

BACK



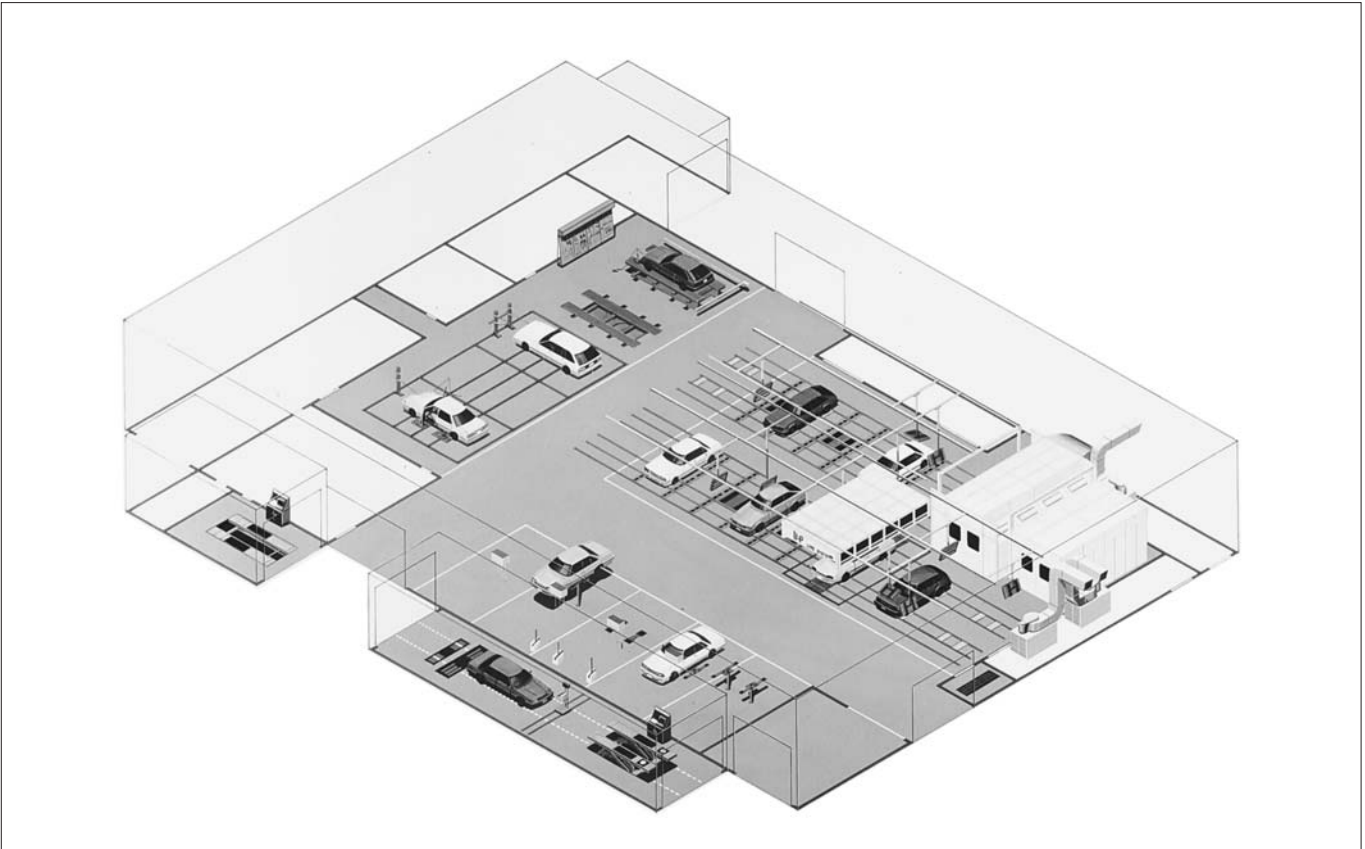
BODY-FRAME REPAIR, WELDING AND PAINTING EQUIPMENT



BODY REPAIR & PAINTING LINE SYSTEM

This is an efficient system which realizes 8-hour body and painting works.

The dividing works and rationalization are accomplished with works from body work to painting work processed on conveyors.



- **Improvement of productivity**

This is a body and painting line system where useless works have been eliminated thoroughly.

The repair vehicle is automatically moved.

Tools and repair equipment are provided exclusively for each individual stall.

Heavy objects are hoisted electrically.

As regards the preparatory time of three elements (preparatory time, net working time and margin time), this system makes it possible to keep the preparatory time at a minimum level.

Hence, it can be said that this is a truly efficient system wherein the net working time has been improved to the fullest extent.

- **Installation space**

The passages for repair vehicles constitute the working spaces.

Compared with the conventional fixed layout, it is possible to reduce the required shop space by the passage sections (about 30%).

- **Labor cost**

The work contents can be simplified by assigning an exclusive worker for each process.

This arrangement will make possible the employment of apprentices and part-time workers.

Consequently, you can perform works of four to five times greater volume than the hitherto employed layout, while keeping the number of skilled workers at a minimum level.

- **Improvement of quality of finished works**

Each process is carried out by the same person repeatedly. Hence, the quality of finished works will become uniformed.

Even if comeback jobs should occur, these will be directly fed back to the person who performed the work, thereby clarifying the assigned job for which each person is responsible.

As a result, the occurrence of claims can be avoided in advance.

The system prevents frying of powdered dust, thereby improving the quality of painting works.

- **Others**

A set of peripheral tools are provided for each stall.

If you adopt this streamlined system, there will be many other merits, such as prevention of loss of tools and saving.

BODY REPAIR & PAINTING LINE SYSTEM

• Slide Pallet (Device for vehicle moving)



This pallet which are mounted on vehicle can move the vehicle horizontally, so it can reduce the working space. (about 30%)

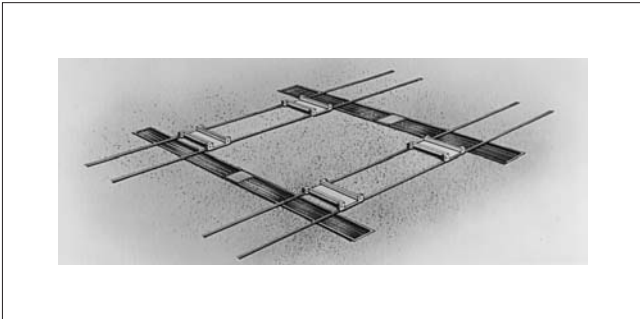
• Slide Pallet

Model	Pallet	Method
SP-2S	For Single Tire	(Return Type) Slide pallet are returned to the original position
SP-2W	For Double Tire	
SP-3S	For Single Tire	(Short Type) To be able to meet the wheel base size.
SP-3W	For Double Tire	

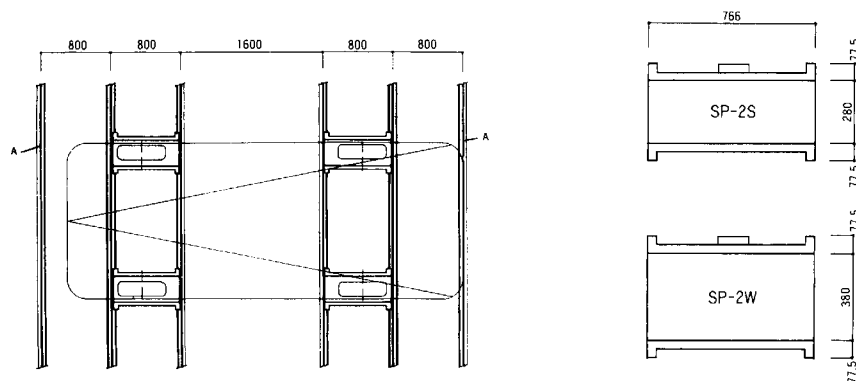
• Rail

Model	Applicable Pallet
SP-2R SP-3R	SP-2 Type SP-3 Type

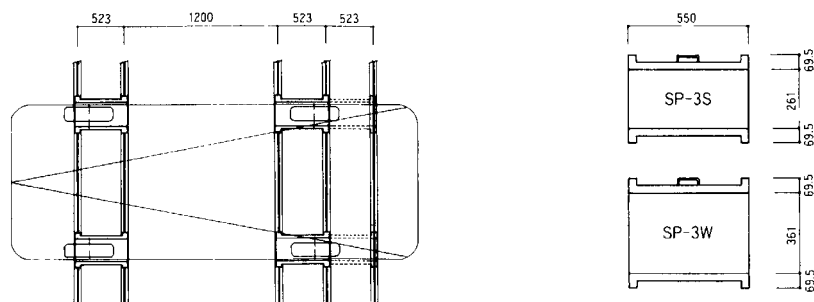
Standard rail length: 4m



Return Type (Slide pallet are returned to the original position) to be used for outside rail (A).)

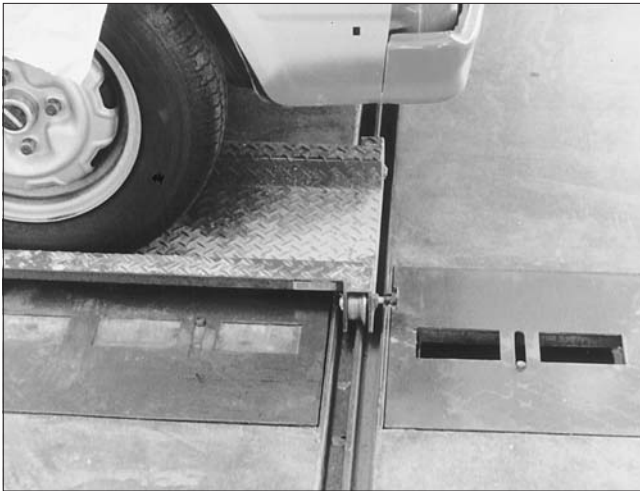


Short Type (It can meet the length of wheel base to be used for outside rail.)



BODY REPAIR & PAINTING LINE SYSTEM

• Dust Collector



This is dust collection system for Body & Paint Workshop. This dust collection is capable of dust collection from floor pit which are located in surface preparation stall.

Order Procedure

1. To select MB-A type or MB-B type.
2. To select the motor capacity (5.5kW or 7.5kW).
3. To select the direction of flange.

MB-A-55-SR

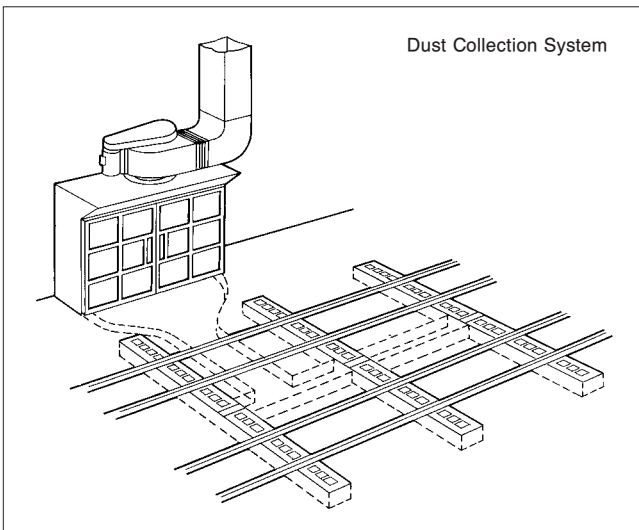
↓
Type of dust collector

↓
Motor capacity 5.5kW
SCO-4

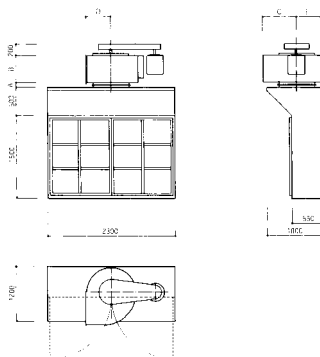
↓
The direction of flange

• Motor Specification

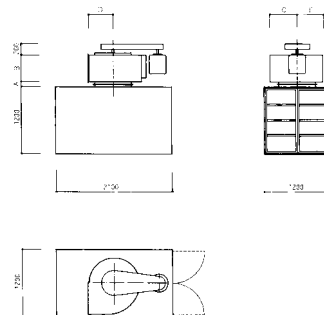
Fan Size		SCO-4	SCO4 ¹ / ₂
Motor	kW	5.5	7.5
Air Volume	m ³ /m	300	360
Heat Pressure	mmAq	40	45
A		150	150
B		490	550
C		610	685
D		430	490
E		460	500
Applicable Stall		2 – 4	3 – 6
Flange Size		490 × 610	550 × 685
Exhaust Duct Size		600 × 800	700 × 900



