

MOTOR GENERATOR
division of Hobart Brothers Company
Troy, Ohio 45373, U.S.A.

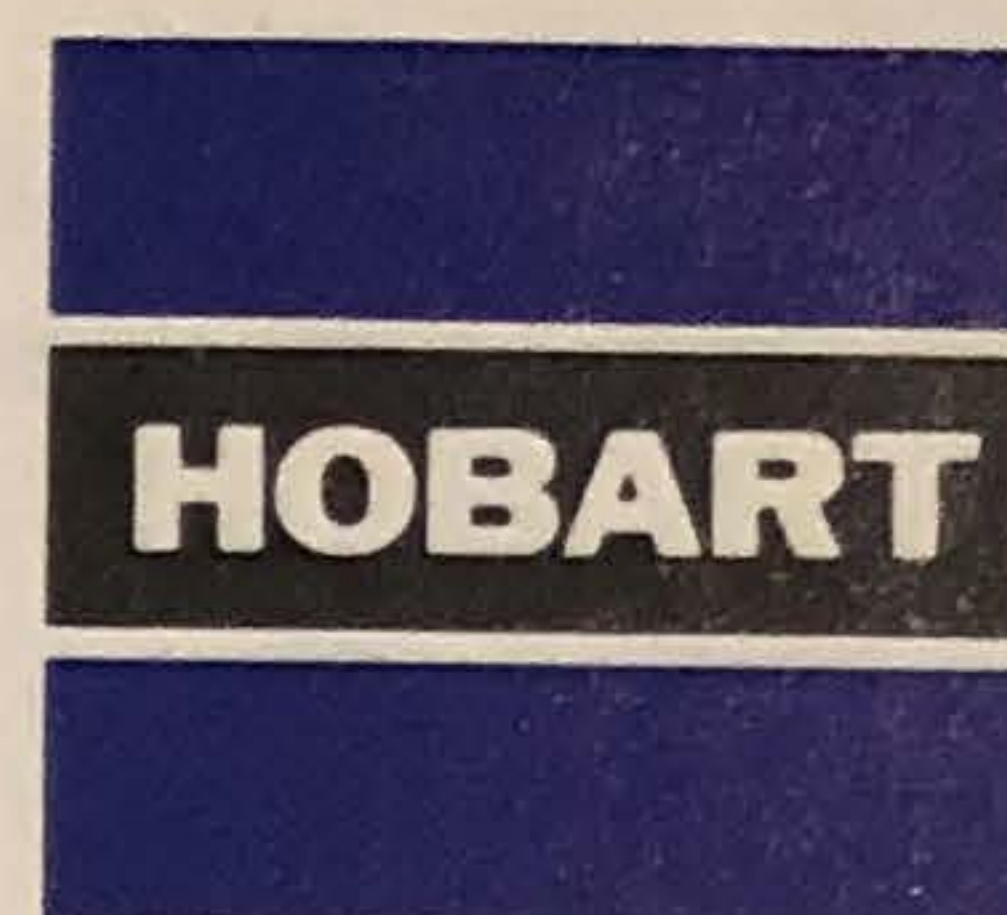
INSTRUCTION MANUAL

SPECIFICATIONS 4426 B V3

MODEL 3180

Lockheed

file



HOBART SOLID STATE 28.5 VOLT DC SINGLE PHASE HANGAR POWER SOURCE

HOBART STANDARD FEATURES:

- Ferroresonant circuitry
- Output DC voltage virtually independent of $\pm 10\%$ input voltage variations
- High conversion efficiency and power factor
- Protective recessed control panel
- Thermostatic safety switches to protect transformer and rectifier
- Fuse protected cooling fan
- Circuit breaker ON/OFF switch
- Voltmeter
- Ammeter
- Pilot light
- 115 volt A.C. 15 amp fused duplex outlet
- 2 wheel hand cart—8" wheels
- 50 ft. AC power cable—
50 amp range plug furnished for 230 volts
Matching receptacle 401847 at extra cost
- 15 ft. DC output cable with AN2551 plug



