WHEEL LOADER

SERVICE MANUAL

HL780-3A

HYUNDAI

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Fault code (Hex)	Int. code (Dec)	Meaning of the fault code possible reason for fault detection	Reaction of the TCU	Possible steps to repair	Remarks
D6	58	**Error at valve power supply VPS2** TCU switched on VPS2 and measured VPS2 is off or TCU switched off VPS2 and measured VPS2 is still on • Cable or connectors are defect and are contacted to battery voltage • Cable or connectors are defect and are contacted to vehicle ground • Permanent power supply KL30 missing • TCU has an internal defect	Shift to neutral OP mode : TCU shutdown	• Check fuse • Check cables from gearbox to TCU • Check connectors from gearbox to TCU • Replace TCU	

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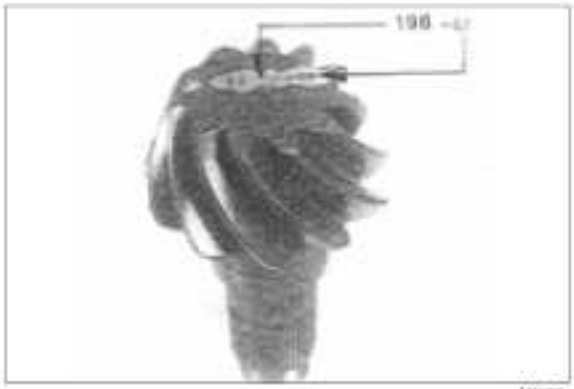
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¤Ø Read pinion dimension.

Pinion dimension e.g. 198 197.90mm

EXAMPLE ¥-

Bearing width	42.45mm
Pinion dimension	+197.90mm
gives dimension X1	240.35mm

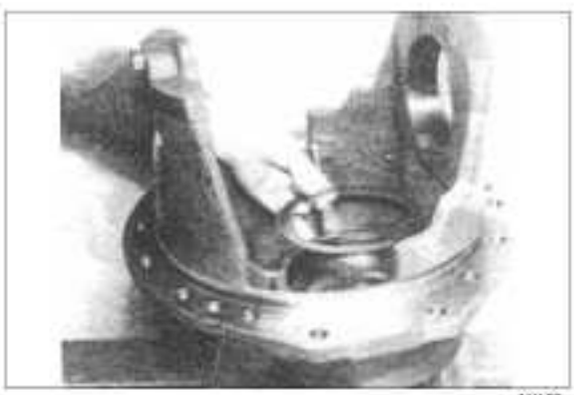


AX157

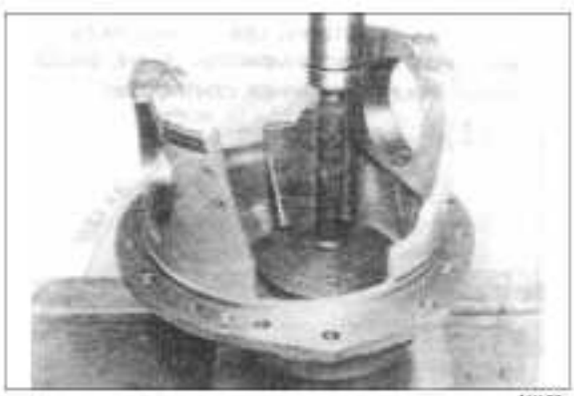
EXAMPLE ¥†

Dimension X	241.70mm
Dimension X1	-240.35mm
Difference = Shim thickness	s =1.35mm

¤Œ Lay shim(According to the example s = 1.35mm) into the housing bore.

