FORKLIFT

SERVICE MANUAL

80D-7

HYUNDAI

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CONTENTS

SECTION 1 GENERAL

Group 1 Safety hints 1-1
Group 2 Specifications 1-5
Group 3 Periodic replacement 1-13

SECTION 2 REMOVAL AND INSTALLATION OF UNIT

Group 1 Structure 2-1
Group 2 Removal and Installation of Unit 2-2

SECTION 3 POWER TRAIN SYSTEM

Group 1 Structure and operation 3-1
Group 2 Operation and maintenance 3-30
Group 3 Disassembly and assembly 3-67
Group 4 Adjustment 3-139

SECTION 4 BRAKE SYSTEM

Group 1 Structure and function 4-1
Group 2 Operational checks and troubleshooting 4-9
Group 3 Tests and adjustments 4-11

SECTION 5 STEERING SYSTEM

Group 1 Structure and function 5-1
Group 2 Operational checks and troubleshooting 5-11
Group 3 Disassembly and assembly 5-13

SECTION 6 HYDRAULIC SYSTEM

Group 1 Structure and function 6-1
Group 2 Operational checks and troubleshooting 6-15
Group 3 Disassembly and assembly 6-19

SECTION 7 ELECTRICAL SYSTEM

Group 1 Component location 7-1
Group 2 Electrical circuit 7-2
Group 3 Component specification 7-12
Group 4 Connector destination 7-13
Group 5 Troubleshooting 7-15

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SECTION 8 MAST

Group 1 Structure 8-1
Group 2 Operational checks and troubleshooting 8-5
Group 3 Adjustment 8-8
Group 4 Removal and installation 8-10

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(4) Definition of the error codes

① Introduction

The error codes consists of two hexadecimal numbers.

The first number shows the type of signal, the second number shows signal and the type of the error.

② Description of error codes

First No.	Meaning of number
1 hex	Digital input signals
2 hex	Analog input signals
3 hex	Speed signals
4 hex	Speed signals
7 hex	Analog current output signals
8 hex	Analog current output signals
9 hex	Digital output signals
A hex	Digital output signals
B hex	Clutch errors
D hex	Power supply
E hex	High speed signals
F hex	General errors

③ List of error codes

Number	Meaning of error code	
11 hex	Logical error at gear range signal	
12 hex	Logical error at direction select signal	
21 hex	Short circuit to battery voltage at clutch cutoff input	
22 hex	Short circuit to ground or open circuit at clutch cutoff input	
23 hex	Short circuit to battery voltage at load sensor input	not used
24 hex	Short circuit to ground or open circuit at load sensor input	not used
25 hex	Short circuit to battery voltage or open circuit at temperature sensor input	
26 hex	Short circuit to ground at temperature sensor input	
31 hex	Short circuit to battery voltage at engine speed input	
32 hex	Short circuit to ground or open circuit at engine speed input	
33 hex	Logical error at engine speed input	
34 hex	Short circuit to battery voltage at turbine speed input	
35 hex	Short circuit to ground or open circuit at turbine speed input	
36 hex	Logical error at turbine speed input	
37 hex	Short circuit to battery voltage at internal speed input	
38 hex	Short circuit to ground or open circuit at internal speed input	
39 hex	Logical error at internal speed input	

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4. REASSEMBLY OF DRIVE AXLE

Clean all of the parts with cleaner and then remove remained loctite.

※ **Be careful not to spill cleaner on your body.**
Avoid drinking cleaner or breathing its fumes.
Wear protective clothing, glasses and gloves.
If spilled on the skin, flush your skin with water immediately.
If swallowed, get medical attention immediately.
Please observe safety regulations.

- Check wear, damage or crack for all the parts and replace if needed.
- If the teeth of gear are damaged, replace it as a set.
- Replace damaged tapered roller bearing.
- Do not reuse deformed shims or worn thrust washers.
- Rasp off the seal contacted surface.

1) ADJUSTMENT OF BEVEL PINION SHAFT

Adjusting shim of bevel pinion shaft.

(1) Adjust shim thickness and bevel pinion shaft with following method.

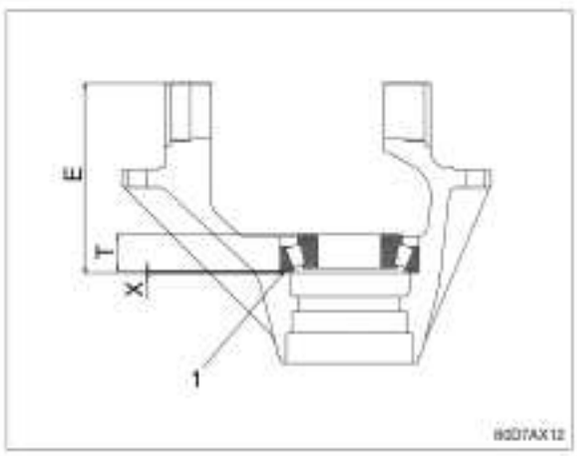
① Measure "**E**" at the housing.

