



## PTO BOOKLET



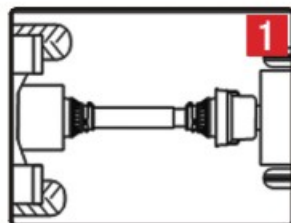
# PTO BOOKLET



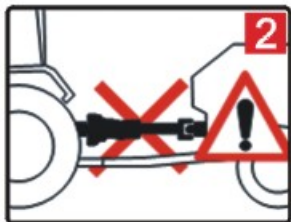


Do not operate the machine without the driveshaft, tractor, and implement shields in place. Driveshaft shields must turn freely on the driveline.

Keep operators and bystanders away from all moving parts.  
**CONTACT WITH A ROTATING DRIVESHAFT CAN CAUSE SERIOUS INJURY OR DEATH.**



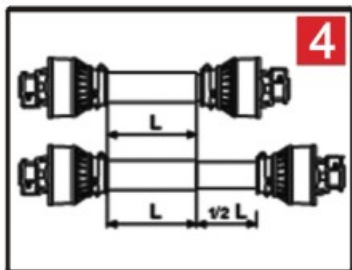
All rotating parts must be shielded



The driveline must be securely attached at both ends.  
Guards must turn freely on the driveline

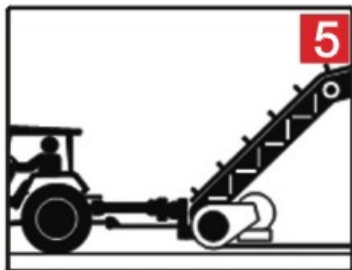


Shut off tractor engine and remove the key before approaching the implement or doing any maintenance

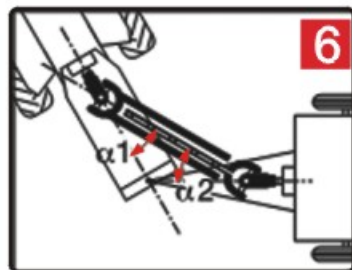


Confirm the minimum and maximum working lengths of the driveshaft.

The telescoping tubes must overlap by at least 1/3 of their length while in use.



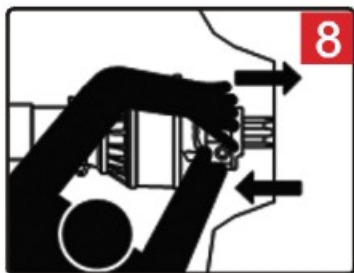
The tractor must be hitched to the implement and positioned so that the angles of the joints are minimal and equal.



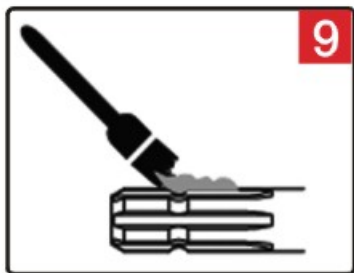
Disengage the PTO if the angles are too large or not identical.



**BEFORE ATTEMPTING ANY REPAIR PROCEDURES, ALWAYS USE APPROPRIATE SUCH AS SAFETY GLASSES, SAFETY SHOES, AND GLOVES. DO NOT WEAR LOOSE OR BAGGY CLOTHING AROUND THE PTO SHAFT.**



Ensure that the driveline is securely attached to the tractor and the implement before operating.

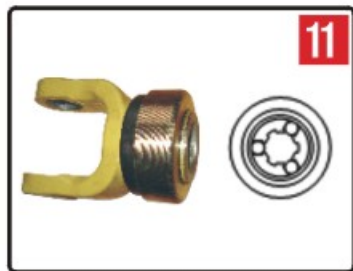


Clean and grease the tractor PTO and implement shaft before installing the driveline.



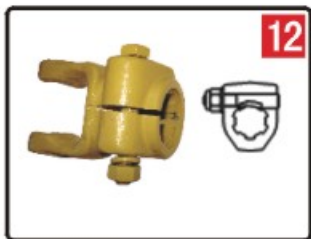
**PUSH PIN**

Push the pin and slide the yoke onto the PTO shaft so that the pin engages the groove on the PTO. Make sure that the pin returns to its initial position after attachment to the shaft.



**BALL COLLAR**

Slide the collar to the open position. Slide the yoke onto the splined shaft. Release the collar and adjust until the yoke is properly attached to the shaft.



**CLAMP BOLT**

Slide the yoke onto the PTO and insert the bolt.



