



Operators Manual



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Introduction

Thank you for purchasing a Fence-Pro postdriver. To ensure you gain the greatest value from your investment in a postdriver and maximum safety **in its operation**, we ask that you read all these instructions carefully **before** mounting the driver to your tractor.

If you wish to clarify the instructions or have questions regarding the fitting or operation of your new unit please do not hesitate to contact your dealer or Fence-Pro.

Your Dealer



Scan the QR Code Below to Register your 24-month Factory Warranty



SET-UP : Installation and Connection

Fencepro Postdriver

Please read all the instructions carefully before mounting the driver to your tractor.

Safety Considerations when setting up your new machine

1. Keep all bystanders clear of the machinery at all times during set up and operation.
2. The operator should be familiar with all operating and safety guidance in this document before operating the postdriver.
3. The operator is responsible for the health and safety of others while operating the machine.

Check “Open” or “Closed” centre hydraulic valve configuration

Confirm that the postdriver valve bank has been correctly configured for your tractor. The majority of Fence-Pro postdrivers are shipped from the factory with an ‘open centre’ hydraulic set-up. ‘Closed-centre’ hydraulics will be supplied by Fence-Pro if requested at time of order placement (“closed centre” hydraulics are particularly relevant for certain tractors, including many John Deere brand tractors). Your dealer will be able to advise whether the postdriver has been specially configured and whether you require ‘closed-centre’ valve hydraulics. Switching a valve from open centre to closed centre is not difficult but will require additional plugs for your valve bank, (your dealer or Fence-Pro staff will be able to help you with advice and guidance).

Prepare the mast prior to lifting.

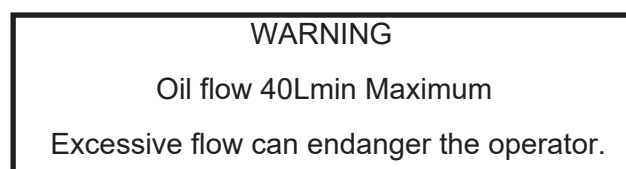
The Hydraulic Oil System

Fencepro postdrivers are fully assembled and run on a test rig at the factory prior to despatch. The hydraulic rams are primed with oil however care should be taken when reassembling after delivery. Please ensure that the side-tilt ram and top-link rams are able to firmly support the weight of the mast in a vertical position once the postdriver is fitted to a tractor.

1. With the post-driver lying flat, reverse the tractor to within reach of the pressure feed and low pressure dump hose and connect the dump hose to the tractor (see additional notes “Connecting the dump hose” in the “Additional Guidance” section)
2. Connect the postdriver pressure hose to the pressure outlet on the tractor remotes hydraulic supply. This hose is fitted with a push fit quick coupling connector.

WARNING

Farmtek and Mule Model post drivers may be fitted with valve banks that are optimised to operate at 20 - 40 L/min oil flow. Please check if this warning sign is placed near the controls.



1. Liven the tractor remote valve to circulate oil through the postdriver's valve and back to tractor through the postdriver dump line.
2. Operate the Top Link and Side Tilt rams.

Ensure that the rams are able to extend without causing damage, then

Fully-stroke the top link ram and the side-tilt ram several times to remove all air from the ram and hoses.

 - Leave the top-link ram slightly less than half open
 - Leave the side tilt half open (i.e. the postdriver base should be square to mast).
5. To prime the Ultra mast shift base (if fitted).

Ensure that the mast shift ram (and base) is able to move without causing damage, then fully stroke the mast shift ram to bleed all air.

Leave the mast shift ram at half stroke.
6. Do not prime the Lift Ram and mast hydraulic hinge (if fitted) at this time.

At this point there is no need to check the block lift ram or the hydraulic hinge ram. It is easier to fill these rams once the postdriver is secure on the tractor
7. Disconnect the postdriver pressure and return hoses and coil them in a convenient place to avoid damage when standing the postdriver mast. Be aware that oil may flow out of return hose; use the plastic plug provided, if required.

Fit the adjustable feet into the mast base

Fit the adjustable feet into the mast base and secure each with a pin. Lock the pins with a lynch pin

Grease the wire rope

Fully grease the wire rope while the postdriver is lying on the ground. Smear the entire rope with a film of grease. The rope is already greased before fitting in the factory, but additional grease will greatly increase the working life of your postdriver's rope. A general bearing grease, or similar, is suitable for greasing the rope.

