

**ITEM NO. 20**

**FRA Database Data for Track Caused Derailments on Main Line Track**

TRAIN ACCIDENTS BY CAUSE FROM FORM FRA F 6180.54

Selections: Railroad - ALL  
 State - ALL, County - ALL  
 ALL ACCIDENT TYPES / MAIN / T - Rail, Joint Bar and Rail Anchoring  
 Time Frame: Jan 1995 To Dec 2000

MAJOR CAUSE= Track

Specific causes:	Total		Type of Accident			Reportable Damage		Casualty	
	Cnt	%	Coll	Der	Othr	Amount	%	Kld	Nonf
T201- Bolt hole crack or break	19	2.5	-	19	-	9,010,478	3.7	0	4
T202- Broken base of rail	98	12.8	-	98	-	28,071,702	11.7	0	18
T203- Broken weld (plant)	5	0.7	-	5	-	1,932,268	0.8	0	0
T204- Broken weld (field)	26	3.4	-	26	-	16,371,956	6.8	0	2
T205- Defective or missing cross-ties	18	2.4	-	18	-	2,036,101	0.8	0	2
T206- Defect/missing spike-oth rail fastener	6	0.8	1	5	-	604,676	0.3	0	0
T207- Detail fracture - shelling/head check	109	14.3	1	108	-	41,832,732	17.4	1	9
T208- Engine burn fracture	2	0.3	-	2	-	157,084	0.1	0	0
T210- Head and web sep(outside jt bar limit)	63	8.2	-	63	-	13,079,380	5.4	0	1
T211- Head & web separation-in jt bar limit	15	2.0	-	15	-	7,091,254	2.9	0	7
T212- Horizontal split head	12	1.6	-	12	-	1,443,068	0.6	0	0
T213- Joint bar broken (compromise)	5	0.7	-	5	-	1,299,923	0.5	0	0
T214- Joint bar broken (insulated)	3	0.4	-	3	-	3,027,219	1.3	0	7
T215- Joint bar broken (noninsulated)	34	4.5	-	34	-	19,216,520	8.0	1	5
T216- Joint bolts, broken, or missing	7	0.9	-	7	-	2,018,853	0.8	0	0
T217- Mismatched rail-head contour	2	0.3	-	2	-	75,800	0.0	0	0
T218- Piped rail	3	0.4	-	3	-	172,896	0.1	0	0
T219- Rail defect with joint bar repair	3	0.4	-	3	-	690,956	0.3	0	0
T220- Transverse/compound fissure	157	20.5	-	156	1	44,288,680	18.4	0	4
T221- Vertical split head	89	11.6	-	89	-	22,550,046	9.4	2	5
T222- Worn rail	31	4.1	-	31	-	5,333,364	2.2	0	0
T299- Other rail and joint bar defects	57	7.5	-	57	-	20,381,752	8.5	0	6
- Total	764	100	2	761	1	240,686,728	100.0	4	70