



Professional Automotive Meter

多功能電錶(專業級)

- * Full length: 200x95x52mm
- * 3-3/4 digit, 3999 counts, bar graph display
- * RPM: 600-4000, 6000-12000 ± 2 %
- * ms pulse width: 0.1ms to 10.0ms ±2 %
- * Dwell angle: 4,5,6,8 cylinders ±2 %
- * Duty cycle: 0-90%>100µs, <100ms ±2 %
- * DC volts (auto): 0-400mV/4/40/400/1000V ± 0.5 %
- * AC volts (auto): 0-400mV/4/40/400/750V ±1.2 %
- * DC current: 0-400mA/20A ±1.0 %
- * AC current: 0-400mA/20A ±1.5 %
- * Resistance (auto): 0-400/4k/40k/400k/4M/40M Ω ±1.0 %
- * Capacitance (auto): 0-4nF/40/400/4μF /40μF±2.0 %
- * Frequency (auto): 0-100Hz/1k/10k/100k/400kHz±0.1%
- * Temperature: -50 to 1100° C, -50 to 2000° F ±1.0 %

- * Resolution: $100\mu V$, $100\mu A$, 0.1Ω , 0.01Hz, 1° C/F
- * Diode test
- * Continuity test
- * Data hold
- * ZERO relative
- * Max/min hold
- * ±trigger
- * 20A fused
- * Auto power off
- * Safety test leads
- * Overload protection on all ranges



5202

Automotive Meter 多功能電錶 (標準級)

- * Full length: 165x78x48mm
- * 3200 counts, bar graph display
- * RPM: 600-3200, 6000-12000 ± 2 %
- * Dwell angle: 4,5,6,8 cylinders ±2 %
- * Duty cycle: 0-90%>100 μ s, <100ms \pm 2 %
- * DC volts (auto): 0-320mV/3.2/32/320/600V ±1.2 %
- * AC volts (auto): 0-3.2V/32/320/600V ±2.0 %
- * DC current: 0-320μA/3.2/32/320mA/10A±2 %
- * AC current: 0-320 $\mu\text{A}/3.2/32/320\text{mA}/10\text{A}\pm2.5~\%$
- * Resistance (auto): 0-320/3.2k/32k/320k/3.2M/30MΩ±1.5 %
- * Frequency: 10-320 HZ /3200 HZ /32kHZ \pm 1.0 % * Temperature: -30 to 750° C, -22 to 1400° F \pm 2 %
- * Resolution: $100\mu V$, $0.1\mu A$, 0.1Ω , 0.1Hz, 1° C/F

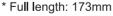
- * Diode test
 - * Continuity test
 - * Data hold
 - * 10A fused
 - * Auto power off
 - * Safety test leads
 - * Supplied probe: type K beaded wire thermocouple each input
 - * Overload protection on all ranges
 - * Safety input jacks



5203

AC/DC Current Clamp

交/直流鉤錶



- * Use two hell-effect sensors
- * For use with any multimeter with 200mv or/and 2v ranges for direct readout. Input impedance of at least $1m\Omega$
- * A LED lights up when the clamp is under power
- * Zero adjustment knob to compensate the hysteresis effect in DC measurements
- * Transformer ratio: 1000:1
- * Output: 1mV/A
- * Current range: 0-600A
- * Accuracy: DCA±2.0 %+2A

ACA±3.0 %+2A (50-400 Hz)

- * Jaw opening capability: 30mm conductor
- * Please use this tool with 5201 or 5202



Battery & Alternator Tester

電瓶試驗器(簡便型)

- * LED lights indicate battery condition with engine stop or output of alternator with engine running.
- * Light indicator shows poor, fair or good condition.
- * Magnetic backboard keeps your hands free for easier checking.
- * Suitable for DC 12 volt.



