

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	5.585E-11	0.000006211	0.000029	0
140	Tren A2	LinDirHis	Min	0	0	-0.000324	-0.000005991	-2.267E-13	0
229	Tren A2	LinDirHis	Max	0	0	2.088E-11	2.309E-08	5.559E-12	0
229	Tren A2	LinDirHis	Min	0	0	-0.00028	-0.000076	-0.000025	0
230	Tren A2	LinDirHis	Max	0	0	1.786E-11	0.000000306	0.000007395	0
230	Tren A2	LinDirHis	Min	0	0	-0.000295	-0.000038	-0.000021	0
231	Tren A2	LinDirHis	Max	0	0	3.301E-12	7.425E-12	0.000027	0
231	Tren A2	LinDirHis	Min	0	0	-0.000242	-0.000101	-0.000008076	0
232	Tren A2	LinDirHis	Max	0	0	0.000002086	7.547E-12	0.000062	0
232	Tren A2	LinDirHis	Min	0	0	-0.000408	-0.000118	-0.00000491	0
233	Tren A2	LinDirHis	Max	0	0	0.000002841	6.205E-12	0.000028	0
233	Tren A2	LinDirHis	Min	0	0	-0.00054	-0.000154	-0.000004428	0
234	Tren A2	LinDirHis	Max	0	0	7.992E-07	2.016E-07	0.000055	0
234	Tren A2	LinDirHis	Min	0	0	-0.00061	-0.000202	-0.000008032	0
235	Tren A2	LinDirHis	Max	0	0	3.859E-07	1.403E-07	0.00007	0
235	Tren A2	LinDirHis	Min	0	0	-0.000855	-0.000207	-0.000005766	0
236	Tren A2	LinDirHis	Max	0	0	0.000001599	6.283E-08	0.000057	0
236	Tren A2	LinDirHis	Min	0	0	-0.001047	-0.000235	-0.000011	0
237	Tren A2	LinDirHis	Max	0	0	7.147E-07	1.769E-07	0.000084	0
237	Tren A2	LinDirHis	Min	0	0	-0.001226	-0.000262	-0.000012	0
238	Tren A2	LinDirHis	Max	0	0	6.491E-07	1.906E-07	0.000086	0
238	Tren A2	LinDirHis	Min	0	0	-0.001497	-0.000259	-0.000012	0
239	Tren A2	LinDirHis	Max	0	0	0.000001698	1.118E-07	0.000072	0
239	Tren A2	LinDirHis	Min	0	0	-0.001715	-0.000279	-0.000017	0
240	Tren A2	LinDirHis	Max	0	0	0.00000131	2.103E-07	0.000089	0
240	Tren A2	LinDirHis	Min	0	0	-0.001946	-0.000288	-0.000019	0
241	Tren A2	LinDirHis	Max	0	0	0.000001384	2.623E-07	0.000095	0
241	Tren A2	LinDirHis	Min	0	0	-0.002226	-0.000281	-0.000022	0
242	Tren A2	LinDirHis	Max	0	0	0.000002397	2.385E-07	0.00009	0
242	Tren A2	LinDirHis	Min	0	0	-0.002467	-0.000286	-0.000024	0
244	Tren A2	LinDirHis	Max	0	0	0.000002729	2.942E-07	0.000089	0
244	Tren A2	LinDirHis	Min	0	0	-0.002974	-0.00027	-0.00003	0
245	Tren A2	LinDirHis	Max	0	0	0.000003338	3.066E-07	0.000094	0
245	Tren A2	LinDirHis	Min	0	0	-0.003215	-0.000262	-0.000037	0
246	Tren A2	LinDirHis	Max	0	0	0.000004152	3.571E-07	0.000097	0
246	Tren A2	LinDirHis	Min	0	0	-0.003449	-0.000246	-0.000041	0
247	Tren A2	LinDirHis	Max	0	0	0.00000468	0.00000028	0.000091	0
247	Tren A2	LinDirHis	Min	0	0	-0.003667	-0.000227	-0.000044	0
248	Tren A2	LinDirHis	Max	0	0	0.000004906	2.939E-07	0.000087	0
