

# POST DRIVER SAFETY

The Rhino® Multi-Pro™ gas powered driver is designed to drive fence post, ground rod, delineator post, grape stake, form pin, tent stake and other like items into the ground. Uses, other than those intended, can result in injury to the operator as well as those around the operator. Damage to the driver and to the surrounding area may result as well.

This post driver is intended for use by professional installers. Never allow children to operate this tool.

Most accidents can be prevented if you follow all instructions in this manual and on the post driver. The most common hazards are discussed below, along with the best method to protect yourself and others.

 **WARNING UNDERGROUND UTILITIES:** Driving a post into an underground utility can be **EXTREMELY DANGEROUS**, exposing the operator and those around to potentially life threatening danger. Damage to surrounding property can also occur as a result of a post being driven into an under-

ground utility. Be absolutely certain that you are aware of all underground utilities in the area in which you intend to drive posts. Ensure that a certified locating service has identified all underground utilities prior to beginning your project. Failure to do so can be catastrophic. Underground utilities include but are not limited to: Electric, Gas, Telephone, Water, Sewer, TV Cable, Lawn Sprinklers, etc.

 **WARNING GASOLINE:** Gasoline is **HIGHLY FLAMMABLE** and **EXPLOSIVE**. You can be burned or seriously injured when handling fuel.

 **WARNING EXHAUST:** The exhaust from the engine contains poisonous carbon monoxide gas that can build up to dangerous levels in closed areas. Breathing carbon monoxide can cause unconsciousness or death. Never run the engine in a closed or even partly closed area where people may be present.

 **WARNING** The engine exhaust from this product

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contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

 **WARNING ENGINE MAINTENANCE:**

Improperly maintaining the engine on this power tool, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed.

In accordance with the engine owner's manual, always perform a pre-operation inspection of the engine before each use and correct any problem.

 **WARNING DRIVER MAINTENANCE:**

Improperly maintaining the driving mechanism on this power tool, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed.

In accordance with this manual, always perform a pre-operation inspection of the driving mechanism before each use and correct any problem.

## POST DRIVER SAFETY... continued

 **WARNING** **Do not** lend or rent your post driver without the instruction manuals. Be sure that anyone using it understands the information contained in these manuals.

 **WARNING** **Do not** use this post driver for any purpose other than driving posts into the ground. Misuse may result in personal injury or property damage, including damage to the machine

 **WARNING** Minors should never be allowed to use this power tool. Bystanders, especially children, and animals should not be allowed in the area where it is in use.

 **WARNING** **NEVER** let your power tool run unattended. When it is not in use, shut it off and make sure that unauthorized persons do not use it.

 **WARNING** **Do not** operate this post driver unless the operator is wearing safety glasses, safety shoes, hearing protection, gloves or any

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other safety equipment advised by, ANSI, NIOSH, OSHA, or any other safety regulatory agency, the employer or the owner of this post driver.

**Hearing protection is required** as the post driver emits noise at 100 dB level. Bystanders should, at a minimum, wear safety glasses and hearing protection while in the presence of this power tool during operation. If not wearing protective gear, bystanders should keep a distance of 20 feet (6 m) from the post driver while in operation.

 **WARNING** **Prolonged use** of a power tool (or other machines) exposing the operator to vibrations may produce white finger disease (Raynaud's phenomenon) or carpal tunnel syndrome. These conditions reduce the hand's ability to feel and regulate temperature, produce numbness and burning sensations and may cause nerve and circulation damage and tissue necrosis.

Not all factors contributing to white finger disease are known, but cold weather,

smoking and diseases or physical conditions that affect blood vessels and blood transport, as well as high vibration levels and long periods of exposure to vibration are mentioned as factors in the development of white finger disease.

In order to reduce the risk of white finger disease and carpal tunnel syndrome, please note the following:

- The Multi-Pro™ has been designed with Rhino® CIS™ anti-vibration handles to reduce the transmission of vibrations created by the machine to the operator's hands. An anti-vibration system is recommended for those persons using power tools on a regular or sustained basis.
- The handle opposite the throttle handle has been fitted with an EPDM foam grip further dampening vibrations.
- Wear gloves and keep your hands warm.
- Ensure that the EPDM foam and the spring dampening system are in good working condition.

## POST DRIVER SAFETY... continued

- Ensure the post driver has no loose components. Loose components lead to high vibration levels.
- Maintain a firm grip at all times, but do not squeeze the handles with constant, excessive pressure. Take frequent breaks.

All of the above mentioned precautions do not guarantee that you will not sustain white finger disease or carpal tunnel syndrome. Therefore, continual and regular users should closely monitor the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.



