

PROFESSIONAL TOOLS & EQUIPMENT

ROBINAIR

OTC

TIF



Quick Finder Index



Electronic Diagnostics 1–64



Fuel Service Tools 65–78



General Purpose Tools 175–204



Pullers 205–222



Heavy-Duty Tools 223–248



Shop Equipment 249–320



A/C Recovery & Recycling . . 321–374

Index 375–384

Genisys™	2-13	Breakout Boxes	42
Nemisys®	14	Timing Lights	43
ABS Reader II	15	Digital Pressure & Temp. Analyzer	44
Scan Pro™	16	Noid Lites	45
Code Scanner®	17	Oil Light Reset Tool	46
AutoCode™, Ready Scan™	18	Fuel Injection Testers	48
Tech 2 Flash	20	Idle Tester	49
Scan Tool Accessories & Cables	21-23	Electrical Terminal Tools	50
Heavy-Duty Diagnostics	24-25	Air Bag/ABS Tools	51
Solarity®	26-29	Vision Premier	52
Auto Scope	30	Gas Analyzers	54
Scope & Meter Accessories	31	Diesel Smoke Emission Tester	54
DAT & Multimeters	32	Sabre HP & Heavy-Duty	56-57
Terminal Test Kits	34	Battery Test Tools	58-61
Circuit Testers	35-37	Alternator/Starter Test Bench	62-64
TPMS Tire Pressure Monitor Tool	38-41	OneStep™ and The Judge	



ELECTRONIC DIAGNOSTICS

OTC's Family of Scan Tools

Genisys



Nemisys



***OTC Scan Tools are best in class...
best in diagnostic power...
best user features...
best vehicle coverage...
best investment value!***

OTC Scan Tools are the choice of professional technicians who want to work faster, smarter and improve their shop's bottom line. For more than 80 years, OTC has been the One Tool Company professional technicians trust to meet their needs for specialty tools and diagnostic equipment.

Code Scanner



AutoCode



ScanPro

Call 1-800-533-6127
www.otctools.com

Productivity IS...

Coverage (Best in Class)

BEST IN CLASS

Genisys is simply the best and fastest automotive aftermarket hand-held scan tool you can own. Why? In less time than it takes other scan tools to even boot up, Genisys can provide a comprehensive diagnostic evaluation—all at the push of a single button. That means you fix vehicles faster with fewer comebacks. That's productivity. And feature for feature, Genisys can't be beat on price either. That's value. That's the bottom line.

Productivity Begins with Coverage

As an aftermarket repair shop, you need to service the wide variety of vehicles that enter your service bays everyday. These vehicles can be USA domestic, Asian or European. They can even be your fleet customers' tow truck, delivery van, or construction vehicle that require heavy-duty software to diagnose. It is a big challenge for any repair shop.

There are choices. One choice is to spend \$100,000 or more buying all the OEM tools you would need and thousands more each year to update them. Then the challenge is to make a profit and stay in business. Another choice is to buy a competitively priced aftermarket tool—such as Genisys—to cover all your needs.

OEM Data Licenses

OTC scan diagnostics is built on OEM vehicle data. Our valued OEM partners include GM, Ford, Chrysler, Toyota, Honda, BMW, Volkswagen and many more. Using vehicle data direct from an OEM under license provides a larger amount of data at a higher quality. The information is not reverse engineered, a costly method usually passed on to the end user in higher tool and update pricing.

Coverage Additions to Older Vehicles

Probably the biggest misconception is that a Genisys model year update only includes new vehicle year coverage, like 2006. That can't be further from the truth. It is not unusual for sub-system information, from our OEM partners, to arrive two or more years after vehicle release. At OTC we place this new information into the tool. This year is no exception. More information was received for this year's domestic, Asian, and European updates than any year in OTC's history. For a preview, go to www.genisysotc.com/literature.php and view the application coverage manuals.

Free Product Improvement Updates

Periodically, free software updates are released. These updates—delivered via the Internet using free Windows software provided in each kit—can be for any of the Genisys vehicle applications or system improvements. This concept is not available from most competitors.

Experience, Service and Leadership

Scan diagnostics is not new to OTC. It began in 1984 with the first Chrysler OEM scan tool. Today the Chrysler StarScan is still produced in the same factory as Genisys. With new scan manufacturers springing up domestically and off shore, who can you trust? You can count on OTC—with over 80 years in the automotive industry—to support you now and in the future. Genisys is backed by a global sales and service infrastructure. When spending your hard-earned money, go with the One Tool Company technicians trust—OTC.

Productivity IS...

Speed (System 2.0)

Genisys System 2.0

System 2.0 is a new software application and a high-speed compact flash card containing Power Features that will improve the performance of all Genisys scan tools.

POWER FEATURES:

Fast Boot

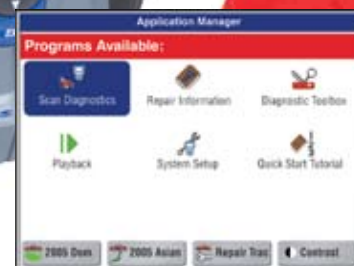
- Approximately 10 seconds for the new Genisys
- Approximately 15 seconds for the Genisys Classic (3454 and earlier)

New User Interface – Provides Genisys with a new improved icon-based user interface. (Think MS DOS to Windows XP.)

Code Reader Mode – Allows user to read or clear codes fast. Now Genisys can boot into a code reader mode FAST—approximately 5 seconds!

Personalization – A custom setup mode for user preferences.

- User configurable Function Keys – user selected applications at one button
- Interface Selection – New System 2.0 (icon based) or Genisys Classic



ELECTRONIC DIAGNOSTICS

OBD II Smart Cable™ and Automated System Test™



Productivity IS...

OBD II Smart Cable™

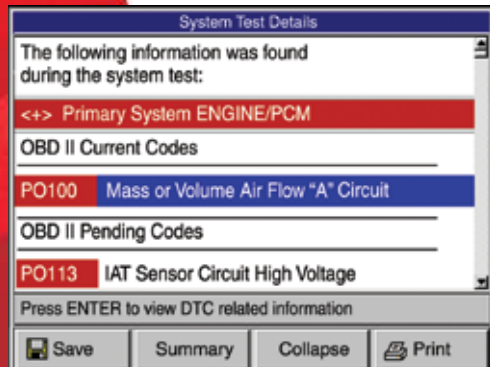
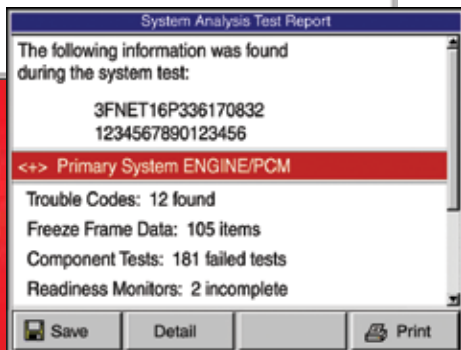
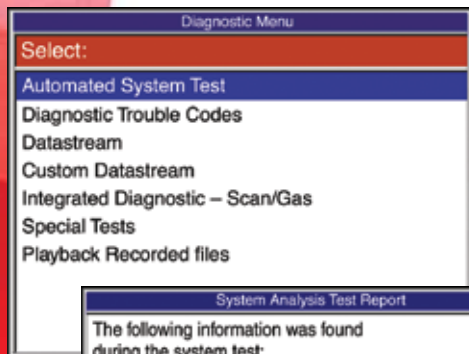
OBD II Smart Cable™

- Has the combined power of more than 50 System Smart Inserts.
- Eliminates the need for many current and future System Smart Inserts.
- Provides improved test capability and accuracy.

Bottom Line Benefits

- Improved technician satisfaction
- Faster diagnosis
- More convenient
- Higher technician productivity

IMPORTANT: OBD II Smart Cable is designed to work with any of the following applications: USA 2006 Domestic, USA 2006 Asian, USA 2005 European, 2004 ABS/Air Bag and Heavy-Duty Standard.



Productivity IS...

Automated System Test™

Automated System Test™

Now Available with USA 2006 Domestic, USA 2006 Asian, USA 2005 European and USA 2004 ABS/Air Bag Software Applications

- With one button press, Automated System Test performs a system "health check" of all available vehicle controllers.
- Any trouble codes found are reported along with other vital scan data.
- Repair-Trac™ pattern failures and available repair information are linked to trouble codes of the top known component failures.

Automated System Test™ is the default selection in Diagnostic Menu. One button press and it will perform the test and report the data in a fraction of the time it used to take using manual, step-by-step procedures.

A System Analysis Test Report summarizes the findings. The primary controller is that selected by the technician. The secondary controllers are any others found with a report on their DTC status.

Selecting the Detail Screen provides specifics on the primary and secondary controllers. Pressing Enter on any DTC provides the technician with any available code information for that specific vehicle.

See a sample of Test Vehicle on page 8

2001 Chevrolet Silverado 5.3L 4X4 (9 Systems available)
(2 codes engine system, 2 codes sub-system)

Productivity IS... **Packaged for You**

USA 2006 Domestic Software with Pathfinder

New Expanded Systems Coverage and Special Tests

- Ford bi-directional special tests.
- New vehicles, systems and approximately 200 NEW special tests are added for earlier year vehicles as well as 2006 models.
- Domestic 2006 provides coverage back to 1980 with focus on vehicles technicians see in their shops everyday.
- NEW Mode 6 Summary Screen sorts all failed Mode 6 tests to the top for easy identification.

New Code Library

- Fast access to OBD II Generic and OEM Enhanced DTC's from the Repair Information Menu.
- Pathfinder Troubleshooting Code Information available from Code Library.

New USB Drive Expanded Recording

- Read the extended recordings on Genisys or the PC.
- Data recordings without a USB drive are extended to 1000 frames!

USA 2006 Domestic Software includes three powerful repair information databases!

Pathfinder Troubleshooting Information

Pathfinder troubleshooting information from 1992 to 2005 provides critical information at the technician's fingertips. In addition to the Repair-Trac™ and Fast Fixes™ databases, repair information includes:

- Code information
- Symptoms
- Specifications
- Data/sensor information
- TSB references
- PCM connector information
- Component location

Repair-Trac™ Tech Tips

As the vehicle fleet ages more pattern-failure tech tips are available. Many Domestic, Asian, and European older vehicle tips added. Repair-Trac is the largest database of known vehicle-specific fixes available to the automotive aftermarket. Only the NGIS scan tool has the diagnostic power and the largest repair database to help you work smarter. Check it out:

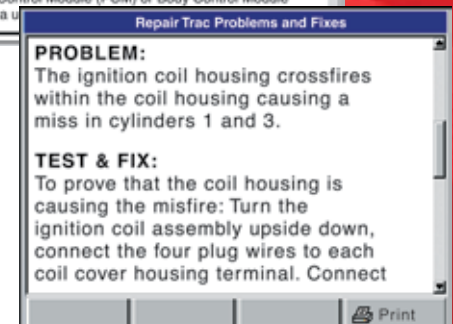
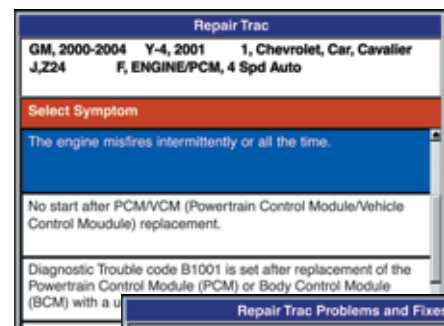
- Coverage from 1969 through 2005 for USA domestic, USA Asian, and USA European vehicles.
- Aftermarket TSB's based on information from over 2 million tech service calls.
- Access Repair-Trac from the Main Menu, Data Stream, or Trouble Code menus.

Fast Fixes™ Repair Information Database

Fast Fixes is a "sister" information database to Repair-Trac. No pattern failure listed for the vehicle's symptom? No problem. Fast Fixes data provides a vehicle-specific checklist of the most likely and most overlooked causes.

Systems covered:

- Engine performance
- Brakes
- Starting
- Steering
- Charging
- Suspension
- HVAC



ELECTRONIC DIAGNOSTICS

USA 2006 Asian and USA 2005 European Software



Productivity IS...

Packaged for You

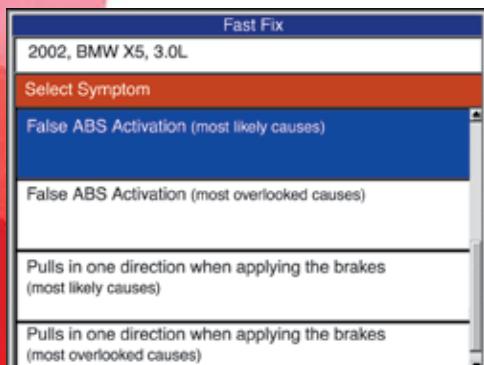
USA 2006 Asian Software with Pathfinder

Now with Honda OEM coverage and expanded bi-directional test!

Powerful Asian 2006 diagnostics includes more new system and bi-directional coverage than can be listed. The 2006 release now integrates Repair-Trac™ tech tips and Fast Fixes™ into Asian software.

New key features include:

- NEW—over 500 bi-directional special tests added to Asian 2006 software.
- NEW Honda licensed OEM data coverage includes engine, transmission, ABS, air bag, tire pressure monitor, and more body and chassis systems.
- NEW Hyundai and Kia enhanced engine coverage.
- Enhanced engine and transmission data stream and read codes for Nissan (1990–2006 DDL1 & DDL2 protocols), Mitsubishi and Mazda (1996–2006), and Toyota (through 2006).
- ABS and air bag support for Nissan, Mitsubishi (1996–2006), and Toyota (includes keyword protocols for 1998–2006).
- Expanded Toyota OBD I, 1995 and older coverage.



USA 2005 European Software with Pathfinder

A dedicated European scan tool is no longer required with the new Genisys European 2005 software package. More OEM coverage, more system coverage and more value than any other aftermarket scan tool!

Functionality includes:

- Diagnostic Trouble Codes
- Data Stream
- Actuator Tests (bi-directional tests)

System coverage includes:

- Engine
- Transmission
- ABS
- Air Bag
- Most Body System
- Most Chassis Systems

BMW Coverage

Genisys now includes licensed BMW OEM data. You would have to buy the BMW OEM tool to get more coverage!

BMW coverage includes:

- 1987 – 2005 Model Years



VW/Audi Coverage

Genisys now has best in class coverage for VW/Audi, comparable or exceeding any other aftermarket diagnostic tool. Functions include controller coding, throttle body alignment, oil light reset, and the ability to change convenience settings.

VW coverage includes:

- 1987 – 2005 Model Years

Audi coverage includes:

- 1986 – 2005 Model Years



Volvo Coverage

Volvo coverage started with the ABS and Air Bag coverage in our current ABS/Air Bag 2004 software and now has expanded to include most controllers.

Volvo coverage includes:

- 1993 – 2005 Model Years



Mercedes Coverage

Mercedes coverage has been expanded. You will find more system coverage than ever. Like the other OEM's considerable functionality added to earlier model years.

Mercedes coverage includes:

- 1986 - 2005 Model Years



Mercedes-Benz

ELECTRONIC DIAGNOSTICS

Heavy-Duty Standard and InfoTech 2006 Software

Heavy-Duty Standard

Featuring:

- Class 4 – Class 8 truck coverage.
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more!
- Live vehicle data such as:
 - Engine speed
 - Engine ECU temperature
 - Percent acceleration pedal position
 - Engine intercooler temperature
 - Engine coolant temperature
 - Battery volts
 - Alternator volts
 - Ambient air temperature
 - Air inlet temperature
- View and clear diagnostic trouble codes.
- Windows PC software.

Applications:

Tow trucks, recreational vehicles, cement trucks, dump trucks, garbage trucks, buses, step vans, municipal vehicles, refrigerated trucks, and conventional trucks.

Supported Manufacturers Include:

Mac Trucks, GM, GMC, Freightliner, Ford, Kenworth, Peterbilt, International, Volvo and more medium and heavy-duty vehicles.

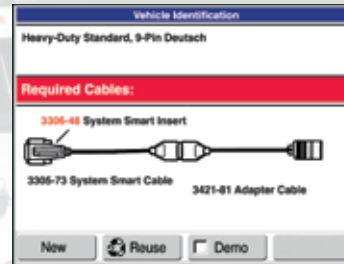
Transmission and ABS Systems Include:

Bendix, Detroit, Eaton, Meritor WABCO, Caterpillar, Cummins, Allison, etc.



1) Select the cable connector icon that matches what is on the truck.

2) Select the protocol ONLY if the 9 pin Deutsch cable is used (the others go directly to #3).



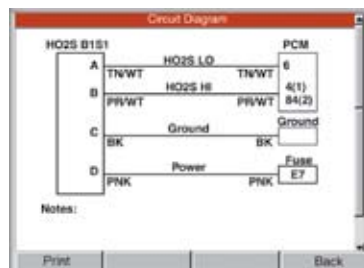
3) Connect the appropriate cable to Genisys and the truck.

4) Press Enter to continue and Genisys automatically searches the system and displays all available controllers.



InfoTech 2006 Software

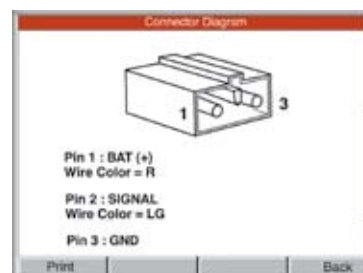
- Domestic, Asian, and European vehicle coverage for vehicles on the road today.
- Engine, transmission, and ABS systems covered.
- Asian and European coverage added for component wiring, circuit descriptions, component and control module locations.
- Vehicle System Test (multiple charging, fuel, and ignition tests)
- Engine Specifications
- Functional Tests
- Circuit Description
- Component Locations
- Wiring Diagrams
- Connector Information
- Component Specifications
- Reference Waveforms
- Oil Light Reset Procedures
- Current Ramping Tests
- Transducer Tests



InfoTech Vehicle Coverage

Feature	Domestic	Asian	European
Component Functional Tests – includes reference waveforms and display presets	1985–2006	1985–2006	1985–2006
Component Specifications	1984–2006	1984–2006	1984–2006
Component Wiring Diagrams	1993–2006	1993–2006	1993–2006
Circuit Description	1993–2006	1993–2006	1993–2006
Component Locations	1993–2006	1993–2006	1993–2006
Control Module Locations	1993–2006	1993–2006	1993–2006
Vehicle System Tests	All	All	All
Torque Specifications	1984–2004	1984–2004	–
Oil Light Reset	1984–2005	1984–2005	1985–2005
Transmission Pan ID Charts	1984–2004	–	–
Indexed Information	All	All	All
Repair-Trac Quick Fixes	All	All	All

NOTE: Red text indicates updates from InfoTech 2005.



ELECTRONIC DIAGNOSTICS

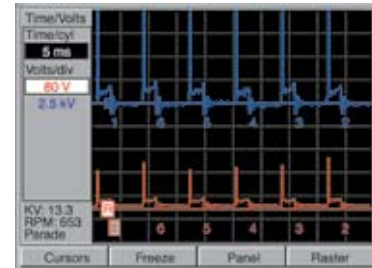
Genisys Scope with InfoTech 2006 Software

Genisys Scope with InfoTech 2006 Software (Note: Requires System 2.0.)

Genisys is a powerful 4-channel scope with the functionality required to analyze the most sophisticated vehicles. InfoTech software provides the key information to transform a driveability or component fault into a fast and accurate repair.

Genisys Scope Features and Benefits

- 4-channel full-function scope.
- Adjustable glitch capture.
- Smart Card security.
- Auto ranging function data.
- Custom enclosure—horizontally oriented and ergonomic.
- User selectable background color.
- Sunlight readable display.
- Modular design allows for future expansion capabilities.
- 4 MHz sample rate on all channels.
- Update via Compact Flash or PC.
- Print via standard desktop color printer.
- Copy files to and from USB.

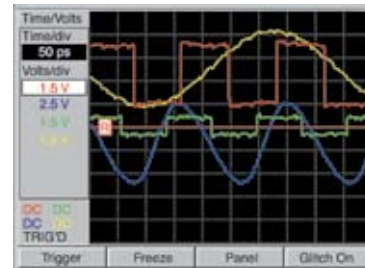


Ignition Scope Capabilities:

- Primary/secondary
- Raster
- Single cylinder
- Distributorless ignition
- Parade
- Record
- Coil-on-plug
- Superimposed

4-Channel High-Speed Lab Scope Graphing and Digital Multimeter:

- Volts
- Ohms
- RPM
- Frequency
- Duty cycle



Diagnostic time savings for you!

Productivity means having the information to fix the car right the first time and fast. The comparison below illustrates this dramatically. In a little over 1-1/2 minutes, Automated System Test scanned the available systems on a 2001 Chevy Silverado and provided an information detailed report. During that 1-1/2 minutes the technician

didn't even have to participate—its all automatic. That test time can be used performing a visual inspection under the hood or any other required task. And don't underestimate the button pushes. Only 10 were required using Automated System Test compared to 191 manually! Let Genisys do the work.

Test Vehicle

2001 Chevrolet Silverado 5.3L 4X4 (9 Systems available) (2 codes engine system, 2 codes sub-systems)

Engine System

1. Automated System test
2. Read trouble codes (engine system) Current/History/Pending codes
3. Review freeze frame data (Mode 2)
4. See component tests that failed (Mode 6)
5. Review Oxygen Sensor Test (Mode 5)
6. Review Readiness monitors
7. Look at DataStream and review related data items.
8. Run tests - review repair data menu for DTC (start count with DTC highlighted)
 - a. Circuit Description
 - b. Possible Causes
 - c. Code Setting
 - d. Data Stream Items
 - e. Repair Trac



Sub-Systems

9. Read trouble codes (Global OBD II system) Current/History/Pending codes
10. Read trouble codes (ABS system) Current/History/Pending codes
11. Read trouble codes (Air bag system) Current/History/Pending codes
12. Read trouble codes (Body Controls system) Current/History/Pending codes
13. Read trouble codes (Instrument panel cluster system) Current/History Pending codes
14. Read trouble codes (Elect. Vari. Orifice system) Current/History/Pending codes
15. Read trouble codes (RTD/EVO system) Current/History/Pending codes
16. Read trouble codes (Transfer Case system) Current/History/Pending codes

Total key presses and time to review information

All key presses referenced from the diagnostic function menu.

	Automated System Tests	Manual selection for tests
	Key presses	Key presses
1	1	
2	1	5
3	N/A	N/A
4	0	12
5	0	16
6	0	9
7	2	2
8	1	63
a	1	1
b	1	1
c	2	2
d	1	1
e	1	1
9	0	7
10	0	12
11	0	11
12	0	11
13	0	13
14	0	12
15	0	12
16	N/A	N/A
	10 Total	191 Total

USA GM SPS Reprogramming

OTC is proud to present the All Modules Reprogramming Kit to allow your customers to reprogram and recalibrate all reprogrammable control modules in their 1993-2007 model year General Motors vehicles.

This software subscription includes 12 months of updates on CD for registered owners.

In addition OTC is offering renewal kits for both the engine and all module USA GM SPS Reprogramming kits. These renewal kits will continue your SPS subscription and delivery of update DVDs.

Genisys Requirements: USA 2006 Domestic software.



Note: GM will be moving to a new Web based Software Delivery Process in the near future. This will replace DVD's.

Your shop computer... must fulfill these minimum PC requirements for the GM SPS program:		
CPU	Minimum PC Spec.	Recommended PC Spec.
	Intel Pentium IV 1.3 GHz	Intel Pentium 4 3.0 GHz, 865G chip set. 800 MHz or greater front side bus, 1024 KB L2 cache
Hard Drive	20 GB ATA	40 GB Smart III Ultra ATA/100
RAM	256 MB SDRAM	512 MB RAM or greater
Video RAM	16 MB DRAM	Integrated AGP w/64 MB or greater
Optical Drive	40X/16X CD/DVD combo drive	40X/16X CD/DVD combo drive
Operating System	Microsoft Windows 2000 Pro (SP4 or XP Professional (SP2	Microsoft Windows XP Professional SP2 with Internet Explorer 6.0
Anti-Virus Protection	Current version of commercially available virus protection	Current version of commercially available virus protection
Comm. Ports	1 Parallel, 1 Serial, 1 USB	1 Parallel, 1 Serial, 1 or more USB

Important: For the latest GM minimum PC specifications visit <http://www.gmde.net/standards.cfm>

Genisys Training

Use the Genisys itself, DVD, or our trainers.

Protect your investment by getting the most out of your scan tool. Genisys has a number of built-in training and demo features, and OTC provides additional training on an DVD, and through personal trainers.

The more you learn about the capabilities of Genisys, the better you will become at servicing your customers' vehicles, and that's good for the bottom line.

- **Quick-Start Tutorial**—Built into the Genisys, to get a new user working within minutes of turning on the scan tool, is a slide show that runs automatically, or you can control it similar to operating a VCR.
- **Demonstration Mode**—Exclusive to Genisys, the Demo Mode allows you to select ANY vehicle contained in the embedded software and review specific test functions. Great for practice while reviewing the manual or training DVD. Good for previewing specific diagnostic tests before a customer's vehicle arrives at your shop.
- **On-site Personal Training**—For a nominal charge, OTC offers personal instruction at your shop by a qualified Genisys trainer. (Get up to four hours of personal training FREE with purchase of Genisys Master Kit No. 3681, or 3421-28 training purchase, U.S. only.)



ELECTRONIC DIAGNOSTICS

Genisys Software Kits

Genisys Super Bundle Productivity Kit

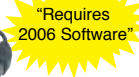
This powerful kit maximizes technician productivity with the three most popular Genisys options — OBD II Smart Cable, USA 2006 Domestic software, and USA 2006 Asian software. Each software application includes the new Automated System Test feature.

No. 3421-90 – Genisys super bundle productivity kit.

IMPORTANT NOTE: System 2.0 required to install; see No. 3421-84.



No. 3421-88 – The new OBD II Smart Cable is essentially “plug and play.”



System 2.0 Starter Kit

Kit includes the System 2.0 software, a high-speed compact flash “super card”, NGIS CD, card reader, and compact flash cover for your scan tool.

No. 3421-84 – System 2.0 starter kit.

IMPORTANT NOTE: This kit is required to install applications for Domestic '06, Asian '06, European '05, HD Standard, and InfoTech 2006.



USA 2006 Domestic Software Update Kit

This OBD II Smart Cable compatible update kit includes expanded vehicle coverage, Pathfinder troubleshooting with Repair-Trac, Fast Fixes, Automated System Test, Smart Card, manual, ConnecTech Reader, and the NGIS Windows-based program CD for downloading software updates.

No. 3421-82 – USA 2006 Domestic software update kit.

IMPORTANT NOTE: System 2.0 required to install; see No. 3421-84.



InfoTech 2006 Driveability and Component Test Diagnostic Software

InfoTech 2006 software is available for all Genisys scan tools! No Genisys Scope is required.

- Genisys without Scope – InfoTech 2006 is available from the Repair Information menu and operates as a stand-alone electronic database. InfoTech data is also integrated into the new Automated System Test analysis. Have a scope already? No problem, now add repair info!
- Genisys with Scope – InfoTech 2006 not only provides the powerful repair information, but also sets up the Genisys scope for you!

The kit includes InfoTech 2006 Smart Card, manual, and the NGIS Windows-based program CD for downloading software updates.

No. 3421-83 – InfoTech 2006 software update kit.

IMPORTANT NOTE: System 2.0 required to install; see No. 3421-84.



USA 2006 Asian Software Update Kit

This OBD II Smart Cable compatible update kit is for Genisys owners who already have the Asian Import 2000 or 2003 starter kits and want to update software coverage to 2006. Asian 2006 includes the new Automated System Test feature. Kit includes the NGIS software CD, manual, and Smart Card.

No. 3421-85 – USA 2006 Asian software update kit.

IMPORTANT NOTE: System 2.0 required to install; see No. 3421-84.



USA 2006 Asian Software Starter Kit

This OBD II Smart Cable compatible starter kit is for Genisys owners who want to add coverage for Asian OBD I and OBD II software and cables through 2006. Asian 2006 includes the new Automated System Test feature.

Kit includes the NGIS software CD, Asian 2006 Smart Card, Asian specific OBD I vehicle cables, and manual. What you need to start servicing Asian vehicles.

No. 3421-86 – USA 2006 Asian software starter kit.

IMPORTANT NOTE: System 2.0 required to install; see No. 3421-84.



USA Asian Cable Kit (cables only)

This cable kit is for Genisys owners who have the USA 2006 Asian software, but need the Asian-specific OBD I vehicle cables.

No. 3421-87 – USA Asian cable kit (cables only).



Genisys Heavy-Duty Starter Kit

Genisys Heavy-Duty Standard software includes J1587/1708 and J1939 CAN communications.

Kit includes 9-pin Deutsch cable, 6-pin Deutsch cable, heavy-duty System Smart Insert, Smart Card, and PC software CD.

No. 3421-79 – Genisys heavy-duty starter kit.

IMPORTANT NOTE: System 2.0 required to install; see No. 3421-84.



USA 2005 European Software Update Kit

This kit is for Genisys owners who already have European 2003 and want to update coverage to 2005. Kit includes European Smart Card, manual, and CD. (The new BMW cable and Mercedes 38-pin SSI must be purchased separately, see kit No. 3421-77.)



No. 3421-73 – USA 2003 European software update kit.

Note: Requires System 2.0. Smart Cable 3421-88 is required for BMW application coverage.

USA 2005 European Starter Kit

Get European coverage in a single kit! This starter kit allows you to service select European manufacturers: Audi, BMW, Mercedes-Benz, Volvo, Volkswagen, and more. Kit includes software CD, Smart Card, Mercedes 38-pin cable, Mercedes 1-pin cable, Mercedes 38-pin SSI, BMW cable, and Volkswagen/Audi cable.



No. 3421-74 – USA 2005 European starter kit with cables.

Note: Requires System 2.0. Smart Cable 3421-88 is required for BMW application coverage.

USA European Cable Kit

"For users that have European 2005 software and no European OBD I cables." Kit includes Mercedes 38-pin cable, Mercedes 1-pin cable, Mercedes 38-pin SSI, BMW cable, and Volkswagen/Audi cable.



No. 3421-75 – USA European cable kit.

Note: Smart Cable 3421-88 is required for application coverage.

USA European Cable Update Kit

These cables are for Genisys owners who already have European 2003 cables and want to update cables to 2005. Kit includes Mercedes 38-pin SSI and BMW cable.



No. 3421-77 – USA European cable update kit.

Note: Smart Cable 3421-88 is required for application coverage.

Genisys DVD Training

Customized training – This full length video program is based solely on the Genisys.

Enhanced training – Takes you beyond the basics of the Genisys.

Train at your own pace – The TEAM AVI training format using chaptered DVDs allows you to start and stop.

Step-by-step instructions – On using the most powerful diagnostic functions.

How to use – Graphing, recording, and record playback for those "intermittent" problems.



USA 2004 ABS/Air Bag Software Starter Kit

Expanded coverage for domestic, USA European, and USA Asian through 2004 model year. This is the kit you need if you are a Genisys owner wanting to add data stream, bi-directional testing, fault codes, Pathfinder troubleshooting, and ABS-specific cables.



Kit includes four System Smart Inserts, ABS-specific cables, software CD, Smart Card, and manual.

No. 3421-48 – USA 2004 ABS/Air Bag software starter kit.

No. 3421-47 – USA 2004 ABS/Air Bag update kit (software only).

No. 3421-54 – USA ABS/Air Bag cable kit. Includes four System Smart Inserts, ABS-specific cables.



ConnecTech™ PC Software Kit

Use your PC for more diagnostic functionality!

No. 3421-36 – Genisys ConnecTech PC software kit. Includes ConnecTech software CD, Smart Card, and 20' cable to PC.



Forget the Cables... Go Wireless with Genisys PC Wireless Kit!

Coverage range up to 1,750 ft./533 m, depending upon multiple variables.

No. 3421-37 – Genisys ConnecTech PC wireless kit. Includes ConnecTech software CD, Smart Card, wireless LAN PC card, and USB wireless access point.



No. 3421-38 – Genisys to PC wireless kit. Includes wireless LAN PC card and USB wireless access point.



IMPORTANT NOTE: System 2.0 required to install; see No. 3421-84.

In-depth training – Goes beyond button pushing to showcase such important features as Pathfinder troubleshooting, graphing, and more.

Ease of use – Questions on the Genisys are covered in the training and can be reviewed quickly, even in the shop.

No. 3615 – Genisys DVD Training. Contains two full-length DVDs and an illustrated manual for shop use. Training is based on System 2.0 and 2005 software.



ELECTRONIC DIAGNOSTICS

Genisys Tester Kits



Important: see page 9 for GM SPS minimum PC specifications.

Note: GM will be moving to a new Web based Software Delivery Process in the near future. This will replace DVD's.

Genisys GM All Modules Reprogramming Starter Kit

This kit provides the ability to reprogram all reprogrammable modules on 1993 to 2005 General Motors vehicles. Includes the authentic GM application and data DVD's (for Windows), PC hardware security lock, Smart Card, System Smart Insert, manuals, and a 12-month subscription to updates of GM AC Delco application and data DVD's.

No. 3421-46 – Genisys GM all modules reprogramming starter kit. IMPORTANT NOTE: USA 2006 Domestic required; see No. 3421-82.



Genisys Scope Module with InfoTech 2006 Driveability Software Kit

Includes the Genisys 4-channel lab scope module with four DMM leads, ground lead, kV conventional ignition lead, GM HEI ignition adapter, ignition sync lead, manual, InfoTech 2006 repair information software Smart Card, and carrying case.

No. 3688 – Genisys scope with InfoTech 2006 software kit. IMPORTANT NOTE: Must be used with System 2.0; see No. 3421-84.



Genisys Performance 5-Gas Module

The Genisys emissions repair solution. Kit includes the plug-in Performance 5-Gas Analyzer Module, hose, probe, Gas M-P software, regulator, filters, manual, and carrying case.

No. 3780 – Genisys Performance 5-gas Module. IMPORTANT NOTE: System 2.0 required to install; see No. 3421-84.



Genisys Exchange Kit with System 2.0

Trade in your old Genisys for one with all the newest features and a 3-Year Warranty. This exchange kit includes a BRAND NEW Genisys scan tool, OBD II Smart Cable, carrying case, CD, manual, and return mailer. System 2.0, USA 2006 Domestic with Pathfinder, USA 2006 Asian with Pathfinder and USA 2004 ABS/Air Bag are pre-loaded. For those who already own a Gas Module and GM Reprogramming, Smart Cards are included.

No. 3687 – Genisys exchange kit with System 2.0. NOTE: When you return your used Genisys tool to the factory, FREE InfoTech 2006 and ConnecTech PC software kits with Smart Cards will be shipped to you. (Allow 6 to 8 weeks for delivery.)



Genisys Heavy-Duty Standard Deluxe Kit

Includes Genisys scan tool, OBD II Smart Cable, Automated System Test, Heavy-Duty Standard software, USA 2006 Domestic with Pathfinder, Repair-Trac, Fast Fixes, USA 2006 Asian, InfoTech 2006, USA 2004 ABS/Air Bag software, manuals, adapters, and domestic OBD I vehicle cables (for GM, Ford, Chrysler, Jeep, Saturn), and carrying case.

No. 3669HD – Genisys Heavy-Duty Standard deluxe kit. (USA Asian OBD I cables not included; see Kit No. 3421-87.) (USA ABS/Air Bag cables not included; see Kit No. 3421-54.)

Genisys USA 2006 Deluxe Kit

Includes Genisys scan tool, OBD II Smart Cable, Automated System Test, USA 2006 Domestic software with Pathfinder, Repair-Trac, Fast Fixes, USA 2006 Asian, USA 2004 ABS/Air Bag software, InfoTech 2006 software, manuals, adapters, domestic OBD I vehicle cables (for GM, Ford, Chrysler, Jeep, Saturn), Smart Cards, and carrying case.

No. 3669 – Genisys USA 2006 deluxe kit.

(USA Asian OBD I cables not included; see Kit No. 3421-87.)

(USA ABS/Air Bag cables not included; see Kit No. 3421-54.)



3669

Genisys USA 2006 Deluxe Kit with ABS/Air Bag-Specific Cables

Includes Genisys scan tool, OBD II Smart Cable, Automated System Test, USA 2006 Domestic software with Pathfinder, Repair-Trac, Fast Fixes, USA 2004 ABS/Air Bag software and vehicle-specific cables, USA 2006 Asian software, InfoTech 2006 software, manuals, adapters, domestic OBD I vehicle cables (for GM, Ford, Chrysler, Jeep, Saturn), Smart Cards, and carrying case.

