

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 A2	LinDirHis	Max	0	0	2.396E-11	0.000008147	0.000031	0
140	Tren A2	LinDirHis	Min	0	0	-0.000358	-0.000005509	-4.578E-13	0
229	Tren A2	LinDirHis	Max	0	0	7.698E-12	2.309E-08	2.08E-12	0
229	Tren A2	LinDirHis	Min	0	0	-0.000304	-0.000082	-0.000028	0
230	Tren A2	LinDirHis	Max	0	0	8.197E-12	3.308E-07	0.000007166	0
230	Tren A2	LinDirHis	Min	0	0	-0.000331	-0.00004	-0.000028	0
231	Tren A2	LinDirHis	Max	0	0	5.747E-13	1.392E-12	0.000024	0
231	Tren A2	LinDirHis	Min	0	0	-0.000262	-0.000109	-0.000013	0
232	Tren A2	LinDirHis	Max	0	0	0.000002929	1.447E-13	0.000064	0
232	Tren A2	LinDirHis	Min	0	0	-0.000437	-0.000126	-0.000005754	0
233	Tren A2	LinDirHis	Max	0	0	0.000005188	3.298E-13	0.000032	0
233	Tren A2	LinDirHis	Min	0	0	-0.00058	-0.000164	-0.000012	0
234	Tren A2	LinDirHis	Max	0	0	0.000001547	3.764E-07	0.000064	0
234	Tren A2	LinDirHis	Min	0	0	-0.000652	-0.000216	-0.000014	0
235	Tren A2	LinDirHis	Max	0	0	0.000001095	2.365E-07	0.000084	0
235	Tren A2	LinDirHis	Min	0	0	-0.000914	-0.000221	-0.00001	0
236	Tren A2	LinDirHis	Max	0	0	0.000002919	9.334E-08	0.00006	0
236	Tren A2	LinDirHis	Min	0	0	-0.001119	-0.000251	-0.000015	0
237	Tren A2	LinDirHis	Max	0	0	0.000001578	3.645E-07	0.000087	0
237	Tren A2	LinDirHis	Min	0	0	-0.00131	-0.000281	-0.000019	0
238	Tren A2	LinDirHis	Max	0	0	0.000001058	2.906E-07	0.000093	0
238	Tren A2	LinDirHis	Min	0	0	-0.001602	-0.000277	-0.000018	0
239	Tren A2	LinDirHis	Max	0	0	0.000002553	2.241E-07	0.000088	0
239	Tren A2	LinDirHis	Min	0	0	-0.00184	-0.000297	-0.000026	0
240	Tren A2	LinDirHis	Max	0	0	0.000002371	4.346E-07	0.000107	0
240	Tren A2	LinDirHis	Min	0	0	-0.002085	-0.000307	-0.000031	0
241	Tren A2	LinDirHis	Max	0	0	0.000002273	4.103E-07	0.000105	0
241	Tren A2	LinDirHis	Min	0	0	-0.002375	-0.0003	-0.000033	0
242	Tren A2	LinDirHis	Max	0	0	0.000003532	3.619E-07	0.000105	0
242	Tren A2	LinDirHis	Min	0	0	-0.002635	-0.000305	-0.000038	0
244	Tren A2	LinDirHis	Max	0	0	0.00000456	4.728E-07	0.000106	0
244	Tren A2	LinDirHis	Min	0	0	-0.003179	-0.000288	-0.000042	0
245	Tren A2	LinDirHis	Max	0	0	0.000005732	4.413E-07	0.000109	0
245	Tren A2	LinDirHis	Min	0	0	-0.003426	-0.00028	-0.000051	0
246	Tren A2	LinDirHis	Max	0	0	0.000006174	0.0000005	0.000113	0
246	Tren A2	LinDirHis	Min	0	0	-0.003679	-0.000263	-0.000054	0
247	Tren A2	LinDirHis	Max	0	0	0.000007032	0.000000469	0.000111	0
247	Tren A2	LinDirHis	Min	0	0	-0.003925	-0.000243	-0.000063	0
248	Tren A2	LinDirHis	Max	0	0	0.000008225	4.242E-07	0.000112	0
