

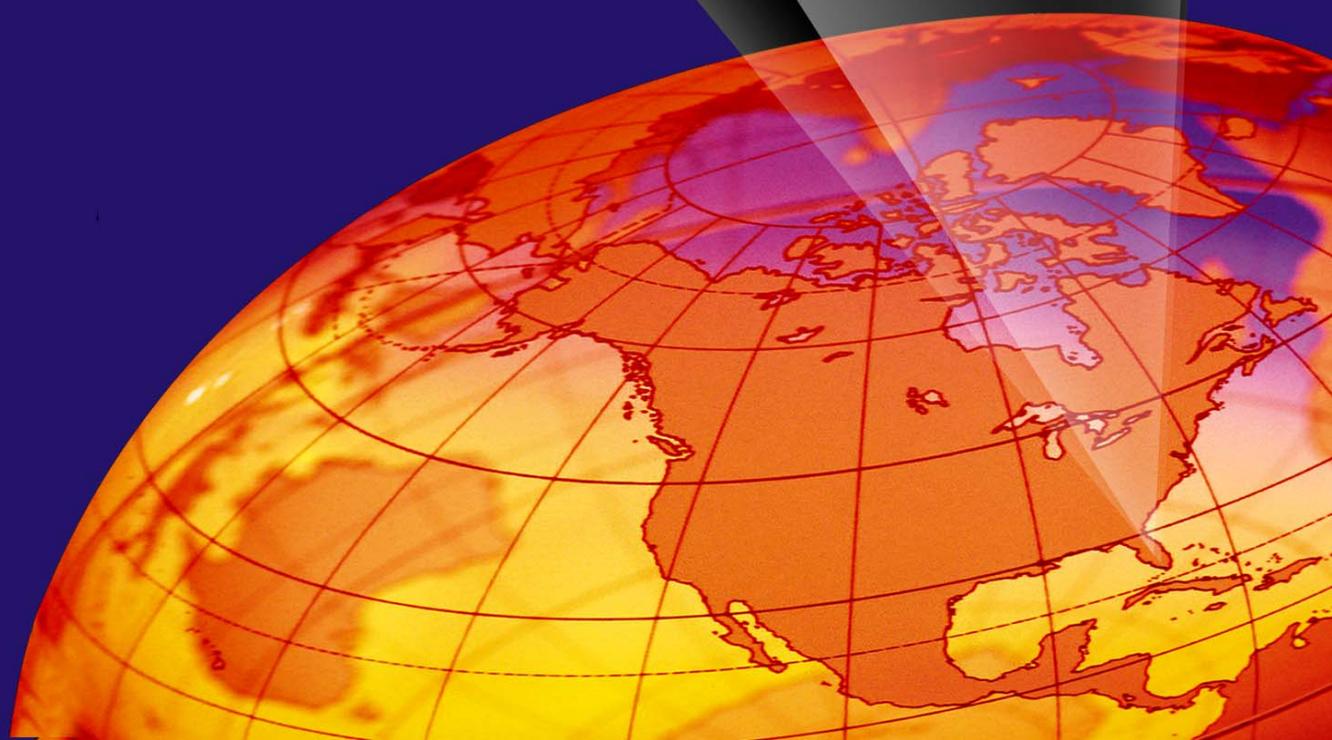
FLAGSHIP

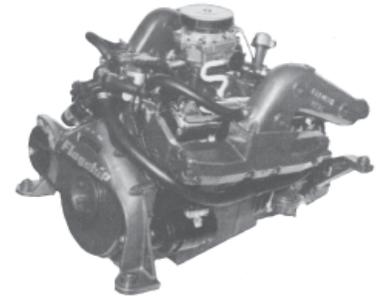
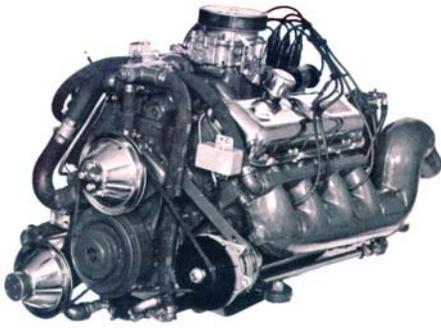


MARINE ENGINES

GM

POWERED by





Flagship Heritage

Dependable Performance

"Since 1946"



Flagship Marine Engine Company was purchased from Brunswick Corporation in 1964 by Tom Fileman. Since the purchase of the company we have built the Owens Yacht and Flagship line of flywheel forward engines in a variety of sizes. Shown above is of the first Chevy 427 cubic inch marine engine built in 1969. From then to today, Tom is still involved with all facets of Flagship's engine business. Although the models of marine engines today has changed, our experiences with inboards runs through several generations of the family. We have been building **GM** marine engines since 1955, a tradition that continues today in our facility in Florida. Our inboard models produce horsepower that range from 145 hp, 4 cylinder through our mighty 850 hp V8's. All production models come with a limited warranty. Plus Flagship Marine Engine is one of a select few who have the privilege of distributing **GM's** Marine Performance Parts and Base Engines.

Our R&D Center has full machine shop capabilities with 2 fully operational Dynamometers, which compliments our complete customer engine rebuild center. Our Hi-performance inboard team has competed in both APBA / UIM sanctioned events and collected several World Championships, National Championships and APBA kilo speed records.

Our **Outboard** experience spans a quarter of a century in remanufacturing **EVINRUDE / JOHNSON** replacement powerheads. Today, our association with **EVINRUDE / JOHNSON** Genuine Parts remains strong and will continue. We still remain the only independent remanufacturer that builds, sells, services, and warrants any (OMC) Bombardier **EVINRUDE / JOHNSON** produced replacement powerhead. The experience of our outboard group of experts totals over 90 years and includes several former OMC Master Technicians. This experience stems from major dealership service department experience, combined with 20+ years as a Senior Technical Representative / Service Department Supervisor from OMC's Technical Service group. When it comes to hi-performance our outboard experts have competed in both APBA / UIM sanctioned events and collected several World Championships and National Championships. Our experience for perfection is what drives us every step of the way. We enjoy boating and hope our customers do too. We want every customer of Flagship Marine Engine Company to enjoy using our products, and because of our experience we make every effort to make sure that happens.

At Flagship Marine we are a family of boaters, and because we are boaters, we know what it's like to have a failure, that's why we take the extra time and use OEM components in every product we build.

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We ship by UPS any weight to most areas. We also ship by Overnight Transportation and AAA Cooper. All pricing F.O.B. Punta Gorda, FL, and will ship C.O.D. Business Hours 8 a.m. to 12:00 noon to 1:00 p.m. to 5:00 p.m. E.S.T.

Any restocking on special orders will require a 20% restocking charge and any custom ordered part cannot be returned.

Additional products used and sold by Flagship Marine Engine Co.



Advance	Borg Warner	Barbron	Earl's	Felpro	Fram
Glenwood	Jabsco	J&E	K&N	TeleFlex	DRP
Pennzoil	Paragon	Russels	Speedpro	SRP	TRW
Obendorfer	Sherwood	Sierra	Teleflex	ZF	ARP



Wholesale Factory
EVINRUDE / JOHNSON
Remanufactured Machine Blocks



1-888-282-2840 Toll Free

This program is for dealers who wish to rebuild their own powerheads, but require the Block to be replaced. These Cylinder and Crankcases are hot tank cleaned, and prepared using the same process as in our remanufacturing program. Each engine block has been inspected for bolt thread condition, bore and head surface distortion and has been inspected for cracks. If they pass our rigorous inspection processes they are bored and honed to the OEM's specifications using state-of-the-art Sunnen automated cylinder honing machine. After all that, they are cleaned and oiled to prevent corrosion during shipment.

These blocks listed below are in stock.
 2 to 3 days time must be allowed to prepare the blocks for shipment.



Wholesale Price Includes:

- > Cylinders & Crankcase*
- > Blocks are Stripped and Cleaned*
- > Cylinders are bored to OMC Specs*
- > Cylinders are Precision Honed*
- > Cylinders are Deburred*
- > Cylinders are Sealed for Protection*

No Core Charge



HP	Description	CID	Year
20-35	2 Cyl	32 CID	1985 thru 2004
40 - 55	2 Cyl	45 CID	1989 thru 2004
60 - 70	3 Cyl	56 CID	1986 thru 2001
85 - 140	V4 Cross	100 CID	1977 thru 1998
120 - 140	V4 Loop	110 & 122 CID	1985 thru 1996
150 - 200	V6 Cross	149 CID	1976 thru 1991
200 - 225	V6 Loop	2.7 & 3.0 Litre	1986 thru 1991
250 - 300	V8 Loop	3.6 & 4.0 Litre	1985 thru

Wholesale Factory Takeoff V-4 Cross Flow 90 HP Dressed Powerheads



1-888-282-2840 Toll Free



Flagship Remanufacturing has a limited supply of the 90 HP Cross Flow Dressed Powerheads available to all marine dealers (wholesale only). These powerheads are new (TAKEOFF) replacements for all "Flat Back Exhaust" V4 Cross Flow Motors from 1978 to the present, including 85, 88, 90 horsepower motors and 90 turbo jets.

FREE TRUCK FREIGHT ON THE PURCHASE OF 2 OR MORE UNITS IN THE CONTINENTAL U.S. ON THIS DRESSED POWERHEAD

NO CORE CHARGE
180 DAY FLAGSHIP LIMITED WARRANTY

Miscellaneous Evinrude & Johnson Outboard Engine Parts

We offer various outboard parts that are used but in excellent shape. These parts have been cleaned, inspected and stored. Since we have a large excess of them, we offer these at a drastically reduced price.



Crankshafts

1989 thru 60/70 3 cylinder
All Cross flow V6's
1986 thru 1991 V6 Loop



Connecting Rods

3 Cyl 56 CID
V4 / V6 Cross Flow
V6 Loop (Light)

Cylinder Heads

3 Cyl head 56 CID
1986 and 1987 200/ 225 hp
All Small Bore V8 275 / 300 HP



Evinrude / Johnson V4 / V6 Gearcases

These gearcases are remanufactured with the same philosophy, quality parts and care that goes into all Flagship products.

V6 / V4 Remanufactured Gearcases



The gearcases are checked with equipment to ensure that the housing is straight and true before going through our assembly facility. If they make it pass this inspection process and into the Flagship assembly facility, you can rest assured that they are assembled using **parts that meet or exceed OEM criteria**, while getting the same quality control procedures that go into all Flagship products. They are correctly shimmed using the same shimming tools to get the desired gear lash that the factory technical specs require. From here they get assembled in our cleanroom, and get a primer coat of paint and packaged. Every gearcase is shipped with a new water pump kit.

Flagship 4 Stroke Outboard Dealer Rebuilding Service



1-888-282-2840 Toll Free

At Flagship Marine our experience extends beyond those products you have always associated us with. In addition to our Evinrude / Johnson Option 3 and Option 4, we also offer our Rebuilding service to those dealers who handle Mercury, Yamaha and Suzuki Outboard products.

Dealer Rebuilds / Precision Boring / Honing Service

4 Cycle Outboard Cylinder Head Rebuilds (Dealer Cylinder Valve Jobs)

Dealer PH Rebuild



Dealer PH Rebuild



OUTBOARDS

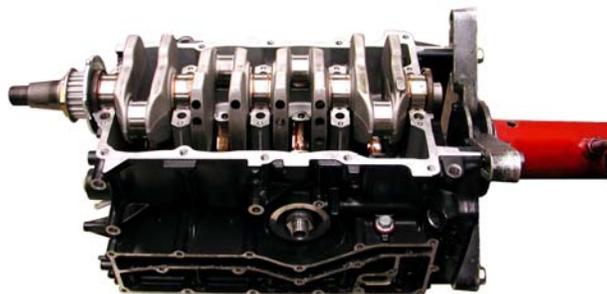


200 / 225 Cylinder Head



40 / 50 Cylinder Head

Dealer PH Rebuild



MERCURY
OUTBOARDS

Prices include all parts and labor for the disassembly, cleaning, machining and reassembly. All Powerheads will be remanufactured using new gaskets, pistons, o-rings and seals. All blocks must be borable and have a usable crankshaft and rods. Call today for a quote. Any additional work such as, cylinder sleeving, block decking or cylinder head repair, etc. will be done at an additional cost. If there are additional charges incurred you will be notified prior to the repair.

Mercury & Yamaha Dealer Rebuilding Service Options 3



1-888-282-2840 Toll Free

This program is for those powerheads returned by the dealers to Flagship to be remanufactured. These are powerheads that do not need to be replaced, but simply need to be remanufactured. Examples of this type of powerhead would be those that are worn (high usage), have broken rings, scuffed cylinders or simply an older powerhead the customer wants upgraded as an option to replace. Powerheads remanufactured under this program carry the full 180-Day Flagship Limited Warranty.

Option 3 - Send us **YOUR** powerhead less the carburetors, fuel system and ignition system (**UNDRESSED**) and we will remanufacture it. Regardless of make or model all dealer rebuilds are remanufactured using quality parts (not aftermarket). With this option you get the same results as if you purchased a powerhead from us and saved a little money. Freight is not paid by Flagship Marine in either direction.

M E R C U R Y

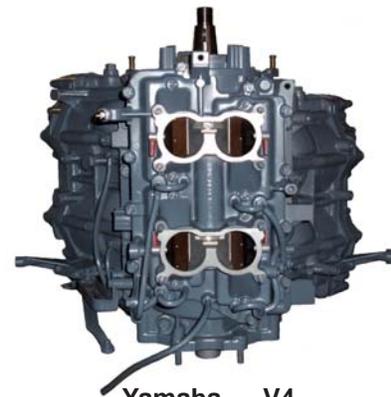
OUTBOARDS



Mercury EFI / CARB V6
Option 3



Mercury Optimax V6
Option 3



Yamaha V4
Option 3



Yamaha V6 HPDI
Option 3

EVINRUDE / JOHNSON Dealer Rebuilding Service Options 3



1-888-282-2840 Toll Free

Option 3 - Send us **YOUR** powerhead less the carburetors, fuel system and ignition system (**UNDRESSED**) and we will remanufacture it. Regardless of make or model all dealer rebuilds are remanufactured using quality parts (not aftermarket). With this option you get the same results as if you purchased a powerhead from us and saved a little money. Freight is not paid by Flagship Marine in either direction.

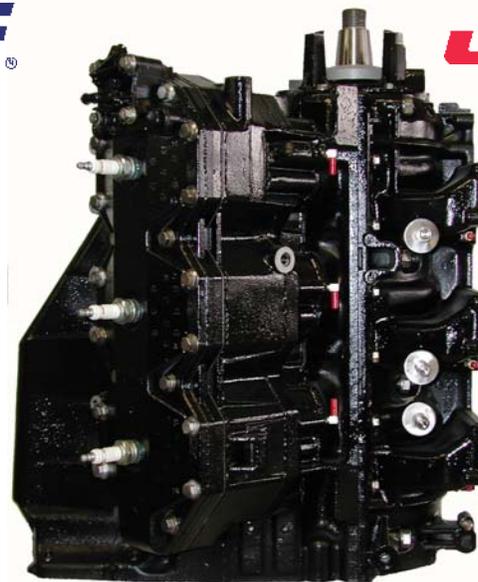
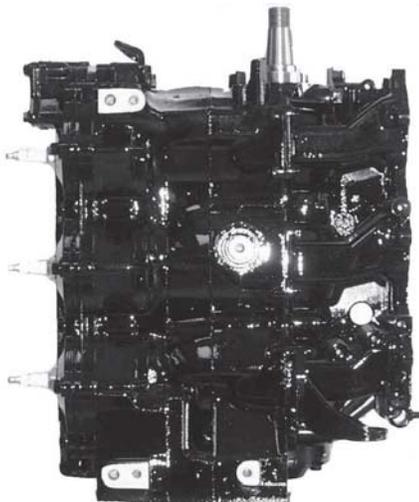
Flagship's Options 3 This program is for those powerheads Shipped by the dealers to Flagship to be remanufactured. These are powerheads that do not need to be replaced, but simply need to be remanufactured. Examples of this type of powerhead would be those that are worn (high usage), have broken rings, scuffed cylinders or simply an older powerhead the customer wants upgraded as an option to replace. Powerheads remanufactured under this program carry the full 180-Day Flagship Limited Warranty. Prices include all parts and labor for the disassembly, cleaning, machining and reassembly. All Powerheads will be remanufactured, using new gaskets, pistons, o-rings and seals. All cylinders will have new pistons installed and all of the powerheads will be reassembled with the latest style cylinder heads. All return cores must be borable and have a usable crankshaft and rods. Powerheads other than those listed above can be remanufactured. Call today for a quote. **Option 3** Evinrude / Johnson 1-888-282-2840

GENUINE PARTS

EVINRUDE

Johnson

60 / 70 hp (56 CID)
Powerheads (Option 3)



200 / 225 hp V6
Powerheads (Option 3)

150 / 175 hp 6V6
Powerheads (Option 3)



Mercury & Yamaha Dealer Rebuilding Service Options 4



1-888-282-2840 Toll Free

Option 4 - Send us **YOUR** powerhead with the carburetors, fuel system and ignition system (**DRESSED**) and we will remanufacture it. In this option we clean all components and rebuild the carburetors. All EFI & Direct fuel injected outboards (Except Ficht, E-Tec style) get the injectors clean and flow tested prior to assembly, see page 7 for details. Regardless of make or model all dealer rebuilds are remanufactured using quality parts (not aftermarket).

Note! Freight is not paid by Flagship Marine in either direction.

(Note! We can not run the motor, so we can not check to see whether the ignition or oiling systems are working properly, nor can we set the timing on all engines except for the all OIS 2000 ignition system equipped engines.)

Prices include all parts and labor for the disassembly, cleaning, machining and reassembly. All Powerheads will be remanufactured, using new gaskets, pistons, o-rings and seals. All cylinders will have new pistons installed and all of the powerheads will be reassembled with the latest style cylinder heads. All return cores must be borable and have a usable crankshaft and rods. Powerheads other than those listed above can be remanufactured. Call today for a quote.



Mercury 225 Optimax

Option 4



Yamaha carbureted V6

Option 4

Option 4 Fuel Injection Cleaning

Note! This procedure is a standard procedure on our (Option 4)EFI Dealer Powerhead Rebuilding Service

Today fuels are developed for everyday automotive driving. In the marine environment, however, boats will usually sit for long periods unused and are exposed to foreign matter that can get into a boats fuel system. This can be especially problematic with the current fuel injection outboards which are more common today then in the past.

As a dealer, you probably witnessed the ever increasing number of reports by operators of conventional style injection (shown below) of problems caused by clogged, gummed up or even stuck injectors.

