FORKLIFT

SERVICE MANUAL

15, 18, 20LC-7M

HYUNDAI

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CONTENTS

SECTION 1 GENERAL

Group 1 Safety Hints 1-1
Group 2 Specifications 1-5
Group 3 Periodic Replacement 1-13

SECTION 2 REMOVAL AND INSTALLATION OF UNIT

Group 1 Structure 2-1
Group 2 Removal and Installation of Unit 2-2

SECTION 3 POWER TRAIN SYSTEM

Group 1 Structure and Operation 3-1
Group 2 Troubleshooting 3-19
Group 3 Disassembly and Assembly 3-25

SECTION 4 BRAKE SYSTEM

Group 1 Structure and Function 4-1
Group 2 Operational Checks and Troubleshooting 4-8
Group 3 Tests and Adjustments 4-10

SECTION 5 STEERING SYSTEM

Group 1 Structure and Function 5-1
Group 2 Operational Checks and Troubleshooting 5-10
Group 3 Disassembly and Assembly 5-12

SECTION 6 HYDRAULIC SYSTEM

Group 1 Structure and Function 6-1
Group 2 Operational Checks and Troubleshooting 6-15
Group 3 Disassembly and Assembly 6-19

SECTION 7 ELECTRICAL SYSTEM

Group 1 Component Location 7-1
Group 2 Electrical Circuit 7-2
Group 3 Component Specification 7-8
Group 4 Connector Destination 7-9
Group 5 Troubleshooting 7-11

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SECTION 8 MAST

Group 1 Structure 8-1
Group 2 Operational Checks and Troubleshooting 8-4
Group 3 Adjustment 8-7
Group 4 Removal and Installation 8-10

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(2) Remove the torque converter housing cover, mounting bolts installed to flywheel housing.
For details, see page 2-10.

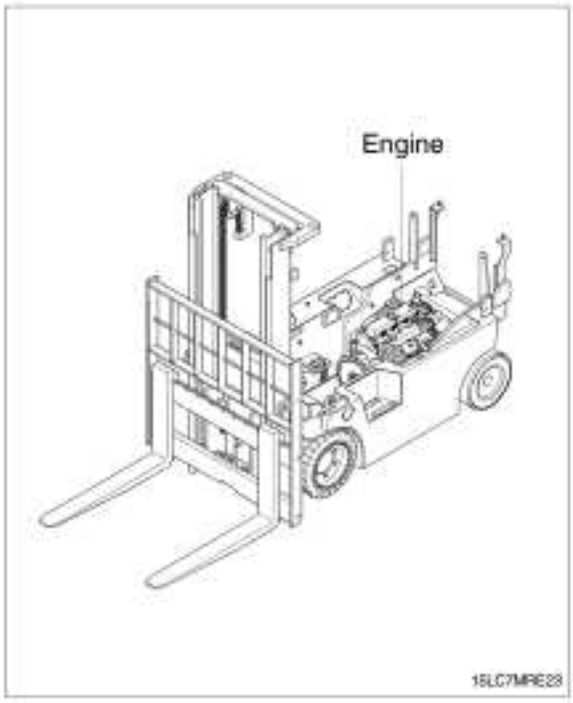
(3) Engine accessory

Remove all wiring harnesses, cables and hoses around the engine, dashboard and frame.

① Wiring harness to alternator and starter.
② Wiring harness for oil pressure and engine water temperature gauges.
③ Hoses to fuel tank and air cleaner.
④ Exhaust pipe.

(4) Radiator hose

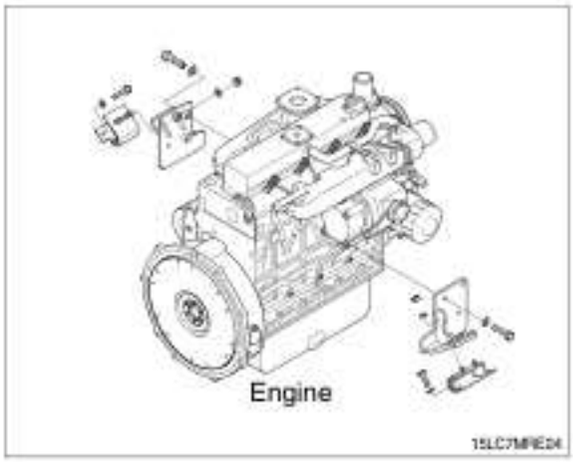
Open the drain valve of the radiator and drain the cooling water, then remove the radiator hose.