You are now ready to mount the postdriver onto your tractor

The best way for you to set up your new machine will depend on whether you:

- will be mounting your postdriver on a sidemount - have a hinged or straight mast

- Will be lifting a mast with the tractor to which it will be fitted (or whether you have a second lifting ability).

Refer to the table below to identify the notes most relevant for your set-up requirement; go to the page listed, follow the relevant notes and then continue from page 11 to fit your block and to complete the set-up procedure.

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Guidance on fitting the Postdriver to a tractor (only 1 tractor available for lift and mounting)

If the postdriver is to be side-mounted:

- Lift the sidemount with a strop. The centre of balance will be fairly close to the counterweight end depending on the model of sidemount. Insert and pin in place the sidemount “third foot”.
- Position the sidemount on a firm and flat piece of ground
- Lift the mast following the instructions “how to lift your mast” below (Please Note there are two lifting options dependent upon whether your mast is straight or hinged “lifting an unhinged mast” or “lifting a your mast is straight or hinged “lifting an unhinged mast” or “lifting a hinged mast”)
- Attach the mast to the sidemount by means of the two bottom 3-point linkage pins, then lower the mast so that it leans over the side-mount and attach the postdriver top-link ram between the postdriver and the sidemount (you may need to move the valve lever and manually contract or extend the top-link ram to get this into a position where the pin can be secured while the mast is still supported by the tractor – note that oil will come out of the return hose if you do adjust the extension of the ram)

- Once the mast is on the sidemount slacken off the lifting strop ensure the postdriver and mast shift are stable on the chosen location. Preferably the mast will be leaning slightly over the centre of the side-mount. You may need to operate the valve bank lever to let oil out of the top-link ram.
- Once the mast and sidemount assembly is sitting in a stable position and is in no danger of falling once the lift support has been removed then the strop may be removed from the mast.
- Reverse the tractor into the sidemount lugs and connect the 3 point linkage between the sidemount and the tractor, tighten tractor sway chains

Throughout this process ensure that no observers stand in a position where they may be at risk if the side-mount and postdriver are knocked over by the tractor.

Be aware that:

- the inside of the sidemount channels and the outside of the main box section slides need grease where the steel could rub. These have been greased prior to leaving out factory but may need more prior to frequent use.
- there are 4 adjustable wear plates positioned in the slide channel. These slides may need adjustment after a short period of use (see the section on maintenance below)

If the postdriver is a straight (unhinged) mast and is to be rear mounted on a tractor

- Lift the un-hinged mast following the instructions below “lifting an un-hinged mast”
- Secure the standing mast to a well driven post using a chain or rope to keep it safely upright
- Remove the strop and reverse the tractor into a pick-up position
- Reverse the tractor into the postdriver lugs and connect the 3 point linkage between the tractor and the post-driver.

Throughout this process ensure that no observers stand in a position where they may be at risk if the postdriver should move during this process.

If the postdriver has a hinged mast and is to be rear mounted on a tractor

1. Lift the un-hinged mast following the instructions below “lifting an un-hinged mast”
2. Secure the standing, but folded, mast to a well driven post using a chain or rope to keep it safely upright
3. Remove the stop and reverse the tractor into a pick-up position
4. Reverse the tractor into the postdriver lugs and connect the 3 point linkage between the tractor and the post-driver.

Throughout this process ensure that no observers stand in a position where they may be at risk if the postdriver should move during this process.

Guidance on fitting the Postdriver to a tractor (if a second lifting capability is available in addition to the tractor)

If the postdriver is to be side-mounted:

- Place the sidemount where the tractor can drive into the 3 point linkage.
- Mount the sidemount on the tractor 3 point linkage and tighten tractor sway chains
- Lift the sidemount using the tractor 3 point linkage. Locate the third foot in its mounting sleeve (on the side of the counter weight) from beneath the side-mount. Pin the foot and secure the pin with a lynch pin.
- Lift the mast following the instructions “how to lift your mast” below (Please note there are two lifting options dependent upon whether your mast is straight or hinged “lifting an unhinged mast” or “lifting a hinged mast”)
- With the mast still supported by the load lifter :
 - Attach the mast to the sidemount by means of the two bottom 3-point linkage pins.
 - Attach the pressure and return hoses to the tractor.
 - Live postdriver hydraulics and extend the postdriver top-link ram to half stroke.
 - Pin the postdriver top-link ram to the side mount top link carrier. Secure the pin with the lynch pin provided.
 - Plug the sidemount hoses into postdriver control valve.

