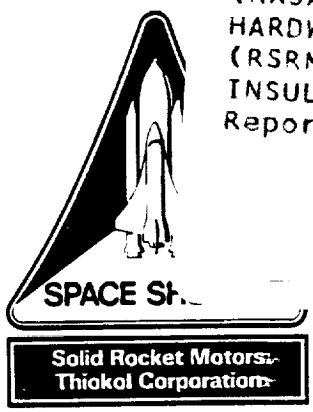
TWR-60699



Appendix E
Insulation Postfire Data

Final Postflight Hardware Evaluation Report 360T025 (RSRM-25, STS-46)

March 1993

Prepared for

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George C. Marshall Space Flight Center
Marshall Space Flight Center, Alabama 35812

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APPENDIX E
INSULATION POSTFIRE DATA

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Table E-I. 360T025B Nozzle-to-Case Joint Performance

DEGREE LOCATION	PREFIRE (INCHES)	POSTFIRE (INCHES)	MDD	CSF	ASF
0.0	5.603	4.367	1.236	4.0	4.5
21.6	5.609				
46.8	5.598	4.699	0.899	5.5	6.2
68.4	5.592				
90.0	5.615	4.982	0.633	7.7	8.9
111.6	5.622				
136.8	5.593	4.817	0.776	6.3	7.2
158.4	5.615				
180.0	5.594	4.674	0.920	5.3	6.1
201.6	5.617				
226.8	5.600	4.628	0.972	5.0	5.8
248.4	5.623				
270.0	5.625	4.956	0.669	7.3	8.4
291.6	5.620				
316.8	5.636	5.043	0.593	8.3	9.5
338.4	5.610				
	MEDIAN	MEDIAN	MEDIAN	MINIMUM	MINIMUM
	5.613	4.758	0.838	4.0	4.5

A SAFETY FACTOR OF 2.0 IS REQUIRED

A BLANK INDICATES THAT POSTFIRE DATA COLLECTION IS NOT REQUIRED AT THAT LOCATION

Table E-II. 360T025B Aft Field Joint Performance

DEGREE LOCATION	PREFIRE (INCHES)	POSTFIRE (INCHES)	MDD	CSF	ASF
2.0	2.762	2.272	0.490	5.3	5.6
16.0	2.757				
30.0	2.760				
46.0	2.761	2.298	0.463	5.6	6.0
60.0	2.755				
76.0	2.757				
90.0	2.761	2.248	0.513	5.1	5.4
106.0	2.765				
120.0	2.770				
136.0	2.768	2.316	0.452	5.7	6.1
150.0	2.769				
166.0	2.773				
180.0	2.772	2.390	0.382	6.8	7.3
196.0	2.757				
210.0	2.743				
226.0	2.745	2.313	0.432	6.0	6.4
242.0	2.748				
256.0	2.750				
270.0	2.753	2.280	0.473	5.5	5.8
286.0	2.747				
300.0	2.749				
316.0	2.753	2.213	0.540	4.8	5.1
330.0	2.755				
346.0	2.759				
	MEDIAN 2.757	MEDIAN 2.289	MEDIAN 0.468	MINIMUM 4.8	MINIMUM 5.1

A SAFETY FACTOR OF 2.0 IS REQUIRED

A BLANK INDICATES THAT POSTFIRE DATA COLLECTION IS NOT REQUIRED AT THAT LOCATION

Table E-III. 360T025B Center Field Joint Performance

DEGREE LOCATION	PREFIRE (INCHES)	POSTFIRE (INCHES)	MDD	CSF	ASF
2.0	2.739	2.528	0.211	12.3	13.0
16.0	2.743				
30.0	2.784				
46.0	2.784	2.522	0.262	9.9	10.6
60.0	2.767				
76.0	2.746				
90.0	2.745	2.528	0.217	12.0	12.6
106.0	2.685				
120.0	2.704				
136.0	2.730	2.573	0.157	16.5	17.4
150.0	2.757				
166.0	2.713				
180.0	2.747	2.527	0.220	11.8	12.5
196.0	2.726				
210.0	2.733				
226.0	2.730	2.532	0.198	13.1	13.8
242.0	2.743				
256.0	2.729				
270.0	2.732	2.557	0.175	14.8	15.6
286.0	2.731				
300.0	2.731				
316.0	2.732	2.564	0.168	15.4	16.3
330.0	2.732				
346.0	2.733				
	MEDIAN	MEDIAN	MEDIAN	MINIMUM	MINIMUM
	2.733	2.530	0.205	9.9	10.6

A SAFETY FACTOR OF 2.0 IS REQUIRED

A BLANK INDICATES THAT POSTFIRE DATA COLLECTION IS NOT REQUIRED AT THAT LOCATION

Table E-IV. 360T025B Forward Field Joint Performance

DEGREE LOCATION	PREFIRE (INCHES)	POSTFIRE (INCHES)	MDD	CSF	ASF
2.0	2.754	2.632	0.122	21.3	22.6
16.0	2.757				
30.0	2.770				
46.0	2.774	2.625	0.149	17.4	18.6
60.0	2.774				
76.0	2.782				
90.0	2.773	2.619	0.154	16.9	18.0
106.0	2.790				
120.0	2.768				
136.0	2.772	2.585	0.187	13.9	14.8
150.0	2.772				
166.0	2.765				
180.0	2.735	2.642	0.093	27.9	29.4
196.0	2.759				
210.0	2.754				
226.0	2.750	2.623	0.127	20.4	21.7
242.0	2.743				
256.0	2.745				
270.0	2.743	2.614	0.129	20.1	21.3
286.0	2.752				
300.0	2.751				
316.0	2.762	2.591	0.171	15.2	16.2
330.0	2.748				
346.0	2.742				
	MEDIAN	MEDIAN	MEDIAN	MINIMUM	MINIMUM
	2.758	2.621	0.139	13.9	14.8

A SAFETY FACTOR OF 2.0 IS REQUIRED

A BLANK INDICATES THAT POSTFIRE DATA COLLECTION IS NOT REQUIRED AT THAT LOCATION

Table E-V. 360T025B Aft Dome Insulation Performance

COMPLIANCE SAFETY FACTOR (CSF)

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MIN.	PLANE	REQUIRED S.F.
9.3	5.78	5.57	4.50	5.27	4.99	6.38	5.10	5.76	4.50	90.0	1.5
10.7	4.58	4.23	3.38	4.50	6.80	5.01	3.75	4.46	3.38	90.0	1.5
12.0	4.31	4.04	3.21	4.17	5.31	4.46	3.58	4.41	3.21	90.0	1.5
13.1	4.04	4.00	3.21	3.81	4.79	4.28	3.39	4.09	3.21	90.0	1.5
14.4	3.89	4.06	3.11	3.75	5.07	4.18	3.44	4.18	3.11	90.0	1.5
16.0	3.90	4.10	2.98	3.77	5.40	4.52	3.57	3.91	2.98	90.0	1.5
17.3	4.28	4.55	3.20	3.76	5.53	4.58	3.69	4.20	3.20	90.0	1.5
18.5	4.84	4.84	3.51	4.25	5.99	5.69	4.22	4.67	3.51	90.0	1.5
19.5	6.29	4.93	4.47	4.49	5.63	6.85	4.56	4.88	4.47	90.0	1.5
21.3	5.69	5.24	4.10	4.95	5.60	6.24	4.58	4.26	4.10	90.0	1.5
24.3	4.55	3.43	3.24	3.55	3.79	4.49	3.97	3.11	3.11	316.8	1.5
33.0	2.72	2.83	2.41	2.75	2.71	2.67	2.57	2.85	2.41	90.0	1.5
45.0	2.37	2.47	2.41	2.46	2.45	2.16	2.51	2.80	2.16	226.8	1.5
53.0	3.32	3.91	3.79	4.28	3.71	3.49	4.66	3.81	3.32	0.0	1.5
56.0	3.87	4.31	4.04	4.06	3.55	3.76	4.94	4.20	3.55	180.0	2.0
72.0	3.88	4.02	4.23	3.58	3.27	4.50	3.55	4.48	3.27	180.0	1.5
75.0	3.70	3.81	4.12	4.74	3.42	4.15	3.81	4.14	3.42	180.0	1.5
78.0	3.41	3.61	3.61	4.88	3.38	3.57	3.56	4.46	3.38	180.0	1.5

SEGMENT MINIMUM = 2.16 AT THE 45.0 INCH STATION

ACTUAL SAFETY FACTOR (ASF)

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MIN.	PLANE	REQUIRED S.F.
9.3	6.01	5.69	4.59	5.56	5.09	6.49	5.21	6.00	4.59	90.0	1.5
10.7	4.85	4.47	3.58	4.78	7.28	5.30	4.01	4.72	3.58	90.0	1.5
12.0	4.61	4.28	3.44	4.47	5.74	4.77	3.87	4.70	3.44	90.0	1.5
13.1	4.34	4.30	3.47	4.13	5.20	4.63	3.71	4.39	3.47	90.0	1.5
14.4	4.12	4.29	3.30	3.98	5.47	4.42	3.69	4.42	3.30	90.0	1.5
16.0	4.24	4.43	3.23	4.11	5.93	4.92	3.90	4.24	3.23	90.0	1.5
17.3	4.79	5.08	3.60	4.21	6.25	5.14	4.14	4.68	3.60	90.0	1.5
18.5	5.56	5.57	4.02	4.85	6.92	6.54	4.84	5.33	4.02	90.0	1.5
19.5	7.29	5.67	5.12	5.16	6.59	7.93	5.31	5.58	5.12	90.0	1.5
21.3	6.64	6.00	4.74	5.74	6.59	7.30	5.29	4.89	4.74	90.0	1.5
24.3	5.13	3.92	3.69	4.05	4.31	5.14	4.52	3.50	3.50	316.8	1.5
33.0	2.97	3.09	2.63	2.97	2.93	2.88	2.77	3.12	2.63	90.0	1.5
45.0	2.57	2.65	2.64	2.64	2.68	2.30	2.78	3.02	2.30	226.8	1.5
53.0	3.61	4.17	4.18	4.80	4.11	3.78	5.12	4.23	3.61	0.0	1.5
56.0	4.55	5.04	4.79	4.95	4.37	4.42	5.94	4.99	4.37	180.0	2.0
72.0	4.20	4.30	4.49	4.07	3.72	4.76	3.78	4.77	3.72	180.0	1.5
75.0	3.99	4.07	4.41	5.26	3.72	4.43	4.13	4.54	3.72	180.0	1.5
78.0	3.65	3.89	3.87	5.26	3.68	3.86	3.98	4.73	3.65	0.0	1.5

SEGMENT MINIMUM = 2.30 AT THE 45.0 INCH STATION

Table E-V. 360T025B Aft Dome Insulation Performance (cont)

MATERIAL DECOMPOSITION DEPTH (MDD)
INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MEDIAN	MAX.	DESIGN M+3S
9.3	0.848	0.880	1.088	0.929	0.981	0.768	0.960	0.851	0.905	1.088	2.560
10.7	1.026	1.112	1.391	1.044	0.691	0.939	1.254	1.054	1.049	1.391	2.261
12.0	1.043	1.113	1.404	1.078	0.848	1.008	1.257	1.021	1.061	1.404	2.208
13.1	1.065	1.075	1.339	1.128	0.898	1.005	1.270	1.051	1.070	1.339	2.218
14.4	1.054	1.010	1.320	1.094	0.809	0.982	1.193	0.982	1.032	1.320	2.225
16.0	0.968	0.922	1.270	1.003	0.700	0.837	1.059	0.966	0.967	1.270	1.980
17.3	0.831	0.782	1.111	0.948	0.644	0.777	0.966	0.848	0.839	1.111	1.675
18.5	0.694	0.694	0.957	0.790	0.561	0.591	0.797	0.720	0.707	0.957	1.496
19.5	0.501	0.639	0.705	0.702	0.560	0.460	0.691	0.646	0.643	0.705	1.617
21.3	0.517	0.561	0.717	0.594	0.525	0.471	0.642	0.690	0.578	0.717	1.654
24.3	0.646	0.856	0.908	0.829	0.776	0.655	0.740	0.946	0.803	0.946	1.832
33.0	1.178	1.129	1.326	1.162	1.181	1.199	1.246	1.124	1.179	1.326	1.399
45.0	1.095	1.053	1.077	1.055	1.061	1.203	1.036	0.927	1.058	1.203	1.222
53.0	1.019	0.865	0.891	0.790	0.912	0.969	0.725	0.886	0.888	1.019	1.305
56.0	0.720	0.647	0.691	0.688	0.785	0.743	0.565	0.665	0.690	0.785	1.369
72.0	0.515	0.498	0.473	0.558	0.611	0.444	0.564	0.446	0.507	0.611	0.817
75.0	0.487	0.472	0.437	0.380	0.527	0.434	0.472	0.435	0.455	0.527	0.773
78.0	0.469	0.443	0.443	0.328	0.474	0.448	0.450	0.359	0.446	0.474	0.718

