CEBM016301

Shop Manual

730E Trolley

DUMP TRUCK

SERIAL NUMBERS

A30355, A30392, A30393, A30403 & A30406

KOMATSU®

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STRUCTURAL COMPONENTS

The Komatsu 730E deck components are removable in sections, as shown in Figure 2-1. The following removal and installation instructions detail the major component removal procedures required before the decks and hood can be removed. It is important to tag and visually verify all cables, harnesses, hoses, etc. have been removed before the structure is lifted off the truck.

Prior to repair and removal of the decks, depressurize the hydraulic system and disconnect battery power. Cap all hoses and fittings during removal to prevent contamination.

⚠WARNING

The anti-slip material on the decks must be inspected and maintained for the safety of all personnel.

For cab removal instructions, refer to Section N of this manual.

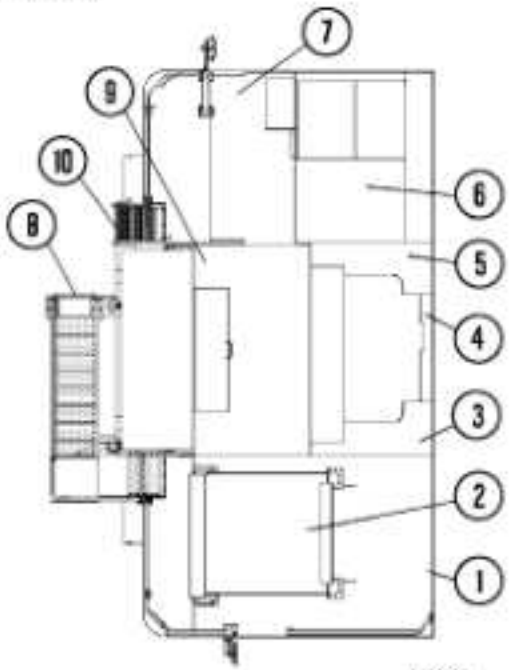


FIGURE 2-1. DECK COMPONENTS

1. LH Deck
2. Cab
3. LH Rear Center Deck
4. Rear Center Deck
5. RH Rear Center Deck
6. Retarding Grids
7. RH Deck
8. Diagonal Ladder
9. Center Deck
10. Vertical Ladder

LADDERS

Diagonal ladder (8, Figure 2-1) provides an easy and safe path for the operator to mount and dismount the truck. In addition, vertical ladder (10) is also available. Anti-skid material is placed at various places on the decks and ladder platform area. Ensure this material is in good condition and replace when worn.

The diagonal ladder must be removed from the truck if radiator or power module removal is necessary.

When removing the ladder(s), ensure all attached wiring and hoses have been removed.

Removal

1. Remove the handrails attached to the diagonal ladder handrail and the platform.
2. Disconnect the ladder light wiring and any other wiring harnesses, hoses, etc. that may be attached.
3. Attach appropriate lifting apparatus to ladder (8). The weight of the ladder is approximately 160 kg.
4. Remove all the attaching hardware, and lift the diagonal ladder from the mounts.
5. If vertical ladder removal is necessary, attach a lifting device to ladder (10). The weight of the ladder is approximately 70 kg.
6. Remove the mounting hardware, and lift the ladder off the truck.

Installation

Repeat the above steps in reverse order for the installation of the components. Tighten all the attaching hardware to standard torque values listed in Section A.

Reinstall all wiring and hoses removed and ensure all clamps are installed and secure.

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OILING AND CHARGING PROCEDURE

GENERAL

These procedures cover the oiling and charging of Hydrair®II suspensions on Komatsu 730E dump trucks.

Suspensions, which have been properly charged, will provide improved handling and ride characteristics while also extending the fatigue life of the truck frame and improving tire wear.

NOTE: Inflation pressures and exposed piston lengths are calculated for a normal truck gross vehicle weight (GVW). Additions to truck weight by adding body liners, tailgates, water tanks, etc. will be considered part of the payload. Keeping the truck GVW within the specification, shown on the Grade/ Speed Retard chart in the operator cab, will extend the service life of the truck main frame and allow the Hydrair®II suspensions to produce a comfortable ride.

