CRAWLER EXCAVATOR

SERVICE MANUAL

HX17A Z

HYUNDAI

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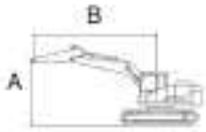
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5. LIFTING CAPACITIES

1) STANDARD COUNTERWEIGHT (180 kg)

Model	Type	Boom	Arm	Counterweight	Rubber shoe	Wheel	Dozer		Outtriger	
		Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
HX17A Z	Canopy	1750	1030	180	230	-	Up	-	-	-

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



Load point height (A)		Load radius (B)						At max. reach		
		2.0 m (6.6 ft)		2.5 m (8.2 ft)		3.0 m (9.8 ft)		Capacity		Reach
										m (ft)
3.0 m (9.8 ft)	kg	*390	*390					*410	*410	2.18
	lb	*860	*860					*900	*900	(7.2)
2.5 m (8.2 ft)	kg			*370	360			320	300	2.74
	lb			*820	790			710	660	(9.0)
2.0 m (6.6 ft)	kg	*380	*380	370	350	270	260	260	250	3.07
	lb	*840	*840	820	770	600	570	570	550	(10.1)
1.5 m (4.9 ft)	kg	*510	490	360	340	270	260	230	220	3.27
	lb	*1120	1080	790	750	600	570	510	490	(10.7)
1.0 m (3.3 ft)	kg	490	460	350	330	260	250	220	210	3.36
	lb	1080	1010	770	730	570	550	490	460	(11.0)
0.5 m (1.6 ft)	kg	470	440	340	320	260	250	220	210	3.36
	lb	1040	970	750	710	570	550	490	460	(11.0)
Ground Line	kg	460	430	330	310	250	240	230	220	3.26
	lb	1010	950	730	680	550	530	510	490	(10.7)
-0.5 m (-1.6 ft)	kg	450	420	330	310	250	240	250	240	3.05
	lb	990	930	730	680	550	530	550	530	(10.0)
-1.0 m (-3.3 ft)	kg	460	430	330	310			300	280	2.70
	lb	1010	950	730	680			660	620	(8.9)
-1.5 m (-4.9 ft)	kg	470	440					*430	410	2.11
	lb	1040	970					*950	900	(6.9)

Note 1. Lifting capacity are based on ISO 10567.
2. Lifting capacity of the HX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The lift-point is bucket pivot mounting pin on the arm (without bucket mass).
4. *Indicates load limited by hydraulic capacity.

※ Lifting capacities are based upon a standard machine conditions.
Lifting capacities will vary with different work tools, ground conditions and attachments.
The difference between the weight of a work tool attachment must be subtracted.
Consult with your local HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.

※ Please be aware of the local regulations and instructions for lifting operations.

⚠ Failure to comply to the rated load can cause serious injury, death, or property damage. Make adjustments to the rated load as necessary for non-standard configurations.

