

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

**Airworthiness Directive**

**61-11-02 BRANTLY:** Amdt. 292 Part 507 Federal Register May 30, 1961. Applies to All Model B-2 Helicopters Prior to Serial No. 95.

Compliance required within the next 25 hours' time in service after effective date of this directive.

Severe oil leaks have been reported recently from failure of the welded seam of the mixture heater oil jacket, Lycoming P/N 72396, on the Lycoming VO-360 engines in Brantly B-2 helicopters. As this condition introduces a fire hazard as well as the probability of engine failure from oil starvation, the following modifications must be accomplished.

(a) Disconnect the oil system hose assemblies from the inlet and outlet ports of the mixture heater oil jacket. Join these assemblies with AN 815-8D union, thus by-passing the mixture heater oil jacket. Support the joined hose assemblies with AN 742-D-14C hose clamps at the right rear starter mount bolt and the left rear transmission mount tube. Remove the mixture heater oil jacket, clean thoroughly, apply zinc chromate to the oil passage cavity, and reinstall with the oil ports capped with AN 928-8 cap assemblies.

(b) Modify engine cooling boxes in accordance with Brantly Service Bulletin No. 12. This modification includes adding covers over the rear openings in the right hand cooling box, deleting the cylinder barrel baffle assemblies from around No. 2 and No. 4, cylinders, making a 1 3/4-inch diameter cutout in the bottom of the left hand cooling box under the No. 3 cylinder, and relocating the cylinder head temperature thermocouple from the No. 4 cylinder to the No. 3 cylinder.

(Brantly Service Bulletin No. 12 covers these modifications.)

This directive effective August 4, 1961.