FORKLIFT

SERVICE MANUAL

35, 40, 45, 50B-7

HYUNDAI

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(5) GEAR PUMP

Item	Unit	Specification
Type	-	Fixed displacement gear pump
Capacity	cc/rev	37
Maximum operating pressure	bar	220
Rated speed(max/min)	rpm	3000/500

(6) MAIN CONTROL VALVE

Item	Unit	Specification
Type	-	2 spool(STD), 3 spool, 4 spool
Operating method	-	Mechanical
Main relief valve pressure	bar	210

(7) DRIVE UNIT

Item	Unit	Specification
Max axle load	kg/lb	6200/13668.7
Max input rpm	rpm	5000
Gear ratio	-	29.0
Weight without fluid	kg/lb	125kg(276lb)/EA
Oil quantity	ℓ /U.S - qt	1.5(1.6)

(8) WHEELS

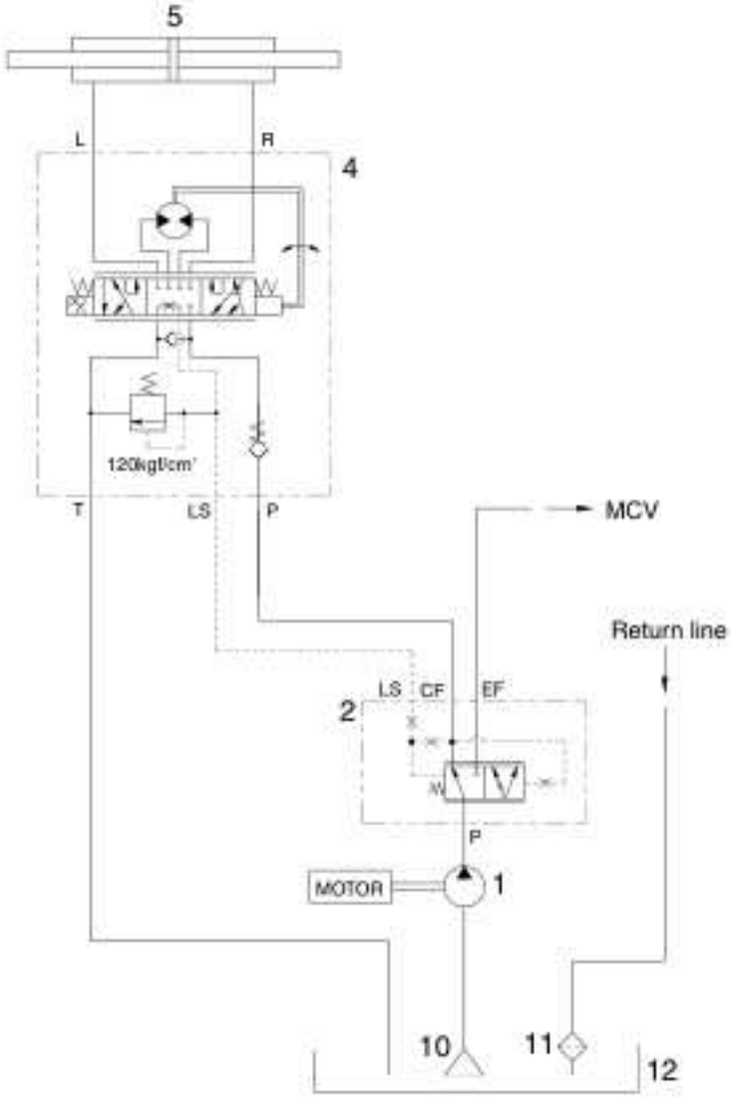
Item		Specification	
Type (front / rear)	Front	Single	Double
		Solid(STD), Pneumatic, Non-marking	Solid, Pneumatic, Non-marking
	Rear	Solid(STD), Pneumatic, Non-marking	
Quantity (front / rear)	Front	2	4
	Rear	2	
Size	Front	250-15(20PR) [50B : 28 × 12.5-15(24PR)]	7.00-15(14PR)
	Rear	21 × 8-9(14PR)	

(9) BRAKES & STEERING

Item		Specification
Brakes	Travel	Front wheel, Hydraulic, wet disc brake
	Parking	Mechanical
Steering	Type	Full hydraulic, power steering

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2. HYDRAULIC CIRCUIT



35B7S502

1	Hydraulic gear pump	10	Suction strainer
2	Priority valve	11	Return filter
4	Steering unit	12	Hydraulic oil tank
5	Steering cylinder		

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⑤ **CAN BUS KO**

Cause:

Graphic Smart Display doesn't receive messages from canbus line or the hour meter synchronization at key-on fails.