No. 3670 – Genisys USA 2006 deluxe kit with ABS/air bag-specific cables.

(USA Asian OBD I cables not included; see Kit No. 3421-87.)



3670

Genisys USA 2006 Domestic Scan and Scope with InfoTech 2006 Software Kit

Includes Genisys scan tool, OBD II Smart Cable, Automated System Test, USA 2006 Domestic software with Pathfinder, Repair-Trac, Fast Fixes, USA 2006 Asian software, InfoTech 2006 software, USA 2004 ABS/Air Bag software, manuals, adapters, domestic OBD I vehicle cables (for GM, Ford, Chrysler, Jeep, Saturn), 4-channel lab scope module with 4 DMM leads, ground lead, kV conventional ignition lead, GM HEI ignition adapter, ignition sync lead, manuals, Smart Cards, and carrying case.

No. 3671 – Genisys USA 2006 Domestic scan and scope with InfoTech 2006 software kit.

(USA Asian OBD I cables not included; see Kit No. 3421-87.)

(USA ABS/Air Bag cables not included; see Kit No. 3421-54.)



3671

Genisys USA 2006 Domestic Scan, Gas, and Scope with InfoTech 2006 Software

Includes Genisys scan tool, OBD II Smart Cable, Automated System Test, USA 2006 Domestic software with Pathfinder, Repair-Trac, Fast Fixes, USA 2006 Asian software, InfoTech 2006 software, USA 2004 ABS/Air Bag software, manuals, adapters, domestic OBD I vehicle cables (for GM, Ford, Chrysler, Jeep, Saturn), 4-channel lab scope module with 4 DMM leads, ground lead, kV conventional ignition lead, GM HEI ignition adapter, ignition sync lead, manual, Smart Cards, Performance 5-Gas Analyzer Module with hose, probe, Gas M-P software, filters, and carrying case.

No. 3681 – Genisys USA 2006 Domestic scan, gas, and scope with InfoTech 2006 software.

(USA Asian OBD I cables not included; see Kit No. 3421-87.)

(USA ABS/Air Bag cables not included; see Kit No. 3421-54.)



INCLUDES 4 HOURS OF FREE ON-SITE TRAINING, U.S. ONLY

3681

ELECTRONIC DIAGNOSTICS

Nemisys™ Scan Tool



Nemisys™ Scan Tool

Nemisys™ is an automotive scan tool designed in the new millennium and powered by OTC Genisys™ technology. Nemisys covers early OBD I systems and all OBD II protocols, including the newly released Controller Area Network (CAN) protocol. CAN protocol was introduced in 2003 model year vehicles and is the mandated protocol in all new vehicles by 2008.

Many Powerful Features

- 320 X 240 Monochrome Graphic Display
- Data Graphing
- USA Domestic OBD I & OBD II coverage (1984 thru 2006)
- Global OBD II Asian & European coverage (1996 thru 2006)
- Domestic Enhanced Data & DTCs
 - Engine, Transmission, ABS, Air Bag
- CAN Enabled—no adapters to buy
- OBD II Mode 6
- Domestic Repair Information
 - Typical Sensor / Data Specs
- Record / Playback
- ScanMate Lite PC Software
 - File Storage, File Playback, File Print
- Vehicle Protocols: CAN, J1850 VPM, J1850 PWM, ISO 9141, Keyword 2000, UART, SCP, SCI, CCD, and more.



ScanMate
PC Software

2006 Vehicle Coverage

GM '84–2006 Ford '84–2006 Chrysler '88–2006
Jeep '91–2006 Saturn '91–2006.
Asian '96–2006 (Global OBD II).
European '96–2006 (Global OBD II).

Improved ScanMate PC Software

Upload recordings, play back recordings, print reports, export captured data in spreadsheet format, get Internet updates, email and share data recordings, view data in line graph, bar graph, meter, digital, or superimposed format.

Nemisys USA 2006 Domestic Scan Kit

Includes Nemisys scan tool loaded with 2006 Domestic software; OBD II cable; Ford, GM, Chrysler OBD I cables; ScanMate Lite PC software; scan tool to PC cable; 12-volt power cable; Quick Start Guide included with CD-based manuals in Spanish, French, English; and a professional carrying case.

No. 3797 – Nemisys USA 2006 Domestic scan kit.

No. 3774-11 – Nemisys USA 2006 Domestic update kit ('84-'06).

No. 3774-12 – Nemisys USA 2006 Asian update kit includes '96-2006 software with enhanced data on Toyota, Honda, Nissan, Mitsubishi, and Mazda.

No. 3774-13 – Nemisys USA 2006 combination update kit. Includes USA 2006 Domestic update ('84-'06) and USA 2006 Asian update ('96-'06).

Nemisys Cables

No. 3774-01 – DB25 to OBD II cable.

No. 3774-02 – DB25 to GM OBD I cable.

No. 3774-03 – DB25 to Ford OBD I cable.

No. 3774-04 – DB25 to Chrysler OBD I cable.

No. 3774-05 – Cigarette plug power cord.

3797



3774-12



3774-11



3774-13

ABS Reader II

The latest technology for servicing ABS and air bag systems. The new Genisys-based tool is loaded with Genisys ABS/Air Bag and Global OBD II software. The ABS software also includes system codes and data from Domestic and Asian 2005.

The ABS Reader II features:

- Graphic display
- Fast data retrieval
- Enhanced data and recording functions
- ScanMate ABS PC software for uploading recorded files, storage, and printing
- Internet/memory card update capability
- Protective rubber over-mold and 3-year warranty

ABS/Air Bag Software features and coverage:

- Diagnose ABS pattern failures with Repair-Trac™ Tech-Tips
- Expanded ABS Pathfinder™ troubleshooting
- Tests through 2004 for GM, Chrysler, and Jeep
 - Chrysler/Jeep: many systems added, including rear wheel ABS and brake bleed for some systems
 - GM: bi-directional tests updated
- Expanded Ford coverage through 2005
- Volvo coverage from 1993 through 2004
- Volkswagen supported from 1990 through 2004
- Audi supported from 1992 through 2003
- Asian ABS and air bag coverage: Toyota, Lexus, Honda, Acura, Mazda, Mitsubishi, Nissan, Infiniti, Isuzu
 - Toyota/Lexus ABS special tests added
 - Honda ABS data added
- Powerful scan functions
 - Read and erase fault codes on ABS and air bag systems
 - Provide accurate definitions of fault codes
 - Display data stream information on most vehicle systems
- Over 900 new advanced diagnostic bi-directional functions on Delco, Bosch, and Teves
 - GM “motor rehome”
 - Manual and hydraulic control
 - Gear tension relief
 - Enable relays
 - Brake bleeding tests
 - Voltage and lamp test
 - Solenoid test

ABS Reader II 2005 Kit

Kit includes: ABS Reader II tool; System Smart Inserts; cables and adapters necessary to support Domestic, Asian and European coverage; ScanMate ABS PC software; operations manual, and carrying case.

No. 3416 – ABS Reader II 2005 Kit.

ABS Reader II 2005 Exchange Kit

This exchange kit is intended for owners of the No. 3762 ABS Reader. It includes: ABS Reader II tool; System Smart Inserts; cables and adapters necessary to support Domestic, Asian and European coverage; ScanMate ABS PC software, and operations manual. Note: Owners will use existing No. 3762 case and some existing cables.

No. 3416-01 – ABS Reader II 2005 Exchange Kit

(Owners of the No. 3761 who did not update with the No. 3763 ABS 2002 kit will require additional cable purchases.)



ELECTRONIC DIAGNOSTICS

OTC ScanPro™



OTC OBD I and OBD II ScanPro™

OTC ScanPro is an ergonomically designed, full function OBD I and OBD II scan tool that provides enhanced powertrain coverage for GM, Ford, and Chrysler. All compliant manufacturers 1996 to 2006 are covered with Global OBD II including CAN-based vehicles.

Features:

- OBD II enhanced functionality - displays enhanced vehicle data from vehicle computer for 1996 and newer vehicles
- Graph data – 1996 and newer only (OBD II)
- Multilingual menu options - English, French, Spanish
- Read, record & playback live sensor data
- OBD I functionality – cables included for '84-'95 Ford, '84-'95 GM and '89-'95 Chrysler vehicles
- USB cable included for product updates
- Updateable via the internet

Other Features:

- PC compatible with ability to print
- State OBD II check (emissions)
- Battery powered for review of data off vehicle
- OBD II code library built into tool
- Vehicle information (includes VIN number and calibration IDs)
- O2 monitor test
- Diagnostic monitor test
- Large, graphic backlit LCD
- Optional cables available: 3498-11 Chrysler LH cable 3498-10 Ford MECS cable

NEW FEATURES!

- Supports OBD I & OBD II enhanced functionality for GM, Ford & Chrysler
- Honda OEM enhanced DTC's for OBD II
- Enhanced data stream

Scanning Suite C.D.

- Browse Manuals
- Update Tool
- Print Companion
- DTC Look-up

OTC ScanPro®

Includes CD with the new Scanning Suite software, manual, padded nylon storage case, 6 AAA batteries, USB cable, with vehicle cables to support OBD II, Ford OBD I MCU/EEC-IV, Chrysler OBD I SCI, and GM OBD I ALDL.

No. 3499 – OTC ScanPro®.



3499

OTC OBD I and OBD II Code Scanner®

OTC Code Scanner is an ergonomically designed multi-function code scanner that retrieves GM, Ford and Chrysler OBD I and all generic OBD II diagnostic trouble codes for all 1996 to 2006 foreign and domestic OBD II compliant vehicles as well as display selected enhanced codes for GM, Ford, Chrysler and Toyota and certain manufacturer's specific codes for Asian and European vehicles.

Functions:

- Read hard and pending codes and their definitions
- Erase codes and reset MIL
- View freeze frame data
- PC upload and printing capability
- Off vehicle data review

Features:

- OBD I functionality – cables included for '84-'95 Ford, '84-'95 GM and '89-'95 Chrysler vehicles
- Functions on all 1996 to current OBD II compliant vehicles
- CAN capability
- Internal library of trouble code definitions
- Fully upgradeable to support future vehicles and tool enhancements via flash programming
- Easy to use, menu driven software
- Large, 128 x 64 backlit graphic display with adjustable contrast
- Displays codes and descriptions on the same screen
- Padded ballistic nylon storage case
- Detachable cable
- 3-year warranty

NEW FEATURES!

- Supports OBD I & OBD II enhanced functionality for GM, Ford & Chrysler
- Honda OEM enhanced DTC's for OBD II
- Scanning Suite C.D.
 - Browse Manuals
 - Update Tool
 - Print Companion
 - DTC Look-up

OTC Code Scanner®

Includes CD with the new Scanning Suite software, manual, padded nylon storage case, 6 AAA batteries, USB cable, with vehicle cables to support OBD II, Ford OBD I MCU/EEC-IV, Chrysler OBD I SCI, and GM OBD I ALDL.

No. 3498 – OTC Code Scanner®.



3498

ELECTRONIC DIAGNOSTICS

OTC AutoCode™ & OTC Ready Scan™



3494

P0305
Cylinder5 Misfire

The Tool Features provides trouble code data telling you why the "Check Engine" light is on.

5 Codes
Erase Codes? (Y/N)

Erases trouble code turning off the "Check Engine" light.

Fuel Sys
READY

Helps you determine if you will pass emission test by reading I/M monitors (can display 11 different I/M monitor codes).

OTC AutoCode™

OTC AutoCode™ can easily retrieve diagnostic trouble codes (DTCs) from your vehicle's computer, leading you to the problem area. Use on all OBD II and CAN compliant cars and light trucks sold in the U.S. from 1996 to current.

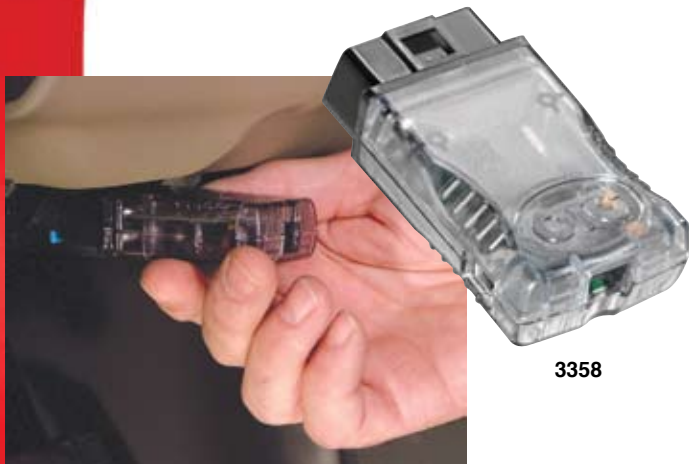
Features and Benefits

- Compatible with all 1996 and newer vehicles (including the new CAN protocol)
- Provides trouble code data telling you why the "Check Engine Light" is on
- Erases trouble code turning off the "Check Engine Light"
- View freeze frame data
- Code look up through internal library of definitions
- No vehicle manual required, trouble code data displayed on screen
- Provides pending code data notifying you of potential problems
- Helps you determine if you will pass emission test by reading I/M monitors
- Hot keys for quick read and erase DTC
- Large, menu-driven, easy to read LCD display
- Field upgradable

OTC AutoCode™

Includes CD with DTC Look-up software, Attached 8' OBD II cable and a blow-molded storage case.

No. 3494 – OTC AutoCode™



3358

OTC Ready Scan™ Readiness Monitor Tool

A drive cycle is required after any emissions related repair. The 3358 OTC Ready Scan eliminates drive cycle guesswork by notifying any driver, or your customer, with color coded LEDs and built in speaker that the drive cycle has been completed and the vehicle is Ready.

Once the vehicle's OBD II system is Ready, repair work is confirmed. If a state emission inspection is required, a retest can then be performed. The compact tool works on 1996 and newer OBD II and CAN compliant vehicles.

Features and Benefits:

- Easy to install and no set up required—Connects easily into the vehicle's OBD II connector and is able to display status in 15 seconds.
- Bright color coded LED's provide Readiness Status. Green LED- Vehicle is Ready.
- Built in speaker provides audible tone every 5 minutes when vehicle becomes Ready.
- Ready Scan is powered from the vehicle—no batteries required.
- Rugged Poly carbonate housing has molded grips and OTC logo.
- 1-year warranty.
- Assembled in USA.

No. 3358 – OTC Ready Scan™ Readiness Monitor Tool.

Ready Scan provides these added benefits:

- Designed to increase productivity, you no longer need to tie up expensive technician time or scan tools to perform a drive cycle.
- Ready Scan safely alerts a driver or your customer when it is time to return the vehicle to the shop. Ready Scan eliminates drive cycle guesswork and increases customer satisfaction by confirming readiness status.
- Updateable. Future update capability allows Ready Scan to be configured to specific readiness criteria.

ELECTRONIC DIAGNOSTICS

OTC Family Scan Tool Comparison Chart

OTC Scan Tool Family Comparison Chart



	AutoCode™ 3494	Code Scanner® 3498	ScanPro™ 3499	Nemisys 3797	Genisys Works Kit
Scan Functionality					
CAN Enabled Tool (no adapters to buy)	■	■	■	■	■
Global OBD II (Dom., Asian, Euro.)	■	■	■	■	■
OBD II Generic DTCs	■	■	■	■	■
DTC Definitions	■	■	■	■	■
Flash Upgradeable	■	■	■	■	■
State OBD Check	■	■	■	■	■
Manufacturer Specific DTCs	■	■	■	■	■
Manufacturer Enhanced DTCs		■	■	■	■
Generic Data Stream			■	■	■
Graph Data Stream			Single Data Item	■	■
Enhanced Data Stream			■	■	■
Domestic OBD II Enhanced			■	■	■
Domestic OBD I		■ (DTC only)	■	■	■
Domestic Non-Engine Coverage		(Trans)		(ABS, Airbag, Trans)	■
Asian OBD II Enhanced		Toy/Honda DTC's	Toy/Honda DTC's	Optional	■
Asian OBD I					■
Asian Non-Engine Coverage				Optional	■
European OBD II Enhanced					■
European OBD I					■
European Non-Engine Coverage					■
PC Software	DTC Lookup	Scanning Suite	Scanning Suite	ScanMate	ConnecTech
Vehicle Repair Information					
Pathfinder Troubleshooting Diagnostics				Domestic Sensor Data	■
Repair-Trac® VIN Specific Tech Tips					■
Fast Fixes® VIN Specific Most Likely/ Overlooked Causes					■
InfoTech® Component Test S/W					■
Options					
GM All Models Reprogramming					■
WiFi Wireless					■
4-Channel Scope					■
5-Gas Analyzer					■
Hardware					
Graphic LCD	■	■	■	■	■
Detachable Cable		■	■	■	■
Battery Power	■	■	■	■	■

ELECTRONIC DIAGNOSTICS

Tech 2 Flash with GM Authentic Software



3625-20

Authentic GM software puts you in the driver's seat to fix GM vehicles right the first time.

- Graphic screen displays both test and graphics, and is capable of showing nine sensors at once.
- Snapshot graphing shows you any failures or glitches at a glance.
- Supports on-board diagnostics for all GM systems 1992–2007.
- The authentic GM software will provide full bi-directional control when performing powertrain, chassis, and body diagnostics.

GM's Service Programming System merges your Tech 2 Flash, a required PC*, and GM's SPS CD-ROM, and lets you reprogram controllers on '93 and newer GM/reprogrammable controllers.

CANdi Module

Includes the CAN diagnostic interface module and instruction sheet. **IMPORTANT:** For the CANdi module to work, you must have a 32 MB PCMCIA card with at least software version 24.001 in your Tech 2 Flash.

No. 3625-20 – CANdi module. Wt., 1 lb. 4 oz.

Tech 2 Flash Basic Kit

Includes the OTC Tech 2 Flash, vehicle power cables, vehicle adapters, and 32 MB '92–'07 GM PC diagnostic card. Packed in a heavy-duty storage case.

No. 3628 – Tech 2 Flash basic kit. Wt., 17 lbs. 4 oz.

Note: Candi module is not included with this kit.

Tech 2 Flash Deluxe Kit

Includes the OTC Tech 2 Flash, vehicle power cables, CANdi module, vehicle adapters, and 32 MB '92–'07 GM PC diagnostic card. Packed in a heavy-duty storage case.

No. 3646 – Tech 2 Flash deluxe kit. Wt., 17 lbs. 4 oz.

GM ACDelco TIS Starter Kit.*

This kit provides you with the ability to reprogram 1993-2007 GM powertrain, body, and chassis controllers. In addition, this option contains software that allows you to use your PC to update the software on your Tech 2 Flash's PCMCIA card as the updates become available. The PC-based software also gives you the ability to play back and analyze snapshots taken with your Tech 2 Flash. Kit includes a 12-month subscription to the authentic GM aftermarket ACDelco TIS software on CD-ROM disks, which will keep you updated.

No. 3625-17 – GM ACDelco TIS starter kit.* Wt., 2 lbs. 13 oz.

Authentic GM Software Update Kit

This includes a 32 MB PCMCIA memory card loaded with authentic GM software covering '92–'07. Includes a one-year subscription.

No. 3625-14 – Authentic GM software update kit. Wt., 1 lb. 2 oz.

* Your shop computer must conform to the GM SPS minimum requirements listed on page 9. For the latest GM minimum PC specifications visit [HTTP: service.gm.com](http://service.gm.com) (select techline).

Note: GM will be moving to a new Web based Software Delivery Process in the near future. This will replace DVD's.



3628



3646



3625-17













3625-14








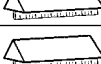
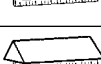
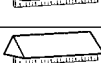
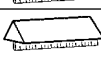


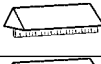


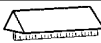

ELECTRONIC DIAGNOSTICS

Accessories and Cables







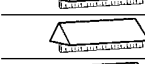





GENERAL APPLICATIONS

	Number	Description
	212541	"Y" battery connector. Used for splitting the power supply from the cigarette lighter or 12-volt power supply to the Monitor, printer, or other accessories. Wt., 4 oz.
	212636	6-ft. vehicle extension cable for Monitor 4000E or 2000 only. Wt., 5 oz.
	212638	Battery adapter for Monitor or Genisys. Used for under-hood access to 12-volt power supply. Wt., 4 oz.
	212641	12-volt power supply. Use when battery power is unavailable and you need to review data from the Monitor. Wt., 1 lb., 4 oz.
	3305-71	DB-25 extension cable to connect 25-pin Monitor and Genisys adapter cables. Wt., 13 oz.
	3305-72	DB-25 to 8-pin DIN extension cable. Use with Enhanced Monitor 4000 only, to connect 8-pin vehicle adapter cables. Wt., 12 oz.
	3421-04	AC/DC power adapter for Genisys. Wt., 1 lb. 7 oz.
	3421-08	6' PC to scan tool cable, DB-9 to RJ-45. Wt., 4 oz.
	3421-44	20' PC to scan tool cable, DB-9 to RJ-45. Wt., 8 oz.
	239180	9.6V Genisys battery. Wt., 7 oz.

















SYSTEM SMART CABLES AND INSERTS

SSI 25-Pin	Number	Description	Applications
	3421-88	OBD II Smart Cable Requires 2006 software (Genisys only) Wt., 1 lb. 2 oz.	Replaces 3305-73 cable and all system smart inserts
	3305-73	System Smart Insert OBD II 25-pin cable Wt., 13 oz.	Use with Monitor Elite, Monitor Enhanced or Genisys. Use with 25-pin SSI.
	3306-05	Chrysler System Smart Insert Wt., 2 oz.	Chrysler Neon '95-'06 Chrysler '96-'06 OEM Enhanced Kelsey-Hayes
	3306-11	GM ABS Smart Insert Wt., 2 oz.	
	3306-12	GM SPS Reprogramming Smart Insert Wt., 2 oz.	SPS and all Modules Reprogramming
	3306-13	Saturn Smart Insert Wt., 2 oz.	Saturn air bag only '04
	3306-14	Dodge/Cummins Smart Insert Wt., 2 oz.	24-valve Cummins engine and '98 and up transmissions '04
	3306-15	GM Smart Insert Wt., 2 oz.	Grand Prix ABS '98-2002
	3306-16	Mercedes-Benz Smart Insert Wt., 2 oz.	Transmission only. Use 3306-22 to access engine '04
	3306-17	Mercedes-Benz Smart Insert Wt., 2 oz.	All engine configurations and V12 right bank. '04
	3306-18	Mercedes-Benz Smart Insert Wt., 2 oz.	Transmission data access '04
	3306-19	Mercedes-Benz Smart Insert Wt., 2 oz.	V12 engine configurations. Left bank only. '04
	3306-20	Nissan Smart Insert Wt., 2 oz.	Use with 2003 & 2005 Asian Import Software '04
	3306-21	Chrysler Smart Insert Wt., 2 oz.	Chrysler OEM Enhanced '04
	3306-22	CAN/OBD II Smart Insert Wt., 2 oz.	Control Area Network plus all other OBD II protocols. '04
	3306-23	Mercedes-Benz Smart Insert Wt., 2 oz.	MB diagnostic module '04
	3306-24	Dodge Smart Insert Wt., 2 oz.	Dodge diesel SCI '04
	3306-26	Ford Smart Insert Wt., 2 oz.	Ford UBP #1 protocol systems '04
	3306-27	Ford Smart Insert Wt., 2 oz.	Mid Speed (MS) CAN protocol systems '04

SYSTEM SMART CABLES AND INSERTS

SSI 25-Pin	Number	Description	Applications
	3306-28	Saturn Smart Insert Wt., 2 oz.	Saturn ABS system
	3306-29	Volvo Smart Insert Wt., 2 oz.	Volvo system
	3306-31	GM Smart Insert Wt., 2 oz.	Single wire low speed CAN
	3306-32	Honda Smart Insert Wt., 2 oz.	OBD II Body, Chassis engine and transmission
	3306-33	Toyota Smart Insert Wt., 2 oz.	Engine
	3306-34	Toyota Smart Insert Wt., 2 oz.	Transmission
	3306-35	Toyota Smart Insert Wt., 2 oz.	ABS
	3306-36	Toyota Smart Insert Wt., 2 oz.	Traction Control
	3306-37	Toyota Smart Insert Wt., 2 oz.	Suspension
	3306-38	Toyota Smart Insert Wt., 2 oz.	Air Bag
	3306-41	Toyota Smart Insert Wt., 2 oz.	Air Conditioning
	3306-48	Heavy-Duty Smart Insert Wt., 2 oz.	J1587 / J1708 and J1939 / CAN







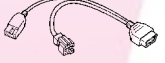

DOMESTIC APPLICATION

GM	Number	Description	Model	Year
	212550	Adapter block (gray) Wt., 3 oz.	GM 5-pin diagnostic connectors	'81-'82
	212633	GM 14" vehicle adapter cable. Wt., 3 oz.	GM most systems	'82-'95
	212653	Tuned port inj. adapter cable (gray). Wt., 4 oz.	GM 5.0L TPI GM 5.7L TPI GM 2.8L V6 P4	'86 '86-'89 '87-'88
	213486	UNIV B 12" adapter cable. Wt., 4 oz.	GM ABS Teves II and Kelsey Hayes	'88-'94
	213487	CARB/UNIV A 12" adapter cable. Wt., 4 oz.	GM 4.3L GM ABS	'80/2 '88-'95
	3305-17	Geo/Isuzu adapter cable. Wt., 6 oz.	GM Geo & Spectrum GM Isuzu and Luv	'87-'95 '81
	3305-18	UNIV 80 adapter cable. Wt., 3 oz.	GM 3.8L	'80/2
	238464	GM ABS cable. Wt., 3 oz.	GM ABS Kelsey Hayes	'90-'95
Ford	Number	Description	Model	Year
	3305-27	Ford ABS cable. Wt., 3 oz.	Ford ABS Mystique Econoline Van	'95 '94-'96
	3305-58	Ford II 14" adapter cable (gray). Wt., 6 oz.	Ford EEC IV MCU, ABS, suspension. Use with Pathfinder II or newer software.	'81-'95
	3305-84	Ford III, 25-pin, 18" cable (red) with 4' power lead. Wt., 10 oz.	Ford EEC IV DCL ABS, suspension. Use with Pathfinder III or newer software.	'83-'95
	213487	CARB/UNIV A 12" adapter cable. Wt., 4 oz.	Ford EEC II & III	'79-'83
	3305-74	Universal "C", 8-pin, 12" cable. Wt., 4 oz.	Ford/Mazda mfd. vehicles, ABS.	'93-'94
	213596	MECS 6' adapter cable. Wt., 4 oz.	Ford/Mazda mfd. vehicles.	'88-'95
	3305-14	MET adapter cable. Wt., 6 oz.	Ford/Mazda mfd. vehicles.	'91-'95
	3305-19	MECS ABS adapter cable. Wt., 2 oz.	Ford/Mazda ABS.	'89-'93

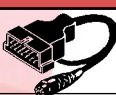










ELECTRONIC DIAGNOSTICS

Accessories and Cables

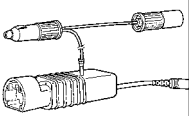
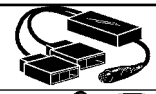



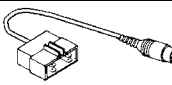
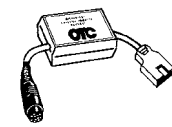
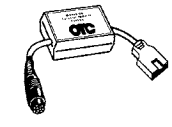
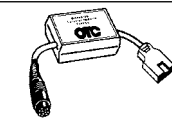
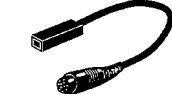

DOMESTIC APPLICATION

Chrysler	Number	Description	Model	Year
	212635	Standard 12" adapter cable. Wt., 4 oz.	Chrysler	'84-'95
	3305-65	Chrysler III 25-pin, 18" cable. Wt., 12 oz.	LH Chrysler CCD	'93-'95 '88-'95
	3305-22	Chrysler CCD 14" adapter cable. Wt., 10 oz.	Chrysler CCD with 4000E Non Enhanced only	'88-'95
	213487	CARB/UNIV A 12" adapter cable. Wt., 4 oz.	Chrysler Import/ 2/3/9-pin connector Colt Conquest TSI	Most '85-'94 '84-'86
	216094	Universal test leads. Wt., 2 oz.	Chrysler/Mitsubishi	
	3305-20	Mitsubishi/Hyundai cable. Wt., 3 oz.		Most
	3305-92	Chrysler OBD II "Y" adapter.	Use on Talon, Avenger, & Sebring	'95, 2002 Wt., 4 oz.
	3305-93	Chrysler OBD II to 6 pin adapter.	Use for accessing CCD systems at the J1962 connector.	'95, '96 Wt., 4 oz.

ASIAN APPLICATIONS

	Number	Description	Model	Year
	212633	GM 14" adapter cable Wt., 3 oz.	Isuzu Pickup (3.1L) Rodeo Trooper II	'91-'95 '91-'95 '89-'95
	213486	UNIV B cable 12" adapter cable Wt., 4 oz.	Geo/Metro Suzuki/Swift	'91-'95 '89-'95
	213487	CARB/UNIV A 12" adapter cable Wt., 4 oz.	Mitsubishi Starion Mirage Galant Cordia Tredia	'84-'86 '85-'95 '85-'95 '84-'95 '84-'95
	213487	CARB/UNIV A 12" adapter cable Wt., 4 oz.	Suzuki Swift GT Swift Geo/Metro	'90-'95 '89-'95 '89-'95
	213487	CARB/UNIV A 12" adapter cable Wt., 4 oz.	Daihatsu Charade Rocky	'89-'95 '90-'95
	213487	CARB/UNIV A 12" adapter cable Wt., 4 oz.	Chrysler Colt Conquest TSI	'84-'94 '84-'86
	3305-68	Honda/Acura Jumper Wt., 2 oz.	Honda Acura	'89-'95 '91-'95
	213596	MECS 6" adapter cable Wt., 5 oz.	Mazda	'83-'95
	3305-14	MET adapter cable Wt., 6 oz.	Mazda 323/Protege 929 Miata MX-3	'90-'95 '92-'95 '90-'95 '92-'95
	216044	Nissan 12" adapter cable Wt., 4 oz.	Nissan	'87-'95
	216094	Universal test leads Wt., 2 oz. Hyundai	Daihatsu, Mitsubishi	'89-'92 '85-'88

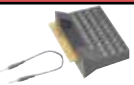




ASIAN APPLICATIONS

	Number	Description	Model	Year
	3305-13	Toyota/Lexus adapter cable. Includes auxiliary probe and power adapter. Wt., 10 oz.	Toyota/Lexus Lexus-Engine Camry-Engine Cressida-Engine Lexus MR2 Cressida Supra Camry Celica Corolla Starlet Truck 4Runner Van	'90-'93 '92-'94 '89-'92 '89-'93 '85-'91 '83-'92 '83-'91 '83-'94 '85-'91 '85-'91 '83-'84 '85-'91 '91 '90
	3305-15	Subaru adapter cable Wt., 6 oz.	Subaru SPFI MPFI (Except Justy) EFC (Justy)	'87-'93 '88-'93 '88-'90
	3305-16	Toyota adapter cable Wt., 5 oz.	Toyota Cressida Supra	'83-'84 '83-'84
	3305-17	Geo/Isuzu adapter cable Wt., 6 oz.	Isuzu I-Mark (Fuel Inj.) I-Mark (Carb.) I-Mark Impulse Pickup, Amigo (2.3 & 2.6L) Rodeo Trooper II	'88-'89 '87-'89 '85-'86 '84-'92 '88-'93 '91-'93 '89-'91
	3305-17	Geo/Isuzu adapter cable Wt., 6 oz.	GM Import Spectrum Storm Geo/Metro	'87-'89 '90-'93 '90-'93
	3305-19	MECS ABS Cable Mazda ABS Wt., 8 oz.	626/MX-6 MX-3	'92-'93 '92-'93
	3305-48	Mitsubishi/DS adapter cable Wt., 8 oz.	Mitsubishi Diamante Precis 3000GT Truck Eclipse Starion Mirage Montero Van Sigma Galant	'92-'93 '90-'93 '91-'93 '89-'93 '90-'93 '87-'89 '89-'93 '89-'93 '87-'90 '89-'91 '87-'93
	3305-48	Mitsubishi/DS adapter cable Wt., 8 oz.	Chrysler Import Stealth D50 Truck Laser Vista Talon Colt Summit Raider Conquest TSI	'91-'93 '91-'93 '91-'93 '89-'93 '90-'93 '88-'93 '89-'93 '89 '87-'89
	3305-48	Mitsubishi/DS adapter cable Wt., 8 oz.	Hyundai Sonata Scoupe Excel (MPI only)	'89-'93 '91-'92 '90-'92
	3305-124	Accord adapter cable Wt., 4 oz.	Accord	'92-'95
	3305-141	Nissan OBD I and II Wt., 4 oz.	Nissan	'89-'99


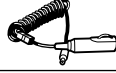





ELECTRONIC DIAGNOSTICS

Accessories and Cables


EUROPEAN

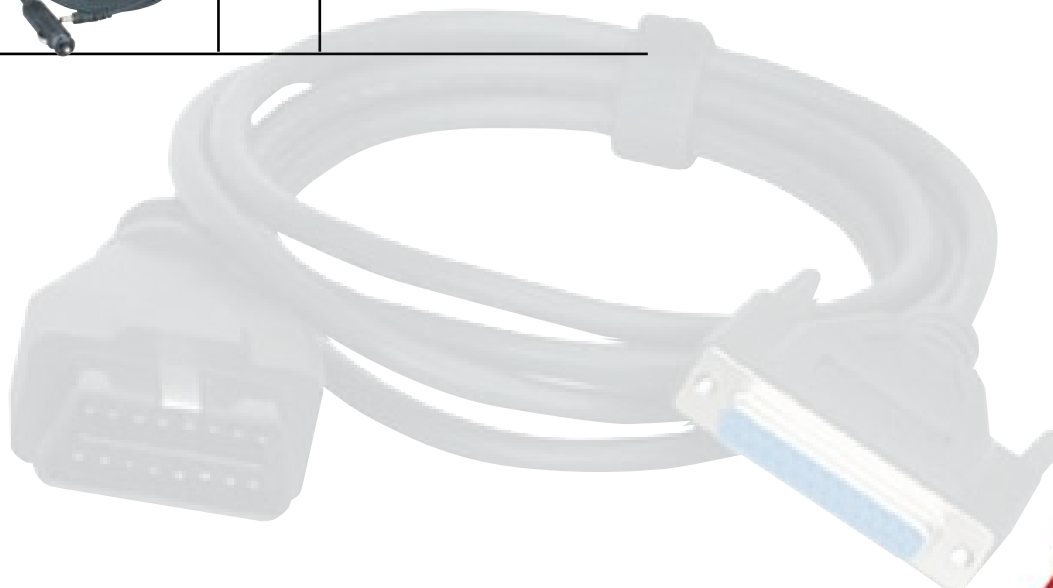
	Number	Description	Model	Year
	3306-47	38 Pin SSI Wt., 8 oz.	Mercedes	'86-'05
	3421-41	38 Pin adapter cable Wt., 8 oz.	Mercedes	'86-'05
	3421-42	1 Pin adapter cable Wt., 8 oz.	Mercedes	'86-'95
	3421-43	VW 4 pin adapter cable Wt., 8 oz.	Volkswagen	'86-'94
	3421-76	BMW adapter cable Wt., 8 oz.	BMW	'87-'05

TECH 2 FLASH

	Number	Description
	3000095	DLC cable use with Tech 2 Flash adapter, 10'. Wt., 1 lb., 8 oz.
	3000096	Cigarette lighter power cable Wt., 4 oz.
	3000097	Battery adapter power cable Wt., 10 oz.
	3000098	OBD II 16-pin DLC adapter. '95 to current OBD II. Wt., 4 oz.
	3000099	GM 12-pin NAO DLC adapter '82-'95 GM applications. Wt., 4 oz.
	3000109	DLC loopback adapter for Tech 2 Flash troubleshooting. Wt., 4 oz.
	3000113	110 volt to 12-volt converter. Wt., 1 lb., 8 oz.

Nemisys Cables

	Number	Description
	3774-01	DB25 to OBD II cable
	3774-02	DB25 to GM OBD I cable
	3774-03	DB25 to Ford OBD I cable
	3774-04	DB25 to Chrysler OBD I cable
	3774-05	Cigarette plug power cord



ELECTRONIC DIAGNOSTICS

Pro-Link® Tester Kits



3104

Pro-Link® GRAPHIQ

Heavy-duty standard kit. The heavy-duty standard application provides the functions necessary to diagnose most SAE/TMC J1708/J1587 OBD electronic control system/engine, transmission, brakes, and instruments.

