



KA-5138 Calibrated Ignition Tester (HEI SYSTEM)

- Use to accurately check for spark in ignition systems without removing spark plug from engine
- Verifies that energy is sufficient for spark plug to fire if voltage on hei tester is great enough the center electrode is not used.
- To use attach spark plug wire to tester end. Clamp tester to engine as ground. Crank engine and check for spark.
- Caution: wear safety goggles.



KA-5139 Calibrated Ignition Tester

(STANDARD IGNITION SYSTEM)



KA-5170 Spark Plug Tester

- Plastic shockproof construction
- Check dead spark plugs in automotive, if ignition circuit is complete, bulb will flash.
- Suitable for all spark ignition engines. Quick and simple fault diagnosis.



KA-1033 (round type)

Brake Fluid Tester

KA-1033 (Round Type)

KA-1033A (Flat Type)

The tester can be used as a digital brake fluid tester suitable for determining brake fluid quality. Developed for professional use in automotive repair shops and in servicing. Quality it tested and indicated on five LEDs in terms of "per cent of water in the brake fluid".

Ready for Brake Fluid Test

- Unscrew the brake fluid reservoir, and pull off the cap of the brake fluid tester.
- Dip the test probes into the brake fluid up to the plastic rim of the device.
- Battery(incl): one 1.5V, type AAA



To Check Fluid Quality

Press the button for power on, green LED will light up.

Insert the tester into reservoir for one second then the test result will be correctly indicated by LEDs.

The tester will automatically power off after 12 seconds of inactivity.



KA-1033A (flat type)

Product Labelling Indication

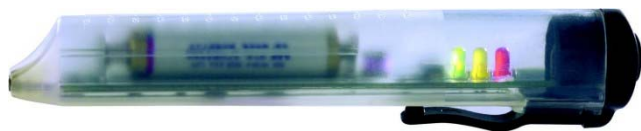
Green: Battery OK, i.e: no water contained in the brake fluid.

Yellow: Less than 1% of water content in brake fluid.

Yellow/White: Approx 2% of water content in brake fluid.

Yellow/White/Red: Approx 3% of water content in brake fluid. The brake fluid should be changed.

Yellow/White/Red/Red: At least 4% of water content in brake fluid. The brake fluid must be changed urgently!

KA-3489BF Brake Fluid Tester

This tester can be used as a digital brake fluid tester suitable for determining brake fluid quality. Developed for professional use in automotive repair shops and in servicing.

- Length: 125mm
- Compact and Accurate
- Easy to Use
- CE, RoHS Conformity

Operation

- Press switch to turn on- green LED illuminates to indicate battery OK (red LED replace battery).
- Note: Tester has auto-off function
- Immerse probe of the tester into brake fluid (probe tip must be at least 10mm above bottom of fluid reservoir).
 - Green LED= Brake Fluid $H_2O < 1.5\%$
Brake Fluid OK/ Battery OK
 - Yellow LED= Brake Fluid $H_2O < 1.5 \sim 3\%$
Low percentage of water
Change again within 6 months
 - Red LED = Brake Fluid $H_2O > 3\%$
Change Brake Fluid

Battery Installation:

- Remove switch cap
- Withdraw circuit board
- Fit battery –positive towards LED.
- Slide circuit board into case, ensuring it engages in slots on side of case.
- Lay back switch cap.

Calibration Check:

To confirm correct operation, immerse probe in plain water, red LED will illuminate if tester is operating correctly. REMEMBER TO DRY TESTER BEFORE USING IN BRAKE FLUID.

* Wear Eye, Face and Hand Protection when Testing the Brake Fluid.

**KA-3338 Battery Tester**

- Avoid dead battery and help to extend battery life
- Test battery life hot or cold detects overcharge.
- Applicable: 6, 12, 24 Volts systems.

**KA-3339 Anti-Freeze Tester**

- Avoid winter freeze-ups and summer boil-over.
- Test all permanent (Ethylene Glycol) solutions with radiator hot or cold.
- Two scales show freeze point of radiator solution and boiling point of summer coolant.

**KA-3252B****KA-3252A****KA-3253****KA-3254****ANTI-FREEZE TESTER**

- KA-3252B** Length: 8-1/2" , packing: color box
- KA-3252A** Length: 8-1/2" , packing: blister card
- KA-3253** Length: 7" , packing: blister card
- KA-3254** with thermometer

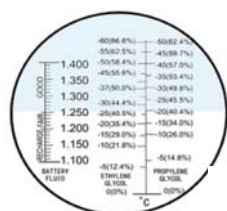
Battery / Antifreeze / Wiper Fluid / AdBlue Fluids Tester

These types are designed for testing the concentration of battery fluids, antifreeze liquids cleaning and AdBlue/ DEF fluids. The percentage indicator indicates the point of freezing for both propylene glycol and ethylene glycol. It can also be used for checking the strength of electrolyte solution batteries.

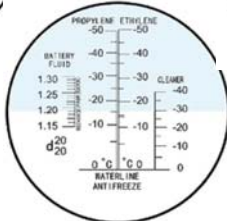


< **B=Battery / C=Cleaner / E=Ethylene Glycol / F=Freezing / P=Propylene Glycol** >

Model	Range	Min. Div.	Accuracy
KA-4125ATC KA-J4125ATC	E: -80°F~32°F	5°F	±5°F
	P: 60°F~32°F	5°F	±5°F
	B: 1.100~1.400 sg	0.01 sg	±0.01 sg
KA-4126ATC KA-J4126ATC	E: -60°C~0°C	5°C	±5°C
	P: -50°C~0°C	5°C	±5°C
	B: 1.100~1.400 sg	0.01 sg	±0.01 sg
KA-4127ATC	E: -60°F~32°F	10°F	±10°F
	P: -50°F~32°F	10°F	±10°F
	B: 1.15~1.30 sg	0.01 sg	±0.01 sg
KA-4128ATC	E: -50°C~0°C	5°C	±5°C
	P: -50°C~0°C	5°C	±5°C
	B: 1.00~1.400 sg	0.01 sg	±0.01 sg
	C: -40°C~0°C	5°C	±5°C
KA-4141ATC	E: -48°C~0°C	3°C	±3°C
	P: -48°C~0°C	3°C	±3°C
	B: 1.100~1.400 sg	0.01 sg	±0.01 sg
KA-4129ATC KA-J4129ATC	E: -50°C~0°C	5°C	±5°C
	P: -50°C~0°C	5°C	±5°C
	B: 1.100~1.400 sg	0.01 sg	±0.01 sg
	C: -40°C~0°C	5°C	±5°C
KA-4130ATC	E: -60°C~0°C	5°C	±5°C
	P: -50°C~0°C	5°C	±5°C
	B: 1.100~1.400 sg	0.01sg	±0.01 sg
	C: -40°C~0°C	5°C	±5°C
KA-4131ATC KA-J4131ATC	E: -60°F~32°F	10°F	±10°F
	P: -50°C~0°C	10°C	±10°C
	B: 1.10~1.40 sg	0.01 sg	±0.01 sg
KA-4132ATC KA-J4132ATC	E: 90°F~32°F	10°F	±10°F
	-70°C~0°C		
	P: -70°F~32°F	10°C	±10°C
	-60°C~0°C		
	B: 1.10~1.40 sg	0.01 sg	±0.01 sg
Model	Range	Min. Div.	Accuracy
KA-4128AD	E: -50°C~0°C	1°C	±1°C
	P: -50°C~0°C	1°C	±1°C
	B: 1.10~1.30 sg	0.01 sg	±0.01 sg
	C: -40°C~0°C	1°C	±1°C
KA-4128ADA	Ad: 30%~35%	0.50%	±0.5%
	E: -50°C~0°C	1°C	±1°C
	P: -50°C~0°C	1°C	±1°C
	B: 1.10~1.30 sg	0.01 sg	±0.01 sg
KA-4128ADB	Ad: 0%~35%	0.5%	±0.5%
	E: -50°C~0°C	5°C	±5°C
	P: 1.10~1.30 sg	0.01 sg	±0.01 sg
	C: -40°C~10°C	1°C	±1°C
KA-4128ADC	Ad: 20%~40%	0.5%	±0.5%
	E: -50°C~15°C	1°C	±1°C
	P: -50°C~15°C	1°C	±1°C
	B: 1.20~1.4 sg	0.01 sg	±0.01 sg
KA-4128ADF	Ad: 20%~40%	1%	±1%
	E: -60°F~32°F	1°F	±1°F
	P: -60°F~32°F	1°F	±1°F
	B: 1.10~1.30 sg	0.01 sg	±0.01 sg
KA-4129AD	DEF: 0%~40%	1%	±1%
	E: 50°C~0°C	5°C	±5°C
	P: 50°C~0°C	5°C	±5°C
	B: 1.10~1.4 sg	0.01 sg	±0.01 sg
KA-4143	C: -40°C~0°C	10°C	±10°C
	Ad: 5%~40%	5%	±5%
	E: -50°C~0°C	5°C	±5°C
	B: 1.10~1.30 sg	0.01 sg	±0.01 sg
KA-4142ATC <i>*only for coolant</i>	F: -60°C~0°C	5°C	±5°C
	B: 1.100~1.400 sg	0.01 sg	±0.01 sg



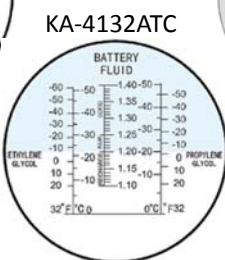
KA-4126ATC



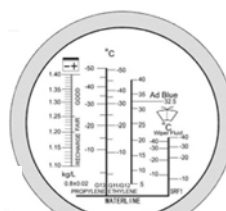
KA-4128ATC



KA-4129ATC



KA-4132ATC



KA-4129AD



KA-4128ADF



KA-4142ATC

Infrared Thermometer

KA-TN102



KA-TN159



KA-TN103



KA-TN104



KA-TN153



KA-TN15A



KA-TN105i2



KA-TN105C

KA-TN110
KA-TN110RB (with rubber)

KA-TN185



Model No	KA-TN102 KA-TN159 KA-TN104 KA-TN15A	KA-TN102B KA-TN103 KA-TN153	KA-TN110RB KA-TN110	KA-TN105I2	KA-TN105C	KA-TN185
Measurement Range	-55°C ~ 220°C (-67 ~ 428°F)		-33°C~220°C (-27.4~428°F)		-55°C~220°C (-67~428°F)	-55°C~250°C (-67~482°F)
Operating Range	-10~50°C (14~122°F)					
Accuracy (Tobj=15-35°C, Tamb=25°C)	+/- 0.6 °C					
Full Range Accuracy	+/- 2°C of reading or 2°C (whichever is greater)					-55 ~ 0°C: +/- (2+0.05/deg)°C, above 0°C, +/-2°C or +/-2°C of the reading, whichever is greater
Resolution (-9.9-199.9°C)	0.1°C / 0.1°F					
Distance: Spot			1:1	5:1		
Emissivity Range	0.05 ~ 1.00		0.95 Fixed	0.05 ~ 1.00		
Wave Length				5µm ~ 14µm		
Power Supply				CR 2032 x 1		



KA-1027 In/Outdoor Thermometer with Backlight

- Freeze Alert
- °C/°F selectable
- Measuring range: indoor temp. -0 ~ +50°C
Outdoor temp. -50 ~ +70°C
- Easily Mounter
- Clock display
- Requires one AAA or Lr03 battery (not included)

Infrared Thermometer

Infrared thermometer is designed to measure surface temperature whereas traditional contact type thermometer is inappropriate. For example, measurement of moving object, items with live voltage, and items not reachable.



KA-1038



KA-1054 / KA-1057



KA-1055



KA-1056

Model No.	KA-1038	KA-1054	KA-1055	KA-1056	KA-1057
Distance to Spot ratio (D:S)	10:1	12:1	12:1	8:1	30:1
Temperature Range	-20~500°C -4~932°F	-30~550°C -22~1022°F	-50~550°C -58~1022°F	-50~550°C -58~1022°F	-50 °C~800 °C -58~1472°F
Operating Temperature	0°C ~ 50°C	0°C ~ 50°C	0°C ~ 50°C	0°C ~ 50°C	0°C ~ 50°C
Emissivity	0.85 / 0.90 / 0.95	0.85 / 0.90 / 0.95	Adjustment Emissivity	NA	Adjustment Emissivity
Accuracy	±2.5% or 3°C	±2.5% or 3°C	±2.5% or 3°C	±2.5% or 3°C	±2.5% or 3°C
Display	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
Backlight	YES	YES	YES	NA	YES
Power	9V Battery	9V Battery	2 AAA Battery	2 AAA Battery	9V Battery
Safety Approval	CE	CE	CE	CE	CE

KA-1030 Wireless Thermometer & Hygrometer & Temperature Emitter

KA-1028 Wireless Thermometer & Hygrometer

Large LCD display of clock, interior/exterior temperature and humidity.

- Clock: time format of 12hr or 24HR for selection.
- Indoor temperature: 0°C ~ 50°C (32°F ~122°F)
- Indoor humidity: 20% ~ 95%
- The testing period for indoor temperature and humidity is 20 seconds, and for outdoor temperature is 80 seconds.
- Alarm clock
- Outdoor temperature: it could receive 3 exterior temperature at most, temperature range: 0.0°C ~ 50.0°C
- Storage of MAX-MIN temperature and humidity.
- Requires two AAA batteries (not included)

KA-1029 Wireless Temperature Emitter

- Temperature measuring range: 0°C ~ 50°C
- The measured data will be transmitted by RF, and there will be indicated on both LCD and LED while transmitting.
- Temperature measuring period is 80 seconds.
- Low voltage indication: while the battery voltage lower than 2.5V
- Resolution: 0.1°C, Accuracy: ±1°C

Temperature unit of °C and °F for your selection.

- There are selectable 3 channels to display temperature, by slide switch to select (CH1; CH2; CH3) (This operation is effective while reinstall of battery or press reset button)
- Reset function.
- Requires two AAA or LRO3 batteries (not included).



KA-1028



KA-1029

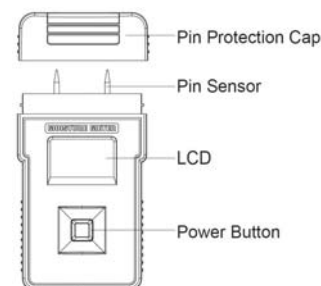
Range: 0 to 400.00°C in 0.01°C
 Resolution: 0.01°C
 Measurement Time: 1 second
 Accuracy: $\pm 0.5^\circ\text{C}$ at 25°C
 $\pm 1.0^\circ\text{C}$ at 200°C
 $\pm 2.0^\circ\text{C}$ at 400°C
 100% emissivity non-contact
 100% non-contact
 100% non-contact

- Display: 3½ digit liquid crystal display (LCD) with a maximum reading of 1999.
- Low battery indication: The “” or “” is displayed when the battery voltage drops below the operating level.
- Operating environment: 0°C to 40°C at <90% R.H.
- Without strong magnetic field.
- Storage temperature: -20°C to 60°C, 0 to 80% R.H.
- with battery removed from meter.
- Accuracy: Stated accuracy at 23°C±5°C, <75% R.H.
- Auto power off: 15 seconds.
- Dimensions: 148mm(H) x 105mm(W) x 42mm(D).

KA-CHY113

The moisture meter measure the moisture by the conductivity between the two pins, it can be widely apply for fiber material, for example, building and its construction material, various nonmetallic material, paper, wood, bamboo products, herb, tobacco, cotton, textile, soil and so on. Easy operation, clear indication; LCD screen will display the moisture of the target.

1. Display: LCD
2. Resolution: 1%
3. Measuring Range: 5% - 45%
4. Accuracy: $\pm 1\%$ @ 5% - 22%, $\pm 2\%$ @ 23% - 45%
5. Power: 2 x AAA battery(Not included)
6. Low battery indication function
7. Unit dimension: 89 x 51 x 25mm
8. Weight: 57g



Petrol Engine Testing & Cleaning Kit

KA-6780



KA-6780K



KA-6692K



KA-6692KN



* For All Petrol Engine Cars

- Clean the following parts: Intake Valve, Combustion Chamber, Vacuum Hose
- Test the following parts: Engine System Pressure, Petrol Pump Pressure, Vacuum System Pressure

* Fuel Injector

The opening of the fuel injector is as thin as the human hair.
The accumulation deposits at the tip would affect and upset the air/fuel mixture.

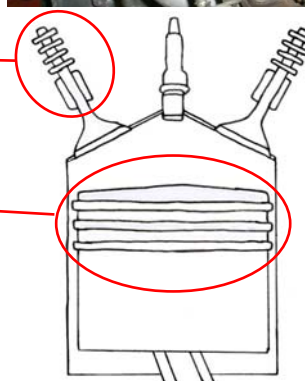
- The Problem Symptoms:
Stumble during acceleration. Power Loss.
Emissions of Hydrocarbons and Carbon Monoxide Increases.



* Intake Valve

While the engine is warming up, the intake valve absorbs fuel and leaves out the air/fuel mixture.

