# **Tools** Contents

ELECTRICAL	413-417
Amphenol Tools	414
Batt Terminal Crimper	413
Connectors	
Crimping Tool	
Fuseholder	417
Multimeters	416
Remote Starters	417
Shears	
Spark Testers	
Tachometer	
Temp Guna	
Timing Light	
Volt Meter	
ENGINE	
Air Grinder	
Inspection Light	
Lifting Eyes	
Piston Tools	
Plug Puller	
Pullers	
Snap Ring Pliers	413
Torque Angle Wrench	
FUEL	
Synchronizers	
Float Gauge	
Jet drills	
Orifice Plug Driver	
LOWER UNIT	
Backlash	
Bearing Remover	
Bushing Remover	
Drive Shaft Tools	
Fillers	
Gimbal	
Hinge Pin Tools	
Nut Removers	
Pinion Nut Holder	
Prop Wrench	
Pullers	
Shift Shaft Bushing Tool	
Thread Chasers	
Trim/Tilt	
PRESSURE TESTERS	
STANDS	
Adapters	
Floor	
Outdrive Installer	
Racks	
Sterndrive Rack	
Trailer Dolly	402

# Stands Tools



### **OUTDRIVE INSTALLERS**

This Outdrive Installer is ideal for boats with swim Platforms. A must for every service center.

### Part No. 980-165

3 wheels

### Part No. 980-170

4 wheels

### Part No. 980-175

With Long Arms. Great for Dual Props





### Part No. 980-155

Drive rack holds five drives any make or model. No more pile of drives to get damaged or scratched. Drive rack holds drives tight, shop looks clean and neat. Wt. 100 lbs.



### Part No. 980-160

A must for every trailer owner at an affordable price. Up to 400 pounds of tongue weight.





### **OUTBOARD ENGINE STAND**

### Part No. 980-145

Heavy Duty Lower Unit Stand for 2 Cyl. Up to V-6 Outboards. Effectively holds outboards for display, service or storage



### LOWER UNIT / **OUTDRIVE STAND**

### Part No. 980-150

Light Duty Lower Unit Stand will neatly hold your lower unit in place for storage. Fits on a 2 wheeler for yard work. Support arms are padded to prevent marring. 14" wide, 15" long and 19" high.



www.wsmparts.com

# Stands *Tools*



### **HEAVY DUTY ADAPTER FLOOR STAND**

### Part No. 980-100

WT. 39 LBS. A variety of popular engine adapters fit into the I.D. of this stand. Base 1/4" thick X 18"X18" and 30" high. Utilizes two 1/2 - 13 threaded set screws with sturdy handle. 1" wide set ring also included. Four holes will accept 1/2" lags.



### **VERTICAL TO HORIZONTAL ADAPTER**

### Part No. 980-105

Allows positioning of normally horizontal adapters to be used in the Floor Stands.



### **BENCH STAND ADAPTER**

### Part No. 980-110

A variety of popular engine adapters fit into the I.D. of this stand. 1/2-13 screw with sturdy handlle holds adapters in place. Four holes will accept 3/8" bolts.



### POWER HEAD FACE PLATE

### Part No. 980-125

Fits both bench and floor stands. Rotates 360 degree and will hold outboard blocks securely in place up to V6.



### **HEAVY DUTY POWER HEAD FACE PLATE**

### Part No. 980-130

Up to V-8 outboards. Heavy duty. Fints into both Bench and Floor Stands.



### **SMALL ENGINE ADAPTER**

### Part No. 980-115

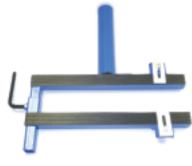
Fits into 980-110 Adapter Bench Stand 2" X 6" metal tubing. Rotates 360 degree. Capacity 25 HP.



### **SWIVEL ENGINE ADAPTER**

### Part No. 980-135

Fits 980-100 floor stand. 2" X 6" metal tubing. Rotates 360 degrees. Capacity 50 HP



### **ADJUSTABLE LOWER UNIT ADAPTER**

### Part No. 980-120

Adjustable width allows you to handle all outdrives from small motors to V-8's. 18" arms provide full support and are padded to prevent marring. Includes clamps, bolts and sturdy handle for tightening of various widths.



www.wsmparts.com

### **HEAVY DUTY LOWER UNIT ADAPTER**

### Part No. 980-140

Heavy duty lower unit holder. Non-adjustable for additional strength. Notch cut out in front to help hold hold lower unit when applying large amounts of torque.



