines and/or components which have been altered, changed, or modified in any way, or subjected to overloading or use beyond recommended capacities and specifications. Worn componentry due to normal wear and tear is not a warranty claim. Goods returned defective shall be returned prepaid freight to ITMS or agreed repair agent, which shall be the buyer's sole and exclusive remedy for defective goods. ITMS accepts no additional liability pursuant to this guarantee for the costs of travelling or transportation of the product or parts to and from ITMS or the service agent or dealer, such costs are not included in this warranty.

Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

**THE MANUFACTURER RESERVES THE RIGHT TO MAKE IMPROVEMENTS AND  
MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE.**

PRODUCTS IMPORTED AND DISTRIBUTED NATIONALLY BY:

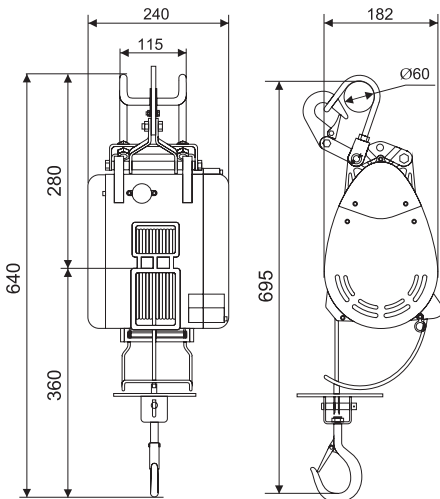


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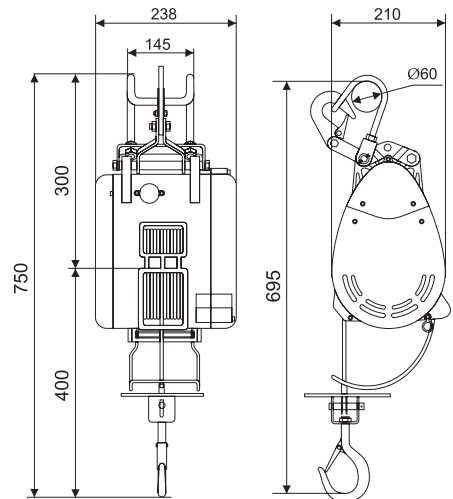
## 2. Technical Specifications

Part No.	TM9006-30030	TM9006-36060	TM9006-50030
Rated Load	300kg	360kg	500kg
Lifting Height	30m	60m	30m
Wire Rope Dia.	5mm	5mm	6mm
Wire Rope Grade	G1900	G1900	G1900
Motor	1600 Watt	1600 Watt	1800 Watt
Lifting Speed	19m/min	13m/min	13m/min
Power Supply	220V 50Hz	220V 50Hz	220V 50Hz
Duty Cycle	25%: 15min/hour	25%: 15min/hour	25%: 15min/hour
IP Rating	IP54	IP54	IP54
Pendant Control Length	7m	7m	7m
Power Cable Length	4.5m	4.5m	4.5m
Weight	20.9kg	28.4kg	28.4kg

