



**Report No. KTC-00-11**

**Results of Panel Bending Tests and  
Screw Pullout Tests for Storage Buildings  
for Stor Mor, Incorporated**

**By**

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**By**

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## ***Introduction***

The Kentucky Transportation Center (KTC) was requested by the Stor-Mor Corporation (SMC) to test a number of building panels that SMC uses to build small storage buildings and small recreational structures. SMC delivered to the KTC laboratories a number of the panels to be tested in bending and other modes as deemed appropriate by KTC. The panels are of sandwich construction consisting of two, thin sheet metal plates and a styrofoam interlayer. Each panel was approximately 64 inches in length and 22 inches in width. The thickness was approximately 1.63 inches.

This report details the testing of the panels and includes the test data along with comments and recommendations. The panels were tested in what was perceived to be the two weakest modes of failure. These were in bending and in "pull-out" of the screw heads that are used to assemble the panels

## ***Testing Procedures***

### **Panel Bending Tests**

Since there is no standardized test procedure to test the panels, KTC developed a procedure that appeared to be reasonable. Figure 1 shows the loading frame and testing apparatus before testing (top view). Figure 2 shows the testing setup before testing from below. Load was applied by hydraulic jack; deflections were monitored by linear variable differential transformers (LVDT); loads were monitored by an electronic load cell, and data was collected by computer. Figure 3 shows the data acquisition system.

The panels were tested in bending normal to the longest axis, as this was its weakest dimension. The panels were loaded at an approximate strain rate of one inch per minute. For purposes of duplication, two panels were tested using the same procedure.

Figure 4 is the load-deflection curve for the two tests. The two panels behaved almost identically with a maximum average load of approximately 325 pounds occurring at an approximate deflection of 0.7 inch. Figures 5 and 6 show the panel after testing. Detailed test data is listed in Appendix A.

## **Fastener (Screw) Pullout Tests**

The second major component of the system is the fastener or screw that locks the panels together. Much of the strength of the system is contributed by this fastener system. It was decided to test an individual screw assembly to determine its ultimate strength and to determine if the head of the screw would pull through the sheet metal or whether the threads would pull through first.

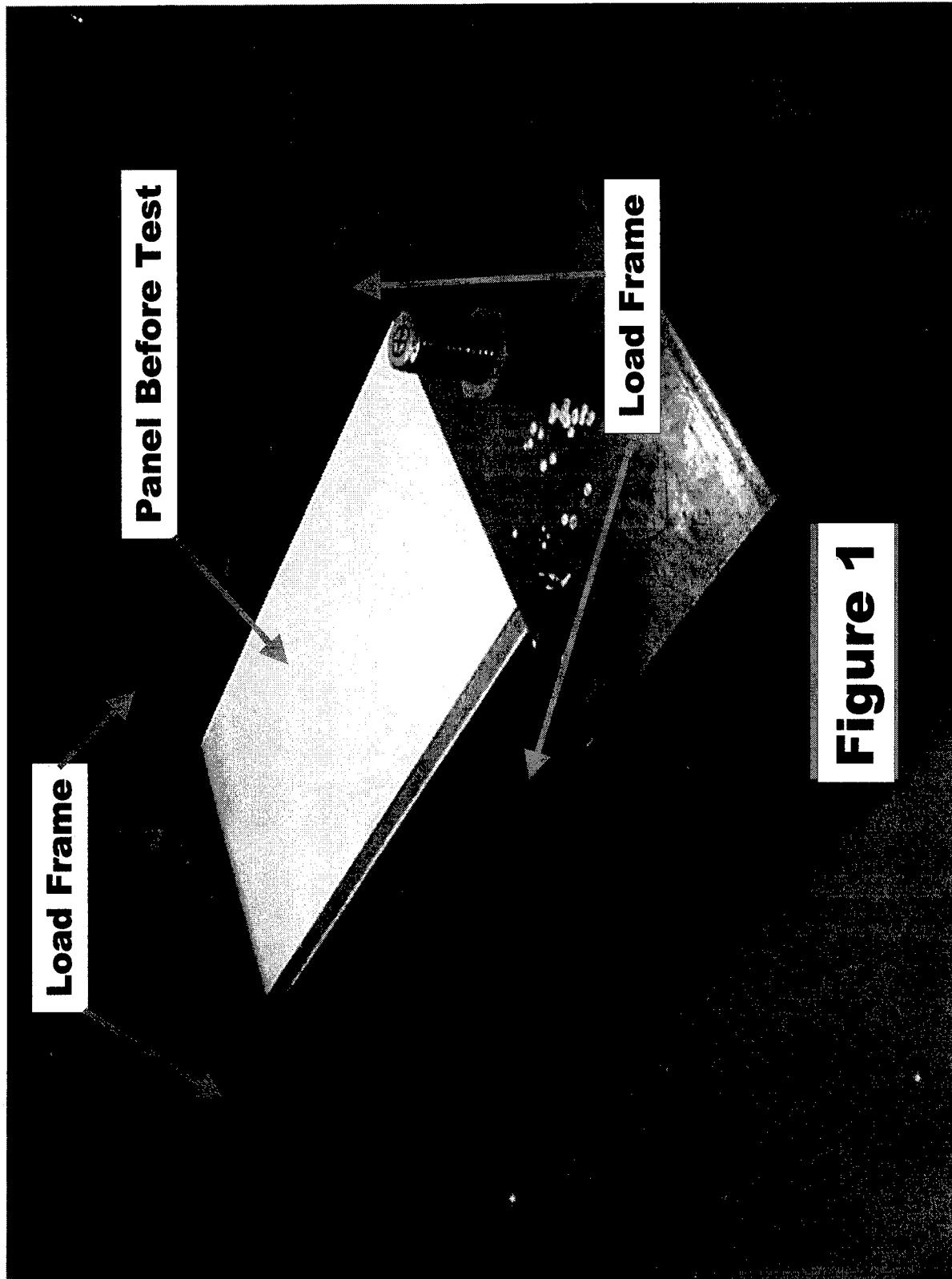
Figure 7 shows the loading apparatus and data acquisition system used to test the screw. Figure 8 is a close-up of the screw assembly used in the tests, and Figure 9 shows the test after completion.

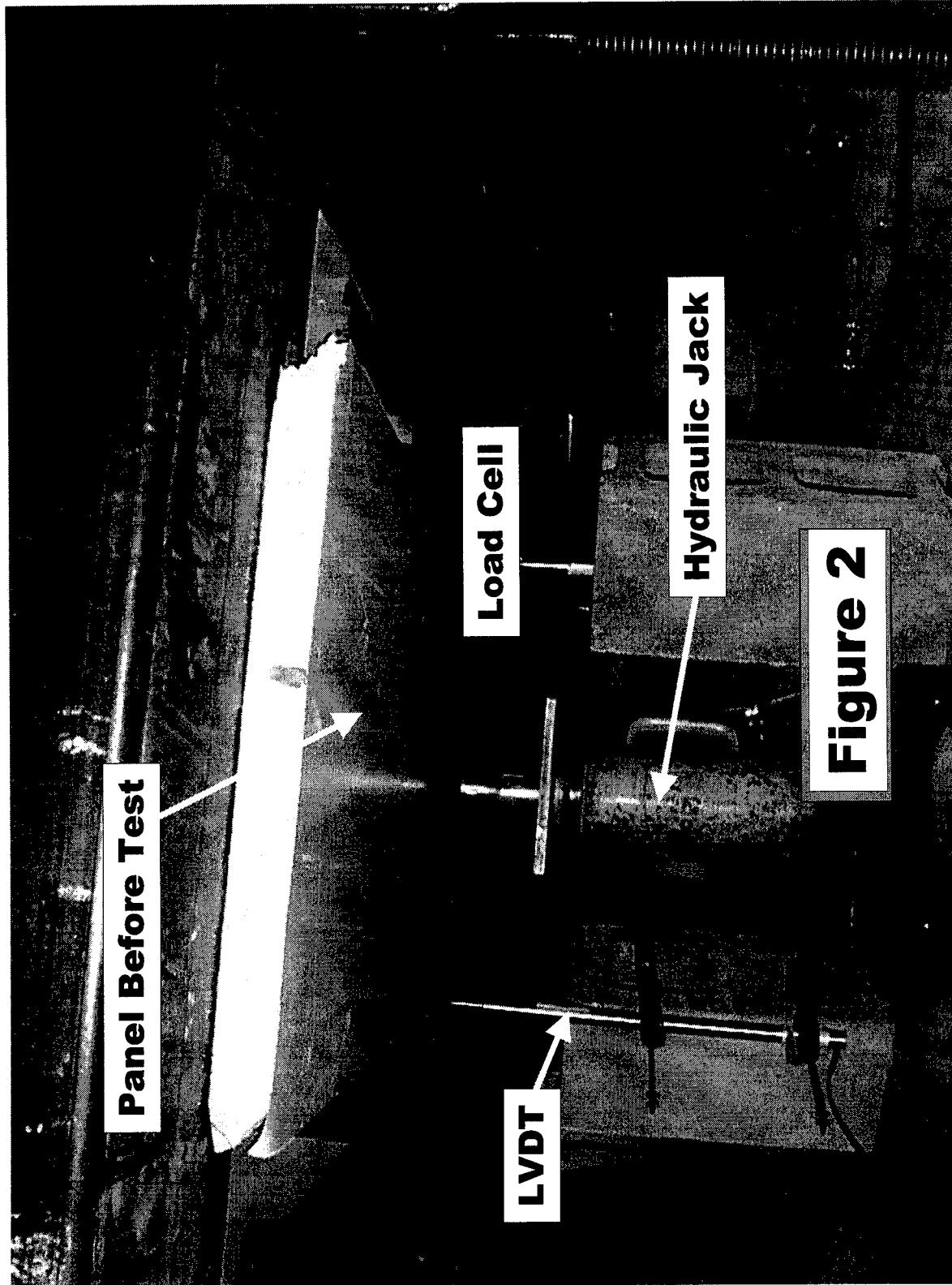
Again, two tests were performed for duplication. The load rate was approximately 0.1 inch per minute. Figure 10 shows the load deflection curves for the two tests. The maximum loads were approximately from 175 to 200 pounds at a deflection of 0.4 inch. Again, detailed test data is listed in Appendix A.

## ***Comments and Recommendations***

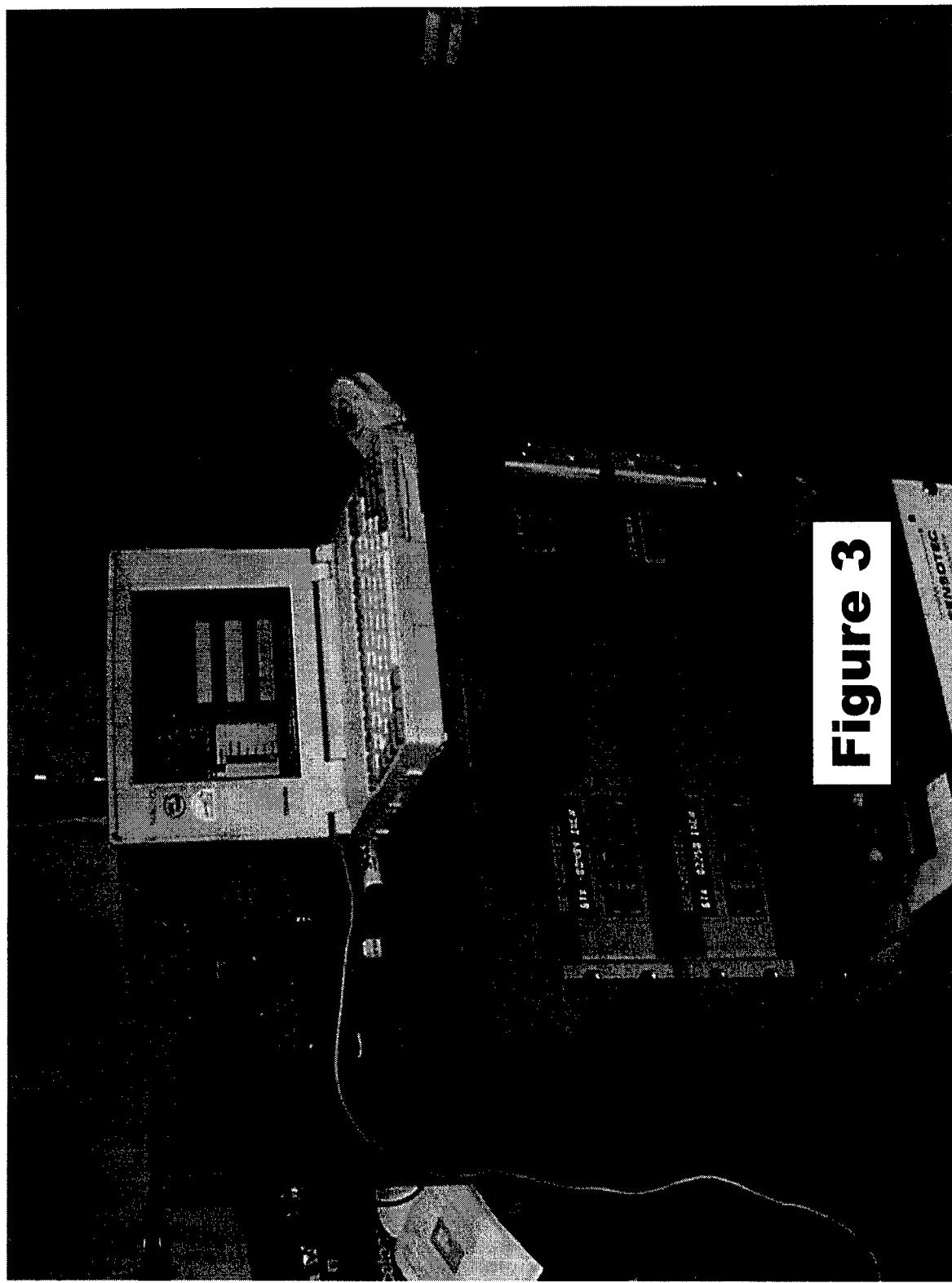
KTC personnel viewed some of the assembled structures at the Lexington Home and Garden Show. It was noted during that tour that the smaller structures are assembled without a frame. This means that the structures are assembled as a shell and that the rigidity and strength of the shell derives largely from the interaction of all the panels acting in concert. Therefore, testing of the individual panels in many different modes is not as critical as analyzing the structures as a whole assembly. How the structure behaves as an assembly should be of the greatest concern of the structural engineer.

It is our recommendation that the structural engineer analyze whole wall and roof assemblies as opposed to individual panels. It appears to us that the strength of the wall and roof assemblies depends largely on the seams between the individual panels. It appears the strength of the individual seams, and hence wall or roof assemblies, could be strengthened or weakened by the addition or subtraction of the number of screws.

