CRAWLER EXCAVATOR

# SERVICE MANUAL

## *R80-7 (India)*

HYUNDAI

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## 6. BUCKET SELECTION GUIDE

### 1) GENERAL BUCKET

| | | |
|---|---|---|
|  |  |  |
| 0.28m³ SAE heaped bucket | ※ 0.32m³ SAE heaped bucket | 0.15m³ SAE heaped bucket |

| Capacity | | Width | | Weight | Recommendation |
|---|---|---|---|---|---|
| | | | | | 3.7m (12' 2") Mono boom |
| SAE heaped | CECE heaped | Without side cutter | With side cutter | | 1.67m arm (5' 6") |
| 0.28m³ (0.37yd³) | 0.25m³ (0.33yd³) | 665mm (26.2") | 760mm (29.9") | 230kg (510lb) | |
| ※ 0.32m³ (0.42yd³) | 0.27m³ (0.35yd³) | 720mm (28.3") | 815mm (32.1") | 245kg (540lb) | |
| 0.15m³ (0.19yd³) | 0.13m³ (0.17yd³) | 390mm (15.4") | 460mm (18.1") | 190kg (420lb) | |

※ : Standard bucket

Applicable for materials with density of 1600kg/m³ (2700lb/yd³) or less



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# GROUP 4 CONNECTORS

## 1. CONNECTOR DESTINATION

| Connectorn umber | Type | No. of pin | Destination | Connector part No. | |
|---|---|---|---|---|---|
| | | | | Female | Male |
| CN-2 | AMP | 15 | Engine harness | 2-85262-1 | 368301-1 |
| CN-4 | AMP | 8 | LH console wire harness | S816-008002 | S816-108002 |
| CN-5 | AMP | 15 | RH side harness | 2-85262-1 | 368301-1 |
| CN-6 | AMP | 12 | RH side harness | S816-012002 | S816-112002 |
| CN-7 | AMP | 15 | RH console wire harness | 2-85262-1 | 368301-1 |
| CN-8 | AMP | 12 | RH console wire harness | S816-012002 | S816-112002 |
| CN-9 | AMP | 8 | RH console wire harness | S816-008002 | S816-108002 |
| CN-10 | DEUTSCH | 12 | Cab harness | DT06-12S | DT04-12P |
| CN-11 | DEUTSCH | 8 | LH console wire harness | DT06-8S | - |
| CN-12 | KET | 2 | Work lamp harness | MG640188-4 | - |
| CN-17 | DEUTSCH | 8 | Wipe harness | DT06-8S | DT04-8P |
| CN-20 | MOLEX | 2 | Horn | 36825-0211 | - |
| CN-21 | AMP | 6 | Wiper motor | 925276-0 | - |
| CN-22 | - | 2 | Washer tank | MG640605 | - |
| CN-23 | KET | 2 | LH speaker | MG610070 | 7322-1520 |
| CN-24 | KET | 2 | RH speaker | MG610070 | 7322-1520 |
| CN-25 | MOLEX | 2 | Horn | 36825-0211 | - |
| CN-27 | AMP | 14 | Cassette radio | 173852 | AMP14P |
| CN-28 | - | 1 | Air-con comp | MWP-01F-B | - |
| CN-29 | KET | 2 | Receiver dryer | MG640795 | - |
| CN-36 | - | 3 | Fuse box | S813-030200 | S813-130200 |
| CN-37 | - | 6 | Fuse box | S816-006002 | S816-106002 |
| CN-38 | AMP | 15 | Fuse box | 2-85262-1 | 368301-1 |
| CN-45 | RING TERM | 1 | Starter | S820-308000 | - |
| CN-48 | - | 2 | Hour meter | S810-002202 | - |
| CN-50 | AMP | 36 | CPU | 3441111-1 | - |
| CN-51 | AMP | 36 | CPU | 3441111-1 | - |
| CN-55 | AMP | 2 | Travel alarm pressure switch | S816-002002 | S816-102002 |
| CN-56 | DEUTSCH | 4 | Cluster | - | DT04-4P |
| CN-60 | - | 2 | Fusible link | - | 7122-4125-50 |
| CN-61 | DEUTSCH | 2 | Fuel filler pump | DT06-2S-EP06 | DT01-2P-P012 |
| CN-66 | DEUTSCH | 2 | Breaker solenoid valve | DT06-2S-EP06 | DT04-2P-E005 |
| CN-68 | DEUTSCH | 2 | Safety solenoid valve | DT06-2S-EP06 | - |
| CN-70 | DEUTSCH | 2 | Travel speed solenoid valve | DT06-2S-EP06 | - |
| CN-74 | KET | 2 | Alternator | MG640188-4 | - |
| CN-76 | DEUTSCH | 6 | Accel actuator | DT06-6S-EP06 | - |
| CN-79 | RING TERM | 1 | Fuel cut-off solenoid | S813-060300 | - |
| CN-81 | DEUTSCH | 2 | Travel buzzer | DT06-2S-EP06 | DP04-2P-E005 |



