



IMPORTERS AND MANUFACTURERS OF AGRICULTURAL,
HORTICULTURAL, LANDSCAPING, GROUNDCARE
AND CONSTRUCTION MACHINERY

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Kilworth Post Driver

Operators Manual

Model _____

Serial No _____



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1 Introduction

This operators manual is one of the most important parts of the machine to which it relates. The information provided within it will enable any operator to get optimum performance from the Post Driver with risk of injury or damage to the machine reduced to a minimum.

Throughout this manual your attention will be drawn to possible hazardous situations by the use of the following symbol:



Whenever you see this symbol take careful note of the message that follows. It is for your own benefit.

2 Purpose of the Machine

The Kilworth Post Driver is designed to be mounted on the 3 point linkage at the rear of a standard agricultural tractor. Its function is to drive wooden posts into the ground to form a solid support for fences, trees etc. Use the Post Driver only for the purpose for which it was designed in accordance with the instructions contained within this handbook. Failure to do so will invalidate the manufacturers warranty.

3 Specifications

	Compact	Standard	Contractor
Underhead Clearance	2.7m	3.1m	3.4m
Reach	2.6m	2.7m	3.2m
Overall Length	3.0m	3.1m	3.6m

SAFETY DECALS

The following decals are attached to the machine. Ensure they are clean and readable at all times. Replacement decals are available from Kilworth.



WARNING



DURING OPERATION:

- Use Holding Arm provided to support post while driving it in and stand at right angles to the Post Driver – not directly behind.
- Ensure driving head is resting on top of post or on ground if you have to approach machine.
- Keep all bystanders at least 5m away.
- Any person using the Post Driver must read and understand the Operators Manual.

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WARNING



- Risk of instability. Fit front end weights on tractor to counter-balance the Post Driver.
- Beware of overhead obstructions (eg. power lines).
- Lower driving head to within 450mm (18") of the ground before driving on public roads.
- Lower driving head fully before allowing any person to approach the Post Driver.

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	Compact	Standard	Contractor
Overall Width	0.8m	0.9m	0.9m
Height	0.7m	1.0m	1.0m
Weight	102 kg	220 kg	300 kg
Power Requirement	12-35 hp	40-70 hp	70-100 hp

4 Safety Notes



Due to the function of the Post Driver it can be dangerous if used carelessly. Always pay complete attention to what you are doing.



Keep all bystanders not directly involved with the operation of the Post Driver well away whilst the tractor is running.



If for any reason you need to work on the Post Driver (eg to make an adjustment):

Lower the machine to the ground (unless these instructions say otherwise).

Stop the tractor engine.

Engage the hand brake.

Remove the ignition key.

5 Connection to the Tractor

Set the tractor hydraulic control selector lever to Position Control (See tractor instruction manual).



CAUTION Operating the Post Driver with the tractor hydraulics in draught control will cause damage to the tractor hydraulic system.

With the Post Driver on level ground reverse the tractor squarely up to the machine and locate the lower linkage arms.

Raise the lower linkage arms so that the base of the Post Driver is approximately 150mm (6") above the ground.

Fit the Kilworth adjustable top link (see Figure 1,1) to the top hitch jaws on the tractor. Use the lowest holes possible on the tractor.

Note: On certain tractors it may be necessary to fit special plates to the tractor top link sensing yoke in order to eliminate any movement. See your dealer if in any doubt.