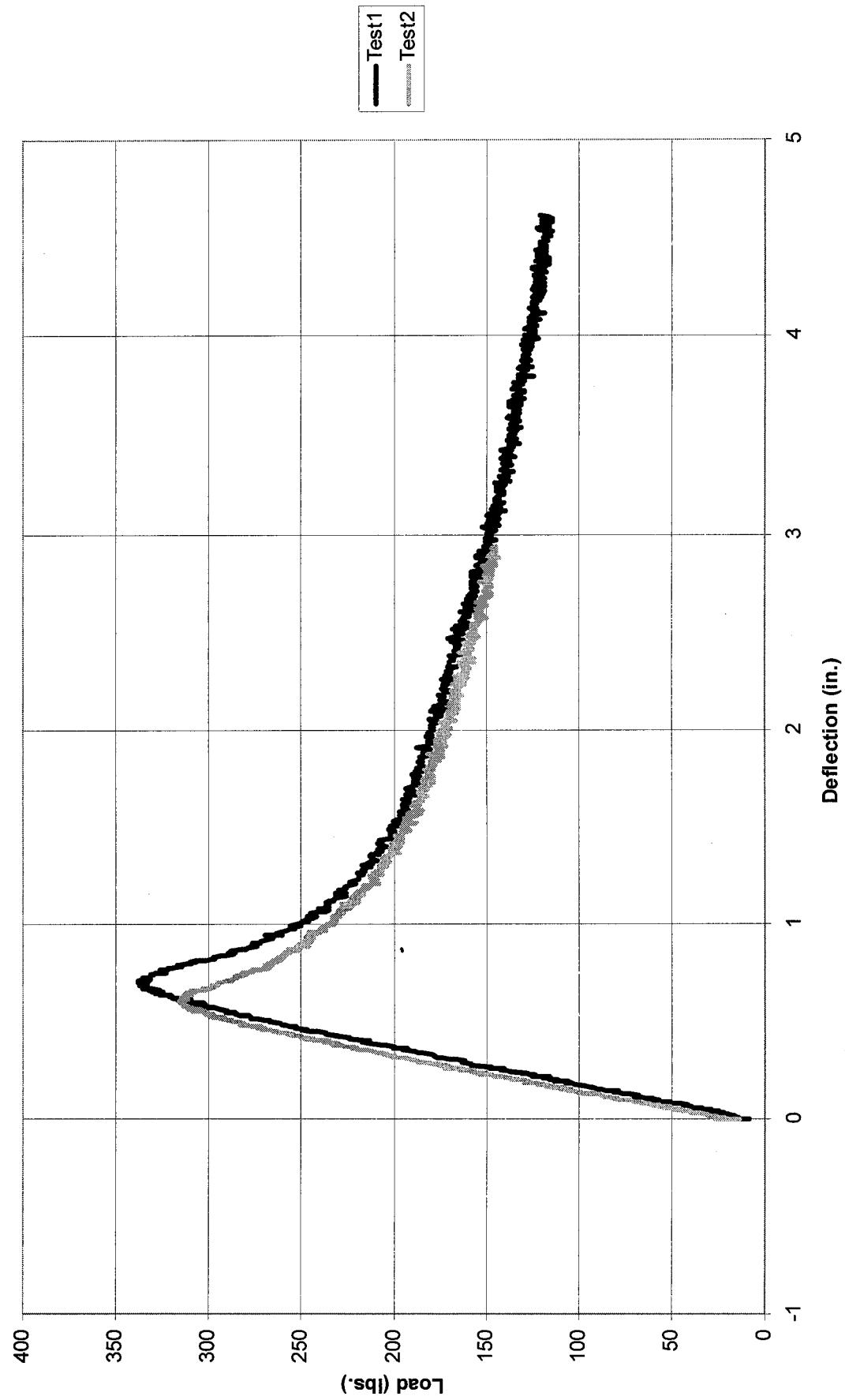




**Figure 3**

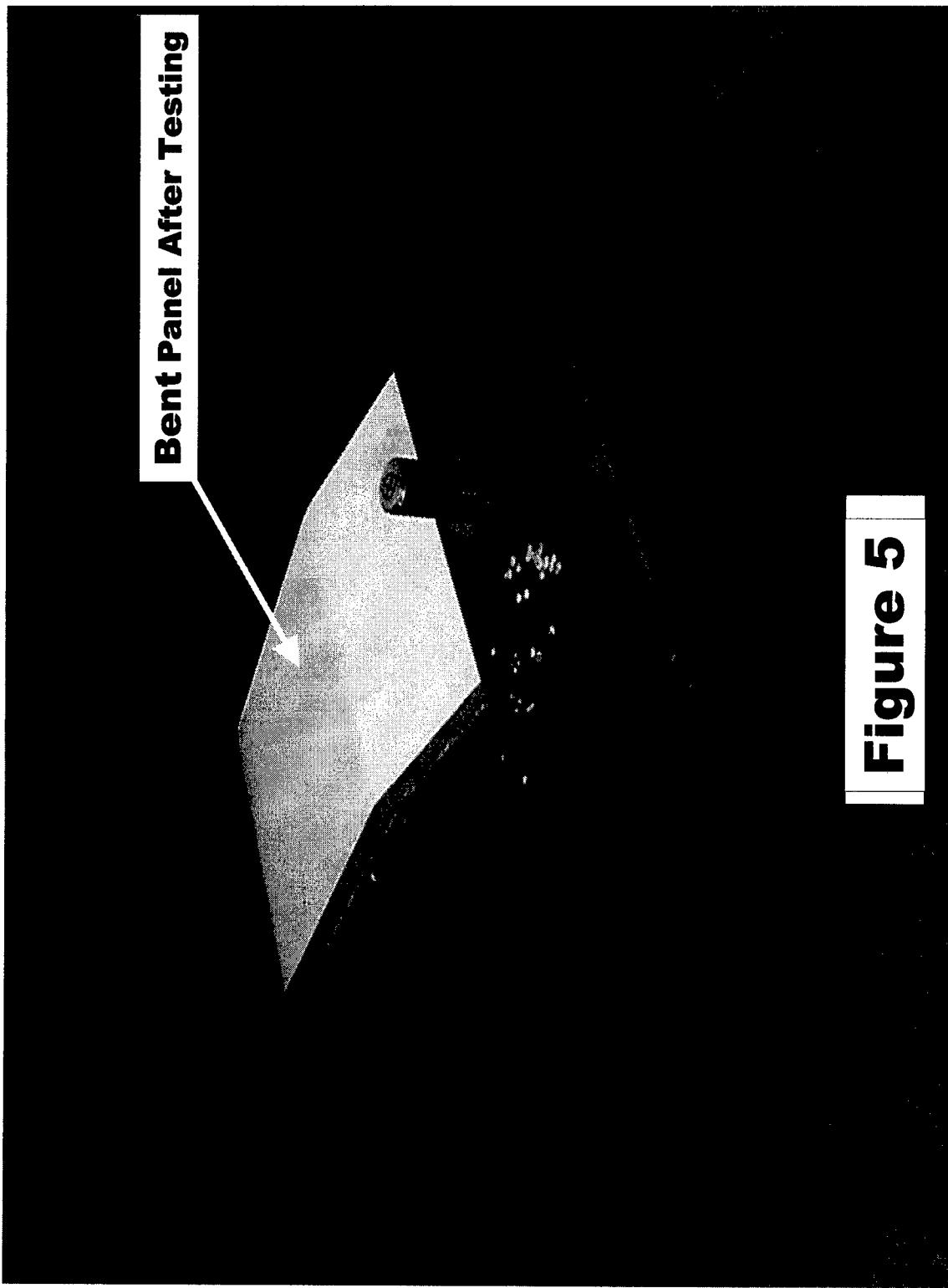


**Panel Tests**



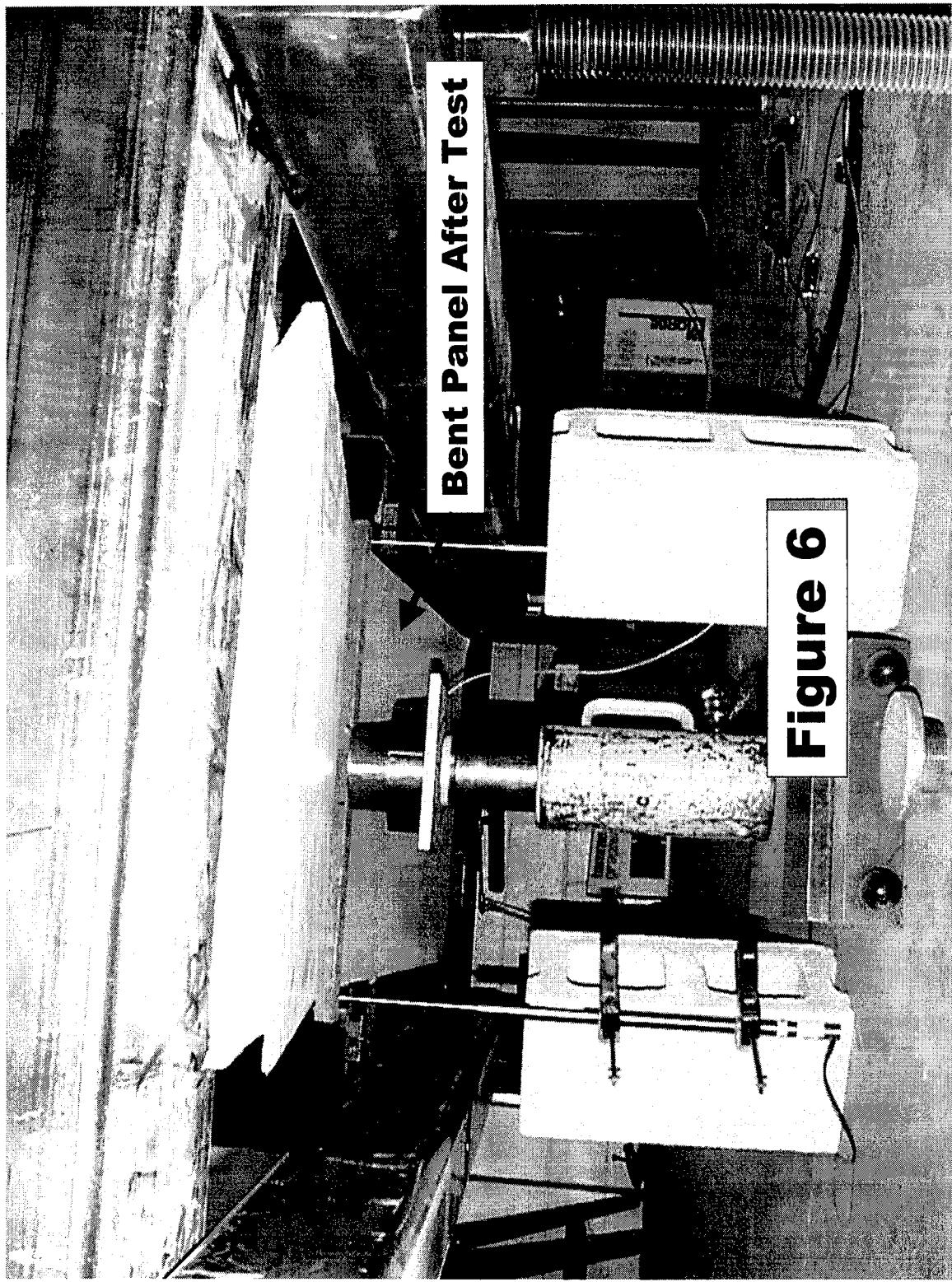
**Figure 4**

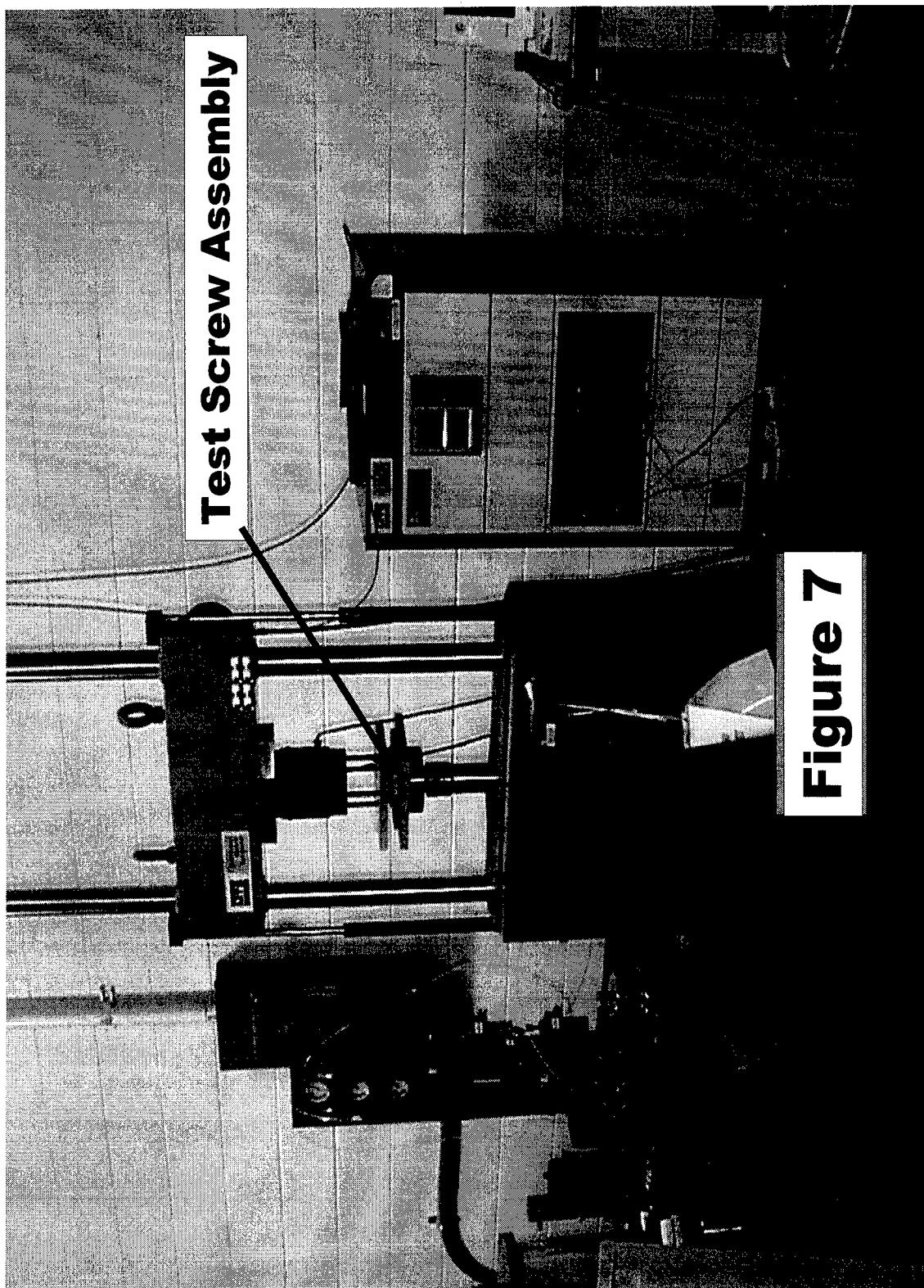
**Figure 5**

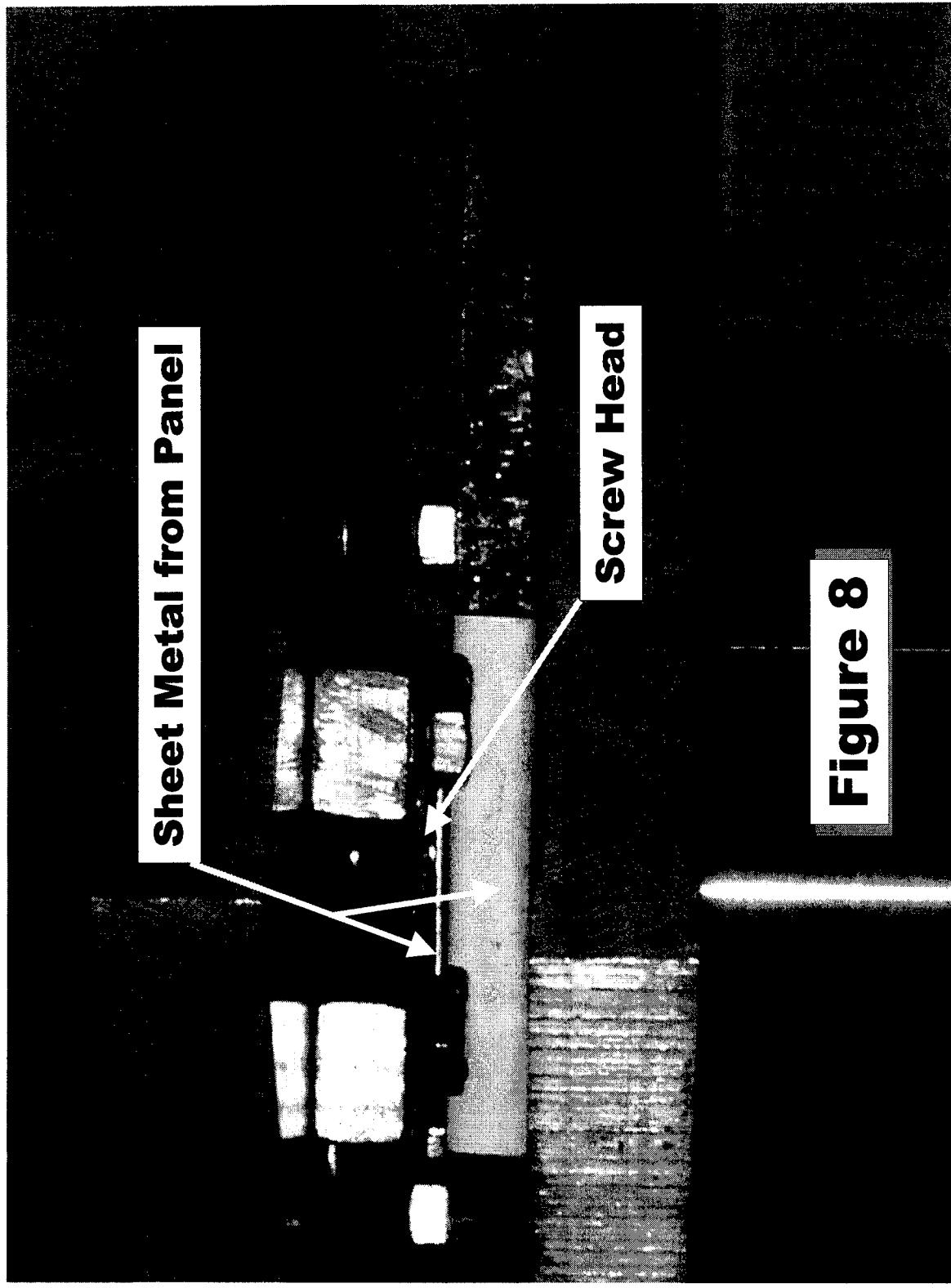


**Figure 6**

**Bent Panel After Test**

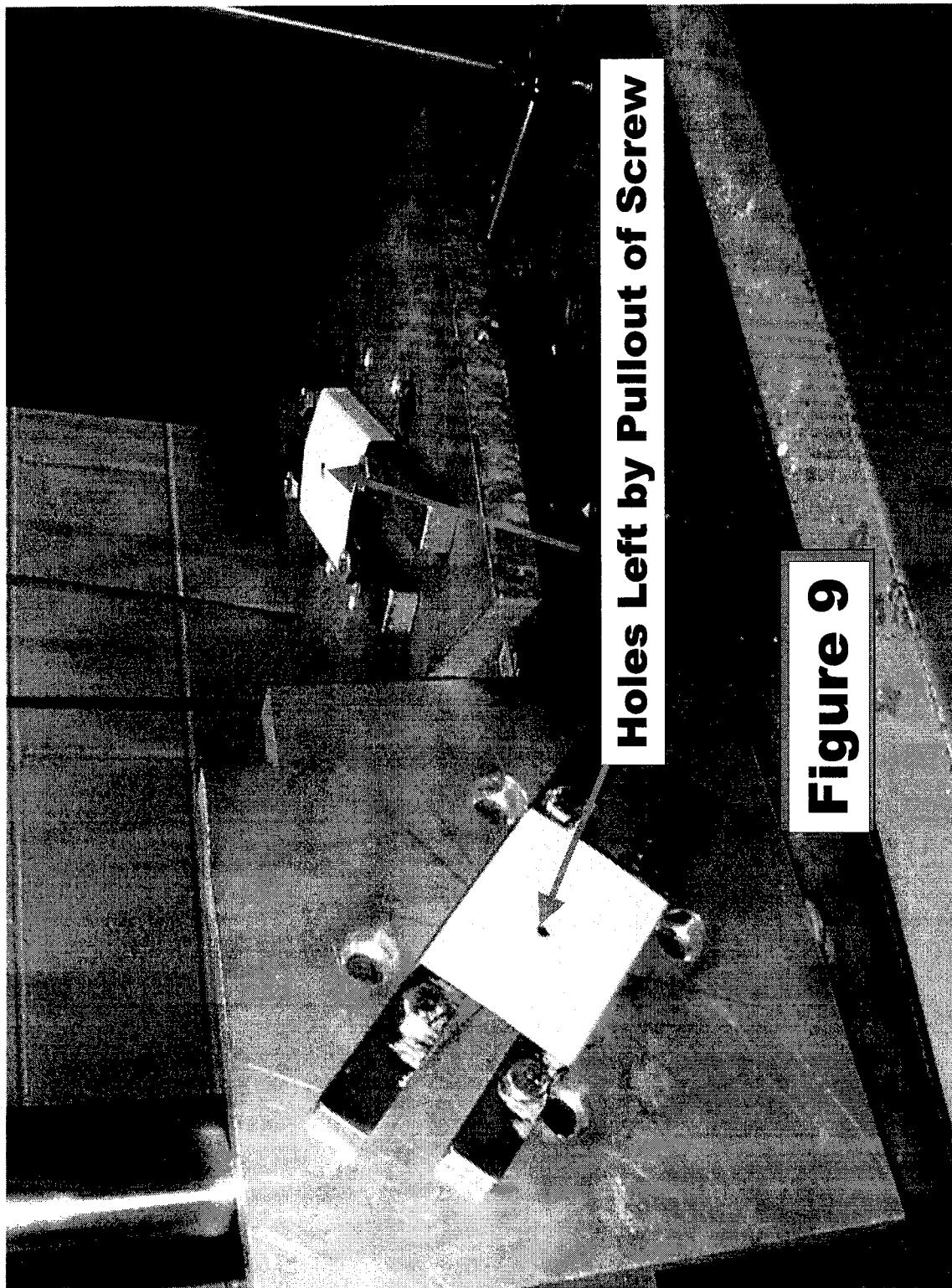






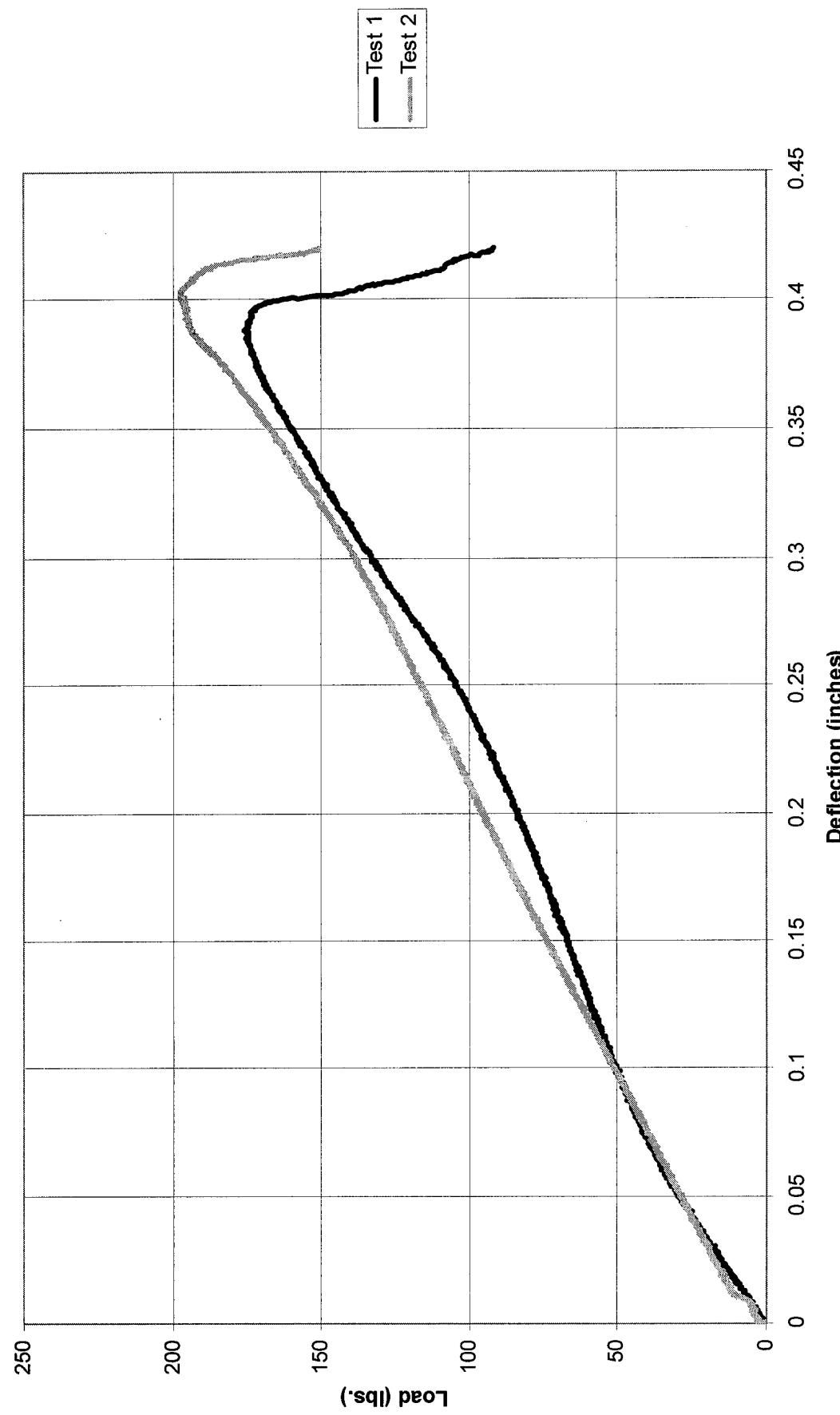
**Figure 9**

**Holes Left by Pullout of Screw**



# Figure 10

## Screw Pull Test - Insulated Panel



## **Appendix A**

# **Panel Test 1, Data**

Deflection inches	load lbs												
0	11.29	0.000367053	10.68	2.39567E-07	11.90	0.001282289	13.12	0.033925306	25.94	0.225008855	123.60		
0.000458097	10.68	0.00027481	11.90	0.000641624	12.51	0.001007478	12.51	0.038328261	24.72	0.228309934	126.04		
0.000458337	11.90	0.00027529	11.29	0.000458337	11.29	0.001190765	11.29	0.040620664	27.16	0.232156081	128.48		
0.000183526	12.51	-0.00027457	8.85	2.39567E-07	13.12	0.000824431	10.68	0.042271203	29.60	0.235548205	130.92		
0.000184005	13.12	0.0005501	10.07	0.000183526	12.51	0.001007718	12.51	0.046764245	30.21	0.235821578	127.87		
0.000367292	12.51	0.000367053	11.29	0.000183526	11.90	0.001006999	9.46	0.049146734	28.38	0.242785278	137.03		
0.000183526	11.90	0.000183047	12.51	0.00027505	13.73	0.000732189	9.46	0.051440334	33.26	0.245720023	137.03		
-0.00018257	9.46	4.79133E-07	13.12	0.000183526	11.29	0.001006999	8.85	0.055384714	33.88	0.248927422	139.47		
0.000274571	11.90	0.000367053	12.51	0.000366813	13.12	0.000732189	11.29	0.058223622	38.15	0.253324628	140.69		
0.000183047	10.68	0.00027505	13.73	0.00027529	11.29	0.001099242	10.07	0.061156211	38.15	0.253966731	141.91		
-9.1284E-05	11.90	0.000458337	8.85	4.79133E-07	9.46	0.001007478	8.85	0.065373484	39.98	0.258733625	140.08		
0.000458097	10.07	0.000183526	9.46	0.00027529	13.73	0.000732668	11.29	0.066655294	39.98	0.262579533	148.01		
0.000367053	11.29	-9.1284E-05	11.90	-9.1284E-05	9.46	0.000915476	11.90	0.070962893	43.64	0.265420598	147.40		
0.00027529	11.29	0.000367053	12.51	0.000183526	10.07	0.000732189	11.29	0.073437145	41.20	0.270096448	150.45		
9.17632E-05	10.68	0.000183526	11.29	0.000183526	8.24	0.001282289	11.29	0.075180406	41.81	0.271194491	149.23		
2.39567E-07	10.68	0.000366813	12.51	0.000366574	11.29	0.000915236	12.51	0.08086014	46.08	0.27760905	157.78		
0.000641624	12.51	0.000367053	11.29	0.000183047	11.29	0.000549142	10.07	0.083884492	51.58	0.28173456	158.39		
0.000366813	14.95	0.00027481	13.73	0.00027481	11.90	0.000915715	8.24	0.086908844	50.35	0.285583343	157.78		
0.000183526	11.29	0.000183766	11.29	0.000183287	11.29	-9.1524E-05	14.95	0.090483775	51.58	0.286771713	157.78		
0.000183526	11.29	0.00027529	12.51	0.000183047	12.51	0.00027529	11.29	0.091765106	60.12	0.295203145	163.27		
-9.1284E-05	13.12	0.000458576	14.95	0.0005501	12.51	-0.00018305	8.85	0.097446517	57.07	0.297951728	161.44		
0.000183526	13.12	0.00027481	10.07	0.000367053	11.29	-9.1524E-05	12.51	0.1023955	62.56	0.305191916	166.32		
0.00027529	10.68	0.000184005	13.73	-0.000183287	11.29	0.0003668574	11.29	0.103860117	60.12	0.306934937	167.54		
0.000641384	11.29	0.000458337	10.68	0.000183047	11.90	9.1284E-05	10.68	0.108075714	60.12	0.311789522	169.99		
0.000183766	8.85	9.17632E-05	12.51	0.000459295	11.29	0.000183526	12.51	0.109635688	63.17	0.317840142	174.26		
0.00027529	12.51	0	10.07	0.000366813	10.68	0.00054986	12.51	0.113210379	66.83	0.320038625	176.70		
0.000366813	13.73	0.000183287	8.85	0.0005501	13.73	0.000183766	16.17	0.117698869	69.89	0.32590524	178.53		
-9.1284E-05	11.29	0.000183766	11.29	0.000823713	12.51	0.000458816	11.29	0.120262968	69.89	0.328101807	177.31		
0.00027529	13.73	0.000458576	12.51	0.001099242	10.07	0.000367053	13.12	0.122096315	67.44	0.333049592	179.14		
0.000367053	13.12	9.17632E-05	9.46	0.000732668	11.29	-0.00018305	12.51	0.126586482	72.33	0.338184497	184.63		
0.00027481	12.51	0.000458337	11.90	0.001190526	14.95	4.79133E-07	11.29	0.128512551	72.33	0.341392136	187.08		
0	12.51	0.000183526	11.90	0.000824431	9.46	0.00027529	13.73	0.131721627	75.99	0.345239002	188.30		
0.000458097	13.73	0.0003666574	8.85	0.000915236	11.29	9.17632E-05	10.68	0.132179766	75.99	0.347073787	189.52		
9.22423E-05	14.34	0.00027529	13.12	0.001098762	13.73	0.000458337	8.85	0.135202638	78.43	0.353854679	194.40		
9.22423E-05	11.90	0.000183526	11.90	0.001098762	12.51	0.000458337	10.68	0.138869812	79.65	0.358893748	191.96		
2.39567E-07	11.29	0.000183526	10.07	0.001006999	10.07	0.0005501	8.85	0.140701482	80.87	0.360087388	195.01		
0.000367053	11.29	0.00027529	11.29	0.001190526	13.12	0.000183287	13.73	0.143268455	79.04	0.36540007	193.18		
0.000275529	13.73	-0.00018305	11.90	0.000915236	12.51	-9.1524E-05	13.73	0.145467178	83.92	0.36870067	200.50		
0.000367053	13.73	0.000458337	11.29	0.000824431	9.46	9.17632E-05	10.07	0.147665661	85.15	0.369798714	199.89		
-0.00018305	14.95	-2.3957E-07	10.07	0.001282049	11.29	0.001282049	9.46	0.152430639	88.20	0.377224105	204.78		
9.22423E-05	11.90	0.000793387	14.95	0.001282289	13.73	0.001099242	13.73	0.152981697	88.81	0.381347459	204.17		
0.00027529	8.85	0.000183526	11.29	0.001190286	13.73	0.001190286	11.29	0.157929482	88.81	0.382811357	206.61		
0.000367053	13.73	9.17632E-05	13.73	0.000915715	11.90	0.001007239	8.24	0.158388537	89.42	0.389684253	212.10		
9.17632E-05	11.29	0.000366574	13.73	0.001099242	11.90	0.001007239	11.29	0.160861831	91.86	0.394543629	216.98		
0.0005501	11.90	0.000550579	11.29	0.000823473	11.90	0.000640665	11.29	0.161688179	91.86	0.401414607	213.32		
-9.1044E-05	12.51	9.20027E-05	12.51	0.001282049	13.73	0.001374531	9.46	0.165811772	93.08	0.403433637	215.76		
0.000458576	13.73	0.000458576	11.29	0.001190526	11.29	0.002015915	13.73	0.166543961	93.08	0.411405534	224.31		
9.20027E-05	13.73	9.17632E-05	11.29	0.000732189	10.68	0.001924631	12.51	0.16947679	96.74	0.418184031	224.31		
0.00027505	11.29	0.0005501	10.68	0.001373812	11.29	0.001466534	10.68	0.172592425	96.74	0.422582914	224.92		
9.17632E-05	14.95	2.39567E-07	11.29	0.001007478	13.73	0.001741105	11.90	0.174793065	96.74	0.429184593	231.63		
0.000183526	14.34	0.00054986	13.73	0.000548663	14.95	0.00183191	10.07	0.178733132	102.24	0.431564207	229.80		
0.000366813	11.90	0.000366574	11.29	0.001007478	10.68	0.002932589	16.17	0.182032773	102.24	0.437798354	237.13		
0.000366813	11.29	0.000367053	11.29	0.001098523	10.07	0.006048704	14.95	0.18569779	104.07	0.44577073	236.51		
9.20027E-05	11.29	0.000275529	10.07	0.000732189	10.68	0.00833895	14.34	0.189360891	107.12	0.450444903	242.01		
0.00027529	14.34	0.000183526	11.29	0.001098762	14.34	0.00971396	17.40	0.191287199	105.90	0.455026833	245.67		
0.000641624	11.29	0.000458576	12.51	0.001006999	11.90	0.012005165	14.34	0.196051218	113.22	0.460615763	250.55		
0.000366813	12.51	0.00027529	11.29	0.001282528	14.34	0.014389091	17.40	0.198160095	110.17	0.463913487	246.89		
0.00027481	11.29	0.000367053	11.90	0.001374052	14.95	0.016041308	16.78	0.203197487	111.39	0.472437401	253.60		
0.000366813	13.12	0.00027505	12.51	0.001099242	11.29	0.019340949	16.17	0.206407282	116.27	0.474088659	252.99		
9.1284E-05	10.07	0.000183526	13.12	0.000732189	8.24	0.019340949	16.17	0.210161427	115.05	0.480684109	256.66		
9.1284E-05	10.07	0.000366813	11.29	0.001282289	11.90	0.023651902	21.06	0.212270303	119.33	0.485819014	259.10		
9.17632E-05	12.51	0.00027529	11.29	0.001190526	15.56	0.026039422	19.23	0.21575371	115.66	0.487649007	260.32		
0.000458097	13.12	0.0005501	13.73	0.000732189	8.24	0.026313274	24.11	0.216668946	119.94	0.49644893	261.54		
0.000366813	12.51	9.22423E-05	10.07	0.000732189	12.51	0.030256934	22.28	0.221159593	125.43	0.500115624	266.42		
0	11.29	0.00027529	11.29	0.000915476	12.51	0.032640381	26.55	0.223542081	124.82	0.503231499	267.64		

