



POST DRIVER OWNER MANUAL

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INTRODUCTION

Kyne Post Drivers are designed and built for Farmers and Contractors that need a durable, high-quality post driver that is guaranteed to last. These drivers are designed to be strong and simple to use, making your job on the fence line faster and easier. Feedback from satisfied customers has built our way to a range of great post rammers suited for the toughest environments.

We highly recommend all users and owners of our post drivers read this manual to ensure a full understanding of how to operate the new machine safely and correctly in order to maintain a reliable machine and safety for all staff and owners involved. Special attention needs to be taken in regards to the safety precautions outlined in this manual.

Please contact Kyne Equipment / Sedco Group Ltd for any other information not covered in this manual.

Please note that any unauthorized modifications made to the post driver may impair its operation and compromise the safety aspects outlined in this manual. Kyne Equipment will not be held responsible for any warranty claims or injuries resulting from such modifications.

We highly recommend the manual is kept with the machine at all times. Additional copies can be obtained from Kyne Equipment by emailing sales@kyneequipment.co.nz

DISCLAIMER

This publication has been put together as a general guide for the safe operation of Kyne Post Drivers. While every attempt has been made to include all the relevant information needed to operate the Kyne Post Drivers in a safe, user-friendly manner, this is not a comprehensive mandatory document and further specialised advice might be needed in regards to regulations and Health and Safety obligations for dealers, owners and operators.

IMPORTANT SAFETY INFORMATION

Post Drivers can be dangerous by nature with the principle of a free falling block / weight hitting a wooden post, especially if operated by an inexperienced individual. Before operating this post driver, read and understand the safety procedures for this machine. Failure to follow safety practices can result in serious injury or even death.

CONTROL LEVER LAYOUT

Although as an operator you may have used a post driver before – please be aware all models / brands may vary in the arrangement of controls. Please be aware when operating the controls which lever performs which action for your own safety and the safety of those around you.

COMPETENCE

The post driver should only be operated by a person who has been trained and is confident with hydraulic controls. Kyne Equipment will make every effort to ensure the new owner has a good understanding of the functions and we strongly recommend that all users read the operating manual in full before using the machine.

USER SAFETY

No Kyne Post Drivers should be operated by any person who is under the influence of drugs or alcohol. This could result in injury or even death. Ensure all steps are taken to avoid this situation.

PPE GEAR

To protect the operator from potential high noise volume and chance of flying debris or wood chips (if a post was to split), when post ramming the operator must protect themselves with good quality PPE gear including a helmet, ear protection, eye protection, leg protection and steel toe cap boots.

ELECTRICAL HAZARDS

When working near power lines, exercise extreme caution to ensure the mast does not come into contact with overhead lines, as this may result in death. If in doubt, contact your local power lines company for advice and a “close approach permit.”

If you are post ramming where there is power lines buried underground, it is advisable to contact your local lines companies’ cable location service and get them to correctly identify EXACTLY where underground cables are. Remember that most cables are 600mm deep and that the post driver spike goes into the ground further than that. Relying on word of mouth about cable locations is insufficient; failure to accurately locate cables can result in operator death.

POST DRIVER GUARDS

All Kyne Post Drivers are equipped with a wire rope guard, which must be in place at all times. This guard helps contain the wire rope in the event of breakage. All persons are required to be a min of 6 metres away from the driver when in operation. This excludes the operator and tractor driver.

SAFETY AROUND HYDRAULIC SYSTEMS

PLEASE BE AWARE: The hydraulic systems on a post driver are under extreme pressure and heat is generated after prolonged use – please do not ignore hydraulic leaks or damaged hoses. These need to be fixed immediately for your safety and the safety of the machine. Hose failure can result in very hot oil burning the operator or being injected into the body, which can be fatal. Hose failure may also cause unexpected sudden movements of the post driver.

SET UP OF YOUR MACHINE

Many operators would have attached linkage mounted machines to their tractor before owning a post driver. However please be aware the points below are very important to note before setting up your machine.

It is recommended to keep your tractor back window closed when fitting your post driver as some models are higher and may hit and smash your window if this is open. Take extra care if your post driver has a folding mast.

The Kyne Mighty Thumper and Mini Thumper require an optimal flow rate of 40 litres per min @2500psi. These models need one set of half-inch remotes; (the Kyne zero dump hydraulic system requires no high flow dump hose)

The Kyne Super Thumper requires an optimal flow rate of 45 litres per min @2800psi. This model needs one remote to power the post driver and a ¾-inch dump directly into the tractor. If the return is through the remotes, back pressure will be created, restricting the speed that the monkey will fall.

