

TABLE: Joint Displacements									
Joint	OutputCase	CaseType	StepType	U1	U2	U3	R1	R2	R3
Text	Text	Text	Text	m	m	m	Radians	Radians	Radians
140	Tren A1	LinDirHis	Max	0	0	1.099E-11	0.000002459	0.000026	0
140	Tren A1	LinDirHis	Min	0	0	-0.000278	-0.000002327	-8.619E-13	0
229	Tren A1	LinDirHis	Max	0	0	2.667E-12	1.963E-08	1.648E-12	0
229	Tren A1	LinDirHis	Min	0	0	-0.000258	-0.000007	-0.000022	0
230	Tren A1	LinDirHis	Max	0	0	5.677E-12	2.601E-07	5.995E-12	0
230	Tren A1	LinDirHis	Min	0	0	-0.000268	-0.000035	-0.000012	0
231	Tren A1	LinDirHis	Max	0	0	1.198E-12	1.13E-12	0.000024	0
231	Tren A1	LinDirHis	Min	0	0	-0.000222	-0.000093	-0.000008909	0
232	Tren A1	LinDirHis	Max	0	0	0.00000201	6.853E-13	0.000055	0
232	Tren A1	LinDirHis	Min	0	0	-0.00038	-0.000109	-0.000003935	0
233	Tren A1	LinDirHis	Max	0	0	0.000004115	5.552E-13	0.000025	0
233	Tren A1	LinDirHis	Min	0	0	-0.000504	-0.000143	-0.00000642	0
234	Tren A1	LinDirHis	Max	0	0	0.000001269	2.989E-07	0.000054	0
234	Tren A1	LinDirHis	Min	0	0	-0.000568	-0.000188	-0.000009129	0
235	Tren A1	LinDirHis	Max	0	0	6.191E-07	1.993E-07	0.000071	0
235	Tren A1	LinDirHis	Min	0	0	-0.000793	-0.000192	-0.000007243	0
236	Tren A1	LinDirHis	Max	0	0	0.000001769	7.829E-08	0.000053	0
236	Tren A1	LinDirHis	Min	0	0	-0.000972	-0.000218	-0.000013	0
237	Tren A1	LinDirHis	Max	0	0	0.000001213	2.371E-07	0.000076	0
237	Tren A1	LinDirHis	Min	0	0	-0.001137	-0.000243	-0.000015	0
238	Tren A1	LinDirHis	Max	0	0	0.000001011	0.00000023	0.00008	0
238	Tren A1	LinDirHis	Min	0	0	-0.001389	-0.000241	-0.000015	0
239	Tren A1	LinDirHis	Max	0	0	0.000002137	1.679E-07	0.000073	0
239	Tren A1	LinDirHis	Min	0	0	-0.001593	-0.000258	-0.000022	0
240	Tren A1	LinDirHis	Max	0	0	0.000001799	2.888E-07	0.000088	0
240	Tren A1	LinDirHis	Min	0	0	-0.001805	-0.000266	-0.000024	0
241	Tren A1	LinDirHis	Max	0	0	0.0000002	3.096E-07	0.000088	0
241	Tren A1	LinDirHis	Min	0	0	-0.002058	-0.000261	-0.000026	0
242	Tren A1	LinDirHis	Max	0	0	0.000003017	2.746E-07	0.000088	0
242	Tren A1	LinDirHis	Min	0	0	-0.002287	-0.000265	-0.000031	0
244	Tren A1	LinDirHis	Max	0	0	0.00000352	3.709E-07	0.000093	0
244	Tren A1	LinDirHis	Min	0	0	-0.002762	-0.00025	-0.000038	0
245	Tren A1	LinDirHis	Max	0	0	0.000004351	3.492E-07	0.000094	0
245	Tren A1	LinDirHis	Min	0	0	-0.002982	-0.000243	-0.000044	0
246	Tren A1	LinDirHis	Max	0	0	0.00000458	4.076E-07	0.000095	0
246	Tren A1	LinDirHis	Min	0	0	-0.003199	-0.000228	-0.000047	0
247	Tren A1	LinDirHis	Max	0	0	0.000005211	3.849E-07	0.000091	0
247	Tren A1	LinDirHis	Min	0	0	-0.003407	-0.000211	-0.000054	0