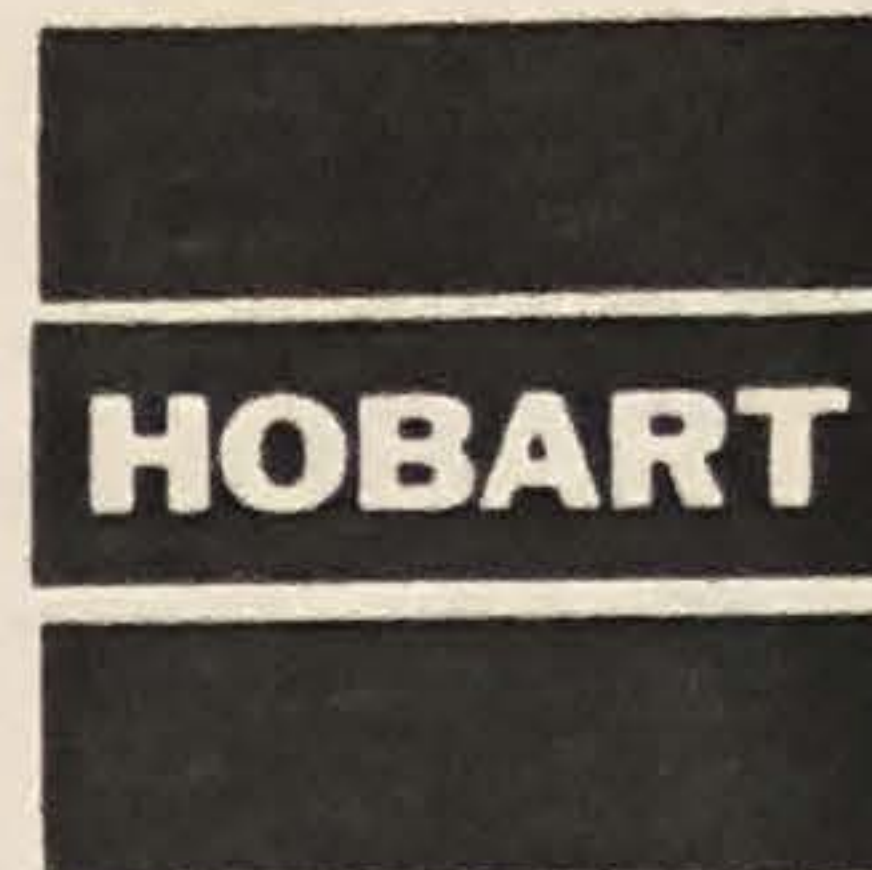
SPECIFICATIONS:

Model number	1-6FR28-150
Nominal output voltage	28.5 V.D.C. (adjustment not required)
Line Regulation	output voltage held $\pm 1\%$ with $\pm 10\%$ input change
Load Regulation	$\pm 5\%$ no load to full load (150 amperes)
Amperes continuous	150 amperes
Peak starting current	300 amperes
Ripple no load	$\frac{1}{2}\%$ RMS
Ripple full load	$1\frac{1}{2}\%$ RMS
Power Factor	.95 at full load
Supply Voltage—Standard—230V 60 Hz 1 phase 34 amps, 208V, 38 amps	
(Optional at extra cost)—460V 60 Hz 1 phase 17 amps	

	Length		Width		Height		Weight	
	(In)	(mm)	(In)	(mm)	(In)	(mm)	(Lb.)	(kg)
UNIT	32	813	28	711	28	711	—	—
CRATED	38½	978	33½	851	31	787	385	175