Deflection inches	load lbs												
0.508360655	267.64	0.721625499	331.12	0.986929419	254.83	1.346084323	212.10	1.586373309	196.23	1.930950324	180.97		
0.512668014	269.47	0.725110823	336.00	0.993158775	250.55	1.34800584	211.49	1.594438886	191.96	1.936085469	181.58		
0.518441428	274.36	0.729142174	336.00	0.995269807	256.05	1.35579469	213.32	1.596635692	195.62	1.938465562	179.14		
0.521193365	277.41	0.730427338	332.34	1.002601039	252.99	1.363590248	212.10	1.604607829	192.57	1.946715145	180.97		
0.525040472	277.41	0.733084637	331.73	1.009379776	249.33	1.368625724	208.44	1.609006233	194.40	1.948458645	182.19		
0.525555709	278.02	0.737485197	331.73	1.011945551	249.94	1.373667189	209.66	1.615516149	195.62	1.958443583	177.31		
0.535946395	282.90	0.741241738	330.51	1.018179458	249.33	1.375773909	207.83	1.62055378	193.79	1.960920949	179.14		
0.540163668	285.95	0.744358572	331.12	1.019002452	246.28	1.382558395	206.61	1.622938904	195.62	1.968527231	182.80		
0.541169709	285.34	0.748026703	329.90	1.028075268	247.50	1.389153845	209.05	1.63146186	192.57	1.971827352	182.19		
0.548319571	285.95	0.748391839	329.29	1.033668031	243.84	1.395663281	208.44	1.632743191	190.74	1.976134711	179.75		
0.553360317	289.62	0.753432825	323.19	1.039805623	242.01	1.399145011	205.39	1.64273292	194.40	1.983282417	179.14		
0.55418403	290.84	0.758109154	325.02	1.043380314	246.89	1.405925664	204.78	1.646948756	195.01	1.984379982	181.58		
0.559499826	290.23	0.762048981	325.63	1.048237534	243.23	1.409407155	204.17	1.651622449	193.79	1.99272013	179.75		
0.560600745	290.23	0.764889328	326.24	1.053646291	242.62	1.416742699	207.83	1.659596982	191.35	1.993730483	179.75		
0.566556967	294.50	0.768649941	321.97	1.055843098	245.06	1.422512041	206.00	1.661701306	191.96	2.004175674	179.14		
0.57086217	296.94	0.772863621	322.58	1.065926986	241.40	1.42480612	209.05	1.669673443	193.79	2.005460598	178.53		
0.573611711	299.99	0.775521399	320.74	1.069958576	237.13	1.432963221	206.61	1.67233857	187.69	2.012148051	179.75		
0.576454214	298.77	0.779280336	320.13	1.073717034	234.68	1.440568305	207.83	1.678567285	188.30	2.018291392	180.36		
0.580671487	303.04	0.783494255	315.86	1.08049577	241.40	1.445241999	202.94	1.685436826	188.91	2.020488438	178.53		
0.583237023	303.04	0.786243557	314.64	1.083977261	239.57	1.448356437	201.11	1.689561617	193.18	2.030297995	179.75		
0.587544622	301.82	0.790002014	317.08	1.091767788	234.68	1.455687669	201.72	1.6933172	191.96	2.032219512	179.75		
0.590568734	306.10	0.791557916	316.47	1.098644277	235.90	1.460269839	201.11	1.699002684	189.52	2.040926473	176.09		
0.593776133	306.71	0.797421416	311.59	1.103135163	237.13	1.464393672	200.50	1.705322605	193.79	2.042854218	179.14		
0.597072421	302.43	0.801638689	309.76	1.10963861	234.68	1.471725863	202.33	1.711648754	191.35	2.049542629	179.75		
0.600649268	310.98	0.805301555	310.37	1.114221259	237.13	1.476399316	201.72	1.717603778	188.30	2.056963948	180.97		
0.604863906	312.81	0.806769761	306.71	1.120821979	235.29	1.481717029	199.28	1.721911138	188.30	2.059805252	176.70		
0.606695816	311.59	0.811899156	310.37	1.125035898	232.85	1.488129671	199.28	1.725853121	186.47	2.065029525	176.70		
0.611647434	309.15	0.815473848	306.71	1.132365454	232.85	1.490057177	202.33	1.731536449	189.52	2.070250204	177.31		
0.614580023	311.59	0.820603003	301.21	1.137591643	231.02	1.498395888	202.94	1.737950768	189.52	2.07364065	174.26		
0.616411453	317.08	0.824178173	298.16	1.145011044	226.14	1.500592215	201.72	1.744735254	189.52	2.081252442	177.31		
0.621637403	316.47	0.825642312	296.94	1.149135117	231.63	1.508566268	201.72	1.75032083	188.30	2.087297552	174.26		
0.623559399	319.52	0.831781102	296.94	1.153626003	227.97	1.515075944	198.06	1.754995003	187.08	2.093808666	177.31		
0.625849645	318.91	0.834988261	297.55	1.16242305	226.14	1.519383304	196.84	1.760038624	189.52	2.100220829	173.65		
0.630251882	321.36	0.83764604	293.28	1.164534322	231.63	1.522866232	199.28	1.765901884	186.47	2.10297013	179.75		
0.631441929	319.52	0.844151643	291.45	1.171224649	229.19	1.528821256	199.28	1.770576057	186.47	2.109020751	172.43		
0.635840572	320.74	0.846444141	286.56	1.177545289	229.80	1.537159966	200.50	1.774791414	190.13	2.111492128	179.14		
0.639415264	326.85	0.850014424	290.23	1.182219222	227.97	1.54073322	198.67	1.778089139	188.30	2.117080099	173.04		
0.641799429	325.02	0.854532394	289.62	1.189004427	226.75	1.546051173	195.62	1.785603897	187.08	2.123130959	178.53		
0.644823062	324.41	0.857164765	285.95	1.190466648	226.14	1.55200428	196.84	1.790647758	188.91	2.124504053	176.09		
0.648120787	328.68	0.865137621	285.95	1.199174328	226.75	1.556219876	196.23	1.797059442	184.63	2.133117813	174.87		
0.651054334	325.02	0.866144381	288.40	1.201285121	224.31	1.563738468	191.96	1.801641372	187.08	2.134678027	175.48		
0.654627109	324.41	0.872924555	282.29	1.209348542	220.65	1.567950231	195.62	1.807511101	187.69	2.142559599	172.43		
0.656735267	329.29	0.87576538	279.85	1.215944231	221.26	1.570152787	197.45	1.811358686	184.02	2.146499666	171.21		
0.659484089	330.51	0.879430397	279.24	1.21997702	224.31	1.575832761	196.23	1.815116904	185.24	2.154565722	174.87		
0.660399565	331.73	0.886761869	274.36	1.224924565	221.87	1.583804659	197.45	1.820427909	183.41	2.156853333	174.26		
0.666358562	332.34	0.8869694218	277.41	1.231068147	221.87	1.586373309	196.23	1.827488164	185.85	2.164458657	173.04		
0.667464006	326.24	0.893267472	274.97	1.239408295	218.81	1.594438886	191.96	1.831154618	185.85	2.171244431	172.43		
0.671859182	330.51	0.90078247	276.19	1.243624131	218.81	1.596635692	195.62	1.838851705	184.63	2.171792525	173.04		
0.673413407	335.39	0.902159158	276.19	1.251226819	218.81	1.604607829	192.57	1.840591612	187.08	2.180039472	176.09		
0.674973141	333.56	0.909399106	272.53	1.257736495	216.37	1.609006233	194.40	1.848655033	185.85	2.182150265	173.04		
0.680105899	333.56	0.91535389	271.92	1.262134899	218.20	1.615516149	195.62	1.852962393	186.47	2.189664305	172.43		
0.681297374	333.56	0.918286239	268.86	1.26817977	220.04	1.62055378	193.79	1.856720371	184.02	2.196382236	171.82		
0.684136283	332.95	0.924062049	270.08	1.271207715	217.59	1.622938904	195.62	1.863682634	184.63	2.201120089	169.99		
0.688078027	333.56	0.925617951	268.86	1.280188528	215.76	1.63146186	192.57	1.866161198	186.47	2.203408179	169.38		
0.689085026	337.83	0.933681611	265.20	1.282110524	216.98	1.632743191	190.74	1.873583474	180.97	2.208635326	173.04		
0.693025812	335.39	0.935883928	267.64	1.287611044	216.37	1.64273292	194.40	1.875872284	184.02	2.214406824	174.26		
0.695134449	332.95	0.944588254	269.47	1.292192975	214.54	1.646948756	195.01	1.883754574	184.02	2.218988754	173.65		
0.69825248	336.00	0.947886218	260.32	1.299161227	215.15	1.651622449	193.79	1.889987762	184.63	2.226320465	171.82		
0.701917258	336.61	0.952194775	262.76	1.305481866	212.10	1.659596982	191.35	1.891909998	182.19	2.228797592	173.04		
0.70476	335.39	0.9560426	263.98	1.307224887	217.59	1.661701306	191.96	1.900617917	180.97	2.237137261	171.21		
0.707327213	338.45	0.962183546	261.54	1.31748751	211.49	1.669673443	193.79	1.902449587	183.41	2.238784926	173.04		
0.710351086	337.83	0.968968032	257.88	1.321611104	215.15	1.672333857	187.69	1.911154871	180.36	2.246390968	171.21		
0.712549569	332.34	0.97263305	257.88	1.328854646	212.71	1.678567285	188.30	1.914641872	187.69	2.2522595	169.99		
0.715760082	33												

Deflection inches	load lbs												
2.265820566	174.26	2.582728942	159.00	2.877452668	152.90	3.148442312	144.35	3.378288502	141.91	3.586686545	132.75		
2.273701419	169.38	2.58593658	159.00	2.87992692	151.67	3.151101048	141.91	3.381677511	140.69	3.590809659	133.36		
2.276633289	169.99	2.58923718	162.66	2.887808013	155.34	3.156416126	140.69	3.385895024	138.25	3.594751643	135.19		
2.282407901	172.43	2.596566017	159.00	2.889367987	155.34	3.159898335	143.13	3.386169116	134.58	3.597498788	132.75		
2.287904588	171.82	2.601605565	159.00	2.895692699	153.51	3.163840798	145.57	3.390111579	140.08	3.599790712	132.14		
2.291205188	169.38	2.605728679	160.83	2.89697379	150.45	3.16869658	145.57	3.394874879	135.81	3.603274359	135.19		
2.29725509	169.38	2.61150425	159.61	2.903754203	152.90	3.172639283	142.52	3.397534095	137.03	3.607030181	135.19		
2.3033934	169.38	2.612693817	163.88	2.907053126	149.84	3.176486868	145.57	3.40037492	139.47	3.609503714	133.36		
2.30486209	171.82	2.620761071	156.56	2.912005223	153.51	3.17969283	144.35	3.403856172	137.03	3.612255412	133.97		
2.310633349	169.99	2.622866114	160.22	2.916493474	154.12	3.182994627	143.13	3.407248534	140.69	3.616561094	133.97		
2.318056104	168.15	2.630197107	161.44	2.919883441	152.90	3.186657967	144.96	3.408072007	137.03	3.618577488	133.36		
2.320717476	169.38	2.633405464	157.78	2.92666625	146.18	3.191884157	143.74	3.415037864	137.64	3.621418793	131.53		
2.329333632	165.71	2.638905745	159.61	2.927675645	150.45	3.19408264	143.13	3.415586766	135.81	3.625725913	133.36		
2.330614484	171.21	2.643302712	157.78	2.935190643	149.84	3.197838941	141.30	3.419802362	136.42	3.629758462	132.75		
2.335834684	169.99	2.645045733	159.00	2.936929831	151.67	3.200679767	140.69	3.420810799	141.91	3.633332435	137.64		
2.340052915	169.99	2.652102394	162.05	2.943252866	147.40	3.204988803	140.69	3.427408644	138.25	3.635166021	133.97		
2.348023136	169.99	2.653658296	155.34	2.948662103	149.23	3.208379728	140.69	3.428234034	138.25	3.639657386	130.92		
2.357008022	169.38	2.6633375131	160.83	2.950677778	148.62	3.211951066	140.08	3.432998532	135.81	3.641946914	135.81		
2.360123178	167.54	2.665023275	157.78	2.953518364	149.84	3.213876895	144.35	3.433914008	135.19	3.645245837	131.53		
2.364243418	169.38	2.670794533	159.00	2.957548757	148.01	3.218277694	140.69	3.43877003	138.25	3.648820768	137.64		
2.368367491	167.54	2.674093216	160.83	2.963141999	150.45	3.222399132	141.30	3.441245719	137.03	3.651843203	130.92		
2.371577046	167.54	2.677117089	156.56	2.96469814	150.45	3.22570069	141.91	3.44674576	137.03	3.655512053	137.64		
2.376435224	168.76	2.684815613	159.61	2.974319379	144.96	3.230280943	144.35	3.4476663392	137.64	3.656978108	130.92		
2.382481292	169.99	2.6865595353	160.22	2.979362521	150.45	3.231657391	141.91	3.45150978	132.14	3.661649645	134.58		
2.386146361	169.38	2.693892741	155.34	2.984675682	149.84	3.236696939	140.08	3.456000426	138.25	3.663942527	135.81		
2.392470782	162.66	2.696455882	159.00	2.985868603	147.40	3.23889662	144.35	3.457925776	133.97	3.666231096	133.36		
2.395682014	166.93	2.703603827	157.78	2.990357572	148.01	3.24512885	142.52	3.461133175	133.97	3.670631896	133.36		
2.404022162	167.54	2.706260647	156.56	2.995859051	149.84	3.246501944	139.47	3.464891872	138.86	3.671730658	134.58		
2.406403453	165.10	2.710754408	154.73	2.997688804	149.84	3.251357726	141.30	3.470207907	137.03	3.675214066	129.70		
2.409519329	167.54	2.716157894	156.56	3.005111156	147.40	3.252826177	145.57	3.471030901	136.42	3.678878843	130.92		
2.41529442	166.32	2.717809631	156.56	3.0063052	149.84	3.25960659	140.08	3.474515027	133.36	3.682086242	134.58		
2.422075552	166.32	2.727247823	157.78	3.014368621	149.23	3.260708228	141.91	3.479187283	137.03	3.686118791	130.92		
2.424182512	165.10	2.728808037	157.17	3.016020359	146.18	3.264648055	141.91	3.481112393	138.25	3.686853136	131.53		
2.430049366	164.49	2.736047745	154.73	3.021518723	144.96	3.266663012	137.03	3.482301482	138.25	3.692167256	135.19		
2.434082873	166.32	2.737328836	154.73	3.025824166	146.18	3.271979527	140.08	3.487710478	135.81	3.693084648	132.14		
2.438936979	163.88	2.743742676	157.17	3.028756754	149.84	3.27647185	141.91	3.489999767	138.25	3.697665859	132.14		
2.444346694	167.54	2.749335918	158.39	3.03389118	152.29	3.277936468	141.30	3.494032555	137.03	3.698673098	132.14		
2.446360453	164.49	2.751257675	158.39	3.036548479	148.01	3.283067539	140.08	3.495224997	135.81	3.703071502	133.97		
2.453599683	164.49	2.757857197	157.17	3.041677635	149.84	3.284168937	143.13	3.501821884	134.58	3.705178941	129.09		
2.456349224	168.76	2.759416692	157.78	3.041860682	149.23	3.290949595	139.47	3.502556948	135.81	3.708755789	132.75		
2.46532836	162.66	2.766748164	156.56	3.049649772	143.13	3.291683456	137.64	3.507322644	135.81	3.7122368	132.75		
2.467071382	164.49	2.769497465	148.01	3.05130127	149.84	3.296908208	139.47	3.51089518	134.58	3.715536442	129.09		
2.473944756	170.60	2.777012464	152.90	3.058267605	147.40	3.298372346	140.69	3.513553198	133.97	3.716177107	132.14		
2.478891823	167.54	2.778384839	154.12	3.060099275	145.57	3.303230764	140.69	3.516579226	135.81	3.721218332	133.97		
2.481367991	164.49	2.785807834	157.78	3.06559716	143.74	3.30708266	140.08	3.519785188	137.64	3.72295752	135.81		
2.48906987	164.49	2.790301115	155.34	3.069171852	148.62	3.309004417	135.19	3.523451882	132.75	3.728090509	132.75		
2.491359876	165.71	2.791673491	151.67	3.074762219	144.35	3.311846668	138.86	3.527116899	136.42	3.728733091	135.19		
2.495300183	162.05	2.796165574	158.39	3.076321474	143.13	3.317161279	140.69	3.529774678	130.92	3.733497589	133.36		
2.50199099	166.32	2.800564936	154.73	3.081544309	144.96	3.321284393	140.69	3.532066122	133.97	3.735698947	131.53		
2.506937337	165.10	2.807804405	151.67	3.084844443	145.57	3.321377115	141.91	3.537197194	134.58	3.739823259	132.14		
2.511337897	164.49	2.80972712	158.39	3.089699733	144.96	3.327516623	140.69	3.539489357	135.19	3.740920824	133.36		
2.513077086	163.88	2.816783062	154.12	3.094100533	146.79	3.328432818	138.86	3.543890396	133.97	3.745411231	132.14		
2.52022551	161.44	2.819350275	154.73	3.096575264	149.84	3.336554694	140.69	3.547004355	137.03	3.747976287	130.31		
2.523981811	168.15	2.821735879	153.51	3.104181546	148.62	3.336496239	140.69	3.551496439	133.97	3.752283647	133.36		
2.530670701	160.22	2.828883345	151.67	3.106196742	143.13	3.341262893	135.81	3.552779925	133.97	3.753201758	135.19		
2.53269021	160.83	2.83053077	152.29	3.11013633	145.57	3.342271809	140.08	3.554792966	133.36	3.758334028	134.58		
2.53974759	166.93	2.837404623	152.90	3.114994269	145.57	3.347404797	139.47	3.559377052	131.53	3.759616556	133.97		
2.541669346	160.22	2.840520259	149.84	3.117835334	139.47	3.351893288	141.30	3.563042069	136.42	3.764290489	132.75		
2.548360153	162.66	2.847484678	155.34	3.122234456	143.74	3.353359821	138.86	3.565607126	133.97	3.765297009	129.70		
2.553493381	160.22	2.850234699	154.12	3.126450771	146.79	3.357302284	138.25	3.568266581	134.58	3.769604369	130.31		
2.554590945	161.44	2.856009071	152.90	3.129933929	146.79	3.361331958	138.25	3.572022643	134.58	3.771896052	130.92		
2.561371359	163.88	2.861232146	151.67	3.134788284	141.91	3.363348832	137.03	3.574588658	133.36	3.776386699	129.09		
2.563574154	161.44	2.866549619	151.67	3.138363455	143.74	3.368024442	138.25	3.578347115	138.86	3.777029041	131.53		
2.572552572	163												

Deflection inches	load lbs								
3.78811873	130.31	3.978003369	127.26	4.157348898	124.21	4.338900815	124.21	4.512476522	115.66
3.789491824	124.21	3.980750994	121.77	4.159731386	124.21	4.34036663	122.38	4.515866011	116.27
3.79398247	132.75	3.983500536	127.87	4.163033184	125.43	4.343024408	119.94	4.516968606	118.72
3.79480762	131.53	3.986984182	128.48	4.163947462	122.38	4.345408334	118.72	4.52017361	118.72
3.799664601	129.70	3.98826719	127.26	4.167157017	123.60	4.349164636	124.82	4.523563816	117.49
3.800856324	130.92	3.992940883	127.87	4.168715074	124.82	4.352007138	119.94	4.526773371	117.49
3.804888394	129.70	3.995141283	129.70	4.174761382	123.60	4.354205621	117.49	4.528696805	118.10
3.806903111	130.92	3.998346047	123.60	4.175403485	120.55	4.357230692	118.72	4.533831949	113.83
3.811487916	129.70	4.001281032	126.04	4.178153266	122.38	4.357689268	118.72	4.534838709	116.27
3.812860531	130.31	4.004577559	123.60	4.18310201	122.38	4.362544811	121.77	4.538139069	121.77
3.817259893	130.92	4.006869722	124.82	4.1840206	123.60	4.363737972	116.27	4.541436315	121.77
3.818177046	128.48	4.010536416	126.65	4.188509329	119.94	4.368045571	119.94	4.544826043	119.94
3.823948544	127.87	4.012277041	124.82	4.189883381	124.82	4.368777281	121.77	4.547118924	115.66
3.825508038	132.75	4.016218546	126.65	4.192276463	123.60	4.374277082	121.16	4.549960948	115.66
3.828258059	131.53	4.018693756	124.21	4.196665951	123.60	4.377023749	123.60	4.550874507	122.38
3.829996768	127.87	4.020982565	124.82	4.199325885	124.21	4.379408154	116.27	4.554634881	117.49
3.834579178	131.53	4.025015833	123.60	4.203172033	123.60	4.381427488	123.60	4.556741601	115.66
3.836229477	124.82	4.027672174	124.82	4.203722612	123.60	4.385181329	118.72	4.558299658	116.27
3.840446511	129.70	4.030055142	126.04	4.207298741	119.33	4.388390645	118.10	4.562700697	117.49
3.844019286	128.48	4.032715315	125.43	4.21123761	122.38	4.389947265	118.72	4.566273472	116.27
3.846495694	130.31	4.034546506	129.70	4.214996307	123.60	4.392329993	119.94	4.566824051	118.72
3.848234643	127.87	4.03784519	127.87	4.216278836	121.16	4.393522675	115.66	4.570672834	118.72
3.853459394	127.87	4.040594491	126.04	4.220492755	121.77	4.397462502	121.16	4.573696707	119.94
3.85648183	128.48	4.044901372	122.38	4.223701831	118.10	4.399663142	122.38	4.578097028	118.72
3.857583467	128.48	4.045635956	127.26	4.224342736	124.21	4.403694253	122.38	4.578644253	113.83
3.861524971	129.70	4.048936316	125.43	4.225627181	123.60	4.404151632	118.72	4.582678718	118.72
3.865187832	130.31	4.052233083	123.60	4.227462205	120.55	4.408003529	119.94	4.584694394	119.94
3.868214101	126.04	4.054066909	123.60	4.232593277	125.43	4.411393017	122.38	4.587535698	118.10
3.869678718	130.92	4.056450556	126.04	4.233143856	120.55	4.414232406	117.49	4.590102672	118.72
3.874809311	128.48	4.061033245	123.60	4.236808873	123.60	4.417350437	122.99	4.592211788	118.10
3.876737057	127.26	4.062407057	127.26	4.240564935	123.60	4.419456678	118.10	4.593952174	118.10
3.878294635	128.48	4.065980311	127.26	4.243133106	121.77	4.421564117	121.77	4.597616712	114.44
3.881776844	128.48	4.068545847	127.26	4.247164697	118.72	4.425782109	118.72	4.600092161	118.72
3.885901875	128.48	4.071845728	126.65	4.248814038	120.55	4.428712541	117.49	4.602932508	118.10
3.888559174	130.31	4.073312023	126.04	4.251656541	124.21	4.429812262	122.99	4.605771656	116.27
3.890666134	129.09	4.07734529	120.55	4.254587453	122.38	4.43311382	121.77	4.608889928	120.55
3.893967453	129.70	4.07917744	124.21	4.25834567	121.77	4.435496548	121.16		
3.897356701	130.31	4.08302766	125.43	4.259812204	123.60	4.437970082	123.60		
3.901849503	126.65	4.084401952	127.26	4.263476742	123.60	4.439067407	119.94		
3.904141187	129.09	4.087607674	126.04	4.266227721	123.60	4.442826104	117.49		
3.906980575	129.70	4.090083842	125.43	4.268975825	118.72	4.444383922	120.55		
3.909180975	129.70	4.092376005	123.60	4.270899977	121.16	4.448049657	117.49		
3.913488334	129.70	4.094025586	126.04	4.273834482	122.38	4.451166491	121.16		
3.915046152	129.09	4.094943458	124.82	4.275758155	123.60	4.454188927	117.49		
3.91880437	126.65	4.100897763	122.38	4.278782507	122.38	4.456114516	119.94		
3.922469627	130.31	4.101173292	122.38	4.28162501	121.77	4.4584062	117.49		
3.925034923	128.48	4.105939228	123.60	4.283915735	121.77	4.462346267	117.49		
3.928242562	126.04	4.107311843	125.43	4.288406142	118.72	4.464271138	120.55		
3.930075669	129.09	4.113360067	118.72	4.291061285	123.60	4.4671134	120.55		
3.932090626	129.70	4.113542156	124.21	4.294087553	119.33	4.469310686	118.10		
3.935113062	128.48	4.118217047	125.43	4.296653089	120.55	4.472428717	119.33		
3.938415338	129.09	4.11885915	121.77	4.299677201	122.38	4.473987254	119.94		
3.941805785	126.65	4.122617368	123.60	4.301694314	123.60	4.476550634	118.10		
3.945104228	126.04	4.124815612	122.38	4.305175566	121.16	4.479026084	120.55		
3.945561367	125.43	4.12756707	122.99	4.30664186	124.21	4.481775865	116.88		
3.94886005	130.92	4.130039884	125.43	4.310308794	121.16	4.484248919	118.72		
3.951791202	127.87	4.131415373	124.82	4.312690564	120.55	4.488556278	117.49		
3.95454242	129.09	4.134349879	124.21	4.315990684	121.16	4.491215973	118.72		
3.956832667	127.26	4.136639406	122.38	4.318553825	121.77	4.494696027	118.72		
3.959764776	126.65	4.139207817	126.65	4.322220279	119.33	4.496255282	118.10		
3.960499121	124.82	4.142413539	123.60	4.322771817	117.49	4.499005303	119.33		
3.966271098	126.65	4.145255802	123.60	4.32607206	123.60	4.501112502	118.72		
3.967831072	128.48	4.148186954	124.21	4.331568385	118.10	4.503586514	115.05		
3.972320999	130.31	4.151210826	125.43	4.332852111	118.72	4.507067765	118.10		
3.973787294	129.70	4.15478432	124.21	4.335416928	125.43	4.509085837	116.88		