Please note larger monkey weights above 300kgs require an optimal flow rate of 50 litres per min @ 2800psi.

When putting the driver onto the tractor, reverse up to it and attach the lift arms first, then plug in the pressure and return hoses for the driver and engage the remote so the oil is flowing to the driver control bank. With the post driver control bank now activated, you will be able to extend the top link out and attach this to the tractor.

The remote on the tractor that is used for the post driver must be locked into position. If your tractor has no factory-fitted means of keeping the remote locked, you will have to find a method of holding the lever in the engaged position. (a bungee cord works well)

Most tractors will not be able to lift or lower the 3 point linkage lift arms when the remote is engaged, so you will want to make it as easy as possible to engage and disengage the remote as you will be doing this between every post. (if your tractor has no factory-fitted means of keeping the remote locked)

Some post driver models are heavier than others - Please consult your tractor user manual for weight carrying limits on the 3point linkage.

Please be aware when first setting your post driver up and connecting it to the tractor that there may be still air in the lines, which will make the machine spongy until the air has bled its way out. It is recommended that every ram excluding the block lift ram is taken to the open and closed position when setting up, to ensure the air is bled out. This may take a couple of cycles per ram.

The wire rope is greased before being fitted to the post driver, but we recommend this is done again before operating for the first time (and regularly throughout its life – this will increase the post driver's rope life.)

OPERATING THE POST DRIVER

Kyne Post Drivers are built to be simple to operate but there are some points to note below which we recommend every operator to read.

NEVER STAND OR PUT ANY PART OF YOUR BODY UNDER THE POST CAP OR BLOCK. KEEP CLEAR AT ALL TIMES.

CONTROLS

Please ensure that the operator fully understand which control levers operate each function before starting the job. Not all post drivers controls are laid out the same.

WHERE TO STAND

When operating the post driver, always stand square to the control bank, behind the base of the post driver mast. This position provides better protection if a post breaks while being driven in, compared to standing beside the post.

ELECTRICAL HAZARDS

When working near power lines, exercise extreme caution to ensure the mast does not come into contact with overhead lines, as this may result in death. If in doubt, contact your local power lines company for advice and a “close approach permit.”

If you are post ramming where there is power lines buried underground, it is advisable to contact your local lines companies’ cable location service and get them to correctly identify EXACTLY where underground cables are. Remember that most cables are 600mm deep and that the post driver spike goes into the ground further than that. Relying on word of mouth about cable locations is insufficient; failure to accurately locate cables can result in operator death.

POST DRIVING

Operating the Block: when operating the weight block to drive a post or spike in, the operator only needs to lift the block approx. 1.5 metres to achieve the maximum hitting force. Dropping the block from higher will only decrease the life of your post driver, wear your rope and not achieve anything more. Never drop the block quickly when there is no post to take up the impact.

Never (unless in an emergency) should you release the lift ram valve lever suddenly to stop the moving block. If you wish to stop the block during its downward travel try to ease the block to a stop by feathering the control valve.

The lift ram does have a pressure relief fitted to protect the valve, rope and ram etc from the very high hydraulic pressures that will be caused by releasing the ram suddenly while the block is falling. Repetitive pressure relief may cause failure of the relief valve, and could damage the lift ram hoses, ram and the rope. The pressure relief on the lift ram is intended for emergency use only.

When post driving always ensure the posts are parallel to the mast.

In order to extend your rope life we recommend not to hold the hydraulic control lever down when the monkey hits, allowing the rope to fully slacken – this doesn’t do the rope any good.

OPERATING THE FOLDING MAST

- FOLDING THE MAST UP AND DOWN CAN BE VERY DANGEROUS IF IT'S NOT CORRECTLY DONE.
- NEVER TIGHTEN THE ROPE WITH THE BLOCK LEVER WHEN MAST IS FOLDED DOWN, THIS WILL DESTROY THE ROPE AND PUT YOU AT RISK OF INJURY OR DEATH.
- KEEP CLEAR AND NEVER STAND NEAR THE FOLDED PART OF THE MAST WHEN STANDING THE MAST UP OR LOWERING IT DOWN. KEEP HANDS AWAY FROM THE MAST RESTING/KEEPER FRAME AT ALL TIMES.

To stand the mast up into the working position, unlock the hydraulic locking tap and carefully, slowly pull the hydraulic lever labelled 'MAST FOLD' towards you (UP). As the mast is lifting, make sure that it's not going to hit anything on its way up, and the rope is not going to get pinched or jammed on anything.