248	Tren A1	LinDirHis	Max	0	0	0.000006136	3.535E-07	0.000093	0
248	Tren A1	LinDirHis	Min	0	0	-0.003601	-0.000195	-0.00006	0
249	Tren A1	LinDirHis	Max	0	0	0.000006992	3.778E-07	0.00009	0
249	Tren A1	LinDirHis	Min	0	0	-0.003776	-0.000173	-0.000065	0
250	Tren A1	LinDirHis	Max	0	0	0.000008479	3.585E-07	0.000087	0
250	Tren A1	LinDirHis	Min	0	0	-0.003933	-0.000151	-0.000071	0
251	Tren A1	LinDirHis	Max	0	0	0.00001	3.511E-07	0.000083	0
251	Tren A1	LinDirHis	Min	0	0	-0.004068	-0.000129	-0.000075	0
252	Tren A1	LinDirHis	Max	0	0	0.000011	3.519E-07	0.000079	0

252	Tren A1	LinDirHis	Min	0	0	-0.004183	-0.000102	-0.000079	0
253	Tren A1	LinDirHis	Max	0	0	0.000012	3.073E-07	0.000074	0
253	Tren A1	LinDirHis	Min	0	0	-0.004275	-0.000076	-0.000083	0
254	Tren A1	LinDirHis	Max	0	0	0.000013	0.000000264	0.000068	0
254	Tren A1	LinDirHis	Min	0	0	-0.00434	-0.00005	-0.000087	0
255	Tren A1	LinDirHis	Max	0	0	0.000014	2.192E-07	0.000061	0
255	Tren A1	LinDirHis	Min	0	0	-0.004375	-0.000024	-0.000089	0
256	Tren A1	LinDirHis	Max	0	0	0.000014	0.000017	0.000054	0
256	Tren A1	LinDirHis	Min	0	0	-0.004383	-0.000008133	-0.000091	0
257	Tren A1	LinDirHis	Max	0	0	0.000014	0.000044	0.000046	0
257	Tren A1	LinDirHis	Min	0	0	-0.00436	-0.000004483	-0.000094	0
258	Tren A1	LinDirHis	Max	0	0	0.000014	0.000072	0.000037	0
258	Tren A1	LinDirHis	Min	0	0	-0.004303	-0.000002714	-0.000096	0
259	Tren A1	LinDirHis	Max	0	0	0.000014	0.0001	0.000028	0
259	Tren A1	LinDirHis	Min	0	0	-0.004216	-0.000001769	-0.000098	0
260	Tren A1	LinDirHis	Max	0	0	0.000014	0.000127	0.000019	0
260	Tren A1	LinDirHis	Min	0	0	-0.004095	-0.000001195	-0.0001	0
261	Tren A1	LinDirHis	Max	0	0	0.000013	0.000152	0.000011	0
261	Tren A1	LinDirHis	Min	0	0	-0.003943	-0.00000101	-0.000102	0
262	Tren A1	LinDirHis	Max	0	0	0.000012	0.000177	0.00000209	0
262	Tren A1	LinDirHis	Min	0	0	-0.003762	-9.394E-07	-0.000102	0
263	Tren A1	LinDirHis	Max	0	0	0.000012	0.000198	0.000001479	0
263	Tren A1	LinDirHis	Min	0	0	-0.003554	-0.000000941	-0.0001	0
264	Tren A1	LinDirHis	Max	0	0	0.000011	0.000218	0.000001355	0
264	Tren A1	LinDirHis	Min	0	0	-0.003324	-9.336E-07	-0.000101	0
265	Tren A1	LinDirHis	Max	0	0	0.000009849	0.000238	0.000001273	0
265	Tren A1	LinDirHis	Min	0	0	-0.00307	-9.692E-07	-0.000102	0
266	Tren A1	LinDirHis	Max	0	0	0.000008218	0.000248	0.000001158	0
266	Tren A1	LinDirHis	Min	0	0	-0.002806	-9.281E-07	-0.0001	0
267	Tren A1	LinDirHis	Max	0	0	0.000007516	0.000256	0.000000962	0
267	Tren A1	LinDirHis	Min	0	0	-0.002526	-8.219E-07	-0.000104	0
268	Tren A1	LinDirHis	Max	0	0	0.000006555	0.000267	0.00000095	0