**WARNING** **DO NOT** modify this power tool in any way.



**CAUTION** **DO NOT** put anything other than a post into the chuck on the driver.



**CAUTION** **DO NOT** operate your post driver unless it is on a post to be driven. Operation of the driver without it driving on a post could

damage the power tool.



**CAUTION** **SURROUNDINGS:** This power tool emits noise at 100 Db, which may be disturbing to animals and livestock. Ensure prior to operation, that any livestock are cleared from the operational area to prevent a situation in which startled livestock become a safety hazard.

### WARNING LABELS

If your post driver's warning label is marred or destroyed, replace it immediately. Simply call Rhino Tool Company and we will send you a new warning label at no expense to you.

### End of Life Cycle

When your Rhino® gas powered driver is coming to the end of its life cycle, destruction of the unit should be conducted according to international and local environmental regulations.

The gas powered post driver contains:

- Fuel

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- Oil
- Grease
- Electric components
- Plastic-steel and aluminum components.

### Rhino® Multi-Pro™

#### Specifications

imperial (metric)

Overall Dimensions	10.75 x 17 x 26 in. (273 x 432 x 660 mm)
Weight	44 lb (19.9 kg)
Engine Configuration	4-stroke, 35.8 cc
Performance	1720 bpm
Fuel	Unleaded Gas, US 86 Octane (>Euro 91)
Fuel Capacity	0.67 US qt. (0.63 ltr)
Engine Oil	SAE 10W-30
Grease	Rhino Post Driver Grease
Noise	≤ 100 Db
Vibration	TBC

# Multi-Pro™ Operating Instructions

Your Rhino® Multi-Pro™ Gas Powered Driver is an efficient and effective power tool designed and developed to tackle a difficult and time consuming task; driving posts.

It is very important to understand that your post driver is a very powerful machine; it has to be to do the very difficult job it is designed to perform. With proper care

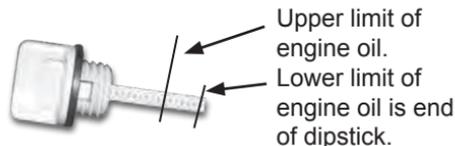


Fig. 1  
6

and maintenance, your Rhino® Multi-Pro™ will give you many years of trouble free service.

You must read and understand your post driver operating instructions before using the post driver. It is also very important that you make sure all operators are trained to operate your post driver safely. If you or any operator doesn't understand any of the instructions in this manual, call Rhino Tool Company at 866-707-1808 or 309-853-5555 and we will assist you with any questions you may have.

**⚠ WARNING** **AVOID SERIOUS INJURY OR DEATH**  
**READ THIS MANUAL BEFORE USING YOUR POST DRIVER**

Visually inspect your Multi-Pro™ Post Driver before use. The interior of the chuck tube should be checked for obstructions, damage or wear to the chuck tube and anvil inside. The outer surfaces of the driver should also be inspected for any defects. Do not use the Multi-Pro™ if there is any damage or wear until the damage or

wear is corrected and repaired.

Check all fluid levels, i.e. engine oil and fuel and fill as needed as per manufacturer's specifications. **(Fig. 1)**

**NOTE** Proper oil level is essential to the operation of the post driver. Overfilling of the oil will result in loss of power and may cause permanent damage to the engine.

**⚠ WARNING** **USE ALL RECOMMENDED SAFETY EQUIPMENT.**

Rest the driver on a solid surface, i.e. tailgate, bench, or clear, solid ground and posture your body in a safe position. DO NOT start the driver anywhere but an open, well-ventilated area. It is recommended that the Multi-Pro™ only be used outdoors and never inside an enclosed building.

## Starting the Engine:

To start a COLD engine, move the choke lever to the CLOSED position **(Fig. 3)**. Lock the throttle into high idle position.

## Multi-Pro™ Operating Instructions... continued

(Fig. 2) This is done by depressing the trigger and the high idle lock simultaneously. The throttle is now in the high idle position.

To start a WARM engine, leave the choke lever in the OPEN position and do not lock the throttle into the high idle position. Press the priming bulb repeatedly (Fig. 4)

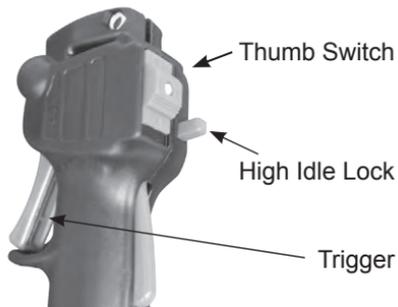
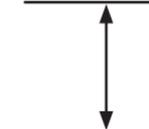


Fig. 2

Choke Closed



Choke Open

Fig. 3



until fuel can be seen in the clear-plastic fuel return tube.

