## THIS IS CHANGING FILTRATION

### **Fuel**



# Water condensation



is forming inside your tanks **24/7** 

### Surfactants spell trouble.

The more you understand the science of engineered media, the more you'll rely on

AQUABLOC®



# Racor<sub>®</sub>

### **Turbine Series Fuel Filters**



P/N Shown: 75500MAX

- Technology leadership, with Aquabloc Synergy® filter media, engineered to perform.
- Heavy-duty, high-capacity water separation and fuel filtration.
- Skilled product engineers designed duplex units offering peace-of-mind, having a clean filter in reserve.

p 800 344 3286 racor@parker.com www.racornews.com

### **ENGINE PARTS**

Engine Diagnostics	CDI	670 - 671
	Fuel Tanks & Tie Downs	672 - 674
	Tank Senders & Fittings	675 - 676
	Hose Assemblies & Fittings	677 - 684
Fuel Customs	Fuel Hose, Funnels & Spill Guards	685 - 686
Fuel Systems	Fuel Filters	687 - 689
	Racor Fuel Filters	690 - 698
	Fuel Filter Accessories	698
	Oil Filters & Oil Absorbents	699 - 700
	Motor Flushers	700
	Tools	701 - 702
	Generator & Engine Parts	703 - 709
Matau Accessories	Spark Plugs & Wire Sets	710 - 712
Motor Accessories	Ignition Tools	712
	Seloc Service Manuals	713
	Noise Suppression	714
	Thermo Tape	715
	Packing	715 - 716
	Shaft Seals & Stuffing Boxes	717 - 722
Bunning Coor	Cutless Bearings	723
Running Gear	Turning Point Propellers	724 - 733
	Prop Guards & Locks	734 - 736
	Outboard Motor Locks	736
	Exhaust Components	737 - 747
Exhaust Components	Centek Exhaust Components	748 - 751
Exhaust Components	Exhaust Flappers	751
	Vetus Exhaust Components	751 - 753



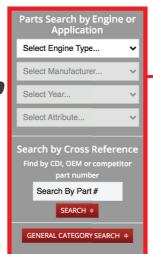


## Have you used the CDI Electronics Part Look Up Tool?

**Use our Part Look Up Tool** to find the exact part you need!

You can search by engine, application, or cross reference with an OEM or competitor part number.

Visit cdielectronics.com, the Part Look Up Tool is on the homepage of our website.







### The Mercury Bundle Part Number: 531-0200T4

Replacing Discontinued Bosch CDS at **Franchised Dealers** 

The M.E.D.S. Mercury bundle includes the following capabilities:

- Pre-G3 Engines: Verado, Optimax, 2.5L EFI and 4-Stroke
- Mercruiser with the 555 Controllers
- Mercruiser with MEFI 1-4 Controllers
- Mercruiser Racing
- Mercury Racing
- · Mercury with the Yamaha EFI
- · French and Spanish Language Versions
- Tacti-Sling Backpack and M.E.D.S. Cable Organizer

**Helping Independent Technicians Generate More Repair Revenue!** 



M.E.D.S. Bundle Platform			
Name Part Number Includes			
Basic Bundle	531-0200T1	Mercury, Yamaha, J/E	
Mercury Bundle	531-0200T4	Mercury, Yamaha, MEFI 1-4	
Standard Bundle 531-0500T		Merc, Yam, J/E, Suzuki, Honda, MEFI 1-4	
Professional Bundle	531-0500T3	Merc, Yam, J/E, Suzuki, Honda, SeaDoo, MEFI 1-4, CANbus	

All Bundle Packages Include Mercury G3 \*Excluding the 531-0200T4\*





#### **CDI Multi Engine Diagnostic System Complete**

M.E.D.S. is the only system capable of testing multiple engine platforms with one package. No more fumbling with multiple computers and programs. The system is designed to be installed quickly and easily onto your Windows based computer. Your platform provides the software interface, USB adapter, optical isolation (to prevent damage to your computer), 12 foot interface cable with security verification to protect your investment.

#### **CDI Engine Diagnostic System - Mercury Only Platform** CDI 531-0118M\*

CDI Engine Diagnostic System - Yamaha Only Platform CDI 531-0118Y\*

\* Request Item



### **Engine Parts Lookup & Cross Over**



#### Scepter **Self Venting Gas Jerry Cans**

- Self venting spout
- Cap is self locking
- High density polyethylene
- Red in colour

SCE 07081 5 litre, 10" x 8-3/4" x 6-1/4" SCE 07079 10 litre, 11-1/2" x 11" x 8" SCE 07622 20 litre, 14-1/2" x 14-3/4" x 9-3/4" SCE 07539 25 litre, 16" x 13-3/4" x 9-3/4"



07539

#### Scepter Self Venting Diesel Jerry Can

- Self venting spout
- Cap is self locking
- High density polyethylene
- Yellow in colour

**SCE 07649** 20 litre, 14-1/2" x 14-3/4" x 9-3/4"



#### **Scepter Jerry Cans**

- 20 litre capacity
- Reversible self-venting spout
- High density polyethylene
- H: 18" x W: 13" x D: 6.5"

**SCE 03609** Gas **SCE 03711** Diesel **SCE 04933** Water



#### Scepter DuraMAX Flo n' Go

- High-density polyethylene in red for use with gasoline, diesel, or kerosene fuels
- Includes Flo n' Go Maxflo siphon pump
- 53 litre capacity and a 305 cm fuel hose
- UL-approved, vented fill cap
- Recessed grooves strapping locations
- Dual mechanical shut-off valves, at both tank and hose, for spill-proof Flo n' Go disconnection
- Meets DOT & UN transportation Requirements
- H: 33-1/2" x W: 15-1/4" x D: 11-1/4"

**SCE 06792** Complete tank, 10' hose & pump

#### Scepter MaxFlo Universal Siphon Pump

- All plastic construction
- 7.5 litres per minute flow
- 6' hose & 2 tank adapters

**SCE 08338** 

EPA rated



#### Scepter Jerry Can Spout Kit

• 4 pc, screw cap, vent cap, flex spout & stopper **SCE 03647** Packaged



#### Moeller EPA/CARB Fuel Tank

EPA/CARB compliant portable fuel tanks are manufactured from highdensity polyethylene with ultraviolet inhibitors. Advanced manufacturing techniques provide the highest quality product components available and meet the new "low permeation" standards put



in place by the EPA/CARB regulations effective 1/1/2011.

- US Coast Guard, and ABYC Standards
- 2 stage self-venting cap meets EPA and CARB requirements
- A reserve fuel area is designed right into the tank by means of a partitioned bottom. When the gauge registers empty, simply tilt the tank and the reserve fuel supply becomes available
- Designed for easy bow storage in inflatables and dinghies
- Universal 1/4" NPT fuel pick-up adapter
- 6 US gallons
- L: 19" x W: 16" x H: 11"

#### **MOE 620040LP**





**Moeller CSA Fuel Tanks** 

- Manually vented closure cap
- Universal 1/4" NPT fuel pick-up adapter
- Meets ABYC standards. ISO and CSA certified
- Not for use in USA

Part #	US Gallons	LxWxD
MOE 620003	3	17" x 9" x 9.75"
MOE 620049	6	21" x 13.5" x 8.5"



#### Scepter **CSA Gas Tanks**

- 03781 Manual vent cap & 1/4" NPT take-off/gauge
- .77 gallon fuel reserve (03781)
- High-density polyethylene
- UL listed, CSA Certified, ISO Certified

Part #	US Gallons	LxWxH
SCE 03780	3.2	14.3" x 10.4" x 9.1"
SCE 03781	6.6	21.5" x 14.3" x 9.3"

Parts:

**SCE 08935** Manual vent cap & gasket



#### **Scepter CSA Neptune Series Fuel Tanks**



- Plastic construction
- Baffled, manually vented cap
- Accepts all 1/4" NPT fittings
- Meets ABYC/CSA

**US Gallons** Part # LxWxD **SCE 04158** 3 16.7" x 10.5" x 8.1" **SCE 04921** 20.7" x 13" x 10.9"

Parts:

**SCE 08935** Manual vent cap & gasket (carded)



04921

08935

880312

#### **Attwood Fuel Tanks**

New EPA COMPLIANT fuel tanks adapt to virtually any outboard engine.

- Manually vented cap
- Low permeation tank virtually eliminates fuel evaporation and fuel loss.
- Compatible with 1/4" NPT fuel fittings
- Ethanol and Alcohol compatible
- EPA & Carb Certified

#### 3 US Gallon

• H: 7-1/2" x W: 11-1/2" x L: 16-1/2"

ATT 880312\*\*

#### 6 US Gallon

• H: 9" x W: 13-1/2" x L: 20"

#### ATT 880612\*\*

\*\* Limited Quantity





#### **Scepter Topside Fuel Tanks**





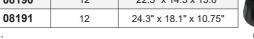


- Easy to read direct sight gauge
- Accepts all 1/4" NPT fittings

		1
1		
	08191	

08189

g-				
Part # US Gallons		LxWxH		
SCE 08189	9	22.5" x 14.3" x 11.75		
SCE 08190	12	22.5" x 14.3 x 13.6"		
SCE 08191	12	24.3" x 18.1" x 10.75"		





**SCE 08935** Manual vent cap & gasket (carded) **SCE 09210** Replacement pick-up for SCE 08191

#### **Epco Gas Tank Strap**

- 1" x 6' polypropylene webbing
- Rust-resistant metal hardware
- Stainless steel screws for mounting

#### **EPC GS1**

## Moeller Topside Fuel Tank



- Polyethylene construction
- Certified to comply with industry requirements
- Designed with UV-stabilized resin
- Tested for use with blended fuels

Part #	US Gallons	LxWxH
MOE 031624	24	29.25" x 19" x 14"

#### **Scepter External Threaded Manually Vented Fuel Cap**

- Universal Moeller/Scepter tank cap
- Bulk

#### **SCE 04083**

#### Scepter Threaded EPA Fuel Cap

 Includes gasket and stainless retaining chain

**SCE 09315** 



#### **Moeller Hold Down Kit**

- 4/pkg, aluminum brackets
- For below deck tanks

MOE 035710



#### Sea-Dog Gas Tank Strap

• 1" x 6' nylon webbing

SED 359995-1 Stainless steel



#### Scepter Gas Tank Strap

- 72" overall length
- Rubber insert in strap allows for tank expansion
- (2) Universal nylon/rubber straps with quick-release buckles
- (4) Stainless steel hold down brackets
- (8) Mounting screws

**SCE 10837** 

#### Moeller **Installation Kit**

Includes a Zimac "Gas" deck fill, 2 x 1-1/8' & 4 x 2-1/4" stainless steel hose clamps, chrome plated brass thru-hull vent, 1-1/2" fuel fill hose, 25" of 5/8" vent hose, a 5/8" brass hose barb, and two mounting strips.





#### **Moeller Permanent Fuel Tanks**

† Does not use the 035710 holdown kit

- Utilizes rotationally molded, cross-linked polyethylene plastic
- Fittings with high O.D. and I.D. tolerances ensure the highest level of input flow
- Ideally suited for gasoline or diesel use with appropriate return kit
- Hold down grooves molded directly into tank shell
- Conforms to all ABYC, NMMA and U.S. Coast Guard regulations

Part #	US Gallons	Dimensions (L x W x H)
MOE 032612	12	20" x 14" x 14.25
MOE 032518	17	36.5" x 16.25" x 10"
MOE 032618	19	39" x 8.25" x 20.5"
MOE 032519	19	26.5" x 16.5" x 15"
MOE 032624†	24	51" x 8.75" x 17.88"
MOE 032627	27	36" x 11.81" x 16.28"
MOE 032529	29	51.5" x 26" x 16.5"
MOE 032534	34	60.25" x 26.5" x 7.38"
MOE 032535	35	69.5" x 16" x 10.75"











#### Moeller Redi-Tank Fuel Tank

- 27 US gallons
- Pre-EPA/CARB/ABYC certified tank options meet all current evaporative emission compliance requirements for all position options including 0° to 5° tank static tip angle or for all position with multiple tank static tip angles
- Includes 1/4" NPT x 3/8" NPT barb fuel pickup, 13" reed sender and 1.5" x 2.75" molded fill
- Fill: 1-1/2", Outlet: 3/8" FPT, Vent: 5/8" hose barb
- L: 24" x W: 20" x H: 14"

#### MOE FTA001108BR



- 7 US gallon capacity
- Utilizes rotationally molded, cross-linked polyethylene plastic
- Fittings include: 1-1/2" inlet, 5/8" vent, 3/8" pickup and 3/8" return

#### **MOE FT-0704**

#### Moeller Universal Electric Fuel Sender

- Adjusts from 4" to 28"
- Pre-calibrated
- Standard 5 hole SAE mounting pattern
- Heavy duty SAW steel flange and extension plates
- Will not rust or corrode
- 33-240 Ohm
- Tested to ensure accurate readings

MOE 035725-10 4" - 28" MOE 035729-10 12" - 24"

Parts:

MOE 035728-10 5 hole gasket set



#### Sierra

#### **Universal Electric Fuel Sender**

- Adjusts from 4" to 24"
- Includes gasket, mounting screws and complete installation instructions





#### **Moeller Mechanical Sending Units**

- Mechanical direct sight gauge on a swing arm sender
- Internal measurement components will not rust or corrode
- Calibrated at 33-240 ohms

Part #	Tank Depth	
MOE 035752-10	10" tank	
MOE 035753-10	11-3/4" tank	
MOE 035757-10	17-3/4" tank	
MOE 035758-10	22" tank	



Parts:

MOE 035760-10 Mech to Elect conversion capsule (33-240 ohms)
MOE 035759-10 Direct sight mech read capsule

### Moeller

#### **Universal Sending Unit**

- Universal fuel level sender with diesel return, 1/4 NPT female with 3/8" barb
- Top mounting
- All stainless steel construction
- 1/4" ground plate terminal
- Calibrated at 33-240 ohms

MOE 035789-10 6" to 24"



### Faria Electric Fuel Gauge Sending Units

- Stainless steel construction
- Sealed electrical connections
- 6' electrical leads
- Calibrated at 33-240 ohms

FAR 91001 8 to 16"

FAR 91003 14 to 24\* single station



### Moeller Reed Array Sending Units

- Fits 6" to 24" tank depths
- Calibrated at 33-240 ohms
- Will not corrode or rust

MOE 035791-10 Sender only

- Includes dash mounted gauge
- 2-1/16" cutout
- 3-wire connection

MOE 035794-10 Sender & Gauge



#### Moeller

#### **Electric Fuel Gauge Sending Units**

- 316 Type, stainless steel construction provides efficient performance
- A direct original equipment manufactured sender replacement (By WEMA USA)
- Calibrated at 33-240 ohms
- Designed for gas, ethanol, diesel, biodiesel and non-potable water use



Part #	Length	Tank Depth	
MOE 035773-10	5"	6"	Pkg
MOE 035774-10	6"	7"	Pkg
MOE 035769-10	7"	8"	Pkg
MOE 035761-10	8"	9"	Pkg
MOE 035762-10	10"	11"	Pkg
MOE 395059-110SC	11"	12"	Bulk
MOE 035764-10	12"	13"	Pkg
MOE 395059-130SC	13"	14"	Bulk
MOE 035765-10	14"	15"	Pkg
MOE 395059-150SC	15"	16"	Bulk
MOE 395059-160SC	16"	17"	Bulk
MOE 035767-10	17"	18"	Pkg
MOE 395059-180SC	18"	19"	Bulk
MOE 395059-190SC	19"	20"	Bulk
MOE 035768-10	20"	21"	Pkg
MOE 395059-210SC	21"	22"	Bulk
MOE 395059-220S	22"	23"	Bulk

#### Moeller Sender Gasket Set

 5 hole gasket set for electic fuel senders

MOE 035728-10



► Also See	Fuel Gauges pg 208-211
► Also See	Electric Senders pg 312

#### **Scepter Hose Mender**

- 3/8" brass mender
- Includes (2) stainless clamps

#### SCE 07198\*\*

\*\* Limited Quantity



#### Sierra Hose Barbs

Brass construction

SIE 18-8042 1/4" NPT x 1/4" hose SIE 18-8055 1/4" NPT x 5/16" hose SIE 18-8074 1/4" NPT x 3/8" hose



#### **EVM Anti-Siphon Valve**

Brass construction

**EVM A/S 160-B** 3/8" hose x 1/4" NPT



#### **Moeller Anti-Siphon Valves**

Aluminum construction

MOE 033801-10 1/4" NPT x 3/8" hose MOE 033802-10 3/8" NPT x 3/8" hose



#### **EVM Aluminum Tank Withdrawal Elbow**

• 3/8" x 1/4" NPT with 3/8" hose barb

#### **EVM WE-3814-WA**

Accessories:

**EVM 2401** 5' x 3/8" rigid nylon tubing



#### **EVM S/S Tank Withdrawal Elbows**

- Stainless tank withdrawal elbows
- 3/8" x 1/4" NPT with 3/8" hose barb

#### **EVM WE-3814-WSS**

• 1/2" x 1/2" NPT with 1/2" hose barb **EVM WE-1212-WSS** 



#### **EVM Nylon Tubing**

• 5' rigid nylon 6/6 tubing

**EVM 2401** 3/8" ID **EVM 2402** 1/2" ID



#### **EVM Tank Withdrawal Assemblies**

 Aluminum tank withdrawal assembly with a rigid nylon 6/6 tubing

■ 3/8" NPT-Male x 1/4" NPT-Female

EVM 3814WA2400N-P 24" tu

■ 1/2" NPT-Male x 1/2" NPT-Female

EVM 1212WA1200N-P 12" tube

#### **EVM Tank Withdrawal Assembly**

- Stainless tank assembly with a rigid nylon 6/6 tubing
- 1/2" NPT-Male x 1/4" NPT-Female

EVM 1214WSS1634NCP 16-3/4" hose



#### **Moeller Tank Withdrawal Assemblies**

- Use with diesel or gas
- 3/8" NPT male x 1/4" NPT female aluminum withdrawal assembly
- Tygon F-4040-A hose with 302 S/S internal flex spring and cylinder screen
- Hose with 302 S/S internal flex spring and cylinder screen

MOE 635021-10 22" MOE 635022-10 36"



#### **EVM Tank Withdrawal Assemblies**

- Use with diesel or gas
- 1/2" NPT male x 3/8" NPT female aluminum withdrawal assembly
- Tygon\* F-4040-A hose with 302 S/S internal flex spring and cylinder screen

**EVM 1238WA1200TCP** 12" **EVM 1238WA2200TCP** 22"



\* Specifically designed to handle most fuels and industrial lubricants, Tygon® fuel and lubricant tubing resists the swelling and hardening caused by hydrocarbon-based fluids. This significantly reduces the risk of failure due to cracking and leakage. Its minimum extractability safeguards the liquid or vapor being transferred against adulteration.



EVM Fittings pg 795

#### **Moeller Fuel Line Assemblies**

- UV, gasoline, and solvent-resistant construction with stainless steel clamps
- Fittings built to strict OEM specifications for replacement parts
- O-ring construction on all fittings ensures tight, leak-free connections
- Internal check valve in primer bulb prevents fuel flow back
- Dual internal check valves
- Maximum flow for improved engine performance





On Tank (not included)	Tank Fitting		Assemblies	Engine Fitting	Description
033477-10		MOE 034385-10	Mercury		
	033486-10		COLLEGE	033482-10	• 3/8" ID hose x 83" • Mercury two prong clip style • 1998 & newer engines
033418-10		MOE 034388-10	Mercury		
	033421-10		TLOW TO THE PARTY OF THE PARTY	033485-10 Female Bayonet 033418-10 Combo kit 90° elbow	<ul> <li>3/8" ID hose x 83"</li> <li>Bayonet style</li> <li>Cast aluminum fittings</li> </ul>
033400-10		MOE 034391-10	Johnson/Evinrude		
	033480-10  033410-10		William !	033480-10  033410-10	• 3/8" ID hose x 83" • Bombardier (Johnson/Evinrude)
			1.000-0.00		• 5/16" ID hose
033470-10		MOE 034394-10	Yamaha		
	033481-10			033481-10	• 3/8" ID hose x 83"
	033471-10			033471-10	■ 5/16" ID hose
		MOE 034386-10	Honda		
033496-10	033498-10	(SEE SEE SEE SEE SEE SEE SEE SEE SEE SEE		Customize	■ 3/8" ID hose
033501-10 (1991+)	033502-10 (1991+)		A STATE OF THE STA	033497-10 (2001+)	Newer style engines
		MOE 034390-10 MOE 033389-10 MOE 034395-10	Universal Universal 3/8" x 83" Universal 3/8" x 12' Universal 5/16" x 83"		
	Universal	-4	Mo-Table 1	Universal	

\* It is not recommended to mix and match different manufacturers fittings

#### **Scepter Fuel Line Assemblies**

- Assemblies use a compounded, tough and pliable UV-resistant hose
- Promotes maximum fuel flow
- Includes fittings built to strict OEM specifications for replacement parts
- Uses O-ring construction on all fittings for tight, leak-free connections
- Hose is 18-1/2" on the tank end and 55-1/2" on motor end



On Tank (not included)	Tank Fitting		Assemblies	Engine Fitting	Description
05837		SCE 07482	Mercury		
	05793			05791	<ul> <li>3/8" ID hose x 83"</li> <li>Mercury two prong clip style</li> <li>1998 &amp; newer engines</li> </ul>
09476		SCE 07483	Mercury		
	07497		Rom	09476	<ul><li> 3/8" ID hose x 83"</li><li> Bayonet style</li><li> Cast aluminum fittings</li></ul>
04068		SCE 07486	Johnson/Evinrude		
	05822		(UTP)	05822	• 3/8" ID hose x 83" • Bombardier (Johnson/Evinrude)
04075		SCE 07489	Yamaha		
	05815			05815	■ 3/8" ID hose x 83"
	Universal	SCE 07485 SCE 07484 SCE 07491	Universal Universal 3/8" x 83" Universal 3/8" x 12' (18-1/2" o Universal 5/16" x 83"	of hose on tank	c end)
	Olliveisal			Olliversal	

\* It is not recommended to mix and match different manufacturers fittings

#### Sierra Silverado 3000 Premium Series Fuel Line Assemblies

- Ultra cold weather flexibility
- SAE J1527 type B1-15 approved
- Highest UV resistance for long life
- Resistant to Ethanol blend fuels and is CARB compliant for small engine use
- Premium rubber for maximum durability



On Tank (not included)	Tank Fitting		Assemblies	Engine Fitting	Description
18-80402		SIE 18-8016S-1	Mercury/Mariner		
F	18-8091			18-8076	• 3/8" ID hose • 8' total length
18-8063		SIE 18-8009S-1	Johnson/Evinrude		
F	18-8092			18-8092	• 3/8" ID hose • 8' total length • 2 hp - 75 hp (1976-02)
		SIE 18-8014S-1	Johnson/Evinrude		
	Universal	-		18-8056	• 3/8" ID hose • 8' total length • All V6 & V8 (1976-02)
18-8077-1		SIE 18-8017S-1	Yamaha		
F	18-80415			18-80415	• 3/8" ID hose • 8' total length • F75-F250 & 115-300hp
		SIE 18-8013S-1 SIE 18-8015S-1	Universal Universal 5/16" x 8' total length Universal 3/8" x 8' total length		
	Universal			Universal	

#### Sierra Silverado 4000 Premium Series Fuel Line Assemblies

- Premium rubber for maximum durability
- Poyester braid with weather resistant CPE cover
- Flexible THV barrier layer

On Tank (not included)	Tank Fitting	Assemblies	Engine Fitting	Description
		SIE 18-8024EP-2 Mercury/Mariner		
	18-8074		18-8076	■ 3/8" ID hose ■ 8' total length
18-8063		SIE 18-8009EP-2 Johnson/Evinrude		
=	18-8092		18-8092	• 3/8" ID hose • 8' total length • 2 hp - 75 hp (1976-02)



#### **Moeller Fuel Line Connectors**

• Built to strict OEM specifications



Tank Fitting 1/4" NPT Threads into fuel withdraw on tank	Connects to Tank Attaches to fuel hose on the fuel tank side	Fuel Hose ID	Connects to Engine Attaches to fuel hose on the engine side				
	Mercury						
MOE 033418-10 Combo kit (die cast): 1/4" NPT - Female tank 1/4" NPT 90° elbow 3/8" Barb - Female engine	MOE 033421-10 3/8" Barb to Male Bayonet (die cast)		MOE 033485-10 3/8" Barb to Female Bayonet (nylon) MOE 033418-10 Kit includes: 1/4" NPT 90° & 1/4" NPT -F, 3/8" Barb - Female				
		3/8"	033485-10 033418-10				
MOE 033477-10 1/4" NPT to Male 2-Prong Clip (brass) 1998 & newer style engines	MOE 033486-10 3/8" Barb to Female 2-Prong Clip 1998 & newer style engines		MOE 033482-10 3/8" Barb to Female Large 2-Prong Clip 1998 & newer style engines				
		3/8"					
	Honda						
MOE 033496-10 1/4" NPT (chromed brass) 1991 & newer style engines	MOE 033498-10 3/8" Barb to Female (chromed brass) 1991 & newer style engines		MOE 033497-10 3/8" Barb to Female 2001 & newer style engines				
MOE 033501-10 1/4" NPT (chromed brass) 1991 & newer style engines	MOE 033502-10 3/8" Barb to Female (chromed brass) 1991 & newer style engines						
This not		a muse a strong					

<sup>\*</sup> It is not recommended to mix and match different manufacturers fittings



#### **Scepter Fuel Line Connectors**

Built to strict OEM specifications

Tank Fitting 1/4" NPT Threads into fuel withdraw on tank	Connects to Tank Attaches to fuel hose on the fuel tank side	Fuel Hose ID	Connects to Engine Attaches to fuel hose on the engine side
	Mercury		
SCE 09476 1/4" NPT - Female tank 3/8" Barb - Female engine	SCE 07497 3/8" Barb to Male Bayonet (die cast)		SCE 09476 3/8" Barb to Female Bayonet (die cast) Kit includes: 1/4" NPT 90° & 1/4" NPT
		3/8"	State of the state
SCE 05837 1/4" NPT to Male 2-Prong Clip (brass) 1998 & newer style engines	SCE 05793 3/8" Barb to Female 2-Prong Clip (plastic) 1998 & newer style engines		SCE 05791 3/8" Barb to Female Large 2-Prong Clip 1998 & newer style engines
		3/8"	

<sup>\*</sup> It is not recommended to mix and match different manufacturers fittings

	ided to mix and match different manufacturers if				
Tank Fitting Threads into fuel withdraw on tank 1/4" NPT	Tank Fitting Connects to Tank & Engine Threads into fuel withdraw on tank 1/4" NPT Attaches to fuel hose on the fuel tank side or the engine side				
	Johnson/Evinrude				
SCE 04068 1/4" NPT	SCE 05822 3/8" Barb	SCE 05787 5/16" Barb			
	Suzuki				
SCE 04070** 1/4" NPT, engines over 75 hp					
	Yamaha				
SCE 04075 1/4" NPT	SCE 05815 3/8" Barb	SCE 05813 5/16" Barb			
	Nissan/Tohatsu				
	SCE 05810** 3/8" Barb, Engines to 90 hp				
SCE 07372** 1/4" NPT	SCE 05809** 3/8" Barb				



#### **Moeller Fuel Line Connectors**

• Built to strict OEM specifications



Tank Fitting Threads into fuel withdraw on tank 1/4" NPT	Connects to Ta Attaches to fuel hose on the fue	
	Johnson/Evinrude	
MOE 033400-10 1/4" NPT Male	MOE 033480-10 3/8" Barb	MOE 033410-10 5/16" Barb Female
MOE 033461-10 1/4"NPT Male (chromed brass)	Chrysler/Force  MOE 033484-10 3/8" Barb Female (chromed brass)	MOE 033464-10 5/16" Barb Female (chromed brass)
	Suzuki	
MOE 033503-10 1/4" NPT Male (chromed brass) Engines over 75 hp	MOE 033487-10 3/8" Barb Female (chromed brass)	
MOE 033463-10 1/4" NPT Male (chromed brass)	MOE 033488-10 3/8" Barb Male (chromed brass)	
	Yamaha	
MOE 033470-10 1/4" NPT Male	MOE 033481-10 3/8" Barb Female	MOE 033471-10 5/16" Barb
	Nissan/Tohatsu	
MOE 033450-10 1/4" NPT Male (chromed brass) Engines to 90 hp	MOE 033451-10 3/8" Barb Female (chromed brass) Engines to 90 hp	
MOE 033491-10 1/4" NPT Male (chromed brass)	MOE 033492-10 3/8" Barb Female (chromed brass)	



#### **Sierra Fuel Line Connectors**

Marine Engine and Drive Parts	•	<b>2</b>
Tank Fitting 1/4" NPT Threads into fuel withdraw on tank	Connects to Tank Attaches to fuel hose on the fuel tank side	Connects to Engine Attaches to fuel hose on the engine side
	Mercury	
SIE 18-8082 1/4" NPT Female Bayonet Die Cast 1/8" x 1/4" NPT reducing nipple	SIE 18-8070 5/16" Barb Male Bayonet Die Cast	SIE 18-8069 5/16" Barb Female Bayonet Die Cast
<b>SIE 18-80402</b> 1/4" NPT	<b>SIE 18-8091</b> 3/8" Female Barb	SIE 18-8076 3/8" Hose Female
-	SIE 18-8084 3/8" Barb Male Bayonet Die Cast	SIE 18-8083 3/8" Hose Female
-		
<b>SIE 18-8077-1</b> 1/4" NPT Male 2-Prong Clip Brass	<b>SIE 18-8075</b> 1/4" Hose Female	-
	Honda	
<b>SIE 18-80400</b> 1/4 NPT Chromed Brass	SIE 18-80401 3/8" Hose, Female, new style	SIE 18-80403 3/8" Barb Female Plastic, late model Rectangular locking post
SIE 18-80406 1/4 NPT Chromed Brass, Old style Replaces 16977-ZV5-900	SIE 18-80407 5/16", with interlocking post (mates with 18-80403 & 18-80408)	SIE 18-80408 5/16" Barb Female Plastic, late model Rectangular locking post
	-155	
-	-	SIE 18-80420 1/4" hose, Female, engines 2001 and earlier Round locking post

#### Sierra Nissan/Tohatsu/Mercury/Mariner

Connects to engines

Nissan/Tohatsu: Replaces 394-7025-0 (female) Mates with 18-80417 Mercury/Mariner: Replaces 22-13563T3 (female) Mates with 18-80412



Tank Fitting Threads into fuel withdraw on tank 1/4" NPT	Connects to	Tank & Engine uel tank side or the engine side
Tiffeaus into fuel withuraw off talik 1/4 NFT	Johnson/Evinrude	uer tank side of the engine side
<b>SIE 18-8063</b> 1/4" NPT Male Tank Brass	SIE 18-8056 5/16" Barb Female Plastic, Comes with hose clamp	SIE 18-8092 3/8" Barb Female, Engine Plastic
	Chrysler/Force	
SIE 18-8071 1/4" NPT Male Tank Chromed Brass	SIE 18-8062 3/8" Barb Female Chromed Brass	-
	Suzuki	
<b>SIE 18-8071</b> 1/4" NPT Male Chromed Brass, .432 O.D.	SIE 18-8062 3.8" Barb Female Chromed Brass (Tank end)	-
<b>SIE 18-8078</b> 1/4" NPT Male Chromed Brass, .508 O.D.	<b>SIE 18-8079</b> 5/16" Barb (Tank end)	<b>SIE 18-80405</b> Female to 3/8" Hose barb
***************************************		
	Yamaha	
<b>SIE 18-8077-1</b> 1/4" NPT Male Brass	SIE 18-8085 5/16" Barb Female Bayonet Die Cast	SIE 18-80415 5/16" Barb Female Plastic
-	<b>SIE 18-80414</b> 1/4" Replaces 6G1-24305-04, 6G1-24305-00	SIE 18-80413 1/4" Replaces 6Y1-24305-04. Mates with 18-8077-1
	Nissan/Tohatsu	
<b>SIE 18-8078</b> 1/4" NPT Large inlet	<b>SIE 18-8079</b> 5/16" Barb, Female	SIE 18-8088 5/16" Barb, Female, Engine side
-	-	SIE 18-8089 (Metric Threads) 5/16" Hose.Fits: 5-90HP 2-stroke and TLDI models Mates with 18-8088

#### Sierra Suzuki

DF25-DF140 HP Mates with 18-80425

SIE 18-80404





#### Sierra Suzuki

Replaces: 65750-94404

Fits: DT4-DT140 Mates with 18-80409 & 18-8087

**SIE 18-80418** 1/4" barb



#### Sierra EPA Primer Bulbs

- Meets current EPA regulations
- Check valves with stainless spring and viton ball
- 7-1/2" overall length

**SIE 18-8004EP-1** 5/16" **SIE 18-8005EP-1** 3/8"



#### Sierra Primer Bulbs

- Check valves w/stainless spring and viton ball
- Nitrile bulb construction

 SIE 18-8002S
 1/4" hose

 SIE 18-8004S
 5/16" hose

 SIE 18-8005S
 3/8" hose



#### **Scepter Primer Bulbs**

- Stainless steel clamps
- Dual internal check valves

SCE 07813 1/4" hose SCE 07494 5/16" hose SCE 05869 3/8" hose



#### **Moeller Primer Bulbs**

- Stainless steel clamps
- Dual internal check valves

MOE 034790-10 1/4" hose MOE 034690-10 5/16" hose MOE 034590-10 3/8" hose



#### **Scepter Fuel Hose**

- Topside fuel line hose
- Meets SAE J1527 Type B1-15
- Full box: 100'
- Sold by the foot

**SCE 07493\*\*** 5/16"

\*\* Limited Quantity

#### **Moeller Fuel Hose**

- Topside fuel line hose
- Low Perm Certified
- Full box: 100'
- Sold by the foot

MOE 034376LP 1/4" MOE 034313LP 5/16" MOE 034375LP 3/8"





#### Sierra Double Fuel Line

- Double fuel line hose for OMC pressurized systems
- ÎD: 1/8"
- 50' roll, sold by the foot

SIE 18-8051



#### Sierra

#### Silverado 4000 Outboard Fuel Lines

- Extremely low permeation
- EPA/CARB certified outboard fuel line
- For above deck primer bulb assemblies
- Can be used for small diesel feed line
- Resistant to ethanol blend fuels
- Meets SAE J1527 Type B1-15
- 50' length

SHI 337-0386 ID: 3/8" x OD: 35/64" SHI 337-0566 ID: 5/16" x OD: 1/2"

#### Sierra Bleeder Hose

- Made from alcohol resistant compounds
- 50' lengths
- Sold by the foot

**SIE 18-8048** 0.09 ID x 0.220 OD **SIE 18-8050** 0.0625 ID x 0.190 OD



► Also See

Fuel Hose pg 761

#### Star brite Funnel Set

• 3 piece plastic set

STA 38010



#### **Racor Fuel Filter Funnels**

Heavy duty, fast flow, pre-filter funnel which separates free water and contaminates from gasoline, diesel, heating fuel and kerosene.



RAC RFF3C 3.9 GPM RAC RFF8C 5 GPM

#### Sea-Dog Oil to Gas Measuring Bottle

Plastic bottle allows you to accurately measure correct oil to gas mixture for all 2 cycle engines. Good for mixtures of 24:1, 33:1, 40:1, 50:1 and 100:1. Will measure for both gallons and litres.





