WHEEL LOADER

SERVICE MANUAL

HL780-9S

HYUNDAI

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CONTENTS

SECTION 1 GENERAL

Group 1 Safety Hints 1-1
Group 2 Specifications 1-10
Group 3 Operational Checkout Record Sheet 1-23

SECTION 2 ENGINE

Group 1 Structure and Function 2-1
Group 2 Engine speed and Stall rpm 2-14
Group 3 Fuel warmer system 2-15

SECTION 3 POWER TRAIN SYSTEM

Group 1 Structure and Function 3-1
Group 2 Operational Checks and Troubleshooting 3-58
Group 3 Test and Adjustments 3-69
Group 4 Disassembly and Assembly 3-71

SECTION 4 BRAKE SYSTEM

Group 1 Structure and Function 4-1
Group 2 Operational Checks and Troubleshooting 4-29
Group 3 Tests and Adjustments 4-36
Group 4 Disassembly and assembly 4-38

SECTION 5 STEERING SYSTEM

Group 1 Structure and Function 5-1
Group 2 Operational Checks and Troubleshooting 5-18
Group 3 Tests and Adjustments 5-26
Group 4 Disassembly and Assembly 5-34

SECTION 6 WORK EQUIPMENT

Group 1 Structure and Function 6-1
Group 2 Operational Checks and Troubleshooting 6-41
Group 3 Tests and Adjustments 6-52
Group 4 Disassembly and Assembly 6-67

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SECTION 7 ELECTRICAL SYSTEM

Group 1 Component Location 7-1
Group 2 Electrical Circuit 7-3
Group 3 Monitoring System 7-21
Group 4 Electrical Component Specification 7-51
Group 5 Connectors 7-58
Group 6 Troubleshooting 7-78

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SECTION 1 GENERAL

Group 1 Safety Hints 1-1
Group 2 Specifications 1-10
Group 3 Operational Checkout Record Sheet 1-25

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GROUP 2 OPERATIONAL CHECKS AND TROUBLESHOOTING

1. POWER TRAIN OPERATIONAL CHECKS

This procedure is designed so that the mechanic can make a quick check of the system using a minimum amount of diagnostic equipment. If you need additional information, read Structure and function, Group 1.

A location will be required which is level and has adequate space to complete the checks.

The engine and all other major components must be at operating temperature for some checks.

Locate system check in the left column and read completely, following the sequence from left to right. Read each check completely before performing.

At the end of each check, if no problem is found (OK), that check is complete or an additional check is needed. If problem is indicated (NOT OK), you will be given repair required and group location. If verification is needed, you will be given next best source of information :

Chapter 2 : Troubleshooting
Group 3 : Tests and adjustments

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③ Determine dimension III (bearing width).

Dimension III e.g. ..... 63.60 mm

Calculation example A :

Dimension I	331.25 mm
Dimension II	- 265.00 mm
Dimension III	- 63.60 mm
Difference = shim	s = 2.60 mm



7B09AX127

Reassembly of input pinion

① Undercool the external bearing outer ring and insert it into the axle drive housing until contact is obtained.

Driver tool	5870 050 007
Handle	5870 260 004



7B09AX128

② Insert the determined shim e.g. s = 2.60 mm into the housing hole.



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③ Undercool the internal bearing outer ring and bring it into contact position in the housing hole by using the assembly fixture.

Assembly fixture	AA00 623 955



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5. CHARGING CIRCUIT

When the starter is activated and the engine is started, the operator releases the key switch to the ON position.

Charging current generated by operating alternator flows into the battery through the battery relay (CR-1).

The current also flows from alternator to each electrical component and controller through the fuse box.

1) OPERATING FLOW

(1) Warning flow

Altermator [CN-74 (2)] → I/conn [CN-13 (8)] → I/conn [CN-6 (49)] → MCU [CN-58A (B36)] → Cluster charge warning lamp ON

(2) Charging flow

Alternator → Starter [CN-45 (B^+)] → Battery relay [CR-1]

- → Battery(+) terminal → Charging
- → Fusible link [CN-60] → Master switch [CS-74] → I/conn [CN-5 (24)] → Fuse box [CN-36)]
- → Fusible link [CN-95] → I/conn [CN-5 (21, 22, 25~28)] → Fuse box [CN-36]

2) CHECK POINT

Engine	Key switch	Check point	Voltage
OFF	ON	① - GND (battery) ② - GND (battery relay) ③ - GND (alternator B^+) ④ - GND (alternator 2) ⑤ - GND (MCU) ⑥ - GND (fuse box)	20~28V

※ GND : Ground

※ MCU : Machine control unit

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(14) Assembled nut (31).

- Tool : spanner 19 mm
- Tightening torque (M12) :
  40 ± 4 kgf · cm (28 ± 28.9 lbf · ft)



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(15) Assemble the boots (32).