HOBART BROTHERS COMPANY POWER SYSTEMS DIVISION

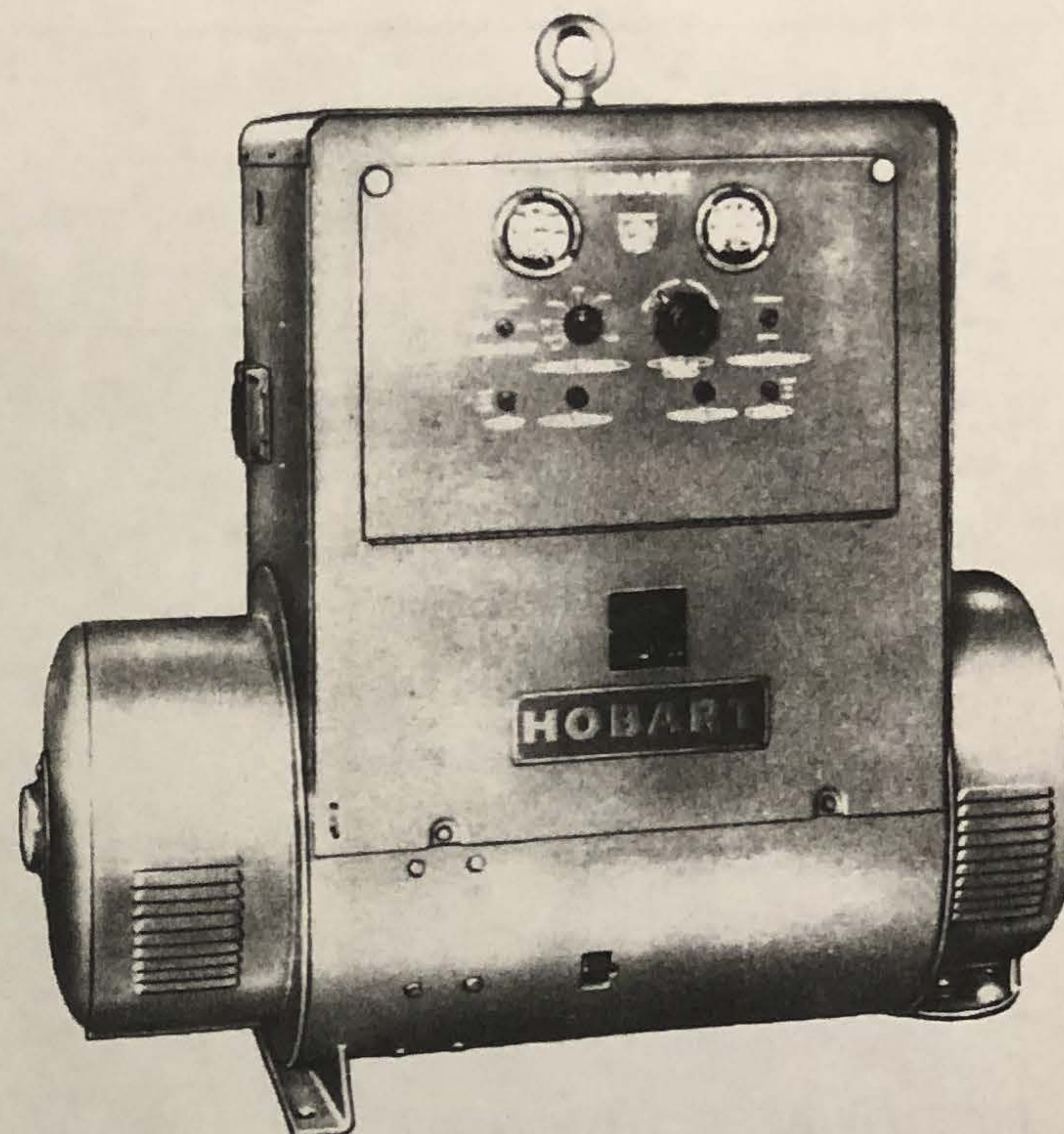
TROY, OHIO 45373 U.S.A. PHONE 513-339-6011, TWX: 810-456-2907



DATA SHEET **310**
INDEX: 100176
REPLACES 112673

Hobart Induction Motor Driven 28.5 VOLT DC GENERATORS

HOBART AC to DC converters are designed for aircraft engine starting and for testing and checking aircraft systems or components requiring a source of 28.5 volts d.c. The standard models are for stationary mounting; portable mountings are optional.



Stationary Mounting

MODEL SELECTION

MODEL	RATED AMPERES	RATED VOLTS	OVERLOAD 3 MINUTES	REGULATING SYSTEM	H.P.	MOTOR VOLTAGE	HZ.
MG1028	1000	28.5	1250 Amps	Constant Voltage and Current Limiting	50	230/460	60
MG1028-50	1000	28.5	1250 Amps	Constant Voltage and Current Limiting	50	220/380	50

VOLTAGE CONTROL

The HOBART motor is not responsive to fluctuations in the primary power supply. To maintain constant voltage within plus or minus 1%, HOBART Generators are separately excited and the genera-

tor voltage is controlled by a static transistorized voltage regulator. Line drop compensation will provide upto 3 volt rise at the generator.

