

June 3, 1969

Pgs. 2, 3, & 4 Rev. 6-30-69

Pg. (3) Rev., Pg. (5) Added 7-3-69

Pgs. (4) & (5) Rev. 7-10-69

Pgs. (2) & (5) Rev. 7-16-69

Page (5) Rev. 7-31-69

Pgs. (3) & (5) Rev. 9-2-69

Page (5) Rev. 10-11-69

Pg. (1) Chassis Point Added 11-18-69

ENGINEERING MEMO #261

TO: Memo Distribution

FROM: R. E. Orwig

SUBJECT: 1970 EVAPORATIVE EMISSION CONTROL (E.E.C.) SYSTEM REQ'D. ON ALL CALIFORNIA VEHICLES EXCEPT AEROBUS

In order to comply with the requirements for light duty vehicles sold in the State of California effective with the 1970 Model year, the Checker Motors Corporation must provide an Evaporative Emission Control System to our vehicles starting on October 1, 1969.

The major items affected by this system are:

1. Fuel Tank
  - a. A new fuel tank has been designed which incorporates a 1-1/2 gallon expansion chamber and three vent tubes.
2. Liquid Separator
  - a. A liquid separator will be installed under the rear floor pan kick-up and is connected to the fuel tank vent tubes with flexible hoses.
3. Charcoal Canister
  - a. A charcoal canister will be installed in the left hand front corner of the engine compartment. This canister is connected to the liquid separator by tubing and hoses; and also to the engine induction system.
4. Carburetor
  - a. Special carburetors are used in conjunction with this system on V/8 Engines.
5. Air Cleaner
  - a. Special air cleaners (to be modified by Checker) will also be used with this system.
  - b. The charcoal canister is routed to the carburetor and air cleaner for metering to the engine and purging of the canister.

The present fuel tank and lines are retained for all production other than for California.

Following is a list of the parts affected:

Effective Point:

6-Cyl. Auto. E.E.C. System P.O. #5862 Chassis #01120  
V/8 Auto. E.E.C. System P.O. #5792 Chassis #01140

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"A"Rev. 6-30-69

"B"Rev. 7-15-69

## ENGINEERING MEMO #261 (Cont'd.)

ITEM	NAME	B OF M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
1.	Fuel Tank Assembly	M	97335	Chg."D"	YES	YES	Revise Usage
2.	Fuel Tank Assembly	M	-----	703543	NO	YES	New(For Calif.)
3.	Section Asm.-Fuel Tank Lwr.	M	97334	Chg."B"	YES	YES	Revised
4.	Section Asm.-Fuel Tank Up.	M	97333	Chg."A"	YES	YES	Revise Usage
5.	Section Asm.-Fuel Tank Up.	M	-----	703538	NO	YES	New(For Calif.)
6.	Section-Fuel Tank Lower	M	98316	Chg."A"	YES	YES	Revised
7.	Section-Fuel Tank Upper	M	98317	Chg."B"	YES	YES	Revise Usage
8.	Section-Fuel Tank Upper	M	-----	704601	NO	YES	New(For Calif.)
9.	Chamber-Fuel Tank Expansion	M	-----	704597	-	-	New(For Calif.)
10.	Pipe-Fuel Tank Vent-Frt.		-----	704600	-	-	New(For Calif.)
11.	Pipe-Fuel Tank Vent-Rear		-----	704602	-	-	New(For Calif.)
A 12.	Clip-Fuel Tank Frt.Vent Pipe	M	704634	704635	NO	-	None
13.	Clip-Fuel Tank Rear Vent Pipe	M	704633	704635	NO	-	None
14.	Cap Asm.-Fuel Tank Filler	B	-----	703539	YES	YES	New(For Calif.)
15.	Cap Asm.-Fuel Tank Filler	B	93878	-----	YES	YES	Revise Usage
16.	Cap Asm.-Fuel Filler(Taxi)	B	80315	-----	YES	YES	Revise Usage
17.	Separator Asm.-Liquid	B	-----	703618	-	-	New(For Calif.)
18.	Grommet-Sep.to Fl.Pan Reinf.	B	-----	704682	-	-	New(For Calif.)
19.	Screw - 1/4-20 x 7/8 Hex.W/Hd. Tapp.Type"D"or"F"	B	-----	9425171	-	-	New(For Calif.)
20.	Hose-Sep.to Fuel Tank-Frt.LH	B	-----	704643	-	-	New(For Calif.)
21.	Hose-Sep.to Fuel Tank-Frt.RH	B	-----	704644	-	-	New(For Calif.)
22.	Hose-Sep.to Fuel Tank-Rear	B	-----	704645	-	-	New(For Calif.)
B 23.	Clamp-Hose 9/16 Nom.	B	-----	704683	-	-	Increase Usage
24.	Clamp-Hose 5/8 Nom.	B	-----	704684	-	-	New(For Calif.)
	Tube Asm.-Canister to Sep.(Frame)	M	-----	703619	-	-	New(For Calif.)

