MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

Published Yanmar Service Bulletins

Table of Contents

MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

TO: ALL O.E.M.'S AND YANMAR DEALERS

PREVENTION OF INCORRECT WARRANTY PROCEDURE

In order to expedite rapid and efficient warranty claims and service we are requesting all O.E.M.'s and Yanmar Dealers to take the following steps:

1. Contact local Yanmar Distributor before any repairs are started.
2. Make sure all repairs are authorized by the local Yanmar Distributor and there is a clear understanding of labor rates, proper procedures, and payments to assure rapid and efficient service.
3. When filling out Yanmar Warranty Claim forms make certain that all information is correct and is recorded properly. Check the form carefully to be sure it is complete, otherwise warranty claims will be rejected by the local Yanmar Distributors.
4. Please save old defective parts as the prompt return of these items may be necessary to complete the warranty claims processing.
5. Please have all claims accompanied by labor and parts invoices. If you have any questions, please contact your local Yanmar Distributor before you send in your warranty claim forms to assure prompt service.

Mack Boring & Parts Company Headquarters: 2365 RT.22 Union, NJ 07083
PH 908-964-8475, FAX 908-964-8475, WEB www.mackboring.com

MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

TO: YANMAR DEALERS AND BOATBUILDERS

BLEEDING THE FUEL SYSTEM

(Purging of air which causes shutdown)

This bulletin contains helpful information for bleeding the fuel system of a Yanmar Diesel and other small diesels as well. Please post where your field service personnel can review.

Since the presence of air in the fuel system anywhere between the fuel tank and the injector will "use a no start or erratic running condition, always bleed the air from the system when the fuel system is disassembled, filter changed or run out of fuel.

1. Make sure fuel tank off is in "on" position.
2. Bleed the air from fuel filter. Loosen the air bleed screw at the top of the fuel filter body and operate the manual handle the lift pump until the air bubbles completely expel in the fuel flowing from the filter.
3. Bleed the air from the fuel return pipe. Loosen the connector bolt of the fuel return pipe installed on the fuel injector, and bleed the air by operating the manual handle of the lift pump. (If there is more than one injector, bleed the one at the end of the line).
4. Bleeding the air from the fuel line - (line from the filter to the injector pump). Loosen the air venting screw at the injection pump and operate the manual handle of the lift pump until an the air bubbles are out.
5. Bleed the air from the fuel injector. Loosen the nipple on the fuel injector side, set the throttle to half and the decompression lever to the decompression position and crank engine. When no more bubbles appear in the fuel flowing from the end of the injection pipe, re-tighten the nipple.

THIS BULLETIN IS FOR INFORMATION ONLY AND NOT AN AUTHORIZATION FOR REPAIRS

MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

TO: MARINE DISTRIBUTERS

COOLANT ADDITIVES

After testing some popular coolant/anti-freeze solutions, we have reached the following recommendations. It was not possible to test all brands on the market, so there may be some solutions that are acceptable but have not been tested. However, caution is advised if using other than approved brands.

Regardless of the recommendation of the coolant/antifreeze manufacturers it is YANMAR'S requirement that the solution is changed every **500 hours** (On the YANMAR Model 6LP **250 hours**) *or once a year whichever comes first.*

We do not recommend any other additives be added to the cooling system. Purified or distilled water mixed with the approved coolant/anti-freeze is the only protection approved by YANMAR. Concentrations of the Enix-ture should follow the recommendations of the manufacturer. The coolant/anti-freeze must be compatible with aluminum.

Advantages of this type of coolant:

- Improved water pump life due to reduced water pump seal wear resulting from fewer abrasive dissolved solids.
- Reduces hard water scale.
- Offers excellent protection against pitting corrosion caused by cylinder liner cavitation. Better heat transfer than conventional coolants with regular SCALE additions.
- No silicate gel formation during use or storage.
- Outstanding hot surface aluminum protection.
- Superior protection in high operating temperature conditions.
- Effective, long-term corrosion protection for aluminum, brass, cast iron, steel, solder and copper alloys.

The coolant/anti-freezes that have been tested and approved are shown below:

- Texaco Long Life Coolant Anti-Freeze both regular and pre-mixed Product codes 7991 and 7998. This product is available in gallon containers, drums and bulk. It is recommended that the cooling system be drained and flushed before filling. Only Texaco Long Life Coolant should be used for top-off. This product has a much longer shelf life than conventional coolants provided the integrity of the container is maintained. For additional information and availability contact Texaco at 1-800-782-7852.
- Havoline Extended Life Anti-Freeze/Coolant. Product code 7994. This product is available through Texaco gas stations, Procedures are the same as with Texaco Long Life Coolant Anti-Freeze.
- Dex-Cool Long Life Coolant. This product is available through GM service centers worldwide.
- Prestone Extended Life Coolant. Product code AF888. If the above coolants are not readily available, Prestone Extended life coolant is satisfactory.