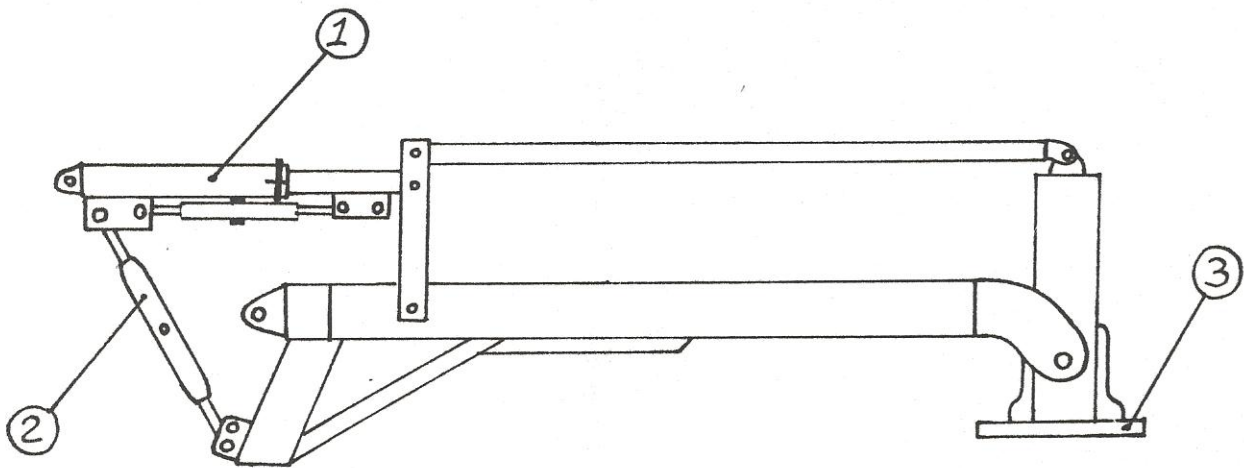


Figure 1. Kilworth Post Driver

Fit the tractors own top link between the underside of the Kilworth top link and the jaws on the base of the Post Driver, using the pins provided (see Figure 1,2). Use the lowest hole initially.



CAUTION Check that the tractor top link does not foul the tractors PTO output shaft.

Set the check chains or stabiliser bars so that the Post driver is rigid behind the tractor and cannot sway from side to side.

6 Operating Instructions

6.1 Setting for Work

Lift the Post Driver until the striking head (see Figure 1,3) is approximately 1.0m (3 feet) off the ground. Adjust the length of the Kilworth top link until the head is vertical. Now lift the Post Driver slowly and carefully as high as it will go.



CAUTION At all times and particularly after making any adjustments ensure that when the Post Driver is lifted up to its highest position there is a clearance of at least 12mm (1/2")

between the top edge of the striker plate and the underside of the main beam (see Figure 2). Failure to observe this will result in damage to both tractor and implement. If a clearance is required, either set the stop on the tractor's hydraulic control lever at a safe height or shorten the Kilworth top link. Where maximum height is required set the clearance by adjusting the tractor top link and then readjust the Kilworth top link to ensure the head is vertical.

