## **OPERATOR'S MANUAL**

# PD100 POST DRIVER



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#### **Table of Contents**

Specifications/Requirements	1
Introduction	2
Equipment Inspection and Storage	2
Warning Labels	2
Assembly/Disassembly Short Channel 3-Point Hitch Mount/Stabilizer Manual Tilt Base Plate Hydraulic System Hydraulic Hoses Debris Guard Post Holder Mounting Bracket Ram Assembly Ram Cylinder	4 5 5 7 8 9 9 12 15
Safety	16
Operating Instructions Drive a Post	17 18
Service	20
Sub-assembly Parts 3-Point Hitch Mount/Stabilizer Ram Assembly Manual Tilt Base Plate	20 20 21 22
Troubleshooting	23
Warranty	24



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Specifications		
PD100 Post Driver		
Dimensions		
Height (Extended)	130"	
Height (Locked Position)	100"	
Width	33"	
Depth	20"	
Weight	460 lbs.	
Dimension & weight do not include		
mounting		
	ſ	
Impact	71,500 lbs.	
Tilt Degrees		
Side/Side	15	
Front/Back	15	
	•	
Nyrim Guide Blocks	4	
Requirements		

Requirements		
PD100 Post Driver		
Mounting		
3-Point Hitch	150 lbs	
Category I		
Category II		
Manual Tilt Bracket	84 lbs.	
Hydraulic		
12 GPM @ 1,500 PSI		

Post Capacities		
PD100 Post Driver		
Maximum Diameter	8 3/4 in.	
Maximum Length	*10 ft.	
* Utilizing lowest mounting position		
Capable of driving T-post with correct		
adapter		

#### Introduction

Welcome to the Kencove Farm Fence Supplies family. You have purchased a post driver that offers up to 71,500 lbs. of impact, versatile mounting options, and the capability of driving posts up to 10 ft. tall.

The Kencove post driver PD-100 manual tilt unit is fast and powerful. With only six (6) moving parts, it is built for durability, easy maintenance, and only takes just a few minutes to mount or detach.

The instructions and information within this manual are important to the proper assembly and operation of this equipment. Please be sure that everyone that is involved with assembly, operation, and maintenance of this equipment reads this manual in its entirety.

Proper care is the owner's responsibility. Always follow all State, Federal, and local health and safety laws and regulations.

CAUTION: IT IS IMPORTANT THAT ALL SAFETY PRECAUTIONS MENTIONED THROUGHTOUT THIS MANUAL BE FOLLOWED. FAILURE TO FOLLOW THESE INSTRUCTIONS OR CONFORM TO THE WARNING AND SAFETY LABELS ON THE EQUIPMENT MAY RESULT IN SERIOUS INJURY, DEATH, AND/OR PROPERTY DAMAGE.

Kencove Farm Fence Supplies reserves the right to make changes or discontinue manufacture or sale at any time, without notice and without any liability or other obligation on its part in materials, equipment, specifications, and models.

## WARNING

- Read and follow operating instructions
   before using this equipment
- Extreme caution must be exercised
   when operating
- Don't place hand on top of post
- Don't stand in front of the post when driving
- Always wear eye, ear, and hand protection
- Avoid operating driver against rubber bumpers
- Check and tighten all bolts regularly
- Don't attempt to transport in raised position
  Always make sure that post holder is in place

Oil Steel slides on driver daily Grease major pivot points weekly

#### **A** WARNING



Pinch Point Keep hands clear, can cause serious injury.

#### **Equipment Inspection and Storage**

WARNING! Adequate lifting device, space, work area, and personnel [two (2) are recommended] are required for the assembly of this equipment. Proper lifting is required as parts can be heavy and serious injury, death, and/or property damage can occur.

Immediately upon receipt of this equipment verify that you received all the parts and inspect for damages that may have been lost or occurred during shipping. If parts are missing or if damage has been found contact Kencove Farm Fence Supplies promptly. This equipment package contains the following:

- 1. Main Channel and Ram Assembly
- 2. Short Channel Assembly
- 3. 3-Point Hitch Mount/Stabilizer Assembly
- 4. Manual Tilt Base Plate Assembly
- 5. Hydraulic Valve Assembly
- 6. Hydraulic Hose and Adapter Kit
- 7. Debris Guard
- 8. Post Holder Assembly

Kencove Farm Fence Supplies recommends for best life and service of this equipment that it is always stored in a clean, dry, and secure location. Life and service of this equipment will be shortened if not protected from the elements.

WARNING! The driver must be secured to the machine on which it will be operated by, or secured to an adequate object to prevent the unit from tipping. Serious injury, death, and/or property damage may be a result from not securing unit.

