

the driver. Since the motion cue to the driver depends mainly on creep force and vehicle weight, NHTSA believes it is appropriate to examine the ratio of creep force (forward and reverse) to vehicle weight (in Table 1, curb weight was used) of the vehicles tested. The results ranged from a minimum value of 0.02 for test number one (rearward creep force) to a maximum value of 0.17 for test number eleven (forward creep force). Since the creep force was obvious to the driver for all of these

vehicles, NHTSA selected the lowest creep force to vehicle curb weight ratio, which was .02. Later, for the purpose of consistency, we decided to convert the lowest creep force/curb weight ratio to its corresponding creep force/GVWR ratio, which is .015. For vehicles that allow the engine to stop and start automatically while the transmission shift lever is in Reverse, the reverse creep force designed into a vehicle's propulsion system must be, at minimum, 1.5 percent of the vehicle's

Gross Vehicle Weight Rating (GVWR) when the vehicle's engine is stopped, the propulsion system is on, the accelerator is released, the vehicle is loaded to its GVWR and the vehicle is on a level, paved surface.

The agency invites input from industry and the public relative to what this minimum ratio of creep force to vehicle GVWR should be. The agency also requests comments on the test for creep force in S5 of the proposed regulatory text.

TABLE 1

Test No.	Date	Vehicle							Creep force (lbs.)		
		Vehicle type	Year	Make	Model	VIN	Engine size (L)	Curb weight (lbs)	Drive	Low	Rev.
1	10/19/01	Truck	2000	Chevrolet	1500 Pickup, Full size, 4X4, 1/2 ton.	1GCEK19T0YE*****	5.3	¹ 4374	150	155	95
2	10/24/01	Passenger Car.	1992	Chevrolet	Camaro Sport Coupe, 2DR, Hatchback/liftback.	1G1FP2385NL*****	5.7	3103	400	400	270
3	10/31/01	MPV (Van-Wagon).	1998	Mazda	MPV, Wagon, (4X4), JEE, HYD/ Class D.	JM3LV5239W0*****	3	4120	265	260	255
4	11/2/01	Passenger Car.	1997	Honda	Civic EX 2DR, Coupe/4A.	1HGEJ824XVL*****	1.6	2518	265	255	200
5	11/3/01	Passenger Car.	1990	Toyota	Corolla, Deluxe, 4DR.	2T1AE94AXLC*****	1.6	2394	270	270	225
6	11/4/01	Passenger Car.	1993	Saturn	SW2, 4DR, Wagon.	1G8ZK8579PZ*****	1.9	2506	265	265	265
7	11/4/01	Passenger Car.	1998	Subaru	Forester, Wagon, L.	JF1SF6351WH*****	2.5	2795	295	295	295
8	11/4/01	MPV	1999	Jeep	Grand Cherokee, 4X4, Laredo, 4DR.	1J4GW58S6XC*****	4	3932	350	350	240
9	11/4/01	MPV	1999	Jeep	Grand Cherokee, 4X4, Laredo, 4DR.	1J4GW58S7XC*****	4	3932	490	490	290
10	11/4/01	MPV	2000	Chevrolet	S10/Blazer, 4X4, 1/2 ton.	1GNDD13W7Y2*****	4.3	5350	175	175	125
11	11/4/01	Truck	1996	Dodge	Dakota, Pickup, Sport.	1B7GL26X5TS*****	3.9	3124	520	520	285
12	11/4/01	Passenger Car.	1988	Ford	Mustang, GT, 2DR, Sedan, Hatchback.	1FABP42E5JF*****	5	3173	200	200	155
13	11/6/01	Passenger Car.	2002	Toyota	Prius	JT2BK18U820*****	1.5	2765	165	167	165

¹ (GVWR = 6400 lbs.).