

Fatigue fixture assembly for testing generic IVC filter fatigue coupons

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5/30/17

Revised for confluent: 5/30/18

Part	Part number (assembly drawing)	McMaster #	Price	Quantity	Total
Equipment:					
BOSE ELF 3300	1				
Honeywell 22N force transducer	2				
Transducer adapter	3				
Custom parts (to be machined):					
Upper plate 1 (delrin)	4				
Upper plate 2 (in contact with struts; slippery delrin)	5				
Bottom plate 1 (delrin)	6				
Bottom plate 2 (delrin)	7				
McMaster parts:					
1" x 24" x 3/8" Delrin bar, tight-tolerance	(4, 6, 7)	9123K76 (2ft)	\$5.70	1	\$5.70
6" x 6" x 1/4" slippery Delrin sheet (13% PTFE)	(5)	8578K412	\$35.80	1	\$35.80
Threaded hex standoff, 3/8" OD, 1" lg, #10-32 thread (Zinc-plated)	8a	91920A300	\$2.57	N/A	
Threaded hex standoff, 3/8" OD, 1" lg, #10-32 thread (Stainless)	8b	91115A300	\$3.49	1	\$3.49
0.051" dia piano wire (36 ft)	9a	8908K56	\$11.86	N/A	
3/64" dowel pins (50 cnt.)	9b	97155A115	\$3.27	1	\$3.27
#2-56 stainless steel set screws (5 cnt.)	10	92313A022	\$5.38	3	\$16.14
#6-32 x 3/4" corrosion resist cap screws (25 cnt.)	11	91274A020	\$9.06	1	\$9.06
#6-32 corrosion resist hex nuts (100 cnt.)	12	90480A007	\$1.24	1	\$1.24
#10-32 x 3/4" corrosion resist cap screws (50 cnt.)	13	91274A174	\$8.87	1	\$8.87
1/4" - 20 x 1 1/4" lg. corrosion resist cap screws (25 cnt.)	14	90128A376	\$7.05	1	\$7.05

(): raw materials

used in preliminary tests only

suggested replacement due to corrosion in PBS bath

Total: \$90.62