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

To prove my commitment to you, if for any reason, you are not happy with one of our products - or more importantly, with the response from our customer service department, or any other member of the IPA® team - I invite you to contact me directly via my email, peter@ipatools.com or call me at 888-786-7899. 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®
# CONTENTS

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

## SPECIALTY TOOLS
- 8050-8053 Air Comb®
- 7899 Gator Jaws®
- 7863 Grease Joint Rejuvenator® Master Kit
- 7862 Professional Model
- 7864 Pocket Model

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

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

## TIRE/ALIGNMENT
- 9060C Five-Tire Pressure Equalizer System
- 9062C Four-Tire Inflation/Equalizer System
- 9067-9068 Tire Comparator™

## DEF TRANSFER SOLUTIONS
- 9070 Diesel Exhaust Fluid (DEF) Transfer System (120V AC)
- 9072 DEF Transfer System (12V DC)
- DEF Transfer Accessories

## FUEL/FLUID TRANSFER & FILTRATION
- Fuel Transfer and Filtration Systems
- 9049M Fleet Tank Sweeper® (120V AC)
- DTP20C Industrial Fuel Cleaner and Transfer System
- 9080 Diesel Fuel Injection Cleaner and Primer
- 9046F Pneumatic Fuel Tank Sweeper®
- 9046H Pneumatic Hydraulic Oil Tank Sweeper

## TRAILER & ELECTRICAL MAINTENANCE
- 9107A Electric Brake Force Meter
- 5700 Alpha MUTT®
- Diagnostic Software Suite
- 9008-DL Super MUTT® Pro Edition
- MUT-RM12 12-Button Remote Control
- 9005A Super MUTT® Head
- 9007A Smart MUTT® (7-Round Pin)
- 9004A Smart MUTT® (7-Spade Pin)
- 9003A Mini MUTT®
- 9007M Smart MUTT® (7-Round Pin) Pro Edition
- 9004M Smart MUTT® (7-Spade Pin) Pro Edition
- 9101 Light Ranger MUTT®
- 9102 Heavy Ranger MUTT®
- 9104 Memory Saver Kit
- 8010 12-Pin NATO Truck-Side Circuit Tester
- M2000 NATO MUTT®
- MUTT® Comparison Chart

## RAMRODZ® GUN CLEANING SYSTEM
- RamRodz® Barrel and Breech Cleaners
- 70680 Range Kit for Pistols

## WARRANTY
- Warranty Information

## RAMRODZ® GUN CLEANING SYSTEM
- RamRodz® Barrel and Breech Cleaners
- 70680 Range Kit for Pistols
- 60010 Rifle and Shotgun Adapters

## NEW
- 9004 Flexible Extensions and 1/4" Driver
- 8004D Flexible Extensions and 1/4" Driver
- 8050-8053 Air Comb®
- 8004 Flexible Extensions for Bore Brush Sets
- 8004D Flexible Extensions and 1/4" Driver
- 9008-DL Super MUTT® Pro Edition
- MUT-RM12 12-Button Remote Control
- 9005A Super MUTT® Head
- 9007A Smart MUTT® (7-Round Pin)
- 9004A Smart MUTT® (7-Spade Pin)
- 9003A Mini MUTT®
- 9007M Smart MUTT® (7-Round Pin) Pro Edition
- 9004M Smart MUTT® (7-Spade Pin) Pro Edition
- 9101 Light Ranger MUTT®
- 9102 Heavy Ranger MUTT®
- 9104 Memory Saver Kit
- 8010 12-Pin NATO Truck-Side Circuit Tester
- M2000 NATO MUTT®
- MUTT® Comparison Chart
- 9200 Tactical Trailer Tester Kit
- 8026 4/5 Pin Towing Maintenance Kit
- 8027 6-Round Pin Towing Maintenance Kit
- 8028 7-Flat (Spade) Pin Towing Maintenance Kit
- 8029 7-Round Pin Towing Maintenance Kit
- 7865L 7-Round Pin Trailer Circuit Tester
- 7893 7-Flat (Spade) Pin Trailer Circuit Tester
- 7897 6-Round Pin Trailer Circuit Tester
- 7866 4/5 Pin Trailer Harness Checker
- 8000 3-Way Trailer Adapter
- TSTPK1 Multi Trailer Tester Jobber Pack
- RamRodz® Barrel and Breech Cleaners
- 70680 Range Kit for Pistols
- 60010 Rifle and Shotgun Adapters
- Warranty Information
Abrasives

#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: 7/8" 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

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", 3/16", 7/64" 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

