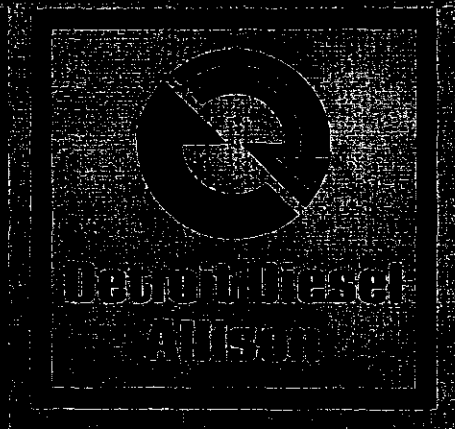




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the
Society
of
Chemists



Volume
XXXIII

Part I

1905
Published by
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London, 1905

SALES TECH DATA BOOK I

VOLUME 1

ENGINE PERFORMANCE CURVES

SERIES 71 AND 92



Detroit Diesel Allison
Division of General Motors Corporation

13400 West Outer Drive
Detroit, Michigan 48228



Detroit Diesel Allison

Division of General Motors Corporation

GENERAL MOTORS CORPORATION • 13400 West Outer Drive Detroit, Michigan, 48228
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52 ☒ 11/75 PK	67 ☐	82 ☐	97 ☐
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55 ☐	70 ☐	85 ☐	100 ☐
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57 ☐	72 ☐	87 ☐	102 ☐
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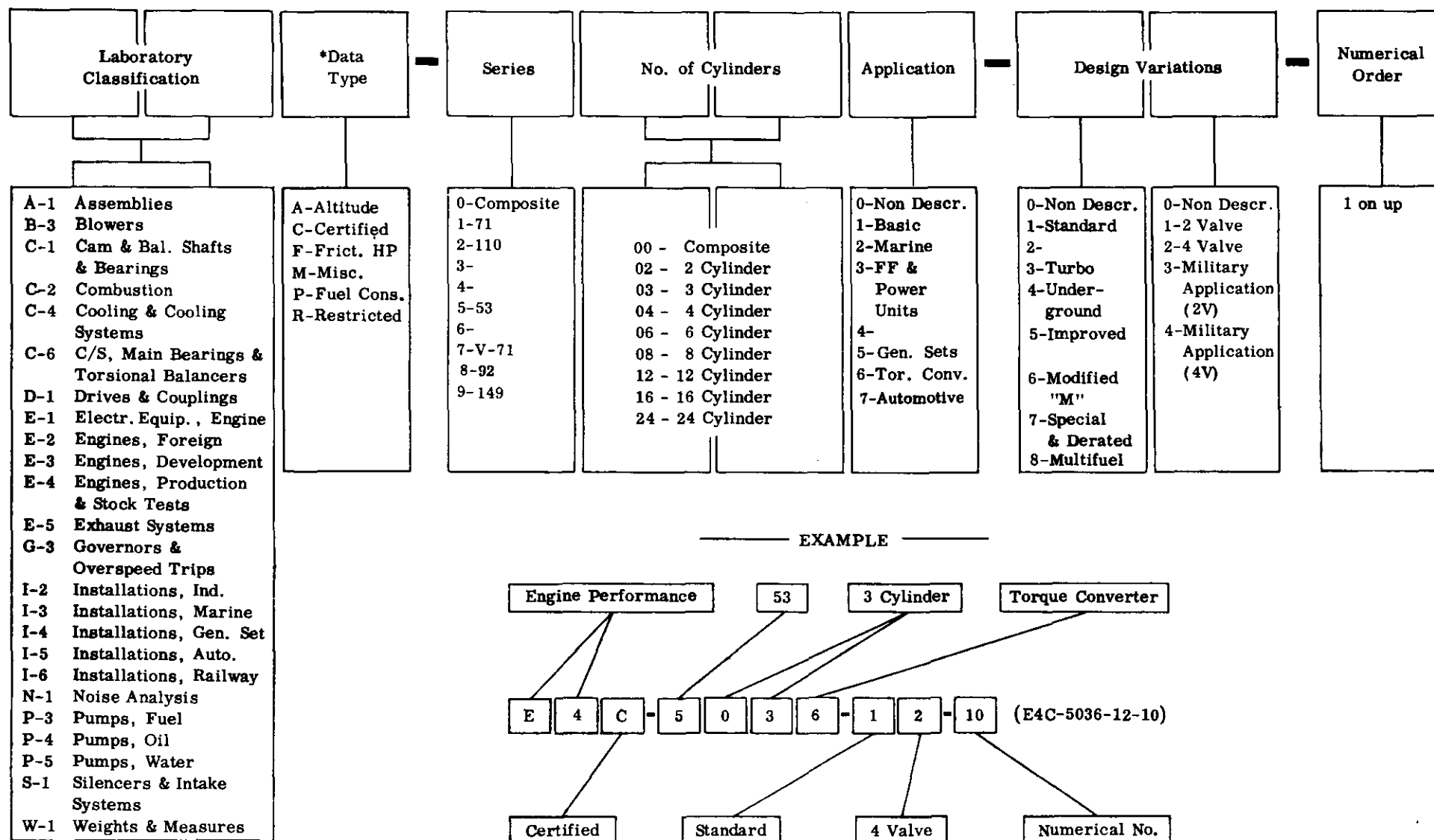
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TECHNICAL DATA NUMBERING SYSTEM

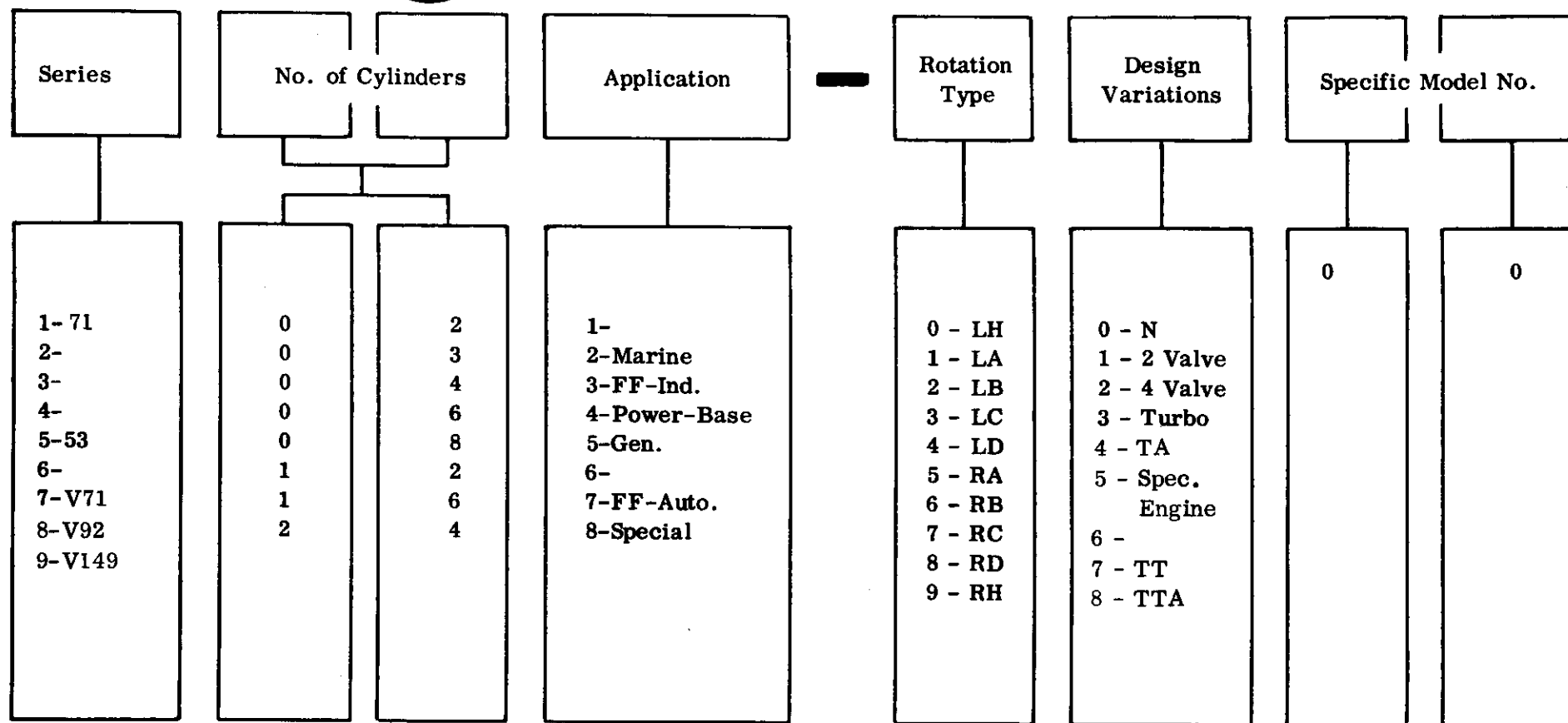


Laboratory Classifications not shown also covered by this numbering system.

* If no letter appears in Data Type space, material is sufficiently identified by numerals.



MODEL NUMBERING SYSTEM



This Model Numbering System became effective with the release of the Series 53 and V-71 engines. The first digit denotes series. The second and third digits show number of cylinders with the second digit carrying a zero for single-engine units; the fourth digit denotes application. The fifth digit denotes rotation and type of engine; the sixth digit covers design variations. The last two digits, seven and eight, represent specific model number.

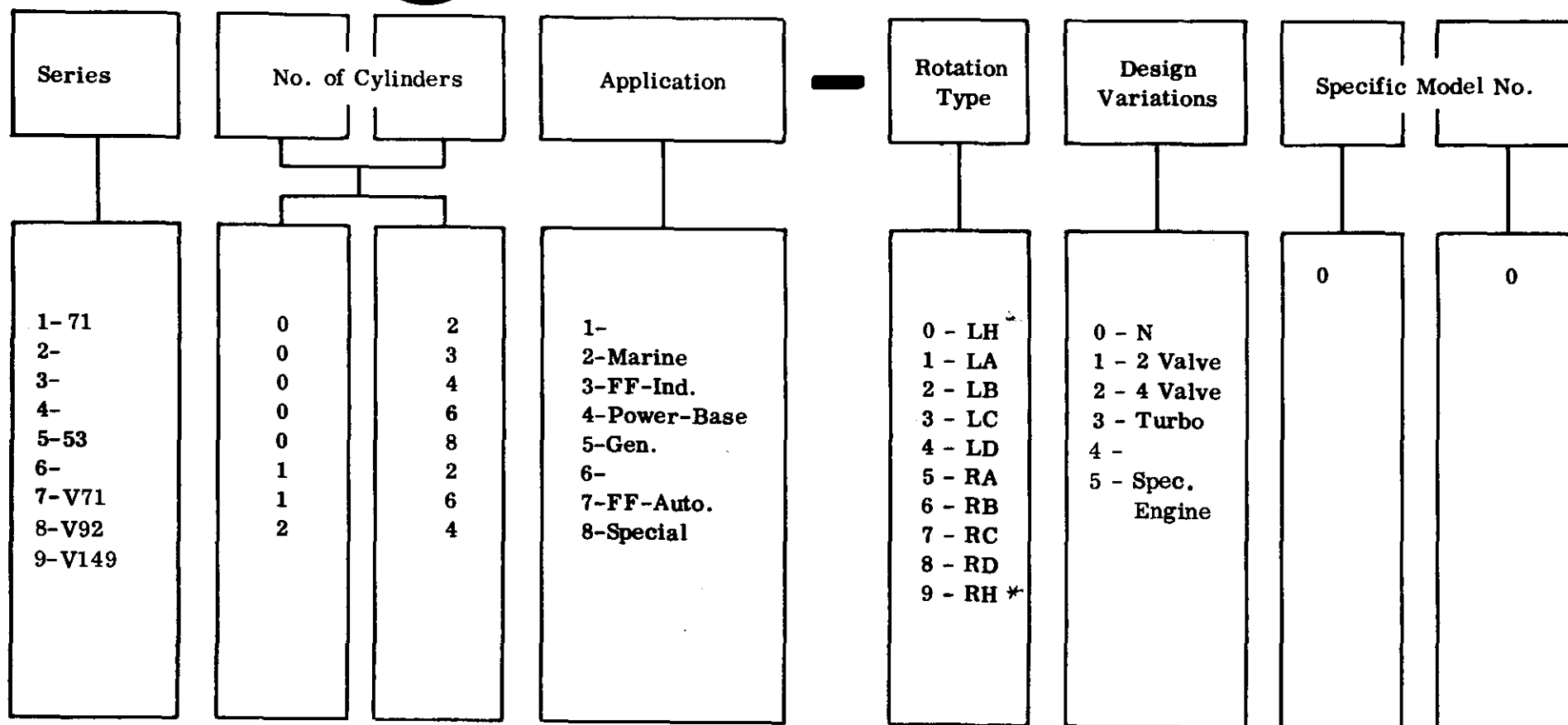
Examples: -

5043-7101 - 4-53 Fan-to-Flywheel-Ind. - RC - 2 Valve Head

7062-3000- 6V-71 Marine - LC - 4 Valve Head N Engine



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Examples: -

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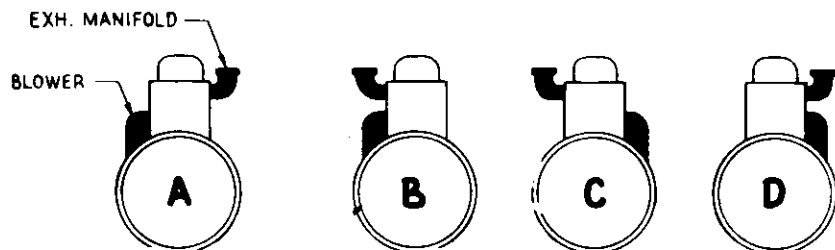
7062-3000- 6V-71 Marine - LC - 4 Valve Head N Engine

BASIC ENGINE ARRANGEMENTS

TYPE OF ENGINE AS VIEWED FROM REAR (FLYWHEEL END)

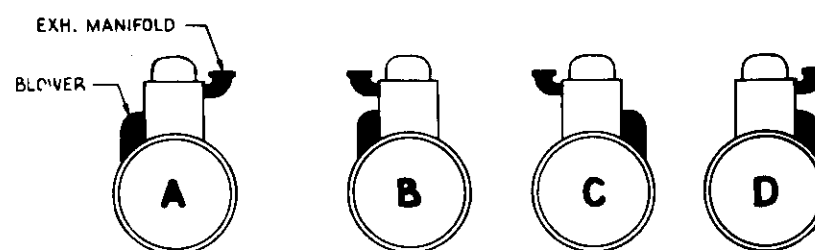
SERIES 71 (IN LINE)

TYPE A, B, C, D - DESIGNATES LOCATION OF BLOWER AND EXHAUST MANIFOLD



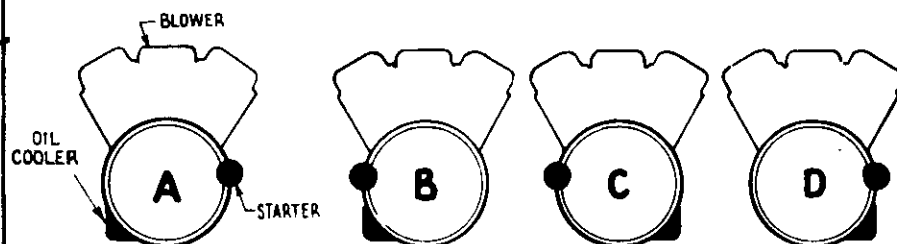
SERIES 53 (IN LINE)

TYPE A, B, C, D - DESIGNATES LOCATION OF BLOWER AND EXHAUST MANIFOLD



SERIES V-71 AND SERIES V-53

TYPE A, B, C, D - DESIGNATES LOCATION OF STARTER AND OIL COOLER



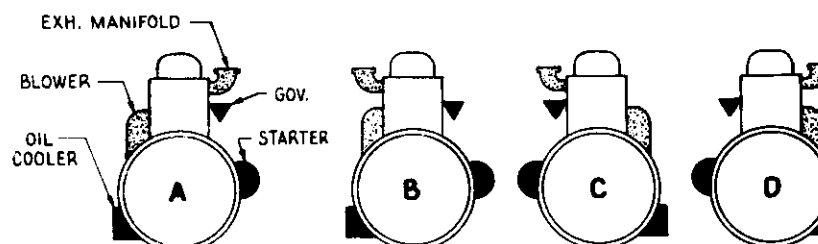
2, 3, 4-53 (IN LINE)

STARTER AND OIL COOLER ARRANGEMENT

THE OIL COOLER IS ALWAYS OPPOSITE THE STARTER (EXCEPT TILT MARINE MODELS)
THE GOVERNOR IS ALWAYS OPPOSITE THE BLOWER

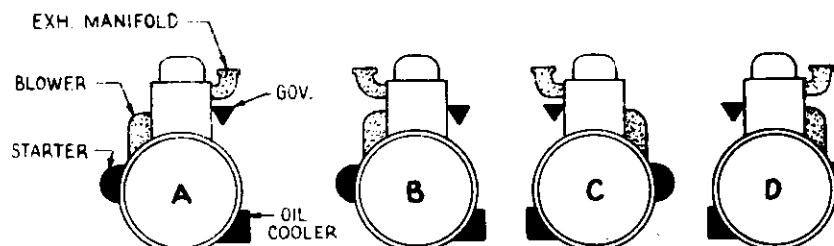
STARTER OPPOSITE BLOWER

DESIGNATED BY ODD NUMBER IN LAST DIGIT OF MODEL NUMBER



STARTER SAME SIDE AS BLOWER

DESIGNATED BY EVEN NUMBER IN LAST DIGIT OF MODEL NUMBER



MODEL NUMBERING SYSTEM

TYPE AND ROTATION*

* CRANKSHAFT ROTATION:-

AS VIEWED FROM
FRONT OF ENGINE

L- COUNTERCLOCKWISE
R- CLOCKWISE

AS VIEWED FROM
REAR OF ENGINE

L- CLOCKWISE
R- COUNTERCLOCKWISE

† FOR MULTIPLE UNITS

□ □ □ □ - □ □ □ □

0-LH†
1-LA
2-LB
3-LC
4-LD
5-RA
6-RB
7-RC
8-RD
9-RH†



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

SPEED DROOP CHART

ENGINE	INJECTOR	ENGINE SPEED Full Load	GOVERNOR MAX. DROOP				HYDR *
			VARI- ABLE	LIMITING		CON- STANT	
				Sgl. Wt.	Dbl. Wt.		
2-71	HV6, HV7, HV8	1200 only 1200-2000	- 140	- 90	-	70 90	5%
71	55E, 6S8 HV55, HV6 S55, S60 71N5, N55	1200-2100	140	140	150		
	N60	1200-2100	175	175	175#		
	N65	1200-2100	200	200	200		
	HV7, S70	1200-2300	140	140	150		
	HV8, HV9 S80, N70, N80	1200-2300	175	175	175		
V71	5S8, 6S8 S45, S50, S55 S60, S65 71N5, N55, N60	1200-2100	140	-	150		
	N65	1200-2100	190	-	175		
	S70, N70	1200-2300	140	-	150		
16V-71	S55, S60	1200-2100	150	-	150	4%(a)	
	S70, N55, N60, N70	1200-2100	175	-	175		
	N65	1200-2100	200	-	200		
V71T	N65, N70, N75, N80	1800-2100	200	-	200	5%	
V149	120, 130	1200-1900	150	-	150		
V149T	140, 150	1200-1900	150	-	150		

(a) For Limiting Speed Hydraulic Governor Assembly 5130047 use 200 RPM droop, 1800-2100 RPM Full Load Speed.

* Droop expressed as percent of full load speed and is adjustable.

For Governor Assembly 5147213 use 265 RPM Droop at 2100, and 315 RPM Droop at 1950.