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GROUP 5 CONNECTORS

1. CONNECTOR DESTINATION

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-3	AMP	12	I/conn (main harness-LH console harness)	S816-012002	S816-112002
CN-4	AMP	16	I/conn (RH console harness-main harness)	368047-1	368050-1
CN-5	AMP	16	I/conn (main harness-RH console harness)	368047-1	368050-1
CN-19	AMP	8	I/conn (main harness-PVG controller harness)	174982-2	174983-2
CN-20	DEUTSCH	2	Horn	DT06-2S	-
CN-26	KET	5	Warning buzzer	MG614354	-
CN-36	-	-	Fuse box body	F12890010	-
CN-45	RING TERM	1	Starter	ST710285-2	-
	YAZAKI	1	Starter	7123-2115	-
CN-56	AMP	34	Cluster	4-1437290-0	-
CN-60	-	2	Fusible link	-	-
CN-68	DEUTSCH	2	Safety solenoid	DT06-2S	-
CN-70	DEUTSCH	2	Travel Hi-Lo solenoid	DT06-2S	-
CN-74	SUMITOMO	3	Alternator	6189-0443	-
	RING TERM	1		S820-306002	-
CN-79	AMP	3	Engine stop solenoid	174200-1	-
CN-80	RING TERM	1	Pre heater	S820-104000	-
CN-81	KET	1	Travel buzzer	MG610320	-
CN-112	DEUTSCH	2	I/conn (upper harness-boom harness)	DT06-2S	DT04-2P-E005
CN-125	DEUTSCH	12	GPS	DT06-12S	-
CN-126	AMP	10	Service tool	174655-2	174657-2
CN-138	AMP	2	12V Socket	172434-2	-
CN-139	-	2	12V Socket	172434-2	-
CN-140	DEUTSCH	2	Quick coupler solenoid valve	DT06-2S	DT04-2P
CN-145	TE	2	Fuel feed pump	174198-1	-
CN-238	DEUTSCH	2	EPPR A2	DT06-2S	DT04-2P
CN-239	DEUTSCH	2	EPPR A1	DT06-2S	DT04-2P
CN-240	DEUTSCH	3	RH EPPR	DT06-3S-EP06	-
CN-264	DEUTSCH	2	Extension valve	DT06-2S	-
CN-305	BOSH	56	PVG controller	1928405161	-
CN-307	DEUTSCH	3	Service tool	DT06-3S	DT04-3P
LAMP					
CL-5	DEUTSCH	2	Work lamp	DT06-2S-EP06	DT04-2P-E004

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GROUP 2 HYDRAULIC AND MECHANICAL SYSTEM

1. INTRODUCTION

1) MACHINE IN GENERAL

(1) If even a minor fault is left intact and operation is continued, a fatal failure may be caused, entailing a large sum of expenses and long hours of restoration.
Therefore when even a small trouble occurs, do not rely on your intuition and experience, but look for the cause based on the troubleshooting principle and perform maintenance and adjustment to prevent major failure from occurring. Keep in mind that a fault results from a combination of different causes.

(2) The following lists up commonly occurring faults and possible causes with this machine. For the troubleshooting of the engine, refer to the coming troubleshooting and repair.

