



*Customer Services*

# SERVICE LETTER

No. 324C

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

Reason for Revision: See NOTE below, and additional sketch (attached).

January 22, 1969

---

(Supersedes Service Letter No. 324B)

Subject: Maintenance and Inspection of Exhaust Systems and Heat Exchangers

Models Affected: See sketches attached

Adequate inspection and maintenance in many instances is not being accomplished on the exhaust and heat exchanger systems.

An exhaust and heat exchange system which has been permitted to deteriorate due to age and poor inspection and maintenance can conceivably cause the following difficulties:

1. Carbon monoxide poisoning.
2. Engine compartment originated fires in flight.
3. Engine malfunction or failure in flight.

We would like to point out that, in the interest of safety and proper maintenance, a visual daily line inspection of the exhaust stack gaskets, exhaust stack muffler assembly and muffler tail pipe joints be made to assure tightness; also that all firewall seals are in a satisfactory condition and the engine compartment is free of excessive oil or other combustible materials.

The entire exhaust system, including heat exchangers, stacks, mufflers, muffler baffles and all exhaust connections must be rigidly inspected at each 100 hour inspection. In addition, the system should be very carefully checked for leaks as the airplane progresses from summer operation (cabin heater not being used) to winter operation (cabin heat on). Removal of the tail pipe will facilitate inspection of the muffler baffle.

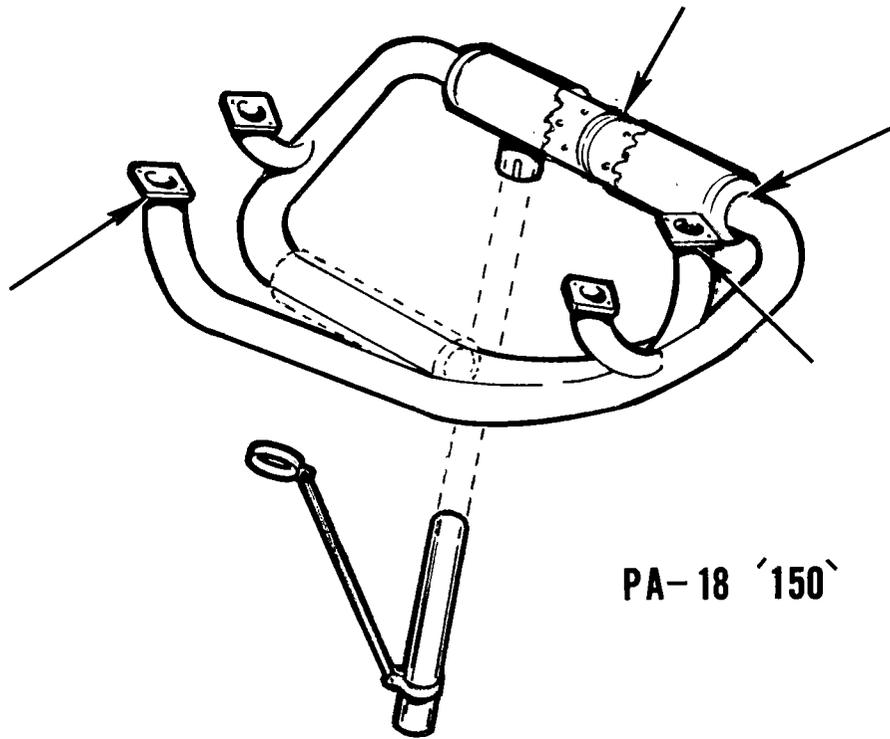
As with any other system, age (number of hours) must be considered. Even though the best materials and techniques are incorporated in these systems, inspections for instance, at the 700-800 hour period, should be more critical than at the 100 hour mark. Possible replacement of parts should be considered after the 1000 hour mark.

Should you at any time detect the odor of exhaust fumes in the cabin, the pilot must immediately discontinue use of the cabin heater and defroster and open all available cabin ventilators. The pilot should land at the first available airport and determine the source of the leak for immediate correction.