#### Attwood

#### **EPA Certified Carbon Canisters**

- EPA Certified Carbon Canister meets EPA diurnal emission control requirements
- Properly installing an EPA Certified diurnal emission control component eliminates the need for a builder to submit test results or an application to the EPA for vessel certification.
- Fits 5/8" vent hose
- Compatible with Ethanol blended fuels
- 2 year warranty

ATT 99CC045-1 70 gallon, 10.48" x 5.5" x 3.05" ATT 99CC085-1 220 gallon, 16.52" x 5.04" x 4.01"

#### **Attwood P-Trap**

- Weathertight and watertight and ensures no liquid water will reach a fuel vent line, carbon canister or fuel tank
- Allows air to vent freely during normal sea conditions and washdowns and meet the ISO 10088 requirement for minimum venting area
- For 5/8" I.D. hose. Meets ABYC Standard.
- Cover can be removed for vent inspection, debris removal and fuel system pressure testing
- 2 year warranty

#### ATT 1684-1

#### **Attwood Surge Protector**

- Easy to install unit prevents fuel surge in your fuel vent line
- Protects from fuel spills due to sloshing and
- Installs in-line on standard 5/8" vent line
- Operates in any orientation within 45° of vertical
- Complete with two hose clamps

ATT 1675-6 Gas use only

#### **Attwood Universal Sprayless Connector**

A safe way to eliminate the spraying of fuel when connecting and disconnecting pressurized fuel hoses during fueling or maintenance.

- Female hose fitting compatible with 3/8" and 5/16" fuel lines
- Male tank fitting compatible with standard 1/4" NPT fuel tank output (Use thread sealant)
- Male and female connectors include check valves that automatically close upon disconnecting

#### **ATT 8838US6**



#### Perko In-Line Vent Hose Surge Protector

- Polymer valve
- Aluminum surge float
- Prevents fuel surges and back splash during re-fueling
- Fits in 5/8" fuel hose vent line
- The in-line surge protector functions both as a fill limit valve assisting in pump auto shut-off and a check valve to prevent wellback in the vent line
- NOTE: Must be installed within 45° of vertical if vented.

#### PER 553-DP0

#### Perko

#### Perko Inlet Check Valve - Flapper Valve

- "In-Pipe ICV" fits inside the pipe itself
- Mounts inside standard 1-1/2" fill pipes near the connection to the fuel tank
- Eliminates the need to retool existing doghouse on plastic tanks
- Allows for full 18 GPM flow rates

#### PER 635-DP0





#### Perko Spill Reduction Kit

- Combination of a PER 553-DP0 in-line surge protector and a PER 635-DP0 in-line flapper check valve
- Installing an inlet check valve in the fill hose and a surge protector in the vent line can significantly reduce spitback & wellback during the refueling of most boats.
- For use with 1-1/2" fill hose and 5/8" vent hose

#### PER 30-DP0-005

#### **Green Marine Fuel Whistle**

The "Fuel Whistle" is a simple solution to prevent spills while fuelling. Provides an audible signal during fuel filling which stops when an overflow situation arises.

- Fits 5/8" fuel lines
- Easy one-time installation

#### **WES 204**

#### Racor Lifeguard Fuel/Air Separator

Installed in the tank vent line Lifeguard efficiently separates air from fuel forced into the line. Vapour is vented, and all fuel returned to the tank.

- Also prevents overboard spillage caused by agitation
- Fuel tanks can be filled without spillage
- Valve contains pressure up to 2.4 PSI

Part #	Air Flow	Line	Dia. x L	Fuel
RAC LG-50	12 CFM	5/8"	1-3/4" x 6"	Gas only





#### Sierra In-Line Fuel Filters & Replacement Elements

SIE 18-7710-1	Yamaha 68T24251-00-00 Fits: F6, F8 (2001 & up)	•
SIE 18-7712	Mercury Mariner 35-16248, Nissan/ Tohatsu 369022300M Fits: Mercury 4/5 2 cyl (99 & Up), 4/5/6 4 stroke (99 & Up), 8/9.9 4-stroke (05 & Up) Firs: Nissan/Tohatsu 2 stroke, 5 HP thru 9.8 HP/4 stroke, 4 HP thru 30 HP	#
SIE 18-7713	Mercury Mariner 35-80365M Yamaha 646-24251-02-00 Fits: Mercury/Mariner 9.9 4-Stroke(95-98), 15 4-Stroke(98 & Up), Yamaha 6 (89, 92-99), 8 (89-99, 01-02), F4 (99-02), F9.9 (89-95, 97-99, 01-02), FT 9.9 (88-90)	•
SIE 18-7714	Mercury Mariner 35-877565T1 Fits: 25 4-Stroke (98 & Up), 30 4-Stroke (99-01), 30 3 cyl 4-Stroke (99-01), 40 4-Stroke (98-01), 40 4_Stroke 4 cyl (01-02), 40 Carb 3-cyl 4-Stroke (02 & Up), 50 4-Stroke 4 cyl (01-02), 60 4-Stroke, 4 cyl (01-02), 75 4-Stroke (00 & Up), 90 4-Stroke (00 & Up)	-
SIE 18-7716	Suzuki 15410-87J10, Johnson Evinrude 5032323 Fits: Suzuki DF25 Thru DF140, Johnson 25 4-Stroke (04-05), 30 4-Stroke (04-07), 40/60/70 4-Stroke (02-06), 90/115/140 4-Stroke (03-04, 06), Evinrude 25/30/40/50/70 4-Stroke (00-01)	3
SIE 18-7718	Mercury 35-879885T Fits: 135/150/175 4-Stroke Verado (S/N 1B227000 & Up), 200/225 4-Stroke Verado (S/N OT980000 & Up), 250/275, 4-Stroke Verado (S/N OT801000 & Up)	
SIE 18-7719	Suzuki 15410-98500, Johnson Evinrude 5032238 Fits: Most small Suzuki outboards, Johnson 4/5 (2003-07), 6 4-Stroke (2005-07), 10/15 4-Stroke (2002- 07), 40/50/60/70 4-Stroke (2002-06), Evinrude 40/50 4-Stroke (2000-01)	4
SIE 18-7720	Honda 16900-SR3-004 For BF115, BF130,AX, AY,A1: Series #14ZW50E1M	4
SIE 18-7721	35-864572 Fits: All MPI & EFI engines W boost pump, 8.1L & 496cid, for 3/8" ID fuel lines	
SIE 18-7722	3/8" barb Replaces: 5005266 For: E-Tec 40, 50, 60, 90, 115, 150, 175, & 200DPL	<b>I</b>
SIE 18-7723	1/4" & 5/16	-
SIE 18-7780	6F5-24563-00-00 For 9.9 - 225NR	NAME OF TAXABLE PARTY.
SIE 18-7781	61N-24563-00-00 For: 9.9/90° SX	1

#### Sierra In-Line Fuel Filters & Replacement Elements

	ruei i iiters & Replacement	
SIE 18-7786	Honda 16900-SA5-004 For BF35/45AM, BF 40/50A, AW, AX: Series #14ZV50M: BF90,AT,AW,AX,AY: Series#14ZW00E1M	*
SIE 18-7790	Complete Kit Contains: Housing, Replaceable Element & Fittings for 1/4", 5/16", & 3/8" Fuel Lines	\$ 111 111
SIE 18-7802	35-87946A3, 35-87946-Q3, Q4, For: 6 HP thru 25 HP	
SIE 18-7828-1	Mercury 1/4" small capacity	
SIE 18-7829	Mercury 1/4" large capacity	
SIE 18-7830	Mercury 35-16494-1, 35-816296 1, T1, Q2 Johnson/Evinrude 398327	-
SIE 18-7831	Mercury 802128A1, Johnson/ Evinrude 398319	-
SIE 18-7832	1399-3938 For: AJ, KA, KB, KC, KD, WM, WMC Carb	
SIE 18-7854	984491, 311684 Rochester 17078904	
SIE 18-7855	Mercruiser 1387-2150	
SIE 18-7857-1	A.C. Delco GF-61P For 3/8" Fuel Line	00
SIE 18-7859	908034, Most GM Inline 4 & 6 cycle Ford and GM V-8's up to 400 HP	1
SIE 18-7861	REPLACEMENT CANISTER AND FILTER Replaces: 981911	
SIE 18-7862	FUEL FILTER ELEMENT For Fuel Filter (Includes Gasket Replaces: 982230	
SIE 18-7869	Mercruiser 1397-8767, 1397-8545	0
SIE 18-8225	Honda 16910-GB2-005 Fits:BF100F, BF50F, BF5AH/AK/AM/ AW/AX/AY/A1/A2, BF75F, BF8AH/ AK.AM.AW.AX.AY	4
SIE 18-7784	Mercruiser 35-11004A1, 35- 803897Q1 For: 2.5L/3.0L(6229718 & later), All MC224 CID (6218037 & later), All GM 262 CID (A331455 & later) with Carter Fuel Pumps	
SIE 18-7860	Chris-Craft 16.83-90006, Mercruiser 35-49088A2, 35-49088Q2, OMC 381690, 312456 For: Inline 4 & 6 cycle engines	

#### Sierra In-Line Fuel Filters & Replacement Elements

0.0	T del l'illers d'illepideement	
SIE 18-7936	Mercury Mariner 35-888289T2, Suzuki 15412-93J00 Fits: 75 4-Stroke (2000 & Up), 90 4-Stroke (2000 & Up), 115 EFI 4-Stroke (2001 & Up)	
SIE 18-7977	Mercruiser 35-866171A01 Fits: 350 Mag MPI Alpha/Bravo, 350 Mag MPI Horizon Alpha/Bravo, 350 Mag MPI Horizon MIE, 350 Mag MPI MIE, 496 MAG, 496 MAG H.O., 5.0 MPI Alpha/ Bravo, 8.1L Inboard, 8.1L Inboard H.O., MX 6.2L MPI Alpha/Bravo, MX 6.2L MPI Horizon Alpha/Bravo, MX 6.2L MPI Horizon MIE, MX 6.2L MPI MIE	
SIE 18-7979	Mercury Marine 881540, Yamaha 68V-24563-00-00 Fits: 115 EFI (4 Stroke), 75HP (4 Stroke), 75HP (4 Stroke) (Bodensee), 90HP (4 Stroke)	
SIE 18-7981	Mercury Marine 35-884380T Fits: All Verados, 90HP (DFI) (3 cyl), 115 DFI (3 cyl) / 200HP (DFI) / 225HP (DFI) (including 3.0L DFI)	
SIE 18-79809	Yamaha 6P3-WS24A-00-00 F150, F200, F225, F250, Z-VZ 150 to 300 hp. after April 2006 For filter housing marked "6P3" ONLY!	
SIE 18-79799	Replaces: 6D8-WS24A-00-00 F50-F115 after April 2006 For filter housing marked "6D8" ONLY! 6D8-WS24A-00-00 Yamaha Marine	

#### Moeller **Gasoline Water Separating Fuel Filters**

- 85 gallon per hour
- 3/8" NPT ports
- 10 micron filtration
- Will not separate 2-cycle oil from gas
- UV protected drain bowl with easy turn thumb screw
- Clear plastic bowl
- Includes barbs, 10 micron canister and filter head

MOE 033314-10 Assembly, composite

MOE 033328-10 Assembly, powder coated aluminum

Replacement filters:

MOE 033315-10 \*Outboard engine use only\*, 10 Micron

#### Moeller **Gasoline Water Separating Fuel Filter**

- 3/8 NPT ports
- Powder coated, cast aluminum
- Universal Mercury/Yamaha filter
- Will not separate 2-cycle oil from gas
- Includes barbs, 10 micron canister (033323-10) and filter head



Replacement filters:

MOE 033323-10 Filter-long, Mercury, Universal, 10 micron MOE 033324-10 Filter-short, Mercury, Yamaha, Universal (kit)

#### Moeller **Gasoline Water Separating Fuel Filter**

- 10 Micron
- 1" thread opening, 3/8 NPT ports

MOE 033325-10 Replacement filter (Short) OMC (Johnson and Evinrude) 502905



#### Sierra Replacement **Gasoline Elements & Assemblies**

Replacement element fits Racor 320RRAC01

SIE 18-7948 Honda 17670-ZW1-030GH,

Mercury 35-886638, Racor S3227,

Suzuki 99105-20005

Replacement element for Racor S3213

SIE 18-7919 Mercury 35-809097,

Yamaha MAR-24563-00-00

SIE 18-7928-1 18-7919 filter and AquaVue bowl

SIE 18-7922-1 AquaVue bowl only











#### Sierra Diesel Fuel Filter

SIE 18-7858

Replaces: Volvo 858201. For CAV Type Unit AQ120B, 125A, B, 131A, 140A, 145A,B, 151,

BB, 140,145A

#### Sierra Diesel Fuel Filter



SIE 18-79960

Yanmar 104500-55710 Fits: All GM Series, YM Series, HM Series, QM Series





#### Sierra

#### **Gasoline Water Separating Fuel Filters**

- For all 2 & 4 cycle gas engines
- Removes 98.8% of water and particles
- Meets and exceeds Mercury and OMC specifications
- Meets all ABYC regulations

	1 C Tegulations
SIE 18-7789	Volvo 3851218-2, 3852413 OMC 502906
SIE 18-7844	Short, 21 micron Mercury 35-807172, 35-802893Q 18-7845 Long, 21 micron Mercury 35-802893Q Yamaha ABB-FUELF-IL-TR
SIE 18-7845	21 micron, Long - 4.35", Mercury - 35-802893Q Yamaha - ABB-FUELF-IL-TR
SIE 18-7846	21 micron, Johnson/Evinrude 502905 Crusader 98041
SIE 18-7865	Compact 10 micron MAR-MINIF-ILTRL
SIE 18-7866	High capacity 6", 10 micron Yamaha MAR-FUELF-IL-TR
SIE 18-7944	Short, 10 micron Mercury 35-807172, 35-802893Q
SIE 18-7945	Long, 10 micron, Mercury 35-802893Q, Yamaha ABB-FUELF-1L-TR
SIE 18-7946	10 micron, OMC 502905
SIE 18-7967	10 micron, Mercury 35-18458Q3 V6 EFI 95 or earlier
SIE 18-7968	10 micron, Mercury 35-18458Q4 V6 EFI 96 or later
SIE 18-7989	Volvo 3851218-2, 3852413, 3862228 OMC 502906
SIE 18-8149	High capacity 10 micron Replaces: Volvo 3847644 For use with side-by-side fuel pump applications.





#### Sierra

### **Gasoline Water Separating Fuel Filter Kits**

- Includes bracket, filter & 2 pipe plugs
- For all 2 & 4 cycle gas engines
- Removes 98.8% of water and particles
- Meets and exceeds Mercury and OMC specifications
- Meets all ABYC regulations

SIE 18-7775-1	SIE 18-7775-1 Tall filter, 21 micron 3/8" NPT 18-7845 filter & 18-7775 aluminum bracket		
SIE 18-7776-1	Tall filter, 21 micron, 3/8" NPT 18-7845 filter & 18-7776 S/S bracket		
SIE 18-7852-1	Tall filter, 21 micron, 1/4" NPT 18-7845 filter & 18-7853-1 aluminum bracket		
SIE 18-7848-1	Short filter, 21 micron, 1/4" NPT Kit 18-7844 filter & 18-7853-1 bracket		
SIE 18-7983-1	Aluminum short filter, 10 micron, 1/4" NPT Kit, 18-7944 & 18-7853-1		

#### Sierra Fuel Filter Head/Brackets



Universal design.

SIE 18-7853-1

1/4" thread, Aluminum, Mercury 89876A3 Yamaha MAR-FLTHD-AL-12

SIE 18-7775 3/8" thread. Aluminum



#### Sierra **Fuel Injector Cleaning Kit**

Fuel additives and gasoline alone cannot clean away layers of fuel deposits when the engine is running. The only proven method is by removing the "stale" fuel (the cause of the deposits) and using a fuel system cleaner periodically. By using Sierra's Fuel Injection Cleaning System regularly, you will help maintain the injector's cleanliness and performance throughout the life of your engine. Kit includes: Cleaning system container, hose, small fitting, large fitting and carrying case.

SIE 18-8600

#### **Racor Gasoline Water Separating Fuel Filters**

- Designed for high performance applications
- Coated with an electrostatically applied powder coating for corrosion resistance
- Clear contaminant collection bowl with drain valve for outboards only
- 10 micron Aquabloc media is standard
- Rated 98% efficient at 10 micron per SAE test procedures
- Corrosion-resistant construction
- Clear contaminant collection bowl with drain valve for outboards only
- Metal bowl units for inboard powered boats meet 33 CFR and USCG regulations
- Meets ABYC standard for gasoline-powered vessels
- Maximum working pressure: 7.0 PSI (0.5 bar)
- 490R-RAC-01 includes integral primer pump



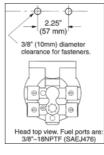
120R-RAC-02

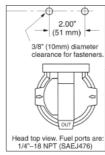














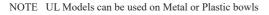


Part #	Bowl	GPH	Ports	Clean Pressure Drop	H x W x D	Micron Rating	Replacement Element
RAC 120R-RAC-01	Clear	30	1/4"-18 NPTF	.2 PSI (0.01 bar)	6.5" x 3.2" x 3.2"	10	RAC S3240
RAC 120R-RAC-02	Metal	30	1/4"-18 NPTF	.2 PSI (0.01 bar)	6.5" x 3.2" x 3.2"	10	RAC S3240TUL
RAC 320R-RAC-01	Clear	60	1/4"-18 NPTF	.6 PSI (0.04 bar)	9.4" x 4" x 4"	10	RAC S3227
RAC 320R-RAC-02	Metal	60	1/4"-18 NPTF	.6 PSI (0.04 bar)	9.4" x 4" x 4"	10	RAC S3228TUL
RAC 490R-RAC-01	Clear	90	3/8"-18 NPTF	1.0 PSI (0.07 bar)	9.9" x 4.5" x 4.8"	10	RAC S3227
RAC 660R-RAC-01	Clear	90	3/8"-18 NPTF	.6 PSI (0.04 bar)	11" x 4.2" x 4.5"	10	RAC S3232
RAC 660R-RAC-02	Metal	90	3/8"-18 NPTF	.6 PSI (0.04 bar)	11" x 4.2" x 4.5"	10	RAC S3232TUL

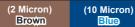
RAC RK 30475 320R bowl kit, clear RAC RK 30473-02 320R bowl kit, white

#### **Racor Replacement Elements**

Part Number	Micron Rating	Filtration Level	Dimensions H x Dia.	GPH	Applications		
RAC S3228SUL	2	Final	4" x 3.7"	60			
RAC S3240	10	Cocondon	2.4" x 3"	30	120R-RAC-01		
RAC S3240TUL	10	Secondary	2.4 X 3	30	120R-RAC-02		
RAC S3227	10	Casandani	4" x 3.7"	90	320R-RAC-01 & 490R-RAC-01		
RAC S3228TUL	10	Secondary	Secondary	3econdary	4 X 3.7	60	320R-RAC-02
RAC S3232	10	Cd	40 Casandani	5.5" x 3.7"	90	660R-RAC-01	
RAC S3232TUL	10	Secondary	3.5 X 3.7	90	660R-RAC-02		







(30 Micron)

#### Racor

#### **Gasoline Water Separating 10 Micron Fuel Filters**

Racor's spin-on filters are designed for use on Mercruiser and OMC gasoline engines. Using Racor's Aquabloc technology, these filters allow gas and gas/oil mixtures to flow freely to the engine while keeping water and dirt out. A rugged seethrough bowl is available for outboard engines. On inboard applications a metal bowl is required.









B32	

Part #	Applications	Dimensions H x Dia.	Bowl	Replacement Element
RAC B32020MAM	Inboard or Outboard Replaces quicksilver. Also fits: SMI, Sierra, Aquapower, and other filter heads	6.5" x 3.8"	Metal	RAC S3220TUL
RAC B32021MAM	Inboard or Outboard Replacement for O.M.C #174144 inboard or outboard filter	6.5" x 3.8"	Metal	RAC S3221TUL
RAC B32013	Outboard Replaces Quicksilver, Yamaha, Suzuki, SMI, Volvo Penta, Sierra, AquaPower, and other filter heads (comes with a clear bowl–shown above)	7.2" x 3.8"	Clear	RAC S3213
RAC B32014	Outboard Replaces OMC (comes with a clear bowl)	7.2" x 3.8"	Clear	RAC S3214

Parts:

RAC S3220SUL Element (2micron) for B32020MAM

#### Racor Water Separating Fuel Filter

- Rated at 15 GPH for diesel and 35 GPH for gasoline
- Rated to 100 PSI
- Spin-on
- Utilizes a two stage process of separation
- Removes 96% of liquid and particulate contaminants down to ten microns
- Applicable for vacuum or pressure installations
- Replaceable cartridge
- Aluminium bowl
- H: 6" x W: 3.2" x D: 3.15"

**RAC 110A** Complete

RAC R11S Spare element (2 micron) **RAC R11T** Spare element (10 micron)

**RAC RK 10062\*\*** Service Kit, comes with nylon retaining washer, top and bottom head bolt gasket

and head housing gasket.

\*\* Limited Quantity

#### Racor Water Separating Fuel Filter

- Rated at 25 G.P.H. for gasoline
- Spin-on
- Utilizes a two stage process of separation
- Removes 96% of liquid and particulate contaminants down to ten microns
- Replaceable cartridge with see-thru bowl, diecast aluminum head
- 1/4"-18 NPT connections
- H: 4.3" x W: 2.3" x D: 2.1"
- Working Pressure: 100 PSI
- \*Not for use with outboard engines\*

RAC 025-RAC-02 Complete

Parts:

**RAC S2502** Element (10 micron)

#### Aquabloc® Filters

(2 Micron) Brown

(10 Micron) Blue

(30 Micron) Red

Make certain that you replace your Turbine Series assemblies only with Genuine Racor Aquabloc® filters. While many others try to imitate the construction and performance of Aquabloc® filters, only the genuine article delivers the fit and performance specified by engine manufacturers, and guarantees that your Racor filter/ water separator will deliver the protection you count on.

For convenience, end-caps are colour-coded for easy identification and application.

- P Red = 30 micron, primary filtration.
- T Blue = 10 micron, secondary filtration. S Brown = 2 micron, final filtration.

The top cap includes handles for easy servicing and a filter bypass button for emergencies.

Aquabloc® media is a blend of high-grade cellulose compounded with engineered fibers, and a special chemical treatment. Water will not cling to the filter, Aquabloc® repels it.

Besides removing asphaltenes, water, gums, and varnishes, Aquabloc® filters out tiny particles of dirt and algae from diesel fuel. Aquabloc® filters have polymer end-caps that will not corrode, ever. With an Aquabloc® replacement filter, you get a complete kit with all the seals you need. And not just any seals, but speciallyformulated, Racor-engineered seals. Always carry extra Racor fuel filters as one tankful of dirty fuel can quickly clog a filter.







### Compact and Versatile Systems for Main Propulsion and Genset Applications

#### **Cost-Effective**

Cost-effective designs for on-engine or remote mounting. Complete assemblies available in all-metal bowls.

#### **High-Capacity**

Hand-operated fuel priming pumps are integral to many Racor diesel spin-on series models, a feature that allows for removal of unwanted air from the filter and engine fuel system.

#### **Environmentally Friendly**

Metal bowls are reusable, impact-resistant, and virtually indestructible. When it's time for service, only the filter is replaced—the bowl and drain plug are reused. The long lifecycle of Racor bowls saves you money and reduces the environmental impact through disposal of less material.

Note: Use metal bowl versions for all marine engine room applications.

#### **Easy Upgrades**

Water-in-fuel (WIF) sensors are available to alert operators to drain accumulated water from the bowl.

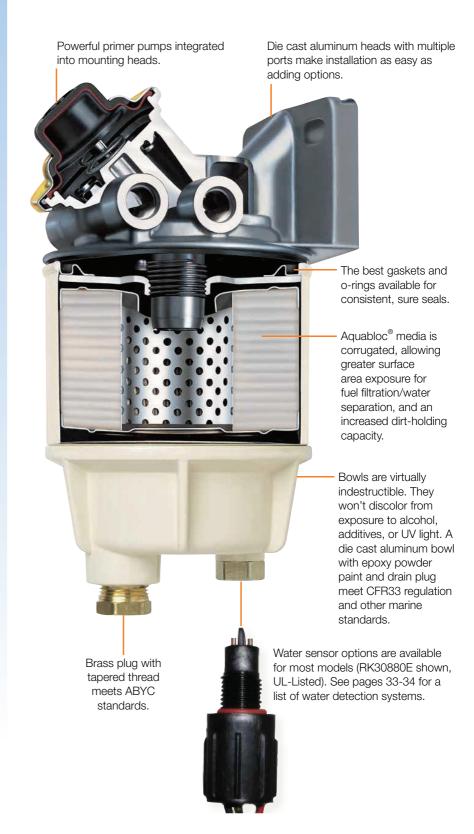
### Corrosion-Resistant Construction

Advanced technology means bowls will not deteriorate from water collection, alcoholblended fuels, exposure to harsh additives, salt spray, or UV light.

#### **Safety First**

Racor's UL-listed filters meet ABYC, ASTM, ISO, and many other global standards for filters used in marine engine rooms.

## **Diesel Spin-on Series**



#### **Racor Detroit Diesel Element**

• Fits all Detroit diesels up to 90 gallons per hour

■ 3.6" x 7.44"

RAC S3202 30 micron



#### **Racor Fuel/Water Separator Elements**

• Used in 490MAM and 4120MAM filter assemblies

■ 3.6" x 7.44"

RAC S3201PUL 30 micron

RAC S3201TUL 10 micron, 90 GPH



#### Racor Fuel/Water Separator Element

Used in 445MAM

RAC S3204TUL 10 micron



#### **Racor Fuel/Water Separator Elements**

- Used in 400 and 600 Series filter assemblies
- Rated to 120 GPH
- H: 12" x Dia: 4.38"

RAC R120S 2 micron
RAC R120T 10 micron
RAC R120P 30 micron



#### **Racor 490 Series Elements**

Replacement filters

 RAC R90P
 30 micron

 RAC R90S
 2 micron

 RAC R90T
 10 micron



#### Racor 75/B32009 Series Spin-On Element

• Replacement filters for 75/B32009 series

RAC S3209S 2 micron



#### **Racor Water Separating Element**

- Made for Mercury, Mercruiser, Yamaha, Suzuki, Honda, and Tohatsu
- Fits 11/16"-16 centre thread mounts
- 10 micron filtration
- H: 4.2" x Dia: 3.6"

#### RAC PFF5510



#### **Racor Water Separating Fuel Elements**

- Replaces Mercury Marine 884380T or 8M0060041
- Genuine Aquabloc filter media removes up 100% of free water
- 10 micron media
- Compatible with Ethanol gas engines

**RAC 31871** 2/pkg



### Racor 400 Series Diesel Water Separating Fuel Filters

The 400 series features a mounting head with integral priming pump and multiple ports. The high-capacity 2 micron Aquabloc filter element stops water and removes solid contamination. The see-thru bowl won't discolour and has a leak-proof positive seal drain for easy service. New electronic diesel engines especially benefit from the powerful priming pump at fuelling and service time.

Maximum allowable pressure: 30 PSI

• Comes standard with a fuel restriction indicator showing filter health (not for use with gasoline applications)

• Port size: 3/8"-18 NPTF

Part #	Max Flow GPH	H x W x D	Replacement Element
RAC 445R2	45	9.3" x 4.5" x 4.8"	RAC R45S
RAC 460R2*	60	11.0" x 4.5" x 4.8"	RAC R60S
RAC 460R10	60	11.0" x 4.5" x 4.8"	RAC R60T

Parts:

 RAC R45P
 30 micron element for 445R

 RAC R45T
 10 micron element for 445R

 RAC RK 10110
 Metal vent plug for 445/460/490/4120

RAC RK 21069
\* Request Item

(2 Micron)	(10 Micron)	(30 Micron)
	( IU MICIOII)	
Brown	Blue	Red
		INCOC.

Water probe for 445/460/490/4120





#### Racor SNAPP

#### Gasoline/Diesel Water Separating Fuel Filter

- A one-piece, high-performance snap-in fuel filter water separator
- Protected with an Aquabloc® filter media and a clear bowl that allows for at-a-glance inspection of fuel system integrity
- Makes every filter change literally a snap. No tools are needed - when it's time for service, simply snap in a new filter
- Simple installation and a patented priming system
- Gas rated up to 26 gph
- Rated to 50 PSI
- 10 micron filtration
- Nylon body with a stainless mounting bracket
- Includes 3/8" quick connect fuel hose fittings
- W: 4" x H: 7-3/4" x D: 4"

RAC 23299-10 Complete unit with bracket RAC R23298-10 Replacement filter module

Simple Flow Rate Formula For medium range diesel engines: Hp x .006 = Approx. GPM pump flow rate

#### **Racor Diesel Water Separating Fuel Filters**

Combines separator, filter, and primer pump in one device, improving fuel delivery and filtration quality while reducing cost. Uses the same principles of separation, coalescing and filtration employed in the Turbine Series. Free water and heavy particles are separated out before reaching the element and drained away through a separate sump chamber so they cannot mix back into the fuel. Remaining water and particles separated in later stages fall into the secondary sump chamber. The two sumps are drained through a common, positive seal, drain valve.

- Features include check valve, bleed vent and multiple ports for ease of installation
- Racor's exclusive Aquabloc elements are up to ten times more effective than competitive filters because their chemical treatment repels emulsified water
- Port size: 1/4" NPT

Part #	Bowl	GPH	H x W x D	Micron Rating	Replacement Element
RAC 120AS <sup>2</sup>	See-thru	15	8" x 3.2" x 3.2"	2	RAC R12S
RAC 120AT <sup>2</sup>	See-thru	15	8" x 3.2" x 3.2"	10	RAC R12T
RAC 215R2 1 2	See-thru	15	8.3" x 4" x 4"	2	RAC R15S
RAC 230R2 1 2	See-thru	30	9" x 4" x 4"	2	RAC R20S
RAC 230R10 1 2	See-thru	30	9" x 4" x 4"	10	RAC R20T
RAC 230RMAM 1 2	Metal	30	9" x 4" x 4"	10	RAC R20TUL
RAC 245R10 1 2	See-thru	45	10.5" x 4" x 4"	10	RAC R25T

<sup>&</sup>lt;sup>1</sup> Integrated primer pump

#### Parts:

RAC RK 20135	Clear bowl 220/225 series
RAC RK 22350-02	Clear bowl kit 200 series & 230R2
<b>RAC RK 10110</b>	Metal vent plug 110/120/220/225
<b>RAC RK 10215</b>	Clear bowl w/drain kit 120
<b>RAC RK 20126</b>	Bowl plug 120/220/225 kits
<b>RAC RK 10063</b>	Service kit 120 series nylon retainir

Service kit 120 series nylon retaining washer, top and bottom head bolt O-ring, and square

cut gasket

**RAC RK 20075-01** Seal kit for 220/225

(2 Micron)	(10 Micron)	(30 Micron)
Brown	Blue	Red

#### **Racor Elements**

Part Number	Micron Rating	Filtration Level	Dimensions H x Dia.	Applications
RAC R12S	2	Final	2.4" x 3.0"	120
RAC R12T	10	Secondary	2.4" x 3.0"	120
RAC R12P	30	Primary	2.4" x 3.0"	120
RAC R15S	2	Final	3.3" x 3.7"	215
RAC R15T	10	Secondary	3.3" x 3.7"	215
RAC R15P	30	Primary	3.3" x 3.7"	215
RAC R20S	2	Final	4.0" x 3.7"	230
RAC R20T	10	Secondary	4.0" x 3.7"	230
RAC R20P	30	Primary	4.0" x 3.7"	230
RAC R24S	2	Final	3.5" x 3.6"	220
RAC R24T	10	Secondary	3.5" x 3.6"	220
RAC R24P	30	Primary	3.5" x 3.6"	220
RAC R25S	2	Final	5.5" x 3.7"	245
RAC R25T	10	Secondary	5.5" x 3.7"	245
RAC R25P	30	Primary	5.5" x 3.7"	245
RAC R26S	2	Final	4.0" x 3.7"	225
RAC R26T	10	Secondary	4.0" x 3.7"	225
RAC R26P	30	Primary	4.0" x 3.7"	225





8.0 in. (20.3 cm) 230MAM

10.2 in. (25.9 cm)

in. (22.0 cm) 245MAM

(5.1 cm)





<sup>&</sup>lt;sup>2</sup> Includes drain valve assembly



### The Inside Story

- As fuel enters, it moves past the internal check valve, then through the turbine centrifuge where it flows in a spiraling direction, spinning off large particulates and water droplets. Being heavier than fuel, the large particulates and water droplets fall to the bottom of the bowl.
- 2 Smaller water droplets bead-up along and on the sides of the internal components and on the surface of the Aquabloc® filter.

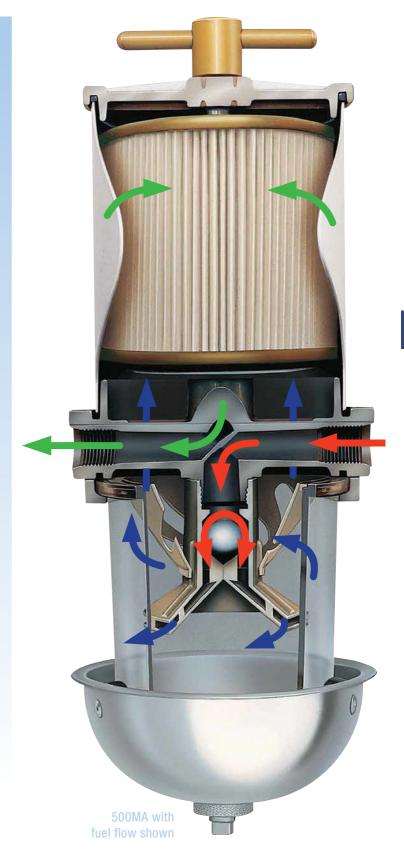
  When large enough, they too fall into the high-capacity bowl to be drained as needed.
- 3 Besides repelling water asphaltenes, algae, rust, and tiny solids from fuel.

  Aquabloc® filters are waterproof, so they remain effective longer, saving you money.

Order only genuine Aquabloc® replacement filters.

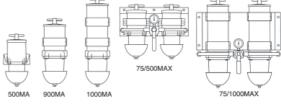
2010	TM	-OR
Select Filter 2010 (500 Series),	Select a Micron	Must have "-0R"
	Rating	in part
	SM = 2,	number
	TM = 10,	(includes
	or	o-rings)
	PM = 30	

2020N	-	02
Select Filter, 2040N (900 Series),		Select a Micron Rating
or <b>2020N</b> (1000 Series)		<b>02</b> , <b>10</b> , or <b>30</b>



#### **Racor Turbine Series Diesel Water Separating Fuel Filters**

Marine Turbine Series filter assemblies are designed to be installed on the vacuum side of the fuel transfer pump for best efficiency and protect precision engine components from dirt, rust, algae, asphaltines, varnishes, and especially water, which is prevalent in engine fuels. They remove contaminates from fuel using the following legendary three stage process:



#### Stage One: Separation

As fuel enters the filter assembly, it moves through the centrifuge and spins off large solids and water droplets which fall to the bottom of the collection bowl.

#### **Stage Two: Coalescing**

Small water droplets bead-up on the surface of the conical baffle and cartridge element.

When heavy enough, they too fall to the bottom of the bowl.

#### **Stage Three: Filtration**

Proprietary Aquabloc®II cartridge elements repel water and removes contaminants from fuel down to 2 micron (nominal). They are waterproof and effective longer than water absorbing elements.