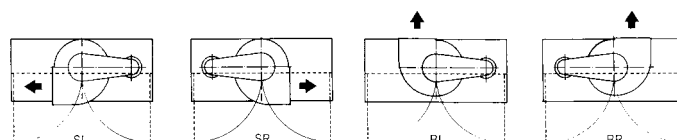
MB-A Type



MB-B Type



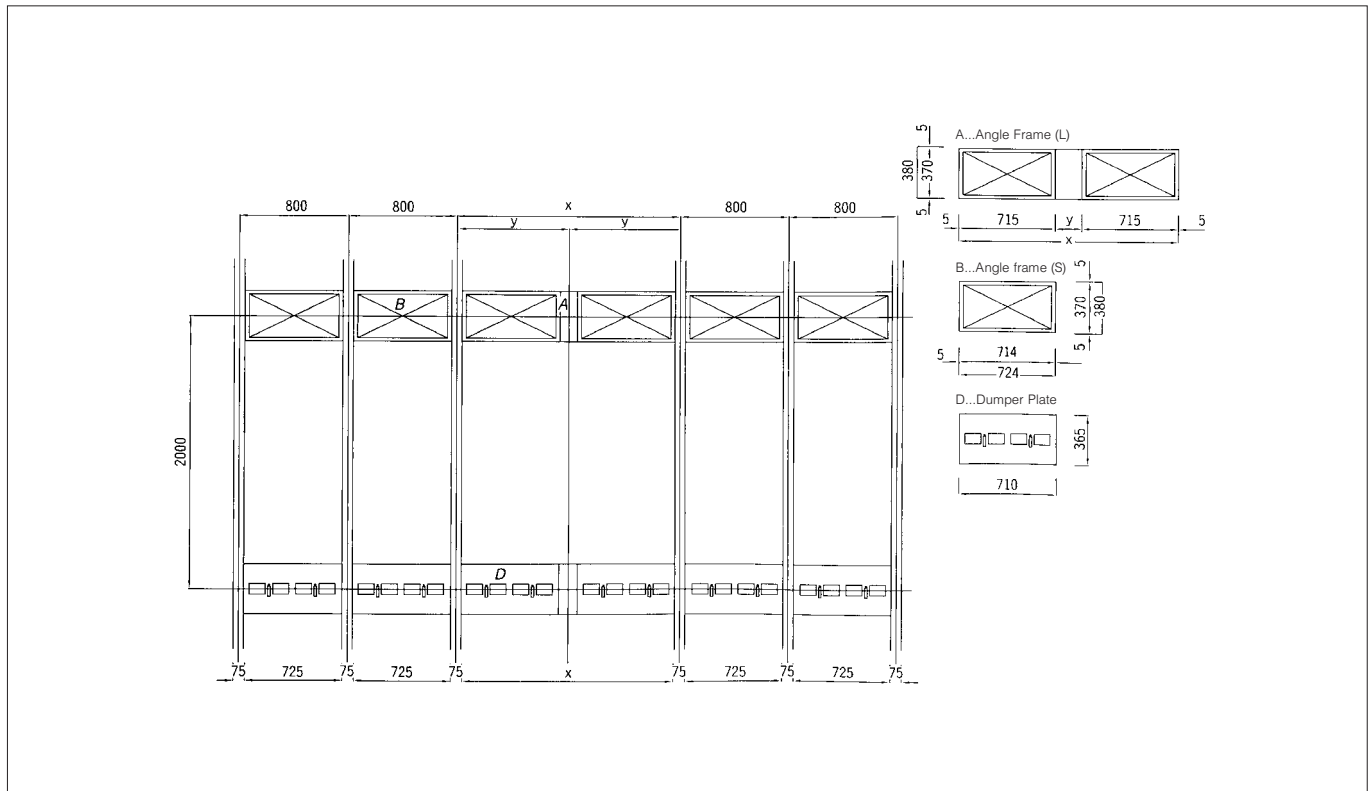
The direction of flange



BODY REPAIR & PAINTING LINE SYSTEM

• Dumper Plate Set

This dumper plate is used for dust collection of air sanding for surface preparation stall.



Model	Contents
MB-BS	A: Angle Frame (L) 1pc. B: Angle Frame (S) 4pcs. D: Dumper Plate 6pcs. Anchor Bolt 12pcs.

• Spray Cabinet



This spray cabinet is exhaust fan of spray mist for color matching of test piece.

Model	SK-40U
Dimensions (W × L × H) mm	880 × 700 × 1,770
Spray Area Size (W × H) mm	800 × 1,000
Tool Cabinet Size (W × H × L) mm	800 × 680 × 620
Exhaust Fan	Motor (# 1½ × 0.4kW)
Exhaust Filter	25t × 500 × 450 × 2pcs.

Model	CB-1Z
Fan	350W 1ph
Dimensions mm	W 650 × L 661 × H 1,440
Accessory	Flex Duct 1m
Color	Green, Blue, Gray

“NOVA VERTA” SPRAY BOOTH

This is a plain type spray booth.

- Multi-purpose spray room which can be used for many purposes, including sanding, surfacer and complete painting.
- Air flow in an up-and-down direction. Adequate air flow speed. The booth interior is maintained at a positive pressure.

- A wide filter area (equipped with primary and secondary filters) assures uniformed air flow speed.
- The required installation space is small. It is possible to install this booth even at a place where the ceiling is comparatively low.
- The installation work is simple. The filter replacement can be performed readily.

PRESTIGE



		Prestige 6.6 Pit Style	Prestige 6.6 Raised Metal Base
External Dimensions	mm	6,800 × 4,080 × 3,125	6,800 × 4,080 × 3,400
Internal Dimensions	mm	6,600 × 3,960 × 2,650	6,600 × 3,960 × 2,650
Access Door	mm	3,200 × 2,650 4 Leaves, 4 Windows	
Lighting		10 Lighting Fixtures in Upper Part with 4 Neon Tubes each 10 Lighting Fixtures in the Lower Part with 4 Neon Tubes each Total 80 Neon Tubes	
Panel		Double Skin Panel 60mm Thickness Fiberglass Material In-between	

Various dimensions, options are available.

CONQUER



		Conquer Poly 6.6 Pit Style	Conquer Poly 6.6 Raised Metal Base
External Dimensions	mm	6,800 × 4,080 × 3,125	6,800 × 4,080 × 3,400
Internal Dimensions	mm	6,600 × 4,000 × 2,650	6,600 × 4,000 × 2,650
Access Door	mm	3,200 × 2,650 4 Leaves, 4 Windows	
Lighting		10 Lighting Fixture in the Upper Part with 4 Neon Tubes each Total 40 Neon Tubes	
Panel		Sandwich Panel 40mm Thickness Polyurethane Material In-between	

Various dimensions, options are available.

“NOVA VERTA” PREPARATION BOOTH

- Using the filter that is the same as standard spray booth.
- Easy to install
- If using curtains around the area, it avoid small dust or mist.

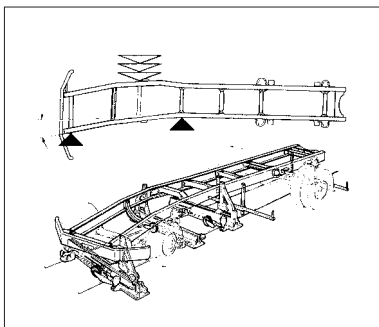
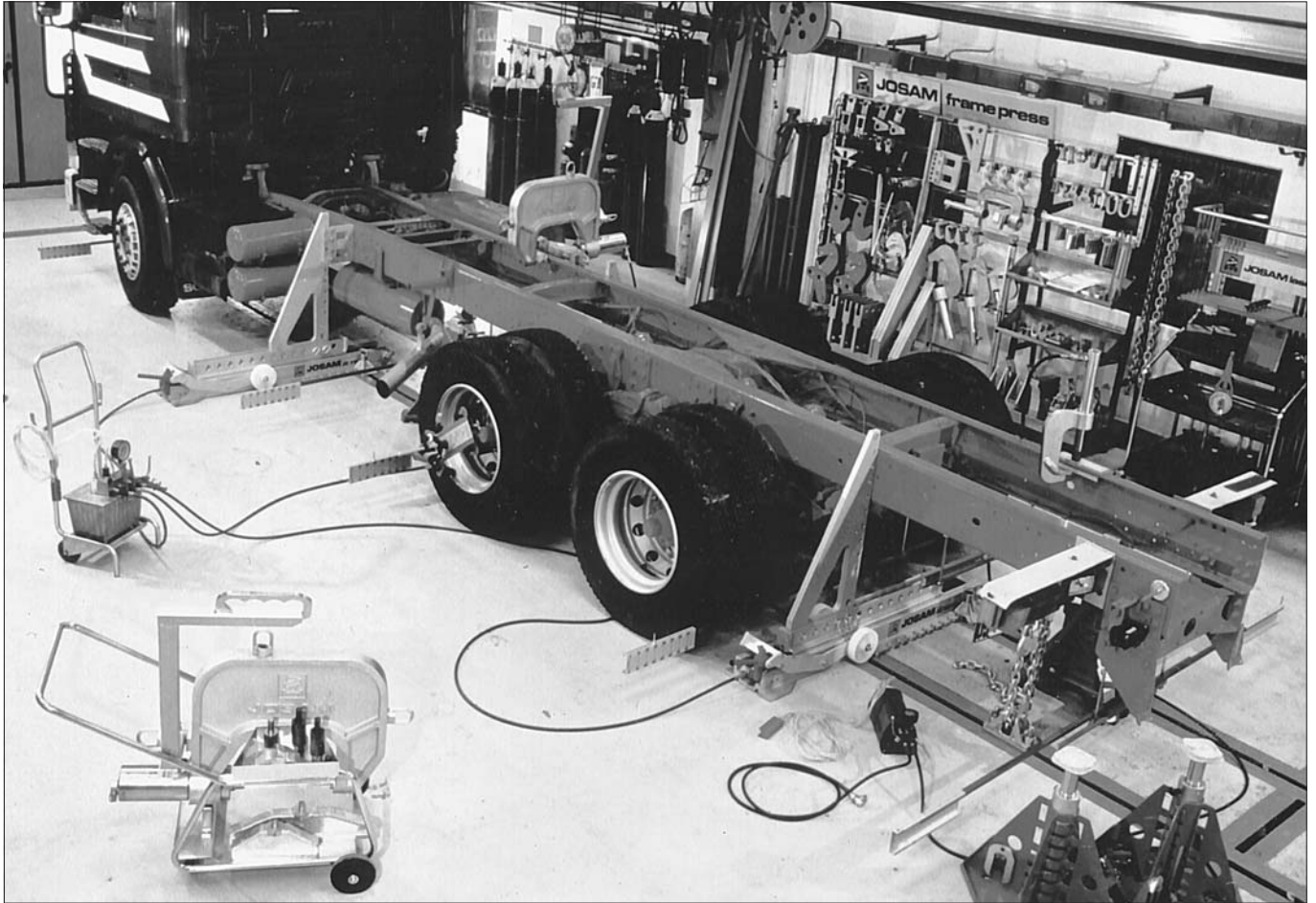


		Series 3600
Filtering Ranp	mm	L: 3,600
Filter	mm	6,000 × 2,400
Lighting		8 Lighting Element for each Total 16 Neon Tubes
Motor	kW	4
Capacity	m ³	15,000
Dimensions (W × H × D)	mm	6,200 × 3,600 × 3,700

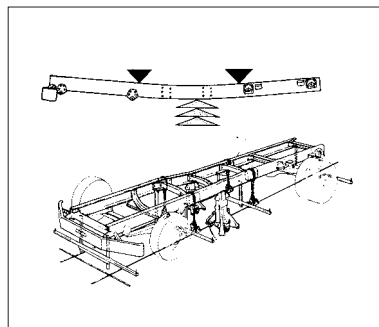
JOSAM FRAME PRESS SYSTEM

- This equipment is used to correct the frames of trucks, trailers, etc. up to 24m in length and 60ton in weight. The compression/tension trolley is used combined with the

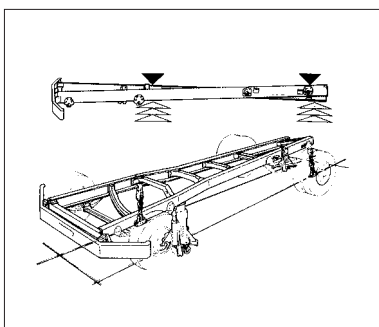
special beam.
- Almost all the accessories are made of light aluminum alloy.



