



>ELECTRICAL DIAGNOSTIC

ACCURATE DIAGNOSTIC TOOLS FOR ANY VEHICLE

Diagnosing vehicle problems used to be a guessing game. Today that's no longer necessary. SP Tools provides a wide range of diagnostic tools that mechanics can use to get accurate information on the problem in any vehicle.

DIGITAL MULTIMETERS



SP62011

DIGITAL AUTOMOTIVE MULTIMETER

FEATURES

- RPM measurement for 2–10 cylinder automotive engines using the inductive pick-up
- inductive pick-up

 Oversized high contrast 9999 count LCD display with backlight
- 14 functions including DC/AC voltage, DC/AC current (max 20A), resistance, RPM (tach), dwell angle, duty cycle frequency, MS-pulse, temperature (^oC/^oF), capacitance, continuity & diode check
- Read pulse duty cycle & dwell angle for electronic fuel injection feedback carburettors and ignition
- Fused current inputs and overload protection on all ranges
 Measure milliseconds pulse width to test on-time of fuel injectors,
- idle air control motors & electronic transmission controls

 Data hold and relative functions
- Auto power off
- Auto ranging
- Back light

SET INCLUDES

- Digital Multimeter
 Probe Test Leads
- (Standard to Banana Plug)

 K-type Temperature Probe
- Inductive Pick-up
- 9v Battery
 Canvas Bag

SP62015

DIGITAL MULTIMETER WITH TEMPERATURE GAUGE - POCKET SIZE

- 2000 counts digital display
- Safety Design Cat 3 600v
- Non-contact ACV detection
- Data hold
- Auto ranging
- Type K temperature input
- · Continuity, diode test, resistance
- Auto power off with low battery indicator

SET INCLUDES

- Mini Digital Multimete
- Probe Test Leads (Standard to Banana Plug)
- (Standard to Banana Plug)
 K-type Temperature Probe



POCKET SIZE

SP62012

DIGITAL MULTIMETER ELECTRICAL

- 1999 counts digital display
- Safety Design Cat 2
- Back Light
- Data Hold
- BuzzerAC/DC Voltage
- DC Current
- Resistance
- Diode Test
- Temperature Continuity
- Transistor Test

SET INCLUDES

- Digital Multimeter
 Decks Test Londs
- (Standard to Banana Plug)



MMLSP

MULTIMETER DUAL TEST LEAD SET **ALLIGATOR & STANDARD PROBE**

SET INCLUDES

- Alligator Clip Test Lead Set
 Standard Probe Test Lead Set

ALLIGATOR CLIP TEST LEAD SET TO BANANA PLUG

- Insulated finger guarded alligator clips for easy application
- Silicon rubber insulated cable 1m
- CAT III 1000V, 10A

STANDARD PROBE TEST LEAD SET TO BANANA PLUG

- Multi-rated probe tips with removable cap (CAT IV 600A) are insulated leaving only 2mm of exposed metal to prevent inadvertent bridging of live conductors and accidental short circuits
- · Silicon rubber insulated cable 1m
- CAT III 1000V, 10A



THERMOMETERS

SP62020

INFRARED THERMOMETER LASER GUIDED

- Dual laser technology (twin dots)
- · Rapid detection function
- · Precise non-contact
- measurements · Automatic data hold
- °C/°F switch
- · Unique flat surface, modern housing design
- Emissivity digitally adjustable from 0.10 to 1.0
- Max temperature displays
- Backlit LCD display
- Automatic selection range & display resolution 0.1°C (0.1°F)
- Trigger lock
- . Set high & low alarms

APPLICATIONS

- Plant/general maintenance
- · HVAC/R
- Transportation/automotive
- Cooling & reheating
- Service areas
- Food service equipment
- Cold storage

SP62022

MINI INFRARED THERMOMETER

- LCD display with backlight Single dot laser targeting
- Low battery indication
- Auto power off
 -20°C / 270°C Range (-4° F 518°F)



TACHOMETERS

SP62032

DIGITAL TACHOMETER NON-CONTACT

- . LCD display with backlight
- Laser target
- Range: 100-30000rpm, 1.7-500rps
- Accuracy: +/-0.1% reading (100.0 -9,999rpm), +/-0.02% reading (10,000 -30,000rpm)
- Auto power off
 1.5V x 3 AAA batteries
- · Protective cover and carrying case



SP62030

TACHOMETER LASER ACTUATED

- . Non contact measurement of RPM RPM range 2.5–99,999
- . Instant and total RPM function
- Memory function 50mm–2000mm range with
- reflective tape
- Accuracy +/- 0.05% Requires 4x 1.5v AA Batteries







