

3rd Edition

MACK BORING ***& PARTS COMPANY***

The Power Behind The Power

Marine & Industrial



***POWER
TO GO***

Accessories Guide

Headquarters

2365 Route 22, West
Union, NJ 07083
(908) 964-0700
Fax: (908) 687-6725
parts@mackboring.com

New England

48 Leona Drive
Middleborough, MA 02346
(508) 946-9200
Fax: (508) 946-0779
mass@mackboring.com

Carolinas

4500 Northchase Pkwy., NE
Wilmington, NC 28405
(910) 792-1900
Fax: (910) 792-6266
carolina@mackboring.com

Great Lakes

1270 Kyle Court
Wauconda, IL 60084
(847) 526-9700
Fax: (847) 526-9708
greatlakes@mackboring.com

A Reputation Built On Dependable Service Since 1922

Dear Friends:

As we enter into our 84th year in business, we still maintain the core values upon which Mack Boring was founded by our grandfather, Ed McGovern, Sr. Quality, Strong Support, Engineered Solutions, Superior Customer Service, and Added Value to the products we supply, has been the Mack Boring way.



Mack Boring and the McGovern Family stand for Quality. We provide quality solutions, backed by quality support – with no compromise, to the challenges our customers face every day, and deliver high quality products, services and resources. We hire high quality personnel.

Mack Boring relentlessly strives to provide superior support in the form of friendly, technically-savvy customer service representatives in the field, or on the telephone when you call for parts or whole-goods. If you are performing a start-up or an application review, we will support your needs.

If an accessory does not exist, we will often times have our engineering staff design and manufacture the item to enable our customers to reduce vendors, labor expense and other costs necessary to implement power plants into equipment or vessels.

Our ***Mack Boring Third Edition Accessories Catalog*** is an example of our dedication to providing Quality, Strong Support, Engineered Solutions and Added Value to you, our valued customers. When you succeed – we succeed! As always, we thank you for your continued business and look forward to working with you now and in the future.

Our Warmest Regards,

A handwritten signature in dark ink, appearing to read "Ned McGovern".

Ned McGovern
Co-President

A handwritten signature in dark ink, appearing to read "Steve McGovern".

Steve McGovern
Co-President

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PART NO:	BORE SIZE	O.D.	KEYWAY	TYPE	PILOT RING O.D.
MACK 171	1"	4"	1/4"	Solid	1.966"
MACK 172	1"	4"	1/4"	Split	1.966"
MACK 173	1-1/4"	4"	5/16"	Solid	1.966"
MACK 174	1-1/4"	4"	5/16"	Split	1.966"
MACK 175	1-1/8"	4"	1/4"	Solid	1.966"
MACK 204	1-1/8"	4"	1/4"	Split	1.966"
MACK 176	3/4"	4"	3/16"	Solid	1.966"
MACK 177A	3/4"	4"	1/4"	Solid	1.966"
MACK 178	7/8"	4"	1/4"	Solid	1.966"
MACK 708	7/8"	4"	1/4"	Split	1.966"

Applications: All KM2A, KM2C, KM2P, KM2P1, KM3A, KM3A1, KM3P(4), KM3V, KM35A, KM35P1 & KBW10 series transmissions used on 1GM10, 2GM20F, 3GM30F, 3HM/3HM35F, 2YM, 3YM, JH3, JH4, YSM, YSB, SB, SVE, 2QM15 & 2QM20 series engines.



MACK 171

PART NO:	BORE SIZE	O.D.	KEYWAY	TYPE	PILOT RING O.D.
MACK 179	1"	4-3/4"	1/4"	Solid	2.556"
MACK 180	1"	4-3/4"	1/4"	Split	2.556"
MACK 181	1-1/2"	4-3/4"	3/8"	Solid	2.556"
MACK 182	1-1/2"	4-3/4"	3/8"	Split	2.556"
MACK 183	1-1/4"	4-3/4"	5/16"	Solid	2.556"
MACK 184	1-1/4"	4-3/4"	5/16"	Split	2.556"
MACK 185	1-1/8"	4-3/4"	1/4"	Solid	2.556"
MACK 186	1-1/8"	4-3/4"	1/4"	Split	2.556"
MACK 187	1-3/4"	4-3/4"	7/16"	Solid	2.556"
MACK 188	1-3/8"	4-3/4"	5/16"	Solid	2.556"
MACK 189	1-3/8"	4-3/4"	5/16"	Split	2.556"



MACK 184

Applications: All KBW20, KBW20-1, KBW21, KM4A, KM4A-1 & KH18, transmissions used on 3QM30, 4JHE, 4JH2, 4JH3 & 4JH4 series engines.

PART NO:	BORE SIZE	O.D.	KEYWAY	TYPE	PILOT RING O.D.
MACK 192	Pilot	5"	-	Solid	2.500"
MACK 193	1"	5"	1/4"	Solid	2.500"
MACK 194	1-1/4"	5"	5/16"	Solid	2.500"
MACK 195	1-1/8"	5"	1/4"	Solid	2.500"
MACK 196	1-3/8"	5"	5/16"	Solid	2.500"

Applications: KM5 transmissions used on 4LH series engine. Pilot ring area is relieved to accept transmission flange set screws.



MACK 194

PART NO:	DESCRIPTION
MACK 197	Pilot for KM6A Transmission

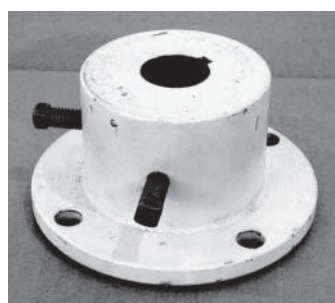
Application: KM6A gear used on 6LY series engines.

Custom metric couplings are available on special order basis. Tapered couplings are available, match to shaft only.

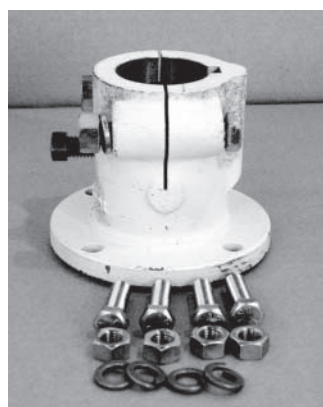
TRANSMISSION COUPLINGS FOR HURTH, ZF & VELVET DRIVE



MACK 853



MACK 601



MACK 695



MACK 700

PART NO:	BORE SIZE	O.D.	LENGTH	TYPE	PILOT RING O.D.
MACK 853	3/4"	4"	2-1/4"	Solid	2.500"
MACK 690	1"	4"	2-1/4"	Solid	2.500"
MACK 691	1-1/8"	4"	2-1/4"	Solid	2.500"
MACK 692	1-1/4"	4"	2-1/4"	Solid	2.500"
MACK 693	1-3/8"	4"	2-1/4"	Solid	2.500"
MACK 694	PILOT	4"	2-1/4"	Solid	2.500"
MACK 890	1-1/2"	4"	2-1/4"	Solid	2.500"

Applications: Velvet Drive 71 Series, Hurth ZF5M, 10M, 12M, 15M, 15MIV, 25 & ZF45A (Ratio 1:25-1 only)

PART NO:	BORE SIZE	O.D.	LENGTH	TYPE	PILOT RING O.D.
MACK 600	1"	5"	2-5/8"	Solid	2.500"
MACK 601	1-1/8"	5"	2-5/8"	Solid	2.500"
MACK 602	1-1/4"	5"	2-5/8"	Solid	2.500"
MACK 603	1-3/8"	5"	2-5/8"	Solid	2.500"
MACK 604	1-1/2"	5"	2-5/8"	Solid	2.500"
MACK 605	1-3/4"	5"	2-5/8"	Solid	2.500"
MACK 606	PILOT	5"	2-5/8"	Solid	2.500"
MACK 960	1"	5"	3-7/16"	Split	2.500"
MACK 595	1-1/8"	5"	3-7/16"	Split	2.500"
MACK 596	1-1/4"	5"	3-7/16"	Split	2.500"
MACK 597	1-3/8"	5"	3-7/16"	Split	2.500"
MACK 598	1-1/2"	5"	3-7/16"	Split	2.500"
MACK 704	1-3/4"	5"	3-7/16"	Split	2.500"
MACK 599	PILOT	5"	3-7/16"	Split	2.500"

Applications: Velvet Drive 72 Series, Velvet Drive 5000 Series, Hurth, ZF45A (except 1:25-1 Ratio) ZF63, 63A & 63IV

PART NO:	BORE SIZE	O.D.	LENGTH	TYPE	PILOT RING O.D.
MACK 207	1-1/2"	4-3/4"	4"	Split	2.500"
MACK 208	1-3/4"	4-3/4"	4"	Split	2.500"
MACK 695	2"	4-3/4"	4"	Split	2.500"
MACK 696	PILOT	4-3/4"	4"	Split	2.500"

Applications: ZF220A & 220V2

PART NO:	BORE SIZE	O.D.	LENGTH	TYPE	PILOT RING O.D.
MACK 213	1-1/2"	5-3/4"	4-3/16"	Split	3.00"
MACK 700	1-3/4"	5-3/4"	4-3/16"	Split	3.00"
MACK 701	2"	5-3/4"	4-3/16"	Split	3.00"
MACK 702	PILOT	5-3/4"	4-3/16"	Split	3.00"

Applications: ZF280A, ZF301A, ZF301C, ZF80A & ZF80IV

BORE SIZE	KEYWAY
3/4"	3/16"
7/8" - 1-1/8"	1/4"
1-1/4" - 1-3/8"	5/16"
1-1/2"	3/8"
1-3/4"	7/16"
2"	1/2"
2-1/4"	9/16"

We also carry a full line of Hurth, Velvet Drive, ZF & Kanzaki Transmission Parts. Call for your needs!

Top quality remote oil filter kits allow easy filter access to previously inaccessible locations. Perfect for twin engine installations or re-powers when engine bed interference occurs. Each pre-assembled kit is supplied with aluminum (356 alloy) filter head and adapter, 2-39" Parker 2,250 P.S.I. hoses and mounting bracket. Uses original OEM lube oil filter cartridge.

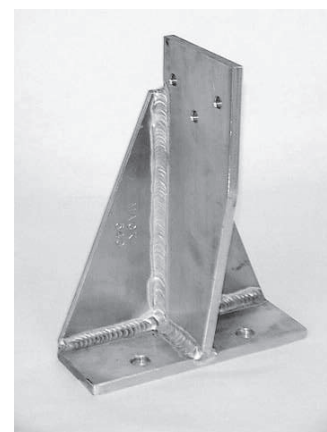
PART NO:	DESCRIPTION
MACK 309	Kit for 4LHA-HTP, DTP, STP, 6LYA-STP, 6LY2A-STP, 6LY3-ETP, 6CX-GTE & 6CX-GTE2 series engine. For primary oil filter. Two kits required for 6CX engines.
MACK 310	Kit for 3YM20, 3YM30, 3JH3E, 3JH4E & 4JH4E series engines. Also fits 2GM20F, 3GM30F, 3HM35F, 4JH2 & 4JH3 series engines, natural or turbo applications.
MACK 570	Kit for 6LPA-DTE/DTP & 6LPA-STE/STP series engines.
MACK 645	Kit for 6LY3-ETP, 6LY2-STE & 6LY2A-STP engines, by-pass filter only.


MACK 310

MACK 570
REMOTE OIL FILTER COMPONENTS

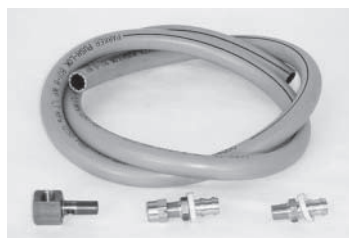
PART NO:	DESCRIPTION
MACK 588	Remote adapter for MACK 309 kit.
MACK 589	Filter head for MACK 309 kit.
MACK 520	Remote adapter for MACK 310 kit.
MACK 521	Filter head for MACK 310 kit.
MACK 703	Remote adapter for MACK 570 kit (6LP).
MACK 522	Filter head for MACK 570 kit (6LP).
MACK 509	ZF IRM 301A, PL 90° offset filter adapter.
MACK 627	59" hose, 1 straight & 1 90° female 6CX.
MACK 628	57" hose, 1 straight & 1 90° female 6CX.
MACK 592	Bracket, filter head mounting.
MACK 540	Aluminum filter head bracket.


MACK 521

MACK 509

MACK 540

Limited warranty covers all defects in material and workmanship of this product. This warranty does not apply if product has been damaged by accident, misuse, improper installation or as a result of service or modification in a manner not specifically recommended by the manufacturer of product. In no event shall Mack Boring & Parts Company be liable for any consequential damages.

ENGINE OIL DRAIN KITS



MACK 116



MACK 686

POWERBOAT APPLICATIONS

PART NO:	DESCRIPTION
MACK 116	6LPA-DTP/STP oil drain kit with 20' of 1/2" hose.
MACK 686	4LHA, 6LYA, 6LY2A & 6LY3 oil drain kit with 20' of 1/2" hose.
MACK 687	4LHA, 6LYA, 6LY2A & 6LY3 oil drain kit with 20' of 5/8" hose.
MACK 684	6CX-GTE/GTE2 oil drain kit with 20' of 1/2" hose.
MACK 685	6CX-GTE/GTE2 oil drain kit with 20' of 5/8" hose.

TRANSMISSION DRAIN KITS



MACK 865

PART NO:	DESCRIPTION
MACK 864	IRM 220/280 drain kit with 10' of 1/2" hose.
MACK 865	IRM 301 drain kit with 10' of 1/2" hose.
MACK 866	IRM 301 drain kit with 10' of 3/8" hose.
MACK 966	ZF80 V-Drive drain kit with 10' of 1/2" hose.
MACK 967	Velvet Drive 5000 drain kit with 10' of 3/8" hose.
MACK 893	IRM 220/280 drain kit with 20' of 1/2" hose.
MACK 894	IRM 301 drain kit with 20' of 3/8" hose.

OIL DRAIN FITTINGS & COMPONENTS



MACK 955



MACK 289



MACK 269

SAILBOAT & POWERBOAT APPLICATIONS

PART NO:	DESCRIPTION
MACK 955	2YM15, 3YM20 & 3YM30 oil drain adapter, 16 mm banjo to 1/4" N.P.T.
MACK 499	3JH4E, 4JH4E, 3JH3E & 4JH3E oil drain adapter, 14 mm banjo to 1/4" N.P.T.
MACK 289	4JH3 turbo series & 4JH2 series oil drain adapter, 16 mm to 3/8" N.P.T.
MACK 448	6LY3, 6LYA, 6LY2A & 4LHA series oil drain adapter, 22 mm to 1/2" N.P.T.
MACK 968	6LP, 6LPA oil drain adapter.
MACK 269	Reverso twin valve manifold assembly allows two engines to use single electric oil pump. Uses 1/2" N.P.T. oil connections.
MACK 663	6LYA, 6LY2A oil pump mounting bracket (port) use with MACK 272 pump.
MACK 664	6LYA, 6LY2A oil pump mounting bracket (starboard) use with MACK 272 pump.

“CHANGE YOUR OIL WITH A FLICK OF A SWITCH!”**X-CHANGER**

PART NO:	DESCRIPTION
<u>IMPELLER PUMPS</u>	
MACK 990	X-Changer 12 volt electric reversible pump is economically priced, for single engine applications.
MACK 487	X-Changer 12 volt electric reversible pump with mounting plate complete with hose for single engine applications.
MACK 446	X-Changer 12 volt electric reversible pump with mounting enclosure complete with hoses for twin engine & generator applications.

REVERSO

PART NO:	DESCRIPTION
<u>IMPELLER PUMPS</u>	
MACK 1019	Reverso 12 volt heavy duty electric reversible pump is suitable for oil, diesel or water transfer. Equipped with a 15 amp fuse, safety lock and 3/8" N.P.T. - 3/4" ports.
MACK 1018	Reverso 12 volt heavy duty portable reversible pump. Use for dockside service or permanent mount. Features 6' power cord, mounting plate, dipstick suction & hoses.
<u>GEAR PUMPS</u>	
MACK 1017	Reverso 12 volt heavy duty gear pump. Compact design for single engine applications. Features bronze gears, 3/8" N.P.T. ports. Pumps 3 gallons per minute.
MACK 1016	Reverso 12 volt heavy duty gear pump with enclosure. For twin engine & generator applications. Features safety lock, draws 10 amps and pumps 3 gallons per minute. Dimensions 10"x8.5"x4".
MACK 1015	Reverso 12 volt heavy duty gear pump with enclosure. For twin engine, twin transmission and generator applications. Features switch guard protection and easy operation. Draws 10 amps and pumps 3 gallons per minute. Dimensions 14.5"x8.5"x4"

IMTRA

PART NO:	DESCRIPTION
<u>MANUAL TRANSFER PUMP</u>	
MACK 272	Manually operated brass sump pump, adaptable to most engines, simple & economical.