⚠WARNING

All Hydrair®II suspensions are charged with compressed nitrogen gas with sufficient pressure to cause injury and/or damage if improperly handled. Follow all safety instructions, cautions, and warnings provided in the following procedures to prevent any accidents during oiling and charging.

Proper charging of Hydrair®II suspensions requires that three basic conditions be established in the following order:

1. The oil level must be correct.
2. The suspension piston rod extension for nitrogen charging must be correct.
3. The nitrogen charge pressure must be correct.

For best results, charge Hydrair® II suspensions in pairs (fronts together and rears together). If rears are to be charged, the fronts must be charged first.

NOTE: For longer life of the suspension components, a friction modifier must be added to the suspension oil. See Specifications chart, Figure 4-6, at the end of this chapter.

NOTE: Set up dimensions specified in the charts must be maintained during oiling and charging procedures. However, after the truck has been operated, these dimensions may vary.

EQUIPMENT LIST

- Hydrair® Charging Kit
- Jacks and/or Overhead Crane
- Support Blocks for:

  Oiling Height Dimensions (Front and Rear)

  Charging Height Dimensions (Front Only)
- Hydrair® Oil (See Specifications Chart)
- Friction Modifier (See Specifications Chart)
- Dry Nitrogen (See Specifications Chart)

Hydrair® Charging Kit

Assemble service kit, as shown in Figure 4-1, and attach to container of pure dry nitrogen gas (8).

Installation of Charging Kit

1. Remove protective covers and charging valve caps from suspensions to be charged.
2. Turn T handle valve (1, Figure 4-1) of charging valve adapters (2) completely counterclockwise.
3. Ensure manifold outlet valves (3) and inlet valve (4) are closed (turned completely clockwise).

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WIRE NUMBERS AND SHEET LOCATIONS

