CRAWLER EXCAVATOR

# SERVICE MANUAL

## *R290LC-9*

HYUNDAI

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# SECTION 9 COMPONENT MOUNTING TORQUE

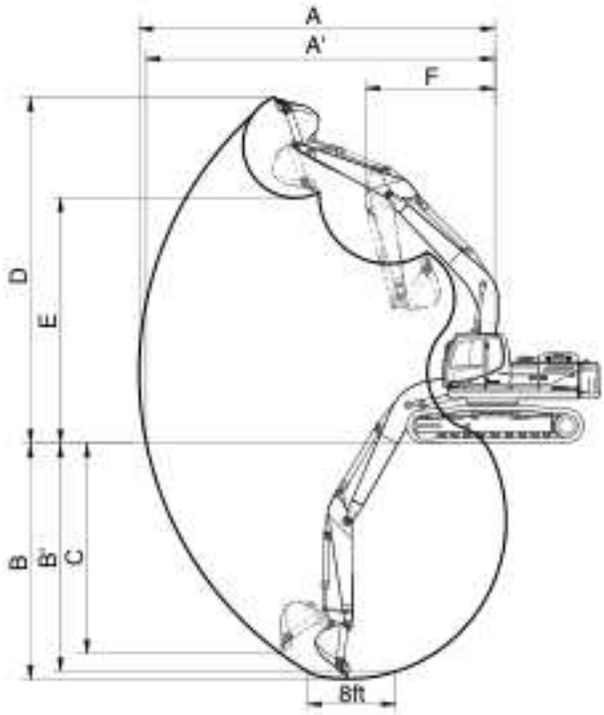

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## 3. WORKING RANGE

### 1) R290LC-9, R290NLC-9

6.25 m (20' 6") BOOM




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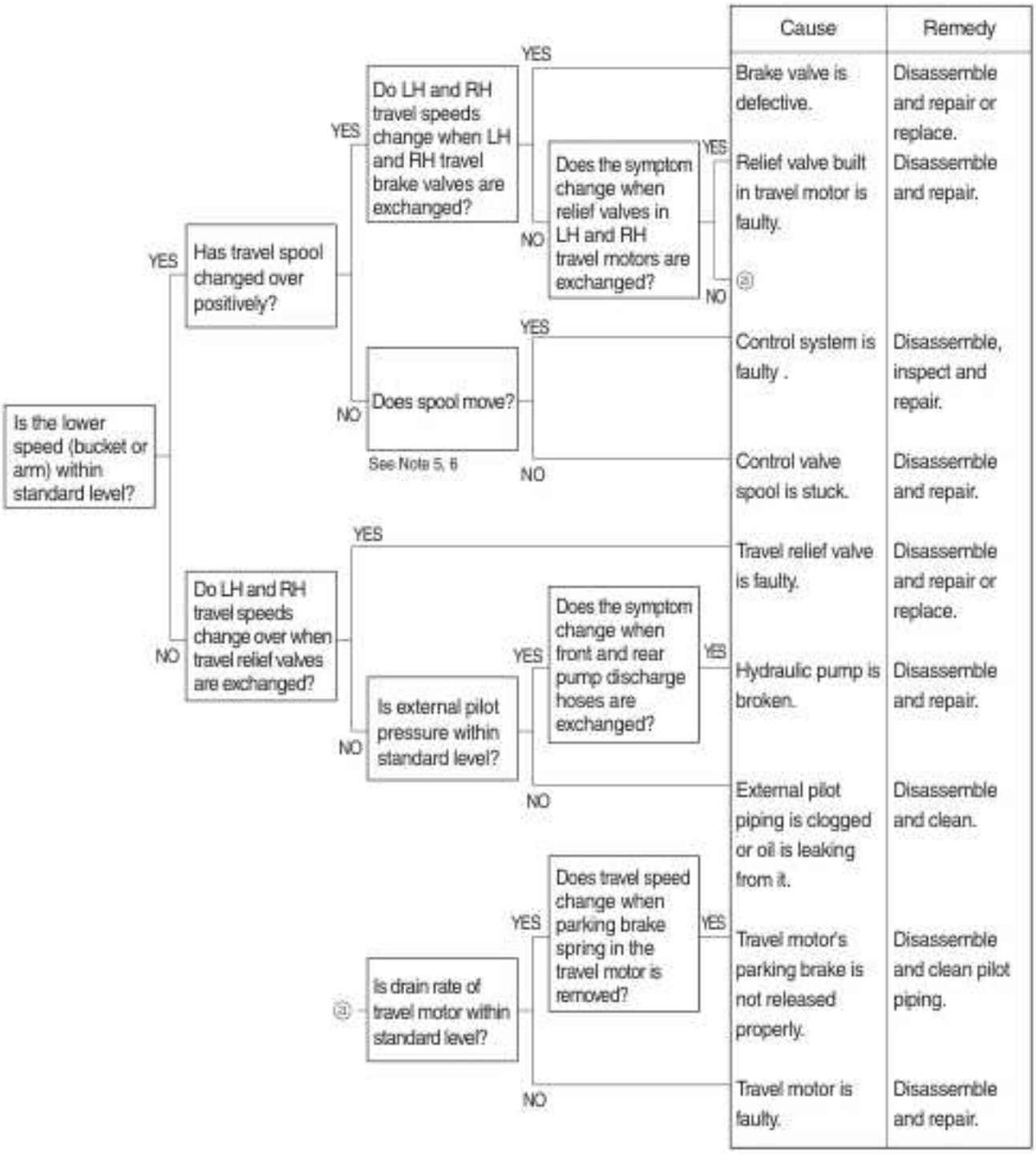
| Description | | 2.10m (6' 11") Arm | 2.50 m (8' 2") Arm | 3.05 m (10' 0") Arm | 3.75 m (12' 4") Arm |
|---|---|---|---|---|---|
| Max digging reach | A | 10020 mm (32' 10") | 10280 mm (33' 7") | 10820 mm (35' 6") | 11400 mm (37' 5") |
| Max digging reach on ground | A' | 9820 mm (32' 3") | 10080 mm (33' 1") | 10620 mm (34' 10") | 11220 mm (36' 10") |
| Max digging depth | B | 6440 mm (21' 1") | 6840 mm (22' 5") | 7390 mm (24' 3") | 8090 mm (26' 7") |
| Max digging depth (8 ft level) | B' | 6240 mm (20' 6") | 6630 mm (21' 9") | 7300 mm (23' 11") | 7920 mm (25' 12") |
| Max vertical wall digging depth | C | 6000 mm (19' 8") | 5850 mm (19' 2") | 6380 mm (20' 11") | 7080 mm (23' 3") |
| Max digging height | D | 10070 mm (33' 0") | 10110 mm (33' 2") | 10160 mm (33' 4") | 10360 mm (33' 12") |
