



Detroit Diesel Allison
Division of General Motors Corporation

6V-92
BASIC ENGINE
AVERAGE FUEL CONSUMPTION

SAE STD AMBIENT CONDITIONS:

85°F (29.4°C) - AIR INLET TEMPERATURE

29.00 IN. HG (98.19 kPa) - BAROMETER (DRY)

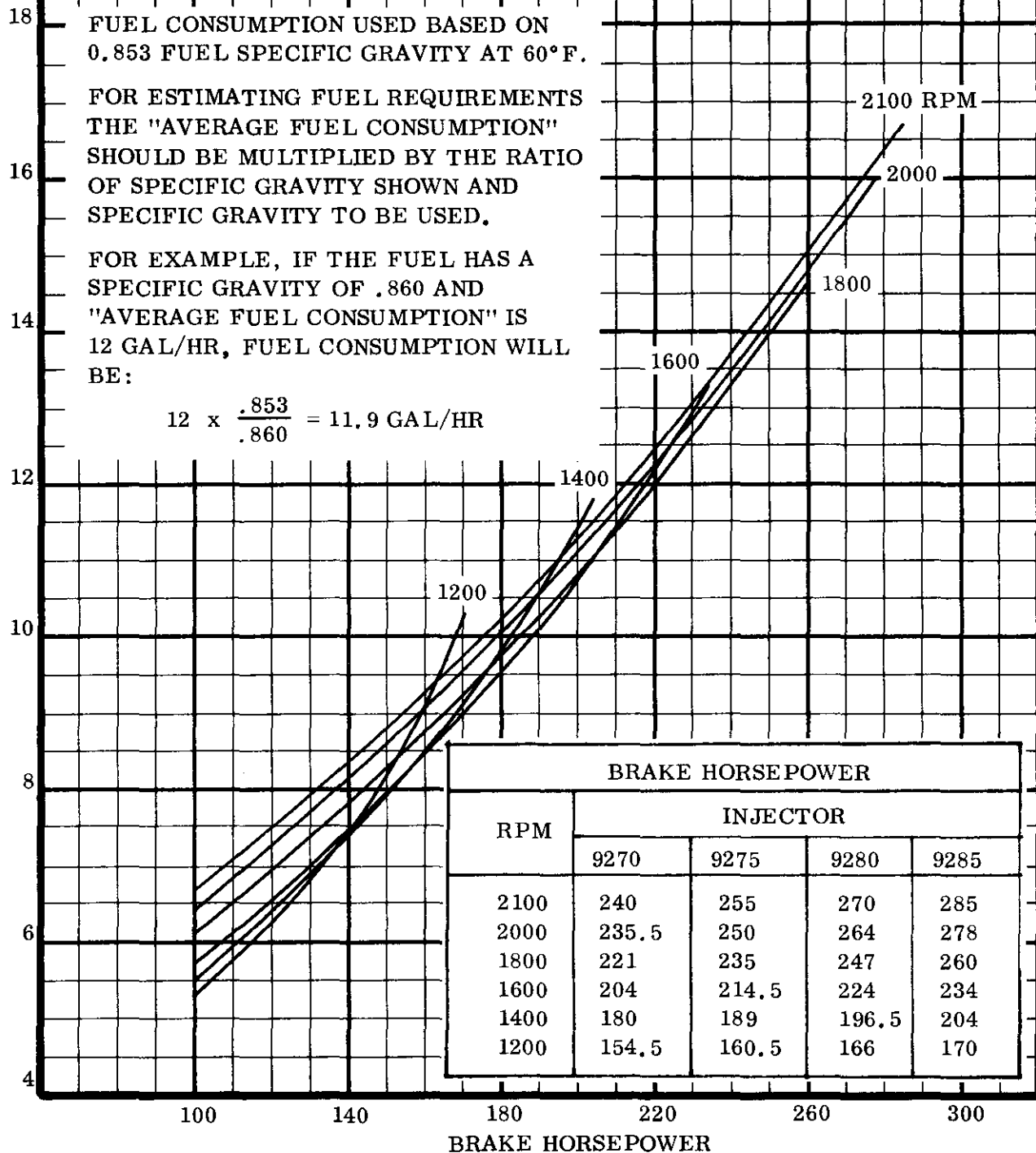
FUEL CONSUMPTION USED BASED ON
0.853 FUEL SPECIFIC GRAVITY AT 60°F.

FOR ESTIMATING FUEL REQUIREMENTS
THE "AVERAGE FUEL CONSUMPTION"
SHOULD BE MULTIPLIED BY THE RATIO
OF SPECIFIC GRAVITY SHOWN AND
SPECIFIC GRAVITY TO BE USED.

FOR EXAMPLE, IF THE FUEL HAS A
SPECIFIC GRAVITY OF .860 AND
"AVERAGE FUEL CONSUMPTION" IS
12 GAL/HR, FUEL CONSUMPTION WILL
BE:

$$12 \times \frac{.853}{.860} = 11.9 \text{ GAL/HR}$$

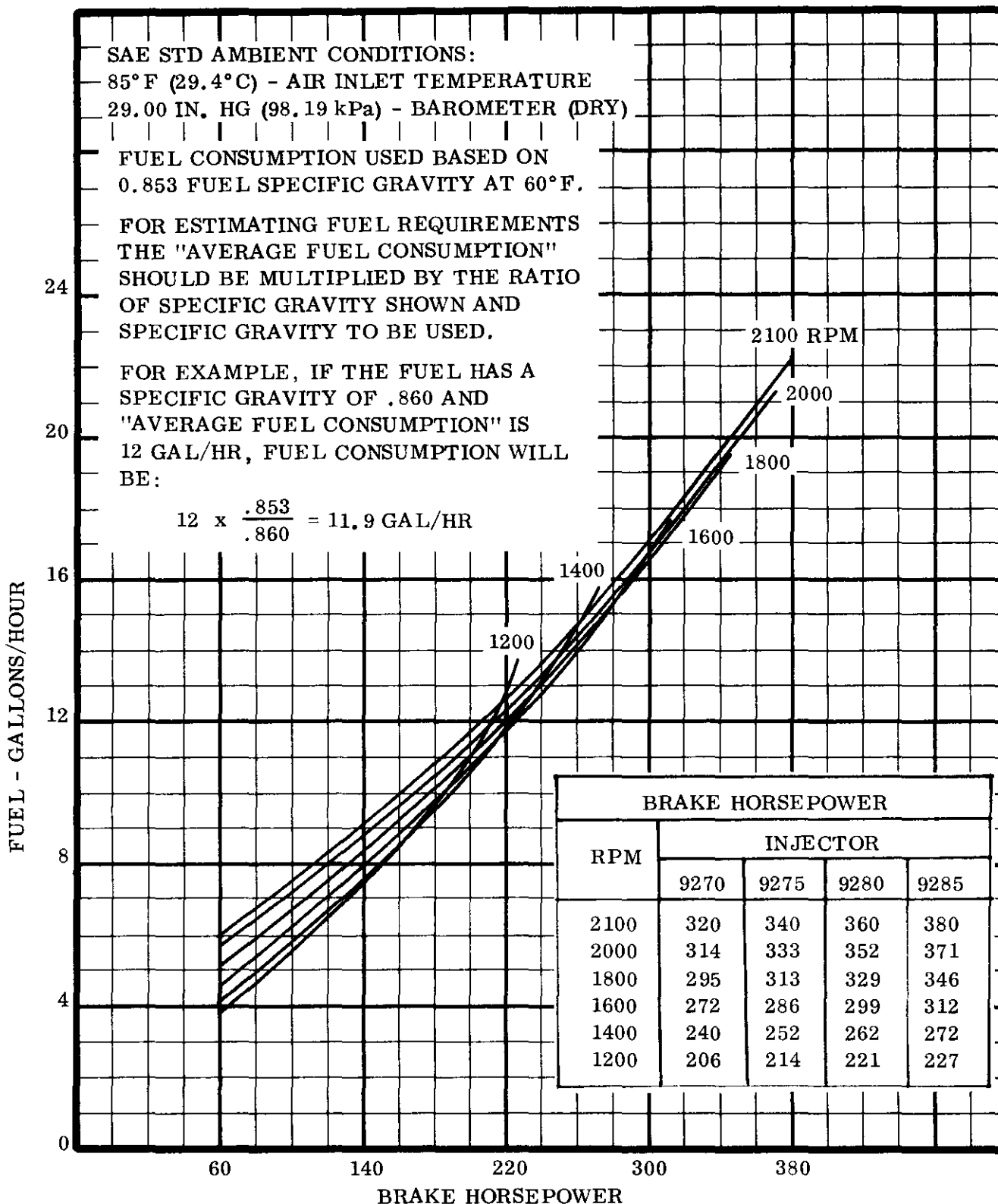
FUEL - GALLONS/HOUR





Detroit Diesel Allison
Division of General Motors Corporation

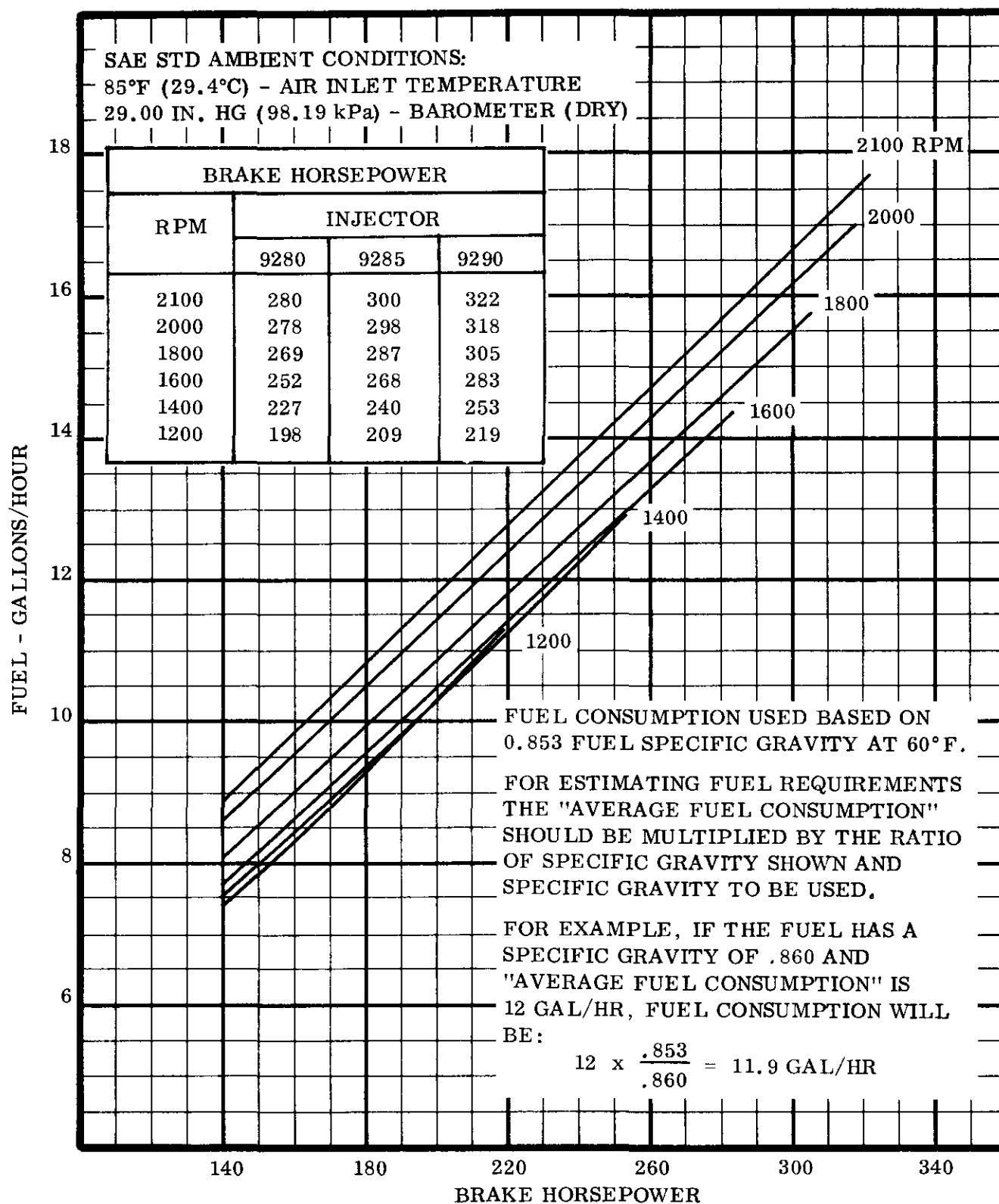
8V-92
BASIC ENGINE
AVERAGE FUEL CONSUMPTION





Detroit Diesel Allison
Division of General Motors Corporation

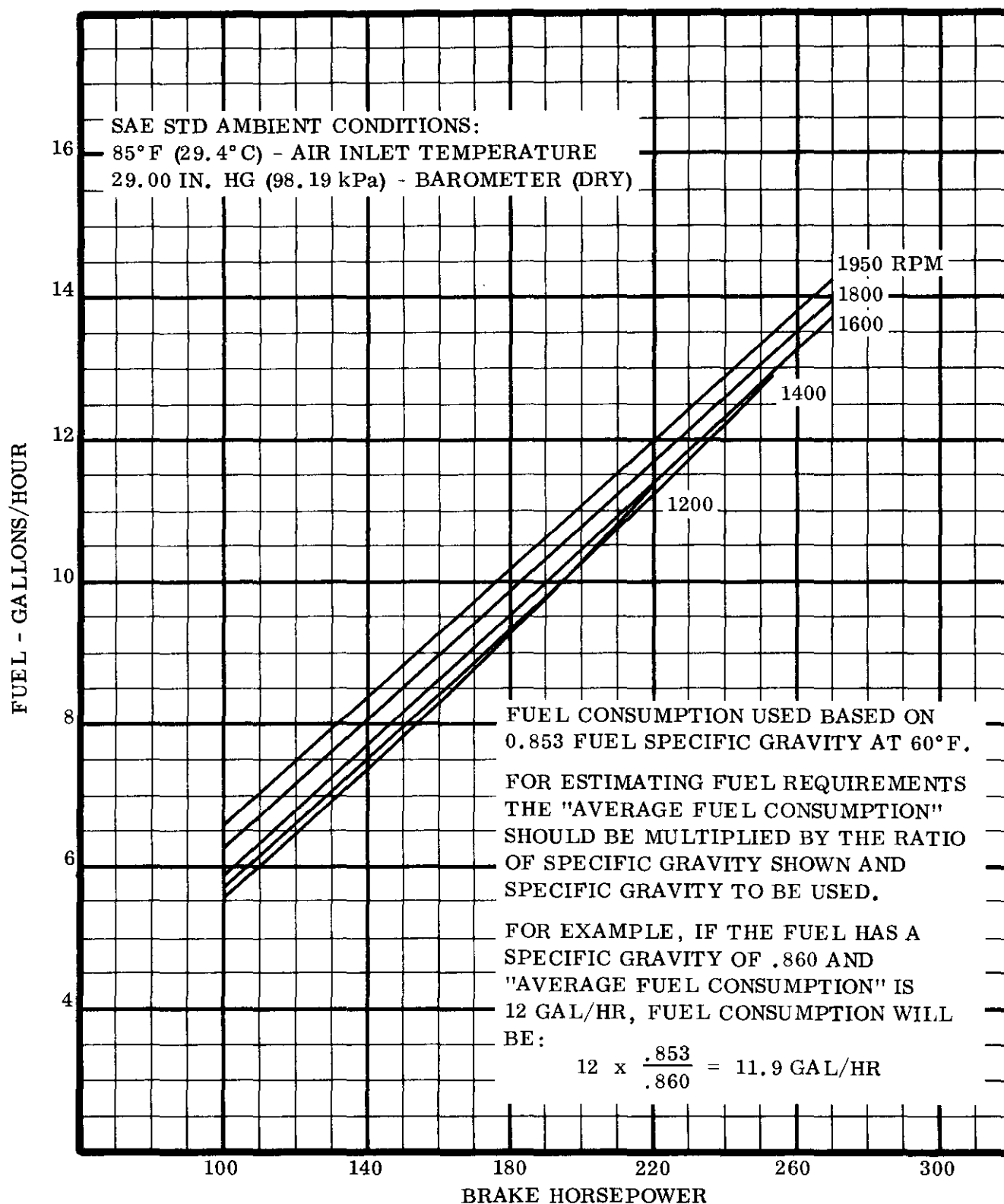
6V-92T(OTM)
BASIC ENGINE
AVERAGE FUEL CONSUMPTION





Detroit Diesel Allison
Division of General Motors Corporation

6V-92TT (OTM)
BASIC ENGINE
AVERAGE FUEL CONSUMPTION
9290 INJECTORS





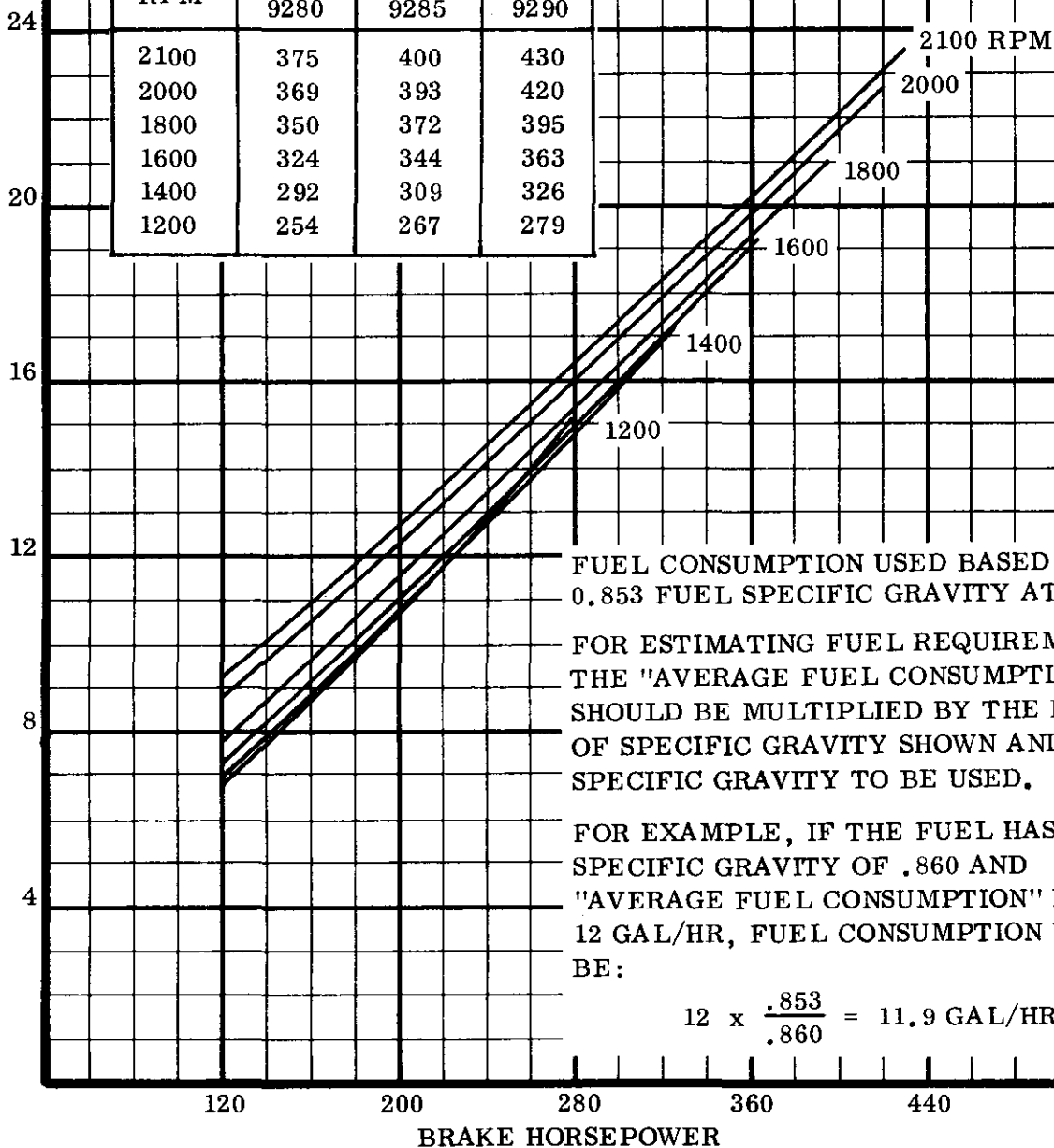
Detroit Diesel Allison
Division of General Motors Corporation

8V-92T (OTM)
BASIC ENGINE
AVERAGE FUEL CONSUMPTION

SAE STD AMBIENT CONDITIONS:
85°F (29.4°C) - AIR INLET TEMPERATURE
29.00 IN. HG (98.19 kPa) - BAROMETER (DRY)

BRAKE HORSEPOWER			
RPM	INJECTOR		
	9280	9285	9290
2100	375	400	430
2000	369	393	420
1800	350	372	395
1600	324	344	363
1400	292	309	326
1200	254	267	279

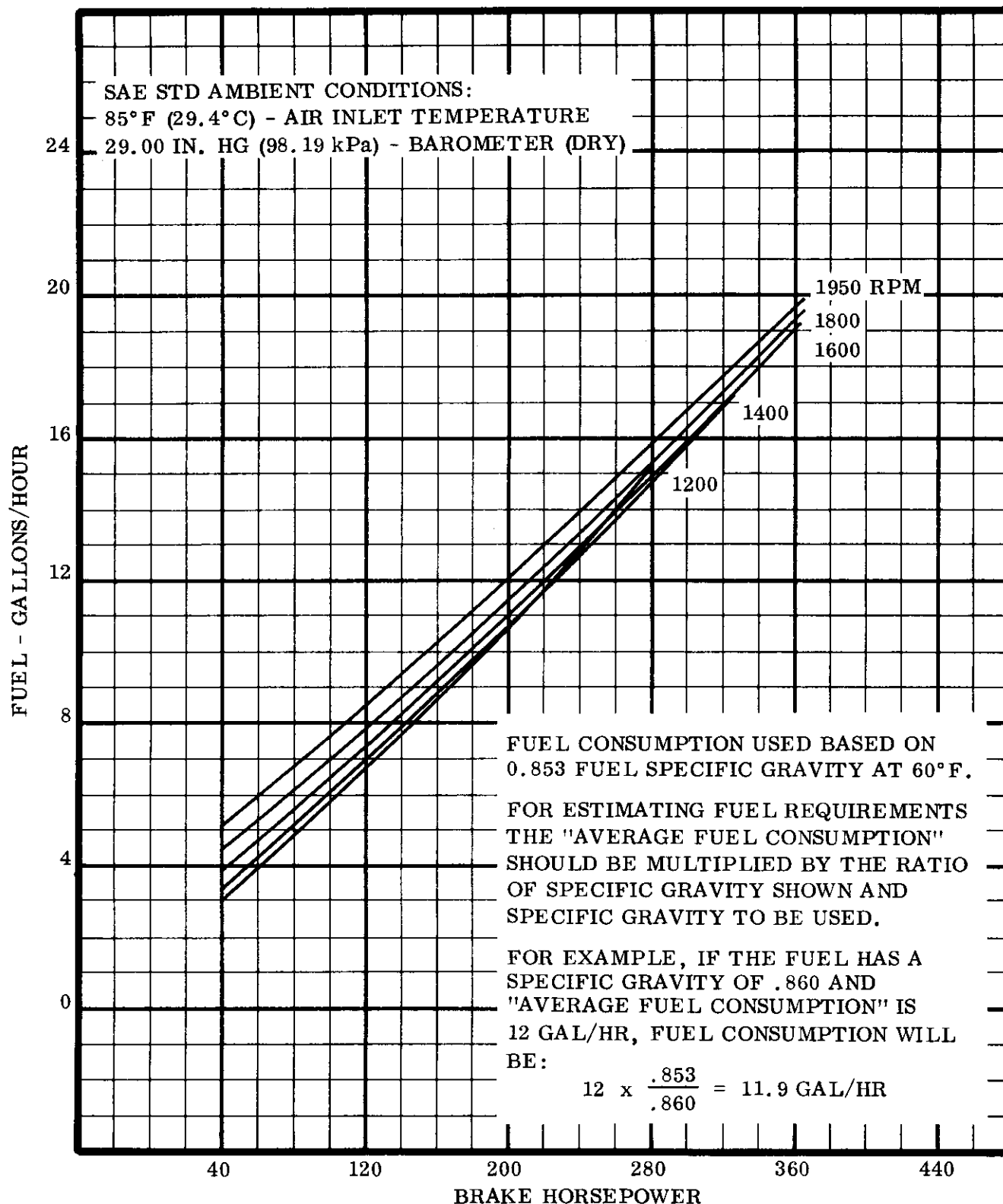
FUEL - GALLONS/HOUR





Detroit Diesel Allison
Division of General Motors Corporation

8V-92TT (OTM)
BASIC ENGINE
AVERAGE FUEL CONSUMPTION
9290 INJECTORS





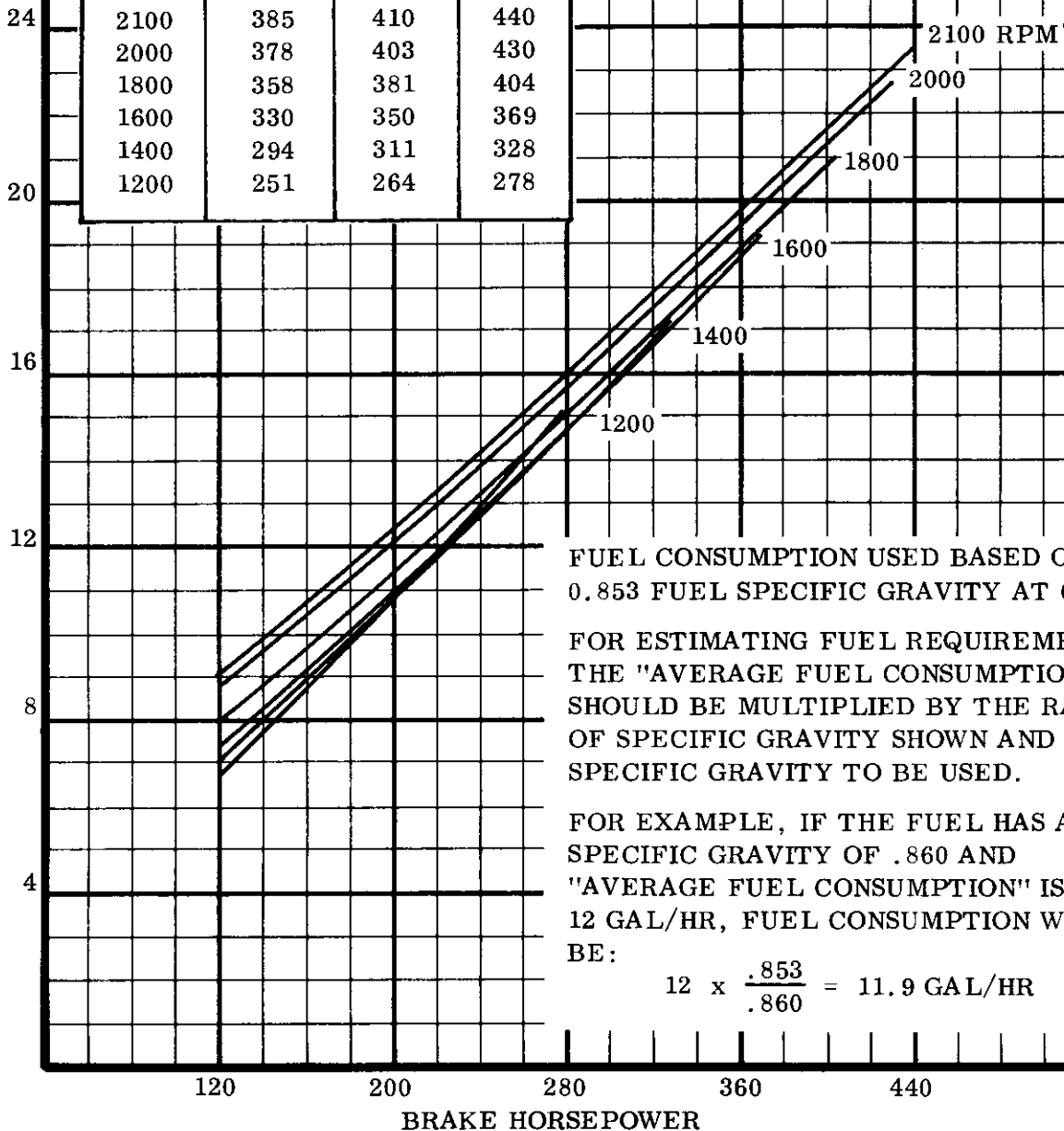
Detroit Diesel Allison
Division of General Motors Corporation