A01Z	16
0	13,14,17,21 23,24,25,27 28,29,30
0AM	12
0AMB	8,9
0A0V	8
0AFA	10
0ATA	10
0BV	11
0DPZ	11
0LEV	22
0M1A	10
0M2V	8
0M2Y	10
0MPH	27
0S2	11
0S3	11
0S4	11
0TA	10
0TM	10
1	7,28
10V	21,22
11	7,10,18,24 27,28
11A	7,13,24
11B	28
11B1	7,16,28
11B2	7,16
11B4	7,16
11B5	16
11B6	7,16
11BT	16
11DL	7,24
11D	7,24
11DL	7,24
11DR	7,24
11F	7
11H	24,29,30
11HL	7,24
11HR	7,24
11HS	24
11L	7,24
11PT	28
11R	15
11RB	24
11S	7,15,16,28
11T	7,24
11TD	15
11X	24
11Z	7
12F	14,15,23,25
12FD	13,14,15,23, 25,26
12FD1	25
12FD2	25
12GE	7,16
12H	7,25
12M	7,14,15,22 24,28,29,30
12MD	14,15,17,19 21,23,28
12MD1	19
12MD2	19
12MD3	19
12MD4	19
12MD5	19
12MD6	19
12MD7	19
12T	24,29,30
12V	25,28
12VDC	25
1852	11
1853	11
1854	11
21	7,28
21A	28
21C	28
21PB	28
21PS	28
21PSW	28
21PT	28
21S	7,28
22C	25
23F	7,28
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23L1	15
25A	28
25B	28
28E	16
2DDA	11
2DDB	11
2DDC	11
2DDD	11
2DDE	11
2DDF	11
2DDG	11
2DDH	11
2DDL	11
2DDW	11
2DP1	11
2DP2	11
2DP3	11
2DP4	11
2DP5	11
31A	23
31CB	26
31MT	28
31MTR	28
31PC	12
31PD	12
31PE	12
31PF	12
31PG	12
31PH	12
31PJ	12
31PK	12
31PL	12
31PS	16
31R	21
31RR	21
31TA	12
31TB	12
31TC	12
31TS	16
32B	25
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33	23
33A	23
33F	23
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33J	23,24
33K	23
33L	23
33MR	21
33RS	21
33T	23
33Z	23
34L	25
34LL	25
34T	25
34TL	25
35L2	27
35L3	27
35L4	27
35L5	27
35L7	27
35L8	27
35L9	27
36	24
38	23
38B	16
39	25
39A	27
39AA	27
39B	27
39BA	27
39C	27
39CA	27
39D	27
39E	27
39F	27
39FA	27
39FB	27
39FC	27
39FD	27
39FE	27
39FG	27
41S	28
41S1	28
41SM	28
41H	24,29,30
41HL	24
41HR	24
41L	24,29,30
41LL	24
41LR	24
41LS	7
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44BV	11
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44D	17
44DL	17
44DR	17
44L	23
44R	23
45L	22,24,29,30
45LL	24
45R	22,24,29,30
45RL	24
47	21
47B	7,21
47L	21
47S	21
48	24
48A	24
48B	24
48F	24
49	14,26
509	28
509MA	28
510E	17
51A	23
525	22
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528A	28
52A	23
52B	23
52C	21
52CS	21
52R	22
53H	23
556	28
61	28
63	29
63H	29
63HI	29
63L	23,29
63L1	29
63L2	29
63P	29
63T1	29
63W	29
65C	25
65T	25
66	25,29,30
66L	25,30
66L1	30
66L2	30
66P	25,30
66S	25,30
66S1	30
66T1	30
67L	16
67M	16
67S	16
677	16
68	7,13
68A	7,13
68D	13
68LLP	13
68LLP1	13
68P	13
68SR	13
68T	13
68TL	13
69M	16
71	7,11,13,17 18,19,20,21 22,23
710	9,10,11,12 13,15,16,17 18,19,20,21 22,23,24,25 26,28
710C	28
711A	10
711B	10
71Z	7,13,15,16 21,22,23,25 28,29,30
712A	7,13,23
712BL	23
712D	7,16
712H	7,13,23
712L	22
712R	7,16
712S	7,21,23,28
712SI	27
712W	7,25,29,30
713H	9
714	9
714A	9
715S	9
715H	9
715J	9
716A	10
716B	10
716C	10
716D	10
716E	10
716F	10
716H	10
716J	10
717E	10
717F	10
717G	10,17
717H	10,17
717R	8,10
717S	8,10
719A	20
719AS	20
719AT	20
719AV	20
719AW	20
719AX	20
719B	20
719BB	20
719CS	20
719D	20
719DP	19
719DS	20
719ES	20
719FS	20
719M	20
719P	20
719SB	19
719T	20
71D	10
71E	10
71F	18
71G	8,10
71H	21
71HT	7,21
71J	10
71K	10
72	21
72AM	8,9,12
72D	8,9,10
72F	8,9,10
72FF	17
72G	18
72H	17
72J	18
72L	17
72LL	17
72N	8
72P	10
72PP	18
72R	10
72RB	20
72RBS	20
72RC	20
72RCS	20
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72TA	10
72TM	10
72V	10
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72X	10
72Y	10
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721AS	20
721B	19
721BB	20
721C	19
721CS	20
721D	19
721DS	20
721E	19
721ES	20
721F	19
721FS	20
721G	19
721GS	20
721H	19
721HA	20
721J	19
721JA	20
721K	19
721KA	20
721L	19
721LA	20
722A	9
722C	9
722F	9
722H	9
722L	25
725J	19,20
725K	20
725L	20
73A	17
73C	18
73DS	18
73D	8
73E	18
73J	18
73L	18
73LL	21
73LS	21
73LSL	27
73MSL	27
73DSL	27
73R	17
735	23
73V	13
73VR	13
73W	20
73Y	10
73Z	10
74	8,10
74A	10
74AA	8,10
74B	10
74C	7,10
74D	8,10
74E	10
74F	10
746	18
74GS	17
74H	18
74HS	17
74N	22
74PU	20
74X	8
74XA	21
74XB	21
74XC	21
74XD	21
74Z	8
74ZA	17
74ZD	20
75A	8,10
75A1	18
75B	8,10
75C	8,10
75D	8,10
75X	8,10
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76L	22
76M	22
76MM	22
76N	18
76R	18
76RS	17
76S	18
76SS	17
76T	18
76TS	17
76W	18
76WS	17
76X	18
76XS	17
76Y	18
76YS	17
762	18
76ZS	17
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77A	9,27
73E	27
73F	27
78BA	19
78CA	19
78MP	27
78Z	19
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79A	7,21
79B	21
79C	10
79D	10
79E	19
79ES	20
79G	9
79H	9,10
79J	10
79M	20
79V	25
79VD	25
79VG	25
79VS	25
7GA1	8,9
7GA2	8
7JJ	8,10
7JJL	8
7JJLS	8
7JJR	8
7JJRS	8
7JQ	8,9
7JQ	8
7JQ30	8,9
7JQ32	8
7JQ	8
7JQ46	8
7JS	8
7JT	8
7JU	8
7JV	8
7JV13	8,10
7JV14	8,10
7JV15	8
7JV16	8
7JV17	8
7JV18	8
7RC4	8
7RCS	8,9
7RC6	8
7SI	8
7SSI	8
7SXI	8
7SSXI	8
7S2	8
7SS2	8
7SX2	8
7SSX2	8
7TRI	8
7TR2	8
7TR3A	8
7TR5	8
7TRI0	8
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900	28
901	28
90CAD	26
90CA5	26
90CAR	26
90CBD	26
90CBG	26
90CBR	26
91EM	28
920	28
921	28
922	28
923	28
924	28
925	28
926	28
927	28
928	28
929	28
9396	27
9396B	27
939Y	27
939YB	27
952M	28
953	28
954	28
9HLD	22,27,28
9HLD1	27
9HLD2	27
9HLD3	27
9HLD4	27
9HLD5	27
9HLD6	27
9HLD7A	27
9HLD8B	27
9P1-2	15
9P4	15
9P6	15
9PR1-2	14
9PR20-23	15
9PR30-33	15
9PR40-47	7,15
9PR54-55	15
9PR57-59	15
9PR60-63	14
9P5D1	15
9P7D1	15
T1	8
T2	8
T3	8