Slide thumb switch on throttle handle down or into the **ON** position.

Grasp the starter grip lightly until you feel resistance, then pull briskly in the direction of the arrow as shown in Fig. 5. Return the starter grip gently.

**CAUTION** Do not extend the starter rope to its full length as it can cause damage the recoil mechanism.

**CAUTION** An operator should never wrap the starter rope around their hand. This will cause serious injury.

Priming Bulb

Fuel Return Line (clear plastic tube)

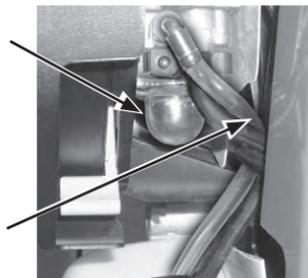


Fig. 4

**NOTE** Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.

If the choke lever was moved to the **CLOSED** position to start the engine, gradually move it to the open position as the engine warms up. As the engine warms up also release the high idle lock by slightly depressing the trigger and then immediately releasing it. Use caution as to not engage the clutch.

### Hot Restart

If the engine is operated at higher ambient temperatures, then turned off and allowed to sit for a short time, it may not restart on Starter Grip



Fig. 5

## Multi-Pro™ Operating Instructions... continued

the first pull. If necessary, use the following procedure:

Failure to follow instructions can result in personal injury

**⚠ WARNING**  
**IMPORTANT SAFETY PRECAUTION**

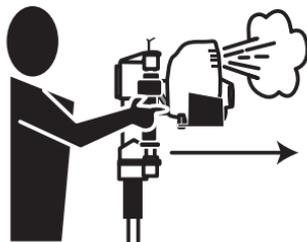
Turn the engine switch to the **OFF** position before performing the following procedure. This will prevent the engine from starting and running at maximum speed when the throttle is in the **MAX.** speed position. If the engine starts with the throttle in the **MAX.** speed position, the post driver will operate at maximum power. This may result in **personal injury** and damage to the post driver.

1. Turn the engine switch on the post driver to the **OFF** position.
2. Move the choke lever to the **OPEN** position.
3. Hold the throttle in the **MAX** speed position.
4. Pull the starter grip 3 to 5 times.

Follow the **STARTING THE ENGINE** procedure on the previous page and start the engine with the choke lever in the **OPEN** position.

### Driving a Post

Holding the post driver with your left hand on the foam grip and your right hand on the throttle will position the driver to direct the engine exhaust away from the operator (**Fig. 6**). (See Exhaust Warning) Insert a post into the Multi-Pro™ making sure the end of the post to be driven is in the correct location on the ground. (**Fig. 7**) Position the driver aligned centered to the post. If not aligned properly, damage could be caused to the driver or the post.

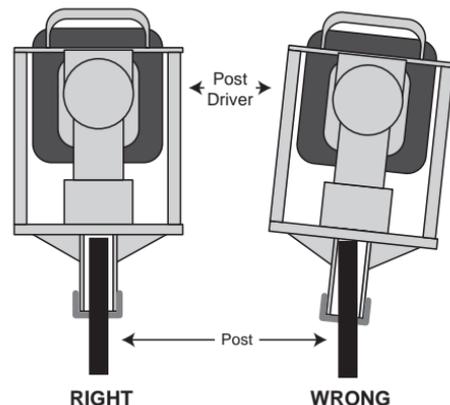


**Fig. 6**

Apply steady downward pressure to the handles and apply enough throttle to engage the clutch and hammer.

Once you are confident that the post is driving straight, apply full throttle to the driver until the post is driven to the desired depth.

Release the trigger dropping the engine RPM back to idle before removing from the post. When the engine has returned to idle, proceed to the next post repeating the previous method of driving a post.



**Fig. 7**

## Multi-Pro™ Operating Instructions... continued

### Installing a Chuck Adapter



**WARNING** **CHUCK SIZE:** A chuck or chuck adapter that is too large for the post being driven may damage the driver and may damage the end of the post. Using a the appropriate chuck or chuck with adapter will align the post to optimum striking position and prevent damage to the driver. See the chart below to specify the appropriate adapter for your application. Chucks and chuck

adapters wear out and should be replaced as needed. Inspect your driver's chuck and chuck adapters frequently.

The Multi-Pro™ is equipped with the Rhino® Chuck-Lok™ Adapter System. It is comprised of the master chuck, the locking nut and two-piece adapters.