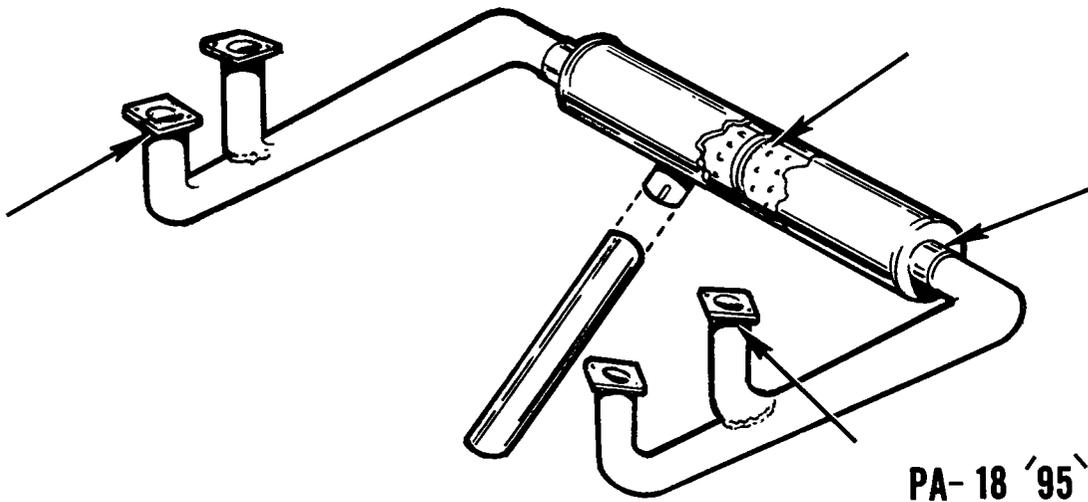
#### NOTE

FAA Advisory Circular No. 43.13-1, Chapter 14, Section 3 (concerning exhaust systems), contains information relative to inspection and maintenance of aircraft exhaust systems. Field maintenance personnel should be aware of the information contained therein.

---

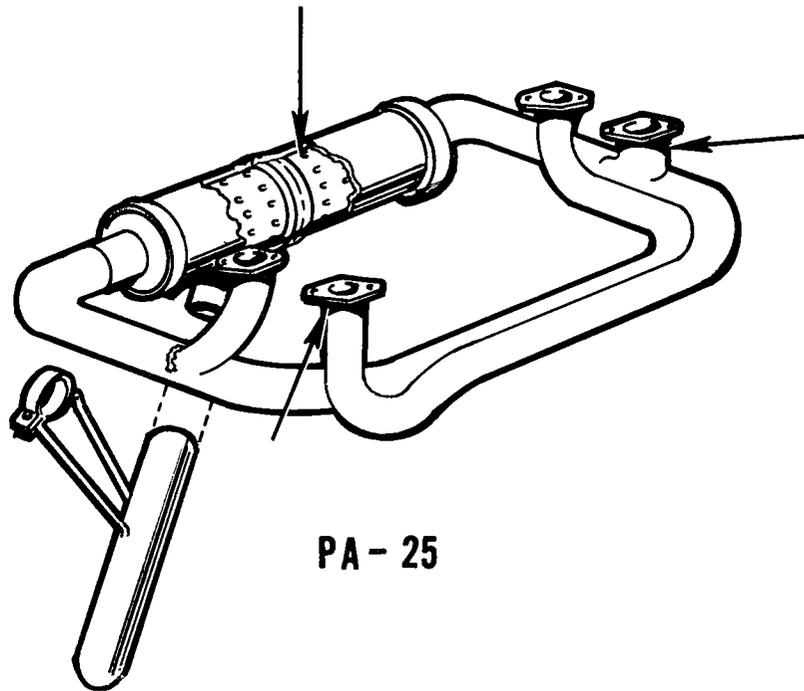


PA-18 '150'