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ENGINEERING MEMO #261 (Cont'd.)

ITEM	NAME	B OF M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
1.	Fuel Tank Assembly	M	97335	Chg."D"	YES	YES	Revise Usage
2.	Fuel Tank Assembly	M	-----	703543	NO	YES	New(For Calif.)
3.	Section Asm.-Fuel Tank Lwr.	M	97334	Chg."B"	YES	YES	Revised
4.	Section Asm.-Fuel Tank Up.	M	97333	Chg."A"	YES	YES	Revise Usage
5.	Section Asm.-Fuel Tank Up.	M	-----	703538	NO	YES	New(For Calif.)
6.	Section-Fuel Tank Lower	M	98316	Chg."A"	YES	YES	Revised
7.	Section-Fuel Tank Upper	M	98317	Chg."B"	YES	YES	Revise Usage
8.	Section-Fuel Tank Upper	M	-----	704601	NO	YES	New(For Calif.)
9.	Chamber-Fuel Tank Expansion	M	-----	704597	-	-	New(For Calif.)
10.	Pipe-Fuel Tank Vent-Frt.		-----	704600	-	-	New(For Calif.)
11.	Pipe-Fuel Tank Vent-Rear		-----	704602	-	-	New(For Calif.)
A 12.	Clip-Fuel Tank Frt.Vent Pipe	M	704634	704635	NO	-	None
13.	Clip-Fuel Tank Rear Vent Pipe	M	704633	704635	NO	-	None
14.	Cap Asm.-Fuel Tank Filler	B	-----	703539	YES	YES	New(For Calif.)
15.	Cap Asm.-Fuel Tank Filler	B	93878	-----	YES	YES	Revise Usage
16.	Cap Asm.-Fuel Filler(Taxi)	B	80315	-----	YES	YES	Revise Usage
17.	Separator Asm.-Liquid	B	-----	703618	-	-	New(For Calif.)
18.	Grommet-Sep.to Fl.Pan Reinf.	B	-----	704682	-	-	New(For Calif.)
19.	Screw - 1/4-20 x 7/8 Hex.W/Hd. Tapp.Type"D"or"F"	B	-----	9425171	-	-	New(For Calif.)
20.	Hose-Sep.to Fuel Tank-Frt.LH	B	-----	704643	-	-	New(For Calif.)
21.	Hose-Sep.to Fuel Tank-Frt.RH	B	-----	704644	-	-	New(For Calif.)
22.	Hose-Sep.to Fuel Tank-Rear	B	-----	704645	-	-	New(For Calif.)
B 23.	Clamp-Hose 9/16 Nom.	B	-----	704683	-	-	Increase Usage
24.	Clamp-Hose 5/8 Nom.	B	-----	704684	-	-	New(For Calif.)
	Tube Asm.-Canister to Sep.(Frame)	M	-----	703619	-	-	New(For Calif.)