268	Tren A1	LinDirHis	Min	0	0	-0.002215	-0.0000009	-0.000102	0
269	Tren A1	LinDirHis	Max	0	0	0.000005645	0.00026	8.115E-07	0
269	Tren A1	LinDirHis	Min	0	0	-0.00193	-8.822E-07	-0.000092	0
270	Tren A1	LinDirHis	Max	0	0	0.000005437	0.000253	7.215E-07	0
270	Tren A1	LinDirHis	Min	0	0	-0.001629	-0.000000782	-0.0001	0
271	Tren A1	LinDirHis	Max	0	0	0.000004283	0.000251	7.571E-07	0
271	Tren A1	LinDirHis	Min	0	0	-0.001312	-8.745E-07	-0.000087	0
272	Tren A1	LinDirHis	Max	0	0	0.000003347	0.000221	5.509E-07	0
272	Tren A1	LinDirHis	Min	0	0	-0.001078	-0.000000795	-0.000071	0
273	Tren A1	LinDirHis	Max	0	0	0.000003207	0.000199	4.745E-07	0
273	Tren A1	LinDirHis	Min	0	0	-0.000809	-6.595E-07	-0.000082	0
274	Tren A1	LinDirHis	Max	0	0	0.000001873	0.000177	5.704E-07	0
274	Tren A1	LinDirHis	Min	0	0	-0.00057	-7.323E-07	-0.000048	0
275	Tren A1	LinDirHis	Max	0	0	0.000002413	0.000114	2.339E-07	0
275	Tren A1	LinDirHis	Min	0	0	-0.000476	-5.949E-07	-0.000037	0
276	Tren A1	LinDirHis	Max	0	0	0.000002353	0.000074	6.345E-07	0
276	Tren A1	LinDirHis	Min	0	0	-0.000265	-4.385E-07	-0.000059	0
277	Tren A1	LinDirHis	Max	0	0	0.000003664	0.000035	0.000001228	0

277	Tren A1	LinDirHis	Min	0	0	-0.000066	-4.986E-07	-0.000013	0
278	Tren A1	LinDirHis	Max	0	0	0.000000883	0.000034	4.353E-07	0
278	Tren A1	LinDirHis	Min	0	0	-0.000078	-4.851E-07	-0.000065	0
279	Tren A1	LinDirHis	Max	0	0	3.805E-12	0.00000225	0.000079	0
279	Tren A1	LinDirHis	Min	0	0	-0.00014	-7.97E-08	-0.000001234	0
280	Tren A1	LinDirHis	Max	0	0	6.272E-08	7.454E-13	0.000053	0
280	Tren A1	LinDirHis	Min	0	0	-0.000308	-0.000104	-0.000004374	0
283	Tren A1	LinDirHis	Max	0	0	0.000004183	6.408E-13	0.000038	0
283	Tren A1	LinDirHis	Min	0	0	-0.000479	-0.000125	-0.000002354	0
347	Tren A1	LinDirHis	Max	0	0	0.000002807	9.563E-08	0.000023	0
347	Tren A1	LinDirHis	Min	0	0	-0.000544	-0.000173	-0.000009134	0
378	Tren A1	LinDirHis	Max	0	0	2.845E-07	2.921E-07	0.000076	0
378	Tren A1	LinDirHis	Min	0	0	-0.00069	-0.000194	-0.000006297	0
379	Tren A1	LinDirHis	Max	0	0	0.000001713	1.095E-07	0.000058	0
379	Tren A1	LinDirHis	Min	0	0	-0.00091	-0.000207	-0.000007943	0
380	Tren A1	LinDirHis	Max	0	0	0.000001556	1.542E-07	0.00006	0
380	Tren A1	LinDirHis	Min	0	0	-0.001058	-0.000239	-0.000013	0
381	Tren A1	LinDirHis	Max	0	0	8.089E-07	2.974E-07	0.000088	0
381	Tren A1	LinDirHis	Min	0	0	-0.001275	-0.000247	-0.000013	0
383	Tren A1	LinDirHis	Max	0	0	0.000001405	0.000000171	0.000072	0
383	Tren A1	LinDirHis	Min	0	0	-0.001508	-0.000254	-0.000016	0