CURRENT LIMITING FEATURE —

The Hobart Current Limiting "Soft-Start" control, standard on Models MG1028 and MG1028-50, is recommended by most turbine-powered aircraft and helicopter manufacturers for protection of the engine starter shear section. Inrush current may be

preset to any limited value between 700 and 1300 amperes as recommended by the aircraft manufacturers. A special 400 ampere "low" current limiting system is provided for helicopter and small turbine starting.

Motor Generator Corporation

Hobart Brothers Affiliate



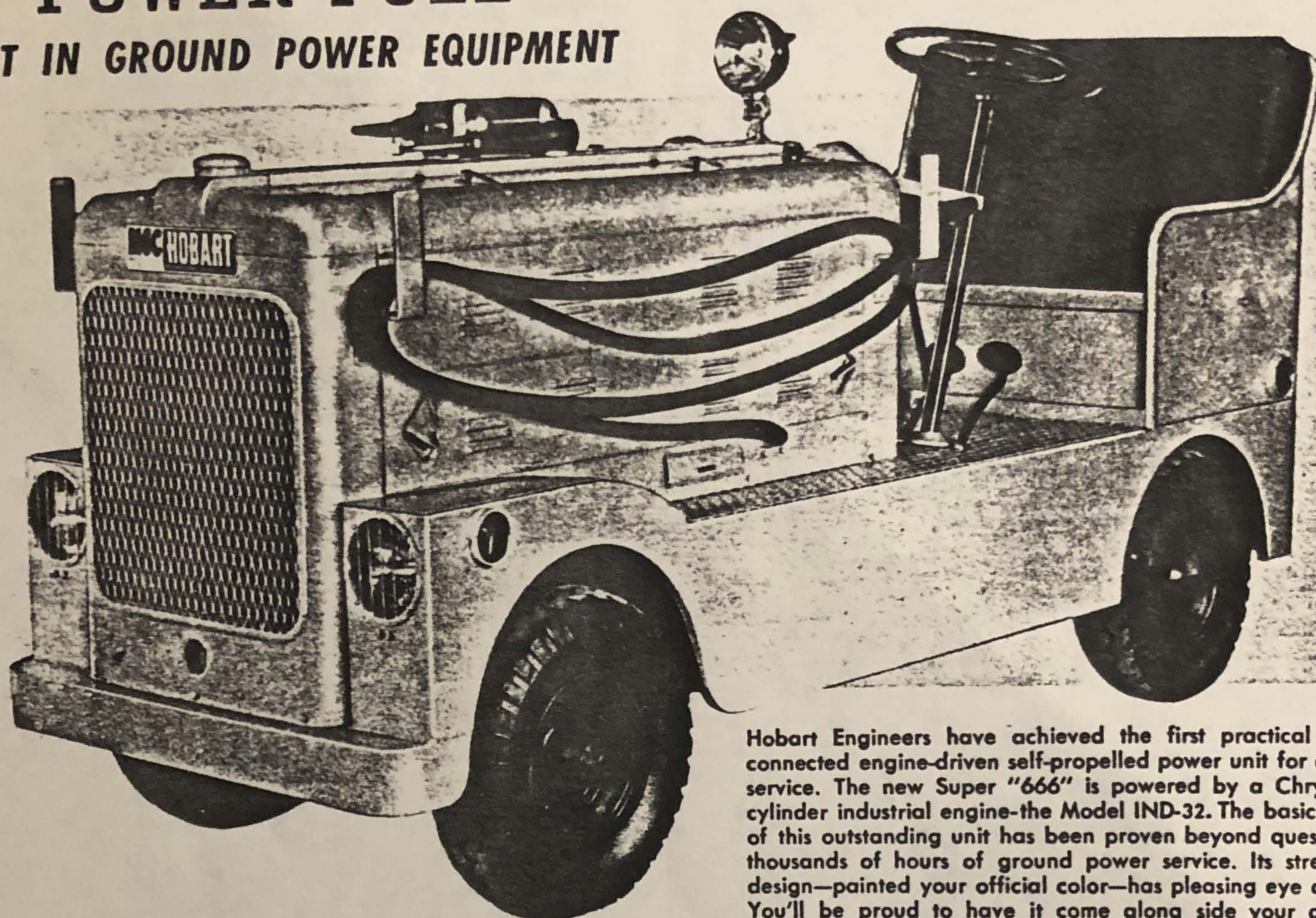
Troy, Ohio

SUBJECT **HOBERT SUPER 666 "POWER-PULL," MOBILE GROUND
AUXILIARY POWER UNIT AND TOWING TRACTOR**

DATA SHEET **MGC-127**
INDEX **031456**
REPLACES **MGC-84**

"POWER-PULL"