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## 2) DESCRIPTION OF MONITORING DISPLAY

| Group | Display | Name | Description |
|---|---|---|---|
| Group 0 | 2200 rpm | Engine speed | It displays current engine speed detected by engine speed sensor from 500 to 3000rpm.<br>Range : 500–3000rpm by 10rpm |
| | TIME 12 : 30 | Time | It displays current time(12 is hour and 30 is minute)<br>Range : Hour(1–12), minute(00–59) |
| | 08 : C1.0 | Model and CPU program version | It shows that machine model(R80-7) and the program version of the CPU controller is 1.0.<br>Version display range : 0.0–9.9 by 0.1 |
| Group 1 | b24 : 8V | Battery voltage | It shows that battery power of 24.8V is supplied into CPU controller.<br>Range : 00.0–48.0V by 0.1V |
| | Po : 2.5V | Potentiometer voltage | It shows that potentiometer signal voltage is 2.5V.<br>Range : 0.0–5.0V by 0.1V |
| | dL : 3.8V | Accel dial voltage | It shows that accel dial signal voltage is 3.8V.<br>Range : 0.0–5.0V by 0.1V |
| | Hd : 50°C | Hydraulic oil temperature | It shows that hydraulic oil temperature detected by temperature sensor is 50°C.<br>Range : 0–150°C by 1°C |
| | Ct : 85°C | Coolant temperature | It shows that coolant oil temperature detected by temperature sensor is 50°C.<br>Range : 0–150°C by 1°C |
| Group 2 | CHECK Er : 01 | Current error | It shows that current error of 01(Short circuit in accel actuator motor system) is diagnosed by self diagnosis system in the CPU controller.<br>If more than 2 errors, when pressing ▼ or ▲ switch, other error codes show.<br>Range : 00–58 |
| | TIME Er : 03 | Recorded error | It shows recorded error code of 03 which is diagnosed before.<br>If more than 2 error codes, when pressing ▼ or ▲ switch, other error codes show.<br>Range : 00–58 |
| | TIME Er : 00 | Recorded error deletion | It shows all recorded error codes are removed in the CPU controller memory. |



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⑤ Disassembling steel ball(7) from shaft casing(1).



### (3) Rear cover

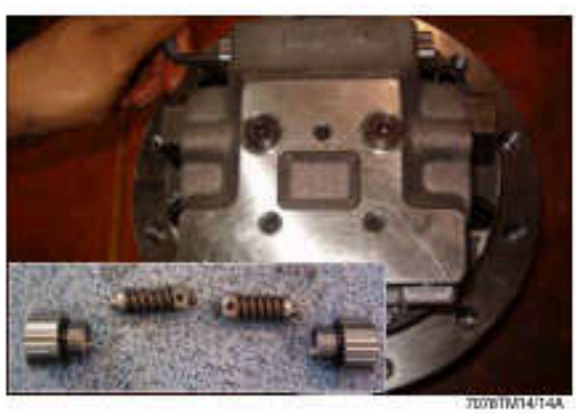
① Disassembling valve plate(13) from rear cover(22).



② Using plier jig, disassembling in order snap ring(27), stopper(26), spring(25), spool(24) from rear cover(22) and then disassembling snap ring(32), seat(30), spring(29), check(28) same procedure.



③ Using L-wrench, disassembling plug(45) from rear cover(22) and then relief valve assembly(43) (left, right is symmetry).

