CEBM018000

Shop Manual

730E

DUMP TRUCK

SERIAL NUMBERS **A30427 - A30538**

KOMATSU®

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Engine Fault Codes

Table 4: Engine Fault Codes

VHMS Fault Code	VHMS Fault Description	Source	Sent via OrbComm	Snapshot Trigger	Model Notes
C112	Timing Fueling Flow Mismatch	Engine			830E, 930E
C113	Timing Actuator Circuit Shorted	Engine			830E, 930E
C115	Engine Speed and Position Signal Lost	Engine	X	X	All
C116	Timing Rail Pressure Ckt Failed High	Engine			830E, 930E
C117	Timing Rail Pressure Ckt Failed Low	Engine			830E, 930E
C118	Fuel Pump Pressure Ckt Failed High	Engine			830E, 930E
C119	Fuel Pump Pressure Ckt Failed Low	Engine			830E, 930E
C121	One Engine Speed Signal Lost	Engine			All
C122	LB Boost Ckt Failed High	Engine			All
C123	LB Boost Ckt Failed Low	Engine			All
C124	High Boost LB	Engine			All
C125	Low Boost LB	Engine			All
C126	High Boost RB	Engine			All
C127	Low Boost RB	Engine			All
C128	RB Boost Ckt Failed High	Engine			All
C129	RB Boost Ckt Failed Low	Engine			All
C131	Throttle Ckt Failed High	Engine			830E, 930E
C132	Throttle Ckt Failed Low	Engine			All
C133	PTO Circuit Shorted High	Engine			830E, 930E
C134	PTO Circuit Shorted Low	Engine			830E, 930E
C135	Oil Pressure Circuit Failed High	Engine	X	X	All
C136	Pre Filter Oil Press Ckt Failed High	Engine			All
C137	Pre Filter Oil Press Ckt Failed Low	Engine			All
C141	Oil Press Ckt Failed Low	Engine			All
C143	Low Oil Pressure	Engine	X	X	All
C144	Coolant Temp Ckt Failed High	Engine			All
C145	Coolant Temp Ckt Failed Low	Engine			All
C147	Freq Throttle OOR High	Engine			830E, 930E
C151	High Coolant Temperature	Engine	X	X	All
C153	LBF IMT Ckt Failed High	Engine			All
C154	LBF IMT Ckt Failed Low	Engine			All
C155	High IMT LBF	Engine	X	X	All
C156	LBR IMT Ckt Failed High	Engine			All
C157	LBR IMT Ckt Failed Low	Engine			All
C158	High IMT LBR	Engine	X	X	All

Boost - Intake Manifold Pressure

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PUSHER TOOLS

TABLE 1. PUSHER TOOL DIMENSIONS		
Item	**Description**	**Dimension**
A	Plate Bolt Hole Diameter	34.8 mm (1.37 in.)
B	Plate O.D.	453.9 mm (17.87 in.)
C	Bolt Circle Diameter	393.7 mm (15.5 in.)
D	Plate I.D.	50.8 mm (2.00 in.)
E	Plate Thickness	34.8 mm (1.37 in.)
F	Pusher Cylinder Height	114.3 mm (4.50 in.)
G	Pusher Cylinder O.D.	247.7 mm (9.75 in.)
H	Pusher Cylinder I.D.	152.4 mm (6.00 in.)
I	Cylinder Wall Thickness	47.8 mm (1.88 in.)

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FAULT CODE INFORMATION

EVENT NO.	EVENT DESCRIPTION
70	HORSEPOWER LIMIT EXCEEDED
71	ENGINE OVERSPEED EXCEEDED
72	OIL PRESSURE WARNING
73	OIL PRESSURE SHUTDOWN
74	COOLANT PRESSURE WARNING
75	COOLANT PRESSURE SHUTDOWN
76	CRANKCASE OVERPRESSURE
77	COOLANT OVERTEMPREATURE
78	ENGINE SERVICE
79	ENGINE SHUTDOWN
80	ENGINE SPEED RETARD
81	MOTOR 1 VOLTAGE LIMIT EXCEEDED
82	MOTOR 2 VOLTAGE LIMIT EXCEEDED
83	ALTERNATOR FIELD CURRENT LEVEL
84	TROLLEY NOTCHING CONTACTORS
84:01 84:02 84:03 84:04 84:05 84:06 84:07 84:08 84:09	RC1 CONTACTOR RC2 CONTACTOR RC3 CONTACTOR RC4 CONTACTOR RC5 CONTACTOR RC6 CONTACTOR RC7 CONTACTOR RC8 CONTACTOR (FUTURE) RC9 CONTACTOR (FUTURE)
85	TROLLEY LINE CONTACTORS
85:01 85:02	TC1 CONTACTOR TC2 CONTACTOR

