

TOLERANCE COMPENSATING, VARIABLE FORCE LATCHING INJECTOR / EJECTOR WHICH PROVIDES EVENLY DISTRIBUTED FORCE IN ORDER TO INSURE UNIFORM MATING OF MODULE MECHANICAL, OPTICAL, AND OTHER CRITICAL CONNECTION POINTS TO DEPLOYED ENCLOSURE BACKPLANE WHILE SIMULTANEOUSLY PROTECTING CONNECTOR PINS AND BACKPLANE RECEPTACLES FROM OVER-INSERTION BY SERVICE PERSONNEL.



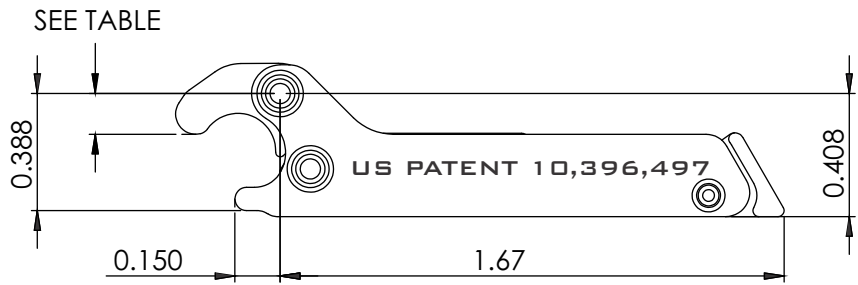
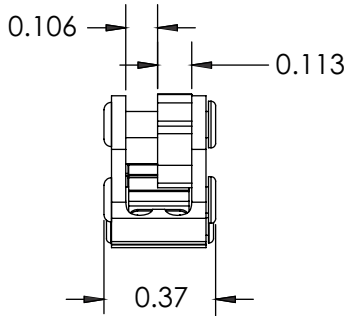
OPTIMIZED FOR
VITA 48.2, 48.4,
48.5, 78.0, 78.1

PAWL POSITION	PAWL FORCE (LBS)	INSERTION FORCE (LBS)
< .075	80-120	95-150
.075	70-80	85-105
.100	40-60	50-75
.135	0-10	0-20

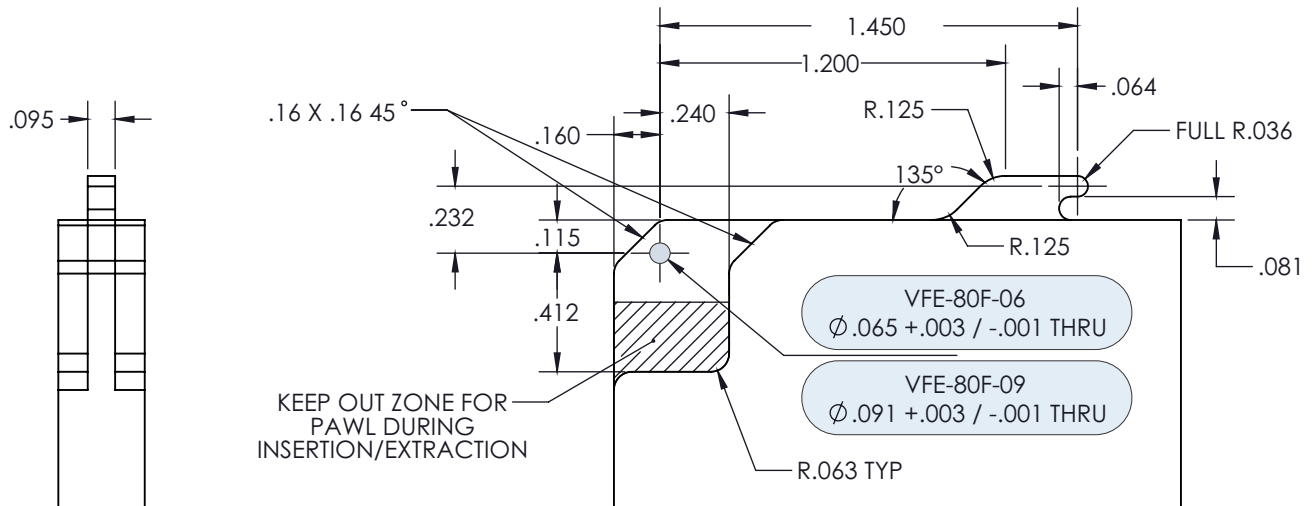
PER VITA 48.4, 78.1 - See Page 2



CUSTOMIZE FRONT FACE
W/ LASER ETCH



RECOMMENDED HEAT FRAME SPECS FOR 48.2, 48.4, 48.5, 78.0, 78.1



ALL DIMS +/- .005" UNLESS SPECIFIED

MATERIALS / FINISHES:
MAINBODY, CAM, PAWL, CATCH - AL7075
TEFLON IMPREGNATED HARD COAT ANODIZE
PER AMS 2482, TYPE I

.090" RIVETS, COIL SPRING - SS300 SERIES, PASSIVATED
.060" RIVETS - SS17-4 SERIES H900, PASSIVATED
LEAF SPRING - SS17-7 SERIES HT1050, PASSIVATED