631-244-8060 • fax 631-244-0556 61 Floyd Run, Bohemia, NY 11716



Puerto Rico 787-832-2499 • fax 787-832-2939 234 Balboa St., Mayaquez, Puerto Rico 00681-2605



e-mail: info@wsm



### **BRUTE PRO-PULL PROP PULLER**

### Part No. 983-175

This tool is designed to remove 2, 3, most 4 and some 5 blade propellers on inboard shafts ranging from 3/4" to 2". All models made of high strength heat-treated alloy steel and finished with cadmium. The threaded rods, pivot pins and handle are manufactured of stressproof steels. The shaft end of the puller has a recess to capture and hold the propeller shaft in the center. The offset design of the pivot pins keep the hook of the tool on the propeller hub.



### **PRO-PULL**

Brute models are designed to remove 2, 3, most 4 and some 5 blade propellers on inboard shafts.

Part No.	Shaft Dia.	Clearance Required	Weight
983-180	1 1/4"-1 1/2"	5/8"	11 lbs



**UNIVERSAL PROP PULLER** 

Part No. 983-185



### **BEARING CARRIER PULLER**

Solid one piece construction. Pulls carrier straight out without catching or binding. Fast, efficient, very resistant to abuse. Will outlast any tool for this job.

Part No.	Fits
983-225	Merc-CruiserAlpha 1, Merc V-6 OB. Alpha
	Generation II 93 & up, 3 liter 94 & up,
	Merc TRS OMC V6 OB, Yam V6 OB up
	to 225 HP, Suz V6 OB
983-245	Yamaha 70-115 OB



### **VOLVO DUAL PROP WRENCH**

Part No. 983-255

For removing special nut on dual props. 1/2" drive, 9 1/2" long.









Thread Chaser Nut



Thread Chaser Nut Tool

### **THREAD CHASERS**

To accommodate the Bearing Carrier Retainer Nuts. Finally a tool to clean out those corroded damaged threads. Made of heat treated high grade tool steel. Supplied with a large bolt on hex drive. Resharpenable. 4 lbs.

Part No.	Description	
MERCURY 4" GEAR HOUSING		
982-105	Thread Chaser	
984-105	Replacement Nut	
983-105	Thread Chaser / Nut Tool	
MERCUR	Y 4.375" GEAR HOUSING	
982-110	Thread Chaser	
984-110	Replacement Nut	
983-110	Thread Chaser / Nut Tool	

Part No.	Description
YAMAH	A 79MM GEAR HOUSING
982-100	Thread Chaser
984-100	Replacement Nut
983-100	Thread Chaser Adaptor*
983-100-01	*Thread Chaser / Nut Tool
<u>YAMAHA</u>	101MM GEAR HOUSING
<u>982-115</u>	Thread Chaser
984-115	Replacement Nut
983-115*	Thread Chaser / Nut Tool
<u>YAMAHA</u>	111MM GEAR HOUSING
982-120	Thread Chaser
984-120	Replacement Nut
983-110*	Thread Chaser / Nut Tool
* Tool will	I fit both throad chaser and Nut

Tool will fit both thread chaser and Nut



**GEARCASE COVER NUT TOOL** 

Part No. 18-9809

Loosens and tightens bearing carrier retainer on Bravo Two Drives.



### **BEARING RETAINER** WRENCH

Part No. 18-9803

Removes and installs threaded cover on drive shaft housing.



### PINION NUT ADAPTOR

Part No. 18-9857

Holds pinion nut when removing pinion gear and drive shaft on MC- 1, R-MR, Alpha One drive units and outboards. Replaces Merc Mariner 91-61067A3



### PINION NUT HOLDER

Part No. 334455

Holds Pinion Nut - OMC V4, V6, V8, counter rotation and standard.



# I/O / Lower Unit *Tools*



### **BELLOWS EXPANDER TOOL**

### Part No. 18-9847

Installs exhaust bellows on MC-1, R-MR, Alpha One, Bravo One and Two and Blackhawk drives. Replaces Mercury Mariner 91-45497A1.



