



PTO CONNECTIONS MADE EASY



PLEASE READ AND FOLLOW ALL INSTRUCTIONS BEFORE INSTALLATION AND OPERATION!

Operator / User Instruction Manual, including
Limited Warranty, Operational Specifications & Return Policy



PTO Link® Compact System



Cat 1 tractors up to 70 HP*

all subcompact and compact tractors
w/ Cat 1, 3-pt hitch implements only

PTO Link® SD System



For tractors up to 100 HP*

w/ most 3-point hitch implements
(Category 1 or 2; excludes pull-behinds)

PTO Link® HD System



For tractors 35 HP to 130 HP*

w/ all 3-point hitch and all pull-behind implements

*All Horsepower (HP) ratings refer to Tractor Engine (Net)

TABLE OF CONTENTS

• LIMITED WARRANTY, OPERATIONAL SPECS & REFUND/RETURN POLICY.....	4-5
• GENERAL PTO SAFETY GUIDELINES WHEN USING THE PTO LINK® SYSTEM.....	6-7
• USING THE SAFETY SHIELD (PTO MASTER SHIELD).....	6
• SHIELD ALL ROTATING PARTS.....	6
• FREE-WHEELING / NON-FREE-WHEELING PTOs.....	6
• IMPLEMENTS WITH DUAL (TWO-SECTION) DRIVELINES.....	6
• DRAWBAR EXTENSION FOR PULL-BEHIND IMPLEMENTS.....	7
• AVOIDING SHOCK LOAD.....	7
• IMPLEMENTS OUTFITTED WITH SLIP-CLUTCHES.....	7
• INSTALLATION INSTRUCTIONS FOR THE PTO LINK® SYSTEM.....	8-9
• ILLUSTRATION OF PLUNGER PIN USAGE.....	10
• KUBOTA BX TRACTORS ONLY (LIFT ARM STABILIZER PLATE KIT).....	10
• INSTALLATION FOR KUBOTA BX LIFT ARM STABILIZER REPLACEMENT PLATE KIT.....	11
• ANATOMY OF PTO LINK® SYSTEM.....	12
• USING THE PTO LINK® SYSTEM WITH PULL-BEHIND (DRAWBAR) IMPLEMENTS.....	13
• REPLACING THE PTO LINK® LOCKING PIN, MORE INFO ON PLUNGER PIN USAGE.....	14
• INSTRUCTIONS ON MEASURING THE PTO DRIVELINE AND WHETHER TO SHORTEN AN IMPLEMENT DRIVELINE WHEN USING THE PTO LINK® SYSTEM.....	15
• TECHNICAL SUPPORT & CONTACT INFORMATION.....	16

LIMITED WARRANTY, OPERATIONAL SPECIFICATIONS & RETURN POLICY FOR THE PTO LINK® SYSTEM

Thank you for purchasing the PTO Link® system! The PTO Link® system is the original, universal 6-spline PTO quick-connect system. If you have any questions, the product does not seem to work with your equipment, or you are having difficulty installing, please call our Customer Care Line at 833.444.5465 Ext. 3 for technical support before returning our product. As part of our commitment to quality and reliability, PTO Link® provides a limited warranty for your new PTO Link® system.

Our Limited Warranty: The PTO Link® system has been carefully manufactured and tested. We will repair or replace system parts with defects in materials or workmanship. The warranty is one year from the date of purchase and has certain other restrictions below. Our warranty is only valid within or under the following **Operational Specifications:**

- OBSERVE ALL GENERAL PTO SAFETY GUIDELINES (PAGES 6-7), INSTALLATION & OPERATIONAL INSTRUCTIONS (PAGES 8-14) and INSTRUCTIONS ON WHETHER TO SHORTEN AN IMPLEMENT DRIVELINE (Page 15)

• **REAR PTOs ONLY:** This system is designed for six spline (540 RPM) rear PTOs only! Do not attempt to install to any mid or front PTOs. All tractors with rear PTO shafts 3 inches or less in length should use the PTO Link® Compact system.

• Maximum Tractor HP (Engine Net) & Max Torque Output Rating: Compact Model: up to 70 HP with combined max torque output of 800 ft-lbs., limited to Category 1 tractors and implements; SD Model: Up to 100 HP with combined max torque output 1000 ft-lbs.; HD Model: Up to 130 HP with combined max torque output of 1300 ft-lbs.;

• **NEVER USE IN COMBINATION WITH PTO ADAPTERS!** By its design, the PTO Link® system is NOT an adapter. To be compliant with ASABE standards, it should never be used with PTO adapters. Any such use will void the warranty.