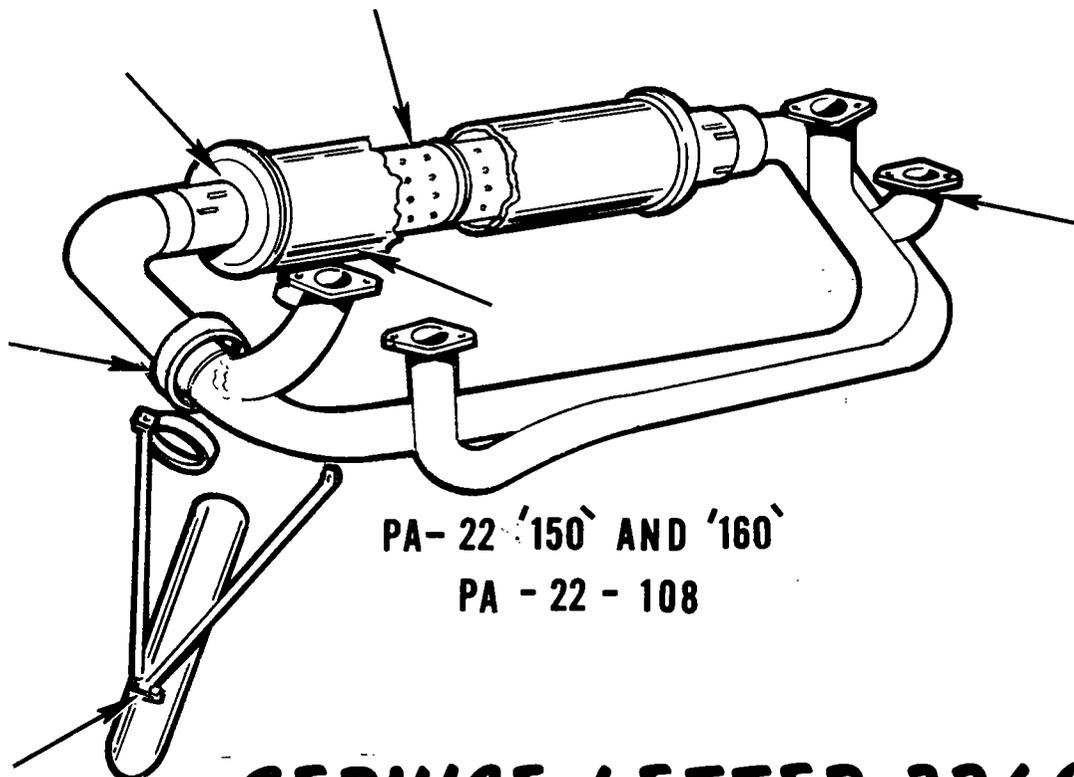


PA-18 '95'

