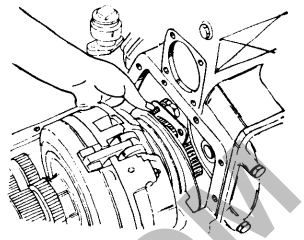
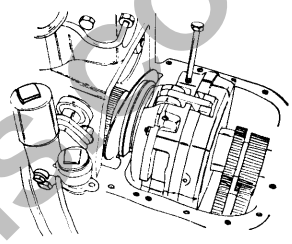
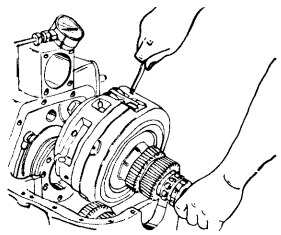
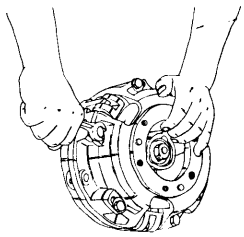
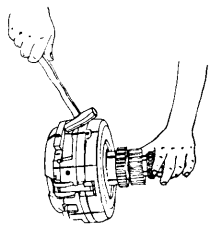
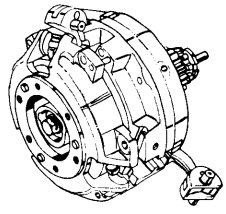
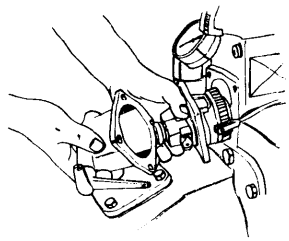
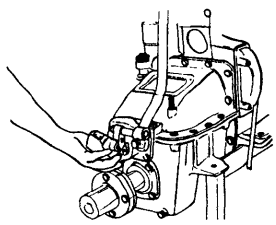
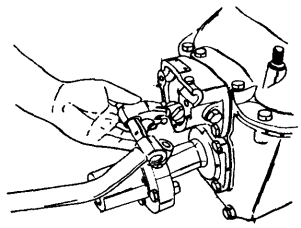
Part Name	Disassembling Procedure	Tool Used	Remarks	Illustration
Clutch body				
	Fit the hanging bolt to the screw hole of clutch housing Ⓑ and remove the clutch body.	Hanging bolt By hand		 
	Remove the fitting bolts of clutch housings Ⓐ Ⓑ Ⓒ (with bend washers).	Hammer Chisel Spanner (14)		
	Remove the clutch housing Ⓐ and then the sliding shaft.	Copper hammer		 

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

6. For removing of such parts as shafts, use appropriate brass or copper rod and caulking plates.
7. Arrange the disassembled parts in good order.
8. Confirm the positions by setting marks.
   The following parts are provided with the setting marks:
   Connecting rod large end and its metal bush; connecting rod metal bush and rod bolt; camshaft gear and crank & gear; clutch housings A, B & C; shaft couplings of thrust shaft and propeller or intermediate shaft; fuel oil control pinion and fuel oil adjusting rack of fuel injection pump; and fuel oil control pinion and plunger of fuel injection pump.
9. Make the most out of disassembly by cleaning those sections usually difficult to clean.
10. Wash clean the disassembled parts and arrange in order.

5-4. Procedure on Disassembling

Part Name	Disassembling Procedure	Tool Used	Remarks	Illustration
Governor	Remove the regulator spring. Remove the pin of governor second lever (with a split pin).	By hand Pliers		
	Remove the governor cover. Remove the governor. Remove the cover of reversing gear upper case. Set the clutch handle to neutral position.	Spanner (14) By hand Spanner (19) By hand	With rubber washer With paper packing With paper packing	
Remote control device	Remove the rear bearing cover of ahead shaft.	Spanner (17)	With paper packing	
	Remove the operating lever together with the clutch handle.	By hand		