TIMING LIGHTS

SP62040

TIMING LIGHT ADJUSTABLE ADVANCE

- · Quickly tune-up cars, trucks, marine and recreational vehicles
- · Works on conventional, electronic and computer controlled ignition systems on both adjustable and non adjustable timing systems
- Patented Skip circuitry Tests up to 10,000RPM
- Dial type timing advance (0°-60° score)
 Heat resistant metal inductive
- pick-up
- One handed operation
- Detachable leads for easy replacement and use
- Protective hand guard for added safety
- · Rotating barrel for better aim at timing mark
- Easy access slim-line barrel
- Optical correct lens



SP62042

TIMING LIGHT PROFESSIONAL

- · 4 function digital display readout and easy to read backlit LCD
- Heavy duty inductive pick-up and clamps
- One handed operation
- Detachable leads for easy replacement and use
- · Protective hand guard for added safety
- Rotating barrel for better aim at timing mark and LCD viewing angle
- Patented Skip circuitry Tests up to 10.000 RPM
- · Easy access slim-line barrel
- Optical correct lens
- Shock resistant boots
- Tachometer: 249 to 9,990 RPM
- (+/-1% accuracy) Advance degrees (2 and 4 cycle DIS and conventional): 0º to 90º (+/- 5º accuracy)

 Dwell: 0º to 180º /2-12 cylinders
- (+/-1% accuracy)
- Voltage: 10 to 16 volts DC (+/- 1% accuracy)



BORESCOPES



SP70925

VIDEO BORESCOPE 9_{MM} CAMERA

- 2.4" colour TFT LCD screen
- 1m long flexible, waterproof gooseneck imager head that easily performs visual inspections in hard to reach areas
- High visibility and 6° adjustable LED lighting
- Rechargeable battery with USB cable
 Display resolution: 480 x 234px
 Video format: MPEG4/3GP/AVI/ASF
- · Photo format: JPEG

SP70935

VIDEO BORESCOPE 6мм CAMERA HIGH RESOLUTION

- 3.2" colour TFT LCD screen
- 1m long flexible, waterproof gooseneck imager head that easily performs visual inspections in hard to reach areas
- High visibility and 10° adjustable LED lighting
- Camera and video function supports audio and video recording
- Allows user to view image on LCD monitor and displays the current time and date
- Support SD memory card extension with built-in 75mb flash capacity
- Menu with multi-national languages
- Display resolution: 320 x 240px
- Video format: MPEG4/3GP/AVI/ASF
- Photo format: JPEG





SCANNER CODE READERS

READ AND CLEAR GENERIC DIAGNOSTIC TROUBLE CODES (DTC'S) AND TURN OFF CHECK **ENGINE LIGHT**



CHECK ENGINE



SP61150

SCANNER CODE READER CAN OBDII/EOBD

- Covers all OBDII compliant vehicles: Made in USA from 1996 on; Made in Europe petrol 2001 on & diesel 2004 on; Made in Australia or New Zealand from 2006 on.
- · Reads and clears generic and manufacturer specific diagnostic trouble codes (DTC's) and turns off check engine light
- Supports multiple trouble code requests: Generic codes, pending codes and manufacturer specific codes
- · Code definitions are displayed on unit screen
- · Reviews the emission readiness status of OBDII Monitors
- Determines malfunction indicator lamp (MIL) status
- Retrieves VIN (Vehicle Identification No.) on 2002 and newer vehicles that supports Mode 9
- · Reviews the live data on unit screen
- Easy to use with one plug in, highly reliable and accurate
- · Stand-alone unit with no need for an additional laptop/computer to operate
- Small in size and comfortably fits in the palm of your hand
 Unit updates via internet by USB cable
- Software CD with over 10,000 DTC definitions included
- No batteries needed as the unit is powered via OBD2 cable

SP61155

SCANNER CODE READER CAN OBDII/EOBD/JOBD

OBDILEOBD

- · Covers all OBDII compliant vehicles: Made in USA from 1996 on; Made in Europe petrol 2001 on & diesel 2004 on; Made in Australia or New Zealand from 2006 on. (Including the CAN, J1850 PWM, J1850 VPW, ISO9141 and KWP2000 protocols)
- Compliant with OBDII 16 PIN Toyota, Honda, Daihatsu, Mitsubishi, Mazda, Nissan, Suzuki & Subaru
- Reads and clears generic and manufacturer specific diagnostic trouble codes (DTC's) and turns off check engine light
- Wider vehicle coverage with CAN protocol support
- · Supports multiple trouble code requests: Generic codes, pending codes and manufacturer specific codes
- Code definitions are displayed on unit screen
- · Reviews the emission readiness status of OBDII Monitors
- Determines malfunction indicator lamp (MIL) status
- Retrieves VIN (Vehicle Identification No.) on 2002 and newer vehicles that supports Mode 9
- · Reviews the live data on unit screen. Review live data graph with four items in one screen
- Stand-alone unit with no need for an additional laptop or computer to operate
- Small in size and comfortably fits in the palm of your hand
- Unit updates via internet by USB cable
- Software CD with over 10,000 DTC definitions included
- · No batteries needed as the unit is powered via OBD2 cable
- 2.8" TFT colour screen displays more information on screen



> IS YOUR VEHICLE COMPATIBLE?

