Introduction

Barr Marine By EDM

100 Douglas Way P.O. Box 190 Natural Bridge Station, VA 24579 Toll Free: (866) 255-9265 Phone: (540) 291-4180 Fax: (540) 291-4185

Barr Marine by EDM, a pioneer in the marine engine component replacement field, was founded in 1933 by Horatio W. Barraclough, Sr. under the name Marine Salvage. Among the first products engineered and manufactured were replacement exhaust manifolds for conversions of the famous 4-cylinder Model "A" Ford and Pierce Arrow 6-cylinder engines, along with the Buick and Chrysler straight 8 cylinder engines. Additional water-cooled manifolds followed throughout the 1930s for such engines as the 4-cylinder Willy's, flathead Ford V8, and the 16-cylinder Cadillac.

Operating his shop in the Philadelphia area, Barraclough Sr., joined by his four sons, saw the firm grow until the outbreak of World War II. As the sons left for military service, the business suspended almost all operations for the duration of the war. During this period, Barraclough Sr. moved the company to Port Republic, New Jersey, and remained active in the marine salvage business.

After the war, the four sons, Wallace, Robert, Russell, and Richard, started up their own operation, again in the Philadelphia area and incorporated as Barr Marine Products Co., the name that continues in use today. In addition to supplying the marine field with replacement exhaust system parts and engine conversions, Barr started manufacturing Barr diesel and gas engines, using the Chevrolet and Oldsmobile V8 gas engines and Ford and GMC engines for diesel.

As the company expanded, they moved several times into larger quarters until in 1972 a new plant was built to their own specifications in Bensalem, PA. This modern, one-story building housed offices, warehouse and manufacturing facilities. Here Barr began to phase out engine manufacturing and engine conversions. Recognizing the need for marine exhaust manifold and riser replacements that were of superior quality, but still economically priced, they began to specialize in marine exhaust systems and soon become known as "The Manifold People".

Joined by the third generation of the Barraclough family, Barr Marine continued to grow, and in the fall of 1980 was purchased by Barr International Industries, Inc. Barr Marine was sold to EDM, Inc. in the winter of 2001.

Barr Marine by EDM looks to the future with great optimism. They are now offering the pleasure boat and work boat industries an ever expanding line of replacement exhaust manifolds, exhaust risers and connectors, and other related engine parts.



Barr Marine By EDM

Engine Exhaust Systems

100 Douglas Way P.O. Box 190 Natural Bridge Station, VA 24579 Toll Free: (866) 255-9265 Phone: (540) 291-4180 Fax: (540) 291-4185

During the operation of any marine engine-gas or diesel-exhaust gases are produced and must be removed from the engine and conducted outside the boat. While there are two basic exhaust systems, wet and dry, the wet system is the one most often found in pleasure boats as well as many work boats. This system mixes the exhaust gases with engine-cooling water and then discharges them through the transom of the boat via an exhaust line.

Exhaust Manifold

Attached to the engine is an exhaust manifold with its exhaust inlets matching the exhaust outlet ports of the engine. Circulating cooling water through the water jacket surrounding the exhaust gas chamber cools this manifold.

Exhaust Connector

At the exhaust end of the manifold is an exhaust connector. This connector is an intermediary between the manifold and an exhaust hose or pipe. This connector also mixes the exhaust gases with water to further cool the gases, and it operates as a means for directing the gas and water outflows so that a connection can be made between the manifold and the exhaust tubing.

Particular attention must be paid to the relative height difference between the center line of the exhaust end of the center line of the transom overboard exhaust fitting, the exhaust connector can an be exhaust dump or drop of a convenient angle.

In those instances where the manifold is not appreciably above or is below the overboard fitting, an exhaust riser is used. By design, the riser acts as a dam to keep both exhaust-cooling water and seawater from back flooding into the engine and destroying it.

Back Pressure

From an engineering viewpoint, the most critical design requirement for exhaust systems is to limit the backpressure on the engine to a minimum. Backpressure is the pressure that builds up in the exhaust manifold engine exhaust outlets. The lower the pressure in the exhaust, the more efficient the operation of the engine. Low backpressure is achieved by designing exhaust passages to minimize resistance to the flow of gases and to prove for a uniform gas flow away from all cylinders.

Barr manifolds and exhaust connectors are designed to minimize backpressure. In many cases, after replacing an OEM manifold with Barr replacement parts, more r.p.m.'s are achieved.

Replacement Exhaust Systems

When the need arises to replace an OEM-installed manifold and/or exhaust connector, one of the three situations will exist: replacement of both manifold and connector, replacement of the manifold only, or replacement of the exhaust connector only.

When replacing both manifold and connector, normally there are no problems in matching, and connection to existing exhaust lines is usually very easy. When replacing just the manifold or just the exhaust connector, problems can arise in matching the replacement part to the existing part. Barr recognizes these problems and, wherever possible, has provided the necessary adaptors for connecting a Barr replacement manifold or exhaust connector to original exhaust parts.



It's The Law - Know Your Rights!

Barr Marine By EDM

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Consumers are protected from manufacturers who attempt to unfairly chain the purchasers of their products to the continued purchase of their maintenance and repair products and authorized services. Congress has provided consumers with this protection under the Magnuson-Moss Warranty Act as well as specific provisions of the Federal Trade Commission Improvement Act.

It's against the law for an original equipment manufacturer to inform consumers that their warranty would be void should they use other than genuine replacement parts or if service were to be preformed by anyone other than an authorized "OEM" dealer unless, of course, such parts and service were to be performed "Free of Charge" under the terms of the warranty.

The laws were enacted to grant the consumers and dealers the basic right to select replacement parts from competent manufacturers without fear of jeopardizing their warranty. The law directly provides the consumer the right of choice, the right to an affordable alternative choice of manufactured product. Of course, the original equipment manufacturer is not responsible for product failures or damages caused by product failures of product manufactured by others. Such damages become the responsibility of the company providing such products under the terms of their own warranties. Barr Marine by EDM originated the three-year limited warranty that has recently become the standard for all others to follow. Our warranty can be found in our catalog directly following this notice.

Barr Marine by EDM has been a manufacturer of Marine Engine Parts for seventy-three years. The company has and continues to manufacture marine engine parts for many of the original equipment manufacturers. For years, we have represented the affordable alternative choice for your needs. We thank you for your continued support!



Barr Marine By EDM

Three Year Limited Warranty

100 Douglas Way P.O. Box 190 Natural Bridge Station, VA 24579 Toll Free: (866) 255-9265 Phone: (540) 291-4180 Fax: (540) 291-4185

Three-year warranty on exhaust manifolds, risers and exhaust connectors manufactured by Barr Marine by EDM.

Unless specifically indicated otherwise, Barr Marine by EDM ("Manufacturer") warrants this product against defects in workmanship and material for three years from date of purchase by the original purchaser to the extent that Manufacturer will, at its option, replace or repair the product or any part thereof which in Manufacturer's judgment has such a defect, provided that written notice of such defect is received by Manufacturer at the address above within three years after date of purchase by the original purchaser. The Buyer shall return the product to Manufacturer, at Buyer's expense to the address above. Manufacturer's obligation does not include any cost of removal or reinstallation, and this warranty shall not apply if the product has been misused, abused, altered, neglected or improperly installed or repaired work by anyone other than the Manufacturer was a cause of the defect.

This Warranty does not extend to Barr Marine by EDM products used in racing or "high performance" applications. Any work done by others without notifying Barr Marine by EDM in advance of such performance and without written authorized shall automatically terminate buyer's rights or remedies against seller.

The warranties set forth above are the sole express warranties made by manufacturer with respect to this product or any thereof.

Any implied warranties, including without limitation any warranties of fitness or of merchantability, are hereby expressly limited in duration to the three-year period of this warranty.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty does not extend to anyone other than the original purchaser.

Notwithstanding anything to the contrary herein contained, if this product is specifically excluded or used for commercial purposes, rental, or other income-producing activities, then the duration of this warranty shall be one year from the date of purchase.

Manufacturer reserves the right to improve its products through changes in design or materials without being obligated to incorporate such changes in products of prior manufacture and to make changes at any time in design, materials, or parts of products without obligation or liability to owners or products of prior manufacture.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and may also have other rights, which vary from state to state.



Barr Marine By EDM

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Complete List of Barr Conversion Manifolds

ENGINE APPLICATION

PART NUMBER

BV-1-57

BV-1-67

BV6-1-75

CAT-1-3208

MC-1-0120

CHV-1-5557

CHV-1-63

CHVA-1-58

CHVA-1-65

CHVA-1-84**

CHVA-1-92#

CHV-1-83**

CHV-1-92#

CHD-1-82

DD-1-501

DD-1-3710

DD-1-4710

DD-1-6710

FM-1-83**##

FM 1 7275

FM-1-5457

FM-1-6268

FE-1-58

OR-1-73

OR-1-73

FM-1-6970##

FC-1-60

C-1-6364

Buick V8: 364, 401 & 425 C.I.D.; 1957-66 Buick V8: 400, 435 & 455 C.I.D.; 1967-76 Buick V6: 198, 225 & 231 C.I.D.; All Models Caterpillar V8 Diesel: 636 C.I.D.; Naturally Aspirated Chevrolet 4 Cylinder: 153 & 181 C.I.D. Chevrolet 6 Cylinder: 194, 230, 250 & 292 C.I.D.; 1962-75 Chevrolet V8 OHV: 235 & 283 C.I.D.; 1955-57 Chevrolet V8 OHV: 305, 307, 327, 350 & 400 C.I.D.; 1962 Up Chevrolet V8 OHV: 348 & 409 C.I.D. 1958-65 Chevrolet V8 OHV: 396, 427 & 454 C.I.D.; 1966 Up Chevrolet V8 OHV: 396, 427 & 454 C.I.D.; 1966 Up Chevrolet V8 OHV: 396, 427 & 454 C.I.D.; 1966 Up Chevrolet V8 : Fits All Small Block Chevy 283-400 C.I.D. Chevrolet V8 : Fits All Small Block Chevy 283-400 C.I.D. Detroit Diesel V8: 6.2 Liter Detroit Diesel V8: 8.2 Liter Detroit Diesel: 3/71 & 6V/71 Detroit Diesel: 4/71 & 8V/71 (Will Fit Early 92 Series/Call Barr) Detroit Diesel: 6/71 & 12V/71 (Will Fit Early 92 Series/Call Barr) Ford Falcon, Comet 6 Cylinder 144 & 177 C.I.D.; 1960-64 Ford V8: Fits 260, 289, 302 & 351 C.I.D. (Windsor Models Only) Ford, Lincoln, Mercury: 460 C.I.D.; All Years Ford & Mercury V8 OHV: 239, 292 & 312 C.I.D. Ford & Mercury V8: 221, 260 & 289 C.I.D.; 1962 Up Ford & Mercury V8: 302 & 351 C.I.D. Windsor 2 Barrel Carburetor Ford & Mercury V8 OHV: 332, 352, 390 and 427 C.I.D. ;1958-67 Oldsmobile V8 Diesel: 260 & 350 C.I.D.; 1978 Up Oldsmobile Rocket V8: 330, 350, 400, 425 & 455 C.I.D.

**CENTER RISER MANIFOLD #ALUMINUM MANIFOLD ##WILL NOT FIT CLEVELAND ENGINES



Manifold End Plate and Gasket Identification Listing

Barr Marine By EDM

100 Douglas Way P.O. Box 190 Natural Bridge Station, VA 24579 Toll Free: (866) 255-9265 Phone: (540) 291-4180 Fax: (540) 291-4185

Manifold	Front		Exhaust		Header
Part #	End Plate	Gasket	End Plate	Gasket	Adaptor
BV-1-57	1-0032	1-0019	1-0025	1-0019	1-0001
BV-1-67	1-0032	1-0019	1-0025	1-0019	1-0001
BV6-1-75	1-0092	1-0022	1-0024##	1-0022	1-0000
C-1-6364	1-0032	1-0019	1-0025	1-0019	1-0001
C6-1-M7M27	1-0056	1-0062	1-0067*	1-0068	1-0007
C6-1-M47	1-0057	1-0062	1-0067*	1-0068	1-0007
CAT-1-3208	DA-1-6371L2/R2	1-0019	1-0025	1-0019	1-0001
CHD-1-82	1-0036	1-0019	1-0025	1-0019	1-0001
CHV-1-5557	1-0042	1-0022	1-0024	1-0022	1-0000
CHV-1-63	1-0032	1-0019	1-0025	1-0019	1-0001
CHVA-1-58	1-0032	1-0019	1-0025	1-0019	1-0001
CHVA-1-65	1-0032	1-0019	1-0025	1-0019	1-0001
CM-1-5665	1-0092	1-0022	1-0024##	1-0022	1-0000
D-1-M6M26	1-0056	1-0062	1-0067*	1-0068	1-0007
D-1-M46SP	1-0057	1-0062	1-0067*	1-0068	1-0007
D1-M46ST	1-0057	1-0062	1-0067*	1-0068	1-0007
DD-1-501	1-0036	1-0019`	1-0025	1-0019	1-0001
FC-1-60	1-0042	1-0022	1-0024	1-0022	1-0000
FE-1-58	1-0032	1-0019	1-0025	1-0019	1-0001
FM-1-5457	1-0031	1-0022	1-0024	1-0022	1-0000
FM-1-6970	1-0032	1-0019	1-0025	1-0019	1-0001
FM-1-7275	1-0032	1-0019	1-0025	1-0019	1-0001
GR-1-162**	1-0059	1-0060	GR-1-0001**	N/A	N/A
GR-1-175**	1-0059	1-0060	GR-1-0001**	N/A	N/A
GR-1-226	1-0009	1-0011	GR-1-0001**	N/A	N/A
GR-1-3273L	GR-1-0005L	GR-1-0006	GR-1-0003L	GR-1-0006	1-0069
GR-1-3273R	GR-1-0005R	GR-1-0006	GR-1-0003R	GR-1-0006	1-0069
GR-1-3274L	GR-1-0005L	GR-1-0006	GR-1-0002L	GR-1-0006	1-0002
GR-1-3274R	GR-1-0005R	GR-1-0002R	GR-1-0002R	GR-1-0006	1-0002
GR-1-6470	GR-1-6470A	1-0019	1-0036##	1-0019	1-0001
INT-1-5457L	1-0072	1-0022	1-0024##	1-0022	1-0000
INT-1-5457R	1-0074	1-0022	1-0024##	1-0022	1-0000
INT-1-58L	1-0077	1-0019	1-0025##	1-0019	1-0001
INT-1-58R	1-0076	1-0019	1-0025##	1-0019	1-0001
INT-1-6268L	1-0072	1-0022	1-0024##	1-0022	1-0000
INT-1-6268R	1-0074	1-0022	1-0024##	1-0022	1-0000
MC-1-0120	1-0075	1-0022	1-0092	1-0022	NOT REQ'D
MC-1-6364	C-1-6365B	1-0019	1-0036	1-0019	NOT REQ'D
OF-1-60	1-0036	1-0019	1-0025	1-0019	1-0001
OR-1-73	NOT REQ'D	NOT REQ'D	1-0080	1-0082	1-0081
V6D-1-478	V8D-1-0002	V8D-1-0003	V8D-1-0001##	V8D-1-0003	V8D-1-0004
V8D-1-637	V8D-1-0002	V8D-1-0003	V8D-1-0001##	V8D-1-0003	V8D-1-0004

*NOTE: MANIFOLDS WITH FOUR BOLT STYLE AND FLANGES REQUIRE ADAPTOR # 1-0061 AND GASKET 1-0062 BETWEEN MANI-FOLD AND END PLATE.

NOTE: PART # GR-1-0001 IS A REPLACEMENT FOR THE ORIGINAL GRAY THREADED FLANGE AND IS NOT SUPPLIED WITH THE MANIFOLD. MANIFOLDS MARKED () THUS CAN BE USED WITH THE ORIGINAL GRAY EXHAUST FITTING.

HEADER ADAPTOR FURNISHED INSTEAD OF EXHAUST END PLATE.



MerCruiser 4 Cylinder 181 C.I.D. 140 H.P. 3.0L and 3.0LX Models All Models 1990 and Up (Vortec Style Head) Log Style Direct Replacement

MC 1 860235



MC1860235



MC 20 12076





MC 20 12076P





MC 50 22 862557

MC 50 10 53728

MC 50 22 862065

50 512 020

MC47 27 807982



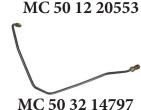
MC 50 11 24883



MC 50 22 806608



MC 50 11 862902



MC 50 10 806300

MARGAN



MC 50 23 861634

	0002001101.
MC 20 12076	Direct replacement exhaust riser. Re- places MerCruiser part # 12076A2.
MC 20 12076P	Exhaust riser mounting kit.
50 170 207	3/8"-16 X 3/4" Hex Head Cap Screw (for mounting lifting eye).
50 512 020	Fitting, 3/4" N.P.T. X 1" hose.
MC47 27 99777-2	Replacement exhaust riser to man- ifold gasket. Supersedes MerCruiser part # 27-52076 and 27-99777.
MC47 27 807982	Replacement carburetor to intake/ exhaust manifold gasket.
MC47 27 815528	Replacement cylinder head to exhaust manifold gasket.
MC 50 865549	Lifting eye.
MC 50 10 53728	Replacement 3/8"-16 X 4 5/8" screw.
MC 50 10 806300	Replacement 3/8" X 5 3/8" stud.
MC 50 11 24883	Replacement nut.
MC 50 11 862902	Replacement nut.
MC 50 12 20553	Replacement washer.
MC 50 22 806608	Drain plug.
MC 50 22 845175	Replacement reducer bushing, 3/4" to 3/8".
MC 50 22 862557	Replacement bushing, 3/8 X 1/2 NPT.
MC 50 22 862065	Replacement 90 degree adaptor assembly.
MC 50 25 32506	Replacement O-Ring.
MC 50 32 14797	Replacement fuel line.
MC 50 23 861634	Replacement cooling water hose, formed.

Direct replacement exhaust manifold.

Replaces MerCruiser part # 860235A04.

Note:

MC47 27 815528

MC 50 865549

SUPPLEMENT

OMC/VOLVO V8- 5.0L and 5.8L Cobra

All Models (Carbureted) Center Riser Direct Replacement



OMC 1 3852347

OMC-1-3852347	Direct replacement exhaust manifold. Replaces Volvo part # 3852347.
OMC-20-913784	Direct replacement exhaust riser/ elbow. Replaces OMC # 913784 and Volvo part # 3863061 (New Style).
OMC-20-913784P	Exhaust riser/elbow mounting pack- age.
FM 47 0000	Exhaust manifold to cylinder head gasket.
OMC47-913783	Direct replacement exhaust riser/ elbow to manifold gasket.
50-512-017	Replacement 1/2" N.P.T. to 1" hose (straight)/brass hose fitting.

Note:

Manifold includes all plugs, gaskets, hose fitting and mounting hardware to head. Risers include plugs, gasket and mouniting hardware to mount to manifold.



OMC 20 913784









Warning: Barr Riser Shown Only Fits Carbureted Ford Engines! Will Not Directly Replace Volvo Part #'s 3855271 (port) Or 3855269 (stbd) Risers for EFI Models



OMC/VOLVO V6- 4.3 Liter Cobra

All Models

Center Riser Direct Replacement



OMC 1 3857656

OMC-1-3857656	Direct replacement exhaust manifold. Replaces Volvo part # 3857656.
OMC-20-913784	Direct replacement exhaust riser/ elbow. Replaces OMC # 913784 and Volvo part # 3863061 (New Style).
OMC-20-913784P	Exhaust riser/elbow mounting pack- age.
MC47-27 99757	Exhaust manifold to cylinder head gasket.
OMC47-913783	Direct replacement exhaust riser/ elbow to manifold gasket.
50-512-017	Replacement 1/2" N.P.T. to 1" hose (straight)/brass hose fitting.

Note:



OMC 20 913784











Barr Marine Diesel Engine Riser



20-0094	Versatile 1 1/2" N.P.T. exhaust riser. Approx. 10 lbs in weight; Gray Iron.
20-0101	Versatile 1 1/2" N.P.T. exhaust riser. Approx. 2 1/2 lbs. in weight; Aluminum.
50-090-150	1 1/2" N.P.T. Pipe Plug

20 0094



20 0101





Chevrolet V8-283, 302, 305, 307, 327 and 350 C.I.D. All Models Center Riser Generic Aluminum



CHV 1 92



20 0107

20 0087P



CHV-1-92	Water cooled center discharge mani- fold to fit the small block GM engine (3/4" N.P.T. cooling hose con- nections). All years.
20-0108	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose.
20-0107	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose.
1-0105	Center riser manifold-to-riser gasket for fresh water cooling.
1-0107	Center riser manifold-to-riser gasket (raw water cooling).
20-0107P	Riser mounting package for both 20-0107 and 20-0108.
20-0087P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0093P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose.
CHV-1-92P	Manifold mounting package (in- cludes bolts and pipe plugs).
CHV-47-0000	Manifold to cylinder head gasket.

Note:

Manifold includes CHV 1 92P (mounting package to head) and risers include 20 0107P (mounting package to manifold).



The center riser is a two-piece aluminum manifold/riser ideally suited for replacement use where riser protection is required. The Barr Center Riser aluminum manifold/riser uses flexible exhaust hose which facilitates connection to existing exhaust lines. All elbows (cast iron) can swivel inboard or outboard for perfect fit. The Barr Center Riser aluminum manifold/riser is designed to limit back presure on the engine, resulting in more efficient engine performance. The manifold and riser can be reversed and will fit either side of the engine.

The Barr Center Riser aluminum manifold/riser is cast of 356 T6 aluminum, well suited for fresh water marine applications. Barr Marine's Center Riser aluminum manifold/riser come wih a one year warranty. However, Barr Marine By EDM does not recommend use of this product in salt water applications and does not warrant this product in salt water due to extreme corrosion.



Chevrolet Big Block 427 and 454 C.I.D. All Models Center Riser Generic Aluminum

CHVA-1-92	Water cooled center discharge mani- fold to fit the big block GM engine (3/4" N.P.T. cooling hose con- nections). All years.
20-0108	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose.
20-0107	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose.
1-0105	Center riser manifold-to-riser gasket for fresh water cooling.
1-0107	Center riser manifold-to-riser gasket (raw water cooling).
20-0107P	Riser mounting package for both 20-0107 and 20-0108.
20-0087P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0093P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose.
CHVA-1-92P	Manifold mounting package (in- cludes bolts and pipe plugs).
CHVA-47-0000	Manifold to cylinder head gasket.

Note:

Manifold includes CHV 1 92P (mounting package to head) and risers include 20 0107P (mounting package to manifold).

The center riser is a two-piece aluminum manifold/riser ideally suited for replacement use where riser protection is required. The Barr Center Riser aluminum manifold/riser uses flexible exhaust hose which facilitates connection to existing exhaust lines. All elbows (cast iron) can swivel inboard or outboard for perfect fit. The Barr Center Riser aluminum manifold/riser is designed to limit back presure on the engine, resulting in more efficient engine performance. The manifold and riser can be reversed and will fit either side of the engine.

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Chris Craft V8-283, 302, 305, 307, 327 and 350 C.I.D. All Models Log Style Direct Replacement

The CC-1-07686 must not be used in 3 pass plumbing systems!



CC 1 07686



CC 20 08288



CC 20 08289



CC 20 07605



CC-1-07686	Direct replacement water cooled manifold. Replaces Chris Craft part # 16.20-07686.	
CC-20-08288	Direct replacement port side riser.	
CC-20-08289	Direct replacement starboard side riser.	
CC-1-07686P	Manifold mounting package.	
CC-6-80	Pressure relief valve adaptor package for use with Chris Craft direct replace ment risers as needed.	
CC-20-07593	Riser/deflector plate. Replaces Chris Craft part #16.20-07593 (Order (2) of the appropriate gaskets according to your requirements).	
CC-20-07605	Direct replacement exhaust elbow.	
CC-20-0828P	Exhaust riser mounting package.	
CC47-1650-05944	End cap gasket for all models except 283 C.I.D. with flywheel forward (Order (2) of the appropriate gaskets according to your requirements).	
CC47-1650-06022	End cap gasket for 283 C.I.D. with flywheel forward (Order (2) of the appropriate gaskets according to your requirements).	
CC47-1650-07290	Pressure relief valve housing gasket.	
CC47-1650-07596	Riser/deflector plate gasket. Also requires gasket CC47-1650-07597 (Order (2) of the appropriate gaskets according to your requirements).	
CC47-1650-07597	Riser/tail pipe gasket. Also requires gasket CC47-1650-07596 (Order (2) of the appropriate gaskets according to your requirements).	
CC47-1650-07681	Adaptor/tail pipe gasket for 283 C.I.D. with flywheel forward (Order (2) of the appropriate gaskets accord- ing to your requirements).	
CHV-47-0000	Manifold to cylinder head gasket.	

Note:

Manifold includes all mounting hardware to head, gaskets and plugs. Risers include mounting gaskets and plugs only. Order CC 20 0828P to mount riser to manifold ((2) required per engine).















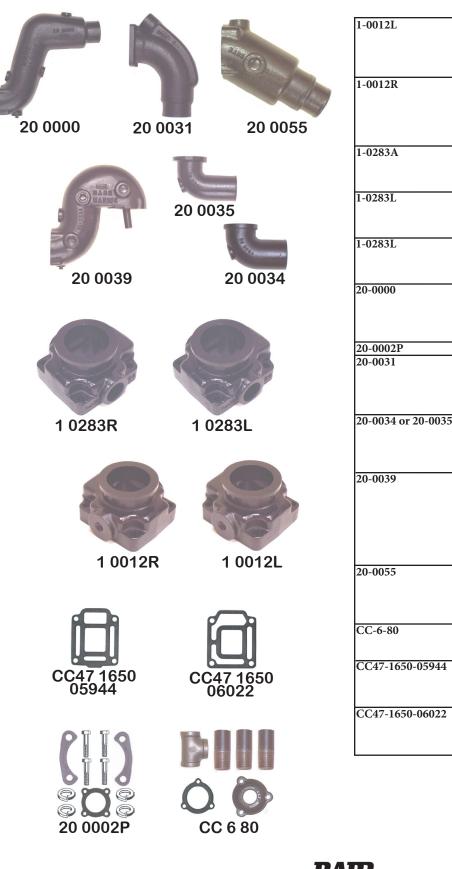








Chris Craft V8-283, 302, 305, 307, 327 and 350 C.I.D. All Models Generic



1-0012L	Adaptor for Chris Craft V8 283 C.I.D.
	Manifolds prior to Models F, G, K
	and Q (three pass manifold system)
	left side. Requires Chris Craft adaptor
	part #16.20-07602 (port side).
1-0012R	Adaptor for Chris Craft V8 283 C.I.D.
1 001210	Manifolds prior to Models F, G, K
	and Q (three pass manifold system)
	right side. Requires Chris Craft
	adaptor part #16.20-07064 (starboard
	side).
1-0283A	Adaptor for Chris Craft V8 283, 302,
1-0203A	305, 307, 327 and 350 C.I.D. Mani-
	folds, Models F, G, and K (two pass
	manifold system). Not pictured.
1-0283L	Adaptor for Chris Craft V8 283, 302,
1-0263L	305, 307, 327 and 350 C.I.D. Mani-
	folds, Model Q (single pass manifold system) left side.
1 00001	· · · · · · · · · · · · · · · · · · ·
1-0283L	Adaptor for Chris Craft V8 283, 302,
	305, 307, 327 and 350 C.I.D. Mani-
	folds, Model Q (single pass manifold
2 0,0000	system) right side.
20-0000	Swivel-type high discharge exhaust
	riser; 8 1/2" riser protection. Re-
	quires (1) mounting hardware kit
	#20-0002P per riser. Use only with 2 7/8" to 3" I.D. exhaust hose.
20-0002P	Mounting hardware kit.
20-0031	Swivel-type 90 degree exhaust elbow
	connector with internal water dis-
	charge. Accepts 2 1/2" to 3" I.D. ex-
	haust hose. Requires (1) mounting
	hardware kit #20-0002P per elbow.
20-0034 or 20-0035	Exhaust connector #20-0035 (for
20 000 1 01 20 0000	2 1/2" I.D. exhaust hose) or exhaust
	connector #20-0034 (for 3" I.D. ex-
	haust hose). Connects to #20-0039
	using (1) #20-0002P per connector.
20-0039	Fully jacketed swivel-type exhaust
20-0039	riser; 7" riser protection. Requires (2)
	mounting hardware kits #20-0002P
	((1) kit to mount riser to manifold and (1) kit to mount albour #20,0024
	and (1) kit to mount elbows #20-0034
	or #20-0035 to riser). Use for Models
	F, G, K, and Q; requires (1) CC-6-80
20.00EE	package.
20-0055	Swivel-type 30 degree exhaust elbow
	connector; fully jacketed. Accepts
	2 1/2" or 3" I.D. exhaust hose. Re-
	quires (1) mounting hardware kit
	#20-0002P per elbow.
CC-6-80	Pressure relief valve adaptor package
	for Chris Craft V8 Models F, G, K,
	and Q. Use with #20-0039 riser.
CC47-1650-05944	End cap gasket for all models except
	283 C.I.D. with flywheel forward
	(Order (2) of the appropriate gaskets
	according to your requirements).
	server and the server requirements).
CC47-1650-06022	End gasket for 283 C I D with fly
CC47-1650-06022	End gasket for 283 C.I.D. with fly- wheel forward (Order (2) of the
CC47-1650-06022	wheel forward (Order (2) of the
CC47-1650-06022	



Chris Craft V8-283, 302, 305, 307, 327 and 350 C.I.D. All Models Center Riser Generic



CHV-1-83	Water cooled center discharge mani- fold to fit the small block GM engine (3/4" N.P.T. cooling hose con- nections). All years.
20-0082	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose.
20-0100	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose.
1-0104P	Adaptor package for fresh water cooled manifold (includes gaskets and block off plate).
1-0105	Center riser manifold-to-riser gasket for fresh water cooling.
1-0106P	Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole).
1-0107	Center riser manifold-to-riser gasket (raw water cooling).
20-0082P	Riser mounting package for both 20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured.
20-0085P	Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0097	3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking.
CC-27-79	Alternator bracket. Use where engine water pump is mounted on the star- board side of the engine.
CHV-1-83P	Manifold mounting package (in- cludes bolts and pipe plugs).
CHV-1-83SS-P	Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.
CHV-27-0083	Alternator bracket. Use where engine water pump is mounted on port side of engine below alternator.
CHV-47-0000	Manifold to cylinder head gasket.