Note that the postdriver pressure return hoses should pass under the postdriver top link to avoid the possibility of the hose getting pinched during top-link ram movement.

We supply a length of bungee cord with each machine leaving the factory. Attach the cord midway along the pressure, return and side mount hoses. Tie the opposite end of the cord to top right hand corner of the tractor roll frame or cab.

This will help keep long hoses up out of the way of draw bars, side-mount moving parts etc. make sure that hoses do not get pinched when the sidemount is retracted.

Once all the 3-point linkage pins between the tractor and sidemount, and the sidemount to postdriver, are securely attached and locked with lynch pins, and once the postdriver top-link and side tilt rams are fully bled of air the lifting strop can be removed from the mast.

Be aware that:

- the inside of the sidemount channels and the outside of the main box section slides need grease where the steel could rub. These have been greased prior to leaving out factory but may need more prior to frequent use.
- there are 4 adjustable wear plates positioned in the slide channel. These slides may need adjustment after a short period of use (see the section on maintenance below)

If the postdriver is a straight (unhinged) mast and is to be rear mounted on a tractor.....

- Lift the mast following the instructions “lifting an unhinged mast”
- With the mast still supported by the load lifter :
 - Attach the postdriver two bottom 3-point linkage pins first and secure each with a lynch pin. Connect the return hose and pressure hose to tractor and liven the tractor hydraulic supply to the postdriver.
 - Extend the postdriver top-link and pin the top-link to the top-link clevis on the tractor. The postdriver pressure return hoses should pass under the postdriver top link to avoid the possibility of the hose getting pinched during top-link ram movement.

Once all the 3-point linkage pins are securely attached and locked with lynch pins, and once the top-link and side tilt rams are fully bled of air, the lifting strop can be removed from the mast.

If the postdriver has a hinged mast and is to be rear mounted on a tractor

- Lift the hinged mast following the instructions below “lifting a hinged mast”
- With the mast still folded and supported by the load lifter :
 - Attach the postdriver two bottom 3-point linkage pins first and secure each with a lynch pin. Connect the return hose and pressure hose to tractor and liven the tractor hydraulic supply to the postdriver.

- Extend the postdriver top-link and pin the top-link to the top-link clevis on the tractor. The postdriver pressure return hoses should pass under the postdriver top link to avoid the possibility of the hose getting pinched during top-link ram movement.

Check the position of the return hose and other longer hoses

Note that the postdriver pressure return hoses should pass under the postdriver top link to avoid the possibility of the hose getting pinched during top-link ram movement.

We supply a length of bungee cord with each machine leaving the factory. Attach the cord midway along the pressure, return (and, if fitted, the sidemount hoses). Tie the opposite end of the cord to top right hand corner of the tractor roll frame, cab or other suitable tie-off point.

This will help keep long hoses up out of the way of draw bars, top-link, sidemount moving parts etc. make sure that hoses can not get pinched when the rams retract (or the sidemount is moved when fitted).

Check the sidemount levelling and movement

Once the postdriver is mounted on the sidemount this third foot should be adjusted so that the sidemount is level (when the postdriver is vertical)

Slowly extend the sidemount to it's full extension. Note that:

- The postdriver feet must always be on the ground when sideshifting
- The sidemount ram movement will be very sudden to begin with until all air is out of the system)

Ensure the sidemount is adequately greased (see notes below)

Extend and contract the sidemount ram a couple of times to expel air from the hydraulic system.

Check the movement of your postdriver in relation to the tractor

Check the movement of an unhinged postdriver

Check that there are no obstructions i.e. tractor cab, mud guards, pipe-work etc that could be damaged when activating the postdriver movement controls. Test the following controls.

- Lift the postdriver using the tractor draught arms,
- Operate the postdriver top-link ram, side tilt ram (and mast shift ram where fitted). Take note of any possibility of impact damage while moving the rams and also look for any risk of hoses catching on miscellaneous objects.

Check the movement of a hinged postdriver (and also prime the hinge ram)

Check the movement of the folded postdriver on the draught arms, top link and side tilt as described for the unhinged machine above.

