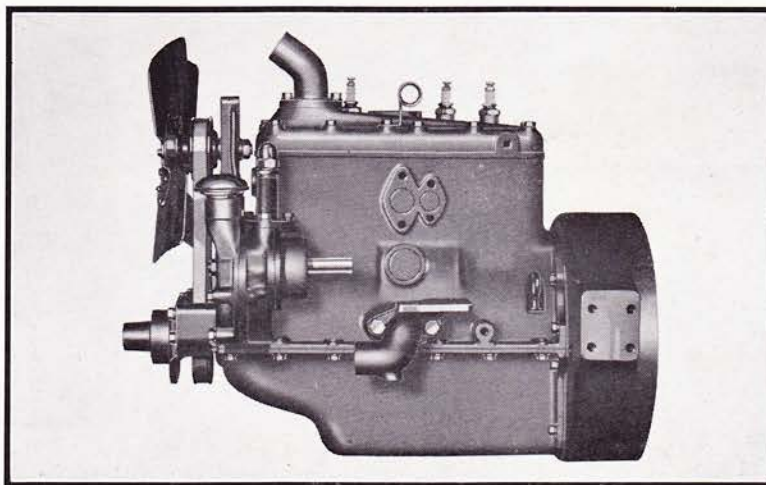


HERCULES ENGINES



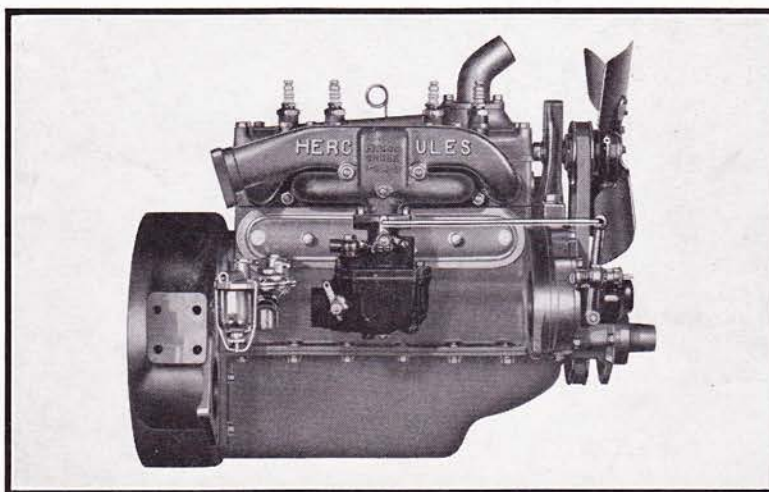
IX Series Accessory Side

Four Cylinder Engines

Models IX - IXA - IXB

Specifications, Installation Diagrams, Power Chart

[Models IX 2½" x 4"—IXA 3" x 4"—IXB 3¼" x 4"]

