

STETHOSCOPE



MECHANICS STETHOSCOPE

- High grade instrument made from quality materials
 Metal ear piece and thick flexible tubing
- Quality diaphragm assembly
- Assists in locating abnormal mechanical sounds within a component
- Ensures targeted sounds are transmitted clearly
- Minimises phantom and background noises
- A probe length of 285mm and tube length of 600mm
- Extra reach when working in confined areas
- An essential diagnostic tool for fault finding in vehicle engines and engine bays, under-body, transmissions, differentials & bearings

PRESSURE & VACUUM DIAGNOSTIC PUMPS



SP80020

DIAGNOSTIC PUMP KIT - DUAL MODE 2 WAY - QUICK SWITCH

- High quality diagnostic tool
- 2-Way pressure and vacuum test functions
- Patented design Intuitive rotary dial mode switch Pistol grip with lever
- High volume efficiency in both pressure and vacuum modes
- Manufactured from reinforced composite materials Very high strength -
- High impact resistance Excellent chemical resistance • Integrated rear mount gauge - Optimum viewing angle - Maximum impact protection
- High quality silicon material hoses with quick couple hose fittings Quick hose interchange - No leaks under vacuum or pressure
- Housed in heavy duty blow mould storage case

DUAL MODE PRESSURE AND VACUUM FUNCTIONS:

PRESSURE MODE:

- Monitor turbo charger boost pressure
- Test and adjust turbo charger waste gate actuators
- Test pressure operated central locking systems
- Test fuel tank vent valves
- Test one way valves
- Diagnose small engine faults

VACUUM MODE:

- Test EGR valve
- Test fuel pressure regulator
- Test map sensor • Test thermal vacuum switches
- Test electric vacuum switches
- Test one way valves
- Test HVAC valves
- Test automatic transmission modulator valve
- Test central locking systems





> AUTO ELECTRICAL

Auto electrical tools are used to test, diagnose and repair electrical circuits in automotive 12 & 24 volt electrical systems.

SP Tools provides a range of high quality circuit testers, ignition tests and repair tools to solve any electrical problem a mechanic may find.

CIRCUIT TESTERS

HEAVY DUTY

CIRCUIT TESTER - SHORT PROBE 6 TO 24V

- Tests 6, 12 & 24 Volt electric circuits
- Sharp, short length probe Handle lights up if the circuit is good
- Long 1200mm lead (1.2m)
- · Heavy duty insulated alligator clip

HEAVY DUTY

SP61014

CIRCUIT TESTER - LONG PROBE 6 TO 24V

- Tests 6. 12 & 24 Volt electric circuits
- Heavy duty design and construction Sharp, extra long, insulated probe for
- access to hard to reach circuits
- Handle lights up if the circuit is good · New coil cord design for ease of use
- Spring relief cord stretches to 3600mm (3.6m)
- · Leads remain flexible in low
- temperatures
- · Heavy duty insulated alligator clip

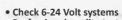
SP61021

CIRCUIT TESTER 6 TO 24V

- Check 6-24 Volt systems Light for testing low voltage DC
- electrical circuits
- Check series parallel switches and solenoids
- . Heavy duty contact crocodile clip and bulb
- High impact transparent handle
- Steel probe
- Extra long lead 1200mm (1.2m)

T861010

CIRCUIT TESTER - 888 SERIES 6 TO 24V



- · Professional quality tester with solid brass body housing and test
- Globe illuminates to indicate active power
- Insulation piercing contact point with protective brass screw cap
- Supplied with 850mm of insulated cable with crocodile clip
- Suitable for automotive or marine use













CIRCUIT TESTERS CONTINUED



CIRCUIT TESTER - DIGITAL DISPLAY 3 TO 48V

- Tests 3-48 Volt electric circuits
- Heavy duty design and construction Sharp, extra long, insulated probe for
- access to hard to reach circuits Digital LCD display provides a fast and accurate reading
- Dual color LED indicates: Red for power, green for ground
- New coil cord design for ease of use Lead remains flexible in low temperatures

