

IPA[®]

FUTURE NOW[®]

INNOVATIVE PRODUCTS OF AMERICA[®]

FALL 2017 PRODUCT CATALOG



**USA
Manufacturer
of Innovative
Tools and
Equipment
for All
Industries
Since 1991**



LETTER FROM THE PRESIDENT OF IPA®

My name is Peter Vinci and I am the president of IPA®. I would like to first thank you for your interest in IPA®'s product line and share my commitment to you, our products and our policies. In today's world, we have all experienced the lack of service and consideration demonstrated by many companies after you buy their products. They say whatever they can to make the sale, and then it's like pulling teeth to get any service response out of them. I know this myself firsthand and because of this, I want to be sure that your experience with IPA® meets your expectations and that IPA® never disappoints you with our service or customer response.



Your satisfaction is more important to me than the sale itself. We will not be in business for long if we don't make you completely happy with our products and service. I want IPA® to be different and be known for its quality and service.

With that said, please take a look at our product line. You will see innovative, first time products that were created to help you do your job faster and better than before. I would also like to invite you to critique our products. If you can think of a better way to make them or changes that will make them work better, please contact me directly and I will be sure to look into it. If you have an innovation and would like some feedback, give me a call.

From all of us at IPA®, we thank you for taking the time to review our product line and wish you and your family the very best of everything.

Peter Vinci
President
Innovative Products of America®

ABRASIVES

8150	4.5" Diamond Grinding Wheel	4	NEW
8120-8151	3-in-1 Diamond Grinding Wheels	4	NEW
8108	8" Diamond File Set	5	NEW
8087-8088	Micro Bore & Valve-Guide Brush Set	5	NEW
8090	Professional Injector Seat Cleaning Kit.....	6	
8001D	36-Piece Original Bore Brush Set	7	
8080-8081	Twisted Wire Bore Brush Sets.....	7	
8037-8038	XL Bore Brushes.....	7	
8083-8085	9" Bore Brush Sets.....	8	
8080D	Stainless Steel Bore Brush Set w/ Driver Handle	8	NEW
8004	Flexible Extensions for Bore Brush Sets.....	8	
8004D	Flexible Extensions and 1/4" Driver	8	

SPECIALTY TOOLS

8050-8053	Air Comb®.....	9	
7899	Gator Jaws®.....	9	
7863	Grease Joint Rejuvenator® Master Kit.....	10	
7862	Professional Model.....	10	
7864	Pocket Model.....	10	

DIAGNOSTICS

9050	Mobile Power Station (MPS) with Plasma Boost™.....	11	NEW
9038A	Relay Bypass Switch Kit with Amp Loop.....	12	
9038	Fuel Pump Relay Bypass Master Kit	12	
9036	Fuel Pump Relay Bypass Kit I	12	
9037	Fuel Pump Relay Bypass Kit II	12	
8016	Fuse Saver® Master Kit	13	
8005	Fuse Saver®.....	13	
7884	Disc Brake System Analyzer.....	14	
7891	Engine Calibration & Set-up Kit	14	
7880	TDC Indicator Standard 6.25" (14mm)	15	
7886	TDC Indicator Extended 10.75" (14mm)	15	
7882	Whistle Alert (Rigid).....	15	
7894	Whistle Alert (Flexible).....	15	
7881	Compression Gauge Extension	16	
7877	Piston Lock.....	16	
7885	Spark Plug Hole Adapter - 14mm to 18mm.....	16	
7892	Spark Plug Hole Adapter - 14mm to 12mm.....	16	
7883	Ford Spark Plug Socket.....	16	

CONTACT CARE

8043	Micro Male Electrical Pin Cleaners.....	17	
8076	Carbide-Tube Pin Cleaners	17	
8086	Light Socket Brush Kit.....	18	
8040	Diamond-Tip Electrical Terminal Cleaners.....	18	
8042	Diamond Micro Round Files.....	19	
8047	Diamond-Coated Flexible Flat Files.....	19	
8024	7-Round Pin Connector Cleaners.....	20	
8025	Light-Duty Truck and Trailer Connector Cleaners.....	20	
8100	14" Large MANTUS™.....	21	
8041	MANTUS™ Tight Access Tool.....	21	
8045	Plow Terminal Cleaners.....	21	
8044	Truck and Trailer Pin Master Cleaner Set.....	22	
8048	HD Fleet Tech. Electrical Terminal Maintenance Set.....	22	
8030-8036A	DeoxIT® Cleaner and Shield.....	23	
9010	SWAB-EEZ®	23	

TIRE/ALIGNMENT

9060C	Five-Tire Pressure Equalizer System.....	24	
9062C	Four-Tire Inflation/Equalizer System	25	
9067-9068	Tire Comparator™.....	25	

DEF TRANSFER SOLUTIONS

9070	Diesel Exhaust Fluid (DEF) Transfer System (120V AC)	26	
9072	DEF Transfer System (12V DC).....	26	
DEF Transfer Accessories.....		27	

FUEL/FLUID TRANSFER & FILTRATION

Fuel Transfer and Filtration Systems.....		28	
9049M	Fleet Tank Sweeper® (120V AC).....	28	
DTP20C	Industrial Fuel Cleaner and Transfer System	29	
9080	Diesel Fuel Injection Cleaner and Primer.....	29	NEW
9046F	Pneumatic Fuel Tank Sweeper®.....	30	NEW
9046H	Pneumatic Hydraulic Oil Tank Sweeper®.....	30	NEW

TRAILER & ELECTRICAL MAINTENANCE

9107A	Electric Brake Force Meter	31	NEW
5700	Alpha MUTT®	32	NEW
Diagnostic Software Suite		33	NEW
9008-DL	Super MUTT® Pro Edition	34	
MUT-RM12	12-Button Remote Control.....	35	NEW
9005A	Super MUTT® Head	35	
9007A	Smart MUTT® (7-Round Pin).....	36	
9004A	Smart MUTT® (7-Spade Pin).....	36	
9003A	Mini MUTT®	36	
9007M	Smart MUTT® (7-Round Pin) Pro Edition.....	37	NEW
9004M	Smart MUTT® (7-Spade Pin) Pro Edition.....	37	NEW
9101	Light Ranger MUTT®	38	
9102	Heavy Ranger MUTT®.....	38	
9104	Memory Saver Kit.....	38	
8010	12-Pin NATO Truck-Side Circuit Tester.....	39	NEW
M2000	NATO MUTT®.....	39	NEW
MUTT® Comparison Chart.....		40	
9200	Tactical Trailer Tester Field Kit.....	42	
8026	4/5 Pin Towing Maintenance Kit	43	
8027	6-Round Pin Towing Maintenance Kit	43	
8028	7-Flat (Spade) Pin Towing Maintenance Kit.....	43	
8029	7-Round Pin Towing Maintenance Kit	43	
7865L	7-Round Pin Tractor Trailer Circuit Tester	44	
7893	7-Flat (Spade) Pin Trailer Circuit Tester.....	44	
7897	6-Round Pin Tractor Trailer Circuit Tester.....	44	
7866	4/5 Pin Trailer Harness Checker.....	44	
8000	3-Way Trailer Adapter.....	44	
TSTPK1	Multi Trailer Tester Jobber Pack.....	44	

RAMROD® GUN CLEANING SYSTEM

RamRod®	Barrel and Breech Cleaners	45	
70680	Range Kit for Pistols	46	
60010	Rifle and Shotgun Adapters	46	

#8150 4.5" DIAMOND GRINDING WHEEL

More Than 2,000% Longer Life Compared to Standard Grinding Wheels

- Maintains diameter and shape throughout life of wheel
- Three-dimensional contour allows for fast cutting, back cutting, gully grinding and bead finishing
- Long lasting; cleaner and faster cut
- Low sparks, odor and debris
- Saves time and cost

Specifications

Arbor: 7/8" with 5/8" Adapter
 Speed: 14,000 rpm max.
 Size: 4.5" Diameter
 Grit: 36 Medium
 Contour Type: 29
 Material: Industrial Diamond Abrasive

Applications: For use on all ferrous metals, concrete and ceramic.
 Can also be used on aluminum with proper lubrication.



#8120-8151 3-IN-1 DIAMOND GRINDING WHEELS

① Grind ② Cut ③ Undercut

For 1/4" and 3/8" Arbor Die Grinders

The unique 2" and 3" size grinding wheels allow access to hard-to-reach areas.

Specifications

Arbor: #8120: 1/4" Shank
 #8151: 3/8" Arbor with 1/4" Shank Adapter
 Speed: 30,000 rpm max.
 Available Sizes: 2" Diameter (#8120)
 3" Diameter (#8151)
 Grit: 36 Medium
 Material: Industrial Diamond Abrasive
 Applications: For use on ferrous metals, concrete and ceramic. Can also be used on aluminum with proper lubrication.



#8108 8" DIAMOND FILE SET

4-Piece Set of Premium Industrial Files

- Many times harder than conventional files
- Cuts 10X faster and in all directions
- Cuts into welds and hardened surfaces where other files can't
- Smooth action
- 12" overall length with 8" blade
- Comes in a custom folding pouch

NEW

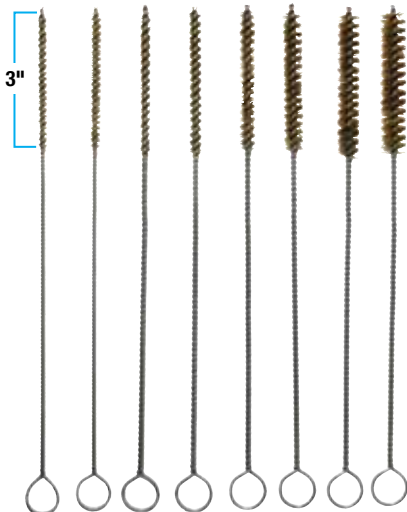


Half Round Round Flat Square

#8087-8088 MICRO BORE AND VALVE-GUIDE BRUSH SET

8-Piece Set of Small-Diameter Brushes for Precisely Cleaning Valve Guides, Bores, Ports and More

- 9" length with flexible shaft for accessing hard-to-reach areas
- Includes 8 sizes: 1/8", 5/32", 13/64", 1/4", 5/16", 3/8", 7/16" and 1/2"
- Durable, twisted wire for increased cleaning function
- Extra-large finger loop for enhanced control

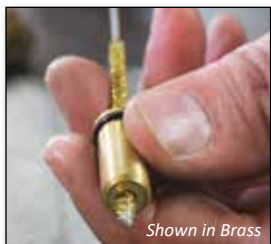


Available in

(#8087) Stainless Steel

(#8088) Brass

NEW



#8090 PROFESSIONAL INJECTOR SEAT CLEANING KIT

Specially Designed to Clean Injector Seats and Bores on Most Light, Medium and Heavy-Duty Diesel Motors

17-piece kit includes Helix Brushes, Two-Stage Brushes, Bore Brushes and SWAB-EEZ®.

