

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	8.232E-12	0.000002654	0.000022	0
140	Tren A1	LinDirHis	Min	0	0	-0.000284	-0.000001236	-2.443E-13	0
229	Tren A1	LinDirHis	Max	0	0	3.291E-12	1.963E-08	7.987E-13	0
229	Tren A1	LinDirHis	Min	0	0	-0.000259	-0.000066	-0.000022	0
230	Tren A1	LinDirHis	Max	0	0	2.651E-12	2.601E-07	5.199E-12	0
230	Tren A1	LinDirHis	Min	0	0	-0.000266	-0.000032	-0.00001	0
231	Tren A1	LinDirHis	Max	0	0	3.517E-13	6.148E-13	0.000016	0
231	Tren A1	LinDirHis	Min	0	0	-0.000215	-0.00009	-0.000006865	0
232	Tren A1	LinDirHis	Max	0	0	0.000001773	1.137E-12	0.000047	0
232	Tren A1	LinDirHis	Min	0	0	-0.000358	-0.000104	-0.000004173	0
233	Tren A1	LinDirHis	Max	0	0	0.000002415	8.484E-13	0.000027	0
233	Tren A1	LinDirHis	Min	0	0	-0.000477	-0.000136	-0.000003764	0
234	Tren A1	LinDirHis	Max	0	0	6.793E-07	1.714E-07	0.00005	0
234	Tren A1	LinDirHis	Min	0	0	-0.000539	-0.000178	-0.000006827	0
235	Tren A1	LinDirHis	Max	0	0	0.000000328	1.192E-07	0.000065	0
235	Tren A1	LinDirHis	Min	0	0	-0.000752	-0.000182	-0.000004878	0
236	Tren A1	LinDirHis	Max	0	0	0.000001359	5.341E-08	0.000046	0
236	Tren A1	LinDirHis	Min	0	0	-0.000922	-0.000208	-0.000009181	0
237	Tren A1	LinDirHis	Max	0	0	6.075E-07	1.504E-07	0.000072	0
237	Tren A1	LinDirHis	Min	0	0	-0.001081	-0.000231	-0.00001	0
238	Tren A1	LinDirHis	Max	0	0	5.517E-07	0.000000162	0.000077	0
238	Tren A1	LinDirHis	Min	0	0	-0.001323	-0.000229	-0.00001	0
239	Tren A1	LinDirHis	Max	0	0	0.000001448	9.449E-08	0.000068	0
239	Tren A1	LinDirHis	Min	0	0	-0.001513	-0.000245	-0.000015	0
240	Tren A1	LinDirHis	Max	0	0	0.000001116	1.791E-07	0.000077	0
240	Tren A1	LinDirHis	Min	0	0	-0.001717	-0.000254	-0.000016	0
241	Tren A1	LinDirHis	Max	0	0	0.000001176	2.234E-07	0.000078	0
241	Tren A1	LinDirHis	Min	0	0	-0.001959	-0.000249	-0.00002	0
242	Tren A1	LinDirHis	Max	0	0	0.000002037	2.026E-07	0.000082	0
242	Tren A1	LinDirHis	Min	0	0	-0.00218	-0.000252	-0.000023	0
244	Tren A1	LinDirHis	Max	0	0	0.000002317	0.00000025	0.000081	0
244	Tren A1	LinDirHis	Min	0	0	-0.002619	-0.000238	-0.000027	0
245	Tren A1	LinDirHis	Max	0	0	0.000002836	2.603E-07	0.00008	0
245	Tren A1	LinDirHis	Min	0	0	-0.002836	-0.000232	-0.000034	0
246	Tren A1	LinDirHis	Max	0	0	0.000003526	3.033E-07	0.000083	0
246	Tren A1	LinDirHis	Min	0	0	-0.003044	-0.000217	-0.000037	0
247	Tren A1	LinDirHis	Max	0	0	0.000003973	2.379E-07	0.000081	0
247	Tren A1	LinDirHis	Min	0	0	-0.003241	-0.0002	-0.00004	0
248	Tren A1	LinDirHis	Max	0	0	0.000004165	2.495E-07	0.000081	0
248	Tren A1	LinDirHis	Min	0	0	-0.00342	-0.000186	-0.000045	0