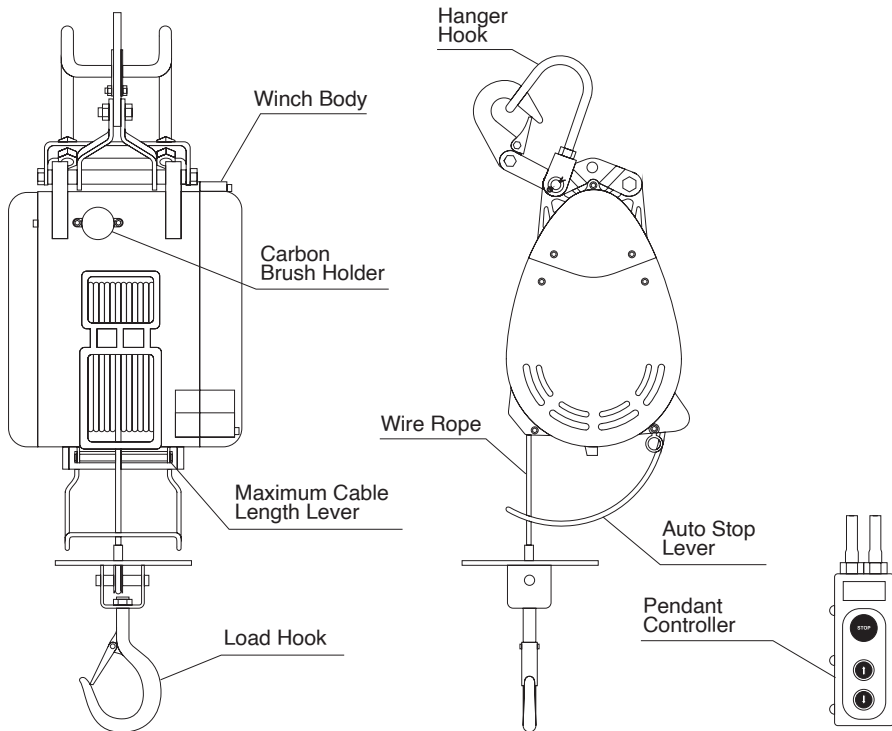
**TM9006-30030**



**TM9006-36060 / TM9006-50030**



## 4. Product Identification



## 5. Safety Rules

- a. Before use, read and understand this manual.
- b. Only trained operators are allowed to use the hoist.
- c. Before use, complete the Daily Inspection Log as instructed in this manual.
- d. Before use, check for any damage or excessive wear as instructed in this manual. Do not use if damage or excessive wear is found.
- e. Ensure the main voltage corresponds to the voltage on the rating plate.
- f. The operator is required to be familiar with the hoist and hoist controls before being authorized to operate the hoist or lifting system.
- g. Hoist operators should be trained in proper rigging procedures for the attachment of loads to the hoist hook. Do not lift any object which is insecure or out of balance and ensure the load weight is centred.
- h. Before lifting a load, examine the steel cable (wire rope) to ensure that there is no twisting, kinking or turning of the bottom hook for multiple falls.
- i. The hoist is only used for lifting within the rated capacity. Do not lift over the rated capacity.
- j. Ensure to lift the load vertically. Do not lift or pull a load in any direction other than exactly vertical.
- k. Do not operate the hoist when it is restricted from forming a straight vertical line from hook to support in the direction of loading.
- l. Do not lengthen the steel cable or repair damaged steel cable. Damaged cable must be replaced by an authorized and qualified repairer.
- m. Ensure there are never any people standing or working underneath the hoist or load.
- n. Do not lift any load with the steel cable used like a sling.
- o. Never apply any load to the tip of hook for lifting.
- p. While lifting, do not operate the hoist rapidly up and down repetitively and avoid excessive inching operation.
- q. Do not run the hoist out of the limited position.
- r. Never lift a load using more than 2 hoists simultaneously.
- s. Do not dismantle and adjust the load limit device.
- t. Do not measure the weight of the load by the load limiter.
- u. Ensure the load you are hooking to is properly put into the hook throat with the safety latch properly closed.
- v. This hoist is not designed for and should not be used for lifting, supporting, or transporting personnel.
- w. Do not modify, upgrade, re-rate, or otherwise alter the hoist.
- x. Do not use the hoist in an explosive atmosphere.
- y. Always allow the hoist motor to stop completely before reversing.
- z. Ensure to leave the control pendant and cable, and the bottom hook load chain sitting vertically after completion of operation. Do not leave them in a position which will allow them to slip or swing.

## 6. Application

This hoist is to be used only for the purpose of vertical lifting and can be used as an integrated part of an overhead gantry crane system. The equipment is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user or operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of misuse.

## 7. Installation

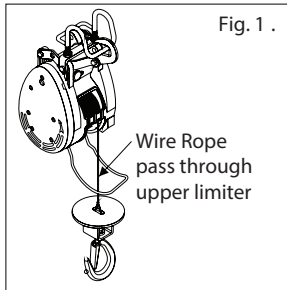
### UNPACKING:

After removing the hoist from its box, carefully inspect the external condition of the electrical cables, steel cable, pendant controller, hooks, gearbox and motor casing for damage.

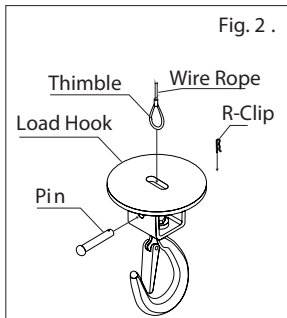
### INSTALLING LOAD HOOK:

Before use, the load hook will need to be assembled to the hoist.