Part #	Max Flow (G.P.H.)	Port	Dimensions H x W x D	Micron Rating	Replacement Element
RAC 500FG-2				2	RAC 2010SM-OR
RAC 500FG-10	60	3/4"-16	11.5" x 6" x 4.8"	10	RAC 2010TM-OR
RAC 500FG-30				30	RAC 2010PM-OR
RAC 500MA30	60	3/4"-16	11.5" x 5.8" x 4.8"	30	RAC 2010PM-OR
RAC 900FH-2				2	RAC 2040N-02
RAC 900FH-2	90	3/4"-16	17" x 6" x 6"		RAC 2040V2
RAC 900FH10	90	3/4 - 10	17 X0 X0	10	RAC 2040N-10
KAC 900FH10				10	RAC 2040V10
RAC 900MA30	90	3/4"-16	17" x 6" x 7"	30	RAC 2040N-30
RAC 900WA30	90	3/4 - 10	17 X 0 X 7	30	RAC 2040V30
RAC 1000FH-2	180	2 30 7/8"-14 22" x 6" x 5"	2	RAC 2020N-02**	
KAC 1000FH-2			22" v 6" v 5"	2	RAC 2020V2
RAC 1000FH10		170-14	22 10 13	10	RAC 2020N-10
KAC 1000FH10					RAC 2020V10
RAC 1000MA30	180	80 7/8"-14 22" x 6" x 7"	30	RAC 2020N-30**	
NAC 1000MA30	100		22 10 11	30	RAC 2020V30
RAC 75500MAX2*		0/120 7/8"-14 11.5" x 14.5" x	2	RAC 2010SM-OR	
RAC 75500MAX10	60/120			10	RAC 2010TM-OR
RAC 75500MAX30*	00/120	7/0 -14	9.5"	30	RAC 2010PM-OR
RAC 75500MAXM30				30	RAC 2010PM-OR
RAC 75900MAX10*	90/180	7/8"-14	17" x 18.8" x 11"	10	RAC 2040N-10
KAC 75500WAX10	90/100	770 - 14	17 × 10.0 × 11	10	RAC 2040V10
RAC 75900MAX30	90/180	7/8"-14	17" v 10 0" v 11"	20	RAC 2040N-30
NAC 75500MAX50	90/100	770 - 14	17" x 18.8" x 11"	30	RAC 2040V30
RAC 751000MAX30*				30	RAC 2020N-30**
RAC 75 TOUGHAASU	400/000	7/0" 1/	0011 v. 40. 011 v. 44.11	30	RAC 2020V30
RAC 751000MAXM30	180/360	7/8"-14	22" x 18.8" x 11"	30	RAC 2020N-30**
RAC /51000IVIAXIVI30				30	RAC 2020V30



75500MAX2

Racor's MA Turbine series includes the added protection of a heat shield over the lower bowl and metal drain fittings.



MA Series

\* Request Item

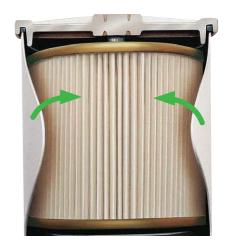
\*\* Limited Quantity

(2 Micron) Brown (10 Micron)

(30 Micron) Red Simple Flow Rate Formula For medium range diesel engines: Hp x .006 = Approx. GPM pump flow rate

#### **Racor Turbine Series Elements**

Part Number	Micron Rating	Filtration Level	Dimensions H x Dia.	Applications	
RAC 2010SM-OR	2	Final	2.7" x 3.1"	500MA	
RAC 2010TM-OR	10	Secondary	2.7" x 3.1"	500MA	
RAC 2010PM-OR	30	Primary	2.7" x 3.1"	500MA	
RAC 2020N-02**	2	Final	9 6" x 4 7"	1000MA	
RAC 2020V2	2	rillai	9.0 X 4.7	1000MA	
RAC 2020N-10**	10	Secondary	9 6" x 4 7"	1000MA	
RAC 2020V10	10	Secondary	9.0 X 4.7	TOOOIVIA	
RAC 2020N-30**	30	Drimon,	9.6" x 4.7"	1000MA	
RAC 2020V30	30	Primary	9.0 X 4.7	TOOOIVIA	
RAC 2040N-02	2	Final	4 6" x 4 7"	900MA	
RAC 2040V2	2	Filiai	4.0 X 4.7	900IVIA	
RAC 2040N-10	10	Cocondony	4 6" x 4 7"	900MA	
RAC 2040V10	10	Secondary	Secondary 4.6" x 4.7"	GOOMA	
RAC 2040N-30	30	Drimon,	4 6" x 4 7"	900MA	
RAC 2040V30	30	Primary	4.0 14.7	900MA	



#### \*\* Limited Quantity

Brown Blue Red	(2 Micron) Brown	(10 Micron)	(30 Micron) Red
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Parts 500 series:

RAC RK 15405 Kit - Replacement bowl 500FG RAC RK 11341 Bowl drain gasket kit 500/1000

RAC RK 15211 Seal service kit 500

RAC RK 30488 FH series drain valve

RAC RK 15374 Gasket-bowl 500

RAC 15424\*\* Spacer 500 (1997 & older)

\*\* Limited Quantity

Parts 900 series:

RAC RK 11007 Bowl gasket

RAC RK 11868 Heat deflector kit 900/1000MA

RAC RK 21069 Water probe assembly

RAC RK 11-1606-1 Clear bowl RAC RK 11-1404 Service kit

Parts 1000 series:

RAC RK 11007 Bowl gasket

RAC RK 11341 Bowl drain gasket kit 500/1000
RAC RK 11868 Heat deflector kit 900/1000MA

RAC RK 21069 Water probe assembly RAC RK 30488 Self venting drain

RAC RK 11-1606-1 Clear bowl RAC RK 11-1404 Service kit

#### Fairview Hose and Pipe Fittings for Racor Filters

Part #	Use with	O-Ring	Connector	Fig. #
FRV S3620-6B	500 series pre 96	9/16"-18	1/4" FPT	3
FRV S3620-6C	500 series pre 96	9/16"-18	3/8" FPT	3
FRV S3620-8C	500 series	3/4"-16	3/8 " FPT	3
FRV S3620-8D	500 series	3/4"-16	1/2" FPT	3
FRV S3620-10C	900/1000	7/8"-14	3/8" FPT	3
FRV S3620-10D	900/1000	7/8"-14	1/2" FPT	3
FRV S3620-10E	900/1000	7/8"-14	3/4" FPT	3
FRV S3648-8	500 series	3/4"-16	3/4" Tube JIC	2
FRV S3648-10	900/1000	7/8"-14	5/8" Tube JIC	2
FRV S3649-8	500 series	3/4"-16	1/2" Tube JIC	1
FRV S3649-10	900/1000	7/8"-14	5/8" Tube JIC	1
FRV S3649-68	500 series	3/4"-16	3/8" Tube JIC	1







#### **Racor Water Detection Kit**

This kit can be used with any Racor diesel fuel/water separator assemblies. Comes complete with water probe and detection module. The detection module analyses electrical resistance at the probe and determines if water is present. If so a warning light and buzzer are sounded at the display.

**RAC RK 20726\*\*** 12/24V \*\* Limited Quantity



#### **Racor Water Detection Module**

- Alarm/probe kit
- Under dash protection module illuminates and sounds when water is
- Water must be drained to reset light and stop horn
- 1.38" square x 1.25" deep

**RAC RK 12870** 

#### **Racor Replacement Filters**

• Filters for the RAC 200FG

RAC 2000SM-OR 2 micron RAC 2000TM-OR 10 micron



#### **Racor Replacement Filter**

• Filters for the RAC 120R RAC-02 RAC S3240TUL 2 micron



#### Racor Replacement Filter

- Marine Power G-Force TIGE fuel filter
- 10 micron

RAC R58011-10



#### Racor Compound Gauge Kit

A compound (vacuum or pressure) gauge kit permits accurate monitoring of the restriction level in the outlet line of the fuel/water separator. This will increase fuel system troubleshooting efficiency, eliminate guess work, and lengthen filter change intervals.

- Bottom mount 2.5" x 1.25" gauge with 1/4"NPT threads
- Displays pressures from -30inHg to 0 to +15 PSI (relative to atmospheric barametric pressure

#### **RAC RK19669**

Same gauge as above with the addition of a stainless steel T-handle 1/4" NPT threads

**RAC RK19671** 

#### Racor Vacuum Gauge Kit

Vacuum gauge kit permits accurate monitoring of the restriction level in the outlet line of the fuel/ water separator. This will increase fuel system troubleshooting efficiency, eliminate guess work, and lengthen filter change intervals.

- Back mount 2.5" x 2.5" gauge with 1/4"NPT threads
- Displays pressures from -30inHg to 0 to +15 PSI (relative to atmospheric barametric pressure)

#### **RAC RK19668**







#### Sierra Oil Filters

- Specifically designed to match the OEM filter
- Anti-drain back valves help prevent dry-starts
- Epoxy coated steel canister prevents corrosion and allows for easy installation and removal
- Meets or exceeds OEM filtration requirements
- Backed by Sierra Limited Lifetime Warranty

\*Note - Replace filter after first 20 hours of engine operation. After first 20 hours filters are to be replaced every 50 hours of operation or at a minimum of once yearly.

#### Sierra Diesel Oil Filters

SIE 18-7884	Replaces: Universal: 299381, Volvo-Penta: 834337, Thread Spec: 3/4" x 16NPT
SIE 18-7910-1	Replaces: Westerbeke: 30220, Yanmar: 124450-35100 Thread Spec: 20mm x 1.5
SIE 18-7917	Replaces: Yanmar: 124450-35110, 124550-35110, 171056- 35110, 171056-35111 Thread Spec: 20mm x 1.5

#### Sierra Sterndrive & Inboard Oil Filters

SIE 18-7824-2	Replaces 35-866340Q03 For GM marine engines. Used on 4 cyl, 8 cyl, and remote oil filter systems. Short oil filter. Thread Spec: 13/16" x 16NPT.
SIE 18-7875	3/4" x 16 NPT Chris-Craft 16.81-06536 Chrysler Inboard 1851658 Crusader 9002514 Mercruiser 35802886Q, 60565 OMC Sterndrive/Cobra 173231, 502900 Pleasurecraft RO77001 Yamaha YSC-16231-20-0C
SIE 18-7878-1	3/4" x 16 NPT Chrysler Inboard 3549957, L-1008, L-19 Crusader 3549957, L-1008, L-19 Mercruiser 803470 OMC Sterndrive/Cobra Volvo Penta 1266286-2, 3517857-3, 430143-8
SIE 18-7879-1	18mm x 1.5 Chrysler Inboard L-319 Mercruiser 32-883702Q, 35-802884Q, 41815 OMC Sterndrive/Cobra 173834, 502903 Yamaha 16231-20-0C

#### Sierra 4 Cycle Outboard Oil Filters

Sierra 4 Cycle (	Outboard Oil Filters
SIE 18-7758	Replaces: Mercury: 35-877761K01, 35-877761Q01 Thread Spec: 22mm x 1.5
SIE 18-7895	Replaces: Johnson/Evinrude: 778888, 5035703 Suzuki: 16510-93J00 Thread Spec: 3/4" x 16NPT
SIE 18-7896	Replaces: Johnson/Evinrude: 778886, 5033539 Suzuki: 16510-61A20-MHL Thread Spec: 3/4" x 16NPT
SIE 18-7897	Replaces: Johnson/Evinrude: 778887, 5033919 Suzuki: 16510-61A20-MHL Thread Spec: 3/4" x 16NPT
SIE 18-7901	Replaces: Mercury: 825467A1, 825467T1 Yamaha: 6G8-13440-00-00
SIE 18-7902	Replaces: Yamaha: 3FV-13440-00-00 Thread Spec: 20mm x 1.5
SIE 18-7903	Replaces: Johnson/Evinrude: 5033102, 763364 Suzuki: 16510-05240
SIE 18-7905-1	Replaces: Suzuki: 16510-96J00 Thread Spec: 20mm x 1.5
SIE 18-7906-1**	Replaces: Yamaha: 69J-13440-00-00 Mercury: 35-822626T7, Q15 Thread Spec: 3/4" x 16NPT
SIE 18-7906-2	Replaces: Yamaha: 69J-13440-00-00 Mercury: 35-822626T7, Q15 Thread Spec: 3/4" x 16NPT
SIE 18-7909	Replaces: Honda: 15400-POH-305PE, 15400-POH- 305, 15400-ZJI-004, 15400-PLM-A01PE Thread Spec: 20mm x 1.5
SIE 18-7911-1	Replaces: Honda: 15400-PFB-007 Nissan: 3R0076150M Yamaha 5GH-13440-00-00 Thread Spec: 20mm x 1.5
SIE 18-7913	Replaces: Honda 15400-PFB-014 Mercury: 35-822626Q1, Q03 Thread Spec: 20mm x 1.5
SIE 18-7914	Replaces: Mercury: 35-822626Q2, Q04 Thread Spec: 20mm x 1.5
SIE 18-7915-1	Replaces: Johnson/Evinrude: 778885, 5031411 Suzuki: 16510-87J00 Thread Spec: 3/4" x 16NPT
SIE 18-7916	Replaces: Johnson/Evinrude: 434839 Thread Spec: 3/4" x 16NPT
SIE 18-7918	Replaces: Mercury: 35-883701K01, 35-877769K01 Thread Spec: 24mm x 1.5
SIE 18-7921	Replaces: Mercury: 35-896546T, 35-877767K01 Thread Spec: 24mm x 1.5
SIE 18-7954	Replaces: Yamaha N26-13440-00-00 Fits: F350 Thread Spec: 3/4" x 16NPT
SIE 18-8003-1**	Replaces: Volvo: 8692305

\*\* Limited Quantity

#### Sierra to OEM Fuel Filter/Oil Filter Crossover

SIE#	AC#	Luber	Fram	Puro	WIX
SIE 18-7879-1	PF-52	PH51A	PH3535	PER-173	51036
SIE 18-7876-1	PF-35	PH29	PH13	PER-40	51061
SIE 18-7875	PF-2	PH8A	PH8A	FCO-1	51515
SIE 18-7878-1	PF-13	PH228	PH16	FCO-17	51307

#### 3M High Performance Oil Sorbent Pads

- Designed to contain and control petroleumbased fluids while repelling water
- Won't deteriorate, disintegrate or sink
- Microbundles absorb up to 100% more oil than competitive products
- One pad picks up on average, 2 quarts of oil
- 17" x 19" x 1/2"

**THR HP-156** 

#### 3M Petroleum Sorbent

Folded sorbents are the easy-to use solution for spills, drips and fluid leaks. You get four sorbent configurations from one folded sorbent dispenser box.



- It can be used as a boom, pillow, pad, or roll
- Perforations every 16"
- High water repellency
- A handy dispenser box
- 5" x 50', 20" wide unfolded

#### THR PFL550DD

#### 3M Marine Oil and Fuel Absorbent Bilge Pillow

- Holds up to 2 quarts of oil
- Just toss the pillow in the bilge
- Bilge water can be pumped overboard



7" x 15"



#### **Perko Flush Pro Motor Flushers**

Flush-Pro is fully encased with an injection molded PVC see-through housing. It uses a durable UL approved valve and stainless steel springs to prevent corrosion within the Flush-Pro system. Flush your boat engine safely and easily. Durable check

valve system activated by water pressure from a garden hose. Flush-Pro can be purchased to fit 5/8", 1" or 1-1/4" diameter hoses.

 PER 456-DP4
 For 5/8" hose

 PER 456-DP6
 For 1" hose

 PER 456-DP7
 For 1-1/4" hose

#### **Panther Inboard Motor Flusher**

- Run your inboard engine while out of the water
- Just connect a garden hose, fit the cup over the water intake and extend the leg sealing cup to the hull
- Constructed of aluminum and heavy duty rubber
- Adjustable from 19" to 30-1/4"

#### PAN 75-5000



#### Sierra Motor Flusher

- Replaces: Mercruiser 73971A2, 44357A2, Q2
- High quality EPDM rubber cups
- Use with a standard garden hose

#### SIE 18-9010



#### Sea-Dog Inboard Motor Flusher

Molded rubber and aluminum construction
 SED 521550-1



#### **Moeller Motor Flusher**

 Designed to fit inboards, performance ski boats and all boats with a thru-hull water intake

MOE 099085-00



#### **Moeller Motor Flushers**

- Universal round cup motor flusher
- For lower units with side water inlets

#### MOE 099076-00

- Universal motor flusher
- For rectangular water inlet

#### MOE 099077-00

- Volvo round cup motor flusher
- Fits 200; 250; 270; 280 & 290 hp lower units
- No tools required
- Easy to use

#### MOE 099080-00

- Dual water feed motor flusher
- Installs in seconds
- Rectangular cups
- Designed for engines above 75 HP
- HD metal yoke for added strength and extended use

#### MOE 099082-00



#### Sierra Drive Shaft Adapter

For: Mercury 91-56775T

• Provides a wrench surface to turn the drive shaft on Mercruiser MC-I, R-MR, Alpha drive units and many outboard engines with a 13 spline drive shaft



SIE 18-9854

### Sierra Bearing Carrier Retaining Wrench

Replaces: Mercury Marine 91-61069T

• Loosens and tightens the bearing carrier retainer nut on MC-I, R-MR, TRS, Alpha, Bravo I, and Bravo III drives

SIE 18-9858

#### Sierra Bearing Driver

- Replaces: Mercury Marine 91-32325T
- Installs gimbal bearing in MC-I, R-MR, Alpha One, Alpha One/Gen II, Blackhawk and all Bravo drive units



SIE 18-9821

#### <u>Sierra</u> Grease Filler Adapter

Fits: OMC and Volvo dual prop gearcases

SIE 18-81006



#### Sierra Intermediate Shift Cable Snake

For: Mercury 91-821571A1

• Use to easily remove and install intermediate shift cables in Mercruiser drives

SIE 18-9879

#### Sierra Shift Cable Adjuster

- Replaces: Mercury Marine 91-17262A1
- Used to install shift cable core wire on all Bravo drive units

SIE 18-9810



#### Sierra Engine Alignment Tool

Replaces: Mercury Marine 91-57797A3, 91-57797A2, 91-57797A1, 91-8M0067546, 91-805475A1, 91-48347, 91-37384. Used to verify engine alignment on all Mercruiser, OMC Cobra, SX Cobra, and Volvo SX Sterndrives.

SIE 18-4442

#### Sierra Extreme Shift Cable Tool

For: Mercury 91-12037

• Installs and removes shift cables on MC-I, R-MR, Alpha One, Alpha One/Gen II drive units

SIE 18-9806E

#### Sierra Shift Cable Tool

For: Mercury 91-12427, 91-12427T

• Used for proper Bravo drive unit shift cable adjustment at the shift plate

SIE 18-9807



#### Sierra Fuel Injector Analyzer

Checks the operation of any gasoline or diesel fuel injector.

- Works on solenoid, piezo (direct injectors), and mechanical injectors.
- Compare readings between injectors with a candlestick graph that displays maximum, minimum, and average readings for each injector
- Display injector waveforms in real time
- Detect and display ECM control signals
- Monitor pintle valve motion and response
- Detect and display engine speed
- 3.5" color TFT LCD display
- Rechargeable battery provides 6+ hours of use
- Drop impact resistant

SIE 18-9915

#### Sierra Engine Ignition Analyzer

For Diagnosis and Performance Measurement of all types of spark ignition systems

- Display waveforms in real time
- Graph burn time, spark plug voltage, dwell/ramp time, and RPM for each spark
- Compare readings between cylinders with a candlestick graph that displays maximum, minimum, and average for each cylinder
- Displays everything on a 3.5" color screen
- Rechargeable battery provides 6+ hours of use
- Durable design (MIL-STD-810) drop test approved
- Comes with hard shell carrying case
- Includes 18-9914 Plug Wire Sensor Clip and Extension Lead

#### SIE 18-9903

► Also See	Sierra Engine Tools pg 712
► Also See	Sierra Electrical Tools pg 180



#### Star brite Filter Removal Wrench

- Fits canister filters from 2-3/4" to 4" diameter
- Oversized handle for maximum torque

#### **STA 28908**



#### Star brite Filter Removal Wrench

- For 3-1/2" 3-7/8" diameter filters
- Heavy duty unit for larger filters
- Swivel handle for use in confined areas
- 3-1/2" x 3-7/8"

#### STA 28902



#### **Racor Bowl Removal Wrench**

• Quickly separate bowls from filters

#### **RAC RK 22628**



#### Sierra Spanner Wrench

- Replaces: Mercury Marine 91-17256
- Removes and installs driveshaft bearing retainer on MC-I, R-MR, Blackhawk, all Bravo and all Alpha drive units

#### SIE 18-9803



#### **Sierra Shimming Tool**

- Drive gear shimming tool
- Replaces: Mercury Marine 91-60526T
- Measures upper drive gear clearance on MC-I, R-MR, Alpha One, Alpha One/Gen II drive units

#### SIE 18-9856



#### Sierra Driver Rod

- Replaces: Mercury Marine 91-37323
- Used with various drivers to install bearings on Alpha One, Gen II and Bravo One and Two gear cases

#### SIE 18-9835

#### Sierra Retaining Wrench

- Replaces: Mercury Marine 91-43506T
- Removes and installs threaded bearing retainer on Alpha stern drives and outboards

#### SIE 18-9842



#### Sierra Bellows Expander

- Replaces: Mercury Marine 91-45497A1
- Installs exhaust bellows on MC-I, R-MR, Alpha One, Bravo One and Two and Blackhawk drive units

#### SIE 18-9847



#### Sierra Backlash Indicator

- Replaces: Mercury Marine 91-53459
- Checks gear backlash on TR, TRS, MC-I, R-MR, Alpha One, Alpha One/Gen II and Bravo One and Two drive units

#### SIE 18-9850



#### **Sierra Shimming Tool**

- Pinion gear shimming tool
- Replaces: Mercury Marine 91-56048T, 91-56048001
- Measures pinion height of MC-I, R-MR, Alpha One and Alpha One/Gen II drive units

#### SIE 18-9853



#### Sierra Hinge Pin Tool

- Replaces: Mercury Marine 91-78310
- Removes and installs hinge pins from all Mercury Marine drive units

#### SIE 18-9861

#### **CDI Pressure/Vacuum Pump**

Combination unit does both pressure and vacuum testing in one unit. Simply flip a valve on the side and change it from vacuum to pressure. Includes 551-34HA hose assembly, 551-334M and 551-334S adapters.





#### Sierra Sleeve Install Tool

- Replaces: Mercury Marine 91-818162
- Installs the aluminum sleeve in the u-joint bellows of all Bravo, Alpha One/Gen II, Blackhawk drive units and outboards





#### **SIERRA Marine Generator Replacement Parts**



- Starters, alternators, fuel filters, impellers and impeller kits, thermostats and thermostat kits, oil filters, air filters, anodes, crab kits, glow plugs, temperature sensors, oil pressure senders and solenoids
- Focus on Kohler, Onan and Westerbeke generator sets

#### Sierra Generator Parts - Oil Filters



SIE 23-7800	Replaces: Westerbeke 36918 Fits several models.		
SIE 23-7801	Replaces: Westerbeke 35595, Northern Lights 24-02000 Fits: 4.0 BCG(60Hz)/3.0 BCG(50Hz), 6.5 BCG(60Hz)/4.8 CG(50Hz), 9.0 BTG(60Hz)/7.0 BTG(50Hz)		
SIE 23-7802	Replaces: Westerbeke 48078 Fits: 3.0 BPMG (60Hz)		
SIE 23-7803	Replaces: Kohler 326817 Fits: 8E, 10E, 12.5E		
SIE 23-7804	Replaces: Onan 185-7444, Fischer Panda 15853-99170 Fits: Onan MDKAU, MDKBH, Fischer Panda PMS 8 Mini, PMS 8 DP, PMS 4200, PMS 6500, PMS 12 DP and PMS 12 Mini		
SIE 23-7820	Replaces: Kohler 279449 Fits: 12.5CF, 15C, 16CF, 20C		
SIE 23-7821	Replaces: Kohler 359771 Fits: 4EF, 5E, 6EF, 7.3E		
SIE 23-7822	Replaces: Kohler 229678 Fits: 4 CCFOZ, 4 EFOZ, 5 CCOZ, 5 EOZ, 6.5 EFOZ, 8 EOZ		
SIE 23-7823	Replaces: Kohler 267714 Fits: 3.5 CFZ, 3.5 EFZ, 4 CZ, 4 ESZ, 5 CFZ, 5 EFZ, 6.5 CZ, 6.5 ESZ		
SIE 23-7824	Replaces: Kohler GM47465 Fits several models		
SIE 23-7825	Replaces: Westerbeke 35828 Fits: 11.0 BTD(60Hz) / 8.3 BTD(50Hz), 12.5 BTD(60Hz) / 9.4 BTD(50Hz), 12.5 BTDA(60Hz) / 9.4 BTDA(50Hz), 12.5 WMD(60Hz) / 9.4 WMD(50Hz), 15.0 BTD(60Hz) / 12.0 BTD(50Hz), 15.0 BTDA(60Hz) / 12.0 BTDA(60Hz) / 12.0 BTDA(50Hz), 15.0 BTDB(60Hz) / 12.0 BTDB(50Hz)		
SIE 23-7826	Replaces: Westerbeke 40154 Fits: 20.0 BED(60Hz) / 16.0 BED(50Hz), 20.0 BEDA(60Hz) / 16.0 BEDA(50Hz), 25.0 BED(60Hz) / 20.0 BED(50Hz), 25.0 WTA(60Hz) / 20.0 WTA(50Hz), 32.0 BED(60Hz) /25.0 BED(50Hz), 32.0 BEDA(60Hz) / 25.0 BEDA(50Hz)		
SIE 23-7840	Replaces: Onan 122-0810 Fits: MDKBD, MDKBE, MDKBF, MDKBD (w/ Isolated Ground), MDKBE (w/ Isolated Ground), MDKBF (w/ Isolated Ground), MDKAD/E/F		
SIE 23-7841**	Replaces: Onan 122-0185 Fits: MDJB, MDJC, MDJE, MDJF, MJA, MJB, MJC		
SIE 23-7842	Replaces: Onan 185-5835 Fits: MDKAV, MDKBG, MDKAW (Spacesaver), MDKAZ, MDKAL/A/B		

#### \*\* Limited Quantity

#### Sierra Generator Parts - Fuel Filters

SIE 23-7720	Replaces: Westerbeke 35920, Onan 149-1445 Fits: Westerbeke: 4.0 BCG(60Hz)/3.0 BCG(50Hz), 6.5 BCG(60Hz)/4.8 BCG(50Hz), 6.5 TWG(60Hz)/4.9 TWG(50Hz), 8.0 TWG(60Hz)/6.4 TWG(50Hz), 9.0 BTG(60Hz)/7.0 BTG(50Hz), 11.0 TWG(60Hz)/8.5 TWG(50Hz)	01
SIE 23-7740	Replaces: Kohler 252898 Fits: 11 CCFOZ (variation 2), 11.5 CCFOZ (variation 2), 11EFOZ (variation 2), 11.5EFOZ (variation 2), 3EOZ (variation 2), 14EFOZ (variation 2), 3EOZ (variation 2), 14 CCOZ (variation 2), 14EOZ (variation 2), 15 CCFOZ (variation 3), 15.5EOZ (variation 2), 16EFOZ (variation 3), 17.5EFOZ (variation 3), 18.5 CCOZ (variation 3), 19EFOZ (variation 3), 20 CCFOZ (variation 3), 20EOZ (variation 3), 20EFOZ (variation 3), 24EOZ (variation 3), 24EOZD (variation 3), 17.5EFOZD (variation 3), 17.5EFOZD (variation 3), 17.5EFOZD (variation 3), 20EFOZD (variation 3), 20EOZD (variation 3), 20EFOZD (variation 3), 23EOZD (variation 3), 24EOZD (variation 3), 23EOZD (variation 3), 24EOZD (variation 3)	sierte (S)
SIE 23-7750**	Replaces: Onan 149-0428 Fits: MDJA (Spec A-R), MDJB (Spec A-R), MDJC (Spec A-R), MDJE (Spec A), MDJF (Spec A)	
SIE 23-7751	Replaces: Kohler 229715 Fits: 4 CCFOZ, 4EFOZ, 5 CCOZ, 5EOZ, 6.5 EFOZ, 8EOZ, 6.5EFOZD, 8EOZD	
SIE 23-7760	Replaces: Onan A026K278, 149-2106 Fits: MDKAU, MDKAV, MDKBG, MDKAW (Spacesaver), MDKAZ MDKBD, MDKBE, MDKBF, MDKBD (w/ Isolated Ground), MDKBE (w/ solated Ground), MDKBF (w/ Isolated Ground), MDKAD/E/F	
SIE 23-7761	Replaces: Kohler GM32359 Fits: 7 EFOZD(variation 1), 8.5 EFOZD(variation 1),9 EOZD(variation 1),1EFOZD(variation 1), 10EOZD(variation 1), 11EFOZD(variation 3), 11.5EFOZD(variation 3), 13EOZD(variation 3), 13EOZD(variation 3), 15.5 EOZD(variation 3), 17 FEOZD(variation 1), 17.5EFOZD(variation 1), 19EFOZD(variation 1), 20EOZD(variation 1), 20EOZD(variation 1), 23EOZD(variation 1), 23EOZD(variation 1), 23EOZD, 27EFOZD, 28EOZD, 32EOZD	
SIE 23-7762	Replaces: Kohler 267987 Fits: 4EF, 5E, 6EF, 7.3E, 8E (GR4 Version), 10E (GR4 Version), 12.5E (GR4 Version)	
SIE 23-7770	Replaces: Westerbeke 47006, 30200 Fits several models.	0
SIE 23-7771	Replaces: Kohler 249433 Fits: 3.5 CFZ(Variation 2), 4 CZ(Variation 2), 5 CFZ(Variation 2), 6.5 CZ(Variation 2), 8E(Variation 2), 10E(Variation 2), 12.5E(Variation 2)	

### Sierra Generator Parts - Temperature Sender

• Replaces: Westerbeke 35109

• Fits several models

SIE 23-5840



### Sierra Generator Parts - Oil Pressure Sender

• Replaces: Westerbeke 24132

SIE 23-5880



### Sierra Generator Parts - Air Filter

• Replaces: Kohler 278857

SIE 23-1130\* \* Request Item



### Sierra Generator Parts - Solenoid

• Replaces: Westerbeke 24639

SIE 23-5800



### Sierra Generator Parts - Glow Plug

• Replaces: Westerbeke 24353

SIE 23-1000



### Sierra Generator Parts - Anodes

Replaces: Westerbeke 11885, Kohler 260085



• Fits several models.

SIE 23-6400

Replaces: Onan 130-4434

Fits: MDKAV, MDKBG, MDKAW (Spacesaver), MDKAZ, MDKBD, MDKBE, MDKBF, MDKBD (w/ Isolated Ground), MDKBE (w/ Isolated Ground), MDKBF (w/ Isolated Ground), MDKBH, MDKBK, MDKBL, MDKBM, MDKBN, MDKBP, MDKBR, MDKBS, MDKBV, MDKBT, MDKBU

## SIE 23-6401

Replaces: Onan 130-6228 Fits: MDDCA, MDDCB, MDDCC, MDDCF, MDDCG, MDDCD, MDDCE, MDDCH, MDDCJ

SIE 23-6402

# **Sierra Generator Parts Impeller Kits**



SIE 23-3300	Replaces: Onan 132-0349
SIE 23-3301	Replaces: Westerbeke 11907
SIE 23-3303	Replaces: Kohler 229826
SIE 23-3304	Replaces: Kohler 229955
SIE 23-3305	Replaces: Westerbeke 32620
SIE 23-3306	Replaces: Westerbeke 46622
SIE 23-3307	Replaces: Westerbeke 34440
SIE 23-3308	Replaces: Kohler 352122
SIE 23-3309**	Replaces: Onan 132-0436
SIE 23-3310	Replaces: Onan 541-1519
SIE 23-3311	Replaces: Fischer Panda J009-46840, Mase 80161
SIE 23-3312	Replaces: Fischer Panda J009-1027B-1, Mase 92911
SIE 23-3313**	Replaces: Westerbeke 33104
SIE 23-3314	Replaces: Kohler 359978

\*\* Limited Quantity

### Sierra Bellows OMC/Cobra I/O



Part #	Description
SIE 18-2764	EXHAUST BELLOWS Replaces: 914036

All clutch dog Cobra models (1986-93) U-JOINT BELLOWS Replaces: 983973, 987467, 3854127 SIE 18-2765 All clutch dog Cobra models (1986-93)

## Sierra Bellows Volvo/Penta I/O



Part #	Description
SIE 18-2744	DRIVE BELLOWS KIT Replaces: 875826, 876294 (with ridge) AQ200, 250, 270, 270T, 275, 280, 280T, PT, 290 DP UNIT: 280, 290
SIE 18-2758	EXHAUST BELLOWS KIT Replaces: 875848, 876631 AQ200, 250, 270, 275, 280, 280DP, 290, 290DP
SIE 18-2765	U-JOINT BELLOWS Replaces: 3854127 For: DP-S, SX

## Sierra Gasket Kits

OMC Outdrive gasket set, 508105

SIE 18-2613 (AP-475)



Mercruiser Outdrive gasket set, 1967-1982, Replaces: 27-64818A1, 27-64818T4, 27-64818Q4

SIE 18-2614 (AP-300)

Mercruiser Outdrive gasket set, Replaces: 27-64818A3, 27-94996Q2, 27-94996T2, For: R, MR, Alpha I, Alpha Gen II (1983-Newer)

SIE 18-2619-1

## Sierra **Exhaust Tubes Mercruiser I/O**



18-2746

SIE 18-2746	EXHAUST BOOT Replaces: 32-14358T, (4" Lower Tube)
SIE 18-2748	EXHAUST BOOT Replaces: 32-44348T, (4" Upper Tube)
SIE 18-2760	EXHAUST TUBE Replaces: 78458A1 (Includes 18-7314 Clamp), For: #1, Bravo I, II, III
SIE 18-2762	EXHAUST TUBE Replaces: 70981A3

## Sierra Bellows Mercruiser I/O



18-2747

Part #	Description
SIE 18-2747	U-JOINT BELLOWS Alpha 1, Gen II Replaces: 816431A1
SIE 18-2750	EXHAUST BELLOWS All #1 Units, Gen II, TRS, & Bravo I, II, III Replaces: 32734A3, 18654A1 (Includes 18-7314 Clamp)
SIE 18-2751	U-JOINT BELLOWS All #1 units with ridge (S/N 3469428 & UP) Replaces: 60932A4 (Includes 18-7316 Clamp)
SIE 18-2752	U-JOINT BELLOWS All #1 units without ridge (S/N 3443920 & BELOW) Replaces: 36223 (Includes 18-710-72-2 Clamps)
SIE 18-2753-2	SHIFT CABLE BELLOWS All #1, #2 units, Alpha, Bravo I, II, III Replaces: 74639, 74639A2 (Includes 18-7321 Clamp)
SIE 18-2756	U-JOINT BELLOWS Replaces: 86840A3, 86840A05 Fits all Bravo and Blackhawk models

18-2601-1



### Sierra

# Transom Seal Kits Mercruiser I/O

Part #	Description
SIE 18-2601-1	Replaces: 30-803097T1 R, MR, ALPHA 1 (1983-90) S/N 6225577 & UP ALPHA 1 SS (1986-89) S/N OA 545004 & UP *Greasable Gimbal Bearing
SIE 18-8205	Replaces: 30-803098T1 For: 1, R, MR, Alpha 1 with exhaust tube *Greasable Gimbal Bearing
SIE 18-8206-1	Replaces: 30-803099T1 For: Alpha 1 Gen II *Greasable Gimbal Bearing
SIE 18-8212-1	Replaces: 30-803100T1 For: All Bravos 1982 & up *Greasable Gimbal Bearing

