DANDY DIGGER & SUPPLY, INC.
BORING EQUIPMENT AND ETC.
MAIL TO: 60 HENDRICKSON ROAD, CATHLAMET, WA. 98612, (360) 795-3617
SHIP TO: 244 WEST STATE ROUTE #4, CATHLAMET, WA 98612
FAX: (360) 795-3952

January 12, 2000

ORIGINAL

Administrator
ATTN: VIN Coordinator
National Highway Traffic Safety Adm. (NSA-32)
400 Seventh Street, SW
Washington, DC 20590

Gentlemen:

I am enclosing the new VIN Check Digit Calculation Sheets for the trailers that we manufacture. All of our 2000 trailers will be numbered using these formulas.

Our number series will start over for the 2000 year. If you have any questions, please contact me.

Thank you for your help regarding this matter.

Sincerely,

Sheryl L. Jones
Office Manager

Enclosures (3)

CHECK DIGIT CALCULATIONS
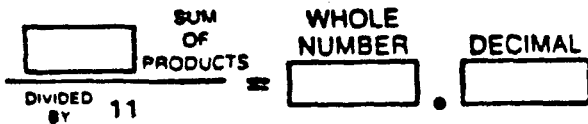
2000 year
starting #001

CHECK DIGIT

CHARACTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ACTUAL VIN	1	0	9	T	0	2	3	2		Y	C	1	5	5			
CONVERTED VALUES from TABLE A (below)	1	4	9	3	0	2	3	2		8	3	1	5	5			
MULTIPLIER (X)	8	7	6	5	4	3	2	10	0	9	8	7	6	5	4	3	2
PRODUCT (Value x multiplier)	8	28	54	15	0	6	6	20		72	24	7	30	25			

= [ ] SUM OF PRODUCTS

$$\frac{\text{SUM OF PRODUCTS } [\ ]}{\text{DIVIDED BY } 11} = \text{WHOLE NUMBER } [\ ] . \text{ DECIMAL } [\ ] \Longleftrightarrow$$

ALPHABETIC TO NUMERIC CONVERSION VALUES

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	

TABLE A

NOTE: Numerical characters from actual VIN are used in check digit calculation. Alphabetical characters are converted to numerical, according to TABLE A values.

IF DECIMAL IS	CHECK DIGIT IS	IF DECIMAL IS	CHECK DIGIT IS
.09 [.09]	1	.54 [.54]	6
.18 [.18]	2	.63 [.63]	7
.27 [.27]	3	.72 [.72]	8
.36 [.36]	4	.81 [.81]	9
.45 [.45]	5	.90 [.90]	X
		.00 [.00]	0

TABLE B

EXAMPLE

ABC Trailers, Inc. builds a flat bed standard series trailer with a 16 foot bed length on two axles at a plant in Cleveland, Ohio. What is the VIN coding for this trailer?

Since ABC manufactures less than 500 units per year, SAE assigned ABC a six digit number as follows: 1A9/347. (1A9 goes in columns 1-3 and 347 goes in columns 12-14) ABC has elected to code body type in column 4, series in column 5, length in columns 6 and 7 and number of axles in column 8. (The characters utilized and their placement are determined by the manufacturer, but must include all required attributes for vehicle type) ABC's coding for vehicle attributes are: Type—F = flatbed, U = utility. Series/body type—S = standard, P = special. Length—actual overall bed length in feet (08, 12, 16, etc.) and number of axles—1 = single, 2 = tandem, etc. The letter F designates the 1985 model year and ABC uses the letter C for the location of their only plant, in Cleveland.

CHECK DIGIT

CHARACTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ACTUAL VIN	1	A	9	F	S	1	6	2	5	F	C	3	4	7	0	0	1
CONVERTED VALUES from TABLE A	1	1	9	6	2	1	6	2	0	6	3	3	4	7	0	0	1
MULTIPLIER (X)	8	7	6	5	4	3	2	10	0	9	8	7	6	5	4	3	2
PRODUCT (Value x multiplier)	8	7	54	30	8	3	12	20	0	54	24	21	24	35	0	0	2

= [302] SUM OF PRODUCTS

$$\frac{\text{SUM OF PRODUCTS } [.302]}{\text{DIVIDED BY } 11} = \text{WHOLE NUMBER } [27] . \text{ DECIMAL } [45]$$

Since the check digit calculation for ABC Trailers resulted in a decimal value of .45, Table B shows that the check digit is 5. The value 5, placed in position 9 of the actual VIN, completes the 17 digit VIN requirements.

6.

CHECK DIGIT CALCULATIONS

CHECK DIGIT

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
CHARACTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
ACTUAL VIN	1	0	9	T	0	1	6	1		V	C	1	5	5				
CONVERTED VALUES from TABLE A (below)	1	4	9	3	0	1	6	1		8	3	1	5	5				
MULTIPLIER (X)	8	7	6	5	4	3	2	10	0	9	8	7	6	5	4	3	2	
PRODUCT (Value x multiplier)	8	28	54	15	0	3	12	10		72	24	7	30	25			=	SUM OF PRODUCTS

$$\frac{\text{SUM OF PRODUCTS}}{\text{DIVIDED BY } 11} = \text{WHOLE NUMBER . DECIMAL} \Longleftrightarrow$$

ALPHABETIC TO NUMERIC CONVERSION VALUES

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	

TABLE A

NOTE: Numerical characters from actual VIN are used in check digit calculation. Alphabetical characters are converted to numerical, according to TABLE A values.