Pro-Link GRAPHIQ applications

- Allison diagnostic WTEC II & III
- Bendix application
- D.D. Mercedes-Benz MBE 900/4000 engine
- Allison reprogramming
- Detroit dsl. III/IV engine
- Detroit diesel DDEC V
- Dana/Eaton RoadRanger
- Heavy-duty standard
- Mack - V-Mac III
- Meritor WABCO ABS
- ZF Meritor transmission
- Navistar NAVPAK

No. 3104 – Heavy-duty standard kit. Includes: Pro-Link® GRAPHIQ with multi-protocol cartridge, HDS software, PCMCIA card, 6-pin and 9-pin Deutsch cable, data and power cable, manual, carrying case. * Applications are sold separately.



3101-11

Multi-Protocol Cartridge (MPC)

No. 3101-11 – Multi-Protocol cartridge.

Light- and Medium-Duty Truck

No. 3101-80* – '99–2004 GM, Ford, and Chrysler cartridge, 3101-09 GM/Ford OBD II adapter, 3101-01 Chrysler OBD II adapter, and manual.

No. 3101-02 – '81–2001 GM and Ford cartridge, 3101-09 GM/Ford OBD II adapter, and manual.

* Compatible with Pro-Link GRAPHIQ only.



3101-80



Heavy-Duty MPC Software

Heavy-Duty MPC Software*

- No. 3101-61** Allison Diagnostic WTEC II & III
- No. 3101-16** Bendix Application
- No. 3101-72** D.D. Mercedes Benz MBE 900/4000 Engine
- No. 3101-65** Detroit Dsl. III/IV Engine
- No. 3101-77** Detroit Diesel DDEC V
- No. 3101-15** Dana/Eaton RoadRanger
- No. 3101-17** Heavy-Duty Standard
- No. 3101-45** Mack - V-Mac III
- No. 3101-14** Meritor WABCO ABS
- No. 3101-69** ZF Meritor Transmission
- No. 3101-63** Navistar NAVPAK
- No. 3101-79** Heavy-duty fault code manual

* No. 3101-11 Multimeter-Protocol cartridge (MPC) required.



Heavy-Duty Vehicle Cartridge

Heavy-Duty Vehicle Cartridge

- No. 3101-52** Caterpillar V 1.11
- No. 3101-46** Eaton Vorad
- No. 3101-47** Detroit Diesel I & II V 4.1
- No. 3101-70** Kelsey-Hayes ABS/ATC
- No. 3101-49** Detroit Diesel II & III V 5.2
- No. 3101-56** Navistar MRD
- No. 3101-57** Hino Injection Pump
- No. 3101-71** Navistar IPC
- No. 3101-41** Mack V-MAC I V 3.1
- No. 3101-62** Volvo VED 12 V 2.1
- No. 3101-44** Mack V-MAC II V 2.1

Brake-Link™ Hand-Held Diagnostic Trailer Brake Tool

Brake-Link™ ABS Coverage:

- Bendix EC-17, EC-30, and EC-30T (tractor and trailer).
- Meritor WABCO Easy-Stop and Enhanced Easy-Stop (trailer only).
- Wabash National MBS-1P and MBS-2.
- Eaton GEN4 and GEN5.
- Haldex PLC, PLC Plus, and PLC Select (trailer only).

No. 3106 – Brake-Link™ hand-held diagnostic trailer brake tool.

3106



ABS Power Line Carrier (PLC) Converter for Pro-Link®

- Detects the ABS warning lamp message coming from the trailer ECU.
- Tests SAE MID 10 and 11 ABS messages.
- Tests the in-dash trailer ABS warning lamp.
- Supports all tractor/trailer ABS brake controllers equipped with the Power Line Carrier (PLC) network.
- Interfaces with the trailer via J560 cable set or standard Deutsch connection for communication to the trailer or tractor.
- Utilizes SAE J2497 communication protocol.

No. 3101-04 – ABS power line carrier (PLC) converter for Pro-Link®. Includes 6" data cables, 6' DB-15 cables, J560 PLC set.



3101-04

Pro-Link and application card shown are not included.

MagiKey® PDM

The MagiKey® Parallel Port Data Module (PDM) connects your PC through a standard IEEE-1284 port to any heavy-duty truck. The MagiKey® is compatible with the latest vehicle standards, including SAE J1708/J1939. It is the primary module for heavy-duty vehicle service compatible with OEM PC applications.

No. 3102 – MagiKey® PDM

MagiKey® PDM USB Adapter for PC-to-Heavy-Duty Vehicle Connectivity

The USB port adapter converts the MagiKey® PDM parallel port connector into a USB connector.

No. 3102-05 – The complete USB connectivity kit for new users includes: Magikey PDM, USB cable, USB to PDM adapter.

No. 3102-01 – For existing NEXIQ MagiKey PDM customers includes: USB cable, USB to PDM adapter.

3102



USB Link

- Single interface box used for all RP1210A compatible OEM PC applications.
- Easy USB connectivity
- Flexible configuration supports wired or wireless connectivity via Bluetooth.
- Supports Windows 2000 and XP.
- CE compliant.

No. 3101-78 – USB link

3101-78



Heavy-duty standard Lite™ Adapter

Includes heavy-duty standard Lite Link™ adapter, 15' null modem cable*, driver installation CD and guide, RP1210A API single-use license (for use with PC or PDA applications), 6-pin Deutsch adapter.

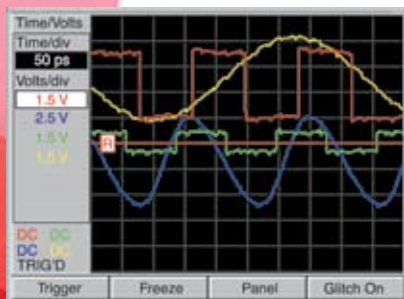
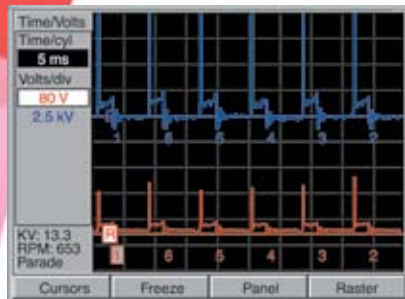
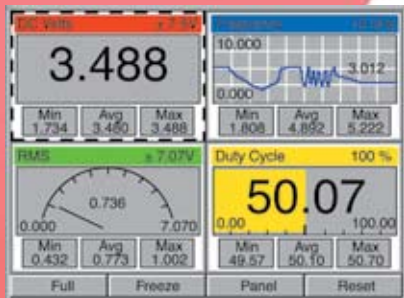
No. 3103 – Heavy-duty standard Lite Link™ adapter.

3103



ELECTRONIC DIAGNOSTICS

Solarity™ with InfoTech 2006 Software



Solarity with InfoTech Software

Solarity is a powerful 4-channel scope with the functionality required to analyze the most sophisticated vehicles. InfoTech software provides the key information to transform a driveability or component fault into a fast and accurate repair.

Solarity Scope Features and Benefits

- 4-channel full function scope.
- 4 MHz sample rate on all channels.
- Adjustable glitch capture.
- Update via Compact Flash or PC.
- Smart Card security.
- Print via standard desktop color printer.
- Custom enclosure—horizontally oriented and ergonomic.
- Sunlight readable display.
- Modular design allows for future expansion capabilities.



Ignition Scope Capabilities:

- Primary/secondary
- Coil-on-plug
- Parade
- Single cylinder
- Distributorless ignition
- Raster
- Superimposed
- Record

4-Channel High Speed Lab Scope Graphing and Digital Multimeter:

- Volts
- Frequency
- Ohms
- Duty cycle
- RPM

InfoTech 2006 Software Coverage

- Domestic, Asian, and European vehicle coverage for vehicles on the road today.
- Engine, transmission, and ABS systems covered.

InfoTech Vehicle Coverage

Feature	Domestic	Asian	European
Component Functional Tests – includes reference waveforms and display presets	1985–2006	1985–2006	1985–2006
Component Specifications	1984–2006	1984–2006	1984–2006
Component Wiring Diagrams	1993–2006	1993–2006	1993–2006
Circuit Description	1993–2006	1993–2006	1993–2006
Component Locations	1993–2006	1993–2006	1993–2006
Control Module Locations	1993–2006	1993–2006	1993–2006
Vehicle System Tests	All	All	All
Torque Specifications	1984–2004	1984–2004	–
Oil Light Reset	1984–2005	1984–2005	1985–2005
Transmission Pan ID Charts	1984–2004	–	–
Indexed Information	All	All	All
Repair-Trac Quick Fixes	All	All	All

NOTE: Red text indicates updates from InfoTech 2005.



Vehicle Specific Component Tests and Information

For each vehicle specific component, the following information is available:

- **Functional Tests** – walks user through complete test procedure.
- **Circuit Description** – gives user description about how the circuit functions.
- **Component Locations** – provides on-vehicle location of sensor.
- **Circuit Diagrams** – shows component wiring diagrams including wiring colors and names.
- **Connector Diagram** – displays connector pinout providing correct hookup to circuit.
- **Component Specifications** – lists the correct sensor operating values for specific operating conditions.
- **Reference Waveforms** – displays exactly what the user should, and should not, see when connected to circuit.

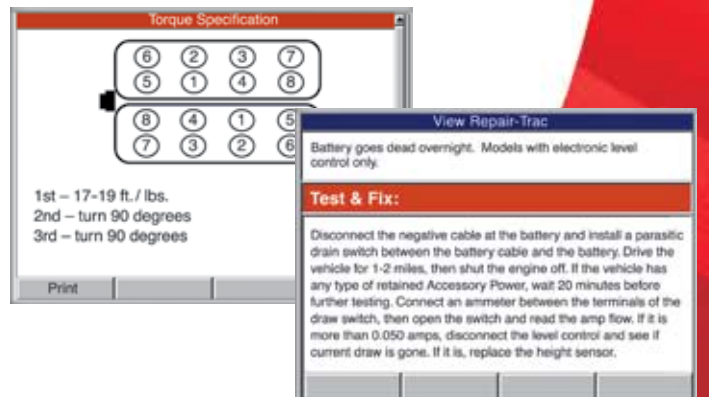
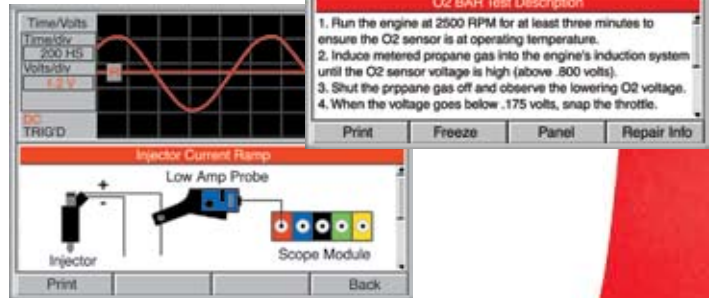
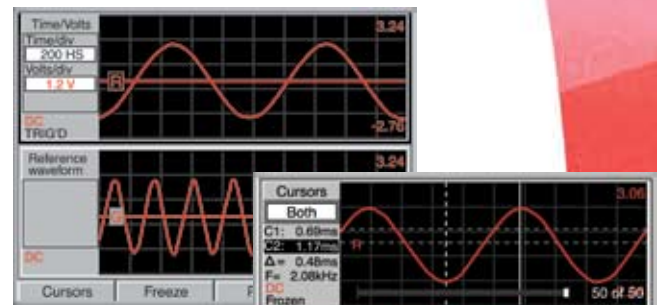
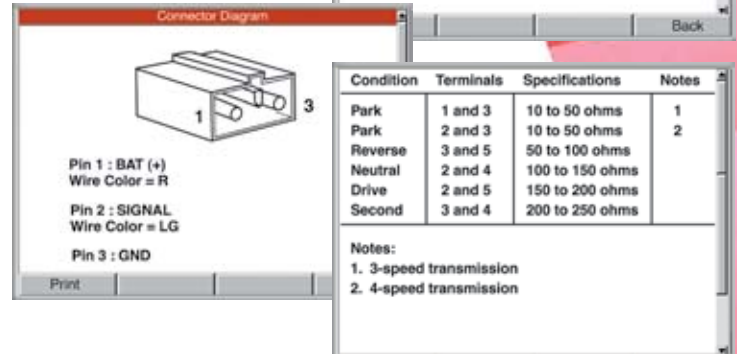
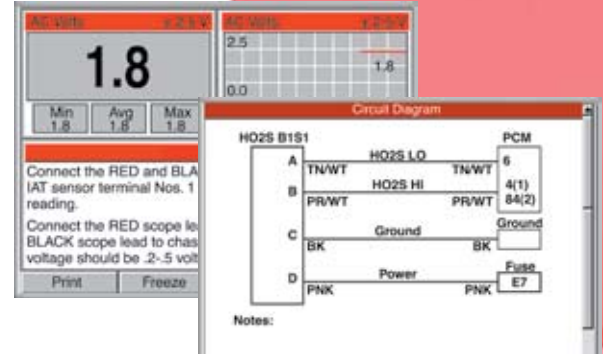
Vehicle System Tests

Complete test procedure and circuit connection diagrams are provided for key driveability systems:

- EGR system tests.
- Canister purge system.
- Fuel control including injectors, M/C solenoid, and O₂ sensor.
- Fuel delivery, including fuel pressure, fuel volume, pressure regulator, fuel pump voltage, and current.
- Charging system including alternator voltage, current, and diode.
- Starter cranking tests and voltage drop.
- Ignition system including coil, module, wires, and plugs.
- OBD system including idle controls, out-of-range, and no-signal tests.
- No-start including ignition, fuel, and compression.
- Transmission pressure, solenoid, and TCC tests.
- Back pressure.

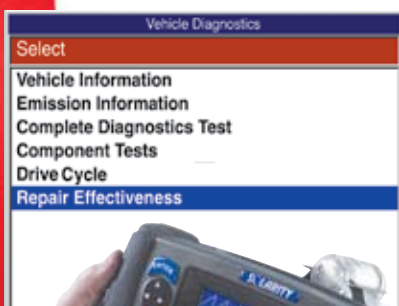
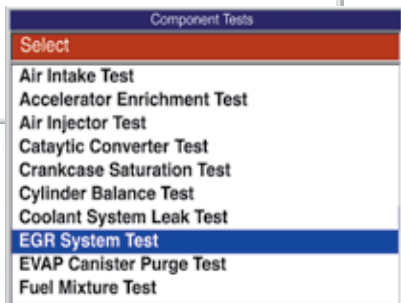
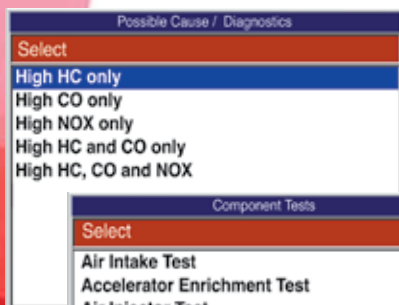
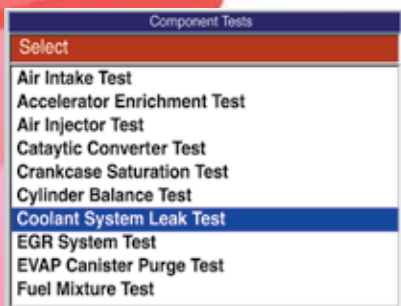
Additional InfoTech Features

- **Repair-Trac** – known fixes and fast repairs for today's high-tech vehicles.
- **Domestic Transmission Pan ID** – transmission pan identification graphics.
- **Torque Specs** – cylinder head and intake manifold torque sequence pictures, including torque and torque angle specifications.
- **Tune-up Specification** – includes fuel and ignition systems specifications.
- **Oil Light Reset Procedures** – includes the manual reset procedures for oil service lights.
- **Indexed Information** – helpful information including definitions and how-to procedures for scope and automotive terminology.



ELECTRONIC DIAGNOSTICS

Solarity Performance Gas



Solarity Performance Gas

The Solarity Performance Gas is the most advanced stand-alone gas analyzer available. The Gas M-P software features advanced diagnostics providing the ability to troubleshoot emission related or mechanical system failures. The Performance Gas module meets the latest BAR accuracy requirements, while providing automated functions to simplify use and operation.

Live Data Display

Gas M-P software offers complete 5-gas functionality with hot links directly into vehicle diagnostics.

- Vehicle entry information. Entering pertinent vehicle information provides tailored diagnostic information.
- Comparison values displayed in conjunction with live data provide typical operating range values based off current operating conditions, and quick identification of out-of-range readings.
- Adjustable limits show out-of-range data in red.
- Possible causes available directly from the live display automatically detect which readings are out of range.

Mechanical System Diagnosis

Gas M-P software, combined with the Genisys built-in diagnostic software, provides the ability to perform automated mechanical system tests such as:

- Leaking head gaskets
- Fuel system leaks
- Cylinder balance
- Restricted air intake system
- Leaking intake manifold gaskets
- Catalytic converter condition

Emission Related Diagnosis

The vehicle diagnostics menu provides the user with a complete emissions manual, plus interactive testing.

- On-board diagnostics provide possible causes of excessive emissions and describes the vehicle system that is likely to be causing the condition.
- Component tests allow for automated testing of components suspected of causing excessive emissions.
- Diagnostic tests instruct the user how to perform the test and automatically collect data throughout the procedure to provide a summary.
- Drive cycle explains the correct vehicle operating conditions to best test emission systems.
- The Repair Effectiveness feature utilizes average mass calculation and baseline/verification strategy to provide a highly accurate and repeatable test process for validating emission repairs.

Features and Functions

- Automatic water purge eliminates the need to disassemble the water trap or manually drain water.
- Fluid overload protection keeps liquids from entering the system.
- Automatic Zero mode eliminates the need to remove the sample probe from the tailpipe.
- Heavy-duty pump has extended life expectancy compared to other portable analyzers.
- Heavy-duty filtration has two-ten times longer life compared to competitive analyzers, which dramatically reduces operating costs.

Features and Functions continued

- Heavy-duty pump and filtration, along with the O₂ and NOx sensors are user serviceable.
- Meets or exceeds the following accuracy standards: BAR 97, OIML Class 0.
- Average Mass feature allows you to convert recorded data to grams-per-mile; then you can compare pre-repair to post-repair data to verify emission improvement after repairs are made.
- Software can be configured to 3-, 4-, or 5-gas.
- System configuration lets you choose reading gasses from gas, propane, methane, or variable fuel vehicles.
- Contains recommended maintenance schedule and gas analyzer status.

No. 3851 – Solarity platform with InfoTech and 5-Gas software—does not include scope or gas module.

No. 3850-02 – 12-volt power adapter, isolated ground.

No. 3850-05 – High capacity battery and high output wall changer.

Average Mass			
Comparison Report BASE-T8C			
	Baseline	Verification	Result
NOX g/mi	49.13	49.13	-0.00
CO g/mi	45.62	32.03	0.14
HC g/mi	0.10	0.10	0.00
CO2 g/mi	358.49	358.49	0.00

Overall Report Completed. Press Exit

Measurement Ranges

HC . . .	0–30,000 ppm
CO . . .	0–15 %
CO ₂ . . .	0–18 %
NOx . . .	0–5,000 ppm
O ₂ . . .	0–25 %

Solarity Performance 5-Gas

The Solarity emissions repair solution. Kit includes Solarity with plug-in 5-Gas Analyzer Module, hoses, exhaust probe, power cable and battery adapter, RS232 cable, AC power supply, Smart Card, Gas M-P software CD, filters, manual, and carrying case.

No. 3855 – Solarity performance 5-gas.



3855

Performance Gas Module Kit

Kit includes the plug-in 5-Gas Analyzer Module, hoses, exhaust probe, Smart Card, Gas M-P software CD, filters, manual, and carrying case.

No. 3780 – Performance gas module kit.

No. 3700-60 – Gas M-P software kit. Update for MicroGas module. Includes update CD, Smart Card, and manual.



3780

Performance Gas Accessories and Replacement Parts

No. 3700-25 – Calibration gas

No. 3780-01 – Filter kit (4 primary, 4 secondary)

No. 3780-02 – O₂ sensor replacement

No. 3780-03 – NOx sensor replacement

No. 3780-04 – Pump replacement

No. 3780-05 – Regulator

No. 3780-08 – Exhaust probe replacement

No. 3780-09 – Sample hose replacement

Solarity 4-Channel Scope Kit

Includes Solarity with plug-in 4-channel scope module, 4 scope/DMM leads with 5-way alligator clips, ground lead, kV ignition lead, ignition sync lead, HEI adapter, manual, InfoTech Smart Card, CD, and carrying case.

No. 3852 – Solarity 4-channel scope kit.



3852

Solarity 4-Channel Scope Master Kit

Includes Solarity with plug-in 4-channel scope module, 4 Scope/DMM leads, ground lead, kV ignition lead, ignition sync lead, HEI adapter, low amp probe 0–60A, pressure/vacuum adapter, temperature adapter, COP adapter (5 OEMs), COP adapter cable, 14-piece terminal adapters, BNC/banana adapter cable, 3 test probes, 3 back probes, manual, InfoTech Smart Card, CD, and carrying case.

No. 3852M – Solarity 4-channel scope master kit.

No. 3852MT – Includes 3850M with a 4-hour training coupon. (Note: Coupon valid in U.S.A. only.)



3852M

ELECTRONIC DIAGNOSTICS

Automotive Scope



CE-certified

3-year warranty

Automotive Scope

Features and Benefits

- 2-channel lab scope.
- A 25 MHz sample rate per channel for rapid data updates.
- True RMS GMM (Graphing Multimeter) measurements and graphs.
- A unique "Glitch Capture" feature captures, displays, and optionally saves abnormal signal patterns in the Scope mode for component testing.
- Real-time comparison between actual waveforms and reference waveforms on the same screen for component testing.
- Preset tests enable the user to check the majority of automotive sensors, actuators, and systems easily and quickly.
- Powerful built-in reference information for each preset test includes a test procedure, a normal reference signal pattern, theory of operation, and troubleshooting tips.
- The extremely powerful Help Menu lets you find answers fast.
- The secondary ignition single function displays the waveform along with the spark voltage, RPM, burn time, and burn voltage at the same time.
- USB interface supports update for code and data over the internet.
- Over-molded case technology disperses shock over more of the case than a conventional rubber boot design.

No. 3840 – Automotive scope kit. Includes red and yellow test leads, black ground lead, 3- and 5-way alligator clips, 3 test probes, 3 back probes, ignition probes, inductive pickup, lead extensions, AC adapter, update cable/software, soft carrying case, and user manual.

Replacement Accessories

No. 3840-01 – Red and yellow test leads.

No. 3840-06 – Ignition probe.

No. 3843-07 – Inductive pickup.

No. 3843-11 – User manual.



3840

Scope and Meter Accessories (Amp Clamps)

No. 3820-13 – Low-range amp probe with display – use alone or connected to scope. Long, small jaws combined with superior performance are ideal for:

- Ignition coils
- Fuel injectors • Fuel pumps • Relays • Electric motors
- Parasitic draw
- 0–60A range, measure to 90A, 100mV/A
- High accuracy, and low noise interference
- Non-intrusive AC/DC current measurement
- Resolution: 10mA
- Average responding, RMS calibrated
- Auto ranging, auto zero, data hold, low battery indicator

No. 3820-06 – Low-range amp probe.

Measures current in two ranges: 0–60 amps AC/DC

- Ignition coils • Fuel injectors • Relays • Electric motors • Parasitic draw
- Non-intrusive AC/DC current measurement

No. 3500-01A – Mid-range amp probe.

Measures current in a range of 2–600 amps AC/DC.

No. 3500-01 – Mid- and high-range amp probe.

Amp probe measures current in two ranges: 2–200 amps AC/DC and 2–2000 amps AC/DC.



3820-13



3820-06



3500-01A



3500-01

Scope and Meter Accessories (Amp Clamps)

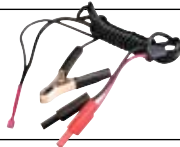
No. 3850-01 – Coil-on-plug master kit. Includes BNC style universal lead, Chrysler, Ford, Honda, Isuzu, BMW, VW, Audi, Volvo coil-on-plug adapters with No. 3421-09 universal coil-on-plug lead.



No. 3421-09 – Universal coil-on-plug lead with BNC connector. For single-cylinder testing only.



No. 3820-09 – Universal coil-on-plug lead with banana jacks. (covers 1 cylinder)



No. 3947-03 – Chrysler coil-on-plug adapter for use with No. 3421-09 or No. 3820-09 universal coil-on-plug lead.



No. 3947-04 – Ford coil-on-plug adapter for use with No. 3421-09 or No. 3820-09 universal coil-on-plug lead.



No. 3947-05 – Honda/Isuzu/BMW coil-on-plug adapter for use with No. 3421-09 or No. 3820-09 universal coil-on-plug lead.



No. 3947-06 – VW/Audi coil-on-plug adapter for use with No. 3421-09 or No. 3820-09 universal coil-on-plug lead.



No. 3947-07 – Volvo coil-on-plug adapter for use with No. 3421-09 or No. 3820-09 universal coil-on-plug lead.



No. 3500-31 – Pressure/vacuum adapter - Measure pressure from 0–500 psi (0–3, 447 kPa); vacuum from 0–30 in Hg. An optional transducer is available to measure pressure from 0–3,000 psi (0–17,237 kPa).



No. 3500-38 – High pressure transducer - Measures pressure from 0–3,000 psi (0–17,237 kPa). For use with 3500-31 adapter kit.



No. 3500-39 – Transducer 0–500 psi, vacuum 0–30 (replacement).



No. 3820-07 – Temperature adapter module provides scope and meters with temperature capabilities. Allows use of K-type temperature probes.



No. 3500-03 – Surface temp probe - Measures surface temp of hoses, engine blocks, catalytic converters, and tire temp. K-type connector.



No. 3500-04 – Air temp probe - Measures air temp when servicing HVAC systems. K-type connector.



No. 3500-05 – Bead-type temperature probe - Measures air temp when servicing HVAC systems. K-type connector.



No. 3500-06 – Immersion temp probe - Wire type measures liquid temp of coolant, oil, transmission fluid, fuel, etc. K-type connector.



No. 3820-12 – BNC to banana adapter cable. Required to use the temperature or pressure adapter with scope.



No. 3840-04 – Test probes. Three pieces: red, yellow, black.



No. 3500-15 – Jaw clip insulated mini-plunger - Plug-on adapter includes jaws that securely grip thick wire and cable; ground leads and rails eliminate interference from cable during testing.



No. 3500-17 – Large alligator clips - Plug-on red and black large alligator clips with insulated jaws.



No. 3500-26 – Ignition DAT test lead kit - Includes 5 ft. red and black leads with retractable shroud, red and black probe adapters, red and black large alligator clips with insulated jaws.



No. 3840-05 – Back probes. Three pieces: red, yellow, black.



No. 3500-28 – 5-way alligator clip - plug-on multiple-use clip includes: bed of nails, piercing tip, alligator clip, spade and square lug connectivity.



No. 3840-03 – 3-piece, 5-way alligator clip - Plug-on multiple-use clip includes: bed of nails, piercing tip, alligator clip, spade and square lug connectivity.



No. 3840-02 – Banana lead extension includes two 4 ft. leads.



No. 3500-36 – Blue lead - 5 ft. lead with retractable shroud.



No. 3500-37 – Electrical DAT test lead kit - Includes 5 ft. red and black leads with retractable shroud, red and black probe adapters.



No. 3800-25 – E-Z hook.



ELECTRONIC DIAGNOSTICS

Multimeters



3535
Function Wheel



3545 Shown

I - Not Shown

Kit Contents:

Description	3535	3545
A Red & black leads	X	X
B Red & black probes	X	X
C Red & black large alligator clips		X
D Back probes		X
E 5-way alligator		X
F Test lead extension		X
G Ignition secondary/RPM probe		X
H Blue lead		X
I Blow-molded case		X
J Manual	X	X

OTC's Digital Automotive Tester (DAT) is much more than a standard multimeter. It would take several tools to match the functions and features found in the DAT's electronic toolbox.

- Full Function Multimeter
- Fuel Injector Tester
- Battery Drain Tester
- Charging System Tester
- Sensor Tester
- Pressure Tester*
- Ground Tester
- Noid Lights

* Auto set-up on DAT, optional adapter required.

The DAT automatically sets up the test for the circuit being tested. Simply turn the dual action selector wheel, and/or press a function button to select the function desired. The DAT is ready to go, no additional set up required!

No. 3545 — Ignition DAT complete kit. All features are included: volts, ohms, amps, batt, elect, sen, fuel, and ign. See chart for kit contents.

No. 3535 — Electrical DAT kit. Features volts, ohms, amps, battery drain test, and electrical system test functions. See chart for kit contents.

Accessories exclusive to the DAT:

No. 3500-30 — Ignition secondary/RPM probe.

No. 3500-40 — Case - blow-molded.

No. 3500-41 — Manual.

No. 3500-42 — DAT replacement fuse.

No. 3500-43 — Coil-on-plug adapter.

No. 16543 — Battery.



3505

Autoranging Multimeter

This high quality, low cost multimeter has features you'd expect to find only on more expensive meters:

- Analog display with a 34 segment bar graph for checking TPS and other readings.
- Diode test for checking alternators, relays, solenoids, and A/C clutch compressor diodes.
- Continuity check for quick "Go-No Go" tests on fuses, wires, and switches.
- Inductive rpm pickup for conventional ignitions.
- Duty cycle and dwell angle for checking fuel injection, feedback carburetors, and ignitions. No conversion charts needed!
- Autoranging for volts, ohms, amps, and frequency.
- Frequency for checking MAP, MAF, and other components for output.
- 10 meg ohm impedance protects sensitive components on today's electronic systems.
- Low battery indicator.
- 3-year warranty.

No. 3505 — 100 Series autoranging multimeter set. Includes multimeter, test leads, large insulated alligator clips, inductive rpm pickup, bead type temperature probe.

No. 233870 — 10 amp fuse.

No. 233871 — 1.5 amp fuse.

Automotive DVOM

- Accurate ms-pulse width function to test on-time for fuel injectors, IAC motors, and transmission controls.
- Inductive rpm for 1–8 cylinders (2- or 4-stroke), inductive clamp included in the kit.
- Direct dwell readings and duty cycle. DC volts and mV, AC volts, ohms, continuity, frequency.
- Four step adjustable \pm trigger.
- 4-1/4" digit display. Analog bar graph, 41 segment.
- Auto ranging, automatic power off, and data hold features.

No. 3514 – Automotive DVOM. Wt.,



Pocket DVOM

- CE/UL.
- DCV, ACV, ohms, continuity/diode, micro and milli amps.
- Auto power off/low battery indicator.
- Auto ranging data hold/max hold.
- Self-contained probe storage and carry pouch.

No. 3509 – Pocket DVOM. Wt., 1 lb., 15 oz.



Comparison Chart

Test Description Multimeter	3509	3514	3505	3535	3545
Volts AC/DC	•		•	•	•
Ohms	•	•	•	•	•
Amps AC/DC	•	•	•	•	•
mA AC/DC	•	•	•	•	•
Fused amps		•	•	•	•
Diode check	•	•	•	•	•
Continuity beeper	•	•	•	•	•
RPM		•	•	•	•
4-cycle / 2-cycle		•		•	•
Duty cycle		•	•	•	•
Frequency		•	•	•	•
Temperature			•	•	•
Bar graph		•	•	•	•
Digital display	•	•	•	•	•
Low battery indicator	•	•	•	•	•
Data hold	•	•	•		
Auto power off	•	•		•	•
Direct dwell readings		•	•		•
Autorange	•	•	•	•	•
Min./Max.	•			•	•
Averaging				•	•
Delta				•	•
Logic check				•	•

Test Description Multimeter	3509	3514	3505	3535	3545
Backlighting				•	•
+/- Triggering		•		•	•
Adj. triggering level				•	•
Smoothing				•	•
Overmolded enclosure				•	•
Sleep mode				•	•
Dual display				•	•
LEDs				•	•
Adjustable logic probe				•	•
PC connectivity					•
Ground test				•	•
Charging system test				•	•
Battery drain tester				•	•
O2 sensor with signal out					•
TPS sensor with glitch					•
MAP/BP sensor (dedicated mode)					•
MAF sensor (dedicated mode)					•
Magnetic pickup (dedicated mode)					•
Noid Light (low impedance circuit)					•
Fuel injection (on-time, peak V.)					•
Pressure/vacuum (dedicated mode)					•
Ignition - peak kV/Burn Time/Spark kV					•

Terminal Test Kits



3969

Terminal Test Kit with LED Circuit Tester (Extended Adapters)

- 14-piece extended terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. External-internal versions of adapter styles.
- Computer safe circuit tester with two color LEDs indicate proper connection and probed voltage or ground source. Interchangeable probes for use with terminal test adapters for use on 6-12-24 volt systems.
- Terminal adapters have extended leads allowing for use with close pitch connectors. Also eliminates damaged connector terminals that result from testing with a standard test probe.
- Sturdy aluminum storage case with clear top.

No. 3969 – Terminal test kit with circuit tester.

No. 3969-1 – Circuit tester.



3569

Terminal Test Kit with Circuit Tester (Standard Adapters)

- 14-piece standard terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. External-internal versions of adapter styles.
- Circuit tester with bulb for 6-12-24 volt systems with interchangeable probes for use with terminal test adapters. Heavy-duty coil cord extends to 12 ft.
- Terminal adapters have flexible joints that eliminate damaged connector terminals that result from testing with a standard test probe.
- Complete kit in plastic storage case.

No. 3569 – Terminal test kit with circuit tester.

No. 3525 – Circuit tester.



3987

Terminal Test Kit (Extended Adapters)

- Excellent accessory when testing with a scope or meter.
- 32-piece extended terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. Multiple external-internal versions of adapter styles.
- Set of 4 patch cords (4 ft.) included for use on multiple terminal connectors, for use with terminal adapters.
- Terminal adapters have extended leads allowing for use with close pitch connectors. Also eliminates damaged connector terminals that result from testing with a standard test probe.
- Sturdy aluminum storage case with clear top.

No. 3987 – Terminal test kit.



3587

Terminal Test Kit (Standard Adapters)

- Excellent accessory when testing with a scope or meter.
- 32-piece standard terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. Multiple external-internal versions of adapter styles.
- Terminal adapters have flexible joints that eliminate damaged connector terminals that result from testing with a standard test probe.
- Set of 4 patch cords (4 ft.) included for use on multiple terminal connectors, for use with terminal adapters.
- Complete kit in plastic storage case.

No. 3587 – Terminal test kit.

Battery Powered Continuity Tester

Designed to test any type of non-live electrical circuit. Track down broken wires, bad grounds, and blown fuses quickly.

Features and Benefits

- Comes with AAA alkaline battery.
- Ergonomic, slim designed clear handle.
- 12', red coil cord.
- Low voltage replaceable bulb.
- Molded strain relief.
- Heavy-duty stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.

No. 3630 – Battery powered continuity tester.

3630



Heavy-duty Logic Probe Tester

Multi-functional design allows testing range of 3–26 volts. Bright red and green LEDs interpret voltage signals such as ground, power, and frequency. Tests fuel injectors, solenoids, presence of serial data, and tach reference signals. Output tests on MAF, Cam, Crank, Hall Effect VRS sensors and more. High impedance input compatible with computer circuits and sensors.

Features and Benefits

- Air bag safe.
- 12', heavy-duty, twin clip, red coil cord lead.
- Checks 6-, 12-, and 24-volt systems.
- Ergonomic, slim designed clear handle.
- Positive contact molded strain relief.
- Heavy-duty stainless steel probe with insulated shaft.

No. 3631 – Heavy-duty logic probe tester.

3631



12V–36V Truck Circuit Tester

Features and Benefits

- Works on 12–36 volt systems.
- Features 7" stainless steel probe.
- 24' coil cord.
- Extra large clamp.

No. 3642 – 12V–36V truck circuit tester.

3642



Mini-coil Cord Circuit Tester

Small handle with needlepoint stainless steel probe allows easy back probing and piercing. Special threaded probe comes with screw on alligator clip for additional versatility. Useful in testing electrical circuits and locating shorts, grounds, and open circuits.

Features and Benefits

- 12', heavy-duty, red coil, cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, high intensity/slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.

No. 3633 – Mini-coil cord circuit tester.