WARNING! Personal protective equipment should be worn during cleaning. This includes, but not be limited to, safety glasses, hearing protection, protective gloves, and steel toe footwear.

#### Storage

- 1. Clean before storing:
  - Remove loose debris.
  - Clean the entire driver:
    - Compressed air or pressure washer.

- 2. Inspection of the Driver:
  - Road lock pin should be in the top hole of ram I-beam for storage.
  - Ensure all bolts are tight.
  - Check that correct pins are secured in the correct location.
  - Verify all warning labels are in their correct location and are readable.
  - Inspect complete hydraulic system for leaks or signs of wear.
  - Place debris guard in correct position and check that it is in working condition.
  - Move valve control lever to check full range of motion and that the lever lock is operating correctly.
- 3. Replace any worn or damaged parts before operating this equipment.
- 4. Lightly coat four (4) guide blocks with new oil. **Do not** use grease, grease can hold contaminates that will put excessive wear on guide blocks.
- 5. To prevent rust, coat exposed hydraulic cylinder shaft with a thin layer of new grease.

Note: Inspection steps of driver should be followed before each time equipment is stored, and before every use of the Driver.

#### Assembly/ Disassembly



**KD-1** 

**Short Channel** 

WARNING! Before mounting the short channel, the ram assembly must be secured to an adequate object to prevent the unit from tipping. Serious injury, death, and/or property damage may be a result from not securing unit.

The PD-100 main carriage channel is designed so that the short channel can be mounted in three different vertical locations. Each set of six (6) holes are positioned for a specific function. **NOTE:** These are recommended positions and can vary depending on type and make of power supply equipment.

Top position – Is used to mount to the front of a tractor.

Middle position – Three-point hitch mounting.

Lower position – this position will permit the driving of 10 foot tall posts.



KD-2

#### **Short Channel Mounting**

 Select corresponding mounting position from the above information. Mount the short channel assembly to the main carriage channel and ram assembly using the six (6) 5/8-11 X 1-1/4" bolts and 5/8 lock washers. Tighten completely.

#### **Short Channel Disassembly**

- 1. Note location of bracket to ease assembly.
- 2. Remove six (6) bolts



KD-3



KD-4

#### 3-Point Hitch Mount/Stabilizer

**NOTE:** The PD-100 Driver will fit Category I or Category II three-point hitch equipped tractors. Select the correct supplied category pins.

- With the three-point hitch mount secure on flat floor surface. Install supplied category pins in lower two (2) mounting positions. Securely tighten nuts.
  - a. Category I with the threads pointing outward.
  - b. Category II with the threads pointing inward.





#### Manual Tilt Base Plate Assembly

- 1. Place the base plate centered on threepoint hitch mount with the top crank handle above the stabilizer legs.
- Using the four (4) 5/8-11 x 2" bolts, 5/8 washers, 5/8 lock washers, and 5/8-11 nuts, mount base plate on the threepoint hitch and securely tighten.

#### Manual Tilt Base Plate Disassembly

1. To remove, reverse above steps one (1) and two (2).

#### Base Plate/Hitch Mounting to Ram Assembly

WARNING! Before mounting the base plate/hitch, the ram assembly must be secured to an adequate object to prevent the unit from tipping. Serious injury, death, and/or property damage may be a result from not securing unit.

1. To prevent tipping secure ram assembly (only). Recommend using an overhead lifting device rated to hold the weight of the equipment. Locate two (2) mounting pins and four
 (4) cotter pins.

**NOTE**: A floor jack may be used to assist in stabilizing Base Plate /Hitch mounting and aligning mounting holes.

- 3. With assistance match the Base Plate /Hitch mounting to the mounting holes of the short channel. (You may need to readjust the stabilizer legs to vertically align the mounting holes)
- 4. Support the Base Plate /Hitch mounting.
- 5. Crank vertical tilt adjustment to align top mounting hole and insert mounting pin and secure each side with cotter pin.



KD-6

- 6. Align bottom mounting hole and insert mounting pin and secure each side with cotter pin.
- Loosen the two (2) adjustment bolts at the bottom of the hitch mount/stabilizer and adjust to corresponding height. Securely tighten bolts.

**Removing Base Plate/Hitch from Ram** 

WARNING! Before removing the base plate/hitch, the ram assembly must be secured to an adequate object to prevent the unit from tipping. Serious injury, death, and/or property damage may be a result from not securing unit

1. To prevent tipping secure ram assembly (only). Recommend using an overhead lifting device rated to hold the weight equipment.

Note: A floor jack may be used to assist in stabilizing Base Plate /Hitch mounting and to move assembly.

