CRAWLER EXCAVATOR

SERVICE MANUAL

R30Z-9AK

HYUNDAI

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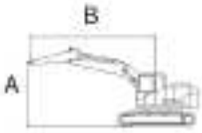
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5. LIFTING CAPACITIES

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R30Z-9AK	Canopy	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		2030	1120	220	250	-	Down	-	-	-

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



Lift-point height (A)		Lift-point radius (B)										At max. reach		
		2.0 m (6.6 ft)		2.5 m (8.2 ft)		3.0 m (9.8 ft)		3.5 m (11.5 ft)		4.0 m (13.1 ft)		Capacity		Reach
														m (ft)
3.5 m (11.5 ft)	kg											*720	560	2.64
	lb											*1590	1230	(8.6)
3.0 m (9.8 ft)	kg					*690	460					*620	410	3.20
	lb					*1520	1010					*1370	900	(10.5)
2.5 m (8.2 ft)	kg					*690	460	*700	350			*580	340	3.55
	lb					*1520	1010	*1540	770			*1280	750	(11.7)
2.0 m (6.6 ft)	kg			*830	600	*760	450	*720	350			*570	300	3.78
	lb			*1830	1320	*1680	990	*1590	770			*1260	660	(12.4)
1.5 m (4.9 ft)	kg			*1060	570	*870	430	*780	340			*580	280	3.91
	lb			*2340	1260	*1920	950	*1720	750			*1280	620	(12.8)
1.0 m (3.3 ft)	kg			*1300	550	*990	420	*840	330			*600	270	3.95
	lb			*2870	1210	*2180	930	*1850	740			*1320	600	(13.0)
0.5 m (1.6 ft)	kg			*1450	530	*1090	400	*890	320			*650	270	3.91
	lb			*3200	1170	*2400	880	*1960	710			*1430	600	(12.8)
Ground Line	kg	*1550	730	*1500	520	*1130	400	*900	320			*740	290	3.78
	lb	*3420	1610	*3310	1150	*2490	880	*1980	710			*1630	640	(12.4)
-0.5 m (-1.6 ft)	kg	*2020	730	*1450	510	*1100	390	*850	320			*820	310	3.56
	lb	*4450	1610	*3200	1120	*2430	860	*1870	710			*1810	680	(11.7)
-1.0 m (-3.3 ft)	kg	*1770	740	*1300	520	*970	400					*840	360	3.21
	lb	*3900	1630	*2870	1150	*2140	880					*1850	790	(10.5)
-1.5 m (-4.9 ft)	kg	*1330	750	*950	530							*830	490	2.66
	lb	*2930	1650	*2090	1170							*1830	1080	(8.7)

Note 1. Lifting capacity are based on SAE J1097 and ISO 10567.

2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook located on the back of the bucket.
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 your Hyundai 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 possible personal injury or property damage.
Make adjustments to the rated load as necessory for non-standard configurations.

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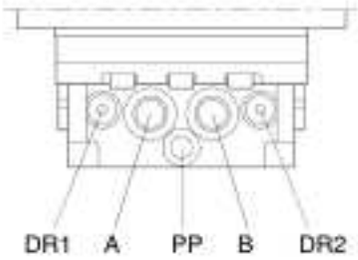
GROUP 4 TRAVEL DEVICE

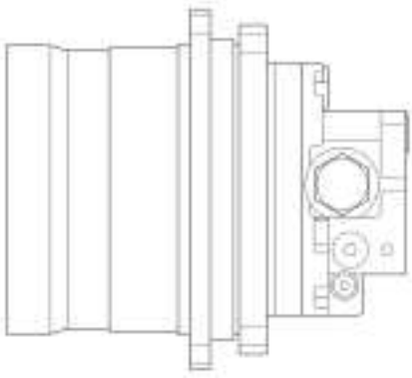
1. CONSTRUCTION

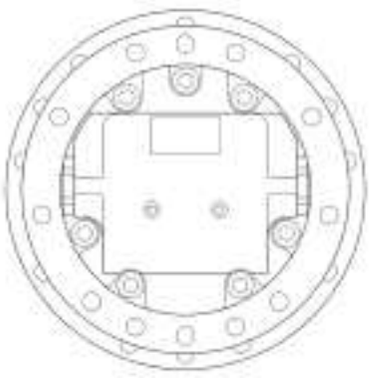
Travel device consists travel motor and gear box.

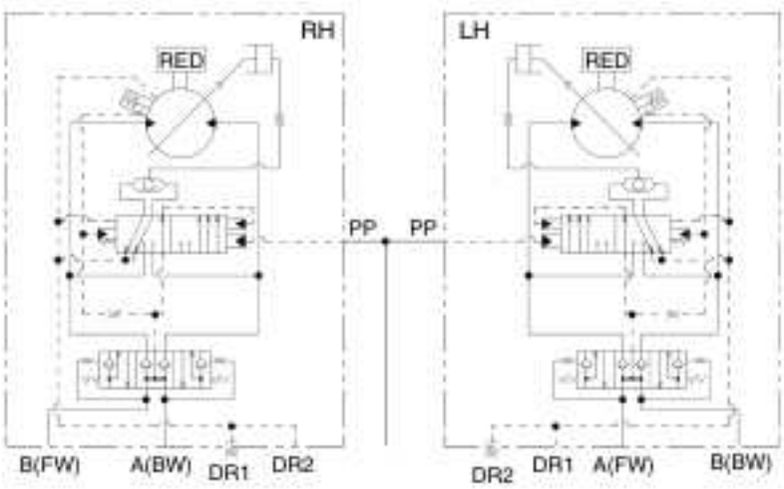
Travel motor includes counterbalance valve, parking brake and high/low speed changeover mechanism.

