

Honeywell Aerospace

Honeywell is a leading global provider of integrated avionics, wheels and brakes, engines, components, and service solutions for aircraft manufacturers, airlines, business and general aviation, military, space and airport operations.

For more information on Honeywell Aerospace, visit us online at www.honeywell.com/aero

Key Performance Data @ Output Shaft Speed of 15,066 RPM

Engine	Rating	SHP (min)	SFC (max)
55-L-714A	SEA LEVEL/59°F		
	Contingency	4,967	0.518
	Maximum	4,777	0.513
	Intermediate	4,456	0.510
	Max Continuous	4,115	0.512
55-L-714A	4,000 FT/95°F		
	Contingency	3,934	0.524
	Maximum	3,693	0.525
	Intermediate	3,312	0.532
	Max Continuous	2,977	0.541

Physical Characteristics

Length: 47.1 inches (1,196.3 mm*)

Diameter: 24.25 inches (615.9 mm)

Dry Weight: 55-L-714A: 830 lb/377 kg*

*without tailpipe

Cover photo courtesy of U.S. Army, by Pfc. Gul A. Alisan.

Find out more

For more information on the 55-L-714A upgrade programs, contact us at 1-800-421-2133.

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T55 Turboshaft Engine

Honeywell



**IMPROVED PERFORMANCE. HIGHER RELIABILITY.
LOWER COST OF OWNERSHIP.**

55-L-714A Engine Upgrade for Chinook CH47

Honeywell



To enhance the mission capability of T55-powered Chinooks, look to Honeywell's engine upgrades for increased performance, greater service life, and decreased cost of operation with full OEM configuration control and support.

Advanced engine performance for the most demanding environments

With proven power, reliability and durability, Honeywell's T55 turboshaft engine delivers advanced performance for the Boeing CH-47 Chinook. Having fielded over 4,200 T55 gas turbine engines, Honeywell continues our technology development with the 55-L-714A engine with technology upgrades that overcome obsolescence issues while increasing operational performance.

Proven Performance, 55-L-714A

Providing 4,777 maximum shaft horsepower, the 55-L-714A has proven its abilities with service in some of the world's harshest conditions, including high altitude/hot day mission performance of the CH-47 Chinook in Operations Enduring Freedom and Iraqi Freedom.

With the upgraded 55-L-714A engine, the Chinook has 20% more payload capability at high/hot conditions. The 55-L-714A

boasts an improved engine power of 22% for an improved high/hot performance, longer range, and 7% lower specific fuel consumption. New materials are incorporated to increase the life and durability of the engine. In fact, the time between overhaul is increased from 2,400 hours to 3,000 hours. The 55-L-714A introduces a FADEC to reduce pilot workload and lower cost of ownership.

These cumulative technology improvements have increased the Chinook's mission capability while keeping engines in operation longer with lower life cycle costs and higher mission readiness. Additionally, our ongoing technological advancements support our military customers' needs to reduce maintenance down time and logistics costs while improving overall aircraft performance.

Engine Upgrade Program

Ranging from a one-step all-inclusive upgrade to a phased approach, Honeywell has structured our 55-L-714A engine upgrades to meet your unique needs and operational requirements. The more cost-effective, timely approach is the one-step, full engine upgrade that directly advances the performance of your T55-L-712 series engine to the 55-L-714A. To address general T55-L-712 series engine part obsolescence issues, and incorporate improved materials, and more durable designs, a Cold End Upgrade, which includes replacing the IMT, can be performed. A Hot End/FADEC Upgrade then can be performed to fully upgrade your T55-L-712 series to a 55-L-714A engine. No matter which approach or whatever timeframe you choose, Honeywell is there to support your T55 engine and operations.