- The Problem Symptoms:
Poor Driveability. Power Loss.
Emissions of Hydrocarbons and Carbon Monoxide Increases.



* Combustion Chamber

As the deposits keep accumulating, the compression temperature increases, and lead to auto-ignition of the air/fuel mixture.

- The Problem Symptoms:
Poor Acceleration, Run-On, Knocking, Pinging, Octane is increasingly required.
Emissions of Nitrogen Oxide increases.

NEW TYPE



The removable pin can avoid the cleaner from flowing during installation.

OLD TYPE



Regular Valve

☆ SPECIAL FEATURE ☆

KA-6692KN

A new upgrade design for cleaning the carbon deposit for fuel injector.

KA-6692KN is made with Pressure Adjusting Device which also adjusts the flow rate, so only adequate amount of cleaner flow through, to avoid ignition difficulties caused by too little or too much of cleaner.

Re-Discover The Power of Your Car Engine

Before



After



CO2 Checking in Radiator (with CO2 test liquid)

- ➔ Convenient device with test chemical liquid provides quick determination of gasket leakage.
- ➔ Test chemical of gasket leakage.

Application:

Step 1: prepare a container and remove the approximately 1/10 of the volume of coolant from the radiator. (Fig. 1)

Step 2: disassemble the rubber cone from the detector.

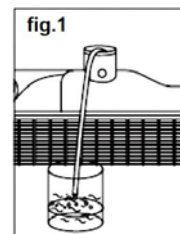
Step 3-1 : install the rubber bulb, cap, upper chamber, lower chamber, brass adaptor, and the available radiator cap one after another. (This way could provide a safer and more accurate test) and then, fill the upper chamber with blue detector liquid till the black line. (Fig. 2)

Step 3-2: Alternative installment for the situation when there is no available radiator cap (Fig. 3). Install the rubber bulb, cap, upper chamber, lower chamber, and rubber cone one after another. Please hold the detector body as operating.

Step 4: Pump the rubber bulb continually to draw the stem from radiator.

Test Analysis:

- If exhaust gas presents in cooling system, the color of test liquid turns from blue to green or yellow when the steam mixes with CO2 detector liquid in detector (Fig. 4)
- If the detector liquid still in blue during test operating, it means the gasket keeps in good condition.



KA-7230B Leak-Check Kit w/o Fluid



KA-7230C Leak-Check Kit With Fluid 250c.c.



KA-7230D Cylinder Leakage Test Kit 250c.c.

- Included 250c.c. CO2 detector liquid & a storage bottle.
- Included test chamber with rubber cone
- Included a rubber bulb & a brass adaptor

KA-2401 Universal Independent Engine Cylinder Leakage Tester

Design for workshop service people easy to check the common engine cylinder condition by oneself.

Set contains a support holder capable of holding an axle center of an engine crankshaft stationary, and consisting of a base, a frame, an adjusting plate and a coupling member; a leakage-detecting device adapted to detect leakage of an engine, and having 3 connectors and a connector-tube assemble provided with a pressure gauge and a switch. Quickly find worn valves, crack in cylinder walls, worn cylinder seal.

Easy check engine leakage, convenient in operation by a single person..

The other engine cylinder leakage testers need two peoples (one people operates tester, another one holds crankshaft). The adjusting plate design allows the operator to make an adjustment to required position.



Test Procedure:

1. Run engine until achieves normal operating temperature.
2. Take out spark plug and rotate the crankshaft to cylinder TDC.
3. Use **engine crankshaft support holder** to support the crankshaft pulley center bolt stationary. (Fig. 1-8)
Firstly, place the support holder on the ground. Secondly, adjust the height of the adjusting plate to make the location hole aligned to the axle center of the engine crankshaft, and then screw the nuts with the studs of the frame tightly. Thirdly, insert one end of the coupling member through the location hole of the adjusting plate, fit the other end of the coupling member into a general socket, and then couple the general socket over an axle center of an engine crankshaft tight so as to hold the axle center of the engine crankshaft stationary to prevent the crankshaft from rotation.
4. Choice applicable connector to screw in spark plug hole (Fig. 9) then quick-coupling gauge assembly (Fig.10, 11, 12)
5. Supply workshop compressed air into cylinder.
6.
 - a. If crack in cylinder walls. You will find leakage air sound from oil dipstick tube or bubbles in the water cooling system.
 - b. If worn valves. You will find leakage air sound from intake/exhaust manifold.
 - c. If worn seal between cylinder and piston. You will find leakage air sound from oil dipstick tube.



KA-7301 12 Volt UV Detection Light

For air condition leakage check



KA-7384 Cylinder Leakage Testers

- PSI & Bar Percentage Gauge
- 26" Extra Long Hose

Allows you to accurately diagnose engine problems such as bad valves, worn rings, cracked cylinder walls and blown gaskets.

Works from shop airline and has 14 & 18mm adaptor fittings to fit most engines. Blow-by readings shown in percentages. Dual gauges allow mechanic to monitor input line pressure. Supplied in plastic blow mold case.



KA-7385 Cylinder Leakdown Tester

Allows you to accurately diagnose engine problems such as bad valves, worn rings, cracked cylinder walls and blown gaskets.

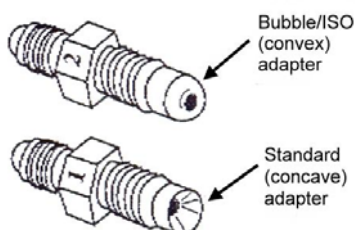
Work from shop airline and has 14 & 18mm adaptor fittings to fit most engines. Blow-by readings shown in percentages.

Supplied in plastic blow mold case.

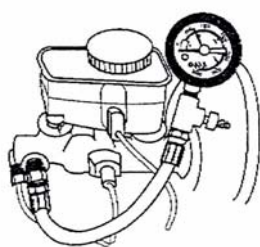


KA-7421B Master Cylinder Pressure Test Kit (Brake & Clutch)

- Gauge: 0 ~ 3000 PSI
- 11 pcs Adapter:
 - A. Pressure Gauge 0 ~ 3000 PSI
 - B. 45° adapter
 - C. 90° adapter
 - D. Master Cylinder Adapters



Adapter Code	Thread Specs	Flare Type
1	10 x 1.0	Concave
2	10 x 1.0	Bubble
3	3/8 x 24	Concave
	12 x 1.0	Bubble
5	11 x 1.5	Bubble
6	13 x 1.5	Bubble
7	1/2 x 20	Concave
8	9/16 x 20	Concave
9	1/16 x 24	Concave
10	9/16 x 18	Concave
11	10 x 1.25	Bubble



KA-6640NA Cylinder Compression Test Kit

- Air gauge with quick coupling & release valve.
- High-tension connecting pipe with safety lock coupling
- Crank shaft type test pipe with rubber plug.
- Transverse axis test pipe with rubber plug
- M10 x 1.0 adapter
- M12 x 1.25 adapter
- M14 x 1.25 adapter
- M18 x 1.5 adapter
- Gauge : 0~300PSI
0~21BAR

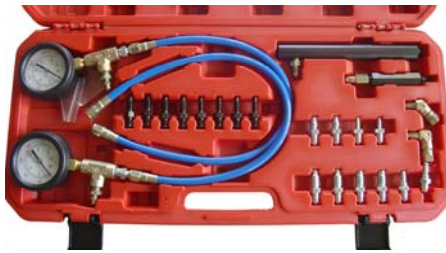


KA-7421A ABS Brake Pressure Tester Kit

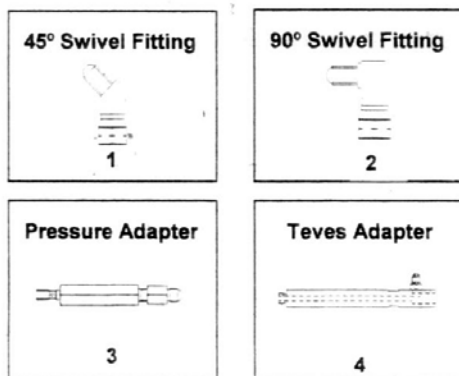
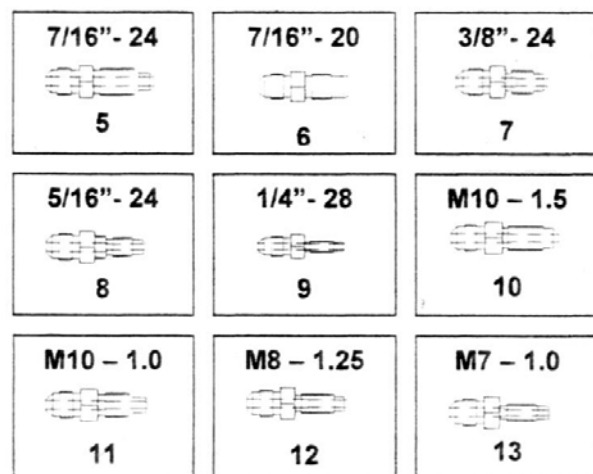
■ For ABS system (anti-lock brake system), Non-ABS systems

■ Contents:

- | | |
|------------------------------|------------------------------|
| 2 - 3000 PSI Gauge Assembly | 2 - 3/8-24 Straight Fitting |
| 1 - Pressure Adapter | 2 - 5/16-24 Straight Fitting |
| 1 - Teves Adapter | 2 - M10-1.5 Straight Fitting |
| 1 - 45° Swivel Fitting | 2 - M8-1.25 Straight Fitting |
| 1 - 90° Swivel Fitting | 2 - M10-1.0 Bleeder Adapter |
| 2 - 7/16-24 Straight Fitting | 2 - 7/16-20 Straight Fitting |
| 2 - 1/4-28 Straight Fitting | 2 - M7-1.0 Straight Fitting |



- Caution: Wear approved safety glasses when using the Brake Pressure Test Kits. Do not discount hose under pressure. Pressurized fluid may cause injury.
- The brake pressure test kit tests abs or conventional brake systems for most makes and models.
- Always read instructions carefully prior to use.
- This kit comes complete with steel gauges, plastic lens; brass/steel fittings; high pressure hose.

ADAPTER CHART**BLEEDER SCREW REFERENCE CHART****KA-7530K Transmission Pressure Tester**

For all major manufacturer domestic and import vehicles.

Set contains two gauge assemblies for high and low pressure ranges. Nine adaptors to test a wide variety of domestic and import automatic transmissions. Four special fittings are also included for connection to hard-to-reach test ports in areas requiring a 45° or 90° angle. All contained in a plastic storage case.

**Parts List:**

Desc.	Q'ty
0-100 PSI low pressure gauge assembly	1
0-500 PSI high pressure gauge assembly	1
Adaptor hose 1/8-27 NPT	1
Adaptor 1/8-27 to 1/4-18 NPT	1
Adaptor 1/8-27 to 1/8-28 BSPT	1
Adaptor 1/8-27 to M10-1.0	1
Fitting 1/8-27 90° steering elbow	1
Fitting 1/8-27 nipple 2" long	1
Fitting 1/8-27 coupling	1
Adaptor 1/8-27 to M8-1.0	1
Adaptor 1/8-27 to M8-1.25	1
Adaptor 1/8-27 to 5/16-24 NF	1
Adaptor 1/8-27 to 1/16-27 NPT	1
Fitting 1/8-27 45° steering elbow	1
Adaptor 1/8-27 to VW Audi	1

KA-7042A Master Fuel Injection Test Kit

The adapter set tests fuel injection systems on most vehicles: ACCURA HONDA HYUNDAI MAZDA, SUZUKI, TOYOTA, AUDI, BMW, MERCEDES, PUEGOT, PORSHE, SAAB VW, VOLVO W/ CISE OR K.JETRONI.

CONTENTS:

- | | |
|---------------------------------|---|
| 1 - 1/4x1/4 inch Pipe Plug | 1 - 8mm-1.00 Banjo Bolt Adapter |
| 2 - 5/16x1/4 inch NPT Hose Barb | 1 - 10mm-1.00 Banjo Bolt Adapter |
| 2 - 1/4x1/4 inch NPT Hose Barb | 1 - 12mm-1.25 Banjo Bolt Adapter |
| 1 - 0-50 PSI (0-3.5BAR) Gauge | 1 - 12mm-1.50 Banjo Bolt Adapter |
| 1 - 0-100 PSI (0-7BAR) gauge | 1 - Honda Adapter |
| 4 - Hose Clamps | 1 - 12mm-1.50 Male X 10mm-1.00 Male x 1-9/16 inch Adapter |
| 1 - 5/16 inch Hose | 1 - 12mm-1.50 Male X 10mm-1.00 Female X1-1/4 inch Adapter |
| 1 - 1/4 inch Hose | 1 - 12mm-1.50 Male X 8mm-1.00 Female X 5/16 inch Adapter |
| 1 - Ford Spring Lock Adapter | 2 - 12mm-1.50 Male X 8mm-1.00 Male Adapter |
| 1 - 1/4 inch NPT Tee with Valve | 1 - 12mm-1.50 Male X 8mm-1.00 Male X 3 inches Adapter |
| 1 - GM T.B.I. Adapter | 1 - 12mm-1.50 Male x 5/8-18mm-1.5 Male x 1-9/16" Adapter |
| 1 - GM Quick Connect Adapter | 1 - 5/8-18 union |
| 1 - GM 2.2L Adapter | 1 - 12mm-1.5 Male x 16mm-1.5 Male x 1-9/16" Adapter |
| 1 - Ford Hair Pin Adapter | 1 - 16mm-1.5 union |
| 1 - 13 inch Ford Adapter Hose | 1 - 14mm-1.5 union |
| 1 - Bleed-Off Hose | 1 - 12mm-1.5 Male x 14mm-1.5 Male x 1-9/16" Adapter |
| 1 - Bosch C.I.S Hose | 1 - 1/4 PT-19 union |
| 1 - Basic Hose, 24 inch | 1 - 12mm-1.5 Male x 1/4 PT-19 Male x 1-9/16" Adapter |
| | 1 - 12mm-1.5 Male x 14" -3/8" Hose Barb |

**KA-7236K Fuel Injection Pressure Test**

- A large 3-1/2" gauge with dual readings of 0-145 psi and 0-1000 kpa. Also a low pressure 2-1/2" gauge for an accurate reading below 15 psi.
- All adapters, gauges, and hose assemblies feature a quick coupling system for speedy and efficient testing connection.
- The uniquely designed relief valve relieves the pressure and the fuel safely. Also allows checking for sufficient fuel flow.
- No need for wrenches.
- Come with instruction manual.
- ACCURA, HONDA, HYUNDAI, MAZDA, SUZUKI, TOYOTA, NISSAN, SUBARU, FIAT, BOSCH, JAGUAR, PUEGOT, PORSCHE, RENAULT, VW, VOLVO, TRIUMPH, FORD, PFI, TBI, CHRYSLER, GM, AUDI, BMW, BENZ, SAAB, CISE

**KA-7237K Instructions For Multi-Port Fuel Injection Pressure Testing**

Contents of kit:

- Gauge and blow down hose assembly
- Adapter hose for schrader test ports with 7/16-20 threads
- Adapter hose for schrader test ports with .308-32 threads
- Single end hose connector 1/4" , 5/16: and 3/8"
- Double end hose connector 5/16" and 3/8"
- 6mm fuel bolt adapter

**KA-7545K Fuel Injection Fitting Kit**

- For European cars
- For Audi, Mercedes Benz, Volkswagen, and other European automotive engines, and diagnose most common fuel system problems involving low fuel pressure and low fuel volume at the injectors. It even works on CIS and CISE systems. Each fitting comes with a quick-connect Schrader valve for asfe, easy hookup to the gauge assembly.
- Fitting seals are compatible with most popular cleaning solvents.



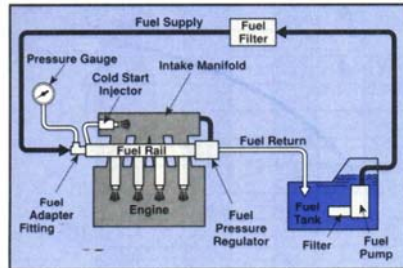


KA-7532K Gasoline Engine Injecting Pressure Tester Kit

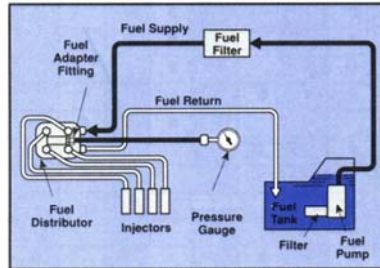
SERVICES BOTH IMPORT AND DOMESTIC FUEL INJECTION SYSTEMS.

Allows you to diagnose and clean fuel injection systems. Includes all the necessary fittings, hoses, adapters, disconnect tools, and gauges. The newest fuel line disconnect tools included in this set. Use your set to check system pressure, or pair it with fuel injector cleaner to offer complete fuel injection service.

