



GRANIT
QUALITY PARTS

Operating Instructions for **PTO Shafts**



These operating instructions must be read thoroughly before use and followed. These Operating Instructions must be retained for future reference.

Translation of the original operating instructions

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1 General description



Translation of the original operating instructions for PTO shafts
Type: Blueline Index Group 377
Manufacturer: Wilhelm Fricke SE – DE-27404 Heeslingen
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2 Safety information

- It is essential to read the operating instructions before operating this product.
- Use only replacement spare parts for repairs.
- Use only for power transmission between a tractor and implement (intended use).
- This PTO shaft must be used only in accordance with the Instructions specified for machines and their performance.
- Do not exceed the maximum operating speed.
- Operate the PTO shaft only if its safety devices and retaining chains are intact.
- Modifications to this product, other than those described in these operating instructions, are strictly prohibited.
- In the course of operation, the PTO shaft parts may become hot.
- Do not stand in the vicinity of the rotating PTO shaft.
- The PTO shaft must be transported in a horizontal position.
- Closely-fitting clothing, safety shoes and gloves must be worn when operating this product.
- The engine must be turned off and secured against re-starting before working on this product or engaging the clutch.
- Do not lengthen or alter the cross-sections of profiles.



3 Connecting and operating the PTO shaft

The tractor/PTO shaft drive must be turned off and secured against re-starting before the drive shaft is coupled/uncoupled.

- Lubricate before assembling.
- Overload and overrunning clutches must always be installed at the implement end.
- Check the length of the PTO shaft in all working positions before commencing operation. The drive shaft must not be compressed or operated with insufficient profile overlap.
- Mount the retaining chains, ensuring that there is clearance for them to swing.
- Push in slider pins (A) while moving the drive and PTO shafts until the slider pin engages.

The slider pin must engage fully.

Do not touch the PTO shaft until it has come to a complete stop and has been secured against re-starting.

The retaining chain on the PTO shaft is an anti-twist device and must not be used as a support.

Maximum operational angle for standard joints:

< 25°	continuous operation
< 45°	short time operation
> 45°	only when stationary



A



<25°

Wide-angle CV joints 80°

To ensure uniform transmission of rotary motion in any angular position. Maximum articulation of the wide-angle CV joint:

- <25° continuous operation
- <80° at short duration
- >80° at standstill

Angles above 80° will damage the CV-joint!

4 Care and maintenance

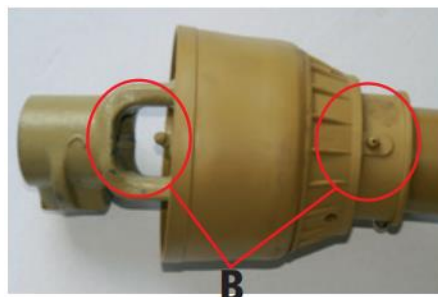
Prior to each engagement of the clutch and at the latest after 8 operating hours, the grease nipples (B) on the universal joints and protective sheath (B) should be lubricated using environmentally compatible multi-function grease.

Clean the PTO shaft before pushing the drive shaft on and lubricate using environmentally compatible multirange grease.

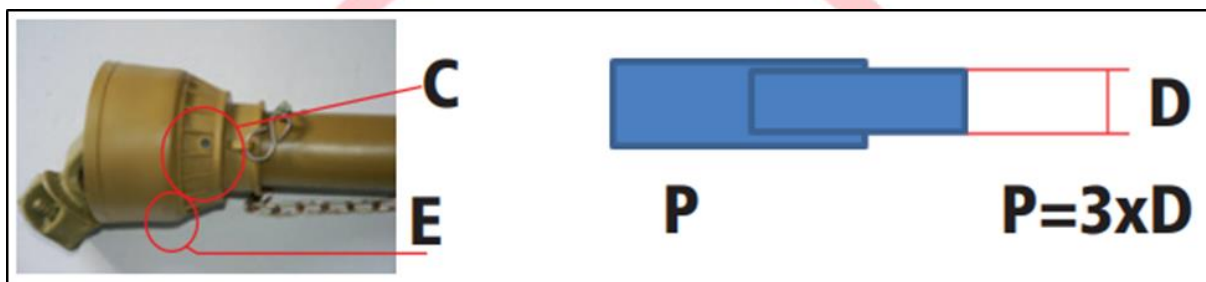
Damaged information plates and/or shaft protectors and guards must be replaced promptly before further wear can occur using original replacement parts.

Never direct a water jet at the bearing points.

Remove any soiling and stubborn residue using a brush or a broom. Rinse off any particularly stubborn soiling using a water jet. Do not use aggressive cleaning agents. All repairs to PTO shafts must be carried out by a specialist repair shop.



5 Length adjustment



PTO shafts may be shortened only by a trained expert!
The fewest possible changes should be made to the product, and the original length must be maintained.

Every effort should be made to retain the same joint angle.

1. Pull apart the two halves of the PTO shaft and place them beside each other in the closest working position between the tractor and the implement.
2. The PTO shaft must not be pulled apart by more than half of the profile overlap P in closed position. The length of the minimum overlap must be no less than $3 \times$ the diameter of the inner profile tube.
3. Use a screwdriver to open the three locks (C) and remove the protective covers (E).
4. Shorten both profile tubes by the same amount.
5. Shorten the guards by the same amount.
6. Deburr all cut faces.
7. Lubricate the profile barrels before joining them.
8. Install protective tubes and push the PTO shaft together.
9. Carry out a final check of connection points and the operating angle and make sure that there is adequate overlap.

Inadequate overlap can result in serious accidents or damage to property.

6 EC declaration of conformity

The manufacturer,

Wilhelm Fricke SE
Zum Kreuzkamp 7
DE-27404 Heeslingen

hereby declares on its sole responsibility that the PTO shafts:

Type/series identification:

377101021912, 37746021912, 37756021912, 377071021912, 377086021912, 3771010B112, 3771210B112, 3770560B112, 3770860B112, 377121022912, 37751022934, 37753022934, 377086022912, 3771010B234, 3771210B234, 3770510B234900, 3770560B234, 3770710B234, 3770860B234, 377101024956, 3771210248956W, 3771210248956WW, 3770121024956, 377056024956, 3770860248956W, 3770860248956WW, 377086024956, 377086024956R, 3771210258978W, 3771210258978WW, 3770860258978W, 3770860258978WW, 377101023934, 3771210238934W, 3771210238934WW, 377121023934, 37756023934, 3770860238934W, 3770860238934WW, 377086023934, 3771010B465, 3771010B465K1700, 3771210B48065W, 3771210B48065WW, 3771210B465, 3770560B465, 3770710B456K1700, 3770710B465, 3770860B48065W, 3770860B48065WW, 3770860B465, 3771010B578, 3771210B578, 3770560B578, 3770860B578, 3771010B679, 3771010B679K2500, 3771010B679K2900, 3771210B68079W, 3771210B68079WW, 3771210B679, 3770560B679, 3770860B68079W, 3770860B68079WW, 3770860B679

(Series 1, Series 2, Series 32, Series 36, Series 4, Series 5, Series 6)

are in conformity with the provisions of

2006/42/EC Machinery Directive

The product was developed in accordance with the following standards:

EN ISO 12100:2010
EN 12965:2003+A2:2009

Technical documentation is kept by:

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DE-27404 Heeslingen

The serial number and model year are shown on the type plate of the equipment.

Translation of the original declaration of conformity

7 Addresses

Sales/Customer Service/
Spare parts sales:

Tel.: +49 (4281) 712 712
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Postal and shipping address:

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