8V-92TA
BASIC ENGINE
AVERAGE FUEL CONSUMPTION

SAE STD AMBIENT CONDITIONS:
85° F (29. 4° C) - AIR INLET TEMPERATURE
29.00 IN. HG (98.19 kPa) - BAROMETER (DRY)

BRAKE HORSEPOWER			
RPM	INJECTOR		
	9280	9285	9290
2100	385	410	440
2000	378	403	430
1800	358	381	404
1600	330	350	369
1400	294	311	328
1200	251	264	278

FUEL - GALLONS/HOUR

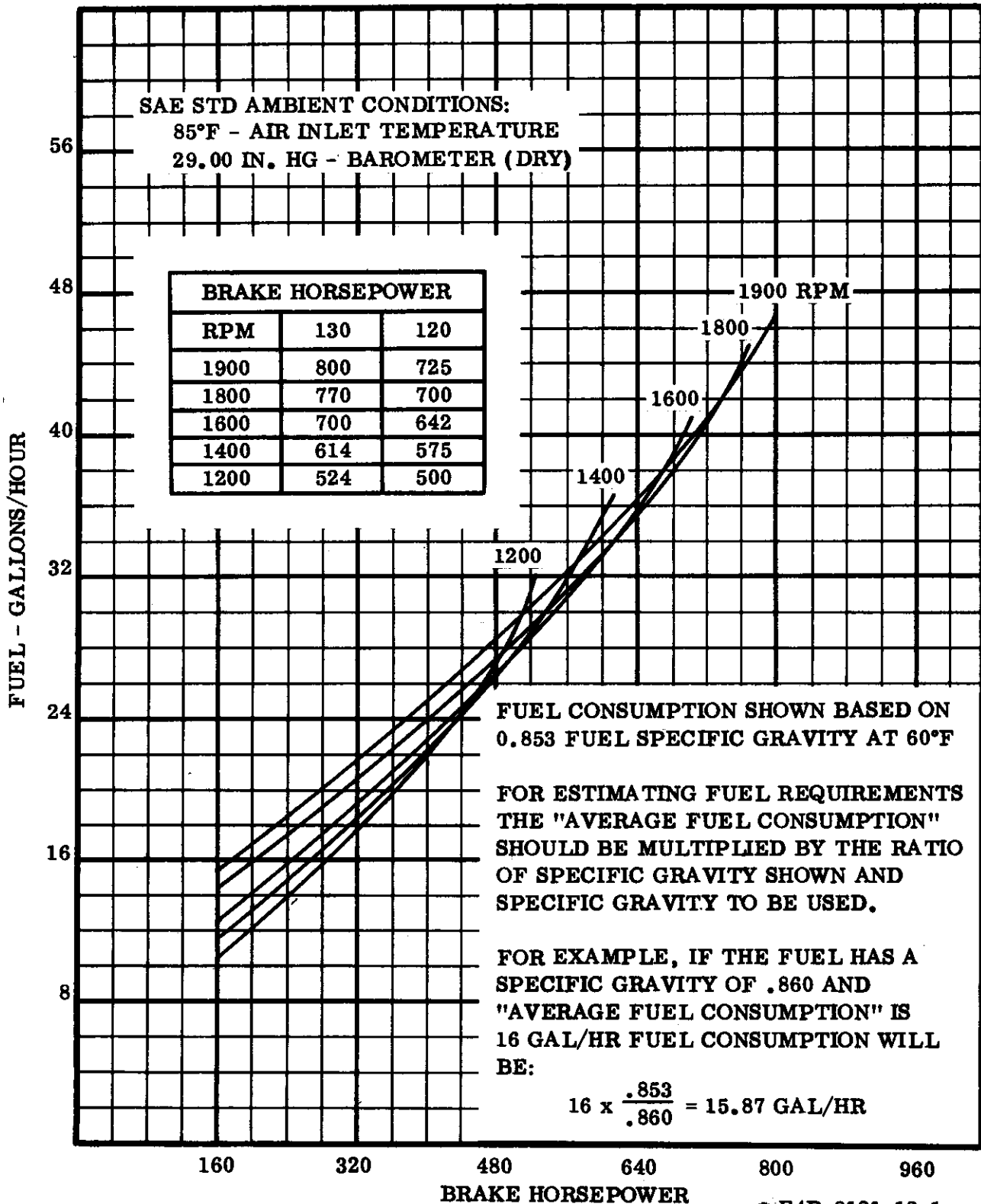




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

12V-149 BASIC ENGINE AVERAGE FUEL CONSUMPTION

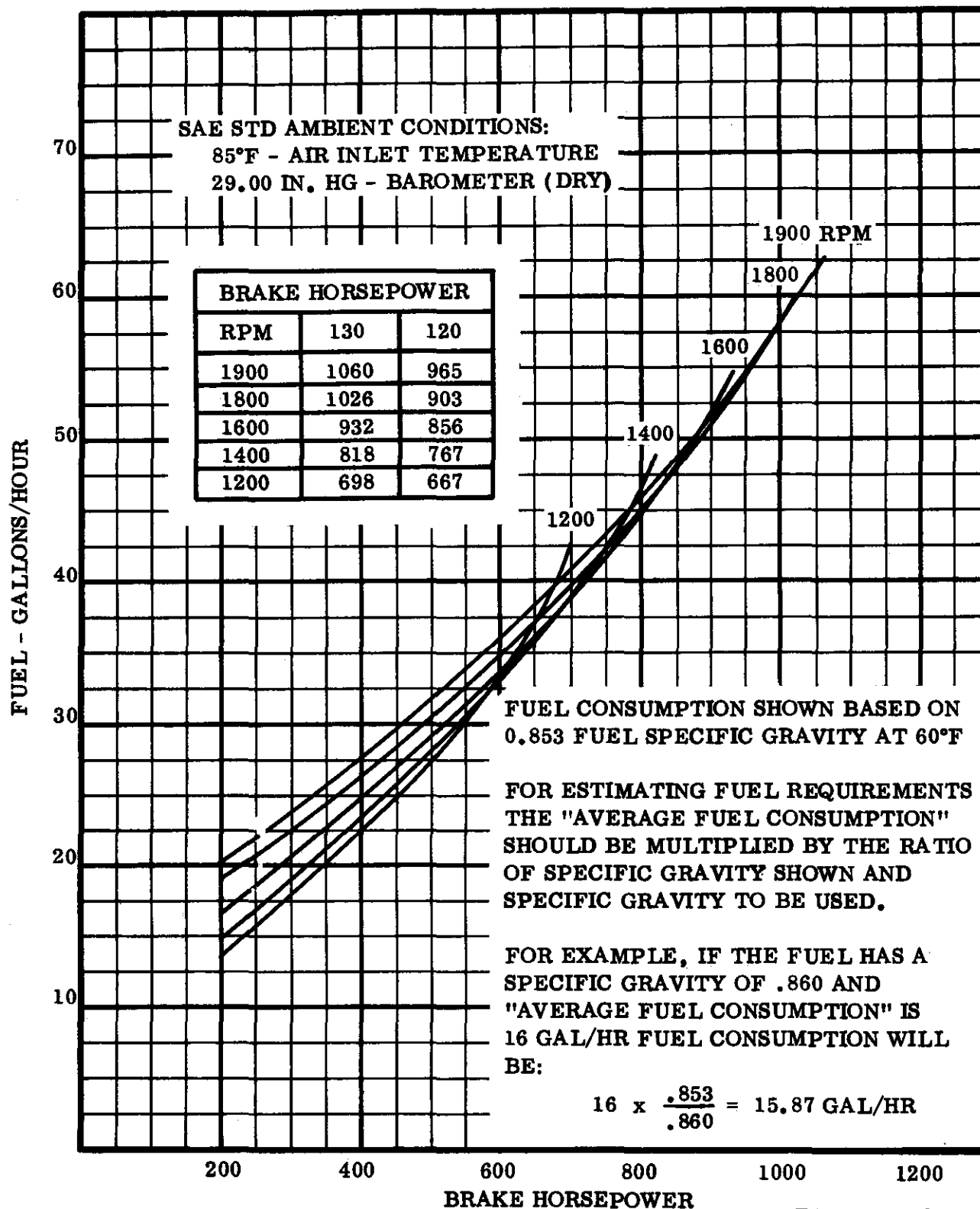




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

16V-149 BASIC ENGINE AVERAGE FUEL CONSUMPTION



INTAKE AIR



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

AIR FLOW FOR GENERATOR SETS

MODEL	ENGINE RPM	GEN. KW	* AIR FLOW - CFM		
			COOLING	ENGINE	TOTAL
2150	1200	20	3579	131	3710
	1800	30	5360	200	5560
	1800	35	6250	200	6450
3150	1200	30	4053	207	4260
	1800	45	6101	319	6420
	1800	55	7411	319	7730
4150E	1200	40	3920	255	4175
	1800	75	7353	377	7730
	1800	82	8053	377	8430
6150E	1200	60	4702	383	5085
	1800	115	9001	564	9565
	1800	128	10001	564	10565
12205	1800	200	16401	1274	17675
	1800	245	20001	1274	21275
7125-7200	1800	235	20402	1128	21530
	1800	260	22602	1128	23730
62508	1200	100	11400	690	12090
	1800	150	17100	1035	18135
	1800	170	19350	1035	20385
5025-7101	1200	13.5	1474	91	1565
	1800	20	2180	130	2310
	1800	23.5	2570	130	2700

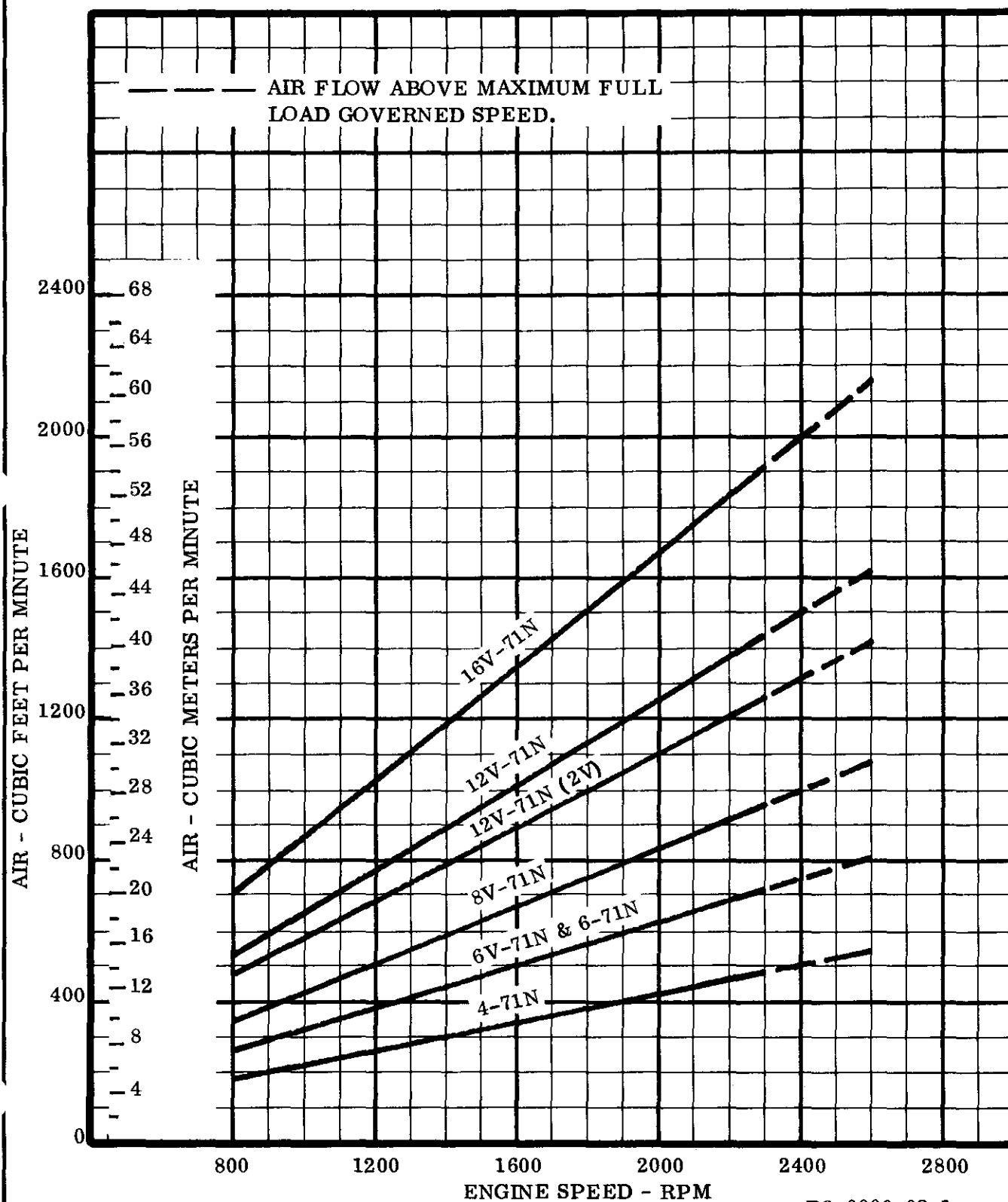
* Duct restriction for cooling air based on 0.3" water maximum.

I4-0005-00-5
10-5-60



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES V-71N ENGINES
SERIES 71N ENGINES



ENGINEERING-TECHNICAL DATA DEPT.

B3-0000-02-1
Rev. 2-18-72



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

AIR REQUIREMENTS FOR SCAVENGING AND COMBUSTION SERIES V-71 AND 71E ENGINES* AIR-CUBIC FEET PER MINUTE

ENGINE RPM	12V 4-VALVE	12V 2-VALVE	8V ⊕ 4-VALVE	6V & 6-71E 4-VALVE HD	4-71E 4-VALVE HD
800	523	473	348	262	174
900	583	528	388	282	194
1000	644	580	429	322	215
1100	704	633	469	354	235
1200	765	690	510	383	255
1300	825	740	550	413	275
1400	886	792	591	443	296
1500	946	845	631	473	316
1600	1007	898	672	504	336
1700	1067	950	712	534	356
1800	1128	1002	753	564	377
1900	1188	1056	793	594	397
2000	1249	1108	834	625	417
2100	1309	1160	874	655	437
2200	1370	1210	914	685	457
2300	1430	1260	954	715	477
2400	1491	1315	995	746	498
2500	1551	1368	1035	776	518
2600	1612	1420	1076	806	538
2700	1672		1116	836	558
2800	1733		1157	867	579

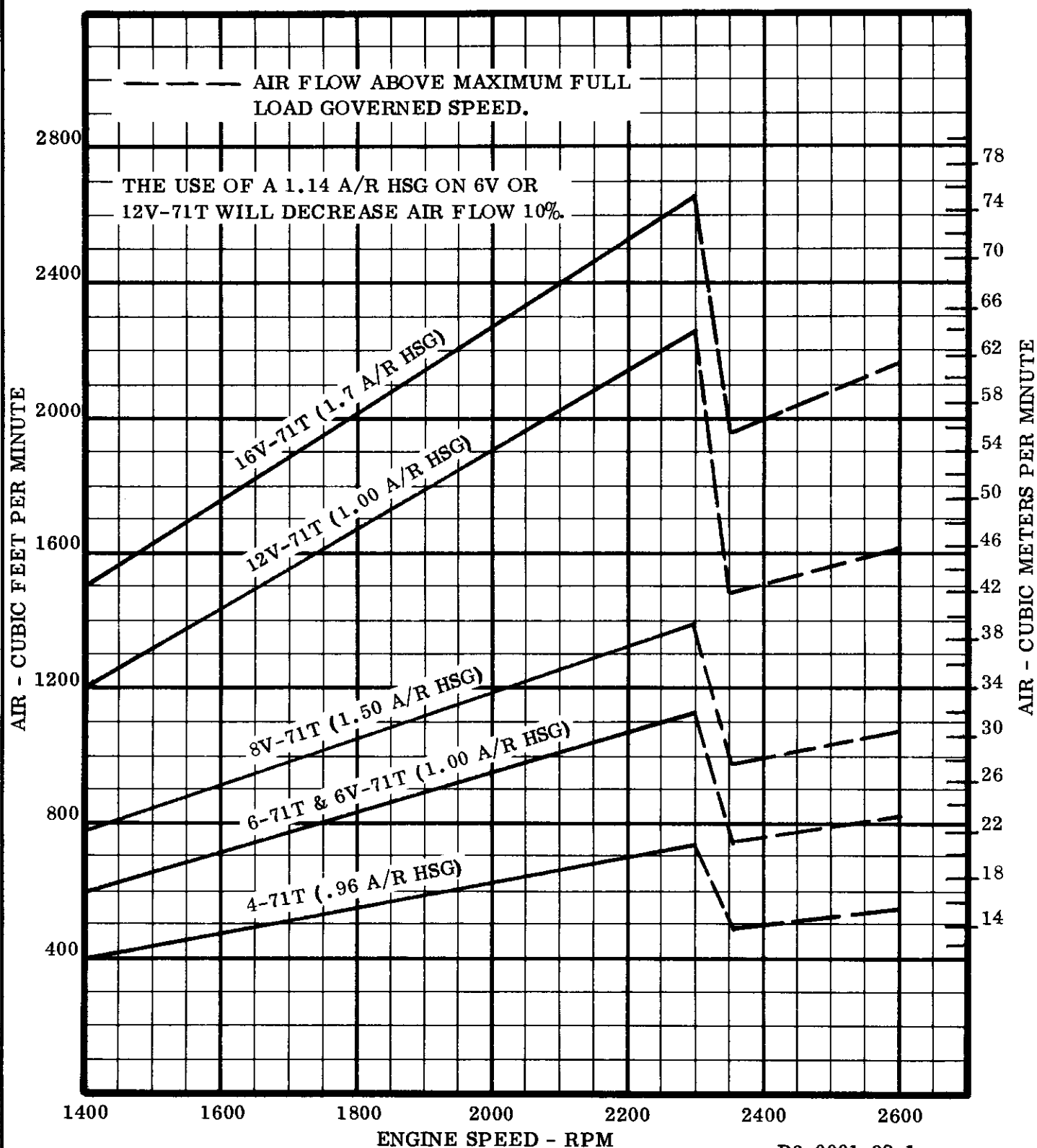
⊕ 16V-71 Equals 2 Times 8V

* Use these flows for respective "N" engines



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES 71T ENGINE
N75, N70 & N65 INJECTORS



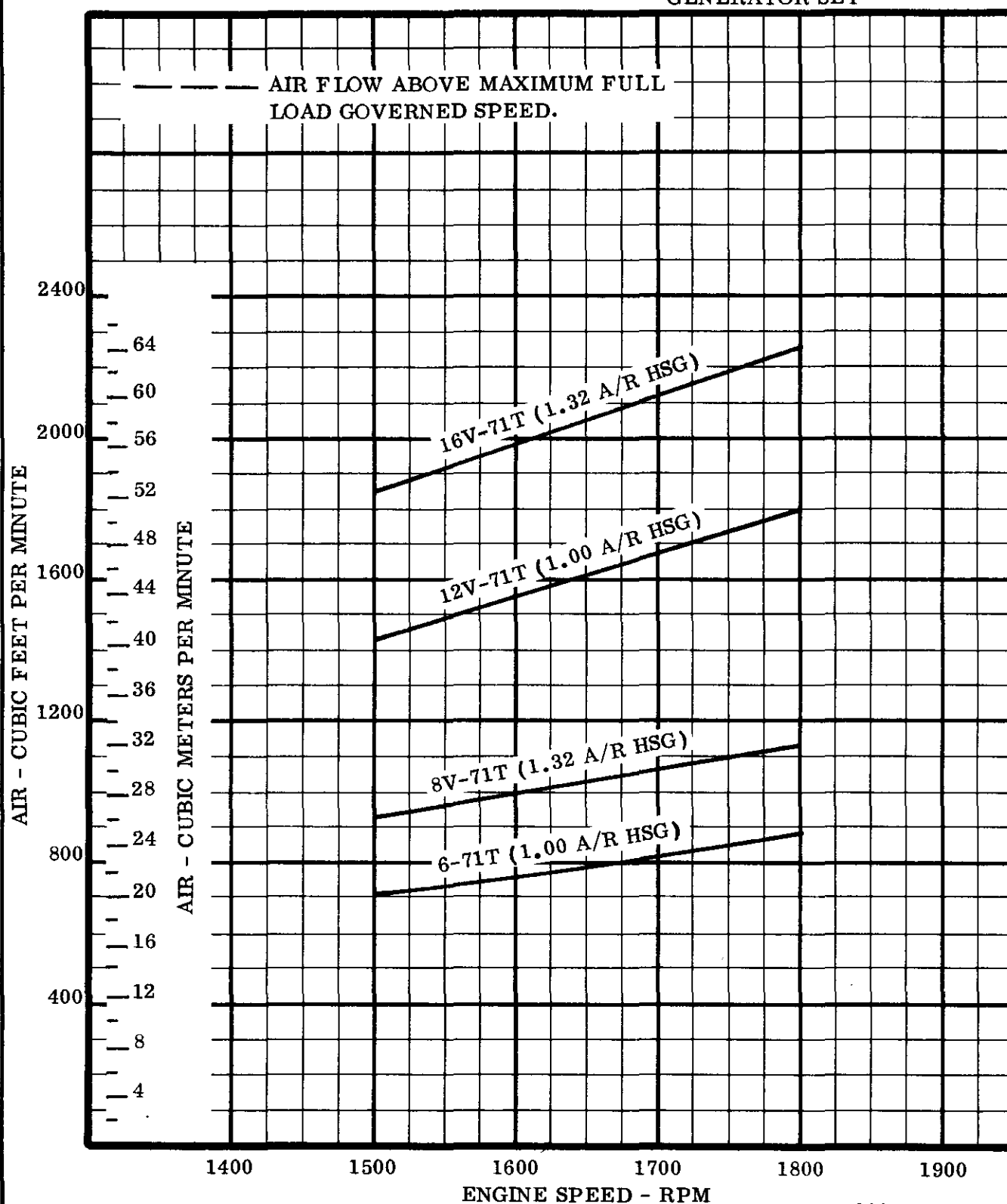
ENGINEERING-TECHNICAL DATA DEPT.

