

April 13, 2021

NOTICE TO SAFARI OWNERS REGARDING CLUTCH ENGAGEMENT

WARNING

Centrifugal clutches in helicopters operate in several different ways. The clutch drum of a Safari is attached to the engine fly wheel. The assembly holding the clutch shoes is attached to the bottom of the transmission. This allows the engine to be started and run without immediate engagement of the rotor blades. In fact, the rotor blades can be prevented from turning as long as the engine is at low rpm.

If you have observed the function of the Safari clutch system, you have noticed that the centrifugal clutch in the Safari engages as the clutch shoes make contact with the lining of the clutch drum. This engagement is designed to occur slowly as the engine is at idle speed (600-800 rpm).

Because the clutch shoes are lightly and intermittently touching the drum as it spins, they will begin to turn the transmission and therefore the rotor blades. The blades will begin to turn slowly as the clutch shoes engage fully with the drum.

Engine rpm should not be increased until the clutch is fully engaged. A sudden increase in the engine rpm before the clutch shoes have fully engaged with the clutch drum can result in damage to the transmission.

Before starting the engine of a Safari, the main rotor blades should be turned backwards far enough to be certain that the clutch shoes are freely turning. Do not start the engine without being certain the clutch shoes are not engaged.