Once the mast is in the working position, hold the hydraulic lever in the 'UP' position to pressurise the folding mast ram and lock the locking tap, once the locking tap has been locked, let go of the hydraulic lever. Take up any slack of the rope using the block lift lever until rope is tight, EXTRA care is needed when taking up the slack of the rope. Ensure it's not tangled around anything, if it is and you tighten the rope you could damage the rope or the post driver and this may also cause injury or death.

TO FOLD THE MAST INTO THE TRANSPORT POSITION

To fold the mast down, first you MUST lower the block to the BOTTOM of the mast so there is NO weight on the rope. Then carefully push the block lever forward to 'DOWN' with your left hand and at the same time with your right hand pull the rope to give you a good amount of slack rope. Pull the rope off the left hand side of the mast (near side) against the rope keeper pin. This is located on the folding mast pivot.

Unlock the locking tap and carefully lower the mast down into the transport position. Take care that the rope stays in the rope keeper. NEVER LOWER THE MAST WITH THE ROPE AGAINST THE FACE OF THE MAST OVER THE FOLD JOIN, This will destroy the rope.

Once the mast is lowered, once again, lock the locking tap.

OPERATING THE ROCK SPIKE ATTACHMENT

When using the rock spike, lift the block clear of the top of the spike, and rotate the spike extractor into position. Lower the spike onto the ground into the desired spot, using the extractor ram (up/down), then lower the block and post cap onto the top of the spike, then lower the extractor carriage to the bottom of the mast. Then drive the spike into the desired depth. Once the desired depth is achieved, connect the post cap to the block with the rope and lift the block and cap clear of the spike and remove the spike from the ground with the extractor and rotate it out of working position. (NEVER lower the extractor ram when it is in the non-working position – this will destroy the side tilt ram)

OPERATING THE ROCK DRILL FITTED TO THE ROCK SPIKE EXTRACTOR

When using the rock drill, lift the block clear of the top of the rock drill, and rotate the rock drill extractor into position. Lower the rock drill onto the ground into the desired spot, using the extractor ram (up/down), then start the drill by using the hydraulic valve lever and lower the extractor carriage to the desired depth. Once the desired depth is achieved, remove the rock drill from the ground with the extractor and rotate it out of working position (NEVER lower the extractor ram when it is in the non-working position – this will destroy the side tilt ram) NEVER Drop the block onto the top of the auger motor. Please ensure that the operator fully understand which control levers operate each function before starting the job. Not all post drivers controls are laid out the same.

OPERATING THE AUGER KIT

When using the auger kit, lift the block clear of the top of the auger motor, and rotate the auger motor extractor into position. Lower the auger onto the ground into the desired spot, using the extractor ram (up/down), then start the drill by using the hydraulic valve lever and lower the extractor carriage to the desired depth. Once the desired depth is achieved, remove the auger from the ground with the extractor and rotate it out of working position (NEVER lower the extractor ram when it is in the non-working position – this will destroy the side tilt ram)

NEVER drop the block onto the top of the Auger Motor.

Please ensure that the operator fully understand which control levers operate each function before starting the job. Not all post drivers controls are laid out the same.

OPERATING THE POST PULLER

When using the post puller kit, loop the chain around the broken post and hook chain into the hook on the puller carriage and slowly pull the post out, please take care as the chain may pull off the post if it doesn't get a good hold of the post.

Once post has been removed lower the puller back down.

POST ALIGNMENT

Never attempt to straighten a post using the side or front face of the block, as this can cause the mast to bend, creating an extremely dangerous situation for the operator and potentially damaging the machine.

When adjusting the angle of a post before it is driven in more than 300mm, ensure the block is sitting firmly on the post cap, with the post cap spike in the top of the post. This will help hold it.

PREPARING YOUR POST BEFORE DRIVING IT IN

To avoid unnecessary stress on the post cap and mast, we recommend to have the post placed as close to the mast as possible in the post cap before post driving takes place. If a post doesn't have a flat top, place the highest side against the back of the post cap (towards the mast). We would recommend all operators to do a quick trim with a chainsaw to square them up to avoid post splitting and for your safety.

WHEN THE POST DRIVER IS NOT IN USE

When the post driver is not in use the monkey **MUST** be lowered to the very bottom of the mast so the rope is loose, (if it has a folding mast please ensure this is folded to the down position) and the top link ram needs to be brought into closed position.

When removing your post driver from the tractor the block **MUST** be lowered to the very bottom of the mast so the rope is loose, (if it has a folding mast please ensure this is folded to the down position) and the top link ram needs to be brought into closed position. If the post driver is fitted to a Kyne side mount or rotating base they can be removed and free stand on flat, level, firm ground. If you don't have a Kyne side mount or rotating base you will need to sit your post rammer on a post when not attached to the tractor. If this is the case make sure you have a very large, solid post on firm, flat, level ground. Sit block and post cap on top of post and using a large strong load strap and tie the post driver mast to the post **BEFORE** disconnecting this from your tractor. To disconnect the tractor from the post driver, disconnect the lift arms then using the hydraulic top link control, take any weight off the top link pin and remove it. Retract the top link ram to closed position, turn tractor engine off and float hydraulic system to relieve any pressure, disconnect hoses.