Shown in Brass
#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 ¼” Hex Shank)
- ¼” Locking Bit Head Driver

### #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)
- ¼” hex shank
- Available in stainless steel (#8080) or brass (#8081)
- Do not exceed 600 rpm

### #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)
- ¼” hex drive, 3 ½” 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
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

#8083- Stainless Steel
#8084- Brass
#8085- Nylon

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

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
90° Multi-Port Air Gun
Special, multi-port nozzle maximizes air pressure and volume at a 90° angle to thoroughly clean air filters, condensors, 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

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

#7899 GATOR JAWS®
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
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

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

---

**DIAGNOSTICS**

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

#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

#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.
#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
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

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
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 ¼" long (14mm thread)
- ½" gradient marks
- Made of 1144 steel alloy with a stainless steel spring

**#7880 TDC INDICATOR STANDARD 6.25” (14MM)**

**#7886 TDC INDICATOR EXTENDED 10.75” (14mm)**

- Same function as the #7880
- 10 ¾" 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.

**#7882 WHISTLE ALERT (RIGID)**

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

**#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.
**DIAGNOSTICS**

**#7881 COMPRESSION GAUGE EXTENSION**

**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

**#7877 PISTON LOCK**

**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

**SPARK PLUG THREAD ADAPTERS AND SOCKET**

**#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

**#7892 SPARK PLUG HOLE ADAPTER**

**REDUCES 14mm to 12mm**

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

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"


Internal Carbide Coating

#240 Grit Carbide: lasts 10X longer than common sand paper
**#8040 DIAMOND-TIP ELECTRICAL TERMINAL CLEANERS**

**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

**#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®

**CONTACT CARE**

**#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

**2X**

Thinner than the smallest available file
#8024 7-ROUND PIN CONNECTOR CLEANERS

Patented

For Commercial Truck and Trailer Connectors

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

- 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

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

Assembled in USA from Global Components

CONTACT CARE

#8025 LIGHT-DUTY TRUCK AND TRAILER CONNECTOR CLEANERS

Patented

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

- 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

Assembled in USA from Global Components
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

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!

#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

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

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

Assembled in USA from Global Components
The Only Set of Tools to Clean Every North American Trailer Connector

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

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

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
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!

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

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.

More Uses Than You Can Think Of!
- 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
- Automotive
- Agricultural
- Electronic
- Arts & Crafts
- Sports
- Pet Care
- Modeling
- Airplanes
- Motorcycles
- Laboratory
- MRO
- PBE

#8030-8036A DEOXIT® CLEANER AND SHIELD

#9010 SWAB-EEZ®
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)

#9060C 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

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

**#9062C FOUR-TIRE INFLATION/EQUALIZER SYSTEM**

**#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
- Reduces blowouts and tire decapitation
- Can be used on any dual-mated tires
- Lightweight and portable

**#9067 TIRE COMPARATOR™ (TYPE II)**

For ½" tolerances

**#9068 TIRE COMPARATOR™ (TYPE III)**

For ¼" tolerances
DEF TRANSFER SOLUTIONS

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)

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: ¾” Diameter
Output: ¾” Diameter
Weight: 15 lbs.

#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

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>#9070</th>
<th>#9070A</th>
<th>#9070-20</th>
<th>#9070A-20</th>
<th>#9072</th>
<th>#9072A</th>
<th>#9072-20</th>
<th>#9072A-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>120V AC Pump</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>12V DC Pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tote Hang Design</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Digital Flow Meter</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Manual Transfer Nozzle</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Auto Shut-Off Nozzle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>8ft. Output Hose</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>12 ft. Output Hose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>20 ft. Output Hose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
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 IPAs’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

#9071 DEF RECOVERY WAND KIT
Stainless Steel Quick Disconnect Fittings

5’ Flexible Wand

*Tote-cart not included

*AC Transfer System

Coupler Valve/Down Tube Assembly

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
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.

**#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**
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:** ¾" 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

**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 ¾" W x 15 ½" H x 13 ¼" D

**Includes**

- Flexible Fluid Dispensing Adapter, (3) Hose Adapters, ¼", ¾" and ½" Barbed Fuel Fittings, Compucheck® Fitting, Chassis Ground Cable and 500mA Battery Charger

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

**#9080  DIESEL FUEL INJECTION CLEANER AND PRIMER**

**New**

**Clean, 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 ¾" W x 15 ½" H x 13 ¼" D

**Includes**

- Flexible Fluid Dispensing Adapter, (3) Hose Adapters, ¼", ¾" and ½" Barbed Fuel Fittings, Compucheck® Fitting, Chassis Ground Cable and 500mA Battery Charger