***SERVICE LETTER 324C***

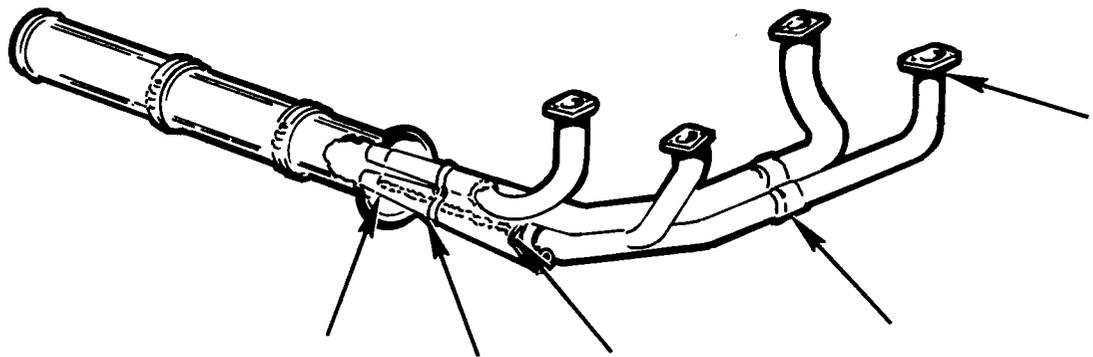


PA - 25

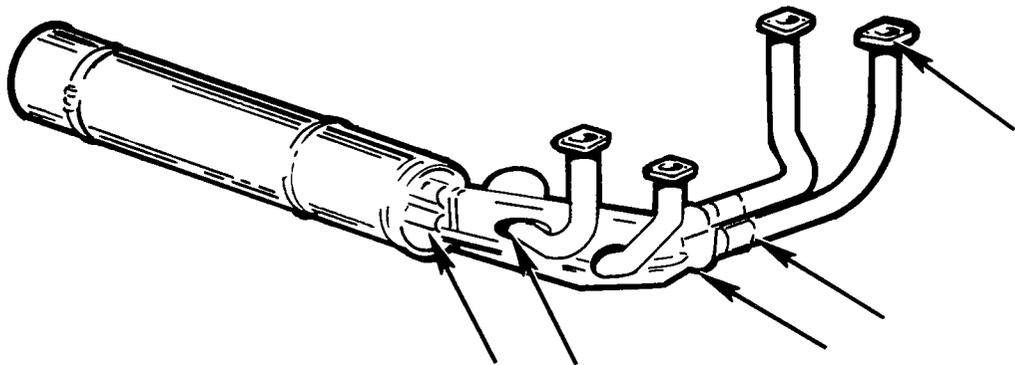


PA - 22 '150' AND '160'  
PA - 22 - 108

