

March 15, 1993

TO ALL EXEC 90 BUILDERS

EXEC 90 ADVISORY BULLETIN A-18

History: The condition of certain valvetrain components should be monitored closely to maximize engine life and performance.

Action: Observe the valve guide inspection procedures outlined on the following page. This page should be inserted into your RI 162 engine manual after page 43. NOTE: The following inspection should be done <u>every 25 hours</u>. It should be performed prior to each valve lash measurement. While these parts "normally" do not wear and require no maintenance, it is important to monitor their condition in order to prevent a failure.

Valve Guide: If excessive wear occurs between a valve and valve guide, the guide will develop an "hour glass" shape on its inside diameter. This can cause excessive oil consumption and if the wear becomes extreme it will cause engine failure by damaging the valve To inspect for wear, rotate the engine to the proper position for valve adjustment of the individual valve/valve quide to be inspected. Prior to measuring and adjusting the valve lash, grasp the valve spring retainer with your fingers and move it up and down. During this process look between the coils of the valve spring and watch the part of the valve stem which protrudes from the Wear would be evident by excessive movement and by a visible "gap" between the valve stem and guide. You will need to use a fair amount of pressure to get any movement, but under all conditions never use a tool to pry on the assembly. Since this is a dificult area to view it might be helpful to use a small inspection light. Next try to move it from side to side while looking for valve stem movement. Abnormal wear will usually cause more movement in one direction than in the other. This is a subjective measurement since the valve spring is trying to keep the valve from moving and varying degrees of pressure will cause different amounts of However, you should be able to notice a difference deflection. between a "normal assembly" and one which has excessive valve quide If you determine that a valve may have more "play" than normal, proceed as follows: remove the rocker arm (see Valve Train - Lash Cap, Rocker and Pushrod Inspection). Carefully install an external valve spring compressor on the suspect assembly and compress the spring just enough to allow unrestricted movement of the valve. (It is not necessary to remove the lash cap.) Without the interference of valve spring pressure you should be able to verify if the quide has excessive wear. If this is the case OR if you have any questions regarding these procedures, DO NOT continue to operate the engine! Call Customer Service for additional instructions.