G3-0000-00-2
Rev. 12-15-70
Sheet 1 of 2



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

SPEED DROOP CHART

ENGINE	INJECTOR	ENGINE SPEED Full Load	GOVERNOR MAX. DROOP				
			VARIABLE		LIMITING	CON- STANT	HYDR **
			Open	Encl.	Dbl. Wt.		
2*, 3, 4-53 (2V) (a)	All Injectors	0 - 1200	125	220	160	5%	
		1201 - 1400	135	220	170		
		1401 - 1600	145	205	180		
		1601 - 1800	155	185	190(150)		
		1801 - 2000	165	175	200		
		2001 - 2200	175	160	210		
3, 4-53 (4V) (b, d)	All Injectors	0 - 1200	125	220	160		
		1201 - 1400	135	220	170		
		1401 - 1600	145	205	180		
		1601 - 1800	155	185	190		
		1801 - 2000	165	175	200		
		2001 - 2200	175	160	210(150)		
		2201 - 2400	185	145	220(140)		
		2401 - 2600	195	140	230(130)		
6V-53 (4V) (c, e, f)	All Injectors	2601 - 2800	205	140	240(110)		
		0 - 1200		230	200		
		1201 - 1400		185	175		
		1401 - 1600		140	150		
		1601 - 1800		145(175)	160		
		1801 - 2000		150(175)	170		
		2001 - 2200		155(175)	180		
		2201 - 2400		160(175)	190		
8V-53N	All Injectors	2401 - 2600		165(175)	200(150)		
		2601 - 2800		170(175)	210(140)		
		2500 - 2800		150	150		

- (a) For limiting speed single weight governors 5134910 & 5136304 use droop shown in parentheses, 1700-1800 rpm.
- (b) For Gov. Asm. 5137854 (lim. speed) use droops shown in parentheses, 2001-2400 rpm.
- (c) For Gov. Asm. 5128776, 5139094 and 5145924 (lim. speed) use droops shown in parentheses, 2500-2800 rpm.
- (d) For Gov. Asm. 5138284, 5139676 and 5143045 (lim. speed) use droops shown in parentheses, 2401-2800 rpm. For "N" injectors add 30 rpm to these droops.
- (e) For Gov. Asm. 5134683 (var. speed) use droops shown in parentheses, 1800-2800 rpm.
- (f) For Gov. Asm. 5147529 (lim. speed) use 175 rpm droop, 2600-2800 engine rpm.

* Maximum speed for 2-53 (2V) is 2000 rpm.

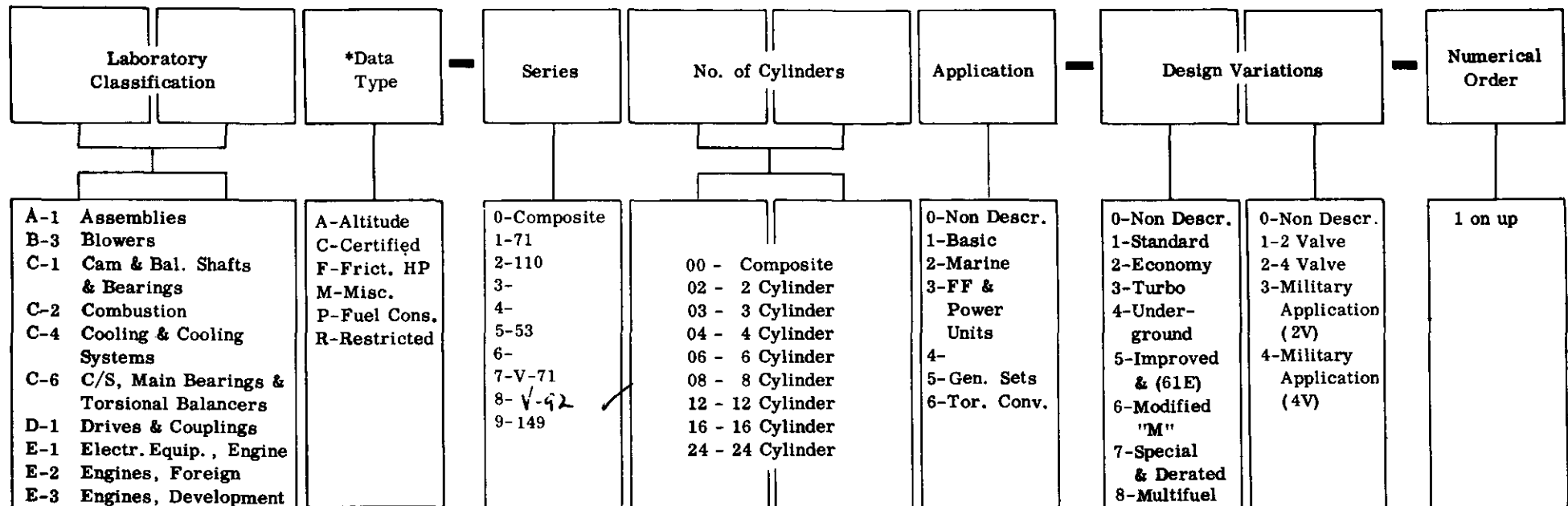
** Droop expressed as percent of full load speed and is adjustable. Set no load to closest multiple of 10 rpm.

G3-0000-00-2

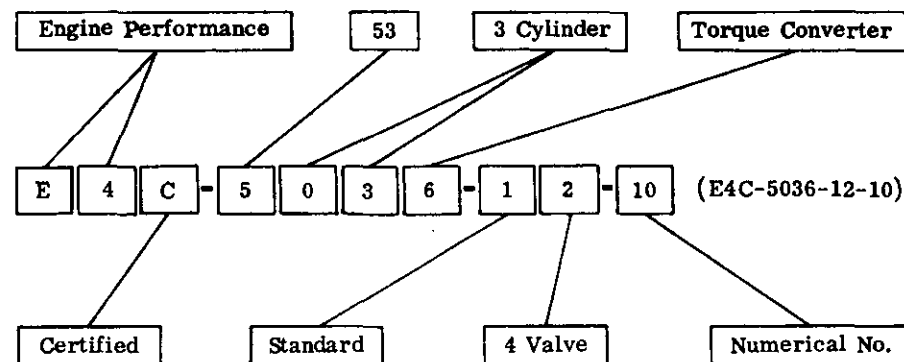
Rev. 12-8-72

Sheet 2 of 2

TECHNICAL DATA NUMBERING SYSTEM



EXAMPLE



Laboratory Classifications not shown also covered by this numbering system.

* If no letter appears in Data Type space, material is sufficiently identified by numerals.



Detroit Diesel Allison
Division of General Motors Corporation

(GS) 4

SPEED DROOP CHART - 3 & 4-53N SERIES

REV. 12-6-74

INJECTOR	ENGINE SPEED FULL LOAD	GOVERNOR DROOP *		
		VARIABLE OPEN	CLOSED	LIMITING (DBL. WT.)
ALL **	1400-1600	145	"	"
	1601-1800	155	"	"
	1801-2000	165	"	"
	2001-2200	175	"	"
	2201-2400	185	"	"
	2401-2600	195	"	"
	2601-2800	205	"	"
35 S40, S45	1400-1600	"	165	200
	1601-1800	"	150	195
	1801-2000	"	140	190
	2001-2200	"	130	185
	2201-2400	"	120	180 (160)
	2401-2600	"	115	195 (160)
	2601-2800	"	110	215 (140)
C40, N40 L40, C45 N45, C50 N50	1400-1600	"	190	235
	1601-1800	"	180	230
	1801-2000	"	170	225
	2001-2200	"	160	220
	2201-2400	"	150	215 (170)
	2401-2600	"	145	230 (170)
	2601-2800	"	140	250 (150)
M55	1800-2000	"	190	255
	2001-2200	"	170	250
	2201-2400	"	160	245
	2401-2600	"	155	260 (190)
	2601-2800	"	150	280 (170)

* HYDRAULIC GOVERNOR DROOP IS 5% OF FULL LOAD SPEED

** GOVERNOR GROUPS 6N4-1027, 1028, 1030 AND 1044

FOR GOVERNOR GROUPS 6N4-1032, 1414, 1479 & 1862 USE DROOP
SHOWN IN PARENTHESES



Detroit Diesel Allison

Division of General Motors Corporation

(GS) 5

SPEED DROOP CHART - 6V-53 SERIES

REV. 5-01-75

INJECTOR	ENGINE SPEED FULL LOAD	GOVERNOR DROOP *	
		VARIABLE	LIMITING (DBL. WT.)
S40, S45	1400-1600	140	150
	1601-1800	120	130
	1801-2000	100	140
	2001-2200	90	150
	2201-2400	100	160
	2401-2600	110	170
	2601-2800	120	190
(A, B, C, D) C40, N40 C45, N45 C50, N50 M50, M60	1400-1600	150	200
	1601-1800	130	180
	1801-2000	110	190
	2001-2200	120	200
	2201-2400	130	210 (140)
	2401-2600	140	220 (140)
	2601-2800	150	240 (125)
(A, C) N60, N70 M55M70	1800-2000	130	210
	2001-2200	140	220
	2201-2400	150	230
	2401-2600	160	240 (150)
	2601-2800	170	260 (140)

* HYDRAULIC GOVERNOR DROOP IS 5% OF FULL LOAD SPEED

(A) FOR GOVERNOR GROUPS 6N4-1748, 1807, 1808, 1894 (LIMITING SPEED)
USE DROOPS SHOWN IN PARENTHESES

(B) FOR GOVERNOR GROUPS 6N4-1805 & 1806 WITH C40, C45 & C50 INJECTORS
SPECIFY 175 RPM DROOP FOR 2600-2800 RPM RANGE ONLY

(C) FOR GOVERNOR GROUP 6N4-1303 (VARIABLE SPEED) SPECIFY 175 RPM DROOP

(D) FOR GOVERNOR GROUP 6N4-1435 (LIMITING SPEED) SPECIFY 175 RPM DROOP

G3-0000-00-2
SHEET 2 OF 5



SPEED DROOP CHART - 71 SERIES

REV. 10-22-75

ENGINE	INJECTOR	VAR. & LIM. SPEED GOV. DROOP-#
2-71	HV6	120-
2-71	HV7	140-
2-71	HV8	160-
3,4,86-71	71B5 B55	125
3,4,86-71	B60 C55 C60 C65 N55 N60	150
3,4,86-71	C70 N65 N70 N80	175
3,4,86-71	B65	200
486-71T	C65	175
486-71T	N65 N70 N75 N80 N90	200
6V-71	7B5E B55E	125
6V-71	B60F	150
6,8,812V-71	71B5 B55 B60 71C5* C55* 71N5 N55	125
6,8,812V-71	B65 C60 C65% C70 N60 N70	150
6,8,812V-71	N65	175
8V-71T	140	150
6,8,812V-71T	N60 C65% N70%	175
6,8,812V-71T	N65 N75% N80 N90 M95 S80	200
8V-71 TA	N65 N75	200##
8V-71 TA	N70	175
16V-71	N55	150
16V-71	N60 N70	175
16V-71	N65	200
16V-71T	N60 N70	200
16V-71T	N65 N75 N80 N90	225

HYDRAULIC GOVERNOR DROOP IS 5% OF FULL LOAD SPEED

* WHEN USED WITH 6N4-1849/1897 FULL LOAD SPEED 1950 RPM, DROOP IS 275 RPM.

% WHEN USED WITH 6N4-1915 FULL LOAD SPEED 1950 RPM, DROOP IS 325 RPM.

- CONSTANT SPEED GOVERNOR DROOP IS 100 RPM FOR ALL 2-71 ENGINES

EXCEPT FOR 6N4-226 AND 304 WITH HV7 INJECTORS THE DROOP IS AS FOLLOWS

ENGINE SPEED	DROOP RPM
1400 - 1500	90
1501 - 1600	75
1601 - 1725	60

FOR 8V-71T OTM ENGINES WITH N75 INJECTORS, THE DROOP IS 175 RPM @ 2100 RPM. FOR 8V-71TT ENGINES WITH N75 INJECTORS, THE DROOP IS 150 RPM @ 1900 & 1950 RPM.



SPEED DROOP CHART - 92 SERIES

NEW 7-14-75

ENGINE	INJECTOR	LIM. & VAR. SPEED GOV. DROOP #	
		LIM.	VAR.
6&8V-92	9270	125	150
6&8V-92	9275, 9280	150	175
6&8V-92	9285, 9290	175	200
6&8V-92	9295	200	225
16V-92	9270	125	125
16V-92	9275, 9280	150	150
16V-92	9285, 9290	175	175
16V-92	9295	200	200
6, 8&8V-92T, TA	9280	125	150
6, 8&8V-92T, TA	9285, 9290	125##	175
6, 8&8V-92T, TA	9295	150	200
16V-92T	9280	100	150
16V-92T	9285, 9290	125	175
16V-92T	9295	150	200

HYDRAULIC GOVERNOR DROOP IS 5% OF FULL LOAD SPEED

FOR 6 & 8V-92TT ENGINES WITH 9290 INJECTORS THE DROOP IS 150 RPM @ 1900 & 1950 RPM.
FOR 6V-92 AND 8V-92 OTM ENGINES WITH 9290 INJECTORS, THE DROOP IS 175 RPM @ 2100 RPM.



Detroit Diesel Allison
Division of General Motors Corporation

(GS) 8

SPEED DROOP CHART - 149 SERIES

10-23-75

ENGINE	INJECTORS	ENGINE SPEED	VAR. & LIM. SPEED GOV. DROOP #
V149	120, 130	1200-1900	150
V149T	140, 150	1200-1900	150
V149TI	165, 180	1200-1900	150

HYDRAULIC GOVERNOR DROOP IS 5% OF FULL LOAD SPEED

G3-0000-00-2
SHEET 5 OF 5

53, 71, & V71

ENGINE APPLICATION RATINGS

Engine application rating is determined by the type of service in which the engine is applied. The following charts list engine speed and injector size by ratings, classifications, and usages; these terms are explained. For handy reference, applications are grouped as shown in the index in the last paragraph on this page.

ENGINE RATINGS

Ratings consist of four general classifications. Each rating classification, depending upon the application, is usually defined in terms of "Recommended" and "Maximum" speed and injector usage. Classification and usage terms are abbreviated as follows:

C Continuous	}	RATING TERMS	{	IR = Intermittent-Rated	}	USAGE TERMS	{	Max. = Maximum
IC Intermittent-Continuous	}		{	IM = Intermittent-Maximum	}		{	Rec. = Recommended

RATING CLASSIFICATIONS

CONTINUOUS	{	This rating is for a constant load, operating for long periods of time without intervals at reduced speed or load. The maximum speed for this rating is shown on the performance curve. Injectors used may or may not have reserve capacity for momentary overload demands.
INTERMITTENT-CONTINUOUS	{	This rating is for applications which are primarily continuous but will involve some variations in load and/or speed. The average fuel consumption at this rating should not exceed that of the Continuous rating. Injectors used may or may not have reserve capacity for momentary overload demands.
INTERMITTENT-RATED	{	This rating is used for variable speed and load applications where full output is required for short intervals of time. To obtain optimum life expectancy, the average load should not exceed 70% of full load at the average operating speed.
INTERMITTENT-MAXIMUM	{	This rating is used for applications where maximum output is desirable and long engine life between overhauls is of secondary importance or where the average load does not exceed 35% of full load at the average operating speed.

RATING USAGES

MAX. - Maximum speed and injector size approved for short periods of operation at rated load. In all cases where the maximum speeds and injector sizes are used, a re-evaluation of the following items should be made:

Air cleaner and duct capacities.	Critical torsionals in mass elastic system.
Mufflers and exhaust pipes size capacities.	Crankcase ventilation.
Vibration dampers speed limitations.	Torque converter speed limitations.
Fan, air compressor or hydraulic pump speed limitations.	Site elevation and temperature.
Accessory drive load and speed limitations.	

REC. - Maximum speed and injector size recommended for longer life and better fuel economy.

INDEX

APPLICATION	PAGE
Automotive	2
Marine	2
Industrial - Stationary and Portable	3 - 4
Oil Field	4
Railroad	5
Off-Highway Vehicles	5



MAXIMUM ENGINE SPEED AND INJECTOR SIZE

(GS) 12

APPLICATION	CODE NO.	RATING	53		53N			71		71N & V71N	REMARKS
			2V	4V	3 & 4 Cyl	6 Cyl	8 Cyl				

AUTOMOTIVE

Bus or Coach												
City	330	IR	Rec. Max.	- -	- -	2500/N45 2800/N45	2500/N45 2800/N45	2500/N40 2500/N45	- -		2100/71N5 2100/N55 h	h 2100/N60 for air conditioned city coach
School	330	IR	Rec. Max.	- -	- -	2500/N45 2800/N45	2500/N45 2800/N45	- -	- -		2100/71N5 2100/N55	
Parlor	310	IR	Rec. Max.	- -	- -	- -	2500/N45 2800/N45	2500/N40 2500/N45	- -		1900/N60 2100/N60	
Truck												
Delivery	380	IR	Rec. Max.	- -	- -	2500/N45 2800/N50	2600/N45 2800/N50	- -	- -		1950/N55 2100/N60	
Crane Carrier	020	IR	Rec. Max.	- -	- -	2500/N45 2800/N50	2600/N45 2800/N50	2500/N45 2500/N45	- -		2300/N60 2300/N65	
Fire	350	IM	Rec. Max.	- -	- -	2800/N45 2800/N50	2600/N45 2800/N50	2500/N45 2800/N50	- -		2100/N65 2300/N70	
Highway	320	IR	Rec. Max.	- -	- -	2500/N45 2800/N50	2600/N45 2800/N50	2500/N40 2500/N45	- -		1950/N55 2100/N65	
Turnpike	380	IR	Rec. Max.	- -	- -	- -	- -	2500/N40 2500/N45	- -		1950/N55 2100/N60	
Snow Plow	320	IR	Rec. Max.	- -	- -	2500/N45 2800/N50	2600/N45 2800/N50	2500/N40 2500/N45	- -		1950/N55 2100/N65	
Military												
Consult factory for ratings requiring injectors and speeds other than those shown in this section.												

MARINE

Bow Thruster											
Docking	410	IM	-	-	-	-	-	-		2300/N70	
Steering	450	IC	-	-	-	-	-	-		1800/N55	
Crew Boat	430	IR	-	-	2500/N45	2500/N45	2500/N45	-		2100/N60 x	x Requires factory approval for N65 injectors.
Pleasure Craft	410	IM	-	-	2800/N50	2800 /N50	2800/N50			2300/N70 2300/N80 m	m 71M Models
Work Boat	450	IC	-	-	2400/N40	-	-	1800/N55		1800/N55	
Military Consult factory for ratings requiring injectors and speeds other than those shown in this section.											

