CEBM014501

Shop Manual

930E-3

DUMP TRUCK

SERIAL NUMBERS **A30329 - A30363**

KOMATSU®

MidWestTech | Komatsu 930E- 3 Dump Truck Service Manual | Publication CEBM014501

Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

SUBJECT	SECTION
GENERAL INFORMATION	A
STRUCTURES	B
ENGINE SYSTEMS	C
ELECTRIC SYSTEM (24 VDC. NON-PROPULSION)	D
ELECTRIC PROPULSION AND CONTROL	E
DRIVE AXLE, SPINDLES AND WHEELS	G
HYDRAIR® II SUSPENSIONS	H
BRAKE CIRCUIT	J
HYDRAULIC SYSTEM	L
OPTIONS AND SPECIAL TOOLS	M
OPERATOR'S CAB	N
LUBRICATION AND SERVICE	P
ALPHABETICAL INDEX	Q
SYSTEM SCHEMATICS	R

MidWestTech | Komatsu 930E- 3 Dump Truck Service Manual | Publication CEBM014501 Order the manual at mid-west-tech.com >

SECTION A

GENERAL INFORMATION

INDEX

MAJOR COMPONENTS & SPECIFICATIONS A2-1

GENERAL SAFETY AND TRUCK OPERATION A3-1

WARNINGS AND CAUTIONS. A4-1

STANDARD TABLES. A5-1

STORAGE PROCEDURES A7-1

MidWestTech | Komatsu 930E- 3 Dump Truck Service Manual | Publication CEBM014501 Order the manual at mid-west-tech.com >

Accumulator Storage procedures

⚠WARNING

Always store bladder accumulators with 100 - 120 psi (690 - 827 kPa) nitrogen precharge pressure. Do not exceed 120 psi (827 kPa). Storing accumulators with more than 120 psi (827 kPa) pressure is not safe due to possible leakage.

Only pre-charge accumulators to operating pressure while installed on the truck. Never handle accumulator with lifting equipment with a nitrogen precharge greater than 120 psi (827 kPa). Always set precharge to 100 - 120 psi (690 - 827 kPa) before handling (removing or installing) accumulators.

1. If the accumulator was just rebuilt, make sure there is approximately 64 oz. (1.91 l) of clean oil inside the accumulator before adding 100 psi (690 kPa) of nitrogen precharge pressure.
2. Bladder accumulators should always be stored with 100 - 120 psi (690 - 827 kPa) nitrogen precharge pressure, which fully expands the bladder and holds a film of oil against the inner walls for lubrication and rust prevention.
3. The hydraulic port should always be covered with a plastic plug (without threads) to prevent contamination. **NEVER install a threaded plug into the hydraulic port.**
4. Always store the accumulator in an upright position.

Installing A Bladder Accumulator From Storage

1. Refer to Accumulator Charging Procedure to install the pressure gauges on the accumulator, and to check precharge pressure.
   a. If precharge pressure is 24 psi (165 kPa) or less, slowly drain off any nitrogen precharge, and proceed to Step 2.
   b. If precharge pressure is between 25 psi (172 kPa) and 100 psi (690 kPa), set the regulator to 100 psi (690 kPa), and slowly charge the accumulator to 100 psi (690 kPa). Disconnect pressure gauges from the accumulator, and install on the truck. Refer to Charging Procedure in this chapter to fully charge accumulator to the correct operating precharge pressure.
2. Remove the gauges from the accumulator.
3. Lay the accumulator on a suitable work bench so that the hydraulic port is higher than the other end of the accumulator. Remove the plastic dust cap from the hydraulic port.
4. Pour approximately 64 oz. (1.91 l) of clean C-4 hydraulic oil into the accumulator through the hydraulic port. Allow time for the oil to run down the inside of the accumulator to reach the other end.
5. Lay the accumulator flat on the work bench (or floor), and slowly rotate the accumulator two complete revolutions. This will thoroughly coat the accumulator walls with a film of oil necessary for bladder lubrication during precharging.
6. Stand the accumulator upright. Install pressure gauges, and refer to Charging Procedure for instructions to charge the accumulator up to 100 psi (690 kPa). Remove the gauges from the accumulator, and install a plastic dust cap over the hydraulic port.
7. Install the accumulator on the truck.
8. Precharge the accumulator to the correct operating precharge pressure.

