CRAWLER EXCAVATOR

SERVICE MANUAL

HX350L Tier 3

HYUNDAI

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2) HX350LT3, HW

(1) 6000 kg counterweight



General bucket



Heavy duty
(without side cutter)



Rock heavy duty

Type	Capacity		Width	Weight	Tooth	MONO						
						Recommendation mm (ft-in)						
	SAE Heaped	CECE heaped				6.15 m (20' 2") HD Short Boom		6.45 m (21' 2") Boom			6.45 m (21' 2") HD Boom	
	m³ (yd³)	m³ (yd³)	mm (in)	kg (lb)	EA	2.2 m (7' 3") Arm	2.5 m (8' 2") Arm	2.5 m (8' 2") Arm	3.2 m (10' 6") Arm	4.05 m (13' 3") Arm	2.2 m (7' 3") Arm	2.5 m (8' 2") Arm
General bucket	1.44 (1.88)	1.25 (1.63)	1,380 (54.3")	1,150 (2,540)	5	●	●	●	●	●	●	●
	1.74 (2.28)	1.50 (1.96)	1,620 (63.8")	1,260 (2,780)	6	●	●	●	●	◐	●	●
	2.10 (2.75)	1.80 (2.35)	1,910 (75.2")	1,650 (3,640)	6	●	●	◐	■	▲	◐	◐
Heavy duty	1.44 (1.88)	1.25 (1.63)	1,470 (57.9")	1,380 (3,040)	5	●	●	●	●	●	●	●
	1.90 (2.49)	1.65 (2.16)	1,600 (63.0")	1,780 (3,920)	5	●	●	●	◐	■	●	●
Rock heavy duty	1.44 (1.88)	1.25 (1.63)	1,470 (57.9")	1,470 (3,240)	5	●	●	●	●	-	●	●
	1.60 (2.09)	1.39 (1.82)	1,585 (62.4")	1,650 (3,640)	5	●	●	●	●	-	●	●
	1.73 (2.26)	1.50 (1.96)	1,710 (67.3")	1,650 (3,640)	5	●	●	●	◐	-	●	●

● Applicable for materials with density of 2100 kg/m³ (3500 lb/yd³) or less

◐ Applicable for materials with density of 1800 kg/m³ (3000 lb/yd³) or less

■ Applicable for materials with density of 1500 kg/m³ (2500 lb/yd³) or less

▲ Applicable for materials with density of 1200 kg/m³ (2000 lb/yd³) or less

X Not recommended

\- Not available

※ These recommendations are for general conditions and average use.
Work tools and ground conditions have effects on machine performance.
Select an optimum combination according to the working conditions and the type of work that is being done.
Consult your HD Hyundai Construction Equipment dealer for information on selecting the correct boom–arm–bucket combination.

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GROUP 4 CONNECTORS

1. CONNECTOR DESTINATION

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-1	TE/AMP	16	I/conn (Frame harness-Engine harness)	368047-1	368051-1
CN-2	TE/AMP	15	I/conn (Frame harness-Engine harness)	2-85262-1	368301-1
CN-3	TYCO	12	I/conn (Frame harness-Pro vlv harness)	174661-2	368537-1
CN-4	AMP/TE	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	DRB14-60PAE-L018
CN-6	AMP	10	I/conn (Console harness RH-Frame harness)	S816-010002	174655-2
CN-7	AMP	12	I/conn (Console harness RH-Frame harness)	S816-012002	S816-112002
CN-9	DEUTSCH	12	I/conn (Frame harness-AAVM harness)	DT06-12SA-P021	DT04-12PA-P021
CN-10	DEUTSCH	12	I/conn (Cab harness-Side harness RH)	DT06-12S-EP06	DT04-12PA-P021
CN-11	DEUTSCH	8	I/conn (Frame harness-Aircon harness)	DT06-8S-EP06	-
CN-12	DEUTSCH	2	I/conn (Frame harness-Boom wire harness)	DT06-2S-EP06	DT04-2P-E005
CN-14	TE	4	I/conn (Fream harness-Swing parking & fine control)	174257-2	174259-2
CN-15	AMP	12	I/conn (Frame harness-Breaker sol)	174661-2	S816-112002
CN-16	TYCO	6	Emergency engine start & speed control	-	174661-2
CN-16A	-	6	Emergency engine start & speed control	965687-1	-
CN-16B	-	6	Emergency engine start & speed control	965687-1	-
CN-17	AMP	8	I/conn (Side harness RH-Wiper harness)	S816-008002	S816-108002
CN-20	MOLEX	2	Horn	DT06-2S-EP06	-
CN-21	AMP	6	Wiper motor	S810-006202	-
CN-22	KET	2	Washer tank 1	MG640605	-
CN-23	KET	2	Speaker-LH	MG610070	-
CN-24	KET	2	Speaker-RH	MG610070	-
CN-25	MOLEX	2	Horn	35825-0211	-
CN-27A	KUM	16	Radio & USB player	PK145-16017	-
CN-27B	AMP	8	Radio & USB player	-	174984-2
CN-28	KET	2	Aircon compressor	MG610320	-
CN-29	KET	2	Receiver dryer	MG640795	-
CN-36	-	-	Fuse & relay box	21Q7-10910	-
CN-45	RING-TERM	-	Starter motor B+	S820-108000	-
CN-48	KET	3	Hour meter	2-520193-2	-
CN-51	DEUTSCH	40	MCU	DRC26-40SA	-
CN-52	DEUTSCH	40	MCU	DRC26-40SB	-
CN-56A	AMP	12	Cluster	-	174663-2
CN-56B	AMP	8	Cluster	-	174984-2
CN-60	R/TERM/-	2	Fuse maxi	ST710285-2	31K9-03270
CN-61	DEUTSCH	2	Fuel filler pump	DT06-2S-EP06	-

