WHEEL LOADER

SERVICE MANUAL

HL760-7A

HYUNDAI

MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-7A

Order the manual at mid-west-tech.com >

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 & stall rpm 2-7
Group 3 Fan drive circuit for cooling system 2-8

SECTION 3 POWER TRAIN SYSTEM

Group 1 Structure and Function 3-1
Group 2 Operational Checks and Troubleshooting 3-69
Group 3 Test and Adjustments 3-80
Group 4 Disassembly and Assembly 3-83

SECTION 4 BRAKE SYSTEM

Group 1 Structure and Function 4-1
Group 2 Operational Checks and Troubleshooting 4-24
Group 3 Tests and Adjustments 4-32
Group 4 Disassembly and assembly 4-34

SECTION 5 STEERING SYSTEM

Group 1 Structure and Function 5-1
Group 2 Operational Checks and Troubleshooting 5-15
Group 3 Tests and Adjustments 5-23
Group 4 Disassembly and Assembly 5-30

SECTION 6 WORK EQUIPMENT

Group 1 Structure and Function 6-1
Group 2 Operational Checks and Troubleshooting 6-35
Group 3 Tests and Adjustments 6-46
Group 4 Disassembly and Assembly 6-62

MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-... Order the manual at mid-west-tech.com >

SECTION 7 ELECTRICAL SYSTEM

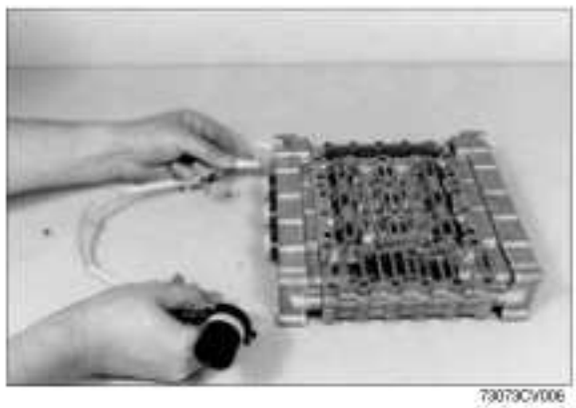
Group 1 Component Location 7-1
Group 2 Electrical Circuit 7-3
Group 3 Monitoring System 7-21
Group 4 Electrical Component Specification 7-38
Group 5 Connectors 7-45
Group 6 Troubleshooting 7-65

MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-... Order the manual at mid-west-tech.com >

(5) Loosen socket head screws.
Separate cover from housing and cable harness.
Box spanner 5873 042 002



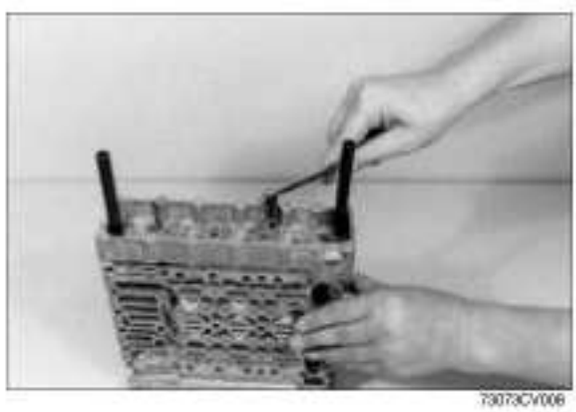
(6) Disassemble opposite cover.
Disconnect pressure regulator and remove cable harness.



(7) Loosen socket head screws, remove fixing plate and pressure regulators(3EA).
Box spanner 5873 042 002



(8) Loosen two socket head screws and locate housing provisionally, using adjusting screws(Housing is under spring preload).
Now, loosen remaining socket head screws.
Box spanner 5873 042 002
Adjusting screws 5870 204 036



MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-... Order the manual at mid-west-tech.com >

