



The Flixible Corporation

ORIGINAL

B 4/28/86 rdy

10 pgs.

April 18, 1986

01-22-N11B-2260

Administrator
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

Attention: VIN Coordinator

Reference: 49CFR565 VIN Content Requirements

Dear Sir,

The Flixible Corporation has revised the "C" and "D" engine codes for the seventh character of our seventeen character VIN number as shown below:

Code "C" Cummins Diesel LTA10B, 6 cylinders, 10 liters (611 cubic inch) displacement, meets current California EPA requirements.

Code "D" Detroit Diesel 6V-92TA DDEC, 6 cylinders, 552 cubic in., 49 State Federal Engine, electronically controlled engine (DDEC).

The Flixible Corporation has added additional engine codes to the seventh character of our seventeen character VIN number as shown below:

Code "E" Cummins Diesel LTA10B, 6 cylinders, 10 liters (611 cubic inch) displacement, 49 State Federal Engine.

Code "F" Detroit Diesel 6V-92TA, 6 cylinders, 552 cubic inch, 49 State Federal Engine.

Code "G" Detroit Diesel 6V-92 TAC, 6 cylinders, 552 cubic inch, meets current California EPA requirements.

Code "H" Detroit Diesel 6V-71TA, 6 cylinders, 426 cubic inch, 49 State Federal Engine.

Code "J" Detroit Diesel 6V-71, 6 cylinders, 426 cubic inch, 49 State Federal Engine.

Sincerely,

James R. Mitzenberg

James R. Mitzenberg
Product Safety Engineer

WRITER'S DIRECT DIAL 614-362-2739

cc: J. Bolton
L. Watt L. Musser

PREPARED BY		 GRUMMAN FLEXIBLE DELAWARE, OHIO 43015	
C. Sidner <i>cat.</i>	2/28/80		
APPROVALS			
<i>J. Schubert</i>	2/28/80	SPECIFICATION	
<i>L. Mueser</i>	3/7/80		
<i>R. J. Mue</i>	3-7-80	TITLE	NUMBER
		VEHICLE IDENTIFICATION NUMBER (VIN) CODES	95-0010
			TYPE Product
			DATE 2/20/80
			PAGE 1 of 9

REVISIONS

REV		DATE	BY	APPR
A	Added Code "E" to Section 3.2.2.3 - Added Codes "6", "7" & "8" to Section 3.2.2.4 PCR 02693-400	6/3/81	RDF	6/15
B	Section 3.2.2.1 Added Code "5" Per PCR 04875-400	11-8-82	TKM	<i>Sum</i> 11/8
C	Section 3.2.2.3 Added Code "F" & "G" Per PCR 05096-400	6-31-83	D.P.	
D	Sections 1.0, 3.2.1.2, 3.2.4.2 - Changed Grumman Flexible Corp to The Flexible Corporation - Per PCR 5663-400	10-7-83	DP	
E	Section 3.2.2.4 - Added Code "9" - Per PCR 05984-400	12/22/83		<i>GET</i> 12/23/83
F	Section 3.2.2.2 - Added Code "E" Section 3.2.2.3 - Added Code "H" per PCR 05823-220	5/25/84		<i>GET</i> 5/25/84
G	Section 3.2.2.4 - Added Code "A" per PCR 06603-400	9/5/84	<i>CHS</i>	<i>GET</i> 9/5/84
H	Section 3.2.2.3 - Added Code "J" per PCR 6722-200	8/27/85	<i>CHS</i>	<i>GET</i> 8/27/85
J	Section 3.2.2.3 - Code "J" was two (2) now one (1) per PCR 06757-400	5/6/85	<i>CHS</i>	<i>GET</i> 5/6/85
K	Section 3.2.2.4 - Added Code "B" and page 6 per PCR 6697-220	6/17/85	<i>CHS</i>	<i>GET</i> 6/17/85
L	Section 3.2.2.4 - Added Code "C" Per PCR 6818-331	9/26/85	<i>CHS</i>	<i>GET</i> 9/26/85
M	Section 3.2.2.4 - Added Code "D" Per PCR 6950-220	12/13/85	<i>CHS</i>	<i>GET</i> 12/13/85
N	Section 3.2.2.4 - Revised Code "C" & "D"; added Codes "E" thru "J" Per PCR 07178-400	1/29/86		<i>GET</i> 1/29/86

1.0

SCOPE

This specification describes and establishes the codes that shall be used by The Flexible Corporation for the seventeen (17) characters of the vehicle Identification Number (VIN).

2.0

APPLICABLE DOCUMENTS

2.1

Federal Motor Vehicle Safety Standard (FMVSS) #115 as amended March 22, 1979.

2.2

Federal Regulation 49CFR567, Certification Regulation of NHTSA.