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DTC		Diagnostic Criteria	Application		
HCESPN	FMI		G	C	W
866	2	(When mounting the AAVM) 60 seconds continuous, AAVM communication Data Error	●		
		(Results / Symptoms) 1. Control Function – AAVM operation failure (Checking list) 1. CN-401 (#86) – CN-51 (#22) Checking Open/Short 2. CN-401 (#87) – CN-51 (#32) Checking Open/Short			
867	2	60 seconds continuous, RDU communication Data Error	●		
		(Results / Symptoms) 1. Control Function – RDU operation failure (Checking list) 1. CN-376 (#10) – CN-51 (#22) Checking Open/Short 2. CN-376 (#18) – CN-51 (#32) Checking Open/Short			
868	2	60 seconds continuous, Switch Controller communication Data Error	●		
		(Results / Symptoms) 1. Control Function – Switch Controller operation failure (Checking list) 1. CN-56 (#7) – CN-51 (#32) Checking Open/Short 2. CN-56 (#6) – CN-51 (#22) Checking Open/Short			
869	2	(When mounting the BKCU) 60 seconds continuous, BKCU communication Data Error	●		
		(Results / Symptoms) 1. Control Function – BKCU operation failure (Checking list) 1. CS-2B (#A) – CN-51 (#22) Checking Open/Short 2. CS-2B (#B) – CN-51 (#32) Checking Open/Short			

※ Some error codes are not applied to this machine.

G : General C : Crawler Type W : Wheel Type

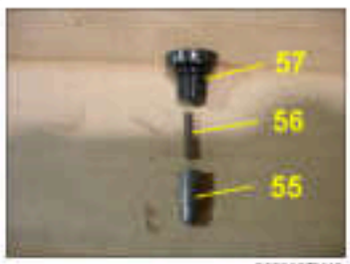
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4. REASSEMBLING

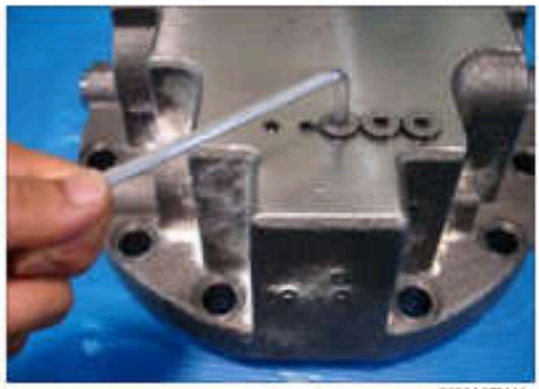
1) ASSEMBLING MOTOR

- REAR COVER ASSY

(1) Assemble check valve (55), spring (56) into rear cover (34) and then assemble plug (57) using L-wrench.



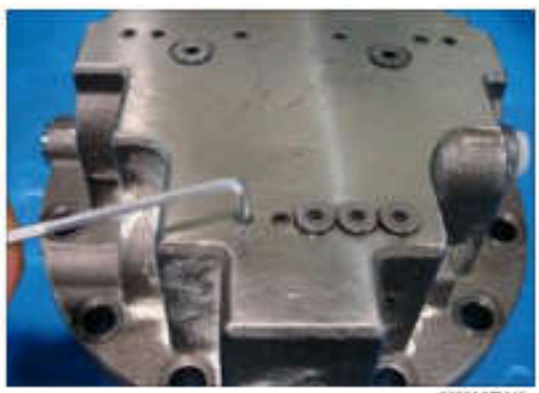
2609A8TM40


2609A8TM41

(2) Apply loctite #242 on the NPTF 1/16 plug (2) and then assemble 12-NPTF 1/16 Plug (2) into rear cover(34).



2609A8TM42


2609A8TM43

(3) Assemble spool (47), parallel pin (50), spring seat (49) and spring (51) into rear cover (34) in regular sequence and then assemble plug (48) and connector (52).



2609A8TM44


2609A8TM45


2609A8TM46

(4) Assemble relief valve (42, 2EA) into rear cover (34).