MAXIMUM ENGINE SPEED AND INJECTOR SIZE

(GS) 13

APPLICATION	CODE NO.	RATING	53		53N			71		71N & V71N	REMARKS
			2V	4V	3 & 4 Cyl	6 Cyl	8 Cyl				

INDUSTRIAL - STATIONARY AND PORTABLE

Air Compressor											
@ Portable	210	IC	Rec. Max.	+2200/S40 +2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N55 # 2100/N60		p For short duration, high pressure operation.
Portable - Aircraft Jet Starter Only	280	IM	Rec. Max.	-	-	2500/N50	2500/N45	2500/N45	# 2300/N65	s 2300/N70	
Stationary	200	C	Rec. Max.	+2200/c +2200/S40	2400/c 2400/S40	2400/c 2400/N40	2400/c 2400/N40	2400/c 2400/N40	1800/c 1800/N55		c Continuous Rating.
Asphalt Plant	230	IC	Rec. Max.	+2200/S40 +2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 1900/N60	1800/N60 1900/N60	
Cable Spinner	230	IC	Rec. Max.	+2200/S40 +2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 1900/N60	1800/N60 1900/N60	
Concrete Plant	230	IC	Rec. Max.	+2200/S40 +2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 1900/N60	1800/N60 1900/N60	
Conveyor	230	IC	Rec. Max.	+2200/S40 +2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 1900/N60	1800/N60 1900/N60	
Cotton Gin	650	IC	Rec. Max.	+2200/S40 +2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 1900/N60	1800/N60 1900/N60	
Crane & Hoist	070	IR	Rec. Max.	*2200/S45 +2200/S45	2500/S45 2800/S45	2500/N45 2800/N50	2500/N45 2800/N50	2500/N45 # 2300/N65	# 2100/N65 s 2300/N65	2100/N65 s 2300/N65	
Crusher & Hammer Mill	220	IC	Rec. Max.	+2200/S40 +2200/S40	2400/S40 2400/S40	2400/N40 2400/N40	2400/N40 2400/N40	2400/N40 2400/N40	1800/N55 1800/N60	1800/N55 1800/N60	
Dredge	720	C	Rec. Max.	+2200/c +2200/S40	2200/c 2200/S40	2200/c 2200/N40	2200/c 2200/N40	2200/c 2200/N40	1800/c 1800/N55	1800/c 1800/N55	c Continuous Rating.
Drill	270	IC	Rec. Max.	+2200/S40 *2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 # 2100/N60	1800/N60 2100/N60	
Feed Mill	620	IC	Rec. Max.	+2200/S40 *2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 # 2100/N60	1800/N60 2100/N60	
Generator											
Continuous	820	IC	Rec. Max.	+2182/S40 +2182/S45	2400/S40 2400/S45	2400/N40 2400/N45	2400/N40 2400/N45	2400/N40 2400/N45	1800/N55 1846/N60	1800/N55 1846/N60	
Standby	870	IM	Rec. Max.	+2182/S45 +2182/S45	2400/S45 2400/S45	2400/N45 2400/N50	2400/N45 2400/N50	2400/N45 2400/N50	1800/N65 2000/N70	1800/N70 2000/N70	
Military Consult factory for ratings requiring injectors and speeds other than those shown in this section.											
Paver - Asphalt & Concrete	240	IC	Rec. Max.	+2200/S40 *2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 # 2100/N60	1800/N60 2100/N60	
Planing Mill	960	IC	Rec. Max.	+2200/S40 +2200/S45	2400/S40 2400/S45	2400/N40 2400/N45	2400/N40 2400/N45	2400/N40 2400/N45	1800/N55 1800/N60	1800/N55 1800/N60	

This section continued on next page.

- + 1800 RPM for 2-53
- * 2000 RPM for 2-53
- # 2000 RPM for 2-71
- @ For manifolded application, consult factory.
- s 2100 RPM for 16V-71N

M2-0000-00-37
Page 3 of 5
Rev. 1-12-71

MAXIMUM ENGINE SPEED AND INJECTOR SIZE

(GS) 14

APPLICATION	CODE NO.	RATING	53		53N			71		71N & V71N	REMARKS
			2V	4V	3 & 4 Cyl	6 Cyl	8 Cyl				

INDUSTRIAL - STATIONARY AND PORTABLE - (CONTINUED)

Pump											
See also "Oil Field" section.											
Irrigation	840	IC	Rec. Max.	+ 2200/S40 * 2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N55 # 2100/N60	1800/N55 2100/N60	
Barge or Dredge	470	IC	Rec. Max.	+ 2200/c + 2200/S40	2200/c 2200/S40	2200/c 2200/N40	2200/c 2200/N40	2200/c 2200/N40	1800/c # 2100/N60	1800/c 2100/N60	c Continuous rating.
Fire	880	IM	Rec. Max.	- -	- -	2800/N45 2800/N50	2600/N45 2800/N50 x	2500/N45 2800/N50 x	- # 2300/N70	2100/N65 s 2300/N70	x Requires factory approval.
Municipal	720	C IC	Rec. Max.	+ 2200/c + 2200/S40	2200/c 2200/S40	2200/c 2200/N40	2200/c 2200/N40	2200/c 2200/N40	1800/c 1800/N55	1800/c 1800/N55	c Continuous rating.
Standby	890	IM	Rec. Max.	- -	- -	2800/N45 2800/N50	2600/N45 2800/N50 x	2500/N45 2800/N50 x	# 2100/N65 # 2300/N70	2100/N65 s 2300/N70	x Requires factory approval.
Saw Mill	920	IR	Rec. Max.	* 2200/S45 * 2200/S45	2400/S45 2500/S45	2400/N45 2500/N50	2400/N45 2500/N50	2400/N45 2500/N45	1800/N60 # 2100/N65	1800/N60 2100/N65	
Shovel	070	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2800/S45	2500/N45 2800/N50	2500/N45 2800/N50	2500/N45 2500/N45	# 2100/N60 # 2300/N65	2100/N60 s 2300/N65	
Welder	830	IR	Rec. Max.	* 2200/S45 * 2200/S45	2400/S45 2500/S45	2400/N45 2500/N50	2400/N45 2500/N50	2400/N45 2500/N45	1800/N60 # 2100/N65	1800/N60 2100/N65	
Winch	930	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2500/S45	2500/N45 2500/N50	2500/N45 2500/N50	2500/N45 2500/N45	# 2100/N60 # 2100/N65	2100/N60 2100/N65	
Yarder	930	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2500/S45	2500/N45 2500/N50	2500/N45 2500/N50	2500/N45 2500/N45	# 2100/N60 # 2100/N65	2100/N60 2100/N65	
Snow Blower	370	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2800/S45	2500/N45 2800/N45	2500/N45 2800/N45	2500/N45 2500/N45	# 2100/N60 # 2100/N65	2100/N60 2100/N65	
Aircraft Tow Tractor	980	IM	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2800/S45	2500/N45 2800/N45	2500/N45 2800/N45	2500/N45 2500/N45	# 2100/N60 # 2100/N65	2100/N60 2100/N65	

OIL FIELD

Draw Works	750	IR	Rec. Max.	- -	2500/S45 2800/S45	2500/N45 2800/N45	2500/N45 2800/N45	2500/N45 2800/N45	1800/N60 # 2100/N65	1800/N60 2100/N65	
Drill Table	740	C IC	Rec. Max.	+ 2200/c + 2200/S40	2400/c 2400/S40	2400/c 2400/N40	2400/c 2400/N40	2400/c 2400/N40	1800/c 1800/N55	1800/c 1800/N55	c Continuous rating.
Mud Pump	720	C IC	Rec. Max.	+ 2200/c + 2200/S40	2200/c 2200/S40	2200/c 2200/N40	2200/c 2200/N40	2200/c 2200/N40	1800/c 1800/N55	1800/c 1800/N55	c Continuous rating.
Line Pump	720	C IC	Rec. Max.	+ 2200/c + 2200/S40	2200/c 2200/S40	2200/c 2200/N40	2200/c 2200/N40	2200/c 2200/N40	1800/c 1800/N55	1800/c 1800/N55	c Continuous rating.
Hydro-Frac & Cement Pump	730	IM (x)	Rec. Max.	- -	2500/S40 2800/S45	2500/N45 2800/N50	2500/N45 2800/N50	2500/N45 2800/N50	# 2100/N65 # 2300/N65	2100/N65 s 2300/N70	

+ 1800 RPM for 2-53
* 2000 RPM for 2-53
2000 RPM for 2-71
s 2100 RPM for 16V-71N

(x) Use IR rating (see "Draw Works") for improved life expectancy where full throttle operation may be expected to exceed 50% of total operating time or where sustained full throttle runs in excess of 1 hour duration are anticipated.

MAXIMUM ENGINE SPEED AND INJECTOR SIZE

(GS) 15

APPLICATION	CODE NO.	RATING	53		53N			71		71N & V71N	REMARKS
			2V	4V	3 & 4 Cyl	6 Cyl	8 Cyl				

RAILROAD

Railcar	520	IR	Rec. Max.	-	-	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	-	-	1800/N60 2100/N60	
Reefer	510	C	Rec. Max.	+ 2200/c f	2200/c f	2200/c f	- f	- f	1800/c f	-	1800/c f	c Continuous Rating. f Consult Factory.
Road Locomotive	530	IC	Rec. Max.	-	2400/S40 2400/S40	2400/N40 2400/N40	2400/N40 2400/N40	2400/N40 2400/N40	-	-	1800/N55 1800/N55	
Switcher	550	IR	Rec. Max.	-	2500/S45 2500/S45	2500/N45 2500/N50	2500/N45 2500/N50	2500/N45 2500/N45	# 2100/N60 # 2100/N65	-	2100/N60 2100/N65	
Underground				f	f	f	f	f	f	f	f	f Consult Factory.

OFF-HIGHWAY VEHICLES

Compactor-Vibratory & Non Vibratory	160	IR	Rec. Max.	* 2200/S40 * 2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	1800/N60 # 2100/N65	-	1800/N60 2100/N65	See also "Roller-Road" in this section.
Ditcher or Trencher	050	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2500/S45	2500/N45 2500/N45	2500/N45 2500/N45	2500/N45 2500/N45	# 2100/N60 # 2100/N65	-	2100/N60 2100/N65	
Grader	130	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2800/S45	2500/N45 2800/N50	2500/N45 2800/N50	2500/N45 2500/N45	# 2100/N60 # 2300/N70	-	2100/N60 s 2300/N65	
Lift Truck	850	IR	Rec. Max.	* 2200/L40r * 2200/S45	- -	2500/N40 2800/N45	2500/N40 2800/N45	2500/N40 2500/N45	- -	-	1800/N55 2100/N60	r "In-plant" Operation.
Loader-Front End (Crawler & Wheel)	180	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2800/S45	2500/N45 2800/N50	2500/N45 2800/N50	2500/N45 2500/N45	# 2100/N60 # 2300/N65	-	2100/N60 s 2300/N65	
Road Base Preparation	250	IR	Rec. Max.	-	-	-	-	-	-	-	2100/N60 2100/N65	
Roller-Road	290	IR	Rec. Max.	+ 2200/S45 * 2200/S45	2500/S45 2800/S45	2500/N45 2500/N50	2500/N45 2500/N50	2500/N45 2500/N45	# 2100/N60 # 2100/N65	-	2100/N60 2100/N65	See also "Compactor" in this section.
Scraper	140	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2500/S45	2500/N45 2500/N45	2500/N45 2500/N45	2500/N45 2500/N45	# 2100/N60 # 2100/N65	-	2100/N60 2100/N65	

Tractor-Dozer and Push Loader

Crawler	110	IR	Rec. Max.	* 2200/S40 * 2200/S45	2400/S40 2500/S45	2400/N40 2500/N45	2400/N40 2500/N45	2400/N40 2500/N45	-	-	1800/N55 2100/N60 x	x N65 Injectors require factory approval.
Rubber Tire	909	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2500/S45	2500/N45 2500/N50	2500/N45 2500/N45	2500/N45 2500/N45	# 2100/N60 # 2100/N65	-	2100/N60 2100/N65	
Tractor-Farm	610	IR	Rec. Max.	* 2200/S45 * 2200/S45	2400/S45 2500/S45	2400/N45 2500/N50	2400/N45 2500/N50	2400/N45 2500/N45	1800/N60 # 2100/N65	-	2100/N60 2100/N65	
Tractor-Log Skidder	970	IR	Rec. Max.	-	2600/S45 2800/S45	2600/N45 2800/N45	2600/N45 2800/N45	2500/N45 2500/N45	# 2100/N60 # 2100/N65	-	-	
Truck-Rear Dump	170	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2500/S45	2500/N45 2500/N45	2500/N45 2500/N45	2500/N45 2500/N45	# 2100/N60 # 2100/N65	-	2100/N60 2100/N65	
Bottom Dump	120	IR	Rec. Max.	* 2200/S45 * 2200/S45	2500/S45 2500/S45	2500/N45 2500/N45	2500/N45 2500/N45	2500/N45 2500/N45	-	-	2100/N55 2100/N60	

Military - Consult factory for ratings requiring injectors and speeds other than those shown.

+ 1800 RPM for 2-53

* 2000 RPM for 2-53

2000 RPM for 2-71

s 2100 RPM for 16V-71N

53T, 71TV, & V71TV

ENGINE APPLICATION RATINGS

Engine application rating is determined by the type of service in which the engine is applied. The following chart lists engine speed and injector size by ratings, classifications, and usages; these terms are explained. For handy reference, applications are grouped as shown in the index in the last paragraph on this page. Ratings apply for 71 and V-71 engines with WBP cylinder blocks and vaneless turbochargers.

ENGINE RATINGS

Ratings consist of two general classifications. Each rating classification, depending upon the application, is usually defined in terms of 'Recommended' and 'Maximum' speed and injector usage. Classification and usage terms are abbreviated as follows:

RATING TERMS — { IR Intermittent-Rated
IM Intermittent-Maximum

USAGE TERMS — { Max. = Maximum
Rec. = Recommended

RATING CLASSIFICATIONS

INTERMITTENT - RATED — { This rating is used for variable speed and load applications where full output is required for short intervals of time. To obtain optimum life expectancy, the average load should not exceed 65% of full load at the average operating speed.

INTERMITTENT - MAXIMUM — { This rating is used for applications where maximum output is desirable and long engine life between overhauls is of secondary importance or where the average load does not exceed 35% of full load at the average operating speed.

RATING USAGES

REC. - Maximum speed and injector size recommended for longer life and better fuel economy.

MAX. - Maximum speed and injector size approved for short periods of operation at rated load.

INDEX

APPLICATION	PAGE
Automotive _____	2
Marine _____	2
Industrial - Stationary and Portable _____	2
Off-Highway Vehicles _____	2



MAXIMUM ENGINE SPEED AND INJECTOR SIZE

(GS) 8

APPLICATION	CODE NO.	RATING	53T	71TV & V71TV	REMARKS
AUTOMOTIVE					
Fire Truck	350	IM Rec. Max.	-	2100/N70 *2300/N75	
Highway Truck	320	IM Rec. Max.	-	2100/N70 2100/N75	

MARINE					
Pleasure Craft**	410	IM	2500/N70	*2300/N80	
Bow Thruster					
Docking**	410	IM	-	*2300/N80	
Steering		—	—	—	Use "work boat" recommendations shown on M2-0000-00-14 (page 2)
Crew Boat**	430	IR Rec. Max.	-	2100/N65 2100/N70	

INDUSTRIAL - STATIONARY & PORTABLE

Air Compressor - Portable					
Multiple Manifolded	210	IR	-	2100/N65	
Not Multiple Manifolded	211	IR Rec. Max.	-	2100/N65 2100/N70	
Generator					
Standby	870	IM Rec. Max.	-	1800/N80 1800/N90	
Snow Blower	370	IR	-	2100/N70	
Military - Consult factory for ratings requiring injectors and speeds other than those shown.					

APPLICATION	CODE NO.	RATING	53T	71TV & V71TV	REMARKS
OFF-HIGHWAY VEHICLES					
Compactor - Non Vibratory	160	IR	-	2100/N65	
Grader	130	IR	-	2100/N70	2300 RPM Max. for 4 & 6-71TV & 6V & 8V-71TV
Loader - Front End	180	IR Rec. Max.	-	2100/N70 2100/N75	2300 RPM Max. for 4 & 6-71TV & 6V & 8V-71TV
Road Base Preparation	250	IR	-	2100/N65	
Tow Tractor - Aircraft	980	IM Rec. Max.	-	2100/N75 *2300/N70	
Scraper	140	IR Rec. Max.	-	2100/N65 2100/N70	
Tractor - Dozer & Push Loader					
Crawler	110	IR	-	2100/N70 2100/N75	
Rubber Tire	090	IR	-	2100/N65	
Truck					
Bottom Dump	120	IR	-	2100/N65	
Rear Dump	170	IM Rec. Max.	-	2100/N70 2100/N75#	#Overseas Applications Limited to N70
Military - Consult factory for ratings requiring injectors and speeds other than those shown.					

*2100 RPM for 16V-71TV.

**Raw Water Intercooled.

149 & 149T

ENGINE APPLICATION RATINGS

Engine application rating is determined by the type of service in which the engine is applied. The following chart lists engine speed and injector size by ratings, classifications, and usages: these terms are explained. For handy reference, applications are grouped as shown in the index in the last paragraph on this page.

ENGINE RATINGS

Ratings consist of four general classifications. Each rating classification, depending upon the application, is usually defined in terms of "Recommended" and "Maximum" speed and injector usage. Classification and usage terms are abbreviated as follows:

C	Continuous	} RATING TERMS	{ IR Intermittent-Rated IM Intermittent-Maximum	USAGE TERMS	{ Max. = Maximum Rec. = Recommended
IC	Intermittent-Continuous				

RATING CLASSIFICATIONS

CONTINUOUS	{ This rating is for a constant load, operating for long periods of time without intervals at reduced speed or load. The maximum speed for this rating is shown on the performance curve. Injectors used may or may not have reserve capacity for momentary overload demands.
INTERMITTENT-CONTINUOUS	{ This rating is for applications which are primarily continuous but will involve some variations in load and/or speed. The average fuel consumption at this rating should not exceed that of the Continuous rating. Injectors used may or may not have reserve capacity for momentary overload demands.
INTERMITTENT-RATED	{ This rating is used for variable speed and load applications where full output is required for short intervals of time. To obtain optimum life expectancy, the average load should not exceed 60% (turbo) and 70% (non-turbo) of full load at the average operating speed.
INTERMITTENT-MAXIMUM	{ This rating is used for applications where maximum output is desirable and long engine life between overhauls is of secondary importance or where the average load does not exceed 35% of full load at the average operating speed.

RATING USAGES

REC. - Maximum speed and injector size recommended for longer life and better fuel economy.

MAX. - Maximum speed and injector size approved for short periods of operation of rated load.

INDEX

APPLICATION	PAGE
Marine _____	2
Industrial-Stationary and Portable _____	2
Oil Field _____	2
Railroad _____	2
Off-Highway Vehicles _____	2



MAXIMUM ENGINE SPEED AND INJECTOR SIZE

(GS) 10

APPLICATION	CODE NO.	RATING	149	149T	149TI	REMARKS
MARINE						
Bow Thruster						
Docking	410	IM	-	1900/150	1900/180	
Steering	450	IC	1800/120	-	-	
Crew Boat	430	IR	1900/130	-	1800/150	
Work Boat	450	IC	1800/120	-	-	
Military - Consult factory for ratings requiring injectors and speeds other than those shown.						

INDUSTRIAL - STATIONARY AND PORTABLE

Air Compressor							
Portable	210	IC		1800/120	-	1800/140	
Stationary	200	C	Rec.	1800/c	-	1800/c	c Continuous rating
		IC	Max.	1800/120	-	1800/140	
Crane	070	IR	Rec.	1800/130	-	1800/150	
			Max.	1900/130	-	1900/150	
Crusher	220	C	Rec.	1800/c	-	1800/c	c Continuous rating
		IC	Max.	1800/120	-	1800/140	
Dredge	720	C	Rec.	1800/c	-	1800/c	c Continuous rating
		IC	Max.	1800/120	-	1800/140	
Generator							
Continuous	820	C	Rec.	1800/c	-	1800/c	c Continuous rating
		IC	Max.	1800/120	-	1800/140	
Standby	870	IM	Rev.	1800/120	1800/150	1800/180	
			Max.	1800/130	1800/165	1800/180	
Pump							
Fire	880	IM		1900/130	1900/150	1900/180	
Standby	890	IM		1900/130	1900/150	1900/180	
Shovel	070	IR	Rec.	1900/130	-	1800/150	
			Max.	1900/130	-	1900/150	
Snow Blower	370	IM		1900/130	1900/150	1900/180	
Military - Consult factory for ratings requiring injectors and speeds other than those shown.							

APPLICATION	CODE NO.	RATING	149	149T	149TI	REMARKS
OIL FIELD						
Mud Pump	720	C	1800/c	-	1800/c	c Continuous rating
Hydro-Frac & Cement Pump	730	IM	1900/130	1900/150	1900/180	
Military - Consult factory for ratings requiring injectors and speeds other than those shown.						

RAILROAD

Railcar	520	IR	Rec. 1800/120 Max. 1900/120	-	1800/140 1900/140	
Road Locomotive	530	IC	1800/120	-	-	
Switcher	540	IR	1900/130	-	1900/150	
Military - Consult factory for ratings requiring injectors and speeds other than those shown.						

