FORKLIFT

SERVICE MANUAL

15, 18, 20L(G)-7A

HYUNDAI

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3. SPECIFICATION FOR MAJOR COMPONENTS

(1) ENGINE

Item	Unit	Specification
Model	-	HYUNDAI beta, L4GC
Type	-	4-cycle, vertical
Cooling Method	-	Water cooled
Number of cylinders and arrangement	-	4 cylinders, In line
Firing order	-	1-3-4-2
Cylinder bore X stroke	mm(in)	82 × 93.5(3.2 × 3.7)
Piston displacement	cc(cu in)	1975(120.5)
Compression ratio	-	9.4
Rated gross horse power	ps/rpm	50/2450
Maximum gross torque at rpm	kgf · m/rpm	16.3/1600
Engine oil quantity	ℓ (U.S.gal)	4(1.06)
Dry weight	kg(lb)	150(331)
High idling speed	rpm	2700
Low idling speed	rpm	800
Rated fuel consumption	g/ps.hr	-
Starting motor	V-kW	12 - 1.7
Alternator	V-A	13.5 - 90
Battery	V-AH	12 - 60
Fan belt deflection	mm(in)	10~15(0.4~0.6)

(2) MAIN PUMP

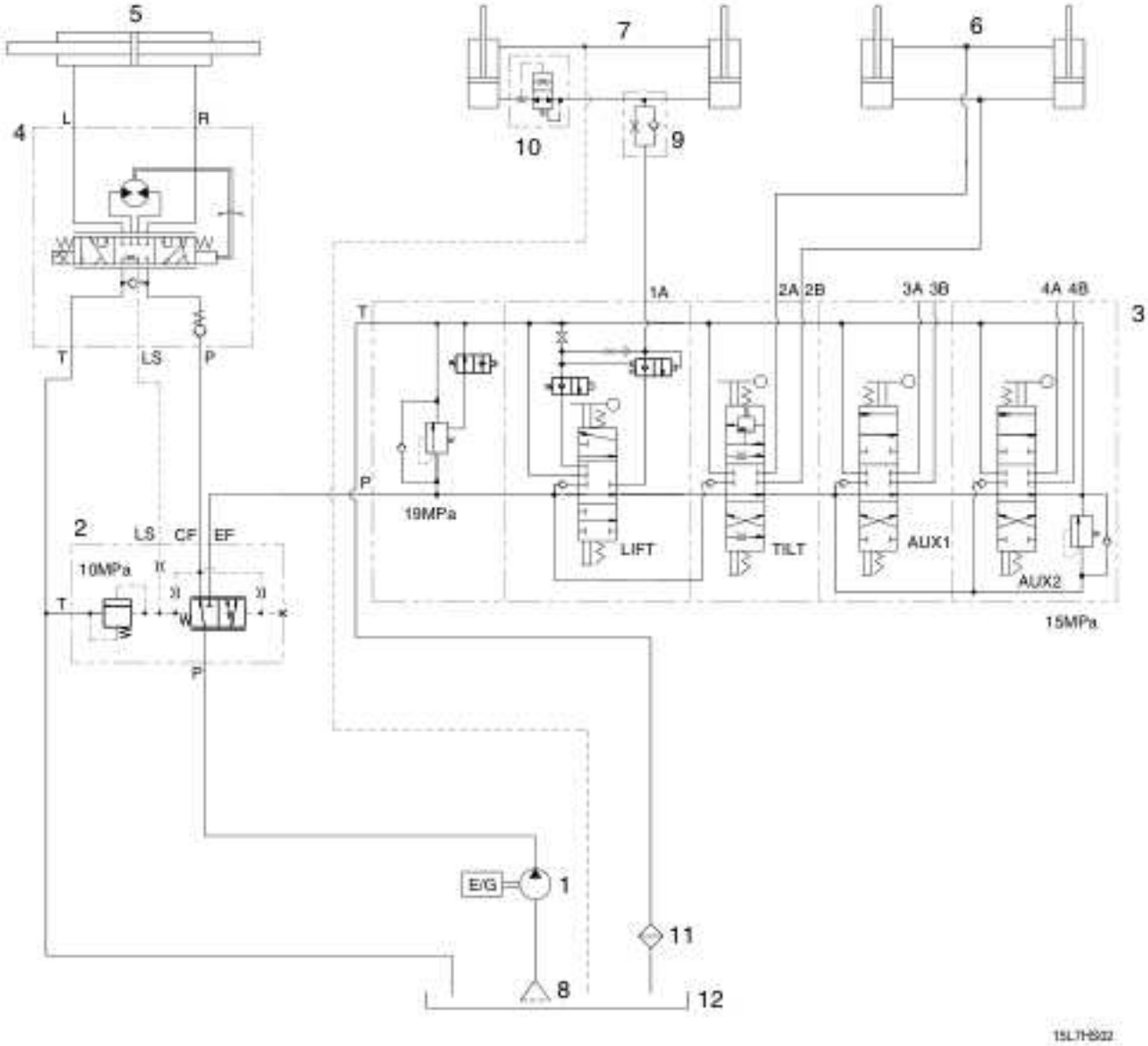
Item	Unit	Specification
Type	-	Gear
Capacity	cc/rev	26
Maximum operating pressure	bar	210
Rated speed (Max/Min)	rpm	3000/500

