WHEELED EXCAVATOR

SERVICE MANUAL

HW140

HYUNDAI

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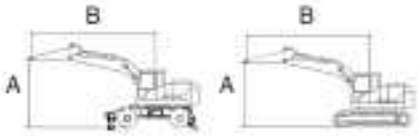
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Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2100	2200	-	500	-	Down	-	-

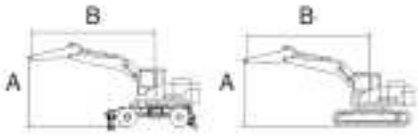
· : Rating over-front · : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg							*4290	*4290	4.13
	lb							*9460	*9460	(13.6)
6.0 m (19.7 ft)	kg			*3820	*3820			*4060	3190	5.68
	lb			*8420	*8420			*8950	7030	(18.6)
4.5 m (14.8 ft)	kg	*5410	*5410	*4400	*4400	4010	2910	3460	2510	6.54
	lb	*11930	*11930	*9700	*9700	8840	6420	7630	5530	(21.5)
3.0 m (9.8 ft)	kg			*5540	4330	3910	2820	3080	2220	6.97
	lb			*12210	9550	8620	6220	6790	4890	(22.9)
1.5 m (4.9 ft)	kg			5890	4090	3790	2710	2970	2140	7.06
	lb			12990	9020	8360	5970	6550	4720	(23.2)
Ground Line	kg			5750	3960	3720	2640	3100	2220	6.82
	lb			12680	8730	8200	5820	6830	4890	(22.4)
-1.5 m (-4.9 ft)	kg	*10390	7600	5740	3950	3720	2650	3560	2540	6.21
	lb	*22910	16760	12650	8710	8200	5840	7850	5600	(20.4)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HW140	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5000	2100	2200	-	500	-	Up	-	-

· : Rating over-front · : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5 m (24.6 ft)	kg							*4290	*4290	4.13
	lb							*9460	*9460	(13.6)
6.0 m (19.7 ft)	kg			*3820	*3820			*4060	3200	5.68
	lb			*8420	*8420			*8950	7050	(18.6)
4.5 m (14.8 ft)	kg	*5410	*5410	*4400	*4400	4010	2910	3460	2520	6.54
	lb	*11930	*11930	*9700	*9700	8840	6420	7630	5560	(21.5)
3.0 m (9.8 ft)	kg			*5540	4340	3910	2820	3080	2230	6.97
	lb			*12210	9570	8620	6220	6790	4920	(22.9)
1.5 m (4.9 ft)	kg			5890	4100	3790	2720	2970	2140	7.06
	lb			12990	9040	8360	6000	6550	4720	(23.2)
Ground Line	kg			5750	3970	3720	2650	3100	2220	6.82
	lb			12680	8750	8200	5840	6830	4890	(22.4)
-1.5 m (-4.9 ft)	kg	*10390	7620	5740	3960	3720	2650	3560	2540	6.21
	lb	*22910	16800	12650	8730	8200	5840	7850	5600	(20.4)

