

MOTOR VEHICLE SAFETY CERTIFICATION

7.1 Description of the Motor Vehicle

Safety Standards

The major automobile producing countries of the world have motor vehicle safety standards which establish the performance requirements for various components of automobiles. The Canadian CMVSS are different than the U.S. FMVSS in that the Canadian Motor Vehicle Safety Act places the onus on the manufacturer to prove that he has tested the vehicles being certified, and that the vehicle has passed the test. In the United States, the Federal Department of Transport requires compliance with the FMVSS, but the DOT must purchase vehicles from the manufacturer and test them itself to prove that the vehicles do not comply with the FMVSS.

Tests include equipment such as seat belts, bumpers, hydraulic brake systems, as well as specific structural strength tests such as side door strength, roof intrusion protection, driver impact protection, and steering column rearward displacement. While some tests can probably be satisfied very readily in the choice of materials, such as the election of wheel nuts, hub caps, and wheel discs, structural tests may require more sophisticated design and expensive destructive testing to confirm compliance with CMVSS.

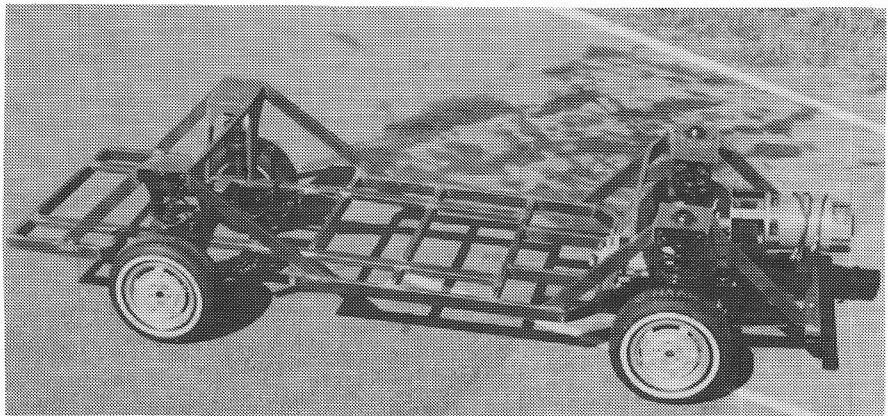
The equipment to be tested totals 45 different tests for