② By the equation " **X = E - B - T ± C** ", define the the shim thickness(1).

B : Mounting dimension of bevel pinion shaft , 133.20mm (5.2 in)

T : Height of bearing.

C: Dimension of carved seal on the pinion. If there's no carved seal **C**=0.

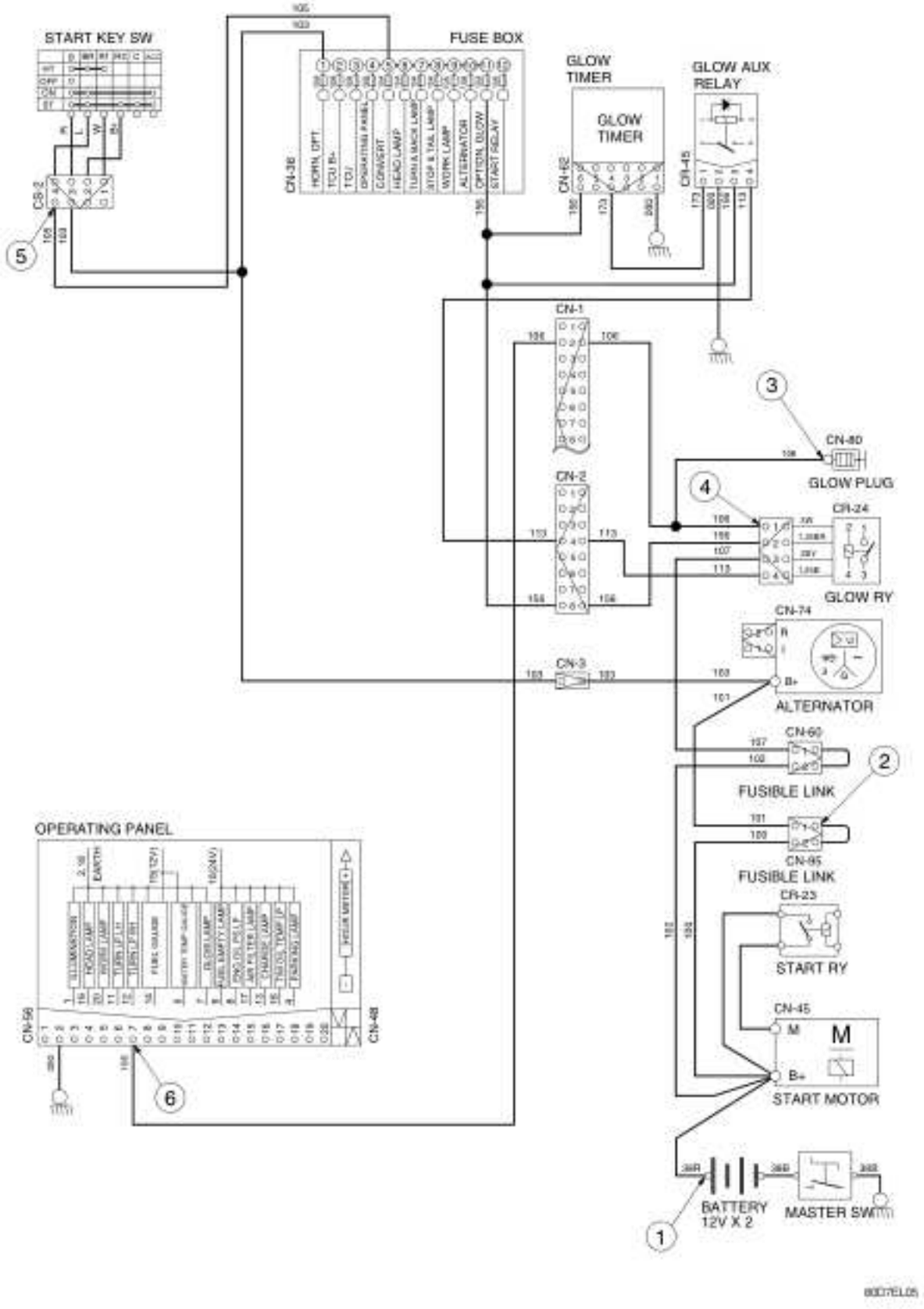


EX) : From the housing
"**E**" = 162.95mm (6.4in)
B is factory dimension
"**B**" = 133.20mm (5.2in)
From the bearing
"**T**" = 29.25mm (1.2in)
Carved seal on the pinion
"**C**"= 0.05mm (0.002in)
Shim thickness :
"**X**" = 162.95 -133.20 - 29.25 + 0.05
= 0.55mm (0.022in)