B3-0001-32-1
2-18-72



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES 71T & V71T ENGINES
N90 OR N80 INJECTORS
GENERATOR SET



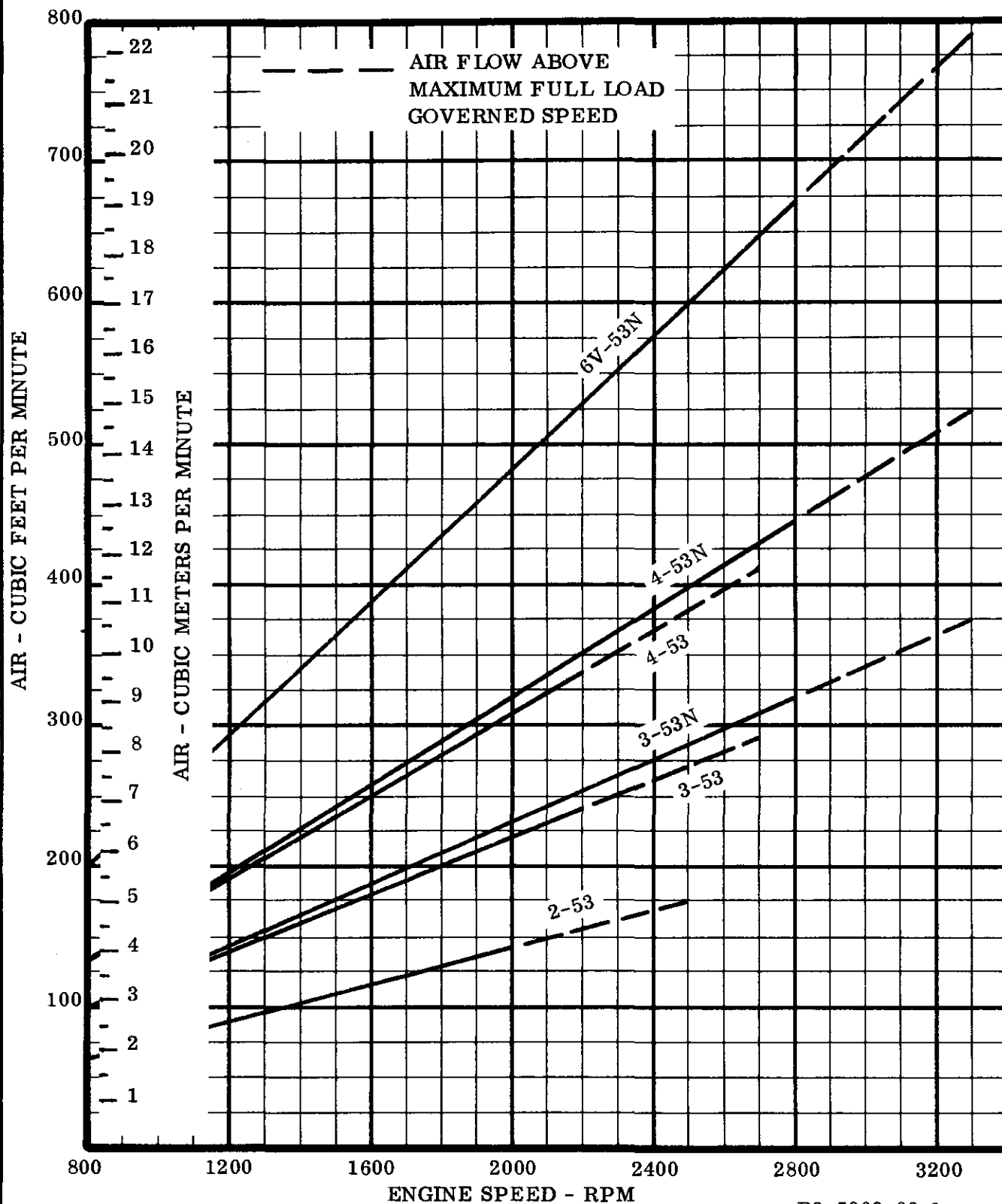
ENGINEERING-TECHNICAL DATA DEPT.

B3-0005-32-1
2-18-72



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES 53 ENGINE
SERIES 53N ENGINE



ENGINEERING-TECHNICAL DATA DEPT.

B3-5000-00-1

Rev. 2-16-72



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

AIR REQUIREMENTS FOR SCAVENGING AND COMBUSTION SERIES 53 & 53N ENGINES AIR-CUBIC FEET PER MINUTE

RPM	2-53 2-VALVE	3-53 2-VALVE	3-53 & 53N 4-VALVE	4-53 2-VALVE	4-53 & 53N 4-VALVE	6V-53 & 53N 4-VALVE	8V-53N 4-VALVE
800	65	102	102	135	135	202	250
1000	78	122	124	164	166	249	312
1200	91	142	146	194	198	297	376
1400	104	162	168	223	229	344	440
1600	117	182	190	253	261	392	503
1800	130	202	211	282	292	438	567
2000	142	222	232	312	324	486	630
2200	156	242	253	340	356	534	693
2400	169	262	275	370	388	582	755
2500	175	272	286	385	403	605	786
2600		282	297	400	418	627	818
2700		292	308	415	434	650	850
2800			319		450	675	880
3000			341		481	721	941
3200			363		513	770	1005
3300			374		528	792	1035

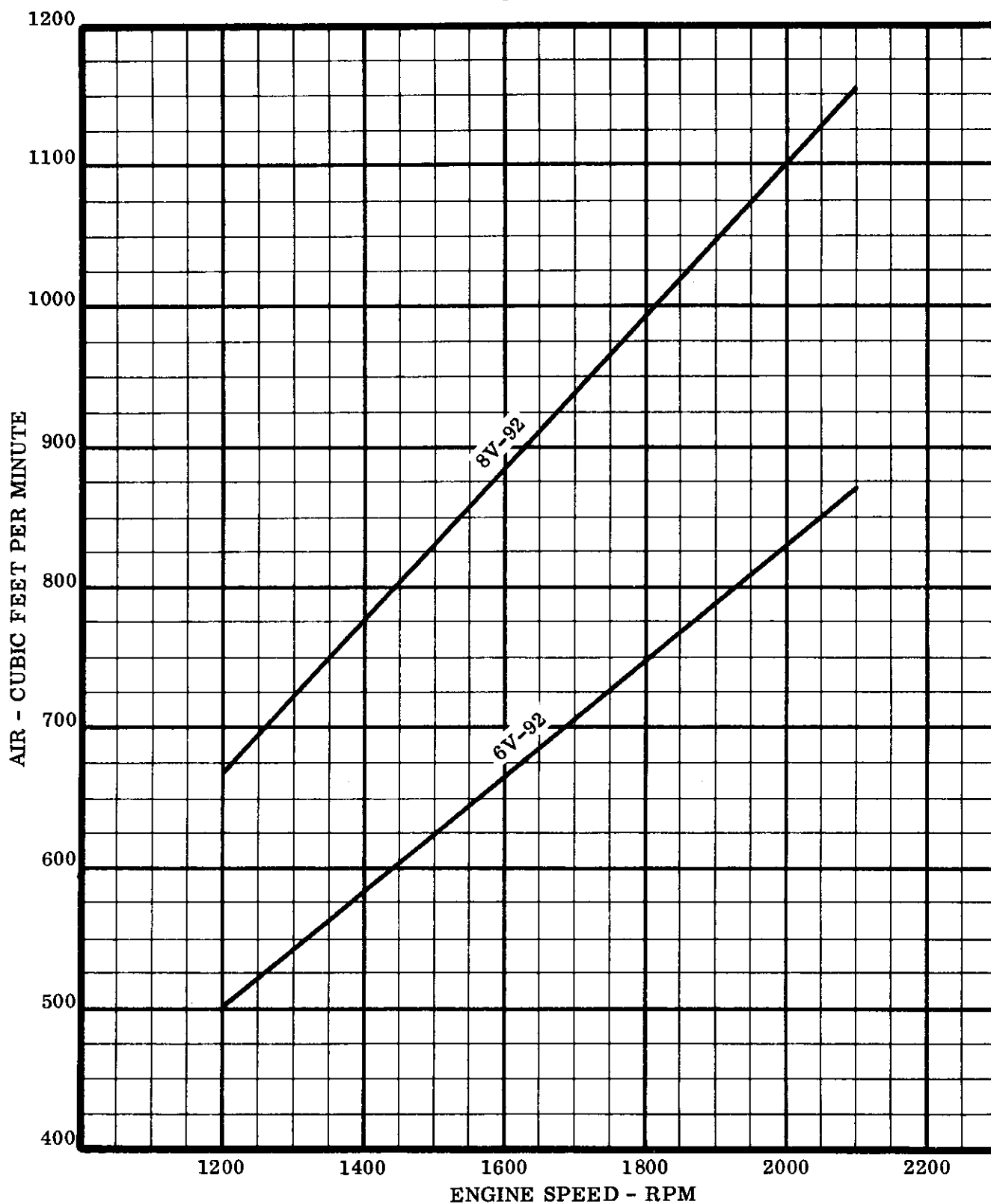
B3-5000-00-1B

5/27/64



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES V92



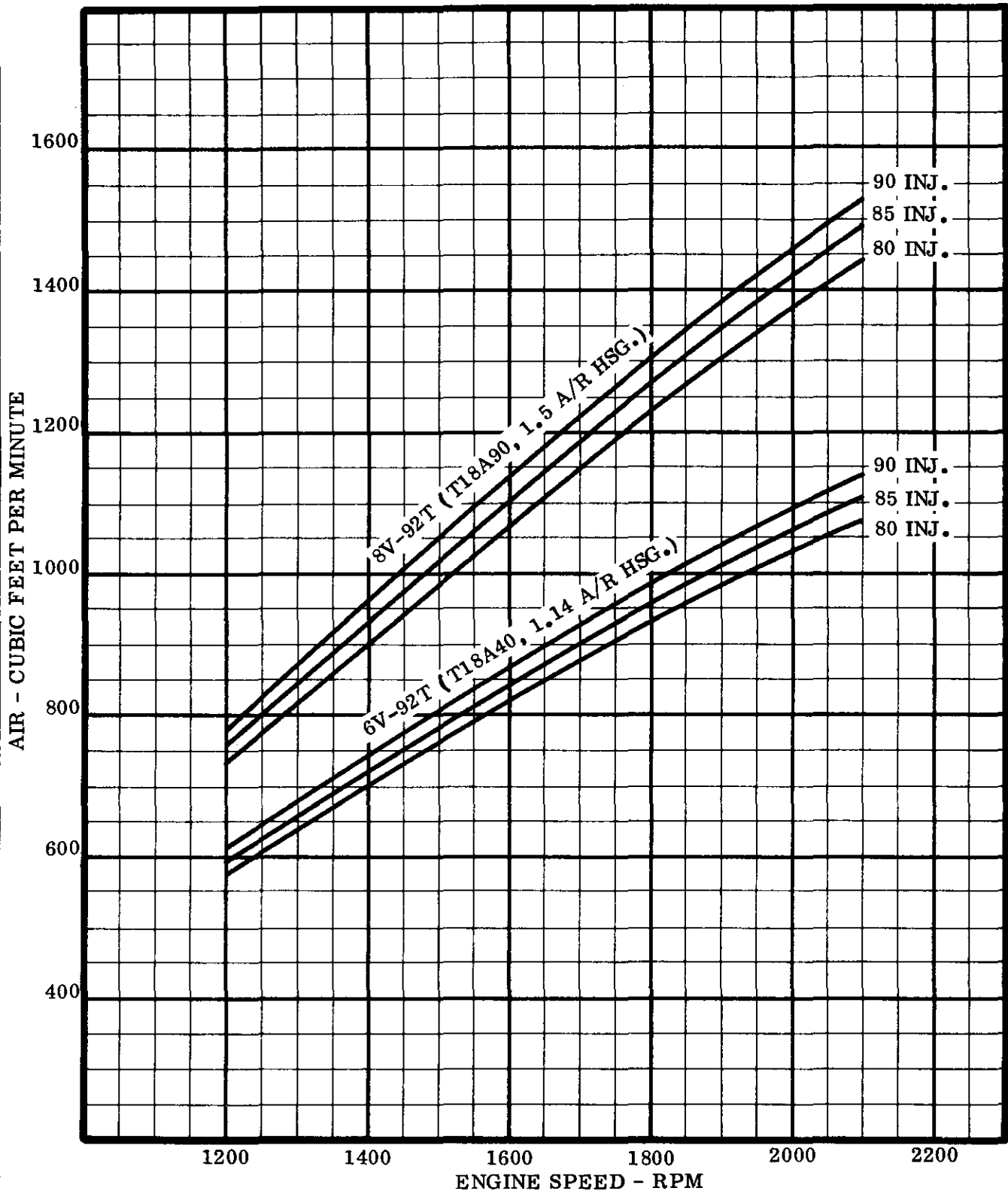
ENGINEERING-TECHNICAL DATA DEPT.

B3-8000-12-1
2-21-74



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES V92T



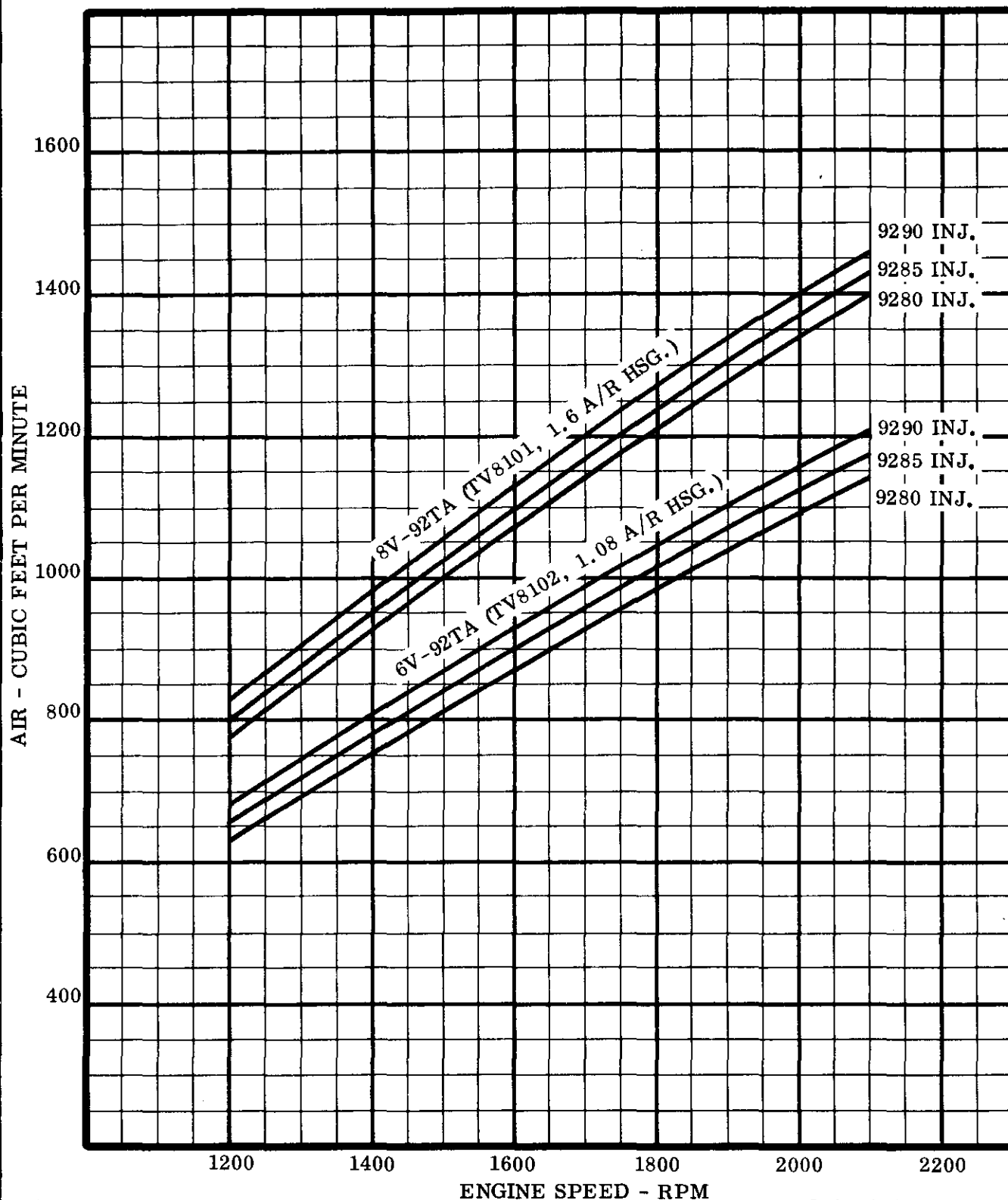
ENGINEERING-TECHNICAL DATA DEPT.

B3-8000-32-1
2-21-74



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES V92TA



ENGINEERING-TECHNICAL DATA DEPT.

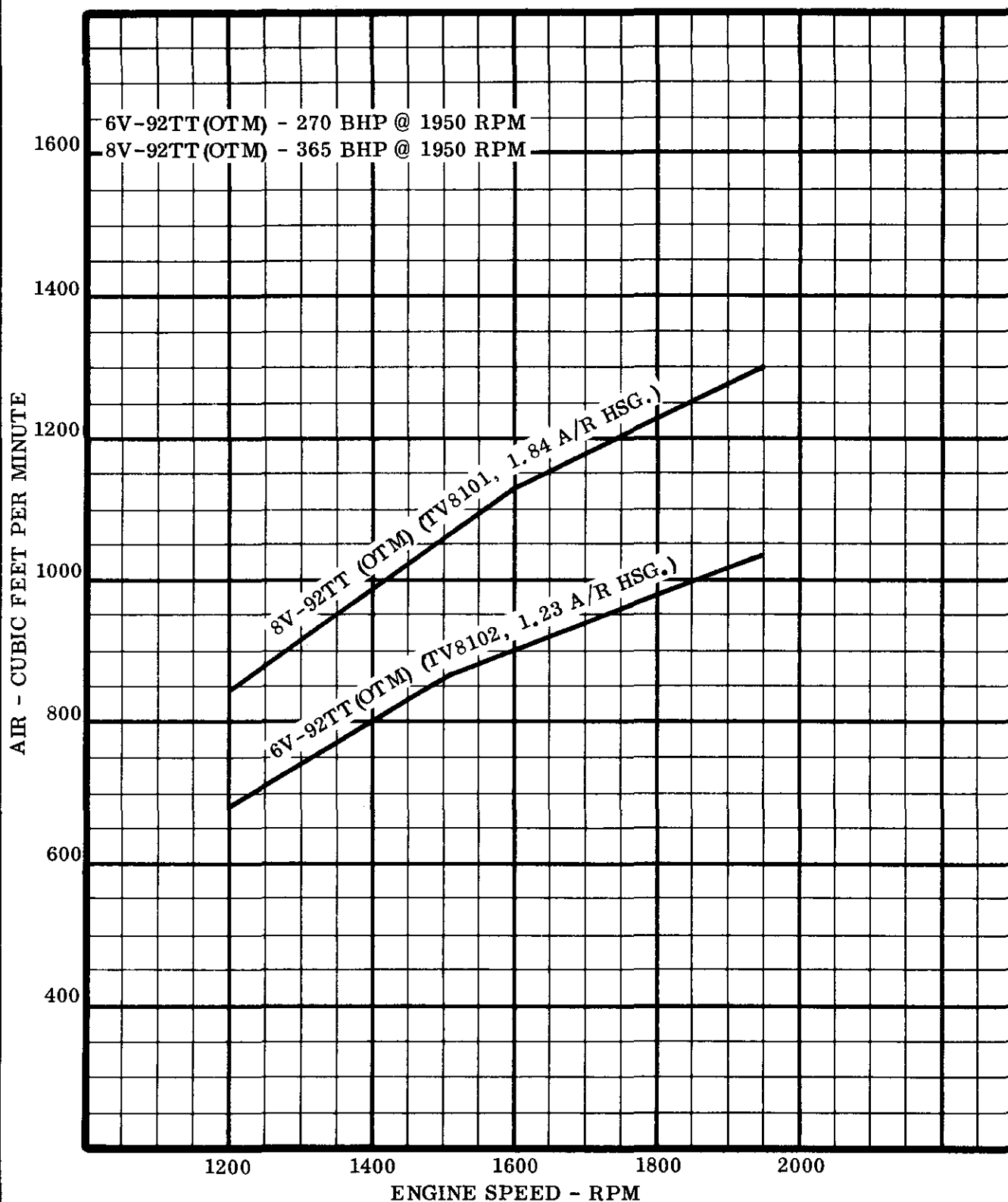
B3-8000-32-2

6-5-75



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES V92TT(OTM)
9290 INJECTORS



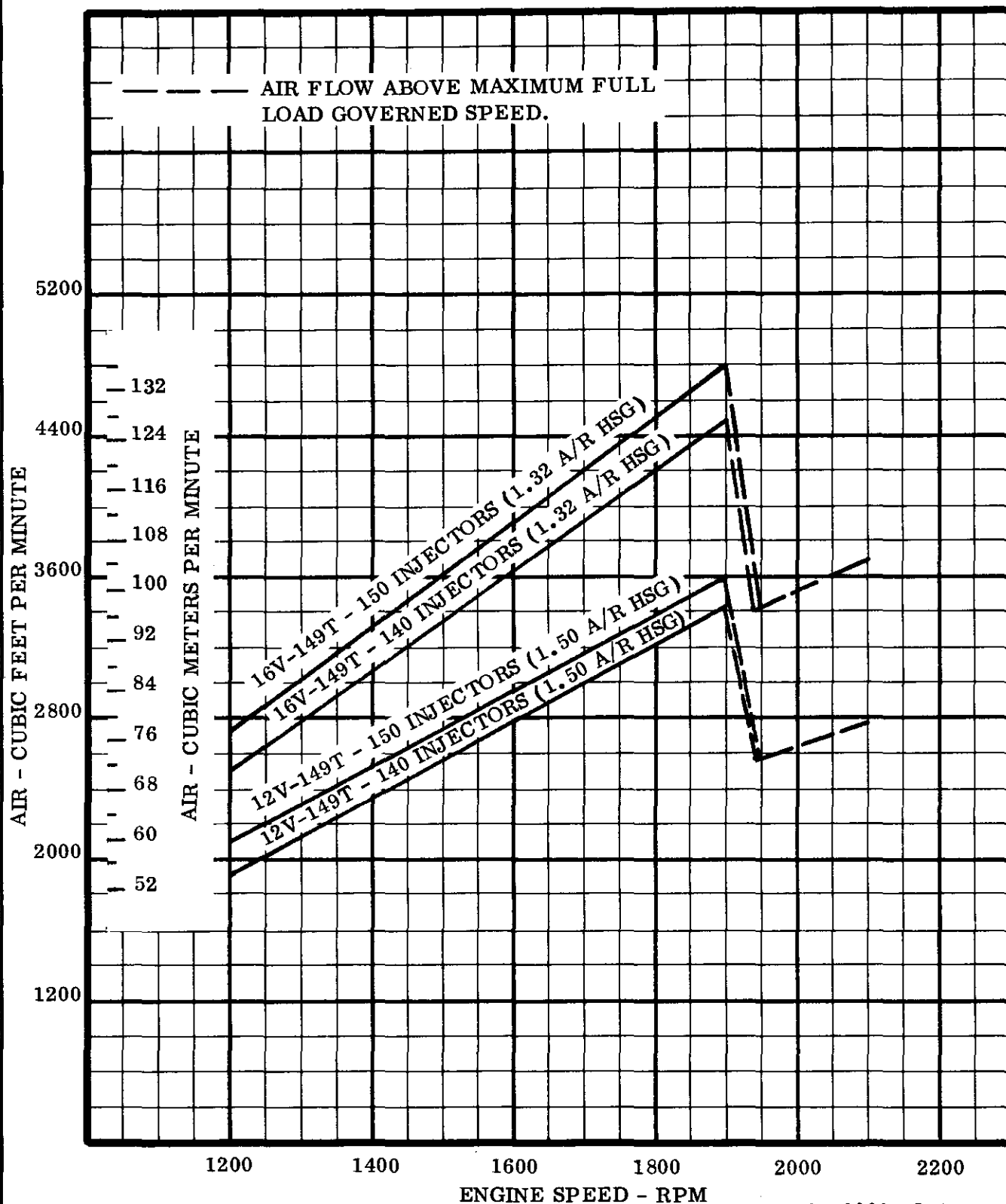
ENGINEERING-TECHNICAL DATA DEPT.

B3-8000-32-4
9-22-75



Detroit Diesel Allison
Division of General Motors Corporation

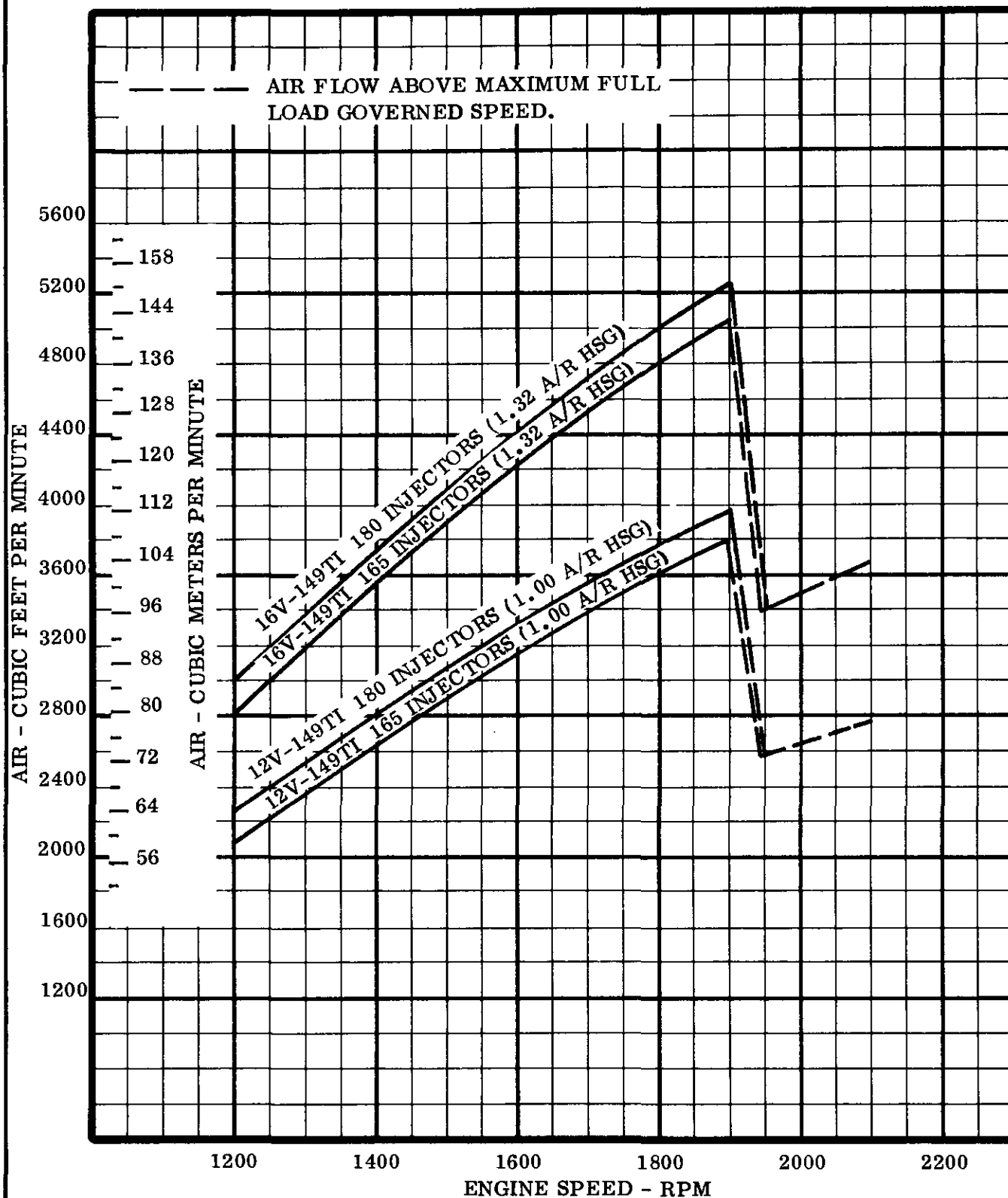
AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES V-149T ENGINE





Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES V-149TI ENGINES



ENGINEERING-TECHNICAL DATA DEPT.

