



## Engine Noise and Compressor Blisks

Air flow disruption and damaged / bent compressor blades are common as we operate Army aircraft at the lowest of altitudes.

*Can you expect a change in engine noise due to a change in airflow? YES.*

*Will damage to the blisks (compressor blades) indicate as a change in engine sound/noise? YES.*

Managing compressor issues includes engine washes for performance recovery, borescope of the compressor, and may require blending or even clipping blades. Managing engine noise is no different. A borescope inspection will tell the tale on the condition of the compressor and the effort needed to bring the engine back to life.

Blending the blisks (compressor blades) is designed to smooth out damage caused by foreign object ingestion. Slight dings to the leading edge of the blades can be blended to regain engine performance. Bent blade tips can be clipped within limits prescribed in the engine manual. Clipping a blade requires that you also clip the undamaged opposite blade for purposes of balance.

Clipped blade tips can cause a change in the airflow and a change to the sound of the engine. A change in engine noise due to blade clipping can be expected and is acceptable. Ensure if the blades are clipped and the engine noise changes, a note is annotated in the logbook, announcing the action, and informing the crew of the completed procedure. Aircrew members may misdiagnose the change in engine noise as new damage resulting in the replace the Cold Section Module or engine assembly.

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