Note:



Chris Craft V8-454 C.I.D. All Models Center Riser Generic

	CHVA 1		
20 07	100	2	0 0082
20 0097		34P	20 0085P
20 0086P	20 008	7P	20 0088P
20 0089P	20 00)92P	20 0093P
] 82P	CHVA 1	84P
	04P		06P
1 0105	1 0107	CHVA	47 0000

	Water cooled center discharge mani
CHVA-1-84	Water cooled center discharge mani- fold to fit the big block GM engine (3/4" N.P.T. cooling hose con-
	nections). All years.
20-0082	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 3"
	I.D. exhaust hose.
20-0100	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 4"
1.01040	I.D. exhaust hose.
1-0104P	Adaptor package for fresh water cooled manifold (includes gaskets
	and block off plate).
1-0105	Center riser manifold-to-riser gasket
1 0100	for fresh water cooling.
1-0106P	Adaptor package for raw water
	cooling. Used in pre-heating applica-
	tions (includes gaskets and block off
	plate with vent hole).
1-0107	Center riser manifold-to-riser gasket
	(raw water cooling).
20-0082P	Riser mounting package for both
20 000266 P	20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package (with brass plugs) for both 20-0082
	and 20-0100. Not pictured.
20-0084P	Straight exhaust adaptor (includes
20 000 11	adaptor, hose and clamps). For use
	with 3 1/2" I.D. exhaust hose.
20-0085P	Straight exhaust adaptor (includes
	adaptor, hose and clamps). For use
	with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose.
20-0087P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
20.00000	For use with 3" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose
20-0089P	30 degree exhaust elbow adaptor
20-00091	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0092P	45 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0093P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust
	hose.
20-0097	3" spacer block (complete with
	mounting hardware, gasket and 3/4"
	pipe plug). Capable of stacking.
	1110/111000
CHVA-1-84P	Manifold mounting package (in-
CHVA-1-84P	Manifold mounting package (in- cludes bolts and pipe plugs).
CHVA-1-84P CHVA-1-84SS-P	cludes bolts and pipe plugs).
	cludes bolts and pipe plugs). Stainless steel manifold mounting package (includes stainless bolts and
	cludes bolts and pipe plugs). Stainless steel manifold mounting

Note:



Chrysler V8 - 273, 318, 340, and 360 C.I.D. All Models. 1986 and Up Center Riser Direct Replacement



CM 1 4417063



CM-1-4417063	Water cooled center discharge ex- haust manifold to fit the small block Chrysler (1/2" N.P.T. cooling hose connections). Used during years 1986 and later.
534005	Generic riser designed to be mounted to the original Chrysler center riser exhaust manifold (for use with 3" I.D exhaust hose/3/4" N.P.T. cooling hose connection).
534002	Adaptor kit (sold as shown) to fit the original Chrysler center riser exhaus manifold to the Barr style riser (part #534005). Adaptor must be used for Barr style riser.
534004	Riser gasket for raw water cooled manifolds (installed between manifold and adaptor plate).
50-512-018	1/2" N.P.T. X 3/4" hose (straight barb) brass fitting.
50-512-019	3/4" N.P.T. X 3/4" hose (straight barb) brass fitting.
50-525-018	1/2" N.P.T. X 3/4" hose (90 degree) brass fitting
50-525-019	3/4" N.P.T. X 3/4" hose (90 degree) brass fitting.
CM47-4417127	Riser gasket for raw water cooled manifolds (installed between adaptor plate and riser).
CM47-4417232	Riser gasket for fresh water cooled manifolds (installed between manifold and adaptor plate).

Note: Manifold includes all mounting hardware, gaskets and plugs.













50 512 019





Chrysler V8 - 273, 318, 340, and 360 C.I.D. All Models. 1966 and Up Log Style Direct Replacement

	CM-1-6672A	Direct replacement water cooled manifold for model years 1966 to 1972.
	CM-1-6677A	Direct replacement water cooled manifold for model years 1973 to 1986.
CM 1 6677A CM 1 6672A	CM-20-2600402	Exhaust riser lower elbow. Direct replacement for Chrysler part # 2600402.
	CM-20-2847405	90 degree exhaust elbow. Direct re- placement for Chrysler part #'s 2847405 and 2469639.
	CM-20-4142411	Exhaust riser/upper elbow. Direct replacement for Chrysler part #'s 3745639, 2847623, 2487404 and E9233M.
CM 20 6672 CM 20 6674 CM 20 284740	CM-20-6672	Fully jacketed 20 degree exhaust elbow. Accepts 3" I.D. exhaust hose. Direct replacement for Chrysler part # 3527794. Will mount directly to manifold or can be used with riser
	5	# CM-20-6674.
	CM-20-6674	Fully jacketed exhaust riser. 6" riser protection. Direct replacement for Chrysler part # 2846689.
	CM-20-9232	6" exhaust elbow high riser exten- sion. Direct replacement for Chrysler part # E9232M.
CM 20 4142411 CM 20 9232 CM 20 26004	CM-1-6672B	Front end plate without the water connector, (1) required per manifold (Chrysler part # 2846106). May re- quire mounting kit # CM-1-6672B-P (shown on next page). Order the appropriate end flanges and fittings
		according to your requirements.
	CM-1-6672C	Adaptor for rear end of manifold. Use with Barr style exhaust risers or elbows, (1) required per manifold.
	CM-1-6672E	Copper water distribution tube, (1) required per manifold. Replaces original tube (Chrysler part # 3527781) where used. Will fit both manifold styles.
CM 1 6672C CM 1 6672B CM 1 6672H	СМ-1-6672Н	Front end plate with 1/2" N.P.T. water connection. For use where water con- nection is made from the front of the manifold. Will replace Chrysler part # 3527869, (1) required per manifold. May require mounting kit # CM-1-6672B-P (show on next page). Will fit both manifold styles.
CM 20 6672P CM 1 6677P	CM-1-6677P	Manifold to cylinder head mounting kit (Order (1) of the appropriate mounting kits according to your requirements).
	CM-1-6677SS-P	Stainless steel manifold to cylinder head mounting kit (includes stainless studs, nuts, manifold to head gaskets and brass drain plugs). Not pictured.
CM 1 6672E	CM-20-6672P	Mounting kit for exhaust elbow con- nector for raw water cooled manifold (includes bolts, gasket and pipe plug).
	CM-20-6674 and C	1-6677A, CM-20-6672, CM-20-2847405 include all mount- ets and plugs, Swivel-style con-

CM-20-66/4 and CM-20-284/405 include all moun ing hardware, gaskets and plugs. Swivel-style connector packages must be purchased seperate for the corresponding riser/elbows. See next page for part part numbers.



Chrysler V8 - 273, 318, 340, and 360 C.I.D. All Models. 1966 and Up Log Style Direct Replacement

CM 20 6674J P

CM 20 6672J P

CM 20 6674B P

CM 1 6672D









CM 1 6672J





CM 50 6025923



CM 20 1947617

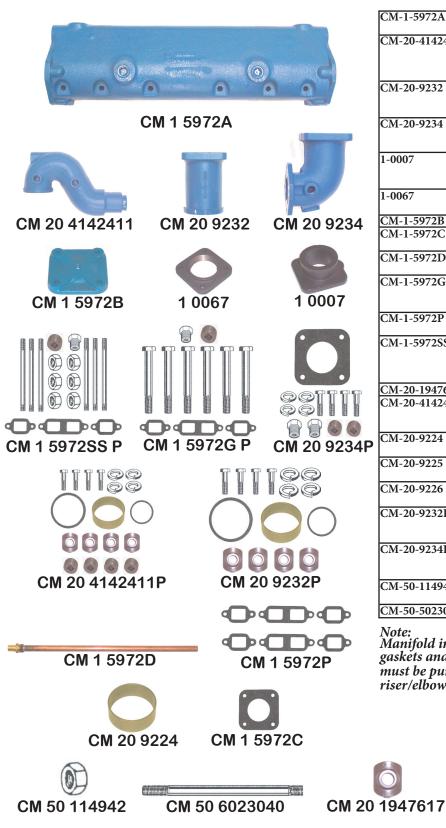


CM-1-6672D	End flange gasket for raw water
	cooled manifolds, (2) required per
	manifold. Replaces Chrysler part #
	2847480. Will fit both manifold
	styles.
CM-1-6672J	End flange gasket for fresh water cooled manifolds, (1) required per exhaust end. Will fit both manifold
	cooled manifolds, (1) required per
	exhaust end. Will fit both manifold
	styles.
CM-1-6672P	Manifold to cylinder head gasket set,
	(1) required per engine. Replaces Chrysler part # 3745220. Will fit both
	manifold styles.
CM-20-1947617	Exhaust elbow extension retainer.
CM-20-2600402P	
CM1-20-2600402P	Mounting kit for lower elbow riser
	(includes bolts, gasket and pipe
CM 20 2045405D	plugs).
CM-20-2847405P	Mounting kit for exhaust elbow (in-
	cludes bolts, gasket and pipe plugs).
CM-20-4142411P	Mounting kit for upper riser/elbow
	(includes sleeve, O-rings, retainers,
	bolts and pipe plugs).
СМ-20-6672Ј-Р	Mounting kit for exhaust elbow
	connector for fresh water cooled
	manifold (includes bolts, gasket, and
	pipe plugs).
CM-20-6674J-P	Mounting kit for exhaust riser for fresh water cooled manifold (includes
	fresh water cooled manifold (includes
	bolts, gasket and pipe plug).
CM-20-6674P	Mounting kit for raw water cooled
	manifold (includes bolts, gasket and
	pipe plugs).
CM-20-9232P	Mounting kit for 6" extension (includes sleeve, O-rings, retainers
	and bolts).
CM 20.0224	
CM-20-9224	Exhaust to elbow extension retainer
	sleeve.
CM-20-9225	Exhaust to elbow extension inner
	seal.
CM-20-9226	Exhaust to elbow extension outer
	seal.
CM-50-115729	Stainless steel exhaust manifold stud
	nut.
CM-50-602593	Stainless steel exhaust manifold stud.





Chrysler V8 - 361, 383, 400, 413, 426 and 440 C.I.D. All Models. 1959 and Up Log Style Direct Replacement



CM-1-5972A	Direct replacement water cooled manifold for big block Chrysler.
CM-20-4142411	Exhaust riser/upper elbow. Direct replacement for Chrysler part #'s 3745639, 2847623, 2847404 and
	E9233M.
CM-20-9232	6" exhaust elbow high riser exten- tion. Direct replacement for Chrysler part # E9232M.
CM-20-9234	Exhaust riser lower elbow. Direct replacement for Chrysler part # E9234M.
1-0007	Adaptor for rear end of manifold. Use with Barr style exhaust risers or elbow connectors.
1-0067	2 1/2" N.P.T. threaded exhaust end plate.
CM-1-5972B	Direct replacement front end plate.
CM-1-5972C	End plate gasket, (2) required per manifold.
CM-1-5972D	Copper water distribution tube. Re- places original tube where used.
CM-1-5972G-P	Manifold to cylinder head mounitng kit (includes bolts, manifold to head gaskets and brass drain plug).
CM-1-5972P	Manifold to cylinder head mounting gasket set.
CM-1-5972SS-P	Manifold to cylinder head mounting kit (includes stainless steel studs and nuts, manifold to head gaskets and brass drain plugs).
CM-20-1947617	Exhaust elbow extension retainer.
CM-20-4142411P	Mounting kit for upper riser/elbow (includes sleeve, O-rings, retainers, bolts and pipe plugs).
CM-20-9224	Exhaust elbow to extension seal re- tainer sleeve.
CM-20-9225	Exhaust elbow to extension inner seal.
CM-20-9226	Exhaust elbow to extension outer seal.
CM-20-9232P	Mounting kit for 6" extension (in- cludes sleeve, O-rings, clamps and bolts).
CM-20-9234P	Mounitng kit for lower elbow riser (includes bolts, gasket and pipe plugs).
CM-50-114942	Stainless steel exhaust manifold stud nut.
CM-50-5023040	Stainless steel exhaust manifold stud.

Note: Manifold includes all mounting hardware to head, gaskets and plugs. Swivel-style connector packages must be purchased seperate for the corresponding riser/elbows.







Crusader V8-283, 302, 305, 307, 327 and 350 C.I.D. All Models Center Riser Generic



CHV 1 83

20 0088P

20 0089P



20 0100



20 0085P





20 0082

20 0086P











Note:



Crusader V8-283, 305, 307, 327 and 350 C.I.D. All Models Direct Replacement

		CR-1-97752	Direct replacement starboard side manifold. Replaces Crusader part # 97752.
0		CR-1-97753	Direct replacement port side manifold. Replaces Crusader part # 97753.
CR 1 97753	CR 1 97752	CR-20-96560	Direct replacement exhaust elbow assembly, 3" I.D. exhaust hose. Re- places Crusader part # 96560.
UK 197755		CR-20-97169	6" riser extension. Replaces Crusader part # 97169.
	A Distance of the Science of the Sci	CR-20-97386	90 degree swivel elbow. Replaces Crusader part # 97386.
and a new first the Co		CR-20-97387	Elbow, lower swivel with 3" outlet. Replaces Crusader part # 97387.
	presente to the	CR-20-97624	Elbow, lower swivel with 4" outlet. Replaces Crusader part # 97624.
A A Antonio III	15/16" Longer	CR-20-97772	4" riser extension. Replaces Crusader part # 97772.
CR 20 96560	CR 20 98068	CR-20-97924	Direct replacement exhaust elbow assembly, 4" I.D. exhaust hose. Re- places Crusader part # 97924.
		CR-20-98068	Direct replacement exhaust elbow assembly, 3" I.D. exhaust hose. For
	State of the second		use without Crusader spacer part # 97295. Replaces Crusader part #
		CHV-47-0000	98068. 1 Manifold to cylinder head gasket.
		CR-1-97752P	Manifold mounting package. Not pictured.
CR 20 97924	CR 20 97386	CR 1 97753P	Manifold mounting package (alt- ernator side of engine). Not pictured.
	E C	CR-20-96560P	Mounting package for CR-20-96560, CR-20-97386, CR-20-97924, and CR-20-98068.
	CR 20 97387	CR-20-97169P CR-20-97296	Mounting package for CR-20-97169. Stainless steel block off plate for fresh water applications.
	CR 20 97 387	CR-20-97772P	Mounting package for CR-20-97772.
		CR-20-96319	143 degree thermostat for Crusader. Not pictured.
224.02		CR47-C-96108	Replacement exhaust elbow gasket (3 hole).
CR 20 97772 CR 20 97	7169 CR 20 97624	CR47-C-96562	Replacement exhaust elbow gasket (1 hole).
		CR-50-20471	Replaces Crusader part # 20471 (3/8" X 5 3/4" stainless steel stud).
	CR 20 97296	CR-50-22032	Replaces Crusader part # 22032 (3/8" X 9 3/8" stainless steel stud). For use with OEM adaptor # 97295.
	CR 20 97 290	CR-50-22033	Replaces Crusader part # 22033 (3/8" X 7 3/4" stainless steel stud).
CR 20 97169P CR 20	97772P	CR-50-96369	Replaces Crusader part # 96369 (3/8" X 4" stainless steel stud). For use with OEM adaptor # 97295.
	CR47 C 96108	8 Note:	
		e	<i>rs include all mounting hardware,</i> R-20-96169P and CR-20-97772P
	CR 50 96369		eperate for the corresponding
	CR 50 20471	risers.	1 5 1 6
	CR 50 22033		
CR 20 96560P	CR 50 22032	CR47 C 96562	CHV 47 0000
	BA MARINE	IRR BY EDM	

Crusader V8-283, 305, 307, 327 and 350 C.I.D. **Center Riser Direct Replacement**



CR 1 98243



CR 20 98126

CR-1-98243	Direct replacement water cooled exhaust manifold. Replaces Crusader part # 98243.
CR-20-98216	Direct replacement water cooled center discharge riser. Replaces Cru- sader part # 98126. Accepts 4" I.D. exhaust hose.
CR-20-98128	Manifold to riser 3" spacer block (single). Replaces Crusader part # 98128.
CHV-47-0000	Manifold to cylinder head gasket.
CR-1-98243P	Mounting package for CR-1-98243.
CR-20-98124	Stainless steel block off plate for closed cooling applications.
CR-20-98126P	Mounting package for CR-20-98126 riser.
CR-20-98128P	Mounting package for CR-20-98128 spacer.
CR47-C-98127	Direct replacement manifold to riser gasket.

Note: Manifold, riser and spacer block include all mounting hardware, gaskets and plugs.





CR 20 98124













Crusader V8-427 and 454 C.I.D. **All Models Center Riser Generic**

	CHVA		
20 010	0	2	0 0082
20 0097	20 008	34P	20 0085P
20 0086P	20 008	7P	20 0088P
20 0089P	20 O	092P	20 0093P
		CHVA	
	04P	10	106P
1 0105	1 0107	CH	0-0-0 /A 47 0000

fold to fit the big block GM engine (3/4" N.P.T. cooling hose con- nections). All years. 20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate).	CHVA-1-84	Water cooled center discharge mani
(3/4" N.P.T. cooling hose con- nections). All years. 20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. 1-0106P Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Riser mounting package for both 20-0082S-P Stailess steel mounting package for both 20-0084P 20-0082 and 20-0100. Not pictured. 20-0085P Stailght exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" 1.D. exhaust hose. 20-0086P 90 degree exhaust elobor adaptor (includes adaptor, hose and clamps). For use with 2 1/2" 1.D. exhaust hose. 20-0087P 90 degree exhaust elobor adaptor (includes adaptor, hose and clamps). For use with 3 '1.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 '1.D. exhaust hose. 20-0087P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 '1.D. exhaust	CHVA-1-84	Water cooled center discharge mani- fold to fit the big block GM engine
nections). All years. 20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gakets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. 1-0106P Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gakets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Riser mounting package for both 20-0082 and 20-0100. 20-0082P Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. 20-0084P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0085P Straight exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3". I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3". I.D. exhaust hose. 20-0087P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). Fo		(3/4" N.P.T. cooling hose con-
20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. 1-0106P Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Riser mounting package for both 20-0082 and 20-0100. 20-0082S-P Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured. 20-0084P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0085P Straight exhaust adaptor, fore and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0087P 90 degree exhaust elbow adaptor (includes dadptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0089P 30 degree exh		
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20-0093P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 20-0097 3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (in- cludes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.		(includes adaptor, hose and clamps).
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For use with 3 1/2" or 4" I.D. exhaust hose. 20-0097 3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (includes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and pipe plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.	20-0093P	90 degree exhaust elbow adaptor
hose.20-00973" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking.CHVA-1-84PManifold mounting package (in- cludes bolts and pipe plugs).CHVA-1-84SS-PStainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.CHVA-47-0000Manifold to cylinder head gasket.		(includes adaptor, nose and clamps). For use with $3 1/2^{\circ}$ or 4° I D exhaust
20-00973" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking.CHVA-1-84PManifold mounting package (in- cludes bolts and pipe plugs).CHVA-1-84SS-PStainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.CHVA-47-0000Manifold to cylinder head gasket.		
mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (includes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.	20-0097	
pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (includes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.		mounting hardware, gasket and 3/4"
CHVA-1-84PManifold mounting package (in- cludes bolts and pipe plugs).CHVA-1-84SS-PStainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.CHVA-47-0000Manifold to cylinder head gasket.		
cludes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.	CHVA-1-84P	Manifold mounting package (in-
package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.		cludes bolts and pipe plugs).
brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.	CHVA-1-84SS-P	
CHVA-47-0000 Manifold to cylinder head gasket.		
	CHWA 47 0000	
Note:	CIIVA-4/-0000	mannoid to cynnder nead gasket.
	Note:	



Crusader V8- 454 and 502 C.I.D. All Models Direct Replacement

		CR-1-97992
Ote		CR-1-97993
		CR-20-96560
CR 1 97993	CR 1 97992	CR-20-97169
		CR-20-97386
BANN BRAITER		CR-20-97387
		CR-20-97624
	and the second second	CR-20-97772
CR 20 96560	15/16" Longer CR 20 98068	CR-20-97924
		CR-20-98068
	and the second sec	
		CHVA-47-0000
¥ Antonio		CR-1-97992P
CR 20 97924	CR 20 97386	CR-1-97993P
	H A	CR-20-96560P
		CR-20-97169P CR-20-97296
	CR 20 97387	
		CR-20-97772P CR-20-96319
		CR47-C-96108
		CR47-C-96562
CR 20 97772 CR 20 97	169 CR 20 97624	CR-50-20471
		CR-50-22032
	CR47 C 96108	CR-50-22033
		CR-50-96369
CR 20 97169P CR 20	97772P CR 20 97296	Note:
		Manifolds and elbows a gaskets and plugs. CR-2
	CR 50 96369	must be purchased sep
	CR 50 20471	risers.
	(mont)	
	CR 50 22033	
CR 20 96560P	CR 50 22032	CR47 C 96562
	DA	
	MARINE B	Y EDM

OD 1 07000	
CR-1-97992	Direct replacement starboard side manifold. Replaces Crusader part # 97992.
CR-1-97993	Direct replacement port side manifold. Replaces Crusader part # 97993.
CR-20-96560	Direct replacement exhaust elbow assembly, 3" I.D. exhaust hose. Re- places Crusader part # 96560.
CR-20-97169	6" riser extension. Replaces Crusader part # 97169.
CR-20-97386	90 degree swivel elbow. Replaces Crusader part # 97386.
CR-20-97387	Elbow, lower swivel with 3" outlet. Replaces Crusader part # 97387.
CR-20-97624	Elbow, lower swivel with 4" outlet. Replaces Crusader part # 97624.
CR-20-97772	4" riser extension. Replaces Crusader part # 97772.
CR-20-97924	Direct replacement exhaust elbow assembly, 4" I.D. exhaust hose. Re- places Crusader part # 97924.
CR-20-98068	Direct replacement exhaust elbow assembly, 3" I.D. exhaust hose. For use without Crusader spacer part # 97295. Replaces Crusader part # 98068.
CHVA-47-0000	Manifold to cylinder head gasket.
CR-1-97992P	Manifold mounting package. Not pictured.
CR-1-97993P	Manifold mounting package. Not pictured.
CR-20-96560P	Mounting package for CR-20-96560, CR-20-97386, CR-20-97924, and CR-20-98068.
CR-20-97169P	Mounting package for CR-20-97169.
CR-20-97296	Stainless steel block off plate for fresh water applications.
CR-20-97772P	Mounting package for CR-20-97772.
CR-20-96319	143 degree thermostat for Crusader (not pictured).
CR47-C-96108	Replacement exhaust elbow gasket (3 hole).
CR47-C-96562	Replacement exhaust elbow gasket (1 hole).
CR-50-20471	Replaces Crusader part # 20471 3/8" X 5 3/4" stainless steel stud).
CR-50-22032	Replaces Crusader part # 22032 (3/8" X 9 3/8" stainless steel stud). For use with OEM adaptor # 97295.
CR-50-22033	Replaces Crusader part # 22033 (3/8" X 7 3/4" stainless steel stud).
CR-50-96369	Replaces Crusader part # 96369 (3/8" X 4" stainless steel stud). For use with OEM adaptor # 97295.

Mole: Manifolds and elbows include all mounting hardware, gaskets and plugs. CR-20-96169P and CR-20-97772P must be purchased seperate for the corresponding risers.



Crusader V8-302 and 351 C.I.D. All Models Center Riser Generic

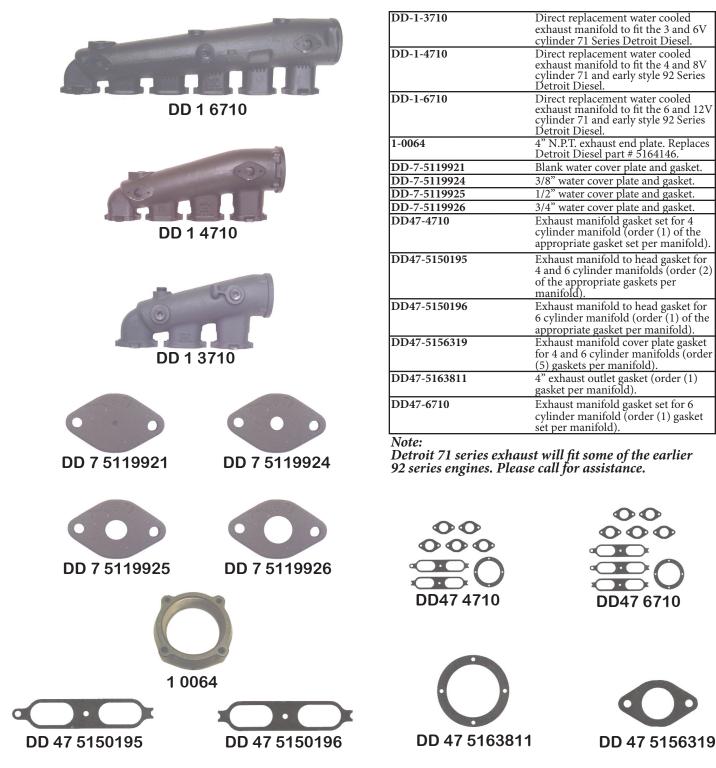
	FM 1 83	
20 01	00	20 0082
20 0097	20 0084P	20 0085P
20 0086P	20 0087P	20 0088P
20 0089P	20 0092	20 0093P
	082P FI	M 1 83P
	0 0 1 104P	1 0106P
[] 1 0105	1 0107	FM 47 0000

FM-1-83	Water cooled center discharge mani-
111-1-05	fold to fit the small block Ford engine
	(3/4" N.P.T. cooling hose con-
	nections). All years.
20-0082	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con- nection). Standard for use with 3"
	I.D. exhaust hose.
20-0100	Water cooled center discharge riser
20-0100	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 4"
	I.D. exhaust hose.
1-0104P	Adaptor package for fresh water
	cooled manifold (includes gaskets
	and block off plate).
1-0105	Center riser manifold-to-riser gasket
	for fresh water cooling.
1-0106P	Adaptor package for raw water
	cooling. Used in pre-heating applica- tions (includes gaskets and block off
	plate with vent hole).
1-0107	Center riser manifold-to-riser gasket
1 010/	(raw water cooling).
20-0082P	Riser mounting package for both
20 00021	20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package
	(with brass plugs) for both 20-0082
	and 20-0100. Not pictured.
20-0084P	Straight exhaust adaptor (includes
	adaptor, hose and clamps). For use
*** ****	with 3 1/2" I.D. exhaust hose.
20-0085P	Straight exhaust adaptor (includes
	adaptor, hose and clāmps). For use with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor
20-0080F	(includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose.
20-0087P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
••••••••	
	45 degree exhaust elbow adaptor
20-0092F	(includes adapter base and alcorrect)
20-0092r	(includes adaptor, hose and clamps).
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0092P 20-0093P	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 3" spacer block (complete with
20-0093P	 (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 3" spacer block (complete with mounting hardware, gasket and 3/4"
20-0093P	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 3" spacer block (complete with
20-0093P 20-0097	 (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. Manifold mounting package (in-
20-0093P 20-0097 FM-1-83P	 (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. Manifold mounting package (in- cludes bolts and pipe plugs).
	 (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. Manifold mounting package (in- cludes bolts and pipe plugs). Stainless steel manifold mounting
20-0093P 20-0097 FM-1-83P	 (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. Manifold mounting package (in- cludes bolts and pipe plugs). Stainless steel manifold mounting package (includes stainless bolts and
20-0093P 20-0097 FM-1-83P	 (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. Manifold mounting package (in- cludes bolts and pipe plugs). Stainless steel manifold mounting

Note:



Detroit Diesel 3-71, 6V-71, 4-71, 8V-71 6-71 and 12V-71 All Models Direct Replacement



Barr Marine extends a 1 year warranty on these exhaust manifolds.



Flagship V8-283, 327 and 350 C.I.D. All Models Center Riser Generic



CHV 1 83



20 0100





20 0085P







1 0106P

20 0082

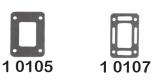
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20 0086P

CHV 27 0083

QQ







CHV-1-83	Water cooled center discharge mani- fold to fit the small block GM engine
	(3/4" N.P.T. cooling hose con- nections). All years.
20-0082	Water cooled center discharge riser
20 0002	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 3"
	I.D. exhaust hose.
20-0100	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 4" I.D. exhaust hose.
1-0104P	
1-01041	Adaptor package for fresh water cooled manifold (includes gaskets
	and block off plate).
1-0105	Center riser manifold-to-riser gasket
	for fresh water cooling.
1-0106P	Adaptor package for raw water
	cooling. Used in pre-heating applica-
	tions (includes gaskets and block off
1 0107	plate with vent hole).
1-0107	Center riser manifold-to-riser gasket (raw water cooling).
20-0082P	Riser mounting package for both
20-00021	20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package
	(with brass plugs) for both 20-0082
	and 20-0100. Not pictured.
20-0085P	Straight exhaust adaptor (includes
	adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor
20-00001	(includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0097	3" spacer block (complete with
	mounting hardware, gasket and 3/4" pipe plug). Capable of stacking.
CHV-1-83P	Manifold mounting package (in-
	cludes bolts and pipe plugs).
CHV-1-83SS-P	Stainless steel manifold mounting
	package (includes stainless bolts and
	brass plugs). Not pictured.
CHV-27-0083	Alternator bracket. Use where engine
	water pump is mounted on port side
CHN 47 0000	of engine below alternator.
CHV-47-0000	Manifold to cylinder head gasket.

Note:



Flagship V8-283, 327 and 350 C.I.D. Log Style Generic



OF-1-60L	Water cooled end discharge port manifold to fit the small block Chev- rolet (1/2" N.P.T. cooling hose con- nections). All years
OF-1-60R	Water cooled end discharge starboard manifold to fit the small block Chev- rolet (1/2" N.P.T. cooling hose con- nections). All years
1-0019	End plate gasket (will fit both ends).
20-0000	Swivel-type high discharge exhaust riser; 8 1/2" riser protection. Requires (1) mounting hardware kit #20-0002P per riser. Use only with 2 7/8" to 3" I.D. exhaust hose.
20-0002P	Mounting hardware kit.
20-0031	Swivel-type 90 degree exhaust elbow connector with internal water dis- charge. Accepts 2 1/2" to 3" I.D. ex- haust hose. Requires (1) mounting hardware kit #20-0002P per elbow.
20-0034 or 20-0035	Exhaust connector #20-0035 (for 2 1/2" I.D. exhaust hose) or exhaust connector #20-0034 (for 3" I.D. ex- haust hose). Connects to #20-0039 using (1) #20-0002P per connector.
20-0039	Fully jacketed swivel-type exhaust riser; 7" riser protection. Requires (2, mounting hardware kits #20-0002P ((1) kit to mount riser to manifold and (1) kit to mount elbows 20-0034 or 20-0035 to riser).
20-0055	Swivel-type 30 degree exhaust elbow connector; fully jacketed. Accepts 2 1/2" or 3" I.D. exhaust hose. Re- quires (1) mounting hardware kit #20-0002P per elbow.
CHV-47-0000	Manifold to cylinder head gasket.
OF-1-60F-P	Manifold to cylinder head mounting package.









Graymarine 4 and 6 cylinder In-Line Models Generic



GR-1-162	Water cooled exhaust manifold to fit the 4-cylinder models 620, 4-60 and 70. Use with OEM risers, elbow connectors or replace with Barr products.
GR-1-175	Water cooled exhaust manifold to fit the 4-cylinder models 4-75, 4-85 and 80. Use with OEM risers, elbow connectors or replace with Barr products.
GR-1-226	Water cooled exhaust manifold to fit the 6-cylinder 226 C.I.D. models. Use with OEM riser, elbow connectors or replace with Barr products.
GR-1-0001	Exhaust end plate flange (threaded for 2" female N.P.T.).





GR 1 226





Graymarine Fireball V8-250 and 327 C.I.D. All Models Log Style Generic

Port side part # GR	1 3274L.		GR-1-327 GR-1-327
GI	R 1 3274R	C. C.	1-0002 1-0069
			20-0000 20-0002P 20-0031
	20 0031	20 0055	20-0034 o
20 0039	20 003	35 20 0034	20-0039
	0069	GR 20 0001	GR-1-000 GR-1-000 GR-20-00
 O O<		1 3273P) GR-20-00 GR-20-00
	GR 1		GR 1 0006

GR-1-3273L & R	Water cooled exhaust manifold for older 3 bolt end manifold (not
	pictured). Use with OEM risers and
	connectors or replace with Barr
	products.
GR-1-3274L & R	Water cooled exhaust manifold for
	the later 4 bolt end manifold. Use
	with OEM risers and connectors or
	replace with Barr products.
1-0002	Adaptor for 4 bolt end plate style manifold. For use with Barr style
	riser/elbows.
1-0069	Adaptor for 3 bolt end plate style
	manifold. For use with Barr style
	riser/elbows.
20-0000	Swivel-type high discharge exhaust
	riser; 8 1/2" riser protection. Requires
	(1) mounting hardware kit #20-0002P per riser. Use only with
	#20-0002P per riser. Use only with 2 7/8" to 3" I.D. exhaust hose.
20-0002P	Mounting hardware kit (Barr style
20 00021	riser/elbows only).
20-0031	Swivel-type 90 degree exhaust elbow
	connector with internal water dis-
	charge. Accepts 2 1/2" to 3" I.D. ex-
	haust hose. Requires (1) mounting
20-0034 or 20-0035	hardware kit #20-0002P per elbow. Exhaust connector #20-0035 (for
20-0034 01 20-0033	2 1/2" I.D. exhaust hose) or exhaust
	connector #20-0034 (for 3" I.D. ex-
	haust hose). Connects to #20-0039
	using (1) #20-0002P per connector.
20-0039	Fully jacketed swivel-type exhaust
	riser; 7" riser protection. Requires (2)
	mounting hardware kits #20-0002P
	((1) kit to mount riser to manifold
	and (1) kit to mount elbows 20-0034 or 20-0035 to riser).
20-0055	Swivel-type 30 degree exhaust elbow
	connector; fully jacketed. Accepts
	2 1/2" or 3" I.D. exhaust hose. Re-
	quires (1) mounting hardware kit
CD 1 0007	#20-0002P per elbow.
GR-1-0006	Manifold to end plate gasket.
GR-1-0007	Manifold to head gasket.
GR-20-0001	"S" turn tail pipe connector as a
	direct replacement of original. Re- quires (2) clamps # GR-20-0002 per
	connector. When using with 3 bolt
	Barr manifold, replace rear flange
	with end plate # GR-1-0002L and
	GR-1-0002R.
GR-20-0002	Mounting clamp to connect "S" turn
	pipe to Barr style manifold ((2)
CD A A AAAA	clamps required per connection).
GR-20-0003	3 or 4 bolt endplate to "S" turn tail
	pipe gasket.