11. PILOT OIL SUPPLY UNIT PRESSURE TEST

- **SPECIFICATION**

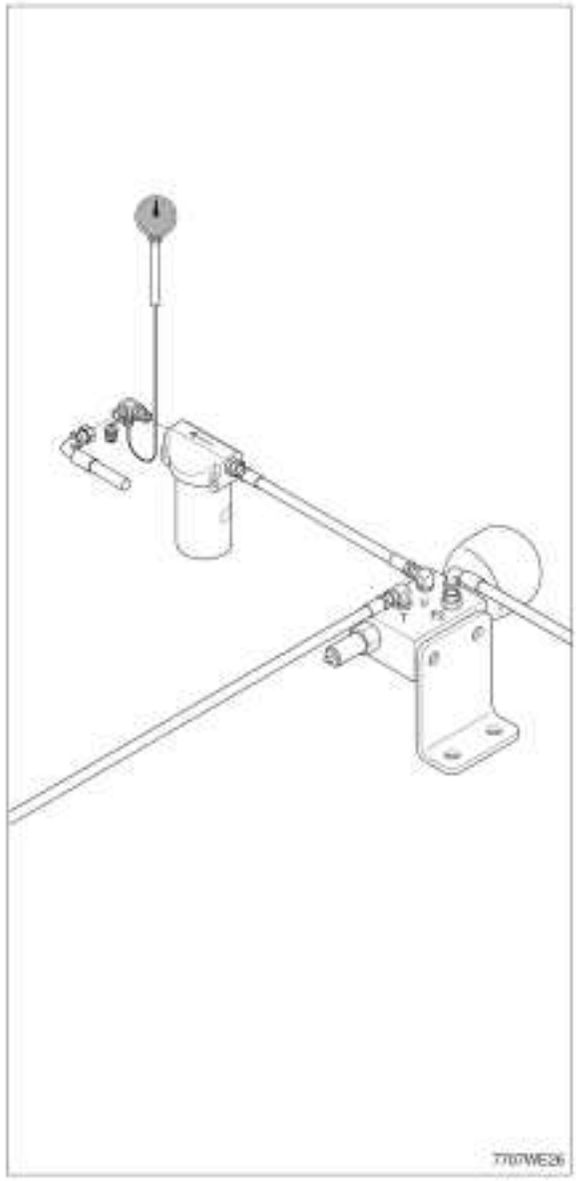
Oil temperature	45±5°C(113±9°F)
Engine speed	Low idle and stop
Pilot pressure setting	
30~35bar(430~500psi)	
Relief valve setting pressure	45bar
Accumulator precharging pressure	16bar

- **GAUGE AND TOOL**

Gauge 0~7MPa(0~70bar, 0~1000psi)

The pilot supply unit consist of the pressure reducing valve, the relief valve and an accumulator. This regulates pressure to the pilot control circuit.

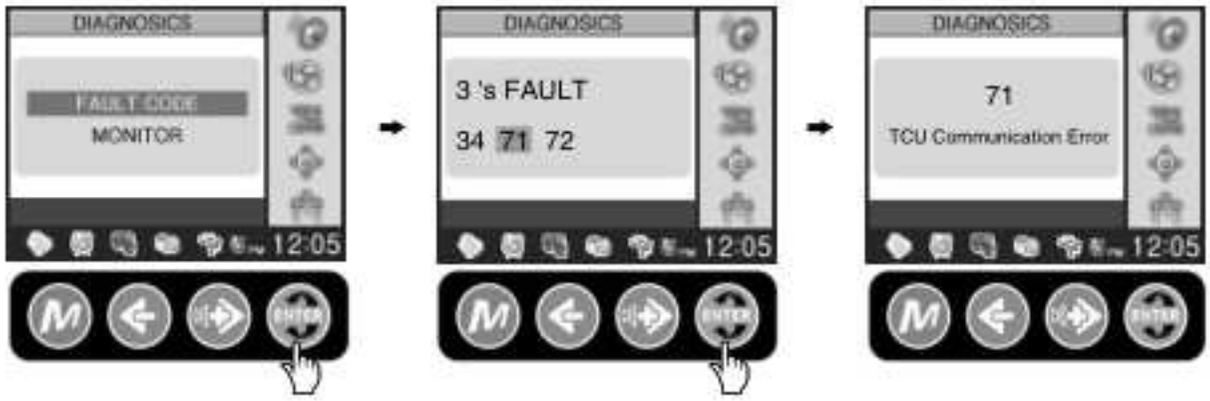
1) Connect gauge to test port on the screw coupling.
2) Install temperature reader(See temperature reader installation procedure in this group).
3) Heat hydraulic oil to specification(See hydraulic oil warm up procedure in this group).
4) Run engine at low idle for 1 minute and stop engine, wait for 5 minutes. Then start measuring.
5) If pressure in not within specifications, replace valve.



MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-... Order the manual at mid-west-tech.com >

(3) Machine fault code

When selecting the fault code menu, it shows all of the fault codes which mean abnormal conditions of present time.



7707A3CD36

※ To go out from fault explanation window, press ← button.
(Press 🌐 , Ⓜ to go out to main.)