# <u>Sierra</u> <u>Drain Plugs and Washers - Outboards</u>

	Washers - Outboards	
Part #	Description	
SIE 18-1236	Johnson/Evinrude (OMC/BRP) Drain Screw Replaces: 309243 For: 40-50 HP (1989-97) Cobra Drives	*
SIE 18-2375	Mercury/Mariner, Yamaha Drain Plug • 3/8" -16 thread Replaces: 10-14834A1, 22-67892A1 Uses Gasket 18-2945 Chrysler/Force	<b>&gt;</b> 0
SIE 18-2378	Johnson/Evinrude (OMC/BRP) Magnetic Drain Screw Drain Plug	<b>&gt;</b> 0
SIE 18-2387	Johnson/Evinrude (OMC/BRP) Drain Screw Replaces: 307551 Fits: 60-75hp 3 cylinder, 20-35hp (1985-97)	
SIE 18-4255	E-TEC Drain Screw Replaces: 307551 Allen Head	
SIE 18-2430	Mercury/Mariner Drain Screw Gasket Mercury 26-830749 For: All Verado	0
SIE 18-2945	Mercury/Mariner, Yamaha Drain Screw Gasket Replaces: 12-20260, 12-19183, 12-19183 2 Used in most lower units and sea water pumps	0
SIE 18-29451-9	As above (PKG. OF 50)	
SIE 18-4253-9	Johnson/Evinrude (OMC/BRP) Drain Screw O-Ring Replaces: 336982 Used w/18-1236 Drain Screw	0
SIE 18-4698	Mercury/Mariner, Yamaha Drain Fill Washer Replaces: 27-81987M	0
SIE 18-46981-9	As above (PKG. OF 50)	
SIE 18-8331	Suzuki Drain Plug Gasket Replaces: 09168-10022	0

For a complete list of all available items Ask for a Sierra Catalogue



## <u>Sierra</u> <u>Drain Plugs and Washers - Sterndrives</u>

Part #	Description	
SIE 18-2244	Mercruiser Drain Plug Replaces: 10-79953A2 For: #1/R/MR/Alpha/Alpha I Gen II Both Upper And Lower Units	00
SIE 18-2375	Mercruiser Replaces: 10-14834A1, 22-67892A1 For: Alpha MR/Gen II lower units Not to be used on #1/R lower units	<b>&gt;</b> 0
SIE 18-2378	OMC Sterndrive/Cobra Magnetic Drain Screw Replaces: 318544 Fits: Cobra 2.3, 3.0, 3.8 & 5.8L (1986-92), V-6, V-4(1979 & Up), 60- 75hp 3 cyl, 40/50hp (1989-98)	<b>&gt;</b> 0
SIE 18-2387	OMC Sterndrive/Cobra Lower Unit Drain Screw Replaces: 307551 Fits: OMC V-6, V-4(1979 & Up)	Sim
SIE 18-2454	OMC Sterndrive/Cobra Drain Plug Replaces: 3854539 For: Cobra SX drives  Volvo SX Drives Replaces: 3854539	
SIE 18-4226	Mercruiser Drain Plug Replaces: 22-806608A1	
SIE 18-2945	OMC Sterndrive Replaces: 307552	
SIE 18-29451-9	As above (PKG. OF 50)	
SIE 18-4248	OMC Sterndrive/Cobra Drain Fill Washer (Plastic) Replaces: 311598	0
SIE 18-42481-9	As above (PKG. OF 50)	
SIE 18-4253-9	OMC Sterndrive/Cobra Drain Screw O-Ring Replaces: 336982 Used w/18-1236 Drain Screw	0



# Sierra Impellers - Outboards

SIE 18-3007	Mercury/Mariner 47-89983, 47-899831
SIE 18-3017	Mercury/Mariner 47-89984, 47-89984T4, 47-30221, 47-65960
SIE 18-3039	Mercury/Mariner .456", 47-89981
SIE 18-3050	Johnson/Evinrude 386084
SIF 18-3056	Mercury/Mariner 47-43026-2 47-43026T2

# <u>Sierra</u> Bearings





Part #	Description
SIE 18-2100	HEAVY DUTY GIMBAL BEARING Replaces: 30-60794A4, (Link Belt) Fits: Mercruiser- 120HP / 140HP (2791957-6225576) ( With Gimbal Trim Sender), 165HP (2763442 & Up), 225S (3856268-4200499), 228HP (4782330 & Up), 233HP (4200500 & Up), 250HP (4791300 & Up)
SIE 18-2100K	SEAL & GIMBAL BEARING KIT Fits: 1, R, MR and Alpha (1974-97)
SIE 18-21001	GIMBAL BEARING Replaces: 30-879194A02 Fits: MC-1, R, MR and Alpha(1974-97), Gen II(1991-97), Bravo I/II/III (1988-95)
SIE 18-21005	GIMBAL BEARING Replaces: 30-862540A3 Fits:All Bravos, Alpha One Gen II (1998-up)
SIE 18-21006	GIMBAL BEARING Replaces: 30-879194A01 Fits: Gen II (1998-10), Bravo I/II/III & X/XR/XZ (1996-10)

# Sierra U-Joints

18-2104



Part #	Description
SIE 18-2104	Heavy Duty Replaces: 75832A2, 75832T Includes both straight and 90° grease fitting. (Rockwell) Fits all #1 and ALPHA I Units S/N 1684188-B418818. Also TR/TRS and II SSM.
SIE 18-2174	Heavy Duty Replaces: 75832A3, 758321, 75832T1 Includes both straight and 90° grease fitting. (Rockwell) Fits ALPHA I Units S/N B418819 & above. Also fits ALPHA I SS & BRAVO
SIE 18-6406	Replaces: 865496A01, 865493A01 GKN new style with external clips. Fits: Alpha I Gen II 0L949779 & UP, Bravo 0M111208 & UP For: Mercruiser Vazer

# Sierra Starters



Part #	Description
SIE 18-5903	Replaces: 841066-4 (No Core)Clockwise Bottom mount two bolt pattern for standard rotation FORD engines.
SIE 18-5906	Replaces: 840808, 872241 Fits: Volvo Penta 4 Cylinder and 6 Cylinder Gas Engines
SIE 18-5907	(Heavy Duty) (No Core) Clockwise Top Mount Rear Entry Starter Will not replace non-starter mounted solenoids. For Opposite Rotation GM & Ford Engines. Replaces: 42090
SIE 18-5908	(Heavy Duty) (No Core) Counter-Clockwise Top Mount Rear Entry Starter For Standard Rotation GM & Ford Engines. Replaces: 42091
SIE 18-5910	(Heavy-Duty) (No Core) Small block GM V-6 & V-8 Engine with 14 1/4" flywheel and bottom mount, offset bolt pattern. For standard rotation engines. Clockwise. 1986-1992 - V-6, V-8 (GM) and 1990-1993 OMC King Cobra Replaces: 984456, 986505
SIE 18-5911	Replaces: 834893, 855326 (Heavy-Duty) (No Core) Clockwise For GM engines, bottom mount straight across bolt pattern. Standard rotation
SIE 18-5913-1	Replaces: 3856004, 3860764, 3587625, 3853982, 3854751, 3885317 (Clockwise) Delco permanent magnet gear reduction 2 bolt starter. 12V - 11 Tooth Offset Bolt Pattern For: Late model GM 14" Flywheel
SIE 18-5917	Starter
SIE 18-5919-1	Replaces: 3856003 Permanent magnet I/O starter Fits: Chevy Engines with 14" flywheels Straight across bolt pattern
SIE 18-5920	Replaces: 3854190 Permanent magnet starter
SIE 18-6275-1	Inboard • Permanent Magnet Gear Reduction Starter • 2 Long Bolt Offset Pattern • CW Rotation • Use w/ Late Model 3.0L Engines with 14" Flywheel

## Sierra Starter Rope

■ 200' rolls

Sold by the foot

 SIE 18-4911
 5/32", Replaces OMC 322236

 SIE 18-4913
 3/16", Replaces OMC 0772578

 SIE 18-4914
 1/8", Replaces OMC 0772579



For a complete list of all available items Ask for a Sierra Catalogue



# Sierra Alternators



Part #	Description
SIE 18-5882	Replaces: 3884950 75A, 12V, Serpentine 3.0L, 4.3L, 5.0L, 5.7L, 8.1L (2007 - Current)
SIE 18-5939	Replaces: 872235, 3803260, 873770, Valeo: A13N234, 2541451 14V/60 AMP: AQ115, AQ120B, AQ125, AQ130, AQ140, AQ145, AQ165, AQ170, AQ200, AQ225, AQ256, AQ260, AQ280, AQ290, BB115, BB145, MB20; Diesel Engine
SIE 18-5956	(1-Wire) (No Core) (68 AMP) Single wire connection fits Mercruiser and many other applications. Equipped with fan and drive pulley. Replaces: 69729
SIE 18-5957	(3-Wire) (No Core) (68 AMP) Replaces Mando, Motorola and original equipment Delco. Uses same electrical connections and mounting method. Equipped with fan and drive pulley. Replaces: 78477, 78403A2, 92497A3.
SIE 18-5960	Serpentine Pulley • 65 Amp, Replaces: 807653T
SIE 18-5965	65 Amp, Replaces: 817119A1, 817119A4, 805884T
SIE 18-5966	Single Groove Pulley • 55 Amp Replaces: 817119A4, 12449A1 • SAE J1171
SIE 18-5967	Replaces: 3860769 (3-Wire) (68 AMP) (No Core) Replaces Mando, Motorola and Original Equipment Delco.
SIE 18-5982	Replaces: Cummins 216040, 3604234RX Fits: Cummins Diesel Marine
SIE 18-6293	Replaces: 862031T • SAE J1171 7SI/70 amp, Hinge Mount, Serpentine Pulley 2.44" Diameter
SIE 18-6298	Replaces: 863077T • SAE J1171 7SI/70 amp, Hinge Mount, Serpentine Pulley 1.97" Diameter
SIE 18-6454	Replaces: 875285T1, 881248T02, 889955T01 5S/I 50 amp Spool mount, Fits 2.5L
SIE 18-6841	Replaces: 983424, 836, 247 For: 37-63A Marine Applications
SIE 18-6842	Replaces: Mercruiser 56045, 59755, 69729 For: 37-63A Marine Applications
SIE 18-6846	Replaces: Volvo Penta 1502272, 3803270-2, 5001677, 845940, 72021, 872022, 872757, 873635, 873757, 873757-9, 873771,
SIE 18-6848	Replaces: Volvo 3862612, 2656299, Valeo A0002655299 Fits: 2000 and on Volvo Penta Models w/ 4.3, 5.0, and 5.7 GM engines
SIE 18-6952	Replaces: Cummins 214169, 3603853RX, 3920618, 10459244, Delco 1100077, 93, 1100211, 74, 1105474, 75, 76
SIE 18-6953*	Replaces: Volvo, Fits: Diesel D3 Models
SIE 18-6955	Replaces: Caterpillar 3001117, 10-258, Prestolite 110-258, 110-258A, Volvo 849748-9

Fits: Volvo Diesel 6 cylinder models

\* Request Item

# <u>Sierra</u> Johnson/Evinrude Tune-Up Kits I/O's

E 88

18-5002

Part #	Description
SIE 18-5002	Replaces: 172523 18-5205 (581419) Condenser 2 ea 18-5156 (580148) Contact Set 2 ea
SIE 18-5003	Replaces: 172806 18-5205 (581419) Condenser 2 ea 18-5141 (581207) Contact Set 2 ea
SIE 18-5006	Replaces: 172522 18-5199 (580321) Condenser 2 ea 18-5156 (580148) Contact Set 2 ea

# Sierra

# Volvo/Penta Tune-Up Kits I/O's

Part #	Description
SIE 18-5256*	18-5314 (835304) Contact Set 18-5338 (835308-8) Condenser 18-5411 (841243) Rotor
SIE 18-5260	18-5306 (240149) Contact Set 18-5342 (243653) Condenser 18-5428 (243903) Rotor Bosch 4 cyl.
SIE 18-5266	Fits: Flame Thrower Distributors 18-5481, 18-5482, 18-5483, 18-5477, 18-5478, 18-5479
SIE 18-5284	18-5305 (243799, 1306169, 243460) Contact Set 18-5349 (841262) Condenser 18-5428 (243903) Rotor

## \* Request Item

## Sierra

# Mercruiser Tune-Up Kits I/O's

Part #	Description
SIE 18-5246	Replaces: 898253T28 For: Late model V-6, 4.3L (Alpha/Bravo)
SIE 18-5247	Replaces: 898253T29 For: Late model V-8 (Alpha/Bravo 350 Mag, 5.0L, & MX 6.2L)
SIE 18-5250	Replaces: 34235T1, 34235Q1 18-5311 (34235) Contact Set 18-5345 (33662) Condenser 18-5418 (58217) Rotor Delco 4 & 6 cyl.
SIE 18-5251	18-5314 (391-5090) Contact Set 18-5338 (391-5092) Condenser 18-5404-1 (391-7057) Rotor Mallory 8 cyl. Tall Cap
SIE 18-5254	18-5317 (64850, 87-71831) Contact Set 18-5346 (58034, 81-64851) Condenser 18-5420 (65864, 78016) Rotor Mercury 8 cyl.
SIE 18-5258	18-5303 (392-6325) Contact Set 18-5347 (392-6324) Condenser 18-5407 (392-6326) Rotor Prestolite 8 cyl.
SIE 18-5291	Replaces: 808483K2 GM V-8 engines w/Delco HEI-1998 and newer (except MPI engines with 555 ECM)

### Sierra

## Mercruiser Tune-Up Kits with Cap I/O's



18-5267

	-
Part #	Description
SIE 18-5268	18-5311 (34235) Contact Set 18-5345 (33662) Condenser 18-5418 (58217) Rotor 18-5385 )393-9459) Distributor Cap Delco In-Line 4 - Single Point
SIE 18-5269	18-5311 (34235) Contact Set 18-5345 (33662) Condenser 18-5418 (58217) Rotor 18-5386 (33765) Distributor Cap Delco In-Line 6 - Single Point
SIE 18-5271	18-5314 (391-5090) Contact Set 18-5338 (391-5092) Condenser 18-5404-1 (391-7057, 391-5088) Rotor 18-5376 (391-5075) Distributor Cap Mallory V-8 - Single Point - Top Terminal
SIE 18-5273	Replaces: 805759T3 / 805759Q3 18-5431 (13524A5) Rotor 18-5395 (16457A4) Distributor Cap Mercury Thunderbolt HEI - V-8
SIE 18-5274	18-5432 (13524A6) Rotor 18-5396 (13753A2, 815407A2) Distributor Cap Mercury Thunderbolt HEI - V-6
SIE 18-5275	18-5303 (392-6325) Contact Set 18-5347 (392-6324) Condenser 18-5403 (392-9089) Rotor 18-5352 (392-9766) Distributor Cap Prestolite V-8 - Single Point - Screw Cap
SIE 18-5276	18-5303 (392-6325) Contact Set 18-5347 (392-6324) Condenser 18-5403 (392-9089) Rotor 18-5353 (392-9086) Distributor Cap Prestolite V-6 - Single Point - Screw Cap
SIE 18-5277	18-5303 (392-6325) Contact Set 18-5347 (392-6324) Condenser 18-5407 (392-6326) Rotor 18-5369 (392-6318) Distributor Cap Prestolite V-8 - Single Point - Clip Cap
SIE 18-5278	Replaces: 850484T3 Delco EST - V-6
SIE 18-5280	Replaces: 811635Q2 Delco EST - In-Line 4 18-5361 (811635, T3) Distributor Cap 18-5406 (811636, 1) Rotor
SIE 18-5281	Fits: male cap v-8 flamethrower distributors
SIE 18-5282	Holley, Mercury Marine - Single Point V-8

# Sierra

# Chris-Craft Tune-Up Kits I/O's



8-5289

Part #	Description
SIE 18-5289	HI-PERFORMANCE ELECTRONIC CONVERSION KIT Fits: Most Prestolite V-8 Distributors with screw down cap
SIE 18-5290	HI-PERFORMANCE ELECTRONIC CONVERSION KIT Fits: Most Mallory YL or YD 8 cylinder Distributors with clockwise and counter clockwise rotation

## **NGK Spark Plugs**

NGK produces spark plugs for almost every application, from outboards to stern drives, from small trolling motors to highly modified V8s. Cold-rolled threads help prevent spark plugs from seizing, even in aluminum heads or salt water environments. And NGK's double-dipped zinc chromate coated metal shell makes it very corrosion resistant, even in harsh salt water environments.

NGK AR6FS	3323
NGK BCPR5EIX-11*	3306
NGK BKR6E	6962
NGK BKR6EKU	6993
NGK BKR7EKU	5881
NGK BKR7ES-11	4952-2387
NGK BPMR7A-SOLID	6703
NGK BPR5ES	7522
NGK BPR6EFS	3623-3534
NGK BPR6ES	7922
NGK BPR6FS	2623
NGK BPR6HS	7022-1176
NGK BPR6HS-10	2633
NGK BPR7HS	5032
NGK BPR7HS-10	1092
NGK BPZ8H-N-10	4495
NGK BPZ8HS-10	3133
NGK BPZ8HS-15	3180
NGK BP8H-N-10	4838
NGK BP8HS-10	3823
NGK BP8HS-15	6729
NGK BR6ES	5371
NGK BR6FS	4323
NGK BR6HS	3922-4065
NGK BR6HS-10	1090
NGK BR6S	3522-1294
NGK BR7HS	3977
NGK BR7HS-10	6088
NGK BR8EIX-SOLID*	6747
NGK BR8ES	5422-5522
NGK BR8ES-SOLID	6065
NGK BR8HS	4035
NGK BR8HS-10	2257
NGK BR9ES	5822
NGK BR9ES-SOLID	3277
NGK BR9HS	7059
NGK BR9HS-10	4551
NGK BUHX	2522
NGK BUHXW-1**	5526-5780
NGK BUZHW**	2147
NGK BUZ8H	7447
NGK BU8H	6431
NGK BZ7HS-10	3579
NGK B6HS**	4610
NGK B7HS	5210
NGK B7S	3710-3662
NGK B8HS**	5610
NGK CR4HSA	2430
NGK CR5EH-9	6689
NGK CR6HSA	2983

NOK OBSER	0055
NGK CR9EB	6955
NGK DCPR6E	3481
NGK DCPR7E	3932
NGK DCPR8E	4339
NGK DPR6EA-9	3685
NGK DPR6EB-9	3108
NGK DR5HS	4623
NGK DR6HS	4823
NGK DR7EA	7839
NGK DR8EA	7162
NGK DR8ES-L	2823
NGK GR5*	7537
NGK ILFR6G-E	4212
NGK ITR4A-15	5599
NGK IZFR5G	5887
NGK IZFR5J	5899
NGK LFR4A-E	6499
NGK LFR5A-11	6376
NGK LFR6A-11	3672
NGK LKAR7C-9	93961
NGK PZFR5F-11	4363
NGK PZFR6H	7696
NGK PZTR5A-15	7862
NGK TR5	7837
NGK TR5IX	7397
NGK TR55IX	7164
NGK TR55	3951
NGK TR55GP	3403
NGK TR6	4177-6078
NGK UR4	4762
NGK UR5	2139
NGK XR5	5953
NGK YR5	5334
NGK YR55*	3475
NGK ZFR7F-11	2975
* Request Item	
** Limited Quantity	

# **AC Delco Spark Plugs**

**ACD MR43LTS** 

**ACD MR43T** 



Mercury 33-862029 Mercury 33-898264001.



# Sierra Spark Plug Wires

8mm Spiral core provides the high conductivity of metallic conductor while suppressing radio frequency interference (RFI). Terminals are factory-crimped with extra pull-strength for reliable connection. Corrosion resistant spark plug and distributor terminals provide maximum conductivity. Boots seal at wire and spark plug to protect connection from heat, dirt, and moisture. Silicone outer jacket & fibreglass braiding.



1 0 1		3					
Part #	Sterndrive/Inboard Description	No of Cylinders	Coil Wire	Dist. End	Spark Plug End	Coil End	Coil Dist. End
SIE 18-8800-1	Chris-Craft 181 CID	4	13	5	2	9	5
SIE 18-8801-1	Volvo Penta 876532-3	6	13	5	2	9	5
SIE 18-8802-1	Volvo Penta, Chris-Craft 350 CID	8	13	5	1	9	5
SIE 18-8803-2	Volvo Penta 876533-1	8	13	5	1	9	5
SIE 18-8804-1	Mercruiser 84-813720A2, 84-813720A3, 84-813720A4, 84-816608Q61, 84-816761A4, 84-816761Q3, 84-816761Q4	8	12	6	1	10	6
SIE 18-8806-1	OMC/OMC Cobra 5L 8 cyl 89-90, 5.8L 8 cyl 89-90	8	13	5	1	9	5
SIE 18-8807-1	OMC 2.3L 4 cyl 87-90	4	13	5	2	9	5
SIE 18-8808-2	Mercruiser 84-813720A6, 84-816761Q6	4	13	5	3	9	5
SIE 18-8809-1	Mercruiser 84-813720A8, 84-816761Q8 L6 84-816761A8, 84-816761Q8 L6	6	13	5	1	9	5
SIE 18-8810-1	OMC Sterndrive/Cobra 503751	6	13	6	1	10	6
SIE 18-8811-1	Mercruiser 84-813720A13, 84-816761Q13	4	12	7	3	7	7
SIE 18-8813-1	Volvo Penta 875571-2	4	20	9	14	13	13
SIE 18-8820-1	Pleasurecraft 5.0/5.7L Delco EST	8	14	4	1	6	4
SIE 18-8821-1	Mercruiser 84-813720A3, 84-816761Q3, 84-813720A4, 84-816761Q4, 84-816761A4, 84-816761Q4	8	12	6	1	5	6
SIE 18-8823-1	Chris-Craft 350 CID (Mallory side)	8	12/17	9	1	11	5
SIE 18-8824-1	84816608Q78 Mercury Marine	8	14	4	1	6	4
SIE 18-8828-1	Mercruiser 5.0L MPI Alpha 8 cyl 01 & up	8	21	17	1	8	8
SIE 18-8832-1	Mercruiser 84-816608K68	8	9	4	1	4	4
SIE 18-8833-1	Marine Power 3.0L 8cyl 1993 & up Mercruiser 3.0LX 1991-1997	4	9	4	1	4	4
SIE 18-8836-1	Mercruiser 84-816608Q71	8	16	4	1	4	4
SIE 18-8842-1	503753 Evinrude Johnson OMC BRP	8	9	5	3	5	5



Part #	Outboard Description	No of Wires	Dist. End	Spark Plug End
SIE 18-8816-1	Johnson/Evinrude	1	4	4
SIE 18-8818-1	Johnson/Evinrude (OMC) 582365	1	4	4
SIE 18-8839-1	Replaces OEM #5005805	4	4	6



### Sierra Spark Plug Wire Kit

Kit includes a 25' roll of 7mm Hypalon ignition wire with a metallic core and a assortment of three types of end fittings for outboard motors.

SIE 18-5225

### Sierra Hypalon Spark Plug Wire

100' spool

SIE 18-5226



### **CDI Multimeter**

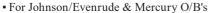
- Auto-ranging
- DC & AC volts range: 0.0001 to 1000 volts
- Diode
- Continuity beeper
- Milli and micro ampere (400mA MAX)
- Amps (10 amps MAX)
- Ohms
- Temperature
- Auto shutdown
- Back lighted display
- 511-9773-NL DVA Adapter

Includes storage case, test leads and manual.

CDI 511-60A



Allows connection to DVA Adapter/ Meter to coils and switch cylinders while engine is cranking, idling or running at wide open throttle. It is also used to check trigger and stator voltages.



CDI 511-9776\*

\* Request Item

### **Sierra Timing Light**

- Replaces Mercury Marine 91-99379
- Powered by two "D" cell batteries (not included)



# -99379 eries

### **CDI Piercing Probe Set**

Set contains 1 red and 1 black test probe. Fully insulated probes have a spring loaded clamp with a tiny stainless steel pin that self centres and punctures the insulation.



CDI 511-9770

## **CDI Peak Reading Adapter**

DVA adapter uses your meters test leads
 CDI 511-9773NL



### **CDI Pin Tool Set**

Set contains 1 each of: 553-2697, Insertion tool 533-2698, Pin Removal tool 553-2699, Socket Removal tool





### **CDI Neon Spark Tester 1 Cylinder**

Sealed spark tester can be used inline to the spark plug while the engine is running or it can be connected to engine ground for cranking speed tests.

CDI 511-9764



### **CDI Spark Tester**

- Spark tester can be used to test from 1 to 8 cylinders
- Sealed design reduces the possibility of fire

CDI 511-9766



► Also See

Sierra Tools pg 701-702

For a complete list of all available items Ask for a CDI Catalogue



# **Seloc by Sierra Marine Manuals**

The only marine tune-up and repair manuals with easy to understand step-by-step illustrated procedures for the complete dismantling, repair and assembling of marine power plants. Seloc manuals include Skill Level Ratings (1 - 4 wrenches) based upon the degree of difficulty



along with Special Tool icons where an OEM or electronic testing tool is required to perform the specified procedure. Comprehensive and authoritative.

Chrysler Outboards		
SEL 18-01000**	1962-1984 Chrysler Outboard Covers all engines 3.5-150 Hp, 1 to 4-cylinder, 2-stroke models	
	Honda Outboards	
SEL 18-01200	1978-01 Covers all 2 - 130 Hp, 1 to 4-cylinder, 4-stroke models	
SEL 18-01202	2002-08 Covers all 2 - 225 Hp, 1 to 4-cylinder & V6, including jetdrives	
	Johnson/Evinrude Outboards	
SEL 18-01301	Johnson/Evinrude O/B - 1958-72 1 - 2 Cyl 1.5 - 125 Hp, 1-3 cylinder and V4, 2-stroke models	
SEL 18-01302	1971-1989 Covers all 1.25-60 Hp, 1 and 2-cylinder, 2-stroke models	
SEL 18-01308	1973-91 Covers all 60-235 Hp, 3-cylinder, V4 and V6, 2-stroke models	
SEL 18-01311	1992-2001 Covers all 65-300 Hp, V4, V6, and V8 engines. Includes Jet Drives	
SEL 18-01312	1.25HP-70HP 2 and 4 stroke 90-2001	
SEL 18-01313	40-250 Hp All 2-stroke fuel Injected	
SEL 18-01314	2.5 - 250 HP 2-stroke and 4-stroke	
	Mercury Outboards	
SEL 18-01404	1965-1989 Covers all 2-40 Hp, 1 and 2-cylinder, 2-stroke models	
SEL 18-01406	1965-1989 Covers all 40-115 Hp, 3 and 4-cylinder, 2-stroke models	
SEL 18-01408	1965-1989 Covers all 90-300 Hp, in-line 6 and V6, 2-stroke models, including fuel injected units	
	Mariner Outboards	
SEL 18-01400	1977-1989 Covers all 2-60 Hp, 1 and 2-cylinder, 2-stroke models	
SEL 18-01402	1977-1989 Covers all 3 and 4-cylinder, in-line 6 & V6, 2-stroke, including fuel injected units.	
	Mercury/Mariner Outboards	
SEL 18-01416	1990-2000 Covers all 2-250 Hp, 1 to 4-cylinder, V6, 2-stroke models; includes Fuel Injectionand Jet Drives	
SEL 18-01418	2001-05 2.5-250 Hp All 2-stroke models; includes fuel injection and Jet drives	
SEL 18-01422	2005-10 2.5-300 Hp All 4-stroke models; includes  Jet drives	
	Force Outboards	
SEL 18-01101	1962-1999 Chrysler/Force Outboard Covers all 3 -150 Hp, 1 to 5-cylinder, 2-stroke models, including L Drives	
	Nissan/Tohatsu Outboards	
SEL 18-01500	92-2009 2 & 4-stroke models	

	Suzuki Outboards
SEL 18-01600	1985-99 Covers all 2-225 Hp, 1 to 3-cylinder, V4 and V6, 2-stroke models; includes Fuel Injection & Jet Drives
SEL 18-01602	1996-07 2-300 Hp, 1 to 4-cylinder and V6, 4-stroke includes fuel injection and jet drives.
	Yamaha Outboards
SEL 18-01701	1984-1996 Covers all 2 -250 hp 1-4 Cylinder, V4 and V6 Models 2 and 4 Stroke Models, including Jet Drives
SEL 18-01703	1997-2003 Covers all 2 -250 hp 1-4 Cylinder, V4 and V6 Models 2 Stroke Models, including Jet Drives
SEL 18-01705	1995-04 Yamaha/Mercury O/B 4-stroke
SEL 18-01707	2005-10, 2.5 - 350 hp 4-stroke including Jet Drives
	Mercruiser Stern Drive
SEL 18-03200	1964-1991 Covers Type 1, Alpha/MR and Bravo I and II units powered by Ford and GM 4-cylinder, in-line 6, V6 and V8 engines
SEL 18-03206	1992 - 2000 Covers all engines and drive units, including transmission Includes carburettor and fuel injected engines
SEL 18-03208	2001-13 All engines and drive units, including Velvet and ZF/Hurth transmissions. Includes carburetted and fuel injected engines
	OMC Stern Drive
SEL 18-03400	1964 - 1986 Covers stern drive units powered by GM 4-cylinder, V6 and V8 engines
SEL 18-03404	1986-1998 Covers all Cobra, King Cobra and Cobra "SX" stern drive units powered by Ford and GM 4-cylinder, V6 and V8 engines. Includes carburettor and fuel injected engines.
	Volvo Stern Drive
SEL 18-03600	1968-1991 Covers all Single (SP) and Duo Prop (DP) models powered by Ford, GM or Volvo 4-cylinder, V6 and V8 engines
SEL 18-03602	1992-1993 Covers all Single (SP) and Duo Prop (DP) models powered by Volvo 4 cylinder engines
SEL 18-03606	1992-2003 Covers all Gas engine models powered by Ford and GM and includes all drive systems.
SEL 18-03608	2003-2012 all gasoline engine models and sterndrives
	Jet Drives and PWC
SEL 18-09000*	1988-91 Covers all models of Sea-Doo and Bombardier personal watercraft
SEL 18-09200	Kawasaki 1973-91 Covers all 300 to 650 Series personal watercraft
SEL 18-09202	Kawasaki 1992-97 Covers all 550 to 1100 Series personal watercraft
SEL 18-09600	Yamaha 1987-91 Covers all models of Yamaha personal watercraft
SEL 18-09600 SEL 18-09602*	
	personal watercraft  Yamaha 1992 - 97 Covers all Aqua-Jet, Faze II, Fazer, Jet-n-Cat, Scram-Jet, Tide Rider, Super Jet, Wave Jammer, Wave Runner, Wet Jet and other

<sup>\*</sup> Request Item

<sup>\*\*</sup> Limited Quantity

### **Silent Running Sound Proofing**

SR 1000 is a high performance coating specifically designed for marine applications to eliminate unwanted sound and vibration. SR 1000 works by converting noise energy and vibrations into a low-grade heat, which is then dissipated throughout the applied surface.



- Water-based, non toxic and VOC free cleans up with water
- Designed as a "permanent" coating excellent adhesion to all metal, fibreglass, wood and most plastic surfaces
- Adhesion is not affected by harsh cold or extreme heat withstands temperatures from -30°F up to 300°F
- Dries to a hard surface and retains excellent elongation will not chip or crack with any expanding, flexing or bending
- Cures virtually waterproof extremely resistant to gas, oil and most chemicals
- Non flammable self-extinguishing
- Applies faster and easier and penetrates where other traditional methods of dampening cannot

SIL SR1000-1QT Quart
SIL SR1000-1G Gallon
SIL SR1000-5G 5 gallon

### **Robco Thermofab Millboard**

Thermofab is a proven, high performance, high temperature alternative to asbestos. This premium quality millboard can be cut, punched, shaped and wet-molded.

Part #	Sheet Size	Thickness	Temp. Limit
ROB BRD700018	40" x 40"	3/16"	999° C
ROB BRD700025	40" x 40"	1/4"	999° C

### Soundown Noise Reduction Products

Soundown manufactures noise control materials for a wide range of fields including the marine industry. They offer a wide variety of product, of which we only stock a few sku's, in various thicknesses, weights, and surface finishes to suit your customer's needs. Ask our sales staff for assistance.



Noise barrier sheets. 10-35 dB noise reduction. 1" and 1-1/4" thick barrier consisting of a layer of fire retardant foam with a 1 mil reflective, easy to clean, chrome polyester facing and a layer of 1 lb./sq.ft. lead substitute. Use for larger gasoline and all diesel engines for maximum quieting. Use a double layer for severe applications (up to 50 dB noise reduction). Do not use in areas where temperature exceeds 250°F.

Part #	Size	Thickness
SOU 54"x32"x1"	54" x 32"	1" w/facing
SOU 54x72x1-1/4F	54" x 72"	1-1/4" w/facing

Perforated aluminium sheets. Ideal as a protective and cosmetic covering for insulation. Oven cured white epoxy polyester hybrid coating offers excellent abrasion and chemical resistance.

### Standard

SOU HFPA1 Pattern #1-36% open area 4' x 8'
SOU HFPA2 Pattern #2-25% open area 4' x 8'

### QuieTech

QuieTech is a wet laid acoustic nonwoven fabric made of cellulose and glass fibers bonded firmly to the perforated panel. It is very homogeneous in weight and thickness.

SOU HEPA1B	Pattern #1-36% w/Quie lech 4' x 8'
SOU HFPA2B	Pattern #2-25% w/QuieTech 4' x 8'
Accessories:	
SOU HPA25K	2-1/2" aluminum insulated pin & keeper
SOU HPA45K	4-1/2" aluminum insulated pin & keeper
SOU HWA	Aluminum pin keeper only
SOU HW50	S/S washer 1-1/4" OD x 3/16" ID
SOU HPAD	Cap only for pin & keeper

Mylar tape is a 2" wide self adhering product for finishing sound barrier installations. The SCRIM version has the same texture as the faced sound barrier for a professional looking finish.

 SOU HTA20S
 2" x 108' mylar

 SOU HTA20L
 2" x 216' mylar

 SOU HTA20SC
 2" x 125' SCRIM mylar



### Soundown Noise Reduction EcoDamp

Soundown's EcoDamp is a self-adhesive, constrained-layer damper for noise reduction on light structure and panels. EcoDamp also is used as an acoustic barrier to stop noise leakage from pipe or cable penetration points, as it is highly flexible and easily formed to create a seal.

- Viscoelastic polymer and an aluminum contraining layer
- Non-foil side has an aggressive pressure sensitive adhesive backing

SOU DT12P 1/8X54"

## Western Pacific Trading Fibreglass Muffler Tape

- Constructed from continuous filament glass fibre yarns
- Temperature limit of 750°F.
- Comes with 10' of stainless steel locking wire

WPT 20015 1/8" x 2" x 25' WPT 20017 1/16" x 3" x 25' WPT 20028 1/8" x 3" x 25'



Same high quality tape as above but with a foil back to increase the temperature rating to 950°F.

WPT 20026 1/16" x 3" x 25'

### Western Pacific Foilback Thermofab Wrap

- Hotshield fibreglass muffler/manifold wrap
- Includes a 10' roll of stainless locking wire
- Continuous operation to 950°F
- Sold in rolls

**WPT 20009** 1/8" x 2" x 100' **WPT 20010** 1/16" x 3" x 100'



### **Robco Thermofab Tape**

Thermofab Tape is a high performance alternative to asbestos in virtually all hot-work and insulation/energy conservation applications. Constructed from continuous filament glass fibre yarn.



- Continuous operation from sub-zero temperatures to 538°C (1000° F)
- Non-flammable will not burn or smoulder
- Resists organic solvents and most acids and alkalies
- Soft and flexible
- Will not support mold or mildew
- Non-health hazardous

ROB 1/16X2" GW150	1/16" x 2", sold per foot
ROB 1/16X3" GW150	1/16" x 3", sold per foot
ROB 1/8X2" GW300	1/8" x 2", sold per foot
ROB 1/8X3" GW300	1/8" x 3", sold per foot
ROB TAPGW150200	1/16" x 2", 100' reel
ROB TAPGW150300	1/16" x 3", 100' reel
ROB TAPGW300200	1/8" x 2", 100' reel
ROB TAPGW300300	1/8" x 3", 100' reel
ROB IAPGW300300	1/8" x 3", 100" reel



Installation: Secure with wire or plastic strap. Do not use coatings over Thermofab as they will severely affect performance and can contribute to fire hazard. Sold in 100' rolls.