EVENT NO.	EVENT DESCRIPTION
86	GIC, GROUND INTERRUPT CONTACTOR
87	DTS CONTACTOR
88	BATTERY VOLTAGE LOW
89	DRIVE OFF TROLLY WIRE
91	BATTERY VOLTAGE HIGH
92	BAD ENGINE SENSOR
93	MOTOR SPEED SENSOR
94	TROLLEY LEAKAGE CURRENT
95	TROLLEY OVERCURRENT
96	TROLLEY GRIP PROTECT
97	MTR DUMP WHILE IN REDUCED TROLLY SPEED
97:01 97:02 97:03	LO SPEED MED SPEED HI SPEED
98	DATA STORE
99	SOFTWARE PROBLEM

(PER INFORMATION PROVIDED BY GENERAL ELECTRIC CO.)

XS0106 DEC 02
ELECTRIC SCHEMATIC
G.E. FAULT CODES
730E
A30212 and UP
6 OF 33

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5. Remove the rotor from the rotor shaft.

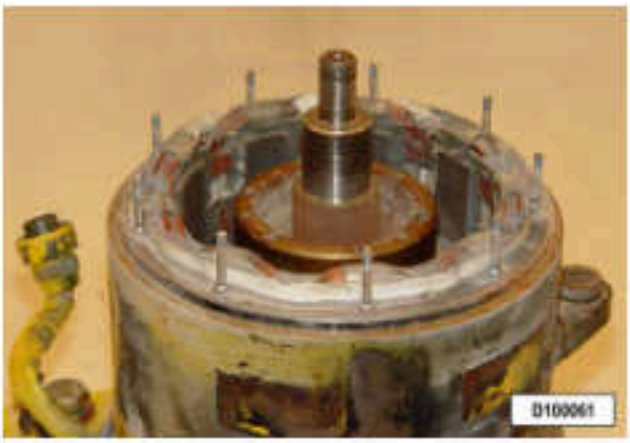


FIGURE 10-50.

Drive End Housing Removal

⚠ IMPORTANT ⚠

Ensure the single mark has been scribed between drive end housing (20) and shell (58). This mark will be used during the assembly process to correctly align the two parts.

1. Position the support stand so the large diameter hole is facing up.

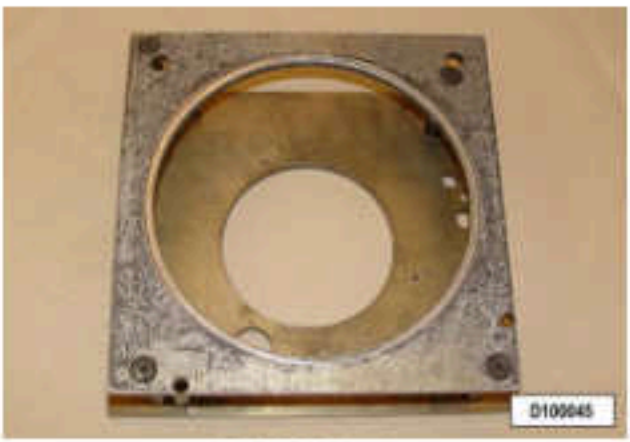


FIGURE 10-51.

2. Place the alternator in the support stand with the drive end facing up.



FIGURE 10-52.