OFF-HIGHWAY VEHICLES

Loader	190	IR	1900/130	1900/150	1900/180	
Scraper	140	IR	1900/130	1900/140	1900/165	
Tractor - Dozer & Push Loader						
Rubber Tire	090	IR	1900/130	1900/140	1900/165	
Truck						
Bottom Dump	120	IR	1900/120	1900/130	1900/150	
Rear Dump	170	IR	1900/130	1900/150	1900/180	
Aircraft Tow Tractor	980	IM Rec. Max.	1900/120 1900/130	1900/140 1900/150	1900/165 1900/180	
Military - Consult factory for ratings requiring injectors and speeds other than those shown.						

GS (10)



COMMERICAL ENGINE RATING AND WEIGHT COMPARISONS
Basic Engine HP and Speed

ENGINE		INTERMITTENT RATINGS			CONTINUOUS RATING	ENGINE WEIGHTS	
		Intermittent Maximum	Intermittent Rated	Intermittent Continuous		Typical F to F (C.I.)	
						Pounds	Lb/Max. HP
2-71	2 Valve	65 @ 2000	65 @ 2000	50 @ 1800	48 @ 1800	960	14.8
3-71	2 Valve	113 @ 2300	102 @ 2100	78 @ 1800	75 @ 1800	1525	13.5
4-71	2 Valve	159 @ 2300	143 @ 2100	106 @ 1800	101 @ 1800	1780	11.2
6-71	2 Valve	244 @ 2300	219 @ 2100	160 @ 1800	154 @ 1800	2190	9.0
4-71E	4 Valve	160 @ 2300	140 @ 2100*	117 @ 1800	113 @ 1800	1780	11.1
4-71N	4 Valve	167 @ 2300	152 @ 2100	119 @ 1800	117 @ 1800	1780	10.7
6-71E	4 Valve	241 @ 2300	210 @ 2100*	177 @ 1800	170 @ 1800	2190	9.1
6-71N	4 Valve	250 @ 2300	228 @ 2100	179 @ 1800	175 @ 1800	2190	8.8
6-71M	4 Valve	264 @ 2300	230 @ 2100	—	—	2190	8.3
2-53	2 Valve	45 @ 2000	45 @ 2000	36 @ 1800	35 @ 1800	780	17.3
3-53	2 Valve	75 @ 2200	75 @ 2200	65 @ 2200	64 @ 2200	965	12.9
3-53	4 Valve	94 @ 2800	94 @ 2800	72 @ 2400	64 @ 2200	965	10.3
4-53	2 Valve	103 @ 2200	103 @ 2200	88 @ 2200	87 @ 2200	1110	10.8
4-53	4 Valve	127 @ 2800	127 @ 2800	98 @ 2400	87 @ 2200	1110	8.7
6V-53	4 Valve	190 @ 2800	190 @ 2800	148 @ 2400	130 @ 2200	1485	7.8
3-53N	4 Valve	98 @ 2800	92 @ 2800	74 @ 2400	70 @ 2400	965	9.8
4-53N	4 Valve	136 @ 2800	127 @ 2800	101 @ 2400	93 @ 2400	1110	8.2
6V-53N	4 Valve	210 @ 2800	197 @ 2800	152 @ 2400	140 @ 2400	1485	7.1
8V-53N	4 Valve	275 @ 2800	253 @ 2800	203 @ 2400	186 @ 2400	1800	6.5
6V-71	4 Valve	241 @ 2300	210 @ 2100*	177 @ 1800	170 @ 1800	2010	8.3
8V-71	4 Valve	321 @ 2300	280 @ 2100*	236 @ 1800	227 @ 1800	2395	7.5
12V-71	4 Valve	482 @ 2300	420 @ 2100*	354 @ 1800	340 @ 1800	3350	7.0
16V-71	4 Valve	640 @ 2300**	560 @ 2100*	472 @ 1800	454 @ 1800	4600	7.2
6V-71N	4 Valve	250 @ 2300	228 @ 2100	179 @ 1800	175 @ 1800	2010	8.0
8V-71N	4 Valve	333 @ 2300	304 @ 2100	239 @ 1800	233 @ 1800	2395	7.2
12V-71N	4 Valve	500 @ 2300	456 @ 2100	359 @ 1800	350 @ 1800	3350	6.7
16V-71N	4 Valve	666 @ 2300**	608 @ 2100	478 @ 1800	466 @ 1800	4600	6.9
8V-149	4 Valve	530 @ 1900	530 @ 1900	465 @ 1800	450 @ 1800	5695	10.7
12V-149	4 Valve	800 @ 1900	800 @ 1900	700 @ 1800	675 @ 1800	8430	10.5
16V-149	4 Valve	1060 @ 1900	1060 @ 1900	930 @ 1800	900 @ 1800	10630	10.0

INTERMITTENT MAXIMUM - Use for pleasure craft and generator stand-by installations.

INTERMITTENT RATED - Use for intermittent load applications when optimum engine durability and fuel consumption are not major factors.

INTERMITTENT CONTINUOUS - Use for continuous operation which involves some variation in load and speed, i.e. generator set.

*Also "N" Engine with N60 Injectors

**2300 RPM require Approval.

**RATED POWER OUTPUT
GUARANTEED WITHIN 5% AT
SAE STD AMBIENT CONDITIONS:-
AIR TEMP 85°F, ELEV 500 FT,
DRY AIR DENSITY .0705 LB/CU FT**

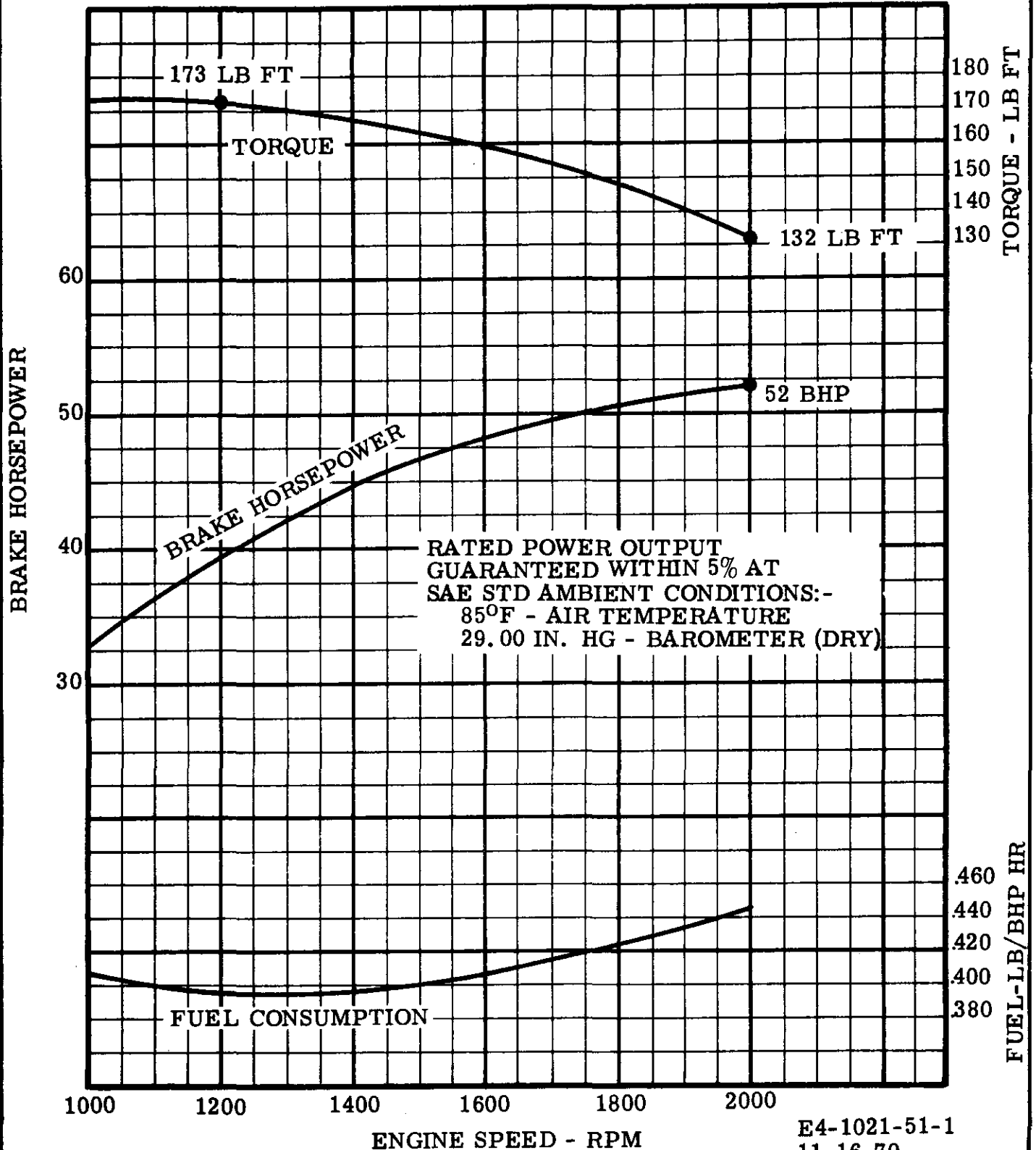
7/14/2011 10:10 AM



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 2-71 DIESEL
2 VALVE HEAD
71N5 INJECTORS

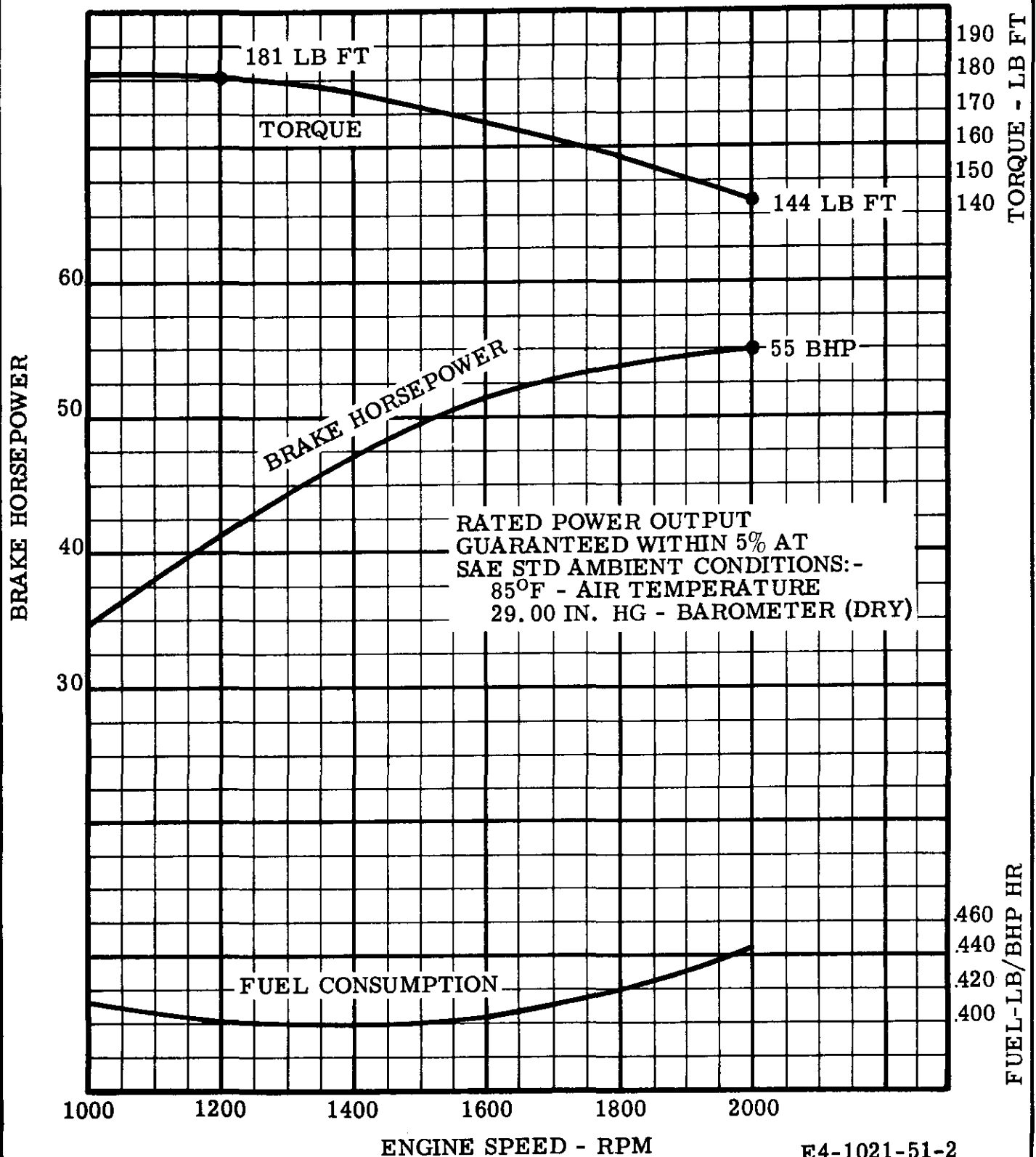




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 2-71 DIESEL
2 VALVE HEAD
N55 INJECTORS

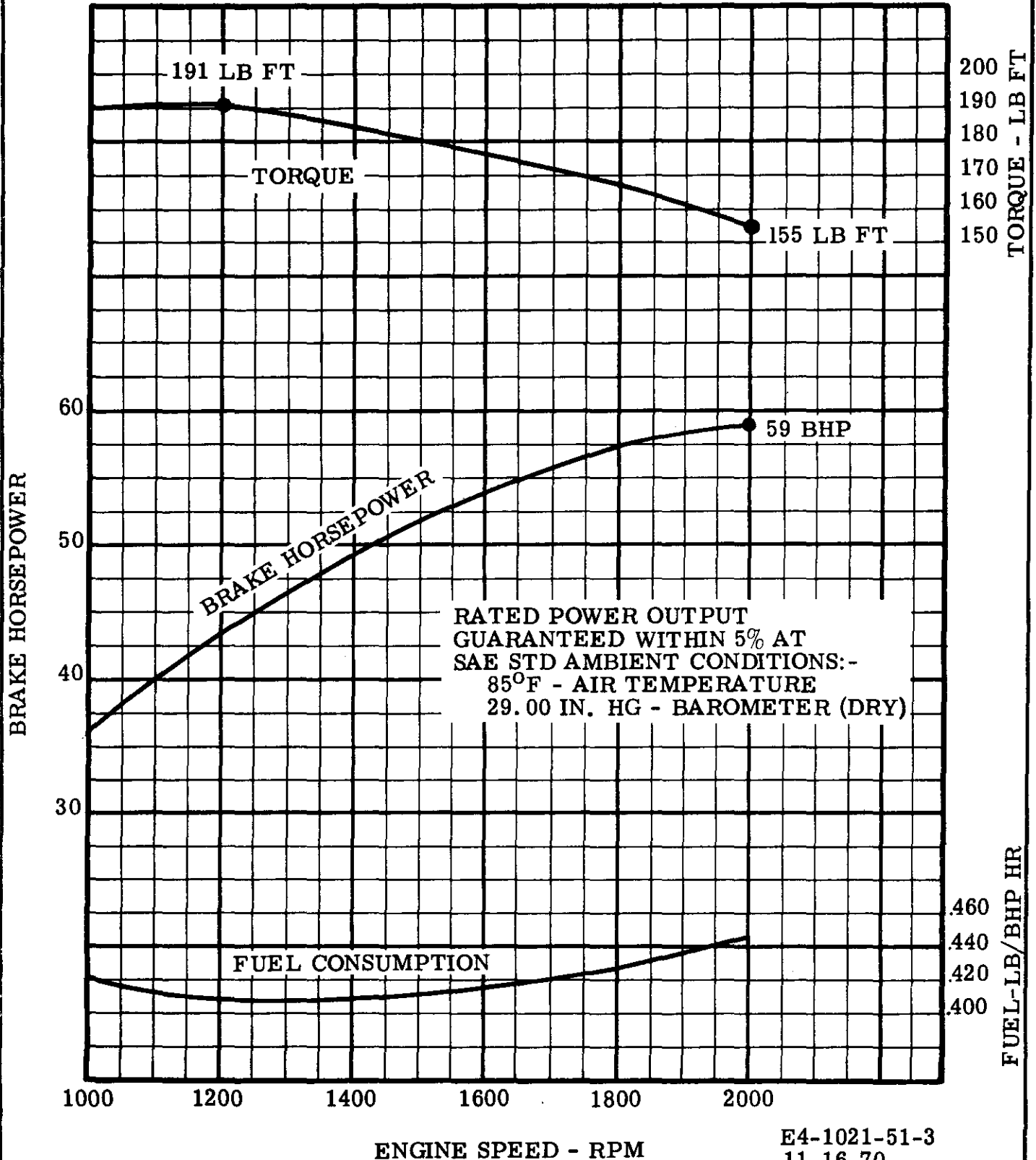




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 2-71 DIESEL
2 VALVE HEAD
N60 INJECTORS





DETROIT DIESEL ENGINE DIVISION

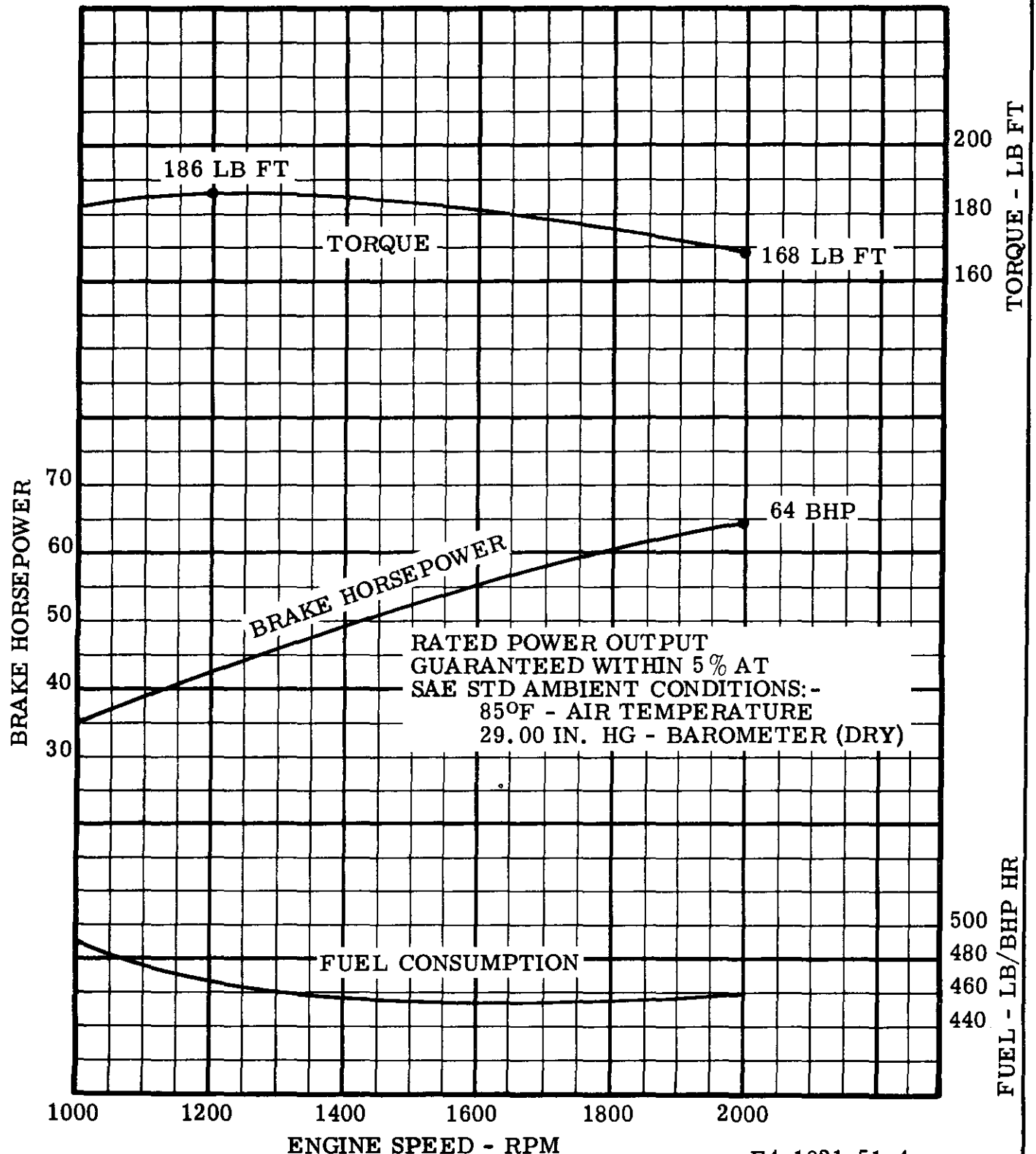
GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 2-71 DIESEL

