SHOP MANUAL

KOMATSU®

140-3 SERIES DIESEL ENGINE

MidWestTech | Komatsu 140-3 Series Diesel Engine Service Manual | Publication SEBM022213

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CONTENTS

No. of page

01 GENERAL 01-1

11 STRUCTURE AND FUNCTION, MAINTENANCE STANDARD 11-1

12 TESTING AND ADJUSTING 12-1

13 DISASSEMBLY AND ASSEMBLY 13-1

15 REPAIR AND REPLACEMENT OF PARTS 15-1

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Engine	Machine model	Test item	Specification value	Speed (rpm)	Dynamometer load (N {kg})
SDA6D140E-3	D275A-5 D275AX-5	Rated horsepower	332 kW/2,000 rpm (Gross) {446 HP/2,000 rpm} (Gross)	2,000 ± 5	2,150 – 2,290 {219 – 233}
		Max. torque	1,990 Nm/1,400 rpm (Gross) {203 kgm/1,400 rpm} (Gross)	1,400 ± 100	2,700 – 2,860 {275 – 292}
		High idling speed	2,200 ± 50 rpm	2,200 ± 50 rpm	—
		Low idling speed	700 ± 30 rpm	700 ± 30 rpm	—
		Rated horsepower			
		Max. torque			
		High idling speed			
		Low idling speed			
		Rated horsepower			
		Max. torque			
		High idling speed			
		Low idling speed			
		Rated horsepower			
		Max. torque			
		High idling speed			
		Low idling speed			

★ This table shows the standard values using the JIS correction factor

★ The output and torque values in the table are the standard values with the fan removed, so they are different from the specification values.

★ The table shows the standard values with an air cleaner installed, muffler installed, alternator under no load, and air compressor open (when installed).

★ The dynamometer load shows the value for an arm length of 716 mm..

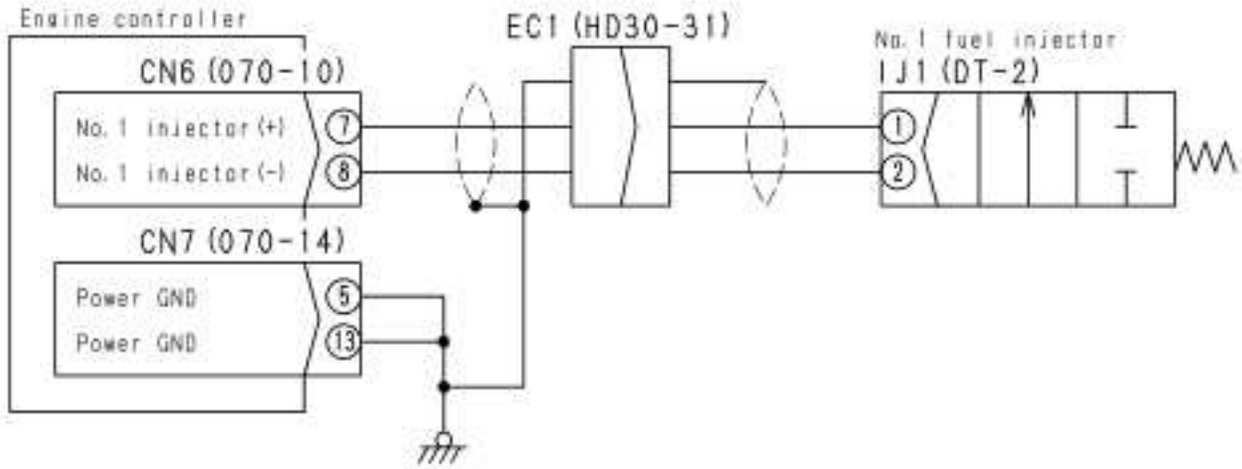
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2. Table of error codes

