

VEHICLE IDENTIFICATION NUMBER

This Vehicle Identification Number manual becomes effective with the implementation of the 17 digit VIN requirements of FMVSS-115. This VIN structure is effective September 1, 1980.

Federal law requires no deviation from the specifications in this manual without 60 days prior notification. Consequently, any variance must be requested from and approved by the KREMCC, INC. Engineering Department, Ogden, Utah, who is charged with the responsibility of VIN specification maintenance and change notification to NHTSA and M.I.S. Unauthorized changes will result in both a systems rejection and a non-acceptance of the manufacturers VIN.

01-22-111B-5058

8 7/11/86 pds



CODE POSITION	SECTION REF.	SIGNIFICANCE	EXPLANATION	1	K	9	B	S	4	1	2	5	G	U	011001
1		Country of Manufacture	United States												
2	A	Manufacturer	KREMCO, INC.												
3		Volume of Vehicles	"9" signifies under 500 Vehicles produced annually												
4	B	Uniquely identifies	Type of Trailer												
5	B	The Vehicle Attributes being produced	Series "S" = Standard "C" = Custom												
6		Trailer length in feet	Length rounded off to nearest whole number												
7															
8		Number of Axles													
9	C	Check Digit	Calculated Check Digit												
10	D	Vehicle Model Year	1986												
11	E	Plant of Manufacture	Ogden, Utah												
12-17	F	Serial Number	First three digits assigned by SAE Last three digits assigned by producing plant in numeric sequence.												

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SECTION A

VEHICLE IDENTIFICATION NUMBER

CODE POSITIONS 1 - 3

CODE POSITION 1 - COUNTRY OF MANUFACTURER*

<u>CODE</u>	<u>COUNTRY</u>
1	United States
2	Canada

CODE POSITION 2 - MANUFACTURER*

<u>CODE</u>	<u>MANUFACTURER</u>
K	KREMCO, INC.

CODE POSITION 3 - TYPE OF VEHICLE & VOLUME OF VEHICLES PRODUCED**

<u>CODE</u>	<u>TYPE & VOLUME</u>
9	Identifies the type of vehicle and if the manufacturer produces less than 500 vehicles of its type annually.

KREMCO, INC.
Ogden, Utah

**Code positions 1-3 are assigned by the Society of Automotive Engineers (412-776-4841) and, in conjunction with code positions 12-14, uniquely identify the manufacturer.

SECTION B

VEHICLE IDENTIFICATION NUMBER

CODE POSITION 4

<u>CODE</u>	<u>TYPE OF TRAILER</u>
B	Bottom Dump
E	End Dump
F	Flat Bed
G	Gooseneck
R	Recreational Trailer
U	Utility
V	Van

CODE POSITION 5

<u>CODE</u>	<u>DESCRIPTION</u>
S	Standard
C	Custom

SECTION C
 VEHICLE IDENTIFICATION NUMBER
 CODE POSITION 9
CHECK DIGIT

The check digit is determined by carrying out the mathematical computation specified as follows:

- Assign to each number in the vehicle identification number its actual mathematical value, e.g. 1=1, 2=2, etc., and assign to each letter the value specified for it below:

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

- Multiply the assigned value for each character in the vehicle identification by the weight factor specified for it below:

<u>Code Position</u>	<u>Multiplied By Factor</u>	<u>Code Position</u>	<u>Multiplied By Factor</u>
1	8	10	9
2	7	11	8
3	6	12	7
4	5	13	6
5	4	14	5
6	3	15	4
7	2	16	3
8	10	17	2
9	0		

- Add the resulting products
- Divide the total by eleven (11)
- The remainder is the check digit. If the remainder is 10 the check digit is X.

SECTION C

VEHICLE IDENTIFICATION NUMBER

CODE POSITION 9

CALCULATION OF CHECK DIGIT FOR SEVENTEEN CHARACTER V.I.N.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
(B1)V.I.N.	1	K	9	B	S	4	1	2	5	G	U	0	1	1	0	0	1
(B2)VALUES	1	2	9	2	2	4	1	2	0	7	4	0	1	1	0	0	1
(B3)MULTIPLIER	8	7	6	5	4	3	2	10	0	9	8	7	6	5	4	3	2
(B4)PRODUCT	8	14	54	10	8	12	2	20	0	63	32	0	6	5	0	0	2

= 236

- MULTIPLY (B2) BY (B3), PUT ANSWER IN (B4).
- ADD ALL OF (B4) AND DIVIDE TOTAL BY ELEVEN; REMAINDER OF DIVISION IS THE CHECK DIGIT; ENTER THIS NUMBER IN BCX #9 OF (B1) V.I.N. IF THERE IS NO REMAINDER, THE CHECK DIGIT IS ZERO. IF THE REMAINDER EQUALS 10, THEN THE CHECK DIGIT EQUALS X.

ASSIGNED VALUES FOR LETTERS OF V.I.N. (B1) ARE:

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

IF CALCULATOR IS USED:

DECIMAL EQUIVALENT = REMAINDER

.09 = 1	.54 = 6
.18 = 2	.63 = 7
.27 = 3	.72 = 8
.36 = 4	.81 = 9
.45 = 5	.90 = X
	.00 = 0

ASSIGNED VALUES FOR NUMBERS IN V.I.N. ARE THE SAME NUMBER.

SECTION D
VEHICLE IDENTIFICATION NUMBER
VEHICLE MODEL YEAR

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

KREMCO, INC.
Ogden, Utah

SECTION E

VEHICLE IDENTIFICATION NUMBER

CODE POSITION 11

PLANT OF MANUFACTURE

CODE

PLANT LOCATION

E

Edmonton, Alberta, Canada

U

Ogden, Utah, U.S.A.

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SECTION F

VEHICLE IDENTIFICATION NUMBER

SIX DIGIT SEQUENTIAL SERIAL NUMBER

- CODE POSITIONS 12 - 14 ASSIGNED BY THE SOCIETY OF AUTOMOTIVE ENGINEERS
- CODE POSITIONS 15 - 17 ASSIGNED SEQUENTIALLY BY PRODUCING PLANT
- CANCELLED SERIAL NUMBERS CANNOT BE REUSED
- SEQUENTIAL SERIAL NUMBERS WILL BE REUSED AT THE BEGINNING OF EACH NEW CALENDAR YEAR WHICH WILL BE DIFFERENTIATED FROM PREVIOUSLY USED SERIAL NUMBERS BY CODE POSITION 10 (MODEL YEAR)