• **Proper Matching of Implement with Tractor:** The HP rating for implements installed with the PTO Link® system should NEVER EXCEED your tractor's PTO HP rating. Any implements that exceed this rating should NOT have the PTO Link® system installed, and any such use will void the warranty. For more information on properly matching your implement to your tractor, please refer to your local tractor dealer or your tractor's operation manual.

• **Length Added To Driveline and Driveline Angularity:** Once installed, the PTO Link® system will lengthen the driveline by approximately 5 inches. Therefore, shorten (cut) the driveline as necessary to be certain it is short enough to compensate for the added length of the system and for short turning or steep inclines. Prior to installing the PTO Link® system, see the Instructions On Whether To Shorten An Implement Driveline (on page 15) for further clarification. While using the PTO Link® system, keeping straight drivelines with moderate turn angles are always encouraged. Excess angularity run-out or length to the driveline caused by: a) short turning (greater than 60°) or b) steep incline/decline pitches (greater than 15°) can damage the PTO Link® system, possibly damage your driveline or other equipment, injure the operator and void the warranty. See page 13 for operational guidelines and limitations on angles when using PTO Link® with pull-behind drawbar implements and the added horizontal distance between the PTO Link® and the drawbar hitch pin.

- Observe all General PTO Safety Guidelines (found on pages 6 & 7) when using the PTO Link® system.
- Use of Separate Safety Plunger Pin: The stand-alone zinc-plated safety plunger pin (SLIC® Pin-- $\frac{1}{2}$ " diameter, 1.5" length) acts as an alignment pin for the two mating couplers of the PTO Link® system and further secures the couplers (much like a deadbolt lock) to withstand most high torque scenarios, or instances, wherein reverse torque on the PTO shaft, could be experienced (e.g., while using flex-wing mowers, heavy-duty shredders, tillers, augers, stump grinders, PTO auto-brakes or reverse safety switches etc.). Since these high torque or reverse torque scenarios on the PTO are often unforeseen, it is therefore required to always install the safety plunger pin while using the PTO Link® system.
- Replacement Stainless Steel Spring Loaded Locking Pin: Replacing the Locking Pin on the PTO Link® tractor coupler should rarely be needed. However, when replacing the stainless steel locking pin, always apply a small amount of Loctite® Threadlocker Red 271™ on the threads of the PTO Link® tractor coupler, then wrench tighten the locking pin onto the receiving threads of the PTO Link® tractor coupler to ensure the pin housing is secure.

Warranty Procedures: Should the PTO Link® system (during normal use) prove defective or even appear to be, please discontinue use immediately and contact us at 833-444-5465, Ext. 3 for Customer Care to report the problem or defect and initiate any warranty claim. PTO Link, its affiliated companies, or its agents are not responsible for any damage or claims beyond the selling price of the product. Please provide the PTO Link® system order number and date of purchase. In addition, please provide the tractor make and model number and the implement make and model number in which the failure occurred. Take pictures of the failure, including pictures of the tractor and implement, and explain the problem. Email us at customercare@tractorptolink.com, and we will send you replacement instructions, or call 833.444.5465, ext. 3, for our Customer Care line. All returns are subject to PTO Link's right to inspect and review the customer's facts and circumstances to determine if a defect in materials or workmanship exists before any replacement or refund is issued.

It is the customer's responsibility to ship the product to the PTO Link address below for this inspection.

Refund / Return Policy: Any refunds or returns for products unrelated to warranty matters must have the products returned unused and are subject to a restocking fee of up to 15% of the purchase price. Except for warranty claims, no refunds will be given or returns accepted after 30 days from the date of purchase or date of shipment, whichever is the latest. For more information regarding returns, refunds, and other terms, see www.tractorptolink.com/terms.

The PTO Link location serving the United States for returns and / or inspections is:

PTO Link
Department: Returns
3832 Greenbriar Dr.
Stafford, TX 77477

General PTO Safety Guidelines When Using the PTO Link system.

Safety Shield -- The PTO master shield covers the area on top and on the sides of the PTO splined shaft. The master shield, or a portion of it, may be configured to temporarily hinge out of position to allow easier connection of the implement driveline to the PTO splined shaft. Once the PTO Link® system is installed and fully coupled, both couplers should be clearly inside and under the area of the PTO master shield.