249	Tren A1	LinDirHis	Max	0	0	0.00000462	2.817E-07	0.000073	0
249	Tren A1	LinDirHis	Min	0	0	-0.003598	-0.000166	-0.000048	0
250	Tren A1	LinDirHis	Max	0	0	0.000005911	2.426E-07	0.000071	0
250	Tren A1	LinDirHis	Min	0	0	-0.00375	-0.000144	-0.000058	0
251	Tren A1	LinDirHis	Max	0	0	0.000007432	2.234E-07	0.000072	0
251	Tren A1	LinDirHis	Min	0	0	-0.003883	-0.000123	-0.000059	0
252	Tren A1	LinDirHis	Max	0	0	0.000008206	2.525E-07	0.000063	0

252	Tren A1	LinDirHis	Min	0	0	-0.003986	-0.000097	-0.000059	0
253	Tren A1	LinDirHis	Max	0	0	0.000008302	2.256E-07	0.000057	0
253	Tren A1	LinDirHis	Min	0	0	-0.004068	-0.000072	-0.000063	0
254	Tren A1	LinDirHis	Max	0	0	0.00000864	1.719E-07	0.000049	0
254	Tren A1	LinDirHis	Min	0	0	-0.004137	-0.000047	-0.000068	0
255	Tren A1	LinDirHis	Max	0	0	0.000009758	1.531E-07	0.000046	0
255	Tren A1	LinDirHis	Min	0	0	-0.004169	-0.000021	-0.000072	0
256	Tren A1	LinDirHis	Max	0	0	0.00001	0.000015	0.000041	0
256	Tren A1	LinDirHis	Min	0	0	-0.004171	-0.000006044	-0.000072	0
257	Tren A1	LinDirHis	Max	0	0	0.00001	0.000041	0.000032	0
257	Tren A1	LinDirHis	Min	0	0	-0.004141	-0.000003203	-0.000074	0
258	Tren A1	LinDirHis	Max	0	0	0.000009056	0.000067	0.000021	0
258	Tren A1	LinDirHis	Min	0	0	-0.004096	-0.000002104	-0.000072	0
259	Tren A1	LinDirHis	Max	0	0	0.00001	0.000094	0.000014	0
259	Tren A1	LinDirHis	Min	0	0	-0.004015	-0.000001255	-0.000079	0
260	Tren A1	LinDirHis	Max	0	0	0.000011	0.000121	0.000011	0
260	Tren A1	LinDirHis	Min	0	0	-0.003905	-7.987E-07	-0.000078	0
261	Tren A1	LinDirHis	Max	0	0	0.00001	0.000144	0.000001215	0
261	Tren A1	LinDirHis	Min	0	0	-0.003754	-7.555E-07	-0.000076	0
262	Tren A1	LinDirHis	Max	0	0	0.000009349	0.000169	0.000001163	0
262	Tren A1	LinDirHis	Min	0	0	-0.003578	-6.396E-07	-0.000085	0
263	Tren A1	LinDirHis	Max	0	0	0.000008288	0.000189	0.000001006	0
263	Tren A1	LinDirHis	Min	0	0	-0.003387	-7.247E-07	-0.000089	0
264	Tren A1	LinDirHis	Max	0	0	0.000008391	0.000207	9.897E-07	0
264	Tren A1	LinDirHis	Min	0	0	-0.003165	-6.517E-07	-0.000091	0
265	Tren A1	LinDirHis	Max	0	0	0.00000767	0.000227	0.000001007	0
265	Tren A1	LinDirHis	Min	0	0	-0.002918	-6.492E-07	-0.000088	0
266	Tren A1	LinDirHis	Max	0	0	0.000006043	0.000236	9.168E-07	0
266	Tren A1	LinDirHis	Min	0	0	-0.00266	-0.000000678	-0.000088	0
267	Tren A1	LinDirHis	Max	0	0	0.000004876	0.000243	7.101E-07	0
267	Tren A1	LinDirHis	Min	0	0	-0.0024	-5.616E-07	-0.000096	0
268	Tren A1	LinDirHis	Max	0	0	0.000004662	0.000254	6.165E-07	0
268	Tren A1	LinDirHis	Min	0	0	-0.002106	-5.631E-07	-0.000095	0