3. Remove cover plate (7) by removing six Torx screws (6) using a number T20 Torx bit.

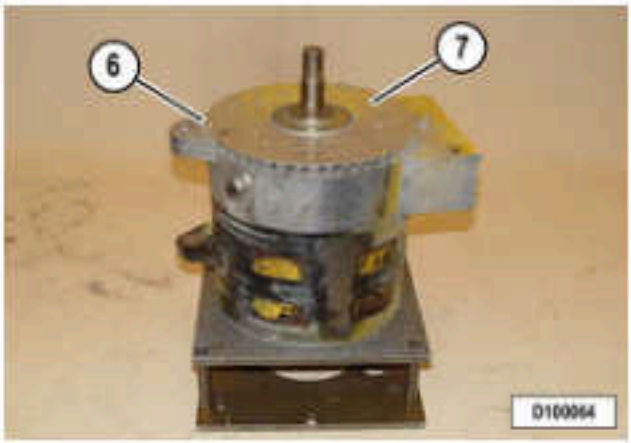
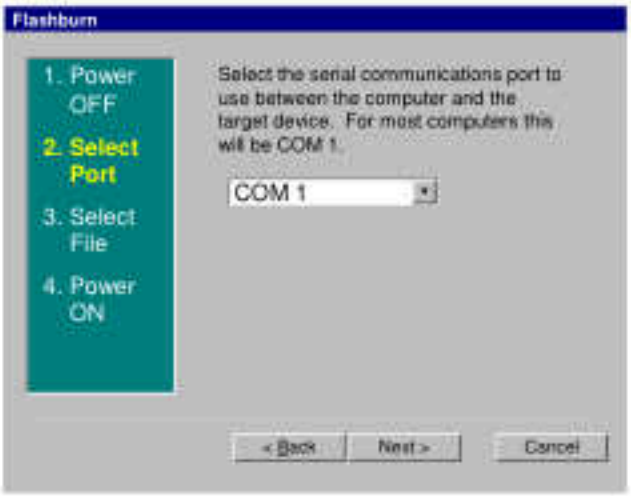


FIGURE 10-53.

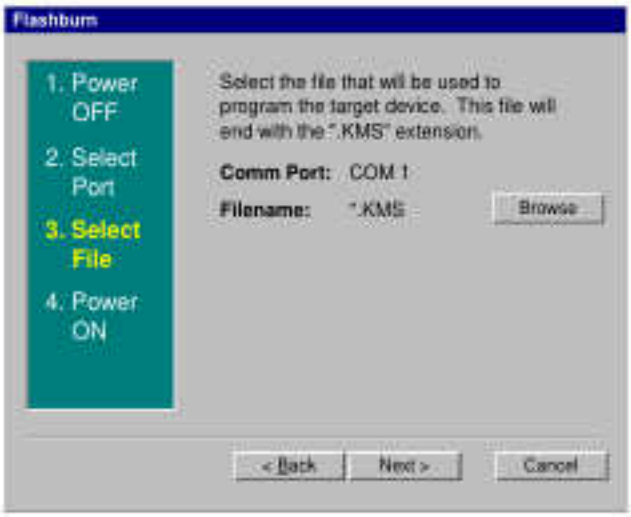
6. Screw 7. Cover Plate

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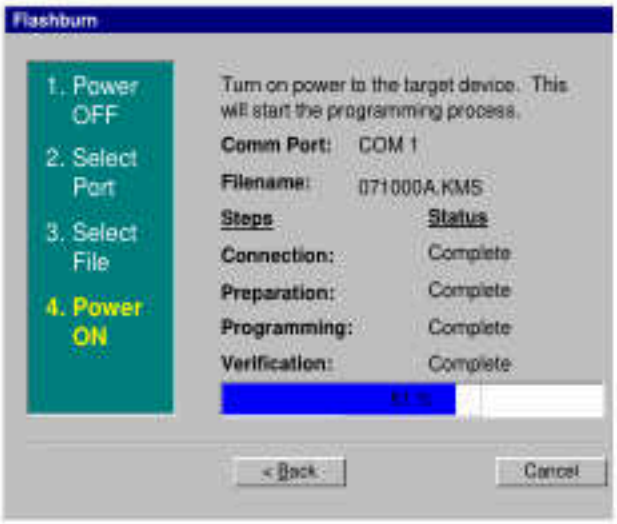
4. Confirm the proper communications port for the programming laptop. This is usually COM 1. Press "NEXT".