248	Tren A2	LinDirHis	Min	0	0	-0.003881	-0.000212	-0.000049	0
249	Tren A2	LinDirHis	Max	0	0	0.000005442	3.318E-07	0.000084	0
249	Tren A2	LinDirHis	Min	0	0	-0.004078	-0.000188	-0.000053	0
250	Tren A2	LinDirHis	Max	0	0	0.000006964	2.859E-07	0.000086	0
250	Tren A2	LinDirHis	Min	0	0	-0.004255	-0.000163	-0.000064	0
251	Tren A2	LinDirHis	Max	0	0	0.000008756	2.632E-07	0.000078	0
251	Tren A2	LinDirHis	Min	0	0	-0.004395	-0.000139	-0.000065	0
252	Tren A2	LinDirHis	Max	0	0	0.000009668	2.975E-07	0.000071	0

252	Tren A2	LinDirHis	Min	0	0	-0.004509	-0.000111	-0.000066	0
253	Tren A2	LinDirHis	Max	0	0	0.000009778	2.659E-07	0.000062	0
253	Tren A2	LinDirHis	Min	0	0	-0.004617	-0.000082	-0.00007	0
254	Tren A2	LinDirHis	Max	0	0	0.00001	2.025E-07	0.00006	0
254	Tren A2	LinDirHis	Min	0	0	-0.00469	-0.000053	-0.000076	0
255	Tren A2	LinDirHis	Max	0	0	0.000012	1.804E-07	0.000054	0
255	Tren A2	LinDirHis	Min	0	0	-0.004723	-0.000024	-0.00008	0
256	Tren A2	LinDirHis	Max	0	0	0.000012	0.000017	0.000046	0
256	Tren A2	LinDirHis	Min	0	0	-0.00472	-0.000006662	-0.00008	0
257	Tren A2	LinDirHis	Max	0	0	0.000012	0.000046	0.000032	0
257	Tren A2	LinDirHis	Min	0	0	-0.004699	-0.000003771	-0.000083	0
258	Tren A2	LinDirHis	Max	0	0	0.000011	0.000076	0.000024	0
258	Tren A2	LinDirHis	Min	0	0	-0.004642	-0.000002481	-0.00008	0
259	Tren A2	LinDirHis	Max	0	0	0.000012	0.000108	0.000022	0
259	Tren A2	LinDirHis	Min	0	0	-0.004556	-0.000001481	-0.000089	0
260	Tren A2	LinDirHis	Max	0	0	0.000012	0.000136	0.000009178	0
260	Tren A2	LinDirHis	Min	0	0	-0.004419	-9.409E-07	-0.000087	0
261	Tren A2	LinDirHis	Max	0	0	0.000012	0.000164	0.000001432	0
261	Tren A2	LinDirHis	Min	0	0	-0.004246	-8.908E-07	-0.000088	0
262	Tren A2	LinDirHis	Max	0	0	0.000011	0.000191	0.000001371	0
262	Tren A2	LinDirHis	Min	0	0	-0.004062	-7.545E-07	-0.000098	0
263	Tren A2	LinDirHis	Max	0	0	0.000009777	0.000214	0.000001185	0
263	Tren A2	LinDirHis	Min	0	0	-0.00384	-8.548E-07	-0.000097	0
264	Tren A2	LinDirHis	Max	0	0	0.000009898	0.000236	0.000001168	0
264	Tren A2	LinDirHis	Min	0	0	-0.003587	-7.681E-07	-0.000097	0
265	Tren A2	LinDirHis	Max	0	0	0.000009046	0.000257	0.000001188	0
265	Tren A2	LinDirHis	Min	0	0	-0.003302	-0.000000766	-0.000098	0
266	Tren A2	LinDirHis	Max	0	0	0.000007125	0.000267	0.000001081	0
266	Tren A2	LinDirHis	Min	0	0	-0.00302	-7.998E-07	-0.000103	0
267	Tren A2	LinDirHis	Max	0	0	0.000005753	0.000275	8.371E-07	0
267	Tren A2	LinDirHis	Min	0	0	-0.00272	-6.623E-07	-0.000109	0
268	Tren A2	LinDirHis	Max	0	0	0.000005501	0.000289	7.274E-07	0
