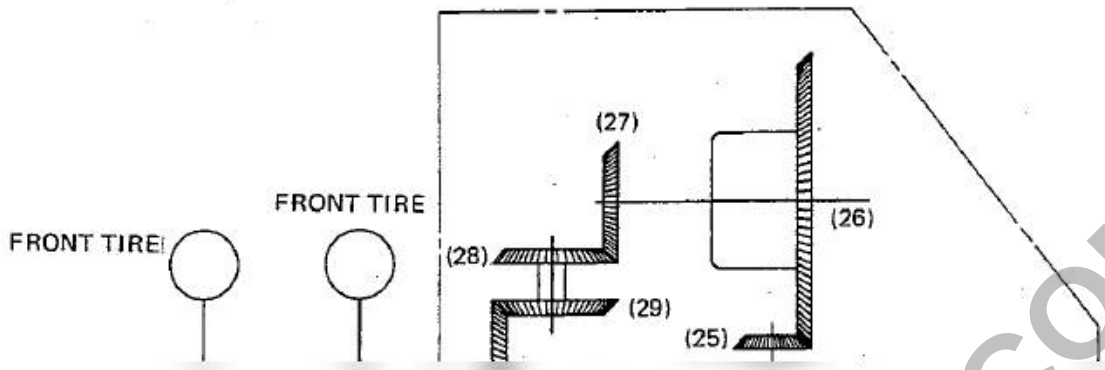


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POWER TRAIN (2) : YM135(D)/YM155(D) POWER TRANSMISSION STRUCTURAL DRAWING



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XV. TIGHTENING TORQUE RATINGS

[Unit: ft.lbs (kg-m)]

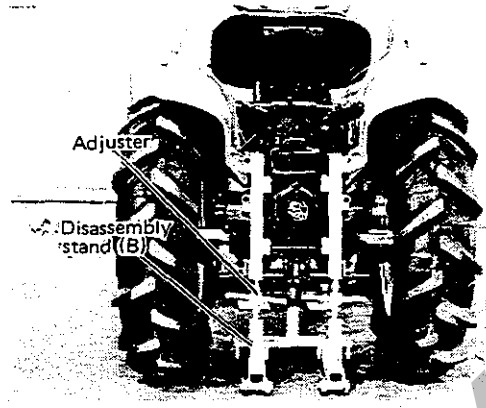
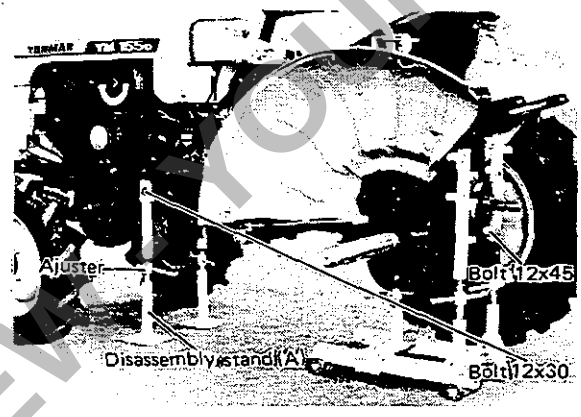
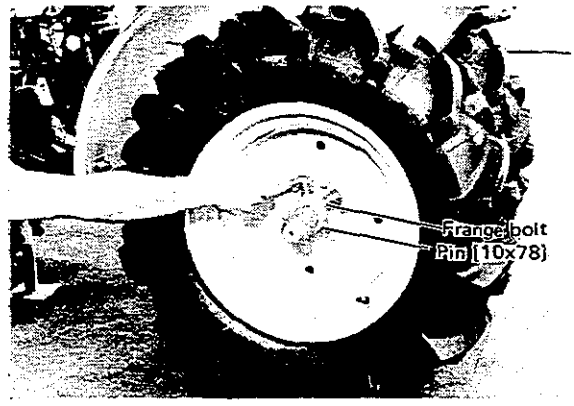
Item	No.	Tightening torque
[ENGINE]		
Cylinder head nuts	6	114 – 116 (15.5 – 16.0)
Rocker arm support	2	58 – 72 (8.0 – 10.0)
Rod bolts	4	33 – 36 (4.5 – 5.0)
Main bearing housing	6	15 – 18 (2.0 – 2.5)

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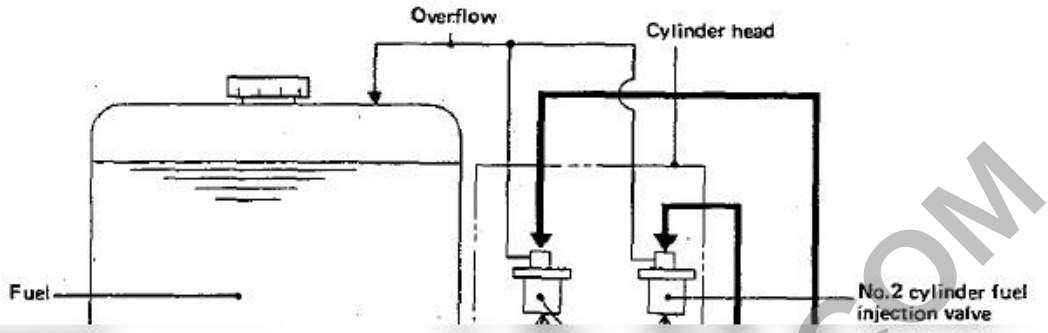
IV. DISASSEMBLY SEQUENCE

