

**BACK**

# K

**ENGINE RECONDITIONING  
EQUIPMENT**



## ECCENTRIC VALVE SEAT GRINDER



Model		EC-65N	EC-160N
Capacity – Valve Seat	mm	φ 28 – 65	38 – 160
Capacity – Valve Stem	mm	φ 7 – 10	10 – 25
Driving Motor		AC 1-ph., 250W 8,000rpm	AC 1-ph., 400W 3,800rpm
Eccentric Shaft	rpm	21	15
Eccentricity	mm	1	1
Grinding Wheel Angles	degree	5, 15, 20, 30 45, 60, 75	15, 20, 30 45, 60, 75
Diamond Dresser	carat	1/3	1/3
Pilot Stem ( ) Guide	mm	φ 7, φ 8, φ 8.65 φ 9, φ 10 (11.1)	φ 10, φ 11, φ 12 φ 13 (14.2)
Grinding Wheel	pcs.	13	10
Case Size	mm	410×470×430	820×380×440
Weight	kg	Approx. 28.5	Approx. 45
Use for		Passenger Cars	Trucks

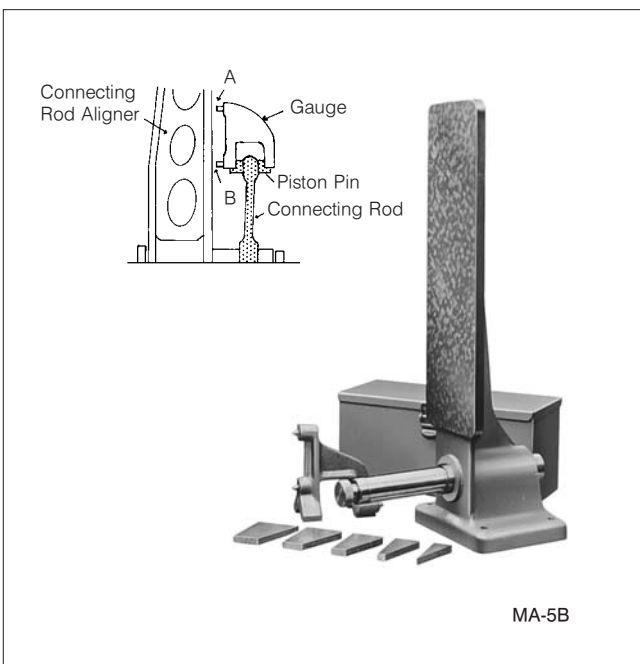
Please specify voltage and cycles when ordering.

## DIAMOND DRESSER FOR VALVE SEAT GRINDER



Model	Length mm	Carat	Use for
<b>DR-2A</b>	70	1/4	VSG series
<b>DR-2B</b>	50	1/3	EC series

## CON-ROD ALIGNER



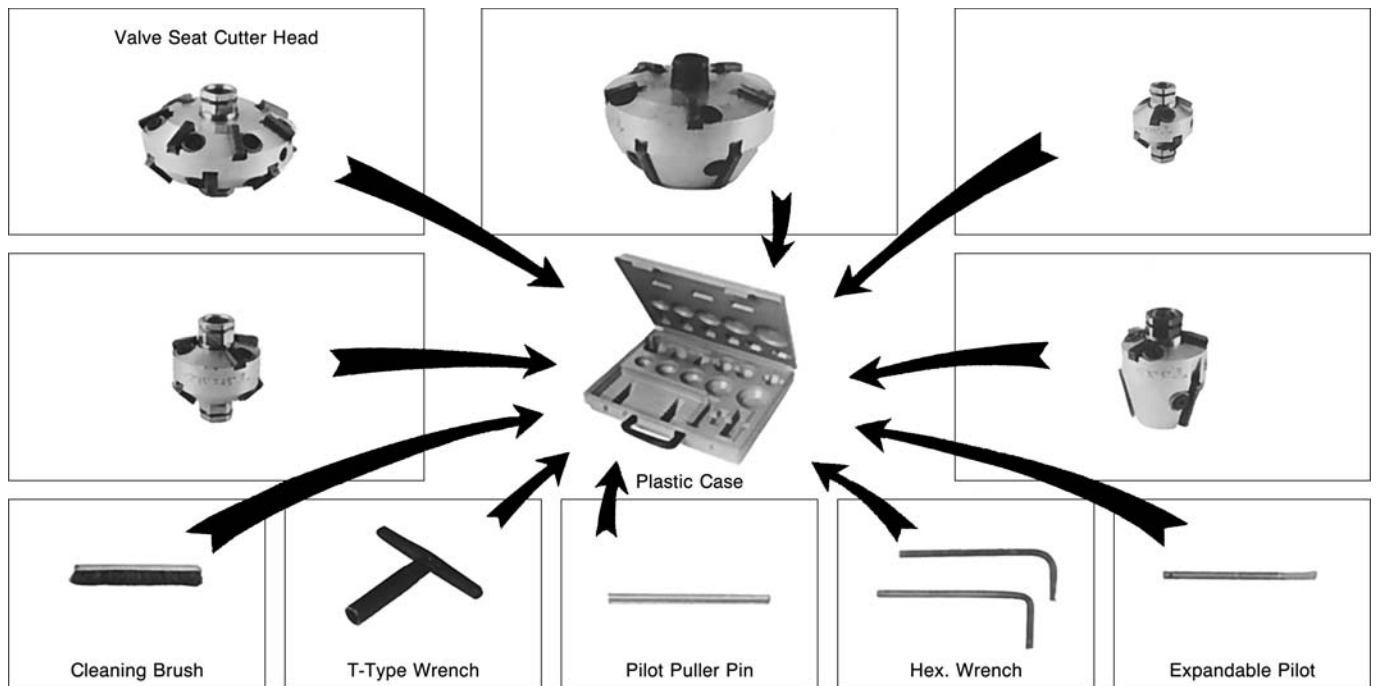
Model		MA-5B	MA-5E
Connecting Rod Available Dia.	mm	30 – 75	50 – 105
Connecting Rod Available Length	mm	65 – 300	150 – 420
Dimensions (H × W × D)	mm	Approx. 460 × 145 × 120	Approx. 650 × 230 × 170
Weight	kg	Approx. 16	Approx. 27

## VALVE SEAT CUTTER SET



Model	TB-524
Contents	Cutter Head 60° (38 φ mm) 1, 30° × 45(31.6 φ mm) 1 (35 φ mm) 1, (38 φ mm) 1, (41.3 φ mm) 1 60° (31.6 φ mm) 1, (25.4 φ mm) 1 45° (24.8 φ mm) 1, 75° (25.4 φ mm) 1
	Pilot Stem 6, 7, 8, 8.5 Each 1
	Accessories Key Wrench 5/64; 1, Key Wrench 3/32; 1 Pilot Puller Pin; 1, Brush; 1 T-Wrench; 1, Adapter for T-Wrench; 1