269	Tren A1	LinDirHis	Max	0	0	0.000004144	0.000248	0.000000586	0
269	Tren A1	LinDirHis	Min	0	0	-0.00184	-6.323E-07	-0.000082	0
270	Tren A1	LinDirHis	Max	0	0	0.000004013	0.000242	5.248E-07	0
270	Tren A1	LinDirHis	Min	0	0	-0.00155	-5.769E-07	-0.000088	0
271	Tren A1	LinDirHis	Max	0	0	0.000003027	0.000239	5.609E-07	0
271	Tren A1	LinDirHis	Min	0	0	-0.001247	-0.000000645	-0.00008	0
272	Tren A1	LinDirHis	Max	0	0	0.000002434	0.00021	3.964E-07	0
272	Tren A1	LinDirHis	Min	0	0	-0.001028	-5.104E-07	-0.000067	0
273	Tren A1	LinDirHis	Max	0	0	0.000002222	0.00019	3.848E-07	0
273	Tren A1	LinDirHis	Min	0	0	-0.000772	-4.609E-07	-0.000078	0
274	Tren A1	LinDirHis	Max	0	0	0.000001383	0.000169	4.042E-07	0
274	Tren A1	LinDirHis	Min	0	0	-0.000542	-5.397E-07	-0.00004	0
275	Tren A1	LinDirHis	Max	0	0	0.00000187	0.000108	1.701E-07	0
275	Tren A1	LinDirHis	Min	0	0	-0.000447	-4.187E-07	-0.000033	0
276	Tren A1	LinDirHis	Max	0	0	0.00000155	0.000071	0.000000459	0
276	Tren A1	LinDirHis	Min	0	0	-0.000251	-3.061E-07	-0.000056	0
277	Tren A1	LinDirHis	Max	0	0	0.000003073	0.000028	1.229E-07	0

277	Tren A1	LinDirHis	Min	0	0	-0.000069	-0.000000347	-0.000006555	0
278	Tren A1	LinDirHis	Max	0	0	7.868E-07	0.000034	2.779E-07	0
278	Tren A1	LinDirHis	Min	0	0	-0.000089	-3.291E-07	-0.000045	0
279	Tren A1	LinDirHis	Max	0	0	6.149E-12	0.000002586	0.00008	0
279	Tren A1	LinDirHis	Min	0	0	-0.000146	-1.08E-12	-0.000001234	0
280	Tren A1	LinDirHis	Max	0	0	6.272E-08	4.146E-13	0.000051	0
280	Tren A1	LinDirHis	Min	0	0	-0.000287	-0.0001	-0.000002574	0
283	Tren A1	LinDirHis	Max	0	0	0.000002642	2.265E-14	0.000037	0
283	Tren A1	LinDirHis	Min	0	0	-0.000442	-0.00012	-7.746E-07	0
347	Tren A1	LinDirHis	Max	0	0	0.000001587	8.012E-08	0.000019	0
347	Tren A1	LinDirHis	Min	0	0	-0.00051	-0.000164	-0.000006344	0
378	Tren A1	LinDirHis	Max	0	0	2.986E-07	0.000000153	0.00007	0
378	Tren A1	LinDirHis	Min	0	0	-0.000653	-0.000184	-0.000004824	0
379	Tren A1	LinDirHis	Max	0	0	0.000001262	9.11E-08	0.000056	0
379	Tren A1	LinDirHis	Min	0	0	-0.000863	-0.000197	-0.000005155	0
380	Tren A1	LinDirHis	Max	0	0	0.000001039	1.123E-07	0.000055	0
380	Tren A1	LinDirHis	Min	0	0	-0.001001	-0.000228	-0.000009269	0
381	Tren A1	LinDirHis	Max	0	0	0.000000598	1.604E-07	0.00008	0
381	Tren A1	LinDirHis	Min	0	0	-0.001208	-0.000236	-0.000008402	0
383	Tren A1	LinDirHis	Max	0	0	0.000001175	1.347E-07	0.000063	0
383	Tren A1	LinDirHis	Min	0	0	-0.001435	-0.000242	-0.000012	0
388	Tren A1	LinDirHis	Max	0	0	0.000001262	1.838E-07	0.000074	0