The majority of hinged mast postdrivers are used with sidemounts. If your hinged postdriver is being used as a rear-mounted unit then take particular care to check that there are no obstructions (ie tractor cab, roll bar etc) that could be damaged when the mast is straightened on the hinge. Take particular care with the position of the wire rope when operating the hinge. To check for obstructions:

- Tilt the mast away from the tractor.
- Having checked that the lock bolts are removed from the hinge lock and that the hydraulic locking tap is open (at the valve bank), release the orange hinge locking clip and slowly activate the hinge ram (note that movement will be 'springy' for the first few lift and drop cycles as air is bled from the hinge system). Move the ram with care ensuring that:
 - The mast can not hit any obstruction on the tractor.
 - The wire rope does not get trapped in the hinge (before operating the hinge, flick the rope so that it sits in the retaining loop positioned at the side of the mast hinge point).
- If necessary, use the side-tilt ram to position the mast on an angle such that the top of the hinged mast can travel in an arc without making contact with the tractor.

If a rear mounted hinged mast is likely to hit the cab or tractor regardless of top-link or side-tilt position then you may need to obtain a Fence-Pro 'Rear Extension' accessory. This will enable you to position the postdriver further out on your tractor carrier arms. Discuss this possible requirement with your Fence-Pro Dealer.

Raise and lower the hinged mast several times to fully bleed air from the hydraulics (taking care to ensure the wire rope is kept clear of the hinge at all times). When the mast is in the straight position you can lock the hinge hydraulics using the hydraulic tap. This tap will retain a pressurised hydraulic oil lock in the hinge ram and will prevent the mast from folding due to accidental activation of the hinge valve lever. The mast will remain locked in this position for as long as the pressure lock remains in the ram and for as long as the hinge ram pins and mounts remain sound and secured. Note that the pressure in the hinge ram will very slowly decline over time due to microscopic leakage across the hinge tap and valve bank. When locking the mast vertical using the tap, periodically re-charge the hinge ram pressure by opening the tap, activating the hinge valve lever and then relocking the tap.

IMPORTANT. If you intend leaving the mast unattended or vertical for any extended time then lock the mast using the lock bolts provided. Alternatively, position the machine with the block on a post and then fold the mast when leaving the machine unattended.

IMPORTANT. Always ensure that the block is down before hinging the mast.

Fit the Block

Stand the block upright with the block guides facing the mast

Lift the postdriver on the tractor and manoeuvre the mast over the block guides.

Carefully lower the mast down into the block guides taking care that mast is straight in line with the block. It may be necessary to adjust the top-link ram and side-tilt ram to enable the mast to freely slide down the block.

Attach the Rope

Undo the retainer bolt on the face of the block and remove the block pin.

Insert the rope ferrule into the rope cavity on the top of the block

Re-insert the block pin into the block, through rope ferrule and secure with the retainer bolt.

(Note; After a few days use with a new rope check the wire rope to see whether any twist exists in the rope. Disconnect the rope from the block to release any twist in the rope before re-attaching the rope to the block.

Prime and activate the lift ram

IMPORTANT - When lifting the block always ensure that neither you or anyone else is at risk of positioning any part of their body beneath the raised block.

Lift and lower the block slowly to remove air out of the lift ram system (pull the lever to lift, push the lever to lower the block). The ram action will be sudden but 'spongy' for some time until all the air is bled from the hydraulic system. The block will 'bounce' slightly on the wire rope while air is in the ram.

Lubricate the block and mast by pouring oil into the top cavity where the block meets the mast. When the block is lifted up the mast a 'V' groove on back of block will spread oil.

Run the block up and down the mast slowly several times to remove paint.

IMPORTANT: Only drop the block quickly when there is a post to take the impact (see additional notes on lifting the block in the section "Safe Operation").

Fit the post cap and rubber

Please note that when fitting the post cap there is an increased risk because the fitting requires work near or below the block. For this reason before working beneath the block ensure that the block has a back-up support mechanism and will not slide down the mast in the unlikely event of any mechanical failure (eg rope or pin connection failure).

1. Lift the block a short distance up the mast.
2. Provide the block with a secondary support mechanism. For example this support can be provided by angling a post towards the mast and lowering the block onto the post (do not over lower; ie the wire rope should have little or no slack). Ensure the bottom of the post is not so close in to the mast that it will prevent the fitting of a post cap.
3. Fit the post cap rubber mat if using a standard post cap, (Note that a heavy duty post cap already has a black shock absorber block as part of the post cap build and a rubber mat is not required)
4. Fit the post cap onto the mast
5. Place the post cap retaining pin through the hole in the base of the mast. A lynch pin is provided as a shear pin. Using a shear pin will prevent damage if the block is dropped below the end of the mast.
6. Lift the block and remove the secondary support
7. Lower the block slowly to the post cap and hook the cap to the block by the chain link.
8. Lift the cap and block together to check that the post cap slides up the mast.
Note that the post cap is lifted at a slight angle. When new a post cap can occasionally 'grab' onto the sides of the mast. If this is the case the post cap may need slight filing on faces that make contact with the mast edge.