	Division	Part Name	Illustration	Caution/Remarks
1.	Installation stand	Installation stand	 	1) Utilize the top link hinge assembly bolt (12 x 45) to attach the installation stand (B). 2) Utilize the front axle bracket assembly bolt (12 x 30) to attach the disassembly stand (A). 3) Raise the rear tires by turning the adjusting bar of both stands (A) and (B). Prior to this adjustment loosen the flange bolts of the rear tire rim. 4) Be sure to adjust both stands (A) and (B) uniformly to ensure that the tractor remains level. *CAUTION: When attaching the front stand (A) be sure the front tires remain in contact with the ground.*
2.	Tires	Flange bolts Pin 10 x 78		Loosen the two flange bolts and remove the snap pin (10 x 78). The rear tire can then be removed.

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5. FUEL SYSTEM



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1. ENGINE AND RELATED ITEMS

	Trouble	Probable cause	Remedy
1.	**Won't start or hard to start.**	1. No fuel.	Replenish fuel.
		2. Fuel cock closed.	Open fuel cock.
		3. Air in fuel system.	Bleed air.
		4. Faulty delivery valve; valve clogged	Disassemble delivery valve and clean.
		5. Worn plunger.	Replace plunger.
		6. Faulty governor.	Adjust governor.
		7. Sezing of nozzle.	Lap nozzle or replace.
		8. Insufficient nozzle pressure.	Adjust injection pressure or replace nozzle.
		9. Clogged fuel return pipe	Replace fuel pipe; if no hole in the center of injection pressure adjusting plate, replace.
		10. Lube oil of excessively high viscosity.	Select lube oil suitable for ambient temperature and engine.
		11. Low specific gravity of battery electrolyte.	Charge battery.
		12. Faulty starter motor.	(Refer to section on electrical equipment)
		13. Faulty safety switch.	Carry out continuity test on safety switch readjusting height.
2.	**Engine starts, but will not run smoothly.**	1. Unstable fuel supply:	
		Air in fuel system.	Bleed air and retighten.
		Governor linkage not functioning smoothly.	Adjust governor.
		2. Water or dust in fuel.	Replace fuel.
		3. Faulty fuel pump:	
		Dirt in delivery valve.	Clean delivery valve.
		Plunger does not function smoothly.	Disassemble fuel pump.
		Injection timing incorrect.	Adjust injection timing.
		4. Nozzle or verge of seizing.	Lap or replace.
3.	**Insufficient power.**	1. Excessive load.	Reduce load.
		2. Dirty lube oil. Excessive viscosity.	Replace lube oil.
		3. Insufficient compression:	
		Worn rings, pistons, liners.	Replace.
		Head bolts loose.	Tighten.
		4. Valve clearance incorrect.	Adjust valve clearance.
		5. Overheating:	
		Uneven tightening or moving components.	Check and adjust.
		Insufficient coolant.	Add to proper level.
		Insufficient lube oil.	Add to proper level.
		6. Poor fuel oil.	Replace with good quality fuel oil.

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II. SPECIFICATIONS

1. SPECIFICATIONS (1)

Item			Unit	YM135	YM135D	YM155	YM155D
EN-GINE	Engine block	Engine model		2T73A		2TR13A	
		Type of engine		Diesel engine			
		Number of cylinders		2			

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VI. ENGINE CONSTRUCTION AND MAINTENANCE

1. CYLINDER LINERS

Cylinder liners must provide a good fit with pistons and piston rings, provide good heat dissipation, and must also have ample wear resistance.

The 2TR13A, 2T73A engine employs wet type cylinder liners made of special cast iron.

(1) Visual Inspection

The cylinder liner should be replaced when there are visible scratches, traces of rust, or corrosion.

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5. CONNECTING RODS

The connecting rods are stamp forged, and the big end sides have square cuts. The small end bushings are made of sintered copper and lead alloy, and the large end side has kelmet bearings.

(1) Visual Inspection

The bushings are checked to see whether there is any scoring or peeling.

(2) Inspecting by Testing Equipment

[Unit: in (mm)]

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8. THERMOSTART (Optional)

(1) Specifications

Item	Specifications
Type	SH100-02 (Hitachi)

e) Setting thermostart switch to OFF position will switch off the electricity and the heater will cool off. This will close the ball valve.

f) Fuel will cease to flow. Fuel is stored in header tank, and is fed to thermostart plug by gravity.

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