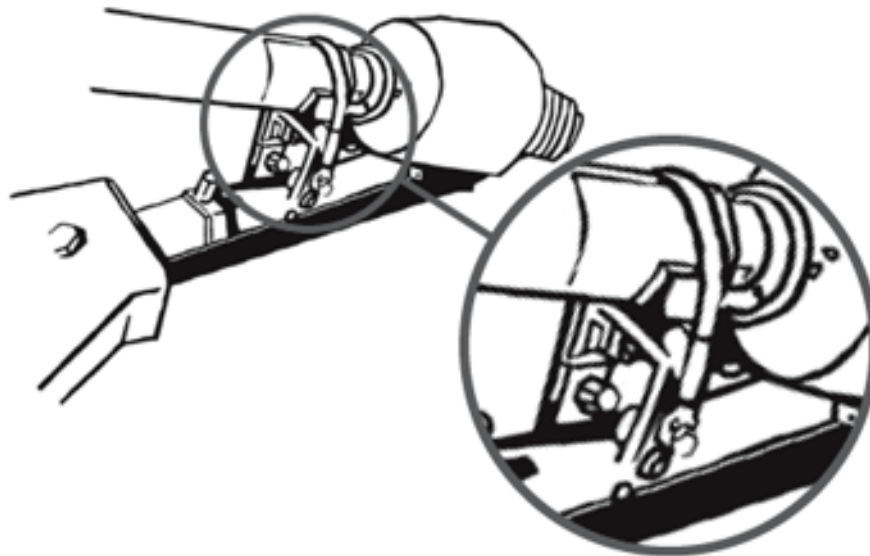


Power Take-Off (PTO) Drive Shaft Storage Support Systems

For OEM Designers and Engineers

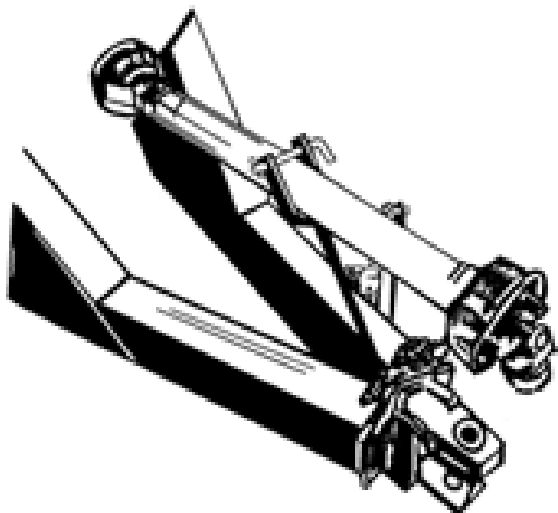


Agriculture is recognized as one of the more hazardous occupations. Today's farmer spends long hours in close proximity to increasingly complex and powerful machinery. In order to avoid accidents, everyone from the component suppliers, to the company who manufactures and assembles the machinery, to the dealers and ultimately the actual user must keep safety in mind.

ADMA is concerned that PTO drive shafts be used in the safest possible manner. This pamphlet provides information about the various types of drive shaft support devices as specified by ASABE Standard S207, (see back page) which are increasingly being designed into the latest models of farm implements. The PTO drive shaft guarding and tractor yoke attachment mechanisms are subject to less damage and functional problems when these storage devices are provided.

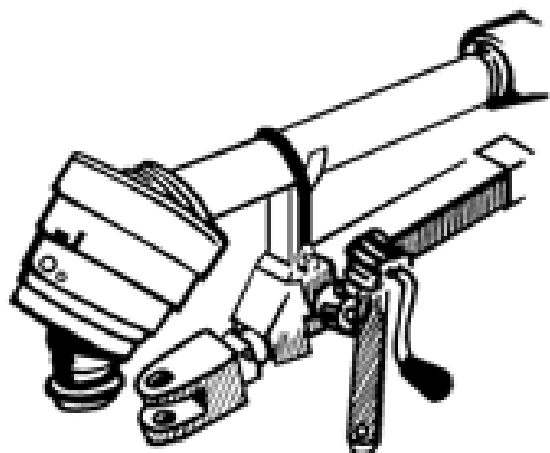
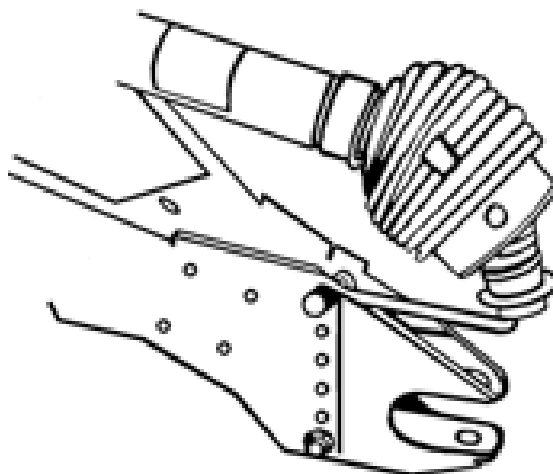
Make sure that the packaging or shipping position for the drive shaft from the factory to the dealer does not damage the driveshaft guarding or deform the guard cones. Consider including the ADMA Agricultural Implement Driveline Safety Manual in the implement Operator's Manual package.