MACK 272



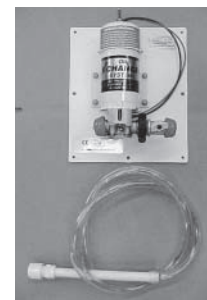
MACK 1015



MACK 1016



MACK 990



MACK 487



MACK 1019



MACK 1018



MACK 1017

PTO ACCESSORY DRIVE PULLEYS

Power take off pulleys will bolt to the front of the engine damper or crankshaft pulley. Allows installation of additional alternators, wash down pumps, compressors etc. Will not interfere with existing pulleys or drive belts. "A" belt = 1/2" width, "B" belt = 5/8" width.



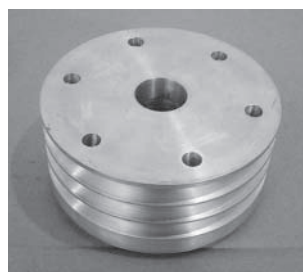
MACK 456



MACK 528



MACK 325



MACK 529

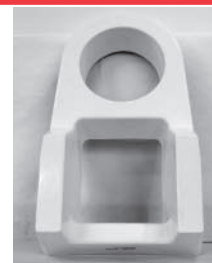
PART NO:	DESCRIPTION
MACK 972	2YM15, 3YM20, 3YM30 single groove pulley, 5" O.D. "A" belt. Use 2 pulleys (stack) for 2 & 3 groove applications.
MACK 456	2GM20F, 3GM30F, 3HM, 4JHE, 4JH2 series single groove pulley, 6" O.D. "A" belt. Use 2 pulleys (stack) for 2 & 3 groove applications.
MACK 517	3JH3 single groove pulley, 6" O.D. "A" belt.
MACK 527	3JH3 dual groove pulley, 6" O.D. "A" belt.
MACK 516	4JH3 single groove pulley, 6" O.D. "A" belt.
MACK 528	4JH3 dual groove pulley, 6" O.D. "A" belt.
MACK 978	4JH3 triple groove pulley, 6" O.D. "A" belt.
MACK 844	4JH3 four groove pulley, 6" O.D. "A" belt.
129271-21350	3JH4/4JH4 single groove pulley, 5" O.D. "A" belt.
MACK 1061	3JH4/4JH4 dual groove pulley, 6" O.D. "A" belt.
MACK 1062	3JH4/4JH4 four groove pulley, 6" O.D. "A" belt.
119171-21650	4LHA dual groove pulley, 7" O.D. "A" belt.
MACK 318	4LHA four groove pulley, 6" O.D. "A" belt.
MACK 594	6LPA dual groove pulley, 6" O.D. "A" belt.
MACK 325	6LYA/6LY2A single groove pulley, 7" O.D. "B" belt.
MACK 322	6LYA/6LY2A dual groove pulley, 7" O.D. "A" belt.
MACK 290	6LYA/6LY2A dual groove pulley, 7" O.D. "B" belt.
MACK 455	6LYA/6LY2A four groove pulley, 7" O.D. "B" belt.
MACK 460	6CX-GTE(2) dual groove pulley, 7" O.D. "B" belt.
MACK 529	6CX-GTE(2) triple groove pulley, 7" O.D. "B" belt.
MACK 323	6CX-GTE(2) four groove pulley, 7" O.D. "B" belt.

Note: Hardware is not included with pulley. Professional installation only. Consult Yanmar installation manual (#AOA1028E) for proper torque values, applications & load factors.

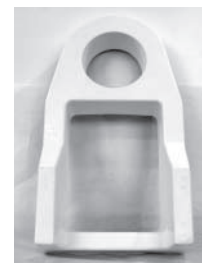
Limited warranty covers all defects in material and workmanship of this product. This warranty does not apply if product has been damaged by accident, misuse, improper installation, or as a result of service or modification in a manner not specifically recommended by the manufacturer of product. In no event shall Mack Boring & Parts Company be liable for any consequential damages.

SAILDRIVE BEDS

PART NO:	DESCRIPTION
MACK 301	2YM15, 1GM10C, 2GM20C/SD 20, Saildrive Bed.
MACK 302A	3YM20, 3YM30, 3GM30C/SD 20, Saildrive Bed.
MACK 313A	3JH3CE/SD 31 Saildrive Bed.
MACK 315	4JH3CE/SD 31 Saildrive Bed.
MACK 665	3JH4E, 3JH3CE/SD 40-50, Saildrive Bed.
MACK 666A	4JH4E, 4JH3CE, 4JH3-TCE/SD 40-50, Saildrive Bed.



MACK 302A



MACK 666A

Custom made fiberglass saildrive beds manufactured for Mack Boring will ease the installation of your Yanmar Marine saildrive package. Units feature aluminum reinforced mounting pads, front & rear. Drilling & tapping beds is required.

SAILDRIVE EXTENSION

PART NO:	DESCRIPTION
796420-02400	80 mm (3-1/8") extension kit, SD 20/30/31.
796450-02450	50 mm (2") extension, SD 50.
796450-02460	100 mm (3-7/8") extension, SD 50.

Converts standard reach saildrive units into long reach. Solves installation problems & allows use of large props.



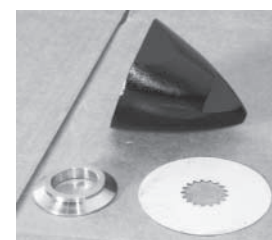
796420-02400

SAILDRIVE ACCESSORIES

PART NO:	DESCRIPTION
MACK 758	SD 20, 30 & 31 locking nose cone kit for fixed propeller.
MACK 757	SD 40 locking nose cone kit for fixed propeller.
MACK 756	SD 40 lock nut for folding propeller.
MACK 854	Saildrive spacers, 5/8" thick for front engine mounts.
SAILDRIVE 2 Piece Zinc Kit	New two piece kit allows replacement of zincs without removal of propeller. All hardware included. Order zinc halves (#196440-02660) as needed.



2 PIECE ZINC KIT



MACK 758

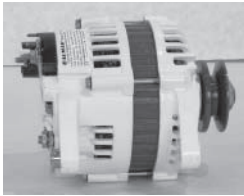
SAILDRIVE PROPELLERS

PART NO:	DESCRIPTION
MACK 1036	15" X 11" Folding propeller with 2 blades.
MACK 1037	15" X 13" Folding propeller with 2 blades.
MACK 1038	16" X 10" Folding propeller with 2 blades.
MACK 1039	16" X 12" Folding propeller with 2 blades.
MACK 1040	17" X 13" Folding propeller with 2 blades.



MACK 1038

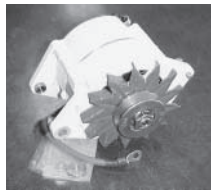
ALTERNATORS - HIGH OUTPUT



MACK 868



MACK 1022



MACK 621



444115-77200

PART NO:	DESCRIPTION
MACK 868	Balmar 70 series 110 amp, 12 volt alternator, single pulley, case ground. Use with external multi stage regulator. Engine applications: 2YM15, 3YM20, 3YM30, 2GM20F & 3GM30F.
MACK 1022	Balmar 60 series 110 amp 12 volt alternator, single pulley, isolated ground. Features built in single stage regulator with wiring connection for external regulator. Supplied with Yanmar harness adapter. Engine applications: 3JH4, 4JH4, 4JH3(TE), 6LYA & 6LY2A.
MACK 567	Balmar 90 series 100 amp dual output 12 volt alternator, single pulley, case ground. Use with external multi-stage regulator.
MACK 621	Balmar 90 series 80 amp dual output 24 volt alternator, single pulley, case ground. Use with external multi-stage regulator.
MACK 819	Powermax 125 amp, 12 volt alternator, single pulley, isolated ground. Use with external regulator.
MACK 482	Motorola 90 amp, 12 volt alternator, single pulley with built in single regulator.
444115-77200	Yanmar-Megavolt 115 amp, 12 volt alternator, single pulley, isolated ground, built-in single stage regulator. This low cost unit features direct bolt on, plug in capability.

Note: Inquire about 6LPA & 6CX applications. Output & ground cable upgrades are mandatory. Use #2 AWG wire for up to 150 amps. Shim alternator as necessary for proper alignment.

BALMAR MULTI-STAGE REGULATORS



MACK 500



MACK 979

PART NO:	DESCRIPTION
MACK 500	Balmar Max Charge multi-stage 12 volt regulator with wiring harness & instruction manual. Features start delay, one minute soft ramp & seven preset charging programs for charging most battery types.
MACK 621	Balmar Max Charge multi-stage 24 volt regulator with wiring harness & instruction manual. Features seven selectable charging programs. Alternator & battery temp. sensing, digital numeric LED display.
MACK 979	Balmar Digital Duo Charge provides regulated charging current to secondary battery bank. Eliminates battery isolators & need for second alternator. 30 amp charging capacity.
MACK 1024	Balmar Centerfielder charge parallel controller. Use with twin engine, twin alternator system charging single battery bank. 12/24 volt capable.

BALMAR TEMPERATURE SENSORS

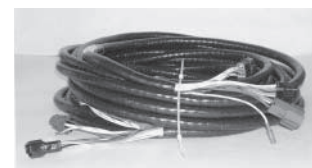


MACK 1033

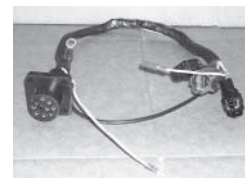
PART NO:	DESCRIPTION
MACK 1033	Balmar alternator temperature sensor kit.
MACK 1035	Balmar battery temperature sensor kit.

Shown below are harnesses & adapters, designed to solve wiring problems which occur during engine installations.

PART NO:	DESCRIPTION
MACK 748	15' extension harness with Yanmar connectors - 2 plug
MACK 1021	26' extension harness with Yanmar connectors - 3 plug
MACK 585	50' extension harness with Yanmar connectors - 3 plug
MACK 897	Adapter Harness - Activates air heaters & improves engine warm up time, 20".
MACK 849	Adapter Harness - 3 wires: red-battery, white-cranking, blue-glow plug. Connects to Yanmar harness with grey male connector, 24". Used for Teleflex I6000 system conversion.
MACK 299	Adapter harness connects Yanmar 3 plug to Mercruiser 10 pin female round plug.
MACK 484	Adapter harness connects Yanmar 3 plug to 8 pin rectangular female plug.
MACK 593	Adapter harness connects Yanmar 3 plug to 8 pin rectangular male plug.
MACK 752	Adapter harness -3 plug connector to 10 wire with engine ground and resistor.



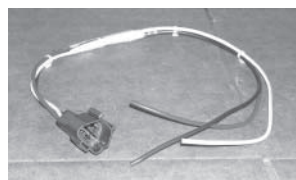
MACK 585



MACK 299



MACK 593



MACK 849



MACK 897

MERCRUISER HARNESS BRACKETS

PART NO:	DESCRIPTION
MACK 847	Aluminum mounting bracket. Use for mounting MACK 299 female pin to plug.
MACK 551	Steel mounting bracket for Mercruiser 10 pin female plug mounts. Use with MACK 550 stud kit.
MACK 550	Stud mounting kit for MACK 551 bracket.



MACK 847

3JH4/4JH4 ALTERNATOR BRACKET KIT

PART NO:	DESCRIPTION
099-JH4 ALT KIT	3JH4/4JH4 Alternator mounting bracket kit , mounts Hitachi or Balmar twin foot alternator, to lower left side of engine. Kit includes: mounting bracket, adjusting strap, 5.25" PTO pulley, 38" belt (A=1 1/2"), split belt cover , harness adapter & hardware. Yanmar factory engineered. Alternator is not included.



099-JH4 ALT KIT

6LYA/6LY2A KEVLAR ALTERNATOR BELT

PART NO:	DESCRIPTION
MACK 905	6LYA/6LY2A series, heavy duty kevlar replacement V-belt. Reduces premature wear & provides long service life. Use with high or standard output alternators.



MACK 905

INSTRUMENT PANELS



MACK 279



MACK 278

Compact Instrument Panels are functionally compatible with Yanmar design and plug into existing engine harness. These panels feature Teleflex anti-fog gauges, hourmeter, high intensity warning lights, audible warning alarm buzzer, circuit breaker & durable ABS construction. Modified senders are required.*

PART NO:	DESCRIPTION
MACK 278	MACK "B" compact instrument panel for GM, 3JH3, 4JH3, 4LHA & 6LYA series engines. Dimensions: 8.5" W x 5" H.
MACK 279	MACK "C" compact instrument panel for 3JH3, 4JH3, 4LHA & 6LYA/6LY2 series engines. Includes water temperature & oil pressure gauges. Adaptable to 2GM20F, 3GM30F engines, call for details. Can be used on 3JH4 & 4JH4 engines by adding tach sender & rerouting tach pick up wire. Dimensions: 11.5" W x 5" H.

PANEL COMPONENTS

***Required Sending Units can be found on page 11.**



MACK 334



MACK 259

PART NO:	DESCRIPTION
MACK 334A	Tachometer with hourmeter, 0-6000 RPM (Power boats).
MACK 334	Tachometer with hourmeter, 0-4000 RPM (Sailboats).
MACK 333	Water temperature gauge 100°-240° (240/33 OHM).
MACK 335	Oil pressure gauge 0-80 p.s.i. (240/33 OHM).
MACK 626	Volt/meter 10-16 volts (optional).
MACK 336	Start switch (push button).
MACK 337	Key switch with keys, 3 position.
MACK 332	Alarm buzzer.
MACK 259	Cole Hersee keyless ignition switch, 2 position.
MACK 1007	Key switch with keys, 2 position.
95634-01	Keyless ignition switch, 3 position.

ALARM PANELS & HARNESES



MACK 731



MACK 899

PART NO:	DESCRIPTION
MACK 731	Mack alarm panel for Yanmar twin engine applications. Design allows use of aftermarket gauges or instrument panel while retaining all factory alarms, including low oil pressure, high coolant temperature, low coolant level, low seawater flow, water in fuel, gear oil & turbo boost. Provides visual & audible alarm. Adapter harnesses listed below.
MACK 732	Adapter Y-harness connects Yanmar harness to MACK 731 panel. Provides hook-up via 8 pin rectangular female plug.
MACK 739	10' harness for MACK 731.
MACK 740	20' harness for MACK 731.
MACK 741	30' harness for MACK 731.
MACK 899	Mack alarm panel for single engine applications. Same function as MACK 731.

PART NO:	DESCRIPTION
02-124126	VDO Ocean Line - sealed Oil Pressure gauge, 0-72 P.S.I. 2-1/16" diameter, high quality, suited for exterior mount, sailboat applications. Use VDO sender 36003B, 1/8" NPT.
02-321628	VDO Ocean Line - sealed Water Temperature gauge, 100-250°, 2-1/16" diameter, high quality, suited for exterior mount, sailboat applications. Use VDO sender 323421B, 3/8" NPT.
331-1101	VDO Ocean Line - sealed Hour Meter, 2-1/16" diameter, high quality suited for exterior mount sailboat applications.
331-953	VDO Quart D.C. Hourmeter, 2-1/16" diameter.
MACK 571	Teleflex tachometer 0-4000 rpm diesel applications. Use with magnetic pick-up, 90-180 tooth f.w. 3-3/8" diameter, gold bezel.
MACK 590	Teleflex oil pressure gauge, 0-100 p.s.i., 2-1/16" diameter, gold trim. 240/33 ohm.
MACK 618	Teleflex water temperature gauge, 100-240°, 2-1/16" diameter, gold trim. 240/33 ohm.
MACK 626	Teleflex volt meter 2-1/16" diameter, black bezel.
MACK 755	Teleflex fuel gauge 2-1/16" diameter, black bezel.
12812	Faria water temperature gauge 100-250°, 2-1/16" diameter, "Euro" series, 240/33 ohm.
12845	Faria oil pressure gauge 0-100 p.s.i. 2-1/16" diameter, "Euro" series, 240/33 ohm.
MACK 824	Stewart Warner Quartz DC Hourmeter 2-1/6" diameter, black bezel.