GR 20 0003

GR 20 0002



Graymarine V8-401 C.I.D. 280 H.P. All Models Direct Replacement



GR-1-6470L	Water cooled exhaust manifold (port side) to fit the 401 Buick. Includes all fittings, hose adaptors and
	primary water pump mounting pro- vision. Accepts Barr replacement
	risers and connectors only.
GR-1-6470R	Water cooled exhaust manifold (star-
	board side) to fit the 401 Buick. In-
	cludes all fittings, hose adaptors and primary water pump mounting pro-
	vision. Accepts Barr replacement
	risers and connectors only.
1-0019	End plate gasket (will fit both ends).
GR-1-6470P	Manifold to cylinder head mounting
	kit.
20-0000	Swivel-type high discharge exhaust
	riser; 8 1/2" riser protection. Requires
	(1) mounting hardware kit
	#20-0002P per riser. Use only with 2 7/8" to 3" I.D. exhaust hose.
20-0002P	Mounting hardware kit (Barr style
	riser/elbows only).
20-0031	Swivel-type 90 degree exhaust elbow
	connector with internal water dis-
	charge. Accepts 2 1/2" to 3" I.D. exhaust hose. Requires (1) mounting
	hardware kit #20-0002P per elbow.
20-0034 or 20-0035	Exhaust connector #20-0035 (for
	2 1/2" I.D. exhaust hose) or exhaust
	connector #20-0034 (for 3" I.D. ex-
	haust hose). Connects to #20-0039
20,0020	using (1) #20-0002P per connector.
20-0039	Fully jacketed swivel-type exhaust riser; 7" riser protection. Requires (2)
	mounting hardware kits #20-0002P
	((1) kit to mount riser to manifold
	and (1) kit to mount elbows 20-0034
20.0055	or 20-0035 to riser).
20-0055	Swivel-type 30 degree exhaust elbow
	connector; fully jacketed. Accepts 2 1/2" or 3" I.D. exhaust hose. Re-
	quires (1) mounting hardware kit
	#20-0002P per elbow.







Indmar V8-283, 305, 307, 327and 350 C.I.D. All Models Inboard. Center Riser Generic



CHV 1 83



20 0100



20 0102



20 0097





20 0085P







20 0082P









20 0082

20 0086P

CHV 27 0083

QQ

CHV-1-83	Water cooled center discharge mani- fold to fit the small block GM engine (3/4" N.P.T. cooling hose con- nections). All years.
20-0082	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose.
20-0100	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose.
20-0102	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Replaces Indmar # 532009.
1-0104P	Adaptor package for fresh water cooled manifold (includes gaskets and block off plate).
1-0105	Center riser manifold-to-riser gasket for fresh water cooling.
1-0106P	Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole).
1-0107	Center riser manifold-to-riser gasket (raw water cooling).
20-0082P	Riser mounting package for both 20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured.
20-0085P	Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0097	3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking.
CHV-1-83P	Manifold mounting package (in- cludes bolts and pipe plugs).
CHV-1-83SS-P	Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.
CHV-27-0083	Alternator bracket. Use where engine water pump is mounted on port side of engine below alternator.
CHV-47-0000	Manifold to cylinder head gasket.

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.



Indmar V8-427 and 454 C.I.D. All Models Inboard Center Riser Generic

	СНУА	1 84	
20 01	100	6	20 0082
ł	20 0	Day	,
20 0097	20 008	4P	20 0085P
20 0086P	20 008	37P	20 0088P
20 0089P	20 0	092P	20 0093P
	082P	CHVA	1 84P
1 01	04P		106P
D 1 0105	1 0107	CH	P-O-O /A 47 0000

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20-0089P30 degree exhaust elbow adaptor (includes adaptor, hose and clamps) For use with 3" I.D. exhaust hose.20-0092P45 degree exhaust elbow adaptor (includes adaptor, hose and clamps) For use with 3" I.D. exhaust hose.20-0093P90 degree exhaust elbow adaptor (includes adaptor, hose and clamps) For use with 3" I.D. exhaust hose.20-0093P90 degree exhaust elbow adaptor (includes adaptor, hose and clamps) For use with 3 1/2" or 4" I.D. exhau hose.20-00973" spacer block (complete with mounting hardware, gasket and 3/4 pipe plug). Capable of stacking.CHVA-1-84PManifold mounting package (in- cludes bolts and pipe plugs).CHVA-1-84SS-PStainless steel manifold mounting package (includes stainless bolts and bras plugs). Not pictured.CHVA-47-0000Manifold to cylinder head gasket.		(includes adaptor, hose and clamps).
(includes adaptor, hose and ĉlamps) For use with 3" I.D. exhaust hose.20-0092P45 degree exhaust elbow adaptor (includes adaptor, hose and clamps) For use with 3" I.D. exhaust hose.20-0093P90 degree exhaust elbow adaptor (includes adaptor, hose and clamps) For use with 3 1/2" or 4" I.D. exhau hose.20-00973" spacer block (complete with mounting hardware, gasket and 3/4 pipe plug). Capable of stacking.CHVA-1-84PManifold mounting package (in- cludes bolts and pipe plugs).CHVA-1-84SS-PStainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.CHVA-47-0000Manifold to cylinder head gasket.	20 00000	
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(includes adaptor, hose and clamps) For use with 3" I.D. exhaust hose. 20-0093P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps) For use with 3 1/2" or 4" I.D. exhau hose. 20-0097 3" spacer block (complete with mounting hardware, gasket and 3/4 pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (in- cludes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.	20-0092P	45 degree exhaust elbow adaptor
20-0093P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps) For use with 3 1/2" or 4" I.D. exhau hose. 20-0097 3" spacer block (complete with mounting hardware, gasket and 3/4 pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (in- cludes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.		(includes adaptor, hose and clamps).
(includes adaptor, hose and clamps) For use with 3 1/2" or 4" I.D. exhau hose. 20-0097 3" spacer block (complete with mounting hardware, gasket and 3/4 pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (includes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.		
For use with 3 1/2" or 4" I.D. exhau hose. 20-0097 3" spacer block (complete with mounting hardware, gasket and 3/4 pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (includes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and pipe plugs). CHVA-1-84SS-P Manifold to cylinder head gasket.	20-0093P	
hose. 20-0097 3" spacer block (complete with mounting hardware, gasket and 3/4 pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (includes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.		(includes adaptor, nose and clamps). For use with $3 1/2^{\circ}$ or 4° LD exhaust
mounting hardware, gasket and 3/4 pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (in-cludes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.		
mounting hardware, gasket and 3/4 pipe plug). Capable of stacking. CHVA-1-84P Manifold mounting package (in-cludes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.	20-0097	3" spacer block (complete with
CHVA-1-84PManifold mounting package (in- cludes bolts and pipe plugs).CHVA-1-84SS-PStainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.CHVA-47-0000Manifold to cylinder head gasket.		mounting hardware, gasket and 3/4"
cludes bolts and pipe plugs). CHVA-1-84SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.		
CHVA-1-84SS-PStainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.CHVA-47-0000Manifold to cylinder head gasket.	CHVA-1-84P	Manifold mounting package (in-
package (includes stainless bolts and brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.	CHWA 1 0400 B	
brass plugs). Not pictured. CHVA-47-0000 Manifold to cylinder head gasket.	CHVA-1-8488-P	Stainless steel manifold mounting
CHVA-47-0000 Manifold to cylinder head gasket.		
	CHVA-47-0000	
	Note:	, ,

Note:



Indmar V8-302 and 351 C.I.D. All Models Inboard

Center Riser Generic

	FM	1 83	6
20 01	00		20 0082
4	20 0*		7
	200	102	
		Construction of Construction of	
20 0097	20 008	34P	20 0085P
20 0086P	20 008	87P	20 0088P
20 0089P	20 0	092P	20 0093P
20 0) 082P	FM 1 8	B3P
	04P		106P
1 0105	1 0107	FI	M 47 0000

FM-1-83	Water cooled center discharge mani- fold to fit the small block Ford engine (3/4" N.P.T. cooling hose con- nections). All years.		
20-0082	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose.		
20-0100	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose.		
20-0102	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Replaces Indmar # 532009.		
1-0104P	Adaptor package for fresh water cooled manifold (includes gaskets and block off plate).		
1-0105	Center riser manifold-to-riser gasket for fresh water cooling.		
1-0106P	Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole).		
1-0107	Center riser manifold-to-riser gasket (raw water cooling).		
20-0082P	Riser mounting package for both 20-0082 and 20-0100.		
20-0082SS-P	Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured.		
20-0084P	Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose.		
20-0085P	Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.		
20-0086P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.		
20-0087P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.		
20-0088P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.		
20-0089P	30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.		
20-0092P	45 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.		
20-0093P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose.		
20-0097	3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking.		
FM-1-83P	Manifold mounting package (in- cludes bolts and pipe plugs).		
FM-1-83SS-P	Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured.		
FM-47-0000	Manifold to cylinder head gasket.		

Note:



Interceptor V8-239, 256, 272, 292, and 312 C.I.D. Models 125, 135, 150, 170, 185 and 215 H.P. Log Style Generic

Port side part # INT 1 5457L



INT 1 5457R





20 0031

20 0000

20 0002P



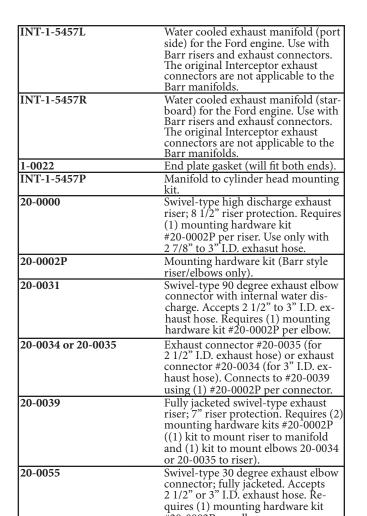






20 0035





#20-0002P per elbow.



20 0034

20 0055





Interceptor V8-352, 390 and 427 C.I.D. Models 240, 250, 260, 285, and 300 H.P. Log Style Generic

Port side part # INT 1 58L



INT 1 58R



20 0000



20 0031

20 0035



20 0055



20 0039







1 0019





20 0034





INT-1-58L INT-1-58R	Water cooled exhaust manifold (port) for the Ford engine. Use with Barr risers and connectors. The original Interceptor exhaust connectors are not applicable to the Barr manifolds. Water cooled exhaust manifold (star-
	board) for the Ford engine. Use with Barr risers and connectors. The original Interceptor exhaust con- nectors are not applicable to the Barr manifolds.
1-0019	End plate gasket (will fit both ends).
INT-1-58P	Manifold to cylinder head mounting kit.
20-0000	Swivel-type high discharge exhaust riser; 8 1/2" riser protection. Requires (1) mounting hardware kit #20-0002P per riser. Use only with 2 7/8" to 3" I.D. exhasut hose.
20-0002P	Mounting hardware kit (Barr style riser/elbows only).
20-0031	Swivel-type 90 degree exhaust elbow connector with internal water dis- charge. Accepts 2 1/2" to 3" I.D. ex- haust hose. Requires (1) mounting hardware kit #20-0002P per elbow.
20-0034 or 20-0035	Exhaust connector #20-0035 (for 2 1/2" I.D. exhaust hose) or exhaust connector #20-0034 (for 3" I.D. exhaust hose). Connects to #20-0039 using (1) #20-0002P per connector.
20-0039	Fully jacketed swivel-type exhaust riser; 7" riser protection. Requires (2) mounting hardware kits #20-0002P ((1) kit to mount riser to manifold and (1) kit to mount elbows 20-0034 or 20-0035 to riser).
20-0055	Swivel-type 30 degree exhaust elbow connector; fully jacketed. Accepts 2 1/2" or 3" I.D. exhaust hose. Re- quires (1) mounting hardware kit #20-0002P per elbow.

Interceptor V8-221, 260 and 289 C.I.D. Models 120, 140, 165, 190, 200 and 210 H.P. Log Style Generic

Port side part # INT 1 6268L



INT 1 6268R





20 0031



20 0055





20 0034

INT-1-6268L	Water cooled exhaust manifold (port) for the Ford engine. Use with Barr risers and connectors. The original Interceptor exhaust connectors are not applicable to the Barr manifolds.
INT-1-6268R	Water cooled exhaust manfold (star- board for the Ford engine. Use with the Barr risers and connectors. The original Interceptor exhaust con- nectors are not applicable to the Barr manifolds.
1-0022	End plate gasket (will fit both ends).
INT-1-6268P	Manifold to cylinder head mounting kit.
20-0000	Swivel-type high discharge exhaust riser; 8 1/2" riser protection. Requires (1) mounting hardware kit #20-0002P per riser. Use only with 2 7/8" to 3" I.D. exhaust hose.
20-0002P	Mounting hardware kit (Barr style riser/elbows only).
20-0031	Swivel-type 90 degree exhaust elbow connector with internal water dis- charge. Accepts 2 1/2" to 3" I.D. ex- haust hose. Requires (1) mounting hardware kit #20-0002P per elbow.
20-0034 or 20-0035	Exhaust connector #20-0035 (for 2 1/2" I.D. exhaust hose) or exhaust connector #20-0034 (for 3" I.D. ex- haust hose). Connects to #20-0039 using (1) #20-0002P per connector.
20-0039	Fully jacketed swivel-type exhaust riser; 7" riser protection. Requires (2) mounting hardware kits #20-0002P ((1) kit to mount riser to manifold and (1) kit to mount elbows 20-0034 or 20-0035 to riser).
20-0055	Swivel-type 30 degree exhaust elbow connector; fully jacketed. Accepts 2 1/2" or 3" I.D. exhaust hose. Re- quires (1) mounting hardware kit #20-0002P per elbow.











Interceptor V8-221, 260, 289, 302 and 351 C.I.D. All Models Center Riser Generic

	FM 1	83	
20 0	100	ſ	20 0082
20 0097	20 003	84P	20 0085P
20 0086P	20 00	87P	20 0088P
20 0089P	200	0092P	20 0093P
	082P	FM 1 8	33P
[] 1 0 ⁻	0 0 104P		106P
1 0105	1 0107	FM	47 0000

	X 4
FM-1-83	Water cooled center discharge mani- fold to fit the small block Ford engine (3/4" N.P.T. cooling hose con-
	nections). All years.
20-0082	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 3"
	I.D. exhaust hose.
20-0100	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 4"
1 0104D	I.D. exhaust hose.
1-0104P	Adaptor package for fresh water cooled manifold (includes gaskets
	and block off plate).
1-0105	Center riser manifold-to-riser gasket
1 0100	for fresh water cooling.
1-0106P	Adaptor package for raw water
	cooling. Used in pre-heating applica-
	tions (includes gaskets and block off
1 0107	plate with vent hole).
1-0107	Center riser manifold-to-riser gasket
20,00920	(raw water cooling).
20-0082P	Riser mounting package for both 20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package
20-000200-1	(with brass plugs) for both 20-0082
	and 20-0100. Not pictured.
20-0084P	Straight exhaust adaptor (includes
	adaptor, hose and clamps). For use
	with 3 1/2" I.D. exhaust hose.
20-0085P	Straight exhaust adaptor (includes
	adaptor, hose and clamps). For use
	with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20 0097D	
20-0087P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor
20-00001	(includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0092P	45 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
20.0002D	For use with 3 [°] I.D. exhaust hose.
20-0093P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust
	hose.
20-0097	3" spacer block (complete with
	mounting hardware, gasket and 3/4"
	pipe plug). Capable of stacking.
FM-1-83P	Manifold mounting package (in-
	cludes bolts and pipe plugs).
FM-1-83SS-P	Stainless steel manifold mounting
	package (includes stainless bolts and
EM 47 0000	brass plugs). Not pictured.
FM-47-0000	Manifold to cylinder head gasket.
Note:	
M	11.1 1.1 1.



MerCruiser 4 Cylinder 153 C.I.D. 120 H.P. Model 120 Engine Log Style Direct Replacement



MC 1 63122



MC 20 55538



MC47 27 35898





MC 29 60372

101110	
MC-1-63122	Direct replacement water cooled
	exhaust manifold. Replaces Mer-
	Cruiser part # B-63122A1.
MC-20-55538	Direct replacement exhaust elbow/
	riser. Replaces MerCruiser part #
	riser. Replaces MerCruiser part # B-39920 and # B-55538A2.
MC-20-55538P	Riser to exhaust manifold mounting
MC-20-55558P	Riser to exhaust mannoid mounting
1.000.000	package.
1-39949P	Choke oven cover assembly. Not
	pictured.
1-47638	Direct replacement exhaust manifold
	end cap/connector (front). Replaces
	MerCruiser part # B-47638.
1-47638P	
1-4/0301	Exhaust manifold end cap/connector (front) mounting package.
1-73811	Direct replacement exhaust manifold
1-73811	Direct replacement exhaust manifold
	end cap (rear).
1-73811P	Exhaust manifold end cap (rear)
	mounting package.
MC-1-35898P	Intake manifold mounting package.
MC-1-63122P	Exhaust manifold mounting package.
MC-29-47587	Direct replacement lower thermostat
	housing.
MC-29-60372	Direct replacement upper thermostat
1010-29-00372	housing.
MC47-475KIT	0
MC4/-4/5KI1	Thermostat kit (includes gasket and
	thermostat).
MC47-27-35898	Direct replacement intake manifold
	gasket.
MC47-27-35898A4	Exhaust manifold gasket set.
MC47-27-39915	Direct replacement exhaust manifold
	to exhaust elbow gasket.
MC47-27-39917	Direct replacement exhaust manifold
111114/-2/-3991/	
	end cap/connector gasket.
MC47-27-39923	Direct replacement exhaust manifold
	end cap gasket.
MC47-27-52546	Direct replacement exhaust manifold
	to cylinder head gasket.
	, 0

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Riser includes plugs, gasket and mounting hardware to mount to manifold.





MC 20 55538P







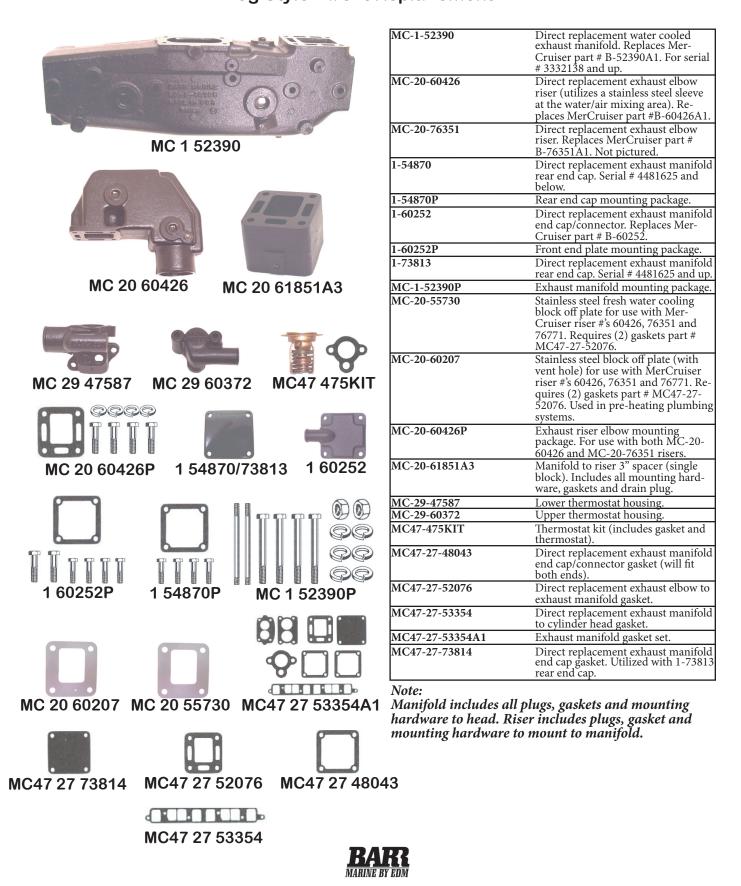








MerCruiser 4 Cylinder 181 C.I.D. 140 H.P. Model 140 Engine Log Style Direct Replacement



MerCruiser 4 Cylinder 153 C.I.D. and 181 C.I.D. 120 H.P. (2.5L), 140 H.P. (3.0L) Models 120R and 140R-MR/Alpha 1 Engines Log Style Direct Replacement



MC 1 99798





MC 20 76325 MC 20 12076





MC 29 47587





MC 20 12076P

MC 20 76325P





MC 20 61851A3

MC47 475KIT











MC-1-95862	Direct replacement water cooled manifold (Rochester (3 1/4" X 1 7/8")
	bolt pattern). 6 bolt mounting. Re-
	places MerCruiser part # 95862A9
	(no choke stove).
MC-1-96705	Direct replacement water cooled
	manifold (Rochester (3 1/4" X 1 7/8")
	bolt pattern). 6 bolt mounting. Re-
	places MerCruiser part # 96705A1.
MC-1-99798	Direct replacement water cooled
	manifold (MerCarb (3 11/16" X 2")
	bolt pattern). 6 bolt mounting. Re-
MC-20-12076	places MerCruiser part # 99798A9. Direct replacement exhaust riser. Re-
MC-20-12078	places MerCruiser part # 12076A2.
MC-20-76325	Direct replacement exhaust riser. Re-
WIC-20-70525	places MerCruiser part # 76325A2.
1-60252	Direct replacement exhaust manifold
1-00252	end cap/connector. Replaces Mer-
	Cruiser part # B-60252.
1-60252P	Front end plate mounting package.
1-99197	Direct replacement exhaust manifold
	rear end cap/lifting eye.
1-99179P	Rear end cap mounting package.
MC-1-99798P	Exhaust manifold to cylinder head
	mounting package.
MC-20-61851A3	Manifold to riser 3" spacer (single
	block). Includes all mounting hard-
	ware, gaskets and drain plug.
MC-29-47587	Lower thermostat housing.
MC-29-60372	Upper thermostat housing.
MC47-475KIT	Thermostat kit (includes gasket and
	thermostat).
MC47-27-48043	Direct replacement exhaust manifold
	end cap/connector gasket (will fit
	both ends).
MC47-27-73814	Direct replacement exhaust manifold
	end cap gasket. Utilized with 1-73813 rear end cap.
MC47-27-96429	
11104/-2/-70427	Direct replacement exhaust manifold
MC47-27-99777	to cylinder head gasket.
WIC4/-2/->>///	Direct replacement exhaust elbow to manifold gasket. Supersedes Mer-
	Cruiser part # 27-52076.
MC47-27-99777A1	Exhaust manifold gasket set.
mtth/-2/-77///Al	Exhaust mannolu gasket set.

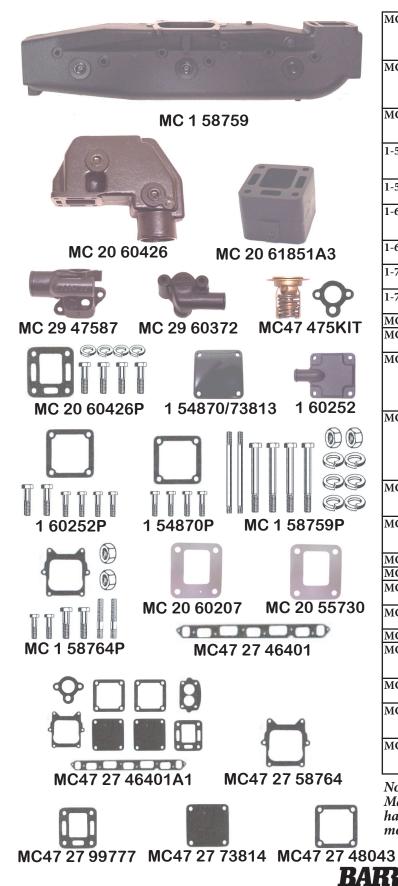
Note:







MerCruiser Straight 6 Cylinder Model 165 Log Style Direct Replacement



MC-1-58759	Direct replacement water cooled manifold to fit the 6 cyl. GM (Model 165) engine. Replaces MerCruiser part # B-58759Å1.
MC-20-60426	Direct replacement exhaust elbow riser (utilizes a stainless steel sleeve at the water/air mixing area). Re- places MerCruiser part #B-60426A1.
MC-20-76351	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76351A1. Not pictured.
1-54870	Direct replacement exhaust manifold end cap (rear). Superseded by part # 1-73813.
1-54870P	Exhaust manifold end cap (rear) mounting package.
1-60252	Direct replacement exhaust manifold end cap/connector (front). Replaces MerCruiser part # B-60252.
1-60252P	Exhaust manifold end cap/connector mounting package.
1-73813	Direct replacement manifold end cap (rear). Supercedes part # 1-54870.
1-71813P	Exhaust manifold end cap mounting package.
MC-1-58759P	Exhaust manifold mounting package
MC-1-58764P	Manifold to carburetor adaptor mounting package.
MC-20-55730	Stainless steel fresh water cooling block off plate for use with Mer- Cruiser riser #'s 60426, 76351 and 76771. Requires (2) gaskets part # MC47-27-99777.
MC-20-60207	Stainless steel block off plate (with vent hole) for use with MerCruiser riser #'s 60426, 76351 and 76771. Re- quires (2) gaskets part # MC47-27- 99777. Used in pre-heating plumbing systems.
MC-20-60426P	Exhaust riser elbow mounting package. For use with both MC-20- 60426 and MC-20-76351 risers.
MC-20-61851A3	Manifold to riser 3" spacer (single block). Includes all mounting hard- ware, gaskets and drain plug.
MC-29-47587	Lower thermostat housing.
MC-29-60372	Upper thermostat housing.
MC47-475KIT	Thermostat kit (includes gasket and thermostat).
MC47-27-46401	Direct replacement manifold to head gasket.
MC47-27-46401A1	Exhaust manifold gasket set.
MC47-27-48043	Direct replacement exhaust manifold end cap/connector gasket (will fit both ends).
MC47-27-58764	Direct replacement manifold to carb- uretor adaptor gasket.
MC47-27-73814	Direct replacement exhaust manifold end cap gasket. Utilized with 1-73814 rear end cap.
MC47-27-99777	Direct replacement exhaust elbow to manifold gasket. Supersedes Mer- Cruiser part # 27-52076.

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.

MARINE BY EDM

MerCruiser V6-229 C.I.D and 262 C.I.D. Models 185R, 185MR, 205R and 205MR Center Riser Direct Replacement

MC-1-99746

MC-20-44354



MC 1 99746



MC 20 44354





MC 20 98504





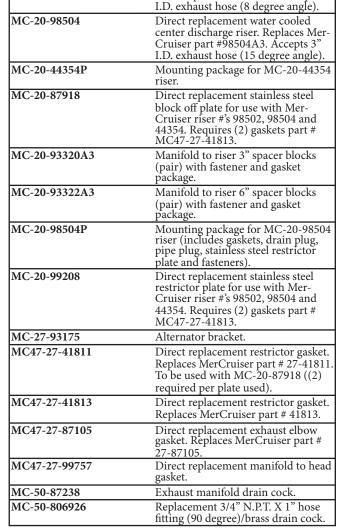
MC 50 806926



MC 50 87238



MC 20 44354P



Direct replacement water cooled exhaust manifold. Replaces Mer-Cruiser part # 99746A3 or part #

Direct replacement water cooled center discharge riser. Replaces Mer-Cruiser part # B-44354A3. Accepts 4"

99746A8.

Note:











MerCruiser V8-283, 302, 305, 307, 327 and 350 C.I.D. All Models Center Riser Generic

CHV 1 83 20 0100 20 0082 20 0097 20 0084P 20 0085P 20 0086P 20 0087P 20 0088P 20 0089P 20 0092P 20 0093P () (\mathcal{O}) QQ ()**CHV 27 0083** MC 45 0002 **CHV 1 83P** 20 0082P 1 0104P 1 0106P . . CHV 47 0000

10105

1 0107

CHV-1-83	Water cooled center discharge mani
	fold to fit the small block GM engine
	(3/4" N.P.T. cooling hose con-
	nections). All years.
20-0082	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 3"
	I.D. exhaust hose.
20-0100	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 4"
	I.D. exhaust hose.
1-0104P	Adaptor package for fresh water
	cooled manifold (includes gaskets
	and block off plate).
1-0105	Center riser manifold-to-riser gaske
1.01070	for fresh water cooling.
1-0106P	Adaptor package for raw water
	cooling. Used in pre-heating applica
	tions (includes gaskets and block off
1 0107	plate with vent hole).
1-0107	Center riser manifold-to-riser gaske
20 00020	(raw water cooling).
20-0082P	Riser mounting package for both
20 000255 D	20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package
	(with brass plugs) for both 20-0082 and 20-0100. Not pictured.
20-0084P	
20-0084r	Straight exhaust adaptor (includes adaptor, hose and clamps). For use
	with 3 1/2" I.D. exhaust hose.
20-0085P	Straight exhaust adaptor (includes
20-00031	adaptor, hose and clamps). For use
	with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor for
	I/O applications (includes adaptor,
	hose and clamps). For use with 2 1/2
	I.D. exhaust hose.
20-0087P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps)
	For use with 3" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps)
	For use with 2 1/2" I.D. exhaust hose
20-0089P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps)
	For use with 3" I.D. exhaust hose.
20-0092P	45 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps)
	For use with 3" I.D. exhaust hose.
20-0093P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps)
	For use with $\frac{3}{1/2}$ or 4" I.D. exhaus
20.0007	hose.
20-0097	3" spacer block (complete with mounting hardware, gasket and 3/4"
	pipe plug). Capable of stacking.
CHV-1-83P	
UU11-93L	Manifold mounting package (in- cludes bolts and pipe plugs).
CHV 1 9255 D	
CHV-1-83SS-P	Stainless steel manifold mounting package (includes stainless bolts and
	brass plugs). Not pictured.
CHV 27 0002	
CHV-27-0083	Alternator bracket. Use where engin water pump is mounted on port side
	of engine below alternator.
MC-45-0002	
MC-45-0002 CHV-47-0000	Fuel filter/solenoid bracket. Manifold to cylinder head gasket.