248	Tren A2	LinDirHis	Min	0	0	-0.004149	-0.000225	-0.000072	0
249	Tren A2	LinDirHis	Max	0	0	0.000009086	0.000000455	0.000109	0
249	Tren A2	LinDirHis	Min	0	0	-0.004354	-0.0002	-0.000078	0
250	Tren A2	LinDirHis	Max	0	0	0.00001	4.303E-07	0.000105	0
250	Tren A2	LinDirHis	Min	0	0	-0.004538	-0.000174	-0.000082	0
251	Tren A2	LinDirHis	Max	0	0	0.000012	4.516E-07	0.000097	0
251	Tren A2	LinDirHis	Min	0	0	-0.004697	-0.000149	-0.000086	0
252	Tren A2	LinDirHis	Max	0	0	0.000014	4.586E-07	0.000091	0

252	Tren A2	LinDirHis	Min	0	0	-0.004824	-0.000119	-0.000096	0
253	Tren A2	LinDirHis	Max	0	0	0.000016	0.000000393	0.000088	0
253	Tren A2	LinDirHis	Min	0	0	-0.004926	-0.000088	-0.0001	0
254	Tren A2	LinDirHis	Max	0	0	0.000017	3.341E-07	0.000084	0
254	Tren A2	LinDirHis	Min	0	0	-0.005004	-0.000058	-0.000104	0
255	Tren A2	LinDirHis	Max	0	0	0.000017	2.732E-07	0.000076	0
255	Tren A2	LinDirHis	Min	0	0	-0.005044	-0.000027	-0.00011	0
256	Tren A2	LinDirHis	Max	0	0	0.000018	0.00002	0.000068	0
256	Tren A2	LinDirHis	Min	0	0	-0.005051	-0.000009794	-0.000112	0
257	Tren A2	LinDirHis	Max	0	0	0.000017	0.000051	0.000059	0
257	Tren A2	LinDirHis	Min	0	0	-0.005024	-0.000005773	-0.000113	0
258	Tren A2	LinDirHis	Max	0	0	0.000018	0.000083	0.000046	0
258	Tren A2	LinDirHis	Min	0	0	-0.00496	-0.000003539	-0.000115	0
259	Tren A2	LinDirHis	Max	0	0	0.000019	0.000115	0.000036	0
259	Tren A2	LinDirHis	Min	0	0	-0.004858	-0.000002177	-0.000121	0
260	Tren A2	LinDirHis	Max	0	0	0.000018	0.000146	0.000027	0
260	Tren A2	LinDirHis	Min	0	0	-0.004716	-0.000001595	-0.000122	0
261	Tren A2	LinDirHis	Max	0	0	0.000018	0.000175	0.00002	0
261	Tren A2	LinDirHis	Min	0	0	-0.004545	-0.000001232	-0.000119	0
262	Tren A2	LinDirHis	Max	0	0	0.000017	0.000205	0.00001	0
262	Tren A2	LinDirHis	Min	0	0	-0.00434	-0.000001227	-0.00012	0
263	Tren A2	LinDirHis	Max	0	0	0.000016	0.000229	0.000002	0
263	Tren A2	LinDirHis	Min	0	0	-0.004098	-0.000001243	-0.000115	0
264	Tren A2	LinDirHis	Max	0	0	0.000014	0.000251	0.000001839	0
264	Tren A2	LinDirHis	Min	0	0	-0.00383	-0.000001197	-0.000118	0
265	Tren A2	LinDirHis	Max	0	0	0.000012	0.000274	0.00000171	0
265	Tren A2	LinDirHis	Min	0	0	-0.003536	-0.000001235	-0.000124	0
266	Tren A2	LinDirHis	Max	0	0	0.000011	0.000285	0.000001513	0
266	Tren A2	LinDirHis	Min	0	0	-0.003229	-0.000001183	-0.000122	0
267	Tren A2	LinDirHis	Max	0	0	0.000009812	0.000294	0.000001241	0
267	Tren A2	LinDirHis	Min	0	0	-0.002902	-0.000001048	-0.000124	0
268	Tren A2	LinDirHis	Max	0	0	0.000008568	0.000308	0.000001239	0
268	Tren A2	LinDirHis	Min	0	0	-0.002548	-0.000001122	-0.000118	0