ENSURE YOUR VEHICLE IS COMPATIBLE BEFORE PURCHASE

Head over to the SP Tools Website for a list of known CAN OBDII/EOBD & CAN OBDII/EOBD/JOBD compliant vehicles, if your vehicle is not on the list or you are unsure, contact your vehicle manufacturer or dealership to find out.

WWW.SPTOOLS.COM

SEARCH BY PART NUMBER SP61150 & SP61155

Software available through support tab.





STETHOSCOPE



SP62001

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
- 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

SP61011

CIRCUIT TESTER - SHORT PROBE

- 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

SP61013

CIRCUIT TESTER - MEDIUM PROBE

- Tests 6, 12 & 24 Volt electric circuits
- · Heavy duty design and construction
- · Sharp, medium length probe for access to hard to reach circuits
- · Handle lights up if the circuit is good
- Extra long 1500mm lead (1.5m) · Heavy duty insulated alligator clip

HEAVY DUTY

SP61014

CIRCUIT TESTER - LONG PROBE

- 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)







CIRCUIT TESTERS CONTINUED



T861010

CIRCUIT TESTER - 888 SERIES 6 TO 24V



- Check 6-24 Volt systems
- · Professional quality tester with solid brass body housing and test light
- · 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



SP61016

CIRCUIT TESTER - DIGITAL DISPLAY

- Digital LCD display for accurate
- voltage reading Reads 6, 12 & 24V DC systems · Stainless steel testing probe
- Voltage measurement from 5 28V
 3000mm (3m) extendible spring cable
- Small testing current < 10mA.
- Accuracy: ±(1%+3digits)



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

- 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 (0.8m)



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 (3.0m)

CIRCUIT TESTERS CONTINUED

SP61050

TERMINAL ADAPTER & CIRCUIT TESTER KIT 6, 12 & 24V - 14 PIECE

- Terminals include Weather-Pack, Metri-Pack & Micro-Pack style terminals
- External internal design to test the circuit
- without damaging the connector

 Use this tester to check high and low voltages (power & ground) on 6,12 & 24 Volt systems
- High impedance to protect sensitive electronic sensors, microprocessors electronic ignition components & air bags
- LED indicates red for power (high) & green for ground (low)
- Connect the red lead to a power source and the black lead to a ground source
- . LED circuit tester includes a 1.8m long cable







- Circuit tester 14-piece terminal adapter kit Banana socket x 1pc
- Alligator clips x 2pi

VOLTAGE TESTERS



SP61022

VOLTAGE TESTER - DUALITE HI/LOW

- Checks 6-12 volt system and spark plug test
- Voltage check on secondary or high voltage circuits
- · White light low voltage
- Red light high voltage

CURRENT TESTERS

• Extra long 1200mm lead (1.2m)



CURRENT TESTERS - DIGITAL AUTOMOTIVE

- . Tests circuit current up to 30Amps
- Design allows for easy connection into fuse Sockets
- · Maintains fuse protection while connected
- Resolution .1A (100 milliamps), accuracy +2

AVAILABLE IN 2 OPTIONS

BLADE TYPE

MODEL

30A Maxi-Blade 30A Mini-Blade

SP62008 SP62009

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

- · 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

IGNITION SPARK TESTER - INLINE

- 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.



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



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



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



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)

WIRE STRIPPERS & CRIMPERS



SP32272

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



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)
- Strips wire to predetermined length automatically
- Crimps insulated & Non insulated terminals



SP32282

CRIMPING TOOL AND WIRE STRIPPERS

- 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



SP32287

OUICK CHANGE RATCHET CRIMPER KIT

- · 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

HEAT SHRINK TUBING

SP32293

HEAT SHRINK TUBE KIT WITH GAS TORCH

- · Heat shrink assortment pack contains the most commonly used sizes in black, red, yellow, blue & green
- · Provides an insulated flame retardant covering to protect cables from abrasion or environmental wear and restore insulation on damaged cables
- Includes self igniting gas torch
- Housed in a clear plastic divider case
- for easy storage
 Material: Polyethylene
- Operating temp: -55 °C~ +125 °C
 Shrink temperature: Starts at 70°C, Shrunk totally at 110°C
- Shrink ratio: 2:1
- . Maximum electrical rating: 600 Volts





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.