Troubleshooting:

A) If this fault code is displayed together with other alarm messages, the fault is probably to be looked for in the Graphic Smart Display can interface, since the display seems to be unable to receive any can message. So it is suggested to check Graphic Smart Display canbus wiring and connection.

B) Otherwise, the fault is in the can interface of other modules present on canbus network.

(2) Graphic Smart Display warnings

① **EEPROM KO**

Cause:

It's due to an HW or SW defect of the non-volatile embedded memory supporting the dashboard parameters. This alarm does not inhibit the machine operations, but the truck will work with the Graphic Display parameters default values.

Troubleshooting:

Try to execute a CLEAR EEPROM operation (refer to console manual).

Switch the key off and on to check the result. If the alarm occurs permanently, it is necessary to replace the logic. If the alarm disappears, the previously stored parameters will have been replaced by the default parameters.

② **MAINTENANCE NEEDED**

Cause:

This is just a warning to call for the time programmed maintenance.

Troubleshooting:

It is just enough to turn the MAINTENANCE DONE option to level ON after the maintenance is executed.

(3) Alarms visualization

When an alarm condition occurs, Graphic Smart Display gives the information showing the initial of module in which the alarm occurred, the alarm code and description.

For example, the information:

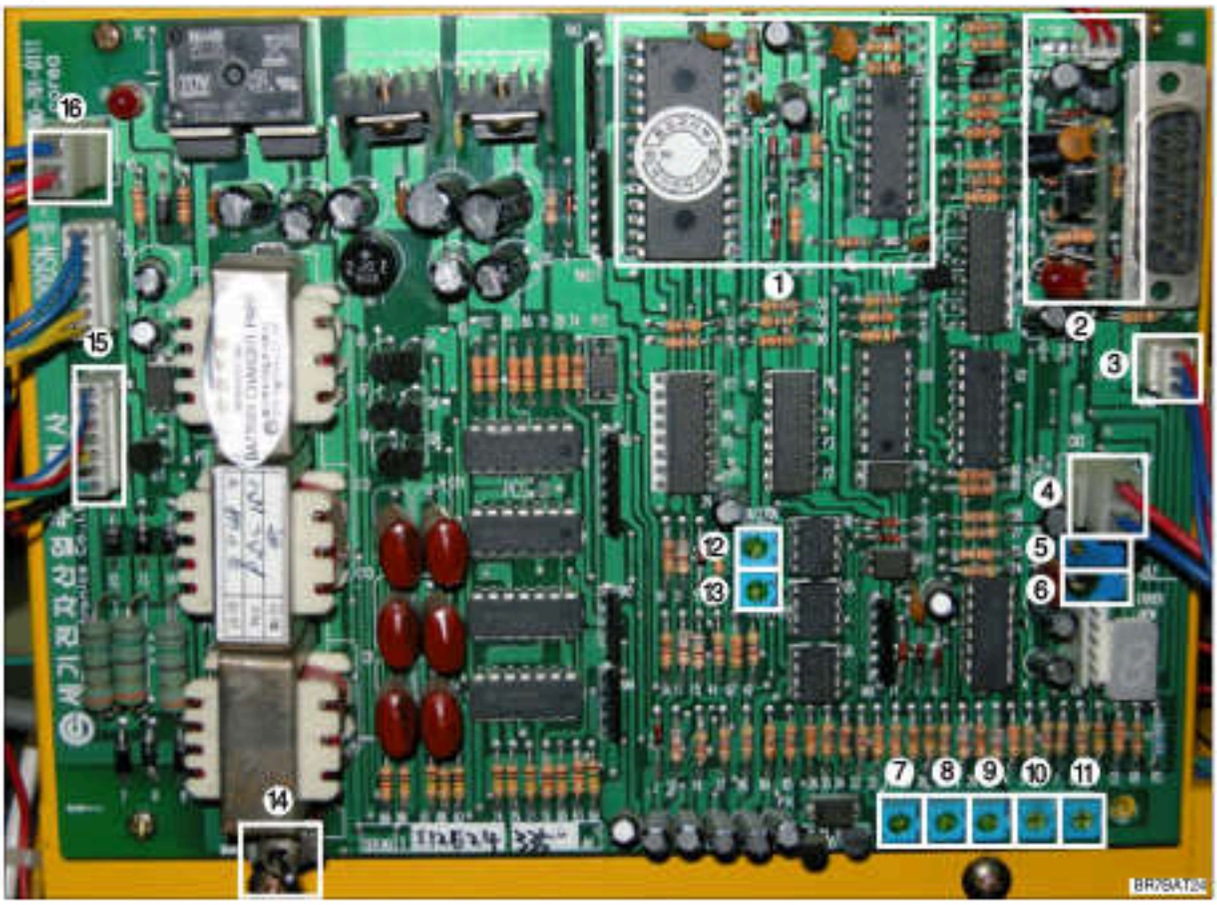
```
M 245:
   WRONG SET BAT
```

means that the alarm 245 - "WRONG SET BATTERY" occurred in the master traction controller (M).

Here the table with the alarm codes and the respective meaning is shown.

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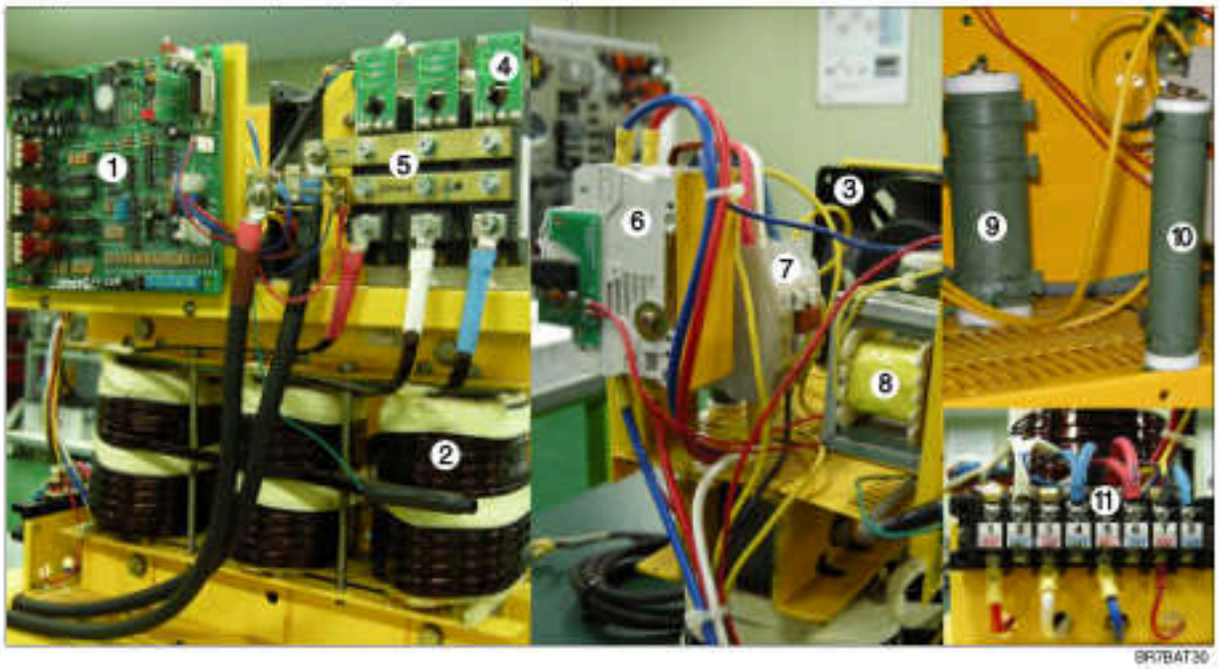
8) PCB MAJOR PARTS NAME AND LOCATION



1	Micro control unit #1	7	Over voltage	13	Set input over current
2	Micro control unit #2	8	Monitor level yellow	14	Auto/manual switch
3	CN6 voltage detect	9	Monitor level green	15	SCR control connector
4	SH current detect	10	Under current	16	CN4 RY contact point
5	Adjust charging current	11	Over current		
6	Adjust charging voltage	12	Set input over voltage		

