

ENGINEERING MEMO #428

TO: Memo Distribution  
FROM: R. E. Orwig  
SUBJECT: SPECIAL MODIFICATION FOR NEW YORK CITY TAXI FLEETS (1981 MODEL YEAR)

The following changes are being made to increase the durability of our vehicle due to the severe taxicab duty cycle in the New York City environment. Management has concurred to make these special modifications.

All production personnel concerned with the building of these vehicles are reminded that close attention must be given to assure that each and every special feature listed below is done as specified.

FRAME ASSEMBLY (707540)

The following items are peculiar to this frame assembly and are special for all New York City Taxicabs:

1. 96085 -- REINFORCEMENT-REAR SHOCK BRKT.  
Four (4) of these are being added (2 at each shock mounting bracket) for added strength.
2. 708345 -- REINFORCEMENT-SIDE RAIL(CENTER OUTER)  
Two (2) of these are being welded (1 on each side of frame) to the frame side rails in place of 706899 & 706900 standard production reinforcements.
3. 708349 -- BRACKET-BODY FRAME-CENTER(MOD)  
Two (2) of these are used (1 on each side of frame) in place of 702011 standard production brackets (Note: 708349 is made from 702011).
4. 708343 -- REINFORCEMENT-FRAME X-MEMBER  
One (1) of these is welded to the L.H. X-Member only.
5. 708353 -- PLATE-FRAME X-MEMBER-REINFORCEMENT  
One (1) of these is welded to the L.H. X-Member only.
6. 707256 -- PLATE ASM-REAR ENGINE SUPT FRAME  
708352 -- PLATE-ENGINE SUPT FRAME  
One (1) each is used in place of 705501 & 706565 standard production parts. (Note: (2) holes must be drilled thru lower flange of X-Member after welding 707256 Plate Asm to frame).

- 7. 706982 -- ANGLE-FRAME RAIL  
 One (1) is welded to the R.H. Frame Side Rail after the 708345 Reinforcement is welded in place. (Note: This is already a standard frame option - but must be included in this special frame asm).
- 8. 708341 -- REINFORCEMENT-UPPER CONTROL ARM BRACKET  
 Four (4) of these are welded (2 on each side) to the Upper Control Arm Brackets.
- 9. 708354 -- BAR-FRONT CHASSIS SKID  
 Two (2) of these are welded to the #1 and #2 frame tubular crossmembers. (Note: This is a standard frame option - but must be included on this special frame asm).
- B 10. 708752 -- BRACE-STEERING GEAR  
 This Brace must be included for all NYC Taxis. Reference: GI 372 J-3

OTHER CHASSIS REVISIONS

- 1. 707445 -- BAR ASM-REAR ENGINE SUPT (MOD)  
 This bar assembly must have a .42 diameter hole drilled for additional bolt attachment to the frame. This part is made from the current 707384 - Bar Asm.
- A 2. TIRES (#708732)  
 Special bias-belted tires G78-15 load range "C" will be purchased for these New York City Taxis. Tire pressure should be 32 P.S.I. (36 P.S.I. Max).
- 3. COOLANT LEVEL SENSOR

A special radiator (707713) with provision for the coolant level sensor probe will be used for New York City Taxis. Following is a list of items required for this installation.

- 707713 -- RADIATOR ASM-2.00 CORE (SPECIAL)
- 707213 -- PROBE ASM-COOLANT LVL SENSOR
- 707214 -- MODULE ASM-COOLANT LVL SENSOR
- 707432 -- HARNESS ASM-COOLANT LVL SENSOR
- 626898 -- SCR & WA ASM - #8 x 3/4 OHCR TAP (2 REQ'D)
- 646508 -- PANEL-INSTRUMENT (ADD 2 HOLES FOR MODULE)

4. RADIATOR OVERFLOW BOTTLE

The coolant recovery reservoir bottle will have an additional strap binding it to the inner fender. The required items are as follows:

- 708731 -- BAND-RAD COOLANT RECOVERY BOTTLE  
 (Mounting holes to be located and drilled at assembly).
- 121187 -- BOLT-1/4-20 x 3/4 HEX )
- 120392 -- WASHER-9/32 ID x 5/8 OD PLAIN ) 2 EACH REQ'D
- 271172 -- NUT & EXT L/W - 1/4-20 HEX )

5. WINDSHIELD WASHER BOTTLE RELOCATION

The W/S washer bottle will be mounted on the firewall for the New York City Taxis. Following is a list of items for this installation:

708728 -- BRKT-W/S WASHER MT

NOTE: Use this brkt to locate and drill (4) holes in cowl for pop rivets.

626642 -- RIVET-POP 3/16 OD (4 REQ'D)

120854 -- BOLT-1/4-20 x 5/8 HEX HD (2 REQ'D)

120392 -- WASHER-9/32 ID x 5/8 OD PLAIN (2 REQ'D)

271172 -- NUT & EXT L/W-1/4-20 HEX (2 REQ'D)

NOTE: Cut-off 21" of 640075 hose and discard.