- Brushes are specially engineered to fit injector seats
- Removes rust, carbon and other debris from seats and cups without damage
- Driver handle features a spring-loaded, quick-lock coupler
- ¼" drive hex shaft allows for quick interchange of brushes, drivers, extensions and the use of LOW SPEED drills
- 3", 4" and 6" brushes
- Intended for hand use - Do NOT exceed 600 rpm - Clockwise rotation only
- SWAB-EEZ® for cleaning and polishing injector bores and cups

Available in
#8090B Brass
#8090S Stainless Steel



Includes:
 13 Custom Brushes,
 Driver Handle, 6" Rigid
 and Flexible Extensions,
 400+ Assorted SWAB-EEZ®,
 Custom Blow-Molded Case



#8001D 36-PIECE ORIGINAL BORE BRUSH SET

Clean Bushings, Ports, Tubes, Holes, Channels, Sockets, Brake Guides, Etc.

This 36-piece set has stainless steel, brass and nylon bristle brushes to clean a wide variety of surfaces and locations.

- Twisted wires for increased cleaning action
- For use in automotive, agricultural, industrial and MRO industries
- Do not exceed 600 rpm

Includes

- 36 Brushes: 12 Steel, 12 Brass and 12 Nylon (8mm-19mm Diameter with 1/4" Hex Shank)
- 1/4" Locking Bit Head Driver



#8001-K1:
72-Piece Bore Brush
Replacement Kit
(Driver not included)



#8080-8081 TWISTED WIRE BORE BRUSH SET

6-Piece Bore Brush Set Features the Most Common Sizes

- Durable and abrasive bore brushes
- 6-piece set (8, 10, 12, 15, 17 and 19mm sizes)
- 1/4" hex shank
- Available in stainless steel (#8080) or brass (#8081)
- Do not exceed 600 rpm



#8081-Brass

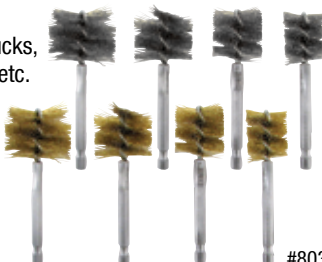
#8080 - Stainless Steel

#8037-8038 XL BORE BRUSHES (4-PIECE SET)

Clean Brake Calipers, Throttle Bodies, Fittings and More!

- 4-piece set (25, 30, 35 and 40mm sizes)
- 1/4" hex drive, 3 1/2" overall length
- Unique large sizes for use on cars, trucks, motorcycles, engines, transmissions, etc.
- Available in stainless steel (#8037) or brass (#8038)
- Also available individually
- Do not exceed 600 rpm

#8037-Stainless Steel



#8038-Brass



#8083-8085 9" BORE BRUSH SETS

4-Piece Set of 9" Bore Brushes in 10, 15 and 19mm Sizes with Driver

The 9" long-reach bore brushes are ideal for cleaning tubes, ports, bearings and other deep hole applications.

- Durable and abrasive bore brushes
- 4-piece set (10, 15 and 19mm sizes) with ¼" standard driver
- ¼" hex shank
- Innovative, long-reach design
- Use on ports, tubes, bearings and other common wire brush applications



#8080D STAINLESS STEEL BORE BRUSH SET W/ DRIVER HANDLE

NEW

Clean Valve Bodies, Bushings, Ports, Tubes, Holes, Channels, Sockets, Caliper Slides and Much More!

- Twisted wire for increased cleaning action
- 6-piece set (8, 10, 12, 15, 17 and 19mm sizes)
- ¼" driver with quick-lock adapter included
- Do not exceed 600 rpm



#8004 FLEXIBLE EXTENSIONS (FOR THE BORE BRUSH SET)

Have Full Access to Clean Hard-to-Reach Areas



The set includes 6", 12" and 18" Flexible Extensions with a locking set screw.

- 6", 12" and 18" flexible extensions on ¼" drive hex shank
- Perfect for accessing hard-to-reach transmission valve bodies, oil galleys and EGR ports
- ¼" female coupler uses a set screw to prevent a brush or similar type tool from slipping
- Allen key included



#8004D FLEXIBLE EXTENSIONS AND ¼" DRIVER HANDLE

#8050-8053 AIR COMB® FILTER & RADIATOR CLEANER

Patents Pending

90° Multi-Port Air Gun

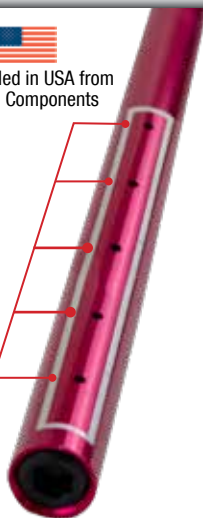
Special, multi-port nozzle maximizes air pressure and volume at a 90° angle to thoroughly clean air filters, condensers, radiators, etc.

- Focused, high-pressure output
- 5X the air volume
- Long-reaching, 90° airflow
- Accesses hard-to-reach areas
- Does not punch holes in air filters
- Available in four sizes



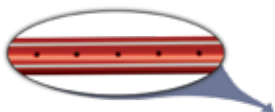
Assembled in USA from Global Components

5X
the air
volume



Industries

Agriculture, Construction, Automotive, Industrial, Stationary Power and Others

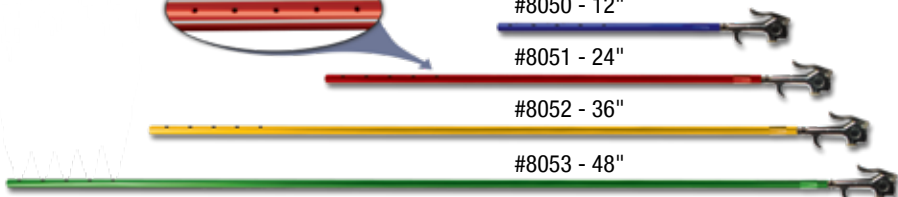


#8050 - 12"

#8051 - 24"

#8052 - 36"

#8053 - 48"



#7899 GATOR JAWS®

LIFETIME WARRANTY

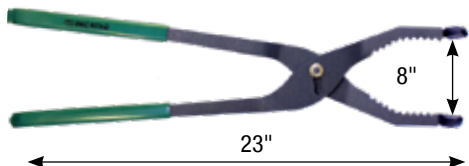
Patented

The Most Versatile Filter Pliers for Cars, Trucks and Heavy-Duty Equipment



Built with a powerful grip and tremendous holding power, **Gator Jaws**® have 32 teeth that can firmly grab an over-tightened filter and loosen it from a variety of angles without slipping.

- Works on oil, fuel and hydraulic filters, fuel sending units and more
- Snakes around hot exhaust manifolds
- 23" length
- Three different settings for optimum grip



New and improved – opens wider





Have You Ever Tried to Force Grease Through a Grease Fitting and Couldn't? Now You Can!

The Grease Joint Rejuvenator® forces light oil into a grease joint, flushing out old hardened grease and allowing new grease to be pushed through.

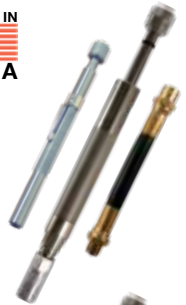
- Instantly opens clogged grease joints
- Cleans ways and stays in milling machines and lathes
- Lubricates and unclogs bearings, control arms, king pins, piston arms, packaging, shafts, bushings, etc.
- Can be used on farm, construction, lawn, excavating, manufacturing, machine shop and well-drilling equipment, as well as trucks, trailers and marine drivetrains



#7863 GREASE JOINT REJUVENATOR® MASTER KIT

Includes

- Professional Model #7862
- Pocket Model #7864
- 5" Flex Hose
- Extra Coupler
- Patented



#7862 GREASE JOINT REJUVENATOR® PROFESSIONAL MODEL

Includes

- 5" Flex Hose
- Extra Coupler
- Patented



Also Available in Clamshell: #7862H

#7864 GREASE JOINT REJUVENATOR® POCKET MODEL

- Especially handy for small equipment
- Patented



#9050 MOBILE POWER STATION (MPS) WITH PLASMA BOOST™

12/24V Battery Jump Cart with Charger/Maintainer, Load Tester and Plasma Boost™ is Guaranteed to Start Any Engine

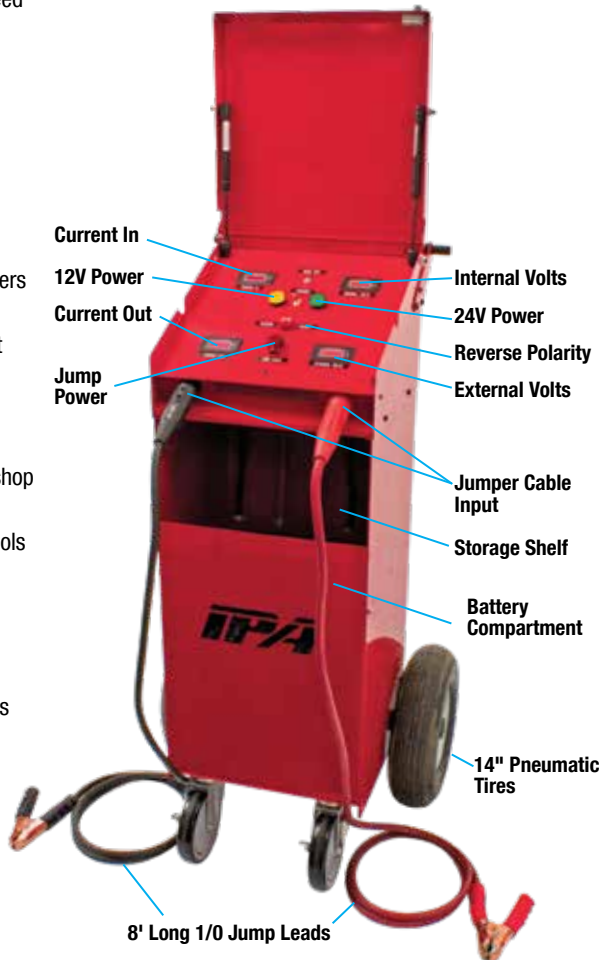
NEW

The **Mobile Power Station (MPS) with Plasma Boost™** is a breakthrough in 12/24 volt jump-cart technology that is setting a new standard for the Automotive and Fleet Industries. Rugged and powerful, the MPS is a fully integrated shop solution for battery maintenance, testing, charging and troubleshooting. The Plasma Boost™ feature is an integrated, momentary 24-volt boost that will overcome even an excessive starter load, jumping any engine and helping diagnose charging system problems in real time. Rugged enough for the most severe environments, the MPS is truly a mobile power station for the professional automotive, fleet or ag shop.