B3-9000-32-2
2-18-72



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

AIR REQUIREMENTS FOR SCAVENGING AND COMBUSTION SERIES V-149T ENGINES AIR-CUBIC FEET PER MINUTE

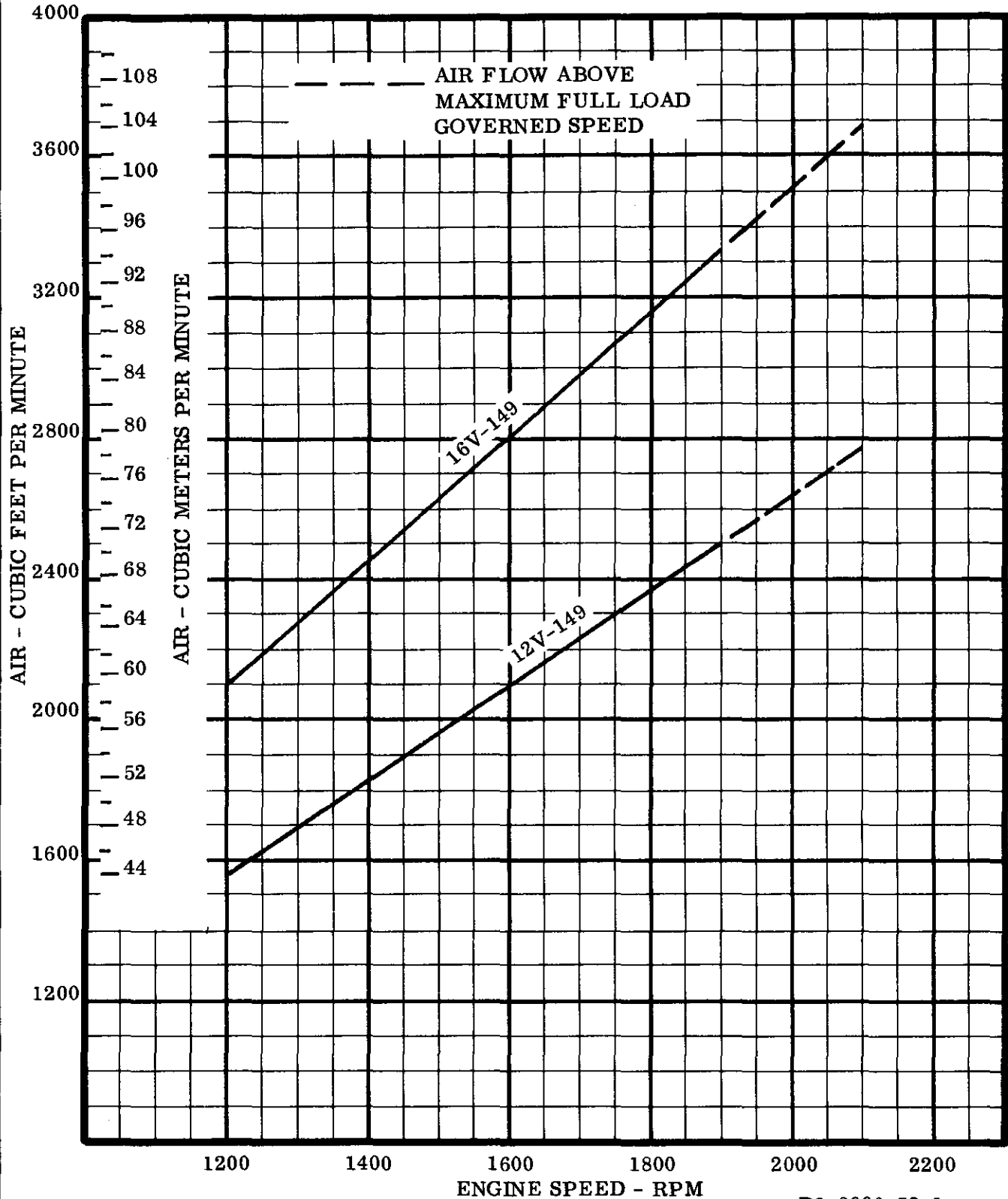
ENGINE RPM	12V-149T (140 Inj.)	12V-149T (150 Inj.)	16V-149T (140 Inj.)	16V-149T (150 Inj.)
1200	1880	2080	2530	2740
1300	2110	2300	2810	3040
1400	2330	2510	3090	3325
1500	2560	2730	3370	3620
1600	2765	2940	3640	3910
1700	2995	3180	3930	4210
1800	3205	3400	4200	4500
1900	3440	3600	4480	4800
2000	2635	2635	3505	3505
2100	2770	2770	3680	3680

B3-9000-32-1A
Rev. 1-7-69



Detroit Diesel Allison
Division of General Motors Corporation

AIR REQUIREMENTS FOR
SCAVENGING AND COMBUSTION
SERIES V-149 ENGINES





DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

AIR REQUIREMENTS FOR SCAVENGING AND COMBUSTION SERIES V-149 ENGINES AIR-CUBIC FEET PER MINUTE

ENGINE RPM	12V-149	16V-149
1200	1560	2090
1300	1700	2265
1400	1830	2440
1500	1970	2620
1600	2100	2795
1700	2230	2975
1800	2370	3155
1900	2500	3330
2000	2635	3505
2100	2770	3680

B3-9000-52-1A
7-16-68

RESTRICTION

RECOMMENDATIONS FOR DETROIT DIESEL ENGINES LIGHT DUTY OIL BATH

ENG. MODEL	FULL LOAD ENG. RPM	ENG. AIR FLOW CFM	INDUSTRIAL AND AUTOMOTIVE				REMARKS
			AIR MAZE	DONALDSON - DDED	AC.	VORTEX	
2-71	1200 1800 2000	131 200 223	F140SGN F250SGN F250SGN			1529617 1529617 1529617	S-90P S-110E S-110E
3-71	1200 1800 2100	207 319 375	F250SGS F350SGS F570SGS	B-1003 B-1003 B-1003	5183248 5183248 5183248	- - -	S-110H S-120J S-120J
4-71	1200 1800 2100 2300	275 425 500 550	F350SGS F570SGS F570SGS F570SGS	B-1003 B-1003 FBE13-0100 FBE14-0000	5183248 5183248 5121346 5114221		S-110H T-120 T-135D T-140C
4-71E, N	1800 2100 2300	377 437 477	F570SGS F570SGS F570SGS	FBE12-0680 FBE12-0680 FBE13-0100	5114214 5114214 5121346		T-120 T-120 T-135D
6-71	1200 1800 2100 2300	413 637 750 825	F570SGT F858SGT F858SGT F858SGT	FBE13-0100 FBE14-0000 FBE14-0000 -	5121346 5114221 5114221 -		T-120 T-140C (2)T-120 (2)T-120
6-71E, N	1800 2100 2300	564 655 715	F858SGT F858SGT F858SGT	FBE14-0000 FBE14-0000 FBE14-0000	5114221 5114221 5114221		T-140C T-140A (2)T-120
2-53	1200 1800 2000	91 130 142	F140SGN F140SGN F250SGN	FAE06-5010 FAE07-9761 FAE07-9761	- - -	1529617 1529617 1529617	S-90P S-90P S-90P
3-53(2V)	1800 2200	202 242	F250SGN F250SGN	FCE09-2700 FCE09-2700	- -	5647305 5647305	S-110E S-110E
3-53(4V)	2200 2800	253 319	F250SGN F250SGN	FCE09-2700 FCE09-2700	- -	5647305 5647305	S-110E S-120J
4-53(2V)	1800 2200	282 340	F350SGS F350SGS	FBE12-0680 FBE12-0680	5114214 5114214	(2)1529617 (2)1529617	S-110H S-120J
4-53(4V)	2200 2800	356 450	F570SGS F570SGS	FBE12-0680 FBE13-0100	5114214 5121346	(2)1529617 (2)1529617	S-120J T-135
6V-53	2200 2600 2800	534 627 675	F570SGT F858SGT F858SGT	FBE14-0000 FBE14-0000 FBE14-0000	5114221 5114221 5114221		T-140C T-140C T-140A
8V-53	2200 2500	693 786	F858SGT F858SGT	FBE14-0000(2) FBE14-0000(2)	5114221 5114221		(2)T-120 (2)T-120
6V-71	1800 2100 2300	564 655 715	F858SGT F858SGT F858SGT	FBE14-0000 FBE14-0000 FBE14-0000	5114221 5114221 5114221		T-140C T-140A (2)T-120
8V-71	1800 2100 2300	753 874 954	(2)F570SGS (2)F570SGS (2)F570SGS	FBE14-0000(2) FBE14-0000(2) FBE14-0000(2)	5114221 5114221 5114221		(2)T-120 (2)T-135D (2)T-135D
8V-71T**	1800 2100	1120 1200	- -	- -	- -		- -
12V-71	1800 2100 2300	1128 1309 1430	(2)F858SGT (2)F858SGT (2)F858SGT	FBE14-0000(2) FBE14-0000(2) FBE14-0000(2)	5114221 5114221 5114221		(2)T-135D (2)T-140C (2)T-140A
12V-71T**	1800 2100	1650 1800	# -	# -	- -		- -
16V-71	1800 2100	1506 1748	(2)F858SGT (2)F1208SGT	- -	- -		- -
16V-71T**	1800 2100	2300	-	-	-		-
12V-149	1900	2800	F2808S	(2)FCA20-0015			
12V-149T	1900	3600	F4008S	(2)FCA20-0015			
16V-149	1900	3600	F4008S	(2)FCA20-0015			
16V-149T	1900	4800	F6508S	(4)FCA20-0015			

Light duty oil bath air cleaners are to be used in areas of relatively clean conditions. "Light duty" signifies high cleaning efficiency but small dirt holding capacity. Any dirt in the engine shortens cylinder life and cleaners are to be serviced according to manufacturers instructions.

Automotive - For vehicle installations subject to tilting and overspeeding on downgrades.

Industrial - Permanent horizontal engine installations operating at governed speeds.

Following is a list of installations where light duty cleaners can be used under limited conditions:

EXCEPTIONS

Air Compressors	Portable Units
Contractor Pumps	--- Road Construction & Quarries
Generator Sets	
Highway Trucks	
Holsts and Yarders	
Inside Installations	--- Cotton Gins, Feed & Grain Mills, Foundries
Irrigation and Well Pumps	
Locomotive Cranes and Switchers	--- Foundries Dusty Conditions
Oil Field Equipment	--- Desert Operation
Saw & Planing Mills	--- Dusty Conditions
Utility Trucks	
Welder Sets	--- Foundries
Work Boats	--- Dusty Conditions

Donaldson "B" type cleaners and Air Maze "C" type cleaners mount on air inlet housing. Donaldson "E" type, Air Maze "J" type and Vortex cleaners mount remote from engine.

See published data for maximum total permissible intake restriction.

#Use H. D. Oil Bath or Dry Type Cleaners

* 75mm inj.
**80mm inj.

AIR CLEANER RECOMMENDATIONS FOR DETROIT DIESEL ENGINES

HEAVY DUTY OIL BATH

ENG. MODEL	FULL LOAD ENG. RPM	ENGINE AIR FLOW CFM	AIR MAZE	DONALDSON - DDED		UNITED	VORTEX
2-71	1200	131	J250AK	FGA07-0013	5119045	52D	G-73AK
	1800	200	J250AK	FGA09-0020	5135648	52D	G-80AK
	2000	223	J250AK	FGA09-0020	5135648	52D	G-100AK
3-71	1200	207	W1016007	FGA10-0013	-	52D	G-80AL
	1800	319	W1016007	FGA12-7200	5123925	53D	G-110Q
	2100	375	W1016007	FGA12-7200	5123925	55D	G-120T
4-71	1200	275	W1016007	FGA10-0013	-	53D	G-100AQ
	1800	425	W1218008	FGA12-7200	5123925	55D	G-120T
	2100	500	W1414004	FGA13-0550	5129860	55D	G-135V
	2300	550	W1418007	FGA14-4900	5127363	57D	G-135V
	1800	377	W1218008	FGA12-7200	5123925	55D	G-120T
6-71	2100	437	W1414004	FGA12-7200	5123925	55D	G-120T
	2300	477	W1414004	FGA13-0550	5129860	55D	G-135V
	1200	413	W1218007	FGA14-5110	5129861	55D	G-120T
	1800	637	W1418006	FGA14-4900	5127363	57D	G-140M
	2100	750	W1620003	FGA14-4800	5129862	57D	G-150B
6-71E, N	2300	825	W1620003	FGA16-1600	5129866	57D	G-160E
	1800	564	W1418006	FGA14-4900	5127363	57D	G-140M
	2100	655	W1418006	FGA14-4900	5127363	57D	G-140M
2-53	2300	715	W1620003	FGA14-4800	5129862	57D	G-150B
	1200	91	J140AV	FGA07-0013	5119045	52D	G-73AB
	1800	130	J250AC	FGA07-0013	5119045	52D	G-73AB
3-53(2V)	2000	142	J250AC	FGA08-0011	5127153	52D	G-73AB
	1800	202	J250AK	FGA10-0013	-	52D	G-80AJ
3-53(4V)	2200	242	W1016006	FGA10-0013	-	53D	G-100AV
	2200	253	W1016006	FGA10-0013	-	53D	G-100AU
4-53(2V)	2800	319	W1016006	FGA12-7200	5123925	53D	G-110G
	1800	282	W1016007	FGA10-0013	-	53D	G-100AU
4-53(4V)	2200	340	W1016007	FGA12-7200	5123925	55D	G-110G
	2200	356	W1016007	FGA12-7200	5123925	55D	G-110G
6V-53	2800	450	W1218008	FGA12-7200	5123925	55D	G-135G
	2200	534	W1418006	FGA14-4900	5127363	55D	G-135G
	2600	627	W1418006	FGA14-4900	5127363	57D	G-140M
8V-53	2800	675	W1420100	FGA14-4900	5127363	57D	G-150B
	2200	693	W1620003	FGA16-1600	5129866	57D	G-135G
	2500	786	W1620003	FGA16-1600	5129866	57D	G-140M
6V-71	2800	880	-	FGA16-1600	5129866	60D	G-120AR(2)
	1800	564	W1418006	FGA14-4900	5127363	57D	G-135G
	2100	655	W1418006	FGA14-4900	5127363	57D	G-140M
8V-71	2300	715	W1620003	FGA14-4800	5129862	57D	G-150B
	1800	753	W1620002	FGA14-4800	5129862	57D	G-160D
	2100	874	(2)W1218008	FGA16-1600	5129866	57D	G-120AR(2)
8V-71T **	2300	954	(2)W1218008	FGA16-1500	-	60D	G-135G(2)
	1800	1100	-	(2)FHG16-4800	-	-	-
12V-71	2100	1200	-	(2)FHG16-4800	-	-	-
	1800	1128	(2)W1418006	(2)FGA14-4900	5127363	60D	G-1355(2)
12V-71T **	2100	1309	(2)W1420002	(2)FGA14-4900	5127363	60D	G-150(2)
	2300	1430	(2)W1620003	(2)FGA14-4800	5129862	(2)57D	G-150(2)
	1800	1650	-	(2)FHG16-0048	-	-	-
16V-71	2100	1800	-	(2)FHG16-0048	-	-	-
	1800	1506	(2)W1620002	(2)FGA14-4800	5129862	(2)57D	G-160D(2)
16V-71T	2100	1748	(2)W1620002	(2)FGA16-1600	5129866	(2)57D	G-160D(2)
	1800	2240	-	(2)FGA16-1500	5138886	-	-
12V-149	2100	2300	-	-	-	-	-
	1900	2500	LP20	(2)FCA20-0015	-	-	-
12V-149T	1900	3600	LP30	(2)FCA20-0015	-	-	-
	1900	3330	LP30	(2)FCA20-0015	-	-	-
16V-149	1900	4800	LP40	(4)FCA20-0015	-	-	-

REMARKS

It is recommended that these cleaners be used with air inlet hoods or pre-screens which are available from the manufacturer.

Extend air intake into clean area if possible.

Use of precleaners is not recommended except where chaff is encountered.

AIR CLEANER TO ENGINE DUCT WORK:

1. Use seamless steel tubing with 1/16 to 3/32 wall thickness or "Flexaust" heavy duty neoprene hose with cuffed or flanged ends. Protect all rubber type hose from chaffing.
2. Maximum length 20 feet with as few bends as possible.
3. Hose connections to be made with reinforced rubber or synthetic hose with sturdy clamps at each joint.

Cleaners to be serviced according to manufacturer's instructions. See published data for maximum permissible intake restriction.

GENERAL USAGE

Portable Air Compressors
Contractors Pumps (Road Construction & Quarries)
Cotton Gins (Screen Air Intake)
Ditchers
Earth Moving Equipment (Clean Air Intake)
Generator Sets (Clean Air Intake)
Locomotive Cranes and Switchers
Off Highway Trucks (Clean Air Intake)
Oil Field Equipment in Desert Operations
Pavers, Shovels, Cranes & Tractors
Rail Cars
Saw & Planing Mills (Screen Air Intake)
Welder Sets
Work Boats (Dusty Conditions)
Asphalt Plants Crushers
Rock Crushers
Feed & Grain Mills (Screen Air Intake)

AIR CLEANER RECOMMENDATIONS FOR DETROIT DIESEL ENGINES

TYPE

L.D. AIR CLEANERS FOR USE INSIDE BLDGS, PAVED HIGHWAYS, MILK TRUCKS, LOCAL DELIVERY TRUCKS					FOR USE ON COMMERCIAL HIGHWAY CARRIERS, LOADERS, OTHER MEDIUM HEAVY DUTY APPLICATIONS						OFF HIGHWAY EQUIPMENT, ROCK CRUSHERS OTHER EXTRA HEAVY DUTY APPLICATIONS		
LIGHT DUTY - SINGLE STAGE					HEAVY DUTY - TWO STAGE						EXTRA HEAVY DUTY - TWO STAGE		
ENGINE MODEL	FULL LOAD ENG. RPM	ENG. AIR FLOW - CFM	PUROLATOR	FARR PAMIC	DONALDSON CYCLOPAC	UNITED TRI PHASE	VORTEX CENTRIFAIR	RICE EJECTO-MATIC	AIR MAZE * DRY STACK	PUROLATOR	FARR ROTO PAMIC	DONALDSON SBO	DONALDSON EXTENDED STG. SER
2-71	1200 1800 2000	131 200 223	AF-100	9 12 12	FWA08-0022 FWA08-0022 FWA08-0022	106D 108D 108D	AB80A4 AB80A4 AB80A4	RF-10E RF-10E RF-10E	CD0816100 CD0816100 CD0816100	AF-1608 AF-1608 AF-1608	9 12 12	SBG08-0010 SBG08-0010 SBG08-0010	- - -
3-71	1200 1800 2100	207 319 375	AF-1012 AF-1012 AF-1012	12 16 20	FWA10-0017 FWA10-0017 FWA10-0017	108D 108D 110D	AB80E4 AB100A4 AB100A4	RF-10E RF-10E RF-12E	CD0816102 CD1018100 CD1220100	AF-1608 AF-1612 AF-1612	12 24 24	SBG10-0161 SBG10-0161 SBG12-0251	- STG12-0056 STG12-0058
4-71	1200 1800 2100 2300	275 425 500 550	AF-1215 AF-1215 AF-1215 AF-1215	16 24 32 32	FWA12-0003 FWA12-0003 FWA12-0003 FWA14-0003	109D 110D 110D 112D	AB80E4 AB100A4 AB120B4 AB120B4	RF-10E RF-12E RF-14E RF-14E	CD1018100 CD1220100 CD1220100 CD1420100	AF-1608 AF-1612 AF-1612 AF-1612	20 32 32 32	SBG12-0251 SBG14-0271 SBG14-0271 SBG14-0261	STG12-0058 STG12-0045 STG12-0045 STG14-0068
4-71E, N	1800 2100 2300	377 437 477	AF-1215 AF-1215 AF-1215	20 24 32	FWA12-0003 FWA14-0003 FWA14-0003	110D 110D 110D	AB100A4 AB120B4 AB120B4	RF-12E RF-12E RF-12E	CD1220100 CD1220100 CD1420101	AF-1612 AF-1612 AF-1612	20 32 32	SBG12-0251 SBG14-0271 SBG14-0271	STG12-0056 STG12-0058 STG12-0045
6-71	1200 1800 2100 2300	413 637 750 825	AF-1215 AF-1215 AF-1215 AF-1215	24 32 40 48	FWA14-0003 FWA14-0003 FWA16-0001 FWA16-0001	110D 112D 114D 114D	AB100A4 AB120B4 AB135A4 AB160B4	RF-12E RF-14E RF-16E RF-16E	CD1220102 CD1420100 CD1420100 CD1626101	AF-1616 AF-1616 AF-1624 AF-1624	32 48 48 64	SBG14-0271 SBG16-0341 SBG16-0341 SBG16-0341	STG14-0068 STG14-0059 STG14-0059 STG16-0158
6-71E, N	1800 2100 2300	564 655 715	AF-1215 AF-1215 AF-1215	32 32 40	FWA14-0003 FWA14-0003 FWA14-0003	112D 114D 114D	AB120A4 AB120A4 AB135A4	RF-14E RF-14E RF-16E	CD1220102 CD1420100 CD1420100	AF-1616 AF-1616 AF-1624	40 48 48	SBG14-0261 SBG14-0261 SBG14-0261	STG14-0068 STG14-0068 STG14-0059
2-53	1200 1800 2000	91 130 142	AF-410 AF-410 AF-410	9 9 9	FWA08-0022 FWA08-0022 FWA08-0022	106D 106D 106D	AB80D4 AB80D4 AB80D4	RF-10E RF-10E RF-10E	CD0816003 CD0816003 CD0816003	AF-410 AF-410 AF-410	9 9 9	SBG08-0010 SBG08-0010 SBG08-0010	- - -
3-53(2V)	1800 2200	202 242	AF-910 AF-910	12 12	FWA10-0017 FWA10-0017	108D 108D	AB80E4 AB80E4	RF-10E RF-10E	CD0816003 CD1018101	AF-1215 AF-1215	12 18	SBG10-0161 SBG10-0161	- STG12-0056
3-53(4V)	2200 2800	253 319	AF-910 AF-910	16 16	FWA10-0017 FWA10-0017	108D 108D	AB80E4 AB100B4	RF-10E RF-10E	CD1018101 CD1018101	AF-1215 AF-1215	18 24	SBG10-0161 SBG10-0161	STG12-0056 STG12-0056
4-53(2V)	1800 2200	282 340	AF-910 AF-910	16 20	FWA12-0003 FWA12-0003	109D 110D	AB80E4 AB100A4	RF-10E RF-10E	CD1018100 CD1018100	AF-1215 AF-1215	20 24	SBG12-0251 SBG12-0251	STG12-0056 STG12-0056
4-53(4V)	2200 2800	356 450	AF-1012 AF-1012	24 24	FWA12-0003 FWA12-0003	110D 110D	AB100A4 AB120B4	RF-12E RF-12E	CD1220100 CD1220100	AF-1612 AF-1612	24 32	SBG12-0251 SBG14-0271	STG12-0056 STG12-0056
6V-53	2200 2600 2800	534 627 675	AF-1012 AF-1215 AF-1215	32 32 40	FWA14-0003 FWA14-0003 FWA14-0003	110D 112D 112D	AB120A4 AB135A4 AB135A4	RF-14E RF-14E RF-14E	CD1420100 CD1420100 CD1420100	AF-1416 AF-1416 AF-1416	40 48 48	SBG14-0261 SBG16-0341 SBG16-0341	STG14-0068 STG14-0068 STG14-0059
8V-53	2200 2500	693 786	AF-1215 AF-1215	40 48	FWA16-0001 FWA16-0001	112D 112D	AB135A4 AB135A4	RF-16E RF-16E	CD1420100 CD1420100	AF-1416 AF-1624	48 48	SBG16-0331 SBG16-0331	STG14-0059 STG16-0158
6V-71	1800 2100 2300	564 655 715	AF-1012 AF-1215 AF-1215	32 32 40	FWA14-0003 FWA14-0003 FWA14-0003	112D 112D 112D	AB120A4 AB135A4 AB135A4	RF-14E RF-14E RF-14E	CD1420100 CD1420100 CD1420100	AF-1416 AF-1416 AF-1416	40 48 48	SBG14-0261 SBG14-0261 SBG14-0261	STG14-0068 STG14-0068 STG14-0059
8V-71	1800 2100 2300	753 874 954	AF-1215 AF-1012(2) AF-1012(2)	48 48 64	FWA16-0001 FWA16-0001 FWA16-0001	114D 114D 114D	AB135A4 AB160A4 AB160A4	RF-16E RF-16E RF-16E	CD1626100 CD1626100 CD1626100	AF-1416 AF-1424 AF-1424	48 64 64	SBG16-0331 SBG16-0331 SBG16-0335	STG16-0158 STG16-0158 STG16-0158
8V-71T **	1800 2100	1100 1200	AF-1215(2) AF-1215(2)	64 64	FWA16-0001(2) FWA16-0001(2)	112D(2) 112D(2)	- -	- -	- -	- -	48(2) 48(2)	SBG16-0331(2) SBG16-0331(2)	STG16-0092(2) STG16-0092(2)
12V-71	1800 2100 2300	1128 1309 1430	AF-1215(2) AF-1215(2) AF-1215(2)	64 40(2) 48(2)	FWA14-0003(2) FWA14-0003(2) FWA14-0003(2)	112D(2) 112D(2) 112D(2)	AB120A4(2) AB135A4(2) AB135A4(2)	RF-14E(2) RF-14E(2) RF-16E(2)	CD1420100(2) CD1420100(2) CD1420100(2)	AF-1416(2) AF-1416(2) AF-1624(2)	40(2) 48(2) 48(2)	SBG14-0261(2) SBG14-0261(2) SBG14-0261(2)	STG14-0068(2) STG14-0068(2) STG14-0059(2)
12V-71T **	1800 2100	1650 1800	- -	64(2) 64(2)	- -	- -	- -	- -	- -	AF-1624(2) AF-1624(2)	64(2) 64(2)	SBG16-0335(2) SBG16-0335(2)	STG16-0092(2) STG16-0092(2)
16V-71	1800 2100	1506 1748	- -	64(2) 64(2)	FWA16-0001(2) FWA16-0001(2)	114D(2) 114D(2)	AB135A4(2) AB160A4(2)	RF-16E(2) RF-16E(2)	CD1626100(2) CD1626100(2)	- -	64(2) 64(2)	SBG16-0331(2) SBG16-0331(2)	STG16-0158(2) STG16-0158(2)
16V-71T **	1800 2100	2240 2300	- -	64(2) 64(2)	- -	- -	- -	- -	- -	- -	- -	- -	SEG18-0004(2) SEG18-0004(2)
12V-149	1900	2800	-	-	-	-	-	-	DN285S	-	48(4)	-	SEG18-0004(2)
12V-149T	1900	3600	-	-	-	-	-	-	DN325S	-	-	-	SEG22-0002(2)
16V-149	1900	3600	-	-	-	-	-	-	DN325S	-	-	-	SEG19-0002(2)
16V-149T	1900	4800	-	-	-	-	-	-	DN365S	-	-	-	SEG21-0003(4)