## “NEWAY” VALVE SEAT CUTTER



### 100 series Valve Seat Cutter Head (for small vehicle)

#### • (Dia. of) Head Dia. 19.0mm (3/4")

Head Model	Angle	No. of Blade	Remark
<b>N-130</b>	15°	3	Assy
<b>N-131</b>	45°	3	Assy
<b>N-132</b>	32°	3	Assy
<b>N-133</b>	60°	3	Assy
<b>N-134</b>	15°	3	Assy
<b>N-135</b>	45°	3	Assy

#### • (Dia. of) Head Dia. 24.8mm (0.975")

Head Model	Angle	No. of Blade	Remark
<b>N-110-R</b>	46°	3	253
<b>N-115</b>	31°	3	250
<b>N-122</b>	45°	3	253
<b>N-126</b>	30°	3	253
<b>N-127</b>	20°	3	253

#### • (Dia. of) Head Dia. 25.4mm (1")

Head Model	Angle	No. of Blade	Remark
<b>N-111-R</b>	60°	3	252
<b>N-119</b>	15°	3	355
<b>N-120</b>	15°	3	553
<b>N-121</b>	15°	3	253
<b>N-126</b>	30°	3	253

#### • (Dia. of) Head Dia. 31.6mm (1 1/4")

Head Model	Angle	No. of Blade	Remark
<b>N-114</b>	60°	3	252
<b>N-128</b>	30° × 45°	3/3	250

#### • (Dia. of) Head Dia. 33.3mm(1 5/16")













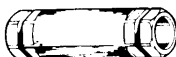





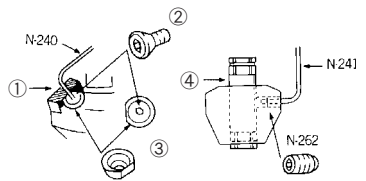

Head Model	Angle	No. of Blade	Remark
<b>N-102-W</b>	31° × 46°	3/3	250/251
<b>N-124</b>	15° × 60°	3/3	251/254

#### • 100 series Expandable Pilot

Model	Opening	Overall Length mm
<b>N-120-5.5</b>	5.5mm	101
<b>N-120-6.0</b>	6.0mm	101
<b>N-120-6.5</b>	6.5mm	101
<b>N-120-7.0</b>	7.0mm	152
<b>N-120-7.5</b>	7.5mm	152
<b>N-120-8.0</b>	8.0mm	158
<b>N-120-8.5</b>	8.5mm	158
<b>N-120-16</b>	1/4"	101

# ENGINE RECONDITIONING EQUIPMENT

## ACCESSORY FOR "NEWAY" VALVE SEAT CUTTER

Tool						
						
<b>N-505</b> T-Type Wrench 1/2" (for 200 series cutter head)	<b>N-503-1</b> Adaptor 1/2" ⇔ 3/8" (for 100 series cutter head)	<b>N-245</b> Pilot Puller Pin	<b>N-240</b> Hex. Wrench 5/64" (for blade fixing screw)	<b>N-241</b> Hex. Wrench 3/32" (for hub fixing screw)	<b>N-267</b> Cleaning Brush (for blade cleaning)	
Parts of Cutter Head						
						
<b>N-260</b> Blade Fixing Screw (for cutter head more than φ28.6mm)	<b>N-261</b> Blade Fixing Screw (for φ25.4mm cutter head)	<b>N-262</b> Hub Fixing Screw	<b>N-265</b> Blade Fixing Wedge (for cutter head more than φ25.4mm)	<b>N-266</b> Blade Fixing Wedge (for φ25.4mm cutter head)	<b>N-100-9</b> Hub (for 100 series)	<b>Hub</b> (for 200 series) <b>N-202-269</b> (Standard 41.3mm) <b>N-202-268</b> (Hexagon)
						
<b>Super Solid Blade</b> (for 0°-46° cutter) (for normal seat) <b>N-250</b> 9.5mm long <b>N-251</b> 12.7mm long <b>N-253</b> 7.9mm long	<b>Super Solid Blade</b> (for 60°-75° cutter for correction of up & down) <b>N-252</b> 12.7mm long <b>N-254</b> 19mm long	<b>Special Solid Blade</b> <b>N-352</b> 12.7mm long Radius type (for motorcycle engine) <b>N-354</b> 19.0mm long Radius type (for motorcycle engine) <b>N-355</b> 9.5mm long Radius type (for motorcycle engine) <b>N-353</b> 7.9mm long Step type (for engine of Honda Generation) <b>N-553</b> 7.9mm long Diagonal type (for Suzuki motorcycle engine)			<p>① Super solid Blade ② Blade fixing Screw ③ Wedge ④ Hub</p>	
Parts of Expandable Pilot						
						
<p>Stem      Snap Ring      Spacer or Expander      Collet      Expander      Nut</p>						

### • Plastic Case



Model	Dimensions of Case mm	Remarks
<b>N-497</b>	320 × 395	for 11pcs. of cutter head
<b>N-160</b>	200 × 305	for 6pcs. of cutter head
<b>N-303</b>	190 × 250	for 3pcs. of cutter head (only for 100 series cutter head)

## “NEWAY” VALVE SEAT CUTTER

### 200 Series Valve Seat Cutter

#### • (Dia. of) Head Dia. 28.6mm (1<sup>1</sup>/<sub>8</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-243	15°	3	250
N-268	45°	3	250
N-269	60°	3	252
N-274	30°×45°	3/3	250
N-278	30°	3	250
N-279	75°	3	254
N-299	30°	3	253

#### • (Dia. of) Head Dia. 31.6mm (1<sup>1</sup>/<sub>4</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-203	31°×46°	3/3	250
N-204	15°×46°	3/3	250
N-206	75°	3	254
N-211	60°×75°	3/3	252/254
N-212	15°×75°	3/3	250/254
N-220	20°×45°	3/3	250
N-222	70°	3	252
N-229	15°×45°	3/3	250
N-230	30°×45°	3/3	250
N-244	15°	3	250
N-270	60°	3	252
N-273	15°×60°	3/3	250/252
N-285	46°	3	250
N-287	20°×46°	3/3	250
N-601	15°×46°	3/5	250
N-602	31°	5	250
N-603	15°×31°	3/5	250
N-604	15°	5	250
N-605	65°	3	254
N-607	30°	5	250
N-608	45°	5	250
N-609	46°	5	250
N-701	0°	3	250