MerCruiser V8-198, 228, 255, 260 and 898 Inboard and Stern-Drive Units Log Style Direct Replacement

A CARDINAL CONTRACT		MC-1-77234	Direct replacement water cooled exhaust manifold (port side). Re- places MerCruiser part # B-77234A2.
		MC-1-77235	Direct replacement water cooled exhaust manifold (starboard side). Replaces MerCruiser part # B-77235A2.
MC 1 77	234	MC-20-60426	Direct replacement exhaust elbow riser (utilizes a stainless steel sleeve at the water/air mixing area). Re- places MerCruiser part #B-60426A1 (I/O applications).
	<u>o</u>	MC-20-76351	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76351A1(I/O applications). Not pictured.
MC 1 77	235	MC-20-76771	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76771A3 (inboard applications).
		1-60252	Direct replacement exhaust manifold end cap/connector. Replaces Mer- Cruiser part # B-60252.
		1-60252P	Front end plate mounting package.
		1-73813	Direct replacement manifold end cap
		1-73813P	(rear). Supercedes part # 1-54870. Rear end cap mounting package.
		MC-1-77234P	Manifold mounting package.
MC 20 60426	MC 20 76771	MC-20-55730	Stainless steel fresh water cooling block off plate for use with Mer- Cruiser riser #'s 60426, 76351 and 76771. Requires (2) gaskets part # MC47-27-99777.
	MC 29 47441	MC-20-60207	Stainless steel block off plate (with vent hole) for use with MerCruiser riser #'s 60426, 76351 and 76771. Re- quires (2) gaskets part # MC47-27- 99777. Used in pre-heating plumbing systems.
MC 20 61851A2 MC 29 78	3984 MC 27 48104	MC-20-60426P	Exhaust riser elbow mounting package. For use with both MC-20- 60426 and MC-20-76351 risers.
		MC-20-61851A2	Manifold to riser 3" spacers (sold in pairs). Includes all mounting hard-ware, gaskets and drain plugs.
1 73813 1 60252	MC47 488KIT	MC-27-48104	Alternator mounting bracket.
		MC-29-47441	Upper thermostat housing.
		MC-29-78984	Lower thermostat housing.
		MC47-488KIT	Thermostat kit (includes gasket and thermostat).
MC 20 60207 MC 20 5573	MC 20 60426P	MC47-27-33395	Direct replacement exhaust manifold to head gasket.
	Ô	MC47-27-33395A2	Exhaust manifold gasket set.
		MC47-27-48043	Direct replacement exhaust manifold end cap/connector gasket (will fit both ends).
		MC47-27-99777	Direct replacement exhaust elbow to manifold gasket. Supersedes Mer- Cruiser part # 27-52076.
1 60252P 1 73813P	MC 1 77234P		plugs, gaskets and mounting ser includes plugs, gasket and o mount to manifold.
MC47 27 33395A2	MC47 27 99777 BA I	MC47 27 48043	MC47 27 33395
	MARINE B	Y EDM	

MerCruiser V8 Models 898R, 228R and 260R Center Riser Direct Replacement

MC-1-87114



MC 1 87114



MC 20 44354



MC 20 98502



MC 27 93175

MC 50 806926



MC 50 87238



MC 29 87290

MC 20 98504

MC 20 93320A3



MC-1-8/114	Direct replacement water cooled exhaust manifold. Replaces Mer- Cruiser part # 87114A8, 87114A19 and #860246A10.
MC-20-44354	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part # B-44354A3. Accepts 4" I.D. exhaust hose (8 degree angle).
MC-20-98502	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part #98502A2. Accepts 3" I.D. exhaust hose (0 degree angle).
MC-20-98504	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part #98504A3. Accepts 3" I.D. exhaust hose (15 degree angle).
MC-20-44354P	Mounting package for MC-20-44354 riser.
MC-20-87918	Direct replacement stainless steel block off plate for use with Mer- Cruiser riser #'s 98502, 98504 and 44354. Requires (2) gaskets part # MC47-27-41813.
MC-20-93320A3	Manifold to riser 3" spacer blocks (pair) with fastener and gasket package.
MC-20-93322A3	Manifold to riser 6" spacer blocks (pair) with fastener and gasket package.
MC-20-98504P	Mounting package for MC-20-98504 riser (includes gaskets, drain plug, pipe plug, stainless steel restrictor plate and fasteners).
MC-20-99208	Direct replacement stainless steel restrictor plate for use with Mer- Cruiser riser #'s 98502, 98504 and 44354. Requires (2) gaskets part # MC47-27-41813.
MC-27-93175	Alternator bracket.
MC-29-47441	Upper thermostat housing.
MC-29-87290	Lower thermostat housing.
MC47-27-33395	Direct replacement exhaust manifold to head gasket.
MC47-27-41811	Direct replacement restrictor gasket. Replaces MerCruiser part # 27-41811. To be used with MC-20-87918 ((2) required per plate used).
MC47-27-41813	Direct replacement restrictor gasket. Replaces MerCruiser part # 27-41813.
MC47-27-87105	Direct replacement exhaust elbow gasket. Replaces MerCruiser part # 27-87105.
MC-50-87238	Exhaust manifold drain cock.
MC-50-806926	Replacement 3/4" N.P.T. X 1" hose fitting (90 degree)/brass drain cock.

Direct replacement water cooled

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.





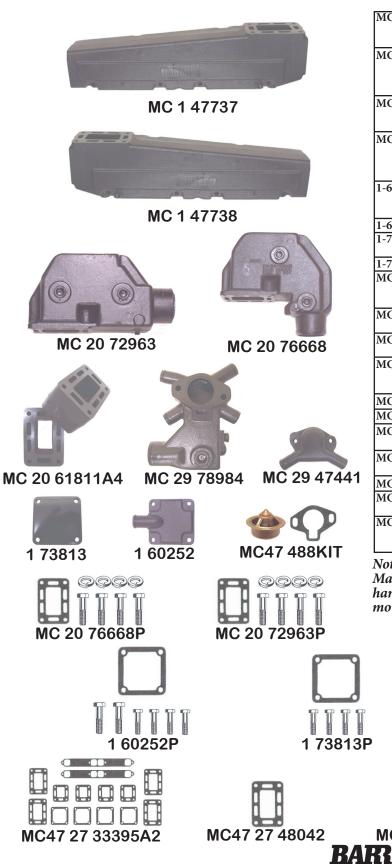
MC47 27 87105

MC47 27 41813



BAR

MerCruiser V8-225, 250, 255, 270 and 280 Inboard and Stern-Drive Units Log Style Direct Replacement



MC 1 47727	Dimentary la company and produce a 1 1
MC-1-47737	Direct replacement water cooled exhaust manifold (port side). Re- places MerCruiser part # B-47737A1.
MC-1-47738	Direct replacement water cooled exhaust manifold (starboard side). Replaces MerCruiser part # B-47738A1.
MC-20-72963	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-72963A1 (inboard applications).
MC-20-76668	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76668A3, B-72964A1 and B-47877A4 (I/O applications).
1-60252	Direct replacement exhaust manifold end cap/connector. Replaces Mer- Cruiser part # B-60252.
1-60252P	Front end plate mounting package.
1-73813	Direct replacement manifold end cap (rear). Supercedes part # 1-54870.
1-73813P	Rear end cap mounting package.
MC-1-77234P	Manifold mounting package. Use this package for the MC-1-47737 and MC-1-47738 manifolds.
MC-20-72963P	Exhaust riser elbow mounting package.
MC-20-76668P	Exhaust riser elbow mounting package.
MC-20-61811A4	Manifold to riser 3" spacers (sold in pairs). Includes all mounting hard-ware, gaskets and drain plugs.
MC-29-47441	Upper thermostat housing.
MC-29-78984	Lower thermostat housing.
MC47-488KIT	Thermostat kit (includes gasket and thermostat).
MC47-27-33395	Direct replacement exhaust manifold to head gasket.
MC47-27-33395A2	Exhaust manifold gasket set.
MC47-27-48042	Direct replacement exhaust elbow to manifold gasket.
MC47-27-48043	Direct replacement exhaust manifold end cap/connector gasket (will fit both ends).

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Riser includes plugs, gasket and mounting hardware to mount to manifold.





MARINE BY EDM

MC47 27 48043

MerCruiser V8-454 and 502 C.I.D. All Models Center Riser Generic

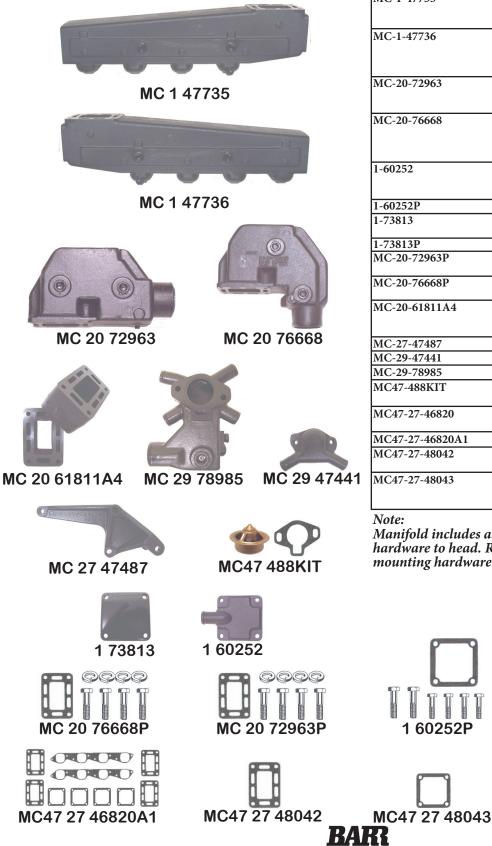
	CHVA 1 84	
20 010		20 0082
20 0097	20 0084P	20 0085P
20 0086P	20 0087P	20 0088P
20 0089P	20 0092P	20 0093P
MC 27 47487	20 0082P	CHVA 1 84P
	1 04P 1	0106P
1 0105	1 0107 C	HVA 47 0000

	XAZ . 1 1 . 1· 1 ·
CHVA-1-84	Water cooled center discharge mani- fold to fit the big block GM engine (3/4" N.P.T. cooling hose con-
20.0002	nections). All years.
20-0082	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con- nection). Standard for use with 3"
	I.D. exhaust hose.
20-0100	
20-0100	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con- nection). Standard for use with 4"
	I.D. exhaust hose.
1-0104P	Adaptor package for fresh water
1 01011	cooled manifold (includes gaskets
	and block off plate).
1-0105	Center riser manifold-to-riser gasket
1 0100	for fresh water cooling.
1-0106P	Adaptor package for raw water
	cooling. Used in pre-heating applica-
	tions (includes gaskets and block off
	plate with vent hole).
1-0107	Center riser manifold-to-riser gasket
	(raw water cooling).
20-0082P	Riser mounting package for both
20.00000 D	<u>20-0082 and 20-0100.</u>
20-0082SS-P	Stainless steel mounting package
	(with brass plugs) for both 20-0082 and 20-0100. Not pictured.
20.0094D	
20-0084P	Straight exhaust adaptor (includes adaptor, hose and clamps). For use
	with 3 1/2" I.D. exhaust hose.
20-0085P	Straight exhaust adaptor (includes
20-00031	adaptor, hose and clamps). For use
	with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor for
	I/O applications (includes adaptor,
	hose and clamps). For use with 2 1/2'
	I.D. exhaust hose.
20-0087P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
20-0089P	For use with 2 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0092P	45 degree exhaust elbow adaptor
20-00921	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0093P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	(includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust
	hose.
20-0097	3" spacer block (complete with
	mounting hardware, gasket and 3/4"
	pipe plug). Capable of stacking.
CHVA-1-84P	Manifold mounting package (in-
	cludes bolts and pipe plugs).
CHVA-1-84SS-P	Stainless steel manifold mounting
	package (includes stainless bolts and brass plugs). Not pictured.
CHVA-47-0000	Manifold to cylinder head gasket.
MC-27-47487	Alternator bracket.
1110-2/-4/40/	Alternator bracket.

Note:



MerCruiser V8-325, 330, 350, 370 and 400 Inboard and Stern-Drive Units Log Style Direct Replacement



AC-1-47735	Direct replacement water cooled exhaust manifold (port side). Re- places MerCruiser part # B-47735A1.
AC-1-47736	Direct replacement water cooled exhaust manifold (starboard side). Replaces MerCruiser part # B-47736A1.
АС-20-72963	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-72963A1 (inboard applications).
ИС-20-76668	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76668A3, B-72964A1 and B-47877A4 (I/O applications).
-60252	Direct replacement exhaust manifold end cap/connector. Replaces Mer- Cruiser part # B-60252.
-60252P	Front end plate mounting package.
-73813	Direct replacement manifold end cap (rear). Supercedes part # 1-54870.
-73813P	Rear end cap mounting package.
AC-20-72963P	Exhaust riser elbow mounting package.
AC-20-76668P	Exhaust riser elbow mounting package.
ИС-20-61811А4	Manifold to riser 3" spacers (sold in pairs). Includes all mounting hardware, gaskets and drain plugs.
AC-27-47487	Alternator bracket.
AC-29-47441	Upper thermostat housing.
AC-29-78985	Lower thermostat housing.
AC47-488KIT	Thermostat kit (includes gasket and thermostat).
AC47-27-46820	Direct replacement exhaust manifold to head gasket.
AC47-27-46820A1	Exhaust manifold gasket set.
AC47-27-48042	Direct replacement exhaust elbow to manifold gasket.
AC47-27-48043	Direct replacement exhaust manifold end cap/connector gasket (will fit both ends).

Manifold includes all plugs, gaskets and mounting hardware to head. Riser includes plugs, gasket and mounting hardware to mount to manifold.



MC47 27 46820

MARINE BY EDM

MerCruiser V8 Models 330, 340 and 454 Magnum Inboard and Stern Drive Units Center Riser Direct Replacement

MC-1-89011



MC 1 89011

MC 29 47442

MC 20 87918



MC 20 44354



MC 20 98502



MC 27 47487



MC 50 806926





MC 20 98504

MC 20 93320A3

MC 29 90736

MC 20 99208





MC-1-89011	Direct replacement water cooled exhaust manifold. Replaces Mer- Cruiser part # 89011A8.
MC-20-44354	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part # B-44354A3. Accepts 4" I.D. exhaust hose (8 degree angle).
MC-20-98502	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part #98502A2. Accepts 3" I.D. exhaust hose (0 degree angle).
MC-20-98504	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part #98504A3. Accepts 3" I.D. exhaust hose (15 degree angle).
MC-20-44354P	Mounting package for MC-20-44354 riser.
MC-20-87918	Direct replacement stainless steel block off plate for use with Mer- Cruiser riser #'s 98502, 98504 and 44354. Requires (2) gaskets part # MC47-27-41813.
MC-20-93320A3	Manifold to riser 3" spacer blocks (pair) with fastener and gasket package.
MC-20-93322A3	Manifold to riser 6" spacer blocks (pair) with fastener and gasket package.
MC-20-98504P	Mounting package for MC-20-98504 riser (includes gaskets, drain plug, pipe plug, stainless steel restrictor plate and fasteners).
MC-20-99208	Direct replacement stainless steel restrictor plate for use with Mer- Cruiser riser #'s 98502, 98504 and 44354. Requires (2) gaskets part # MC47-27-41813.
MC-27-47487	Alternator bracket.
MC-29-47442	Upper thermostat housing.
MC-29-90736	Lower thermostat housing.
MC47-27-41811	Direct replacement restrictor gasket. Replaces MerCruiser part # 27-41811. To be used with MC-20-87918 ((2) required per plate used).
MC47-27-41813	Direct replacement restrictor gasket. Replaces MerCruiser part # 27-41813.
MC47-27-46820	Direct replacement exhaust manifold to head gasket.
MC47-27-87105	Direct replacement exhaust elbow gasket. Replaces MerCruiser part # 27-87105.
MC-50-87238	Exhaust manifold drain cock.
1.00 =0.000000	\mathbf{D} 1 $(\mathbf{A}' \mathbf{A}'') \mathbf{X} \mathbf{D} \mathbf{T} \mathbf{X} \mathbf{A}'' 1$

Direct replacement water cooled

Note:

MC-50-806926

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.

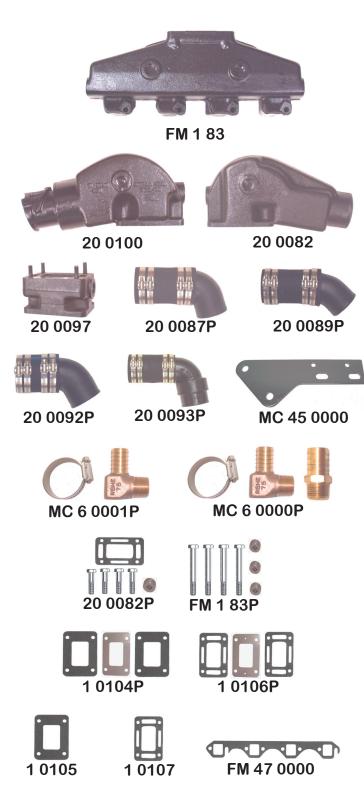




Replacement 3/4" N.P.T. X 1" hose fitting (90 degree)/brass drain cock.

MARINE BY EDM

MerCruiser V8 (Ford)-302 and 351 C.I.D. All Models Center Riser Generic



FM-1-83	Water cooled center discharge mani-
111-1-05	fold to fit the small block Ford engine
	(3/4" N.P.T. cooling hose con-
	nections). All years.
20-0082	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 3"
	I.D. exhaust hose.
20-0100	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con- nection). Standard for use with 4"
	I.D. exhaust hose.
1-0104P	Adaptor package for fresh water
1-01041	cooled manifold (includes gaskets
	and block off plate).
1-0105	Center riser manifold-to-riser gasket
	for fresh water cooling.
1-0106P	Adaptor package for raw water
	cooling. Used in pre-heating applica-
	tions (includes gaskets and block off
1 0105	plate with vent hole).
1-0107	Center riser manifold-to-riser gasket
20.0002B	(raw water cooling).
20-0082P	Riser mounting package for both 20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package
20-000233-1	(with brass plugs) for both 20-0082
	and 20-0100. Not pictured.
20-0087P	90 degree exhaust elbow adaptor
20 00071	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
••••••••	For use with 3° I.D. exhaust hose.
20-0092P	45 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0093P	
20-0093P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust
	hose.
20-0097	3" spacer block (complete with
	mounting hardware, gasket and 3/4"
	pipe plug). Capable of stacking.
FM-1-83P	Manifold mounting package (in-
	cludes bolts and pipe plugs).
FM-1-83SS-P	Stainless steel manifold mounting
	package (includes stainless bolts and
FM_47_0000	brass plugs). Not pictured.
FM-47-0000	Manifold to cylinder head gasket.
MC-6-0000P	Exhaust manifold plumbing fittings
	package for models 188, 255, 233, 255, 302, 351 and 888.
MC-6-0001P	Exhaust manifold plumbing fittings
1010-0-0001F	package for model 215.
MC-45 0000	Fuel filter and solenoid universal
1110-43 0000	mounting bracket.
	mounting or workers

Note:



MerCruiser V8 (Ford)-302 and 351 C.I.D. Models 188, 215, 225, 233, 255 and 888 Inboard and I/O Units Log Style Direct Replacement

a ne	0	MC-1-65603	Direct replacement water cooled exhaust manifold (starboard side). Replaces MerCruiser part # B-65603A4 and B-54099A5.
		MC-1-65604	Direct replacement water cooled exhaust manifold (port side). Re- places MerCruiser part # B-65604A4 and B-54100A5.
	MC 1 65603	MC-20-60426	Direct replacement exhaust elbow riser (utilizes a stainless steel sleeve at the water/air mixing area). Re- places MerCruiser part #B-60426A1 (I/O applications).
		MC-20-76351	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76351A1(I/O applications). Not pictured.
	MC 1 65604	MC-20-76771	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76771A3 (inboard applications).
		1-60252	Direct replacement exhaust manifold end cap/connector. Replaces Mer- Cruiser part # B-60252.
		1-60252P	Front end plate mounting package.
		1-73813	Direct replacement manifold end cap (rear). Supercedes part # 1-54870.
	MC 00 767	1-73813P 71 MC-1-6560P	Rear end cap mounting package. Manifold mounting package.
MC 20 6042	6 MC 20 767	MC-20-55730	Stainless steel fresh water cooling block off plate for use with Mer- Cruiser riser #'s 60426, 76351 and 76771. Requires (2) gaskets part # MC47-27-99777.
MC 20 61851A2	MC 29 63588 MC 29	MC-20-60207	Stainless steel block off plate (with vent hole) for use with MerCruiser riser #'s 60426, 76351 and 76771. Re- quires (2) gaskets part # MC47-27- 99777. Used in pre-heating plumbing systems.
WIC 20 0 185 1A2		MC-20-60426P	Exhaust riser elbow mounting package. For use with both MC-20- 60426 and MC-20-76351 risers.
	LI 🦲 '	MC-20-61851A2	Manifold to riser 3" spacers (sold in pairs). Includes all mounting hard-ware, gaskets and drain plugs.
MC 20 60207 MC	20 55730 1 73813	1 60252 MC-29-62898	Upper thermostat housing.
		MC-29-63588	Lower thermostat housing.
		MC47-27-48043	Direct replacement exhaust manifold end cap/connector gasket (will fit both ends).
 1 1 1 1 1 1		MC47-27-73866	Direct replacement exhaust manifold to head gasket.
1 60252P	1 73813P MC 20 6		Direct replacement exhaust elbow to manifold gasket. Supersedes Mer- Cruiser part # 27-52076.
	MC47 27 4804	3 hardware to head. 3 mounting hardwar	all plugs, gaskets and mounting Riser includes plugs, gasket and e to mount to manifold.
MC 1 65	60P MC47 27 9977 MC47 27 73866	7 DAD	



MerCruiser Exhaust Risers and Accessories Direct Replacement



MC 20 12076



MC 20 55538



MC 20 72963



MC 20 76351



MC 20 76771



MC 20 98502



MC 20 87918



MC 20 44354



MC 20 60426



MC 20 76325



MC 20 76668

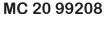


MC 20 90880



MC 20 98504







60207 MC 20 55730

MC-20-12076	Direct replacement exhaust riser. Re- places MerCruiser part # 12076A2.
MC-20-44354	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part # B-44354A3. Accepts 4" I.D. exhaust hose (8 degree angle).
MC-20-55538	Direct replacement exhaust elbow/ riser. Replaces MerCruiser part # B-39920 and # B-55538A2.
MC-20-60426	Direct replacement exhaust elbow riser (utilizes a stainless steel sleeve at the water/air mixing area). Re- places MerCruiser part #B-60426A1.
MC-20-72963	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-72963A1 (inboard applications).
MC-20-76325	Direct replacement exhaust riser. Re- places MerCruiser part # 76325A2.
MC-20-76351	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76351A1.
MC-20-76668	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76668A3, B-72964A1 and B-47877A4 (I/O applications).
MC-20-76771	Direct replacement exhaust elbow riser. Replaces MerCruiser part # B-76771A3 (inboard applications).
MC-20-90880	Direct replacement (cast iron) ex- haust riser/expansion tank. Replaces MerCruiser part # 90880A2.
MC-20-98502	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part #98502A2. Accepts 3" I.D. exhaust hose (0 degree angle).
MC-20-98504	Direct replacement water cooled center discharge riser. Replaces Mer- Cruiser part #98504A3. Accepts 3" I.D. exhaust hose (15 degree angle).
MC-20-55730	Stainless steel fresh water cooling block off plate for use with Mer- Cruiser riser #'s 60426, 76351 and 76771. Requires (2) gaskets part # MC47-27-99777.
MC-20-60207	Stainless steel block off plate (with vent hole) for use with MerCruiser riser #'s 60426, 76351 and 76771. Re- quires (2) gaskets part # MC47-27- 99777. Used in pre-heating plumbing systems.
MC-20-87918	Direct replacement stainless steel block off plate for use with Mer- Cruiser riser #'s 98502, 98504 and 44354.
MC-20-99208	Direct replacement stainless steel restrictor plate for use with Mer- Cruiser riser #'s 98502, 98504 and 44354.

Note:

Risers include plugs, gasket and mounting hardware to mount to manifold.



MerCruiser 3" and 6" Riser Kits Direct Replacement



MC 20 61811A4



MC 20 61851A2

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			V

MC 20 61851A3



MC 20 93320A3

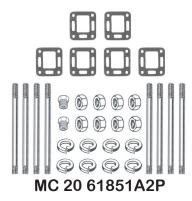
MC-20-61811A4	Manifold to riser 3" spacers (sold in pairs). Includes all mounting hard-ware, gaskets and drain plugs.
MC-20-61851A2	Manifold to riser 3" spacers (sold in pairs). Includes all mounting hard-ware, gaskets and drain plugs.
MC-20-61851A3	Manifold to riser 3" spacer (single block). Includes all mounting hard- ware, gaskets and drain plug.
MC-20-93320A3	Manifold to riser 3" spacer blocks (pair) with fastener and gasket package.
MC-20-93322A3	Manifold to riser 6" spacer blocks (pair) with fastener and gasket package.
MC-20-61811A4P	Mounting package for MC-20-61811A4 spacer block kit.
MC-20-61852A2P	Mounting package for MC-20-61851A2 spacer block kit.
MC-20-61811A3P	Mounting package for MC-20-61811A3 spacer block kit.
MC-20-93320A3P	Mounting package for MC-20-93320A3 spacer block kit.
MC-20-93322A3P	Mounting package for MC-20-93322A3 spacer block kit.

Note:

Each spacer block kit includes the spacer block (s) and the corresponding package to mount.



MC 20 93322A3













MerCruiser Thermostat Housing Assemblies





MC 29 63588 Part# MC 29 60372

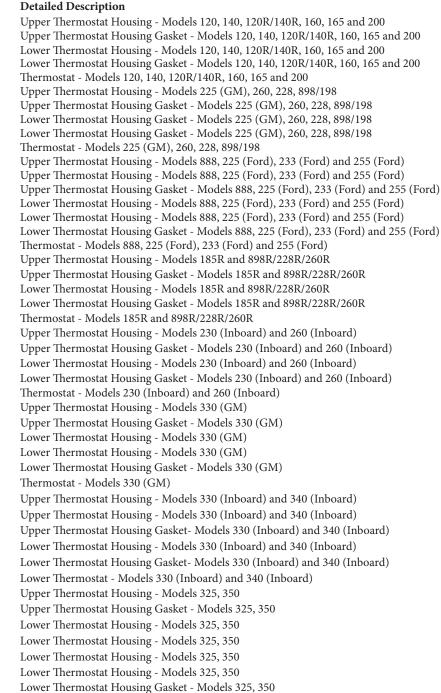
MC-29-60372 MC47-27-47590 MC-29-47587 MC47-27-33680 MC-29-59078 MC-29-47441 MC47-27-48818 MC-29-78984 MC47-27-53045 MC-29-59137 MC-29-59498 MC-29-62898 MC47-27-60208 MC-29-60783 MC-29-63588 MC47-27-54506 MC-29-59137 MC-29-47441 MC47-27-41812 MC-29-87290 MC47-27-53045 MC-29-59137 MC-29-97429 MC47-27-90556 MC-29-87290 MC47-27-53045 MC-29-59137 MC-29-47442 MC47-27-48818 MC-29-78985 MC-29-79468 MC47-27-53045 MC-29-59137 MC-29-47442 MC-29-97428 MC47-27-90556 MC-29-90736 MC47-27-53405 MC-29-59137 MC-29-47442 MC47-27-48818 MC-29-47479 MC-29-49966 MC-29-52852 MC-29-78985 MC47-27-53045 MC-29-59137







MC 29 78985



MC 29 62898





Thermostat - Models 325, 350

MerCruiser Thermostat Kits



Contents: MC47-27-47590 Gasket MC-29-59078 Thermostat



MC47-27-48818 Gasket MC-29-59137 Thermostat



Part #	Detailed Description
MC47-475KIT	Thermostat Kit 475 - Engine model 120 Beginning S/N 2324347 - Ending S/N 337734. Note MC47 475 Kit Contents: MC47-27-47590 Gasket and MC-29-59078 Thermostat
MC47-475KIT	Thermostat Kit 475 - Engine model 120 Beginning S/N 3377341 - Ending S/N Up. Note MC47 475 Kit Contents: MC47-27-47590 Gasket and MC-29-59078 Thermostat
MC47-475KIT	Thermostat Kit 475 - Engine model 140 Beginning S/N 2508261 - Ending S/N Up. Note MC47 475 Kit Contents: MC47-27-47590 Gasket and MC-29-59078 Thermostat
MC47-475KIT	Thermostat Kit 475 - Engine model 165 Beginning S/N 3377341 - Ending S/N Up. Note MC47 475 Kit Contents: MC47-27-47590 Gasket and MC-29-59078 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 198 Beginning S/N 4776402 - Ending S/N 6218461. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-602KIT	Thermostat Kit 602 - Engine model 215 Beginning S/N 3040411 - Ending S/N Up. Note MC47 602 Kit Contents: MC47-27-60208 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 225 Beginning S/N 2278647 - Ending S/N 2694014. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-602KIT	Thermostat Kit 602 - Engine model 225 Beginning S/N 3385721 - Ending S/N Up. Note MC47 602 Kit Contents: MC47-27-60208 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 228 Beginning S/N 4765100 - Ending S/N 2618461. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 230 Beginning S/N 6040716 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-602KIT	Thermostat Kit 602 - Engine model 233 Beginning S/N 4173000 - Ending S/N Up. Note MC47 602 Kit Contents: MC47-27-60208 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 250 Beginning S/N 2314301 - Ending S/N 2639854.Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 250 Beginning S/N 4768000 - Ending S/N 4908849. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-602KIT	Thermostat Kit 602 - Engine model 255 Beginning S/N 3258728 - Ending S/N Up. Note MC47 602 Kit Contents: MC47-27-60208 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 255 Beginning S/N 4175500 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 260 Beginning S/N 5907058 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 270 Beginning S/N 2851074 - Ending S/N 3077735. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 280 Beginning S/N 4176250 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 325 Beginning S/N 2288747 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 330 Beginning S/N 4623115 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 340 Beginning S/N 5889914 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 350 Beginning S/N 3780450 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 370 Beginning S/N 4179554 - Ending S/N Up. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 390 Beginning S/N 2781129 - Ending S/N 2825059. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat
MC47-602KIT	Thermostat Kit 602 - Engine model 888 Beginning S/N 3108723 - Ending S/N Up. Note MC47 602 Kit Contents: MC47-27-60208 Gasket and MC-29-59137 Thermostat
MC47-488KIT	Thermostat Kit 488 - Engine model 898 Beginning S/N 4762210 - Ending S/N 6218461. Note MC47 488 Kit Contents: MC47-27-48818 Gasket and MC-29-59137 Thermostat



OMC 4-Cylinder 153 C.I.D. 120 H.P. 2.5 Liter Model 120 Engine Log Style Direct Replacement



OMC 1 981462



OMC 1 982657



OMC 20 980536





OMC 20 909368



1-907885 1-910280

OMC 20 907765





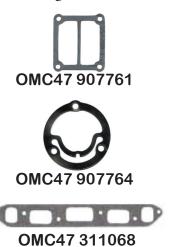




0 3 4 0 x 4 4 4 4 4	SA 1 11
OMC-1-981462	Direct replacement water cooled exhaust manifold. Replaces OMC part #'s 979729 and 980459.
OMC-1-982657	Direct replacement water cooled exhaust manifold. Manifold has the heat source in the exhaust port for automatic choke.
OMC-20-909368	Direct replacement high rise to ad- aptor elbow for use with OMC-20- 980536.
OMC-20-910380	Direct repalcement exhaust elbow. Replaces OMC riser part #'s 980188 and 910380.
OMC-20-980536	Direct replacement exhaust riser. Replaces OMC riser part #'s 979730 and 980536.
1-380446	Heat exchanger assembly.
1-907885	Direct replacement rear end cap. Replaces OMC part # 907885.
1-910280	Direct replacement front end cap. Replaces OMC part # 910280 and 311550 (choke).
1-910384	Direct replacement front end cap. Replaces OMC part # 910384.
OMC-1-98146/982	Manifold mounting package.
OMC-20-907765	Direct replacement exhaust elbow to hose adaptor.
OMC-20-908014	Exhaust manifold to riser adaptor for use with OMC riser part #'s 980188 and 910380.
OMC-20-910380P	Exhaust riser mounting package.
OMC47-311068	Exhaust manifold to cylinder head gasket.
OMC47-311121	Exhaust manifold to elbow and end cap gasket.
OMC47-907761	Manifold end cap gasket.
OMC47-907764	Exhaust elbow to hose adaptor gas- ket.
OMC47-908013	Adaptor plate (OMC-20-908014) to riser (OMC-20-910380) gasket.

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.