## **Panel Test 2, Data**



	Deflection load inches	load lbs	Deflection load inches	load lbs	Deflection load inches	load lbs	Deflection load inches	load lbs	Deflection load inches	load lbs	Deflection load inches	load lbs
0	14.95	0.000458576	14.34	-9.1E-05	18.62	0.142407	101.01	0.328251	201.72	0.513278	287.79	
0.000367	21.67	0.000366813	16.17	0.000367	17.40	0.14653	103.46	0.333109	205.39	0.516853	294.50	
0.000458	19.84	0.000642103	18.62	-9.1E-05	16.78	0.148454	105.29	0.335126	202.94	0.520333	294.50	
0.000367	18.62	0.000367292	19.23	0.001007	16.17	0.151572	104.07	0.337507	206.00	0.522718	291.45	
0.000366	20.45	0.000366813	18.62	0.001007	18.62	0.154505	105.90	0.340351	209.05	0.525191	293.89	
7.19E-07	18.62	0.00027505	18.62	0.003299	27.16	0.155053	110.17	0.34319	209.05	0.528306	296.33	
-9.1E-05	13.73	0.00027529	16.17	0.0066	22.28	0.159176	107.73	0.346031	211.49	0.529498	298.16	
0.000275	19.84	-0.000182568	15.56	0.007517	21.06	0.162017	112.00	0.348412	211.49	0.532338	300.60	
-9.1E-05	17.40	0.000458816	17.40	0.008892	22.28	0.165957	113.83	0.351072	211.49	0.535362	296.94	
0.000367	17.40	0.000641863	16.17	0.011275	23.50	0.167882	118.10	0.354004	215.15	0.536096	298.16	
2.4E-07	17.40	7.187E-07	14.95	0.012284	25.94	0.16999	113.83	0.35877	218.81	0.540312	297.55	
0.000275	14.34	0.000183526	15.56	0.01494	25.94	0.173107	115.05	0.359135	218.81	0.541685	300.60	
0.000275	16.17	0.00027505	14.34	0.016225	26.55	0.176037	121.16	0.362984	221.26	0.546267	301.82	
9.2E-05	18.01	9.20027E-05	16.78	0.018607	30.21	0.178879	119.33	0.366008	223.09	0.549476	301.82	
0.000367	14.95	-9.10445E-05	18.01	0.019981	27.16	0.181354	122.99	0.367291	220.04	0.553234	303.04	
9.18E-05	16.78	0.00054986	19.84	0.021356	28.38	0.185661	122.38	0.371875	222.48	0.556165	301.82	
0.000276	19.23	-0.000366334	17.40	0.022455	32.04	0.187585	129.09	0.375999	225.53	0.557907	305.49	
0.000367	18.62	2.39567E-07	14.95	0.026671	32.65	0.189875	129.70	0.378566	229.19	0.560107	305.49	
0.000275	16.17	-9.10445E-05	18.01	0.028871	30.82	0.192809	127.87	0.380673	228.58	0.561572	309.15	
0.000183	18.62	0.00055034	18.62	0.029696	35.71	0.19464	127.26	0.384796	229.80	0.566888	309.15	
0.000184	14.95	0.000366813	16.17	0.032994	35.71	0.200233	132.14	0.384797	233.46	0.569088	310.98	
-9.2E-05	19.23	0.00055034	18.62	0.034369	38.15	0.202706	132.14	0.390755	229.80	0.570004	304.26	
9.18E-05	16.17	0.000275529	15.56	0.035378	39.37	0.203072	135.81	0.394053	235.90	0.573213	310.37	
9.2E-05	14.95	0.000733626	16.17	0.03996	39.98	0.20747	137.03	0.395154	237.74	0.577336	309.76	
0.000275	14.95	0.000366334	14.95	0.042067	40.59	0.209669	137.64	0.399645	238.35	0.580362	313.42	
0.000183	16.17	0.00027505	18.01	0.042985	44.25	0.214435	138.25	0.401935	235.29	0.583018	310.98	
0.000184	16.17	0.00027529	18.62	0.046558	45.47	0.216451	141.91	0.405416	242.01	0.58366	312.20	
9.2E-05	19.23	0.00027505	16.17	0.046832	44.25	0.219844	145.57	0.406974	243.23	0.588242	314.03	
-9.2E-05	18.62	0.000183766	16.17	0.050957	49.13	0.222133	146.18	0.410733	243.23	0.591816	312.81	
0.00055	13.73	0.00027505	18.01	0.053523	47.91	0.225891	146.79	0.413206	248.72	0.59319	313.42	
0.000275	19.23	-9.1284E-05	13.12	0.055081	50.97	0.227813	152.90	0.415587	246.89	0.596948	313.42	
0.000275	18.62	0.000458576	18.01	0.057554	51.58	0.231666	149.84	0.416321	243.23	0.597497	313.42	
9.22E-05	18.62	9.17632E-05	16.78	0.059569	54.02	0.234596	151.67	0.420717	249.33	0.601988	315.25	
0	17.40	0.000183766	16.17	0.063144	54.02	0.235146	154.12	0.422278	250.55	0.604646	312.81	
9.15E-05	15.56	-9.15236E-05	15.56	0.064611	50.35	0.238995	155.34	0.426677	249.94	0.608313	316.47	
0	16.17	0.000183287	18.62	0.066901	55.24	0.24101	157.17	0.429058	249.94	0.610968	312.81	
2.4E-07	18.01	0.000366813	14.95	0.067635	57.68	0.245959	158.39	0.432906	255.44	0.612251	314.64	
0.000184	16.78	0.000275529	16.17	0.071483	60.73	0.248799	156.56	0.433182	253.60	0.613445	311.59	
2.4E-07	13.73	0.000366574	15.56	0.07359	56.46	0.251551	162.05	0.437856	254.22	0.619126	315.25	
-0.00028	17.40	0.00027505	15.56	0.073958	59.51	0.253475	163.88	0.43932	257.88	0.619034	315.25	
0.000183	13.73	0.00027505	17.40	0.077255	60.12	0.256588	162.66	0.443445	257.88	0.622699	311.59	
0.000459	17.40	0.000458576	16.17	0.079272	63.78	0.260806	162.66	0.446287	261.54	0.625909	313.42	
-0.00018	17.40	0.000458576	16.78	0.083119	63.78	0.26218	172.43	0.448395	262.15	0.62884	311.59	
0.000276	18.01	0.00027505	18.01	0.08532	66.22	0.26548	168.76	0.452609	264.59	0.632507	312.81	
0.000183	14.95	0.000458097	13.73	0.086512	68.67	0.269787	172.43	0.454626	262.76	0.633697	313.42	
-9.2E-05	18.01	0.000275529	18.62	0.089443	69.89	0.271162	172.43	0.456366	265.20	0.63773	311.59	
9.22E-05	18.01	0.000366813	17.40	0.091276	68.06	0.274094	170.60	0.461223	267.64	0.640662	309.76	
0.000183	18.62	0.000366574	14.95	0.094026	70.50	0.277025	174.87	0.463332	271.31	0.643505	309.76	
0.000367	18.62	2.39567E-07	16.17	0.096225	71.72	0.2806	177.31	0.466815	270.08	0.646894	309.15	
0.000275	17.40	-0.000458097	19.23	0.098972	73.55	0.281791	174.87	0.467456	270.70	0.648454	312.81	
9.25E-05	18.01	9.20027E-05	19.23	0.100349	76.60	0.285914	178.53	0.472955	273.75	0.651938	309.76	
0.000367	18.01	0.00027505	17.40	0.105022	80.87	0.289672	183.41	0.475888	271.31	0.654319	306.71	
9.2E-05	15.56	0.000366813	19.84	0.107862	79.04	0.291964	187.08	0.47818	276.19	0.656153	306.71	
9.2E-05	16.17	-0.000182568	19.23	0.108687	80.87	0.295902	186.47	0.480195	276.19	0.660001	309.15	
0	16.17	0.00027505	18.62	0.112994	83.31	0.297185	188.30	0.483401	279.85	0.663576	304.88	
0.000367	16.78	0.00027529	16.17	0.115285	84.53	0.299935	187.08	0.485602	279.24	0.664125	301.82	
0.000183	20.45	0.000275529	16.17	0.116749	86.37	0.304425	191.35	0.489359	283.51	0.669257	303.65	
0.000275	16.78	-9.10445E-05	18.62	0.121148	88.20	0.30672	190.74	0.492841	280.46	0.670905	299.99	
2.4E-07	18.01	9.15236E-05	17.40	0.12353	88.20	0.309741	190.74	0.494399	283.51	0.675121	299.38	
9.22E-05	17.40	0.000366813	17.40	0.127654	89.42	0.312676	194.40	0.49724	283.51	0.677322	297.55	
2.4E-07	15.56	0.000366813	16.78	0.128845	91.86	0.315607	196.84	0.497789	282.29	0.680256	298.16	
0	18.01	-9.10445E-05	17.40	0.132144	94.30	0.317256	194.40	0.502922	283.51	0.683464	296.94	
0.00055	16.78	0.00027505	17.40	0.134345	97.96	0.32019	200.50	0.503746	287.79	0.684838	298.16	
2.4E-07	18.62	0.000367053	16.17	0.1381	98.57	0.321746	199.28	0.508695	287.17	0.688595	298.16	
-9.1E-05	21.67	0.000183287	18.62	0.140942	99.18	0.326053	199.28	0.510894	290.23	0.691252	296.33	

Deflection inches	load lbs	Deflection inches										
0.694368	294.50	0.886542	250.55	1.085043	223.70	1.288944	207.83	1.494223	191.96	1.704915	183.41	1.907993
0.697301	294.50	0.888007	252.99	1.087974	223.09	1.292427	207.83	1.498256	194.40	1.709315	183.41	1.909093
0.699499	295.11	0.89149	246.28	1.090906	227.97	1.297099	207.22	1.501465	193.18	1.712613	185.85	1.914775
0.704816	295.11	0.895065	251.77	1.09329	226.14	1.299024	204.17	1.505496	196.23	1.714171	186.47	1.918351
0.70564	292.67	0.897448	249.94	1.098146	224.92	1.300857	206.00	1.508703	195.62	1.717195	185.24	1.919265
0.708023	290.84	0.900473	250.55	1.099796	222.48	1.303698	206.61	1.510627	193.18	1.717744	179.75	1.923848
0.711691	290.23	0.903588	248.72	1.101814	226.14	1.308554	208.44	1.514019	193.79	1.723701	184.02	1.925408
0.714896	287.79	0.906979	246.28	1.107767	227.97	1.311397	203.56	1.517501	193.18	1.727369	183.41	1.929623
0.715172	289.62	0.910551	248.72	1.109693	221.87	1.314513	204.17	1.521993	193.18	1.729017	182.19	1.933469
0.719846	286.56	0.912477	247.50	1.112258	220.65	1.316528	206.00	1.524283	187.69	1.732682	184.63	1.93787
0.723145	287.17	0.916419	244.45	1.11611	223.70	1.320011	205.39	1.526849	191.96	1.733967	184.63	1.939153
0.726443	285.34	0.91761	245.67	1.117208	219.42	1.323494	205.39	1.531249	190.74	1.738183	178.53	1.941992
0.729378	285.34	0.922741	246.28	1.12179	222.48	1.327891	201.72	1.534547	194.40	1.741939	182.80	1.946393
0.732226	285.95	0.9254	246.89	1.12509	219.42	1.329543	205.39	1.535281	193.79	1.744964	178.53	1.947857
0.735424	285.95	0.928972	243.23	1.127838	223.70	1.334124	205.39	1.53977	191.96	1.748721	182.80	1.952347
0.738449	282.29	0.931631	243.23	1.129672	221.87	1.335865	202.94	1.544903	190.74	1.749546	181.58	1.953907
0.7412	279.85	0.934104	248.11	1.135355	218.81	1.338798	204.78	1.545453	190.74	1.75587	179.14	1.958215
0.744497	281.07	0.936764	245.67	1.138011	218.81	1.343197	205.39	1.550676	194.40	1.756693	184.02	1.959679
0.747338	280.46	0.940429	246.28	1.139571	223.09	1.344204	202.94	1.553883	193.18	1.761917	183.41	1.965729
0.750273	282.29	0.944462	245.67	1.144336	222.48	1.349336	202.33	1.556999	191.35	1.76375	182.80	1.967194
0.754394	281.68	0.946203	246.89	1.144701	218.20	1.35282	206.61	1.561124	188.91	1.768426	182.19	1.969761
0.755587	279.85	0.950968	243.23	1.150657	220.04	1.355659	203.56	1.564697	192.57	1.769709	178.53	1.975351
0.759619	275.58	0.952526	243.23	1.153316	221.87	1.358408	201.72	1.566165	188.30	1.772822	180.36	1.976815
0.760443	278.63	0.955826	242.01	1.154781	219.42	1.360243	201.11	1.569279	187.08	1.777591	182.19	1.980939
0.765667	273.75	0.95665	242.01	1.159271	216.37	1.361984	202.33	1.574228	185.24	1.778964	179.14	1.982316
0.767499	276.80	0.961323	245.67	1.162203	220.04	1.368307	201.72	1.576335	193.18	1.784004	179.75	1.987081
0.772173	272.53	0.96343	238.96	1.16587	216.37	1.371241	201.72	1.579821	192.57	1.786111	182.19	1.988179
0.774556	267.03	0.968656	239.57	1.169444	220.04	1.373989	196.84	1.582843	191.35	1.789225	180.97	1.994137
0.77804	270.70	0.971312	239.57	1.17082	216.37	1.378202	201.72	1.585959	190.13	1.791974	181.58	1.995511
0.780331	267.64	0.972413	237.13	1.175311	216.37	1.379669	202.33	1.588984	188.91	1.794175	181.58	1.99872
0.782164	267.64	0.976812	238.96	1.178241	216.37	1.384161	201.72	1.591643	186.47	1.798299	178.53	2.003209
0.785738	270.08	0.979836	240.18	1.180899	216.37	1.387459	201.72	1.594574	184.63	1.800042	183.41	2.0044
0.788854	269.47	0.984143	239.57	1.185207	213.93	1.388469	198.06	1.597597	188.91	1.805081	179.14	2.009348
0.791694	265.20	0.986433	237.13	1.18658	216.98	1.393966	199.28	1.600807	188.30	1.805905	180.36	2.011275
0.794168	267.64	0.986891	239.57	1.191345	216.37	1.397631	202.33	1.605021	188.30	1.811771	180.97	2.015307
0.797651	267.03	0.992482	237.13	1.193544	215.15	1.400199	199.89	1.607955	188.30	1.813879	180.97	2.01833
0.801224	267.64	0.995599	238.35	1.199135	213.32	1.40359	200.50	1.609971	187.69	1.820111	181.58	2.021536
0.803973	268.25	0.997705	236.51	1.201609	213.93	1.404963	196.23	1.61272	186.47	1.821121	178.53	2.02649
0.806908	265.20	1.001187	231.63	1.202434	212.10	1.409544	196.84	1.616751	190.13	1.824511	178.53	2.030065
0.810482	262.76	1.00522	237.13	1.206741	216.37	1.411744	198.67	1.620143	187.69	1.829368	177.92	2.033087
0.813046	263.98	1.008793	233.46	1.207473	213.93	1.416326	198.67	1.623991	188.30	1.830744	179.14	2.035653
0.814514	261.54	1.00962	232.85	1.213889	212.10	1.419534	201.11	1.625549	187.08	1.834226	179.75	2.040694
0.818087	261.54	1.013284	233.46	1.214805	207.83	1.42164	195.62	1.629583	188.91	1.836148	179.14	2.040969
0.820929	265.20	1.016219	232.24	1.217831	209.66	1.423841	201.11	1.632697	189.52	1.840272	176.70	2.046469
0.824317	262.76	1.018507	231.02	1.221038	210.88	1.428974	195.62	1.635905	187.08	1.841649	180.36	2.05004
0.827709	262.76	1.022265	231.63	1.22617	211.49	1.432549	197.45	1.638288	184.63	1.847604	179.75	2.05279
0.828258	260.32	1.024831	233.46	1.229468	212.10	1.436304	198.67	1.641497	187.08	1.849528	174.87	2.055082
0.832384	262.76	1.028773	233.46	1.230111	210.88	1.438596	199.28	1.645528	184.02	1.853104	177.31	2.058657
0.836047	259.71	1.032254	233.46	1.23625	209.05	1.442262	196.84	1.649012	184.63	1.854752	178.53	2.062504
0.83944	258.49	1.033996	233.46	1.237807	211.49	1.445103	196.84	1.65286	185.85	1.86016	176.09	2.064703
0.843104	259.10	1.039861	233.46	1.239825	212.10	1.447395	195.62	1.654692	185.24	1.863643	177.31	2.068368
0.844114	259.71	1.040412	232.24	1.244224	212.10	1.450966	195.62	1.659184	184.63	1.864467	173.65	2.069836
0.846769	260.32	1.04371	229.19	1.24578	213.32	1.455365	195.62	1.662115	185.85	1.867947	174.26	2.074876
0.851443	257.88	1.049208	230.41	1.250088	209.05	1.458206	195.62	1.66404	182.19	1.868956	179.75	2.075791
0.852911	257.88	1.051408	230.41	1.25302	211.49	1.461141	199.28	1.666421	186.47	1.874911	177.31	2.07909
0.857218	258.49	1.055533	231.02	1.25687	212.71	1.465447	198.06	1.671098	184.63	1.875553	176.70	2.081655
0.858408	256.05	1.057822	229.19	1.260627	209.66	1.467646	195.62	1.674487	185.85	1.879401	177.92	2.086787
0.863081	257.27	1.059199	227.36	1.260903	206.61	1.469845	195.62	1.678799	184.63	1.882702	181.58	2.087981
0.866108	252.99	1.063597	227.36	1.266858	211.49	1.472597	195.01	1.684113	187.08	1.883342	173.04	2.092836
0.867206	252.38	1.064605	230.41	1.26979	207.83	1.477451	196.23	1.686312	184.02	1.889301	177.31	2.095312
0.872339	251.77	1.07047	229.19	1.273365	207.83	1.47837	194.40	1.688878	187.08	1.890673	176.09	2.099984
0.875637	257.27	1.072851	229.80	1.277488	209.66	1.483227	191.35	1.692083	184.63	1.895988	174.26	2.102552
0.876921	252.99	1.075328	227.36	1.280421	206.61	1.483776	195.01	1.695752	182.80	1.898739	173.04	2.107407
0.881226	250.55	1.077528	227.36	1.283812	206.61	1.490283	194.40	1.69951	182.80	1.903227	174.26	2.108599
0.883701	251.77	1.0811	223.70	1.284362	207.22	1.492575	195.01	1.701249	182.19	1.904694	175.48	2.112448

load lbs	Deflection inches	load lbs	Deflection inches	load lbs	Deflection inches	load lbs	Deflection inches	load lbs
175.48	2.115839	168.76	2.327258	162.05	2.539506	154.73	2.748358	146.79
176.70	2.11822	168.15	2.328543	160.22	2.541339	155.34	2.753581	149.23
173.65	2.121611	165.10	2.333033	163.88	2.543813	157.78	2.75514	150.45
174.87	2.125094	170.60	2.333307	160.22	2.548946	156.56	2.761005	154.12
171.82	2.127933	166.32	2.338622	160.22	2.550961	154.12	2.761647	150.45
176.09	2.12995	168.15	2.341189	161.44	2.551877	155.95	2.767054	151.67
177.92	2.133434	165.10	2.346137	162.66	2.557926	152.90	2.768336	148.01
174.26	2.136275	165.71	2.347421	165.10	2.560126	153.51	2.773009	149.23
175.48	2.140674	167.54	2.352095	156.56	2.564523	154.73	2.775667	150.45
174.26	2.144522	169.99	2.354844	160.83	2.566358	152.29	2.780066	149.84
172.43	2.145715	168.15	2.358233	162.05	2.57039	152.90	2.780984	147.40
177.31	2.150846	165.10	2.360432	159.00	2.571396	152.90	2.786024	150.45
172.43	2.152036	167.54	2.364468	159.61	2.577538	155.34	2.789596	150.45
174.87	2.156527	164.49	2.368039	162.66	2.57827	149.84	2.793814	146.18
177.31	2.160836	167.54	2.370148	156.56	2.583952	151.06	2.795555	151.67
173.65	2.163767	167.54	2.375462	160.83	2.585603	155.34	2.799127	147.40
174.26	2.164685	166.32	2.377114	159.00	2.590094	151.06	2.802428	149.23
174.87	2.170183	169.38	2.381146	160.22	2.593027	153.51	2.806641	149.84
173.04	2.171466	165.10	2.382153	161.44	2.596141	155.34	2.809392	149.23
174.26	2.176137	166.32	2.38967	159.00	2.599441	155.34	2.813242	149.23
171.21	2.178706	166.93	2.391043	159.61	2.601824	154.12	2.816081	150.45
174.26	2.180445	163.27	2.395166	159.61	2.607415	152.90	2.81938	146.18
169.99	2.185487	165.10	2.398374	164.49	2.608696	154.73	2.822497	148.62
176.09	2.18741	166.32	2.401034	162.05	2.613461	152.90	2.825887	146.18
172.43	2.192909	167.54	2.403873	159.61	2.614929	154.12	2.829094	148.62
175.48	2.193277	168.15	2.407631	159.00	2.619695	152.29	2.832578	151.67
174.87	2.198866	166.32	2.411664	162.05	2.621894	155.34	2.836334	149.84
170.60	2.202531	168.76	2.414963	157.78	2.626752	153.51	2.840184	152.29
174.26	2.205282	165.10	2.418629	157.17	2.628307	155.34	2.842109	144.35
171.82	2.208398	165.71	2.419361	157.17	2.632707	152.90	2.846873	152.29
174.87	2.212795	166.32	2.423303	157.78	2.635731	151.06	2.849716	144.35
174.87	2.215913	166.93	2.426143	158.39	2.638757	153.51	2.853473	148.01
170.60	2.217928	166.32	2.430451	159.61	2.642236	154.12	2.855762	149.23
172.43	2.219853	165.10	2.431732	159.00	2.644253	149.84	2.859888	149.23
169.38	2.224342	165.10	2.437415	161.44	2.648745	151.67	2.863094	145.57
173.65	2.227551	163.27	2.438605	159.00	2.652411	152.90	2.866118	148.01
173.04	2.228466	165.10	2.443554	158.39	2.656077	155.34	2.869235	148.01
173.65	2.234516	164.49	2.44438	157.17	2.659285	152.90	2.872992	145.57
171.82	2.235981	168.15	2.450336	156.56	2.662216	151.67	2.876108	148.01
173.04	2.240471	161.44	2.451436	162.66	2.666342	152.29	2.880878	143.13
170.60	2.242123	164.49	2.458035	157.17	2.668542	150.45	2.884907	147.40
174.87	2.24643	164.49	2.459226	157.17	2.673122	152.90	2.887016	145.57
169.99	2.249546	161.44	2.462707	157.78	2.676791	152.90	2.890866	149.23
169.99	2.254127	166.32	2.465915	157.78	2.680178	151.06	2.894896	149.23
168.76	2.255317	165.71	2.470041	158.39	2.682745	149.23	2.898014	144.35
171.21	2.259442	166.93	2.472882	157.78	2.684853	152.90	2.900945	145.57
166.93	2.26265	164.49	2.475996	155.34	2.689157	147.40	2.904061	148.01
171.82	2.266867	163.88	2.480303	160.22	2.691269	147.40	2.908003	144.96
171.82	2.269889	166.93	2.483144	153.51	2.694199	149.84	2.91066	146.79
169.38	2.270899	160.22	2.486721	159.61	2.699332	150.45	2.914508	144.35
171.21	2.277129	166.32	2.488552	157.78	2.702723	149.84	2.915974	145.57
171.21	2.278964	163.88	2.492951	157.78	2.705289	147.40	2.921106	146.18
169.38	2.283454	163.27	2.49515	155.95	2.70804	148.62	2.923213	145.57
171.21	2.284369	162.66	2.498448	159.00	2.711797	148.62	2.927615	144.96
168.15	2.289959	164.49	2.502848	155.95	2.713903	149.23	2.93137	145.57
170.60	2.290876	160.22	2.505505	157.78	2.718486	151.06	2.933295	146.79
167.54	2.296925	160.83	2.509079	156.56	2.719862	150.45	2.936136	144.35
169.38	2.299032	160.83	2.512194	156.56	2.722882	150.45	2.939711	144.96
166.32	2.301506	162.66	2.516043	155.34	2.724347	149.23	2.94182	144.35
165.71	2.304897	161.44	2.51742	155.34	2.73003	150.45		
170.60	2.309663	161.44	2.522186	155.95	2.73397	149.23		
167.54	2.311313	160.22	2.523283	155.34	2.736169	147.40		
164.49	2.315346	159.00	2.527957	158.39	2.739193	148.01		
169.99	2.31837	160.83	2.530066	156.56	2.743225	148.62		
166.93	2.322035	162.66	2.536389	158.39	2.747077	148.01		



## **Screw Test 1, Data**



Deflection inches	load lbs	Deflection inches										
0	0	0.013581	8.12	0.026627	15.99	0.040436	23.99	0.053788	31.13	0.067979	37.60	0.081559
0	0.488289	0.013733	8.12	0.026932	16.05	0.040894	24.17	0.054627	31.80	0.067597	37.72	0.081178
0.000229	0.122072	0.013886	8.67	0.027161	15.87	0.040589	24.41	0.054932	31.86	0.06775	38.09	0.081941
0.00061	0.30518	0.013886	8.79	0.027848	16.17	0.041276	24.84	0.054627	32.04	0.068589	37.78	0.081712
0.000839	0.427253	0.014115	8.42	0.028153	16.85	0.041047	25.09	0.055085	32.59	0.068742	38.70	0.082399
0.001297	0.732433	0.014343	8.67	0.027848	16.66	0.041428	24.17	0.055161	32.04	0.068437	37.96	0.082551
0.001297	1.40383	0.01503	8.79	0.028153	17.46	0.042191	25.27	0.055467	32.59	0.069276	38.33	0.08278
0.001755	1.09865	0.015106	9.09	0.028611	17.27	0.04181	24.72	0.055924	32.65	0.068971	38.94	0.082933
0.001526	0.671397	0.015564	9.03	0.028534	17.40	0.042191	25.02	0.055619	32.78	0.069581	38.57	0.083085
0.001831	1.037613	0.014878	8.91	0.02884	17.70	0.04242	25.27	0.056229	32.65	0.0692	38.45	0.083391
0.002441	1.464866	0.015488	9.40	0.029374	17.33	0.042344	25.45	0.056001	32.47	0.070039	39.43	0.083238
0.002213	1.037613	0.016022	9.40	0.029145	18.13	0.043259	26.12	0.056458	32.72	0.070497	39.43	0.084154
0.00206	1.953155	0.015793	9.77	0.029374	17.94	0.043183	25.76	0.056153	32.53	0.070268	39.67	0.084077
0.002747	1.586938	0.015869	9.64	0.030137	17.27	0.042878	25.39	0.056687	32.78	0.070649	39.25	0.083772
0.002899	1.464866	0.016175	10.25	0.029908	18.19	0.043412	25.88	0.057298	33.14	0.070573	39.61	0.084611
0.002976	2.075227	0.016327	9.89	0.03006	18.13	0.043717	25.09	0.057145	33.45	0.070726	39.37	0.084764
0.003281	2.197299	0.016861	10.19	0.030594	18.49	0.043793	25.88	0.057145	33.26	0.07126	39.12	0.084154
0.003662	2.563516	0.017014	10.07	0.030442	18.31	0.044251	26.18	0.057374	32.78	0.071412	39.31	0.084688
0.004044	2.319371	0.017014	10.07	0.030289	18.49	0.044556	26.37	0.057679	33.20	0.071717	39.55	0.084916
0.003738	2.563516	0.017166	10.86	0.031281	18.62	0.044862	26.37	0.058061	33.26	0.071946	39.31	0.085374
0.004349	2.868696	0.017472	10.86	0.031281	18.92	0.044404	25.94	0.058213	34.00	0.072099	39.98	0.085298
0.004273	2.746624	0.018082	11.11	0.031662	18.86	0.045319	26.61	0.058213	33.26	0.072099	39.80	0.085451
0.004883	2.685588	0.018158	10.62	0.031205	18.92	0.04509	26.92	0.058595	33.94	0.072099	39.86	0.085832
0.004654	3.356985	0.018311	11.35	0.031662	19.10	0.045014	27.04	0.059129	34.06	0.072938	40.65	0.086595
0.004654	3.051804	0.018616	11.11	0.031815	19.23	0.045624	27.04	0.059052	34.30	0.073091	40.04	0.086748
0.004959	3.051804	0.018463	11.47	0.032731	19.65	0.045777	27.34	0.059586	34.06	0.073243	40.28	0.086748
0.005646	3.173877	0.018769	11.72	0.032425	19.41	0.046159	26.86	0.060044	33.94	0.073396	40.10	0.086671
0.005341	3.051804	0.019684	11.66	0.032349	19.71	0.046311	26.86	0.060273	34.42	0.073472	40.34	0.087358
0.005875	3.051804	0.019455	11.90	0.032578	19.10	0.046006	27.53	0.059739	34.00	0.073854	40.65	0.087358
0.006027	4.150454	0.019455	11.60	0.033265	19.84	0.046998	27.95	0.060121	34.30	0.073625	40.10	0.087968
0.006104	3.784237	0.020142	12.15	0.033341	19.84	0.046921	28.08	0.060349	35.46	0.074159	40.53	0.087434
0.006714	4.21149	0.019837	12.27	0.03357	20.26	0.046769	27.71	0.060502	34.79	0.074083	40.65	0.087892
0.006332	3.540093	0.020447	12.33	0.033494	19.65	0.047227	27.95	0.060578	35.16	0.074464	40.47	0.087892
0.006638	4.638743	0.020523	12.51	0.033494	20.39	0.047684	27.89	0.061036	34.61	0.074922	41.87	0.088335
0.007019	4.150454	0.020981	12.76	0.034028	20.81	0.047837	28.32	0.061112	35.03	0.074617	40.65	0.087968
0.007324	4.394598	0.020905	12.94	0.034409	20.45	0.047913	28.87	0.061418	34.81	0.074617	41.44	0.088655
0.007553	4.455634	0.020752	12.51	0.034333	20.75	0.047913	28.08	0.061952	34.91	0.074998	40.89	0.088808
0.007477	4.699779	0.020905	12.76	0.034562	20.75	0.047913	28.32	0.061952	34.97	0.075227	41.02	0.089265
0.008164	4.21149	0.02121	12.51	0.035019	20.75	0.048447	28.02	0.062409	35.71	0.075761	42.11	0.089494
0.007935	5.127031	0.021515	12.82	0.035096	20.87	0.048371	28.26	0.062028	35.52	0.075914	41.44	0.089494
0.00824	4.699779	0.021897	13.00	0.035172	21.06	0.049287	29.36	0.062181	35.95	0.076371	41.32	0.08957
0.008545	5.127031	0.022202	13.43	0.035706	21.00	0.049058	28.56	0.062791	35.83	0.076448	41.26	0.089723
0.008885	5.249104	0.022354	13.55	0.03563	21.48	0.049516	28.69	0.062867	35.71	0.076448	40.89	0.090028
0.008774	5.371176	0.022736	13.92	0.036393	20.87	0.049592	29.79	0.063172	35.71	0.076677	41.75	0.090333
0.009232	5.432212	0.02266	14.28	0.03624	21.36	0.049516	29.60	0.06302	35.58	0.076982	41.87	0.090944
0.009155	5.859464	0.022889	13.98	0.036393	22.03	0.050126	29.18	0.063706	36.26	0.077058	42.18	0.09102
0.010071	5.432212	0.023346	14.04	0.03624	22.10	0.05005	29.85	0.064012	36.68	0.077058	41.44	0.091096
0.009537	6.347753	0.022583	14.28	0.036774	21.85	0.050507	29.24	0.063783	36.50	0.077516	42.30	0.091707
0.009918	5.61532	0.023728	14.65	0.037232	21.91	0.050813	29.30	0.064622	36.74	0.07744	41.50	0.091859
0.010224	6.408789	0.023423	14.40	0.037613	22.34	0.050584	29.85	0.064164	36.01	0.077745	42.60	0.09163
0.010758	6.042573	0.023575	13.92	0.036851	22.46	0.050736	29.91	0.064927	36.19	0.078584	41.99	0.092012
0.010986	6.408789	0.023957	14.95	0.037919	22.89	0.050965	30.40	0.064622	36.93	0.078584	42.18	0.092393
0.010986	6.164645	0.024262	15.20	0.037919	22.64	0.051118	29.72	0.065385	37.11	0.07866	41.75	0.092088
0.011063	6.897078	0.024414	14.77	0.038453	23.13	0.051423	30.58	0.065156	36.80	0.07866	42.97	0.092546
0.010986	6.408789	0.024567	14.95	0.038224	23.50	0.05211	30.58	0.065537	36.87	0.079118	42.11	0.092775
0.011597	7.01915	0.025177	14.83	0.038682	22.83	0.051957	30.21	0.065843	37.48	0.079042	42.66	0.092775
0.012055	7.141222	0.025254	15.69	0.038453	23.07	0.05211	30.52	0.065614	36.87	0.079957	43.09	0.093462
0.011521	6.958114	0.02533	15.69	0.039063	23.56	0.052415	30.82	0.066377	37.11	0.080034	43.09	0.09308
0.012284	7.568475	0.025788	15.38	0.038987	23.32	0.052415	30.82	0.066529	37.48	0.079957	42.73	0.093767
0.011826	7.568475	0.025559	15.20	0.039368	23.13	0.053254	30.88	0.066835	37.72	0.079881	42.97	0.094148
0.012741	7.446403	0.025635	15.63	0.039292	23.56	0.053101	30.88	0.066606	36.99	0.080186	43.40	0.094224
0.012741	7.568475	0.026627	16.05	0.039597	23.50	0.053635	30.95	0.066911	37.35	0.080644	43.64	0.09453
0.013046	7.629511	0.026246	16.48	0.03975	23.74	0.053407	30.95	0.066835	36.99	0.081025	44.01	0.094759
0.013275	8.1178	0.026017	15.99	0.03975	23.62	0.053864	31.74	0.06714	37.48	0.081254	43.21	0.094301
0.013657	8.361944	0.02678	15.99	0.040055	24.11	0.053941	31.19	0.067826	37.84	0.08072	43.70	0.094911

