

The Rhino Air Operated Post Driver has only one moving part, the piston, which strikes directly on the post to be driven. The post driver is very efficient and with reasonable care and maintenance will give you trouble-free service.

It is VERY IMPORTANT to understand that the driver is a very powerful machine; it has to be to drive posts into the ground.

You must read and understand your post driver operating instructions before using the unit. It is also very important that you make sure all operators are trained to operate the post driver safely. If you or any operator doesn't understand any of the instructions, call CROWN RENTAL @ 952-894-7368 and we will be happy to answer any questions.

WARNING - AVOID SERIOUS INJURY OR DEATH, READ BEFORE USING YOUR POST DRIVER!

WARNING UNDERGROUND UTILITIES: Be absolutely sure you know where all underground utilities are before driving so you can avoid hitting them while driving a post into the ground. Utilities include but are not limited to Electric, Gas, Telephone, Water, Sewer, TV Cable, Lawn Sprinklers, Etc. Hitting an underground utility could be EXTREMELY DANGEROUS for the operator and others.

WARNING AIR PRESSURE: You must use a Filter-Regulator-Lubricator combination with the Rhino Air Operated Post Driver. The use of the pressure regulator is required for safety. Set the pressure regulator at 100 PSI. Higher air pressures will not make the driver perform better. High air pressure could cause the post driver to lift off and fall from the post causing serious injury or death. Do not tie down the throttle valve so it will not shut off when released. If the throttle valve does not stop the unit immediately when released, RETURN IT TO CROWN RENTAL IMMEDIATELY. Slowly squeeze the air throttle valve lever to start the driver. Opening the throttle valve slowly will prevent a violent start of the driver.

Never use anything to keep the throttle valve lever in the open position other than the operator's hand. For safety, the valve must close, stopping the drive, when the operator releases the valve lever.

WARNING CHUCK SIZING: A chuck or chuck adapter that is too large for the post being driven may contribute to a condition which would allow the post driver to fall from the post causing serious injury or death.

Do not use a chuck or chuck adapter that is too large for the post being driven. The post should be loose in the chuck or chuck adapter with a minimum of 1/8" clearance and not over 5/8" clearance. The post driver piston should hit the post as squarely as possible. If the fit is too loose, damage may be caused to the driver, its chuck or chuck adapter causing the driver, its chuck or chuck adapter to fail.

WARNING SAFETY EQUIPMENT: Do not operate the post driver unless the operator and any others near the post driver are wearing hard hats, safety glasses, safety shoes, ear protection, back supports, antivibration gloves, and any other safety equipment advised by, ANSI, NIOSH, OSHA, or any other safety regulatory agency, or the employer or the owner of this post driver.

WARNING SAFETY CHECKS: Check your driver daily for loose bolts, cracks, bulges or abnormalities in welds, castings, chuck or chuck adapters, top cover plate, piston, air line, or any other part. Do not repair any parts. Immediately replace worn or defective parts with new parts. Do not run the unit with worn or defective parts. If you are in doubt, return the driver, chuck, chuck adapter, or any other part to CROWN RENTAL, for a free inspection.

Model PD-110 Air Operated Post Driver

OPERATING & SERVICE INSTRUCTIONS

WARNING REMEMBER ALWAYS PUT SAFETY FIRST! Do not operate the post driver if any unsafe conditions are present.

CAUTION Do not put anything but a post into the chuck on your driver.

CAUTION Do not operate the post driver unless it is on a post to be driven.

Operation of the driver without it driving on a post could damage it.

