

2012

Comparative Motion Study

Axial Trac vs. Conventional Flexion-Distraction Table

Figure I

Axial Trac Distraction Movement: **0.07m**

Figure II

Conventional Table Distraction Movement: **0m**

Figure III

Axial Trac Flexion Movement: **0.44m**
(note bell curve indicating increasing velocity)

Figure IV

Conventional table Flexion Movement: **0.19m**

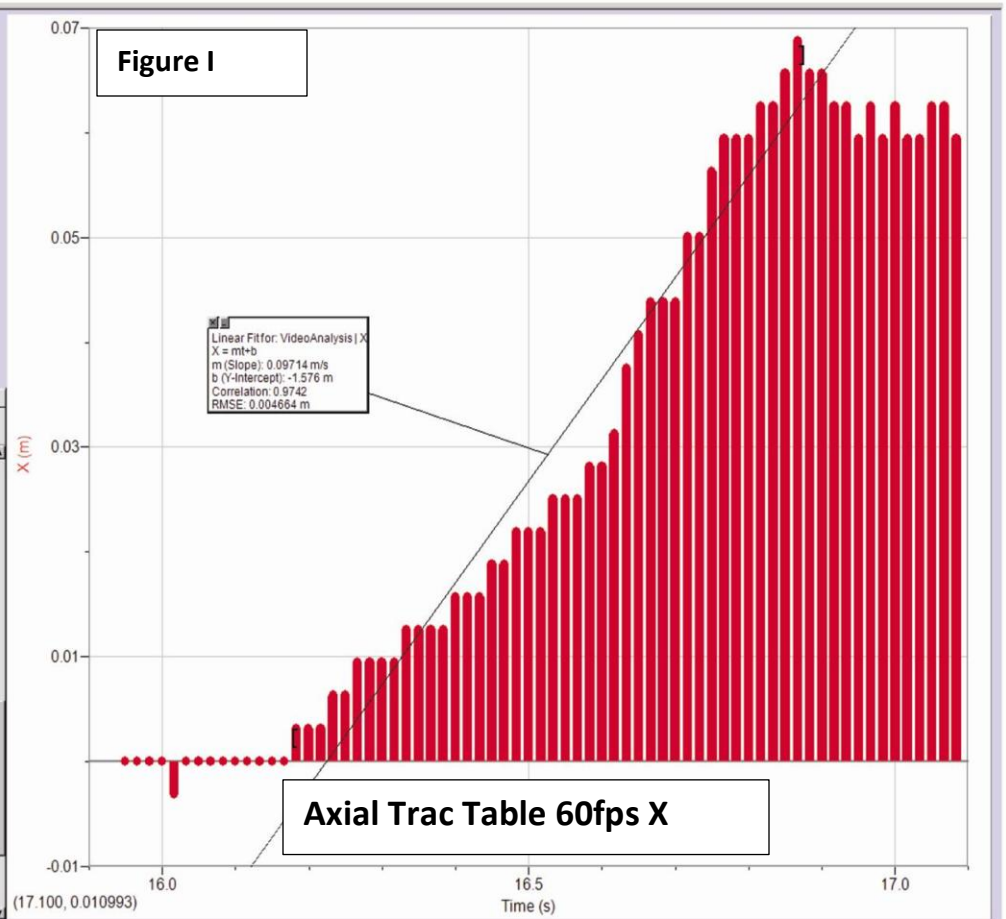
Summary:

Axial Trac flexed twice as far as the conventional table and produced 0.07m of Actual Distraction while the conventional table produced Zero Actual Distraction.





VideoAnalysis					
Time (s)	X (m)	Y (m)	X Velocity (m/s)	Y Velocity (m/s)	
38	16.57	0.02502	-0.09697	0.078	-0.474
39	16.58	0.02815	-0.1032	0.099	-0.490
40	16.60	0.02815	-0.1126	0.135	-0.547
41	16.62	0.03128	-0.1220	0.234	-0.583
42	16.63	0.03754	-0.1314	0.245	-0.656
43	16.65	0.04066	-0.1439	0.182	-0.724
44	16.67	0.04379	-0.1564	0.109	-0.750
45	16.68	0.04379	-0.1689	0.068	-0.781
46	16.70	0.04379	-0.1814	0.151	-0.865
47	16.72	0.05005	-0.1971	0.182	-0.979
48	16.73	0.05005	-0.2158	0.198	-1.010
49	16.75	0.05630	-0.2315	0.214	-1.000
50	16.77	0.05943	-0.2471	0.115	-1.083
51	16.78	0.05943	-0.2690	0.052	-1.104
52	16.80	0.05943	-0.2846	0.078	-1.088
53	16.82	0.06256	-0.3034	0.094	-1.156
54	16.83	0.06256	-0.3253	0.104	-1.115
55	16.85	0.06569	-0.3409	0.120	-1.052
56	16.87	0.06882	-0.3597	0.016	-1.005
57	16.88	0.06569	-0.3754	-0.062	-0.911
58	16.90	0.06569	-0.3910	-0.089	-0.776
59	16.92	0.06256	-0.4004	-0.089	-0.677
60	16.93	0.06256	-0.4129	-0.073	-0.615
61	16.95	0.05943	-0.4223	-0.021	-0.484



VideoAnalysis					
Time (s)	X (m)	Y (m)	X Velocity (m/s)	Y Velocity (m/s)	
18	12.10	0.002488	-0.08175	0.000	-0.393
19	12.11	0.002488	-0.08804	0.000	-0.419
20	12.13	0.002488	-0.09748	0.000	-0.356
21	12.15	0.002488	-0.1006	0.000	-0.262
22	12.16	0.002488	-0.1038	0.000	-0.299
23	12.18	0.002488	-0.1101	0.000	-0.372
24	12.20	0.002488	-0.1164	0.000	-0.435
25	12.21	0.002488	-0.1258	0.000	-0.419
26	12.23	0.002488	-0.1321	0.000	-0.309
27	12.25	0.002488	-0.1352	0.000	-0.246
28	12.26	0.002488	-0.1384	0.000	-0.288
29	12.28	0.002488	-0.1447	0.000	-0.346
30	12.30	0.002488	-0.1510	0.000	-0.346
31	12.31	0.002488	-0.1573	0.000	-0.288
32	12.33	0.002488	-0.1604	0.000	-0.246
33	12.35	0.002488	-0.1635	0.000	-0.304
34	12.36	0.002488	-0.1698	0.000	-0.388
35	12.38	0.002488	-0.1793	0.000	-0.330
36	12.40	0.002488	-0.1824	0.000	-0.189
37	12.41	0.002488	-0.1824	0.000	-0.199
38	12.43	0.002488	-0.1887	0.000	-0.236
39	12.45	0.002488	-0.1919	0.000	-0.204
40	12.46	0.002488	-0.1950	0.000	-0.196
41	12.48	0.002488	-0.1982	0.000	-0.189
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