The sketches that follow depict several different design approaches to provide storage devices for implement drive shafts when they are not connected to the tractor. It is recommended that all designs include a means to positively retain the drive shaft in the storage device to prevent it from bouncing out during transportation.



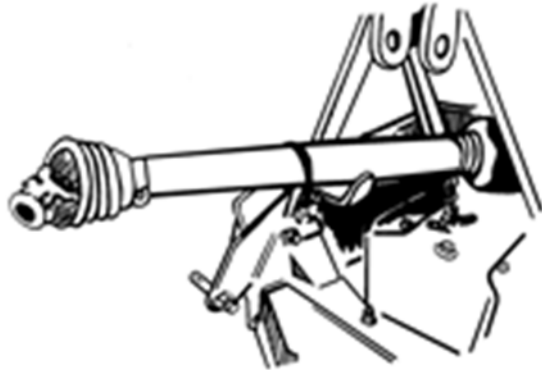
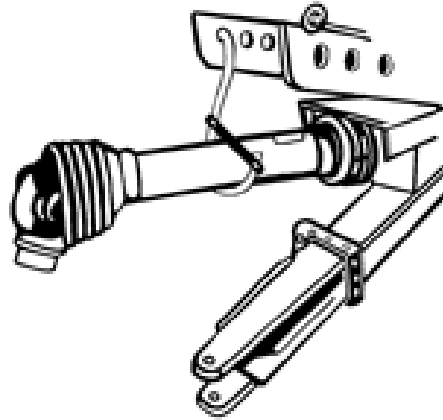
A "U" shaped flat metal strap on a rod that pivots up from inside the "A" frame hitch provides storage support without the risk of damage to the guarding during operation of the drive shaft.

A bent rod with retention device, pivots up from between the "A" frame to support the drive shaft.



A sheet metal support that pivots up off of its storage location on top of the tongue.

A bent metal rod that swings down from a support above the rear mounting point for the drive shaft.



The drive shaft is moved to the "A" frame of 3-point hitch mounted implements where a cradle has been provided.

DRIVE SHAFT DON'TS:



Improperly designed or improperly located drive shaft support devices can result in damage to the guarding. Sharp edges or straps that tightly compress and permanently deform plastic guarding must be avoided. Do not use storage positions that deform or damage the drive shaft guard cones or bearings. Make sure that the drive shaft support device does not damage the safety signs. Chains, that are provided to restrain "non-rotational" types of drive shaft guards, are not to be used as drive shaft support devices.

YOUR “SUPPORT” MAKES A DIFFERENCE IN FARM SAFETY

APPLICABLE STANDARD

ANSI/ASABE AD5673-1 — Agricultural tractors and machinery — Power take-off drive shafts and power-input connection — Part 1: General manufacturing and safety requirements

In Section 5.1: The implement shall be supplied with a support for the primary PTO drive shaft for keeping it in the storage position when uncoupled from the tractor PTO. This support shall not be the restraining system used to prevent the rotation of the primary PTO drive shaft guard. Information for the use of the support shall be given in the instruction handbook.

Further information about PTO drive shaft specifications and safety may be obtained from your ADMA PTO driveshaft supplier.

Go to www.admausa.com to find a list of industry standards relevant to PTO powered equipment.

Standards may be found at www.asabe.org.



Agricultural Driveline Manufacturers Association

Member Companies:

Benzi America, Inc.
Comer Industries
Neapco Components, LLC.
Weasler Engineering, Inc.

Bondioli & Pavesi, Inc.
G&G Manufacturing Co.
Walterscheid, Inc.