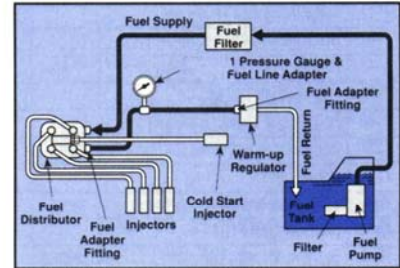
- Set for testing injection pressure on gasoline engines.
- Ideal for testing BOSCH CIS, GM TBI and other fuel injection systems.
- Suitable for using on American, European and Japanese vehicles.
- Includes a pressure gauge, 34 types of fuel valve adapters and various tubes for easier connection.
- Set does not apply to diesel and gasoline direct injections (GDI) engines.



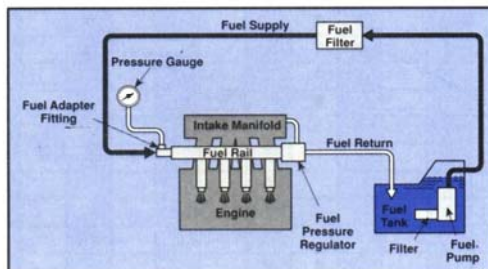
Typical Asian import fuel system connection.



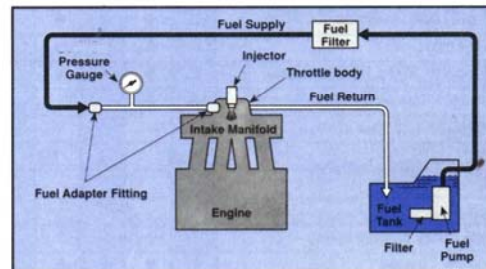
Typical European import CISE fuel system connection.



Typical European import CIS fuel system connection.



Typical domestic fuel system connection.



Typical GM low pressure TBI fuel system connection.



KA-7546K Fuel Injection Fitting Kit

- For Asian cars
- Diagnoses fuel related problems such as hesitation, stumble, stall, and lack power on nearly every Asian import system by simply checking fuel pressure and volume. With just a few quick connections you'll know if the problem caused by low fuel pressure, a defective fuel pressure regulator, low fuel volume to the injectors plus much more.
- Each fitting comes with a quick-connect Schrader valve for safety and easy hookup to the gauge assembly.
- Fitting seals are compatible with most popular cleaning solvents.
- Set includes an organizer and storage tray.
- Operating instructions included.



KA-7370K 3-In-1 Fuel Injection Service Kit

- Cleans injectors.
- Decarbonizes the intake system.
- Checks fuel pressure
- Gauge: 3.5"
- Dual gauge readings: 220PSI/15BAR/15KG/CM²/1500KPa



KA-7663 Fuel Injection Canister Cleaner

- Two gauge design allows vehicle fuel pressure to be checked and cleaned
- Top gauge allows easy setting of cleaning pressure by simply checking the vehicle fuel pressure on the bottom gauge
- Allows for cleaning of carbon from cylinders, intake valves and fuel passages
- Allows cleaning of fuel injectors to restore spray patterns
- Unit uses standard shop air and any professional canister cleaning solution.



KA-7241N Fuel Injection Pressure Test Kit

- The set designed for most Japanese car.
- Model No.: A, D, HE, HN, HO, HP, HQ, HR, HA, HE, F, Repair Kit, Instruction Manual.



KA-7240N Fuel Injection Pressure Test Kit

- The set designed for most European car.
- Model No.: A, D, G, F, AMx2, AE, AI, AT, AA, AB, AL, AG, AK, AC, E, Repair Kit, Instruction Manual.



KA-7376 Instruction For Multi-Fuel Injection Pressure Test Kit

- Gauge and blow down hose assembly
- Adapter hose for Schrader test ports with 7/16-20 threads
- Adapter hose for Schrader test ports with 0.308-32 threads
- Single end hose connector 1/4" , 5/16 and 3/8"
- Double end hose connector 5/16" and 3/8"
- 6mm fuel bolt adapter



KA-2897K

Common Rail Injector Set (return flow pressure measurement tester)

For testing the return flow pressure from common rail injectors of Bosch, VDO/Siemens & Delphi engine system.

Suitable for testing the condition of a piezo pass or fail statement.



KA-7191E Petrol Engine compression Tester Deluxe Kit

KA-7191E includes a large 2-1/2" gauge fitted with protective cover and 445mm hose. The gauge has scale from 0-350 psi (0-25 bar) and conforms to BS 1980-1985. For petrol engines with 10,12,14, or 18mm spark plugs. KA-7191E also includes a long reach adaptor for 16V and V6 engine. The 445mm hose and quick release connector is included for air input.



KA-4365 Oil Pressure Gauge Set

Use on diesel and gasoline engines . Includes standard and metric adaptors for most popular domestic and import cars, trucks, tractors and stationary engines Includes:

1. 0-100 PSI (0-700 kPa) Gauge Assembly
2. Adaptor (1/8-27 to 1/4-18)
3. Adaptor (1/8-27 to 1/-28 BSPT)
4. Adaptor (1/8-27 to M12-1.5)
5. Street Elbow
6. Coupling
7. Hose Assembly
8. Adaptor (1/8-27 to 3/8-18)
9. Adaptor (1/8-27 to 10-1.0)
10. Adaptor (1/8-27 to M14-1.5)
11. 2" Large Nipple



KA-7231A Engine Oil Pressure Tester

- Check engine oil pressure in both cars and trucks. Easy to read dual scale gauge. Complete with 24" (600mm) of oil proof hose with 1/8"NPT.
- Also includes 1/4" NPT and 3/8" NPT adaptors.
- Dual gauge readings: 0 to 300psi (0 to 21bar)
- Gauge diameter: 2.5"



KA-7687K Oil Pressure Check Kit

For testing engine oil pressure at the oil filter on most cars and light trucks. Adapters are included for both domestic and imported engines. Gauge range 0-100PSI.



KA-7382 Engine Oil Pressure Tester

- Check engine oil pressure in both cars and trucks.
- Easy to read dual scale gauge.
- Complete with 24" (600mm) of oil proof hose with 1/8"NPT.
- Also includes 1/4"NPT and 3/8"NPT adaptors.
- Features handy built-in gauge hook.
- Packed in vinyl pouch.
- Dual gauge readings:
0 to 400psi (0 to 28bar)
Gauge diameter: 2.5"



KA-7548 Transmission & Engine Oil Pressure Tester

- Designed to check engine oil pressure in automatic transmissions and engines in both cars and trucks.
- With two easy to read dual scale gauges. Both of two gauges with quick set-up. Complete with 6ft(1.8m) of oil proof hose, nine adaptor fittings, and instructions.
- Packed in Sturdy PVC case.
- Dual gauge readings:
A: 0 to 400psi (0 to 28bar)
B: 0 to 100psi (0 to 7bar)
Gauge diameter: 2.5"

KA-6722KN Heavy-Duty Oil Pressure Tester Kit

- Helps to diagnose work oil pumps and engines faulty oil pressure switches and warning indicators easy to use.
- Accurately tests oil pump pressure, switch & warning indicators.
- Large clear dual scaled gauge 0 – 10 bar.
- Quick coupling adapters with shut-off valve, for speed & security.
- Permanently oil primed, long, flexible hose
- APPLICATIONS: ALFA, MITSUBISHI, AUDI, NISSAN, BMW, OPEL, CTTROEN, PEUGEOT, DAIHATSU, RENAULT, FIAT, ROVER, FORD, SAAB, HONDA, SKODA, HYUNDAI, SUBARU, ISUZU, SUZUKI, JAGUAR, TOYOTA, LADA, VAUXHALL, LANCIA, VW, MAZDA, VOLVO, MERCEDES-BENZ, ZASTAVA

**Gauge Assembly:**

	Hose overall length	Gauge Diameter	Scale
A	1300mm	63.5mm	0-10 bar (0 ~ 150psi)
	Adapters	Adapters Thread	
B		1/8x28PT	
C		1/8x27NPT	
D		1/4x18NPT	
E		3/8x20UNF	
F		1/2x20UNF	
G		M10x1.0	
H		M12x1.5	
I		M14x1.5	
J		M16x1.5	
K		M18x1.5	
L		90° ELBOW	
M		SERVICE KIT	

KA-6722KN-A Oil Pressure Tester Kit

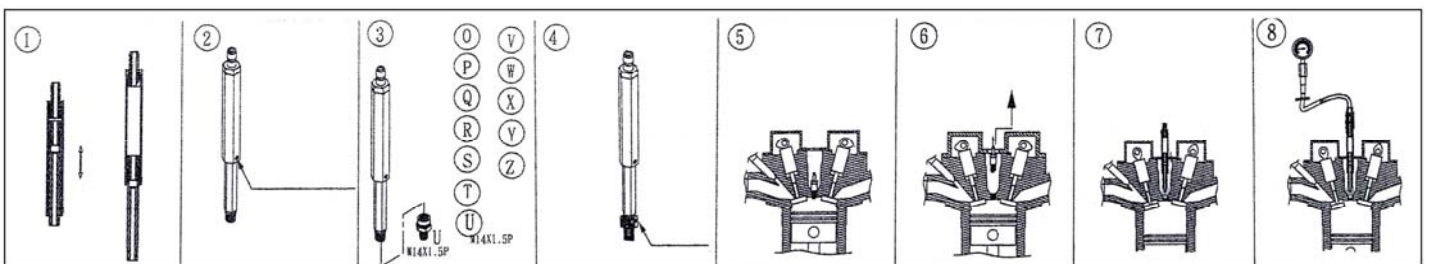
- Helps to diagnose work oil pumps and engines faulty oil pressure switches and warning indicators
- Easy to use.
- Accurately tests oil pump pressure, switch & warning indicators.
- Large clear dual scaled gauge 0 – 10 bar.
- Quick coupling adapters with shut-off valve, for speed & security.

**Gauge Assembly:**

	Hose overall length	Gauge Diameter	Scale
A	1300mm	63.5mm	0-10 bar (0 ~ 150psi)
	Adapters	Adapters Thread	
B		1/8x28PT	
C		1/8x27NPT	
D		1/4x18NPT	
E		3/8x20UNF	
F		1/2x20UNF	
G		M10x1.0	
H		M12x1.5	
I		M14x1.5	
J		M16x1.5	
K		M18x1.5	
L		90° ELBOW	
M		SERVICE KIT	

Preparation before Testing:

1. Adjust the Cylinder Pressure Testing Rod (M or N) to Required Length
2. Secure the length with Screw A.
3. Select the Suitable Adapter (O ~ Z)
4. Insert the Suitable Adapter into the Threaded End, and Tighten the Screw B.
5. & 6. Remove the Spark Plug from the Engine Chamber
7. Insert the Cylinder Pressure Testing Rod into the Engine Chamber
8. Connect the Cylinder Pressure Testing Rod with Pressure Testing Gauge.





KA-6721KN Heavy-Duty Petrol Engine Compression Tester Kit

- Petrol compression tester for vehicles with m10, m12,m14 and m18 spark plug thread. Complete with extensions, thread chasers and service kit.
- Easy to use.
- Checks condition of valves piston rings. Gaskets & cylinder heads.
- Pressure relief valve enables repeated testing of a cylinder without removing the gauge. DUAL SCALE 83MM DIA GAUGE 0~300PSI & 0-20 BAR.

	Description	Over all Length	Gauge diameter	Scale	Applications
A	Gauge assembly	200mm	83mm	0-20Bar (0-300psi)	Compressor tester general purpose M14 & M18 plug ports
B	Thread chaser	DIA. x L 21Hx64	THREAD M10X1.0	THREAD M12x1.25	
C	Thread chaser	21Hx77	M14x1.25	M18x1.5	
		DIA. x L	INT. THREAD	EXT. THREAD	
D	Adapter	5/8x63.5	M14x1.25	M10x1.0	Extension M10 x 1.0-63.5mm Motorcycles
E	Adapter	5/8x63.5	M14x1.25	M12x1.25	Extension M12 x 1.25-63.5mm Motorcycles
F	Adapter	5/8x63.5	M14x1.25	M14x1.25	■ For use on engines with deep sedated plug ports ■ For difficult access due to obstruction. Two extensions included in this set, F and G, which can be used separately or together
G	Adapter	5/8x70	M14x1.25	M14x1.25	Provides easy & Improved access on ford pinto engines as used in sierra & cortina models.
H	Adapter	19HX69.5	M14x1.25	M18x1.5	
I	Service Kit				



KA-7238K Compression Test Kit

Compression test on vehicles with gasoline engines. Long flex hose and adapters eliminate the need to remove secondary equipment such as power brakes, steering, air conditioning, and manifold components. Side release valve for quick re-testing of cylinder. Set includes gauge and 14mm/18mm solid short adapter, 14mm/18mm long flexible adapter, 14mm long reach adapter, and instruction manual.

- Large 2-1/2" gauge with dual inch/metric readings: 0 to 300 PSI and 0 to 21 kg/cm².
- Boot on gauge provides extra protection from rough handling.
- Small 1-1/2" gauge w/dual inch/metric readings 0-200 PSI and 0 to 14 kg/cm².



KA-7238A Compression Test Kit (Electronic Gauge)

Compression test on vehicles with gasoline engines. Long flex hose and adapters eliminate the need to remove secondary equipment such as power brakes, steering, air conditioning, and manifold components.

Side release valve for quick re-testing of cylinder. Set includes gauge and 14m/18mm solid short adapter, 14mm/18mm long flexible adapter, 14mm long reach adapter, and instruction manual.

- Large 2-1/2" electronic gauge with dual inch/metric readings:0 to 300 PSI and 0 to 21 kg/cm².
- Boot on gauge provides extra protection from rough handling.
- Small 1 1/2" gauge w/dual inch/metric readings 0-200 PSI and 0 to 14 kg/cm².
- Application: American Motors, Chrysler, Ford, GM, Mitsubishi, Nissan, Peugeot Porsche, Subaru, Suzuki, Toyota, Jeep, Saturn, Saura, Audi, BMW, Daiha, Hoda, Hyundai, Infiniti, Isuzu, Jaguar, Kia, Land rover, Lexus, Mazda, Mercedes.



KA-7380 2-In-1 Compression Gauge Set

- Supplied with interchangeable stems to allow four different tester configurations.
- Quick set-up.
- Supplied in sturdy vinyl storage pouch.
- Dual gauge readings:
 - 0 to 300psi (0 to 21 bar)
 - Gauge diameter: 2.5"

KA-7235K Compression Tester

Checks cylinder compression from 0 to 300 psi (0 to 21 kg/cm²).

Adapters fit 14 and 18mm spark plug holes and a special air-hold valve is included to easily reset gauge. Has a 12" rubber hose.

Instructions:

1. Run engine long enough to bring crankcase oil to normal operating temperature.
2. Stop engine and remove all spark plugs and their gaskets.
3. Block choke and throttle valve in "open" position.
4. On standard ignition, remove high tension cable from distributor cap and ground it. On HEI, remove three terminal connectors and battery connector.
5. Select the correct size threaded adapter.
6. Screw adapter into the spark plug hole.
7. Crank the engine four compressions to obtain maximum reading. Make a note of the pressure in each cylinder.
8. To remove the gauge from spark plug hole, depress the valve below the dial, releasing the pressure. If compression readings vary more than 10% between cylinders further tests should be performed. See Manufacturer's Service Manual.

**KA-7373 Compression Tester**

Easy-reading 2-1/2" diameter gauge features color-coded quadruple calibrations 0-300 psi, 21kg/cm, 21bar & 2100kpa.

13" durable rubber hose with 14mm/18mm adapter.

6" heavy-duty stem with universal rubber cone adapter fits all plug holes.

Convenient pressure-holding side release valve.

Provides an accurate reading on high performance engines.

**KA-7373A Compression Tester**

Checks cylinder compression from 0 to 300 PSI (0 to 21kg / cm²).

Fit 10mm spark plug threads

Equipped with air-hold valve and gauge reset button

11" flexible rubber hose

**KA-7373B Compression Tester**

Checks cylinder compression from 0 to 300 PSI (0 to 21kg / cm²).

Fit 10 and 12 mm spark plug threads

Equipped with air-hold valve and gauge reset button

11" flexible rubber hose

**KA-7373C Compression Tester**

Checks cylinder compression from 0 to 300 PSI (0 to 21kg / cm²).

Fit 14mm spark plug threads

Equipped with air-hold valve and gauge reset button

11" flexible rubber hose

**KA-7373D Compression Tester**

Checks cylinder compression from 0 to 300 PSI (0 to 21kg / cm²).

Fit 18mm spark plug threads

Equipped with air-hold valve and gauge reset button

11" flexible rubber hose





KA-7243 Compression Tester

Quickly and accurately check compression on Gasoline Engines.

- Gauge includes release valve and 400mm (15") of hose. Dial reads from 0-300 PSI and 0-21 BAR.
- A 15" flexible with 14mm & 18mm in one Thread Head, unique swivel end quick coupler allows the operator to use quickly and easily.