- 2. Remove one (1) cotter pin from each channel mounting pin, and tap pins out of channel.
- 3. With help, carefully separate the threepoint hitch/stabilizer and base plate assembly away from the Ram assembly upright.
- 4. Store components in a safe location, making sure all components are properly secure to prevent tipping.

Note: For servicing and maintenance of the Ram Assembly, the unit must be placed horizontal on a support rated to hold the assembly upright. Use an overhead lifting device rated to hold the weight equipment to position the ram assembly horizontal.

WARNING! The driver must be secured to an adequate object to prevent the unit from tipping. Serious injury, death, and/or property damage may be a result from not securing unit.



**KD-7** 

#### **Hydraulic System**





#### **Hydraulic Valve Mounting**

 Mount the hydraulic valve on bracket using two (2) 5/16-18 X 3" bolts, 5/16 lock washers, and 5/16-18 nuts. Note: over-tightening mounting hardware can damage the valve assembly.





#### Hydraulic Hoses and Adapter Kit

- 1. Supply Line 1/2"(12MM) X 8FT.
- 2. Return Line 1"(25MM) X 8FT.
- 3. Cylinder Line 3/4" (19MM) X 3FT.
- 4. Fitting 1/2" X 90 DEG. (O-RING)
- 5. Fitting -3/4" X 45 DEG. (O-RING)
- 6. Fitting 1" X 90 DEG. (O-RING)
- 7. Coupler -1/2 for supply line

#### Assemble the hydraulic lever valve.



KD-10

- 1. Before installing inspect valve assembly for defects and ensure lever neutral safety bracket is installed.
- 2. Lift lever out of its neutral position and move to verify that the lever as full range of motion. Return to neutral position.

NOTE: Valve comes with three (3) ports plugged. With using a closed center valve, one (1) port will need plug with supplied metal plug. (KD-10) 3. Remove three (3) plastic plugs from valve.

IMPORTANT! Hydraulic system fittings are o-ring sealed. Do not use paste or tapetype sealer, this can damage o-ring seals and voids warranty of all parts of the hydraulic system.



KD-11



KD-12

#### Valve Fitting Assembly

 Locate adapter kit and install the three (3) supplied elbow fittings as shown in (KD-7).



KD-13

#### **Connect Hydraulic Hoses (Post Driver)**

- 1. Attach the hydraulic hoses to valve assembly and ram cylinder.
  - a. Connect o-ring seal end of 3/4" return hose to 3/4" fitting on top of valve assembly. Tighten the hose fittings securely.
  - b. Connect o-ring seal end of 1/2" supply hose (long) to 1/2" fitting on side of valve assembly. Tighten the hose fittings securely.
  - c. Connect o-ring seal end of 1/2" cylinder hose (short) to 1/2" fitting on top of valve assembly. Tighten the hose fittings securely.
  - d. Apply Teflon tape to the threads of the loose end of 1/2" cylinder hose (short), and connect to Ram Cylinder. Tighten the hose fittings securely.
  - e. Apply Teflon tape to the threads of the loose end of 1/2" supply hose (long), install 1/2" coupler. Tighten the coupler securely.

**NOTE:** Customer must supply proper hydraulic fitting for connecting the return line to the tractors hydraulic system.

IMPORTANT! Operator is to ensure the oil from the power sources hydraulic system is clean and properly filtered before connecting the Post Driver. Damage from dirty unfiltered oil will not be covered under warranty of the post driver.

**Disconnect Hydraulic Hoses (Post Driver)** 



WARNING! Hydraulic fluid can be hot pressurized.

WARNING! Personal protective equipment should be worn during all service procedures. This includes, but not be limited to, safety glasses, hearing protection, protective gloves, and steel toe footwear

**NOTE:** When disconnecting hydraulic hoses have a container available to catch the fluid that is remaining in the system.

- 1. Detach the hydraulic hoses to valve assembly and ram cylinder.
  - a. Reverse steps a through e.



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#### **Debris Guard**





#### **Mount Debris Guard**

- 1. Locate debris guard and bag containing hardware.
- Attach debris guard to the drive ram head with two (2) 1/4 – 20 X 3/4 mounting bolts and 1/4 washers, as shown. Do not over-tighten.

**Note:** Debris guard should only be removed for replacement or to clear debris from guard.

#### **Remove Debris Guard**

1. To Remove Debris Guard reverse steps one (1) and two (2).

#### **Post Holder Mounting Bracket**

WARNING! Before mounting the post holder, the driver must be secured to the machine in which it will be operated by, or secured to an adequate object to prevent the unit from tipping. Serious injury, death, and/or property damage may be a result from not securing unit.