ABBREVIATIONS

A	- AMPERE
ACCL	- ACCELERATOR
ACCUMR	- ACCUMULATOR
AID	- ALARM [INDICATING] DEVICE
A/C	- AIR CONDITIONER
ALT	- ALTERNATOR
ANNUN	- ANNUNCIATOR
AUX	- AUXILIARY
BAT	- BATTERY
BL	- BLEED
BLWR	- BLOWER
BR	- BRAKE
BKR	- BREAKER
BUZ	- BUZZER
CKT/BKR	- CIRCUIT BREAKER
CK	- CHECK
CKT	- CIRCUIT
CLEAR	- CLEARANCE
CLR	- COOLER
CNTRL	- CONTROL
COMP	- COMPARTMENT
CONNR	- CONNECTOR
DET	- DETECTOR
DIAGN	- DIAGNOSTIC
DIFF	- DIFFERENTIAL
DIG	- DIGITAL
DN	- DOWN
DTSV	- DIESEL TROLLEY SWITCH
DYN	- DYNAMIC
ECM	- ENGINE CONTROL MONITOR
ELECL	- ELECTRICAL
EMER	- EMERGENCY
ENG	- ENGINE
EQ	- EQUALIZER
EXC	- EXCITER
EXTRNL	- EXTERNAL
FIL	- FILTER
FRWD	- FORWARD
GA	- GAUGE
GEN	- GENERATOR
GRND	- GROUND
HSNG	- HOUSING
HTR	- HEATER
HVTB	- HI VOLTAGE TERMINAL BOARD
HYD	- HYDRAULIC
INDCTG	- INDICATING
INLCK	- INTERLOCK
JCT	- JUNCTION
L.H.	- LEFT HAND
LEV	- LEVEL
LK	- LEAK
LOCAT	- LOCATION
LT	- LIGHT
MTR	- MOTOR
MAN	- MANUAL
MFA	- MOTOR FIELD 'A'
MFB	- MOTOR FIELD 'B'
MODL	- MODULE
MON	- MONITOR
MTD	- MOUNTED
NO	- NUMBER
PLG	- PLUG
PNL	- PANEL
POS	- POSITION
PRESS	- PRESSURE
PROP	- PROPULSION
RECPCL	- RECEPTACLE
RAD	- RADIATOR
RD	- ROAD
RES	- RESISTOR
RETD	- RETARD
REV	- REVERSE
R.H.	- RIGHT HAND
REL	- RELAY
SEC	- SECOND, SECONDARY
SLCTR	- SELECTOR
SNDR	- SENDER
SIG	- SIGNAL
SOLEN	- SOLENOID
SERV	- SERVICE
SS1	- SPEED SENSOR 1
SS2	- SPEED SENSOR 2
STRG	- STEERING
SW	- SWITCH
SYS	- SYSTEM
TACH	- TACHOMETER
TB	- TERMINAL BOARD
TEMP	- TEMPERATURE
THERMO	- THERMOSTAT
THROT	- THROTTLE
TRANSF	- TRANSFORMER
VLV	- VALVE
WRNG	- WARNING
WT	- WEIGHT

