## Second Strike

The Newsletter for the Superformance Owners Group

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## BITS AND PIECES

## **Submissions**

Bits and Pieces is an owner's forum and includes modifications made by individual owners to their Superformance to improve the performance, reliability, individuality, and/or drivability of their cars. Maybe it's just puttering. The decision to use any idea and the proper installation and operation of any idea is entirely the responsibility of the owner.

## EC: Throttle Arm Attachment to Shaft

On early cars, the throttle arm was slipped over the throttle shaft and was secured by two allen screws. With constant usage (and who would not use the throttle constantly, I ask you), the allen screws backed out and interjected play into the throttle linkage. Once it started, it got worse quickly and soon there was no throttle. After approximately car 400, the throttle arm is welded to the shaft, a big improvement.

**Retrofit**: You can replace the throttle shaft assembly, but it isn't necessary. The following fix has proved very satisfactory.

**Fix**: There are two allen screws in the throttle arm collar. I changed out the one perpendicular to the throttle arm, but I suppose either would do.

Purchase a  $1/4 \ge 28 \ge 3/4$ bolt and  $1/4 \ge 28$  nut. This is a 1/4 inch <u>fine</u> thread bolt 3/4" long. Grind a taper on the end as shown.



Before you remove the throttle arm, it is useful to put something on the throttle petal to hold it down a bit while you make the modifications. I used a rifle butt with the barrel resting on the seat.

Mark the position of the throttle link on the throttle arm, and then disconnect it. Back out the allen screws and remove the throttle arm.

Look for the mark that the allen screw point made on the throttle shaft. If there isn't a flat spot or indentation already, file a flat spot or drill a dent on the throttle shaft at this point. It doesn't take much. Remove the perpendicular allen screw. The parallel one can be left. It doesn't hurt anything and it looks neater to leave it.

Put the nut on the bolt and run it up close to the bolt head out of the way. Screw the bolt into the hole vacated by the allen screw, but only a little so that it doesn't interfere with the shaft when you slip the collar over the shaft.

Put the throttle arm back on the shaft. Tighten the bolt a little and wiggle the arm. Repeat this to get the bolt centered over the flat spot or dent you made. When there is no more play, tighten the bolt firmly, and then run the lock nut down tight to jam it.



Throttle arm with new lock bolt retainer. View is looking down on assembly from the driver's side.

The lock nut prevents the bolt from backing out. In the two years since I made this modification, it has not backed out once.

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