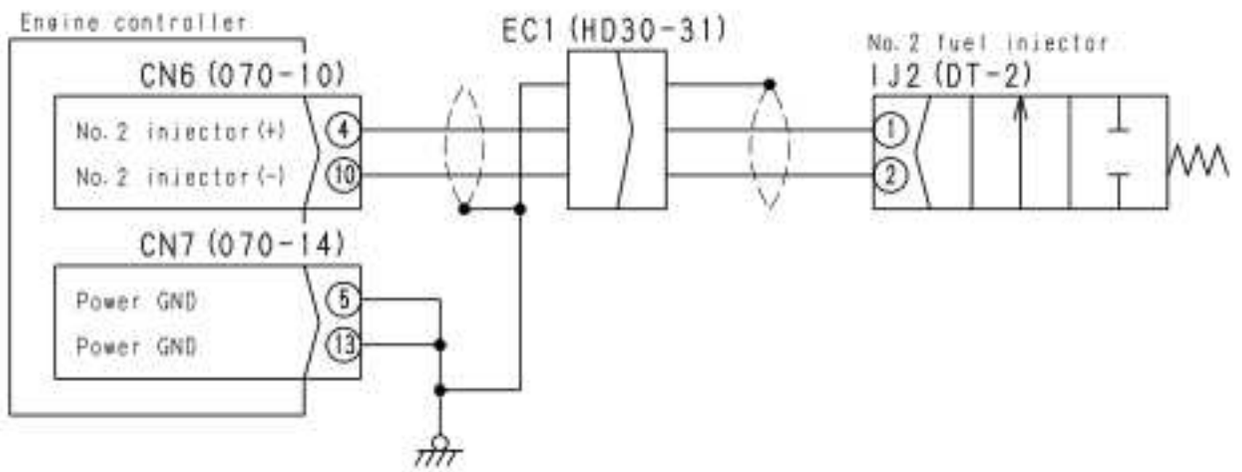
Error code	Nature of abnormality	Operation for re-enaction
E-1b	Abnormality in NE revolution sensor system	Start engine.
E-1C	Abnormality in G revolution sensor system	Start engine.
E-20	Abnormality in model selection system	Turn starting switch ON.
E-22	Overrun	Start engine.
E-23	Overheat	Start engine.
E-24	Drop in oil pressure	Start engine.
E-30	Abnormality in idling validation signal system	Turn starting switch ON.
E-31	Abnormality in throttle sensor system	Turn starting switch ON.
E-34	Abnormality in water temperature high-temperature sensor system	Turn starting switch ON.
E-36	Abnormality in oil pressure switch system	Start engine.
E-3C	Abnormality in boost pressure sensor system	Turn starting switch ON.
E-3d	Abnormality in fuel temperature sensor system	Turn starting switch ON.
E-50	Abnormality in preheat relay contact system	Turn starting switch ON.
E-51	Abnormality preheat relay coil system	Turn starting switch ON.
E-54	Short circuit in starting switch signal C	Turn starting switch OFF.
E-56	Abnormality 1 in power source system	Turn starting switch ON.
E-57	Abnormality 2 in power source system	Turn starting switch OFF.
E-5A	Abnormality fuel injection quantity control switch signal	Turn starting switch ON.
E-6A	Abnormality in water temperature low-temperature sensor system	Turn starting switch ON.
E-70	Excess current in fuel supply pump PCV1 system	Turn starting switch ON.
E-71	Excess current in fuel supply pump PCV2 system	Turn starting switch ON.
E-74	Disconnection in fuel supply pump PCV1 system	Turn starting switch ON.
E-75	Disconnection in fuel supply pump PCV2 system	Turn starting switch ON.
E-77	Abnormality in common rail fuel pressure sensor system	Turn starting switch ON.
E-79	Abnormality 1 in common rail fuel high pressure	Start engine.
E-7A	Abnormality 2 in common rail fuel high pressure	Start engine.
E-7b	Fuel supply pump non-force feed 1	Start engine.
E-7C	Fuel supply pump non-force feed 2	Start engine.
E-7d	Abnormality in common rail fuel pressure	Start engine.
E-80	Defective controller	Turn starting switch ON.
E-81	Disconnection in No. 1 fuel injector system	Turn starting switch ON.
E-82	Disconnection in No. 2 fuel injector system	Turn starting switch ON.
E-83	Disconnection in No. 3 fuel injector system	Turn starting switch ON.
E-84	Disconnection in No. 4 fuel injector system	Turn starting switch ON.
E-85	Disconnection in No. 5 fuel injector system	Turn starting switch ON.
E-86	Disconnection in No. 6 fuel injector system	Turn starting switch ON.
E-8A	Short circuit in No. 1, No. 2, No. 3 fuel injector system	Turn starting switch ON.
E-8b	Short circuit in No. 4, No. 5, No. 6 fuel injector system	Turn starting switch ON.

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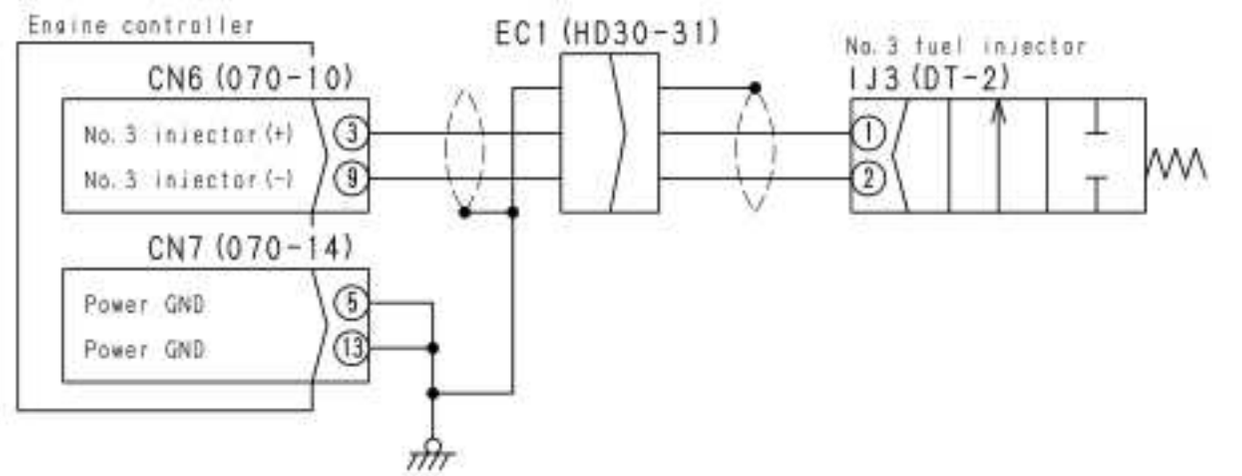
E-35 a), b) Related electrical circuit diagram



E-35 a), c) Related electrical circuit diagram



E-35 a), d) Related electrical circuit diagram



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