BARE MARINE BY FOM

OMC 4-Cylinder 181 C.I.D. 140 H.P. 3.0 Liter Model 140 Engine Log Style Direct Replacement



OMC 1 984054





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C) C)	C) C)		Non-second		Sec. 1			
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OMC47 908079



OMC-1-984054	Direct replacement exhaust manifold Replaces OMC part #'s 998083, 980460, 980957 and 982490.
OMC-20-910380	Direct repalcement exhaust elbow. Replaces OMC riser part #'s 980188 and 910380.
1-910384	Direct replacement front end cap. Replaces OMC part # 910384.
OMC-1-984054P	Exhaust manifold mounting package.
OMC-20-910380P	Exhaust riser mounting package.
OMC47-311121	Exhaust manifold to elbow and end cap gasket.
OMC47-908013	Adaptor plate (OMC-20-908014) to riser (OMC-20-910380) gasket.
OMC47-908079	Exhaust manifold to cylinder head gasket.

Note:

OMC V6-155 H.P. All Years Log Style Generic

Port side part # BV6 1 75L.



20 0031

BV6-1-75L	Water cooled end discharge port manifold to fit the Buick V6 engine (1/2" N.P.T. cooling connections). All years.
BV6-1-75R	Water cooled end discharge starboard manifold to fit the Buick V6 engine (1/2" N.P.T. cooling connections). All years.
20-0031	Swivel-type 90 degree exhaust elbow connector with internal water dis- charge. Accepts 2 1/2" to 3" I.D. ex- haust hose. Requires (1) mounting hardware kit #20-0002P per elbow.
OMC-1-0092	Front end plate with choke stove heat exchanger (starboard side only).
OMC-6-0000P	Plumbing fittings package (3/4" I.D. hose only).
OMC-29-0000	Upper thermostat housing. Replaces either OMC # 314810 or # 982201 (may also order under part #'s OMC- 29-314810 or OMC-29-982201).
OMC-29-383307	160 degree thermostat.
OMC47-314809	Thermostat housing gasket.



OMC 1 0092



OMC 29 0000



OMC47 314809









OMC V6-155 H.P. All Years Log Style Direct Replacement



OMC-1-979758	Direct replacement exhaust manifold (port side). Replaces OMC part # 979758.	
OMC-1-979759	Direct replacement exhaust manifold (starboard side). Replaces OMC part #979759.	
OMC-20-981281	Direct replacement exhaust elbow. Replaces OMC part #'s 907776 and # 907777.	
1-31214P	Exhaust manifold end cap/connector mounting package.	
1-312148	Direct replacement exhaust manifold front end cap/connector (port side).	
1-312149	Direct replacement exhaust manifold front end cap/connector(starboard side). End cap has extra hole drilled for choke stove.	
1-380985	Choke stove heat exchanger (star- board side only). Uses 1-312149 end cap.	
OMC-1-9797P	End cap and exhaust elbow stud package.	
OMC-1-97975P	Exhaust manifold mounting package.	
OMC-20-981281P	Exhaust elbow mounting package.	
OMC-29-383307	160 degree thermostat.	
OMC-29-0000	Upper thermostat housing. Replaces either OMC # 314810 or # 982201 (may also order under part #'s OMC- 29-314810 or OMC-29-982201).	
OMC47-311130	Direct replacement exhaust manifold end cap/connector gasket (not to be used between elbow and manifold).	
OMC47-314809	Thermostat housing gasket.	
OMC47-907775	Direct replacement exhaust elbow gasket.	

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.

OMC 1 9797P



59

OMC V8-283, 305, 307, and 350 C.I.D. Models 210, 215, 225, 235 and 245 H.P. Log Style Generic

Port side part # OF 1 60L.

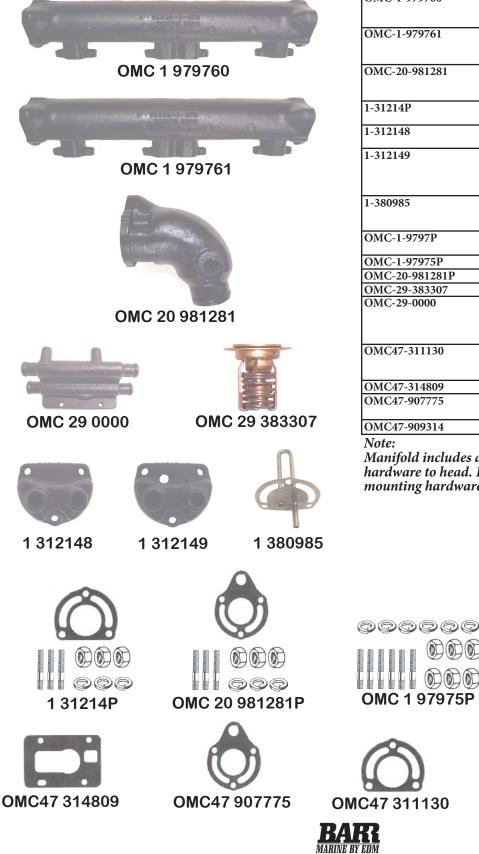
BARR OF	MARINE 1 60R		OF-1-601 OF-1-601 20-0031
20 0031	20 0055		20-0055 20-0002F OF-1-60I OMC-6-0 OMC-29-
OMC 29 0000	OMC 29 38	3307	OMC-29- OMC47- OMC47- OMC47-
OMC	6 0000P		
	OF 1 60	F P	
OMC47 905	9314	OMC47 3	14809

OF-1-60L	Water cooled end discharge port manifold to fit the Small Block GM engine (1/2" N.P.T. cooling hose connections).
OF-1-60R	Water cooled end discharge starboard manifold to fit the Small Block GM engine (1/2" N.P.T. cooling hose connections).
20-0031	Swivel-type 90 degree exhaust elbow connector with internal water dis- charge. Accepts 2 1/2" to 3" I.D. ex- haust hose. Requires (1) mounting hardware kit #20-0002P per elbow.
20-0055	Swivel-type 30 degree exhaust elbow connector; fully jacketed. Accepts 2 1/2" or 3" I.D. exhaust hose. Re- quires (1) mounting hardware kit #20-0002P per elbow.
20-0002P	Mounting hardware kit.
OF-1-60F-P	Manifold to cylinder head mounting package.
OMC-6-0000P	Plumbing fittings package (3/4" I.D. hose only).
OMC-29-0000	Upper thermostat housing. Replaces either OMC # 314810 or # 982201 (may also order under part #'s OMC- 29-314810 or OMC-29-982201).
OMC-29-383307	160 degree thermostat.
OMC47-314809	Thermostat housing gasket.
OMC47-909314	Exhaust manifold to cylinder head gasket.
OMC47-909515	Adaptor housing gasket.





OMC V8-283, 305, 307 and 350 C.I.D. Models 225, and 245 H.P. Log Style Direct Replacement



OMC-1-979760	Direct replacement exhaust manifold (port side). Replaces OMC part # 979760.
OMC-1-979761	Direct replacement exhaust manifold (starboard side). Replaces OMC part #979761.
OMC-20-981281	Direct replacement exhaust elbow. Replaces OMC part #'s 907776 and # 907777.
1-31214P	Exhaust manifold end cap/connector mounting package.
1-312148	Direct replacement exhaust manifold front end cap/connector (port side).
1-312149	Direct replacement exhaust manifold front end cap/connector(starboard side). End cap has extra hole drilled for choke stove.
1-380985	Choke stove heat exchanger (star- board side only). Uses 1-312149 end cap.
OMC-1-9797P	End cap and exhaust elbow stud package.
OMC-1-97975P	Exhaust manifold mounting package.
OMC-20-981281P	Exhaust elbow mounting package.
OMC-29-383307	160 degree thermostat.
OMC-29-0000	Upper thermostat housing. Replaces either OMC # 314810 or # 982201 (may also order under part #'s OMC- 29-314810 or OMC-29-982201).
OMC47-311130	Direct replacement exhaust manifold end cap/connector gasket (not to be used between elbow and manifold).
OMC47-314809	Thermostat housing gasket.
OMC47-907775	Direct replacement exhaust elbow gasket.
OMC47-909314	Manifold to cylinder head gasket.

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.





OMC47 909314

OMC 1 9797P

OMC V8-283, 305, 307 and 350 C.I.D. Models 185, 200, 225, 230, and 260 H.P. Log Style Direct Replacement















OMC-1-912441	Direct replacement exhaust manifold (starboard side). Replaces OMC part #'s 912441 and 909280.	
OMC-1-912442	Direct replacement exhaust manifold (port side). Replaces OMC part #'s #'s 912442 and 910144.	
OMC-20-982680	Direct replacement exhaust riser/ elbow. Replaces OMC part # 982680.	
OMC-20-982680P	Exhaust riser/elbow mounting package.	
OMC-29-0000	Upper thermostat housing. Replaces either OMC # 314810 or # 982201 (may also order under part #'s OMC- 29-314810 or OMC-29-982201).	
OMC-29-383307	160 degree thermostat.	
OMC47-314809	Thermostat housing gasket.	
OMC47-909314	Exhaust manifold to cylinder head gasket.	
OMC47-909786	Direct replacement exhaust riser to manifold gasket.	

Note:



OMC V8-283, 302, 305, 307, and 350 C.I.D. **All Models Center Riser Generic**

CHV-1-83



20 0084P

20 0087P

20 0092P



20 0100





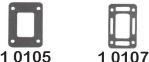


20 0089P











20 0082

20 0085P

20 0088P

20 0093P









nections). All years. 20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose connection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con-nection). Standard for use with 4" I.D. exhaust hose. Adaptor package for fresh water cooled manifold (includes gaskets 1-0104P and block off plate) 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. Adaptor package for raw water cooling, Used in pre-heating applica-tions (includes gaskets and block off plate with vent hole). 1-0106P Center riser manifold-to-riser gasket (raw water cooling). 1-0107 Riser mounting package for both 20-0082 and 20-0100. 20-0082P Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured. 20-0082SS-P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0084P 20-0085P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor for I/O applications (includes adaptor, hose and clamps). For use with 2 1/2 I.D. exhaust hose. 20-0087P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0089P 20-0092P 45 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0093P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust hose. 20-0097 3" spacer block (complete with mounting hardware, gasket and 3/4" pipe plug). Capable of stacking. Manifold mounting package (in-cludes bolts and pipe plugs). CHV-1-83P CHV-1-83SS-P Stainless steel manifold mounting package (includes stainless bolts and brass plugs). Not pictured. CHV-47-0000 Manifold to cylinder head gasket. Exhaust manifold plumbing fittings package for model 215. MC-6-0001P OMC-20-0003 Hose bushing 3" to 3 1/2" (where

Water cooled center discharge manifold to fit the small block GM engine (3/4" N.P.T. cooling hose con-

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.

applicable).



OMC/VOLVO V8- 5.7 Liter Cobra All Models Center Riser Direct Replacement



OMC 1 914035



OMC 20 913784



OMC-1-914035	Direct replacement exhaust manifold. Replaces OMC part # 914035 and Volvo part # 3857723 (New Style).
OMC-20-913784	Direct replacement exhaust riser/ elbow. Replaces OMC # 913784 and Volvo part # 3863061 (New Style).
OMC-1-914035P	Exhaust manifold mounting package.
OMC-20-913784P	Exhaust riser/elbow mounting pack- age.
OMC47-909314	Exhaust manifold to cylinder head gasket.
OMC47-913783	Direct replacement exhaust riser/ elbow to manifold gasket.
50-512-017	Replacement 1/2" N.P.T. to 1" hose (straight)/brass hose fitting.

Note:





OMC47 909314







OMC (Ford) V8-302 and 351 C.I.D. Models 170, 175, 190 and 235 H.P. Direct Replacement



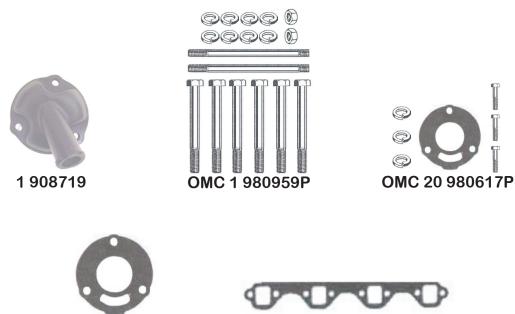
OMC 1 980959



OMC47 908935

OMC-1-980959	Direct replacement exhaust manifold. Replaces OMC part # 980572 and # 980959.	
OMC-20-980617	Direct replacement exhaust elbow. Replaces OMC part # 980617.	
1-908719	Direct replacement exhaust manifold end cap/connector (front). Replaces OMC part # 908719.	
OMC-1-980959P	Manifold to cylinder head mounting package.	
OMC-20-980617P	Exhaust elbow mounting package.	
OMC47-908717	Exhaust manifold to cylinder head gasket.	
OMC47-908935	Direct replacement exhaust manifold end cap/connector gasket.	

Note:







OMC (Ford) V8-302 and 351 C.I.D. All Models Center Riser Generic



FM-1-83 Water cooled center discharge m fold to fit the small block Ford en (3/4" N.P.T. cooling hose connections). All years. 20-0082 Water cooled center discharge ris (3/4" N.P.T. cooling hose connection). Standard for use with 3 I.D. exhaust hose. 20-0100 Water cooled center discharge ris (3/4" N.P.T. cooling hose connection). Standard for use with 3 I.D. exhaust hose.			
20-0082Water cooled center discharge ris (3/4" N.P.T. cooling hose con- nection). Standard for use with 3 I.D. exhaust hose.20-0100Water cooled center discharge ris			
nection). Standard for use with 4 I.D. exhaust hose.			
1-0104P Adaptor package for fresh water cooled manifold (includes gasket and block off plate).	s		
1-0105 Center riser manifold-to-riser ga for fresh water cooling.	sket		
1-0106P Adaptor package for raw water cooling. Used in pre-heating app tions (includes gaskets and block plate with vent hole).			
1-0107 Center riser manifold-to-riser ga (raw water cooling).	sket		
20-0082P Riser mounting package for both 20-0082 and 20-0100.			
20-0082SS-P Stainless steel mounting package (with brass plugs) for both 20-00 and 20-0100. Not pictured.			
20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clam For use with 2 1/2" I.D. exhaust h	ps).		
20-0089P 30 degree exhaust elbow adaptor (includes adaptor, hose and clam For use with 3" I.D. exhaust hose	ps).		
20-0092P 45 degree exhaust elbow adaptor (includes adaptor, hose and clam For use with 3" I.D. exhaust hose	45 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.		
20-0093P 90 degree exhaust elbow adaptor (includes adaptor, hose and clam For use with 3 1/2" or 4" I.D. exh hose.	(includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust		
20-0097 3" spacer block (complete with	3" spacer block (complete with mounting hardware, gasket and 3/4"		
mounting hardware, gasket and 3 pipe plug). Capable of stacking.			
mounting hardware, gasket and			
FM-1-83P Manifold mounting package (includes bolts and pipe plug). Capable of stacking. FM-1-83SS-P Stainless steel manifold mounting package (includes stainless bolts b	g and		
FM-1-83P Manifold mounting package (includes bolts and pipe plug). Capable of stacking. FM-1-83SS-P Stainless steel manifold mounting package (includes stainless bolts).	g and		
mounting hardware, gasket and 3 pipe plug). Capable of stacking. FM-1-83P Manifold mounting package (includes bolts and pipe plugs). FM-1-83SS-P Stainless steel manifold mounting package (includes stainless bolts brass plugs). Not pictured. FM-47-0000 Manifold to cylinder head gasket MC-6-0001P Exhaust manifold plumbing fittir package (1" I.D. hose only).	g and 1gs		
mounting hardware, gasket and 3 pipe plug). Capable of stacking. FM-1-83P Manifold mounting package (includes bolts and pipe plugs). FM-1-83SS-P Stainless steel manifold mounting package (includes stainless bolts brass plugs). Not pictured. FM-47-0000 Manifold to cylinder head gasket MC-6-0001P Exhaust manifold plumbing fittir	g and 1gs		
mounting hardware, gasket and 3 pipe plug). Capable of stacking. FM-1-83P Manifold mounting package (includes bolts and pipe plugs). FM-1-83SS-P Stainless steel manifold mounting package (includes stainless bolts brass plugs). Not pictured. FM-47-0000 Manifold to cylinder head gasket MC-6-0001P Exhaust manifold plumbing fittir package (1" I.D. hose only). OMC-6-0000P Exhaust manifold plumbing fittir	g and igs igs ed ts		

Note:



Perkins Diesel 160 H.P. 354 C.I.D. Model T6.354M



PE 1 6354

PE-1-6354	Water cooled exhaust manifold (in- cludes mounting hardware to head). Replaces Perkins part number 89058.
PE-1-6354B	Cover plate. Replaces Perkins part # 35732861.
PE-1-6354P	Manifold mounting kit.

Note:

The manifold will fit vertical or inclined models and will accept all of the original end plates, fittings, gaskets and hardware. It will not fit engines equipped with a combined exhaust manifold heat exchanger, nor is it applicable to naturally aspirated models.



PE 1 6354B





Pleasurecraft V8-302 and 351 C.I.D. All Years Center Riser Generic

	FM 1	83	
Tompeter (Destruction of the second	16	
20 01	00	4	20 0082
	A O		
	20 01	02	
20 0097	20 008	4P	20 0085P
	20 000		20 00001
20 0086P	20 008	87P	20 0088P
20 0089P	20 0	092P	20 0093P
20 0	082P	FM 1 8	8 8 3 P
	0 0 104P		106P
1 0105	1 0107	FN	47 0000

FM-1-83	Water cooled center discharge mani- fold to fit the small block Ford engine
	(3/4" N.P.T. cooling hose connections). All years.
20-0082	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 3"
20-0100	I.D. exhaust hose. Water cooled center discharge riser
20-0100	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 4"
	I.D. exhaust hose.
20-0102	Water cooled center discharge riser (3/4" N.P.T. cooling hose con-
	nection).
1-0104P	Adaptor package for fresh water
	cooled manifold (includes gaskets
	and block off plate).
1-0105	Center riser manifold-to-riser gasket
1-0106P	for fresh water cooling.
1 01001	Adaptor package for raw water cooling. Used in pre-heating applica-
	tions (includes gaskets and block off
	plate with vent hole).
1-0107	Center riser manifold-to-riser gasket
20-0082P	(raw water cooling). Riser mounting package for both
20-00021	20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package
	(with brass plugs) for both 20-0082
20.0004D	and 20-0100. Not pictured.
20-0084P	Straight exhaust adaptor (includes adaptor, hose and clamps). For use
	with 3 1/2" I.D. exhaust hose.
20-0085P	Straight exhaust adaptor (includes
	adaptor, hose and clamps). For use
20-0086P	with 2 1/2" I.D. exhaust hose.
20-0080P	90 degree exhaust elbow adaptor (includes adaptor, hose and clamps).
	For use with 2 1/2" I.D. exhaust hose.
20-0087P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 3" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
•••••••	For use with 3" I.D. exhaust hose.
20-0092P	45 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0093P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps).
	For use with 3 1/2" or 4" I.D. exhaust
20-0097	hose. 3" spacer block (complete with
20-007/	3" spacer block (complete with mounting hardware, gasket and 3/4"
	pipe plug). Capable of stacking.
FM-1-83P	Manifold mounting package (in-
	cludes bolts and pipe plugs).
FM-1-83SS-P	Stainless steel manifold mounting
	package (includes stainless bolts and brass plugs). Not pictured.
FM-47-0000	Manifold to cylinder head gasket.
Note.	mannora to cynnaer nead gusket.

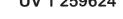
Note:



Universal Atomic 4 Log Style Direct Replacement



UV-1-259624	Water cooled manifold.
UV47-261050	Manifold to cylinder head gasket. Direct replacement for Universal gasket part # 261050.







Volvo 4 Cylinder Models AQ 115 and AQ 130 Log Style Direct Replacement



	1.00	
VO	1	824532

VO-1-824532	Dierect replacement water cooled exhaust manifold. Replaces Volvo part # 824532-6.
VO-20-825599	Direct replacement exhaust elbow. Replaces Volvo part # 825599-4.
VO47-856028	Direct replacement exhaust elbow to manifold gasket. Replaces Volvo part # 856028.



VO 20 825599



Barr Marine extends a 1 year warranty on this exhaust manifold.



Volvo 4 Cylinder Models AQ 120B, 125A, 140A, 145A BB, 140A and 145A Log Style Direct Replacement



VO 1 855387

VO-1-855387	Direct replacement water cooled exhaust manifold. Replaces Volvo part # 855387-7 and 834438-4.
VO47-855383	Exhaust manifold to cylinder head gasket (requires four gasket per engine).

Note:

Manifold includes all plugs, gaskets and mounting hardware to head.



Barr Marine extends a 1 year warranty on this exhaust manifold.



Volvo V8-307 and 350 C.I.D. All Models Center Riser Generic

Riser Generic	
CHV-1-83	Water cooled center discharge mani-
	fold to fit the small block GM engine
	(3/4" N.P.T. cooling hose con-
20-0082	nections). All years. Water cooled center discharge riser
20 0002	(3/4" N.P.T. cooling hose con-
	nection). Standard for use with 3"
	I.D. exhaust hose.
20-0100	Water cooled center discharge riser
	(3/4" N.P.T. cooling hose con- nection). Standard for use with 4"
	I.D. exhaust hose.
1-0104P	Adaptor package for fresh water
	cooled manifold (includes gaskets
1 0105	and block off plate).
1-0105	Center riser manifold-to-riser gasket for fresh water cooling.
1-0106P	Adaptor package for raw water
1 01001	cooling. Used in pre-heating applica-
	tions (includes gaskets and block off
1 0105	plate with vent hole).
1-0107	Center riser manifold-to-riser gasket (raw water cooling).
20-0082P	Riser mounting package for both
	20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package
	(with brass plugs) for both 20-0082
20-0084P	and 20-0100. Not pictured.
20-0084P	Straight exhaust adaptor (includes adaptor, hose and clamps). For use
	with 3 1/2" I.D. exhaust hose.
20-0085P	Straight exhaust adaptor (includes
	adaptor, hose and clamps). For use
20 0096D	with 2 1/2" I.D. exhaust hose.
20-0086P	90 degree exhaust elbow adaptor for I/O applications (includes adaptor,
	hose and clamps). For use with 2 1/2"
	I.D. exhaust hose.
20-0087P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0088P	30 degree exhaust elbow adaptor
20-00001	(includes adaptor, hose and clamps).
	For use with $\frac{1}{2}$ 1/2" I.D. exhaust hose.
20-0089P	30 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0092P	45 degree exhaust elbow adaptor
40-00741	(includes adaptor, hose and clamps).
	(includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose.
20-0093P	90 degree exhaust elbow adaptor
	(includes adaptor, hose and clamps). For use with 3 1/2" or 4" I.D. exhaust
	hose.
20-0097	
	3" spacer block (complete with mounting hardware, gasket and 3/4"
OTTL 1 AAD	pipe plug). Capable of stacking.
CHV-1-83P	Manifold mounting package (in-
CHV-1-83\$\$-P	cludes bolts and pipe plugs).
011 v - 1 - 03 3 3 - r	Stainless steel manifold mounting package (includes stainless bolts and
	brass plugs). Not pictured.
CHV-27-0083	Alternator bracket. Use where engine
	water pump is mounted on port side
CIIV 47 0000	of engine below alternator.
CHV-47-0000 OMC 20 0003	Manifold to cylinder head gasket.
OMC-20-0003	Hose bushing 3" to 3 1/2".
Note:	

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.



Volvo V8-307 and 350 C.I.D. Models AQ 200D, 200F, 225D, 225E, 225F, 255B, 260A, 271A, 280A, 290A 311A BB, 225A, 225 AV, 225B, 260A, 260B and 260C Center Riser Direct Replacement



VO 1 835804

VO-1-835804	Direct replacement water cooled exhaust manifold. Replaces Volvo part # 835804-6.
VO-20-855384	Direct replacement exhaust riser/ elbow. Replaces Volvo part # 855384-4.
VO-20-855384P	Exhaust riser/elbow mounting pack- age.
VO47-835908	Exhaust riser/elbow to manifold gasket.
VO47-841601	Exhaust manifold to cylinder head gasket

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.



VO 20 855384









Volvo/OMC V8- 5.7 Liter Cobra Center Riser Direct Replacement



OMC 1 914035



OMC 20 913784



OMC-1-914035	Direct replacement exhaust manifold. Replaces OMC part # 914035 and Volvo part # 3857723 (New Style).
OMC-20-913784	Direct replacement exhaust riser/ elbow. Replaces OMC # 913784 and Volvo part # 3863061 (New Style).
OMC-1-914035P	Exhaust manifold mounting package.
OMC-20-913784P	Exhaust riser/elbow mounting pack- age.
OMC47-909314	Exhaust manifold to cylinder head gasket.
OMC47-913783	Direct replacement exhaust riser/ elbow to manifold gasket.
50-512-017	Replacement 1/2" N.P.T. to 1" hose (straight)/brass hose fitting.

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.





OMC47 909314







Waukesha V8-302 and 351 C.I.D. All Years Center Riser Generic

	FM 1	83	
20 01	00		20 0082
20 0097		34P	20 0085P
20 0086P	20 008	37P	20 0088P
20 0089P	20 0	092P	20 0093P
		FM 1 83	• • • •
	1 04P		06P
1 0105	1 0107	FM	47 0000

FM-1-83 Water cooled center discharge main-fold to fit the small block Ford engine (3/4" N.P.T. cooling hose connection). Standard for use with 3" I.D. exhaust hose. 20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose connection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose connection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. Used in pre-heating applications (includes gaskets and block off plate). 1-0106P Adaptor package for fresh water cooling. Used in pre-heating applications (includes gaskets and block off plate with vert hole). 1-0107 Center riser manifold-to-riser gasket for fresh water cooling. 20-0082P Riser mounting package for both 20-0082 and 20-0100. Not pictured. 20-0082P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0082P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0082P Straight exhaust adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0082P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0085P 30 degree exhaust elbow adaptor (includ	EM 1 92	Water cooled center dischance
(3/4" N.P.T. cooling hose con- nections). All years. 20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. 1-0106P Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Riser mounting package for both 20-0082and 20-0100. Not pictured. 20-0082P Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured. 20-0084P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0085P Straight exhaust adaptor, hose and clamps). For use with 3 'I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3' I.D. exhaust hose. 20-0087P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3' I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3'	FM-1-83	Water cooled center discharge mani- fold to fit the small block Ford engine
nections). All years. 20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. 1-0106P Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Stainless steel mounting package for both 20-0082 and 20-0100. 20-0084P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0085P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 'I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 'I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes		(3/4" N PT cooling hose con-
20-0082 Water cooled center discharge riser (3/4" N.P.T. cooling hose connection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose connection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. Used in pre-heating applications (includes gaskets and block off plate). 1-0106P Adaptor package for raw water cooling. Used in pre-heating applications (includes gaskets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Riser mounting package for both 20-0082 and 20-0100. 20-0082P Staiplers steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured. 20-0084P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0085P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0087P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D		
 (3/4" N.P.T. cooling hose con- nection). Standard for use with 3" I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. 1-0106P Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Riser mounting package for both 20-0082 and 20-0100. 20-0082SS-P Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured. 20-0084P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0085P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3" I.D. ex	20-0082	
I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. 1-0106P Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Riser mounting package for both 20-0082 and 20-0100. 20-0082P Staiples steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured. 20-0084P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0085P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 'I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 'I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 'I.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 'I.D. exhaust hose.	20 0002	(3/4" N.P.T. cooling hose con-
I.D. exhaust hose. 20-0100 Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose. 1-0104P Adaptor package for fresh water cooled manifold (includes gaskets and block off plate). 1-0105 Center riser manifold-to-riser gasket for fresh water cooling. 1-0106P Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole). 1-0107 Center riser manifold-to-riser gasket (raw water cooling). 20-0082P Riser mounting package for both 20-0082 and 20-0100. 20-0082SS-P Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100. Not pictured. 20-0085P Straight exhaust adaptor (includes adaptor, hose and clamps). For use with 3 1/2" I.D. exhaust hose. 20-0086P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 2 1/2" I.D. exhaust hose. 20-0087P 90 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 ''.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 ''.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 ''.D. exhaust hose. 20-0088P 30 degree exhaust elbow adaptor (includes adaptor, hose and clamps). For use with 3 ''.D. exhaust hose. <th></th> <th>nection). Standard for use with 3"</th>		nection). Standard for use with 3"
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		package (includes stainless bolts and
FM-47-0000 Manifold to cylinder head gasket.		
· · · · · · · · · · · · · · · · · · ·	FM-47-0000	Manifold to cylinder head gasket.
Note:	Note	

Note:

Manifold includes all plugs, gaskets and mounting hardware to head. Risers include plugs, gasket and mounting hardware to mount to manifold.



Center Discharge Exhaust Riser 4"

0100



20 0100







1 0107



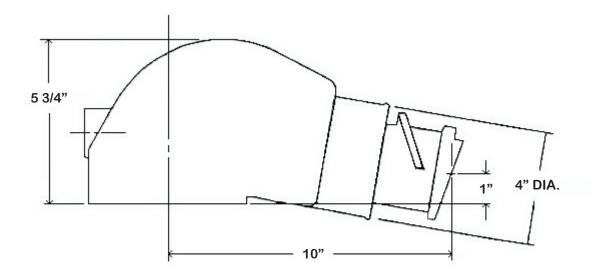
1 0105

20-0100	Water cooled center discharge riser (3/4" N.P.T. cooling hose con- nection). Standard for use with 4" I.D. exhaust hose.
1-0104P	Adaptor package for fresh water cooled manifold (includes gaskets and block off plate).
1-0105	Center riser manifold-to-riser gasket for fresh water cooling.
1-0106P	Adaptor package for raw water cooling. Used in pre-heating applica- tions (includes gaskets and block off plate with vent hole).
1-0107	Center riser manifold-to-riser gasket (raw water cooling).
20-0082P	Riser mounting package for both 20-0082 and 20-0100.
20-0082SS-P	Stainless steel mounting package (with brass plugs) for both 20-0082 and 20-0100.

The Barr Center Riser is designed to limit back pressure on the engine. This riser is to be utilized with the Barr CHV-1-83, FM-1-83 and CHVA-1-84 manifolds!

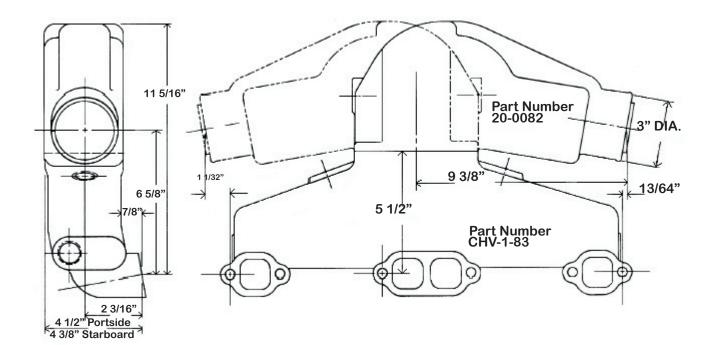
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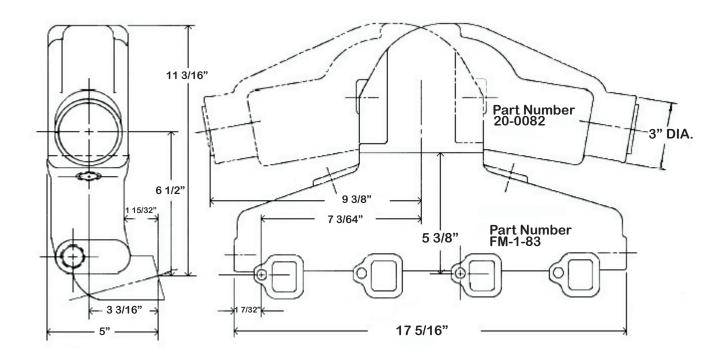
Riser includes plug, gasket and mounting hardware to mount to manifold.





