WHEEL LOADER

SERVICE MANUAL

HL730-9S

HYUNDAI

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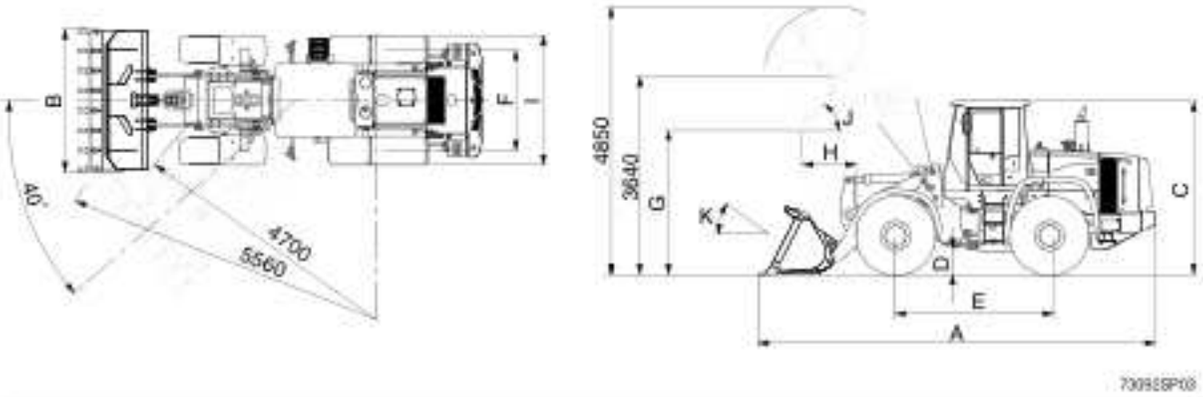
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2) WITH TOOTH TYPE BUCKET (HL730-9S)