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, & Calcium, 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

Charge Stages: 5 Stages

Large LED display shows percentage of battery charge
 Battery Testing function while charging (faulty batteries cause the full battery bar display to flash).









SP61080

SMART CHARGER - 8 STAGE 6 AMP

- Current Output: 6 Amp
- Output Voltage (Nom): 12 Volt
- Battery Type Supported:
- Gel/Calcium/Lead Acid AGM
- Charge Stages: 8 Stages



SMART CHARGER - 8 STAGE **10 AMP**

- Current Output: 10 Amp
- Output Voltage (Nom): 12 Volt
- Battery Type Supported: Gel/Calcium/Lead Acid AGM
- Charge Stages: 8 Stages





SP61085

SMART CHARGER - 8 STAGE

- Current Output: 20 Amp
- Output Voltage (Nom): 12 Volt
- Battery Type Supported: Gel/Calcium/Lead Acid - AGM
- Charge Stages: 8 Stages



SP61087

SMART CHARGER - 8 STAGE

- . Current Output: 40 Amp
- Output Voltage (Nom): 12 Volt
- Battery Type Supported: Gel/Calcium/Lead Acid - AGM
- Charge Stages: 8 Stages





SMART CHARGER - 8 STAGE 10 AMP - MULTI VOLT

- Current Output: 10 Amp Output Voltage (Nom): 5,12 & 24 Volt
- Battery Type Supported:
- Gel/Calcium/Lead Acid AGM
- Charge Stages: 8 Stages









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

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 reception.

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 will start.

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.

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.

WARNING:

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 & LOAD TESTERS



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 testing
- 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



SP61062

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
- 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



SP61009

BATTERY LOAD TESTER **DIGITAL DISPLAY**

- 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

SP61074

NEXT GENERATION ULTRA CAPACITOR JUMP STARTER

RELIABILITY WHEN YOU NEED IT

- · Always ready for use when you need it
- Capacitors can fully charge in 45 Seconds*
- Displays battery voltage and condition Accepts power input from multiple sources*
- This premium, next generation jump starter utilises ultra-capacitor technology and allows a vehicles flat battery (provided it still has more than 5 volts available) to charge the jump starters capacitors and then jump start the vehicle.
- Simply connect the ultra-capacitor jump starter to the vehicle battery, the jump starter will display the vehicle batteries existing voltage and health status and if necessary it will then charge itself from the depleted vehicle battery (or if available from any other vehicles battery), once charged the Jump Starter is then able to supply a short burst of full power back into the vehicles electrical system, allowing for vehicle start

Tough, compact and always reliable. The SP Next Generation Ultra-Capacitor Jump starter is an essential tool in the vehicle maintenance and road side assistance industry's tool box.

Rugged enough to be stored in vehicle for many years and able to be quickly recharged on site for use when its needed.



MULTIPLE WAYS TO CHARGE

Worst case scenario, the vehicles battery has less than 5 Volts, the jump starter can be charged through multiple devices, from any:

- USB charging port via the 5V input, such as USB mobile phones charger. computers, power banks and so on.
- The vehicles on-board 12v power outlet.
- Another vehicles battery via the jumper cables, or
- . Transfer the stored power from the charged on-board back-up battery.
- 12v 700AMP Jump start (Petrol engines up to 5L V8 & Diesel up to 3L)
- LCD intelligent display shows health status of battery
- Fast charging, 4 ways to get power for jump starter
 Protective rubber sleeve
- Hi-power LED flashlight
- Back-up battery capacity: 6,000mAh
- Cycle Life: Approx. 100,000 cycles
- Includes convenient carry case



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
- Cycle Life: Approx. 1000 Times
- Weight: 610g

COMPACT SIZE 181L x 95w x 40h mm





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
- Sharp teeth cleans corrosion from the battery terminal
- · Insulated ergonomically designed handles
- · Manufactured from durable high quality steel

SP61004

BATTERY TERMINAL PULLER

- Mini puller with spring loaded jaws designed for removal of corroded battery clamps from terminals

 T-handle centre screw for more applied torque
- · Also suitable for the removal of small gears, pulleys and bearings





SENSOR SOCKET 22мм

- 3/8"Dr x 22mm
- · Window in socket allows the wires attached to the sensors to be bypassed
- · Offset drive accesses sensor from the side, eliminating wire damage
- Common 6 point socket fits most oxygen sensors
- · Applications include: Mitsubishi, Nissan, GM and the Volkswagen Audi Group
- · For heated & non-heated lambda sensors



SENSOR SOCKET OFFSET - 22_{MM}

- 3/8"Dr x 22mm
- · Window in socket allows the wires attached to the sensors to be bypassed · Offset drive accesses sensor from the side,
- eliminating wire damage Common 6 point socket fits most oxygen
- sensors · Applications include: Mitsubishi, Nissan,
- GM and the Volkswagen Audi Group
- · For heated & non-heated lambda sensors