268	Tren A2	LinDirHis	Min	0	0	-0.002391	-6.645E-07	-0.000101	0
269	Tren A2	LinDirHis	Max	0	0	0.000004888	0.000281	6.913E-07	0
269	Tren A2	LinDirHis	Min	0	0	-0.002081	-7.461E-07	-0.000089	0
270	Tren A2	LinDirHis	Max	0	0	0.000004732	0.000274	0.000000619	0
270	Tren A2	LinDirHis	Min	0	0	-0.001751	-6.805E-07	-0.000102	0
271	Tren A2	LinDirHis	Max	0	0	0.000003568	0.000271	6.614E-07	0
271	Tren A2	LinDirHis	Min	0	0	-0.00142	-7.604E-07	-0.000092	0
272	Tren A2	LinDirHis	Max	0	0	0.000002867	0.000239	4.674E-07	0
272	Tren A2	LinDirHis	Min	0	0	-0.001166	-6.021E-07	-0.000074	0
273	Tren A2	LinDirHis	Max	0	0	0.000002619	0.000216	4.533E-07	0
273	Tren A2	LinDirHis	Min	0	0	-0.000876	-5.436E-07	-0.000083	0
274	Tren A2	LinDirHis	Max	0	0	0.000001631	0.000191	4.764E-07	0
274	Tren A2	LinDirHis	Min	0	0	-0.000612	-6.364E-07	-0.000045	0
275	Tren A2	LinDirHis	Max	0	0	0.000002201	0.000123	2.005E-07	0
275	Tren A2	LinDirHis	Min	0	0	-0.000507	-4.941E-07	-0.00004	0
276	Tren A2	LinDirHis	Max	0	0	0.000001826	0.00008	5.404E-07	0
276	Tren A2	LinDirHis	Min	0	0	-0.000285	-3.612E-07	-0.000068	0
277	Tren A2	LinDirHis	Max	0	0	0.000003624	0.000032	0.000003529	0

277	Tren A2	LinDirHis	Min	0	0	-0.000086	-4.097E-07	-0.000014	0
278	Tren A2	LinDirHis	Max	0	0	9.255E-07	0.000039	3.273E-07	0
278	Tren A2	LinDirHis	Min	0	0	-0.000097	-3.885E-07	-0.000067	0
279	Tren A2	LinDirHis	Max	0	0	2.688E-11	0.000003304	0.000097	0
279	Tren A2	LinDirHis	Min	0	0	-0.000153	-6.264E-07	-0.000001452	0
280	Tren A2	LinDirHis	Max	0	0	7.379E-08	1.092E-12	0.000057	0
280	Tren A2	LinDirHis	Min	0	0	-0.00032	-0.000113	-0.000003029	0
283	Tren A2	LinDirHis	Max	0	0	0.000003109	2.708E-13	0.000038	0
283	Tren A2	LinDirHis	Min	0	0	-0.000511	-0.000135	-9.113E-07	0
347	Tren A2	LinDirHis	Max	0	0	0.000001867	9.426E-08	0.000023	0
347	Tren A2	LinDirHis	Min	0	0	-0.000583	-0.000186	-0.000007215	0
378	Tren A2	LinDirHis	Max	0	0	3.513E-07	1.799E-07	0.000084	0
378	Tren A2	LinDirHis	Min	0	0	-0.000743	-0.000209	-0.000005675	0
379	Tren A2	LinDirHis	Max	0	0	0.000001485	1.072E-07	0.000062	0
379	Tren A2	LinDirHis	Min	0	0	-0.000972	-0.000224	-0.000006067	0
380	Tren A2	LinDirHis	Max	0	0	0.000001222	1.321E-07	0.000059	0
380	Tren A2	LinDirHis	Min	0	0	-0.001135	-0.000258	-0.000011	0
381	Tren A2	LinDirHis	Max	0	0	7.035E-07	1.887E-07	0.000089	0
381	Tren A2	LinDirHis	Min	0	0	-0.001371	-0.000267	-0.000009902	0
383	Tren A2	LinDirHis	Max	0	0	0.000001376	1.584E-07	0.000077	0
383	Tren A2	LinDirHis	Min	0	0	-0.001633	-0.000274	-0.000014	0
388	Tren A2	LinDirHis	Max	0	0	0.000001481	2.161E-07	0.000084	0
