

**AIRWORTHINESS DIRECTIVE 2010-07-08**

Kelly Aerospace Energy Systems, LLC  
(formerly Kelly Aerospace Power Systems):  
Amendment 39-16253. Docket No. FAA-2009-  
1259; Directorate Identifier 2009-NE-41-AD.  
Effective Date

- (a) This airworthiness directive (AD) becomes effective April 19, 2010. Affected ADs
- (b) None. Applicability
- (c) This AD applies to certain serial numbers (S/Ns) of Kelly Aerospace Energy Systems, LLC (KAES) rebuilt turbochargers listed by part number (P/N) in the following Table 1 of this AD. The affected S/Ns are listed in Table III of Kelly Aerospace Energy Systems, LLC Service Bulletin (SB) No. 039 A, dated February 10, 2010.

**Table 1 – Part Numbers of Rebuilt Turbochargers Affected**

406610-9005	406610-9015	406610-9018
406610-9019	406610-9020	406610-9021
406610-9025	406610-9026	406610-9028
406610-9029	406610-9030	406610-9032
407810-9001	406990-9004	408610-9001
409170-9001	409680-9011	465680-9001
465680-9004	465680-9005	465930-9002
465930-9003	465292-9002	465292-9004
465398-9002	407540-9003	466881-9001
466642-9001	466642-9002	466642-9005
466304-9003	600572-9000*	600573-9000*
600574-9001*	600575-9001*	600575-9002*
600576-9000*	600700-9001*	600803-9001*
600803-9002*	N/A	N/A

\* P/Ns with an asterisk may have a CF prefix. These rebuilt turbochargers are installed on, but not limited to, the engines and aircraft listed in Table IV of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010. Unsafe Condition

- (d) This AD results from three reports of infant mortality turbine wheel failure in rebuilt turbochargers, since June of 2007. We are issuing this AD to prevent separation or seizure of the turbocharger turbine, which could result in full or partial engine power loss, loss of engine oil, and smoke in the airplane cabin.
- (e) You are responsible for having the actions required by this AD performed

within 10 hours time-in-service after the effective date of this AD, unless the actions have already been done. Turbocharger Removal From Service

(f) Remove from service the rebuilt turbochargers listed by P/N in paragraph (c) of this AD that have a S/N listed in Table III of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010. Installation Eligibility of Removed Turbochargers

(g) Removed turbochargers listed in Table III of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010, are eligible for installation once they are overhauled by an FAA-approved repair station. That overhaul must include replacing the turbine wheels listed by P/N in Table II of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010, replacing the turbine wheel mating bushings, and marking the attached Return To Service Tag with this AD number, which is AD 2010-07-08. Installation Prohibition

(h) After the effective date of this AD, do not install any of the turbochargers listed in Table III of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010, unless the turbocharger is overhauled as specified in paragraph (g) of this AD. Alternative Methods of Compliance

(i) The Manager, Atlanta Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19. Special Flight Permits

(j) Under 14 CFR 39.23, we are limiting the special flight permits for this AD by the following conditions:

- (1) Use of minimum crew.
  - (2) Flight made during daytime, using visual flight rule conditions.
  - (3) Maximum flight altitude of 12,000 feet mean-sea-level, based upon terrain.
- Related Information

(k) Contact Gary Wechsler, Aerospace Engineer, Propulsion, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park,

GA 30337; telephone (404) 474-5575; fax (404) 474-5606, for more information about this AD.

Material Incorporated by Reference

(I) You must use Kelly Aerospace Energy Systems, LLC Service Bulletin No. 039 A, dated February 10, 2010, to determine which turbocharger(s) are affected by this AD.

The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Kelly Aerospace Energy Systems, LLC, 2900 Selma Highway, Montgomery, Alabama 36108, telephone (334) 386-5400, fax (334) 386-5450, or go to: <http://www.kellyaerospace.com>, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on March 23, 2010. Robert J. Ganley, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

Not Required, Listed Turbocharger not Installed