### SHIFT SNAKE SHIFT CABLE **INSTALLER**

### Part No. 983-140

Simply screw swivel male threads into existing cable and pull old cable out. Remove old cable and thread new cable onto shift snake and pull it back thru. Plastic coated cable 5 feet long. A real time saver.



### GIMBAL BEARING INSTALLER

### Part No. 983-310

Used in conjunction with the 983-305 to install the Gimbal Bearing.



### **ENGINE ALIGNMENT TOOL**

### Part No. 983-305

All OMC Cobra Sterndrives, Mercruiser Drives, 1, 1A, 1B and 1C 1964 and up. Alpha 1 Generation 2, Bravo III. 24 inches long



### GIMBAL BEARING PULLER AND PRESSURE PLATE UNIT

### Part No. 983-300

Comes with plate to accommodate both Mercruiser and the OMC Cobra Bell Housing. Two thrust races and a bearing separate the pressure plate and the tensioning nut. A guide pin is welded to the puller and slides through the pressure plate. This allows you to expand the front of the puller without putting your hand or a wrench inside the Bell Housing. This Blind Hole puller has three 120 deg. segments that fit into and lock onto the inner race of the Gimbal Bearing for easy removal. Spacer allows for 360 deg. wrench rotation.



Revolutionary new approach to repair the existing housing without removing the engine. Before this the only way to fix the actual housing was to replace everything, a cost which could easily reach \$4,000.00. Simple: A special ring is adhered with a space-age epoxy that cures in 24 hours. Save money and time. Be back in the water the next day! Each kit comes with detailed instructions. Kits are compatible with MerCruiser Alpha, Alpha Gen II and Bravo. Tools needed: Die Grinder, Approved Wire Wheel, Acetone, 1/2" Dia. Drift, Screwdriver and a GHR Kit.

Part No. 983-160 Mercruiser Alpha, MR Drive, #1 Drive (Bellows with groove in it). Part No. 983-162 Alpha Generation II Part No. 983-164 Bravo

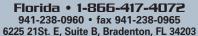


### GIMBAL HOUSING WRENCH

Part No. 983-325











### TILT CYLINDER END CAP REMOVER

### Part No. 326485

Unscrews tilt cylinder end cap. Also used to remove tilt cylinder cap on 25/35 3 cylinder; OMC 40, 48 and 50 models.



### **BUSHING REMOVER AND INSTALLER SETS**

### Part No. 983-450

Removes and inserts bushings in boats. (also works on cars, trucks, motorcycles and off road equipment). Sizes are stamped on each bushing adapter. Select proper size and drive bushing into place. 3/8"-1 1/4". Set of 24



### TRIM CYLINDER END **CAP REMOVER**

Part No. 324958

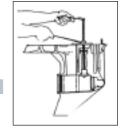
Unscrews end caps from trim cylinders. Fits all but Fastrike.



### **BEARING REMOVAL AND** INSTALLATION TOOL

Part No. 18-9820

Removes and installs bearings in MC-1, R-MR, Alpha One Gen Two and all Bravo gear cases.





### TRIM CYLINDER END **CAP REMOVER**

Part No. 436710

Unscrews end caps from trim cylinders. Fits Fastrike.



### TRIM AND TILT CYLINDER WRENCH

Cannot slip. Raise motor, insert wrench with the pins onto nut, slip u-shape sleeve over tilt cylinder shaft, lightly tighten thumb screw. Lower motor. At this point wrench cannot slip. Use a 3/4 water pipe if necessary as a cheater bar. Once loosened the 2

studs allow you to index the wrench (replaceable studs are grade 8 steel and sleeve stores nicely on handle. Removes trim and tilt end caps. Each wrench has three replaceable pins (please specify which wrench you have when ordering replacement pins).

Part No.	iviodei
983-401	Mercruiser
983-402	Cobra
983-403	OMC
983-404	Merc Tilt
983-405	Merc Trim
983-406	Yamaha Tilt
983-407	Yamaha Trim

Davit Na Madal





**DRIVESHAFT BEARING RETAINER TOOL** 

Part No. 18-9842

Required tool for removing and installing threaded retainer.



**DRIVESHAFT HOLDING TOOL** 

Part No. 18-9854

For use on 75 & 80 HP & 100 HP 4 Cy. Mercruiser R-MR; Alpha -1. Holds driveshaft to install or remove pinion gear nut.



