

### Propane Powered Post Driver

**INNOVATION DESCRIPTION:** Propane Powered Post Driver by Tippmann Industrial Products, Inc. This driver will drive up to 300 posts on a single 14.1 oz. propane tank.

#### **WHAT IS THE INNOVATION AND WHY IS IT INNOVATIVE?**

The Propane Hammer is the first post driver of its kind, in that it operates off of Propane and is completely self-contained in a unit weighing less than 43 lbs. The power source for this driver is a standard 14.1 oz. propane Tank found in most hardware and home improvement stores. This post driver which will drive posts ranging in size from a 5/8" grounding rod, all the way up to a 4.5lb. per foot U-channel post, operates off of Internal Combustion. To put it in simple terms, it is a small internal combustion motor. The Propane Hammer has a combustion chamber in which the Propane combines with a spark supplied by a standard 9 volt battery, creating an internal combustion. To operate the hammer, the user simply holds a momentary switch, located on the right handle of the machine. As long as the momentary switch is held, the driver will fire at a rate of 2-3 times per second.

#### **WHY IS THIS POST DRIVER INNOVATIVE?**

The Propane Hammer offers a self-contained, lightweight solution for driving various types of posts into the ground, without having to be hooked to an air compressor or a PTO (power take off) unit. This driver, which is a single person operation, goes where you go, even if you have to go up or down a steep grade or into heavy brush. A good way to explain it is to say that when you see a fence along a federal highway disappear into the woods, the fence does not stop. You still need to have a way in which to get into the thick brush and drive the endless miles of fence, and the Propane Hammer offers a great solution. I have listed a few more examples of where the Propane Hammer can replace existing post drivers and why it is more practical:

- Driving Stop Sign Post / Street sign posts / U'channel posts up to 4.5 lb. per foot
- Driving Telespar Posts / Break away posts
- Driving T posts / round Steel Posts / Thin wall residential steel posts
- Driving silt fence and other erosion control type fencing -Driving grounding rod
- etc.

#### **WHERE DID THE PROPANE HAMMER ORIGINATE?**

Dennis Tippmann, the owner and President of Tippmann Industrial Products, had driven hundreds, if not thousands of fence posts and was convinced there had to be a better way to handle this chore. Dennis Tippmann has used Propane to power another invention in a different industry and decided to apply the same internal combustion principle to developing the most user friendly post driver ever built, and the Propane Hammer was born.

#### **WHERE HAS THE PROPANE HAMMER BEEN USED?**

The Propane Hammer has been used for dozens of applications in many different industries, which I have listed a few below.

1. Construction: Construction fencing, rebar, ground rod, T posts, Uchannel posts, etc.
2. Municipal: Uchannel posts, T posts fencing, ground rod, rebar, silt fence, etc.
3. Farm and ranch: Primarily T post fencing and residential chain link fencing
4. Utility: Primarily grounding rod, Uchannel and T post fencing
5. Residential: Primarily Chain link fence posts

#### **FUTURE USES FOR THE PROPANE HAMMER.**

This product has quickly gained the attention of many markets and we feel that with the continued exposure we can become a must have for every construction company and municipal department in the U.S. The bottom line is that if you are in need of driving something into the ground that ranging in size from 5/8" grounding rod, up to a 4.5lb. per foot Uchannel post, this driver is a must have.

[www.propanehammer.com](http://www.propanehammer.com)

# PROPANE POWERED POST DRIVER

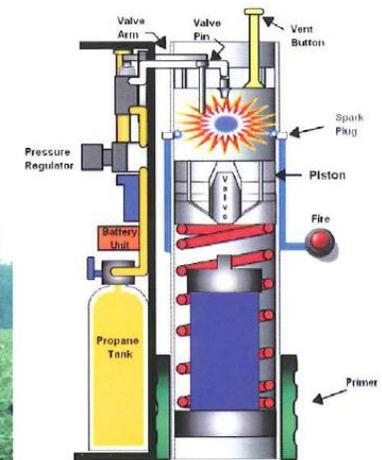
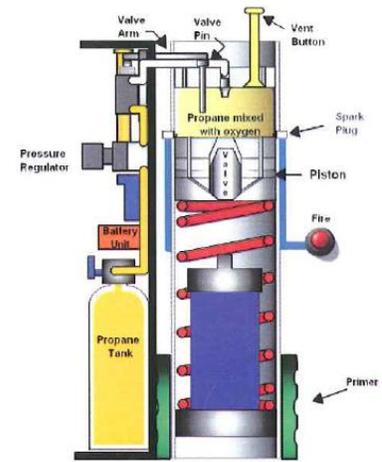
# 2010 Nova Award Nomination 20

Name of Innovation: Propane Hammer Post Driver

www.propanehammer.com

Drive up to 300 posts on a single 14.1 oz. tank

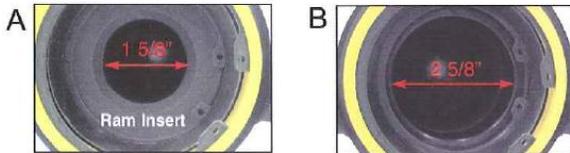
HOW IT WORKS.



The stock Propane Hammer is set up to drive posts up to 1 5/8" in diameter. You can quickly enlarge the opening to accommodate up to 2 5/8" by removing the ram insert.

Figure A. shows the propane hammer with the ram insert in place. This is how you will receive your machine.

Figure B. shows the propane hammer with the ram insert removed.



As stated, the stock driver can drive up to a 2 5/8" post, as illustrated above, but we offer a full line of adapters, such as the one shown below, to drive larger posts, smaller posts, Uchannel posts, etc.

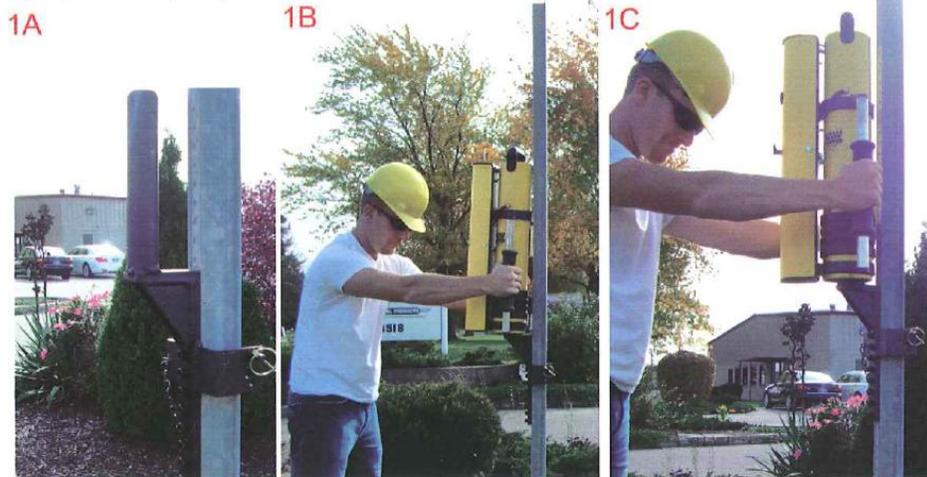


Illustration 1A through 1C on left shows how our side mount adapter works for driving U channel posts. As stated, we offer a full line of both side mount and top mount adapters for driving a full range of posts.