

## AIR TURBINE STARTER UPGRADE

Provides operators with a significant increase in reliability and safety, higher performance and reduced maintenance costs over the life cycle of the aircraft.

### EXCLUSIVE AUTHORIZED DISTRIBUTOR

PART NUMBER: 3505300-10 | NSN: 2995-01-676-7405

# Honeywell

**EXCLUSIVE AUTHORIZED DISTRIBUTOR  
& REPAIR CENTER**

S3 CAGE CODE: 4GPC1



## FEATURES & BENEFITS

5x More Reliable than -6/-9 Starters

Drop in Replacement - No Aircraft Modification Required

Improved Containment Features

Reduced Maintenance Cost and Man Hours

No Oil Overfilling

## TECHNICAL ADVANTAGES

+4000 Hours MTBF

14%+ Increased Light-Off Torque. Imperative During Adverse Atmospheric Conditions Or Other Unfavorable Engine Start Conditions

New Quick Drain Oil Valve Allows The Starter To Be Serviced While Installed On The Aircraft

New Crescent Oil Pump for Improved Lubrication

All new 10 Sprag Clutch Replacing 5 Sprag Clutch

## QUALIFIED & APPROVED

Approved via US Army AVIATION MAINTENANCE ACTION MESSAGE, H-60-21-AMAM-10.

Stock listed and authorized drop-in replacements for the following part numbers:

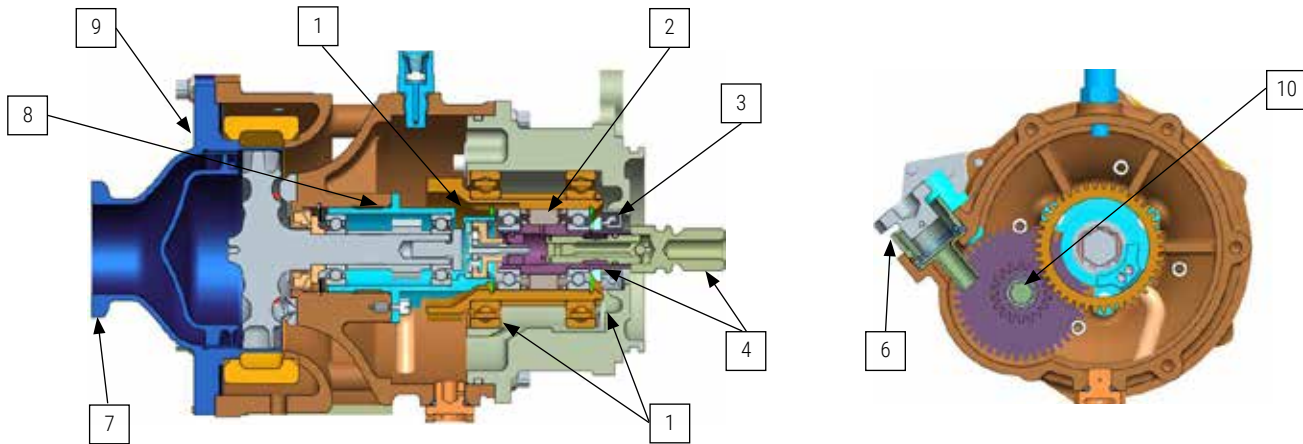
3505300-9-1

36E144-12B

3505300-6-1

36E144-12A





## DROP-IN REPLACEMENT BENEFITS

ITEM	PN 3505300-5/6/9	PN 3505300-10	BENEFITS
1	Centrifugal Lube Pump System	Crescent Pump Lube System	Provides more consistent oil flow to overrunning components at all speeds. More robust/reliable design.
2	5-Sprag Clutch	10-Sprag Clutch	The 10 sprag clutch improves cage centering on the clutch inner race shaft, which reduces inner race wear during overrun operation for improved reliability
3	Oil Orifices Solid Seal Rotor	Redesigned, Controlled Orifices Slotted Seal Rotor	Additional oil delivery passages incorporated for improved lubrication to starter components. Redesigned seal rotor contains an annulus and 5 slots so oil can flow from the inner clutch spline area out across the backside of the rotor and return to the sump. This prevents oil from puddling in the seal/rotor area which can cause coking, excessive heat and oil leaks. Reduction in carbon seal temperature promotes longer carbon seal life.
4	Straight Spline, Output Shaft	Crowned Spline Output Shaft Increased spline length	Crowned splines to accommodate misalignment (if necessary), reduces the bending moment in the shaft compared to a straight spline, and reduces the occurrence of shaft shear incidents. Increased spline length provides for improved engagement with the clutch inner race (inboard splines).
5	Oil Return Passages	Larger Oil Return passages	Existing return passages were made larger for faster oil return to the sump (reduces oil puddling/coking in overrun/seal area).
6	Oil Level line inside starter fill neck	Fill-to-spill Oil Neck	Ease of maintenance: easier for maintenance personnel to see when the oil level is full - ensures consistent oil level at all times.
7	~200cc Oil Capacity	~150cc Oil Capacity	Minimizes overrun bearing oil churning losses and facilitates oil return to the sump
8	Plugged clutch inner race shaft	Open Cavity Design	Improved output shaft spline lubrication by removing oil plug inside clutch inner race shaft. Providing oil lubrication to the spline significantly increases the wear life of the spline.
9	Cast Inlet Stator	Machined Inlet Stator	Consistent flow area, provides increased starter performance and higher reliability. +14% increase in light-off torque results in improved starting capability during high-hot, cold weather and degraded engine start capability.
10	Jack Shaft Inner Race	Upgraded material Jack Shaft Inner Race	Improves wear resistance, increases reliability
11	Standard Oil Drain	Quick Drain Oil Valve	Allows oil draining without starter removal