269	Tren A2	LinDirHis	Max	0	0	0.000007251	0.0003	0.000001065	0
269	Tren A2	LinDirHis	Min	0	0	-0.002228	-0.000001113	-0.000104	0
270	Tren A2	LinDirHis	Max	0	0	0.000006616	0.000293	9.161E-07	0
270	Tren A2	LinDirHis	Min	0	0	-0.001881	-9.756E-07	-0.000112	0
271	Tren A2	LinDirHis	Max	0	0	0.000005121	0.000291	9.126E-07	0
271	Tren A2	LinDirHis	Min	0	0	-0.001516	-0.000001075	-0.000098	0
272	Tren A2	LinDirHis	Max	0	0	0.000004495	0.000255	6.515E-07	0
272	Tren A2	LinDirHis	Min	0	0	-0.001247	-9.633E-07	-0.000084	0
273	Tren A2	LinDirHis	Max	0	0	0.000004547	0.00023	6.566E-07	0
273	Tren A2	LinDirHis	Min	0	0	-0.000939	-0.000000844	-0.000098	0
274	Tren A2	LinDirHis	Max	0	0	0.00000252	0.000204	7.022E-07	0
274	Tren A2	LinDirHis	Min	0	0	-0.000657	-9.755E-07	-0.000058	0
275	Tren A2	LinDirHis	Max	0	0	0.00000318	0.000131	3.143E-07	0
275	Tren A2	LinDirHis	Min	0	0	-0.00055	-7.581E-07	-0.000042	0
276	Tren A2	LinDirHis	Max	0	0	0.000003033	0.000086	8.201E-07	0
276	Tren A2	LinDirHis	Min	0	0	-0.000307	-0.000000567	-0.000066	0
277	Tren A2	LinDirHis	Max	0	0	0.000005363	0.00004	0.000016	0

277	Tren A2	LinDirHis	Min	0	0	-0.00012	-6.503E-07	-0.000018	0
278	Tren A2	LinDirHis	Max	0	0	0.000001449	0.000041	5.609E-07	0
278	Tren A2	LinDirHis	Min	0	0	-0.000105	-6.467E-07	-0.000072	0
279	Tren A2	LinDirHis	Max	0	0	9.107E-12	0.000003456	0.000104	0
279	Tren A2	LinDirHis	Min	0	0	-0.000184	-0.000001069	-0.000001452	0
280	Tren A2	LinDirHis	Max	0	0	7.379E-08	9.782E-13	0.000061	0
280	Tren A2	LinDirHis	Min	0	0	-0.000346	-0.000121	-0.000005163	0
283	Tren A2	LinDirHis	Max	0	0	0.000005421	3.077E-13	0.000043	0
283	Tren A2	LinDirHis	Min	0	0	-0.000545	-0.000145	-0.000002209	0
347	Tren A2	LinDirHis	Max	0	0	0.000003493	1.312E-07	0.000026	0
347	Tren A2	LinDirHis	Min	0	0	-0.000623	-0.000199	-0.00001	0
378	Tren A2	LinDirHis	Max	0	0	4.817E-07	3.539E-07	0.000087	0
378	Tren A2	LinDirHis	Min	0	0	-0.000796	-0.000223	-0.000007986	0
379	Tren A2	LinDirHis	Max	0	0	0.000001987	1.605E-07	0.000068	0
379	Tren A2	LinDirHis	Min	0	0	-0.001054	-0.000239	-0.000009813	0
380	Tren A2	LinDirHis	Max	0	0	0.000002492	1.771E-07	0.000072	0
380	Tren A2	LinDirHis	Min	0	0	-0.001222	-0.000276	-0.000019	0
381	Tren A2	LinDirHis	Max	0	0	0.000001062	3.536E-07	0.000103	0
381	Tren A2	LinDirHis	Min	0	0	-0.001465	-0.000285	-0.000018	0
383	Tren A2	LinDirHis	Max	0	0	0.000002072	2.472E-07	0.000085	0
383	Tren A2	LinDirHis	Min	0	0	-0.001735	-0.000293	-0.000021	0
388	Tren A2	LinDirHis	Max	0	0	0.000002867	3.252E-07	0.000093	0
