WHEEL LOADER

SERVICE MANUAL

HL940A

HYUNDAI

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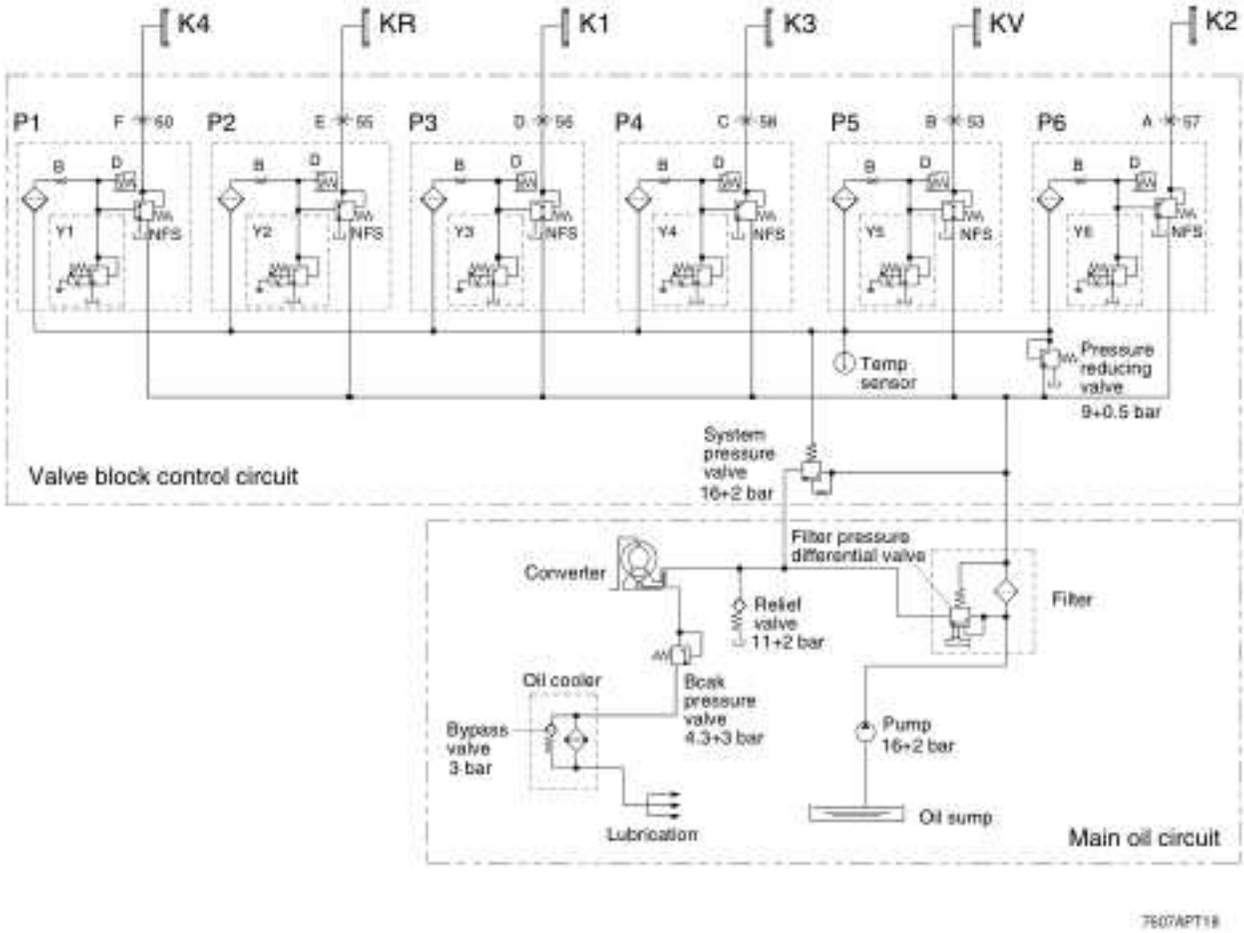
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HYDRAULIC CIRCUIT (HL940A: ~#1179, HL940A TM: ~#0230)



7607APT18

NFS	Follow-on slide	P3	Proportional valve clutch K1
D	Vibration damper	P4	Proportional valve clutch K3
B	Orifice	P5	Proportional valve clutch KV
P1	Proportional valve clutch K4	P6	Proportional valve clutch K2
P2	Proportional valve clutch 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				K1	D	56
Y4			X	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

1) TRANSMISSION

- 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 group 3 in section 1.)