2 VALVE HEAD

N65 INJECTORS

ADVANCED CAMSHAFT TIMING



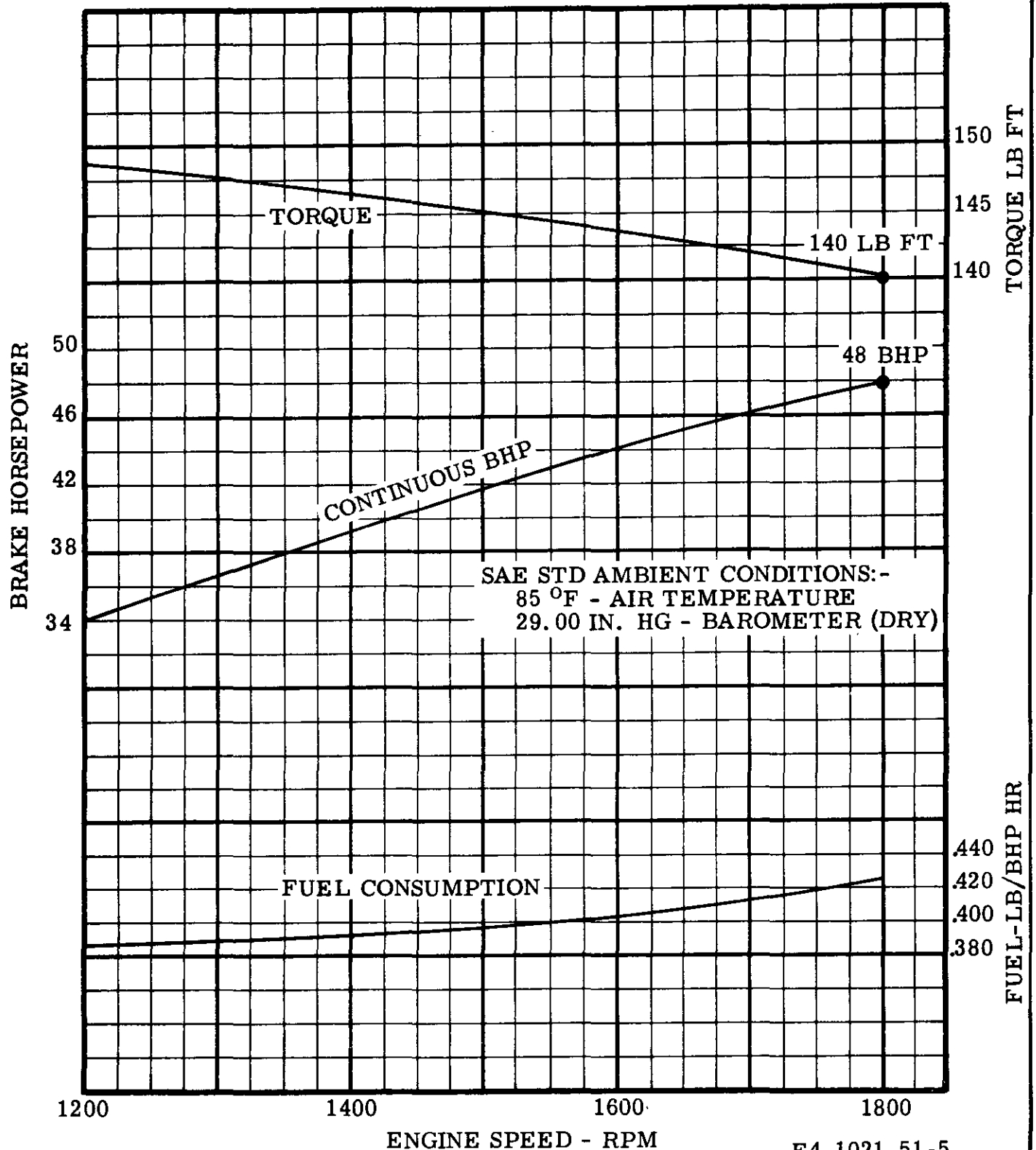


DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 2-71 DIESEL
2 VALVE HEAD

CONTINUOUS RATING

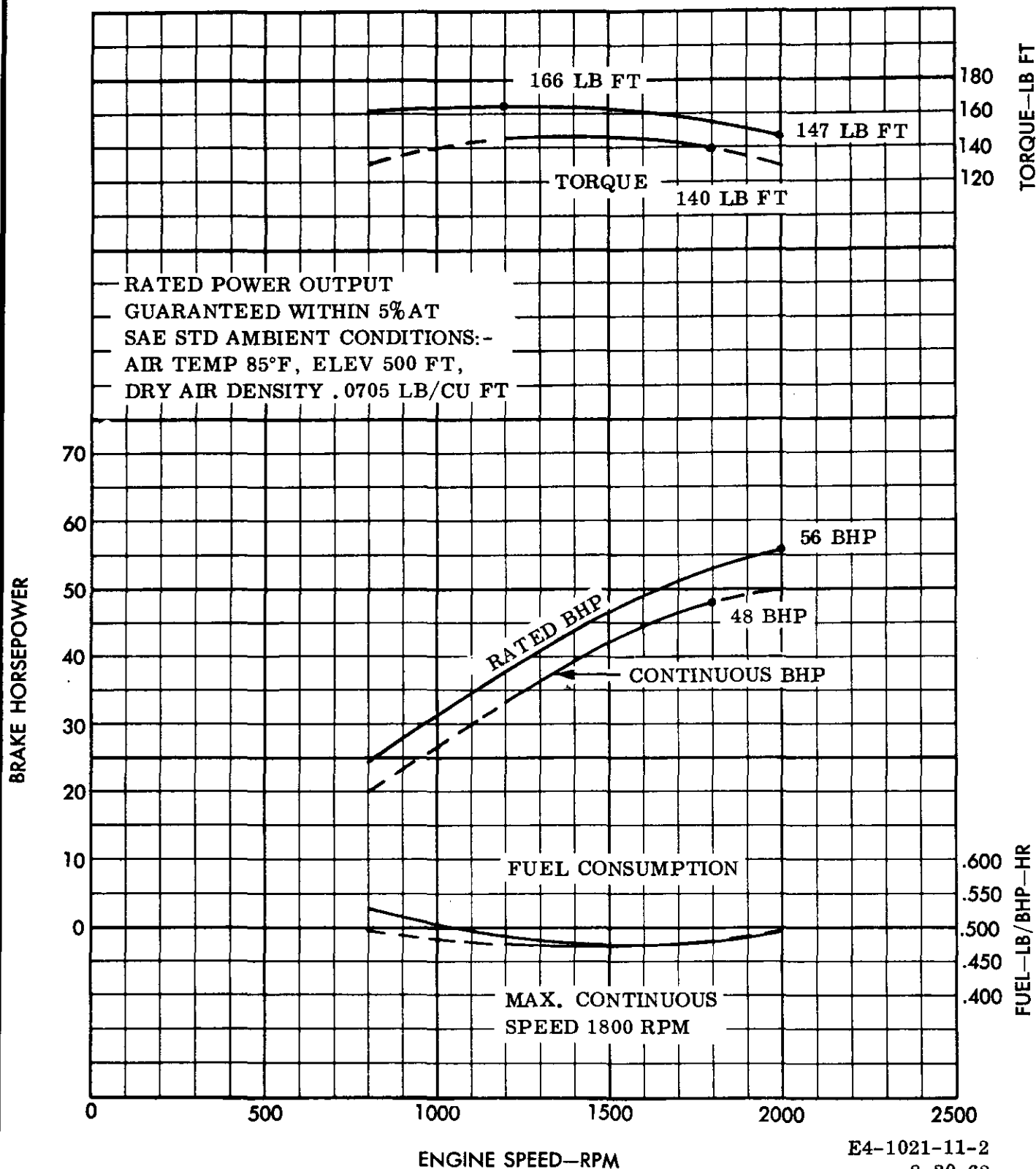




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 2-71 DIESEL
HV6 INJECTORS





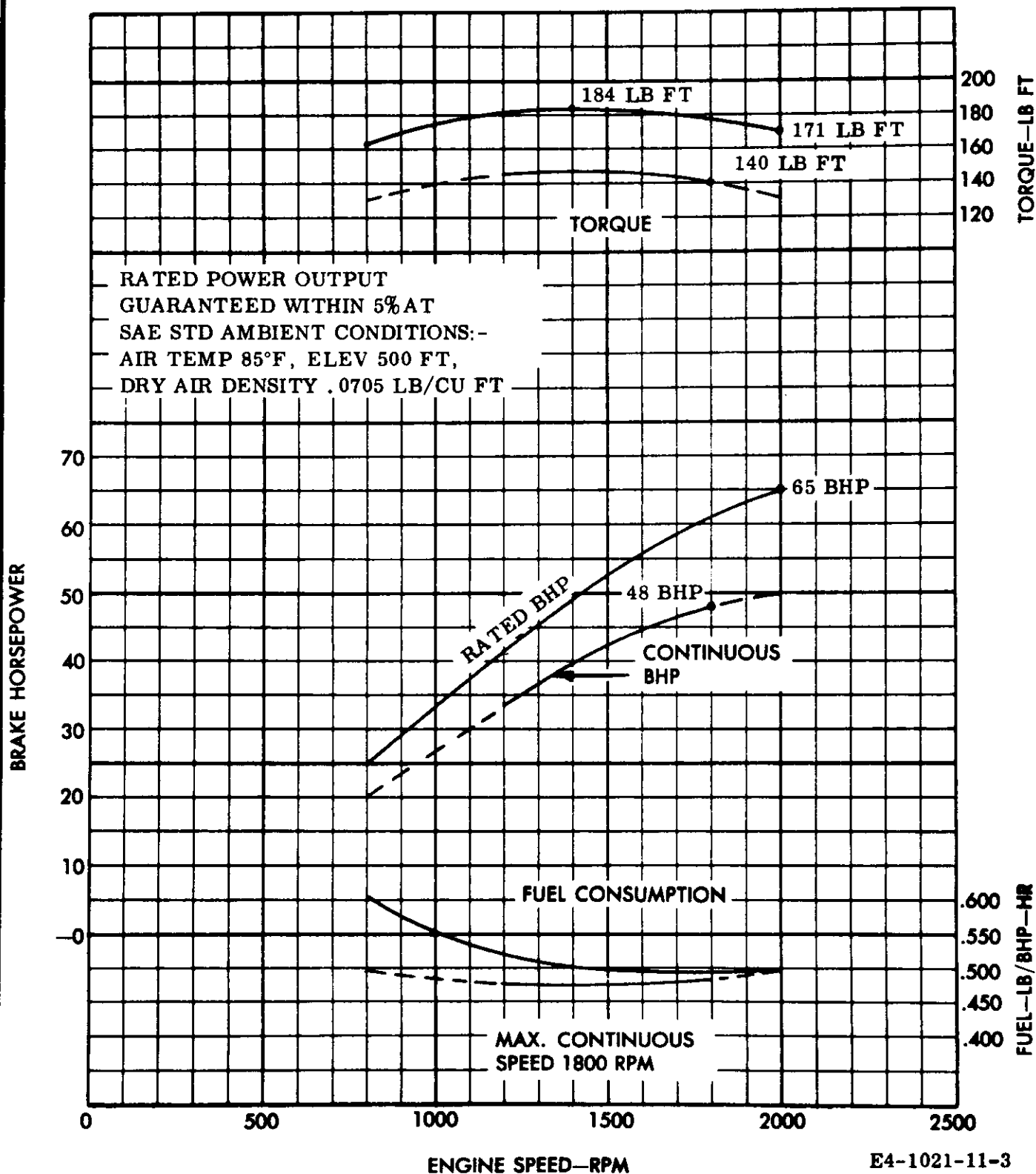
DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE

MODEL 2-71 DIESEL

HV7 INJECTORS

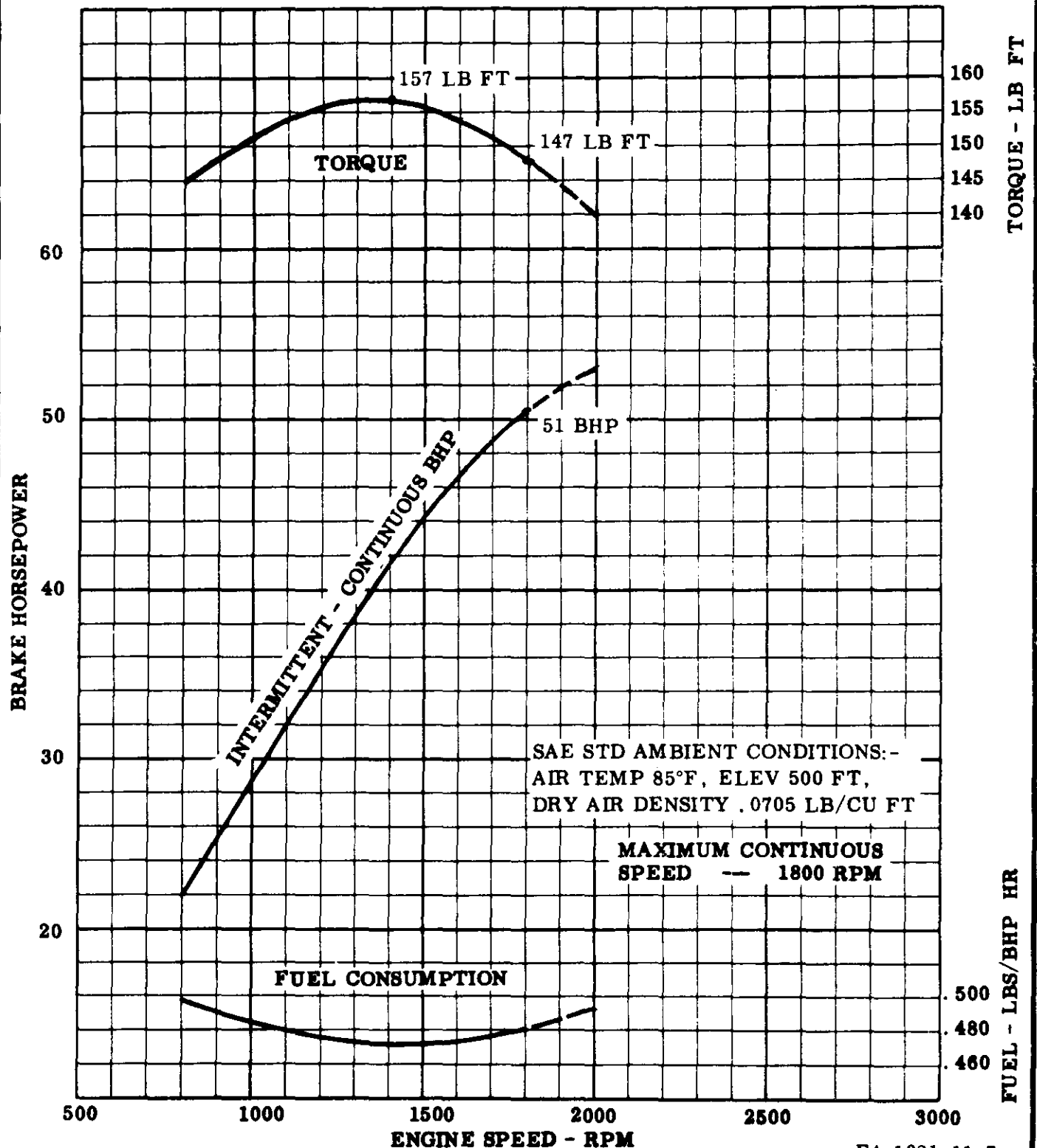




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

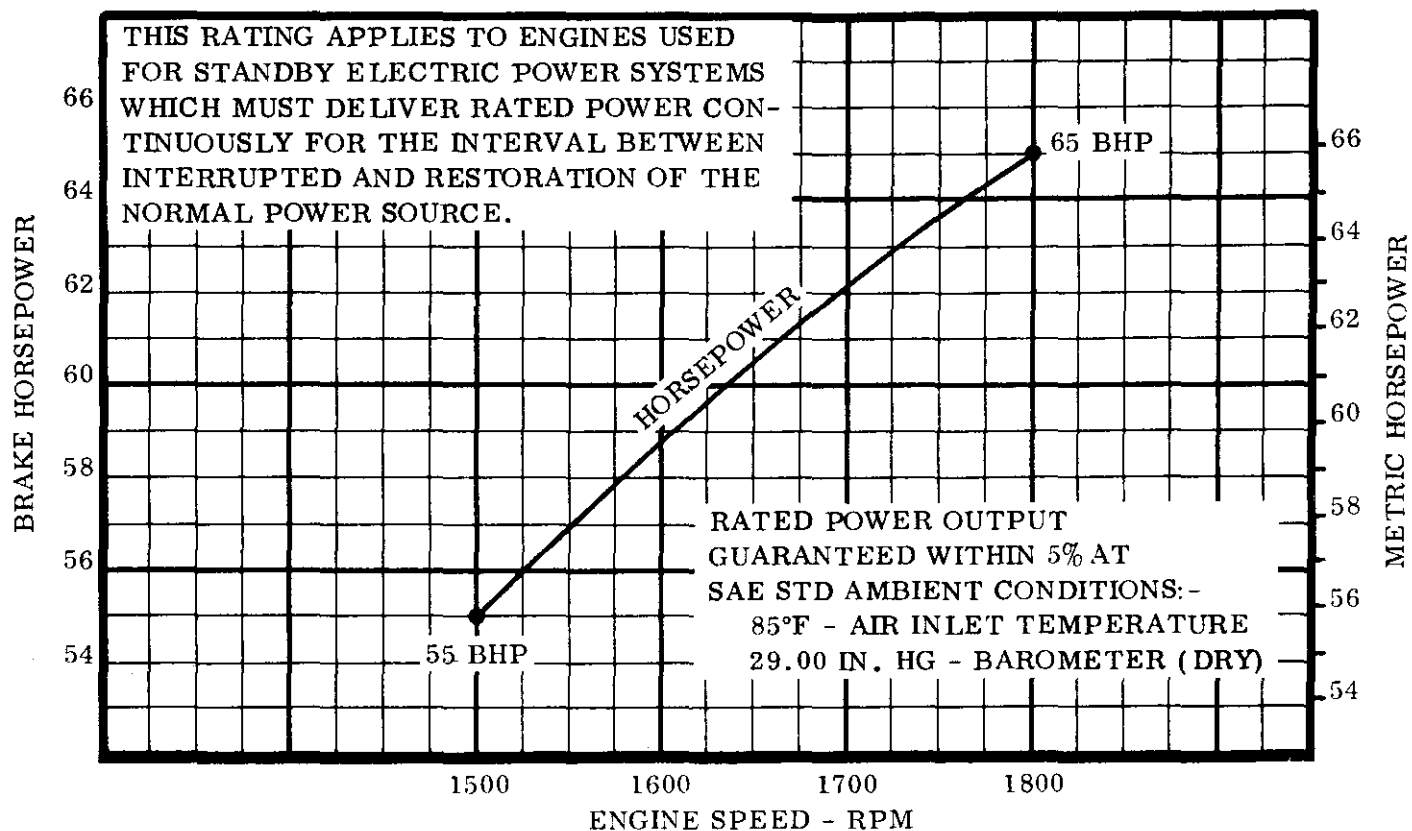
BASIC ENGINE
MODEL 2-71 DIESEL
HV6 OR HV7 INJECTORS