388	Tren A1	LinDirHis	Min	0	0	-0.001627	-0.000257	-0.000014	0
389	Tren A1	LinDirHis	Max	0	0	0.000001312	2.469E-07	0.000084	0
389	Tren A1	LinDirHis	Min	0	0	-0.00185	-0.000254	-0.000015	0
390	Tren A1	LinDirHis	Max	0	0	0.000001861	1.768E-07	0.000078	0
390	Tren A1	LinDirHis	Min	0	0	-0.002074	-0.000255	-0.000018	0
391	Tren A1	LinDirHis	Max	0	0	0.000001754	0.000000233	0.00008	0
391	Tren A1	LinDirHis	Min	0	0	-0.002298	-0.000258	-0.000022	0
392	Tren A1	LinDirHis	Max	0	0	0.000002255	2.984E-07	0.000082	0
392	Tren A1	LinDirHis	Min	0	0	-0.002529	-0.000247	-0.000026	0
393	Tren A1	LinDirHis	Max	0	0	0.000003006	2.277E-07	0.000085	0
393	Tren A1	LinDirHis	Min	0	0	-0.002743	-0.00024	-0.000028	0
394	Tren A1	LinDirHis	Max	0	0	0.000003279	2.465E-07	0.000084	0
394	Tren A1	LinDirHis	Min	0	0	-0.002943	-0.000232	-0.00003	0
448	Tren A1	LinDirHis	Max	0	0	0.000003118	3.069E-07	0.000079	0
448	Tren A1	LinDirHis	Min	0	0	-0.00315	-0.000215	-0.000034	0
449	Tren A1	LinDirHis	Max	0	0	0.000004065	0.000000271	0.000077	0
449	Tren A1	LinDirHis	Min	0	0	-0.003349	-0.000199	-0.000044	0
450	Tren A1	LinDirHis	Max	0	0	0.000004993	2.481E-07	0.000078	0
450	Tren A1	LinDirHis	Min	0	0	-0.003532	-0.000178	-0.000047	0
451	Tren A1	LinDirHis	Max	0	0	0.000005649	2.599E-07	0.000074	0
451	Tren A1	LinDirHis	Min	0	0	-0.003684	-0.000156	-0.000048	0
452	Tren A1	LinDirHis	Max	0	0	0.000006396	2.633E-07	0.00007	0
452	Tren A1	LinDirHis	Min	0	0	-0.003819	-0.000135	-0.000053	0
455	Tren A1	LinDirHis	Max	0	0	0.000006876	0.000000273	0.000062	0
455	Tren A1	LinDirHis	Min	0	0	-0.00395	-0.000111	-0.000057	0
516	Tren A1	LinDirHis	Max	0	0	0.000008278	2.083E-07	0.000059	0
516	Tren A1	LinDirHis	Min	0	0	-0.004049	-0.000085	-0.000063	0
517	Tren A1	LinDirHis	Max	0	0	0.000009463	2.018E-07	0.000057	0

517	Tren A1	LinDirHis	Min	0	0	-0.00412	-0.00006	-0.000064	0
518	Tren A1	LinDirHis	Max	0	0	0.000009742	1.826E-07	0.000047	0
518	Tren A1	LinDirHis	Min	0	0	-0.004156	-0.000034	-0.000066	0
519	Tren A1	LinDirHis	Max	0	0	0.00000902	0.000002639	0.00004	0
519	Tren A1	LinDirHis	Min	0	0	-0.00418	-0.000009877	-0.000066	0
527	Tren A1	LinDirHis	Max	0	0	0.000009673	0.000028	0.000032	0
527	Tren A1	LinDirHis	Min	0	0	-0.004178	-0.000004043	-0.000072	0
528	Tren A1	LinDirHis	Max	0	0	0.000011	0.000055	0.000027	0
528	Tren A1	LinDirHis	Min	0	0	-0.004143	-0.000002683	-0.000074	0
529	Tren A1	LinDirHis	Max	0	0	0.000011	0.000083	0.00002	0
529	Tren A1	LinDirHis	Min	0	0	-0.004066	-0.000001682	-0.000073	0
531	Tren A1	LinDirHis	Max	0	0	0.00001	0.000109	0.000011	0