Shield All Rotating Parts - All implement shafts should come equipped with a plastic shaft guard and a bell guard, and should turn freely while encasing the entire shaft, yoke and u-joint. Any exposed portion of this shaft presents a potential safety hazard for the user while the PTO is in motion. Do NOT touch or attempt to attach or detach any components of the PTO Link® system until the **tractor engine is completely OFF**.

Free-Wheeling & Non Free-Wheeling PTOs. Most tractor models have a free-wheeling PTO, which allows for manual rotational movement of the PTO when the tractor engine is off. This feature is very beneficial to PTO Link users when attempting to attach and couple an implement's PTO driveline to the PTO. However, a handful of tractor models are oddly designed with "non-freewheeling" PTO drives which are immovable and stationary even when the engine is off. However, there are cases where if a tractor is equipped with a mid-PTO, there could be a setting on the PTO switch that's interfering with the free-wheeling motion of the rear PTO. Adjust the mid-PTO to off or neutral (if so equipped) and that may free up the rear PTO. Another tip for the non-freewheeling PTO is to make sure the implement is resting slightly above the ground so that the blades or tines of the implement are not contacting the ground and thereby interfering with the implement shaft's ability to make the **normal $\frac{1}{4}$ -inch rotation needed to couple the PTO Link® system with relative ease**. See our Video page at tractorptolink.com/videos for more tips and best practices for making the PTO Link® system a success.

Implements with Dual (two section) Drivelines. In rare situations, some pull-behind implements may come with two sections of a driveline with a CV joint located at a midway point on the shaft between the primary PTO connection and the first gearbox. To maintain the proper geometry and angles of these drivelines while using the PTO Link® system, we generally recommend extending the drawbar (see next page) to ensure these shorter sections of the driveline are not put in a bind.

Drawbar Extension For Pull-Behind Implements Since PTO Link® adds approximately 5 inches to the driveline, it is preferred to extend the drawbar hitch pin connection point the same 5 inches while using the system with pull-behind implements. However, if the drawbar cannot be extended, be sure to measure (and if necessary, shorten) the implement driveline as instructed on page 15 to ensure the 5 inches added by the PTO Link® system does not create a “bottoming out” effect during turns, lifts or inclines—all of which could damage the shaft, the PTO and/or the components of the PTO Link® system. For proper distance between the installed location of PTO Link's male spline tip end and the drawbar's hitch pin hole, see illustrations on page 13 (bottom right).

Avoiding Shock Load. After completing the installation of PTO Link® and when the tractor engine is first started and running, be sure to initially engage the PTO (at low RPMs) and gradually build up to 540 RPM to avoid a “shock load” effect on the PTO driveline upon PTO start-up. This approach will avoid damage to your PTO Link® system and other PTO components (whether the tractor's PTO shaft, the implement's driveline, yoke, u-joints or the gearbox). If a shear pin is properly installed at or near the implement's gearbox, the shear pin should typically absorb most instances of shock load torque; however, implements without a shear pin at the gearbox could force a shock load torque effect and damage the PTO components including the PTO Link® system.

implements Outfitted with Slip-Clutches. Slip clutches are designed for over-torque protection and are common on larger implement drivelines or gearboxes and should provide the proper slippage when shock load or over-torque occurs. However, all slip clutches should be properly and routinely maintained at periodic intervals of use per the implement's operating manual. Slip clutches that are not properly maintained will likely rust, corrode or seize up during operation and not provide proper slippage during the over-torque events, causing severe damage to the PTO Link® system or other PTO components.

WARNING: Any damage to the PTO Link® system caused by a sudden RPM shock load or a failure to maintain any slip clutches on the implements will NOT be covered by the PTO Link warranty. In these shock load or unprotected over-torque scenarios, which will likely cause damage, PTO Link® may incidentally and unintentionally serve as the shear pin and/or slip clutch. However, PTO Link® is not designed to function nor substitute as the shear pin and/or slip clutch and is not engineered to sustain shock load from these events, and therefore any damage incurred due to shock load will not be covered under warranty.

