RAILMAN™

Railway Track Maintenance Equipment Catalog 2017-18

70th Anniversary

ISHIDA MFG Co,Ltd.

ISO 9001
Quality management system International standard ISO 9001

Our Road to the Railway Business

In December 2016, we at Ishida MFG celebrate our 70th anniversary. Throughout our history, Ishida has designed, developed and produced many products, chiefly electric generators and motors. In recent years, however, we are finding our way back to our earliest roots, namely electric drills for railway work, building on our original strengths to supply an important global niche market for high-quality railway maintenance equipment.

RAILMAN product quality is backed up by the ISO9001 quality management system, which has been in place at Ishida since 2008, and we will continue to work for even better quality and customer satisfaction.

In Japan, we have sixteen locations working to fulfill end user needs in a timely fashion. Today, buoyed by government support of railway infrastructure exports, RAILMAN products are also being demonstrated and sold in Indonesia, Vietnam and other countries. Ishida is committed to building new partnerships and pioneering sales channels in neighboring Asian nations.

To further encourage end users to choose RAILMAN products, Ishida aims to lower costs, beginning with competitively priced materials and assembly-line efficiency. In addition, we strive to manufacture and deliver service parts as quickly as possible. To this end, Ishida is doings its best to study customer needs and provide products and services vital to maintain railways throughout the world.

We at Ishida appreciate the patronage of all of our customers and look forward to your feedback and continued support in the coming years.

Greetings from Ishida MFG Co., Ltd.

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ISO9001 Certification

Head Office and Kiryu Plant

This international quality management system standard aims to improve customer satisfaction through quality assurance and continuous quality-management improvements. The Ishida Head Office and Kiryu Plant are ISO9001 certified. Our mission is to utilize this system continuously and to its fullest to provide our customers with products of ever better quality.

ISHIDA MFG CO., LTD.

CERTIFICATE

Certificate No.: QC08J0034

ISO 9001:2008・JIS Q 9001:2008

Powerful Tie Tamper

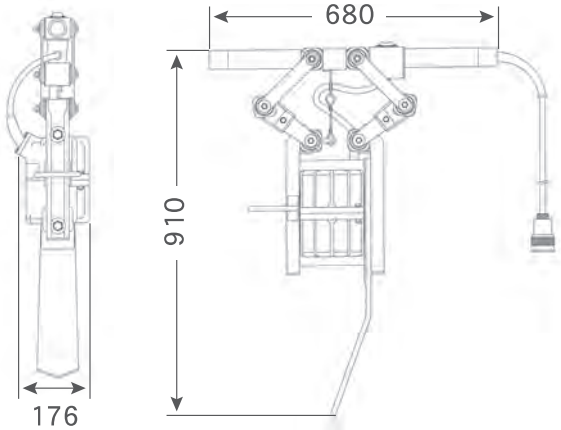
IT-450E

Made in JAPAN

RoHS COMPLIANT

**RAILMAN's Next Generation Tie Tamper IT-450E.
Built-in short circuit prevention function, Smart Handle to cut vibrations and reduce fatigue, shared 50/60Hz specs, improved service (repairs, maintenance inspections), and quick response to requests for voltage specs for products for export.**