KA-6640N Heavy Duty Compression Test Kit

1. Compression gauge with protective rubber 2-1/2"
2. Extension alum. tube
3. Angled extension alum. tube
4. NBR hose fit no.M14 & M18
5. Extension thread head
Inner: M14 Outer: M14
6. H/D release valve



KA-7688K Universal Compression Tester Kit

This versatile kit provides a quick method to obtain cylinder compression pressure on engines with deep, recessed spark plugs and difficult access.

A special air-hold valve is included for easy resetting of the gauge, which is graduated from 10 to 300 psi (0 to 21 kg/cm²). Gauge assembly includes pressure relief valve.



KA-7372 Flexible Shaft Compression Tester

- Tester can be screwed into spark plug hole by hand with just a few turns. Side release valve allows multiple re-testing without removing the tester.
- Has a 14 & 18mm adaptor attached to end of hose, plus separate 14mm long reach adaptor.
- Tests engines with both 5/8" and 13/16" hex spark plugs.
- Supplied in sturdy vinyl storage pouch
- Dual gauge readings:
0 to 300psi (0 to 21bar)
Gauge diameter: 2.5"
(10 & 12mm Adaptors available separately)



KA-7374 Compression Tester

- Easy-reading 2-1/2" diameter gauge features color-coded quadruple calibrations with 0-300 psi, 21 kg/cm, 21 bar & 2100 kpa.
- 13" durable rubber hose with 14mm/18mm adapter.
- 6" heavy-duty stem with universal rubber cone adapter fits all plug holes.
- Convenient pressure-holding side release valve.
- Provides an accurate reading on high performance engines.



KA-7531K Power Steering Tester

- For accurate, reliable power steering analysis.
- Determines if trouble is in front suspension or steering linkage.
- Saves valuable time when rebuilding or replacing parts not actually defective.
- Set contains 2,000PSI gauge with metering valve, connection hose, 13 adapters and power steering pressure specifications.
- All packed in a plastic storage case.



KA-7268K Oil Pressure Test Kit

- Quick and accurate check engine oil pressure, and also available for checking oil pressure in automatic transmission.
- Available for domestic and import vehicles, passenger cars and light trucks, gasoline and diesel cars.

Specification:

- Mechanical gauge (0 ~ 150psi)
- Quick tester clamp (only for connecting with oil filter)
- Tester adapters:

Black (SAE threads)	Silver (Metric threads)
1/2" x 20 UNF	M10 x P1.0
3/8" x 20 UNF	M12 x P1.5
1/4" x 18 NPT	M14 x P1.5
1/8" x 27 UPT	M16 x P1.5
R 1/8" DIN	M18 x P1.5

Instruction:

Test by removing oil pressure switch

- Step 1: Remove oil pressure switch (Fig. 1)
- Step 2: Choose a suitable adapter and connect to the oil pressure switch.
- Step 3: Connect pressure gauge to the adapter.
- Step 4: Turn on the engine to test pressure.
- Step 5: Press pressure release button after test is done.



Fig. 1

Test with an oil filter canister clamp

- Step 1: Take the oil filter canister clamp and place it around the oil filter canister.
This is particularly useful when oil pressure switch is difficult to access.
- Step 2: Fasten the bolt on the clamp and the piercer will gradually pierce through the oil filter canister.
- Step 3: Connect pressure gauge to the clamp (Fig. 2).
- Step 4: Turn on the engine to test pressure.
- Step 5: Press pressure release button after test is done



Fig. 2

KA-7268 Quick Test Clamp For Oil Pressure (parts for oil pressure test kit (KA-7268K))



- For testing engine oil pressure by pierce through oil filter canister when oil pressure switch is hard to access.
- Applicable to both gasoline and diesel engines, also suitable for passenger cars and light trucks.
- Use in conjunction with KA-7268K.

Specification:

- Body size: L: 187mm, W: 109mm
- Body material: SCM440
- HRC: 45 ~ 48 degree
- Sharp max length: 19mm
- Sharp material: SUJ2
- HRC: 55 ~ 58 degree



KA-4144 Diesel Fuel Low Pressure Tester

- Diesel fuel low pressure and vacuum diesel fuel test kit.
- Measure the diesel fuel pressure on the low pressure fuel feed side of common rail diesel engines quickly and easily.
- Measure and test fuel vacuum and pressure quickly and easily.
- 9.89mm quick connectors for easy connection to Jaguar, Land Rover, Ford & Citroën Peugeot applications.
- Can be used while engine running to observe post filter feed pressure variation.



KA-4146 Digital Diesel Fuel Low Pressure Tester

- Diesel fuel low pressure and vacuum diesel fuel test kit.
- Measure the diesel fuel pressure on the low pressure fuel feed side of common rail diesel engines quickly and easily.
- Measure and test fuel vacuum and pressure quickly and easily.
- 9.89mm Quick connectors for easy connection to Jaguar, Land Rover, Ford & Citroën Peugeot Applications.
- Can be used while engine running to observe post filter feed pressure variation.



KA-4145 Extreme Luxury Pressure Tester

- Extreme luxury pressure tester for gasoline engines.
- Complete with standard and specialty adapters for compression testing on gasoline engines.
- 2-1/2" dual scale gauge reads 0-300 psi and 0-20 kg/cm².



KA-4147 Digital Extreme Luxury Pressure Tester

- Digital extreme luxury pressure tester for gasoline engines.
- Complete with standard and specialty adapters for compression testing on gasoline engines.
- 2-1/2" dual scale gauge reads 0-300 psi and 0-20 kg/cm².

KA-6719KN Diesel Engine Compression Tester Kit

- Comprehensive test kit for both direct and indirect diesel injected cars.
- Simple & easy to use.
- For use on both direct and indirect injection engines.
- Checks engine compression under cranking conditions.
- Small profile, quick coupling adapters for speed & security
- Built-in pressure relief valve enables repeat tests without dismantling.
- Flexible hose (355mm) gives access to restricted plug & injector ports.



	DESCRIPTION	OVERALL LENGTH	GAUGE DIAMETER	SCALE
A	GAUGE ASSEMBLY	560MM	83MM	0-70BAR (0-1000PSI)
B	CENTRE PILLAR	LENGTH 165	INT. THREAD M8x1.25	EXT. THREAD 1/2x20UNF
C	SPACER SET	LENGTH	INT. DIAMETER	EXT. DIAMETER
		38.3	17	20.1
		25.6	17	20.1
		19.1	17	20.1
		12.65	17	20.1
		6.6	17	20.1
D	END ADAPTER	30	1/2x20UNF	21
E	END ADAPTER	32	1/2x20UNF	24
F	END ADAPTER	41.5	1/2x20UNF	24
G	90° ELBOW			
H	CLAMP PLATE	78	25	17
I	CLAMP PLATE	64	25	17
J	REPLACEMENT SEAL AND WAHSEK SET			

KA-6720KN Diesel Engine Compression Tester Set (Cars)

Comprehensive test kit for both direct and indirect diesel injected commercial, marine and industrial engines.

- Simple & easy to use.
- Checks engine compression under cranking conditions.
- Small profile, quick coupling adapters for speed & security
- Built-in pressure release enables complete test without dismantling.
- Flexible hose (355mm) gives access to restricted space.

©APPLICATIONS

BMW, HOLDEN, NISSAN, VAUXHALL, CARBODIES, ISUZU, OPEL, VOLKSWAGEN, CITROEN, LAND ROVER, PEUGEOT VOLVO, DACIA, LEYLAND/DAF, RENAULT, DIAHATSU, MAZDA, ROVER, FIAT, MERCEDES-BENZ, SEAT, FORD, MITSUBISHI, TOYOTA



	DESCRIPTION	OVERALL LENGTH	GAUGE DIAMETER	SCALE
A	GAUGE ASSEMBLY	560mm	83mm	0-70 BAR (0-1000PSI)
B	GLOWPLUG ADAPTER	OUTSIDE DIA 14H	LENGTH 74	THREAD M10X1.25
C	GLOWPLUG ADAPTER	5/8H	54	M12X1.25
D	GLOWPLUG ADAPTER	19H	72	M14X1.25
E	DUMMY INJECTOR	Ø21	114	N/A
F	DUMMY INJECTOR	27H	65.5	M24X2.0
G	STANDYNE DUMMY INJECTOR	Ø19	112	N/A
H	GLOWPLUG ADAPTER	12H	114	M10X1.25
I	GLOWPLUG ADAPTER	12H	119	M10X1.0
J	DUMMY INJECTOR	21H	76	M20X1.5
K	90° ELBOW			
L	REPLACEMENT SEAL AND WAHSEK SET			
M	CLAMP PLATE	LENGTH 64	WIDTH 25	HOLE DIA. 17



KA-7191 Diesel Compression Tester

2-1/2" dial, glycering filled gauge with glass lens in stainless steel housing. 4,500 PSI rated nylon jacketed pressure hose assembly. Dual scale -0-1,000 PSI; Metric Scale -0-70 BAR. 13 Piece adapter set (Deere & BMW adapters included)

- AUDI, VOVO, BENZ, PEUGEOT, BMW, CUMMINS, FIAT ALLIS, TOYOTA, ONAN, WAUKESHA, FORD, GM, NAVISTAR...etc



KA-7191A Heavy Duty Global Diesel Compression Test Set

Contains compression tester and an assortment of adapters to test a wide variety of vehicles, trucks, heavy-duty equipment deluxe gauge with rubber boot.

- ALLIS CHALMERS, BEDFORD, J.I CASE, JOGN DEERE, FLAT ALLIS, FORD TRACTOR, AUD, BENZ, VW, VOLVO, CUMMINS, NAVISTAR, DETROIT DIESEL, CATERPILLAR.



KA-2402 Diesel Engine Compression Tester Set

(FOR CUMMINS ENGINES)

ITEM NO.	ENGINE	TESTING PORT	THREAD
0201	2.9L, 3.9L, 5.9L	FUEL INJECTOR	24.0mm - 1.5
0202	6 BT, 4.02"bore, 5.9 liter	FUEL INJECTOR	24.0mm - 2.0
0203	V-185, V-210, V-225 V-555, VT-255, VT-555	FUEL INJECTOR	
0204	These 5.5" bore engines: NH(855 cubic inches), V-6, V-8, V-12 & 903 V-8 Cylindrical PTB	FUEL INJECTOR	
0205	GAUGE INCLUDES RELEASE VALVE AND 368mm(14.5") OF HOSE, DIAL READS FROM 0-1,000 PSI AND 0-70 BAR.		



KA-2402A Diesel Compression Tester With Adapters

Easy-to-use compression tester is designed specifically for medium-duty engines equipped with glow plugs. Dual reading gauge measures compression to 1000 PSI and 7000 kPa. Gauge has a push-button release valve and quick disconnect fittings on the hose end.

Tester comes with all the necessary glow plug and nozzle adapters in a handy storage case.

Tester service these engines:

- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9 & 7.3L
- GM 6.2L and 6.5L
- Hino diesel and Mitsubishi Fuso truck engines



KA-2402B Automotive Diesel Compression Test Set

- Tester with handy deflator for releasing air & retesting.
- A 16-1/2" wire reinforced hydraulic hose with a quick coupler on a swivel for ease of connection.
- A 2-1/2" gauge. Records pressures from 0-1000 PSI and 0-70 bar.
- Adapters for All GM, Isuzu, Lincoln Mark VII and Continental, Ford/Navistar, Audi, Mercedes, Peugeot, Toyota, VW, Volvo-Bacharach conversion adapter also included.
- In a red metal box with insert; instructions and specifications included.



KA-7234KA Master Cummins Diesel Fuel Injection Test Kit

- Includes the fitting gauge needed to check fuel pressure, fuel volume, and fuel restrictions.
- Application: 1988-98 Dodge pickups and vans with 5.9L 12-valve, and 1998 1/2-newer 5.9L 24-valve Cummins Diesel engines.
- Contents:
 - Special quick-disconnect banjo fitting (M14 x 1.5 male).
 - Two fuel injection quick-coupler adapters.
 - Quick disconnect banjo fitting (M12 x 1.5 male).
 - Gauge assembly.
 - Fuel volume test adapter.
 - Diesel fuel inlet restriction test adapter.



KA-7239K Diesel Compression Tester Set(For Mack Truck Engines)

Set contains one gauge and a complete adapter system for testing cylinder compression through the injector port on most mack truck engines. Gauge includes release valve and 368mm(14.5") of hose, dial reads from 0 – 1,000psi and 0 – 70bar. Unique swivel end quick coupler allows the operator to connect the adapter quickly and easily.

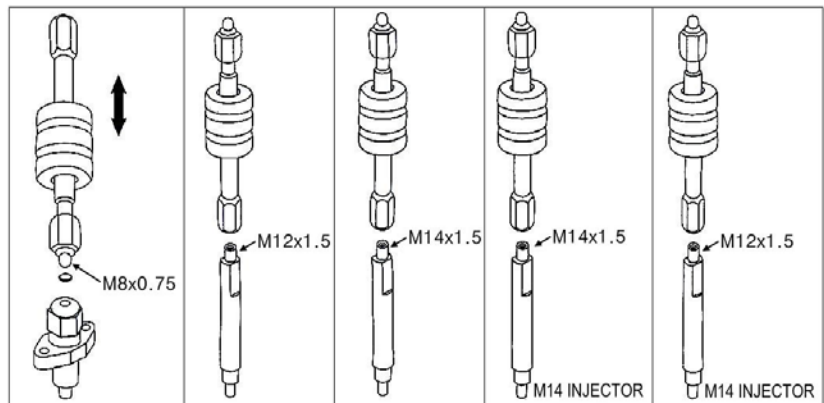
Application	Engine
Allis chalmers	6000, 7000, 10000, 11000
Bedford	200, 220, 300, 330, 466
Case, J.I.	all models not using pencil nozzle
Deere, John	404, 466, 531, 619
Fiat Allis	8035-02-300, 8035-02-301, 8035-02-302, 8045-02, 8045-03
Ford Tractor	all
International Harvester	D/DT 361, D/DT 429, DV 462, DV/DVT 550 DT/DV/DVT 573, 361, 407
Mack Truck	END 405, 457, 475, 510, 519, 605, 672, 673, 674, 711, 864, ENDT 673, 675, 676, 865, 866
Onan	DSL, MDSL
Waukesha	180DLC, 190D, 195D, 197D
White Farm	66, 77, 88, 99, 166, 177, 188, 199, 550, 660, 770, 880, 950, 1550, 1555, 1600, 1650, 1655, 1750, 1755 & 1800



KA-2877N Diesel Injector puller

Assists removal of stubborn bosch and lucas diesel injectors – saves time and money when injectors are difficult to remove.

- With M8 - M12 - M14 adapters
- L:230mm





KA-2899K Flow Meter common Rail Set

The purpose of this instrument is to measure rapidly and effectively the amount of fuel that every injector returns to the deposit tank, so that you will know if any injector is damaged.

Features:

- Direct measurement of return flow of the injector
- Measurement of return flow using external flow meter
- Possibility of simultaneous measurement of up to 6 injectors



KA-2899K1 Flow Meter Common Rail Adaptor Set

This kit is design to measure the amount of the fuel that every injector returns to the deposit tank rapidly and effectively.

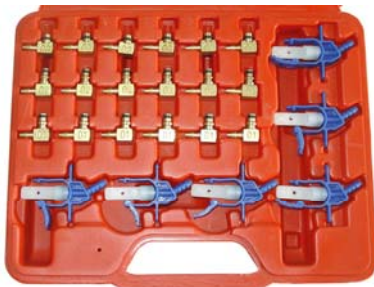
Therefore, you can detect if the injector is damaged.

Special Feature:

- 24 injector adaptors for BOSCH, SIEMENS, DENSO and DELPHI injector
- Direct measurement of return flow of the injector.
- With use of external flow meter to measure return flow.
- Possibility of simultaneous measurement of up to 6 injectors.
- Blow molded case



KA-2899K1-C



KA-2899K2 24pcs Flow Meter Common Rail Set

- Direct measurement of return flow of the injector
- Measurement of return flow using external flow meter
- Possibility of simultaneous measurement of up to 6 injectors
- Box for transportation and storage is included
- 24pcs injector adaptors: apply for BOSH-01, SIEMENS-02, DENSO-03 and DELPHI injector



KA-2899K2-C



KA-2899K3

Return Fuel Volume Tester for Common Rail Injectors (8V)

Specification & Application:

1 off measuring unit with 8 off 1000mm rubber hoses.

1set (8 unit) C1 adapters for BOSCH injectors

1set (8 unit) C2 adapters for SIEMENS injectors

1set (8 unit) C3 adapters for DENSO injectors

1set (8 unit) C4 adapters for DEPHI injectors

Packing: Blow Case 10sets/1.2'

“ QUICK REPLACEMENT TYPE “

The purpose of this instrument is to measure rapidly and effectively the amount of fuel that every injector returns to the deposit tank, so that you will know if any injector is damaged.