HEAVY DUTY

HEAVY DUTY



NO EARTH LEAD. **TOUCH GROUND TO** COMPLETE CIRCUIT

SP61018

CIRCUIT TESTER - CORDLESS 3 TO 30V

- Suitable for testing DC circuits with a voltage between 3 and 30 Volts
- No ground or clip necessary simply touch something that acts as a ground (bare metal part on a car) and use the probe to test for power
- Bi-directional polarity testing: Power and Ground
- Dual colour LED indicates: Red for power, green for ground on 6V, 12V and 24V systems
- Compact size for ease of use in confined areas



SP61020

CIRCUIT TESTER - COMPUTER-SAFE 3 TO 15V

- Safely tests standard primary automotive circuits and on-board computer controlled electrical systems without damaging the micro-processor
- Operates from 3-15 Volts Includes probe adaptor for testing female connectors
- Supplied with 1200mm (1.2m) ground



SP61012

CIRCUIT TESTER - CAR AND TRUCK 3 TO 48V

- Tests 3-48 Volt electric circuits · Circuit tester with test lead for
- either passenger car or trucks LED display shows polarity
- Safe to use with electronics
- Extra long lead 850mm (0.85m)



SP61015

CIRCUIT TESTER - HYBRID VEHICLE 12 TO 42V

- Compatible with current 12V system
- plus newer 42V system Safe for low current circuits since
- tester only draws 3 milliamps at 12V Automatic voltage identification with blue for 12V and red 42V systems
- Two super-bright LED's for visibility under all conditions
- Crystal-clear handle provides 360 visibility, even in bright light
- Spring relief cord stretches to 3000mm

VOLTAGE TESTERS



SP61022

VOLTAGE TESTER - DUALITE HI/LOW

- · White light low voltage Checks 6-12 volt system and spark
- Voltage check on secondary or high voltage circuits
- Red light high voltage • Extra long 1200mm lead (1.2m)

CURRENT TESTERS



REMOTE SWITCHES AND MEMORY POWER SUPPLY

SP61054

MEMORY POWER SUPPLY

- Retains setting of computers, radios, clocks, etc. when battery is disconnected
- Attaches to 9 volt battery
- Plugs into cigarette lighter socket



SP61052

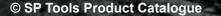
REMOTE STARTER **SWITCH**

- Used to bypass ignition switch by connecting starter to solenoid
- One-man operation, suitable for turning the engine over for various diagnostic tasks such as compression testing
- Connects to the starter with push button activation
- Features a connectivity LED and 1.5m cable











IGNITION & SPARK PLUG TOOLS

SP61030

INLINE IGNITION SPARK TESTER

- Checks whether there is high tension spark potential at the spark plug
- · "Hands free" operation means no risk of electric shock to user
- Ideal for modern vehicles with sensitive electronics
- Easy to use Remove rubber boot from spark plug, insert inline tester & place tester boot on plug.
- Turn the engine over Tester light will glow if ignition spark is being sent to the cylinder.



SP64044

SPARK PLUG BOOT PULLERS

- Fully insulated tongs designed for removal/installation of spark plug boot
- Reduces risk of electric shock or burns when checking installation of plug leads whilst engine is running
- Unique gripping jaw design assists with removal of tight leads

SP64041

SPARK PLUG RAMP GAUGE

- Quick easy method to set spark plug gap
- Suits any size from 0.020 to 0.100 (0.6 - 2.4mm)
- · Hole in the gauge works as an electrode adjuster
- Inch sizes stamped on the front
- Metric sizes stamped on the back
- · Attaches to your key chain for easy access



SP31300

SPARK PLUG HOLE RETHREADER 14mm/18mm

- Double ended spark plug hole rethreader
- Cleans and repairs damaged spark plug threads
- Suitable for cleaning corrosion and carbon build-up from spark plug threads
- Also possible to restore minor cross threading damage
- Use with a spark plug socket (21mm)

SP64047

SPARK PLUG INSTALLATION & REMOVAL TOOL

- Fits on most common size spark plugs
- Flexible rubber shaft allows access in confined areas
- Reduces possible cross threading on deep seated engine applications