| Max dumping height | E | 6940 mm (22' 9") | 7030 mm (23' 1") | 7110 mm (23' 4") | 7310 mm (23' 12") |
| Min swing radius | F | 4380 mm (14' 4") | 4260 mm (13' 12") | 4230 mm (13' 11") | 4140 mm (13' 7") |
| Bucket digging force | SAE | 166.7 [181] kN | 166.7 [181] kN | 166.7 [181] kN | 166.7 [181] kN |
| | | 17000 [18460] kgf | 17000 [18460] kgf | 17200 [18460] kgf | 17000 [18460] kgf |
| | | 37480 [40690] lbf | 37480 [40690] lbf | 37920 [40690] lbf | 37480 [40690] lbf |
| | ISO | 189.3 [205.5] kN | 189.3 [205.5] kN | 189.3 [205.5] kN | 189.3 [205.5] kN |
| | | 19300 [20950] kgf | 19300 [20950] kgf | 19300 [20950] kgf | 19300 [20950] kgf |
| | | 42550 [46200] lbf | 42550 [46200] lbf | 42550 [46200] lbf | 42550 [46200] lbf |
| Arm digging force | SAE | 180.4 [195.9] kN | 156.9 [170.4] kN | 131.4 [142.7] kN | 114.7 [124.6] kN |
| | | 18400 [19980] kgf | 16000 [17370] kgf | 13400 [14550] kgf | 11700 [12700] kgf |
| | | 40570 [44050] lbf | 35270 [38290] lbf | 29540 [32070] lbf | 25790 [28000] lbf |
| | ISO | 190.3 [206.6] kN | 163.8 [177.8] kN | 136.3 [148] kN | 119.6 [129.9] kN |
| | | 19400 [21060] kgf | 16700 [18130] kgf | 13900 [15090] kgf | 12200 [13250] kgf |
| | | 42770 [46440] lbf | 36820 [39980] lbf | 30640 [33270] lbf | 26900 [29210] lbf |