Electric Circuit Tester

起子型驗電筆

- * Power on type tests DC 6,12,24 volt circuits.
- * For wire breaks, short, fuses, lamps, relays armatures, etc.
- * 75mm inspection probe with point cover.
- * 120cm long 16# wire with alligator clip.



Electric Circuit Tester

驗電筆(一般型)

- * Sharp probe tip covered with brass protection cap, check function of car lights faster and easier.
- * Check range: DC 6-12, 24v



Automotive Circuit Tester

正負極驗電筆

* Checks vehicle circuits between DC 3-48 volts from passenger cars up to trucks either for electric or electronics.



1016

Multi-purpose Connector Kit (92pcs)

萬用型測試線組(92pcs)

* Various wires in this box, it is suitable for the Europe, America and Japan terminal.

Contents:

- 5K
 Ω Potentiometer (variable resistor) x 2pcs
- LED stroboscope x 2pcs
- SRS connector x 2pcs
- Alligator clip x 2pcs
- Probe x 2pcs
- Acicular probe x 4pcs
- 1 to 2 Connector (1 to 2 male/female connectors of banana sockets)
 x 2pcs
- 1 to 1 Connector (1 to 1 male/female connectors of banana sockets)
 x 4pcs
- Male terminals (L: 15mm) x 36pcs
- Female terminals (L:15mm) x 36pcs





Auto Repair Sools > ///F











1017

Test Lead Kit (15pcs)

簡易型測試線組(15pcs)

- * Apply to any automotive multi-meter, the extended line of probe for oscilloscope.
- * When checking the electric current, only use the lines to connect the circuit, do not need to cut the electric wires.
- * Various wires in this box, it is suitable for the Europe, America and Japan terminal.

Contents:

- LED stroboscope x 2pcs
- Alligator clip x 2pcs
- Probe x 2pcs
- Acicular probe x 4pcs
- 1 to 1 Connector (1 to 1 male/female connectors of banana sockets)
 x 4pcs
- Wire checking clip (+) x 1pc

5108

1048

5205

Terminal Release Tool Set (18pcs)

端子拆卸組(18pcs)

* Suitable for BMW, DAIMLER, CHRYSLER, FIAT, Ford, HONDA, JAGUAR, OPEL, MAZDA, Mercedes Benz, MITSUBISHI, PORSCHE, PSA, RENAULT, SAAB, TOYOTA, VOLVO, VW, Audi, SEAT, SKODA.

Dashboard Service Tool Kit

賓士儀錶、音響、鎖頭拆裝組

* Kit includes ignition lock remover, radio set remover, and instrument cluster removing hooks.

Radio Removal Tool Kit (20pcs)

汽車音響拔取器(20pcs)

- * Universal tool for removing radio on car.
- * Suitable for VW, Audi, Mercedes Benz, SKODA, BMW, Ford, OPEL.

Extra Heavy Duty Booster Cables

救車線

- * Connect the power to the weak battery vehicle and start the vehicle.
- * Special rubber cable material prevents oil and extends working life.
- * Cable Dia.: 50AA, 10ft(L).

Battery Clamp

特級電瓶夾

- * Clamp the battery for connecting the power.
- * Capacity: 600A 5206R--Red 5206B--Black



Radio Removal Tool Kit (52pcs)

汽車音響拔取器(52pcs)

- * Universal tool for removing radio on car.
- * Suitable for Benz, BMW, FIAT, OPEL, VW, Audi, SKODA, PORSCHE.
- * Suitable for radio brand: KENWOOD, SONY, PIONEER, PANASONIC, CLARION, BLAUPUNKT, BECKER, JVC.