388	Tren A2	LinDirHis	Min	0	0	-0.001839	-0.000291	-0.000016	0
389	Tren A2	LinDirHis	Max	0	0	0.000001543	2.897E-07	0.000095	0
389	Tren A2	LinDirHis	Min	0	0	-0.002093	-0.000288	-0.000018	0
390	Tren A2	LinDirHis	Max	0	0	0.000002189	2.077E-07	0.000084	0
390	Tren A2	LinDirHis	Min	0	0	-0.002356	-0.000289	-0.000022	0
391	Tren A2	LinDirHis	Max	0	0	0.000002064	2.742E-07	0.000093	0
391	Tren A2	LinDirHis	Min	0	0	-0.002606	-0.000292	-0.000025	0
392	Tren A2	LinDirHis	Max	0	0	0.000002654	3.512E-07	0.000098	0
392	Tren A2	LinDirHis	Min	0	0	-0.002868	-0.000279	-0.000029	0
393	Tren A2	LinDirHis	Max	0	0	0.000003539	2.685E-07	0.000095	0
393	Tren A2	LinDirHis	Min	0	0	-0.003102	-0.000272	-0.00003	0
394	Tren A2	LinDirHis	Max	0	0	0.000003861	2.901E-07	0.000093	0
394	Tren A2	LinDirHis	Min	0	0	-0.003334	-0.000263	-0.000033	0
448	Tren A2	LinDirHis	Max	0	0	0.000003671	3.612E-07	0.000089	0
448	Tren A2	LinDirHis	Min	0	0	-0.003575	-0.000243	-0.000037	0
449	Tren A2	LinDirHis	Max	0	0	0.000004787	3.194E-07	0.000091	0
449	Tren A2	LinDirHis	Min	0	0	-0.003802	-0.000225	-0.000049	0
450	Tren A2	LinDirHis	Max	0	0	0.00000588	2.923E-07	0.000088	0
450	Tren A2	LinDirHis	Min	0	0	-0.003995	-0.000202	-0.000052	0
451	Tren A2	LinDirHis	Max	0	0	0.000006655	0.000000306	0.000084	0
451	Tren A2	LinDirHis	Min	0	0	-0.004167	-0.000177	-0.000053	0
452	Tren A2	LinDirHis	Max	0	0	0.000007534	3.103E-07	0.000075	0
452	Tren A2	LinDirHis	Min	0	0	-0.004337	-0.000153	-0.000059	0
455	Tren A2	LinDirHis	Max	0	0	0.000008101	3.216E-07	0.000073	0
455	Tren A2	LinDirHis	Min	0	0	-0.004477	-0.000126	-0.000063	0
516	Tren A2	LinDirHis	Max	0	0	0.000009753	2.455E-07	0.000071	0
516	Tren A2	LinDirHis	Min	0	0	-0.004589	-0.000097	-0.00007	0
517	Tren A2	LinDirHis	Max	0	0	0.000011	2.378E-07	0.000062	0

517	Tren A2	LinDirHis	Min	0	0	-0.00466	-0.000068	-0.000071	0
518	Tren A2	LinDirHis	Max	0	0	0.000011	2.151E-07	0.000051	0
518	Tren A2	LinDirHis	Min	0	0	-0.004712	-0.000039	-0.000073	0
519	Tren A2	LinDirHis	Max	0	0	0.000011	0.00000289	0.000044	0
519	Tren A2	LinDirHis	Min	0	0	-0.004742	-0.000011	-0.000074	0
527	Tren A2	LinDirHis	Max	0	0	0.000011	0.000033	0.000041	0
527	Tren A2	LinDirHis	Min	0	0	-0.00474	-0.000004752	-0.000081	0
528	Tren A2	LinDirHis	Max	0	0	0.000012	0.000063	0.000031	0
528	Tren A2	LinDirHis	Min	0	0	-0.004688	-0.000003161	-0.000083	0
529	Tren A2	LinDirHis	Max	0	0	0.000013	0.000094	0.000023	0
529	Tren A2	LinDirHis	Min	0	0	-0.004599	-0.000001984	-0.000082	0
531	Tren A2	LinDirHis	Max	0	0	0.000012	0.000124	0.000008246	0