02-124126



331953



12812



MACK 755

SENDING UNITS

PART NO:	DESCRIPTION
MACK 273	Teleflex single station oil pressure sender - MACK "C" panel ; 1/8" NPT.
MACK 274	Teleflex single station water temp. sender - MACK "C" panel ; 3/8" NPT.
MACK 485	Teleflex dual station oil pressure sender - MACK "C" panel ; 1/8" NPT.
MACK 486	Teleflex dual station water temp. sender - MACK "C" panel ; 3/8" NPT.
MACK 623	Beede # 127437 - single station oil pressure sender; 1/8" NPT.
MACK 624	Beede # 127338 - single station temp sender; 1/8" NPT.
MACK 646	Beede dual station oil pressure sender; 1/8" NPT.
MACK 647	Beede dual station water temp sender; 1/8" NPT.
MACK 667	Datcon single station water temp sender; 3/8" NPT.
MACK 668	Datcon single station oil pressure sender; 1/8" NPT.
MACK 671	Datcon dual station oil pressure sender; 1/8" NPT.
MACK 672	Datcon dual station water temp sender; 3/8" NPT.
MACK 873	Faria single station oil pressure sender 0-100 P.S.I.
MACK 874	Faria single station temperature sender 0-250°.
82561-F	S/W metric oil pressure sender adapter kit.
171375-39600	Yanmar metric TEE adapter oil pressure.
362004B	VDO 0-400 p.s.i. sender 1/8" NPT dual station.
360406B	VDO 0-400 p.s.i. sender 1/8" NPT single station.
360003B	VDO 0-72 p.s.i. sender 1/8" NPT single station.
323421B	VDO 100-250° sender 3/8" NPT single station.



MACK 273



MACK 274



362004B



82561-F

NOTE: Call for senders not listed.

ACCUSYNC ENGINE SYNCHRONIZERS



37D-00941-003



39A-00458

The Accusync performs the job of synchronizing twin engines automatically when you set the engine speed of the lead engine. Operates synchronized or at different engine speeds. Electronically locks engines together, works on gas & diesel applications. Includes installation video & 3 year warranty.

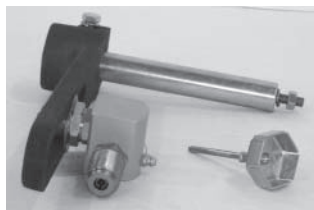
PART NO:	DESCRIPTION
37D-00941-003	Kit for Yanmar twin engine application uses standard magnetic pick up for single station applications.
37D-00941-002	Kit for diesel engine application using sine generator pick up.
37D-00941-001	Kit for gas engines, speed sensors included.
39A-00458	Switch kit (optional).
31B-00369	Magnetic pick up.
57C-01602	Dual magnetic pick up speed sensor.

ACCUSYNC - CRUISE CONTROL FOR YOUR BOAT!

SYNCHRONIZER ADAPTERS & KITS



MACK 470



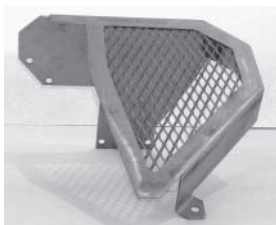
MACK 526



MACK 998

PART NO:	DESCRIPTION
MACK 470	Glendinning 6LYA/6LY2A Drive adapter.
MACK 526	Glendinning 6LPA-DTP/STP Drive kit.
MACK 469	Glendinning 6CX-GTE/GTE2 Drive kit - compact type.
MACK 674	Glendinning 6CX-GTE/GTE2 Drive kit - new style.
MACK 998	Aetna Engineering - single output, pulse generator, tachometer drive.

ALTERNATOR BELT GUARD



MACK 629

PART NO:	DESCRIPTION
MACK 629	Custom fabricated belt guard for Yanmar 6LY, 6LYA & 6LY2A diesel engines. Protects from injuries due to incidental contact. No modifications necessary to engine.

I6000 ELECTRONIC THROTTLE & SHIFT

Teleflex Electronic Controls are simple to operate, reliable, responsive & stylish. Whether you are repowering or purchasing a new boat, Teleflex Electronic Controls brings your boating experience to a whole new level. Available for single, dual or triple inboard & outboard applications. Compatible with NMEA 2000 open standard. Provides full powertrain synchronization.

PART NO:	DESCRIPTION
YN-SSSE-TS	Complete throttle & shift system for Yanmar single engine, single station applications.
YN-DSSE-TS	Complete throttle & shift system for Yanmar single engine, dual station applications.
YN-SSDE-TS	Complete throttle & shift system for Yanmar dual engine, single station applications.
YN-DSDE-TS	Complete throttle & shift system for Yanmar dual engine, dual station applications.

The Teleflex Electronic systems listed here include: control head(s) electronic control unit, harnesses, shift & throttle actuators, shift & throttle cables, installation guides plus Operators Manual. Color coded plug and play makes easy installation & repair. Note: all systems require installation lengths for wiring harnesses & cables. We offer system layout assistance & free technical advice. Contact us for systems not listed or for additional information.



Dual Control
CH 64500



Single Control
CH 64600



Electronic Control Unit
EU 64400

TELEFLEX MONITORING SYSTEMS**I5500 MONITORING**

The I5500 is a multipurpose display that handles engine monitoring, navigation & general boat data. The TE network will bring data from all connected items to this unit & display in different formats. Provides all Yanmar engine alarm functions. Can be used as stand alone system or in conjunction with throttle & shift systems. See your salesman for system selection or additional information.

PART NO:	DESCRIPTION
YN-SSSE-M	Complete monitoring system for Yanmar single engine, single station applications.
YN-DSSE-M	Complete monitoring system for Yanmar dual station, single engine applications.
YN-SSDE-M	Complete monitoring system for Yanmar single station, dual engine applications.
YN-DSDE-M	Complete monitoring system for Yanmar dual engine, dual station applications.



I5501 Display
"Twin Engine"



I5501 Display
"Navigator"

Monitoring systems include: monitor(s), engine interface cables, network cables & instruction guide.

Yanmar Genuine Marine Engine Oil was developed by a major U.S. manufacturer to meet Yanmar's strict engineering specifications. Extensive research & testing resulted in a custom blend, premium engine oil.



40030G



40030



41540G



41540

SAE 30 WEIGHT

PART NO:	DESCRIPTION
40030	Quart bottle (12 per case).
40030G	Gallon jug (4 per case).
40030DRUM	55 gallon drum (inquire).

(API SERVICES CF-4, CF, CF-2 & SJ)

SAE 15 / 40 WEIGHT

PART NO:	DESCRIPTION
41540	Quart bottle (12 per case).
41540G	Gallon jug (4 per case).
41540DRUM	55 gallon drum (inquire).

(API SERVICES CH-4, CG-4, CF-4, SJ)

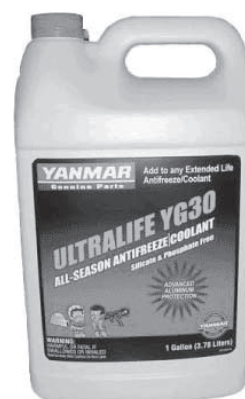
YANMAR MARINE DIESEL ENGINE OIL

- Provides high temperature piston deposit control.
- Formulated with premium group II base oil.
- Higher TBN level for long life performance.
- Valvetrain and piston wear protection.
- Anti-rust formula neutralizes harmful rust deposits.
- Anti foaming agent.
- Reduced lacquer formation.
- Better fuel economy.

YANMAR GENUINE ANTI-FREEZE

PART NO:	DESCRIPTION
YG30	YANMAR ULTRALIFE COOLANT - GALLON

Yanmar's New Genuine Anti-Freeze Coolant is designed for today's high performance marine diesel engines. This all-season extended life coolant features state-of-the-art organic acid technology (OAT), advanced aluminum protection & corrosion inhibitors. Contains no phosphates, silicates, borates or nitrates - meeting requirements of Yanmar diesel engines. YG30 is dyed red compatible with Dexcool and other red or orange extended life anti-freeze types. Boiling point 265° & a freezing point of -34° when mixed at 50% solution. See Bulletin # 1204-261 for complete specifications.



YG30

EVANS WATERLESS ENGINE COOLANT

PART NO:	DESCRIPTION
MACK 767	<u>EVANS NPG+ COOLANT - GALLON</u> Evans waterless engine coolant contains no water & prevents water caused corrosion, cavitation & electrolysis. Evans Coolant boils at 375° and has a freezing point of -40°. Features reduced overheating, low system pressure (0-7 P.S.I.), & excellent protection against internal cavitation or boil at hot spots common in aluminum exhaust manifolds. Meets or exceeds major manufacturers coolant requirements. Safe for gas or diesel applications.
MACK 926	<u>EVANS PREP FLUID</u> Evans Prep Fluid is for absorbing water from a cooling system. Used <i>post drain</i> to remove water trapped in cooling system.



MACK 767



MACK 926

IHI BLOWER/TURBO WASH

PART NO:	DESCRIPTION
974500-00400	<u>IHI BLOWER WASH 4KG (1.2 GALLONS)</u> Cleaner for turbocharger during operation. Restores boost pressure, gives engine full power by cleaning the blower. Follow instructions on container.
919200-21000	IHI Blower Wash - single use 1/2 pint.



974500-00400



90188
#1 Seller!



90119



90165



90149



90212



90168

PART NO:	DESCRIPTION
<u>Fuel Additives</u>	
90100	Fuel Power 8 oz. bottle treats 240 gallons. Disperses water, stabilizes fuel, reduces gum & varnish, prevents bacteria growth, controls icing & improves fuel economy.
90105	Fuel Power Plus Lubricity 32 oz bottle treats 250 gallons. Contains fuel power & lubricity additive to help prevent rotary fuel pump wear. Reduces pintle scoring & improves engine starting.
90188	8+ Cetane Improver 32 oz bottle treats 250 gallons. Raises cetane rating in diesel fuel providing reduced smoke, increased power & acceleration, reduced engine noise, smoother performance & faster starting.
90119	Killem 16 oz bottle treats 1,920 gallons. Kills bacteria in fuel on contact, EPA approved as biocide, reduces injector & fuel filter plugging & reduces exhaust smoke.
90165	Marine Diesel Formula 16 oz bottle treats 240 gallons. De-carbonizes & cleans entire injection system & stabilizes fuel for winter storage. Provides greater power, disperses water & improves fuel economy.
90106	Polar Power 32 oz bottle treats 250 gallon. Anti-gel & water dispersant. Contains fuel power, wax dispersant, lowers pour point & lowers cold filter plug point. Contains no alcohol.
90602	Super Fuel Storage Stabilizer 32 oz bottle treat 500 gallons. Prevents aging & sludge formation in diesel fuel.
90212	Diesel Injector Cleaner 32 oz bottle treats up to 250 gallons. Removes varnish & carbon from injector tips. Restores spray pattern.
90168	Marine Formula Gas Treatment 12 oz bottle treats up to 30 gallons. Increases cetane by up to 10 points, dissipates water & stabilizes fuel.

Coolant Additives

90149	4000 Cooling System Treatment 12 oz bottle treats up to 8 gallons. Removes scale, reduces cavitation & eliminates foaming. Safe for gaskets & aluminum. Compatible with all types of anti-freeze.
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Note: FPPF fuel additives are Yanmar factory approved!
Please call for dealer opportunities or additional information.

Vernalift mufflers feature all fiberglass construction which are effective in reducing engine exhaust noise. They will also help prevent water from returning to the exhaust manifold when an engine is installed below the water line. Below are some of our popular mufflers, call Parts Technical for other applications.

SAIL

PART NO:	DESCRIPTION
1300123	2" side inlet, 2" top outlet. Height 9-1/2" x Width 7-1/2".
1300212	2" inlet, 2" outlet. Inline Length 14" x Width 7-1/2".
1300126	3" side inlet, 3" top outlet. Height 10-1/2" x Width 10-1/2".
1300110	3" top inlet, 3" top outlet. Height 10-1/2" x Width 10-1/2".

POWER

PART NO:	DESCRIPTION
1000106	Vernatone 4" inlet/outlet - Length 34" x Diameter 9".
1000108	Vernatone 5" inlet/outlet - Length 38-3/4" x Diameter 11".
1000111	Vernatone 6" inlet/outlet - Length 41-1/2" x Diameter 12-1/4".



1300110



1300126

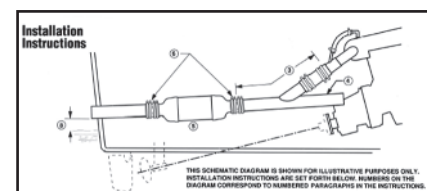


1000106

EXHAUST SYSTEM COMPONENTS

CEN TEK INDUSTRIES

PART NO:	DESCRIPTION
1200362	Fiberglass surge chamber 4" inlet/outlet, Length 18".
1200364	Fiberglass surge chamber 5" inlet/outlet, Length 21-1/2".
1200365	Fiberglass surge chamber 6" inlet/outlet, Length 25".
1200192	2" 45 degree fiberglass elbow - Length 6-3/4".
1200109	3" 45 degree fiberglass elbow - Length 8-1/2".
1200112	4" 45 degree fiberglass elbow - Length 10-1/4".
1200113	5" 45 degree fiberglass elbow - Length 13-3/4".
1200114	6" 45 degree fiberglass elbow - Length 15-1/4".
1200200	2" 90 degree fiberglass elbow - Length 5-3/4".
1200171	3" 90 degree fiberglass elbow - Length 7-1/2".
1200157	4" 90 degree fiberglass elbow - Length 9-1/2".
1200175	5" 90 degree fiberglass elbow - Length 12-1/4".
1200162	6" 90 degree fiberglass elbow - Length 14".
MACK 286	2" Transom exhaust outlet - bronze / chrome construction.



Surge Chamber



1200112



1200171



MACK 286

Note: Yanmar standard exhaust outlet sizes: 1GM10-1.77", 2YM15-2", 3YM20-2", 3YM30-2", 3JH4-2" or 3", 4JH4 -3", 4JH3 Turbo-3", 4LHA/6LPA-4", 6LYA/6LY2A-5", 6CXGTE/2-6".

YANMAR MARINE DIESEL ON BOARD SPARE PARTS KITS

On Board Kits for Sailboat applications. Choose Minor Kit for basic necessities needed for local cruising or Major Kit for extended voyages.



MACK 726 Dry Box

MINOR KIT

For Local Cruising

Lube Oil Filter
Fuel Oil Filter Kit
Air Filter Element
Set of Zinc(s) + Gasket(s) (see Note #1)
Set of Belt(s)
Water Pump Impeller & Gasket
Coolant Treatment (see Note #2)
Marine Diesel Fuel Treatment
MACK 726 Dry Box

MAJOR KIT

For Offshore Cruising

MINOR KIT PARTS PLUS:
Full Gasket Set (see Note #3)
Injector Washer
Can of Engine Paint
Lift Pump & Gasket
Parts Manual & Service Manual
Fuel Injector (see Note #4)
Thermostat & Gasket
Water Pump Seal
MACK 727 Dry Box



On Board Spare Parts Minor Kit



MACK 727 Dry Box

MODEL:	MINOR KIT	MAJOR KIT
1GM	\$ 96.00	\$ 465.00
1GM10	96.00	495.00
2GM	110.00	495.00
2GMF	118.00	540.00
2GM20	112.00	495.00
2GM20F	112.00	525.00
2GM20FE	118.00	525.00
2YM15	118.00	390.00
3GM	112.00	525.00
3GMF	118.00	550.00
3GM30	112.00	550.00
3GM30F	112.00	550.00
3GM30FE	118.00	570.00
3YM20	120.00	400.00
3YM30	120.00	415.00
3HM	120.00	550.00
3HMF	112.00	550.00
3HM35	112.00	575.00
3HM35F	112.00	575.00
3JH2E	120.00	500.00
3JH2-TE	140.00	470.00
3JH3E	90.00	410.00
3JH4E	100.00	520.00
4JHE, TE, HTE, DTE	140.00	490.00
4JH2E, TE, HTE, DTE	140.00	580.00
4JH2-UTE	165.00	540.00
4JH3E	120.00	400.00
4JH4E	100.00	510.00
4JH3-TE, HTE, DTE	140.00	490.00
2QM15	108.00	410.00
2QM20	108.00	420.00
3QM30	108.00	530.00
3QM30F	150.00	550.00

Prices & Specifications are subject to change without notice. Be sure to give model, serial number & application with your order. For model number, reference engine identification plate, not manual.

Notes:

- (1) If Applicable.
- (2) Fresh Water Models Only.
- (3) Gasket set is not included in 3YM20, 3YM30, 3JH & 4JH Series Major Kits.
- (4) Serial number is required for 4JH-TE & 4JH-HTE Major Kit.
- (5) Yanmar 2GM20 & 3GM30 engines built after 1997 are the European "YEU" versions.
2GM20 E2001~
3GM30 E20101~

YANMAR MARINE DIESEL ON BOARD SPARE PARTS KITS

On Board Kits for Power Boat applications. Choose Minor Kit for local cruising or Major Kit for extended voyages.