5207

Airbag Removal Tool Kit (7pcs)

歐系安全氣囊工具組

2pcs--1/4" Dr. x 87mm(L) Torx bit socket: T25 (for BMW), T30 (for Audi, OPEL, RENAULT, VW) 5pcs--Airbag removal tool:

- * #1: airbag removal tool is used to remove driver airbag from steering wheel on 1999-04 new body style VW PASSAT, JETTA, GOLF & BEETLE.
- *#2: for VW PASSAT B5, POLO, LUPO, Audi A4, A6, SKODA SUPERB.
- * #3: for VW GOLF4, NEW BEETLE, SEAT, SKODA FABIA, OKTAVIA AB BJ. 99
- * #4: for VW GOLF 4 (BJ, 1998-2004), VW PASSAT AB BJ. 1997, BORA AB BJ. 1999
- * #5: for VW-MODELLE U.A: PASSAT AB BJ. 2000



4001

Spark Plug Pullers Set WW, Audi直接點火線圈拆裝組

* 4001A: For installing and removing ignition coils with power stage on VW POLO, GOLF1.4, 1.6L, CADDY 1.4L, BORA 1.4,1.6L, PASSAT, TOURAN 1.6L, PHAETON, TRANSPORTER T4.

* 4001B: For removing and installing ignition coils with power stage on injection engines on 5 and 6 cyl. VW GOLF, BORA, 4 and 5 cyl. VW PASSAT, 6 cyl. VW SHARAN, TOUAREG, PHAETON.

- * 4001C: For removing and installing ignition coils with power stage on injection engines on VW 8 and 12 cyl.
- * 4001D: For removing and installing ignition coils with power stage on injection engines on VW 8 and 12 cyl.







Spark Plug Wire Pliers

火星塞高壓線鉗

- * Suitable for 190E & 300E or most European cars.
- * Length: 220mm.



1085

Spark Plug Cap

高壓線圏拉拔器

* Suitable for releasing and detaching plug-leads from inaccessible locations, such as VW, Audi, Mercedes, SMART,...etc.



1425



5208

1425

Round "Key Chain" Spark Plug Gauge

錢幣型火星寒間隙量規

This popular solid steel spark plug gauge is designed with a tapered edge for gauging sparkplugs and with a flanged hole to adjust the side wire of plugs without pressuring center electrode. Marked in standard and metric sizes. Used to gap all plugs from .020" to .100" (0.5 to 2.53mm)



Terminal Crimping Tool

端子壓著器

Special design for fast and efficient crimping of #16 thru #4 terminals and lugs.



5214

Quick Change Ratchet Crimper Set (3pcs)

替換式端子鉗(3pcs)

Suitable: insulated terminal AWG22-18/16-14/12-10. Open barrel terminal AWG20-18/16-14/12-10.



5103

Wire Stripper & Crimper 多功能剝線鉗

- * The easy stripper cutters are made by precision machines and HRC55 cuts wire fast and smoothly.
- * Suitable: stripper range: AWG 24-10 (0.2~6.0 mm²) For insulated terminals: AWG 22-10 (0.5~6.0 mm²) For non-insulated terminals: AWG 22-10 (0.5~6.0 mm²) For auto ignition terminals: 7-8mm

Crimping Tool

二用型端子鉗

Use with the terminals and open barrel terminals.



5104

Battery/Antifreeze Fluid Tester

電瓶/水箱水濃度測試器(100%)

* Freezing: 60 °C~0 °C * Antifreeze: 0%~100% * Battery: 1,000~1,400sg



Universal Battery Carrier

電瓶提取器

- * Heavy rubber pads provide a positive grip on any top and side terminal batteries up to 190mm.
- * Tube steel plastic grip handle for comfortable lifting and carrying.



5209

Battery Brush

電瓶接頭清潔器(雙用)

- * Designed for cleaning the battery terminals.
- * You can use on both sides.