Bladder Storage Procedures

The shelf life of bladders under normal storage conditions is one year. Normal storage condition consists of the bladder being heat sealed in a black plastic bag, and placed in a cool dry place away from the sun, ultraviolet and fluorescent lights, as well as electrical equipment. Direct sunlight or fluorescent light can cause the bladder to weather check and dry rot, which will appear on the bladder surface as cracks.

MidWestTech | Komatsu 930E- 3 Dump Truck Service Manual | Publication CEBM014501 Order the manual at mid-west-tech.com >

NOTES:

MidWestTech | Komatsu 930E- 3 Dump Truck Service Manual | Publication CEBM014501 Order the manual at mid-west-tech.com >

TROUBLESHOOTING

It is important to understand the LED signal for the pumping unit. It is used primarily to verify that the system is maintaining the oil level at the level of the open end of the withdrawal tube in the engine oil pan. The signal is also a valuable tool in troubleshooting the system.

When the signal is 'steady' (not flashing), pump 1 is running and oil is being withdrawn from the engine and being transferred to the reserve tank.

When the signal is 'flashing', pump 1 is drawing air from the suction tube which triggers operation of the pump 2 to operate and transfer oil back to the engine from the tank (the flashing is actually the pulses of pump 2). When the oil is at the correct level in the engine, air and oil are alternatively entering the suction tube, with pump 1 commanding operation of pump 2 with each portion of air that comes through the line.

This is a complete test for proper operation of the pumping unit. This operation can be accomplished without running the engine by jumping the oil pressure switch that activates the system.

1. If the signal light is 'steady', pump 1 should be pumping oil. Verify by loosening the hose at pump 1 outlet to verify that oil is coming through (pump 1 is marked by a groove on its outlet).
2. Loosen the hose at the inlet of pump 1 to admit air. Pump 2 should then run and the signal should be flashing. Verify proper pumping of pump 2 by loosening the hose at its outlet to see that oil is coming through.
3. Re-tighten the inlet hose on pump 1. The pump should again receive oil and the flashing should stop.

NOTE: There is a condition that would show a level higher than the controlled point. If both the engine and reserve tank are overfilled, there is no room in the tank to draw the oil level down in the engine. In this case, the LED signal would never start 'flashing' because pump 1 is never receiving air. It will continue to pump oil from the engine to the tank, but because the tank is full, the oil will be routed back to the engine via the air relief valve on top of the tank.

There are two explanations for an overfilled tank and engine:

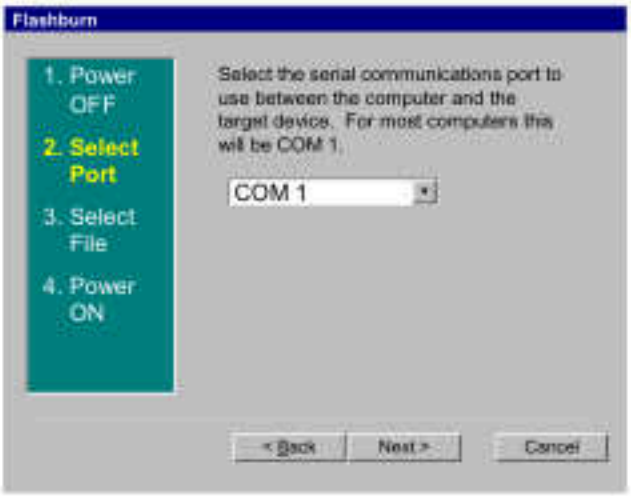
- When the tank is filled to "FULL" and the engine is overfilled.
- When oil is added directly to the engine between oil changes. The system transfers the oil to the reserve tank until it can not receive any more and the engine remains overfilled. It is, therefore, important that oil should be added only to the reserve tank between oil changes; except, of course, if the engine is extremely low.

Circuit Breaker or Fuse

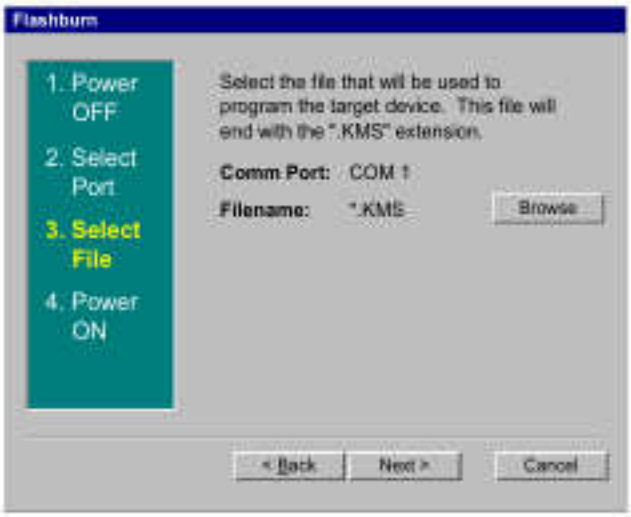
The reserve system is protected either by a 15 amp circuit breaker or a 15 amp fuse located in the auxiliary control cabinet. If the truck is protected by circuit breakers, it will be CB10. If the truck is protected by fuses, the fuse will be in fuse block 2, position 10.

MidWestTech | Komatsu 930E- 3 Dump Truck Service Manual | Publication CEBM014501 Order the manual at mid-west-tech.com >

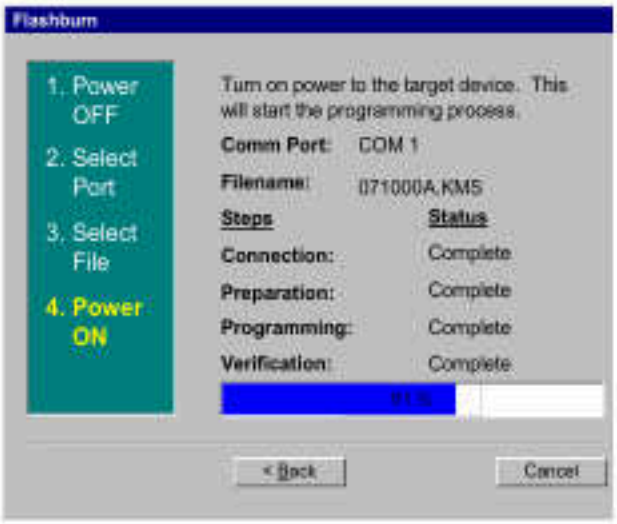
4. Confirm the proper communications port for the programming laptop. This is usually COM 1. Press "NEXT".



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



6. When instructed, turn the keyswitch 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 keyswitch 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.

MidWestTech | Komatsu 930E- 3 Dump Truck Service Manual | Publication CEBM014501 Order the manual at mid-west-tech.com >

COMPONENT	SHEET
ACCELERATOR PEDAL	20
AID MODULE	11,12,13,14
AID SONALERT (CAB OVERHEAD)	11
ALTERNATOR AMB. TEMP.	09
ANTENNA, RADIO	21
BATTERY CHARGING ALT.	26
BATTERY CONTROL	09
BATTERY CRANKING	09
BATTERY ISOLATION DIODES	26
BATTERY SYSTEM	26
BRAKE SONALERT	14
CB-50A. 12V POWER	10,26
CB-70A. 24/12V CONVERTER	10,26
CB 11 - BACK-UP HORN & LTS (RB3)	10
CB 13 - CLEARANCE LIGHTS (RB1)	22
CB 14 - TURN SIGNAL FLASHER	22
CB 15 - TAIL LIGHTS (RB1)	22
CB 16 - RETARD LIGHTS (RB3)	10,19
CB 17 - MANUAL BACK-UP LTS (RB3)	19
CB 18 - STOP LIGHTS (RB3)	10,12
CB 19 - BACKUP LTS & HORN (RB3)	19
CB 20 - ENGINE CONTROL PWR.(RB4)	10,26,27
CB 21 - SERV. LTS, HRN. SOL. (RB4)	10
CB 22 - ENGINE RUN RELAY	10,27
CB 23 - HDLIGHTS LFT LO BEAM (RB5)	10,23
CB 24 - HDLIGHTS RT LO BEAM (RB5)	10,23
CB 25 - HDLIGHTS LFT HI BEAM (RB5)	10,23
CB 26 - HDLIGHTS RT HI BEAM (RB5)	10,23
CB 27 - HDLIGHTS & DASH LTS (RB5)	10,23
CIGARETTE LIGHTER	21
CONVERTER 24/12V	10,26
DASH LIGHT RHEOSTAT	24
DBI - DIODES D5,D7,D10,D11	12,20
DBI - DIODES D21,D22,D23	11
DBI - P12 (20 OHM)	09
DBI - D8	27
DBI- 1.5K RESISTOR	27
DBI- 47K RESISTOR	27
DBI- 1K RESISTOR	27
DIAGNOSTIC #3 (QUANTUM) OPER CAB	27
DIAGNOSTIC #4 (CENSE) OPER CAB	27
DID PANEL	09
DIODE, BID- BODY UP ISOLATION	12
DIODE, DI- NO PROP/RET LIGHT	13
DIODE, D2- NO PROPULSION LIGHT	13
DIODE, D3- PROP. SYS CAUTION LT	13
DIODE, D4- BRAKE HYD TEMP HI LT	14
DIODE, D-4- LINC. LUBE	25
DIODE, D11- LINC LUBE LO PRESS LT	15
DIODE, D12- SPARE L5 LIGHT	13
DIODE, D14- HOIST LIMIT SOLENOID	15
DIODE, D15- STEER. ACCUM BLEED DN	18
DIODE, D25- FORWARD HORN #1	18
DIODE, D27- BRAKE LOCK SWITCH	18
DIODE, D31- PROP. SYS TEMP CAUT LT	13
DIODE, D32- PROP. SYS CAUTION LT	13
DIODE, D33- HI HYD. OIL TEMP LT	14
DIODE, D34- LO HYD. TANK LEVEL LT	14
DIODE, D35- LOW FUEL LIGHT	14
DIODE, D36- BODY UP LIGHT	12
DIODE, D37- CHECK ENGINE LIGHT	12
DIODE, D38- LINC LUBE	15
DIODE, D40- STARTER FAILURE LIGHT	13
DIODE, DB1- NO PROPULSION LIGHT	13
DIODE, DB2- NO PROP/RET LIGHT	13
DIODE, DR2- BRAKE LOCK SOLENOID	11
DIODE, DR3- PARK BRAKE SOLENOID	26
DIODE, DR4- PARK BRAKE SOLENOID	26
DIODE, DR6- SERV. BRAKE PRESS SW.	12
DIODE, EWP0- ENGINE WARN. PULL UP	12
DIODE, LLD1- LINC. LUBE	15
DIODE, PPD1- PARK BRAKE SWITCH 1	26
DIODE, PPD2- PARK BRAKE SWITCH 2	26
DIODE, SFD-1- STARTER FAILURE 1	13
DIODE, SFD-2- STARTER FAILURE 2	13
DIODE, SFD-3- STARTER FAILURE 3	13
DIODE, SFD-4- STARTER FAILURE 4	13
DIODE, SFD-5- STARTER FAILURE 5	13
DIODE, SID- SONALERT ISOLATION	14
DIODE, SID-1- STARTER ISOLATION	26
DIODE, WRLD - WIPER RELAY LOW	32,33
DIODE, WRHD - WIPER RELAY HIGH	32,33
DIODE, WSD - WIPER SYSTEM	32,33
ENGINE ECU - FAN CLUTCH SIGNAL	17

COMPONENT	SHEET
ENGINE ECU - CUMMINS	7
ENGINE INTERFACE MODULE	27
FUSE - 400 AMP PRE LUBE PUMP	26
FUSE-FB1-1 15A, A/C HTR BLOW MTR	10,17
FUSE-FB1-2 10A, WINDSHLD WASH/WIPE	10,21,32,33
FUSE-FB1-3 5A, FUEL, TEMP GA. VOLTM	10,16
FUSE-FB1-4 10A, CAB KEY POWER	10,25
FUSE-FB1-5 10A, HOIST SOLENOID	10,15
FUSE-FB1-6 15A, TURN/CLEAR LIGHTS	10,22,32,33
FUSE-FB1-7 10A, ENGINE OPTIONS	10,16
FUSE-FB1-8 10A, AID & INDIC. LTS	10,11
FUSE-FB1-9 10A, ENG START FAIL.	10
FUSE-FB1-10 10A, ENG.SHUTTERS	10
FUSE-FB1-11 10A, DOME LIGHT SW.	10
FUSE-FB1-13 5A, GAUGE VOLTAGE	10
FUSE-FB1-14 5A, PEDAL VOLTAGE	10
FUSE-FB1-15 5A, ENGINE INTERFACE	10
FUSE-FB1-23 15A, CAB DRIVE SYS. PWR	10,20
FUSE-FB1-24 10A, AUTO LUBE TIMER	10,15
FUSE-FB2-1 15A, DOME,FOG,LADDER LTS	10
FUSE-FB2-2 15A, SERVICE LIGHTS	10,23
FUSE-FB2-13 10A, L. FRT WHEEL SPS	10
FUSE-FB2-14 10A, R. FRT WHEEL SPS	10
FUSE-FB2-17 10A, 12V POWER PLUGS	10,21
FUSE-FB2-18 15A, R.H. WINDOW	10,21
FUSE-FB2-19 15A, L.H. WINDOW	10,21
GAUGE, BRAKE HYD. TEMPERATURE	16
GAUGE, DRIVE SYSTEM	16
GAUGE, FUEL	16
GAUGE, OIL PRESSURE	16
GAUGE, WATER TEMPERATURE	16
EDIC- OPERATOR DISPLAY	29
HEATER A/C SYSTEM	17
HORN BUTTON	18,32,33
HORN FORWARD #1	18
HORN - LEFT REAR BACKUP	19
HORN - RIGHT REAR BACKUP	19
HOURMETER	16
INDICATOR, CIRCUIT BREAKER TRIPPED	11
INDICATOR, ELECTRIC SYS FAULT	11
INDICATOR, ENGINE MAINT.	13
INDICATOR, HYDRAULIC FILTER	11
INDICATOR, HIGH HYD OIL TEMP	11
INDICATOR, LINK ENERGIZED	09
INDICATOR, LINK VOLTAGE	14
INDICATOR, LOW ACCUM PRECHARGE	11
INDICATOR, LOW BRAKE PRESSURE	11
INDICATOR, LOW FUEL	11
INDICATOR, LOW HYDRAULIC TK LEVEL	11
INDICATOR, LOW RETARD LEVEL	14
INDICATOR, LOW STEERING PRESSURE	11
INDICATOR, MANUAL BACK UP	13
INDICATOR, PARK BRAKE	12
INDICATOR, PROPULSION SYS AT REST	14
INDICATOR, PROPULSION SYS CAUTION	13
INDICATOR, PROPULSION SYS NO PROPEL	13
INDICATOR, PROPUL. SYS NO PROP/RET	13
INDICATOR, PROPUL. SYS NOT READY	14
INDICATOR, PROPUL. SYS REDUCED PWR	14
INDICATOR, RETARD	12
INDICATOR, SERVICE BRAKE	12
INDICATOR, SPARE	14
INDICATOR, SPARE L5	13
JUNCTION BLOCK 3A (JB3A)	20
JUNCTION BLOCK 4 (JB4)	26
JUNCTION BLOCK 4A (JB4A)	21
JUNCTION BLOCK 4B (JB4B)	21
JUNCTION BLOCK 4C (JB4C)	14,33
JUNCTION BLOCK 6A (JB6A)	14,33
JUNCTION BLOCK 6B (JB6B)	21,32,33
JUNCTION BLOCK 8A (JB8A)	14
KONTROL POWER RELAY	08,10
LEFT DECK PAYLOAD LIGHTS	28
LEFT SCOREBOARD	28
LIGHT, 5 MIN. IDLE TIMER INDICAT.	25
LIGHT, AIR RESTRICTION GAUGE	24
LIGHT, BODY UP	12
LIGHT, BRAKE HYD. TEMP. HIGH	14
LIGHT, BRAKE HYD. TEMP. GAUGE	24
LIGHT, CHECK ENGINE	12
LIGHT, ENGINE STOP SWITCH	24
LIGHT, OVERRIDE SWITCH	24
LIGHT, RETARD SPEED CONTROL SWITCH	24
LIGHT, DASH #1	24
LIGHT, DASH #2	24

