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Book Descriptions:

3ym30 workshop manual

This manual contains maintenance and repair procedure for the Yanmar Marine Diesel Engine 3YM30 3YM20 2YM15. With this manual, you may maintain, service, diagnose and repair your own. All repair procedures are covered. Applicable Models Covers Yanmar Marine Diesel Engine 3YM30 Yanmar Marine Diesel Engine 3YM20 Yanmar Marine Diesel Engine 2YM15 Service Repair Manual Covers General Inspection And adjustment Troubleshooting Disassembly And Reassembly Inspection And Servicing Of Basic Engine Parts Fuel Injection Equipment Intake And Exhaust System Lubrication System Cooling Water System Reduction And Reversing Gear Remote Control Electrical System Service Standards Tightening Torque For Bolts And Nuts Instant Download means there is NO shipping costs or waiting for a CD or paper manual to arrive in the mail. You will receive this manual TODAY via Instant Download on completion of payment via our secure payment processor. All pages are printable. Thank you, for helping us keep this platform clean. The editors will have a look at it as soon as possible. Can anyone please tell me where I can download a copy. Help is much appreciated Best Regards Sonny Soh Posts 209No manuals are jumping out at me for download. Personally, unless youre really strapped for cash, buying the shop manual and parts manual package is a very good investment if you plan on doing any kind of work on the engine yourself. Good luck in your search.Boat Cruiser Living On Dirt. Posts 38,198Anyone seeking a manual, is advised to look here. Boat Catalac Catamaran. Posts 2,462Boat Knysna 480. Posts 94I am about to acquire a boat with 2 and would like both service and shop manuals. I have looked at all of the above threads and their corresponding sites without success. Doesnt Yanmar offer them somewhere for sale Boat Northstar 1500, 35. Posts 318Boat Knysna 480. Posts 94Boat Northstar 1500, 35. Posts 318Boat Cruiser Living On Dirt. Posts 38,198Send me a short note and Ill see what I can do for you.http://www.saadawi1.net/upLoadedFiles/other/comfort-manual-breast-pump-avent.xml

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I guess a friend of mine still got some.pdf Manuals. Rgds Michael Can anyone please tell me where I can download a copy. Help is much appreciated Best Regards Sonny Soh Much appreciated. Best regards sonnysohCheers SonnySohIve also been looking around for a copyfor some time. Thank you. Model 3YM30 has been used for the illustrations in this service manual, but they apply to other models in the 3YM series engines. For accident prevention, it is important to avoid such causes before development to accidents. Please read this manual carefully before starting repair or maintenance to fully understand safety precautions and appropriate inspection and maintenance procedures. Damage to the engine, shortened engine life and or personal injury may result. Check the customer ledger file for the history of the engine. General rules are described here. Usermaintenance Parts replacement Shopinspection. Unit liter guart Engine oil capacity Model at rake angle 8 degree 3YM30 with KM2P1 Full2.8 3.0 0.2 3YM20 with KM2P1 Full2.7 2.9 0.2. Usually do not open the filler cap to check or replenish. Standard Cooling water volume Unit liter quart Model Engine Coolant recovery tank 3YM30 4.9 5.2 0.8 0.8 3YM20 4.1 4.3 0.8 0.8 Increase in the water level of the coolant recovery tank during operation is not abnormal. Remove the Vbelt. After replacing with a new Vbelt and adjusting the tension, run the engine for 5 minutes and readjust the Belt adjuster deflection to the value in the table above. 3YM30 Tighten the adjusting bolt. Standard valve clearance mm 0.150.25 c Apply oil to the contact surface between adjusting screw and push rod. Failure to do so could cause shortcircuiting and fires. GREASE When the amount of fluid nears

the lower limit, fill with battery fluid available in the market to the upper limit. If operation continues with insufficient battery fluid, the battery life is shortened, and the battery may overheat and explode.<u>http://acilperde.com/userfiles/comfort-master-apu-manual.xml</u>