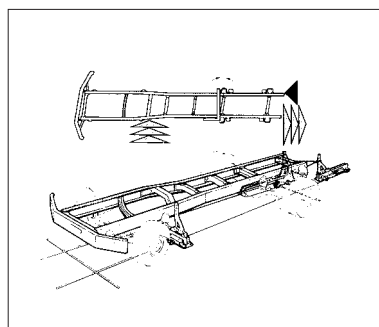
Side Sway



Verticals Bends



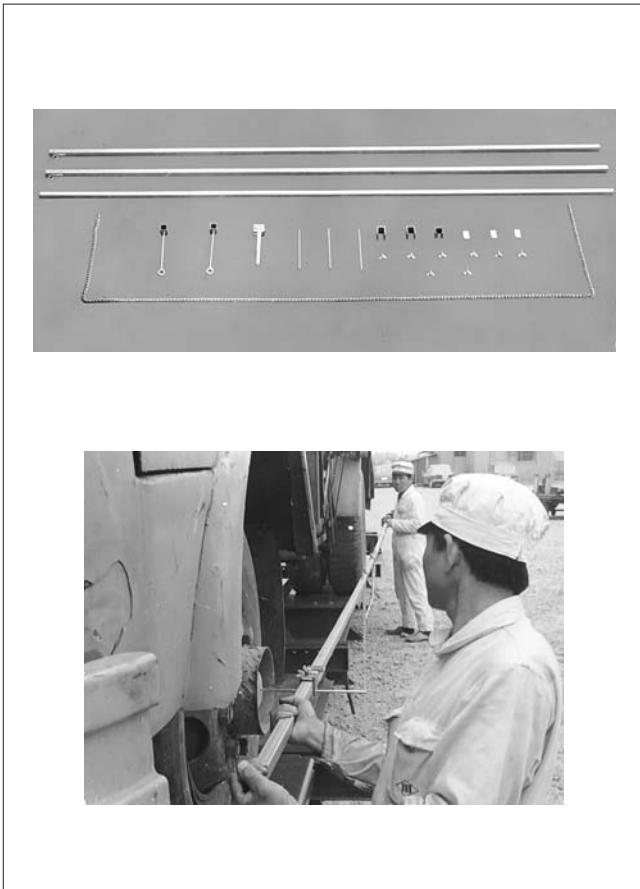
Twist



Diagonal Displacement

Model		SRSSL-20PBKA-A
Laser Measuring Set		Equipped
Cylinder Capacity		10ton – 6sets
		20ton – 6sets
		40ton – 1sets
Hydraulic Capacity		3sets
I Beam	mm	12,000 (L) – 4,500(W)

TRACKING GAUGE



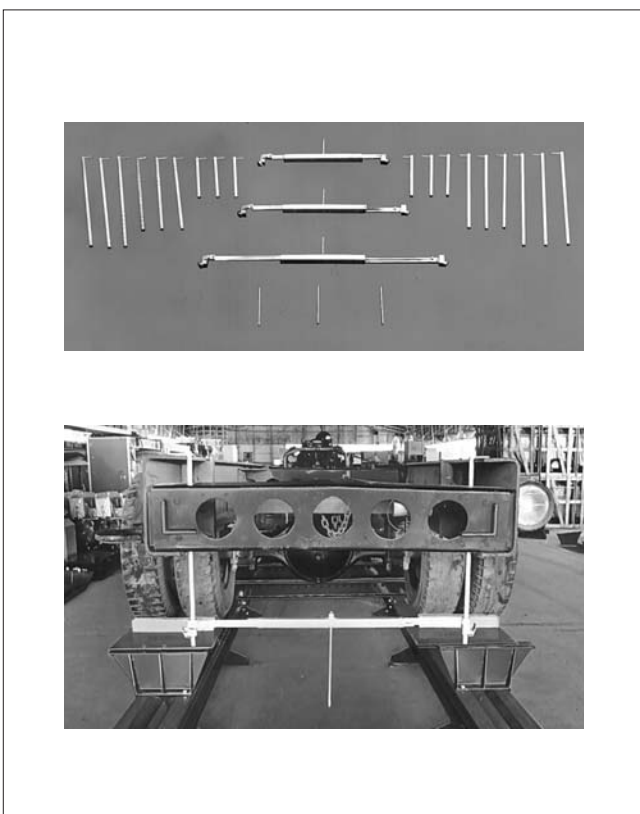
This is a measuring gauge whereby you can determine "Pass/fail" of front wheel alignments, front and rear wheel setting positions, in conjunction with alignment tools. This is an indispensable gauge for body shops.

Measuring Item

- "Pass/fail" of squareness of front wheel alignment.
- Bend of front spindles and faulty front system.
- Rear housing improperly mounted, bend, or runout thereof.
- Bend of chassis (horizontal plane).
- Distorted frame in a diamond shape.

Model		TRG-50H	TRG-25H
Applicable Vehicle		Passenger Car, Truck	Passenger Car
Range	mm	0 – 6,600	0 – 3,900
Case Size	mm	3,020 × 110 × 60	2,020 × 110 × 60
Weight	kg	Approx. 13	Approx. 8

FRAME CENTER GAUGE



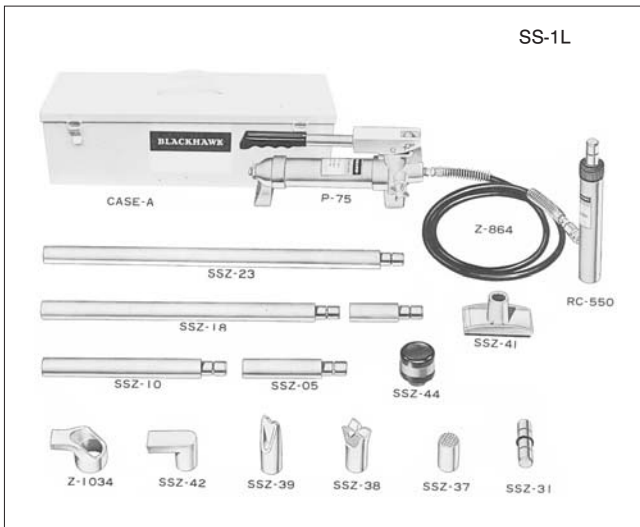
FRAME CENTER GAUGE

Measuring Item

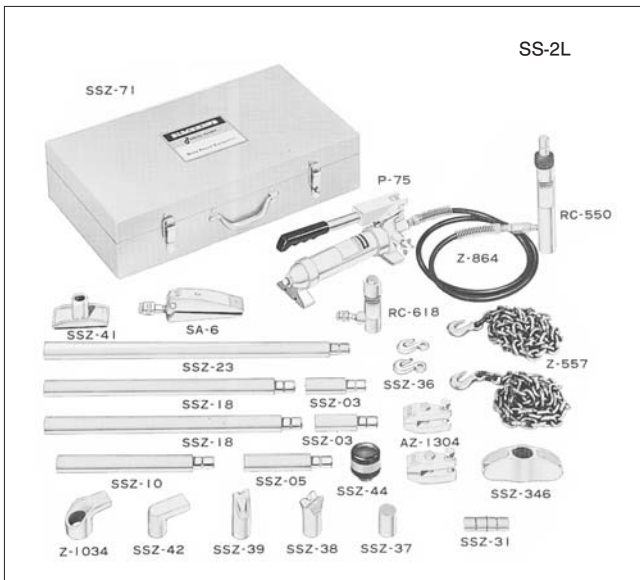
- Check of longitudinal center line.
- Check of chassis for twist.
- Check of chassis for bend.

Model		FCG-10H
Applicable Vehicle		Passenger Car, Truck
Range	mm	600 – 1,000
Case Size	mm	652 × 252 × 76
Weight	kg	Approx. 20

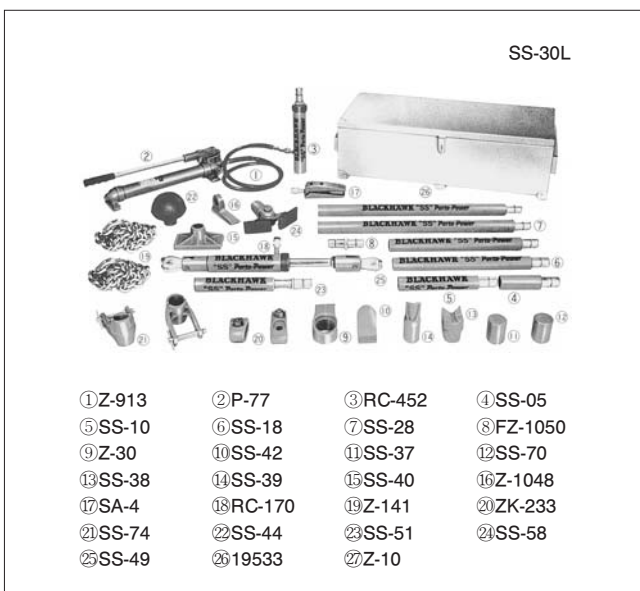
BLACKHAWK PORTO-POWER “SS”



Model	Remarks
SS-1L	5ton Standard Set

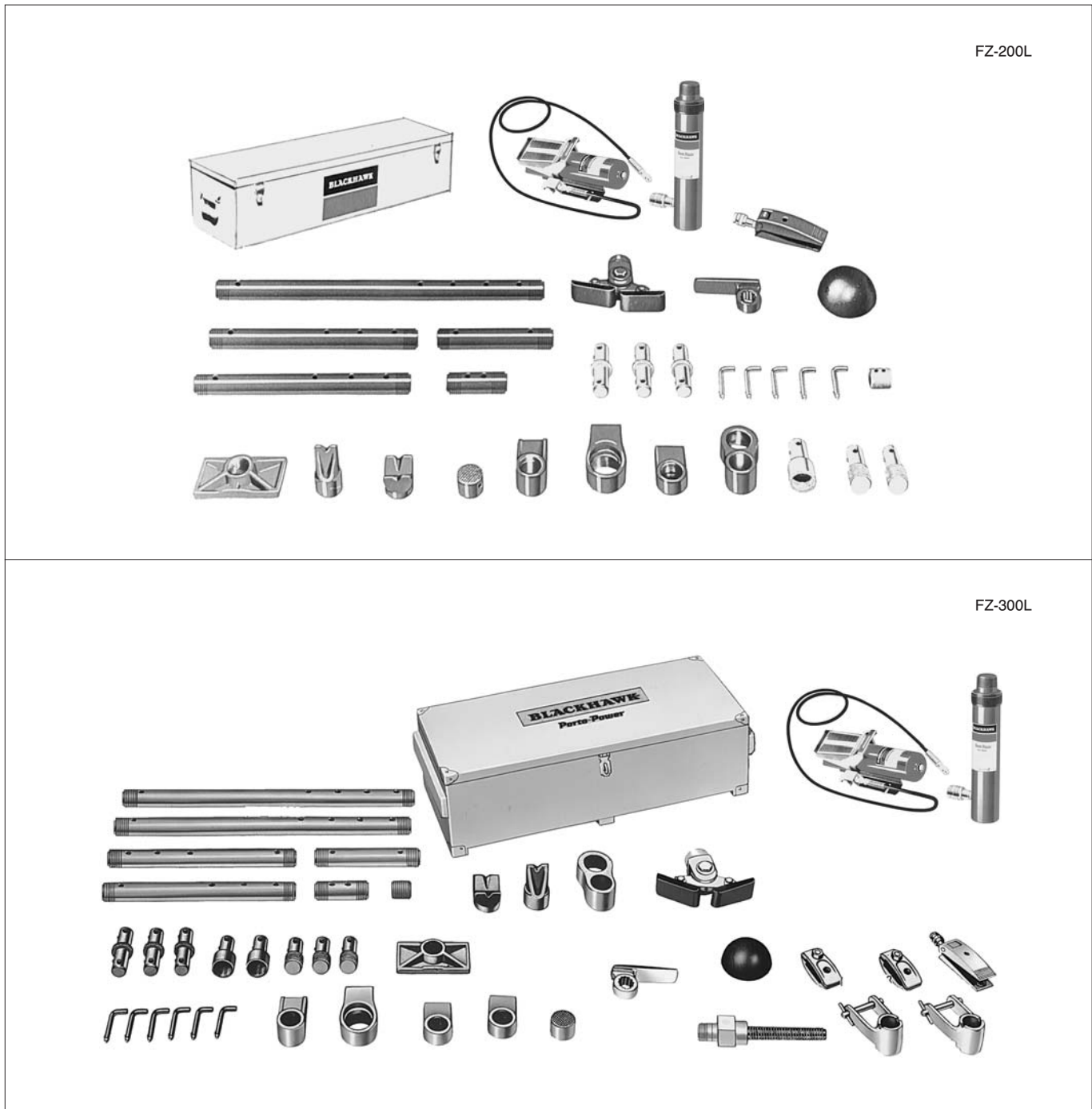


Model	Remarks
SS-2L	5ton Deluxe Set



Model	Remarks
SS-30L	10ton “SS” Master Set

BLACKHAWK PORTO-POWER (10 TON SET)



FZ-200L

FZ-300L

• Standard Set (Push, Spread)

Model	Pump Type	Remarks
FZ-1L FZ-1T	P-76 Manual Pump	Lock-on Tube Threaded Tube
FZ-100L FZ-100T	S-202 Air Pump	Lock-on Tube Threaded Tube

• Deluxe Set (Push, Clamp, Spread)

Model	Pump Type	Remarks
FZ-2L FZ-2T	P-76 Manual Pump	Lock-on Tube Threaded Tube
FZ-200L FZ-200T	S-202 Air Pump	Lock-on Tube Threaded Tube

• Master Set (Push, Spread, Clamp, Stretch)

Model	Pump Type	Remarks
FZ-3L FZ-3T	P-76 Manual Pump	Lock-on Tube Threaded Tube

• Master Set (Push, Spread, Clamp, Stretch)

Model	Pump Type	Remarks
FZ-300L FZ-300T	S-202 Air Pump	Lock-on Tube Threaded Tube

BLACKHAWK PORTO-POWER (10 TON SET)



