FORKLIFT

SERVICE MANUAL

20DF

HYUNDAI

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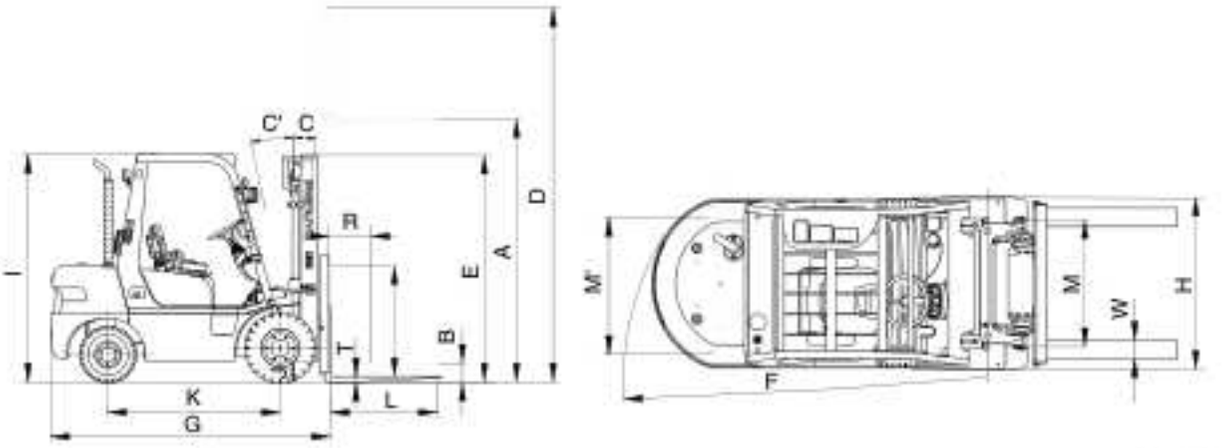
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2. SPECIFICATIONS



D2558P01

Model			Unit	20DF-7	25DF-7	30DF-7	33DF-7
Capacity			kg	2000	2500	3000	3300
Load center		R	mm	500	←	←	←
Weight(Unloaded)			kg	3430	3720	4237	4648
Fork	Lifting height	A	mm	3005	←	←	3205
	Free lift	B	mm	155	←	←	←
	Lifting speed(Unload/Load)		mm/sec	590/570	590/550	480/460	480/450
	Lowering speed(Unload/Load)		mm/sec	450/500	←	←	←
	L × W × T	L,W,T	mm	1050 × 100 × 45	←	1050 × 122 × 45	←
Mast	Tilt angle (forward/backward)	C/C'	degree	6/10	←	←	←
	Max height	D	mm	4185	←	←	4385
	Min height	E	mm	2025	←	2040	2190
Body	Travel speed		km/h	17.6	←	18.5	←
	Gradeability		degree	18.8	16.4	13.5	12.5
	Min turning radius(Outside)	F	mm	2248	2302	2398	2434
ETC	Max hydraulic pressure		kgf/cm²	200	←	←	←
	Hydraulic oil tank		/	40	←	←	←
	Fuel tank		/	54	←	←	←
Overall length		G	mm	2534	2594	2692	2732
Overall width		H	mm	1160	←	1230	←
Overhead guard height		I	mm	2160	←	2180	←
Ground clearance		J	mm	127	←	145	←
Wheel base		K	mm	1650	←	1700	←
Wheel tread front/rear		M, M'	mm	965/980	←	1005/980	←

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

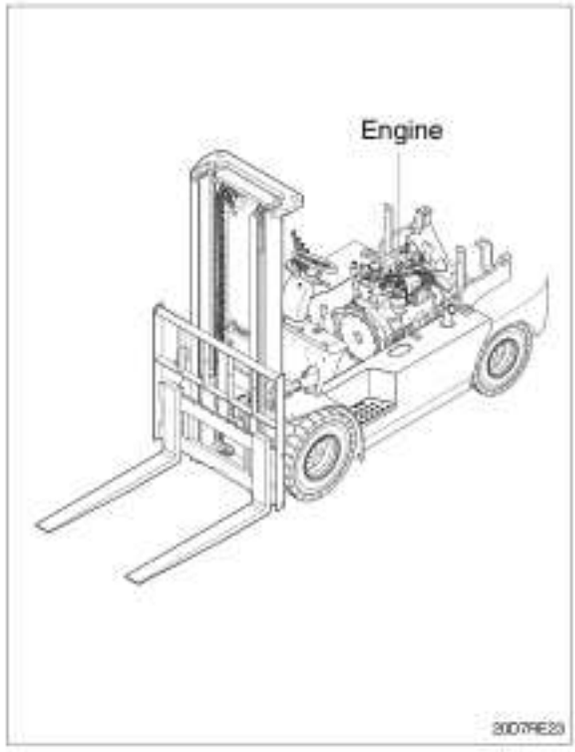
(3) Engine accessory

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.

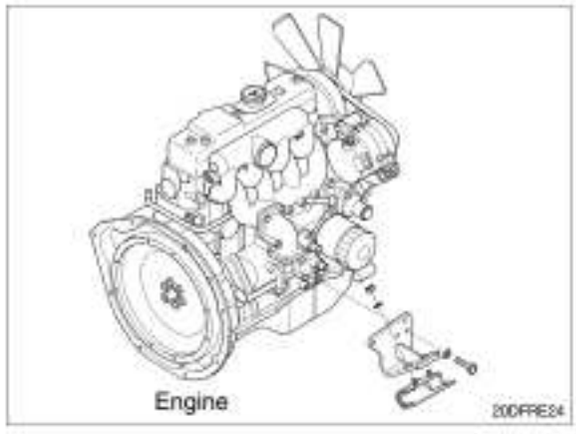


(5) Mounting bolt

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.