#### • (Dia. of) Head Dia. 35.0mm (1<sup>3</sup>/<sub>8</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-201	31°×46°	3/3	250/251
N-209	15°×46°	3/3	250
N-221	20°×45°	3/3	251/250
N-231	15°×45°	3/3	250
N-232	30°×45°	3/3	250/251
N-286	11°×45°	3/3	250
N-611	31°	5	250
N-612	15°×46°	3/5	250
N-613	20°×46°	3/5	251/250
N-615※	15°×46°	3/3	250/251
N-616	30°×45°	5/5	251/251
N-617	0°×46°	3/5	250/251
N-618	35°×60°	5/5	251/252

#### • (Dia. of) Head Dia. 38.0mm (1<sup>1</sup>/<sub>2</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-205	60°	3	254
N-208	31°×46°	3/3	251
N-213	15°×60°	3/3	251/254
N-216	75°	3	254
N-217	15°×75°	3/3	251/254
N-234	30°×45°	3/3	251
N-239	11°×45°	3/3	251
N-271	70°	3	254
N-275	46°	3	251
N-297	15°×70°	3/3	251/254
N-619	15°×60°	5/5	251/254
N-620	45°	5	251
N-621	15°×46°	3/5	251
N-622	31°×46°	5/5	251
N-623	15°×30°	3/5	250
N-624	15°×75°	5/5	251/254
N-625	15°×45°	3/5	251
N-626	30°×45°	5/5	251

#### • (Dia. of) Head Dia. 38.0mm (1<sup>1</sup>/<sub>2</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-627	30°	5	250
N-628	31°	5	251
N-629	15°	5	250
N-689	25°	5	251
N-690	35°	5	251
N-691	43°×52°	5/5	251/251
N-692	36°	5	251
N-693	0°×46°	3/5	250/251
N-694	35°×60°	5/5	250/252
N-720	0°	3	251

#### • (Dia. of) Head Dia. 41.3mm (1<sup>5</sup>/<sub>8</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-235	15°×45°	3/3	251
N-236	15°×46°	3/3	251
N-237	30°×45°	3/3	251
N-631	15°×46°	3/5	251
N-632	31°×46°	5/5	251
N-633	20°×45°	5/5	251
N-634	45°	5	251
N-635	15°×45°	5/5	251
N-636	30°×45°	5/5	251

#### • (Dia. of) Head Dia. 44.5mm (1<sup>3</sup>/<sub>4</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-272	75°	3	254
N-292	15°×60°	3/3	251/254
N-293	60°	3	254
N-641	15°×46°	3/5	251
N-642	31°×46°	5/5	251
N-643	15°×60°	5/5	251/254
N-644	60°	5	254
N-645	30°×45°	5/5	251
N-646	15°×45°	3/5	251
N-647	30°	5	250
N-648	30°×60°	5/5	251/254
N-649	31°	5	251
N-695	35°	5	251
N-696	25°	5	251
N-697	15°×75°	5/5	251/254
N-698	37.5°	5	251
N-699	70°	5	254
N-740	0°	3	251

#### • (Dia. of) Head Dia. 50.8mm (2" )

Head Model	Angle	No. of Blade	Blade Model
N-288	15°×60°	3/3	251/254
N-294	60°	3	254
N-652	31°×46°	5/5	251
N-653	15°×60°	5/5	251/254
N-654	15°×75°	5/5	251/254
N-655	15°×31°	3/5	251
N-656	15°×46°	5/5	251
N-657	60°	5	254
N-658	30°×60°	5/5	251/254
N-659	15°×45°	3/5	251
N-660	30°×45°	5/5	251
N-680	30°	5	251
N-681	20°	5	250
N-682	31°×46°	7/7	251
N-683	36°	5	251
N-684	70°	5	254
N-750	0°	3	251

#### • (Dia. of) Head Dia. 55.5mm(2<sup>3</sup>/<sub>16</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-685	20°	5	251

#### • (Dia. of) Head Dia. 57.0mm (2<sup>1</sup>/<sub>4</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-662	31°×46°	7/7	251
N-663	15°×45°	5/5	251
N-664	15°×46°	5/9	251
N-665	30°×45°	7/7	251
N-666	15°×60°	5/5	251/254
N-760	0°	3	251

#### • (Dia. of) Head Dia. 63.5mm (2<sup>1</sup>/<sub>2</sub>" )

Head Model	Angle	No. of Blade	Blade Model
N-671	15°×46°	5/5	251
N-672	31°×46°	7/7	251
N-673	15°×31°	5/5	251
N-674	15°×60°	5/5	251/254
N-675	60°	5	254
N-676	15°	5	251
N-677	30°×45°	7/7	251/251

※ …… with short Hub

### 200 Series Expandable Pilot

#### • Metric (mm) size

Model	Dimensions mm	Length mm
N-150-6.0	6.0	152
N-150-6.5	6.5	152
N-150-7.0	7.0	152
N-150-7.5	7.5	152
N-150-8.0	8.0	165
N-150-8.5	8.5	165
N-150-9.0	9.0	178
N-150-9.5	9.5	178
N-150-10.0	10.0	178
N-150-10.5	10.5	178
N-150-11.0	11.0	178
N-150-11.5	11.5	178
N-150-12.0	12.0	178
N-150-12.5	12.5	178

Model	Dimensions mm	Length mm
N-200-8.0	8.0	197
N-200-8.5	8.5	197
N-200-9.0	9.0	197
N-200-9.5	9.5	197
N-200-10.0	10.0	203
N-200-10.5	10.5	203
N-200-11.0	11.0	203
N-200-11.5	11.5	203
N-200-12.0	12.0	203
N-200-12.5	12.5	203
N-200-13.0	13.0	203

#### • Inch Size

Model	Dimensions mm	Length mm
N-150-16	1/4"	152
N-150-18	9/32"	152
N-150-20	5/16"	165
N-150-22	11/32"	165
N-150-24	3/8"	178
N-150-26	13/32"	178
N-150-28	7/16"	178
N-150-32	1/2"	178

Model	Dimensions mm	Length mm
N-200-26	13/32"	203
N-200-32	1/2"	203

# ENGINE RECONDITIONING EQUIPMENT

## AIR VALVE LAPPER



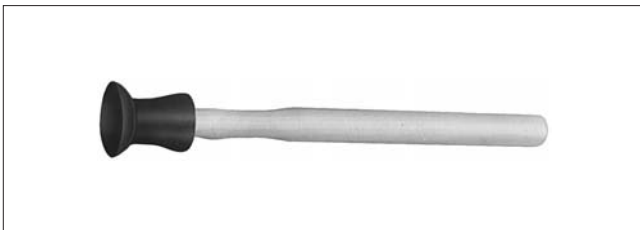
Model	Air Pressure MPa(kgf/cm <sup>2</sup> )	Overall Length mm	Weight kg
<b>T-510D</b>	0.58 (6) or more	175	1.4