SOLDERING KIT

SP32290

SELF-IGNITING PROFESSIONAL **GAS SOLDERING/TORCH KIT**

+ HEAT SHRINK FUNCTION

Can be used as a blow torch

- Professional self-igniting cordless butane gas soldering iron with interchangeable tips to suit most soldering applications
- Ideal for various applications in automotive repairs, electrical/electronic circuit repair, light gauge welding, brazing and jewellery industries.
- Lightweight and compact design, all neatly stored in heavy duty x-case.
- Fast heat-up for increased productivity with a 70 minute continuous use run time

KIT INCLUDES

- Refillable butane gas soldering iron Lead free soldering wire in dispense
- Cleaning sponge
- Heat insulated protective head cap Deflector attachment
- Standard Tip
- Anvil Tip
 Chisel Tip
- Knife Tip

WIRE STRIPPERS & CRIMPERS

SP32278

AUTOMATIC WIRE STRIPPERS

- 200mm (8") Automatic wire stripper with crimper features
- Strips and cuts cable or wire 24-10 AWG (0.2 to 6.0mm)
- Provides effortless cable stripping, wire cutting & crimping
 Adjustable stopper for quickly setting the length of stripping wire
- Spring-loaded return for quick repetitive use
- Ergonomic comfort-grip handle
- Insulated: AWG: 10-22 (0.5-6mm²)
- Non Insulated: AWG: 12-10, 16-14, 22-18 (4-6, 1.5-2.5, 0.5-1mm2)



WIRE CUTTER & STRIPPERS

- 175mm (7") wire cutter & stripper
 Strips and cuts cable or wire 10, 12, 14, 16, 18 & 22 AWG
 ISO 5.5, 4.0, 2.5, 1.5, 1.0 & 0.75mm
- Firm rubber ergonomic grips
- Simple to use locking mechanism
- Black oxide finish

SP32272

QUICK CHANGE RATCHET CRIMPER KIT 4 PIECE

- Ideal for any crimping Job
- Kit comes with dies to suit insulated terminals, noninsulated terminals & spark plug connectors.

 • Dies quickly slide in and slide out
- Quick release action
- Ratchet function
- Supplied with storage pouch



CRIMPING TOOL AND WIRE STRIPPERS INSULATED

- 225mm (8.8") Automatic wire stripper with crimper features
- 4.0mm Insulated & Open Barrel
- Terminal Crimper
- Wire cutter: 1.25, 2.0 & 5.5mm
- ISO: M2.6, M3, M3.5, M4 & M5,
 Wire stripper: 0.75, 0.9, 1.25, 2.0, 3.5 & 5.5mm



RATCHET CRIMPER 0.5 - 6 MM

- 220mm (8.5") hand ratchet crimper for pre-insulated terminals
- Quick release action
- Crimping range: 0.5 6mm²
- Crimping type: Quad-point crimping
- Crimping Capacity: Insulated AWG: 10-22 (0.5-6mm²)
- · Ergonomic comfort-grip handle

BATTERY TOOLS

Car batteries are an essential part of any vehicle electrical system. Battery service tools are equally essential. SP Tools provides all the tools you need to test, charge or replace an automotive battery. Batteries will always fail at the most inconvenient time, so battery service saves both money and time for both consumer and the automotive workshop.

MULTI-VOLT SMART BATTERY CHARGERS

SP'S RANGE OF SMART CHARGERS ALL FEATURE

- . Built-in microchip charging control and monitoring system
- Zero volt minimum start can charge a completely flat battery
- Optimally designed charging cycle designed for Lead Acid / AGM, Gel, & Lithium, starting and deep cycle batteries
- Automatic adjustment of charging voltages according to environmental temperature
- Overcharge protection, protecting the battery from damage due to overcharging Reverse polarity, short circuit, overload and high temperature protection
- Battery Testing function while charging (faulty batteries cause the full battery bar display to flash).