※ **If teeth are damaged, replace bevel gear and shaft**

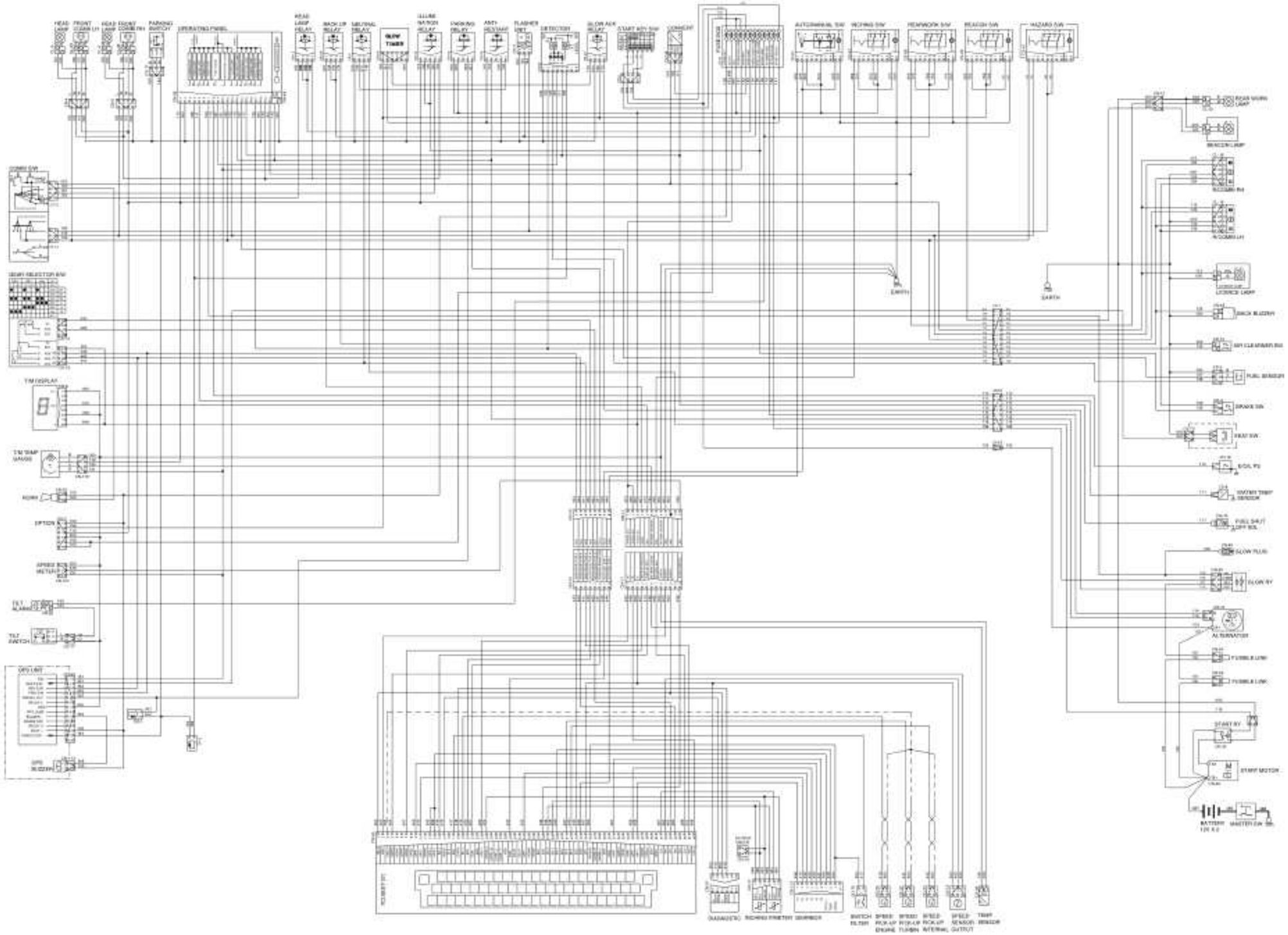
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PREHEATING CIRCUIT



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GROUP 2 ELECTRICAL CIRCUIT



80D7EL01

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