RotorWay INTERNATIONAL

300 South 25th Ave. Phoenix, Arizona 85009 / 602-278-8899
FAX 602-278-7657

September 8, 1992

TO ALL EXEC 90 BUILDERS
and
EXEC OWNERS WITH RI 162 ENGINE CONVERSIONS

ADVISORY BULLETIN A-14

History: On a few instances, a waterjacket casting on the RI 162 engine has cracked. This crack has occurred just around the head bolt attachment point. At first it is not visible to the eye; however, it will be noticed by a small seepage or drip of engine coolant bleeding out through the crack.

This type of crack is a fatigue fracture to the casting and occurs when a casting has a weak spot that cannot be detected through our standard quality control zyglo process.

Action: This type of fatigue crack should not require any type of emergency shutdown procedure during operation of the aircraft. By regularly monitoring the waterjacket, you will be able to detect the leakage at a very early stage. If you do not observe the coolant leakage, it will eventually lose enough coolant that the engine will not maintain proper operating temperature.

Important: Incorrect torque on the head bolts can also cause or accelerate a fatigue crack on the waterjacket. Consult your RI 162 Engine Manual for recommended time intervals to torque the head bolts and observe the procedures below:

1. Follow the cylinder head torque sequence diagram found on page 71 or page 73 of the Engine Manual (depending upon which edition you have).

2. Loosen the first cylinder head bolt approximately 1/2 turn (or until the bolt moves freely).

3. Re-torque cylinder head bolt to the proper specifications.

4. Repeat this process on the remaining bolts, in the proper sequence.

   Note: The engine must be cold when torquing these bolts.