

Very Important Post Pounder operation information.

Gas powered Post Pounders work on the principle of an engine driving a crank attached to a piston. The piston comprises air on the down stroke which drives a hammer. The hammer hits an anvil which transfers the energy to the post. The anvil then recoils from the post and the hammer and piston move back up to the top of the cylinder to start the cycle once more.

The PP83 and PP52 both have 4 stroke Honda Engines with a centrifugal clutch. When starting the engine runs but does not engage the drive. The crank, piston and hammer drive are not engaged until the throttle is lever is pressed.

The throttle lever should be depressed slowly when the Post Pounder is on a post and some downward pressure is applied.

Pressing the throttle lever when the Post Pounder is not on a post causes considerable damage to the crank, piston and hammer mechanisms.

The energy created with each stroke of the piston is 26 joules and the engine drives the piston at 1720 strokes per minute. This equates to 750 foot pounds of energy per second.

A really hefty amount of force.

Now if the engine is run at full throttle without being on a post ie no load then all this energy generated needs to go somewhere.

Where does it go?

The energy stays in the machine.

The hammer hits the anvil and drives it against the internal stop. The hammer keeps on driving the anvil against the internal stop and the anvil gets jammed against the internal stop. Once jammed some of the energy is transferred to the Damper rings and Damper O rings. These small parts do not last long and start to break up. Excessive vibration then starts and the left hand screw crank bolt can loosen and come out.

In the extreme case with continual running without a load the bottom of the cylinder wall gets damaged by the Damper rings smashing against the pounder walls.

Your driver is now toast and needs a new cylinder body , new Damper rings, new O rings. As the anvil has been driven onto the end stop in the chuck housing then this may also need to be replaced.

What are the first signs that the machine has been misused?

Excessive vibration , screws shake loose, cover screws, handle screws etc. These all have thread locker applied at assembly stage so it takes a lot of force to shake these free.

How long does it take to cause this type of damage?

No more than a few hours running at full throttle without a load.

Does the few hours need to be continuous?

No. Once the anvil has been hammered against the end stop then all subsequent use will exacerbate the problem.

Can the anvil be released from the end stop if the throttle has been accidentally pressed

Yes. Raise the machine onto a post and pull down with the full weight of the machine striking the anvil.

If this fails the machine needs to be dismantled to release the anvil by striking with a heavy hammer .

How to avoid this extreme damage?

Start the engine as normal.

Do not touch the throttle lever

Place Post Pounder on the post.

Gently press the throttle and pull the Post Pounder down on the post with approx 10lbs of pressure.

When the Post is in to the required depth release the throttle.

Do not touch the throttle lever again until the Post Pounder is on the next post.

Remember it is a 4 stroke engine with a centrifugal clutch. The engine will keep idling when not driving a post. It is not a 2 stroke high revving engine that needs to be on full throttle all the time.