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PAGE: 2**3.0 REQUIREMENTS****3.1 General**

The VIN shall be structured in accordance with FMVSS #115. It shall be a seventeen character display which is composed of three (3) sections and a check digit as follows:

- (a) **Section I - Maker Identifier**
This section includes the first three (3) characters (first through the third digit).
- (b) **Section II - Vehicle Attributes**
This section relates to the next five characters (fourth through the eighth digits).
- (c) **Check Digit**
This is a single character (the ninth digit).
- (d) **Section III - Vehicle Identifier**
This section is composed of eight characters (tenth through the seventeenth digits).

3.2 Codes

The following codes shall be used as applicable for the listed digits. For each digit a description is given and the applicable codes are defined.

3.2.1 Section I

These codes are approved by the federal government and no change may be made without prior approval by the government.

3.2.1.1 First Character:

- Country - The country in which manufacture occurs.
- Code: "1" - United States

3.2.1.2 Second Character:

- Manufacturer - The entity responsible for affixing the vehicle certification label required by 49CFR567.
- Code: "G" - The Flxible Corporation
970 Pittsburgh Drive
Delaware, Ohio 43015
(614) 369-7671

3.2.1.3 Third Character

- Make and Type - A name which a manufacturer applies to a group of vehicles distinguished by common traits, including design and purpose.
- Code: "F" - Flxible transit coaches (bus).

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F

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3.2.2 Section II

These codes are established by the manufacturer, but must be submitted to the federal government for information sixty (60) days prior to usage.

3.2.2.1 Fourth Character:

- Line - A name which is applied to a family of vehicles within a make which have a degree of commonality in construction such as body, chassis or cab type.
- Code: "4" - Advance Design Transit Coach manufactured to the UMTA Baseline Specification; GFC Model 870.
- Code: "5" - Advance Design Transit; METRO TM

3.2.2.2 Fifth Character:

- Series - A noun applied to a subdivision of a "line" denoting price, size or weight identification and which is utilized by the manufacturer for marketing purposes.
- Codes: "A" - 40 x 102 (40 feet long, 102 inches wide)
"B" - 40 x 96 (40 feet long, 96 inches wide)
"C" - 35 x 102 (35 feet long, 102 inches wide)
"D" - 35 x 96 (35 feet long, 96 inches wide)
"E" - 30 x 96 (30 feet long, 96 inches wide)

- Notes:
- (1) The above lengths and widths are nominal overall body dimensions exclusive of exterior mirrors, side marker and signal lamps, flexible portions of bumpers, rubrails, and flexible fender skirts.
 - (2) The code is not related to number of passengers as this is an option of the customer within any of the above given sizes and is not used within Flexible to denote series.

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A

C

F

H

J

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3.2.2.3 Sixth Character:

- Body Type - The general configuration or shape of a vehicle distinguished by such characteristics as the number of doors or windows, cargo - carrying features and roof lines.
- Code: "A" - City transit coach 2 doors, automatic environmental control, transverse and longitudinal seating.
- Code: "B" - City transit coach 2 door, automatic environmental control, wheelchair occupant space, wheelchair lift equipped, transverse & longitudinal seating.
- Code: "C" - City transit coach 2 door, automatic environmental control, wheelchair lift equipped, two (2) wheelchair occupant spaces, transverse and longitudinal seating.
- Code: "D" - City transit coach 2 door, automatic environmental control, perimeter seating.
- Code: "E" - City transit coach, 2 door, no air conditioner, wheelchair occupant space, wheelchair equipped, transverse and longitudinal seating.
- Code: "F" - City transit coach 2 door, manual air conditioner transverse and longitudinal seating.
- Code: "G" - City transit coach 2 door, no A/C transverse and longitudinal seating.
- Code: "H" - City transit coach 1 door, automatic environmental control, wheelchair occupant space, wheelchair lift equipped, transverse and longitudinal seating.
- Code: "J" - City transit coach 1 door, automatic environmental control, one (1) wheelchair occupant spaces, transverse and longitudinal seating.

3.2.2.4 Seventh Character:

- Engine Type - Identifies the power source with specifically defined characteristics such as fuel utilized, number of cylinders, displacement, manufacturer and horsepower.
- Code: "1" - Detroit Diesel 8V-71, 8 cylinders, 568 cubic inch, 262 bhp at 2100 rpm.
- Code: "2" - Detroit Diesel 6V-71, 6 cylinders, 426 cubic inch, 183 bhp at 2100 rpm.
- Code: "3" - Detroit Diesel 8V-71 TAE, 8 cylinders, 568 cubic inch, 262 bhp at 2100 rpm. (TAE indicates turbo-charged aftercooled emissions) meets California EPA requirements.