Note that if the tractor and postdriver is ever in transit on a trailer or truck then this shear pin should be replaced with one or two bolts through the mast to ensure that the block cannot drop off the bottom of a folded mast.

Check the Tractor Hydraulic Oil

Once all the postdriver rams have been bled of air and the machine is fully mounted on the tractor, recheck the oil level in the tractor

Note that an Ultra postdriver fitted with mast shift base, side-mount and hydraulic hinge will require approximate 7lts of oil to fill the full hydraulic system. A machine fitted with additional accessories will require more oil.

Additional Guidance notes.

Connecting the return dump hose

The dump hose is a low pressure return with push fit couplings.

A common hydraulic return connection point is to the tractor gear box housing. Note that the return hose must have the ability to free dump oil back to tank (i.e no restriction to the return flow and no back-pressure affecting the return of oil). Most tractors have a removable bung suitable for this somewhere on the gear box housing.

We strongly recommend that the return hose should not be connected back to tank through a quick release coupler, valve or any other restrictive device that can cause back pressure within the return hose. If you do wish to use a quick release coupling use one that provides for high volume flow. Removal of the centre pop-pets in a quick release coupling will increase the flow-rate (but removes the benefit of a plug on the hose when disconnected).

Some users choose to connect the hose through the tank breather pipe. Please note that if you do use this option the tank must still be able to release oil and air pressure build-up. Do not fully plug the breather pipe or damage to the tractor hydraulic system may result.

If the connection causes back pressure to develop in the return hose then the drop of the block will be slow, Postdriver return hose damage will be likely or damage to the tractor hydraulic system may result.

If in doubt about the best connection point take advice from your tractor dealer.

Fitting a sidemount to your tractor

Lifting the postdriver - Unhinged-mast machines

Lift the postdriver by the block lift ram stopper (or from the top of the mast if adequate height lifting equipment is available). The lift-ram stopper is welded to the mast at the full extension reach of the lift ram and has a predrilled hole in it suitable for attachment of a shackle. Alternatively a strop can be placed around the mast and tightened below the stopper. Ensure that the lifting strop, chain etc is well attached at both ends and is not able to come free if lifting tension should come loose. Lift with front end loader, forklift or crane etc. you will need approximately 3.5m of lift.

Ensure the end of the postdriver wire rope is tied to a point that will still be within reach when the mast is vertical.

Lifting the postdriver - Hinged-mast machines

Remove and retain the hinge locking bolts (for locking the mast when straightened).

Lift the hinged postdriver by putting a strop around the mast just below the block lift ram stopper. The lift-ram stopper is welded to the mast at the full extension reach of the lift ram and has a predrilled hole in it suitable for attachment of a shackle.

Ensure that the lifting strop, chain etc is well attached at both ends and is not able to come free if tension should come loose. Lift with front end loader, forklift or crane etc. you will need approximately 3.5m of lift.

Ensure the end of the postdriver wire rope is tied to a point that will still be within reach when the mast is vertical.

Safe Operation

WARNING: Postdrivers can be dangerous and could cause serious injury or even death if not operated with caution. Keep all hands and head etc. away from moving parts at all times. **NEVER** stand beneath the block or postcap. Always wear suitable eye and ear protection.

Safety Issues

Some examples of the risks associated with the use of a postdriver are:

Risk of physical impact from:

- falling block
- shattered wooden post

Risk of vehicle accident:

- vehicle overturn due to tipping point being exceeded
- impact when driving due to insufficient mast clearance (eg under bridge cable or tree branch)

Risk of electric shock from:

- overhead cables

Risk of injury due to underground hazards

- Gas pipe
- Electric supply

Risk of operator getting snagged in moving parts:

- Loose clothing in sliding parts
- Long hair in rope

Risk to hearing from:

- Repetitive loud noise from post driving Risk

to sight from:

