

February 6, 1969
 "A" Rev. Pg. (3) 2-10-69
 "B" Rev. Pg. (2) 3-24-69
 "C" Rev. Pg. (1) (2) & (3) 4-18-69
 "D" Rev. Pg. (1) & (3) Pg. (4) Added 5-15-69
 Rev. Pg. (3) & (4), Pgs. (2a) & (3a) Added 5-26-69
 Rev. Pg. (2) & (4) 6-18-69
 Rev. Pgs. (2) & (2a) 7-15-69
 Rev. Page (3a) 7-31-69
 Rev. Pgs. (2a) & (3a) 8-12-69
 Rev. Pg. (2a), (2b) Added 9-2-69
 Rev. Pgs. (2b, 3a) 10-10-69
 Pg. (2b) Rev., Pg. (4) Chas. Pt. Added 11-19-69
 Rev. Pgs. (2b, 3, 3a) 12-31-69

ENGINEERING MEMO #253

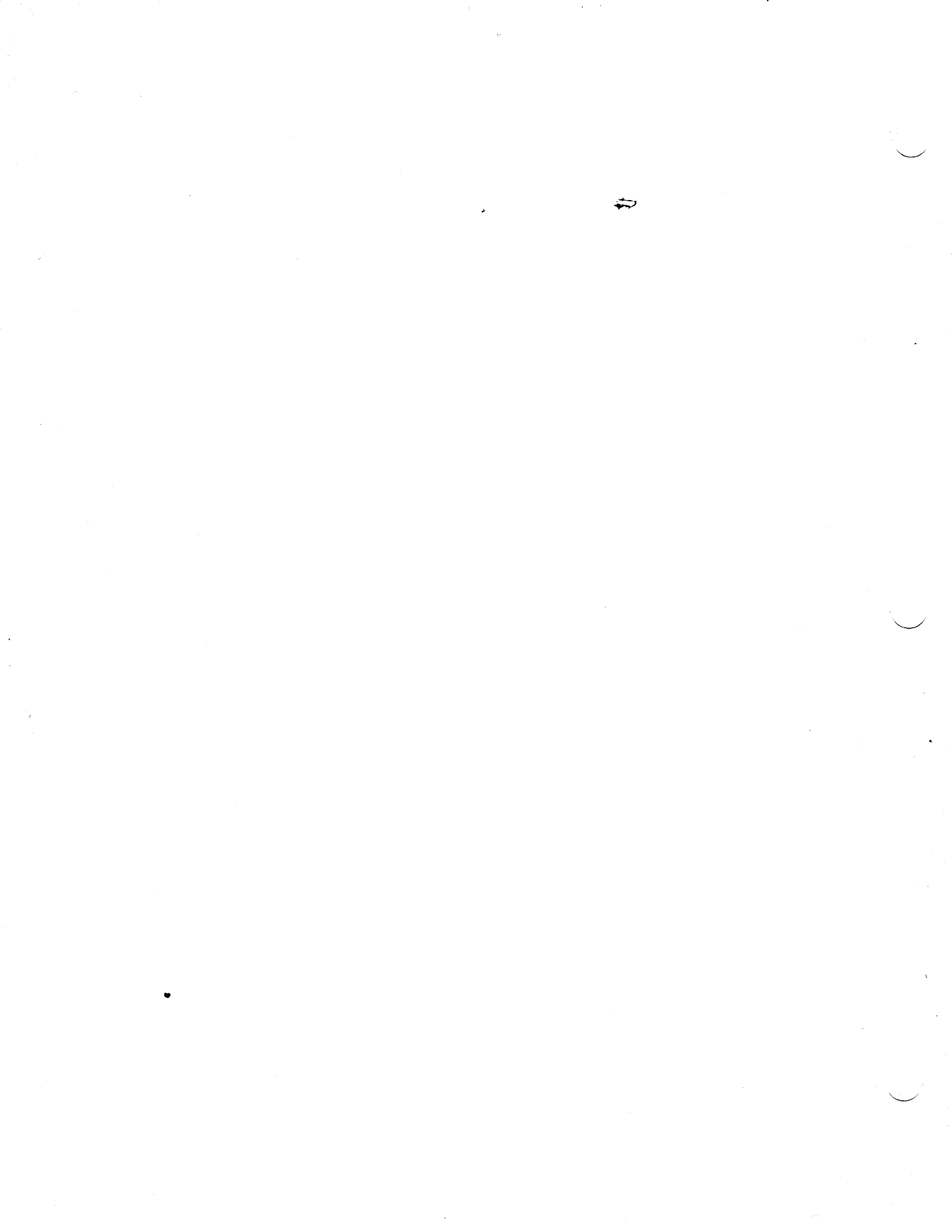
TO: Memo Distribution

FROM: B. Lewis

① SUBJECT: 1970 ENGINE AND TRANSMISSION REVISIONS FOR THE AEROBUS MODELS A-12W6 & A-12W8

- A. To conform with the Federal Standard for Exhaust Emissions applicable to new gasoline powered engines manufactured on or after January 1, 1970, for use in heavy duty vehicles and to conform with the engine source changeover program, the Checker Motors Corporation will make the change to the 1970 Model Aerobus engines with exhaust emission controls on October 1, 1969.
- B. The Aerobus automatic transmission change will be made to conform with the change from the Warner Gear Model 8 to the Warner Gear Model 12 automatic transmission for the 1970 Model year.
 - 1. The Aerobus automatic transmission will be the same as the passenger car 8-cylinder engine automatic transmission except for the deletion of the T.C.S. switch.
 - 2. No changes will be made on the Aerobus standard transmission.
 - 3. The Aerobus 4-spd. Floor Shift Trans. option will be discontinued.
- C. The 1970 Aerobus engine changes will affect the following components:
 - 1. Engines
 - 2. Engine kits
 - 3. Air cleaner Hoses
 - 4. Carburetors
 - 5. A.I.R. pump, hoses and valves
 - 6. Tune-up labels
- D. The change to the Warner Gear Model 12 automatic transmission will affect the following components:
 - 1. Propeller shafts
 - 2. Torque converter
 - 3. Rear engine mount
 - 4. Kick down control system
 - 5. Shift rods
 - 6. Speedometer gears
- E. List of Engines and Kits to be affected:

