CRAWLER EXCAVATOR

SERVICE MANUAL

R160,180LC-9

HYUNDAI

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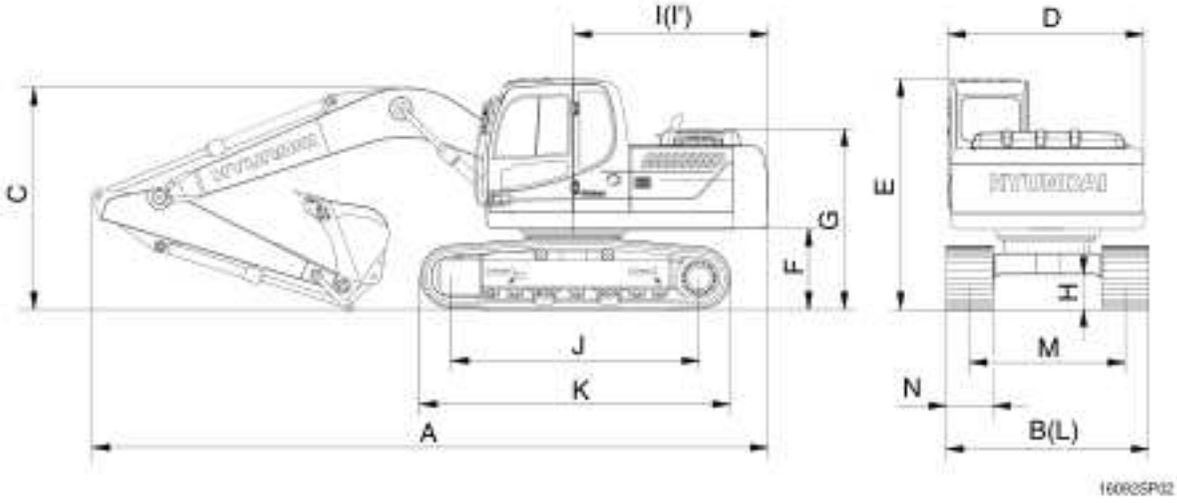
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2. SPECIFICATIONS

1) R160LC-9

· 5.1 m (16' 9") BOOM and 2.6 m (8' 6") ARM



Description		Unit	Specification
Operating weight		kg (lb)	17800 (39240)
Bucket capacity (SAE heaped), standard		m³ (yd³)	0.70 (0.92)
Overall length	A	mm (ft-in)	8650 (28' 5")
Overall width, with 600 mm shoe	B		2590 (8' 6")
Overall height	C		2990 (9' 10")
Superstructure width	D		2475 (8' 1")
Overall height of cab	E		2980 (9' 9")
Ground clearance of counterweight	F		1055 (3' 6")
Engine cover height	G		2315 (7' 7")
Minimum ground clearance	H		460 (1' 6")
Rear-end distance	I		2480 (8' 2")
Rear-end swing radius	I'		2530 (8' 4")
Distance between tumblers	J		3170 (10' 5")
Undercarriage length	K		3960 (13' 0")
Undercarriage width	L		2590 (8' 6")
Track gauge	M		1990 (6' 6")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.2/5.5 (2.0/3.4)
Swing speed		rpm	11.3
Gradeability		Degree (%)	30 (58)
Ground pressure (600 mm shoe)		kgf/cm²(psi)	0.43 (6.11)
Max traction force		kg (lb)	17000 (37500)