[ ] : Power boost



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## 2) SPEED ON ONE SIDE FALLS AND THE MACHINE CURVES





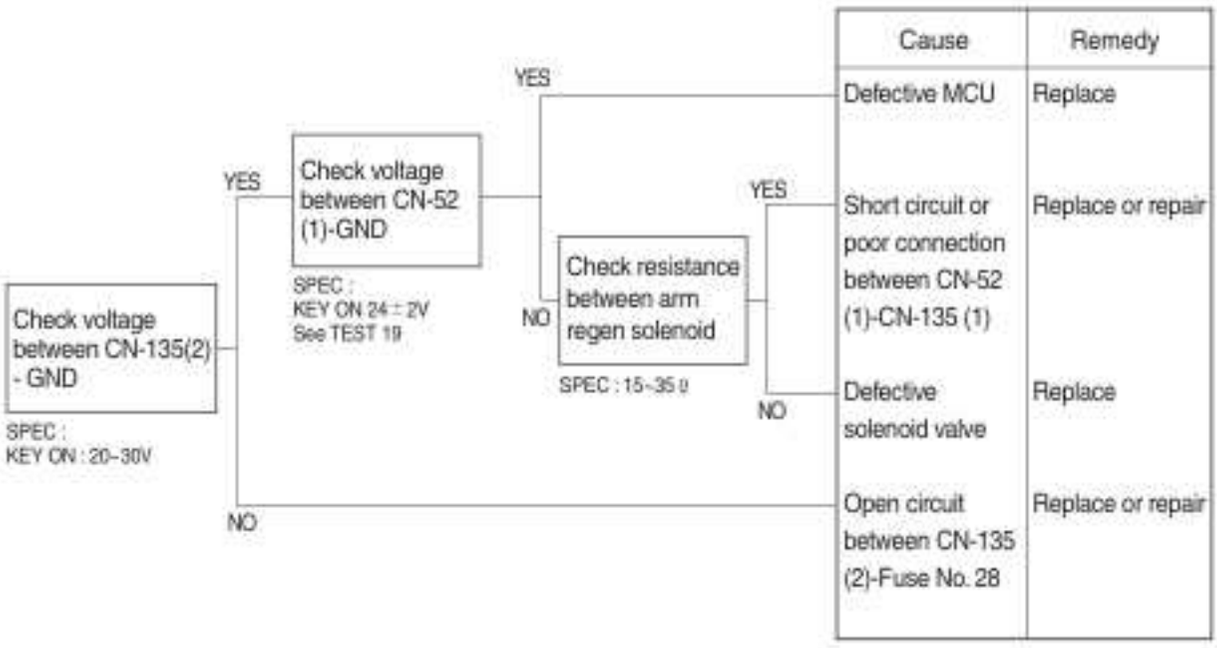

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## 16. MALFUNCTION OF ARM REGENERATION SOLENOID

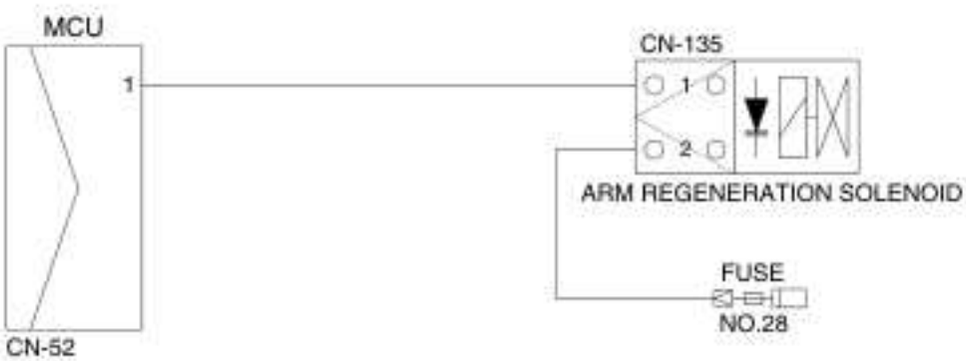
- Fault code : HCESPN 170, FMI 4 or 6

※ Before carrying out below procedure, check all the related connectors are properly inserted.

### 1) INSPECTION PROCEDURE




Wiring diagram






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(28)Assemble piston ring (30), piston ring 252 (30) and 278 (31) into brake piston (29).



(29)Assemble brake piston into shaft casing.

* Be careful of the direction of assembling brake piston.



(30)Assemble brake spring (32).

* Quantity : Spring-10pieces, Holes-11pieces
* Do not assemble on the top of brake piston.



(31)Insert O-ring (69), after fastening orifice screw (4) with standard torque.