measurements



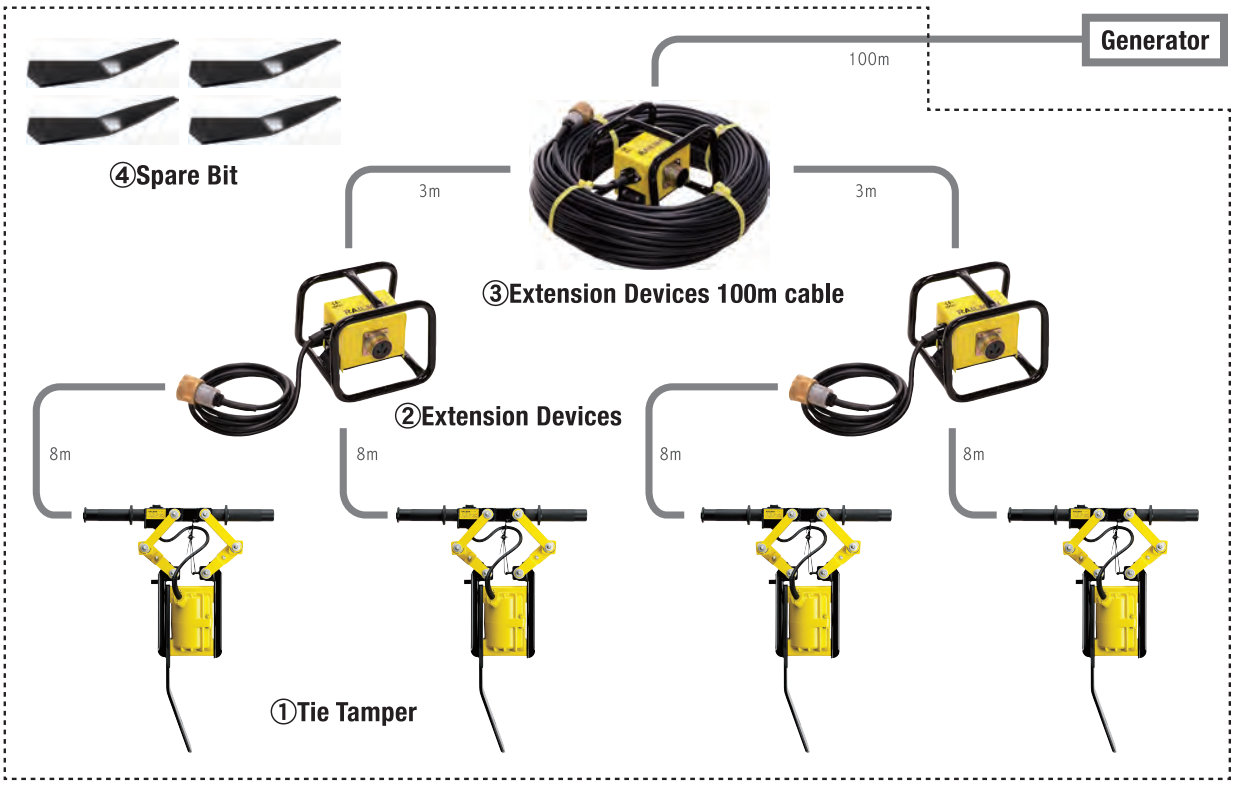
Standard cable length 8 m

Product Specs

Model	IT-450E
Input voltage	3-phase electric power 200-220V
Rated current	2A
Rated output	450W (520W-220V)
Input frequency	50/60Hz
No. vibrations	2800/3400 min-1
Tamping capacity	1tie/20-30 seconds
3-coordinate composite value	8.5 m/s2
Weight	29 kg (not including cable)
Consecutive use time	30 minutes

• Only machinery equipped with standard bits have protective isolation.

Tie Tamper Set



① Tie Tamper ×4

② Extension Devices ×2

③ Extension Devices 100m cable ×1

④ Spare Bit ×4

IT-450E set Made in JAPAN

Option

Made with durable materials for a long service life!

Long Bits

※ Ask to have long bits pre-installed when placing orders for tie tampers.

670mm

Made in JAPAN

700mm

Made in JAPAN

720mm

Made in JAPAN

Handle

Made in JAPAN

※ Request options parts when placing orders for tie tampers.

New!

Short-circuit-proof tie tamper

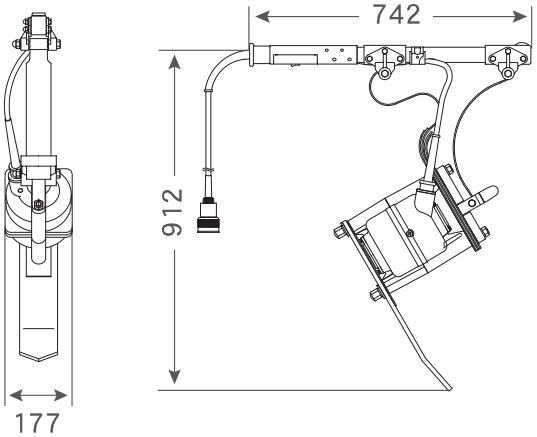
ST-200B

Made in JAPAN

RoHS COMPLIANT

RAILMAN's Next Generation Tie Tamper ST-200B.
Features a built-in short circuit prevention function and durable switches with long service lives.
Shared 50/60Hz specs, improved maintenance service, and quick response to requests for voltage specs for products for export.

measurements

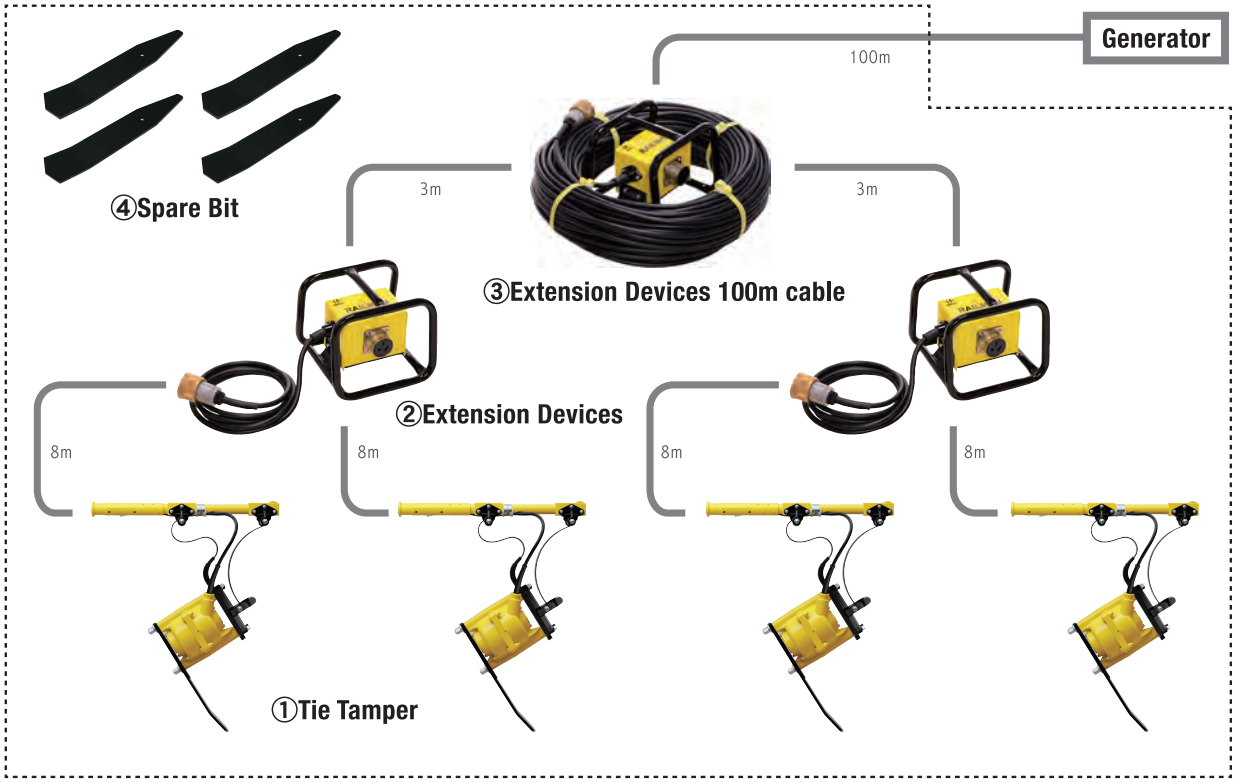


Standard cable length 8 m

Product Specs

Model	ST-200B
Input voltage	3-phase electric power 200-220V
Rated current	1A
Rated output	200W
Input frequency	50/60Hz
No. vibrations	2800/3400 min-1
Tamping capacity	1tie/40-60 seconds
3-coordinate composite value	8.5 m/s2
Weight	28 kg (not including cable)

Tie Tamper Set



① Tie Tamper ×4

② Extension Devices ×2

③ Extension Devices 100m cable ×1

④ Spare Bit ×4

ST-200B set Made in JAPAN RoHS COMPLIANT

Option

Long bit

580mm

Made in JAPAN RoHS COMPLIANT

Connector assembly

Made in JAPAN RoHS COMPLIANT

Connector plug

Made in JAPAN RoHS COMPLIANT

※ Ask to have long bits pre-installed when placing orders for tie tampers.

