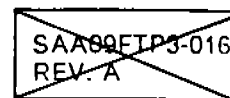


EO 1-SAA09FTP3-016  
SHEET 2 OF 2



B/L: 380.00  
SYS: Crew Hatch  
Access Tunnel  
Lifting Device

NOV 20 1995

**Critical Item:** Hoist Assembly (1 Item Total)  
**Find Number:** N/A  
**Criticality Category:** 2

<b>SAA No:</b>	09FTP3-016	<b>System/Area:</b>	Crew Hatch Access Tunnel Lifting Device / OPF 1, 2, 3
<b>NASA Part No:</b>	None	<b>PMN/ Name:</b>	H70-1512 Crew Hatch Access Tunnel Lifting Device
<b>Mfg/ Part No:</b>	Thern 46P	<b>Drawing/ Sheet No:</b>	G070-551768 All

**Function:** To lift, hold and lower the EDO Waste Collection System.

**Critical Failure Mode/Failure Mode No:** Gear disengagement/FMN 09FTP3-016.001

**Failure Cause:** worn or broken gears, structural failure of gear case,

**Failure Effect:** Load will drop resulting in possible loss (damage) to a vehicle system. Failure of system is detectable by abnormal noises or visual. Time to effect is seconds

#### ACCEPTANCE RATIONALE

**Design:**

- The hoist is an off the shelf item manufactured by Thern and is designed for a 1000 lb load.
- It has a rated capacity of 300 lbs (actual weight is 275 lbs which will give it an operational safety factor of 3.6:1).
- The worm is made of steel and the gear is made of bronze.

**Test:**

- The hoist and structure was proof load tested at 375 lbs. upon installation.
- Annual 300 lb. load test is performed per OMI V6104.
- OMRS File VI requires the annual performance of a rated load test.

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**Inspection:**

- Visual inspections of the unit for damage, missing hardware and proper markings are performed annually per OMI V6104.
- The oil in the gearbox is replaced annually.

**Failure History:**

- The PRACA database was researched and no failure data was found on this component in the critical failure mode.
- The GIDEP failure data interchange system was researched and no failure data was found on this component in the critical failure mode.

**Operational Use:**

- Correcting Action:

There is no action which can be taken to mitigate the failure effect.

- Timeframe:

Since no correcting action is available, timeframe does not apply.