

September 20, 1977

ENGINEERING MEMO #392

TO: Memo Distribution  
FROM: R. E. Orwig  
SUBJECT: 1978 CHECKER VEHICLE DESIGN CHANGES TO IMPROVE THE  
CRASH-WORTHINESS AND FUEL SYSTEM INTEGRITY OF THE CARS.

As the result of the Engineering Analysis of our 1978 Barrier Crash Test Vehicle, we are making some design changes for product improvements:

FRAME:

1. Wherever the inner and outer rails mate together to form the box section, there will be continuous welding—both top and bottom, the entire length of the frame. In other words, no "skip" welding at the frame rail box section areas. This results in approximately 98 inches of additional weld per frame assembly. (Effective with Chassis(#74694).
2. A frame rail gusset and a reinforcement plate are being added forward of the spring seat on both sides of the frame assembly. These plates will be .187 thick and welded to the frame.

FUEL TANK FILLER:

1. The fuel tank filler tube ((94653) is being shortened by 7/8 inch and the soldered connection to the tank is being improved by better quality control.
2. The fuel tank filler tube assembly (#705924) is being lengthened and the diameter at the lower end reduced for a tighter fit.

Following is a list of the parts affected:

## ENGINEERING MEMO # (Cont'd)

ITEM	NAME	B O R M	OLD PART NUMBER	NEW PART NUMBER	INT NEW FOR OLD	AVAIL AFTER CHG	REMARKS
1	FRAME ASM-COMP (BASIC)	M	707041	-----	YES	NO	CHANGES A THRU D
2	GUSSET-FRAME RAIL LH	M	-----	708173	-	-	NEW PART
3	GUSSET-FRAME RAIL RH	M	-----	708174	-	-	NEW PART
4	REINF ASM-FRAME SIDE RAIL _LH FRT	M	707039	-----	YES	NO	CHANGE A
5	REINF ASM-FRAME SIDE RAIL -RH FRT	M	707040	-----	YES	NO	CHANGE A
6	PLATE-FRAME REINF LH	M	-----	708171	-	-	NEW PART
7	PLATE-FRAME REINF RH	M	-----	708172	-	-	NEW PART
8	TUBE-FUEL TANK FILLER	B	94653	-----	YES	NO	CHANGE C
	FUEL TANK ASM-W/EEC	M	707045	-----	YES	NO	CHANGE A
10	TUBE ASM-FUEL TANK FILLER	B	705924	-----	YES	NO	CHANGES A&B