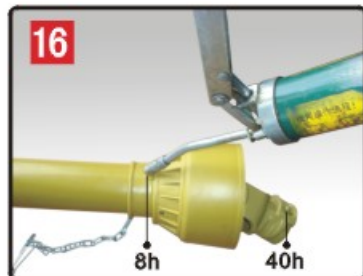
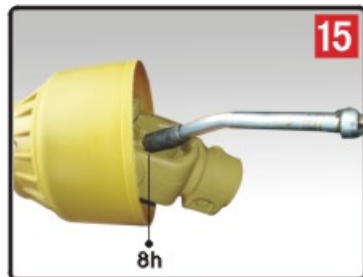
**CLAMP BOLT**

Slide the yoke onto the PTO and insert the bolt.



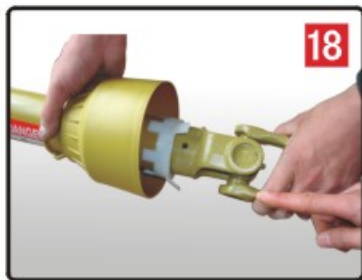
**PLAIN BORE AND KEYWAY**

Choose the bolt length in such a way as to minimize protrusion.



**LUBRICATION:**

Frequent lubrication is required,  
Grease the driveline shaft parts  
After the number of hours used  
As shown on the drawing above



### ***DISMANTLE***

1. Dismantle the inside tube from the outside one.
2. Take a screwdriver to depress the buckle from one to another then to take outside tube apart from plastic cap.

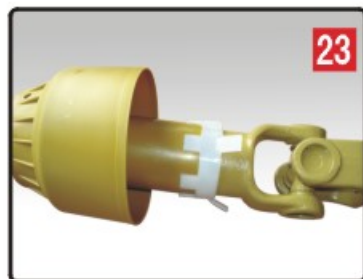


3. Remove the nylon bearing from the slot of the yoke.
4. Repeat the above-mentioned steps for the other side.



### **INSTALLATION**

1. Grease the slot on the yoke.
2. Put the nylon bearing into the slot of the yoke.



3. Put the inside tube with the yoke into its plastic cover.
4. Align the bearing with the two holes on the plastic cap and then press it.



### **SHORTENING THE DRIVESHAFT**

(We don't recommend modification to our products.)



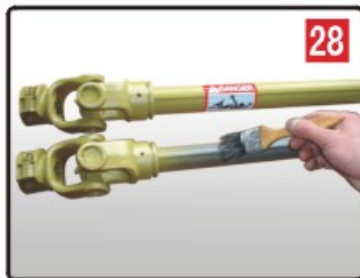
1. Remove shielding.
2. Shorten the inside and outside drive tubes to the required length. Shorten the drive tubes one at a time by cutting the same length from both inside and outside tubes.



3. Deburr edges of the drive tube with a file and clean all filings from the tubes.



4. Shorten the plastic shield tubes one at a time by cutting the same length that was cut from the inside drive tubes.



5. Grease the internal drive tube and reassemble the shielding on the driveshaft.



Check the length of the driveshaft in the minimum and maximum positions of the machine. The drive tubes should overlap by 1/3 of their length during working conditions; Shield tubes should never separate while in use.



#### **RA-OVERRUNNING CLUTCH**

This device prevents transmission of inertial loads from implement to the tractor during deceleration or stopping of the PTO.

Keep clear of the implement until all parts have stopped moving. Lubricate every 50 hours of use and after storage.



#### **SA-RATCHET TYPE TORQUE LIMITER**

This device interrupts the transmission of power when the torque exceeds the setting.

Immediately disengage the PTO when ratcheting sounds are heard.

Lubricate every 50 hours of use and after storage.

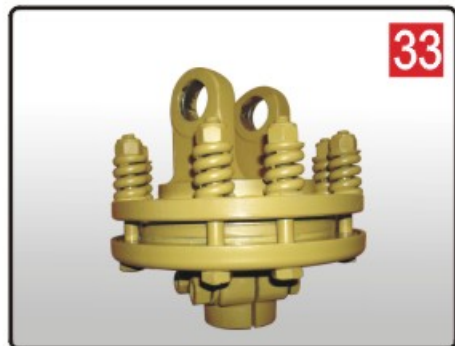


### ***SB-SHEAR BOLT TORQUE LIMITER***

This device interrupts the transmission of power by shearing a bolt when the torque exceeds the setting.

Replace the sheared bolt with the same diameter, length and grade as the original.

Lubricate the SB with grease fitting at least once every season and after a period of disuse.



### ***FF-FRICTION TORQUE LIMITER***

Limits torque transmission to the setting value. Do not change spring compression as this will modify the device setting.

The torque setting is adjusted by increasing or decreasing the height of the springs. To increase/decrease the torque setting tighten/loosen the eight nuts by 1/4 of a turn and check for correct operation. Repeat the procedure if necessary. Avoid excessive tightening of the bolts- implement, tractor, or driveline damage may occur.