Flagship now has the ability to solve this problem. Flagship will go through its procedure to “flow” the injectors to establish a relative value of your injector to that of a new one. After such, Flagship will clean the injectors as needed. This will allow your injectors, as well as your engine, to operate at their optimal level. Likewise, this procedure is also available for stern drive and inboard 4 cycle engines.



EVINRUDE **Johnson**

Dealer Rebuilding Service Flagship's Options 4

FLAGSHIP 
MARINE ENGINES

1-888-282-2840 Toll Free

This program is for those powerheads returned by the dealers to Flagship to be remanufactured. These are powerheads that do not need to be replaced, but simply need to be remanufactured. Examples of this type of powerhead would be those that are worn (high usage), have broken rings, scuffed cylinders or simply an older powerhead the customer wants upgraded as an option to replace. Powerheads remanufactured under this program carry the full 180-Day Flagship Limited Warranty.

Option 4 - Send us **YOUR** powerhead less the carburetors, fuel system and ignition system (**UNDRESSED**) and we will remanufacture it. Regardless of make or model all dealer rebuilds are remanufactured using quality parts (not aftermarket). With this option you get the same results as if you purchased a powerhead from us and saved a little money.

Freight is not paid by Flagship Marine in either direction.

EVINRUDE
GENUINE PARTS
Johnson



Evinrude / Johnson
Option 4



Evinrude / Johnson
Option 4

Option 4 - Send us **YOUR** powerhead with the carburetors, fuel system and ignition system (**DRESSED**) and we will remanufacture it. In this option we clean all components and rebuild the carburetors. All EFI & Directed fuel injected outboards (Except for Ficht, E-Tec Style) get the injectors clean and flow tested prior to assembly, see page 7 for details. Regardless of make or model all dealer rebuilds are remanufactured using quality parts (not aftermarket).

(Note! We do not run the motor, so we can not check to see whether the ignition or oiling systems are working properly, nor can we set the timing on all engines except for the all OIS 2000 ignition system equipped engines.)

Prices include all parts and labor for the disassembly, cleaning, machining and reassembly. All Powerheads will be remanufactured, using new gaskets, pistons, o-rings and seals. All cylinders will have new pistons installed and all of the powerheads will be reassembled with the latest style cylinder heads. All return cores must be borable and have a usable crankshaft and rods. Powerheads other than those listed above can be remanufactured. Call today for a quote.

Option 5



1-888-282-2840 Toll Free

EVINRUDE Johnson Remanufactured Powerheads

This program is for powerheads that have been severely damaged and must be replaced. The remanufactured powerheads listed below are in stock and ready for immediate same day shipment to provide your customers with the least possible down time. There is no core charge or need to send your powerhead in advance.

All Flagship Replacement Powerheads start out being hot tank cleaned, then inspected for bolt thread condition, bore and head surface distortion and inspected for cracks. If they pass our rigorous inspection processes they are bored and then honed to the precise fit and finish using the latest OEM's specifications using a Sunnen automated cylinder honing machine. Then they are finish cleaned and assembly readied and delivered to our state-of-the-art assembly room. All Flagship replacement powerheads are assembled using quality parts (Not Aftermarket components) then paint protected and boxed with all gaskets and spark plugs necessary to complete the job.

All Flagship Remanufactured Evinrude & Johnson Replacement Powerheads use **EVINRUDE / JOHNSON Genuine Parts**. Powerheads remanufactured under this program carry the 1 Year Flagship Limited Warranty.

All Mercury & Yamaha Flagship Remanufactured Powerheads are remanufactured using Mercury or Yamaha specifications and assembled with high quality components (not Aftermarket). Due to Limited quantities please call for price and availability, or ask about our rebuilding services.



M
E
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Y

Option 5 Description
2 cylinder 25 / 30 HP 1985 - 2001
3 cylinder 25 / 35 HP 1995 - 2001
2 cylinder 40 / 50 HP 1985 - 2001
3 cylinder 50 / 60 / 70 HP 1989 - 2001 56 cid
4 cylinder CF Flatback 88, 90, 100, 115, and 1.6 Sea Drive
4 cylinder CF Bubble Back 110, 115, 135, 140 and 1.6 Sea Drive
4 cylinder 6V4 carb 90, 115
4 cylinder 6V4 FFI 75, 90, 115
4 cylinder Looper carb 120, 130, 135 and 140
6 cylinder 149 cid 150, 150 xp gt, 155 Comm 175, 185, 200, 2.5 Sea Drive
6 cylinder 160 cid 175, 235 2.6 Sea Drive
6 cylinder 6V6 158 cid 105j, 155 comm 150, 150 GL, 175
6 cylinder 6V6 FFI 135, 150, and 175
6 cylinder Looper carb 185 comm, 200, 225
6 cylinder Looper carb 225HO, and 250
6 cylinder FFI 200, 225, 200 comm, and 250
8 cylinder 250 HP, 275, 300

Y
A
M
A
H
A

Please Order by using Engine Model

Outboard Model Year Guide

I	N	T	R	O	D	U	C	E	S
1	2	3	4	5	6	7	8	9	0

** We pay the freight STANDARD ground within mainland 48 states

Mercury Remanufactured Powerheads



1-888-282-2840 Toll Free

Mercury Option 5

This program is for powerheads that have been severely damaged and must be replaced. The remanufactured powerheads listed below are in stock and ready for immediate same day shipment to provide your customers with the least possible down time. All Mercury powerhead purchases require a core charge. Please ask for details when inquiring about price and availability.

All Flagship Replacement Powerheads start out being hot tank cleaned, then inspected for bolt thread condition, bore and head surface distortion and inspected for cracks. If they pass our rigorous inspection processes they are bored and then honed to the precise fit and finish using the latest OEM's specifications using a Sunnen automated cylinder honing machine. Then they are finish cleaned and assembly readied and delivered to our state-of-the-art assembly room.

All Flagship Remanufactured Mercury Replacement Powerheads are assembled using **Mercury Genuine Parts** (not aftermarket components) . Powerheads remanufactured under this program carry the 1 Year Flagship Limited Warranty, then paint protected and boxed with all gaskets and spark plugs necessary to complete the job.

Due to Limited quantities please call for price and availability, or ask about our rebuilding services.

Mercury Option 5 Description	pt #
2 cylinder 25 / 20 / 40 HP	FM5L2
3 cylinder 30 / 40 / 50 60 HP	FM5L3
3 cylinder 75 / 90 HP Small Bore	FM5i3SB
3 cylinder 75 / 90 HP Big Bore	FM5i3BB
4 cylinder 115 / 125 HP Small Bore	FM5i4SB
4 cylinder 115 / 125 HP Big Bore	FM5i4SB
6 cylinder 2.0 litre vertical reed 135 / 150 HP	FM5OLD6
6 cylinder 2.0 litre horizontal reed 135 / 175 HP	FM5MID6
6 cylinder 2.4 litre horizontal reed 175 / 200 HP	FM5NEW6
6 cylinder 2.5 EFI / Carb 150 / 175 / 200 HP	FM526X6
6 cylinder 2.5 litre Optimax 135 / 150 / 175 HP	FM526DI
6 cylinder 3.0 litre Carbureted 200 / 225 HP 9 spline 1994 only	FM5309S
6 cylinder 3.0 litre Carbureted 200 / 225 HP 13 spline	FM5313S
6 cylinder 3.0 litre EFI 200 / 225 / 250 HP	FM530EFI
6 cylinder 3.0 litre EFI Optimax 200 / 225 / 250 HP	FM530DI

Yamaha Remanufactured Powerheads



1-888-282-2840 Toll Free

Yamaha Option

This program is for powerheads that have been severely damaged and must be replaced. The remanufactured powerheads listed below are in stock and ready for immediate same day shipment to provide your customers with the least possible down time.

All Flagship Replacement Powerheads start out being hot tank cleaned, then inspected for bolt thread condition, bore and head surface distortion and inspected for cracks. If they pass our rigorous inspection processes they are bored and then honed to the precise fit and finish using the latest OEM's specifications using a Sunnen automated cylinder honing machine. Then they are finish cleaned and assembly readied and delivered to our state-of-the-art assembly room.

All Flagship Remanufactured **Yamaha Replacement Powerheads** are assembled using **Yamaha Genuine Parts** (not aftermarket components) . Powerheads remanufactured under this program carry the 1 Year Flagship Limited Warranty.then paint protected and boxed with all gaskets and spark plugs necessary to complete the job.

Due to Limited quantities please call for price and availability, or ask about our rebuilding services. Model Number must be provided to assured that the correct part can be identified

Yamaha Option 5 Description	pt #
2 cylinder 25 / 30 HP 1	FY5L2
3 cylinder 30 / 40 / 50 HP	FY5L3
2 cylinder 40 / 50 HP	FY5B2
3 cylinder 60 / 70 / 90 HP	FY5B3
4 cylinder 115 / 130	FY5V4
6 cylinder 2.6 litre vertical reed 150 / 175 / 200 1984 - 1990	FY5OLD6
6 cylinder 2.6 litre vertical reed 150 / 175 / 200 1991 - 1995	FY5MID6
6 cylinder 2.6 litre horizontil reed 150 / 175 / 200	FY5NEW6
6 cylinder 2.6 litre OX66 EFI 150 / 175 / 200 1997 - 2005	FY526X6
6 cylinder 2.6 litre HPDI 150 / 175 / 200 2000 - 2005	FY526DI
6 cyclinder 3.1 litre V76 Carbureted 225 / 250 HP	FY531C
6 cyclinder 3.1 litre V76 OX66 EFI Vmax 200 / 225 / 250 HP	FY531X6
6 cyclinder 3.3 litre V76 HPDI Vmax 200 / 225 / 250 / 300 HP	FY533DI

Outboard Cylinder Sleeves



Cast Iron-alloy Material designed and manufactured for marine application to meet & exceed OEM specifications. Ported Sleeves are machined to exact specifications offering the engine builder

the finest fit and performance. Wall thickness remains consistent, providing maximum heat transfer and superior engine life for all outboards. Evinrude and Johnson models shown below. Also, Flagship offers sleeves for **Mercury** and **Yamaha** with limited availability or special order. Call for Information.

1-888-282-2840 Toll Free

MODEL	DESCRIPTION	SLEEVE PT #	O.D.
20 - 35 1981 - 95	Straight Sleeve w/o Ports	FM 1011SA FM 1011SB FM 1011SC	3.125 3.188 3.250
40 / 45 / 48 / 50 / 55 / 60 HP 1980 THRU 2000	Straight Sleeve w/Ports	FM 1007SA FM 1007SB	3.452 3.473
55 HP 1979	Flanged Sleeve w/Ports	FM 1008FA FM 1008FB	3.313 3.333
55 HP 1976 -1978	Flanged Sleeve w/Ports	FM 1009F FM 1009FB	3.313 3.333
50 HP 1979 - 80	Flanged Sleeve w/Ports	FM 1010FA FM 1010FB	3.313 3.333
65 / 70 / 75 HP (49 CID)	Flanged Sleeve w/Ports	FM 1003FA FM 1003FB	3.190 3.210
60 / 70 HP (56 CID) 1986 thru 1991	Straight Sleeve w/Ports	FM 1006SA FM 1006SB	3.190 3.464
60 / 65 / 70 HP (56 CID) 1995 thru 2000	Straight Sleeve w/Ports	FM 1088SA FM 1088SB	3.444 3.464
	Flanged Sleeve w/Ports	FM 1088FA	3.444
V4 - V6 Cross Flow 3.500 Dia.Bore (All) (149" CID)	Straight Sleeve w/o Ports	FM 1000SA FM 1000SB FM 1000SC	3.628 3.690 3.753
	Flanged Sleeve w/o Ports	FM 1000FA FM 1000FB FM 1000FC	3.628 3.690 3.753
90 6V4 1995 thru	Straight Sleeve w/Ports	FM 1097PSA / SSA	3.800
115 6V4 1995 thru	Straight Sleeve w/Ports	FM 1098PSA / SSA	3.800
90 115 FFI thru	Straight Sleeve w/Ports	FM 1125PSA / SSA	3.800
V6 Cross Flow 3.625 Dia Bore (All) (160" CID)	Straight Sleeve w/o Ports	FM 1001SA FM 1001SB FM 1001SC	3.753 3.815 3.878
	Flanged Sleeve w/o Ports	FM 1001FA FM 1001FB FM 1001FC	3.753 3.815 3.875
120 / 140 / 200 / 225 1985 thru 1987 3.500" bore	Straight Sleeve w/Ports	FM 1023SA FM 1023SB	3.875 3.895
120 / 130 / 140 HP 1988 Thru 2000 (250 / 300 V8 ALL)1988-95	Straight Sleeve w/Ports	FM 1002SA FM 1002SB	3.875 3.895
	Flanged Sleeve w/Ports	FM 1002FA	3.905
150 HP 6V6 (158" CID) 1991 Thru	Straight Sleeve w/Ports	FM 1045PSA / SSA FM 1045PSB / SSB	3.800 3.820
150 HP GL (Fastrike / Intruder) 1994 Thru	Straight Sleeve w/Ports	FM 1126 PSA / SSA	3.800
175 HP 6v6 (158 CID) 1991 thru	Straight Sleeve w/Ports	FM 1067PSA / SSA FM 1067PSB / SSB	3.800 3.820
150 FFI 6V6 1997-1999 early	Straight Sleeve w/Ports	FM 1116 PSA / SSA	3.800
175 FFI 6V6 1997 - 1999 early	Straight Sleeve w/Ports	FM 1110PSA / SSA	3.800
150 FFI 6V6 1999 late 2000 thru 2002	Straight Sleeve w/Ports	FM 1121PSA / SSA	3.800
175 FFI 6V6 1999 late 2000 thru 2002	Straight Sleeve w/Ports	FM 1121PSA / SSA	3.800
200 / 225 HP 1988 Thru 92	Straight Sleeve w/Ports	FM 1025SA FM 1025SB	3.875 3.895
200 / 225 HP 1993 Thru 2001	Straight Sleeve w/Ports	FM 1040SA FM 1040SB	3.875 3.895
225HO / 250 HP 1997 thru 2001	Straight Sleeve w/Ports	FM 1112 PSA / SSA	3.800
275 / 300 HP 1985 Thru 87 3.500 Dia. Bore	Straight Sleeve w/Ports	FM 1013SA FM 1013SB	3.875 3.895

Aftermarket Outboard Pistons



1-888-282-2840 Toll Free



Wiseco or other Aftermarket Pistons Special Order Only

Evinrude / Johnson Outboard Starter & Trim Motors

P/N 586279



40 / 50 hp
2 Cylinder

P/N 586281



3 Cylinder

P/N 586283



V4 Cross Flow

P/N 586285



V4 Loop

P/N 586288



V6 Cross Flow

P/N 586284



All Eagle 6V4

P/N 586287



All Eagle 6V6

P/N 586731



V6 / V8 Loop

Integral Trim Motor
3 bolt flange



P/N 394176



P/N 585229
Trac Trim Motor
4 bolt Flange

Techmate - Self-contained diagnostic scan tool that Displays GM Marine EFI System Information and performs Component diagnosis. Techmate also displays live sensor readings, extracts ECM fault codes, and performs multiple pulse fuel injector test and allows base spark advance to be set using a timing light



EFI Test Equipment by Rinda Technologies

Codemate - Serves as an economical tool that only reads fault codes and also allows spark advance to be set when used with a timing light.



Diacom Plus - PC based diagnostic software tool that taps into the engines onboard computer allowing the technician to quickly zero in on the problem. Diacom also displays 30 engine perimeters allowing you to get the big picture. It displays graphical data to help you analyze data to pinpoint those troublesome intermittent problems.



Flagship PWC Dealer Rebuilding Service



1-888-282-2840 Toll Free

This program offers all of our superior Flagship Machine Shop Services to dealers who wish to rebuild their own PWC, Snowmobile or ATV, models that do not contain a transmission, air or water cooled cylinders. These are the same procedures used in the Flagship Remanufacturing processes.

Dealer Rebuilds / Precision Boring & Honing Service



Dealer Rebuilds



Dealer Rebuilds



Piston Kits
Special order only

Crankshaft
Rebuilding



Machine Shop Services

- (Including Port Deburring)
- Boring One Cylinder up to .040
- Boring Two or More Cylinders Up to .040
- Boring One Cylinder up to .080
- Boring Two or More Cylinders Up to .080
- Precision Honing (Clean-Up)
- Replace Cylinder Sleeve
- Including Sleeve (depending on model)



Cylinder Machining
and Resleeving



Motor Cycle & ATV Cylinder Boring



Harley Davidson Cylinder Boring



Yamaha Banshee Cylinder Boring

Faria®

MARINE
INSTRUMENTS

FLAGSHIP 
MARINE ENGINES

1-888-282-2840 Toll Free



Flagship Marine has teamed up with Faria Instrument Company to offer an array of instruments for both Inboard, Diesel, I/O, and Outboard Applications. Shown are a few models that we have in stock. Other Faria models can be special ordered upon request. Check out them out at Faria-instruments.com. Call for price and availability.

Outboard Spark plugs

- | | |
|---------|----------------------|
| L77JC4 | QL76V |
| QL77JC4 | 7712 |
| QL77CC | XC12PEPB |
| QL78YC | QC12PEP |
| QL78C | QC12GMC (OPTIMAX V6) |
| QL82C | QC10WEP(E-Tec) |
| UL77V | QC8WEP (E-Tec) |



Flagship Marine gets many calls asking why should I buy a Q-type of Spark Plug vs an L-type, and what is the difference? The following explanation provided by Champion Spark Plug Co. trying to explain why it is important to pick the correct spark plug and that not all spark plugs are created equal. We hope this information helps in making your decision easier.

At the moment the spark jumps the gap it causes a high frequency burst of energy, this is known as RFI (radio frequency interference). This is why Champion introduced resistor spark plugs in the mid 1960's. Placing a resistor within the spark plug suppresses the RFI. Without resistor plugs in your car you can experience static on your radio as well as interfere with other sensitive electronic equipment. Some later model vehicles as well as newer Powersport engines must use resistor plugs for a proper "talkback" to the electronic ignition. Outboard marine Capacitive Discharge Ignition (CDI) such as used on some Evinrude and Johnson marine engines require a special inductive type resistor (such as a Champion Q-type resistor). Use of non-inductive resistor type plugs on these motors can cause misfire and poor performance. For automotive CDI high output ignition systems (such as Mallory, MSD, Crane and Accel), refer to Resistor plugs for race engines for information relative to modified motors.