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SECTION 6 TROUBLESHOOTING

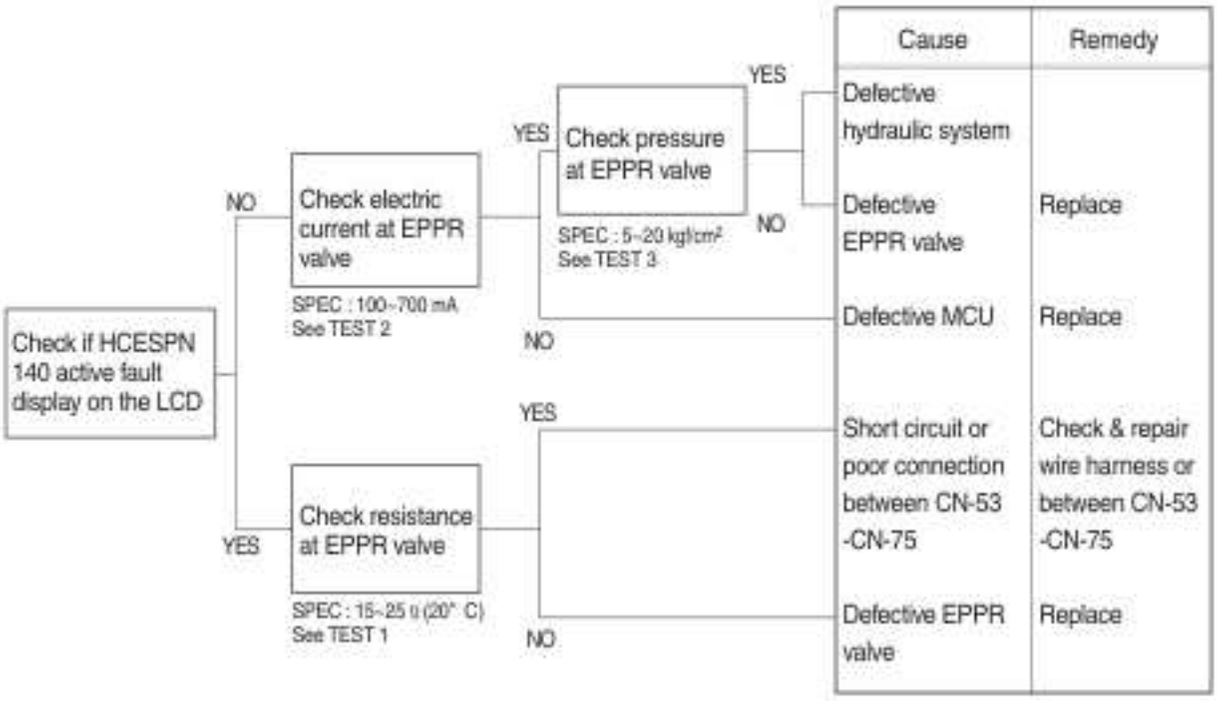
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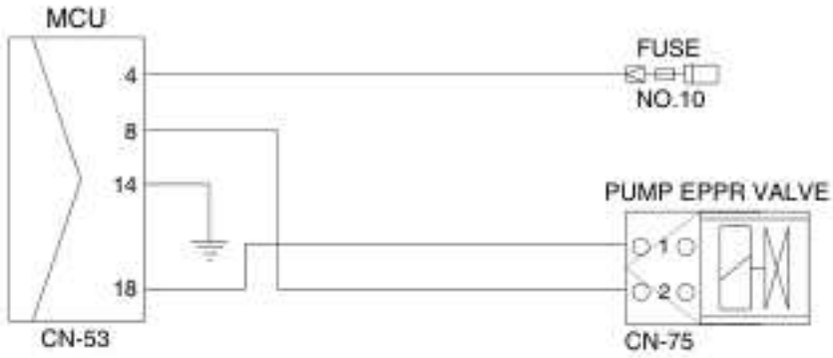
1. ALL ACTUATORS SPEED ARE SLOW

※ Boom, Arm, Bucket, Swing and travel speed are slow, but engine speed is good.
※ Spec : P-mode 2100 ± 50 rpm S -mode 1900 ± 50 rpm E-mode 1750 ± 50 rpm
※ Before carrying out below procedure, check all the related connectors are properly inserted and fault code on the cluster.

1) INSPECTION PROCEDURE



Wiring diagram



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■ **Disassemble cylinder sub.**

9) Disassemble cylinder block assembly, piston assembly (9) and seat plate (M).





10) Disassemble ball guide (16), ring and pin (15) from cylinder block, respectively.





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8) Assemble ring, pin (15) on cylinder block (10) ball guide (16) respectively.



