



# Installation Instructions

## **CRANK PIN DRILL FIXTURE KIT FOR LS1**

Part # 918993

*Using ATI's Crank Pin Drill Fixture Kit, you can install 1 or 2 dowel pins in the LS1 crank to eliminate the damper twist on the shaft - a must for engines used for circle track racing or supercharging!*

### **Please note!**

**All drilling and reaming dry - no lubricants or cutting oils are necessary!**

1. Remove the damper.
2. Install the fixture to the crank and position 1 bushing hole for best drill access.
3. Using the old crank bolt, lock the fixture to the crank so it can not move.
4. Install the 11/64 bushing in the adapter and snug the holding screw.
5. Using the 11/64 drill bit, drill through the crank to the center bore.
6. Change the bushing to the 3/16 bushing and ream the 11/64 hole to 3/16 with one pass **in** and **out** at low RPM.
7. For a second pin at 180°, rotate the crank. **Do not loosen bolt!**  
The fixture must stay locked to the crank until both holes are drilled.
8. Repeat steps 4, 5, and 6 on the opposite side if you are installing 2 pins.
9. Blow the outside and center bore clean of all chips before removing adapter. Then remove adapter.
10. Install the 3/16 pin, allowing it to protrude above the crank surface .093" to fit the keyway in the hub.
11. Install the damper and pull it tight to 200 ft/lbs with the old bolt.
12. Install a new bolt (ATI #951503 - ARP bolt w/sealer or GM Part #12557840) with red #262 Loctite and torque the bolt to 240/250 ft/lbs.

**NOTE: All ATI LS1 dampers have one 3/16 keyway in the hub or ATI can key your existing damper.**