XS1002-2 DEC 04
ELECTRICAL SCHEMATIC
CIRCUIT NUMBER LOCATION
730E TROLLEY
A30225 & UP
2 OF 32

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5. Remove the rotor from the rotor shaft.

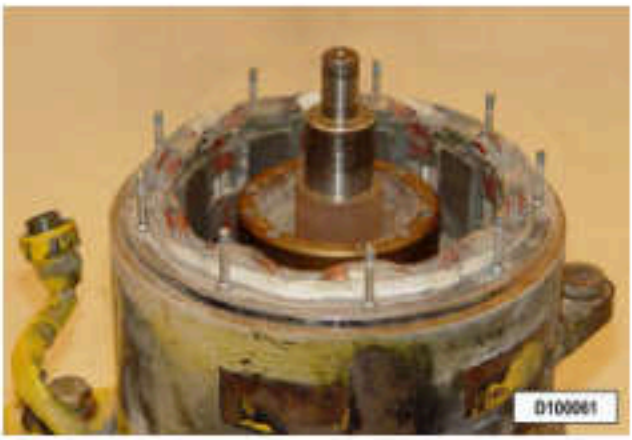


FIGURE 10-50.

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.

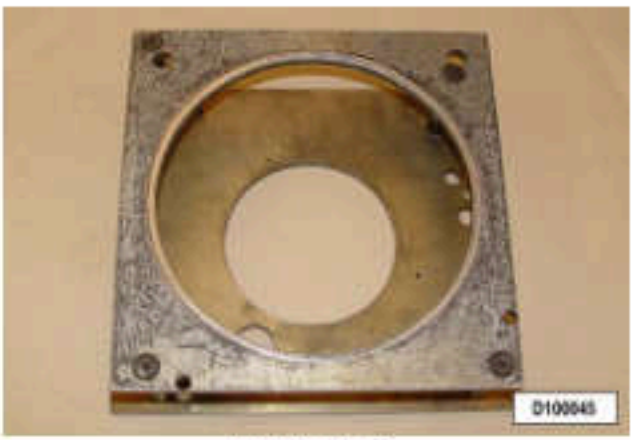


FIGURE 10-51.

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.

