

EIL  
CRITICAL ITEM LIST

ASSEMBLY NAME/PART NUMBER: CABLE CUTTER ASSY/10054-10054-02  
 Reference: EIL\_CC  
 Prepared By: C. Harlan  
 Approved By: H. Wathey  
 Superseding Date: 11/80  
 Date: 1/81 Rev: 2

NAME P/N	QUANTITY	CRIT	FAILURE MODE & CAUSE	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
Cable Cutter 10054-10054 1-02, Item 5.2 1000		Z/FB	<p>5.2FN08 Movable handle inoperable.</p> <p>CAUSE: Broken or damaged link drive or dowel pin. Loss of pin shaft and retainer pin. Defective thread adhesive. Contamination or foreign material in pin shaft, retain pin, link drive or dowel pin. Binding.</p>	<p>END LINK: Handle unable to operate ratchet mechanism.</p> <p>OPE INTERFACE: Cable not in cut using back- up Cable Cutters.</p> <p>MISSION: Additional time required to complete task.</p> <p>CRIM/VEHICLE: Possible loss of crew/vehicle with loss of back-up cable cutter.</p>	<p>D. DESIGN: The pin shaft, pin retainer, dowel pin and link drive are all fabricated from 15-5 PH stainless steel heat treated to H1058 condition and passivated per 88-P-35 specifications. High strength materials and heat treated conditions preclude wear and breakage.</p> <p>Loss of retainer pin is precluded in design by the use of thread lock adhesive. It is installed using high strength Loctite D271. An added assurance, the Loctite is allowed to cure 30 minutes before further handling.</p> <p>The shelf life of Loctite is carefully monitored to eliminate unacceptable deterioration.</p> <p>Tight tolerances and close fit between pin shaft, pin retainers, drive link dowel pin and handle, thread and housing reduce the possibility of foreign material entering the movable assembly. The Cable Cutter has a NC level cleanliness requirement which is further protection from contamination.</p>

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CRITICAL ITEMS LIST

ASSEMBLY NAME/PART NUMBER: CABLE CUTTER ASST/10159-10026-01  
 Reference: CIL\_CC  
 Prepared By: C. Hartman  
 Approved By: M. Wilkes  
 Superseding Dates: 11/00  
 Dates: 11/00 Page: 9

NAME P/N QUANTITY	CRIT	FAILURE MODE & CAUSE	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
Cable Cutter 10159-10026 1-02, Item 3.2 100g	2/10	3.2FMO0 Reusable handle inoperable.		<p>B. 1001) Component Acceptance Test - None</p> <p>PER Test - The following tests are conducted at the Cable Cutter Assembly level in accordance with ILC Document 10107-70673a</p> <p>I. Functional test to verify proper operation.</p> <p>Certification Test - The Cable Cutter was certified for worst case PER Storage temperature range of -200 degrees F to +250 degrees F. It was functionally tested to demonstrate ability to cut wire bundles at -200 degrees F to +250 degrees F and exhibited no evidence of damage, binding or jamming.</p> <p>C. INSPECTIONS: Components and material manufactured to ILC requirements of an approved supplier are documented from procurement through shipping by the supplier. ILC incoming receiving inspections verified that the materials received are as identified in the procurement documents, that no damage has occurred during shipment and that supplier certification has been received which provides traceability information.</p>

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CIL  
CRITICAL ITEMS LIST

ASSEMBLY NAME/PART NUMBER: CABLE CUTTER AGSV/10034-10034-02  
 References: CIL CC  
 Prepared By: C. Harlan Approved By: M. Wilkey  
 Superseding Date: 11/80 Date: 1/87 Rev: A

NAME P/N	FAILURE MODE & CAUSE	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
Cable Cutter 10034-10034 1-92, Figure S.2 00na	1/1R S.2F00 Movable handle inoperable.		<p>The following NIP's are performed during the Cable Cutter manufacturing process to assure the failure causes are precluded from the fabricated items:</p> <ol style="list-style-type: none"> <li>1. Inspection of all components for damage or material degradation.</li> <li>2. The looseness of Lactite is controlled by inspection.</li> <li>3. Verification that Lactite shell life is within specification.</li> <li>4. Witness of Lactite application to retainer pin and verify proper cure time.</li> <li>5. Verify cleanliness to VC level.</li> </ol> <p>During PDR, the following inspection points are performed at the Cable Cutter Assembly level in accordance with ITC Document 10101-70697:</p> <ol style="list-style-type: none"> <li>1. Verify conformance to drawing.</li> <li>2. Inspection for damage or material degradation.</li> <li>3. Verify cleanliness to VC level.</li> </ol> <p>0. FAILURE HISTORY: None</p>

CIL  
CRITICAL ITEM LIST

ASSEMBLY NAME/PART NUMBER: CABLE CUTTER RESV/10159-1005A-01  
 Reference: CIL\_CC  
 Prepared By: C. Hartman  
 Superseding Date: 11/88  
 Approved By: H. Mithay  
 Date: 1/89 Rev: A

NAME P/N QUANTITY	COIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
Cable Cutter 10159-1005A 1-02, Item 5.2 049	2/10	S.2FASB Nevada Bendin inoperable.		<p>E. GROUND TURNAROUNDS:            During ground turnaround, in accordance with ILC Document 10107-70711, the Cable Cutter are inspected for damage and proper operation and cleaned in UC level.</p> <p>F. OPERATIONAL USE:</p> <ol style="list-style-type: none"> <li>1. Crew Response              PRE/POST EVA - N/A              EVA - Cut cables using back-up Cable Cutter stored in PSA or attempt to manually disconnect.</li> <li>2. Training              Crew Briefing.</li> <li>3. Operational Considerations              Test bay requires additional time.</li> </ol>