TRANSPORTING YOUR POST DRIVER

When travelling with your post driver on the tractor, both on the road and over your farm or property, if your post driver has a folding mast please ensure this is folded down at all times when in transport to minimize any risk of hitting trees or power lines. When transporting, the top link ram should always be in the closed position. If you are transporting your post driver on a truck or trailer please see operation manual for lift points and ensure this is loaded and unloaded correctly by a competent person and that they are aware of the weight.

MAINTENANCE

Kyne Equipment and/or your local dealer would have completed a pre delivery check prior to delivery. However, as with any new machine, maintaining your post driver is very important. There are several points below which need to be read very carefully and thoroughly by the owner and any operators.

Any bolts present on the post driver need to be checked daily as they are a high vibration machine and this can cause these to come loose.

Your new post driver mast, block and post cap will have an initial wearing in period. We strongly recommended that the mast is well lubricated during this time. Chainsaw chain bar oil is recommended as it is a thicker oil. The Mast should ALWAYS be well lubricated. DON'T use grease on your mast. Kyne Post Drivers have a number of grease points, and we advise you to grease these daily in order to extend your post drivers life. Grease points will be found as detailed below.

Grease Points on Folding Mast:

- Hinge mast pivot - 1 x grease nipple. Have the mast in folded down position to grease.
- Both Ends of the Folding Mast Ram, It's easier to get to the spear end of the ram to grease it with the top part of the mast at 90 degrees to the bottom part of the mast.

Grease Points on Side Tilt Ram

- Both Ends of the Side Tilt Ram at the mounting pins

Grease Points on Mast Pivot Pin on non-Mast Shift model

- See the Grease Nipple in top of the Pivot Bush that is part of the lower linkage frame,

Grease Points on Mast Pivot Pin/Bush Mast Shift Model

- See the Grease Nipple under side of the Pivot Bush that is part of the Slide Frame,

Grease Points on Top link ram with Double pin Knuckle joints

- 2 x Grease Nipples in each end of the top link ram

Mast Face Lubrication

- Pour oil on to the face of the Mast and raise and lower the Block.

Wire Rope Lubrication

- Pour Oil or Grease on to a Rag and rub the wire rope though the rag to spread the oil evenly onto the rope, Also pour a small amount of oil onto the lift pulleys and then raise and lower the Block a few times to help spread the oil.

The Pulleys are fitted with Sealed Bearings, so there is no need to grease them.

DAILY CHECKS FOR YOUR POST DRIVER

- Check Wire rope condition
- Check Mast lubrication
- Check Attachment bolts of all components
- Check Hydraulic cylinder pins
- Ensure all guards are fitted safely
- Check Hydraulic hose condition
- Check Nylon cap for wear

TROUBLESHOOTING FOR YOUR POST DRIVER

What happens if my post driver struggles to lift the block?

- 1) The lift ram safety pressure relief valve, spring may have weakened or a foreign object may be stopping the safety relief valve from closing.
- 2) Check the mast is well lubricated as an unlubricated mast would be a lot harder work to move than one that's lubricated.
- 3) The Lift Ram seal may be damaged.
- 4) The hydraulic control bank spool may be damaged.
- 5) The tractor pump may have dropped in pressure.
- 6) The Lift Ram safety pressure relief may be set too low.

Hydraulic system is operating slowly in one direction and possibly the Block is not lifting as it should.

1. Check the hand rest bar is not bent towards the levers and stopping them from their full movement,
2. The control levers should never be able to touch the hand rest bar.

Please be in touch with Kyne Equipment if you need more help.

PARTS AND ADVICE

Please call Kyne Equipment or your dealer where you purchased the machine from for any consumable parts and we will ensure these are sent to you ASAP. Please see our contact details below. The below parts we would consider as consumables due to the nature of the machine and environment they work in. Wire Rope, Post Cap Nylon / Rubber Mat.

REGISTER YOUR WARRANTY

Name/Trading Name: _____ Date: _____

Phone Number: _____

Email Address: _____

Physical Address: _____

Purchased From: _____

Post Driver Model: _____

Serial Number: _____

Send a copy of this to sales@kyneequipment.co.nz to ensure your warranty is valid
Or fill in this form online:



<https://kyneequipment.co.nz/kyne-post-driver-warranty-registration/>