- Jump starts both 12V and 24V vehicles
- Plasma Boost™ (patent pending) up to 28V/2000 cranking amps, guaranteed to start any engine
- Offers complete and convenient diagnosis of: high current parasitic draw, charge system output, loose connections, shorted batteries, faulty starters and more
- Integrated 10-second load test of vehicle battery health
- Dual digital ammeters and volt meters monitor internal/external current
- Integrated 10 amp automatic smart charger/maintainer
- Large 14" pneumatic tires for easy transport on rough terrain
- Swivel-type locking casters for in-shop maneuverability
- Large storage shelf for parts and tools
- Fits two Group 31 batteries (not included)

Includes

- 8' long 1/0 solid copper jump leads with heavy-duty copper battery clamps



#9038A RELAY BYPASS SWITCH KIT WITH AMP LOOP

Allows Circuit Bypass and Current Testing for 12V DC Relays

The **Relay Bypass Switch Kit with Amp Loop** energizes fuel pumps and any 12V relay by powering a DC motor for testing. It also makes DC motor actuation and current monitoring easy. By attaching an Amp Clamp or Lab Scope, you can monitor the current or amperage readings. It allows a technician to judge the health of the DC electric motor to identify if a motor is drawing more current than specified, or if the current load is inconsistent during operation.

- Control relay circuit independent of “key-on/key-off” systems
- Run all automotive, 12V DC motors with a push of a switch
- Simplifies fuel injection testing
- Use in conjunction with clamp-on Amp Probes and Lab Scopes
- Operating range: Up to 20 amp continuous, 30 amp surge (12V)
- Covers most makes and models



#9038 FUEL PUMP RELAY BYPASS MASTER KIT

Energize a Fuel Pump with the Push of a Switch

Conveniently combining the #9036 and #9037, the 6-piece **Fuel Pump Relay Bypass Master Kit** provides direct control of the fuel pump circuit in most domestic, Japanese, Korean and German applications.



#9036 FUEL PUMP RELAY BYPASS KIT I (3-Piece Set)

Includes #9036-1, #9036-2, #9036-3

#9037 FUEL PUMP RELAY BYPASS KIT II (3-Piece Set)

Includes #9037-1, #9037-2, #9037-3



#8016 FUSE SAVER® MASTER KIT**Chase Down Short Circuits Without Blowing Fuses!**

Provides a level of versatility in electronics testing (5-30 amps) never before available.

- Helps install radios, CD players, radar detectors and accessories with ease
- The BuzzAlert™ module plugs in-line to your Fuse Saver® and sounds an alert when the circuit shorts
- The 6-piece Fuse Box Adapter Kit allows access to a wide variety of fuse boxes: FLF, FLS, JCase, MAXI, Female Maxi, screw-on style pal, European ceramic and all glass-style fuses

**Includes**

- 5 Resetting, Color-Matching Breaker Handles: 5, 10, 15, 20 and 30 amps
- #8005-7 Dual-Type Fuse Box Connector with 10' Cord
- #8011 BuzzAlert™
- #8014 Fuse Box Adapter Kit

**Parts & Accessories**

- | | |
|-----------------------------|-----------------------------|
| #8005-5AMP (5 amp Handle) | #8005-20AMP (20 amp Handle) |
| #8005-10AMP (10 amp Handle) | #8005-30AMP (30 amp Handle) |
| #8005-15AMP (15 amp Handle) | #8005-EXT (10' Ext. Cable) |

**#8005 FUSE SAVER® STANDARD KIT****No More Overheating Fuse Boxes!**

The **Fuse Saver®** provides a fast and safe solution to the old methods of "smoke testing" a short.

- Allows a technician to move around a vehicle shake testing wires while looking for the short
- Dual-type fuse box connector with 10' cord eases the installation of radios, CD players, radar detectors and other accessory equipment

**Includes**

- 3-Resetting, Color-Matching Breaker Handles: 10, 15 and 20 amps
- #8005-7 Dual-Type Fuse Box Connector with 10' Cord



#7884 DISC BRAKE SYSTEM ANALYZERLIFETIME
WARRANTY

Patented

Uneven Brake Pad Wear? Eliminate Guesswork When Troubleshooting Disc Brake Problems

The only tool that identifies an imploded brake hose and accurately detects exactly where the problem lies without breaking a line.

- Has two load cells attached to analog gauges that each have a range of 0-5000 psi (0-350 BAR)
- Gauges are built with a red tell-tale memory needle that allows for one-man brake testing
- Tests improperly adjusted proportioning valves, air in hydraulic systems, power booster problems, rear brake adjustment check, etc.
- Tests sticky or broken brake calipers
- Identifies the exact cause of uneven wear

MADE IN
USA OF
GLOBAL
COMPONENTS**#7891 ENGINE CALIBRATION AND SET-UP KIT**LIFETIME
WARRANTY

Patented

Save Time on Engine Set-up

The **Engine Calibration and Set-up Kit** contains innovative tools designed to help eliminate mistakes when setting up mechanical engine timing sequences, chains and belts, balance shafts and belts, and distributor installations, as well as when performing general engine set-up procedures.

- Finds TDC compression stroke
- Locks engine for harmonic balancer removal and replacement
- Includes compression extension with adapters and whistles

Includes

- #7880 - TDC Indicator Standard 6.25" (14mm)
- #7886 - TDC Indicator Extended 10.75" (14mm)
- #7881 - Compression Gauge Extension
- #7882 - Whistle Alert (Rigid)
- #7894 - Whistle Alert (Flexible)
- #7877 - Piston Lock
- #7892 - Spark Plug Hole Adapter - Reduces 14mm to 12mm
- #7885 - Spark Plug Hole Adapter - Enlarges 14mm to 18mm

MADE IN
USA OF
USA

#7880 TDC INDICATOR STANDARD 6.25" (14MM)LIFETIME
WARRANTY**Stop the Guessing and Easily Set a Piston to TDC**

The **TDC Indicator** enables a technician to accurately set a piston to Top Dead Center (TDC). Just remove the spark plug, screw in the gauge and rotate the engine while observing the radial marks on the sliding shaft and note the top of the piston stroke.

- Accurately displays piston movement
- Installs as easily as a spark plug
- 6 1/4" long (14mm thread)
- 1/8" gradient marks
- Made of 1144 steel alloy with a stainless steel spring

MADE IN

USA**#7886 TDC INDICATOR EXTENDED 10.75" (14mm)**

- Same function as the #7880
- 10 3/4" long (14mm thread)

DO NOT use on an engine that has an acute spark plug angle relative to the flat top of the piston or you may bend the TDC shaft



GOOD



BAD

**#7882 WHISTLE ALERT (RIGID)**LIFETIME
WARRANTY**No More Burning Fingers and Hands! Just Listen for the Whistle to Find the TDC Compression Stroke**

The **Whistle Alert (Rigid)** screws into a spark plug hole to quickly indicate compression stroke.

- Eliminates the need for an extra hand
- After installation, your hands are free to complete the job
- Excellent for use on deep, recessed spark plug threads

MADE IN

USA**#7894 WHISTLE ALERT (FLEXIBLE)**

The **Whistle Alert (Flexible)** identifies compression stroke performs the same job as the rigid version, but can be placed in hard-to-reach places where the rigid version would be difficult or impossible to place.



#7881 COMPRESSION GAUGE EXTENSION

LIFETIME WARRANTY

Patented

No More Stuck Compression Gauges

The **Compression Gauge Extension** brings a spark plug hole above the valve cover on engines with a deep spark plug socket or coil over design.

- No more difficulty removing threaded hoses from deep holes
- Easy to install and remove
- Adapters available for various applications



MADE IN USA

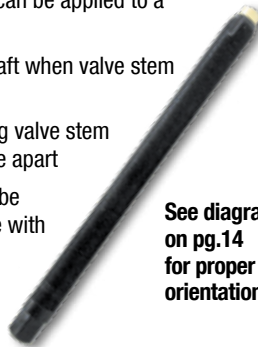
#7877 PISTON LOCK

LIFETIME WARRANTY

Prevents Crankshaft from Rotating

The **Piston Lock** is a necessary tool for performing leak down tests and valve seal replacements on engines.

- Holds the crank shaft in place so shop air can be applied to a piston at top dead center
- Prevents shop air from rotating a crank shaft when valve stem seals are being removed
- Pressure holds the valves in place, allowing valve stem seal replacement without taking the engine apart
- Up to 100 psi of shop compressed air can be applied to a cylinder at the top of its stroke with valves closed



See diagram on pg.14 for proper orientation



MADE IN USA

SPARK PLUG THREAD ADAPTERS AND SOCKET

LIFETIME WARRANTY

#7885 SPARK PLUG HOLE ADAPTER ENLARGES 14mm to 18mm

Adapts any 14mm spark plug thread to an 18mm hole.

- Can be used as a temporary diagnostic adapter using a 14mm spark plug in an 18mm application



MADE IN USA

#7892 SPARK PLUG HOLE ADAPTER REDUCES 14mm to 12mm

Adapts any 14mm spark plug thread to a 12mm hole.



MADE IN USA

#8043 MICRO MALE ELECTRICAL PIN CLEANERS**Cleans Deutsch, Cannon, Bullet and Other Round Electrical Pins**

Specially engineered with a contoured design and diamond coating to clean male electrical pins safely. The 3-piece set includes a leather-type holster and cleans pins ranging in sizes from .030"-.040", .060"-.070", and .090"-.100" - the same sizes found in most makes of cars, trucks, construction, agriculture, industrial and military equipment.