Otherwise, it results in engine damage, Fuel filter uneven engine performance and shorten engine life. Be sure to replace the fresh water every year. When the long life coolant is used of the specified type, the replacement period of two years can be obtained. Use clean soft water and be sure to add the Long Life Coolant Antifreeze LLC to the cooling water in order to prevent rust built up and freezing. There are two types of mixing elbows, the Ltype and the Utype. The mixing elbow is attached to the exhaust manifold. The exhaust gas is mixed with seawater in the mixing elbow. Utype Mixing elbow Seawater. Check whether each connection part doesnt have looseness. STOP Btype panel Glow connector GLOW START Neutral safety switch Glow plug Fitting to marine gear Glow relay Magnet relay Safety Extension relay wire harness Alternator To lube switch and. Never approach the injection nozzle portion with a hand. The oil jetting out from the nozzle is at a high pressure to cause loss of sight or injury if coming into careless contact with it. Place the heat Air hose Filler cap exchanger in a water tank, feed in compressed air from the overflow pipe and check for any water leakage, air bubbles. Remote High speed control limiting bolt Fuel 2 If the noload maximum speed is out of the cable injection standard, adjust it by turning the high idle limiting. The thermostat is functioning normally if it starts to open between 7578 deg C, and opens until 8 mm or more at 90 deg C. When the signs of a trouble appear in the engine or a trouble occurs, grasp the trouble conditions fully by the next point and find out the cause of sincerity according to the troubleshooting. When problems arise, it is important to carefully observe and analyze the indications of trouble in order to save time in determining their cause. TROUBLE AND TROUBLESHOOTING I1 Add fuel oil and prime. II1 Replace. I2 Bleed air. II2 Clean carefully to insure good working order.

13 Remove water from drain and fuel oil system and prime. I4 Check and make necessary repairs. I5 Clean. Please use them as instructed. 4.2.1 General hand tools Name of tool Illustration Remarks Wrench Size 10 x 13 Wrench Size 12 x 14 Wrench. Test indicator Measures narrow and deep places, which cannot be measured with dial gauge. Magnetic stand Keeps the dial gauge firmly in position, thereby permitting it to be used at various angles. Torque wrench Used to tighten bolts and nuts to standard torque. Thickness gauge Measures the distance between the ring and ring groove, and between the shaft and shaft joint at time of assembling. Compression gauge Measures the pressure of the compression. Yanmar code No. TOL97190080. Three Bond 200g Nondrying liquid gasket;. Intake pipe 2 Remove the intake silencer from cylinder head. Cylinder head Intake silencer 6 Removing the mixing elbow 1 Remove the seawater rubber hose connecting to a heat exchanger a mixing elbow. 2 Remove the mixing elbow from the exhaust manifold. Gear case Spacer bolt Vbelt. Washer 2 Remove the engine mounting feet. Crankshaft Vpully 22Removing the crankshaft Vpulley Loosen the bolt tightening the crankshaft Vpulley and Oil pan remove the crankshaft Vpulley with a pulley puller. Outer rotor Control Inner rotor valve Gear case cover 27Removing the idle gear Bolt Loosen the three bolts holding the idle gear and pull out the idle gear and shaft. NOTE 1 When mounting the gear case, match up the two knock pins for cylinder block. NOTE The thrust metal lower is mounted to the base main bearing cap. 35Removing the crankshaft 1 Remove the crankshaft NOTE Cylinder block. NOTE 1 If the dust remain with the parts, engine may cause the seizing or damage. 2 The cleaning agent removes even carbon adhering to disassembled parts. Lower NOTE Thrust metal 1 The lower main bearing metal does not have an oil hole.