load lbs	Deflection inches	load lbs										
43.58	0.095598	49.32	0.108949	53.59	0.123064	58.96	0.136568	63.23	0.150759	66.71	0.164797	72.02
43.70	0.095369	49.32	0.109255	53.83	0.123369	58.78	0.137102	62.44	0.150759	66.65	0.165484	71.47
43.58	0.095445	49.81	0.109255	53.83	0.123445	58.59	0.137102	63.11	0.151293	67.44	0.165789	71.29
43.88	0.095598	48.71	0.109712	53.59	0.123293	58.84	0.137713	62.75	0.151217	67.14	0.166094	71.90
43.70	0.096056	49.87	0.109712	54.63	0.123751	58.72	0.137942	62.93	0.151675	67.20	0.165556	72.02
44.37	0.096208	48.52	0.110094	53.71	0.123751	58.29	0.137636	63.23	0.152209	67.38	0.165866	72.51
44.43	0.096742	49.32	0.110246	54.44	0.124132	58.41	0.138018	62.62	0.152056	66.77	0.1664	72.27
44.56	0.096284	49.68	0.11078	54.08	0.124437	59.02	0.138552	62.87	0.152438	67.38	0.166781	72.33
44.07	0.096666	49.32	0.110704	54.32	0.124819	59.02	0.138247	63.54	0.152743	67.69	0.166552	72.63
44.31	0.097124	49.44	0.110628	54.69	0.12525	59.02	0.138552	63.78	0.152972	67.75	0.166629	72.33
44.50	0.097276	49.56	0.111391	54.20	0.124895	59.57	0.139086	63.23	0.153506	67.14	0.167391	72.33
44.98	0.0972	50.23	0.111238	54.08	0.125048	59.02	0.139467	63.05	0.153277	67.57	0.167468	72.33
44.50	0.097429	49.68	0.111543	53.83	0.125658	59.21	0.139391	63.54	0.153887	68.18	0.167544	72.82
45.11	0.097658	49.93	0.111467	54.32	0.125429	59.57	0.139773	63.48	0.153811	68.48	0.167697	72.94
45.29	0.097963	50.54	0.112001	54.44	0.12604	58.84	0.13962	63.97	0.153506	68.48	0.167773	72.94
44.50	0.098192	49.99	0.112306	54.51	0.125963	59.27	0.140154	63.36	0.154421	68.12	0.168078	72.76
45.35	0.098878	49.26	0.112306	54.14	0.125887	59.45	0.140307	63.90	0.153964	68.12	0.168765	73.00
45.41	0.09865	50.17	0.112612	55.24	0.126268	59.45	0.140841	64.09	0.154345	67.93	0.168383	72.88
45.47	0.099107	49.93	0.112917	55.12	0.126726	59.69	0.140688	64.21	0.154879	68.30	0.168994	72.88
45.29	0.09926	50.54	0.113603	54.93	0.127031	59.63	0.140764	64.03	0.154803	68.73	0.169299	72.82
44.92	0.099184	50.17	0.113298	55.42	0.12726	59.08	0.14107	64.21	0.155337	69.40	0.169146	72.94
45.17	0.099794	50.54	0.113832	54.93	0.127642	60.06	0.141222	64.39	0.1555413	68.60	0.169909	73.49
45.29	0.099718	51.09	0.113603	55.48	0.127565	60.12	0.142138	64.64	0.155718	68.24	0.169451	73.30
45.23	0.100328	50.54	0.114137	55.54	0.127642	59.57	0.141604	64.64	0.155871	68.42	0.170291	73.37
45.04	0.099947	50.84	0.114137	55.60	0.128099	60.00	0.141909	63.84	0.155718	68.60	0.169986	72.88
45.41	0.100023	50.90	0.114249	55.60	0.128099	59.88	0.14229	64.70	0.156634	68.48	0.17052	73.49
45.53	0.10071	50.97	0.114595	55.42	0.128252	59.51	0.142443	64.58	0.156786	68.97	0.170748	73.12
45.65	0.100786	50.48	0.114672	56.40	0.128557	60.12	0.142748	65.00	0.156558	68.67	0.170977	73.00
46.39	0.101015	51.09	0.114824	55.42	0.129091	60.24	0.142824	64.45	0.156939	68.48	0.170825	73.61
46.14	0.101625	50.60	0.115129	55.48	0.129015	59.45	0.142977	64.33	0.156939	69.15	0.171664	73.55
46.69	0.101396	51.03	0.115282	56.64	0.129091	60.61	0.14374	64.58	0.157168	69.46	0.171588	73.85
45.96	0.101549	51.51	0.115206	56.03	0.129931	60.79	0.143816	64.82	0.157855	68.91	0.171817	73.79
46.45	0.101854	51.51	0.115816	55.42	0.129702	60.61	0.143969	64.76	0.158007	69.34	0.171969	74.59
46.51	0.102083	51.88	0.115969	55.73	0.130236	60.79	0.144045	65.06	0.158007	69.95	0.171817	74.59
46.39	0.10277	51.76	0.116335	55.85	0.130083	60.67	0.144656	65.06	0.158186	68.97	0.172045	74.40
46.14	0.102922	51.15	0.116426	56.21	0.130236	60.61	0.144503	64.94	0.158465	68.97	0.172732	73.85
46.45	0.102846	51.27	0.116732	56.46	0.130617	60.43	0.144427	64.88	0.158923	69.76	0.172732	74.40
46.02	0.103151	52.37	0.117189	56.40	0.130922	60.79	0.144884	65.43	0.15877	70.25	0.172732	74.04
46.81	0.10338	52.06	0.116655	56.28	0.131304	60.79	0.144884	65.19	0.158618	69.83	0.172885	74.46
46.75	0.103761	52.12	0.117266	56.52	0.130999	61.10	0.145647	65.74	0.159304	70.13	0.173571	74.46
46.39	0.103761	51.76	0.117723	57.01	0.131533	61.10	0.145571	65.49	0.159915	69.83	0.173648	74.53
46.94	0.103532	52.25	0.117571	56.76	0.131991	61.10	0.145876	66.29	0.159838	69.83	0.173648	75.01
47.24	0.103838	52.37	0.117952	56.52	0.131609	61.10	0.145647	65.49	0.159686	70.07	0.174258	74.10
47.24	0.104524	52.06	0.118715	57.07	0.131838	61.52	0.145953	66.10	0.159915	70.37	0.174029	74.83
47.43	0.104143	52.19	0.118334	56.76	0.132372	61.77	0.146258	65.67	0.159915	70.92	0.174411	75.44
47.73	0.104524	52.55	0.119097	56.52	0.132753	61.40	0.146715	65.80	0.160983	70.74	0.174563	74.65
47.36	0.105211	52.49	0.118791	56.64	0.132753	60.91	0.147097	66.04	0.160983	70.50	0.175021	74.59
47.67	0.104829	52.19	0.118715	57.01	0.133135	61.65	0.146868	65.92	0.160906	69.95	0.175174	75.56
47.43	0.105898	52.25	0.119173	56.95	0.13344	61.83	0.147478	65.98	0.161517	70.31	0.17525	75.07
47.79	0.105364	52.80	0.119097	56.89	0.133135	61.46	0.14786	66.22	0.161746	71.05	0.175708	75.26
47.85	0.105898	52.43	0.119783	57.68	0.133516	61.89	0.147097	66.16	0.161669	70.37	0.176089	75.56
48.16	0.106126	52.67	0.120241	56.95	0.133974	61.46	0.147707	66.16	0.162203	71.23	0.176165	75.01
47.49	0.10605	52.86	0.120241	57.62	0.133898	61.40	0.148165	66.41	0.162432	70.74	0.176699	75.56
47.73	0.106203	53.65	0.120165	57.68	0.134432	61.52	0.148165	66.53	0.162661	71.05	0.176242	75.93
48.40	0.106813	53.35	0.12108	58.05	0.134661	61.89	0.148623	66.16	0.162432	71.78	0.176547	75.38
47.91	0.106813	52.67	0.12047	57.74	0.13489	61.83	0.14847	66.04	0.162737	71.11	0.176699	76.30
48.46	0.1075	53.35	0.121386	58.11	0.134737	61.89	0.149157	66.22	0.162432	70.74	0.177615	75.81
48.22	0.107118	53.10	0.120928	57.56	0.135729	62.38	0.148852	66.90	0.163043	70.86	0.177005	75.50
48.22	0.107424	53.16	0.121233	57.86	0.135729	62.13	0.149233	66.41	0.1635	71.66	0.177844	75.93
48.58	0.107805	52.19	0.121767	57.98	0.135729	62.32	0.149081	66.77	0.163653	71.66	0.177996	76.30
48.10	0.108034	53.22	0.12192	57.43	0.136034	61.65	0.149691	66.83	0.163653	70.74	0.177615	75.50
48.34	0.108034	53.59	0.122148	57.98	0.135805	62.26	0.14992	66.71	0.163958	71.84	0.178149	76.48
48.89	0.108034	53.83	0.122454	58.11	0.13611	62.32	0.150301	67.38	0.164416	71.78	0.178607	76.54
48.77	0.108339	53.71	0.122759	58.29	0.136721	62.50	0.149844	67.26	0.164416	70.86	0.178378	76.78
48.83	0.109178	53.41	0.122835	58.11	0.13695	62.13	0.15053	66.83	0.164645	71.72	0.178836	75.93

Deflection inches	load lbs	Deflection inches										
0.179294	76.66	0.193256	81.73	0.207828	86.67	0.222171	92.10	0.23682	98.39	0.251621	105.04	0.26627
0.179294	76.48	0.194018	80.99	0.208133	86.49	0.222171	92.53	0.236896	98.02	0.251545	104.49	0.265888
0.179904	77.21	0.19379	81.61	0.208515	86.73	0.222324	92.10	0.23743	98.27	0.252079	105.29	0.266194
0.179751	77.03	0.194018	81.85	0.208667	87.16	0.222858	91.68	0.237583	98.76	0.252079	104.74	0.266423
0.179828	76.91	0.194018	81.91	0.208591	87.40	0.222782	93.08	0.237964	98.88	0.252079	104.80	0.267033
0.180133	76.66	0.194705	81.42	0.208896	87.95	0.223087	92.10	0.237659	98.39	0.252689	105.59	0.266804
0.180667	77.03	0.194553	81.42	0.209506	87.65	0.223621	92.90	0.238346	99.31	0.252918	106.26	0.267185
0.180514	76.60	0.194781	81.36	0.209659	86.79	0.223545	92.23	0.238041	98.88	0.253376	105.90	0.267872
0.180667	76.78	0.194934	82.15	0.209201	87.53	0.223926	92.90	0.238575	99.61	0.253223	105.71	0.267414
0.180743	77.27	0.195468	81.73	0.209888	87.28	0.224231	93.14	0.238499	99.37	0.2533	105.71	0.268101
0.180972	76.84	0.195926	82.15	0.210575	87.46	0.224308	93.45	0.238888	99.12	0.253605	106.08	0.26833
0.181506	77.09	0.195926	82.15	0.209964	87.46	0.224384	93.26	0.239185	99.37	0.253681	106.57	0.268177
0.181735	77.58	0.196002	81.85	0.210575	87.53	0.224842	93.51	0.239261	99.37	0.254139	106.57	0.268482
0.182422	76.91	0.196231	82.64	0.211109	88.01	0.225147	93.39	0.239567	100.04	0.254292	105.84	0.269169
0.181964	77.15	0.196612	82.09	0.21088	87.83	0.225681	93.51	0.239643	99.86	0.254673	106.51	0.268864
0.182422	76.78	0.196689	82.52	0.211261	88.14	0.225376	93.81	0.240558	100.59	0.254902	106.57	0.269398
0.182269	77.45	0.196841	82.95	0.211185	88.01	0.225757	93.39	0.240558	99.67	0.255207	107.06	0.269932
0.183185	77.27	0.196765	83.01	0.212329	87.53	0.22652	93.87	0.24094	99.92	0.255436	106.26	0.269932
0.18265	78.00	0.197147	82.64	0.211643	88.50	0.226596	94.61	0.24094	99.86	0.255741	107.30	0.270161
0.18349	78.13	0.197757	83.62	0.2121	88.26	0.226673	94.12	0.241093	99.98	0.255741	106.81	0.270466
0.183795	77.76	0.198138	82.95	0.212024	88.26	0.226825	93.87	0.241016	100.16	0.255894	107.42	0.270619
0.183337	78.31	0.198291	83.25	0.212711	88.14	0.227207	94.18	0.241245	100.71	0.256275	107.12	0.270466
0.183642	78.07	0.198367	83.13	0.212558	88.32	0.226749	94.24	0.24155	100.47	0.256352	107.42	0.270848
0.184558	77.52	0.198596	82.76	0.212863	88.62	0.227512	94.61	0.242161	100.59	0.257038	107.67	0.271382
0.184176	77.70	0.198596	83.68	0.213016	88.38	0.227741	94.18	0.242237	100.95	0.256962	107.97	0.271077
0.184863	77.76	0.198672	83.56	0.213703	88.44	0.227797	94.85	0.24239	100.95	0.256809	108.03	0.271611
0.184939	78.19	0.199283	83.99	0.213779	88.75	0.227893	94.91	0.242542	100.77	0.257038	108.52	0.272145
0.185321	78.25	0.199359	83.74	0.214237	88.93	0.228199	94.73	0.242924	100.89	0.257343	107.79	0.271992
0.185321	78.92	0.199512	84.11	0.213931	88.93	0.228428	95.34	0.242771	100.83	0.25803	108.40	0.272145
0.185855	78.37	0.199588	83.19	0.214313	89.30	0.22858	94.91	0.243534	101.26	0.257649	108.89	0.272297
0.185702	79.16	0.199664	83.62	0.214389	89.72	0.228962	95.83	0.243534	101.32	0.257954	108.46	0.273213
0.18616	78.68	0.200122	83.99	0.214923	89.17	0.229496	95.34	0.24361	101.14	0.258488	108.34	0.272908
0.186618	78.61	0.200504	83.99	0.215152	89.60	0.229343	95.09	0.244221	101.38	0.258869	108.58	0.272908
0.186389	78.49	0.201119	83.44	0.215076	89.42	0.229877	95.83	0.244755	101.56	0.258946	108.52	0.273747
0.186618	79.22	0.200656	83.86	0.215686	89.85	0.230003	95.58	0.244373	101.20	0.259098	108.95	0.273365
0.18677	79.04	0.201495	84.23	0.215381	89.85	0.229877	95.70	0.244602	101.14	0.259174	108.83	0.273823
0.187304	79.35	0.201495	84.41	0.215915	90.21	0.230335	95.09	0.244755	101.56	0.259251	108.71	0.273747
0.187381	78.98	0.201343	84.35	0.215686	90.46	0.230259	95.70	0.244678	101.44	0.260014	108.95	0.274357
0.187686	79.16	0.202182	84.23	0.216297	89.72	0.230488	95.70	0.245365	102.05	0.259709	109.68	0.274586
0.187991	78.98	0.202411	84.96	0.216602	89.72	0.231479	96.07	0.245747	101.93	0.260014	109.74	0.274968
0.187915	79.41	0.202487	84.41	0.216526	90.09	0.231403	95.95	0.246052	102.30	0.260777	109.93	0.275196
0.188373	79.96	0.202335	84.60	0.217136	89.97	0.231479	96.19	0.245594	101.93	0.2607	109.86	0.274891
0.188602	79.53	0.202869	85.08	0.217441	90.70	0.231632	96.19	0.24567	102.24	0.261234	109.93	0.275273
0.188883	80.08	0.202792	84.60	0.217441	90.46	0.231556	96.19	0.246433	102.91	0.261082	110.29	0.275959
0.188754	79.59	0.20325	85.33	0.217365	90.82	0.232395	96.31	0.246433	102.42	0.26154	109.68	0.275578
0.188883	79.84	0.203632	85.15	0.217823	90.82	0.232547	96.56	0.246815	102.60	0.261311	110.11	0.275883
0.189136	79.53	0.203403	85.15	0.218357	91.00	0.23209	96.25	0.246967	103.27	0.261387	110.23	0.276188
0.189212	80.51	0.204013	85.08	0.218662	90.46	0.233158	96.50	0.24712	102.78	0.262303	110.29	0.276722
0.189746	79.96	0.203937	85.51	0.218662	91.00	0.233158	96.68	0.247501	102.91	0.262226	110.84	0.276799
0.190051	80.20	0.204471	85.33	0.218662	90.82	0.232853	97.17	0.247807	103.46	0.262379	110.60	0.276799
0.190356	80.51	0.204166	85.33	0.21912	91.07	0.233692	97.29	0.247578	103.15	0.262684	110.60	0.276875
0.19028	80.38	0.2047	85.21	0.219501	90.70	0.233692	97.11	0.248264	103.64	0.262913	110.66	0.277256
0.190889	80.45	0.204929	85.21	0.219196	90.94	0.23415	97.11	0.248417	103.76	0.262913	111.33	0.277485
0.190356	80.45	0.205158	85.21	0.21973	91.07	0.234073	97.66	0.248493	103.52	0.263066	111.45	0.277714
0.190661	80.51	0.20531	85.82	0.219959	91.13	0.234607	97.05	0.248798	103.88	0.263905	111.45	0.278172
0.190814	80.20	0.205386	85.27	0.219806	91.37	0.234607	96.86	0.249104	103.88	0.263676	111.82	0.27863
0.191882	80.57	0.205539	85.45	0.220264	91.86	0.234836	97.78	0.24918	104.01	0.263752	111.27	0.278401
0.191424	80.57	0.206226	85.69	0.220417	91.80	0.234836	97.78	0.250019	104.37	0.264744	112.37	0.278782
0.191882	80.87	0.206302	86.06	0.22034	91.74	0.234989	97.54	0.24979	104.74	0.264744	111.82	0.278935
0.19234	80.38	0.206302	86.18	0.220951	91.37	0.235218	97.90	0.250324	104.49	0.26482	111.70	0.279469
0.192493	80.87	0.206607	85.88	0.220874	92.10	0.235676	98.45	0.250782	104.62	0.265049	111.76	0.279393
0.192569	80.69	0.20676	86.18	0.221256	92.59	0.235828	97.41	0.250401	104.62	0.265126	111.82	0.280156
0.19295	80.75	0.206836	86.18	0.221637	91.68	0.235599	97.90	0.250553	104.80	0.265126	112.43	0.280232
0.193179	81.30	0.207294	86.49	0.2211485	91.68	0.236439	98.21	0.250858	104.80	0.265736	112.18	0.280232
0.193027	81.54	0.207904	86.31	0.222248	91.86	0.236591	97.78	0.251316	104.86	0.266117	112.06	0.280766