- Durable diamond coating
- Innovative, contoured design
- For use on DC circuitry only
- Will not damage pins
- For all types of male electrical pin applications

Includes

- Small, medium and large terminal cleaners
- Premium-quality holster with magnetic clasp

**#8076 CARBIDE-TUBE PIN CLEANERS**

Patents Pending

A Breakthrough in Electrical Pin Cleaning

This 10-piece set of **Carbide-Tube Pin Cleaners** allows for quick and safe cleaning of electrical pins.

- Safely removes corrosion and extends harness life on small and large male electrical pins
- Restores poor intermittent connections
- Safe on electrical connections
- Applications for high voltage DC and AC connectors found on trains, communication and data center equipment, electric vehicles, military vehicles, forklifts, aircraft, mining/marine equipment and more
- Also can be used to clean bar stock, tubing, pins and pipes by removing scaling or rust prior to welding or painting
- Other sizes available up to 3"



Designed to clean 10 diameter size pins:
 .217", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8",
 11/16", 3/4"

#240 Grit Carbide:
 lasts 10X longer than
 common sand paper

#8086 LIGHT SOCKET BRUSH KIT

Corroded Light Bulb Sockets?

The new tufted end is specially designed to clean the entire light socket in one operation.

- Special tufted end safely cleans the side and bottom of a light socket in one pass
- For 1156/1157 type light bulb sockets and 5/8"-3/4" bores

Includes

- Brass brush for copper connectors and moderate corrosion
- Stainless steel brush for severe corrosion
- 2 ml DeoxIT® Contact Cleaner
- SWAB-EEZ®



Ergonomic Handle

Special Tufted End



#8040 DIAMOND-TIP ELECTRICAL TERMINAL CLEANERS

Patented

For Electrical Flat (Spade) Type Pin Connectors

This 3-piece, pro-series set features three different size tips specifically designed and custom engineered to fit and clean most male/female flat pin-type connectors.

- Highly durable with mild abrasive coating
- Pivoting-handle design for added versatility
- Works for both male and female connectors on flat (spade) pin-type terminals
- Designed to clean and enhance electrical connections safely
- Increase overall harness life

Includes

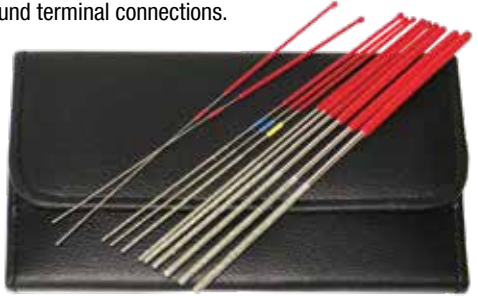
- Small, medium and large terminal cleaners
- Premium-quality holster with magnetic clasp



#8042 DIAMOND MICRO ROUND FILES**Super-Hard, Flexible and Diamond-Coated for Cleaning Small, Round, Female Electrical Pins**

This 12-piece set of **Diamond Micro Round Files** are specially designed to remove corrosion from Cannon, Deutsch, Bullet, NATO, Weather Pack and other round terminal connections.

- Strong but flexible
- Specially designed for cleaning small, round electrical connectors
- Diameter sizes range from .030" to .120" and 5" long
- For use in general filing applications such as steel, aluminum, plastic, brass, etc.
- Comes in a premium-quality holster with magnetic clasp
- Individual sizes are marked and available for replacement

**#8047 DIAMOND-COATED FLEXIBLE FLAT FILES****Super-Hard, Flexible, Flat Cleaners for Large Spade Electrical Contacts and General Filing Applications**

This 3-piece, pro-series set covers a wide range of contact sizes for cleaning and enhancing electrical connections to reduce diagnostic guesswork and increase contact life.

- Highly abrasive and durable
- Ultra-thin and flexible for added functionality
- Non-slip, high-viz, ergonomic handles for comfortable use



15mm 9mm 6mm



2X

Thinner than the smallest available file



For Commercial Truck and Trailer Connectors

Clean and resize male and female 7-way round pin tractor trailer connectors.



Assembled in USA from Global Components

- Maintains continuity and prevents circuit failure
- Quickly and precisely cuts away corrosion
- Enhances electrical contact points and extends harness life
- Use as a pin-wear gauge
- Male and female terminal cleaners included



Cleans and resizes male...



...AND female connectors

Male Cleaner



Easy Grip

Female Cleaner

#8025 LIGHT-DUTY TRUCK AND TRAILER CONNECTOR CLEANERS

Clean and resize male and female connectors on 7-way flat (spade), 6-way round and 4/5 pin terminals.

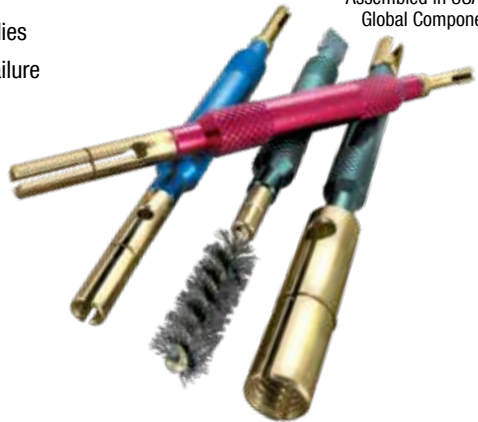


Assembled in USA from Global Components

- Services tail and side marker light assemblies
- Maintains continuity and prevents circuit failure
- Quickly cuts away corrosion

Includes

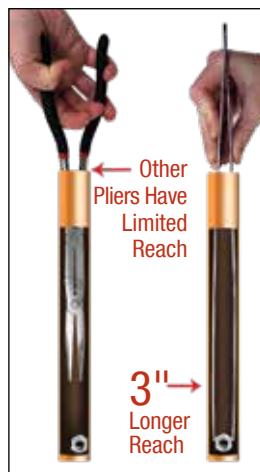
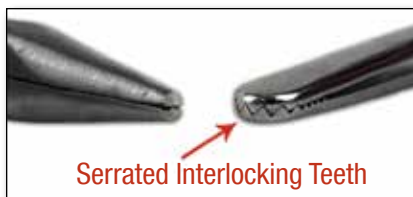
- #8021 - For 4/5 Pin Male and Female and 6-Way Round Pin
- #8022 - For 4/5 Pin Male and Female and 6-Way Round Pin Male and Female
- #8023 - For 7-Way Flat (Spade) Pin Male and Female



#8100 14" LARGE MANTUS™**Go Where No Tool Has Gone Before!**

The **14" Large MANTUS™** is the ultimate tool for accessing hard-to-reach areas. Surpassing the reach of the industry's longest available needle nose pliers with greater precision and control, the MANTUS™ provides a sure grip on a variety of surfaces including fuses, wires, hoses, gaskets, O-rings, hardware and more!

- 14" length
- Durable, surgical stainless steel construction
- Slim-profile design for reaching tight-access areas
- Extended length for greater versatility

**#8041 MANTUS™ TIGHT ACCESS TOOL**

The **MANTUS™ Tight Access Tool** is a versatile product featuring surgical stainless steel with serrated interlocking hands at the end of a 6" reach. The ultimate grab tool!

**#8045 PLOW TERMINAL CLEANERS**

Patented

The First Set of Tools for Cleaning Dirty, Corroded Plow Connectors

Assembled in USA from
Global Components

Clean and restore male and female electrical plow connectors used on most Boss, Fisher, Meyer, Western plows, etc.

- Removes corrosion and increases harness life
- Repairs intermittent electrical connections

Includes

- Small, medium and large, male/female terminal cleaners
- Premium-quality holster with magnetic clasp



The Only Set of Tools to Clean Every North American Trailer Connector



Assembled in USA from Global Components

Clean and restore male and female connectors on any trailer connection used in North America.

- Maintains continuity and helps prevent circuit failure
- Cleans and resizes trailer pins
- Removes corrosion and increases harness life



Includes

- 4/5 Pin Terminal Cleaner
- 6-Way Round Pin Terminal Cleaner
- 7-Way Flat (Spade) Pin Terminal Cleaners
- 7-Way Round Pin Terminal Cleaners
- SWAB-EEZ®
- Contact Cleaner
- Premium-quality holster with magnetic clasp

#8048 HD FLEET TECHNICIAN'S ELECTRICAL TERMINAL MAINTENANCE SET

Specially Designed Tools for Cleaning All Vehicle Electrical Connections in Commercial Heavy-Duty Fleets



Assembled in USA from Global Components

Clean and restore male and female terminals on fleet connections.

- Removes corrosion and extends harness life
- Ensures proper diagnostic connectivity
- Connector types: Deutsch, Cannon, 7-way round pin, Bullet, Weather Pack, common ABS sensor and power connectors, trailer light connectors, common plow connections, etc.

Includes

- Large and small spade terminal cleaners
- 7-Way Round Pin Terminal Cleaners
- ABS sensor/power connector cleaner
- Ten Diamond Micro Round Files
- Trailer light bullet connector cleaner
- Contact Cleaner
- Premium-quality holster with magnetic clasp



Patented



#8030-8036A DEOXIT® CLEANER AND SHIELD**Clean and Protect Electrical Connections****DeoxIT® CLEANER**

- Cleans and restores connections
- Prevents electrical failure
- Removes oxidation and corrosion
- Enhances electrical contact points

DeoxIT® SHIELD

- Lubricates and protects connections
- Use after DeoxIT® cleaner for long-term protection
- For severe environments

Use On

Terminals, ABS, input/output sensors, E.C.U. connectors, battery pins and plugs, horn connections, fuel injectors, fuses, ribbon cable connections, tail and head light connections, relays, air flow meters, audio and video connections, and more!



MADE IN

 U S A



#8030 DeoxIT® CLEANER Squeeze Tube 2 ml

#8031 DeoxIT® SHIELD Squeeze Tube 2 ml

#8035A DeoxIT® CLEANER Spray Can 5 oz.

#8036A DeoxIT® SHIELD Spray Can 5 oz.

#9010 SWAB-EEZ®**More Uses Than You Can Think Of!**

SWAB-EEZ® industrial-strength, low-lint cotton swabs are a great item to keep on hand for a variety of uses. This large, 325-piece assortment comes with a variety of head sizes, ranging from 5mm-20mm.