Special Order

POWER UP

New!

Rechargeable Cordless Tie Tamper

RT-200

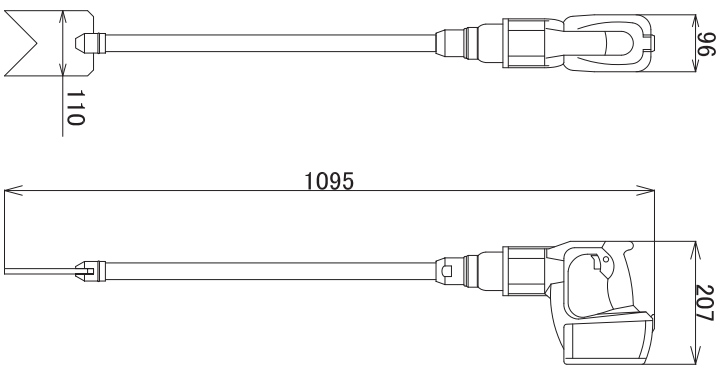
Made in JAPAN

RoHS COMPLIANT

Comes with
- Battery case
- Recharger
- 2 batteries

For MTT trailing after ballast distribution and tamping inside branch circuit.
One battery provides 25 minutes of continuous use.
An extra battery is included with the cordless tamper.
Two batteries supply 40 to 50 minutes of tamping.

measurements



Product Specs

Model	RT-200
Recharging time	1 hour (complete recharge)
Weight	6.5 kg
No. vibrations	200Hz

Model	R1840
Type	Lithium-ion battery
Voltage	DC 18V
Measurements	155 mm x 85 mm x 72 mm
Weight	0.8 kg

New!

Power Generator for Hand Tie Tamper

RG-3500 (50Hz)

RG-4100 (60Hz)

Made in JAPAN

RoHS COMPLIANT

Special Order

New!

Power Generator for Hand Tie Tamper

ET4500 (50Hz)

Made in JAPAN

RoHS COMPLIANT

Air Cleaner standard equipment and, low price.
Railway Track Maintenance for Southeast Asia.
More Power Generator.

Product Specs

Model		RG-3500		RG-4100		ET4500	
Generator	Phase	3	single	3	single	3	single
	Maximum AC Output (kVA)	3.5	1.16	4.1	1.35	4.0	0.5
	Voltage (V)	200	115	200	115	200	100
	AMP (A)	10.1	10.1	11.8	11.8	11.5	5
	Frequency (Hz)	50		60		50	
	Power factor	0.8	1.0	0.8	1.0	0.8	1.0
	Revolution (rpm)	3,000		3,600		3,000	
	excitation	Self-excitation				2-pole magnetic rotation type	
	Overcurrent protection	No fuse breaker				No fuse breaker	
Engine	Model	SUBARU EX27D				HONDA	
	Power (kW/min-1)	4.4/3,000		5.1/3,600		–	
	Displacement	265 ml				389 ㎤	
	Starting System	Recoil starter				Recoil starter	
	Fuel	Gasoline				Gasoline	
	Tank capacity (ml)	12.8				13.5	
	Binding mode	Direct connection				Direct connection	
Continuous rated operation time (h)		5.5		4.5		5.4	
Dimensions L × W × H mm		650×490×735				650×490×735	
Noise Level [dB(A)/7m]		68		71		98.4[dB(A)/LWA]	
Dry Weight (kg)		75				77	

New!

Rail Rust Remover (belt drive)

RG-120

Made in JAPAN

RoHS COMPLIANT

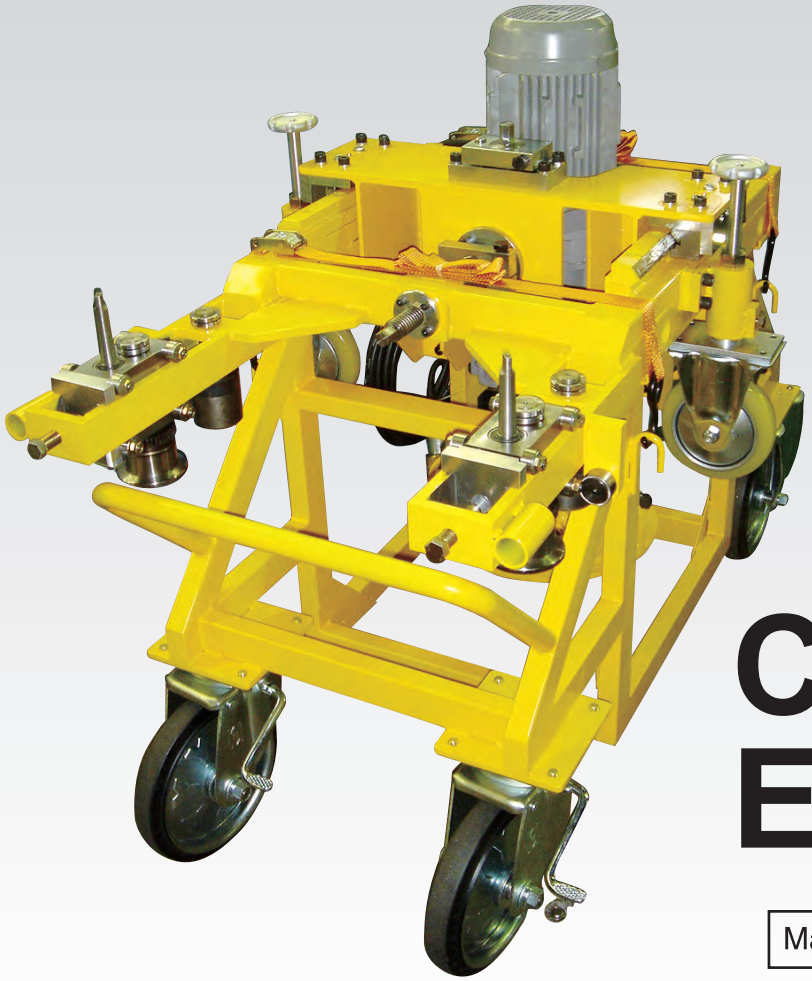
Speedy removal of rust from new rails.
With the belt adjustment rollers, the entire belt can be used.
Operator can run the device for a longer time,
because less vibration means less fatigue.
Low-priced belt sanders available (500-meters use each).

