

**70-14-07 TELEDYNE CONTINENTAL: Amendment 39-1028 as amended by Amendment 39-1092 is further amended by Amendment 39-2014. Applies to Teledyne Continental Models IO-360-A, -C, -D; IO-520-A, -B, -C, -D, -E, -F, -J, -K; IO-470-C, -D, -E, -F, -H, -K, -L, -M, -N, -S, -J, -U, -V, -VO; TSIO-470-B, -C and -D engines.**

NOTE: Compliance with AD 70-14-07 on the Model IO-470-J, -U, -V, and -VO engines added to the applicability statement commences on the effective date of amendment 39-1092.

Compliance: Required as indicated unless already accomplished.

To prevent loss of the fuel injection pump adjustable bypass needle with subsequent power failure accomplish the following or any equivalent procedure approved by Chief, Engineering and Manufacturing Branch, FAA, Central Region, Kansas City, Missouri:

A) Within 25 hours' time in service after the effective date of this AD, visually inspect the fuel injection pump below the fuel inlet elbow for the presence of a hexagonal head brass plug containing a stainless steel adjusting needle with a screwdriver slot. If the pump does not have this feature, or if the adjusting needle is retained in the brass plug by an internal spring circular clip, no further action is required. If it does, and the slotted head of the needle is flush or below the face of the plug, secure the needle in its present position by cleaning the plug and needle with gasoline or carbon tetrachloride and applying LePages Epoxy or Loctite #2508 epoxy cement or equivalent over the slotted head of the needle and face of the plug. If the slotted head of the needle extends outward beyond the face of the plug, accomplish Paragraph B before further flight.

B) At next engine or fuel injection pump overhaul, fuel injection pump adjustment or as indicated in Paragraph A, replace the existing fuel injection bypass needle with P/N 637766 or 637767 needle as appropriate in accordance with the following:

1. Before removing the needle start the engine and adjust engine to obtain full throttle and maximum RPM, then record fuel flow or pressures and RPM for future reference. Stop the engine and record the number of turns required to bottom the needle.

2. Replace the present needle with P/N 637766 needle having 8-32 threads or P/N 637767 needle having 10-32 threads as applicable. Use a new "O" ring, P/N AN123957, with the new needle.

3. Bottom the new needle and back out to the previous setting, start the engine, and stabilize power at full throttle and maximum RPM, then adjust the needle to obtain the previously recorded full throttle, maximum RPM, fuel pressure or flow.

4. Safety wire the needle through the drilled hole in the needle shank and the unused hole in the brass plug, or around the pressure relief valve adjusting screw in the cover at the back of the pump. Exercise care to avoid disturbing the needle setting.

Teledyne Continental Motors Service Bulletin M70-10, Revision 1, dated June 25, 1970, or later FAA-approved revision, refers to this subject.

NOTE: The presently FAA-approved manufacturer's fuel pump adjustment procedures contained in his Overhaul and Parts Catalog for Fuel Injection Systems, Form X-30091 may be substituted for the adjustment instructions contained in Paragraphs B.1., 2. and 3.

Amendment 39-1028 became effective July 16, 1970.

Amendment 39-1092 became effective October 13, 1970.

This Amendment 39-2014 becomes effective November 22, 1974.