MATERIAL DECOMPOSITION RATE (MDR)
MILS / SECOND

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	AVE.	EXPOSURE TIME
9.3	7.0	7.2	9.0	7.6	8.1	6.3	7.9	7.0	7.5	121.5
10.7	8.6	9.3	11.7	8.8	5.8	7.9	10.5	8.8	8.9	119.3
12.0	9.0	9.6	12.1	9.3	7.3	8.7	10.8	8.8	9.4	116.3
13.1	9.4	9.5	11.8	9.9	7.9	8.8	11.2	9.3	9.7	113.6
14.4	9.5	9.1	11.9	9.9	7.3	8.9	10.8	8.9	9.5	110.8
16.0	9.0	8.6	11.8	9.3	6.5	7.8	9.8	9.0	9.0	107.8
17.3	7.9	7.5	10.6	9.0	6.1	7.4	9.2	8.1	8.2	104.8
18.5	6.8	6.8	9.3	7.7	5.5	5.8	7.8	7.0	7.1	102.6
19.5	5.0	6.3	7.0	7.0	5.6	4.6	6.9	6.4	6.1	100.7
21.3	5.3	5.8	7.4	6.1	5.4	4.8	6.6	7.1	6.1	97.3
24.3	6.9	9.2	9.7	8.9	8.3	7.0	7.9	10.1	8.5	93.3
33.0	14.2	13.6	15.9	14.0	14.2	14.4	15.0	13.5	14.3	83.2
45.0	14.7	14.1	14.4	14.1	14.2	16.1	13.9	12.4	14.2	74.7
53.0	13.7	11.6	12.0	10.6	12.3	13.0	9.8	11.9	11.9	74.3
56.0	9.7	8.7	9.3	9.3	10.6	10.0	7.6	9.0	9.3	74.1
72.0	9.2	8.9	8.4	9.9	10.9	7.9	10.0	7.9	9.1	56.2
75.0	9.7	9.4	8.7	7.5	10.5	8.6	9.4	8.6	9.0	50.4
78.0	10.1	9.6	9.6	7.1	10.2	9.7	9.7	7.8	9.2	46.3

MOTOR ACTION TIME = 122.3 SECONDS

Table E-V. 360T025B Aft Dome Insulation Performance (cont)

PART NO. 1U76668-02 — PREFIRE MEASUREMENTS
SERIAL NO. 0000019 — INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MIN.	MEDIAN	MDT
9.3	5.099	5.010	4.992	5.161	4.997	4.981	5.006	5.107	4.981	5.008	4.900
10.7	4.973	4.970	4.983	4.993	5.028	4.979	5.034	4.976	4.970	4.981	4.700
12.0	4.809	4.765	4.830	4.823	4.869	4.812	4.864	4.795	4.765	4.818	4.500
13.1	4.625	4.620	4.644	4.655	4.671	4.658	4.712	4.619	4.619	4.650	4.300
14.4	4.344	4.335	4.361	4.356	4.424	4.343	4.401	4.338	4.335	4.350	4.100
16.0	4.109	4.082	4.097	4.120	4.149	4.122	4.126	4.097	4.082	4.115	3.780
17.3	3.984	3.969	3.997	3.989	4.026	3.994	3.998	3.967	3.967	3.992	3.560
18.5	3.857	3.867	3.851	3.834	3.884	3.868	3.860	3.840	3.834	3.859	3.360
19.5	3.654	3.624	3.613	3.620	3.689	3.647	3.670	3.606	3.606	3.636	3.150
21.3	3.432	3.364	3.396	3.407	3.462	3.440	3.396	3.376	3.364	3.401	2.940
24.3	3.317	3.357	3.349	3.354	3.344	3.365	3.346	3.310	3.310	3.348	2.940
33.0	3.503	3.487	3.492	3.452	3.461	3.448	3.455	3.509	3.448	3.474	3.200
45.0	2.809	2.790	2.843	2.787	2.842	2.770	2.883	2.797	2.770	2.803	2.600
53.0	3.675	3.603	3.722	3.790	3.744	3.659	3.714	3.744	3.603	3.718	3.380
56.0	3.273	3.258	3.311	3.409	3.432	3.283	3.355	3.319	3.258	3.315	2.790
72.0	2.163	2.143	2.124	2.269	2.273	2.113	2.134	2.129	2.113	2.138	2.000
75.0	1.943	1.922	1.927	1.998	1.958	1.921	1.950	1.976	1.921	1.947	1.800
78.0	1.710	1.722	1.715	1.724	1.744	1.729	1.792	1.699	1.699	1.723	1.600

PART NO. 1U76957-03 — POSTFIRE MEASUREMENTS
SERIAL NO. 0000010 — INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MIN.	MEDIAN
9.3	4.251	4.130	3.904	4.232	4.016	4.213	4.046	4.256	3.904	4.172
10.7	3.947	3.858	3.592	3.949	4.337	4.040	3.780	3.922	3.592	3.934
12.0	3.766	3.652	3.426	3.745	4.021	3.804	3.607	3.774	3.426	3.756
13.1	3.560	3.545	3.305	3.527	3.773	3.653	3.442	3.568	3.305	3.553
14.4	3.290	3.325	3.041	3.262	3.615	3.361	3.208	3.356	3.041	3.308
16.0	3.141	3.160	2.827	3.117	3.449	3.285	3.067	3.131	2.827	3.136
17.3	3.153	3.187	2.886	3.041	3.382	3.217	3.032	3.119	2.886	3.136
18.5	3.163	3.173	2.894	3.044	3.323	3.277	3.063	3.120	2.894	3.141
19.5	3.153	2.985	2.908	2.918	3.129	3.187	2.979	2.960	2.908	2.982
21.3	2.915	2.803	2.679	2.813	2.937	2.969	2.754	2.686	2.679	2.808
24.3	2.671	2.501	2.441	2.525	2.568	2.710	2.606	2.364	2.364	2.547
33.0	2.325	2.358	2.166	2.290	2.280	2.249	2.209	2.385	2.166	2.285
45.0	1.714	1.737	1.766	1.732	1.781	1.567	1.847	1.870	1.567	1.752
53.0	2.656	2.738	2.831	3.000	2.832	2.690	2.989	2.858	2.656	2.832
56.0	2.553	2.611	2.620	2.721	2.647	2.540	2.790	2.654	2.540	2.634
72.0	1.648	1.645	1.651	1.711	1.662	1.669	1.570	1.683	1.570	1.656
75.0	1.456	1.450	1.490	1.618	1.431	1.487	1.478	1.541	1.431	1.483
78.0	1.241	1.279	1.272	1.396	1.270	1.281	1.342	1.340	1.241	1.280

Table E-VI. 360T025B Aft Cylinder Insulation Performance

STATION	COMPLIANCE SAFETY FACTOR (CSF) DEGREE LOCATIONS										REQUIRED
(IN)	0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MIN.	PLANE	S.F.
85.0	3.21	3.37	3.30	4.10	2.94	2.92	4.64	3.03	2.92	226.8	1.5
90.0	3.11	3.45	3.10	2.86	4.19	3.03	4.81	3.19	2.86	136.8	1.5
98.0	2.25	2.53	2.66	2.56	3.04	2.32	3.75	2.62	2.25	0.0	1.5
105.8	2.35	2.62	2.54	2.69	2.31	2.30	3.05	2.28	2.28	316.8	1.5
116.0	2.43	2.62	2.73	2.65	2.41	2.36	2.54	2.60	2.36	226.8	1.5
124.5	2.15	2.42	2.74	2.37	2.36	2.42	4.20	2.41	2.15	0.0	1.5
133.0	2.33	2.30	2.52	2.51	2.26	2.21	4.07	2.25	2.21	226.8	1.5
145.5	2.36	2.61	2.53	2.44	2.38	2.26	2.63	2.30	2.26	226.8	1.5
158.5	2.52	2.63	2.72	2.38	2.23	2.15	2.57	2.73	2.15	226.8	1.5
166.0	2.29	2.78	2.65	2.41	2.25	2.38	2.29	2.31	2.25	180.0	1.5
177.7	3.02	2.86	2.82	2.44	2.62	2.49	2.50	2.68	2.44	136.8	2.0
192.5	2.54	2.94	2.89	2.62	2.45	2.30	3.80	2.76	2.30	226.8	1.5
202.5	2.91	3.20	3.12	3.15	2.53	3.23	4.37	2.73	2.53	180.0	1.5
214.0	2.59	2.63	2.66	2.71	2.29	2.65	3.95	2.72	2.29	180.0	1.5
227.3	2.54	2.37	2.30	3.22	2.23	2.32	2.56	2.43	2.23	180.0	1.5
238.3	2.81	2.84	2.80	2.78	2.73	2.70	2.90	2.93	2.70	226.8	1.5
250.0	2.46	2.63	2.59	2.47	2.25	2.24	2.76	2.55	2.24	226.8	1.5
269.0	2.79	2.60	2.27	2.63	2.39	4.90	2.30	2.62	2.27	90.0	1.5
283.9	2.94	2.63	2.32	2.50	3.63	3.19	3.15	3.38	2.32	90.0	1.5
299.1	3.69	3.14	3.48	2.83	3.02	2.86	3.56	4.36	2.83	136.8	2.0
322.0	4.13	4.58	5.43	3.42	3.92	3.96	3.17	2.92	2.92	316.8	1.5
339.0	4.52	4.52	3.88	4.87	5.67	4.09	4.63	6.33	3.88	90.0	1.5
358.0	7.17	8.64	8.09	+	6.44	7.17	6.67	54.29	6.44	180.0	1.5
367.0	7.60	4.75	6.91	3.19	95.00	6.03	7.45	4.47	3.19	136.8	1.5
377.5	5.96	11.04	12.05	5.52	+	6.31	5.96	11.28	5.52	136.8	1.5

SEGMENT MINIMUM = 2.15 AT THE 158.5 INCH STATION
A " + " MEANS NEGLIGIBLE MDD HAS OCCURRED

Table E-VI. 360T025B Aft Cylinder Insulation Performance (cont)

STATION (IN)	ACTUAL SAFETY FACTOR (ASF) DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MIN.	PLANE	REQUIRED S.F.
85.0	3.85	4.05	3.96	4.91	3.56	3.62	5.68	3.70	3.56	180.0	1.5
90.0	3.57	3.91	3.60	3.27	4.70	3.45	5.62	3.56	3.27	136.8	1.5
98.0	2.91	3.25	3.42	3.19	3.85	2.94	4.85	3.33	2.91	0.0	1.5
105.8	2.45	2.75	2.69	2.80	2.47	2.39	3.23	2.40	2.39	226.8	1.5
116.0	2.53	2.72	2.86	2.78	2.55	2.45	2.64	2.77	2.45	226.8	1.5
124.5	2.30	2.55	2.91	2.52	2.51	2.54	4.41	2.56	2.30	0.0	1.5
133.0	2.83	2.81	3.10	2.99	2.71	2.64	4.95	2.77	2.64	226.8	1.5
145.5	2.37	2.60	2.52	2.44	2.37	2.26	2.59	2.28	2.26	226.8	1.5
158.5	2.59	2.69	2.79	2.47	2.29	2.19	2.57	2.77	2.19	226.8	1.5
166.0	2.81	3.37	3.14	2.95	2.73	2.86	2.77	2.80	2.73	180.0	1.5
177.7	4.66	4.36	4.29	3.76	4.03	3.83	3.85	4.05	3.76	136.8	2.0
192.5	2.98	3.48	3.37	2.96	2.79	2.63	4.53	3.18	2.63	226.8	1.5
202.5	2.96	3.24	3.16	3.21	2.55	3.27	4.52	2.75	2.55	180.0	1.5
214.0	2.67	2.67	2.72	2.75	2.33	2.70	4.12	2.76	2.33	180.0	1.5
227.3	3.00	2.88	2.73	3.80	2.59	2.72	3.02	2.76	2.59	180.0	1.5
238.3	2.84	2.86	2.83	2.81	2.76	2.74	2.92	2.95	2.74	226.8	1.5
250.0	2.50	2.69	2.66	2.52	2.31	2.29	2.79	2.57	2.29	226.8	1.5
269.0	3.27	3.03	2.62	3.04	2.78	5.71	2.64	2.99	2.62	90.0	1.5
283.9	3.20	2.96	2.53	2.75	3.99	3.55	3.46	3.92	2.53	90.0	1.5
299.1	5.97	5.10	5.59	4.56	4.90	4.63	5.68	7.06	4.56	136.8	2.0
322.0	4.46	4.98	5.74	3.71	4.21	4.27	3.30	3.15	3.15	316.8	1.5
339.0	4.79	4.85	4.18	5.10	6.03	4.34	4.90	6.80	4.18	90.0	1.5
358.0	7.89	9.34	9.00	+	6.83	7.77	7.49	60.00	6.83	180.0	1.5
367.0	9.34	5.87	8.45	4.04	+	7.65	8.59	5.25	4.04	136.8	1.5
377.5	7.38	13.69	14.32	7.75	+	7.33	7.24	13.15	7.24	270.0	1.5

SEGMENT MINIMUM = 2.19 AT THE 158.5 INCH STATION
A " + " MEANS NEGLIGIBLE MDD HAS OCCURRED

Table E-VI. 360T025B Aft Cylinder Insulation Performance (cont)

MATERIAL DECOMPOSITION DEPTH (MDD) INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MEDIAN	MAX.	DESIGN M+3S
85.0	0.405	0.386	0.394	0.317	0.442	0.445	0.280	0.429	0.399	0.445	0.618
90.0	0.407	0.367	0.408	0.443	0.302	0.417	0.263	0.396	0.402	0.443	0.576
98.0	0.505	0.449	0.427	0.443	0.373	0.489	0.303	0.433	0.438	0.505	0.582
105.8	0.460	0.413	0.426	0.401	0.468	0.469	0.354	0.474	0.443	0.474	0.559
116.0	0.432	0.401	0.384	0.396	0.435	0.444	0.413	0.404	0.409	0.444	0.527
124.5	0.479	0.426	0.376	0.435	0.437	0.426	0.245	0.428	0.427	0.479	0.522
133.0	0.421	0.426	0.389	0.391	0.434	0.444	0.241	0.436	0.424	0.444	0.516
145.5	0.394	0.356	0.368	0.381	0.390	0.412	0.353	0.405	0.386	0.412	0.493
158.5	0.349	0.334	0.323	0.369	0.394	0.410	0.343	0.322	0.346	0.410	0.491
166.0	0.371	0.306	0.321	0.352	0.378	0.357	0.371	0.368	0.362	0.378	0.466
177.7	0.331	0.350	0.354	0.409	0.381	0.401	0.400	0.373	0.377	0.409	0.452
192.5	0.307	0.265	0.270	0.298	0.318	0.339	0.205	0.283	0.291	0.339	0.400
202.5	0.251	0.228	0.234	0.232	0.289	0.226	0.167	0.267	0.233	0.289	0.376
214.0	0.270	0.266	0.263	0.258	0.306	0.264	0.177	0.257	0.264	0.306	0.351
227.3	0.256	0.274	0.283	0.202	0.291	0.280	0.254	0.267	0.271	0.291	0.317
238.3	0.224	0.222	0.225	0.227	0.231	0.233	0.217	0.215	0.225	0.233	0.331
250.0	0.224	0.209	0.212	0.223	0.244	0.246	0.199	0.216	0.219	0.246	0.285
269.0	0.179	0.192	0.220	0.190	0.209	0.102	0.217	0.191	0.192	0.220	0.297
283.9	0.153	0.171	0.194	0.180	0.124	0.141	0.143	0.133	0.148	0.194	0.251
299.1	0.183	0.215	0.194	0.239	0.224	0.236	0.190	0.155	0.204	0.239	0.253
322.0	0.092	0.083	0.070	0.111	0.097	0.096	0.120	0.130	0.096	0.130	0.197
339.0	0.084	0.084	0.098	0.078	0.067	0.093	0.082	0.060	0.083	0.098	0.190
358.0	0.053	0.044	0.047	0	0.059	0.053	0.057	0.007	0.050	0.059	0.181
367.0	0.050	0.080	0.055	0.119	0.004	0.063	0.051	0.085	0.059	0.119	0.175
377.5	0.089	0.048	0.044	0.096	0	0.084	0.089	0.047	0.066	0.096	0.237