531	Tren A2	LinDirHis	Min	0	0	-0.004501	-0.00000123	-0.000085	0
532	Tren A2	LinDirHis	Max	0	0	0.000011	0.000152	0.000001383	0
532	Tren A2	LinDirHis	Min	0	0	-0.004359	-0.000000987	-0.000085	0
533	Tren A2	LinDirHis	Max	0	0	0.000011	0.00018	0.000001268	0
533	Tren A2	LinDirHis	Min	0	0	-0.004181	-8.906E-07	-0.000086	0
539	Tren A2	LinDirHis	Max	0	0	0.000011	0.000207	0.000001331	0
539	Tren A2	LinDirHis	Min	0	0	-0.003958	-9.132E-07	-0.00009	0
540	Tren A2	LinDirHis	Max	0	0	0.000011	0.000229	0.000001281	0
540	Tren A2	LinDirHis	Min	0	0	-0.003718	-8.014E-07	-0.000098	0
541	Tren A2	LinDirHis	Max	0	0	0.000008556	0.000252	0.000001162	0
541	Tren A2	LinDirHis	Min	0	0	-0.003462	-8.718E-07	-0.000104	0
542	Tren A2	LinDirHis	Max	0	0	0.00000775	0.000269	0.000000977	0
542	Tren A2	LinDirHis	Min	0	0	-0.003185	-8.502E-07	-0.0001	0
543	Tren A2	LinDirHis	Max	0	0	0.000007026	0.000276	9.272E-07	0
543	Tren A2	LinDirHis	Min	0	0	-0.002888	-7.284E-07	-0.000098	0
544	Tren A2	LinDirHis	Max	0	0	0.000006335	0.000288	8.499E-07	0
544	Tren A2	LinDirHis	Min	0	0	-0.002555	-7.563E-07	-0.000105	0
545	Tren A2	LinDirHis	Max	0	0	0.000004933	0.000291	7.875E-07	0
545	Tren A2	LinDirHis	Min	0	0	-0.002241	-8.348E-07	-0.000098	0
546	Tren A2	LinDirHis	Max	0	0	0.000004147	0.00028	5.888E-07	0
546	Tren A2	LinDirHis	Min	0	0	-0.00194	-6.298E-07	-0.000098	0
547	Tren A2	LinDirHis	Max	0	0	0.000003968	0.00028	0.000000588	0
547	Tren A2	LinDirHis	Min	0	0	-0.001601	-6.599E-07	-0.000099	0
548	Tren A2	LinDirHis	Max	0	0	0.000003147	0.000262	5.103E-07	0
548	Tren A2	LinDirHis	Min	0	0	-0.001296	-7.782E-07	-0.000068	0
549	Tren A2	LinDirHis	Max	0	0	0.0000031	0.000229	3.916E-07	0
549	Tren A2	LinDirHis	Min	0	0	-0.001034	-6.428E-07	-0.000081	0
550	Tren A2	LinDirHis	Max	0	0	0.000002518	0.000211	4.661E-07	0
550	Tren A2	LinDirHis	Min	0	0	-0.000743	-6.244E-07	-0.000077	0
551	Tren A2	LinDirHis	Max	0	0	0.000001485	0.000163	3.305E-07	0
551	Tren A2	LinDirHis	Min	0	0	-0.000578	-0.000000542	-0.000023	0
552	Tren A2	LinDirHis	Max	0	0	0.000002648	0.0001	2.403E-07	0
552	Tren A2	LinDirHis	Min	0	0	-0.000429	-4.258E-07	-0.000061	0
553	Tren A2	LinDirHis	Max	0	0	8.315E-07	0.00006	4.888E-07	0
553	Tren A2	LinDirHis	Min	0	0	-0.000193	-0.000000437	-0.000044	0
556	Tren A2	LinDirHis	Max	0	0	3.158E-11	0.000005093	0.000109	0
556	Tren A2	LinDirHis	Min	0	0	-0.00018	-4.585E-12	-0.000001619	0
557	Tren A2	LinDirHis	Max	0	0	0.000002684	0.000000282	0.000096	0

Apéndice H				Flecha Dinámica Tren A2						V= 336 km/h
557	Tren A2	LinDirHis	Min	0	0	-0.002715	-0.00028	-0.000026	0	