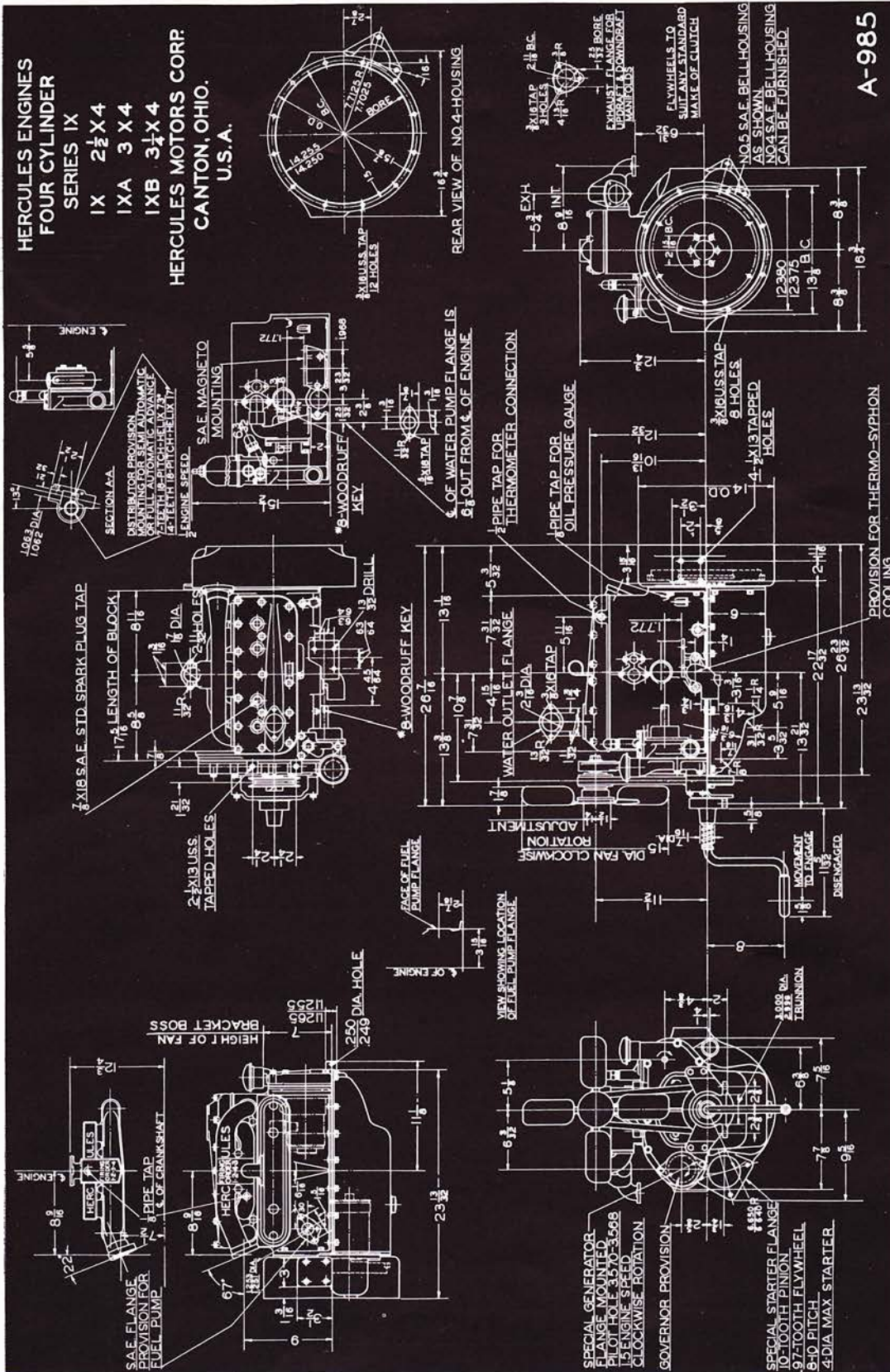


IX Series Manifold Side

HERCULES MOTORS CORPORATION CANTON, OHIO, U. S. A.