MINOR KIT

For Local Cruising

Lube Oil Filter(s)
 Fuel Oil Filter Kit
 Air Filter Element
 Set of Zinc(s) + Gasket(s) (A)
 Set of Belt(s)
 Water Pump Impeller & Gasket
 Coolant Treatment
 Marine Diesel Fuel Treatment
 MACK 726 Dry Box

MAJOR KIT

For Offshore Cruising

MINOR KIT PARTS PLUS:
 Service Manual
 Parts Manual
 Can of Engine Paint
 Fuel Primer Pump + Gasket (B)
 Fuel Injector
 Fuel Injector Washer
 Heat Exchanger Gaskets
 Thermostat & Gasket
 Water Pump Seal
 MACK 727 Dry Box



MACK 726 Dry Box



6CX GTE2 Minor Kit

MODEL:	MINOR KIT	MAJOR KIT
4LH-TE	\$ 120.00	\$ 490.00
4LH-HTE	120.00	490.00
4LH-DTE	110.00	500.00
4LH-STE	120.00	620.00
4LHA-HTE/HTP	175.00	600.00
4LHA-DTE/DTP	160.00	540.00
4LHA-STE/STP	140.00	580.00
6LY-UTE	220.00	800.00
6LY-STE	220.00	800.00
6LY2(A)-STE	210.00	725.00
6LYA-STP	190.00	800.00
6LYA-UTE	190.00	880.00
6LYA-STE	190.00	760.00
6LY2A-STP	210.00	770.00
6LP-DTE/6LPA-DTP	200.00	640.00
6LP-STE/6LPA-STP	200.00	640.00
6CX-ETE	295.00	835.00
6CX-GTE	350.00	925.00
6CX-GTE2	350.00	940.00



MACK 727 Dry Box

Prices & Specifications are subject to change without notice. Be sure to give model, serial number & application with your order. For model number, reference engine identification plate, not manual.

Notes:

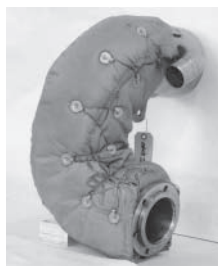
(A) If Applicable.

(B) Primer Pump is not used on 4LH-TE & 4LH-HTE, 4LHA-HTE & 6LP Series Engines

EXHAUST RISERS, ELBOWS & ADAPTERS



MACK 656



MACK 729



MACK 765



MACK 956



MACK 848

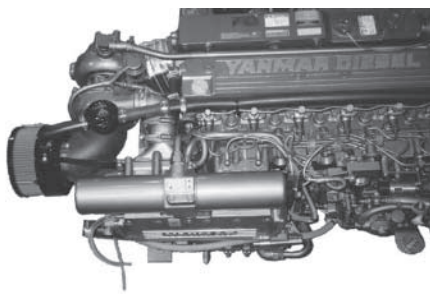


MACK 1013

PART NO:	DESCRIPTION
MACK 656	6CX-GTE, GTE2 Exhaust elbow features slotted adjustable mounting flange, polished 316L stainless steel construction, 1/8" NPT back pressure fitting & improved water distribution design. Backed by 3-year manufacturer's warranty.
MACK 729	6CX-GTE, GTE2 Exhaust elbow features 10" rise, swivel type mounting flange, 316L stainless steel construction, 1/8" NPT back pressure fitting, grey blanket covers dry portion. 1-year warranty.
MACK 848	6LYA/6LY2A Exhaust elbow features 14" rise, swivel mount, 316L stainless steel construction, 1/8" NPT back pressure fitting blanketed on dry section. 3-year manufacturer's warranty. TPI design
MACK 921	6LYA/6LY2A 5" Exhaust extension with blanket.
MACK 764	6LYA/6LY2A 5" Dry riser, 90° with blanket (starboard).
MACK 997	6LYA/6LY2A 5" Dry riser, 65° with blanket (port).
MACK 765	6LPA 5" Dry riser, 90° with blanket (starboard).
MACK 1060	6LPA 5" Dry riser, 65° with blanket (port).
MACK 892	4LHA/6LPA 2-1/2" Exhaust extension.
MACK 956	4LHA/6LPA 8" Exhaust extension.
MACK 1013	2YM15, 3YM20 & 3YM30 "U" type riser extension 3-1/2".
MACK 464	4JH3 Turbo exhaust elbow offset adapter.

NOTE: Custom Risers are available on request, inquire.

AIRSEP SYSTEMS



MACK 1004
6LY2A-STP Application

The Walker Engineering Airsep closed crankcase system will keep your boat free of oil mist and noxious fumes. Helps reduce engine turbo whine, plus saves on oil and fuel consumption.

PART NO:	DESCRIPTION
MACK 896	6LPA-STP Airsep kit.
MACK 1004	6LYA/6LY2A Airsep kit.
MACK 843	6CX-GTE/GTE2 Airsep kit.
CD 1725	Air element for above kits.

Installation jigs simulate engine position & transmission flange angle. Saves 8-10 hours of labor on each installation. All units are manufactured from heavy duty aluminum, accuracy to within .003". Use with standard engine mounts.

PART NO:	DESCRIPTION
MACK 1063	3JH4 installation jig , for use with KM35P transmission.
MACK 1064	4JH4 installation jig , for use with KM35P transmission.
MACK 832	6LPA-STP installation jig, for use with Hurth ZF63A down angle transmission & rear trunnion style, adjustable mounts.
MACK 839	6LYA/6LY2A installation jig for use with ZF280-1A down angle transmission.
MACK 1000	6LYA/6LY2A installation jig for use with ZF80-1A down angle transmission.
MACK 822	6CX-GTE/GTE2 installation jig for use with ZF280-1A down angle transmission.



MACK 832
(6LPA Jig)

8-WAY ADJUSTABLE ENGINE MOUNTS

New 8-Way anchor adjustable engine mounts, solve installation problems due to inconsistent factory stringers. All mounts are CNC machined from #6061 aluminum, available for sail & powerboat applications.

PART NO:	DESCRIPTION
MACK 1005	Three piece mount assembly, dimensions: 4" wide x 9.5" length x 6" depth. Includes 5" isolater mount footprint. Mount is 1/2" thick. Use on JH4-CX applications.
MACK 1006	Slotted isolator mount spacer, 1/2" thick, for MACK 1005 mount.
MACK 1027	Three piece mount assembly, dimensions: 4" wide x 9.5" length x 4" depth. Includes 5" isolater mount footprint. Mount is 1/2" thick. Use on YM/GM & JH4 applications.
MACK 1028	Three piece mount assembly, dimensions: 6" wide x 9.5" length x 6" depth. Includes 5" isolater mount footprint. Mount is 1/2" thick. Use on LH-CX applications.
MACK 1029	One piece welded & gusseted engine mount, dimensions: 6" wide x 9.5" length x 6" depth. Includes 5" isolater mount footprint. Mount is 1/2" thick. Use on LH-CX applications.
MACK 1030	Back plate for MACK 1029 mount, 1/4" thick.
MACK 1031	Slotted 1/2" isolator spacer plate for MACK 1029 mount.



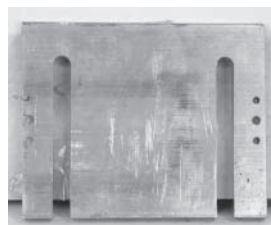
MACK 1005



MACK 1027



MACK 1029



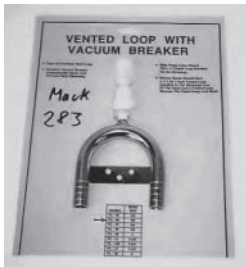
MACK 1031



MACK 1028

ANTI-SYPHON VALVES

Our vented loop anti-syphon valves are required for below the water line engine installations. This loop is made from type 316 stainless steel while the vacuum breaker is plastic with a stainless steel spring. Unit must be installed two feet above sea level to prevent back syphonage.



MACK 283

PART NO:	DESCRIPTION
MACK 285	Vent loop for 1/2" I.D. hose.
MACK 283	Vent loop for 5/8" I.D. hose.
MACK 288	Vent loop for 3/4" I.D. hose.
MACK 284	Vent loop for 1" I.D. hose.
MACK 823	Vent loop for 1-1/2" I.D. hose.

SURGE TANK



9208-1

PART NO:	DESCRIPTION
9208-1	Remote surge tank for use in sailboat applications when hot water heater is located above the engine. Copper construction with 7 P.S.I. filler cap & 2-3/4" N.P.T. hose connections. Unit measures 10" x 4", includes integral mounting brackets.

BLOCK HEATERS



MACK 254

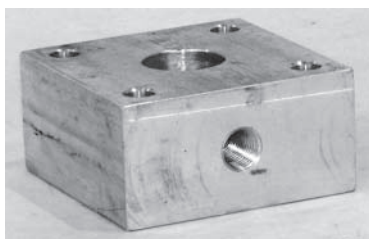


099-6CX

Block Heater Kit

PART NO:	DESCRIPTION
MACK 254	Block heater 1000 watt, 120 volt with 5/8" hose connections. Works on thermo syphon principle. Includes built in thermostat. Used on all Yanmar Marine engines except 6CX series. Remote mount design, includes mounting bracket.
099-6CX Block Heater Kit	6CX/GTE(2) engine block heater kit. This 1500 watt unit replaces water jacket plate behind F.I. pump, includes thermostat control and probe.

FILLER NECK EXTENSION



MACK 432

PART NO:	DESCRIPTION
MACK 432	Filler neck extension block is 1-1/2" thick, used on V-drive engine applications to raise heat exchanger fill cap. Tapped for 1/4" N.P.T. fitting for running bleed hose to rear of exchanger.

PART NO:	DESCRIPTION
18004	Sherwood 1/2" NPT plastic strainer.
18001	Sherwood 3/4" NPT plastic strainer, use mounting bracket # 14240.
18005	Sherwood 1" NPT plastic strainer, use mounting bracket # 14239.
18016	Sherwood 1-1/4" NPT plastic strainer, use mounting bracket # 21930.
MACK 661	Perko 1-1/2" NPT bronze strainer, 11-1/2" height x 7-1/4" width. Units feature built-in mounting lugs, stainless steel strainer basket & drain plugs for winterizing.
MACK 634	Buck Algonquin bronze strainer accepts 1-1/2" I.D. hose or 1" NPT fittings.
MACK 630	Buck Algonquin bronze intake strainer 1-1/2" I.P.T. pipe.
MACK 631	Seacock 1-1/2" NPT, features bronze body, ball type operation with stainless steel handle for full flow.
MACK 632	Bronze fitting 90° 1-1/2" NPT accepts 1-1/2" I.D. hose.
MACK 633	Bronze fitting straight, 1-1/2" NPT accepts 1-3/4" I.D. hose.
MACK 662	Bronze fitting 90° 1-1/2" NPT accepts 1-3/4" I.D. hose.



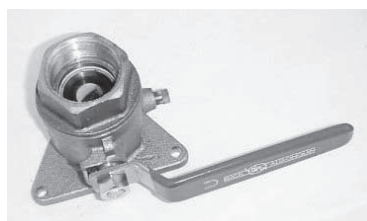
18016



MACK 661



MACK 630



MACK 631



MACK 634

HOT WATER FITTINGS & KITS

Use when connecting hot water heater to engine.

PART NO:	DESCRIPTION
MACK 291	Brass fitting (straight) 3/8" NPT - 5/8" hose.
MACK 292	Brass fitting (90°) 3/8" NPT - 5/8" hose.
MACK 942	2YM15, 3YM20/30 fitting kit for 5/8" hose.
MACK 973	6LYA-6CX series fitting kit with shut-off valves for 5/8" hose.
MACK 974	4LHA-6LPA series fitting kit with shut-off valves for 5/8" hose.
MACK 975	6LYA/6CX series fitting kit with shut-off valves for 3/4" hose.
099-HW3	3JH4 & 4JH4 series fitting kit with shut-off valves for 5/8" hose.



MACK 942



MACK 973

NOTE: Refer to the installation manual for fitting location.

ENGINE MOUNTS



MACK 157



MACK 1014

Low Profile Mounts for Yanmar Engines

PART NO:	DESCRIPTION
MACK 825	Bushing mount # DF2204-2, 5/8" stud for 1GM or 1GM10 engines up to 150 lbs.
MACK 157	Bushing mount #DF2205-2, 5/8" stud for 2YM15, 3YM20/30, 2GM20F, 3GM30F, 2QM15, 2QM20 & all SB, SVE, YSE & YSM series engines up to 450 lbs.
MACK 159	Bushing Mount # DF2207-2, 5/8" stud for all 3QM30, 3JH2, 3JH3, 4JH3, 3JH4, 4JH4 series engines up to 750 lbs with 4" footprint.
MACK 1014	Bushing mount #DF9106, 1" stud for 6LYA, 6LY2A & 6CX series engines up to 2400 lbs with 5" footprint.

BARRY MOUNTS



MACK 863

PART NO:	DESCRIPTION
MACK 863	6LPA, 6LYA, 6LY2A & 6CX-GTE/2 front & rear mount, red stripe, 1" stud, 3-3/4" wide, 5" footprint.
119175-08440-01	4LHA front & rear mount, purple stripe, 3/4" stud.

MISCELLANEOUS ENGINE MOUNTS



MACK 165



MACK 750

PART NO:	DESCRIPTION
MACK 150	Bushing Mount DF206, 5/8" stud. 800 lbs. max.
MACK 151	Bushing Mount DF236M1, 3/4" stud. 1100-1500 lbs.
MACK 152	Bushing Mount DF237, 3/4" stud. 1500-1800 lbs.
MACK 153	Bushing Mount DF100, 5/8" stud-low profile. 850 lbs max.
MACK 158	Bushing Mount DF2205-1, 1/2" stud. 150-450 lbs.
MACK 161	Bushing Mount DF238M1, 3/4" stud. 1800-2200 lbs.
MACK 165	Bushing Mount DF3307-3, 3/4" stud. 1400-1600 lbs.
MACK 169	Bushing Mount DF477-M3, 3/4" stud. 1200-1600 lbs.
MACK 750	Metalastic Mount for 6LPA-6LY2A engines, 24 mm stud with 7-1/4" isolator footprint.

AQUADRIVE MOUNTS



6050212



6050232

A Low Vibration, Low Profile Alternative Mount

PART NO:	DESCRIPTION
6050212	1GM, 1GM10 12 mm stud
6050213	2GM, 2GM20F 12 mm stud
6050222	3GM, 3GM30F, 3JH 16 mm stud
6050223	4JH Series 16 mm stud
6050231	4LH Series 20 mm stud
6050232	6LY Series 20 mm stud
6050233	6CX Series 20 mm stud
MACK 580	Adjuster, stainless 50230 series
MACK 582	20 mm stainless stud 50230 series

ENGINE PAINT

High quality paint-custom matched for Yanmar applications.

PART NO:	DESCRIPTION
MACK 317	Charcoal Grey spray paint, 12 oz. can, 6 per case.
MACK 652	White spray paint, 12 oz. can, 6 per case (6CX-GTE2).
MACK 475	Primer spray paint, 12 oz. can, 6 per case.
MACK 870	Charcoal Grey paint, gallon size. Reduce with DuPont 366IS (mid-temp) acrylic thinner.
MACK 319	GPP Green spray paint, 12 oz. can.



MACK 317

POWER STEERING KIT - 6LYA/6LY2A

PART NO:	DESCRIPTION
MACK 728	Power steering kit for 6LYA/6LY2A engines. Complete with PTO pulley, belt, high performance pump & mounting hardware.



MACK 728

RESERVOIR - POWER STEERING

PART NO:	DESCRIPTION
MACK 903	Stainless steel reservoir for single or twin engine applications. Features: built-in filter, 3 quart capacity, sight glass, thermometer, breather, 1" NPT fittings & mounting bracket. Use for high performance or heavy duty applications.



MACK 903

FUEL BLOCKS

PART NO:	DESCRIPTION
MACK 539	Fuel inlet block - replaces standard barbed hose fitting to allow connection of high pressure threaded hose connector. Fits 4LHA, 6LP, 6LY and 6CX series engines. Connects via 3/8" NPT female port.
MACK 539A	Fuel return block - same as MACK 539 with additional 1/4" NPT female port to run return line to fuel tank. Fits 6LYA and 6CX series engines.
MACK 610	Fuel block, inlet and outlet for 6LPA-DTP/STP. Mounts to fuel filter mounting bracket.