Accessories: Rubber Cap 45, 35, 30, 20mm 1 each

### • Rubber Cap only

Model	Size	Model	Size
<b>T-510D-20</b>	φ 20 (10pcs./set)	<b>T-510D-35</b>	φ 35 (10pcs./set)
<b>T-510D-30</b>	φ 30 (10pcs./set)	<b>T-510D-45</b>	φ 45 (10pcs./set)

## HAND VALVE LAPPER



Model	Rubber Head mm
<b>VL-20T</b>	φ 20
<b>VL-30T</b>	φ 30
<b>VL-35T</b>	φ 35
<b>VL-45T</b>	φ 45

## VALVE LAPPING COMPOUND



Model	Capacity g	Grain
<b>VC-120</b>	200	Coarse
<b>VC-220</b>	200	Fine

## PISTON RING COMPRESSOR



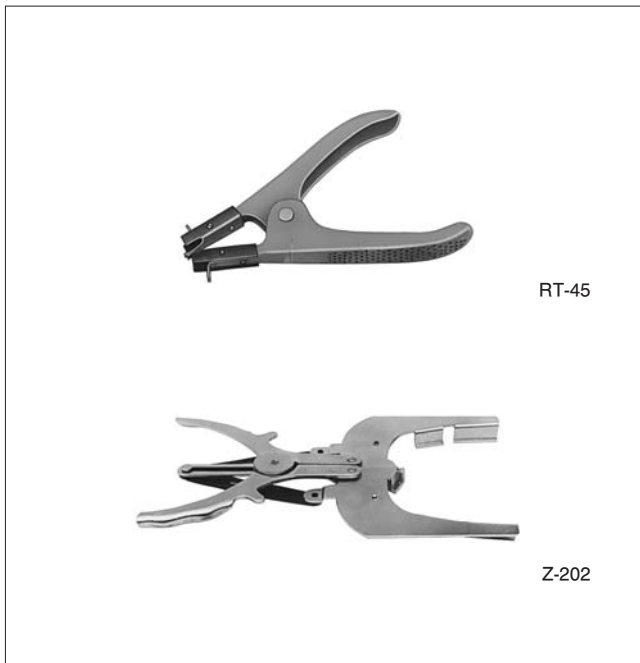
Model	Capacity mm	Weight kg
<b>RC-25</b>	50 – 125	Approx. 0.25
<b>RC-30</b>	75 – 175	Approx. 0.3

## PISTON FEELER GAUGE



Model	Leaf Overall Length m	Leaf Width mm	Thickness of Each Leaf mm
<b>No.208</b>	230	13	.05, .08, .10, .13, .15, .20, .25, .38 (8 Leaves)

## PISTON RING TOOL



Model	Capacity mm
<b>RT-45</b>	51- 85
<b>Z-202</b>	70-105

## CARL-MAHR TYPE CYLINDER GAUGE



Model	Range mm	Graduations mm	Max. Depth mm
<b>BC-10</b>	10 – 18	1/100	130
<b>BC-18</b>	18 – 35	1/100	130
<b>BC-35</b>	35 – 60	1/100	200
<b>BC-38</b>	35 – 80	1/100	200
<b>BC-50</b>	50 – 100	1/100	250
<b>BC-58</b>	50 – 150	1/100	250
<b>BC-100</b>	100 – 160	1/100	300
<b>BC-160</b>	160 – 250	1/100	400
<b>BC-250</b>	250 – 450	1/100	500

## “PERFECT CIRCLE” PLASTI-GAUGE



Model	Clearance Range mm	Quantity
<b>PG-1</b>	0.025 – 0.076	Green 12
<b>PR-1</b>	0.051 – 0.152	Red 12
<b>PB-1</b>	0.102 – 0.229	Blue 12

# ENGINE RECONDITIONING EQUIPMENT

## VALVE LIFTER & COMPRESSOR



Model	Remarks
<b>VL-400</b>	Cap. 15 – 180mm
<b>VL-500</b>	Cap. 50 – 225mm

## VALVE COTTER TOOL SET



Model	Description
<b>VP-939FS</b>	Valve Cotter Tool Set

## VALVE & CLUTCH SPRING TESTER



Model	<b>VST-120B</b>	<b>VST-240B</b>
Capacity	120 (Gauge min. 1kg)	240 (Gauge min. 2kg)
Spring $\phi \times L$	80 × 210	80 × 210
Dimensions (L × W × H)	200 × 335 × 550	200 × 335 × 550
Weight	23.5	23.5
Standard Accessories	Hex. Wrench (3mm) 1 Handle 2 Vinyl Cover 1	Hex. Wrench 1 Handle 2 Vinyl Cover 1