**WARNING** **ALWAYS HAVE THE LOCKING NUT IN PLACE WHEN DRIVING POSTS:**

The Chuck-Lok™ locking nut should

always be tightened onto the master chuck to protect the chuck threads, even when not using an adapter. Failure to do so exposes the chuck to possible damage.

The two-piece adapter design is a solution for the occasional flared post. Should a post flare and lodge inside the chuck when using the adapter, in most cases the operator can loosen the locking nut letting it slide down the post, then lift the driver off the post. The operator can quickly re-insert the adapter, secure them with the locking nut and resume driving posts. See **Fig. 8** for steps for installing Chuck-Lok™ adapters.

### Installing an Alternative Chuck

The Multi-Pro quick change design allows the operator to quickly remove the standard master chuck and install an alternative chuck configuration for your post driving application.

Turn off the engine and allow it to cool. Position the post driver on a work bench or level surface. Using a 3/16" hex bit socket wrench loosen and remove the 4

Type or Size of Post to be Driven (mm)	Chuck/Accessory Required
Fiberglass T-Post	1¾" (44.45) Adapter
T-Post	1¾" (44.45) Adapter
5/8" (15.87) to 3/4" (19) Ground Rod	1" (25.4) Adapter
Tent Stake	Tent Stake Chuck*
Concrete Form Pin	1" Adapter
1" (25.4) to 1-5/8" (41.27) Post	1¾" (44.45) Adapter
1-7/8" Post	2" (50.8) Adapter
2"(50.8) to 2-3/8" (60.32) Post	Master Chuck
1-1/2" (38.1) to 2-1/2" (63.5) Square Post and Square Post Sign Anchor	Short Chuck and Drive Cap*
1.2 - 4 lb Channel Post and Channel Post Sign Anchor	Channel Chuck and Long Anvil*

\* Contact Rhino Tool Company for more details

Note: Custom chucks may be available for your specific application contact Rhino Tool Company.

## Multi-Pro™ Operating Instructions... continued

chuck bolts (p/n 300715-4) and compression washers (p/n 517703-8). Replace compression washers if they are worn. Remove the chuck and set it aside in a convenient place to store until needed. Clean any residue from the bolts with acetone or solvent. Apply threadlocker primer to the bolt holes and bolt threads. Then follow with an application of threadlocker to the bolt threads.

Align the alternate chuck to the bolt holes on the lower body, taking into account the position of slots or internal configuration for the post to insert according to the operator side of the post driver. Insert bolts through new compression washers into the bolt holes, snug into position and then

tighten them in a crossing pattern with a torque wrench set to 132 **inch/pounds** torque them accordingly.

If alternative anvil parts are needed please follow the instructions provided with alternative chuck kit.

If you do not see a chuck option for a specific post, contact your Rhino Tool Company representative to inquire if there is an option available.

### Maintenance of the Multi-Pro™

**⚠ WARNING** **NEVER REFUEL WITH THE ENGINE HOT OR RUNNING:** Never refuel your Multi-Pro™ with the engine hot or run-

ning as there is a possibility the flammable fumes from the gasoline can ignite, causing severe injury and/or damage to your Multi-Pro™ and surrounding area. Follow engine manufacturer's instructions for the refueling of the engine.

**⚠ WARNING** **DO NOT OPEN CRANKCASE COVER WHILE ENGINE IS RUNNING.**

With each use check the engine oil level, air filter, and all fasteners. If necessary, add oil, clean or replace the air filter and tighten any loose nuts, bolts, or any other fastener. (See page 6 for engine oil level)

Change engine oil as per engine manufacturer's specifications. Dispose of used oil in accordance with any local, state, or federal regulations.

To help insure years of operation, wipe down the Multi-Pro™ with a clean cloth after each days use.

**Refer to the Service Instructions for more detail regarding maintenance of the Post Driver.**

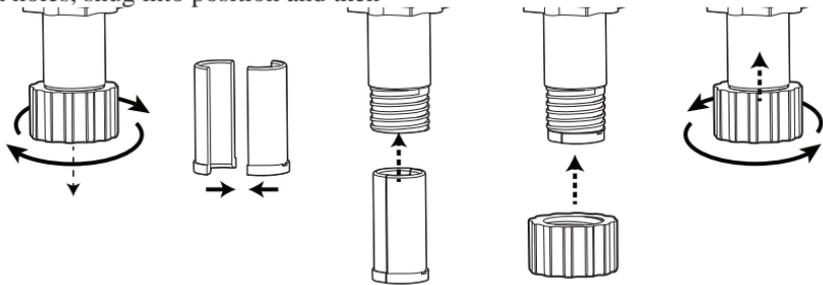


Fig. 8 - Hand tighten ONLY. No Tools.