

# ACE-500 PNEUMATIC JET START EQUIPMENT (STORED AIR SYSTEMS)



## DESCRIPTION

The 500 Series Pneumatic Jet Engine Start Units Provide medium pressure air sources for jet aircraft engine starting. Start air pressure are adjustable to 45 psig at 0-300 lbs/min. air flow to start all types of jet aircraft engines. The units are available in a variety of sizes and configurations to meet individual customer requirements – based on aircraft to be serviced and frequency of utilization.

These self-recharging stored-air units are supplied complete with a properly rated piston-type compressor, ASME cylinder, customer selected power source and mounting (truck/trailer/stationary pedestal). A major component is the ACE-developed “soft-start” regulator control valve, which controls air pressures delivered to the engine in accordance with the engine manufacturer’s specifications.

## DESIGN FEATURES

- ACE Control valve, normally-closed, fail-safe design. Signal pressure operated to produce slow opening (Soft-start) and fast closing.
- Properly rated and sized **ASME cylinder** and **ASME relief valve**.
- **High flow relief valve set** at required safety pressure to protect aircraft starter supply lines.
- **Industrial two-stage fan-cooled compressor** with interstage cooler, oil lubricated with automatic unloading.
- **Adjustable pressure** for all aircraft engine pressure requirements

- **Automatic bleeding** of starter at finish of each engine start.
- **Heavy-duty construction** – structural steel base, sheet metal enclosure, hinged doors, hose storage area.
- **1 each 3-1/2” I.D. outlet provided.**
- **Low profile running gear** for increased stability and maneuverability.
- **Vibration isolation** for all engine driven units to reduce noise and protect all components.
- **Ease of maintenance** – all service points are easily accessible for routine maintenance and/or servicing.
- **Meets or exceeds all airport noise restrictions** when recharging or when starting engines.

## OPTIONAL EQUIPMENT

- Engine fuel/water separator
- Illuminated engine instrument panel
- Self-circulating engine block heater with panel mounted power receptacle.
- Shop air supply kit.
- 380 Volts, 3 phase, 50 Hz operation.
- Fifth wheel steering

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## DESIGN SPECIFICATIONS

Electric*	ACE-500-1116	ACE-500-1119	ACE-500-1123
Diesel – Isuzu 3LB 1-PW**	ACE-500-1516	ACE-500-1519	ACE-500-1523
Stored Air lbs (kg)	420 (191)	500 (227)	600 (273)
Usable Air lbs (kg)	340 (155)	415 (189)	500 (227)
PSIG (Kg/cm2)	500 (35.15)	500 (35.15)	500 (35.15)
Cylinder Size	60 inch I.D. 500	Lbs. rated ASME	Pressure Vessel
Recharge Rate lbs/min	2.0	2.0	2.0
Compressor Horsepower	15.0	15.0	15.0
Length inches (cm)	175 (445)	200 (508)	220 (559)
Width inches (cm)	82 (208)	82 (208)	82 (208)
Height inches (cm)	76 (193)	76 (193)	76 (193)
Weight lbs (kg)	9,760 (4,436)	11,790 (5,359)	13,200 (6,000)

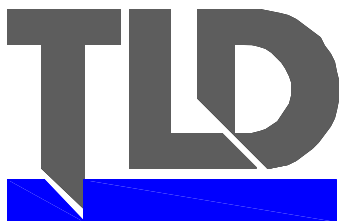
\*Electric Motor Driven Units wire for 480V, 3 phase, 60 Hz operation; other options available.

\*\*Other engines available.

## AIRCRAFT SELECTION CHART

AIRCRAFT TYPE	ACE-500-1116 ACE-500-1516	ACE-500-1119 ACE-500-1519	ACE-500-1123 ACE-500-1523
<b>Aribus Industries</b> A300/A310		X	X
A318/319/A320/A321	X	X	X
<b>British Aerospace</b> BAE 146/RJ-70/RJ-85/RJ-100	X	X	X
<b>Boeing</b> 707/720/717/727/737	X	X	X
747/757/767/777*/MD11			X
<b>Canadair – Regional Jet</b>	X	X	X
<b>McDonnell Douglas</b> DC8/DC9/DC10/MD80/MD90	X	X	X
<b>Fokker – F28/F100</b>	X	X	X
<b>Lockheed – L-1011</b>		X	X

\*For starting B-777 with PW 4084 Engine

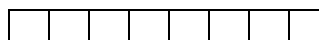


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Tolerances of mentioned data: +/- 5 %  
Specifications may be altered due to a constant effort to improve performance.