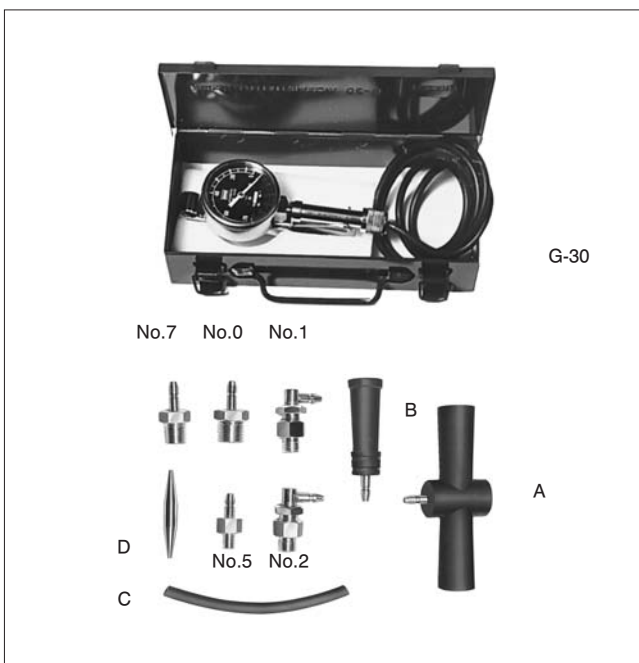


## COMPRESSION GAUGE FOR GASOLINE ENGINE



Model	Type	Gauge Scale MPa	Case Size (L×W×H) mm	Weight kg	Standard Accessories
<b>G-24B-2</b>	Hand Pressing (Conventional)	0 – 2.45	260 × 160 × 55	Approx. 1.8	Valve Ass'y Rubber Cone Adaptor w/short pipe Rubber Cone Adaptor w/long pipe Rubber Cone Adaptor w/curved pipe
<b>G-25B</b>	Self Sealing	0 – 2.45	290 × 140 × 65	Approx. 1.8	Valve Ass'y Tapered Rubber Adaptor 14mm Tapered Rubber Adaptor 18mm Connector Pipe long Connector Pipe short
<b>GU-51C</b>	Almighty	0 – 2.45	285 × 150 × 65	Approx. 1.5	Hose Adaptor for 14mm Oring: 1pc.
<b>GU-53C</b>	Almighty	0 – 2.45	285 × 150 × 65	Approx. 1.8	Hose Adaptor 10mm, 12mm, 14mm for plug: 1pc. Orig: 1pc. for each adaptor 400 ℓ

## VACUUM GAUGE



Model	Graduations KPa, MPa (cmHg, kgf/cm <sup>2</sup> )	Case Size mm	Weight kg
<b>G-8B</b>	0 – 7.45 (0 – 76)	230 × 130 × 60	1
<b>G-30</b>	0 – 7.45 (0 – 76) 0 – 0.05 (0 – 0.5)	250 × 140 × 55	1.7

**Standard Accessories**

- G-8B Adaptor PT 1/8 × 28-thread
- G-30 No.0 Adaptor PT 3/8 × 19-thread
- No.2 Adaptor 12m/m P = 1.5
- No.1 Adaptor PT 1/8 × 28-thread
- No.5 Adaptor 8m/m P = 1.25
- No.7 Adaptor PT 1/4 × 19-thread
- A Double-End Rubber Connector
- B Single-End Rubber Connector
- C Rubber Hose 1.5cm
- D Hose Connector

# ENGINE RECONDITIONING EQUIPMENT

## COMPOUND GAUGE



TB-3-1

Model	TB-3-1	TB-3-2
Gauge (+)	1kgf/cm <sup>2</sup> × 760mm/Hg	0.19MPa(2kgf/cm <sup>2</sup> )
Gauge (-)	(-) 1kgf/cm <sup>2</sup> × (-) 760mm/Hg	-
Case Size	290 × 150 × 68 mm	

## FUEL PRESSURE TEST GAUGE



PG-10D

Model	PG-10D	
Range	MPa	0 – 0.98
Min. Graduations	MPa	0.0098

## CARBURETOR BALANCER



Model	CAB-1	
Method		Floating Ball
Dimensions	mm	115 × φ 90
Weight	g	200

## HAND-HELD VACUUM PUMP



Model	Range kpa	Weight g
VP-D-S	0 – 100	200

## AIR ELEMENT CLEANER

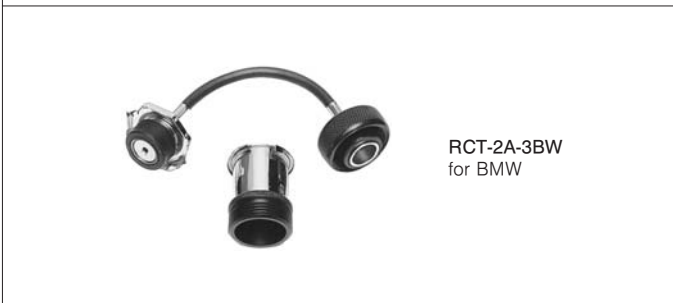
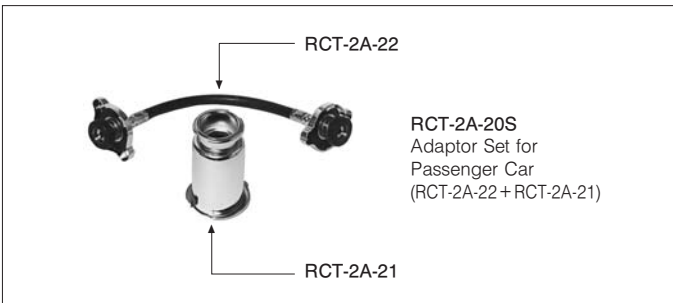


Model	EC-300	
Applicable Element	Dry Type (Because of a shape, some elements can not be adapted.)	
Dimensions of Setable Element	mm	Outside Dia.: φ 180 – 340 Inside Dia.: Min. φ 100 Length: 200 – 550
Method of Fixing Method of Cleaning Power Source	Chuck Type Air Blow by Nozzle AC 100V, 900W	
Water Air Pressure	MPa	0.2 – 0.49MPa, more than 20 ℓ /min. 0.68 – 0.97
Dimensions (W×D×H) Weight	mm kg	1,010 × 470 × 2,031 160
Safety Device	Short-circuit Breaker Circuit-protector Emergency Stop Switch	

## RADIATOR CAP & COOLINGSYSTEM TESTER



Model	Range MPa (Lbs)	Length mm	Weight kg
<b>RCT-2A</b>	0 – 0.196 (0 – 30)	260	850



## FUEL CONSUMPTION TESTER



Model	<b>FM-20P3</b>
Electric Source	DC 12V (Car Battery) Air Separator (AS40) equipped with Gasoline used for
Main Body (LS4150)	Flow Rate: 2 – 40 l /h Max. Pressure: 0.49MPa Accuracy: Within 1%
Indicator (EL0103A-501)	Min. Unit: 10cc Max. Indication: 5-figure (999.99 l )
Temperature degree Shock Proof Case Size mm Total Weight of the Set kg	-10 – 60 Within 3G 240 × 215 × 90 Approx. 2.5