- Industrial strength
- Low-lint, medical-grade cotton
- Soft and nonabrasive
- Highly absorbent tips; no drip or splatter
- Compatible with all solvents; can be presoaked
- Strong, flexible bamboo handles
- Disposable and biodegradable

**Industries**

- | | | |
|-----------------|-------------|---------------|
| • Industrial | • Sports | • Motorcycles |
| • Automotive | • Pet Care | • Laboratory |
| • Agricultural | • Modeling | • MRO |
| • Electronic | • Airplanes | • PBE |
| • Arts & Crafts | | |



#9060C FIVE-TIRE PRESSURE EQUALIZER SYSTEM

Inflate, Deflate or Equalize up to Five Tires at Once



The **Five-Tire Pressure Equalizer System** provides a turnkey solution to ensure repeatable and consistent tire inflation for all fleet vehicles. It is specifically designed for the fastest fill times, improving fuel mileage, spotting mismatched duals, as well as reducing tread wear, blowouts and tire decapitation.

HIGH-ACCURACY GAUGES

- Increase fuel mileage
- Decrease tire wear
- Improve technician's confidence
- Provide consistent readings



HIGH-FLOW REGULATORS

- Faster inflation time
- Maintain initial setting

TOGGLE VALVES

- Read individual tire pressures
- Easily identify problem tires

Includes

- Five Color-Coded Air Hoses
- Two Panel-Mounted, High-Flow Regulators
- Two Panel-Mounted, Highly Accurate Air Gauges
- Five Lock-On Air Chucks (#9060M5)



#9060 FIVE-TIRE PRESSURE EQUALIZER SYSTEM (Base Model)

Includes

- Five Color-Coded Air Hoses
- Two Panel-Mounted, High-Flow Regulators
- Two Panel-Mounted, Highly Accurate Air Gauges



Hose Storage
Holster Holds
Air Chucks



Steer Tire (above)
Drive Tires (right)



#9062C FOUR-TIRE INFLATION/EQUALIZER SYSTEM**Fast and Accurate Four-Tire Inflation, Deflation and Equalization System**

Engineered for maximum air volume and the highest possible accuracy, the **Four-Tire Inflation/Equalizer System** ensures repeatable and consistent tire inflation for every shop bay.

- Prevents blowouts and tire decapitation
- Increases fuel mileage and tread life
- Highly accurate, glycerin-filled gauges
- On/off air toggle valves
- Color-coded hoses with corresponding panel indicators
- Internal storage compartment
- Side-mounted hose hangers
- Telescoping handle

Includes

- Four Color-Coded Air Hoses
- One Panel-Mounted, High-Flow Regulator
- One Panel-Mounted, Highly Accurate Air Gauge
- Four Lock-On Air Chucks (#9060M4)

**3-YEAR
WARRANTY**

**#9062 FOUR-TIRE INFLATION/EQUALIZER (Base Model)****TIRE COMPARATOR™****The Ultimate Dual Tire Pairing Gauge – a Quick and Easy Way to Ensure Dual-Mated Tires are Within Tolerance**

The **Tire Comparator™** is the industry's fastest and most consistent caliper for comparing tread wear on dual-mated tires. The simple-to-use sliding tolerance gauge requires no measuring, guessing, or even visual inspection. Just hold it against the tire and slide the gauge across the treads for a quick reading every time.

- Helps extend tread life and improve fuel mileage
- Can be used on any dual-mated tires
- Reduces blowouts and tire decapitation
- Lightweight and portable

#9067 TIRE COMPARATOR™ (TYPE II)

For ½" tolerances

#9068 TIRE COMPARATOR™ (TYPE III)

For ¼" tolerances



DIESEL EXHAUST FLUID (DEF) TRANSFER SYSTEMS

Professional Grade Equipment with 2-Year Warranty

- Corrosion-resistant fittings
- Highly accurate, digital flow meter
- Self-priming

Standard Equipment Includes

- #9070 comes with bracket assembly for totes
- #9072 comes with carrying handle
- DEF-rated 6' intake and 8-20' output hoses
- DEF-rated transfer nozzle (manual or automatic shut-off)



**#9070
AC MODEL**

Specifications

- Pump Type: Rotary Diaphragm (AC and DC)
 Pump Req.: #9070 120V AC (6.5 amp)
 #9072 12V DC (18 amp)
 Flow Rate: 9 gpm
 Input: 3/4" Diameter
 Output: 3/4" Diameter
 Weight: 15 lbs.



**#9072
DC MODEL**



- #9070 DIESEL EXHAUST FLUID (DEF) TRANSFER SYSTEM (120V AC)**
- #9070A DEF TRANSFER SYSTEM WITH AUTOMATIC SHUT-OFF NOZZLE**
- #9072 DIESEL EXHAUST FLUID (DEF) TRANSFER SYSTEM (12V DC)**
- #9072A DEF TRANSFER SYSTEM WITH AUTOMATIC SHUT-OFF NOZZLE**



DEF Transfer System Selection Chart

FEATURES	#9070	#9070A	#9070-20	#9070A-20	#9072	#9072A	#9072-20	#9072A-20
120V AC Pump	✓	✓	✓	✓				
12V DC Pump					✓	✓	✓	✓
Tote Hang Design	✓	✓	✓	✓				
Digital Flow Meter	✓	✓	✓	✓				
Manual Transfer Nozzle	✓		✓		✓		✓	
Auto Shut-Off Nozzle		✓		✓		✓		✓
8ft. Output Hose	✓	✓						
12 ft. Output Hose					✓	✓		
20 ft. Output Hose			✓	✓			✓	✓

DEF TRANSFER ACCESSORIES

A Selection of High Quality DEF-Rated Couplers, Valves and Nozzles

- Constructed of all DEF-rated components
- Ensures a contaminant-free connection every time
- For closed and sealed systems
- For use with IPA's DEF Transfer Systems

Available Products

- #DEFPPV Composite Tote Valve and Down Tube Kit
- #DEFSSV Stainless Steel Tote Valve and Down Tube Kit
- #DEFPPC Composite DEF Tote Coupler
- #DEFSSC Stainless Steel DEF Tote Coupler
- #9071 DEF Recovery Wand Kit
- #9070-DEFNOZ Manual Transfer Nozzle
- #9070-DEFNOZA Automatic Shut-off Nozzle



#9070-DEFNOZ
Manual Shut-Off
Nozzle



#9070-DEFNOZA
Automatic Shut-Off
Nozzle



#9071 DEF RECOVERY WAND KIT
Stainless Steel Quick
Disconnect Fittings

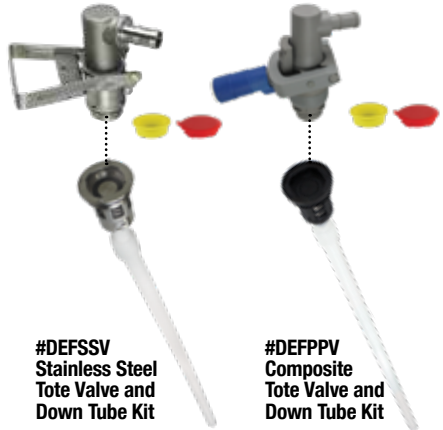


5' Flexible Wand

Valves and Couplers Available in
Composite or Stainless Steel

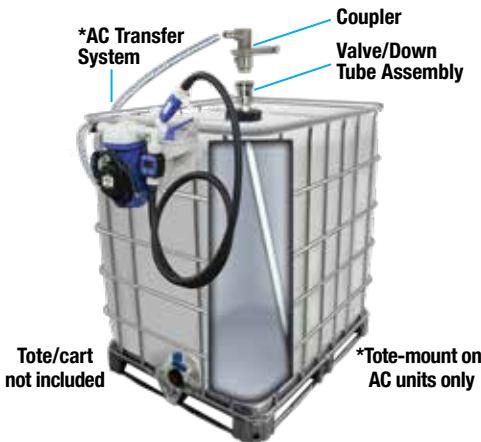
#DEFSSC
Stainless Steel
DEF Tote Coupler

#DEFPPC
Composite DEF
Tote Coupler



#DEFSSV
Stainless Steel
Tote Valve and
Down Tube Kit

#DEFPPV
Composite
Tote Valve and
Down Tube Kit



*AC Transfer
System

Coupler
Valve/Down
Tube Assembly

Tote/cart
not included

*Tote-mount on
AC units only

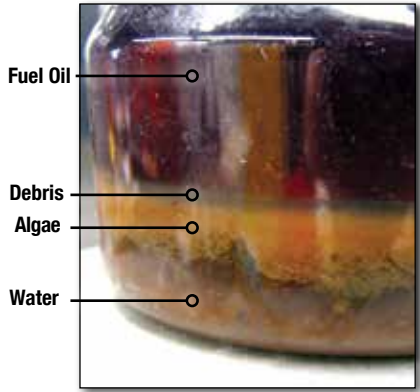
FUEL TRANSFER AND FILTRATION SYSTEMS

Maintaining diesel oil has always been a science, but with the advent of commercially prepared biodiesels, new threats have arisen from the depths of your fuel tank in the form of algae, sludge and other contaminants.

Dangers of Biofuel: Biofuel contamination occurs when organic compounds are left clinging to the sides of a fuel tank, which over time evolve into an algae-like growth. When a fuel tank runs low, biomass begins to grow and the continuous die-off will accumulate in your filters and injectors, eventually causing engine problems and equipment downtime. Even the finest micron filters will leave behind particles suspended in oil that will begin to grow. Once the contaminated fuel makes its way to the combustion chamber, the tiny particles that do not burn will imbed themselves into the valve seats, guides and piston tops, ultimately reducing a diesel engine's life.

Prevention and Maintenance: Several forms of maintenance are available and should be used regularly, such as fuel additives, routine engine filter changing, storage tank cleaning and truck fuel tank cleaning (sweeping and polishing). The best methods only require a few minutes of service at regular intervals.

IPA's Fuel Transfer and Filtration Systems are compact, portable and include input and output hoses with special attachments for accessing saddle tanks on fleet trucks and 55-gallon drums. Orifice reduction in the intake and output wands creates an extremely high vacuum and pressure stream capable of blasting most contaminants from the fuel tank walls.