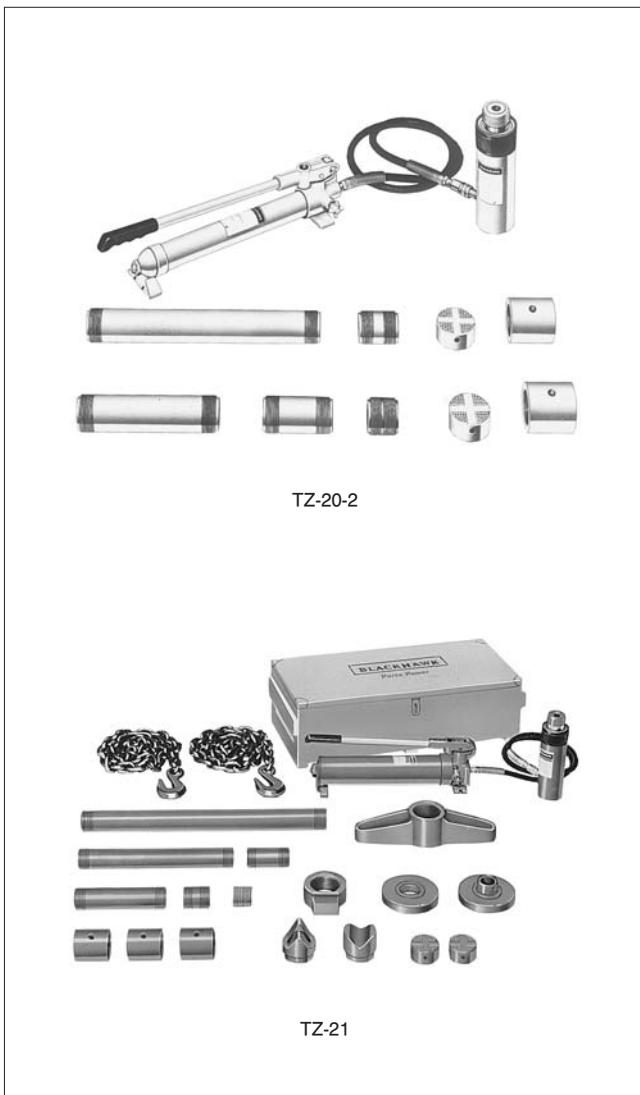
- General Set (Push, Pull, Spread, Clamp, Press)

Model	Pump Type	Remarks
FZ-4L	P-76 Manual Pump	Lock-on Tube
FZ-4T	P-76 Manual Pump	Threaded Tube
FZ-400L	S-202 Air Pump	Lock-on Tube

- Rescue Set (Push, Spread, Clamp)

Model	Pump Type	Remarks
RS-1	P-400 Manual Pump (4ton)	Extension Tube
RS-2	P-400 Manual Pump (4ton)	Lock-on Tube
RS-3	P-76 Manual Pump (10ton)	Lock-on Tube

BLACKHAWK PORTO-POWER (20 TON SET)



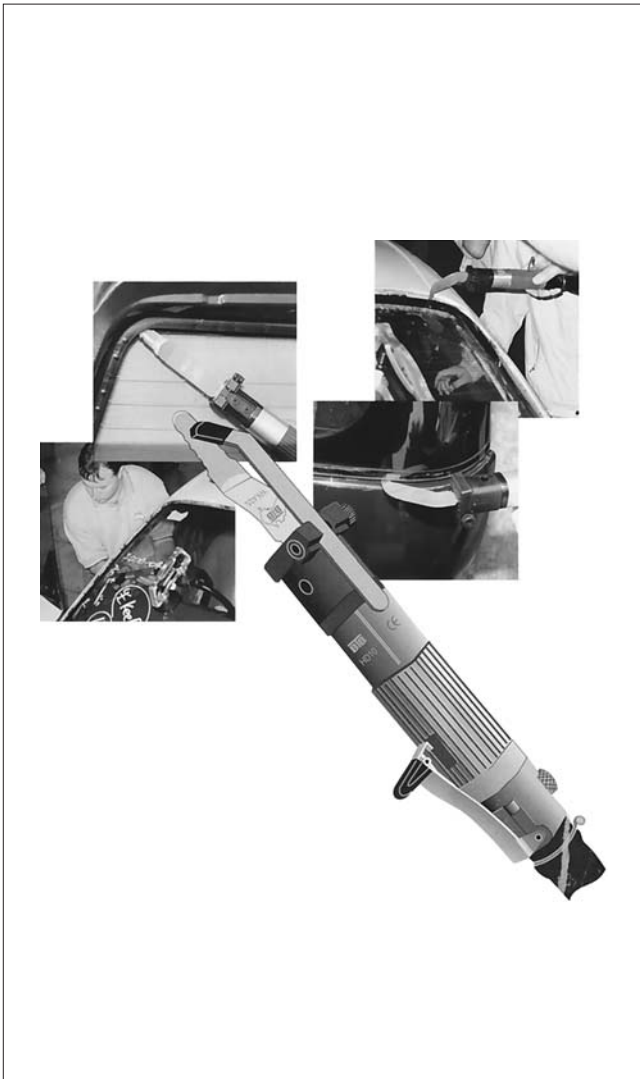
- Standard Set (Push)

Model	Pump Type
TZ-20-2	P-77 (Manual Pump) + RC-250 (Ram) + Z-913 (Hose)

- Deluxe Set (Push, Spread, Pull)

Model	Pump Type
TZ-21	P-420 (Manual Pump) + RC-250 (Ram) + Z-913 (Hose)

GLASS & MOULDING TOOL



Model: **BTB-30**

Contents

Model	Description	Q'ty
WK-1	Extra Long Flat Blade	1
WK-4RSC	Bent Curve Blade	1
WK-3	Bent Blade	1
WK-4Z	"Z" Blade	1
WK-5SC	Trim Blade (Serrated)	1
WK-6	Scraper Blade	1
WK-24ZSC	Z Type Curve Blade	1
WK-24ZRSC	Z Type Rebirth Curve Blade	1
WK-24	Bent Curve Blade	1
WK-27S	Cold Knife Blade (Left Hand)	2
WK-28M	Cold Knife Blade (Right Hand)	2
WK-11A	Control Arm	1
WK-11B	Control Arm	1
WK-11E	Control Arm	1
WK-11F	Control Arm	1
WK-25C1	Control Arm	1
WK-25C2	Control Arm	1
WK-10HD	Air Power Tool	1
WK-7	Handle	1
WK-7L	Long Handle	1
WK-8	Sharpening Stone	1
WK-9	Spray Bottle	1
WK-11VEL	Glass Protection Seal	1
WK-20	Plastic Paddle	1
WA-1	Oil	1
WA-2	Driver	1
9602-CM	Suction Cup	2
NO.5060	Tool Box	1

BODY REPAIR TOOL SET



Model	Tool Case Size (W) × (D) × (H) mm
BRS-56	535 × 215 × 185

BODY REPAIR TOOL SET



Model	Tool Case Size (W) × (D) × (H) mm
BRS-100SK	600 × 400 × 1,050

WINDSHIELD REMOVING KNIFE



Model	Blade Dimension mm	Length mm
TB-603	8 × 12	150

BODY REPAIR SERVICE TOOL



Model	Name	Length mm
APU-S	for Inner Lining (S)	185
APU-B	for Inner Lining (L)	220

POWER WINDOW SERVICE TOOL



The power window service tool can be directly connected to the power window motor from the cigarette to provide simplified window adjustment.

Model	BS-1
Power	Dry Battery × 8

DOOR HINGE BOLT WRENCH



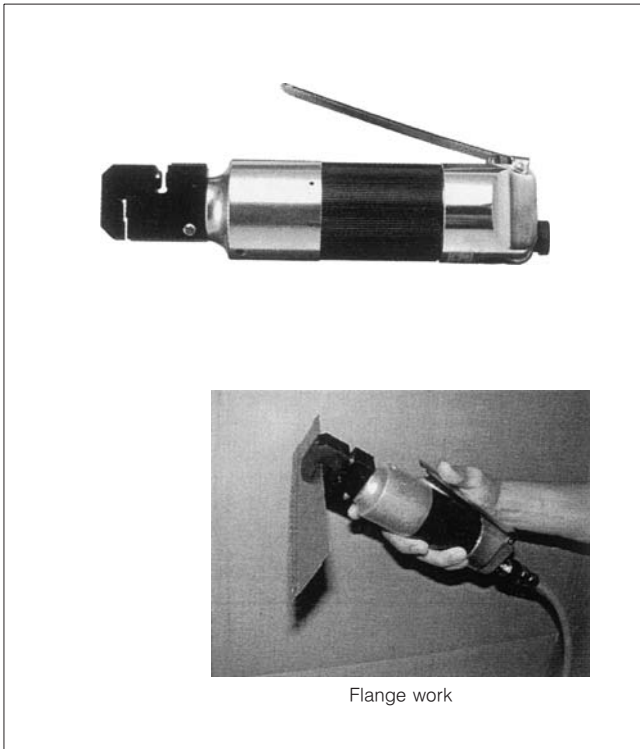
Model	
DMZ-12	12mm
DMZ-14	14mm
DMZ-2	DMZ-12, DMZ-14

SPOT CUTTER RESHARPNER

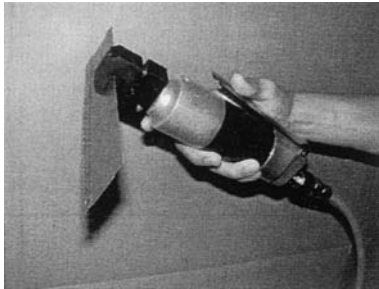


Model	S-1000
Grindstone	φ 121 CBN # 170
Motor W	65
RPM rpm	2,850/3,440
Power Source	AC 1-ph., 50/60Hz
Weight kg	8
Size mm	230 × 230 × 225
Attachments	Holder Pipe (φ 8.0, 8.2, 10.0 one piece each)
	Holder Ring one piece
	Hexagonal Wrench

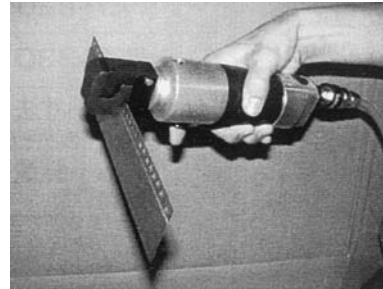
EAGLE PUNCHER



Model	Capacity mm	Air Pressure MPa	Overall Length mm
EP-10N	Mild Steel Plate 1.0 Punch Hole Dia. ϕ 5	0.65	245



Flange work



Punching

CHISEL SET



Model	Note
APT-2P	Chisel Tip 1pc. } 2pcs./set Chisel Tip 1pc. }

with Protector

SPOT TOOL



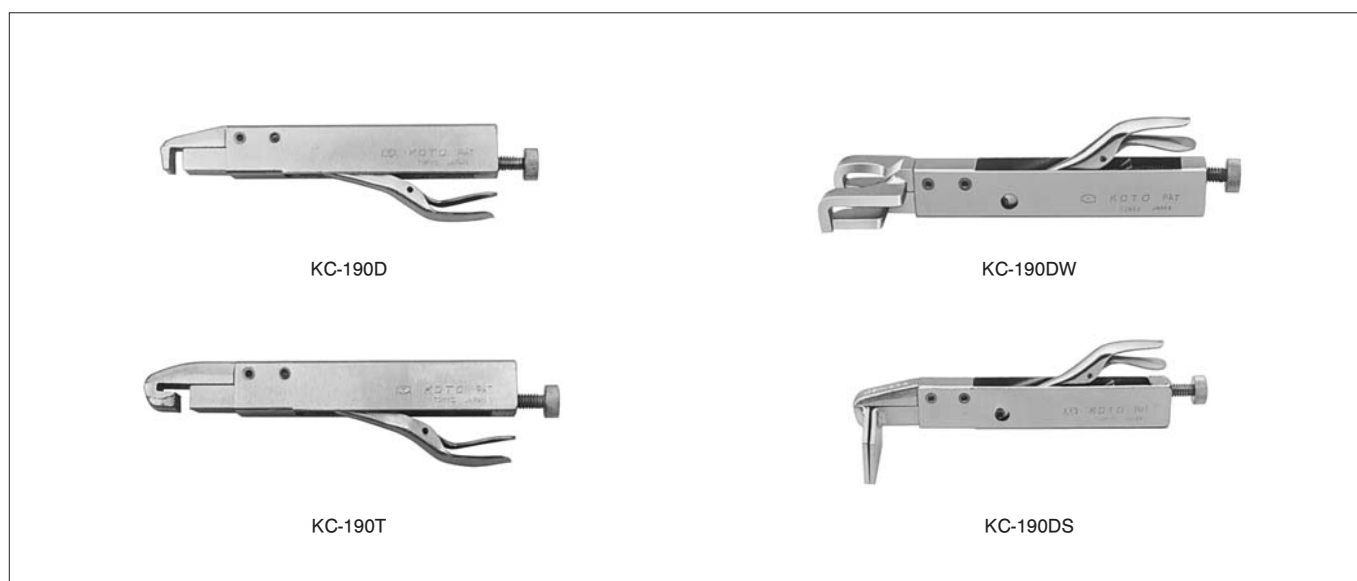
Model	Air Drill	Accessories
TH-902DX	Drill Size: ϕ 8mm No-load Revolution: 1,200rpm Length: 300mm	Drill (8mm) 6pcs. File 1pc. Adjusting Bolt 1pc. Air Regulator 1pc. Air Nipple 1pc. Wrench, 8 x 10mm 1pc. Case 1pc.

SPOTWELD CUTTER



Model	Contents
DR-21590	10mm Spot Cutter (1pc.) Spare Cutter (10pcs.), Needle (2pcs.)
SSC-1065N SSC-1082N SSC-1100N SSC-1082AC	ϕ 6.5 × 70mm (5pcs.) ϕ 8.2 × 85mm (5pcs.) ϕ 10.0 × 95mm (5pcs.) ϕ 8.2 × 80mm (5pcs.) (Special Coating)
MSC-65 MSC-85	ϕ 6.5 × 3pcs. ϕ 8.2 × 3pcs.
MH-65G	6.5mm (SKH55-CO) × 5pcs.
MH-85G	8.2mm (SKH55-CO) × 5pcs.