388	Tren A2	LinDirHis	Min	0	0	-0.001962	-0.000312	-0.000026	0
389	Tren A2	LinDirHis	Max	0	0	0.000002381	4.245E-07	0.000104	0
389	Tren A2	LinDirHis	Min	0	0	-0.002241	-0.000309	-0.000027	0
390	Tren A2	LinDirHis	Max	0	0	0.00000322	3.401E-07	0.0001	0
390	Tren A2	LinDirHis	Min	0	0	-0.00252	-0.000308	-0.000031	0
391	Tren A2	LinDirHis	Max	0	0	0.000004047	4.505E-07	0.00011	0
391	Tren A2	LinDirHis	Min	0	0	-0.002785	-0.000311	-0.000037	0
392	Tren A2	LinDirHis	Max	0	0	0.000004251	5.196E-07	0.000113	0
392	Tren A2	LinDirHis	Min	0	0	-0.003065	-0.000299	-0.000041	0
393	Tren A2	LinDirHis	Max	0	0	0.000005076	4.461E-07	0.000111	0
393	Tren A2	LinDirHis	Min	0	0	-0.00332	-0.00029	-0.000046	0
394	Tren A2	LinDirHis	Max	0	0	0.000005822	5.368E-07	0.000113	0
394	Tren A2	LinDirHis	Min	0	0	-0.003566	-0.00028	-0.00005	0
448	Tren A2	LinDirHis	Max	0	0	0.000006148	5.556E-07	0.00011	0
448	Tren A2	LinDirHis	Min	0	0	-0.003816	-0.000259	-0.000054	0
449	Tren A2	LinDirHis	Max	0	0	0.00000694	4.818E-07	0.000106	0
449	Tren A2	LinDirHis	Min	0	0	-0.004052	-0.000241	-0.000063	0
450	Tren A2	LinDirHis	Max	0	0	0.000008344	4.977E-07	0.000105	0
450	Tren A2	LinDirHis	Min	0	0	-0.004264	-0.000216	-0.000072	0
451	Tren A2	LinDirHis	Max	0	0	0.000009886	0.000000497	0.000104	0
451	Tren A2	LinDirHis	Min	0	0	-0.004459	-0.000189	-0.000077	0
452	Tren A2	LinDirHis	Max	0	0	0.000012	4.572E-07	0.000103	0
452	Tren A2	LinDirHis	Min	0	0	-0.004636	-0.000163	-0.000082	0
455	Tren A2	LinDirHis	Max	0	0	0.000014	0.000000456	0.000097	0
455	Tren A2	LinDirHis	Min	0	0	-0.004779	-0.000135	-0.00009	0
516	Tren A2	LinDirHis	Max	0	0	0.000015	4.239E-07	0.000092	0
516	Tren A2	LinDirHis	Min	0	0	-0.004894	-0.000103	-0.000094	0
517	Tren A2	LinDirHis	Max	0	0	0.000015	3.563E-07	0.000085	0

517	Tren A2	LinDirHis	Min	0	0	-0.004984	-0.000074	-0.000097	0
518	Tren A2	LinDirHis	Max	0	0	0.000016	3.028E-07	0.000073	0
518	Tren A2	LinDirHis	Min	0	0	-0.005042	-0.000043	-0.000101	0
519	Tren A2	LinDirHis	Max	0	0	0.000018	0.000005804	0.000066	0
519	Tren A2	LinDirHis	Min	0	0	-0.005064	-0.000016	-0.000108	0
527	Tren A2	LinDirHis	Max	0	0	0.000018	0.000036	0.00006	0
527	Tren A2	LinDirHis	Min	0	0	-0.005053	-0.000007079	-0.000112	0
528	Tren A2	LinDirHis	Max	0	0	0.000019	0.000068	0.000052	0
528	Tren A2	LinDirHis	Min	0	0	-0.005009	-0.000004698	-0.000113	0
529	Tren A2	LinDirHis	Max	0	0	0.000019	0.000101	0.000044	0
529	Tren A2	LinDirHis	Min	0	0	-0.004928	-0.000002817	-0.000115	0
531	Tren A2	LinDirHis	Max	0	0	0.000018	0.000133	0.000033	0