**DRIVESHAFT TORQUE TOOL** 

Part No. 90094

Holds driveshaft while removing or installing pinion nut.



### **DRIVESHAFT HOLDING SOCKETS**

_	
Part No.	Description
316612	OMC 1992 & older 40, 48, 50;
	and 45/55 commercial
334995	OMC 1993 and newer 40, 48, 50;
	1993 & newer 45/55commerical
	1989 & newer 50, 60, 70 - 3 cyl.
312752	OMC 1998 and older 3-cylinder
311875	OMC v4, v6 v8



**HINGE PIN TOOL** 

Part No. 18-9861

Splined tool to remove hinge pins.



SHIFT SHAFT **BUSHING TOOL** 

Part No. 18-9817

For 75-80 HP 4 cyl., 6 cyl. inline, V6. Remove or install shift shaft bushing.



**DRIVESHAFT PULLERS** 

Part No. 390706 Fits: OMC V4, V6, V8



**BACKING PLATE** 

Part No. 325867

Used with 387206 and 390706 Driveshaft pullers.



**DRIVE SHAFT BEARING AND** PRELOAD TOOL

Part No. 18-9874



**TAPERED INSERT** TOOL

Part No. 18-9844

For installation of tapered insert retainer.



BACKLASH **INDICATOR ROD** 

Part No. 18-9850

For checking gear backlash.





# GEARCASE FILLS

### **GEARCASE FILLER**

### Part No. 995-100

An indispensable dispenser, this rugged time saver is one you can use two or three for different lubes or flushing agents. No easier or faster system available, even at twice the price. Three gallon tanks hold 10 quarts of gear lube. Faster flowing. Includes new dispensing enhancement.



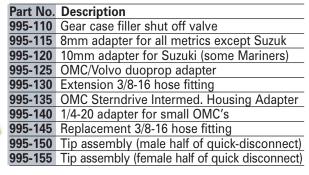
995-110



995-115



995-120





995-125



995-135







995-150

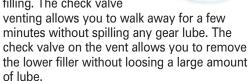


995-155

### **GEARCASE FILLER**

### Part No. 551-33GF

Non-corrosive plastic container. Sturdy teardrop design resists tipping over. A new design in gearcase fillers makes it easier to fill or flush gearcases. The new valve arrangement for filling and venting has a quick disconnect threaded assembly for filling. The check valve



Includes 551-33CV



QUICK DISCONNECT **HOSE FOR 995-100** Part No. 995-105



### **EZ FILL FILLER VENT CHECK VALVE**

### Part No. 551-33CV

This design allows you to fill your gearcase with a minimum of spillage of gear lube or flushing fluid. A MUST FOR EVERY SHOP. Included with 551-33GF

# Pressure Testers *Tools*



### PRESSURE/ **VACUUM TESTER**

Part No. 995-175K **COMBINATION UNIT - TWO TESTERS IN ONE! Test** pressure and vacuum with one unit. Includes standard adapter, hose and case. For other adapters see table to left. Metal construction.



### **GEARCASE VACUUM TESTER**

Part No. 995-102

A gearcase that holds pressure will hold lubricant, but may leak in the opposite direction, allowing water to enter the unit. Use this to test for inward leakage, assuring that the unit is properly sealed. SEE 995-100 FOR VARIOUS ADAPTERS.



### **GEARCASE PRESSURE TESTER**

Part No. 995-103

If leakage is suspected due to loss of lubricant, merely pressurize the unit and inspect for signs of seepage. If none is apparent, inspection of shift rod and driveshaft areas is called for. Following repairs, the gearcase can be checked before filling by pressurizing and submerging in test tank. SEE 995-100 FOR VARIOUS ADAPTERS.

### MOTION PRO COMPRESSION TESTER

Part No. 08-0188

Contains hoses for 10, 12, 14mm. Spark plug applications features pressure release valve and 300 PSI. Gauge comes with case.



### MERC-O-TRONIC COMPRESSION **TESTER**

Part No. 995-205

Comes with adapters 10, 12, 14 and 18mm. Provides a quick disconnect coupler to permit easier handling and installing the spark plug adapters and air release for multiple readings without removing the tester. Capacity 300 psi with a large easy-to-read dial face in pounds and kilograms. Long flexible hose.

