

CR11 ITEM 181
 ITEM 1-1-1355/2

NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE															
SHEAR PLATE ASSEMBLY ITEM 815 SV778540- 24 111	2/2	DIFFERENTIAL FAILS IN PRESS POSITION. (POSTEVAL)	END ITEM ACTUATOR CAME AND/OR CARRIAGE WILL NOT TRANSLATE FROM PRESS POSITION AND MAINTAINS SOP SHUTOFF.	<p>A. DESIGN - THE DE ACTUATION SYSTEM INCORPORATES FEATURES TO MAINTAIN RELIABLE AND LOW FRICTION MOTION CAPABILITY OF THE MOVING PARTS. THESE FEATURES INCLUDE MATERIAL SELECTIONS, SURFACE TREATMENTS AND CONTROL OF THE WEARBASE AND LOADS ON MOVING PARTS. THE ACTUATOR CAME HAS HITLER COATED SURFACES AND HAS A BOND WEARBASE WITH BALL BEARING SUPPORTS. WHILE THE CARRIAGE IS MADE OF INCONEL 60 AND SLIDES ON ELECTROLYTIC STAINLESS STEEL RAILS WITH LONG WEARBASE. THE DISMOUNTING SLIDE BEARINGS ARE MADE OF S-206 AND LUBRICATED WHEN ASSEMBLED INTO THE ACTUATOR CAME CARRIAGE. THE PEEK CABLE ASSEMBLY CONSISTS OF A STAINLESS STEEL FLEM CABLE SLIDING IN A PEEK LINED SHEATH.</p> <p>B. TEST - COMPONENT ACCEPTANCE TEST - NONE.</p> <p>ORG TEST - PER SERP-60-018 THE FORCES REQUIRED TO DISMOUNT THE ACTUATOR WEIGHTS, AND THE FORCES REQUIRED TO PUSH OR PULL THE ACTUATOR THROUGH ITS COMPLETE TRAVEL ARE MEASURED. THE FORCE REQUIRED TO PUSH THE ACTUATOR OUT OF THE "OFF", "PRESS", "EVA", OR "IV", POSITIONS MUST BE 0.0 - 4.0 LBS. THE FORCES REQUIRED TO SLIDE THE ACTUATOR TO ANY OF THE ABOVE FOUR POSITIONS MUST BE 25 LBS MAXIMUM. PROPER CAME MECHANISM ACTUATION IS VERIFIED THROUGH THIS TEST.</p> <p>CERTIFICATION TEST - THE ITEM HAS CYCLED FOR THE FOLLOWING:</p> <table border="1"> <thead> <tr> <th>POSITION</th> <th>ACTUAL</th> <th>SPEC</th> </tr> </thead> <tbody> <tr> <td>IV</td> <td>5.825</td> <td>5.510</td> </tr> <tr> <td>OFF</td> <td>10.396</td> <td>10.010</td> </tr> <tr> <td>PRESS</td> <td>4.856</td> <td>4.010</td> </tr> <tr> <td>EVA</td> <td>1.578</td> <td>1.574</td> </tr> </tbody> </table>	POSITION	ACTUAL	SPEC	IV	5.825	5.510	OFF	10.396	10.010	PRESS	4.856	4.010	EVA	1.578	1.574
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FC12-1 8		CAUSE: CAME ON LEAKAGE MECHANISM JAMS; SEVERED CABLE OR CONNECTION, HIGH BEARING BRID, ACTUATOR CARRIAGE JAM.	<p>OFF INTERFACE; UNABLE TO CLOSE PRIMARY DE SHUTOFF VALVE. UNABLE TO GYF EVA WITHOUT DUMPING PRIMARY DE TANK INTO AIRLOCK.</p> <p>MISSION: LOSS OF USE BY ONE EMP. DIFFICULT TO GYF END WHEN PRESSURIZED TO 4.0 PSIG.</p> <p>CREW/VEHICLE: NONE.</p>																

520 020
 10-10-77

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 CRITICAL ITEMS LIST
 FILE: 43L-PSS/2

NAME P/N QTY	ENGT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
SIFAR PLATE ASSEMBLY ITEM 105 SV7704-0- 24 111	Z/R	INSTALLED FAILS IN PRESS POSITION. (POSTEVA)		CERTIFICATION TEST - (CONTINUED) ENGINEERING CHANGES 42001-701-46 (ADDED A SCREEN, LATE AND WASHER); REMOVED A NOTCH FOR CLEARANCE), 42004-034 (ADDED THE SMICH, LARGER WASHER AND THE APPLICATION OF HORIZONTAL), 42006-020 (EVA MICROSWITCH ADJUSTMENT CHANGE), 42006-029 (ACTUATION ON SEMI LEVEL) HAVE BEEN INCORPORATED AND CERTIFIED BY ANALYSIS/SIMILARITY SINCE THIS CONFIGURATION HAS CERTIFIED.

EC-52-2
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C. INSPECTION -
 DETAILS ARE 100% INSPECTED PER DRAWING DIMENSIONS
 AND SURFACE FINISH CHARACTERISTICS. DETAILS ARE
 MANUFACTURED FROM MATERIAL WITH CERTIFIED PHYSICAL
 AND CHEMICAL PROPERTIES. ALL DETAILS, GASKETS AND
 TEST FACILITIES ARE CLEANED AND INSPECTED TO
 ASSURE ENGINE TO PRECLUDE CONTAMINATION CLOGGING.

D. FAILURE HISTORY -
 NONE.

E. GROUND TURNAROUND -
 TESTED PER FEMU-N-001, ITEM 105B AND 105C
 REGULATION.

F. OPERATIONAL USE -
 CRM RESPONSE -
 PROEVA: DEPRESS AIRLOCK, USE THIRD ERM IF
 AVAILABLE. 3RD IS NO GO FOR EVA.
 POSTEVA: PERFORM QUICK DOFFING PROCEDURE IF
 LIMITED BY CABIN PRESS. HAVE EV CREWMEMBER COVER
 THE DECK WING VENT HOLE WHILE CREWMEMBER DOES THE
 HJT. BIRM REPLACE HELMET IN THE NO VENT POSITION.
 TRAINING -
 NO TRAINING SPECIFICALLY COVERS THIS FAILURE MODE.
 OPERATIONAL CONSIDERATIONS -
 FLIGHT RULES DEFINE LOSS OF ERM FOR LOSS OF SOP
 PRESSURE REGULATION.
 EVA CHECKLIST PROCEDURES VERIFY HARDWARE INTEGRITY
 AND SYSTEMS OPERATIONAL STATUS PRIOR TO EVA.

STC-4-201F
 PAGE 577