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

8. COUNTERMEASURES TO ENGINE TROUBLES

Sympton	Check Point	Trouble		Treatment	Reference
1. Hard to crank up	Lub. oil	Extremely high viscosity		Replace	Refer to page 17.
		Deterioration			
	Moving parts	Seizure of piston		Repair or replace	
		Seizure of crank journal metal			
		Seizure of crank pin metal			
		Seizure of cam shaft metal			
		Seizure of reversing gear box metal			
		Extremely small clearance of metal		Adjust	
		Seizure of each guide and sliding part		Repair or replace	
		Improper centering of shaft or pump		Adjust	
2. Leakage of compressed air	Suction & exhaust valves	Clearance of valve seat		Repair or adjust lapping the valve	Refer to page 75.
		Clogging of valve seat		Clean	
		Improper valve timing		Adjust	Refer to page 77.
	Cylinder head	Insufficient tightness		Retighten	Refer to page 77.
		Disorder of copper packing		Replace	
	Fuel injection valve	Improper tightness		Retighten	
		Disorder of copper packing		Replace	
	Piston ring	Wear		Replace	Refer to page 80.
		Sticking		Replace	
		Cuts of piston ring lined up in one line		Adjust the rings or check the piston liner	
	Cylinder liner	Wear		Replace	Refer to page 81.
		Separation of plating layer		Replace	
3. No injection of fuel oil	Fuel tank	Lack of fuel oil		Supply fuel oil	
	Fuel cock	Remaining closed		Open	
	Governor handle	Remaining unraised		Raise	
	Fuel pipe	Clogging		Clean	
	Fuel system	Air mixed with fuel		Vent air	Refer to page 73.
	Fuel injection valve	Wear		Replace	
		Sticking		Lap or replace	
		Broken of spring		Replace	
		Loosened case nuts or spring retainer		Tighten	
	Fuel injection pump	Exh. valve	Clogging	Clean	Refer to page 65.
			Disorder of valve seat	Lap or replace	
			Broken spring	Replace	
		Plunger	Wear		
			Seizure	Replace	
			Broken spring		
			Loosened plunger barrel set screw	Tighten	
		Improper pump assembly matchmark		Adjust	
	Fuel regulating device	Improper regulation		Adjust	Refer to page 67.

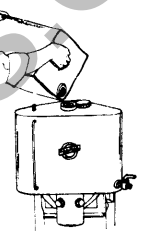
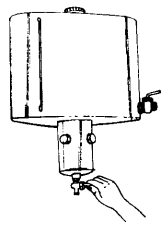
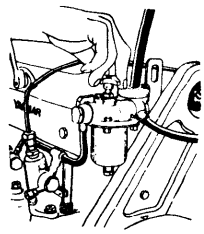
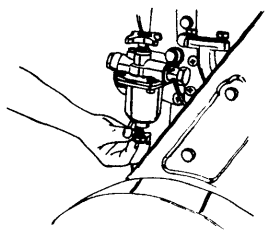
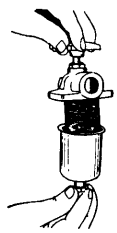
PREVIEW: YOUFIXTHIS.COM

Download full manual at youfixthis.com

3. PERIODICAL CHECKING & SERVICING

A periodical checking is necessary to keep the engine always in good condition. The frequency of the periodical checks may vary depending upon the purpose for which the engine is used, the conditions of use, the quality of oils used, and the method of handling of engine. It is, therefore, difficult to generalize on the frequency with which periodical checks and servicing should occur. However, here we will explain in general.

3-1. Periodical List of Items to be Checked and Frequency of Checks

Checking & Servicing Item		Service period					Illustration
		Daily	Every 50 hrs.	Every 250 hrs.	Every 500 hrs.	Every 1000 hrs.	
Fuel oil	(Prior to starting) Check fuel volume & replenish, if necessary	•					
	Discharge fuel tank drain to eliminate water condensation	•					
	Trun handle of fuel strainer	•					
	Discharge fuel strainer drain to eliminate particle build up		•				
	Clean fuel tank strainer			•			

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

4. MAINTENANCE STANDARDS OF MAIN PARTS

When an engine is used for a period of time, its parts will become worn, not only reducing the engines' performance, but also resulting in engine troubles unless these worn down parts are replaced. The lists of wear limits of main parts will be given at the end of this section. These wear limits are estimated values which will ensure superior performance of the engine and thus they are not absolute values by which the safety of worn down parts can be guaranteed. As indicated in the section concerning the periodical checks and servicing, it is recommended that the parts which will wear out before the next periodical check also be replaced, even if they are at the time of the

Blurred on purpose. The manual you buy has this page in full quality.

