PRODUCT FAMILY

INTER-CONNECT ASSEMBLY

The Donor and Acceptor units make up the Inter-connect Assembly. The donor is a single or dual input port unit that has an extending piston. This allows for multiple inputs from alternate sources should a system require that feature. It functions when a detonating input is received from either a high energy end fitting from an ETL or a detonator (electrical or laser). The output energy of the ETL extends the Donor piston across the canopy sill line and through mechanical energy, strikes an Acceptor mounted to the canopy frame that is in-line with the Donor. The Acceptor Assembly is a receiving unit designed to function when struck by the piston of the donor. It can be either explosive loaded or inert. An explosive loaded Acceptor is designed with an internal transfer charge similar to those discussed in the previous Initiator section.



APPLICABLE SPECIFICATIONS

Operating Temp: $-65^{\circ}F$ to $+200^{\circ}F$ Leak Rate: $1\times10-5$ cc/sec. Helium

TSH&A 28 Days: Per Mil Std-83124 at 80K Feet Altitude -65°F to +200°F and 95% Relative Humidity.

Shock: Per MIL-STD-810, Method 516, Procedure 1, 40 G for 11 milliseconds; 18 saw tooth shock

pulses.

Vibration: MIL-STD-810 Method 514, Procedure I, Part 1, 2, & 3. Curve Z up to 2000 CPS with

temperature range $-65^{\circ}F$ to $+200^{\circ}F$.

Salt/Fog: MIL-STD-810, Method 509: 5%+1% Sodium Chloride by Weight for 50 Hours plus 48 Hours

drying time. Fired at 70°F.

Dust: MIL-STD-810 Method 510, Except High Temperature 200°F. Dust concentration was .3

grains/ft., velocity was 1,750 feet/minute for a duration of 28 hours. All units fire successfully.

lced Condition: MIL-C-83124 paragraph 4.5.11.10: Temperature -65°F & stabilized, then placed in

100°F/90% relative humidity until ice disappears, then -65°F & stabilized, then fired at

–65°F

Submerged Operation: Submerged in 2 inches of water with gap completely filled with water. Fired successfully.

6 Foot Drop: Dropped Firing Mechanism Up, Firing Mechanism Down and Side, then fired units successfully.

IAW MIL-STD-331A, Test 103.1 Procedure 1 Dropped Firing Mechanism Up, Firing Mechanism

40-Foot Drop: Down and Side. Units did not fire and were safe to dispose of.

Platform Use & Heritage: AV-8B, JAS-39, T-38A/N, T-6, Concept Aircraft, Improved CFS w/Inert