KD-15

 Mount post holder mounting bracket to short channel assembly using two (2) 3/4-10 X 2" bolts, 3/4 lock washers, and 3/4-10 nuts, securely tighten. (Bolts need to be installed so that the head of the bolts are inside of the channel)

#### **Post holder**



KD-16

#### **Post Holder Parts**

- 1 Mounting Bracket
- 1 Post Holder Arm

2 3/4 Lock Washers

1 Post Guide

- 1 Spring
- n 1 5/8-11 Lock Nut
  - 3 Lynch Pins
  - 3 3/4 Washers
- 2 3/4-10 X 2" Hex Bolts
- 1 5/8-11 x 2-1/4" Hex Bolt





#### **Post Holder Assembly**

 Assemble post holder by bolting post guide to arm as shown above. Use one (1) 5/8-11 X 2-1/4" bolt and 5/8-11 locknut. (Do not over tighten; guide must be able to rotate freely)





#### Mount post holder assembly

- 1. Remove pin and washer from long shaft of assembly.
- 2. Lightly coat pivot shaft with grease.
- 3. Insert arm up into bracket (You may need to tap shaft into mounting bracket) and replace washer and pin.



KD-19

- 4. Attach post holder spring:
  - a. Remove pin and washer from lower pin on mounting bracket.
  - b. With arm rotated away from beam place spring loop on pin located on bottom of mounting bracket, and secure it in place with washer and pin.





5. Carefully test the Post Holder for range of motion Post Holder handle should be able to contact the Ram I-beam and swing back to the arm stop on the mount bracket.





#### **Remove Post Holder**

**NOTE:** Post holder should only be removed for servicing.

1. Reverse assembly instructions one (1) through four b (4b).

#### Ram





**NOTE:** Your Kencove Post Driver Ram Assembly comes pre-assembled from the warehouse. The following instructions are for service and maintenance.

#### **Ram Disassembly**

- 1. Remove lynch pin from road lock pin and remove pin.
- 2. Slide the main carriage channel toward top of unit as far as possible; this will take the tension off the springs.
- 3. Hook a pulling strap to one (1) of the spring's upper spring u- clip. Pull spring up towards the top of the assembly and unhook spring u-clip from spring bracket.
- 4. Repeat step three (3) for other spring.
- Remove locknut from top (piston end) of ram cylinder. (Do not remove cylinder from mount)
- 6. Remove two (2) lock nuts from ram drive cylinder mounting flange.
- Take cylinder piston end out of top mounting bracket, and move cylinder up off of two (2) bottom mounting bolts. (Do not remove cylinder)
- 8. Remove spring lower mounting bracket with springs from road lock bracket bolts.
- 9. Pull springs out of ram assembly from road lock side.
- 10. Remove cylinder from top end of assembly.
- 11. Remove two (2) road lock bracket nuts and remove road lock bracket.
- 12. Slide main carriage channel out from the top of the ram I-beam.

IMPORTANT! Before removing Nyrim blocks and shims, note the location of each as these will need to be replace in the exact location from which they were removed (Shims may be different thicknesses). 13. Remove guide blocks and shims from ram I-beam.

#### **Ram Assembly**

1. Place Ram I-beam Assembly horizontal with the cylinder mounting bracket pointed upward on a support rated to hold the weight of the equipment.



KD-23

 Install four (4) guide block shims and four (4) Nyrim guide blocks on the pins inside the drive ram I-beam. (When reassembling ram, make sure the shims are installed in their original locations).

**NOTE:** Guide blocks are not square and must be positioned to fit inside the inside of the main carriage channel frame. (Narrow sides fit into channel)

- 3. Lubricate the guide blocks with new oil to reduce friction (**do not** use grease).
- With help slide the main carriage channel (with open channel end leading) over guide blocks from the top of the ram I-beam (cylinder mounting bracket side).

- 5. The main carriage channel should slide back and forth in the ram I-beam freely.
- Check the side to side movement of the main carriage channel in the ram Ibeam. Side to side movement should not be less than 1/8" or more than 1/4".



KD-24

- 7. Mount two (2) rubber bumpers on road lock bracket. Do not tighten bolts at this time.
- 8. Align the road lock bracket on main carriage channel and mount with two (2) 3/8-16 X 2-1/2 bolts and 3/8-16 heavy nuts. Do not tighten bolts at this time.



KD-25

**NOTE:** Hydraulic ram cylinder must be placed in main carriage channel before springs can be inserted. Center the cylinder loose in the ram beam.