⚠ When raising the engine, only must use appropriate lifting appliances which should be had sufficient capacity for lifting of the engine.



2) INSTALLATION

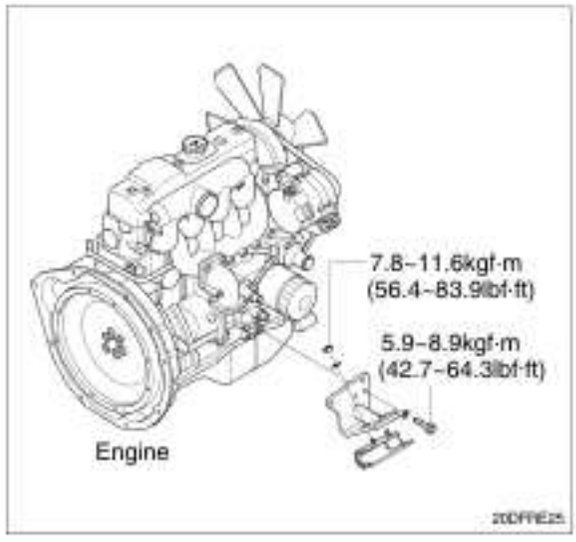
Installation is the reverse order of removal, but be careful of the following points.

(1) Tighten the engine mounting bolts and nuts.

(2) Tighten the engine mounting bracket bolts.

※ Do not remove the bolts unless necessary. Loctite is coated over the threads of bolt. So, once the bolts were removed, coat them with loctite (#243) when installing.

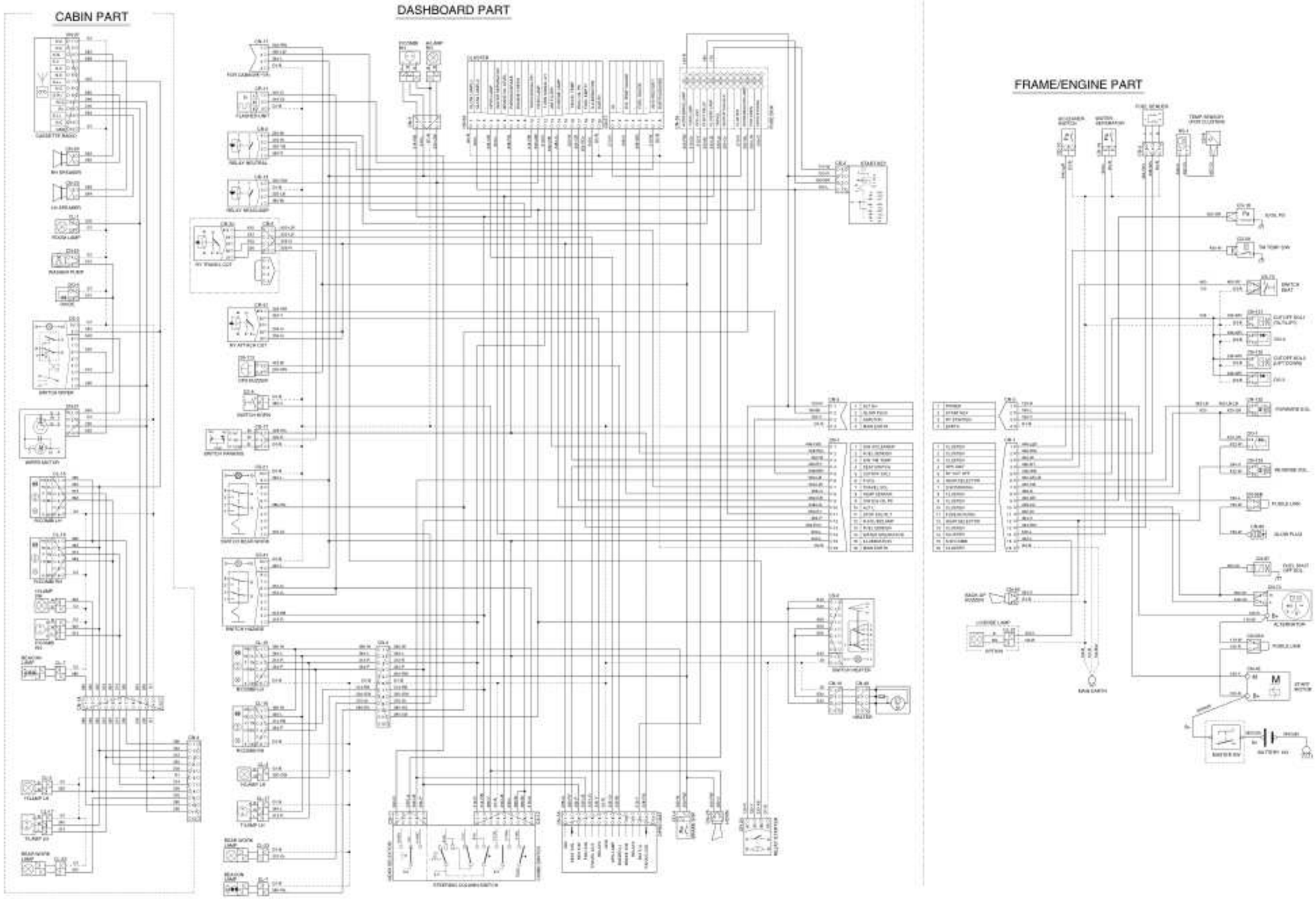
※ Before installing the bolts, loctite in the holes should be removed by a tap.



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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		
1) Axle shaft	· Injured 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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