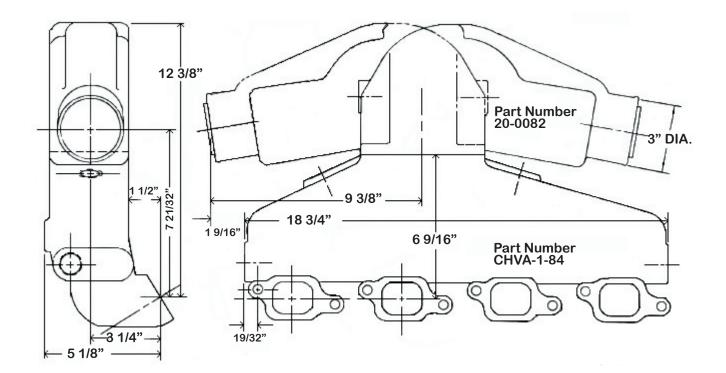
Center Discharge Manifold and Riser System Dimensions







Center Discharge Manifold and Riser System Dimensions





Exhaust Risers and Connectors

Part#	Detailed Description
1-0001	AdaptorAdaptor for Barr manifold replacing size "A" end plate (2" pipe). Order (1) for 4 or 6 cylinder engines or (2) for V8 cylinder engines.
1-0081	Adaptor for Barr round-type Oldsmobile conversion manifold (OR-1-73). Order (2) for Oldsmobile V8 cylinder engines.
1-0012L	Adaptor for Chris Craft V8 283 C.I.D. manifolds prior to Models F, G, K and Q (three pass system), "L" for left side. Order (1) for Chris Craft V8 cylinder engines (port/left side).
1-0012R	Adaptor for Chris Craft V8 283 C.I.D. manifolds prior to Models F, G, K and Q (three pass system), "R" for right side. Order (1) for Chris Craft V8 cylinder engines (starboard/right side).
1-0283A	Adaptor for Chris Craft V8 283, 302, 305, 307, 327 and 350 C.I.D. manifolds; models F, G and K (two pass system). Order 2 for Chris Craft V8 cylinder engines.
1-0283L	Adaptor for Chris Craft V8 283, 302, 305, 307, 327 and 350 C.I.D. manifolds; model Q (single pass system), "L" for left side. Order (1) for Chris Craft V8 cylinder engines (port/left side).
1-0283R	Adaptor for Chris Craft V8 283, 302, 305, 307, 327 and 350 C.I.D. manifolds; model Q (single pass system), "R" for right side. Order (1) for Chris Craft V8 cylinder engines (starboard/right side).
1-0007	Adaptor for Chrysler V8 383, 413 and 440 C.I.D. manifolds (4 bolt), Chrysler Ace and Crown Engines. Order (1) for Ace and Crown 6 cylinder engines and (2) for Chrysler V8 engines.
1-0013L	Adaptor for Chrysler V8 318 C.I.D. (prior to 1966); "L" for left side. Order (1) for Chrysler V8 engines (port/left side).
1-0013R	Adaptor for Chrysler V8 318 C.I.D. (prior to 1966); "R" for right side. Order (1) for Chrysler V8 engines (port/left side).
1-0071	Adaptor for Chrysler V8, Model M 81 (225 H.P.). Order (2) for Chrysler M 81 V8 engines.
CM-1-6672C	Adaptor for Chrysler V8 318 C.I.D. (after 1966). Order (2) for Chrysler V8 engines.
1-0002	Adaptor for Graymarine V8 327 C.I.D. (4 bolt flange). Order (2) for Graymarine V8 (4 bolt) engines.
1-0069	Adaptor for Graymarine V8 327 C.I.D. (3 bolt flange). Order (2) for Graymarine V8 (3 bolt) engines.
1-0070	Adaptor for Palmer V8, Model 14-345
1-0014	Universal adaptor to fit any engine with 3 1/4" or smaller manifold end (drill to suit manifold). Order (1) for 4 or 6 cylinder engines or (2) for V8 cylinder engines.
20-0008	Adaptor for 2" standard N.P.T. pipe thread. Order (1) for 4 or 6 cylinder engines or (2) for V8 cylinder engines.
20-0004	Adaptor for 2 1/2" standard N.P.T. pipe thread. Order (1) for 4 or 6 cylinder engines or (2) for V8 cylinder engines.



Exhaust Risers and Connectors





20 0031



20-0000	Swivel-type high discharge exhaust riser; 8 1/2" riser protection. Re- quires (1) mounting hardware kit #20-0002P per riser. Use only with 2 7/8" to 3" I.D. exhaust hose.
20-0002P	Mounting hardware kit.
20-0031	Swivel-type 90 degree exhaust elbow connector with internal water dis- charge. Accepts 2 1/2" to 3" I.D. ex- haust hose. Requires (1) mounting hardware kit #20-0002P per elbow.
20-0034 or 20-0035	Exhaust connector #20-0035 (for 2 1/2" I.D. exhaust hose) or exhaust connector #20-0034 (for 3" I.D. exhaust hose). Connects to #20-0039 using (1) #20-0002P per connector.
20-0039	Fully jacketed swivel-type exhaust riser; 7" riser protection. Requires (2) mounting hardware kits #20-0002P ((1) kit to mount riser to manifold and (1) kit to mount elbows #20-0034 or #20-0035 to riser).
20-0055	Swivel-type 30 degree exhaust elbow connector; fully jacketed. Accepts 2 1/2" or 3" I.D. exhaust hose. Re- quires (1) mounting hardware kit #20-0002P per elbow.

Note:

Note: A header adaptor style end cap must be installed on the exhaust end of the log manifold in order to mount these risers or elbows. See the "Manifold End Plate and Gasket Identification Listing" page at the begin-ning of this catalog for the proper end plates specific to your aplication.





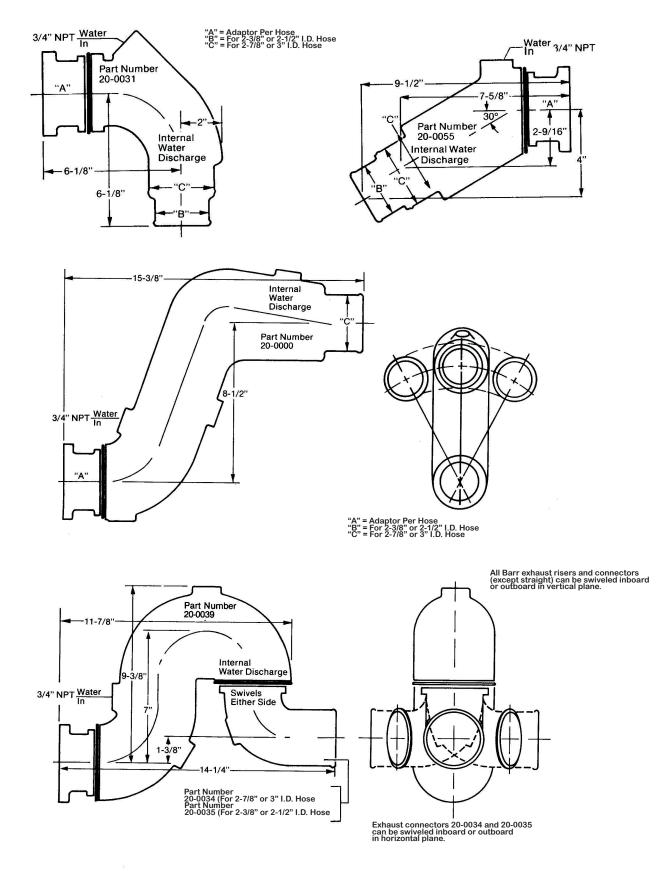


20 0034





Exhaust Risers and Connectors





Thermostat and Thermostat Housing Assemblies Barr Marine Style



CHV 29 0120



CHV 29 80



CHVA 29 78



FM 29 0083

CHV-29-0120	Thermostat housing assembly for dual pump cooling system on 4 cyl. Chevrolet engines.
CHV-29-80	Thermostat housing assembly for dual pump cooling system on Chev- rolet V6 and Small Block V8 engines.
CHVA-29-78	Thermostat housing assembly for dual pump cooling system on Big Block Chevrolet V8's.
CM-29-3675303	Chrysler thermostat (140 degree).
CM-29-4142522	Chrysler thermostat (163 degree).
CR-29-96319	Crusader thermostat (143 degree).
FM-29-0083	Thermostat housing assembly for dual pump system on Small Block Ford V8's.
MC-29-59078	MerCruiser thermostat for models 120, 140, 120R/140R, 160, 165 and 200.
MC-29-59137	MerCruiser thermostat for models 888 (Ford), 225 (Ford), 233 (Ford) and 255 (Ford).
OMC-29-383307	OMC thermostat (160 degree).
OR-29-74	Thermostat housing assembly for dual pump cooling system on Olds- mobile V8's (350, 403 and 455 C.I.D.).



OR 29 74







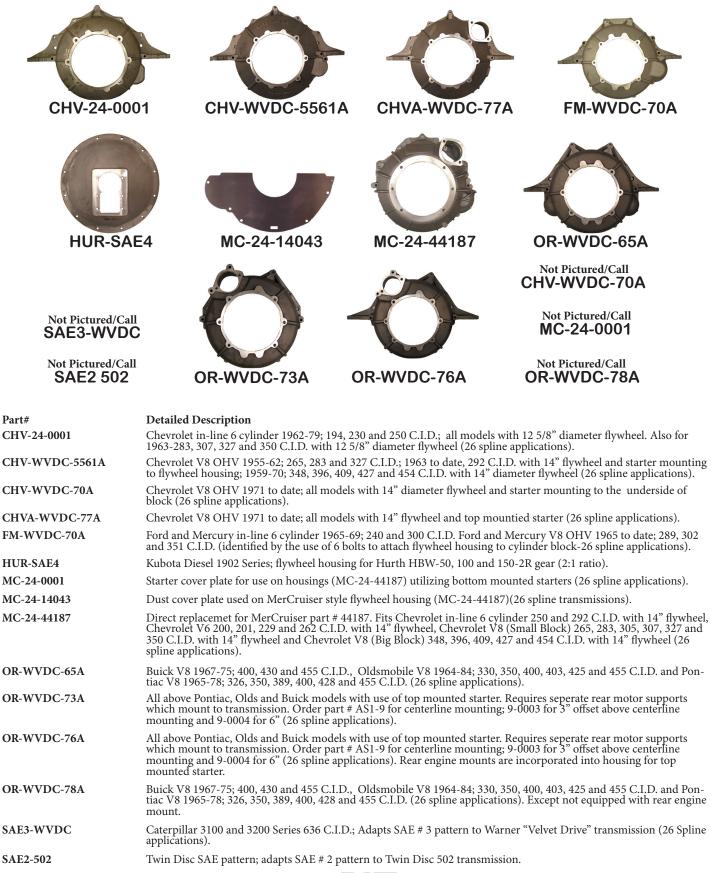






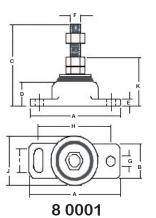


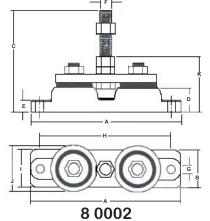
Adaptor Bell Housings





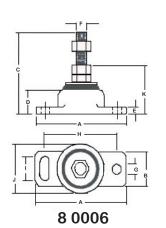
Rubber Engine Mounts

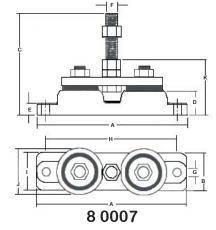


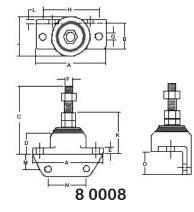


8 0004	

8-0001	Rubber engine mount; single. Adjus- table both vertically and horizontally to facilitate engine-propeller shaft alignment. Each mount has a capacity of 350 lbs. The rubber cushions are locked to the base and are oil and fuel resistant.
8-0002	Rubber engine mount; double. Incre- ased capacity for Diesel and extra heavy-duty applications. The rubber cushions are locked to the base, not vulcanized and can be replaced. This mount is vertically adjustable to facil- itate engine alignment. Each mount has a capacity of 350 lbs.
8-0004	Rubber engine mount; single. This mount retains all of the fine features of the 8-0001 augmented by an ad- ditional tie-down area to bolt to the stringer pads. Each mount has a cap- acity of 350 lbs.
8-0006	Rubber engine mount; single. Adjus- table both vertically and horizontally to facilitate engine-propeller shaft alignment. Each mount has a capacit of 350 lbs. The rubber cushions are locked to the base and are oil and fuel resistant.
8-0007	Rubber engine mount; double. Incre- ased capacity for Diesel and extra heavy-duty applications. The rubber cushions are locked to the base, not vulcanized and can be replaced. This mount is vertically adjustable to facil itate engine alignment. Each mount has a capacity of 550 lbs.
8-0008	Rubber engine mount; single. This mount retains all of the fine features of the 8-0006 augmented by an ad- ditional tie-down area to bolt to the stringer pads. Each mount has a cap- acity of 350 lbs.







Specifications For Rubber Engine Mounts

Part # 8-0001	A 5	B 1 3/4	C 4 1/2	D 1 5/16	E 5/8	F 5/8 - 18UNF	Hold Down Bolt Size G 7/16	H 4	l 1 3/16	J 2 1/2	K 2 11/16	L N/A	M N/A	N N/A	O N/A	Max Rated Load Per Mount In Lbs. 350	Deflection at Avg. Rated Load In Ins. 0.060	Packaged Weight In Lbs. 3
8-0002	8 1/4	2	5 5/8	1 5/16	5/8	5/8 - 18UNF	7/16	7 1/4	N/A	2 1/2	3 1/8	N/A	N/A	N/A	N/A	550	0.060	5
8-0004	5	1 3/4	4 1/2	1 5/16	5/8	5/8 - 18UNF	7/16	4	N/A	2 3/4	2 11/16	1/4	1	2 3/4	1 1/2	350	0.060	3.5
8-0006	5	1 3/4	4 1/2	1 5/16	5/8	3/4 - 16UNF	7/16	4	1 3/16	2 1/2	2 11/16	N/A	N/A	N/A	N/A	350	0.060	3
8-0007	8 1/4	2	5 5/8	1 5/16	5/8	3/4 - 16UNF	7/16	7 1/4	N/A	2 1/2	N/A	N/A	N/A	N/A	N/A	550	0.060	5
8-0008	5	1 3/4	4 1/2	1 5/16	5/8	3/4 - 16UNF	7/16	4	N/A	2 3/4	2 11/16	1/4	1	2 3/4	1 1/2	350	0.060	3



Torsional Dampers



AS3-K2C	Heavy duty damper for diesel applic- ations up to 15" diameter for 26
	spline transmissions. Not pictured.
AS4-K1C	6.50" diameter damper (5.593" bolt circle diameter) for 26 spline trans- missions as used on flywheel forward Flagship and Chris Craft installations Replaces Chris Craft part # 16.99-08334.
AS4-K2C	Three-legged damper for 26 spline transmissions and flywheel diameters more than 13.32". For V8 engines up to 350 C.I.D.
A\$5-K2C	Full circle damper 13.25" diameter for 26 spline transmissions. For eng- ines up to 370 C.I.D. Not pictured.
AS7-K1C	7.12" diameter damper (6.58" bolt circle diameter) for 26 transmissions
A\$7-K2C	Full circle damper 13.25" diameter for 26 spline transmissions. For eng- ines up to 454 C.I.D.
AS8-K2C	Three-legged damper for 26 spline transmissions and flywheel diameters less than 13.32". For V8 engines up to 350 C.I.D.
1004-65-0001	Full circle damper 13.87" diameter for 26 spline transmissions (use on CAT 3208's and Detroit Diesel 6-71's). Not pictured.







AS4 K2C



AS8 K2C



Flame Arrestors



CAO 10 59

CAO-10-59	Flame arrestor; throat diameter- 4 1/4" and height-2 1/8".
CHV-10-56	Flame arrestor; throat diameter-2 5/8" and height-1 7/8".
LEM-10-58	Flame arrestor; throat diameter- 5 1/8" and height-3 1/4".
OR-10-61	Flame arrestor; throat diameter- 3 1/8" and height-1 7/8".
OR-10-66	Flame arrestor; throat diameter- 5 1/8" and height-2 1/4".



CHV 10 56



OR 10 61







CHRIS CRAFT TO BARR

CHRIS CRAFT PART #
16.20-07593
16.20-07605
16.20-07686
16.20-08288
16.20-08289
16.50-05944
16.50-06022
16.50-07290
16.50-07596
16.50-07597
16.50-07681

CHRYSLER TO BARR

CHRYSLER PART #

2469556

2469639

2600402

2846106

2846689

2847404

2847405

2847623

3527781

3527794

3619659

3675826

3745639

4142322

4417063

E7081M

E9232M

E9233M

CC 20 07593 CC 20 07605 CC 1 07686 CC 20 08288 CC 20 08289 CC47 1650 05944 CC47 1650 07290 CC47 1650 07290 CC47 1650 07596 CC47 1650 07597 CC47 1650 07681 BARR PART # CM 1 6672A

BARR PART #

CM 20 2847405 CM 20 2600402 CM 1 6672B CM 20 6674 CM 20 4142411 CM 20 2847405 CM 20 4142411 CM 1 6672E CM 20 6672 CM 1 5972A CM 1 6677A CM 20 4142411 CM 1 6677A CM 1 4417063 CM 1 5972A CM 20 9232 CM 20 4142411

CRUSADER TO BARR

CRUSADER PART #	BARR PART #
20471	CR 50 20471
22032	CR 50 22032
22033	CR 50 22033
96108	CR47 C 96108
96120	CR 1 97752
96121	CR 1 97753
96306	CHV 47 0000
96369	CR 50 96369
96560	CR 20 96560
96562	CR47 C 96562
96653	CHVA 47 0000
97169	CR 20 97169
97387	CR 20 97387
97624	CR 20 97624
97752	CR 1 97752
97753	CR 1 97753

CRUSADER TO BARR (CONTINUED)

CRUSADER PART #	BARR PART #
97772	CR 20 97772
97924	CR 20 97924
97992	CR 1 97992
97993	CR 1 97993
98068	CR 20 98068
98126	CR 20 98126
98243	CR 1 98243

MARINE POWER TO BARR

MARINE POWER PART #	BARR PART #
0000-815H7	50 525 020
0991-110	CHVA 1 84
0991-600	CHVA 47 0000
0992-000	20 0082
0992-001	1 0106P
0992-300	1 0104P
0992-400	MC 20 44354
0992-593	20 0100
0994-000	CHV 1 83
0994-600	CHV 47 0000

MERCRUISER TO BARR

MERC. PART #	BARR PART #
97429	MC 29 97429
12076A2	MC 20 12076
47441A1	MC 29 47441
47442A1	MC 20 47442
47638A1	1 47638
47735A17	MC 1 47735
47736A17	MC 1 47736
47737A10	MC 1 47737
47738A10	MC 1 47738
55538A2	MC 20 55538
58759A14	MC 1 58759
59498A1	MC 29 59498
60252A2	1 60252
60783A3	MC 29 60783
61851A3	MC 20 61851A2
62898A1	MC 29 62898
63122A13	MC 1 63122
63588A1	MC 29 63588
65603A13	MC 1 65603
65604A12	MC 1 65604
72963A9	MC 20 72963
73811A1	1 73811
73813A1	1 54870
73813A1	1 73813
76325A9	MC 20 76325
76351A2	MC 20 60426
76351A2	MC 20 76351
76668A3	MC 20 76668



MERCRUISER TO BARR (CONTINUED)

MERCRUISER TO BARR (CONTINUED)		OMC TO BARR (CONTINUED)			
MERC. PART #	BARR PART #	OMC PART #	BARR PART#		
76771A3	MC 20 76771	979758	OMC 1 979758		
77234A7	MC 1 77234	979759	OMC 1 979759		
77235A8	MC 1 77235	979760	OMC 1 979760		
78984A1	MC 29 78984	979761	OMC 1 979761		
78985A1	MC 29 78985	980083	OMC 1 984054		
806867A8	MC 1 99798	980188	OMC 20 910380		
807078A6	MC 1 89011	980382	OMC 24 0000		
807476A6	MC 20 93320A3	980459	OMC 1 981462		
807477A5	MC 20 93322A3	980460	OMC 1 984054		
807988A2	MC 20 44354	980536	OMC 20 980636		
860246A10	MC 1 87114	980572	OMC 1 980959		
861493A3	MC 29 47587	980617	OMC 20 980617		
861493A3	MC 29 60372	980957	OMC 1 984054		
87290A4	MC 29 87290	980959	OMC 1 980959		
90736A18	MC 29 90736	981281	OMC 20 981281		
90880A2	MC 20 90880	982490	OMC 1 984054		
95862A5	MC 1 95862	982680	OMC 20 982680		
96705A1	MC 1 52390	2000	0101C 20 902000		
96705A10	MC 1 96705				
97428T 2	MC 29 97428	OSCO TO BARR			
98502A2	MC 20 98502	OSCO#	EDM PART#		
98504A3	MC 20 98504	106	CM 1 6672B		
99746A17	MC 1 99746	121	CM 1 5972C		
NLA	MC 20 61811A4	150	CM 1 5972B		
NLA	MC 29 79468	424	CM 1 5972D		
1623-8951A37	MC51 1623 8951A27	557	CM 1 6672E		
		639	CM 20 2847405		
		689	CM 20 6674		
OMC TO BARR		794	CM 20 6672		
OMC PART #	BARR PART#	826	CM 1 6677A		
311550	1 910280	992	20 0082		
312148	1 312148	994	CHV 1 83		
312149	1 312149	2018	20 0102		
314810	OMC 29 982201	2076	MC 20 12076		
384560	OMC 24 0000	2441	OMC 1 912441		
385799	OMC 20 910380	2442	OMC 1 912442		
907776	OMC 20 981281	4354	MC 20 44354		
907777	OMC 20 981281	5538	MC 20 55538		
907885	1 907885	5603	MC 1 65603		
908719	1 908719	5604	MC 1 65604		
909280	OMC 1 912441	5639	CM 20 4142411		
910144	OMC 1 912442	5805	VO 1 835804		
910280	1 910280	5862	MC 1 95862		
910380	OMC 20 910380	6022	CC47 1650 06022		
910384	1 910384	6108	CR47 C 96108		
912441	OMC 1 912441	6325	MC 20 76325		
912442	OMC 1 912442	6351	MC 20 76351		
913784	OMC 20 913784	6562	CR47 C 96562		
914035	OMC 1 914035	6705	MC 1 96705		
979729	OMC 1 981462	6771	MC 20 76771		
979730	OMC 20 980536	7056	CC 1 07686		



OSCO TO BARR (CONTINUED)

OSCO TO BARR (CONTINUED)		OSCO TO BARR (CONTINUED)			
OSCO PART #	BARR PART #	OSCO PART #	BARR PART #		
7081	CM 1 5972A	8503-GB	MC47 27 41811		
7169	CR 20 97169	8503-GR	MC47 27 41813		
7296	CR 20 97296	9863-T	OMC 20 982680		
7387	CR 20 97387	992-G	1 0107		
7624	CR 20 97624	992-G-FW	1 0105		
7752	CR 1 97752	992MK	20 0082P		
7753	CR 1 97753	994-S3	20 0097		
7772	CR 20 97772	BG	1 0019		
7924	CR 20 97924	CV-GH	CHV 47 0000		
7992	CR 1 97992	CW994	CHVA 1 84		
7993	CR 1 97993	CW-GH	CHVA 47 0000		
8068	CR 20 98068	CY4 GH	CHV 47 0120		
8243	CR 1 98243	CY-MG	MC 1 6364G		
8759	MC 1 58759	F66CS	50 512 019		
9011	MC 1 89011	F68C9	50 525 020		
9234	CM 20 9234	F68CS	50 512 020		
9745	MC 1 99746	FL994	FM 1 83		
9798	MC 1 99798	MC552-BB	MC 29 90736		
41812	MC47 27 41812	MC552-SB	MC 29 87290		
47510	MC47 27 47510	MC553-SB	MC 29 78984		
48818	MC47 27 48818	MC55-TBB	MC 29 47442		
50456	OMC 20 913784	MC55-TSB	MC 29 47441		
52076	MC47 27 52076	V0418	VO 1 855387		
MC553-BB	MC 29 78985	10110	10100000		
54870	1 54870				
56879	VO 20 855384	SIERRA TO BARR			
60252	1 60252	SIERRA PART #	BARR PART #		
99204	20 0100	18-0113	MC47 27 97542		
0188	OMC 20 910380	18-0114	OMC47 907761		
0402	CM 20 2600402	18-0183	MC47 27 73866		
05944	CC47 1650 05944	18-0332	MC47 27 35898		
0879	MC 20 90880	18-0335	MC47 27 39947		
106-Т	CM 1 6672H	18-0353	MC47 27 58764		
143-DEG	MC 29 59137	18-0356	MC47 27 64692		
1851(SINGLE)	MC 20 61851A2	18-0364	MC47 27 73812		
3320(SINGLE)	MC 20 93320A3	18-0418	MC47 27 46820		
3322(SINGLE)	MC 20 93322A3	18-0672	MC47 27 41811		
480-MK	CM 20 6672P	18-0872	MC47 27 33395		
480-MK	CM 20 6674P	18-0885	MC47 27 48042		
480-MK-FW	CM 20 6672J P	18-0897	MC47 27 41813		
480-MK-FW	CM 20 6674J P	18-0903	MC47 27 49110		
7081-GH	CM 1 5972P	18-0928	MC47 27 73814		
7087-MK	CM 20 9232P	18-0943	OMC47 909786		
7087-OR	CM 20 9225/6	18-0954	MC47 27 92720		
7114B2	MC 1 87114	18-0992	MC47 27 68715		
7234B	MC 1 77234	18-1203	MC47 27 53354		
7235B	MC 1 77235	18-1204	MC47 27 96429		
826GH	CM 1 6672P	18-1209	MC47 27 39917		
826-MK-SS	CM 1 6677 SS P	18-1210	MC47 27 39923		
8503A	MC 20 98504	18-1902	OMC 1 912441		
8503-G0	MC47 27 87105	18-1903	OMC 1 912442		



SIERRA TO BARR (CONTINUED)

SIERRA TO BARR (CONTINUED)

SIERRA PART #	BARR PART #	SIERRA PART #	BARR PART #
18-1904	OMC 1 980959	18-2146	MC 51 59830
18-1916	CR 20 97169	18-2554	MC47 27 41812
18-1919	CR 20 97387	18-2819	MC47 27 39915
18-1921	OMC 20 982680	18-2830	MC47 27 46401
18-1922	OMC 20 910380	18-2831	MC47 27 47590
18-1924	CR 20 97624	18-2832	MC47 27 48043
18-1927	CR 20 97772	18-2833	MC47 27 99777
18-1929	CR 1 97992	18-2844	MC47 27 48818
18-1930-1	VO 1 855387	18-2849	MC47 27 87105
18-1931-1	VO 1 835804	18-2850	OMC47 908935
18-1933	CR 1 97993	18-2854	1 0107
18-1935-1	VO 20 855384	18-2859	OMC47 311131
18-1940	CM 1 6677A	18-2860	OMC47 311130
18-1941	CM 1 6672B	18-2861	OMC47 311121
18-1945	CM 20 6674	18-2875	OMC47 908013
18-1946	CM 20 6672	18-2883	OMC47 907775
18-1950-1	MC 1 77234	18-2896	MC47 27 52546
18-1951-1	MC 1 77235	18-2743	MC47 27 94996
18-1952-1	MC 1 99746	18-2820	MC47 27 64818
18-1953	MC 1 87114	18-2902	MC47 27 33395
18-1954	MC 1 95862	18-2909	MC47 27 97757
18-1955	MC 1 96705	18-2917	MC47 27 53045
18-1956-1	MC 1 99798	18-2941	CM 1 6672D
18-1957	MC 1 89011	18-2949	CHV47 0000
18-1958	MC 1 65604	18-2971	VO47 835908
18-1959	MC 1 63122	18-4008	MC 20 60207
18-1960-1	MC 1 58759	18-4009	1 60252
18-1961	MC 1 52390	18-4360	CM 1 6672B P
18-1962	MC 1 65603	18-4363	FM 1 83P
18-1968	MC 29 47587	18-4364	20 0082P
18-1969	MC 29 60372	18-4367	MC47 27
18-1970-1	MC 20 98504	18-4394	99777A1
18-1971	MC 20 76351	18-4395	MC47 27
18-1972	MC 20 76325	18-4396	33395A1
18-1973	MC 20 55538	18-4397	MC47 27
18-1974-1	MC 20 98502	18-4398	35898A4
18-1975	MC 20 12076	18-4399	MC47 27
18-1976-1	MC 20 44354	18-4461	46401A1
18-1977	MC 29 47441		
18-1978	MC 20 76771	VOLVO TO BARR	
18-1983	CR 1 98243	VOLVO PART #	
18-1990	1 73813		BARR PART #
18-1991	20 0089P	824532-6	VO 1 824532
18-1992-1	20 0087P	825599-4	VO 20 825599
18-1993	MC 29 78984	834438-4	VO 1 855387
18-1994	MC 29 87290	835804-6	VO 1 835804
18-1995	1 47368	855384-4	VO 20 855384
18-1997-1	CHV 1 83	855387-7	VO 1 855387
18-1998-1	FM 1 83	856883-4	VO 1 835804
18-1999	20 0082	3857723	OMC 1 914034
18-2104	MC 51 75832	3863031	OMC 20 913784









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It's The Law - Know Your Rights!

Consumers are protected from manufacturers who attempt to unfairly chain the purchasers of their products to the continued purchase of their maintenance and repair products and authorized services. Congress has provided consumers with this protection under the Magnuson-Moss Warranty Act as well as specific provisions of the Federal Trade Commission Improvement Act.

It's against the law for an original equipment manufacturer to inform consumers that their warranty would be void should they use other than genuine replacement parts or if service were to be preformed by anyone other than an authorized "OEM" dealer unless, of course, such parts and service were to be performed "Free of Charge" under the terms of the warranty.

The laws were enacted to grant the consumers and dealers the basic right to select replacement parts from competent manufacturers without fear of jeopardizing their warranty. The law directly provides the consumer the right of choice, the right to an affordable alternative choice of manufactured product. Of course, the original equipment manufacturer is not responsible for product failures or damages caused by product failures of product manufactured by others. Such damages become the responsibility of the company providing such products under the terms of their own warranties. Barr Marine by EDM originated the three-year limited warranty that has recently become the standard for all others to follow. Our warranty can be found in our catalog directly following this notice.

Barr Marine by EDM has been a manufacturer of Marine Engine Parts for seventy-three years. The company has and continues to manufacture marine engine parts for many of the original equipment manufacturers. For years, we have represented the affordable alternative choice for your needs. We thank you for your continued support!

Barr Marine By EDM P.O. Box 190 100 Douglas Way Natural Bridge Station, VA. 24579 Ph. # 1-540-291-4180 Fax # 1-540-291-4185



BARR MARINE BY EDM 1 YEAR ENGINE WARRANTY

Long Blocks Pleasure Boat Applications

12 Months Parts and Labor* 24 Months Parts

Commercial or Charter Boats

12 Months Parts & Labor

Barr Marine expressly warrants that its engine is of good quality and free from defects in materials or workmanship. Purchaser acknowledges that Barr Marine has made no affirmation of fact or promise relating to its engines outside this Limited Warranty and Barr Marine has provided the purchaser no description, sample or model of its engine upon which the purchaser has relied in deciding to purchase a Barr Marine engine. Barr Marine will, at its sole discretion, replace defective parts or a complete engine. All repairs will be made at the seller's or distributors cost, plus applicable labor pursuant to the Labor Policy set forth below. PRIOR AUTHORI-ZATION IS REQUIRED FROM BARR MARINE BEFORE WARRANTY WORK IS BEGUN. Call Barr Marine at (866) 255-9265 for a numbered authorization. It is the sole responsibility of the ultimate purchaser/ owner to pay for such work and submit the alleged defective parts, written repair order showing all charges, and a written receipt for payment of all charges to Barr Marine for review and determination by Barr Marine that the engine failure is or is not covered by this Limited Warranty. Repairs or replacements do not extend this Limited Warranty.