  Step 2. Operational checks (In this group.)

  Step 3. Troubleshooting

  Step 4. Tests and/or adjustments (See group 3.)

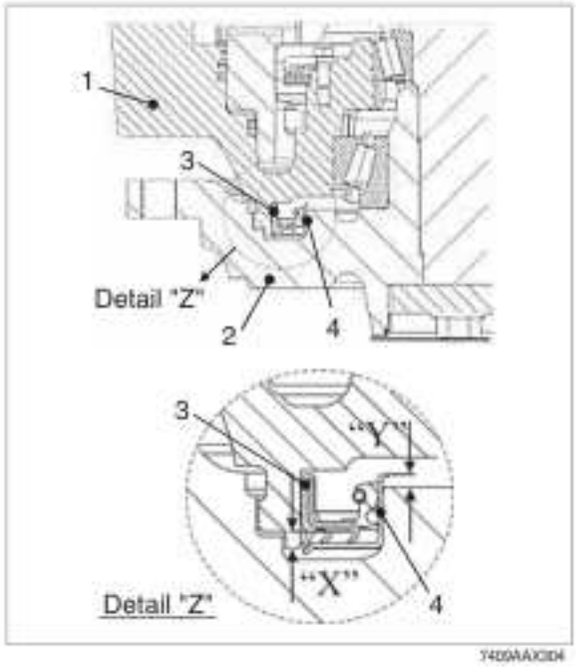
Problem	Cause	Remedy
Transmission slippage	Low oil level.	Add oil.
	Wrong oil grade.	Change oil.
	Restricted transmission pump suction screen.	Remove and clean screen.
	Leak in transmission control valve or gasket.	Remove valve and inspect gaskets.
	Low transmission pump flow due to worn pump.	Do transmission pump flow test.
	Weak or broken pressure regulating valve spring.	Do transmission system pressure test.
Error code on display	Something wrong in transmission.	Go to transmission fault code group at page 3-57~3-73.

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1 Brake housing
2 Output shaft
3 Shaft seal (part I) ┐ combi
4 Wear sleeve (part II) ┘ seal ring

"X" = installation dimension /shaft seal
4.1 $^{+0.2}$ mm

"Y" = installation dimension /wear sleeve
2.6 $^{+0.2}$ mm



7400AAX304

② Apply sealing agent (loctite #574) on contact faces of wear sleeve /output shaft and mount wear sleeve (part I / combi seal ring) considering installation dimension "Y" see detailed AX304.

Pressing device 5870 506 172


7400AAX305

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290F3CD246

- When the worker or pedestrian go near the danger area line (green, radius 3 m), an external danger area of equipping on the main display, the warning buzzer sounds and it displays the green rectangular box for the recognition of the worker and pedestrian. At this time, the operator should stop work immediately, and stop the buzzer by pressing the buzzer stop switch. And then, please work after you check whether the danger factors are solved.



290F3CD247

- When the worker or pedestrian go inside of the danger area line (red, radius 3 m), an internal danger area of equipping on the main display, the warning buzzer sounds and it displays the red rectangular box for the recognition of the worker and pedestrian. At this time, the operator should stop work immediately, and stop the buzzer by pressing the buzzer stop switch. And then, please work after you check whether the danger factors are solved.