Engine Care Products



1-888-282-2840 Toll Free

Evinrude / Johnson Products



Fogging Oil P/N **775626**
 Engine Tuner P/N **775627**
 2+4 Stabilizer P/N **775613**
 Carbon Guard P/N **772048**
 Marine Cleaner P/N **775631**
 XD 30 Outboard oil P/N **777219**
 XD 100 Outboard oil P/N **777118**
 6n1 Penetrating lube P/N **775621**
 Wheel Bearing Grease P/N **508303**

Sta-Bil Products



P/N **1108B** - 8OZ
 P/N **1132** - 32OZ

Yamaha Products



Outboard 2 cycle Oil P/N **ACC-M TCW3 OIL 4-1GL/CS**
 Ringfree Fuel Additive P/N **ACC-RNGFR-EE-12**
 Multi-purpose Grease P/N **ACC-GREAS-16-TB**
 Stor-rite Fogging Oil P/N **ACC-STORE-RI-TE**

Loctite / Permatex Products

Gasket Eliminator 518 P/N **51813**
 Thread Sealant P/N **56521**
 Hi tack Sealant P/N **80065**
 Loctite 271 P/N **26240**
 Loctite 242 P/N **24240**



Penzoil Products



Engine Oil - 30W SAE P/N **62599**
 Engine Oil - 40W SAE P/N **62600**
 Synthetic Outboard Oil P/N **56571** 1 GAL TCW3
 Oil Filters P/N **PZ-1, PZ-3, PZ-29**
 Z4 Multi-purpose Lube P/N **1115**
 Corrosion Protectant P/N **1108**
 ZQ Quick Penetrant P/N **1118**

Engine Coating and Paint



Hi-temp engine paint as well as original equipment paint from Evinrude/Johnson, Crusader, and Chris Craft - 12 oz cans

Note! Other colors available see price sheet or call

Commercial Engine Coatings extremely durable for marine applications - 16oz cans



Water Finder Paste

Finds water in fuel and oil
 P/N **WFP-1**

Torque-Seal

Anti-tamper Sealer P/N **TS-1**



Engine Care Products



1-888-282-2840 Toll Free

Inboard Champion Spark Plugs



INBOARD

- RV8C
- RV9YC
- RS12YC
- RV12YC
- RV15YC4

Fuel Filter / Water Separators



18-7853-1



18-7776-1



18-7844



18-7848-1



18-7789



Inboard Spark Plugs

- P/N **MR43T** - 3.0L thru 8.2L
- P/N **MR44T**
- P/N **MR43LTS** - 3.0 thru 8.2L all Vortec
- P/N **R45XL**T - 572 620hp
- P/N **12578277** - 41-983 8.1LT (gp)

- P/N **25162556** - 41-932 5.7, 5.0, 4.3 (MPI) (IAF) gp
- P/N **12571164** - 6.0L 2002 - 2005
- P/N **19158036** - 41-940 3.1 - 3.4L V6 (gp)
- P/N **89017883** - 41-932 3.0L thru 5.7L 1985 - 94(gp)
- P/N **19145290** - 8 - RapidFire



(gp) denotes Gold Platinum



Flame Arrestor

Flagship Air Filter / Arrestor



P/N 59-5050

P/N 59-5000

P/N HP-3001

P/N 59-3364

Other K&N oil filters and Coast Guard approved air filters available. Call for price and availability.



P/N 802220AB

P/N 803010B

P/N 571510B



P/N 4MA112-FLA01



P/N 7000P



P/N A7430-15V62



FUEL INJECTORS CLOGGED

Don't Buy New Ones, We Can Clean Them.

Flagship's Clean and Flow Service



**Opti-max Injectors
Air of Fuel**

All vehicles including marine engines are vulnerable to injector clogging, and most likely to experience driveability problems. In the marine environment, usage or lack of, along with water in the fuel tend to accelerate or aggravate this condition.

Flagship Fuel Injectors Service can service all Solenoid type of Injectors except (Pump Style Injectors Ficht / E-tec). Flagship Clean and Flow service is the only approved service for their dealers, Reference Yamaha Tech Exchange 02005-008. In addition to Yamaha Injectors we can perform this service to Mercury Outboards both EFI and Optimax, MerCruiser, Cobra and Volvo inboard and Sterndrives. Indmar, Crusader and Marine power Inboards and including Suzuki and Honda Outboards.

Where do the deposits come from? Mostly from the fuel itself. Gasoline is a mixture of many different hydrocarbons, including olefins, which are heavy, waxy compounds. The heavier the hydrocarbon, the more energy it yields when it burns. When the engine is shut off, the injectors undergo heat soak. Fuel residue in the injector nozzles evaporates, leaving the waxy olefins behind. Because the engine is off, there is no cooling air flow through the ports and no fuel flow through the injectors to wash it away, so heat bakes the olefins into hard varnish deposits. Over time, these deposits can build up and clog the injectors.

The first step in the test process is to install the injectors on Flagship Marine's computer-controlled injector flow-testing equipment. A unique, gasoline-like test fluid is pumped at a precisely controlled pressure (identical to your engines) through the injectors while they are pulsed by injector-drivers built into the equipment. The volume of the fluid passed through the injector is accurately measured for a set amount of time and from those figures, fuel flow is derived. During the flow-test, the injector spray patterns are visually inspected and analyzed by Flagship's technician using both bright room light and a strobe light.

After the initial flow-test, your injectors are transferred to an ultrasonic cleaning machine. They are submerged in cleaning solution and subjected to ultrasonic waves. The solution and the ultrasound aggressively clean the internal and external parts of the injectors.

Finally, the now-clean injectors gets a new basket filter and are reinstalled on the flow-tester and run again, to verify the fuel flow rates and spray pattern assessments for each injector tested. Data for each injector is collected and compared to collected data of new injectors. Units of measurement are in fuel flow rate values in cc/min.

The charge for Flagship's Clean and Flow Service is \$50.00per injector retail. Turn around time is 24 hrs. If we find a bad injector we will advise you of our findings.



1-888-282-2840 Toll Free



FLAGSHIP Marine Engines	Date: 10/20/08
200 E. New Street Piquette Center, MI 48670 1-888-282-2840 Fax: 519-471-1200 www.FlagshipMarine.com	Order Name: 120000 Service
	Engine Brand: Yamaha
	Engine Model: F 115
	Test Pressure: 3.5bar

Injector Performance Test Report											
CONTINUITY BY OHMS before CLEANING											
INJ 1	INJ 2	INJ 3	INJ 4	INJ 5	INJ 6	INJ 7	INJ 8	INJ 9	INJ 10	INJ 11	INJ 12
100	100	100	100	100	100	100	100	100	100	100	100
3.5 SECONDS TIMED OPEN FLOW TEST MEASURED BY ML before CLEANING											
INJ 1	INJ 2	INJ 3	INJ 4	INJ 5	INJ 6	INJ 7	INJ 8	INJ 9	INJ 10	INJ 11	INJ 12
100	100	100	100	100	100	100	100	100	100	100	100
30 SECONDS TEST PULSED FLOW TEST MEASURED BY ML before CLEANING											
INJ 1	INJ 2	INJ 3	INJ 4	INJ 5	INJ 6	INJ 7	INJ 8	INJ 9	INJ 10	INJ 11	INJ 12
100	100	100	100	100	100	100	100	100	100	100	100
LEAK TEST after CLEANING (P = PASS / F = FAIL)											
INJ 1	INJ 2	INJ 3	INJ 4	INJ 5	INJ 6	INJ 7	INJ 8	INJ 9	INJ 10	INJ 11	INJ 12
P	P	P	P	P	P	P	P	P	P	P	P
3.5 SECONDS TIMED OPEN FLOW TEST MEASURED BY ML after CLEANING											
INJ 1	INJ 2	INJ 3	INJ 4	INJ 5	INJ 6	INJ 7	INJ 8	INJ 9	INJ 10	INJ 11	INJ 12
100	100	100	100	100	100	100	100	100	100	100	100
30 SECONDS TEST PULSED FLOW TEST MEASURED BY ML after CLEANING											
INJ 1	INJ 2	INJ 3	INJ 4	INJ 5	INJ 6	INJ 7	INJ 8	INJ 9	INJ 10	INJ 11	INJ 12
100	100	100	100	100	100	100	100	100	100	100	100
NOTES											
P = Pass / F = Fail / O = Out of Spec / T = Test											

This is an economical alternative service that Flagship offers for Yamaha outboards. This service has been field tested and was a joint Yamaha / Flagship Project. After many months of field testing we developed a process that brings all High Pressure Pumps assemblies back to like new performance and in some cases better. (Reference Yamaha Tech Exchange below)

Remove the High Pressure Pump Assembly complete as shown below. Packaged the pump assembly extremely well give extra attention to the outlet valve end on older style pumps. Ship the pump to the address below.



**Outlet Valve only on
2001 thru 2003
2.6 litre pump Assy.**

**Ship to: Flagship Marine Engine Co.
200 E Ann Street
Punta Gorda, FL. 33950**

Once we receive your pump assembly we will flow test your pump and record all values both [pressure and fuel flow). We then completely disassemble the pump, clean all pump components and reassemble. We then re-flow the pump while adjusting the pressure regulator and again record the performance values. We return your sealed and serialized pump along with matching performance test sheet.

Note! On 2001, 2002 & 2003 It is extremely important to package these pumps with extra padding on the end where the fuel return tube is located. We have received many Pump Assemblies where this tube was bent or broken off of the valve cover (shown below) this piece is not serviced and you have to replace the fuel pump.



Note! All 2.6 Litre style Pumps are not tested with Pressure Sensor therefore the sensor is not tested



Note ! 3.3 litre high pressure pump assy should also be returned with pulley as we drive from the pulley during the flow test.

OUTBOARD 5/08/2009 Q2009-011

TECH EXCHANGE

SUBJECTS: 1. All HPDI Models – High Pressure Fuel Pump Servicing
2. F200, F225, F250 Models – Main Bearing Identification

©2009 YAMAHA MOTOR CORPORATION, U.S.A.

All HPDI Models – High Pressure Fuel Pump Servicing

The HPDI high pressure fuel pump assemblies are equipped with internal filter screens. The filters may become clogged from contaminated fuel and varnish. The filters are not a dealer serviceable item. In the past, this meant that the fuel pump needed replacement to fix internal filter-related fuel pressure or volume issues.

Flagship Marine Engines Co., Inc. has developed specialized equipment to service and test the HPDI high pressure pumps. The service includes:

- Cleaning and inspection
- New filter screens, O-rings, gaskets, camshaft seals and camshaft lubricant
- Certification of fuel pressure and flow rate

Contact Flagship Marine directly for HPDI high pressure pump and fuel injector service (see Technical Bulletin Q2005-008):

Flagship Marine Engines Co., Inc.
200 E. Ann St.
Punta Gorda, FL 33950-6006
Ph: 1-888-282-2840
Website: www.flagshipengine.com
E-mail: info@flagshipengine.com

When shipping the pump assembly to Flagship Marine for service, remove all hoses as shown in the adjacent photos. Secure the pump assembly inside an adequate shipping container to prevent damage to the hose nipples and fittings during shipping. Shipping damage will increase the cost of repair.

NOTE: The 2.6L Pump Outlet (see adjacent photo) is very susceptible to damage during shipping.



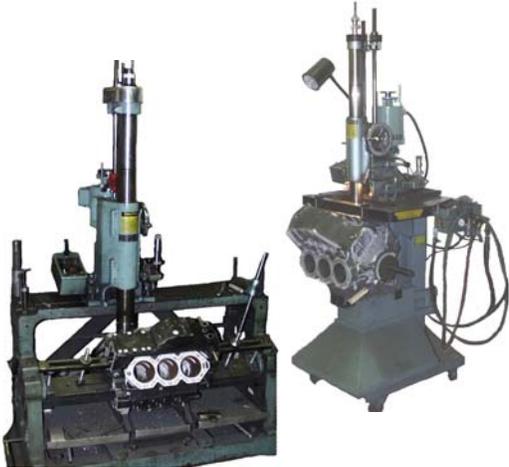
3.3L Litre Pumps	FLHPP52	Port	SanCarlos	Starboard	Total Flow
Before Cleaning	Max Pressure Flow Pressure Flow GPH	600 PSI 600 PSI 0 GPH	Max Pressure Flow Pressure Flow GPH	1050 PSI 1000 PSI 10.5 GPH	10.5 GPH
After Cleaning	Max Pressure Flow pressure Flow GPH	1080 PSI 1000 PSI 14.8 GPH	Max Pressure Flow Pressure Flow GPH	1080 PSI 1000 PSI 14.9 GPH	29.7 GPH

Flagship's Outboard Machine Shop Services



1-888-282-2840 Toll Free

Flagship's fully equipped Machine Shop Service offers services to our dealers who wish to rebuild their own Powerheads. These are the same services used in all of Flagships remanufactured products. In addition to machining Evinrude / Johnson blocks we also perform these services to Mercury & Yamaha blocks



Precision Boring and Honing

- (Includes Port Deburring)
- Boring One Cylinder up to .030
- Boring Two or More Cylinders Up to .030
- Boring Cylinders up to .065
- Boring Over .065 Oversize
- Precision Honing (Clean-Up)
- Replace Cylinder Sleeve
- Including Sleeve (depending on model)



Outboard Cylinder Boring

Available for Mercury and Yamaha.

Outboard Block Honing

As part of our continued dealers services, when you send in a block to be machined, high quality (not aftermarket) parts are available for your rebuild. We make these available for your convenience, kind of a one stop shopping. This way everything comes to you in one package with one freight bill.

**EVINRUDE
Johnson**
GENUINE PARTS



Suzuki 4 Cycle Cylinder Boring

MERCURY
OUTBOARDS



Mercury V6 Cylinder Boring

YAMAHA
GENUINE
Parts & Accessories



Flagship's Outboard Machine Shop Services



1-888-282-2840 Toll Free

Flagship's fully equipped Machine Shop Services offers services to our dealers who wish to rebuild their own Powerheads. These are the same services used in all of Flagship remanufactured products. In addition to machining Evinrude / Johnson blocks, we also perform these services to Mercury & Yamaha products.

Machine Block Decks or Surface Cylinder Heads



Cylinder Head Surfacing

Cylinder head surfacing is a very important part of engine rebuilding. If the surface is not flat and within the manufacturer's tolerance the proper amount of gasket squish is not achieved across the gasket. At Flagship we surface these cylinder heads to bring them back within tolerance while removing the minimum amount of material.



Cylinder and Crankcase & Parts Cleaning Service

This procedure consists of hot tank plus glass beading that removes heavy carbon deposits plus removes severe corrosion while cleaning the gasket surfaces leaving all parts looking almost like new. This process is available for all **cylinder & crankcases**, **cylinder heads** and **pistons**. Pricing is calculated by the number of cylinders, pistons, and cylinder heads.

Flagship makes every attempt to advise you of a problem that we find during any of the above processes.

Miscellaneous Operations

- Retrofit Late Model V4 Block
- Heli-arc Welding Service
- Block Pressure Testing
- (Priced per Individual Job)



Flywheel Repair Service

Flagship not only reglues and replaces the outside magnets but now has the ability to reglue the sensor (center) magnets for **Evinrude & Johnson** flywheels. In order for us to reglue the center magnet your magnet must be good. It cannot be cracked or melted.

Flagship makes every attempt to advise you of a problem that we find during any of the above processes.

Broken Bolt and Tap Removal



Broken bolt removal
Broken Tap removal
Priced Per/Hr

Heli-coil installation is
priced per installation

Crankshaft & Wrist Pin Polishing

Pricing is calculated by the number of cylinders



All Outboard crankshafts and wrist pins that we polish are measured, inspected and cleaned before polishing. Once polished they get a coat of rust preventative prior to shipment. Shown above is, before polishing and after.

Flagship's Inboard Machine Shop Services

FLAGSHIP 
MARINE ENGINES

1-888-282-2840 Toll Free



Inboard Block Boring

Cylinder Block Boring & Honing

- Bore & hone up to .060 per cyl.
- Bore & hone .060 to .125 per cyl.
- Bore & hone .125 to .250 per cyl. - V8
- Torque plate extra
- Hone with torque plate extra
- Boil and install brass plugs
- Install cyl. Sleeve per cyl.
- Hone std. Type V8
- Align hone (most std. V8)
- Install cam bearings
- Measure deck height by way of 4 corner method.
- Drill and tap oil galleries
- "O" ring block
- Mill V8 block both head sides
- Mill 6 cyl block
- Mill 4 cyl block

Crank Work

- Grind, radius and microfinish all crank V8
- Magnaflux crank V8
- Microfinish and radius oil holes V8
- Glass peen crank
- Boil crankshaft
- Hard chrome and stroker cranks available by Crower & Eagle



Inboard Engine Block Honing



**Rod Align Honing
Inboard Connecting Rod
Reconditioning**

Piston Work

- Glass peen pistons V8 and pin fit
- Hone pistons for oversize pins
- Mill dome to specific CC
- Mill one valve notch per piston - V8
- Mill two valve notches per piston - V8
- Mill Flame notch std. Design
- Measure piston to valve clearance (when assembled)

Rod Work

- Align Honing
- Magnaflux rods V8
- Press pins on and off V8
- Hone rods for floating and oversize pins V8
- Recondition rods V8 and glass peen
- Glass peen rods
- SPS bolts Extra
- Crower & Eagle rods available



Crankshaft Align Honing

Balancing Work

- V8 independent assembly
- V8 dependent assembly
- V8 assembly using light or heavy components
- Modify or stroker assembly
- 8 cyl. In-line engine
- 6 cyl. In-line engine
- 4 cyl. In-line engine
- V6 engine assembly
- Flywheel
- Pressure plate
- Harmonic balancer
- Pistons
- Rods
- Balance odd jobs



Press Wrist Pins On and Off Rods



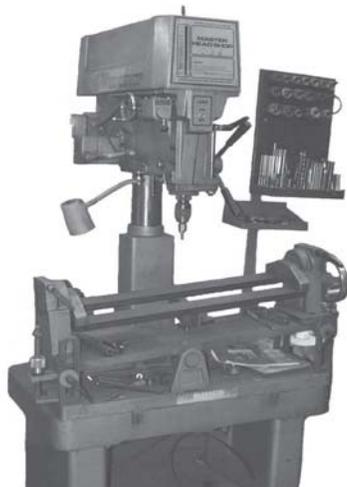
Inboard Engine Balancing

Flagship's Inboard Machine Shop Services

At Flagship we offer a vast amount of machine shop services from Block & Cylinder head surfacing, engine balancing, Connecting Rod reconditioning to block sleeving.

FLAGSHIP V8
MARINE ENGINES

1-888-282-2840 Toll Free



Inboard Cylinder Head Rebuilding



Broken Bolt / Stud Removal



Fuel Injector Cleaning & Flow Testing for Inboard

Head Work

Std. Valve Job - disassemble heads, boil and glass peen heads and valves, resurface valves and regrind seats, reassemble heads.