Part No. 995-10 (10mm adaptor)

Part No. 995-12 (12mm adaptor)

Part No. 995-14 (14/18mm adaptor)



### MOTION PRO 4-STROKE LEAK DOWN **TESTER BY**

Part No. 08-0126

Checks amount of cylinder leakage in a 4stroke engine. With an air source of 70 to 160 psi this system will pressurize the cylinder with 60 psi of air, 10, 12, & 14mm spark plug thread hoses, regulator



and gauge included. Speeds up troubleshooting and helps to isolate bad components. Instructions included.

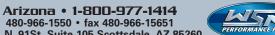
### COMPRESSION TESTER

Part No. 995-210

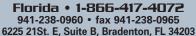
1 1/2" compact compression tester with 14mm spark plug adapter reads 0-200 P.S.I. for hard to get at places where engine cowling presents a problem.













# Engine *Tools*

### **UNIVERSAL PULLER KIT**

### Part No. 378103

Removes flywheels, lower main bearings, and gearcase heads. Set consists of these separately available components.

Fig. Part No.		Description	
Α	307636	Puller Body B 307637	
В	307627	Pressing Screw	
С	307638	Handle	
D	307639	Washers (3) 11/32	
Е	307640	Washers (3) 13/32	
F	307641	(3), 1/4-20x2 1/8	
G	307642	(3), 5/16-18 x 2-3/4	
Н	307645	Guide	
I	309492	(3), 5/16-24 x 2-7/16	
J	316982	(2), 5/16-18 x 8 in	



### **OMC FLYWHEEL PULLER**

### Part No. 985-140

Heavy duty. 1/2" thick plate. 1" dia. fine threaded push rod with built in center. No need for flywheel holder. comes with three 5/16" fine thread bolts.



### **MERCURY FLYWHEEL PULLER**

### Part No. 985-145

Fits 2 Cyl. 35 & 40 HP, 4 Cyl. 45 & 50 HP, 3 Cyl 50-75 HP, 4 Cyl 75-125 HP, all 6 cyl. inline engines and all V-6 Engines.



### **FLYWHEEL SERVICE KIT**

### Part No. 434649

Removes and installs flywheel - 60 degree V models.



### **MERCURY LIFTING EYE**

### Part No. 985-150

Fits 2 cyl. 35 & 40 HP, 4 cyl. 45 & 50 hp, 3 cyl. 50-70, 4 cyl. 75-80 HP. All 6 cyl. inlines and all V6.



### **OMC LIFTING EYE**

### Part No. 321537

For all models that need a straight lift from the crankshaft centerline. Use with components of Universal Puller Kit 378103



### **OMC LIFTING EYE**

### Part No. 985-155

A tool for saving labor. Easy to install. Lifts engine in a vertical position. Allows one person to install motor, Johnson-Evinrude V4 & V6.



e-mail: info@wsmp

# Engine *Tools*



FLY WHEEL HOLDER Part No. 551-5110



### **PISTON PIN TOOL BY MOTION PRO**

### Part No. 08-0472

This tool will remove pressed in piston pins from pistons. Single or multi cylinder engines. Fits pistons from 40mm (1 5/8") to 100mm (4") and all piston pins from 12mm(1/2") to 25mm (1"). Single cylinder engines from 50cc to 600cc. 2,3, or 4 cylinder. W ill not damage piston during removal. Weight 1 lb.



### **PISTON CRADEL**

### Part No. 326572

Supports the piston when removing and installing the wrist pin and connecting rod - both standard and oversize pistons. OMC V4, V6, V8 AND 2 THRU 4.5 HP.



### **PISTON STOP**

### Part No. 384887

Determines top dead center of piston to center the timing pointer.



### L.E.D. INSPECTION LIGHT

### Part No. 996-115

Aluminum body with L.E.D. light means long trouble free operation (no bulb to burn out). Flexible stem is 300mm long. Uses CR-2032 battery (included).



### MICRO AIR GRINDER

### Part No. 990-200

Slim (approx. 5/8" diameter) aluminum body and 56,000 RPM (variable speed) make this handpiece ideal for precision work. Comes in a clear top case. Includes oil, collet and mount and demount wrenches.



### **TORQUE ANGLE GAUGE**

### Part No. 985-165

Use this mechanical gauge with a 1/2" drive to install various engineering fasteners that require specified angle application after a pre-torque load has been applied. Tool is calibrated to 5" increments with a rotating pointer. Unique mechanism holds the gauge in position during use. Storage pouch included.