6. FRONT SPRINGS (REMINDER)

It is imperative that the 9260 Alloy Front Springs (#708355) be installed on all New York City Taxis. No other spring usage is acceptable. EXCEPT DIESELS USE #708339

7. "RACOR" FUEL FILTER (DIESEL ENGINE ONLY)

A special "Racor" Fuel Filter will be supplied by Midland Service, Inc. of N.Y.C. for installation on 90 Diesel Engine vehicles. This installation will be developed by the Engineering Department. Sales Department will specify which vehicles are to receive these filters.

8. TRANSMISSION DIPSTICK MODIFICATION

A modified transmission dipstick will be used for all N.Y.C. Taxis as follows:

707715 -- CAP & GAGE ASM-TRANS OIL LVL(MOD)

NOTE: 707715 made from 707501

9. RADIATOR INSTALLATION

Three (3) pieces of MA-140 1-1/2" wide cloth tape is to be added to the lower radiator tank. (1) piece at each rubber mounting location. (3.00" Lg. each)

BODY REVISIONS

1. RADIATOR SUPPORT

In addition to the current 653527-RAD SUPT PANEL ASM which is special for New York City Taxi, the following revisions will be included.

648291 -- REINF-RAD SUPT INR SIDE (2 REQ'D)

648289 -- PLATE-RAD CROSS LWR ANCHOR (2 REQ'D)

(These parts are welded to the RAD SUPT PANEL ASM #653527)

648290 -- MEMBER-RADIATOR CROSS )

180077 -- BOLT-5/16-18 x 3/4 HEX ) 2 EACH REQ'D

120214 -- LOCKWASHER-5/16 MED SPR ) (cannot be used

120376 -- NUT-5/16-18 HEX ) with Air Cond.)

Lower (2) holes to be drilled at ...

A  
A  
A  
A

## 2. FRONT FENDER CROSS ROD

A cross rod (brace) is to be installed from left to right fenders just rearward of the radiator. (Holes to be drilled in fenders at assembly). Following is a list of items required:

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708729 -- ROD-FRONT END REINF  
708730 -- COVER-FRONT END REINF ROD  
640597 -- SHIM-RAD SUPT MT (4 REQ'D)  
446477 -- WASHER-7/16 ID x 1-3/8 OF PLAIN (6 REQ'D)  
120377 -- NUT-3/8-16 HEX (4 REQ'D)  
120382 -- LOCKWASHER-3/8 MED (2 REQ'D)

## 3. HOOD REINFORCEMENT (FRT)

The Hood Reinf & Plate Asm - Front (647502) is to be wire welded in addition to the spot welding for added strength.

## 4. COWL BRACKETS

The FRONT BODY MOUNTING BRACKET (630371 LH & 630372 RH) has been increased in stock thickness from .059 to .080 MIN. (Change "K") to increase strength. This will eventually become an "across the board change", but is absolutely mandatory for all New York City Taxis. In other words, production should make sure that none of the existing .059 stock be used for New York City orders.

## 5. REAR SEAT ASH TRAYS

The rear seat ash trays are to be relocated from the rear doors to the rear quarter panel (under the arm rests). This will be a production line procedure only - as instructed by Larry Temple.

## 6. FRONT FLOOR MAT (H.D.)

A new "Heavy Duty" rubber FRONT FLOOR MAT (#653645) will be installed in place of the regular rubber floor mat (#653350). The new H.D. mat will be of .125 gauge, 1021 SBR Compound.

## 7. REAR FLOOR MAT (H.D.)

648246 REAR FLOOR MAT will continue to be installed for New York City Taxis. This will also be .125 gauge, 1021 SBR Compound.

## 8. FRONT FLOOR PAN

648234 - REINF-FRT FLOOR FRT will continue to added to each side of the front floor pan at the location the cowl bracket welds to the floor. (2) REQ'D)

9. BODY MT-FRT FLOOR OUTER

648229 - CUP WASHER-BODY MT BOLT will continue to be added to the front floor outer body mounting location to double the metal thickness in this area. (2) REQ'D)

10. FRONT FENDER-INNER

648227 LH & 648228 RH - REINF-FRT FENDER INNER will continue to be added in the area of the radiator support and upward above the hood line. (1) each REQ'D.

648235 - REINF-INNER FENDER UPPER REAR will also continue to be added. (1) REQ'D on each fender.

11. FRONT FENDER-OUTER

A reinforcing brace (648293 LH & 648294 RH) will be added to the front outer fender at the upper rear corner.

A 12. OUTSIDE HOOD RELEASE

The outside hood release mechanism (as cancelled Per Memo 423) is re-instated for use on "NEW YORK CITY TAXICABS" per customer's request. Following is a list of the affected items:

- 707716 -- CONTROL & SUPT ASM-PARK BRK(SPL) Used in place of 707668 Asm.
- 653329 -- RELEASE ASM-HOOD LOCK )
- 648201 -- BRKT-HOOD LOCK RELEASE LEVER ) REINSTATED
- 648202 -- LEVER-HOOD LOCK RELEASE ) FOR N.Y.C.
- 636175 -- RIVET-T/G SUPT SHOULDER ) TAXI
- 626356 -- WASHER-WAVE ) ONLY
- 648203 -- WIRE-HOOD LOCK RELEASE )