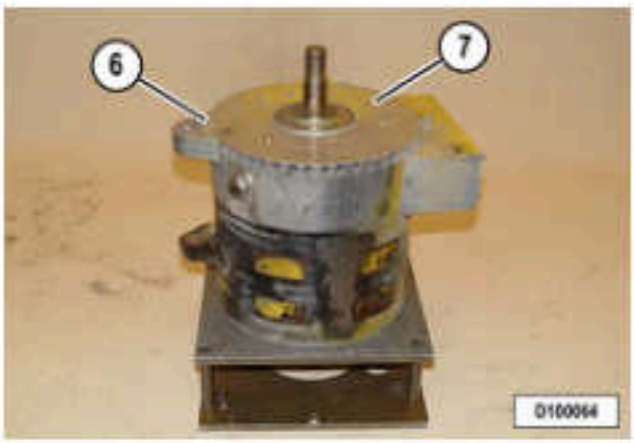
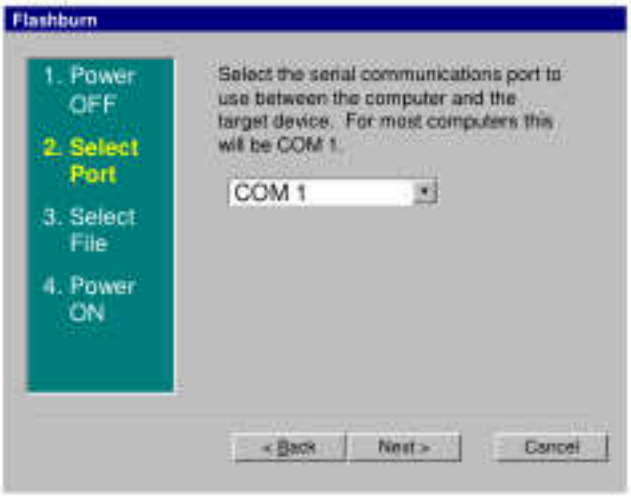


FIGURE 10-53.

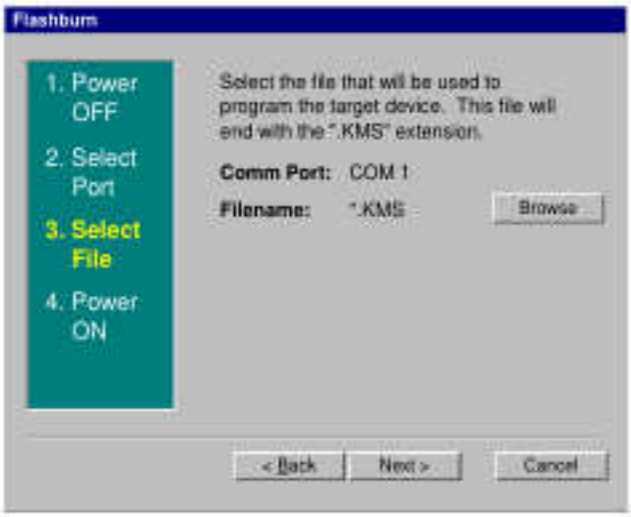
6. Screw 7. Cover Plate

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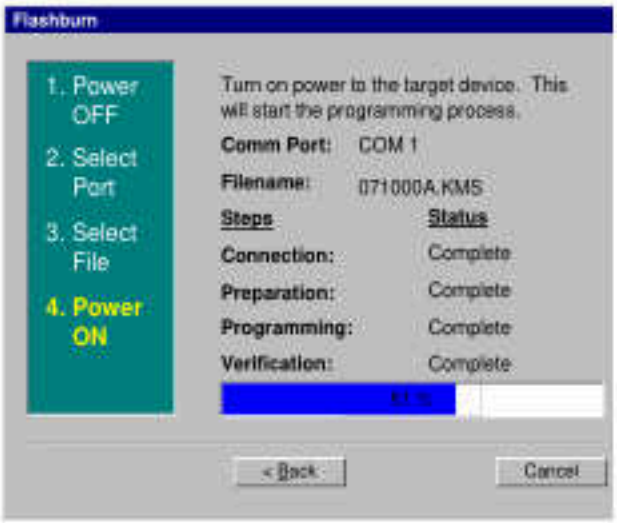
4. Confirm the proper communications port for the programming laptop. This is usually COM 1. Press "NEXT".