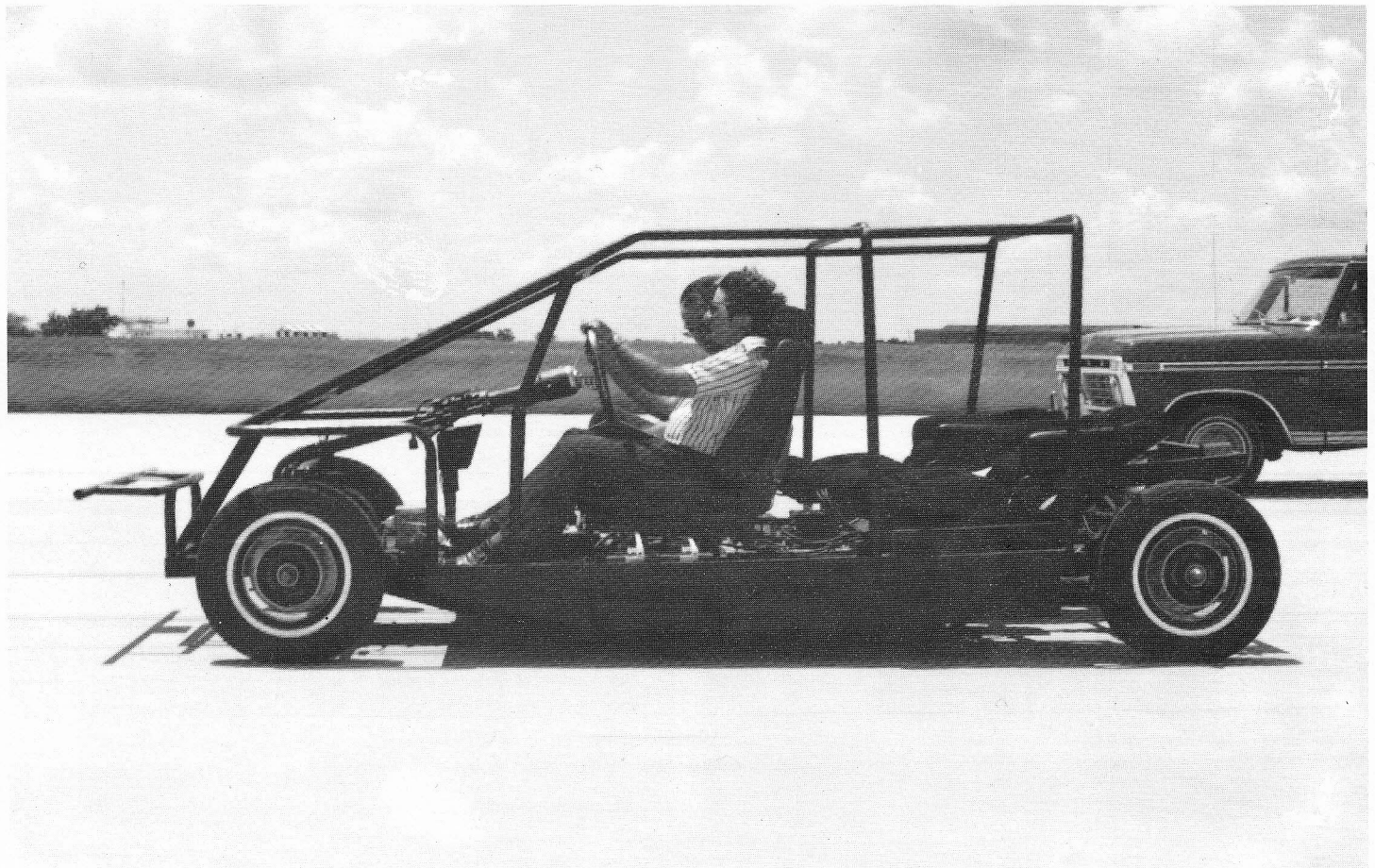
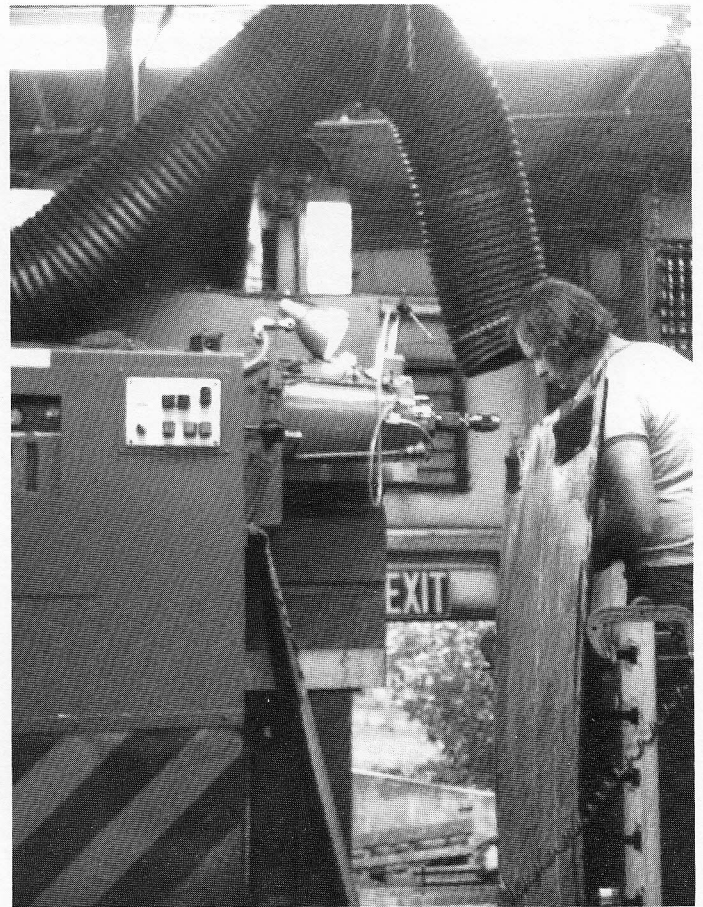
an internal combustion passenger car, with an estimated 8 of these tests being specifically related to gasoline/diesel engines, and therefore not applicable to an electric vehicle, as of May 1988. This does not consider any tests which may be added for an electric vehicle.

