

2. Place a blunt punch at least ½" diameter squarely on the end of the stub. Two or three good blows with a hammer will help shock and loosen the threads. An air hammer with a blunt punch will work also. You can also shock the threads loose by hammering the thinnest section of the manifold next to the bolt. Don't hit wildly, as you may fracture the manifold. Use a controlled square blow.
3. Turn the stub out with back and forth turns with a suitable tool. Recondition threads with a tap or thread chaser.

If a threaded stub is left:

1. Use a commercial stud remover or "double-nut" if possible. Use penetrating oil and hand wrench it out. A combination of heat and shock techniques may also be used. Do not use oil on red hot surfaces, as the oil may catch fire.

If the stud unscrews from the manifold, but the nut is still stuck on it, place the stud over an anvil. Hit the nut with a hammer blow on each flat side, rotating the nut each time. Put the stud in a vise, being careful not to damage the threads, and gently turn the nut off using penetrating oil.

You may also split the nut by chiseling the flat surface of the nut (see diagram 3 on last page).

Ten minutes of patience and common sense can save hours of needless labor. Broken stud removal need not be an obstacle to efficient exhaust system installation. These removal procedures may also be applied to broken stud or screw removal on other parts of the vehicle as well.

We recommend the use of antisieze compound on all threads and the use of brass nuts on studs when reassembling manifold connections. You may be the next person to replace that pipe and would then benefit from this extra step.