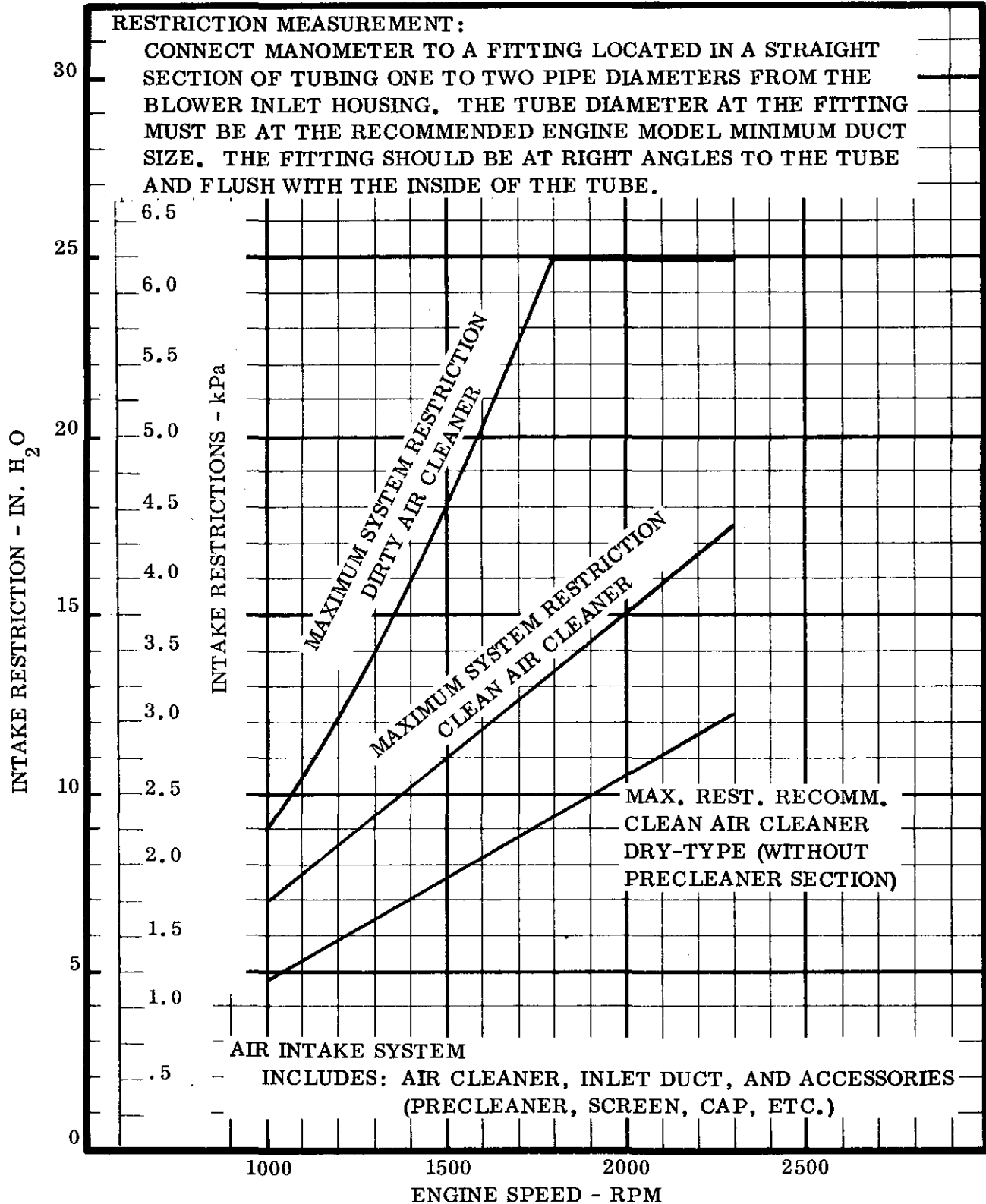
*75mm
**80mm

(see reverse side)



Detroit Diesel Allison
Division of General Motors Corporation

SERIES 71, 71N, & V71N
AIR INTAKE RESTRICTION
(NON-TURBOCHARGED)



S1-0000-00-2

Rev. 12-4-74

ENGINEERING-TECHNICAL DATA DEPT.



Detroit Diesel Allison
Division of General Motors Corporation

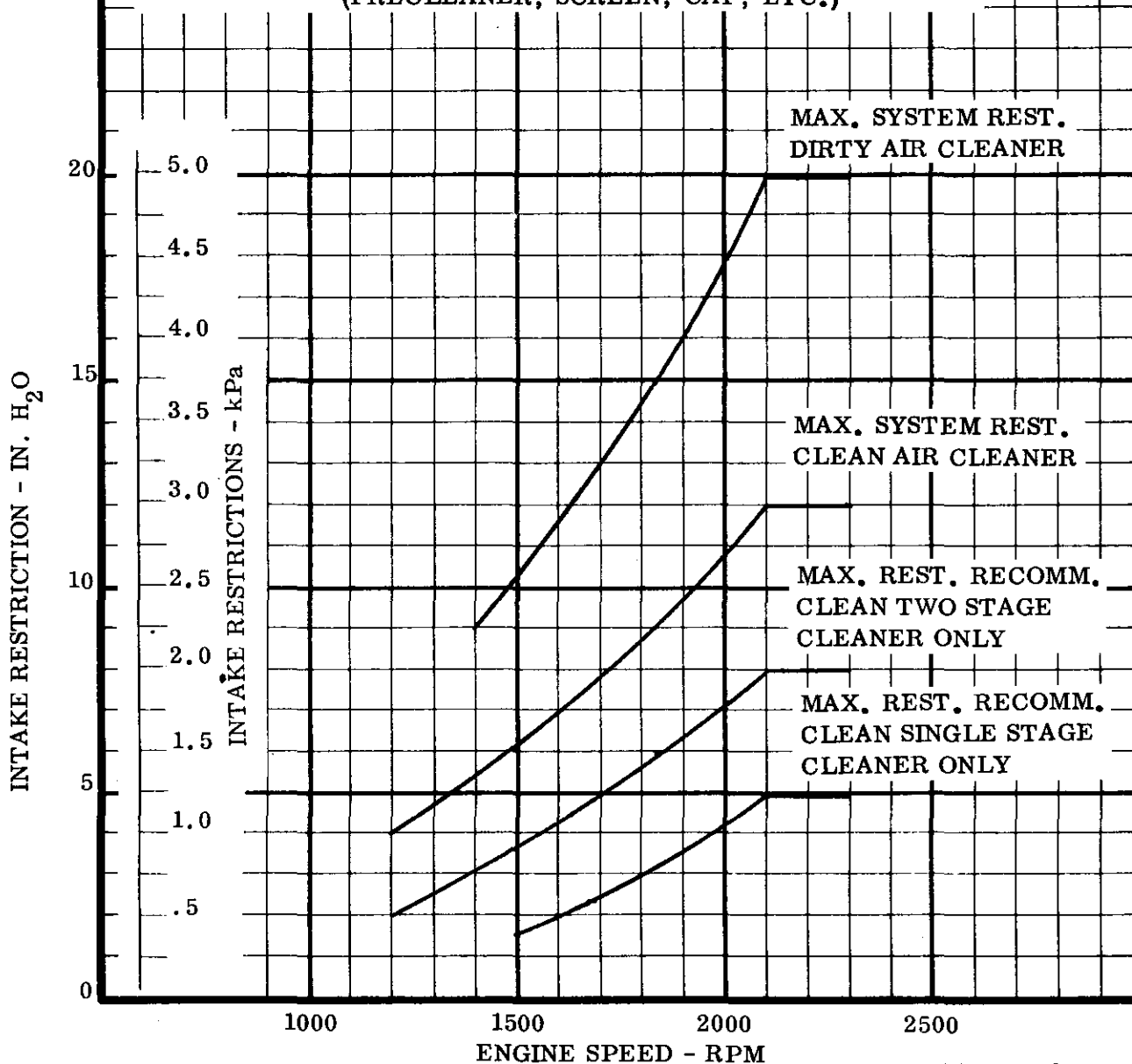
SERIES V-71 & V-92 TURBOCHARGED ENGINES
AIR INTAKE RESTRICTION
FULL LOAD

RESTRICTION MEASUREMENT:

CONNECT MANOMETER TO A FITTING LOCATED IN A STRAIGHT SECTION OF TUBING ONE TO TWO PIPE DIAMETERS FROM THE TURBOCHARGER COMPRESSOR INLET. THE TUBE DIAMETER AT THE FITTING MUST BE AT THE RECOMMENDED ENGINE MODEL MINIMUM DUCT SIZE. THE FITTING SHOULD BE AT RIGHT ANGLES TO THE TUBE AND FLUSH WITH THE INSIDE OF THE TUBE.

AIR INTAKE SYSTEM

INCLUDES: AIR CLEANER, INLET DUCT, AND ACCESSORIES (PRECLEANER, SCREEN, CAP, ETC.)





Detroit Diesel Allison
Division of General Motors Corporation

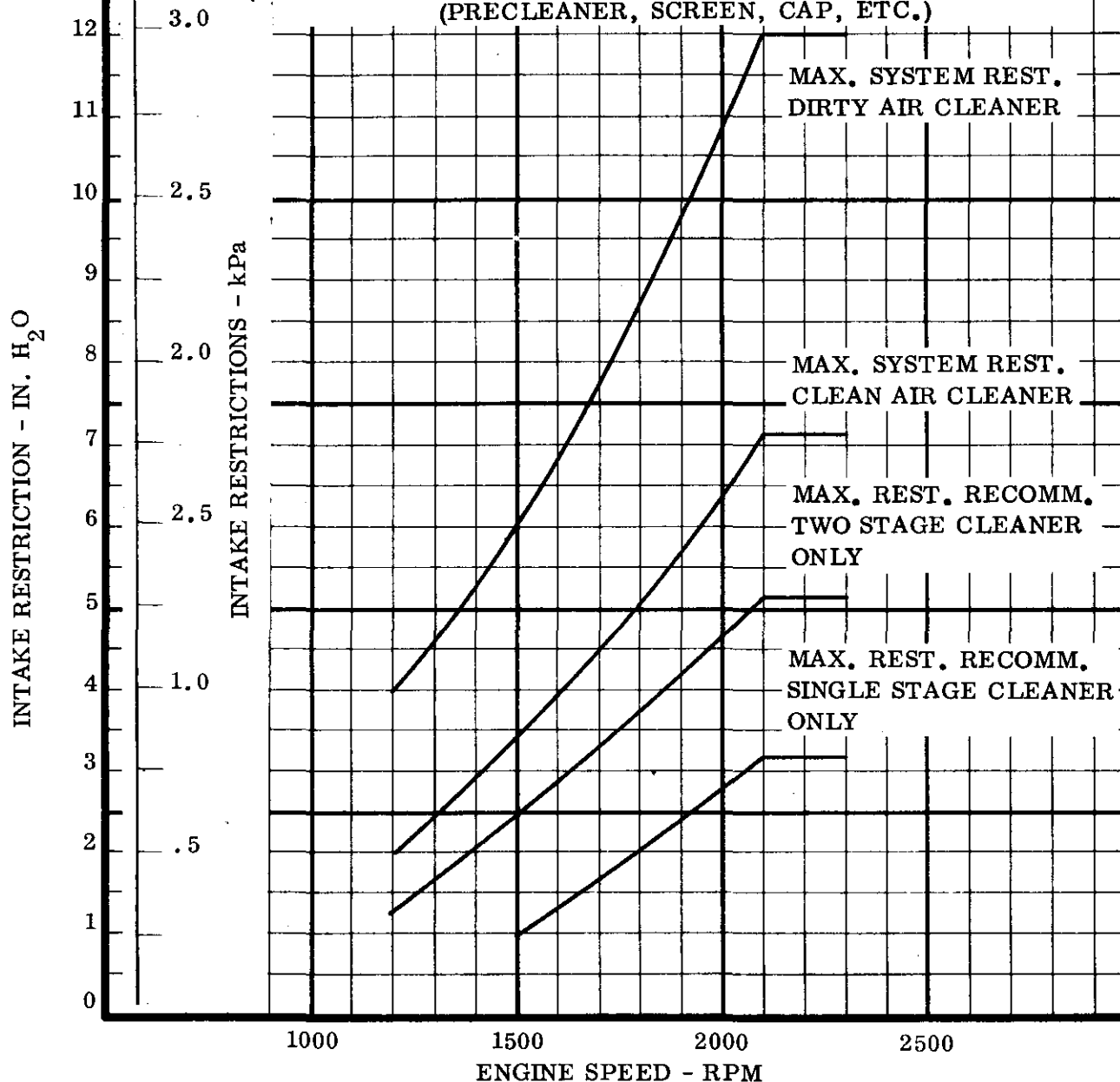
SERIES V-71 & V-92 TURBOCHARGED ENGINES
AIR INTAKE RESTRICTION
NO LOAD

RESTRICTION MEASUREMENT:

CONNECT MANOMETER TO A FITTING LOCATED IN A STRAIGHT SECTION OF TUBING ONE TO TWO PIPE DIAMETERS FROM THE TURBOCHARGER COMPRESSOR INLET. THE TUBE DIAMETER AT THE FITTING MUST BE AT THE RECOMMENDED ENGINE MODEL MINIMUM DUCT SIZE. THE FITTING SHOULD BE AT RIGHT ANGLES TO THE TUBE AND FLUSH WITH THE INSIDE OF THE TUBE.

AIR INTAKE SYSTEM

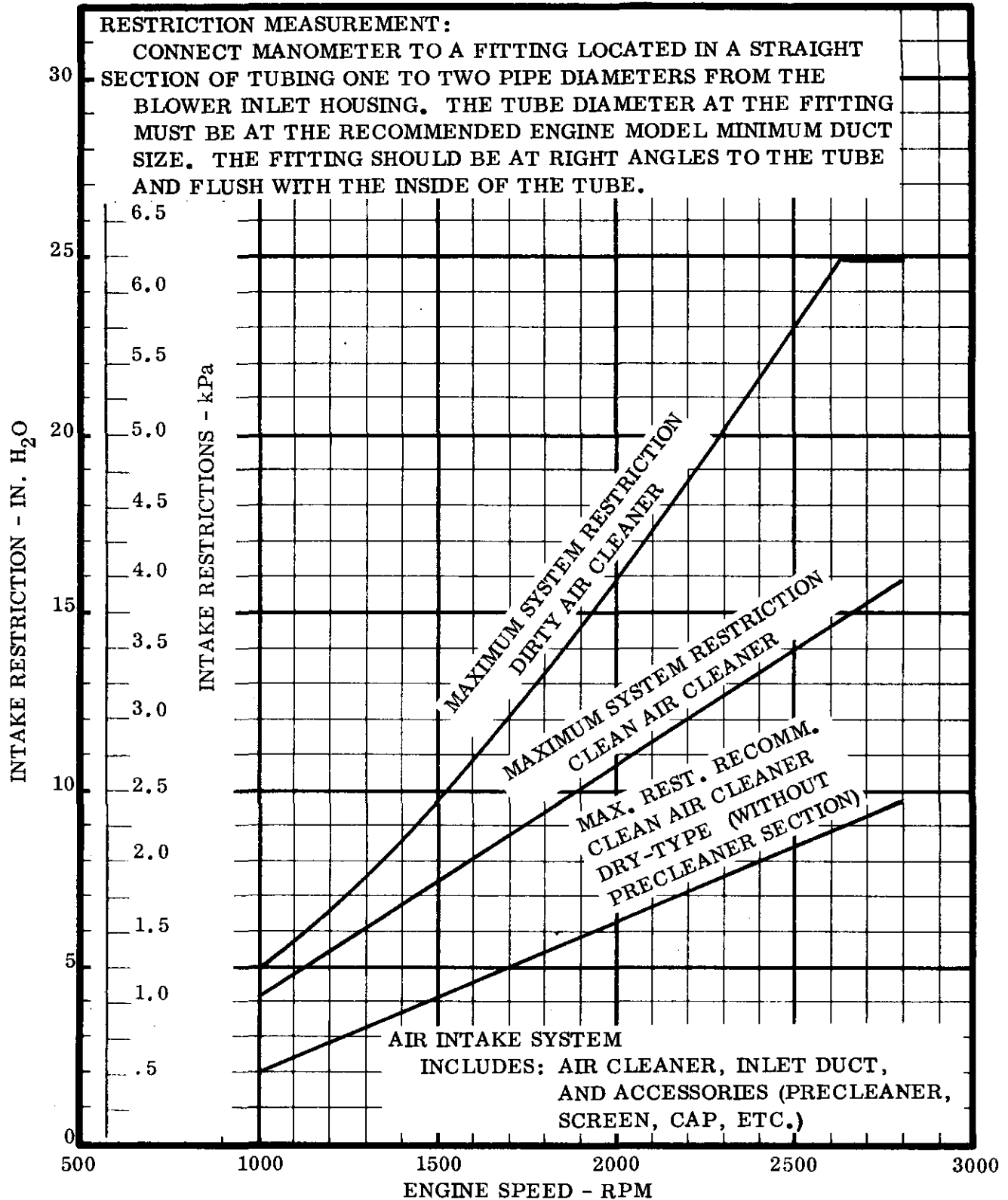
INCLUDES: AIR CLEANER, INLET DUCT, AND ACCESSORIES (PRECLEANER, SCREEN, CAP, ETC.)





Detroit Diesel Allison
Division of General Motors Corporation

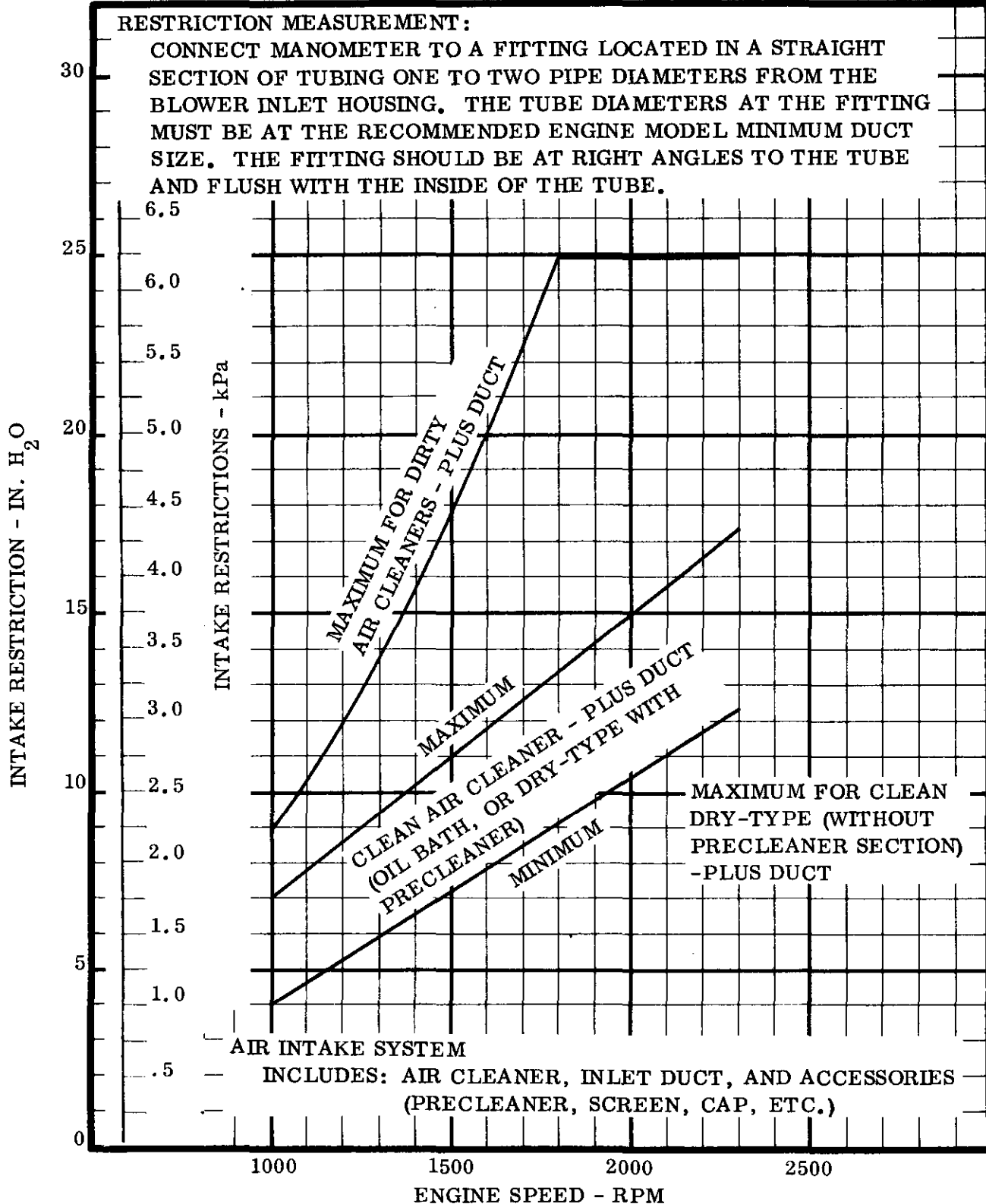
**SERIES 53 & 53N ENGINES
AIR INTAKE RESTRICTION
(NON-TURBOCHARGED)**





Detroit Diesel Allison
Division of General Motors Corporation

SERIES 92
AIR INTAKE RESTRICTION
(NON-TURBOCHARGED)