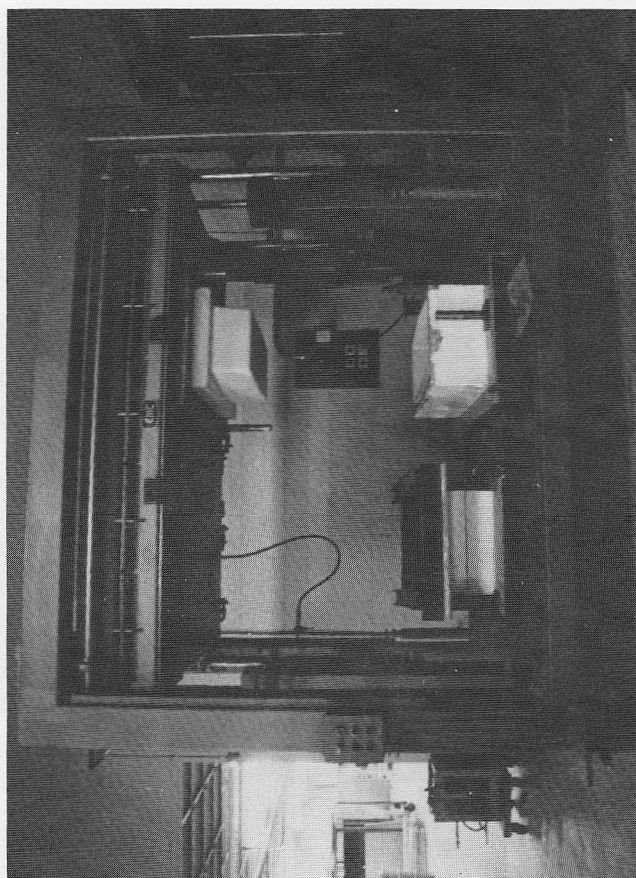
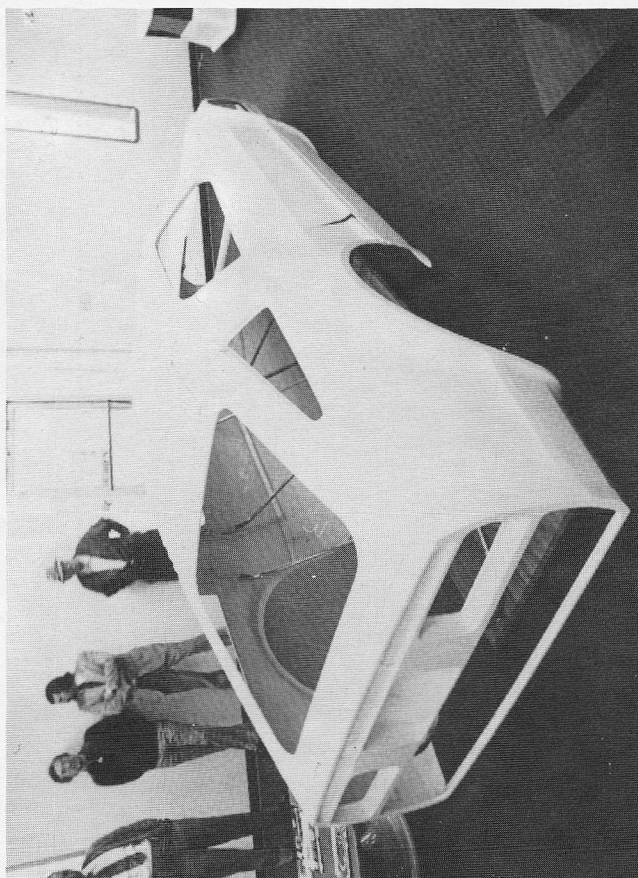
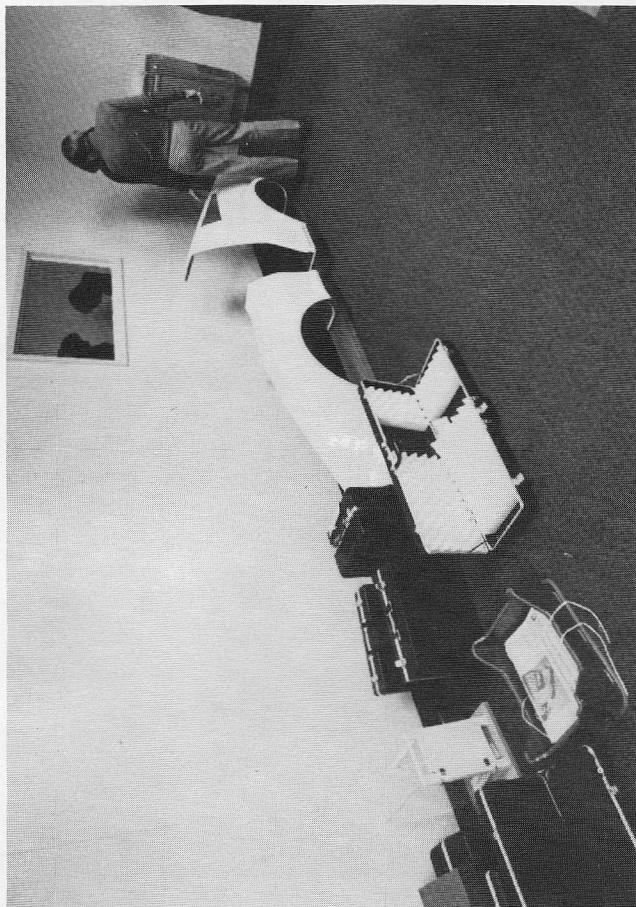
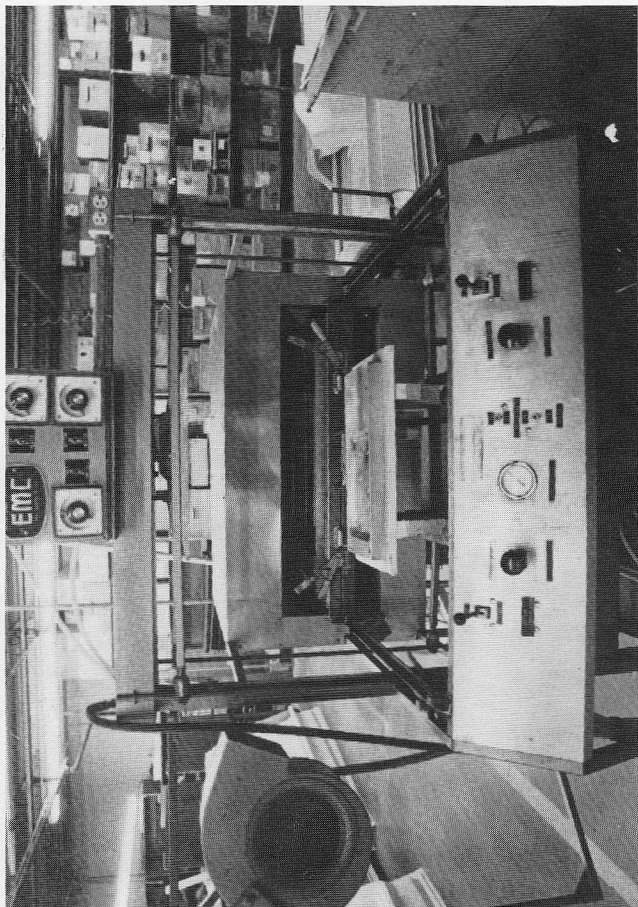
The EXAR-1 and any subsequent vehicles will each have to satisfy CMVSS if sold in Canada, and FMVSS if sold in the U.S. The FMVSS requirements are apparently very similar to those of the CMVSS. A CMVSS listing of the equipment to be tested is in the Exhibits.