**NEW**

- 5-Gallon Capacity
- 12 Volt Power Socket
- Pressure and Voltage Gauges
- Battery Compartment (Battery Not Included)
- Fluid Dispensing Adapter
- 500mA Battery Charger
- Quick Disconnect Fitting
- Coiled Fuel Delivery Hose
- Hose and Accessory Storage Compartment
#9046H PNEUMATIC HYDRAULIC OIL TANK SWEEPER®

Remove Water and Contaminants from Hydraulic Oil Systems

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" Dia. Rigid Wand, 5' ¾" Dia. Flex Wand with Flow-Through Brush, 5' ¾" Dia. Flex Wand, 5' ½" Dia. Flex Wand, Quick-Disconnect Ball Valve, Adapter Hose, Chassis Ground Cable

NEW MADE IN USA OF GLOBAL COMPONENTS

11' Input and Output Hoses Quick-Disconnect Ball Valve

Chassis Ground Cable 17-Micron Filter Adapter Hose

5' ¾" Dia. Flex Wand

5' ½" Dia. Flex Wand

5' ¼" Rigid Wand

5' ¾" Flex Wand

10-Micron Water Blocking Filter (Extra Filter Included)

#9046F PNEUMATIC FUEL TANK SWEEPER®

Remove Water and Contaminants from Diesel Oil Systems

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' ¾" Dia. Flex Wand with Flow-Through Brush, 5' ¾" Dia. Flex Wand, 5' ½" Dia. Flex Wand, Quick-Disconnect Ball Valve, Chassis Ground Cable

NEW MADE IN USA OF GLOBAL COMPONENTS

11' Input and Output Hoses Quick-Disconnect Ball Valve

Chassis Ground Cable 17-Micron Filter Adapter Hose

5' 1" Dia. Rigid Wand

5' ¾" Dia. Flex Wand with Flow-Through Brush

17-Micron Water Blocking Filter (Extra Filter Included)

30-Micron Particulate Filter (Extra Filter Included)

5' ¾" Dia. Flex Wand

5' ½" Dia. Flex Wand

5' ¼" Rigid Wand

5' ¾" Flex Wand

10-Micron Water Blocking Filter (Extra Filter Included)
Tests Truck-Side Brake Controller Output and All Tow-Lighting Functions Without a Trailer

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

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

**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**

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

**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
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
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
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 ½” H x 9 ½” D

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

Optional battery not included

New #9005A SUPER M U T T® HEAD

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

- 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)

New #9005A-EXT – 12’ Glad Hands and 12’ 7-Way Cable
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 ½” D

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

Optional battery not included

#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 ½” D

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

Optional battery not included

#9003A MINI MUTT® Analog version

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

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

**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

**NEW**

**#7900K-1 #MUT-RM12 #MUT-RM3-9007A #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**

**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

**NEW**

**#8000 #MUT-RM12 #MUT-RM3-904A #KCHG-121001 #CVR-0001 #7900K-2BCHAS**
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

#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

- 500mA Battery Charger
- 3-Way Trailer Adapter

Includes

- 3’ Cigarette Socket Extension Cable
- 3’ Cigarette Socket to Battery Clip Cable
Tests All Light Circuits on Military Vehicles with NATO Plugs

