

AIRCRAFT AIR START UNIT

DAVCO MODEL NO. AS 250-T

I. Introduction

This specification describes DAVCO's Trailer Mounted diesel operated Air Start Unit for use on commercial aircraft.

II. General

The DAVCO model AS250-T will produce a continuous flow of oil-free, low-pressure air for starting aircraft jet engines. The unit is available in trailer, skid or truck mount configurations.

The DAVCO model AS250 basic unit is comprised of a rotary screw compressor and turbo charged diesel engine mounted on a welded, powder coated steel frame. The unit comes complete with a pneumatic pressure control system, compressor lubricating and cooling system, engine air cleaner, engine and compressor protection equipment and two air supply hoses and couplings.

III. Characteristics *

Inlet Pressure:	14.7 p.s.i.a. (1.01 bar)
Inlet Temperature:	30° C (86°F)
Compressor Inlet Flow:	3436 c.f.m. (1.52 M ³ /S)
Compressor Discharge Pressure:	43 p.s.i.g.
Compressor Discharge Temperature:	194°C (381.1°F)
Pounds Per Minute	250 PPM (mode A); optimal (mode B)
* Sea level	

IV. Prime Mover

DAVCO utilizes Cummins Model N14-525, Turbo charged and after-cooled, 525 bhp, 6-cylinder diesel engine or equivalent. This engine exceeds EPA emission requirements through the year 2000.

Engine accessories include fuel filters, oil filters, heavy-duty air cleaner and radiator, capable of operation in sandy, dusty desert environments as well as cold weather environments.

Engine starting battery is two Optima Model 800. System is 24 V.

V. Fuel System

Cummins electronic CELECT or CENTURY system, large capacity fuel filter with replaceable element.

VI. Induction

Dry type air cleaner, ducted to a side mounted turbocharger.

VII. Lubrication

Central-sump type. Fuel flow lubricating oil filter and by-pass lubricating oil filter with replaceable elements.

VIII. Exhaust

Air-cooled exhaust manifold with turbocharger outlet.

IX. Cooling

Thermostatically controlled cooling system with belt driven centrifugal water pump

X. Compressor

GHH-Rand positive displacement screw compressor, #CD42S, with integral speed increasing gearbox. Rotors and casings are oil cooled and filtered.