INSTALLATION DIAGRAM

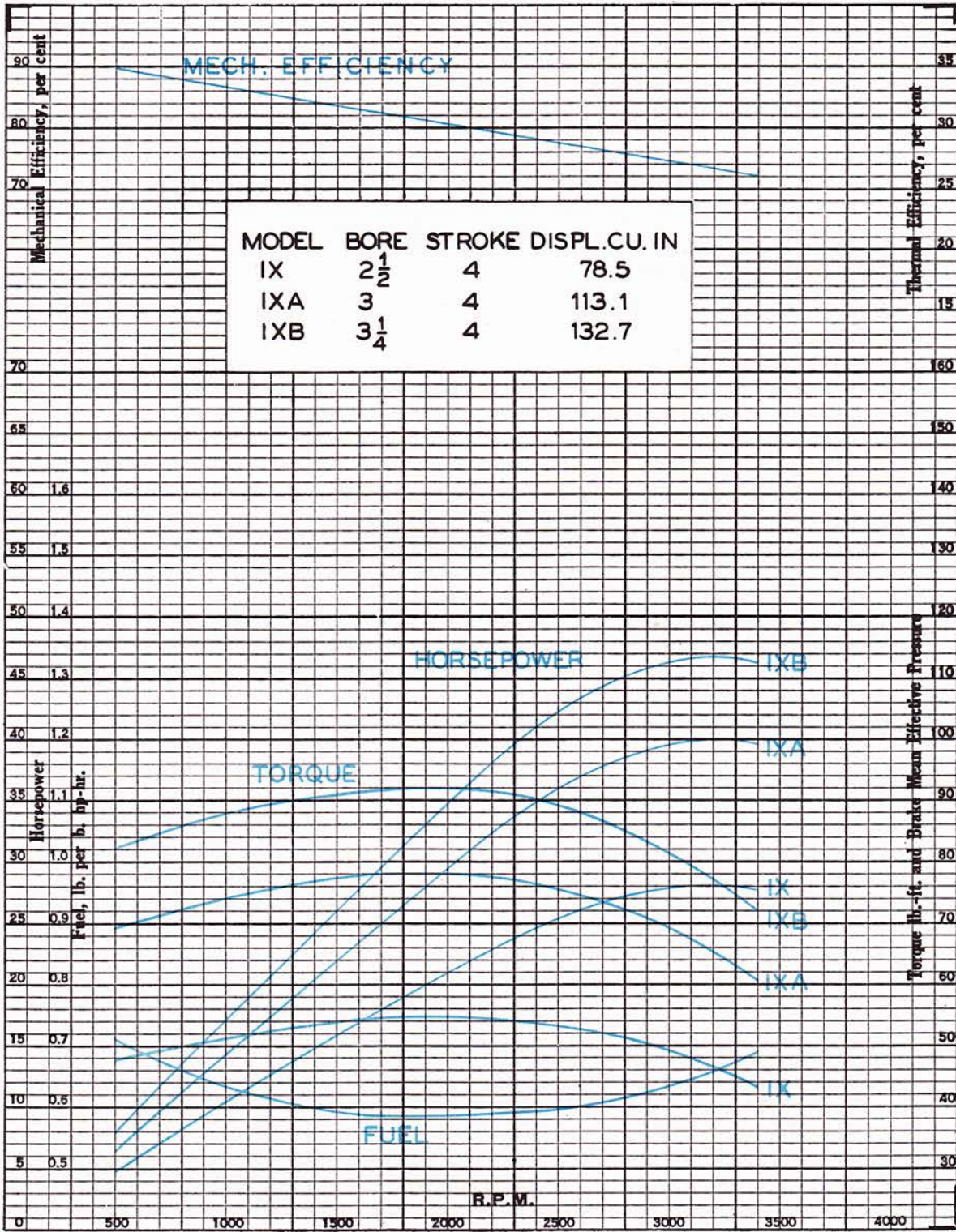
Models IX IXA IXB Engines



HERCULES

POWER CHART

FIRM HERCULES MODEL IX-IXA-IXB SERIAL NO. _____ DATE 10-20-31 TEST NO. 320
 NO. CYL. 4 BORE _____ STROKE 4 DISPLACEMENT _____ COMPRESSION RATIO _____
 FUEL GASOLINE For Details see Specification Sheet _____ and Log Sheet _____



THESE CURVES WERE PRODUCED ON ELECTRIC DYNAMOMETER, USING CARBURETOR FITTINGS FOR MAXIMUM POWER AND ECONOMY AND CORRECTED TO STANDARD SAE BAROMETER AND TEMPERATURE. POWER DELIVERED AT FLYWHEEL WITHOUT ACCESSORIES.

ON THE JOB

HERCULES ENGINES

SPECIFICATIONS

Models IX IXA IXB Engines

	Model IX	Model IXA	Model IXB
Bore and Stroke.....	2½" x 4"	3" x 4"	3¼" x 4"
Number of Cylinders.....	4	4	4
N. A. C. C. Horsepower.....	10	14.4	16.9
For Actual Horsepower See Power Chart.			
Piston Displacement, cu. in.....	78.5	113	133
Firing Order.....	1-2-4-3	1-2-4-3	1-2-4-3

	Model IX	Model IXA	Model IXB
CYLINDERS			
Cast.....	In Four	In Four	In Four
CRANKCASE			
Material.....	Cast Iron	Cast Iron	Cast Iron
How Cast.....	Integral with Block	Integral with Block	Integral with Block