2609A8TM47


2609A8TM48


2609A8TM49

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③ Assemble 9 piston assy (12) into retainer plate (11).

- Piston assy × 9EA
- Retainer plate × 1EA



④ Assemble parts of procedure ② and ③.



(3) Assemble valve casing sub

① Assemble make up check valve sub

Assemble check valve (24), O-ring (27), plug (26) in that order and then screw it torque wrench.

- Make up check valve × 2EA
- Spring × 2EA
- Plug × 2EA
- O-ring × 2EA
- Tightening torque : 38 ± 3.8 kgf · m (275 ± 27.5 lbf · ft)



② Assemble reactionless valve assy

Assemble reactionless valve assy (31), plug (32), O-ring (33, 34) in that order and then screw it a torque wrench.

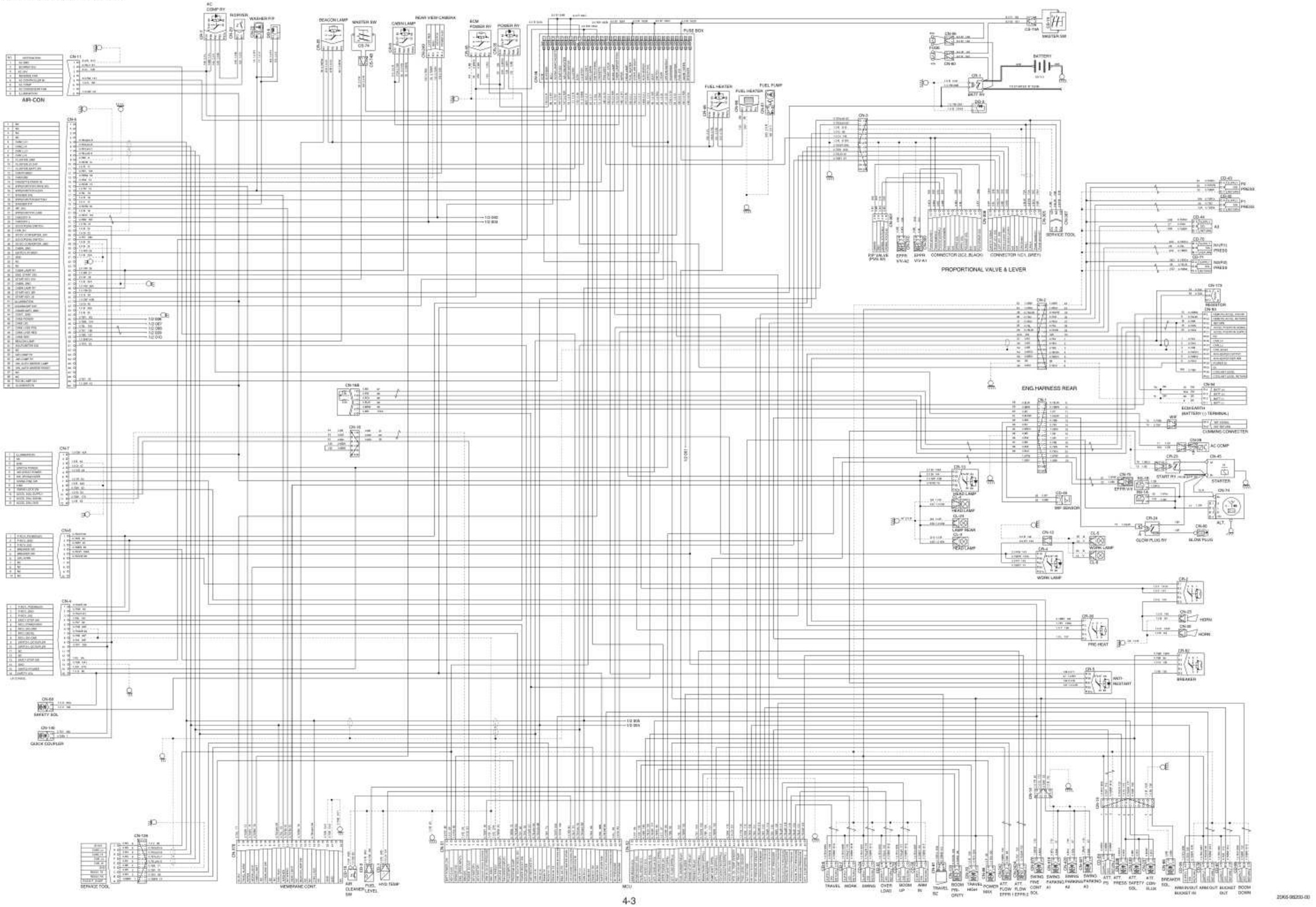
- Reactionless valve assy (31) × 2EA
- Plug (32) × 2EA
- O-ring (33, 34) × 2EA
- Tightening torque : 22 ± 1.5 kgf · m (159 ± 11 lbf · ft)



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ELECTRICAL CIRCUIT (1/2)

- MACHINE SERIAL NO. : -#00138



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