Port	Port name	Port size
A	Main port	PF 1/2
B	Main port	PF 1/2
DR1, DR2	Drain port	PF 1/4
PP	2 speed control port	PF 1/4









HYDRAULIC CIRCUIT

R27Z9AK2TM20

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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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(4) Fit the O-ring (214) into the plug (221).



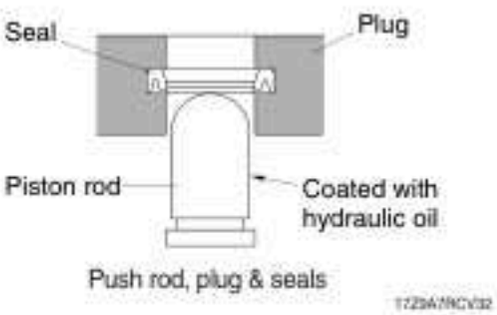
(5) Fit the seal (213) into the plug (211).

- Fit the lip of the seal (213) as shown right.



(6) Fit the push-rod (212) into the plug (211).

- Apply hydraulic oil to the surface of the push rod.



Push rod, plug & seals





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(16) Place the ring (128) over the pre-load collars.



(17) Place the carrier 1 assembly into the body (101) align spline of carrier to the pinion shaft (104).



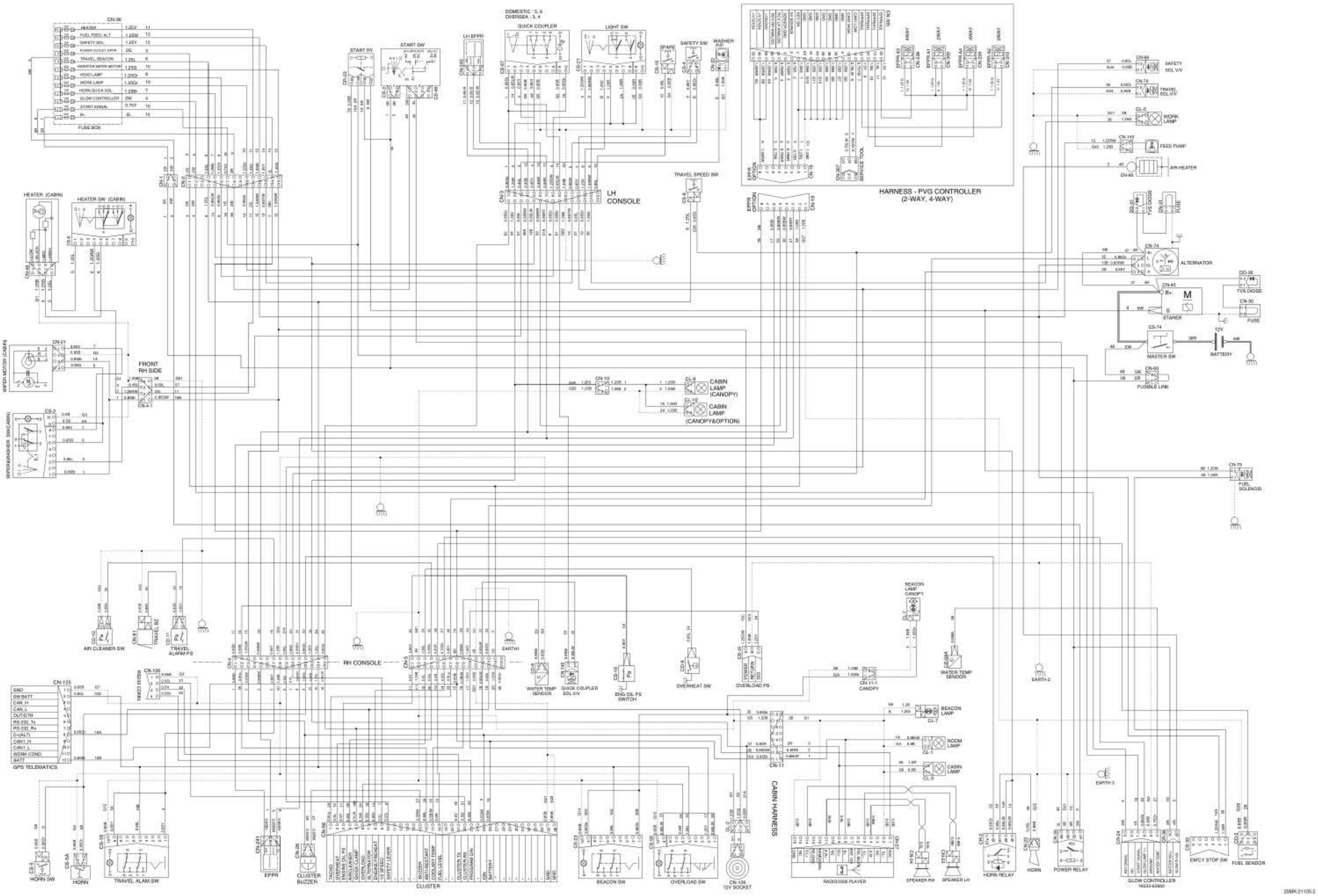
(18) Place the carrier 2 assembly into the body (101) align spline of S1 gear to the b1 gear.



(19) Place the S2 gear (109) into the carrier 2 assembly.



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