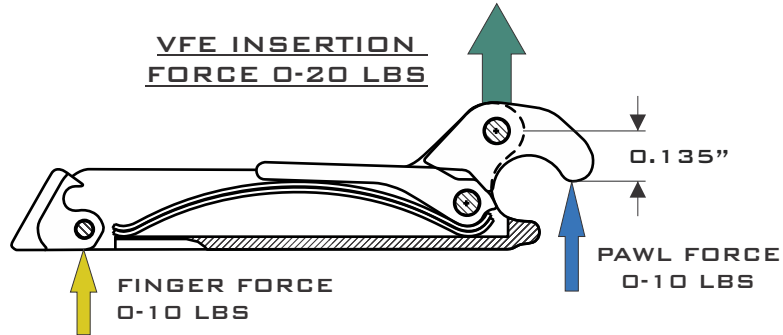
**VARIABLE FORCE
LOCKING EJECTOR
P/N: VFE-80F-XX**

US PATENT 10,396,497

THE OPENCOTS VARIABLE FORCE INJECTOR-EJECTOR EMPLOYS A DOUBLE PIVOT, FORCE MULTIPLYING DESIGN. THE INNOVATIVE DESIGN CREATES A MECHANICAL ADVANTAGE THAT TAKES ADVANTAGE OF A LONGER SPRING THAT IS LESS PRONE TO SETTING AND IS CAPABLE OF GENERATING HIGHER INJECTION FORCE. THE DOUBLE PIVOT DESIGN IS A MECHANICAL BREAK THRU FOR NEXT GENERATION VPX CARDS.

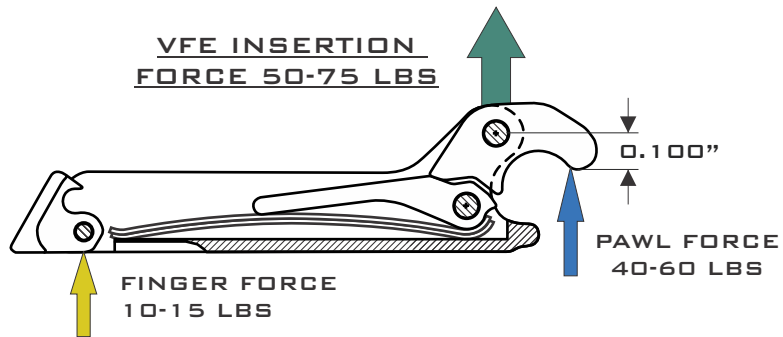
PRE-ENGAGEMENT

PAWL BEGINS ENGAGING COLDWALL AT 0.135" WITH INTIAL FINGER FORCE. PAWL WILL TRAVEL TO 0.120" WITH ~10 LBS OF FINGER FORCE AND GENERATE ~10 LBS OF PAWL FORCE, YIELDING AN INSERTION FORCE OF ~ 20 LBS. FINGER FORCES ARE ASSUMED TO BE APPLIED APPROXIMATELY AS SHOWN NEAR THE TIP.



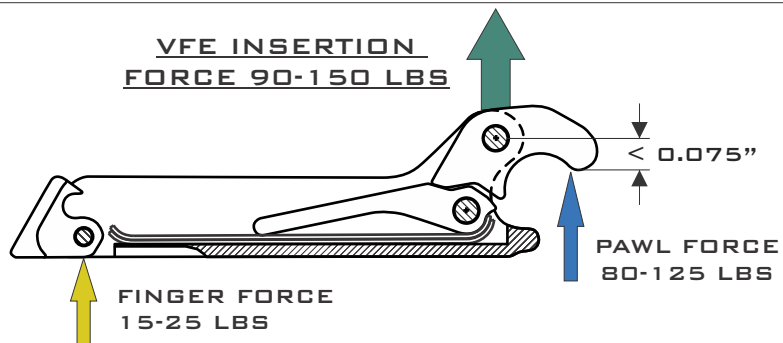
NOMINAL ENGAGEMENT

PAWL IS IN MID RANGE OF SPRING COMPRESSION AND REQUIRES 10-15 LBS OF FINGER FORCE TO GENERATE 40-60 LBS OF PAWL FORCE. THIS RESULTS IN A MODULE INSERTION FORCE OF 50-75 LBS. MORE FORCE CAN BE APPLIED TO THE EJECTOR WITH YOUR FINGER, BUT THE FORCES WILL NOT BE MULTIPLIED BY THE MECHANICAL ADVANTAGE OF THE EJECTOR.



MAX ENGAGEMENT

PAWL BOTTOMS OUT AT APPROXIMATELY 80 LBS WITH A 15-20 LBS FINGER FORCE WHEN THE PAWL IS AT 0.075". BEYOND PAWL POSITION 0.075", ALL FORCES ARE MULTIPLIED BY 5 AND SUMMED AS MODULE INSERTION FORCES. I.E. A 25LBS INPUT YIELDS A 125 LBS PAWL FORCE AND 150LBS MODULE INSERTION FORCE.



PART NUMBERS:

VFE-80F-06 (INCLUDES EJECTOR BODY, PAWL AND .060" RIVET)
VFE-80F-09 (INCLUDES EJECTOR BODY, PAWL AND .090" RIVET)

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PER AMS 2482, TYPE I

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.060" RIVETS - SS17-4 SERIES H900, PASSIVATED
LEAF SPRING - SS17-7 SERIES HT1050, PASSIVATED

OpenCOTS™

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LOCKING EJECTOR
P/N: VFE-80F-XX

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