KA-2899KQC

36pcs For Flow Meter Common Rail (Quick Replacement)

Can used with old type of KA-2899K, KA-2899K1

- Direct measurement of return flow of the injector
- Measurement of return flow using external flow meter
- Possibility of simultaneous measurement of up to 6 injectors
- Box for transportation and storage is included
- Set included 24pc injector adaptors : apply for BOSH-01, SIEMENS-02 , DENSO-03 and DELPHI injector



KA-2898KQC Flow Meter common Rail Set (Quick Replacement)

Features:

- Direct measurement of return flow of the injector
- Measurement of return flow using external flow meter
- Possibility of simultaneous measurement of up to 6 injectors
- Box for transportation and storage is included



KA-2898KQC1

Flow Meter Common Rail Adaptor Set (Quick Replacement)

Features:

- Direct measurement of return flow of the injector
- Measurement of return flow using external flow meter
- Possibility of simultaneous measurement of up to 6 injectors
- Box for transportation and storage is included
- Set included 24pc injector adaptors : apply for BOSH . SIEMENS . DENSO and DELPHI injector



KA-2898KQC2

24pcs For Flow Meter Common Rail Set (Quick Replacement)

(Quick Replace Something)

- Direct measurement of return flow of the injector
- Measurement of return flow using external flow meter
- Possibility of simultaneous measurement of up to 6 injectors
- Box for transportation and storage is included
- Set included 24pc injector adaptors : apply for BOSH-01, DENSO-03 and DELPHI injector



KA-7191C Diesel Engine Cylinder Leakage Test Kits

KA-7191C covers most popular cars and vans.

KA-7191C has additional glow plug adaptors for more coverage and KA-7191C also includes the adaptor set for clamp-type injectors to cover more car, van, truck, bus, agricultural and marine applications.

Glow plug adaptor application:

Alfa, BMW, Chrysler, Daewoo, Ford, Hyundai, Isuzu, Land Rover, LDV, Mazda, Mercedes Benz, Mitsubishi, Nissan, Opel, PSA, Renault, Saab, Suzuki, Toyota, VAG, Vauxhall, Volvo Diesel Engine.

Injectors: M20, M22, M24 & Ford Stanadyne injector plus clamp-on injector.



KA-7191D Diesel Engine Compression Tool Kit

KA-7191D includes the additional Clamp-on Injector Adaptor Set,

the large 2-1/2", 70 bar (1000psi) gauge with rubber bumper, straight and right angled connect fittings, wide range of glow plug and injector adaptors which enables KA-7191D to cover the majority of car, van, truck, bus, agricultural and marine diesel engines.

Glow plug adaptor application:

Alfa, BMW, Chrysler, Daewoo, Ford, Hyundai, Isuzu, land Rover, LDV, Mazda, Mercedes Benz, Mitsubishi, Nissan, Opel, PSA, Renault, Saab, Suzuki, Toyota, BAG, Vauxhall, Volvo Diesel Engine.

Injector: M20, M22, M24 & Ford Stanadyne injector plus clamp-on injector.



KA-7018 Heavy-Duty Diesel Engine Nozzle Testing & Cleaning Set

FOR ALL DIESEL ENGINE CARS & TRUCKS

For Testing injection nozzle opening pressure, leakage spray pattern, Atomization & Chatter Characteristic & Cleaner.

Capacity: SAFE WORKING PRESSURE

- Max.: 9000 PSI (640 KG/CM²)
- Adapters: M-12 x P1.5, M-14 x P1.5, M-16 x P1.5
- Weight: 8 kg
- Pressure Gauge: 70mm, Pump: 11mm, Stroke: 20mm
- Discharge Amount: 2.0cc
- Simple & Easy to operating by hand
- Follow New International Standard
- Clean the Nozzle with **3M** Cleaning Solution for Diesel Nozzle.

(Please fill the Cleaning Solution in the white pot)

WARNING

1. Before operating, please fill the pump with approx. 6cc diesel fuel to avoid idling.
2. To avoid injury by high pressure spraying while operating, do not stand in front of the nozzle, do not place hands in front of the nozzle, do not expose any body parts in front of the nozzle, please do not operate when any person is standing in front of the nozzle.
3. Please wear safety goggle or slippery-proof footwear.
4. Please do not operate near fire.

Pressure unit conversion table

	psi	bar	kg/cm ²
1PSI	1.0	0.069	0.07
1BAR	14.5	1.0	1.02
1kg/cm ²	14.2	0.98	1.0

1bar=100kPa



KA-7018A Diesel Engine Nozzle Testing & Cleaning Set

- The liquid tank is provided with a filter.
- Supplied with M14xM14 and M14xM12 pipes.
- Weight: 2 kg
- 3.5" dial gauge reading 0-600 bar also reading 0-8700 lbs/sq.Inch.

WARNING

1. Keep away from any heat places
2. We recommend using special fluids to operate this device properly, such as Shell oil S.9365. or 1P Fanum Fluid Cd.



KA-5193 TDC Indicator

- A pneumatic indicator for finding top dead Centre (TDC) position on petrol and diesel engines.
- The TDC indicator is located into the spark plug/glow plug hole, and as the engine is rotated, clearly shows when the piston has achieved TDC by visible movement of the indicator float.
- A adaptor for 8mm to 18mm spark plug and glow plug holes.
- Magnetic attachment for hand free use.
- Application: Diesel and Petrol engines for car and vans.



KA-8392 Common Rail Diesel Fuel Return Flow Kit

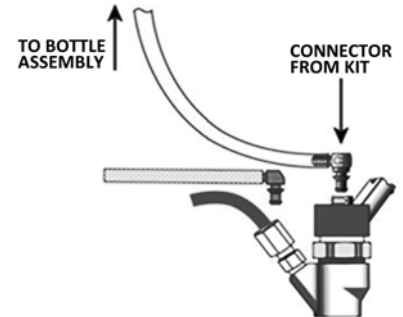
Checking the return flow volumes from common rail systems for eight injectors. Used on injectors of Bosch, Delphi, Denso and Vdo/Siemens.

A plexiglass container with a graduated scale permits the comparative measurement of return flow volumes from individual injectors.

The container is provided with a hook, which can be hung up in the engine compartment. The tester is connected by adapters to the return flow pipe from the injector. The adapters, marked with the name of the injector manufacturer which can be changed over at the connecting hosepipe.

Contents:

- 1 - Plexglass measuring container with 8 fuel-resistant
- 8 - Highly flexible hoses, 1.2M for each
- 8 - Highly flexible hoses, 130mm (Ø3.3) for each.
- 8 - Highly flexible hoses, 130mm (Ø2.5) for each.
- 8 - Adapters for Bosch injectors.
- 8 - Adapters for Delphi injectors.
- 8 - Adapters for Denso injectors.
- 8 - Adapters for Vdo/Siemens injectors.
- 1 - Solid plastic case
- 1 - Hose clamp
- 1 - Spring
- 1 - Hook



KA-7845 Diesel Engine Low Pressure Diagnostic Kit

- This diagnostic set is to inspect low pressure or return fuel side of diesel engines.
- Two manometers with different scales (-1 -5 bar and -1 -15 bar) offer more accurate test results.
- Ten fuel line adapters cover a wide range of diesel engines and car makes.
- Translucent tube on adapters help observe impurities and bubbles in the fuel.
- 2 meter long hoses help connections in confined areas in engine compartment.
- Exclusive sales in France and Germany.



KA-7843 Fuel System Testing And Cleaning Set

- Set for inspecting faults on diesel engine low pressure side: between fuel tank and fuel filter, and between fuel filter and high pressure pump.
- Also for introducing cleaning agent into the engine without the cleaner being diluted in fuel tank.
- Provided with various adapters for the most common vehicles and models.
- Includes a 12.5 liter tank suitable for works requiring large capacity.
- Exclusive sales in France and Germany.



KA-7230K Universal Radiator Pressure Tester Kit**(For cooling system testers)**

Availability range for the testing head:

NO 0: Needle type thermometer.

NO 1: Manual pumping set.

NO 2: TRUCK, GM (CADILLAC)

NO 3: BENZ, FORD, TRUCK, JAPANESE 123 SERIES, GM (BUICK), JEEP

NO 4: PEUGEOT, JAPANESE 124 SERIES (MITSUBISHI, NISSAN, MAZDA, TOYOTA, SUBARU, INFINITI, GEO, SUZUKI, ISUZU, LEXUS)

NO 5: JAPANESE 125 SERIES (HONDA, TOYOTA, SUZUKI, MITSUBISHI)

NO 6: OPEL, VW, FORD, BMW245, SAAB, JAGUAR

NO 7: VOLVO, SAAB, AUDI, CITRON, RENAULT, FIAT, PEUGIOT, ALFA, JEEP

NO 8: NEW VW

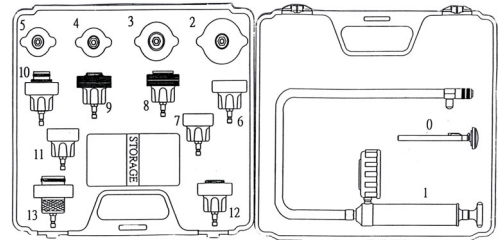
NO 9: VW T4, NEW AUDI A4, A5, A6, BMW 345

NO 10: BMW

NO 11: AUDI, VW

NO 12: FORD, INTERNATIONAL, GM, ROVER

NO 13: BENZ

**KA-7230G Cooling System & Radiator Cap Pressure Tester****Extra Device for vehicles which not covered in above 14 adapters:**

A. The extra device is a bonus device to overcome a situation in case those adapters we prepared are out of dimensions to fit a vehicle with rare design in cooling system. In this case, the useful device will provide you good quality service to you customer.

Caution: Do not apply this device as your routine way to test cooling system. Always wait until the coolant has drop to room temperature to avoid possible steam burnt.

Composition: "T" shape brass joint – both ends are designed to fit 3/8" or 5/16" hose. One piece of 5/16" hose one piece of 3/8" hose. Two pieces of metal clamp.

B. Disconnect the hose with radiator and main cooling system.

C. Select either 5.16" or 3/8" hose which the system applied; and then connect with "t" brass joint with proper size hose with clamp.

D. Connect T-joint with main cooling system with original hose at the other end with clamp.

E. To ensure the security of the loop, metal clamps should be used always. Apply the pump head to connect T-joint.

F. Operate the pump to input air pressure to desired pressure level (10 PSI to 20 PSI recommended). The indicator hand will tell you the fact of the cooling system being tested.

Key Specifications/Special Features:

- With bonus extra device for vehicle not covered in following 14 adapters
- Adapter No. 1: GM 4 cylinder (Buick, Chevrolet, Oldsmobile, Pontiac, Cadillac)
- Adapter No. 2: Truck
- Adapter No. 3: Mercedes-Benz, Ford, Chrysler, GM, Jeep, Truck, Peugeot
- Adapter No. 4: Acura, Dodge, Eagle, Geo, Honda, Isuzu, Lexus, Mazda, Mitsubishi, Suzuki
- Adapter No. 5: Toyota, Infiniti, Nissan, GM (Nova, Spectrum, Sprint), Peugeot, Ford, Chrysler
- Adapter No. 6: Buick, Chevrolet, Ford, Lincoln, GM, OPEL, VW, SAAB, Benz (ML-Class), Jaguar, Rover
- Adapter No. 7: Jeep, Renault, SAAB, VOLVO, AUDI, CITRON, FIAT, Peugeot, Alfa, Sterling, VW
- Adapter No. 8: VW
- Adapter No. 9: AUDI (A4,A6,A8), VW (Passat 1997-2002, GOLF, JETTA)
- Adapter No. 10: BMW
- Adapter No. 11: VW, AUDI
- Adapter No. 12: FORD, GM International, ROVER, OPEL, Jaguar, BMW 245 (BMW up to 1987)
- Adapter No. 13: Mercedes-Benz Sedans with threaded neck
- Adapter No. 14: SAAB, OPEL
- 2.3 cap adapter and 4.5 cap adapter: testing pressure cap
- Cooling system pump with pressure gauge
- T shape joint: 5/16 and 3/8 inches
- Oil hose: 5/16 and 3/8 inch, hose clamp x 2
- For all cars
- Patented



Radiator Pressure Tester & Vacuum-Type Cooling System Kit



1. Contents:

1.1 Specification- Radiator Pressure Tester:

No.	Radiator Cap Application	KA-7230KV	KA-7230KVP	KA-7230KVN	KA-7230KVM	KA-7230F
0	Thermometer	•	•	•	•	•
1	Pressure Testing Pump with Gauge	•	•	•	•	•
2A	Connector R123/R124(Black color)	•	•	•	•	•
2B	Connector R123/R125(Blue color)	•	•	•	•	•
3	Mercedes Benz(w123, w126, w124, w201) GM(Buick) Jeep	•	•	•	•	•
4	Peugeot, Subaru, Chrysler, Acura, GM(Nova, Spectrum, Sprint), Mitsubishi, Nissan, Mazda, Toyota, Infiniti, GEO, Suzuki, Isuzu, Mercedes Benz)	•	•	•	•	•
5	Honda, Toyota, Suzuki, Mitsubishi, Chrysler, Acura, Lexus	•	•	•	•	•
6	Mercedes Benz (ML-class, W163, W164) GM(achiva, skylark, grand am-1992-2002)	•	•	•	•	•
7	Volvo, Saab, Sterling, Citroen, Renault, Fiat, Alfa, Jeep, Mini	•	•	•	•	•
8	VW(Vento, T4, Passa-1996, Golf, Beetle, Sharan)	•	•	•	•	•
9	Audi(A4, A5, A6), BMW 345, VW(Passa-1997-2002), Porsche (Cayenne)	•	•	•	•	•
10	BMW (E46, E36, E34, E39, E38, E32, E90)	•	•	•	•	•
11	Audi, VW	•	•	•	•	•
12	Ford Mondeo, International, Land Rover, Opel, Ssangyong motor	•	•	•	•	•
13	Mercedes Benz(C-class, E-class, S-class, W140, W220, W124, W210, W211, W215, W216, W221, R230)	•	•	•	•	•
14	Ford Mondeo, Focus, C-MAX03	•	•	•	•	•
15	Mazda (M3)	•	•	•	•	•
16	Mercedes A-class (W168)	•	•	•	•	•
17	BMW E60, E63, E64, E65	•	•	•	•	•
18	VW Sharan 1.8T2.8	•	•	•	•	•
19	Toyota-Rav4, Previa	•	•	•	•	•
20	SAAB		•	•	•	•
21	Lincoln, Mercedes, Mercury, Oldsmobile, Pontiac, Saturn, Buick, Cadillac, Chevrolet, GMC, Hummer, International, Jaguar, Land Rover			•	•	•
22	BMW, Mini 2008				•	•
23	Audi(A3, Q7), Porsche(Carrera), Skoda(Octavia), Seat(Toledo), VW					•
KA-7230K-QA 90° Connector For Radiator Adapters						•



1.2 Specification- Vacuum Purge & Refill Tool

KA-7230V Vacuum-type Cooling System Filler Kit

part	Advantage
Gauge	Could turn almost 180°
Radiator test adaptor	Two application provides more accurate fitting (1) universal cone radiator cap (2) specific radiator cap
on/off button	User select if the air goes



2. Instruction of radiator pressure tester

2.1 check leakage in radiator system with radiator caps (material-Nylon 66)

Step 1: Remove the original radiator cap while the engine is cold.

Step 2: Choose a test cap suiting the connection type onto the radiator. Screw the cap onto the radiator opening(Fig.1).

Step 3: Connect the pump to the test cap through the quick coupling at the hose end.

Step 4: Pump until pressure is approximately 10~15psi(Fig.2). If the gauge pointer perfectly efficient; if the gauge goes down and no fluid discharges can be located, check whether the engine head gasket is worn. (CAUTION: please avoid the pressure up to the 35psi)

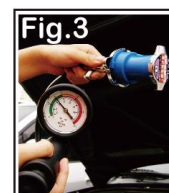
Step 5: Finally, release pressure through the button next to the quick coupling, and put away the device, after removing any fluid or dirt.

2.2 Check leakage on original radiator cap

Step 1: Choose the #2A or #2B with available steel radiator.

Step 2: Work the hand pump for few times, and then check the gauge reading for testing leakage. (Fig. 3)

Step 3: Follow the pressure standard shows on original radiator cap.



3. Instruction of vacuum purge & refill tool

3.1 Purge the air in radiator

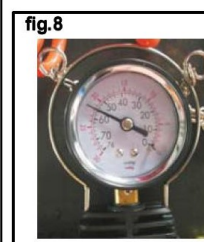
Step 1: Please empty water from the radiator as clear as possible.

Step 2: Raise the vehicle bonnet and hand the hook in available position.

Step 3: Connect the universal radiator rubber adaptor provided or suitable radiator cap on radiator. (see fig. 4 & 5)

Step 4: Ensure the switch No.3 is ON, No.7 is OFF. (see fig. 6)

Step 5: Connect air line. Press button "ON" to allow the air goes (see fig. 7). Turn switch No.3 "OFF" when the pressure reaches 20-25 inHG (50-60cmHG) (see fig. 8). Then press button "OFF".