Table E-VI. 360T025B Aft Cylinder Insulation Performance (cont)

MATERIAL DECOMPOSITION RATE (MDR)
MILS / SECOND

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	AVE.	EXPOSURE TIME
85.0	9.0	8.6	8.8	7.1	9.8	9.9	6.2	9.6	8.6	44.9
90.0	9.2	8.3	9.2	10.0	6.8	9.4	5.9	8.9	8.5	44.3
98.0	11.7	10.4	9.9	10.2	8.6	11.3	7.0	10.0	9.9	43.3
105.8	10.8	9.7	10.0	9.4	11.0	11.0	8.3	11.2	10.2	42.5
116.0	10.4	9.6	9.2	9.5	10.4	10.6	9.9	9.7	9.9	41.7
124.5	11.8	10.5	9.2	10.7	10.7	10.5	6.0	10.5	10.0	40.7
133.0	10.7	10.8	9.8	9.9	11.0	11.2	6.1	11.0	10.1	39.5
145.5	10.5	9.5	9.8	10.2	10.4	11.0	9.4	10.8	10.2	37.5
158.5	9.7	9.3	9.0	10.3	11.0	11.4	9.6	9.0	9.9	35.9
166.0	10.5	8.6	9.0	9.9	10.6	10.1	10.5	10.4	9.9	35.5
177.7	9.7	10.3	10.4	12.0	11.2	11.8	11.7	10.9	11.0	34.1
192.5	9.9	8.5	8.7	9.6	10.3	10.9	6.6	9.1	9.2	31.0
202.5	8.5	7.7	7.9	7.8	9.8	7.6	5.6	9.0	8.0	29.6
214.0	9.7	9.6	9.5	9.3	11.0	9.5	6.4	9.2	9.3	27.8
227.3	9.9	10.6	11.0	7.8	11.3	10.9	9.8	10.3	10.2	25.8
238.3	9.3	9.2	9.3	9.4	9.5	9.6	9.0	8.9	9.3	24.2
250.0	9.9	9.2	9.4	9.9	10.8	10.9	8.8	9.6	9.8	22.6
269.0	9.1	9.7	11.2	9.6	10.6	5.2	11.0	9.7	9.5	19.7
283.9	9.1	10.1	11.5	10.7	7.3	8.3	8.5	7.9	9.2	16.9
299.1	10.5	12.3	11.1	13.7	12.8	13.5	10.9	8.9	11.7	17.5
322.0	7.2	6.5	5.5	8.7	7.6	7.6	9.4	10.2	7.9	12.7
339.0	6.9	6.9	8.1	6.4	5.5	7.7	6.8	5.0	6.7	12.1
358.0	4.7	3.9	4.2	0	5.2	4.7	5.0	0.6	3.5	11.3
367.0	4.6	7.3	5.0	10.9	0.4	5.8	4.7	7.8	5.8	10.9
377.5	4.4	2.4	2.2	4.7	0	4.1	4.4	2.3	3.1	20.3

MOTOR ACTION TIME = 122.3 SECONDS

Table E-VI. 360T025B Aft Cylinder Insulation Performance (cont)

PART NO. 1U76668-02
SERIAL NO. 0000019

PREFIRE MEASUREMENTS
INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MIN.	MEDIAN	MDT
85.0	1.561	1.564	1.560	1.556	1.573	1.611	1.590	1.588	1.556	1.569	1.300
90.0	1.452	1.436	1.469	1.448	1.418	1.438	1.478	1.408	1.408	1.443	1.265
98.0	1.469	1.459	1.459	1.413	1.435	1.440	1.469	1.441	1.413	1.450	1.135
105.8	1.125	1.137	1.145	1.122	1.158	1.122	1.143	1.139	1.122	1.138	1.080
116.0	1.095	1.092	1.100	1.102	1.109	1.088	1.092	1.121	1.088	1.098	1.050
124.5	1.101	1.087	1.095	1.095	1.099	1.082	1.080	1.094	1.080	1.095	1.030
133.0	1.190	1.198	1.207	1.171	1.177	1.174	1.192	1.207	1.171	1.191	0.980
145.5	0.934	0.925	0.929	0.929	0.926	0.930	0.915	0.924	0.915	0.928	0.930
158.5	0.904	0.897	0.900	0.910	0.903	0.899	0.882	0.893	0.882	0.900	0.880
166.0	1.042	1.032	1.008	1.037	1.031	1.020	1.028	1.030	1.008	1.031	0.850
177.7	1.544	1.526	1.520	1.537	1.534	1.536	1.540	1.511	1.511	1.535	1.000
192.5	0.916	0.921	0.909	0.881	0.887	0.893	0.929	0.901	0.881	0.905	0.780
202.5	0.742	0.738	0.739	0.744	0.736	0.739	0.755	0.735	0.735	0.739	0.730
214.0	0.721	0.710	0.715	0.709	0.713	0.714	0.730	0.709	0.709	0.714	0.700
227.3	0.769	0.789	0.774	0.767	0.753	0.761	0.767	0.738	0.738	0.767	0.650
238.3	0.637	0.636	0.636	0.637	0.638	0.638	0.633	0.635	0.633	0.637	0.630
250.0	0.559	0.563	0.563	0.562	0.563	0.564	0.555	0.556	0.555	0.563	0.550
269.0	0.585	0.582	0.577	0.578	0.582	0.582	0.572	0.571	0.571	0.580	0.500
283.9	0.489	0.507	0.490	0.495	0.495	0.500	0.495	0.522	0.489	0.495	0.450
299.1	1.093	1.097	1.084	1.091	1.098	1.093	1.080	1.095	1.080	1.093	0.676
322.0	0.410	0.413	0.402	0.412	0.408	0.410	0.396	0.410	0.396	0.410	0.380
339.0	0.402	0.407	0.410	0.398	0.404	0.404	0.402	0.408	0.398	0.404	0.380
358.0	0.418	0.411	0.423	0.397	0.403	0.412	0.427	0.420	0.397	0.415	0.380
367.0	0.467	0.470	0.465	0.481	0.433	0.482	0.438	0.446	0.433	0.466	0.380
377.5	0.657	0.657	0.630	0.744	0.618	0.616	0.644	0.618	0.616	0.637	0.530

Table E-VI. 360T025B Aft Cylinder Insulation Performance (cont)

PART NO. 1U76957-03
SERIAL NO. 0000010

POSTFIRE MEASUREMENTS
INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.8	90.0	136.8	180.0	226.8	270.0	316.8	MIN.	MEDIAN
85.0	1.156	1.178	1.166	1.239	1.131	1.166	1.310	1.159	1.131	1.166
90.0	1.045	1.069	1.061	1.005	1.116	1.021	1.215	1.012	1.005	1.053
98.0	0.964	1.010	1.032	0.970	1.062	0.951	1.166	1.008	0.951	1.009
105.8	0.665	0.724	0.719	0.721	0.690	0.653	0.789	0.665	0.653	0.705
116.0	0.663	0.691	0.716	0.706	0.674	0.644	0.679	0.717	0.644	0.685
124.5	0.622	0.661	0.719	0.660	0.662	0.656	0.835	0.666	0.622	0.662
133.0	0.769	0.772	0.818	0.780	0.743	0.730	0.951	0.771	0.730	0.772
145.5	0.540	0.569	0.561	0.548	0.536	0.518	0.562	0.519	0.518	0.544
158.5	0.555	0.563	0.577	0.541	0.509	0.489	0.539	0.571	0.489	0.548
166.0	0.671	0.726	0.687	0.685	0.653	0.663	0.657	0.662	0.653	0.667
177.7	1.213	1.176	1.166	1.128	1.153	1.135	1.140	1.138	1.128	1.146
192.5	0.609	0.656	0.639	0.583	0.569	0.554	0.724	0.618	0.554	0.613
202.5	0.491	0.510	0.505	0.512	0.447	0.513	0.588	0.468	0.447	0.507
214.0	0.451	0.444	0.452	0.451	0.407	0.450	0.553	0.452	0.407	0.451
227.3	0.513	0.515	0.491	0.565	0.462	0.481	0.513	0.471	0.462	0.502
238.3	0.413	0.414	0.411	0.410	0.407	0.405	0.416	0.420	0.405	0.412
250.0	0.335	0.354	0.351	0.339	0.319	0.318	0.356	0.340	0.318	0.340
269.0	0.406	0.390	0.357	0.388	0.373	0.480	0.355	0.380	0.355	0.384
283.9	0.336	0.336	0.296	0.315	0.371	0.359	0.352	0.389	0.296	0.344
299.1	0.910	0.882	0.890	0.852	0.874	0.857	0.890	0.940	0.852	0.886
322.0	0.318	0.330	0.332	0.301	0.311	0.314	0.276	0.280	0.276	0.313
339.0	0.318	0.323	0.312	0.320	0.337	0.311	0.320	0.348	0.311	0.320
358.0	0.365	0.367	0.376	0.446	0.344	0.359	0.370	0.413	0.344	0.369
367.0	0.417	0.390	0.410	0.362	0.429	0.419	0.387	0.361	0.361	0.400
377.5	0.568	0.609	0.586	0.648	0.646	0.532	0.555	0.571	0.532	0.579

Table E-VII. 360T025B Aft Center Segment Insulation Performance

COMPLIANCE SAFETY FACTOR (CSF)

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MIN.	PLANE	REQUIRED S.F.
3.5	4.56	3.78	3.81	3.16	3.32	5.39	4.01	3.33	3.16	136.0	2.0
11.0	3.40	4.17	3.56	3.04	2.87	3.75	5.22	4.82	2.87	180.0	1.5
30.7	2.45	2.53	3.89	2.87	3.15	2.62	3.28	2.73	2.45	0.0	1.5
36.2	3.17	2.58	3.90	3.51	3.80	3.02	4.08	2.67	2.58	46.0	1.5
44.6	4.56	5.90	5.90	5.71	5.90	7.35	4.19	8.18	4.19	270.0	1.5
71.5	6.07	3.62	2.50	2.79	4.59	3.09	7.08	4.15	2.50	90.0	1.5
126.0	3.57	6.00	3.26	3.49	21.43	4.84	18.75	4.55	3.26	90.0	1.5
145.0	5.17	4.41	3.85	4.17	6.00	4.69	15.00	4.69	3.85	90.0	1.5
161.4	2.19	1.21<	3.81	2.15	1.48<	2.46	2.74	2.23	1.21	46.0	2.0
163.0	2.31	2.65	78.67	3.87	2.68	2.57	3.58	2.95	2.31	0.0	1.5
178.0	6.19	4.64	4.64	+	7.22	6.50	3.82	3.82	3.82	316.0	1.5
214.1	9.29	6.50	4.81	5.42	18.57	32.50	32.50	65.00	4.81	90.0	1.5
280.0	+	+	+	+	+	+	+	+	+	0.0	1.5
298.0	+	+	+	+	+	+	+	+	+	0.0	1.5
311.8	+	+	+	+	+	+	+	+	+	0.0	1.5

SEGMENT MINIMUM = 1.21 AT THE 161.4 INCH STATION
A " < " INDICATES THE PRECEDING SAFETY FACTOR HAS VIOLATED THE MINIMUM SAFETY FACTOR REQUIREMENT
A " + " MEANS NEGLIGIBLE MDD HAS OCCURRED

ACTUAL SAFETY FACTOR (ASF)

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MIN.	PLANE	REQUIRED S.F.
3.5	5.68	4.67	4.69	4.11	4.19	6.38	4.99	4.18	4.11	136.0	2.0
11.0	4.18	5.21	4.41	3.82	3.94	4.86	6.43	5.93	3.82	136.0	1.5
30.7	2.80	2.78	4.30	3.07	3.48	3.04	3.56	2.98	2.78	46.0	1.5
36.2	4.47	3.61	5.29	4.63	5.14	4.22	5.40	3.55	3.55	316.0	1.5
44.6	5.08	6.03	6.15	5.97	6.08	7.49	4.30	8.30	4.30	270.0	1.5
71.5	6.89	3.85	2.78	3.03	5.05	3.42	7.88	4.85	2.78	90.0	1.5
126.0	3.88	6.16	3.54	3.70	23.29	5.16	20.00	4.76	3.54	90.0	1.5
145.0	5.45	4.53	4.13	4.47	6.36	5.03	15.70	5.03	4.13	90.0	1.5
161.4	5.95	3.54	10.87	5.61	3.97	6.43	7.05	5.91	3.54	46.0	2.0
163.0	5.39	6.18	+	9.02	6.25	5.98	8.33	6.87	5.39	0.0	1.5
178.0	9.43	6.57	6.79	+	10.44	9.80	5.59	5.91	5.59	270.0	1.5
214.1	9.57	6.45	5.04	5.67	19.57	33.25	34.50	67.00	5.04	90.0	1.5
280.0	+	+	+	+	+	+	+	+	+	0.0	1.5
298.0	+	+	+	+	+	+	+	+	+	0.0	1.5
311.8	+	+	+	+	+	+	+	+	+	0.0	1.5