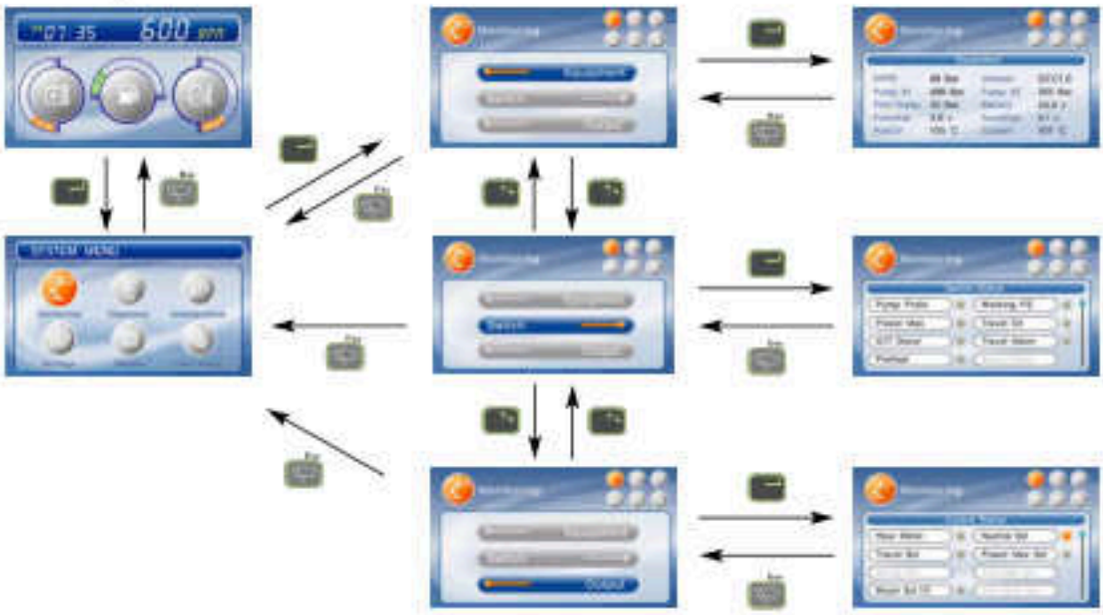




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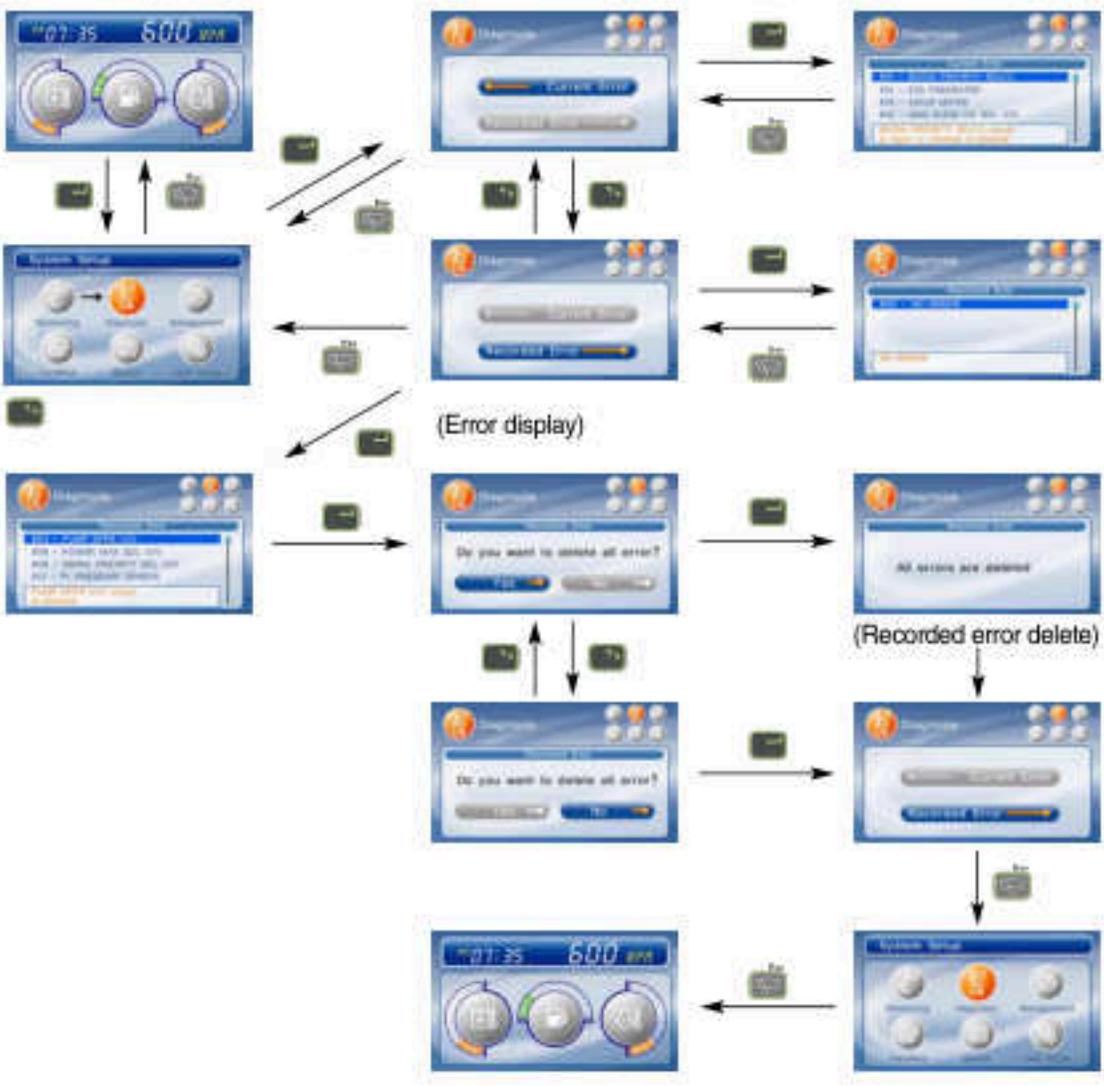
(2) Display map

