**TABLE III-I. INSPECTION REPORT - PA-32-260/300** (cont.)

**K. NOTES**

1. Refer to Piper's Customer Service Information Aerofiche P/N 1753-755 for latest revision dates to Piper Inspection Reports/Manuals and this Service manual. References to Chapter/Section are to the appropriate Chapter/Section in this manual.

   WARNING: INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA) FOR ALL NON-PIPER APPROVED STC INSTALLATIONS ARE NOT INCLUDED IN THIS MANUAL. WHEN A NON-PIPER APPROVED STC INSTALLATION IS INCORPORATED ON THE AIRPLANE, THOSE PORTIONS OF THE AIRPLANE AFFECTED BY THE INSTALLATION MUST BE INSPECTED IN ACCORDANCE WITH THE ICA PUBLISHED BY THE OWNER OF THE STC. SINCE NON-PIPER APPROVED STC INSTALLATIONS MAY CHANGE SYSTEMS INTERFACE, OPERATING CHARACTERISTICS AND COMPONENT LOADS OR STRESSES ON ADJACENT STRUCTURES, THE PIPER PROVIDED ICA MAY NOT BE VALID FOR AIRPLANES SO MODIFIED.

2. Inspections or operations are to be performed as indicated by a "O" at the 50 or 100 hour inspection interval. Inspections or operations (i.e. - component overhauls/replacements, etc.) required outside the 100 hour cycle are listed as special inspections in Section III. Inspections must be accomplished by persons authorized by the FAA.

   (a) The 50 hour inspection accomplishes preventive maintenance, lubrication and servicing as well as inspecting critical components.

   (b) The 100 hour inspection is a complete inspection of the airplane, identical to an annual inspection. ←

   NOTE: A log book entry should be made upon completion of any inspections.

3. Piper Service Bulletins are of special importance and Piper considers compliance mandatory. In all cases, see Service Bulletin/Service Letter Index P/N 762-332 or Service Bulletin/Service Letter Aerofiche Set P/N 1762-331 to verify latest revision. See also Table III-III.

4. Piper Service Letters are product improvements and service hints pertaining to servicing the airplane and should be given careful attention.

5. Inspections given for the power plant are based on the engine manufacturer's operator's manual (Lycoming P/N 60297-10) for this airplane. Any changes issued to the engine manufacturer's operator's manual shall supersede or supplement the inspections outlined in this report. Should fuel other than the specified octane rating for the power plant be used, refer to the latest revision of Lycoming Service Letter No. L185 for additional information and recommended service procedures.

6. Refer to latest revision of Lycoming Service Bulletin No. 480.

7. Check cylinders for evidence of excessive heat indicated by burned paint on the cylinders. This condition is indicative of internal damage to the cylinder and, if found, its cause must be determined and corrected before the airplane is returned to service. Heavy discoloration and appearance of seepage at the cylinder head and barrel attachment area is usually due to emission of thread lubricant used during assembly of the barrel at the factory, or by slight gas leakage which stops after the cylinder has been in service for a while. This condition is neither harmful nor detrimental to engine performance and operation. If it can be proven that leakage exceeds these conditions, the cylinder must be replaced.

B. Procedures

(1) EXHAUST SYSTEM INSPECTION. (Refer to Figure 3-1 and 3-2.) A very thorough inspection of the entire exhaust system, including heat exchange shroud, muffler, muffler baffles, stacks and all exhaust connections must be accomplished at each 100 hour inspection and whenever maintenance is performed on the exhaust system. The possibility of exhaust system failure increases with use. It is recommended that the system be checked even more carefully as the number of hours increase; for example an inspection at the 700 hour period would be more critical than one in the 100 hour period. The system should also be checked carefully before winter operation when the cabin heat will be in use.

NOTE: Fit all PA-32 airplanes with a new muffler at or near 1000 hours of muffler operation.

CAUTION: WHEN REMOVING OR INSTALLING COUPLING CLAMP, SLIDE CLAMP OVER END OF PIPE BEFORE ASSEMBLY / DISASSEMBLY. EXCESSIVE SPREADING CAN LEAD TO PREMATURE FAILURE OF CLAMP.

NOTE: When installing an exhaust clamp having an alignment pin be certain that the pin engages the mating holes in exhaust pipe and muffler to prevent separation of components.