(6) Mutimedia





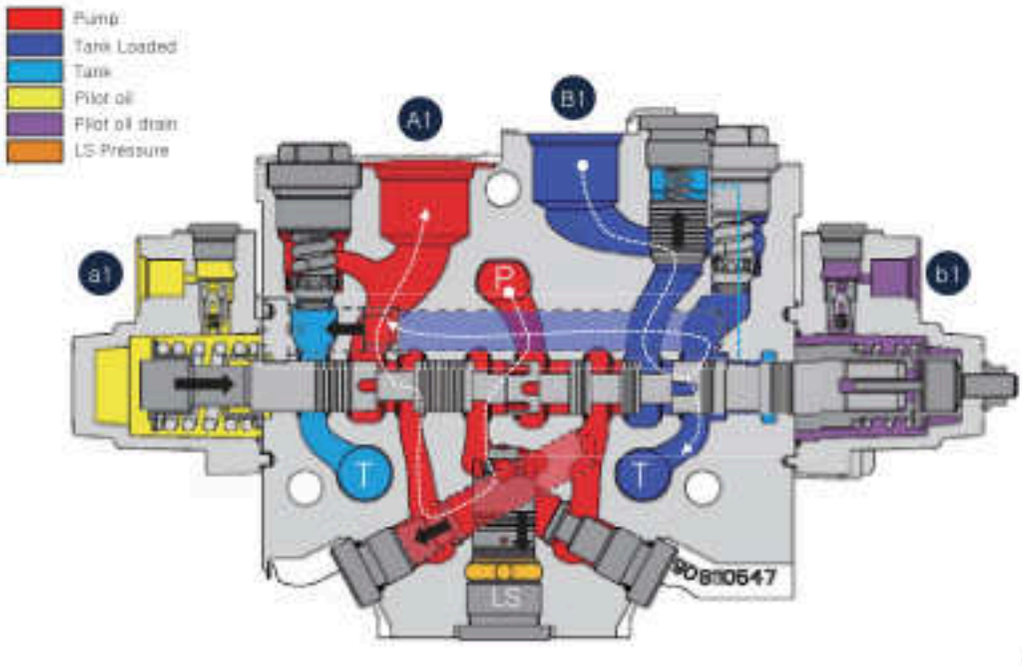
- Media player
- Play video files in USB (mp4, mkv, avi, 3gp, divx, f4v, flv, mpeg, mov, vob, wmv, webm, xvid).
- Play audio files in USB (mp3, mp4, ogg, wma, wav, flac, aac).

- Smart terminal
- The menu features a smartphone and operates the miracast.

⚠ Operation of screen mirroring can be dangerous while driving.
Driver is responsible for accident or other damages. Operate the screen mirroring while stopping for safety.

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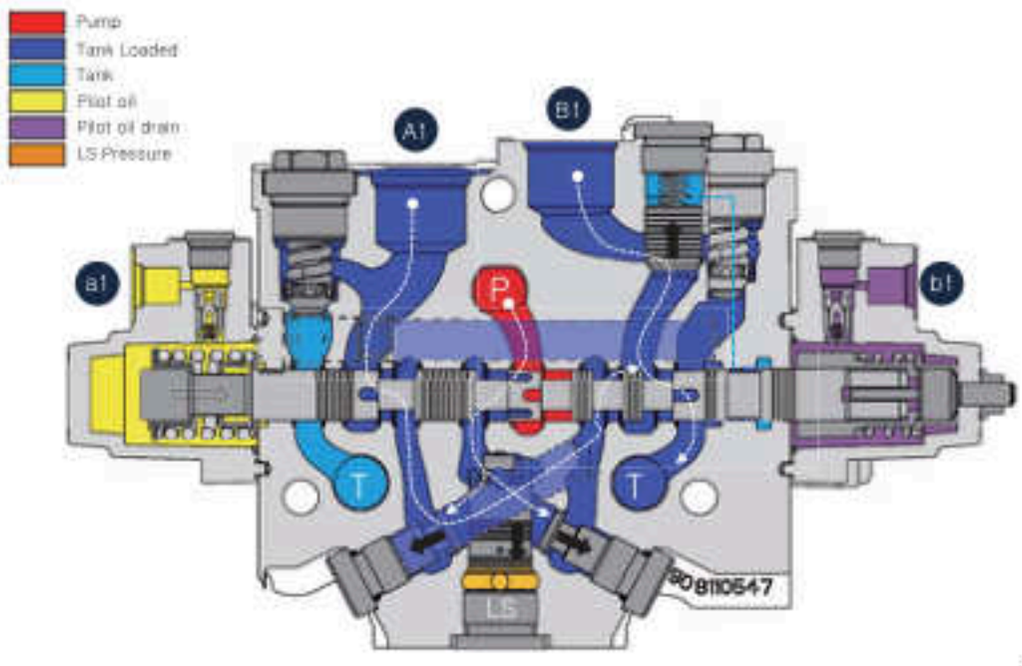
(4) Boom lower position



940A6WE14

When the pilot pressure is led to the port a1, the oil from the pump flows to the cylinder port A1 and oil from the cylinder flows into the tank through the cylinder port B1. If pressure in A1 becomes too low, flow from the tank avoid fullfiled A1 through tank regen channel.