load lbs	Deflection inches	load lbs										
112.49	0.281147	121.52	0.295338	130.37	0.310521	138.92	0.324712	147.10	0.339742	155.03	0.354391	162.97
112.86	0.281147	121.34	0.295567	129.95	0.310674	138.92	0.325246	147.22	0.340047	154.60	0.355077	162.60
113.22	0.281224	122.07	0.296254	131.11	0.310063	139.16	0.325704	147.40	0.340276	154.67	0.354925	162.23
113.16	0.281147	122.19	0.296483	130.19	0.310903	139.28	0.325933	147.10	0.340734	154.67	0.35523	162.84
113.65	0.281376	121.89	0.296178	130.86	0.31136	139.41	0.325704	147.34	0.340734	155.64	0.355688	163.15
113.10	0.281605	122.44	0.296407	131.23	0.311131	139.71	0.326162	147.28	0.34081	155.15	0.356146	162.97
113.22	0.281682	121.95	0.297017	130.92	0.31136	139.53	0.326238	148.01	0.340963	154.85	0.356298	163.39
114.14	0.282368	122.56	0.297322	131.84	0.311894	139.28	0.326467	148.44	0.340887	155.64	0.356527	163.82
114.14	0.282139	123.17	0.297322	130.98	0.311666	139.71	0.327077	147.71	0.341955	155.64	0.356527	163.21
113.83	0.282368	122.56	0.297627	131.11	0.3122	140.02	0.327077	148.50	0.341878	155.83	0.356527	163.39
113.89	0.283336	122.62	0.297475	132.08	0.312581	139.83	0.327459	148.68	0.342412	155.89	0.357061	163.70
114.02	0.283207	123.11	0.298009	131.35	0.312734	139.96	0.327077	148.50	0.342489	155.76	0.356985	163.70
114.20	0.283589	123.54	0.298466	131.53	0.313344	139.89	0.327611	148.32	0.342794	155.83	0.357061	164.49
114.50	0.283894	123.35	0.298848	132.45	0.312886	140.26	0.328145	148.62	0.342565	156.37	0.357977	164.43
114.50	0.284199	122.99	0.298314	132.14	0.31342	140.20	0.327916	149.11	0.343023	156.50	0.358053	163.88
114.50	0.284276	123.41	0.298848	132.63	0.31342	140.75	0.328527	148.13	0.343404	156.01	0.358206	163.76
115.36	0.284352	123.84	0.299153	131.96	0.313725	140.51	0.328374	148.44	0.343404	156.31	0.358358	164.55
115.11	0.284352	123.84	0.299001	132.81	0.313725	140.38	0.328908	148.81	0.343404	157.17	0.358434	164.92
114.87	0.284733	124.03	0.299382	132.69	0.314031	141.18	0.328832	149.23	0.344244	156.50	0.358587	164.68
115.24	0.285039	124.76	0.299535	132.94	0.314565	140.75	0.328985	149.36	0.344167	156.62	0.359045	164.55
115.30	0.285191	123.90	0.300069	133.24	0.31426	141.54	0.329595	149.54	0.344396	156.98	0.359197	164.86
115.48	0.285725	124.76	0.29984	133.24	0.314565	140.87	0.3299	149.42	0.34432	157.41	0.359426	165.29
115.97	0.285573	124.03	0.300679	132.81	0.315404	141.36	0.330129	149.42	0.344778	157.60	0.359503	165.16
115.85	0.285954	124.88	0.300526	133.06	0.315557	141.85	0.330434	149.66	0.345159	157.47	0.359808	164.98
115.91	0.285878	124.88	0.301137	133.18	0.315709	141.73	0.330129	150.27	0.345159	157.84	0.360418	165.29
116.03	0.286564	125.12	0.301213	133.49	0.315938	142.21	0.330587	150.27	0.345541	157.35	0.360494	165.59
116.27	0.286793	125.12	0.301137	133.55	0.316548	142.21	0.330968	150.64	0.345846	158.02	0.360723	165.84
116.03	0.287175	125.00	0.301213	133.36	0.315862	141.91	0.330663	150.21	0.345693	157.96	0.360876	166.20
116.64	0.286793	125.73	0.301823	133.49	0.316243	141.60	0.331197	150.45	0.346532	157.96	0.361334	166.38
116.46	0.28748	126.10	0.302281	133.61	0.316548	142.34	0.331273	150.94	0.346075	158.27	0.361028	165.85
116.82	0.287709	125.61	0.30251	134.77	0.317159	142.03	0.331579	150.27	0.346761	158.27	0.36141	166.08
116.82	0.287709	125.73	0.302815	134.77	0.316854	142.21	0.331807	150.64	0.346609	158.57	0.362249	166.26
116.82	0.288167	126.47	0.30312	134.28	0.317617	142.95	0.332265	151.37	0.347143	158.33	0.362097	166.69
116.88	0.288396	126.16	0.302892	134.58	0.318074	143.19	0.332113	151.31	0.347295	158.14	0.362325	166.63
117.37	0.288853	126.34	0.303273	135.26	0.317845	142.89	0.332723	150.94	0.347753	159.06	0.362707	166.87
117.07	0.288777	126.59	0.303197	134.65	0.318303	143.68	0.332494	151.25	0.347906	158.69	0.363012	166.32
118.35	0.289235	127.26	0.303426	135.13	0.318227	142.82	0.333028	151.37	0.348211	158.82	0.362631	166.87
117.43	0.289235	126.83	0.303883	134.77	0.318761	143.50	0.333257	151.74	0.348211	159.18	0.363317	167.36
117.92	0.289158	126.83	0.304112	135.87	0.318837	143.25	0.333639	151.49	0.348058	159.12	0.363241	167.36
118.10	0.289693	127.32	0.304036	135.01	0.318685	143.56	0.33402	152.10	0.348669	159.18	0.363775	167.91
118.04	0.28954	127.32	0.304646	135.50	0.318914	143.50	0.333944	151.98	0.34905	159.79	0.364233	167.91
118.04	0.290074	127.57	0.304952	135.74	0.319295	144.53	0.334325	151.67	0.349203	159.79	0.36408	167.42
118.41	0.290379	127.44	0.305409	136.11	0.319524	144.17	0.334859	151.92	0.349584	159.73	0.364538	167.73
118.53	0.290227	127.02	0.305104	135.99	0.320211	144.53	0.334936	152.41	0.34966	160.40	0.36492	168.15
118.96	0.290379	127.57	0.305486	136.11	0.320287	144.41	0.33547	152.53	0.349508	160.04	0.364843	168.34
118.53	0.290761	127.81	0.305943	136.23	0.320287	144.41	0.334783	152.59	0.349889	159.30	0.365377	167.97
119.26	0.290761	127.81	0.305715	136.35	0.320211	144.72	0.335393	152.77	0.349737	159.91	0.365301	168.15
119.51	0.291676	128.85	0.305791	136.11	0.321279	144.84	0.335393	152.41	0.350347	160.16	0.365606	168.58
119.02	0.291676	128.05	0.306401	137.09	0.321279	144.90	0.335393	152.22	0.350652	160.46	0.36553	168.83
119.69	0.291676	128.85	0.306783	136.72	0.321355	144.90	0.33608	152.71	0.351263	160.40	0.365911	168.58
119.39	0.291752	128.66	0.306477	136.66	0.321202	145.02	0.336461	153.69	0.35111	160.77	0.366522	169.07
120.00	0.292515	128.79	0.307164	136.96	0.321508	145.39	0.336385	152.35	0.351034	161.01	0.366751	168.34
119.57	0.292997	128.79	0.307317	137.33	0.322118	145.39	0.337224	152.96	0.351873	161.38	0.366522	169.19
120.30	0.292592	129.09	0.307546	137.51	0.322042	145.45	0.337301	153.38	0.352255	161.01	0.366827	169.01
120.36	0.292668	128.66	0.30808	137.51	0.322805	145.33	0.337224	153.57	0.351949	160.89	0.367437	168.76
120.12	0.293126	129.27	0.307774	137.76	0.322805	145.45	0.337606	153.02	0.352789	161.62	0.367208	169.07
120.73	0.293584	129.88	0.308003	137.82	0.322652	146.00	0.337835	153.32	0.352789	161.75	0.367819	169.19
120.24	0.294041	129.40	0.308461	138.19	0.322652	145.88	0.337835	153.99	0.352636	161.44	0.367514	169.25
120.73	0.294194	129.76	0.308385	137.58	0.323415	145.69	0.338064	153.93	0.352712	161.50	0.3682	169.38
120.61	0.29427	129.76	0.308232	138.00	0.323949	146.36	0.338293	154.06	0.353094	161.93	0.368048	169.13
120.73	0.294347	129.70	0.309453	138.12	0.324025	145.88	0.338369	153.44	0.353552	162.17	0.368658	169.56
121.34	0.294347	129.76	0.309148	138.49	0.324178	146.97	0.338827	154.36	0.354009	161.93	0.368429	169.80
121.71	0.294728	129.76	0.309682	138.55	0.324254	147.10	0.339208	154.12	0.354009	161.93	0.369268	169.68
120.85	0.295186	130.31	0.309453	138.49	0.324254	146.12	0.33959	153.93	0.354162	162.17	0.369574	169.50
121.58	0.295262	129.95	0.310445	138.80	0.325093	146.30	0.340047	154.36	0.354162	162.11	0.369802	170.23

Deflection load inches	load lbs						
0.369574	169.56	0.384527	174.38	0.399481	164.19	0.414664	105.84
0.370031	169.80	0.384756	174.81	0.400168	163.03	0.415427	105.10
0.370489	169.99	0.385443	175.17	0.400244	161.56	0.415198	104.31
0.370031	170.53	0.384985	175.42	0.400626	159.37	0.415503	103.64
0.371023	170.35	0.38529	175.17	0.400473	157.90	0.415808	103.27
0.370718	170.41	0.385443	175.11	0.401007	155.28	0.415732	103.27
0.371099	170.90	0.386053	174.56	0.401465	151.49	0.416114	102.54
0.371557	170.78	0.385977	175.05	0.401617	148.81	0.416648	101.93
0.371099	170.66	0.386358	175.05	0.401312	148.13	0.416876	99.86
0.371405	170.78	0.387045	175.36	0.401694	146.12	0.417411	99.12
0.37171	170.78	0.387274	175.30	0.401846	145.02	0.417105	98.15
0.372473	171.15	0.387045	174.38	0.401999	144.05	0.417258	96.80
0.372091	171.21	0.387274	174.44	0.402304	143.01	0.417945	96.50
0.37293	171.27	0.387961	175.78	0.402686	141.85	0.418173	95.34
0.372473	171.39	0.388037	174.81	0.402686	141.36	0.418173	94.61
0.372854	171.63	0.388571	174.93	0.403296	140.51	0.418708	93.51
0.373312	171.27	0.388418	175.42	0.403449	139.96	0.418326	93.02
0.373617	172.00	0.388647	174.93	0.403601	138.80	0.419013	92.53
0.373846	171.45	0.388876	175.11	0.404135	137.94	0.419776	92.16
0.373922	171.27	0.389258	174.56	0.404059	137.88	0.419165	92.04
0.37438	171.69	0.389105	174.69	0.404898	137.09	0.419928	92.04
0.374151	171.51	0.389334	175.17	0.404364	136.05	0.420157	91.43
0.375067	172.24	0.38941	174.87	0.404517	135.87		
0.374762	171.63	0.389715	174.69	0.405203	134.89		
0.375372	172.24	0.390097	174.87	0.405203	133.79		
0.375448	171.76	0.390173	174.87	0.40589	132.69		
0.375982	172.00	0.390707	174.81	0.406195	132.45		
0.376287	172.43	0.390936	174.81	0.405585	131.96		
0.376364	172.24	0.390784	174.26	0.406348	130.74		
0.376211	172.00	0.391318	173.89	0.406271	129.88		
0.376669	172.55	0.391623	174.26	0.406577	128.42		
0.377127	172.61	0.391928	173.65	0.406653	127.69		
0.377127	172.43	0.392233	173.83	0.406882	125.86		
0.377203	172.18	0.392691	173.59	0.407492	124.64		
0.377203	172.49	0.392691	173.83	0.407568	123.41		
0.377966	172.85	0.392538	174.01	0.407721	122.68		
0.378195	173.04	0.393072	173.95	0.407797	121.03		
0.3785	172.61	0.393072	173.46	0.408484	120.97		
0.378042	173.04	0.393606	173.59	0.40856	119.81		
0.378805	172.67	0.394064	173.46	0.408942	119.39		
0.379034	173.40	0.394064	173.34	0.409247	117.92		
0.378958	173.71	0.394217	173.34	0.409323	118.04		
0.379721	173.59	0.394369	173.28	0.409171	116.46		
0.379797	173.28	0.394903	173.10	0.409857	115.85		
0.379568	173.59	0.394751	173.65	0.409857	114.50		
0.380407	173.10	0.395132	173.71	0.410468	114.08		
0.380255	174.07	0.395514	173.10	0.410315	113.77		
0.380407	173.83	0.395438	172.85	0.410849	112.98		
0.380789	173.59	0.395895	173.10	0.411002	111.45		
0.381247	173.95	0.395743	172.37	0.411002	110.72		
0.380865	173.83	0.396277	172.67	0.411078	109.74		
0.381552	174.07	0.396277	172.37	0.411841	109.25		
0.381476	173.83	0.396811	171.94	0.411917	108.77		
0.38201	174.20	0.396582	172.24	0.412146	108.83		
0.382238	174.01	0.397192	171.69	0.412222	108.16		
0.382696	174.20	0.397345	171.15	0.412757	108.40		
0.382696	174.20	0.39765	170.47	0.412604	108.03		
0.382467	174.32	0.397498	170.29	0.413291	108.22		
0.383078	174.32	0.398413	169.68	0.412909	108.40		
0.383688	174.69	0.398184	168.95	0.413367	107.91		
0.383764	174.87	0.399023	168.83	0.413748	107.36		
0.383764	174.20	0.3991	167.42	0.41413	106.69		
0.384222	174.69	0.399176	167.18	0.414588	106.69		
0.383993	175.05	0.399557	165.90	0.414435	106.08		
0.38468	174.81	0.399481	165.10	0.414588	105.53		



## **Screw Test 2, Data**



Deflection	load	Deflection	load	Deflection	load	Deflection	load	Deflection	load	Deflection	load
inches	lbs	inches	lbs	inches	lbs	inches	lbs	inches	lbs	inches	lbs
0	0	7.63E-05	1.89	0.001068	2.69	0.007172	5.55	0.013123	11.41	0.019303	14.77
0.000305	-0.12207	0	2.26	0.001602	2.38	0.007935	5.25	0.013275	12.09	0.018921	15.20
0.000381	-0.24414	0.000229	2.38	0.001678	2.38	0.007706	4.58	0.013428	11.66	0.01915	14.71
0.000687	-0.54932	7.63E-05	2.26	0.001678	2.87	0.00763	5.49	0.013275	11.78	0.018997	14.77
7.63E-05	0.122072	0.000153	2.26	0.001602	3.11	0.008087	5.25	0.013428	11.78	0.019226	14.71
7.63E-05	0.366217	0.000229	2.08	0.001678	3.17	0.007401	4.82	0.013733	12.45	0.019684	14.89
0	0.244144	0.000305	2.20	0.001602	2.50	0.007706	4.76	0.014115	12.27	0.01976	14.95
0.000229	0.549325	0.000381	2.38	0.002289	3.05	0.007935	5.68	0.013809	11.90	0.019532	15.20
0.000458	0.30518	0.000381	1.89	0.002441	3.17	0.008545	5.68	0.013733	12.15	0.019532	14.77
-0.00015	0.915541	7.63E-05	1.89	0.00206	3.23	0.008392	5.55	0.014191	11.35	0.020294	14.59
7.63E-05	1.770047	0.000458	2.26	0.002213	2.99	0.008164	5.07	0.013733	11.90	0.019455	14.83
0	1.464866	0	2.50	0.002594	3.17	0.008469	5.43	0.014343	12.09	0.019684	15.44
0.000153	0.915541	-0.00015	2.08	0.002518	3.48	0.008774	5.74	0.014343	12.33	0.020218	15.08
-0.00015	1.892119	0.000229	1.46	0.002899	3.05	0.008927	5.74	0.01442	12.57	0.020142	14.89
0.000534	2.136263	-7.6E-05	2.62	0.00267	2.75	0.009003	5.92	0.014725	12.57	0.0206	15.50
-7.6E-05	1.647974	0.000534	2.20	0.003052	3.11	0.008545	5.80	0.014191	12.45	0.020142	15.20
-7.6E-05	2.258335	0.000458	2.56	0.003204	3.23	0.008621	5.80	0.014572	12.76	0.020752	15.50
7.63E-05	2.075227	0	2.01	0.003204	3.30	0.009079	5.25	0.014649	12.09	0.020294	15.08
0.000153	1.892119	-0.00015	1.77	0.003052	3.48	0.008545	5.80	0.015106	12.21	0.0206	14.83
7.63E-05	1.831083	0.000153	2.69	0.002747	3.72	0.009155	5.92	0.014954	12.39	0.020523	14.95
7.63E-05	2.014191	0.000687	1.89	0.003357	3.36	0.008774	5.98	0.014725	12.63	0.020829	14.95
-0.00031	1.831083	0	1.77	0.003531	3.66	0.009232	6.41	0.014878	12.70	0.020447	15.32
0	2.50248	0	1.83	0.003357	3.48	0.009461	6.41	0.015259	12.57	0.020905	15.56
0.000458	1.831083	7.63E-05	2.38	0.003281	4.33	0.009461	6.84	0.015488	12.63	0.021134	15.50
0	1.770047	0.000305	2.38	0.003586	4.03	0.009537	6.96	0.015717	12.88	0.0206	15.08
0.000458	1.70901	0	1.83	0.003586	4.27	0.009842	7.14	0.015717	12.82	0.021134	15.56
0.000458	2.075227	0	2.75	0.003738	3.78	0.009689	7.75	0.015412	13.24	0.021515	15.81
-0.00015	2.380407	-0.00015	2.75	0.004044	3.60	0.010147	8.00	0.015335	12.82	0.02121	15.81
0.000153	2.319371	-0.00015	2.01	0.00412	3.85	0.009918	7.51	0.01564	13.37	0.021668	16.17
-0.00015	2.380407	7.63E-05	2.38	0.00412	4.33	0.009689	7.87	0.015793	12.70	0.021286	16.17
7.63E-05	2.380407	7.63E-05	1.95	0.004349	4.58	0.009842	7.93	0.015869	12.76	0.021363	15.93
0.000305	2.50248	0.000229	2.08	0.004883	3.48	0.010147	8.42	0.015946	13.18	0.022049	15.99
-0.00023	1.892119	0.000458	1.89	0.004578	3.78	0.010681	8.91	0.01564	13.31	0.02182	15.81
0.000458	2.380407	0.000458	2.26	0.004807	4.27	0.010681	8.61	0.015717	13.06	0.021668	16.05
-0.00015	2.136263	0.000381	1.83	0.004578	4.33	0.010147	9.03	0.016098	13.61	0.021973	16.30
0.000153	2.014191	7.63E-05	1.65	0.004883	3.72	0.010834	8.79	0.01648	13.43	0.02182	16.48
0.000458	1.70901	0.000305	2.14	0.00473	4.70	0.010834	9.22	0.016327	13.12	0.022354	16.36
7.63E-05	1.831083	0.000305	2.69	0.00473	4.09	0.010681	9.70	0.015946	13.37	0.022354	15.93
0.000381	1.892119	0.000229	2.69	0.005035	4.39	0.010452	10.01	0.016861	13.31	0.022278	16.24
-0.00023	2.319371	0.000153	2.56	0.004959	3.97	0.010986	9.09	0.016403	13.49	0.022431	16.24
-0.00015	2.075227	0.000153	2.38	0.005112	4.33	0.010986	10.44	0.016709	13.67	0.021973	16.05
0.000305	1.953155	7.63E-05	2.56	0.004959	4.46	0.011215	10.99	0.017166	13.49	0.022507	16.66
-0.00015	2.075227	0.000458	1.71	0.005646	4.09	0.011139	10.93	0.016556	13.98	0.022583	16.54
-0.00015	2.197299	0	2.01	0.005188	4.33	0.011521	11.11	0.016938	13.43	0.022812	16.66
0.000229	2.136263	0.000305	2.20	0.005341	4.70	0.011826	11.05	0.017243	13.61	0.022736	16.72
0.000458	2.075227	0	2.14	0.005557	4.58	0.011978	11.23	0.017472	13.37	0.023194	16.66
0.000687	1.953155	0.000305	2.01	0.006027	4.27	0.011521	10.99	0.017166	13.31	0.022965	16.11
0.000153	2.258335	7.63E-05	1.77	0.006256	4.76	0.011826	10.56	0.0177	14.47	0.023117	16.30
0.000305	2.136263	0.000305	2.01	0.005951	4.58	0.012131	11.17	0.017319	13.98	0.022889	16.78
0	2.014191	0.000305	2.01	0.005951	4.82	0.012741	11.72	0.01709	14.53	0.023117	16.97
0	2.441444	0	2.08	0.005951	4.46	0.011978	10.93	0.017929	14.16	0.023346	17.03
-0.00046	2.014191	0	2.14	0.006104	4.46	0.012207	10.93	0.017624	14.22	0.023194	16.48
0.000153	2.80766	0.000381	1.71	0.006104	4.58	0.011826	11.17	0.017853	13.92	0.02327	16.54
7.63E-05	1.831083	0.000229	2.08	0.006256	4.58	0.012665	11.35	0.017319	14.47	0.023346	16.85
-0.00031	1.892119	0	2.81	0.006256	4.76	0.012512	11.90	0.018387	14.28	0.023423	17.09
0.000229	2.075227	0.000305	2.38	0.006714	4.76	0.013046	11.78	0.018082	13.86	0.023957	16.85
0.000458	2.136263	0.00061	3.23	0.006561	5.19	0.012512	11.47	0.01854	13.86	0.023957	17.15
7.63E-05	2.258335	0.000381	2.93	0.00679	4.70	0.012589	11.78	0.018463	14.22	0.023804	16.60
-7.6E-05	2.136263	0.000687	2.69	0.007095	4.94	0.012284	11.60	0.018311	14.16	0.024262	17.21
0.000305	2.197299	0.000763	2.69	0.00679	5.19	0.012589	11.66	0.018311	14.04	0.023957	17.09
-7.6E-05	2.868696	0.000534	2.87	0.007019	5.19	0.012665	11.90	0.018616	14.34	0.023651	17.03
0.000153	2.380407	0.001068	2.87	0.007095	5.19	0.012741	11.47	0.01854	15.01	0.024414	17.09
0.00061	2.197299	0.000763	3.11	0.006714	5.00	0.013581	12.21	0.019226	14.71	0.024186	17.21
0	2.868696	0.001526	2.99	0.007172	4.88	0.012894	12.15	0.018616	14.71	0.024109	17.15
-0.00015	1.953155	0.001526	2.99	0.007706	5.43	0.012818	11.90	0.018845	13.86	0.024414	17.03

Deflection load inches	Deflection load lbs								
0.024643	17.64	0.030976	20.33	0.037308	23.19	0.043793	26.18	0.049744	28.87
0.024491	16.91	0.031128	20.20	0.037003	22.83	0.04387	26.55	0.049973	28.81
0.024796	17.03	0.031434	20.57	0.037461	23.07	0.043793	25.76	0.049821	28.81
0.024567	16.97	0.031281	20.45	0.037156	23.19	0.043946	26.00	0.049592	28.87
0.024643	17.09	0.031205	19.90	0.037919	23.01	0.04387	26.31	0.05066	28.38
0.024414	17.58	0.031662	20.33	0.037537	23.25	0.043641	25.51	0.050507	28.93
0.025025	17.52	0.031815	20.08	0.038148	23.01	0.043793	26.31	0.050584	29.11
0.025254	17.94	0.031739	20.08	0.037461	23.50	0.043793	25.70	0.050736	28.63
0.025559	18.01	0.032273	20.87	0.037613	23.44	0.044404	26.55	0.05066	28.87
0.025177	17.76	0.031815	20.08	0.037995	23.19	0.044022	26.06	0.05127	29.36
0.025101	17.76	0.03212	20.57	0.037995	23.44	0.044099	26.25	0.050965	29.11
0.025788	17.76	0.032197	20.63	0.0383	23.62	0.044251	26.37	0.051194	29.30
0.025483	17.88	0.032197	21.12	0.038071	23.07	0.044709	26.25	0.051194	29.24
0.025559	17.52	0.03212	20.81	0.038224	23.56	0.044709	26.79	0.051041	28.99
0.025864	18.13	0.032502	20.94	0.038376	23.50	0.044785	26.43	0.051118	29.11
0.025864	18.07	0.032654	20.94	0.0383	23.87	0.044709	26.18	0.051347	29.36
0.02594	18.25	0.032578	21.36	0.038529	23.62	0.045014	26.55	0.051652	29.72
0.026093	17.76	0.032502	20.57	0.039216	23.87	0.045624	26.49	0.051957	29.72
0.025864	18.19	0.032883	20.81	0.038911	23.56	0.045014	26.67	0.051499	29.91
0.026551	18.01	0.033036	21.06	0.039368	23.99	0.04509	26.25	0.051728	29.48
0.026246	18.07	0.032959	21.18	0.039292	23.07	0.045243	26.06	0.051881	29.54
0.026322	18.01	0.032807	20.94	0.039521	24.05	0.045853	26.92	0.052415	29.72
0.02678	18.68	0.032959	21.42	0.039063	23.99	0.045319	26.79	0.052262	29.79
0.02678	18.25	0.033265	21.48	0.039597	23.68	0.045777	26.61	0.052415	29.60
0.026551	18.25	0.033036	21.42	0.039521	23.99	0.045396	26.92	0.052644	30.03
0.026703	18.13	0.033875	21.42	0.039597	24.05	0.045548	26.55	0.052567	30.21
0.026932	18.62	0.033494	21.30	0.03975	24.35	0.046235	26.49	0.052415	29.48
0.027161	18.13	0.03357	21.61	0.039902	23.99	0.045701	27.04	0.052644	29.85
0.026932	18.86	0.034028	21.61	0.039597	24.17	0.045701	27.34	0.053178	30.03
0.027771	18.80	0.034104	20.87	0.039673	23.87	0.046235	26.98	0.052796	30.15
0.027771	18.68	0.033722	21.73	0.039826	23.99	0.046693	27.28	0.052796	30.21
0.027848	18.49	0.034028	21.79	0.039902	24.35	0.046769	27.04	0.053559	30.09
0.028	18.86	0.034257	21.55	0.040589	24.41	0.046235	27.59	0.05333	30.09
0.027924	18.74	0.034409	21.61	0.040513	24.23	0.046769	27.34	0.053101	30.40
0.028229	18.55	0.034104	21.42	0.040131	24.29	0.046693	27.16	0.053635	29.97
0.028077	19.17	0.034485	22.03	0.040513	24.96	0.047456	27.22	0.053712	29.85
0.028153	18.55	0.034638	21.67	0.040742	25.09	0.04654	27.47	0.054093	30.76
0.028229	18.98	0.034714	22.03	0.04036	24.96	0.046998	27.59	0.053864	30.52
0.028458	19.41	0.034943	21.79	0.040818	24.96	0.047074	27.71	0.053712	30.64
0.028458	18.92	0.035096	22.40	0.040742	24.72	0.047532	27.53	0.05417	30.33
0.028763	18.98	0.034943	22.34	0.040742	24.84	0.047837	27.47	0.05417	30.46
0.028305	19.47	0.034791	21.79	0.040589	25.02	0.04715	27.53	0.054093	30.52
0.028916	19.23	0.035248	22.34	0.040818	24.78	0.047913	27.53	0.054551	30.52
0.029526	19.17	0.035477	22.34	0.04097	24.72	0.047379	27.89	0.054475	30.52
0.028763	19.35	0.035706	21.91	0.041505	24.72	0.047684	27.77	0.054704	30.52
0.029068	19.23	0.035554	22.34	0.04097	25.21	0.048066	27.77	0.054475	30.82
0.02945	18.98	0.035706	22.28	0.041581	25.57	0.047761	27.83	0.055009	30.64
0.02884	19.41	0.035554	22.40	0.041733	25.45	0.04799	27.47	0.055161	30.21
0.02945	19.23	0.035706	22.89	0.041505	25.15	0.048219	28.08	0.05478	30.88
0.029526	19.65	0.035172	22.46	0.041581	24.84	0.048219	28.26	0.055161	30.58
0.029603	19.71	0.035782	22.03	0.041581	24.90	0.048142	27.59	0.055009	30.70
0.029374	19.41	0.035935	22.77	0.041886	25.39	0.048676	27.59	0.054932	30.88
0.03006	18.98	0.035782	22.46	0.041733	25.51	0.048219	27.95	0.055314	30.70
0.029526	19.10	0.036545	22.28	0.042424	25.21	0.048829	28.08	0.055924	30.76
0.029526	20.14	0.036164	22.83	0.042344	24.96	0.048905	28.14	0.055161	31.31
0.029831	19.53	0.036316	22.16	0.042115	24.96	0.0486	28.02	0.056306	31.74
0.029526	19.71	0.036316	22.52	0.042573	25.57	0.048981	28.14	0.055848	31.80
0.030365	20.08	0.036164	22.77	0.042878	25.70	0.048676	28.26	0.055543	31.49
0.030289	19.71	0.036545	22.10	0.042649	25.76	0.04921	28.26	0.056001	31.19
0.030289	19.84	0.036774	23.01	0.042649	25.51	0.048981	28.02	0.056153	31.92
0.030518	20.14	0.036927	22.95	0.042649	25.39	0.049516	29.18	0.056306	31.68
0.030823	19.35	0.037003	22.77	0.042802	25.39	0.049744	28.50	0.056077	31.74
0.030442	19.65	0.036927	23.07	0.04303	25.33	0.049439	28.75	0.056153	31.56
0.03039	19.78	0.036851	23.25	0.043336	25.45	0.049744	28.87	0.056306	31.68
0.030594	20.39	0.037461	23.07	0.043412	25.70	0.049897	28.50	0.056687	31.68
								0.063478	34.55
								0.063859	34.85