7.2 An Internal Combustion version of the EXAR-1

While not included in the current plans, the receipt of CMVSS would allow the company to explore the desirability of producing an internal combustion version of the EXAR-1.







SCHEDULE III - Continued

CANADA MOTOR VEHICLE SAFETY STANDARDS

EQUIPMENT	CMVSS	CLASSES OF VEHICLES										
		Bus	Chassis-cab	Restricted-Use Motorcycle	Motorcycle	Multipurpose Passenger Vehicle	Passenger Car	Snowmobile	Snowmobile Cutter	Trailer	Trailer Converter Dolly	Truck
Belt Anchorages	210	X	X			X	X					X
Tether Anchorages for Child Restraints	210.1						X					
Nuts, Discs, Hub Caps	211					X	X					
Windshield Mounting	212	X				X	X					X
Child Seating and Restraint Systems	213	X				X	X					X
Side Door Strength	214						X					
Bumpers	215						X					
Roof Intrusion Protection	216						X					
Bus Window Retention, Release and Emergency EXits	217	X										
Windshield Zone Intrusion	219	X				X	X					X
Rollover Protection	220	X										
Joint Strength	221	X										
Fuel System	301	X				X	X					X
LPG Fuel System	301.1	X	X			X	X					X
CNG Fuel System	301.2	X	X			X	X					X
Flammability	302	X	X			X	X					X
AXle	901									X		
Emission Device	1101	X	X			X	X					X
Crankcase Emission	1102	X	X			X	X					X
Hydrocarbon and CO	1103	X	X			X	X					X
Diesel Capacity	1104	X	X			X						X
Evaporative Emission	1105	X	X			X	X					X
Noise	1106	X			X	X	X					X
Snowmobile Standards	1201							X				
Tie Down	1207								X			
	1208									X		
Tow Bar	1209								X			

CMVSS Schedule of Itemized Safety Standards

SCHEDULE III
(s.s. 2, 13 and 14)

CANADA MOTOR VEHICLE SAFETY STANDARDS

CLASSES OF VEHICLES

EQUIPMENT	CMVSS	Bus	Chassis-cab	Restricted-Use Motorcycle	Motorcycle	Multipurpose passenger vehicle	Passenger car	Snowmobile	Snowmobile Cutter	Trailer	Trailer converter Dolly	Truck
Control Location	101	X	X				X	X				
Shift Sequence	102	X	X				X	X				
Defrosting Defogging	103	X	X				X	X				
Wiping and Washing	104	X	X				X	X				
Hydraulic Brakes	105	X	X				X	X				
Brake Hoses	106	X	X			X	X	X			X	X
Reflecting Surface	107	X	X				X	X				
Lighting	108	X	X	X		X	X	X		X	X	
Headlamps	108.1	X	X			X	X	X				
Tires and Rims	110							X				
Rearview Mirrors	111	X				X	X	X				
Headlamp Concealment	112	X	X			X	X	X				
Hood Latches	113	X	X				X	X				
Locking System	114							X				
Vehicle Identification Number	115	X	X	X		X	X	X	X		X	X
Hydraulic Fluids	116	X	X			X	X	X			X	X
Power Windows	118						X	X				
Tire Selection and Rims	120	X	X			X	X				X	X
Air Brake Systems	121	X	X								X	X
Motorcycle Brake Systems	122					X					X	X
Controls & Displays - Two & Three Wheeled Vehicles	123					X						
Accelerator Control Systems	124	X	X				X	X				
Occupant Protection	201	X					X	X				
Head Restraints	202							X				
Impact Protection	203	X					X	X				
Steering Wheel	204	X					X	X				
Glazing Materials	205	X	X			X	X	X			X	
Door Latches	206		X				X	X				
Seat Anchorages	207	X	X				X	X				
Seat Belts	208	X					X	X				
Belt Assemblies	209	X	X				X	X			X	