**SERVICE LETTER 324C**

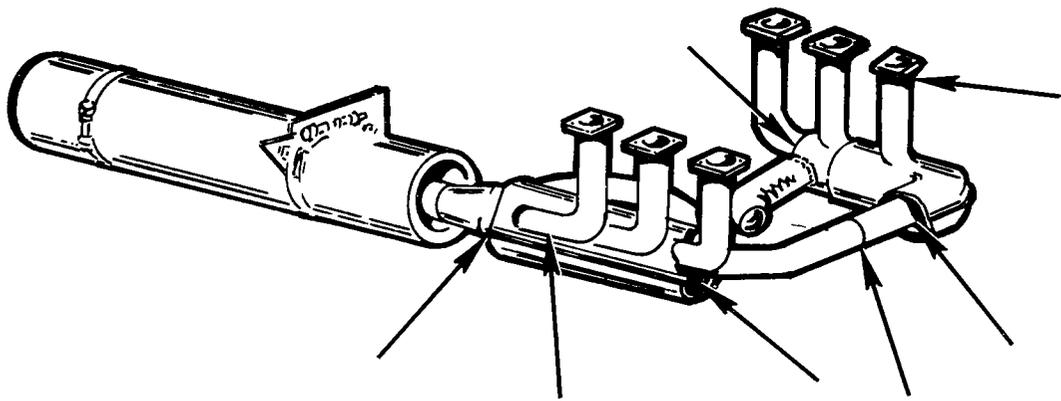


PA - 23-150 - 160      23-1 TO  
23 - 1151



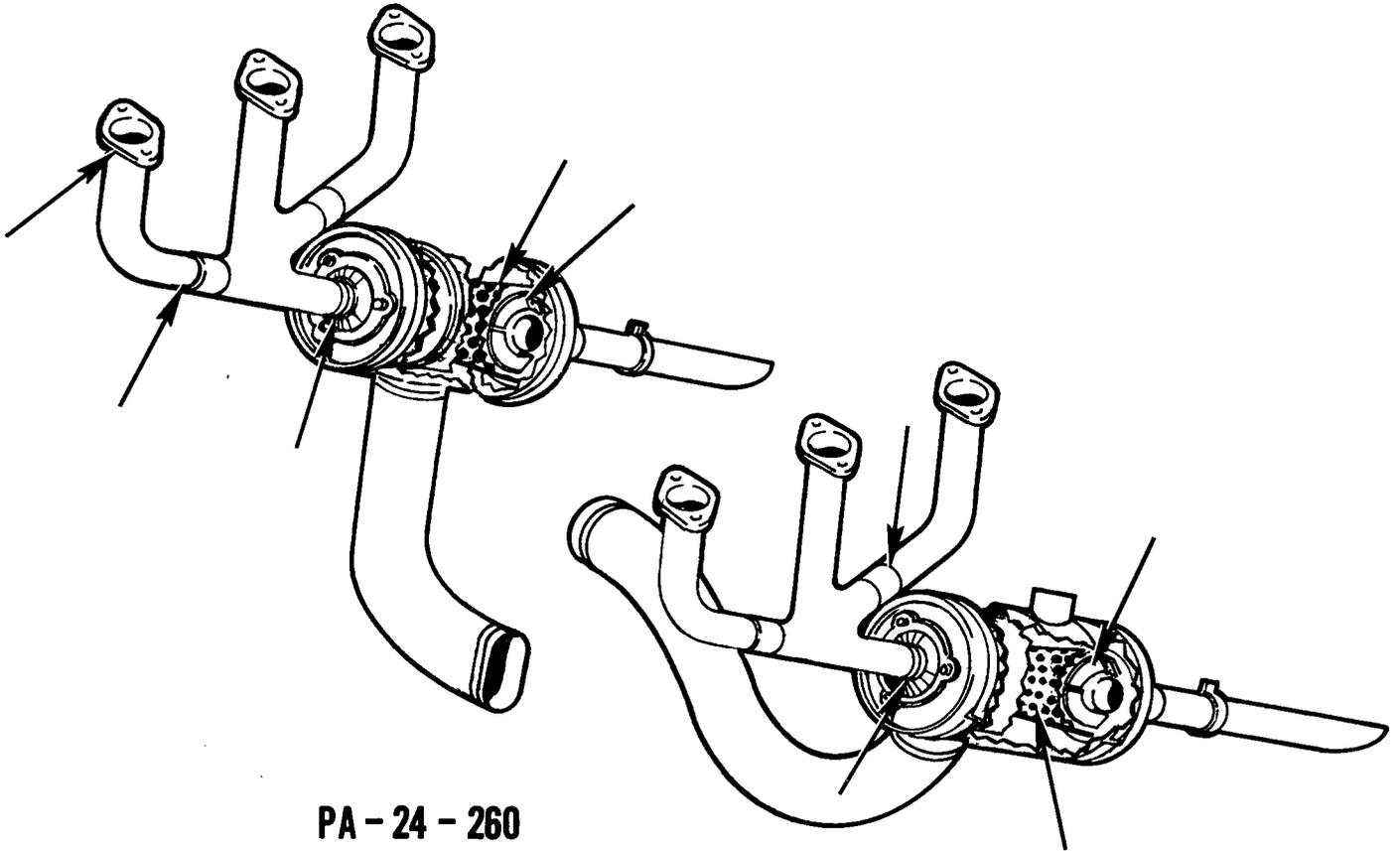
PA - 23-150 - 160      23-1152 AND UP