http://www.drupalitalia.org/node/69274

Flywheel housing 8 Mounting the gear case Apply the liquid gasket to the gear case and mount the gear case and lube oil line Oring onto the cylinder block. NOTE 1 Insert the piston so that the match mark on the large end of the connecting rod faces the fuel nozzle, and the manufacture's embossed

mark on the stem faces toward the flywheel. Damper disk Align the damper disk with the input shaft spline and insert. 2 Mount the marine gearbox to the flywheel housing. Flywheel 20 Mounting the cylinder head Assembly 1 Put the cylinder head gasket on the cylinder block,. Before mounting heat exchanger to the cylinder head, adjust the injection timing.. Cylinder head 2 Renew the Oring for the connecting part of the pump, which is inserted in the cylinder block, and tighten the fresh water pump. Cylinder block Mount the lube oil filter with the tool of the filter case remover. Lube oil pressure switch Lube oil filter 27 Mounting the seawater pump 1 Tighten the spacer bolt to the gear case cover. 2 Mount the bracket and the seawater pump assembly to the gear case cover. Cylinder head Bracket Fuel pipe. Model Engine capacity L quart 3YM30 4.9 5.2 3YM20 4.1 4.3 2 Fill with water until the level in the coolant recovery tank is between the full and low marks. The side walls are save shaped to maximize rigidity for strength and low noise. 5.1.1 Inspection of parts Cap plug 45 mm Make a visual inspection to check for cracks on engines. Cylindricity is the maximum value between those difference values. Special alloy stellite with superior resistance to heat and wear is fitted on the seats, and the area between the valves is cooled by the water jet. Thoroughly remove all the carbon and dirt after disassembly and carefully inspect all parts. Measure the inside diameter of the valve guide and replace it if it exceeds the wear limit. Standard Limit Intake 6.0006.012 6.08 Valve guide inside dia. When they are removed, be sure to replace them.

$\label{eq:http://groupepse-cabinet-recouvrement-affacturage-assurancecredit.com/images/canon-mp160-manual-download.pdf$

The side with the smaller pitch painted yellow should face down cylinder head. Model 3YM30 75.970 3YM20 69.975 3 Removing the piston pin A floating type piston pin is used in this engine. The piston pin can be pressed into the piston pin hole at room temperature Coat with oil to make it slide easily. Measure the thickness and width of the rings, and the ringtogroove clearance after installation. Replace if wear exceed the limit. 3YM30 Standard Limit Groove width 1.5501.570 Width Top ring Ring width 1.4701.490. Joint of coil expander. The large end with the aluminium metal can be separated into two and the small end has a 2layer copper alloy coil bushing. Standard Limit Connecting rod. Excessive piston pin bushing wear may result in damage to the piston pin or the piston itself. Measure the piston pin bushing inside diameter and the piston pin outside diameter. Crank shaft The crankshaft main veering is of the hanger type. Correct by grinding if unevenly wear, roundness exceeding the limit or insufficient outside diameter is found. The cams have a curve that minimized the repeated shocks on the valve seats and maximizes valve seat life. The oil clearance shall be calculated by Flywheel side subtracting the measured camshaft outside diameter Micrometer from the inside diameter of the camshaft bearing or bushing. Check the contact of each tappet and replace if excessively or unevenly worn. Tighten the nut. 2 Adjust the rack position to R0 15mm with the FO limiter, and measure the injection volume A at the rated speed. The cause of the trouble may not necessarily be in the pump itself, but may be in the engine or the fuel system. Clean immediately stops. 2 Fuel filter is clogged. Disassemble and clean, or replace the element Replace packing repair 3 Improper air tightness of the fuel pipe pipe connection or pipe is broken and air is being sucked in. Adjust 2 Injection from nozzle is improper. Adjust Fuel drips after each injection.