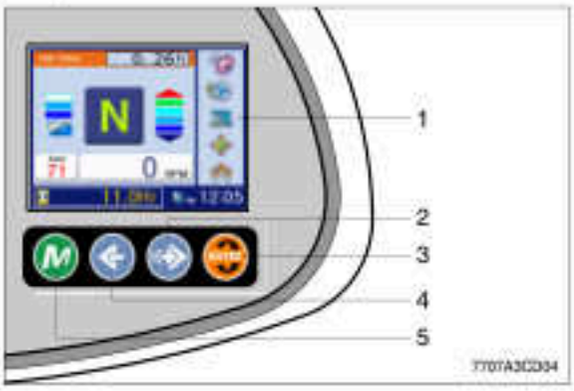
※ **No error** will be indicated in case that there's no fault.

Description	Code	Meaning	Remark
Electrical system	010	Power input voltage low	Below 18V
	011	Power input voltage high	Above 38V
	012	Alternator voltage low	Below 5V
	013	Alternator voltage high	Above 36V
	014	Buzzer circuit open or short to ground	
	015	Buzzer circuit short to power	
Hydraulic system	020	Hydraulic oil temperature sensor open or short to power	
	021	Hydraulic oil temperature sensor short to ground	
Engine system	030	Fuel level sensor open or short to power	
	031	Fuel level sensor short to ground	
	034	Cooling fan driving valve open or short to ground	
	035	Cooling fan driving valve short to power	
T/M system	050	Auto select switch supply power open or short to power	
	051	Auto select switch supply power short to ground	
	052	Clutch cutoff supply power open or short to power	
	053	Clutch cutoff supply power short to ground	
Steering system	060	Emergency steering relay open or short to ground	Option
	061	Emergency steering relay short to power	Option
Communication	070	MCU communication error	
	071	TCU communication error	
	072	ECM communication error	

MCU : Machine control unit TCU : Transmission control unit ECM : Engine control module

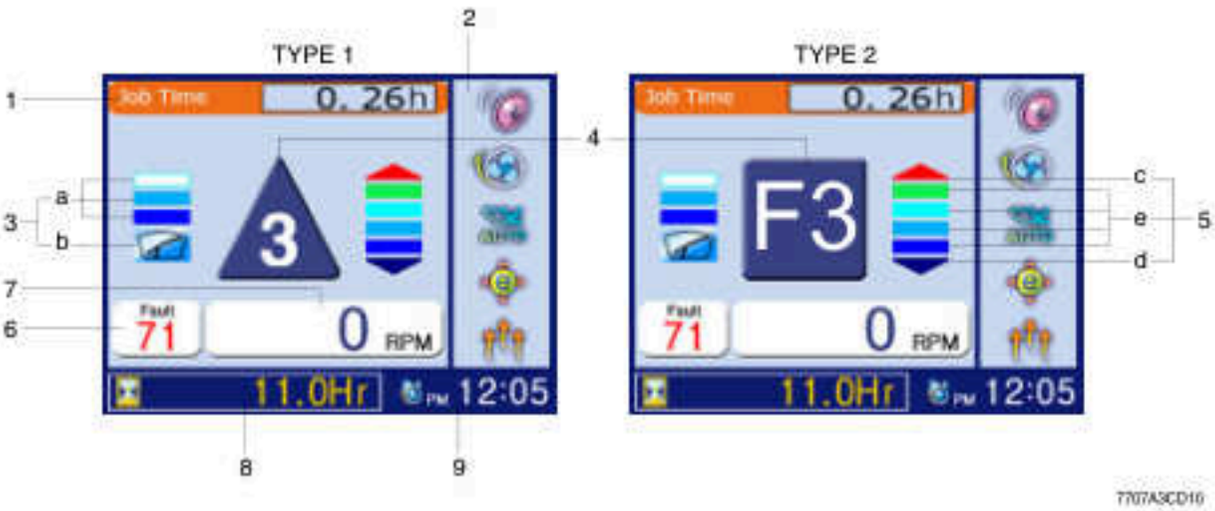
MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-... Order the manual at mid-west-tech.com >

26) LCD



1 LCD
2 ( ) Right, Buzzer stop
Move to the next selection
3 ( ) Select(Enter)
Activate the currently chosen item
4 ( ) Escape
Return to the previous menu
5 ( ) Main, Menu
- Display menu
- Return to the main display