Replacement belt 10 per box
(Compatible with NIBG-40)
Belt width 100 mm
(rough 40#/moderately rough 60#/not rough 80#)

RoHS COMPLIANT

Product Specs

Model	RG-120
Engine model	HONDA GX 120
Engine displacement	188 cc
Max. output	4.0/400 PS/rpm
Max. torque	0.75/2500 kgm/rpm
Fuel used	Unleaded gasoline
Fuel tank capacity	2.5 liters
Weight (dry weight)	45 kg



Special Order

Designed to meet the many customer requests we've received.

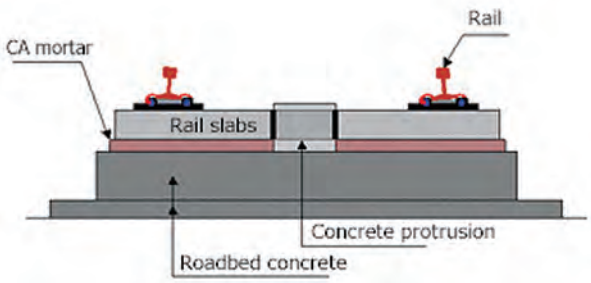
CA Mortar Excavator

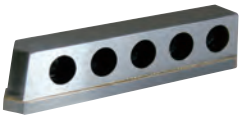
Made in JAPAN

RoHS COMPLIANT

This machine is used to dig up and safely remove deteriorated concrete and asphalt when repairing ballastless track.

The welded construction is made with gear teeth to operate on light power. The rail-grabbing part, which holds the long operation handles that prevent the operator from having to work in difficult positions, and the opposite side of the rail-grabbing part have a vertical-motion function that make it possible to do parallel frame adjustments and support the weight of the equipment. RAILMAN has added castors for simpler horizontal movement during excavation.





Standard replacement blade

RoHS COMPLIANT

Thin blade

RoHS COMPLIANT

Thin blade holder

RoHS COMPLIANT

Product Specs

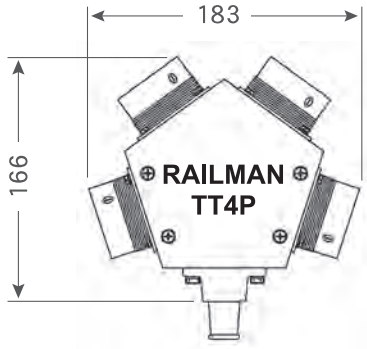
Model	CA Mortar Excavator
Electric power	3-phase totally enclosed fan-cooled induction motor with end cover
Output	1.5kW
Total length	1100mm
Total width	780mm
Total height	800mm
Weight	Body: 120 kg Transport car: 50 kg
Voltage	3-phase alternating current 200-220V
Cutting depth	Standard 100 mm Standard blade thickness 34 mm
Excavation capacity	Approx. 1.7 m per minute

Short-circuit-proof Multi-outlet Extension Device

TT4P

Made in JAPAN

measurements



Product Specs

Model	TT4P
Outlets	4
Cable length	3m
Rated current	15A
Rated voltage	3-phase electric power 200-220V
IP Code	IP 20 compliant
Ambient temperature	-30°C to 40°C
Relevant standard	JIS8282-1:2010
Use environments	Indoors and outdoors
Weight	2.6 kg

TT2S

Made in JAPAN

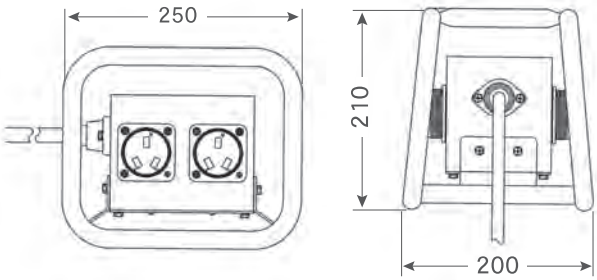
TT4S

Made in JAPAN

TT2S100

Made in JAPAN

measurements



Product Specs

Model	TT4S	TT2S	TT2S100
Power outlets	4	2	2
Cable length	3m	3m	100m
Rated current	15A		
Rated voltage	3-phase electric power 200-220V		
IP Code	IP 20 compliant		
Ambient temperature	-30°C to 40°C		
Relevant standard	JIS8282-1:2010		
Use environment	Indoors and outdoors		

200V

Short-circuit-proof

New!