Weekend Racer Valve Job V8 - disassemble heads, boil and glass peen heads and valves, multi-angle valve seats, reface valves, cut for P.C. seals, assemble to spring height.

Pro Racing Valve Job V8 - disassemble heads, boil and glass peen heads and valves, multi-angle valve seats, back cut valves and reface, cut for P.C. seals, C.C. and mill heads, assemble to spring height.

Multi-angle valve job on Seats V8

Install valve seat

Install valve guides

Reface valves glass peen

Back cut valves

Grind valve seats std. Type

Knurl and ream guides

Grind valve pocket for large valves

Cut heads for PC seals V8

Cut heads for inner spring V8

Cut heads for outer spring V8

Assemble spring height shims included

Replace guides std. removeable type

Bronze wall guide installed and seat removed

Remove broken stud

C.C. and mill heads V8

Mill intake side

Mill stepped intake type heads

Mill heads up to .010 V8

Mill heads up to .030 V8

Mill heads over .030 V8

Install screw-in studs (remove and machine)

Mill heads with valve job V8

Magnaflux Cylinder head

O-ring B/B Head V8



Inboard Block & Cylinder Head Decking

General Shop Labor

Assemble short block

Assemble base engine

Assemble a complete engine, ready to run (Auto)

Assemble a complete engine, ready to run (Marine)

Degree harmonic balancer

Mill intake manifold

Resurface flywheel

Install thread inserts

Degree and move camshaft

Disassemble short block

Disassemble complete engine

Glass peen intake manifold

Notch block for strokers

Engine Dynamometer Service and Testing

Each Engine that is dynamometer tested or tuned on a Flagship dynamometer is accompanied by an experienced Development Technician and supplied with a Computerized report of the dyno run. Other brands, other than Chevrolet, can also be tested.

NOTE! All Flagship Marine Dynamometer Data Provided is Corrected to ISO 3046 / SAE J1228 the same as used by General Motors Powertrain.



Engine Dyno

Flagship Inboard / Stern Drive Engine Rebuilding and Dynamometer Testing



1-888-282-2840 Toll Free

Servicing for MerCruiser, Crusader, Flagship, Indmar, OMC, Volvo and Chrysler Marine

This program is for those engines sent by the dealers to Flagship to be remanufactured. These are Inboard / Stern Drive engines that do not need to be replaced, but simply need to be remanufactured. Examples of this type of work would be those that are worn (high usage), have broken rings, scuffed cylinders or simply an older engine that the customer wants refreshed (rebuilt) rather than replaced. Engines remanufactured under this program are dyno-tuned and have gone thru a break-in run and carry a One Year Flagship Limited Warranty. This includes any new parts or components that are installed.

All quotes for this service are assuming that your block, crankshaft, connecting rods, cylinders heads can be used. Should any of the above mentioned components need to be replaced along with manifolds, risers, starters, alternators, distributors, carburetors or fuel injectors, additional charges will be added. No work will be started until the job has been ok'd. Note! If some parts are found to have problems while running on the dyno, they will be changed to complete the dyno run. These corrections will be necessary at additional cost to complete the dyno work **and all bad components will be returned.**

Remember having Flagship install any marine component to replace a bad one assures you that you have a complete tested drop in engine. You will have no worries and no additional charges once it has been installed. Remember, it is much easier for us to install these components on the dyno rather than the extra time and cost to change them in the bilge of your boat.

Quotes Are Difficult without Seeing! - We realize that is is hard to give a complete and accurate quote without seeing any engine. Our explanation is an attempt to explain why the estimated cost vary. Since there are alot of "unknowns" the prices are subject to change. Once disassembly has been completed we can safely give a more complete quote for the build.

All of **Flagship's Phaze's 1 thru 4** get the fuel system throughly cleaned. Carburetors get rebuilt, while fuel injected models get the fuel system cleaned and the fuel injectors clean and "flowed". If we find a bad fuel pump it will be replaced and an additional cost will be applied.

Phaze 1 - All quotes are calculated assuming the long block is "rebuildable". Figures assume that all external components of yours, the exhaust system, and ignition and electrical are in good working order. If any dressing components are found to be bad they will be replaced so the engine can be run on the dyno. All parts that are changed will come with a one year warranty. **See Examples on page 24**

Phaze 2 - All quotes are calculated assuming that the long block is rebuildable and that the complete exhaust system needs replacing, the cylinder heads need new valves and valve seals and rockers arms. Figures assume that the Electrical and Ignition system is in good working order. If any dressing components are found bad they will be replaced so the engine can be run on the dyno. All parts that are changed will come with a one year warranty. **See Examples on page 24**

Phaze 3 - All quotes are calculated assuming a new long block engines is no longer available and major work is necessary on both the engine block, crankshaft, connection rods and cylinders head or heads needs to be replaced. Additional components could be, camshafts, valve lifters, rocker arms, valves, connecting rods, Crankshaft and complete exhaust system. Engine block needs to be align bored and decked, and we assume the ignition and electrical systems are in working order. If any dressing components are found to be bad they will be replaced so the engine is can be run on the dyno. All parts that are changed will come with a one year warranty. **See Examples on page 24**

Note! Should a crankshaft need to be "turned" Flagship only goes a maximum of .020 undersize and Flagship will not warranty any choice smaller.

Note! Some parts won't show a problem until we run the engine on the Dyno. Example of those parts include exhaust manifolds and risers, starters, alternators, distributors or ignition coils.

Note! Upgrades. OEM exhaust system, Dupont Imron painted, new factory decals if they are still available, horsepower modifications and electronic ignition are available upon request.

Flagship Inboard / Stern Drive Engine Rebuilding and Dynamometer Testing



1-888-282-2840 Toll Free

Phaze 4- All quotes are calculated assuming the engines block and cylinder heads are bad and a complete long block is available. The engine exhaust system, ignition and electrical are in good working order. If any dressing components are found "bad" we will replace so the engine can be run on the dyno. All parts that are changed will come with a one year warranty. **See Examples below**



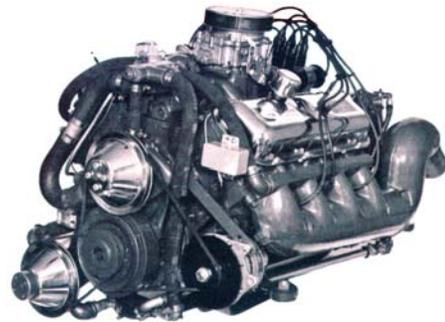
Chris Craft 283, 307, 327 & 350 CID flywheel forward engines Rebuilding Service



Cadillac 365 CID Crusader Marine Engine Rebuilding Service



3.0Litre CID MercCruiser, Flagship Volvo & OMC Rebuilding Service



1969 Flagship 427 Chevy Rebuilding Service



305, 350 CID MercCruiser TBI Rebuilding Service



MerCruiser 454, 502 CID MPI Rebuilding Service

Note! If any bad components are found while running on the dyno. such as the exhaust risers, exhaust manifolds, fuel pumps, carburetors, fuel injectors distributor, alternators, ignition coils or starters you will be notified. In order to complete the dyno brake-in and tuning all components necessary to complete the dyno work, will be installed. Additional charges will apply. All replaced parts will be returned.

Note! Upgrades. OEM exhaust system, Dupont Imron painted, new factory decals if they are still available, horsepower modifications and electronic ignition are available upon request.

NEW



FLAGSHIP MARINE ENGINES

1-888-282-2840 Toll Free

Replacements for Flagship, Crusader, OMC, MerCruiser and Volvo

Vortec™ 3000 140 HP

301501P - 3.0 Litre, (181 CID) 4 Cyl

140 hp @ 4800 RPM / 177 lb-ft @ 3600 RPM (2bbl)

Replaces 1968 - 2007 3.0 Litre GM Marine Base Engine



Flagship has now made it easy to install a **New** 1 piece seal 3.0Litre 140 HP GM base engine to replace any older 2 piece seal OMC Stringer, Cobra, Volvo & MerCruiser Model Stern Drives.

This motor comes complete Electronic Ignition and instruction, Marine Bi-directional Water Pump, 14" Flywheel, 12 3/4 " Flywheel Optional.

Shown below are the kits we offer to complete this conversion. These kits are reasonably priced when purchased with the engine shown.

Conversion Kits

OMC Stringer Kit 1 with base engine

Note! You must send us your coupler so modifications can be made to fit on these newer engines.



All 2 Piece Seal Motors
1968 -1975 requires this kits

OMC Cobra / Volvo SX Kit 2 with base engine



All 2 Piece Seal Motors
1986 - 1990 requires this kit
1991 + No additional kits needed

MerCruiser Kit 2M with Base Engine



All 2 Piece Seal Motors
1968 - 1990 requires this kit
1991 + No additional kits needed



Pre 1991 3.0L Cylinder Head Assembly PN **A10020**
Pre 1991 3.0L Cylinder Head Assembly PN **A10021**

Note! *This cylinder head replaces a GM cylinder head with the following casting number 2278864*



Casting # Location



1991 and later 3.0L HO Cylinder Head Assembly PN **10140599**
1991 and later 3.0L HO Cylinder Head Assembly PN **10140599A**

Note! *This cylinder head will have a GM casting number 14096620*

NEW



FLAGSHIP V8 MARINE ENGINES

1-888-282-2840 Toll Free

Replacement for Flagship, Crusader, OMC, MerCruiser and Volvo



NEW 4.3 Litre V6

262LB - 4.3 Litre 262 CID Marine Long Block

This new replacement engine is available for the direct replacement of older OMC Stringer, Cobra, MerCruiser and Volvo 1986 - 1992. This motor is a non-Vortec, Non-balance shaft design, but comes with a roller cam shaft, w/ Fuel Pump Pad and a 1 piece rear main seal. **No- Intake, Flywheel, Balancer or Water Pump**

43235V (4bbl)

Vortec™ 4300

432352V (2bbl)



NEW

4.3 Litre (262 CID) GM Base Marine Engine



223 hp @ 4800 RPM / 267 lb-ft @ 2800 RPM (4bbl)

185 hp @ 4400 RPM / 245 lb-ft @ 2400 RPM (2bbl)

Replaces 1986 - 2007 OMC / MerCruiser / Volvo

Marine Bi-directional Water Pump MUST USE ELECTRIC FUEL PUMP

1 Piece Rear Main Seal

Flagship has now made it easy to install a **New** 4.3Litre GM base engine to replace any older OMC Cobra / Volvo & MerCruiser Model Stern Drives. Shown below are two kits we offer. These kits are reasonably priced when purchased with one of the base engines shown.

Conversion Kits

OMC / Volvo SX Kit 3 with base engine

- This kit is for 43235V or 432352V
OMC / Volvo models from 1986-1999 include:
 2BBL Must use an ADAPTER PLATE
 4BBL MUST HAVE an ELECTRIC CHOKE
 -CARB ADAPTER PLATE
 -ENGINE COUPLER
 -RETAINER
 -FITTING
 -GASKET
 -WASHER & O-RINGS
 -DIPSTICK & TUBE
 -TIMING TAPE
 -FUEL PUMP



MerCruiser Kit 4 with base engine

- This kit is for 43235V or 432352V
4.3L MerCruiser conversion kits for models from 1993-1999 include:
 2BBL must use an ADAPTER PLATE
 4BBL must have an ELECTRIC CHOKE
 -CARB ADAPTER PLATE
 -DIPSTICK & TUBE
 -TIMING TAPE



NEW

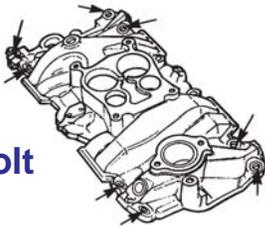


1-888-282-2840 Toll Free

Replacement for Flagship, Crusader, OMC, MerCruiser and Volvo

Vortec™ 5000

8 Bolt



50250V - 5.0 Litre (305 CID) GM Marine Base Engine
250 hp @ 5000 RPM / 305 lb-ft @ 3600 RPM - PFI
Replaces 1998-2007

1 piece seal, 2 bolt main, New style Vortec heads, Hydraulic roller cam, Marine Bi-directional Water Pump without a mechanical fuel pump pad -must use an Electric fuel pump.

No - Intake

(Compatible with 8 bolt pattern style Intake manifolds)

(Opposite Rotation Available with Ignition)

An Optional 8 bolt aluminum 4bbl intake manifold with bronze crossover is available - Pt # 425062

572602P - 5.7 Litre (350 CID) GM Marine Base Engine
260 hp @ 4400 RPM / 350 lb-ft @ 3600 RPM (4bbl)

This new replacement marine engine is available for the direct replacement of older OMC Stringer, Cobra, MerCruiser, and Volvo 1967 thru 1985

2 piece seal, 4 bolt main **w/ Mechanical fuel pump pad.**

No - Intake, Flywheel, Balancer or Marine WaterPump

(12 bolt pattern style for your Intake Manifold)

(Opposite Rotation Available)



Fuel Pump Pad

572701P - 5.7 Litre (350 CID) GM Marine Engine
270 hp @ 4800 RPM / 340 lb-ft @ 3200 RPM (4bbl)
Replaces 1986 thru 2000

1 Piece Seal, 4 Bolt Main, Flat-tappet Camshaft

No - Intake, Marine Water pump, Balancer, and Flywheel

(12 bolt pattern style for your Intake Manifold)

(Opposite Rotation Available with Ignition)

Note! - Must use Electric Fuel Pump



Non-functioning Fuel Pump Pad.

NEW

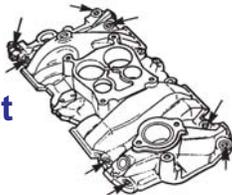


FLAGSHIP MARINE ENGINES

1-888-282-2840 Toll Free

Replacement for Flagship, Crusader, OMC, MerCruiser and Volvo

8 Bolt



Vortec™ 5700

**57320V - 5.7Litre (350 CID) GM Marine Base Engine
295 hp @ 5000 RPM / 355 lb-ft @ 3600 RPM (PFI)**

Replaces 1998 thru 2007

1 piece seal, 2 bolt main, Vortec cylinder heads without a mechanical fuel pump pad, Marine Bi-directional Water Pump.

Needs an Electric fuel pump.

No - Intake

(Compatible with 8 bolt pattern style Intake manifolds)

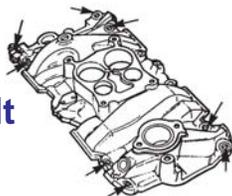
(Opposite Rotation available with Ignition)

An Optional 8 bolt aluminum 4bbl intake manifold with bronze crossover is available - Pt # **425062**

P/N **57320VB Special** - Base Engine with Intake, Carburetor, Fuel pump, Fuel line, and Ignition system.

P/N **57320VBO Special** - Same as above but **Opposite Rotation**

8 Bolt



57330 - 5.7 Litre (350 CID) GM Marine Engine

330 hp @ 5000 RPM / 480 lb-ft @ 3800 RPM

1 piece seal, 9.0 to 1 compression ratio Specially tuned 4 bolt main 350 delivering great power in a small package. With its Vortec cylinder heads this 350 produces great power for the **PERFORMANCE ENTHUSIAST**. Peak torque is 480 lb-ft @ 3800 RPM while peak horsepower is 330 hp @ 5000 RPM.

No intake manifold, water pump, balancer or flywheel

(Compatible with 8 bolt pattern style Intake manifolds)

Will fit 1986 - 2007

An Optional 8 bolt aluminum 4bbl intake manifold with bronze crossover is available - Pt # **425062**

Vortec™ 6000

**60364V - 6.0 Litre (364 CID) GM Replacement Engine
350 hp @ 5200 RPM / 391 lb-ft @ 4400 RPM - (PFI)**

Replaces 2002 -2007

This motor comes as you see it. Aluminum cylinder heads, Oil pan, Water pump, Valve covers all assembled to a very durable Cast Iron block. Comes with Flywheel, Intake & Injectors, Ignition Coils, Dampner & Water Pump.



NEW



FLAGSHIP MARINE ENGINES

1-888-282-2840 Toll Free

Replacement for Flagship, Crusader, OMC, MerCruiser and Volvo

305 HP L29 MPI



74330G6WRCVH - 7.4L (454 CID) GM Marine Long Block
310 hp @ 5000 RPM / 504 lb-ft @ 3800 RPM (MPI)

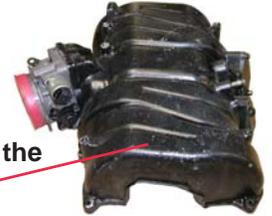
Replaces 1998 thru 2001

1 piece seal, 4 bolt main, Swirl port design cyl. heads,
Roller cam, 8 qt Oil Pan.

Must use an Electric fuel pump.

No - intake, flywheel, or water pump

Upperhalf of the
L29 Intake



743101G6WRC - 7.4 Litre (454 CID) GM Marine Long Block
310/330 hp @ 4400 RPM / 435 lb-ft @ 3200 RPM
(Carb. or MPI)

Replaces 1987 thru 2002

1 piece seal, 4 bolt main,
Roller cam, Oval port heads & 8 qt Oil Pan.
Must use an Electric fuel pump.

No - intake, flywheel, or water pump

(Opposite Rotation Available with Ignition) Part # [74310G6WRCRH](#)



454380 - 7.4 Litre (454 CID) GM Marine Long Block
380-392 hp @ 5200 RPM / 447 lb-ft @ 4000 RPM (4bbl)

Replaces 1987 thru 2002

1 piece seal, 4 bolt main, Rectangular port heads,
Roller cam & 8 qt oil pan.

Must use an Electric fuel pump.

No - intake, flywheel, or water pump

(Opposite Rotation Available with Ignition) Part # [454380RH](#)

823801P - 8.2 Litre (502 CID) GM Marine Long Block
415 hp @ 5000 RPM / 504 lb-ft @ 3800 RPM
(4 bbl or MPI)

Replaces 1990-2002

1 piece seal, 4 bolt main, Rectangular port heads,
Roller cam & 8 qt oil pan.

Must use an Electric fuel pump.

No - intake, flywheel, or water pump

(Opposite Rotation Available with Ignition) Part # [823801PRH](#)



NEW



1-888-282-2840 Toll Free

Replacement for Flagship, Crusader, OMC, MerCruiser and Volvo



Vortec™ 8100

81496STD - 8.1 Litre (496 CID) GM Marine Base Engine
375 hp @ 4600 RPM / 490 lb-ft @ 4600 RPM

Replaces 2000 thru 2004

These New Generation Vortec Big Block Engines come with PFI intake, Flywheel, Marine Bi-directional Water pump, Marine damper, Ignition coils, Crank sensor, Cam sensor and Platinum tipped spark plugs.