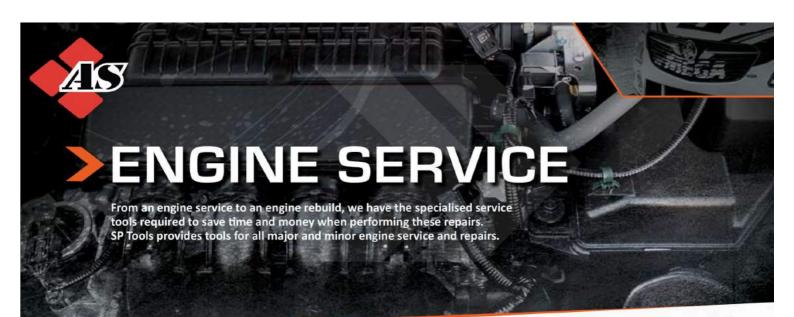
> RADIO REMOVAL

SP61040

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





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



SP71052

NOID LIGHT KIT 10 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
- 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

ALSO AVAILABLE INDIVIDUALLY

SINGLE NOID LIGHTS TO SUIT

Suits Bosch Port fuel Injection harness with round pins

Suits GM Port fuel Injection harness with flat pins

Suits GEO Throttle body Injection harness with flat pins

Suits GM Throttle body Injection harness with large round pins

Suits GM SCPI Throttle body Injection harness with large round pins

Suits Ford TBI Throttle body Injection harness with large round pins

MODEL SP66150 SP66151 SP66152 SP66153 SP66154 SP66155





FUEL LINE DISCONNECT TOOLS

SP64052

AC & FUEL LINE DISCONNECT KIT

- · Comprehensive set of tools for decoupling automotive air conditioning hoses and fuel lines
- Offset design with spring loaded action allows one handed operation
- · Suitable for a wide variety of vehicles
- Colour coded for easy identification
- Supplied in a sturdy carry case

SIZES INCLUDE

- 8mm (5/16")
- 9.5mm (3/8")
- 9.5mm (3/8") Cooler Line
- 9.5mm (3/8") Oil Cooler Line
- 13mm (1/2")
- 16mm (5/8")
- 19mm (3/4")
- 22mm (7/8")



SP64050

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"





SP64051

FUEL LINE DISCONNECT TOOL

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

PETROL

SP66062

FUEL INJECTION PRESSURE TESTER MULTI-POINT

- · Suits Multi-point systems with "Push On" and "Banjo" style
- Features quick coupling fittings
- Suits GM, Ford, Toyota, Mazda, Honda, Mitsubishi, Nissan, Suzuki, Daihatsu









PETROL CONTINUED

SP66065

FUEL INJECTION PRESSURE TESTER

- Suits the workshop that handles a wide variety of vehicle's multi-point, throttle body & CIS system (Continuous Injection Systems)
- All adaptors, gauges & hose assemblies feature a quick coupling system for speedy & efficient testing connection
- The uniquely designed relief valve relieves the pressure & the fuel safely
- No need for wrenches or pipe dope
- All housed in a heavy duty blow mould storage case



SP66060

VACUUM/FUEL PUMP TESTER KIT

- Check for leaking or defective parts in vacuum systems & mechanical fuel pumps
- Thick rubber bump guard
- · Clear and easy to read gauge design

MEASURES

- Engine Vacuum:
- 0-30 in-Hg • 0-700 mm-Hg
- 0-100 KPA
- Fuel Pump Pressure:
- 0-10 PSI
- 0-700 g/cm2
- 0-700 g/cr

DIESEL

SP66068

COMMON RAIL DIESEL FUEL RETURN FLOW TEST KIT - 49 PIECE

- Designed to measure return fuel flow on diesel vehicles up to 8 cylinders fitted with common rail injection systems
- · Identifies worn, blocked or inoperative injectors quickly & easily
- Includes measurement tubes for short term tests & measurement bottles for long term, more accurate evaluation
- · Adaptor set to suit Bosch, Siemens, Delphi & Denso Injectors
- All housed in a heavy duty blow mould storage case





DIESEL INJECTOR SYSTEM PRIMING PUMP

 Essential for reintroduction of fuel into fuel pump following maintenance, such as fitting of new diesel filter or following drainage of fuel tank



CONTINUED

DIESEL



SP66076

DIESEL INJECTION SYSTEM PRIMING PUMP KIT

- · Essential for reintroduction of fuel into fuel pump following maintenance, such as fitting of new diesel filter or following drainage of fuel tank
 • Includes adaptors for GM, Renault, Fiat, Ford, PSA (Peugeot, Citroën & Ford)
- · Housed in EVA foam organiser tray