Verifies 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

#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

#MUT-RM12 #MUT-RM3-9005A/8 #7900K-1 #7900K-28CHAS #7900K-93 #MUT-GAS8 #KCHG-121001 #9008-4R #CVR-0001

3-YEAR WARRANTY

TRAILER & ELECTRICAL MAINTENANCE

#8010 12-PIN NATO TRUCK-SIDE CIRCUIT TESTER
<table>
<thead>
<tr>
<th>Model</th>
<th>PIN Type</th>
<th>Diagnostic</th>
<th>ABS Blink Codes</th>
<th>Brake Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>#9101 LIGHT RANGER MUTTON® Small Trailer</td>
<td>7-Way Flat Pin</td>
<td>Short Circuit Protection</td>
<td>Electric Brake Circuit (Max Output 10 Amp)</td>
<td></td>
</tr>
<tr>
<td>#9102 HEAVY RANGER MUTTON® Semi Trailer</td>
<td>7-Way Round Pin</td>
<td>Short Circuit Protection</td>
<td>10 Amp Max Output Available on Auxiliary Circuit</td>
<td></td>
</tr>
<tr>
<td>#9004A SMART MUTTON® Small Trailer</td>
<td>7-Way Flat Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>Electric Brake Circuit (Max Output 20 Amp)</td>
<td></td>
</tr>
<tr>
<td>#9004M SMART MUTTON® Small Trailer (PRO EDITION)</td>
<td>7-Way Flat Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>Electric Brake Circuit (Max Output 20 Amp)</td>
<td></td>
</tr>
<tr>
<td>#9007A SMART MUTTON® Semi Trailer</td>
<td>7-Way Round Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>20 Amp Max Output Available on Auxiliary Circuit</td>
<td></td>
</tr>
<tr>
<td>#9007M SMART MUTTON® Semi Trailer (PRO EDITION)</td>
<td>7-Way Round Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>20 Amp Max Output Available on Auxiliary Circuit</td>
<td></td>
</tr>
<tr>
<td>#9005A SUPER MUTTON® HEAD Semi Trailer</td>
<td>7-Way Round Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>Air Brakes</td>
<td></td>
</tr>
<tr>
<td>#9008-SE SUPER MUTTON® BASE MODEL Semi Trailer</td>
<td>7-Way Round Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>Air Brakes</td>
<td></td>
</tr>
<tr>
<td>#9008-DL SUPER MUTTON® Semi Trailer (PRO EDITION)</td>
<td>7-Way Round Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>Air Brakes</td>
<td></td>
</tr>
<tr>
<td>#M2000 NATO MUTTON® Semi and Military Trailer</td>
<td>7-Way Round Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>Air Brakes</td>
<td></td>
</tr>
<tr>
<td>#5700 ALPHA MUTTON® Semi Trailer</td>
<td>7-Way Round Pin</td>
<td>Short Circuit Protection, Cross and Open Circuit Sensing</td>
<td>Air Brakes</td>
<td></td>
</tr>
</tbody>
</table>

Bluetooth-enabled technology; the latest and the most advanced in the MUTTON® line. See Page 32 for more information.
<table>
<thead>
<tr>
<th>REMOTE</th>
<th>BATTERY CHARGER</th>
<th>BATTERY TYPE (NOT INCLUDED)</th>
<th>BODY</th>
<th>WEIGHT</th>
<th>WARRANTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>500mA</td>
<td>Group 14</td>
<td>Plastic Enclosure w/ Carrying Handle</td>
<td>2 lbs.</td>
<td>1 yr.</td>
</tr>
<tr>
<td>N/A</td>
<td>500mA</td>
<td>Group 14</td>
<td>Plastic Enclosure w/ Carrying Handle</td>
<td>2 lbs.</td>
<td>1 yr.</td>
</tr>
<tr>
<td>3-Button Remote*</td>
<td>500mA</td>
<td>Group 14</td>
<td>Steel Enclosure w/ Carrying Handle</td>
<td>10 lbs.</td>
<td>3 yr.</td>
</tr>
<tr>
<td>12-Button Remote</td>
<td>10 Amp Smart Charger</td>
<td>Group 31</td>
<td>Unibody Steel Cart w/ Pneumatic Wheels</td>
<td>40 lbs.</td>
<td>3 yr.</td>
</tr>
<tr>
<td>3-Button Remote*</td>
<td>500mA</td>
<td>Group 14</td>
<td>Steel Enclosure w/ Carrying Handle</td>
<td>15 lbs.</td>
<td>3 yr.</td>
</tr>
<tr>
<td>12-Button Remote</td>
<td>10 Amp Smart Charger</td>
<td>Group 31</td>
<td>Unibody Steel Cart w/ Pneumatic Wheels</td>
<td>40 lbs.</td>
<td>3 yr.</td>
</tr>
<tr>
<td>(2x) 3-Button Remote, 12-Button Remote</td>
<td>500mA</td>
<td>Group 14</td>
<td>Steel Enclosure w/ Carrying Handle</td>
<td>26 lbs.</td>
<td>3 yr.</td>
</tr>
<tr>
<td>3-Button Remote*</td>
<td>10 Amp Smart Charger</td>
<td>Group 31</td>
<td>Unibody Steel Cart w/ Pneumatic Wheels</td>
<td>42 lbs.</td>
<td>3 yr.</td>
</tr>
<tr>
<td>(2x) 3-Button Remote, 12-Button Remote</td>
<td>10 Amp Smart Charger</td>
<td>Group 31</td>
<td>Unibody Steel Cart w/ Pneumatic Wheels</td>
<td>56 lbs.</td>
<td>3 yr.</td>
</tr>
<tr>
<td>(2x) 3-Button Remote, 12-Button Remote</td>
<td>10 Amp Smart Charger</td>
<td>Group 31</td>
<td>Unibody Steel Cart w/ Pneumatic Wheels</td>
<td>56 lbs.</td>
<td>3 yr.</td>
</tr>
<tr>
<td>(2x) 3-Button Remote, 12-Button Remote, Tablet</td>
<td>10 Amp Smart Charger</td>
<td>Group 31</td>
<td>Unibody Steel Cart w/ Pneumatic Wheels</td>
<td>70 lbs.</td>
<td>3 yr.</td>
</tr>
</tbody>
</table>