1. Pass the wire rope through the upper limiter. See Fig.1.



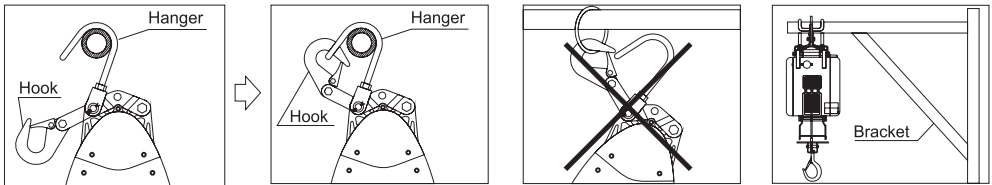
2.
  - a) Insert the wire rope through the slot on the load hook as shown in Fig.2.
  - b) Insert the pin into the side of the load hook.
  - c) Ensure the pin goes through the loop in the wire rope and through the opposite side of the load hook
  - d) Secure the pin by inserting R-Clip through the end of the pin.



## MOUNTING:

Intended use for this Builders Hoist is to mount the hoist onto a load tested scaffold bar which will be the main support for the hoist. The suspension point should be of a correct size to hook the top hanger on to and allow it to rest properly on the scaffold bar with the safety catch locked. If the suspension bar is open ended, suitable measures should be taken to 'close' it (i.e. a scaffold bracket) to ensure that the hoist will not fall off.

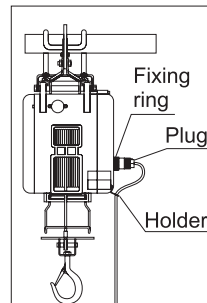
The support bar and its supporting structure must be capable of carrying 125% of the hoist's rated capacity (Safe working load) and approved for safe operation.



## CONNECTING THE PENDANT CONTROLLER:

Insert the pendant controller plug into the pendant controller socket and turn the fixing ring clockwise to secure the plug. Ensure the controller cable does not obstruct any load that is being lifted by the hoist or allow it to be caught location in the wire rope and drum.

The length of any extension power lead is limited to 20m. Longer extension leads will cause voltage drop and will damage the motor.



## 8. Operational Test Before Use

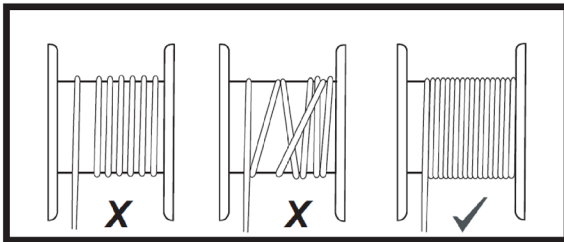
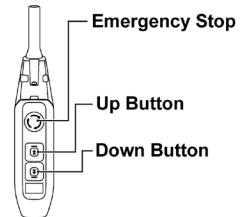
1. Firmly push the Down Button to lower the lifting hook until the limit spring touches the limit switch. Power should be cut off automatically.
2. Firmly push the Up Button to raise the lifting hook until the limit spring touches the limit switch.
3. Check the emergency stop button function : While holding down either the up or down button, push the emergency stop button. Check that the hook stops when the emergency stop button is pushed. Also, check the hoist does not move in response to the push button switch. Finally, check that the emergency stop device pops out when turned to the right and that operation can be resumed thereafter. If the equipment fails to pass any of the above checks, refer to an authorised repairer to check the wiring and automatic locking function of the emergency stop device.
4. Before operating a new hoist with a load, it must be operated without load for 15 minutes to ensure it is operating without any apparent failures or problems. Refer to the Troubleshooting or discuss with the seller if any problem is identified. The same procedure should be given to the hoist if it has has been out of use for a long time.

## 9. Safety Inspection & Log

### DAILY INSPECTIONS

Inspection of the below list must be carried out each day before use, and an entry reporting on the inspection must be completed in the Inspection and Service Log at the back of this user manual. Please take a copy of the blank log before first entry so you can continue the process. Logs must be archived, and will be requested if any warranty claims or injury occurs.