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GROUP 4 CONNECTORS

1. CONNECTOR DESTINATION (SERIAL NO. : -#0507)

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-1	AMP	10	I/conn (Frame harness-Pump PS harness)	S816-010002	S816-110002
CN-2	DELPHI	15	I/conn (Frame harness-Engine harness)	13964577	-
CN-3	TYCO	12	I/conn (Frame harness-AAVM harness)	174661-2	368537-1
CN-3A	AMP	12	PVG harness	174661-2	368537-1
CN-4	AMP	16	I/conn (Console harness LH-Frame harness)	368047-1	368050-1
CN-5	DEUTSCH	60	I/conn (Side harness RH-Frame harness)	DRB16-60SAE-L018	DRB12-60PAE-L018
CN-6	AMP	16	I/conn (Console harness RH-Frame harness)	368047-1	368050-1
CN-7	AMP	15	I/conn (Console harness RH-Frame harness)	2-85262-1	936301-1
CN-8	AMP	10	I/conn (Console harness RH-Frame harness)	S816-010002	174655-2
CN-9	DEUTSCH	12	I/conn (Frame harness-AAVM harness)	DT06-12S	DT04-12PA-P021
CN-10	DEUTSCH	12	I/conn (Cab harness-Side harness RH)	DT06-12S-EP06	DT04-12PA-P021
CN-12	DEUTSCH	2	I/conn (Frame harness-Boom wire harness)	DT06-2S-EP06	DT04-2P-E004
CN-14	DEUTSCH	2	I/conn (Frame harness-swing parking harness)	DT06-2S-EP06	DT04-2P-EP06
CN-15	AMP	8	I/conn (Frame harness-Two way harness)	S816-008002	174984-2
CN-16	AMP	6	Emergency engine start & speed control	S816-006002	-
CN-16A, B	AMP	6	Emergency engine start & speed control	-	S816-106002
CN-17	AMP	8	I/conn (Side harness RH-Wiper motor harness)	S816-008002	S816-108202
CN-20	MOLEX	2	Horn	36825-0211	-
CN-21	AMP	6	Wiper motor	S810-006202	-
CN-22	KET	2	Washer pump	MG640605	-
CN-23	KET	2	Speaker-LH	MG610070	-
CN-24	KET	2	Speaker-RH	MG610070	-
CN-25	MOLEX	2	Horn	36825-0211	-
CN-27A	KUM	16	Radio & USB player	PK145-16017	-
CN-27B	AMP	8	USB player	-	174984-2
CN-28	-	2	Aircon compressor	-	-
CN-29	KET	2	Receiver dryer	MG640795	-
CN-36	TYCO	-	Fuse box (micro relay)	-	3-1393292-8
CN-45	RING-TERM	-	Starter motor B+	S820-308000	-
CN-48	KET	1	Service meter	2-520193-2	-
CN-51	DEUTSCH	40	MCU	DRC26-40SA	-
CN-52	DEUTSCH	40	MCU	DRC26-40SC	-
CN-53	DEUTSCH	40	MCU	DRC26-40SA	-
CN-54	DEUTSCH	40	MCU	DRC26-40SA	-
CN-56A	AMP	12	Cluster	-	174663-2

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SECTION 6 TROUBLESHOOTING

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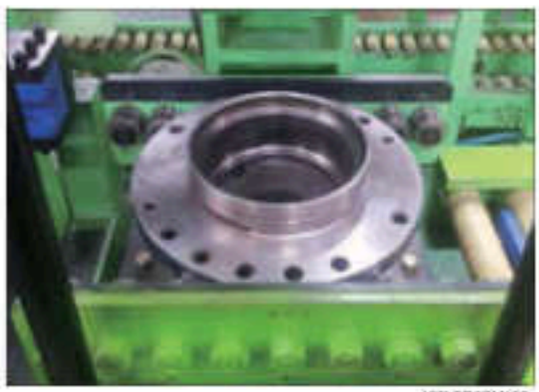
(19) Shrink fit taper bearing (3) on drive shaft, complete drive shaft sub assembly.



125LCR8SM102

Casing assembly

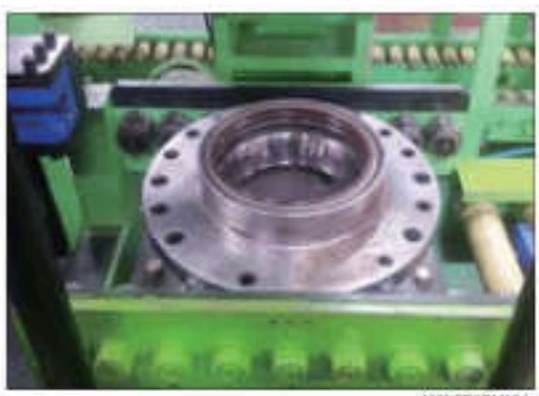
(20) Press outer ring of the taper bearing in the casing (8) by using the jig.



125LCR8SM103

(21) Press in oil seal (27) by using the jig.

※ Be careful of the direction of the assembly.



125LCR8SM104

(22) Assemble drive shaft sub assembly.

※ Be careful of damage of oil seal.



125LCR8SM105

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③ **AAVM** (All Around View Monitoring, option)

- The AAVM buttons of the cluster consist of ESC/CAM and AUTO IDLE/Buzzer stop.



- **Escape button**
- It will enter into the AAVM mode from the beginning screen if the AAVM is installed.
- While in the AAVM mode, select the ESC button to return to the beginning screen.


140W3CD155A

The beginning screen


2205A3CD222A

AAVM mode

- **Buzzer stop button**
- In AAVM mode, it detects surrounding pedestrians or objects and the warning buzzer sounds.
- User can turn OFF the warning sound by pressing buzzer stop button.


220A3CD246

- When the worker or pedestrian go to the blue line (radius 5 m), an external danger area of equipping on the cluster screen, the warning buzzer sounds and it displays the blue 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 button. And then, please work after you check whether the danger factors are solved.