Vortec™ HP 8100

81496HO - 8.1 Litre (496 CID) GM Marine Base Engine
420 hp @ 5000 RPM / 505 lb-ft @ 4000 RPM

Replaces 2000 thru 2004

These New Generation Vortec Big Block Engines come with PFI intake, Flywheel, Marine Water Bi-directional pump, Marine damper, Ignition coils, Crank sensor, Cam sensor, Platinum tipped spark plugs, Performance camshaft.



Vortec™ HP 8100+

81496525+ - 8.1 Litre (496 CID) GM Performance Base Engine
525+ hp @ 5400 RPM / 570+ lb-ft @ 4000 RPM

Replaces 2000 thru 2004

These new Generation Vortec Big Block Engines come with PFI Intake (Flowed) for higher air flow, Higher lift camshaft, Ported hi-flow cylinder heads, Roller rockers, Crank sensor, Cam sensor & the additional marine EFI engine Sensors.

In addition to the Flywheel, Marine Bi-directional Water Pump, Marine damper, Ignition coils, and Platinum spark plugs, you get the engine Wiring harness, ECM, Throttle Body, and Fuel Pump.

Note! Must be equipped with Performance Exhaust System.



NEW



FLAGSHIP MARINE ENGINES

1-888-282-2840 Toll Free

New Generation Marine Base and Bobtail Engines for
Flagship, Crusader, OMC, MerCruiser and Volvo

IAFM Fuel Injected



Vortec™ 4300

4.3 Litre 262 CID
223 hp @ 4800 RPM (PFI)
267 lb-ft @ 2800 RPM
IAFM with Port Fuel Injection
Vortec cylinder heads, Hyd. roller cam
& Balance shaft

Base Engine - **4300IAF**
Replacements for 2002 - 2007

1 Year Warranty



Bobtail - **225FME**



Vortec™ 5000

5.0 Litre 305 CID
250 hp @ 5000 RPM (PFI)
305 lb-ft @ 3500 RPM
IAFM with Port Fuel Injection
Vortec cylinder heads, Hyd. roller cam

Base Engine - **5000IAF**
Replacements for 2002 - 2007

1 Year Warranty



Bobtail - **250FME**



Vortec™ 5700

5.7 Litre 350 CID
295 hp @ 5000 RPM (PFI)
355 lb-ft @ 3600 RPM
IAFM with Port Fuel Injection
Vortec cylinder heads, Hyd. roller cam

Base Engine - **5700IAF**
Replacements for 2002 - 2007

1 Year Warranty



Bobtail - **300FME**

Flagship Airboat engines are Electronic Fuel Injected for better fuel economy, cleaner burning providing lower emissions for a cleaner environment. Turn key Starting in all temperatures along with Improved throttle response and mid-range torque for improved performance. They come with a heavy duty SFI approved flexplate flywheel. All engines are run on a dynamometer and tuned prior to delivery.



1-888-282-2840 Toll Free

CYCLONE "700"



700 FABE 600 CID

FLAGSHIP CYCLONE



375 FABE 496 CID
 450 FABE 496 CID
 490 FABE 496 CID



500 FABE 502 CID
 600 FABE 540 CID World
 600 FABE 540 CID GM

350 FABE 364 CID*
 400 FABE 364 CID*
 * denotes no picture



300 FABE 350 CID
 425 FABE 383 CID



225 FABE 262 CID



Flagship Airboat & Marine Motors



1-888-282-2840 Toll Free



62383 - 383 Stroker - 6.2 Litre (383 CID) 340 hp @ 4500 RPM / 435 lb-ft @ 4000 RPM

This 1 piece seal specially tuned 383 CID delivers great torque in a small package. With its 3/8" stroke and 9.1 to 1 compression Ratio, Vortec cylinder heads, 7 Qt Marine Oil Pan, Marine Bi-directional Water Pump. This 383 makes awesome power.

No - Intake or Flywheel
Great for Airboats and Pulling Skiers



57350RJ - 5.7 Litre (350 CID) 350 hp @ 5200 RPM / 400 lb-ft @ 3500 RPM

Update your boat with this multiport fuel injected performance motor at an affordable price. 1 piece seal, 9.4 to 1 compression ratio, & Vortec cylinder heads give the added performance at the turn of a key.

No - Flywheel or Water Pump



74425G6 - 7.4 Litre (454 CID) 425 hp @ 5250 RPM / 500 lb-ft @ 3250 RPM

Upgrade your tired 7.4L with this powerhouse. 1 piece seal, 4 bolt main, Rectangular port 8.75 to 1 compression ratio cyl heads, Marine hyd. roller cam. Marine 8 QT Oil Pan. Must use an Electric fuel pump.

No - Intake, Flywheel or Water Pump



82450G6 - (502 CID) 8.2 Litre 450 hp @ 5250 RPM / 550 lb-ft @ 3500 RPM

1 piece seal, 4 bolt main, rectangular port cyl heads, 8.75 to 1 compression ratio, Marine hyd. roller cam. Marine 8 QT Oil Pan. Must use an electric fuel pump.

No - Intake, Flywheel or Water Pump



A10029 - ZZ454 Aluminum Cylinder Head 440 hp @ 5500 RPM - 500 lb-ft @ 3250 RPM

9.6:1 Compression ratio, Aluminum cylinder heads, 510/540 Hydraulic roller camshaft, 2.19 intake valve, 1.88 exhaust valve, Forged crankshaft, connecting rods, pistons, 4 bolt main block, Intake, Marine Bi-directional Waterpump, Dampner and Flexplate. **92 octane friendly.**





Flagship Airboat & Marine Motors



1-888-282-2840 Toll Free



A10024 - 350 CID

355 hp @ 5250 RPM - 405 lb-ft @ 3500 RPM

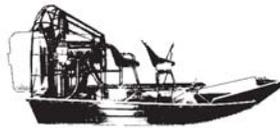
58cc Aluminum Cylinder Heads, 10.1:1 Compression Ratio, 474/510 Hydraulic roller camshaft, 4 bolt main block, Marine Bi-directional water Pump, and HEI Distributor, **92 octane friendly.**



A10025 - 350 CID

385 hp @ 5600 RPM - 385 lb-ft @ 4000 RPM

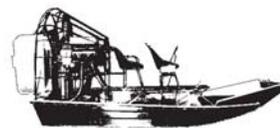
Fast Burn Aluminum Cylinder Heads, 9.6:1 Compression Ratio, 474/510 Hydraulic roller camshaft, 4 bolt main block, 4 bbl aluminum intake manifold, Marine Bi-directional Water Pump, and HEI Distributor, **92 octane friendly.**



A10041 - HT383 CID

340 hp @ 4800 RPM - 435 lb-ft @ 4000 RPM

Cast Iron Cylinder Heads, 9.1:1 Compression Ratio, 431/451 Hydraulic roller camshaft, 4 bbl Aluminum Intake manifold, Marine Bi-directional water Pump, 4 bolt main block with a 3.800" stroke, **87 octane friendly.**



A10027 - 383 CID

425 hp @ 5600 RPM - 460 lb-ft @ 4500 RPM

Fast Burn Aluminum Cylinder Heads, 9.7:1 Compression Ratio 509/528 Hydraulic roller camshaft, Roller rocker arms, 4 bolt main block with a 3.800" stroke, **92 octane friendly.**



ZZ620MarL - Long Block - 620 hp 572 CID

ZZ620MarS - Short Block - 620 hp 572 CID

Long Block - Includes Marine 8 QT Oil Pan & Marine specific Hi-Torque Roller Camshaft. Does not include Intake, Distributor, Water pump, Oil filter and Carburetor.

Short Block - Includes Marine 8 QT Oil Pan & Marine specific Hi-Torque Roller Camshaft & Lifters, Timing chain, Cam sprocket & Timing Cover





Flagship Marine Engine Performance Parts



1-888-282-2840 Toll Free



P/N 12366573



P/N 19131359 All Aluminum
P/N 6269318 Aluminum
with brass water passage

Flagship Marine Engine Performance Parts

- 24502500** GEN V Bow Tie Short Deck B/B Bore-4.250-4.600
- 24502502** GEN V Bow Tie Tall Deck B/B Bore-4.250-4.600
- Both of the above are fully race-prepared machine valley head bolt bosses & enlarged main oil galley
- 10105123** 350 Bare Block 1 pc seal replacement 4 bolt main
- 10066034** 350 Bare Block 2 pc seal replacement 4 bolt main
- 24502501** Cast Iron Siamese Bore — 3.875-4.030
- 24502503** Cast Iron Siamese Bore — 3.995-4.160
- 12562920** Gen V & VI Rect. Port 454/502 Cyl. Head Complete
- 12562925** Gen V & VI Rect. Port 454/502 Cyl. Head Bare
- 14096036** 350 Forged Steel Crankshaft 1053 Steel 1 pc Seal
- 14096983** Gen V & VI 454/502 Crankshaft 1 piece ext. bal.
- 88962516** 383 Bare Block
- 12489436** 383 Forged Stroker Crankshaft
- 19169670** Set of (8) 383 Connecting Rods
- 88962542** Set of (8) 383 Pistons
- 19170540** 502 GEN VI BARE BLOCK w Fuel Pump Pad
- 12371204** ZZ502/502 Long Block Kit
- 10108688** Connecting Rods SB (5.70)



P/N 12558060
350 Bare Block



P/N 12558060



P/N 12562920 Rect. Port Cast
Iron Gen V & VI



P/N 88962516
383 Bare Block

NEW FLAGSHIP HI-PERFORMANCE CUSTOM MARINE GM & World BASE ENGINES



1-888-282-2840 Toll Free

HAND ASSEMBLED and COMPETITION BLUEPRINTED
Replacement for Merc - MerCruiser HP500 & 525

GM Gen VI 502 CID 4.447" x 4.00" base engine 9 to 1 compression ratio, Forged crank, Rods, Pistons, Cranehydraulic roller cam, springs, Lifters, Push rods, Rocker arms, GM Ported heads with 2.250 S/S Intake and Inconel exhaust valves, Flywheel and Dampner.

GM Standard Deck Gen VI 540 CID 4.50" x 4.25" base engine 9 to 1 compression with Hydraulic roller cam, Forged crank, Rods and Pistons. Merlin heads 2.250 S/S intake valves and Inconel exhaust valves. 8-quart oil pan, Flywheel and Dampner.

600+ hp @ 5400 RPM
650 lb-ft @ 4000 RPM

Optional HP - Forged blower pistons, 8 to 1 compression with Fel-Pro Marine S/S head gaskets with O-ringed cylinder heads .
Supercharged @ 5 LBS of boost 700+ hp @ 5400 RPM - 750 lb-ft @ 4000 RPM

World III Tall Deck Mark IV 540 CID 4.50"x 4.25" base engine 9 to 1 compression with Hydraulic roller cam, Forged crank, Rods and Pistons. Merlin III heads 2.300 S/S intake valves and Inconel exhaust valves. 14-quart oil pan, Flywheel and Fluid dampner.

625 hp @ 5400 RPM
675 lb-ft @ 4000 RPM

Optional HP - Forged blower pistons, 8 to 1 compression with Fel-Pro Marine S/S head gaskets with O-ringed cylinder heads.
Supercharged @ 5 LBS of boost 800 hp @ 5400 RPM - 870 LB-FT @ 4000 rpm

World III Tall Deck Mark IV 575 CID 4.50"x 4.50" base engine 9 to 1 compression with Hydraulic roller cam, Forged crank, Rods and Pistons. Merlin III heads 2.300 S/S intake valves and Inconel exhaust valves. 14-quart oil pan, Flywheel and Fluid dampner.

685 hp @ 5400 RPM
710 lb-ft @ 4000

Optional HP - Forged blower pistons, 8 to 1 compression with Fel-Pro Marine S/S head gaskets with O-ringed cylinder heads.
Supercharged @ 5 LBS of boost 825 hp @ 5400 RPM - 885 lb-ft @ 4000 RPM

World III Tall Deck Mark IV 600 CID 4.60"x 4.50" base engine 9 to 1 compression with Hydraulic roller cam, Forged crank, Rods and Pistons. Merlin III heads 2.300 S/S intake valves and Inconel exhaust valves. 14-quart oil pan, Flywheel and Fluid dampner.

700 hp @ 5600 RPM
730 lb-ft @ 4000 RPM

Optional HP - Forged blower pistons, 8 to 1 compression with Fel-Pro Marine S/S head gaskets with O-ringed cylinder heads.
Supercharged @ 5 LBS of boost 850 hp @ 5400 RPM - 895 lb-ft @ 4000 RPM



502-540 CID



575 + 600 CID

Bellhousings, Torque Plates, Couplers and Plate Mounts for GM Engines



1-888-282-2840 Toll Free

Top or Bottom Mount Bellhousing



P/N **MC24-44187**

Merc. S/D Bellhousing



P/N **12675A7**

Imco Bellhousing



P/N **O4-2295**
See Page 51 for more details

F/F Dampner



P/N **PO16507**

F/A Dampner BB



P/N **1004-650-007**

F/A Dampner SB



P/N **1004-650-006**

Merc Eng. Coupling



P/N **861523A 9**



Rear Plate Mount - Single
P/N **844843T**



Front plate mount - Single
P/N **849143T**



Front plate mount - Port
P/N **849339T**



Front plate mount - Star.
P/N **849299T**

Flagship Brackets, Remote Oil Brackets, Pulleys and Mounts



1-888-282-2840 Toll Free

4.3 - 5.7 & 7.4 / 8.2 Lifting Eyes



P/N 12363238

8.1L Lifting Eye Front



P/N FMS104

8.1L Lifting EyeRear



P/N FMS105

4.3 - 5.7 IAF Throttle Bracket



P/N FMS100

4.3 - 5.7 IAF Fuel Pump & Filter Bracket



P/N 2503

8.1L Fuel Pump, Filter and ECM Bracket



P/N FMS107

4.3 - 5.7 IAF & 7.4 / 8.2 Fuel Pump & Filter Bracket



P/N FMS101

4.3 - 5.7 IAF ECU & Coil Bracket & Cable Anchor Bkt



P/N FMS103 P/N 2502

6.0 L Alternator Bracket



P/N 12554030

8.1L Alternator Bracket



P/N 12558964

P/N FMS106

4.3 - 5.7 Alt Bracket and Adjusting Arm



P/N MC27-93175



P/N 85013T

BB Alt. Bracket



P/N MC27-47487

Remote Oil Filter Bracket Mounts

8.1L - P/N 8.1ORB



6.0 L - P/N 6.0ORB

BB - P/N 8.2ORB



4.3 Oil Bypass



P/N A10018

BB or SB Remote Oil Filter Oil Bypass Filter Bracket



P/N A10019



P/N A10020

SB - P/N 5.7ORB

Transmission Mounts



P/N PO22029



P/N A519



P/N 9 0004

Adjustable Isolation Mounts



P/N 8 0002

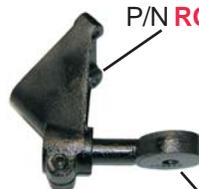


P/N 8 0006



P/N 8 0001

Front Engine Mounts



P/N RO90071A



P/N 107-61



P/N PO02272

P/N RO91001



P/N NIC300



P/N PO22028

New GM Replacement Pulleys



1-888-282-2840 Toll Free

3/8" V-belt



P/N **3744043**



P/N **3927796**

1/2" V-belt



Small Block
P/N **3858533**



P/N **3942992**



Big Block
P/N **3921923**



6.0L Belt Tensioner
P/N **12580162**



8.1L Circulating pump
P/N **12550053**



8.1L Belt Tensioner
P/N **12580828**

Polished Serpentine Pulleys and Pulley Kits

6.0L Circulating Pump Pulley
P/N **60WC1**

8.1L Circulating Pump Pulley
P/N **81WC1**



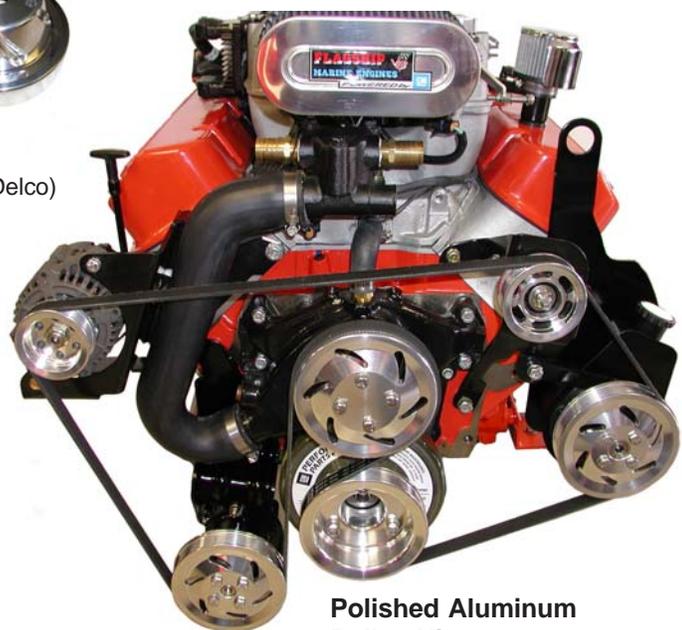
Alternator Pulley (New Style Delco)
P/N **BBA1**



Circulating Pump Pulley
(V6, SB, BB)
P/N **BBWC1**



Water Pump Pulley (MerCruiser)
P/N **BBWP1**



Polished Aluminum
Pulley Kit
P/N **P301K**



6.0L Circulating Pump Pulley
P/N **60WC1**



Idler Pulley
P/N **BB11**

Delco Power Steering
Pump Pulley
P/N **BBPS1**



SB / BB Crank Pulley
P/N **BBC1**



New Delco Remy Marine Electronic Ignition System with Hi-Perf. Spark Plug Wires



1-888-282-2840 Toll Free

Only Available for GM Marine Engines

- 4Cyl _____ **0030**
- V6 _____ **0043**
- V8 SB _____ **0057**
- V8 BB _____ **0074**



Flagship Hi-Performance Custom Fitted Red Spark Plug Wire Sets



- 28087 4cyl With Delco EST Ign
- 28088 V6 With Delco EST Ign
- 28157 V8 New Delco Ign