# ENGINE RECONDITIONING EQUIPMENT

## FUEL CONSUMPTION METER

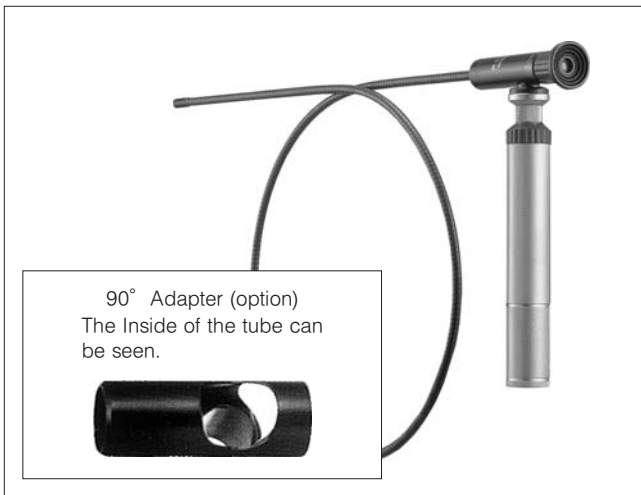


**Model:** FC-9521

**Measurement Items:**

- 1) Start Date: The starting date of the test.
- 2) Finish Date: The finishing date of the test.
- 3) Fuel Consumption (L):  
Accumulated quantity of fuel consumption from the starting point to the end of test.
- 4) Testing Period (Time) (H.M.S.):  
Time spent from the starting point to the end of test.
- 5) Fuel Consumption Rate  
(KM/L): Distance per one liter (Mileage).  
(L/H): Quantity per one hour.
- 6) Instantaneous Consumption Rate (L/H):  
One second sampling and convert it into the rate of per hour.
- 7) Average Speed (KM/H):  
From the starting point to the end of test.
- 8) Fuel Value (L/H):  
One second sampling and convert it into the rate of per hour. (Both supply and return)

## LIGHT SCOPE



Model	MSPS-1000-3	MSPI-1000-3
Overall Length mm	1,000	1,000
Bend	Center part can be bended flexibly up to radius 17mm	This can be bended and fixed up to radius 60mm
Power Source	Dry Cell (SUM3) × 2pcs.	Dry Cell (SUM3) × 2pcs.

## NOISE DETECTING CHECKER



This checker can detect the noise of vehicles due to the sensor which are set to possible point of noise. (Max. 4 point can connect to possible point of noise)

And also this checker can connect with tape recorder, so it confirm the situation of difference for before and after repair.

Model	S2000
Dimensions of Checker (W × D × H)	100 × 167 × 45mm
Standard Accessories	Stereo-head set, Impact (vibration) sensor (2m, 3m, 5m/each), Impact (vibration) sensor with velcro tape (3m, 5m/each), Suction cup adaptor, Remote power SW cable

**SOUND SCOPE**



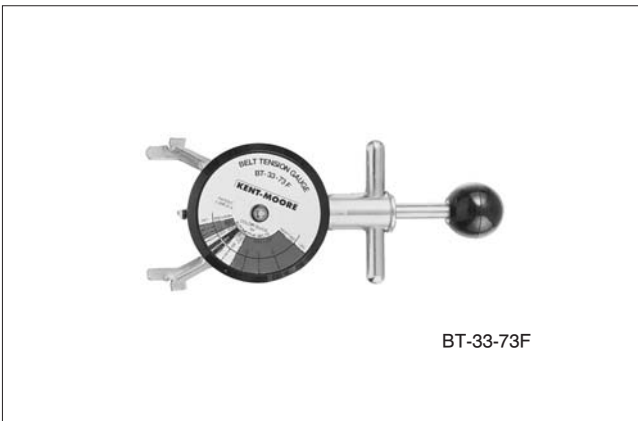
Model	Case Size mm	Weight kg
<b>SS-1</b>	350 × 110 × 60	0.5

**OIL PRESSURE GAUGE FOR ENGINE**



Model	Graduation MPa	Hose Length m	Case Size mm	Weight kg
<b>HE-70</b>	0.68	1.9	260 × 200 × 43	1.8

**BELT TENSION GAUGE**



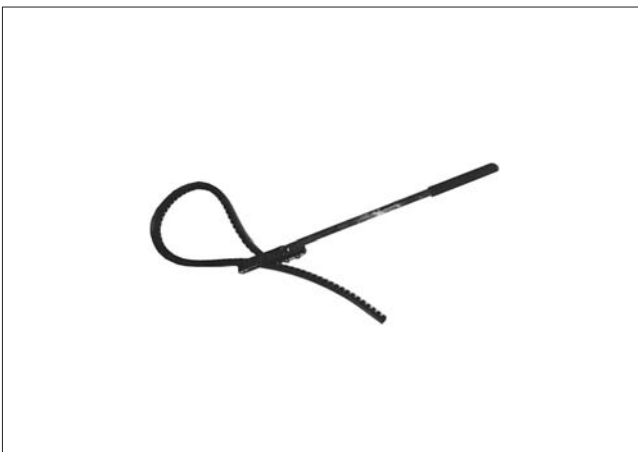
Model	Application	Tension Measure Range (Lbs)
<b>BT-33-73F</b>	V-Belt for Passenger Car	30 – 180
<b>BT-33-74</b>	V-Belt for Large Vehicle	60 – 200

**CRANKSHAFT PULLEY PULLER**



Model	Remarks
<b>CP-931FS</b>	Applicable Outside Dia.: $\phi$ 132 – 195mm, Max. width: 68mm

**V HAND LEVER**



Model	CP-93B
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# ENGINE RECONDITIONING EQUIPMENT

## AIR HAMMER WRENCH



Model		AHW-1100
Max. Torque	Nm	520
Applicable Torque Range	Nm	382 – 441
Square Drive	mm	12.7
Length	mm	375
Weight	kg	4

## OIL PRESSURE GAUGE FOR AUTOMATIC TRANSMISSION



Model	Graduation MPa	Case Size mm	Weight kg
HT-67	1.96	260 × 200 × 43	2

## HYDRAULIC TEST GAUGE



Model		HT-G
Pressure Gauge	MPa	2.5, 10, 40 each 1
Case Size	mm	380 × 285 × 95
Weight	kg	15

## ENGINE STAND



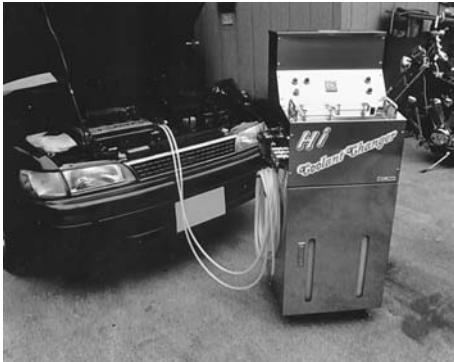
Model	ES-10B	ES-17	ES-17B	ES-31	
Use for	Light cars	Small cars	Small cars	Medium & Large car	
Weighting Capacity	kg	100	200	250	550
Length	mm	800	970	970	1,125
Width	mm	550	650	650	680
Height	mm	750	970	970	910
Weight	kg	40	80	60	100
L-Type Arm	–	Equipped	–	–	
Standard Installing Bolts	M10 × 1.25 M12 × 1.25 4pcs./each	M10 × 1.25, M10 × 1.5, M12 × 1.25, M12 × 1.5, M12 × 1.25 (for Corolla) 4pcs./each			

- Extra attachments for assembling other differential are available on request.