Sample Oil Removed From Tank

#9049M FLEET TANK SWEEPER® (120V AC)

Lightweight and Portable Filtration System for Tank Applications Including Trucks, Tractors and 55-Gallon Drums



Specifications

- Pump Type: Rotary Vane
- Pump Req.: 120V AC (6.5 amp)
- Flow Rate: 22 gpm
- Input: ¾" dia.
- Output: ½" dia.
- Filter: 17-Micron Water Blocking
- Frame: Steel Construction
- Weight: 32 lbs.
- Dimensions: 12" W x 20" H x 13" D



Includes

Extra 17-Micron Filter, 6' Long ¾" Black Intake Hose, 6' Long ½" Black Output Hose, 5' Long ½" Flexible Output Wand and 5' Long ¾" Flexible Input Wand

#9049S FLEET TANK SWEEPER® (120V AC) Base Model

#DTP20C INDUSTRIAL FUEL CLEANER AND TRANSFER SYSTEM (12V DC)

Battery-Powered, Mobile Filtration System for Vehicle Recovery, Fleet Operations and for use in Fuel Islands



Specifications

- Pump Type: Rotary Vane
- Pump Req.: 12V DC 30 amp
- Flow Rate: Up to 18 gpm
- Input: 1" dia.
- Output: 3/4" dia.
- Filter: 17-Micron Water Blocking
- Frame: Steel Construction
- Tires: 17" Pneumatic Tires
- Meters: Panel Mounted Volt and Amp Meters
- Weight: 75 lbs.
- Dimensions: 23" W x 42" H x 14" D



Includes

11' Intake Hose, 12' Output Hose, Digital Flow-Meter Nozzle Extra 17-Micron Water Blocking Filter and Fire Extinguisher

#DTP20C-BIO BIODIESEL FUEL CLEANER AND TRANSFER SYSTEM

#9080 DIESEL FUEL INJECTION CLEANER AND PRIMER

Cleans, Primes and Troubleshoots Diesel Injection Systems



Specifications

- Battery Type: Group 14, Yuasa YTX14 or Similar (Battery Not Included)
- Flow Rate: 27 gph/101 lph
- Pressure: 7-9 psi
- Dry Weight: 27 lbs.
- Capacity: 5 gal.
- Hose Length: 10' Coiled
- Dimensions: 12 3/4" W x 15 1/2" H x 13 1/4" D



Includes

Flexible Fluid Dispensing Adapter, (3) Hose Adapters, 1/4", 3/8" and 1/2" Barbed Fuel Fittings, Compucheck® Fitting, Chassis Ground Cable and 500mA Battery Charger

#9046F PNEUMATIC FUEL TANK SWEEPER®

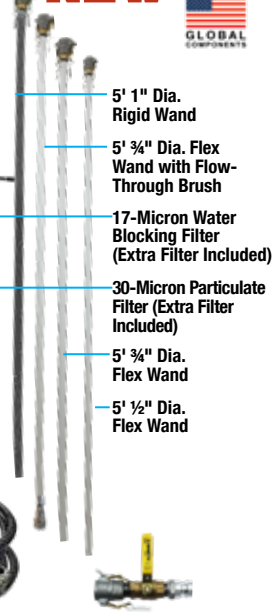
Remove Water and Contaminants from Diesel Oil Systems

NEW



Specifications

- Pump Type: Pneumatic Diaphragm
- Operating Pressure: 4 cfm @ 22-102 psi
- Head-Lift Height: 22'
- Unfiltered Flow Rate: Pump rated up to 26 gpm
- Intake/Output: 1" Dia.
- Primary Filter: 30-Micron Particulate
- Secondary Filter: 17-Micron Water Blocking
- Frame Construction: Powder-Coated Steel
- Tires: 10" Pneumatic Tires
- Weight: 70 lbs.
- Dimensions: 24" W x 42" H x 14" D



Includes

- Extra 17-Micron Filter, Extra 30-Micron Filter, 11' Intake Hose, 11' Output Hose, 5' 1" Dia. Rigid Wand, 5' 3/4" Dia. Flex Wand with Flow-Through Brush, 5' 3/4" Dia. Flex Wand, 5' 1/2" Dia. Flex Wand, Quick-Disconnect Ball Valve, Chassis Ground Cable

Chassis Ground Cable 11' Input and Output Hoses Quick-Disconnect Ball Valve

#9046H PNEUMATIC HYDRAULIC OIL TANK SWEEPER®

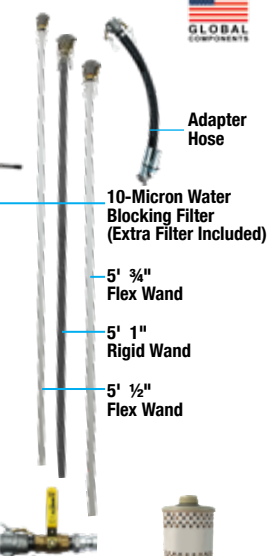
Remove Water and Contaminants from Hydraulic Oil Systems

NEW



Specifications

- Pump Type: Pneumatic Diaphragm
- Operating Pressure: 4 cfm @ 22-102 psi
- Head-Lift Height: 22'
- Unfiltered Flow Rate: Pump rated up to 26 gpm
- Intake/Output: 1" Dia.
- Primary Filter: 10-Micron Water Blocking
- Secondary Filter: Optional
- Frame Construction: Powder-Coated Steel
- Tires: 10" Pneumatic Tires
- Weight: 70 lbs.
- Dimensions: 24" W x 42" H x 14" D



Includes

- Extra 10-Micron Filter, Extra 17-Micron Filter, 11' Intake Hose, 11' Output Hose, 5' 1/2" Dia. Flex Wand, 5' 1" Dia. Rigid Wand, 5' 3/4" Dia. Flex Wand, Quick-Disconnect Ball Valve, Adapter Hose, Chassis Ground Cable

11' Input and Output Hoses Chassis Ground Cable Quick-Disconnect Ball Valve 17-Micron Filter

#9107A ELECTRIC BRAKE FORCE METER W/ DYNAMIC LOAD SIMULATION & CIRCUIT TESTING

Tests Truck-Side Brake Controller Output and All Tow-Lighting Functions Without a Trailer

NEW



INCLUDES 2017 UPDATES

Use to verify that the vehicle's adaptive (speed/load sensitive) brake-controller output is functioning properly.

Features and Benefits

- Brake Force Meter displays real-time, brake controller output gain and timing
- Quickly troubleshoots electrical circuits and ground condition
- For use with integrated and aftermarket brake controllers
- Microprocessor controlled; simulates trailer brake loads
- 25' cable allows one-man, in-cab testing of brake controller and all truck-side tow circuits.
- Comes in soft nylon case



MULTIPLE PATENTS PENDING



Real-Time Brake Force Output Gain and Timing



Complete One-Man Solution



7-Way Spade/Flat Vehicle Female Socket (Front View)

Also Available: 2017 Update Kit (#9106) for #9107

Advanced Diagnostic Trailer Tester with Detailed Reporting Capabilities



The Alpha MUTT® adds a Bluetooth-connected tablet with IPA®'s custom diagnostic software suite to the Super MUTT® platform. It can instantly save, store and share inspection reports by integrating the most up-to-date technology across an entire fleet with easy plug-and-play design. It requires minimal training for the technician; helps eliminate human error and gives customers peace of mind with complete accountability through detailed reports.

ELECTRICAL TESTING (12/24 Volt Operation)

- Highly accurate digital ammeter with 5mA resolution
- Custom login and trailer VIN entry with each inspection
- Automatic cross, open, overload, short and ground fault detection
- Detailed inspection report generated from auto-test report function in under 60 seconds

NEW



ABS TESTING

- Access ABS blink codes
- Optional ABS scan tool

AIR BRAKE TESTING

- Tablet, remote-controlled and manual air brake activation
- Performs leak-down test on service and emergency lines
- Real-time, repetitive brake activation to find developing problems and verify leaking servo cans

Specifications

Connection Type:	7-Way Round Pin
Power:	12/24V DC
Power Input:	Group 31 Battery or Similar (Not Included)
Ammeter:	5mA - 21A
Source Output:	20A @ 12/24V DC
Max. Operating Pressure:	120 psi
Tablet:	10" Screen Running on Android Operating System (Included)
Controls:	Tablet, Remote or Manual
Tires:	14" Pneumatic
Materials:	Steel Construction
Weight:	70 lbs.
Body Dimensions:	44 ½" H x 19 ½" W x 23" D
Battery Charger:	10-Amp Smart Battery Charger



Includes

10" Tablet, 12-Button Remote Control, (2) 3-Button Remote Controls, 5' 7-Way Cable, Chassis Ground Cable, External Battery Connector, 8' Glad Hands, 10A Smart Battery Charger



#MUT-RM12



#MUT-RM3-9005A/8



#7900K-1



#7900K-2BCHAS



#7900K-93



#MUT-GAS8



#KCHG-121001

#5700 DIAGNOSTIC SOFTWARE SUITE

Provides Highly Accurate Inspection Results for All Common Trailer Configurations

Standardize consistent inspections across all fleet and service center locations with one-button pass/fail inspections and printable reports—it will reduce labor time and create more detailed service records.

Inspection Accountability

- Customizable, password-protected user login
- Technician's username is recorded and exported on inspection reports/receipts
- Trailer VIN entry with each inspection maintains more accurate record keeping

Prevents Recurring Mistakes and Provides Walk-Through Expert Guidance

- Built-in Diagnostic Message Center analyzes inspection results in real-time, providing users with immediate feedback and troubleshooting suggestions
- Detailed pass/fail circuit conditions (ground, open, crossed and short) will alert with specific values
- Provides real-time data and control over all trailer electrical circuits
- Records multiple data points for each circuit including wattage, voltage and current
- Reads accurate current with 0-21A @ 5mA resolution

Record and Analyze Inspection Results

- Logs detailed pass/fail inspection reports
- Easily accessible report history allows technicians to analyze patterns for predictable failure points across all fleet service operations
- Cloud saving option syncs an unlimited number of service locations with a central hub
- Email, print or export reports to PDF or XLS formats



Base Functions
Work with or
Without Tablet





Advanced, Remote-Controlled Diagnostic Trailer Testers

ELECTRICAL TESTING (12/24 Volt Operation)

- Power lights: Manually, All-On, Auto Scan, or by Remote Control
- Audible and visual alerts: cross, open, overloaded, short circuit and ground integrity indication
- Pulsar® mode allows diagnostic repair
- Amperage readout and range (0-20 amps)

ABS TESTING

- Test ABS fault blink codes via Auxiliary and Brake Circuit activation (i.e. Meritor/Wabco, Bendix® TABS-6 and Haldex systems)

AIR BRAKE TESTING

- Performs leak down test on service and emergency lines
- Remote control allows observation of slackers to measure and adjust pushrods
- Real time, repetitive brake activation to find developing problems and verify leaking servo cans

REMOTE CONTROL

- Included 12-button remote and (2) 3-button remotes provide 200+ ft. range
- Sync multiple (12) remotes to one unit