PREVIEW - YOUFIXTHIS.COM

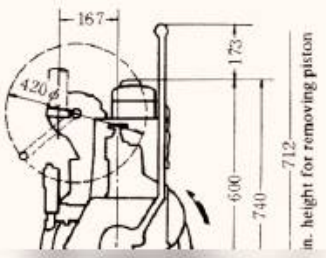
Download full manual at youfixthis.com

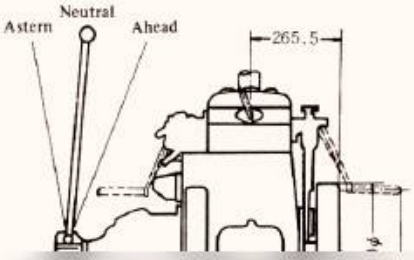
CONTENTS

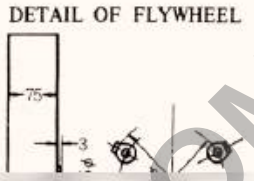
PREFACE
1. OUTLINE OF MAJOR STRUCTURES 1
2. FUEL AND LUBRICATING OIL 2
2-1. Fuel 2
2-1-1. Light Oil 2
2-1-2. Heavy Oil 3
2-1-3. Quality Fuel Oil 4
2-1-4. Properties of Fuel & Engine Performances 8
2-1-5. Cautions on Fuel 9
2-2. Lubricating Oil 9
2-2-1. Engine Oil 9
2-2-2. W & Multi Purpose Grade Oils 11
2-2-3. Property Requirements for Engine Oil 12
2-2-4. Exchange of Engine Oil 12
2-2-5. Cautions for Handling Engine Oil 13
3. PERIODICAL CHECKING & SERVICING 15
3-1. Periodical List of Items to be Checked and Frequency of Checks 15
3-2. Checking Locations 20
3-3. Checking Locations by Systems 20
4. MAINTENANCE STANDARDS OF MAIN PARTS 22
4-1. Maintenance Standards 22
4-2. List of Measuring Positions 23
4-3. List of Wear Limit 26
4-4. List of Undersize Metals 27
4-5. List of Oversize Metals 27
5. ENGINE DISASSEMBLY 28
5-1. Precautions Prior to the Disassembly of the Engine 28
5-2. General Cautions for Maintenance and Cleaning 30
5-3. Cautions for Disassembling the Engine 30
5-4. Procedure on Disassembling 31
6. ENGINE REASSEMBLY 47
6-1. Cautions for Reassembling the Engine 47
6-2. Procedure on Reassembling 47
7. DISASSEMBLY & REASSEMBLY OF OTHER PARTS 65
7-1. Fuel Injection Pump 65
7-2. Adjustment of Governor 67
7-3. Fuel Injection Time 69
7-4. Fuel Injection Valve 71
7-5. Air Venting of Fuel Injection System 73
7-6. Cylinder Head 74
7-7. Piston Pin and Connecting Rod 79

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



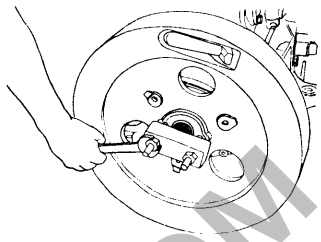
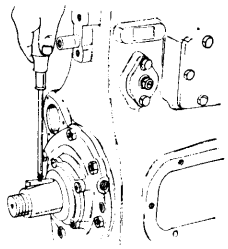
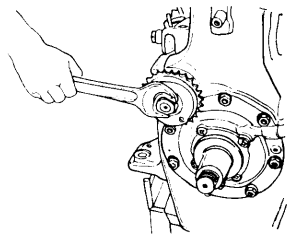
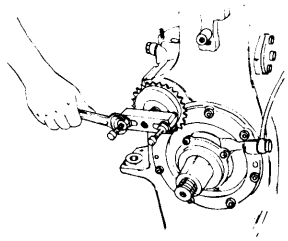
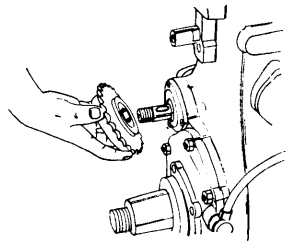




PREVIEW - YOUFIXTHIS.COM

Blurred on purpose. The manual you buy has this page in full quality.

Download full manual at youfixthis.com

Part Name	Disassembling Procedure	Tool Used	Remarks	Illustration
Flywheel	Withdraw the flywheel by means of drawing-out tool.	Flywheel drawing-out tool		
	Remove the flywheel	By hand		
	Remove the flywheel key.	Screwdriver		
Camshaft	Remove the flywheel clamping nuts (with bend washers).	Spanner (32)		
	Withdraw the flywheel and chain wheel together by means of drawing-out tool.	Flywheel drawing-out tool		 

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 8 of 95 pages

The full manual includes:

- All 95 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Yanmar 2S Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual