



ITEM NO.	DESCRIPTION	QTY	ITEM NO.	DEVICE NO.	NOMENCLATURE OR DESCRIPTION
61	IE MOTOR, 3/4 HP, 1800 RPM, 575 VAC, 3 PHASE, 60HZ	1	1		PUMP, MAIN LUBE (ENGINE DRIVEN)
62	PUMP, GPM AT 1750RPM	1	2		PUMP, MAIN LUBE (ENGINE DRIVEN)
63	C-FACE MOTOR-PUMP ADAPTER	1	3		PUMP, PISTON COOLING (ENGINE DRIVEN)
64	HALF COUPLING	1	4		STRAINER, SCAVENGING PUMP
65	HALF COUPLING, DRILLED FOR 0.625 IN. SHAFT DIAMETER WITH .188 SQUARE KEY	1	5		STRAINER, MAIN & PISTON COOLING PUMPS
66	SIGHT GAUGE, 3/4" -14 NPT, 500°F MAXIMUM OPERATING TEMPERATURE	5	6		COOLER, LUBE OIL
67	CHOKE FITTING, 1/8" ORIFICE 1/2" NPT EACH END	2	7		FILTER, LUBE OIL
68	CHECK VALVE, SPRING LOADED, 75PSI CRACKING PRESSURE, 1" FPT EACH END, SYSTEM DESIGN PRESSURE 150PSI, SYSTEM DESIGN TEMPERATURE 275°F	1	8		VALVE, RELIEF--MAIN LUBE--BUILT INTO ENGINE
69	STRAINER, 1" NPT, INLINE WYE TYPE SELF-CLEANING, 300" SMP, ASTM B62, SYSTEM DESIGN PRESSURE 150 PSI, SYSTEM DESIGN TEMPERATURE 275°F	1	9		VALVE, RELIEF--FILTER
70	PIPE ASSEMBLY SAXOPHONE PIPE, LUBE OIL COOLER DISCHARGE CONSISTING OF 8/M315-19A THRU 315-19L PREFABRICATED IN PSD SHOP	1	10		GAUGE PRESSURE (0-100) 2 1/2"
71	VALVE, BALL, 1 1/2" NPT EACH END	1	11	S9	SWITCH LOW PRESSURE-LUBE (SHUTDOWN) 16 PSIG
72	SWING CHECK VALVE BRONZE 1/2" NPT EACH END ASTM B62, SYSTEM DESIGN PRESSURE 150 PSI, SYSTEM DESIGN TEMPERATURE 275°F	1	12		VALVE, STRAINER BODY DRAIN
73	SWING CHECK VALVE BRONZE 1/2" NPT EACH END ASTM B62, SYSTEM DESIGN PRESSURE 150 PSI, SYSTEM DESIGN TEMPERATURE 275°F	2	13		CIRCULATING PUMP ASSY. (INCLUDES ITEMS 15 & 16)
74	PUMP ADAPTER, 3GPM AT 1750 RPM	1	14	B7	ELECTRIC MOTOR 1HP, 575 VOLT, PART OF ITEM 14
75	MOTOR, 3/4HP, 125VDC, 1750RPM	1	15		PUMP, CIRCULATING 6 GPM PART OF ITEM 14
76	COUPLING	1	16		STRAINER "Y" TYPE
77	PUMP MOUNTING FOOT	1	17		
78	PRESSURE SWITCH	1	18		
79	PRESSURE SWITCH	2	19		VALVE CHECK--SOAK BACK FILTER PART OF IT21
80	CHECK VALVE SPRING LOADED, 30 PSI CRACKING PRESSURE, SYSTEM DESIGN PRESSURE 150 PSIG, WITH 1/16 INCH ORIFICE.	1	20		VALVE CHECK--TURBO CHARGER FILTER PART OF IT21
81	CHOKE FITTING, 1/16 INCH ORIFICE, 3/8 INCH NPT EACH END 2 1/2 INCH LONG, ASTM A36 BAR	1	21		FILTER TURBO-ENGINE MOUNTED
			22	S20	HIGH CRANKCASE PRESSURE SWITCH
			23		FILTER, SOAK BACK
			24		
			25	B4	CIRCULATING PUMP MOTOR DRIVEN 125 VOLT D.C., 3/4 HP
			26	S10	SWITCH, LOW LUBE PRESSURE (ALARM)
			27	S14	SWITCH, LOW LUBE TEMPERATURE (ALARM)
			28	S21	SWITCH, HIGH LUBE TEMPERATURE (ALARM)
			29	S6	SWITCH CRANK LOCKOUT
			30		CHECK VALVE 1" STEEL SOCKET-WELD ENDS
			31		CHECK VALVE 1/2" STEEL SOCKET-WELD ENDS
			32		GAUGE, MAIN LUBE PRESS 4 1/2" PANEL MOUNTED (0-160 PSI SCALE)
			33		
			34	S42	SWITCH, PRESSURE, RESTRICTED L/O FILTER