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 "A" Rev. 6-30-69  
 "B" Rev. 7-3-69

## ENGINEERING MEMO #261 (Cont'd.)

ITEM	NAME	B or M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
26.	Tube-Canister to Sep.(Frame)	M	-----	704004	-	-	New(For Calif.)
27.	Loom-3/8 I.D. x 1/2 O.D. x 15 Lg.	B	94319	-----	-	-	Increase Usage
28.	Loom-3/8 I.D. x 1/2 O.D. x 12 Lg.	B	702830	-----	-	-	Increase Usage
29.	Hose-Sep.to Frame Tube	B	-----	704646	-	-	New(For Calif.)
30.	Clamp-CCV Tee To Can.Hose	B	-----	704701	-	-	New(For Calif.)
31.	Canister Asm.-Vapor	B	-----	703540	-	-	New(For Calif.)
C 32.	Plate Asm.-Fuel Vent Canis.Mtg.	M	-----	703599	-	-	New(For Calif.)
33.	Plate-Fuel Vent Canister Mtg.	M	-----	704680	-	-	New(For Calif.)
C 34.	Bolt - 5/16-18 x 3/4 Ohio Weld	B	625194	-----	-	-	Increase Usage
35.	Support Asm.-Fuel Vent Canis.	B	-----	703597	-	-	New(For Calif.)
C 36.	Nut - 5/16-18 Hex.	B	120376	-----	-	-	Increase Usage
7.	Lockwasher-5/16 Med.Spring	B	120214	-----	-	-	Increase Usage
	Bolt - 1/4-20 x 5/8 Hex.Wd.Mach.	B	274473	-----	-	-	Increase Usage
39.	Cap-Canister Drain	B	-----	704693	-	-	New(For Calif.)
40.	Hose-Canister Drain	B	-----	704697	-	-	New(For Calif.)
41.	Clamp-Canister Drain Hose	B	702104	-----	-	-	Increase Usage
42.	Carb.Asm.-V/8 2Bbl.Auto.Trans. with E.E.C.	B	703274	703584	-	-	Serv.or Scrap..)
43.	Carb.Asm.-V/8 2Bbl.Auto.Tr. with E.E.C. & A.C.	B	703273	703586	-	-	Serv.or Scrap..)
44.	Carb.Asm.-V/8 Hi-P.Auto.Tr. with E.E.C.	B	703275	703588	-	-	Serv.or Scrap..)
45.	Air Cleaner Asm.-6-Cyl.(Modified)	M	-----	703678	-	-	New(For Calif.)
46.	Air Cleaner Asm.-6-Cyl.Dual Stage (Modified)	M	-----	703680	-	-	New(For Calif.)
47.	Air Cleaner Asm.-2Bbl.V/8 (Mod.)	M	-----	703673	-	-	New(For Calif.)
48.	Air Cleaner Asm.-V/8 Hi-P.(Mod.)	M	-----	703675	-	-	New(For Calif.)

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"A"Rev. 6-30-69

"B"Rev. 7-10-69

ENGINEERING MEMO #261 (Cont'd.)