388	Tren A1	LinDirHis	Max	0	0	0.000001997	2.675E-07	0.00008	0
388	Tren A1	LinDirHis	Min	0	0	-0.001702	-0.00027	-0.00002	0
389	Tren A1	LinDirHis	Max	0	0	0.00000181	3.658E-07	0.000092	0
389	Tren A1	LinDirHis	Min	0	0	-0.001942	-0.000267	-0.000021	0
390	Tren A1	LinDirHis	Max	0	0	0.000002399	2.701E-07	0.000087	0
390	Tren A1	LinDirHis	Min	0	0	-0.002183	-0.000267	-0.000024	0
391	Tren A1	LinDirHis	Max	0	0	0.000003165	3.696E-07	0.000093	0
391	Tren A1	LinDirHis	Min	0	0	-0.00241	-0.00027	-0.000028	0
392	Tren A1	LinDirHis	Max	0	0	0.000003336	4.168E-07	0.000095	0
392	Tren A1	LinDirHis	Min	0	0	-0.002653	-0.00026	-0.000031	0
393	Tren A1	LinDirHis	Max	0	0	0.000004021	3.443E-07	0.000094	0
393	Tren A1	LinDirHis	Min	0	0	-0.002879	-0.000253	-0.000036	0
394	Tren A1	LinDirHis	Max	0	0	0.000004701	4.178E-07	0.000095	0
394	Tren A1	LinDirHis	Min	0	0	-0.003097	-0.000244	-0.000041	0
448	Tren A1	LinDirHis	Max	0	0	0.000005066	4.242E-07	0.000093	0
448	Tren A1	LinDirHis	Min	0	0	-0.003314	-0.000226	-0.000046	0
449	Tren A1	LinDirHis	Max	0	0	0.000005813	3.532E-07	0.000091	0
449	Tren A1	LinDirHis	Min	0	0	-0.003515	-0.000209	-0.000053	0
450	Tren A1	LinDirHis	Max	0	0	0.000006625	3.676E-07	0.000089	0
450	Tren A1	LinDirHis	Min	0	0	-0.003701	-0.000188	-0.000059	0
451	Tren A1	LinDirHis	Max	0	0	0.000007436	3.578E-07	0.000085	0
451	Tren A1	LinDirHis	Min	0	0	-0.003869	-0.000164	-0.000064	0
452	Tren A1	LinDirHis	Max	0	0	0.000008692	3.385E-07	0.000083	0
452	Tren A1	LinDirHis	Min	0	0	-0.004016	-0.000142	-0.00007	0
455	Tren A1	LinDirHis	Max	0	0	0.00000984	3.567E-07	0.000078	0
455	Tren A1	LinDirHis	Min	0	0	-0.004144	-0.000117	-0.000076	0
516	Tren A1	LinDirHis	Max	0	0	0.000011	3.177E-07	0.000074	0
516	Tren A1	LinDirHis	Min	0	0	-0.004249	-0.00009	-0.00008	0
517	Tren A1	LinDirHis	Max	0	0	0.000012	2.603E-07	0.000069	0

517	Tren A1	LinDirHis	Min	0	0	-0.00433	-0.000064	-0.000085	0
518	Tren A1	LinDirHis	Max	0	0	0.000013	2.283E-07	0.000062	0
518	Tren A1	LinDirHis	Min	0	0	-0.004382	-0.000037	-0.000089	0
519	Tren A1	LinDirHis	Max	0	0	0.000014	0.000004631	0.000056	0
519	Tren A1	LinDirHis	Min	0	0	-0.004405	-0.000013	-0.000091	0
527	Tren A1	LinDirHis	Max	0	0	0.000014	0.000031	0.000048	0
527	Tren A1	LinDirHis	Min	0	0	-0.004396	-0.000005727	-0.000093	0
528	Tren A1	LinDirHis	Max	0	0	0.000014	0.000059	0.000039	0
528	Tren A1	LinDirHis	Min	0	0	-0.004353	-0.0000035	-0.000096	0
529	Tren A1	LinDirHis	Max	0	0	0.000015	0.000087	0.000032	0
529	Tren A1	LinDirHis	Min	0	0	-0.00428	-0.000002289	-0.000096	0
531	Tren A1	LinDirHis	Max	0	0	0.000015	0.000115	0.000023	0