SEGMENT MINIMUM = 2.78 AT THE 30.7 INCH STATION
A " + " MEANS NEGLIGIBLE MDD HAS OCCURRED

Table E-VII. 360T025B Aft Center Segment Insulation Performance (cont)

MATERIAL DECOMPOSITION DEPTH (MDD)
INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MEDIAN	MAX.	DESIGN M+3S
3.5	0.465	0.561	0.557	0.671	0.639	0.393	0.529	0.636	0.559	0.671	1.067
11.0	0.559	0.456	0.533	0.626	0.663	0.506	0.364	0.394	0.519	0.663	0.829
30.7	0.316	0.306	0.199	0.270	0.246	0.295	0.236	0.284	0.277	0.316	0.484
36.2	0.189	0.233	0.154	0.171	0.158	0.199	0.147	0.225	0.180	0.233	0.318
44.6	0.079	0.061	0.061	0.063	0.061	0.049	0.086	0.044	0.061	0.086	0.090
71.5	0.028	0.047	0.068	0.061	0.037	0.055	0.024	0.041	0.044	0.068	0.086
126.0	0.042	0.025	0.046	0.043	0.007	0.031	0.008	0.033	0.032	0.046	0.074
145.0	0.029	0.034	0.039	0.036	0.025	0.032	0.010	0.032	0.032	0.039	0.063
161.4	0.108<	0.195<	0.062	0.110<	0.159<	0.096<	0.086<	0.106<	0.107	0.195	0.082
163.0	0.102<	0.089<	0.003	0.061	0.088<	0.092<	0.066	0.080	0.084	0.102	0.082
178.0	0.021	0.028	0.028	0	0.018	0.020	0.034	0.034	0.024	0.034	0.065
214.1	0.014	0.020	0.027	0.024	0.007	0.004	0.004	0.002	0.011	0.027	0.029
280.0	0	0	0	0	0	0	0	0	0	0	0.005
298.0	0	0	0	0	0	0	0	0	0	0	0.005
311.8	0	0	0	0	0	0	0	0	0	0	0.003

A " < " INDICATES THE PRECEDING MDD HAS EXCEEDED THE M + 3 SIGMA DESIGN CRITERIA

MATERIAL DECOMPOSITION RATE (MDR)
MILS / SECOND

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	AVE.	EXPOSURE TIME
3.5	4.2	5.0	5.0	6.0	5.7	3.5	4.8	5.7	5.0	111.2
11.0	5.8	4.7	5.5	6.5	6.9	5.2	3.8	4.1	5.3	96.7
30.7	6.7	6.5	4.2	5.7	5.2	6.2	5.0	6.0	5.7	47.3
36.2	5.8	7.2	4.8	5.3	4.9	6.1	4.5	6.9	5.7	32.4
44.6	6.6	5.1	5.1	5.3	5.1	4.1	7.2	3.7	5.3	11.9
71.5	2.8	4.7	6.7	6.0	3.7	5.4	2.4	4.1	4.5	10.1
126.0	4.8	2.9	5.3	4.9	0.8	3.6	0.9	3.8	3.4	8.7
145.0	4.0	4.7	5.3	4.9	3.4	4.4	1.4	4.4	4.1	7.3
161.4	10.9	19.7	6.3	11.1	16.1	9.7	8.7	10.7	11.6	9.9
163.0	10.3	9.0	0.3	6.2	8.9	9.3	6.7	8.1	7.3	9.9
178.0	3.5	4.7	4.7	0	3.0	3.3	5.7	5.7	3.8	6.0
214.1	2.3	3.3	4.5	4.0	1.2	0.7	0.7	0.3	2.1	6.0
280.0	0	0	0	0	0	0	0	0	0	3.4
298.0	0	0	0	0	0	0	0	0	0	2.8
311.8	0	0	0	0	0	0	0	0	0	2.0

MOTOR ACTION TIME = 122.3 SECONDS

Table E-VII. 360T025B Aft Center Segment Insulation Performance (cont)

PART NO. 1U76667-02 PREFIRE MEASUREMENTS .
SERIAL NO. 0000049 INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MIN.	MEDIAN	MDT
3.5	2.641	2.619	2.614	2.756	2.675	2.509	2.639	2.658	2.509	2.640	2.120
11.0	2.339	2.374	2.353	2.389	2.613	2.457	2.342	2.338	2.338	2.364	1.900
30.7	0.885	0.850	0.856	0.828	0.855	0.897	0.841	0.845	0.828	0.853	0.774
36.2	0.844	0.842	0.814	0.792	0.812	0.839	0.794	0.799	0.792	0.813	0.600
44.6	0.401	0.368	0.375	0.376	0.371	0.367	0.370	0.365	0.365	0.370	0.360
71.5	0.193	0.181	0.189	0.185	0.187	0.188	0.189	0.199	0.181	0.189	0.170
126.0	0.163	0.154	0.163	0.159	0.163	0.160	0.160	0.157	0.154	0.160	0.150
145.0	0.158	0.154	0.161	0.161	0.159	0.161	0.157	0.161	0.154	0.160	0.150
161.4	0.643	0.691	0.674	0.617	0.631	0.617	0.606	0.626	0.606	0.628	0.236
163.0	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.236
178.0	0.198	0.184	0.190	0.190	0.188	0.196	0.190	0.201	0.184	0.190	0.130
214.1	0.134	0.129	0.136	0.136	0.137	0.133	0.138	0.134	0.129	0.135	0.130
280.0	0.102	0.101	0.105	0.105	0.104	0.112	0.117	0.104	0.101	0.105	0.090
298.0	0.101	0.105	0.111	0.110	0.108	0.111	0.112	0.109	0.101	0.109	0.090
311.8	0.104	0.110	0.111	0.108	0.109	0.111	0.109	0.104	0.104	0.109	0.090

PART NO. 1U76791-01 POSTFIRE MEASUREMENTS
SERIAL NO. 0000020 INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MIN.	MEDIAN
3.5	2.176	2.058	2.057	2.085	2.036	2.116	2.110	2.022	2.022	2.072
11.0	1.780	1.918	1.820	1.763	1.950	1.951	1.978	1.944	1.763	1.931
30.7	0.569	0.544	0.657	0.558	0.609	0.602	0.605	0.561	0.544	0.586
36.2	0.655	0.609	0.660	0.621	0.654	0.640	0.647	0.574	0.574	0.644
44.6	0.322	0.307	0.314	0.313	0.310	0.318	0.284	0.321	0.284	0.314
71.5	0.165	0.134	0.121	0.124	0.150	0.133	0.165	0.158	0.121	0.142
126.0	0.121	0.129	0.117	0.116	0.156	0.129	0.152	0.124	0.116	0.126
145.0	0.129	0.120	0.122	0.125	0.134	0.129	0.147	0.129	0.120	0.129
161.4	0.535	0.496	0.612	0.507	0.472	0.521	0.520	0.520	0.472	0.520
163.0	0.448	0.461	0.547	0.489	0.462	0.458	0.484	0.470	0.448	0.466
178.0	0.177	0.156	0.162	0.191	0.170	0.176	0.156	0.167	0.156	0.169
214.1	0.120	0.109	0.109	0.112	0.130	0.129	0.134	0.132	0.109	0.124
280.0	L	L	L	L	L	L	L	L	L	0.105
298.0	L	L	L	L	L	L	L	L	L	0.109
311.8	L	L	L	L	L	L	L	L	L	0.109

AN " L " INDICATES THAT LINER MATERIAL WAS REMAINING AT THAT LOCATION.
THE MEDIAN AND MINIMUM VALUES WERE CALCULATED USING THE PREFIRE THICKNESSES
AT THE LOCATIONS WHERE LINER MATERIAL WAS REMAINING

Table E-VIII. 360T025B Forward Center Segment Insulation Performance

COMPLIANCE SAFETY FACTOR (CSF)

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MIN.	PLANE	REQUIRED S.F.
3.5	14.42	10.93	+	11.71	12.62	14.62	+	17.52	10.93	46.0	2.0
11.0	22.62	+	+	51.35	+	+	65.52	+	22.62	0.0	1.5
30.7	6.25	4.08	+	4.08	5.33	5.41	+	4.00	4.00	316.0	1.5
36.2	10.53	8.22	12.77	8.70	11.11	19.35	7.06	7.32	7.06	270.0	1.5
44.6	32.73	11.25	9.00	10.29	10.59	+	13.33	9.73	9.00	90.0	1.5
71.5	+	3.78	5.86	5.15	6.54	9.44	13.08	5.48	3.78	46.0	1.5
126.0	+	11.54	6.82	18.75	6.82	13.64	+	13.64	6.82	90.0	1.5
145.0	+	+	18.75	8.82	8.82	37.50	6.82	21.43	6.82	270.0	1.5
161.4	6.56	7.61	14.75	5.49	6.21	7.15	5.02	4.21	4.21	316.0	2.0
163.0	3.87	+	4.00	3.93	4.72	5.90	4.14	4.07	3.87	0.0	1.5
178.0	+	+	14.44	5.65	5.42	43.33	+	6.50	5.42	180.0	1.5
214.1	+	+	+	+	+	+	+	+	+	0.0	1.5
280.0	+	+	+	+	+	+	+	+	+	0.0	1.5
298.0	+	+	+	+	+	+	+	+	+	0.0	1.5
311.8	+	+	+	+	+	+	+	+	+	0.0	1.5

SEGMENT MINIMUM = 3.78 AT THE 71.5 INCH STATION
A " + " MEANS NEGLIGIBLE MDD HAS OCCURRED

ACTUAL SAFETY FACTOR (ASF)

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MIN.	PLANE	REQUIRED S.F.
3.5	17.01	13.38	+	14.70	15.35	18.46	+	21.46	13.38	46.0	2.0
11.0	29.18	+	+	62.76	+	+	82.97	+	29.18	0.0	1.5
30.7	13.31	8.68	+	8.56	11.29	11.30	+	8.37	8.37	316.0	1.5
36.2	14.40	11.25	17.62	11.77	15.20	26.16	9.84	9.80	9.80	316.0	1.5
44.6	34.73	11.91	9.70	11.00	11.26	+	14.15	10.27	9.70	90.0	1.5
71.5	+	4.29	6.52	5.79	7.35	10.50	14.85	6.06	4.29	46.0	1.5
126.0	+	13.15	7.36	21.00	7.41	14.82	+	15.00	7.36	90.0	1.5
145.0	+	+	19.87	9.82	9.82	40.75	7.50	23.29	7.50	270.0	1.5
161.4	16.67	18.81	33.81	13.33	14.63	16.73	11.77	10.32	10.32	316.0	2.0
163.0	9.02	+	9.32	9.17	11.00	13.75	9.65	9.48	9.02	0.0	1.5
178.0	+	+	21.89	8.57	8.08	63.00	+	9.50	8.08	180.0	1.5
214.1	+	+	+	+	+	+	+	+	+	0.0	1.5
280.0	+	+	+	+	+	+	+	+	+	0.0	1.5
298.0	+	+	+	+	+	+	+	+	+	0.0	1.5
311.8	+	+	+	+	+	+	+	+	+	0.0	1.5

SEGMENT MINIMUM = 4.29 AT THE 71.5 INCH STATION
A " + " MEANS NEGLIGIBLE MDD HAS OCCURRED

Table E-VIII. 360T025B Forward Center Segment Insulation Performance (cont)

MATERIAL DECOMPOSITION DEPTH (MDD)
INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MEDIAN	MAX.	DESIGN M+3S
3.5	0.147	0.194	0	0.181	0.168	0.145	0	0.121	0.146	0.194	1.067
11.0	0.084	0.005	0	0.037	0	0	0.029	0	0	0.084	0.829
30.7	0.064	0.098	0	0.098	0.075	0.074	0	0.100	0.074	0.100	0.484
36.2	0.057	0.073	0.047	0.069	0.054	0.031	0.085	0.082	0.063	0.085	0.318
44.6	0.011	0.032	0.040	0.035	0.034	0	0.027	0.037	0.033	0.040	0.090
71.5	0	0.045	0.029	0.033	0.026	0.018	0.013	0.031	0.027	0.045	0.086
126.0	0	0.013	0.022	0.008	0.022	0.011	0	0.011	0.011	0.022	0.074
145.0	0	0	0.008	0.017	0.017	0.004	0.022	0.007	0.008	0.022	0.063
161.4	0.036	0.031	0.016	0.043	0.038	0.033	0.047	0.056	0.037	0.056	0.082
163.0	0.061	0	0.059	0.060	0.050	0.040	0.057	0.058	0.058	0.061	0.082
178.0	0	0	0.009	0.023	0.024	0.003	0.001	0.020	0.006	0.024	0.065
214.1	0	0	0	0	0	0	0	0	0	0	0.029
280.0	0	0	0	0	0	0	0	0	0	0	0.005
298.0	0	0	0	0	0	0	0	0	0	0	0.005
311.8	0	0	0	0	0	0	0	0	0	0	0.003