(3) MAIN CONTROL VALVE

Item	Unit	Specification
Type	-	Sectional
Operating method	-	Mechanical
Relief valve pressure(Main/Aux)	bar	190/150
Flow capacity	lpm	65

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HYDRAULIC CIRCUIT (TRAVEL WITH MAST OPSS)



1	Hydraulic gear pump	7	Lift cylinder
2	Priority valve	8	Suction strainer
3	Main control valve	9	Down control valve
4	Steering unit	10	Down safety valve
5	Steering cylinder	11	Return filter
6	Tilt cylinder	12	Hydraulic tank

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GROUP 2 OPERATIONAL CHECKS AND TROUBLESHOOTING

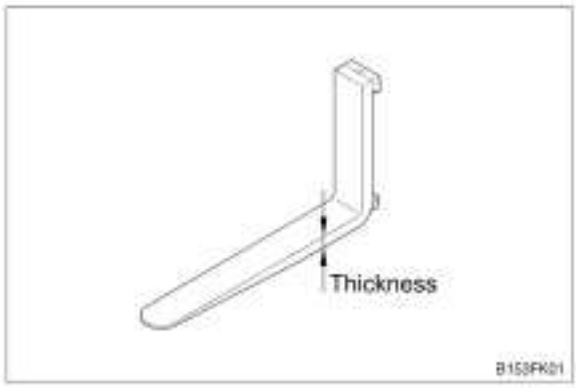
1. OPERATIONAL CHECKS

1) FORKS

(1) Measure thickness of root of forks and check that it is more than specified value.
EX : ℓ =900mm(35.4in)

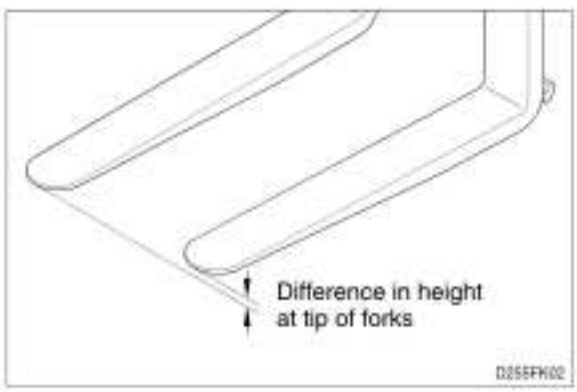
mm(in)

STD Fork assy	Applicable model	Standard	Limit
64FP-12030	15L(G)/18L(G)-7A	35(1.4)	32(1.3)
64FD-11010	20L(G)-7A	40(1.6)	36(1.4)



(2) Set forks in middle and measure difference in height at top of forks.

Model	Fork length (mm)	Height difference(mm)
15L(G)/18L(G)-7A	below 1200	3
	above 1200	6
20L(G)-7A	below 1200	3
	above 1200	6



(3) Most force is concentrated at root of fork and at hook, so use crack detection method to check cracks.