5301

Digital Manifold

電子式冷媒錶組

- * High and low pressure measurement.
- * Display corresponding refrigerant temperature for current pressure.
- * Vacuum measurement and leak indication.
- * Back-light display for easy reading in dark area.
- * Battery low indication.
- * Auto off function.
- * Low pressure: 0-500psi/0-34bar.
- * High pressure: 0-800psi/0-55bar.
- * Pressure resolution: 0.5psi/0.01bar.
- * Digital manifold can be used with the following refrigerants: R11,R12,R13,R22,R23,R113,R114,R123,R124,R134A,R290,R401A, R401B,R402A,R402B,R403B,R404A,R406A,R407A,R407C,R408A, R409A,R410A,R413A,R414B,R416A,R417A,R420A,R422A,R422B, R422C,R422D,R427A,R437A,R502,R503,R507,R508B,R600A,R744



Cuto Repair Tools > ///





R-134a Manifold

R-134a 冷媒錶組

- * Includes the 5111 adjustable coupler.
- * R-134a sight glass manifold with three 60" color-coded hoses.
- * High pressure: 0~500psi 0~35kg/cm²
- * Low pressure: 0~350psi -1~24.5kg/cm²
- * Vacuum:0-76 cm/Hg





R-12 Manifold

R-12冷媒錶組

- * R-12 sight glass manifold with three 60" color-coded hoses.
- * High pressure: 0~500psi 0~35kg/cm²
- * Low pressure: 0~350psi -1~24.5kg/cm²
- * Vacuum:0-76 cm/Hg



5111

Adjustable Quick Coupler Set

R-134a快速接頭組

- * Includes the high side and low side coupler.
- * The valve core puller is adjustable to fit different valve core.



5105

Auto A/C Swivel Adapter Kit

冷媒轉接頭(5pcs)

- * All adapters have been combined into a kit that's ideal for accessing R-12 vehicle A/C systems, as well as other type of systems.
- * Five different adapters are included with 1/4" fittings.
- * Two flexible adapters: 1/4" x 3/16", 1/4" x 1/8"
- * Three 90° brass adapters: 1/4" x 1/4", 1/4" x 3/16", 1/4" x 1/8"



5106

Valve Core Remover & Installer Tool Kit

逆止型冷媒風嘴拆裝器

- * Service valve cores without losing the system charge.
- * Unique design offers a locking device that holds the shaft in place while removing or installing the valve cores.

A/C System Testing Adaptor Set (General)

冷氣測漏接頭(一般車)

- * Various adaptors for testing leakage on each part of air condition system.
- * Suitable for testing drier, expansion valve, compressor, air condenser, and evaporator etc...
- * Suitable for VW, Audi, NISSAN-MARCH, GM, VOLVO, TOYOTA, HONDA, and etc...

A/C System Testing Adaptor Set (Japanese Car) 冷氣測漏接頭(日規車)

- * Various adaptors for testing leakage on each part of air condition system.
- * Suitable for testing drier, expansion valve, compressor, air condenser, and evaporator etc...

A/C System Testing Adaptor Set (European & American Combination) 測漏接頭(歐美系綜合型)

- * Various adaptors for testing leakage on each part of air condition system.
- * Suitable for testing drier, expansion valve, compressor, air condenser, and evaporator etc...



* Volume: 1L

5302

5211

- * Flush solvent performs all mechanical actions required to clean out contaminated systems.
- * The cylinder is equipped with a top inlet fitting and a side outlet for connecting to compressed air lines.
- * With a gun control on/off.

Charging Cylinder 冷媒定量充填桶

- * Make charging fast and accurate to save your time and money.
- * Using a charging cylinder eliminates under-and over-charging which reduces additional servicing.
- * It has a precise gauge and a clear calibration that you could charge more quickly and correctly.
- * For use on both R-134a and R-12 systems.
- * Capacity: 2000g







5210



5211



5212

Auto Repair Tools >> ////



5303

Electronic Programmable Charging Scale

冷媒電子磅秤

- Switch on the scale by pressing the "ON" button.
- Select measure unit, kg/lb by pressing and releasing the "UNIT"
- * Press the "ZERO" button and the display will reset to zero.
- * Shut off the scale by pressing "OFF" button.
- * Monitor the display, when the target charge or maximum allowable fill is reached, the scale will back to weight measurement model and display the current reading.
- * Weight capacity: 120kg/264lb; resolution: 5g/0.2oz; accuracy: ± 0.5%
- * Operating temperature: 32°-113°F (0°-45°C)
- * Power: 6V (AA battery x 4pcs)