### **SPARK PLUG PULLER**

Part No. 551-9765





e-mail: info@wsmparts.com •



# Engine/Electrical *Tools*



### **IGNITION WIRE PULLER**

Part No. 996-190

Non-metallic. No shock.



### **4 PIECE SNAP RING PLIER SET**

Part No. 990-105

Fits: 10-50mm / 3/8"- 2"



### **RETAINING RING PLIERS**

Part No. 331045

12 1/2" LONG.



### COPPER CABLE SHEARS

Part No. 996-195

7 1/2" in length for battery/welding cable. Power grip, heavy duty wire & cable cutting shears. Designed to cut virtually all copper battery cable. Design transfers maximum cutting actlon with minimum cutting effort allowing an easy cut of 2/0 gauge cable. Heat treated for long dependable operation. Wt. 2 lbs.



### **HD BATTERY TERMINAL CRIMPER**

Part No. 996-200

Use on Battery Terminal/Lugs. Designed to crimp large, heavy duty cable terminals. Welded plate construction for long life. Easy to read crimp depth scales on both sides of the punch. To operate, set up cable and strike punch with a hammer or mallet. (Always use safety glasses). Weight 2 lbs.



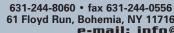
e-mail: info@wsmp

### SHRINK TUBE BUTT CONNECTORS

A premium terminal best used where moisture and corrosion are a problem. After crimping these terminals to wire, heat is applied enabling the adhesive within each Shrink Tube Terminal to melt and flow evenly to seal the connection against the harshest environments. Our heat gun part number 980035 is ideal for Shrink Tubing Terminals. Priced 25 per bag.

Part No.	Fits Guage Wire
996-215	22-18
996-220	16-14
996-225	12-10





# Shop Tools



### **AMPHENOL TOOLS**

For Marine Connectors, starter motors, ignition systems, instrumentation controls, etc. For series 44 contacts, 18 gauge wire.

Part No.	Description
553-6297	Contact Insertion Tool
553-2698	Pin Contact Romoval Tool
553-2699	Socket Contact Removal Tool
342667	Deutsch Tool 1996 & Newer Omc



AMPHYNOL TOOL Part No. 554-9706



CRIMPING TOOL Part No. 551-9761



CRIMPING TOOL Part No. 551-9762



### SELF-POWERED INDUCTIVE CLAMP TIMING LIGHT

Part No. 996-175

Four foot lead. Works with Magneto Ignition Systems. Accurate up to at least 10,000 RPM. Brilliant flash at all speeds. For 2 and 4 cycle engines. **All ignition systems.** Self powered by 2 "D" cell batteries. Ideal for field, shop, motorcycle, marine and stationary engines. Protective sleeve withstands high temperaturre (1200 degrees). One year warranty.





### RAYTEK MINITEMP GUN

Part No. 996-180

Pocket size and easy to use. Just point, shoot and read the temperature on the large backlit display. MiniTemp non-contact thermometer will give you an easy, safe way to measure surface temperature. Troubleshoot engines including ignition system problems and fuel/air adjustments. Diagnose cooling systems, thermostats and coolant sensors; radiators, brakes and tires. Balance room temperatures on your HVAC by monitoring supply and return registers. Check furnace performance, perform energy audits and check window installations. Check for electrical hot spots, find defective transformers and detect loose electrical connections. Temperature range -18 to 260 C (0 to 500 F). Works with alkaline 9V or rechargeable Ni-Cad.

### **TEMPERATURE GUN**

Part No. 996-181



# Electrical *Tools*



### NON-ADJUSTABLE NEON INDICATOR

### Part No. 511-9764

Sealed 1 cyl. in-line Neon Spark Gap tester. Sealed design reduces possibility of igniting gas fumes. Detachable grounding clamp.

### **OPEN SPARK TESTERS**

Handy tester for hot DC sparks. Presence of spark is a logical first test in ignition troubleshooting. Intensity is next, determined by adjusting the gap. The cutout behind this gap prevents carbon tracking, which will cause a weak spark to look good on other testers. All four points adjust by sliding the spark plate which is calibrated for 1/4, 3/8, 7/16 and 1/2 inch gaps. Plug in connectors for positive contact with spark plug wires plus protection from accidental grounding.