- a. Correct power supply
- b. With no load, test the Up, Down and Emergency Stop buttons.
- c. Normal motor performance including speed.
- d. No excessive or abnormal noise.
- e. Inspect the hook for damage, deformation or cracks.
- f. Bottom hook safety latch is functioning correctly and closes fully.
- g. Correct function of moving and turning parts and brake.
- h. No obvious worn, damaged or defected parts.
- i. Inspect the Steel Lifting Cable for an damage including broken wires, nicks, gouges, corrosion and distortion. Check for correct lubrication.
- j. Check that the cable is wound correctly on the drum as per the diagram below.
- k. Inspect the rating label and ensure it is displaying the specifications and ratings clearly and legible.
- l. Inspect the power lead and the pendant control leads for damage.
- m. Check that all bolts and nuts are secure and in good working order.



### 3 MONTH INSPECTIONS

- a. Check the carbon brushes for wear as per the instruction in section 9 (Maintenance) in this user manual. Clean out any carbon powder accumulation.
- b. Check the condition of the motor insulation.
- c. Check the condition of the Drum for any signs of wearing
- d. Lubricate the gears

### Repair and Maintenance Warning

If damage or malfunction is identified, or the hoist can not be operated normally or as it should, consult with the supplier or a qualified repairer. Users are not allowed to open, maintain or repair the hoist by themselves.

**Electrical work including carbon brush checking and replacement must only be done by a qualified electrician with all required certification and tickets to complete the relevant task.**



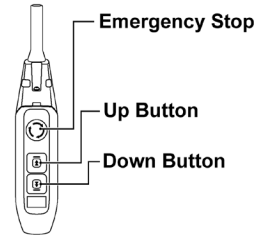
## 10. Operation

### LIFTING AND LOWERING LOADS:

To lift a load, press the UP button. The drum will rotate and lift the load.  
To lower a load, press the DOWN button. The drum will rotate and lower the load. When the button is released, the winch will stop operating.

### EMERGENCY STOP BUTTON:

If the emergency stop button is pressed, the hoist operation will immediately cease. Once the operator is sure that any potential problem with operations has been solved, the hoist can be put back into use. To do this, the emergency stop needs to be reset by a small turn clockwise to release the button. 'UP' and 'DOWN' control can then be resumed.

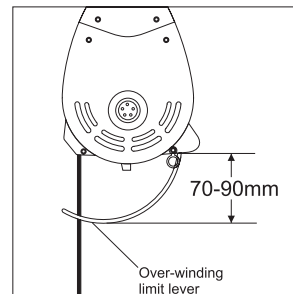


### BRAKING:

The braking mechanism combines a mechanical brake and an electronic generated brake. The brake distance from the time of initial braking to stopping should be within 1.5% of the rope length wound in 1 minute. The braking distance can be determined by measuring the amount of rope that is wound in 1 minute, multiplied by 1.5%. The rope speed when the winch is not under load is 1.5 - 1.8 times faster than when under load. The braking distance will be larger when not under load but still within 1.5% of the length of the rope.

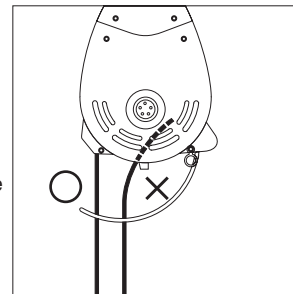
### OVERWIND LIMITER:

The purpose of the overwind limiter is to keep the drum from being overwound when raising. The hoist will automatically stop when the load hook's flat plate comes into contact with the overwind limit lever. 70-90mm should separate the bottom of the overwind limiter from the bottom of the hoist.



### REVERSE WINDING LIMITER:

This keeps the wire rope from being overwound and from being rewound onto the drum backwards at the bottom of the lift. Lowering will come to an automated stop when the rope moves from O to X and comes into contact with the reverse limitation bar and. In the event that this occurs, restore the wire rope by pressing the controller's "UP" button. Make sure there are always five wraps or more of wire rope on the drum to avoid this.



### CONTINUOUS RATING:

The winch's lifespan is contingent upon the load conditions and frequency of operation. Make that the winch is operated within its continuous rating duty cycle when working for extended periods of time. Continuous rating refers to the maximum quantity of usage that is permitted in a given hour, which is 25%, (15 minutes), or 300 starts.

## 11. Maintenance

Maintenance must only be done by a qualified and competent person.