S1-8000-00-1

12-4-74

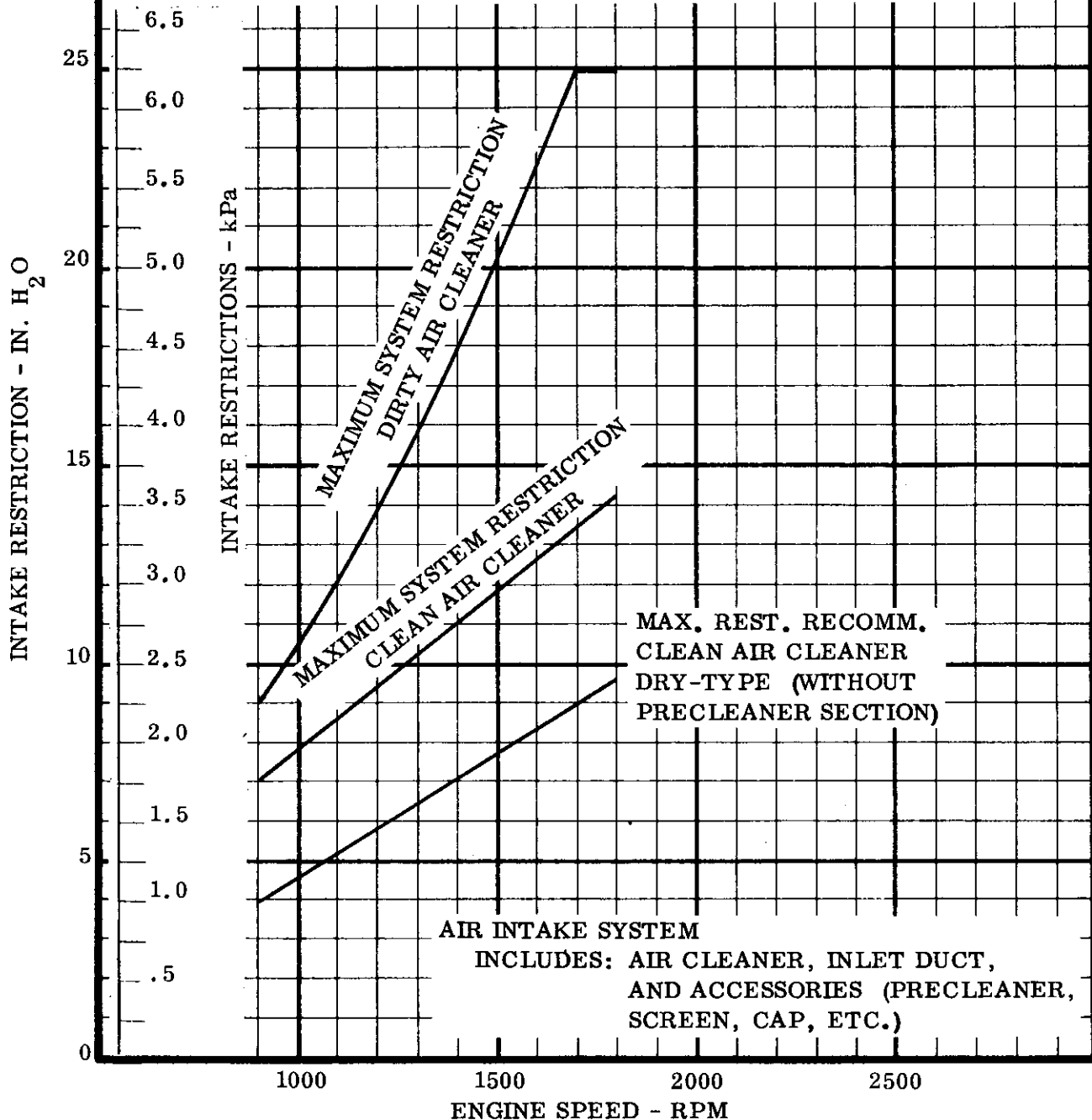


Detroit Diesel Allison
Division of General Motors Corporation

SERIES V149
AIR INTAKE RESTRICTION
(NON-TURBOCHARGED)

RESTRICTION MEASUREMENT:

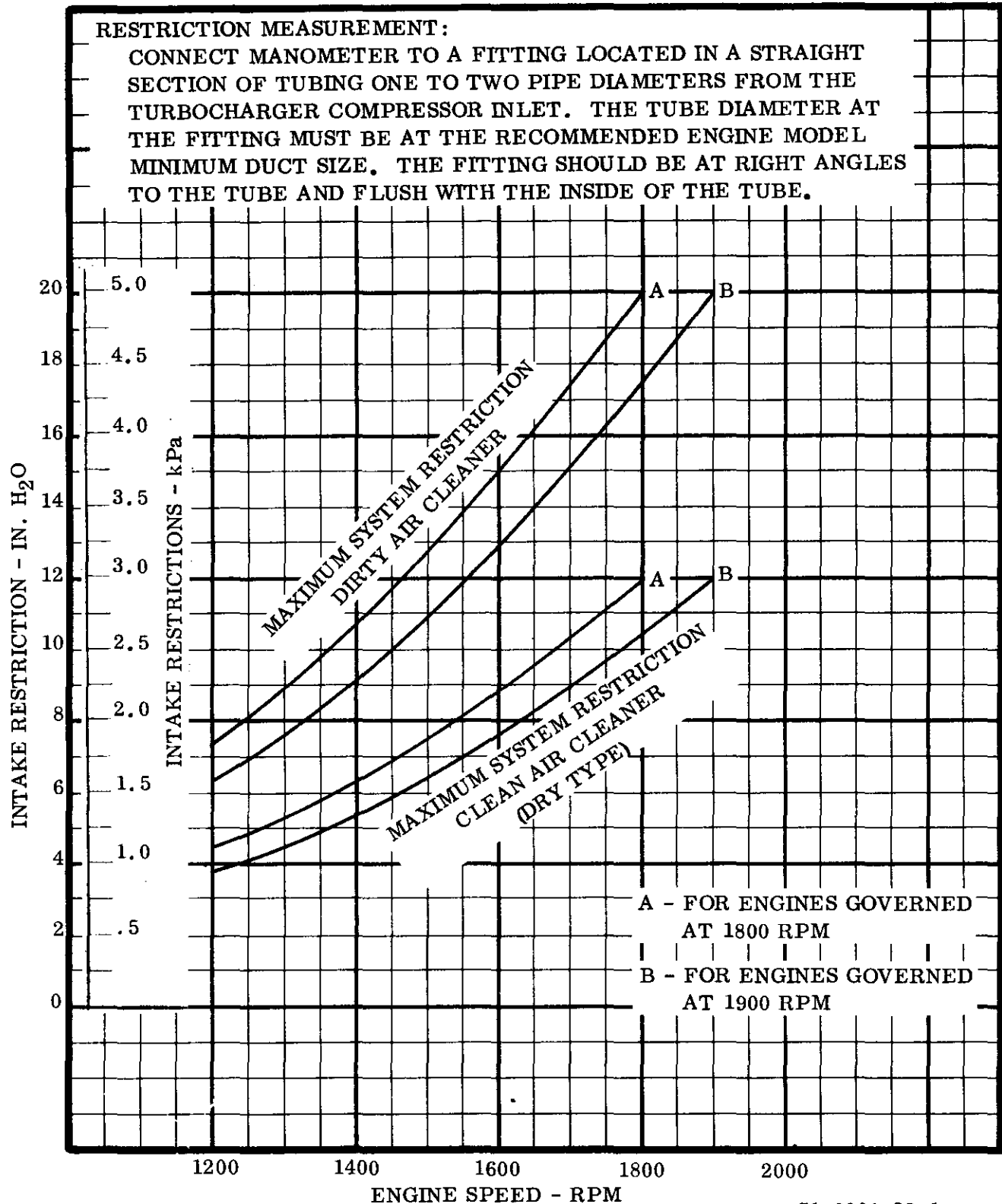
CONNECT MANOMETER TO A FITTING LOCATED IN A STRAIGHT SECTION OF TUBING ONE TO TWO PIPE DIAMETERS FROM THE BLOWER INLET HOUSING. THE TUBE DIAMETER AT THE FITTING MUST BE AT THE RECOMMENDED ENGINE MODEL MINIMUM DUCT SIZE. THE FITTING SHOULD BE AT RIGHT ANGLES TO THE TUBE AND FLUSH WITH THE INSIDE OF THE TUBE.





Detroit Diesel Allison
Division of General Motors Corporation

SERIES 149T & 149TI ENGINES
AIR INTAKE RESTRICTION
FULL LOAD





Detroit Diesel Allison
Division of General Motors Corporation

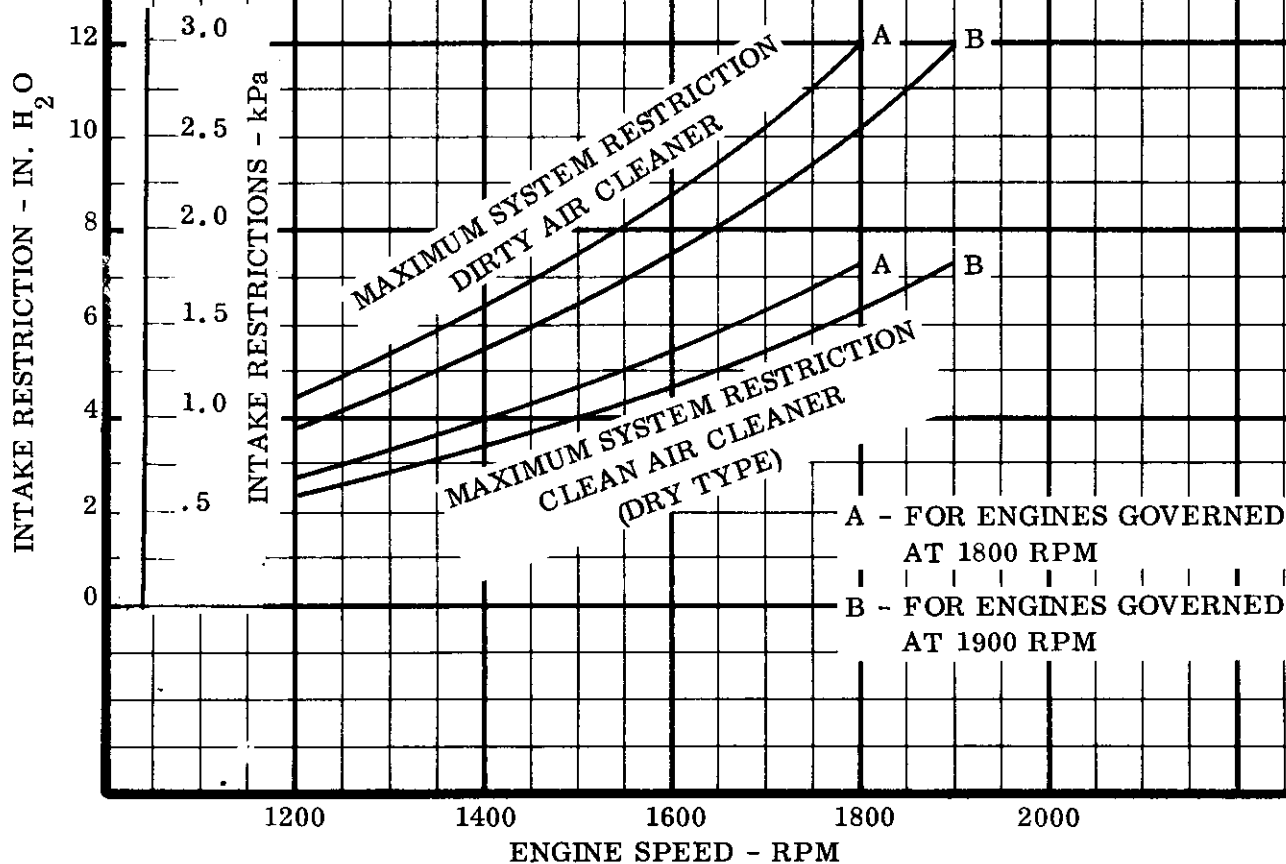
SERIES 149T & 149TI ENGINES
AIR INTAKE RESTRICTION
NO LOAD

RESTRICTION MEASUREMENT:

CONNECT MANOMETER TO A FITTING LOCATED IN A STRAIGHT SECTION OF TUBING ONE TO TWO PIPE DIAMETERS FROM THE TURBOCHARGER COMPRESSOR INLET. THE TUBE DIAMETER AT THE FITTING MUST BE AT THE RECOMMENDED ENGINE MODEL MINIMUM DUCT SIZE. THE FITTING SHOULD BE AT RIGHT ANGLES TO THE TUBE AND FLUSH WITH THE INSIDE OF THE TUBE.

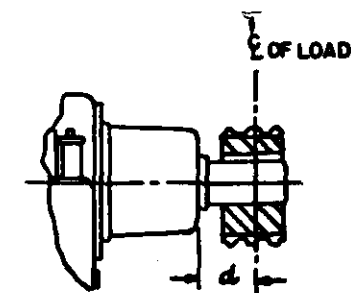
AIR INTAKE SYSTEM

INCLUDES: AIR CLEANER, INLET DUCT, AND ACCESSORIES (PRECLEANER, SCREEN, CAP, ETC.)





POWER TAKE-OFF SPROCKET CHART **TG-240, 320 AND 370 SERIES ALLISON CONVERTERS** **WITH HEAVY DUTY OUTPUT SHAFT** *** (CHAIN DRIVE ONLY)**



EXAMPLES:

DISTANCE FROM HOUSING TO ϵ OF LOAD (d) -

CONVERTER OUTPUT TORQUE -
 THEN MIN. PITCH DIAMETER -

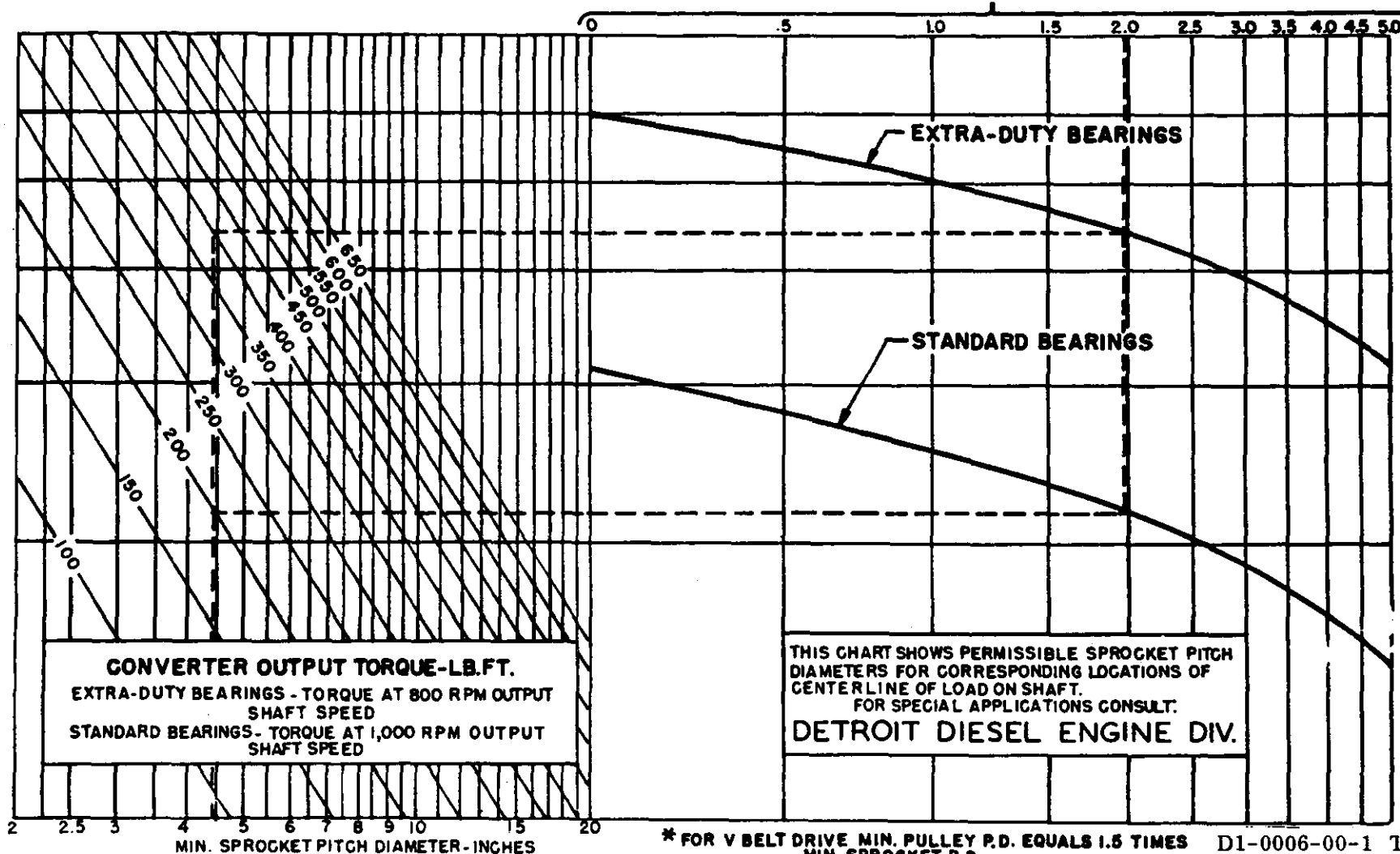
STANDARD BEARINGS
 2"

200 (AT 1,000 RPM)
 4.5 INCHES

EXTRA-DUTY BEARINGS
 2"

400 (AT 800 RPM)
 4.4 INCHES

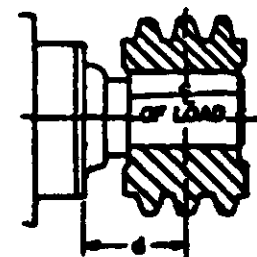
d = DISTANCE FROM HOUSING
 TO CENTERLINE OF LOAD
 IN INCHES. (DO NOT EXCEED
 5 INCHES)





POWER TAKE-OFF SPROCKET CHART
FOR TC-400, 500 & 600 SERIES ALLISON CONVERTERS
WITH HEAVY DUTY OUTPUT SHAFT

*(CHAIN DRIVE ONLY)



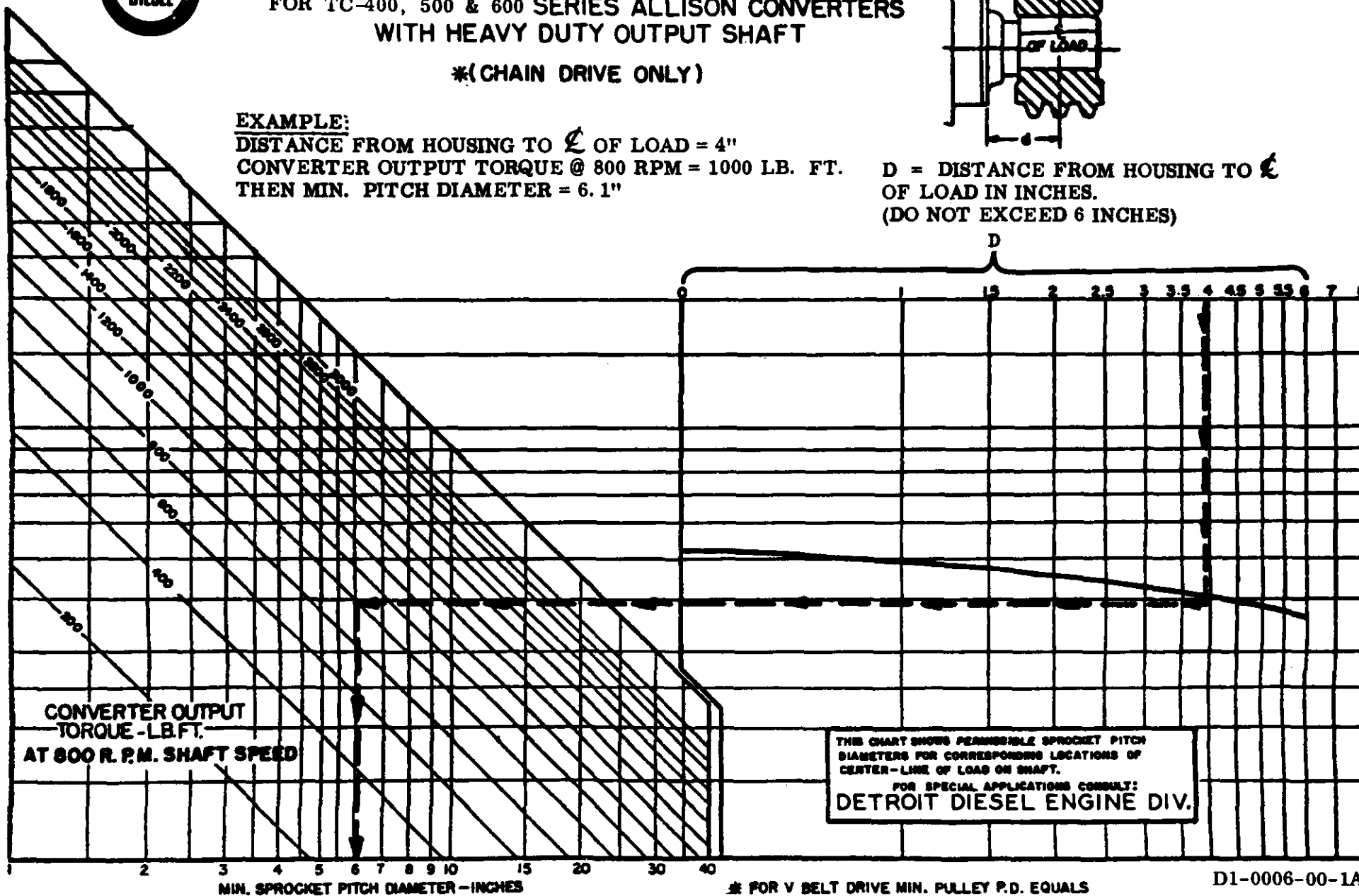
EXAMPLE:

DISTANCE FROM HOUSING TO $\mathcal{L}$ OF LOAD = 4"

CONVERTER OUTPUT TORQUE @ 800 RPM = 1000 LB. FT.

THEN MIN. PITCH DIAMETER = 6.1"

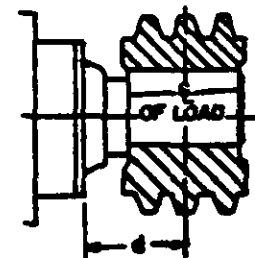
D = DISTANCE FROM HOUSING TO $\mathcal{L}$
OF LOAD IN INCHES.
(DO NOT EXCEED 6 INCHES)





POWER TAKE-OFF SPROCKET CHART FOR TC-800 & 900 SERIES ALLISON CONVERTERS WITH HEAVY DUTY OUTPUT SHAFT

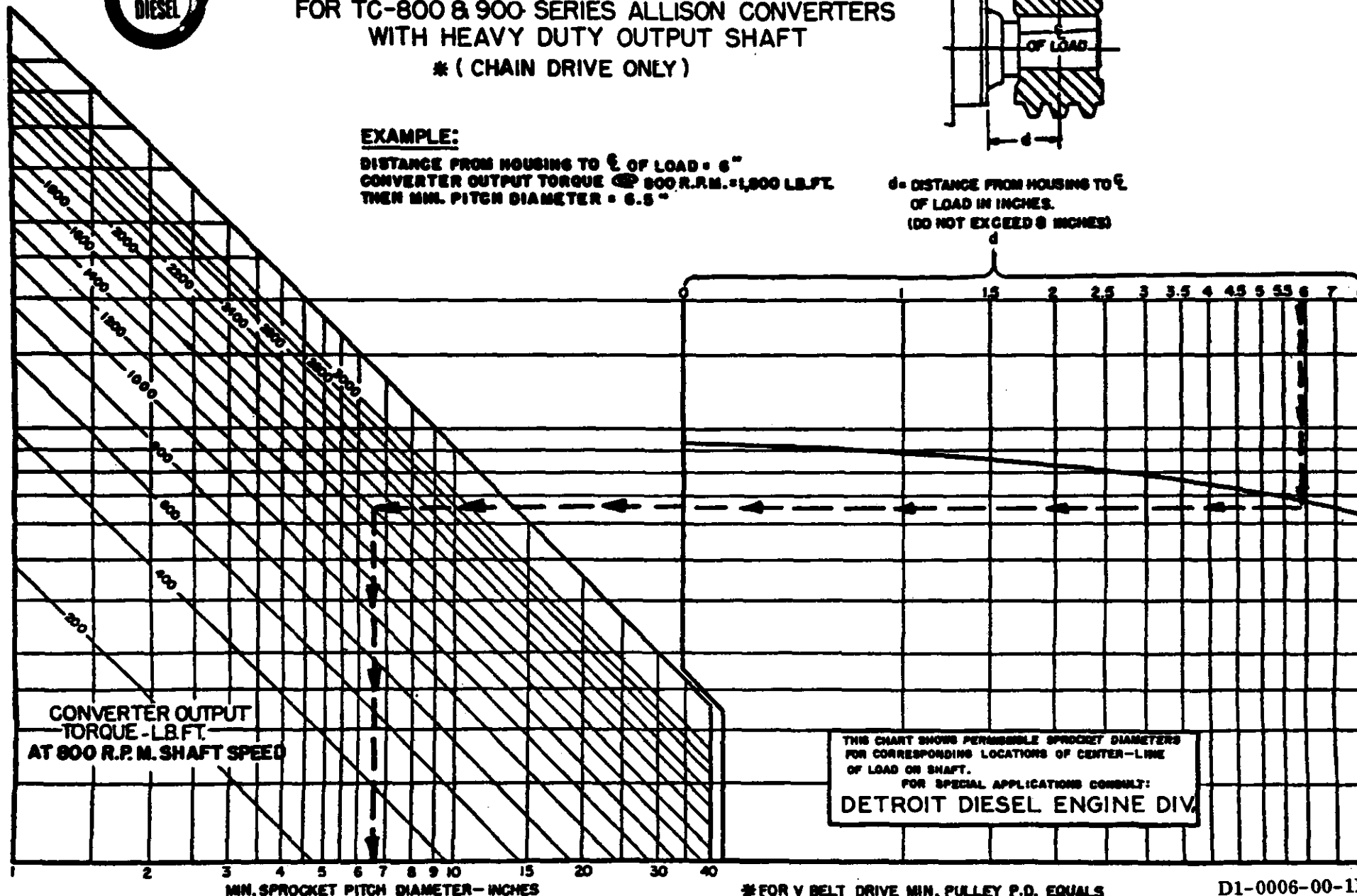
*(CHAIN DRIVE ONLY)



EXAMPLE:

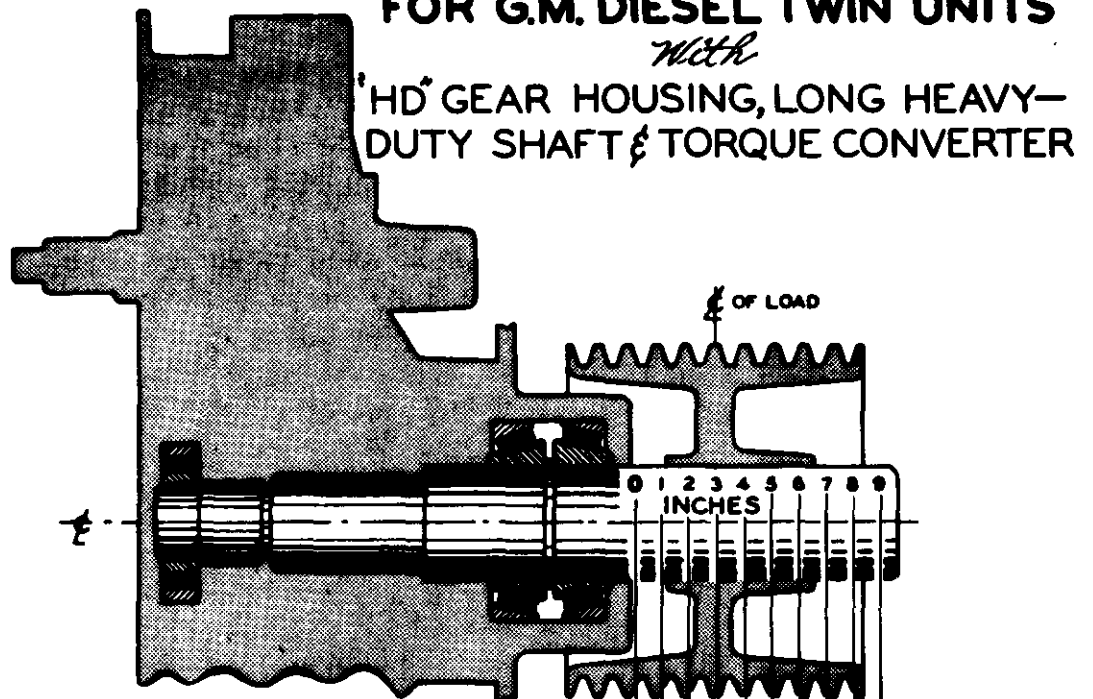
DISTANCE FROM HOUSING TO $\bar{C}$ OF LOAD = 6"
CONVERTER OUTPUT TORQUE @ 800 R.P.M. = 1,500 LB.FT.
THEN MIN. PITCH DIAMETER = 6.5"

d = DISTANCE FROM HOUSING TO $\bar{C}$
OF LOAD IN INCHES.
(DO NOT EXCEED 8 INCHES)





POWER TAKE-OFF PULLEY CHART FOR G.M. DIESEL TWIN UNITS

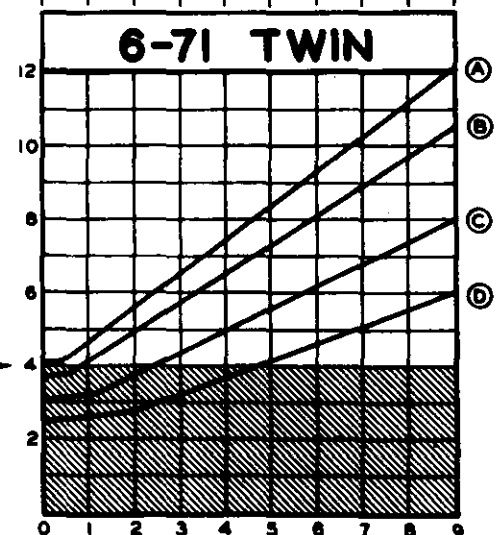
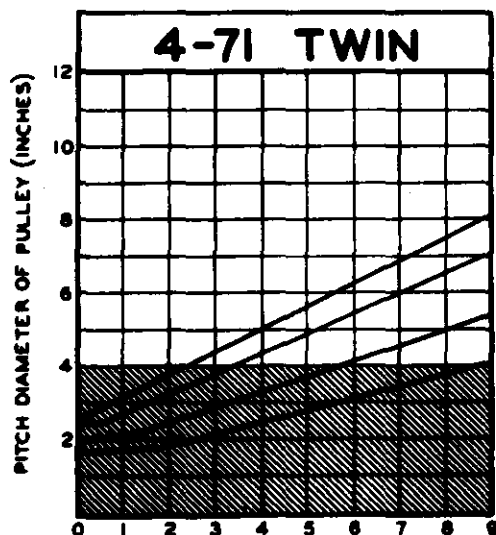


CHARTS SHOW MINIMUM PERMISSIBLE PULLEY PITCH DIAMETERS FOR CORRESPONDING CENTER-LINE OF LOAD ON SHAFT. PULLEY DIAMETER FOR CHAIN DRIVE IS SHOWN. CALCULATE DIAMETER FOR V BELT AND FLAT BELT DRIVES.