WINTERIZING FRESH WATER COOLED DIESEL ENGINES

1. Drain crankcase and transmission and refill with fresh lubricant as specified in owner's manual. Change oil filters.
2. Drain and clean all fuel filters and change elements, gaskets and seals. Bleed all air from fuel systems.
3. Start engine and bring up to operating temperature. Slowly remove the radiator cap on expansion tank. Using an antifreeze hydrometer, check the antifreeze for proper protection (add antifreeze to lower the freezing point of the antifreeze solution). If the antifreeze solution is dirty, more than 2 years old, or weak it should be complete drained and replaced with the proper

MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

WINTERIZING RAW WATER COOLED DIESEL ENGINES

1. Drain crankcase and transmission and refill with fresh oil as specified in owner's manual. Change oil filters.
2. Close sea cock, remove raw water pick up hose from water pump, attach a 4-foot length of hose to water pump and immerse in a 5 gal. bucket of antifreeze solution. Remove hose from engine or manifold that leads to exhaust elbow. Attach about a 4-foot length of hose and immerse one end in the bucket of antifreeze solution. Start engine and run until water begins to warm up (about 3 to 5 min.) and thermostat opens. Stop engine. Replace hose that leads to exhaust elbow. Start engine and let run till water comes out exhaust pipe. Stop engine, remove hose from water pump to bucket, attach hose from sea cock to water pump and tighten all hose clamps.
3. Loosen water pump and alternator to lessen tensions on belts during winter.
4. Drain and clean all fuel filters and change elements, gaskets and seals. Bleed all air from fuel systems.
5. Pull compression release lever and turn engine slowly with hand crank. Slowly pour about 2 ounces of engine oil into the intake pipe or manifold while engine is turning. DO NOT USE the starter to turn engine or serious engine damage may result.
6. Tape the openings of the intake and exhaust manifolds with duck tape to help prevent corrosion of the upper cylinder during lay up.
7. Scrape all rust or corrosion from exposed metal parts and surfaces. Scrub all metal surfaces with detergent and rinse thoroughly. Paint any bare metal.
8. Place a dust cover over engine. Do not leave the engine exposed to rain and sea breeze.
9. Disconnect the battery cables, remove the battery from the boat. Clean the terminal ends and battery with a solution of baking soda and water, rinse thoroughly with clean water. Apply a light coat of grease on the terminal end of the battery and cables. Store the battery in a cool dry place. Use a trickle charger to keep battery charged. Do not charge battery near any open flame or in a confined area.

CAUTION: Wear safety goggles and rubber gloves to protect your eyes and skin.

Mack Boring & Parts Company Headquarters: 2365 RT.22 Union, NJ 07083
PH 908-964-8475, FAX 908-964-8475, WEB www.mackboring.com

MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

TO: **ALL BOAT AND YANMAR DEALERS & OWNERS**

YANMAR STOP CABLES

We would like to bring to your attention that the stop cables are not being lubricated periodically.

The stop cables are a steel cable with a steel jacket. In order to maintain the cable in good working order it is important to grease the cable periodically with a water proof grease. This is done by loosening the locking screw in the barrel at the engine side of the cable. Pulling the inside cable out at the panel, take a water proof grease and generously coat the cable and shank. When the cable is reinserted, make certain the cable is pushed all the way in and the shut down arm is in the complete run position before locking the barrel screw back up.

Failure to lubricate the stop cables will result in:

CAUSE	**(A)**	CABLE RUSTED IN SHUT DOWN POSITION
RESULT	**(B)**	ENGINE WOULDN'T START
CAUSE	**(A)**	CABLE RUSTED IN FULL RUN POSITION
RESULT	**(B)**	ENGINE WOULDN'T SHUT DOWN
CAUSE	**(A)**	CABLE RUSTED IN PARTIAL RUN POSITION
RESULT	**(B)**	ENGINE WILL NOT REACH FULL RPM
CAUSE	**(A)**	CABLE RUSTED IN ANY POSITION AND FORCED OUT
RESULT	**(B)**	PANEL FACE WILL FRACTURE

If any questions, please contact the service department.