3633



ELECTRONIC DIAGNOSTICS

Circuit Testers



3634

Heavy-Duty, Straight Cord Circuit Tester

Designed for testing electrical circuits and locating shorts, grounds, and open circuits.

Features and Benefits

- 5-foot heavy-duty cord.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.

No. 3634 – Heavy-duty, straight cord circuit tester.



3636

Heavy-Duty, Coil Cord Circuit Tester

Designed for testing electrical circuits and locating shorts, grounds, and open circuits.

Features and Benefits.

- 12-foot, heavy-duty, red coil cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.

No. 3636 – Heavy-duty, coil cord circuit tester.



3639

Extra Long, Heavy-Duty Circuit Tester

Long 7" probe shank allows access to difficult to reach areas for testing electrical circuits and locating shorts, grounds, and open circuits.

Features and Benefits

- 12-foot, heavy-duty, red coil cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.

No. 3639 – Extra long, heavy-duty circuit tester.



3644

12-Pack Display Assortment

Stand-up display of 12 circuit testers contains an assortment of all 6 circuit testers in a point-of-purchase display.

Contents include:

No. 3630 – Battery powered continuity tester - (1)

No. 3631 – Heavy-duty logic probe tester - (1)

No. 3633 – Mini-coil cord circuit testers - (3)

No. 3634 – Straight cord circuit testers - (2)

No. 3636 – Coil cord circuit testers - (3)

No. 3639 – Extra long circuit tester - (1)

No. 3642 – 12V–36V truck circuit tester - (1)

No. 3644 – 12-pack display assortment.

Replacement Bulbs

No. 3630-10 – 10 pack of replacement bulbs for No. 3630

No. 3633-10 – 10 pack of replacement bulbs for Nos. 3633 – 3639

No. 3642-10 – 10 pack of replacement bulbs for No. 3642

OTC Test Leads

Constructed from high quality polyurethane, these high visibility coil cord test leads have superior memory retention and resistance to grease and oil, making them a perfect compliment to any technician's arsenal of test equipment. Test leads come with a variety of interchangeable tips suited for just the right application.

No. 3902 – Twin 5' jumper leads. High visibility black and red leads stretch to over 5 feet in length.

No. 3903 – 24' jumper leads. From headlight to taillight, this extra long test lead stretches to over 24 feet in length.

No. 3904 – Twin 5' multimeter lead set. Expand the usefulness of any standard multimeter. This set includes one black and one red test lead, 2 multimeter probes, 2 banana plugs, and 4 alligator clips.

No. 3905 – Twin 5' multimeter/piercing jumper lead set. Pierce small gauge wires with this complete jumper lead set. This set includes one black and one red test lead, 2 multimeter probes, 2 banana plugs, 2 bed-of-nails, and 2 alligator clips.

No. 3906 – Twin 5' piercing test lead set. With 2 banana plugs and 2 bed-of-nails, this test lead set has just the right combination of tips for most testing applications.



Heavy-Duty, Remote Starter Switch

Allows one person to start and crank engine while under the hood or from either side of the vehicle.

Features and Benefits

- With convenient hot circuit indicator, red ready light glows when starter switch is connected to a hot circuit; light goes off when switch is depressed.
- High current, heavy-duty push button switch ensures reliable operation and long service life.
- 5' leads made from heavy-duty, oil and grease resistant, 12-gauge wire.
- High current clips with protective boots open to an extra wide 5/8" for ease of hook-up.
- Soft, non-slip rubber grip.

No. 3650 – Heavy-duty, remote starter switch.



Component Diagnostic Guides

Sensor Testing & Specifications – Test procedure descriptions of powertrain sensor tests including sensor specifications.

Component Locations – Vehicle component diagrams clearly labeled with sensor locations for simple identification.

Wiring Diagrams – Diagrams are broken down into systems for engine and transmission applications. Includes wire colors, circuit and component descriptions.

No. 3565 – Component diagnostics guide, domestic OBD II, 1996–2004. Combination kit includes manual and CD.

No. 3565-CD – Component diagnostics guide, domestic OBD II, 1996–2004. CD only.

No. 3567 – Component diagnostics guide, Asian and European Imports OBD II, 1996–2004. Combination kit includes manual and CD.

No. 3567-CD – Component diagnostics guide, Asian and European Imports OBD II, 1996–2004. CD only.

No. 3564 – Component diagnostics guide, domestic OBD I, 1985–1996.

No. 3566 – Component diagnostics guide, Asian and European Imports OBD I, 1985–1996.



ELECTRONIC DIAGNOSTICS

TPMS Tire Pressure Monitor Tool

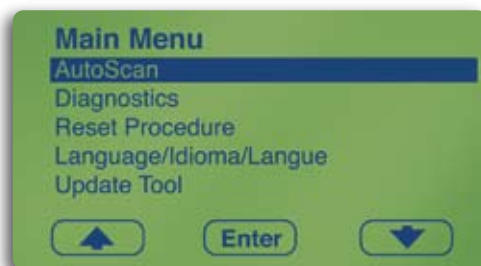


Total Solution for TPMS Servicing - OTC TPM Tool Kit

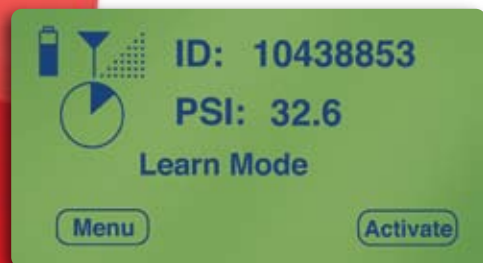
The OTC Tire Pressure Monitor Kit is designed to be a complete universal kit covering vehicles with Tire Pressure Monitoring Systems (TPMS). The software has the option to AutoScan the wheel sensor or utilize the vehicle entry system for easy and accurate access to the proper interface to the vehicle. The manual contains the critical reset procedures along with all the system information including torque specifications and wiring diagrams.

The monitor has a graphical interface that allows for use of the tool with little or no knowledge of TPM systems. The monitor and manual frequently updated to keep up with changing vehicle requirements.

The TPM Tool includes software that includes the following features:

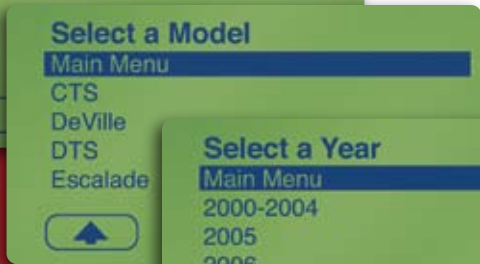
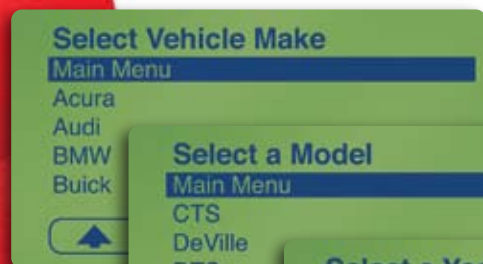


Kit covers both direct and indirect systems.



AutoScan

The new AutoScan features provides the capability to walk up to any TPM equipped vehicle and activate the sensor with the push of a button. This will search through all the communication protocols until the sensor is activated, then a successful activation is shown on the display.



Diagnostics

The Diagnostics feature allows for quick check of sensor via the **Make – Model – Year** vehicle entry system. Selection of the specific vehicle eliminates the search time of proper protocol. Live sensor information is displayed when available. Powerful feature that allows the technician to validate that all the sensors are functional before any work is started.

ELECTRONIC DIAGNOSTICS

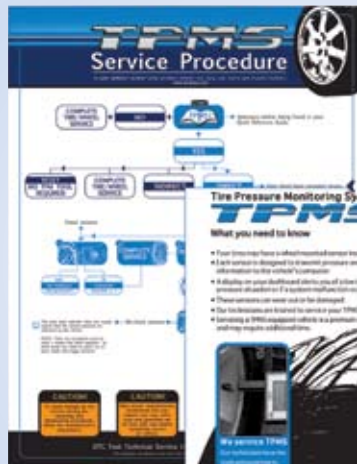
TPMS Tire Pressure Monitor Tool

Reset Procedure

The Reset Procedure is the key function that “resets” the tire locations and will turn off the dash light. This function is accessed via the vehicle entry and walks the user through all the necessary steps to complete the reset procedure.

Sales and Services Support Material

3833-19
Service Procedure
Flowchart Color
Wall Poster
25-1/2" x 33"



3833-18
Application Flip Chart



3833-20
Consumer Poster
Counter Display 11" x 17"



CDTPMS0506
TPMS Training Video



3833-18 Application Flip Chart



Make	Model	Year	Type of System	Reset After Tire Rotate	Reset After Sensor Replace	Reset After Tire Change	Tool Used For Reset	Sensor Bolt or Nut Torque Inch/Lbs/N-m
Lexus	GS 430	2006	Direct	Yes	Yes	Yes	No	35/4.0
Lexus	GX 470	2004-06	Direct	No	Yes	Yes	Yes	35/4.0
Lexus	IS 250	2006	Direct	Yes	Yes	Yes	No	35/4.0
Lexus	IS 350	2006	Direct	Yes	Yes	Yes	No	35/4.0
Lexus	LS430	2004-06	Indirect	Yes	Yes	Yes	No	n/a
Lexus	LX 470	2006	Direct	No	Yes	Yes	Yes	35/4.0
Lexus	RX330	2004-06	Indirect	Yes	Yes	Yes	No	n/a
Lexus	SC430	2004-06	Direct	No	Yes	Yes	Yes	27/3.1
Lincoln	Aviator	2003-05	Direct	No	Yes	Yes	Magnet	44/5.0

ELECTRONIC DIAGNOSTICS

TPMS Tire Pressure Monitor Kits and Accessories

TPMS



3833QR

Tire Pressure Monitor Base Kits

Includes a TPM tool with latest software subscription, activation magnet, quick start guide, latest comprehensive reset manual, update cable, CD training video, 3 C batteries, backup software CD, and a blow molded case. Base kits are available with three different reset manual formats;

No. 3833 – Tire pressure monitor base kit, with printed full volume manual set. Wt., 10 lbs., 8 oz.

No. 3833QR – Tire pressure monitor base kit, with printed Quick Reference manuals. Wt., 6 lbs.

No. 3833CD – Tire pressure monitor base kit, with CD manual. Wt., 1 lb.

TPMS



3833T

Tire Pressure Monitor Master Kits

Includes a TPM tool with latest software subscription, activation magnet, quick start guide, latest comprehensive reset manual, update cable, CD training video, 6 nM Hi rechargeable batteries and recharging station, backup software CD, digital tire pressure gauge, 4-way valve tool, valve core torque driver, laminated application flip chart, service procedure flowchart poster, consumer poster, and a blow molded case. Master kits are available with 3 different reset manual formats;

No. 3833T – Tire pressure monitor master kit, with printed full volume manual set. Wt., 13 lbs., 12 oz.

No. 3833TQR – Tire pressure monitor master kit, with printed Quick Reference manuals. Wt., 9 lbs.

No. 3833TCD – Tire pressure monitor master kit, with CD manual. Wt., 5 lbs.



3833-9

Tire Pressure Monitor Master Update Kit

Includes material to turn a Tire Pressure Monitor Base Kit into a Master Kit (ex; 3833QR to a 3833TQR). Includes latest comprehensive reset manual supplement, latest software CD subscription, update cable, CD training video, 6 nM Hi rechargeable batteries and recharging station, digital tire pressure gauge, 4-way valve tool, valve core torque driver, laminated application flip chart, service procedure flowchart poster, and consumer poster.

No. 3833-9 – Tire pressure monitor master update kit. Wt., 10 oz.



3833-11

Tire Pressure Monitor 2006-2007 Software Update Kit

Includes 2006-2007 software subscription CD, 2006-2007 reset manual supplement, and update cable.

No. 3833-11 – Tire pressure monitor 2006-2007 software update kit. Wt., 8 oz.



3831

Tire Pressure Reset Tool for Nissan

This tool is designed to extinguish the Tire Pressure Warning Light on 2003 and newer Nissan vehicles with TPM Reset Connector. The connector end of the cable mates to the vehicle connector found behind the DLC connector under the dash. The alligator clip is clipped onto the metal bracket that holds the DLC connector. Once connected and the ignition is turned on, the tool trigger is pressed 5 times within 10 seconds causing the warning light to start flashing. With the tool disconnected, the vehicle can be started and driven over 30 mph until the light stops flashing, which completes the procedure.

No. 3831 – Tire pressure reset tool for Nissan. Wt., 1 lb.

Tire Pressure Monitor Tool Accessories

Part No.	Description	Part No.	Description
3833-2	TPM Manual-Printed, full volume manual set	3833-14	Batteries - 6 nM Hi and Charger
3833-3	TPM Manual-CD	3833-15	Digital Tire Gauge – 0-150 psi, red backlight
3833-4	TPM Magnet	3833-16	Valve Nut Tool – Installs valve stem grommets
3833-5	TPM Quick Ref Guide & 2006 Supplement	3833-17	Valve Core Torque Driver – 2-5 inch pounds
3833-6	TPM Case	3833-18	Application Flip Chart – 8" x 5" laminated pages
3833-7	TPM Update cable	3833-19	Procedure Flowchart – Full color wall poster
3833-8	Serial to USB Adapter	3833-20	Consumer Poster – for counter display
3833-9	Update base kit(s) to a Master Tool Kit.	CDTPMS0506	TPMS Training Video – CD
3833-11	TPM Update 2007 Subscription		



IR/RF Signal Tester

- Provides quick and easy verification of RF and IR transmitter signal with audible beep and LED light.
- RF Example; Key fobs, garage door openers, tire pressure sensors activation tools, aftermarket key fobs, and remote starters, etc.
- IR Example; IR printer ports, in-vehicle audio/video remote controls, general IR remote control and signals.
- Designed to detect RF signals between 0-900 MHz.
- Operates on 9V battery (included).

No. 3891 – IR/RF signal tester. Wt., 10 oz.

3891



Diesel Glow Plug Tester

Features:

Glow Plug Tester provides fault detection thru LED's for a quick analysis; Short Circuit, Over Current, Normal Operation, Open Circuit/Under Current.

Benefits:

- Glow Plug Tester allows for testing without removing glow plug from engine.
- Powers the glow plug to test the plug in it's operating state.
- Much more accurate test than a cold resistance test, which can miss short circuits.
- Tester uses a current measurement to accurately determine proper operation and check for short circuits.

No. 3673 – Diesel glow plug tester Wt., 1 lb.



3673

Diesel Fuel Pressure Tester

Features:

- Simple one wire connectivity to the fuel pressure sensor signal wire. Designed for diesel engines that have a fuel pressure sensor reading used by vehicle computer.
- Displays pressure in PSI or BAR.
- Range 0-22,000 PSI (0-1500 BAR).

Benefits:

- Read diesel fuel pressure in vehicle.
- No fittings required.
- Readings alternate between current and max pressure.

No. 3674 – Diesel glow plug tester Wt., 1 lb.



3674

ELECTRONIC DIAGNOSTICS

Universal Breakout Box



3235

Universal Breakout Box

- An easy, affordable way to really “pick the brains” of domestic and import computerized vehicles with or without a data stream system.
- Designed to “T” into the vehicle wiring harness leading to the engine and various other computers. This unit permits vital readings of voltage, resistance, frequency, pulse width or duty cycle, depending on the instrumentation with which it’s used. With each accessory vehicle adapter cable (VAC) kit, you get a specially designed cable and a custom magnetic pin panel overlay that matches the make of vehicle system being tested.
- Used with any DVOM or scope, such as the Digital Automotive Tester or the Perception 2-channel scope.
- Exclusive isolated ground lead and tipjack prevents a faulty ground from interfering with a correct diagnosis, and permits locating bad grounds in just seconds.



3225

Ford EEC-V 104-Pin Breakout Box

- Unit accesses all connections to the Powertrain Control Module (PCM) on all 1994 and newer EEC-V systems.
- Adapter cable interfaces with the PCM connector and vehicle’s harness connector.
- Includes a plastic overlay panel and a connecting cable for numeric identification of each jack to match the vehicle’s PCM pinout.

No. 3235 – Ford EEC-V 104-pin breakout box.

No. 3225-10 – 104- to 60-pin BOB adapter, Ford BOB.



3226

EEC-IV 60-Pin Breakout Box

Use to completely test all 1983 and later EEC-IV vehicles. Critical resistance and voltage measurements are easily accessible from all 60 electrical circuits of the EEC-IV system through the remotely located diagnostic breakout box.

No. 3225 – EEC-IV 60-pin breakout box.



3239

80-Pin Breakout Box

No. 3226 – 80-pin breakout box.

No. 3226-04 – 60-pin VAC, Ford '83–up EEC-IV vehicles.

No. 3226-13 – 10' extension cable, use with No. 3226.



3238

180-Pin Universal Breakout Box

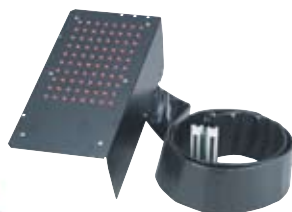
Universal breakout/pinout box with 180 pins. Consists of the No. 3238 and the No. 3238-UPD. Use in conjunction with vehicle adapter cable (VAC).

No. 3239 – 180-pin universal breakout box.

100-Pin Breakout Box

Universal breakout/pinout box with 100 test points. Use for vehicle diagnosis via voltage and resistance measurements. Not designed for signal injection. Expandable to 180-pin with No. 3238-UPD to handle future vehicle systems. Use in conjunction with a vehicle adapter cable (VAC).

No. 3238 – 100-pin breakout box. Same as J-39700.



3238-UPD

80-Pin Expansion Panel for 3238

Expands the 100-pin No. 3238 with an additional 80-pin panel, resulting in a 180-pin No. 3239. Used with No. 3238.

No. 3238-UPD – 80-pin expansion panel for No. 3238.

Inductive Timing Light

Professional inductive timing light designed for standard base timing.

Unique features

- On/off touch control.

Standard features

- All metal inductive pickup.
- Reflected, super bright xenon flash.
- Removable leads with positive twist-lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.

No. 3363 – Inductive timing light.



Advance Timing Light

Professional advance timing light allows accurate adjustment of base and advance timing reading.

Unique features

- Adjustable knob measures centrifugal, vacuum, and computer advance.
- On/off touch control.

Standard features

- All metal inductive pickup.
- Reflected, super bright xenon flash.
- Removable leads with positive twist lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.

No. 3365 – Advance timing light.



3363

3365

3367

Digital Timing Light

Professional digital timing light has advanced features with a bright LED screen and mode indicator lights.

Unique features

- Microprocessor-controlled circuitry.
- LED tachometer display reads 0–9999 rpm.
- LED advance display indicates to 1/10.
- Unique flashlight feature.
- 2/4 cycle and rpm/advance lights.
- Up and down scroll buttons.

Standard features

- All metal inductive pickup.
- Reflected, super bright xenon flash.
- Removable leads with positive twist lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.

No. 3367 – Digital timing light.

Timing Light Comparison

Timing Light - Functions/Features	3363	3365	3367
Conventional, electronic, computer controlled ignition systems	•	•	•
DIS and 2-cycle systems	•		•
On/off touch control	•	•	•
Adjustable advance		•	•
Digital LED readout tach and advance			•
2- to 4-cycle & rpm/advance mode lights			•
2- to 4-cycle selector button			•
Flashlight feature button			•
RPM to advance selector button			•
Up or down scroll buttons			•

ELECTRONIC DIAGNOSTICS

Digital Pressure Gauge



3490

Multi-Application Digital Pressure and Temperature Analyzer

Combining the functions of vacuum, oil pressure, hydraulic system pressure, fuel pressure, transmission pressure, compression, and air conditioning—all in one!

No. 3490 – Deluxe digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes (500 psi) transducer, 12' cable, 8-1/2" hose, bead-type temperature probe, assorted fittings, plastic storage case, instruction manual.

Wt., 4 lbs., 8 oz.

No. 3492 – Heavy-duty digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes: No. 3491-02 (5,000 psi) transducer, No. 3491-13 20' cable, No. 3500-05 bead-type temperature probe, assorted fittings, No. 3491-31 plastic storage case, instruction manual.

Wt., 5 lbs.

Accessory Options:

No. 3491-01 – 500 psi transducer. Wt., 4 oz.

No. 3491-02 – 5,000 psi transducer. Required for ABS and power steering pressure readings. Wt., 4 oz.

No. 3491-03 – 10,000 psi transducer. Wt., 4 oz. (Note: For No. 3492 only.)

No. 3491-11 – 6' cable. Wt., 4 oz.

No. 3491-12 – 12' cable. Wt., 7 oz.

No. 3491-13 – 20' cable. Wt., 12 oz.

No need to have fuel or transmission hoses inside vehicle during a road test.

No makeshift taping of gauges to the windshield.

"Min/Max." pinpoints:

- Fuel restrictions
- Plugged filters
- Weak fuel pumps
- Transmission pressure spikes

Use with OTC's No. 3398 to find clogged/dirty fuel injectors.

Pinpoints worn power steering pumps or racks.

PSI reading for hydrostatic drives and high pressure hydraulics.

Finds blocked intake ports and plugged catalytic converters.

Checks transmission cooler efficiency and catalytic converter temperatures.

"Delta Zero" monitors fuel pressure drop caused by faulty check valves.

Displays readings in BAR for checking European specs.

Permits comparison of ABS brake pressures at each wheel.

See Scope/Meter accessories for temp probes. page 31.

3490



3385

Universal Gauge and Component Tester

This is the fast way to pinpoint problems in fuel, oil, temperature, and vacuum electrical gauges. This gauge and component tester includes a test light and switch to also test instrument voltage regulators on various vehicles. Plus, you can use it as an instrument gauge tester by attaching the alligator clips to sensors and wiring harnesses on a variety of vehicles. Included is an instrument gauge application data sheet listing resistance set points for GM, Ford, Chrysler, Toyota, Nissan, VW, Mack, Navistar, and John Deere.

No. 3385 – Universal gauge and component tester. Wt., 1 lb., 15 oz.

Noid Lite/IAC Test Kits

- Noid Lites are a proven test device to quickly determine if the electrical signal is present at the fuel injector.
- Simplest method for eliminating the EFI system or idle air control as possible faults on no-start vehicles.
- Disconnect the fuel injectors, plug in a Noid Lite, and crank the engine. A flashing noid light indicates normal pulsing voltage.
- Expanded set of eight specific Noid Lites covers: GM PFI, Ford TBI, Geo TBI, Bosch PFI, GM TBI, GM SCPI, and new applications of Bosch 2 and Multec 2. Also includes two GM IAC testers (flat and square four-connector applications) with red and green LEDs.
- Kit comes in a molded plastic case and includes a harness extension that allows for convenient remote viewing from the driver's seat.

Noid Lite Test Kit

Set includes (available separately):

- No. 7187** – GM TBI Noid Lite. Wt., 2 oz.
- No. 7188** – Bosch PFI Noid Lite. Wt., 2 oz.
- No. 7601** – Ford Noid TBI Lite. Wt., 2 oz.
- No. 6023** – GM Multec 2 Noid Lite. Wt., 2 oz.
- No. 7602** – GM PFI Noid Lite. Wt., 2 oz.
- No. 7608** – Geo TBI Noid Lite. Wt., 2 oz.
- No. 7828** – GM SCPI Noid Lite. Wt., 2 oz.
- No. 6266** – Bosch 2 Noid Lite. Wt., 2 oz.
- No. 6260** – Fiber optic Noid Lite extension. Wt., 5 oz.
- No. 3050C** – Noid Lite test kit. Wt., 1 lb. 1 oz.

Noid Lite/IAC Test Kit

Set includes (available separately):

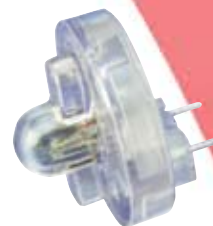
- No. 7187** – GM TBI Noid Lite. Wt., 2 oz.
- No. 7188** – Bosch PFI Noid Lite. Wt., 2 oz.
- No. 7601** – Ford Noid TBI Lite. Wt., 2 oz.
- No. 6023** – GM Multec 2 Noid Lite. Wt., 2 oz.
- No. 7602** – GM PFI Noid Lite. Wt., 2 oz.
- No. 7608** – Geo TBI Noid Lite. Wt., 2 oz.
- No. 7828** – GM SCPI Noid Lite. Wt., 2 oz.
- No. 6266** – Bosch 2 Noid Lite. Wt., 2 oz.
- No. 6260** – Fiber optic Noid Lite extension. Wt., 5 oz.
- No. 3052S** – '82 and newer GM TBI/PFI with square 4-pin connector. Wt., 2 oz.
- No. 3053S** – '87 and newer Model 700 TBNI/PFI with flat 4-pin connector. Wt., 2 oz.
- No. 3054C** – Noid Lite/IAC test kit. Wt., 1 lb. 3 oz.

General Motors IAC Signal Test Lights

For checking the electronic control module signal that provides direction to the idle air control motor on General Motors vehicles with throttle body or port fuel injection systems.

- No. 3051** – Set consists of Nos. 3052S and 3053S. Wt., 2 oz.
- No. 3052S** – Signal test light for 1982 and newer GM TBI and PFI fuel injection systems with square 4-pin connector. Wt., 2 oz.
- No. 3053S** – Signal test light for 1987 and newer GM Model 700 TBI and PFI fuel injection systems with a flat 4-pin connector. Wt., 2 oz.

Typical Noid Lite



3050C



3054C



3052S

3053S

ELECTRONIC DIAGNOSTICS

Oil Light Reset Tool



Oil Light Reset Tool

- Oil changes are the #1 service your shop will perform each year. Enhance your service with this complete electronic tool and manual kit, No. 3596E.
- This kit eliminates the need to take the vehicle to the dealer or use an OEM scan tool to reset oil service lights.
- Electronic tool set includes the adapters and interface module required to reset the oil service lights on Volkswagen, Audi, Mercedes Benz, BMW, and Volvo.
- Manual includes oil light reset procedures for all domestic and import vehicles not requiring electronic tools to reset, but have manual reset procedures.

Kit Includes:

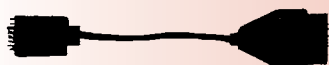
- No. 3596-1** – Oil reset monitor V2.1.
- No. 3596-2** – Mercedes-Benz cable.
- No. 3596-3** – BMW cable.
- No. 3596-4** – Volvo cable.
- No. 3596-5** – VW and Audi cable.
- No. 3596-6** – VW and Audi OBD II cable.
- No. 3596-8** – Case.
- No. 3596-9** – Oil light reset manual.
- No. 3596-10** – Battery power adapter cable.
- No. 3596E** – Oil light reset tool kit.

Sample of manual contents:

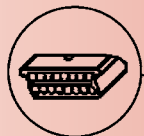
BMW

Vehicle Adapters / Data Link Connector Locations for BMW

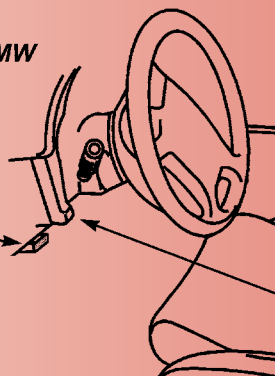
There are two vehicle adapters for BMW vehicles. The illustrations below show the adapters and their data link connector (DLC) / socket locations.



BMW-OBD II 16-pin Vehicle Adapter
(for the 3596E Oil Reset Tools only)



16-pin DLC
(under dash on driver side)



Dash on
Driver side

Reset Procedures for BMW

Manufacturer	Model	Year	Reset Tool	Procedure
BMW	5-Series (E39, E53)	2000-2005	X	<p>Oil Reset Tool: Use the BMW-OBD II 16-pin Vehicle Adapter. Select BMW then E46 (OBDII).</p> <p>Manual Reset:</p> <ol style="list-style-type: none"> 1 Turn off the ignition. 2 Press and hold the TRIP ODOMETER button in the instrument cluster and turn the ignition to Accessory (1). 3 Keep the button pressed for approximately 5 more seconds until OIL SERVICE RESET (RE) or INSPECTION RESET (RE) appears in the display. Then release the button. 4 Press and hold the button again for approx. 5 seconds until RE or RESET flashes in the display. Then release the button. 5 With the display flashing, press the button briefly to reset and display the new Service Interval. After this, END SIA appears in the display for approximately 2 seconds.

Phototach

- No. 3665 phototach can be used as a contact as well as a non-contact tachometer.
- Four styles of contact adapter tips clip easily to the top of the phototach.
- Infrared technology makes the phototach accurate, convenient, and easy to use.
- Infrared beam not affected by ambient light.
- Non-contact design results in (zero) torque loss for true precision.
- Phototach is equipped with a laser pointer for accurate targeting.
- Reflective tape placed on a revolving object can be measured at distances from 2" to 20".
- Wide measuring range and high resolution, 2.5 to 99,999 rpm with a large 5-digit display, autoranging, min/max memory storage, and low-battery indicator.

No. 3665 – Phototach contact/non-contact.

No. 3660 – Phototach non-contact only.

No. 3660-03 – Replacement reflective tape, 10' roll.



Flex-View UV Bore Scope

- Flex-View fluoresces UV dyes.
- Use as a traditional bore scope.
- Battery powered.
- Quick detection of leak dye in hard-to-see and reach places.
- Ability to inspect inside components.
- Confirms leaks where component removal would normally be required.
- Saves time trying to diagnose A/C evaporator leaks.
- Inspects the top side of fuel tanks for EVAP leaks without removal.
- Saves costs by eliminating the need to remove and replace unrelated components.
- A/C systems: Evaporator/condenser, hoses, compressor.
- EVAP system.
- Engine oil, transmission, and power steering fluid.
- Coolant and fuel systems.
- ACR2000.
- EVAP Tester.
- Any system using fluorescent dye.

No. 3591 – 18" Flex-View UV bore scope in a sturdy case.

Flex-View Bore Scope

- Ultra-thin 1/4" cable.
- Small diameter cable allows for inspection in tighter locations.
- White light, non-fluorescent bulb.
- Uses two AA batteries.
- Flexible cable does not retain a set shape.

No. 3598 – 36" Flex-View bore scope in a sturdy case.



To check for leaks in the evaporator, the technician simply drills a 1/2" hole in the housing top and inserts the Flex-View. UV dye leak is fluoresced by the Flex-View.



ELECTRONIC DIAGNOSTICS

Fuel Injection and Ignition



3397

Fuel Injection Tester

Fuel injectors can pass a resistance test but still fail under load. With this tool, you can check and balance fuel injectors. Also tests fuel injector coil windings under load, and detects intermittent fuel injector coil faults. Adjustable current output. Works on both throttle body and multiport fuel injectors. TBI adapter included.

No. 3397 – Fuel injector tester. Wt., 3 lbs., 5 oz.



3398

306677
Replacement Lead

Fuel Injection Pulse Tester

Fuel injector testing requires precision equipment. This vehicle-powered tool fills that requirement. It enables you to check cylinder balance by firing individual injectors at 1/2-second increments in three different ranges: 1 pulse of 500 milliseconds, 50 pulses of 10 milliseconds, 100 pulses of 5 milliseconds.

- Power and output lights indicate test activation.
- Includes wiring harness adapter and instructions.

No. 3398 – Fuel injection pulse tester. Wt., 8 oz.

No. 306677 – Replacement lead. Wt., 2 oz.



3590

Electronic Stethoscope

Quickly pinpoints noise and location of bad bearings, bushings, dirty fuel injectors, wind/air leaks, valves, and lifters.

- Flexible shaft reaches tight areas.
- Ultra-sensitive mic and amplifier provide a full range of sounds needed by the professional.
- 7 sound-level control settings; 60 dB to 120 dB.

No. 3590 – Electronic stethoscope. Wt., 3 lbs., 7 oz.



3579
Adapters

3589

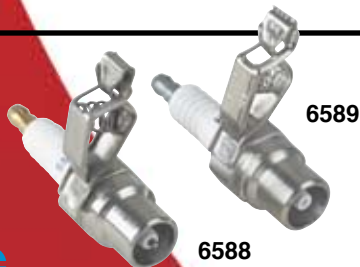
Ignition System Quick Test Kit

This kit enables technicians to do power-balance tests and diagnose problems on standard, electronic, or distributorless ignition systems. Comes with brass adapters to fit all auto coils, test probes and leads, spark gap tester, and step-by-step instructions that lead technicians through the power-balance test.

- Performs power-balance in less than 5 minutes on standard, electronic, or distributorless ignition systems.
- Spark gap tester checks for adequate kV voltages on electronic ignition systems, providing instant diagnosis of problems—whether a faulty coil, ignition wire, or spark plug.
- Ideal for checking spark in no-start condition, instead of wasting time trying to “ground out your screwdriver.”
- Step-by-step instructions lead technician through tests to check if ignition has a bad ground all the way to defective coils.

No. 3589 – Ignition system quick test kit. Wt., 2 lbs., 1 oz.

No. 3579 – Ignition system adapters, set of six. Wt., 14 oz.



6589

6588

Spark Testers

Check for spark on gasoline engines used in import and domestic cars and trucks, plus small engines.

No. 6588 – Standard ignition spark tester. Wt., 4 oz.

No. 6589 – Electronic ignition spark tester. Wt., 4 oz.

Self-Contained Spark Plug kV Tester – Digital

Features a display providing live, minimum and maximum readings for the following spark plug measurements:

- Firing voltage
- Burn time
- Burn voltage

This information permits accurate, professional diagnosis of the spark plugs, plug wires, ignition system, fuel control, and most other factors affecting the spark plug voltage and combustion chamber. Fully tested on both conventional and distributorless ignition systems, and direct spark systems using an additional spark plug wire. A simple rotary switch selects firing voltage, burn time, and burn voltage. All readings are taken on each firing of the spark plug. The tester may be used on any gas engine, including those on motor vehicles, lawn mowers, snow blowers, motorcycles, personal watercrafts, snowmobiles, marine and industrial equipment, etc. Tester has an internal battery. On-screen indicator advises when battery replacement is needed. An operator's manual is included.

No. 3141 – Self-contained spark plug kV tester – digital. Wt., 1 lb., 1 oz.

3141



Self-Contained Spark Plug kV Tester – LED

- Display indicates spark plug firing voltage on either conventional or distributorless ignition systems (DIS).
- Permits accurate, professional diagnosis of spark plugs, plug wires, fuel control, and other factors affecting performance.

No. 3142 – Self-contained spark plug kV tester – LED. Wt., 10 oz.

3142



Two-in-One Idle Tester

- Idle Air Control
- Idle Speed Control

Now there's one convenient tester for GM idle speed control, GM idle air control, and Chrysler/AMC automatic idle speed control. Use for adjusting high- and low-idle speed settings and controlling rpm for ignition and cylinder balancing testing. See page 43 for IAC signal testers.

No. 3320 – 2-in-1 tester for idle air control, idle speed control on GM and Chrysler/AMC vehicles. Wt., 10 oz.

No. 46589 – GM/Chrysler replacement cable. Wt., 2 oz.

3320



Anti-Static Wrist Strap

Virtually eliminates the possibility of static electricity causing damage while working on electronic components.

- One-size-fits-most adjustable wrist strap.
- Includes a 6' coil cord with alligator clip.

No. 7744 – Anti-static wrist strap. Wt., 4 oz.

7744



GM Code Retrieval Key

This key retrieves trouble codes from pre-OBD II model GM vehicles.

No. 7739 – ECM code retrieval key. Jumps between A and B terminals on ALDL connector to retrieve trouble codes from the ECM. Wt., 2 oz.

7739



Angle-Tip Relay Pliers

- Designed to remove and install relays, which are usually located in confined, hard-to-reach areas.
- Specially coated tips offer a solid grip on the relay.

No. 4493 – Angle-Tip Relay Pliers. Wt., 10 oz.

4493



ELECTRONIC DIAGNOSTICS

Electronic Tools



4497

Ratcheting Terminal Crimper

- Heavy-gauge steel crimping tool designed for insulated wire terminals.
- Ratcheting action crimps terminal to correct tightness on the wire, making crimping fast and easy.
- For wire sizes: AWG 22–18 (0.6 mm–1.0 mm) red terminal; AWG 16–14 (1.3 mm–1.6 mm) blue terminal; AWG 12–10 (2.0 mm–2.6 mm) yellow terminal.
- Insulated handles with compound mechanical leverage for power.

No. 4497 – Ratcheting terminal crimper. Wt., 1 lb., 3 oz.