http://afhobiecat.com/images/canon-mp140-manual.pdf

3 Injection nozzle starting pressure is too high Adjust 4 Uneven injection. The fuel feed pump is mounted on the side of this engine and is driven by the eccentric cam of the fuel pump camshaft. NOTE Replace parts as an assembly. A fuel return connection is provided on top of the tank of which a rubber hose can be connected to return fuel from the fuel nozzles. It is fed to the intake manifold and then on to each cylinder. Intake pipe Exhaust gas goes into exhaust manifold in the fresh water tank mounted on the cylinder head outlet. When the internal pressure of the crankcase decreases too much due to the damage of a spring, much blowby gas containing oil is reduced in intake air system, and it may cause the combustion defect by the early dirt of the intake valve or the urgent rotation of the engine by the oil burning. The mixing elbow is attached to the exhaust manifold. Utype Mixing elbow Seawater Joint Heat exchanger Ltype Mixing elbow Seawater Exhaust elbow Heat exchanger. Put a ruler on the end face of the gear case cover, and insert a gap gauge between rotor, and measure a side gap. The cartridge type filter is easy to remove. To prevent seizure in the event of the filter clogging up, Lube oil pressure a bypass circuit is provided in the oil filter. The cylinders, cylinder heads and exhaust manifold are cooled with fresh water, and fresh water cooler heat exchanger use seawater. Vpulley Shaft Retaining ring Ball bearing Spacer Retaining ring Oring Ball bearing Plate Cover Oring. NOTE Coat the shaft with grease. 3 Mount the impeller. The fresh water pump consists of the pump body, impeller, pump shaft, bearing unit and mechanical seal. It is difficult to disassemble and, once disassembled, even more difficult to reassemble. Replace the pump as an assembly in the event of trouble. 2 When removing the fresh water pump, replace the Oring inlet to cylinder. Straightedge Standard Limit Side clearance between impeller and plate Thickness gauge.

Cooler core The cooler core consists of many small diameter tubes, Pressure cap baffle plates and tube cover. The cap is mounted on the filler neck cam by placing it on the rocking tab and rotating. When the filler neck is removed, remove it with being careful not to damage the fresh water cooler, and scrap it. The coolant recovery tank maintains the water level by preventing this discharge of water. The pump can be run continuously for a period of 10 minutes. After this time it must shut off for a period of 2 hours before reusing. The hose attached at the nozzle should be 1.8 m or less and should reach without any strain, therefore care should be taken in deciding on the best position. Check to be sure that the strainer is in the water before turning on the switch. Problem Cause Countermeasure 1. Pump does not turn Faulty wiring Check the wiring between the motor and battery. Faulty battery Check to see if the specific gravity of the battery fluid is greater than 1.25. Reduction and reversing gear Marine gear KM2P1 is applied to the 3YM30 and 3YM20 series engines. Refer to chapter 10 in the service manual of the GM series engines for inspection, disassembly and reassembly. These are designed specifically for use with Morse control heads. This engineered system of Worse cables, control head and engine connection kits ensures dependable, smooth operation with an absolute minimum of backlash. If they do not coincide, adjust the fittings as necessary first engine side, then controller side. Electrical system 12.1 Electrical system STOP Btype panel Glow connector GLOW START Neutral safety switch Glow plug Fitting to marine gear Glow relay Magnet relay Safety Extension relay wire harness Alternator To lube switch and fresh water switch To earth bolt Stop solenoid Starting motor. The features are compactness, waterproof and independence from pulse by ring gear teeth number.

www.birdandwildlifeteam.com/wp-content/plugins/formcraft/file-upload/server/content/files/1626bf9 7b8fb14---97-toyota-4runner-repair-manual-pdf.pdf

The engine speed, indicated with the instrument panel is activated by the pulse from flywheel ring gear. The pinion engages with the ring gear of a engine, and the engine is started. Magnetic Switch Center Bracket A Torsion Spring Shift Lever Brush. It contains diodes that convert AC to DC, and an IC regulator that keeps the generated voltage constant even when the engine speed changes. 12.4.1 Specifications Yanmar code 12827177200 Model of alternator LR160741 HITACHI Check that a belt doesnt touch the bottom part of the pulley groove. If necessary, replace the V belt set. The features are compactness, waterproof and independence from pulse by ring gear teeth number. The engine speed, indicated with the instrument panel is activated by the pulse from flywheel ring gear. Replace lamp. illuminated when blown out. 2 Lamp not illuminated even main switch set when main switch set to ON to ON. The glow plug is M4 x 0.7 mounted to the cylinder head. The device is operated by the glow switch on the instrument panel. Rated current 810A Rated voltage. The device is operated by the stop switch on the Emergency stop button instrument panel. The emergency stop button is integrated with the solenoid. This Service Manual has easytoread text sections with topTrust Yanmar