MATERIAL DECOMPOSITION RATE (MDR)
MILS / SECOND

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	AVE.	EXPOSURE TIME
3.5	1.3	1.7	0	1.6	1.5	1.3	0	1.1	1.1	111.2
11.0	0.9	0.1	0	0.4	0	0	0.3	0	0.2	96.9
30.7	1.3	2.1	0	2.1	1.6	1.6	0	2.1	1.3	47.6
36.2	1.7	2.2	1.4	2.1	1.6	0.9	2.6	2.5	1.9	33.0
44.6	0.9	2.5	3.1	2.8	2.7	0	2.1	2.9	2.1	12.7
71.5	0	4.1	2.7	3.0	2.4	1.7	1.2	2.8	2.2	10.9
126.0	0	1.4	2.3	0.8	2.3	1.2	0	1.2	1.1	9.5
145.0	0	0	1.0	2.2	2.2	0.5	2.8	0.9	1.2	7.9
161.4	3.4	2.9	1.5	4.0	3.6	3.1	4.4	5.2	3.5	10.7
163.0	5.7	0	5.5	5.6	4.7	3.7	5.3	5.4	4.5	10.7
178.0	0	0	1.3	3.2	3.4	0.4	0.1	2.8	1.4	7.1
214.1	0	0	0	0	0	0	0	0	0	7.1
280.0	0	0	0	0	0	0	0	0	0	4.2
298.0	0	0	0	0	0	0	0	0	0	4.0
311.8	0	0	0	0	0	0	0	0	0	3.4

MOTOR ACTION TIME = 122.3 SECONDS

Table E-VIII. 360T025B Forward Center Segment Insulation Performance (cont)

PART NO. 1U76667-02 PREFIRE MEASUREMENTS
SERIAL NO. 0000050 INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MIN.	MEDIAN	MDT
3.5	2.500	2.595	2.417	2.661	2.579	2.676	2.372	2.597	2.372	2.587	2.120
11.0	2.451	2.422	2.287	2.322	2.363	2.208	2.406	2.344	2.208	2.354	1.900
30.7	0.852	0.851	0.420	0.839	0.847	0.836	0.403	0.837	0.403	0.838	0.400
36.2	0.821	0.821	0.828	0.812	0.821	0.811	0.836	0.804	0.804	0.821	0.600
44.6	0.382	0.381	0.388	0.385	0.383	0.389	0.382	0.380	0.380	0.382	0.360
71.5	0.196	0.193	0.189	0.191	0.191	0.189	0.193	0.188	0.188	0.191	0.170
126.0	0.162	0.171	0.162	0.168	0.163	0.163	0.161	0.165	0.161	0.163	0.150
145.0	0.166	0.172	0.159	0.167	0.167	0.163	0.165	0.163	0.159	0.166	0.150
161.4	0.600	0.583	0.541	0.573	0.556	0.552	0.553	0.578	0.541	0.565	0.236
163.0	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.236
178.0	0.191	0.192	0.197	0.197	0.194	0.189	0.192	0.190	0.189	0.192	0.130
214.1	0.139	0.137	0.139	0.138	0.138	0.136	0.137	0.139	0.136	0.138	0.130
280.0	0.101	0.108	0.112	0.108	0.104	0.106	0.116	0.099	0.099	0.107	0.090
298.0	0.110	0.100	0.108	0.111	0.110	0.100	0.100	0.108	0.100	0.108	0.090
311.8	0.101	0.112	0.111	0.112	0.103	0.101	0.114	0.099	0.099	0.107	0.090

PART NO. 1U76791-01 POSTFIRE MEASUREMENTS
SERIAL NO. 0000021 INCHES

STATION (IN)	DEGREE LOCATIONS 0.0	46.0	90.0	136.0	180.0	226.0	270.0	316.0	MIN.	MEDIAN
3.5	2.353	2.401	2.427	2.480	2.411	2.531	2.505	2.476	2.353	2.452
11.0	2.367	2.417	2.368	2.285	2.464	2.323	2.377	2.489	2.285	2.373
30.7	0.788	0.753	0.775	0.741	0.772	0.762	0.747	0.737	0.737	0.758
36.2	0.764	0.748	0.781	0.743	0.767	0.780	0.751	0.722	0.722	0.757
44.6	0.371	0.349	0.348	0.350	0.349	0.399	0.355	0.343	0.343	0.350
71.5	0.210	0.148	0.160	0.158	0.165	0.171	0.180	0.157	0.148	0.163
126.0	0.167	0.158	0.140	0.160	0.141	0.152	0.162	0.154	0.140	0.156
145.0	0.183	0.177	0.151	0.150	0.150	0.159	0.143	0.156	0.143	0.154
161.4	0.564	0.552	0.525	0.530	0.518	0.519	0.506	0.522	0.506	0.524
163.0	0.489	L	0.491	0.490	0.500	0.510	0.493	0.492	0.489	0.493
178.0	L	L	0.188	0.174	0.170	0.186	0.191	0.170	0.170	0.187
214.1	L	L	L	L	L	L	L	L	L	0.138
280.0	L	L	L	L	L	L	L	L	L	0.107
298.0	L	L	L	L	L	L	L	L	L	0.108
311.8	L	L	L	L	L	L	L	L	L	0.107

AN " L " INDICATES THAT LINER MATERIAL WAS REMAINING AT THAT LOCATION.
THE MEDIAN AND MINIMUM VALUES WERE CALCULATED USING THE PREFIRE THICKNESSES
AT THE LOCATIONS WHERE LINER MATERIAL WAS REMAINING

Table E-IX. 360T025B Forward Segment Star Tip Insulation Performance

COMPLIANCE SAFETY FACTOR (CSF)

STATION (IN)	DEGREE LOCATIONS 90.0	154.0	222.0	286.0	352.0	MIN.	PLANE	REQUIRED S.F.
3.5	+	+	+	+	+	+	90.0	2.0
13.0	34.21	+	7.14	16.67	6.70	6.70	352.0	1.5
27.0	+	+	+	+	+	+	90.0	1.5
44.0	+	+	+	+	+	+	90.0	1.5
60.0	+	+	+	+	+	+	90.0	1.5
94.7	+	+	+	+	+	+	90.0	1.5
142.0	+	+	+	+	+	+	90.0	1.5
152.0	5.47	15.85	6.22	6.60	5.11	5.11	352.0	1.5
162.0	4.02	6.92	5.02	4.27	4.27	4.02	90.0	2.0
175.5	3.78	3.53	3.41	3.26	4.14	3.26	286.0	1.5
187.0	3.00	2.23	2.71	2.54	2.81	2.23	154.0	1.5
199.0	4.81	3.27	3.40	3.47	3.04	3.04	352.0	1.5
213.0	3.05	3.18	2.83	3.15	2.93	2.83	222.0	1.5
224.0	3.56	3.54	3.60	2.77	2.88	2.77	286.0	1.5
230.0	3.42	3.68	4.23	3.32	3.64	3.32	286.0	1.5
236.0	2.68	2.83	3.19	2.41	2.52	2.41	286.0	1.5
240.0	2.56	2.30	2.46	3.21	2.57	2.30	154.0	1.5
254.0	2.62	3.01	3.05	2.84	2.94	2.62	90.0	1.5
263.0	2.80	2.93	2.83	2.44	2.69	2.44	286.0	1.5
282.0	2.45	3.76	2.65	2.19	2.40	2.19	286.0	1.5
293.0	2.43	2.83	2.68	2.94	2.65	2.43	90.0	1.5
305.0	2.36	2.71	2.98	2.36	2.65	2.36	90.0	1.5
312.0	2.70	3.30	2.43	2.80	2.33	2.33	352.0	1.5
321.0	5.70	5.16	4.21	3.67	4.37	3.67	286.0	2.0
339.0	2.84	2.64	3.91	2.60	2.76	2.60	286.0	1.5
350.0	2.32	3.17	2.84	3.13	3.68	2.32	90.0	1.5
362.0	2.29	2.91	2.35	2.18	2.02	2.02	352.0	1.5
371.0	1.91	2.42	2.56	2.46	2.10	1.91	90.0	1.5
383.0	3.32	3.08	3.06	2.85	3.01	2.85	286.0	1.5
397.0	3.27	3.93	2.68	2.92	3.45	2.68	222.0	1.5
403.0	4.38	4.32	4.52	3.47	4.28	3.47	286.0	1.5

SEGMENT MINIMUM = 1.91 AT THE 371.0 INCH STATION
A " + " MEANS NEGLIGIBLE MDD HAS OCCURRED

ACTUAL SAFETY FACTOR (ASF)

STATION (IN)	DEGREE LOCATIONS 90.0	154.0	222.0	286.0	352.0	MIN.	PLANE
3.5	+	+	+	+	+	+	90.0
13.0	51.74	+	10.38	24.33	10.52	10.38	222.0
27.0	+	+	+	+	+	+	90.0
44.0	+	+	+	+	+	+	90.0
60.0	+	+	+	+	+	+	90.0
94.7	+	+	+	+	+	+	90.0
142.0	+	+	+	+	+	+	90.0
152.0	6.69	20.35	7.55	7.85	6.34	6.34	352.0
162.0	5.59	9.58	6.88	5.95	5.80	5.59	90.0
175.5	4.55	4.33	4.10	3.82	4.89	3.82	286.0
187.0	3.04	2.41	2.86	2.66	2.86	2.41	154.0
199.0	5.21	3.53	3.78	3.75	3.37	3.37	352.0
213.0	3.35	3.46	3.14	3.43	3.32	3.14	222.0
224.0	4.18	4.15	4.36	3.30	3.40	3.30	286.0
230.0	3.75	3.99	4.65	3.64	3.95	3.64	286.0
236.0	3.05	3.22	3.70	2.75	3.03	2.75	286.0
240.0	2.93	2.70	2.94	3.70	3.00	2.70	154.0
254.0	2.74	3.13	3.22	2.99	3.10	2.74	90.0
263.0	2.94	3.10	3.00	2.61	2.81	2.61	286.0
282.0	2.80	4.23	3.10	2.61	2.77	2.61	286.0
293.0	2.87	3.24	3.10	3.39	3.01	2.87	90.0
305.0	2.84	3.43	3.80	2.90	3.41	2.84	90.0
312.0	3.30	4.30	3.22	3.66	3.10	3.10	352.0
321.0	6.12	5.36	4.52	3.87	4.61	3.87	286.0
339.0	3.06	2.86	4.23	2.85	3.07	2.85	286.0
350.0	2.70	3.52	3.30	3.47	4.14	2.70	90.0
362.0	2.61	3.33	2.70	2.71	2.61	2.61	90.0
371.0	2.45	2.77	3.05	2.97	2.58	2.45	90.0
383.0	3.90	3.63	3.67	3.29	3.46	3.29	286.0
397.0	3.94	4.64	3.28	3.58	4.15	3.28	222.0
403.0	4.91	4.81	4.96	3.95	5.01	3.95	286.0

SEGMENT MINIMUM = 2.41 AT THE 187.0 INCH STATION

Table E-IX. 360T025B Forward Segment Star Tip Insulation Performance (cont)

MATERIAL DECOMPOSITION DEPTH (MDD)
INCHES

STATION (IN)	DEGREE LOCATIONS 90.0	154.0	222.0	286.0	352.0	MEDIAN	MAX.	DESIGN M+3S
3.5	0	0	0	0	0.020	0	0.020	0.103
13.0	0.019	0	0.091	0.039	0.097	0.039	0.097	0.101
27.0	0	0	0	0	0	0	0	0.044
44.0	0	0	0	0	0	0	0	0.015
60.0	0	0	0	0	0	0	0	0.012
94.7	0	0	0	0	0	0	0	0.004
142.0	0	0	0	0	0	0	0	0.019
152.0	0.058	0.020	0.051	0.048	0.062	0.051	0.062	0.123
162.0	0.136	0.079	0.109	0.128	0.128	0.128	0.136	0.227
175.5	0.160	0.171	0.177	0.185	0.146	0.171	0.185	0.324
187.0	0.213	0.287	0.236	0.252	0.228	0.236	0.287	0.398
199.0	0.142	0.209	0.201	0.197	0.225	0.201	0.225	0.427
213.0	0.222	0.213	0.239	0.215	0.231	0.222	0.239	0.423
224.0	0.190	0.191	0.188	0.244	0.235	0.191	0.244	0.422
230.0	0.198	0.184	0.160	0.204	0.186	0.186	0.204	0.375
236.0	0.216	0.204	0.181	0.240	0.229	0.216	0.240	0.327
240.0	0.224	0.250	0.233	0.179	0.223	0.224	0.250	0.342
254.0	0.217	0.189	0.186	0.200	0.193	0.193	0.217	0.318
263.0	0.203	0.194	0.201	0.233	0.211	0.203	0.233	0.334
282.0	0.232	0.151	0.214	0.259	0.237	0.232	0.259	0.349
293.0	0.225	0.193	0.204	0.186	0.206	0.204	0.225	0.330
305.0	0.222	0.194	0.176	0.222	0.198	0.198	0.222	0.309
312.0	0.200	0.164	0.223	0.193	0.232	0.200	0.232	0.308
321.0	0.161	0.178	0.218	0.250	0.210	0.210	0.250	0.434
339.0	0.194	0.209	0.141	0.212	0.200	0.200	0.212	0.319
350.0	0.225	0.165	0.184	0.167	0.142	0.167	0.225	0.300
362.0	0.227	0.179	0.221	0.239	0.257	0.227	0.257	0.285
371.0	0.272	0.215	0.203	0.211	0.248	0.215	0.272	0.304
383.0	0.154	0.166	0.167	0.179	0.170	0.167	0.179	0.295
397.0	0.154	0.128	0.188	0.172	0.146	0.154	0.188	0.287
403.0	0.217	0.220	0.210	0.274	0.222	0.220	0.274	0.287