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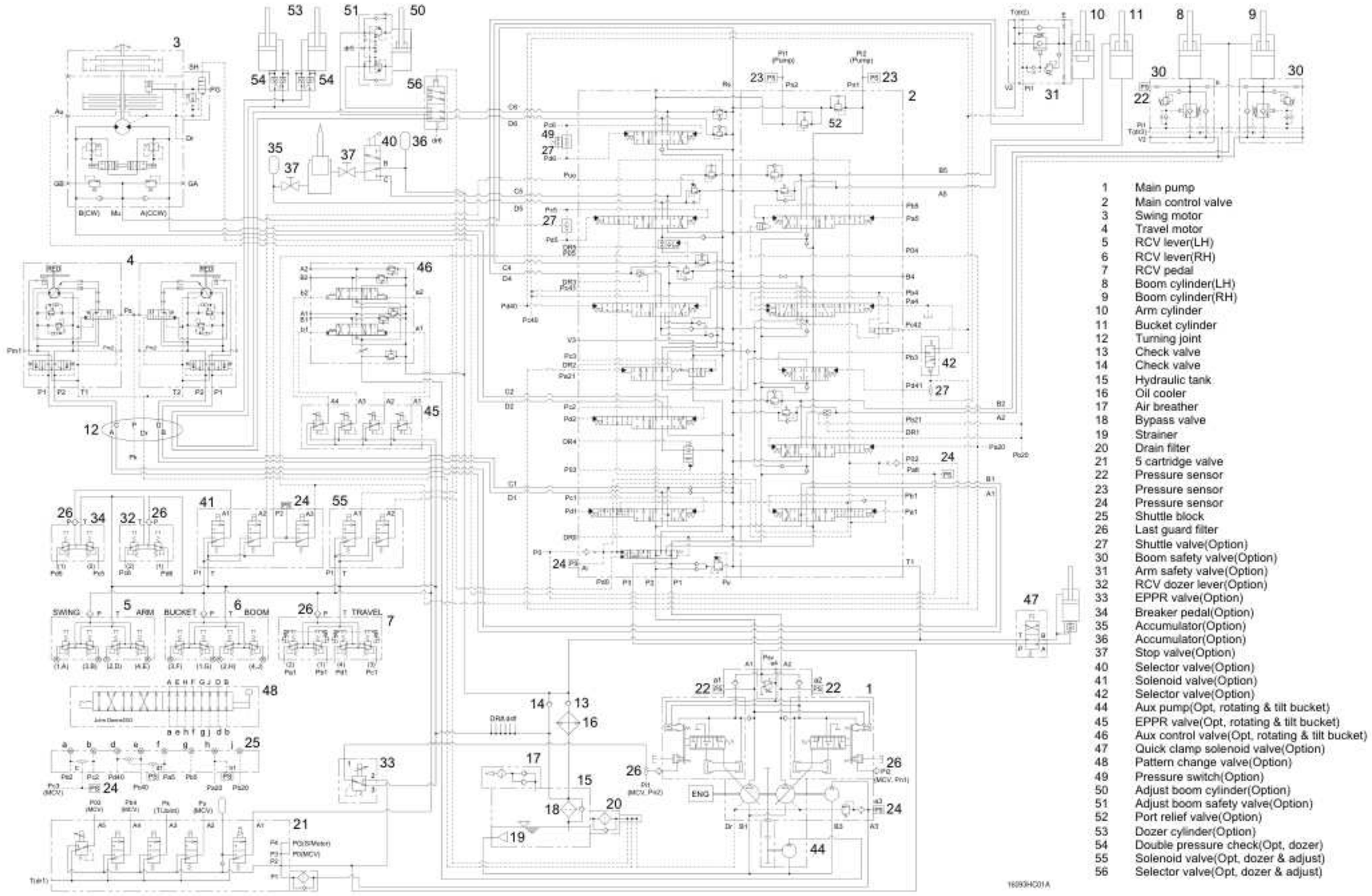
9) Assemble cylinder block assembly, piston assembly (9), seat plate (17).



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GROUP 1 HYDRAULIC CIRCUIT



1 Main pump
2 Main control valve
3 Swing motor
4 Travel motor
5 RCV lever(LH)
6 RCV lever(RH)
7 RCV pedal
8 Boom cylinder(LH)
9 Boom cylinder(RH)
10 Arm cylinder
11 Bucket cylinder
12 Turning joint
13 Check valve
14 Check valve
15 Hydraulic tank
16 Oil cooler
17 Air breather
18 Bypass valve
19 Strainer
20 Drain filter
21 5 cartridge valve
22 Pressure sensor
23 Pressure sensor
24 Pressure sensor
25 Shuttle block
26 Last guard filter
27 Shuttle valve(Option)
30 Boom safety valve(Option)
31 Arm safety valve(Option)
32 RCV dozer lever(Option)
33 EPPR valve(Option)
34 Breaker pedal(Option)
35 Accumulator(Option)
36 Accumulator(Option)
37 Stop valve(Option)
40 Selector valve(Option)
41 Solenoid valve(Option)
42 Selector valve(Option)
44 Aux pump(Opt, rotating & tilt bucket)
45 EPPR valve(Opt, rotating & tilt bucket)
46 Aux control valve(Opt, rotating & tilt bucket)
47 Quick clamp solenoid valve(Option)
48 Pattern change valve(Option)
49 Pressure switch(Option)
50 Adjust boom cylinder(Option)
51 Adjust boom safety valve(Option)
52 Port relief valve(Option)
53 Dozer cylinder(Option)
54 Double pressure check(Opt, dozer)
55 Solenoid valve(Opt, dozer & adjust)
56 Selector valve(Opt, dozer & adjust)

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