- dirt blown from post cap
- Pressured oil from hydraulic system

Key principles for safe operation

- The operator must be familiar with the postdriver operating/maintenance process and safety instructions (both for the postdriver and any fitted accessories).
- Never allow any body part to come under a raised block.
- Ensure that the postdriver is being used on a suitable tractor (load bearing capability and hydraulic flows).
- Ensure that the tractor is driven in a sensible manner in steep areas .
- Be aware of mast clearance when driving under low structures. Pay particular attention to overhead cables and wiring.
- Only the operator should be located near to the postdriver when in use. Keep all bystanders well clear of the machine and working area.
- Never operate the machinery if children are nearby.
- When positioning or operating be aware of overhead hazards such as power cables. Be aware of the position of the top of the mast in relation to hazards at all times. **NEVER** work near high voltage cables and keep a minimum of 3m between the postdriver mast and house supply wires.
- Investigate any underground hazards before undertaking post driving work. Do not operate near buried cables or pipe-work .
- The postdriver should never be left unattended with the power supply still active .
- Always park the postdriver with the block on a post (and a safety chain around the post and the mast if parking for an extended period)
- All moving parts should be clear of pressurised hoses
- Keep the Fence-Pro machine well maintained at all times (refer to maintenance section).
- Use of protective clothing is essential. Wear a hard hat, ear muffs, eye goggles and steel capped footwear at all times when operating the machine. Ensure that loose clothing or long hair is secured away from moving parts.
- Use only good quality fence posts and fencing material to reduce the likelihood of post shatter or splintering. The top ends of posts to be rammed should have clean square cuts. When post driving always ensure posts are parallel to mast
- In hard ground prepare a pilot hole using a rock spike or auger prior to driving a post.
- Only drop the block quickly when there is a post to take the impact of the block.

Control lever layout

Fence-pro postdrivers come with a standard configuration for the first three control levers. Starting from left: Block, Top link, Side tilt,

The remaining control levers will depend upon the postdriver specification but (again from the left) are likely to be Mast shift, Sidemount, other Accessory

The lift ram operation is pull the lever to lift the block, push the lever to lower the block.

CAUTION: Do not switch the lift ram hose connection between the different valve slices. The block must always remain on the first control lever from left near to the hose returning oil to the tank.

Lifting and dropping the block

Only lift and quickly drop the block when there is a post to take the impact.

Except in an emergency, never release the lift ram valve lever suddenly to stop the moving block. If you wish to stop the block during it's downward travel try to ease the block to a stop by 'feathering' the valve control.

The lift ram does have a pressure relief fitted to protect the valve and ram etc from the very high hydraulic pressures that will be caused by releasing the lever suddenly while the block is falling. The pressure relief on the lift ram is intended for emergency use only. Continued or repetitive pressure relief may cause failure of the relief cartridge spring and cone, or may damage the postdriver lift ram or hose system.

Fitting a new wire rope

When ordering a new rope please provide your dealer with details of the Fence-Pro model of postdriver (Ultra G2) and the height of the mast (4m, 4.5m or 4.8m)

Remove the old rope, noting that the rope is wound onto the pulleys from the inside away from the mast (ending at the rope tie-off point) keep the wire clamps for fitting the new rope.

Check the pulleys spin well on the bearings and check the edges of the pulley sheave for signs of wear. Replace any bearings that are bad. If you detect chips in the edges of the pulley sheave or any rough parts on the pulley that could catch on the rope then replace the pulley sheave.

Check the block pin for signs of wear (replace as required)

Wind the new rope onto the pulleys

- Lay out the new rope
- Starting with the clean end (i.e. no thimble) feed the rope through the mast-top pulley housing assembly start from the block side of the mast

- Feed the rope down the mast through the rope guide and into the bottom pulley assembly winding first onto the bottom inside pulley (ie the pulley closest to the mast)
- Wind the rope onto the ram top and bottom pulley assemblies to end with the rope passing through the tie-off point.
- Try to avoid introducing twist into the wire rope as you fit it on the pulleys.

Stretch the wire rope along the front of the mast so that the thimble end is about 300mm up from the bottom of the mast (it may be easiest to tie the thimble in this position).

Please ensure that the lift ram is pulled down to its fully closed position.

