Air Turbine Start System Upgrade
for the UH/SH-60 and H-1
Helicopter Platforms

Expertise

80% of the World’s Military and Commercial Aircraft use Honeywell Air Turbine Starters

- We have pioneered virtually all Air Turbine Starter System technological advances
- 160+ Pneumatic Starter Models designed and produced since 1950
- 200,000+ Air Turbine Starters have been shipped
- 140,000 Daily main engine starts
- 8 million+ Starter operating hours logged per month

Since 1938

Honeywell has been at the forefront of design and manufacturing of high performance pneumatic valves for aerospace applications

- 1,500 Pneumatic Valve Designs designed and produced by Honeywell
- 200+ Applications Across military, commercial air transport, business and regional aircraft
- 10+ years Demonstrated reliability of PN 3213850-6 Starter Air Valve on the S92 Helicopter

Innovation

Air Turbine Starters

- Increased Light-off Torque >14%
- Imperative during engine start conditions with elevated resistance:
  - Degraded aerodynamics
  - Higher internal drag/resistance
  - Colder temperatures

Quick Drain Oil Valve
- Allows maintainer to quickly and easily drain oil without removing starter from helicopter

Fill-to–Spill Oil Neck
- Ensures proper oil servicing every time; prevents overfilling the oil sump

Starter Configuration
- Redesigned lubrication system and output shaft
- Redesigned stator inlet duct
- Retains all safety features from previous design

Proven Design

Increased Mean Time Between Failure (MTBF)

- Improved starter performance with lower cost of ownership:
  - >4,000 hours – Air Turbine Starter
    Starter reliability proven over 4-year flight evaluation test
  - >8,000 hours – Starter Air Valve
    Valve reliability proven over 10+ years flight operation

Reduced Maintenance Costs

Drop-in Replacement
- No aircraft modifications required

Global Service and Support Network
- Knowledge and resources for all service needs – whenever and wherever maintenance and repair services are required

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Air Turbine Starter (PN 3505300-10)
Starter Air Valve (PN 3213850-6)

Provides operators an optimized Air Turbine Start System with higher reliability, greater performance and reduced maintenance costs over the life cycle of the aircraft.

Find out more at www.aerospace.honeywell.com