ITEM	NAME	B or M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
1.	Engine A.-350 V/8 Std.Tr.-Aero.	B	703266	703574	NO	NO	Use W/O Obsoles.
	Engine A.-350 V/8 Auto.Tr.-Aero.	B	703267	703575	NO	NO	Use W/O Obsoles.



February 6, 1969
 "F" Rev. 6-18-69
 "G" Rev. 7-16-69

ENGINEERING MEMO #253 (Cont'd.)

ITEM	NAME	B or M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
CF 3.	Kit-Power Strg. V/8 Eng.	B	703314		NO	NO	REINSTATE Service or Scrap
CF 4.	Kit-Eng. Access. 350 V/8 Aerobus W/O Air Cond.	B	703317	703649	NO	NO	Service or Scrap
CF 5.	Kit-Eng. Access. 350 V/8 Aerobus W/Air Cond.	B	703318	703650	NO	NO	Service or Scrap
C 6.	Kit-A.I.R. Equipment	B	703319	-----	NO	NO	Service or Scrap

F. List of Engine Related Items to be affected:

ITEM	NAME	B or M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
C 1.	Carb. A.-350 V/8 Aero.	B	703276	703576	NO	YES	Service or Scrap
C 2.	Cleaner A. Carb. Air	B	703287		NO	YES	Use Reinstall
3.	Pump A. Air Injection	B	703291		NO	YES	Use Reinstall
4.	Valve A. Exh. Gas Comb. Ck.	B	703117		NO	YES	Use Reinstall
5.	Hose Div. Vlv. to Exh. Gas Comb. Ck. Vlv. LH	B	704435		NO	YES	Use Reinstall
6.	Hose Div. Vlv. to Exh. Gas Comb. Ck. Vlv. RH	B	704436		NO	YES	Use Reinstall
7.	Valve A. Air Pump Div.	B	703294		NO	YES	Use Reinstall
8.	Hose Div. Valve to Carb.	B	704440		NO	YES	Use Reinstall
9.	Hose-Cr/case Vent to Air Cleaner	B	704432	-----	NO	YES	Service or Scrap
10.	Label-Engine Tune-up	M	704566	704760	NO	YES	Service or Scrap
11.	Conn. Straight 1/4 Inv. Fl. 1/8 MPT	B	137405	-----	NO	YES	Serv. or Scrap
12.	Elbow-Auto Pipe 45° Street 1/8 M & F	B	9409927	-----	NO	YES	Serv. or Scrap
13.	Switch A.-Gov. Vacuum	B	701397	-----	NO	YES	Serv. or Scrap
14.	Wire A.-Gov. Vac. Switch	B	701883	-----	NO	YES	Serv. or Scrap
15.	Socket & Wire A.-Gov. Indicator	B	701884	-----	NO	YES	Serv. or Scrap
16.	Lens A.-Park. Br. Warn. Lamp	B	95068	-----	NO	YES	Reduce Usage
17.	Bulb-2 C.P. 12 V Sin. Contact	B	9417863	-----	NO	YES	Reduce Usage

ENGINEERING MEMO #253 (Cont'd.)