3.2 Refill the Coolant

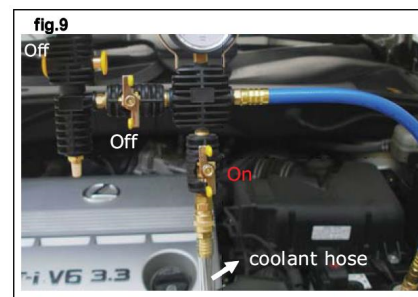
Step 1: Connect the coolant hose.

Step 2: It is necessary to ensure the No.3 is "OFF" before refilling coolant, then ensure coolant hose is filled with coolant.

Step 3: Turn No.7 "ON" to allow the coolant sucked into radiator. (see fig. 9)

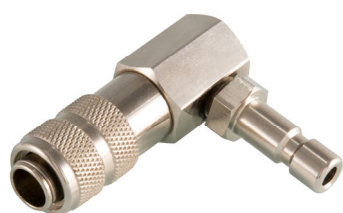
Step 4: The work is done when the needle points will be back to "zero."

Note: Please check if the radiator is fully filled with coolant or not. If not, please fill the coolant by yourself until the radiator is full of coolant.



KA-7230K-QA

90° Connector For Radiator Adapters



- Specially designed to tackle limited sapce problems:
 - Overall height can be reduced by 55% after connection
 - Connector can be turned 360°
- With high quality quick coupling for smooth connections.
- Surface treated with anti-oxidize materials to prevent rusts resulted from constantly contacting coolant.
- Suitable for confined spaces!

Use KA-7230K-QA



No use KA-7230K-QA



The overall height after connection is 60mm, which is about 55% shorter than the connection without such connector.

KA-7230N

Universal Radiator Pressure Tester Kit – 18pcs



KA-7230M

Universal Radiator Pressure Tester Kit – 24pcs

**1. Contents:****1.1 Specification- Radiator Pressure Tester:**

No.	Radiator Cap Application	KA-7230N	KA-7230M
0	Thermometer	•	•
1	Pressure Testing Pump with Gauge	•	•
2A	Connector R123/R124(Black color)	•	•
2B	Connector R123/R125(Blue color)	•	•
3	Mercedes Benz(w123, w126, w124, w201), GM(Buick) , Jeep	•	•
4	Peugeot, Subaru, Chrysler, Acura, GM(Nova, Spectrum, Sprint), Mitsubishi, Nissan, Mazda, Toyota, Infiniti, GEO, Suzuki, Isuzu, Mercedes Benz)	•	•
5	Honda, Toyota, Suzuki, Mitsubishi, Chrysler, Acura, Lexus, Chevrolet, Dodge, Eagle, Geo, Isuzu, Mercedes Benz	•	•
6	Mercedes Benz, GM, Cadillac, Daewoo, Ford, Jaguar, Jeep, Land Rover, Mercury, Pontiac, Porsche, Saab, Saturn	•	•
7	Volvo, Saab, Sterling, Citroen, Renault, Fiat, Alfa, Jeep, Mini, Peugeot	•	•
8	VW(Vento, T4, Passa-1996, Golf, Beetle, Sharan)	•	•
9	Audi(A4, A5, A6), BMW 345, VW(Passa-1997-2002), Porsche (Cayenne)	•	•
10	BMW (E46, E36, E34, E39, E38, E32, E90)	•	•
11	Audi , VW	•	•
12	Ford Mondeo, International, Land Rover, Opel, Ssangyong motor	•	•
13	Mercedes Benz(C-class, E-class, S-class, W140, W220, W124, W210, W211, W215, W216, W221, R230) , Chrysler	•	•
14	Ford Mondeo, Focus (C-MAX03)	•	•
15	Mazda (M3) , Ford	•	•
16	Mercedes A-class (W168)		•
17	BMW E60, E63, E64, E65		•
18	VW Sharan 1.8T2.8		•
19	Toyota-Rav4, Previa		•
20	SAAB		•
21	Lincoln, Mercedes, Mercury, Oldsmobile, Pontiac, Satum, Buick, Cadillac, Chevrolet, Ford, GMC, Hummer, International, Jaguar, Land Rover		•
H	Handle	•	•

2. Instruction of radiator pressure tester**2.1 check leakage in radiator system with radiator caps (material-Nylon 66)**

Step 1: Remove the original radiator cap while the engine is cold.

Step 2: Choose a test cap suiting the connection type onto the radiator. Screw the cap onto the radiator opening(Fig.1).

Step 3: Connect the pump to the test cap through the quick coupling at the hose end.

Step 4: Pump until pressure is approximately 10~15psi(Fig.2). If the gauge pointer perfectly efficient; if the gauge goes down and no fluid discharges can be located, check whether the engine head gasket is worn. (CAUTION: please avoid the pressure up to the 35psi)

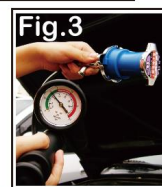
Step 5: Finally, release pressure through the button next to the quick coupling, and put away the device, after removing any fluid or dirt.

2.2 Check leakage on original radiator cap

Step 1: Choose the #2A or #2B with available steel radiator.

Step 2: Work the hand pump for few times, and then check the gauge reading for testing leakage. (Fig. 3)

Step 3: Follow the pressure standard shows on original radiator cap.



**KA-7230E****Cooling System & Radiator Cap Pressure Tester****(European Type Quick Coupling)**

- This kit suitable for Mercedes-Benz, BMW, VW, Audi
- The cooling system tester's quick coupling fit the European type nipple for quick coupling
- Can be sold separately

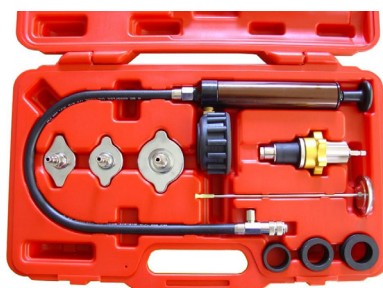
**KA-7230H Cooling System & radiator cap pressure tester****Key Specifications/Special Features:**

- Cap No. 1: GM 4 cylinder (Buick, Chevrolet, Oldsmobile, Pontiac, Cadillac)
- Cap No. 2: trucks
- Cap No. 3: Mercedes-Benz, Ford, Chrysler, GM, Jeep, Truck, Peugeot
- Cap No. 4: Acura, Dodge, Eagle, Geo, Honda, Isuzu, Lexus, Mazda, Mitsubishi, Suzuki, Toyota, Infiniti, Nissan, GM (Nova, Spectrum, Sprint), Peugeot, Ford, Chrysler
- Cap No. 5: Toyota, Honda, Mitsubishi, Suzuki, Lexus, Chrysler, Acura, Dodge, Geo
- 2.3 cap adapter (testing pressure cap)
- 4.5 cap adapter (testing pressure cap)
- Cooling system pump (with pressure gauge)

Testing the pressure cap:

**KA-7230J****Cooling System & Radiator Cap Pressure Tester For "Japanese Cars"****Key Specifications/Special Features:**

- #0 Temperature Thermometer
- #1 Pressure testing pump with gauge
- #2-A Switch connector of radiator lid
- #2-B Switch connector of radiator lid
- #3 Adapter - Benz, GM (Buick), Jeep
- #4 Adapter - Peugeot, Subaru, Chrysler, Acura, GM(Nova, Spectrum, Sprint) Mitsubishi, Nissan, Mazda, Toyota, Infiniti, Geo, Suzuki, Isuzu, Ford
- #5 Adapter - Honda, Toyota, Suzuki, Mitsubishi, Chrysler, Acura

**KA-7230A Universal Radiator Pressure Tester Kit**

This tester kit is used for checking the radiator to see if any water leaked because of the body or the connector not fitted properly or any broken. It is tested through pressure increase by using an adapter for closing the master or second inlet of the radiator then pushing the manual pump by hand.

Contents:

- No.0: Needle Thermometer
- No.1: Manual pump with quick joint & release valve
- No.2: Universal adapter with 3 rubber rings (used for cars not listed on Nos. 3-5) (See Fig.1, 2, 3)
- No.3: Japanese R123 adapter- suitable for Benz, GM (Buick) & Jeep
- No.4: Japanese R134 adapter- suitable for Peugeot, Subaru, Chrysler, Acura, GM(Nova, Spectrum & Sprint), Mitsubishi, Nissan, Mazda, Toyota, Infiniti, Geo, Suzuki, Isuzu & Ford
- No.5: Japanese R125 adapter- suitable for Honda, Toyota, Suzuki, Mitsubishi, Chrysler & Acura

Operation:

1. According to the type of car, choose a suitable adapter and screw it in the inlet of radiator then have the manual pump pressure increased to 15-20PSI and stay the level 5-10 minutes for checking. If the pressure in the meter lower automatically, then check the body of radiator or the connector joint to see if any leaked. If the pressure is kept same, then the radiator is in good condition.
2. Before using no. 2 universal adapter, be sure to clear up the inlet of the radiator then check its size and chose an appropriate rubber ring to fit then screw securely to the inlet of the radiator. Before loosening the adapter and the manual pump, be sure to leak out the pressure to prevent the water coming out from the radiator.

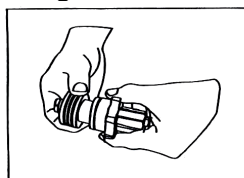
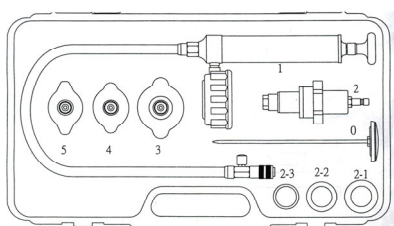


Fig. 1

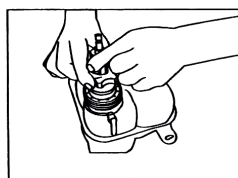


Fig. 2

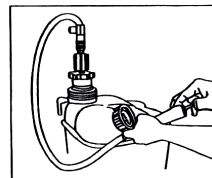


Fig. 3

KA-2878K Cooling System Vacuum Purge & Refill Kit (for all cars)

1. Please empty water of radiator. Choose a suitable rubber bush, and put it between cooling system adapter and radiator tightly. (See Figure 1)
2. Connect cooling system adapter to vacuum pump, and connect shop air to air connector. Please turn on the switch. (See Figure 2)
3. Allow air pressure to reach a vacuum level of approximately between 20~25 inches of mercury. Please turn off the switch, and take off the vacuum pump. (See Figure 3)
4. Connect coolant hose to cooling system adapter and then turn on the switch. (The coolant hose should have filled with coolant, and put in the box which filled with coolant) (See Figure 4)
5. The coolant will flow to the radiator via coolant hose.



The Air Usually Enter the Radiator when the Mechanics Refill the Coolant In and Causes Damages to the Car Engines.

The new KA-2878K Cooling System Vacuum Purge & Refill Kit can prevent this problem.

- Enable total Vacuum of the Radiator.
- Prevent the Air Entering the Radiator.

FIGURE 1.

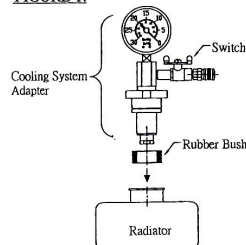


FIGURE 2.

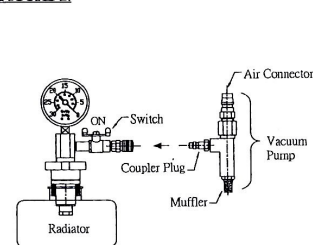


FIGURE 3.

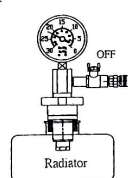
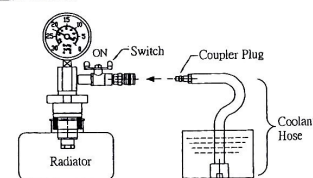


FIGURE 4.

**Engine Cooling System Leakage Tester**

KA-4277A for U.S.A. system vehicles

KA-4277B for European system vehicles

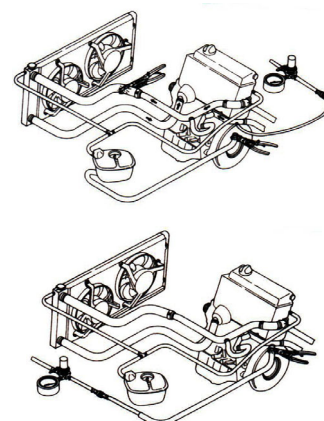
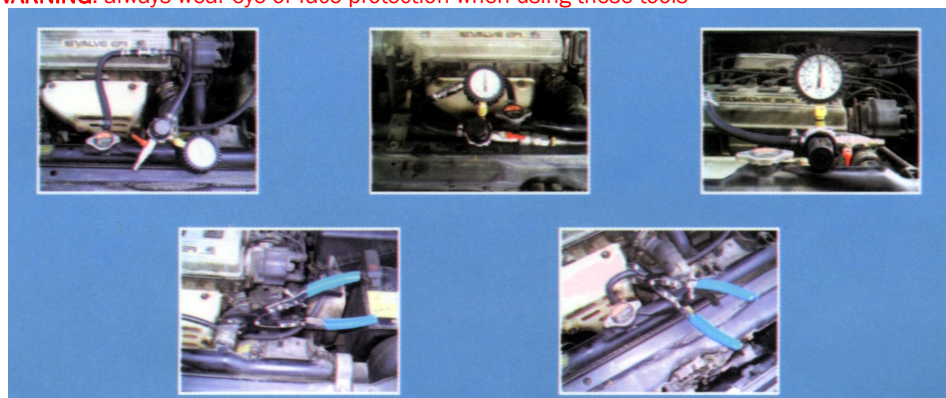
Designed to check cooling system for leaks on common cars. Tester set includes air pressure regulator with gauge, different diameter connecting tube (1/4", 5/16") and hose clamp pliers (8", 10", 12").

Easy to use and quickly find leaks in cooling system.

Test Procedure:

1. Let engine cool down until close to room temperature.
2. Close the manual valve on pressure regulator assembly. Connect the pressure regulator assembly with connecting tube to colling system. Supply compressed air into pressure regulator assembly.
3. Open the manual valve on regulator assembly. Adjust regulator assembly until gauge display approx 1kg.
4. Close the manual valve on pressure regulator assembly again. Unconnect tompressed air to pressure regulator assembly.
5. Hold the gauge pressure on regulator. If pressures reduce, lokking for where appears cooling water to find leakage position in cooling system. Swivel hose clamp pliers' jaws for parallel clamping cooling system hoses.

WARNING: always wear eye or face protection when using these tools





KA-7200 Carburetor & Synchronize

For testing fuel pump, carburetor and transmission check auto with 2 ~ 4pcs Carburetors

1. 4pcs 3-1/2" synchronizer gauges with fixed plate
2. Rubber hose 4pcs 8x5x7500mm
3. Extension tube
 - 4pcs 3.9 x 122mm
 - 4pcs 3.9 x 52mm
4. Cone Type Connector
 - 8pcs 8x40mm
 - 4pcs 10x53mm (M6x0.75)
 - 4pcs 10x60mm (M6x1.0)



KA-7201 Vacuum Tester

For testing fuel pump carburetor and transmission check auto with 2 ~ 4pcs CARBURETORS

1. 4pcs 3-1/2" synchronizer gauges with fixed plate
2. Pressure range: 0~76cmHg
3. Rubber hose 4pcs 4PC 8x5x7500mm
4. Extension tube
 - 4pcs 3.9 x 52mm
 - 4pcs 3.9 x 122mm
5. Cone Type Connector
 - 8pcs 8x40mm
 - 4pcs 10x53mm (M6x0.75)
 - 4pcs 10x60mm (M6x1.0)



KA-1237 Carburetor Synchronizer (Vacuum, Mini-Type)

- Four pieces Gauges
- Dial Diameter: 2"
- Pressure Range: 0~76cmHg
- Housing: Painted Steel
- Ring: Painted Steel
- Lens: Arcylic
- Pointer: Flat Red-Painted Aluminum

Accessories:

- Fixed Plate
- Rubber Hose:
 - Ø8x Ø5x950mm(4pieces)
- Extension Tube:
 - M5x0.8x100mm(4pieces)
 - M5x0.8x169mm(4pieces)
- Cone Type Connector:
 - M6x1.0x60mm(4pieces)
 - M6x0.75x53mm(4pieces)
 - Ø6x55mm(1pieces)



KA-1238 Carburetor Synchronizer

- One piece Gauges
- Dial Diameter: 2"
- Pressure Range:
- Vacuum or Compound available
- Housing: Painted Steel
- Ring :Painted Steel
- Lens: Arcylic
- Pointer: Flat Red-Painted Aluminum

Accessories:

- Rubber Hose:
 - Ø8x Ø5x950mm
- Extension Tube:
 - M4x Ø0.7x169mm
 - M4x0.7x100mm
- Cone Type Connector:
 - M6x1.0x60mm
 - M6x0.75x53mm
 - Ø6x55mm



KA-7383K Vacuum Tester

- For engine pressure testing
- Gauge: 0 ~ -76 CMHG (0 ~ -30 INHG)



KA-7202 Vacuum & Fuel Pump Tester

- Large 3-1/2" diameter gauge with color-coded easy-reading scales.
- Extra long heavy-duty rubber hose and 14mm/18mm manifold adapter.
- Checks for worn or defective parts in fuel pumps, vacuum system.