- NOTES:
- SIGHT GLASS VERTICAL HEIGHT CRITICAL
 - THE CIRCULATING OIL PUMP RELIEF CHECK VALVE IS DRILLED TO PROVIDE PRESSURE RELIEF UPON FAILURE OF THE AC MOTOR AND TO START THE DC CIRCUIT PUMP MOTOR.
 -
 - ALL INSTRUMENT & EQUIPMENT TO BE PREFIXED WITH "2EGO-" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN. AN ASTERISK (*) WILL REPLACE THE DASH (-) IN THE PREFIX FOR EQUIPMENT OR INSTRUMENTS WHICH ARE A PART OF NUCLEAR SAFETY FEATURES SYSTEMS.
 - G.E. IDENTIFICATION NUMBERS ARE IN RECTANGLES.
 - PIPING AND COMPONENTS ARE LOCATED ON THE ACCESSORY SKID UNLESS OTHERWISE NOTED.
 - 2EGO#P3 INCLUDES ITEMS 74, 75, 76, & 77.
 - 2EGO#P2 INCLUDES ITEMS 61, 62, 63, 64, & 65.
 - BALLOON ITEM NUMBERS ARE LISTED ABOVE.

LEGEND:

- COP-CIRCULATING OIL PUMP PRESSURE SWITCH
- BPT-DC TURBO PUMP CONTROL SWITCH
- TOS-TURBO SOAKBACK OIL PUMP ALARM SWITCH
- SG-SIGHTGLASS-1, -2, -3

LR NOTE:
PLEASE REFER TO DRAWING LR-000 SHEETS 2A THROUGH 2F FOR LR BOUNDARY DRAWING NOTES, SYMBOLS, AND ACRONYMS.

- NOTES:
- ITEMS ARE MOUNTED IN CONTROL PANEL.
 - LUBRICATING OIL TO BE IN ACCORDANCE WITH C-B SPEC. SE-1114-2.
 - ENGINE DRIVEN PUMP CAPACITY 550 GPM * 90 PSIG.
 - ENGINE OIL SUMP CAPACITY APPROX. 700 GAL. AUXILIARY SKID LUBE OIL SYSTEM CAPACITY APPROX. 800 GAL.
 - LUBE OIL CIRCULATION & PRE-LUBE PUMP, 120GPM * 50 PSIG, 15 HP 1800 RPM, 575 VOLT, 3 PH, 60 HZ.
 - LUBE OIL CIRCULATION & PRE-LUBE PUMP WILL RUN CONTINUOUSLY WHEN ENGINE SPEED IS LESS THAN 280 RPM.
 - EQUIPMENT CONSTRUCTED TO ASME SECTION III, CLASS 3 INCLUDES, PRE-LUBE PUMP, LUBE OIL COOLERS, FILTER, STRAINERS, CHECK VALVES, BALL VALVES, THERMOSTATIC VALVE, EXPANSION JOINTS, HEATER, AND PIPING. ASME SECTION III, CLASS 3 CONSTRUCTION IS LIMITED TO SKID MOUNTED EQUIPMENT.
 - ALL STARTERS AND CONTRACTORS FURNISHED BY OTHERS.
 - POWER WIRING DIRECTLY TO COMPONENTS IS BY OTHERS. CONTROL & METERING WIRING TO TERMINATE AT SKID MOUNTED JUNCTION BOXES BY CES REFER TO CONDUIT & WIRING SCHEMATIC KSV-87 SERIES.
 - REFER TO VENDOR MANUAL KSV-87 SERIES DRAWINGS FOR SWITCH SETTINGS.
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 - COOPER-BESSEMER IDENTIFICATION NUMBERS TO BE SHOWN IN RECTANGLES.
 - LETTER "A" COMPONENTS INDICATES FOR USE ON 2EGS*EG1 LETTER "B" COMPONENTS INDICATES FOR USE ON 2EGS*EG3 100 SERIES NUMBERS INDICATE USE ON 2EGS*EG1, 200 SERIES NUMBERS INDICATE USE ON 2EGS*EG2.
 - REFER TO CONTROL AIR DRAWINGS, 0001,040-209-047,048,049,050.
 - SEE DRAWING KSV-45-16 IN MANUAL N20395.

LEGEND:

- PEV-14 ENGINE LUBE OIL PRESSURE TRIP VALVE
- PEV-18 TURBO LUBE OIL PRESSURE TRIP VALVE
- TEV-31 ENGINE LUBE OIL TEMPERATURE TRIP VALVE

SAFETY RELATED
QUALITY RELATED
(REF. ISPT-104E)
(REF. SAR FIG. 9.5-47, 9.5-48)

Constellation Energy Group
NINE MILE POINT
NUCLEAR STATION
UNIT 2 - SCRIBA, N.Y.
PIPING & INSTRUMENTATION DIAGRAM
LUBE OIL
STANDBY DIESEL GENERATOR SYSTEM

SCALE NONE DRAWING NO LR-104E-0