(5) Boom float position

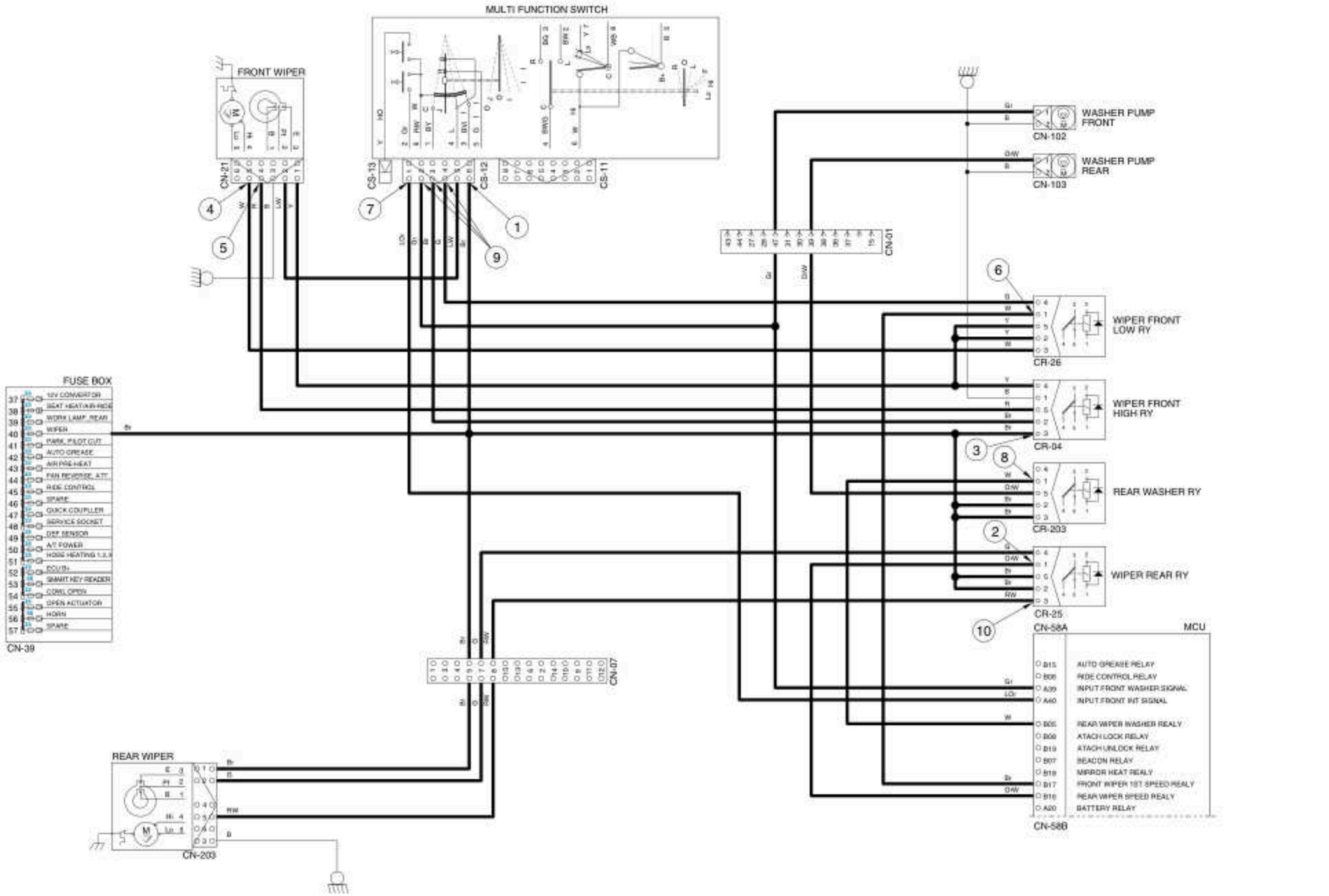


940A6WE15

When the pilot pressure is led to the port a1 in 4th position, the oil from the pump flows to the cylinder port A1 & A1 and oil from the cylinder flows into the tank through the cylinder port B1 & A1 to let cylinder free of movement.

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WIPER AND WASHER CIRCUIT



※ The circuit diagram may differ from the equipment, so please check before a repair.

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