MATERIAL DECOMPOSITION RATE (MDR)
MILS / SECOND

STATION (IN)	DEGREE LOCATIONS 90.0	154.0	222.0	286.0	352.0	AVE.	EXPOSURE TIME
3.5	0	0	0	0	0.6	0.1	34.1
13.0	1.0	0	4.7	2.0	5.0	2.5	19.3
27.0	0	0	0	0	0	0	4.8
44.0	0	0	0	0	0	0	3.0
60.0	0	0	0	0	0	0	1.4
94.7	0	0	0	0	0	0	0.8
142.0	0	0	0	0	0	0	1.0
152.0	1.8	0.6	1.6	1.5	1.9	1.5	32.4
162.0	2.4	1.4	1.9	2.2	2.2	2.0	57.6
175.5	1.8	1.9	2.0	2.1	1.6	1.9	88.5
187.0	2.1	2.8	2.3	2.5	2.3	2.4	101.3
199.0	1.4	2.1	2.0	1.9	2.2	1.9	101.3
213.0	2.2	2.1	2.4	2.1	2.3	2.2	101.3
224.0	1.9	1.9	1.9	2.4	2.3	2.1	101.3
230.0	2.0	1.8	1.6	2.0	1.8	1.8	101.3
236.0	2.1	2.0	1.8	2.4	2.3	2.1	101.3
240.0	2.2	2.5	2.3	1.8	2.2	2.2	101.3
254.0	2.1	1.9	1.8	2.0	1.9	1.9	101.3
263.0	2.0	1.9	2.0	2.3	2.1	2.1	101.3
282.0	2.3	1.5	2.1	2.6	2.3	2.2	101.3
293.0	2.2	1.9	2.0	1.8	2.0	2.0	101.3
305.0	2.2	1.9	1.7	2.2	2.0	2.0	101.3
312.0	2.0	1.6	2.2	1.9	2.3	2.0	101.3
321.0	1.6	1.7	2.1	2.4	2.0	2.0	103.4
339.0	1.9	2.1	1.4	2.1	2.0	1.9	99.9
350.0	2.3	1.7	1.8	1.7	1.4	1.8	99.7
362.0	2.3	1.8	2.2	2.4	2.6	2.3	98.7
371.0	2.9	2.3	2.2	2.2	2.6	2.4	94.3
383.0	1.6	1.7	1.7	1.9	1.8	1.8	95.5
397.0	1.5	1.3	1.9	1.7	1.5	1.6	99.7
403.0	1.8	1.8	1.7	2.2	1.8	1.9	122.3

MOTOR ACTION TIME = 122.3 SECONDS

Table E-IX. 360T025B Forward Segment Star Tip Insulation Performance (cont)

PREFIRE MEASUREMENTS INCHES — PART NO. 1U76666-02 SERIAL NO. 0000026

STATION (IN)	DEGREE LOCATIONS 90.0	154.0	222.0	286.0	352.0	MIN.	MEDIAN	MDT
3.5	2.417	2.532	2.473	2.531	2.462	2.417	2.473	2.120
13.0	0.983	0.928	0.945	0.949	1.020	0.928	0.949	0.650
27.0	0.594	0.572	0.593	0.588	0.577	0.572	0.588	0.450
44.0	0.300	0.289	0.310	0.293	0.284	0.284	0.293	0.250
60.0	0.135	0.133	0.145	0.140	0.136	0.133	0.136	0.100
94.7	0.101	0.102	0.107	0.109	0.098	0.098	0.102	0.090
142.0	0.165	0.164	0.165	0.161	0.160	0.160	0.164	0.113
152.0	0.388	0.407	0.385	0.377	0.393	0.377	0.388	0.317
162.0	0.760	0.757	0.750	0.761	0.742	0.742	0.757	0.547
175.5	0.728	0.740	0.725	0.707	0.714	0.707	0.725	0.604
187.0	0.647	0.693	0.674	0.671	0.652	0.647	0.671	0.640
199.0	0.740	0.737	0.759	0.738	0.758	0.737	0.740	0.683
213.0	0.743	0.737	0.750	0.738	0.767	0.737	0.743	0.677
224.0	0.794	0.792	0.820	0.806	0.800	0.792	0.800	0.677
230.0	0.743	0.734	0.744	0.743	0.735	0.734	0.743	0.677
236.0	0.659	0.656	0.670	0.661	0.693	0.656	0.661	0.578
240.0	0.656	0.675	0.684	0.663	0.668	0.656	0.668	0.574
254.0	0.594	0.591	0.599	0.597	0.598	0.591	0.597	0.568
263.0	0.597	0.602	0.603	0.607	0.592	0.592	0.602	0.568
282.0	0.650	0.639	0.664	0.676	0.657	0.639	0.657	0.568
293.0	0.645	0.626	0.632	0.631	0.620	0.620	0.631	0.546
305.0	0.630	0.665	0.669	0.643	0.676	0.630	0.665	0.525
312.0	0.660	0.706	0.719	0.707	0.719	0.660	0.707	0.541
321.0	0.985	0.954	0.985	0.968	0.968	0.954	0.968	0.918
339.0	0.594	0.597	0.597	0.604	0.613	0.594	0.597	0.551
350.0	0.607	0.580	0.608	0.580	0.588	0.580	0.588	0.523
362.0	0.592	0.596	0.596	0.648	0.671	0.592	0.596	0.520
371.0	0.666	0.595	0.620	0.627	0.640	0.595	0.627	0.520
383.0	0.600	0.602	0.613	0.589	0.588	0.588	0.600	0.511
397.0	0.606	0.594	0.617	0.615	0.606	0.594	0.606	0.503
403.0	1.066	1.059	1.042	1.083	1.112	1.042	1.066	0.950

POSTFIRE MEASUREMENTS INCHES — PART NO. 1U76790-05 SERIAL NO. 0000009

STATION (IN)	DEGREE LOCATIONS 90.0	154.0	222.0	286.0	352.0	MIN.	MEDIAN
3.5	2.440	2.570	2.487	2.561	2.442	2.440	2.487
13.0	0.964	0.959	0.854	0.910	0.923	0.854	0.923
27.0	L	L	L	L	L	L	0.588
44.0	L	L	L	L	L	L	0.293
60.0	L	L	L	L	L	L	0.136
94.7	L	L	L	L	L	L	0.102
142.0	L	L	L	L	L	L	0.164
152.0	0.330	0.387	0.334	0.329	0.331	0.329	0.331
162.0	0.624	0.678	0.641	0.633	0.614	0.614	0.633
175.5	0.568	0.569	0.548	0.522	0.568	0.522	0.568
187.0	0.434	0.406	0.438	0.419	0.424	0.406	0.424
199.0	0.598	0.528	0.558	0.541	0.533	0.528	0.541
213.0	0.521	0.524	0.511	0.523	0.536	0.511	0.523
224.0	0.604	0.601	0.632	0.562	0.565	0.562	0.601
230.0	0.545	0.550	0.584	0.539	0.549	0.539	0.549
236.0	0.443	0.452	0.489	0.421	0.464	0.421	0.452
240.0	0.432	0.425	0.451	0.484	0.445	0.425	0.445
254.0	0.377	0.402	0.413	0.397	0.405	0.377	0.402
263.0	0.394	0.408	0.402	0.374	0.381	0.374	0.394
282.0	0.418	0.488	0.450	0.417	0.420	0.417	0.420
293.0	0.420	0.433	0.428	0.445	0.414	0.414	0.428
305.0	0.408	0.471	0.493	0.421	0.478	0.408	0.471
312.0	0.460	0.542	0.496	0.514	0.487	0.460	0.496
321.0	0.824	0.776	0.767	0.718	0.758	0.718	0.767
339.0	0.400	0.388	0.456	0.392	0.413	0.388	0.400
350.0	0.382	0.415	0.424	0.413	0.446	0.382	0.415
362.0	0.365	0.417	0.375	0.409	0.414	0.365	0.409
371.0	0.394	0.380	0.417	0.416	0.392	0.380	0.394
383.0	0.446	0.436	0.446	0.410	0.418	0.410	0.436
397.0	0.452	0.466	0.429	0.443	0.460	0.429	0.452
403.0	0.849	0.839	0.832	0.809	0.890	0.809	0.839

AN " L " INDICATES THAT LINER MATERIAL WAS REMAINING AT THAT LOCATION.
THE MEDIAN AND MINIMUM VALUES WERE CALCULATED USING THE PREFIRE THICKNESSES
AT THE LOCATIONS WHERE LINER MATERIAL WAS REMAINING

Table E-X. 360T025B Forward Segment Non-Star Tip Insulation Performance

COMPLIANCE SAFETY FACTOR (CSF)

STATION (IN)	DEGREE LOCATIONS 74.0	140.0	206.0	270.0	336.0	MIN.	PLANE	REQUIRED S.F.
3.5	+	+	+	+	42.40	42.40	336.0	2.0
13.0	+	+	8.78	3.74	15.48	3.74	270.0	1.5
27.0	+	+	+	+	+	+	74.0	1.5
44.0	+	+	+	+	+	+	74.0	1.5
60.0	+	+	+	+	+	+	74.0	1.5
94.7	+	+	+	+	+	+	74.0	1.5
142.0	+	+	+	+	+	+	74.0	1.5
152.0	+	+	17.61	+	19.81	17.61	206.0	1.5
162.0	18.23	8.04	8.16	7.01	6.67	6.67	336.0	2.0
175.5	3.75	5.98	6.29	4.79	5.25	3.75	74.0	1.5
187.0	3.88	5.08	5.00	4.21	4.74	3.88	74.0	1.5
199.0	4.91	6.21	4.71	5.60	4.52	4.52	336.0	1.5
213.0	5.69	5.29	5.21	6.91	5.21	5.21	336.0	1.5
224.0	5.99	5.79	4.98	11.67	5.09	4.98	206.0	1.5
230.0	4.94	5.17	5.13	6.45	4.77	4.77	336.0	1.5
236.0	4.66	5.16	4.74	4.07	4.48	4.07	270.0	1.5
240.0	4.28	4.48	4.63	4.91	3.59	3.59	336.0	1.5
254.0	4.73	5.12	4.15	5.16	4.66	4.15	206.0	1.5
263.0	5.86	6.11	4.62	4.85	3.86	3.86	336.0	1.5
282.0	4.34	5.03	6.04	4.69	4.94	4.34	74.0	1.5
293.0	4.67	5.15	4.33	4.51	4.59	4.33	206.0	1.5
305.0	5.41	4.82	4.57	4.61	4.20	4.20	336.0	1.5
312.0	3.47	4.75	4.70	4.04	4.40	3.47	74.0	1.5
321.0	8.35	9.09	6.33	5.74	6.42	5.74	270.0	2.0
339.0	4.08	4.24	4.55	6.19	3.85	3.85	336.0	1.5
350.0	2.80	3.40	5.88	2.75	3.93	2.75	270.0	1.5
362.0	2.51	3.38	2.50	2.87	2.99	2.50	206.0	1.5
371.0	3.04	3.11	3.11	3.21	2.60	2.60	336.0	1.5
383.0	2.48	2.95	2.66	2.39	3.55	2.39	270.0	1.5
397.0	3.47	3.07	3.14	2.73	2.61	2.61	336.0	1.5
403.0	4.26	4.55	4.34	4.13	4.32	4.13	270.0	1.5

SEGMENT MINIMUM = 2.39 AT THE 383.0 INCH STATION
A " + " MEANS NEGLIGIBLE MDD HAS OCCURRED

ACTUAL SAFETY FACTOR (ASF)

STATION (IN)	DEGREE LOCATIONS 74.0	140.0	206.0	270.0	336.0	MIN.	PLANE
3.5	+	+	+	+	49.88	49.88	336.0
13.0	+	+	12.59	6.36	22.86	6.36	270.0
27.0	+	+	+	+	+	+	74.0
44.0	+	+	+	+	+	+	74.0
60.0	+	+	+	+	+	+	74.0
94.7	+	+	+	+	+	+	74.0
142.0	+	+	+	+	+	+	74.0
152.0	+	+	21.67	+	23.44	21.67	206.0
162.0	24.63	10.93	10.90	9.85	9.21	9.21	336.0
175.5	4.52	7.31	7.23	5.60	6.35	4.52	74.0
187.0	4.01	5.20	5.10	4.33	4.87	4.01	74.0
199.0	5.27	6.72	5.12	6.16	4.91	4.91	336.0
213.0	6.15	5.78	5.90	7.89	5.75	5.75	336.0
224.0	6.91	6.81	6.04	13.83	5.92	5.92	336.0
230.0	5.42	5.65	5.65	6.99	5.18	5.18	336.0
236.0	5.47	6.11	5.51	4.75	5.27	4.75	270.0
240.0	5.13	5.32	5.31	5.63	4.38	4.38	336.0
254.0	4.93	5.44	4.30	5.45	4.98	4.30	206.0
263.0	6.06	6.42	4.84	5.15	4.16	4.16	336.0
282.0	4.97	6.03	6.81	5.45	5.68	4.97	74.0
293.0	5.47	6.04	4.87	5.29	5.33	4.87	206.0
305.0	6.62	6.11	5.53	5.68	5.21	5.21	336.0
312.0	4.42	6.32	6.18	5.14	5.47	4.42	74.0
321.0	9.15	9.55	7.28	6.14	6.74	6.14	270.0
339.0	4.27	4.64	4.69	6.43	4.16	4.16	336.0
350.0	3.18	3.84	6.70	3.34	4.48	3.18	74.0
362.0	3.00	3.95	3.12	3.24	3.39	3.00	74.0
371.0	3.77	3.55	3.71	3.68	3.03	3.03	336.0
383.0	2.93	3.45	3.14	2.87	4.28	2.87	270.0
397.0	4.21	3.66	3.81	3.39	3.20	3.20	336.0
403.0	4.81	5.08	4.80	4.59	4.99	4.59	270.0

SEGMENT MINIMUM = 2.87 AT THE 383.0 INCH STATION

Table E-X. 360T025B Forward Segment Non-Star Tip Insulation Performance (cont)