(5) Mounting bolt

Attach a crane to the engine hook and raise, then remove mounting bolts. Raise the engine slightly, slide towards the radiator, then lift up.

* When sliding the engine, be careful of the collision engine and radiator.



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GROUP 2 OPERATIONAL CHECKS AND TROUBLESHOOTING

1. OPERATIONAL CHECKS

Check item	Checking procedure
Steering wheel  	- Set rear wheels facing straight forward, then turn steering wheel to left and right. Measure range of steering wheel movement before rear wheel starts to move. Range should be 30~60mm at rim of steering wheel. If play is too large, adjust at gear box. Test steering wheel play with engine at idling.
Knuckle	- Check knuckle visually or use crack detection method. If the knuckle is bent, the tire wear is uneven, so check tire wear.
Steering axle	- Put camber gauge in contact with hub and measure camber. If camber is not within 1 ± 0.5° ; rear axle is bent. - Ask assistant to drive machine at minimum turning radius. - Fit bar and a piece of chalk at outside edge of counterweight to mark line of turning radius. - If minimum turning radius is not within ± 100mm (± 4in) of specified value, adjust turning angle stopper bolt. Min turning radius(Outside) 15LC-7M: 1892mm (74in) 18LC-7M: 1920mm (75in) 20LC-7M: 1940mm (76in)
Hydraulic pressure of power steering	Remove plug from outlet port of flow divider and install oil pressure gauge. Turn steering wheel fully and check oil pressure. ※ Oil pressure :100~105kgf/cm² (1420~1490psi)

2. TROUBLESHOOTING

Problem	Cause	Remedy
Steering wheel drags.	· Low oil pressure. · Bearing faulty. · Spring spool faulty. · Reaction plunger faulty. · Ball-and-screw assembly faulty. · Sector shaft adjusting screw excessively tight. · Gears poorly meshing. · Flow divider coil spring fatigued.	· Check lockout. Repair. · Clean or replace. · Clean or replace. · Replace. · Clean or replace. · Adjust. · Check and correct meshing. · Replace.
Steering wheel fails to return smoothly.	· Bearing faulty. · Reaction plunger faulty. · Ball-and-screw assy faulty · Gears poorly meshing.	· Clean or replace. · Replace. · Clean or replace. · Check and correct meshing.