### **Robco Thermofab Rope Lagging**

Thermofab is a proven, high performance, high temperature alternative to asbestos.

- Continuous operation to 1000°F
- Non-health hazardous
- Sold in rolls

ROB ROP078F050 1/2" x 100' ROB ROP078F075 3/4" x 100' ROB ROP078F100 1" x 100'



### **Western Pacific Trading Flax Packing**

- Standard replacement product for stuffing boxes
- Braided roving impregnated with lubricant
- Sold clam packed in 2 foot lengths or bulk in 1 & 5lb boxes
- Temp. limit: 266F°, PSI limit: 150, FPM limit: 1900

### **Packaged**

WPT 10001	2' x 1/8"
WPT 10002	2' x 3/16"
WPT 10003	2' x 1/4"
WPT 10004	2' x 5/16"
WPT 10005	2' x 3/8"
WPT 10006	2' x 7/16"
WPT 10007	2' x 1/2"
WPT 10008	2' x 5/8"

### Bulk

1 lb x 1/8" (103.4')
1 lb x 3/16" (37.2')
1 lb x 1/4" (25.9')
1 lb x 5/16" (14.5')
1 lb x 3/8" (9.3')
1 lb x 7/16" (7.7')
1 lb x 1/2" (6.5')
1 lb x 5/8" (3.6')

WPT 10070	5 lb x 1/4" (129.3')
WPT 10071	5 lb x 5/16" (72.7')
WPT 10072	5 lb x 3/8" (46.5')
WPT 10073	5 lb x 7/16" (38.5')
WPT 10074	5 lb x 1/2" (32.3')
WPT 10075	5 lb x 5/8" (18.2')
WPT 10076	5 lb x 3/4" (11.6')

WPT 10090	10 lb x 9/16" (47.5')
WPT 10084	10 lb x 3/4" (23.2')
WPT 10085	10 lb x 7/8" (19.2')
WPT 10086	10 lb x 1" (14.9')
WPT 10087	10 lb x 1-1/8" (11.9')
WPT 10088	10 lb x 1-1/4" (9.1')





### Western Pacific Trading Synthetic Flax Packing

- Braided synthetic yarn impregnated with Teflon lubricant
- Sold clam packed in 2 foot lengths or bulk in 1lb boxes
- Temp. limit: 536F°, PSI limit: 500, FPM limit: 1900

### **Packaged**

WPT 10030	2' x 1/8"
WPT 10031	2' x 3/16"
WPT 10032	2' x 1/4"
WPT 10033	2' x 5/16"
WPT 10034	2' x 3/8"
WPT 10035	2' x 7/16"
WPT 10036	2' x 1/2"
WPT 10037	2' x 5/8"
<b>.</b>	



### **Bulk**

WPT 10120	1 lb x 1/8" (94.5')
WPT 10121	1 lb x 3/16" (34')
WPT 10122	1 lb x 1/4" (23.6')
WPT 10123	1 lb x 5/16" (13.3'
WPT 10124	1 lb x 3/8" (8.5')
WPT 10125	1 lb x 7/16" (7')
WPT 10126	1 lb x 1/2" (5.9')
WPT 10127	1 lb x 5/8" (4.3')

# Western Pacific Trading Teflon PTFE Flax Packing

- Braided roving impregnated with Teflon lubricant
- Sold clam packed in 2 foot lengths or bulk in 1lb boxes
- Temp. limit: 266F°, PSI limit: 160, FPM limit: 1900

### **Packaged**

WPT 10015	2' x 1/8"
WPT 10016	2' x 3/16"
WPT 10017	2' x 1/4"
WPT 10018	2' x 5/16"
WPT 10019	2' x 3/8"
WPT 10020	2' x 7/16"
WPT 10021	2' x 1/2"
WPT 10022	2' x 5/8"
Bulk	



WPT 10100	1 lb x 1/8" (122.6')
WPT 10101	1 lb x 3/16" (44.1')
WPT 10102	1 lb x 1/4" (30.6')
WPT 10103	1 lb x 5/16" (17.2')
WPT 10104	1 lb x 3/8" (11')
WPT 10105	1 lb x 7/16" (9.1')
WPT 10106	1 lb x 1/2" (7.7')
WPT 10107	1 lb x 5/8" (4.5')

### Western Pacific Trading Graphtex Ultra GTU

- A blend of W.L. Gore fibres and graphite fibres that are impregnated with PTFE
- This combination of fibres produces a packing that is thermal conductive, strong and very durable
- This packing will help to dissipate heat away from the stuffing box

WPT 10240	2' x 1/8"
WPT 10241	2' x 3/16"
WPT 10242	2' x 1/4"
WPT 10243	2' x 5/16"
WPT 10244	2' x 3/8"
WPT 10245	2' x 7/16"
WPT 10246	2' x 1/2"
WPT 10247	2' x 5/8"



# Western Pacific Trading SYNTEF Shaft Lubricant

Use SYNTEF packing lubricant when replacing shaft packing for reduced friction, added performance and increased packing life.

### **WPT 10150**



# Western Pacific Trading Packing Kit

Kit will pack up to a 1-1/4" (32mm) diameter shaft.

- Eliminates frequent haulouts
- Outlasts conventional packing
- No water needed to operate
- One size fits most shafts
- Increases performance
- Reduces friction

\*NOTE - The proper installation of this kit requires a package of conventional square braid shaft packing of the proper size for your stuffing box. That packing is not included in this kit.

**WPT 10146** 

# Western Pacific Trading Packing Extractors

Packing extractor tool has a flexible shaft and replaceable tips. Retail packaged.

WPT 10159 #0 tool, 7"
WPT 10160 #1 tool, 7.75"
WPT 10161 #2 tool, 11.5"
WPT 10162 #3 tool, 15.5"



### Osborne Flexible Packing Hooks

Part #	Length O.A.	Tip Dia.
OSE 1204-1	6-1/4"	1/4"
OSE 1204-2	10-5/8"	5/16"
OSE 1204-3	15"	3/8"



# **TIDESMARINE**



### **Tides Marine** SureSeal Shaft Seals

Key Features of the SureSeal include:

- ABS and Lloyds Type Approval
- Minimal scheduled maintenance
- Replaceable Lip Seal while in the water (with spare seal carrier
- No Winterization is necessary but winterization fluids will NOT harm the SureSeal
- Easy to install

### **HOUSING**

Made from fiber-reinforced composite material, the housing is strong, durable and compact. The SureSeal® is dimensionally unaffected by temperature and will not absorb water.

The integral PTFE bearing extends the operating life of the SureSeal® under normal operating conditions.

Connecting the SureSeal® to the vessel is now easier with an "articulating hose". This hose design automatically positions the SureSeal® the correct operating distance from the stern tube. No measurements are required - installation is simplified. The articulating hose reduces side loads to the SureSeal® when shaft misalignment occurs. As a result, lip seal and bearing life are extended.

### LIP SEAL REPLACEMENT

The SureSeal® design incorporates a removable front cap which improves access to the lip seal. A worn lip seal can be replaced, even while the vessel is in the water, restoring the "100% watertight" characteristic of the SureSeal®.

### INJECTION FITTING

The SureSeal water injection fitting is made from 316 stainless steel. Depending on the propeller shaft size, it comes in 3/8 or 1/2 inch sizes. A plastic cap is provided with each fitting so that if the injection hose has to be removed, the cap will restrict water flow into the vessel..

- Continuous operation from sub-zero temperatures to 538°C (1000° F)
- Non-flammable will not burn or smoulder
- Resists organic solvents and most acids and alkalies
- Soft and flexible
- Will not support mold or mildew



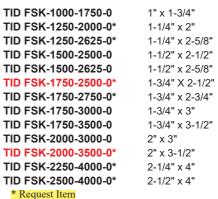
All shaft seal kits include a SureSeal, articulating hose with hose clamps and a red installation hat



### **Tides Marine** SureSeal Shaft Seal Kits

### Single Water Injection Port

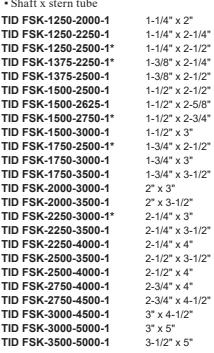
- Includes ShaftSeal, articulating hose, red installation hat and hose clamps
- Shaft x stern tube





### **Twin Water Injection Ports**

- Includes ShaftSeal, articulating hose, red installation hat and hose clamps
- Shaft x stern tube





TID FSKM-60M-102M-1 60MM x 102MM TID FSKM-75M-114M-1 75MM x 114MM TID FSKM-90M-127M-1\* 90MM x 127MM

50MM x 76MM

\* Request Item

TID FSKM-50M-76M-1\*

### **Tides Marine Shaft Lip Seals**

Nitrile Lip Seals are specifically designed for each type of sealing

application. They are the only seals which are covered by the Tides Warranty. The outer shell is made of an Aramid fiber composite which is integrally molded to a rubber hinge and a nitrile lip edge. A 316-stainless steel garter spring is incorporated to distribute loads uniformly over the propeller shaft or rudder stock.

• Includes red installation hat

### For SureSeal models ONLY. Sold after the year 2000

TID LIP SEAL F1250	1-1/4" (5729)	
TID LIP SEAL F1375	1-3/8" (3740)	100
TID LIP SEAL F2000	2" (9043)	
TID LIP SEAL F2250	2-1/4" (10432)	CHO.
TID LIP SEAL F2500	2-1/2" (10121)	10
TID LIP SEAL F2750	2-3/4" (11894)	SureSeal

### For StrongSeal models ONLY. Sold prior to the year 2000

-		U
	1-1/4" (5728)	TID LIP SEAL 1250
	1-1/2" (9041)	TID LIP SEAL 1500
	1-3/4" (15557)	TID LIP SEAL 1750
	2" (11551)	TID LIP SEAL 2000
	2-1/4" (10418)	TID LIP SEAL 2250
	2-1/2" (8497)	TID LIP SEAL 2500
Strongs	2-3/4" (9732)	TID LIP SEAL 2750
	3" (9045)	TID LIP SEAL 3000
	3-1/2" (11197)	TID LIP SEAL 3500
	4" (7199)	TID LIP SEAL 4000

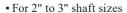
# **Tides Marine Spare Seal Carriers**

The spare lip seal carrier is a lightweight, two-piece composite housing which is clamped over the spare lip seals and onto the propeller shaft between the SureSeal and the propeller shaft coupling.



- For 1" to 1-3/4" shaft sizes
- Includes one lip seal, one single carrier and one installation hat

TID KF-1000	1"
TID KF-1125	1-1/8"
TID KF-1250-00	1-1/4"
TID KF-1375-00	1-3/8"
TID K-1500-00	1-1/2"
TID K-1750-00	1-3/4"



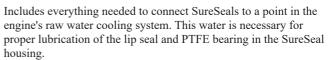
• Includes two lip seals, two single carriers and two installation hats

TID KF-2000-01	2"
TID KF-2250-00	2-1/4"
TID KF-2500-00	2-1/2"
TID KF-2750-00	2-3/4"
TID K-3000-00	3"

- For 3-1/4" and greater shaft sizes
- Includes two lip seals, one double carrier and one installation hat







• Includes hose T connector, 8' Type B hose and hose clamps

TID TK-1000-3/8218	3/8" barb x 1" hose tee
TID TK-1250-3/8218	3/8" barb x 1-1/4" hose tee
TID TK-1500-3/8218	3/8" barb x 1-1/2" hose tee
TID TK-1750-3/8218	3/8" barb x 1-3/4" hose tee
TID TK-2000-3/8218*	3/8" barb x 2" hose tee

\* Request Item

### **Tides Marine** Silicone Hose



- High grade silicone water injection hose
- 250' sold by the foot

**TID INJHOSE 0375** 3/8" **TID INJHOSE 0500** 1/2"

### **Tides Marine Clamps**



- 316-stainless steel hose clamps won't mar or tear the hose surface
- They require less force to tighten and adjust to variations in the hose diameter caused by changes in temperature and pressure
- The standard band width is 1/2"
- The entire clamp (band, screw, and housing) is manufactured from 316-stainless steel

TID CLAMP-0375 For 3/8" ID hose TID CLAMP-0500 For 1/2" ID hose





# <u>Tides Marine</u> <u>Low Profile Upper Rudder Bearings</u>



Designed to be installed on vessels where the steering system components need to be located as close to the rudder shelf as possible.

ABS and Lloyds-approved, self-aligning design which accommodates up to 10 degrees of off-axis alignment between the mounting surface (rudder shelf) and the rudder stock. As a result, it requires no shimming during installation and will not load up the rudder shaft during vessel operation.

Listed by rudder stock diameter

TID URB-LP-1500-00	1-1/2"
TID URB-LP-1750-00*	1-3/4"
TID URB-LP-2000-00	2"
TID URB-LP-2250-00	2-1/4"
TID URB-LP-2500-00	2-1/2"
TID URB-LP-3000-00*	3"

\* Request Item

# Tides Marine Type D Rudder Bearings

The Type-D rudder port is an integrated approach to rudder port installation. It is for boats constructed of FRP. It can be used for new boat construction and is also easy to use as a retrofit for replacing other types of conventional rudder ports. No tooling is required.



The Type-D is a sealed bearing consisting of a UHMW housing with a nitrile rubber lip seal. It eliminates metal-to-metal abrasion and electrolytic corrosion.

• Listed by rudder stock diameter

TID RPBH-D-1250-00*	1-1/4"
TID RPBH-D-1500-00	1-1/2"
TID RPBH-D-2000-00	2"
TID RPBH-D-2250-00*	2-1/4"
TID RPBH-D-2500-00	2-1/2"

\* Request Item

# Tides Marine Rudder Collars

Rudder Collars are for use on power boats. Machined from 304 stainless steel, each unit comes with two threaded locking screws. A third "indexed hole" (which is not threaded) is machined into each Rudder Collar and may be used as a guide to drill "dimples" in the rudder stock.

**TID RUD COLLAR-1750\*** 1-3/4" ID x 2-3/4" OD **TID RUD COLLAR-2000** 2" ID x 3" OD

\* Request Item

### <u>Tides Marine</u> Nitrile Rudder Lip Seals

Nitrile Lip Seals are specifically designed for each type of sealing application. They are the only seals



which are covered by the Tides Warranty. The outer shell is made of an Aramid fiber composite which is integrally molded to a rubber hinge and a nitrile lip edge. A 316-stainless steel garter spring is incorporated to distribute loads uniformly over the propeller shaft or rudder stock.

- Includes red installation cap
- Listed by rudder stock diameter

TID LIP SEAL R2000	2" (14783)
TID LIP SEAL R2500	2-1/2" (11814)
TID LIP SEAL R2750	2-3/4" (11023)
TID LIP SEAL R3000	3" (10901)
TID LIP SEAL R3500	3-1/2" (10914)
TID LIP SEAL R4000	4" (10900)
TID LIP SEAL R4500	4-1/2" (12269)

# Tides Marine Spare Rudder Seal Carriers

The spare lip seal carrier is a lightweight, two-piece composite housing which is clamped over the spare lip seals and onto the rudder shaft between the SureSeal and the propeller shaft coupling.

- Includes two lip seals, one double carrier and one installation hat
- · Listed by rudder stock diameter

TID KR-3500-00 3-1/2" TID KR-4000-00\* 4"

\* Request Item







# **PSS Type A Shaft Seals**

The Type A PSS Shaft Seal is a mechanical face seal. The sealing surface is created between the flat surfaces of the rotating stainless-steel rotor and the stationary carbon flange. The stationary carbon flange is attached to the front side of the bellow with hose clamps, and the back end of the bellow fits over the Stern tube and is secured with hose clamps. The stainless-steel rotor is fit on the shaft in front of the carbon flange. The stainless-steel rotor is used to compress the bellow before the rotor is secured to the shaft with set-screws. This compression (pre-load) maintains constant contact between the two flat faces of the stainless-steel rotor and carbon flange, allowing the PSS to compensate for the variable fore and aft movement due to propeller thrust. The carbon flange is over-bored to the shaft diameter allowing it to "float" around the shaft and thus compensate for most misalignment and vibration problems. The stainless-steel rotor is sealed to the shaft by two O-rings that are recessed into the bore of the collar. These O-rings rotate with the shaft and stainless-steel rotor and do not experience wear during operation.

• Temperature Limits: 5°F to 225°F (-15°C to 107°C)

Pressure Limits: 15 PSI (1 BAR)Shaft RPM Limits: 10,000 RPM

Carbon Graphite: Lapped to 4 HLB (0.000044" tolerance)

316SS / Nitronic 50: Faced to 9 Ra
Bellow Material: Molded Nitrile - PVC

### **HOW DOES IT WORK?**



- 1 Two nitrile o-rings seal the stainless steel rotor to the shaft and will not experience wear.
- 2 A primary set screw and a backup set screw (2 sets) are used to secure the stainless steel rotor to the shaft.
- A seal is created between the two flat surfaces of the carbon stator and the stainless steel rotor.
- f 4 Water is fed into the PSS Shaft Seal for cooling/lubricating the seal faces on high speed vessels.
- The stationary carbon stator is attached to the nitrile bellow, which is attached to the stern tube (shaft log).

### COMPONENTS

### Rotor

The PSS 316L stainless steel rotor is slid down the shaft and is secured to the shaft with set screws at 90° for maximum holding power. Precision tolerances are maintained by computer controlled lathes. The faces have a number 9 micro finish and are perpendicular to the bore to prevent run-out as the collar rotates. The carbon graphite stator will polish the face of the rotor during the first few minutes of operation. The stainless steel rotor should not need to be replaced under normal operating conditions.

### **Bellow**

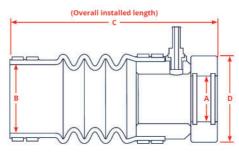
The PSS Type A Shaft Seal bellow is made from rubber (Nitrile), and has a temperature rating of -25°F to +225°F (-31°C to +107°C). Nitrile is known for its resistance to weathering. Nitrile rubber is exceptionally resistant to oils and non-polar solvents. It also offers good gas impermeability, abrasion resistance, and better thermal stability than most general purpose elastomers.

### **Carbon Stator**

The high density, resin impregnated carbon/graphite stator is a composite that is first mixed, molded and then formed under pressure. The blanks are then baked, machined and lapped. The face of our carbon is finished to a flatness of 4 helium light bands (measured .000044" of variation over entire lapped surface). The grade of carbon used in the PSS has an operating temperature over 500° Fahrenheit (+260° Celsius), and cannot melt if the seal runs dry, unlike a rubber lip seal or plastic face seal. The high density of the carbon greatly increases the longevity and wear resistance. The carbon should not need to be replaced under normal operating conditions.

### **PSS Type A Shaft Seals**

Shaft Seal Part #	A (shaft) x B (tube) C (~installed length) x D (dia.)	O-Ring Kit	Maintenance Kit
PSS 02-100-112	1" x 1-1/2" to 1-5/8" 6" x 2.375"	PSS 07-N10-0	PSS 07-100-112R
PSS 02-100-200	1" x 2" to 2-1/8" 6" x 2.375"	PSS 07-N10-0	PSS 07-100-200R
PSS 02-118-112	1-1/8" x 1-5/8" to 1-3/8" 6" x 2.375"	PSS 07-N11-8	PSS 07-118-112R
PSS 02-118-200	1-1/8" x 2" to 2-1/8" 6" x 2.375"	PSS 07-N11-8	PSS 07-118-200R
PSS 02-114-134	1-1/4" x 1-3/4" to 1-7/8" 6.625" x 2.875"	PSS 07-N11-4	PSS 07-114-134R
PSS 02-114-214	1-1/4" x 2-1/4" to 2-3/8" 6.625" x 2.875"	PSS 07-N11-4	PSS 07-114-214R
PSS 02-138-134	1-3/8" x 1-3/4" to 1-7/8" 6.625" x 2.875"	PSS 07-N13-8	PSS 07-138-134R
PSS 02-138-214	1-3/8" x 2-1/4" to 2-3/8" 6.625" x 2.875"	PSS 07-N13-8	PSS 07-138-214R
PSS 02-112-214	1-1/2" x 2-1/4" to 2-3/8" 8" x 3.75"	PSS 07-N11-2	PSS 07-112-214R
PSS 02-112-234	1-1/2" x 2-3/4" to 2-3/8" 8" x 3.75"	PSS 07-N11-2	PSS 07-112-234R
PSS 02-112-314	1-1/2" x 3-1/4" to 3-3/8" 8" x 3.75"	PSS 07-N11-2	PSS 07-112-314R
PSS 02-134-234	1-3/4" x 2-3/4" to 2-7/8" 8" x 3.75"	PSS 07-N13-4	PSS 07-134-234R
PSS 02-134-314	1-3/4" x 3-1/4" to 3-3/8" 8" x 3.75"	PSS 07-N13-4	PSS 07-134-314R
PSS 02-200-234	2" x 2-3/4" to 7/8" 8" x 3.75"	PSS 07-N20-0	PSS 07-200-234R
PSS 02-200-314	2" x 3-1/4" to 3-3/8" 8" x 3.75"	PSS 07-N20-0	PSS 07-200-314R
PSS 02-214-312	2-1/4" x 3-1/2" to 3-5/8" 8.625" x 4.2"	PSS 07-N21-4	PSS 07-214-312R*
PSS 02-214-334	2-1/4" x 3-3/4" to 3-7/8" 8.625" x 4.2"	PSS 07-N21-4	PSS 07-214-334R*
PSS 02-214-400	2-1/4" x 4" to 4-1/8" 8.625" x 4.2"	PSS 07-N21-4	PSS 07-214-400R*
PSS 02-212-312	2-1/2" x 3-1/2" to 3-5/8" 8.625" x 4.2"	PSS 07-N21-2	PSS 07-212-312R
PSS 02-212-334	2-1/2" x 3-3/4" to 3-7/8" 8.625" x 4.2"	PSS 07-N21-2	PSS 07-212-334R
PSS 02-212-400	2-1/2" x 4" to 4-1/8" 8.625" x 4.2"	PSS 07-N21-2	PSS 07-212-400R
PSS 02-300-414	3" x 4-1/4" to 4-3/8" 9.125" x 5.0"	PSS 07-N30-0	PSS 07-300-414R
PSS 02-300-434	3" x 4-3/4" to 4-7/8" 9.125" x 5.0"	PSS 07-N30-0	PSS 07-300-434R
PSS 02-312-500*	3-1/2" x 5" to 5-1/8" 9.675" x 6.0"	PSS 07-N31-2*	PSS 07-312-500R*
	30mm x 1-1/2" to 1-5/8"		
PSS 02-30M-112	6" x 2.375"	PSS 07-N30-M	PSS 07-30M-112R*
PSS 02-30M-200	30mm x 2" to 2-1/8" 6" x 2.375"	PSS 07-N30-M	PSS 07-30M-200R*





### **PSS Maintenance Kits**

As with any rubber hose below waterline, the PSS bellows must be inspected on a regular basis for any sign of wear, aging or chemical deterioration. PYI suggests preventative maintenance. The PSS bellow should be replaced in six year intervals. During bellows replacement it is recommended the o-rings & set screws in the stainless steel rotor also be replaced. Bellows may need to be more frequently inspected in an environment where non-sealed batteries emit sulfuric acid. Sulfuric acid vapor will accelerate rubber

# Includes:

- 1 Bellow
- 2 O-rings
- 5 Set screws
- 4 Hose clamps
- 1 Tube of thread lock

deterioration, as will an ozonater.

■ 1 Allen key



### \* Request Item

### **PSS O-Ring Kit**

Overtime you may find that you need to replace the o-rings inside the stainless steel rotor of your PSS Shaft Seal. This kit comes with everything you need to get the job done. Includes:

- Allen wrench
- Set screws x5
- O-rings x2
- Clamp Jackets x4
- Thread lock

### **Set Screws Tip**

Please be sure to never use the same set screw on the shaft twice. There are two set screws in each of the two holes in the stainless steel rotor. One is tightened onto the shaft and the other is tightened onto the first to lock it in place against the shaft. The set screws are made with a cup at the base that compresses into the shaft ensuring a secure grip. When re-installing the rotor please use new set screws. In the case that you do not have spare set screws, the set screws in the rotor need to be reversed so there is an unused cup being compressed onto the shaft.

### Lasdrop GEN II Shaft Seals



The GenII uses a 316 SS spring to provide pressure to the seal surfaces. Together, the spring and seal ring rotate along with the shaft, and remain secured in the Clamp/Pressure housing. Dual U-Cup seals, which also rotate with the shaft, are seated in the inside of the seal ring. Because there is no metal to metal contact, the risk of electrolysis is eliminated. The friction ring assembly is mounted with a rigid connection hose and uses a carbon graphite sealing surface, all which is incased by a durable copolymer housing. A cutlass bearing insures proper alignment to the shaft.

LAS G114-214	1-1/4" shaft x 2-1/4"
LAS G114-212	1-1/4" shaft x 2-1/2"
LAS G114-258	1-1/4" shaft x 2-5/8"
LAS G114-234	1-1/4" shaft x 2-3/4"
LAS G138-212	1-3/8" shaft x 2-1/2"
LAS G112-212	1-1/2" shaft x 2-1/2"
LAS G112-234	1-1/2" shaft x 2-3/4"
LAS G112-3	1-1/2" shaft x 3"
LAS G134-3	1-3/4" shaft x 3"
LAS G134-312	1-3/4" shaft x 3-1/2"
LAS G200-3	2" shaft x 3"
LAS G200-312	2" shaft x 3-1/2"
LAS G214-3	2-1/4" shaft x 3"
LAS G214-3-1/2	2-1/4" shaft x 3-1/2"
LAS G212-4	2-1/2" shaft x 4"
Parts:	
LAS GSK-112	1-1/2" Seal kit
LAS GSK-114	1-1/4" Seal kit
LAS GSK-134	1-3/4" Seal kit
	1-3/8" Seal kit
LAS GSK-200	2" Seal kit
LAS GSK-212	2-1/2" Seal kit
LAS GSK-214	2-1/4" Seal kit

### **Lasdrop DrySeal Shaft Seals**



Features a compact, economical lip seal that can be installed quickly and easily. The self-adjusting inner lip seal is held in place by a split-face plate and secured to a stationary durable copolymer housing. This keeps the seal in constant, low friction contact with the shaft, preventing water from passing in, or out. Incorporation of a cutlass bearing maintains proper alignment. Solid coated brass hose barbs and 316 SS hose clamps.

LAS D114-212 1-1/4" shaft x 2-1/2" (shaft seal)
LAS EX-114 1-1/4" back up seal

### Lasdrop Elite Seals



The Lasdrop Elite is a compact, lip seal designed for quick and easy installation. The lip seal, made specically for marine use, is in constant low friction contact with the propeller shaft, preventing water from passing in your vessel. As in all Lasdrop models, the Elite incorporates a water lubricated alignment bearing in the housing to keep the unit properly aligned with the shaft. There is a compartment that is secured to the housing that encompasses a back-up seal, making it changeable in the future without the need of removing the shaft or entire unit. 2nd back-up seal in compartment is available as an option.

- Split-face plate makes it easy to replace inner lip seal without the need for special installation tools
- Seal housing constructed of a durable co-polymer with built in water lubricated bearing insuring proper alignment to the shaft
- Seal Case encompassing back-up seal that rotates freely on the shaft until replacement is needed
- Utilizes Trident VHT Blue Silicone polyester reinforced hose
- Flange adapters available

# Marine Hardware Nut Style Stuffing Boxes

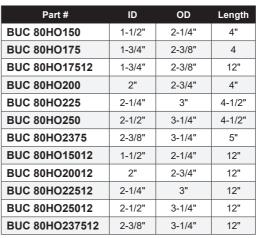
This stuffing box is cast red brass with precision-machined threads. Unit comes complete with packing nut, jam nut and braided flax packing.



Part #	Shaft Dia.	Fits Hose
MHI SPNS1.00B1.62	1"	1-5/8"
MHI SPNS1.25B2.25	1-1/4"	2-1/4"
MHI SPNS1.50B2.50	1-1/2"	2-1/2"

### **Buck Algonquin**

Heavy duty, multi-ply marine hose is designed for self-aligning packing boxes.

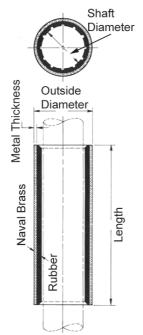


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## Johnson Naval Brass Standard Sleeve Rubber Bearings

These bearings feature a tough wear and oil resistant nitrile rubber lining that is permanently adhered to a naval brass shell. The exclusive water wedge design provides maximum lubrication for both bearing and shaft effectively separating the two with a thin film of water. This special design incorporates grooves that easily channel the flow of water effectively lowering the coefficient of friction while preventing heat build up. Outgoing water expels potentially damaging marine contaminates. Sleeve bearings are usually installed by, light-press fitting and locking in place with cone-pointed set screws. The installer should spot the shell to receive the screws.



	Shaft D	iameter	Outs Diam		Le	ngth	Me Thick	
Part #	inch	mm	inch	mm	inch	mm	inch	mm
JON ABLE	3/4	19.05	1-1/4	31.75	3	76.20	1/8	3.18
JON ACID	7/8	22.23	1-1/4	31.75	3-1/2	88.90	1/16	1.59
JON APEX	7/8	22.23	1-3/8	34.93	3-1/2	88.90	1/8	3.18
JON ATOM	7/8	22.23	1-1/2	38.10	3-1/2	88.90	1/8	3.18
JON BACK	1	25.40	1-1/4	31.75	4	101.60	3/64	1.19
JON BAIT	1	25.40	1-3/8	34.93	4	101.60	1/16	1.59
JON BALE	1	25.40	1-1/2	38.10	4	101.60	1/8	3.18
JON BAND	1	25.40	1-5/8	41.28	4	101.60	1/8	3.18
JON BASE	1	25.40	2	50.80	4	101.60	1/8	3.18
JON BEAM	1-1/8	25.58	1-1/2	38.10	41/2	114.30	1/16	1.59
JON BELT	1-1/8	28.58	1-5/8	41.28	4-1/2	114.30	1/8	3.18
JON BEND	1-1/8	28.58	1-3/4	44.45	4-1/2	114.30	1/8	3.18
JON BILL*	1-1/8	28.58	2	50.80	4-1/2	114.30	1/8	3.18
JON BIND	1-1/4	31.75	1-1/2	38.10	5	127.00	1/16	1.59
JON BIRD	1-1/4	31.75	1-3/4	44.45	5	127.00	1/8	3.18
JON BITE	1-1/4	31.75	2	50.80	5	127.00	1/8	3.18
JON BLOW	1-1/4	31.75	2-1/8	53.98	5	127.00	1/8	3.18
JON BOAT	1-3/8	34.93	1-7/8	47.63	5-1/2	13.70	1/8	3.18
JON BOLD	1-3/8	34.93	2	50.80	5-1/2	139.70	1/8	3.18
JON BOSS	1-1/2	38.10	2	50.80	6	152.40	1/8	3.18
JON BRAD	1-1/2	38.10	2-3/8	60.33	6	152.40	1/8	3.18
JON BROW	1-3/4	44.45	2-3/8	60.33	7	177.80	1/8	3.18
JON BUCK	1-3/4	44.45	2-5/8	66.68	7	177.80	1/8	3.18
JON BULB	1-7/8	47.63	2-5/8	66.68	7-1/2	190.50	1/8	3.18
JON CALL	2	50.80	2-5/8	66.68	8	203.20	1/8	3.18
JON CALM	2	50.80	3	76.20	8	203.20	1/8	3.18
JON CARE	2-1/4	57.15	2-15/16	74.61	9	228.60	3/32	2.38
JON CART	2-1/4	57.15	3-1/8	79.38	9	228.60	1/8	3.18
JON CORD	2-1/2	63.50	3-1/8	79.38	10	254.00	1/8	3.18
JON CORN	2-1/2	63.50	3-3/8	85.73	10	254.00	1/8	3.18
JON DANE	3	76.20	3-3/4	95.25	12	304.80	1/8	3.18
JON DARE	3	76.20	4	101.60	12	304.80	1/8	3.18
JON EARN	4	101.60	5	127.00	16	406.40	3/16	4.76

\* Request Item

JON 870454100

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# Johnson Phenolic Shell Rubber Sleeve Bearings

These non-metallic sleeve bearings combine outstanding toughness and corrosion resistance with less weight. The specially compounded Nitrile rubber is securely bonded to the outer shell comprised of a dense structure of engineered reinforced thermoplastic. Recommended for installations where electrolysis is a problem. Johnson Cutless Bearings weigh up to 70% less than a comparable design in brass.

Part #	Shaft Dia.	Outside Dia.	Length	Shell
JON FANNY	1-1/2"	2-3/8"	6"	1/8"
JON GLENDA	1-3/4"	2-3/8"	7"	1/8"
JON GLORIA	1-3/4"	2-5/8"	7"	1/8"
JON HAZEL	2"	2-5/8"	8"	1/8"
JON HELEN	2"	3"	8"	1/8"

# Express 3 & 4 Blade Pitch Options

**9.9BF-35hp** (with 3" Gearcase) **1** 



11", 13" pitch

**25-75hp** (with 3.5" Gearcase) **12** 



12", 13", 14" pitch

**40-150hp** (with 4.25" Gearcase)

11", 13", 15", 17", 19", 21" pitch

9",11", 13", 15", 17", 19", 21", 23" pitch

**90-300+hp** (with 4,75"+ Gearcase)

15". 17". 19". 21". 23" pitch

🙏 📆 🖼 OS Large Diameter 11", 13", 15", 17", 19", 21", 23", 25", 27" pitch

13", 15", 17", 19", 21", 23" pitch

# ADDITIONAL EXPRESS

# PROPRIETARY STAINLESS STEEL, TP1711

Formulated to meet the exacting requirements of the Express designs. 20% higher chromium content than the competition - more shine, better corrosion resistance. Almost 250% Stronger and 5X more durable than run-of-the-mill stainless steel. This new material allows Turning Point's Engineers and Designers the freedom to produce radical new designs that will help you wring the most performance out of your boat.

# VENTED PROPS FOR 40-300+HP ENGINES

(17+ Pitch Props 4.75" & 4.25" Gearcases)

- Vented Barrels for Fast Hole Shot/Low End Acceleration.
- Wake-Boarders & water skiers get up out of the water faster!



# LARGE EXHAUST PATHWAYS



- Massive exhaust flow pathways.
- 40% more exhaust flow area vs rubber hub propellers with restrictive exhaust flow path.
- More exhaust flow and less back pressure can generate more horsepower. Like headers for your boat.

## PERFORMANCE TUNED RAKE ANGLES

Higher rake angles tighten the vortex produced by the propellers, adding to boat lift and overall performance.

# TUNED PROGRESSIVE PITCH ANGLES

Accelerating and channeling water to minimize slip increases performance and fuel economy.







# **Something Better Than**

Industry leading designs & geometry that Run Faster, Pull Harder, and Handle Better.

The OEM Propeller

# **4 Blades Props** with 3 Blade Speed

Unique geometry with unprecedented hole shot, lift, handling, and 3 blade top end.

# **Precision Premium Built Propellers**

State-of-the-art casting and finishing technology from TP's new manufacturing facility.



AVOID BEING STRANDED USE TURNING POINT PROPS, MASTERGUARD® HUB KITS CARRY THE ONLY LIFETIME\* WARRANTY IN THF WORI D!

\*Lifetime warranty on hubs only, Non-Commercial Use Only - visit: tpprops.com/warranty







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# Stainless Steel Like Performance

Aluminum Hustler props built better than OEM with stainless steel geometry & designs.

