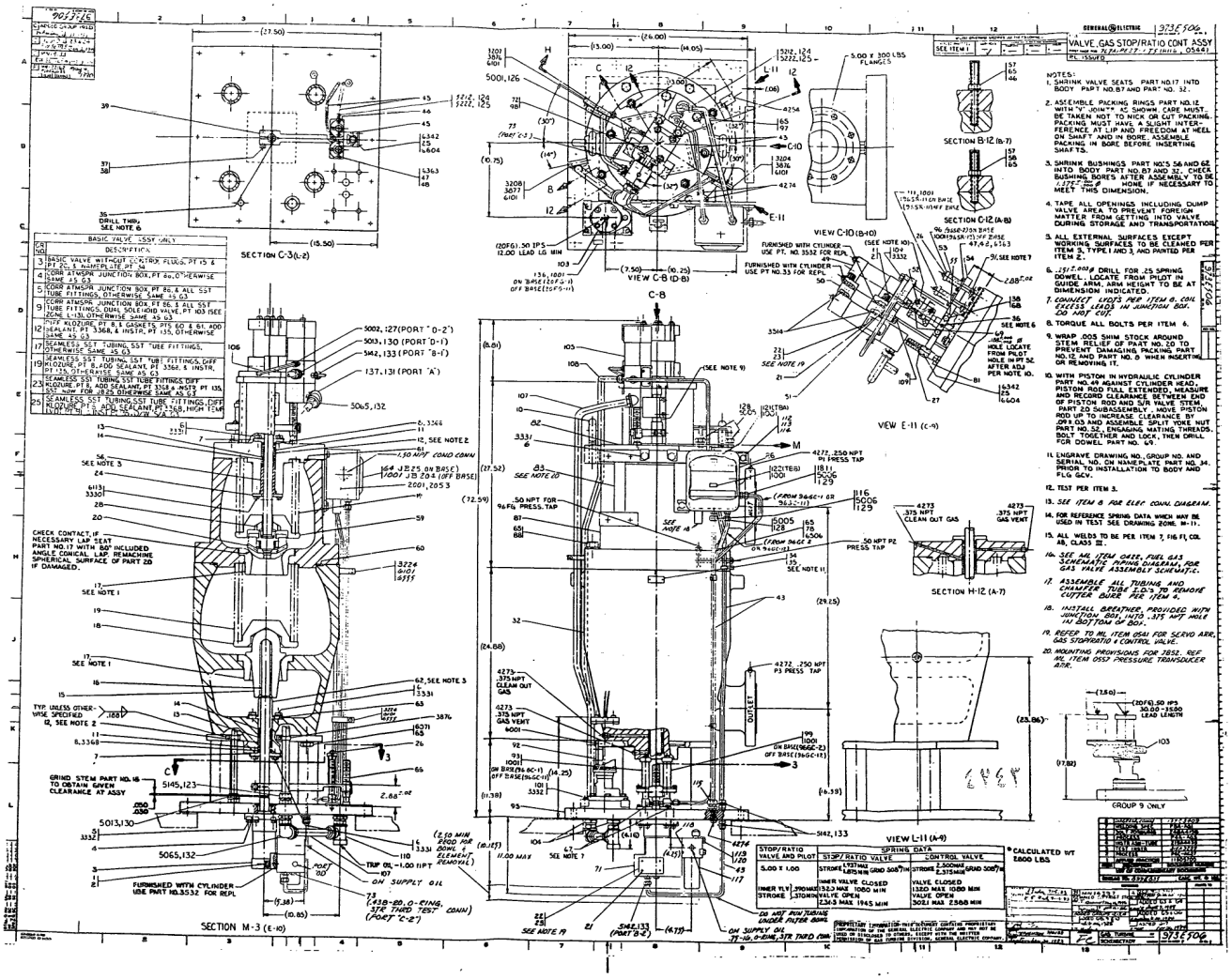
GENERAL ELECTRIC
973E506
VALVE, GAS STOP/RATIO CONT ASSY
PL 15SUED
SECTION C-3 (L-2)
VIEW C-8 (D-8)
VIEW C-10 (B-10)
SECTION B-12 (B-7)
SECTION C-12 (A-8)
VIEW E-11 (C-9)
SECTION H-12 (A-7)
VIEW L-11 (A-9)
SECTION M-3 (E-10)
GROUP 9 ONLY
BASIC VALVE ASSY ONLY
CHECK CONTACT, IF NECESSARY LAP SEAT PART NO. 17 WITH 80° INCLUDED ANGLE CONICAL LAP. REMACHINE SPHERICAL SURFACE OF PART 20 IF DAMAGED.