Pull the other end of the rope to remove slack and then clamp the rope in place

- Clamp the wire rope so that the bridge part of the rope grip is on the working part of the rope and the 'U' bolt part is on the rope tail or dead end. Fit all wire grips.
- Attach the rope to the block using the block pin
- Check all wire grips are secure and that the block pin has been locked in place

Slowly lift the block on the mast and check the lift-ram extension and the block position on the mast. The rope fitting should ensure that when the lift ram extends fully (so that the top of the top pulley assembly hits the stop on the back of the mast) the block should come to a standstill approximately 150mm below the stop welded to the front of the mast (below the mast-top pulley housing).

If the block lifts too high up the mast (or hits the mast block stop before the lift ram has fully extended) then change the wire clamp position to produce a bit more slack in the rope. If the block does not lift high enough shorten the rope a bit.

Once the rope is correctly fitted then grease the rope liberally using a general bearing grease or similar.

If any part of the above instructions are unclear please do not hesitate to contact your Dealer or **Fence-Pro**.

When Parking the postdriver for an extended time

Before parking up for any extended period of time ensure that:

- All recommended grease points have been well lubricated (see Grease Points")
- The postdriver is in a safe and stable location, ensure that it is parked on the flat and cannot topple.
- The postdriver is parked with the block and post cap sitting on a well driven post (approx. 1m-1.5m high)

If the mast is hinged either:

- Straighten the mast and insert the bolts before parking or
- Hinge the mast after the block is positioned on top of the post

Parking the block on a post helps to avoid ram movement due to slow oil creep through the valve spools. This spool creep can result in movement of the mast unless the mast is supported.

For additional support and security chain the mast to the post

Moving a tractor and postdriver on a trailer or flatbed

If the tractor and postdriver is ever in transit on a trailer or truck then, in addition to securing the tractor and postdriver to the trailer or truck, the post cap retaining lynch shear pin at the base of the mast should be replaced with one or two bolts through the mast to ensure that the block cannot drop off the bottom of the mast. This is particularly relevant in the case of a folded mast where the rope cannot provide any support the weight of the block or post cap.

The shear pin is not intended to support the block in transit of this nature and may fail if the block repeatedly bounces on the pin.

Fence-Pro Ultra G2 Maintenance Checks

CAUTION : Postdrivers can be dangerous and could cause injury or death if not operated with caution. Keep all hands and heads away from moving parts at all times. **NEVER** stand beneath the block or post cap. **Never grease or perform other servicing tasks while the machine is operating.**

Recommended Daily Maintenance Checks

Check the attachment of the postdriver to the tractor (and side-mount where fitted):

- Check the tractor 3 point linkage top-link ram connections to the postdriver (or side-mount where fitted)
- Check the tractor 3 point linkage lower carrier arms connection to the postdriver (or side-mount where fitted)
- Check the sidemount attachments to the postdriver
- Check the top link ram attachment between the postdriver and the side-mount (where fitted)

In each case ensure that:

- pins are locked by lynch pins or similar locking devices.
- there is no sign of corrosion impacting on moving parts such as rams on pins knuckles etc.
- all greasable parts are greased (see “Grease Points” below)

Check all hydraulic fittings and hoses are properly connected. Ensure that there are no leaks and that all hydraulics are in good condition.

Check that the wire rope is in good condition and well lubricated. Check the connection of the wire rope to the block and the wire clamps are tight. Check that the rope thimble has not worn an excessive groove in the block pin.

Check for damaged, worn, missing parts and replace if necessary.

Recommended Monthly Checks (when Postdriver is in regular use)

Check the pulleys (particularly at the top and bottom of the lift ram).

Ensure they spin freely on the bearings and that the edges are not damaged or chipped.

Check the mast shift base (where fitted)

Thoroughly grease the base box section to allow mast shift to move with ease (see grease points below).

Check that the two side adjustment bolts and two bottom adjustment bolts on the mast shift base provide the correct pressure on the cross member:

Lift the postdriver so that the postdriver legs are up off the ground.

For each adjustment:

- Loosen lock nut, tighten bolt, release approximately 1/8th of turn and re-tighten locknut while holding bolt with 2nd spanner to ensure it stays in set position.
- Lower the legs back on the ground and check the movement of the mast shift

Check the Side-Mount (where fitted)

Thoroughly grease the sidemount sliding member to allow the inner part to slide with ease (see grease points below).

There are 4 adjustable wear plates positioned in the base of the slide channel.

Check that the wear plates are still in position and not worn through. This can be a visual check (the edge of the wear plates are visible above the adjustable nut locations) alternatively extend the side mount and feel along the bottom of the sliding member. If you can feel a groove then it is likely that one or more of your wear plates need replacement.