4498

7-in-1 Wire Stripper and Crimper

- Strips insulation off electrical wires ranging from 10 AWG–22 AWG (0.6mm–2.6mm) in diameter. Pliers on tip of jaw for looping or grabbing wire in tight places.
- Heat-treated steel jaws cut solid or multi-strand wire.
- Screw cutter shears screws clean, with no thread clean-up required. Works on machine screw sizes 4-40, 5-40, 6-32, 8-32, 10-24, & 10-32.
- Crimps insulated and non-insulated wire terminals, 7mm–8mm spark plug wire connectors.

No. 4498 – 7-in-1 wire stripper and crimper. Wt., 8 oz.



4499

Wire Stripper and Cutter

- Only 6" in length. Clean size separations and markings allow ease of use in tight areas.
- Strips insulation off of electrical wires ranging from 10 AWG–22 AWG (0.6mm–2.6mm) in diameter. Heat-treated steel construction with durable grips.
- Spring-loaded jaws stay open for ease of use, and lock for storage; gripping area at tip of jaws for working in tight areas; wire cutter at base of jaws.

No. 4499 – Wire stripper and cutter. Wt., 5 oz.



7737

7738

7740

7741

7742

7743

Terminal Release Tools

- Covers GM, Ford, Chrysler, and a variety of import vehicles.
- Quickest and easiest way to release terminals from their plastic connectors without damaging them or delicate computer components.
- Design makes them easier to hold on to than the key-ring style release tools.

No. 7737 – Computer edgeboard and header release tool. Each end of the tool works on different terminal connector configurations. Works on various domestic and import models. Wt., 2 oz.

No. 7738 – Weather Pack sensor terminal release tool. Works on various domestic and import models. Wt., 2 oz.

No. 7740 – Micro-style terminal release tool. Works on various domestic and import vehicles. Wt., 2 oz.

No. 7741 – Specifically designed to release ID computer terminals on 1988 thru current GM W bodies, 1990 thru current Chevrolet Lumina sedans, and various other domestic and import vehicles. Wt., 2 oz.

No. 7742 – Universal harness release tool designed for the RWAL (rear wheel anti-lock) microprocessor found on 1988 thru current GM pickups. Also works on various other domestic and import vehicles. Wt., 2 oz.

No. 7743 – Releases terminals on most body wiring connectors on various domestic and import vehicles, including cold start injector and timer, water, O₂, vacuum, and air temperature sensors. Wt., 2 oz.

Universal Air Bag Simulator... includes PC diagnostic software!

Universal design emulates nearly all OE simulators currently available. You need only this one tool, not several vehicle specific tools.

- The No. 3770 replaces the air bag in the system and puts the proper electrical load on the circuit. With no air bag installed, there is no chance for accidental deployment during testing.
- If a deployment condition is present in the system, the simulator will "blow," not the expensive air bag. You can then find the problem and verify the fix before making the air bag "live" again.
- All systems typically turn themselves off after an intended deployment due to a collision. Use the No. 3770 to check for other problems before re-arming the system with an air bag scan tool such as the OTC No. 3761.

Included with the No. 3770 is an incredibly valuable tool— a Tools & Techniques CD which offers comprehensive air bag information on 1983–2000 vehicles. It includes diagnostic procedures, wiring schematics, and re-arming procedures on 1983 thru 2000 domestic and import cars, vans, and light trucks.

Schematic Drawings

Detailed drawings and component locations will lead you to easy repairs, if problems exist in an air bag system.

System Inspection

Recommended OE procedures for post-collision inspection. You can print this out, and attach it to the work order to show you've done the work by the book!

Trouble Code Diagnosis

Track down codes that keep the air bag warning light on! Procedures give you step-by-step information on all codes to help you find the problem.

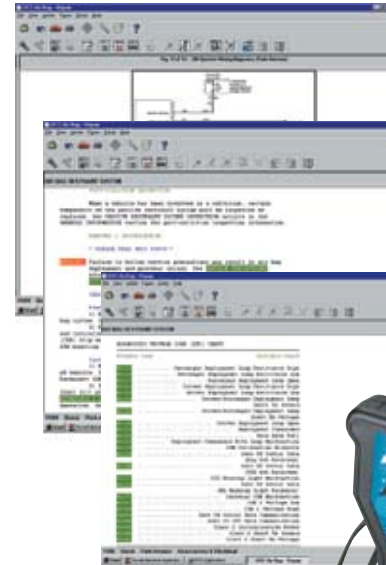
Applications

- GM • Ford • Chrysler • Saturn • Honda • Mitsubishi

No. 3770 – Air bag simulator. Includes the simulator, leads for U.S. domestic and import vehicles, Tools & Techniques for air bags on CD-ROM, and a handy storage case. Wt., 5 lbs., 10 oz.



Schematic Drawings



System Inspection

Trouble Code Diagnosis

3770



Ford Air Bag Simulator

When plugged into the vehicle harness connector, power is restored to simulate a complete circuit for diagnostic purposes.

No. 7954 – Ford air bag simulator. For use on most Ford 1989 to 1991 air bag systems and 1992 Ford air bag system I. Wt., 6 oz.

No. 7955 – Ford air bag simulator. Special one-ohm resistor for use on air bags on Probe vehicles. Wt., 6 oz.

No. 7956 – Ford air bag simulator. Special two-ohm resistor for use on 1993 and newer Ford system II air bags. Wt., 6 oz.

No. 7957 – Ford air bag simulator. Special three-ohm resistor for use on Ford Villager air bag systems. Wt., 6 oz.



Air Bag Release Tool Kit

- Use to remove the air bag module from the steering wheel.
- Work on many GM, Ford and Mercedes Benz vehicles.

Applications: Ford 2000-2004 Taurus/Sable, 1999-2003 Windstar Van GM 1999-2005 Chevrolet Impala, Lumina, Monte Carlo, Venture, Pontiac Bonneville, Grand Prix, Montana, Buick LeSabre, Century, Regal, Olds Intrigue, Cadillac El Dorado, Deville, STS,SLS Mercedes Benz Models 107,123, 124, 126, 129, 140, 163, 164, 170, 201, 202, 203, 208, 209, 210, 211, 215, 219, 220, 221 and 463

No. 5945 – Air bag release tool kit. Wt., 2 lbs.



5945

ELECTRONIC DIAGNOSTICS

Vision Premier

Vision Premier



3955



Instructions and Photos



3D Secondary with Cursor



Secondary Data in Min/Max Mode



Power Balance



Gas Analyzer



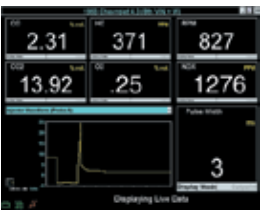
Quad Scope Adjustment Panel



Starter Test



Fuel Measurement Bar Graph



Custom Screen/
Drop Down Menu

- State-of-the-Art Engine Analyzer
- Fast, High-Resolution Color Scope
- Preselect Waveforms
- Intuitive, Easy-to-Use Software
- On-line Help and Operator Guide
- Flexible Meter Display
- Automated Diagnostic System Tests
- Custom Fuel System Measurement Screen

Detailed diagnostic screens make for quick, accurate diagnostics!

Coil-on-Plug (COP)

- Primary and secondary ignition pattern display capability; single- or multiple-cylinder display in parade, raster, or 3-D view.
- Dedicated COP vehicle-specific database.
- Easy-to-read test instructions.
- Actual pictures of lead connection points.

Oscilloscope

- 4-channel display.
- Color separation of cylinder patterns.
- Fastest digital automotive scope on the market.

Ignition Tests

- View primary and secondary data.
- Optional timing light.
- Review kV, firing time, and firing line kV.
- Easy navigation.

Starting/Charging Tests

- Volts/amps graph.
- Procedural tests.
- Disable ignition.
- Display live diode. Waveforms.

Cylinder Tests

- Measure cranking amps and vacuum per cylinder.
- Cylinder contribution for DIS, interprets and reports.
- Cylinder kill-measuring percentage drop for each cylinder.

Fuel/Emission System Tests

- Optional 4- or 5-gas bench analyzer.
- Microgas 4- or 5-gas modules available for portable, cost effective, gas analysis.
- Horiba 4-gas module available for stationary, automated, gas analysis.

Custom Screens

- For maximum flexibility, you can customize up to seven different screens using up to four measurements.

No. 3955 – Vision Premier portable engine analyzer with boom. Vision Premier module, PC with stand, 9' leads, printer with cables, software, and manuals. (On-site setup and training provided.)

Cable Descriptions



534-07071
Interface Harness



538-06766-002
Scope B Adapter



DIS Secondary Leads
four pair shown
(See options S44-5540)

3947-14
9' Amp Probe



000-31529
GM HEI



000-31598
Nippondenso



000-31568
Toyota



0000-8103
Vacuum "T"



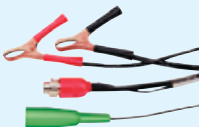
3947-10
9' Sync Probe



3947-13
9' Conventional Ignition "T" Clip



3947-15
6' Engine Analyzer MUX Box



3947-11
9' Battery/Primary Lead



3947-12
9' Scope A Lead Assembly



3947-16
9' Scope B Lead Assembly

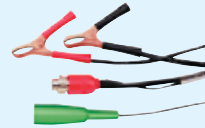
No. 3947-09 – Replacement lead kit



3947-10
9' Sync Probe



3947-13
9' Conventional Ignition "T" Clip



3947-11
9' Battery/Primary Lead



3947-15
6' Engine Analyzer MUX Box



3947-12
9' Scope A Lead Assembly



3947-16
9' Scope B Lead Assembly

Diesel Injection Adapter

Requires the use of piezo adapters.
(Sold separately.)

- **3840-16** – Diesel timing adapter - 1/4" piezo
- **3840-15** – Diesel timing adapter - 6 mm piezo
- **3840-17** – Diesel timing adapter - 6.5 mm piezo

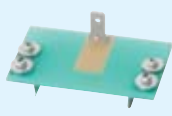


No. 3947-17

Individual COP Leads and Adapters



3947-02
COP Universal Lead
(covers 2 cylinders)



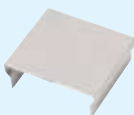
3947-03
COP Chrysler



3947-04
COP Ford



3947-05
COP Honda/
Isuzu/BMW



3947-06
COP VW/Audi



3947-07
COP Volvo

3947-01 – COP Master Kit Includes:

COP Universal Lead (covers 2 cylinders)	(4 ea.)
COP Chrysler	(6 ea.)
COP Ford	(8 ea.)
COP Honda/Isuzu/BMW	(6 ea.)
COP VW/Audi	(4 ea.)
COP Volvo	(4 ea.)
Comes complete with storage case.	

Optional Components



3740 – 5-Gas module.
Includes necessary
cables and 5-gas module.



S44557 – Vision Premier power
adapter. Includes AC/DC converter,
"Y" battery adapter, cigarette lighter
battery plug, and power cord.



3947-08 – Temp probe,
two piece adapter cable.



S44554 – Two-cylinder DIS
secondary leads connect to
MUX box for 10- and 12-cylinder
capability. Optional coil-on-plug
leads also available.



S44555 – Vision Premier
timing light. Includes timing
light and instructions.



00046160
– Cadillac HEI
secondary adapter.



00041920
– Propane
enrichment.

ELECTRONIC DIAGNOSTICS

Gas Analyzers



3740

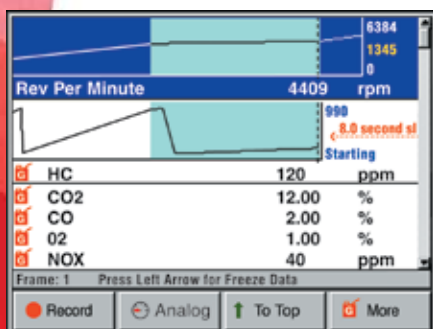
Measurement Ranges:

- Hydrocarbons (HC): 0–30,000 ppm
- Carbon Monoxide (CO): 0–15%
- Carbon Dioxide (CO₂): 0–20%
- Oxygen (O₂): 0–25%
- Oxides of Nitrogen (NOx): 0–5000 ppm

No. 3740 — Deluxe MicroGas 5-gas module kit for use with OTC Vision Premier engine analyzer or your shop PC with the PC gas software. Includes the module along with sampling hose, probe, cables, filters, and PC gas software with cable.

MicroGas Accessories

- No. 3700-25** — Calibration gas, 5-gas
- No. 3700-26** — Sample inlet hose, 21'
- No. 3700-27** — Sample probe
- No. 3700-28** — Base filter, 10 pack
- No. 3700-29** — Nox upgrade/replacement cell
- No. 3700-30** — O₂ replacement cell
- No. 3700-36** — Water trap pre-filter 10 pack
- No. 3700-39** — Filter-internal water trap, 1 filter, and short hose
- No. 3700-41** — Power cable
- No. 3700-60** — Genisys/MicroGas Gas M-P vehicle diagnostic software
- No. 234977** — Cleaning kit
- No. 234978** — Replacement pump
- No. 234979** — Replacement sample cell
- No. 234980** — Annual maint. kit, includes: swabs, base filter kit (10), water trap pre-filter (10), internal water trap.
- No. 235973** — Manual
- No. 236404** — Replacement printer cable
- No. 236406** — Replacement calibration hoses
- No. 3780-05** — Regulator



Performance 5-Gas Analyzer Module—Powerful diagnostics software automatically detects out-of-range readings and describes the vehicle system most likely to be causing the condition.

Measurement Ranges

- HC 0–30,000 ppm
- CO 0–15 %
- CO₂ 0–18 %
- NOx 0–5,000 ppm
- O₂ 0–25 %

Overall Dimensions

6.4"W x 4.9"H x 3.9"D

Performance 5-Gas Module

Complete Emission Analysis and Diagnostics!

When you combine the compact, repair grade, Performance 5-Gas Plug-in Module with the Genisys scan tool, you have the complete interactive emission repair solution. This powerful combo covers any emission-related diagnosis required, and also gives you the ability to test for mechanical failures.

The system meets or exceeds BAR 97, OIML Class 0 standards.

The module includes a reliable, heavy-duty pump, automatic water purge, water overload protection, automatic zero mode, easy pump and sensor servicing, and covers the full measurement ranges for HC, CO, CO₂, NOx, and O₂ gases.

Genisys—at the core of integrated diagnostics solutions!

Genisys takes the lead with new ID™ (Integrated Diagnostics) solutions—our exclusive capability lets you display 5-gas and scan data simultaneously. But this is just the beginning. It's the direction technology is going that will give technicians access to more usable data—from a variety of sources—to service today's high-tech vehicles faster and more accurately.



3855

Solarity Performance 5-Gas

The Solarity emissions repair solution. Kit includes Solarity with plug-in 5-Gas Analyzer Module, hoses, exhaust probe, power cable and battery adapter, RS232 cable, AC power supply, Smart Card, Gas M-P software CD, filters, manual, and carrying case.

No. 3855 — Solarity performance 5-gas.

Smoke Check 1667 Diesel Emission Tester

In some states, failing the on-road emission test can result in a "must appear in court" citation, and up to an \$1,800 fine. Add the downtime, missed delivery, rescheduling, and the potential for lost business. More states are adopting emissions standards and testing programs. This can cost time and money for local and interstate fleets.

SMOKE CHECK 1667 DIESEL EMISSION TESTER

- Fleets can determine immediately if the truck will pass state standards and interstate emission programs.
- Completely portable; all components in one case; there is no PC. One person can do the entire test. Windows-based, PC downloadable program transfers up to 100 stored tests.
- No warm-up time needed; perfect for random roadside testing or in your PM Service Program.
- The partial flow meter clips inside any smokestack; testing can be performed in any weather.
- Digital LCD screen walks you through each step; when testing is complete, a printout of results is produced for verification.
- This is the same meter used for enforcement in California, New York, Illinois, and the majority of states that test for diesel emissions compliance.
- Meets the latest SAE J1667 specifications.

SPECIFICATIONS

Range.....	0-100%
Accuracy	+/-1.0%
Light Source	Green LED
Power	12 VDC battery (built-in)
Battery Life	40 hrs./charge
Warm-up Time5 sec.
Response Time	0.01 sec.
Control Unit	14" x 10" x 8"
Maintenance	Clean lens w/cotton swab
Weight:	
Control Unit	15.5 lbs.
Sensor.....	3.5 lbs.

ORDERING INFORMATION

No. RM1020CPC – Smoke Check 1667 diesel smoke opacity tester. Includes partial flow meter, base unit with hand-held display, built-in printer, ambient sensors, two battery chargers – one for vehicle or shop, 20 ft. cable, telescoping rod, spring clamp, neutral density filter, and sensor head case.

OPTIONAL ITEMS

No. OTC3020CPC – Standard meter listed above with OIL/RPM software and accessories.

These options are required for state approval testing in New York and New Jersey.

No. OTCSH – New sensor head with quick detach release.

No. OTCSHCS – Sensor head case for new or existing meters and accessories.



Scrolling instructions walk you through the entire testing procedure.

Temp: 76.4 F
Rel. Humid: 23.2%
Atm Pres 28.4 InHg
Press any key

Visual Inspection
Press 1 for OK
2 for REJECT
All AUX Equip is off

PRESS
1 = ENTER USER DATA
2 = BEGIN TESTING
3 = CHECK SENSORS

PRESS
1 to TEST MENU
2 to EDIT SETTINGS
3 to CALIBRATE METER

Aluminum rod telescopes from 3 ft. to 8 ft.; reaches all stacks.

Optional pinch clamp holds head securely, on horizontal or downward facing stacks.

Three-point detachment quickly releases the sensor head for easy cleaning.

One person can run the entire test, even in the wind, since the sensor measures smoke inside the stack.



RM1020CPC

ELECTRONIC DIAGNOSTICS

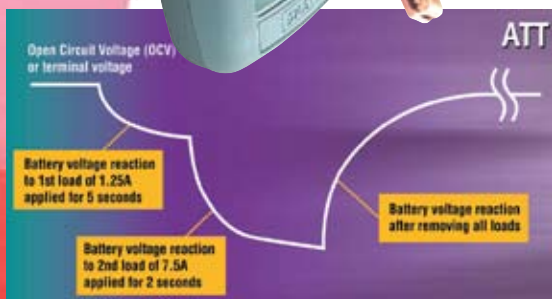
Battery and Electrical Systems

Sabre HP

Sabre HP is designed to let you quickly diagnose bad batteries in a discharged state without needing to charge them first. By utilizing a SPX micro-load testing method, this tester ensures accurate test results without any interpretation on vehicle battery, starting, and charging systems. Ships with 3' leads.

Features and Benefits

- Digital circuitry precisely controls battery test loads to accurately determine battery conditions using SPX micro-load test technology.
 - Tests the battery both statically and dynamically with multiple fixed loads.
 - Provides the most accurate test results.
 - Less susceptible to erroneous results from remote or bad connections, surface charge, and parasitic drains.
- Accurately tests both absorption glass mat (AGM) and flooded lead acid (FLA) batteries.
- Tests vehicle's starting and charging systems with minimal user interaction; automatically applies loads for accurate charging system tests.
- Tests all 6- and 12-volt batteries with a 50–2000 CCA operating range.
- Tests batteries down to 1 volt state of charge.
- Temperature and low charge compensation.
- Detects bad cells.
- Scales: CCA, CA, AHR, MCA, JIS, DIN.
- 4 x 20 backlit display shows CCAs, voltage, and good/bad status.
- Over-molded enclosure with soft-touch keys.
- Built-in infrared printer interface for remote printing (printer optional).
- Flash upgradeable memory in field.
- Removable/auto-sensing leads (3' leads included in kits; optional 10' leads available).
- Printout has date/time stamp and user definable header and footer.
- Optional amp clamps for current drain tests and starting/charging measurements—the only hand-held battery tester with this feature.
- Reverse polarity protection.
- Hard carrying case.
- 3-year warranty.



SABRE HP

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, and molded-plastic carrying case.

No. 3167 – SABRE HP.

SABRE HP Deluxe Kit

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, infrared wireless printer, and molded-plastic carrying case.

No. 3168 – SABRE HP deluxe kit.



Accessories:

No. 3169 – Infrared wireless printer for use with No. 3167 (included with No. 3168).

No. 3167-01 – 3' test leads.

No. 3172 – 10' test leads.

Sabre Heavy-Duty Battery and Electrical System Diagnostic Tester

- Heavy-duty for 24-volt battery and electrical systems.
- Diagnoses battery packs in series, parallel, or series/parallel.
- Tests AGM/gel-cell batteries.

HIGHEST CCA capacity ranges (50–4000 CCA – 24V).

LARGE DISPLAY for less scrolling, more detailed instructions. It's also backlit for all light conditions.

INDUSTRY FIRST amp-clamp connection ports for live amperage readings using optional external amp-clamp.

15 FT. CABLE to perform tests from the cab of the vehicle.

FIELD UPDATEABLE to accommodate new battery types, system updates, feature additions.

Battery Testing

- Tests the following battery pack configurations:
 - One battery (6V or 12V).
 - Two batteries in series (24V); 2, 3, or 4 batteries in parallel (12V).
 - Two banks in parallel, each bank having 2 batteries in series (24V).
- Uses pack configuration in algorithm design.
- Step-by-step user instructions for easy test completion.
- Tester-applied loads used on all pack combinations.

Electrical System Testing

- 12V and 24V charging system tests.
- 12V and 24V starting system tests.
- 12V and 24V diode tests.
- Amp-clamps available (not included) for starting/charging and current draw tests.

Features

Amp-Clamp Connection – allows current drain tests and starting/charging analysis.

Tests Both FLA (flooded lead acid) and **AGM** (absorbed glass mat) battery types.

Scales – CCA, CA, AHR, MCA, JIS, DIN

User Definable – print header and footer.

Removable Test Cables – easily field replaceable.

PC Interface Port – allows for field updateable software.

IR Compatible – allows optional infrared wireless printer.

Readout Display – backlit for low light conditions, easy to view data in direct sunlight (4 x 20 character display).

Security Cable Connection – protects against stolen or dropped units.

Over-molded Surround with Soft-touch Keys – ruggedly built, easy to use, even with gloves.

No. 3167-HD – Sabre HD deluxe kit includes 24-volt heavy-duty battery tester, 15' test leads, instruction manual, molded-plastic carrying case.

No. 3168-HD – Same as No. 3167-HD above, but also includes an infrared wireless printer.

Accessories:

No. 3172-15 – 15' lead set.

No. 3169 – Infrared wireless printer.



No. 3168-HD

Battery Charging/Starting System Professional Analyzer Kit

Made for the professional technician, No. 3185 tests batteries and starting/charging systems faster than ever before. The BCS system analyzer has an operating range of 50–2000 CCAs and is able to store data in memory or remotely print out the results using an infrared printer interface. It also measures voltage, and tests starting and charging systems at the push of a button.

Features and Benefits

- Utilizes cost effective, conductance test technology for accurate testing at a value price point.
- Quick 1-second initial results.
- Tests charging and starting systems 50–2000 CCA range accurate to 5 CCAs.
- Tests 6V and 12V batteries.
- Temperature and low charge compensation.
- Detects and identifies loose leads.
- Supports CCA, IEC, EN, BCI, and DIN scales.
- 4-line, 20-character LCD display shows CCAs, voltage, and good/bad status.
- Displays results in seven languages: English, French, Spanish, German, Italian, Dutch, Swedish.
- Built-in infrared printer interface for remote printing.
- Detachable cable leads.

No. 3184 – BCS system analyzer kit. Includes BCS system analyzer, a 12' extension cable for in-cab testing, two voltmeter probes, battery side- and threaded-post adapters, detachable leads, 9-volt battery, soft-sided carrying case.

No. 3185 – BCS system analyzer kit.

Same as No. 3184, but also includes an infrared printer.



3185

Digital Battery Tester

Speed. Accuracy. Reliability. These are the cornerstones behind the technology in our digital battery testers. No. 3183 tests 12-volt batteries (125–1400 CCAs) and analyzes by measuring multiple parameters within the battery to deliver accurate results. A live voltmeter allows easy starting/charging system testing. Its bright, 4-digit LED display indicates the battery's good/bad status, voltage, and available CCAs. It even compensates for cold temperatures.

Features and Benefits

- Utilizes cost effective, conductance test technology for accurate testing at a value price point.
- Quick 1-second initial results.
- 125–1400 CCA range.
- Analyze starting/charging system voltages.
- Tests 12V batteries.
- Temperature and low charge compensation.
- Detects and identifies loose leads.
- Detects bad cells.
- Surface charge warning.
- Measures multiple international units: CCA, IEC, DIN, BCI, and EN.
- 4-digit LED display shows good/bad status, available CCAs, and voltage.

No. 3183 – Includes digital battery tester. Includes digital battery tester and soft-sided carrying case.



3183

130-Amp Digital Battery Load Tester

Produce more accurate results with this 130-amp digital battery load tester. The compact, lightweight design is rugged enough for everyday testing of 6- and 12-volt batteries.

Features and Benefits

- Large, easy-to-read display.
- Side-clamp mount.
- Comfortable, easy-to-grip, ergonomic handle.
- Alternator test lead.
- Ripple detection light.
- 0–16 volt range.
- Dual jaw load clamp design.
- State of charge.
- Battery load test.
- Starter and charging system test.
- Alternator ripple test.

No. 3182 – Digital battery tester.
Includes 130-amp digital battery tester and test leads.



3182

130-Amp Heavy-Duty Battery Load Tester

Applying an industry-leading 130-amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds. It includes uniquely designed clamps for a positive grip on top- and side-post batteries and an extra-large, easy-to-read display.

Features and Benefits

- 130-amp load capacity for accurate results.
- 0–16 volt range.
- Uniquely designed clamps for both top- and side-post batteries.
- Extra-large display with zero adjust.
- Works on both 6V and 12V batteries.
- Ergonomic handle design.
- Side tabs for on-tool clamp storage.
- Back brackets for tool storage on wall or toolbox.

No. 3181 – 130 amp heavy-duty battery load tester.



3181

100-Amp Battery Load Tester

Tests batteries on or off the car in just 10 seconds. Convenient, portable size and easy-to-read scales.

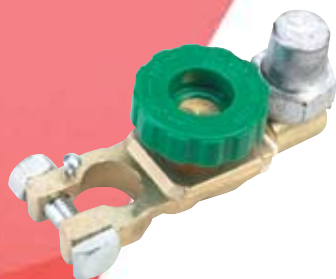
Features and Benefits

- Heavy-duty, copper-plated clamps.
- 100 amp load capacity.
- 0–16 volt range.
- Load safety switch prevents arcing.
- Heavy-duty, chrome-plated, ventilated steel case.
- Works on both 6V and 12V batteries.
- Ceramic insulators.
- Determines state-of-charge, cranking, and charging volts.
- Determines good/bad status.
- Extra-large display with zero adjust.

No. 3180 – 100-amp battery load tester.



3180



7645

Parasitic Draw Test Switch

Finding electrical problems that drain the battery is getting harder all the time. But using No. 7645 with your digital amp meter takes the guesswork out of a complicated job. Attach the test switch between the negative battery cable and the battery, and then road-test the vehicle. Next, connect an amp meter to the switch to determine the parasitic amperage draw, and locate the excessive electrical drain on the battery. Works on any vehicle with side- or top-post batteries.

No. 7645 – Parasitic draw test switch. Wt., 8 oz.



3382

Parasitic Drain Tester with Memory Saver

- Provides instant feedback of a possible battery drain condition, eliminating unnecessary replacement of battery or charging system components.
- Memory saver feature protects vehicle's computer memory, preserving stored fault codes, driveability parameters, and programmed electrical settings, such as clock, radio, seat position, etc.

No. 3382 – Parasitic drain tester.

No. 3382-01 – Charger.

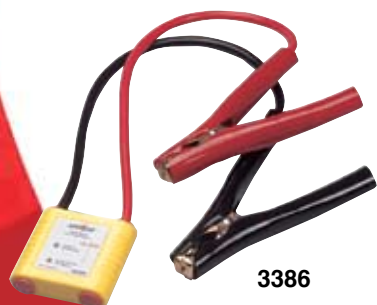


3381

Parasitic Battery Drain Tester

- Connects between battery and negative battery cable, providing instant feedback of a possible parasitic battery drain condition in an undriven vehicle.
- Prevents unnecessary replacement of a suspected battery or charging system component by verifying that a parasitic drain is responsible for a low battery.
- Calibrated to vehicle manufacturer standards to allow certain parasitic loads while detecting those that are above acceptable limits.

No. 3381 – Parasitic battery drain tester.



3386

Antizap Auto Surge Protector

- Connects to battery, and becomes part of vehicle's electrical circuit. If a voltage spike is detected, the Antizap automatically clips it to a safe level to prevent damage to sensitive electronic systems.
- Protects fuel gauge, ABS brakes, radios, tape and CD players, car alarms, SRS air bags, LED instrumentation, EFI, fuel, and climate control systems. Protects against welding (Arc, Mig, and TIG).

No. 3386 – Antizap auto surge protector.

12 Volts only

MinuteMan Plus saves you hours when you're testing batteries, starters, alternators, regulators, and charging systems.

Features

- Special AGM test options for accurately diagnosing AGM and spiral (six-pack style) batteries.
- Can switch between English and Spanish languages with a menu-based selection.

Battery Testing

The way it has been: Your customer brings in a dead battery and you have to charge it up to test it. Then, if it's a keeper, you have to recharge it. Hardly efficient use of your valuable time. With MinuteMan Plus on the job, you can test discharged batteries down to as low as two volts, and it won't drain a charged battery you are testing. You won't waste time charging bad batteries.

Works on all 12-volt automotive-type batteries with cold cranking amp ratings of 100–1500. This includes batteries found in motor-vehicle, marine, agricultural, forestry, and industrial applications. The tester operates from either 110 volts AC or its own internal, rechargeable 6-volt battery. Features self-calibration, an internal battery check, and an automatic shut-down to reduce power consumption.

On certain competitive, carbon-pile load battery testers, the technician must interpret the readings, then make the electrical system diagnosis. With MinuteMan Plus, all you have to do is read simple test results on the LCD display.

Starter Testing

The MinuteMan Plus display shows cranking volts and amps, and indicates either "Good Starter" or "Bad Starter." Excessive starter current draw can indicate a defective starter. Excessive engine drag, due to tight or damaged bearings or piston drag, can also cause an abnormally high starter draw.

Charging System Testing

Checks the charging system at high rpms and at idle, and stores the data. Results show regulator volts, peak amps, and a diode condition. MinuteMan Plus utilizes waveform analysis when testing alternator diodes, which provides more accuracy than the commonly used "ripple voltage" tests.

Battery Tachometer Capability

Unique, direct-from-battery technology gives you tachometer readings without having to make complicated connections to the ignition system. Provides battery-sensing measurements to 4,000 rpm, with 1 rpm resolution.

Order Information

No. 3130AGM – MinuteMan Plus multi-application electrical system tester. Includes connector cables, internal rechargeable battery, battery charger, and instructions. Wt., 27 lbs.

No. 3131AGM – Same as No. 3130AGM, but also includes roll-around cart with two additional shelves for other equipment. Wt., 53 lbs.

No. 3135 – Printer kit.

No. 3131-02 – Dust cover.

Updated
Features

3130AGM



3130-003
Voltage Harness

3130-01
Amp Probe Assembly

Quick
Starter Test
...tests starter
in seconds
with no need
to disable
ignition.

3131AGM



3130-02
Dust cover



ELECTRONIC DIAGNOSTICS

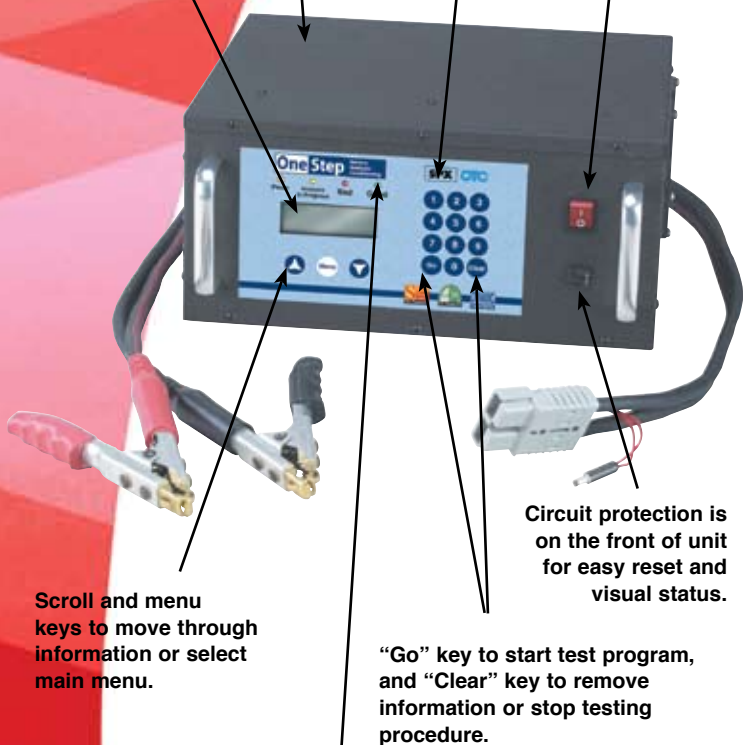
Battery Analyzer and Charger

Display window shows menus and input screens.

Numeric key pad for entering information fast is kept clean by a sealed membrane.

Heavy-duty all steel construction.

Heavy-duty power switch lights up for power-on indication.



Scroll and menu keys to move through information or select main menu.

Circuit protection is on the front of unit for easy reset and visual status.

“Go” key to start test program, and “Clear” key to remove information or stop testing procedure.

LED status lights show Power, Progress, Fault, or Completed test procedure.

OneStep™ Battery Analyzer and Charger

The OneStep is a bench-top battery tester and charger that provides extremely accurate battery diagnosis. The combination of SABRE heavy load, dynamic charge, and accuracy test technologies yields unparalleled accuracy, and the addition of charge acceptance into the test algorithms further increases the level of accuracy. Precise high-output charging can test, fully charge, and return a battery to service in under 45 minutes. It also provides analysis of a battery's charge acceptance by testing the battery again following the charge cycle. It is specifically designed for all forms of the newer AGM (including spiral wound types), gel cell and deep cycle batteries, as well as conventional FLA (lead-acid) batteries.

Features and Benefits

OneStep gives the user one piece of equipment to completely test and charge batteries with the highest accuracy.

- **Precise High-output Charging**—returns charged batteries to service in less than 45 min.
- Compatible with **AGM, FLA, Gel Cell, and Spiral-Wound** batteries.
- Extremely accurate testing—combination of **Heavy-Load, Dynamic Charge and Accuracy Test Technology**.
- **Sealed Numeric Keyboard**—clear covering keeps unit clean as you enter data.
- **LED Status Lights**—quickly identify test status.
- **Built Rugged**—all-steel construction with solid copper transformer.
- **Compact Flash Card Port**—updates software and add memory as needed.
- **Low Cost of Ownership**—designed with internal overload protections for high volume use; field replaceable cables.
- **Precise Output Charging**—computerized control of charging voltage and current.
- **Easy-to-Use Menus**—screen prompts guide user through procedures.
- **Expandability**—easy to update and expand as new battery technologies are released.
- **Bar Code Reader**—optional feature for fast and accurate entry of battery specifications.
- **Battery Warranty Output Code**—allows easy warranty administration analysis.

No. 3641 – OneStep battery analyzer/charger, 20-amp input. Wt., 68 lbs.

No. 3640 – OneStep battery analyzer/charger, 15-amp input. Wt., 68 lbs.

No. 3136 – Serial printer kit.

Specifications:

Battery Test Range: 12 volt, 150 – 1500 CCA

Battery Type: Works on all constructions of 12-volt lead-acid, gel-cell, absorbed glass mat (AGM), wet cell, spiral-wound batteries.

Operating Temperature Range: 4° F – 158° F ambient air temperature.

Humidity: 0 – 85%

Voltage Input: 115 volt 20 amp dedicated. Optional 15 amp input available.

The Judge—Rotating Electrical Alternator/ Starter Bench Tester

This rotating electrical tester, using advanced computer technology, lets you quickly diagnose alternators and starters with extreme accuracy—validated by component manufacturers. It features an integrated self-test to eliminate bad test leads, thus improving test results and reducing warranty costs to the auto parts retailer. Your tester investment is protected by The Judge—it can be updated to accommodate manufacturer's new starters and alternators, or to change test parameters on existing devices.

The Judge is easy to use and will test virtually every alternator and starter precisely, providing accurate results.