KD-26

**NOTE:** Replacement springs will be supplied with u-clips installed on each end.

- 9. Un-crimp and remove u-clips from one (1) end of each spring.
- 10. Install the two (2) spring u-clips into spring bracket.
- 11. Thread each spring back onto spring uclip [three (3) total turns].
- 12. Crimp closed both sides of each spring u-clip.
- Slide the main carriage channel away from the ram I-beam about 24 inches (Road Lock side).
- 14. Insert springs from the bottom (Road Lock side) of the equipment between the ram I-beam and main carriage channel, and guide into position.



**KD-27** 

- 15. Align spring and install onto two (2) road lock bracket bolts.
- Align and install ram cylinder mounting bracket onto two (2) road lock bracket bolts.
- 17. Install two (2) 3/8-16 locknuts onto bolts. Do not tighten at this time.
- 18. Tighten nuts in step (8), and now tighten nuts in step (17).
- Slide main channel to align road lock bracket with bottom hole in Ram Ibeam and insert top of ram cylinder into mounting bracket.
- 20. Install road lock pin and secure with lynch pin.

WARNING! Personal protective equipment should be worn during all service procedures. This includes, but not be limited to, safety glasses, hearing protection, protective gloves, and steel toe footwear



KD-28



K-29

- 21. Hook a pulling strap to one (1) of the spring's upper spring clip. Pull spring up towards the top of the assembly and carefully hook spring u-clip onto spring bracket.
- 22. Repeat step twenty-one (21) for other spring.



**KD-30** 

23. Attach ram cylinder rod to the top of the ram I-beam using new lock washer and new lock nut. (Never reuse locknuts) Securely tighten the nut. Do not over tighten locknut.

#### **Ram Cylinder Disassembly**



KD-32

1. For cylinder removal refer to Ram disassembly on page 12 of this manual.

**NOTE:** When disconnecting hydraulic hoses and cylinder end cap, have a container available to catch the fluid that is remaining in the system.

**NOTE:** When serving cylinder, place cylinder on a flat clean surface. Take caution not to damage any threads or seals.

- 2. Remove nut from shaft.
- 3. Loosen cylinder cap and remove.
- 4. Slowly pull shaft out of cylinder body taking caution not to contact the shaft with the cylinder body.
- 5. To disassembly shaft:
  - a. Remove piston guide nut and remove piston guide.

#### **Ram Cylinder Seal Disassembly**



KD-31

- 1 O-Ring Seal
- 1 O-ring Washer
- 1 Shaft Wiper
- 1 Shaft Seal
- 1 Cylinder Cap
  - 6. To disassembly seal assembly:
    - a. With an O-ring/Oil seal pick, remove seals and shaft wiper from cylinder cap being careful not to damage seal contact surfaces.

#### Ram Cylinder Seal Assembly

**NOTE: Do not** reassembly cylinder without replace with new seal kit.

- 1. Clean each seal surface.
- 2. Lubricate each seal and wiper with clean hydraulic fluid. This will assist in replacing seals.
- 3. Replace each seal in working from the center of the cap and working out to each end.

#### **Ram Cylinder Assembly**

- 1. Replace piston guide onto shaft and secure into place with new locking nut.
- 2. Slide shaft into open end of cylinder body taking caution not to contact the shaft with the cylinder body.
- 3. Reinstall cylinder cap and securely tighten.

#### SAFETY-SAFETY-SAFETY

IT IS IMPORTANT THAT ALL SAFETY STEPS MENTIONED BELOW BE FOLLOWED. FAILURE TO FOLLOW THESE INSTRUCTIONS OR CONFORM TO THE WARNING AND SAFETY LABELS ON THE EQUIPMENT MAY RESULT IN SERIOUS INJURY, DEATH, AND/OR PROPERTY DAMAGE.

#### CAUTION! MAXUIM DRIVING FORCE IS NOT REQUIRED TO DRIVE SMALL DIAMETER WOOD OR STEEL POSTS.

- Personal protective equipment should be worn at all times during operation. This includes, but not be limited to, safety glasses, hearing protection, protective gloves, and steel toe footwear.
- Safety equipment and safety labels are NOT to be removed from equipment. Safety equipment and labels should be inspected before each use and in working condition during operation.
- 3. Always be aware of the environment in and around in which you are operating in.

- 4. **Do not** modify the hydraulic lever control valve or remove safety neutral bracket.
- 5. Be aware of underground utilities. If unsure of locations, call your local utility companies.
- 6. **Never** operate equipment on steep slopes.
- The Post Driver operator is to never stand directly in front of equipment. Stand to the valve side of equipment.
- 8. Keep Hands Clear of post and post driver when driving a post.
- 9. Maximum force of the Post Driver is not to be use until the post being driven is started into the ground and is straight.
- 10. If the post fails to drive into the ground after two (2) or three (3) attempts, move to another location. There could be an underground obstruction; this could cause the post to splinter and cause injury to the operator.
- Post holder assembly is to be in the open position at all times except when driving a post, or during transportation.
- 12. Driving posts is a two (2) person operation, an operator for the power source equipment and an operator for the post driver. Never attempt to operate the post driver alone.
- Road lock pin is to be secure in lower position before transporting more than one-hundred (100) feet. During storage secure road lock pin in top hole.