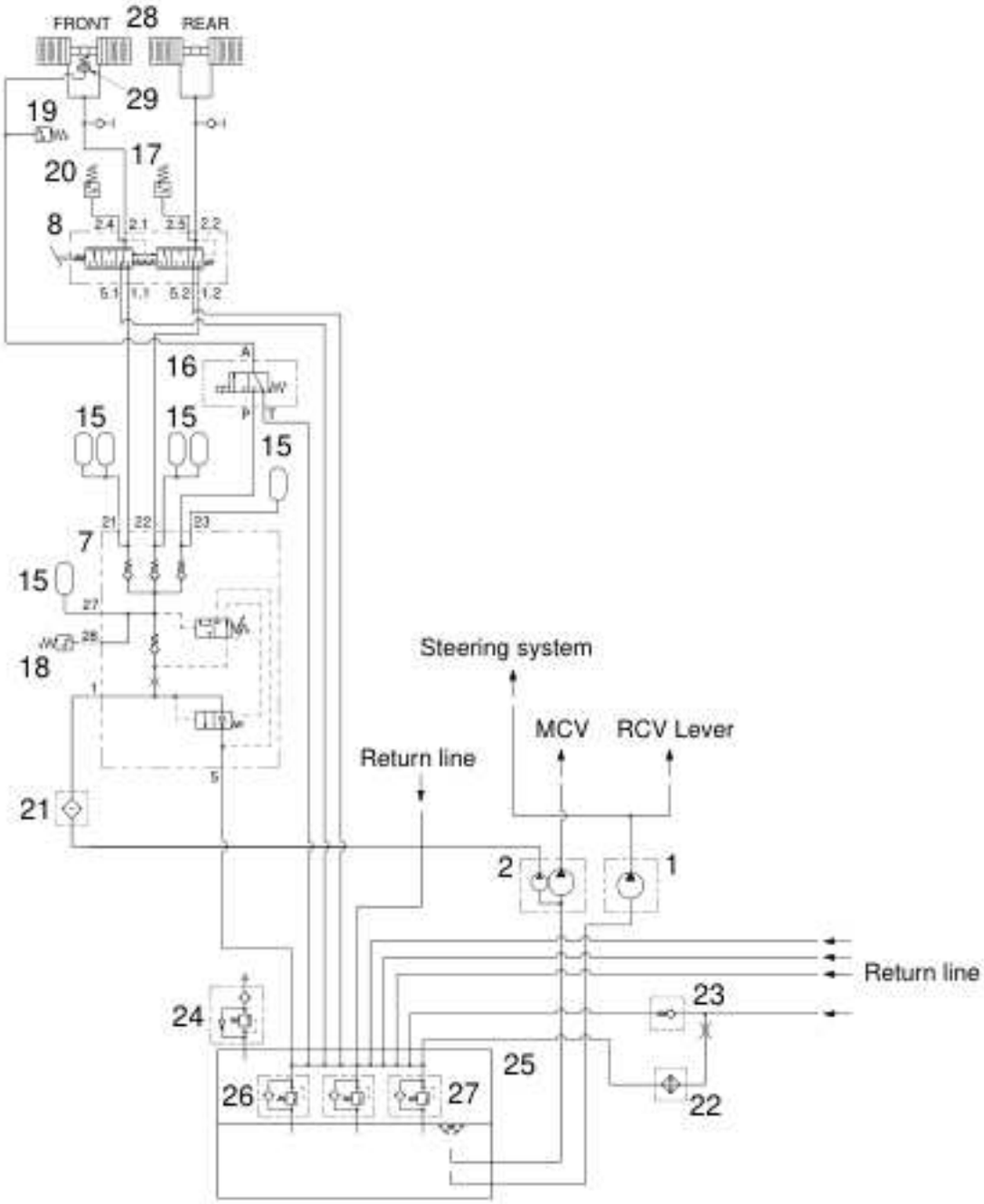

AX158

¤ Undercool bearing outer race and press it firmly against shoulder.
Install the drive flange side bearing outer race correspondingly.