VICE LOCKING PLIER



Model	Use	Capacity mm	Overall Length mm	Weight g
KC-190D	Door Vice	0 – 25	190	350
KC-190T	Trunk Vice	0 – 25	200	380
KC-190DW	Welding Vice	0 – 25	210	420
KC-190DS	Step Vice	0 – 25	195	440

“C” CLAMP



Model	Opening mm	Weight g
CV-25	25	220
CV-50	50	320
CV-75	75	550
CV-100	100	1,280

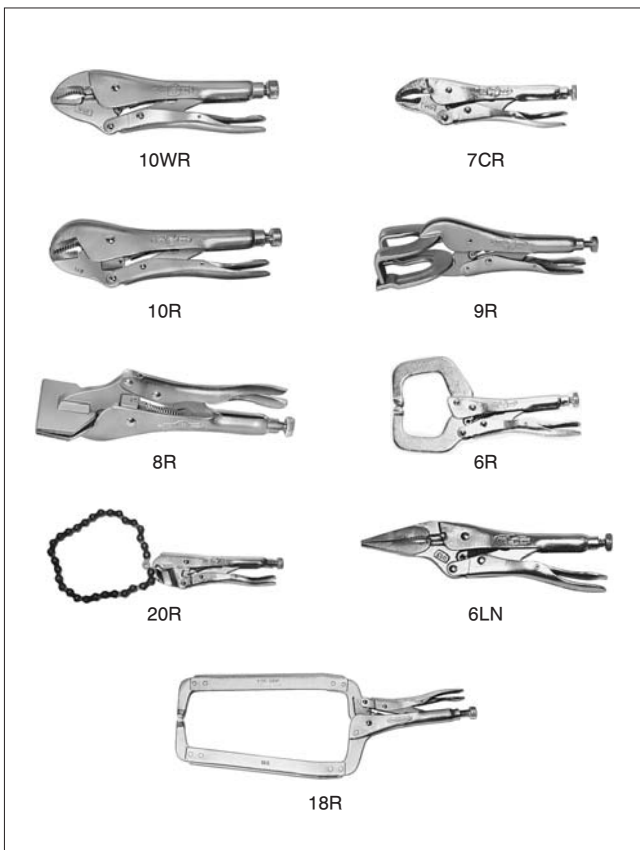
Model	Opening mm	Weight g
CV-125	125	1,600
CV-150	150	2,100
CV-200	200	3,500

VICE PLIER & WELDING PLIER



Model	Length mm	Remarks
VG-7N	175	for General
WP-9	240	for Welding
WP-10	450	for Body Repair

VICE GRIP WRENCH



Model	Length mm (inch)	Remarks
5WR	125 (5)	Curved Jaw with Wire Cutter Curved Jaw with Wire Cutter Curved Jaw with Wire Cutter
7WR	178 (7)	
10WR	254 (10)	
7CR	178 (7)	Curved Jaw Curved Jaw
10CR	254 (10)	
7R	178 (7)	Straight Jaw Straight Jaw
10R	254 (10)	
9R	229 (9)	Welding Clamp
8R	203 (8)	Body-Repair Tool
6R	165 (6 ³ / ₈)	C Clamp, 50 × 38mm C Clamp, 95 × 66mm C Clamp, 100 × 250mm
11R	279 (11)	
18R	457 (18)	
6LN	153 (6)	Long Nose Long Nose Chain Clamp
9LN	229 (9)	
20R	500mm	

BODY PULLER



Model	HBP-110	HBP-220	HBP-330
Type	Small	Standard	Large
Shaft Length	mm 325	520	630
Shaft Ass. Weight	kg 1.3	3	4
Hammer Size $\phi \times L$	mm 50 × 110	57 × 119	75 × 165
Hammer Weight	kg 0.9	2	3.2
Case Size	mm 370 × 150 × 60	325 × 90 × 50	660 × 190 × 75
Accessories Weight	kg 0.5	2.4	5.5

• Body Puller Set with Board

Model	Contents
HBP-550	HBP-110, HBP-220, HBP-330

SAFETY GOGGLE



Model	1800
Note	Round type

METAL CUTTING SHEARS



Model	Cutting Capacity	Length mm
DR-71049	Approx. 1.2mm (steel) Approx 2.0mm (plastic)	250

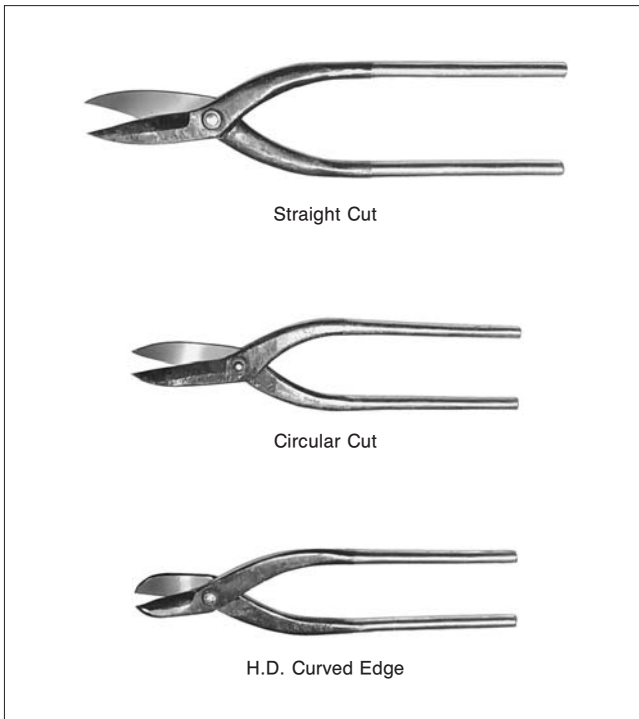
METAL CUTTING SNIPS



• MS-Type

Model	Length mm	Cutting Capacity mm	Weight kg	Remarks
MS-260R	255	1.2	0.4	for Left Cut
MS-260L	255	1.2	0.4	for Right Cut
MS-260S	260	1.2	0.4	for Straight Cut

TINNER'S SHEARS



• Straight Cut

Model	210ST	240ST	270ST	300ST	360ST
Length mm	210	240	270	300	360

• Circular Cut

Model	210C	240C	270C	300C	360C
Length mm	210	240	270	300	360

• H.D. Curved Edge

Model	210SS	240SS	270SS	300SS	360SS
Length mm	210	240	270	300	360

HACKSAW FRAME & HACKSAW HOLDER



Model	Cutting Range	Length mm
V-12	250 – 300	–
DR-71204	–	315

• V-12 HACKSAW BLADE

Model	Length mm	Number of Teeth	Remarks
N-1024	250	24	NACHI per 1 doz.
N-1224	300	24	

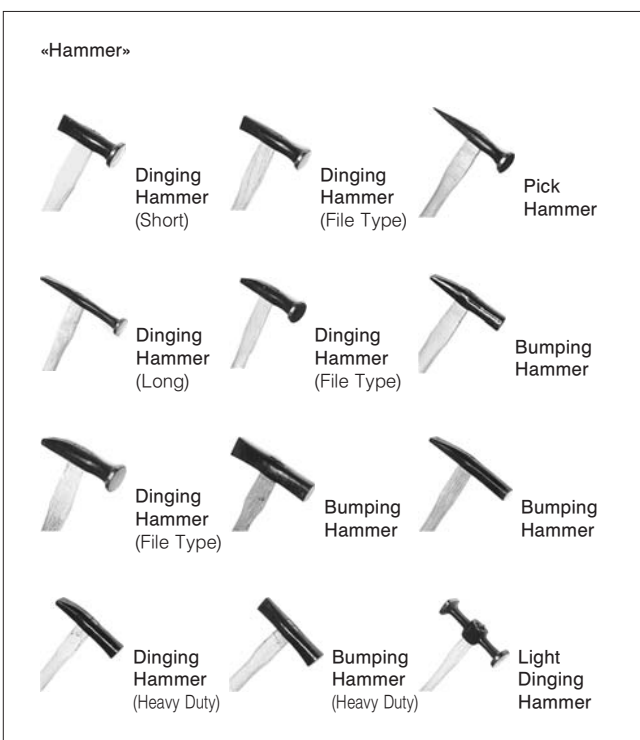
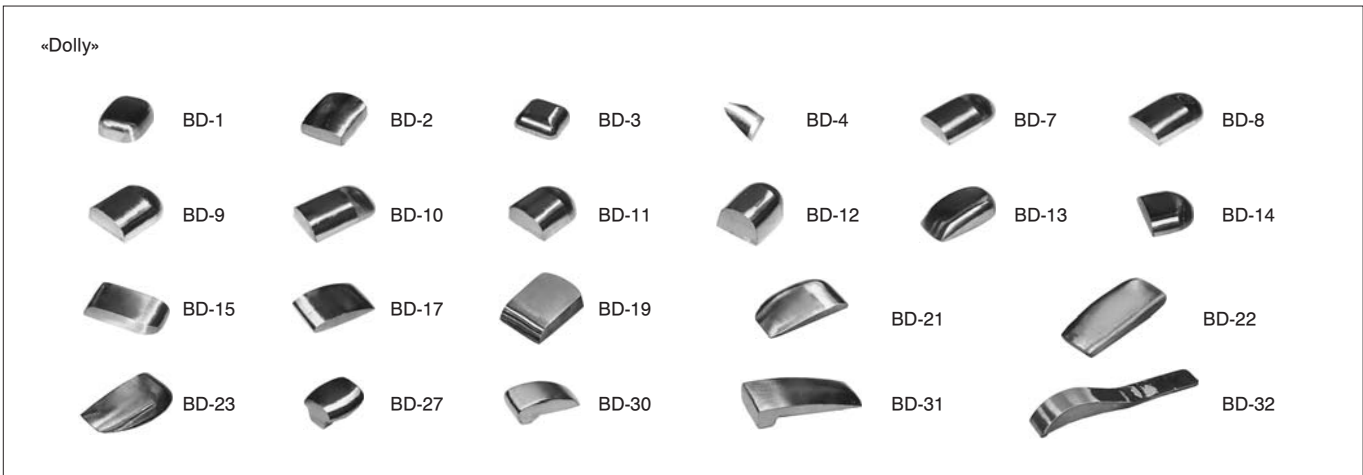
Standard number of teeth – 24
Extra number 14-18-32 available

BODY-FENDER TOOL SET



Model	TF-50A	
Case	370 × 215 × 90mm Weight Approx. 11kg	
Contents	BD-4 Dolly BD-9 Dolly BD-15 Dolly BD-31 Dolly	BD-33 Curved Spoon BS-35 Flange Tool BH-252 Bumping Hammer BH-176 Finishing Hammer BH-172 Finishing Hammer 262 Rubber Hammer

BODY-FENDER TOOL



Type	Model	Size mm
Dinging Hammer (Short)	BH-131	39
	BH-132	43
	BH-142	43
Dinging Hammer (Long)	BH-151	28
	BH-152	30
	BH-153	33
	BH-161	28
	BH-163	33
Dinging Hammer (File Type)	BH-171	28
	BH-172	30
	BH-173	34
	BH-174	35
Dinging Hammer (Heavy Duty)	BH-231	33
	BH-232	35
	BH-233	38
Dinging Hammer (File Type)	BH-175	28
	BH-176	30
	BH-177	34
Dinging Hammer (File Type)	BH-181	28
	BH-182	30
	BH-183	34

Type	Model	Size mm
Bumping Hammer	BH-192	18
	BH-194	24
	BH-195	27
	BH-196	31
Bumping Hammer (Heavy Duty)	BH-241	33
	BH-242	36
	BH-243	38
Pick Hammer	BH-186	33
Bumping Hammer	BH-202	18
	BH-203	21
	BH-204	24
	BH-205	27
	BH-206	31
Bumping Hammer	BH-211	18
	BH-212	21
	BH-221	18
	BH-222	21
	BH-223	25
Light Dinging Hammer	BH-251	35
	BH-252	35

HAND RIVETTER



Model		HR-002D
Rivet Dia. Range	mm	ϕ 2.4, ϕ 3.2, ϕ 4.0, ϕ 4.8
Overall Length	mm	270
Weight	kg	0.48
Type		L

HAND RIVETTER TOOL KIT



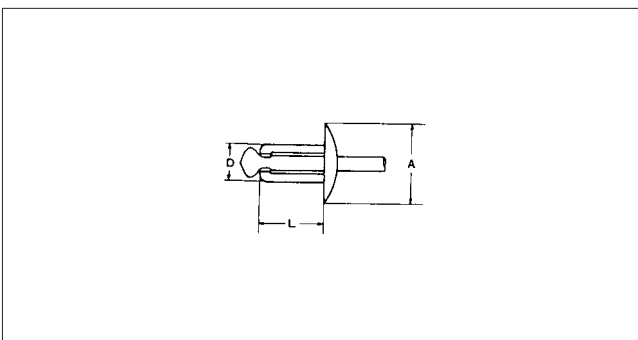
Model	HR-102D
Rivetter	HR-002
Blind Rivets	NAS 4-2 (100pcs.) NSA 5-2 (100pcs.) NSA 4-3 (100pcs.) NSA 5-4 (100pcs.)