ITEM	NAME	B or M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
18.	Supt. A.-Eng. Mtg. Rear	M	701842	-----	NO	YES	Reduce Usage
19.	Clamp-Eng. Mtg. Rear	M	702062	-----	NO	YES	Reduce Usage
20.	Supt. A.-Rear Eng. Mtg. V/8 Auto.	M	-----	703553	NO	YES	New Part
21.	Base-Rear Eng. Mtg. V/8 Auto.	M	-----	704653	NO	YES	New Part
22.	Supt.-Rear Eng. Mtg. V/8 Auto.	M	-----	704654	NO	YES	New Part
A 23.	Mtg. A.-Eng. Frt. Left Side	M	703233	-----	NO	YES	Serv. or Scrap
A 24.	Gasket-Carb. Mtg. Aerobus	F	704512	704530	NO	YES	Serv. or Scrap
A 25.	Cleaner A.-Dist. Air	F	701393	-----	NO	YES	Serv. or Scrap
A 26.	Gasket-Carb. Spacer	F	704552	-----	NO	YES	Serv. or Scrap
A 27.	Plug-Air Inj. Pipe Hole (Exh. Man.)	F	704539	-----	NO	YES	Serv. or Scrap
A 28.	Elbow-Auto. Pipe 90° Street M&F	F	702538	-----	NO	YES	Serv. or Scrap
A	Tee-Spec. Inv. Fl. Tube 1/8 M&F	F	702539	-----	NO	YES	Serv. or Scrap
A 30.	Seal-Governor	F	702540	-----	NO	YES	Serv. or Scrap
A 31.	Mtg. A.-Frt. Eng. V/8	F	703020	703684	NO	YES	Serv. or Scrap
A 32.	Pipe A.-Gov. Vacuum Cont.	F	703110	-----	NO	YES	Serv. or Scrap
A 33.	Conn. C/C Vent Vlv. Cvr. to A/C Hose	F	704528	704660 704661	NO	YES	Revise Usage
A 34.	Grommet-C/C Vent LH	F	704146	704753	NO	YES	Revise Usage
A 35.	Clip-C/C Vent Hose	F	-----	704700	NO	YES	New Part
A 36.	Spacer-Carb. Mtg.	F	704551	-----	NO	YES	Serv. or Scrap
A 37.	Supt.-Eng. Mtg. Rear	M	704164	-----	NO	YES	Revise Usage
A 38.	Spacer-Eng. Mtg. Rear Supt.	B	702061	-----	NO	YES	Revise Usage
A 39.	Hose-Carb. to Dist. (Vac.)	B	-----	704744	NO	YES	New Part
A 40.	Brkt.-Eng. Mtg. Adapter (V/8)	M	702466	704765	NO	YES	Serv. or Scrap
	Screw - 5/16-24 x 1-1/2 FHCR Mach.	B	178433	-----	NO	YES	Reduce Usage
	Nut - 5/16-24 Hex. Crown Lock	B	626851	-----	NO	YES	Reduce Usage

Sept. 2, 1969
 "A"Rev. 10-10-69
 "B"Rev. 11-19-69
 "C"Rev. 12-31-69

ENGINEERING MEMO #253 (Cont'd.)