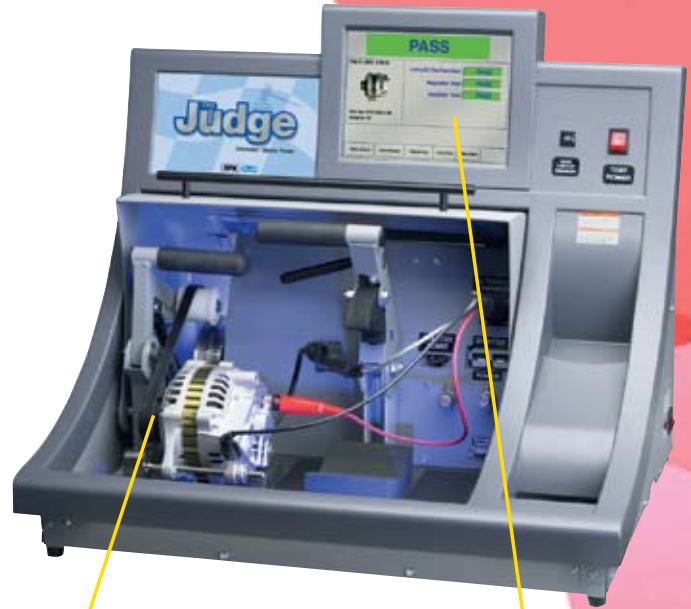
- **No More Flip Charts**—Integrated “Lester-based” part number database, or by vehicle selection.
- **Faster Set-up**—new improved mounting for alternators and starters.
- **Integrated Self-test Features** provide a lead check application—ensuring bad test leads are eliminated.
- **ETL Certified**—with circuitry specifically designed for reliability and durability.
- **Hooded Test Bay**—allows observation while capturing debris, grease, or oil when testing a well-used component.
- **Full-Color Touch Screen**—easy-to-use interface screen (10.5" display).
- **Ease of Component Mounting**—improved flexibility supports the latest mounting configurations.
- **Easy-to-Use Menus**—screen prompts guide technician through procedures.
- **Expandability**—easy to update and expand as new alternators/starters are developed.
- **Compact Flash Card Port**—update software and add memory as needed.
- **Bar Code Reader**—optional feature for fast and accurate test set-up.
- **Interlock Switch**—prevents operation when door is open.

No. 3643 – Judge rotating electrical tester. Includes bench tester, mounting pins, alternator cable, starter cable, solenoid cable, test leads, manuals.

No. 3643-01 – High-speed serial printer.

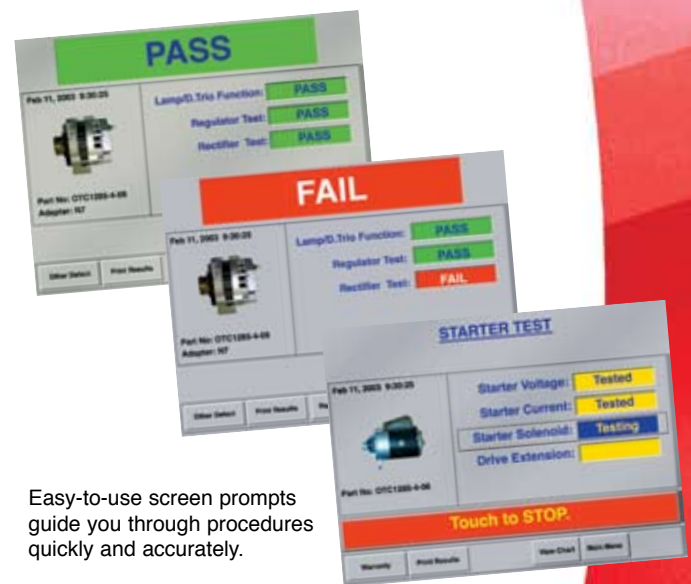
No. 3643-78 – Printer mount.

Hooded test bay with observation window improves safety. Door interlock switch prevents operation when door is open.



Innovative alternator mounting with tensioned idler and a newly designed starter vise.

Easy-to-use, 10.5" color touchscreen allows intuitive user interface.



Easy-to-use screen prompts guide you through procedures quickly and accurately.



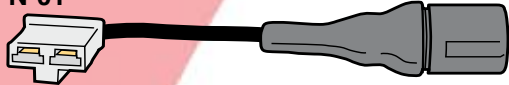
3643-01
High speed
serial printer.

3643-78
Printer
mount.

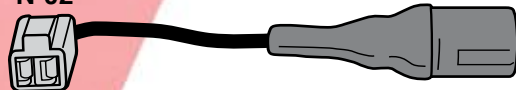
ELECTRONIC DIAGNOSTICS

The Judge Rotating Electrical Test Cable Chart

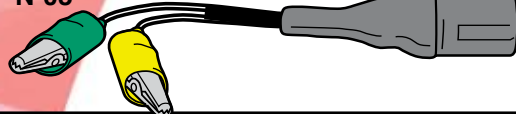
3643-21 N-01



3643-22 N-02



3643-23 N-03



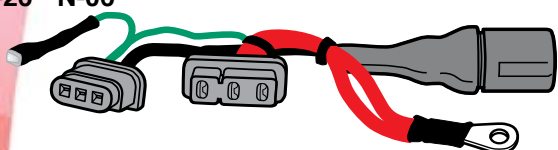
3643-24 N-04



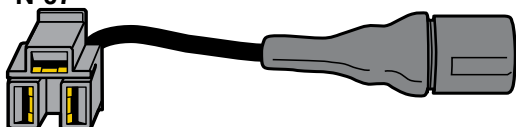
3643-25 N-05



3643-26 N-06



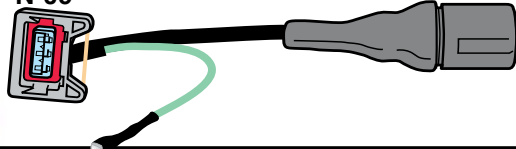
3643-27 N-07



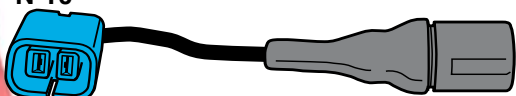
3643-28 N-08



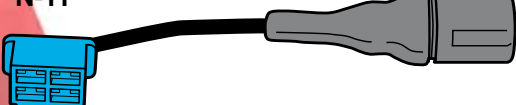
3643-29 N-09



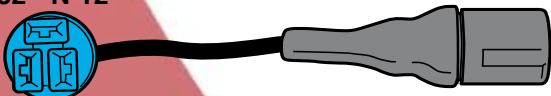
3643-30 N-10



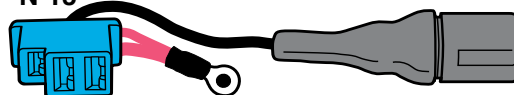
3643-31 N-11



3643-32 N-12



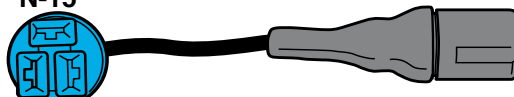
3643-33 N-13



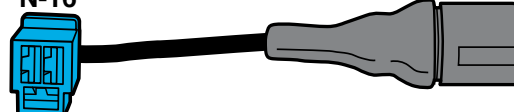
3643-34 N-14



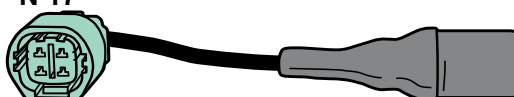
3643-35 N-15



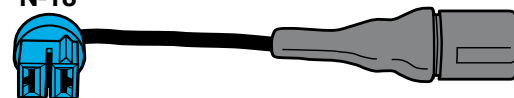
3643-36 N-16



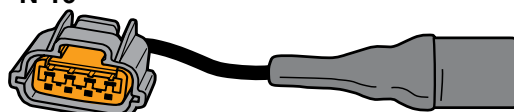
3643-37 N-17



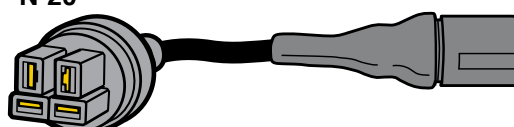
3643-38 N-18



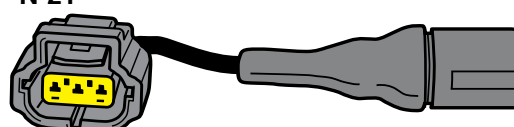
3643-39 N-19



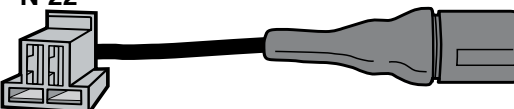
3643-40 N-20



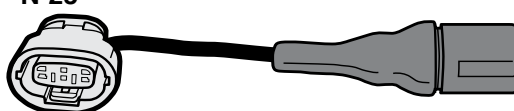
3643-41 N-21



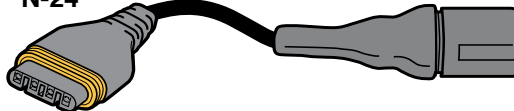
3643-42 N-22



3643-43 N-23



3643-44 N-24



Quick Finder Index...

Fuel Injection Diagnostic and Cleaning Equipment and Tools	66-74
Fuel Line Disconnect Tools	75-76
Fuel Injection and Emission System Tools	77-78

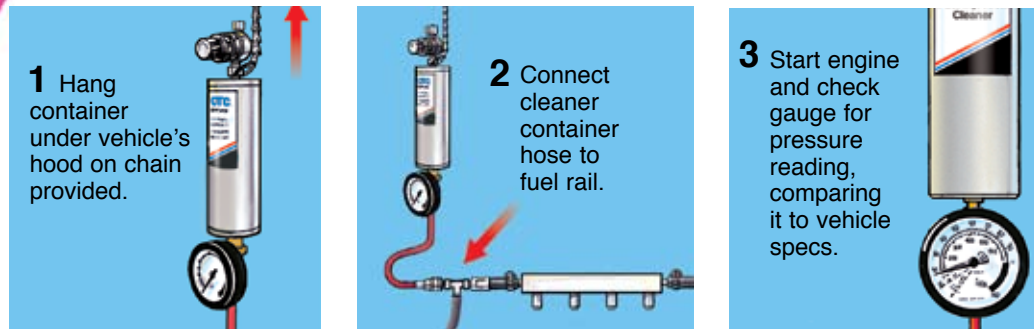


FUEL SERVICE TOOLS

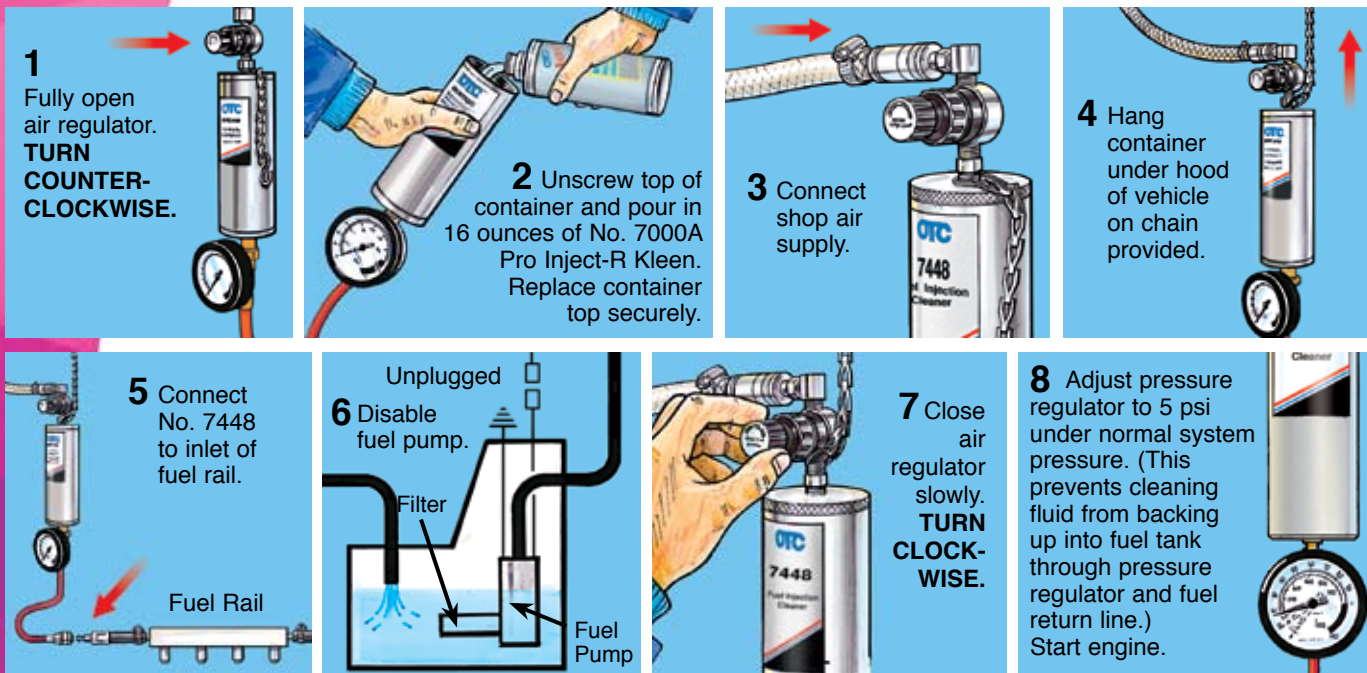
Fuel Service Tools

Only
OTC offers
you complete
fuel injection
service
coverage:

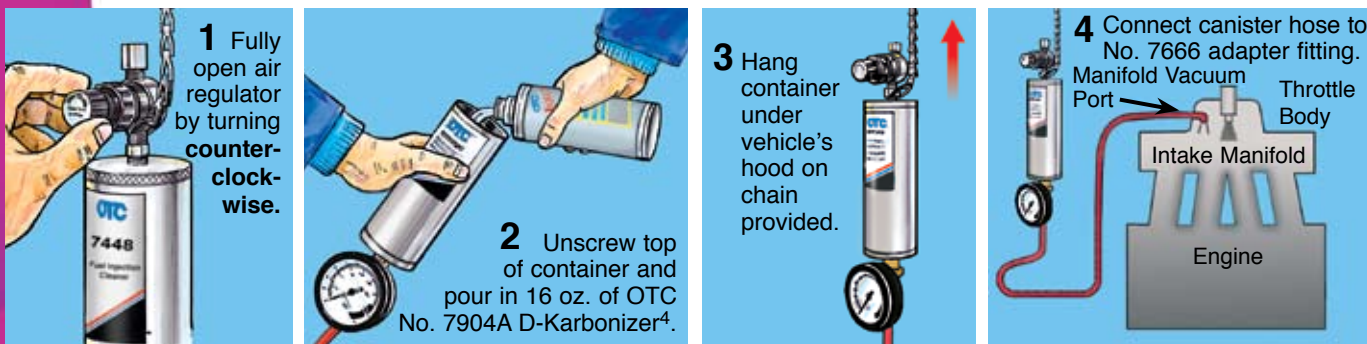
Diagnostic (Fuel Pressure Check)



Cleaning Injectors



Intake System Decarbonizing



- 5** a) Locate a manifold vacuum port (NOT ported vacuum) near throttle body or carburetor to distribute decarbonizing solution evenly. Connect decarbonizer hose with adapter to vacuum port.
- b) Start engine. Manually increase throttle to 1,500 RPM. Slowly open shut-off valve until engine runs rough and RPM decreases. (Do not manually increase RPM at this point.)
- c) When 16 oz. of decarbonizer solution has been used, turn off engine. Remove adapter fitting from engine and reconnect vacuum hose. Do not start engine for at least 30 minutes, to allow cleaning solution to loosen carbon deposits.

Fuel Injector Cleaning Kit

Clogged fuel injectors cause sluggish engine performance, poor fuel economy, and a rough idle. You can easily correct such problems with this injector cleaning kit. It works on a wide range of engines, both domestic and imported. Using our Pro Inject-R Kleen fluid, you can effectively clean injectors, restore their spray patterns, and prevent recurring deposits. The kit also enables you to do low- and high-pressure fuel system tests. It will also work with your shop's pressurized air supply for more powerful cleaning without expensive propellants.

- Removes carbon from intake and combustion systems when used with fitting No. 7666 and No. 7904A D-Karbonizer⁴ fluid.
- Includes canister, gauge, hose, fittings, operating instructions.

No. 7649 – Fuel injector cleaning kit. Wt., 9 lbs., 10 oz.

No. 7659 – Fuel injector cleaning kit. Includes everything in kit No. 7649, plus twelve 16 oz. cans of Pro Inject-R Kleen fluid. Wt., 29 lbs.



7649

No. 7236 – Spring lock coupling adapter
No. 7272 – EFI quick-disconnect fitting (.307-32 internal; Ford)
No. 7273 – Pressure adapter TBI (5/16" and 3/8")
No. 7430 – Quick-disconnect 90° elbow fitting (7/16"-20 internal)
No. 7441 – Banjo fitting (M8 internal banjo)
No. 7442 – Banjo fitting (M10 internal banjo)
No. 7443 – Banjo fitting (M12 internal banjo)
No. 47955 – Fuel injector cleaner (canister)

Canister-type Fuel Injector Cleaner

When connected to your shop's pressurized air supply, this tool provides the most effective method of cleaning fouled fuel injectors. It's much quicker than aerosol methods, and it works on many domestic and imported engines, with either low- or high-pressure systems. The canister, built with brass and aluminum, is rugged and holds 18 fluid ounces. The gauge's large dial is easy to read. We recommend that our No. 7000A Pro Inject-R Kleen fluid be used with this cleaner.

- Works with all OTC fuel injection system adapters.
- Will remove carbon from intake and combustion systems, when used with our No. 7666 adapter and No. 7904A D-Karbonizer⁴ fluid.
- Includes gauge, 72" hose, under-hood hanger, and instructions.

No. 7448 – Canister-type fuel injector cleaner. Wt., 6 lbs., 14 oz.



7448

No. 313575 – Pressure gauge
No. 213299 – Air regulator
No. 213209 – O-ring
No. 206878 – Coupler socket
No. 306905 – Hose

Pro Inject-R Kleen Fluid

Clean fuel injectors mean cleaner running, more efficient engines – and lower emissions. This fluid restores injectors' original spray pattern, helps prevent recurring problems, and reduces intake and port deposits. We recommend it for all of our canister-type cleaning devices.

- No mixing; use right from the can.

No. 7000A – Pro Inject-R Kleen fluid. Case of 12 16-oz. cans. Wt., 13 lbs., 10 oz.

No. 7000A-1 – Pro Inject-R Kleen fluid single can.

D-Karbonizer⁴ Intake System Cleaning

When you need serious intake system cleaning, you need our D-Karbonizer⁴ fluid. It quickly strips away carbon, gum, and varnish. A clean intake and combustion system results in easier starting, less engine knocking, better fuel economy, and fewer emissions. We recommend it for all of our canister-type cleaning devices.

- No mixing; use right from the can.

No. 7904A – D-Karbonizer⁴ intake system cleaning treatment. Case of 12 16-oz. cans. Wt., 13 lbs., 10 oz.

No. 7904A-1 – D-Karbonizer⁴ single can.



7000A

Not a fuel additive
DO NOT POUR INTO
FUEL TANK.

Not a fuel additive
DO NOT POUR INTO
FUEL TANK.



7904A

FUEL SERVICE TOOLS

Fuel Service Tools



7797



7635A

Fuel Injection Diagnostic Set

With these sets, you can quickly and accurately diagnose fuel pressure problems on Chrysler, Ford, GM, or Jeep engines that have multi-port fuel injection systems. You can also bleed air from the system with the bleed valve. No. 7211 gauge assembly allows technicians to check fuel pressure and fuel volume.

Set Includes:

- No. 7665 – GM TBI fuel pressure adapter
- No. 7430 – Quick-disconnect 90° elbow fitting
- No. 7272 – Ford EFI quick-disconnect fitting
- No. 211398 – Pressure hose
- No. 206878 – Coupler
- No. 19088 – O-ring

No. 7797 – Fuel injection diagnostic set. Wt., 1 lb., 13 oz.

No. 7635A – Basic fuel injection diagnostic set. (Same as No. 7797, but does not include No. 7665 GM TBI adapter.) Wt., 1 lb., 8 oz.

Gauge and Hose Assembly

This gauge is designed to work with any of our fittings for testing fuel injection systems. It features a sturdy 3-1/2" dial that reads 0–100 psi. It also has a built-in (100–150 psi) retard to prevent excess pressure damage. The assembly's disconnect fitting has a check valve to lessen chance of fuel spray.

- Includes 6-ft. bleed hose and 30" pressure hose.
- Bleed valve eliminates air from injection system and can be used to reduce pressure when disconnecting hoses.
- Bleed valve also allows gauge assembly to be used to check fuel pump volume.

No. 7211 – Gauge and hose assembly. Wt., 1 lb., 3 oz.

No. 306905 – Optional pressure hose, 70" long. Wt., 7 oz.

No. 7211M – Gauge, 6' bleed hose, and 70" pressure hose.



7211

Fuel Pressure Tester Kit

Quickly and easily locate any malfunctioning fuel system component, including fuel filters, pressure regulators, fuel lines, and fuel pumps without removing it from the vehicle.

Features and benefits:

- Large, easy-to-read 0–100 psi scale, 0–700 kPa.
- Solid brass fittings.
- Pressure relief valve for safe, clean testing.

No. 5630 – Fuel pressure tester kit. Wt., 1 lb., 4 oz.



5630

Master Fuel Injection Kit

Test fuel injection systems on most GMs, including GM TBI, Ford, Chrysler, and Jeep vehicles. Also works on imports, including CIS and CISE fuel systems. With this kit you can diagnose fuel-related problems, such as a weak fuel pump or restricted fuel filter, and perform leak-down tests. Kit includes 0–100 psi fuel pressure gauge and 35 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve. Replacement seal kit also included.

No. 6550 – Master fuel injection kit. Wt., 11 lb., 12 oz.

6550



Domestic Fuel Injection Kit

Test fuel injection systems on most GMs, including GM TBI, Ford, Chrysler, and Jeep vehicles. With this kit you can diagnose fuel-related problems, such as a weak fuel pump or restricted fuel filter, and perform leak-down tests. Kit includes 0–100 psi fuel pressure gauge and 17 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve. Replacement seal kit also included.

No. 6551 – Domestic fuel injection kit. Wt., 4 lb., 2 oz.

6551



Import Fuel Injection Kit

Test fuel injection systems on imports, including CIS and CISE fuel systems. With this kit you can diagnose fuel-related problems, such as a weak fuel pump or restricted fuel filter, and perform leak-down tests. Kit includes 0–100 psi fuel pressure gauge and 23 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve for. Replacement seal kit also included.

No. 6552 – Import fuel injection kit. Wt., 4 lb., 2 oz.

6552



Asian Fuel Injection Fitting Kit

The fittings in this kit enable you to connect OTC No. 7211 gauge (not included) to most Hyundai, Honda, Mitsubishi, and other Asian automotive engines, and diagnose most common fuel system problems involving low fuel pressure and low fuel volume at the injectors. Each fitting comes with a quick-connect Schrader valve for easy hookup to the gauge assembly.

- Fitting seals are compatible with most popular cleaning solvents.
- Includes operating instructions and handy blow-molded case.

No. 6570 – Asian fuel injection fitting kit. Wt., 3 lb.

6570



FUEL SERVICE TOOLS


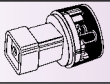
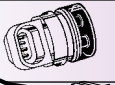
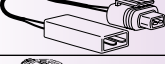







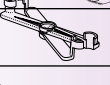
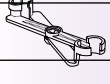



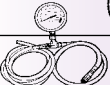

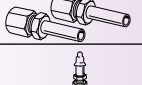
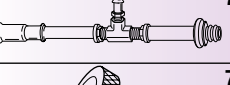

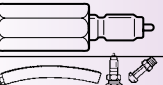
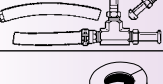


Fuel Injection Comparison Chart (Adapters, Fittings, and Accessories)

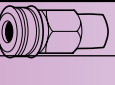


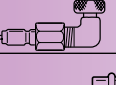




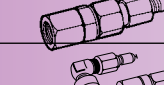

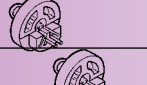
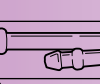


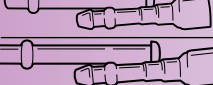
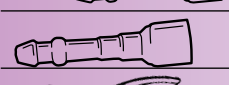
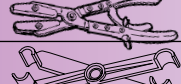
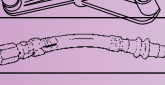

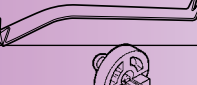
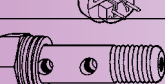



No.	Description	6550	6551	6552	6570
518356	CIS/TBI hose assembly with shutoff valve	•	•	•	
518472	16 mm x 1.5 internal o-ring adapter	•	•		
518473	14 mm x 1.5 external o-ring adapter	•	•		
518474	14 mm x 1.5 internal o-ring adapter	•	•		
518476	Ford hairpin adapter (5/16")	•	•		
518477	Seal Kit	•	•	•	
518478	Single-end hose adapter (1/4, 5/16, 3/8)	•	•	•	
518480	Double-end hose adapter (5/16, 3/8)	•	•	•	•
518481	16 mm x 1.5 external o-ring adapter	•	•		
518482	14 mm x 1.5 external o-ring plug	•	•		
518483	3-1/2" gauge, 0–100 psi (0–7 BAR)	•	•	•	
518484	M10 x 1.0 internal o-ring adapter	•		•	
518485	M8 x 1.0 internal o-ring adapter	•		•	
518486	M12 x 1.5 internal swivel adapter	•		•	
518487	GM TBI inline adapter (16 mm x 1.5)	•	•		
518488	M8 x 1.0 external o-ring adapter (long)	•		•	
518489	M10 x 1.0 external o-ring adapter	•		•	
518490	M6 x 1.0 external o-ring adapter	•		•	•
518491	M8 x 1.0 external banjo adapter	•		•	
518492	M10 x 1.0 external banjo adapter	•		•	
518493	M12 x 1.5 external banjo adapter	•		•	
518494	M12 x 1.25 external banjo adapter	•		•	•
518495	Ford flexible EFI adapter	•	•		
518496	M16 x 1.5 external & internal swivel adapter	•		•	
518497	1/4" BSPT external & internal swivel adapter	•		•	
518498	M14 x 1.5 external & internal swivel adapter	•		•	
518499	Ford spring lock adapter	•	•		
518501	M14 x 1.5 external banjo adapter	•		•	
518527	GM/Chrysler hairpin adapter (3/8")	•	•		
518530	Gauge hose assembly with relief valve	•	•	•	
518534	5/8" x 18 external flare adapter	•	•		
518535	5/8" x 18 internal flare adapter	•	•		
518536	M8 x 1.0 external o-ring adapter	•		•	
518537	M8 x 1.0 internal o-ring adapter (long)	•		•	
518542	7/16 x 20 GM/Chrysler flexible adapter	•	•		
528177	7/16 x 20 GM/Chrysler elbow adapter				
528178	7/16 x 20 GM/Chrysler straight adapter (short)				
528180	Low pressure gauge 0–15 psi (0–1 BAR)				
528182	16 mm x 1.5 elbow GM TBI fitting				
528183	3/8 hairpin adapter				
528541	5/8 x 18 flare straight adapter				
528766	M12 banjo adapter				•
528767	M8 x 1.0 double banjo bolt				•
528768	M12 x 1.25 double banjo bolt				•
528769	M8 banjo fitting				•
528770	.430 diameter adapter				•
528771	.560 diameter adapter				•
528772	5/8" diameter adapter				•
528773	O-ring & washer kit				
528774	O-ring & washer kit				•
528776	Ford EFI adapter				
528779	16 mm x 1.5 internal union adapter				



FUEL SERVICE TOOLS

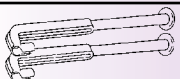
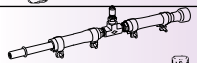





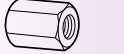




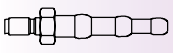
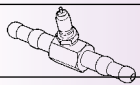
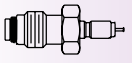
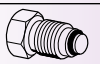
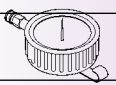
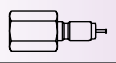
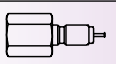
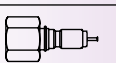
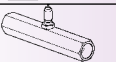
Fuel Injection Comparison Chart (Adapters, Fittings, and Accessories)


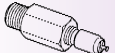
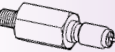
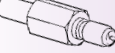
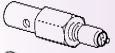


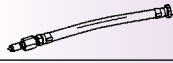
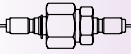

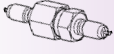
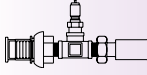
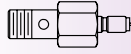
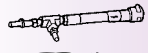

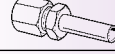


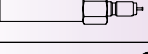







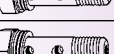

	Part No.	Description
	3054C	Noid Lite/IAC signal tester with fiber optic cable. Wt., 15 oz.
	3052S	IAC signal tester (GM). (Square 4-pin connector). Wt., 3 oz. See page 74.
	3053S	IAC signal tester (GM). (Flat 4-pin connector). Wt., 3 oz. See page 74.
	3305-53	TBI adapter. Wt., 11 oz.
	3320	2-in-1 idle air/idle speed control tester. Wt., 10 oz. See page 49.
	3397	Fuel injector tester (TBI adapter included). (Same as Kent-Moore J-39021-22.) Wt., 2 lbs., 10 oz. See page 48.
	3398	Fuel injection pulse tester. Wt., 10 oz. See page 74.
	4506	Fuel line clamp set. Wt., 6 oz.
	6023	Noid Lite (for GM Multec 2 injectors). Wt., 2 oz. See page 73.
	6260	Fiber Optic Noid Lite Extension Cable. Wt., 5 oz. See page 74.
	6266	Noid Lite (for GM Bosch 2 injectors). Wt., 2 oz.
	6509	Fuel line disconnect tool. Wt., 3 oz. See page 76.
	6511	Fuel line disconnect tool. Wt., 3 oz. See page 76.
	7000A	Injector cleaning fluid. case of 12 cans. Wt., 13 lb., 10 oz. See page 67.
	7187	Noid Lite (GM TBI). GM model 220, 300, 500 series TBI. Wt., 2 oz. See page 73.
	7188	Noid Lite (Bosch PFI). GM model 700 series TBI. Wt., 2 oz. See page 73.
	7211	Pressure gauge assembly (0-100 psi). Wt., 1 lb., 3 oz.
	7214A	Quick-disconnect straight fitting (1/16-20 internal). (Also conversion adapter for Champion and 3M.) Wt., 2 oz.
	7222A	Adapter set (5/8-18 internal, 45° flare inverted). Wt., 7 oz.
	7236	Spring lock coupling adapter same as Ford 310-D003 (D85L-9974-C). Wt., 7 oz.
	7244	Quick-disconnect tool (for duck bill clips). Same as Ford 307-123 (T82L-9500-AH). Wt., 2 oz.
	7272	EFI Quick coupler disconnect fitting (Ford .307-32 internal). Wt., 1 oz.
	7273	Pressure adapter (1/16" & 3/16" fuel line). Wt., 8 oz.
	7335	Fuel line disconnect tool (3/16") (yellow). Same as Ford 310-D004 (D87L-9280-A). Wt., 2 oz.
	7336	Fuel line disconnect tool (1/2") (green). Same as Ford 310-D005 (D87L-9280-B.) Wt., 2 oz.

	Part No.	Description
	7342	Quick coupler adapter. Wt., 2 oz.
	7370	Fuel line disconnect tool (3/16") (gray). Same as Ford 310-040 (T90T-9550-B). Wt., 1 oz.
	7371	Fuel line disconnect tool (3/16") (blue). Same as Ford 310-041 (T90T-9550-C). Wt., 1 oz.
	7430	Quick-disconnect 90° elbow fitting (7/16-20 internal). Also conversion adapter for Champion & 3M. Wt., 3 oz.
	7433	Fuel return line plug (3/8" external). Wt., 2 oz.
	7439	Pressure gauge (0-100 psi). Has a built-in retard (100-150 psi). Wt., 11 oz.
	7442	Banjo fitting (M10 internal banjo). Wt., 3 oz.
	7443	Banjo fitting (M12 internal banjo). Wt., 3 oz.
	7448	Fuel injector canister-type cleaner. Wt., 6 lbs., 13 oz. See page 67.
	7472	Conversion adapter (M12 x 1.5 internal ball nose snap-on). Wt., 3 oz.
	7597	Conversion Adapter Kit (7430 & 7472 snap-on). Wt., 7 oz.
	7601	Noid Lite (Ford TBI). Wt., 1 oz. See page 73.
	7602	Noid Lite (GM PFI). Wt., 1 oz. See page 73.
	7608	Noid Lite (Geo TBI). Wt., 1 oz. See page 73.
	7628	Special fitting set (5/16"). Wt., 3 oz.
	7629	Special fitting set (3/8"). Wt., 3 oz.
	7631	Fuel return line plug (5/16"). Wt., 2 oz.
	7655	Pinch-off pliers. Wt., 13 oz.
	7660	Fuel line disconnect tool. Same as Ford 310-052 (T93T-9550-AH). Wt., 2 oz.
	7666	Decarbonizing adapter. Wt., 5 oz.
	519154	Ford fuel line coupling tool. Same as 310-052 (T90T-9550-A). Wt., 1 oz. See page 77.
	519155	Chrysler fuel line disconnect Tool. Wt., 10 oz.
	7828	GM SCPI Noid-Lite. Wt., 2 oz. See page 73.
	518501	EFI pressure test adapter (M14 x 1.5 external double banjo). Wt., 3 oz.






FUEL SERVICE TOOLS





Fuel Injection Comparison Chart (Adapters, Fittings, and Accessories)

Part No.	Description
 7896	Fuel line disconnect tool set, 5/16" red and 3/8" blue. (Same as Kent-Moore J-39504.) Wt., 7 oz.
 7902	Chrysler fuel injection fitting. Wt., 13 oz.
 7904A	D-Karbonizer ⁺ intake system cleaning fluid. Case of 12 cans. Wt., 13 lbs., 10 oz. See page 67.
 7915	Fuel injection quick coupler adapter. Wt., 2 oz.
 7923	Ford fuel injection adapter. Wt., 5 oz.
 7951	Ford idle speed control tester. Wt., 9 oz.
 518356	Fuel line adapter (CIS). Wt., 12 oz.
 518472	16 mm x 1.5 Internal o-ring adapter. Wt., 3 oz.
 518473	14 mm x 1.5 External o-ring adapter. Wt., 2 oz.
 518474	14 mm x 1.5 Internal o-ring adapter. Wt., 2 oz.
 518476	Ford hairpin adapter (5/16"). Wt., 5 oz.
 518477	Fuel injection seal kit. Wt., 2 oz.
 518478	Single-end hose adapter (1/4", 5/16", 3/8"). Wt., 12 oz..
 518480	Double-end hose adapter (5/16", 3/8"). Wt., 3 oz.
 518481	16 mm x 1.5 external o-ring. Wt., 2 oz.
 518482	Fuel return line plug (M14 x 1.5 external). Wt., 3 oz.
 518483	3-1/2" Gauge, 0-100 psi, 0-7 BAR. protective boot. Wt., 12 oz.
 518484	M10 x 1.0 internal o-ring adapter. Wt., 10 oz.
 518485	M8 x 1.0 Internal o-ring adapter. Wt., 10 oz.
 518486	M12 x 1.5 Internal swivel adapter. Wt., 1 oz.
 518487	GM TBI fuel pressure adapter. (16 mm x 1.5). Wt., 5 oz.