ITEM	NAME	B O R M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
B 49.	Connector-Air Cleaner	F	-----	704750	-	-	New(For Calif.)
B 50.	Clip-Air Cleaner Connector	F	-----	704751	-	-	New(For Calif.)
B 51.	Stud-Carb.Mtg.(6-Cyl.)	F	-----	704749	-	-	New(For Calif.)
B 52.	Stud-Carb.Mtg.(V/8)	F	-----	704754	-	-	New(For Calif.)
B 53.	Insulator-Carb.Mtg.	F	-----	704747	-	-	New(For Calif.)
B 54.	Nut-Carb.Mtg.Stud	F	-----	704748	-	-	New(For Calif.)
A 55.	Reinf.-Flr.Pan Kick Up	M	634108	-----	NO	YES	Revise Usage
A 56.	Hose-Drip Pan to Drain Elbow	B	640621	-----	NO	YES	Increase Usage
A 57.	Panel-Frt.Fender Inner LH	M	640705	-----	NO	YES	Revise Usage
A 58.	Clip-5/16 Double Tube Type"S"	B	702612	-----	NO	YES	Increase Usage
A 59.	Kit-E.E.C. 6-Cyl.	B	-----	703630	NO	-	New(For Calif.)
A 60.	Kit-E.E.C. 350 V/8 2-Bbl.	B	-----	703651	NO	-	New(For Calif.)
A 61.	Kit-E.E.C. 350 V/8 Hi-P.	B	-----	703652	NO	-	New(For Calif.)
A 62.	Tube A.-Canister to Sep.Fr.	M	-----	703661	NO	-	New(For Calif.)
A 63.	Tube-5/16 O.D. x .028 Wall x 160-1/4	M	-----	704006	NO	-	New(For Calif.)
A 64.	Hose-Canister to A/C V/8	M	-----	704642	NO	-	New(For Calif.)
A 65.	Hose-Canister to P.C.V.Tee V/8	M	-----	704695	NO	-	New(For Calif.)
A 66.	Hose-P.C.V.Tee to Eng.	M	-----	704696	NO	-	New(For Calif.)
A 67.	Hose-P.C.V.Tee to Carb.V/8 Hi-P.	M	-----	704697	NO	-	New(For Calif.)
A 68.	Hose-P.C.V.Tee to Carb.V/8 2-Bbl.	M	-----	704705	NO	-	New(For Calif.)
A 69.	Hose-Canister to A/C 6-Cyl.	M	-----	704711	NO	-	New(For Calif.)
A 70.	Hose-Canister to P.C.V.Tee 6-Cyl.	M	-----	704712	NO	-	New(For Calif.)
A 71.	Hose-1/4 I.D. Fuel Line	B	-----	MG-110	NO	-	New(For Calif.)
A 72.	Hose-5/16 I.D. Fuel Line	B	-----	MG-111	NO	-	New(For Calif.)
A 73.	Hose-3/8 I.D. Fuel Line	B	-----	MG-112	NO	-	New(For Calif.)
A 74.	Hose-.350 I.D. P.C.V. Spec.	B	-----	MG-113	NO	-	New(For Calif.)
A 75.	Clip-1/2 ID Closed x 9/32 BoltHole	B	80568	-----	NO	YES	Increase Usage
A 76.	Clip-Band	B	80727	-----	NO	YES	Increase Usage

July 3, 1969

"A"Rev. 7-10-69

"B"Rev. 7-16-69

"C"Rev. 7-31-69

"D"Rev. 9-2-69

"E"Rev. 10-11-69

## ENGINEERING MEMO #261 (Cont'd.)

QTY	NAME	B OF M	OLD PART NUMBER	NEW PART NUMBER	I	A	REMARKS
77.	Cleaner & Trim A.-V/8 Hi-P.	M	-----	703676	NO	-	New(For Calif.)
78.	Cleaner & Trim A.-V/8 2-Bbl.	M	-----	703674	NO	-	New(For Calif.)
79.	Cleaner A.-Air (Dual Stage) 6-Cyl. E.E.C.	M	-----	703681	NO	-	New(For Calif.)
80.	Cleaner A.-Air 6-Cyl. E.E.C.	M	-----	703679	NO	-	New(For Calif.)
81.	Insul. Asm.-Carb. Heat (V/8 2-Bbl.)	F	-----	703670	NO	-	New(For Calif.)
82.	Insul. Asm.-Carb. Heat (V/8 4-Bbl.)	F	-----	703686	NO	-	New(For Calif.)
83.	Thermo. Cov. & Rod Asm. (2-1/2" Dia.)	F	-----	703687	NO	-	New(For Calif.)
84.	Thermo. Cov. & Rod Asm. (2-1/2" Dia.)	F	-----	703688	NO	-	New(For Calif.)
85.	Tee-Dr/Case Vent Hose	F	-----	704740	NO	-	New(For Calif.)
86.	Bolt-Carb. Mtg. (Spec.)	F	-----	704755	NO	-	New(For Calif.)
87.	Label-Fuel Vapor Emission	B	-----	704774	NO	-	New(For Calif.)
88.	Cleaner A.-Carb. Air V/8 A.T. (Mod.)	M	703424	-----	NO	YES	Revise Usage
89.	Cleaner & Trim A.-Carb. Air V/8 A.T.	M	703425	-----	NO	YES	Revise Usage
90.	Cleaner A.-Air (Mod.) 350 V/8 Hi-P.	M	703666	-----	NO	YES	Revise Usage
91.	Cleaner & Trim A.-Air 350 V/8 Hi-Perf.	M	703667	-----	NO	YES	Revise Usage
92.	Bolt - 5/16-18 x 3/4 Hex. (280M)	B	180077	-----	NO	YES	Increase Use