ITEM	NAME	B or M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
43.	Mtg. A.-Eng. Frt. Left Side Comp.	M	703234	-----	NO	YES	Serv. or Scrap
44.	Adapter-Carb. Tr. Cont.	M	702512	704719	NO	YES	Serv. or Scrap
45.	Clamp-Heater Hose	B	92818	-----	NO	YES	Revise Usage
46.	Bolt - 3/8-16 x 5 Hex. Hd. Spec. (GM 280M)	B	704153	-----	NO	YES	Revise Usage
47.	V-Belt - 3/8 x 38° x 44.25 Long	B	704498	-----	NO	YES	Revise Usage
48.	Bolt - 1/4-20 x 2-3/4 Hex. Hd.	B	121973	-----	NO	YES	Revise Usage
49.	Protector-Pwr. Strg. Hose	M	704672	-----	NO	YES	Revise Usage
50.	Bolt - 3/8-16 x 1 Hex. Hd. (GM280M)	B	180122	-----	NO	YES	Revise Usage
51.	Bolt - 1/4-20 x 3/4 Hex. Hd.	B	121887	-----	NO	YES	Revise Usage
52.	Bolt - 3/8-16 x 1-1/4 Hex. Hd. (GM 300M)	B	186679	-----	NO	YES	Revise Usage
	V-Belt - 3/8 x 38° x 47.50	B	704499	-----	NO	YES	Revise Usage
54.	Nipple-Carb. to Vac. Hose	B	702205	-----	NO	YES	Serv. or Scrap
55.	Conn.-Inlet Manif. Vac.	M	704638	-----	NO	YES	Serv. or Scrap
56.	V-Belt - 15/32 x 36° x 47.50 Long	B	704767	704770	NO	YES	Serv. or Scrap Surplus
57.	Spring-Acc. Pull Back	B	704532	-----	NO	YES	Reinstate
58.	Tube-1/4 O.D. x 5.00 Long	M	-----	704720	NO	YES	New Part
A 59.	Rod-Cont. Lvr. to B/Cr. Frt.	M	-----	704769	NO	YES	New Part
C 60.	Rod & Tube A.-Cont. Lvr. to B/Cr. Front	M	701844	703701	NO	YES	Serv. or Scrap
B 61.	Rod-Cont. Lvr. to B/Cr. Rear	M	702984	704707	-	-	Serv. or Scrap
B 62.	Washer-Carb. Stud Sealing	B	702357	-----	-	-	Increase Usage
B 63.	Panel-Instrument Center	M	644357	Chg."D"	-	-	Use
B 64.	Facing-Instru. Panel Wood Grain	M	644760	Chg."A"	-	-	Serv. or Scrap

ENGINEERING MEMO #253

"F" G. List of Transmission & Related Parts to be affected:

ITEM	NAME	B OF M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
1.	Trans.A.-D.R. Auto.350 V/8	B	703448	703525	NO	YES	Use
2.	Torque Conv.-Heavy Duty	B	701386	703518	NO	YES	Service or Scrap
3.	Cable Assem.-T.V.Control 8-Cyl.	B	701239	-----	NO	YES	Service or Scrap
4.	Bracket-T.V.Control Cable(Aero.)	M	702513	-----	NO	YES	Service or Scrap
5.	Bolt - 3/8-16 x 2-3/4 Hex.Hd.	B	180137	-----	NO	YES	Service or Scrap
6.	Lockwasher-3/8 Medium Spring	B	120382	-----	NO	YES	Reduce Use
7.	Washer-13/32 I.D. x 3/4 O.D. x 1/8 Thk.	B	702262	-----	NO	YES	Reduce Use
8.	Nut - 3/8-16 Hex.	B	120377	-----	NO	YES	Reduce Use
9.	Clevis-#10 Adjustable	B	110322	-----	NO	YES	Reduce Use
9.	Nut - #10-32 Hex.	B	120614	-----	NO	YES	Reduce Use
	Pin-3/16 Clevis Std.	B	121547	-----	NO	YES	Reduce Use
12.	Cotter Pin-1/16 x 1/2	B	112726	-----	NO	YES	Reduce Use
13.	"O" Ring-Auto.Tr.Control Cable	B	702257	-----	NO	YES	Service or Scrap
14.	Retainer-Auto.Tr. T.V.Cable	B	702258	-----	NO	YES	Service or Scrap
15.	Bolt - 1/4-20 x 1/2 Hex.Hd.	B	120706	-----	NO	YES	Reduce Use
16.	Lockwasher-1/4 Medium Spring	B	120380	-----	NO	YES	Reduce Use
17.	Washer-9/32 I.D. x 5/8 O.D.Plain	B	120392	-----	NO	YES	Reduce Use
18.	Propeller Shaft A.-Comp.154-1/2 WB	B	701371	703529	NO	YES	Service or Scrap
19.	Propeller Shaft-Comp. 189 WB	B	701372	703530	NO	YES	Service or Scrap
20.	Gear-Speedo.Driven. - 17T.	B	701449	-----	NO	YES	REINSTATE
21.	Gear-Speedo.Driven. - 16T. (Auto.)	B	701179	703527	NO	YES	Service or Scrap
22.	Nut - 9/16-18 Hex.Jam	B	-----	124939	NO	YES	Reinstate
3.	Switch Asm.-Kick Down	B	-----	703637	NO	YES	New Part
	Nut - 7/16-20 Hex.Jam	B	272123	-----	NO	YES	Increase Use

May 26, 1969
 "A"Rev. 7-31-69
 "B"Rev. 8-12-69
 "C"Rev. 10-10-69
 "D"Rev. 12-31-69

ENGINEERING MEMO #253 (Cont'd.)

