

SECTION 04: EXHAUST SYSTEM

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1. DESCRIPTION

The muffler is rubber mounted on the vehicle frame. This feature reduces the transmission of vibrations to the muffler thus resulting in extended life of muffler, brackets and other components.

2. MAINTENANCE

The exhaust system should be inspected periodically for restrictions and leaks. The exhaust systems are shown on Figures 1 & 2 (Fig. 1 = XL-40 & 45E and Fig. 2 = XL-45). Restrictions such as kinked or crimped pipes result in excessive back pressure that can lead to increased fuel consumption, power loss, and possible damage to engine combustion chamber components. Exhaust leaks are commonly the result of loose clamp bolts, corroded pipes, or a punctured muffler. In addition to objectionable noise, a leaking exhaust system could allow toxic gases to enter the vehicle. Inspect the exhaust system as follows:

- At vehicle inspection intervals,
- Whenever a change is noticed in the sound of the exhaust system, and
- Whenever the exhaust system is damaged.

Replace damaged or corroded exhaust system components without delay.

When operating the engine in a service garage or in a closed area, the exhaust must be vented to the outside. Place the shop vent hose over the exhaust outlet pipe.

Warning: Avoid breathing exhaust gases since they contain carbon monoxide which is odorless and colorless but harmful. Carbon monoxide is a dangerous gas that can cause unconsciousness and can be lethal. If, at any time you suspect that exhaust fumes are entering the vehicle, locate and correct the cause(s) as soon as possible.