INSTALLATION INSTRUCTIONS FOR THE PTO LINK® SYSTEM

1. PRIOR TO INSTALLATION, PLEASE READ ALL OPERATIONAL SPECS ON PAGES 4 AND 5.
2. DRIVELINE MEASUREMENT: Because the PTO Link® system adds approximately 5 inches in length to the driveline, you must measure and possibly shorten (cut) the implement shaft as necessary to provide proper distance from the PTO. Prior to installing the PTO Link® system, **see page 15 for Instructions On Whether To Shorten An Implement Driveline**. See variables* below for possible exceptions in measuring the actual distance in your situation. **For more help in determining whether your implement shaft needs adjustment, see videos: tractorptolink.com/install**
3. *VARIABLES TO CONSIDER IN DETERMINING THE PROPER DISTANCE AND THE LENGTH OF YOUR IMPLEMENT SHAFT WHILE USING THE PTO LINK SYSTEM®:
 - The height of your tractor's PTO spline from the ground
 - Implement Type (pull behind vs. 3-point hitch)
 - The use or absence of a Quick Hitch System (e.g., Pat's Quick Hitch, iMatch, etc.)
 - Length and angle of the implement shaft.
 - Distance of the tip end of the PTO to the hitch pin placement on the drawbar (for pull-behind implements).
 - The angle and range of distance of upward / downward travel of hydraulic lifts.
 - The topography type of the land (flat, hilly, ditches, creek beds, inclines, etc.)
3. PRE-INSTALLATION PREP: (A) Both for safety and ease of installation, **turn the tractor's engine completely off**, which should enable most tractors' PTOs to turn or free-wheel by hand; (B) Clean any dirt, debris, or rust off the tractor's PTO shaft and from inside the female receiver of the implement shaft, using a wire brush, penetrating oil and/or lubricant to ease connectivity; (C) Make sure the PTO housing area is clear of any obstruction to accommodate the full diameter of the PTO Link® system (of 5 inches) both before and after a normal hydraulic lift. (A minimum vertical rotational diameter would be 4" for the Compact model and 5" for the SD and HD models).
4. COUPLER INSTALLATION: With the PTO Link® tractor coupler's flange area facing you, slide its female spline onto the tractor's PTO until it stops. Then, retract the coupler's quick-release collar on the neck of the female spline and continue to slide the coupler forward a short distance until the internal ball bearings lock into the ball bearing notch on the PTO. You should feel and hear a

“click” as the coupler locks onto the PTO. Next, give the installed tractor coupler a firm tug to ensure it’s locked into place and doesn’t move. **Once properly installed, the top of the tractor coupler collar (C-Clip area) should not rest against or make any contact with any part of the PTO housing.** Any such contact may damage your tractor’s PTO oil seal, PTO housing and/or compromise the PTO Link® system’s connectivity to the PTO. See the illustration below to ensure the tractor coupler’s collar is properly installed onto your tractor’s PTO. Repeat the installation process for the implement coupler into the implement shaft receiver. On completion, give a firm tug, ensuring the ball bearing notches on the spline of the implement coupler are properly locked into the implement shaft female receiver.



5. **DIRECTIONS FOR MATING COUPLERS:** Next, mate the implement and tractor couplers together, aligning the studs of the implement coupler into the openings of the tractor coupler. Then, slightly rotate the implement coupler counter-clockwise (or the tractor coupler clockwise) approximately $\frac{1}{2}$ ” turn until the two connected couplers are fully mated, and the stainless steel spring-loaded locking pin has fully engaged. For more installation best practices, go to: www.tractortolink.com/install
6. **INSTALL THE SAFETY PLUNGER PIN:** When both couplers are fully mated, note the aligned $\frac{1}{2}$ ” round opening through both couplers positioned 180° across from the stainless steel spring-loaded locking pin. Next, place the tip of the plunger pin into the $\frac{1}{2}$ ” opening on the tractor coupler side. **With the head of the pin always facing the tractor** (see illustration on page 10), insert the pin through the aligned $\frac{1}{2}$ ” openings on both couplers. The wedge of the plunger pin will release its internal spring, align and secure both couplers together. See page 14 for more information on plunger pin usage.



1



2

Push the pin through toward the implement side. 

When the PTO Link® system is not in use, affix the safety plunger pin through the $\frac{1}{2}$ " opening on the tractor coupler for convenient storage. To reorder plunger pins, see info on page 14.

PTO Link® Lift Arm Stabilizer Replacement Plate Kit

For Kubota BX Tractors Only



For a video tutorial on replacing the BX plate, please visit www.tractorptolink.com/install or scan the QR code here.