55-L-714A Incorporates Latest Technology

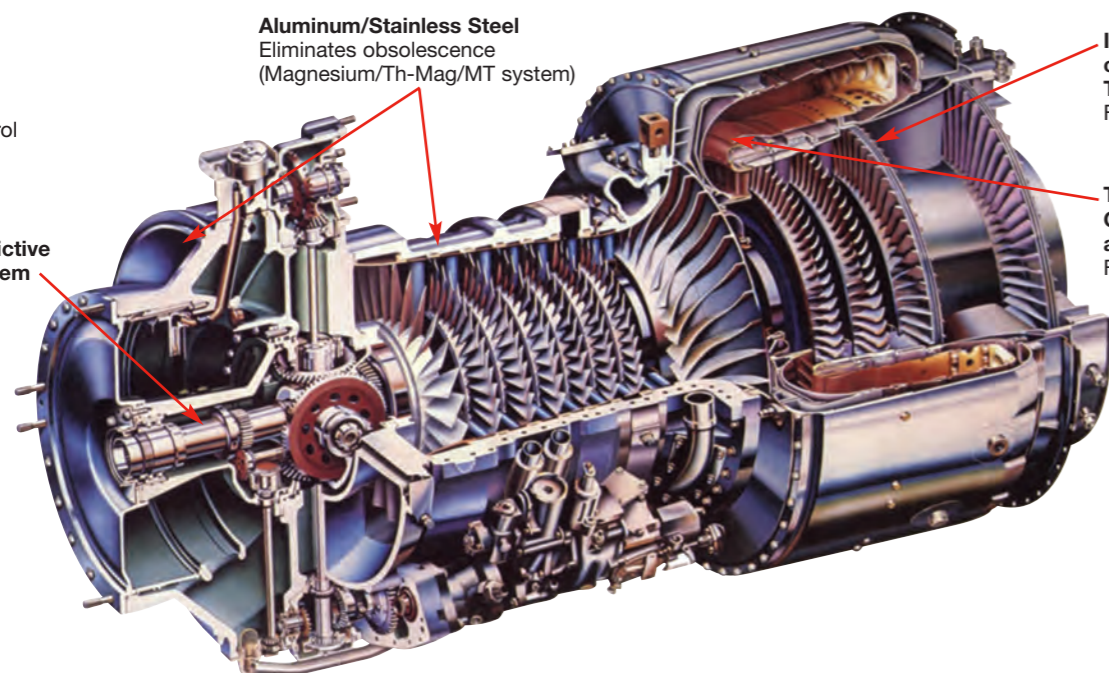
FADEC
For optimal engine control

Improved Magnetostrictive Torque System

Aluminum/Stainless Steel
Eliminates obsolescence (Magnesium/Th-Mag/MT system)

Improved Cooling on Third Power Turbine Nozzle
For improved life

Thermal Barrier Coated Combustor and Curl
For longer life



55-L-714A Upgrade Benefits

The 55-L-714A provides significant improvements in performance, cost of ownership and reliability:

- | | |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| ■ Improved high hot performance | ■ 22% increase in engine power |
| ■ Longer range | ■ Reduced fuel burn |
| ■ Reduced pilot workload | ■ FADEC eases pilot workload |
| ■ Improved trouble-shooting | ■ FADEC provides diagnostics |
| ■ Higher reliability <ul style="list-style-type: none"> - Longer HSI interval - Greater MTBUR | ■ Longer time between maintenance <ul style="list-style-type: none"> - Increase to 1500 hours - Doubles time on wing |
| ■ Higher maintainability | ■ Increased Time Between Overhaul (TBO) 3,000 hours. |
| ■ Lower operating cost | ■ Longer time between servicing |
| ■ Improved mission capability | ■ 20% payload increase, improved range |
| ■ Reduced life cycle costs | ■ 50% reduction |

Key Honeywell Advantages

Development Capability
We apply our 50 years of propulsion systems experience and industry-leading engine integration expertise to the ongoing development of new engine systems, technology upgrades and product enhancements.

Dedicated Resources
Focused organization that understands the propulsion needs and requirements of aircraft operators with over 65,000 fielded propulsion engines and more than 241 million service hours.

Operational Performance
With our Six Sigma methodology and ongoing technological investments, Honeywell delivers optimal value and peak performance.

Advanced Technologies
We use the newest processes, materials and concepts to create propulsion system solutions with high reliability, improved performance, and cost-effective operation.

Global Network
Worldwide resources that span the Americas, Europe, Middle East, Africa, Asia and the South Pacific, providing 24/7/365 support and a full range of maintenance, repair and overhaul, superior turnaround time, AOG support, and customer service capabilities.

55-L-714A Upgrade Approach