#### **Operating Instructions**

WARNING! Personal protective equipment should be worn during all procedures. This includes, but not be limited to, safety glasses, hearing protection, protective gloves, and steel toe footwear

#### **Mounting Driver to Power Source**

1. Line up equipment and move the power supply equipment toward the secure Post Driver until the mounting points are aligned.

#### For 3 Point Hitch Mounting

**NOTE:** The PD-100 Driver will fit Category I or Category II three-point hitch equipped tractors. Select the correct supplied mounting pins

- 2. Attach two (2) lower, three-point hitch lift arms to Post Driver three-point category pins. Secure in place with (operator supplied) lock pins.
- Attach top link of 3 point hitch to top mounting location of post driver bracket. Secure in place with (operator supplied) pins.

**NOTE:** To correctly attach the Post Driver, adjust the length of the machine's top link, as required.

#### **Connect Hydraulics**

 Connect the Driver's 1/2" hydraulic pressure hose to the equipment's hydraulic supply (pressure side).
 Connect the Driver's 3/4" hydraulic hose to the equipment's fill cap on the hydraulic reservoir.

- 5. Remove securing device from Post Driver.
- Road lock pin is to be secure in top position for storage. Before transporting more than one-hundred (100) feet, raise ram and reposition road lock pin in bottom hole.

#### **Dismounting Post Driver from Power Source**

WARNING! Before removing the power supply equipment from the post driver, secure the ram assembly to an adequate object to prevent the unit from tipping. Serious injury, death, and/or property damage may be a result from not securing unit

WARNING! Personal protective equipment should be worn during all procedures. This includes, but not be limited to, safety glasses, hearing protection, protective gloves, and steel toe footwear

- 1. Place post driver on a firm level surface.
- 2. Insert road lock pin into top hole and secure with pin.
- 3. Slowly lower the ram until it is on the ground.
- Adjust the stabilizer legs (if so equipped) to allow ram I-beam to fully contact the ground. Make sure the Post Driver is stable.
- 5. Verify hydraulic valve lever is in the "Neutral Safety" position.

6. Release all pressure from the Post Driver hydraulic system. Disconnect the Driver's 1/2" hydraulic pressure hose to the equipment's hydraulic supply (pressure side). Disconnect the Driver's 3/4" hydraulic hose to the equipment's hydraulic return (nonpressure side).

#### **Dismounting for 3-Point Hitch**

- Detach top link of 3 point hitch from top mounting location of post driver bracket.
- 8. Detach two (2) lower, three-point hitch lift arms from Post Driver three-point category pins.
- 9. Carefully pull away from the Post Driver.

#### **Ready to Drive a Post**

WARNING! Personal protective equipment should be worn during all operating procedures. This includes, but not be limited to, safety glasses, hearing protection, protective gloves, and steel toe footwear

WARNING! Driving posts is a two (2) person operation, an operator for the power source equipment and an operator for the post driver. Never attempt to operate the post driver alone.

#### WARNING! IT IS IMPORTANT THAT ALL SAFETY STEPS MENTIONED BELOW BE FOLLOWED. FAILURE TO FOLLOW THESE INSTRUCTIONS OR CONFORM TO THE WARNING AND SAFETY LABELS ON THE EQUIPMENT MAY RESULT IN SERIOUS INJURY, DEATH, AND/OR PROPERTY DAMAGE.

**NOTE:** Lubricate four (4) guide blocks with oil before each project and, during a project if necessary. (Do not use grease)





Lift valve lever out of Neutral Safety lock and pull back hydraulic valve lever to raise ram.

- 1. Position the equipment in place to drive the first post.
- 2. Tractor or power source equipment must be placed in park if so equipped, and parking brake must be set.
- 3. Remove road lock pin and lower ram until it comes in contact with the rubber stops on main channel or the ground.

**NOTE:** Step 4 can be skipped if ram contacted ground before the rubber stops.

4. Continue to lower Driver main carriage channel .This will reduce the amount wear on the rubber stops.

IMPORTANT! When operating equipment on uneven surfaces, make sure that both stabilizer legs contact the ground at each location. Readjust may be required at each location to accomplish this. Failure to do so can cause damage the equipment.