(1) Main display



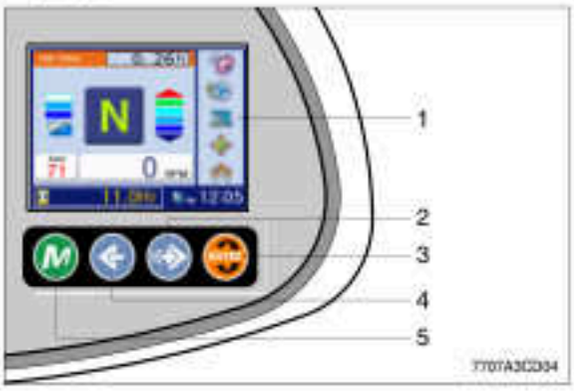
7707A3CD10

No	Symbol	Meaning	Remark		
1	Job Time 1.26h	Monitoring information	Job timer, Odometer, Hydraulic temperature, Battery voltage, Coolant temperature, T/M oil temperature.		
2		State information	Buzzer, Fan state, Ride state(option), Steering joystic(option), Warming up		
3	a	Wiper display	When operating intermittently, it shows an operating time interval		
	b		Wiper motor intermittently operating		
4	△·▽·□	Actual gear display	Forward, reverse, neutral	LCD type 1	
	F, R, N		Forward, reverse, neutral	LCD type 2	
	1, 2, 3, 4		Actual gear		
	P		Parking brake mode active		
5	c, d	Select gear display	Up and down shifting	c: Forward, d: Reverse	Automatic mode
	e		Pre-selected gear		
6	71	Fault code display	Fault code state display		
7	0 RPM	Engine rpm display	Now engine rpm state display		
8	11.0Hr	Hour meter display	Hour meter state display		
9	PM 12:05	Timer & alarm display	Now time & alarm state display		

※ Both type1 and type2 are LCD modes and they can be changed each other by operator's selection. (Adjustment/Display, see page 7-29)

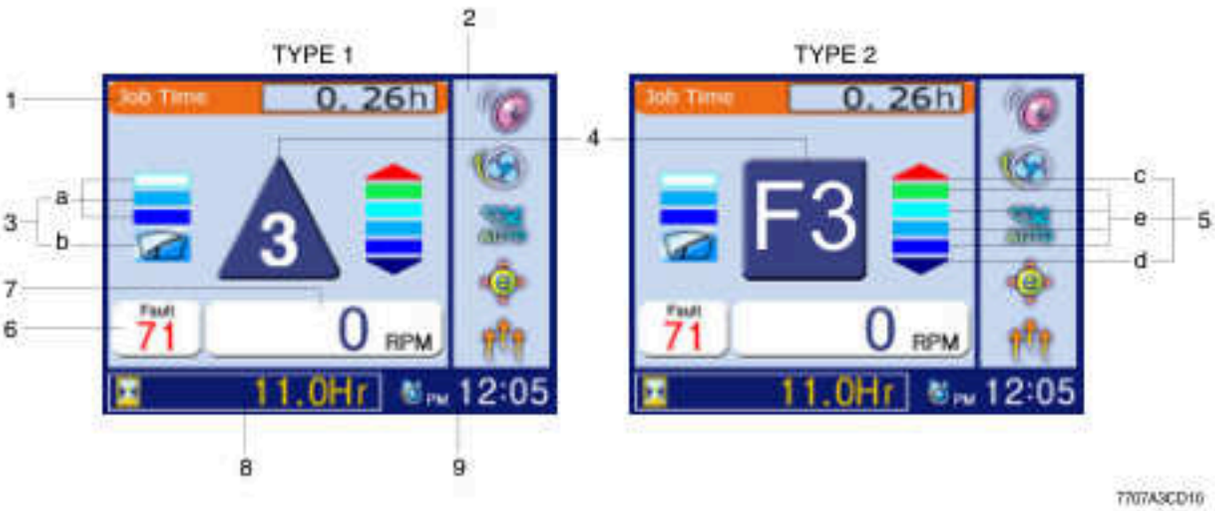
MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-... Order the manual at mid-west-tech.com >

6) LCD



1 LCD
2 ( ) Right, Buzzer stop
Move to the next selection
3 ( ) Select(Enter)
Activate the currently chosen item
4 ( ) Escape
Return to the previous menu
5 ( ) Main, Menu
- Display menu
- Return to the main display