ITEM	NAME	B OF M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
25.	Bolt - 7/16-20 x 1 Hex.Hd. GM 280M	B	181666	-----	NO	YES	Increase Use
26.	Bolt - 7/16-14 x 7/8 Hex.Hd. GM 280M	B	180144	-----	NO	YES	Increase Use
27.	Lockwasher-7/16 Med.Spring	B	120383	-----	NO	YES	Increase Use
A 28.	Rod A.-Auto.Tr.Cont. V/8	M	702270	704629	NO	YES	Serv.or Scrap
A 29.	Rod-Auto.Tr.Shift V/8	M	701208	703528	NO	YES	Serv.or Scrap
A 30.	Rod-Low & Rev.Gear Shift V/8	M	704397	704667	NO	YES	Serv.or Scrap Cancelled
A 31.	Rod A.-Low & Rev.Gear Shift V/8	M	703246	703555	NO	YES	Serv.or Scrap Cancelled
B 32.	Pedal A.-Accelerator	B	95130	-----	YES	YES	Revise Usage
B 33.	Pedal & Plate A.-Accelerator	M	95133	-----	YES	YES	Revise Usage
C 34.	Hose-Tr.Vac.Cont.Tube	B	704694	704773	NO	YES	Partial
	Rod-Low & Rev.Gear Shift V/8	M	704667	704798 704799	NO	YES	Use to make 704798-99
D 36.	Set Screw-1/4-28 x 3/8 Hex. Socket Cup Point	B	-----	139011	-	-	New Part
D 37.	Rod Asm.-Low & Rev.Gear Sh.V/8	M	703555	703716	NO	YES	Use to make 703717 & 704799
D 38.	Reinf.Shift Rod Clamp Tube	M	-----	704801	-	-	New Part
D 39.	Tube-Low & Rev.Shift Rod Clamp	M	-----	704800	-	-	New Part
D 40.	Tube Asm.-Low & Rev.Sh. Rod Clamp	M	-----	703718	-	-	New Part
D 41.	Rod & Tube Asm.-Low & Rev.Sh.Upr.	M	-----	703717	-	-	New Part

May 15, 1969

"E" Rev. 5-26-69
"F" Rev. 6-18-69
Chas.Pt. Added 11-19-69ENGINEERING MEMO #253 (Cont'd.)

H. List of 4-speed Floor Shift Trans. and Related Parts to be affected.

ITEM	NAME	B or M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
1.	Clutch Housing	B	08090	-----	NO	YES	Serv.or Scrap
2.	Trans.Asm. - 4-Spd.Flr.Shift	B	703320	-----	NO	NO	Use W/O Obsoles.
3.	Support Asm.-Eng.Mtg.Rear	M	701969	-----	NO	YES	Serv.or Scrap
4.	Fitting & Seal Asm.-Speedo.Gear	B	701970	-----	NO	YES	Serv.or Scrap
5.	Retainer-Speedo.Driven Gear	B	701971	-----	NO	YES	Serv.or Scrap
6.	Gear-Speedo.Driven	B	701972	-----	NO	YES	Serv.or Scrap
7.	Shifter Kit- 4-Spd.Trans.Flr.	B	701975	-----	NO	YES	Serv.or Scrap
(F) 8.	Propeller Shaft-1.89" 4-Speed	B	701939	-----	NO	YES	Serv.or Scrap
9.	Spacer-Rear Engine Mtg.to Supt.	M	704079	-----	NO	YES	Serv.or Scrap
10.	Cable Asm.-Speedo. (Taxi)	B	703215	-----	NO	YES	Revise Usage
(F)	Harness Asm.-Back Up Lite 4-Spd.	M	703241	-----	NO	YES	Serv.or Scrap
(E) 12.	Bolt - 7/16-14 x 1-1/4 Hex.Hd.(GM 280M)	B	180147	-----	NO	YES	Reduce Usage
13.	Bolt - 7/16-14 x 2-1/4 Hex.Hd.(GM 280M)	B	180155	-----	NO	YES	Serv.or Scrap

Effective Point:

V/8 Aero.Std. P.O. #6089 Chassis #0101
V/8 Aero.Auto.P.O. #6010 Chassis #0102