Part No. 996-100 (4 wire)



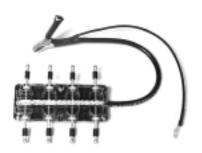
Part No. 996-101 (6 lead)



Part No. 996-101-01 Leads for 996-101



Part No. 996-102 (8 wire)



### ADJUSTABLE NEON **INDICATOR**

### Part No. 511-9766

Sealed 8 cyl. Adjustable Spark Gap Tester. Has heavy duty wire for mounting in any position. Helps reduce possibility of igniting gas fumes. Optional extension wires available. 4 pc.



7" EXTENSION WIRES Part No. 511-9902

For use with 511-9902 (set of 4)



24" EXTENSION WIRES

Part No. 511-9903

For use with 511-9766 (set of 4)



# Electrical *Tools*

### **SMARTACH PLUS**

### Part No. 996-160

A wireless tachometer and spark analyzer. To read RPM simply hold unit near engine. The Smrart Tach works by sensing radio transmissions from the engine's ignition system and analyzing these signals with a powerful microprocessor to display the RPM digitally on its liquid crystal display screen. To check the voltage in each spark plug wire simply hook each spark wire in turn using the sensor hook on the end of the antenna. Read the kilovolts on the display. No wire - no clips -

no connections. A real time saver.



### DIGITAL ENGINE TEST TACHOMETER

### Part No. 996-165

Incorporates wireless capability as well as interchangeable capacitive and inductive secondary clamp on pick-ups. Provides for quick RPM checks and readings where secondary leads are inaccessible. The capacitive clip on pick-up allows for hands free engine adjustment. Selector



switches allow for direct readings of 4 and 2 cycle engines firing up to three times per crankshaft revolution. Select 4 cycle (one firing every other revolution), 1, 2, and 3 sparks per revolution. These settings give you true RPM readings regardless of multiple firings per revolution. RPM hold switch captures and holds the max. engine RPM. A spark indicator LED indicates presence of secondary coil output and will determine misfire. Auto shut off. 1 year warranty.

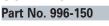
### MULTI-METER/DVA TESTER

### Part No. 996-170

A VOA Meter with built-in Direct Voltage Adapter. Properly tests electrical and ignition systems. Required tool for Mercury dealers. Includes instructions, test leads, a spare fuse and convenient carrying case.



### CDI MULTIMETER W/VOLTS, OHMS, AMPS, DIODE AND CONTINUITY TEST





### CDI CDI MULTIMETER MULTIMETER W/DVA ADAPTER

Part No. 996-155



# PEAK READING VOLTAGE ADAPTOR

### Part No. 511-9773

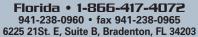
Plug into the Fluke Multimeter and set on DC volts. Connect the leads to the test points(sensor trigger, ignition output or stator) and measure the peak voltage. Automatically compensates for polarity on the ignition output. Peak voltage



readings will be close to those on the Stevens CD77 and Merc-otronic specifications as well as many other test meters. Enclosed is a list of peak voltage readings for numerous ignition systems.







# Electrical Tools



# PEAK READING VOLT METER

### Part No. 996-105

With out a doubt the best made for troubleshooting CD systems. The CD77 gives direct, accurate coil output, sensor output and pack output. Guesswork is gone. Overload meter protection without fuses or breakers. Connectors and jumpers for use with OMC CD-2 systems. Compact package with exceptional wide sweep taut-band meter. "Anyangle" rigid handle stand. Positive or negative polarity switch with sensor position. Voltage range 0-5, 0-50, and 0-500. Instructions for all OMC CD systems included.



### WATERPROOF FUSEHOLDER 5 PACK

### Part No. 992-9703

An economical & versatile fuseholder for harsh environments. Water, Salt spray, ultra-violet light, ozone- 40 C to 150 C temp. range. Pack of 5 Accept #12 to #18 wire. Holder rated 32 volts, 32 amps.



REMOTE STARTER SWITCH

Part No. 996-125



### **REMOTE STARTER**

### Part No. 511-6996

Controls most OMC engines from 1969-2000. Unit replaces boat controls at the engine so you can quickly determine if the boat harness is a source of trouble.



### **REMOTE STARTER**

### Part No. 511-7900

e-mail: info@wsmparts.com

Controls most Mercury engines from 1979-2000. Unit replaces boat controls at the engine so you can quickly determine if the boat harness is a source of trouble.