Mack Boring & Parts Company Headquarters: 2365 RT.22 Union, NJ 07083
PH 908-964-8475, FAX 908-964-8475, WEB www.mackboring.com

MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

YANMAR DIESEL SEMINARS

Mack Boring & Parts Co. and Engine City Technical Institute, our Diesel Vocational School, have Yanmar Diesel Owner Seminars from October - June at our New Jersey, Massachusetts and North Carolina locations.

If you are interested, please contact us for more information.

ECTI: (908) 964-1450. FAX: (908) 9641457.

MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

YANMAR DISTRIBUTORS

California/Hawaii
Boatswain's Locker
931 West 18 th Street
Costa Mesa, CA 92627
(949) 642-6800

Canada
Diesel-Bec, Inc.
1805 Lionel-Bertrand
Boisbriand
Quebec, Can. J7H 1N8
(514) 434-3401

Canada
Land Sea Power
7400 Wilson Avenue, Delta
British Col., Can. V4G 1 ES
(604) 946-5996

Canada
Total Power Ltd.
5080 Timberlea Blvd., Unit 25
Mississauga, Ont., Can. L4W 4M2
(905) 238-1529

Canada
Liftow Limited
P.O. Box 350
11 Acadia Street-Darts mouth
Nova Scotia, Can. 132Y 3Y5
(902) 469-6721

Florida
Mastry Engine Center
289546 th Avenue, North
St. Petersburg, FIL 33714
(813) 522-9471

Illinois
Mack Boring & Parts Co.
1623 Barclay Blvd.
Buffalo Grove, IL 60089
(847) 353-8400
Fax (847) 353-8360

Louisiana
Star Power Services, Inc.
74257 Highway 25
Covington, LA 70123
(800) 628-9882

Massachusetts
Mack Boring & Parts Co.
48 Leona Drive
Middleborough, MA 02346
(508)946-9200
Fax (508) 946-0779

New Jersey
Mack Boring & Parts Co.
2365 Route 22 West
Union, NJ 07083
(908) 964-0700
Fax (908) 964-8475

North Carolina
Mack Boring & Parts Co.
3305 Merchant Court
Northchase Park of Commerce
Wilmington, NC 28405
(910) 397-0303
Fax (910) 397-0331

Puerto Rico
Clemente Santisteban, Inc.
P.O. Box 366147
San Juan, PR 00936-6147
(809) 785-9696

Washington
Alaska Diesel Electric
442014 th Avenue,N.W.
Seattle, WA 98107-0543
(206) 789-3880

Washington
Cascade Diesel
426 South Cloverdale Street
Seattle, WA 98108
(206) 764-3850

MACK BORING & PARTS COMPANY

"EVERYTHING IN ENGINES SINCE 1922"

YANMAR MARINE ENGINES ON BOARD SPARE PARTS KITS

MINOR KIT

1 - Lube Oil Filter
1 - Fuel Oil Filter Kit
1 - Air Filter Element
I - Set of Zinc(s) + Gasket(s)*
1 - Set of Belt(s)
1 - Water Pump Repair Kit
1 - Coolant Treatment-
MACK BORING & PARTS COMPANY

MAJOR KIT

MINOR KIT PLUS:
Full Gasket Set
Injector Washers
Can Engine Paint
Lift Pump + Gasket
Parts Manual & Service Manual
1 - Fuel Injector
1 - Thermostat & Gasket

PRICE LIST

	MINOR KIT	MAJOR KIT
1GM/1GM10	$71.00	$400.00
2GM/2GM20	89.00	445.00
2GMF/2GM20F	94.00	460.00
3GM/3GM30	94.00	465.00
3GMF/3GM30F	94.00	475.00
3HM/3HM35	94.00	475.00
3HMF/3HM35F	94.00	475.00
3JH2E	120.00	625.00
3JH2-TE	142.00	650.00
4JHE/4JH2E	151.00	670.00
4JH-TE/4JH2-TE	151.00	670.00
4JH-HTE/4JH2-HTE	151.00	670.00
4JH-DTE/4JH2-DTE-UTE	151.00	670.00
4LH,TE,HTE,DTE	194.00	625.00
4LH-STE	194.00	900.00
2QM15	80.00	363.00
2QM20	84.00	370.00
3QM30	84.00	390.00
3QM30F	113.00	410.00
D27	110.00	TBA
D36	125.00	TBA
6LP-SERIES	360.00	TBA
6LY-SERIES	322.00	TBA
6CX-ETE	343.00	TBA

These are 1998 Prices. Prices and Specifications above are subject to change without notice. Be sure to give model, serial number, and application with your order. For model number, reference engine identification plate, not manual.

*1f Applicable