DIESEL INJECTOR PULLER SET

- Set of 3 adaptors plus a special tool for removing the internal part of Bosch
- injectors

 Specifically designed for removing Delphi/Bosch diesel injectors
- · Adaptors can also be used with an air hammer to loosen the injector by vibration
- Use with a slide hammer with 5/8" UNF thread (SP66086)
- · All housed in a heavy duty blow mould storage case

SP66086

5/8"UNF DIESEL INJECTOR PULLER SLIDE HAMMER

- Slide hammer to suit diesel injector puller kit (SP66085)
- Thread: 5/8"UNF
- · Hammer weight: 1.5kg (3.5lb)



DIESEL INJECTOR SEAT CLEANER SET

- Set of five diesel injector seat cleaners, centering pilot and t-handle
- Used to clean/de-carbonise injector seats when changing injectors
- Centring pilot: 7mm
- Various vehicles: 15mm
- Delphi/Bosch injectors: 17 x 17mm (BMW, PSA, Renault, Ford)
- Bosch injectors: 17 x 19mm (Mercedes CDI)
- Angled: 17 x 17mm (Mercedes CDI)
- . Angled: 17 x 21mm (Fiat, Iveco)
- All housed in a marked EVA foam tray and heavy duty blow mould storage case







DIESEL CONTINUED

SP66081

DIESEL INJECTOR SOCKET SET **6 PIECE**

- Designed for removal, inspection or replacement of injectors
- 1/2"Dr sockets
- Window in socket allows the wires attached to the sensors to be bypassed, eliminating wire damage
- · Applications include: Ford, Nissan, Audi, BMW, Mercedes, Land Rover, Seat, Holden, Volvo, VW, Peugeot, LGV, Scania, Alfa Romeo
- · Chrome Molybdenum
- · All housed in a heavy duty blow mould storage case

Size & Applications:

- 90 X 21mm Ford
- 80 X 22mm Nissan, VW
- 110 X 22mm Audi, BMW, Mercedes, Rover, Seat, Vauxhall, Volvo, VW
- 80 X 27mm BMW, Fiat, Ford, Peugeot
 80 X 28mm LGV Scania, Volvo
- 83 X 28mm VM 2.4D/2.5D Engined Alfa Romeo, Chrysler, Land Rover



PETROL COMPRESSION TESTERS

SP66023

PETROL COMPRESSION TESTER

- 2.5" gauge with dual scale, 0-300psi, 0-21kg/cm2, 0-300psi
- · Pressure relief valve allows repeated on-vehicle test
- Includes multiple adaptors to fit most applications





PETROL COMPRESSION TESTER

- Easy reading 2-5" gauge features colour coated quadruple calibrations
 0-300psi 21kg/cm, 21bar & 2100kpa
 13" durable rubber hose with 14mm/18mm adapter
- 6" Heavy duty stem with universal rubber cone adapter fits all plugs
- Pressure relief valve allows repeated on-vehicle tests
 All housed in a EVA foam tray and heavy duty blow mould storage case



CONTINUED PETROL COMPRESSION TESTERS

SP66030

PETROL COMPRESSION TESTER

- Checks cylinder compression from 0-300psi (0 to 21kg/cm2)
- Assembles to form either push in or screw in type testers
 Screw in adaptors include: M10 x 1.0, M12 x 1.25, M14 x 1.25 & M18 x 1.5
- · All housed in a heavy duty blow mould storage case



DIESEL COMPRESSION TESTERS

DIESEL COMPRESSION TESTER SET AUTOMOTIVE

- · Tester has a pressure relief valve for releasing air & retesting
- A 16-1/2" wire reinforced hydraulic hose has a quick coupler on a swivel for ease of connection
- A 2-1/2" gauge with easy to read red and black dial with snap-in lens
- Records pressures from 0-1000psi and 0-70 Bar
 Adaptors for GM, Ford, Audi, Mercedes Benz, Peugeot, VW & Volvo
- · All housed in a heavy duty blow mould storage case

SP66038

DIESEL COMPRESSION TESTER SET

- . Comprehensive test kit for both direct & indirect diesel injected cars
- · Simple and easy to use
- Checks engine compression under cranking conditions
- Small profile, quick coupling adaptors for speed & security
- Built-in pressure relief valve enables repeat tests without dismantling
- Flexible hose (355mm) gives access to restricted plug & injector ports
- Dual scale 80mm gauge 0-1000 psi and 0-70 Bar
- · All housed in a EVA foam tray and heavy duty blow mould storage case



SP66039

DIESEL COMPRESSION TESTER SET COMMERCIAL

- Measures cylinder pressure on diesel cars and trucks
- Unique swivel end quick coupler allows the operator to connect the adaptors quickly and easily