- 28089 V8 s/b With Delco EST Ign
- 28090 V8 B/B With Delco EST Ign

MSDTM Marine Hi-Performance Ignition Systems



EFI Engine Harnesses and GM Delco Controllers



1-888-282-2840 Toll Free

Engine Only Harness



P/N **A10001**

IAF SB Harness



P/N **A10002**

6.0 L Harness



P/N **A10003**

8.1 L Mod. Harness



P/N **A10005**

Big Block Harness



MEFI 5 Harness



DELCO - GM MEFI 2
Generation Controllers



MEFI 2 P/N **16210729**

DELCO - GM MEFI IV
Generation Controllers



MEFI 4a P/N **12575479**
MEFI 4b P/N **12584052**

DELCO - GM MEFI V
Generation Controllers



MEFI 5a P/N **12617802**
MEFI 5b P/N **12618020**

SB, BB V8 Chevy
Electronic
PN **11044060**



V6 Chevy
Electronic
PN **1103993**



Chevy Ign Coil
PN **1115491**



SB, BB V8 Chevy IAF
PN **93441558**



V6 Chevy IAF
PN **93441559**



Chevy Ign Coil
PN **1115498**

EFI Components & Sensors



1-888-282-2840 Toll Free



ACDelco®

TPS Sensor
4.3, 5.0, 5.7 SB & 8.1L P/N **17123852**
TBI P/N **17113070**



ACDelco®

MAP Sensors
4.3, 5.0, 5.7 SB P/N **12568929**
8.1L P/N **9359409**
7.4 & 8.2L P/N **12569240**



ACDelco®

Knock Sensors
4.3 IAF P/N **10456119**
5.0 / 5.7L IAF P/N **10456126**
8.1L P/N **12591312**
7.4, 8.2L P/N **10456208**



ACDelco®

Injectors
4.3, 5.0, 5.7 SB P/N **12567905**
8.1L P/N **17113739**
7.4, 8.2L P/N **17090919**



ACDelco®



IAC Controller
4.3, 5.0, 5.7, 8.1L P/N **88893284**
TBI P/N **17112193**

ACDelco®



Air Temp Sensor
4.3, 5.0, 5.7 SB - Combined in MAP Sensor
7.4, 8.2 & 8.1L P/N **25036751**

ACDelco®



Coolant Temp Sensor
4.3, 5.0, 5.7 SB P/N **15326386**
7.4, 8.2 & 8.1L P/N **15326386**



ACDelco®



Fuel Pressure Regulators
4.3, 5.0, 5.7 SB P/N **12568878**
8.1L P/N **89060414 40 LB**
8.1L P/N **12574986 60 LB**
7.4, 8.2L P/N **17123897 60 LB**

GM and Arizona Speed & Marine EFI Manifolds and Throttle Bodies

FLAGSHIP 
MARINE ENGINES

1-888-282-2840 Toll Free



GM

8.1 Throttle Body
375 hp to 450 hp
P/N **17113080**



GM

8.1 Throttle Body
Modified for
475 hp to 525 hp
P/N **17097230M**



**ARIZONA
SPEED & MARINE**

85 MM
8.1 Billet Throttle
Body P/N **ASM-6008**



GM

GM 502 - 502 HP
Throttle Body
P/N **17095179**



**ARIZONA
SPEED & MARINE**

58 MM
Throttle Body
P/N **ASM-6002M**



**ARIZONA
SPEED & MARINE**

Mono Blade
1300 CFM
Throttle Body
P/N **ASM-6004M**



**ARIZONA
SPEED & MARINE**

MerCruiser Mono Blade
1300 CFM Throttle Body
P/N **ASM-6005M**



GM

GM IAFM Intake
Manifold 5.0, 5.7L V8
P/N **1258087 V8 Upper**
P/N **12567900 V8 Lower**
P/N **17097079 Throttle Body V8**
P/N **88894337 V8 Fuel Rail**



GM

GM 8.1 Modified
and Ported Intake
Manifold
500-525 hp
Std Manifold P/N 12581392
P/N **12581392MOD**

**ARIZONA
SPEED & MARINE**

8.1 Plenum Chamber
and Manifold Base
Plenum P/N **ASM-8100-1**
Manifold Base P/N **ASM-8100-2**
Fuel Rails P/N **ASM 8100-3**



**ARIZONA
SPEED & MARINE**

Manifold Base and Plenum
Chamber
502-510 CID
Plenum P/N **12550670**
Base P/N **12550669**
Fuel Rails P/N **12550672**



**ARIZONA
SPEED & MARINE**

Modified Manifold
Plenum Chamber
shown on manifold base
540-572 CID
P/N **12550670SR**



**ARIZONA
SPEED & MARINE**

Manifold Base Modified
540 - 572 CID
P/N **12550669SR**



Marine Fuel Pumps Electric & Mechanical



1-888-282-2840 Toll Free

High & Low Pressure Electric Fuel Pumps for Carbureted and EFI Equipped Inboard and Stern Drive Engines

Delco Remy
Hi-pressure
Electric fuel pump
40 gph @ 42 psi
P/N **52365517**
OMC P/N **38557650**
Merc P/N **849930T**



Pierburg
Hi-pressure
Electric fuel pump
48 gph @ 60 psi
P/N **98154**
Up to 600 HP



SX Performance
Hi-pressure
Electric fuel pump
120 gph @ 45 psi
P/N **18207** pump
P/N **15402** Regulator
Up to 1500 HP



Delco Remy
Low-pressure
Electric fuel pump
40 gph @ 6 psi
P/N **52365842**
OMCP/N **3857985**
Merc P/N **861155A 3**



Carter Marine
Low-pressure
Electric fuel pump
72 gph @ 5.75 psi
P/N **P4389**

Carter



Holley Marine
Low-pressure
Electric fuel pump
78 gph @ 9 psi
P/N **712-802-1**

Holley



Low-Pressure Mechanical Fuel Pumps for Carbureted and EFI Equipped Inboard and Stern Drive Engines

Carter Marine
Low-pressure
Mech. fuel pump
42 gph @ 5.75 psi
Merc Marine 5.0 - 5.7 1988-1995
P/N **M61073** Small Block Chevy
OMC P/N **3855276**
Merc P/N **97401A 8 - 861678 1**

Carter



Carter Marine
Low-pressure
Mech. fuel pump
42 gph @ 5.75 psi
Merc Marine 454 1989-1991
P/N **M60601** Big Block Chevy
OMC P/N **986357**
Merc P/N **861677T**

Carter



Carter Marine
Low-pressure
Mech. fuel pump
42 gph @ 5.75 psi
Merc Marine 2.5L & 3.0L 1988-1995
P/N **M60337** In-line 4cyl / 6cyl Chevy
OMC P/N **3854858**
Merc P/N **861676A 1**

Carter



Carter Marine
Low-pressure
Mech. fuel pump
42 gph @ 5.75 psi
Merc Marine 3.8 / 4.3 1984-1992
P/N **M60315** V6 Chevy
OMC P/N **982997**
Merc P/N **862077A 1**

Carter



Holley Marine
Low-pressure
Mech. fuel pump
110 gph @ 6.5 psi
Small Block Chevy hi-output
P/N **712-327-1**

Holley



Holley Marine
Low-pressure
Mech. fuel pump
110 gph @ 6.5 psi
Big Block Chevy hi-output
P/N **712-454-1**

Holley



New Marine Alternators & Starters for Inboards and Sterndrives SAE J1711 Coast Guard Certified



1-888-282-2840 Toll Free

Genuine Delco Remy Marine Alternators

These new Delco 12V **70 & 95 AMP** alternators come complete with pigtail to convert your harness to fit these models.

70 AMP



V belt
P/N **19020608**

70 AMP



Serpentine belt
P/N **19020617**

95 AMP



Serpentine belt
P/N **8600002**



New Mando 12V
P/N **20054HD**
65AMP
Replacements for
Merc, OMC
and Others.

General Motors 6.0 Litre / 8.1 Litre



New **65 AMP** 12V Alternator
Fits Flagship 6.0L & 8.1L
with GM mounting bracket.
Serpentine belt P/N **20098**



New **120AMP** 12V Alternator
Fits Flagship 6.0L & 8.1L
with GM mounting bracket.
Serpentine belt P/N **20097**

Genuine New Delco Remy Gear Drive Marine Coast Guard SAE J1711 Certified Starters



P/N **9000884**
14" flywheel

6.0L

P/N **9000887**



P/N **9000895**
12" flywheel



These are the latest style Delco gear drive starters. They are designed to deliver enough starting force to start all GM gasoline engines from the 3.0L 4 cylinder through the 572 CID 720 HP V8 Big Block. Fits Late Model Merc, OMC & Volvo V6 & V8 Engines, GM Blocks w/ 12" or 14" Flywheels. High torque gear reduction unit. 6.0Litre starters also Available

This top mount Delco starter is a gear reduction style, compact and high torque starter. Replaces top mount starters. Standard rotation engines only. P/N **8000186**

Top Mount Starter

SUPER HIGH TORQUE



Fits Merc, OMC, Crusader, and other top mount rear entry on bellhousing for GM engines. Super High Torque (12 volt) P/N **10059SP**
P/N **10059SPLH**



High torque top mount opposite rotation engines only. (12 volt) P/N **10059** Opp. Rot.
P/N **10059LH** Std Rot



DELCO STYLE (12 volt) P/N **10071** 12" Flywheel
P/N **10064** 14" Flywheel
Fits MERC, OMC, YAMAHA and Volvo Penta Using GM Block.

Marine Carburetors, Intakes & Dampners



1-888-282-2840 Toll Free



Intake Manifold

305/350 S/B GM Vortec Performer RPM Intake Manifold P/N **7116**

454/502 B/B GM Victor TD Intake Manifold P/N **2911**



7116



2911

Marine Carburetors

For use in marine applications with Edelbrock Performer manifolds and others of similar design. Complies with U.S. Coast Guard safety standards. Cast surfaces are indited with Teflon-coated shafts and pump arm for maximum protection. Other features include modified bowl venting, specially designed throttle shafts, accelerator pump seal, 3/8" inverted flare fuel inlet fitting, tube in airhorn for fuel pump vent, 5-1/8" flame arrester flange, universal throttle lever and a revised secondary system for improved transient performance in marine applications. Use our Carb Stud Kits #8008 or #8024 if needed.

600 cfm, Electric Choke

600 cfm, Square-flange, Electric choke, Marine P/N **1409**



1409



1410

750 cfm, Electric Choke

750 cfm, Square-flange, Electric choke, Marine P/N **1410**

Holley Marino



715-5



734-4



080340



0-9022 or 0-80443

- P/N **0-80320-1** 300CFM 2bbl
- P/N **0-80492** 600CFM 4.3L
- P/N **0-80551** 600CFM Universal Marine
- P/N **0-9022** 800CFM 4bbl
- P/N **0-80443** 850CFM 4bbl
- P/N **0-80340** 1050CFM Dominator 4bbl
- P/N **715-5** Throttle Cable Bkt.
- P/N **734-4** Fuel Line
- P/N **300-5** BB rect. port Intake



300-5



080320-1



80492 or 80551



Small Block Chevy

P/N **620101** 6.24" Dia. Internal Balanced

P/N **720101** 7.25" Dia. Internal Balanced

Big Block Chevy

P/N **800101** 8.0" Dia. Internal Balanced

P/N **800111** 8.0" Dia. External Balanced



Engine Oil and Transmission Coolers



1-888-282-2840 Toll Free

Transmission Cooler



- 6" x 2" x 3/8" npt oil 1.25" hose ends - P/N **RD206EE-05**
- 6" x 2" x 1/2" npt oil 1.25" hose ends - P/N **RD206TT-05**
- 9" x 2" x 3/8" npt oil 1.25" hose ends - P/N **RD209QQ-47C**
- 9" x 2" x 1/2" npt oil 1.25" hose ends - P/N **RD209EE-05**

Engine Oil Cooler



- 9" x 2" x 1/2" npt oil 3/4" hose ends - P/N **RD209TT**
- 9" x 2" x 1/2" npt oil 1" npt ends - zinc - P/N **RD209TT-05C**
- 12" x 2" x 1/2" npt oil 1" npt ends - zinc - P/N **RD212TT-05C**
- 16" x 2" x 1/2" npt oil 1" npt ends - zinc - P/N **RD216TT-05C**

Powersteering Coolers



2" x 5" x 3/8" npt x 1/14" hose - P/N **RD205EE-05**



2" x 5" x 3/4" npt x 1/14" hose - P/N **RD205-41-FS**

Cooler Options



- Zinc (only) - P/N **70-EO**
- Zinc and Plug - P/N **70-EOC**
- Brackets for Mounting for both 2" and 3" models - P/N **12-33-3**
- Custom Oil Coolers available

Engine Oil & Transmission Coolers



12" x 2" x 3/8" - 1/2" npt oil 1" npt ends - zinc - P/N **RD221209-FS**

P/S & Transmission Cooler Assemblies



- 16" x 2" x 1/2" npt. & 3/8" npt .1" hose ends - P/N **RD221609-FS**
- 16" x 2" x 1/2" npt. & 3/8" npt .1" hose ends - zinc - P/N **RD221609-05C**

Engine Heat Exchangers



STANDARD OR CUSTOM MADE HEAT EXCHANGERS FOR YOUR BOAT ENGINE

Stainless Marine

Polished SS Chevy SB / BB Crossovers & Thermostat Housings



Cast Kit BB Chevy - P/N **04-3212001**



SB Chevy with Bypass - P/N **04-2111001**

BB Chevy with Bypass - P/N **04-1111001**

BB Chevy B&M Blower with Bypass - P/N **04-1112501**

Flagship offers a great selection of Raw Water Pumps, Circulating Pumps, T-Stat Housings and Replacement Thermostat Kits



1-888-282-2840 Toll Free

Raw Water Pumps



MerCruiser
P/N **46-72774A32**

SB Chevy Bracket
P/N **FMS - 102**



Jabsco
P/N **50410-1301**

8.1& BB Chevy Bracket
P/N **2501** BB
P/N **2506** 8.1L



Sherwood
P/N **G46**
Ford - SB

Circulating Pumps



IN-LINE 4 / 6 CYL Chevy
P/N **WP447M**



SB Chevy
P/N **WP453ML**



BB Chevy
P/N **WP415M**



8.1L Chevy
P/N **89017771**

Thermostat Housings



BB Chevy
P/N **CHVA29-78**



IN-LINE 4 / 6 CYL Chevy
P/N **CHV29-0120**



SB Chevy
P/N **CHV29-80**



Merc
SB/BB
P/N **47442A1**



SS Polished SB & BB
Chevy P/N **SIE 18-1989**



SB & BB Chevy
P/N **RKO 25026**

Thermostat Kits



OMC
4 Cyl SB / BB4 Chevy
P/N **SIE18-3676**



Merc
2.5, 3.0 4.1L
P/N **SIE 18-3650**



Merc
Chevy BB & SB
P/N **807252Q5**



Merc
Chevy BB & SB
P/N **SIE 18-3646**

WORLD Products



1-888-282-2840 Toll Free



Brass inserts for corrosion resistance (even in Salt Water)

World BB Aluminum Intake Manifold

Marine Intake Manifolds - Big Block Chevrolet				
Block Deck Hgt.	Material	Design	Carb. Type	Part #
9.800" Std.	Aluminum	360 degrees	Holley 4150 Series	063034
10.200" Tall	Aluminum	360 degrees	Holley 4150 Series	063035
9.800" Std.	Aluminum	360 degrees	Holley 4500 Series	063036
10.200" Tall	Aluminum	360 degrees	Holley 4500 Series	063037

World Small Block Replacement

World Small Block Chevrolet Iron Block Stock Replacement				
Description	Bore Size	Main Size	Deck Ht.	Part #
SBC Block	3.990"	350	9.025"	084010
SBC Block Prepped	4.000"	350	9.025"	084011
SBC Block	4.115"	350	9.025"	084020
SBC Block Prepped	4.125"	350	9.025"	084021
SBC Block	4.115"	400	9.025"	084030
SBC Block Prepped	4.125"	400	9.025"	084031



Merlin III Big Block Replacement



Merlin II Blocks			
Deck Height	Bore	Prep	Part#
9.80	4.424	None	081100
10.200	4.424	None	081110
9.80	4.490	None	081101
10.200	4.490	None	081111
9.80	4.250	Fully Race - Prepped	081103
10.200	4.250	Fully Race - Prepped	081113
9.800	4.500	Fully Race - Prepped	081102
10.200	4.500	Fully Race - Prepped	081112

Merlin SB Stock Replacement Cylinder Head Assemblies

Small Block Chevrolet Stock Cyl. Head Replacement				1968 thru 1986	1987 & up
Application	Material	Valve Dimensions	Chamber	P/N	P/N
Bare Head	Cast Iron	1.94" x 1.50" 11/32"	76cc	043600	043640
Hydraulic	Cast Iron	1.94" x 1.50" 11/32"	76cc	043600-1	043640-1
Hydraulic Roller	Cast Iron	1.94" x 1.50" 11/32"	76cc	043600-2	043640-2



Merlin III Big Block Cylinder Head



Big Block Merlin Bare Cylinder Heads					
Application	Material	Valve Dimensions	Chamber	Runner cc	Part #
Bare Head	Cast Iron	2.190" x 1.88" x 3/8"	76cc	269cc Oval	030040
Bare Head	Cast Iron	2.300" x 1.88" x 11/32"	76cc	345cc Rect.	030630

All Cylinder Heads Above also available Assembled



ESP Specialty Products



1-888-282-2840 Toll Free

Flagship makes available Rotating Assembly kits containing SRP pistons by J&E that cover a wide range of applications at an affordable price.

“ESP” Rotating Assemblies include ESP crankshaft, ESP pin fit 4340 H-beam 3-D connecting rods SRP/J&E forged aluminum, piston pins and oil rail support when required. Piston ring kits listed are either Std or File Fit Piston Rings. Std.rings are premium plasma moly std. bore cast iron ring sets. File fit rings include plasma ductile iron top ring, reverse twist 2nd ring standard tension oil ring and oil rail support when required. Federal-Mogul Race rod & main bearings.

SPECIFY BORE SIZE WHEN ORDERING

Small Block kits include a Crankshaft forged of 4340 steel with nitrided rod and main journals.

Big Block kits include a crankshaft forged of 4130 steel with induction hardened journals.

ESP Rotating Assemblies consist of name brand quality components in stock for immediate shipment.