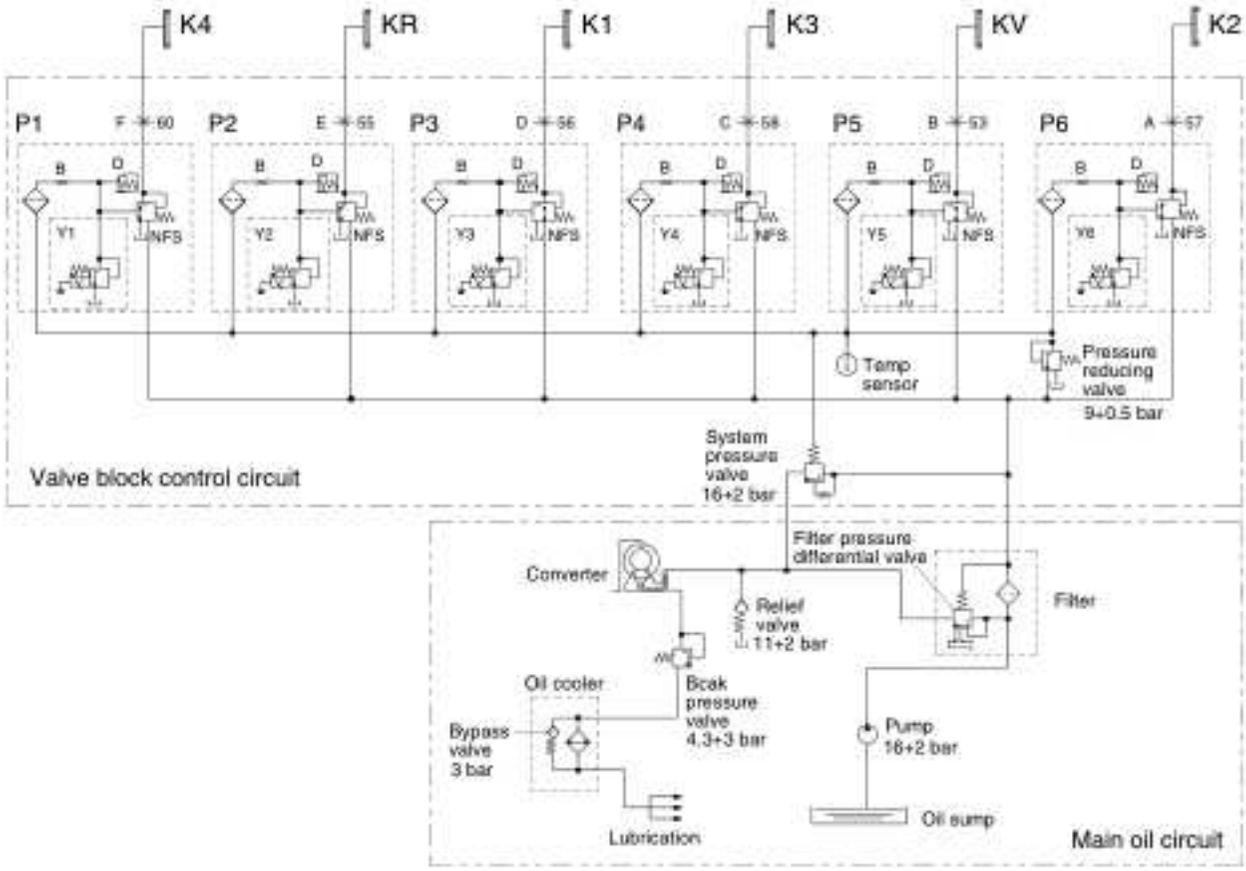


730SSP03

Description			Unit	Specification
Operating weight			kg (lb)	9700 (21400)
Bucket capacity		Struck	m^3 (yd^3)	1.4 (1.9)
		Heaped		1.7 (2.2)
Overall length		A	mm (ft-in)	7000 (23' 0")
Overall width		B		2480 (8' 2")
Overall height		C		3190 (10' 6")
Ground clearance		D		370 (1' 3")
Wheelbase		E		2750 (9' 0")
Tread		F		1850 (6' 0")
Dump clearance at 45°		G		2640 (8' 8")
Dump reach (full lift)		H		1075 (3' 6")
Width over tires		I		2295 (7' 6")
Dump angle		J	degree (°)	48
Roll back angle (carry position)		K		48
Cycle time		Lift (with load)	sec	5.6
		Dump (with load)		1.0
		Lower (empty)		3.0
Maximum travel speed (DANA axle/ZF axle)			km/hr (mph)	37.0 (23.0) / 38.3 (23.8)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				4.7 (15' 5")
Gradeability			degree (°)	30
Brakeout force			kg (lb)	10320 (22750)
Travel speed	Forward (DANA axle/ZF axle)	First gear	km/hr (mph)	6.0 (3.7) / 6.7 (4.2)
		Second gear		11.0 (6.8) / 12.3 (7.6)
		Third gear		21.8 (13.5) / 23.7 (14.7)
		Fourth gear		37.0 (23.0) / 38.3 (23.8)
	Reverse (DANA axle/ZF axle)	First gear		6.3 (3.9) / 7.1 (4.4)
		Second gear		11.6 (7.2) / 12.9 (8.0)
		Third gear		23.0 (14.3) / 24.8 (15.4)

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HYDRAULIC CIRCUIT



7607APT18

NFS	Follow-on slide	P3	Proportional valve K1
D	Vibration damper	P4	Proportional valve K3
B	Orifice	P5	Proportional valve KV
P1	Proportional valve K4	P6	Proportional valve K2
P2	Proportional valve KR	Y1~Y6	Pressure regulator

Speed	Forward				Reverse			Neutral	Engaged clutch	Positions on the valve block	Current No. of the measuring points
	1	2	3	4	1	2	3				
Y1				X					K4	F	60
Y2					X	X	X		KR	E	55
Y3	X				X		X		K1	D	56
Y4			X	X					K3	C	58
Y5	X	X	X						KV	B	53
Y6		X				X			K2	A	57
Engaged clutch	K1,KV	KV,K2	K3,KV	K4,K3	KR,K1	KR,K2	KR, K3		-	-	-

X : Pressure regulator under voltage

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2. TROUBLESHOOTING

※ Diagnose malfunction charts are arranged from most probable and simplest to verify, to least likely, more difficult to verify. Remember the following steps when troubleshooting a problem :

Step 1. Operational check out procedure (see section 1)
Step 2. Operational checks (see group 2)
Step 3. Troubleshooting
Step 4. Tests and adjustments (see group 3)