Installation Instructions for the PTO Link® Lift Arm Stabilizer Replacement Plate Kit (**FOR KUBOTA BX TRACTORS ONLY**)

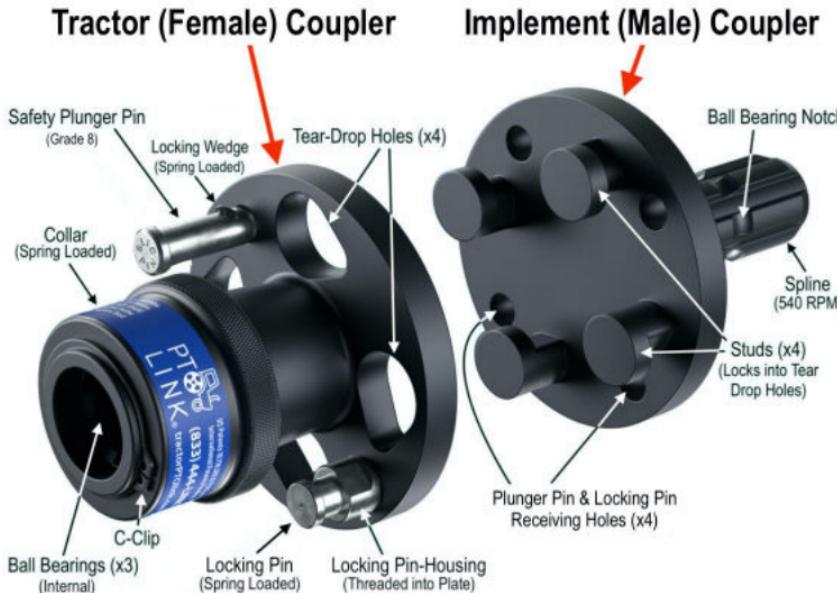
This REPLACEMENT plate kit retains all of the functionality of the original Kubota part but shortens its overall length to avoid making any direct contact with the PTO Link® system when the lift arm hydraulics are in full-lift position. **To avoid damage to your PTO shaft, driveline, and the PTO Link® system, all customers with the Kubota BX tractor must install this replacement plate prior to using the PTO Link® system to maintain the PTO Link® warranty.** To change out your original BX Stabilizer Plate with the new PTO Link® Stabilizer Plate, you will need two basic tools—needle nose pliers and an adjustable wrench.

Easy steps: (NOTE: retain all hardware, except the two used cotter pins)

- Loosen both tension arms (turnbuckles) with a wrench to create adequate plate slack to freely move the plate (but DO NOT disconnect the turnbuckles from the plate)
- Remove the Hitch Pin from the “keeper pin” (located at the top center of the plate)
- Press down on the center “keeper pin” with a finger. Now that the hitch pin has been removed, it will fall out through the bottom.
- Allow the loosened plate to swing downward, so the back can “unhook” from the bar which holds the plate and lift arms.
- Lay the stabilizer plate (still attached to the turnbuckles) on the ground with cotter pins and bent area facing up (the labeled side of the plate will be facing toward the ground)
- Bend the ends of the cotter pin with pliers and remove them from each side (you may discard these used cotter pins)
- Remove the original stabilizer plate (noticing how it is positioned)
- Lay the New Compact stabilizer plate in the same position as the original plate (with labels facing down)
- Reattach the new plate using the two new cotter pins and the original turnbuckle hardware
- Swing the plate back up and hook it on the bar from which the original plate was removed. Note: the swing arms may need to be pushed to either side to make room for the plate.
- Reattach the center “keeper pin” from the bottom (holds the plate onto the bar)
- Reattach the Hitch pin into the center pin
- Tighten the turnbuckle for proper tension for the lift arms as the final step.