CHEVY B/B “ESP”

Chevy 454 / 502 -1 Piece Rear Seal - various oversizes available

Kit#	Stroke	CID	Rod	Piston Type	Dish Dome	CR/112 cc	CR/118cc	CR/124cc	Piston	Piston Ring
11115	4.000	460	6.535	Flat Top	-3cc	8.5	8.3	8.0	SRP	File Fit
11116	4.000	460	6.535	Dome	14cc	9.9	9.3	9.0	SRP	Std
11117	4.000	460	6.535	Dome	26cc	10.9	10.3	9.8	SRP	File Fit
11118	4.000	460	6.800	Dome	26cc	10.9	10.3	9.8	SRP	File Fit
11119	4.000	460	6.535	Dome	48cc	13.9	12.9	12.1	SRP	File Fit
11120	4.000	460	6.800	Dome	48cc	13.7	12.8	11.9	SRP	File Fit
11121	4.250	489	6.535	FlatTop	-3cc	9.1	8.7	8.4	SRP	File Fit
11122	4.250	489	6.535	Dome	17cc	10.7	10.1	9.7	SRP	File Fit
11123	4.250	489	6.800	Dome	18cc	10.7	10.2	9.7	SRP	File Fit
11124	4.250	489	6.535	Dome	43cc	13.8	12.9	12.1	SRP	File Fit
11125	4.250	489	6.800	Dome	43cc	13.8	12.7	11.8	SRP	File Fit
11126	4.500	518	6.700	Dome	48cc	14.4	13.4	12.6	SRP	File Fit



Big Block Rotating Assemblies

CHEVY S/B “ESP”

Chevy 350 - 1 Piece Rear Seal – Various oversizes available

Kit#	Stroke	CID	Rod	Piston Type	Dish Dome	CR/112 cc	CR/118cc	CR/124cc	Piston	Piston Ring
12101	3.480	355	5.700	Flat Top	-5cc	11.1	10.3	9.0	SRP	File Fit
12133	3.480	355	5.850	Flat Top	-5cc	11.1	10.3	9.0	SRP	File Fit
12103	3.480	355	6.000	Flat Top	-5cc	11.1	10.3	9.0	SRP	File Fit
12131	3.480	355	6.125	Flat Top	-5cc	11.1	10.3	9.0	SRP	File Fit

Chevy 350 - 2 Piece Rear Seal – Various oversizes available

Kit#	Stroke	CID	Rod	Piston Type	Dish Dome	CR/112 cc	CR/118cc	CR/124cc	Piston	Piston Ring
12040	3.250	331	6.250	Flat Top	-5cc	10.5	9.7	8.8	SRP	File Fit
12041	3.250	331	6.250	Dome	7cc	11.7	11.0	10.5	SRP	File Fit
12029	3.480	355	5.700	Inv. Dome	-24cc	9.0	8.5	7.6	SRP	File Fit



Small Block Rotating Assemblies

“ESP” Forged 4340 Steel Crankshafts

Chevy 350 – Cross Drilled Oiling – Internal Balanced – 1 Piece Rear Seal

Stroke	Rod Length	Target Bobweight	Rod Journal	Part #
3.480	5.700 / 6.000	1875	2.100	435334805700
3.500	5.700 / 6.000	1875	2.100	435335005700
3.750	5.700 / 6.000	1875	2.100	435337505700
3.800	6.000	1875	2.100	435338006000
3.875	6.000	1875	2.100	435338756000
4.000	6.000	1875	2.100	435340006000

Chevy 454 / 502 Lightweight 70 lbs – Cross Drilled – Internal Balanced – 1 Piece Rear Seal

Stroke	Rod Length	Target Bobweight	Rod Journal	Part #
4.000	6.135	2350	2.200	445640046135
4.250	6.385	2350*	2.200	445642546386
4.500c	6.535	2350*	2.200	445645046535

Chevy 454 / 502 – Cross Drilled Oiling – Internal Balanced – 2 Piece Rear Seal

Stroke	Rod Length	Target Bobweight	Rod Journal	Part #
4.000	6.135	2300	2.200	445440026135
4.250	6.385	2300	2.200	445442526386
4.500	6.535	2300	2.200	445445006536



Chevy Small Block Rods – 327,350,400 Large Journal – 2.100 Crank Pin / .927 Piston Pin / .940 b.e. Width

C-C Length	Notes	Gram weight	Part #
5.700	stock 327,350	635	CRS5700B3D2000
5.700	stock 327,350	635	CRS5700B3DL19
6.000	+ .300	645	CRS6000B3D2000
6.000	+ .300	645	CRS6000B3DL19

Chevy Big Block Rods – 396,402,427,454,502 – 2.200 – 2.200 CrankPin / .990 Piston Pin / .990 b.e. Width

Stroke	Notes	Gram weight	Part #
6.135	stock	775	CRS61353D2000
6.135	stock	775	CRS61353DL19
6.385	+ .250	785	CRS63853D2000
6.385	+ .250	785	CRS63853DL19
6.535	+ .400	795	CRS65353D2000
6.535	+ .400	795	CRS65353DL19
6.800	+ .665	815	CRS68003D2000
6.800	+ .665	815	CRS68003DL19

“ESP” H - Beam Connecting Rods





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SUPER DUTY COMPETITION INT. VALVES

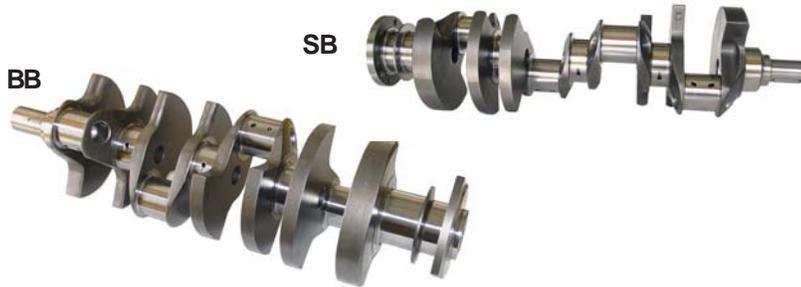
SUPER DUTY COMPETITION EXH. VALVES
Super Alloy Exhaust Valves (X-751 Inconel)

Part #	Head Dia.	OAL	Stem Dia.	Tip Length	Installed Height	Stem	Note
CL1730	2.065	5.275	.3715	.225	+.050	Undercut	
CL1731	2.190	5.275	.3715	.225	+.050	Undercut	
CL1745	2.190	5.350	.3715	.225	+.125	Undercut	
CL1732	2.250	5.275	.3715	.225	+.050	Undercut	
CL1735	2.250	5.350	.3715	.225	+.125	Undercut	
CL1734	2.300	5.350	.3715	.225	+.125	Undercut	Dart 360
CL1736	2.300	5.475	.3715	.225	+.250	Undercut	Brodix
CL1738	2.250	5.300	.3415	.250			

Part #	Head Dia.	OAL	Stem Dia.	Tip Length	Installed Height	Stem	Note
CL1717	1.890	5.400	.3715	.225	+.050		
CL1721	1.890	5.425	.3415	.250	+.050		
CL1718	1.910	5.400	.3715	.225	+.050		
CL1722	1.910	5.475	.3715	.250	+.100		
CL1720	1.910	5.475	.3415	.250	+.100		
CL1723	1.940	5.400	.3715	.225	+.050		
CL1719	1.940	6.450	.3415	.250	+.1540		Pro Stock Head



Precision Crankshafts and Connecting rods made of 4340 NT forged, heat-treated steel are machined using state-of-the-art CNC machining centers, to precise tolerances.



SB Magnum Cranks
3.480 Stroke w Main 2.100 pin SAF11A-MG
4.000 SAO11A-MG

BB Magnum Cranks
4.000 Stroke 2.750 Main 2.200 Pin BBO42B-MG
4.250 BBP42B-MG
4.500 BBQ42B-MG

SB Oliver Connecting Rods

- 5.700 2.100 CAA1
- 6.000 2.100 CAC1
- 6.125 2.100 CAD1
- 6.200 2.100 CAF1



BB Oliver Connecting Rods

- 6.135 2.200 CBE1
- 6.385 2.200 CBJ1
- 6.535 2.200 CBM1



BB Chevy

P/N 11587-8

P/N 11562-8

P/N 22406-16



P/N 25832-8

P/N 25815-8

P/N 23762-16



Valve springs and light weight retainers both in Steel and Titanium and 4130 Chrome Moly Swedged End Pushrods



GM BB Mark IV 12 Quart P/N 31560

GM BB Gen V&VI 12 Quart P/N 31562



Offshore 14 Quart BB Chevy up to 1/2" Stroke

Federal-Mogul Marine Performance Parts



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Everything to rebuild your stern drive marine engine



Speed Pro & Sealed Power Engine Parts



Federal-Mogul & TRW

Fel-Pro Gaskets



The Name Behind the Performance Legends Fel-Pro, Speed-Pro, Carter, and TRW. These legendary brands have been brought together under the Federal-Mogul Performance Parts Family.

Big Block GM Gen V & VI
396 CID- 502 CID
P/N **C5332**
P/N **C5333**



8.1L GM 4.450
P/N **C5766**



8.1L GM 4.450
P/N **C5763**

FLAGSHIP CUSTOM MARINE CAMSHAFTS



Valve Springs

Hyd. Roller Lifters

Retainers

Push Rods

Camshaft



DIAMOND

Racing Products



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5.7 Litre Flat Top Piston

Bore Size	Stroke	Rod Length	Comp. Height	Pocket Volume	Part #
4.020"	3.480"	5.700"	1.550"	-5cc	11100

5.7 Litre D-Dish Dome Piston

Bore Size	Stroke	Rod Length	Comp. Height	Pocket Volume	Part #
4.030"	3.480"	5.700"	1.550"	-12cc	11401

8.1 Litre Flat Top Piston

Bore Size	Stroke	Rod Length	Comp. Height	Pocket Volume	Part #
4.252"	4.370"	6.710"	1.363"		12705

502 Flat Top Piston

Bore Size	Stroke	Rod Length	Comp. Height	Pocket Volume	Part #
4.470"	4.000"	6.135"	1.645"	124cc	12701
4.500"	4.000"	6.135"	1.645"	124cc	12702



WISECO

502 Piston Sets

Piston Set Part No.	Bore Size	Replacement Piston Part No.	Wrist Pin Part No.	Spiro Lox Part No.	Stock 502 Chevy 4.00" Stroke and 6.135 Rod Length
1.645" Compression Height / + 3.8 cc / + .750" Dome Rise					Pistons can be used with these combinations
K 226 A S	4.466"	622 A S	S-460	CS-25	Stroke * Rod Length * 0" Deck Height at:
K 226 A 05	4.470"	6226 A 05	2.930" x .990"		
K 226 A 3	4.500"	622 A 3			4.000" 6.535" 10.180"

BB Chevy Piston Sets

Piston Set Part No.	Bore Size	Replacement Piston Part No.	Wrist Pin Part No.	Spiro Lox Part No.	Stock BB Chevy 4.00" Stroke and 6.135 Rod Length
1.645" Compression Height / + 36 cc / + .455" Dome Rise					Pistons can be used with these combinations
K 117 A 3	4.280"	6117 A 3	S-460	CS-25	Stroke * Rod Length * Deck Height at:
K 117 A 6	4.310"	6117 A 6	2.930" x .990"		4.000" 6.135" 9.780"
K 117 A 7	4.320"	6117 A 7			4.000" 6.535" 10.180"

Piston Set Part No.	Bore Size	Replacement Piston Part No.	Wrist Pin Part No.	Spiro Lox Part No.	Stock BB Chevy 4.00" Stroke and 6.135 Rod Length
1.645" Compression Height / + 21.5cc / + .255" Dome Rise					Pistons can be used with these combinations
K 308 A 3	4.280"	6308 A 3	S-460	CS-25	Stroke * Rod Length * 0" Deck Height at:
K 308 A 6	4.310"	6308 A 6	2.930" x .990"		
K 308 A 125	4.375"	6308 A 125			4.000" 6.135" 9.780"
K 321 A S	4.500"	6321 A S			4.000" 6.535" 10.180"

Chevy BB Reverse Dome Piston Sets

Piston Set Part No.	Bore Size	Replacement Piston Part No.	Wrist Pin Part No.	Spiro Lox Part No.	Stock BB Chevy 4.00" Stroke and 6.135 Rod Length
1.645" Compression Height / + 36 cc / + .455" Dome Rise					Pistons can be used with these combinations
K 332 A 6	4.310"	6332 A 6	S-460	CS-25	Stroke * Rod Length * 0" Deck Height at:
			2.930" x .990"		4.000" 6.135" 9.780"
					4.000" 6.535" 10.180"

MC# 52390A1
Replacement for MerCruiser 1968-1992
Complete with Plugs and Gaskets
GM 4 cyl 3.0L / 181 CID 140 hp engines
P/N **BAR MC-1-52390 Manifold**
P/N **BAR MC - 1 62430 Elbow**



MC# 99746A8
Direct replacement for MerCruiser
Complete with Plugs and Gaskets
GM 4.3L/262CID V6
P/N **BAR MC-1-99746**



MC# 87114A8
For GM Small Block V8
Complete with Plugs and Gaskets
Engines with Center Riser Design
P/N **BAR MC-1-87114**



OMC# 3857723
Complete with Plugs and Gaskets
Small Block GM Engines
P/N **BAR OMC-1-914035**



OMC# 912441 & 912442
Complete with Plugs and Gaskets
Fits most GM Small Block V8
P/N **BAR OMC-1- 912441** Port
P/N **BAR OMC-1- 912442** Star



MC# 8011A8
Replacement for MerCruiser
Complete with Plugs and Gaskets
For 454CID or 502CID engines
P/N **BAR MC-1-89011**



OMC# 909863
Fits most GM V8 SB
Rear Riser
Complete with Bolts
and Gaskets.
P/N **BAR OMC-20-982680**

MC# 98504A3
Fits V6 & V8 GM
Complete with Bolts
and Gaskets.
3" Center Riser
P/N **BAR MC-20-98504**



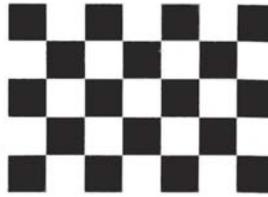
OMC# 3857944
Center Riser
Complete with Bolts
and Gaskets.
P/N **BAR OMC-20-913784**



MC# 44354A 4" Riser
Fits MerCruiser
Complete with Bolts
and Gaskets. V6 & V8
P/N **BAR MC-20-44354**

CUSTOM MARINE

STAINLESS EXHAUST



FLAGSHIP V8

MARINE ENGINES

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STANDARD ELBOW TOP SYSTEMS

SB & BB Chevy Thru Transom*
For Alpha & Bravo Drives
Available



SB Polished P/N **13460**
Polished tails P/N **39420**
SB Polished Upper and
Satin Lower P/N **13490**
BB Polished P/N **13005**
BB Polished upper
and Satin Lower P/N **13055**

ELBOW TOP with SOUND CHOICE

SB & BB Chevy*
For Alpha & Bravo Drives
Available



Polished Sound choice P/N **39900**

SPORT TUBE - BIG TUBE HEADERS

Fits BB 540+ CID*



BB 2.25" ID. Polished P/N **13680**
BB 2.38" ID. Polished P/N **13720**

SPORT TUBE DROP HEADERS

Fits Both SB & BB Chevy*



SB Polished P/N **13660**
BB Polished P/N **13640**

Tails and Tips also available for all Applications

*ALSO FITS THE NEW GM 6.0 LITRE AND 8.1 LITRE



STAINLESS MARINE

SB & BB CHEVY EXHAUST SYSTEMS



Hi-Torque SB Exhaust System
P/N **01-2230000-SE**



Hi-Torque BB Gen III
Manifold System with
thru transom pipes
P/N **01-3230000-SE**

IMCO

FLAGSHIP 
MARINE ENGINES

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World Renown For Their Innovative Performance Stern Drive Engine Accessories



P/N **M-72** Merc SS Riser 3" & 6" Taller Available
P/N **M-GK** Riser Gasket



P/N **PF-85SA** SS S.A. Riser Pipe 3" & 6" Taller Pipes Available
P/N **M-73** Merc SS with Silent Choice



Riser Pipe with ECM Bracket P/N **PF-82A-EFI**
Riser Pipe with Shift Bracket P/N **CB-88PFW**



P/N **PF-82A** Power Flow Riser 3" & 6" Taller Pipes Available
P/N **RGK** Round water holes Flange Gasket
P/N **RGKN** Triangular shaped water holes Flange Gasket

Power Flow Manifolds



Black P/N **PF-80B**
Polished P/N **PF-80P**
BB Chevy Manifold

Black Recirculating BB P/N **PF-87B**
Polished Recirculating BB P/N **PF-87P**



Black P/N **PFS-82AKB**
Polished P/N **PFS-82AKP**
SB Chevy Manifold with Pipe

SOUND ADVANTAGE

for BB & SB GM Engines



P/N **SA-94Y** Merc Alpha & Bravo
P/N **SA-100Y** OMC Cobra, SX
P/N **SA-96L** Low Profile Merc
P/N **SA-99L** Low Profile OMC



P/N **SAWK-20** Momentary rocker switch kit

IMCO

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MARINE ENGINES

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85 Degree Risers & Manifold

BB CHEVY



90 Degree Risers & Manifold

Tail pipes extra on both sets

IMCO's - PowerFlow Plus Exhaust System

High performance marine engines are growing in size 510, 540, & 572 c.i.d. motors and larger, naturally aspirate and blown, are becoming increasingly popular. But, until now, there hasn't been an efficient or affordable high performance marine exhaust system specifically engineered to accommodate these "monster motors". The answer, however, is IMCO's totally new Power Flow Plus cast aluminum fully water-jacketed exhaust manifolds.

Available in Black or Polished. Black manifolds and risers are hard-coat anodized inside and out to withstand the tough marine environment. The new PowerFlow Plus features IMCO's innovative patented design with 33" internal runners and a new ultra hi-flow exhaust riser (custom stainless steel tailpipes and integrated mufflers available). Is it possible that a cast aluminum water jacketed exhaust manifold can match or exceed the power output of racing style dry-stack collector headers? YES!!

P/N **PF- 84K** Plus Black
P/N **PF- 84K** Plus Polished

P/N **PF- 85K** Plus Black
P/N **PF- 85K** Plus Polished

Tail Pipe Gasket - P/N **RGKS** Riser Gasket P/N **RGKP**

THUMPER POWER MANIFOLDS and RISERS SB & BB CHEVY

P/N **TP-82KB** Black BB
P/N **TP-82KP** Polished BB
P/N **TP-S82KB** Black SB
P/N **TP-S82KP** Polished SB
P/N **TP-V82KB** Black V-6
P/N **TP-V82KP** Polished V-6

IMCO's affordable alternative to stock cast iron Chevy manifolds and risers. Our all cast aluminum manifolds and risers will increase Horsepower, RPM, and Torque by 5 to 7% over stock cast iron manifolds and risers at a fraction of the cost. We have designed Thumper Power for everyone whether you're a high performance or family recreation boater. Kits are available for Chevy big block, small block, and V-6 motors. Available in black powder coated, optional hard anodized for corrosion (prior to powder coat), and polished. Shift, EFI, or ECM brackets sold separately. When using these manifold and riser kits, it's best to order 2 each of FH-67V oval hoses for wishbone connections.