Transferable

This Limited Warranty is transferable and is not limited to the ultimate purchase/owner at the time of the sale.

Labor Policy

Barr Marine will pay labor claims only to repair facilities it has authorized. Barr Marine will not be liable for or pay any labor claims on Barr Marine engines installed by a third party who is not a certified marine mechanic (Marine Certificate or equivalent). All labor expense for field repairs, removal or reinstallation shall be limited to that expense and to those hours listed in the most recent Motors Flat Rate Manual, or equivalent manual pre- approved by Barr Marine, at the prevailing labor rate for the area but not to exceed \$40.00 per hour. In no event shall the total amount of labor cost exceed \$350.00 for all boats 20 foot or shorter, \$450.00 for cabin cruisers 21 foot or longer. A \$100.00 crane allowance will be allowed on cabin cruisers 21 feet or longer in addition to the limitation on labor costs.

OWNER OBLIGATIONS

After 10 hours upon initial startup, ultimate purchase/owner shall assure that a certified licensed and qualified mechanic authorized by Barr Marine inspects your engine, which inspection should include, but is not limited to, adjustment of tappets (if applicable), adjustment of valves, timing and carburetor adjustments, tightening of gasket bolts (Barr Marine recommends retorquing gasket bolts regardless of gasket type), and a change of oil and oil filter. Carefully monitor oil levels for the first 100 hours as oil consumption may be higher during this period. Use good quality motor oil of the appropriate grade and viscosity as recommended by the original engine manufacturer. Barr Marine recommends against the use of synthetic oils or non-detergent oil, the use of which by the ultimate purchaser/owner shall void this Limited Warranty. Proper oil pressure and lubrication are mandatory for good engine break-in. All boats should be equipped with gauges or lights to indicate engine temperature and oil pressure. DO NOT OPERATE BOAT WITH ABNORMAL OIL PRESSURE OR WATER TEMPERATURE. After initial startup, avoid excessive RPM and keep boat on plane. Vary RPM range for first 3 to 5 hours running time. High engine RPM may damage your new engine through friction and high temperatures. Avoid long period of idling. Engine overheating and failure due to lack of lubrication can be prevented by adequate monitoring of all gauges or lights and should never in the absence of neglect by the purchaser result in engine damage.



Limitations & Exclusions

ALL OTHER WARRANTIES EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES (INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE HEREBY EXCLUDED AND NO WARRANTIES EXIST WHICH EX-TEND BEYOND THE DESCRIPTION IN THE EXPRESS LIMITED WARRANTY ON THE FACE OF THIS DOCUMENT WITH REGARD TO ANY ENGINE OR PART PROVIDED BY BARR MARINE. NO ORAL STATMENTS BY ANY PERSON, DISTRIBU-TOR OR SALESMAN MAY MODIFY OR CHANGE THIS LIMITED WARRANTY. NO TERM OF ANY PURCHASE ORDER OR OTHER FORM THE PURCHASER OR DISTRIBUTOR/SELLER SHALL MODIFY OR CHANGE THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT AN UNCONDITIONAL WARRANTY AGAINST ALL HAZARDS OR FAILURES. BARR MARINE SHALL NOT BE RESPONSIBLE FOR:

DAMAGE OR REPAIRS REQUIRED AS A CONSEQUENCE OF FAULTY INSTALLATIONMISAPPLICATION, ABUSE, IM-PROPER SERVICING, UNAUTHORIZED ALTERATION OR IMPROPER OPERATION.

PARTS NOT SUPPLIED BY BARR MARINE (INCLUDING BUT NOT LIMITED TO PAN, MANIFOLDS AND COVERS, WATER PUMPS, FUEL PUMPS, DISTRIBUTOR AND CARBURATOR OR FUEL INJECTION SYSTEMS), OR DAMAGES RESULTING FROM THE USE OF PARTS NOT SUPPLIED BY BARR MARINE.

DAMAGES RESULTING FROM DETONATION OR PRE-IGNITION, INCLUDING BUT NOT LIMITED TO MELTED OR BROKEN PISTONS, BROKEN OR SCORED RINGS, DAMAGED CYLINDER HEADS OR GASKETS, SCORING ON CYLINDER WALLS OR PISTON HEADS.

DAMAGES RESULTING FROM IMPROPER PRE-LUBRICATION PRIOR TO STARTUP.

THE ULTIMATE PURCHASERS/OWNERS EXCLUSIVE REMEDY AGAINST BARR MARINE SHALL BE FOR THE REPLACE-MENT OF THE ENGINE OR PAY, AT DISTRIBUTORS COST, THE COST OF MATERIALS USED FOR REPAIRS AS SET FORTH ABOVE. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, ANY SPECIAL, DIRECT OR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SUCH AS LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, TOWING, OIL LUBRICATIONS, FILTERS, ANTIFREEZE, GASKETS, SHIPPING AND FREIGHT, LOSS OF USE OF VEHICLE OR LOSS OF TIME OR ANY OTHER INCIDENTIAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE ULTIMATE PUR-CHASER/OWNER.

NO WARRANTY FROM INDMAR PRODUCTS CO., INC.

INDMAR PRODUCTS CO., INC. GIVES NO WARRANTY, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MER-CHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER OF ANY GOODS WHICH ARE SUPPLIED BY BARR MARINE. INDMAR PRODUCTS CO., INC. SHALL BE IN NO WAY RESPONSIBLE FOR THEIR PROPER USE, IN SERVICE AND THE PURCHASER HEREBY WAIVES ALL RIGHTS OF REFUSAL AND RETURN OF GOODS. THE PURCHASER ACKNOWLEDGES THAT INDMAR PRODUCTS CO., INC HAS GIVEN NO WARRANTY AND THAT THE ONLY WARRANTY THAT PURCHASER SHALL HAVE SHALL BE SUCH WARRANTY, IF ANY, FROM BARR MARINE AS SET FORTH ABOVE AND THE PURCHASER SHALL LOOK SOLELY TO BARR MARINE.

Governing Law & Venue

The terms and provisions of the Limited Warranty, and each and every document related to this Limited Warranty, shall be governed by and construed according to the laws of the State of Virginia. Any action at law, suit in equity or judicial proceeding for the enforcement of the Limited Warranty or any provision thereof shall be instituted only in the courts of Virginia.



1. **Warranty**. Pursuant to the terms and conditions and exclusions herein, Barr Marine by EDM, 100 Douglas Way, P.O. Box 190, Natural Bridge Station, Virginia 24579 ("Barr Marine"), warrants that its marine propulsion engine, factory installed accessories and the parts related thereto (collectively, "Product") are free from material defects in material and workmanship under normal use and service during the applicable warranty period as set forth herein.

2. **Coverage.** Barr Marine shall replace or repair any defect in material or workmanship relating to the Product under the terms and conditions of this Limited Product Warranty. Components or parts of the Product that Barr Marine determines in its sole discretion to be "worn-out" from use are specifically excluded from this Limited Product Warranty. If a Product or defective part thereof is, upon examination by Barr Marine, determined in sole opinion by Barr Marine to be defective, Barr Marine shall repair, or at its sole option, provide either a new or rebuilt replacement of equivalent quality. Barr Marine shall have the sole discretion to determine whether the replacement, if provided, shall be a new or rebuilt replacement. Barr Marine's sole obligation under this Limited Product Warranty is limited only to the foregoing obligations and exclusions as stated herein. The Limited Product Warranty shall only be available to Customers who complete and properly fill out and deliver to Barr Marine an authorized Barr Marine Warranty Registration card within ten (10) days of purchase of the Product as set forth herein.

3. **Customer.** This Limited Product Warranty is extended only to the original retail purchaser of a boat in which a Product has been installed pursuant to Barr Marine's approval or authority ("Customer"). If the boat is sold or traded prior to the end of the applicable warranty period set forth herein, the remainder of the applicable warranty period is transferable to the new owner (also referred herein as "Customer") provided that all of the requirements for a valid transfer as set forth in this Limited Product Warranty are satisfied. No transfer of any rights by any Customer shall be deemed valid or effective unless and until approved in writing by Barr Marine. Warranties of any nature to any person other than those described herein are specifically excluded.

4. **Excluded Items.** In addition to, and without in any way limiting, any exclusion set forth elsewhere in this Limited Product Warranty, this Limited Product Warranty shall not apply to the following items:

- (a) Shop supplies used in performing work pursuant to this Limited Product Warranty, including, but not limited to, rags, sealants and lubricants.
- (b) Incidental, punitive and/or consequential damages, including, but not limited to, storage charges, attorney fees, telephone or rental charges of any type, inconvenience or loss of time or income.
- (c) Minor adjustments and tune-ups, including, but not limited to, checking, cleaning or adjusting spark plugs, carbu retor setting, filters, belts, controls and checking lubrication.
- (d) Water pump impellers, water hoses, cooling system anodes, or any component determined solely by Barr Marine to be damaged from the failure of any of such items.
- (e) Product failure as determined solely by Barr Marine to be caused by neglect, lack of maintenance, accident, abnormal operation, improper installation, improper preparation, improper winterization, improper dealer set-up, improper service or normal wear and tear.
- (f) Haul-out, launch, and towing charges.
- (g) Cost and expense incurred that relate to the removal and/or replacement of boat partitions or material due to boat design for necessary access to the Product.
- (h) Transportation charges and travel time incurred by Barr Marine to fulfill any of its obligations pursuant to this Limited Product Warranty.



(i) Service or work to the Product as requested by the Customer that is as determined solely by Barr Marine to be beyond the scope of this Limited Product Warranty.

(j) Use of parts other than Barr Marine parts (or parts authorized by Barr Marine) and the use of labor other than Barr Marine labor (or labor authorized by Barr Marine) when making repairs or providing a replacement under this Lim ited Product Warranty.

- (k) Oil, lubricants or fluids used for the normal maintenance of the Product.
- (l) Defects to the Product as determined solely by Barr Marine to be caused by or due to participation in or preparing for racing or other competitive activity.
- (m) Defects to the starter motor, armatures or field coil assembly of the Product as determined solely by Barr Marine to be caused by excessive cranking, condensation or submersion.
- (n) Defects to the Product as determined solely by Barr Marine to be caused by water entering the Product via the itake or exhaust system or submersion.
- (o) Defects to the Product as determined solely by Barr Marine to be caused by the use of fuels and lubricants that are not suitable for use with or on the Product or its fuel system components that was damaged or rendered inoperable from stale gasoline.
- (p) Defects to the Product as determined solely by Barr Marine to be caused by the lack of cooling water resulting from the motor being started out of water or foreign materials blocking intake passages.
- (q) Defects to the Product as determined solely by Barr Marine to be caused by servicing errors made by the Customer or by any servicing dealer/mechanic not approved or authorized by Barr Marine.
- (r) Product warranty claims that Barr Marine in its sole opinion determines are not due or traceable to material de fects in material or workmanship of the Product; or
- (s) Delivery fees, including but not limited to, air freight, next-day or second-day air, or any special delivery fee or ex pense unless authorized by Barr Marine prior to ordering of parts and prior to any work or service provided by Barr Marine pursuant to this warranty, including but not limited to its ordering of parts.

5. **Inspection and Testing of Product.** Certain parts of the Product may be tested upon receipt by Barr Marine. Such parts of the Product found to be free of defects in Barr Marine's sole opinion will be returned to the Customer at Customer's expense and no credit will be issued to the Customer. Barr Marine reserves the right to retrieve run time/run condition data from a Product's Electric Control Module prior to granting any warranty coverage on the Product under this Limited Product Warranty.

- 6. **Warranty Period.** Warranty coverage shall be provided only for the periods of time hereinafter set forth for the Product:
 - (i) A period of twenty-four (24) months commencing from the date of purchase or the date of commencement of the Product use, whichever sooner occurs, in the case of non-commercial use;
 - (ii) A period of three (3) months commencing from the date of purchase or the date of commencement of the Product use, whichever sooner occurs, in the case of commercial use.

In the event that more than one warranty time period may be applicable to a particular Product pursuant to this Section 6, the shorter period of time shall apply and shall be the only warranty time period allowed for that Product.



The repair or replacement of parts or the performance of service under this Limited Product Warranty does not extend the applicable period of this warranty beyond its original expiration date as set forth herein.

Procedure. Within 10 days from the date of purchase by the original retail purchaser of the Product, the Customer shall 7. complete and deliver the Barr Marine Warranty Registration Card to Barr Marine; or Indmar Products Co. If the Barr Marine Warranty Registration Card is not completed and delivered as set forth herein the Product will be excluded from all warranties set forth herein. In addition to other requirements set forth herein, no warranty claim will be honored without Barr Marine's prior timely receipt of a completed Barr Marine Warranty Registration Card. In the case of a warranty transfer to a subsequent owner, the new owner's information along with a check for \$50.00 made payable to "Barr Marine Warranty Transfer" must be sent to Barr Marine within 10 days of the transfer. No transfer shall be effective or valid unless and until approved by Barr Marine in its sole discretion. For warranty claims to be asserted hereunder, the Product or defective part thereof, together with a written notice of itemized defects must be returned to the retailer from whom the Product was purchased or to any other convenient Barr Marine authorized dealer. To obtain the location of an authorized Barr Marine dealer or service center in your area, write to Barr Marine requesting such information or visit www.barrmarine.net. In the event that the local authorized Barr Marine dealer is unable to remedy a warranted defect in the Product, the Product or defective part thereof, together with a written notice of itemized defects, must be delivered to Barr Marine at 100 Douglas Way, P.O. Box 190, Natural Bridge Station, Virginia 24579 with any and all freight and insurance charges prepaid. All insurance and freight charges and return charges incurred by Barr Marine for delivery of the Product (or its new or rebuilt replacement) to the retail purchaser shall be paid by such purchaser. The Customer shall be solely responsible for any and all labor expenses related to the repair or replacement of a Product pursuant to this Limited Product Warranty that exceed the specified services rates of Barr Marine in effect at the date of purchase. A schedule of service rates of Barr Marine may be obtained from any authorized Barr Marine dealer.

8. **Trade Accessories.** Barr Marine makes no warranty of any character with respect to any and all trade accessories not manu factured by Barr Marine or not installed by Barr Marine or pursuant to Barr Marine's written authority.

9. **Voiding the Warranty.** In addition to any requirement set forth in this Limited Product Warranty not being met or satisfied, this Limited Product Warranty shall become void and shall not apply under the following conditions or circumstances:

- (a) When the Product or any part thereof is subject to accident, alternation, modifications, abuse, misuse, neglect or improper maintenance in Barr Marine's sole determination;
- (b) When the Product is serviced by any individual or entity not authorized or approved in writing by Barr Marine; or
- (c) When damage to the Product results from cases not arising from defects in material and/or workmanship in Barr Marine's sole determination.

10. **Notices.** Any notice to Barr Marine set forth pursuant to this Limited Product Warranty shall be delivered to the following address:

Barr Marine by EDM 100 Douglas Way P.O. Box 190 Natural Bridge Station, VA 24579

11. **Warranty Claims Made Outside the United States.** In the event that Barr Marine fulfills a warranty claim outside the United States pursuant to this Limited Product Warranty, the Customer shall be solely responsible for any and all additional charges which Barr Marine may incur in order to fulfill its warranty obligations outside the United States. Barr Marine will not provide warranty coverage on any Product sold outside the United States unless the warranty work or service is performed by a marine technician certified by a major inboard or sterndrive marine engine manufacturer approved and authorized in writing by Barr Marine.



12. Limitation. THE WARRANTY STATED ABOVE IS A LIMITED WARRANTY AND IT IS THE ONLY WARRANTY MADE BY BARR MARINE. BARR MARINE DOES NOT MAKE ANY OTHER WARRANTIES EXPRESS OR IMPLIED. THERE ARE EXPRESSLY EXCLUDED ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. BARR MARINE SHALL HAVE NO LIABILITY WITH RESPECT TO ITS OBLIGATIONS UNDER THIS LIMITED WARRANTY OR OTHERWISE FOR CONSEQUENTIAL, EXEMPLARY, INCIDENTAL OR PUNITIVE DAMAGES EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE STATED EXPRESS LIMITED WARRANTY IS IN LIEU OF ALL LIABILITIES OR OBLIGATIONS OF BARR MARINE FOR DAMAGES ARISING OUT OF OR IN CON-NECTION WITH THE DEVELOPMENT, DELIVERY, USE OR PERFORMANCE OF THE PRODUCT. IN ANY EVENT, THE LIABILITY OF BARR MARINE FOR ANY REASON AND UPON ANY CAUSE OF ACTION WHATSOEVER SHALL BE LIM-ITED TO THE AMOUNT THEN PREVIOUSLY PAID FOR THE PRODUCT BY THE CUSTOMER.

BARR MARINE DOES NOT AUTHORIZE ANY PERSON, EMPLOYEE, AGENT, REPRESENTATIVE OR ENTITY TO ALTER ANY OF THE TERMS AND CONDITIONS OF THIS LIMITED PRODUCT WARRANTY OR CREATE ANY OTHER OBLI-GATION RELATING TO THE PRODUCT. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

NOTICE TO CALIFORNIA CUSTOMERS: CALIFORNIA CUSTOMERS MUST DIRECTLY NOTIFY BARR MARINE IN WRITING IF THE PRODUCT DOES NOT CONFORM TO APPLICABLE WARRANTIES AND (A) THE NON-CONFORM-ITY IS LIKELY TO CAUSE DEATH OR SERIOUS BODILY INJURY AND HAS BEEN SUBJECT TO REPAIR TWO (2) OR MORE TIMES, AND/OR (B) THE NON-CONFORMITY HAS BEEN SUBJECT TO REPAIR FOUR (4) OR MORE TIMES. CALIFORNIA CUSTOMERS ARE HEREBY NOTIFIED TO THE FOLLOWING PROVISIONS OF CALIFORNIA LAW: CAL. CIVIL CODE § 1793.22 AND CAL. CIVIL CODE § 1793.2(d). COMPLETE COPIES OF THESE CODE SECTIONS ARE AVAILABLE UPON REQUEST.

Any/all litigation under this Warranty or arising out of the Product must be filed within the state of Virginia, County of Rockbridge.



NEW!!

5.0L GM "Long Block/Green" (vortec)Marine Engine Quest Part # 051070G

The Quest 5.0L new "Long Block" engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump 14" Flywheel



Valve Covers Spark Plugs



Oil Pan Spo

Specifications

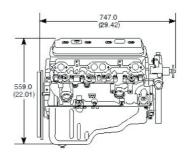
305 C.I.D. (4999 CC) / 5.0L 90 Degree V8 Cylinder 9.4:1 Overhead Valves (2 valves per cylinder) **Hydralic Roller** 3.80" x 3.48" (95 x 88.39 mm) Cast Iron GM232-M **Customer Supplied Customer Supplied (Vortec Style) GM** Powertrain 14" (Ring Gear Towards Engine) 1 - 8 - 4 - 3 - 6 - 5 - 7 - 2 5.5 Quarts (With Filter) SAE 15W40 Pennzoil Marine 253 H.P. @ 4800 RPM (Carburetor) 302 lb-ft @ 3800 RPM 1 Year Limited (90 Days Commercial)

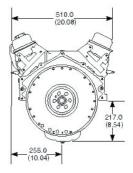
Note: Actual power levels may vary depending on Quest's calibration and application.

Available Options:

-A full range of new replacement parts needed to complete the build up!

-12 3/4" Flywheel Order Part # 24-14088650









NEW!!

5.7L GM "Enhanced Base" MPI Marine Engine Quest Part # 041009

The Quest 5.7L new "Enhanced Base" MPI engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump 14" Flywheel Electronic Ignition System (MPI) Flame Arrestor Circ. Pump Pulley Starter Harmonic Balancer Timing Chain Cover Oil Pan Fuel Injection System Thermostat Housing Crank Shaft Pulley Dipstick/Tube

Valve Covers Spark Plugs Plug Wires Intake T-HSG Hose Alternator Wire Harness Throttle Bracket

MEFI 5 ECM (w/ Pedal Position Sensor for manual cable)



Displacement: Cylinders: Comp. Ratio: Valve Config.: Valve Lifters: Bore x Stroke: Main Bearings Caps: **Ignition: Intake Manifold:** Block MFG.: Flywheel Dia.: Firing Order: **Oil Pan Capacity:** Oil Type: **Horsepower:** Torque: Warranty:

Specifications 350 C.I.D. (5736 CC) / 5.7L 90 Degree V8 Cylinder 9.4:1 Overhead Valves (2 valves per cylinder) **Hydralic Roller** 4.00" x 3.48" (101.60 x 88.39 mm) Cast Iron GM232-M High Voltage Switch (MEFI 5) MPI **GM** Powertrain 14" (Ring Gear Towards Engine) 1-8-4-3-6-5-7-2 5.5 Quarts (With Filter) SAE 15W40 Pennzoil Marine 325 H.P. @ 5200 RPM (MPI) 370 lb-ft @ 3200 RPM 1 Year Limited (90 Days Commercial)

Note: Actual power levels may vary depending on Quest's calibration and application.

Available Options:

-A full range of new replacement parts needed to complete the build up!

-12 3/4" Flywheel Order Part # 24-14088650

The Quest "Enhanced Base" fuel and spark is brand new and the perfect engine for the boater who requires a new power plant in their boat. This engine is and excellent replacement for customer who has existing components they want to re-install to get their boat back in the water!

Please Call about our full line of Transmissions!





NEW!! 3.0L GM Base Marine Engine Quest Part # 051079N

The Quest 3.0L new base engine includes the following (when ordered under the above part number).

Block (with all internal components) Water Circulating Pump Spark Plugs 14" Flywheel Oil Pan



Quest is currently working on Fuel and Spark and Bobtail versions or this engine!

Please call for availability!

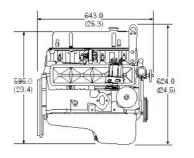
Harmonic Balancer Electronic Distributor High Output Coil Timing Shunt Power Tach Lead

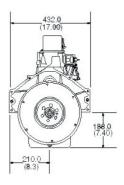
> **Displacement: Cylinders:** Comp. Ratio: Valve Config.: Valve Lifters: Bore x Stroke: **Main Bearings: Ignition:** Intake/Exhaust Manifold: Block MFG.: Flywheel Dia.: Firing Order: Oil Pan Capacity: **Oil Type: Paint Protectant: Horsepower: Torque:** Warranty:

Valve Cover Timing Chain Cover Interrupter Harness Cable / Coil to Distributor

Specifications 181 C.I.D. (2966.59 CC) / 3.0L In-Line 4 Cylinder 9.25:1 (High Flow Vortec Head) **Pushrod Actuated / Overhead Valves Hydralic Flat Tappet** 4.00" x 3.60" (101.60 x 91.44 mm) 2 Bolt Cast Iron **Delco EST (Electronic) Customer Supplied GM** Powertrain 14" (Ring Gear Towards Engine) 1 - 3 - 4 - 24 Quarts (W/O Filter) SAE 15W40 Pennzoil Marine High Gloss Black / Superior Corrosion Resistant 140 H.P. @ 4800 RPM (Carburetor) 177 lb-ft @ 3600 RPM 1 Year Limited (90 Days Commercial)

Note: Actual power levels may vary depending on Quest's calibration and application.







Toll Free: 1-866-255-9265 www.barrmarine.net



NEW!! 4.3L GM Base Marine Engine Quest Part # 051028N

The Quest 4.3L new base engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump 14" Flywheel Harmonic Balancer Timing Chain Cover Cast Iron Intake (2 barrel)

Valve Covers Spark Plugs Oil Pan



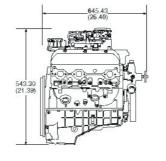
Displacement: Cylinders: Comp. Ratio: Valve Config.: Valve Lifters: Bore x Stroke: **Main Bearings Caps** Ignition: **Intake Manifold:** Block MFG.: Flywheel Dia.: Firing Order: Oil Pan Capacity: **Oil Type: Paint Protectant: Horsepower: Torque:** Warranty:

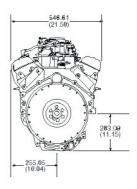
Specifications 262 C.I.D. (4294 CC) / 4.3L 90 Degree V6 Cylinder 9.4:1 **Overhead Valves (2 valves per cylinder) Hydralic Roller** 4.00" x 3.48" (101.60 x 88.39 mm) Cast Iron GM232-M **Customer Supplied Cast Iron (2 Barrel Carburetor) GM** Powertrain 14" (Ring Gear Towards Engine) 1-6-5-4-3-2 4.5 Quarts (W/O Filter) SAE 15W40 Pennzoil Marine High Gloss Black / Superior Corrosion Resistant 223 H.P. @ 4800 RPM (Carburetor) 267 lb-ft @ 2800 RPM 1 Year Limited (90 Days Commercial)

Note: Actual power levels may vary depending on Quest's calibration and application.

Available Options:

-A full range of new replacement parts needed to complete the build up!









NEW!! 4.3L GM "Enhanced Base" Marine Engine Quest Part # 051000

The Quest 4.3L new "Enhanced Base" engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump 14" Flywheel Electronic Distributor (HEI-Delco) Carburetor (Holley/600 cfm)



Harmonic Balancer Timing Chain Cover Oil Pan Fuel Pump (electronic) Thermostat Housing

Valve Covers Spark Plugs Plug Wires Coil T-HSG Hose

Specifications

Displacement: Cylinders: Comp. Ratio: Valve Config.: Valve Lifters: **Bore x Stroke:** Main Bearings Caps **Ignition:** Intake Manifold: Block MFG.: Flywheel Dia.: Firing Order: **Oil Pan Capacity: Oil Type: Paint Protectant:** Horsepower: Torque: Warranty:

262 C.I.D. (4294 CC) / 4.3L 90 Degree V6 Cylinder 9.4:1 Overhead Valves (2 valves per cylinder) Hydralic Roller 4.00" x 3.48" (101.60 x 88.39 mm) Cast Iron GM232-M **Customer Supplied Cast Iron (4 Barrel Carburetor) GM** Powertrain 14" (Ring Gear Towards Engine) 1 - 6 - 5 - 4 - 3 - 24.5 Quarts (W/O Filter) SAE 15W40 Pennzoil Marine High Gloss Black / Superior Corrosion Resistant 223 H.P. @ 4800 RPM (Carburetor) 267 lb-ft @ 2800 RPM 1 Year Limited (90 Days Commercial)

Note: Actual power levels may vary depending on Quest's calibration and application.

Available Options:

-A full range of new replacement parts needed to complete the build up!

The Quest "Enhanced Base" fuel and spark is brand new and the perfect engine for the boater who requires a new power plant in their boat. This engine is an excellent replacement for customer who has existing components they want to re-install to get their boat back in the water!





NEW!! 4.3L GM "Bobtail" Marine Engine Quest Part # 51003

The Quest 4.3L "Bobtail" engine includes the following (when ordered under the above part number).

The Quest Enhanced Base (part #051000) plus:

Exhaust System (Volvo or MerCruiser) Coupler (Volvo or MerCruiser) Alternator Throttle Linkage Starter (bottom mount) **Engine Wiring Harness** Flame Arrestor Weather Cover E Z Oil Drain Fuel/Water Sep. (I/O only) High Gloss Paint (non-corrosive) Dipstick and Tube Crank Pulley Circ. Pump Pulley P/U Pump (when applicable) Flywheel Hsg. (where applicable) Torsion Damper (where applicable) Dust Cover (where applicable)



The "Bobtail" engines by Quest are built only with premium components to insure many years of boating! These super high quality engines have everything factory installed to make sure your customer's complete engine replacement is a smooth transaction!

Please give the folks at Barr Marine By EDM or one of our very fine engine distributors a call and we will be glad to help you get started breathing life back into your boat!

Bobtail Without Exhaust Order Part #051002

Please Call about our full line of Transmissions!

Note: Closed cooling system, power steering system, and fuel water seperator are shown but must be purchased in addition to the bobtail engine. Fuel / water seperator is only included on I/O Bobtails only (at no extra charge).

Available Options:

-Power Steering System (w/ oil cooler) -Closed Cooling (Half or Full System)

2 YEAR WARRANTY!





Replacement **Block Components** and Related Parts For The **4.3L Carbureted** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!



4.3L Block Components

Part Number	Part Description	Part Number	Part Description
MC 8 66418	Front Engine Mount (Merc. replacement-in pairs)	8 0006	Stringer Mount (for #MC 8 66418)
885016	Drive Plate (torsion damper)	535011	Transmission Mount (for direct drive ZF Trans.)
531009	Flywheel Housing (bottom mount starter)	535015R	Trans. Mount (RH-for reduction and V-Drive ZF)
535033	Splash Plate (bottom mount starter)	535015L	Trans. Mount (LH-for reduction and V-Drive ZF)
531005	Front Engine Mount, RH (to block)	535021	Trunion (for #531004 & 5)
531004	Front Engine Mount, LH (to block)	535032	Stringer Mount (flat)
515003KIT	E-Z Oil Drain Kit (metric thread)	551660	Dipstick (V6 engine)
25 1000	Power Steering Kit (only installed at Barr Marine)	551661	Dipstick Tube (V6 engine)
495121	Remote Oil Filter Kit		

Note: The Quest Power Steering System is not for sale unless sold as a direct replacement or sold already installed on a Quest bobtail engine! It is recommended that the new Power Steering System is installed on all bobtail engines.





Replacement **Cooling System** and Related Parts For The **4.3L Carbureted** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!



4.3L Cooling System

art Number	Part Description	Part Number	Part Description
81001	Pick Up Pump Bracket (old style)	CHV 29 80	Thermostat Housing (Barr style)
981108	Pick Up Pump Bracket "A" (new style)	531093	1/2" Spacer, T-Stat Housing
981204	Pick Up Pump Bracket "B" (new style)	986034	Thermostat (drilled for FWC)
685001	Pick Up Pump, Complete (pump only)	MC47 27 53045	Gasket, Intake to Thermostat Housing
685000	Pick Up Pump Rebuild Kit	551045	Circulation Pump (GM Style)
845010	Hose, Circ. Pump to Thermostat Housing	MC 2 17437	Circulation Pump (Barr style)
551240	Single Groove Circ. Pump Pulley	MC47 27 34897	Gasket, Circ Pump to Engine
041242	Dual Groove Circ. Pump Pulley	645001	Temperature Sender
551241	Single Groove Crank Pulley	BA 37 0350	Closed Cooling System (full)
041494	Dual Groove Crank Pulley	BA 37 0000	Closed Cooling System (half)
531067	Thermostat Housing (low profile)	531015	Thermostat Housing (Indmar Style)

Note: See the Barr Marine By EDM catalog for exhaust system options. All "bobtail" engines purchased with exhaust will automatically includes "center rise" exhaust systems ONLY!





Replacement **Electrical System** and Related Parts For The **4.3L Carbureted** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!



4.3L Electrical System

rt Number	Part Description	Part Number	Part Description
71006	Bottom Mount Starter	556096	Ignition Module
551306	Starter Bolt (single, bottom mount)	556051	Relay, Ignition and Fuel Pump
805061	Starter Relay (carbureted)	556084	Rotor (distributor)
755001	Starter Solenoid (bottom mount)	556194	Pick Up Coil (distributor)
575003	Starter Solenoid (top mount)	551006	Clamp, Distributor
573001	Top Mount Starter (LH)	551037	Clamp Bolt, Distributor
575001	Top Mount Starter (RH)	550003	Distributor Kit
575010	Alternator (70 AMP)	80 473037	Wire Harness Adaptor (cannon style to squa
MC 27 93175	Alternator Bracket (upper)	801012	Timing Shunt
BA 27 0430	Alternator Bracket (lower)	986045	Lifting Eye (single)
27 0430	Bushing For 93175	50 270 012	Lock Washer For 93175
50 170 235	Mounting Bolt For 93175	725036	Alternator Belt (vee)
801059	Wire Harness	805012	Spacer For Wire Harness





Replacement **Fuel System** and Related Parts For The **4.3L Carbureted** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!