531	Tren A2	LinDirHis	Min	0	0	-0.004806	-0.000001969	-0.000116	0
532	Tren A2	LinDirHis	Max	0	0	0.000017	0.000163	0.000023	0
532	Tren A2	LinDirHis	Min	0	0	-0.004649	-0.000001472	-0.000115	0
533	Tren A2	LinDirHis	Max	0	0	0.000017	0.000193	0.000011	0
533	Tren A2	LinDirHis	Min	0	0	-0.004461	-0.000001368	-0.000115	0
539	Tren A2	LinDirHis	Max	0	0	0.000017	0.000221	0.000001885	0
539	Tren A2	LinDirHis	Min	0	0	-0.004235	-0.000001353	-0.000118	0
540	Tren A2	LinDirHis	Max	0	0	0.000016	0.000245	0.000001766	0
540	Tren A2	LinDirHis	Min	0	0	-0.003977	-0.000001217	-0.000117	0
541	Tren A2	LinDirHis	Max	0	0	0.000014	0.00027	0.000001724	0
541	Tren A2	LinDirHis	Min	0	0	-0.003697	-0.000001248	-0.000117	0
542	Tren A2	LinDirHis	Max	0	0	0.000012	0.000288	0.00000167	0
542	Tren A2	LinDirHis	Min	0	0	-0.003397	-0.000001264	-0.000116	0
543	Tren A2	LinDirHis	Max	0	0	0.00001	0.000295	0.000001426	0
543	Tren A2	LinDirHis	Min	0	0	-0.003084	-0.000001075	-0.000115	0
544	Tren A2	LinDirHis	Max	0	0	0.000009027	0.000307	0.00000125	0
544	Tren A2	LinDirHis	Min	0	0	-0.002737	-0.000001096	-0.000121	0
545	Tren A2	LinDirHis	Max	0	0	0.000007283	0.000311	0.000001124	0
545	Tren A2	LinDirHis	Min	0	0	-0.002394	-0.000001224	-0.000112	0
546	Tren A2	LinDirHis	Max	0	0	0.000007127	0.000298	8.806E-07	0
546	Tren A2	LinDirHis	Min	0	0	-0.002072	-0.000001087	-0.000112	0
547	Tren A2	LinDirHis	Max	0	0	0.000006503	0.000298	9.532E-07	0
547	Tren A2	LinDirHis	Min	0	0	-0.001705	-0.000001095	-0.000114	0
548	Tren A2	LinDirHis	Max	0	0	0.000004681	0.00028	8.473E-07	0
548	Tren A2	LinDirHis	Min	0	0	-0.001393	-0.000001164	-0.00008	0
549	Tren A2	LinDirHis	Max	0	0	0.000004657	0.000245	0.000000585	0
549	Tren A2	LinDirHis	Min	0	0	-0.001122	-9.448E-07	-0.000087	0
550	Tren A2	LinDirHis	Max	0	0	0.000003645	0.000226	8.091E-07	0
550	Tren A2	LinDirHis	Min	0	0	-0.000794	-8.763E-07	-0.000079	0
551	Tren A2	LinDirHis	Max	0	0	0.000002087	0.000175	4.843E-07	0
551	Tren A2	LinDirHis	Min	0	0	-0.000611	-8.896E-07	-0.000025	0
552	Tren A2	LinDirHis	Max	0	0	0.000004174	0.000107	4.287E-07	0
552	Tren A2	LinDirHis	Min	0	0	-0.000457	-5.979E-07	-0.00007	0
553	Tren A2	LinDirHis	Max	0	0	0.000001438	0.000061	8.095E-07	0
553	Tren A2	LinDirHis	Min	0	0	-0.000222	-6.847E-07	-0.000051	0
556	Tren A2	LinDirHis	Max	0	0	1.169E-11	0.000006256	0.000115	0
556	Tren A2	LinDirHis	Min	0	0	-0.000211	-3.329E-12	-0.000001619	0
557	Tren A2	LinDirHis	Max	0	0	0.00000374	4.823E-07	0.000111	0

Apéndice K				Flecha Dinámica Tren A2						V= 230 km/h
557	Tren A2	LinDirHis	Min	0	0	-0.002906	-0.0003	-0.00004	0	