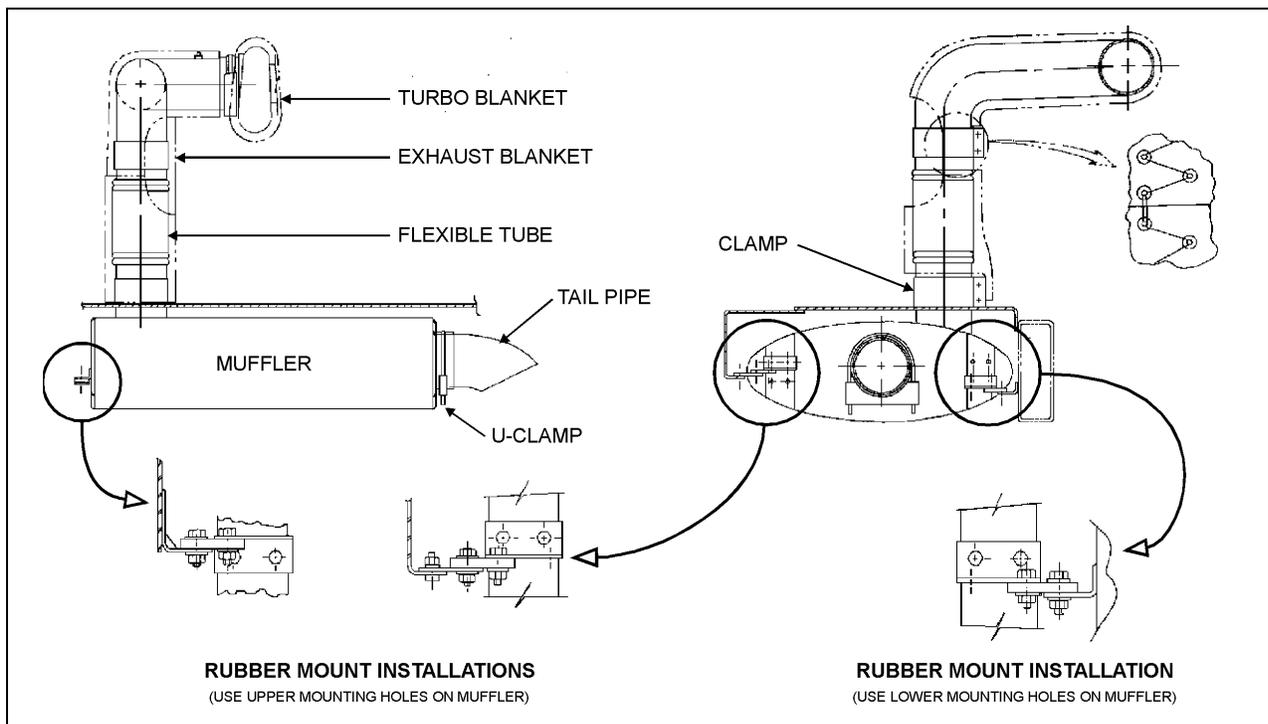


FIGURE 1: EXHAUST SYSTEM - XL-40 & 45E (COACH & SHELL) INSTALLATION

04004

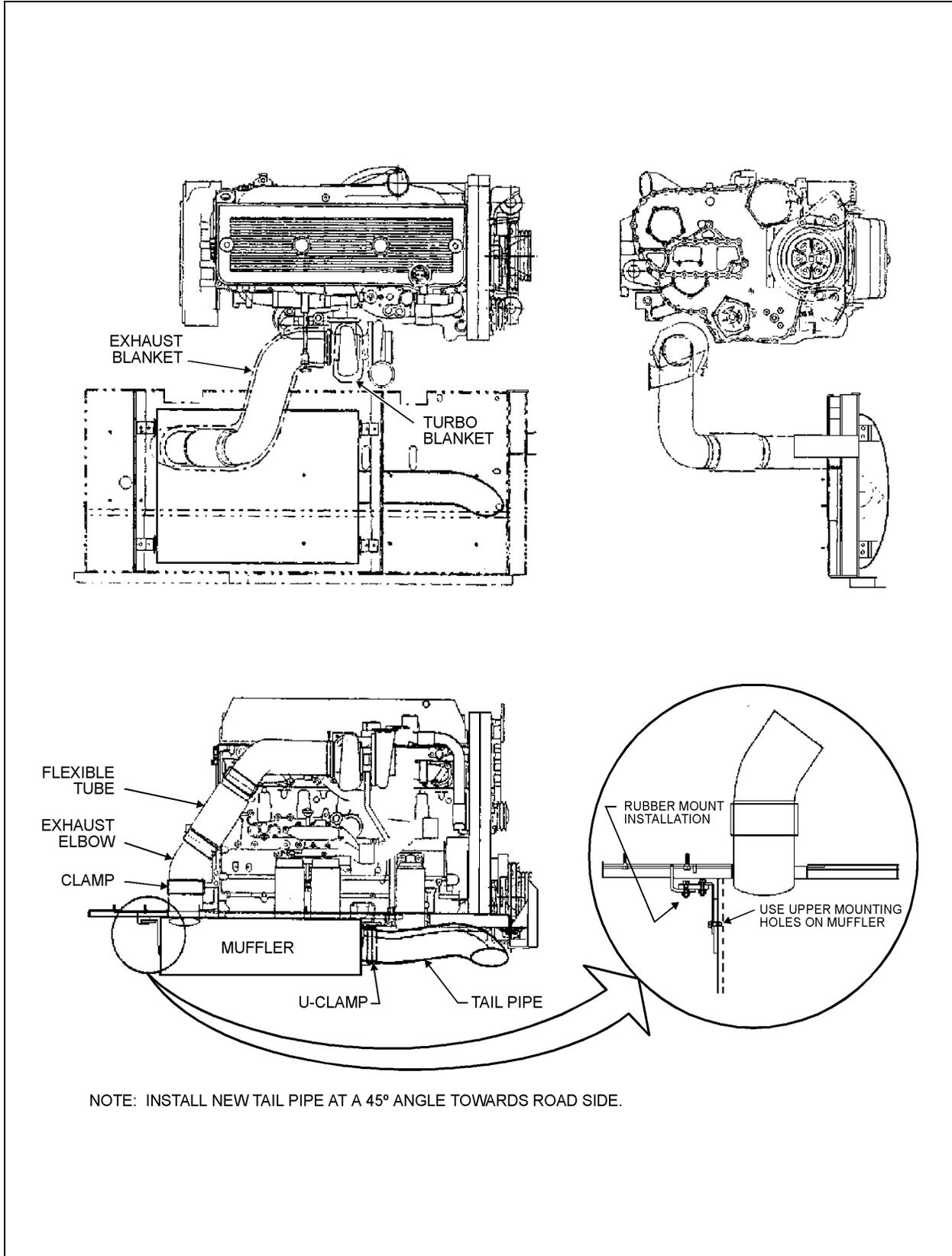


FIGURE 2: EXHAUST SYSTEM - XL-45 (COACH & SHELL) INSTALLATION

04005

3. MUFFLER REMOVAL & INSTALLATION

Warning: *Make sure that muffler and components are cold before handling.*

1. Remove bolts and clamps securing exhaust pipe bellows to the muffler.
2. Support the muffler from underneath vehicle.
3. Remove U-clamp retaining the tail pipe to the muffler.
4. Remove bolt holding the tail pipe to the frame bracket.
5. Remove the tail pipe.
6. Remove the fasteners holding the four rubber mounts to the frame brackets.
7. Remove the fasteners securing the rubber mounts to the muffler brackets.
8. Remove rubber mounts then muffler from underneath vehicle.
9. Remove parts which are attached to the muffler such as brackets and collar.
10. Inspect and replace parts if necessary. Reinstall parts on the new muffler.

For installation, reverse the removal procedure.

Warning: *Check connections for tightness and fasteners for proper assembly.*

4. FLEXIBLE TUBE INSTALLATION

The flexible exhaust tube contains an inside rigid pipe. To allow appropriate flexibility for assembly, make sure that the rigid pipe is concentric to the flexible part. To maintain the pipe centered at the

time of installation, cardboard spacers must be inserted at four places at equal distance around tubing (Fig. 3). These spacers may be left in place and will deteriorate over time.