3YM30 3YM20 2YM15 Marine Diesel Engine. Service Repair Manual will give you everything you need to do the job. Save time and money byEngine Service Repair Manual can provide. Models Covers. Yanmar 3YM30 Marine Diesel Engine. Yanmar 3YM20 Marine Diesel Engine. Yanmar 2YM15 Marine Diesel Engine. Service Repair Manual Covers. General. Inspection and Adjustment. Troubleshooting. Disassembly and Reassembly. Inspection and Servicing of Basic Engine Parts. Fuel Injection Equipment. Intake and E. Something went wrong.Learn more opens in a new window or tab This amount is subject to change until you make payment.

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If crankshaft or crankshaft sprocket show signs of wear Replace crankshaft, crankshaft sprocket and bolt. See applicable Repair Manual for Models listed. This newly developed product permits a cooling system fill that lasts the service life of the engine and was designed with allaluminum engines in mind. Engine damage will result. This mixture is to be drained immediately and the cooling system flushed as described below. FLUSHING PROCEDURE Engine at operating temperature older vehicles with heater valve heater on. Drain coolant. See Repair Manual, General Engine, Repair Group 19. Apply compressed air to expansion tank or radiator to blow out remaining coolant. See Repair Manual, General Engine, Repair Group 19. Test drive, check coolant level and add if necessary. NOTE Coolant G 012 A8D 01 may be used in older vehicles when the original coolant is drained and cooling system flushed as described above. Inform customer that a new coolant is used and that ONLY water or G 012 A8D A1 be used to replenish. Flushing as specified above, or engine damage resulting from the use of a mixture of G 012 A8D A1 and other coolants is not covered by the new vehicle warranty. CAUTION Part numbers are for reference only. Always check with your Parts Dept. This information replace pages 132 and 1326 in the current 04.94 edition Repair Manual 2.0 Liter General, Engine W42 011 294 105. SERVICE INFORMATION The following fluid capacity information covers all vehicles from 1991 and some from 1990. Retain the fluid chart, covering vehicles from 1980 through 1990, as a supplement for older vehicles. Always check with your Parts Department for latest information.

This tool automatically provides immediate temperature compensation and direct reading of the coolant with only a few drops of sample. Check your test equipment inventory to make sure you have this minimum requirement tool. Special Tool CEN5021 can be ordered through Equipment Solutions at 800 8929650. REMOVING Follow sequence when loosening cylinder head. See Fig. 4. Carefully remove remains of gasket, making sure that no scoring or long scratches are formed abrasive materials must be 100 grit minimum. Carefully remove metal particles and remains of abrasive materials. The following information will be integrated into the Repair Manual during the next

update. The following information will be integrated in to the Repair Manual during the next update. CONDITION Toothed belt runs toward outside and wears out, jumps off, cracks or is noisy. SERVICE If this condition exists Replace toothed belt and automatic tensioning roller Part No 028 109 243F see the appropriate Repair Manual for Models listed above. NOTE Prior to installing the new belt, clean idler pulley, crankshaft and Diesel Injection pump sprockets. If belt is correctly positioned Reinstall remaining parts as outlined in applicable Repair Manual. These are checked for accuracy and are all redrawn into a consistent format for easy use. In the past, when cars were simpler, diagrams were simpler. All components were connected by wires and diagrams seldom exceeded 4 pages in length. Today, some wiring diagrams require more than 16 pages. It would be impractical to expect a service technician to trace a wire from page 1 across every page to page 16. Removing some of the wiring maze reduces eyestrain and time wasted searching across several pages. Today the majority of Mitchell diagrams follow a much improved format, which permits space for internal switch details. The diagrams are drawn with the power source at the top of the diagram and the ground point at the bottom of the diagram.

Components locations are identified on the wiring diagrams. Any wires that dont connect directly to a component are identified on the diagram to indicate where they go. COLOR ABBREVIATIONS COLOR ABBREVIATIONS TABLE

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