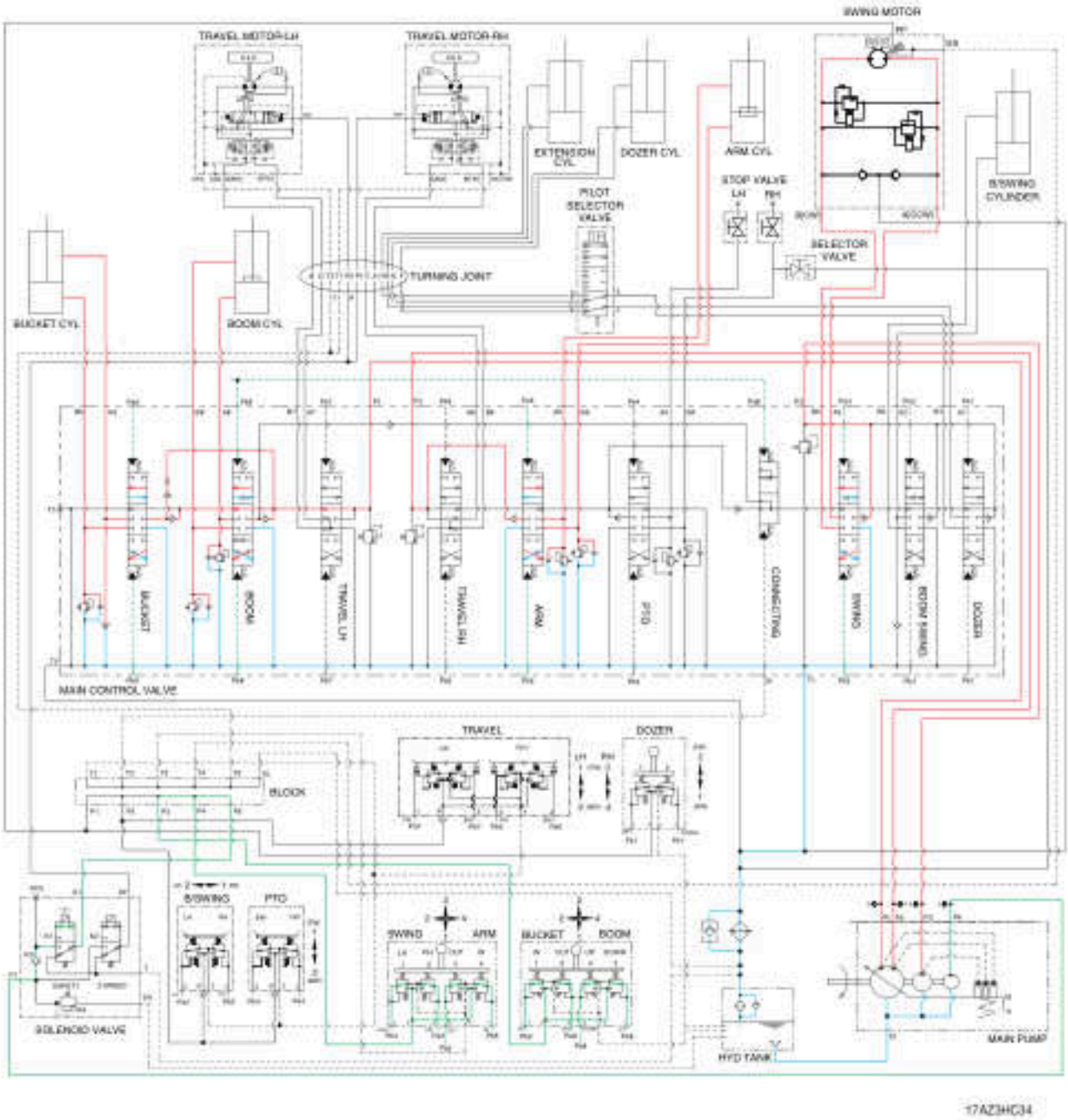
(3) When carrying out troubleshooting, do not hurry to disassemble the components.
It will become impossible to find the cause of the problem.

(4) Ask user or operator the following.
① Was there any strange thing about machine before failure occurred?
② Under what conditions did the failure occur?
③ Have any repairs been carried out before the failure?

(5) Check before troubleshooting.
① Check oil and fuel level.
② Check for any external leakage of oil from components.
③ Check for loose or damage of wiring and connections.