## HI COOLANT CHANGER



HCC-800S  
Polyethylene tank  
is option.



HCC-1000

Model		HCC-800S	HCC-1000
Feeding Pump	ℓ /min.	3.5	4
Suction Pump	ℓ /min.	2.6	2.6
Pressure Gauge	MPa	0.19	0.19
Type of LLC		1-Type	2-Types
Power Source		1-ph., 200W	1-ph., 200W
Dimensions (W × D × H)	mm	550 × 550 × 1,120	550 × 570 × 1,250
Weight	kg	50	55

### • Standard Accessories

- HC-A, B, C Adaptor Cap
- DJ-2 Drain Cock Joint (Toyota, Nissan, Mitsubishi, Mazda, Honda, Subaru, Daihatsu, Suzuki)
- DJ-3 Drain Cock Joint (Toyota, Nissan, Mitsubishi, Mazda, Honda, Isuzu, Subaru, Suzuki)
- DJ-4 Drain Cock Joint (Mitsubishi)
- DJ-5 Drain Cock Joint (Nissan, Mazda, Subaru)
- JH-1 Joint Hose
- JP-1 Joint Plug

### • Option

- HC-D Large Adaptor Cap
- FRH-1 Brushing Return Hose 2.5m
- Polyethylene Tank 20 ℓ (Standard Accessory for HCC-1000)
- Adaptor Cap for European & U.S. Cars

## VACUUM PUMP FOR AIR-CONDITIONER (FOR R-12)



Model		GS-100ZA
Ultimate Pressure	torr	$1 \times 10^{-2}$
Pumping Speed	ℓ /min.	110 (50Hz), 132 (60Hz)
Revolution	rpm	1,440/1,730
Oil Consumption	ℓ	0.23
Motor	kW	0.25, Single Phase 50/60Hz
Weight with Motor Bed	kg	17

- Applicable for HFC-134a.

# ENGINE RECONDITIONING EQUIPMENT

## VACUUM PUMP FOR AIR-CONDITIONER (FOR HFC-134a, R-12, R-22)



Model	CS-756F	
Ultimate Pressure	torr	$5 \times 10^{-3}$
Pumping Speed	ℓ /min.	35
Revolution Meter	rpm	700
Motor	1-ph., 0.2kW	
Timer	5 – 60min. or continuous	
Dimensions (W × D × H)	mm	220 × 360 × 320
Weight	kg	12

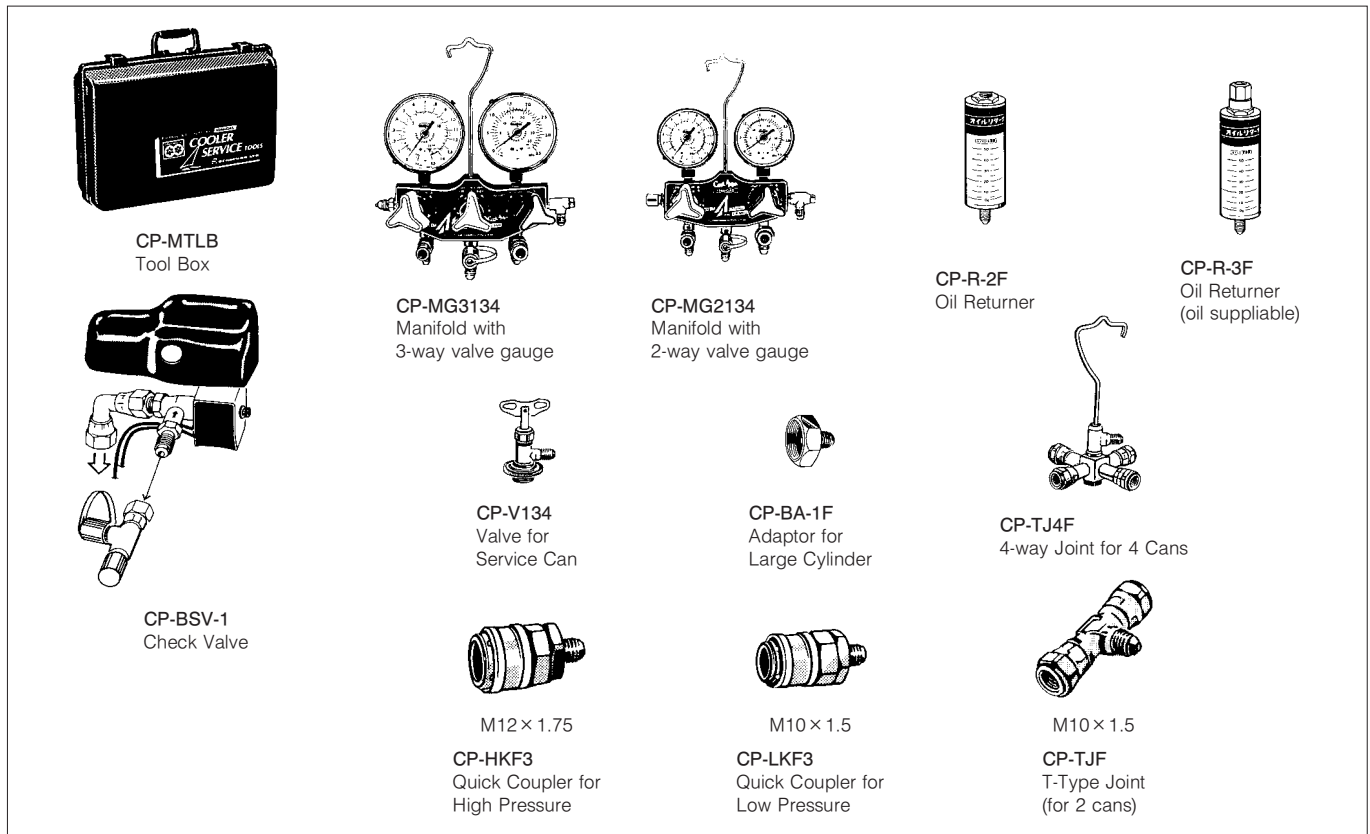
## CAR AIR-CONDITIONER GAS CHARGING TOOL SET