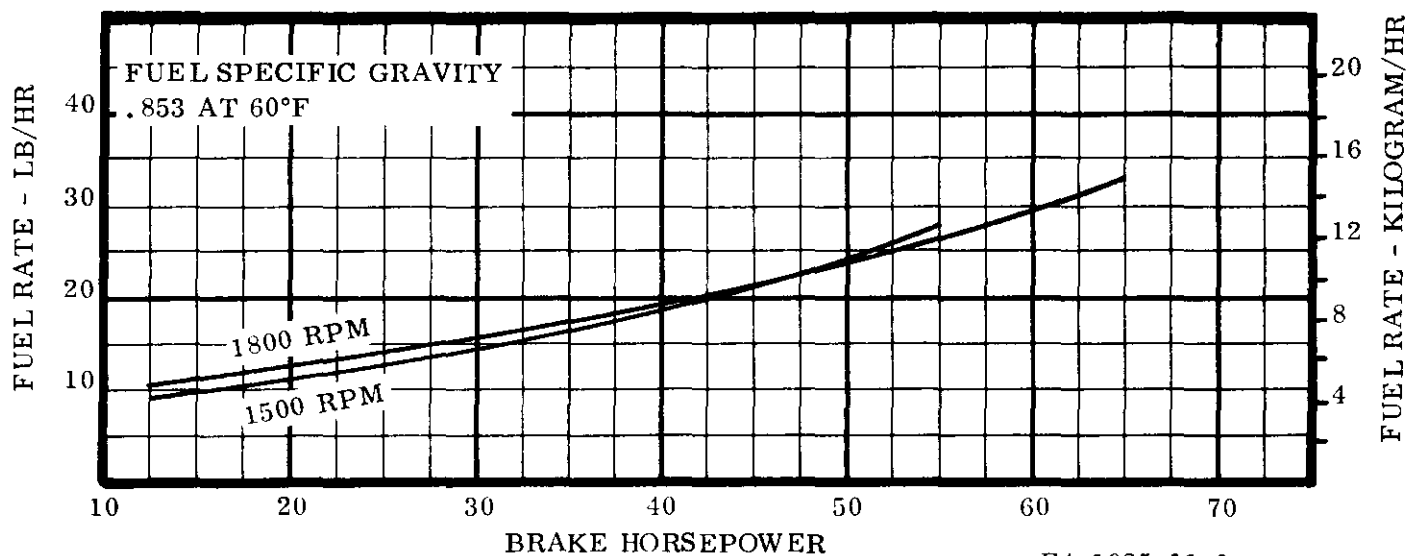


Detroit Diesel Allison
Division of General Motors Corporation

2-71 ENGINE
DIESEL ELECTRIC STANDBY POWER
WITHOUT FAN
HV8 INJECTORS



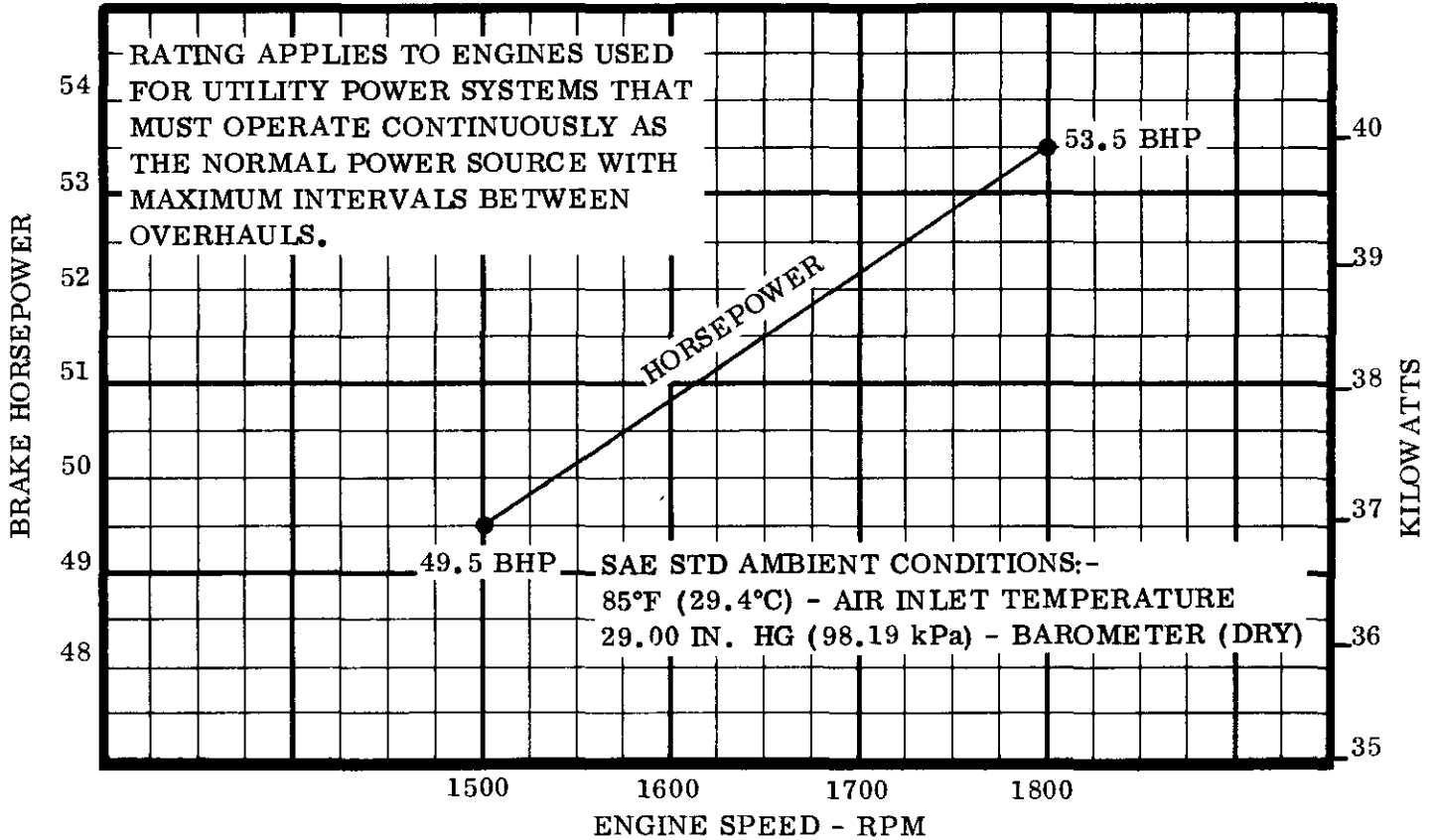
AVERAGE FUEL CONSUMPTION



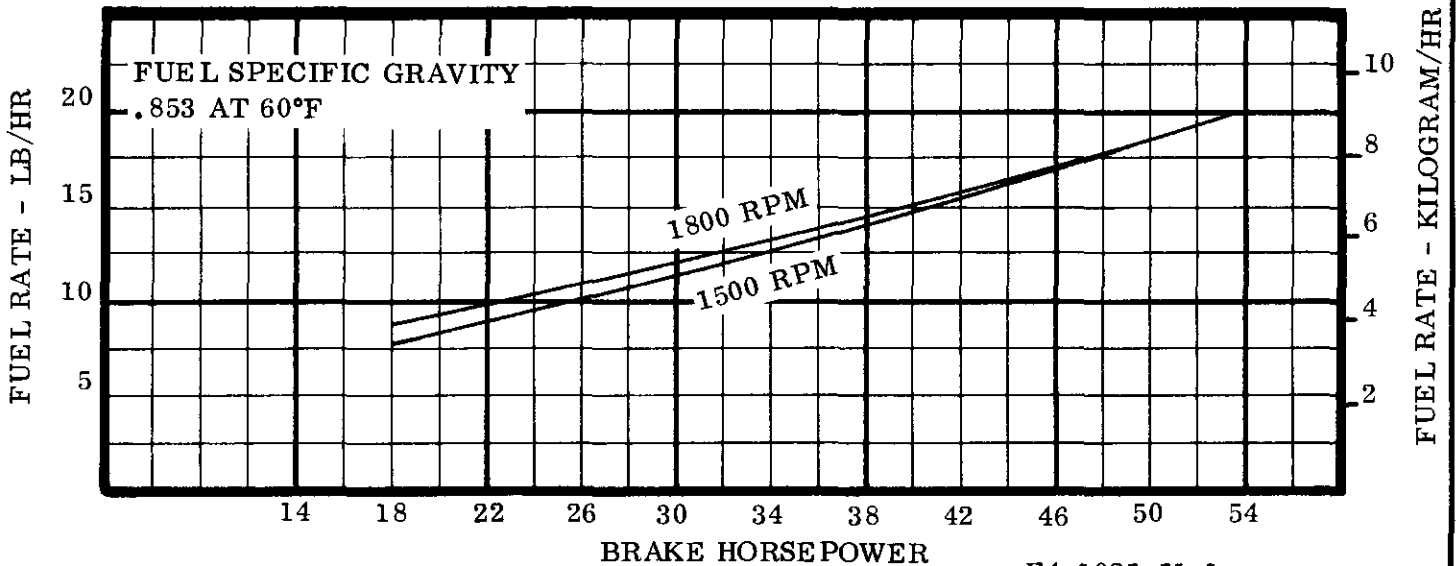


Detroit Diesel Allison
Division of General Motors Corporation

2-71(2V) ENGINE
DIESEL ELECTRIC PRIME POWER
(WITHOUT FAN)



AVERAGE FUEL CONSUMPTION

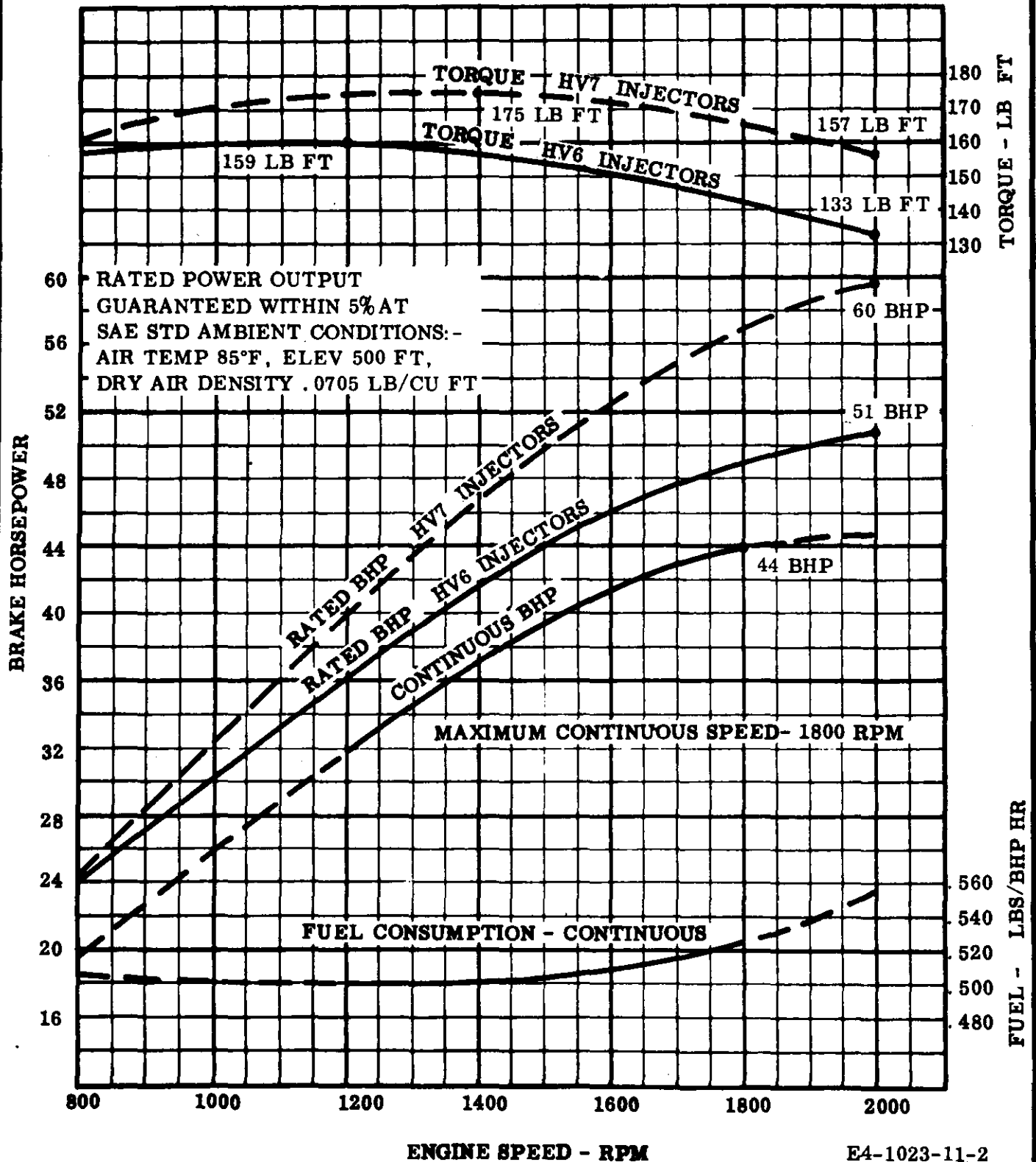




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

SERIES 71
MODELS 2030C - 2031
PERFORMANCE WITH STANDARD EQUIPMENT





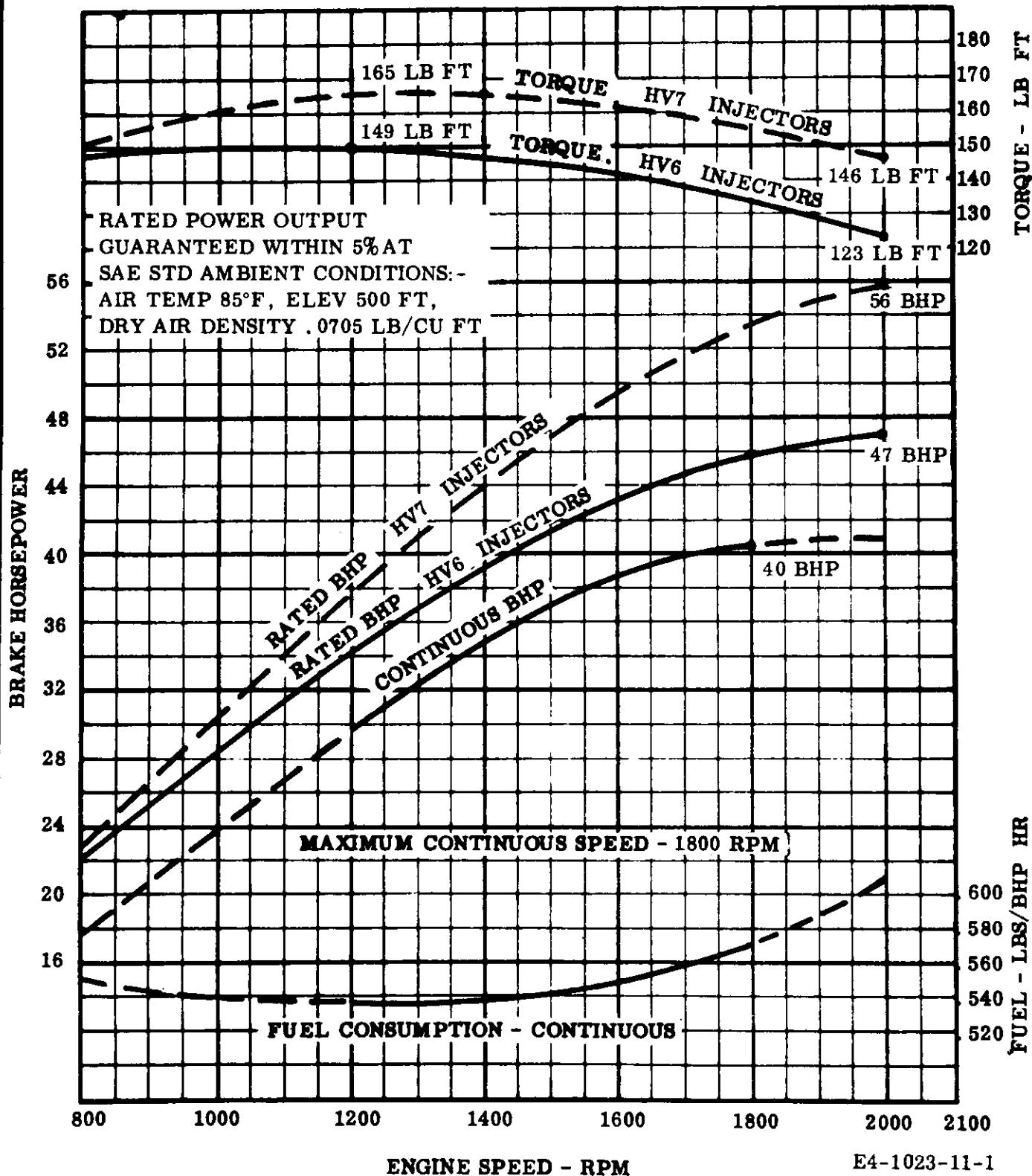
DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

SERIES 71

MODEL 2055

PERFORMANCE WITH STANDARD EQUIPMENT





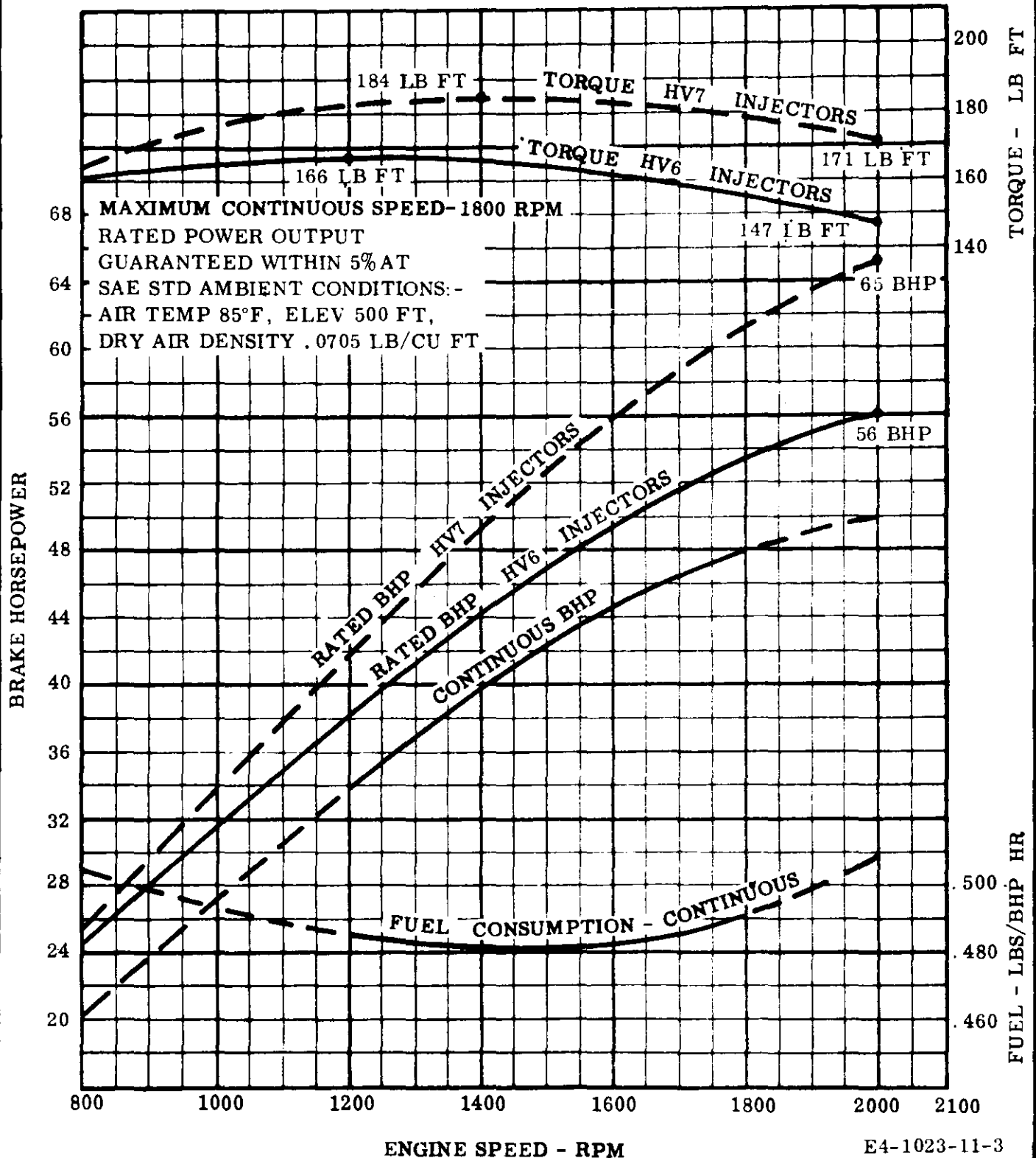
DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

