May 2, 1980

ENGINEERING MEMO #418

TO: Memo Distribution

FROM: H. Dishon

SUBJECT: VEHICLE IDENTIFICATION NUMBER (VIN) EFFECTIVE WITH START OF 1981 MODEL YEAR.

To comply with FMVSS #115 a new 17 digit vehicle identification numbering system as illustrated in "Attachment A" will become effective with the start of 1981 model year production.

The requirement that VIN characters have a minimum height of 4mm will necessitate the use of Character Wheel #PD1177B and Feed Rack #PA1658A in conjunction with the Auto-Mark Metal Typewriter used for stamping vehicle information plates.

To accomodate the increased character size, new vehicle information plates will be required as shown in the accompanying parts list.

A computer program has been developed to reduce the laborious task of computing check digits as described in "Attachment A".

To obtain the VIN check digit, the production control department should fill out a VIN CHECK DIGIT REQUEST form (Attachment B) and submit it to the engineering department.

The engineering department will fill in the appropriate check digit and return the VIN CHECK DIGIT REQUEST form to the production control department.

Only the model year & the last 4 digits of the chassis number will be stamped on the transmission boss, engine boss, frame, and rear axle adjacent to the left hand expander hole. For example if the VIN is 1CMTS412XBK000261, the number to be stamped on the transmission, engine and frame, and rear axle would be B0261.

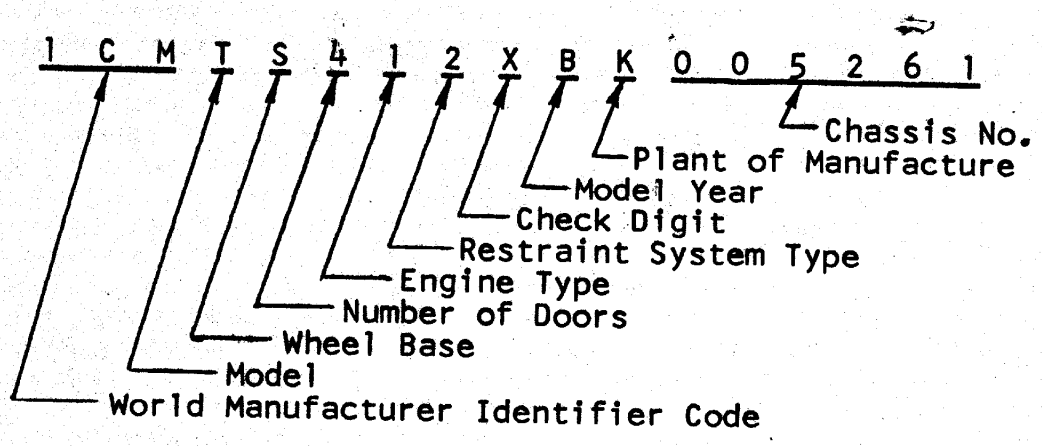
REVISIONS			
DATE	ITEM REV & PAGE NO.	DATE	ITEM REV & PAGE NO.
11-24-80	Rev. P.1, Para 7		
12-15-80	Rev. P.1, Para 7		
12-15-81	Rev Attach A-Propane Engine Added on .		

ATTACHMENT A

VEHICLE IDENTIFICATION NUMBER

(VIN)

1981 and Later Model Years



WORLD MANUFACTURER IDENTIFIER CODE (FIRST 3 DIGITS):

1CM assigned to Checker Motors Corporation by the Society of Automotive Engineers, Inc.

First digit indicates geographic area of manufacturer (1 indicates North America).

CM represents Checker Motors Corporation.