531	Tren A1	LinDirHis	Min	0	0	-0.003964	-0.000001042	-0.000076	0
532	Tren A1	LinDirHis	Max	0	0	0.0000091	0.000134	0.000001043	0
532	Tren A1	LinDirHis	Min	0	0	-0.003846	-8.373E-07	-0.000076	0
533	Tren A1	LinDirHis	Max	0	0	0.000009662	0.000159	0.000001075	0
533	Tren A1	LinDirHis	Min	0	0	-0.003689	-7.551E-07	-0.000081	0
539	Tren A1	LinDirHis	Max	0	0	0.000009695	0.000183	0.000001129	0
539	Tren A1	LinDirHis	Min	0	0	-0.0035	-7.745E-07	-0.000081	0
540	Tren A1	LinDirHis	Max	0	0	0.000008973	0.000202	0.000001086	0
540	Tren A1	LinDirHis	Min	0	0	-0.003281	-6.793E-07	-0.000084	0
541	Tren A1	LinDirHis	Max	0	0	0.00000726	0.000222	9.857E-07	0
541	Tren A1	LinDirHis	Min	0	0	-0.003049	-7.391E-07	-0.00009	0
542	Tren A1	LinDirHis	Max	0	0	0.000006569	0.000237	8.281E-07	0
542	Tren A1	LinDirHis	Min	0	0	-0.002806	-7.211E-07	-0.000092	0
543	Tren A1	LinDirHis	Max	0	0	0.000005956	0.000244	0.000000786	0
543	Tren A1	LinDirHis	Min	0	0	-0.002552	-6.173E-07	-0.00009	0
544	Tren A1	LinDirHis	Max	0	0	0.000005371	0.000254	7.205E-07	0
544	Tren A1	LinDirHis	Min	0	0	-0.002261	-6.411E-07	-0.000093	0
545	Tren A1	LinDirHis	Max	0	0	0.000004183	0.000257	6.677E-07	0
545	Tren A1	LinDirHis	Min	0	0	-0.00197	-7.077E-07	-0.000085	0
546	Tren A1	LinDirHis	Max	0	0	0.000003518	0.000247	4.993E-07	0
546	Tren A1	LinDirHis	Min	0	0	-0.00171	-0.000000534	-0.000088	0
547	Tren A1	LinDirHis	Max	0	0	0.000003364	0.000246	4.988E-07	0
547	Tren A1	LinDirHis	Min	0	0	-0.001409	-5.593E-07	-0.000091	0
548	Tren A1	LinDirHis	Max	0	0	0.000002669	0.000232	4.327E-07	0
548	Tren A1	LinDirHis	Min	0	0	-0.001149	-6.598E-07	-0.000062	0
549	Tren A1	LinDirHis	Max	0	0	0.00000263	0.000202	3.321E-07	0
549	Tren A1	LinDirHis	Min	0	0	-0.000916	-5.449E-07	-0.00007	0
550	Tren A1	LinDirHis	Max	0	0	0.000002136	0.000186	3.955E-07	0
550	Tren A1	LinDirHis	Min	0	0	-0.000648	-5.296E-07	-0.000067	0
551	Tren A1	LinDirHis	Max	0	0	0.00000126	0.000144	2.803E-07	0
551	Tren A1	LinDirHis	Min	0	0	-0.000506	-4.596E-07	-0.000023	0
552	Tren A1	LinDirHis	Max	0	0	0.000002248	0.000088	0.000000204	0
552	Tren A1	LinDirHis	Min	0	0	-0.00038	-3.609E-07	-0.000055	0
553	Tren A1	LinDirHis	Max	0	0	7.058E-07	0.000052	4.151E-07	0
553	Tren A1	LinDirHis	Min	0	0	-0.000182	-3.705E-07	-0.000037	0
556	Tren A1	LinDirHis	Max	0	0	6.38E-12	0.000004642	0.000088	0
556	Tren A1	LinDirHis	Min	0	0	-0.000168	-1.168E-12	-0.000001376	0
557	Tren A1	LinDirHis	Max	0	0	0.00000228	2.396E-07	0.000085	0

Apéndice B				Flecha Dinámica Tren A1						V= 336 km/h
557	Tren A1	LinDirHis	Min	0	0	-0.002401	-0.000247	-0.000022	0	