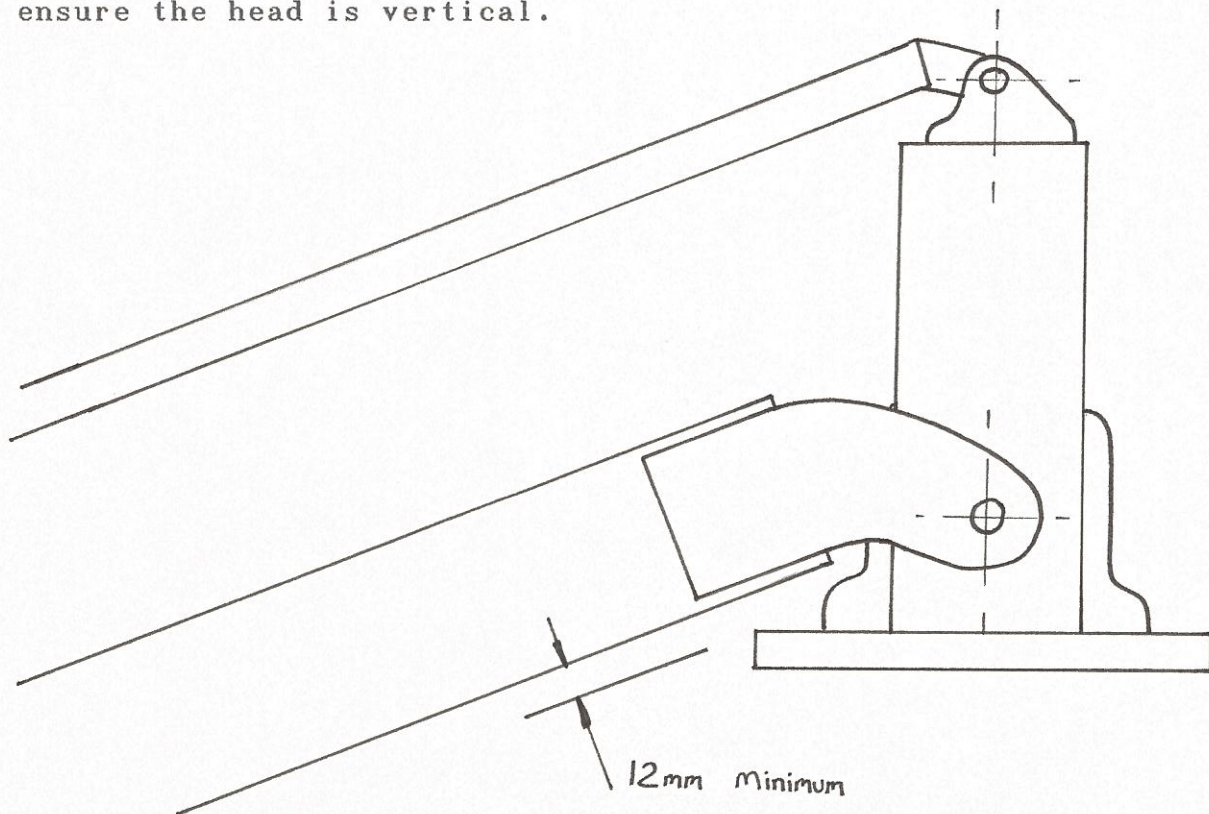


Figure 2 Head Clearance

If the Post Driver does not lift high enough to clear your longest post, lower it to the ground and lengthen the tractor top link to gain more height. If still more height is required lower the Post Driver to the ground and reposition the tractor top link in the higher set of holes at the base of the machine. Readjust the length of the top link as required. Note that more height can be gained on some tractors by shortening the lower linkage lift rods.

Set the post Driver level if necessary using the tractors lower linkage levelling box/screw.

The secret of driving posts in straight in any position is to keep the head of the Post Driver vertical so that it hits the top of the post squarely.



WARNING Only make adjustments with the Post Driver on the ground and the tractor engine stopped.



CAUTION Once all adjustments have been made be sure to tighten all locking nuts etc. on the 2 top links.



WARNING Fit tractor front weights for extra stability.

6.2 Additional Instructions for Compact Model

In certain cases it may be found that the tractor hydraulic system is incapable of raising the Post Driver through the lifting arc. (this will usually only apply to the smaller compact tractors).

To overcome this special lugs have been welded to the cross beam of the Compact Post Driver.

Remove the securing pins at the lower end of the tractor lift rods (usually secured by "R" clips or linch pins) and refit

the lift rods to the lugs on the cross beam (see Figure 3), securing as originally on the tractor.