SUPPLIED WITH ONE GAUGE AND ALL NECESSARY ADAPTERS

- Dual measurement scale: 0 to 1,000psi / 0 to 70bar with quick release valve
- 2-1/2" dial, glycerine filled gauge with glass lens in stainless steel housing
 368mm (14.5") long nylon jacketed pressure hose assembly 4,500psi rated

INCLUDES 13 PIECE ADAPTOR SET TO SUIT:

• Allis Chalmers • Audi • Bedford Case • BMW • Caterpillar • Chalmers • Chevy • Cummins • Detroit Diesel • Fiat • Ford • Ford Tractor • General Motors • International Harvesters • Isuzu • John Deere • Lincoln Continental • Mack Truck • Mercedes Benz • Peugeot • Toyota • Volkswagen • Volvo









LEAK DETECTOR AND CRANK STOPPER

SP66027

CYLINDER LEAK DETECTOR & CRANK STOPPER

- Pinpoints low compression cause i.e. burnt valves, worn rings, etc.
 Crank stopper locks engine in place to facilitate installation of timing belts & removal of harmonic balance pulleys
- Supplied with 14mm adaptor, 14mm deep adaptor & 18mm adaptor

- Gauges show % of cylinder leakage & cylinder pressure
 Suitable for use on any petrol engine with 14 or 18mm spark plugs
 All housed in a EVA foam tray and heavy duty blow mould storage case

OIL PRESSURE TESTERS

SP66069

ENGINE OIL PRESSURE TESTER

- Highly accurate
- Large and easy to read dial
 Pressure scale: 0-100psi / 0-700kpa
- · Gauge fitted with heavy duty rubber bumper
- 610mm long flexible hose
- · Includes adapters to suit most vehicles
- · Housed in a heavy duty, impact resistant storage case





SP66070

ENGINE OIL PRESSURE TESTER DELUXE

- . Designed to check engine oil pressure in both cars & trucks

- Easy to read dual scale gauge
 Complete with 24" (600mm) of oil proof hose with 1/8" NPT
 Also includes 1/4"NPT, 3/8"NPT, 1/2BSP, M10x1.0, M12x1.5, M14x1.5, elbow adaptors & 50mm nipple & coupling
- Dual gauge readings: 0 to 300psi (0 to 21 Bar)
 Gauge diameter: 2.5"



CYLINDER HEAD TOOLS

SP66110

COMPRESSED AIR ADAPTOR

- Used to hold the valves closed whilst spring is compressed
 Spark plug adaptor with 14mm and 18mm threaded fittings for car and light commercial use
- Valve assembly maintains cylinder pressure when air supply is cut
- Requires a 90-125psi supply
- 1/4" BSP female airline coupler included



SP66012

VALVE SPRING COMPRESSOR - SCREW TYPE

- · Easily remove valve springs on most cars & light trucks
- . Works with cylinder head on or off the engine
- The jaws grip the valve spring in parallel compression



SP66014

VALVE SPRING COMPRESSOR

- · 8" valve pinchers
- Universal jaw with 75-165mm capacity & 150mm throat depth
- · Universal compressor with strong adjustable cam-action
- Parallel lift and automatic locking suitable for small to medium OHV engines
- 2 valve spring sizes 25mm and 30mm



SP66015

VALVE SPRING COMPRESSOR

- Suitable for use on multi valve petrol and diesel engines with deep-seated valves
- Universal jaw with 55-175mm capacity and 165mm v
- Suitable also for general use on OHC, OHV and CVH engines
- Reversible iaw and adaptor
- Twin cam action permits use from above or below valve
- 2 Valve spring sizes 25mm and 30mm



SP66115

VALVE LAPPERS

- · Hand grind small & large flat head unslotted valves
- · Contoured hardwood handles for comfortable grip
- To use, place grinding compound on valve face and put in seat

- Small cup diameters 5/8" and 13/16"
- Large cup diameters 1-1/8" and 1-3/8"







PISTON RING COMPRESSOR

PISTON RING COMPRESSORS

- Available in 2 sizes: 50-125mm & 75-175mm
- Compresses piston rings for easy installation
- Self locking ratchet
- · Supplied with tightening arm
- Double band adjustable tensioner

AVAILABLE IN 2 OPTIONS

SIZE

MODEL

50 - 125mm

SP66020

75 - 175mm

SP66021



ENGINE CYLINDER HONES



ENGINE CYLINDER HONE 3 ARM - SMALL

- Versatile hone for 32mm 90mm diameter cylinders
- 50mm fitted stones Medium 220 grit
- Knurled nut controls tension
- Flexible shaft for ease of use and self centering
 Adjustable tension, controlled spring action and spread control limiter