Part No.	Description
 518488	Quick-disconnect fitting (M8 x 1.0 x 3 3/8" long external o-ring). Wt., 3 oz.
 518489	Quick-disconnect fitting (M10 x 1.0 external o-ring). Wt., 2 oz.
 518490	Quick-disconnect fitting (M6 x 1.0 external o-ring). Wt., 3 oz.
 518491	Quick-disconnect banjo fitting (M8 x 1.0 external). Wt., 3 oz.
 518492	Quick-disconnect banjo fitting (M10 x 1.0 external). Wt., 3 oz.
 518493	Quick-disconnect banjo fitting (M12 x 1.5 external). Wt., 3 oz.
 518494	Quick-disconnect banjo fitting (M12 x 1.25 external). Wt., 3 oz.
 518495	Ford adapter, Schrader, .308 x 3/2 thread (Ford EFI). Wt., 2 oz.
 518496	M16 x 1.5 External & internal swivel adapter. Wt., 2 oz.
 518497	1/4" Pipe External & internal swivel adapter. Wt., 5 oz.
 518498	M14 x 1.5 External & internal swivel adapter. Wt., 2 oz.
 518499	Ford spring lock adapter. 2003 - newer with returnless fuel system. Wt., 7 oz.
 518501	M14 x 1.5 External banjo bolt. Wt., 2 oz.
 518527	3/8" Hairpin adapter. Wt., 5 oz.
 518530	Hose assembly with relief valve. Wt., 1 lb. 2 oz.
 518534	Adapter set (5/8-18 external, 45° inverted flare). Wt., 3.5 oz.
 518535	Adapter set (5/8-18 internal, 45° inverted flare). Wt., 3.5 oz.
 518536	Quick-disconnect fitting (M8 x 1.0 external o-ring). Wt., 2 oz.
 518537	M8 x 1.0 Internal o-ring adapter (long). Wt., 5 oz.
 518542	GMC/Chrysler adapter (7/16 x 20). Wt., 6 oz.
 528177	7/16 x 20 GM/Chrysler elbow adapter. Wt., 4 oz.
 528178	7/16 x 20 GM/Chrysler straight adapter (short). Wt. 4 oz.
 528180	Low-pressure gauge 0-15 psi (0-1 BAR). Wt. 12 oz.
 528182	16 mm x 1.5 elbow GM TBI fitting. Wt. 4 oz.
 528183	3/8 hairpin adapter. Wt. 4 oz.
 528766	M12 x 1.0 Double Banjo Bolt. Wt., 5 oz.
 528767	M8 x 1.0 Double Banjo Bolt. Wt., 2 oz.
 528768	M12 x 1.25 Double Banjo Bolt. Wt., 2 oz.

Fuel Injection Adapters, Fittings, and Accessories

Part No.	Description
 528541	5/8 x 18 flare straight adapter. Wt. 3 oz.
 528769	Banjo fitting (M8 banjo). Wt., 3 oz.
 528770	Quick-disconnect fitting (.430 Ø external) (Mitsubishi/Chrysler). Wt., 3 oz.
 528771	Quick-disconnect fitting (.580 Ø external) (Mitsubishi/Chrysler). Wt., 3 oz.
 528772	Quick-disconnect fitting (5/8" Ø external) (Mitsubishi). Wt., 5 oz.

Part No.	Description
 528773	O-ring and washer set for kit No. 6571. Wt. 1 oz.
 528774	O-ring and washer set for kit No. 6570. Wt. 1 oz.
 528776	Ford EFI Adapter. Wt. 4 oz.
 528779	16 mm x 1.5 Internal union adapter. Wt. 2 oz.

Noid Lite/IAC Test Kits

- Noid Lites are a proven test device to quickly determine if the electrical signal is present at the fuel injector.
- Simplest method for eliminating the EFI system or idle air control as possible faults on no-start vehicles.
- Disconnect the fuel injectors, plug in a Noid Lite, and crank the engine. A flashing noid light indicates normal pulsing voltage.

- Expanded set of eight specific Noid Lites covers: GM PFI, Ford TBI, Geo TBI, Bosch PFI, GM TBI, GM SCPI, Bosch 2, and Multec 2. Also includes two GM IAC testers (flat and square four-connector applications) with red and green LEDs.
- Kits come in molded plastic cases and include a fiber optic Noid Lite extension that allows for convenient remote viewing of noid lite flashing from the driver's seat.

No. 3050C – Noid Lite Test kit. Wt., 1 lb. 1 oz.

Set includes: (available separately)

- No. 7187** – GM TBI Noid Lite. Wt., 2 oz.
- No. 7188** – Bosch PFI Noid Lite. Wt., 2 oz.
- No. 7601** – Ford TBI Noid Lite. Wt., 2 oz.
- No. 6023** – GM Multec 2 Noid Lite. Wt., 2 oz.
- No. 7602** – GM PFI Noid Lite. Wt., 2 oz.
- No. 7608** – Geo TBI Noid Lite. Wt., 2 oz.
- No. 7828** – GM SCPI Noid Lite. Wt., 2 oz.
- No. 6266** – Bosch 2 Noid Lite. Wt., 2 oz.
- No. 6260** – Fiber optic Noid Lite extension. Wt., 5 oz.



Typical Noid Lite

3050C

No. 3054C – Noid Lite/IAC test kit. Wt., 1 lb. 3 oz.

Set includes: (available separately)

- No. 7187** – GM TBI Noid Lite. Wt., 2 oz.
- No. 7188** – Bosch PFI Noid Lite. Wt., 2 oz.
- No. 7601** – Ford TBI Noid Lite. Wt., 2 oz.
- No. 6023** – GM Multec 2 Noid Lite. Wt., 2 oz.
- No. 7602** – GM PFI Noid Lite. Wt., 2 oz.
- No. 7608** – Geo TBI Noid Lite. Wt., 2 oz.
- No. 7828** – GM SCPI Noid Lite. Wt., 2 oz.
- No. 6266** – Bosch 2 Noid Lite. Wt., 2 oz.
- No. 6260** – Fiber optic Noid Lite extension. Wt., 5 oz.
- No. 3052S** – '82 and newer GM TBI/PFI IAC tester with square 4-pin connector. Wt., 2 oz.
- No. 3053S** – '87 and newer Model 700 TBI/PFI with flat 4-pin connector. Wt., 2 oz.



3054C

FUEL SERVICE TOOLS

Fuel Service Tools



Similar to Kent-Moore J-34730-225

3397

Fuel Injection Tester

Fuel injectors can pass a resistance test but still fail under load. With this tool, you can check and balance fuel injectors. Also tests fuel injector coil windings under load, and detects intermittent fuel injector coil faults. Adjustable current output. Works on both throttle body and multiport fuel injectors. TBI adapter included.

No. 3397 – Fuel injector tester. Wt., 3 lbs., 5 oz.



3398

Fuel Injection Pulse Tester

Fuel injector testing requires precision equipment. This vehicle-powered tool fills that requirement. It enables you to check cylinder balance by firing individual injectors at 1/2-second increments in three different ranges: 1 pulse of 500 milliseconds, 50 pulses of 10 milliseconds, 100 pulses of 5 milliseconds.

- Power and output lights indicate test activation.
- Includes wiring harness adapter and instructions.

No. 3398 – Fuel injection pulse tester. Wt., 8 oz.

No. 306677 – Replacement lead. Wt., 2 oz.



3052S

3053S

General Motors IAC Signal Test Lights

For checking the electronic control module signal that provides direction to the idle air control motor on General Motors vehicles with throttle body or port fuel injection systems.

No. 3051 – Set consists of Nos. 3052S and 3053S. Wt., 4 oz.

No. 3052S – Signal test light for 1982 and newer GM TBI and PFI fuel injection systems with a square 4-pin connector. Wt., 2 oz.

No. 3053S – Signal test light for 1987 and newer GM Model 700 TBI and PFI fuel injection systems with a flat 4-pin connector. Wt., 2 oz.



6260

Fiber Optic Noid Lite Extension Cable

- Four-foot length permits easy viewing of Noid Lite signal. Used with OTC's Nos. 7187, 7188, 7601, 7602, 7608, 7828, 6023, and 6266, as well as other brands of Noid Lites.
- Noid Lite is inserted into cup end of extension cable, then plugged into vehicle's wiring harness. Fiber optic cable is routed out of engine compartment with end placed where it can be observed. Engine is cranked, and flashing at end of extension indicates normal injector pulsing voltage.
- Suction cup at end of extension cable permits secure placement on hood, fender, windshield, etc., without damage to surface.

No. 6260 – Fiber optic Noid Lite extension cable. Wt., 5 oz.

Full-Coverage Disconnect Tool Set

If you're working on Chrysler, Ford, or General Motors vehicles, this set will make your job easier. The tools are designed for heater hoses, transmission oil coolers, air conditioning and fuel lines. They're approved by vehicle manufacturers and will not damage the fittings being disconnected. Tool Nos. 518092, 518896, 518897, 518898, 518899, 518900, and 518901 are spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

- Comes in blow-molded case.

No. 6508 – Disconnect tool set. Wt., 4 lbs., 8 oz.



Contents of set:

	Tool	Description
	440384	GM hydraulic clutch line disconnect tool.
	440486	GM transmission oil cooler line.
	511410	Fuel line disconnect tool.
	511413	Fuel line disconnect tool.
	518902	Heater hose disconnect tool.
	519158	Fuel line disconnect tool set.
	518582	Fuel line disconnect tool.
	518583	Fuel line disconnect tool.
	518584	Fuel line disconnect tool.
	518896	Fuel line disconnect tool. (Yellow, 3/8")
	518897	A/C spring lock coupling tool. (Black, 5/8")
	518898	A/C spring lock coupling tool. (Blue, 1/2")
	518899	Fuel line disconnect tool. (Green, 1/2")
	518900	A/C spring lock coupling tool. (Red, 3/8")

	Tool	Description
	518901	A/C spring lock coupling tool. (White, 3/4")
	519067	Fuel line disconnect tool.
	519068	Fuel line disconnect tool.
	519151	Quick disconnect tool.
	519152	Oil cooler line disconnect tool.
	519153	Clutch coupling tool.
	519154	Fuel line coupling tool.
	519155	Chrysler fuel line disconnect tool.
	519156	Ford heater hose disconnect tool.
	519157	GM heater line quick connect separator.
	519159	Oil cooler line disconnect tool.

FUEL SERVICE TOOLS

Fuel Service Tools



6517

Disconnect Tool Set

Designed for A/C lines, fuel lines, and transmission cooler lines.

- Contains 3/8", 1/2", 5/8", and 3/4" spring lock disconnect tools for A/C lines on 1981 thru 2006 Ford cars and trucks, 1994 thru 2006 Chrysler and Jeep vehicles.
- Contains the 3/8" and 1/2" fuel line disconnect tool for Ford vehicles.
- Contains the 5/16" and 3/8" fuel line disconnect tools for GM and Chrysler vehicles.
- Contains the transmission oil cooler line disconnect tool used on many GM and Ford vehicles.

No. 6517 – Disconnect tool set. Wt. 7 oz.



6603

Similar to Kent-Moore
No. J-46363.

GM Fuel Line Disconnect Tool

Applications: 2002–newer Tahoe and light-duty trucks with the 5.3L V8 engine.

- This is a required tool to remove the fuel line from the fuel filter.

No. 6603 – GM fuel line disconnect tool. Wt. 1 oz.



7337

Ford Fuel Line Disconnect Tool Set

These tools will easily disconnect the spring lock couplings of fuel lines on Ford's throttle body and port fuel injection systems. The tools are spring-loaded and durable, and they enclose the line to help deflect spray.

- Tools fit 3/8" and 1/2" lines.

No. 7337 – Ford fuel line disconnect tool set. Includes 7335 (3/8" yellow) and 7336 (1/2" green) disconnect tools. Wt., 4 oz.



7361

Similar to Ford
No. 310-5039
(T90T-9550-S)

Fuel Line Disconnect Tool Set

These two disconnect tools are designed to fit quick-connect fuel line fasteners. They'll work on Chrysler, Ford, or GM vehicles, and separate fuel lines without damaging the connectors.

- Tools fit 5/16" and 3/8" lines.

No. 7361 – Fuel line disconnect tool set. Includes 7370 (5/16" gray) and 7371 (3/8" blue) disconnect tools. Wt., 1 oz.



6509



6511

Fuel Line Disconnect Tools

• Special low-profile design works in close quarters on GM, Ford, and Chrysler vehicles where there is limited clearance between the fuel line fittings and fuel filters, fuel rails, or sending units. Both tools are designed to access the center port on the GM fuel tank sending unit.

No. 6509 – For 3/8" & 5/16" applications. Will also service 1999–current GM pickups, and 2000–current Suburban, Tahoe, and Yukon gasoline vehicles. Wt., 3 oz.

No. 6511 – For 3/8" and 1/2" applications. Will also service 2001–current 3/4- & 1-ton trucks with the Duramax diesel engines. Wt., 3 oz.

Fuel and Air Conditioning Line Release Tool

- This spring-lock coupling release tool easily separates fittings on fuel and air conditioning lines.
- Tool sizes are 3/4", 5/8", 1/2", and 3/8".

No. 4494 – Fuel and air conditioning line release tool. Wt., 5 oz.

4494



OTC Stinger

Ford Fuel Line Disconnect Tool Set

Here's the best tool for easy, frustration-free fuel line separation. As you put the tool on the fuel line coupling, its fingers depress the retaining collar to release the fuel line, preventing component damage.

- Works on 1990 to 1995 Ford Ranger and Explorer models fitted with 4.0L, 6-cylinder engines.

No. 519154 – Ford fuel line coupling tool. Wt., 2 oz.

519154

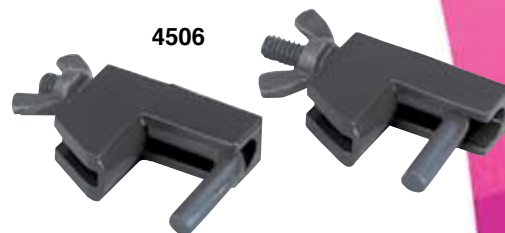


Rubber Line Clamp Set

- Set of two clamps. Used to quickly shut off flow from vacuum, brake, and fuel lines.
- Enables you to clamp and hold hose without damage.

No. 4506 – Rubber line clamp set. Wt., 6 oz.

4506



7-Piece Sensor Socket Set

Includes:

- No. 4673-1** – 29 mm pressure / vacuum switch socket.
- No. 4673-2** – 7/8" vacuum switch socket.
- No. 4673-3** – 27 mm oil pressure sending unit socket.
- No. 4673-4** – 7/8" vacuum switch socket.
- No. 4673-5** – 1-1/16" & 1" oil pressure sending unit socket.
- No. 4673-6** – 22 mm heated oxygen sensor wrench.
- No. 4673-7** – 7/8" short oxygen sensor socket.

No. 4673 – 7-Piece sensor socket set. Wt. 4 lbs. 10 oz.

4673



Oxygen Sensor Socket

- Designed to easily remove an oxygen sensor.
- Heat-treated cast steel.
- 7/8" hex, 1/2" square drive (double square for easy access).

No. 7189 – Oxygen sensor socket. Wt., 8 oz.

Similar to Ford
No. T79P-9472-A

7189



Oxygen Sensor Socket

- Works on all domestic and imported vehicles with oxygen sensors.
- Slot in socket's side allows wire clearance.
- Outside rib provides added strength, yet does not restrict access to sensors.
- 1/2" square drive, 1" male hex drive on top, 7/8" six-point opening, 3-7/8" long

No. 6931 – Oxygen sensor wrench. Wt., 1 lb.

6931



FUEL SERVICE TOOLS

Fuel Service Tools



7215

Exhaust Back Pressure Gauge

Now you can quickly read back pressure to determine the amount of restriction in an exhaust system. This gauge accurately measures through the oxygen sensor hole. Its large dial clearly shows pressure from 0–8 psi. The system has a stainless steel braided tube to withstand high-heat conditions.

- Includes a universal adapter for vehicles with thermactor systems.
- Works on domestic and imported vehicles.

No. 7215 – Exhaust back pressure gauge with universal adapter. Wt., 1 lb., 3 oz.



7416

Fuel Emission Flow Meter

- Enables precise adjustment of engine idle mixtures.
- Works with OTC No. 7148 propane enrichment kit to monitor the propane going into the engine.
- Works on domestic or imported vehicles that have carburetors.

No. 7416 – Fuel emission flow meter. Wt., 6 oz.



Similar to Ford
No. 310-003
(T75L-9600-A)

7148

Propane Enrichment Kit

- Ensures a correct idle mixture and compliance with emission standards.
- Works on domestic or imported vehicles that have carburetors.
- Uses standard 14-oz. propane cartridge.

No. 7148 – Propane enrichment kit. Wt., 14 oz.



Similar to Miller
No. 6856

7998

Chrysler Fuel Pump Module Spanner Wrench

Removes and installs the fuel pump retaining ring that holds the fuel pump module onto the gas tank. Works on most 1994–2005 Chrysler vehicles, and 1995–2004 Jeep vehicles.

No. 7998 – Chrysler fuel pump module spanner wrench. Wt., 1 lb., 5 oz.



6599

Fuel Tank Lock Ring Wrench

Universal design allows tool to fit fuel tank lock rings on Ford, Chrysler, and GM vehicles with gas engines.

- Works on: 2004–newer Ford F-150 trucks; 2004–newer Chrysler / Dodge minivans, PT Cruiser, Dakota, and Durango; 2004–newer Chevy 1/2-ton and 3/4-ton trucks; and 2005–newer Jeep vehicles.
- Tool easily removes and installs lock ring on the fuel tank when servicing the fuel pump or fuel sending unit.
- Used with a 1/2" drive ratchet or breaker bar.

No. 6599 – Fuel tank lock ring wrench. Wt. 1 lb. 8 oz.



6598

Mercedes-Benz Fuel Tank Service Tool Kit

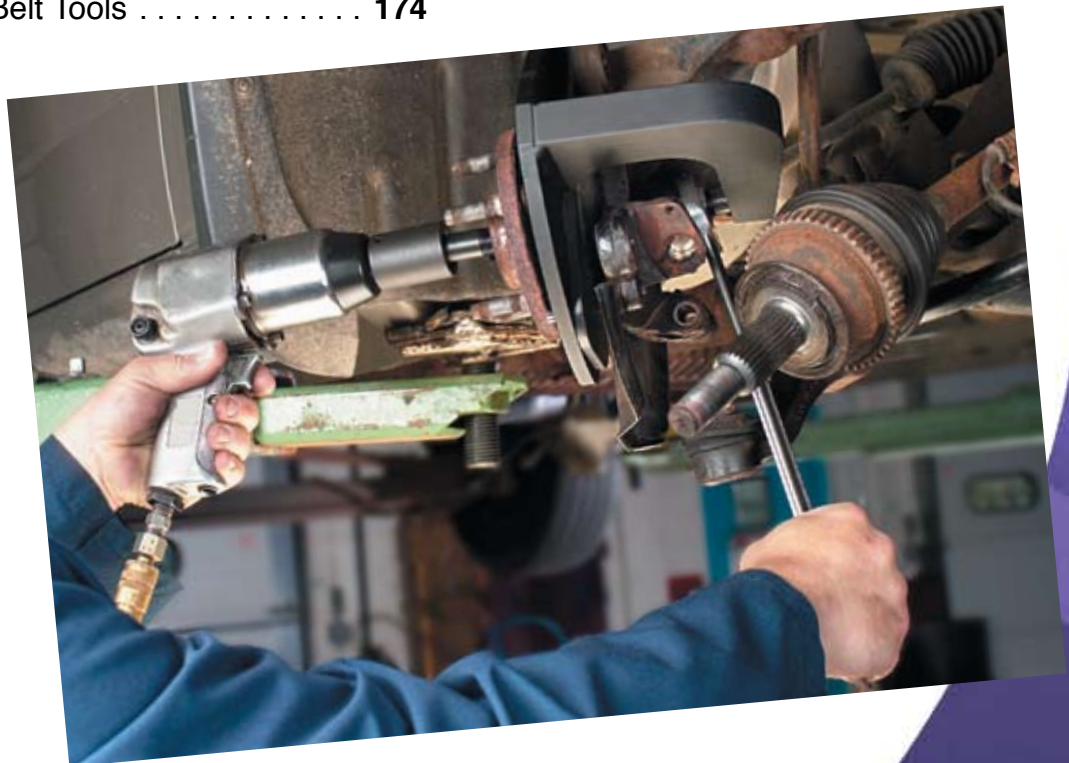
- Tool kit designed to remove fuel tank lids and plastic fuel tank cups to allow service on the fuel pump and/or the fuel sending unit.
- Works on Mercedes-Benz models W202 and W210.

No. 6598 – Mercedes-Benz Fuel Tank Service Tool Kit. Wt. 4 lb. 2 oz.

AUTOMOTIVE SPECIAL TOOLS

Quick Finder Index

Smoke Leak Detection	80–81
Strut Tools	81–83
Suspension/Steering Tools	84–105
Ball Joint Application Charts	94–97
Cam Tools	105–117
Cam Tool Application Charts	106–117
Engine Service	118–133
Coolant Service	134–137
Fan Clutch Wrenches	139–142
Hub Service Tools	142–144
CV Joint Service	145–147
Rear Axle Service	148–149
Transmission Service	150–154
Differential Service	155
Fuel & A/C Tools	156–157
Locknut Sockets	158–162
Brake Tools	162–168
Flaring Tools	168–169
TORX® Fastener Tools	170–173
Ribe Key, Seat Belt Tools	174



AUTOMOTIVE SPECIAL TOOLS

Leak Detector Systems



6521

6525

LeakMaster™ & LeakTamer™ Plus Evap Systems

- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

The LeakMaster and LeakTamer Plus Evap are the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakMaster and LeakTamer Plus Evap versatile tools for quickly locating different kinds of leaks.

The LeakMaster and LeakTamer Plus Evap offer:

- Densest smoke in the industry.
- Newly redesigned smoke chamber and control system.
- More complete line of accessories.
- User refillable.
- More than 1000 tests per refill.
- Non-toxic, non-corrosive smoke.
- Built-in flowmeter to verify flow (6525 only).

No. 6521 – LeakTamer Plus Evap system. Wt., 20 lb.

No. 6525 – LeakMaster leak detection system. Wt., 22 lb.

OTC LeakMaster & LeakTamer Plus Evap System Parts included and available separately

Number	Description	6525	6521
CEA-01	Exhaust Cone (2 each)	X	X
CEA-02	Cap Plug Kit	X	X
CEA-03	Smoke Diffuser Adapter	X	
CEA-04	Standard Service Port Adapter	X	X
CEA-041	Nitrogen Coiled Hose 25 ft.	X	
CEA-042	Small Service Port Adapter	X	
CEA-049	Schrader Removal Tool	X	X
HS-400AC	Halogen Spotlight	X	X
6525-1	Pressure Regulator	X	
6525-2	Dipstick	X	X
6525-3	Pointer Flag (for flow meter)	X	X
6525-4	Water Trap w/filter	X	X
6525-5	Battery Power Cable Assembly	X	
6525-6	Remote On/Off (switch only)	X	X
6525-7	Remote Cable Assembly (w/switch)	X	X
6525-8	Brass Nozzle	X	X
6525-9	Brass Nozzle and Hose Assembly	X	X
6525-10	Rubber Feet (4 reqd.)	X	X
6525-11	Accessory Storage Bag	X	
6525-12	Tech Tips Manual	X	
P-0716-UV	Smoke Producing Solution	X	X

OTC LeakMaster and LeakTamer Plus Evap System Specifications

	No. 6521	No. 6525
Height	23 in. (58.4 cm)	23 in. (58.4 cm)
Width	18 in. (45.7 cm)	18 in. (45.7 cm)
Depth	9-1/2 in. (24.1 cm)	9-1/2 in. (24.1 cm)
Weight	17 lb. (7.6 kg)	17 lb. (7.6 kg)
Ship Weight	20 lb. (9.0 kg)	20 lb. (9.0 kg)
Power Supply	12-volt DC	12-volt DC
Amperage Usage	15 amps	15 amps
Supply Pressure	13.0 in. H ₂ O	13.0 in. H ₂ O
Supply Volume	15 liters per minute	15 liters per minute
Operating Temperature Range	45° F to 140° F (7.2° C to 60° C)	45° F to 140° F (7.2° C to 60° C)
Smoke Supply Line	10 feet (3m)	10 feet (3m)
Power Supply Line	10 feet (3m)	10 feet (3m)
Remote Starter Cable	10 feet (3m)	10 feet (3m)

LeakMaster with EVAP cart

- Recessed area on top of the cart allows smoke machine to fit tightly and ensures its safety from tipping.
- Includes holding well for a standard sized 60 or 75 cubic foot SAE nitrogen tank.
- Large shelf area for the adapters and other accessories that come with the smoke machine.
- Raised handle, large recessed rollers, and a minimum floor footprint for ease in moving the unit around the shop floor.

No. 6625 – EVAP cart only. Wt., 35 lbs., 2 oz.



(Tank not included.)

Clamshell Strut Spring Compressor

Servicing MacPherson struts is convenient and affordable with this compressor. It fits a wide range of struts and requires no special adapter shoes.

- Locking pins hold the compressor jaws in place.
- Tool compresses springs of 4 in. to 9 in. O.D., with wire diameters of 7/16" to 11/16".
- Built to use with an impact wrench

No. 6494 – Clamshell strut spring compressor.
Wt., 19 lbs.



Note: Not to be used on conventional coil springs.

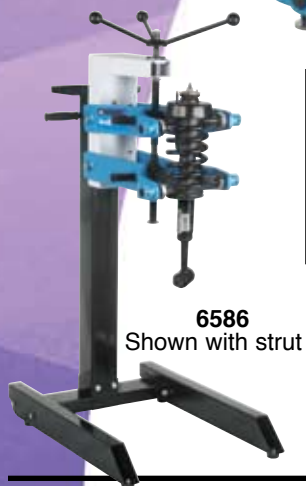
6494

AUTOMOTIVE SPECIAL TOOLS

Strut Tamer™ HD & Strut Tamer™ Elite



6585



6586

Shown with strut



6587



StrutTamer™ HD Strut Spring Compressor

Simply the most effective compressor for virtually any straight, conical, or offset spring.

- Four-point locking jaws securely hold the spring in place.
- Open-ended design means you can take the strut in and out, quickly and easily.
- The arms adjust in and out, up and down, to accept many sizes of springs.
(2-1/2" to 10" diameter)
(2-1/2" to 24" vertical stroke)
- Extra long 3-bar handle gives user the leverage needed to compress the big strut springs.
- No need to change shoes for different size springs.
- Easy to transport when mounted on optional stand (No. 6586 – StrutTamer HD with stand; No. 6582 – stand only).
- Comes with No. 6583 Bridge accessory to be used on springs that cannot be compressed enough to remove the retaining nut.



6583

No. 6585 – StrutTamer HD strut spring compressor, and No. 6583 Bridge accessory. Wt., 82 lbs.

No. 6586 – StrutTamer HD. Includes StrutTamer spring compressor, No. 6583 Bridge accessory, and No. 6582 mobile stand. Wt., 150 lbs.

No. 6582 – StrutTamer stand. Wt., 68 lbs.

No. 6587 – 2:1 reduction gearbox. Allows a 2:1 torque compression increase when compressing struts.



6580



6582



6581

Shown with strut

StrutTamer™ Elite Strut Spring Compressor

Our new StrutTamer Elite for MacPherson strut springs is an effective compressor for handling almost any straight, conical, or offset spring. With its adjustable arms and four-point locking jaws, the StrutTamer Elite securely holds the spring.

The StrutTamer features:

- Adjustable center screw that keeps a strut and spring aligned.
- Crank designed to compress a spring faster and easier.
- Coverage: 2-1/2" to 10" spring diameters, 2-1/2" to 24" vertical stroke range.
- Comes with No. 6583 Bridge accessory to be used on springs that cannot be compressed enough to remove the retaining nut.
- Easy mounting to wall or optional stand.
- Welded steel frame with two wheels that enable easy movement of the unit. (6581)
- Non-slip rubber pads that keep the stand firmly in place during compression. (6581)



6583

No. 6580 – StrutTamer Elite strut spring compressor, and No. 6583 Bridge accessory. Wt., 81 lb.

No. 6581 – Master StrutTamer Elite set. Includes StrutTamer spring compressor, No. 6583 Bridge accessory, and portable stand. Wt., 142 lb.

No. 6582 – StrutTamer Elite portable stand. Wt., 61 lb.

StrutTamer™ HD and StrutTamer™ Elite Strut Compressor Bridge Accessory

- Used to compress strut springs if technician prefers to press on the top plate of the strut rather than attaching the locking jaws to the top coils of the spring.
- Attaches to the locking jaws and is manually adjusted to bridge the strut top plate to be compressed. Lower part of spring is still held in the two lower locking jaws.
- Included with the 6580 & 6585. Available separately for owners of previous model No. 6070. Also works with 6494.

No. 6583 – Bridge accessory for StrutTamer Elite and HD. Wt., 2 lbs. 5 oz.



3-Knob Handle for StrutTamer Elite

- Large, easy-to-grasp knobs provide ease of spring compression when using the StrutTamer Elite strut spring compressor.
- Included with the 6580. Available separately for owners of previous model No. 6070.

No. 518450 – 3-knob handle for StrutTamer Elite. Wt., 1 lb. 5 oz.



MacPherson Strut Spring Hook Compressor

These devices quickly and easily compress most sizes of MacPherson strut springs. Setup is fast and simple. Compression is achieved by alternating from one assembly to another. Each device has a heat-treated alloy thrust screw (5/8"-11 x 12") with forged hooks.

No. 7294 – MacPherson strut spring hook compressor, for most sizes of MacPherson strut springs. Wt., 7 lbs., 3 oz.



Front Coil Spring Compressor

This compressor fits most late-model rear wheel drive domestic vehicles in which the coil springs are between the upper and lower control arms. The tool features four case-hardened, self-aligning plates to ensure correct load distribution under tension. Includes two 3-3/8" ID plates and two 4" ID plates. Will not work on Mercedes-Benz vehicles.

No. 7045B – Front coil spring compressor. Wt., 13 lbs.



GM W-Body Strut Service Set

This set has the tools needed for removing and installing gas-charged or oil-filled strut cartridges on 1988–96 Pontiac Grand Prix, 1988–98 Oldsmobile Cutlass Supreme, 1988–99 Chevrolet Lumina sedan, 1995–99 Chevrolet Monte Carlo, and 1988–96 Buick Regal. It enables you to work through the strut tower without removing the strut assembly from the vehicle.

No. 7568A – GM W-body strut service set. Includes No. 219600 jounce bumper retainer wrench, No. 219601 strut cap nut wrench, and No. 219599 strut extension rod. Wt., 3 lbs., 7 oz.



AUTOMOTIVE SPECIAL TOOLS

Suspension Service



4533

GM W-Body Strut Tool Kit

- Includes one T50 TORX® bit, a universal drive handle, and a double-ended socket.
- Use one end of the socket to remove/install the jounce bumper; the other end to remove/install the strut cap nut.

Works on GM W-body vehicles:

1988–96 Pontiac Grand Prix
1988–98 Olds Cutlass Supreme & Chevrolet Lumina Sedan
1995–99 Chevrolet Monte Carlo
1988–96 Buick Regal

No. 4533 – GM W-body strut tool kit. Wt., 3 lbs., 14 oz.



7707

VW and Audi Strut Nut Socket

This 1-3/4" long socket is built for VW and Audi FWD cars in which the top shock-retaining nut is recessed inside the strut tower. The tool's center bore allows you to hold the strut shaft from turning, using a 7/8" (22 mm) hex key and appropriately sized wrench.

No. 7707 – VW / Audi strut nut socket. Wt., 4 oz.

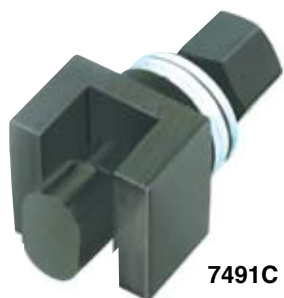


7544

Strut Rod Nut Socket (24 mm)

This specially designed socket is needed to loosen and tighten the top strut nut when servicing the strut spring or strut cartridge. The socket is used with a 1/2" ratchet or breaker bar to turn the strut nut while holding the strut rod with the appropriate wrench. The socket fits 24 mm strut rod nuts found on many domestic FWD vehicles including 1988–96 Pontiac Grand Prix, 1988–98 Oldsmobile Cutlass Supreme, 1988–99 Chevrolet Lumina sedan, 1995–99 Chevrolet Monte Carlo, and 1988–96 Buick Regal.

No. 7544 – Strut rod nut socket. Wt., 8 oz.



7491C

GM Upper Control Arm Knock-Out Tool

Here's the tool you need to remove the inserts on the upper control arm alignment brackets of light-duty GM trucks. It features an indexed forcing bolt that pulls straight and evenly, and works with off-center knock-outs. The tool fits 1989–2001 Chevrolet and GMC 1/2-, 3/4-, and 1-ton trucks, two- or four-wheel drive. Also works on 1990–2001 all-wheel drive Chevrolet Astro vans and GMC Safari vans. 1997–2002 1/2-, 3/4-, and 1-ton full size vans.

No. 7491C – GM upper control arm knock-out tool. Wt., 8 oz.



7826

Ford Truck Torsion Bar Tool

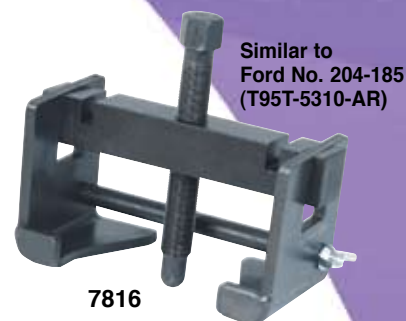
This tool firmly holds the torsion bar on Ford light-duty trucks while you adjust or service the front suspension. Without it, a torsion bar could unwind and possibly cause damage. The tool fits 1997–2003 Ford F-150 4WD pickups, 1995–2001 Ford Explorer 4WD, 1998–2001 Mercury Mountaineer, and 1998–2001 Ford Ranger.

No. 7826 – Ford truck torsion bar tool. Wt., 2 lbs., 10 oz.

Ford Torsion Bar Adjustment Tool

Before servicing a torsion bar on 1995–2001 Ford Explorer and 1998–2001 Mercury Mountaineer vehicles, you must first contain the bar to avoid possible damage. This tool securely accomplishes that task, allowing you to make adjustments.

No. 7816 – Ford torsion bar adjustment tool.
Wt., 3 lbs., 10 oz.



GM Torsion Bar Unloading Tool

This rugged tool is built for GM's K-3500 series trucks with heavy-duty chassis and a larger torsion bar. It features a larger C-frame opening to accommodate beefier torsion bars. The tool holds the torsion bar while you make adjustments. It also works on 1988 to 2003 GMC and Chevrolet 1/2-, 3/4-, and 1-ton pickups; the S-10 Blazer and S-15 Jimmy, 4WD pickups with 4.3L V-6 engines; and 1991 to 2001 Oldsmobile Bravada.

No. 7822A – GM torsion bar unloading tool.
Wt., 4 lbs., 3 oz.



Ford/Mercury Rear Toe Adjustment Wrench

With this wrench and a 1/2" drive ratchet or breaker bar, you can easily adjust the rear toe cams on 1986–95 Taurus and Sable station wagons – from outside the suspension area, even while the vehicle sits on alignment plates.

No. 7706 – Ford/Mercury rear toe adjustment wrench.
Wt., 8 oz.



Ford Rear Toe Adjustment Wrench

This wrench is designed for the larger 2-1/2" star-shaped adjusting cam on late model Ford cars. It works on 1995 to 2003 Lincoln Continentals, and 1996 to 2003 Taurus/Sable station wagons.

No. 7899 – Ford rear toe adjustment wrench.
Wt., 1 lb., 8 oz.



Ford Rear Toe Adjustment Wrench Set

This set contains two wrenches for adjusting the rear toe on Ford and Mercury vehicles. One wrench fits the 1984–94 Tempo and Topaz; the other fits 1986–95 Taurus and Sable sedans, and 1986–95 FWD Continental. Each wrench accommodates a 1/2" ratchet or breaker bar.

- No. 49885 – for Taurus/Sable with 2-1/2" opening.
- No. 49884 – for Tempo/Topaz with 2" opening.

No. 7814 – Ford rear toe adjustment wrench set.
Wt., 1 lb., 6 oz.



AUTOMOTIVE SPECIAL TOOLS

Suspension & Steering Service



7891

Chrysler LH Toe Adjustment Set

Here's a tool set that will quicken front toe adjustments on Chrysler LH series cars. Consisting of a wrench, socket, and retainer, this set is for the 1993–97 Chrysler Concorde and New Yorker, Dodge Intrepid, and Eagle Vision.

No. 7891 – Chrysler LH toe adjustment set. Wt., 1 lb., 14 oz.



6272

Chrysler LH Toe Adjusting Tool Set

This set enables the technician to adjust toe, to obtain a straight steering wheel, and correctly center the tie rod end. Permits easily reaching and breaking loose the tie rod jam nuts, while the entire assembly is held stable. Services 1998–newer Chrysler Concorde, Concorde 300M, New Yorker LHS, Dodge Intrepid, Dodge R/T, and Eagle Vision.

No. 6272 – Chrysler LH toe adjusting tool set. Wt., 1 lb., 13 oz.



6295

Front End Service Set

Kit includes five popular tools used for servicing Pitman arms, ball joints, and tie rods on most vehicles.

No. 6295 – Front end service set. Wt., 12 lbs., 8 oz.
Set includes:

No. 7314A – Pitman arm puller.