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

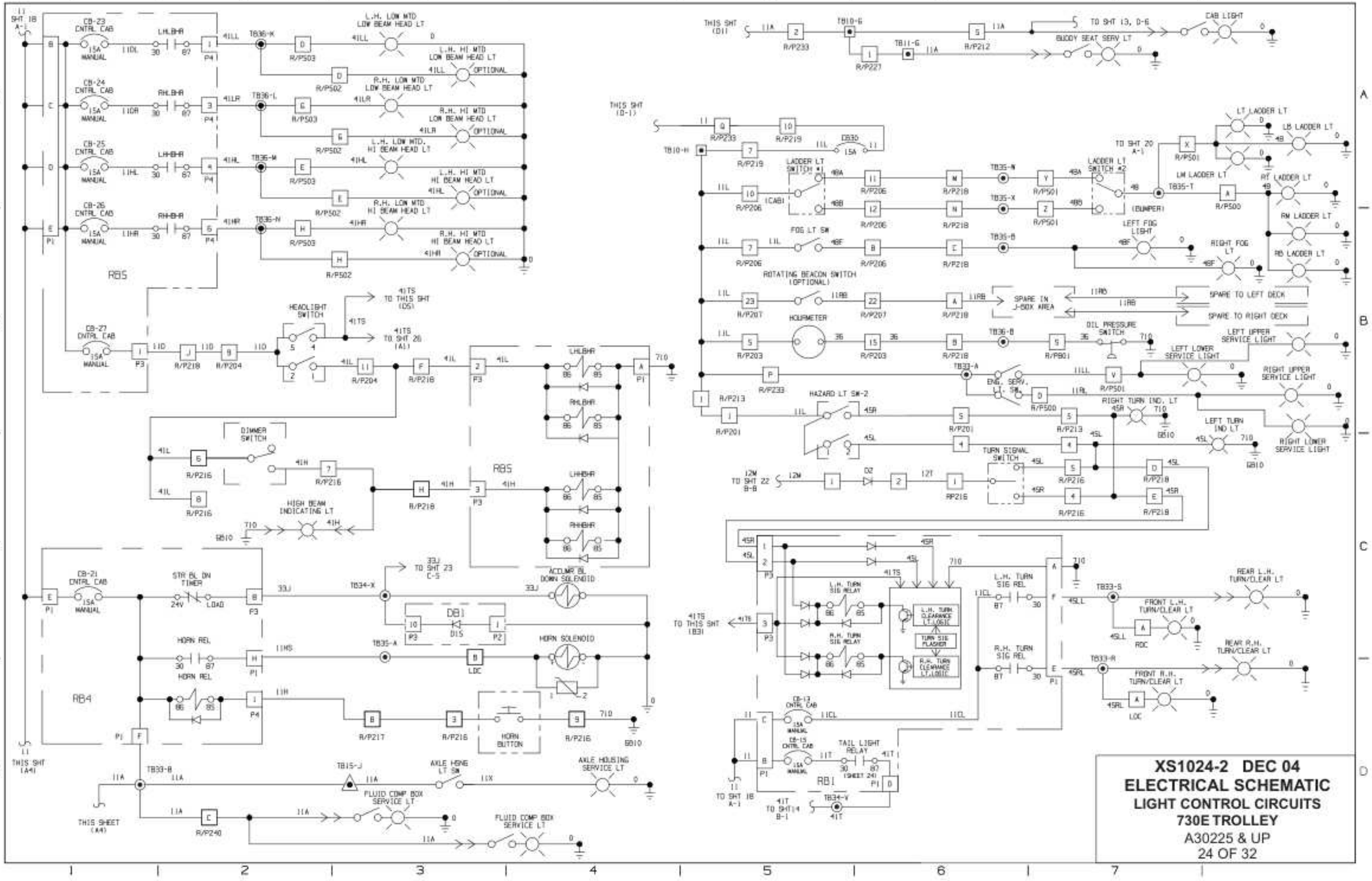


6. When instructed, turn the key switch ON in order to power-up the payload meter. The PC will begin to reprogram the payload meter. This process takes approximately 5 minutes.



7. After successful programming, turn the key witch 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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