**Electrical work including carbon brush replacement must only be done by a qualified electrician with all required certification and tickets to complete the relevant task.**

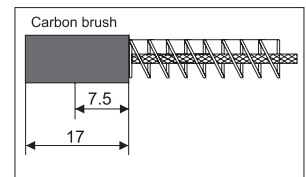
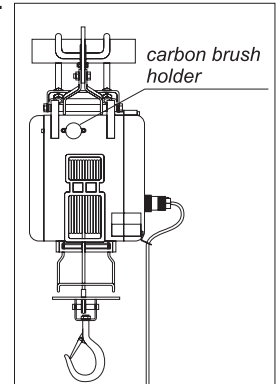
### CARBON BRUSH REPLACEMENT:

Periodically inspecting the carbon brushes is required.

In the event that the length is less than 7.5mm, the carbon brushes must be changed.

- Carefully replace carbon brushes by sliding them into carbon holders and then screwing brush caps into the holes.
- Check that the carbon brush holders are positioned correctly before tightening them.
- There are two pieces in a set of carbon brushes.

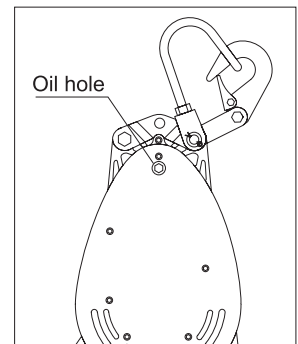
Replace both brushes at all times.



### OIL LUBRICATION:

The factory prelubricates the winch, eliminating the need for initial lubrication. The frequency of relubrication depends on the service provided. The recommended quantity and intervals for oil replenishment are as stated below:

Grease Type	Qty	Intervals
-Caltex Multifak EP -Penrite Indgrease 100LX EP2	250cc	1 Year