# **4 Blades Props** with 3 Blade Speed

Unique geometry with unprecedented hole shot, lift, handling, and 3 blade top end.

# **Precision Premium Built Propellers**

TP's unique squeeze cast technology has strongest AL blades, no flex or voids.

# TURNING POIN PROPELLERS

A FREE DIAMETER & PITCH RECOMMENDATION TODAY CONTACT TURNING POINT SUPPORT: \$\(\circ\) 904-900-7739, EXT 1 ## TPPROPS.COM/PROPWIZARD



# Run FASTER · Pull HARDER · Handle BETTER

6-400+hp • 3 AND 4 BLADE • ALUMINUM AND STAINLESS STEEL • OUTBOARD AND STERNDRIVE PROPS AVAILABLE FOR Coleman® Evinrude® Honda® Johnson® Mariner® Mercury® MerCruiser® Nissan® OMC® Parsun® Suzuki® Tohatsu® Volvo Penta® Yamaha®

# **Hustler 3 & 4 Blade Pitch Options**

**6-20hp** (with 2.5" Gearcase)

**№** 9", 10" pitch

9.9BF-35hp (with 3" Gearcase) 🗚 🙆 🛕

11", 13" pitch

**25-75hp** (with 3.5" Gearcase) 12

12", 13", 14" pitch

**40CT-150hp** (with 4.25" Gearcase)

11", 13", 15", 17", 19", 21" pitch

9",11", 13", 15", 17", 19", 21", 23" pitch

**90CT-300+hp** (with 4.75"+ Gearcase)

**15", 17", 19", 21", 23" pitch** 

OS Large Diameter 11", 13", 15", 17", 19", 21", 23", 25", 27" pitch

13", 15", 17", 19", 21", 23" pitch

# ADDITIONAL HUSTLER

# INDUSTRY'S ONLY VENTED ALUMINUM PROPELLERS FOR 40CT-300+HP ENGINES

(17+ Pitch Props 4.75" & 4.25" Gearcases)

- Vented Barrels for Fast Hole Shot/Low End Acceleration.
- Wake-Boarders & water skiers get up out of the water faster!

# LARGE EXHAUST PATHWAYS





- Massive exhaust flow pathways.
- 40% more exhaust flow area vs rubber hub propellers with restrictive exhaust flow path.
- More exhaust flow and less back pressure can generate more horsepower. Like headers for

## PERFORMANCE TUNED PITCH & RAKE ANGLES

Accelerating and channeling water to minimize slip with more lift increases performance and fuel economy.

# PREMIUM ULTRACOAT™ POWDER COAT

Exclusive to Turning Point, this coat rivals a fine automotive finish, and is more durable than paint.





24 Hour Slurry Test: painted prop had 600% More Wear! Competitor's Process



# **BETTER THAN THE OEM PROPELLER**

\*Note: To find the correct installation kit and propeller housing, locate the HP, gearcase size, and prop shaft spline count of your outboard or sterndri

# 6-20hp

**ENGINES WITH A** 2.5" GEARCASE



200 Series Installation Kits

Premium corrosion resistant brass splines. Eliminate hub system vibration & chatter. Reduce gear shock & engine/drive damage. Reduce prop replacement cost by up to 33%

# AN INSTALLATION KIT IS REQUIRED

MasterGuard Kits include a

FOR PROPS LISTED TO THE RIGHT

Engine Brand - Various Splined Prop Shafts	٨.	Lifetime Warranty	•	
4 stroke: 8hp ('96+), 9.9hp ('95-'01), 15hp ('95+)  EVINRUDE® & JOHNSON®: (10 spline) 4 stroke ('02+): 9.9, 15hp  HONDA®: (8 spline) BF 4 Stroke: 8hp ('01+) / 9.9, 15, 20hp. Note: Does not fit 8 Classic, pin drive.  MERCURY® & MARINER®: (8 spline, lock nut) 2 stroke: 6hp, 8hp, 9.9hp, 15hp / Sea Pro/Marathon 10hp, 15hp 4 stroke: 8hp, 9.9hp ('95-'04), 15hp ('89-'06)  MERCURY® & MARINER®: (14 spline shaft made by Nissan, cotter pin) 4 stroke Bigfoot / CT ('05+): 8hp, 9.9hp / 4 stroke ('07+): 15hp, 20hp  NISSAN® & TOHATSU®: (14 spline) 2 stroke: 9.9hp ('84-'05), 12hp ('85-'88) / 15 & 18hp ('85-'05) / 4 stroke: 9.9hp, 15hp, 18hp, 20hp  PARSUN®: (8 spline) 9.9hp, 15hp  TUR 205	4	Engine Brand - Various Splined Prop Shafts	Part #	MFG.#
HONDA®: (8 spline) BF 4 Stroke: 8hp (*01+) / 9.9, 15, 20hp. Note: Does not fit 8 Classic, pin drive.  MERCURY® & MARINER®: (8 spline, lock nut) 2 stroke: 6hp, 8hp, 9.9hp, 15hp / Sea Pro/Marathon 10hp, 15hp 4 stroke: 8hp, 9.9hp (*95-*04), 15hp (*89-*06)  MERCURY® & MARINER®: (14 spline shaft made by Nissan, cotter pin) 4 stroke Bigfoot / CT (*05+): 8hp, 9.9hp / 4 stroke (*07+): 15hp, 20hp  NISSAN® & TOHATSU®: (14 spline) 2 stroke: 9.9hp (*84-*05), 12hp (*85-*88) / 15 & 18hp (*85-*05) / 4 stroke: 9.9hp, 15hp, 18hp, 20hp  PARSUN®: (8 spline) 9.9hp, 15hp  TUR 205  11100501			TUR 202	11100201
### Stroke: 8hp ('01+) / 9.9, 15, 20hp. Note: Does not fit 8 Classic, pin drive.    MERCURY® & MARINER®: (8 spline, lock nut)		EVINRUDE® & JOHNSON®: (10 spline) 4 stroke ('02+): 9.9, 15hp	TUR 206	11100601
2 stroke: 6hp, 8hp, 9.9hp, 15hp / Sea Pro/Marathón 10hp, 15hp 4 stroke: 8hp, 9.9hp ('95-'04), 15hp ('89-'06)  MERCURY® & MARINER®: (14 spline shaft made by Nissan, cotter pin) 4 stroke Bigfoot / CT ('05+): 8hp, 9.9hp / 4 stroke ('07+): 15hp, 20hp  NISSAN® & TOHATSU®: (14 spline) 2 stroke: 9.9hp ('84-'05), 12hp ('85-'88) / 15 & 18hp ('85-'05) / 4 stroke: 9.9hp, 15hp, 18hp, 20hp  PARSUN®: (8 spline) 9.9hp, 15hp  TUR 205  11100501			TUR 205	11100501
4 stroke Bigfoot / CT ('05+): 8hp, 9.9hp / 4 stroke ('07+): 15hp, 20hp / NISSAN® & TOHATSU®: (14 spline) 2 stroke: 9.9hp ('84-'05), 12hp ('85-'88) / 15 & 18hp ('85-'05) / 4 stroke: 9.9hp, 15hp, 18hp, 20hp / TUR 207   TUR 205   11100501		2 stroke: 6hp, 8hp, 9.9hp, 15hp / Sea Pro/Marathón 10hp, 15hp	TUR 201	11100101
('85-'05) / 4 stroke: 9.9hp, 15hp, 18hp, 20hp <b>PARSUN®</b> : (8 spline) 9.9hp, 15hp <b>TUR 205</b> 11100501			TUR 207	11100701
Total Common Company Comp			TUR 207	11100701
OUTHING (40 1: TV/DEAA) DT 0 1 1 00 (600 107) 451 450 (		PARSUN®: (8 spline) 9.9hp, 15hp	TUR 205	11100501
DF 4 stroke: 8A, 9.9, 9.9A, 9.9B, 15 / ('12+): 15A, 20A  Note: Does not fit DT 8C & 9.9C ('88-'97)  TUR 206  11100601			TUR 206	11100601
<b>YAMAHA®:</b> (8 spline) 2 stroke: 9.9, 15 / 4 stroke: 9.9 ('00-'07), 15, 15C, 20hp <b>TUR 205</b> 11100501		YAMAHA®: (8 spline) 2 stroke: 9.9, 15 / 4 stroke: 9.9 ('00-'07), 15, 15C, 20hp	TUR 205	11100501

# AN INSTALLATION KIT IS REQUIRED

MasterGuard Kits include a Lifetime Warranty

FOR PROPS LISTED TO THE RIGHT

₹	Engine Brand - 12 Spline Prop Shaft	Part #	MFG.#
	NISSAN® & TOHATSU®: (12 spline) 2 & 4 stroke: 8hp, 9.8hp	TUR 208	11100801
	MERCURY® & MARINER®: (12 spline, cotter pin)	TUR 208	11100801

# 9.9-35hp

**ENGINES WITH A** 3" GEARCASE



20 Series Installation Kits Premium corrosion resistant brass splines. Eliminate hub system vibration & chatter. Reduce gear shock & engine/drive damage. Reduce prop replacement cost by up to 33%

Note: Find Additional 3" Gearcase Engines on the next page.

# AN INSTALLATION KIT IS REQUIRED

MasterGuard Kits include a Lifetime Warranty

а.			
'	Engine Brand - Various Splined Prop Shafts	Part #	MFG.#
	<b>EVINRUDE® &amp; JOHNSON®:</b> (14 spline) 2 stroke: 20, 25 ('84+), 25 commercial ('93-'05), 30 ('84+), 35 ('76-'05) / E-Tec: 25hp, 30hp / H.O.: 15hp	TUR 22	11200200
	<b>FORCE®:</b> (10 spline) 25hp ('95-'98)	<b>TUR 21</b>	11200100
	<b>MERCURY® &amp; MARINER®:</b> (10 spline) 2 stroke: 18hp ('80-'85), 20hp ('86+), 25hp ('85+) 4 stroke Bigfoot / Sail: 9.9hp ('99-'05), 15hp ('99-'05)	TUR 21	11200100

# AN INSTALLATION KIT IS REQUIRED MasterGuard Kits include a

FOR PROPS LISTED TO THE RIGHT

FOR PROPS LISTED TO THE RIGHT

N	Lifetime warranty		
	Engine Brand - 10 Spline Prop Shaft	Part #	MFG.#
	HONDA®: BF 4 Stroke: 25, 30hp	<b>TUR 28</b>	11200800
	MERCURY® & MARINER®: 4 stroke ('06 & newer, cotter pin shaft): 25hp , 30hp	TUR 28	11200800
	PARSUN®: 20hp, 25hp	<b>TUR 25</b>	11200500
	NISSAN® & TOHATSU®: 2 and 4 stroke: 25hp, 30hp	<b>TUR 28</b>	11200800
,	<b>YAMAHA®:</b> 2 stroke: 20hp, 25hp, 30hp / 4 stroke: 25hp	<b>TUR 25</b>	11200500

# WANT A DIAMETER AND PITCH RECOMMENDATION?



Turning Point manufactures propellers to fit 6-300+hp Evinrude®, Force®, Honda®, Johnson®, Mariner®, Mercruiser®, Mercury®, Nissan®, OMC®, Parsun®, Suzuki® Tohatsu®, Volvo Penta®, and Yamaha® Outboards and Sterndrives. Choose one of our Lifetime Warranty MasterGuard Installation Kits to fit your engine, then choose the propeller that matches your boating requirements. There are 3 & 4 blade, left & right rotation prop models with a variety of diameter & pitch options available for almost all boat types. Our Props Run Faster, Pull Harder, and Handle Better.







©2019 Turning Point Propellers, Inc. All Rights Reserved. Evinrude, Johnson, and Cobra are registered trademarks of BRP US, Inc. Honda is a registered trademark of American Honda Motor Co., Inc. Mercury, Mariner, Force, MerCruiser, Alpha One™ and Bravo One™ are registered trademarks of Brunswick Corporation. Parsun is a registered trademark of Suzhou Parsun Power Machine Co., LT. Nissan is a registered trademark of Nissan Marine. Suzuki is a registered trademark of American Suzuki Motor Corporation. Tohatsu is a registered trademark of Tohatsu Corp. Volvo is a registered trademark of AB Volvo Penta. Yamaha® is a registered trademark of Yamaha Motor Corporation.







**Get a Free Diameter and Pitch Recommendation With Our Online Tool Prop Wizard:** 

http://tpprops.com/propwizard

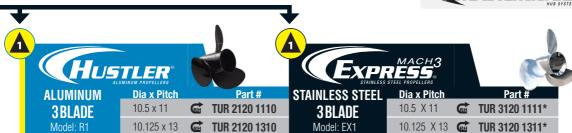
or Call Propeller Support at: +1-904-900-7739 x1

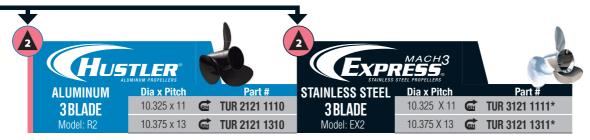
Office Hours M-F 9-5pm ET



- FROM 6-300+hp
- Reduce prop replacement cost by up to 50%. Reduce gear shock and engine/drive damage
- Minimizes propeller vibration and chatter
- Corrosion resistant brass splines and nylon
- Eliminates spun hubs
- Ends hub cracking
- Hub included in MasterGuard Installation Kits







<sup>\*</sup> Request Items



**Engine Brand - 10 Sp EVINRUDE® & JOHNSO** 4 stroke: 25hp, 30hp

DT 2 stroke ('87+): 20, 25, 25C, 30, 30C

SUZUKI®:

DF 4 stroke: 25hp, 30hp

# **BETTER THAN THE OEM PROPELLER**

11200600

\*Note: To find the correct installation kit and propeller housing, locate the HP, gearcase size, and prop shaft spline count of your outboard or sterndrive

# 20-30hp **ENGINES WITH A** 3" GEARCASE



20 Series Installation Kits

Premium corrosion resistant brass splines. Eliminate hub system vibration & chatter. Reduce gear shock & engine/drive damage Reduce prop replacement cost by up to 33%

Note: Find Additional 3" Gearcase Engines on the previous page.

# 25-75hp

**ENGINES WITH A** 3.5" GEARCASE



10 Series Installation Kits

Premium corrosion resistant brass splines. Eliminate hub system vibration & chatter. Reduce gear shock & engine/drive damage. Reduce prop replacement cost by up to 33%

# AN INSTALLATION KIT IS REQUIRED

MasterGuard Kits include a

Lifetime Warranty		
oline Prop Shaft	Part #	MFG.#
N®:	<b>TUR 26</b>	11200600

# **NOT SURE WHICH PROPELLER TO GET?**



Get a Free Diameter and Pitch Recommendation With Our Online Tool Prop Wizard: http://tpprops.com/propwizard or Call Propeller Support +1-904-900-7739 x1 Office Hours M-F 9-5pm ET

**TUR 26** 

# AN INSTALLATION KIT IS REQUIRED

MasterGuard Kits include a

FOR PROPS LISTED TO THE RIGHT

FOR PROPS LISTED TO THE RIGHT

FOR PROPS LISTED TO THE RIGHT

1	Lifetime Warranty		
	Engine Brand - 13 Spline Prop Shaft	Part #	MFG.#
	JOHNSON®: 4 stroke: 40hp, 50hp	<b>TUR 11</b>	11300101
	FORCE®: 40hp ('95-'98), 50hp ('95-'98), 70hp ('91-'95), 75hp ('96-'98)	<b>TUR 11</b>	11300101
	<b>HONDA®:</b> BF 4 stroke: 35, 40, 45, 50, 60hp, (not P60)	<b>TUR 12</b>	11300200
	MERCURY® & MARINER®:  2 stroke: 30hp ('94+) / 35, 45, 55 / 40, 50, 60 ('77+) / 70hp ('77-'83)  4 stroke: 25hp, 30hp Bigfoot / 30hp ('94-'05) / 40hp (*not Bigfoot, CT, or SeaPro 4cyl.),  45hp, 48hp(Mariner), 50hp (*not bigfoot or CT), 55hp (SeaPro), 60hp (*not Bigfoot, CT, or SeaPro) *note: see 4.25" Gearcase for Bigfoot / CT 40-60hp & 2 stroke 70hp.	TUR 11	11300101
	NISSAN® & TOHATSU®: Note: Do not use 12in diarneter propellers. 35B ('84 & older), 40C, 40D, 50A('14+), 50D, 50C, 60A, MFS60, 70A2, 60B, 70B	TUR 13	11300301
	<b>PARSUN®:</b> T30, T35, T36, T40	<b>TUR 12</b>	11300200
	<b>SUZUKI®:</b> DT 2 stroke ('89+): 35C, 40, 50, 50M, 55, 60, 65hp DF 4 stroke: 40hp, 50hp / ('10+): 40Å, 50Å, 60Å	TUR 11	11300101
	YAMAHA®: 2 stroke: 40hp to 55hp / 4 stroke: FT25 High Thrust, 30hp to 60hp	<b>TUR 12</b>	11300200

### AN INSTALLATION KIT IS REQUIRED

MasterGuard Kits include a Lifetime Warranty

	Enotino Tranantj		
4	Engine Brand - 13 Spline Prop Shaft	Part #	MFG.#
	<b>EVINRUINRUDE® &amp; JOHNSON®:</b> 2 cyl.: 40hp, 48hp / 50hp ('75-'05) / 55hp ('76-'79) / 60hp, 65hp ('80-'85) 3 cyl. (with small gearcase): 75hp ('75-'85) Sprint and Formula F ('86-'02)	TUR 12	11300200

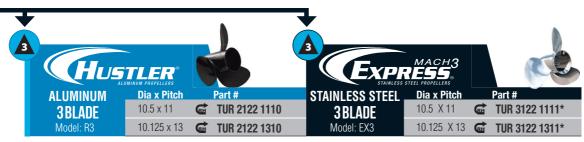
# Spun-a-Hub-a-pho-**EXTREME OR RATIONAL FEAR OF SPUN PROPELLER HUBS** TIRED OF BEING STRANDED? TURNING POINT PROPELLERS FEATURE EXCLUSIVE MASTERGUARD® HUBS WITH LIFETIME WARRANTIE **GUARANTEED TO NOT LET YOU DOWN.**

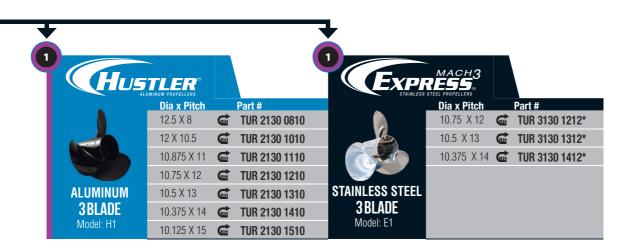
# WANT A DIAMETER AND PITCH RECOMMENDATION?



Turning Point manufactures propellers to fit 6-300+hp Evinrude®, Force®, Honda®, Johnson®, Mariner®, Mercruiser®, Mercury®, Nissan®, OMC®, Parsun®, Suzuki®, Tohatsu®, Volvo Penta®, and Yamaha® Outboards and Sterndrives. Choose one of our Lifetime Warranty MasterGuard Installation Kits to fit your engine, then choose the propeller that matches your boating requirements. There are 3 & 4 blade, left & right rotation prop models with a variety of diameter & pitch options available for almost all boat types. Our Props Run Faster, Pull Harder, and Handle Better.











<sup>\*</sup> Request Items



**WARNING:** Hustler Aluminum Propeller Housing Warning: This product can expose you to chemicals including carbon, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



**WARNING:** MasterGuard Installation Kits Warning: This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



# BETTER THAN THE OEM PROPELLER

\*Note: To find the correct installation kit and propeller housing, locate the HP, gearcase size, and prop shaft spline count of your outboard or sterndrive.



### AN INSTALLATION KIT IS REQUIRED

**T** FOR PROPS LISTED TO THE RIGHT

MasterGuard Kits include a Lifetime Warranty

40-150hp

engines with a 4.25" GEARCASE



500 Series Installation Kits

Use on engines under 200hp with aluminum or stainless steel props or engines 200hp and above with aluminum props only.

Premium corrosion resistant brass splines. Eliminate hub system vibration & chatter. Reduce gear shock & engine/drive damage. Reduce prop replacement cost by up to 50%

500 Series MasterGuard Installation Kits & Corresponding Prop Housings are Compatible with, and Upgrade Competitors' Hub & Prop Systems. Interchangeable with Mercury® Flo-Torq II®, Michigan Wheel® XHS®, Solas® Rubex™ hub kit systems. NOTE: Not applicable with Turning Point's 10, 20 and 200 Hub Kit series.

4	Engine Brand - Various Splined Prop Shafts	Part #	MFG.#
	<b>EVINRUDE® &amp; JOHNSON®:</b> (13 spline shaft) 2 cyl: 50hp ('71-'74) / 45 to 55hp commercial 3 cyl: 55, 60, 65, 70hp, 75hp with large gearcase, 65hp commercial 4 cyl: 75, 85, 88, 90, 100, 110, 115, 120 ('86-'94), 125, 135 ('73-'76), 140 ('77-'84, '86-'94) / H.O. (includes E-TEC H.O.): 60, 90, 115hp E-TEC: 40, 50, 60, 65, 75hp / 20" shaft: 90, 115hp (not pontoon series), 130hp ('09-'10)	TUR 503	11500300
	JOHNSON®: (13 spline shaft) 4 stroke ('98-'09): 60hp, 70hp	TUR 506	11500600
	FORCE®: (15 spline shaft) 75hp ('99) / 90hp to 150hp ('95+)	TUR 501	11500100
	<b>HONDA®:</b> (15 spline shaft) ('95-'98): 75hp, 90hp	TUR 501	11500100
	<b>HONDA®:</b> (15 spline shaft) P60 / 75, 90 ('99+) / 100, 115 (not 115D), 130hp	TUR 507	11500700
	<b>MERCURY® &amp; MARINER®: Note: Props Not Available for '77 &amp; Older models.</b> (15 spline shaft) (2 & 4 stroke) 40 to 60 Bigfoot & FourStroke CT / 70 ('87-'89) / 75, 80 ('78-'89), 90, 100, 115, 125, 140hp / 150 XR4/6 (thru 1993, includes equivalent Mariner Magnum I, II, III.) FourStroke™ & SeaPro™ 4cyl: 40 to 75hp / OptiMax: 75, 90, 115, 125hp	TUR 501	11500100
	NISSAN® & TOHATSU®: (15 spline) 60C, 70C, 70('02-'09) / (not BFT): 90 to 140hp / 115 TLDI ('14+)	TUR 505	11500500
	NISSAN® & TOHATSU®: (15 spline shaft) BFT ('14+): W60, 60, 75, 90hp	TUR 507	11500700
	<b>OMC®:</b> (13 spline shaft) Cobra 400: 2.3 to 3.0L ('78-'89) / Sea Drive: 1.6 to 1.8L	TUR 503	11500300
	<b>PARSUN®:</b> (15 spline shaft) T60, T75, T85, T90	TUR 500	11500000
	<b>SUZUKI®:</b> (13 spline shaft) DT 2 Stroke ('89+): 75 to 140hp / DF 4 Stroke ('98-'09): 60hp, 70hp	TUR 506	11500600
	<b>SUZUKI® &amp; JOHNSON®: (use 4 blade props only)</b> 4 stroke: ('09+) 70A, 80A, 90A, 70, 80 / ('01+) 90, 100, 115 (Not 115A)	TUR 509	11500900
	<b>SUZUKI® &amp; JOHNSON®: (use 4 blade props only)</b> DF 4 stroke: 50AV, 60AV, 115A, 140, 140A	TUR 501	11500100
	<b>YAMAHA®:</b> Note: If prop strikes trim tab, replace with Yamaha part #6E5-45371-10. (15 spline shaft) High Thrust: FT50, FT60 / 2 stroke: 60 to 100hp / 4 stroke: 70, 75 ('03-'16), 80, 90 ('03-'16), 100hp	TUR 500	11500000
	YAMAHA®: Note: If prop strikes trim tab, replace with Yamaha part #6E5-45371-10. (15 spline shaft) 2 stroke: 115 to 130hp / 4 stroke: 75 ('17+), 90 ('17+), 115hp	TUR 505	11500500



# **NEW ENGINEERING CRANKS UP BOAT PERFORMANCE**

**Stainless Steel Performance at Aluminum Prices** 

New unique blade geometry and manufacturing processes results in the highest performance aluminum propellers on the block. Hustler® propellers out performed most competitive stainless steel props in recent tests. Not only does top speed, handling and hole shot improve, but also midrange performance, which will save you a ton in gas usage.

### **Squeeze Cast for Added Strength**

Stainless steel performance is built into the Hustler Aluminum prop line. This is achieved through unique blade geometry and an exclusive Turning Point manufacturing process, Squeeze Casting. It generates the highest mechanical properties attainable in a cast aluminum prop resulting from a tighter grain structure. Stiffer blades means less flex and a faster prop. Competitors still use old Die-Cast processes that produce blades that flex, resulting in overall poor performance.





# WANT A DIAMETER AND PITCH RECOMMENDATION?



Quickly calculates the best props for a boat. Visit http://tpprops.com/propwizard or Call 904-900-7739

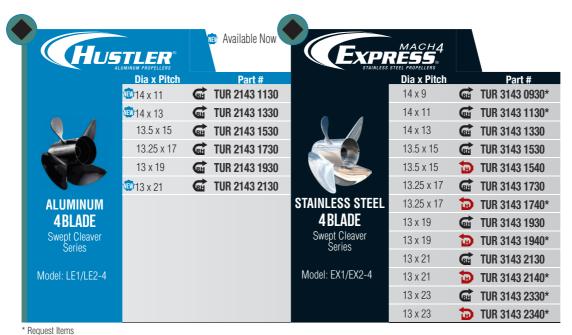


Turning Point manufactures propellers to fit 6-300+hp Evinrude<sup>®</sup>, Force<sup>®</sup>, Honda<sup>®</sup>, Johnson®, Mariner®, Mercruiser®, Mercury®, Nissan®, OMC®, Parsun®, Suzuki® Tohatsu®, Volvo Penta®, and Yamaha® Outboards and Sterndrives. Choose one of our Lifetime Warranty MasterGuard Installation Kits to fit your engine, then choose the propeller that matches your boating requirements. There are 3 & 4 blade, left & right rotation prop models with a variety of diameter & pitch options available for almost all boat types. Our Props Run Faster, Pull Harder, and Handle Better.



Left Rotation RH Right Rotation (standard)









# BETTER THAN THE OEM PROPELLER

\*Note: To find the correct installation kit and propeller housing, locate the HP, gearcase size, and prop shaft spline count of your outboard or sterndrive.

# AN INSTALLATION KIT IS REQUIRED — MasterGuard Kits include a

FOR PROPS LISTED TO THE RIGHT

90-300+hp

ENGINES WITH A 4.75" GEARCASE



500 Series Installation Kits
Use on engines under 200hp with
aluminum or stainless steel props or
engines 200hp and above with
aluminum props only.



700 Series Installation Kits Engineered For Big HP Use on engines 200hp and above with stainless steel props.

500 & 700 Series Installation Kits

Premium corrosion resistant brass splines. Eliminate hub system vibration & chatter. Reduce gear shock & engine/drive damage. Reduce prop replacement cost by <u>up to 50%.</u>

500 & 700 Series MasterGuard Installation Kits & Corresponding Prop Housings are Compatible with, and Upgrade Competitors' Hub & Prop Systems. Interchangeable with Mercury® Flo-Torq II®, Michigan Wheel® XHS®, Solas® Rubex™ hub kit systems. NOTE: Not applicable with Turning Point's 10, 20 and 200 Hub Kit series.

MasterGuard Kits Include a  Lifetime Warranty	•	
Engine Brand - Various Splined Prop Shafts	Part #	MFG.#
EVINRUDE® & JOHNSON®:  V4 with V6 large gearcase: 100hp commercial, 120hp ('85),130hp ('95-'96), 140hp ('85), Pleasure ('95+): 115hp, 130hp /  H.O. (includes E-TEC H.O.): (25" shaft) 90, 115, 135, 150, 200, 225, 250hp  E-TEC (includes pontoon series - not for E-TEC G2): 90hp (25" shaft), 115hp, 130hp ('09-'10), 135hp to 300hp / V6: 135hp to 250hp /  V8: 250hp to 300hp	TUR 502	11500200
EVINRUDE® E-TEC® G2™: (15 spline shaft) Note: Use 711 Super Duty Kit for 200+hp Engines w/ SS Props. G2 Series Only: 150 to 300hp	TUR 511 TUR 711	11501100 11701100
<b>HONDA®:</b> (15 spline shaft) <b>Note: Use 708 Super Duty Kit for 200+hp Engines w/ SS Props.</b> BF115D ('11+), BF135 ('04+), BF150 ('04+), BF200 ('02+),	TUR 508	11500800
BF225 ('02+), BF250 ('12+) JOHNSON®: (use Express Mach3 OS series props only) 4 stroke: 200hp, 225hp	TUR 708 TUR 707	11700800
MERCURY® & MARINER®: (15 spline shaft) Note¹: Use 701 Super Duty Kit for 200+hp Engines w/ SS Props. Note²: 115hp ProXS CT Only; For ProXS & Verado w/ 1.25" prop shaft, use Mercury Solid Hub kit with the Turning Point Prop.	TUR 501	11500100
FourStroke™ & SeaPro™: 90CT, 115CT, 150hp, 200 to 300 / V6: 135 to 300hp / Verado 135 to 300hp(not HD) / OptiMax: 150, 200, 250hp	TUR 701	11700100
MERCRUISER®: (15 spline shaft) Note1: Use 701 Super Duty Kit for 200+hp Engines w/ SS Props. Note2: If propeller strikes trim tab, replace with Mercury part #822777A1	TUR 501	11500100
Alpha One and Bravo One ('83+)  OMC®: Note: SX drives, see Volvo Penta listing below.	TUR 701	11700100
Cobra 800: 3.0 to 7.5L / King Cobra: 454, 502, 7.4-8.2L ('90+) / Sea Drive: 2.0 to 4.0L	TUR 502	11500200
SUZUKI®: (15 spline shaft) Note: Use 707 Super Duty Kit for 200+hp Engines w/ SS Props. DT 2 stroke: 150hp to 225hp	TUR 507 TUR 707	11500700 11700700
SUZUKI®: (15 spline shaft)  Note: Use 707 Super Duty Kit for 200+hp Engines w/ SS Props.  (use Express Mach3 OS series props only) DF 4 stroke: 150 to 300hp	TUR 507 TUR 707	11500700 11700700
<b>TOHATSU®:</b> (15 spline shaft) <b>Note: Use 708 Super Duty Kit for 200+hp Engines.</b> BFT115, BFT150, BFT200, BFT225, BFT250	TUR 508 TUR 708	11500800 11700800
VOLVO® PENTA SX & OMC SX COBRA: (19 spline) ('94+): 3.0 to 8.2L. Not for Volvo DuoProp or Aquamatic drives.	TUR 504	11500400
VOLVO® PENTA AQ: (17 spline) (use 4 blade props only) 200, 250, 270, 280, 290	TUR 510	11501000
YAMAHA®: (15 spline shaft)  Note <sup>1</sup> : Use 705 Super Duty Kit for 200+hp Engines w/ SS Props.  Note <sup>2</sup> : If Express Mach3 OS Prop strikes trim tab, replace with Yamaha part #6E5-45371-10-00 or Turning Point part #41505060.	TUR 505	11500500
2 and 4 stroke: 150 to 250hp / F300 (V6 only '09+) / Sterndrives 3.0 to 7.4L	TUR 705	11700500
YAMAHA®: (use Express Mach3 OS series props only) F350	TUR 715	11701500

EXPRESS 05

The New Express® Mach3™ OS™ Series of Stainless Steel Propellers are the next step in the evolution of our very popular larger diameter VO series. Our Engineers and Propeller Experts made improvements to the cup, leading and trailing edges, and the aggressive progressive rake and blade geometry that are Turning Point hallmarks. These modifications have produced a propeller with

excellent hole shot, impressive bow lift, and class leading cornering. The Express Mach3 OS is perfectly matched to large horsepower bay boats, offshore center consoles, and high horsepower pontoons/tri-toons. It will fit all 90hp and larger 4.75" gearcase outboards from all engine manufacturers, and Mercury® Alpha One™ and Bravo One™, and Volvo® Penta® SX sterndrives. Large diameter three blade propellers offer great mid-range fuel economy in many applications. Whether you are looking to maximize your time on the water, extend your cruise range, or just stretch your fuel dollars, the Express Mach3 OS is a great choice to get the most out of your boat.

# WANT A DIAMETER AND PITCH RECOMMENDATION?



Quickly calculates the best props for a boat Visit http://tpprops.com/propwizard or Call 904-900-773

14.5 x 17

14 x 19

14 x 19

14 x 21

14 x 21

MACH3

Turning Point manufactures propellers to fit 6-300+hp Evinrude®, Force®, Honda®, Johnson®, Mariner®, Mercruiser®, Mercury®, Nissan®, OMC®, Parsun®, Suzuki®, Tohatsu®, Volvo Penta®, and Yamaha® Outboards and Sterndrives. Choose one of our Lifetime Warranty MasterGuard Installation Kits to fit your engine, then choose the propeller that matches your boating requirements. There are 3 & 4 blade, left & right rotation prop models with a variety of diameter & pitch options available for almost all boat types. Our Props Run Faster, Pull Harder, and Handle Better.