MACK 539A



MACK 610



500 FG30



75/500 MAX30



2040PM-OR



RK11-1669

Racor Turbine series separators use a three stage process to remove virtually all contaminants and water from fuel.

FILTER ASSEMBLIES

PART NO:	DESCRIPTION
500 FG30	Turbine series separator flow rated at 60 g.p.h. Ideal for JH and 4LHA series engines. Equipped with 30 micron element, 3/4"-16 SAE ports and plastic bowl. Measures 11.5" in length.
500 MA30	Marine turbine series separator with metal shield, meets all A.B.Y.C. and U.S.C.G. standards.
900 FH30	Turbine series separator flow rated at 90 g.p.h. Ideal for 6LPA and 6LYA series engines. Equipped with 30 micron element, 7/8"-14 SAE ports and plastic bowl. Measures 17" in length.
900 MA30	Marine turbine series separator with metal shield, meets all A.B.Y.C. and U.S.C.G. standards.
1000 FH30	Turbine series separator flow rated at 180 g.p.h. Ideal for 6CX series engines. Equipped with 30 micron element, 7/8"-14 SAE, ports and plastic bowl. Measures 22" in length.
1000 MA30	Marine turbine series separator with metal shield, meets all A.B.Y.C. and U.S.C.G. standards.
75/500 MAX30	Dual marine turbine series separator flow rated at 120 g.p.h. Equipped with 30 micron elements, rotary valve, vacuum gauge. plastic bowls with metal shields. Measures 11.5" h x 14.5" w., meets all A.B.Y.C. and U.S.C.G. standards.
75/900 MAX30	Dual marine turbine series separator flow rated at 180 g.p.h. Equipped with 30 micron elements, rotary valve, vacuum gauge. plastic bowl with metal shields. Measures 17" h x 19" w. Meets all A.B.Y.C. and U.S.C.G. standards.
75/1000 MAX30	Dual marine turbine series separator flow rated at 360 g.p.h. Equipped with 30 micron elements, rotary valve, vacuum gauge. plastic bowls with metal shields. Measures 22" h x 19" w. Meets all A.B.Y.C. and U.S.C.G. standards.
230 RM30	Fuel water separator, 30 micron, 30 g.p.h. with metal bowl.

ELEMENTS, ACCESSORIES AND FITTINGS

PART NO:	DESCRIPTION
2010PM-OR	30 micron replacement element for 500 series filter.
2040PM-OR	30 micron replacement element for 900 series filter.
2020PM-OR	30 micron replacement element for 1000 series filter.
911-08-H6	Hose fitting 3/8"-straight, 3/4" - 16 SAE.
913-08-H6	Hose fitting 3/8"-90°, 3/4" - 16 SAE.
911-10-H6	Hose fitting 3/8"-straight, 7/8" - 14 SAE.
913-10-H6	Hose fitting 3/8"-90°, 7/8" - 14 SAE.
RK21069	Water probe kit for 500, 900 & 1000 series filters.
RK20726	2" gauge type water detection module with light & audio.
RK11-1669	Vacuum gauge kit, monitors element condition for 500, 900 & 1000 series filters.

SAIL BOAT

PART NO:	DESCRIPTION
4120	Yanmar fuel filter/water separator for use on 1GM10, 2YM15 & 2GM20F series engines. Each filter is standard equipped with 30 micron element, plastic see-through bowl, 1/4" NPT ports, drain valve and air vent. Max flow rating is 15 g.p.h., measures 7" in length.
4230B	Yanmar fuel filter/water separator for use on 2YM15, 2GM20F, 3YM20, 3YM30, 3JH3, 3JH4, 4JH3 & 4JH4 series engines. Each filter is standard equipped with 30 micron element, plastic see-through bowl, 1/4" NPT, inlet & outlet, air vent and fuel primer pump. Max flow rating is 30 g.p.h., measures 9" in length.
4120-012	30 micron replacement element for filter # 4120.
RK 10109	Metal bowl for filter # 4120.
4230-0100	30 micron replacement element for filter # 4230B.
RK 22368	Metal bowl for filter # 4230B.
RK 20025	Replacement primer pump for filter # 4230B.
RK 30964	Water probe/connector for filter # 4230B.
MACK 297	90° brass fitting, 1/4" NPT, accepts 5/16" hose.



4120



4230B



4120-012



4230-0100

POWER BOAT

PART NO:	DESCRIPTION
4412	Yanmar fuel filter/water separator for use on 4LHA, 6LPA and 6LYA series engines. Features include; unitized priming pump, multiple 3/4"-16 SAE fuel ports, 30 micron element, plastic see-through bowl and self venting drain valve. Maximum flow rate is 90 g.p.h.
4412-012	30 micron replacement element.
911-08-H6	Barbed hose fitting 3/8", straight 3/4"-16 SAE.
913-08-H6	Barbed hose fitting 3/8", 90° 3/4"-16 SAE.
RK 30964	Water probe/connector.
RK 30876	Heater 2-pole connector kit.



4412



4412-012



911-08-H6

Note: Always install primary filters on the vacuum side of the fuel transfer pump.*
Yanmar specifies 30 micron primary filter and 10 micron secondary filter.
.36 x HP = G.P.H. flow rate.

*** ALWAYS CARRY A SPARE REPLACEMENT ELEMENT.***

MERCURIS STERN DRIVE PROPELLERS

Propellers are available in aluminum or stainless steel for all Bravo & X-Series Stern Drives, call for additional sizes not listed.

BRAVO I PERFORMANCE SERIES: STAINLESS STEEL



48-831913A45

BRAVO I

BRAVO I DRIVE PROPELLERS / LEFT AND RIGHT HAND ROTATION		
DIAMETER X PITCH	LEFT HAND ROTATION P/N	RIGHT HAND ROTATION P/N
15-1/4" x 22"	48-831909A45	48-831910A45
15-1/4" x 24"	48-831911A45	48-831912A45
15-1/4" x 26"	48-831913A45	48-831914A45
15-1/4" x 28"	48-831915A45	48-831916A45

BRAVO II: ALUMINUM



48-18619A40

BRAVO II

BRAVO II DRIVE PROPELLERS / LEFT AND RIGHT HAND ROTATION		
DIAMETER X PITCH	LEFT HAND ROTATION P/N	RIGHT HAND ROTATION P/N
18-1/4" x 19"	48-18615A40	48-18614A40
17-3/4" x 21"	48-18617A40	48-18616A40
17-1/2" x 23"	48-18619A40	48-18618A40

BRAVO III: STAINLESS STEEL



48-823670A6

BRAVO III

BRAVO III DRIVE PROPELLERS / LEFT AND RIGHT HAND ROTATION		
DIAMETER X PITCH	LEFT HAND ROTATION P/N	RIGHT HAND ROTATION P/N
16" x 20"	48-823661A6	
14-3/8" x 20"		48-823662A6
15-3/4" x 22"	48-823663A6	
14-1/4" x 22"		48-823664A6
15-1/2" x 24"	48-823665A6	
14-1/4" x 24"		48-823666A6
15-1/4" x 26"	48-823667A6	
14" x 26"		48-823668A6
13-3/4" x 28"	48-823670A6	
15" x 28"		48-823669A6

Above sets are for single Bravo III Drive. Two sets will be needed for twin engine application.

BOAT BUILDERS NOTICE: Mack Boring offers access to demo propellers to help select the correct diameter and pitch propeller when re-powering with a Yanmar Stern Drive Engine. Competitive pricing is available on all propellers, contact your salesman today!

MERCRUISER JACKSHAFT COMPONENTS

The components listed below will adapt Yanmar 4LHA and 6LPA series inboard engines to Bravo Stern Drives.

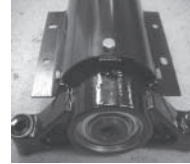
PART NO:	DESCRIPTION
MACK 766	Vulcan Integral Shaft Support (ISS) coupling with spicer #1410 flange and 26 spline shaft. Connect to standard 6 bolt bellhousing.
MACK 770	Aluminum drive shaft shield for MACK 766 coupling.
817416A4	Mercruiser housing assembly-rear. Uses spicer #1410 flange, connects to Bravo input shaft. Includes lower shield only.
93919A1	Upper shield for housing #817416A4.
6040460	Aquadrive adapter #1410 spicer flange (2 required).
6070049BVL58"	Aquadrive CV/drive shaft assembly, 58" length.
6070049BVL60.25"	Aquadrive CV/drive shaft assembly, 60.25" length.



MACK 766



MACK 770



817416A4



6070049BVL58

NOTE: Aquadrive shafts are available in custom lengths, please inquire.

MERCRUISER DRIVE SHAFT KIT

PART NO:	DESCRIPTION
45-94819A3	58" Drive shaft with spicer #1410 flange.
45-94819T5	34.5 Drive shaft with spicer #1410 flange.



45-94819A3

ENGINE COUPLER - STERN DRIVE

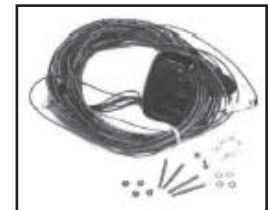
PART NO:	DESCRIPTION
119778-85500-01	Yanmar coupler used for 4LHA/6LPA direct coupled stern drive package. For Jackshaft applications use Vulcan torflex.



119778-85500-01

POWER TRIM PANELS AND GAUGE

PART NO:	DESCRIPTION
55642A13	Single engine inboard power trim control panel (3 button style) with 20' harness and instruction sheet.
90362A3	Dual engine power trim control panel (toggle switch style) with 20' harness and circuit control box. Mounts in 3-3/8" hole with externally mounted tie bars, simultaneously lifts both drives with single toggle switch.
79-859693A1	Quick silver series gauge only, fits 2-1/8" hole. Use with power trim control panel.



55642A13

MERCATHODE KIT

Automatically protects the sterndrive from galvanic corrosion.

PART NO:	DESCRIPTION
98869A14	Mounts in place of zinc anode under the gimbal housing, eliminating the need to drill holes through the transom (fits R, MR, Alpha One and Bravos.)



98869A14

TRANSMISSIONS

Marine Transmission Center

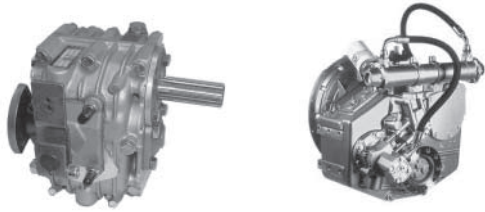
powertrain division of Mack Boring & Parts Company

Mack Boring & Parts Company's Powertrain Division is committed to providing customers one-stop service for all marine transmission needs. With large inventories of transmissions and parts on hand, we are ready to deliver the best selection at highly competitive prices. Call today for free expert transmission technical advice.

OUR PRODUCTS

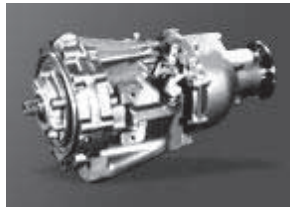
The Marine Transmission Center can provide and support the following products. For a comprehensive list of stock units, new & rebuilt, please contact us or visit us at www.marinetransmission.com.

ZF MARINE



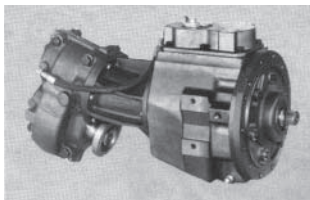
- Models ZF5M through ZF30M with mechanical shift.
- Models ZF25 through ZF350A hydraulic transmissions.
- Other models available through special order.

VELVET DRIVE



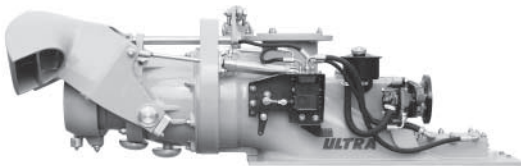
Models 71-Series through the 5000 V-Drive Series are always in stock and available.

PARAGON



Parts for all models including obsolete & hard-to-find parts. Complete custom rebuild service available.

ULTRAJET



Waterjet propulsion drives in a wide range of models for most marine diesel engines from 100-1700 (bhp.) Complete units, parts and accessories available.

KANZAKI



Models KM2P through KM6A transmissions used on Yanmar sail and powerboat applications.

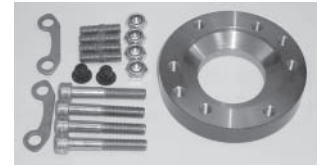
NOTE: We maintain an inventory of hundreds of transmissions and a giant parts department stocked with hard-to-find OEM parts. We also stock a tremendous volume of coolers, couplings, brackets, cable connections, drive plates, hoses, fittings, adapter plates & other accessories. Visit us at www.marinetransmission.com.

Aquadrive constant velocity joints will prevent noise and vibration from transmitting through the boat hull.

The Aquadrive will also allow deliberate angles between the engine and shaft and reduce the need for accurate engine alignment. Aquadrive CV assemblies are available for most engine installations.

Please call with application for proper recommendation.

PART NO:	DESCRIPTION
6070125	1GM10, 2GM20F & 3GM30F CV assembly.
6040301	1GM10, 2GM20F & 3GM30F transmission flange adapter.
6070025	4JH3 Series CV assembly 170 mm length.
6110430	4JH3 Series B10 Thrust Bearing.
6040405	4JH3 Series Transmission Adapter, KBW20,21 & KM4A.
6040400	4JH3 Series Transmission Adapter, 4" Hurth & Velvet Drive.
6040401	4JH3 Series Transmission Adapter 5" Hurth & Velvet Drive.
6070040	4LH Series CV Assembly 210 mm length.
6120530	4LH Series B20 Thrust Bearing.
6040450A	4LH Series Transmission Adapter 5", Hurth & Velvet Drive.
6040467	4LH Series Transmission Adapter 5-3/4", ZF & Twin Disc.
6040514	6LP Series Transmission Adapter 5", Hurth & Velvet Drive.
6070090	6LP Series CV assembly 245 mm length.
60120630	6LP Series B20 Thrust Bearing.
6040700	6LY & 6CX Series Transmission Adapter 5-3/4", ZF & Twin Disc.
6070083	6LY & 6CX Series CV assembly 274 mm length.
6130830A	6LY Series B30 Thrust Bearing.
6039220A	6CX Series HDL20680 Thrust Bearing.



6040405



6070025



6110430

DRIVE SAVERS

The drive saver provides a flexible non-metallic barrier between your transmission & shaft.

The benefits of using a drive saver include:

- **Reduced vibration**
- **Prevents electrolysis**
- **Prevents gear train damage — breakaway design**

PART NO:	APPLICATION	TORQUE RATING	NOTES
MACK 200	Yanmar	500 ft. lb.	4" O.D. Flange KM2A, KM2P(1), KM3P & KBW10.
MACK 216	Yanmar	675 ft. lb.	4-3/4" O.D. Flange KM4, KBW20, KBW21.
MACK 709	Yanmar	500 ft. lb.	4" O.D. Flange KM3P4.
MACK 198	Hurth / Velvet Drive	550 ft. lb.	4" O.D. Flange.
MACK 203	Hurth / Velvet Drive	675 ft. lb.	5" O.D. Flange.
MACK 199	Volvo	550 ft. lb.	MB & MD series.
MACK 217	Twin Disc	1800 ft. lb.	MG506 & MG507.
MACK 218	ZF	1800 ft. lb.	ZF280 & 301.
MACK 644	ZF	1300 ft. lb.	ZF220A & Warner 73C.



MACK 200

ZF HURTH PTO ADAPTER

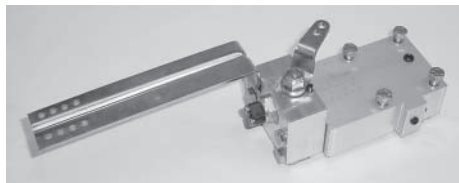
PART NO:	APPLICATION/DESCRIPTION
3311 115 002	Live PTO adapter for ZF Hurth ZF25, 45, 63 & 80 series transmissions. Used for SAE A pad with 9 spline hydraulic pump.



3311 115 002

TROLLING VALVES

Designed to provide slow speed drive, trolling valves are available as an option on most models of marine transmissions. In most cases trolling valves are easily retrofitted. Cable Actuated.



3217 093 014

PART NO:	DESCRIPTION
3312 199 009	ZF45, 63 & 80 Series. 23 bar mechanical trolling valve kit.
3313 199 012	ZF80-1A & ZF80-1IV only. 26 bar mechanical trolling valve kit.
3205 199 011	ZF220A mechanical trolling valve kit.
3205 308 051	Shift bracket for ZF220A trolling valve.
3205 308 050	Lever for ZF220A trolling valve.
3217 093 014	ZF220, 280 & 301 MB15 mechanical trolling valve kit.