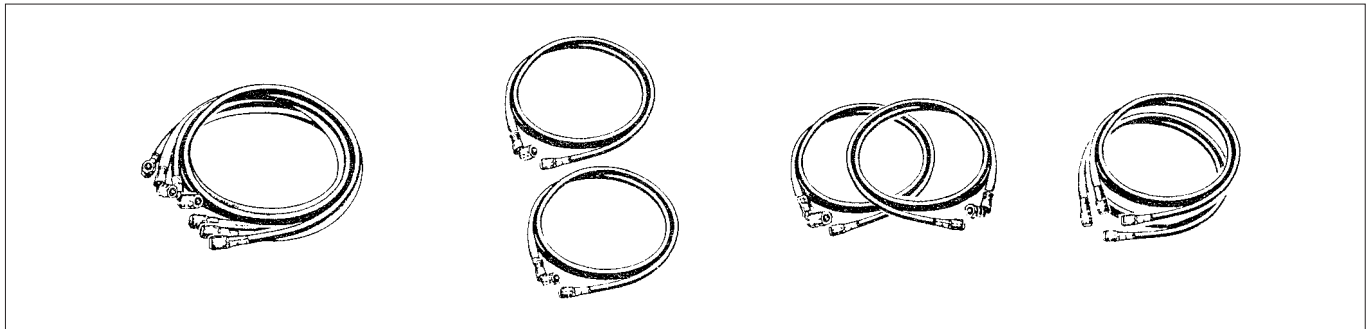
Model	Set Contents	
CP-3VSF	Tool Box	1pc.
	Manifold with 3-valve Gauge	1pc.
	Charging Hose Red - Yellow (1.2m)	2pcs.
	Vacuum Pump Hose (1.6m)	1pc.
	Gas Hose Green (1.2m)	1pc.
	Can Opener Valve for Service Can	4pcs.
	4-way Joint	1pc.
	Thermometer	1pc.
	Quick Coupler	1pc./each
CP-2VSF	Most of contents is the same as CP-3VSF. But Manifold & Gas Hose are different.	



**CAR AIR-CONDITIONER SERVICE PARTS**

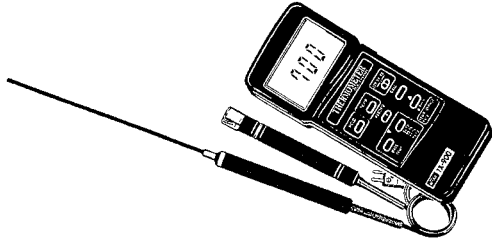


**GAS CHARGING HOSE**



Model	Length m	Quantity	Colour	Hose - Metallic Cap	Remarks
<b>CP-H1200FS</b>	1.2	1	Red	S-L M12×1.75	3pcs./set
		1 each	Yellow - Green	S-L M10×1.5	
<b>CP-H1600FS</b>	1.6	1	Red	S-L M12×1.75	3pcs./set
		1 each	Yellow - Green	S-L M10×1.5	
<b>CP-H1200FR-SL</b>	1.2	1	Red	S-L M12×1.75	
<b>CP-H1600FR-SL</b>	1.6	1	Red	S-L M12×1.75	
<b>CP-H2200FR-SL</b>	2.2	1	Red	S-L M12×1.75	
<b>CP-H1200FY-SL</b>	1.2	1	Yellow	S-L M10×1.5	
<b>CP-H1600FY-SL</b>	1.6	1	Yellow	S-L M10×1.5	
<b>CP-H2200FY-SL</b>	2.2	1	Yellow	S-L M10×1.5	
<b>CP-H1200FG-SL</b>	1.2	1	Green	S-L M10×1.5	without Valve Core
<b>CP-H1200FGC-SL</b>	1.2	1	Green	S-L M10×12	with Valve Core for CP-MG3134
<b>CP-H1600FG-SS</b>	1.6	1	Green	S-S M10×1.5	Dia. of inside 4mm Dia. of inside 6mm
<b>CP-H1600FW-SS</b>	1.6	1	Black	S-S M10×1.5	

## THERMOMETER



• Digital Thermometer

Model	<b>TX-900</b>
Range	-199 – +1,230 °C -326 – +2,246 °F



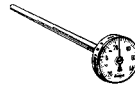
• Option Sensor

Model	<b>TXS-SH</b>	<b>TXS-8600</b>
Sensor Type	Surface	Stick
Measuring Range °C	-50 – +500	-50 – +800



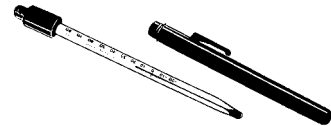
• Glass & Stick Type Thermometer

Model	<b>CP-TA</b>
Scale degree °C	-20-0-+100
Length mm	300



• Bimetal Thermometer

Model	<b>CP-TB</b>
Scale degree °C	-20-0-+100
Length mm	80



• Glass & Stick Type Thermometer

Model	<b>CP-TC</b>
Scale degree °C	-20-0-+80
Length mm	290

## GAUGE MANIFOLD SET (FOR R-12)



Model	CS-12
Set Contents	
Gauge Manifold (2 valves)	1set
High. Charge Hose, 1.2m (Red)	1pc.
Low. Charge Hose, 1.2m (Yellow)	1pc.
Vacuum Hose, 1.8m (Green)	1pc.
Control Valve	2pcs.
High. Joint Hose, 150mm (Red)	1pc.
Low. Joint Hose, 150mm (Yellow)	1pc.
High. Special Hose, 150mm (3/8 Green)	1pc.
Valve for Service Can	2pcs.
T-type Joint for Valve	1pc.
Packing Set	1set
Tool Box	1pc.

## REFRIGERANT RECOVERY RECYCLING SYSTEM



Model	RCS-20
Power Source	1-ph. 10A
Recovery System	Compression System Liquefaction
Recycling Capacity	Approx. 120g/min.
Regeneration System	Filter Absorption System
Regeneration Capacity	Approx. 240g/min.
Vacuuming Capacity	14 L/min
Two-Opening Tank	21L
Dimensions	W 460 × D 942 × H 840mm
Weight	Approx. 45kg

## REFRIGERANT LEAK DETECTOR



Model	DC-9B
Sensitivity	Max. 3g/Year (R-134a)
Indication	Beep, Level Meter, LED
Operating Temperature	0 – 40° C
Power Source	SUM-3 Alkaline Battery × 6 Power Option (1-ph)
Dimensions	173 × 66 × 56mm
Weight	Approx. 400g

## COMBUSTIBLE-GAS DETECTOR



Model	GP-204	GP-226
Measuring Gas	Combustible Gas	
Measuring Range (scale) %	LPG 0 – 1.8 –	LPG 0 – 1.8 Gasoline 0 – 1.4
Accuracy %	within ±5	within ±5
Measuring Temperature degree	-20 – 40	-10 – 40
Power Source	SUM1 × 2pcs.	SUM2 × 3pcs.
Dimensions (L × W × H) mm	85 × 136 × 102	85 × 150 × 125
Weight kg	1.7	1.6

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