COMPONENT	SHEET
LIGHT, DASH #3	24
LIGHT, DECK #1	18
LIGHT, DECK #2	18
LIGHT, DIAGONAL LADDER #1	18
LIGHT, DIAGONAL LADDER #2	18
LIGHT, DIGITAL SPEEDOMOTER	24
LIGHT, DIGITAL TACH	24
LIGHT, DOME 1,2 & 3	10
LIGHT, DRIVE SYSTEM TEMP. GAUGE	24
LIGHT, ENGINE STOP	12,13
LIGHT, FOG	10
LIGHT, FUEL GAUGE	24
LIGHT, HI BEAM INDICATING	23,32,33
LIGHT, HYDRAULIC CABINET RIGHT	18
LIGHT, HYDRAULIC CABINET LEFT	18
LIGHT, LEFT DECK BACK UP	19
LIGHT, LEFT ENGINE SERVICE #1	18
LIGHT, LEFT ENGINE SERVICE #2	18
LIGHT, LEFT FOG	23
LIGHT, LEFT FRONT TURN/CLEARANCE	22
LIGHT, LFT HAND HI-MTD LO BM HOLT	23
LIGHT, LFT HAND HI-MTD HI BM HOLT	23
LIGHT, LEFT HIGH BEAM	23
LIGHT, LEFT LOW BEAM HEADLIGHT	23
LIGHT, LEFT PLATFORM	18
LIGHT, LEFT REAR BACK UP	19
LIGHT, LEFT REAR RETARD	19
LIGHT, LEFT REAR TURN/CLEARANCE	22
LIGHT, LEFT TAIL/STOP	12
LIGHT, LEFT TURN INDICATING	22
LIGHT, LINCOLN LUBE LOW PRESSURE	15
LIGHT, OIL PRESSURE GAUGE	24
LIGHT, OPERATOR CAB RETARD	19
LIGHT, RETARD SPEED CONTROL	13
LIGHT, RIGHT DECK BACK UP	19
LIGHT, RIGHT ENGINE SERVICE #1	18
LIGHT, RIGHT ENGINE SERVICE #2	18
LIGHT, RIGHT FOG	23
LIGHT, RIGHT FRONT TURN/CLEAR	22
LIGHT, RGT HAND HI-MTD LO BM HOLT	23
LIGHT, RGT HAND HI-MTD HI BM HOLT	23
LIGHT, RIGHT HIGH BEAM	23
LIGHT, RIGHT LOW BEAM HEADLIGHT	23
LIGHT, RIGHT PLATFORM	18
LIGHT, RIGHT REAR BACK UP	19
LIGHT, RIGHT REAR RETARD	19
LIGHT, RIGHT REAR TURN/CLEARANCE	22
LIGHT, RIGHT TAIL/STOP	12
LIGHT, RIGHT TURN INDICATING	22
LIGHT, SERVICE BRAKE (CAB ROOF)	12
LIGHT, STARTER FAILURE	13
LIGHT, VOLTMETER GAUGE	24
LIGHT, WATER TEMPERATURE GAUGE	24
LINCOLN LUBE DELAY MODULE	15
MODULAR WINING COMMUNICATION PORT	09
MODULAR WINING HUB	29
MOTOR AIR FLOW DIFFERTIAL PRESSURE	09
MOTOR LEFT WINDOW	21
MOTOR RIGHT WINDOW	21
PAYLOAD METER 3 CONTROL MODULE	28
PROPULSION ALTERNATOR	16
POWER PLUGS, 12V	21
PUMP, PRE-LUBE HI FLOW	26
RADIO	21
RB1 K1 RELAY (LEFT TURN SIGNAL)	22
RB1 K2 RELAY (RIGHT TURN SIGNAL)	22
RB1 K3 RELAY (CLEARANCE LIGHT)	22
RB1 K4 RELAY (FLASHER)	22
RB2 K1 RELAY (PK BRAKE PRESS SW)	27
RB3 K1 RELAY (MANUAL BACKUP LTS)	19
RB3 K2 RELAY (STOP LIGHT)	12
RB3 K3 RELAY (RETARD LIGHT)	19
RB4 K2 RELAY (CRANK INTERLOCK)	26
RB4 K3 RELAY (HORN)	18
RB4 K4 RELAY (BODY UP)	12
RB5 K1 RELAY (LEFT LOW BEAM HOLT)	23
RB5 K2 RELAY (RIGHT LOW BEAM HOLT)	23
RB5 K3 RELAY (LFT HI BEAM HOLT)	23
RB5 K4 RELAY (RIGHT HI BEAM HOLT)	23
RB6 K1 RELAY (BACK UP HORN)	19
RB6 K2 RELAY (ENGINE INTERLOCK)	27
RB6 K3 RELAY (START RELAY)	26
RB6 K6 RELAY (PARK BRAKE)	26
RB6 K7 RELAY (TCI-70X)	28
RB6 K8 RELAY (TCI-100X)	28

