

PTO BOOKLET

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***WARNING
READ BEFORE USING***



VERSION II

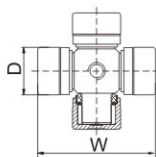


Safety label for
plastic guard tube

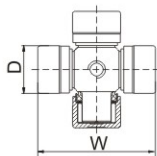


Safety label for
outer profile,
telescoping tube

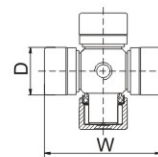
Make sure that the PTO shaft intended to be used will appropriately fit with the power and the torque requirements of the tractor and implement. (See chart)



SERIES	D(mm)	W(mm)	540 min ⁻¹			1000 min ⁻¹		
			Cv	Kw	Nm	Cv	Kw	Nm
1S	22	54	16	12	210	25	18	172
2S	23.8	61.3	21	15	270	31	23	220
3S	27	70	30	22	390	47	35	330
4S	27	74.6	35	26	460	55	40	380
5S	30.2	80	47	35	620	74	54	520
6S	30.2	92	64	47	830	100	74	710
7S	30.2	106.5	75	55	970	118	87	830
8S	35	106.5	95	70	1240	150	110	1050
9S	41	108	120	88	1560	190	140	1340



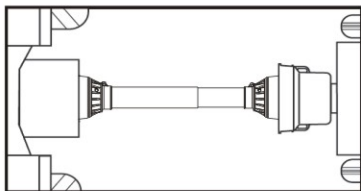
SERIES	D(mm)	W(mm)	540 min ⁻¹			1000 min ⁻¹		
			Cv	Kw	Nm	Cv	Kw	Nm
1S	22	54	16	12	210	24	18	175
2S	23.8	61.3	27	20	355	42	31	295
3S	27	70	33	24	400	50	37	320
4S	27	74.6	38	28	500	60	44	415
5S	30.2	80	47	35	620	70	51	500
32S	32	76	53	39	695	83	61	580
6S	30.2	92	55	40	850	83	61	690



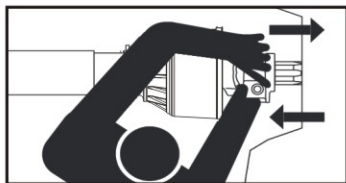
SERIES	D(mm)	W(mm)	540 min ⁻¹			1000 min ⁻¹		
			Cv	Kw	Nm	Cv	Kw	Nm
6S	30.2	92	55	40	850	83	61	690
7S	30.2	106.5	75	55	1000	106	78	810
8S	35	106.5	90	66	1250	136	100	1020
7NS	35	94	70	51	970	118	87	830
36S	36	89	90	66	1175	140	102	975
42S	42	104	107	79	1400	166	122	1165



1. When using the implement and the driveline, do not exceed the speed or power limits specified in the operator's manual. Do not overload the implement or suddenly engage the PTO clutch. Any torque limiter or clutch must be installed on the implement end of the driveline. Use the implement only with the original driveline, which is fit for the purpose in terms of length, dimensions, devices and shields.



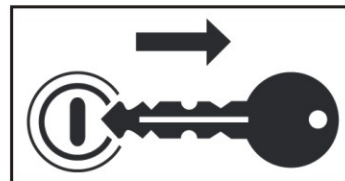
2. All rotating parts must be shielded . The tractor master shield, the driveline guard, and the implement shield all work together for your safety. Do not operate without all driveline, tractor and implement shields in place. Damaged or missing parts must be repaired with original spare parts or replaced before using the driveline. The driveline must be securely attached at both ends. Guards must turn freely on the driveline.



3. Ensure that the driveline is securely attached to the tractor and the implement before operating. Check that all fixing screws are tight.



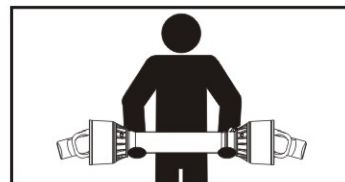
4. Keep clear of the working area and rotating parts. Do not wear loose clothing, jewelry , or hair that could become entangled with the driveline. Contact with rotating parts can cause serious injury or death.



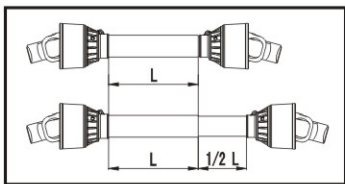
5. Disengage the PTO, switch off the tractor engine and remove key before approaching the implement or performing maintenance work.



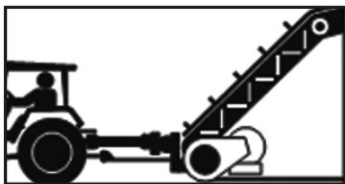
6. When operate at night or in poor visibility illuminate the driveline operating area.



