

**REPORT NUMBER: 214D-MGA-2001-011**

**TESTING FOR FMVSS 214  
SIDE IMPACT PROTECTION**

**Ford Motor Company  
1995 Ford Taurus 4 door  
NHTSA NUMBER: PS0201**

**PREPARED BY:  
MGA RESEARCH CORPORATION  
5000 WARREN ROAD  
BURLINGTON, WI 53105**



**May 1, 2001**

**FINAL REPORT**

**PREPARED FOR:  
U.S. DEPARTMENT OF TRANSPORTATION  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION  
OFFICE OF VEHICLE SAFETY COMPLIANCE  
400 SEVENTH STREET, SW, ROOM 5208  
WASHINGTON, D.C. 20590**

## FMVSS 214D Test Data Summary

Vehicle: 1995 Ford Taurus 4 Door

Test Date: May 1, 2001

Test Speed: 53.1 kph

NHTSA No: PS0201

### Vehicle Test Weight

Weight as Delivered: = 1471.5 kg

Weight as Tested: = 1716.8 kg

### Injury Criteria:

<b>ATD Position</b>	<b>TTI (g's)</b>	<b>Pelvis (g's)</b>	<b>HIC</b>
<b>Driver</b>	70	110	289
<b>Passenger</b>	83	86	1037

**DATA SHEET NO. 5**

**SID INJURY CRITERIA AND SENSOR DATA**

Test Vehicle: 1995/Ford/Taurus/4 door

NHTSA No.: PS0201

Test Program: FMVSS 214

Test Date: May 1, 2001

**THORAX AND PELVIS PEAK ACCELERATIONS (FIR 100 Filtered)**

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Upper Rib (LUR)	Y	G's	53.3	36	26.4	76	88.9	42	4.8	121
Upper Rib (LUR)	Y	G's	52.8	36	25.5	76	92.8	42	4.8	120
Lower Rib (LLR)	Y	G's	59.0	36	15.5	96	104.4	41	31.1	74
Lower Rib (LLR)	Y	G's	58.6	37	15.5	95	107.6	41	30.5	74
Lower Spine (T <sub>12</sub> )	Y	G's	81.3	38	21.0	70	61.8	41	56.4	68
Lower Spine (T <sub>12</sub> )	Y	G's	82.4	38	20.7	96	60.8	41	55.7	68
Pelvis (PEV)	Y	G's	109.6	32	15.4	87	86.0	31	16.9	76
Pelvis (PEV) (R)	Y	G's	109.7	32	15.5	87	86.9	31	16.4	76

**THORACIC TRAUMA INDEX (TTI) AND PELVIC ACCELERATION (FIR 100 Filtered)**

Location	Driver				Passenger			
	LLR	T <sub>12</sub>	TTI(q)	PEV(q)	LLR	T <sub>12</sub>	TTI(q)	PEV(q)
Rib, Spine, and Pelvis	59.0	81.3	70	109.6	104.4	61.8	83	86.0
Rib, Spine, and Pelvis (R)	58.6	82.4	71	109.7	107.6	60.8	84	86.9

**HEAD CG PEAK ACCELERATIONS (SAE CLASS 1000 Filtered)**

Location	Axis	Units	Driver				Passenger			
			Max	Time	Min	Time	Max	Time	Min	Time
Head CG	X	G's	6.9	195	24.9	79	7.6	47	19.1	60
Head CG	Y	G's	38.7	51	9.1	39	143.4	59	13.0	45
Head CG	Z	G's	55.5	65	17.6	49	17.1	58	60.3	63
Head CG		G's	56.0	65			144.5	59		

**HEAD INJURY CRITERIA (SAE CLASS 1000 Filtered)**

Location	Driver				Passenger			
	HIC	T <sup>1</sup>	T <sup>2</sup>	Avg G's	HIC	T <sup>1</sup>	T <sup>2</sup>	Avg
Head CG	289	47.2	83.2	36.5	1037	56.6	64.1	113.8

Positive Acceleration Polarities: Longitudinal (X) = Forward  
 (Conforms to SAE J211) Lateral (Y) = Right  
 Vertical (Z) = Down