Problem	Cause	Remedy
Noisy hydraulic pump	Low oil supply or wrong viscosity.	Fill reservoir with recommended oil.
	Plugged or pinched suction line.	Clean or replace line.
	Air in oil.	Check for foamy oil. Tighten connections. Replace O-rings and or lines.
	Plugged suction strainer.	Inspect and clean strainer in reservoir.
	Loose or missing hydraulic line clamps.	Tighten or replace clamps.
	Hydraulic lines in contract with frame.	Inspect and repair.
	Worn or damaged pump.	Do hydraulic pump performance check in group 2. Do hydraulic pump flow test in group 3.
No or Slow hydraulic functions	Failed or worn hydrualic pump.	Do performance check.
	Cold oil.	Warm oil up.
	Slow engine speed.	Adjust engine speed. Check high idle speed.
	Suction line air leak.	Check for foamy oil.
	Low oil supply.	Add recommended oil.
	Wrong oil viscosity.	Use recommended oil.
	Oil leaking past cylinders or control valve.	Check cylinder drift in group 2.
	Blocked or damaged line.	Inspect lines.
	Faulty pilot control valve (RCV).	Do pilot control valve (RCV) pressure test in group 3.
	Binding loader control valve (MCV) spool.	Inspect valve.
	Faulty steering unit.	Check steering unit specification.

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(9) Assemble drive gear set.
Spread hydraulic fluid around gear set.



(10) Assemble thrust plate.
Rotate the shaft gear and check status of gear set.
Assemble dowel pins and connector shaft.



(11) Assemble the rear cover.
Check the contact status of square seal.



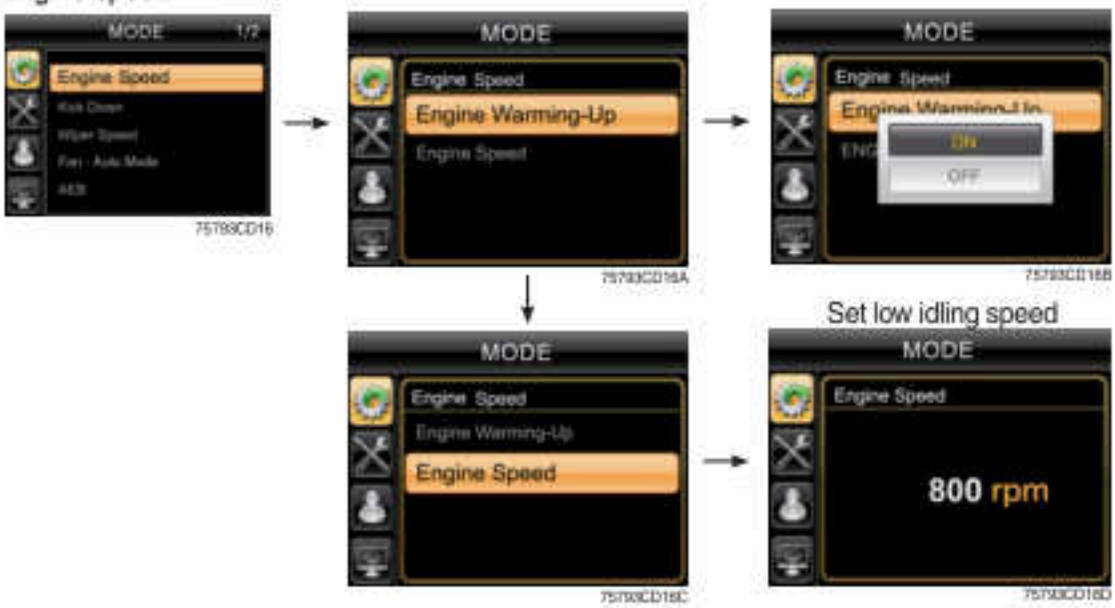
(12) Assemble stud bolt and washer.
※ Washer : smooth - convex side up
※ Keep bolts in dry condition after washing.



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(2) Mode

① Engine speed



② Kick down



- Mode 1 (down/up) : Press kick down button once, shift down and press button again, shift up.
- Mode 2 (down only) : Press kick down button every time, shift to lower gear respectively.

※ Refer to page 7-46.

③ Wiper speed



- Setting wipe speed 1 to 4.