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5. COMBINED SWING, BOOM, ARM AND BUCKET OPERATION

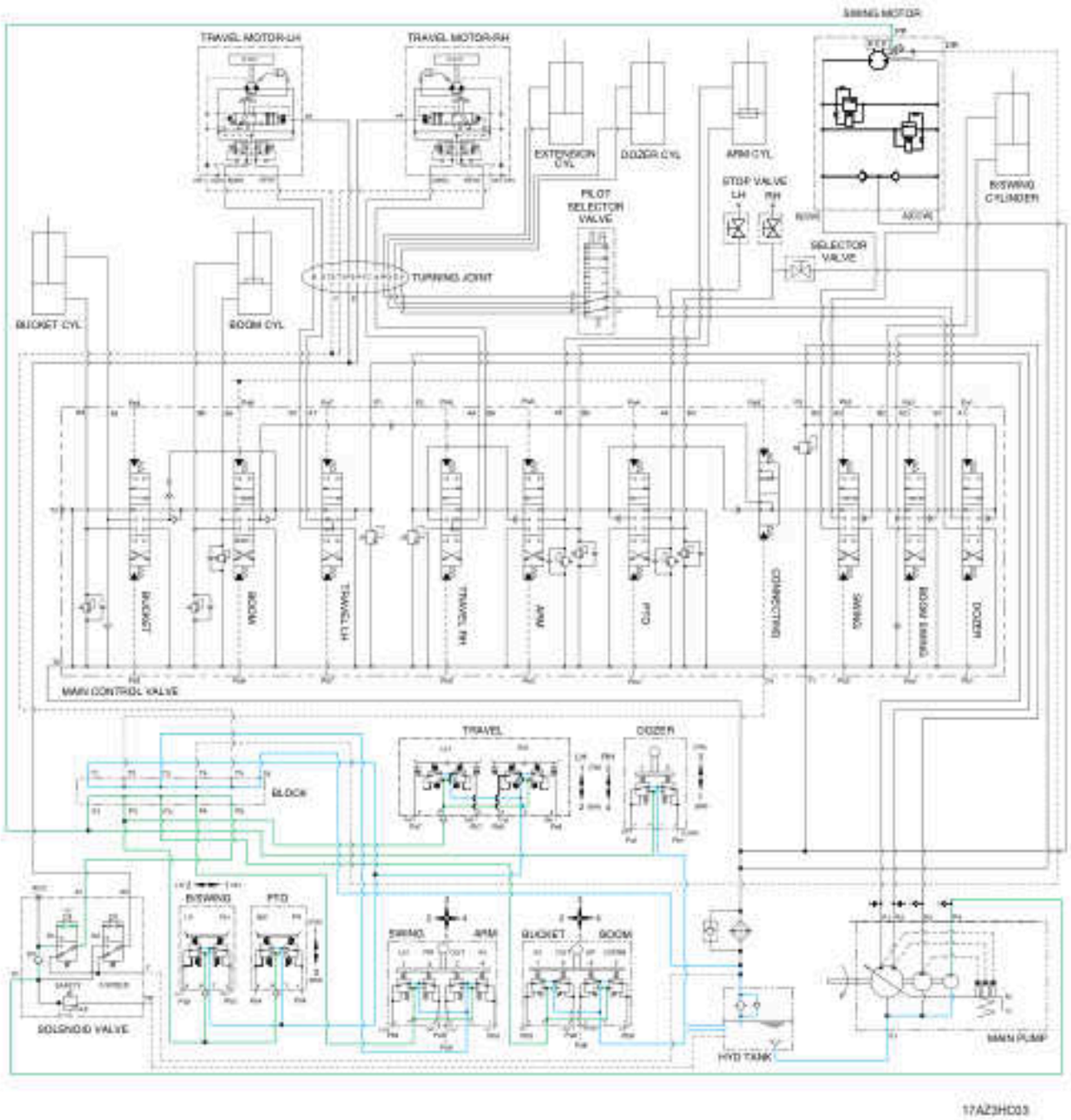


When the swing, boom, arm and bucket functions are operated, simultaneously each spool in the main control valve is moved to the functional position by the pilot oil pressure (Pa3, Pb3, Pa8, Pb8, Pa5, Pb5, Pa9, Pb9) from the remote control valve.
The oil from the P2 pump flows into the arm cylinder through, arm spool.
The oil from the P1 pump flows into the boom cylinder and bucket cylinder through the boom spool, bucket spool.
The oil from the P3 pump flows into the swing motor through the swing spool.
The superstructure swings and the boom, arm and bucket are operated.