COMPONENT	SHEET
RB7 K1 RELAY (LINC LUBE PRESSURE)	15
RB7 K2 RELAY (AUTO ETHER START)	7
RB7 K3 RELAY (LINC LUBE TIMER)	15
RB7 K4 RELAY (LINC LUBE TIMER)	15
RB7 K5 RELAY (LINC LUBE SOLENOID)	15
RB7 K6 RELAY (STARTER FAIL. REL #2)	13
RB7 K7 RELAY (STARTER FAIL. REL #3)	13
RB8 RELAY (STARTER FAILURE REL. #3)	13
RB9 ELAY (STARTER FAILURE REL. #4)	13
RD1- RESISTOR/DIODE MODULE	12
RD2- RESISTOR/DIODE MODULE	12
RELAY, 5 MIN. IDLE TIMER	10,25
RELAY, 12V POWER	10,21
RELAY 1 (PLM3 GREEN LIGHTS)	28
RELAY 2 (PLM3 AMBER LIGHTS)	28
RELAY 3 (PLM3 RED LIGHTS)	28
RELAY 4 (PLM3 LIGHTS)	28
RELAY BOARD 1	11
RELAY BOARD 3	11
RELAY BOARD 4	11
RELAY BOARD 5	11
RELAY, BRAKE WARNING	11
RELAY, CONTROL POWER	10
RELAY, ENGINE START	26
RELAY, GENERATOR FIELD	10
RELAY, KEYSWITCH POWER	10,25
RELAY, KONTROL POWER	08,10
RELAY, RADIO	21
RELAY, RUN SIGNAL	25
RELAY, TIMER HOLD	25
RELAY, WIPER HIGH	32
RELAY, WIPER LOW	32
REMOTE POWER SWITCH	28
RESISTOR 2 OHM	12
RESISTOR 10 OHM	13
RETARD LEVER	20
RETARD PEDAL	20
RIGHT DECK PAYLOAD LIGHTS	28
RIGHT SCOREBOARD	28
SENDER, ENGINE TEMPERATURE	16
SENDER, FUEL LEVEL	16
SENDER, OIL PRESSURE	16
SENSOR #1- LEFT FRT HYD BRAKE TEMP	09
SENSOR #2- RT FRT HYD BRAKE TEMP	09
SENSOR #3- LFT REAR HYD BRAKE TEMP	09
SENSOR #4- RT REAR HYD BRAKE TEMP	09
SENSOR #5- HYDRAULIC TANK TEMP	09
SENSOR, BAROMETRIC PRESSURE	09
SENSOR, HYDRAULIC BRAKE FLUID TEMP	16
SENSOR, HYD. LEVEL	11
SENSOR, LEFT FRONT WHEEL SPEED	09
SENSOR, RIGHT FRONT WHEEL SPEED	09
SOLENOID, BRAKE LOCK	11
SOLENOID, COMPRESSOR	17
SOLENOID, HOIST LIMIT	15
SOLENOID, LUBE PUMP	15
SOLENOID, PARK BRAKE	26
SOLENOID, SHUTTER CONTROL	7
SOLENOID, START #1	26
SOLENOID, START #2	26
SOLENOID, STEERING ACCUM. BLEED DN	18
SPEAKER, RADIO RIGHT RR	21
SPEAKER, RADIO RIGHT FT	21
SPEEDOMETER	16,28
STEERING BLEED DOWN IC CHIP	18
SUSPENSION PRESSURE, LR	28
SUSPENSION PRESSURE, RR	28
SUSPENSION PRESSURE, LF	28
SUSPENSION PRESSURE, RF	28
SWITCH, 5 MINUTE IDLE	25
SWITCH, BODY UP	12,28