## DC AMPMETER ADAPTER

### Part No. 511-9772

Measures starter draw and charging system. Recommended for use with digital multimeters. Range 1 to 400 amps as 1 millivolt to .4 volts. Extension harness available (511-9788E)



# Fuel Tools

# A Must for the Professional Technician



# VACUMATE WITH INTERNAL BATTERY

Part No. 08-0251

3 in 1 Intake Synchronizer, Dynamic Fault Finder, Tachometer "All Weather" By Motion Pro with Re-Chargeable Battery.

- 1. External battery connection cord-set
- 2. Flexible replaceable santoprene hoses heat & chemical resistant
- 3. Two Sets flexi-rigid adaptors allow connection around obstacles
- 4. Four LED-aray displays visible in daylight
- 5. Three graduated "AVE" mode scales with 0.5cm Hg resolution
- 6. RPM scale 500-2500 RPM
- 7. Low battery warning LED
- 8. Function switch RPM/VAC
- 9. Scale range switch. AVE mode
- 10. Function switch AVE/DYN
- RPM selector switch for 2 stroke and 4 stroke engines
- 12. Custom storage carry case.
- 13. Internal battery selection LED

Water Resistant And Buoyant



# VACUUMATE WITHOUT INTERNAL BATTERY

Part No. 08-0252

3 in 1 Intake Synchronizer, Dynamic Fault Finder, Tachometer "All Weather" By Motion Pro

- 1. External battery connection cord-set
- 2. Flexible replaceable santoprene hoses heat & chemical resistant
- 3. Two Sets flexi-rigid adaptors allow connection around obstacles
- 4. Four LED-aray displays visible in daylight
- 5. Three graduated "AVE" mode scales with 0.5cm Hg resolution
- 6. RPM scale 500-2500 RPM
- 7. Low battery warning LED
- 8. Function switch RPM/VAC
- 9. Scale range switch. AVE mode
- 10. Function switch AVE/DYN
- 11. RPM selector switch for 2 stroke and 4 stroke engines
- 12. Custom storage carry case.

Water Resistant And Buoyant

# Replacement adapters sold separately.

5MM FLEXI RIGID ADAPTER

ADAPTE

Part No. 08-0201

6MM FLEXI RIGID ADAPTER Part No. 08-0202





# Fuel Tools



# SYNC PRO CARBURETOR TUNER

Part No. 08-0411



# 4 CYLINDER CARBURETOR SYNCHRONIZER SET

Part No. 999-250

4 cyl. Gauge reading: 0 to 76cm/hg in 2" Gauge with Fixed Plate. Individual damping on each gauge. Comes with four 5mm X 170mm adaptors, four 5mm X 100mm adaptors, four 6mm X 60mm adaptors, spare o-rings and an adaptor to lengthen your hoses by hooking them to each other.



6 CYLINDER CARBURETOR SYCHRONIZER SET

Part No. 999-255

# Fuel Tools



999-140

999-160

### **JET DRILL KIT**

Part No. 999-140 (#40-#80)

### Part No. 999-160 (#60-#80)

A professional Jet Drill Kit. Ideal for Nitrous Oxide Jets as well as Carb Jets. Contains set of 41 Jet Drills size #40 - #80 and a small tapered reamer. Durable heavy gauge case. Easy drill removal and replacements. Only tough durable jet drill case on the market. Drill and drill handle are permanently bonded to give onepiece, trouble free operation and longer drill life.

### REPLACEMENT TAPERED REAMER

Part No. 999-170

### REPLACEMENT DRILLS

Part No. 999-40	Part No. 999-47	Part No. 999-54
Part No. 999-41	Part No. 999-48	Part No. 999-55
Part No. 999-42	Part No. 999-49	Part No. 999-56
Part No. 999-43	Part No. 999-50	Part No. 999-57
Part No. 999-44	Part No. 999-51	Part No. 999-58
Part No. 999-45	Part No. 999-52	Part No. 999-59
Part No. 999-46	Part No. 999-53	Part No. 999-60



### ORIFICE PLUG SCREWDRIVER

Part No. 317002

Removes/installs carburetor fixed orifice plugs.



### **FLOAT GAUGE**

Part No. 324891

Checks carburator float level.