SP61075

SMART CHARGER - 8 STAGE 3.5 AMP

- Current Output: 3.5 Amp
- Output Voltage (Nom): 6 & 12 Volt
- Battery Type Supported: LEAD ACID | AGM | LITHIUM

INCLUDES QUICK CONNECT HARNESS

- Easily switch between using battery clamps and terminal ring quick connect harness
- Ideal for attaching to boat, motorbike or lawnmower batteries to eliminate removing the battery everytime it needs to be charged





SMART CHARGER - 8 STAGE 6 AMP

- Current Output: 6 Amp
- Output Voltage (Nom): 6 & 12 Volt
- Battery Type Supported: LEAD ACID | AGM | GEL | LITHIUM

INCLUDES QUICK CONNECT HARNESS

- · Easily switch between using battery clamps and terminal ring quick connect harness
- Ideal for attaching to boat, motorbike or lawnmower batteries to eliminate removing the battery everytime it needs to be charged



SMART CHARGER - 8 STAGE

- Current Output: 15 Amp Output Voltage (Nom): 6, 12 & 24 Volt
- Battery Type Supported: LEAD ACID | AGM | GEL| LITHIUM
- Cooling Fan





SMART CHARGER - 8 STAGE 4, 12 & 26 AMP

- Current Output: 4, 12 & 26 Amp
- Output Voltage (Nom): 6, 12 & 24 Volt
- Battery Type Supported:
 LEAD ACID | AGM | GEL| LITHIUM
 Automatic Voltage Recognition Charger will automatically recognise the connected batteries voltage and enter into charging state in seconds
- Engine Start Assist Aids in starting vehicles with flat batteries
- Cooling Fan

8 STAGES OF SMART CHARGING

STAGE 1 - "DESULPHATION"

In this initial start-up stage, a high frequency voltage pulse (0.5 sec) assists in "waking up" a deeply discharged battery. This method of pulse charging can also help to reduce build-up of sulphate crystals that may have formed on the battery plates during the time it was discharged. Pulse of 500ms on & 800MS off at 50% of maximum current output for 3 minutes, if the voltage of the battery is > 4 Volts, then the charger progresses to the next

STAGE 2 - "SOFT START"

After the battery is connected, most conventional "Smart" Battery Chargers will immediately apply a high charging voltage and current output. This creates a large amount of gas and heat from the battery and when the consistency of the battery electrolyte / state of cell charge is uneven - (from time to time the consistency of the battery electrolyte can be uneven from daily use) - a full load charging characteristic can result in a period of potentially damaging overcharging. The Soft Start function eliminates this situation by starting the charging process slowly and softly, battery electrolyte and cell charge is able to even out, before receiving the main bulk charge. This significantly improves the battery charging capability and

STAGE 3 - "BULK"

This is the main hard charging stage, where the charger will operate at the maximum rated current output, until the battery reaches a pre-set voltage determined by the battery type selection. Charging time period is determined by the capacity and charge state of the battery.

STAGE 4 - "ABSORPTION"

After the Bulk stage, the charger will automatically begin to reduce its current output depending on the charge acceptance of the battery, while maintaining a constant voltage (determined by the battery type selection - 14.3V GEL / 14.8V Lead Acid, AGM / 15.6V Calcium). When the current reduces to a predetermined threshold level charging will automatically halt, allowing the analysis stage to be performed

STAGE 5 - "ANALYSIS" (Testing the battery while charging)

After the Absorption charging state, the battery charger will start the "Analysis" stage and will stop charging the battery for 1 minute. At this point, if the battery voltage is sensed at below 12.6V, the battery alarm and faulty battery indicators and alarm will sound. If the battery voltage is equal to or above 12.6V, the next Boost stage

STAGE 6 - "BOOST"

After successfully analysing the battery condition, the charger will enter the Boost charge stage, which will charge at a slightly higher voltage ensuring the battery attains a 100% full charge. The current output is limited at 25% of the maximum rated charger output. When the current drops to the pre-set level or a maximum of 15 minutes is reached the charger will enter the last float charge stage.

STAGE 7 - "FLOAT"

When the charger has finished the Boost stage the Float stage will set its output voltage at 13.3V Gel, 13.7 Lead Acid / AGM or 13.8V Calcium when the charging current gets to <1.2A or a maximum time of 2 hours is reached then the charger will progress to the next stage. If a load is applied and the battery voltage drops to < 12.4 Volts the charger will return and restart from the Absorption stage.