5304

Electronic Charging Scale

冷媒電子磅秤(經濟型)

- * Switch on the scale by pressing the "ON" button.
- * Select measure unit, kg/lb by pressing and releasing the "UNIT"
- * Press the "ZERO" button and the display will reset to zero.
- * Shut off the scale by pressing "OFF" button.
- * Monitor the display, when the target charge or maximum allowable fill is reached, close the refrigerant tank valve, manifold valve or recovery machine.
- * Weight capacity: 120kg/264lb; resolution: 5g/0.2oz; accuracy: ± 0.5%
- * Operating temperature: 32°-113°F (0°-45°C)
- * Power: 9V

5112





LED A/C Detective Light

冷媒螢光測漏燈

High power UV LED for easily checking the leakage.



Can Top Valve

冷凍油開瓶器

- * Designed to use on the service can for pack oil and dye.
- * Female thread: 12 x 1.25mm
- * Male thread: 18 x 1.5mm



5305

5306

Charge Tube

冷凍油充填管

- * Tube length: 500mm
- * 1/4"F x 1/4"F
- * Using the limpid tube is easier to check the flow rate.
- * For charging the pack oil and dye.

Manifold Replacement Parts Kit

冷媒錶修理包

To replace the o-ring & gasket on the hose joints of manifold.



5308

Vacuum Pump

真空泵浦

* Voltage: 110V/60Hz

* Free air displacement: 3.6 CFM * Ultimate vacuum: 75 microns

* Motor: 180 W * Oil capacity: 250 cc



Master Deluxe Line Disconnect Tool Set 冷氣油管接頭拆卸組(10pcs)

- * For separating quick disconnect fittings on fuel and cooler lines.
- * Unique offset design allows for access in confined or obstructed areas.
- * Easy, one-handed operation.
- * Material: plastic.

Contents:

- 1/2" deluxe line disconnect tool, for most 1/2" lined.
- 5/8" deluxe line disconnect tool, for heater, A/C lines and more.
- 3/4" deluxe line disconnect tool, for heater, A/C lines and more.
- 7/8" deluxe line disconnect tool, for heater, A/C lines and more.
- 5/16" deluxe line disconnect tool, for fuel & cooler lines.
- 3/8" deluxe line disconnect tool, for fuel & cooler lines.
- 3/16" fuel line disconnect tool.
- 3/8" deluxe cooler line disconnect tool, for cooler lines on most Ford vehicles and on 2003 to current CADILLAC CTS.
- 1/2" oil cooler line remover.
- 1/2" oil cooler line remover.



A/C Disconnection Tool Kit (8pcs)

冷氣油管拆卸器(8pcs)

- * All the disconnection tool you need to work with spring locking coupling, fuel line, and transmissing cooler lines. Contents:
- Aluminum disconnection tool: 1/4"(black), 5/16"(red), 3/8"(yellow), (blue)
- Two ends disconnection tool: 5/16"~3/8"
- Long disconnection tool: 1/2"
- Round disconnection tool: 1/2"
- Two point disconnection tool & rubber cap x 4pcs



1088

5213

A/C Spring Lock Coupling Tools 冷氣快速接頭拆卸組(4pcs)

- * Used on 1981 current Ford cars and pickups with spring lock connection on the A/C system.
- * For 3/8", 1/2", 5/8" and 3/4" couplers.