Deflection load inches	load lbs										
0.063478	34.97	0.070649	38.21	0.078584	40.96	0.085374	44.37	0.09308	47.85	0.100786	51.51
0.064088	34.67	0.070802	37.72	0.078279	41.50	0.085298	44.37	0.092851	47.55	0.10132	51.94
0.063706	35.22	0.071107	38.39	0.078584	41.38	0.085603	44.31	0.093462	47.73	0.101091	51.64
0.064012	35.40	0.07126	38.21	0.078355	41.32	0.085451	44.80	0.093233	47.79	0.101549	51.82
0.064622	35.58	0.07187	38.51	0.078355	41.44	0.085756	43.88	0.093385	48.10	0.101625	51.82
0.063783	34.73	0.07126	38.51	0.079194	41.44	0.085832	45.23	0.093538	48.16	0.10132	52.00
0.064164	35.22	0.071489	38.51	0.078965	41.81	0.086061	44.37	0.093233	47.85	0.101854	52.37
0.06424	34.55	0.071641	38.94	0.079271	41.32	0.086213	44.43	0.093614	48.71	0.101625	51.70
0.065003	35.46	0.072175	38.51	0.07866	41.69	0.086213	45.35	0.093919	47.97	0.102083	51.70
0.064546	35.71	0.072557	38.64	0.079194	42.18	0.086748	44.86	0.093767	48.46	0.101778	51.76
0.064546	35.40	0.071946	38.57	0.079423	41.93	0.086519	44.86	0.094301	48.65	0.102083	52.19
0.065156	35.58	0.072328	38.33	0.079805	41.50	0.086824	45.04	0.093996	48.22	0.102235	52.12
0.065003	35.83	0.072557	38.64	0.079347	41.69	0.086442	44.86	0.094453	48.40	0.102464	52.25
0.065156	35.83	0.072709	38.27	0.079805	42.05	0.086671	44.86	0.094453	48.95	0.102464	52.80
0.065003	35.46	0.073014	38.45	0.079957	41.75	0.086976	45.41	0.094759	49.13	0.10277	52.31
0.06569	35.65	0.072709	38.70	0.079728	42.30	0.087129	45.11	0.094682	48.71	0.103227	52.80
0.065385	35.22	0.073243	38.39	0.080186	42.18	0.087129	45.29	0.094682	48.83	0.102998	52.00
0.065614	35.83	0.072786	38.70	0.080415	41.69	0.087129	45.53	0.095293	49.13	0.10277	53.22
0.065385	36.19	0.073472	39.19	0.080186	42.42	0.087129	45.47	0.095293	49.26	0.103075	52.67
0.065995	35.83	0.073625	39.00	0.080415	42.60	0.087739	45.29	0.095521	48.95	0.10338	52.80
0.065766	35.52	0.073548	38.70	0.080262	41.81	0.087434	44.86	0.095598	48.77	0.10338	53.16
0.066606	36.07	0.073548	39.00	0.080949	41.75	0.087358	44.86	0.09575	49.26	0.104067	52.80
0.066529	36.19	0.07393	39.37	0.080873	42.36	0.087892	45.29	0.095521	49.20	0.103609	52.55
0.06663	35.58	0.07332	38.64	0.080873	42.54	0.088197	45.84	0.095827	48.77	0.10399	52.92
0.066606	36.07	0.073777	38.82	0.080797	42.91	0.088385	46.02	0.09575	49.44	0.103838	52.92
0.06663	36.32	0.074235	39.49	0.080644	42.42	0.087968	45.41	0.09575	49.50	0.103914	52.86
0.066682	36.50	0.074311	39.00	0.081331	42.36	0.088385	46.02	0.096284	49.50	0.104143	53.35
0.066635	36.07	0.074388	39.73	0.081559	42.30	0.088273	45.72	0.096666	49.38	0.104448	53.41
0.06714	36.26	0.074083	39.55	0.081865	43.15	0.088197	45.35	0.096132	49.32	0.104524	53.10
0.067292	36.44	0.074159	40.10	0.081254	42.85	0.088426	45.59	0.096208	49.99	0.104906	52.61
0.067063	36.19	0.074388	39.86	0.081254	43.03	0.088579	46.45	0.096284	49.26	0.104982	53.59
0.06714	36.56	0.074311	39.67	0.081636	42.11	0.088579	45.96	0.09659	49.26	0.104677	53.28
0.067521	36.68	0.074464	39.98	0.081865	43.21	0.089036	46.27	0.096895	49.62	0.105287	53.41
0.067369	36.56	0.074769	39.67	0.081865	42.66	0.089189	46.20	0.0972	50.17	0.104829	53.35
0.067292	36.32	0.074846	39.67	0.081865	43.46	0.08957	46.27	0.097047	49.50	0.105135	53.28
0.067216	36.56	0.075151	39.73	0.082094	42.85	0.08957	46.14	0.097047	49.68	0.105058	53.41
0.067521	36.93	0.074998	39.49	0.081865	43.15	0.089647	46.20	0.0972	49.62	0.10544	53.22
0.067903	36.44	0.075685	39.73	0.082551	43.27	0.089265	46.20	0.097658	49.99	0.105669	54.08
0.068132	37.17	0.075532	39.73	0.08217	42.91	0.089647	45.90	0.097353	50.23	0.10605	54.14
0.068055	36.44	0.075151	40.16	0.082475	43.27	0.08957	46.14	0.097505	50.42	0.106279	53.83
0.067826	37.05	0.075532	40.47	0.082704	43.58	0.089876	46.45	0.097734	49.50	0.106508	53.35
0.068836	36.80	0.075456	39.67	0.082856	42.66	0.090105	46.81	0.098268	50.48	0.106279	54.26
0.068055	36.68	0.075837	40.41	0.082933	42.79	0.090028	46.75	0.098039	50.29	0.106661	53.71
0.068208	36.93	0.076066	40.34	0.082628	43.76	0.089876	46.69	0.097887	50.29	0.106355	54.08
0.068284	37.29	0.076448	40.04	0.083085	43.34	0.090333	46.75	0.098116	50.42	0.106737	54.14
0.068971	36.62	0.076066	40.59	0.08278	43.40	0.090401	46.94	0.098421	50.29	0.106432	54.44
0.069047	37.35	0.076219	40.47	0.082933	43.76	0.090562	46.88	0.098497	50.29	0.106813	54.38
0.068894	36.74	0.076371	40.28	0.083162	44.13	0.090486	47.30	0.098726	50.05	0.106737	54.14
0.068894	37.23	0.076753	40.34	0.083696	43.88	0.090715	46.69	0.09865	50.42	0.107195	54.87
0.069123	37.11	0.076371	40.41	0.083772	43.76	0.091173	47.06	0.099107	50.78	0.107576	54.20
0.069581	37.11	0.076905	40.22	0.083772	44.07	0.090944	46.94	0.098726	50.72	0.107652	54.38
0.0692	37.72	0.07666	40.71	0.084154	44.13	0.091402	47.30	0.099184	50.23	0.107271	54.26
0.069581	37.78	0.076677	40.47	0.083772	43.64	0.090944	47.36	0.099718	50.84	0.107805	54.69
0.069429	37.29	0.077058	40.83	0.083619	44.01	0.091707	47.24	0.09926	50.97	0.108263	55.24
0.069581	37.42	0.076677	40.96	0.08423	44.01	0.091249	47.30	0.099565	50.60	0.107958	54.99
0.069734	37.54	0.076829	40.59	0.084001	44.07	0.091402	47.49	0.09987	51.33	0.108263	54.57
0.069734	37.48	0.077058	40.53	0.084001	44.01	0.091554	47.67	0.099565	50.90	0.107381	54.69
0.070039	37.29	0.077287	40.83	0.084764	44.13	0.091707	47.43	0.099565	51.51	0.108415	54.93
0.07042	37.78	0.077211	40.96	0.084001	44.13	0.092012	47.18	0.100099	51.21	0.108492	55.36
0.070268	37.90	0.07744	40.71	0.084916	44.13	0.091783	47.67	0.100252	50.90	0.108492	55.30
0.070039	37.48	0.077592	40.71	0.084916	44.37	0.092088	47.30	0.100404	50.90	0.109102	54.87
0.070268	37.78	0.077668	41.26	0.084688	44.07	0.092241	47.06	0.100099	51.15	0.109102	54.99
0.070344	37.60	0.07805	40.71	0.084916	44.56	0.092088	47.43	0.100938	51.39	0.109407	55.36
0.070573	38.03	0.078279	41.02	0.085451	44.07	0.092546	47.24	0.100404	51.21	0.109102	55.66
0.070649	37.42	0.078279	41.08	0.085298	43.95	0.092927	47.24	0.10071	51.76	0.10956	55.12

Deflection inches	load lbs										
0.109331	55.36	0.118181	59.39	0.126574	63.72	0.134966	67.44	0.143587	70.98	0.152819	74.71
0.109636	55.60	0.118334	59.33	0.126879	63.42	0.1355	66.90	0.143893	71.47	0.153124	75.14
0.109865	55.54	0.118334	59.14	0.127108	63.29	0.135348	67.20	0.143969	71.29	0.15259	74.83
0.10956	54.93	0.118257	59.51	0.126879	63.54	0.135119	67.20	0.144579	71.60	0.152667	75.14
0.11017	55.97	0.118257	60.06	0.127337	63.66	0.135882	67.02	0.144121	71.05	0.153353	75.50
0.110323	55.79	0.118791	59.51	0.126955	63.29	0.1355	67.26	0.144656	71.41	0.153582	75.62
0.110323	56.46	0.118639	59.45	0.128023	63.54	0.135729	67.38	0.144808	71.23	0.153201	75.20
0.110094	55.85	0.11902	59.88	0.127413	64.03	0.135729	67.14	0.144808	71.60	0.153811	76.11
0.110552	55.30	0.119326	60.30	0.127718	63.78	0.135882	67.51	0.144961	70.98	0.153887	75.68
0.110475	55.48	0.119707	60.00	0.127718	64.03	0.136339	67.87	0.144808	71.23	0.153735	75.62
0.110323	56.03	0.119707	59.69	0.128023	63.90	0.136645	67.38	0.144732	72.08	0.153582	75.62
0.110552	56.09	0.119631	60.06	0.128481	64.15	0.136187	67.32	0.145037	71.47	0.153811	75.14
0.11162	56.03	0.119173	60.18	0.128634	63.90	0.137026	68.06	0.145113	71.47	0.154192	75.56
0.111009	56.21	0.119554	60.12	0.128176	63.97	0.136645	68.18	0.145342	71.66	0.154269	75.75
0.111315	56.46	0.120241	60.36	0.128786	63.78	0.137102	68.18	0.145876	72.21	0.154726	75.38
0.111238	56.52	0.119936	60.36	0.128481	64.03	0.137179	68.18	0.146181	71.53	0.154803	76.11
0.111391	56.03	0.12047	59.94	0.129244	64.33	0.137255	67.81	0.145647	71.41	0.154726	76.48
0.111849	56.58	0.120623	60.18	0.12871	64.27	0.137636	67.63	0.146105	72.08	0.155184	76.48
0.111543	56.95	0.120623	60.24	0.129091	64.64	0.137331	68.54	0.145953	72.08	0.154879	75.87
0.112001	56.52	0.12047	60.85	0.128862	64.45	0.137484	68.30	0.146258	71.78	0.155108	76.42
0.112078	56.58	0.120775	59.75	0.129473	64.58	0.137713	68.54	0.146792	72.33	0.155108	76.11
0.112383	56.89	0.121157	60.98	0.12932	65.00	0.138094	68.18	0.146334	72.33	0.155184	76.11
0.112154	56.70	0.120851	60.67	0.129931	65.25	0.137865	68.24	0.146868	72.08	0.155642	76.17
0.112383	56.21	0.121386	61.10	0.129702	64.76	0.138628	68.54	0.147097	71.72	0.155413	75.93
0.112306	56.70	0.121843	61.10	0.129854	65.06	0.138399	68.54	0.146868	72.21	0.156023	76.11
0.112917	57.43	0.121538	61.04	0.130007	64.88	0.138094	68.30	0.146792	72.76	0.155795	76.48
0.112764	57.01	0.121614	61.10	0.130007	64.88	0.138781	68.91	0.14725	72.82	0.155795	75.75
0.112688	56.64	0.121462	61.04	0.129854	64.88	0.13901	68.73	0.14725	72.21	0.156481	76.36
0.113298	56.64	0.122072	61.83	0.130465	65.25	0.139239	68.91	0.147707	72.63	0.156634	76.97
0.113375	57.31	0.122606	61.34	0.130541	65.13	0.138857	69.09	0.147402	72.94	0.156252	76.48
0.113527	56.89	0.12192	61.04	0.130236	65.55	0.139391	68.91	0.147784	72.21	0.15671	76.60
0.113298	56.82	0.122683	61.46	0.130541	64.76	0.139162	69.15	0.148394	72.76	0.156634	76.60
0.113603	57.19	0.122606	60.79	0.131075	65.25	0.139773	68.97	0.148318	72.88	0.156786	76.72
0.113832	57.07	0.122606	61.77	0.131228	64.88	0.139773	68.91	0.148241	73.00	0.157015	77.09
0.11429	57.43	0.122683	61.34	0.131075	65.25	0.139544	69.28	0.148013	73.30	0.157397	76.97
0.114061	57.62	0.123064	60.91	0.131456	65.00	0.139467	69.89	0.14847	73.30	0.157473	77.45
0.11429	57.74	0.122988	61.71	0.131075	65.31	0.140002	69.76	0.148775	72.82	0.157855	76.72
0.11449	57.92	0.123293	61.65	0.131228	65.37	0.139849	69.40	0.148775	72.76	0.157321	76.84
0.114595	57.80	0.122988	61.71	0.132143	65.25	0.140307	69.21	0.148394	73.24	0.158083	77.15
0.114977	57.62	0.123445	61.77	0.132143	65.19	0.14023	69.40	0.148928	72.94	0.158083	77.33
0.11449	57.43	0.123445	61.89	0.131838	65.98	0.140078	68.91	0.148928	72.94	0.15816	76.97
0.114977	57.37	0.123674	61.40	0.132296	65.86	0.140841	69.76	0.14931	73.61	0.158694	77.21
0.115206	58.05	0.123598	62.20	0.132601	66.10	0.140612	69.58	0.14931	73.55	0.158083	77.33
0.115282	57.86	0.123751	62.07	0.131914	65.55	0.140536	69.28	0.149462	73.85	0.15816	77.58
0.115358	57.68	0.123751	61.77	0.13283	65.86	0.140917	69.58	0.149844	73.49	0.158694	78.19
0.115587	58.05	0.123903	61.34	0.132906	65.92	0.141451	69.58	0.150225	73.55	0.158923	78.07
0.115511	58.35	0.124361	62.07	0.132448	65.31	0.141375	69.58	0.149691	74.04	0.158618	77.45
0.115587	58.29	0.124514	62.38	0.133135	65.49	0.141375	69.89	0.150301	74.10	0.159304	77.82
0.11574	58.29	0.124361	62.38	0.133211	65.86	0.14168	69.89	0.150149	74.04	0.159457	77.82
0.116121	58.96	0.12459	62.07	0.13283	65.92	0.141604	70.25	0.150454	73.91	0.159838	78.19
0.116274	58.72	0.125277	62.20	0.133364	66.22	0.14168	70.13	0.150378	74.04	0.15938	77.64
0.115969	58.29	0.1252	62.93	0.13344	66.53	0.142214	69.95	0.15053	74.04	0.159228	77.88
0.11635	58.41	0.124743	62.75	0.13344	66.29	0.142138	70.25	0.150835	74.16	0.15938	77.76
0.116655	58.17	0.125277	62.93	0.133364	66.10	0.142214	70.13	0.150835	74.40	0.159609	78.68
0.116655	58.17	0.1252	62.68	0.133516	66.47	0.14229	70.19	0.151446	74.65	0.160296	78.31
0.116655	58.66	0.125811	62.56	0.134279	66.10	0.142596	69.89	0.151522	74.28	0.160067	78.86
0.116655	58.29	0.125353	62.93	0.134279	66.35	0.142519	70.37	0.151293	74.53	0.160372	77.88
0.116655	58.90	0.125505	62.75	0.134051	66.96	0.142443	70.50	0.151369	74.46	0.160601	78.31
0.117037	58.53	0.125887	62.81	0.134127	66.65	0.142824	70.50	0.151522	74.22	0.160525	78.92
0.11696	59.08	0.125734	62.62	0.134508	66.77	0.143282	70.56	0.151751	74.65	0.160601	78.55
0.117571	59.02	0.126726	63.17	0.134279	67.08	0.143282	70.92	0.151827	74.77	0.160906	78.25
0.118029	59.33	0.12604	62.75	0.134813	66.53	0.142901	70.31	0.151751	74.65	0.160601	78.49
0.117723	59.21	0.126268	63.11	0.135119	67.20	0.143359	70.74	0.151904	74.89	0.16083	78.43
0.117952	59.14	0.126268	62.56	0.134737	66.71	0.143359	70.62	0.152361	74.53	0.161288	79.10
0.118181	59.21	0.126955	62.99	0.135271	66.77	0.143816	70.98	0.152132	75.01	0.161135	79.16

Deflection load inches	load lbs										
0.161746	78.80	0.170367	82.70	0.178836	86.85	0.188373	90.64	0.19707	94.79	0.207141	97.96
0.161364	79.10	0.170443	83.01	0.179217	86.31	0.188754	90.70	0.197299	94.36	0.207065	97.84
0.161669	79.16	0.17052	82.34	0.179599	86.73	0.188883	90.27	0.197604	94.48	0.20737	97.78
0.161746	78.80	0.170748	82.64	0.179751	86.31	0.188883	90.76	0.197833	94.61	0.207675	98.21
0.161975	78.80	0.170977	83.13	0.179599	86.73	0.189059	90.94	0.198444	94.79	0.207446	98.63
0.162356	79.53	0.171283	82.58	0.179751	86.61	0.189288	90.76	0.198749	94.61	0.207904	98.21
0.162127	79.59	0.171359	83.50	0.179522	86.85	0.189364	91.00	0.19852	94.67	0.207523	98.15
0.162356	79.22	0.171588	83.13	0.179828	87.10	0.189288	90.33	0.198901	94.85	0.208057	98.21
0.162432	79.22	0.171359	83.01	0.180133	86.55	0.189593	90.88	0.198596	94.85	0.208362	98.63
0.162737	80.02	0.171359	83.07	0.180133	87.46	0.189822	91.25	0.19913	94.61	0.207752	98.33
0.163043	79.47	0.171435	83.50	0.180514	87.10	0.189746	91.13	0.198978	95.28	0.208515	98.70
0.163195	79.90	0.172503	83.56	0.180438	87.28	0.190204	90.76	0.199359	94.67	0.208362	98.63
0.163424	79.53	0.171817	83.68	0.180591	87.10	0.190127	91.43	0.19913	94.85	0.208515	98.57
0.162966	79.47	0.172198	83.19	0.180591	86.85	0.189899	91.49	0.199283	95.03	0.208591	98.45
0.163348	79.90	0.172274	83.80	0.181125	87.04	0.190204	90.94	0.199741	96.01	0.208743	98.94
0.163958	79.77	0.172656	83.62	0.180743	87.71	0.19028	90.88	0.199893	95.40	0.208591	98.88
0.163653	79.47	0.172351	83.68	0.180972	87.53	0.190509	91.49	0.200198	95.52	0.209277	99.24
0.163653	80.02	0.172808	83.80	0.181125	86.92	0.190661	91.62	0.200351	95.16	0.209354	98.94
0.163958	80.02	0.172732	84.35	0.181659	87.53	0.190738	91.86	0.199969	95.16	0.209277	99.06
0.164492	79.96	0.172808	83.56	0.18143	88.14	0.191119	91.07	0.200427	95.34	0.209277	98.76
0.164111	80.26	0.173648	84.11	0.181888	87.71	0.190967	91.62	0.200809	95.28	0.209888	99.55
0.164721	80.26	0.173114	83.62	0.182269	87.83	0.191043	91.37	0.20058	96.01	0.210117	99.18
0.164416	80.26	0.173419	84.11	0.18204	88.20	0.191501	91.98	0.20119	96.13	0.209659	99.06
0.164416	80.26	0.173266	83.92	0.182498	87.95	0.19173	91.74	0.201038	95.64	0.210269	99.31
0.164492	80.45	0.174105	84.35	0.182498	88.01	0.191653	91.98	0.200961	96.56	0.209964	99.55
0.165255	80.93	0.174258	84.41	0.182727	88.32	0.191958	91.80	0.201343	95.58	0.210269	99.79
0.165332	80.63	0.174105	84.66	0.182422	88.26	0.192264	91.74	0.201495	95.52	0.210727	100.16
0.165556	80.26	0.174411	84.78	0.18265	88.32	0.191853	92.16	0.20119	95.70	0.210727	99.79
0.165332	80.75	0.174029	84.17	0.183032	88.32	0.192035	92.10	0.201572	96.01	0.211109	99.55
0.165713	80.51	0.174716	84.66	0.183261	88.01	0.192111	92.10	0.201877	96.13	0.211185	100.04
0.165789	80.45	0.174644	85.33	0.182879	88.75	0.192874	92.29	0.201724	95.83	0.210956	99.55
0.166247	80.26	0.175021	84.66	0.183185	88.50	0.192493	92.35	0.202106	95.89	0.211566	100.28
0.166247	80.45	0.174945	84.60	0.183566	88.81	0.193179	92.47	0.202029	95.64	0.211185	99.92
0.166629	81.36	0.174716	84.84	0.183871	88.56	0.192569	92.10	0.202716	96.38	0.211872	99.67
0.166629	80.63	0.175021	84.72	0.184024	88.69	0.192721	91.98	0.202487	96.19	0.211872	99.67
0.166781	81.42	0.175097	85.21	0.1841	88.26	0.192721	92.10	0.202945	96.38	0.2121	100.22
0.166781	81.06	0.175479	84.72	0.1841	88.69	0.19379	92.35	0.202487	96.50	0.212177	99.86
0.167086	81.36	0.175555	84.90	0.183566	88.56	0.193637	92.77	0.202869	96.56	0.2121	100.53
0.1664	80.63	0.175479	84.66	0.184634	88.99	0.193332	92.47	0.202792	96.62	0.212024	100.59
0.166781	81.12	0.17586	85.08	0.184482	88.99	0.194171	92.59	0.203326	96.86	0.212177	100.59
0.166781	81.36	0.176165	85.63	0.184176	88.62	0.193713	92.84	0.203555	96.38	0.212253	100.95
0.167315	81.06	0.175784	85.08	0.184405	89.11	0.194629	92.90	0.20325	96.99	0.212787	100.77
0.167697	81.54	0.176165	85.15	0.184558	88.87	0.194247	92.59	0.203403	96.31	0.212787	100.89
0.167468	81.54	0.176242	85.45	0.184939	89.42	0.194705	93.45	0.204013	96.50	0.213169	100.65
0.167926	81.67	0.176471	85.82	0.185245	89.48	0.1944	93.39	0.203937	97.41	0.212863	100.71
0.168307	81.61	0.176394	85.51	0.185626	89.17	0.194781	93.32	0.204318	97.35	0.213092	101.26
0.167773	82.09	0.176547	84.78	0.185626	88.93	0.19501	92.71	0.204013	97.35	0.213703	100.53
0.167849	81.24	0.176852	85.63	0.18555	89.66	0.195087	93.14	0.204242	96.86	0.213474	100.40
0.168536	81.30	0.17731	85.51	0.18555	89.30	0.194934	93.87	0.204776	96.99	0.21355	100.71
0.168612	82.40	0.177234	86.00	0.18616	89.48	0.195697	93.20	0.204776	97.54	0.213703	100.77
0.16846	82.22	0.177234	85.57	0.186465	89.23	0.195315	93.45	0.204547	97.29	0.213855	100.83
0.168917	81.97	0.177539	86.06	0.186542	89.66	0.19585	93.57	0.204852	97.23	0.214694	101.14
0.168841	82.46	0.177234	85.76	0.186313	89.48	0.195926	93.08	0.205386	97.54	0.214084	100.53
0.168612	82.03	0.177386	86.18	0.186542	89.66	0.195773	94.18	0.205463	97.47	0.214618	100.89
0.168994	82.40	0.177844	85.94	0.186618	89.48	0.196078	93.75	0.205539	97.05	0.214923	101.14
0.169375	82.70	0.177996	85.88	0.186618	89.42	0.196078	94.12	0.20531	97.41	0.214389	100.89
0.169223	82.70	0.177844	85.82	0.186694	89.91	0.196689	93.87	0.205768	97.23	0.215152	101.32
0.169299	81.97	0.177844	85.94	0.187381	89.60	0.196307	93.93	0.205539	97.72	0.215305	101.50
0.169299	82.46	0.178225	85.94	0.187152	90.09	0.196612	94.36	0.205921	97.66	0.215	101.20
0.170062	82.64	0.177792	86.06	0.18761	89.85	0.196536	94.06	0.205921	97.54	0.215457	101.93
0.170214	82.46	0.178225	86.67	0.187533	90.39	0.196994	94.06	0.206378	98.27	0.215534	101.26
0.170062	82.40	0.178454	86.67	0.18761	90.52	0.197147	93.93	0.20676	97.96	0.215915	101.50
0.170062	83.07	0.178912	86.61	0.187686	90.39	0.196765	94.18	0.206378	98.76	0.215839	101.44
0.170443	82.15	0.178454	86.37	0.187762	90.33	0.197604	94.36	0.206989	98.27	0.215381	101.50
0.170367	82.76	0.178912	86.12	0.187686	90.76	0.197833	93.93	0.206683	97.66	0.215839	101.38