TRANSMISSION COOLERS

R & D Low Pressure Coolers for Velvet Drive & Hurth Gears

PART NO:	DESCRIPTION
RD205AA-05	5" x 1" 2" Bundle Copper Cooler
RD206CC-05	6" x 3/4" 2" Bundle Copper Cooler
RD206AA-05	6" x 1" 2" Bundle Copper Cooler
RD206EE-05	6" x 1-1/4" 2" Bundle Copper Cooler
RD209AA-05	9" x 1" 2" Bundle Copper Cooler
RD209EE-05	9" x 1-1/4" 2" Bundle Copper Cooler
RD212EE-05	12" x 1-1/4" 2" Bundle Copper Cooler

R & D High Pressure Coolers for ZF, Hurth & Twin Disc Gears

PART NO:	DESCRIPTION
RD212QQ-85	2" x 12" 1-1/4" hose connections, 3/8" NPT fluid connections.
RD930690-MB	3" x 6" 1-1/4" hose connections, 3/8" NPT oil connections. Copper Nickel.
RD306YY-85B	3" x 6" 1-1/2" hose connections, 3/8" NPT oil connections.
RD306LL-85B	3" x 6" 2" hose connections, 3/8" NPT oil connections.
RD930990-MB	3" x 9" 1-3/4" hose connections, 3/8" NPT oil connections. Copper Nickel.
RD930960-MB	3" x 9" 1-1/2" 90° hose connections, 3/8" NPT oil connections. Copper Nickel.
RD931160-MB	3" x 11" 1-3/4" hose connections (1 straight & 1 90°), 3/8" NPT oil connections. Copper Nickel.
RD9212QQ-85C	2" x 12" 1-1/4" hose connections, 1/2" NPT connections. Copper Nickel.

ZF Marine Cooler

PART NO:	DESCRIPTION
3306 107 001	Side mount cooler for ZF mechanical transmissions. ZF10M - 12M - 15M - 15MA - 15MIV - 25M - 25MA



RD212EE-05



RD930990-MB

Our Weatherhead high pressure lines and fittings are made in the U.S.A.

PART NO:	DESCRIPTION
MACK 106	Hose-Trans Line 21", 90° Inv. FL STR F/M JIC.
MACK 107	Hose-Trans Line 20", 90° Inv. FL STR F/M JIC.
MACK 552	Hose-Trans Line 16", 2 female 8 JIC Fittings.
MACK 553	Hose-Trans Line 20", 2 female 8 JIC Fittings.
MACK 554	Hose-Trans Line 24", 2 female 8 JIC Fittings.
MACK 555	Hose-Trans Line 28", 2 female 8 JIC Fittings.
MACK 568	Hose-Trans Line 11", 2 female 8 JIC Fittings.



MACK 552

TRANSMISSION FITTINGS

PART NO:	DESCRIPTION
MACK 295	3/8" NPT male to 1/2" inverted flare female.
MACK 417	1/2" NPT male to 1/2" inverted flare female.
MACK 436	3/8" NPT male to 1/2" inverted flare female 90°.
MACK 105	3/8" BSPP male to 1/2" inverted flare male.
MACK 556	3/8" NPT to 8 JIC - straight, C 5205X8.
MACK 557	3/8" NPT to 8 JIC - 90°, C 5405X8.

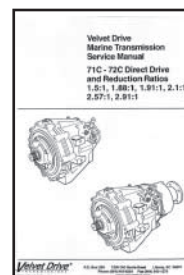


MACK 557

TRANSMISSION MANUALS

SERVICE AND PARTS MANUALS FOR POPULAR TRANSMISSIONS.

PART NO:	DESCRIPTION
1289	Velvet Drive 71 and 72 series, Conventional models.
1146	Velvet Drive 71 and 72 series, V-drive models.
1351	Velvet Drive 5000 series, down angle and V-drive models.
R 310010052	ZF5M thru ZF30M.
R 310010054	ZF63, ZF63A, ZF80A and ZF80-1A.
R 310010009	ZF63IV - 80IV AND 80-1 IV.
R 32702206049	ZF220A.
R 32702206236	ZF220PL.
R 32702806225	ZF280A and ZF280PL.
R 32703026067	ZF301C.
R 32703256274	ZF325-1 and ZF325-1A.
R 32703505261	ZF350PL and ZF350A.



1289



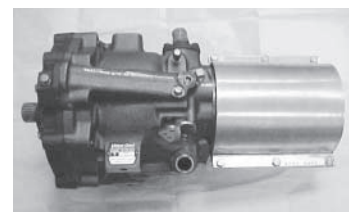
R 32702806225



R 310010052

DRIVESHAFT SHIELD-VELVET DRIVE

PART NO:	DESCRIPTION
MACK 1020	Custom driveshaft shield, bolts to rear of Velvet Drive / Huber transmissions. Use on all driveshaft applications, Konrad, etc.



MACK 1020

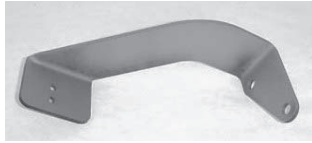
TRANSMISSION SHIFT BRACKETS



MACK 050



MACK 041A



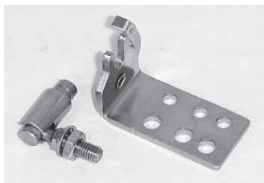
MACK 058



MACK 030

PART NO:	DESCRIPTION
MACK 050	Kanzaki rear entry shift bracket for KM2P and KM3P.
MACK 993	Kanzaki rear entry shift bracket for SD20.
MACK 444	Kanzaki rear entry shift bracket for KBW10.
MACK 023	Kanzaki top entry shift bracket for SD20, SD30 and SD31.
MACK 1032	Kanzaki rear entry slotted shift bracket for SD20.
MACK 450	Kanzaki top entry shift bracket for KBW20 and KBW21.
MACK 034	Hurth ZF45 and ZF63 shift bracket (4LH & 6LP).
MACK 041	Hurth ZF63 shift bracket (4LHA).
MACK 707	Hurth 800V2 aluminum shift bracket (6LY) formula.
MACK 826	Hurth ZF15 MIV shift bracket.
MACK 041A	Velvet Drive 5000 series (4LHA, 6LPA) Hurth 800 (6LY) shift bracket.
MACK 030	Velvet Drive 71/72 series shift bracket.
MACK 058	Velvet Drive 5000 series rear entry shift bracket.
MACK 1059	Velvet Drive 72 series reduction - Crusader applications.
MACK 683	Twin Disc MG5011A, 5061A shift bracket.
MACK 655	Twin Disc MG507A shift bracket

SHIFT CABLE CONNECTION KITS



MACK 003

PART NO:	DESCRIPTION
MACK 003	Single station shift cable connection kit.
MACK 316	Dual station shift cable connection kit.

TRANSMISSION COOLER MOUNTING BRACKETS



MACK 032



MACK 043

PART NO:	DESCRIPTION
MACK 032	Hurth ZF45/63 cooler mounting bracket.
MACK 033A	Velvet Drive 5000 series mounting bracket.
MACK 043	Velvet Drive 71/72 series mounting bracket.
MACK 021R	6LYA, 6LY2A & 6LY3 - ZF80, ZF85 & ZF220 cooler bracket RH.
MACK 021L	6LYA, 6LY2A & 6LY3 - ZF80, ZF85 & ZF220 cooler bracket LH.
MACK 059	ZF IRM301 cooler mounting bracket.
MACK 541	6LYA & 6LY2A heavy duty for multiple coolers.
MACK 851A	6LYA & 6CXE, ZF 280A cooler mounting bracket.
MACK 1055	Twin Disc MG 5075A cooler mounting bracket.



MACK 541



MACK 021 (R) (L)

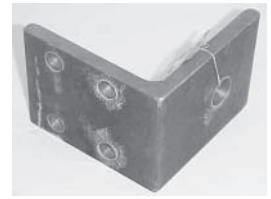


MACK 851A

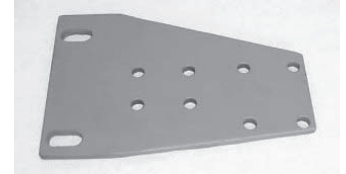
Custom manufactured heavy duty Transmission Mounting Brackets designed for use with Yanmar inboard marine diesels.

4LHA-SERIES

PART NO:	DESCRIPTION
MACK 038	Velvet Drive 5000 series mounting plate (2 required.)
MACK 020	Velvet Drive 5000 series brackets, use with MACK 038 (2 required) with 3/4" ID hole.
MACK 027	Spacer for MACK 038 (2 required.)
MACK 048	Velvet Drive 71/72 series adjustable mounting bracket (2 required.)
MACK 461	Trunnion Pin 3/4" ID hole for MACK 048 and MACK 222.
MACK 047	Hurth ZF45/63 fixed mounting bracket (2 required) with 3/4" ID hole.
MACK 222	Hurth ZF45/63 adjustable mounting bracket (2 required.)
MACK 046	Hurth ZF45A 1/2" spacer plate (2 required.)
MACK 016R	Twin Disc MG5011A mounting bracket (right.)
MACK 016L	Twin Disc MG5011A mounting bracket (left.)



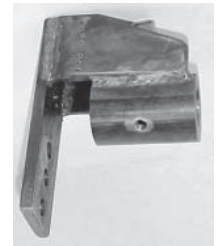
MACK 020



MACK 038



MACK 047



MACK 048



MACK 222



MACK 451

6LPA-SERIES

PART NO:	DESCRIPTION
MACK 026	Hurth ZF63 fixed mount (2 required) with 1" ID hole.
MACK 222	Hurth ZF63 adjustable mount (2 required) use with MACK 449 or MACK 461 Trunnion Pin.
MACK 449	Trunnion Pin 1" ID hole for MACK 222 and MACK 048.
MACK 451	Velvet Drive 5000 series mount (2 required) 1" ID hole.
MACK 048	Velvet Drive 71/72 series adjustable mounting bracket (2 required) use with Trunnion Pin.
MACK 416	ZF IRM 220A mount (2 required) with 1" ID hole.
MACK 016 R	Twin Disc MG5011A mounting bracket (right.)
MACK 016 L	Twin Disc MG5011A mounting bracket (left.)

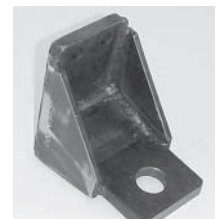
NOTE: Mounts listed on pages 35-37 are designed and approved for pleasure boat applications. High performance or severe duty applications require engineering approval.



MACK 416



MACK 449

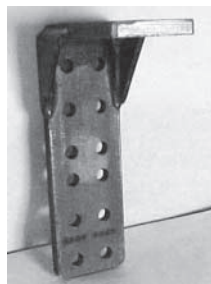


MACK 026

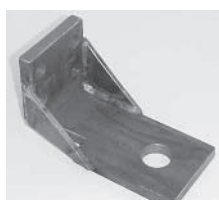
Custom manufactured Transmission and Engine Mounting Brackets designed for use with Yanmar inboard marine engines.



MACK 061



MACK 612B



MACK 015



MACK 051L



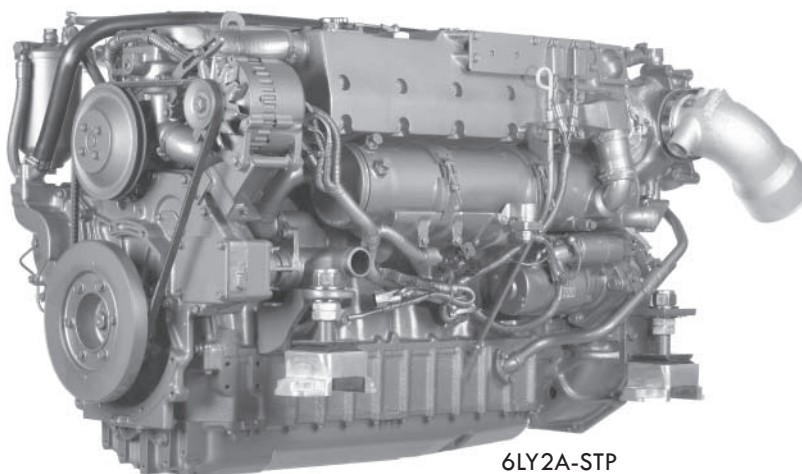
MACK 036L



MACK 617

6LYA/6LY2A/6LY3 SERIES

PART NO:	DESCRIPTION
MACK 061	Hurth ZF80 V-drive mount (2 required) with 1" ID hole.
MACK 612B	Hurth ZF80A adjustable height (2 required) with 1" ID hole.
MACK 222	Hurth ZF80A adjustable mount (2 required.)
MACK 449	Trunnion Pin for MACK 222 and MACK 048 mounts, 1" ID hole.
MACK 048	Velvet Drive 72 series adjustable mount (2 required.)
MACK 015	Velvet Drive 72 series fixed mount (2 required) with 1" ID hole.
MACK 416	ZF220, 220A and 220V mount (2 required.)
MACK 036R	ZF220 and 280 mount (right hand) with 1" ID hole.
MACK 036L	ZF220 and 280 mount (left hand) with 1" ID hole.
MACK 051R	ZF301 mount (right hand) with 1" ID hole.
MACK 051L	ZF301 mount (left hand) with 1" ID hole.
MACK 007	Twin Disc MG5050 mount (left hand.)
MACK 008	Twin Disc MG5050 mount (right hand.)
MACK 654	Twin Disc MG5071A1 mount (2 required.)
MACK 418	Spacer 2-1/2" for 6LY2 front mount.
MACK 617	Spacer 2" for 6LY2 front mount.
MACK 614A	Spacer 1/4" for 6LY2 rear mount bell housing.



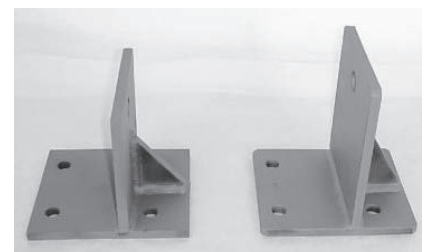
6LY2A-STP

NOTE: Brackets listed are generic types. Check "Bill of Material" (BOM) for manufacturer specific part #.

Custom manufactured Transmission & Engine Mounting Brackets designed for use with Yanmar inboard marine diesels.

6CX SERIES

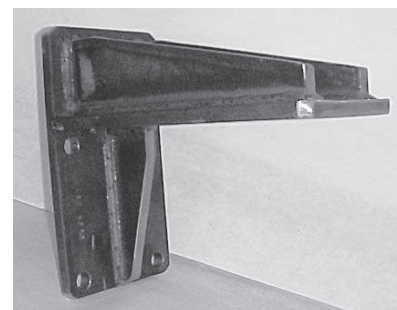
PART NO:	DESCRIPTION
MACK 035R	ZF280 Inline/V-drive mount (RH) with 1" ID hole.
MACK 035L	ZF280 Inline/V-drive mount (LH) with 1" ID hole.
MACK 544R	ZF280A Drop mount extra wide (RH) Rampage.
MACK 544L	ZF280A Drop mount extra wide (LH) Rampage.
MACK 587R	ZF280 drop mount extra wide (RH) Ocean.
MACK 587L	ZF280 drop mount extra wide (RH) Ocean.
MACK 586R	Front engine mount - starboard (RH) Ocean.
MACK 586L	Front engine mount - port (LH) Ocean.
MACK 615R	Front engine mount (RH) Henriques.
MACK 615L	Front engine mount (LH) Henriques.
MACK 659	Front engine mount (port) Silverton.
MACK 659A	Front engine mount - starboard Silverton.
MACK 010	Twin Disc MG507 mount (LH.)
MACK 011	Twin Disc MG507 mount (RH.)
MACK 052	Twin Disc MG506 mount set.
MACK 654	Twin Disc MG507A (order RH & LH.)