AX159

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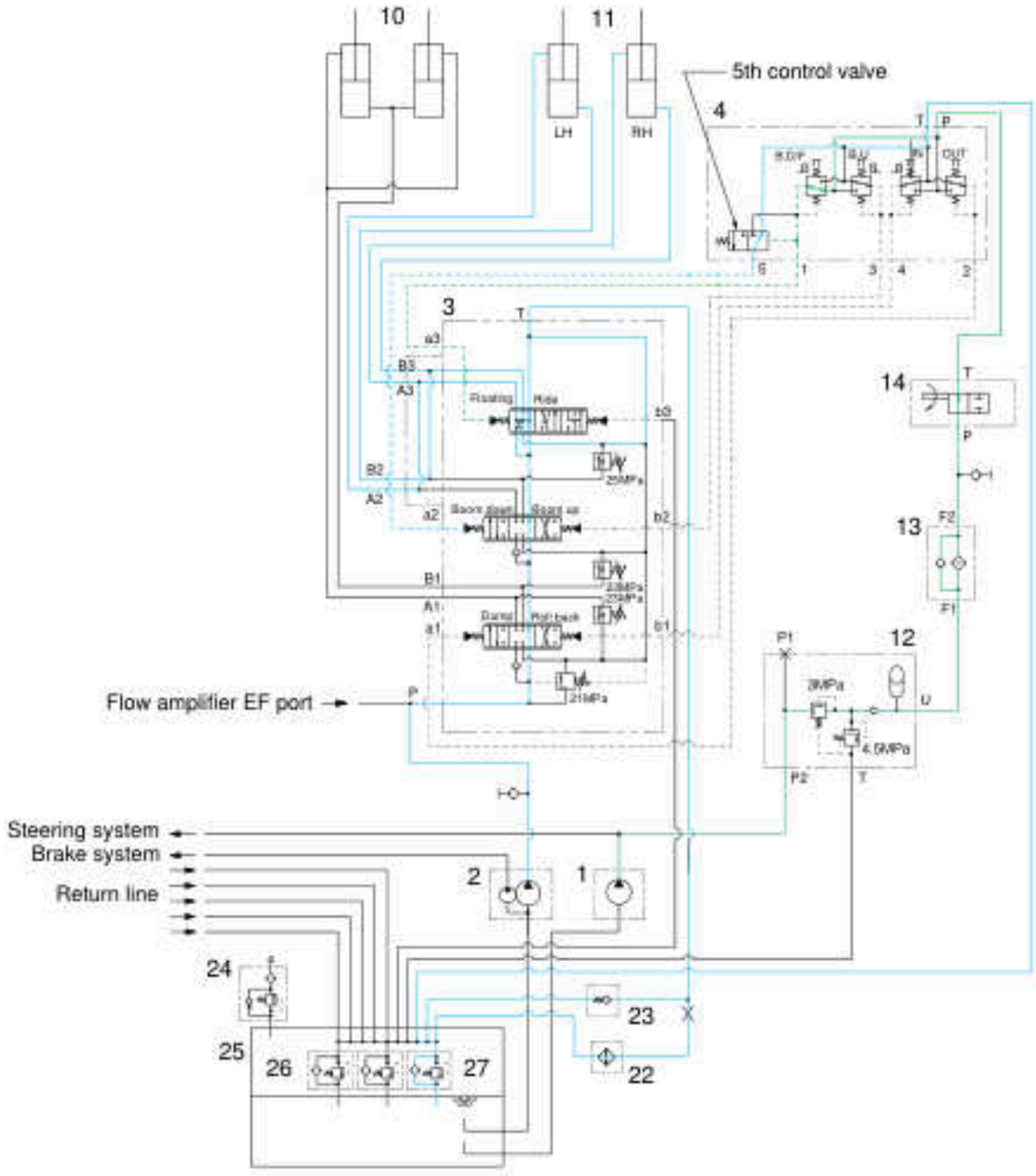
2. HYDRAULIC CIRCUIT



1	Steering pump	18	Pressure switch	25	Hydraulic oil tank
2	Main pump	19	Pressure switch	26	Return filter
7	Cut off valve	20	Pressure switch	27	Bypass valve
8	Brake valve	21	Line filter	28	Axle
15	Accumulator	22	Oil cooler	29	Parking brake
16	Parking brake solenoid valve	23	Check valve		
17	Pressure switch	24	Air breather		

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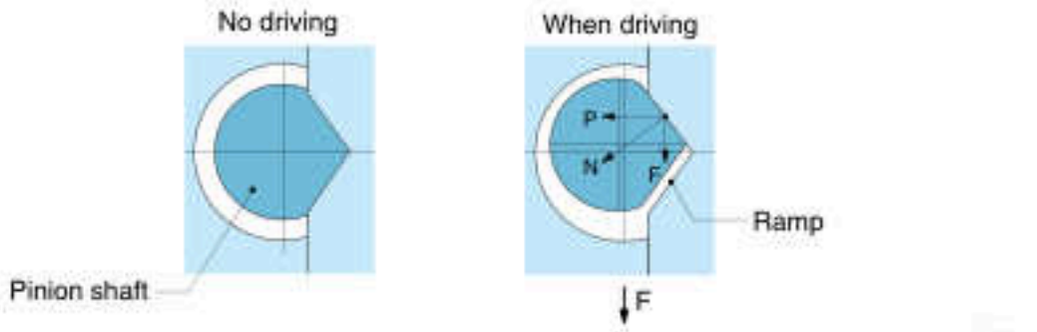
3) WHEN THE RCV LEVER IS IN THE FLOAT POSITION



- When the RCV lever(4) is pushed further forward from the lower position, the boom down pilot port(5) is connected with tank port(T) by shift of 5th control valve. Thus, the boom spool is return to neutral position and the boom float spool is moved to float position by pilot oil pressure from port 1 of RCV.
- The work ports(A3), (B3), (A2), (B2) and the small chamber and the large chamber are connected to the return passage, so the boom will be lowered due to it's own weight.
- In this condition, when the bucket is in contact with the ground, it can be move up and down in accordance with the shape of the ground.