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

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1. SUCTION, DELIVERY AND RETURN CIRCUIT

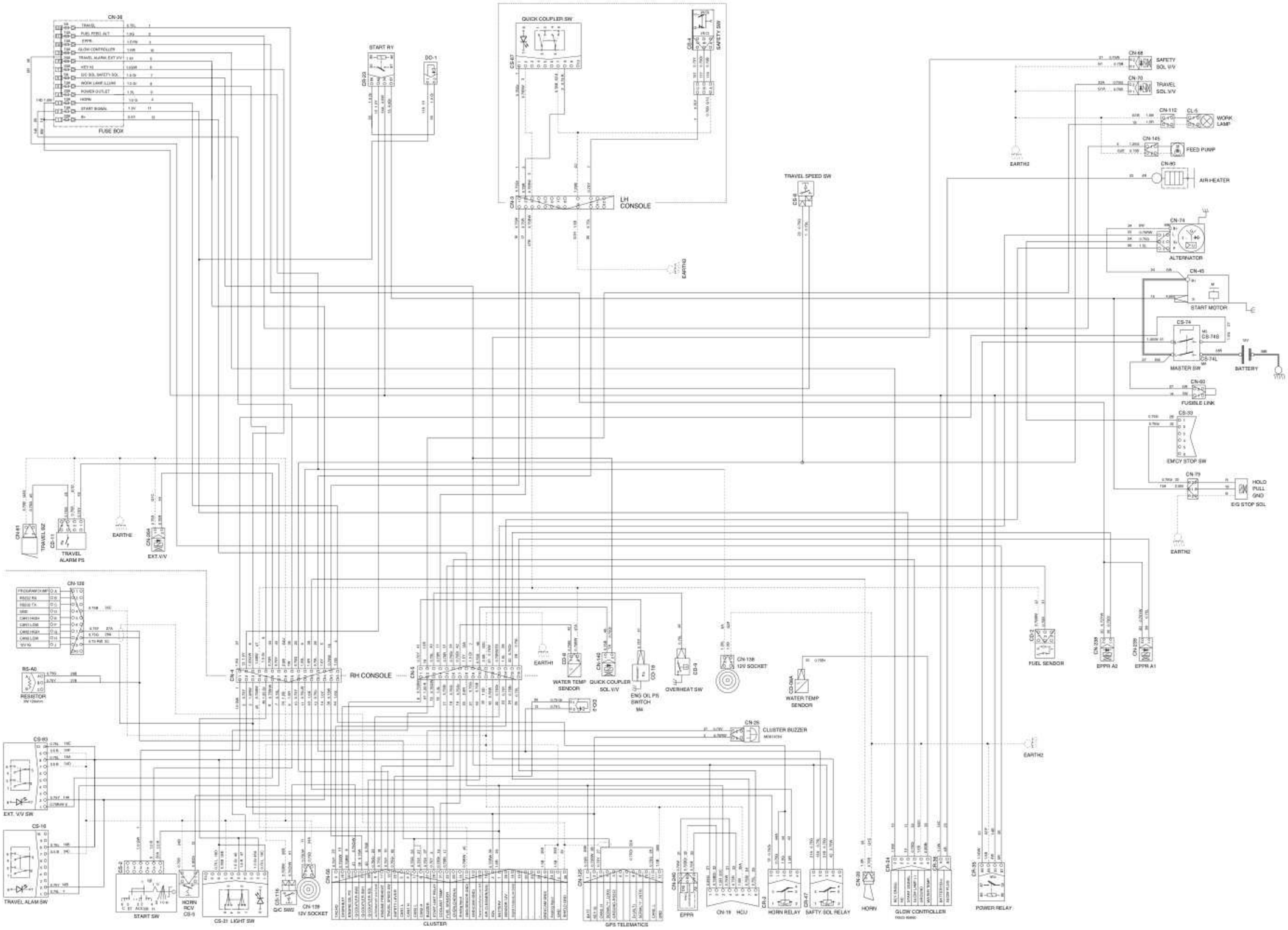


The pilot pump receives oil from the hydraulic tank. The discharged oil from the pilot pump flows to the safety solenoid valve. The pilot relief valve is provided in the solenoid valve for limiting the pilot circuit pressure.
The oil flows remote control valve, MCV and swing motor through safety solenoid valve.
The return oil flow into the hydraulic tank.

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

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- ELECTRICAL CIRCUIT (1/2)



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