STAGE 8 - "MAINTAIN"

This final stage regulates the fully charged battery. A small pulse charge is applied at 1Hz at a voltage of 13.3V to maintain the battery at its fully charged state and ready to be used at any time. If a load is applied to the battery and the battery voltage drops below 12.4 volts, the charger will restart from the Absorption stage

Batteries contain corrosive liquid. Always wear approved gloves and goggles when handling batteries or battery acid. If battery acid contacts skin, wash off immediately and contact a doctor for further advice.



BATTERY ANALYSERS



© SP Tools Product Catalogue

CONTINUED BATTERY ANALYSERS



BATTERY ANALYSER - DELUXE/ **CHARGING SYSTEM TESTER/ CRANKING SYSTEM TESTER**

- Suitable to test all 12V automotive starting batteries, including ordinary lead acid battery, AGM flat plate battery, AGM spiral battery, and Gel battery, etc.
- Simple and easy to use
 Tests batteries on and off the vehicle
- Accurate results in milliseconds
- Battery life analysis
- Slim-line design with large easy to read LCD display
 Test results based on CA, CCA, BCI, MCA, JIS, SAE, EN, GB, DIn & IEC **standards*
 * Multilingual interfaces*
 * Vehicle cranking system test - cranking time, voltage & status*
 * Vehicle charging system test - load voltage, unloaded voltage, ripple status*

- & charging system status
- Digitally store the test results printing capability



SP61060

BATTERY ANALYSER

- Suitable to test all 12V automotive starting batteries, including ordinary lead acid battery, AGM flat plate battery, AGM spiral battery, and Gel battery, etc.
- Directly detects bad cells by measuring internal resistance
- Accurately test a battery with low voltage, no need to fully charge before
- Displays the actual cold cranking amps (CCA) capability of a vehicles starting battery and the health state percentage of the battery itself
 Measurement Range: Cold Cranking Amps (CCA) 100-2000



BATTERY LOAD TESTER

SP61009

BATTERY LOAD TESTER DIGITAL DISPLAY

- American style drop tester
- Load applied by internal switchgear (non-sparking)
- Suitable for 6 and 12 volt batteries
- · Applies load across cells and measures output on meter
- · Accurate indication of battery voltage, faulty cell and short circuit



JUMP STARTERS - POWER BANKS



SP61071

LI+ POWER BANK JUMP STARTER 700A

- The portable power supply for any job Jump starts any car, truck or motorcycle. Power or charge 12v accessories and any USB 5v electronics. Pack includes 14 interchangeable tips and cords to connect to most electronic devices, as well as mini-jumper clamps, all in one convenient carry case.
- 12v 250 700AMP Jump start (Petrol engines up to 5L V8 & Diesel up to 3L) (approx. double normal laptop battery life)
- 12v Port for powering or charging 12v accessories 5v USB Port for charging mobile phones, tablets & cameras
- (approx. 4 full mobile phone charges per charge)

 High power LED flashlight with strobe & SOS flash patterns
 Lithium-Ion Battery Holds charge longer
- Built in battery management system
- Low voltage warning/low voltage shut down
- Reverse polarity indicator and alarm
- Short circuit and overload protection for jumper & USB
- Built-in over charge/discharge circuit protection
 Capacity: 15,000mAh
- Power: 55.50Wh
- Jump Starter Current: 250-800A
- Peak current 700A
- Weight: 610g

SP61073 1600A LI+ COBALT **JUMP STARTER HIGH DENSITY POWER BANK FEATURES**

THE PORTABLE POWER SUPPLY FOR ANY JOB - JUMP STARTS CARS, TRUCKS AND MOTORCYCLES. POWER OR CHARGE 12V ACCESSORIES AND USB 5V ELECTRONICS.



SET INCLUDES

- Compact power bank unit 12V10A DC adapter cable Jumper cables
- · 12v car charger USB to various electronic Charger Heavy Duty storage case

• Peak output 1600A, Rated 800A, Jump start all engines up to 10L Diesel

- 12v Port for powering or charging 12v accessories
- 2x 5v USB Port for charging mobile phones, tablets & cameras
- High power LED flashlight with strobe & SOS flash patterns
- Lithium-Cobalt Battery Holds charge longer
- Built in battery management system
 Low voltage warning/low voltage shut down
- Reverse polarity indicator and alarm
- Short circuit and overload protection for jumper & USB
- Built-in over charge/discharge circuit protection
- · Capacity: 28000mAh
- Power: 103.6Wh
- Jump Starter Peak Current: 1600A
- Weight: 2.92Kg