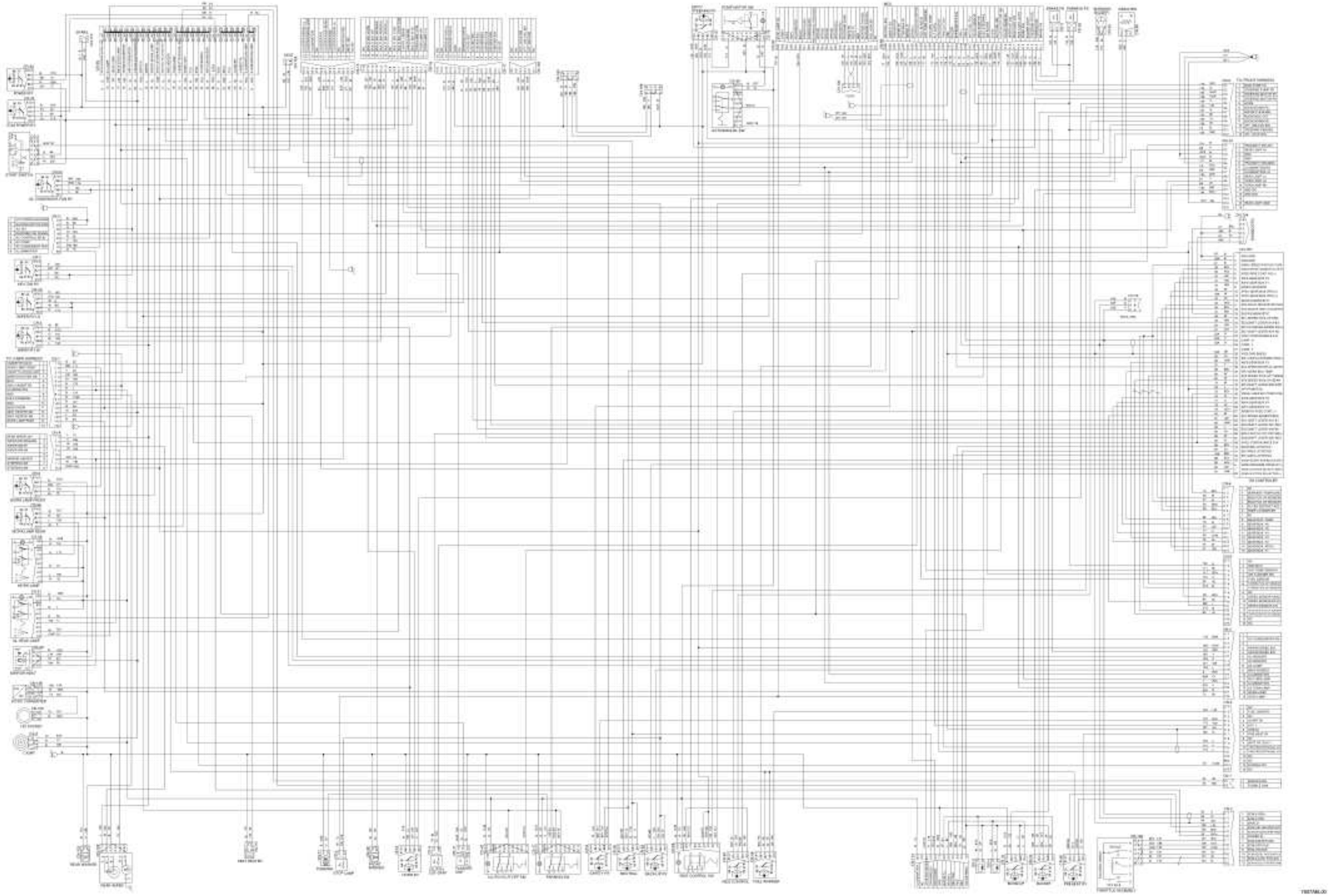
(1) Main display



No	Symbol	Meaning	Remark		
1	Job Time 1.26h	Monitoring information	Job timer, Odometer, Hydraulic temperature, Battery voltage, Coolant temperature, T/M oil temperature.		
2		State information	Buzzer, Fan state, Ride state(option), Steering joystic(option), Warming up		
3	a	Wiper display	When operating intermittently, it shows an operating time interval		
	b		Wiper motor intermittently operating		
4	△·▽·□	Actual gear display	Forward, reverse, neutral	LCD type 1	
	F, R, N		Forward, reverse, neutral	LCD type 2	
	1, 2, 3, 4		Actual gear		
	P		Parking brake mode active		
5	c, d	Select gear display	Up and down shifting	c: Forward, d: Reverse	Automatic mode
	e		Pre-selected gear		
6	71	Fault code display	Fault code state display		
7	0 RPM	Engine rpm display	Now engine rpm state display		
8	11.0Hr	Hour meter display	Hour meter state display		
9	PM 12:05	Timer & alarm display	Now time & alarm state display		

※ Both type1 and type2 are LCD modes and they can be changed each other by operator's selection.
(Adjustment/Display, see page 3-18)

MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-... Order the manual at mid-west-tech.com >



MidWestTech | Hyundai HL760-7A Wheel Loader Service Manual | Publication HL760-7A

Order the manual at mid-west-tech.com >