① Monitoring



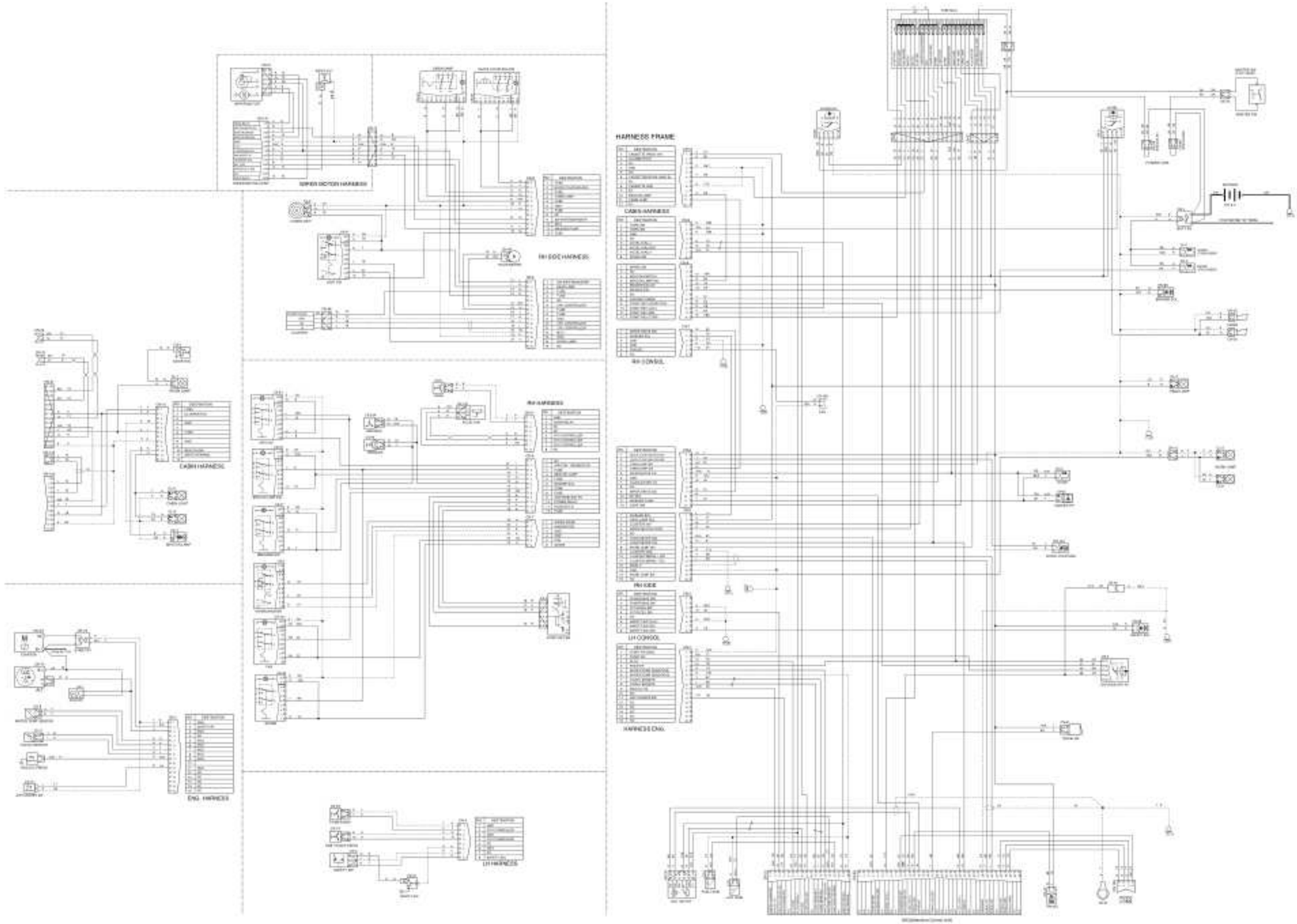
② Diagnosis

a. Protocol type 1






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