MODEL (4th DIGIT):

T = MODEL A-11 TAXICAB

M = MODEL A-12 MARATHON

WHEEL BASE (5th DIGIT):

S = STANDARD 120" WHEEL BASE

E = EXTENDED 129" WHEEL BASE

NUMBER of DOORS 4

ENGINE TYPE (7th DIGIT):

1 = 229 CID V/6 ENGINE

2 = 267 CID V/8 ENGINE

3 = 305 CID V/8 ENGINE

4 = 350 CID V/8 DIESEL ENGINE

5 = 229 CID V/6 PROPANE ENGINE

RESTRAINT SYSTEM TYPE (8th DIGIT):

2 = TYPE II SEAT BELTS

CHECK DIGIT (9th DIGIT):

Single digit or the letter X used to varify the accuracy of the transcription of the VIN.

MODEL YEAR (10th DIGIT):

A = 1980	M = 1991	2 = 2002
B = 1981	N = 1992	3 = 2003
C = 1982	P = 1993	4 = 2004
D = 1983	R = 1994	5 = 2005
E = 1984	S = 1995	6 = 2006
F = 1985	T = 1996	7 = 2007
G = 1986	V = 1997	8 = 2008
H = 1987	W = 1998	9 = 2009
J = 1988	X = 1999	A = 2010
K = 1989	Y = 2000	B = 2011
L = 1990	1 = 2001	C = 2012

PLANT OF MANUFACTURE (11th DIGIT):

K = KALAMAZOO

CHASSIS NO. (12th-17th DIGITS):

Number sequentially assigned to vehicles.

CHECK DIGIT DETERMINATION:

The check digit is determined by carrying out the following mathematical computation.

Assign to each number in the vehicle identification number its actual mathematical value and assign to each letter the value specified for it in table I.

TABLE I

A = 1	G = 7	N = 5	V = 5
B = 2	H = 8	P = 7	W = 6
C = 3	J = 1	R = 9	X = 7
D = 4	K = 2	S = 2	Y = 8
E = 5	L = 3	T = 3	Z = 9
F = 6	M = 4	U = 4	

Multiply the assigned value for each character in the vehicle identification number by the weight factor specified for it in table II.

TABLE II

1st...8	7th...2	13th...6
2nd...7	8th...10	14th...5
3rd...6	9th...0	15th...4
4th...5	10th...9	16th...3
5th...4	11th...8	17th...2
6th...3	12th...7	

Add the resulting products and divide the total by 11. The remainder is the check digit. If the remainder is 10, the check digit is X.

EXAMPLE:

VIN	1	C	M	M	E	4	3	2		B	K	0	0	3	7	1	3
ASSIGNED VALUE	1	3	4	4	5	4	3	2		2	2	0	0	3	7	1	3
MULTIPLY BY WEIGHT FACTOR	8	7	6	5	4	3	2	10	0	9	8	7	6	5	4	3	2

ADD PRODUCTS 8+21+24+20+20+12+ 6+ 20 + 0 +18+16+ 0+ 0+15+28+ 3+ 6=217

DIVIDE BY 11 217/11 = 19 8/11

CHECK DIGIT = 8

VIN = 1CMME4328BK003713

ATTACHMENT B

Date:________________

1981 MODEL YEAR

Requested By:________________

VIN CHECK DIGIT REQUEST

Model | WheelBase | Engine | Check Digit | Chassis Number

1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __
1 C M __ __ 4 __ 2___ B K 0 0 __ __ __ __

MODEL: T = TAXI, M = MARATHON
WHEEL BASE: S = 120, E = 129
ENGINE: 1 = 229 CID, 2 = 267 CID, 3 = 305 CID, 4 = 350 DIESEL

ENGINEERING MEMO # 418

DATE 5-2-80

ITEM	DESCRIPTION (New Parts Only	B or M	OLD PART NUMBER	B or M	NEW PART NUMBER	FOR DEPT USE ONLY	INT NEW FOR OLD	AVAIL AFTER CHG	REMARKS (Old Parts Only)
1	Plate-Identification Number	B	646717	B	708622		NO	NO	Serv or Scrap
2	Plate-Motor Veh Safety Cert	B	708250	B	708623		NO	NO	Serv or Scrap
3	Plate-Vehicle Identifitcation	B	704797	B	708624		NO	NO	Serv or Scrap