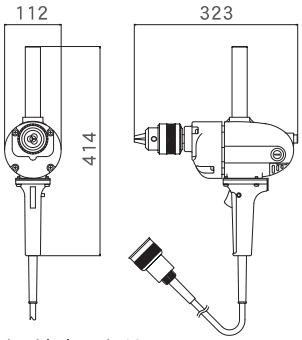
200V Electric Drill

RD-720

Made in JAPAN

RoHS COMPLIANT

measurements



Standard cable length 10 m

Product Specs

Model		RD-720
Capacity	Wood	36m/m
	Metal	16m/m
Rated revolutions		800rmp±15%
Power source		Monophase 200V 50/60Hz
Rated current		4A
Electricity consumption		720W
Consecutive use		30min
Cable length		10m (comes with connector plug)
Total length		415mm
Weight		About 5 kg

※ Does not come with drill attachments

200V

Double insulation

New!

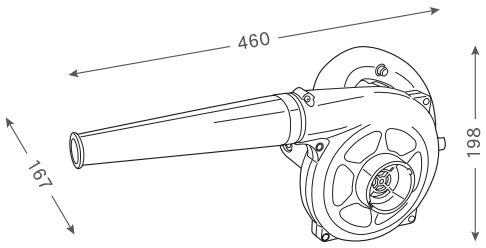
200V Electric Blower

RB-700

Made in JAPAN

RoHS COMPLIANT

measurements



Product Specs

Model	RB-700
Power source	Monophase 200V 50/60Hz
Airflow volume	3.5㎥/min.
Wind pressure	5.5kPa
Rated current	2.5A
Output	700W
Cable length	10 m (comes with connector plug)
Weight	1.9 kg (not including cable)

※ Does not come with trash collection bag

New!

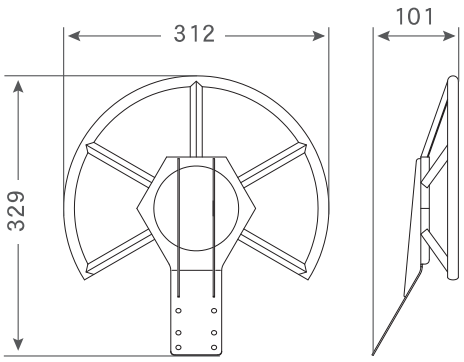
Cable Guard

RC-300

Made in JAPAN

RoHS COMPLIANT

measurements



Product Specs

Model	RC-300
Max. replacement blade diameter	255mm
Weight	570g

※ Replacement blade diameters cannot be larger than 255 mm.

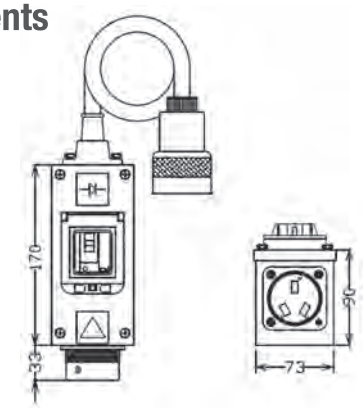
Adapter-type Earth-leakage Circuit Breaker

RB20

Made in JAPAN

RoHS COMPLIANT

measurements

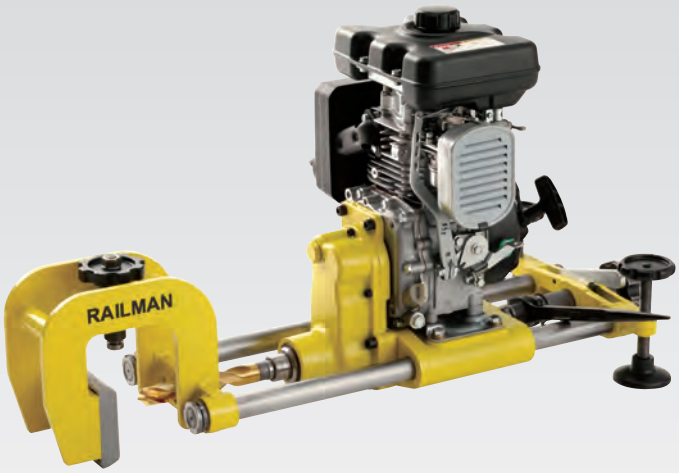


Product Specs

Model	RB20
Rated voltage	100-440V
Rated current	20A
Electrical leakage	30mA
Phase conversion	3
Earth	Built-in short-circuit-proof diode
Max. motion time	0.1 second
Current type	AC
Standard cable	2 m
Trip button	Standard equipment
Service life	10,000 times, mechanically 6,000 times, electrically
Recommended replacement	After 1-3 years of onsite use
Weight	2 kg

※ Recommended replacement referenced from JEMA regulation JEM-TR 142.
※ Please contact RAILMAN to ask about cables other than the standard length.

Special Order



Electric Rail Hole Puncher

IDL-100

Made in JAPAN

RoHS COMPLIANT

Enging-powered Rail Hole Puncher

IEL-140

Made in JAPAN

RoHS COMPLIANT

Punches holes in rails simply and speedily!
Slides make these devices easy to operate.
ISHIDA rail hole punchers are popular throughout the world, including developing nations.

Product Specs

Model	IDL-100 (electric)
Electric power	3-phase induction motor Rated voltage: 200V (50Hz) 220V (60Hz) Rated power: 200V (50Hz) 220V (60Hz) Rated revolutions: 1500rpm (50Hz) 1800rpm (60Hz)
Total length	Minimum 802 mm
Total height	275mm
Weight	About 30 kg
Drill revolutions	120rpm (50Hz) 145rpm (60Hz)
Punching capacity	Maximum drill size Ø 32 mm
Total width	340mm
Cab tire cable	3m