IF DECIMAL IS	CHECK DIGIT IS	IF DECIMAL IS	CHECK DIGIT IS
.09 .00	1	.54 .54	6
.18 .18	2	.63 .63	7
.27 .27	3	.72 .72	8
.36 .36	4	.81 .81	9
.45 .45	5	.90 .90	X
		.00 .00	0

TABLE B

EXAMPLE

ABC Trailers. Inc builds a flat bed standard series trailer with a 16 foot bed length on two axles at a plant in Cleveland, Ohio. What is the VIN coding for this trailer?

Since ABC manufactures less than 500 units per year, SAE assigned ABC a six digit number as follows 1A9/347. (1A9 goes in columns 1-3 and 347 goes in columns 12-14) ABC has elected to code body type in column 4, series in column 5, length in columns 6 and 7 and number of axles in column 8. (The characters utilized and their placement are determined by the manufacturer, but must include all required attributes for vehicle type) ABC's coding for vehicle attributes are Type—F = flatbed. U = utility. Series/body type—S = standard. P = special. Length—actual overall bed length in feet (08, 12, 16, etc.) and number of axles—1 = single. 2 = tandem. etc. The letter F designates the 1985 model year and ABC uses the letter C for the location of their only plant, in Cleveland

CHECK DIGIT

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
CHARACTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
ACTUAL VIN	1	A	9	F	S	1	6	2	5	F	C	3	4	7	0	0	1	
CONVERTED VALUES from TABLE A	1	1	9	6	2	1	6	2	0	6	3	3	4	7	0	0	1	
MULTIPLIER (X)	8	7	6	5	4	3	2	10	0	9	8	7	6	5	4	3	2	
PRODUCT (Value x multiplier)	8	7	54	30	8	3	12	20	0	54	24	21	24	35	0	0	2	= 302 SUM OF PRODUCTS

$$\frac{302 \text{ SUM OF PRODUCTS}}{\text{DIVIDED BY } 11} = \text{WHOLE NUMBER } 27 \text{ . DECIMAL } 45$$

Since the check digit calculation for ABC Trailers resulted in a decimal value of .45, Table B shows that the check digit is 5. The value 5, placed in position 9 of the actual VIN, completes the 17 digit VIN requirements.

CHECK DIGIT CALCULATIONS

CHECK DIGIT

2000 year & starting #001

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
CHARACTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
ACTUAL VIN	1	0	9	T	0	1	7	2		V	C	1	5	5				
CONVERTED VALUES from TABLE A (below)	1	4	9	3	0	1	7	2		8	3	1	5	5				
MULTIPLIER (X)	8	7	6	5	4	3	2	10	0	9	8	7	6	5	4	3	2	
PRODUCT (Value x multiplier)	8	28	54	15	0	3	14	20		72	24	7	30	25				=

SUM OF PRODUCTS [ ]

$$\frac{\text{SUM OF PRODUCTS } [\ ]}{\text{DIVIDED BY } 11} = \text{WHOLE NUMBER } [\ ] . \text{DECIMAL } [\ ] \Longleftrightarrow$$

ALPHABETIC TO NUMERIC CONVERSION VALUES

TABLE A

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	

NOTE: Numerical characters from actual VIN are used in check digit calculation. Alphabetical characters are converted to numerical, according to TABLE A values.

TABLE B

IF DECIMAL IS	CHECK DIGIT IS	IF DECIMAL IS	CHECK DIGIT IS
.09 [.09]	= 1	.54 [.54]	= 6
.18 [.18]	= 2	.63 [.63]	= 7
.27 [.27]	= 3	.72 [.72]	= 8
.36 [.36]	= 4	.81 [.81]	= 9
.45 [.45]	= 5	.90 [.90]	= X
		.00 [.00]	= 0

EXAMPLE

ABC Trailers, Inc. builds a flat bed standard series trailer with a 16 foot bed length on two axles at a plant in Cleveland, Ohio. What is the VIN coding for this trailer?

Since ABC manufactures less than 500 units per year, SAE assigned ABC a six digit number as follows: 1A9/347. (1A9 goes in columns 1-3 and 347 goes in columns 12-14) ABC has elected to code body type in column 4, series in column 5, length in columns 6 and 7 and number of axles in column 8. (The characters utilized and their placement are determined by the manufacturer, but must include all required attributes for vehicle type) ABC's coding for vehicle attributes are: Type—F = flatbed, U = utility. Series/body type—S = standard, P = special. Length—actual overall bed length in feet (08, 12, 16, etc.) and number of axles—1 = single, 2 = tandem, etc. The letter F designates the 1985 model year and ABC uses the letter C for the location of their only plant, in Cleveland.

CHECK DIGIT

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
CHARACTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
ACTUAL VIN	1	A	9	F	S	1	6	2	5	F	C	3	4	7	0	0	1	
CONVERTED VALUES from TABLE A	1	1	9	6	2	1	6	2	0	6	3	3	4	7	0	0	1	
MULTIPLIER (X)	8	7	6	5	4	3	2	10	0	9	8	7	6	5	4	3	2	
PRODUCT (Value x multiplier)	8	7	54	30	8	3	12	20	0	54	24	21	24	35	0	0	2	=

SUM OF PRODUCTS [302]

$$\frac{\text{SUM OF PRODUCTS } [302]}{\text{DIVIDED BY } 11} = \text{WHOLE NUMBER } [27] . \text{DECIMAL } [45]$$

Since the check digit calculation for ABC Trailers resulted in a decimal value of .45, Table B shows that the check digit is 5. The value 5, placed in position 9 of the actual VIN, completes the 17 digit VIN requirements.

6.

0004