GRIND STEM PART NO. 16 TO OBTAIN GIVEN CLEARANCE AT ASSY
FURNISHED WITH CYLINDER USE PART NO. 3532 FOR REPL
DO NOT RUN TUBING UNDER FILTER BOWL
ON SUPPLY OIL
TRIP OIL - 1.00 NPT
ON SUPPLY OIL
NOTES:
1. SHRINK VALVE SEATS PART NO. 17 INTO BODY PART NO. 87 AND PART NO. 32.
2. ASSEMBLE PACKING RINGS PART NO. 12 WITH "V" JOINT* AS SHOWN. CARE MUST BE TAKEN NOT TO NICK OR CUT PACKING. PACKING MUST HAVE A SLIGHT INTERFERENCE AT LIP AND FREEDOM AT HEEL ON SHAFT AND IN BORE. ASSEMBLE PACKING IN BORE BEFORE INSERTING SHAFTS.
3. SHRINK BUSHINGS PART NO'S 56 AND 62 INTO BODY PART NO. 87 AND 32. CHECK BUSHING BORES AFTER ASSEMBLY TO BE 1.375 MIN. HONE IF NECESSARY TO MEET THIS DIMENSION.
4. TAPE ALL OPENINGS INCLUDING DUMP VALVE AREA TO PREVENT FOREIGN MATTER FROM GETTING INTO VALVE DURING STORAGE AND TRANSPORTATION.
5. ALL EXTERNAL SURFACES EXCEPT WORKING SURFACES TO BE CLEANED PER ITEM 3, TYPE I AND 3, AND PAINTED PER ITEM 2.
6. .151 ±.003 DRILL FOR .25 SPRING DOWEL. LOCATE FROM PILOT IN GUIDE ARM. ARM HEIGHT TO BE AT DIMENSION INDICATED.
7. CONNECT LEADS PER ITEM 8. COIL EXCESS LEADS IN JUNCTION BOX. DO NOT CUT.
8. TORQUE ALL BOLTS PER ITEM 6.
9. WRAP .005 SHIM STOCK AROUND STEM RELIEF OF PART NO. 20 TO PREVENT DAMAGING PACKING PART NO. 12 AND PART NO. 8 WHEN INSERTING OR REMOVING IT.
10. WITH PISTON IN HYDRAULIC CYLINDER PART NO. 49 AGAINST CYLINDER HEAD, PISTON ROD FULL EXTENDED, MEASURE AND RECORD CLEARANCE BETWEEN END OF PISTON ROD AND S/R VALVE STEM. PART 20 SUBASSEMBLY. MOVE PISTON ROD UP TO INCREASE CLEARANCE BY .093 ±.03 AND ASSEMBLE SPLIT YOKE NUT PART NO. 52, ENGAGING MATING THREADS, BOLT TOGETHER AND LOCK, THEN DRILL FOR DOWEL PART NO. 69.
11. ENGRAVE DRAWING NO., GROUP NO. AND SERIAL NO. ON NAMEPLATE PART NO. 34. PRIOR TO INSTALLATION TO BODY AND FLG GCV.
12. TEST PER ITEM 3.
13. SEE ITEM 8 FOR ELEC CONN. DIAGRAM.
14. FOR REFERENCE SPRING DATA WHICH MAY BE USED IN TEST SEE DRAWING ZONE M-11.
15. ALL WELDS TO BE PER ITEM 7, FIG F1, COL AB, CLASS III.
16. SEE ML ITEM 0422, FUEL GAS SCHEMATIC PIPING DIAGRAM, FOR GAS VALVE ASSEMBLY SCHEMATIC.
17. ASSEMBLE ALL TUBING AND CHAMFER TUBE I.D.'S TO REMOVE CUTTER BURR PER ITEM 4.
18. INSTALL BREATHER, PROVIDED WITH JUNCTION BOX, INTO .375 NPT HOLE IN BOTTOM OF BOX.
19. REFER TO ML ITEM 0541 FOR SERVO ARR, GAS STOP/RATIO & CONTROL VALVE.
20. MOUNTING PROVISIONS FOR 7852. REF ML ITEM 0557 PRESSURE TRANSDUCER ARR.
* CALCULATED WT 2800 LBS.
STOP/RATIO VALVE AND PILOT
SPRING DATA
STOP/RATIO VALVE
CONTROL VALVE
5.00 X 1.00
INNER VLV STROKE .390 MAX .370 MIN
INNER VALVE CLOSED 1.32.3 MAX 1080 MIN
VALVE OPEN 2.36.3 MAX 1945 MIN
VALVE CLOSED 1.32.0 MAX 1080 MIN
VALVE OPEN 3.02.1 MAX 2.588 MIN
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GAS TURBINE DEPARTMENT
973E506