FOR SPECIAL INSTALLATIONS CONSULT DETROIT DIESEL ENGINEERING DEPARTMENT FOR RECOMMENDATIONS.

— GEAR RATIO —	
(A) — 2:1	(B) — 1.75:1
(C) — 1.33:1	(D) — 1:1

PULLEY PITCH DIA.	
CHAIN	— SHOWN
V BELT	— 1.5 × CHAIN
FLAT BELT	— 2.0 × CHAIN



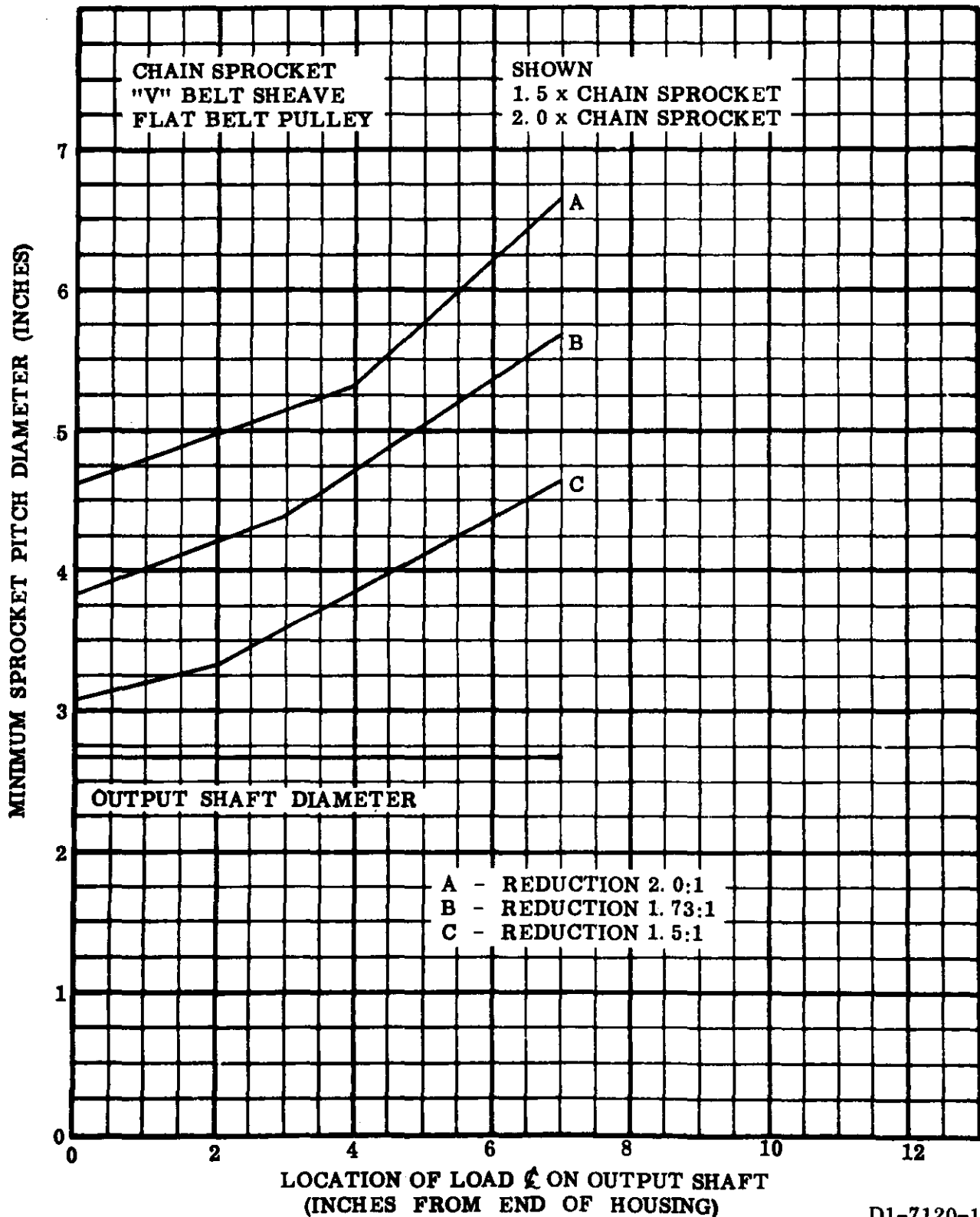
LOCATION OF LOAD CENTERLINE



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

12V-71 ENGINE
CHAIN SPROCKET PITCH DIAMETERS
(COTTA MODEL GR15A)

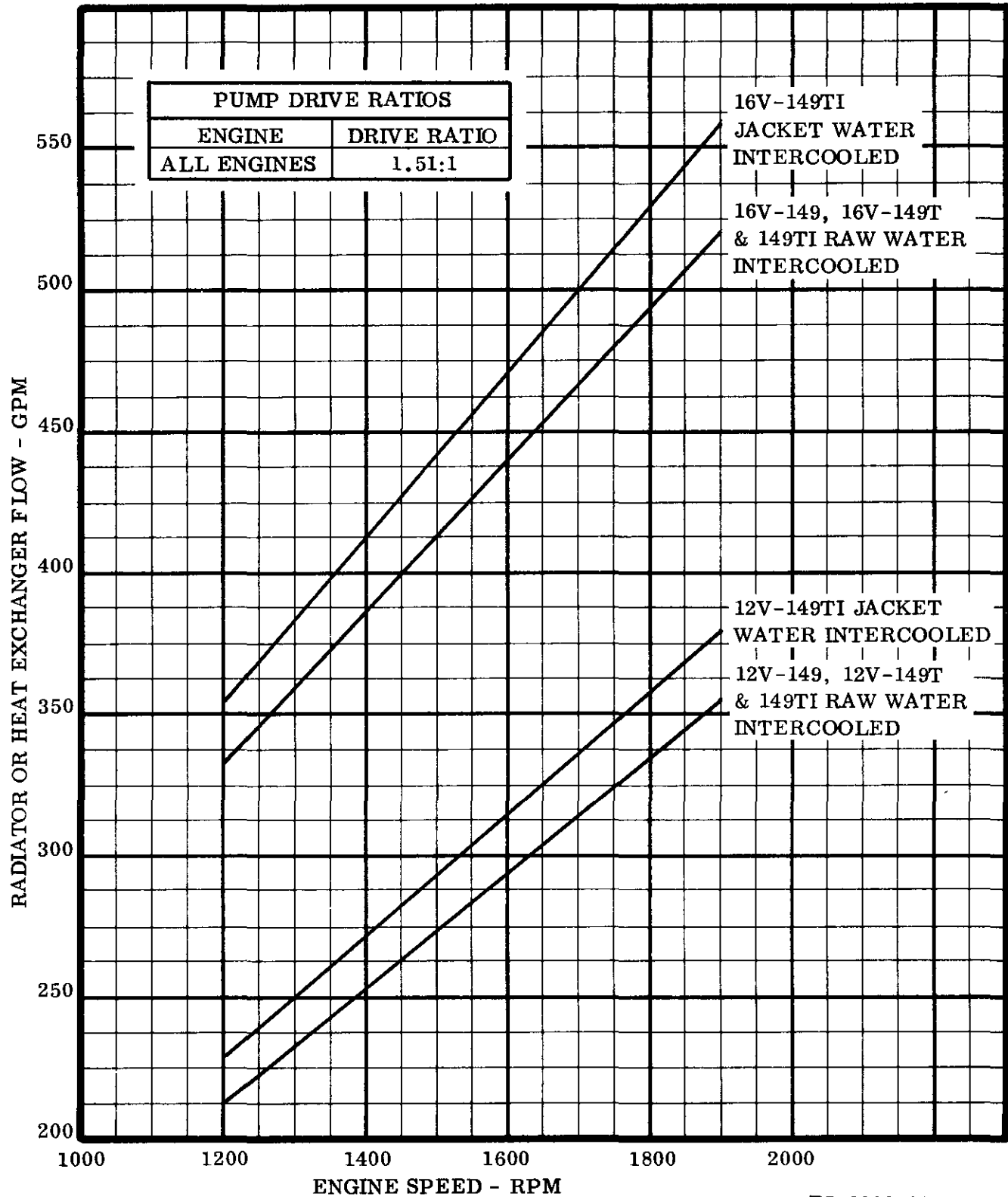


WATER PUMP FLOW



Detroit Diesel Allison
Division of General Motors Corporation

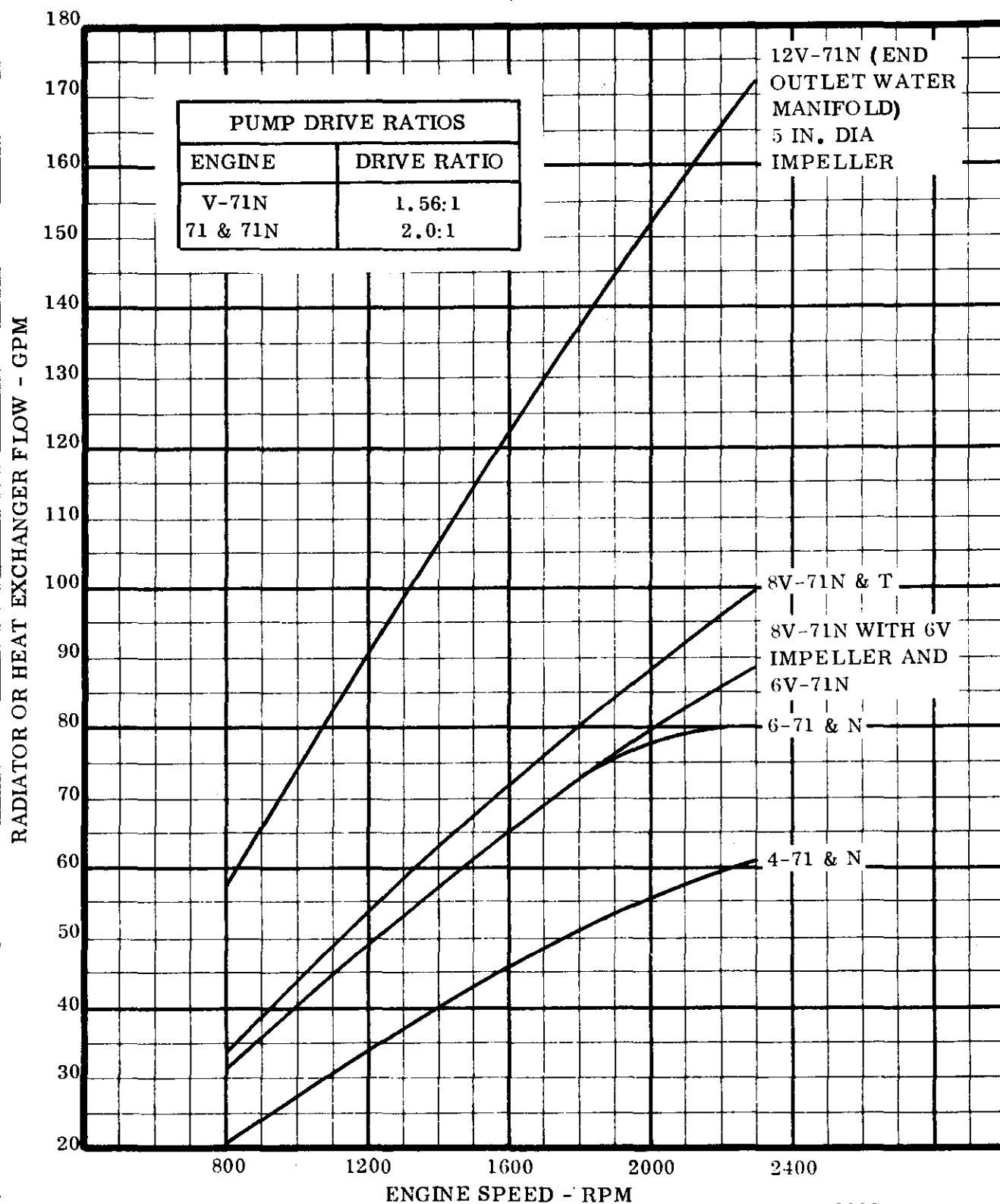
149, 149T AND 149TI
ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
180°F COOLANT TEMPERATURE
BLOCKING TYPE THERMOSTAT





Detroit Diesel Allison
Division of General Motors Corporation

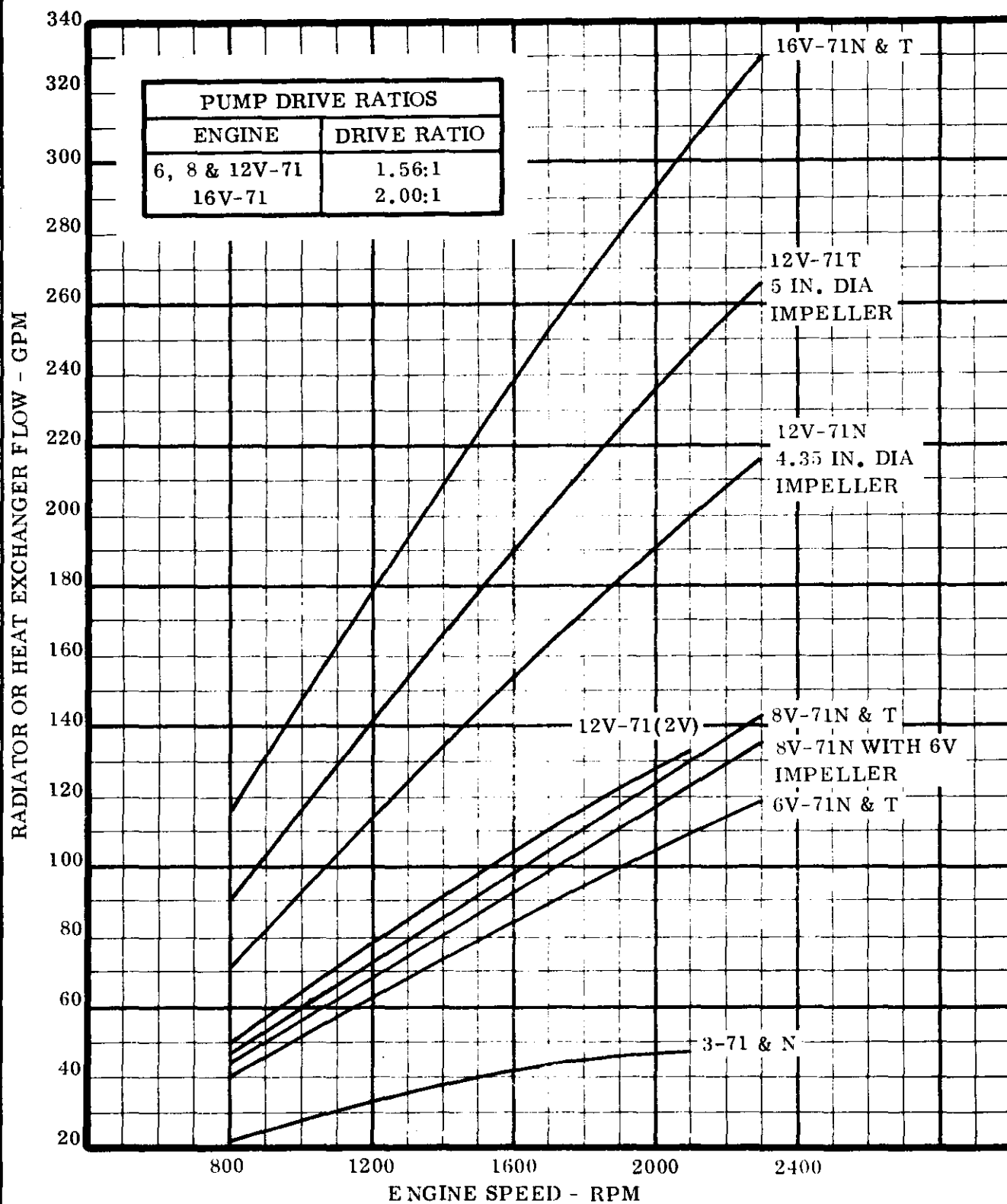
ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
180°F TEMPERATURE
PARTIAL BLOCKING TYPE THERMOSTAT





Detroit Diesel Allison
Division of General Motors Corporation

ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
180°F TEMPERATURE
BLOCKING TYPE THERMOSTAT

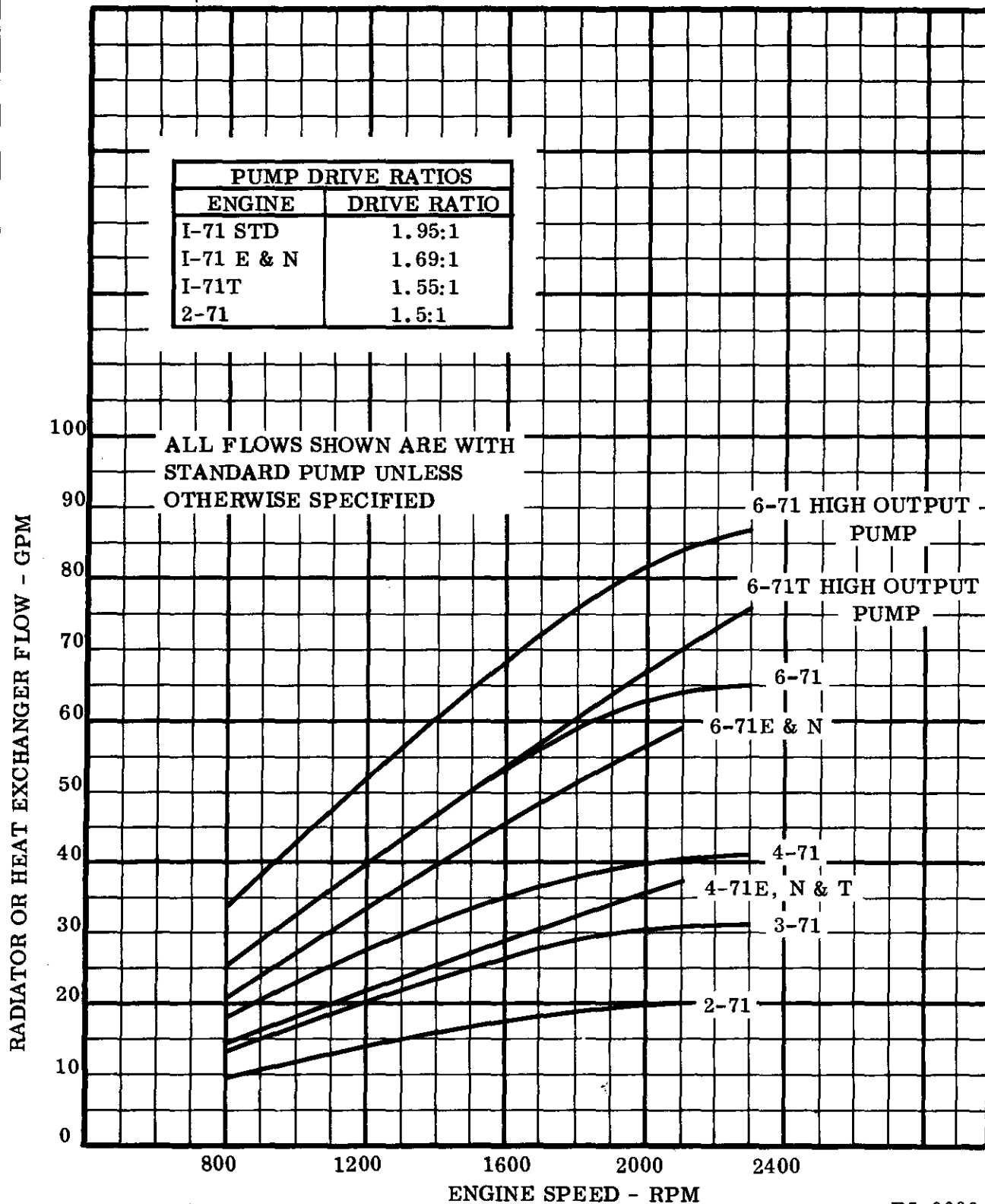




DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

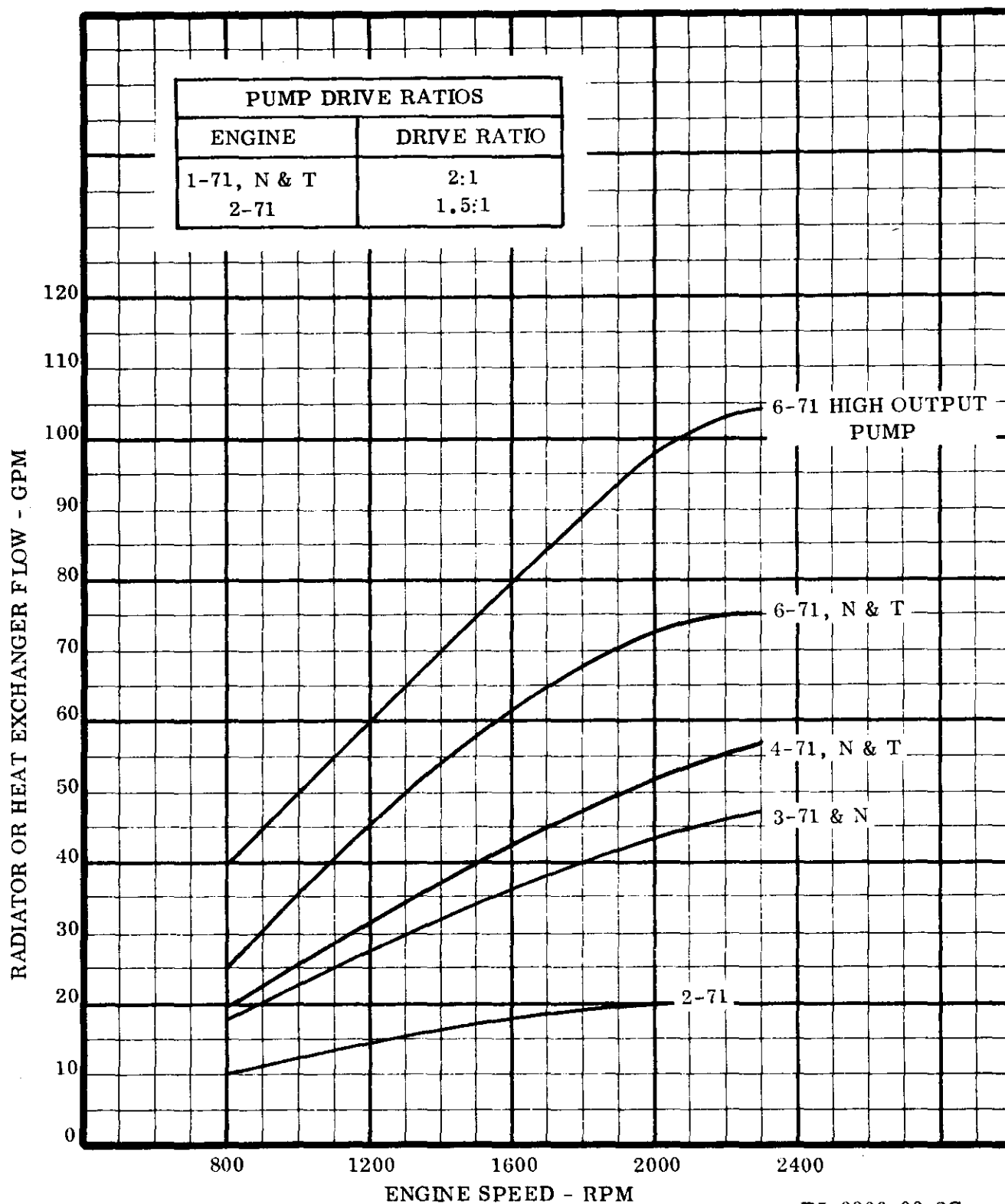
ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
180°F TEMPERATURE
NON-BLOCKING TYPE THERMOSTAT