Removal of the tail pipe and stacks is required for inspection of the muffler baffle. Remove or loosen all exhaust shields, carburetor and cabin heat muffs, shrouds, heat blankets, etc., as required to permit inspection of the complete system. Perform the necessary cleaning operations and inspect all external surfaces for dents, cracks and missing parts. Pay particular attention to welds, clamps, supports and support attachment lugs, slip joints, stack flanges and gaskets. Inspect internal baffle or diffusers. Any cracks, warpage or severe oxidation are cause for replacement of the muffler.

If any component is inaccessible for a thorough visual inspection, accomplish one of the following:

(a) Accomplish a submerged pressure check of the muffler and exhaust stack at 2 psi air pressure.

(b) Conduct a ground test using a carbon monoxide indicator by heading the airplane into the wind, warming the engine on the ground, advancing the throttle to full static RPM with cabin heat valves open, and taking readings of the heated airstream inside the cabin at each outlet (including rear seat heat outlet, if installed). Appropriate sampling procedures applicable to the particular indicator must be followed. If carbon monoxide concentration exceeds .005 percent or if a dangerous reading is obtained on an indicator not calibrated in percentages, the muffler must be replaced.

(c) For PA-32-300 and PA-32R-300 aircraft, ensure the proper installation of the shroud on the muffler upon reassembly. Mislocation of the shroud could result in shifting of the shroud with a resulting reduction of cabin heat and possible inability of the nose landing gear on the PA-32R-300 to fully extend to its down lock position.