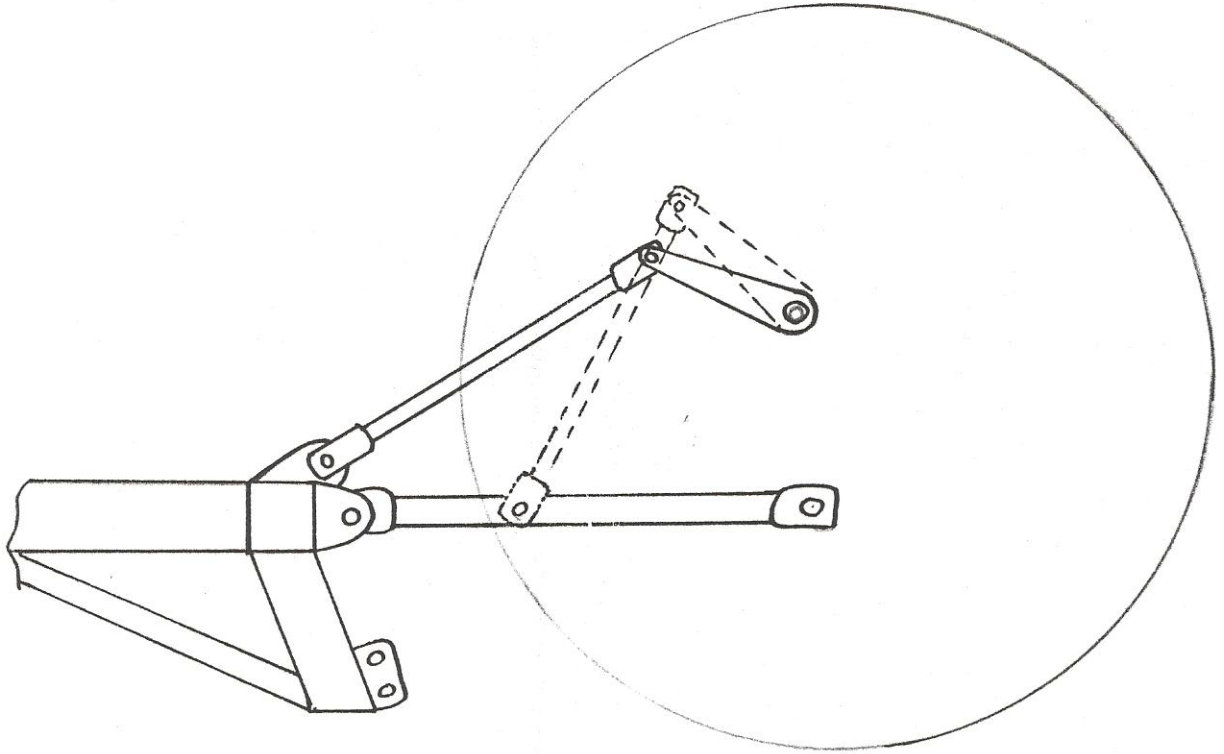


Figure 3 Alternative Position of Tractor Lift Rod (Compact only).

6.3 Operation

If you are working with an assistant (this is preferable and greatly increases the rate of post driving), he/she will hold the post with the holder provided with the machine.



WARNING Always stand to one side of the post driver when holding posts. Never behind.



WARNING Always use the post holder provided to support posts.

Position the tractor with the Post Driver striking head approximately 50mm (2") above the post so that the post is central and to the rear of the striking plate. Always start driving with the rear of the striker plate because as the head moves through an arc, it will move across the top of the post as it drives it into the ground.

Start driving the post with light taps so as to firm it. Once the post is firm increasingly heavier blows (i.e. using more height) can be used according to the operators discretion and the size of the post. Once the post is rigid the assistant can stand back before the full height of the Post Driver is used.

If you are working on your own, it is advisable to make a small starter hole with the end of the holder or steel bar and erect 20 or more posts which can then be driven in in one go.

Important Notes

- Always use new "green" stakes as old, dry stakes are more likely to break or splinter.
- Always use pointed posts or stakes. They penetrate far better than blunt ones and give a firmer post.
- Never attempt to drive in a damaged post.
- If very tall posts are to be used it is advisable to dig a small starter hole approximately 300mm (12") deep to help locate the post and increase the driving range.
- Should one side of the tractor be higher than the other, adjust the tractor lower linkage levelling handle.
- Should the front of the tractor be higher than the rear, shorten the Kilworth top link and vice-versa.

6.4 Travelling on Public Highways



WARNING

When travelling on public roads take note of the following:

- Do not travel with the Post Driver in the fully raised position.

- Lock the Post Driver in the required position by locking the tractor hydraulic lever.

- Be especially careful when turning as the Post Driver will swing out , probably unexpectedly to other road users.

7 Maintenance

Every 10 hours grease striker head pivot

Every 50 hours check all pivot points for wear

Post Driver. Important additional information.