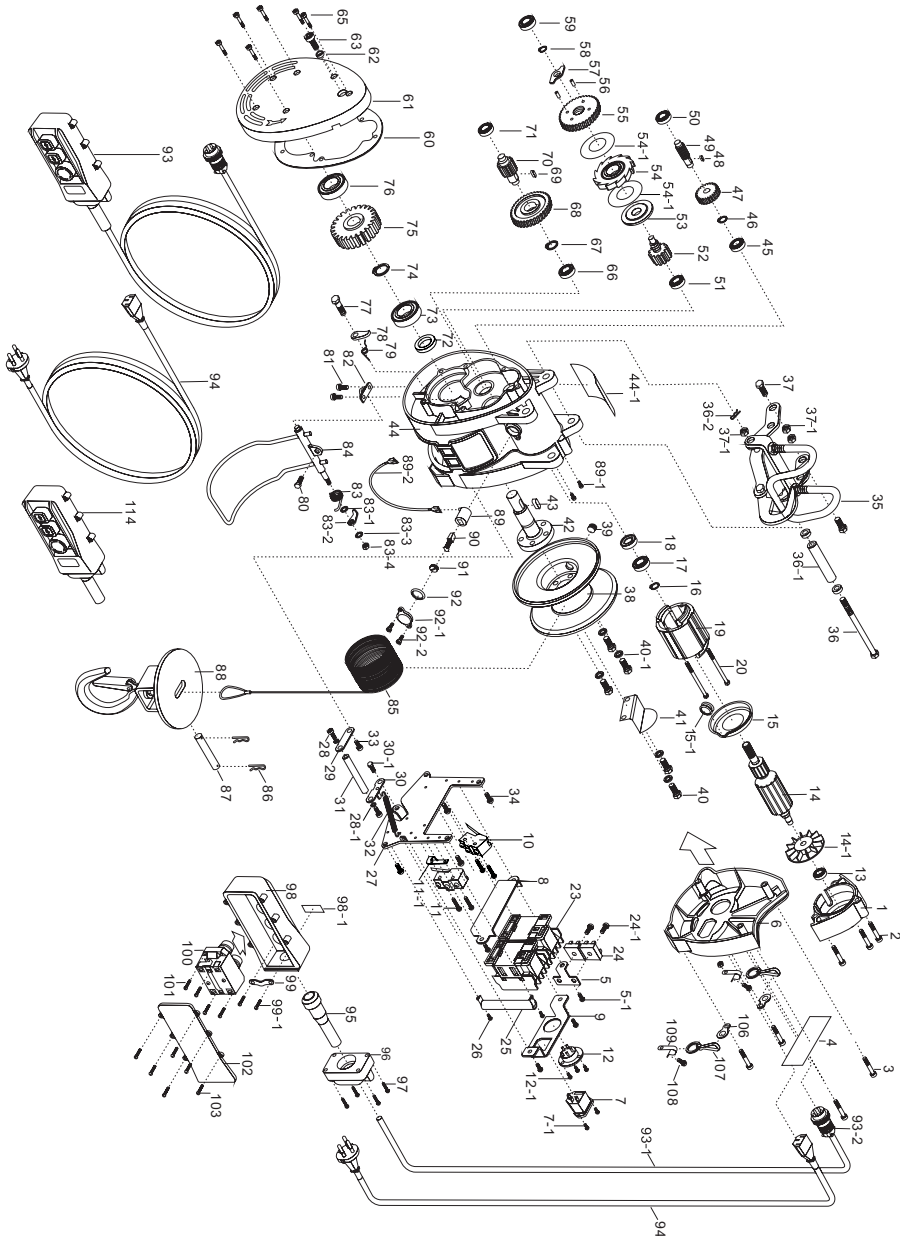




## 12. Parts List

No.	Parts Description	No.	Parts Description	No.	Parts Description
1	Motor Cover	36-2	R Pin	79	Pawl Spring
2	Socket Bolt	37	Hex Bolt	80	Screw
3	Socket Bolt	37-1	Nut	81	Screw
4	Label	38	Reel Drum	82	Upper Limit Holder
5	Rectifier Fixing Plate (M)	39	Wire Rope Fixing Screw	83	Spring
5-1	Screw (M)	40	Screw	83-1	Washer
6	Wiring Box Cover	40-1	Spring Washer	83-2	Upper Limit Push Rod
7	Power Cable Connector	41	Wire Rope Side Cover	83-3	Washer
7-1	Screw	42	Output Shaft	83-4	Nut
8	Contact Fixing Plate (M)	43	key	84	Upper Limit
9	Control Connector Fixing Plate	44	Main Body Base	85	Wire Rope
10	Micro Switch	44-1	Sticker	86	R Pin
11	Screw	45	Bearing	87	Wire Rope Fixing Pin
11-1	Fixing Plate	46	Circlip	88	Lower Hook Set
12	Switch Cable Connector	47	First Reduction Gear	89	Carbon Brush Base
12-1	Screw	48	Key	89-1	Screw
13	Bearing	49	First Reduction Pinion	89-2	Carbon Base Cable
14	Rotator	50	Bearing	90	Carbon Brush
14-1	Fan	51	Bearing	91	Carbon Brush Cover
15	Air Guiding Cover	52	Second Reduction Pinion	92	O Ring
15-1	Insulating Sleeve	53	Brake Disk	92-1	Protective Cap
16	Circlip	54	Ratchet Disc	92-2	Screw
17	Bearing	54-1	Copper Washer	93	Switch with Cable Set
18	Oil Seal	55	Second Reduction Gear	93-1	Switch Cable
19	Stator	56	Spring Pin	93-2	Switch Cable Connector
20	Socket Bolt	57	Rotary Stop Plate	94	Power Cable Set
21	Terminal Block(T)	58	Circlip	94-1	Power Cable With Plug
22	Screw (T)	59	Bearing	94-2	Power Cable Connector
23	Electromagnetic Contactor (M)	60	Gasket	95	Cable Support
24	Bridge Rectifier	61	Gear Cover	96	Cable Support Socket
24-1	Screw	62	Oil Seal	97	Screw
25	Resistor	63	Socket Bolt	98	Switch Box
26	Screw	65	Socket Bolt	98-1	Sticker
27	Wiring Rack	66	Bearing	99	Cable Fixing Plate
28	Screw	67	Circlip	99-1	Screw
28-1	Washer	68	Third Reduction Gear	100	Internal Switch Contact
29	Limit Lever Fixing Plate	69	Key	101	Screw
30	Limit Lever Fixing Plate	70	Third Reduction Pinion	102	Switch Cover
30-1	Screw	71	Bearing	103	Screw
31	Anti-reverse Reel Push Rod	72	Oil Seal	104	PLT Cover Protection(T)
32	Spring	73	Bearing	105	PLT Cover Protection(T)
33	Screw	74	Circlip	106	Twin -Hole Hook
34	Screw	75	Fourth Reduction Gear	107	Switch Cable Hanger
35	Upper Hook Set	76	Bearing	108	Screw
36	Hex Bolt	77	Pawl Screws	109	Cable Fixing Clip
36-1	Sleeve	78	Pawl	114	Switch without Cable

## 13. Exploded Drawing



Date	Notes	Auth Signature