- Quantity and size : (4 ) 2 pieces- ø 1.0
  (56) 1pieces- ø 1.5
- Tightening torque : 7 kgf · m (50.63 lbf · ft)

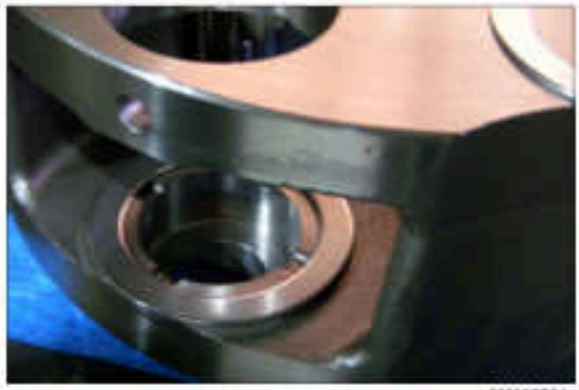




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(7) Assembly of No.2 carrier assembly (6)

① Assemble No.2 planet gear (8) to No.2 carrier (7) with thrust washer (12) and insert No.2 pin (10) correctly and No.2 pin (10) is around with spring pin hole at No.2 carrier (7).



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② Insert spring pin (13) into No.2 carrier (7) hole and No.2 pin (10) hole.



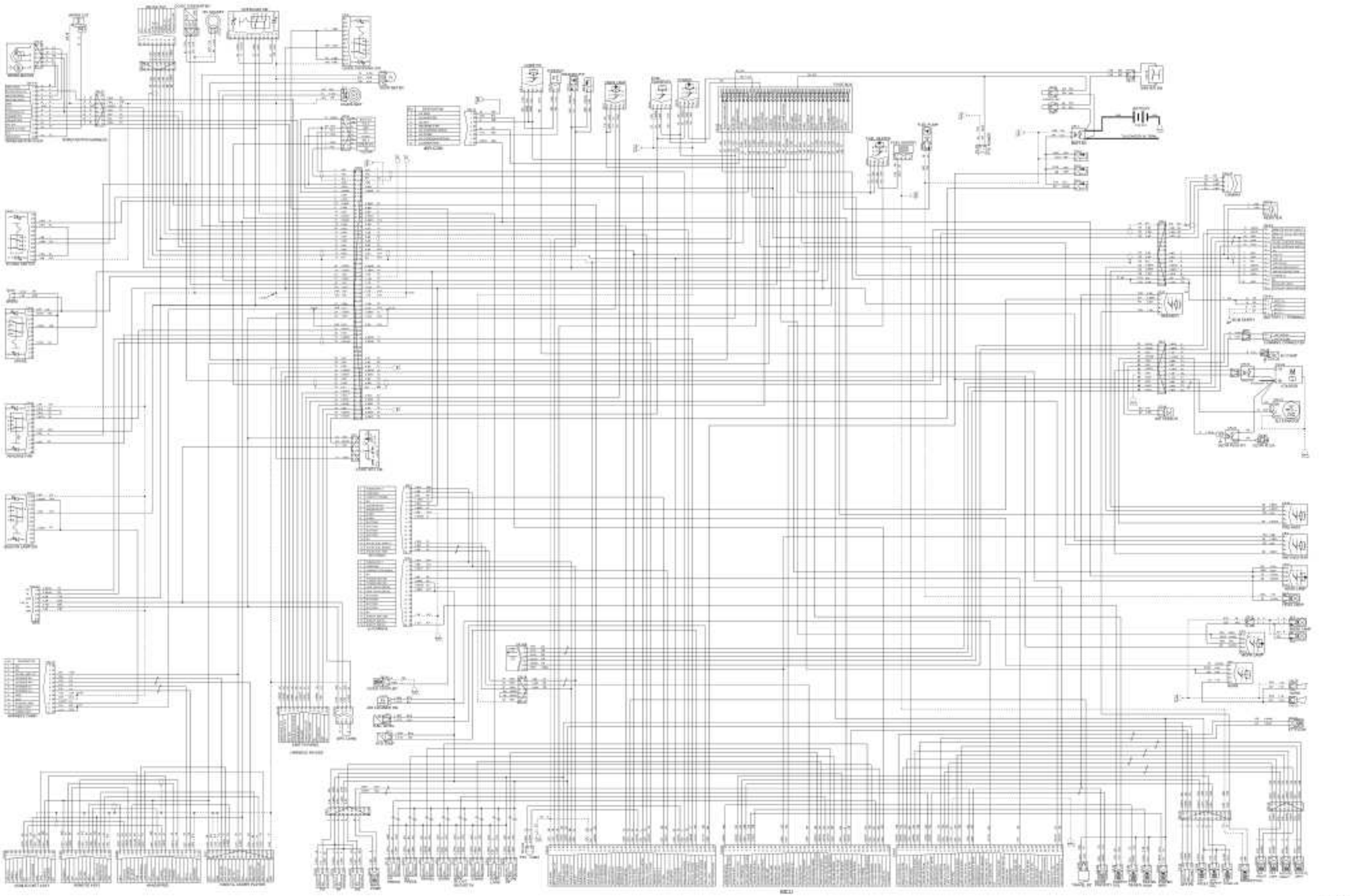
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