No. 7315A – Tie rod end remover.

No. 7503 – Outer tie rod remover/ball joint separator.

No. 6296 – Pitman arm/tie rod end puller.

No. 6297 – Ball joint separator.



7314A

Pitman Arm Puller

This puller will handle nearly any Pitman arm job on passenger cars and light trucks. It features special forged jaws shaped to fit the job, ensuring a positive grip every time. Spread between jaw tips: 1-5/16".

No. 7314A – Pitman arm puller. Wt., 2 lbs., 11 oz.

Similar to
Ford No. 211-001
(TOOL-3290-D)



7315A

Tie Rod End Remover

Redesigned to use on imports and many front wheel drive vehicles, including SUVs with rack and pinion steering. Live center tip on forcing screw swivels to align tool to tie rod stud to ease in removal and prevent damage to stud.

No. 7315A – Tie rod end remover. Wt., 1 lb. 7 oz.



7503

Outer Tie Rod Remover/Ball Joint Separator

This tool is a must when you're servicing outer tie rods and ball joints. It works on imported and domestic models, front or rear wheel drive, cast or stamped-steel steering knuckles.

- Handles up to 5 tons of force.
- Jaws spread to 3" and has a 4" reach.
- Jaws, once tightened, won't slip on the knuckle.

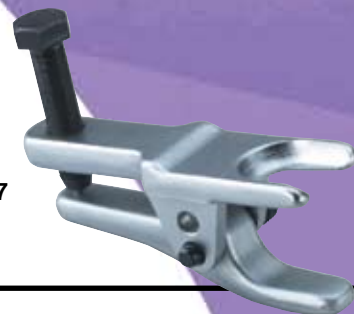
No. 7503 – Outer tie rod remover. Wt., 2 lbs., 12 oz.

Ball Joint Separator

This tool is used to separate the ball joint from the spindle support arm. It works on many domestic and import front wheel drive vehicles, and is adjustable up to 2" for different size ball joints.

No. 6297 – Ball joint separator. Wt., 2 lbs., 13 oz.

6297



Pitman Arm/Tie Rod End Puller

The versatile design allows this tool to be used as a Pitman arm remover for many small, domestic rear wheel drive vehicles, or as a tie rod end puller for many domestic and import vehicles. The jaws, with a spread of 1", give a positive grip in tight work places.

No. 6296 – Pitman arm/tie rod end remover. Wt., 1 lb., 3 oz.



6296

Super-Duty Pitman Arm Puller

- Works on 2005 and newer Ford F-250 and F-350 four-wheel-drive Super Duty trucks.
- Allows the Pitman arm to be removed from the steering gear while the steering gear is still in the vehicle.
- Two clamp bolts lock the jaws on the Pitman arm, ensuring a solid grip.
- Maximum jaw spread is 3-1/4".

No. 6497 – Super-duty Pitman arm puller. Wt., 5 lbs.



6497

Pitman Arm Puller

Cuts Removal Time from 3 1/2 Hours to 40 Minutes!

- Labor intensive removal of steering sector not necessary.
- Compact design allows easy access to the Pitman arm.
- Works on most domestic SUVs and pickups.
- Live center on forcing screw and use of a standard wrench results in less effort required.
- Tool is forged steel for durability and long life.

Works on the following four-wheel-drive vehicles	
1998 – 2003	Ford Navigator
1997 – 2004	Ford F-150 and Expedition
1991 – 2001	Oldsmobile Bravada
1992 – 2006	Chevy Suburban
1988 – 2005	S-10 / S-15 GMC Trucks & Chevy Blazers
1988 – 2006	GMC & Chevy 1/2, 3/4, & 1 ton pickups
1995 – 2006	Chevy Tahoe and GMC Yukon/Denali

No. 6496 – Pitman arm puller. Wt., 2 lbs. 8 oz.



6496



Pitman Arm Puller

The No. 8149 conical tool is designed to fit Pitman arms on compact and intermediate cars.

- Conical design gives increased strength, stability, and fits securely on a Pitman arm.
- Spread is 1-1/4" with a reach of 2-1/4".
- 3/4-16 x 4-3/4" forcing screw provides enough power to remove stubborn Pitman arms.

No. 8149 – Pitman arm puller. Wt., 1 lb., 5 oz.

8149



AUTOMOTIVE SPECIAL TOOLS

Suspension & Steering Service



8150

Pitman Arm Puller

The No. 8150 conical tool is designed to fit Pitman arms on domestic cars and light-duty trucks.

- Conical design gives increased strength, stability, and fits securely on a Pitman arm.
- Spread is 1-1/2" with a reach of 2-1/2".
- 3/4-16 x 4-3/4" forcing screw provides enough power to remove stubborn Pitman arms.

No. 8150 – Pitman arm puller. Wt., 1 lb., 13 oz.



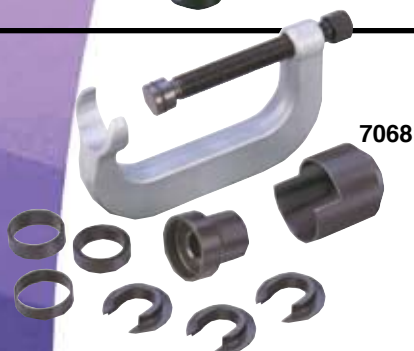
7311A Similar to
Ford No. 211-003
(T64P-3590-F)

Pitman Arm Pullers

These pullers are designed for the toughest Pitman arm jobs. They're adjustable and have rugged forged jaws shaped to fit the job. Two clamp bolts lock the jaws on the Pitman arm, ensuring a solid grip. Puller No. 7310A includes an adapter for added versatility. Both pullers cover a variety of pulling jobs.

No. 7310A – Pitman arm puller for medium- and heavy-duty trucks. Max jaw spread: 2-1/4". Wt., 4 lbs., 8 oz.

No. 7311A – Pitman arm puller for cars and light trucks to 3/4 ton. Max jaw spread: 2-1/8". Wt., 3 lbs.



7068

Upper Control Arm Bushing Service Set

Now you can easily replace press-in type upper control arm bushings on most rear wheel drive Chrysler, Ford, and GM vehicles. Mechanical screw power does the work. Set includes C-frame, screw assembly, and all adapters needed for quick removal or installation of bushings without removing or damaging the control arm.

No. 7068 – Upper control arm bushing service set. Wt., 8 lbs., 3 oz.

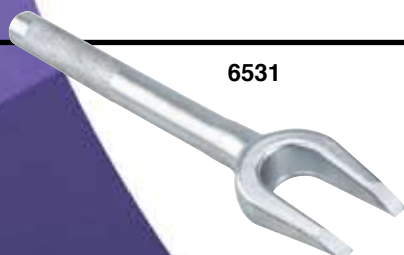


8348

GM Truck Bushing Adapter Set

- Works on 2000–2003 Chevy and GMC 1/2-ton and 3/4-ton trucks, 2- and 4-wheel drive.
- Adapter set is designed for quick and easy removal of the OE control arm bushing and installation of the offset camber bushing.
- Saves shop time by being able to install the offset camber bushing while aligning the front end.
- Saves replacement cost of the control arm assembly.
- Use with OTC No. 7248 C-Frame.

No. 8348 – GM truck bushing adapter set. Wt., 2 lbs., 10 oz.



6531

Pitman Arm Separator

Separating Pitman arms on cars and light trucks is quick and easy with this wedge and an appropriate sized hammer.

- 11" long and has a 1-1/8" fork spread.

No. 6531 – Pitman arm separator. Wt., 2 lbs., 2 oz.

GM Pitman Arm Remover

Removes Pitman arms on pickups and sport utility vehicles. The wedge end is placed between the Pitman arm and steering gear box, and with just a few hammer blows, it separates them. Works on 1988 and newer Chevrolet and GMC 1/2- and 3/4-ton 4WD pickups, Suburban, Tahoe, and Yukon.

- 11-3/4" long with a 1-5/8" fork spread.

No. 6532 – GM Pitman arm remover. Wt., 2 lbs., 2 oz.



Separator Tool

This handy tool is multipurpose. It will remove camber adjustment sleeves on 1980-86 F-150 & F-250 and 1982-88 Bronco II & Ranger Ford pickups that have an adjustable camber. It's also a separating tool for tie rods on medium- and heavy-duty trucks. And it works as a Pitman arm wedge on light trucks.

- 11-5/8" long with a 1-7/16" fork spread.

No. 6533 – Separator tool. Wt., 2 lbs.

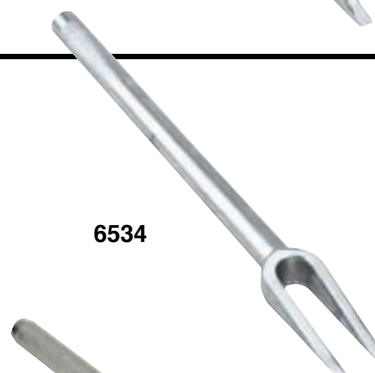


Shock Link and Tie Rod Separator

Here's a tool that will convince even the most stubborn shock links and tie rods to part company. Just insert the tapered wedge between the seized parts, and smack the other end with a hammer.

- 16" long with 11/16" fork spread.

No. 6534 – Shock link/tie rod separator. Wt., 2 lbs., 7 oz.



Ball Joint Separator

Ball joint service is easier with this tool. It was designed to remove ball joints from spindle support arms, and can be used on a wide variety of vehicles, from compact cars to light-duty trucks.

- 16" long and has a 15/16" fork spread.

No. 6535 – Ball joint separator. Wt., 2 lbs., 11 oz.



Separator Set (5 piece)

- Features five popular "pickle forks" in a blow-molded case.
- Used to remove shock linkage, tie rods, and ball joints. Also for general service on many cars and light trucks.

Includes:

- No. 6531 – Size 11" x 1-1/8" Fork Spread.
- No. 6532 – Size 11-3/4" x 1-5/8" Fork Spread.
- No. 6533 – Size 11-5/8" x 1-7/16" Fork Spread.
- No. 6534 – Size 16" x 11/16" Fork Spread.
- No. 6535 – Size 16" x 15/16" Fork Spread.

6299 – Separator set. Wt., 10 lbs.



AUTOMOTIVE SPECIAL TOOLS

Suspension & Steering Service



Manual / Pneumatic Pickle Fork Set

- Use to separate ball joints, tie rods, and Pitman arms.
 - Set contains two handles: knurled handle allows use of a hammer; smooth handle fits in a pneumatic hammer.
 - Three sizes of pickle forks included: 1-1/8", 15/16", and 11/16".
1. Select the correct size fork head that fits the work piece.
 2. Completely thread the fork head onto the appropriate handle: knurled handle allows use of a hammer; smooth handle fits in a pneumatic hammer.
 3. Tighten the handle's jam nut to the fork to secure the fork to the handle assembly.

Set contains:

- No. 4559-1 fork heads (set of three: 11/16", 15/16", and 1-1/8").
- No. 4559-2 handles (set of two: knurled handle for use with a hammer; smooth handle for use with an air hammer).

No. 4559 – Manual / pneumatic pickle fork set.
Wt., 4 lbs., 2 oz.



Chrysler/Jeep Truck and SUV Ball Joint Set

- All new kit with more applications.
- Works on newer vehicle applications:
 - High clearance C-frame for most Chrysler/Jeep trucks and SUVs.
 - 2WD & 4WD.
 - 1992 to 2006 and other larger 4x4s.
- Includes adapters to service 2002–2006 Jeep Liberty lower ball joints.
- Kit comes in a blow-molded case and includes an application chart and instructions.

No. 8031 – Chrysler/Jeep truck ball joint set. Wt., 26 lbs.



C-Frame Update Kit

Kit contains two adapters which, when coupled with the large C-frame included in OTC No. 8031 SUV Ball Joint Kit, make it possible to use any adapter designed for use with the smaller OTC No. 7248 C-frame.

No. 6730 – C-frame update kit. Wt., 1 lb., 11 oz.



Ball Joint Super Set

This set allows for the removal and installation of press-fit ball joints on many GM and Ford light-duty trucks, vans, and SUVs through 2003; Dodge light trucks through 1998; Dodge vans, Durango, and Dakota through 2003; and Honda Accord, Civic, del Sol, and Prelude through 2001.

- Combines the popular OTC Nos. 7249, 7918, and 7996 ball joint sets into one SUPER set, competitively priced.
- The OTC designed and produced C-frame tool can be used alone to remove and replace universal joints.
- Comes complete with an application cross-reference and instructions in a blow-molded case.

No. 6530 – Ball joint super set. Wt., 30 lbs.

Ball Joint Service Tool Set

The tools in this set will press in, or out, most sizes of press-fit ball joints. Plus, the C-frame press can be used alone to remove and replace universal joints.

Set Includes:

- No. 7248 – C-frame press.
- No. 29503 – Receiver tube (3" O.D. x 2-3/4" I.D.).
- No. 29504 – Receiver tube (2-1/2" O.D. x 2-1/4" I.D.).
- No. 29505 – Receiver tube (2" O.D. x 1-3/4" I.D.).
- No. 305227 – Installing adapter.
- No. 305228 – Removing adapter.
- No. 62810 – Plastic carrying case only.

No. 7249 – Ball joint removing/installing set.

Wt., 15 lbs., 3 oz.



Ford Ball Joint Adapter Set

- Allows easy removal and installation of the lower ball joint on 1996–2006 Ford Taurus and Mercury Sable vehicles.
- Lower ball joint can now be replaced without having to replace the entire spindle assembly.
- Adapters are used with OTC No. 7248 C-Frame.

No. 8032 – Ford ball joint adapter set. Wt., 1 lb., 15 oz.



Ford Ball Joint Remover

This tool enables you to quickly remove the lower ball joint on 1992 to current 3/4- and 1-ton vans (E-250 and E-350) when used with ball joint service set Nos. 6530, 7248, and 7249.

No. 7825 – Ford ball joint remover. Wt., 1 lb., 5 oz.



4WD Ball Joint Service Kit

This kit is used with ball joint service set Nos. 6530, 7248, and 7249 to remove and install upper and lower ball joints on 1967 to 1992 1/2- and 3/4-ton 4WD vehicles fitted with Dana 44 front axles (found on Ford, Dodge, GM, International, and Jeep vehicles).

No. 7704 – 4WD ball joint service kit for Dana 44 front axles. Wt., 2 lbs., 5 oz.



Jeep/Dodge Ram Ball Joint Service Adapter Kit

Use with ball joint service set Nos. 6530, 7248, and 7249 to remove or install aftermarket and original equipment upper and lower ball joints, and the offset ball joints used to change caster/camber. Works on 1984–1989 “downsized” Jeep Wagoneer, Cherokee and Comanche; 1987–1998 Wrangler; 1993–2004 Grand Cherokee; 1994–2001 Dodge Ram 4WD 1/2-ton pickup.

No. 7894 – Jeep/Dodge Ram ball joint adapter kit. Wt., 3 lbs.



AUTOMOTIVE SPECIAL TOOLS

Suspension & Steering Service



2WD Ford Van Ball Joint Adapter Set

This set is designed to remove and install press-fit upper and lower ball joints. Fits most Ford 1992 to '97 2WD 3/4- and 1-ton vans.

No. 7919 – 2WD Ford van ball joint adapter set.
Wt., 3 lbs., 14 oz.



Ford Ball Joint Adapter Update Kit

Three-piece kit contains specialty ball joint adapters for use with the industry standard OTC No. 7248 C-frame.

Designed to work with the following Ford vehicles:

Make	Years	Make	Years
F-150	1997-2003	F-250	1997-2004
F-350	1992-2004	F-450	1999-2002
F550	1999-2002	Excursion	2000-2004
Expedition	1997-2002	Explorer	1995-2004
Ranger	1998-2004	–	–

No. 6731 – Ford ball joint adapter update kit.
Wt., 2 lbs., 2 oz.



4WD GM Ball Joint Adapter Set

Use with ball joint service set Nos. 6530, 7248, and 7249 to service GM's 1996 to 2001 4WD 1/2- and 3/4-ton pickups, and Suburban, Yukon, and Tahoe SUVs. Easily remove or install either aftermarket or original equipment press-fit lower ball joints.

No. 7920 – 4WD GM ball joint adapter set. Wt., 2 lbs., 3 oz.



GM Ball Joint Adapter Update Kit

Four-piece kit designed to be used with the industry standard OTC No. 7248 C-frame. Contains specialty ball joint adapters to fit the following GM vehicles:

TrailBlazer & Envoy	2002-2005
1500 Silverado	1999-2004
Suburban & Tahoe	1995-2004
Avalanche	2002-2004
Escalade	1999-2004
Express & Savana	2003-2004
Hummer H2	2003-2004

No. 6732 – GM ball joint adapter update kit. Wt., 3 lbs., 4 oz.



Honda Lower Ball Joint Tool Set

Use with ball joint service set Nos. 6530, 7248, and 7249 to remove and install both sizes of ball joints on Honda 1986–97 Accord, 1988–00 Civic, 1993–99 del Sol, 1988–91 CRX, and 1983–98 Prelude.

No. 7996 – Honda lower ball joint service set.
Wt., 2 lbs., 6 oz.

Asian Vehicle Ball Joint Adapter Update Kit

Two-piece kit contains specialty ball joint adapters for use with the industry standard OTC No. 7248 C-frame. Designed to work with the following Honda and Toyota vehicles:

Honda CR-V	1997-2005
Honda Odyssey	1995-2004
Toyota 4Runner	1996-2005
Toyota Sequoia	2001-2003
Toyota Tacoma	1995-2005

No. 6733 – Asian vehicle ball joint adapter update kit. Wt., 2 lbs., 2 oz.



6733

Live Center Forcing Screw Plug

This plug replaces the existing forcing screw on the No. 7248 C-frame to allow its use on heavy-duty ball joints. The shorter length gives the C-frame a wider opening to accommodate the larger ball joints on 3/4- and 1-ton trucks.

No. 7917 – Live center forcing screw plug. Wt., 6 oz.



7917

Master Ball Joint Adapter Set

This set is designed to expand the capability of ball joint service set Nos. 6530, 7248, and 7249. It includes all the receiver tubes and removing/installing adapters needed to work on press-fit ball joints on most GM, Ford, and Dodge pickups, vans, and SUVs, through 1997. It also includes the No. 7917 live center forcing screw plug. Packaged in a plastic carrying case.

No. 7918 – Master ball joint adapter set. Includes application chart. Wt., 14 lbs., 5 oz.

No. 514479 – Plastic carrying case. Wt., 4 lbs., 10 oz.

See charts on next page.



7918

Chrysler Ball Joint Socket

- Removes and installs the screw-in type ball joints used on mid-size, rear-wheel drive Chrysler cars.
- Similar to Miller Tools No. C-3560.
- Socket is 2" long with a 3/4" drive; fits 1-59/64" ball joints.

No. 8033 – Chrysler ball joint socket. Wt., 5 oz.

Similar to
Miller Tools
No. C-3560

8033



Chrysler Ball Joint Socket

- Removes and installs the screw-in type ball joints used on Chrysler / Dodge light trucks and vans.
- Similar to Miller Tools No. C-3561.
- Socket is 2" long with a 3/4" drive; fits 2-9/64" ball joints.

No. 8034 – Chrysler ball joint socket. Wt., 5 oz.

Similar to
Miller Tools
No. C-3561

8034



Ball Joint Spanner Wrench

Designed for removal and installation of ball joint adjusting sleeves on 1/2-, 3/4-, and 1-ton Dana 44 open yoke front axles found on Chrysler, Ford, GM, International, and Jeep 4WD vehicles.

- Permits easy torquing with 1" socket for correct upper ball-joint preload.

No. 7080 – Ball joint spanner wrench. Wt., 8 oz.

7080

Similar to
Ford No. T71T-3010-G



AUTOMOTIVE SPECIAL TOOLS

Ball Joint Application Chart

Upper or Lower Ball Joint	Application R = Remove I = Install	29501	29503	29504	29505	38354	38355A	39976	204508A	222304	222305	222306	222307	305227	305228	313444	313967	313968	313969	313970	314392	531738	531739	537499	537500	537501	
DODGE / CHRYSLER / PLYMOUTH																											
Lower	1998-03 4WD Dakota & Durango			R					I					R	I					I							
Lower	1987-01 2WD Dakota & Durango 1972-93 1/2-, 3/4-ton 2WD Pickup 1974-93 1/2-ton 2WD Ramcharger 1979-03 1/2-, 3/4-, 1-ton 2WD van								I								RI	R									
Lower	1972-93 3/4-, 1-ton 2WD Pickup 1979-03 1-ton 2WD van		R	I						I				I	RI			R									
Lower	1984-01 Caravan, Voyager, Town & Country				RI									I	RI			R									
Upper	1994-99 1/2-, 3/4-, 1-ton 2WD Pickup (IFS)		R	I					I					RI	R												
Lower	1994-99 1/2-, 3/4-, 1-ton 2WD Pickup (IFS)		R	I						I				RI	I												
Upper	1994-99 1-ton solid axle, 2WD 1994-01 3/4-, 1-ton Dana 60 axle, 4WD (not HD axle)			R			I		I						R												
Lower	1994-99 1-ton solid axle, 2WD 1994-99 3/4-, 1-ton Dana 60 axle, 4WD	RI		R		I			I					R	I						RI						
Lower	1994-01 1/2-ton Dana 44 axle, 4WD 1994-98 3/4-ton Dana 44 axle, 4WD 1972-93 1/2-, 3/4-, 1-ton 4WD & Ramcharger																R	R	I	I							
Upper	1994-01 1/2-ton Dana 44 axle, 4WD 1994-98 3/4-ton Dana 44 axle, 4WD																R	R	I	I							
Upper	1972-93 1/2-, 3/4-, 1-ton 4WD & Ramcharger					R	I		I																		
JEEP																											
Upper	1993-98 2WD Grand Cherokee 1993-98 4WD Grand Cherokee, Grand Wagoneer 1987-98 4WD Wrangler 1984-99 4WD Wagoneer, Comanche, Cherokee																	R	R	I	I						
Lower	1993-98 2WD Grand Cherokee 1990-98 2WD Cherokee, Wagoneer, Comanche 1993-98 4WD Grand Cherokee, Grand Wagoneer 1990-98 4WD Wrangler 1990-95 2WD & 4WD Wagoneer, Comanche, Cherokee																	R	R	I	I						
Upper	1984-99 2WD Cherokee, Wagoneer, Comanche																	R	R	I	I						
Lower	1984-89 2WD Cherokee, Wagoneer, Comanche 1987-89 4WD Wrangler 1984-89 4WD Wagoneer, Comanche, Cherokee																	R	R	I	I						
Upper	1984-92 full size 4WD Grand Wagoneer 1972-88 4WD Truck, CJ, full size Cherokee, Wagoneer					R	I		I																		
Lower	1984-92 full size 4WD Grand Wagoneer 1972-88 4WD Truck, CJ, full size Cherokee, Wagoneer					R	I		I																		

AUTOMOTIVE SPECIAL TOOLS

Ball Joint Application Chart

Upper or Lower Ball Joint	Application R = Remove I = Install	29501	29503	29504	29505	38354	38355A	39976	204508A	222304	222305	222306	222307	305227	305228	313444	313967	313968	313969	313970	314392	531738	531739	537499	537500	537501	
GM																											
Lower	1982-05 2WD S-10 Blazer, Jimmy & Pickup			R		I	R		I						R												
Lower	1993-99 2WD 1/2-, 3/4-, 1-ton Pickup; Suburban 1996-04 1/2-, 3/4-, & 1-ton 2WD G Van		R	RI											RI	RI											
Lower	1988-92 2WD 1/2-, 3/4-, 1-ton, Pickup; Suburban		R	RI											RI	RI											
Lower	1985-05 Astro, Safari van		R	I					I						RI	R											
Lower	1973-95 1/2-, 3/4-ton 2WD G van			R	I				I						RI	R											
Lower	1996-00 1/2-, 3/4-, 1-ton 4x4								I			R	I	RI													
Lower	2002-05 TrailBlazer, Envoy, & Bravada 2WD/4WD					I			I			R		R													
Upper	2002-05 TrailBlazer, Envoy, & Bravada 2WD/4WD						R											I	I			R					
Lower	1999-00 1/2-ton Silverado & Sierra 4WD std. cab 2001-04 1/2-ton Silverado, Sierra, Denali 2WD/4WD std. & extd cab 2000-04 1/2-ton Suburban, Tahoe, Yukon, Denali 2WD/4WD 2002-04 1/2-ton Avalanche 2WD/4WD 2002-04 Cadillac Escalade 2WD/4WD 2003-04 1/2- & 3/4-ton Express, & Savana Van 4WD			I				I	I						RI										R		
Upper	1999-00 1/2-ton Silverado & Sierra 2WD/4WD std. cab 2001-04 1/2-ton Silverado, Sierra, Denali 2WD/4WD std. & extd cab 2000-04 1/2-ton Suburban, Tahoe, Yukon, Denali 2WD/4WD 2002-04 1/2-ton Avalanche 2WD/4WD 2002-04 Cadillac Escalade 2WD/4WD 2003-04 1/2- & 3/4-ton Express & Savana Van 4WD	RI		R				I							R				I							R	
Lower	2001-03 1/2-ton Silverado, Sierra, 2WD/4WD HD Crew Cab 1999-04 3/4-ton Silverado, Sierra, 2WD/4WD 2000-04 3/4-ton Suburban, Yukon 2WD/4WD 2001-04 1-ton Silverado, Sierra 4WD 2002-04 3/4-TON AVALANCHE 2WD/4WD 2003-04 Hummer H2			I					I			R	I	RI													
Upper	2001-03 1/2-ton Silverado, Sierra, 2WD/4WD HD Crew Cab 1999-04 3/4-ton Silverado, Sierra, 2WD/4WD 2000-04 3/4-ton Suburban, Yukon 2WD/4WD 2001-04 1-ton Silverado, Sierra 4WD 2002-04 3/4-Ton Avalanche 2WD/4WD 2003-04 Hummer H2	RI		RI				I							I	R				I							R
Lower	1995-99 Tahoe, Yukon 4WD 2000 Tahoe Z71 4WD (old style) 1995-99 1/2- & 3/4-ton Suburban 4WD								I			R	I	RI													

AUTOMOTIVE SPECIAL TOOLS

Ball Joint Application Chart

Upper or Lower Ball Joint	Application R = Remove I = Install	29501	29503	29504	29505	38354	38355A	39976	204508A	222304	222305	222306	222307	305227	305228	313444	313967	313968	313969	313970	314392	531738	531739	537499	537500	537501	
FORD																											
Lower	1986-97 Aerostar			RI					I					RI	R												
Upper	1989-90 2WD Bronco II 1991-94 2WD Explorer 1989-97 2WD Ranger			R			I		I					R													
Upper	1986-88 2WD Bronco 1983-88 2WD Ranger			R	I				I					RI													
Lower	1989-90 2WD Bronco II 1991-94 2WD Explorer 1989-97 2WD Ranger			R	I				I					RI													
Lower	1986-88 2WD Bronco II 1983-88 2WD Ranger						I		I								R	R									
Lower	1997-03 1/2-ton Pickup, 2WD & 4WD 1997-99 3/4-ton Pickup, 2WD & 4WD	RI	R	I						I				RI	I												
Upper	1987-96 1/2-ton 2WD Pickup 1987-97 3/4-, 1-ton 2WD Pickup						I		I								R	R									
Lower	1987-98 1/2-ton 2WD Pickup			RI										RI													
Upper	1981-86 1/2-ton 2WD Pickup 1990 4WD Bronco II w/Dana 28 1984-89 4WD Bronco II 1991-94 4WD Explorer w/Dana 28 1990-97 4WD Ranger w/Dana 28 1983-89 4WD Ranger		R	I					I					RI													
Lower	1981-86 1/2-ton 2WD Pickup 1980-96 4WD Bronco 1981 1-ton (3800 axle) 4WD 1980-96 1/2- & 3/4-ton 4WD					R	I		I																		
Lower	1987-98 3/4-ton & 1-ton 2WD Pickup	RI		R		I			I					R	I							RI				R	
Upper	1992-03 1/2-, 3/4-, 1-ton 2WD Van 1992-03 E 150, 250, 350 Econoline Van & Club Wagon 1999-03 E 350 Superduty Van 2WD 2002-03 E 450 Superduty Van 2WD 1999-04 F 250, 350 Superduty Twin I Beam 2WD 2000-04 Excursion Twin I Beam 2WD				I				I		R				RI			R									
Lower	1992-03 3/4- & 1-ton 2WD Van							I	I					I	R												
Lower	1992-03 1/2-ton 2WD Van			R	I				I					RI													
Upper	1990 4WD Bronco II w/Dana 35 1991-94 4WD Explorer w/Dana 35 1990-97 4WD Ranger w/Dana 35		R	I						I				RI													
Lower	1990 4WD Bronco II w/Dana 28 1984-89 4WD Bronco II 1991-97 4WD Explorer w/Dana 28 1990-97 4WD Ranger w/Dana 28 1983-89 4WD Ranger		R												I												
Lower	1990 4WD Bronco II w/Dana 35 1991-94 4WD Explorer w/Dana 35 1990-97 4WD Ranger w/Dana 35		R												I												
Upper	1980-96 4WD Bronco 1992-02 1-ton 4WD 1980-96 1/2-, 3/4- & 1-ton 4WD (IFS)						I		I																		

AUTOMOTIVE SPECIAL TOOLS

Ball Joint Application Chart

Upper or Lower Ball Joint	Application R = Remove I = Install	29501	29503	29504	29505	38354	38355A	39976	204508A	222304	222305	222306	222307	305227	305228	313444	313967	313968	313969	313970	314392	531738	531739	537499	537500	537501
FORD																										
Lower	1992-99 1-ton 4WD w/solid axle														I						RI					
Lower	1980-95 3/4- & 1-ton 4WD spindle														I						RI					
Lower	1992-97 F350 4WD (monobeam) 1999-04 F250, 350, 450 & 550 Superduty 4WD (monobeam) 2000-02 Excursion 4WD (monobeam) 1999-02 F250, 350, 450 & 550 Superduty 2WD (monobeam) 1999-04 F250, 350 Superduty 2WD (twin I beam) 2000-04 Excursion 2WD (twin I beam)								I		R				I											
Upper	1992-97 F350 4WD (monobeam) 1999-04 F250, 350, 450 & 550 Superduty 4WD (monobeam) 2000-02 Excursion 4WD (monobeam) 1999-02 F250, 350, 450 & 550 Superduty 2WD (monobeam) 1997 F250 HD 4WD (twin I beam) 1980-96 F150, 250 4WD 1980-85 F350 4WD before 2-1-85 (twin I beam)				I		I		I						I											
Lower	1997-03 F150 2WD/4WD 1997-99 F250 2WD/4WD 1997-02 Expedition 2WD/4WD 1998-04 Ranger 2WD/4WD (w/torsion bar susp.) 1995-04 Explorer, Explorer Sport & Sport Trac 2WD/4WD		R						I						I								I			
Lower	1980-97 F250 4WD (3850 axle and larger) 1980-85 F350 4WD (except 3800 axle)								I						I											

Component Dimensions					Set Contents					
Tool No.	Description	O.D.	I.D.	Length	7249	7918	7919	7920	7704	7894
29501	Plug	7/8"	—	3-5/8"						
29503	Receiving Tube	3"	2-3/4"	2-3/16"	X					
29504	Receiving Tube	2-1/2"	2-1/4"	1-11/16"	X					
29505	Receiving Tube	2"	1-3/4"	1-11/16"	X					
38354	Receiving Tube	2-1/4"	2"	2"		X				X
38355A	Installing Tube	2"	1-13/16"	3"		X				X
39976	Receiving Tube	2-1/2"	2-1/4"	1-1/2"		X	X			
204508A	Receiving Cup	2-1/4"	2"	7/16"		X	X	X	X	
222304	Receiving Tube	2-1/2"	2-1/4"	3/4"		X	X			
222305	Receiving Tube	2-1/2"	2-1/4"	2-3/4"		X	X			
222306	Receiving Tube	3"	2-3/4"	2-1/4"		X		X		
222307	Receiving Tube	2-3/4"	2-7/16"	2-1/4"		X		X		
305227	Installing Adapter	3"	15/16"	1-1/8"	X					
305228	Removing Adapter	3-1/16"	—	1-1/8"	X					
313444	Receiving Tube	2-7/8"	2-5/8"	2-7/8"		X	X			
313967	Receiving Tube	2-7/16"	2-3/16"	3-3/16"		X				X
313968	Remover/Installer	1-7/16"	3/4"	1"		X	X			X
313969	Installing Tube	2"	1-3/4"	2-5/16"		X				X
313970	Receiving Cup	2-1/8"	1-3/4"	1/2"		X				X
314392	Plug	7/8"	—	3"						
531738	Installing Tube	1-9/16"	1-5/16"	2-1/8"						
531739	Receiving Tube	2-1/2"	2-1/4"	1-1/2"						
537499	Receiving Tube	2-3/4"	2-7/16"	2"						
537500	Remover	1-9/16"	13/16"	2-3/16"						
537501	Remover	1-3/4"	13/16"	2-3/16"						

AUTOMOTIVE SPECIAL TOOLS

Suspension & Steering Service

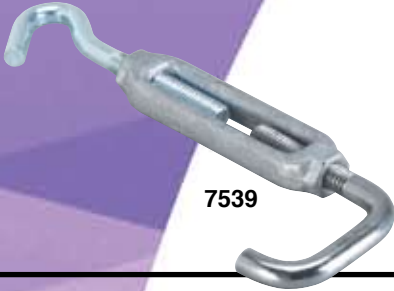


6007

Lower Control Arm Prying Tool

Installing a ball joint on a lower control arm typically requires the effort of two people. However, with this tool and our No. 7420 or 7421 pry bar – or any 7/8" diameter pry bar – it's a one-person job.

No. 6007 – Lower control arm prying tool. Wt., 8 oz.

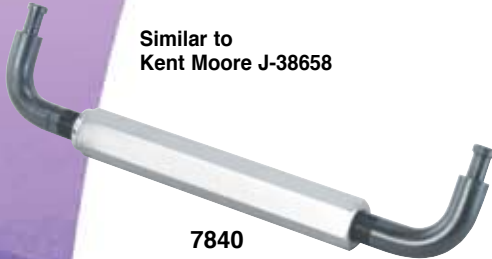


7539

GM F-Body Camber Adjusting Tool

This unique tool works like an extra hand to hold the strut while you're making camber adjustments. For use on 1982 to '92 Camaro and Firebird.

No. 7539 – GM F-body camber adjusting tool. Wt., 8 oz.



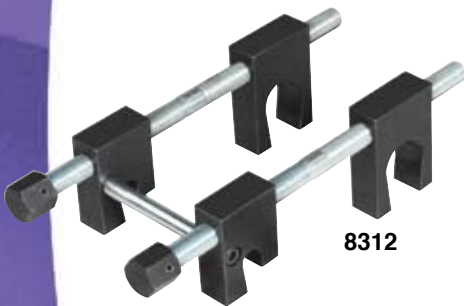
Similar to
Kent Moore J-38658

7840

GM Caster/Camber Adjusting Tool

This tool is designed to make caster/camber adjustments quick and easy. Simply place it into the holes in the cross-member and lower control arm, then turn the tool's turnbuckle nut to hold the correct adjustment. This allows you to tighten the adjusting bolts. For use on 1993 to 2000 Chevrolet Camaro and Pontiac Firebird. Also works on 1986–92 Buick Riviera, Cadillac Seville, Oldsmobile Toronado, and 1986–91 Buick Regal.

No. 7840 – GM caster/camber adjusting tool. Wt., 2 lbs., 14 oz.



8312

Ford Caster/Camber Adjusting Tool

- Works on 2002–2005 Ford Explorer and Mercury Mountaineer.
- Tool allows you to slide control arm in the positive or negative direction.
- Saves up to 30 minutes and allows more accuracy. Adjust caster/camber while maintaining live alignment reading.

No. 8312 – Ford caster/camber adjusting tool. Wt., 3 lbs., 5 oz.



7829

Ford Caster/Camber Adjusting Wrench

This wrench is specially bent to fit on the caster/camber adjusting cam on 1995 to 2001 Ford Explorer 4WD SUVs, and 1997 2WD and 4WD F-150 pickups. You can use it on the nut to loosen the adjusting cam, and on the bolt to set the caster/camber.

- Has a 21 mm, 12-point design.
- Accommodates a 1/2" drive ratchet or breaker bar.

No. 7829 – Ford caster/camber adjusting wrench. Wt., 13 oz.