KA-7383 Vacuum & Fuel Pump Pressure Tester

- Enlarged graduations for accurate readings. Checks for leaky valves, timing, fuel pump vacuum and pressure, fuel line leakage etc.
- Gauges are equipped with 4ft(1.2m) of high quality rubber hose with taper vacuum fitting.
- Complete operating instruction manual included.
- Supplied in sturdy vinyl storage pouch.
- Dual gauge readings:
 - 0 to 30inHg (0 to 76cmHg) Vacuum
 - 0 to 15psi (0 to 1kg/cm²) Pressure
- Gauge diameter: 2.5"



KA-4425K Vacuum Pump / Brake Bleeding Kit

A COMPLETE KIT FOR VACUUM TESTING AND ONE-MAN BRAKE BLEEDING

Testing:

1. Diagnosing mechanical engine conditions
2. The fuel system
3. Ignition system service
4. Engine tune-ups
5. Computerized engine control systems
6. Emission control system components
7. Automatic transmissions
8. Brake systems
9. Body and accessories
10. Motorcycle and marine vehicle
11. Ship honing fluids

***** TOTAL 25 FUNCTION *****



KA-3000KC

KA-6690 Vacuum Testing Brake Bleeding Kit

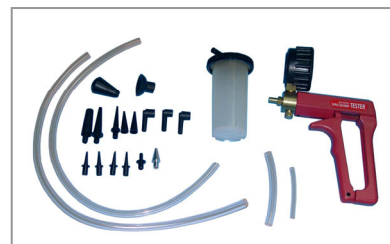
A COMPLETE KIT FOR VACUUM TESTING AND ONE-MAN BRAKE BLEEDING

Useful Information:

1. The kingtool vacuum pump
2. The automotive vacuum system
3. Diagnosing mechanical engine conditions.
4. The fuel system
5. Ignition system service
6. Engine tune-ups
7. Computerized engine control systems.
8. Emission control system components.
9. Automatic transmissions
10. Brake systems
11. Body and accessories
12. Motorcycle and marine vehicle.
13. Ship honing fluids.

***** TOTAL 25 FUNCTION *****

VACUUM READING: 0 ~ 760mmHg(0 ~ 30 INCH Hg)



KA-4422K Vacuum/Pressure Pump■ **Mechanical engine condition**

1. Vacuum gauge
2. Cylinder leakage
3. Valve stem oil seals
4. Heavy duty diesel piston pin retainer leakage
5. Turbocharger waste gates motorcycle and marine
6. Sealing & Defective gaskets

■ **Testing**

Vacuum pump provides many tests including but not limited to the following.

1. Automatic transmission

- *vacuum modulators

2. Body and accessories

- *vacuum reservoirs
- *air conditioning and heating
- *heater cores

3. Brake systems

- *antilock brake system
- *conventional brake system
- *power brake system

4. Computerized engine control systems

- *FORD EED-III and MCU system
- *CHRYSLER electronic fuel control system
- *American motors engine controls

5. Emission control system

- *heated-inlet air system
- *EGR (Exhaust gas recirculation) system

6. Engine tune-up

- *carburetor adjustments and service
- *carburetor chokes
- *propane carburetor service

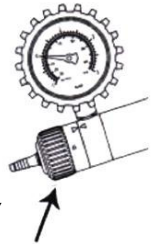
7. Fuel system problems

- *fuel tank
- *fuel lines
- *fuel pumps
- *fuel pressure regulator

8. Ignition system services

- *system functions
- *ignition timing
- *power brake system

- Vacuum reading from 0 to -1 bar / 0 to 760 mmHG with 0.05 gauge increments
- Pressure reading from 0 to 4 bar / 0 to 60 PSI with 0.05 gauge increments



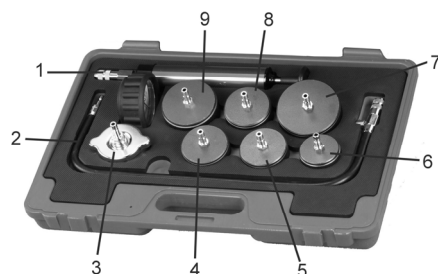
CHANGES FROM VACUUM TO PRESSURE INSTANTLY

KA-7273 Truck Radiator Pressure Tester

- For testing HGV cooling system pressure
- For DEUTZ engine, Mercedes, Volvo, MAN, Renault, DSF, IVECO

Application:

No.	Radiator cap application
1	Pressure testing pump with gauge
2	Connect hose
3	DEUTZ engine (1015) Merced (Sprint-2006 , Vito-2006)
4	Volvo (FH12 1993-)
5	MAN (L2000 1993~2000, TGA 2000-)
8	Renault (Kerax 1999- , Magnum 1990~2003 , Midlum 2000- , Premium 1997-)
6	DAF (LF55 2001-) IVECO (EURO CARGO 1991- , EuroStar 1993~2001, Euro Trakker 1993~2001, Euro Trakker Cursor 2002- , Euro Trakker Cursor 13 2001- Euro Truck, Stralis Cursor 2002-) MAN (E2000 2000- , F2000 1995~1996, F90 1987~1996, TGA/L/M/S 2005-) Mercedes (Actros 1997- , Atego 1998- , Axor 2001- , Eco 8401 , Ikw 1728 , FH12 1993- , FL 2000- , FM 1998-) Volvo (FH12 1993- , FL 2000- , FM 1998-)
7	DAF (XF95 2002~2006, XF 105 2005-) ERF (EC RANGE 1996~2003)
9	Scania (4 series 1995~2004 , 93 , 94 1996~2004 , 113 , 114 1996~2004 , 124 1996~2004 , 144 1996~2002 , 164 1999~2004)



Operation:

- Remove the original radiator cap while the engine is cold. Choose a test cap suiting the connection type onto the radiator. Screw the cap onto the radiator opening(Fig.1).
- Connect the pump to the test cap through the quick coupling at the hose end.
- Pump until pressure is approximately 10~15psi(Fig.2). If the gauge pointer perfectly efficient; if the gauge goes down and no fluid discharges can be located, check whether the engine head gasket is worn.
(CAUTION: please avoid the pressure up to the 35psi)
- Finally, release pressure through the button next to the quick coupling, and put away the device, after removing any fluid or dirt.



One Adaptor fit "ALL" cars



KA-7230U

Universal Radiator Pressure Tester & Vacuum-Type Cooling System Kit (3pcs/set)

Adjustable radiator test adaptor suits most vehicle's radiator pressure cap.

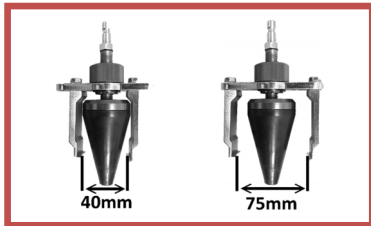
Application:

MB, GM, Jeep, Peugeot, Subaru, Chrysler, Acura, Mitsubishi, Nissan, Mazda, Toyota, Infiniti, Geo, Suzuki, Isuzu, Honda, Acura, Lexus, Volvo, Saab, Citroen, Renault, Fiat, Alfa, Mini Cooper, VW, BMW, Ford, Opel, Porsche, Audi...etc.

Feature:

- Easy work for both testing leakage in radiator system and quick change of coolant in vacuum situation.
- Suitable for universal vehicles.
- Special design of vacuum purge & refill tool connection fits nearly all type of radiator opening.
- This product was made from material SCM440 with heat treatment.
- Patent

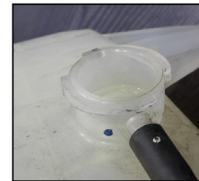
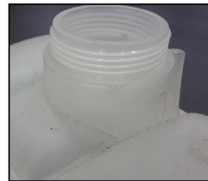
Specification & Instruction:



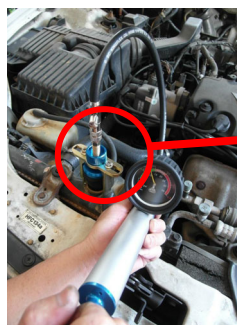
- Applies to all car models.
- No additional tools, only need a Phillips screwdriver.
- **Adjustable radiator test adaptor opening range: 40~75mm**

Instruction:

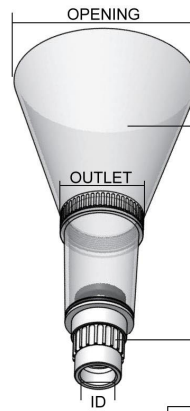
- To open the car radiator cap and then set the tool into the orifice of the car tank, it can easily be measured.
- Make two claws tightly to clip on orifice both sides, then twist the head in counterclockwise way to tighten down to seal with the car tank outlet.
- Last point, use the cross screwdriver to tighten both side screws



Available range, internal whorl, external whorl or the orifice which does not have whorl



Professional design, resistance to high pressure



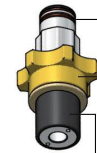
Name	FUNNEL
Material	PP
Opening	Ø125mm
Height	124mm
Outlet	Ø56.8mm

Name	CONNECTOR
Material	Nylon 6-6
ID	Ø24.5mm

Name	RUBBER RING NO. 1
Material	Rubber
Size	Ø35 × 20

Name	RUBBER RING NO. 2
Material	Rubber
Size	Ø39.5 × 20

Name	RUBBER RING NO. 3
Material	Rubber
Size	Ø44 × 20



Name	RADIATOR ADAPTER
O-ring	Ø20.4 × 2
O-ring Material	Viton
Rotor Material	Aluminum 6061
Rubber Info	NBR Ø30.3 × 29



Name	Cap No. 3
Material	Steel
Surface Finish	Chrome
O-ring Material	Viton



Name	Cap No. 4
Material	Steel
Surface Finish	Chrome
O-ring Material	Viton



Name	Cap No. 5
Material	Steel
Surface Finish	Chrome
O-ring Material	Viton

KA-7275 8pcs Coolant Refilling Funnel Set

- Set for refilling coolant and air bleeding.
- Special funnel design features its spill-free function when disconnecting funnel from radiator adapter
- Transparent funnel chamber helps display air bubbles remaining the coolant
- Includes three steel adapters and one universal adapter with three rubber rings.
- Suitable for imported and domestic vehicles.
- 750MI

Instruction:

1. Drain old coolant by removing the drain plug underneath the radiator.
2. Choose a suitable adapter and connect the adapter onto radiator filler neck or recovery tank (Fig. 1 and 2)
NOTE: When using the universal radiator adapter with golden rotor, rubber rings can be connected to the rubber on the adapter for fitting different sizes.
3. Connect the funnel onto the adapter (Fig. 3)
4. Pour new coolant into the radiator or recovery tank (Fig. 4)
5. Turn on the engine, and turn on the heater to maximum.
6. Run at idle for air bleeding (about 20-30 minutes). Air bubbles may be observed through transparent funnel chamber (Fig. 5).

The transparent chamber assists mechanics to detect if there are any leaks from head gasket by observing air bubbles keep coming out from coolant even after 30 minute air bleeding. → Patent Pending

7. Disconnected funnel from radiator adapter without spilling (Fig. 6)

A one-way valve is inserted at the funnel connector to radiator adapter (Fig. 7). → Patent Pending



fig.1



fig.2



fig.3



fig.4



fig.5



fig.6

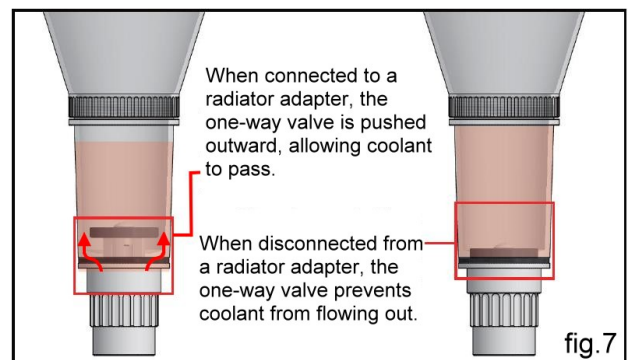
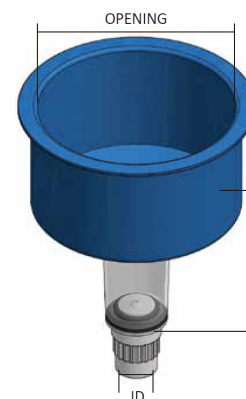


fig.7

KA-7275A

8pcs Coolant Refilling Funnel Set

- Set for refilling coolant and air bleeding.
- Special funnel design features its spill-free function when disconnecting funnel from radiator adapter
- Transparent funnel chamber helps display air bubbles remaining the coolant
- Includes three steel adapters and one universal adapter with three rubber rings.
- Suitable for imported and domestic vehicles.
- 16L, Large funnel (1.6L / 54 Oz capacity) suitable for heavy duty and large vehicles.



Name	FUNNEL
Material	PP
Opening	Ø171mm
Height	124mm
Outlet	Ø56.8mm

Name	CONNECTOR
Material	Nylon 6-6
ID	Ø24.5mm



KA-6785 Universal Radiator Leakage Tester

- Pressure regulates shop air to test any cooling system or radiator cap for leaks.
- Quick-change end easy works on nearly all brands of cooling system testing caps and adapters.
- Fills large cooling systems instantly.
- Provides constant pressure on leaks to trace source.
- Maximum output pressure 30psi to avoid the damage of radiator.
- Release pressure through the exhausted valve.

Specification:

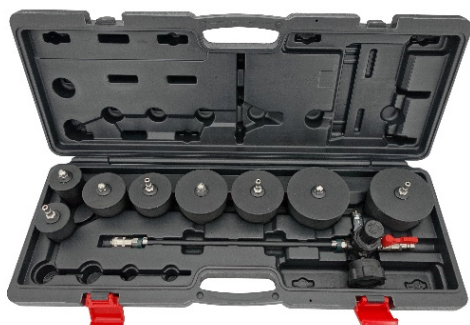
- PVC Hose: 1/4" x 60cm
- Input pressure: 0~145PSI
- Output pressure: 0~30PSI +/-2
- Burst pressure: 1,200 PSI
- Pressure Gauge: 2" (0~30PSI) 1/8"



KA-6786 Liquid Cooling System Leakage Tester And Refilling

Significantly shortens time for refilling new coolant by creating a vacuum in the cooling system. The set make work without mess and without introducing air-locks. No more time consuming cooling system bleeding and no spills to clean up. Simply plug into the workshop air line, attach to the cooling system header tank and create a vacuum. Complete the process by attaching the filler hose and opening the valve allowing your pre-mixed coolant to flow into the system.

Radiator Adapter: Audi VW X 2
BMW, BMW F series
Mercedes Benz
Toyota RAV4



KA-9070 Turbo System Tester (9pcs)

Helps to locate leaks in the components of turbocharger systems such as pressure hoses, air-to-air intercooler, etc. Testing must be performed when engine is switched off. For professional and economic diagnosis.

Connect an airline with known air pressure to the regulator of the tester with the ball valve shut (operating lever at 90° to hose axis).

IMPORTANT: Regulate air pressure in tester to 25psi maximum.

Refer to manufacturer's manual relating to the maximum air pressure of the turbo or other system being tested. Over pressurization may damage system components. For example the maximum pressure in most vehicle turbo systems is approximately 15psi (1bar) up to 25ps (1.7bar). A vehicle coolant system is typically rated at 15psi. A graduated approach to leakage testing is recommended.

Suitable for the following hose sizes:

- 35-40-45 mm
- 50-55-60 mm
- 65-70-75 mm
- 80-85-90 mm



KA-9071 Turbo System Tester For Truck (7pcs)

- Designed to charge the turbo/intercooler system with a low pressure of regulated workshop air to show the presence of leaks within the system.
- Kit supplied with three pairs of stepped adaptors to fit most sizes of hose found on heavy commercial vehicles.
- Features a pressure gauge, shut off valve and pressure release valve.
- Supplied in storage case.

Adaptor Sizes:

- 105-110mm Adaptor air coupling / Blank end
- 115-120mm Adaptor air coupling / Blank end
- 125-130mm Adaptor air coupling / Blank end



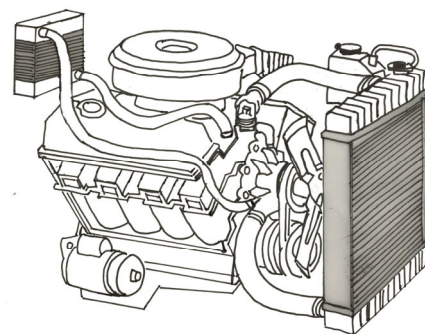
KA-9072 Turbo System Tester (13pcs)

- Ideal for testing turbo system pressure and identifying leaks.
- Pressure test kit for testing turbo system pressure and identifying leaks.
- Charges the turbo system by connecting a low pressure compressed air system through a suitable pressure regulator (not included).
- 6 pairs of stepped adaptors (6 x test, 6 x stop) to fit most common sizes of hose
- Adaptors are lipped to allow for better grip within the turbo hose end.