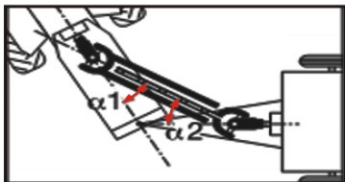
7. Keep the driveline horizontal during handling to prevent the halves from sliding apart, which could cause injury or damage the shielding. Use suitable means to transport heavy drivelines.



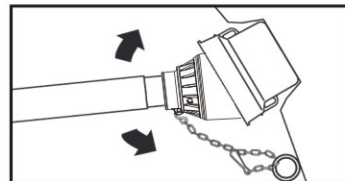
- 8.** Telescoping tubes must always overlap by at least 1/2 of their length in normal operation and at least 1/3 of their length in all working conditions.
During maneuvers, when the driveline is not rotating, the telescoping tubes must have a suitable overlap to maintain the tubes aligned and allow them to slide freely.



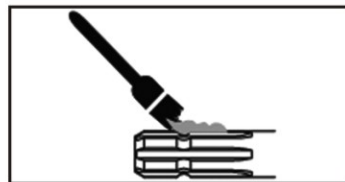
- 9.** The tractor must be hitched to the implement and positioned so that the angles of the joints are minimal and equal.



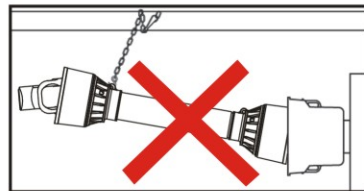
- 10.** Disengage the PTO if the angles are too large or not identical.



- 11.** Attached the driveline guard restraints(chains). Best results are achieved when chains are attached nearly perpendicular to the driveline guard. Adjust the length of the chains to allow enough slack for full movement of the driveline during turns, operation, and transport. Avoid excessive slack, which could cause the chains to roll around the driveline.



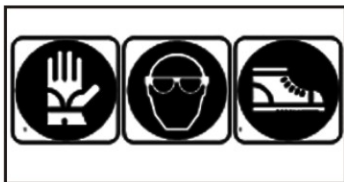
- 12.** Clean and grease the tractor PTO and implement shaft before installing the driveline.



- 13.** Never use the safety chains to support the driveline for storage. Always use the support on the implement.



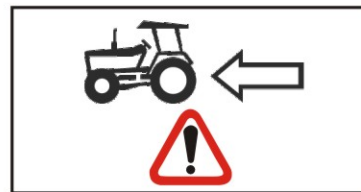
14. Do not stand on the driveline. Do not step over, or go under the driveline.



15. 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.



16. Friction clutch may become hot during use. Do not touch! Keep the area around the friction clutch clear of any material which could catch fire and avoid prolonged slipping.

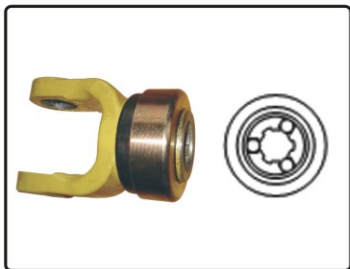


17. The tractor printed on the shield indicates the tractor end of the driveline. Any safety device should be installed on the implement side.



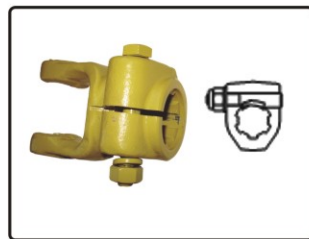
PUSH PIN

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.



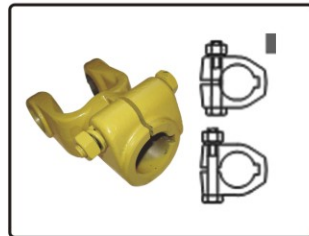
BALL COLLAR

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.



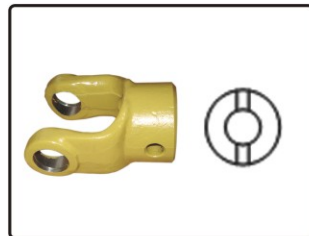
CLAMP BOLT

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 SHEAR PIN

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



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.