TUR 3150 2122

TUR 3150 2311\*



14.25 x 21

14.25 x 23

**ALUMINUM** 3BLADE Model: LE

HUSTLER Dia x Pitch Part # 15.25 x 15 TUR 2150 1511 14.25 x 17 RH TUR 2150 1711 14.25 x 19 TUR 2150 1911 14.25 x 21 TUR 2150 2111 14.25 x 23 TUR 2150 2311

Model: EX 14.25 x 23 TUR 3150 2321\* EXPRESS HUSTLER Dia x Pitch Part # Dia x Pitch TUR 2150 1530 15 x 15 ₩15.3 x 13 15 x 15 TUR 2150 1540 🕮15.3 x 13 14.5 x 17 TUR 2150 1730

TUR 2150 1740

TUR 2150 1930

TUR 2150 1940

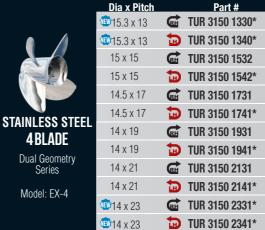
TUR 2150 2131

TUR 2150 2141

STAINLESS STEEL

3 BLADE

Available Now



**ALUMINUM 4BLADE Dual Geometry** Series

Model: LE-4

WARNING: Hustler Aluminum Propeller Housing Warning: This product can expose you to chemicals including carbon, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Available Now

EXPRES STAINLESS STEEL PROPELL	ERS					WEW
•	Dia x Pitch		Part #	Dia x Pitch		Part #
	15.6 x 11	<b>E</b>	TUR 3151 1110*	15.6 x 21	<b>RH</b>	TUR 3151 2110
	15.6 x 11	THE STATE OF THE S	TUR 3151 1120*	15.6 x 21	Tip (	TUR 3151 2120*
	15.6 x 13	(H	TUR 3151 1310	15.6 x 23	(H	TUR 3151 2310
	15.6 x 13	THE STATE OF THE S	TUR 3151 1320*	15.6 x 23	THE STATE OF	TUR 3151 2320
	15.6 x 15	(RH	TUR 3151 1510	€ 15.6 x 25	RH	TUR 3151 2510*
STAINLESS STEEL	15.6 x 15	<b>E</b>	TUR 3151 1520*	<b>1</b> 5.6 x 25 €	Ð	TUR 3151 2520*
3 BLADE	15.6 x 17		TUR 3151 1710	€ 15.6 x 27	RH	TUR 3151 2710*
Large Diameter OS Series	15.6 x 17	THE STATE OF	TUR 3151 1720	<b>1</b> 5.6 x 27	THE STATE OF	TUR 3151 2720*
O2 26Hes	15.6 x 19		TUR 3151 1910			
Model: OS	15.6 x 19	THE STATE OF	TUR 3151 1920*			

<sup>\*</sup> Request Items

### **Megaware Skeg Guard**

- Mirror polished 316 stainless steel
- Thickened lower wear tab protects against ramp dragging and is great for river running
- Drain hole prevents against corrosion and freezing
- Won't compromise performance
- Do-it-yourself install in less than 10 minutes
- Installs with as little as 2-3 inches of skeg remaining
- Three year warranty

### MKG 27021

Mercruiser: Alpha I 1985-1990

#### MKG 27031

Mercruiser: Alpha I Generation II 1991-Present

#### MKG 27051

Mercruiser: Bravo I & III 1990-Present

### MKG 27071

Force: 70-90 2 Stroke 1998-2002 (By Mercury)

Honda: 75-90-115 4 Stroke 1995-2007, 60-75 4 Stroke 2010-Present Mercury/ Mariner: 50-60 Bigfoot 2 & 4 Stroke 2003-2014, 70-90-100-115-

125 Optimax 2 & 4 Stroke 1983-Present

Nissan/Tohatsu: 70-90-115-120-140 2 Stroke 1993-Present Yamaha: 60-70-80-90-100 2 & 4 Stroke 1998-2001

### MKG 27081

Evinrude/Johnson: 150-175-185-200-225 2 Stroke 1986-2003, 150-175-

200-225-250 E-Tec 20" Shaft 2 Stroke 2004-Present

OMC Cobra: V6 & V8 1986-1994 Suzuki: 300 4 Stroke 2009-Present

### MKG 27091

Evinrude: 135-150-175-200 25" or 30" Shaft 2 Stroke 2006-Present 225-

250-300 2 Stroke 2002-Present

/Johnson: 135-150-175-200 25" or 30" Shaft 2 Stroke 2006-Present 135 25" or 30"Shaft 2000-2006 225-250-300 2 Stroke 2002-Present

### MKG 27101

Evinrude/Johnson: 90-100-115-120-130-140 2 Stroke 1980-2001 OMC Cobra: 4 Cylinder 1986-1994

### MKG 27151

Suzuki: 150-175-200-225 2 Stroke 1986-2002, 150-175-200-225 4 Stroke 2003-Present, 250SS & 300 4 Stroke 2006-2011

Yamaha: 150 2 & 4 Stroke 1984-Present, 350 4 Stroke 2009-Present, 115-130-175-200-225-250 2 Stroke 1984-2002, I/O Sterndrive All Models 1989-1993

### MKG 27191

Volvo: SX Single Prop 2007-Present, DP Dual Prop 1996-2007 (No SX-A, DPS-A)

### MKG 27211

Mercury/ Mariner: 150-175-200-225-250-275-300 Verado & Optimax 2005-Present, 200-225 Optimax 2 Stroke 1996-2004, 90-115 Command Thrust 4 Stroke 2014-Present, 200 EFI 2 Stroke 1996-2005

### MKG 27221

Volvo: SX Single Prop 1995-2006

### MKG 27261

Evinrude/Johnson: 27261 - 60, 70, 90, 115, 140 4 Stroke 1999-2003

### MKG 27291

Yamaha: 115-130 2 Stroke 2003-Present, 115-130 4 Stroke 2000-Present

### MKG 27321

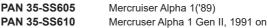
Yamaha: 60-70-80-90-100 2 & 4 Stroke 2002-Present Suzuki: 27261 - 90, 115, 140 4 Stroke 1998-Present

### MKG 27331

Yamaha: 40-50 2 & 4 Stroke 2001-Present

### Panther Safe-Skeg

- Made from 1.5mm 316 stainless steel
- Protect against ramp dragging, rocks, and submerged objects
- Mirror-polished finish
- Drain hole protects against corrosion and freeze-up



PAN 35-SS615 Mercruiser Bravo 3
PAN 35-SS625 Honda 90 Mercury 75
PAN 35-SS630 Evin/John 150,175 (86-03)
PAN 35-SS645 Yamaha 150 ('09)

**PAN 35-SS690** Yamaha 115-130 (03-present)

PAN 35-SS695 Yamaha 200 PAN 35-SS665 Volvo SX 95-06 Parts:

PAN 35-SSKIT1 Spare mounting kit includes mounting hardware and instructions, allen wrench &

Loctite 262

### **Megaware Skeg Pro**

- Made from 18-gauge 304 stainless steel
- Mirror-polished finish creates a custom look and lasting protection
- Protect against ramp dragging, rocks, and submerged objects
- Installs in less than 10 minutes
- Works with selected motors from

Evinrude, Johnson, Force, Honda, Mercury, Suzuki, Tohatsu-Nissan and Yamaha (see manufacturers site for a full list)

### **MKG SP-655**

### **Davis Prop Sox**

Protect your expensive propellers from road kickback when towing and promote safety by increasing your propellers' visibility.

### **DIN 450**





### Sierra Prop Nut Kits

Part #	Description	
SIE 18-3701	For Mercury/Mariner outboards For Mercruser (11-52707A1) I/O's Includes: Tab washer: (2) 18-3200 (90508-ZW1-003) Prop nut: 18-3700 (90301-ZW1-003)	000
SIE 18-3702	For Mercury/Mariner outboards For Mercruser (11-52707A1) I/O's Includes: Tab washer: (2) 18-3204 (14-76281) Prop nut: 18-3704 (11-69578)	\$ <b>\$</b>
SIE 18-3715	OMC Sterndrive/Cobra Includes: Prop nut/keeper: 18-3708-1 (398042) Cotter pin 18-3741: (309955) Prop spacer 18-4231: (320570)	000
SIE 18-3716	OMC Sterndrive/Cobra Replaces: 175267 Includes: Prop nut: 18-3705 (314503) Cotter pin: 18-3742 (314502) Prop spacer: 18-4238 (315810)	010
SIE 18-3717	OMC Sterndrive/Cobra Replaces: 175268 Includes: Prop nut: 18-3707 (319891) Cotter pin: 18-3743 (320785) Prop spacer: 18-4232 (323943)	09
SIE 18-3733	OMC Sterndrive/Cobra For: SX Cobra	

## Handi-Man Propeller Nut/Key Sets

Each kit contains brass key stock cut to length, stainless steel cotter pin and brass finished hex and jam nut.

pin and crace minerica		
Part #	Shaft Size	
HAN 592014	3/4"	
HAN 592024	7/8"	
HAN 592034	1"	
HAN 592044	1-1/8"	
HAN 592054	1-1/4"	
HAN 592064	1-3/8"	



### Handi-Man Brass Shear Pin Kits

Each kit contains two (2) brass shear pins and stainless cotter pin(s).

Part #	Size	Cotter Pins
HAN 550011	1/8" x 13/16"	2
HAN 550041	5/32" x 1-3/16"	1
HAN 550051	3/16" x 15/16"	2
HAN 550061	3/16" x 1-1/16"	2
HAN 550121	9/32" x 2-5/32"	2
HAN 550201	3/16" x 1-3/8"	2
HAN 550231	3/16" x 1-1/4"	1
HAN 550241	5/32" x 1"	2

### **Sea-Dog Prop Wrench**

- Zinc plated steel construction
- 8-7/8" x 13/16"

SED 531112



### **Sierra Prop Wrenches**

SIE 18-4444 Metal

SIE 18-4459 Reinforced fibreglass



# **T-H Marine Nylon Prop Wrench**



- 1-1/16" six point socket style prop wrench
- (OMC over 40 HP, Mercury over 50 HP)
- 9/16" garboard drain plug socket on the reverse side

THM PMW-1-DP



### **Attwood Plastic Prop Wrench**

- Multiple socket sizes for all prop maintenance.
- Offers multiple sockets to fit from 17/32" to 1-1/16", allowing the service multiple props

ATT 11370-7

### **McGard Propeller Locks**

Protect yourself against expensive propeller theft with a McGard propeller lock. A freespinning collar will turn if attacked by gripping tools without loosening the lock. Constructed of naval brass and hardened stainless steel.



Part #	Motors	Thread
	Propeller Locks For Stern Drives	
MCG 74039	MerCruiser Alpha I, Bravo I (Incl. X & XR)     TRS OMC Cobra and King Cobra	3/4 - 16
MCG 74040	All Yamaha	M18 x 1.5
MCG 74053	MerCruiser Bravo III (up to 2003)     Blackhawk	1 - 14
MCG 74057	Volvo DP-S (Duo-Prop)	M22 x 2.0
	Propeller Locks For Outboard Motors	
MCG 74039	Mercury/Mariner 70 HP and larger (2 stroke)     Mercury 50 HP and larger (4 stroke) (ex. 225 HP 4 stroke before 2005)     Johnson/Evinrude 150 HP and larger (2 stroke)	3/4 - 16
MCG 74040	Honda 75 HP and larger     Suzuki 40 HP and larger     Yamaha 115 HP and larger     Johnson/Evinrude 150 HP and larger (4 stroke)	M18 x 1.5

### **McGard Outboard Motor Locks**

Designed to lock the bolt that holds the outboard onto the transom of the boat. Simply replace one of the mounting bolts with a McGuard locking nut. Stainless steel construction.

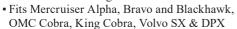


Part #	Motors	Thread
MCG 74036	Mercury/Mariner 40 HP and larger (2 stroke)     Mercury 25 HP and larger (4 stroke)     Suzuki 150 - 300 HP	1/2-20
MCG 74037	Yamaha 40 HP and larger (2 stroke)     Yamaha 30 HP and larger (4 stroke)     Honda 40 HP and larger     Suzuki 25 - 140 HP (2005 and newer)	M12 x 1.25
MCG 74049	Honda 8-20 HP Johnson/Evinrude 6-30 HP Mercury/Mariner 8-25 HP Nissan 8-18 HP Suzuki 8-30 HP Tohatsu 8-18 HP Yamaha 8-25 HP (Lock may fit some 2 strokes up to 30 HP, verify hole diameter) Will fit other small outboards with a 5/16" hole in the transom bracket for mounting the motor (S/S bolt included in set).	5/16-18
MCG 74038	Johnson/Evinrude 40-140 HP (2 stroke)(Some 90 HP & 130 HP may have a 3/4-16 shaft)	5/8 - 11

### **McGard Stern Drive Motor Lock**

MCG 74018

Stern drive locks are fully machined from high quality stainless steel and through-hardened. Free-spinning collar that turns if attacked by gripping tools without loosening the lock. 7/16" thread.





### wicdard Fropelier Lock

# Trimax Outboard Motor Lock

- Constructed of heavy gauge steel
- Fits most outboard motors
- Weather proof powder coating

### TMX TBL610



### **Panther Outboard Motor Lock**

- A heavy carbon steel design that fits turnbuckle mounted engines
- Recessed solid brass lock and noise dampeners that reduce rattle

### PAN 75-8000



### **Panther Outboard Motor Lock**

- Polished stainless steel key locks
- Anti-drill protection
- Fits most outboard engines with turnbuckle installations
- Noise dampeners reduce rattle
- Includes 2 keys (cannot be duplicated without included 4 digit key card)

### PAN 75-8201



### **Panther Outboard Motor Lock**

- Fits on the engine's mount bolts preventing loosening of transom nuts
- Constructed of high strength 300 series marine grade stainless steel with anti-theft by drill protection
- Fits up to 1/2" (12mm) engine bolts
- Complete with two security keys that can not be duplicated

### PAN 75-8101

# <u>Sierra</u> Manifolds - Mercruiser

18-1950-1



Part #	Description
SIE 18-1950-1	Replaces: 77234A2 PORT SIDE Fits most Mercruiser (GM) small blocks with end riser
SIE 18-1951-1	Replaces: 77235A2, 77235A8 STARBOARD SIDE Fits most Mercruiser (GM) small blocks with end riser
SIE 18-1952-1	Port & Starboard Replaces: 99746A8, A17 Fits most 4.3L (262 CID) V-6 application
SIE 18-1953-2	Port & Starboard Supplied with Mounting Package Replaces: 87114A19,86024A10 Will fit either side - Fits most Mercruiser(GM) small blocks with center riser.
SIE 18-1955-1	Replaces: 96705A1 Fits most early Model 3.0L 181 CID with Rochester Carb. 5 bolt pattern and 2.5L, 153CID (1968-82)
SIE 18-1958-1	MANIFOLD
SIE 18-1960-1	Replaces: 58759A10, A14 Fits most Mercruiser (GM) Inline 6 Cyl. Engines
SIE 18-1962-1	Starboard Replaces: 65603A4, 65603A12 Fits most Mercruiser Engines (Ford) V-8 Small blocks

## <u>Sierra</u> Manifolds - Chrysler



Part #	Description
SIE 18-1940	Port & Starboard Replaces: 4142322, 3675826 Fits: Chrysler Model 273, 318, 340 & 360 CID engines (1973-1986)

# Sierra Manifolds - OMC

Part #	Description
SIE 18-1902	Replaces: 912441 V-8 - STARBOARD SIDE
SIE 18-1903	Replaces: 912442 V-8 - PORT SIDE Fits most GM V-8 small blocks with end riser
SIE 18-1904**	Port & Starboard Replaces: 980959 V-8 - EITHER SIDE Fits most Ford V-8 302 & 351W with end riser

# \*\* Limited Quantity

## <u>Sierra</u> Manifolds - Pleasurecraft

Part #	Description
SIE 18-1996	Port & Starboard Replaces: Pleasurecraft RO28001 Pleasurecraft Ford Small Block V8 302 and 351 cu. in.

# <u>Sierra</u> Manifolds - Volvo/Penta

18-1848



Part #	Description
SIE 18-1848	Replaces: 3857656, 3847499 Fits: Volvo 4.3L V-6
SIE 18-1898	Port & Starboard Replaces: Barr CHVA-1-84, Marine Power 0991-110. Fits 454 cu.in. GM big block V8 engines
SIE 18-1901	Replaces: 855387, 834438-4 FITS: Volvo AQ120B, 125A, 140A, 145A, BB140A, 145A
SIE 18-1931-1	Port & Starboard Replaces: 835804, 856883 FITS: Volvo AQ200D, 200F, 225D, 225E, 225F, 255B, 260A, 271A, 280A, 290A, 311A, AQ500, 570: BB225, 225AV, 225B, 260A, 260AV, 260B, 260C
SIE 18-1932	Port & Starboard Replaces: 856894 For: 4.3L Fits: AQ175, AQ430, AQ431A, AQ431B, AQ432, AQ434
SIE 18-1986-1	Port & Starboard Replaces: 3852374-2, 3857723, 3847501 For: 5.0L & 5.7L GM (New Style)
SIE 18-1997-1	Port & Starboard Replaces: Barr CHV-1-83 Universal Center Riser Manifold FITS: GM 283, 305, 307 and 350 CID engines

# Sierra Risers - Crusader

18-1927



Part #	Description
SIE 18-1927	Port & Starboard Replaces: Barr CHV-1-83 Universal Center Riser Manifold
SIE 18-1938	Replaces: Crusader 98126, RO29015 Crusader GM Small Block V8 305-350cu.in.(Models: CM305, CM350XL and CM350HT), GM Big Block V8 454cu.in. (Models: 454XL and 502XL)

### Sierra

## Risers - Volvo/Penta

Part #	Description
SIE 18-1908K	Replaces: 857037 For: 4.3L Fits: AQ175, AQ430, AQ431A, AQ431B, AQ432, AQ434
SIE 18-1909-1	Replaces: OMC 913784, 3855270, 3850456, Volvo 3855270-9, 3863061 OMC Riser, 4" outlet 7°:Fits many GM & Ford center rise manifolds.
SIE 18-1935-1	Replaces: 855384-4, 856891
SIE 18-1999	Replaces: Barr 20-0082 Comes with 18-4364 Exhaust Elbow Kit (open). If blocked mounting kit is required use 18-8535 Replaces: Barr 20-0082-P
SIE 18-1936	Replaces: 857037 For: 4.3L Fits: AQ175, AQ430, AQ431A, AQ431B, AQ432, AQ434

## Sierra Elbows - Crusader

Part #	Description
SIE 18-1921	Replaces: 909863 V-8 Fits most GM V-8 small blocks
SIE 18-1922	Replaces: 987784 4 CYL. Fits most 140 HP 3.0L (181 CID)
SIE 18-1934	Replaces: Crusader 98068 Crusader GM Small Block V8 305-350cu.in.(Models 220 and 270), GM Big Block V8 454cu.in.(Models: CH350 and 454XL) 3" Hose

## Sierra

# Elbows - Mercruiser

Part #	Description
SIE 18-1937	Replaces: 98562A6 Mercruiser 4 Cylinder 224cu. in. 3.7L (Models: 165, 170, 180, 190).
SIE 18-1971	Replaces: 76351A2 Fits most early model Mercruiser 140 HP (4 cyl) applications Replaces: Barr MC20-60426P
SIE 18-1975-1	Replaces: 12076A2 Fits late Model Mercruiser 4 cyl. Engines
SIE 18-1976-2	ELBOW

# Sierra

# Elbows - Chrysler

Part #	Description
SIE 18-1946	Replaces: 3527794 Fits Chrysler Model 273, 318, 340 & 360 CID engines (1966-1986) will work in conjunction with 18-1945

# Sierra **Spacers**



Part #	Description
SIE 18-1985	Replaces: 93322 For: 229 and 262 V6, 305-350 Small Block V8, 454 Big Block V8
SIE 18-1908	Mercruiser GM V6 229 and 262cu.in. (Models: 185 and 205),GM Small Block V8 305-350cu.in. (Models: 200, 228, 230, 260 and 898), GM Big Block V8 454cu.in. (Models: 330, 340 and 7.4L)

# **Exhaust Gaskets - Merecruiser**

18-0897

	1100
Part #	Description
SIE 18-0603	MANIFOLD GASKET SET For: Ford 302/351 CID Engines For use with 18-1998-1
SIE 18-0604	MANIFOLD GASKET SET For: GM 305/350 CID Engines For use with 18-1997-1
SIE 18-0897	ELBOW GASKET Replaces: 27-41813 Used with: Riser: 18-1976-1, 18-1970-1
SIE 18-2833	ELBOW GASKET Replaces: 27-997772
SIE 18-2854-1	ELBOW GASKET Replaces: Barr 01-0107 Use with : Riser: 18-1999, 18-1939, 18-1907
SIE 18-2830-1	MANIFOLD GASKET 6 cyl. Replaces: 27-46401
SIE 18-2909	MANIFOLD GASKET For: GM V-6 Used with: Manifold: 18-1952-1
SIE 18-2949	MANIFOLD GASKET Replaces: Barr CHV-47-000 Use with: Manifold: 18-1997-1
SIE 18-4362	ELBOW MOUNTING KIT Replaces: Barr MC20-60426P Use with: Elbow: 18-1971
SIE 18-8505	ELBOW MOUNTING KIT Mercruiser GM V6 229 and 262cu.in. (Models 185 and 205), GM Small Block V8 305-350cu.in. (Models: 200, 228, 230, 260, 898), GM Big Block V8 454cu.in. (Models: 330, 340 and 7.4L) Used with: Riser: 18-1976-1
SIE 18-8520	MANIFOLD MOUNTING KIT Mercruiser GM Small Block V8 305-350cu.in. (Models: 198, 200, 228, 230, 260, 898) Used with: Manifold: 18-1950-1,18-1951-1, 18-1953-2
SIE 18-8554	ELBOW MOUNTING KIT For: 229 and 262 ci V6, 305 and 350 SB V8, 454 Big Block V8. Used with: Riser Kit: 18-1908K and 18-1908 Spacer Riser: 18-1970-1 Manifold: 18-1952-1, 18-1953-2 & 18- 1957-1

For a complete list of all available items Ask for a Sierra Catalogue



# <u>Sierra</u> Exhaust Gaskets - Crusader

18-0418



Part #	Description
SIE 18-0418	MANIFOLD GASKET Replaces: 96653 Used with: Manifold: 18-1957-1, 18-1982, 18-1929, 18- 1933, 18-1898
SIE 18-0603	MANIFOLD MOUNTING KIT For: Ford 302/351 CID Engines Use with: Manifold: 18-1998-1
SIE 18-0604	MANIFOLD MOUNTING KIT For: GM 305/350 CID Engines Use with: Manifold: 18-1997-1
SIE 18-2854-1	RISER GASKET Replaces: Barr 01-0107 Used with: Riser: 18-1999, 18-1907, 18-1939
SIE 18-2909	MANIFOLD GASKET Replaces: 97498 For: GM V-6 Used with: Manifold: 18-1952-1, 18-1932
SIE 18-2949	MANIFOLD GASKET Replaces: 96306 Barr CHV-47-000 Use with: 18-1997-1
SIE 18-8515	MANIFOLD MOUNTING KIT Crusader GM Small Block V8 305-350cu.in.(Models: 220, 270), GM Big Block V8 454cu.in. (Models: CH350, 454XL) Used with: Elbows: 18-1934, 18-1928, 18-1918

### Sierra Exhaust Gaskets - Pleasurecraft

18-0677-1



Part #	Description
SIE 18-0603	MANIFOLD GASKET SET For: Ford 302/351 CID Engines Use with: Manifold: 18-1998-1
SIE 18-0604	MANIFOLD GASKET SET For: GM 305/350 CID Engines Use with: Manifold: 18-1997-1
SIE 18-0677-1	ELBOW GASKET Replaces: RM0002 Use with: Mounting Kit: 18-8504 Riser: 18-1899
SIE 18-2854-1	ELBOW GASKET Use with: Riser: 18-1999, 18-1907, 18-1939
SIE 18-8504	ELBOW MOUNTING KIT Pleasurecraft Ford Small Block V8 302 and 351cu.in. Used with: Riser: 18-1899
SIE 18-8503	MANIFOLD MOUNTING KIT Pleasurecraft Ford Small Block V8 302 and 351cu.in. Used with: Manifold: 18-1996

## <u>Sierra</u> Exhaust Gaskets - Volvo

18-0476-1



Part #	Description
SIE 18-0476-1	RISER BLOCKOFF GASKET Replaces: Barr 01-0105 Indmar & Marine Power Ford Small Block V8 302-351cu.in. Used with: Riser: 18-1939, 18-1999 & 18-1907
SIE 18-2854-1	ELBOW GASKET Replaces: Barr 01-0107 Used with: Manifold: 18-1999, 18-1939, 18-1907
SIE 18-8507	ELBOW MOUNTING KIT OMC/Volvo GM Small Block V8 305-350cu.in. Used with: Riser: 18-1909-1
SIE 18-2902-1	MANIFOLD MOUNTING KIT Replaces: 3852468 For: 5.0L GL, GXI, OSI, 5.7L GL, GI, GXI, GIL, GXIL, OSI, GXIL, OSXI
SIE 18-2949	MANIFOLD MOUNTING KIT Replaces: Barr CHV-47-000 Used with: Manifold: 18-1986-1, 18-1997-1 and 18-1931-1 AQ200, 225, 260, 271, 290, 311
SIE 18-8502	MANIFOLD MOUNTING KIT OMC GM Small Block V8 305-350cu.in. (1979-89) OMC/ Volvo GM Small Block 305-350cu.in. Used with: Manifold: 18-1931-1,18-1902, 18-1903 & 18- 1986-1
SIE 18-8511	MANIFOLD MOUNTING KIT Volvo GM Small Block V8 305-350cu.in. (Models: AQ and BB200, 205, 211, 231, 225, 260, 271, 290, 311, 500, 501, 570, 571, 572) Used with: Manifold 18-1931-1

# Sierra Brass Drain Cock

- Used with most OEM manifolds
- **1/4**

SIE 18-4218



# Sierra Pipe Plug

Pipe Sealant with Teflon is recommended for use on plug threads

**SIE 18-4263** 1/8" - 27 NPT



Sierra Crossover Chart			
Sierra	Osco	HGE	
18-1907	2018	HGE 2018	
18-1908	3320	HGE 3320	
18-1930-1	VO418	HGE 5387	
18-1931-1	5805	HGE 5804	
18-1935-1	56879	HGE 5384	
18-1950-1	7234B	HGE 7234	
18-1951-1	7235B	HGE 7235	
18-1952-1	9745	HGE 9746	
18-1953-1	7114B2	HGE 7114	
18-1957-1	9011	HGE 9011	
18-1957-1	9011	HGE 9011-A	
18-1960-1	8759	HGE 8759	
18-1971	6351	HGE 6351	
18-1976-1	4354	HGE 4354	
18-1997-1	994	HGE 1-83	
18-1998-1	FL994	HGE 1-81	
18-1999	992	HGE 0082	
18-1986-1	52374	HGE 4035	
18-1909-1	50456	HGE 3784	

Osco Crossover Chart			
Osco	Sierra	HGE	
992	18-1999	HGE 0082	
994	18-1997-1	HGE 1-83	
2018	18-1907	HGE 2018	
3320	18-1908	HGE 3320	
4354	18-1976-1	HGE 4354	
5805	18-1931-1	HGE 5804	
6351	18-1971	HGE 6351	
8759	18-1960-1	HGE 8759	
9011	18-1957-1	HGE 9011	
9011	18-1957-1	HGE 9011-A	
9745	18-1952-1	HGE 9746	
50456	18-1909-1	HGE 3784	
52374	18-1986-1	HGE 4035	
54870		HGE 4870	
56879	18-1935-1	HGE 5384	
60252	18-4009	HGE 0252	
7114B2	18-1953-2	HGE 7114	
7234B	18-1950-1	HGE 7234	
7235B	18-1951-1	HGE 7235	
856095s/s		HGE 6095	
FL994	18-1998-1	HGE 1-81	
CVAB		HGE 1184	

OEM/Barr Crossover Chart			
OEM/Barr	Osco	Sierra	HGE
1-54870	54870	18-1912	HGE 4870
1-60252	60252	18-4009	HGE 0252
20-0082	992	18-1999	HGE 0082
20-0102	2018	18-1907	HGE 2018
23518123 OEM			HGE 1086
3857656 OEM		18-1848	HGE 7656
831521 OEM	856095s/s		HGE 6095
855387-7	VO418	18-1930-1	HGE 5387
864309T02			HGE 4309
864612T01			HGE 4612
913394 OEM			HGE 3394
986041 OEM			HGE 6041
AS7K2C	AS7-K2C		HGE 7K2C
CHV-1-83	994	18-1997-1	HGE 1-83
FM-1-83	FL994	18-1998-1	HGE 1-81
MC-1-58759	8759	18-1960-1	HGE 8759
MC-1-77234	7234B	18-1950-1	HGE 7234
MC-1-77235	7235B	18-1951-1	HGE 7235
MC-1-865735			HGE 5735
MC-1-87114	7114B2	18-1953-2	HGE 7114
MC-1-89011	9011	18-1957-1	HGE 9011
MC-1-89011	9011	18-1957-1	HGE 9011-A
MC-1-99746	9745	18-1952-1	HGE 9746
MC-20-12076		18-1975-1	HGE 2076
MC-20-44354	4354	18-1976-1	HGE 4354
MC-20-76351	6351	18-1971	HGE 6351
MC-20-864591			HGE 4591
MC-20-864929A3			HGE 4929PRK
MC-24-44187		18-2434	HGE0100-000
MC-27-47487			HGE 1186
MC-27-93175	CVAB		HGE 1184
MC-29-861493			HGE 1493
861289			HGE 1289
845261		18-4007	HGE 5261
845528			HGE 5528
858481			HGE 8481
859962			HGE 9963
124070-13520			HGE 3520
OMC-1-3858870			HGE 8870
OMC-1-914035	52374	18-1986-1	HGE 4035
OMC-20-913784	50456	18-1909-1	HGE 3784
VO-1-824532			HGE 4532
VO-1-835804	5805	18-1931-1	HGE 5804
VO-20-825599			HGE 5599
VO-20-855384	56879	18-1935-1	HGE 5384



#### WHY ARE ALUMINUM ALLOY MANIFOLDS MORE PREFERABLE **THAN CAST IRON?**

- A. The persistent problem of corrosion can be overcome.
- B. The weight of the traditional cast iron manifold is greatly reduced (aluminum is 1/5th the weight of iron).
- C. The cost of iron ore remains high due to demand from heavy construction, but demand for aluminum ore has been steadily declining. Aluminum is more economical.

### **HGE Aluminum Manifold** MerCruiser V6

- Aluminum construction
- Fits: 229 cu.in. and 262 cu.in. engines Model 185R, 185MR, 205R and 205MR
- Includes mounting kit

HGE 9746-A	Manifold
Accessories:	

**HGE 4354-A** Riser

Replaces:	
Barr #	MC-1-99746
GLM #	51220,51225
Marine Power #	0996-000
MerCruiser #	99745, 99746
Osco #	9745
Sierra #	18-1952-1

### **HGE Aluminum Manifold** MerCruiser V8 Small Block

- Aluminum construction
- GM Small Block V8 305 350 cu.in. engine Models 220, 228, 230, 260 and 898
- Includes mounting kit

HGE 7114-A	Manifold
Accessories:	

**HGE 4354-A** 

Riser



Replaces:	
Barr #	MC-1-87114
GLM #	51230, 51235
Marine Power #	0994-100
MerCruiser #	87114, 860246
Osco #	7114B2
Ciorro #	18_1053_1

### **HGE Aluminum Manifold** MerCruiser V8 Big Block

- Aluminum construction
- MerCruiser GM V8 Big Block 330, 340 and 454 Magnum Inboard and stern-drive unit
- Includes mounting kit

HGE 9011-A	Manifold	
Accessories:		

**HGE 4354-A** Riser



1	MC-1-89	9011
5	51240,5	1245
# 0	0991-10	0
8	39011, 8	307078
9	9011	
1	18-1957	-1
	# ( # ( (	MC-1-8951240,5 #0991-1089011, 8901118-1957

### **HGE Aluminum Manifold** MerCruiser V6, V8 Riser

- Aluminum construction
- Fits GM center riser style V8 manifold
- Includes mounting kit

#### **HGE 4354-A**



## **Manufacturing Quality Aluminum** and Cast Iron Manifolds



.3884684

#### **HGE Aluminum Volvo Series** 3.0L Exhaust Manifold

- Aluminum construction
- Fits: 3.0GXiC-J, 3.0GXi-J
- Exhaust manifold for engines equipped with Catalytic Converters

**HGE 4684\* Exhaust Manifold** 

Accessories:

**HGE 5175\*** Intake Manifold

**HGE 5139\*** Riser, low **HGE 5820\*** 

Riser, tall

#### **HGE Aluminum Volvo Series** 3.0L Intake Manifold

- Aluminum construction
- Fits: 3.0GXiC-J, 3.0GXi-J
- Intake manifold for engines equipped with Catalytic Converters Replaces:

**HGE 5175\*** Intake Manifold Accessories:

**HGE 4684\* Exhaust Manifold** 

3885175 Volvo..

**NOTE** - Mounting kit is not

included with this item

Volvo.....

NOTE - Mounting kit is not included with this item

.... 3594648

### **HGE Aluminum Volvo Series** 3.0L Elbow

Aluminum construction

• Exhaust elbow for engines equipped with Catalytic Converters

**HGE 4648\*** Elbow Accessories:

**HGE 4684\* Exhaust Manifold** 

**HGE 5139\*** Low Riser **NOTE** - Mounting kit is not **HGE 5820\*** Tall Riser included with this item

### **HGE Aluminum Volvo Series** 3.0L Low Riser

- Aluminum construction
- Low Riser for engines equipped with Catalytic Converters

**HGE 5139\*** Low Riser Accessories:

**HGE 4684\* Exhaust Manifold** 

**HGE 4648\*** Elbow

**HGE Aluminum Volvo Series** 3.0L Tall Riser

- Aluminum construction
- Tall Riser for engines equipped with Catalytic Converters

**HGE 5820\*** 

Tall Riser

Accessories:

**HGE 4684\*** Exhaust Manifold

**HGE 4648\*** Elbow



Volvo......3885139

NOTE - Mounting kit is not

included with this item

Replaces:

Replaces: 3885820 Volvo.