Deflection	load										
inches	lbs										
0.216144	101.75	0.225986	106.02	0.235676	110.11	0.245594	113.95	0.255665	118.47	0.265583	122.87
0.216144	101.75	0.226139	106.02	0.235676	110.29	0.245747	114.44	0.25597	118.72	0.265431	122.62
0.21622	102.48	0.225605	106.02	0.235599	110.05	0.245747	114.32	0.255665	118.59	0.265507	123.05
0.216297	101.99	0.226291	106.02	0.235676	110.54	0.245975	114.69	0.255741	119.14	0.265888	122.74
0.216678	102.24	0.226062	106.02	0.23621	110.05	0.246052	114.20	0.256352	118.47	0.266194	123.66
0.217136	102.54	0.227054	106.20	0.236362	110.66	0.246128	114.75	0.256199	118.84	0.266194	123.60
0.217441	101.99	0.226749	105.90	0.236896	110.54	0.246509	114.69	0.256428	119.08	0.26688	123.48
0.217288	102.72	0.226673	105.71	0.236439	110.78	0.246662	114.69	0.256352	118.96	0.266728	123.35
0.217288	102.17	0.227054	106.26	0.236362	110.35	0.246967	114.56	0.257038	119.39	0.266804	123.17
0.217136	101.87	0.227054	106.51	0.23682	110.66	0.246967	114.56	0.256809	118.90	0.266651	124.09
0.217517	102.48	0.227512	106.14	0.237278	110.78	0.246662	114.81	0.256886	119.14	0.266804	124.15
0.21767	102.85	0.227283	106.45	0.237507	111.15	0.247425	114.69	0.256962	118.84	0.267338	123.23
0.217746	101.99	0.227207	106.63	0.237507	111.02	0.247425	115.05	0.257877	119.20	0.267414	123.60
0.218051	103.21	0.227588	106.57	0.237354	111.57	0.247501	114.26	0.25742	119.57	0.267643	123.96
0.218509	103.46	0.227665	106.75	0.237583	110.84	0.247654	114.81	0.257649	119.75	0.26772	123.48
0.218814	102.97	0.227893	107.00	0.237888	111.33	0.247578	114.69	0.257954	119.14	0.268101	123.96
0.218204	103.03	0.228199	106.75	0.238287	111.51	0.248188	115.36	0.257801	119.87	0.267872	124.09
0.21912	103.27	0.228275	107.00	0.237659	110.66	0.248341	115.79	0.25803	120.06	0.268406	124.21
0.218738	102.85	0.228962	107.00	0.23888	111.21	0.248112	115.91	0.258335	120.42	0.268177	124.33
0.218738	103.15	0.22858	106.63	0.238651	111.27	0.248264	115.42	0.258717	120.00	0.268177	124.09
0.218814	103.21	0.228809	107.00	0.238575	112.18	0.248417	115.42	0.258946	120.42	0.268635	123.54
0.219425	103.46	0.228962	106.51	0.238956	111.51	0.248646	116.03	0.259022	120.00	0.26894	124.21
0.219043	103.03	0.228733	107.42	0.238422	111.64	0.248722	115.72	0.258869	120.24	0.269322	124.09
0.219806	103.33	0.229496	107.24	0.23888	111.70	0.248722	115.48	0.25948	119.87	0.269245	124.70
0.219501	103.52	0.229191	107.97	0.238804	111.88	0.249256	115.66	0.259327	120.42	0.269398	124.57
0.219806	103.33	0.229191	107.00	0.239643	111.45	0.24918	116.21	0.259174	120.42	0.269322	124.21
0.220035	103.46	0.229343	107.24	0.23949	112.12	0.250019	115.91	0.259403	120.42	0.269551	124.45
0.220035	103.33	0.229801	107.36	0.239796	111.76	0.249485	115.54	0.25948	120.55	0.269627	125.00
0.220188	103.88	0.229801	108.64	0.23949	111.94	0.250019	116.03	0.260014	120.91	0.269856	124.82
0.220798	103.46	0.229953	107.91	0.239567	112.25	0.249714	116.27	0.260166	120.55	0.270161	124.39
0.221027	103.94	0.230259	107.55	0.240406	112.12	0.250324	116.33	0.260014	120.67	0.270466	124.82
0.220722	103.70	0.230793	107.79	0.240253	111.76	0.250553	115.91	0.2607	120.61	0.269932	125.00
0.220722	103.88	0.230411	108.09	0.240253	112.18	0.250172	116.64	0.260395	120.67	0.270848	125.31
0.220951	103.70	0.230259	108.34	0.240333	112.61	0.250324	116.40	0.260853	120.61	0.270619	124.94
0.221408	103.70	0.23064	108.09	0.240635	111.76	0.250782	116.70	0.260548	120.91	0.271077	125.49
0.221332	104.13	0.231022	108.16	0.240635	112.18	0.250782	116.64	0.261234	120.61	0.271229	125.61
0.221485	103.82	0.231098	108.22	0.24094	111.94	0.25124	116.88	0.261311	120.67	0.271077	125.19
0.221408	104.55	0.231327	108.95	0.240864	112.67	0.251392	116.88	0.261463	121.46	0.271382	125.31
0.222019	104.80	0.231556	108.03	0.241169	112.61	0.250782	117.25	0.261006	120.67	0.271763	125.80
0.221866	104.31	0.231937	108.03	0.241398	112.18	0.251316	117.25	0.261845	121.40	0.271458	126.10
0.221714	104.43	0.232319	108.34	0.241169	112.86	0.251316	117.62	0.261921	121.16	0.271763	125.00
0.222248	104.43	0.231785	108.58	0.241779	112.55	0.252079	117.68	0.261616	120.73	0.271839	125.49
0.222553	104.62	0.232319	108.58	0.242237	112.98	0.251698	117.43	0.261997	121.28	0.271839	126.28
0.222324	104.80	0.231937	108.71	0.242161	112.79	0.25185	116.82	0.261845	121.22	0.272145	125.43
0.222477	104.92	0.232395	109.38	0.242466	113.47	0.252003	116.76	0.26215	121.34	0.272374	125.92
0.223011	103.94	0.232395	108.83	0.242618	113.22	0.252384	117.07	0.262379	121.52	0.272374	126.16
0.222934	104.92	0.232471	109.13	0.242313	112.73	0.252766	117.13	0.26276	121.16	0.27245	125.92
0.223011	105.23	0.232547	109.25	0.242618	113.41	0.252537	117.62	0.262531	122.13	0.273289	126.16
0.223239	104.92	0.232624	109.07	0.243	113.22	0.252689	117.74	0.26276	121.77	0.272679	126.41
0.223926	104.55	0.233463	109.44	0.243076	113.28	0.252766	117.98	0.263142	122.01	0.273442	126.34
0.223697	104.62	0.233616	109.32	0.243229	113.28	0.253376	117.80	0.263142	122.07	0.273442	126.77
0.223468	105.04	0.233082	108.95	0.243305	113.22	0.252918	118.23	0.2636	121.64	0.273136	125.98
0.223697	104.86	0.233768	109.68	0.243458	113.65	0.253452	117.74	0.263752	121.46	0.273365	125.92
0.223926	105.23	0.233387	109.25	0.243534	113.28	0.253605	117.98	0.263523	122.38	0.274052	126.04
0.224079	105.04	0.23415	109.44	0.243763	113.41	0.253605	117.74	0.263752	121.71	0.274052	125.67
0.224446	104.68	0.234302	108.95	0.244221	113.59	0.253834	118.04	0.26421	122.44	0.273671	126.65
0.224446	105.41	0.234302	109.32	0.243763	113.65	0.253834	117.98	0.264363	121.77	0.274052	126.53
0.224765	105.65	0.234302	109.44	0.244068	114.44	0.253986	117.80	0.264134	122.68	0.274205	126.04
0.224918	105.41	0.234836	109.07	0.244602	113.95	0.254368	118.10	0.264668	122.38	0.274586	126.16
0.224994	105.90	0.234607	110.29	0.244907	114.20	0.254215	118.35	0.264973	122.56	0.274739	127.26
0.225299	105.41	0.235065	109.93	0.245136	113.59	0.25452	119.02	0.264591	122.99	0.274891	126.77
0.224918	105.53	0.234607	109.44	0.244907	114.08	0.25452	119.08	0.264668	122.01	0.274739	126.89
0.225147	105.10	0.235294	109.62	0.244755	114.32	0.255283	118.47	0.265202	122.62	0.275196	127.50
0.225528	105.35	0.235065	109.93	0.245212	114.08	0.255512	118.59	0.265202	122.56	0.275425	127.26
0.225528	105.35	0.235065	109.68	0.245518	114.69	0.255512	118.84	0.265431	122.62	0.275578	127.14

Deflection load inches	load lbs										
0.275578	127.02	0.285954	132.14	0.295872	137.03	0.306706	142.52	0.317159	147.77	0.327535	154.24
0.275731	127.32	0.285954	131.59	0.296254	137.15	0.306554	141.79	0.317617	148.26	0.327535	154.42
0.275578	127.02	0.286107	131.65	0.296407	137.27	0.306935	142.40	0.317464	148.32	0.327993	154.24
0.275959	127.02	0.286107	132.20	0.296864	136.90	0.307393	142.28	0.317693	148.13	0.327611	154.91
0.275959	127.38	0.286717	132.27	0.296712	137.15	0.307164	142.28	0.317311	147.77	0.328298	154.48
0.276188	127.63	0.286488	132.51	0.296635	137.76	0.307012	142.40	0.317845	147.95	0.327993	154.73
0.27657	127.99	0.286717	132.69	0.297093	137.64	0.307622	142.40	0.318227	148.32	0.32845	154.48
0.276493	128.24	0.287098	132.69	0.296864	137.15	0.308003	143.01	0.317922	148.26	0.328756	154.48
0.276722	127.63	0.286946	132.39	0.297093	137.15	0.307774	142.76	0.318456	148.38	0.328603	154.60
0.27718	127.81	0.28748	132.88	0.297169	137.64	0.308232	143.25	0.318837	148.38	0.329366	154.73
0.276951	127.87	0.287251	132.75	0.298009	137.64	0.30808	142.76	0.318914	149.11	0.329137	154.85
0.277333	127.81	0.287251	132.63	0.298161	137.51	0.308156	142.89	0.318456	148.20	0.32929	155.76
0.277718	127.63	0.287861	132.39	0.298238	137.27	0.308766	142.82	0.319142	149.05	0.329366	155.76
0.277485	128.24	0.288243	132.51	0.298314	137.64	0.309224	143.62	0.319142	149.66	0.329442	156.13
0.278096	128.60	0.288319	133.30	0.298695	137.64	0.308537	143.13	0.319219	148.44	0.329976	154.91
0.277714	127.99	0.288167	132.94	0.298772	138.12	0.309377	143.86	0.319295	149.48	0.329976	155.21
0.277943	127.99	0.288396	133.00	0.298772	138.00	0.30869	143.86	0.319753	149.29	0.330129	155.03
0.278172	128.11	0.288624	133.36	0.298619	138.43	0.3093	143.37	0.320134	148.74	0.33051	155.83
0.278248	128.48	0.288472	133.73	0.299153	138.80	0.309224	143.37	0.320211	149.17	0.33051	156.07
0.278325	128.36	0.289006	133.00	0.299077	137.58	0.309529	143.25	0.320211	150.03	0.330053	156.19
0.278859	128.73	0.289158	133.12	0.299458	138.61	0.310063	144.29	0.320134	149.78	0.33051	155.70
0.279164	128.60	0.289158	133.67	0.299458	138.55	0.310369	144.41	0.320516	150.45	0.330663	155.64
0.27924	128.42	0.289158	134.04	0.299687	138.12	0.31014	143.86	0.320363	150.09	0.331197	155.95
0.278782	128.97	0.289464	133.30	0.299535	138.06	0.310445	143.74	0.320821	149.60	0.331197	156.44
0.279622	129.15	0.289845	133.73	0.299763	138.49	0.310292	143.98	0.320668	150.64	0.331426	156.01
0.27985	129.58	0.289616	134.10	0.299916	138.61	0.310597	143.86	0.321202	150.27	0.331807	156.86
0.279622	128.85	0.290227	134.34	0.300374	138.74	0.310979	144.17	0.321279	149.72	0.33135	156.07
0.279545	128.97	0.290074	133.85	0.300145	138.12	0.310826	145.08	0.32166	150.64	0.331426	157.11
0.279622	129.46	0.290303	133.85	0.300908	138.74	0.31136	145.02	0.321431	149.97	0.33196	157.11
0.280003	129.27	0.290455	134.10	0.300679	138.86	0.311284	144.41	0.321813	150.51	0.332189	156.98
0.28069	129.70	0.290761	133.67	0.300984	139.16	0.311513	144.29	0.322042	150.51	0.332265	156.31
0.280385	129.52	0.290684	134.10	0.301289	138.74	0.311284	144.53	0.322271	150.94	0.332265	157.41
0.280232	128.85	0.291142	134.83	0.300908	138.61	0.311513	144.84	0.322042	150.70	0.332418	157.17
0.280995	128.85	0.291295	134.95	0.301442	139.16	0.311894	145.02	0.322194	150.88	0.332494	157.41
0.281224	129.70	0.291295	134.65	0.301747	139.47	0.312428	144.72	0.322805	151.25	0.332799	157.17
0.280842	129.82	0.291447	134.89	0.301518	139.35	0.312428	144.72	0.322805	151.31	0.332799	157.29
0.281376	129.76	0.291829	134.46	0.301595	139.71	0.312276	145.57	0.322728	151.19	0.333257	157.78
0.281071	129.76	0.291752	134.46	0.3019	139.41	0.312276	145.20	0.323339	151.06	0.333562	157.11
0.281224	130.07	0.291524	134.22	0.302052	139.10	0.312581	145.08	0.323186	151.43	0.333944	157.84
0.281071	130.19	0.292134	134.77	0.302052	139.71	0.312505	145.82	0.323491	151.49	0.333944	157.84
0.281605	130.19	0.292515	134.95	0.302205	139.59	0.312886	145.63	0.323568	151.49	0.334096	157.53
0.282216	130.68	0.292287	134.77	0.302892	139.89	0.313115	145.94	0.323644	151.25	0.333639	157.90
0.282063	129.82	0.292439	135.01	0.302968	140.32	0.31342	145.45	0.324254	151.80	0.333944	158.45
0.282368	130.68	0.292744	135.74	0.303349	140.20	0.313802	145.51	0.323873	151.80	0.334325	157.90
0.282292	130.43	0.292973	134.95	0.303197	139.96	0.314031	146.43	0.324483	151.31	0.334783	158.39
0.282444	129.88	0.292744	135.44	0.303052	139.96	0.313725	146.12	0.324483	151.92	0.335164	158.14
0.282902	130.43	0.292897	135.26	0.303502	140.32	0.313954	146.12	0.324254	151.74	0.334707	158.02
0.28275	130.01	0.29305	135.68	0.303807	140.44	0.314183	146.79	0.324559	151.98	0.334936	158.82
0.283131	130.56	0.29366	135.56	0.303655	140.44	0.314031	146.55	0.324865	152.04	0.334783	158.75
0.283284	131.23	0.293431	135.56	0.304036	139.96	0.314336	146.73	0.325017	152.53	0.334936	158.75
0.283131	130.37	0.293507	135.07	0.304494	140.93	0.314565	146.43	0.325399	153.14	0.335317	159.24
0.28336	130.37	0.293812	136.11	0.304036	140.57	0.314641	146.30	0.325093	152.53	0.33547	158.88
0.283665	131.04	0.29427	135.56	0.304723	140.44	0.31548	146.79	0.32578	151.92	0.33608	159.12
0.283894	130.80	0.29427	135.87	0.305104	141.42	0.315404	147.04	0.325322	152.65	0.336233	159.00
0.283818	130.92	0.29427	136.11	0.305028	140.69	0.315709	146.91	0.325399	152.59	0.335927	159.49
0.283894	131.41	0.294957	136.05	0.30457	140.44	0.315862	146.85	0.325704	153.20	0.336538	159.00
0.284581	131.65	0.294499	136.05	0.305257	140.93	0.315404	147.34	0.32639	153.51	0.336461	159.49
0.284733	131.47	0.294804	135.87	0.305409	140.93	0.31632	147.10	0.326162	153.14	0.336233	159.73
0.284733	131.65	0.294881	136.17	0.305486	140.87	0.315938	147.52	0.325856	152.65	0.336614	159.85
0.284962	131.84	0.295262	136.78	0.305638	141.91	0.316548	147.40	0.326543	153.75	0.336843	159.79
0.284733	130.92	0.295567	136.60	0.30602	141.54	0.316243	147.04	0.326696	152.96	0.336995	159.37
0.285649	131.90	0.295796	136.90	0.306249	142.03	0.316472	147.59	0.326772	153.32	0.337301	160.28
0.285725	131.17	0.295491	136.78	0.305867	141.30	0.317006	148.01	0.326619	153.75	0.337911	159.85
0.285573	132.20	0.295644	136.35	0.306706	142.03	0.31693	148.07	0.327001	153.87	0.337835	159.79
0.285115	132.27	0.295872	136.66	0.30663	141.48	0.317082	147.77	0.327687	153.44	0.337835	160.04

Deflection	load										
inches	lbs										
0.338293	160.65	0.348592	166.93	0.359274	172.73	0.370565	180.12	0.380865	189.03	0.392004	195.32
0.338216	160.40	0.348898	166.93	0.359426	173.83	0.369955	180.12	0.381323	188.78	0.392004	194.71
0.338293	160.22	0.34905	166.69	0.359579	173.89	0.370565	180.18	0.381476	189.03	0.392615	195.13
0.338598	160.40	0.348898	166.87	0.35996	173.28	0.371023	180.48	0.381399	189.09	0.392538	195.32
0.338903	160.46	0.349355	166.81	0.359731	173.83	0.370871	180.85	0.381399	189.88	0.392538	195.86
0.338598	160.46	0.349355	166.93	0.360037	173.77	0.370642	180.61	0.382086	190.37	0.392767	195.19
0.338903	160.10	0.349813	167.36	0.360266	173.95	0.371328	180.61	0.382086	189.15	0.393072	194.77
0.338903	160.95	0.349432	167.30	0.360494	173.89	0.371252	180.61	0.382467	189.88	0.393378	195.13
0.339132	160.46	0.349813	167.30	0.360189	174.14	0.371557	181.58	0.382773	190.19	0.393301	195.19
0.339132	161.20	0.350347	167.67	0.360723	173.59	0.371786	181.22	0.382925	190.31	0.393378	195.62
0.339742	161.26	0.350195	167.79	0.360494	174.26	0.371939	181.58	0.382925	190.07	0.393454	194.89
0.339513	161.32	0.350271	168.03	0.361334	174.69	0.372168	181.70	0.38323	190.37	0.393454	195.32
0.339895	160.40	0.350423	167.79	0.361486	174.26	0.372168	181.83	0.382925	190.25	0.393988	194.83
0.339818	160.59	0.351111	168.15	0.361181	174.87	0.371786	180.85	0.383459	190.62	0.394293	195.32
0.340276	160.95	0.350423	168.09	0.36202	174.87	0.37232	182.44	0.383001	190.98	0.393912	195.25
0.340581	161.26	0.351263	167.54	0.362173	175.23	0.372702	182.07	0.38323	191.35	0.394064	195.01
0.340429	161.38	0.351034	168.15	0.361715	174.50	0.372625	182.01	0.383612	191.65	0.394751	195.93
0.340658	162.11	0.351186	168.52	0.362249	174.50	0.373312	182.44	0.383917	190.49	0.394675	195.44
0.340887	161.93	0.351492	168.28	0.362631	175.78	0.373388	182.50	0.383993	190.98	0.395056	195.74
0.340887	161.32	0.351568	168.03	0.362707	175.42	0.373159	182.01	0.38407	191.41	0.394751	195.62
0.341573	161.99	0.351797	168.40	0.363012	175.36	0.373465	182.44	0.384451	191.35	0.395285	195.68
0.34165	161.44	0.352178	168.89	0.363012	175.72	0.373388	182.13	0.384909	191.59	0.395514	195.62
0.341726	162.29	0.352026	168.83	0.362631	175.60	0.373617	182.62	0.384833	192.02	0.395972	196.11
0.341802	162.42	0.352331	168.76	0.363241	175.60	0.374228	182.86	0.385214	192.32	0.395438	194.83
0.341497	161.81	0.352255	169.25	0.363165	175.72	0.374228	183.35	0.384756	191.59	0.396048	195.25
0.341878	162.42	0.35256	169.25	0.363546	175.72	0.374685	183.29	0.38529	192.08	0.396429	195.50
0.341802	162.29	0.353246	168.64	0.363622	176.52	0.374456	182.74	0.385367	192.08	0.395895	195.99
0.342184	162.54	0.352789	169.56	0.363851	176.46	0.374075	183.90	0.385824	192.02	0.396811	196.17
0.342412	162.66	0.353246	169.19	0.364004	176.33	0.374914	183.78	0.385977	192.14	0.396353	195.80
0.342718	162.42	0.352865	169.38	0.364462	176.33	0.374762	183.66	0.385824	192.08	0.39704	194.95
0.343023	163.21	0.353323	169.86	0.364157	176.46	0.375296	183.66	0.385977	192.81	0.396887	195.56
0.342641	162.54	0.353475	169.25	0.364233	176.88	0.375067	184.08	0.386435	193.18	0.397192	196.05
0.342947	162.66	0.354086	169.56	0.364538	177.37	0.375753	184.27	0.386282	192.69	0.397421	195.32
0.343328	162.66	0.353933	169.74	0.364614	176.88	0.375296	184.02	0.386282	193.30	0.397269	196.29
0.343404	162.97	0.354314	170.47	0.364942	176.82	0.375525	184.08	0.386699	193.18	0.397574	196.05
0.344244	162.97	0.354238	170.23	0.365148	176.76	0.376364	184.76	0.387198	193.30	0.398032	195.80
0.344167	163.27	0.354543	170.17	0.365148	177.07	0.376059	184.51	0.386969	193.06	0.39826	195.62
0.344015	163.76	0.354543	169.86	0.365377	177.43	0.376135	184.76	0.386893	193.48	0.39826	195.99
0.343938	163.64	0.355154	170.11	0.365553	177.19	0.376287	184.39	0.387198	193.42	0.398108	195.74
0.344167	163.27	0.354925	170.84	0.365553	177.49	0.376974	185.24	0.387503	193.36	0.398032	196.23
0.34432	164.25	0.354772	170.60	0.365835	177.55	0.376898	184.88	0.387503	193.30	0.398413	195.86
0.344701	163.45	0.355459	170.72	0.366114	177.37	0.376745	185.37	0.388037	193.18	0.398642	196.17
0.345083	164.07	0.355383	171.08	0.366522	177.80	0.377279	185.79	0.387961	193.73	0.399023	195.50
0.345235	164.43	0.355535	170.35	0.366293	177.80	0.377508	185.43	0.388189	193.48	0.399329	197.09
0.34493	164.25	0.356222	170.96	0.366598	177.92	0.377279	186.10	0.388647	194.16	0.3991	196.54
0.345693	164.31	0.355764	171.15	0.367056	178.23	0.37789	186.10	0.388266	194.16	0.3991	196.84
0.345541	165.35	0.355917	171.51	0.366903	178.41	0.377737	186.22	0.389105	194.03	0.399863	196.11
0.345312	164.68	0.356298	170.72	0.367056	178.41	0.378195	185.79	0.388571	194.09	0.399863	197.21
0.345541	164.61	0.356832	170.96	0.367208	178.29	0.378347	186.71	0.389181	194.34	0.400092	196.60
0.345922	164.68	0.356603	171.21	0.367819	178.16	0.379034	186.95	0.389258	194.52	0.40032	196.17
0.345922	165.47	0.356668	171.76	0.367971	179.02	0.378805	185.98	0.389715	194.64	0.399939	197.21
0.34638	165.35	0.356832	171.94	0.36759	179.39	0.378424	186.83	0.389334	193.67	0.400549	196.11
0.346151	164.98	0.357214	172.18	0.368048	178.77	0.378424	187.20	0.389792	194.52	0.400397	197.45
0.34638	165.41	0.357366	171.63	0.368505	179.02	0.378805	187.69	0.389715	194.77	0.400702	196.90
0.346456	165.47	0.357519	171.82	0.368734	178.77	0.379263	187.14	0.390097	194.40	0.401083	197.57
0.347066	165.41	0.357671	172.37	0.368276	179.02	0.378958	187.56	0.390555	194.34	0.401083	196.72
0.346914	165.35	0.358053	172.73	0.368353	178.71	0.379416	187.56	0.390173	194.03	0.401083	197.33
0.346838	165.29	0.357824	172.00	0.369116	179.57	0.379568	187.44	0.390555	194.40	0.40116	197.21
0.347601	165.77	0.3579	172.24	0.369268	179.14	0.37995	187.69	0.39086	194.89	0.401694	197.33
0.347448	165.77	0.35874	173.40	0.369116	179.63	0.380331	188.17	0.390784	194.89	0.401465	197.27
0.347372	165.90	0.358663	172.67	0.369345	179.45	0.380331	188.48	0.391394	194.89	0.401694	197.09
0.347677	166.02	0.358892	172.73	0.36965	179.81	0.38056	187.81	0.390936	194.16	0.401999	197.57
0.347906	166.14	0.358587	172.43	0.369421	179.63	0.38056	188.30	0.391699	194.52	0.401923	197.21
0.348363	166.14	0.359045	172.73	0.369802	180.12	0.380789	188.30	0.391241	194.77	0.402304	197.57
0.348898	166.45	0.358892	173.04	0.369879	179.87	0.380941	188.36	0.391699	194.77	0.402228	197.15

Deflection load inches	Deflection load lbs	Deflection load inches	Deflection load lbs
0.402609	197.27	0.413748	185.06
0.402762	196.84	0.413519	184.63
0.403067	197.82	0.413748	184.02
0.403372	197.45	0.414054	183.47
0.403601	196.96	0.414282	182.93
0.403372	197.09	0.414054	182.50
0.403372	197.21	0.414282	181.22
0.404135	196.72	0.41474	180.24
0.403906	196.96	0.41474	179.87
0.404135	196.35	0.414893	178.65
0.404822	196.41	0.415122	178.04
0.404288	196.72	0.415732	177.07
0.404898	196.60	0.415579	175.84
0.404593	196.29	0.415885	173.89
0.405203	196.11	0.416037	172.37
0.405051	196.11	0.416114	172.67
0.405585	195.86	0.416114	170.53
0.405661	195.19	0.416342	168.89
0.405661	195.50	0.416419	167.61
0.406195	195.13	0.416724	167.06
0.406195	195.50	0.416876	164.86
0.406577	194.52	0.417487	163.64
0.406195	194.64	0.417258	163.52
0.406882	193.67	0.417411	159.73
0.406653	193.67	0.417487	158.51
0.40734	194.16	0.417868	157.60
0.407263	192.94	0.418021	157.41
0.407263	193.12	0.417792	155.70
0.407263	192.69	0.418631	155.34
0.40734	193.42	0.418173	154.97
0.407874	192.94	0.419013	154.12
0.407721	192.51	0.418784	153.44
0.408255	193.42	0.418708	152.77
0.408103	193.00	0.41886	152.65
0.40856	192.94	0.419776	152.29
0.408789	193.61	0.418936	152.04
0.40856	192.20	0.419547	150.45
0.408713	192.39	0.420157	150.39
0.409171	192.57		
0.409247	192.57		
0.409323	192.14		
0.409857	191.65		
0.409628	191.65		
0.409857	191.71		
0.409781	191.59		
0.410468	191.10		
0.410773	191.29		
0.410468	190.07		
0.410544	190.55		
0.410773	190.37		
0.411383	189.64		
0.411154	190.01		
0.411536	189.76		
0.411154	189.70		
0.411994	188.91		
0.412222	188.78		
0.412222	188.66		
0.411917	187.69		
0.412146	188.36		
0.41207	187.32		
0.412833	187.32		
0.412604	186.89		
0.413291	185.98		
0.413138	185.67		
0.413519	185.43		

