FORKLIFT

SERVICE MANUAL

25, 30, 33LF-7

HYUNDAI

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

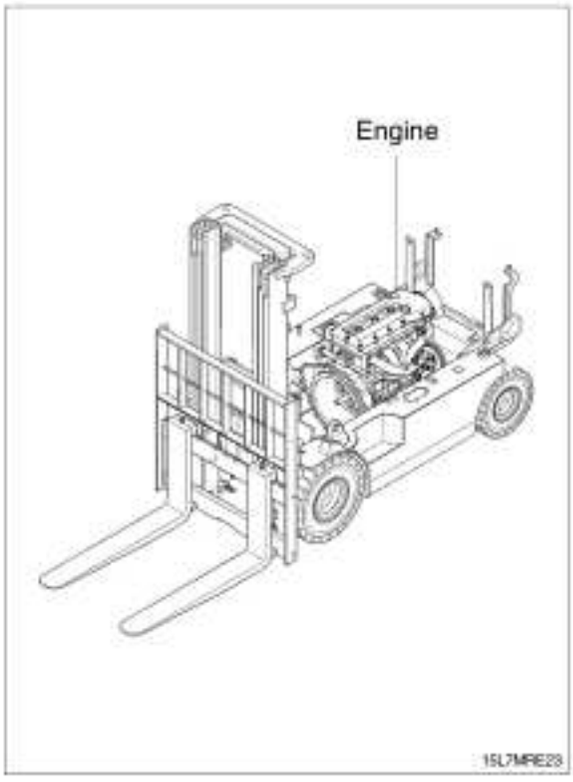
(3) Engine accessory

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 Cables for meters, buttons and accelerator pedal.
④ Hoses to fuel tank and air cleaner.
⑤ Exhaust pipe.

(4) Radiator hose

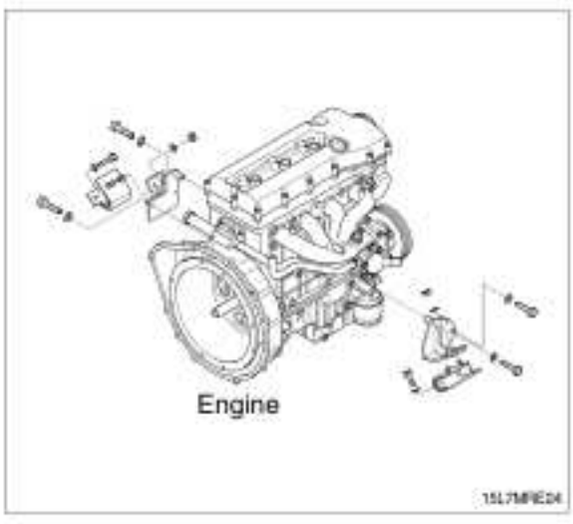
Open the drain valve of the radiator and drain the cooling water, then remove the radiator hose.



(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.



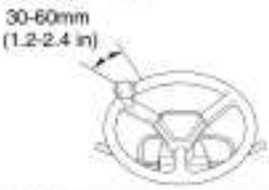
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Trouble symptom	Probable cause	Remedy
2. Oil leakage		
1) External leakage	· Excess of oil.	· Check oil level. Set of oil amount.
	· Using different oil.	· Change oil.
	· Blocking air breather.	· Washing or change air breather.
	· Damaged of hub oil seal.	· Disassemble, check and change.
	· Leakage at pinion shaft.	
	- Excess of oil.	- Check oil level. Set of oil amount.
	- Using different oil.	- Change oil.
	- Blocking air breather.	- Washing or change air breather.
	- Worn or maladjustment pinion shaft oil seal.	- Change oil seal.
	· Loosened bleeder screw.	· Tighten bleeder screw to 150~200 kgf · m.
	· Loosened inlet fitting or plugs.	· Tighten inlet fitting to 380~420 kgf · m.
	· Damaged inlet fitting or plugs or damaged seats.	· Replace inlet fitting or plug and O-ring if used. Repair or resurface area; or replace as necessary.
2) Internal brake		
- Fluid bypasses seals into and fills axle with fluid and blows out breather or emptied brake fluid reservoir.	· Worn or damaged piston seal.	· Replace piston seals.
	· Melted or extruded piston seals.	· Correct cause of overheating and replace seals.
	· Corrosion, pitting wear or other damage, marks, scratches to piston and/or brake housing bore in area seal/sealing lips.	· Clean, smooth, rework or replace affected parts.
3. Axle does not revolution	· Injured axle shaft.	
1) Axle shaft	- Loosened and injured wheel bearing.	· Disassemble and change wheel bearing.
	- A short shaft.	· Change axle shaft
	- Injured disc spline.	· Change axle shaft
2) Hub	· Injured axle shaft.	
	- Injured lock nut.	- Change lock nut.
	- Loosened and injured wheel bearing.	- Reassemble or change wheel bearing.
	- Loosened and damaged bolt between wheel shaft and hub flange.	- Reassemble or change bolt.
	· Loosened or injured hub bolt and hub nut.	· Reassemble or change hub bolt.
3) Differential	· Damaged diff pinion and side gear.	· Change the damaged part.
	· Damaged diff spider.	· Change the damaged part.
	· Damaged differential case.	· Change the damaged part.
	· Damaged ring gear and pinion gear.	· Change the damaged part.

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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 0±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)
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 : 90kgf/cm² (1280psi)

25LF-7	2298 mm (91in)
30LF-7	2398 mm (94in)
33LF-7	2434 mm (96in)

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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