FIRST IN GROUND POWER EQUIPMENT



Hobart Engineers have achieved the first practical direct-connected engine-driven self-propelled power unit for aircraft service. The new Super "666" is powered by a Chrysler 6-cylinder industrial engine—the Model IND-32. The basic design of this outstanding unit has been proven beyond question by thousands of hours of ground power service. Its streamline design—painted your official color—has pleasing eye appeal. You'll be proud to have it come along side your aircraft.

The Power-Pull offers a most satisfactory solution to your ground power requirements because of these desirable features:

RATING. 600 amperes at 28.5 volts continuous, or 750 amperes for three minutes intermittent duty. It has ample power for starting the engines of all types of aircraft using 24 volt electrical systems, also for carrying monitored loads of the larger aircraft.

TOWING. Although designed primarily as a self-propelled ground power unit, it has a drawbar pull of 2000 lbs. When not used as a power unit it can be used to tow baggage, fluid service, commissary and other carts as well as light aircraft. It is the most versatile piece of ground equipment on the market today.

RUGGEDNESS. The unit is just as rugged as it looks. The engine-generator-transmission is straight in line, there

is no loss in transmission of power to the rear axle. Heavy gauge steel is used throughout.

MANEUVERABILITY. Overall height (exclusive of driver) of only 53", low center of gravity, and sharp turning radius make it exceptionally maneuverable around airplanes. Pneumatic tires take up rough pavement shock.

APPLICATION. Meets the electrical load requirements of the Super DC-3, DC-4, DC-6, Constellation, Convair-Liner, Martin-404, and engine starting requirements of the Boeing 377. It is a medium size power unit designed to answer the average electrical load requirements of aircraft while on the ground, with the added advantage of the tractor feature.

The Hobart Super "666" has many features for fast handling, maneuverability, operating economy, and low maintenance. It is equipped with adequate power cable and plug, spot light, hand fire extinguisher, clearance lights, reflectors, etc. Many additional features are incorporated in the Power-Pull to provide trouble-free operation under extreme conditions, and those extra features make Hobart Generators last longer.

(See other side for complete specifications)