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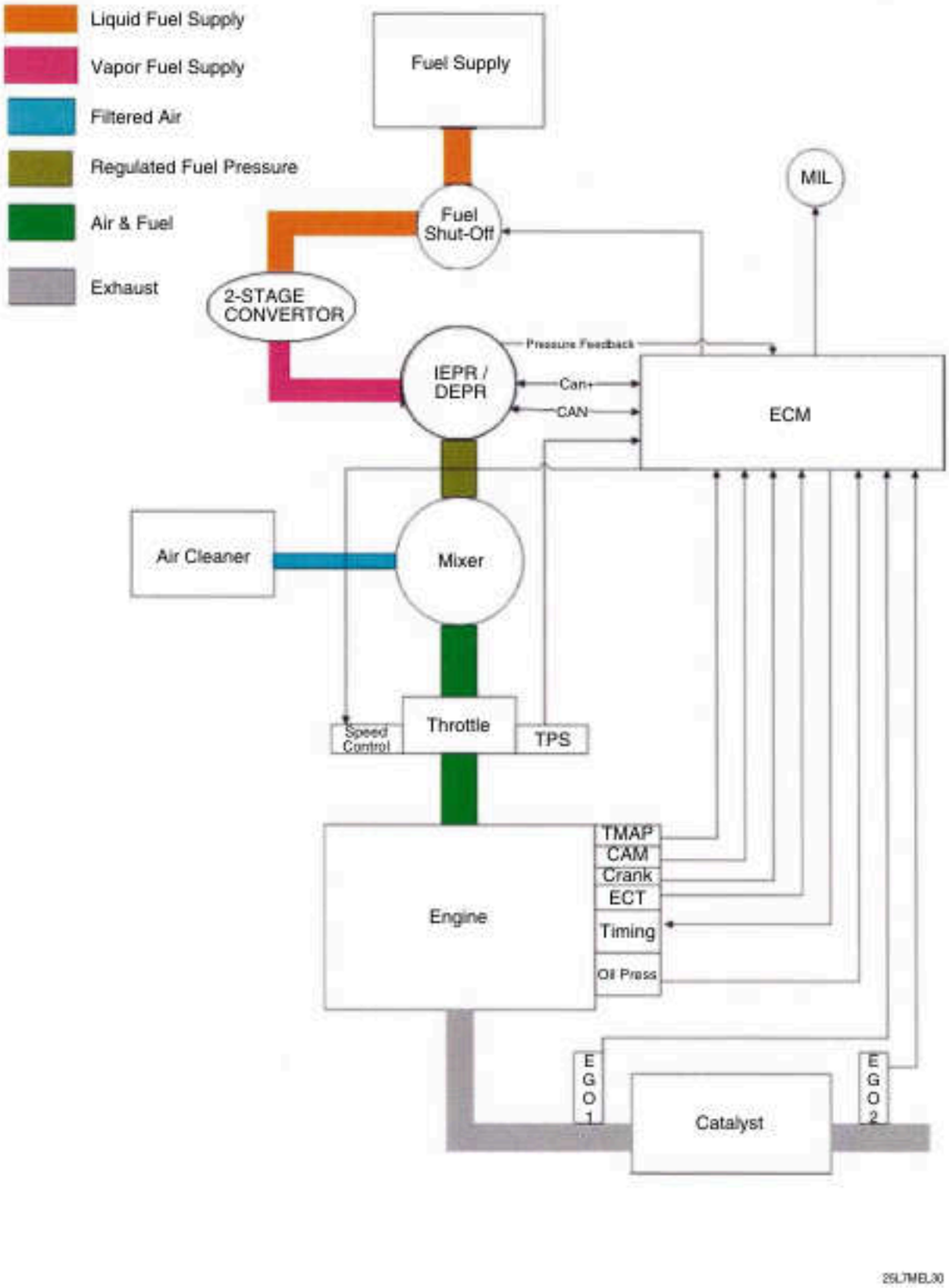
2. TROUBLESHOOTING