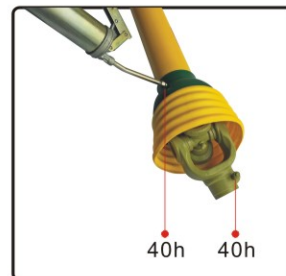
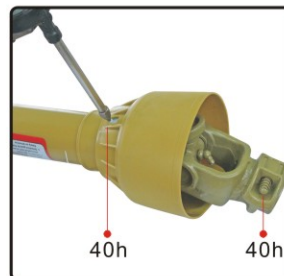
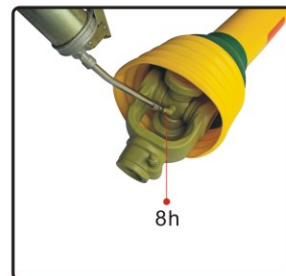
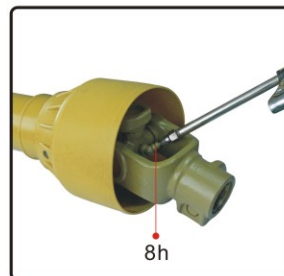
Lubricate the SB with grease fitting at least once every season and after a period of disuse.



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.



Two kinds of plastic safety guard are with the same assembly.

LUBRICATION:

Frequent lubrication is required. Grease the driveline shaft parts at hourly intervals as indicate on the drawing above.



Two kinds of plastic safety guard are with the same assembly.

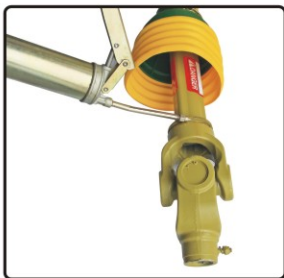
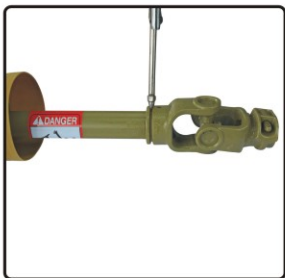
DISASSEMBLY

1. Take a screwdriver to unsnatch the buckle from one to another then to take outside tube apart from plastic cone.



Two kinds of plastic safety guard are with the same assembly.

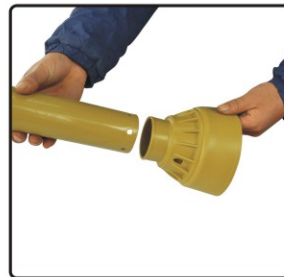
2. Remove the bearing from the groove of the yoke.
3. Repeat the above-mentioned steps for the other side.



Two kinds of plastic safety guard are with the same assembly.

ASSEMBLY

1. Assemble the cones with the shields.
2. Grease the groove on the yoke.



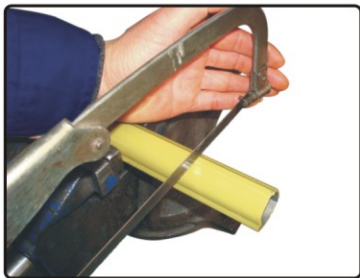
Two kinds of plastic safety guard are with the same assembly.

3. slide bearing into groove.
4. Align the bearing on the plastic cover.



SHORTENING THE DRIVESHAFT

Do not recommend any alterations to our products. Altering the equipment may cause unsafe conditions and may void the manufacturer's warranty



1. Remove shielding.
2. Shorten the inside and outside drive tubes to the required length. Shorten the drive tubes once 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 remove all filings from the tubes.



4. Shorten the plastic shield tubes once 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 when in use.



DISASSEMBLY OF WIDE ANGLE JOINT

1. Remove the inner and outer shield tube.



2.Remove the plastic cone from the yoke.



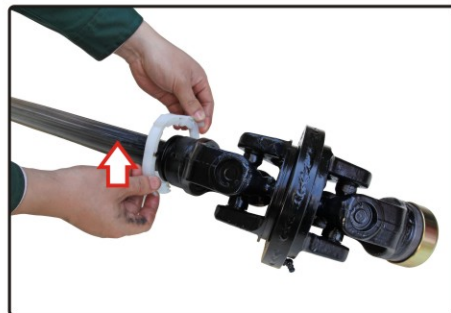
3.Remove the bearing ring from the groove.



4.Remove the screws arranged radially around the circumference of the CV cone.



5. Take a screwdriver to unsnatch the buckle from one to another then to take outside tube apart from plastic cone.

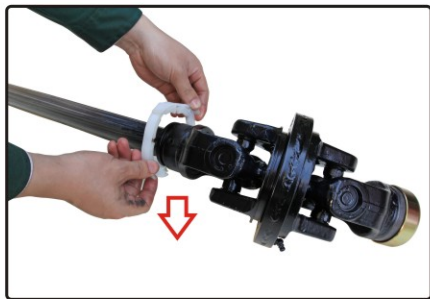


6. Remove the bearing rings from their groove.

ASSEMBLY OF WIDE ANGLE JOINT



1. Fit the bearing ring into the groove of tractor side.



2. Install the bearing ring into the groove.



3. Install the bearing ring on the CV boby with the reference pins facing the inner yoke.



4. Fit the CV cone.



5. Install the screws arranged radially around the circumference of the CV cone.