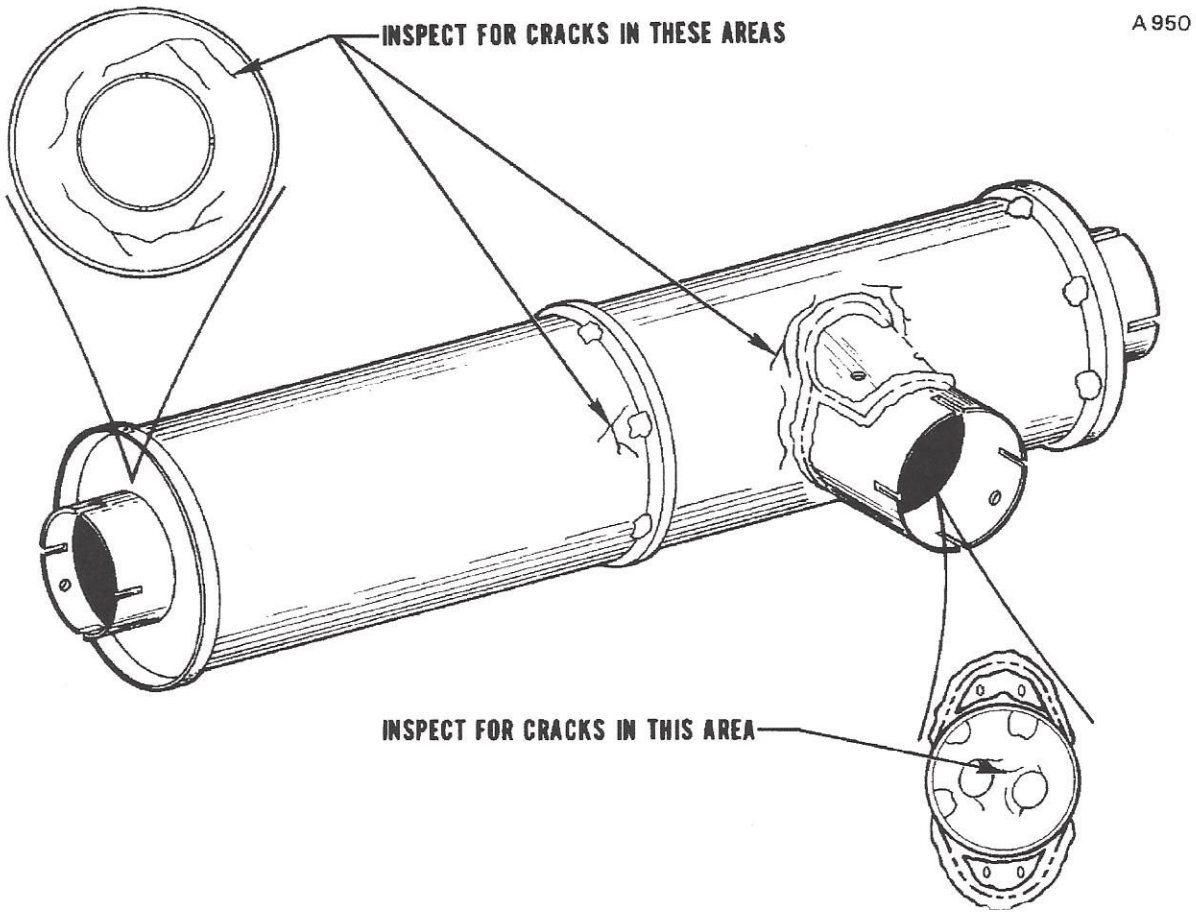


Figure 3-1. Typical Muffler Fatigue Areas

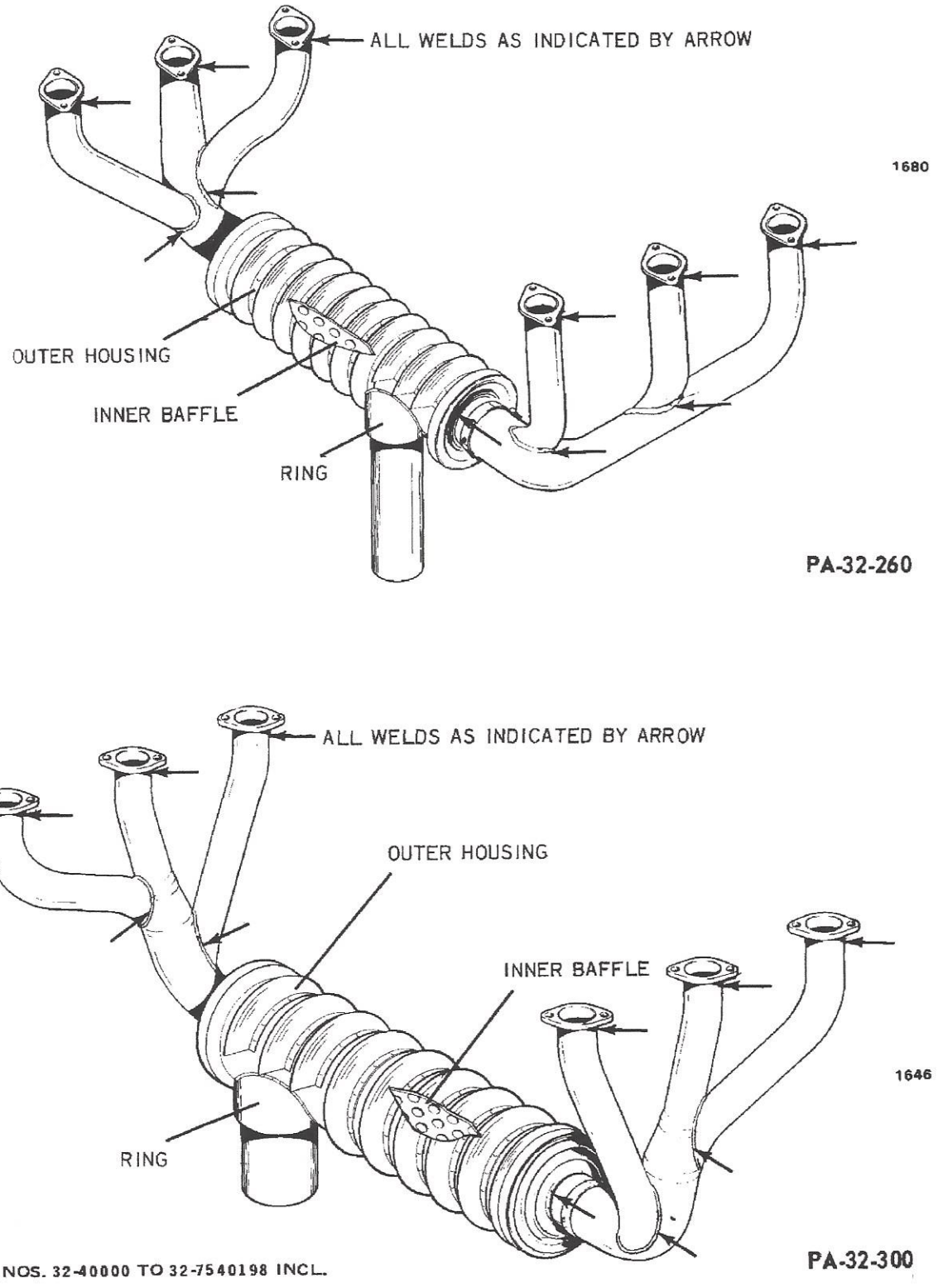


Figure 3-2. Exhaust System Inspection Points