531	Tren A1	LinDirHis	Min	0	0	-0.004173	-0.000001529	-0.000097	0
532	Tren A1	LinDirHis	Max	0	0	0.000014	0.000141	0.000014	0
532	Tren A1	LinDirHis	Min	0	0	-0.004034	-0.000001104	-0.000097	0
533	Tren A1	LinDirHis	Max	0	0	0.000014	0.000167	0.000006906	0
533	Tren A1	LinDirHis	Min	0	0	-0.003866	-0.000001028	-0.000096	0
539	Tren A1	LinDirHis	Max	0	0	0.000013	0.000192	0.000001541	0
539	Tren A1	LinDirHis	Min	0	0	-0.003669	-0.000001067	-0.000098	0
540	Tren A1	LinDirHis	Max	0	0	0.000012	0.000213	0.000001449	0
540	Tren A1	LinDirHis	Min	0	0	-0.003447	-9.942E-07	-0.000099	0
541	Tren A1	LinDirHis	Max	0	0	0.000011	0.000234	0.000001377	0
541	Tren A1	LinDirHis	Min	0	0	-0.003203	-9.986E-07	-0.000102	0
542	Tren A1	LinDirHis	Max	0	0	0.000009633	0.00025	0.000001329	0
542	Tren A1	LinDirHis	Min	0	0	-0.002941	-9.808E-07	-0.000103	0
543	Tren A1	LinDirHis	Max	0	0	0.000008167	0.000256	0.000001128	0
543	Tren A1	LinDirHis	Min	0	0	-0.002675	-8.496E-07	-0.000104	0
544	Tren A1	LinDirHis	Max	0	0	0.000007239	0.000267	0.000000984	0
544	Tren A1	LinDirHis	Min	0	0	-0.002376	-8.133E-07	-0.000107	0
545	Tren A1	LinDirHis	Max	0	0	0.000005984	0.00027	9.012E-07	0
545	Tren A1	LinDirHis	Min	0	0	-0.002078	-8.809E-07	-0.000096	0
546	Tren A1	LinDirHis	Max	0	0	0.000005158	0.000259	7.224E-07	0
546	Tren A1	LinDirHis	Min	0	0	-0.001796	-0.000000802	-0.000095	0
547	Tren A1	LinDirHis	Max	0	0	0.000004546	0.000258	6.782E-07	0
547	Tren A1	LinDirHis	Min	0	0	-0.001477	-0.000000792	-0.000098	0
548	Tren A1	LinDirHis	Max	0	0	0.000003397	0.000243	6.009E-07	0
548	Tren A1	LinDirHis	Min	0	0	-0.001203	-8.569E-07	-0.00007	0
549	Tren A1	LinDirHis	Max	0	0	0.000003723	0.000212	4.487E-07	0
549	Tren A1	LinDirHis	Min	0	0	-0.000966	-6.787E-07	-0.000077	0
550	Tren A1	LinDirHis	Max	0	0	0.000002956	0.000196	5.945E-07	0
550	Tren A1	LinDirHis	Min	0	0	-0.000689	-7.314E-07	-0.000071	0
551	Tren A1	LinDirHis	Max	0	0	0.000001585	0.000152	3.867E-07	0
551	Tren A1	LinDirHis	Min	0	0	-0.000535	-0.000000743	-0.000024	0
552	Tren A1	LinDirHis	Max	0	0	0.000003235	0.000093	3.359E-07	0
552	Tren A1	LinDirHis	Min	0	0	-0.000404	-4.887E-07	-0.000061	0
553	Tren A1	LinDirHis	Max	0	0	0.000001117	0.000052	6.277E-07	0
553	Tren A1	LinDirHis	Min	0	0	-0.000198	-5.343E-07	-0.000042	0
556	Tren A1	LinDirHis	Max	0	0	5.006E-12	0.000003801	0.000087	0
556	Tren A1	LinDirHis	Min	0	0	-0.000162	-2.237E-12	-0.000001376	0
557	Tren A1	LinDirHis	Max	0	0	0.000003049	3.703E-07	0.000095	0

Apéndice D				Flecha Dinámica Tren A1						V= 250 km/h
557	Tren A1	LinDirHis	Min	0	0	-0.002523	-0.00026	-0.000033	0	