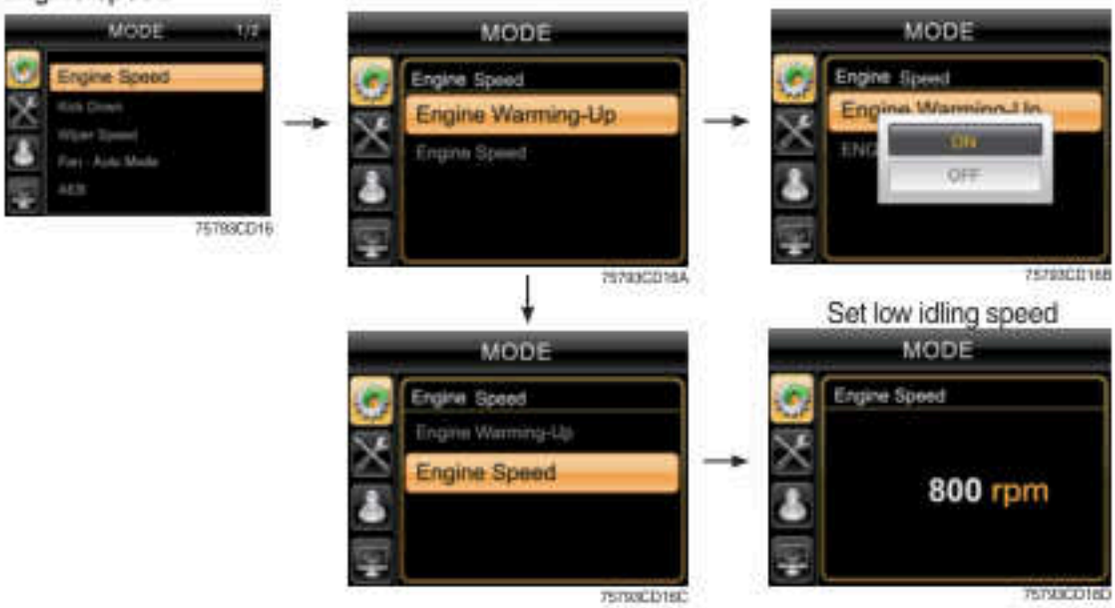


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(2) Mode

① Engine speed



② Kick down



- Mode 1 (down/up) : Press kick down button once, shift down and press button again, shift up.
- Mode 2 (down only) : Press kick down button every time, shift to lower gear respectively.

※ Refer to page 7-48.

③ Wiper speed



- Setting wipe speed 1 to 4.

④ Fan-auto mode



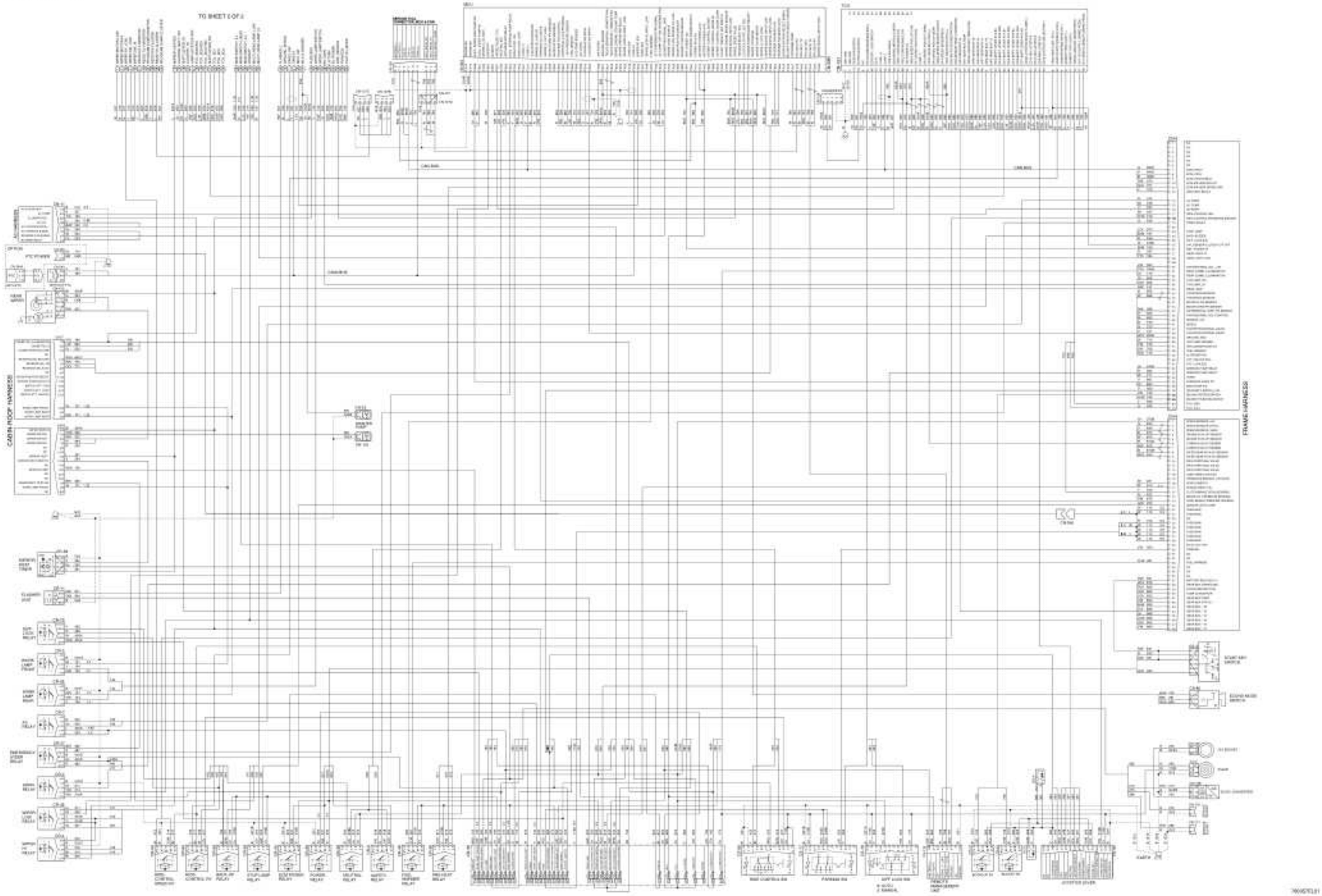
- Select reverse interval or reverse time.
- Set reverse interval (30~300 min) or reverse time (30~300 sec).

※ Default : Interval (60 min), time (120 sec)

※ Refer to page 7-45, fan control switch.

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· ELECTRICAL CIRCUIT (1/2)



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