Product Specs

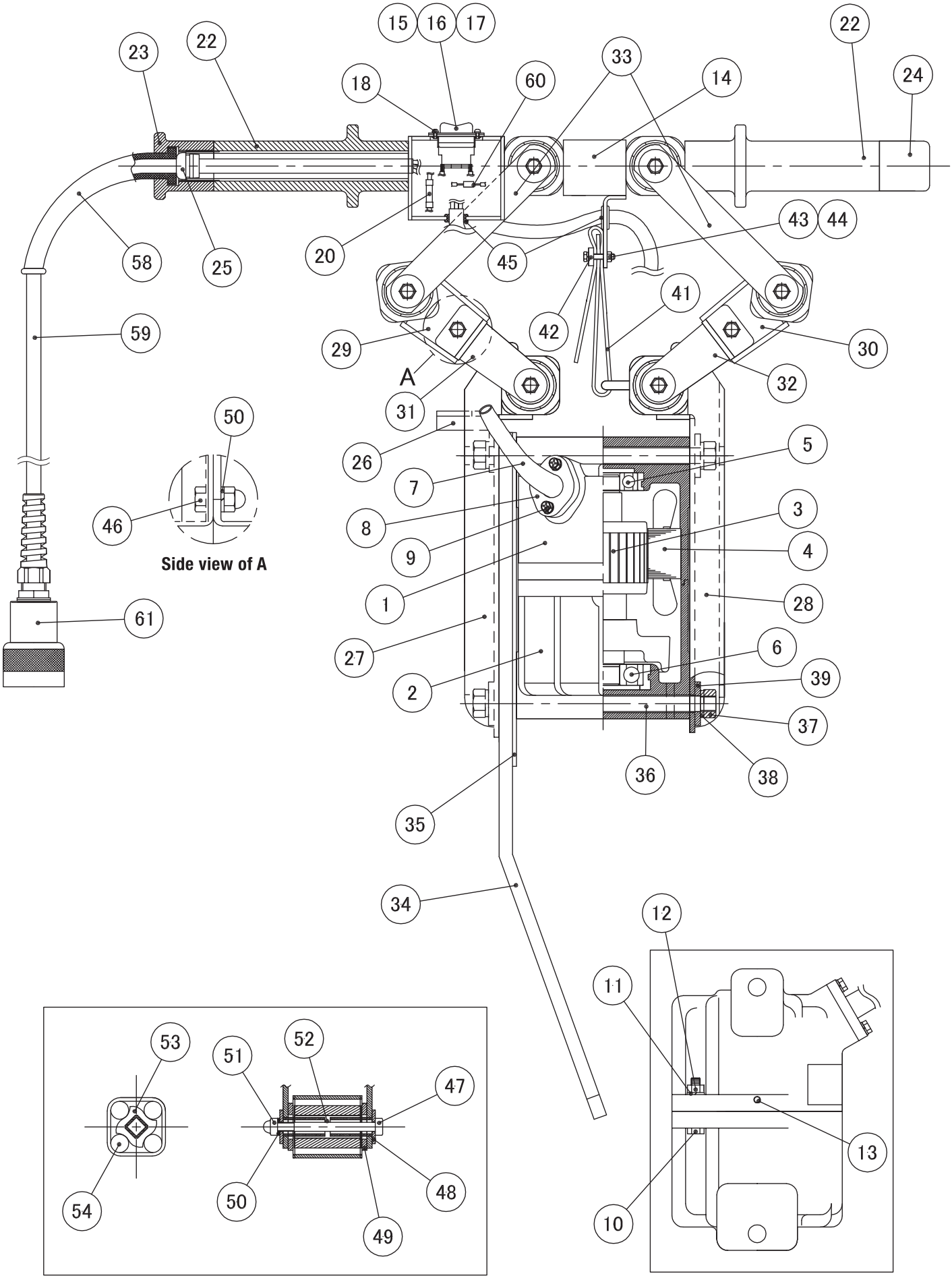
Model	IEL-140 (engine powered)
Electric power	4-cycle air-cooled single cylinder gasoline engine Continuous rated output: 1.4PS/3600rpm Maximum output: 2PS/4200rpm
Total length	Minimum 802 mm
Total height	275mm
Weight	About 34 kg
Drill revolutions	120rpm (50Hz) 145rpm (60Hz)
Punching capacity	Maximum drill size Ø 32 mm
Total width	340mm

