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Service Information Bulletin

SUBJECT	DATE
DD15 and DD16 Axial Power Turbine	May 2014

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0081	DD Platform	Inspection of the DD15 and DD16 Axial Power Turbine	Added instruction to inspect for the correct location of oil seal O-ring.
DDC-SVC-MAN-S181	Euro IV	Inspection of the DD15 and DD16 Axial Power Turbine	

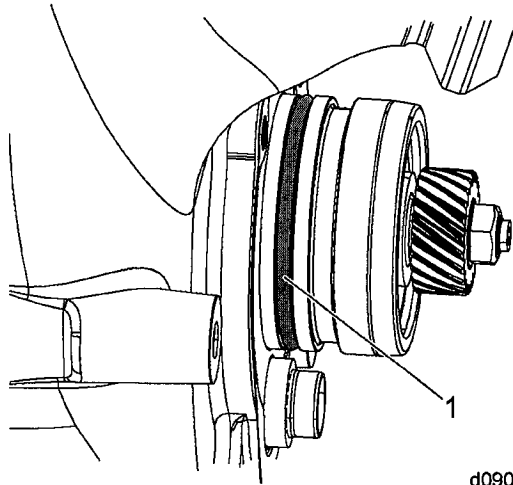


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2 Inspection of the DD15 and DD16 Axial Power Turbine

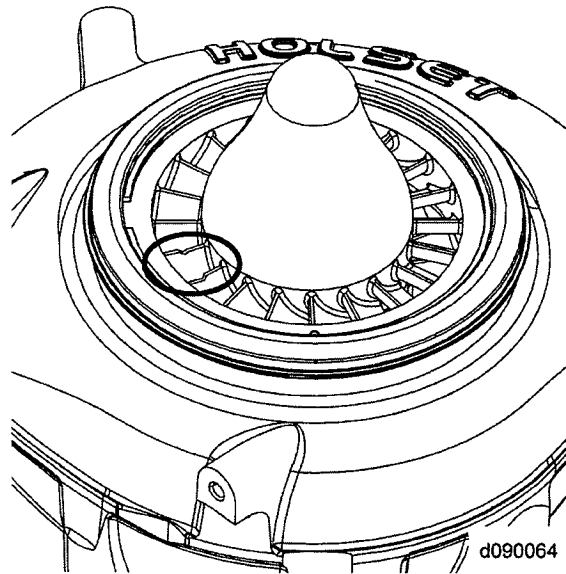
Inspect as follows:

1. Remove the Axial Power Turbine (APT) from the gearbox and ensure the O-ring is installed in the narrow groove (1) on the snout of the APT.



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2. Inspect the APT stator and vanes. If any of the vanes on the stator are damaged, replace the APT assembly.

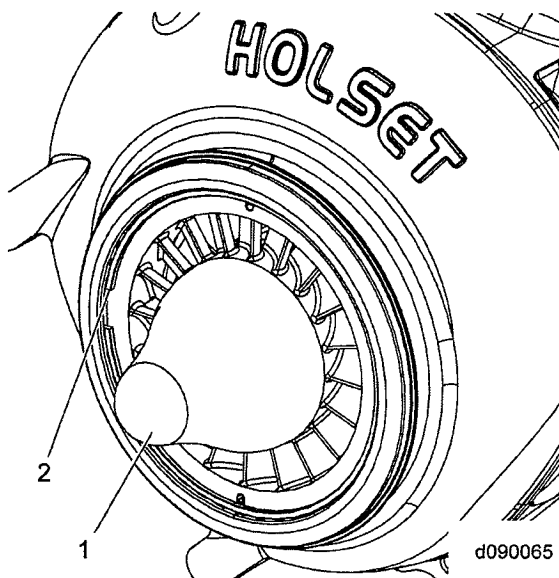


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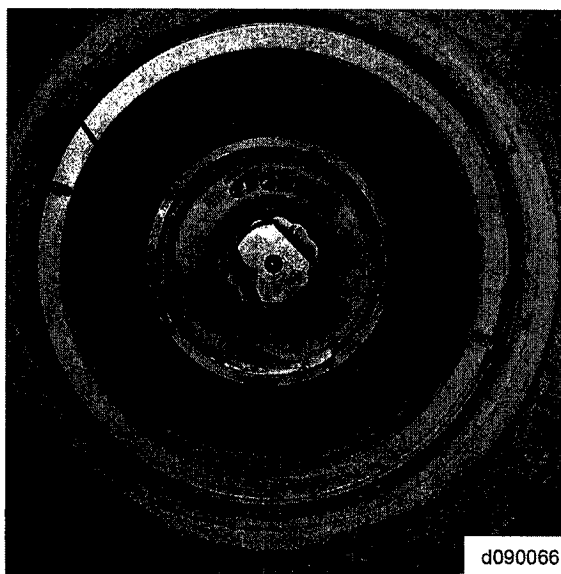
3. Clean the oil and buildup from the APT stator and vanes using mineral spirits. Replacement of the APT for oil or carbon buildup is not necessary.
4. Rotate the APT turbine shaft. If the shaft does not turn smoothly, replace the APT assembly.
5. Remove the retaining ring from the APT stator and remove the stator from the APT housing. The stator is removed by pulling straight away from the housing, taking care not to wedge the assembly. A light abrasive may be used to remove buildup or corrosion inhibiting stator removal.

NOTICE: Do not use any abrasive media on the APT blades as this may cause damage or an imbalance in the assembly.

6. Inspect both sides of the stator (1) and the retaining ring (2); replace APT assembly if damaged.

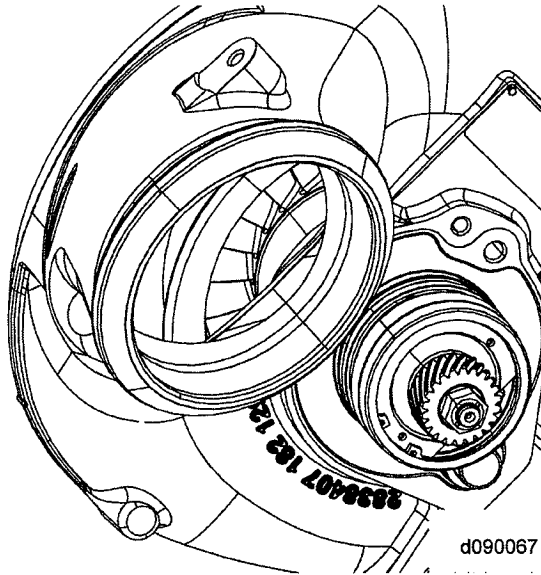


7. With the stator removed, inspect the APT turbine blades for damage and contact with the turbine housing. If any of the turbine blades are damaged, bent, broken, or otherwise damaged, replace the APT assembly.



NOTICE: Do not use any abrasive media on the APT blades as this may cause damage or an imbalance in the assembly.

8. Visually inspect the turbine blades from the exhaust outlet. If any damage is visible, replace the APT assembly.



WARNING: EYE INJURY

To avoid injury from flying debris when using compressed air, wear adequate eye protection (face shield or safety goggles) and do not exceed 276 kPa (40 psi) air pressure.

9. If no physical damage was found during the inspection, thoroughly clean the assembly with mineral spirits, reassemble the stator and retaining ring, and reuse the APT.
 - Take caution not to use any abrasive materials that could damage the turbine rotor blades.
 - Replace the graphite seal and O-ring seal on the APT for reuse.
 - Ensure no oil or mineral spirit residue is left in the APT housing prior to reassembly.
 - Using compressed air, thoroughly dry the APT housing assembly.