MATERIAL DECOMPOSITION DEPTH (MDD) INCHES

STATION (IN)	DEGREE LOCATIONS 74.0	140.0	206.0	270.0	336.0	MEDIAN	MAX.	DESIGN M+3S
3.5	0	0	0	0	0.050	0	0.050	0.103
13.0	0	0.005	0.074	0.174	<0.042	0.042	0.174	0.101
27.0	0	0	0	0	0	0	0	0.044
44.0	0	0	0	0	0	0	0	0.015
60.0	0	0	0	0	0	0	0	0.012
94.7	0	0	0	0	0	0	0	0.004
142.0	0	0	0	0	0	0	0	0.019
152.0	0	0	0.018	0	0.016	0	0.018	0.123
162.0	0.030	0.068	0.067	0.078	0.082	0.068	0.082	0.227
175.5	0.161	0.101	0.096	0.126	0.115	0.115	0.161	0.324
187.0	0.165	0.126	0.128	0.152	0.135	0.135	0.165	0.398
199.0	0.139	0.110	0.145	0.122	0.151	0.139	0.151	0.427
213.0	0.119	0.128	0.130	0.098	0.130	0.128	0.130	0.423
224.0	0.113	0.117	0.136	0.058	0.133	0.117	0.136	0.422
230.0	0.137	0.131	0.132	0.105	0.142	0.132	0.142	0.375
236.0	0.124	0.112	0.122	0.142	0.129	0.124	0.142	0.327
240.0	0.134	0.128	0.124	0.117	0.160	0.128	0.160	0.342
254.0	0.120	0.111	0.137	0.110	0.122	0.120	0.137	0.318
263.0	0.097	0.093	0.123	0.117	0.147	0.117	0.147	0.334
282.0	0.131	0.113	0.094	0.121	0.115	0.115	0.131	0.349
293.0	0.117	0.106	0.126	0.121	0.119	0.119	0.126	0.330
305.0	0.097	0.109	0.115	0.114	0.125	0.114	0.125	0.309
312.0	0.156	0.114	0.115	0.134	0.123	0.123	0.156	0.308
321.0	0.110	0.101	0.145	0.160	0.143	0.143	0.160	0.434
339.0	0.135	0.130	0.121	0.089	0.143	0.130	0.143	0.319
350.0	0.187	0.154	0.089	0.190	0.133	0.154	0.190	0.300
362.0	0.207	0.154	0.208	0.181	0.174	0.181	0.208	0.285
371.0	0.171	0.167	0.167	0.162	0.200	0.167	0.200	0.304
383.0	0.206	0.173	0.192	0.214	0.144	0.192	0.214	0.295
397.0	0.145	0.164	0.160	0.184	0.193	0.164	0.193	0.287
403.0	0.223	0.209	0.219	0.230	0.220	0.220	0.230	0.287

MATERIAL DECOMPOSITION RATE (MDR) MILS / SECOND

STATION (IN)	DEGREE LOCATIONS 74.0	140.0	206.0	270.0	336.0	AVE.	EXPOSURE TIME
3.5	0	0	0	0	1.5	0.3	34.1
13.0	0	0.3	3.8	9.0	2.2	3.1	19.3
27.0	0	0	0	0	0	0	4.8
44.0	0	0	0	0	0	0	3.0
60.0	0	0	0	0	0	0	1.4
94.7	0	0	0	0	0	0	0.8
142.0	0	0	0	0	0	0	1.0
152.0	0	0	0.9	0	0.8	0.3	20.6
162.0	0.7	1.5	1.5	1.8	1.9	1.5	44.1
175.5	2.4	1.5	1.4	1.9	1.7	1.8	67.9
187.0	2.5	1.9	1.9	2.3	2.0	2.1	66.1
199.0	2.1	1.7	2.2	1.8	2.3	2.0	66.1
213.0	1.8	1.9	2.0	1.5	2.0	1.8	66.1
224.0	1.7	1.8	2.1	0.9	2.0	1.7	66.1
230.0	2.1	2.0	2.0	1.6	2.1	2.0	66.1
236.0	1.9	1.7	1.8	2.1	2.0	1.9	66.1
240.0	2.0	1.9	1.9	1.8	2.4	2.0	66.1
254.0	1.8	1.7	2.1	1.7	1.8	1.8	66.1
263.0	1.5	1.4	1.9	1.8	2.2	1.7	66.1
282.0	2.0	1.7	1.4	1.8	1.7	1.7	66.1
293.0	1.8	1.6	1.9	1.8	1.8	1.8	66.1
305.0	1.5	1.6	1.7	1.7	1.9	1.7	66.1
312.0	2.4	1.7	1.7	2.0	1.9	1.9	66.1
321.0	1.6	1.4	2.1	2.3	2.0	1.9	70.5
339.0	1.9	1.8	1.7	1.2	2.0	1.7	72.5
350.0	2.5	2.0	1.2	2.5	1.7	2.0	76.2
362.0	2.5	1.9	2.6	2.2	2.1	2.3	81.2
371.0	2.1	2.0	2.0	2.0	2.5	2.1	81.6
383.0	2.3	1.9	2.2	2.4	1.6	2.1	88.9
397.0	1.5	1.7	1.6	1.9	2.0	1.7	97.1
403.0	1.8	1.7	1.8	1.9	1.8	1.8	122.3

MOTOR ACTION TIME = 122.3 SECONDS

A " < " INDICATES THE PRECEDING MDD HAS EXCEEDED THE M + 3 SIGMA DESIGN CRITERIA

Table E-X. 360T025B Forward Segment Non-Star Tip Insulation Performance (cont)

PREFIRE MEASUREMENTS INCHES — PART NO. 1U76666-02 SERIAL NO. 0000026

STATION (IN)	DEGREE LOCATIONS 74.0	140.0	206.0	270.0	336.0	MIN.	MEDIAN	MDT
3.5	2.471	2.491	2.499	2.372	2.494	2.372	2.491	2.120
13.0	0.905	0.978	0.932	1.106	0.960	0.905	0.960	0.650
27.0	0.593	0.576	0.577	0.556	0.575	0.556	0.576	0.450
44.0	0.285	0.287	0.286	0.311	0.292	0.285	0.287	0.250
60.0	0.134	0.135	0.133	0.136	0.136	0.133	0.135	0.100
94.7	0.105	0.106	0.105	0.109	0.097	0.097	0.105	0.090
142.0	0.160	0.167	0.165	0.164	0.154	0.154	0.164	0.113
152.0	0.404	0.367	0.390	0.388	0.375	0.367	0.388	0.317
162.0	0.739	0.743	0.730	0.768	0.755	0.730	0.743	0.547
175.5	0.728	0.738	0.694	0.705	0.730	0.694	0.728	0.604
187.0	0.661	0.655	0.653	0.658	0.658	0.653	0.658	0.640
199.0	0.733	0.739	0.743	0.752	0.742	0.733	0.742	0.683
213.0	0.732	0.740	0.767	0.773	0.748	0.732	0.748	0.677
224.0	0.781	0.797	0.821	0.802	0.787	0.781	0.797	0.677
230.0	0.743	0.740	0.746	0.734	0.736	0.734	0.740	0.677
236.0	0.678	0.684	0.672	0.675	0.680	0.672	0.678	0.578
240.0	0.688	0.681	0.659	0.659	0.700	0.659	0.681	0.574
254.0	0.592	0.604	0.589	0.600	0.607	0.589	0.600	0.568
263.0	0.588	0.597	0.595	0.603	0.611	0.588	0.597	0.568
282.0	0.651	0.681	0.640	0.659	0.653	0.640	0.653	0.568
293.0	0.640	0.640	0.614	0.640	0.634	0.614	0.640	0.546
305.0	0.642	0.666	0.636	0.647	0.651	0.636	0.647	0.525
312.0	0.690	0.721	0.711	0.689	0.673	0.673	0.690	0.541
321.0	1.006	0.965	1.056	0.983	0.964	0.964	0.983	0.918
339.0	0.577	0.603	0.567	0.572	0.595	0.567	0.577	0.551
350.0	0.594	0.592	0.596	0.634	0.596	0.592	0.596	0.523
362.0	0.622	0.608	0.648	0.586	0.589	0.586	0.608	0.520
371.0	0.645	0.593	0.619	0.596	0.606	0.593	0.606	0.520
383.0	0.603	0.596	0.603	0.614	0.617	0.596	0.603	0.511
397.0	0.610	0.601	0.609	0.623	0.618	0.601	0.610	0.503
403.0	1.073	1.061	1.051	1.056	1.097	1.051	1.061	0.950

POSTFIRE MEASUREMENTS INCHES — PART NO. 1U76790-05 SERIAL NO. 0000009

STATION (IN)	DEGREE LOCATIONS 74.0	140.0	206.0	270.0	336.0	MIN.	MEDIAN
3.5	2.490	2.549	2.523	2.383	2.444	2.383	2.490
13.0	0.958	0.973	0.858	0.932	0.918	0.858	0.932
27.0	L	L	L	L	L	L	0.576
44.0	L	L	L	L	L	L	0.287
60.0	L	L	L	L	L	L	0.135
94.7	L	L	L	L	L	L	0.105
142.0	L	L	L	L	L	L	0.164
152.0	0.431	L	0.372	L	0.359	0.359	0.372
162.0	0.709	0.675	0.663	0.690	0.673	0.663	0.675
175.5	0.567	0.637	0.598	0.579	0.615	0.567	0.598
187.0	0.496	0.529	0.525	0.506	0.523	0.496	0.523
199.0	0.594	0.629	0.598	0.630	0.591	0.591	0.598
213.0	0.613	0.612	0.637	0.675	0.618	0.612	0.618
224.0	0.668	0.680	0.685	0.744	0.654	0.654	0.680
230.0	0.606	0.609	0.614	0.629	0.594	0.594	0.609
236.0	0.554	0.572	0.550	0.533	0.551	0.533	0.551
240.0	0.554	0.553	0.535	0.542	0.540	0.535	0.542
254.0	0.472	0.493	0.452	0.490	0.485	0.452	0.485
263.0	0.491	0.504	0.472	0.486	0.464	0.464	0.486
282.0	0.520	0.568	0.546	0.538	0.538	0.520	0.538
293.0	0.523	0.534	0.488	0.519	0.515	0.488	0.519
305.0	0.545	0.557	0.521	0.533	0.526	0.521	0.533
312.0	0.534	0.607	0.596	0.555	0.550	0.534	0.555
321.0	0.896	0.864	0.911	0.823	0.821	0.821	0.864
339.0	0.442	0.473	0.446	0.483	0.452	0.442	0.452
350.0	0.407	0.438	0.507	0.444	0.463	0.407	0.444
362.0	0.415	0.454	0.440	0.405	0.415	0.405	0.415
371.0	0.474	0.426	0.452	0.434	0.406	0.406	0.434
383.0	0.397	0.423	0.411	0.400	0.473	0.397	0.411
397.0	0.465	0.437	0.449	0.439	0.425	0.425	0.439
403.0	0.850	0.852	0.832	0.826	0.877	0.826	0.850

AN " L " INDICATES THAT LINER MATERIAL WAS REMAINING AT THAT LOCATION.
THE MEDIAN AND MINIMUM VALUES WERE CALCULATED USING THE PREFIRE THICKNESSES
AT THE LOCATIONS WHERE LINER MATERIAL WAS REMAINING

Table E-XI. 360T025A Igniter Chamber and Adapter Insulation Performance

COMPLIANCE SAFETY FACTORS (CSF)

STATION	DEGREE LOCATION									
(NO.)	0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MINIMUM	PLANE
1.0	3.86	3.89	4.06	5.31	4.96	4.68	4.54	6.51	3.86	0.0
2.0	3.49	3.67	4.17	3.53	3.01	3.50	3.84	3.49	3.01	180.0
3.0	3.28	3.21	3.29	2.82	3.37	3.12	3.28	2.75	2.75	330.0
4.0	3.22	3.76	3.05	2.98	3.10	2.96	3.67	3.09	2.96	240.0
5.0	1.38	1.17	1.18	1.16	1.09	1.03	1.16	1.21	1.03	240.0
6.0	+	+	+	+	+	+	+	+	99.90	0.0
7.0	11.23	33.11	24.19	+	+	4.28	4.01	14.30	4.01	270.0
8.0	+	+	+	30.00	18.21	+	+	99.00	18.21	180.0
9.0	15.04	32.58	43.44	6.11	9.09	6.41	10.86	8.32	6.11	150.0
10.0	6.17	22.75	20.22	8.27	9.33	9.33	5.69	5.69	5.69	270.0
11.0	2.66	2.63	2.37	2.82	2.39	2.51	2.51	2.58	2.37	90.0

SF= + INDICATES THAT NEGLIGIBLE MDD OCCURRED

ACTUAL SAFETY FACTORS (ASF)

STATION	DEGREE LOCATION									
(NO.)	0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MINIMUM	PLANE
1.0	4.55	4.47	4.43	5.27	5.18	5.08	4.96	6.96	4.43	90.0
2.0	3.71	3.99	4.53	3.83	3.27	3.84	4.21	3.79	3.27	180.0
3.0	3.49	3.42	3.61	3.04	3.65	3.33	3.53	2.93	2.93	330.0
4.0	3.53	4.37	3.44	3.30	3.37	3.31	4.14	3.45	3.30	150.0
5.0	1.55	1.35	1.34	1.38	1.23	1.19	1.32	1.33	1.19	240.0
6.0	+	+	+	+	+	+	+	+	99.90	0.0
7.0	12.45	35.00	25.35	+	+	4.47	4.28	15.77	4.28	270.0
8.0	+	+	+	30.76	19.11	+	+	99.00	19.11	180.0
9.0	16.38	36.25	46.89	6.75	9.88	6.93	11.78	9.17	6.75	150.0
10.0	6.73	24.25	21.33	8.98	9.74	10.03	6.19	6.28	6.19	270.0
11.0	3.18	3.14	2.83	3.37	2.86	3.00	3.00	3.09	2.83	90.0

SF= + INDICATES THAT NEGLIGIBLE MDD OCCURRED

Table E-XI. 360T025A Igniter Chamber and Adapter Insulation Performance (cont)

MATERIAL DECOMPOSITION DEPTH (MDD)
(INCHES)