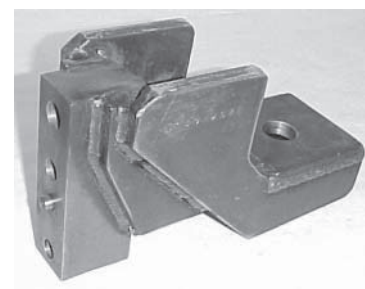
MACK 035R&L



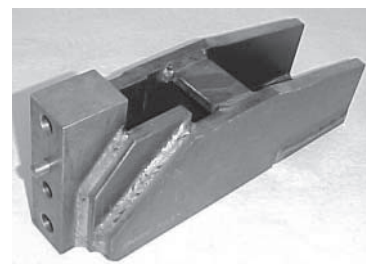
MACK 544L



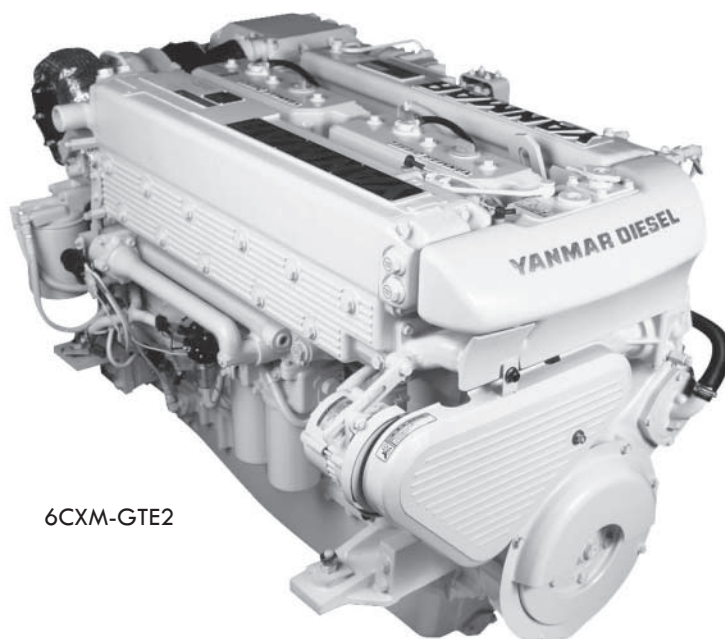
MACK 587R



MACK 615R



MACK 586L



6CXM-GTE2

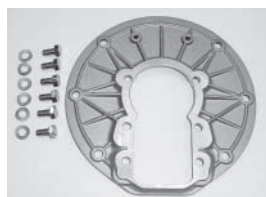
BELL HOUSING ADAPTERS



MACK 276



MACK 306



344544

PART NO:	DESCRIPTION
MACK 306	GM series Hurth/Velvet Drive bell housing adapter plate.
MACK 276	4JH3/3JH3 SAE #5 bell housing adapter plate for Hurth/Velvet Drive - 6 bolt pattern.
3205 006 012	ZF45-1 & ZF220A to 6 bolt Hurth pattern adapter plate (6LP)
3311 316 011	4JH/4LH series SAE #4 bell housing for Hurth/Velvet Drive - 6 bolt pattern - cast iron.
2001 712 001	4JH/4LH series SAE #4 bell housing for Hurth/Velvet Drive - 6 bolt pattern - aluminum.
3313 116 006	6LYA series SAE #3 bell housing adapter plate for ZF80A & 80IV transmission - 6 bolt patter - cast iron.
3312 116 002	4JH3-T series SAE #4 bell housing - 6 bolt pattern.
3316 116 001	SAE #3 bell housing for ZF25, 45A and 63 series and Velvet Drive.
344544	Hurth key hole adapter plate - ZF5M, 10M, 12M, 15M & 15MA.
3307 116 001	Hurth key hole adapter plate - ZF25M.
3306 116 004	Hurth key hole adapter plate - ZF15MIV.

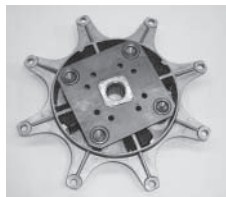
TRANSMISSION SPACERS



MACK 660

PART NO:	DESCRIPTION
MACK 660	Hurth / Velvet Drive 1/2" spacer with 6 bolt pattern.
3311 316 002	Hurth / Velvet Drive 3/4" spacer with 6 bolt pattern.
MACK 307	18" OD spacer ring - adapts 6LY2-STE to ZF IRM 301 (B/H.)
MACK 308	14" OD spacer ring - adapts 6LY2-STE to ZF IRM 301 (F/W.)
128171-81150	GM/YM Series 20 mm spacer
MACK 042	4LHA, 6LP Mercruiser coupling adapter plate.

CENTA TORSIONAL COUPLINGS



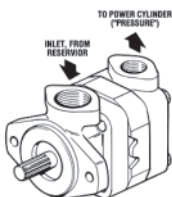
501043



0743188

PART NO:	DESCRIPTION
500125	4JH3-DTE turbo centa for Hurth etc.
501043	6LYA, 6LY2 centa for Hurth, ZF IRM 220A.
500454	SAE 11.5" centa for Hurth 800A/V.
500455	SAE 11.5" centa for Hurth 450 and 630.
0743188	6CX 11.5" centa for ZF IRM 280PL.
3209 116 013	6LY2 centa for ZF IRM 301 (press on type.)

POWER STEERING PUMP



MACK 649

PART NO:	DESCRIPTION
MACK 649	Teleflex power steering pump gear driven. Use on Hurth 630 & 800 series transmissions with adapter #3311 115 002.

VULCAN TORSIONAL COUPLINGS

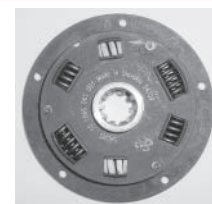
PART NO:	DESCRIPTION
3312 316 005	4LH Series New Style Damper Plate.
1KT3110011	6LP Series New Style Damper Plate.
3312 316 004	Vulcan T63 11.5" coupling - ZF45 & 63 Series.
3205 116 013	6LYA & 6LY2 New Style Damper Plate - 800 & 220AZ.
1KT411032	6LY2 & 6CX Damper Plate, use with ZF280A.
3315 316 002	4JH Turbo Series Damper, use with ZF and Borg Warner.



1KT3110011

HURTH DAMPER PLATES

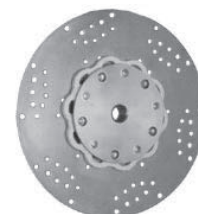
PART NO:	DESCRIPTION
3306 316 003	Hurth Damper 6" diameter, coarse spline 8 hole.
3306 316 002	Hurth Damper 6.25" diameter, coarse spline 5 hole.



3306 316 002

R & D DAMPER PLATES

PART NO:	DESCRIPTION
RD-22W188	Yanmar GM and YM polyurethane damper, transmission models, ZF5M, 10M, 12M, 15M 15MA and 15MIV.
RD-2W88	Yanmar 3JH3E, 4JH3E & 3JH4E polyurethane damper, transmission models, ZF25A, 25M, 25MA and Velvet Drive 71/72.
RD-1W88	Yanmar 3JH3E, 4JH3E & 3JH4E polyurethane damper, transmission models, ZF10M, 12M, 15M, 15MA and 15MIV.
RD-4U102	Yanmar 4LH polyurethane damper, transmission models, KM5A, ZF45 and 63 series and Velvet Drive.



RD-4U102

HURTH TRANSMISSION FILTER

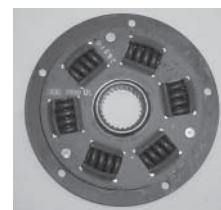
PART NO:	DESCRIPTION
3312 199 031	Transmission filter for ZF45, 63 & 80 series.
3209 308 036	Transmission filter for ZF301 & 310 series.
3213 308 019	Transmission filter for ZF311, 320, 325 & 350 series.



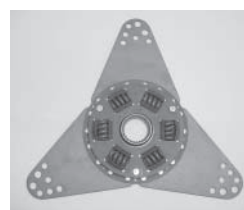
3312 199 031

VELVET DRIVE DAMPER PLATES

PART NO:	DESCRIPTION
1004-650-001	13.87" diameter plate, 8 hole pattern 13.12" diameter bolt circle.
1004-650-002	6.18" diameter plate, 5 hole pattern 5.60" diameter bolt circle.
1004-650-003	8" diameter plate, 8 hole pattern 7.125" diameter bolt circle.
1004-650-005	15" diameter plate, dual pattern 8 hole & 5 hole pattern.
1004-650-006	13.25" diameter triangle plate - multi pattern.
1004-650-007	13.25 diameter round plate - multi pattern.



1004-650-002



1004-650-006



1004-650-007

TOOLS



MACK 532



MACK 103



MACK 677



MACK 681



MACK 115



MACK 1025

PART NO:	DESCRIPTION
MACK 532	Digital optical tachometer kit features LCD display, range of 5 RPM to 100,00 RPM. Includes 5 feet of reflecting tape (for non contact applications), batteries and instruction manual. Use for sea trials, checking idle and PTO speeds. Safe 25" operating distance.
MACK 533	Reflective tape - 5', 1 1/2" wide.
MACK 103	Compression tester - heavy duty for gas or diesel engine applications. Measures from 0-1000 psi, includes heavy duty storage case.
MACK 677	Compression adapter for GM, HM, QM, YSE, YSM, SB & SVE series engines. Nozzle holder (injector) required, IE 128170 - 53080 (GM.)
MACK 679	Compression adapter for 3JH, 4JH, 4LH, 6LY & 6LYA series engines.
MACK 681	Compression adapter for 6CX-ETE, 6CX-GTE and 6CX-GTE2 engines.
MACK 682	Compression adapter for 6LPA-DTE (P) and 6LPA-STE (P) engines.
MACK 737	Compression adapter for 6LY2A-STP engines.
MACK 115	Fuel resistant carrying case for: O-rings, washers, insulators, bleed screws, etc. Perfect for fuel service, 32 compartment.
MACK 1025	6LY2A timer removal tool.
119770-02020	6LPA fuel injection pump timing tool.

TEF-GEL



MACK 1042

Tef-Gel is a unique corrosion eliminator and anti-seize lubricant which prevents seizing of metal and galvanic corrosion. Will not break down in salt water or detergents - PTFE paste.

PART NO:	DESCRIPTION
MACK 1041	Tef-Gel 1 ounce syringe.
MACK 1042	Tef-Gel 2 ounce tub.
MACK 1043	Tef-Gel 12 ounce caulking gun cartridge.

OIL SAMPLE KIT



MACK 820

PART NO:	DESCRIPTION
MACK 820	Oil Analysis Kit, provides spectrochemical analysis for wear metals, fuel dilution, water, glycol and other trace elements.



Mack Boring has built diesel generators since 1972. In 1999, we created the **GLOBAL POWER PRODUCTS™ (GPP)** brand of diesel generators and pumps. We implemented industry-standard manufacturing processes, and our brand took flight. We now supply GPP generators and pumps to domestic, export, military and telecom customers. We excel at severe-duty specialized applications, as well as basic packages. Call today for your diesel power or pumping needs.

GPP premium quality diesel generators are ideal for prime & standby applications, available in one & three phase configurations. Units are available with various instrumentation and design options. Light panels, deluxe gauge panels and electronic controls available. Visit www.gppmb.com to download complete specifications.

SOUND ATTENUATED (ENCLOSED)
"RATED 68 Db., GPP IS THE QUIET CHOICE"

MODEL NO:	DESCRIPTION
GY06100S	6 kW Yanmar powered generator.
GI123CDS	12 kW Isuzu powered generator.
GI234LES	23 kW Isuzu powered generator.
GI354JGTS	35 kW Isuzu powered generator.
GI404BGTS	40 kW Isuzu powered generator.
GI504BGTS	50 kW Isuzu powered generator.
GI604BGTS	60 kW Isuzu powered generator.
GI706BGTS	70 kW Isuzu powered generator.
GI806BGTS	80 kW Isuzu powered generator.
GI906BGTS	90 kW Isuzu powered generator.

**ALL UNITS TIER II
 COMPLIANT. TIER III
 AVAILABLE
 IN 2007**



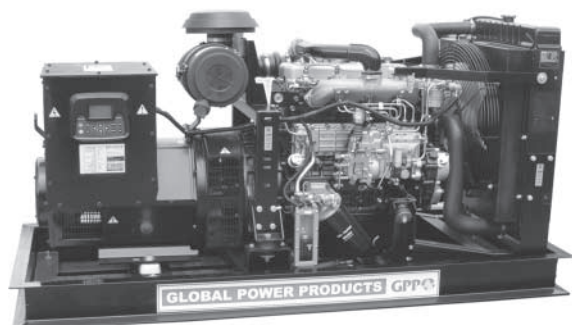
GY06100S



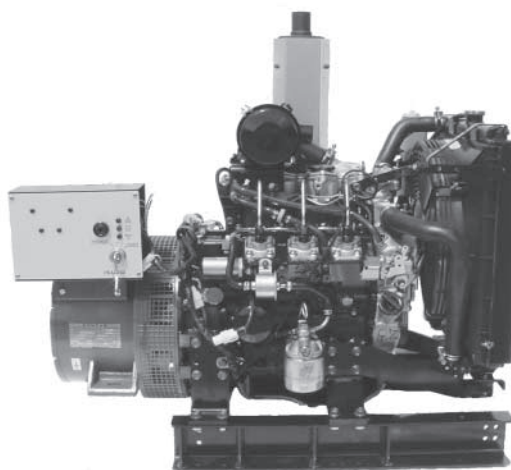
GI234LES

OPEN FRAME
"PREMIUM QUALITY, COMPETITIVE PRICE"

MODEL NO:	DESCRIPTION
GI083CB	8 kW Isuzu powered generator.
GI103CD	10 kW Isuzu powered generator.
GI123CD	12 kW Isuzu powered generator.
GI163CE	16 kW Isuzu powered generator.
GI234LE	23 kW Isuzu powered generator.
GI304JGT	30 kW Isuzu powered generator.
GI404BGT	40 kW Isuzu powered generator.
GI504BGT	50 kW Isuzu powered generator.
GI604BGT	60 kW Isuzu powered generator.
GI706BGT	70 kW Isuzu powered generator.
GI806BGT	80 kW Isuzu powered generator.
GI906BGT	90 kW Isuzu powered generator.



GI 604BGT

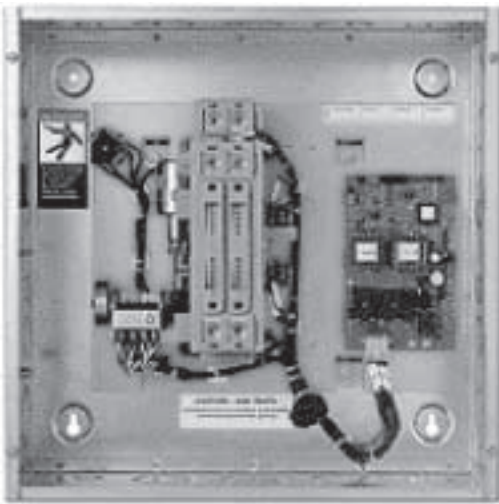


GI 103CD

Mack Boring & Parts Company
Offers
GLOBAL POWER PRODUCTS™
Automatic Transfer Switches
Manufactured by GE Zenith



Automatic Transfer Switches



- * Units come standard with NEMA 1 enclosed.
- * All units are available in NEMA 3, 4 & explosion proof duty.

REGULAR DUTY

1 Phase - 2 Pole

PART NO:	DESCRIPTION
G04BR	40 amps standard duty NEMA 1.
G08BR	80 amps standard duty NEMA 1.
G10BR	100 amps standard duty NEMA 1.
G15BR	150 amps standard duty NEMA 1.
G20BR	200 amps standard duty NEMA 1.
G22BR	225 amps standard duty NEMA 1.
G30BR	300 amps standard duty NEMA 1.
G40BR	400 amps standard duty NEMA 1.

3 Phase - 3 Pole

PART NO:	DESCRIPTION
G04ER	40 amps standard duty NEMA 1.
G08ER	80 amps standard duty NEMA 1.
G10ER	100 amps standard duty NEMA 1.
G15ER	150 amps standard duty NEMA 1.
G20ER	200 amps standard duty NEMA 1.
G22ER	225 amps standard duty NEMA 1.
G30ER	300 amps standard duty NEMA 1.
G40ER	400 amps standard duty NEMA 1.

COMMERCIAL DUTY

1 Phase - 2 Pole

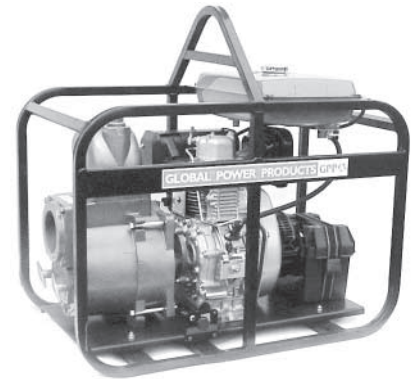
PART NO:	DESCRIPTION
G04BC	40 amps commercial duty NEMA 1.
G08BC	80 amps commercial duty NEMA 1.
G10BC	100 amps commercial duty NEMA 1.
G15BC	150 amps commercial duty NEMA 1.
G20BC	200 amps commercial duty NEMA 1.
G22BC	225 amps commercial duty NEMA 1.
G30BC	300 amps commercial duty NEMA 1.
G40BC	400 amps commercial duty NEMA 1.