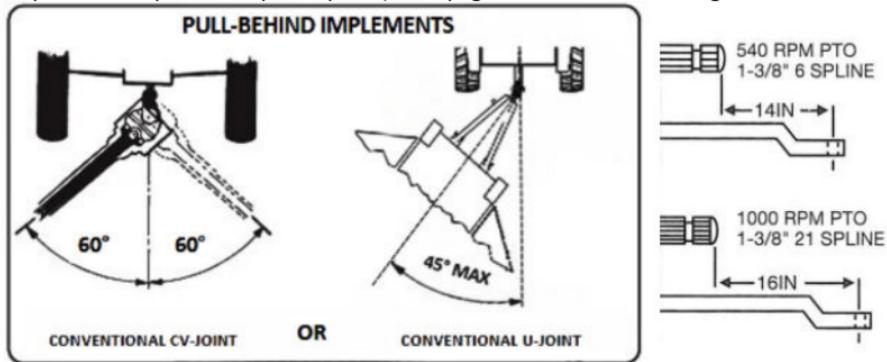


Anatomy of the PTO Link® HD System



Using the PTO Link® System With Pull-Behind Implements

PTO Link® (HD System only) is designed to work with most pull-behind implements attached to the drawbar. The user should generally avoid all PTO shaft angles greater than 60° on implements with Constant Velocity (CV) joints and 45° on implements with conventional U-Joints (see illustrations below). If the tractor operator needs to make a higher degree angle turn, turn off the PTO while making those excess angles to minimize the stress on the PTO Link® components. To test the maximum PTO shaft angle turn on any implement while the tractor engine is off, attempt to attach the implement shaft to the PTO while the implement is at the tested angle. If the PTO connection can be easily achieved with the PTO Link® installed at that given tested angle without straining the PTO components, joints, yoke and shaft, you may proceed to operate the PTO Link® system at that tested angle. However, always observe and comply with the implement's operator manual for BOTH 1. the maximum turning angle while connected to the PTO (see example illustration below bottom left) and 2. the horizontal distance from the tractor's drawbar hitch pin hole to the tip end of the PTO. (See examples bottom right, which depicts the recommended distance from the drawbar hitch pin to the installed location of PTO Link's implement coupler male spline tip end). See page 7 for info on extending the drawbar.



Instructions for Replacing the PTO Link® Locking Pin

Replacement Locking Pins can be found at www.tractorptolink.com/shop

- Remove currently installed Locking Pin housing from the tractor coupler with vise-grips or 5/8" open-end wrench. Heat may need to be applied to the Locking Pin's housing and coupler threads for removal.
- Apply Loctite® Threadlocker Red 271™ to the threads of the tractor coupler and the Locking Pin to keep it from backing out. Wrench replacement Locking Pin into the tractor coupler and torque it down.
- Wipe away excess Loctite® Threadlocker Red 271™ from the top and bottom of the Locking Pin.



PTO Link® Locking
Pin



PTO Link® Safety Plunger
Pin (SLIC Pin®)



To maintain the warranty and safe operation of the PTO Link® system, it is required to **ALWAYS** use the Safety Plunger Pin (SLIC Pin®) or Safety Bolt. Therefore, we recommend you always have a spare Safety Plunger Pin (SLIC Pin®) or Safety Bolt on hand that is compatible with your PTO Link® system's model. **Note:** The Safety Bolt has replaced the Safety Plunger Pin for the Compact System, and serves the same purpose and function, except the Safety Bolt may be inserted from either the tractor or implement side. To order, go to the Shop page at www.tractorptolink.com/shop

Instructions On Whether To Shorten An Implement Driveline

Most PTO Link® system customers do NOT need to shorten their driveline to accommodate the 5 inches added by the PTO Link® system. However, everyone should verify whether this is necessary by first evaluating and comparing the following measurements (a) and (b):

- a) Before installing the PTO Link® system and when the implement is fully connected to your tractor AND is sitting on level ground, measure the maximum distance the driveline slides in during a hydraulic lift, then ADD 1 inch to that measurement;
- b) Install each PTO Link® coupler to the tractor and implement, but do NOT mate the couplers. Then, measure the distance between the two installed PTO Link® couplers (make sure they are facing square to each other) when the driveline is fully collapsed (bottomed out).

For each implement shaft on which the PTO Link® system will be installed, take the above measurements and compare the following:

1. **If (a) is less than or equal to (b), then no adjustment is necessary.**
2. **If (a) is greater than (b), then the difference [(a minus (b))] is the recommended amount to shorten the driveline.**

Of course, a possible alternative to shortening the driveline is to install a quick-hitch system to your 3-point hitch (e.g., Pat's Easy Change, iMatch, etc.), which adds length to the distance between your tractor and implement and tends to offset most of the PTO driveline length added by the PTO Link® system.

For a video tutorial on measuring your driveline, please visit www.tractorptolink.com/install or scan the QR code here.



PLEASE DO NOT RETURN THIS PRODUCT TO THE RETAILER!!!

Our professional staff is here to help make your experience with the PTO Link® system a great one. If you have any questions, concerns, missing parts, installation difficulties, compatibility concerns, or warranty matters, please contact us directly at 1-833-444-5465, ext 3, or visit our website at www.tractorptolink.com.

For the latest warranty information, please visit
www.tractorptolink.com/warranty or scan the QR code >
Answers to many frequently asked questions are found
at: www.tractorptolink.com/faq



US PATENTS 10,718,383 & 11,313,417
INTERNATIONAL PATENTS PENDING