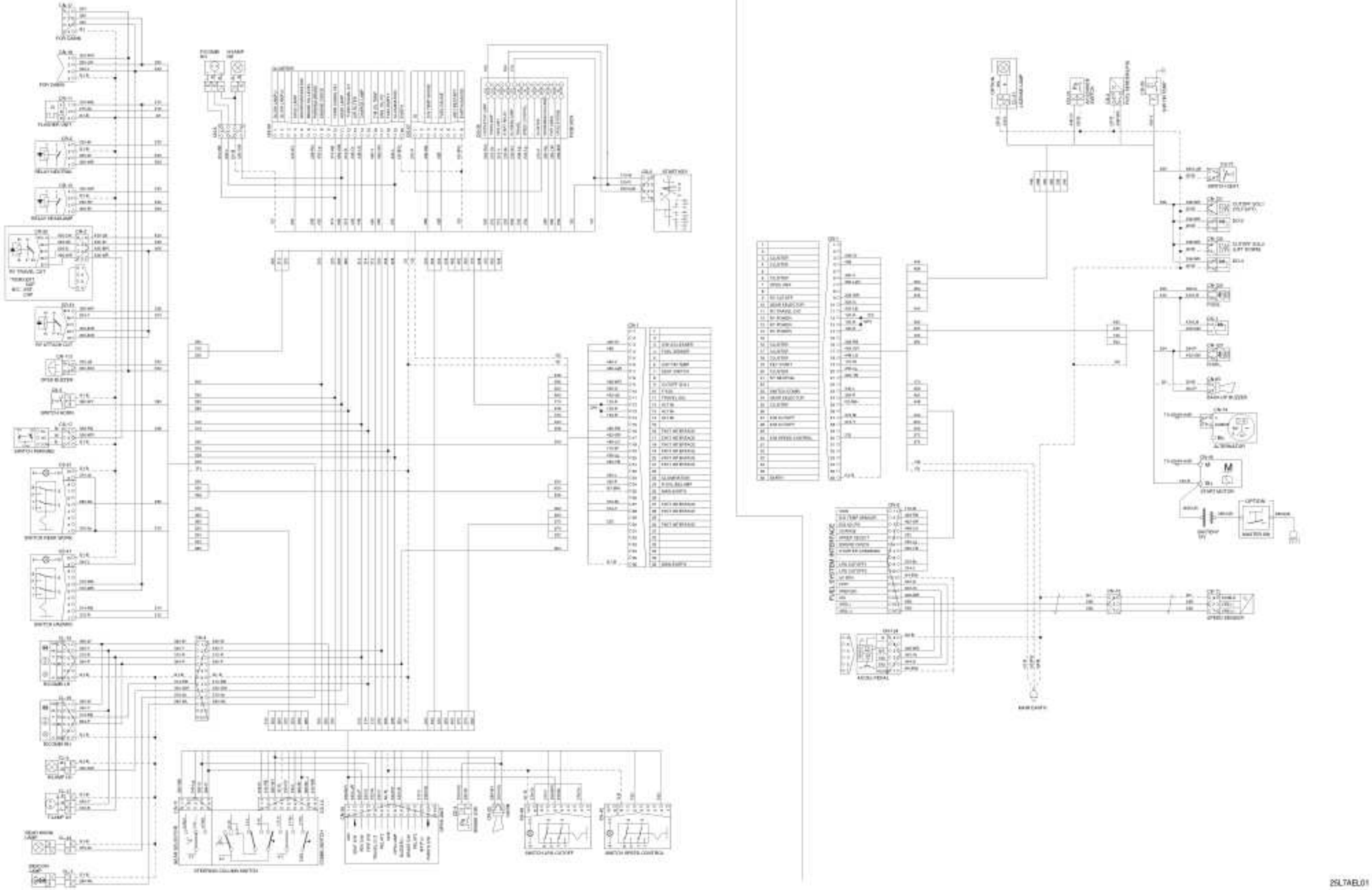
2. MAST

1) Check for cracks at mast stay, tilt cylinder bracket, guide bar, fork carriage and roller shaft weld. Check visually or use crack detection method. Repair any abnormality.
2) Set mast vertical, raise forks about 10cm from ground and check front-to-rear clearance and left-to-right clearance between inner mast and fork carriage, and between outer mast and inner mast. Use these figures to judge if there is any play at roller or rail.
   · Front-to-rear clearance : Within 2.0mm(0.08in)
   · Left-to-right clearance : Within 2.5mm (0.10in)
3) Check that there is an oil groove in bushing at mast support.
4) Set mast vertical, raise forks about 10cm from ground, and push center of lift chain with finger to check for difference in tension.
   If there is any difference in tension, adjust chain stopper bolt.
5) Check visually for abnormalities at thread of chain anchor bolt, and at contact surface between chain wheel and chain.
   Rotate chain wheel by hand and check for any play of bearing.

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DASHBOARD PART

FRAME/ENGINE PART



2SLTAEL01

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