SERIES 71

MODEL 2061A

PERFORMANCE WITH STANDARD EQUIPMENT



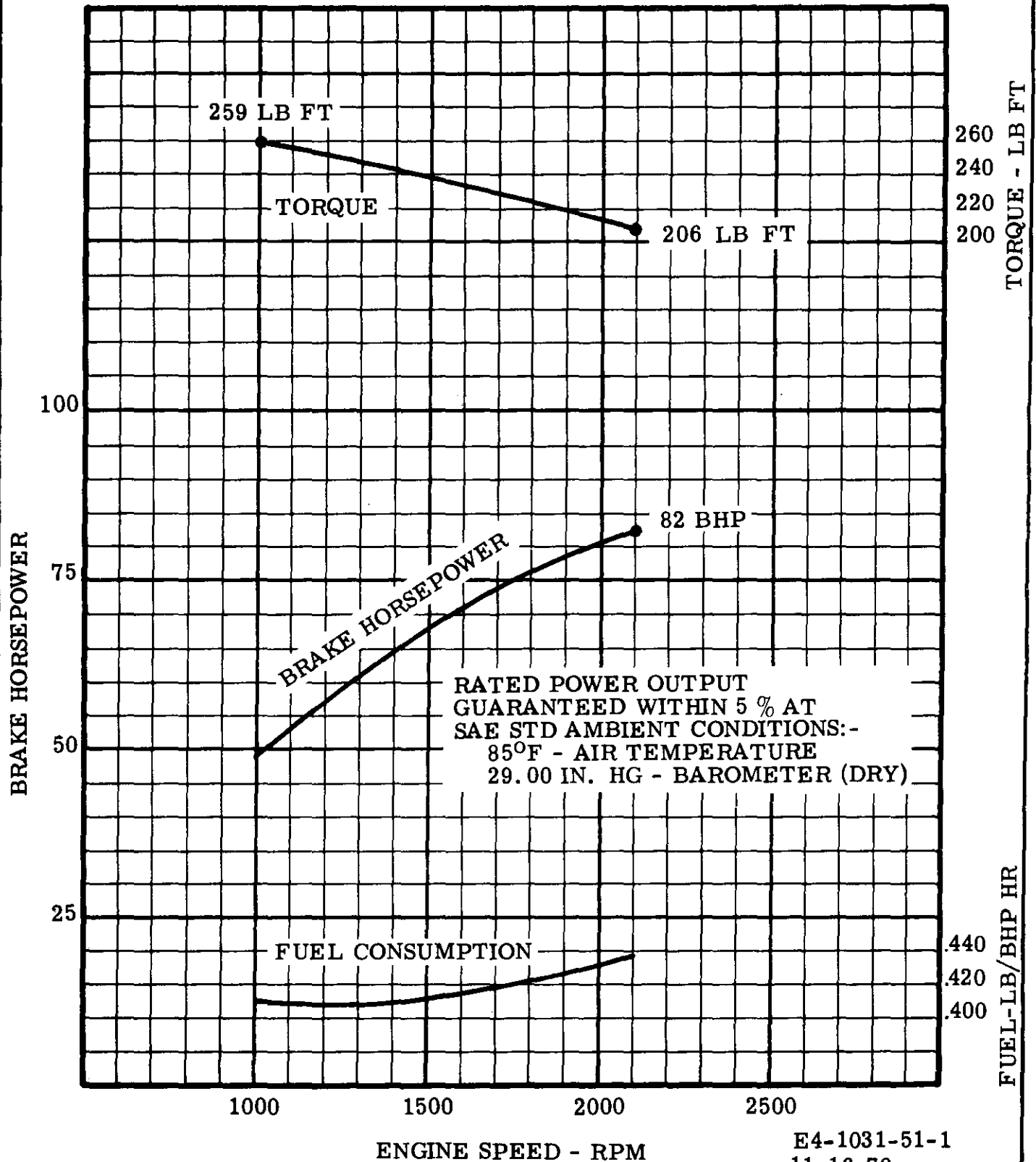
3-71 (2v)



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 3-71 DIESEL
2 VALVE HEAD
71N5 INJECTORS

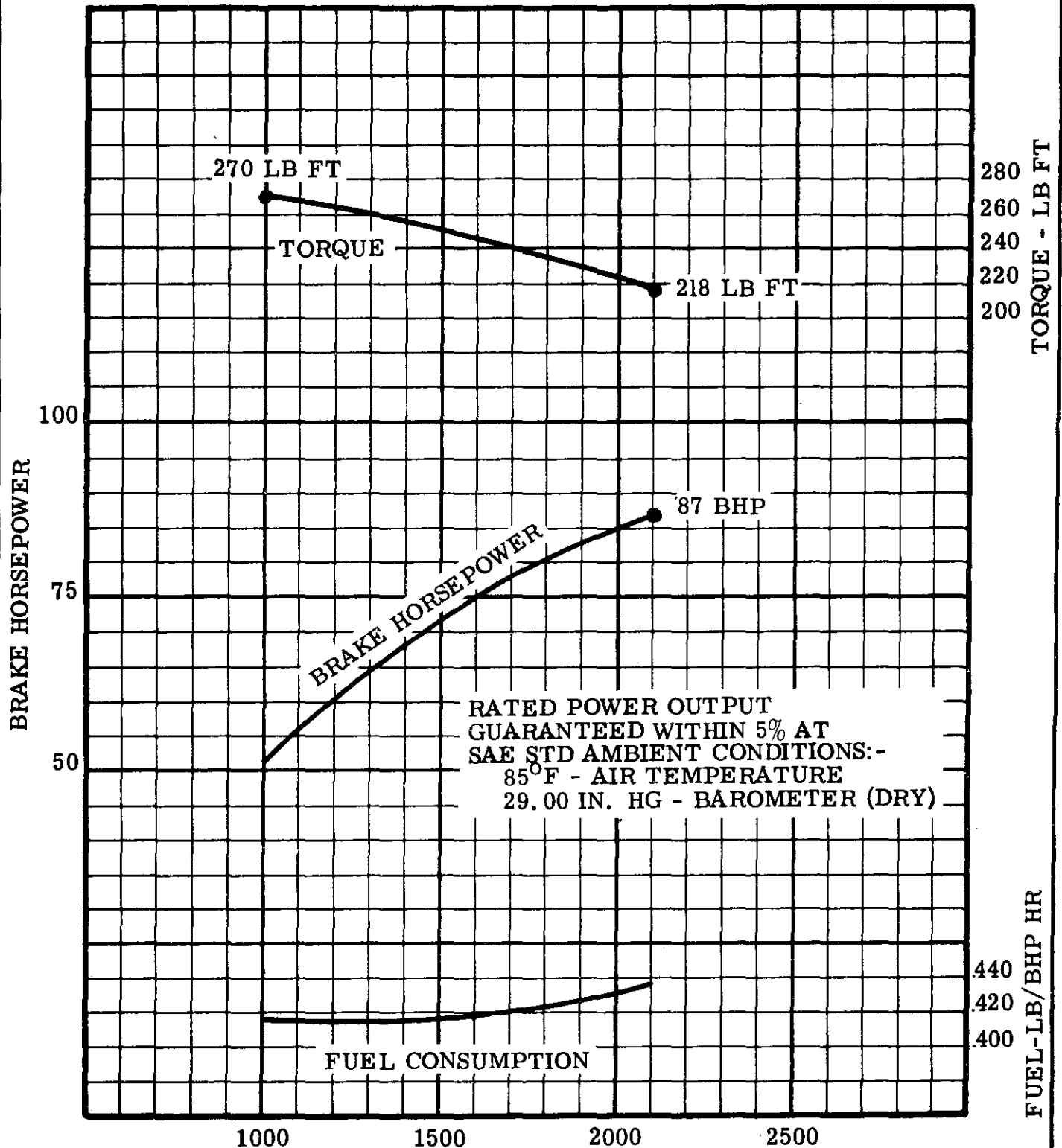




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 3-71 DIESEL
2 VALVE HEAD
N55 INJECTORS

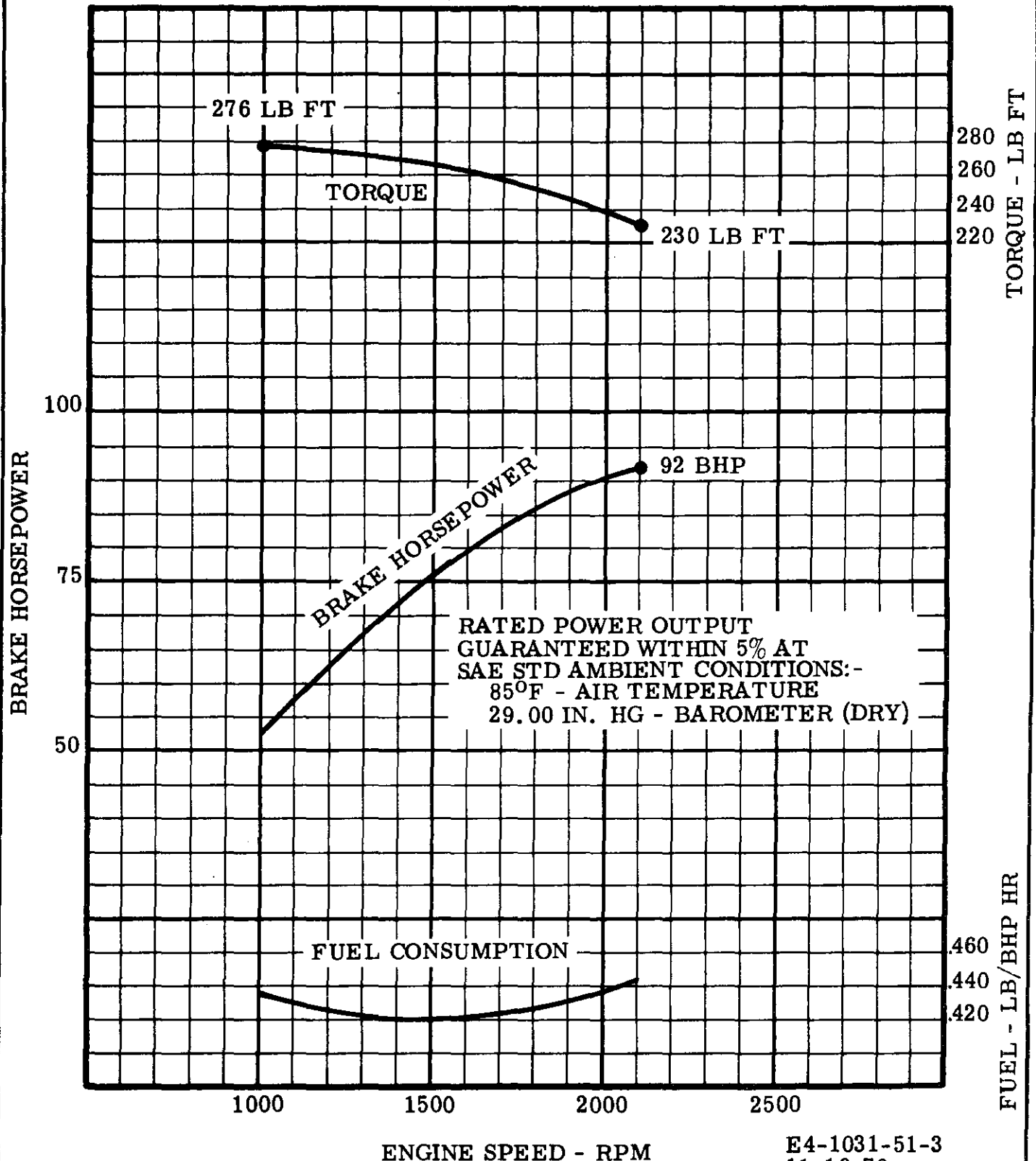




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 3-71 DIESEL
2 VALVE HEAD
N60 INJECTORS





DETROIT DIESEL ENGINE DIVISION

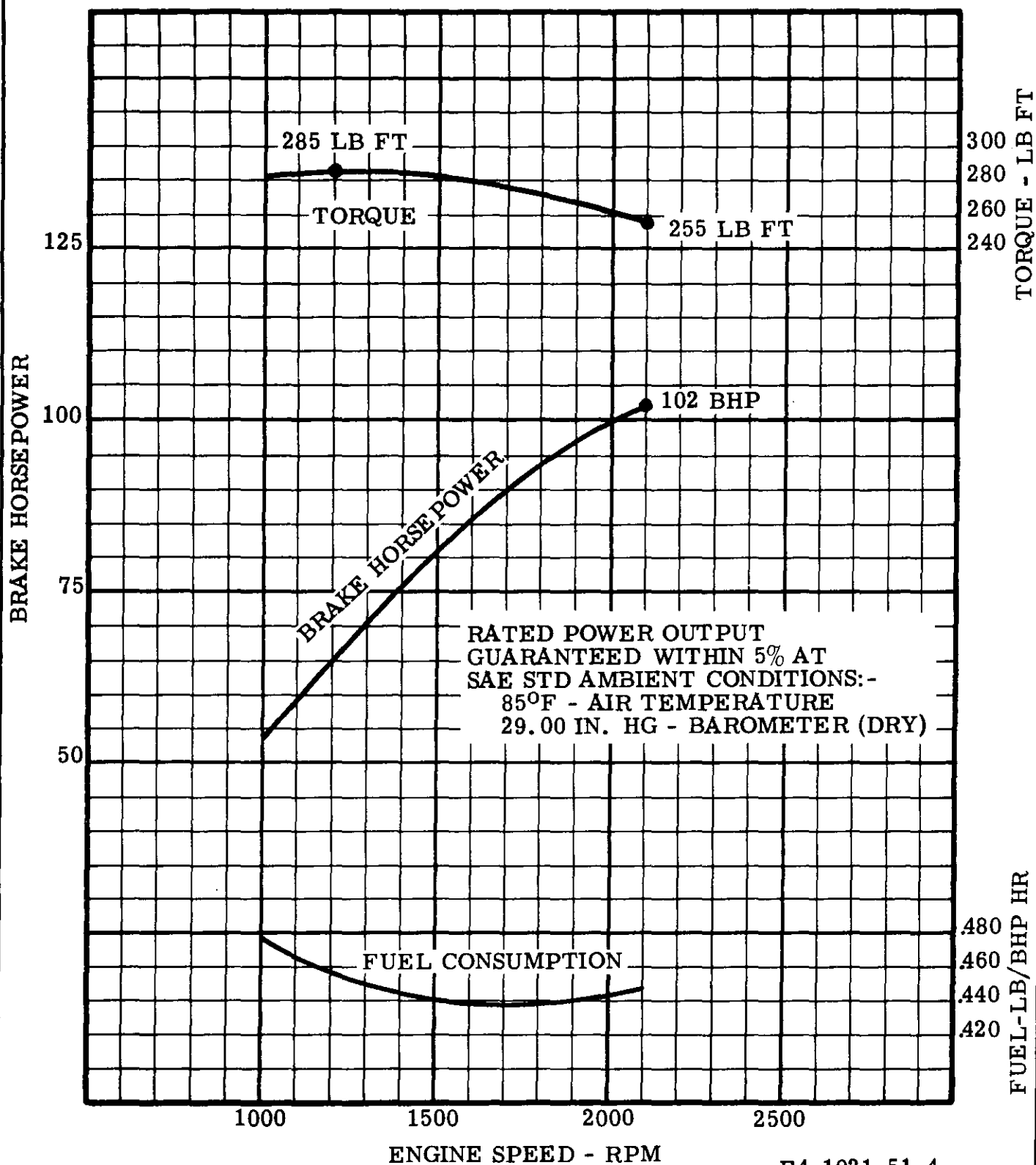
GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 3-71 DIESEL