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(2) Operation

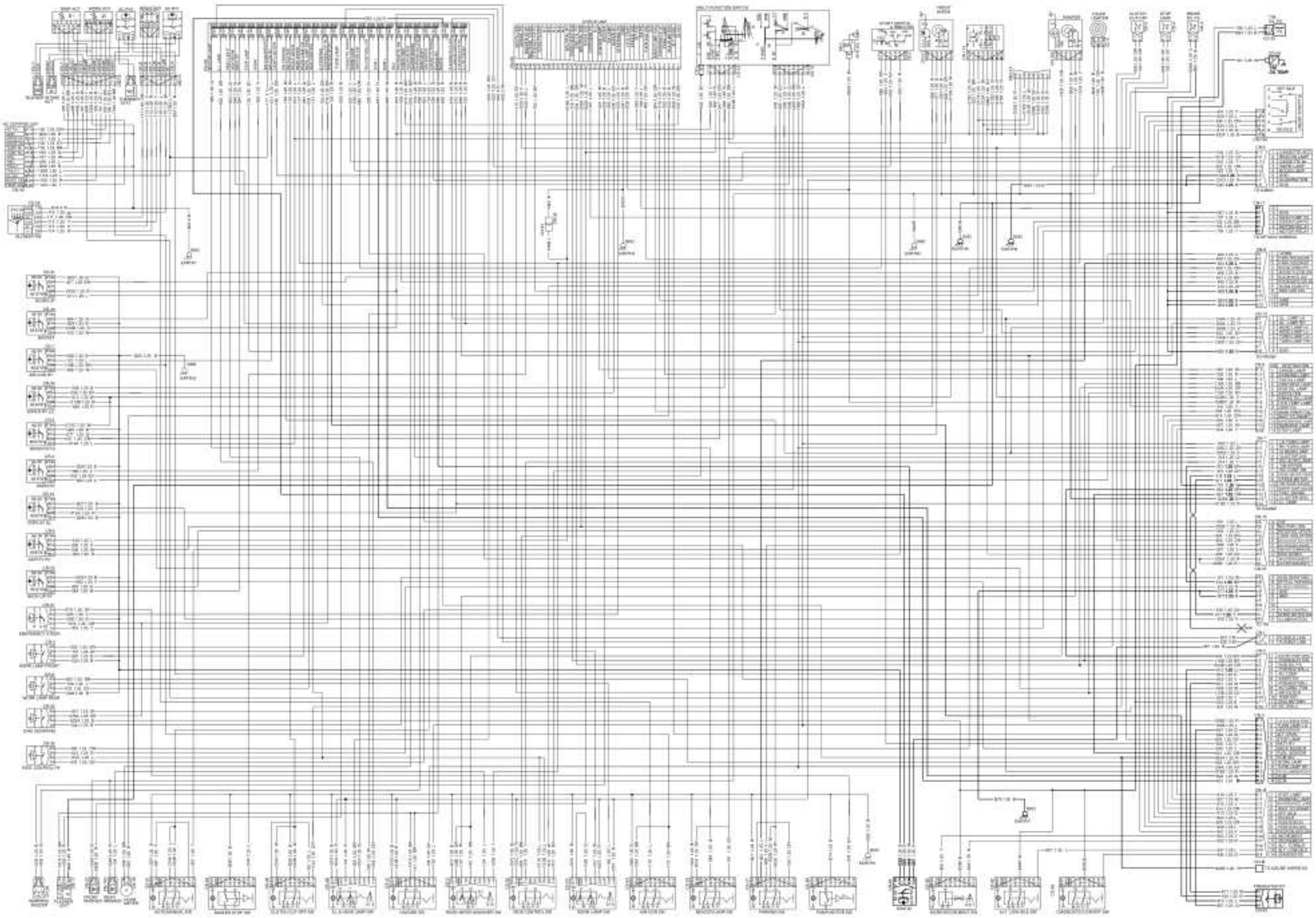


When the differential case is rotated, pinion shaft is moved up on the ramp by the resistance force of tires as the figure, and then force P is generated. This force P becomes the engaging force of clutch.

① When travelling straight(equal resistance from road surface to left and right tires). Under this condition, both clutch are engaged and the left and right side gears are driveb wutg tge sane firce.

② When travelling on soft ground(Resistance from road surface to right tire is smaller). At rotating speed of right tire becomes faster than left due to the smaller resistance of right tive, right clutch is engaged and torque of faster rotating right axle shaft is added to left axle shaft through diffenenting gear case.

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