Specifications

Power:	12/24V DC
Air Input:	120 psi Shop Air
Power Input:	Group 31 (or Similar Battery) or External 12/24V Power Source
Output:	20A @ 12V DC
Connection Type:	7-Way Round Pin
Controls:	Manual, Remote, Automatic
Materials:	Steel Construction
Weight:	56 lbs.
Dimensions:	14" W x 28" H x 10" D

9008-SE Base Model Includes

3-Button Remote Control, 5' 7-Way Cable, Chassis Ground Cable, External Battery Connector and 8' Glad Hands



9008-DL PRO EDITION Includes

12-Button Remote Control, (2) 3-Button Remote Controls, 5' 7-Way Cable, Chassis Ground Cable, External Battery Connector, 8' Glad Hands, 10A Smart Battery Charger, Face/Battery Shield and Rain Cover



#MUT-RM12 12-BUTTON REMOTE CONTROL

Remotely Test All Trailer Electric Circuitry and Air Brake Actuation with 12 Buttons

NEW



- 200+ ft. range
- 340 mHz
- Sync multiple (12) remotes to one unit
- For use with IPA® trailer testers #9008-DL, #9008-SE, #M2000, #9005A, #9007M and #9004M
- Uses battery type 23A (included)



#9005A SUPER MUTT® HEAD

Diagnostic Light, Air Brake and ABS Tester Designed for Service Trucks and Mobile Applications



Specifications

- Power: 12/24V DC
- Air Input: 120 psi Shop Air
- Internal Battery: Yuasa YTX14 or Similar Recommended (Optional)
- Ext. Power Input: Adequate 12V Power Source, i.e., Group 31 Battery or Similar
- Output: 20A @ 12V DC
- Connection Type: 7-Way Round Pin
- Controls: Manual, Remote, Automatic
- Materials: Steel Construction
- Weight: 26 lbs.
- Dimensions: 12" W x 11 1/2" H x 9 1/2" D



Optional battery not included

Includes

12-Button Remote Control, (2) 3-Button Remote Controls, 8' Glad Hands, 5' 7-Way Cable, External Power Supply Cord, 500mA Battery Charger, Chassis Ground Connector and Face Shield



- #MUT-RM12
- #MUT-RM3-9005A/8
- #7900K-1
- #7900K-2BCHAS
- #9005A-4AS
- #MUT-GAS8
- #CHR0001
- #9008-4R

#9005A-EXT – 12' Glad Hands and 12' 7-Way Cable

#9007A SMART MUTT® (7-ROUND PIN)

A Portable Unit for Commercial Trailer Lighting and ABS



Specifications

- Power: 12/24V DC
- Internal Battery: Yuasa YTX14 or Similar Recommended (Optional)
- Ext. Power Input: Adequate 12V Power Source, i.e., Group 31 Battery or Similar
- Output: 20A @ 12V DC
- Connection Type: 7-Round Pin
- Controls: Manual, Remote, Automatic
- Materials: Steel Construction
- Weight: 15 lbs.
- Dimensions: 12" W x 9" H x 9 1/2" D



Optional battery not included

Includes

3-Button Remote Control, External Battery Connector, Chassis Ground Cable, 500mA Battery Charger and 5' 7-Way Cable



#MUT-RM3-9007A



#9005A-4AS



#7900K-2BCHAS



#CHR0001



#7900K-1

#9004A SMART MUTT® (7-SPADE PIN)

A Portable Unit for the Professional Service Shop for Light-Duty Trailer Lighting and Electric Brakes



Specifications

- Power: 12/24V DC
- Internal Battery: Yuasa YTX14 or Similar Recommended (Optional)
- Output: 20A @ 12V DC
- Connection Type: 7-Flat (Spade) Pin
- Controls: Manual, Remote, Automatic
- Materials: Steel Construction
- Weight: 10 lbs.
- Dimensions: 12" W x 9" H x 9 1/2" D



Optional battery not included

Includes

3-Button Remote Control, 3-Way Trailer Adapter, 500mA Battery Charger



#MUT-RM3-9004A



#8000



#CHR0001

#9003A MINI MUTT® Analog version

#9007M SMART MUTT® (7-ROUND PIN) PRO EDITION

Remote-Controlled, Diagnostic Trailer Tester for Commercial Trailer Lights and ABS

NEW



Specifications

- Power Input: 12/24V DC
- Battery Requirements: Group 31 or Similar (Battery Not Included)
- Output: 20A @ 12/24V DC
- Connection Type: 7-Round Pin
- Controls: Manual, Remote, Automatic
- Materials: Steel Construction
- Weight: 40 lbs.
- Dimensions: 14" W x 28" H x 10" D



Includes

12-Button Remote Control, 3-Button Remote Control, 5' 7-Way Cable, Chassis Ground Cable, External Battery Connector, 10A Smart Battery Charger and Rain Cover



#MUT-RM12 #MUT-RM3-9007A #7900K-1 #7900K-2BCHAS #7900K-93 #KCHG-121001 #CVR-0001

#9004M SMART MUTT® (7-SPADE PIN) PRO EDITION

Remote-Controlled, Diagnostic Trailer Tester for Light-Duty Trailer Lights and Electric Brakes

NEW



Specifications

- Power Input: 12/24V DC
- Battery Requirements: Group 31 or Similar (Battery Not Included)
- Output: 20A @ 12/24V DC
- Connection Type: 7-Flat, 6-Round, 4/5 Pin
- Controls: Manual, Remote, Automatic
- Materials: Steel Construction
- Weight: 40 lbs.
- Dimensions: 14" W x 28" H x 10" D



Includes

12-Button Remote Control, 3-Button Remote Control, 10 Amp Smart Battery Charger, 3-Way Trailer Adapter and Rain Cover



#MUT-RM12 #MUT-RM3-9004A #KCHG-121001 #8000 #CVR-0001

RANGER MUTT®

Portable, Water-Resistant Trailer Tester for Lights and Electric Brakes

Test the trailer without the truck!

- Short circuit protection
- Turn signal simulation and power verification LED
- Internal battery compartment
- Water-resistant case

Specifications

Input:	12V DC
Output:	10A @ 12V DC
Battery Required:	Yes
Battery Dimensions:	5 7/8" L x 3 3/8" W x 5 3/4" H (Yuasa YTX14 or Similar)
Overload Protection:	Automatic Resetting Internal Breaker
Controls:	Manual Control Knob
Materials:	ABS
Weight:	2 lbs. (empty)



#9101 LIGHT RANGER MUTT®

Utility and RV Type Trailer Tester

- Tests 7-flat (spade), 6-round and 4/5 pin trailer side harnesses

#9102 HEAVY RANGER MUTT®

Commercial Trailer Tester

- Tests 7-round pin trailer side harnesses

Includes

- 500mA Battery Charger
- 3-Way Trailer Adapter



Includes

- 500mA Battery Charger



#9104 MEMORY SAVER ACCESSORY KIT

Utilize the Ranger MUTT® as a Memory Saver

The **Memory Saver Accessory Kit** provides the adapters necessary to allow the Light and Heavy Ranger MUTT® to be used as memory savers once a battery has been installed.

- Connects to vehicle battery and 12V cigarette sockets
- Can be used with other memory-saver products with a female 12V DC port
- Fuse protected



Includes

- 3' Cigarette Socket Extension Cable
- 3' Cigarette Socket to Battery Clip Cable

#8010 12-PIN NATO TRUCK-SIDE CIRCUIT TESTER

Tests All Light Circuits on Military Vehicles with NATO Plugs

Verify continuity on vehicles utilizing a standard 12-Pin NATO socket. The 25' cable allows the user to sit in the cab of the vehicle while testing all the electrical circuits.

- Handheld circuit continuity tester
- STANAG 4007 wiring specifications displayed on label
- Identify open and crossed circuits
- Ground Selection Switch for testing both wire circuits
- For 12-way NATO plugs
- 12 to 24 volt working range
- Includes 25' cable and custom blow-molded case



NEW

NATO Circuit Diagram

Ground Selection Switch

NATO Plug

Towing Circuits



For 12-Pin NATO Sockets



#M2000 NATO MUTT®

Quickly Troubleshoot and Repair Military and Commercial Trailer Lights, Air Brakes and ABS

Specifications

- Power: 12/24V DC
 Power Input: Group 31 (or Similar Battery) or External 12V Power Source
 Output: 20A @ 12/24V DC
 Connection Type: MS 75021-2 NATO 12 Pin & 7-Way Round Pin
 Controls: Manual, Remote, Automatic
 Materials: Steel Construction
 Weight: 40 lbs.
 Body Dimensions: 21" W x 34" H x 14" D

Includes

12-Button Remote Control, (2) 3-Button Remote Controls, 5' 7-Way Cable, Chassis Ground Cable, External Battery Connector, 8' Glad Hands, 10A Smart Battery Charger, Face Shield and Rain Cover



3-YEAR WARRANTY



#MUT-RM12 #MUT-RM3-9005A/8 #7900K-1 #7900K-2BCHAS #7900K-93 #MUT-GAS8 #KCHG-121001 #9008-4R #CVR-0001

MOBILE UNIVERSAL TRAILER TESTERS - MUTT®

	PIN TYPE	DIAGNOSTIC	ABS BLINK CODES	BRAKE TESTING
 #9101 LIGHT RANGER MUTT® Small Trailer	7-Way Flat Pin	Short Circuit Protection		Electric Brake Circuit (Max Output 10 Amp)
 #9102 HEAVY RANGER MUTT® Semi Trailer	7-Way Round Pin	Short Circuit Protection		10 Amp Max Output Available on Auxiliary Circuit
 #9004A SMART MUTT® Small Trailer	7-Way Flat Pin	Short Circuit Protection, Cross and Open Circuit Sensing		Electric Brake Circuit (Max Output 20 Amp)
 #9004M SMART MUTT® <i>PRO EDITION</i> Small Trailer	7-Way Flat Pin	Short Circuit Protection, Cross and Open Circuit Sensing		Electric Brake Circuit (Max Output 20 Amp)
 #9007A SMART MUTT® Semi Trailer	7-Way Round Pin	Short Circuit Protection, Cross and Open Circuit Sensing	✓	20 Amp Max Output Available on Auxiliary Circuit
 #9007M SMART MUTT® <i>PRO EDITION</i> Semi Trailer	7-Way Round Pin	Short Circuit Protection, Cross and Open Circuit Sensing	✓	20 Amp Max Output Available on Auxiliary Circuit
 #9005A SUPER MUTT® HEAD Semi Trailer	7-Way Round Pin	Short Circuit Protection, Cross and Open Circuit Sensing	✓	Air Brakes
 #9008-SE SUPER MUTT® BASE MODEL Semi Trailer	7-Way Round Pin	Short Circuit Protection, Cross and Open Circuit Sensing	✓	Air Brakes
 #9008-DL SUPER MUTT® <i>PRO EDITION</i> Semi Trailer	7-Way Round Pin	Short Circuit Protection, Cross and Open Circuit Sensing	✓	Air Brakes
 #M2000 NATO MUTT® Semi and Military Trailer	7-Way Round Pin 12-Pin NATO	Short Circuit Protection, Cross and Open Circuit Sensing	✓	Air Brakes
 #5700 ALPHA MUTT® Semi Trailer	7-Way Round Pin	Short Circuit Protection, Cross and Open Circuit Sensing	✓	Air Brakes

Bluetooth-enabled technology, the latest and the most advanced in the MUTT® line. See Page 32 for more information.