 Loosen and adjust stabilizer legs so that both stabilizer legs are contacting the ground. Securely tighten both bolts on stabilizer leg. (for 3-point hitch mounting)

IMPORTANT: Every day before each project, cycle the driver ram to season the springs. It is recommended to cycle unit 10 to 15 times. DO NOT permit ram to come in contact with any surface or object during this time.

- 6. Adjust the main carriage channel tilt using manual cranks to plum post to ground.
- 7. Raise the ram, place a fence post in the I-beam, under the ram strike plate.
- 8. Lower ram so there is a gap of 1" to 2" between the top of the post and the ram strike plate.
- 9. Swing post holder assembly so that the guides contact and secure post.
- 10. The Post Driver operator is to **never** stand directly in front of equipment. Stand to the valve side of equipment.

- 11. Lift valve lever out of neutral and push control lever to release the drive ram to impact the post.
- 12. Pull valve lever back past neutral to raise drive ram again. Repeat cycling until post is driven to the required depth.

NOTE: It is recommended to use shorter strokes to maintain straightness in posts while being driven into ground.

#### CAUTION! MAXIMUM DRIVING FORCE IS NOT REQUIRED TO DRIVE SMALL DIAMETER WOOD OR STEEL POSTS

WARNING! If the post fails to drive into the ground after two (2) or three (3) attempts, move to another location. There could be an underground obstruction; this could cause the post to splinter and cause injury to the operator.

- 13. When the post is driven to the required depth or the ram comes in contact with the ground, place valve lever into the "Neutral Safety" position.
- 14. Swing Post holder assembly away from post.
- 15. Raise the ram and move to the next post location.
- 16. Road lock pin is to be secure in lower position before transporting more than one-hundred (100) feet.



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#### Service

Kencove post driver PD-100 manual tilt unit is designed for easy maintenance with only six (6) moving parts, and only takes just a few minutes to mount or detach.

### Take the follow precautions before serving post driver:

- Follow all safety steps mentioned in this manual.
- Ensure that the hydraulic lever is in the "Neutral Safety" position.
- Always shut off the power source equipment, set parking brake, put in "park" (if equipped) and remove key.
- Wear the proper Personal Protective Equipment. This includes, but not be limited to, safety glasses, hearing protection, protective gloves, and steel toe footwear.
- All service of equipment requires that ram assembly be horizontal. Place on a support rated to hold the weight of the equipment.

Important: Contact Kencove Farm Fence Supplies if any of the instructions provided in this manual are unclear or not understood. Proper care is the owner's responsibility. Always follow all State, Federal, and local health and safety laws and regulations.

#### SUB-ASSEMBLY PARTS

#### **3-POINT HITCH MOUNTING BRACKET**



#### KD-34

- 1 Mounting bracket
- 2 Stabilizer leg
- 2 Stabilizer leg locking bolt
- 2 Category 1 hitch pin
- 2 Category 2 hitch pin

#### **RAM ASSEMBLY**



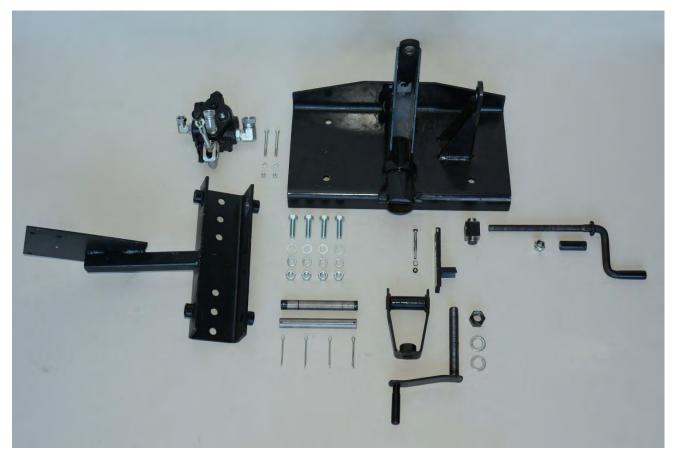
#### **KD-35**

- 1 Ram I-Beam
- 1 Main Channel Assembly
- 4 Rubber Stop w/nuts and washers
- 2 1/4-20 X 1-1/4 Hex Bolts
- 2 1/4 Lock Washers
- 1 Debris Guard
- 6 5/8-11 X 1-1/4 Hex Bolts
- 6 5/8 Lock Washers
- 2 7/16-14 X 2-1/2" Hex Bolts
- 2 7/16-14 Heavy Hex Nuts
- 2 7/16-14 Lock Nuts
- 1 Road Lock Bracket

- 1 Road Lock Pin
- 1 Lynch Pin
- 4 Nyrim Guide Blocks
- 2 10 Gauge Shims
- 2 14 Gauge Shims
- 2 18 Gauge Shims
- 4 Spring Hooks
- 2 Springs
- 1 Lower Spring Bracket
- 1 Ram Cylinder

Note: Number and sizes of shims are unique to each assembly.