NOTE - Mounting kit is not included with this item



#### **HGE Ford Small Block V8 Generic Manifold**

- Ford center riser style V8 manifold
- Ford small block V8: 302-351 C.I.D. V8 engines
- Includes mounting kit

**HGE 1-81** Manifold

Accessories:

**HGE 0082** Riser





. FM-1-83
. 56250
FL-994
. 18-1998-1

#### **HGE MerCruiser V6 Manifold**

- MerCruiser GM V6
- 229 cu.in. and 262 cu.in. engines Model 185R, 185MR, 205R and 205MR
- Includes mounting kit

**HGE 9746** Manifold

Accessories:

**HGE 4354** 4" Riser, 7°

HGE MC-20-98502 3" Riser, 0°





Replaces:	
Barr #	MC-1-99746
GLM #	51220
Marine Power #	0996-000
MerCruiser #	99745, 99746
Osco #	9745
Sierra #	18-1952-1

#### **HGE MerCruiser In-Line 6 Manifold**

- Direct replacement water cooled manifold to fit the GM 6 cyl. 250 & 292 cu. in. engines
- Replaces MerCruiser Part # B-58759A1
- Comes complete with gaskets

HGE MC-1-58759 Manifold

### **HGE MerCruiser V8 Small Block Manifold**

- MerCruiser V8
- GM Small Block V8 305 350 cu.in. engine Models 220, 228, 230, 260 and 898
- Includes mounting kit

**HGE 7114** Manifold Accessories:

**HGE 4354** 4" Riser, 7° HGE MC-20-98502 3" Riser, 0°



Replaces:	
Barr #	MC-1-87114
GLM #	51230
Marine Power #	0994-100
MerCruiser #	87114, 860246
Osco #	7114B2
Sierra #	18-1953-1

### **HGE MerCruiser V8 Big Block Manifold**

- MerCruiser GM V8
- 330, 340 and 454 Magnum Inboard and stern-drive unit
- Includes mounting kit

**HGE 9011** Manifold

Accessories:

**HGE 4354** 4" Riser HGE MC-20-98502 3" Riser, 0°





Replaces Barr# MC-1-89011 GLM# 51240 0991-100 Marine Power # MerCruiser # 89011, 807078 Osco# 9011 18-1957-1 Sierra#

### **HGE MerCruiser V6 Dry Joint Manifold**

- MerCruiser SB V6
- GM 4.3 V6 engines
- Includes mounting kit

HGE 4612 Manifold

Accessories:

**HGE 4309** Riser



Replaces: MerCruiser # ...... 864612T01

### **HGE MerCruiser V8 Dry Joint Manifold**

- MerCruiser SB V8
- GM 5.0, 5.7 & 6.2 V8 engines
- Includes mounting kit

**HGE 5735** Manifold

Accessories:

HGF 4309 Riser HGE MC-20-864591 Riser



MerCruiser #... 865735A02 Barr Marine #.. MC-1-865735 Mallory ..... 9-40508

### **HGE**

### Mercruiser 3.0L - Hybrid



- Mercruiser 4-Cylinder 153 and 181 C.I.D, 120 HP (2.5L), 140 HP (3.0L).
- Includes mounting kit

#### **HGE 9798\***

\* Request Item

#### Benefits of the HGE Hybrid Manifold

- 1. One manifold for multiple applications
- 2. No ordering an incorrect manifold
- 3. Saves storage space
- 4. Better pricing

# Replaces:

MerCruiser ..... 99798A9, 816329 96705A1, 95862A9 523901A1 MC-1-99798, MC-1-96705

MC-1-95862, MC-1-52390 18-1956-1, 18-1955-1 18-1954-1

### **HGE** Mercruiser 3.0L

- Mercruiser 4-Cylinder 181 C.I.D. 140 HP 3.0L and 3.0 LX Models
- Includes mounting kit

#### **HGE 1235**

Accessories:

**HGE 2076** Riser





Replaces:
MerCruiser 860235
806867A8
Barr MC-1-860235
Sierra 18-1966

### **HGE MerCruiser** V6, V8 Centre Riser

- 4" exhaust outlet, 7° down angle
- Includes mounting kit

#### **HGE 4354**



Replaces.	
Barr #	MC-20-44354
GLM #	51140
Marine Power #	0992-400
MerCruiser #	44354, 807914, 80798
Osco #	4354
Sierra #	18-1076-1

### **HGE MerCruiser** V6, V8 Centre Riser

- 3" exhaust outlet, 0° down angle
- Includes mounting kit

HGE MC-20-98502



Replaces:	
Mercruiser #	 98502A2

### **HGE MerCruiser Short Dry Joint Centre Riser**

- Dry Joint, 7° down angle
- Includes mounting kit

**HGE 4309** 





Replaces MerCruiser #......864309T02

### **HGE V8 Centre Riser**

- 3" outlet, 10° down angle. Use 3" i.d. flexible exhaust hose which facilitates connection to existing exhaust pipes
- Includes mounting kit

**HGE 0082** 



Replaces:	
Barr #	20-0082
GLM #	56110
Marine Power #	0992-000
Osco #	992
Sierra #	18-1999



Mercruiser # ... 864591T02

**Tall Dry Joint Centre Riser** • MerCruiser - Riser V8-5.0L, 5.7L AND 6.2L 'Dry Joint'

- Direct replacement exhaust riser/elbow
- Riser will replace the equivalent part number used on 4.3L Models as well

HGE MC-20-864591

**HGE MerCruiser** 



### **HGE MerCruiser Dry Joint High Riser**

- 14° down angle
- Includes mounting kit

**HGE 4591** 





Replaces:	
Barr #	MC-20-86459
Mercruiser #	864591T02

#### **HGE MerCruiser Riser**

- Fits to following manifolds: MerCruiser 860235A03, 806867A12, 99798A 9, 816329A 3, Barr MC-1-99798, MC-1-95862, MC-1-96705, Sierra 18-1956-1, 18-1955-1, 18-1954-1
- Includes mounting kit

#### **HGE 2076**



Replaces:	
Barr #	MC-20-12076
MerCruiser #	12076
Osco #	2076
Sierra #	18-1075

### **HGE MerCruiser 470** Cylinder Elbow / Reservoir

- Fits to following engines: MerCruiser 224 I/L4 Engine, 165/170/180/190/470/3.7L
- Fits to following manifolds:
- HGE 6219 MerCruiser Aluminum Exhaust Manifold
- 816219A 5 MerCruiser Aluminum Exhaust Manifold
- Includes mounting kit

**HGE 8561** 

Replaces:	
MerCruiser #	98562A6
Sierra #	18-1937
Mallory #	9-40551

#### **HGE OMC/Volvo GM V6 Manifold**

- Fits Volvo v6 4.3L engine, 1995 and up, OMC v6 4.3L engine, 1991 and up
- Includes mounting kit

**HGE 7656** Manifold Accessories:

**HGE 3784** 

Riser



Replaces	S:	
Volvo # .	3852338,	3857656

### **HGE GM Small Block Centre Riser**

### - Generic Manifold

- GM Small Block V8
- 283, 305, 307, & 350 cu.in.
- Is standard equipment for Marine Power 350 cu.in. engines
- Includes mounting kit

**HGE CHV-1-83** Manifold



Marine Power . 0994-000 Indmar ..... . 53-1027 Osco Motors ... 994 Barr Marine..... CHV-1-83 Sierra Marine .. 18-1997-1 Aqua Power.... 5517

GLM Products 56230

### **HGE OMC/Volvo GM V8 Small Block Manifold**

- Volvo 305-350 C.I.D. GM small block V8 engine, year 1994 and up
- Includes mounting kit

**HGE 4035** Manifold Accessories:

**HGE 3784** 

Riser





Replaces:	
Barr #	OMC-1-914035
GLM #	51430
OMC #	914035, 3852374
Osco #	57579
Sierra #	18-1986-1
Volvo #	3852374-2

#### **HGE OMC - 2.3L Riser**

- Fits to following manifolds: HGE 6041 OMC 2.3L exhaust manifold
- Includes mounting kit

#### **HGE 3394\***

\* Request Item





Replaces:	
OMC #	913394

### **HGE OMC/Volvo GM V6/V8 Centre Riser**

• Fits to following manifolds: HGE 4035 and 7656 exhaust manifolds

• Includes mounting kit

**HGE 3784** 



Barr #	OMC-20-913784
GLM #	51330
OMC #	913784, 3855270, 3850456
Osco #	50456
Sierra #	18-1909
Volvo #	3855270-9

### **HGE Volvo** 4 Cylinder Manifold

• Fits Volvo 4-Cylinder Models AQ 115 and 130 Log Style

• Includes mounting kit

**HGE 4532\*** Manifold

Accessories:

**HGE 5599** Riser

\* Request Item



5	9	- 6	0
Replace			
Barr #		VO-	1-824532
Volvo#		8245	532-6

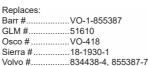
### **HGE Volvo** 4 Cylinder Manifold

• Fits Volvo 2.3L and 2.5L 4-Cylinder engine. Models AQ120B, 125A, 131A B C D, 140A, 145A BB,

• 151A/B/C, 230A/B, 250A/B.

Includes mounting kit

**HGE 5387** 



### **HGE Volvo** V6 Manifold

- Volvo V6 4.3L Engine Manifold 1993 & before
- Fits Volvo V6 4.3L engine 1993 & before, Model AQ150, AQ150A, AQ150B, AQ175A, AQ205A,
- AQ430A, AQ430B, AQ431A, AQ431B, AQ432, AQ434
- Includes mounting kit

**HGE 6894** Manifold

Accessories:

**HGE 7037** Riser



Replaces:	
Volvo #	856894-1
GLM #	51640
Sierra #	18-1932

#### **HGE Volvo GM V8 Small Block Manifold**

- Fits Volvo GM V8 small block 305 -350 cu. in. engines. Models AQ and BB 200, 205, 211, 231, 225,
- **2**60, 271, 290, 311, 500, 501, 570, 571 and 572
- Includes mounting kit

**HGE 5804** Manifold

Accessories:

HGE 5384 Riser



Replaces:	
Barr #	VO-1-835804
GLM #	51630
Marine Power #	0999-772
Osco #	5805
Sierra #	18-1931-1
Volvo #	835804, 835805,
	835806, 856883



#### **HGE Volvo**

#### **GM V8 Centre Riser Small Block Manifold**

- Fits all GM small block engines: 283, 305, 307, & 350 cu.in. Is standard equipment for Marine Power 350 cu.in. engines

 Includes mounting kit Replaces: **HGE CHV-1-83** Manifold Marine Power .... 0994-000

Accessories: **HGE 0082** Riser

Osco Motors ..... Barr Marine...... CHV-1-83 Sierra Marine ..... 18-1997-1 Aqua Power...... 5517 GLM Products..... 56230

Indmar ..

### **HGE Volvo V6 Centre Riser**

• This riser fits Volvo V-6 engine model

Includes mounting kit

**HGE 7037** 



. 53-1027

. 994

Replaces:	
Volvo #	857037-6
GLM #	51520
Volvo V6 Riser Sierra #	18-1936

### **HGE Volvo GM V8 Small Block Center Riser**

■ 3-3/4" (95mm) exhaust outlet, 30° down angle riser

Includes mounting kit

**HGE 5384** 



replaces.	
Barr #	VO-20-855384
GLM #	51510
Marine Power # .	0999-773
Osco #	56879
Sierra #	18-1935-1
Volvo #	855380, 855384
	856879, 856891

### **HGE Volvo** 4 Cylinder Exhaust Bend

- Exhaust bend for Volvo 4-Cylinder log style manifold
- Includes mounting kit

**HGE 5599** 



Replaces:	
Barr #	VO-20-825599
Volvo #	825599-4

#### **HGE Volvo Diesel Elbow Water Connector**

- The connector fits to following elbows: Volvo Elbow Penta Diesel # AQAD40, AQAD40B, TAMD40A, TAMD40B
- Includes mounting kit

#### **HGE 5528**

#### **HGE Volvo Penta Diesel Elbows**

- Fits Volvo Engine: TAMD31P/L/M, TAMD41P/M/H.
- Replaces: Volvo# 859963

#### **HGE 9963**

- Fits Volvo Engine: TAMD300, TAMD43P, TAMD42WJ / K22
- Replaces: Volvo# 861289

#### **HGE 1289**

- Fits Volvo Engine: TAMD30, TAMD40, TMD40A and AOD40A
- Replaces: Volvo# 845261, Sierra 18-4007

#### **HGE 5261**

MC-20-93320A3

#### **HGE Yanmar & Detroit Diesel Elbow**

- Fits Yanmar 1GM, 2GM, 3GM,
- 1GM10, 2GM10, 3GM30,3HM, 3HM35F
- Replaces: Yanmar # 124070

#### **HGE 3520**

#### **HGE Exhaust Elbow**

- Mercruiser 4" to 3" elbows
- Pair

### **HGE 7153-APR**



Replaces:

MerCruiser #..... 93320 .....3320

Sierra #..... 18-1908

Barr #..

Osco#.

#### **HGE Spacer**

- 3" Spacer block
- Fits MerCruiser manifolds HGE 7114, HGE 9746 and HGE 9011

Fits MerCruiser Log Style manifolds

Includes mounting kit

IGE 3320*	Each
IGE 3320PR	Pair
* Request Item	

# **HGE End Plate** • End Cap/Connector (front), 1" hose.

HGE 7234, HGE 7235 and HGE 8759. Includes mounting kit

### **HGE 0252**



#### **HGE Water Fittings**

- 45° Fitting
- Stainless steel 3/4" NPT to 1" hose fitting

#### **HGE 0045**

- 90° Fitting
- Stainless steel 3/4" NPT to 1" hose fitting

### **HGE 0090**



Replaces:	
Barr #	MC-29-86149
Sierra #	18-1910
MerCruiser #	861493A



### **HGE MerCruiser**

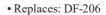
### 3.0L Engine Thermostat Housing Kit

• GM 3.0L/182 CID 4-Cylinder Engine

#### **HGE 1493**

### **HGE Engine Mounts**

- 135 kg / 300 lbs
- H: 4.75" x W:5.25" x D: 2.85"
- Hole centres: 4"



HGE 1421 5/8" -18UND post

• Replaces: DF-216

**HGE 1422** 3/4" -16UND post

### **HGE Full Circle Damper**

- Replaces: AS7K2C
- 13.25" diameter for 26-spline transmissions
- Engines up to 430 cu. in.

#### HGE 7K2C





#### **HGE Dry Joint Spacer**

- MERCRUISER V8-4.3L, 5.0L, 5.7L and 6.2L "DRY JOINT"
- Direct replacement 3" spacer kit for MerCruiser # 864929A 3 Kit includes a pair of spacers, mounting hardware and gaskets.

### HGE MC-20-864929A3

#### **HGE Alternator Bracket**

- Alternator Bracket
- V6-V8
- Replaces: Barr MC-27-93175





### **HGE Gaskets**

#### **Manifold Gaskets**

• For 7114, 7114-A

**HGE 0000** 



• For 1-81

**HGE 10001** 



• For 9011, 9011-A

HGE 46820



■ For 9746-A

**HGE 99757** 



#### **Riser Gaskets**

• For 008 (closed) for 0082, 2018



**HGE 10105** 

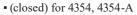
• For 008 (open) for 0082

**HGE 10107** 

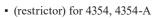


• (open) for 7037

**HGE 35908** 







**HGE 41813** 



**HGE 43783** 



### **HGE Mercruiser Dry Mount Gasket Kit**

#### **HGE 8641**

Content	Qty
S/S plate gasket	1
Closed seal ring (4549)	2
Open seal ring (4547)	2



### **HGE Mounting Kits**

#### **HGE 0082MK**

Content	Qty
Riser Gasket (open) HGE 10107	1
Riser Gasket (close) HGE 10105	1
Stud 1-3/4" Long, (one end 3/8"-16UNV; one end 3/8"-24UNF)	4
Nut	4
Lock Washer	4



### **HGE Mounting Kits**

#### **HGE 3784MK**

Content	Qty
Riser Gasket (open) HGE 43783	1
Bolt 3/8"-16UNC x 7-3/8"	4
Flat Washer	4
Lock Washer	4
Steel Plug 3/4" NPT	1
Steel Plug 1/2" NPT	2



#### **HGE 4354MK**

Content	Qty
Riser Gasket (close) HGE 41811	1
Riser Gasket (restrictor) HGE 41813	1
Bolt 3/8" -16UNC x 5-7/8"	4
Lock Washer	4
Steel Plug 3/4" NPT	1



#### **HGE 5384MK**

Content	Qty
Riser Gasket (open) HGE 35908	1
Bolt 5/16"-18UNC x 5-1/8"	2
Bolt 5/16"-18UNC x 1-3/4"	2
Lock Washer	4
Steel Plug 3/4" NPT	1



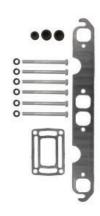
### **HGE 1-83MK**

Content	Qty
Manifold Gasket HGE 0000	1
Riser Gasket (open) HGE 10107	1
Bolt 3/8"-16UNC x 3-1/2"	6
Stud 1-3/4" Long, (one end 3/8"-16UNV; One end 3/8"-24UNF)	4
Lock Washer	10
Steel Plug 3/4" NPT	3



#### **HGE 4035MK**

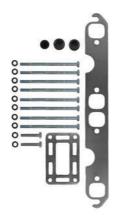
Content	Qty
Manifold gasket HGE 0000	1
Riser Gasket (open) HGE 43783	1
Bolt 3/8"-16UNC x 4-3/8"	6
Lock Washer	6
Steel Plug 3/4" NPT	2
Steel Plug 1/2" NPT	1



### **HGE Mounting Kits**

### **HGE 5804MK**

Content	Qty
Manifold Gasket HGE 0000	1
Riser Gasket (open) HGE 35908	1
Bolt 3/8"-16UNC x 5-1/8"	8
Bolt 5/16"-18UNC x 1-3/4"	2
Lock Washer	10
Steel Plug 3/4" NPT	2
Steel Plug 1/2" NPT	1



### **HGE 7114MK**

Content					
Manifold Gasket HGE 0000	1				
Riser Gasket (restrictor) HGE 41813	1				
Bolt 3/8" 16UNC x 5"	8				
Lock Washer	8				
Steel Plug 3/4" NPT	2				



### **HGE 9011MK**

Content	Qty
Manifold Gasket HGE 46820	1
Riser Gasket (restrictor) HGE 41813	1
Stud 1-3/4" Long, (one end 3/8"-16UNV; One end 3/8"-24UNF)	8
Bolt 3/8"-16UNC x 6"	4
Nut	12
Lock Washer	12
Steel Plug 3/4" NPT	2



### **HGE 9746MK**

Content					
Manifold Gasket HGE 99757	1				
Riser Gasket (restrictor) HGE 41813	1				
1/8" Brass Plug	2				
Bolt 3/8"-16UNC x 5"	10				
Lock Washer	10				
Steel Plug 3/4" NPT	2				





### **HGE 1235MK\***

Content	Qty
Manifold gasket HGE815528	1
Riser Gasket HGE99777	1
Carburetor Gasket HGE807982	1
3/8" - 16UNC x 1", 4-3/4" long bolt	1
3/8" - 16UNC x 3/4", 3/8" - 24UNF x 1.5", 5-3/8" long Stud	3
3/8"-24UNF Nut	3
3/8" Lock Washer 6	5
3/4" NPT to 1" Hose Filling	1



### HGE 9798MK\*

Content	Qty
Manifold Gasket HGE96429	1
Riser Gasket HGE99777	1
Carburetor Gasket HGE807982	1
Rochester Carburetor Gasket HGE64692	1
3/8"-16UNC x 1" 4-3/4" long Bolt	2
3/8"-16UNC x 3/8", 3/8"-24UNF x 1.5", 5-3/8" long stud	3
3/8"-24UNF Nut	3
3/8" Lock Washer	5
3/4" NPT to 1" Hose Fitting	1
Fuel Pump Elbow	1
8/16"-16UNC x 1/2", 8/16"-24UNF x 1/2", 1-1/4" stud	4
8/16"-24UNF Nut	4
8/16" Washer	4
Carburetor Adaptor	1



### HGE 8870MK\*

Content	Qty
Manifold gasket HGE815528	1
Riser Gasket (open) HGE3850495	1
Carburetor Gasket HGE3853283	1
Stud 3/8"-16UNCx1", 3/8"-24UNFx1-1/2" 7-1/8" long	1
Stud 3/8"-16UNCx1", 3/8"-24UNFx1-1/2" 5-7/8" long	5
3/8"-24UNF Nut	6
Square Head Brass Plug 1/4" NPT	1
3/8" Lock Washer	6
Square Head Brass Plug 1/8" NPT	1
Square Head Brass Plug 1/4" NPT	1

#### \* Request Item

#### **Product Selection**

Why use fiberglass reinforced plastics to make wet marine mufflers? FRP will not corrode or deteriorate when exposed to gasoline or diesel fumes mixed with salt or fresh water. Electrolysis and welds in stainless steel, which often cause early failure, are eliminated. Resistance to higher temperatures will not result in warping or melting often observed in some rubber or plastic mufflers.

The right muffler for any given vessel should be determined by answering the following basic questions:

1. Engine location, 2. Exhaust System Size, and 3. Noise Reduction



#### 1. ENGINE LOCATION

Engines located at or below the loaded water line (LWL) require some type of a lift muffler, (Vernalift). Engines located aft or mid ship and above the LWL can utilize a muffler of the Vernatone family.

### 2. EXHAUST SYSTEM SIZE (Diameter)

Larger engines with higher horsepower require larger diameter exhaust systems and more space. The muffler and accompanying tubing, hose and fittings must be large enough to carry the cooling water and gases through the system without creating back pressure in excess of the engine manufacturer's recommendations. Centek's engineering expertise assures accurate sizing.

#### 3. NOISE REDUCTION

Muffler size and internal design will determine the amount of noise reduction achievable in a given installation. Larger mufflers normally provide better silencing than small mufflers. Space limitations for installations will often determine the size and type of muffler that can be used.

#### **EXHAUST SYSTEM SIZE**

The size of the wet marine exhaust muffler is determined by the engine size (H.P.) and the engine manufacturer's allowable back pressure. Diesel engines are particularly sensitive to back pressure.



The attenuation curves as shown are typical only for the products as shown and meant to display their comparative acoustical properties. Actual results will depend highly on the engine to which the product is applied and the operating parameters of that engine.

1.50 or 1.63	30	10		
2"	60	25		
2.5"	110	40		
3"	160	60		
3.5"	220	85		
4"	280	125		
4.5"	320	170		
5"	370	210		
6"	440	280		
8"		420		
10"		680		
12"		900		
14"		1150		
NOTE: For V-Block engines where twin exhaust				

Gasoline

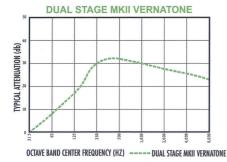
**Maximum HP** 

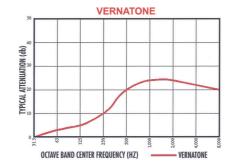
Diesel

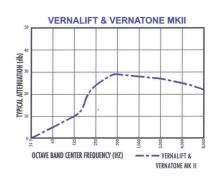
In & Out Size

Dia.

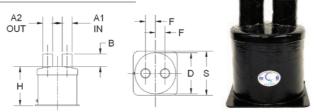
lines are desired, divide the H.P. by two and then match to the appropriate size.







#### **Centek Vernalift Mufflers**

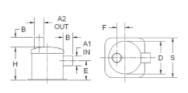


The lift muffler was developed for installation in boats where the engine or genset is below the (LWL) and the engine gases had to be lifted above the water line to be drained. Product line for large gasoline and diesel power plants with ratings to 2,000 hp. VERNALIFT mufflers exceed ABYC requirements for generator applications and are ABS Type Certified.

#### Top Inlet/Top Outlet

Part #	A 1&2	В	D	E	н	s
CEN 1500009	2"	2.5"	8.4"	2"	8"	9"
CEN 1500065*	4"	4"	12.3"	2.75"	12"	12"

\* Request Item





#### Side Inlet/Top Outlet

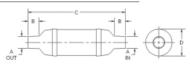
Part #	A 1&2	В	D	E	F	н	s
CEN 1500071	1.5"	2.5"	8.4"	4.7"	2"	8"	9"
CEN 1500020	1.6"	2.5"	8.4"	4.7"	2"	8"	9"
CEN 1500026	2"	2.5"	8.4"	4.7"	2"	8"	9"
CEN 1500027	2"	2.5"	10"	6.5"	2"	10.2"	10.5"
CEN 1500034	3"	3"	10"	6.5"	2.5	10.2"	10.5"
CEN 1500085	3"	3"	12.3"	8"	2.7"	12"	12"
CEN 1500088†	4"	4"	12.3"	7.5"	2.7"	12"	12"
CEN 1500091†	5"	5"	12.3"	6"	2.7"	12"	12"
CEN 1500092†	6"	5"	16.2"	8.7"	4"	16"	17"
† Square Bases							



#### Side Angle Inlet/Top Outlet

Part #								
CEN 1500223	1.5"	2.5"	8.4"	4.4"	2.5"	8"	45°	9"

### **Centek Vernatone Round Mufflers**

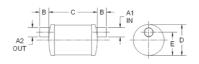


The Vernatone is carefully engineered to minimize back pressure while providing excellent exhaust noise reduction. The all fibreglass muffler will not corrode or deteriorate when exposed to fresh or salt water in combination with either diesel or gasoline exhaust fumes. A Vernatone is available for every type of marine engine installation. OEM builders use them for primary propulsion engines where the engine is above the water line. Vernatone exhaust mufflers are available for engine ratings from 5 hp to 2,000 hp.

Part #	Α	В	С	D
CEN 1000104	3"	3.5"	25.8"	7.1"
CEN 1000106	4"	3.5"	33.7"	9"
CEN 1000108*	5"	4.4"	38.7"	11"
CEN 1000111	6"	5"	41.5"	12.2"

\* Request Item

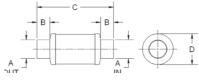
### **Centek Vernalift Inline Mufflers**

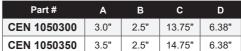




Part #	A 1&2	В	С	D	E
CEN 1500042	2.0"	2.0"	10.5"	6.36"	4.88"
CEN 1500051	3.0"	3.0"	17.5"	10.04"	7.52"

### **Centek Minimax Mufflers**

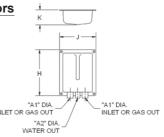






#### **Centek Generator Separators**





This water separator is used with the VERNALIFT muffler on DIESEL ONLY gensets and small auxiliary engines. The water drain from the GEN-SEP can be positioned just below the water line eliminating water splash. This is especially important for night time generator operations.

Part #	A 1	B 2	Н	J	K
CEN 1020150	1.5"	1.25"	15.6"	12.4"	5"
CEN 1020200	2"	1.5"	15.6"	12.4"	5"

### **Centek Exhaust Tubing**

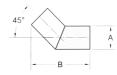
VERNATUBE exhaust tubing is filament wound with resin impregnated continuous rovings for optimum strength. Synergistic fillers are used with the newest fire retardant resins for fire ratings which exceed the requirements for "self-extinguishing" by ASTM-D 635 and UL 94V-0. VERNATUBE can be used with gasoline or diesel wet marine exhaust systems. VERNATUBE products carry the UL approved label and are listed by Underwriter's Laboratories Marine.

- Comes in 10' lengths
- Sold by the foot

Part #	Nominal O.D.	Wall Thickness
CEN 1100525	1.0"	.104"
CEN 1100521	1.5"	.105"
CEN 1100512	2.0"	.125"
CEN 1100501	2.5"	.128"
CEN 1100502	3.0"	.130"
CEN 1100503	3.5"	.135"
CEN 1100504	4.0"	.138"
CEN 1100505	4.5"	.140"
CEN 1100506	5.0"	.144"
CEN 1100507	6.0"	.148"
CEN 1100508	8.0"	.154"

### **Centek Exhaust System Fittings**

The OD's are manufactured to match our other components and are compatible with approved marine exhaust hose.



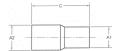
 $\epsilon$ 

### 45° Elbows

Part #	Nom.O.D. A	Length B
CEN 1200217	1.5"	6.0"
CEN 1200214	1.63"	6.0"
CEN 1200192	2.0"	6.75"
CEN 1200215	2.5"	7.75"
CEN 1200109	3.0"	8.50"
CEN 1200111	3.5"	10.25"
CEN 1200112	4.0"	10.25"
CEN 1200113	5.0"	13.63"
CEN 1200114	6.0"	15.38"

► Also See	Exhaust Hose	ng 750-760	
P AISU See	LAHAUSHHUSE	pq / 35-/ 00	

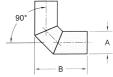
### **Centek Exhaust System Fittings**



### **Reducer Couplings**

Part #	O.D. A	A2	С
CEN 1200410	1.5"	2.0"	6.2"
CEN 1200264	2.0"	3.0"	8.0"
CEN 1200270	2.5"	3.0"	8.5"
CEN 1200161	3.0"	3.5"	9.5"
CEN 1200170	3.0"	4.0"	10.0"
CEN 1200222	3.5"	4.0"	10.5"
CEN 1200223	4.0"	5.0"	12.0"

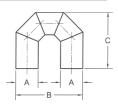
### **Centek Exhaust System Fittings**



#### 90° Elbows

Part #	Nom. O.D. A	Length B
CEN 1200202	1.5"	5.13"
CEN 1200201	1.63	5.13"
CEN 1200200	2.0"	5.75"
CEN 1200195	2.5"	6.38"
CEN 1200171	3.0"	7.5"
CEN 1200189	3.5"	9.0"
CEN 1200157	4.0"	9.38"
CEN 1200175	5.0"	12.25"
CEN 1200162	6.0"	14.00"
CEN 1200197	8.0"	22.50"

### **Centek Exhaust System Fittings**

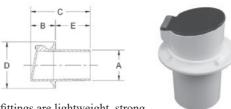


#### 180° Return

Part #	O.D. A	Width B	Height C
CEN 1200353*	1.5"	4.5"	3.75"
CEN 1200333	2.0"	6.0"	5.75"

\* Request Item

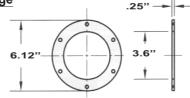
### Centek Exhaust Thru Hulls With Flappers



Centek exhaust fittings are lightweight, strong, non-corroding, and durable. All exhaust system fittings are fibreglass and made of the same fire retardant materials used in the UL listed VERNATUBE filament wound tubing. Our fittings are easy to install when repairing, re-powering or replacing a wet exhaust system. The OD's are manufactured to match our other components and are compatible with approved marine exhaust hose.

Part #		Α	В	С	D	E
CEN 1200300	White	2.0"	1.75"	4.5"	3.5"	2.75"
CEN 1200301	Black					2.75
CEN 1200298	White	3.0"	2.5"	5.5"	4.88"	3.0"
CEN 1200299	Black					3.0
CEN 1200326	White	4.0"	2 25"	7.75"	6.0"	4.5"
CEN 1200325	Black	4.0"	3.25"			4.5"

### **Centek Exhaust Flange**



Centek exhaust fittings are lightweight, strong, non-corroding, and durable. All exhaust system fittings are fibreglass and made of the same fire retardant materials used in the UL listed VERNATUBE filament wound tubing.

CEN 1200140

### **Centek Crush Sleeves**

Welded stainless steel.

 CEN 1200585
 5" diameter

 CEN 1200586
 6" diameter

 CEN 1200587
 8" diameter



#### Sierra Exhaust Flappers

- Speciality compounded rubber with EPDM & U/V stabilizers
- Includes stainless steel hose clamp

SIE 18-4456 3" SIE 18-4457 4" SIE 18-4458 5" & 6"

Note\*\* The 18-4458 is a 6" flapper that can be cut to 5"

# Marine Hardware Generator Thru Hulls

These 316 Stainless steel generator exhaust ports are the finest on the market today. Comes with a 60 durometer nitrile rubber flap to prevent backwash. Fasteners are

high-grade stainless steel. The design allows for easy installation in boat hulls of varying thickness, from 3/8" to 2-1/4".

MHI GETH-1.500-S Hose: 1-1/2", Pipe: 2-1/4" Hose: 2", Pipe: 2-3/8"

Parts:

MHI GETH-FLAPKIT Flap kit for 1-1/2" & 2"

### Vetus Exhaust Thru Hull With Flapper

- Exhaust hose can be fitted directly to this transom connection
- Stainless steel AISI 316 with a high gloss polished cover
- Exhaust hose ID: 3"Cutout: 3-1/6"
- Depth: 3-35/64"

VTS TRC75SV







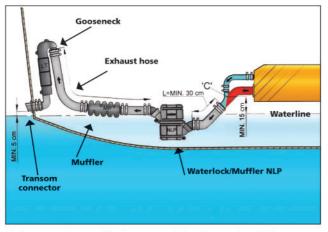
#### A WET EXHAUST SYSTEM

A 'dry' exhaust system causes a tremendous amount of noise and diesel exhaust smell. A diesel engine can easily produce an exhaust gas temperature of 1112°F (600°C) or more. However, reduction of exhaust gas temperature to about 104 or 122°F (40 or 50°C) can be achieved by injecting the engine cooling water into the exhaust line. This is how a "wet" exhaust system works. In addition, the typical diesel exhaust smell is also considerably reduced.

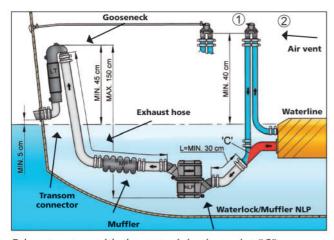
#### PREVENTING WATER RUNNING BACK TO THE ENGINE

#### Installation above or below waterline

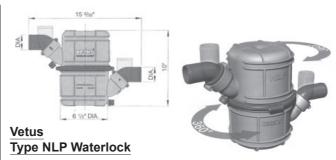
The cooling water injection point is crucial. If the water injection point is 6" (15 cm) or more above the waterline, the cooling water can be injected directly into the exhaust system. But when it is less than 6" (15 cm) above or even below the waterline, the cooling system can siphon water through the intake when the engine is turned off. Water can fill up the exhaust system and get back into the engine through the exhaust valves. This can be prevented by using a breather hose (1) in the cooling water system or an air vent (2).



Exhaust system with the water injection point "C" **6" (15 cm) or more** above the waterline.



Exhaust system with the water injection point "C" less than 6" (15 cm) above the waterline.



NLP waterlocks are of dual stage construction, featuring upper and lower chambers with a horizontal partition plate and a riser tube through the centre.

The top chamber may be rotated through approx 300° and both the inlet and the outlet connectors can rotate through 360°, installation of the exhaust assembly even in confined engine spaces is greatly simplified.

VTS NLP50 2"

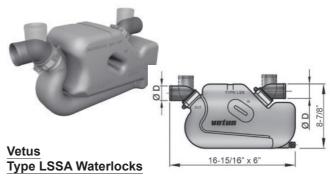


Type WLOCKLR Waterlocks

Once the engine of your boat has stopped, with the correctly chosen capacity, VETUS waterlocks will make sure that water will not run back into the engine. All VETUS waterlocks are provided with a drain plug for winter storage.

Recommended when the total hose length does not exceed 4 metres

VTS WLOCKL40R 1-1/2" (40mm) OD hose VTS WLOCKL45R 1-3/4" (45mm) OD hose VTS WLOCKL50R 2" (50mm) OD hose



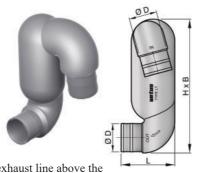
Sometimes the exhaust line is so long that an extra large capacity waterlock is required to prevent water from running back into the engine. The VETUS waterlock type LS is the ideal solution.

- Waterlock for boats sailing in rough waters
- 360° rotating inlet and outlet stubs
- Comes with 1 securing strap

 VTS LSS40A
 1-1/2" (40mm) OD hose

 VTS LSS45A
 1-3/4" (45mm) OD hose

 VTS LSS50A
 2" (50mm) OD hose

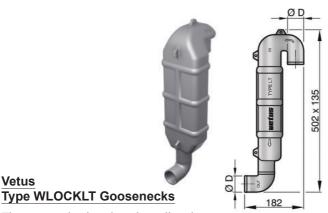


**Vetus** Type LT Goosenecks

The gooseneck raises the exhaust line above the waterline and provides additional noise reduction.

Supplied with stainless steel mounting brackets

Part #	HxB	L	D
VTS LT6565	19-3/4" x 9-1/4"	6-1/8"	3" (65mm)
VTS LT7575	19-3/4" x 9-1/4"	6-1/8"	3" (75mm)
VTS LT90110	20-3/4" x 11-7/8"	8-1/4"	3-1/2" (90mm)
VTS LT102	20-3/4" x 11-7/8"	8-1/4"	4" (100mm)
VTS LT110110	20-3/4" x 11-7/8"	8-1/4"	4-5/16" (110mm)
VTS LT127	22-1/4" x 15"	10-7/8"	5" (127mm)
VTS LT152	22-1/4" x 15"	10-7/8"	6" (152mm)



The gooseneck raises the exhaust line above the waterline and provides additional noise reduction.

- 360° revolving inlet connection which greatly facilitates the installation
- Provided with a plug for draining during winter time

**VTS WLOCKLT40** 1-1/2" (40mm) OD hose **VTS WLOCKLT45** 1-3/4" (45mm) OD hose VTS WLOCKLT50 2" (50mm) OD hose **VTS WLOCKLT60** 2-3/8" (60mm) OD hose

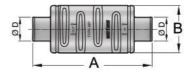
### **Vetus Airvent With Valve**

**Vetus** 

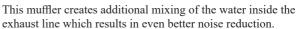
Self contained, anti syphon device with reliable pressure valve.

- Air bleed connection rotates through 360°
- H: 6.3" x W: 3.8" x D: 2.0"
- Suitable for 1/2", 3/4", 1" and 1-1/4" (13, 19, 25 and 32 mm) internal hose connections

#### **VTS AIRVENTV**



### **Vetus** Type DEMPMP Mufflers



Part #	Α	В	D
VTS DEMPMP40	14-1/2" x 4-1/4"	6-1/4"	1-1/2" (40mm)
VTS DEMPMP45	14-1/2" x 4-1/4"	6-1/4"	1-3/4" (45mm)
VTS DEMPMP50	14-1/2" x 4-1/4"	6-1/4"	2" (50mm)
VTS DEMPMP60	14-1/2" x 4-1/4"	6-1/4"	2-3/8" (60mm)
VTS DEMPMP75	17-15/16" x 5-1/8"	7-1/16"	3" (75mm)
VTS DEMPMP90	17-15/16" x 5-1/8"	6-1/4"	3-1/2" (90mm)
VTS DEMPMP100	22-13/16" x 6-5/8"	6-1/4"	4" (100mm)

#### **Vetus**

### **Type Anti-Siphoning Vents**

When the cooling water injection point is less than 6" above the waterline, the cooling system can siphon water through the intake when the engine is turned off.



- Air bleed connection rotates through 360°
- H: 5.24" x W: 3.8" x D: 2.7"
- Suitable for 1/2", 3/4", 1" and 1-1/4" (13, 19, 25 and 32 mm) internal hose connections



#### Type ASDV

This air vent is made of synthetic material and has a silicone anti-siphon pressure valve and is self-contained.

- Ideal for toilets or holding tanks which are installed below the waterline
- Valve can be maintained without removing the vent from the wall and no tools are required

#### **VTS ASDV**



### Type ASDH

This air vent has a hose connection to the outside of the hull and has a constant bleed of cooling water through the hose while the engine is running.

• Comes with a skin fitting, hose clamps and 4 metres of hose

#### **VTS ASDH**