5. Press "BROWSE" and select the .kms file to program into the payload meter. Press "NEXT".

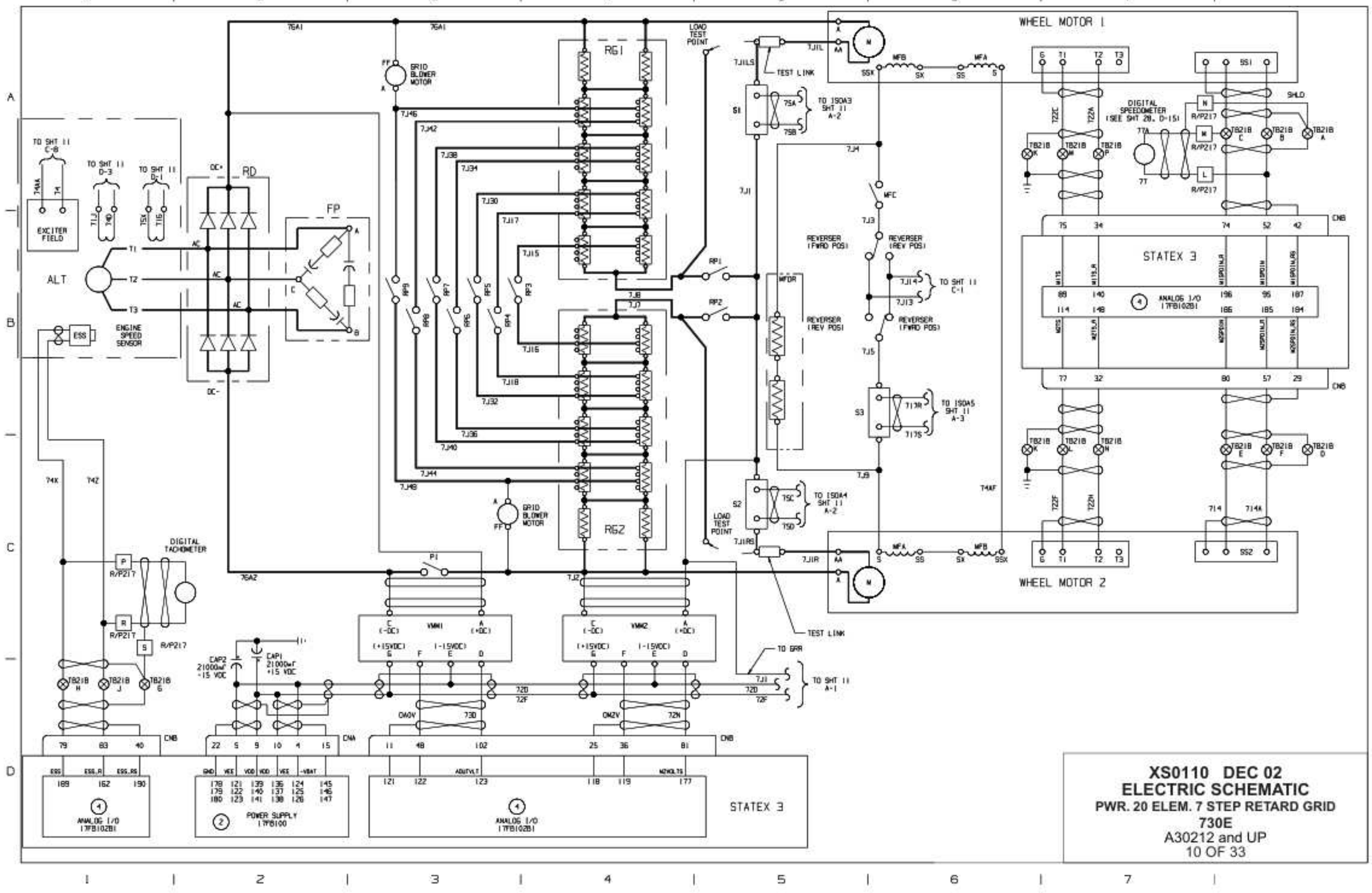


6. When instructed, turn the key switch on in order to power-up the payload meter. The PC will begin to reprogram the payload meter. This process takes approximately five minutes.



7. After successful programming, turn the key switch off.
8. Wait 20 seconds and turn the key switch on.
9. The payload meter will need to be configured as instructed in the manual using the Payload Data Manager software on the laptop computer.

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