④ Fan-auto mode



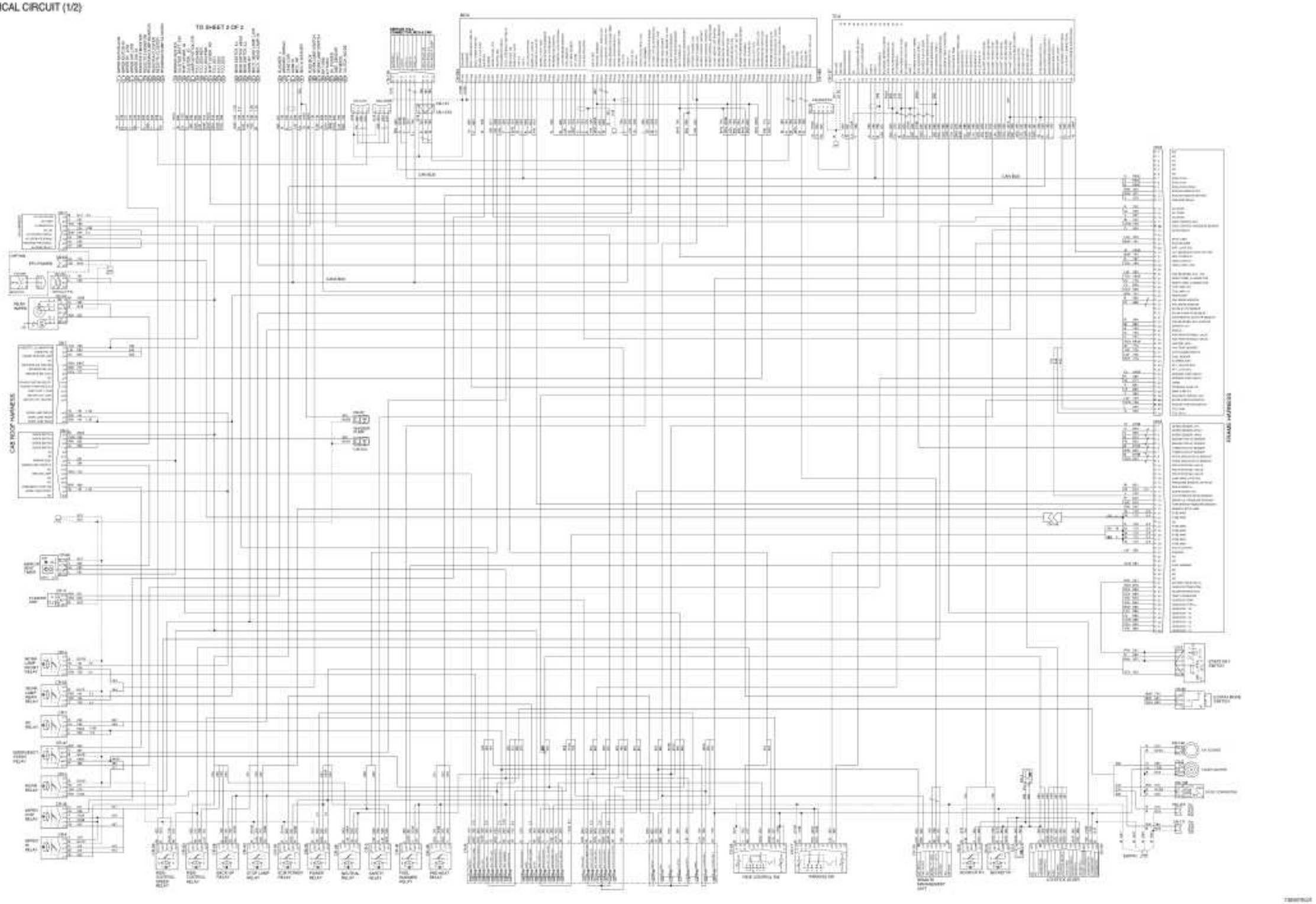
- Select reverse interval or reverse time.
- Set reverse interval (30~300 min) or reverse time (30~300 sec).

※ Default : Interval (60 min), time (120 sec)

※ Refer to page 7-44, fan control switch.

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- ELECTRICAL CIRCUIT (1/2)



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