Annual / Seasonal Checks

Check the safety stickers are in place on block, mast and side-mount and that they are clean and legible. Replace if missing or illegible.

If you have nylon slides fitted to the block (Ultra and Ultra G2) check that they do not display excessive wear.

Check that your tractor manufacturer's service guidance has been adhered to. Pay particular attention to:

- The integrity of the tractor
 - brakes
 - 3 point- linkage system
- The manufacturers schedule for filtration and/or replacement of the hydraulic oil to avoid any damage to the postdriver arising due to water and/or dirt in the hydraulic oil.

Grease Points:

(FENCE-PRO ULTRA G2 Postdriver)

Regular use of grease will extend the life of your machine.

We recommend use of a general purpose bearing grease on all points.

Postdriver

Mast Hinge Bush (grease nipple)

Mast Pin bush (grease nipple under bush in base cross-member), Mast shift base :

Top of base (grease nipple near ram lug).

Mast face of base (grease nipple at each side of tilt arc) Also apply grease to:

Base box section; to allow mast shift slide to move with ease. Top arc of the mast shift base where it is locked to the mast

Wear plates located beneath adjuster bolts on base and side of the sliding part of the base

Side tilt top lug

Wire Rope (Note: Inadequate lubrication of the wire rope can cause excessive wear and premature failure.)

Rams

Side tilt ram spear pin (grease nipple on ram pin housing).

Top-link knuckle at both ends of the top-link ram (note these need a needle applicator to ensure grease is inserted through the drilled hole and reaches the pin. Note that any grease nipple would be sheared by movement of ram)

Side Mount

Fence-Pro side mounts need regular greasing between the sliding inner component and the outer channel housing. Extend the sidemount and put grease on the exposed sliding surface (top and bottom on each side).

Retract the sidemount and repeat as required.

Other moving parts

Grease any moving parts that regularly experience movement of metal on metal (Ram pins etc).

Note the pulleys have sealed bearings and do not need greasing.

Other lubrication

The block requires lubrication to ensure it slides freely on the mast, either grease the mast or apply an oil lubricant between the block and the mast.

Troubleshooting

Block struggles to lift post cap

This can be caused by paint on the mast causing the post cap to “grab”. Try lifting the side of post cap opposite to the rope catch to help it start and run up and down the mast a few times. This is enough to remove the paint.

In extreme cases take the post cap off the mast and round the top and bottom inside edge of the post cap with a file

Postdriver struggles to lift the block.

This may be related to:

- tractor pump pressure drop lift
- ram seal damage
- lift ram pressure-relief spring weakening or failure block
- jamming on the mast
- spool damage in the valve bank
- Pressure relief set too low

If you wish to clarify the instructions or have questions regarding the fitting or operation of your new unit please contact your dealer. If you need further advice do not hesitate to contact us at Fence-Pro on 06 356 8516 or 0800 FNC PRO (362 776).

Accessories

There are various accessories that can be mounted on the Ultra Postdriver including:

- Post lifter
- Rock spike Extractor
- Auger
- Sidemount
- Mast shift

If you have one of these accessories you should also refer to the “safe operation and maintenance” guidance provided with these accessories.

Hydraulics

Operating pressure

The Ultra G2 hydraulic system is protected by a valve inlet pressure relief that is set to 3000PSI. Typical operating pressures are 1800 PSI to 2800 PSI. The pressure requirement is dictated primarily by the lift ram configuration and the size of block in use.

As a rough guide you are likely to require about 2200-2600 PSI to lift the block.

If your pump system regularly delivers more than 2900 PSI seek local advice. Repetitive operation of the inlet valve relief will likely cause oil heating and could result in wear in the relief port.

Oil Flow

The Ultra G2 valve bank is rated to 70lts per min. If your pump is delivering more flow than this you should seek local advice about possibly diverting flow to prevent oil heating as it passes through the valve bank.

Oil flow affects the speed of lift of the block:

At 45 lts per min the block will lift up the mast at about 3m per sec

At 65 lts per min the block will lift up the mast at about 4.2 m per sec

WARNING

Farmtek and Mule Model post drivers may be fitted with valve banks that are optimised to operate at 20 - 40 L/min oil flow. Please check if this warning sign is placed near the controls.

WARNING

Oil flow 40Lmin Maximum

Excessive flow can endanger the operator.