1) MAST

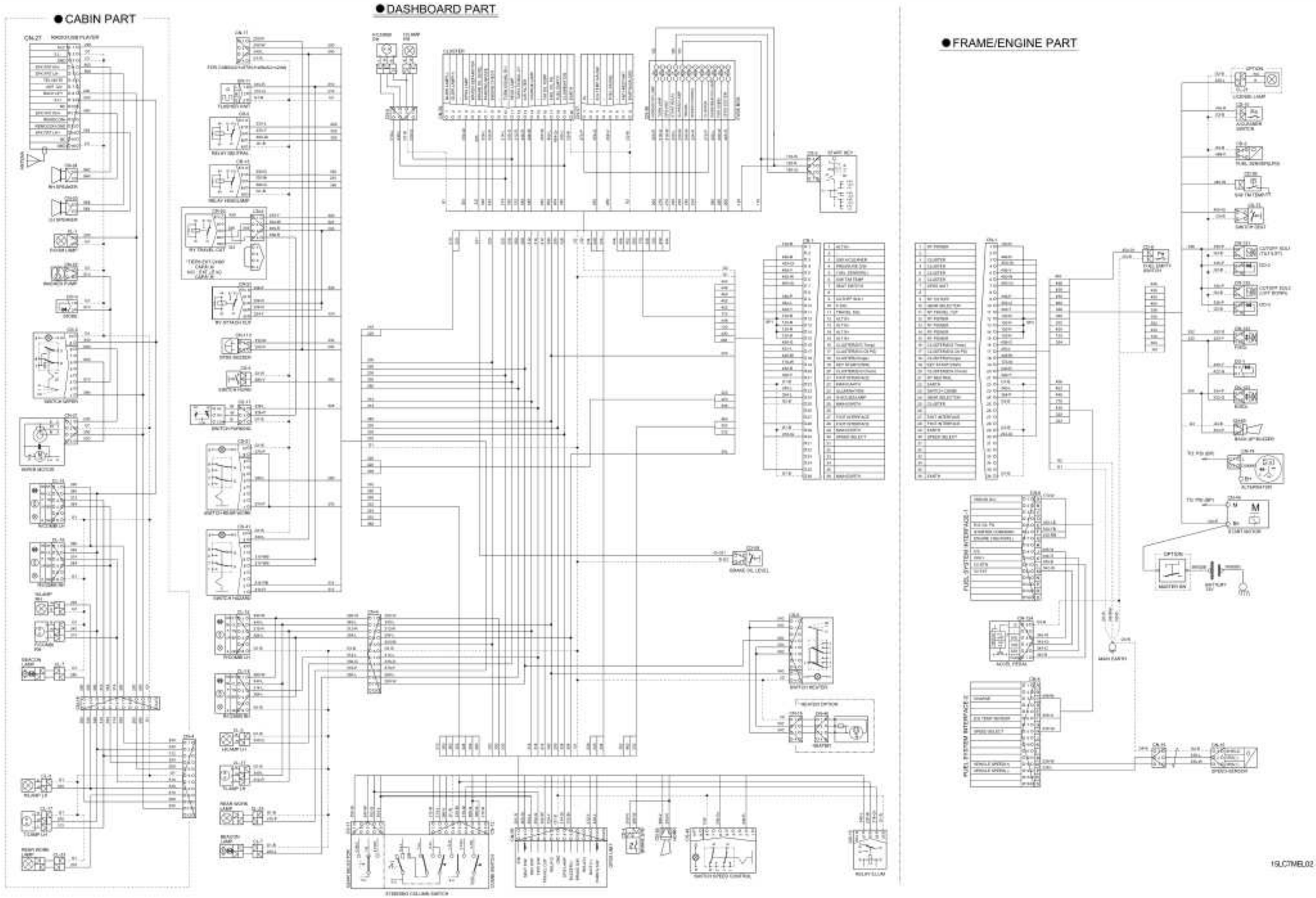
Problem	Cause	Remedy
Forks fail to lower.	· Deformed mast or carriage.	· Disassemble, repair or replace.
Fork fails to elevate	· Faulty hydraulic equipment.	· See troubleshooting hydraulic pump and cylinders in section 6, hydraulic system.
	· Deformed mast assembly.	· Disassemble mast and replace damaged parts or replace complete mast assembly.
Slow lifting speed and insufficient handling capacity.	· Faulty hydraulic equipment.	· See troubleshooting hydraulic pump and cylinders in section 6, hydraulic system.
	· Deformed mast assembly.	· Disassemble mast and replace damaged parts or replace complete mast assembly.
Mast fails to lift smoothly.	· Deformed masts or carriage.	· Disassembly, repair or replace.
	· Faulty hydraulic equipment.	· See Troubleshooting Hydraulic Cylinders, pump and control valve in section 6, hydraulic system.
	· Damaged load and side rollers.	· Replace.
	· Unequal chain tension between LH & RH sides.	· Adjust chains.
	· LH & RH mast inclination angles are unequal. (Mast assembly is twisted when tilted)	· Adjust tilt cylinder rods.
Abnormal noise is produced when mast is lifted and lowered.	· Broken load roller bearings.	· Replace.
	· Broken side roller bearings.	· Replace.
	· Deformed masts.	· Disassemble, repair or replace.
	· Bent lift cylinder rod.	· Replace.
	· Deformed carriage.	· Replace.
	· Broken sheave bearing.	· Replace.
Abnormal noise is produced during tilting operation.	· Insufficient lubrication of anchor pin, or worn bushing and pin.	· Lubricate or replace.
	· Bent tilt cylinder rod.	· Replace.

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MOBILE ENGINE LPG FUEL SYSTEM SCHEMATIC



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