Auto Repair Tools













1089

Disconnection Tool Kit

綜合型冷氣油管拆卸器(9pcs)

- * All the disconnection tool you need to work with spring locking coupling, fuel line, and transmissing cooler lines. Contents:
- Spring locking tool: 3/8"(red), 1/2"(blue), 5/8"(black), 3/4"(white).
- Fuel line disconnection tool: 3/8"(yellow), 1/2"(green).
- Fuel line fitting disconnection tool: 5/16"(gray), 3/8"(cyan).
- Ford/GM quick disconnection tool: 1/2"(black)

1090

A/C, Fuel Line Disconnect Tool Set 冷氣油管拆卸工具組(7pcs)

- * Easily disconnect air conditioning lines and quickly connect fuel lines.
- * Size includes: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8"

1027

A/C Spring Lock Coupling Tools T0Y0TA冷氣接頭拆卸器

- * Special design for removing the spring lock coupling in A/C system.
- * Two tools in a set for the different size of coupling.
- * Suitable for TOYOTA after 2000.

5116

Compressor Clutch Tool Kit 通用型壓縮機培令拆裝組

- * Eye round clutch plate arbor SANDEN, DKS, ZEXEL.
- * Screws: 1/4"-20 Hex, 3/8"-16 Hex, DKS, Zexel hub
- * Puller: DENSO, Ford, fine thread hub remover, coarse thread hub remover.

1072

A/C Compressor Clutch Remover Kit 壓縮機培令拆裝組

- * Replace clutches found on Fs6, C171, 6P & 148 computers.
- * Also GM R4 & A6, HR-6, DA-6 & V5 A/C compressors.
- * Compressors of SANDEN Sd505, 507, 508, 510, 575, 708 and 709.
- * 2 & 3 hole puller plate fits most clutches, the mechanical force does the pulling job.

Tube Cutter & Flaring Tool

銅管切擴器(附黑頭)

Contents:

• Tube cutter: 1/8"~1-1/8"

• Flaring tool:

1092: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" & 5/8" O.D.

1092M: 4, 6, 8, 10, 12, 15, 16mm O.D.



5309

Thread Chaser Set (Metric)

冷氣管螺牙修護器

- * Special design to repair and recondition threads on gas and liquid fittings in air condition, hydraulic and gas applications.
- * Each chaser is marked size and can be use to properly identify thread size.
- * Suitable for using on male and female threads.
- * Contents: M28-1.5P, M27-2P, M24-1.5P, M22-1.5P, M20-1.5P, M18-1.5P, M16-1.5P, M14-1.5P, puller pin.



IT1018

1000V Insulated Tool Kit (EVA-18pcs)

絶緣工具組(18pcs)

- * Manufactured according to EN60900:2004. For work in the area of live part up to 1000V AC. VDE approved.
- * Contents:
- 1pc-- Cable knife
- 1pc-- Diagonal pliers 6"
- 1pc-- Long nose pliers 8"
- 1pc-- Wire strip pliers 6"
- 2pcs-- Screwdriver for phillips screw: PH1 x80, PH2 x100
- 3pcs- Screwdriver for slotted screw: SL0.4x2.5x78, SL0.8x4.0x100, SL1x5.5x125
- 4pcs-- Hexagon nut spinner with handle: 10x125, 8x125, 7x125, 6x125
- 5pcs-- Single open spanner: 7,8,10,12,14mm



IT1031

1/2"Dr. 1000V Insulated Tool Kit (EVA-31pcs) 4分絶緣工具組(31pcs)

- * Manufactured according to EN60900:2004. For work in the area of live part up to 1000V AC. VDE approved.
- * Contents:
- 1pc-- 1/2"Dr. reversible ratchet handle
- 8pcs-- 1/2"Dr.socket: 10, 12, 13, 14, 17, 19, 22, 24mm
- 20pcs-- 1/2"Dr. socket bit: H5, H6, H7, H8, H10, PH2, PH3, PH4, SL6, SL8, SL10, T20, T25, T27, T30, T40, T45, T47, T50, T55
- 1pc-- T handle 1/2"Dr. x 197mm(L)
- 1pc-- Extension bar 1/2"Dr. x 5"(L)