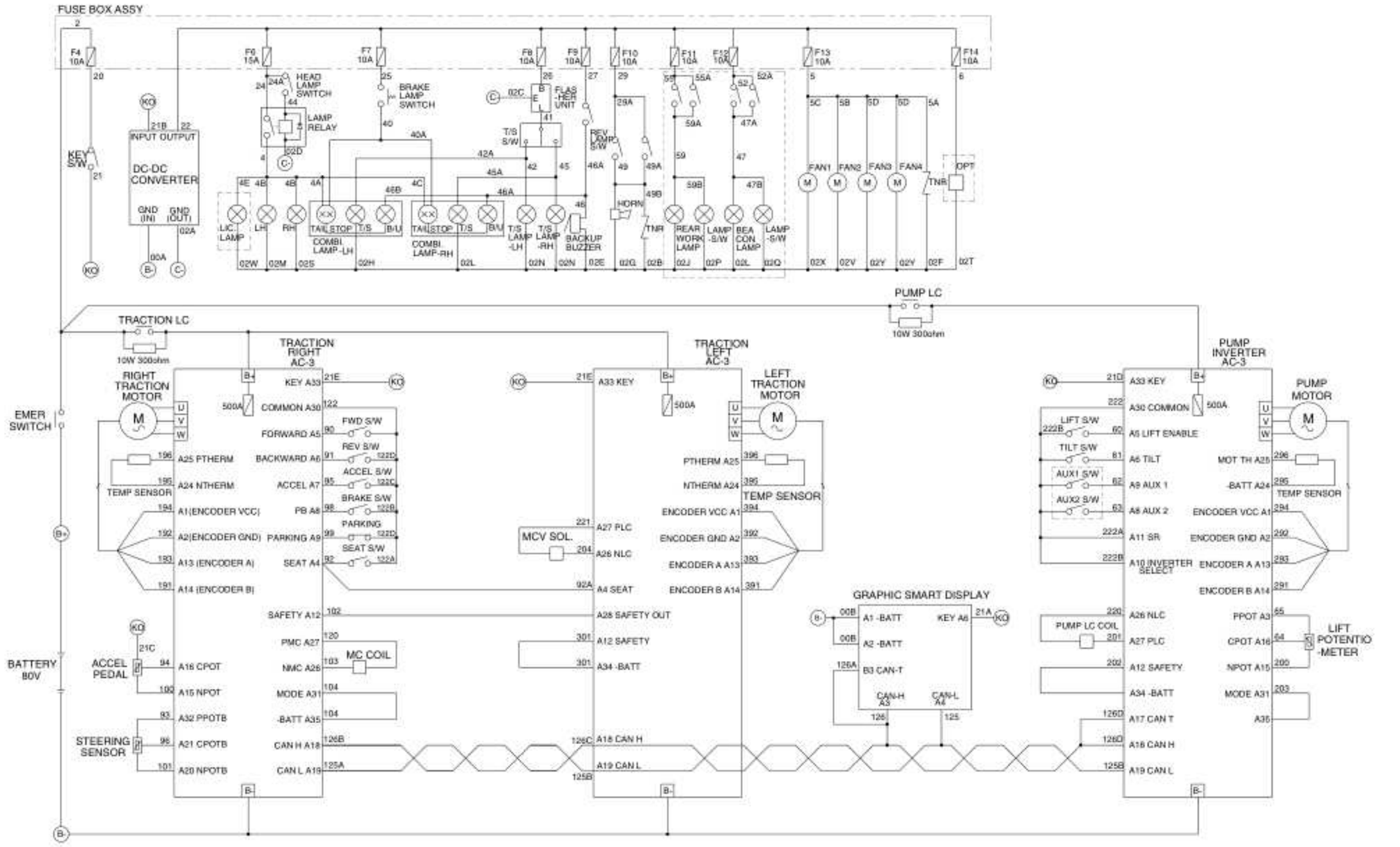
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(3) Names of each part (independent items)



1	Main PCB board	5	Shunt	9	Resistance (RD)
2	Main trans (Class H)	6	NFB	10	Resistance (DR)
3	Cooling fan	7	MG S/W	11	TAP changer
4	SCR module	8	Assistant trans		

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