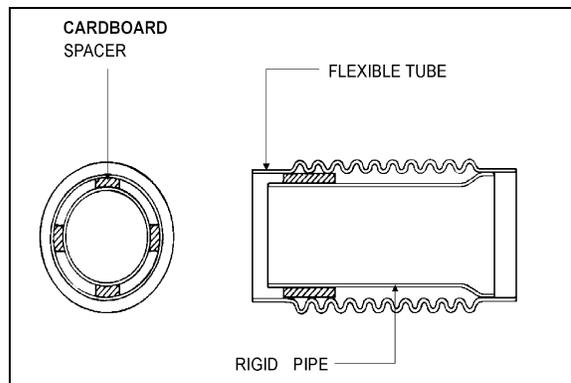


FIGURE 3: FLEXIBLE TUBE INSTALLATION 04003

5. HEAT BLANKETS (Converted vehicles only)

5.1 Exhaust

5.1.1 Installation on XL-45 Shells

1. Open L.H. side rear service compartment door, then working from inside compartment, cover bellows and exhaust pipe with blanket #040507 (Fig. 4). Position blanket so its recess is facing square tubing.

Note: *If access from L.H. side rear service compartment is limited, remove engine access panel from inside vehicle then work from this area.*

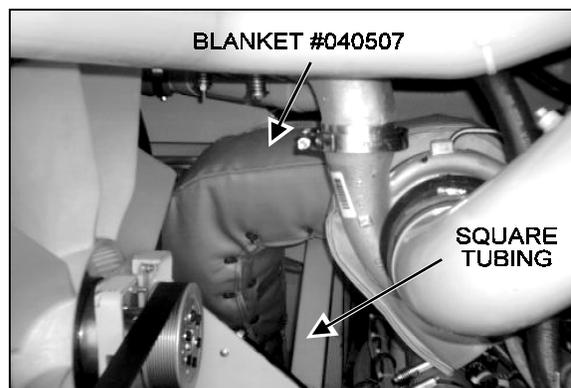


FIGURE 4: EXHAUST BLANKET INSTALLATION 01034

2. Form and compress blanket always working towards seams. Use temporary ties to position and hold blanket for forming, then shoelace for length of blanket using wire #509754 (Fig. 5 shows typical installation). Perform a single loose wrap on each capstan. Align the small hole provided in the blanket with the exhaust port fitted on the exhaust pipe.

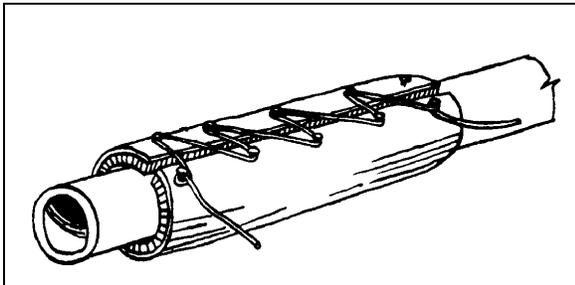


FIGURE 5: LACING WIRE INSTALLATION 01035

3. Form and compress blanket always working towards seams. Use temporary ties to position and hold blanket for forming, then shoelace for length of blanket using lacing wire #509754 (see figure 5 showing typical installation). Perform a single loose wrap on each capstan. Align the small hole provided in the blanket with the exhaust port fitted on the exhaust pipe.

Caution: Ensure radiator fan does not touch the exhaust blanket.

5.2 Turbo (All Shells)

3. Install the turbo blanket as described further in this bulletin.

1. Attach a section of lacing wire #509754 to both upper capstans of turbo blanket #040505, then cover turbine housing (Fig. 6). Attach upper capstans with lower capstans to secure blanket in place.

5.1.2 Installation on XL-40 & XL-45E Shells

1. Working from inside vehicle, locate engine access panel located at rear of vehicle (just over engine), unscrew bolts (4 or 6) retaining panel then remove.
2. Cover bellows and exhaust pipe with blanket #040511. Position blanket so its recess is facing radiator shroud & fan. Refer to figure 4 showing installation on XL-45 vehicles; on this model, the blanket is not provided with a recess since the clearance between radiator fan and exhaust pipe is sufficient.

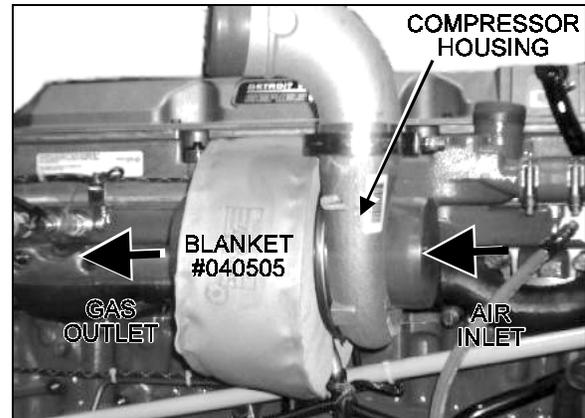


FIGURE 6: INSTALLATION OF TURBO BLANKET 01036

Note: The compressor housing does not require a blanket.

Note: It may be necessary to work from under vehicle to install the lower section of blanket.