***SERVICE LETTER 324C***

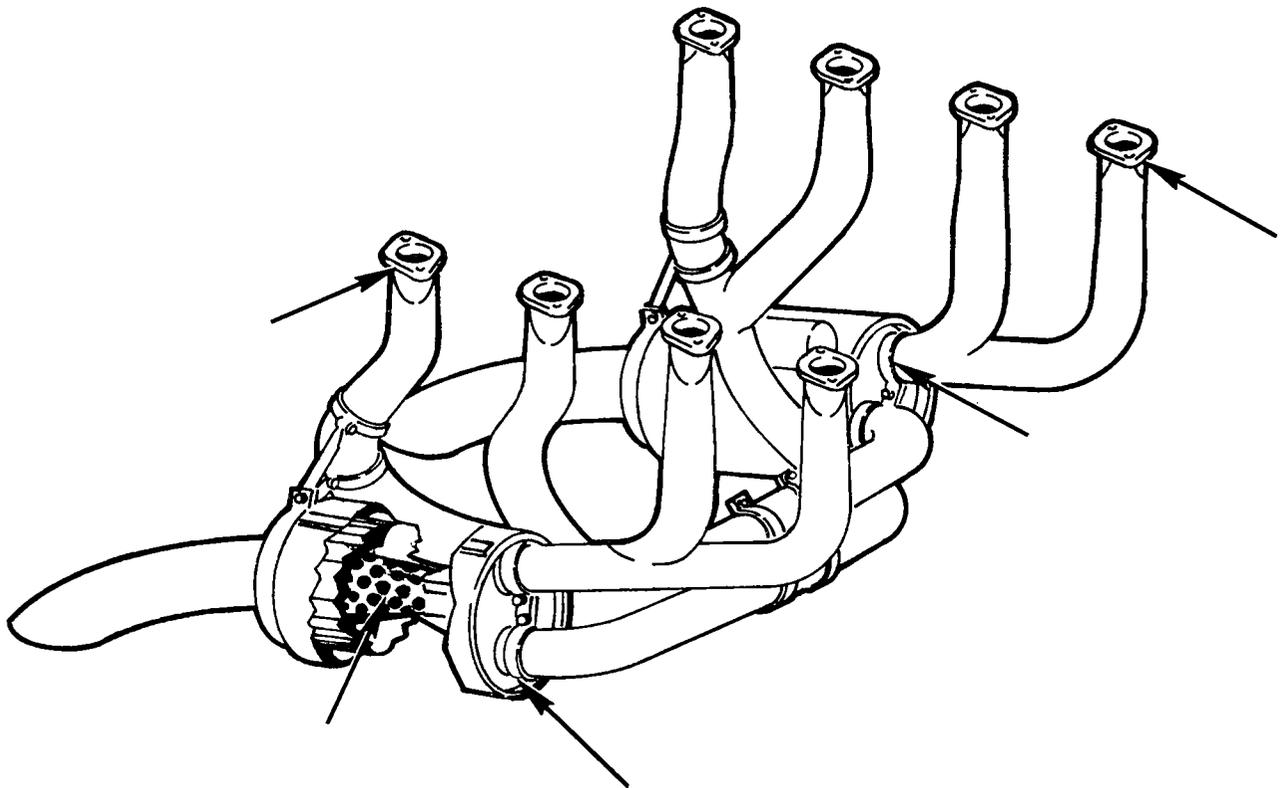


PA - 23 - 250

***SERVICE LETTER 324C***

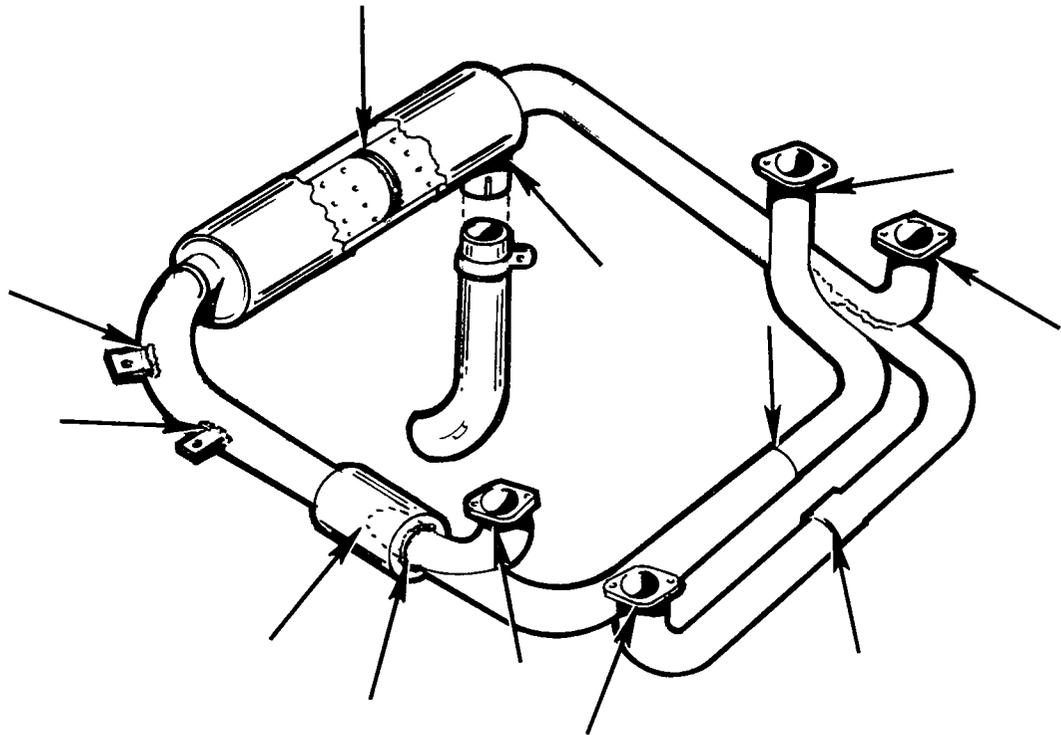


PA - 24 - 260

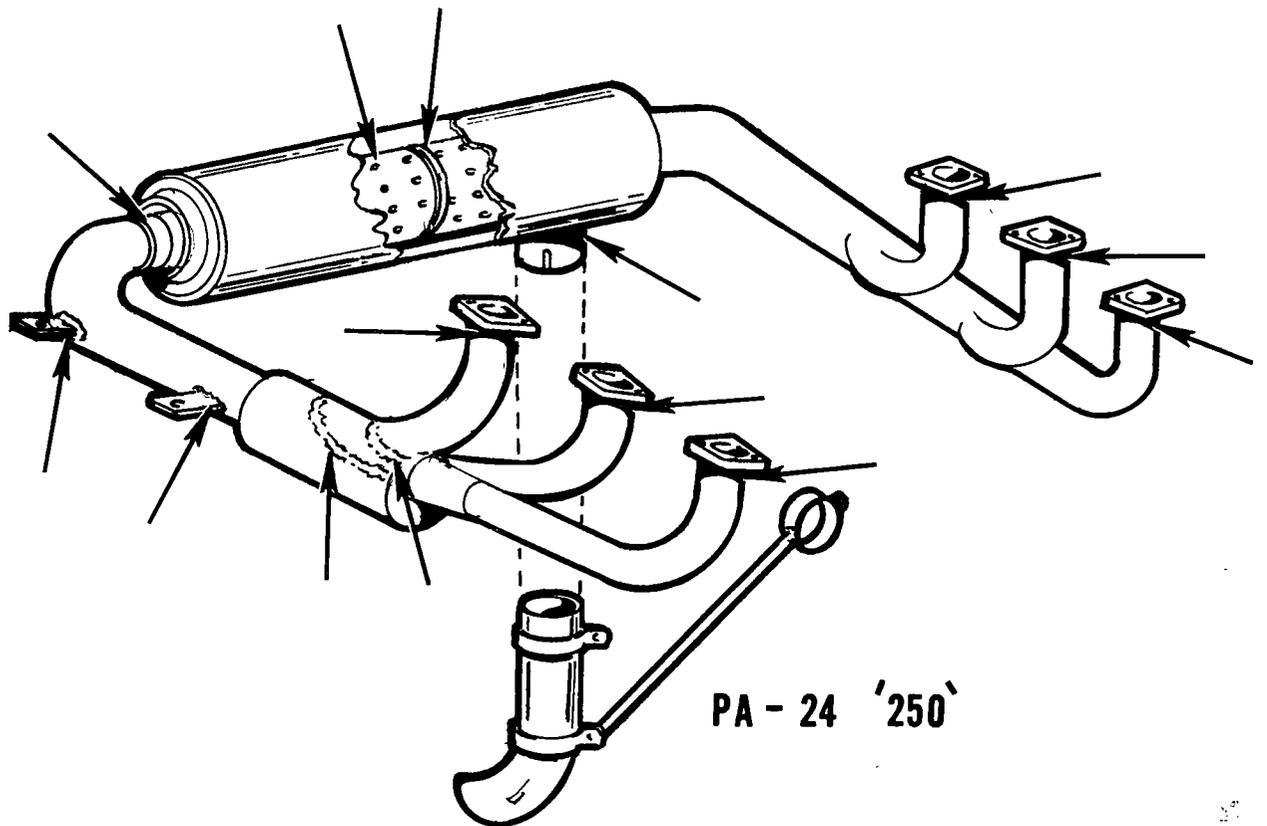