*12-Button Remote Available Separately
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

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

- 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

MADE IN USA
Assembled in USA from Global Components
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)
A Revolutionary Gun Cleaning System

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

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

WARNING: Unload Firearm Before Cleaning
RAMRODZ® GUN CLEANING SYSTEM

#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**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>.22 Caliber</td>
<td>100</td>
</tr>
<tr>
<td>.38/.357/.380/9mm Caliber</td>
<td>60</td>
</tr>
<tr>
<td>.40/10mm Caliber</td>
<td>50</td>
</tr>
<tr>
<td>.44/.45/.410 Caliber</td>
<td>40</td>
</tr>
<tr>
<td>.50 Caliber</td>
<td>30</td>
</tr>
<tr>
<td>Breech</td>
<td>400</td>
</tr>
</tbody>
</table>

**Caliber Sizing Chart**

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 (\(\frac{1}{32}\)“)

**#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 (\(\frac{1}{32}\)“)
We stand behind the quality of our tools and equipment. All of our tools are backed by a 24-Hour (business day) Repair or Replace Policy that is second-to-none. Once your item arrives at our facility, we will repair or replace it and ship it back to you within 24 hours. To return an item for warranty, call our toll free number to receive your RGA# before shipping the product back to IPA®. For more information, please call 888-786-7899 or email: techsupport@ipatools.com

**Warranty Information**

Innovative Products of America® Incorporated has established a Lifetime, 3-Year, 2-Year or 1-Year Warranty Policy depending on each tool. Each warranty is suited to an individual product and complete warranty information is included with the product or supplied upon request.

**LR**  
Lifetime Warranty/Return or Replace Policy: These products are covered for their normal lifetime under the stipulation of the Standard Warranty

**3YR**  
3-Year Limited Warranty/Return or Replace Policy: These products are covered for 3 years from date of original user purchase under the stipulations of the Standard Warranty

**2YR**  
2-Year Limited Warranty/Return or Replace Policy: These products are covered for 2 years from date of original user purchase under the stipulations of the Standard Warranty

**1YR**  
1-Year Limited Warranty/Return or Replace Policy: These products are covered for 1 year from date of original user purchase under the stipulations of the Standard Warranty

The Standard Warranty states that products are warranted to be free from defects in workmanship or materials. Complete warranty details for any product are available upon request. If there is a problem due to workmanship or material defect, Innovative Products of America® will repair or replace the product within 24 working hours. If it is determined that the product has been tampered with, or altered in any way, the warranty is void and all claims against the product will not be honored. All warranty claims must be submitted as outlined below and shall be processed in accordance with the established 24-Hour Repair or Replace Policy. These procedures include that proof of purchase must be established (by either warranty card from the seller or by point of purchase receipt/invoice) and that the manufacturer will make every attempt to return ship the product within one business day from receipt of the returned product, freight prepaid. If it has been determined that the tool has been damaged due to misuse, Innovative Products of America® Incorporated will repair the tool at a cost we deem reasonable and these charges will be the responsibility of the user.

We truly want you to be happy with our products so if you have any questions, call us toll-free at 888-786-7899.

---

**SATISFACTION GUARANTEED**

**Hours: (M-F) 8:30 am – 5 pm EST**
234 Tinker Street, Woodstock, NY 12498
Toll Free: 888-786-7899 • Phone: 845-679-4500 • FAX: 845-679-4600
www.ipatools.com
information@ipatools.com • sales@ipatools.com
customerservice@ipatools.com • techsupport@ipatools.com

Innovative Products of America® Incorporated is a trademark of Innovative Products of America® Incorporated. The specifications and images used in this catalog are based on the latest information at the time of printing. Innovative Products of America® Incorporated reserves the right to change this information within at any time and without notice. Innovative Products of America® Incorporated is not responsible for errors in spelling, punctuation or color matching in the printing of this catalog. Unauthorized use or reproduction of this catalog, images or written copy without the written consent of Innovative Products of America® Incorporated is prohibited. All images are the property of Innovative Products of America® Incorporated. ©2017 Innovative Products of America® Incorporated
#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