Manifold to Riser Seal P/N **RGKC**
Manifold to Riser Gasket P/N **RGKT**

Shift Bkt R.H. Side P/N **CB-88TPR**

EFI ECM Bkt Left P/N **CB-88TPL**



4" With Flapper
P/N **ET-624F**



BB PS & Alt. Bracket
P/N **PSA-111**



Timing Cover
P/N **TC-54** Mark IV BB
P/N **TC-53** Gen V BB
P/N **TC-52** Gen VI BB



Thru Transom Exhaust
P/N **ET-65 4"**

IMCO

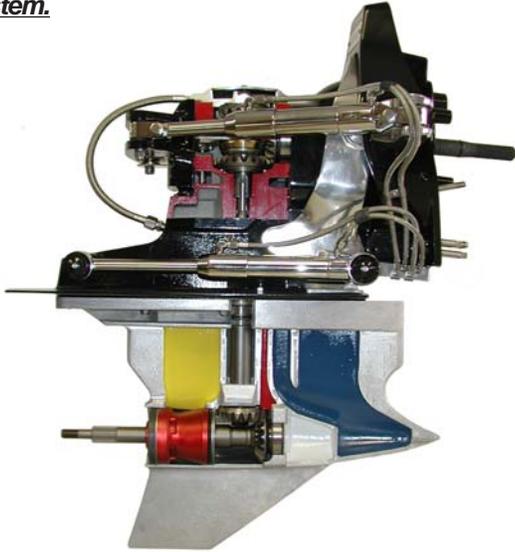
Xtreme Advantage Drive

SC

FLAGSHIP 
MARINE ENGINES

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IMCO spent three years developing, testing, and racing the Xtreme Advantage Drive through the toughest conditions. Our A-40 race boat along with other competitors in offshore series have racked up a lot of checkered flags, including world championships, with Xtreme Advantage drives. If you are looking for high quality, durable, serviceable and affordable outdrive, that can handle higher torque engines up to 600 HP, look no further! **Only compatible with a full hydraulic steering system.**



Gimbal Kit P/N **Call to Order**

Kit includes Gimbal assembly, Bellhousing, Coupler, Transom plate with bolt kit, Steering, Trim pump, Shift bracket, & Drive Oil Reservoir. For more information regarding the Gimbal Assembly see page 50.

Gimbal Kit with Xtreme SC Drive P/N **Call to Order**

Kit includes Gimbal assembly, Bellhousing, Coupler, Transom plate with bolt kit, Steering, Trim pump, Shift bracket, Drive Oil Reservoir & Xtreme Drive. For more information regarding the Gimbal Assembly see page 50.

Xtreme Advantage drives are available in, right hand/left hand combination and right or left hand drives.

Lowers are available in Standard length, 1" and 2".

Optional Finishes - Satin, Black or Polished finished.

Optional Xtreme 1-1/4 " dia. prop shaft with prop adapter also available.

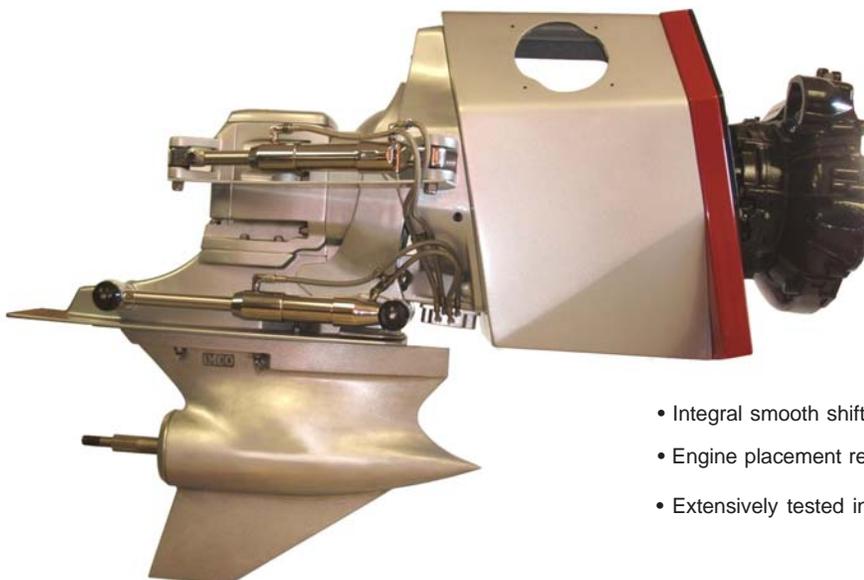
IMCO

XA 1000

4 GEAR DRIVE

The Imco Xtreme Drive was such a success that their customers kept requesting a Performance Drive that would handle more power at a reasonable price. IMCO did it again with the **NEW** Xtreme Advantage 1000. The **XA 1000** will fit in place of any normal Bravo engine due to its revolutionary extension box that has the transmission located inside. This allows you to have a drive that will handle up to **1000** HP without changing any of your boat configurations.

The Complete **XA 1000** Hi-Performance Sterndrive System includes - **BELLHOUSING - TRANSMISSION - EXTENSION BOX - GIMBLE KIT - COUPLER - STEERING**



Single Drive Kit - **Call to Order**

Dual Drive Kit - **Call to Order**

This new drive handles up to 1000 HP

•The only 4-gear Bravo style drive on the market. Dual pinion gears equalize high torque loading. Twice as strong as standard single pinion gear drives. No clutch cone.

- Integral smooth shifting, reliable Borg Warner transmission.
- Engine placement remains the same. No loss of interior cockpit space.
- Extensively tested in offshore competition, speed records and poker runs.

IMCO Xtreme Advantage Drive Steering & Accessories **SC**

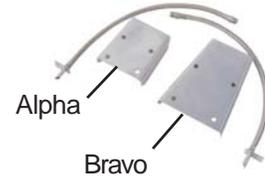


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Drive Shower Kits

Alpha Gen 1 Shower P/N **SH-109A**

Bravo Shower P/N **SH-109**



Drive Extension Spacers Kits (Bravo/IMCO only)



.5" Spacer P/N **BRV-141-5**

1" Spacer P/N **BRV-141-1**

1.5" Spacer P/N **BRV-141-1.5**

2" Spacer P/N **BRV-141-2**

2.5" Spacer P/N **BRV-141-2.5**

3" Spacer P/N **BRV-141-3**

Extension Box and Motor Brackets

P/N **EB-12-N**

P/N **MB-12-N**



P/N **EB-12-3**

P/N **MB-12-3**



NEW

Easier and stronger, IMCO's new complete motor mounting system is fully adjustable (height and width) for 25" to 30" stringers. Compact size allows easy access to hoses, oil coolers, water pumps, wiring and other hardware. All parts pre-fabricated and ready to mount. Adjusting hardware is all stainless steel. Block mounts and stringer mounts are A-356 aluminum heat-treated to T-6 full hard for maximum strength.

P/N **04-2294K**

Hydraulic Steering Kits

SINGLE RAM HOSE KIT P/N **HK-1**

DUAL RAM HOSE KIT P/N **HK-2**



S.S. Tie Bar Kits

1 1/4 Dia. — P/N **TB-6**

1 3/8 Dia. — P/N **TB-27**

1 3/4 Dia. P/N **TB-19**

Bravo / Extreme Drive Dual Ram with Wing Plate

P/N **SA-2**



Twin Drive Steering Kits with Tie Bar

P/N **SA-4-T**

Available for drive center to center distance of 34", 34.5", 35", 35.5", and 36"



IMCO

FLAGSHIP MARINE ENGINES

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IMCO solved another "Bravo" weak-link. IMCO's new oversized gimbal ring is designed with additional mass to increase strength and reliability for high performance applications. Side load strength dramatically increased. IMCO's new gimbal ring is constructed from A-356 aluminum and heat-treated to T6 full hard. Gimbal ring comes with all necessary pins and washers. Available in black or polished with clear coat finish.

P/N 05-1297KB (black)

P/N 05-1297KP (polished)

NEW



NEW



IMCO's new flywheel bellhousing is a direct replacement for installations using "Bravo" XR, XZ and IMCO X-Treme Advantage SC drives. The new bellhousing is reinforced in all critical areas with additional gusseting around the motor mount area. There is a flange at the top of the housing for accessory mounting. Better... and still affordable!

P/N 04-2295.

BIG POWER™ BY RAYLAR

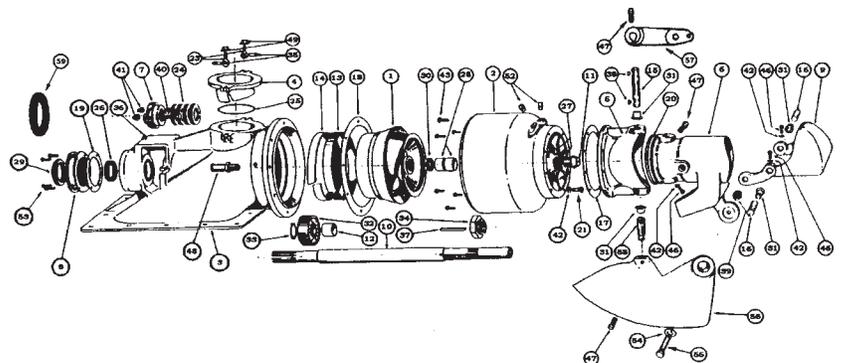


BIG POWER has teamed up with Flagship to bring the world's first aluminum cylinder head for the new GM big block 8.1L marine engine. This new cylinder head with its "quickburn" combustion chambers, high velocity-high flow intake and exhaust ports and its 10:1 compression ratio, allows your marine engine to develop even more power and torque over a stock 8.1L. All this with some weight savings of almost 100 pounds.

In addition to the aluminum cylinder head, BIG POWER offers kits like the stainless 1.8 ratio roller rockers, "varalift" profile roller camshaft and Mahle piston specially matched for these cylinder heads. The addition of these kits combined with these cylinder heads, further enhances the power and performance gain you will get when using this whole package. Also shown above are the additional component kits available.

A matching performance aluminum intake manifold will be available in mid-summer 2004. This new high flow manifold is stock appearing and fits in the same place as the stock using all the stock fitting and hardware to take advantage of all of the improvements the cylinder heads have to offer. The future is looking HOT for the 496 - 8.1 engine.

BERKLEY / DOMINATOR/ AMERICAN JET PUMP & PARTS



Performance Kits from Flagship for Mercury



1-888-282-2840 Toll Free

**Smart Charge Level 1
8 to 15 HP Increase**



Smart Charge Level 1 P/N - **155351**

Flagship Marine

**Smart Charge Kits
for MerCruiser 454/502 MPI**

**Smart Charge Level 2*
20 to 30 HP Increase**



Smart Charge Level 2 P/N - see below

Level 2 Applications:

Mercury Marine VST engines ----- P/N - **155354**

Mercury Marine "Cool Fuel" engines with mechanical fuel pump -- P/N - **155353**

Flagship Smart Charge System Levels 1 & 2 are designed to increase the horsepower and enhance the performance of any stock, non-supercharged Mercury 454/502 MPI engine built in the model years 1993 - 2000.
Only available for engines with GM controllers.

*Denotes a \$500 dollar core charge for the original ECM that was installed on the motor

The Blower Shop Supercharger Kits with Flagship Twin GM TBI Fuel Injection Systems



The Blower Shop low profile 250 polished super charger kit with twin GM TBI fuel injection, Delco electronics, Spark control, and fuel system. Shown on an 8.9L 540 CID 700+ HP Flagship GM marine engine

250SEFI kit -----P/N **FBS250-1**

671SEFII Intercooler kit --- P/N **FBS671-2**



Note! Other Flagship Blower Shop kits available upon request.

Twin TBI Kits for V8 GM supercharged engines

Twin GM TBI fuel injection Kits with Delco electronics, spark control, and fuel systems for Blower Shop blower kits (supercharger kit not included)



Twin TBI fuel injection 250SEFI kit P/N **TTBI001**

Twin TBI fuel injection 671SEFII kit P/N **TTBI002**

Whipple Supercharger Systems



1-888-282-2840 Toll Free

System Available For
 454 / 502 Magnum MPI
 500 HP EFI
 350 Mag MPI
 6.2MX MPI
 Small Block Carb
 Universal EFI 400-1500HP



496 Mag & Mag HO System



Shown above is Flagship's 725FSEFI
 Producing 725 hp @ 5400 RPM
 795 lb-ft @ 4000 RPM with Whipple 3300AE
 Supercharger & Intercooled
 Runs on 89 Octane



Quad Rotor EFI & Twin
 2100 CFM Throttle Bodies



365 / 500 HP - 454 / 502 Mag
 Carbureted System

**All Whipple Systems Available
 call for price and availability**



SUPERCHARGER SYSTEMS

The 1993-2002 Mercruiser 454/502 MPI Magnum base Supercharger System produces 570 hp @ 5300 RPM and 605 lb-ft @ 4400 RPM on 91 octane pump gasoline With 650 HP and 750 HP upgrades available.

- Reprogrammed ECM for supercharged operation
- Rev-limiter set @ 5400 RPM
- Retains stock cooling system and proper cold start cycle
- Fully serviceable aftercooler
- Pressurized supercharger oiling for long gear and bearing life
- Precision high-speed bearings
- Aircraft quality gear sets

P/N 4MA218-070 '98-'02 454/502 Magnum Supercharger System, serpentine drive accessory, satin finish

P/N 4MA218-078 '98-'02 454/502 Magnum Supercharger System, serpentine drive accessory, polished finish

P/N 4MA218-080 '93-98 454/502 Magnum Supercharger System, 3-V belt accessory, satin finish

P/N 4MA218-088 '93-'98 454/502 Magnum Supercharger System, 3-V belt accessory, polished finish



The Vortech Marine HP500 EFI base Supercharger System produces 700 HP @ 5400 RPM and 716 lb-ft @ 4400 RPM on 91 octane pump gasoline. Higher horsepower applications are also available. This system includes the following quality features:

- The reliable and complete HP500 EFI supercharger system
- Reprogrammed ECM for supercharged operation
- Rev-limiter set ~ 5700 RPM
- Retains stock cooling system and proper cold start cycle
- Fully serviceable aftercooler
- Pressurized supercharger oiling for the long gear and bearing life
- Precision high-speed bearings
- OEM fit and finish
- All engine accessories retain stock locations
- Cast aluminum discharge ducts and Purosil silicone discharge hose connections
- Billet anodized mounting brackets
- Aluminum Flame Arrester housing with washable reusable element
- Fits serpentine drives as well as 3 V-accessory engines



P/N 4MA218-010 '98-'02 HP500 EFI Supercharger System, satin

P/N 4MA218-018 '98-'02 HP500 EFI Supercharger System, polished

P/N SFOOI-550 HP500 EFI Fuel Pump

P/N 8F102-002 HP500 EFI Fuel Pump Filter

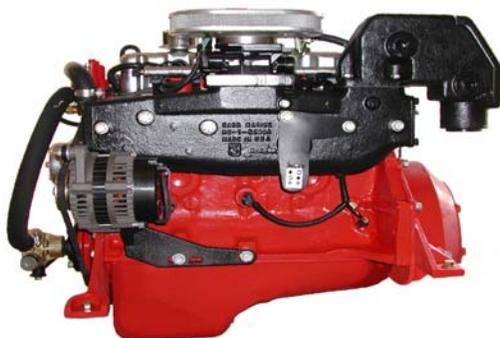
P/N 8F160-050 High-flow Fuel Injectors (8)

P/N 8F130-040 Fuel Pressure Regulator

Flagship Custom EFI Hi-Performance GM Marine Engines

FLAGSHIP 
MARINE ENGINES

1-888-282-2840 Toll Free



135FME - 181 CID



225FME - 262 CID



250FME - 305 CID
300FME - 350 CID



375FME - 496 CID
425FME - 496 CID



350FME - 6.0L, 364 CID
450FMESC - 6.0L, 364 CID



450FME - 496 CID
500FME - 496 CID

Flagship Custom EFI Hi-Performance GM Marine Engines

FLAGSHIP 
MARINE ENGINES

1-888-282-2840 Toll Free



450FEFI - 502 CID
500FEFI - 502 CID



525FME - 496 CID
575FME - 496 CID
600FME - 520 CID



615FEFI - 540 CID World
620FME - ZZ572 CID GM
700FME - 600 CID World



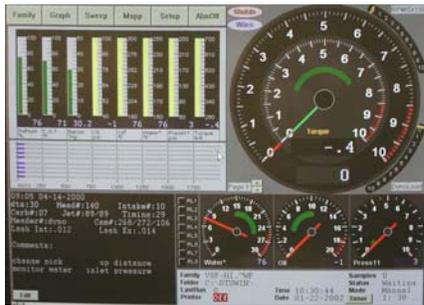
725FSEFI - 540 CID
Blower Shop Supercharged



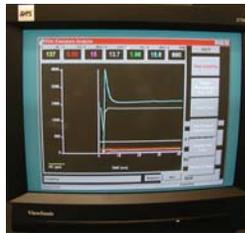
725FSEFI - 496 CID
Whipple Supercharged



825FSEFI - 575 CID
Vortech Supercharged



Computerized Controller
with Data Acquisition



Preliminary Emission Testing



Flagship's newest Dyno is state-of-the-art. This dynamometer, manufactured by Dynamic Test Systems Inc, will accommodate engines ranging from 100HP to over 1,000HP. This system, including the 125 ton Cooling Tower, enables us to do world-class development and durability testing. Our unique muffler system allows us to run continuously into the night without disturbing our neighbors. The DTS system incorporates two (2) lambda sensors to precisely measure A/F ratios on either gasoline or natural gas. Our new emission measurement equipment allows for precise monitoring of HC, CO and NOx for comparison to applicable CARB and EPA marine emission standards. Our new dyno facility enables precise calibration of the GM EFI system in order to maximize engine power while minimizing fuel consumption and exhaust emissions. This system, in combination with our original dynamometer, allows us to compare and evaluate engine performance data for continuous improvement. Engine performance, economy and emission data is recorded and available to our customers in the form of a computer generated report.

The Economical Alternative

EVINRUDE **Johnson** GENUINE PARTS

Evinrude / Johnson Remanufactured Replacement Powerheads. See page 6

Evinrude / Johnson Dealer Powerhead Rebuilding service. See page 6 & 8



Flagships Dealer Rebuilding service for Mercury, Yamaha, & Suzuki 4 Stroke Outboards, Plus ATV, PWC & Snowmobile engines.

Flagship Outboard Dealer Rebuilding Service See page 4, 5 & 7

MERCURY
OUTBOARDS



Mercury Option 3

YAMAHA
GENUINE
Parts & Accessories



Yamaha Option 4

Flagship PWC, Snowmobile and ATV Dealer Rebuilding Service See page 16

Flagship Marine Engine Co., Inc
200 E. Ann St.
Punta Gorda, FL 33950
888-282-2840
fax 941-575-1285

Dependable Performance
"Since 1946"
The Economical Alternative



www.flagshipengine.com