Replacement Parts List

IT-450E

ST-200B

Parts Diagram IT-450E



Side view of A

Tamper detail

Motor side diagram

160912–3

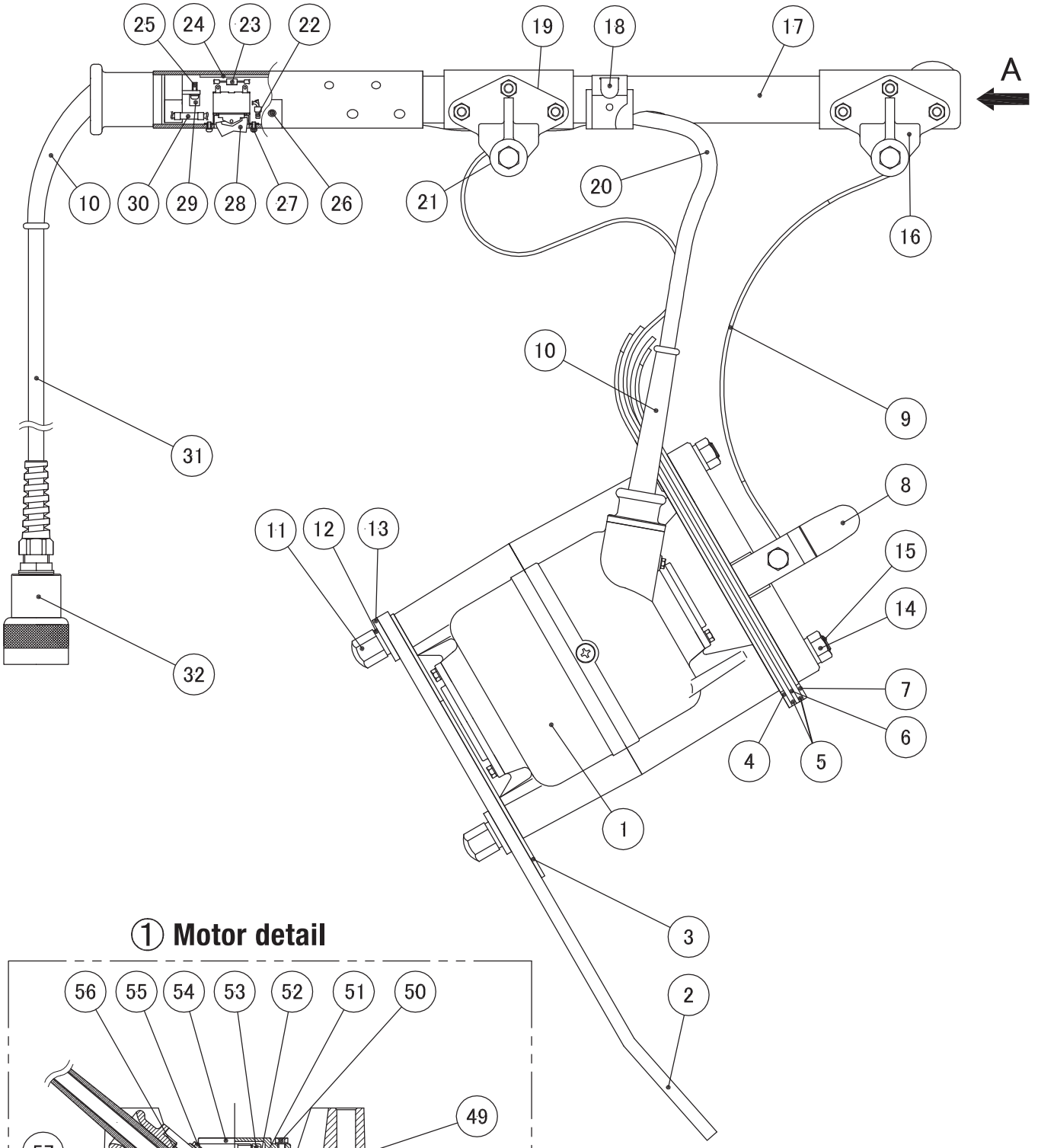
IT-450E Parts List

Part number	Part name	
1	Motor case A	
2	Motor case B	
3	Rotor Assy	
4	Stator Assy	
5	Bearing 6206ZZ	
6	Bearing 6306ZZ	
7	Cord reinforcement rubber (for motor)	
8	Cord clamp	
9	Upset head bolt	(50 piece)
10	Bolt	(50 piece)
11	M10 spring washer	(100 piece)
12	M10 nut	(50 piece)
13	Hexagon socket set screw	(5 piece)
14	Handle	
15	Switch	
16	Switch rubber cover	(5 piece)
17	Stiffening plate for switch rubber cover	(5 piece)
18	Pan head screw with washer	(100 piece)
20	Insulated sleeve TMVB-2	(10 piece)
22	Handle grip	
23	End 1	
24	End 2	
25	Relief bushing	(5 piece)
26	Stopper	
27	Arm 1 (Right) Welded product	
28	Arm 1 (Left) Welded product	
29	Arm 2 (Right) Welded product	
30	Arm 2 (Left) Welded product	

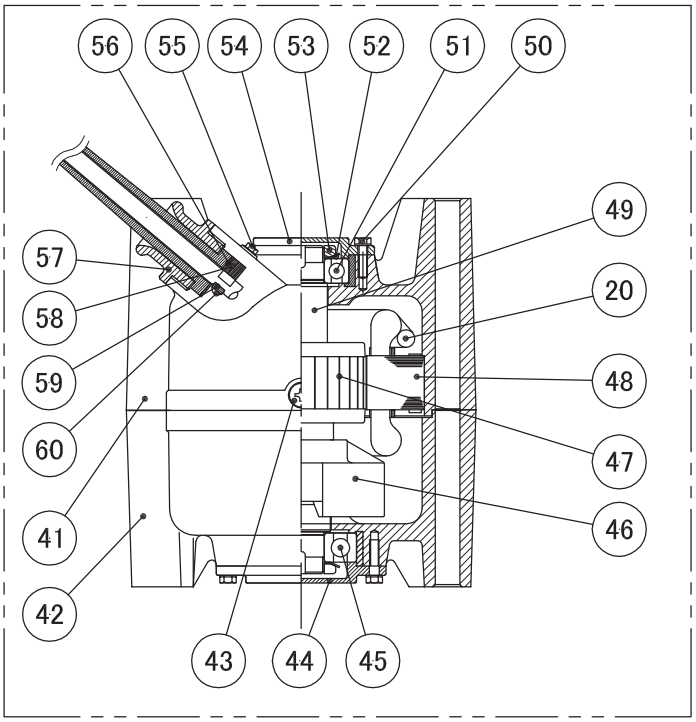
IT-450E Parts List

Part number	Part name
31	Arm 3 (Right) Welded product
32	Arm 3 (Left) Welded product
33	Arm 4 (Both right and left) Welded product
34	Beater (Standard type 635 mm)
35	Keep plate for beater
36	Shaft for fixing motor
37	M14 nut (5 piece)
38	M14 spring washer (10 piece)
39	M14 washer (10 piece)
41	Belt
42	Belt clamp
43	Upset head bolt (50 piece)
44	M5 nut (100 piece)
45	Grommet (5 piece)
46	Hexagon bolt (50 piece)
47	Hexagon bolt (valid 22) (10 piece)
48	M8 washer (special) (100 piece)
49	Plastic washer (5 piece)
50	M8 spring washer (100 piece)
51	M8 cap nut (10 piece)
52	Vinyl tube (5 metres)
53	Damper inner
54	Rubber (100 piece)
58	Cord reinforcement rubber (for 2.0 ㎟ 2 cord)
59	Cabtire cord (8 metres)
-	Motor
60	Diode
61	Connector assembly