MOTOR GENERATOR DIVISION

HOBART BROTHERS COMPANY

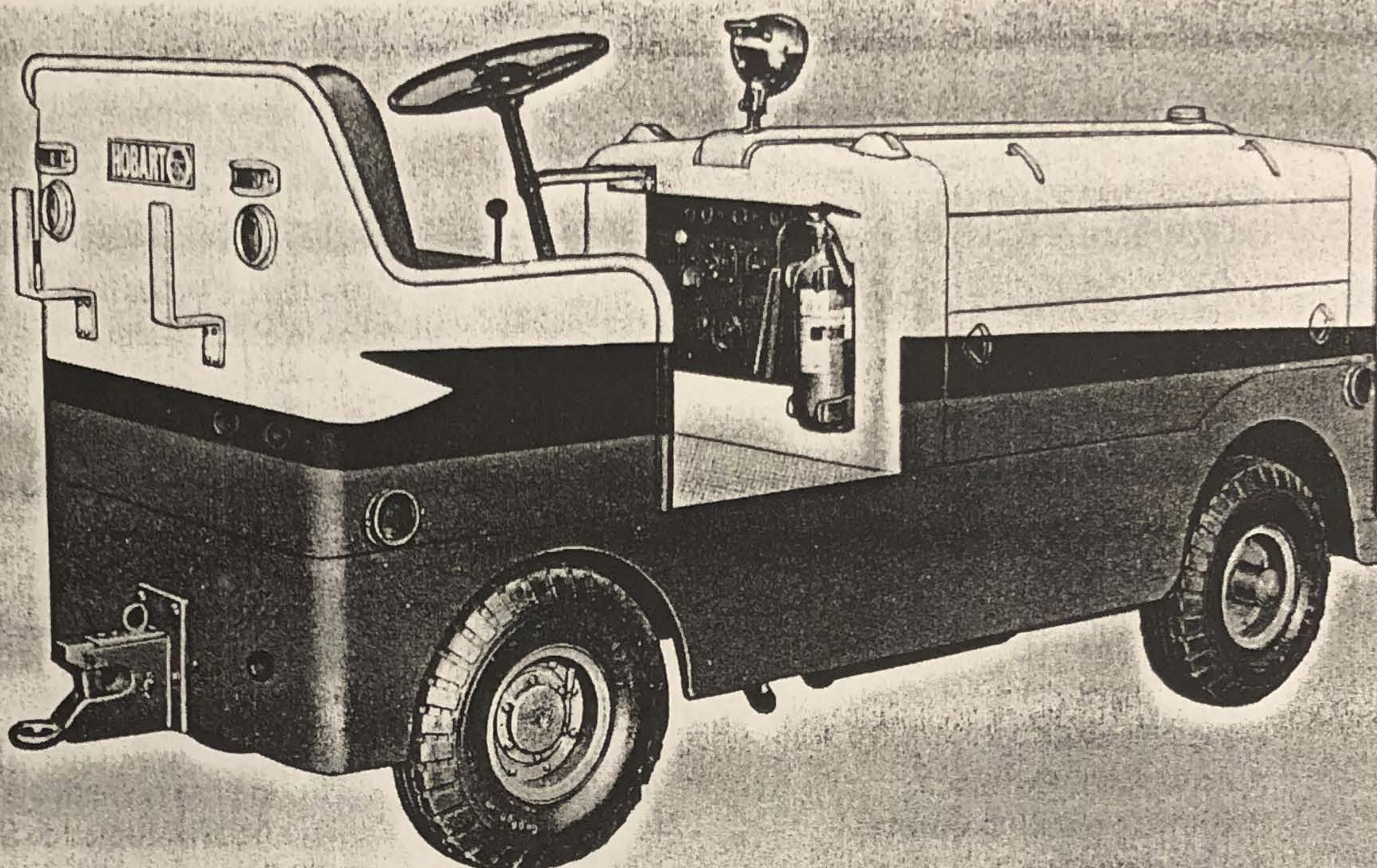
TROY, OHIO 45373, U.S.A., TELEPHONE 513-335-7141, CABLE: MOGEN

HOBART SELF-PROPELLED JET-EX, TOWING GROUND POWER UNIT DC OUTPUT NOMINAL 28.5 VOLT OR 14.25 VOLT

Data Sheet: MC-197

Index: 040168

Replaces: MGC-182



THE HOBART JET-EX is specifically designed to support the new Turbo-Jet and Turbo-Prop Executive type Aircraft. Features include Dual DC voltage output and towing capability. The unit furnishes current limiting for the "Soft-Start" recommended by

many aircraft manufacturers. The capacity and flexibility of the JET-EX provides ground support for the widest range of commercial and executive aircraft. This versatility makes it an ideal unit for the fixed base operator servicing a wide variety of aircraft.

AIRCRAFT SERVICE RECOMMENDATIONS

Turbo-Jet Aircraft

- Lockheed Jetstar
- North American Sabreliner
- Falcon
- Lear Jet
- Jet Commander
- DH-125

Turbo-Prop Aircraft

- Grumman Gulfstream
- Beech King Air
- Turbo Commander
- Turbo Beaver
- Fairchild F-27
- Porter

Reciprocating Engine Types

(With external power receptacle)

- Beechcraft †
- Cessna †
- Piper †
- Mooney †
- † All types
- Convair
- Martin
- Douglas
- DC-3, DC-4, DC-6
- Misc. other types

Helicopters

All reciprocating and Turbine engine types with DC systems.

ELECTRICAL CHARACTERISTICS

Selective voltage output at either 14.25 or 28.5 Volts DC. Capacity 700 to 1300 Amps Current limiting for "Soft-Start." 750 Amps Constant Voltage for normal Aircraft Servicing. Current Limiting system provides constant voltage output up to the preselected current limiting value at which time the voltage drops to maintain selected load current. Extended duty continuous operation or operation at high altitude or high ambient temperatures—500 Amps.

TOWING CHARACTERISTICS

Tractive effort of the JET-EX is 1500 pounds draw bar pull. With optional towing hitches this provides the capacity to move aircraft at gross weights up to 35,000 pounds on dry flat ramps or hanger floors. Short wheel base and tight turning radius make the unit very maneuverable. Reverse first and second gears have low speed "crawler" ratios, 3rd allows speeds up to 13 mph.