PA - 24 - 400

***SERVICE LETTER 324C***

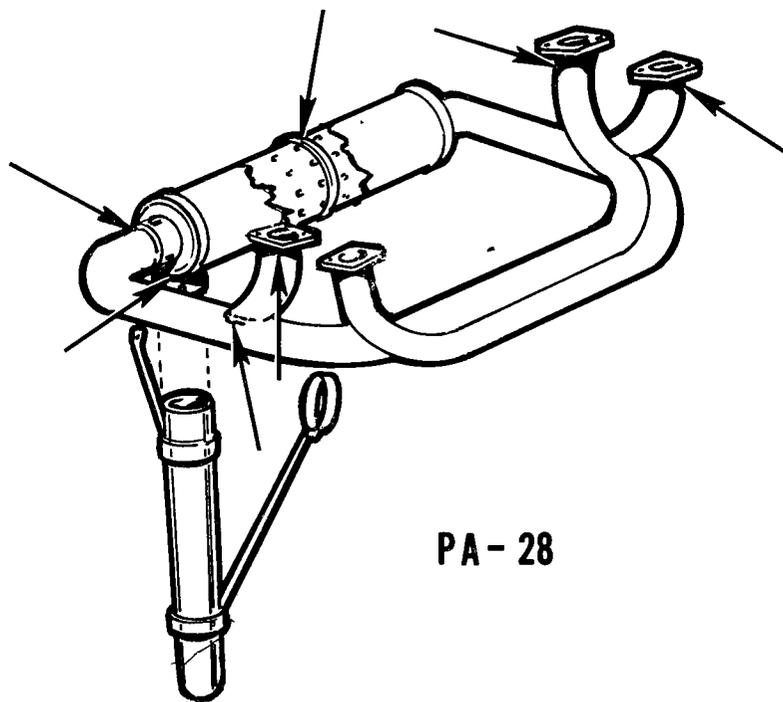


PA - 24



PA - 24 '250'

**SERVICE LETTER 324C**



PA - 28

***SERVICE LETTER 324C***