COMPONENT	SHEET
SWITCH, BRAKE LOCK	11,28
SWITCH, BRAKE DIFF PRESS (FRT/RR)	11
SWITCH, BRAKE DIFF PRESS (L/R REAR)	11
SWITCH, BRAKE FRT (L/R) DIFF PRESS	11
SWITCH, BRAKE PRESSURE	11
SWITCH, CAB ENGINE STOP	27
SWITCH, COOLANT LEVEL	27
SWITCH, COMBO TURN SIGNAL WIPER WASHER HEADLIGHT DIMMER	32,33
SWITCH, DATA STORE	20
SWITCH, DIRECT SELECTOR	20,25
SWITCH, DOME LIGHT	10
SWITCH, ENGINE LEFT SERVICE LIGHT	18
SWITCH, ENGINE RIGHT SERVICE LIGHT	18
SWITCH, ENGINE OIL PRESSURE	26
SWITCH, ENGINE RUN OIL PRESSURE	16
SWITCH, ETHER START	7
SWITCH, FOG LIGHT	23
SWITCH, FUEL LEVEL	11
SWITCH, GROUND LEVEL SHUTDOWN	08,25
SWITCH, HAZARD LIGHT	22
SWITCH, HEADLIGHT	23
SWITCH, HEADLIGHT DIMMER	23,32,33
SWITCH, HEATED MIRROR	16
SWITCH, HOIST LIMIT	15
SWITCH, HOIST FILTER PRESS.	11
SWITCH, KEY SW.	08,10,25
SWITCH, LADDER LIGHTS GROUND LEVEL	18
SWITCH, LAMP TEST	11
SWITCH, LEAKAGE TEST	16
SWITCH, LEFT WINDOW	21
SWITCH, LOW ACCUM. PRE-CHARGE #1	11
SWITCH, LOW ACCUM. PRE-CHARGE #2	11
SWITCH, LOW STEERING PRESSURE	11
SWITCH, LUBE TEST	15
SWITCH, MANUAL BACK UP LIGHT	10,19
SWITCH, NEUTRAL	10
SWITCH, OPER. CAB LADDER LIGHTS	18
SWITCH, PARK BRAKE	10,26
SWITCH, PARK BRAKE PRESSURE	12
SWITCH, PLM CONTROL	28
SWITCH, PRE-LUBE PRESSURE	26
SWITCH, PRESSURE 2500 psi	15
SWITCH, PROPULSION LOCKOUT	10
SWITCH, REAR AXLE PRESS (2000 psi)	15
SWITCH, RESET REQUEST	14,20
SWITCH, RETARD SPEED CONTROL	20
SWITCH, RIGHT WINDOW	21
SWITCH, ROTATING BEACON	16
SWITCH, SERVICE BRAKE PRESS.	11,12
SWITCH, SHUTTER ENABLE	7
SWITCH, STEERING FILTER PRESS.	11
SWITCH, START BATTERY DISCONNECT	10,26
SWITCH, SYSTEM BATTERY DISCONNECT	10,26,28
SWITCH, TRINARY PRESSURE	17
SWITCH, TURN SIGNAL	22,32,33
SWITCH, WINDSHIELD WIPER CONTROL	21,32,33
SYSTEM BRAKE CONTROL (FUTURE)	09
TACHOMETER	16
TIMER, 5 MINUTE MODULE	25
TIMER, BRAKE WARNING	10
TIMER, LINCOLN LUBE	15
TIMER, PRE-LUBE	26
TIMER, STEERING BLEED DOWN	18
VOLTMETER	16
WINDSHIELD WASHER PUMP	21,32,33
WINDSHIELD WIPER MOTOR	21,32,33
WINDSHIELD WIPER DELAY TIMER MODULE	32,33
WINDSHIELD WASHER WIPER TIMER MOD.	33

XS1331-1 JAN 05

ELECTRIC SCHEMATIC

COMPONENT LOCATOR SHEET

930E-3

A30304 & UP

Sheet 31 of 34

Order the manual at mid-west-tech.com >