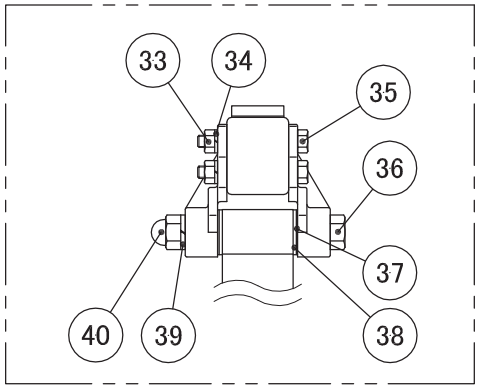
Parts Diagram ST-200B



① Motor detail



Side view of A



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ST-200B Parts List

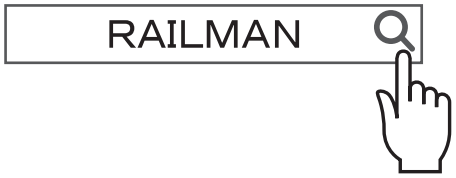
Part number	Part name	
1	Motor	
2	Beater (Standard)	
3	Pressing plate	
4	Leaf spring 1	
5	Rubber plate 1	
6	Main spring	
7	Leaf spring 2	
8	Mounting plate	
9	Support spring	
10	Cord reinforcement rubber	
11	Special nut	(5 piece)
12	Spring washer	(10 piece)
13	Special plain washer	(10 piece)
14	Nut	(5 piece)
15	Fixed shaft	
16	Spring hanger mounting	
17	Handle Assy	
18	Band for cord	(5 piece)
19	Keep plate for cord keep plate	(5 piece)
20	Cabtire cord (1.25 ㎟ 4 core)	(1.5 metres)
21	Shock absorbing rubber washer	(10 piece)
22	Insulated closed end connector	(10 piece)
23	Diode	
24	Insulating plate	(5 piece)
25	(+) Pan head machine screw	(50 piece)
26	Hexagon socket bolt	(50 piece)
27	(+) Pan head machine screw	(50 piece)
28	Switch	
29	Cord mounting bracket	
30	Insulated sleeve TMVB-2	(10 piece)

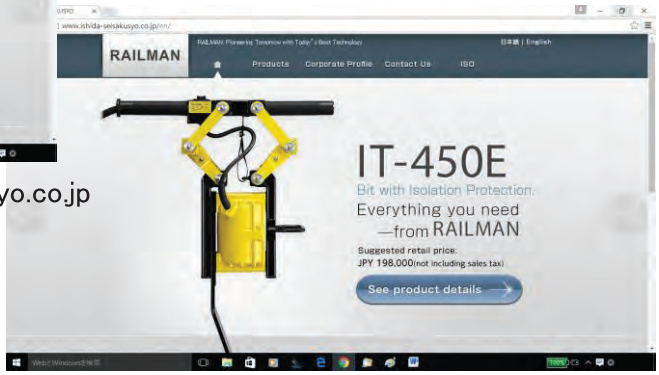
ST-200B Parts List

Part number	Part name	
31	Cabtire cord (1.25 ㎟ 4 core)	(8.5 metres)
32	Connector assembly	
33	Nut	(5 piece)
34	Spring washer	(50 piece)
35	Hexagon bolt	(10 piece)
36	Support spring mounting bolt	
37	Shock absorbing rubber washer	(10 piece)
38	Shock absorbing rubber	(10 piece)
39	Spring washer	(50 piece)
40	Cap nut	(10 piece)
41	Motor case A	
42	Motor case B	
43	Flat head machine screw	(50 piece)
44	Metal holder	
45	Bearing	
46	Fixed weight	
47	Rotor core	
48	Stator Assy	
49	Rotor shaft	
50	Upset head bolt	(50 piece)
51	Bearing	
52	Washer for bearing	
53	Nut for bearing	
54	Metal holder	
55	Upset head bolt	(50 piece)
56	Plain washer	
57	Reinforcement rubber clamp	
58	Cord clamp	
59	Cord mounting	
60	(+) Pan head machine screw	(50 piece)

Visit our website for more details on RAILMAN products.

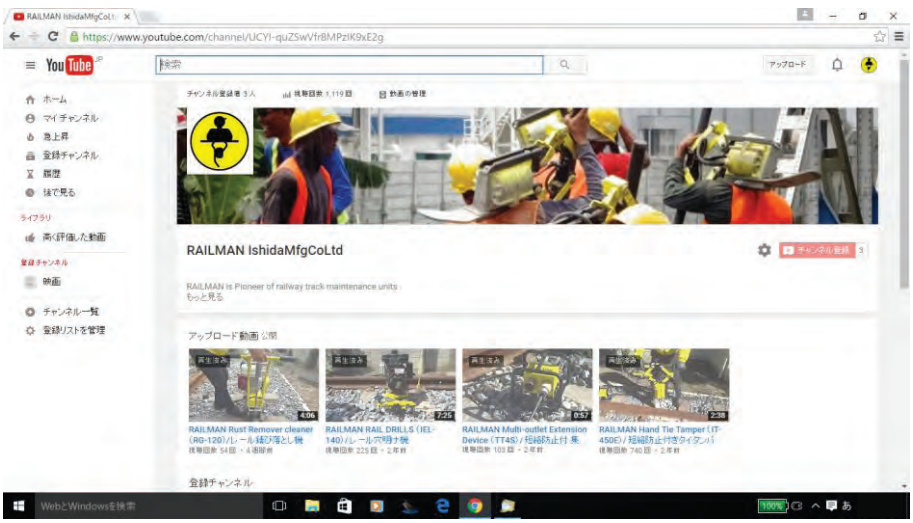
Japanese website http://www.ishida-seisakusyo.co.jp





English-language website http//www.ishida-seisakusyo.co.jp/en/

Watch product demonstrations on YouTube.



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Sales Agent

Please be advised that product specifications may change without notice.