AIR RIVETTER



Model		AR-011M
Air Pressure Required	MPa(kgf/cm ²)	0.54 – 0.58 (5.5 – 6)
Rivet Dia. Range	mm	ϕ 2.4, ϕ 3.2, ϕ 4.0, ϕ 4.8
Weight	kg	1.43

BLIND RIVET



Model	Size (D × L × A) mm
NSA 3-2	2.4 × 5.5 × 4.8
NSA 4-1	3.2 × 4.4 × 6.4
NSA 4-2	3.2 × 6.0 × 6.4
NSA 4-3	3.2 × 7.6 × 6.4
NSA 4-4	3.2 × 9.2 × 6.4

Model	Size (D × L × A) mm
NSA 5-2	4.0 × 6.6 × 7.9
NSA 5-4	4.0 × 9.8 × 7.9
NSA 6-2	4.8 × 7.1 × 9.5
NSA 6-4	4.8 × 10.3 × 9.5
NSA 6-6	4.8 × 13.5 × 9.5

1,000pcs./one case

SPOT AND STUD WELDER



Model		SPOT WELDERS		STUD WELDERS	
		YSI-16D	YS-50	YS-50	YS-30
Input Voltage	V, Hz	3 phase 380 – 440	220, 50/60 Single phase	220, 50/60 Single phase	220, 50/60 Single phase
Output Current:	amp	6500	–	–	–
Max. Input Power	kVA	23	23	16	16
Min. Input Power	kVA	10	11	8	8
Duty Cycle	%	4	4	4	4
Safety		30A No-fuse breaker	30A No-fuse breaker	30A No-fuse breaker	30A No-fuse breaker
Timer		0.05 – 0.6	0.05 – 0.5 and continuance	0.05 – 0.5 and continuance	0.05 – 0.5 and continuance
Single Side		1.5mm	0.5mm Stainless Steel Plate	0.3mm Stainless Steel Plate	0.3mm Stainless Steel Plate
Stud Welding		–	Washing, Pin, Bolt-Nut	Washing, Pin, Bolt-Nut	Washing, Pin, Bolt-Nut
Shirinking:	mm	Available	0.6 – 1.0	0.6 – 1.0	0.6 – 1.0
Cable	Input	5.5sq × 8m	8 φ 8.5m	2 φ 6m	2 φ 6m
	Output	180sq × 2.8m	60 φ , 2m	60 φ , 2m	60 φ , 2m
Dimensions (H × W × D)	mm () include handles	520 × 450 × 790	560 (860) × 370 × 260 (370)	194 × 185 × 260	194 × 185 × 260
Weight:	kg	66	33.0	20.0	20.0

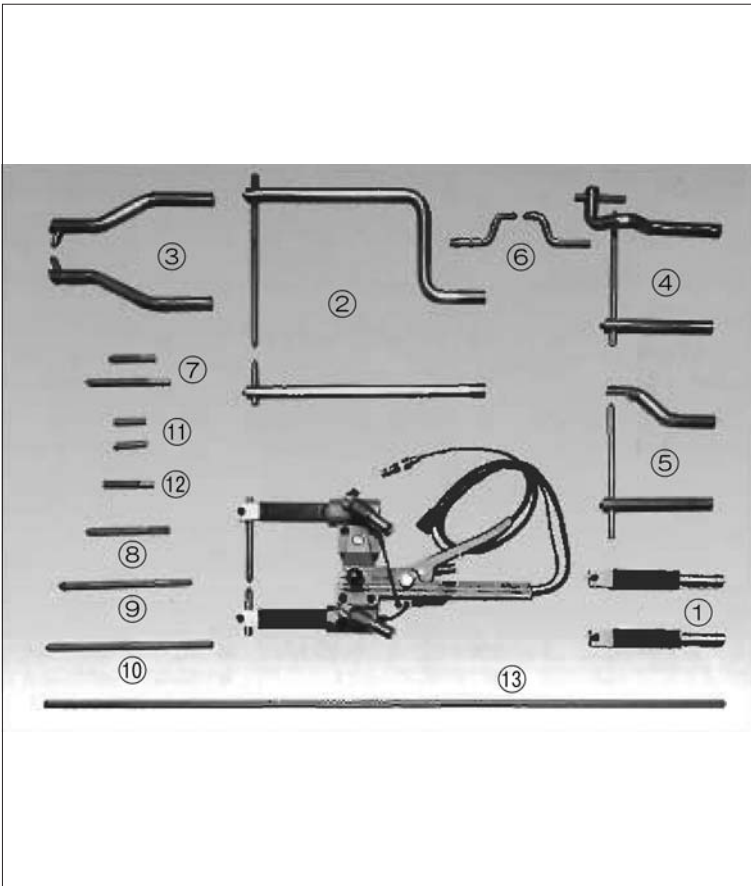
ACCESSORIES FOR SPOT AND STUD WELDER

• Pneumatic Spot Gun YA-7



Max. Clamp Pressure	1.5KN (153kgf) at 0.7Mpa
Max. Stroke	32mm
Cylinder Diameter	φ 54
Dimension	487 × 168 × 175mm
Weight	4.2kg (Arms included)

• Arm / Tip for Manual Gun YEK-982



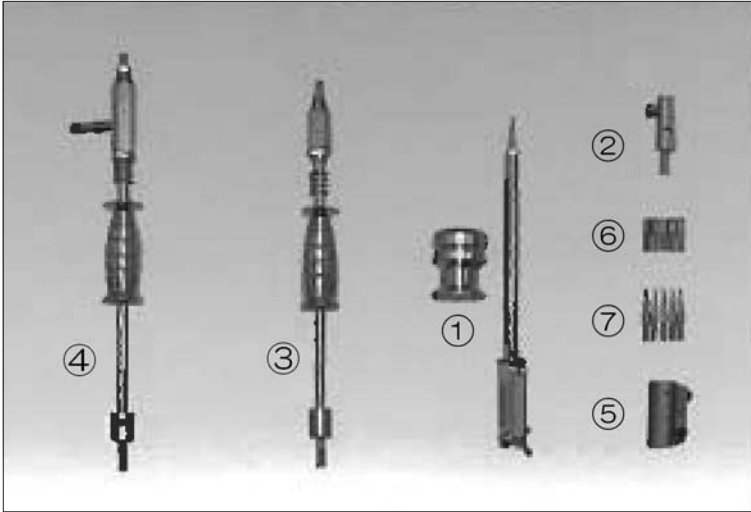
① Straight Alumn. Arm	195mm	(2pcs.)
Straight Alumn. Arm	350mm	(2pcs.)
② Clank Arm Set	350mm	
Clank Arm Set	450mm	
Clank Arm Set	600mm	
③ Narrow Head Arm Set	240mm	
Narrow Head Arm Set	350mm	
④ Wheel House Arm Set		
⑤ Windor Offset Arm Set		
⑥ Offset Tip Set	12 φ	
⑦ Straight Tip Set	12 φ	
⑧ 125L Straight Tip Set	12 φ	
⑨ 195L Straight Tip Set	12 φ	
⑩ 250L Straight Tip Set	12 φ	
⑪ Tip for Narrow Head	12 φ	
⑫ Single Tip for Wheel House	12 φ	
⑬ Tip Material	12 φ × 1,000mm	

*All tips for YEK-982 Arm is 12 φ

*For Straight Alumn. Arm. Tip shall be Purchased Separately

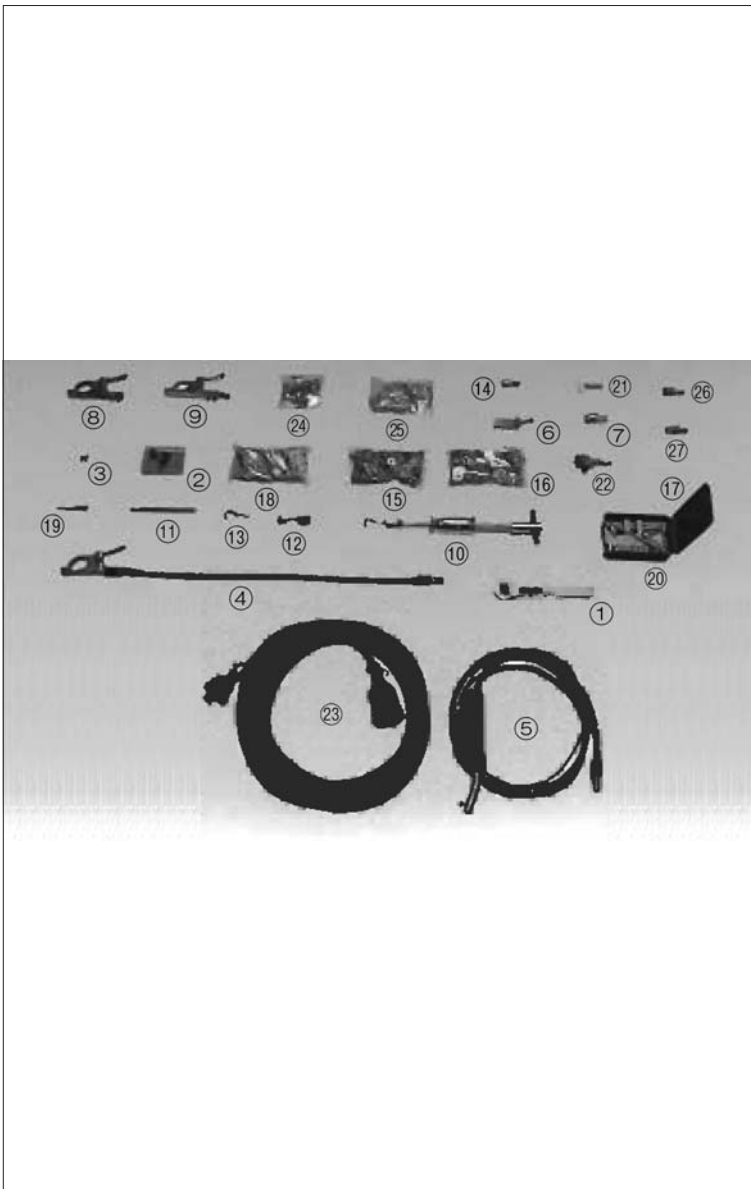
ACCESSORIES FOR SPOT AND STUD WELDER

• Wonder Puller



- ① Quick Pull
- ② Attachement For Quick Pull
- ③ Wonder Puller Standard
- ④ Wonder Puller Side Pole
- ⑤ Attachement For Wonder Puller
- ⑥ Ultra Tip
- ⑦ Ultra Sharp Tip

• Other Accessories



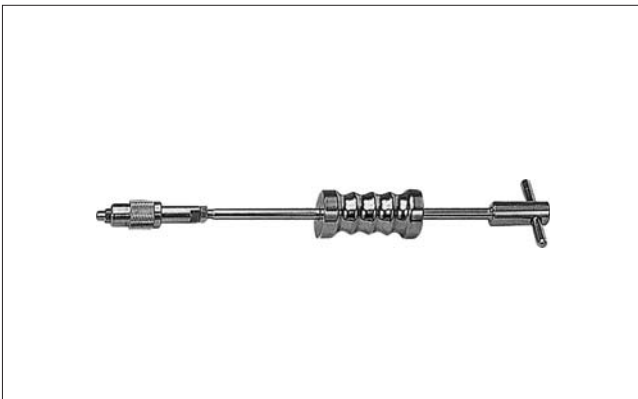
- ① Ratchet Tip Cutter
- ② Tip Cutter Set 10 φ
- Tip Cutter Set 20 φ
- ③ Tip Cutter (Spare Blade)
- ④ Earth Clamp Cable
- ⑤ Secondary Extension Cable
- ⑥ Earth Plate
- ⑦ Tip Joint
- ⑧ Earth Clip
- ⑨ G Earth Clamp
- ⑩ Stud Puller w/hook
- ⑪ Sleeve Carbon
- ⑫ Washer Hook Assy
- ⑬ Washer Hook
- ⑭ Drawing Bit
- ⑮ KB Washer 18 φ (1kg)
- ⑯ KB Washer 22 φ (1kg)
- ⑰ ST Stud Bit
- ⑱ Pull Tab (1kg)
- ⑲ Welding Tip
- ⑳ Pull Plate Assy
- ㉑ Rolling Tip
- ㉒ One-Touch Earth
- ㉓ Primary Extension Cable 10m
- ㉔ Welding Nut 8mm
- Welding Nut 6mm
- Welding Nut 10mm
- ㉕ Welding Bolt 8mm
- Welding Bolt 6mm
- Welding Bolt 10mm
- ㉖ Nut Attachment 8mm
- Nut Attachment 6mm
- Nut Attachment 10mm
- ㉗ Bolt Attachment 8mm
- Bolt Attachment 6mm
- Bolt Attachment 10mm

SPOT WELDER



Model	TNK-4500D	
Mechanical Specifications		
Clamp Arm Pressure	kg	Washer Welder
Output Cable	m	(+) 2.5 (-) 1.5, (38mm ²)
Primary Input Cord	m	7 (2mm ²)
Weldability	mm	Washer, Welder
Weight	kg	14
Electrical Specifications		
Input Voltage	A	200, 1-ph.
Max. Secondary Short Current	A	3,800
Control System		TRC

QUICK PULLER



Model	Lenth mm
TNK-QP-1	330
TNK-QP-1L	440

AUTOMATIC MIG-MAG WELDER



Model	UPT-135	
Rated Current	A	135
Primary Input		1-ph., 4.4kVA
Rated Duty Cycle %		20
Current Range	A	20 – 135A
Dimensions (W × D × H)	mm	342 × 510 × 515
Weight	kg	60