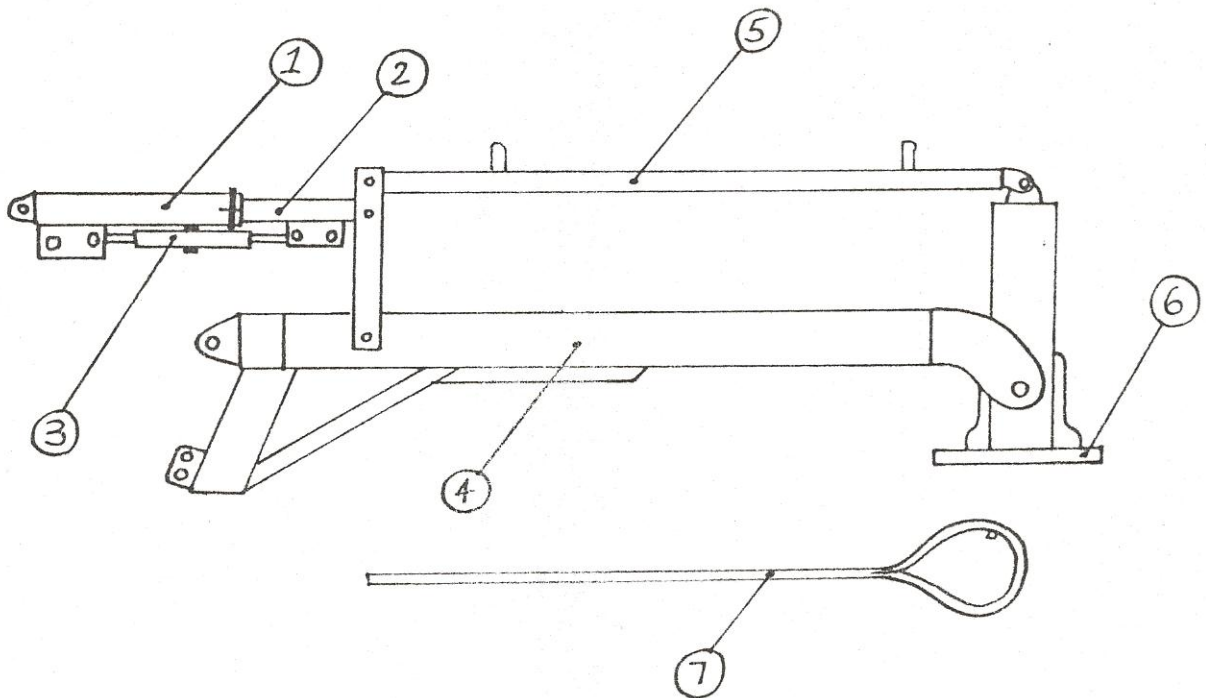
- 1] On certain tractors the Kilworth Top Link (item 1 on Figure 1) may not extend sufficiently to bring the striker plate (item 3) horizontal. If this is the case the centre tube of the grey top link can be exchanged for a longer one. Contact your dealer or Kilworth for further advice.

- 2] On later tractors fitted with electronically controlled hydraulics some difficulty may be experienced with controlling the Post Driver, particularly when positioning the striker head above the post. Kilworth recommend that where possible the Post Driver is used on a tractor with hand lever controlled hydraulics. Contact your dealer or Kilworth for advice.

- 3] Where the tractor is fitted with quick hitch type 3 point linkage (eg. Walterschied hitch) the tractor top link may not fit into the Post Driver jaws (item 2 Figure 1). Kilworth recommend fitting a standard CAT 2 top link at this point if any difficulty is experienced.

- 4] When the Post Driver is fully fitted to the tractor always raise and lower it very slowly through its full range of movement to check that all links and pivots are free to move without contacting other components.

8 Spare Parts



<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	APK101	TOP LINK FEMALE
2	APK102	TOP LINK MALE
3	APK103	ADJUSTER (TOP LINK)
4	APK301	CHASSIS
5	APK302	LINK BAR
6	APK303	STRIKER HEAD
7	APK201	HOLDING RING