4.3L Fuel System

Part Number	Part Description	Part Number	Part Description
525007	Flame Arrestor w/ Vent Tube for ½" I.D. Hose	MC 45 0001	Throttle Bracket (Holley style)
496007	Fuel Pump Safety Switch	496002	Carburetor Wedge Kit
BA 45 188115	Fuel Line (pump to carburetor)	986024	Rossette Knob (for flame arrestor)
605006	Fitting, 90 degree elbow (line in pump)	605036	Hose, Vent Tube to Flame Arrestor
601008	Fitting, Inverted Flare (pump to fuel line)	695002	Throttle Cable Clip
12550460	Intake Manifold (4 barrel/cast iron)	500001	Electronic Fuel Pump Kit
MC 45 0005	Carburetor Gasket	BA 45 80492	Carburetor (600 CFM/4 barrel)
981089	Throttle Bracket (Quest style)	BA 45 1932	Carburetor Adaptor (spread bore to squar
BA 45 KIT	Fuel/Water Separator Kit	425036	Intake Manifold (2 barrel/take off)





NEW!!

5.7L GM "Long Block/Green" (vortec)Marine Engine Quest Part # 051038G

The Quest 5.7L new "Long Block" engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump 14" Flywheel

Harmonic Balancer Timing Chain Cover Oil Pan

Valve Covers Spark Plugs



Displacement: Cylinders: Comp. Ratio: Valve Config.: Valve Lifters: **Bore x Stroke:** Main Bearings Caps:

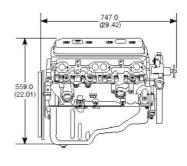
350 C.I.D. (5736 CC) / 5.7L 90 Degree V8 Cylinder 9.4:1 Overhead Valves (2 valves per cylinder) **Hydralic Roller** 4.00" x 3.48" (101.60 x 88.39 mm) Cast Iron GM232-M **Customer Supplied Customer Supplied (Vortec Style) GM** Powertrain 14" (Ring Gear Towards Engine) 1 - 8 - 4 - 3 - 6 - 5 - 7 - 2 5.5 Quarts (With Filter) SAE 15W40 Pennzoil Marine 292 H.P. @ 4800 RPM (Carburetor) 370 lb-ft @ 3200 RPM 1 Year Limited (90 Days Commercial)

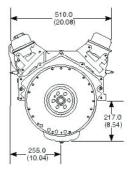
Note: Actual power levels may vary depending on Quest's calibration and application.

Specifications

Available Options:

-Reverse (Right Hand) Rotation Order Part # 042001 -A full range of new replacement parts needed to complete the build up! -12 3/4" Flywheel Order Part # 24-14088650









REMANUFACTURED 5.7L GM "Service Base" (vortec) Marine Engine Quest Part # 021039-1030

The Quest 5.7L "Service Base" engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump Oil Pan Harmonic Balancer Timing Chain Cover Valve Covers Spark Plugs



The "Service Base" engines by Quest are built only with premium components to insure many years of boating! These engines are fitted with General Motors "Vortec" heads and can be purchased in either Left Hand (standard) or Right Hand (opposite) rotation. The Quest "Service Base" engines are offered in a long block configuration and are perfect for the customer who wants to re-use their existing engine parts to complete the repower!

All of the components in our engines are totally re-machined, decked and pressure tested to NASCAR specifications at our own facility! This will provide you with the peace of mind that you have made the right choice in purchasing the BEST remanufactured marine engine on the market today.

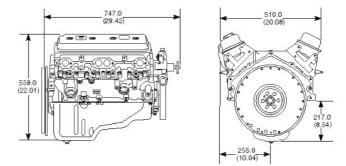
Please give the folks at Barr Marine By EDM or one of our very fine engine distributors a call and we will be glad to help you get started breathing life back into your boat!

Available Options:

-Reverse (Right Hand) Rotation Order Part # 031039-1030
-A full range of new replacement parts needed to complete the build up!

-12 3/4" Flywheel Order Part # 24-14088650

2 YEAR WARRANTY!



Flywheel not included in engine package.





NEW!! 5.7L GM "Enhanced Base" Marine Engine Quest Part # 041000

The Quest 5.7L new "Enhanced Base" engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump 14" Flywheel Electronic Distributor (HEI-Delco) Carburetor (Holley/4150-600 CFM)



Harmonic Balancer Timing Chain Cover Oil Pan Fuel Pump (electronic) Thermostat Housing

Valve Covers Spark Plugs Plug Wires Coil T-HSG Hose

Specifications

Displacement: Cylinders: Comp. Ratio: Valve Config.: Valve Lifters: **Bore x Stroke:** Main Bearings Caps: Ignition: Intake Manifold: Block MFG.: Flywheel Dia.: Firing Order: Oil Pan Capacity: Oil Type: Horsepower: **Torque:** Warranty:

350 C.I.D. (5736 CC) / 5.7L 90 Degree V8 Cylinder 9.4:1 Overhead Valves (2 valves per cylinder) **Hydralic Roller** 4.00" x 3.48" (101.60 x 88.39 mm) Cast Iron GM232-M **Customer Supplied** 4 Barrel (Vortec Style) **GM** Powertrain 14" (Ring Gear Towards Engine) 1 - 8 - 4 - 3 - 6 - 5 - 7 - 2 5.5 Quarts (With Filter) SAE 15W40 Pennzoil Marine 310 H.P. @ 4800 RPM (Carburetor) 370 lb-ft @ 3200 RPM 1 Year Limited (90 Days Commercial)

Note: Actual power levels may vary depending on Quest's calibration and application.

Available Options:

-Reverse (Right Hand) Rotation Order Part # 042000 -A full range of new replacement parts needed to complete the

build up!

-12 3/4" Flywheel Order Part # 24-14088650

The Quest "Enhanced Base" fuel and spark is brand new and the perfect engine for the boater who requires a new power plant in their boat. This engine is and excellent replacement for customer who has existing components they want to re-install to get their boat back in the water!

Please Call about our full line of Transmissions!





NEW!! 5.7L GM "Bobtail" Carbureted Marine Engine Quest Part # 041002A

The Quest 5.7L "Bobtail" engine includes the following (when ordered under the above part number).

The Quest Enhanced Base (part #041000) plus:

Alternator Exhaust System (Volvo or MerCruiser) Coupler (Volvo or MerCruiser) Throttle Linkage Starter (bottom mount) **Engine Wiring Harness** Flame Arrestor Fuel/Water Sep. (I/O only) Weather Cover E Z Oil Drain High Gloss Paint (non-corrosive) Dipstick and Tube Crank Pulley Circ. Pump Pulley P/U Pump (when applicable) Flywheel Hsg. (where applicable) Torsion Damper (where applicable) Dust Cover (where applicable)



The "Bobtail" engines by Quest are built only with premium components to insure many years of boating! These super high quality engines have everything factory installed to make sure your customer's complete engine replacement is a smooth transaction!

Please give the folks at Barr Marine By EDM or one of our very fine engine distributors a call and we will be glad to help you get started breathing life back into your boat!

Bobtail Without Exhaust (inboard) Order Part #041002 Bobtail With Exhaust (inboard) Order Part #041002A Bobtail MerCruiser I/O Order Part #041002M Bobtail Volvo I/O Order Part #041002VO Bobtail W/O Exhaust RH (inboard) Order Part #042002 Bobtail With Exhaust RH (inboard) Order Part #042002A

Note: Power steering system is shown but must be purchased in addition to the bobtail engine. Fuel / water seperator is only included on I/O Bobtails only (at no extra charge).

Available Options:

- -Power Steering System (w/ oil cooler)
- -Closed Cooling (Half or Full System)
- -Top Mounted Starter (LH or RH Rotation)

Please Call about our full line of Transmissions!







Replacement **Block Components** and Related Parts For The **5.7L Carbureted** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!

CR 2	.3 350	551040	551	455	MC 24 44187
MC 2	4 14043	885016	535	5021	535032
		5.7L Block (Componer	nts	
Part Numbe		1	Part Number	I	
MC 8 66418		Merc. replacement-in pairs)	8 0006	Stringer Mount (
885016	Drive Plate (torsion da		535011		ount (for direct drive ZF Trans.)
531009	Flywheel Housing (bot		535015R	Trans. Mount (RH-for reduction and V-Dr	
535033	Splash Plate (bottom n		535015L Trans. Mount (LH-for reduction and V		· · · · · · · · · · · · · · · · · · ·
531005	Front Engine Mount, H		535021	Trunion (for #531004 & 5)	
531004	Front Engine Mount, I		535032	Stringer Mount (flat)
515003KIT	E Z Drain Oil Kit (met	ric thread)	556000	Valve Cover Kit	
551600	Oil Pan Kit		551350 Harmonic Balancer		cer
CR 23 350	Oil Pan (Aluminum)		501001 Oil Filter		77.1
551040	Dipstick Tube		495121 Remote Oil Filter Kit		
551455	Dipstick		551043Flywheel, Bottom Mount, 14" (1 pc res551044Flywheel, Top Mount, 14" (1 pc rear set		· ·
556222		ing Chain Cover (LH)		Flywheel, Top Mount, 14" (1 pc rear seal)	
556222-OR	Timing Chain Cover (RH)		24-14088650		n Mount, 12 3/4" (1 pc rear seal)
551654	Cylinder Head Gasket		MC 24 44187		g (top/bottom mount)
25 1000	Power Steering Kit		MC 24 14043	Splash Plate (for I	MC 24 44187)
505001	PCV Valve (90 degree	type)	506002	PCV Valve (straig	ght type)

Note: The Quest Power Steering System is not for sale unless sold as a direct replacement or sold already installed on a Quest bobtail engine! It is recommended that the new Power Steering System is installed on all bobtail engines.





Replacement Cooling System and Related Parts For The 5.7L Carbureted Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!

•		anores Control			
68	5001	845010	5512	40	551241
53	31067	531093	6450	001	981001
	1007		oling Syster	n	
					<u> </u>
Part Number		±	Part Number		Description
981001	Pick Up Pump Bracket (CHV 29 80	Thermostat House	
981108	Pick Up Pump Bracket "		531093 986034	1/2" Spacer, T-Sta	č
981204 685001	Pick Up Pump Bracket " Pick Up Pump, Complet		MC47 27 53045	Thermostat (drille	,
685000			551045	Circulation Pum	Thermostat Housing
	Pick Up Pump Rebuild H		MC 2 17437		-
845010 551240	Hose, Circ. Pump to The			Circulation Pump	
	Single Groove Circ. Pur	* '	MC47 27 34897 645001	Gasket, Circ Pum Temperature Seno	
041242	Dual Groove Circ. Pump			-	
551241	Single Groove Crank Pu	-	531015		ing (Indmar Style)
041494	Dual Groove Crank Pull	1	BA 37 0350	Closed Cooling S	•
531067	Thermostat Housing (low	v profile)	BA 37 0000	Closed Cooling S	ystem (nalf)

Note: See the Barr Marine By EDM catalog for exhaust system options. All "bobtail" engines purchased with exhaust will automatically includes "center rise" exhaust systems ONLY! Log style exhaust system may be used in place of at an additional cost to the engine package.





Replacement **Electrical System** and Related Parts For The **5.7L Carbureted** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!



5.7L Electrical System

Part Number	Part Description
556161	Spark Plug
571006	Bottom Mount Starter
551306	Starter Bolt (single, bottom mount)
805061	Starter Relay (carbureted)
755001	Starter Solenoid (bottom mount)
575003	Starter Solenoid (top mount)
573001	Top Mount Starter (LH)
575001	Top Mount Starter (RH)
575010	Alternator (70 AMP)
986108	Alternator Bracket (rear)
986238	Alternator Bracket (front)
725018	Alternator Belt (vee)
801059	Wire Harness

Part Number	Part Description
556096	Ignition Module
556051	Relay, Ignition and Fuel Pump
556084	Rotor (distributor)
556194	Pick Up Coil (distributor)
551006	Clamp, Distributor
551037	Clamp Bolt, Distributor
550002	Distributor Kit
80 473037	Wire Harness Adaptor (cannon style to square)
801012	Timing Shunt
986045	Lifting Eye (single)
805012	Spacer For Wire Harness
556083	Distributor Cap





Replacement **Fuel System** and Related Parts For The **5.7L Carbureted** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!



5.7L Fuel System

Part Number	Part Description	Part Number	Part Description
525006	Flame Arrestor w/ Vent Tube for 3/8" I.D. Hose	695002	Throttle Cable Clip
781003	F-Line (fuel line to carburetor fitting)	500001	Electronic Fuel Pump Kit
496007	Fuel Pump Safety Switch	986024	Rossette Knob (for flame arrestor)
981076	Fuel Line (pump to carburetor)	611034	Carburetor (600 CFM/4 barrel)
605006	90 Degree Fuel Fitting (line in)	611015	Carburetor Repair Kit (for # 611034)
601008	Inverted Flare Fuel Fitting (pump to fuel line)	BA 45 KIT	Fuel/Water Seperator Kit
556099	Intake Gasket	MC 45 0001	Throttle Bracket (universal Holley style)
531170	Intake Manifold, 4 brl. (alm. w/ bronze cross-over)	496002	Carburetor Wedge Kit
N/A (call)	Intake Manifold, 4 barrel (cast iron)	841010	Vent Hose (valve cover to flame arrestor)
611031	Carburetor Gasket (Holley-thick)	981089	Throttle Bracket (Indmar style)





NEW!! 5.7L GM "Bobtail" MPI Marine Engine Quest Part # 041003A

The Quest 5.7L "Bobtail" engine includes the following (when ordered under the above part number).

Exhaust System (Volvo or MerCruiser) Coupler (Volvo or MerCruiser) Alternator Flame Arrestor Throttle Linkage Starter (bottom mount) Engine Wiring Harness Fuel/Water Sep. (I/O only) E Z Oil Drain High Gloss Paint (non-corrosive) Dipstick and Tube **Crank Pulley** Circ. Pump Pulley P/U Pump (when applicable) Flywheel Hsg. (where applicable) Torsion Damper (where applicable) Dust Cover (where applicable)



The "Bobtail" engines by Quest are built only with premium components to insure many years of boating! These super high quality engines have everything factory installed to make sure your customer's complete engine replacement is a smooth transaction!

Please give the folks at Barr Marine By EDM or one of our very fine engine distributors a call and we will be glad to help you get started breathing life back into your boat!

Bobtail Without Exhaust (inboard)Order Part #041003 Bobtail With Exhaust (inboard) Order Part #041003A Bobtail MerCruiser I/O Order Part #041003M Bobtail Volvo I/O Order Part #041003VO Bobtail W/O Exhaust RH (inboard) Order Part #042003 Bobtail With Exhaust RH (inboard) Order Part #042003A

Note: Power steering system is shown but must be purchased in addition to the bobtail engine. Fuel / water seperator is only included on I/O Bobtails only (at no extra charge).

Available Options:

-Power Steering System (w/ oil cooler)
-Closed Cooling (Half or Full System)
-Top Mounted Starter (LH or RH Rotation)

Please Call about our full line of Transmissions!

2 YEAR WARRANTY!





Replacement **Block Components** and Related Parts For The **5.7L MPI** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!

55	51044	551040	55	1455	MC 24 44187
MC 2	24 14043	535021		5016	535032
		5.7L Block	Compone	ents	
Part Numb	er Part Des	cription	Part Number	r Part	Description
MC 8 66418		Merc. replacement-in pairs)	8 0006	Stringer Mount (for #MC 8 66418)
885016	Drive Plate (torsion da	imper)	535011	Transmission Me	ount (for direct drive ZF Trans.)
531009	Flywheel Housing (bo	ttom mount starter)	535015R	Trans. Mount (R	H-for reduction and V-Drive ZF)
535033	Splash Plate (bottom r	nount starter)	535015L	Trans. Mount (LH-for reduction and V-Drive	
531005	Front Engine Mount, I	RH (to block)	535021	Trunion (for #531004 & 5)	
531004	Front Engine Mount, 1	LH (to block)	535032	Stringer Mount (flat)	
515003KIT	E Z Drain Oil Kit (me		556000	Valve Cover Kit	
551600	Oil Pan Kit		556293	Crank Position Sensor	
CR 23 350	Oil Pan (Aluminum)		501001	Oil Filter	
551040	Dipstick Tube		495121	Remote Oil Filter Kit	
551455	Dipstick		551043	Flywheel, Bottom Mount, 14" (1 pc rear seal)	
556222	Timing Chain Cover (LH)	551044	Flywheel, Top M	ount, 14" (1 pc rear seal)
556222-OR	Timing Chain Cover (551350	Harmonic Baland	cer
551654	Cylinder Head Gasket		MC 24 44187	Flywheel Housin	g (top/bottom mount)
25 1000	Power Steering Kit		MC 24 14043	Splash Plate (for	MC 24 44187)
551379	Oil Pressure Sensor (d	igital)	556102	MAP Sensor	

Note: The Quest Power Steering System is not for sale unless sold as a direct replacement or sold already installed on a Quest bobtail engine! It is recommended that the new Power Steering System is installed on all bobtail engines.





Replacement **Cooling System** and Related Parts For The **5.7L MPI** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!



5.7L Cooling System

Part Number	Part Description	Part Number	Part Description
981001	Pick Up Pump Bracket (old style)	CHV 29 80	Thermostat Housing (Barr style)
981108	Pick Up Pump Bracket "A" (new style)	531093	1/2" Spacer, T-Stat Housing
981204	Pick Up Pump Bracket "B" (new style)	986034	Thermostat (drilled for FWC)
685001	Pick Up Pump, Complete (pump only)	MC47 27 53045	Gasket, Intake to Thermostat Housing
685001	Pick Up Pump Rebuild Kit	551045	Circulation Pump (GM Style)
845010	Hose, Circ. Pump to Thermostat Housing	MC 2 17437	Circulation Pump (Barr style)
551240	Single Groove Circ. Pump Pulley	MC47 27 34897	Gasket, Circ Pump to Engine
041242	Dual Groove Circ. Pump Pulley	645001	Temperature Sender
551241	Single Groove Crank Pulley	531015	Thermostat Housing (Indmar Style)
041494	Dual Groove Crank Pulley	BA 37 0350	Closed Cooling System (full)
531067	Thermostat Housing (low profile)	BA 37 0000	Closed Cooling System (half)
556013	Coolant Temperature Sender		•

Note: See the Barr Marine By EDM catalog for exhaust system options. All "bobtail" engines purchased with exhaust will automatically includes "center rise" exhaust systems ONLY! Log style exhaust system may be used in place of at an additional cost to the engine package.





Replacement **Electrical System** and Related Parts For The **5.7L MPI** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!



5.7L Electrical System(MPI)

Part Number	Part Description	Part Number	Part Description
556199	Spark Plug	556096	Ignition Module
571006	Bottom Mount Starter	556084	Rotor (distributor)
551306	Starter Bolt (single, bottom mount)	556194	Pick Up Coil (distributor)
986045	Lifting Eye (single)	551006	Clamp, Distributor
755001	Starter Solenoid (top mount)	551037	Clamp Bolt, Distributor
575003	Starter Solenoid (bottom mount)	80 473037	Wire Harness Adaptor (cannon style to square)
573001	Top Mount Starter (LH)	986108	Alternator Bracket (rear)
575001	Top Mount Starter (RH)	986238	Alternator Bracket (front)
575010	Alternator (70 AMP)	724018	Alternator Belt (vee)





Replacement **Fuel System** and Related Parts For The **5.7L MPI** Engine

All replacement parts are from only the best manufacturers and are used on our production engines as well!





5.7L Fuel System (MPI)

Part Number	Part Description	Part Number	Part Description
521119	Flame Arrestor For MPI Engine	556014	Fuel Pump (w/ return line to tank)
556099	Intake Gasket	556114	Throttle Body Gasket
531125	Intake Manifold (PFI)	636125	Fuel Pressure Regulator (4 bar)
506002	PCV Valve (straight type)	556049	Fuel Injector
505001	PCV Valve (90 degree type)	556104	IAC Valve
811127	Hose, Vent To Flame Arrestor	556103	Throttle Position Sensor





NEW!!

5.8L Ford Base (H.O./GT 40 Heads) Marine Engine Quest Part # 092011N

The Quest 5.8L new base engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump Oil Pan Harmonic Balancer Timing Chain Cover Intake Manifold (4 brl/cast iron)

Valve Covers Spark Plugs Flywheel



SpecificationsDisplacement:351 C.I.D.Cylinders:90 Degree VComp. Ratio:8.3:1Bore x Stroke:4.00" x 3.50Ignition:Customer SIntake Manifold:Cast Iron (4Block MFG.:Ford MotorFlywheel Dia.:14" (Ring CFiring Order:1 -3 -7 -2 - (2 - 0)Oil Type:SAE 15W40

351 C.I.D. / 5.8L
90 Degree V8 Cylinder
8.3:1
4.00" x 3.50"
Customer Supplied
Cast Iron (4 Barrel Carburetor)
Ford Motor Company
14" (Ring Gear Towards Engine)
1 -3 -7 - 2 - 6 - 5 - 4 - 8
SAE 15W40 Pennzoil Marine
8 degrees BTDC
12 Volts DC Negative Ground
4200-4400 RPM
5 Quarts - Add 1 quart with filter change
1 Year Limited (90 Days Commercial)

Note: The new Ford Engine may be fitted with Ford's marine EFI intake as well!

Available Parts:

-Holley Carburetor (4 barrel) Order Part # 612004 -Electronic Distributor Order Part # 752002

- -Starter (new style) Order Part # 592007
- -Dipstick Order Part # 592016
- -Dipstick Tube Order Part #592017
- -Crank Pulley (2 groove) Order Part # 594208
- -Circ. Pump Pulley (2 groove) Order Part # 594209

The Quest "351 Base" engine is brand new and the perfect engine for the boater who requires a new power plant in their boat. This engine is an excellent replacement for customer who has existing components they want to re-install to get their boat back in the water!

Base Timing

Oil Capacity:

Warranty:

Electrical System:

Operating Range at WOT:





NEW!! 6.0L GM "Green" Base Marine Engine Quest Part # 051022G

The Quest 6.0L new "Green" base engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump Stock Flywheel Ignition System (coil near plug) Dip Stick Tube

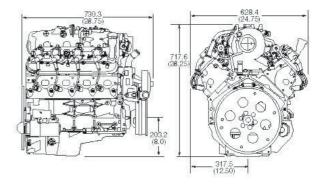


The new Vortec 6000 Marine Engine is sold through Quest exactly the way GM builds the engine for us.

The 6.oL "Green" base engine features an electronic throttle body, coil near plug ignition, a cylinder head inspired by the LS6 Corvette engine and many more features that will make this the perfect direct replacement for any boater! (Note: The LQ-9/6.0L uses a MEFI 5 ECM) Crank Pulley Circ. Pump Pulley Fuel System (GM supplied only) Water Circlating Pump Electronic Throttle Body Valve Covers Spark Plugs Oil Pan Dip Stick

Displacement: Type: Comp. Ratio: Valve Config.: Valve Lifters: Bore x Stroke: Main Bearings Caps Fuel System: Fuel Type: Fuel Shutoff: Emmision Controls.: Firing Order: Horsepower: Torque: Warranty: **Specifications** 364 C.I.D. (5967 CC) / 6.0L 6000 V-8 10.1:1 Overhead Valves (2 valves per cylinder) **Hydralic Roller** 101.60 x 92 mm **Powder Metal Port Fuel Injection Regular Unleaded** 5900 to 6000 RPM Positive Crankcase Vent./Returnless Fuel System 1-8-7-2-6-5-4-3 380 H.P. @ 5200 RPM 409 lb-ft @ 4200 RPM 1 Year Limited (90 Days Commercial)

Note: Actual power levels may vary depending on Quest's calibration and application.







NEW!! 7.4L GM (H.O./390 H.P)Long Block Marine Engine Quest Part # 051014N

The Quest 7.4L new "Long Block" engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Timing Chain Cover Harmonic Balancer Oil Pan Valve Covers



Displacement: Cylinders: Comp. Ratio: Valve Config.: Valve Lifters: Ignition: Intake Manifold: Block MFG.: Flywheel Dia.: Firing Order: Oil Pan Capacity: Oil Type: Warranty: Specifications 454 C.I.D. / 7.4L 90 Degree V8 Cylinder 8.6:1 Overhead Valves (2 valves per cylinder) Hydralic Roller Customer Supplied Customer Supplied GM Powertrain Customer Supplied 1 - 8 - 4 - 3 - 6 - 5 - 7 - 2 8 Quarts (With Filter) SAE 15W40 Pennzoil Marine 1 Year Limited (90 Days Commercial)

Note: Actual power levels may vary depending on Quest's calibration and application.

The Quest "Long Block" engine is brand new and the perfect engine for the boater who requires a new power plant in their boat. This engine is and excellent replacement for customer who has existing components they want to re-install to get their boat back in the water!

Please Call about our full line of Transmissions!





NEW!! 8.1L GM "EFI Base" Marine Engine Quest Part # 051018N

The Quest 8.1L new "EFI Base" engine includes the following (when ordered under the above part number).

Block (with all internal engine components) Water Circulating Pump 14" Flywheel GM Installed EFI (coil near plug ignition)



8.1L Bobtail Pictured (part #041004)

Note: Some parts Shown in this above picture are NOT part of the "Base" build up (bobtail pictured).

Available Options: -Hi Output Version Order Part # 051017N

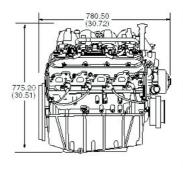
Please Call about our full line of Transmissions!

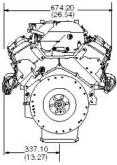
Harmonic Bal	Valve Covers	
Timing Chain	Cover	Spark Plugs
Oil Pan		Plug Wires
EFI Intake	High Gloss Paint (nor	n-corrosive)

Displacement: Cylinders: Comp. Ratio: Valve Config.: Valve Lifters: Bore x Stroke: Main Bearings Caps: Ignition: Intake Manifold: Block MFG.: Flywheel Dia.: Firing Order: Oil Pan Capacity: **Oil Type: Paint Protectant: Horsepower: Torque:** Warranty:

Specifications 496 C.I.D. (8128 CC) / 8.1L 90 Degree V8 Cylinder 9.1:1 **Overhead Valves (2 valves per cylinder) Hydralic Roller** 4.25" x 4.37" (107.95 x 111 mm) **Cast Nodular Iron** GM Installed "Coil Near Plug" EFI Intake / GM Installed **GM** Powertrain 14" (Ring Gear Towards Engine) 1 - 8 - 7 - 2 - 6 - 5 - 4 - 3 **10 Quarts** SAE 15W40 Pennzoil Marine High Gloss Black / Superior Corrosion Resistant 419 H.P. @ 5000 RPM 503 lb-ft @ 4000 RPM 1 Year Limited (90 Days Commercial)

Note: Actual power levels may vary depending on Quest's calibration and application.









NEW!! 8.1L GM "Bobtail" MPI Marine Engine Quest Part # 041004A

The Quest 8.1L "Bobtail" engine includes the following (when ordered under the above part number).

The Quest Enhanced Base (part #051018N) plus:

Exhaust System (Choice of Center Rise System) Starter (bottom mount) Weather Cover Remote Oil Filter

Engine Wiring Harness E Z Oil Drain Flywheel Housing/Dust Cover

Alternator Throttle Linkage Flame Arrestor Serpentine Belt Dipstick and Tube P/U Pump **Torsional Damper**



The "Bobtail" engines by Quest are built only with premium components to insure many years of boating! These super high quality engines have everything factory installed to make sure your customer's complete engine replacement is a smooth transaction!

Please give the folks at Barr Marine By EDM or one of our very fine engine distributors a call and we will be glad to help you get started breathing life back into your boat!

Bobtail Without Exhaust (inboard) Order Part #041004

The 8.1L can only be built for an inboard application (no I/O's).

8.1L Bobtail Pictured (part #041004)

Note: 3 inch spacer blocks must be used when installing the MerCruiser center rise exhaust (spacer # MC 20 93320A3 (spacers will be sold at an additional cost to the package).

Available Options:

-Closed Cooling (Half System only)

Please Call about our full line of **Transmissions!**

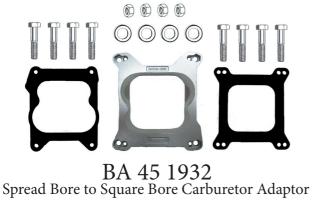
2 YEAR WARRANTY!





Quest Engine Parts KITS

All replacement parts are from only the best manufacturers and are used on our production engines as well!



BA 45 1932 is used on the 4.3L Quest Engine but may be used anywhere a 4 barrel spread bore to square bore carburetor conversion is needed!



BA 45 KIT Fuel/Water Seperator Kit for 4.3L and 5.7L Carbureted Engines BA 45 KIT is included on all Bobtail 4.3L and 5.7L Quest I/O carbureted engine and a great option for any other 4.3L or 5.7L bobtail engine!



500001 Electronic Fuel Pump Kit 500001 Fuel Pump Kit may be used on any 4.3L and 5.7L Enhanced Base or Bobtail. This kit is installed on all Enhansed Base and Bobtail 4.3L and 5.7L Quest Carbureted Engines!



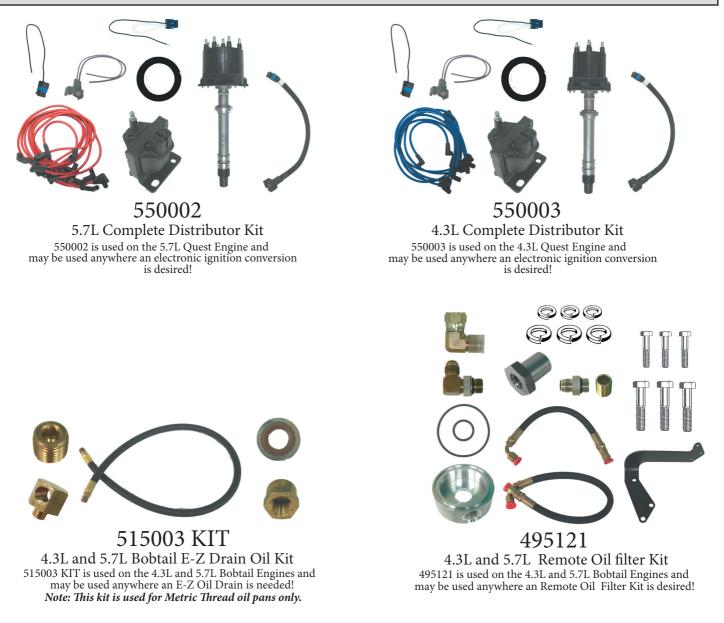
496007 Fuel Pump Safety Switch Kit 496007 F/P saftey switch kit may be used on any 4.3L and 5.7L Enhanced Base or Bobtail. This kit is installed on all Enhansed Base and Bobtail 4.3L and 5.7L Quest Carbureted Engines!





Quest Engine Parts KITS (continued)

All replacement parts are from only the best manufacturers and are used on our production engines as well!







Quest Engine Parts KITS

All replacement parts are from only the best manufacturers and are used on our production engines as well!



551600 Quest 5.7L Steel Oil Pan Kit 551600 KIT is used on the 5.7L Engines and may be used anywhere a steel oil pan replacement is needed! Note: This kit is used for one piece seal engines only!



997422U (USB port) 997422S (serial port) Quest-Diacom Scan Tool MEFI 5 Kit This DIACOM Software Kit can be used on all engines with MEFI 1 thru MEFI 5 systems installed!



556000 Quest 5.7L Valve Cover Kit

556000 KIT is used on the 5.7L Engines and may be used anywhere a valve cover replacement is needed! *Note: This kit replaces the "center bolt" valve covers only!*



685000

Quest Pick Up Pump Rebuild Kit 685000 KIT is used on the 4.3L, 5.7L and 8.1L Engines and may be used anywhere a valve cover replacement is needed!





Quest Closed Cooling KITS (5.7L & 4.3L Half and Full Systems)

All replacement parts are from only the best manufacturers and are used on our production engines as well!



5.7L & 4.3L Closed Cooling Full System Ths FWC Full kit may be installed on any 5.7L bobtail Quest Engine (front mount only)