Adaptor Sizes:

- ø31mm / ø38mm
- ø46mm / ø51mm
- ø55mm / ø60mm
- ø65mm / ø70mm
- ø75mm / ø80mm
- ø85mm / ø90mm

- Engine coolant usually degrades over time, and is likely polluted with abrasive particles and foreign materials that might cause the cooling system to overheat or not working smoothly.
- KA-2220 / KA-6801G Cooling System Flush Gun works without the use of solvents or chemicals
- Use with combination of water and compressed air that increases the water pressure and make flushing job efficient
- KA-2220 / KA-6801G is equipped with water flow valve and air inlet. The water can be turned off directly at the flusher gun.
- Simply connect garden hose and compressed air to power flush cooling systems
- Optimize the cooling system operation with KA-2220 / KA-6801G Cooling System Flusher Gun
- Multiple applications: *cooling system flush, radiator flush, engine block flush, washing jobs.*
- Powerful, compact and easy to use.



KA-2220 Cooling System Flush Gun

- Hose Size: 19mm,29mm,32mm,36.5mm,40mm
- Max Pressure: 120 psi
- Air Consumption: 8 cfm
- Water Consumption: 4-8 l/min
- Material: Nylon 66



KA-6801G Cooling System Flushing Gun

- Designed for cooling system flushing.
- Step adaptor connects to hoses in different diameters.
- Use air and water to cleaning up system.
- Tricle handle to control flushing and simulate pulsing force.



KA-6801 Radiator Back Flusher

Fits 1/2", 5/8" & 3/4" (13, 16, 19mm) heater hoses uses compressed air and standard garden hose pressurized air & water cleans cooling systems & heater cores without disassemble solutions.

Keep radiator pressure cap in position to prevent over boosting. Saves costly replacement charge of the most stubbornly clogged heater cores.

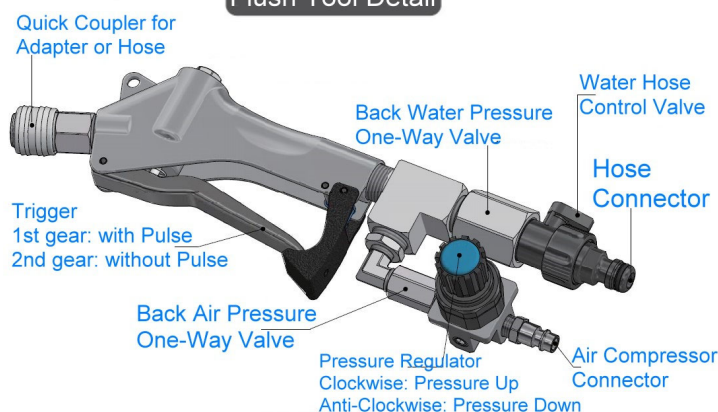
KA-6801N Cooling System Pulse Flushing Tool Set (with water !!)

Flush the Radiator, Upper/Lower hoses,
Heater Core.



- Powerful flush cleans impurities in cooling system with pulsating effect.
- Connects to air compressor and garden hose for flushing the cooling system.
- Special back pressure one-way valve to avoid excessive pressure accumulated in water hose.
- Regulator Equipped to adjust the water pressure.
- Adapters included for radiator, upper/lower hoses, and heater core:
- A conical adapter for fitting radiator filler necks.
- 5/8" & 3/4" heater hose barbs and small conical adapter for flushing heater side.

Flush Tool Detail



1. Connect a garden hose (not included) to the garden hose connector.
2. Connect the tool to air compressor.
3. Depending on the cleaning area, select the appropriate adapters.

Cleaning the radiator -

Connect the flush tool to the big conical adapter, and connect the adapter to radiator filler neck.

Cleaning engine block -

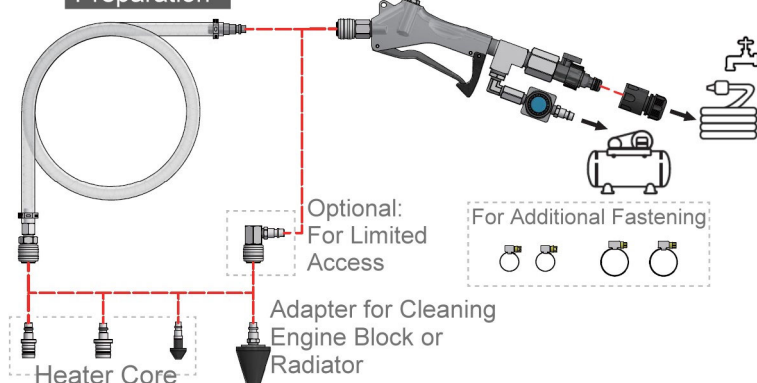
Connect the flush tool to flush hose and the big conical adapter via upper hose or lower hose.

Cleaning heater core -

Connect the flush tool to flush hose and one of the heater core adapters, secured the connection by the hose clamps provided.

4. Prepare a bucket (not included) to collect the liquid flushed out of the system at the water outlet.

Preparation

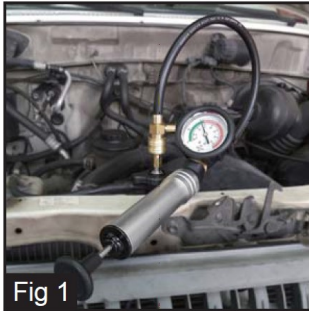


OPERATION

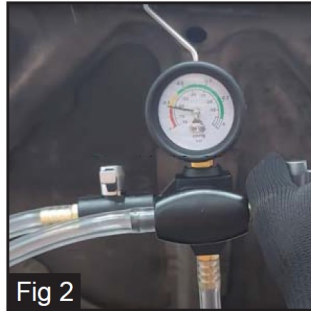
1. Turn on the water faucet, and adjust the pressure regulator to the pressure desired.
2. Press the trigger to the first gear to create the flushing water flow with a pulsating effect. Press the trigger to the second gear to create the flushing water flow without a pulsating effect.
3. Collect the liquid flushed out, and check the impurities or debris within, and do the proper maintenance, for example changing a water pump, if necessary.

**KA-5580****Cooling System Leakage Tester and Vacuum-Type Coolant Refilling Kit
23PCS/SET**

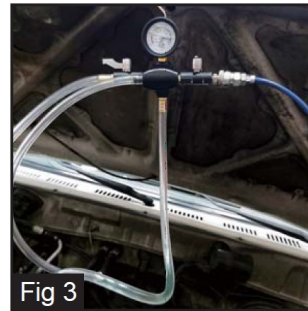
- Pressure pump to test leaks in cooling system
- Provided with 3 twist-on type and 16 threaded type adapters, covering almost all types of car makes and models on the market
- Vacuum-type coolant refill tool has large internal passages to allow coolant to be refilled fast
- Radiator cap test tubes (black and blue) to test if the radiator cap from the car has leaks
- Coolant hose and drain hose are made of cold-resistant material
- Application: Alfa, Romeo, Audi, BMW, Buick, Cadillac, Chevrolet, Chrysler, Citroen, Dodge, Fiat, Ford, GMC, Honda, Hyundai, Jaguar, Kia, Land Rover, Lincoln, Mazda, Mercedes Benz, Mitsubishi, Nissan, Opel, Peugeot, RAM, Renault, SEAT, Skoda, Saab, Subaru, Tesla, Toyota, Volvo, Volkswagen.

**Fig 1****COOLING SYSTEM LEAK TEST**

1. Remove the original cap
2. Choose a suitable adapter
3. Connect the adapter and the pressure pump.
4. Pump pressure to 10-15 psi (Fig 1)
5. Rest for at least 15 minutes.
6. Check to see if the pointer on the gauge falls.
7. If it falls, there are leaks in the cooling system.

**Fig 2****VACUUM-TYPE COOLANT REFILL**

1. Jack up the car and drain old coolant.
2. Choose a suitable adapter or the conical adapter.
3. Hang the tool under the hood.
4. Connect the adapter to the cooling system, and connect the tool's coolant hose.
5. Put the hose with filter in the premixed coolant, and remain submerged under the surface the whole time.
6. Make sure all valves are closed and connect to air compressor.
7. Open the air valve and vacuum can be created (Fig 2).
8. When no more vacuum can be created, turn off the air valve.
9. Open the coolant valve, and the coolant will be introduced to the cooling system automatically (Fig 3).
10. Verify the coolant level, connect the original cap.
11. Fast refill and no air bleeding.

**Fig 3****Fig 4****RADIATOR CAP LEAK TEST**

1. Connect the radiator cap to the blue or black tube.
2. Connect a suitable adapter on the other side.
3. Pump the pressure that is higher than what is specified on the cap to see if the cap can release pressure (Fig 4).
4. Pump the pressure that is lower than what is specified on the cap to see if the cap can hold pressure.

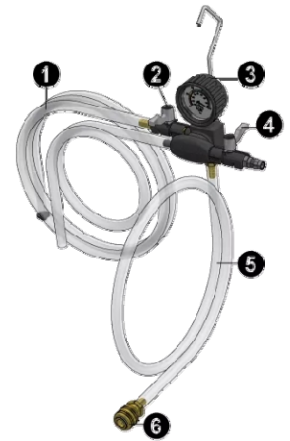
KA-5580V Vacuum Type Coolant Refill Tool

General Specification for KA-5578A, KA-5578B, KA-5578C, KA-5579A, KA-5580, KA-5580S Coolant Vacuum Refill Kit

- Refills coolant by creating a vacuum in the cooling system
- Tool to be hang under the hood and powered by an air compressor
- Includes one coolant refill hose (with a brass female connector) , one coolant pick-up hose (with a filter), and a drain hose



- ✓ Fast coolant refill
 - ✓ No need for air bleeding
 - ✓ Easy to use
 - ✓ Air compressor required
- ① Coolant suction hose 1.5m / 4.9ft
 - ② Coolant Valve
 - ③ Gauge -1 - 0 bar / -76 - 0 cmHg
 - ④ Air Valve
 - ⑤ Coolant refill hose 0.7m / 2.3 ft
 - ⑥ Hose connector to adapters



Tool can be hooked under the hood for easy operation

KA-5579 Coolant Refill Kit For EVs Europe

- Vacuum-type coolant refill tool has large internal passages to allow coolant to be refilled fast.
- Provided with adapters for various battery electric, plug-in hybrid, and conventional internal combustion engine car models.
- Tool is designed with only two valves – easy to use, intuitive design.
- Tool with a hook that can be hung under the hood.
- Tool needs to work with an air compressor to create a vacuum in the cooling system.
- Includes Vacuum Type Coolant Refill Tool (KA-5580V)



Set includes 6 adapters:



27



28



M3 / MY



MS / MX



MG / EV

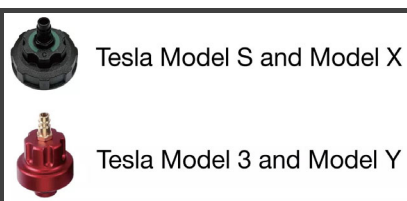


R

KA-5579A Vacuum Type Coolant Refill Kit For Tesla Models S,X,3,Y

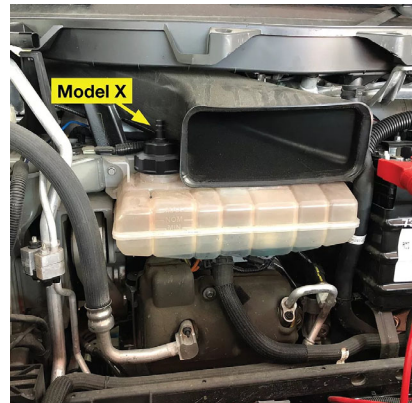
Intuitive Two-Valve Design, Easy to use!

- Two threaded adapters for Tesla Model S and X, and Model 3 and Y
- Large internal passage to refill FAST
- Two-Valve design, easy to use, intuitive design.
- Includes Vacuum Type Coolant Refill Tool (KA-5580V)
- Application: Tesla



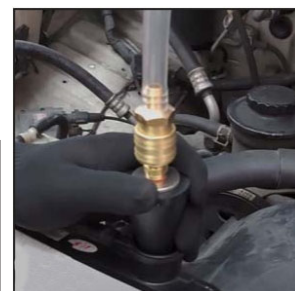
Tesla Model S and Model X

Tesla Model 3 and Model Y



KA-5578A Vacuum Type Coolant Refill Kit With Universal Adapter**Intuitive Two-Valve Design, Easy to use!**

- A Conical adapter, fitting almost all radiator or recovery tank filler necks.
- Large internal passage to refill FAST.
- Two-Valve design, easy to use, intuitive design.
- Includes Vacuum Type Coolant Refill Tool (KA-5580V)

**KA-5578B Vacuum Type Coolant Refill Kit For US & European Cars****Intuitive Two-Valve Design, Easy to use!**

- A twist-on adapter, fitting most US vehicles and some European vehicles
- Large internal passage to refill FAST
- Two-Valve design, easy to use, intuitive design.
- Includes Vacuum Type Coolant Refill Tool (KA-5580V)
- Application: Buick, Cadillac, Chevrolet, Chrysler, Citroen, Dodge, Fiat 500, Ford, GMC, Honda, Hyundai, Jeep, Kia, Mazda, Mercedes-Benz, Mitsubishi, Peugeot, RAM, Renault Koleos, Subaru, Toyota.

**KA-5578C Vacuum Type Coolant Refill Kit for MG PHEV, Electric, Petrol****Intuitive Two-Valve Design, Easy to use!**

- Two Adapters for MG Models.
- Large internal passage to refill FAST.
- Two-Valve design, easy to use, intuitive design.
- Includes Vacuum Type Coolant Refill Tool (KA-5580V)
- Application: MG PHEV, Electric, Petrol Engines.

For MG battery and EDS coolant expansion tanks		
Model	Year	Type
HS	2020-2023	1.5L PHEV
ZS EV	2020-2023	Electric



For MG 1.5L engine coolant expansion tanks		
Model	Year	Type
GS	2016-2019	1.5L
HS	2018-2023	1.5L
HS	2020-2023	1.5L PHEV
MG3	2011-2023	1.5L
MG4 EV	2022-2023	Electric
MG5	2020-2023	1.5L
MG6	2018-2023	1.5L Trophy
MG6	2010-2023	1.8T
RX5	2016-2023	1.5L
ZS	2017-2023	1.5L
ZS EV	2020-2023	Electric





KA-6323
Mechanics Stethoscope



KA-6324
Mechanics Stethoscope



KA-7034
Mechanics Stethoscope
– Supplied with trumpet.

Features

- Professional mechanic quality. Sensitive instrument.
- Provides a fast and easy way to locate troubles in engines, bearings and other moving parts.
- Plastic earphones shut off outside noises.
- Aluminum alloy probe/needle for finding the exact location of unusual noises.
- Plastic and rubber parts make the instrument shockproof.
- Ideal for pinpointing unusual vibrations or suspected leaks (valves, piston rings, gaskets, etc).



KA-4294K I.C. Engine Mechanic's Stethoscope

Provides a fast and easy way to locate troubles in engines, bearings and other moving parts.



KA-4294K1 Combination 4 Channel Electronic Stethoscope Kit

Engine stethoscope:

- Use to locate & identify engine noise
- Super sensitive microphone pick-up
- Flexible non-conductive shaft
- Cushioned headphones

Component stethoscope

- Detect & isolate noisy components
- Enables road test diagnosis
- 4 channel sensor selector unit
- 4 pick up sensors – 4.8m long cords



KA-4294K2 Combination 6 Channel Electronic Stethoscope Kit

- Use to locate & identify engine noise
- Super sensitive microphone pick-up
- Flexible non-conductive shaft
- Cushioned headphones

Component stethoscope

- Detect & isolate noise components
- Enables road test diagnosis
- 6 channel sensor selector unit
- 6 pick up sensors – 4.8m long cords

Use for: * road test diagnosis * under chassis * under hood * fuel injectors

The chassis EAR is a versatile electronic listening tool, which is designed to allow the user to listen to amplified sounds through a professional set of headphones during a road test.

There are 6 extremely sensitive microphone/clamps that can be attached adjacent to many difficult to diagnose vehicle parts and 1 extension lead.

Instructions

Electronic stethoscope

- Connect headphone jack into stethoscope unit
- Turn unit on with volume control dial & set to mid level
- Put headset on & place probe onto part to be tested.
- Use to detect & diagnose worn pistons, faulty lifter, bearing & gear noise, manifold leaks – also use to locate wind & water leaks in doors & windscreens.

Component stethoscope

- Attach 4 or 6 sensor clamps to suspected source of noise
- Use either Velcro straps or cable ties to secure the clamp wires.
- Plug headphone jack into selector box & turn on with volume control & set to midlevel
- Operate component or test drive vehicle to duplicate the problem noise.
- Adjust volume to desired level & rotate the selector box knob between the 4 or 6 channels, until the source of the noise is isolated.
- Use to trace drive-train, under-bonnet & under-dash source of noises.

Stethoscope & 4 or 6 channel selector box require a 9 volt battery – supplied.