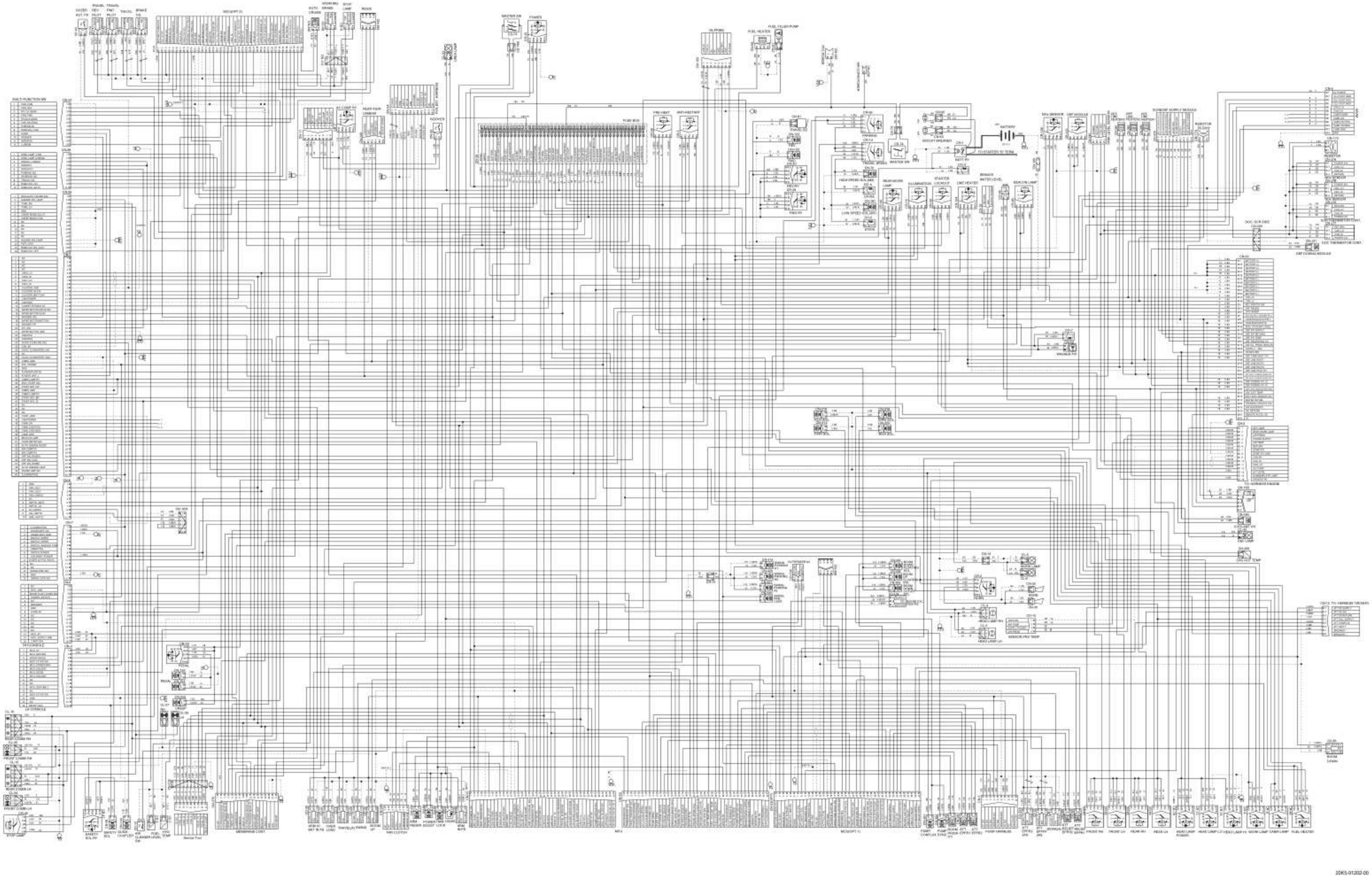

220A3CD247

- When the worker or pedestrian go inside of red line (radius 3 m), an internal danger area of equipping on the cluster screen, 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 button. And then, please work after you check whether the danger factors are solved.

※ In AAVM mode, a touch screen of the LCD is available only. The multimodal dial of the haptic controller is not available.

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· ELECTRICAL CIRCUIT (1/6, SERIAL NO. : -#0507)



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