MIG WELDER



Model	SAY-160DX			
Pated Input Voltage	1ph 200V			
Cosumption Power	3.7kW			
Rated Duty Cycle	100%	30%	15%	9%
Secondary Current	30-45A	80A	115A	145A
	30-145A			
Primary Current	22A			
Dimensions	W 350×L 640×H 470mm			
Weight	25kg			
Applicable Wirereel Size	98 φ × 48T, 200 φ × 58T			
Freeder Capacity	Wire Weight~5.0kg			

BODY COVER



Model	Size mm
PM-1800	1,000 × 1,800

SPOT EIGHT SEALER



Model	Remarks
SPW-140S	Net 1.4kg

HAND BLASTER GUN



Model	NP-3
Air Pressure Required	4 – 12
Air Consumption ℓ /min.	338

PLASMA UNI-CUT










Model	UC-35DX
Primary Input	3-ph., 6.8kVA, 1-ph., 5.4kVA
Rated Current	35A (3-ph.), 25A (1-ph.)
Current Adjustable	10 – 35A (3-ph.), 10 – 25A (1-ph.)
Load Voltage V	Rated 120, Max. 255
Rated Duty Cycle %	60
Cutting Torch Current A	30
Cooling System	Air Cooling
Cable Length m	10
Dimensions (W × D × H) mm	187 × 336 × 249
Weight kg	183

ARC WELDER



Model		SWA-150	SWA-180	SWA-250	SWA-300Z
Rated Output Current	A	150	180	250	300
Rated Duty Cycle	%	20			40
Rated Input Capacity	kVA	9	12.5	19	24.5
	kW	4.8	6.7	11.4	14.0
Output Current Range	A	50 – 150	60 – 180	75 – 250	80 – 300
Max. Sec. No-load Voltage	V	55	65	70	78
Rated Load Voltage	V	27.5	29	32.5	35
Secondary Cable	sq	22	38		50
Available Electrodes		4 – 2.0			6 – 2.6
Dimensions	W	260	260	280	340
	L	370	400	490	535
	H	440	440	480	570
Weight	kg	37	41	50	70

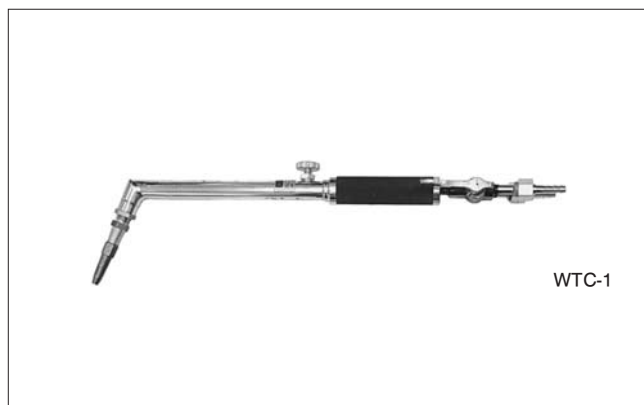
ACCESSORY FOR ARC WELDER

<ul style="list-style-type: none"> • Helmet  <table border="1" data-bbox="316 421 735 517"> <tr> <td>Model</td> <td>EH-1</td> <td>EH-2</td> </tr> <tr> <td>Ref.</td> <td>Mask</td> <td>Hand Holding</td> </tr> </table>	Model	EH-1	EH-2	Ref.	Mask	Hand Holding	<ul style="list-style-type: none"> • Helmet  <table border="1" data-bbox="999 421 1418 461"> <tr> <td>Model</td> <td>TLM-0</td> </tr> </table>	Model	TLM-0												
Model	EH-1	EH-2																			
Ref.	Mask	Hand Holding																			
Model	TLM-0																				
<ul style="list-style-type: none"> • Safety Holder  <table border="1" data-bbox="354 577 735 674"> <tr> <td>Model</td> <td>SHA</td> <td>SHB</td> <td>SHC</td> </tr> <tr> <td>Ref.</td> <td>150 – 250A</td> <td>300/400A</td> <td>500A</td> </tr> </table> <ul style="list-style-type: none"> • Terminal <table border="1" data-bbox="354 719 735 792"> <tr> <td>Model</td> <td>SHT-1</td> <td>SHT-2</td> </tr> <tr> <td>Ref.</td> <td>150 – 250A</td> <td>300 – 400A</td> </tr> </table>	Model	SHA	SHB	SHC	Ref.	150 – 250A	300/400A	500A	Model	SHT-1	SHT-2	Ref.	150 – 250A	300 – 400A	<ul style="list-style-type: none"> • Earth Clamp  <table border="1" data-bbox="1038 663 1418 741"> <tr> <td>Model</td> <td>EA-300</td> <td>EB-500</td> </tr> <tr> <td>Ref.</td> <td>150 – 300A</td> <td>400/500A</td> </tr> </table>	Model	EA-300	EB-500	Ref.	150 – 300A	400/500A
Model	SHA	SHB	SHC																		
Ref.	150 – 250A	300/400A	500A																		
Model	SHT-1	SHT-2																			
Ref.	150 – 250A	300 – 400A																			
Model	EA-300	EB-500																			
Ref.	150 – 300A	400/500A																			
<ul style="list-style-type: none"> • Earth Cord  <table border="1" data-bbox="354 846 735 999"> <tr> <td>Model</td> <td>Remarks</td> </tr> <tr> <td>EC-1525</td> <td>for 150 – 250A, 22mm × 3m</td> </tr> <tr> <td>EC-3040</td> <td>for 300/400A, 38mm × 3m</td> </tr> <tr> <td>EC-50</td> <td>for 500A, 50mm × 3m</td> </tr> </table>	Model	Remarks	EC-1525	for 150 – 250A, 22mm × 3m	EC-3040	for 300/400A, 38mm × 3m	EC-50	for 500A, 50mm × 3m	<ul style="list-style-type: none"> • Leather Groves  <table border="1" data-bbox="999 943 1418 981"> <tr> <td>Model</td> <td>WG-5</td> </tr> </table>	Model	WG-5										
Model	Remarks																				
EC-1525	for 150 – 250A, 22mm × 3m																				
EC-3040	for 300/400A, 38mm × 3m																				
EC-50	for 500A, 50mm × 3m																				
Model	WG-5																				
<ul style="list-style-type: none"> • Secondary Cord <table border="1" data-bbox="129 1088 735 1238"> <tr> <td>Model</td> <td>Remarks</td> </tr> <tr> <td>SC-1525</td> <td>for 150 – 250A, 38mm × 10m</td> </tr> <tr> <td>SC-3040</td> <td>for 300/400A, 50mm × 10m</td> </tr> <tr> <td>SC-50</td> <td>for 500A, 60mm × 10m</td> </tr> </table>	Model	Remarks	SC-1525	for 150 – 250A, 38mm × 10m	SC-3040	for 300/400A, 50mm × 10m	SC-50	for 500A, 60mm × 10m	<ul style="list-style-type: none"> • KH Chipping Hammer 												
Model	Remarks																				
SC-1525	for 150 – 250A, 38mm × 10m																				
SC-3040	for 300/400A, 50mm × 10m																				
SC-50	for 500A, 60mm × 10m																				

• Accessory Kit

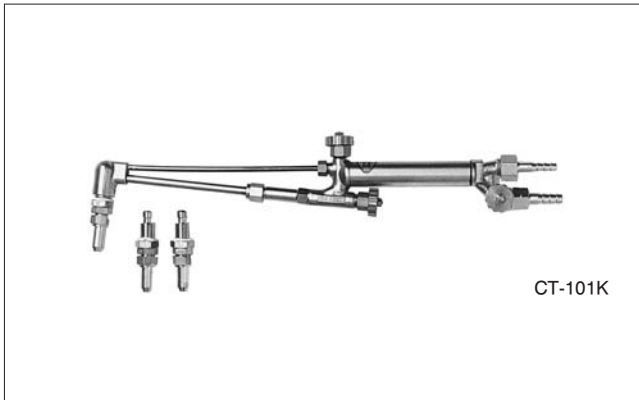
Model	Contents
SAS-1525	SHA Safety Holder, EA-300 Earth Clip, KH Hammer, EH-1, EH-2 Helmet WG-5 Leather Groves, SC-1525 2nd. Cord, EC-1525 Earth Cord
SAS-3040	SHB Safety Holder, EA-300 Earth Clip, KH Hammer, EH-1, EH-2 Helmet WG-5 Leather Groves, SC-3040 2nd. Cord, EC-3040 Earth Cord
SAS-50	SHA Safety Holder, EB-500 Earth Clip, KH Hammer, EH-1, EH-2 Helmet WG-5 Leather Groves, SC-50 2nd. Cord, EC-50 Earth Cord

OXY-ACETYLENE WELDING TORCH



Model	WTC-3		WTC-1		WTV-1	
Overall Length	mm 280		440		410	
Weight	kg Approx. 0.5		Approx. 0.5		Approx. 0.6	
Welding Tips	Tip No.	Max. Welding Thickness mm	Tip No.	Max. Welding Thickness mm	Tip No.	Max. Welding Thickness mm
	25	– 0.5	1	0.5 – 1	1	0.5 – 1
	50	1	2	1 – 2	2	1 – 2
	75	1 – 1.5	3	2 – 3	3	2 – 3
	100	1.5 – 2	5	4 – 5	5	4 – 5
	150	2 – 2.5	7	5 – 7	7	5 – 7

OXY-ACETYLENE CUTTING TORCH



Model	CT-1	CT-2	CT-101K			
Overall Length mm	430	535	420			
Weight kg	Approx. 0.64	Approx. 1.10	Approx. 1.20			
Cutting Tips	Tip No.	Max. Cutting Thickness mm	Tip No.	Max. Cutting Thickness mm	Tip No.	Max. Cutting Thickness mm
	1	3-10	1	3-15	1	3-15
	2	10-20	2	15-40	2	15-40
	3	20-30	3	40-80	3	40-80

GUIDE ROLLER FOR CUTTING TORCH



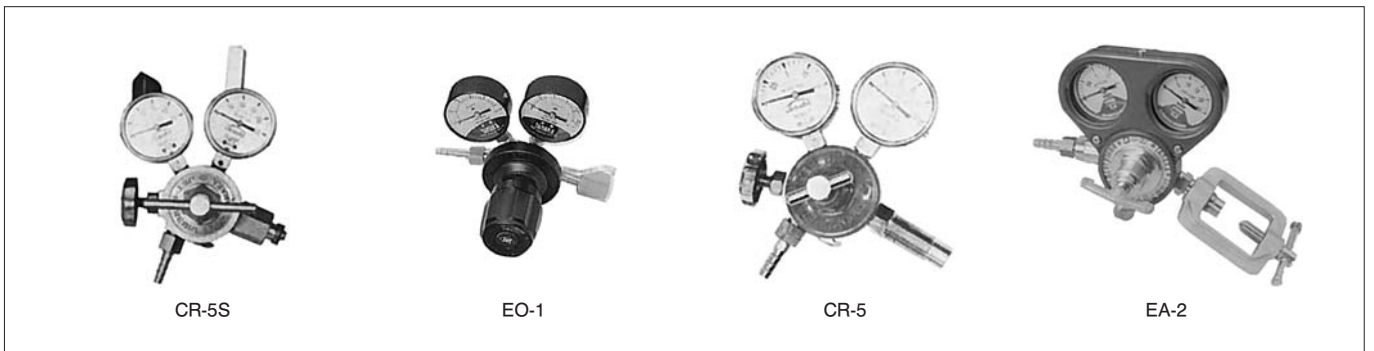
Model	CT-1S	CT-2S
Cutting Dia. mm	420	420
Use with	CT-1	CT-2
Weight kg	Approx. 0.35	Approx. 0.50

GUIDE ROLLER FOR CUTTING TORCH



Model	AP-1
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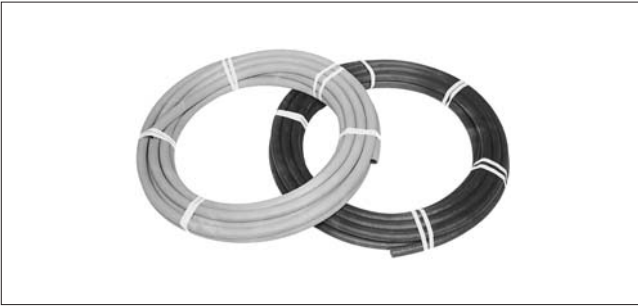
OXYGEN & ACETYLENE PRESSURE REGULATOR



Model	CR-5S	EO-1	CR-5	EA-1	EA-2
Function		Oxygen		Acetylene	
Hi-Press. Meter	MPa(kg/cm ²)	24.5 (250)		2.45 (25)	
Lo-Press. Meter	MPa(kg/cm ²)	2.45 (25)		0.19 (2)	
Weight	kg	Approx. 1.9	Approx. 1.1	Approx. 2.4	Approx. 1.8

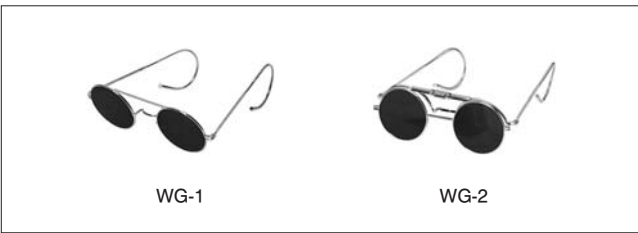
BODY-FRAME REPAIR, WELDING AND PAINTING EQUIPMENT

OXYGEN & ACETYLENE RUBBER HOSE



Model	Specification
CH-210N	Black, for Oxygen, inside dia. 6mm 10m
CH-220N	Black, for Oxygen, inside dia. 6mm 20m
CH-230N	Black, for Oxygen, inside dia. 6mm 30m
ARH-10N	Red, for Acetylene, inside dia. 9mm 10m
ARH-20N	Red, for Acetylene, inside dia. 9mm 20m
ARH-30N	Red, for Acetylene, inside dia. 9mm 30m