Detroit Diesel Allison
Division of General Motors Corporation

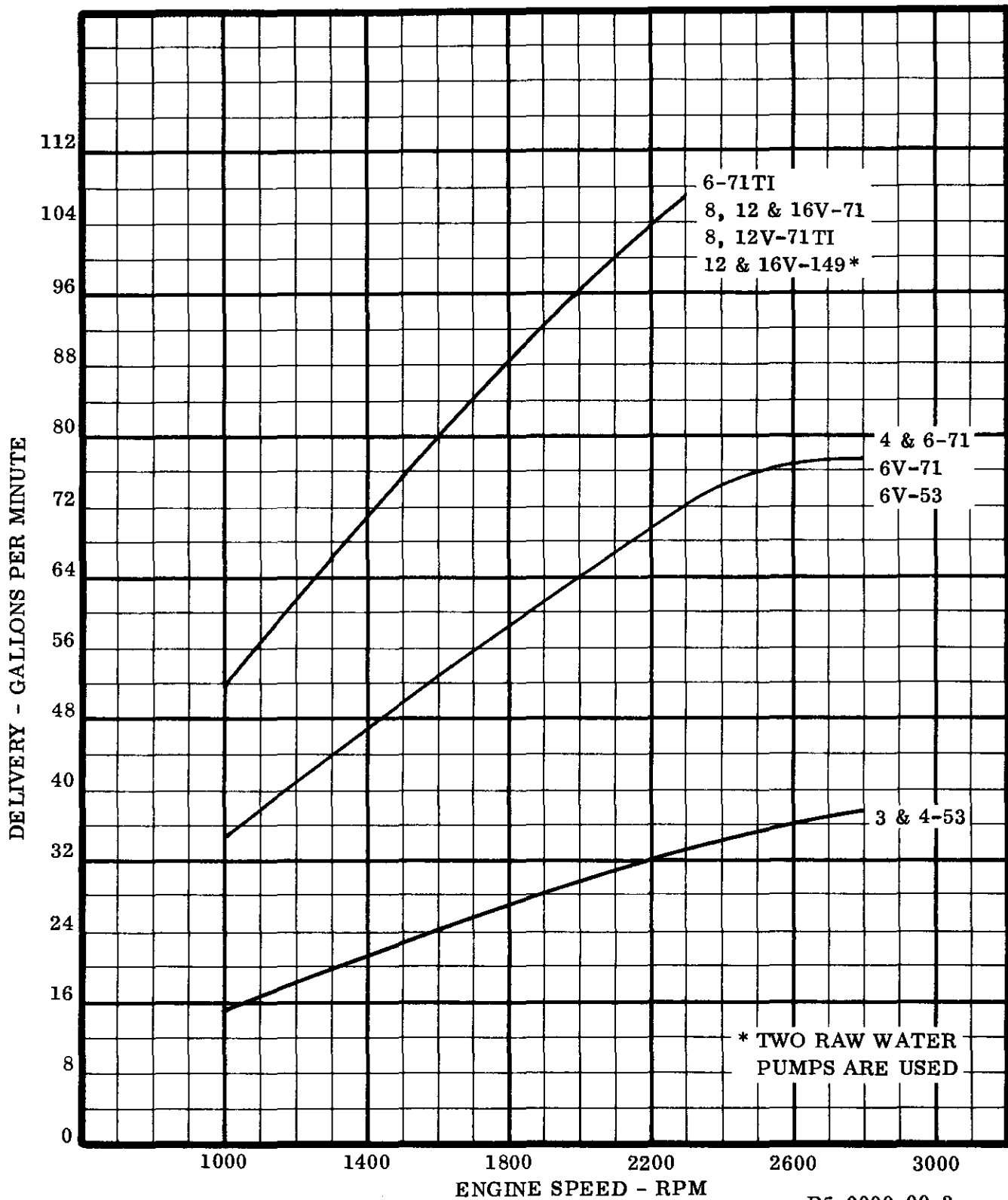
ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
180°F TEMPERATURE
NON-BLOCKING TYPE THERMOSTAT





Detroit Diesel Allison
Division of General Motors Corporation

**RAW WATER PUMP
PERFORMANCE DATA
AT 5 IN. HG SUCTION AND
10 PSI DISCHARGE PRESSURE**



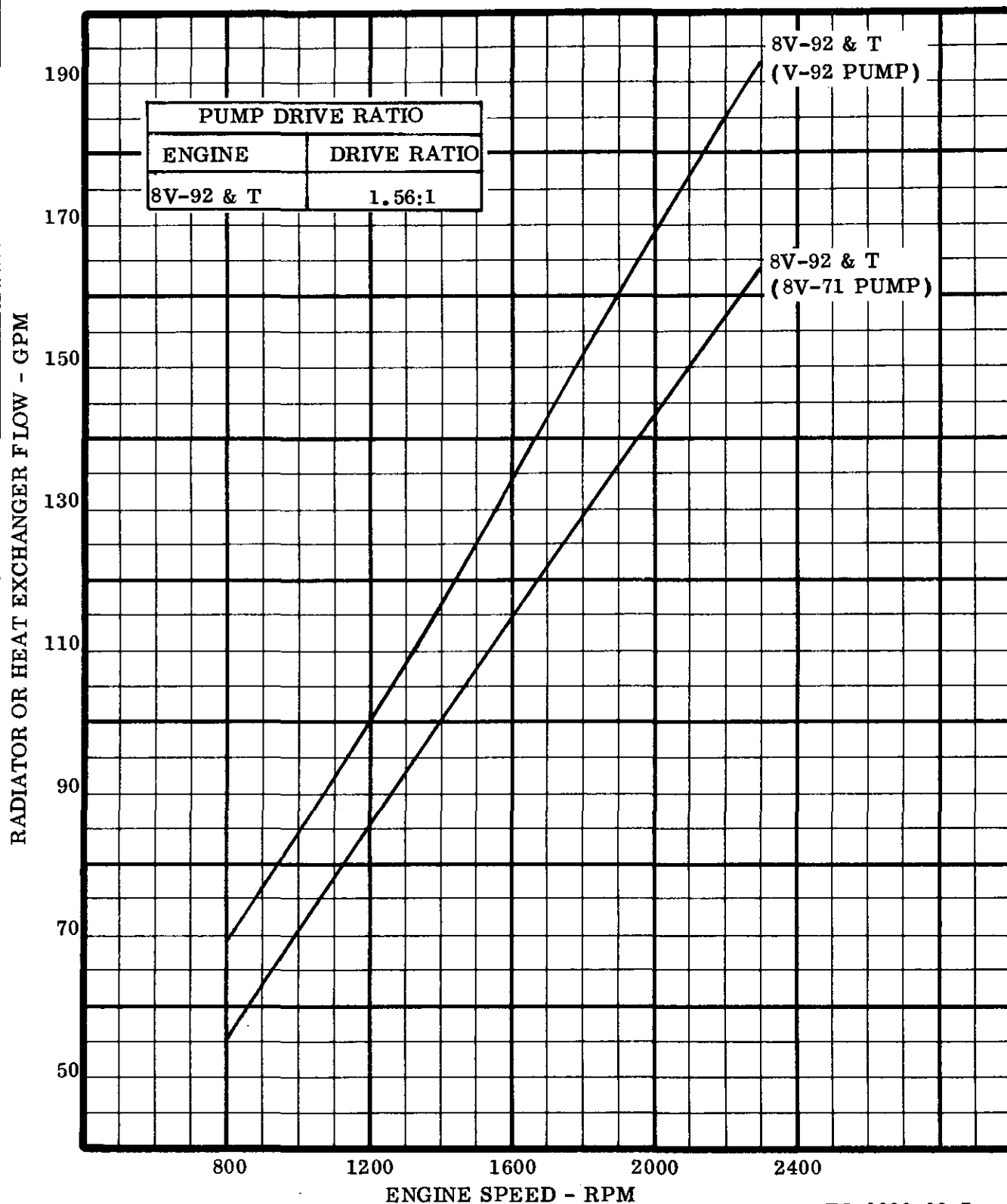
ENGINEERING-TECHNICAL DATA DEPT.

P5-0000-00-3
Rev. 12-18-73



Detroit Diesel Allison
Division of General Motors Corporation

ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
BLOCKING TYPE THERMOSTAT



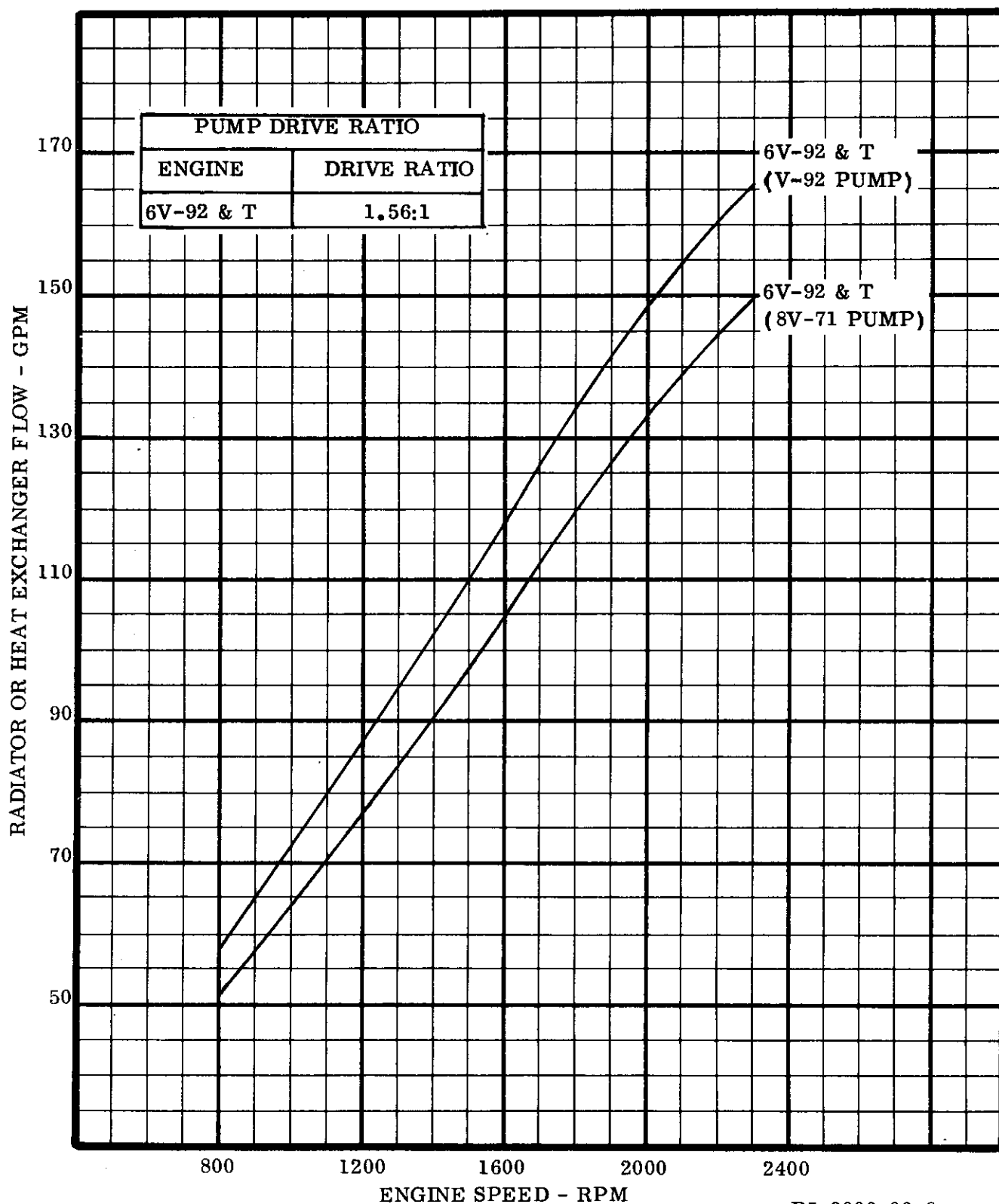
P5-0000-00-7
1-16-74

ENGINEERING-TECHNICAL DATA DEPT.



Detroit Diesel Allison
Division of General Motors Corporation

ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
BLOCKING TYPE THERMOSTAT



P5-0000-00-8

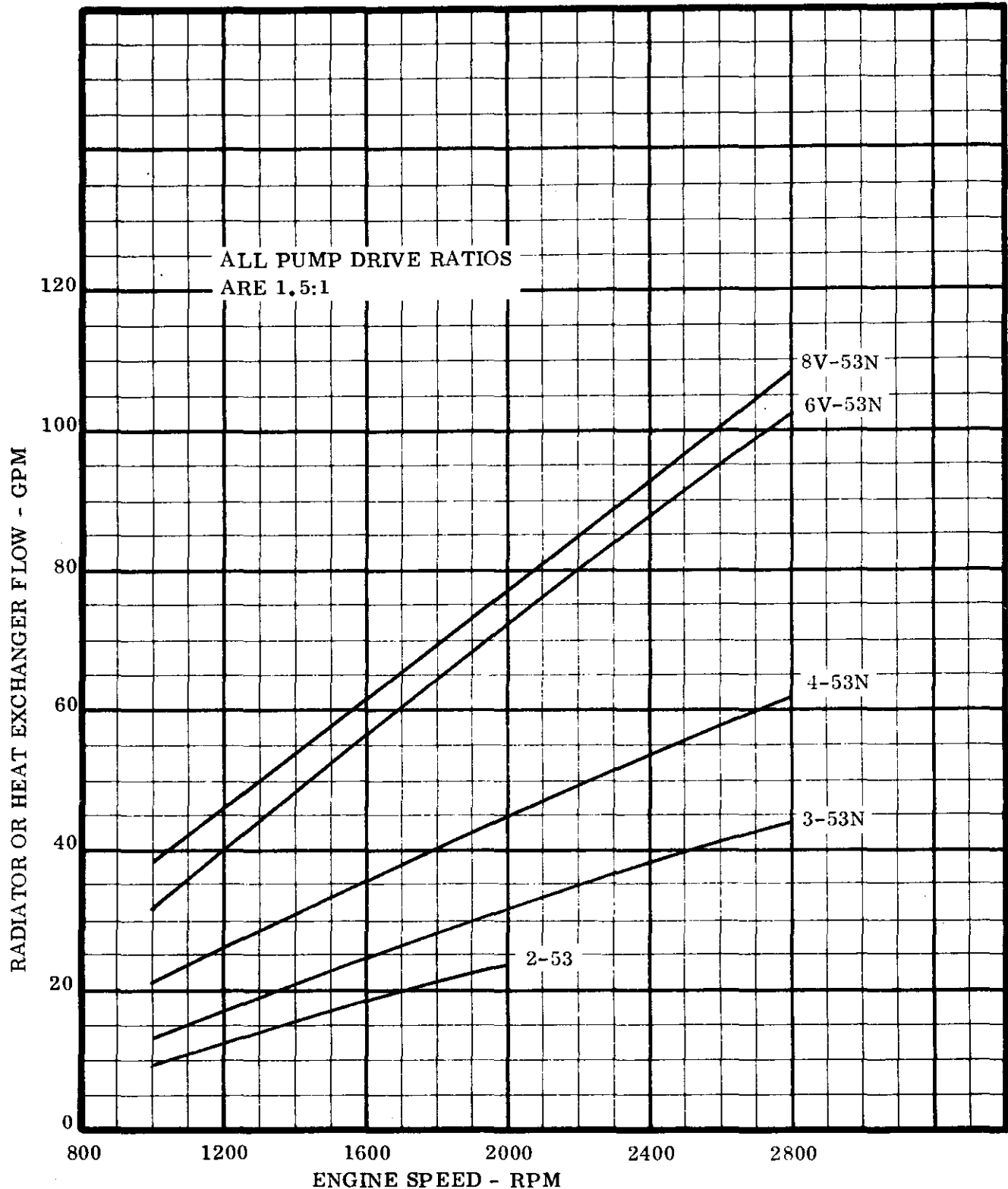
1-16-74

ENGINEERING-TECHNICAL DATA DEPT.



Detroit Diesel Allison
Division of General Motors Corporation

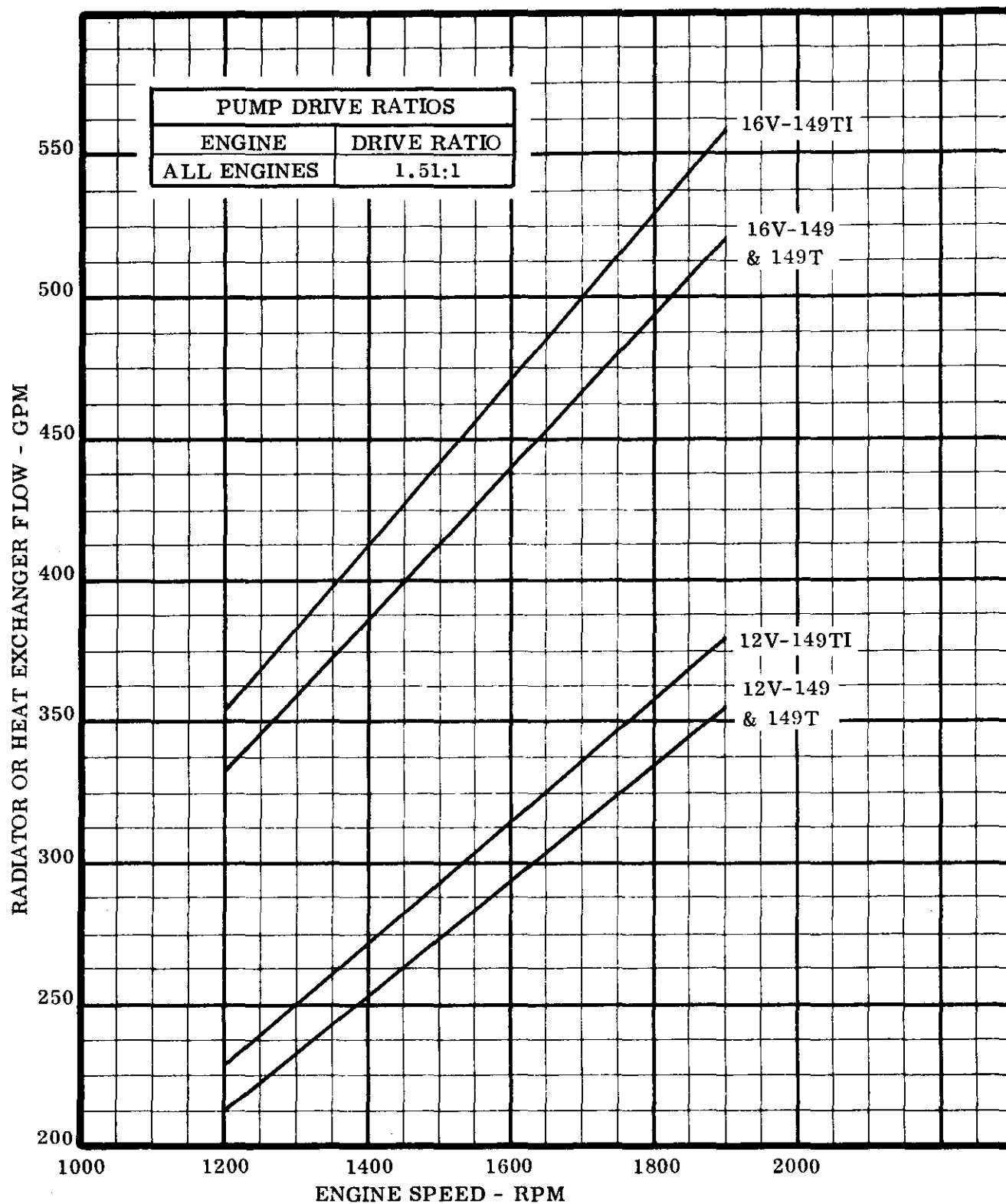
SERIES 53
ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
180°F TEMPERATURE
BLOCKING TYPE THERMOSTAT





Detroit Diesel Allison
Division of General Motors Corporation

149, 149T AND 149TI
ENGINE COOLANT FLOW
THRU RADIATOR OR HEAT EXCHANGER
180°F COOLANT TEMPERATURE
BLOCKING TYPE THERMOSTAT



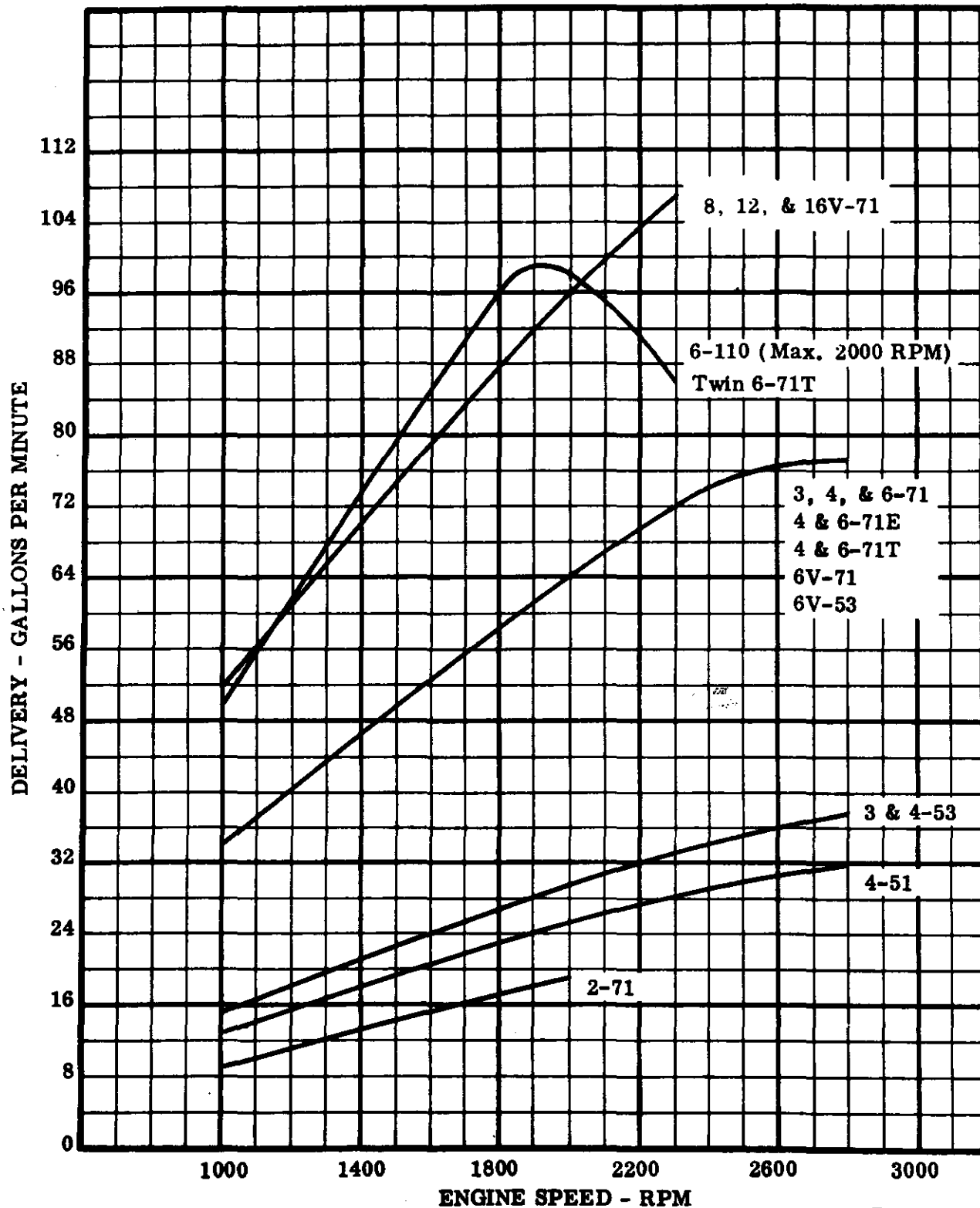
RAW WATER



DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

RAW WATER PUMP
PERFORMANCE DATA
AT 5 IN. HG. SUCTION PRESSURE AND
10 PSI DISCHARGE PRESSURE





DETROIT DIESEL ENGINE DIVISION

GENERAL MOTORS CORPORATION

SERIES 71 ENGINES MARINE PRODUCTS BILGE PUMP DELIVERY AND BHP VERSUS TOTAL HEAD