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A E G K L M N

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3.2.2.4 Seventh Character: (Continued)

- Code: "4" - Cummins Diesel VTB-903, 8 cylinders, 903 cubic inch, 275 bhp at 2100 rpm. (Turbocharged) meets current California EPA requirements.
- Code: "5" - Detroit Diesel 6V-92 TAC, 6 cylinders, 552 cubic inch, 224 bhp at 2100 RPM TAC indicates turbo charged, after cooled meets current California EPA requirements.
- Code: "6" - Detroit Diesel 6V-92TA, 6 cylinders, 552 cubic inches, 294 bhp at 2100 rpm, 49 State Federal engine.
- Code: "7" - Detroit Diesel 6V-71TA, 6 cylinders, 426 cubic in., 225 bhp at 2100 rpm, 49 State Federal engine.
- Code: "8" - Detroit Diesel 6V-92TAC, 6 cylinders, 552 cubic in., 260 bhp at 2100 rpm, 1980 California engine.
- Code: "9" - Detroit Diesel 6V-92TAC, 6 cylinder 552 cubic in., 260 bhp at 2100 rpm, 1984 California engine.
- Code: "A" - Detroit Diesel 6V-92TA, 6 cylinders, 552 cubic in., 294 bhp at 2100 rpm, 49 State Federal engine, 1985 Federal certification.
- Code: "B" - Detroit Diesel 6V-92TAC, 6 cylinder 552 cubic in., 260 bhp at 2100 rpm, 1985 California engine.
- Code "C" Cummins Diesel LTA10B, 6 cylinders, 10 liters (611 cubic inch) displacement, meets current California EPA requirements.
- Code: "D" - Detroit Diesel 6V-92TA DDEC, 6 cylinders, 552 cubic in., 49 State Federal engine, electronically controlled engine (DDEC).

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N

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3.2.2.4 Seventh Character: (Continued)

- Code: "E" - Cummins Diesel LTA10B, 6 cylinders, 10 liters (611 cubic inch) displacement, 49 State Federal Engine.
- Code: "F" - Detroit Diesel 6V-92TA, 6 cylinders, 552 cubic inch, 49 State Federal Engine.
- Code: "G" - Detroit Diesel 6V-92 TAC, 6 cylinders, 552 cubic inch, meets current California EPA requirements.
- Code: "H" - Detroit Diesel 6V-71TA, 6 cylinders, 426 cubic inch, 49 State Federal Engine.
- Code: "J" - Detroit Diesel 6V-71, 6 cylinders, 426 cubic inch, 49 State Federal Engine.

3.2.2.5 Eighth Character:

Brake System - Identifies braking system with specifically defined characteristic such as method of force application (i.e., air, hydraulic, electric, etc.), disc or drum type, anti-lock installation and type of park brake.

Code: "K" - Compressed air, drum type, no anti-lock devices installed, rear axle spring parking brake.

Code: "L" - Compressed air, drum type, anti-lock device installed in rear axle only, rear axle spring parking brake.

Code: "M" - Compressed air, drum type, anti-lock devices installed in both axles, rear axle spring parking brake.

Code: "N" - Compressed air, drum type, no anti-lock devices installed, drive shaft spring parking brake.

Code: "P" - Compressed air, drum type, anti-lock device installed in rear axle only, drive shaft spring parking brake.

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D

PAGE: 8**3.2.2.5 Eighth Character: (Continued)**

Code: "R" - Compressed air, drum type, anti-lock devices installed in both axles, drive shaft spring parking brake.

3.2.3 Check Digit

This single digit shall be left blank on all drawings assigning codes to specific configurations. The check digit shall be calculated by computer in accordance with FMVSS #115, amended, and shall be included in all VIN printouts, listings and other references to, or usage of, the VIN.

3.2.4 Section III

These codes are established by the manufacturer. Codes for the first digit of this section shall be in accordance with FMVSS #115, the second digit of this section must be submitted to the federal government for information sixty (60) days prior to usage. The format, not the specific numbers, of the remaining digits must also be submitted for information.

3.2.4.1 First Character:

Vehicle Model Year - This character is controlled by the application of Table II as found in the amended FMVSS 115.

Code: - Refer to Table II, FMVSS 115, duplicated on pg. 7 of this specification.

3.2.4.2 Second Character:

Plant of Manufacturer - This character code identifies the location of the plant in which the vehicle was manufactured.

Code: "D" - The Flxible Corporation
Delaware Plant
Delaware, Ohio 43015

3.2.4.3 Third Through Eighth Characters:

Production Sequence Number - These characters (must be numerics) represent the number sequentially assigned by the manufacturer in the production process.

Code: - Per continuing applicable current series of serial numbers. (Example: Prototype II - 090007)

DUPLICATION OF
TABLE II
OF FMVSS #115

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