

MODE SELECTOR

Pilot safety is paramount and when a crew needs to eject, they must know their systems will work on time, every time. Our 3-Mode Selector, a cartridge actuated device also known as an Explosive Sequence Control (ESC), PacSci EMC P/N 820833-4 & 826213-1, is a manually operated pyrotechnic device that transfers the stimulus of high energy output ETL (i.e. SMDC, FCDC, RDCTL, etc.) from one ejection sequence to another. For military aircraft, selector of choice is 820833-04 on the F/A-18, T-45 and TAV-8B while the 826213-1 is used on the two seat F-15. Both have the same construction other than the F-15 unit has different positioning of the ports in relation to the other. Its function as a part of the aircraft crew emergency escape system is to provide a selection of ejection modes by transferring the single input energy stimulus to any one of three output ports. The unit's construction contains all fragments produced during its functioning.

PRODUCT FAMILY



APPLICABLE SPECIFICATIONS

Operating Temperature:	-65°F to +200°F
Leak Rate:	1×10-5 cc/sec. Air at 1.1 + 1Atmosphere (Explosive shaft only)
Handle Cycling:	15,000 cycles minimum
Ultimate Load:	150 lbs.
Actuation "Force & Stroke":	NORMAL to AFT INITIATES (90°) with 20-30 lbs. pull in 1.25-1.63 inches
Low Temperature:	Conditioned at -65°F for 16 hours, then fired successfully.
High Temperature:	Conditioned at +200°F for 22 hours, functioned successfully
Altitude:	1 hour at equivalent 80,000 at -65°F
Salt/Fog:	ASTM B117 for 168 hours
Dust:	MIL-STD-810 Method 510, at +200°F for 28 hours.
Ice Condition:	16 hours at -65°F
Vibration (non-gunfire):	5-2,000 Hz – 5 g's to 10 g's, 9 hours/axis
Vibration (gunfire):	5-500 Hz – 5 g's to 10 g's, 2 hours/axis, Mil-STD-810, Curve Z
6 & 40 Foot Drop:	Dropped Firing Mechanism Up, Down and Side, fired successfully.
Shock:	30 G with nominal duration of 11 milliseconds for a total of 18 impacts.
Temperature/Humidity:	28 days at -65°F to +160°F @ 90% Relative Humidity
Altitude:	With ports open, 100 pressure cycles at +200F with absolute pressures between 29.92 inches Hg and 1.32 inches Hg. No adverse effect to initiators.
Fungus:	MIL-STD-810 Method 508.1, Procedure I. No Fungus Growth.
Platform Use & Heritage:	F-15, F/A-18, T-45, AV-8B

ENVELOPE & DIMENSIONS