SP63038

ENGINE CYLINDER HONE

- Versatile hone for 50mm 178mm diameter cylinders
- 100mm fitted stones Medium 220 grit
- Knurled nut controls tension
- Flexible shaft for ease of use and self centering
 Adjustable tension, controlled spring action and spread control limiter
 Replacement stones available: SP63138

SP63138

REPLACEMENT STONES **ENGINE CYLINDER HONE - 3 ARM**

- 100mm fitted stones Medium 220 grit
- Stones suit: SP63038





PITCH & FEELER GAUGES

SP64036

FEELER GAUGE SET - OFFSET

- Offset blade for easy tappet clearance measuring
 0.008, 0.010, 0.012, 0.013, 0.014, 0.015, 0.016, 0.018, 0.019, 0.020, 0.025 & 0.026" blades
- Marked with equivalent metric sizes
- Offset blades 100mm long x 13mm wide with 25mm offset tip
- · Fold out design allows for easy access to all sizes



FEELER GAUGE SET - TYPE A

- 0.0015, 0.002, 0.0025, 0.003, 0.004, 0.005, 0.006, 0.007, 0.008, 0.009, 0.010, 0.011, 0.012, 0.013, 0.014, 0.015, 0.016, 0.017, 0.018, 0.019, 0.021, 0.022, 0.023, 0.024 & 0.025"
- Marked with equivalent Metric sizes
- Straight blades 85mm long x 13mm wide
 Fold out design allows for easy access to all sizes



SP64034

FEELER GAUGE SET 32 PIECE

- 0.0015" 0.035"
- Marked with equivalent metric sizes
- Straight blades 85mm long x 13mm wide



SP64030

FEELER GAUGE SET 25 PIECE

- 0.04-1.00mm

- Marked with metric sizes
 Hardened spring steel straight blades
 Straight blades 75mm long x 13mm wide



FEELER GAUGE SET - DOUBLE SIDED OFFSET

- 005"-030" (0.127-0.762mm)
- Marked with equivalent metric/inch sizes
- Offset blades 100mm long x 13mm wide with 25 mm offset tips







ENGINE TIMING TOOLS - UNIVERSAL

REMOVES & INSTALLS STRETCH BELTS





SP70991

STRETCH BELT TOOL

- · Aids in the quick and easy removal/installation of stretch fit belts
- . Installs all Stretch fit belts
- Allows for the reuse of stretch fit belts
 Magnetic faces hold the tool in place on the pulley
- · Compact, one-piece tool can be used on the front or back side of the pulley

ROTATED VIEW













SP71055

BELT TENSIONER SERPENTINE TOOL SET

- · Essential tool for removing & installing timing belts with spring loaded idler
- Long reach design with multi-positional extension allows access deep into the engine compartment & around obstructions
- Includes: 3/8"Dr sockets 13, 15, 16 & 18mm

SP71060

TENSIONER LOCK OUT PIN SET

- Includes 0.79mm, 1.24mm, 1.37mm, 1.49mm, 1.68mm & 1.92mm
- Suitable for locking back belt tension devices while installing or removing cam or auxiliary drive belt
- Wide range of vehicle & engine applications

SP70865

CRANKSHAFT BOLT REMOVAL TOOL 1/2"DR.

- Reduces service time
- Use where impact guns won't fit
- Loosens and tightens bolts
 Recommended for use with impact sockets
- Produces up to 600 ft/lbs of torque to loosen stubborn bolts



ENGINE TIMING TOOLS - UNIVERSAL CONTINUED





TIMING GEAR HOLDER/SINGLE CAM CLAMPS KIT

- · Securely holds the timing gear during removal or installation
- · Prevents timing gear movement while the retaining bolt is removed
- Allows rotation of cam gear to align valve timing marks
- Single lever looking design is easy to use
 Slimline design allows maximum access





- . Single Cam Clamps lock each gear individually during timing belt replacement
- Holds valve timing during belt replacement
- Compact size allows use in confined engine compartments
- · Easy to use-installs in seconds



SINGLES CAM CLAMP SETS

AVAILABLE IN 2 OPTIONS

- · Use on single, twin and quad cam engines to hold valve timing during belt replacement
- Low profile design works on engines with gear to cylinder head clearances from 5mm (1/4") to 35mm (1-3/8")

SP70902

2 PIECE

- 2 x Timing Gear Clamps2 x Bolt Extensions

SP70905

4 PIECE

- 4 x Timing Gear Clamps 4 x Bolt Extensions

SP70900

MASTER CAM CLAMP KIT 5 PIECE

- This universal kit covers most single overhead cam engines, twin cam engines and guad cam engines
- Lock camshafts to hold valve timing during belt replacement
- Reduces repair time
- · Prevents possible engine damage due to incorrect timing
- Compact design to allow easy operation in small engine bays