2 VALVE HEAD

N65 INJECTORS

ADVANCED CAMSHAFT TIMING



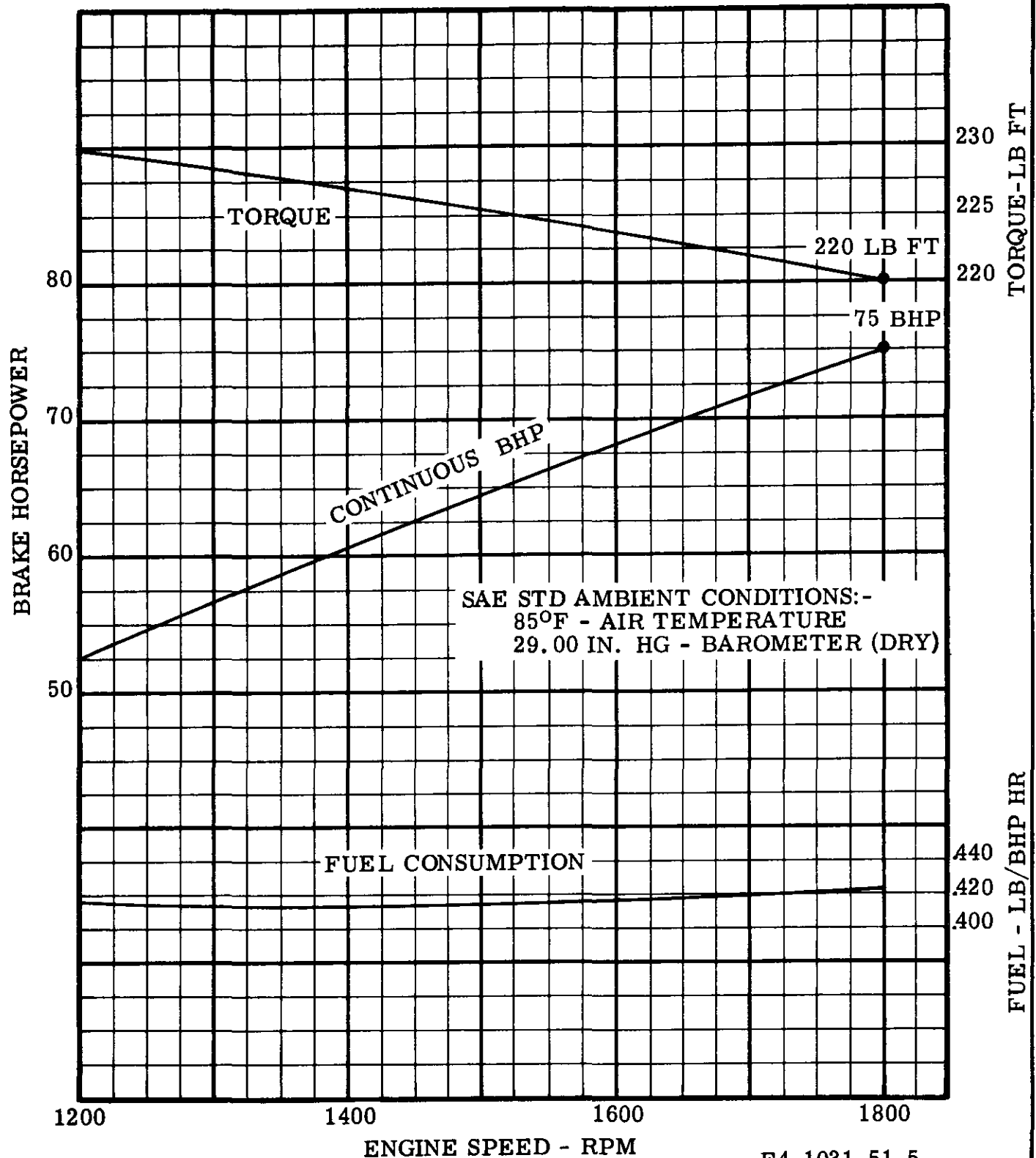


DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 3-71 DIESEL
2 VALVE HEAD

CONTINUOUS RATING

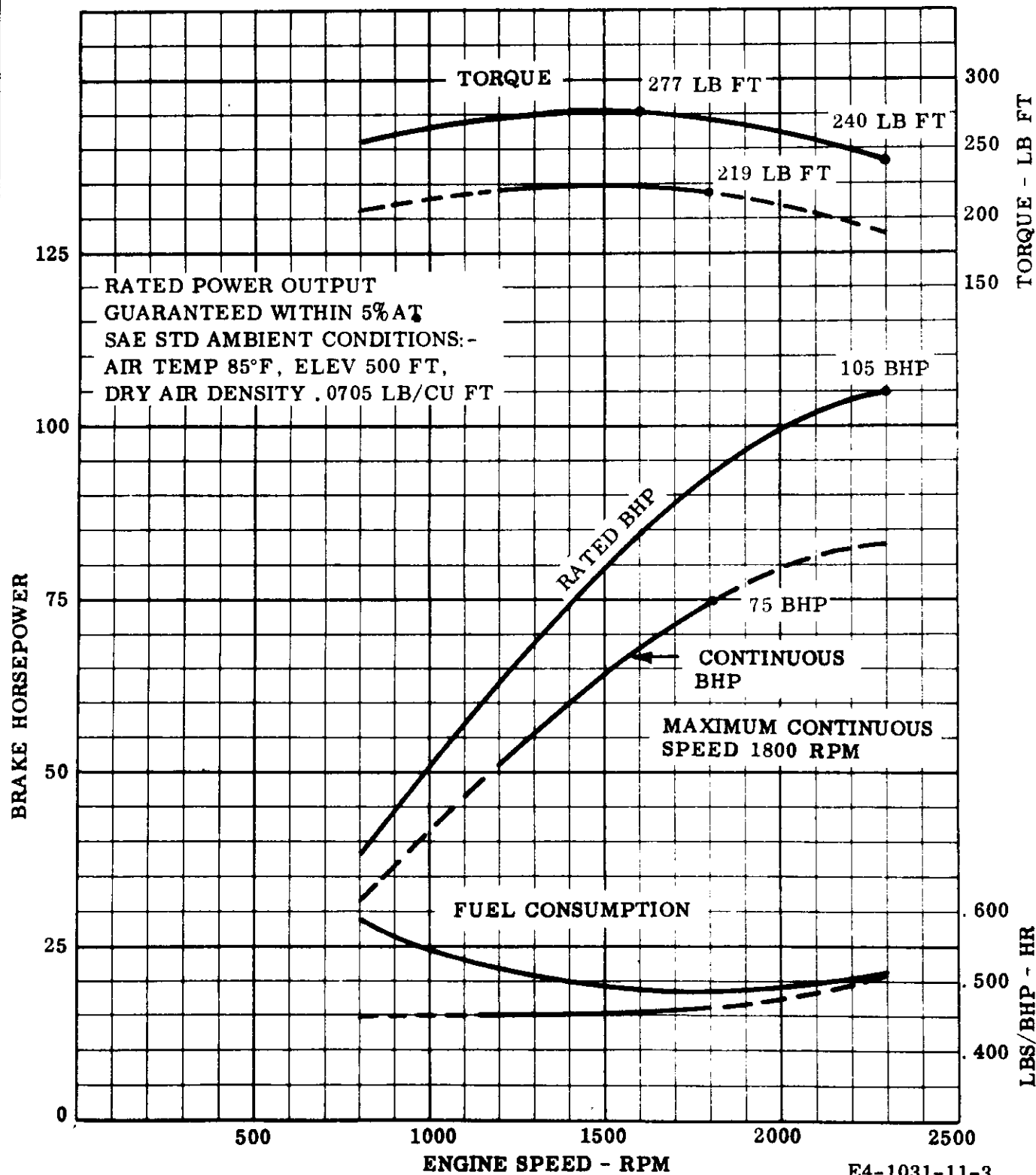




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 3-71 DIESEL
HV7 INJECTORS

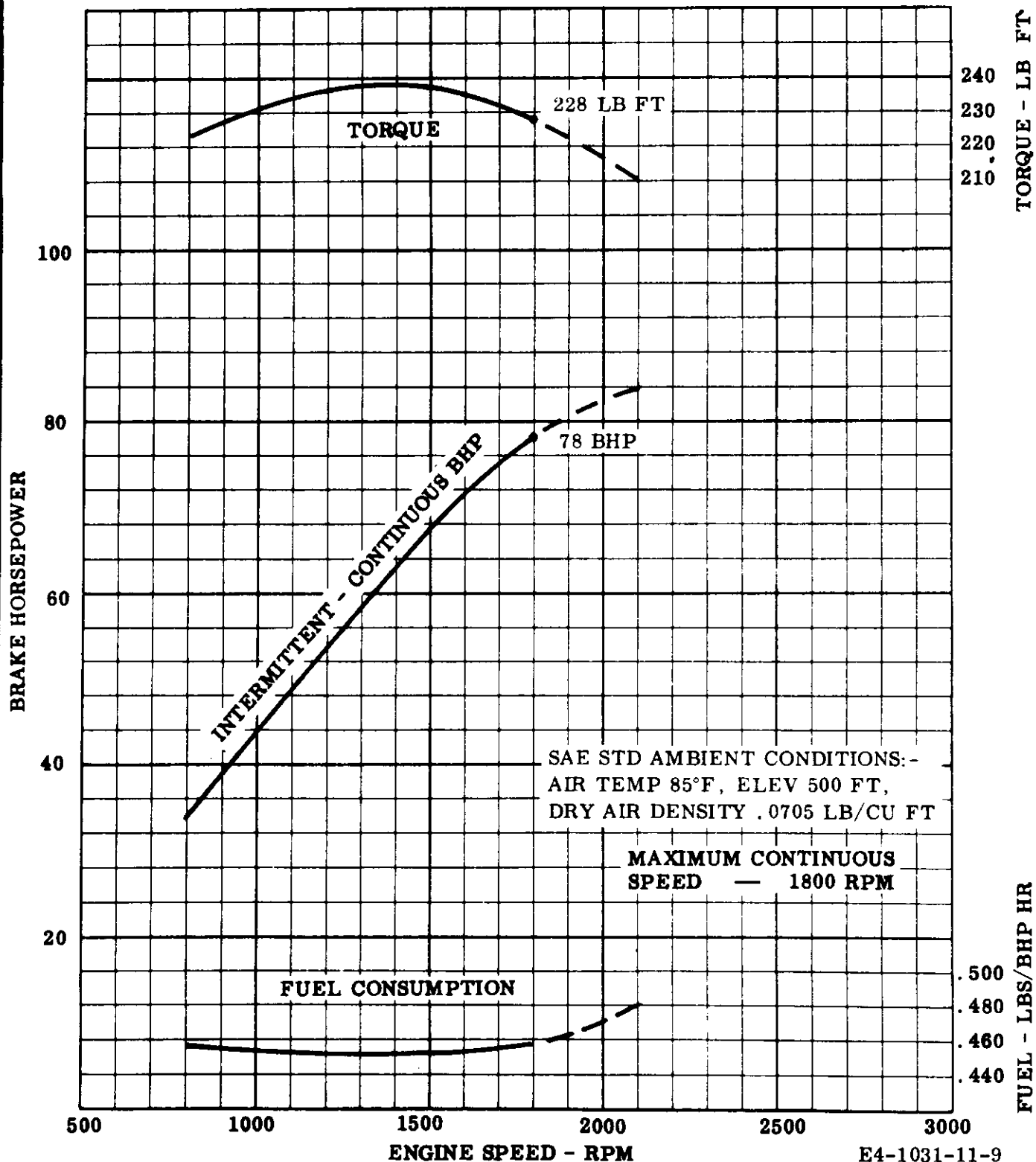




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

BASIC ENGINE
MODEL 3-71 DIESEL
HV6 OR HV7 INJECTORS

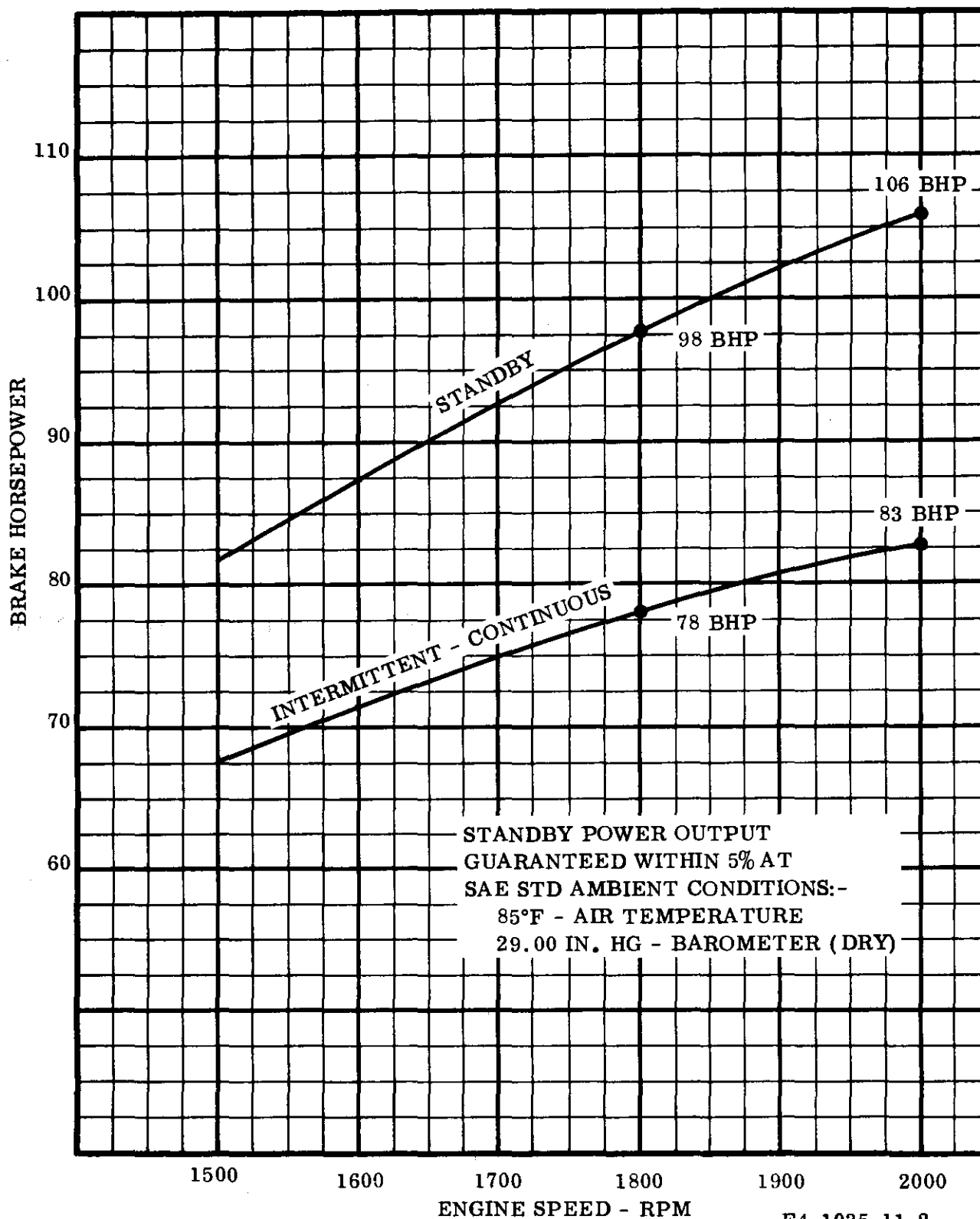




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

3-71 BASIC ENGINE
DIESEL ELECTRIC PRIME MOVER
HV8 INJECTORS





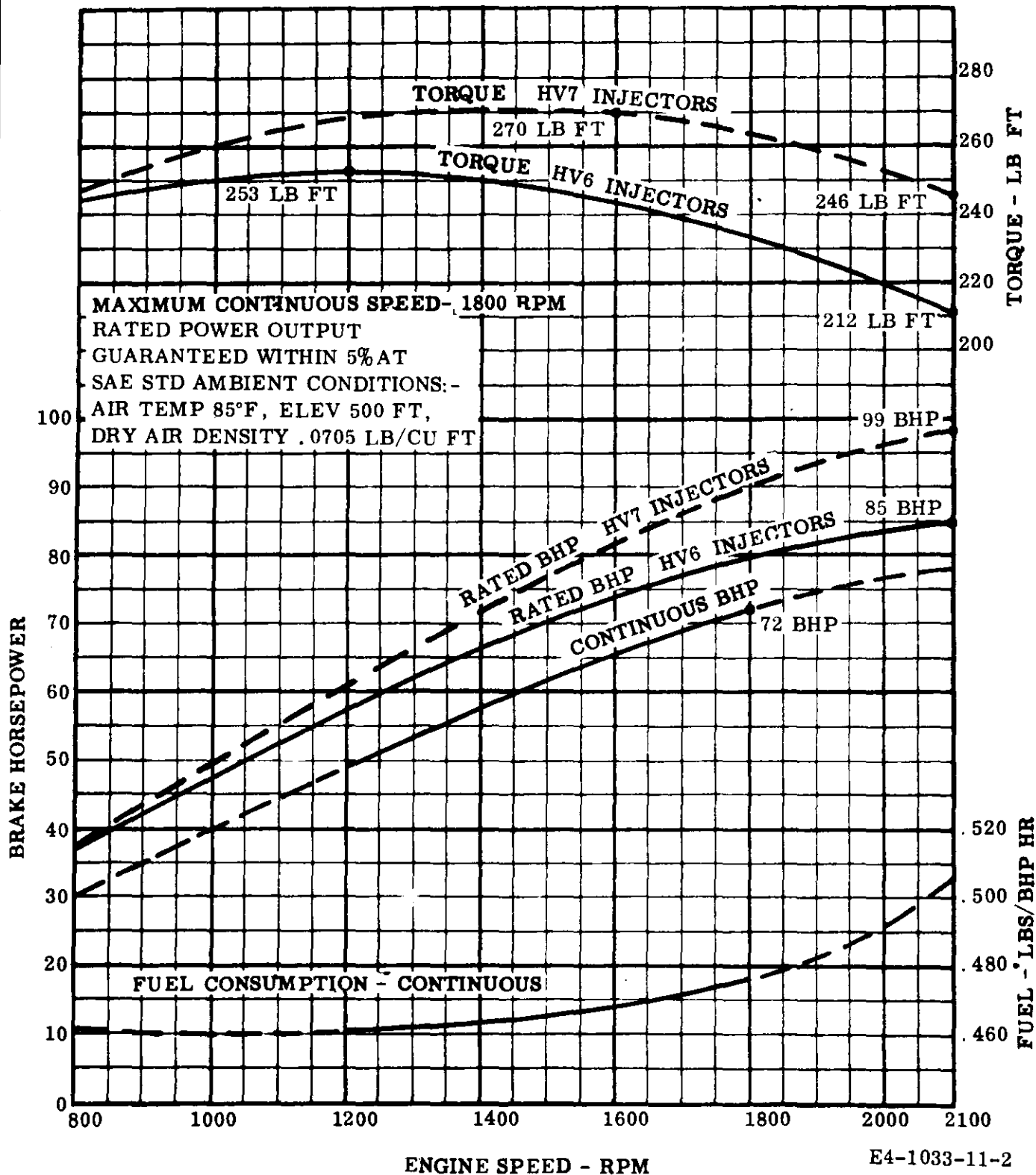
DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

SERIES 71

MODELS 3055C, 3057C, 3058C

PERFORMANCE WITH STANDARD EQUIPMENT





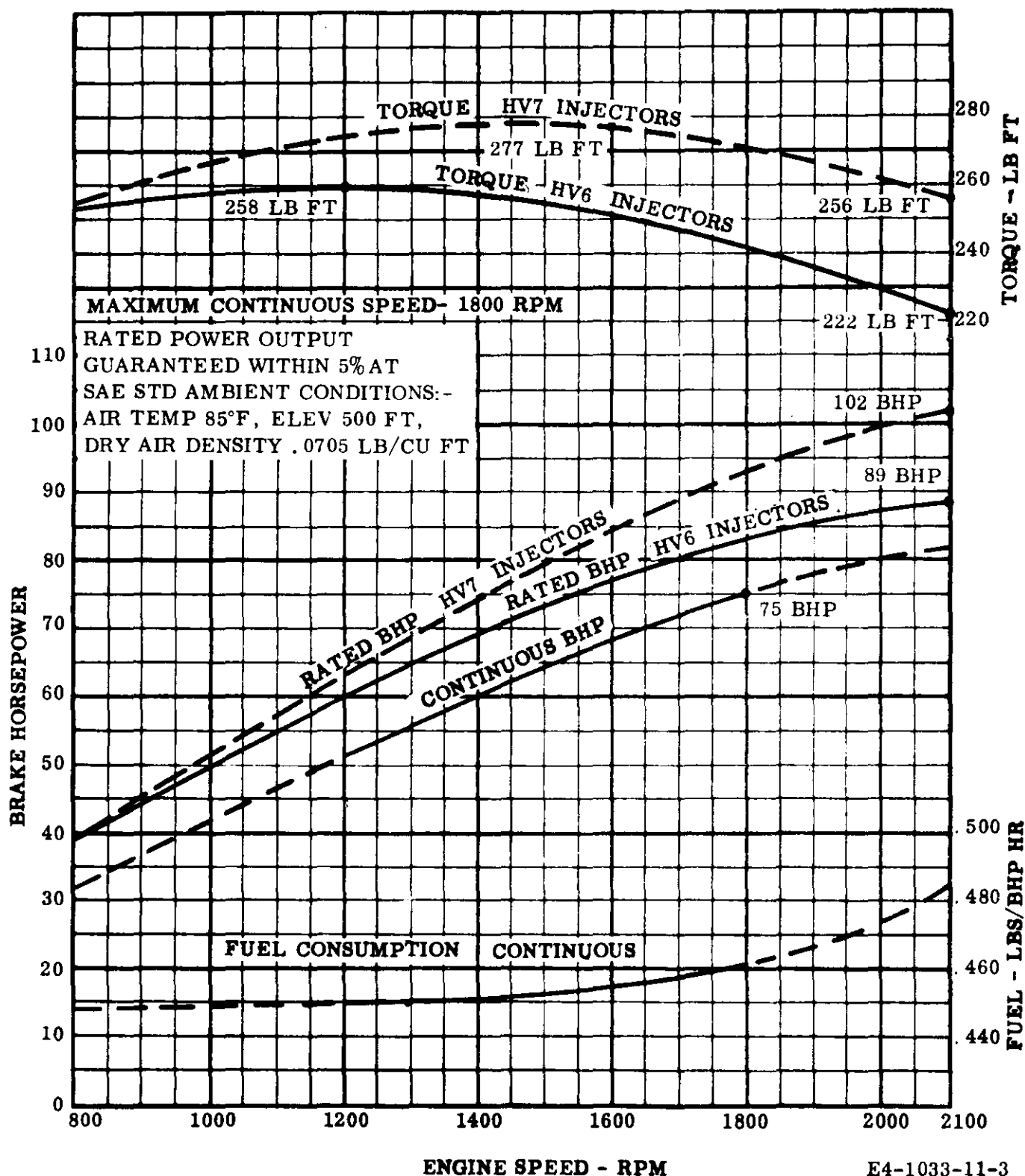
DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

SERIES 71

MODEL 3061A

PERFORMANCE WITH STANDARD EQUIPMENT





DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

3-71 ENGINE

MODEL 3061A-Z

APPROVED RATING FOR CENTRIFUGAL FIRE PUMP ENGINE

UNDERWRITERS' LABORATORIES

FACTORY MUTUAL