LUBRICATION: YOU MUST OIL THE POST DRIVER WHILE IT IS OPERATING. Set the lubricator on the Filter-Regulator-Lubricator in the air line to the post driver so it will deliver approximately 10 drops of oil per minute. Preferably the Filter-Regulator-Lubricator should not be separated from the driver by more than 25 ft. of hose. Make certain that any new air hose between the Filter-Regulator-Lubricator and the post driver has been thoroughly lubricated. The procedure for lubricating the hose is as follows - Remove the air hose from your post driver and (CAUTION!) AFTER SECURING THE AIR LINE SO IT CAN'T WHIP AROUND TO INJURE SOMEONE, open the lubricator wide open so that a steady stream of oil runs into the air stream after the throttle valve has been activated. Actuate the air throttle valve and run the air through the hose until an oil film is felt coming out of the air hose where it connects to the driver. Periodically check to make sure the driver is receiving oil. Air and oil will be exhausted through the chuck. If in doubt, remove the air line from the driver and using the same procedures stated above check to see if an oil film is being exhausted from the hose end that connects to the driver. If oil is coming out of the hose, reconnect the air hose to the driver. Use SAE 5 wt. oil in cold weather (in very cold conditions you may want to dilute your SAE 5 wt. oil to provide proper lubrication), SAE 10 wt. oil for mild weather to 80 degrees and SAE 20 wt. oil for hot weather. AIR SUPPLY: You must have an adequate supply of clean air at the proper pressure. Air supplied to your post driver must be filtered. Drain water from the air compressor air tank prior to use. Use a Filter-Regulator-Lubricator to help remove water, rust and other particulate from the air supply. It will greatly increase the life of the post driver and decrease maintenance costs. PD-110 AIR REQUIREMENTS: 64 CFM @ 100 PSI AIR HOSE: It is recommended that you use a 3/4" double braid air hose with an oil resistant lining to supply air to your post driver.

GENERAL INSTRUCTIONS

1. Blow out air lines before coupling them to your post driver. This precaution will help remove any dirt that may have entered an open hose. CAUTION: Do not turn on pressurized air through an unsecured air line; the air line could whip around causing serious injury.
2. Check your Filter-Regulator-Lubricator. Make sure the regulator is set at no more than 100 PSI. See (WARNING: AIR PRESSURE), for instructions. Make sure the filter has been drained and the lubricator filled with the proper weight oil. See (LUBRICATION), for instructions.
3. Do not use a chuck or chuck adapter that is too large for the post being driven. See (WARNING: CHUCK SIZING), for instructions. If the fit is too loose it is not safe to operate the driver, damage may occur to the driver and the driver may batter the end of the post.
4. Place the driver on the post to be driven. Slowly squeeze the air throttle valve lever to start the driver. Opening the throttle valve slowly will prevent a violent start of the driver. Never tape, wire, etc., the throttle valve lever open. PD-110 AIR REQUIREMENTS: 64 CFM (1.81 m³/min.) @ 100 PSI (7 kg/cm²)
5. Keep dirt out of the chuck. It could enter the unit causing damage. If dirt gets into the chuck, disconnect the driver from the air supply, remove the chuck and clean the dirt out. Be careful to keep dirt out of the driver during reassembly and be sure the bolts holding the chuck are tight and properly torqued. Make certain the surfaces are free of dirt, oil and grease. It is important to install compression washers properly or they will not lock the bolt

or nut securely. Place the compression washer with the center of the cone next to the bolt head or nut being tightened. Then tighten the bolt or nut with a torque wrench until the proper torque for the size of bolt being tightened is reached. Check bolt and nut tightness daily.

If you are driving the same temporary posts time after time, the posts will tend to fill with dirt after a few drives.

The dirt may be pumped out the top of the post into your driver. Rhino Tool Company suggests you pinch the lower end of the post together, which will keep the dirt out.

There are several benefits to doing this. It will decrease the weight of your temporary post stock by hundreds of pounds making it easier to handle the posts, it eliminates the mess of dried dirt falling out of the posts and eliminates hundreds of pounds of extra weight being hauled time and again by your trucks and trailers which saves you fuel.

SERVICE INSTRUCTIONS

1. Check air pressure setting regularly.
2. Check oil supply regularly; fill when needed.
3. Drain and clean air filter regularly, especially in winter.
4. Check to see that the water is drained from the air compressor reservoir regularly.
5. Check the bolts on your post driver daily to make sure they are tight. Do not over torque the bolts.