FLUID TEST TOOLS

SP61005

HAND-HELD REFRACTOMETER

- Accurate concentration check of battery fluids, antifreeze liquid & cleaning
- Suitable for ethylene & propylene glycol coolants
- Ethylene Glycol: -60°C- 0°C
- Propylene Glycol: -50°C- 0°C

 Battery Fluid: 1.15 1.30 Specific Gravity
- Automatic temperature compensation
- Easy to read scale
- Includes sturdy storage case



BATTERY FLUID HYDROMETER

- Test specific gravity of battery fluid
- Floating module indicator specific gravity charge
- One piece rubber bowl
- Flexible neoprene tip



BATTERY TERMINAL TOOLS

SP61001

POST & TERMINAL CLEANER

- Easy Cleaning of battery posts & terminals
- Wire Brushes remove corrosion build up on battery posts and
- terminal for improved electrical contact
- External brush for cleaning battery posts Internal brush for cleaning battery terminals

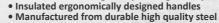


SP61003

BATTERY TERMINAL SPREADER & REAMER PLIERS

- · Heavy duty professional quality spreader
- Suitable for cleaning and spreading battery cable terminals







This incredibly compact, high density power bank can supply a huge amount of power in a very short time, to start both 12V petrol or

jump start motor cycles, ride-on mowers, cars and outboard engines

etc. Or while its not being used as a jump starter, you can use it to

power or charge your low voltage accessories and USB compatible

The storage case with EVA insert includes 14 interchangeable tips

and cords to connect to most devices, as well as extra heavy duty

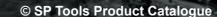
Not just a professional workshop tool, from a safety point of view

it's also a must for your next camping, fishing, 4 wheel drive or

cable clamps, and chargers.

boating adventure.

diesel engines up to 10 litres in capacity - It is equally suitable to



SPECIALITY TOOLS

ENGINE SERVICE

From an engine service to an engine rebuild, we have the specialised service tools required to save time and money when performing these repairs. SP Tools provides tools for all major and minor engine service and repairs.

NOID LIGHTS

SP71050

NOID LIGHT KIT 6 PIECE

- Check fuel injector signal faults fast
- Simply disconnect injector harness and plug in noid Light
- Easy to use and fits a wide variety of injector harnesses
- Compatible with: GM PFI, FORD TBI,
- GEO TBI, BOSCH PFI, GM TBI, GM SCPI
- All housed in a heavy duty blow mould storage case

Group

SP64065

7 PIECE

SENSOR SOCKET SET

• Window in socket allows the wires

bypassed, eliminating wire damage Applications include: Mitsubishi,

For heated & non-heated lambda

with EVA foam tray

Nissan, GM and the Volkswagen Audi

Contained in heavy duty storage case

attached to the sensors to be

3/8"DR OXYGEN SENSOR SOCKET **22**MM

SENSOR

- Window in socket allows the wires attached to the sensors to be bypassed
- Common 6 point socket fits most oxygen sensors
- Applications include: Mitsubishi, Nissan, GM and the Volkswagen Audi Group
- For heated & non-heated lambda sensors

> RADIO REMOVAL

SET INCLUDES

switch socket 7/8" vacuum switch

27mm oil pressure

Long oxygen sensor

Short oxygen sensor socket - 22mm

socket - 22mm

• 29mm pressure/vacuum

sending unit socket
1" & 1-1/16" oil pressure

RADIO REMOVAL TOOL

- Makes radio removal fast and damage free
- . Simply insert tools into holes on radio face-plate to release the retaining clips
- · Handles serve for removing radio from surround panel
- Use on most 1987 to current ford cars & trucks



FUEL LINE DISCONNECT TOOLS

AC & FUEL LINE DISCONNECT SET

- Easy clip over design
- Simple push under fitting until hose releases
- 5/16", 3/8", 1/2", 5/8", 3/4" & 7/8"













FUEL LINE DISCONNECT TOOL

- Fits E-3/8" & F-5/16" fuel lines
- Release locking coupling on 5/16" & 3/8" fuel lines