REMOTE	BATTERY CHARGER	BATTERY TYPE (NOT INCLUDED)	BODY	WEIGHT	WARRANTY
N/A	500mA	Group 14	Plastic Enclosure w/ Carrying Handle	2 lbs.	1 yr.
N/A	500mA	Group 14	Plastic Enclosure w/ Carrying Handle	2 lbs.	1 yr.
3-Button Remote*	500mA	Group 14	Steel Enclosure w/ Carrying Handle	10 lbs.	3 yr.
12-Button Remote	10 Amp Smart Charger	Group 31	Unibody Steel Cart w/ Pneumatic Wheels	40 lbs.	3 yr.
3-Button Remote*	500mA	Group 14	Steel Enclosure w/ Carrying Handle	15 lbs.	3 yr.
12-Button Remote	10 Amp Smart Charger	Group 31	Unibody Steel Cart w/ Pneumatic Wheels	40 lbs.	3 yr.
(2x) 3-Button Remote, 12-Button Remote	500mA	Group 14	Steel Enclosure w/ Carrying Handle	26 lbs.	3 yr.
3-Button Remote*	10 Amp Smart Charger	Group 31	Unibody Steel Cart w/ Pneumatic Wheels	42 lbs.	3 yr.
(2x) 3-Button Remote, 12-Button Remote	10 Amp Smart Charger	Group 31	Unibody Steel Cart w/ Pneumatic Wheels	56 lbs.	3 yr.
(2x) 3-Button Remote, 12-Button Remote	10 Amp Smart Charger	Group 31	Unibody Steel Cart w/ Pneumatic Wheels	56 lbs.	3 yr.
(2x) 3-Button Remote, 12-Button Remote, Tablet	10 Amp Smart Charger	Group 31	Unibody Steel Cart w/ Pneumatic Wheels	70 lbs.	3 yr.

*12-Button Remote Available Separately

#9200 TACTICAL TRAILER TESTER FIELD KIT

Test and Clean Tow Circuits on All Trucks and Trailers in North America



- Test all truck-side tow circuits
- Test all trailer circuits
- Clean all truck and trailer electrical connections



Includes

- Heavy Ranger MUTT® (YTX14 Battery Not Included)
- 8' 7-Round Cable
- 500 mA Battery Charger
- 4/5 Pin Trailer Harness Checker
- 6-Round Pin Truck-Side Circuit Tester
- 7-Round Pin Truck-Side Circuit Tester
- 7-Flat (Spade) Pin Trailer Circuit Tester
- 7-Round to 7-Flat Adapter
- 3-Way Trailer Adapter
- Truck and Trailer Pin Master Cleaner Set
- Diamond-Tip Electrical Terminal Cleaners



Custom Case Features

- Waterproof
- Crushproof
- Custom foam insert
- Pressure Equalization (Purge) Valve
- Lifetime warranty on the case

TOWING MAINTENANCE KITS

Patented

Test, Clean and Restore Connectors and Terminals for Cars and Trucks, Agricultural, Industrial, Landscaping, Contracting, Sporting and Fleet Connections



Assembled in USA from Global Components

- Quickly tests, cleans and repairs truck and trailer connectors
- Extends harness life
- Great preventative maintenance tool
- Promotes safety and limits road hazards
- Connector cleaner can be used as a pin-wear gauge



#8026 4/5 PIN TOWING MAINTENANCE KIT

Includes

- #7866: 4/5 Pin Trailer Harness Checker
- #8021: 4/5 Pin Cleaner
- #8030: 2 ml DeoxIT® Cleaner



#8027 6-ROUND PIN TOWING MAINTENANCE KIT

Includes

- #7897: 6-Round Pin Tractor Trailer Circuit Tester
- #8021 and #8022: 6-Round Pin Connector Cleaners
- #8030: 2 ml DeoxIT® Cleaner



#8028 7-FLAT (SPADE) PIN TOWING MAINTENANCE KIT

Includes

- #7893: 7-Flat (Spade) Pin Trailer Circuit Tester
- #8023: 7-Flat (Spade) Pin Connector Cleaners
- #8030: 2 ml DeoxIT® Cleaner



#8029 7-ROUND PIN TOWING MAINTENANCE KIT

Includes

- #7865L: 7-Round Pin Tractor Trailer Circuit Tester
- #8024: 7-Round Pin Connector Cleaners
- #8030: 2 ml DeoxIT® Cleaner



TRAILER CIRCUIT TESTERS AND ADAPTERS

Test Towing Circuits at the Back of the Truck

The trailer circuit testers allow one man to test trailer circuits quickly and easily.

- Plugs into the vehicle side socket
- LEDs indicate that each circuit is working
- Weatherproof
- Winged grip for easy installation and removal



#7865L 7-ROUND PIN TRACTOR TRAILER CIRCUIT TESTER

“One-man testing” for male and female 7-way round pin tractor trailer plugs.

- Allows bypassing of troubled circuitry while on the road
- Packaged with a brass jumper



#7893 7-FLAT (SPADE) PIN TRAILER CIRCUIT TESTER

Test trailer circuits quickly and easily on most light and medium-duty trucks and campers.



#7897 6-ROUND PIN TRACTOR TRAILER CIRCUIT TESTER

Test trailer circuits quickly and easily on older light and medium-duty trucks and campers.



#7866 4/5 PIN TRAILER HARNESS CHECKER

Allows one man to trace each lighting function to the terminal in question.



#8000 3-WAY TRAILER ADAPTER

Connect 7-way flat (spade) pin type terminal connections to 6-way round pin and 4/5 pin trailer connections.

- Sealed plugs to keep dirt and road debris from corroding connections



#TSTPK1 MULTI TRAILER TESTER JOBBER PACK

All the popular trailer circuit testers in one clamshell.

Includes

- #7866: 4/5 Pin Trailer Harness Checker
- #7897: 6-Round Pin Tractor Trailer Circuit Tester
- #7893: 7-Flat (Spade) Pin Trailer Circuit Tester
- #7865L: 7-Round Pin Tractor Trailer Circuit Tester (Includes One Brass Jumper)
- #8000: 3-Way Trailer Adapter (7-Way Flat Pin To 6-Way Round Pin and 4/5 Pin)





SATISFACTION
GUARANTEED

Caliber-Specific Barrel and Breech Cleaners for Most Handguns, Rifles and Shotguns

- Highly absorbent, low-lint cotton heads
- 3" and 8" flexible bamboo handles
- No drip, mess or hassle
- Disposable and biodegradable
- Also ideal for cleaning slides, receivers, chambers, magazine housings, breeches and more



WARNING: Unload Firearm Before Cleaning



Hanging Bags

Part No.	Description	Quantity
#11800	Breech	800
#22300	.22 Caliber	300
#38200	.38/.357/.380/9mm Caliber	200
#40100	.40/10mm Caliber	120
#45075	.44/.45/.410 Caliber.....	100
#50075	.50 Caliber	80
#22600	.223/5.56mm Caliber.....	600
#30300	.30/.308/7.62mm Caliber	300
#20080	20 Gauge	80
#12060	12 Gauge	60
#80250	Gun Detailing Assortment.....	250



#70680 RAMRODZ® RANGE KIT FOR PISTOLS

Start Out Your RamRodz® Collection with the Convenient and Refillable Range Kit

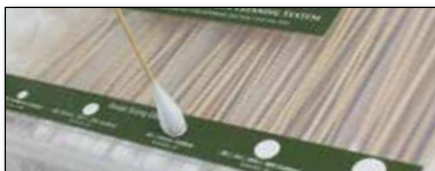
With caliber-specific, low-lint cotton heads, RamRodz® are designed to expand into rifling grooves and conform to barrel walls, cleaning the maximum amount of surface area with each pass.

- 680 assorted RamRodz® in five common pistol calibers
- Breech Cleaner model cleans slides, receivers, breeches and more
- Flexible 8" bamboo handle with low-lint, caliber-specific cotton heads
- Easily stored in a range bag or gun safe



Includes

Description	Quantity
.22 Caliber.....	100
.38/.357/.380/9mm Caliber	60
.40/10mm Caliber.....	50
.44/.45/.410 Caliber.....	40
.50 Caliber.....	30
Breech.....	400



Caliber Sizing Chart

#60010 RIFLE AND SHOTGUN ADAPTERS

Patented

For Use with Caliber-Specific RamRodz® to Clean Long Guns

The RamRodz® Rifle and Shotgun Adapters provide an efficient way to clean rifle and shotgun barrels using caliber-specific RamRodz®.

- When used with RamRodz®, eliminates the need for patches
- Made of durable, reinforced nylon
- Fits standard cleaning-rod threads (8/32")



Rifle



Shotgun



Push-to-Install and Pull-to-Release

More First-Time Products from IPA®...



#8120 - #8151 3-IN-1 DIAMOND GRINDING WHEELS

(PAGE 4)

Small 2" and 3" Diameter
Grinding Wheels for
Accessing Hard-to-
Reach Areas



#9107A ELECTRIC BRAKE FORCE METER W/ DYNAMIC LOAD SIMULATION & CIRCUIT TESTING

(PAGE 31)

Use on 7-Spade Equipped
Vehicles with Integrated
and Aftermarket Brake
Controllers



#9046F PNEUMATIC FUEL TANK SWEEPER®

(PAGE 30)

Remove Water and
Contaminants from
Diesel Oil Systems

IPA
FUTURE NOW.®