	Model IX	Model IXA	Model IXB
LUBRICATION			
Forced Feed.....	By Gear Pump to all Conn'cting Rods and Main Br'gs	By Gear Pump to all Conn'cting Rods and Main Br'gs	By Gear Pump to all Conn'cting Rods and Main Br'gs

	Model IX	Model IXA	Model IXB
CYLINDER HEAD			
Detachable			
Valve Arrangement.....	L-Head	L-Head	L-Head
Exhaust Valve Dia. Clear.....	1⅛"	1⅛"	1⅛"
Intake Valve Dia. Clear.....	1¼"	1¼"	1¼"

	Model IX	Model IXA	Model IXB
PISTON			
Material.....	Cast Iron (Optional Aluminum)	Cast Iron	Cast Iron

	Model IX	Model IXA	Model IXB
PISTON RINGS			
No. Above Pin.....	3	3	3
No. Below Pin.....	0	0	0
Ring Width Comp.....	⅛"	⅛"	⅛"
Ring Width Oil.....	⅜"	⅜"	⅜"

	Model IX	Model IXA	Model IXB
PISTON PIN			
Diameter.....	¾"	¾"	¾"
Bearing Length.....	1¼"	1⅝"	1⅞"
Bearing Location.....	In Piston	In Piston	In Piston
No. of Bearings.....	2	2	2

	Model IX	Model IXA	Model IXB
CRANKSHAFT			
No. of Bearings.....	3	3	3
Bearing Diameter.....	2"	2"	2"
Bearing Length (Front).....	1⅞"	1⅞"	1⅞"
Bearing Length (Center).....	1⅝"	1⅝"	1⅝"
Bearing Length (Rear).....	1⅝"	1⅝"	1⅝"

	Model IX	Model IXA	Model IXB
CAMSHAFT			
Drive.....	Helical Gear	Helical Gear	Helical Gear
No. of Bearings.....	4	4	4
Diameter—Front, Center, Rear.....	1⅞"	1⅞"	1⅞"
Length, (Front).....	1⅜"	1⅜"	1⅜"
Length, (Center,) #2 and 3.....	⅞"	⅞"	⅞"
Length, (Rear).....	1"	1"	1"
Location—Right hand side looking at flywheel.			

	Model IX	Model IXA	Model IXB
CONNECTING RODS			
Con. Rod Brg. Dia....	1¾"	1¾"	1¾"
Con. Rod Brg. Lgth...	1⅞"	1⅞"	1⅞"
Con. Rod Lgth. c to c..	6⅞"	6⅞"	6⅞"

GENERAL DATA

	Model IX	Model IXA	Model IXB
Carburetor Size.....	¾" S.A.E.	1" S.A.E.	1" S.A.E.
Cooling.....	Thermo Syphon	Thermo Syphon	Thermo Syphon
Water Pump can be furnished			
Water Outlet.....	See Installation Diagram		
Water Inlet.....	See Installation Diagram		
Generator Mounting...	Flange Type	Flange Type	Flange Type
Starter Mounting.....	Flange Type	Flange Type	Flange Type
Magneto Location.....	L. H. Side	L. H. Side	L. H. Side

	Model IX	Model IXA	Model IXB
Spark Plug Size.....	18 mm Metric	⅞" x 18 S.A.E.	⅞" x 18 S.A.E.
Exhaust Manifold Bore.....	1⅜"	1⅜"	1⅜"
Method of Suspension.....	3 or 4 Point	3 or 4 Point	3 or 4 Point
Flywheel.....	For Any Std. Clutch	For Any Std. Clutch	For Any Std. Clutch
(Hercules will supply details of fly-wheels available)			

	Model IX	Model IXA	Model IXB
ENGINE			
Height.....	See Installation Diagram		
Length.....	See Installation Diagram		
Width.....	See Installation Diagram		
Bellhousing.....	4 or 5 S.A.E.	4 or 5 S.A.E.	4 or 5 S.A.E.

NOTE: The Hercules Motors Corporation reserves the right to change design or specifications, without notice.