#### MANUAL TILT BASE PLATE



#### KD-36

- 1 Valve Assembly
- 2 5/16-18 X 3" Hex Bolts
- 2 5-16 Lock Washers
- 2 5/16-18 Hex Nuts
- 1 Base Plate Assembly
- 1 Short Channel Assembly
- 4 5/8-11 X 1-3/4" Hex Bolts
- 4 5/8 Washers
- 4 5/8 Lock Washers
- 4 5/8-11 Hex Nuts
- 2 Mounting Pins
- 4 Cotter Pins

- 1 Screw Block Plate
- 1 Screw Block w/bolt
- 1 Side to Side Crank
- 1 3/4-10 Lock Nuts
- 1 Crank Collar
- 1 Forward Tilt Yoke
- 1 Forward Tilt Crank
- 1 1-8 Lock Nut
- 2 1" Washers

PD-100 TROUBLESHOOTING			
PROBLEM	CAUSE	SOLUTION	
Drive ram will not move freely	Guide Blocks are not lubricated	Lubricate guide block with new oil	
	Guide Blocks are not installed correctly	Verify Guide Blocks and Shims are positioned correctly and in their factory installed location	
	Insufficient clearance between Main Channel and Ram I-Beam	Verify Guide Blocks and Shims are positioned correctly and in their factory installed location	
	Drive Cylinder is incorrectly installed in Ram Assembly	Readjust cylinder is that it is centered and parallel with Ram Assembly	
	Main Channel or Ram I-beam is damaged	Do Not attempt to operate and contact Kencove Farm Fence Supplies for replacement parts	
Low power or limited movement	Insufficient hydraulic pressure from power supply	Verify power supply is operating correctly and check connections for proper installation	
	Hydraulic hoses are restricted	Check and replace if required	
	Hydraulic Cylinder is damaged	Do Not attempt to operate and contact Kencove Farm Fence Supplies for replacement parts	
	Weak or broken ram springs	Replace springs	
	Broken spring connections	Replace broken parts	
	Binding in Ram Assembly	Do Not attempt to operate and contact Kencove Farm Fence Supplies for replacement parts	
Damaged rubber stops	Incorrect mounting position of short channel assembly to ram assembly for length of post	Reposition short channel assembly on ram assembly (Refer to page X of this manual)	

For photos and descriptions of the parts, refer to the Service section of this manual.

#### **Limited Warranty**

WARRANTY – Kencove Farm Fence Supply offers a warranty on this Post Driver to the original purchaser for a period of one (1) year from the date of purchase, when installed and operated in accordance with the above instruction manual. This warranty covers defects in materials and workmanship to the Post Driver.

CONDITIONS THAT APPLY TO THE

WARRANTY – Improper installation, misuse, neglect, and unauthorized repairs or modifications of any kind are NOT covered under the Limited Warranty. Post Drivers returned under warranty will be inspected and if the problem is determined to be the result of abuse, neglect, unauthorized repairs or modifications, then no warranty will be applied. Implied warranties of merchantability and fitness for a particular application are hereby disclaimed unless the law specifically precludes this disclaimer. The manufacturer and seller have no liability for damages, incidental of consequential, resulting from or caused by any failure, malfunction or defect of any product.

Rubber Bumpers and Drive Ram Springs are warranted for thirty (30) days from the date of purchase. Manufactures replacement Rubber Bumpers and Drive Ram Springs are warranted for thirty (30) days from the date of purchase.

#### TERMS THAT APPLY TO THE WARRANTY – Kencove Farm Fence Supplies cannot be held liable for the inability to obtain materials or replacement parts due to circumstances that affect supply.

There is no obligation or liability of any kind by Kencove Farm Fence Supplies on account of any of its equipment and shall not be liable for special or consequential damages unless stated in this warranty.

#### FOR WARRANTY CLAIMS:

Contact Kencove Farm Fence Supplies at 1-800-536-2683 to get an authorization to return, file your warranty claim and, if needed, an RMA will be provided. All returned items must have an RMA number.

No unauthorized changes to this warranty in any way are permitted. This includes modifying terms and conditions, or the removal of any terms.

Kencove Farm Fence Supplies 344 Kendall Road Blairsville, PA 15717 CALL 1-800-536-2683 WWW.KENCOVE.COM