STATION (NO.)	DEGREE LOCATION 0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MEDIAN	MAXIMUM
1.0	0.238	0.236	0.226	0.173	0.185	0.196	0.202	0.141	0.199	0.238
2.0	0.263	0.250	0.220	0.260	0.305	0.262	0.239	0.263	0.261	0.305
3.0	0.280	0.286	0.279	0.326	0.272	0.294	0.280	0.334	0.283	0.334
4.0	0.285	0.244	0.301	0.308	0.296	0.310	0.250	0.297	0.297	0.310
5.0	0.250	0.295	0.293	0.297	0.316	0.336	0.299	0.285	0.296	0.336
6.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7.0	0.056	0.019	0.026	0.000	0.000	0.147	0.157	0.044	0.035	0.157
8.0	0.000	0.000	0.000	0.017	0.028	0.000	0.000	0.005	0.000	0.028
9.0	0.026	0.012	0.009	0.064	0.043	0.061	0.036	0.047	0.039	0.064
10.0	0.059	0.016	0.018	0.044	0.039	0.039	0.064	0.064	0.042	0.064
11.0	0.170	0.172	0.191	0.160	0.189	0.180	0.180	0.175	0.178	0.191

MATERIAL DECOMPOSITION RATE (MDR)
(MILS/SEC)

STATION (NO.)	DEGREE LOCATION 0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	AVERAGE
1.0	1.9	1.9	1.9	1.4	1.5	1.6	1.7	1.2	1.6
2.0	2.2	2.0	1.8	2.1	2.5	2.1	2.0	2.2	2.1
3.0	2.3	2.3	2.3	2.7	2.2	2.4	2.3	2.7	2.4
4.0	2.3	2.0	2.5	2.5	2.4	2.5	2.0	2.4	2.3
5.0	2.0	2.4	2.4	2.4	2.6	2.8	2.4	2.3	2.4
6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.0	0.5	0.2	0.2	0.0	0.0	1.2	1.3	0.4	0.5
8.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.1
9.0	0.2	0.1	0.1	0.5	0.4	0.5	0.3	0.4	0.3
10.0	0.5	0.1	0.1	0.4	0.3	0.3	0.5	0.5	0.4
11.0	1.4	1.4	1.6	1.3	1.5	1.5	1.5	1.4	1.5

MOTOR ACTION (EXPOSURE) TIME = 122.10 SEC

A MDR=0 INDICATES THAT MDR < .1 MIL/SEC

Table E-XI. 360T025A Igniter Chamber and Adapter Insulation Performance (cont)

CHAMBER PART NO. 1U75163-01(903)
CHAMBER SERIAL NO. 0000066
ADAPTER PART NO. 1U77392-01(902) PREFIRE MEASUREMENTS
ADAPTER SERIAL NO. 0000006 INCHES

STATION	DEGREE LOCATION									
(NO.)	0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MEDIAN	MINIMUM
1.0	1.083	1.054	1.002	0.912	0.959	0.996	1.001	0.982	0.999	0.912
2.0	0.976	0.997	0.997	0.997	0.997	1.005	1.007	0.997	0.997	0.976
3.0	0.977	0.978	1.006	0.992	0.994	0.978	0.988	0.978	0.983	0.977
4.0	1.007	1.067	1.035	1.015	0.997	1.026	1.035	1.026	1.026	0.997
5.0	0.388	0.399	0.394	0.409	0.390	0.399	0.395	0.380	0.395	0.380
6.0	0.530	0.512	0.493	0.477	0.473	0.497	0.502	0.524	0.500	0.473
7.0	0.697	0.665	0.659	0.641	0.628	0.657	0.672	0.694	0.662	0.628
8.0	0.564	0.551	0.545	0.523	0.535	0.537	0.546	0.561	0.546	0.523
9.0	0.426	0.435	0.422	0.432	0.425	0.423	0.424	0.431	0.426	0.422
10.0	0.397	0.388	0.384	0.395	0.380	0.391	0.396	0.402	0.393	0.380
11.0	0.540	0.540	0.540	0.540	0.540	0.540	0.540	0.540	0.540	0.540

CHAMBER PART NO. 1U75163-07(902)
CHAMBER SERIAL NO. 0000003
ADAPTER PART NO. 1U77547-01(903) POSTFIRE MEASUREMENTS
ADAPTER SERIAL NO. 0000003 INCHES

STATION	DEGREE LOCATION									
(NO.)	0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MEDIAN	MINIMUM
1.0	0.845	0.818	0.776	0.739	0.774	0.800	0.799	0.841	0.800	0.739
2.0	0.713	0.747	0.777	0.737	0.692	0.743	0.768	0.734	0.740	0.692
3.0	0.697	0.692	0.727	0.666	0.722	0.684	0.708	0.644	0.695	0.644
4.0	0.722	0.823	0.734	0.707	0.701	0.716	0.785	0.729	0.725	0.701
5.0	0.138	0.104	0.101	0.112	0.074	0.063	0.096	0.095	0.099	0.063
6.0	0.546	0.561	0.522	0.526	0.500	0.630	0.641	0.582	0.553	0.500
7.0	0.641	0.646	0.633	0.644	0.643	0.510	0.515	0.650	0.642	0.510
8.0	0.571	0.575	0.576	0.506	0.507	0.540	0.557	0.556	0.557	0.506
9.0	0.400	0.423	0.413	0.368	0.382	0.362	0.388	0.384	0.386	0.362
10.0	0.338	0.372	0.366	0.351	0.341	0.352	0.332	0.338	0.346	0.332
11.0	0.370	0.368	0.349	0.380	0.351	0.360	0.360	0.365	0.363	0.349

Table E-XII. 360T025B Igniter Chamber and Adapter Insulation Performance

COMPLIANCE SAFETY FACTORS (CSF)

STATION (NO.)	DEGREE LOCATION 0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MINIMUM	PLANE
1.0	3.79	5.28	4.17	4.50	3.54	4.17	3.96	4.31	3.54	180.0
2.0	3.78	4.71	3.61	4.57	3.99	4.57	3.18	2.65	2.65	330.0
3.0	2.91	4.31	4.19	3.48	3.52	3.27	3.31	3.01	2.91	0.0
4.0	2.65	2.95	3.04	3.11	3.64	3.50	2.93	2.75	2.65	0.0
5.0	1.21	1.28	1.44	1.25	1.33	1.19	1.14	1.08	1.08	330.0
6.0	+	99.00	+	+	+	+	+	+	99.00	60.0
7.0	+	+	17.47	23.30	+	78.62	20.97	+	17.47	90.0
8.0	+	85.00	+	13.78	+	99.00	+	+	13.78	150.0
9.0	17.00	11.50	13.96	8.69	+	+	39.10	13.03	8.69	150.0
10.0	11.03	7.00	15.17	5.87	6.39	16.55	7.14	45.50	5.87	150.0
11.0	2.92	2.84	3.05	3.01	2.99	2.79	2.84	2.92	2.79	240.0

SF= + INDICATES THAT NEGLIGIBLE MDD OCCURRED

ACTUAL SAFETY FACTORS (ASF)

STATION (NO.)	DEGREE LOCATION 0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MINIMUM	PLANE
1.0	4.41	6.24	4.95	5.29	4.22	4.92	4.57	5.14	4.22	180.0
2.0	4.12	5.13	4.11	4.90	4.32	4.96	3.54	3.02	3.02	330.0
3.0	3.15	4.56	4.57	3.70	3.78	3.48	3.55	3.20	3.15	0.0
4.0	2.97	3.34	3.48	3.58	4.14	4.00	3.26	3.10	2.97	0.0
5.0	1.46	1.44	1.67	1.50	1.62	1.36	1.36	1.21	1.21	330.0
6.0	+	99.00	+	+	+	+	+	+	99.00	60.0
7.0	+	+	17.86	24.30	+	80.25	22.00	+	17.86	90.0
8.0	+	91.33	+	15.54	+	99.00	+	+	15.54	150.0
9.0	18.17	12.32	15.11	9.93	+	+	42.40	14.50	9.93	150.0
10.0	11.73	7.67	15.92	6.48	7.00	17.50	7.71	48.75	6.48	150.0
11.0	3.48	3.40	3.65	3.60	3.58	3.33	3.40	3.48	3.33	240.0

SF= + INDICATES THAT NEGLIGIBLE MDD OCCURRED

Table E-XII. 360T025B Igniter Chamber and Adapter Insulation Performance (cont)

MATERIAL DECOMPOSITION DEPTH (MDD)
(INCHES)

STATION (NO.)	DEGREE LOCATION 0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MEDIAN	MAXIMUM
1.0	0.242	0.174	0.220	0.204	0.259	0.220	0.232	0.213	0.220	0.259
2.0	0.243	0.195	0.254	0.201	0.230	0.201	0.289	0.347	0.236	0.347
3.0	0.315	0.213	0.219	0.264	0.261	0.281	0.277	0.305	0.271	0.315
4.0	0.346	0.311	0.302	0.295	0.252	0.262	0.313	0.334	0.306	0.346
5.0	0.285	0.271	0.240	0.277	0.260	0.290	0.303	0.321	0.281	0.321
6.0	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
7.0	0.000	0.000	0.036	0.027	0.000	0.008	0.030	0.000	0.004	0.036
8.0	0.000	0.006	0.000	0.037	0.000	0.003	0.000	0.000	0.000	0.037
9.0	0.023	0.034	0.028	0.045	0.000	0.000	0.010	0.030	0.025	0.045
10.0	0.033	0.052	0.024	0.062	0.057	0.022	0.051	0.008	0.042	0.062
11.0	0.155	0.159	0.148	0.150	0.151	0.162	0.159	0.155	0.155	0.162

MATERIAL DECOMPOSITION RATE (MDR)
(MILS/SEC)

STATION (NO.)	DEGREE LOCATION 0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	AVERAGE
1.0	2.0	1.4	1.8	1.7	2.1	1.8	1.9	1.7	1.8
2.0	2.0	1.6	2.1	1.6	1.9	1.6	2.4	2.8	2.0
3.0	2.6	1.7	1.8	2.2	2.1	2.3	2.3	2.5	2.2
4.0	2.8	2.5	2.5	2.4	2.1	2.1	2.6	2.7	2.5
5.0	2.3	2.2	2.0	2.3	2.1	2.4	2.5	2.6	2.3
6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.0	0.0	0.0	0.3	0.2	0.0	0.1	0.2	0.0	0.1
8.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
9.0	0.2	0.3	0.2	0.4	0.0	0.0	0.1	0.2	0.2
10.0	0.3	0.4	0.2	0.5	0.5	0.2	0.4	0.1	0.3
11.0	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.3	1.3

MOTOR ACTION (EXPOSURE) TIME = 122.30 SEC

A MDR=0 INDICATES THAT MDR < .1 MIL/SEC

Table E-XII. 360T025B Igniter Chamber and Adapter Insulation Performance (cont)

CHAMBER PART NO. 1U75163-01(903)
CHAMBER SERIAL NO. 0000068
ADAPTER PART NO. 1U77392-01(902)
ADAPTER SERIAL NO. 0000008

PREFIRE MEASUREMENTS
INCHES

STATION (NO.)	DEGREE LOCATION 0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MEDIAN	MINIMUM
1.0	1.068	1.085	1.090	1.079	1.093	1.082	1.060	1.094	1.084	1.060
2.0	1.000	1.001	1.045	0.984	0.993	0.996	1.023	1.048	1.001	0.984
3.0	0.992	0.972	1.000	0.977	0.986	0.978	0.984	0.975	0.981	0.972
4.0	1.027	1.038	1.050	1.055	1.043	1.049	1.020	1.037	1.041	1.020
5.0	0.415	0.391	0.401	0.415	0.420	0.395	0.413	0.390	0.407	0.390
6.0	0.493	0.504	0.492	0.500	0.496	0.500	0.501	0.493	0.498	0.492
7.0	0.648	0.648	0.643	0.656	0.658	0.642	0.660	0.641	0.648	0.641
8.0	0.550	0.548	0.540	0.575	0.556	0.576	0.551	0.543	0.551	0.540
9.0	0.418	0.419	0.423	0.447	0.423	0.432	0.424	0.435	0.424	0.418
10.0	0.387	0.399	0.382	0.402	0.399	0.385	0.393	0.390	0.391	0.382
11.0	0.540	0.540	0.540	0.540	0.540	0.540	0.540	0.540	0.540	0.540

CHAMBER PART NO. 1U75163-07(902)
CHAMBER SERIAL NO. 0000004
ADAPTER PART NO. 1U77457-01(903)
ADAPTER SERIAL NO. 0000004

POSTFIRE MEASUREMENTS
INCHES

STATION (NO.)	DEGREE LOCATION 0.0	60.0	90.0	150.0	180.0	240.0	270.0	330.0	MEDIAN	MINIMUM
1.0	0.826	0.911	0.870	0.875	0.834	0.862	0.828	0.881	0.866	0.826
2.0	0.757	0.806	0.791	0.783	0.763	0.795	0.734	0.701	0.773	0.701
3.0	0.677	0.759	0.781	0.713	0.725	0.697	0.707	0.670	0.710	0.670
4.0	0.681	0.727	0.748	0.760	0.791	0.787	0.707	0.703	0.738	0.681
5.0	0.130	0.120	0.161	0.138	0.160	0.105	0.110	0.069	0.125	0.069
6.0	0.530	0.500	0.515	0.528	0.524	0.521	0.501	0.503	0.518	0.500
7.0	0.720	0.653	0.607	0.629	0.690	0.634	0.630	0.672	0.644	0.607
8.0	0.550	0.542	0.546	0.538	0.577	0.573	0.584	0.587	0.562	0.538
9.0	0.395	0.385	0.395	0.402	0.431	0.437	0.414	0.405	0.404	0.385
10.0	0.354	0.347	0.358	0.340	0.342	0.363	0.342	0.382	0.351	0.340
11.0	0.385	0.381	0.392	0.390	0.389	0.378	0.381	0.385	0.385	0.378