WELDING GLASSES



Model	Type
WG-1	Ordinary Type
WG-2	Free Type

FLINT LIGHTER



Model	Remarks
WL-1	Manual Type

GLOVES



Model	LOG-5
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COCK FOR BOMBE



Model	Length mm
BKC-10	143

OXYGEN & ACETYLENE COUPLER

• For Oxygen		• For Acetylene	
22PH	22SH	33PH	33SH
22PF	22SM	33PF	33SM

WELDING HOSE REEL



Model	Name - Specification
SSR-10WS SSR-20WS	Inner dia. ϕ 4.7, Twin Hose 10m, w/Coupler Inner dia. ϕ 4.7, Twin Hose 20m, w/Coupler
SDR-00	Electric Welding Reel Drum only
SDR-2215	Electric Welding Reel 22sq \times 15m300A w/Holder
SDR-2220 SDR-3815 SDR-3820	Electric Welding Reel 22sq \times 20m33A w/Holder Electric Welding Reel 38sq \times 15m33A w/Holder Electric Welding Reel 38sq \times 20m33A w/Holder

GAS CUTTING TOOL & REGURATOR SET



Model	GS-10-A	GS-10S-A
	604 Acetylene Regulator 604S Oxygen Regulator 6220 Welding Torch CT-111K Cutting Torch	622D Acetylene Regulator 622C Oxygen Regulator CT-101R Cutting Torch
Contents	6420-184 Welding Torch Oxygen Hose Acetylene Hose WL-1 Welding Lighter WG-1 Welding Glass HB-10 Hose Clamp BKC-10 Wrench For Cylinder Valve CN-8 Nozzle Cleaning Needle LOG-5 Working Leather Gloves FA-210-A Back Fire Preventive Device (Acetylene)	

HAND TRUCK



Model	B	
Loading Capacity	kg	250
Overall Length	mm	1,800
Overall Width	mm	700
Wheel Diameter	mm	254
Weight	kg	Approx. 40

Designed for carrying 1 oxygen cylinder and 1 acetylene cylinder.

BODY-FRAME REPAIR, WELDING AND PAINTING EQUIPMENT

CAST IRON ANVIL



Model	Weight kg	Model	Weight kg
AN-30	30	AN-70	70
AN-50	50	AN-100	100

CAST IRON SWAGE BLOOK



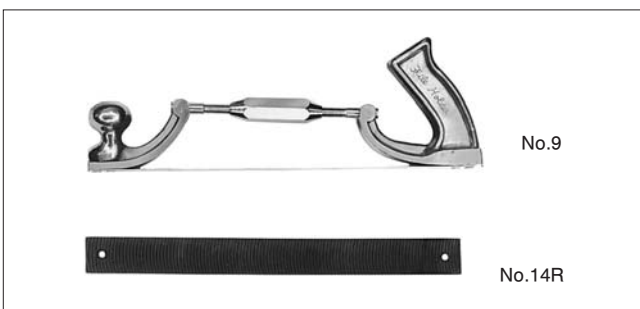
Model	Weight kg	Model	Weight kg
ISB-55	55	ISB-95	95
ISB-75	75	ISB-120	120

“SURFORM” TOOL FOR PUTTY FILING



Model	Feature	Overall Length mm	Weight kg
122A	Curved	300	0.56
101A	Straight	450	0.38
111A	Small	155	0.24
124A	Round Bar	360	0.12

FLEXIBLE FILE & FILE HOLDER



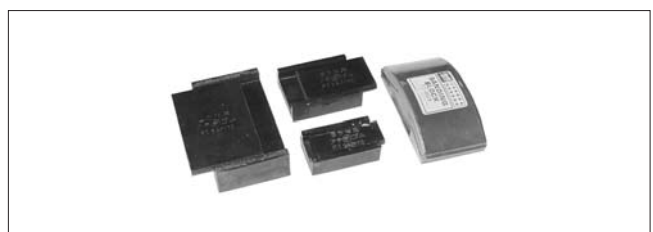
Model	Description	Length mm
No.9	Holder	350
No.14R	Blade, Rough	350
350R	Blade, Rough	350
No.14F	Blade, Fine	350
350F	Blade, Fine	350

SANDING PAPER HOLDER



Model	Plate Size mm
EF-37	300 × 70

SANDING PAD



Model	Size mm	Model	Size mm
SP-8	70 × 40	SP-4	120 × 70
SP-6	75 × 60	SB-K	125 × 70

SOLAX ARTIFICIAL SUN LIGHT



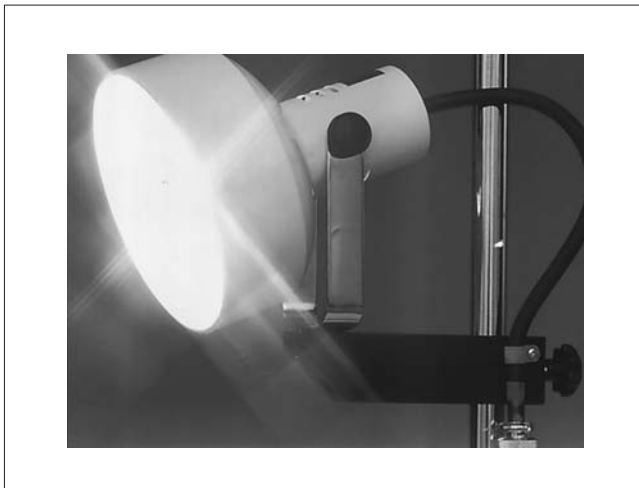
• 100W Type

Model	SOLAX -1A	SOLAX -1F	SOLAX -1AB	SOLAX -1FB	SOLAX -2A	SOLAX -2F
Stand Type	Tripod	Tripod	Tripod	Tripod	Stand	Stand
Number of Lamp	1	1	2	2	1	1
Filter	Clear	Float	Clear	Float	Clear	Float
Lamp Capacity	100W, AC. 1-ph.					
Light Direction	Down to Horizontal					
Luminous Intensity	cd	3,000	1,600	3,800	2,400	3,000
Beam Angle	48°	60°	60°	68°	48°	60°
Number of Estimation	98					
Color Temperature	K 5,500					
Radiant Wave Length	mm 370 – 780 (To Cut Ultraviolet Rays)					
Overall Height	mm	1,250 – 2,450		1,250 – 2,450		1,500
Weight	kg	5.9		9.1		10.5

• 500W Type

Model	XC-500A	XC-500AF
Filter	Clear A	Float A
Power Consumption	W	500
Power Source	AC. 1-ph.	
Light Direction	Down to Horizontal	
Luminous Intensity	cd	26,000
Beam Angle	60°	72°
Number of Estimation	98	98
Color Temperature	K	5,500
Radiant Wave Length	mm	370 – 760
Weight	kg	7.3

SOLAX-EVOLUTION II



Model	SOLAX-EVO-2
Power Source	AC. 1-ph.
Number of Estimation	97
Color Temperature	6,000k
Luminous Intensity	4,600cd

INFRARED STAND



IRT-301



IRT-402

Model	IRT-301	IRT-302	IRT-401	IRT-401XLNC	IRT-402	IRT-402XLNC
No. of Cassettes / Lamp	1/3	2/6	1/4	1/4	2/8	2/8
Power kW	3	6	6	6	12	12
Dried Area m	1.0×0.9	1.6×0.9	1.0×1.4	1.0×1.4	2.0×1.4	2.0×1.4
Drying Capacity m ² /h	12	19	24	24	48	48
Working Distance m	0.5 – 0.7	0.5 – 0.7	0.6	0.6	0.6	0.6
Built in Drying Programmes	6	6	6	6	6	6
Installation of Own Time	3	3	3	3	3	3
Automatic Distance, Temperature Control	–	–	–	○	–	○
Main Cable m	5	5	10	10	10	10
Electric	3ph 400V 4A	3ph 400V 8A	3ph 400V 8A	3ph 400V 8A	3ph 400V 16A	3ph 400V 16A
Weight kg	Approx. 60	Approx. 68	Approx. 62	Approx. 62	Approx. 70	Approx. 70

PAINT SPRAY GUN



W-101G
(Cup is not included)



W-101P



W-101S
(Container is not included)

Model	Type of Feed	Spray Distance mm	Fluid Nozzle Orifice mm	Air Inlet MPa (kgf/cm ²)	Air Consumption (l/min)	Fluid Output (ml/min)	Pattern Width mm	Note	
W-101-134G	Gravity	200	1.3	0.20 (2.0)	210	155	205	Automobile Refinishing	
W-101-134S	Suction				140	180			
W-101-082P	Pressure		0.8	0.29 (3.0)	270	150	190	Industrial	
W-101-102P			1.0			200	220		
W-101-132P			1.3			220	210		
W-101-152P			1.5			250	240		
W-101-101G	Gravity		1.0	0.24 (2.5)	75	95	130	General	
W-101-131G			1.3			145	160		170
W-101-132G			225			175			
W-101-151G			1.5			145	200		180
W-101-152G			225			190	190		
W-101-181G			1.8			170	240		190
W-101-101S	Suction		1.0	0.24 (2.5)	75	85	120	General	
W-101-131S			1.3			145	150		155
W-101-132S			225			160			
W-101-151S			1.5			145	175		170
W-101-152S		225	170			175			
W-101-181S		1.8	170			210	170		
W-200-151G	Gravity	250	1.5	0.29 (3.0)	200	270	220	General	
W-200-152G					330	320			
W-200-201G			2.0		260	410	280		
W-200-202G						320			
W-200-251G	2.5		510		310				
W-200-151S	Suction		1.5		0.29 (3.0)	200	240		210
W-200-152S			330				290		290
W-200-182S			1.8			260	290		340
W-200-201S		260		260					
W-200-202S		2.0	360	350		290			
W-200-251S				440		280			

PAINT CUP & CONTAINER FOR SPRAY GUN



PC-3



PC-4
PC-4S

Type of Feed	Model	Capacity cc	Weight g	Spray Gun Connection inch	For Use With
Suction Feed Container	PCL-7B-2	700	370	PF $\frac{1}{4}$	W-101
	PCL-7B-3		375	PF $\frac{3}{8}$	W-200
	PCL-10B-2	1,000	410	PF $\frac{1}{4}$	W-101
	PCL-10B-3		415	PF $\frac{3}{8}$	W-200
	PC-1	1,000	335	PF $\frac{3}{8}$	W-200
	PC-1S	1,000	330	PF $\frac{1}{4}$	W-101
	PC-2	600	270	PF $\frac{1}{4}$	W-101
Gravity Feed Cup	PC-3	400	180	PF $\frac{1}{4}$	W-101
	PC-4	400	180	PF $\frac{3}{8}$	W-200
	PC-4S	400	168	PF $\frac{1}{4}$	W-101
	PC-5	250	135	PF $\frac{1}{4}$	

*Marked cups are made of stainless steel.

PAINT CUP & GUN CLEANER



Model	SGC-501	
Washing Liquid	Thinner	
Operating Method	Air	
Air Pressure MPa(kgf/cm ²)	0.19 (2 - 5)	
Dimensions (W × D × H) mm	460 × 410 × 950	
Weight kg	Approx. 27	

UNDERBODY COATING GUN (AIR CURTAIN TYPE)



Model		HS-66N
Nozzle Opening	mm	1 Dia.
Operating Air Pressure	MPa(kgf/cm ²)	0.49 – 0.68 (5 – 7)
Container Capacity	ℓ	0.9
Weight	kg	Approx. 11

“SPRAY ACE” UNDERCOAT SPRAY UNIT



Model		HS-200N
Working Pressure	MPa(kgf/cm ²)	0.09 (1)
Capacity	ℓ	18
Height	mm	780
Width	mm	400
Weight	kg	Approx. 29
Contents of Set	Main Body 1, Spray Gun 1, Air Hose 6m 1, Paint Hose 6m 1, Bucket 1	

AIRLESS SPRAY UNIT



Model	Type	Overall Height mm	Standard Accessories
ALS-331B	S. Stand	740	Airless Spray Gun Fluid Hose Fluid Filter Drain Valve
ALS-332B	S. Tank	825	
ALS-333B	S. Cart	780	
ALS-431B	M. Stand	910	
ALS-432B	M. Tank	910	
ALS-433B	M. Cart	920	
ALS-453B	H.P. Cart	920	

“BLACK COATER” UNDERCOAT SPRAY UNIT



Model	Tank Capacity ℓ	Pump Capacity	Height/ Weight
YSE-65P20	20	Output Volume 0.85 ℓ /min. Air Consumption 275 ℓ /min. Pump Ratio 20:1	Height 805mm Weight 15kg

- Standard Accessories
 - Spray Gun, Paint Hose (5m), Carrier

PAINT SPRAY MASK



Model	SR-77	SR-22
Remarks	Inspire Nozzle 1pc.	Inspire Nozzle 2pcs.

DUST OFENDING MASK



Model	8710	9913
Remarks	for General	for Special Dust