3 Phase - 3 Pole

PART NO:	DESCRIPTION
G04EC	40 amps commercial duty NEMA 1.
G08EC	80 amps commercial duty NEMA 1.
G10EC	100 amps commercial duty NEMA 1.
G15EC	150 amps commercial duty NEMA 1.
G20EC	200 amps commercial duty NEMA 1.
G22EC	225 amps commercial duty NEMA 1.
G30EC	300 amps commercial duty NEMA 1.
G40EC	400 amps commercial duty NEMA 1.

GPP compact, efficient & long-lasting pumps are powered by Hatz & Yanmar diesel engines. Units come standard with heat-resistant, silicon-carbide seals. Roll frames are powder coated with vibration-isolated baseplate. Ask about fleet pricing. Visit www.gppmb.com to download complete specifications and pump curves.

MODEL NO:		DESCRIPTION
Manual Decompression	Auto Decompression	
PYL482C	PHB202C	2" Standard centrifugal pump recoil start.
PYL483C	PHB203C	3" Standard centrifugal pump recoil start.
PYL482T	PHB202T	2" Standard trash pump recoil start.
PYL483T	PHB203T	3" Standard trash pump recoil start.
PYL482CH	PHB202CH	2" Heavy-duty centrifugal pump recoil start.
PYL483CH	PHB203CH	3" Heavy-duty centrifugal pump recoil start.
PYL482TH	PHB202TH	2" Heavy-duty trash pump recoil start.
PYL703TH	PHB303TH	3" Heavy-duty trash pump recoil start.
PYL483D		3" Heavy-duty diaphragm pump recoil start.
PYL482SC		2" Standard stainless pump recoil start.
PYL482PP		2" Standard plastic pump recoil start.
PYL482P		2" Standard pressure pump recoil start.
PYL702FP		2" Standard fire pump recoil start.
PYL1004TE		4" Heavy-duty trash pump electric start.



GPP CAM LOCK COUPLINGS

For water, fertilizer, chemicals, basic liquids, petroleum, transport industry. Available in glass-reinforced polypropylene, aluminum, stainless steel or brass. Available in 1.5" - 3" sizes.

TYPE:	DESCRIPTION
Type A	NPT female threads.
Type B	NPT male threads.
Type C	Female adapters.
Type D	NPT female threads.
Type E	Male adapters.
Type F	NPT male adapters.
Type G	Dust female plugs.
Type H	Dust male plugs.



GPP CAM LOCK HOSE

For water, some fertilizer and chemical applications, available with Polypropylene Cam Lock connectors or threaded connections. Suction hose is PVC tube and covered with PVC helix reinforcement, available up to 100 feet uncut. Discharge hose is PVC/polyester reinforced construction that collapses for easy coiling, available up to 300 feet uncut.

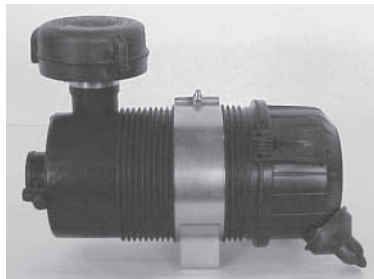
DESCRIPTION
Hose kit threaded. Hose with threaded connections.
Hose kit couplers. Hose with quick - connect couplers.



The Industrial Group is Mack Boring's fastest growing division. We provide engines, power units, generators, pumps and related accessories to OEM's, dealers and equipment users, in the Industrial marketplace. For further information visit www.mackboring.com in the industrial section.

INDUSTRIAL AIR FILTERS/PRECLEANERS

Mack Boring & Parts Company offers premium air filtration for all industrial applications. Donaldson is a recognized market leader. Enginaire manufactures the finest precleaning systems in the industry and extends air filter service intervals & overall engine life.



MACK 922
MACK 935

PART NO:	DESCRIPTION
MACK 255	Donaldson air filter G057514.
MACK 262	Donaldson air filter P82-1575 (I/W 119808-12520.)
MACK 330	Donaldson air filter P822768 (I/W 129687-12510.)
MACK 922	Enginaire precleaner, 5-75 hp engines, 2" ID.
MACK 935	Enginaire air cleaner, dual element, 2" ID.

INDUSTRIAL CONTROLS & INSTRUMENTATION



ATHS-30-12-B

PART NO:	DESCRIPTION
P4X275	Autostart generator control panel with gauges.
PX265	Autostart engine control panel with lights.
L129	Murphy L129 oil level switch assembly.
30-35-0599	Murphy engine electric gauge panel.
ATHS-30-12-B	Murphy tach/hourmeter.
MACK 958	Murphy I-Guard controller with autostart.
MACK 936	Murphy VM12 voltmeter.
MACK 937	Deep Sea electronic panel model # 701.

MURPHY SENDERS/SHUT DOWN



MACK 427

PART NO:	DESCRIPTION
MACK 882	Murphy tach sender 16mm MP7906.
MACK 427	Murphy tatteltale shut down switch.

NEW! AUTHORIZED DISTRIBUTOR

411238T

PART NO:	DESCRIPTION
411298T	SAE # 5 bell housing 7-1/2" f/w 1-7/16" take off shaft.
411298T750	SAE # 5 bell housing 7-1/2" f/w 1-3/4" take off shaft.
411238T	SAE # 4 bell housing 7-1/2" f/w 1-7/16" take off shaft.
411238Y750	SAE # 4 bell housing 7-1/2" f/w 1-3/4" take off shaft.
430973AM	SAE # 4 bell housing 8" f/w.
411256AM	SAE # 4 bell housing 10" f/w.
434510AM	SAE # 3 bell housing 11-1/2" f/w.
411127AM	SAE # 2 bell housing 11-1/2" f/w.

HAYES HYDRAULIC PUMP DRIVES & STUB SHAFTS
Pump Drives

PART NO:	DESCRIPTION
MACK 126-936	Pump Drive SAE5 7-1/2" f/w 9 teeth SAE A 2 bolt.
MACK 124-920	Pump Drive SAE5 7-1/2" f/w 11 teeth SAE A 2 bolt.
MACK 123-344	Pump Drive SAE5 7-1/2" f/w 13 teeth SAE B 2 bolt.
MACK 124-403	Pump Drive SAE5 7-1/2" f/w 13 teeth SAE B 4 bolt.
MACK 123-536	Pump Drive SAE5 7-1/2" f/w 14 teeth SAE C 4 bolt.
MACK 126-093	Pump Drive SAE5 10" f/w 13 teeth SAE A 2 bolt.
MACK 124-168	Pump Drive SAE5 10" f/w 13 teeth SAE B 2 bolt.
MACK 125-398	Pump Drive SAE5 10" f/w 13 teeth SAE B 4 bolt.
MACK 125-207	Pump Drive SAE5 10" f/w 13 teeth SAE B 4 bolt.

Pump Drive Black Plates

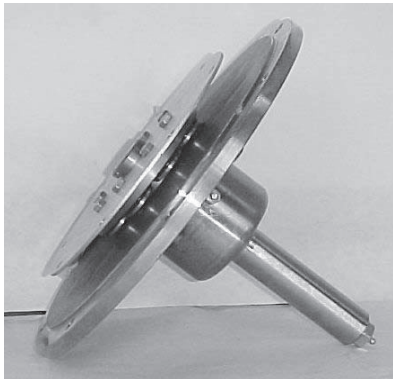
PART NO:	DESCRIPTION
MACK 902-012	Pump Drive Back Plate with feet 9 teeth SAE A 2 bolt.
MACK 902-014	Pump Drive Back Plate side mt. 9 teeth SAE A 2 bolt.
MACK 902-016	Pump Drive Back Plate side mt. 11 teeth SAE B 2 bolt.
MACK 902-011	Pump Drive Back Plate with feet 13 teeth SAE B 2 bolt.
MACK 902-015	Pump Drive Back Plate side mt. 13 teeth SAE B 2 bolt.
MACK 902-007	Pump Drive Back Plate with feet 15 teeth SAE B 2 bolt.
MACK 902-008	Pump Drive Back Plate side mt. 15 teeth SAE B 2 bolt.

Stub Shafts

PART NO:	DESCRIPTION
MACK 127-261	Stub Shaft SAE5 7-1/2" f/w 1-7/16" diameter.

Bearing-Supported Stub Shafts

PART NO:	DESCRIPTION
MACK 125-709	Bearing support Stub Shaft SAE5 7-1/2" f/w 1-1/2" diameter.
MACK 125-730	Bearing support Stub Shaft SAE5 7-1/2" f/w 1-7/16" diameter.
MACK 126-692	Bearing support Stub Shaft SAE5 7-1/2" f/w 2" diameter.
MACK 125-734	Bearing support Stub Shaft SAE4 10" f/w 1-1/2" diameter.


MACK 125-730

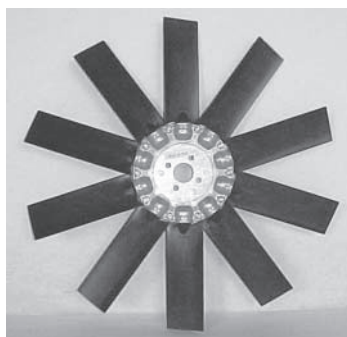
WOODWARD GOVERNORS



MACK 638

PART NO:	DESCRIPTION
MACK 638	Apecs electronic governor controller - 12volt / 24 volt.
MACK 639	Electronic governor controller actuator -12 volt.
MACK 640	Magnetic pick up for electronic governor.
MACK 862	24 volt actuator / run solenoid external mount.

ISUZU ACCESSORIES



MACK 913

PART NO:	DESCRIPTION
897253992-2	Modified oil pan for 4JG1T engine with dual side dipsticks.
MACK 901	4JG1, 4JG1T & 4LE Radiator.
MACK 913	20" high velocity pusher fan for 4JG1 Isuzu engine.
FIZC 6015	15' Isuzu engine wire harness extension.
MACK 924	4LE2 Isuzu engine radiator guard kit.
MACK 925	4LE2 bracket & mounting kit for MACK 924 radiator.

MISCELLANEOUS



MACK 304



MACK 258

PART NO:	DESCRIPTION
MACK 319	GPP green spray paint.
MACK 304	Electric fuel pump - 12 volt facet NPT inlet / outlet.
MACK 941	Universal dome mounts for engine or generator.
MACK 433	Noram reduction gear box 6:1 with a 1" shaft.
MACK 258	Radiator over-flow bottle kit.
92330090-72	6' vernier throttle cable.
MACK 458	6' universal throttle / stop cable.
MACK 637	Wheel / dolly kit for portable generators & pumps.
MACK 426	Fuel pressure regulator for electric fuel pump red. 1/2 PSI.

PART NO:	DESCRIPTION
MACK 712	"Yanmar Diesel Power" baseball hat.
MACK 713	"Yanmar Marine" trade show bags (500.)
MACK 716	"Yanmar" black floor mat.
MACK 718	"Yanmar Marine" navy blue T-shirts, L, XL & 2XL.
DRY BOX White water resistant dry box with "Yanmar Marine" logo along with red & grey lettering. Perfect for stowing parts and will protect spare parts from harsh weather conditions. Features an o-ring seal, a recessed handle and a two-inch deep lift-out tray. Non submersible and comes in 2 sizes.	
MACK 726	"Yanmar Marine" large water resistant dry box, measures 12" h x 15.5" w x 8.75" l.
MACK 727	"Yanmar Marine" extra-large water resistant dry box, measures 15" h x 18" w x 13" l.
MACK 1068	"Yanmar Marine" Metal Sign, 1' x 4.'
MACK 1069	"Yanmar Marine" Illuminated Sign, 2' x 6.'
MACK 1073	"Yanmar Marine" Vinyl Transfer Decal, 8" x 55."
MACK 1074	"Yanmar Marine" Vinyl Transfer Decal, 6" x 42."
MACK 1075	"Yanmar Marine" Vinyl Transfer Decal, 4" x 27."
IPS 1999	"Yanmar Genuine Parts" Indoor Plastic Sign, 30" x 16."
ITD 1998	"Genuine Yanmar Worldclass Service" Decal (set of 2) 16" x 12."
YANMAR CLOCK	"Yanmar Marine" Clock, 11" diameter.



MACK 712



MACK 716



MACK 718



MACK 727



MACK 726



MACK 1073 MACK 1074 MACK 1075



MACK 1069



YANMAR CLOCK



IPS 1999



ITD 1998



MACK 1068

ITEMS LISTED ARE SUBJECT TO AVAILABILITY.

Mack Boring & Parts Company warrants to the original purchaser that all Mack Boring & Parts Company manufactured parts and accessories will be free from defects in material and workmanship under normal use and service during the warranty terms set forth below.

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

The accessory warranty term varies depending on the manufacturer of said part. This individual warranty may be supplied to you upon your request. Any items which do not hold a manufacturer's warranty, yet are offered within this accessory guide, will be covered by Mack Boring & Parts Company as a limited warranty for a period of one year from the date of invoice to the original purchaser. We, Mack Boring & Parts Company, are not responsible for items installed incorrectly.

Mack Boring & Parts Company will replace or repair any manufactured product or accessory which upon thorough examination, is determined to have failed because of defective material and/or workmanship.

This warranty does not cover parts or accessories affected, damaged or depreciated by misuse, abuse, improper maintenance, neglect, use of unsuitable attachments, or non genuine parts, ordinary wear, rusting or corrosion, operator abuse, inadequate transportation, accident or service by an unauthorized facility nor the cost of labor involved with replacement of part or accessory.

This warranty does not oblige Mack Boring & Parts Company to bear any charges of transportation and/or freight affiliated with parts/accessories failure.

Mack Boring & Parts Company makes no other express warranties other than set forth above and all other obligations or liabilities, including special or consequential damages or contingent liabilities arising out of the failure of any manufactured product, are hereby excluded.

No person is authorized to give any other warranty or to assume additional obligation on Mack Boring & Parts Company's behalf. Some states do not allow the exclusion or limitation of incidental or consequential or special damages, so the above limitation of exclusion may not apply to you.

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MACK BORING & PARTS COMPANY

The Power Behind The Power

MARINE

Marine Diesel Engines

Yanmar Marine

Sail: 9-160 HP

Saildrive: 9-75 HP

Sterndrive: 125-315 HP

Powerboat: 125-900 HP

Mitsubishi

Commercial: 429-2157 HP

Marine Transmissions

Kanzaki Velvet Drive

Paragon Walter

Twin Disc ZF Marine/
Hurth

Marine Propulsion

Aquadrive

Konrad

Mercruiser Stern drives

UltraJet

Marine Accessories

Accusync Mitsubishi

Buck- R&D Coolers

Algonquin Racor

FPPF Sendure

Globe Sherwood

Jabsco Teleflex

Johnson Yanmar

Mack

INDUSTRIAL

Industrial Diesel Engines

Isuzu

Fan / Flywheel: 11-525 HP

Power Units: 11-525 HP

Mitsubishi

Fan / Flywheel: 11-85 HP

Power Units: 11-85 HP

Deutz

Industrial Diesel Generators

GLOBAL POWER PRODUCTS™

Diesel: 6-90 kW

Generac

Natural Gas/LP: 15 kW

Portable Diesel Pumps

GLOBAL POWER PRODUCTS™

Trash Polyester

Centrifugal Diaphragm

Stainless Fire

Industrial Accessories

Bosch Mecc Alte

Denso Mitsubishi

Donaldson Murphy

Enginaire NACD

FPPF Newage

Hayes Racor

Isuzu Stanadyne

Marathon Woodward

SERVICE

Complete Diesel Engine

Service, Repair & Overhaul

Rebuilding / Remanufacturing for

Yanmar

Deutz

Isuzu

Mitsubishi

GPP

ZF

Complete ADS Certified Diesel

Shop for Service & Rebuilding of

Bosch

Stanadyne

Delphi

Yanmar

Lucas

Zexel

Turbocharger Rebuilding

Dynamometer Testing

Member



(800) MACK-ENG • www.mackboring.com • (800) MACK-FAX

Headquarters

2365 Route 22, West

Union, NJ 07083

(908) 964-0700

Fax: (908) 687-6725

parts@mackboring.com

New England

48 Leona Drive

Middleborough, MA 02346

(508) 946-9200

Fax: (508) 946-0779

mass@mackboring.com

Carolinas

4500 Northchase Pkwy., NE

Wilmington, NC 28405

(910) 792-1900

Fax: (910) 792-6266

carolina@mackboring.com

Great Lakes

1270 Kyle Court

Wauconda, IL 60084

(847) 526-9700

Fax: (847) 526-9708

greatlakes@mackboring.com