



## **4.5 PTO Gear Box FAQ**

### **What is a PTO Gearbox used for?**

A 4.5 gearbox is used to take a 400RPM PTO shaft and create 1800 rpm. Must make sure the engine has enough horsepower to power the equipment you are trying to run.

### **How does it work?**

The 1 3/8 six spline input shaft is connected to a large gear and the output shaft is connected to a Small gear that is attached to a 32 mm smooth keyed shaft. This makes the output shaft turn in the opposite direction of the input shaft.

The Ratio is 1 to 4.5 or for every one turn of input shaft, the output shaft turns 4.5 turns. It also can be used for speed reducer if the smooth keyed shaft is used for the input and the 1 3/8 six spline shaft is used for the output. This make the ratio 4.5 to 1.

### **What is the diameter of the output shaft?**

32 mm smooth keyed shaft output shaft

### **Does the input and output shafts turn in the same direction?**

Output shaft turns in opposite direction from input shaft.

### **Can this be used as a reducer?**

Yes, see above.

**Can this unit be mounted upside down?**

No, it is made to mount right side up because of the vent on top. It can be set at an angle but not upside down.

**Will this work with my tractor?**

The 4.5 Gearbox is rated for equipment requiring 40 hp continuous, 50 hp standby. Tractor can be rated for more than 40 hp (horsepower) or less than 40 hp. For Generators up to 30 kw continuous to 40 kw standby.

**Will this work with my engine?**

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**Does this product include the PTO Drive Shaft?**

This does not include the PTO shaft, the PTO shaft is available at Tractors Supply and on line.

**What is the spline input?**

1 3/8 inch six spline input shaft

**Is this product shipped with oil?**

No this product is shipped without the oil. You must purchase 90-120 weight gear oil from local auto parts store. Any good gear oil will work. You may use up to 140 weight oil.

**What kind of oil do I use?**

90-120 weight gear oil from local auto parts store. May use up to 140 wt. Gear oil

**Are directions shipped with this product?**

Yes directions are included.

**What If I need further help?**

We have friendly sales staff that are awaiting to answer any questions you may have and help you every step of the way! Contact us by calling 678-603-5852 or by sending us a email at [shannonsavagecgg@gmail.com](mailto:shannonsavagecgg@gmail.com) Monday- Friday 9am-5pm EST.

**What other items are needed to have this connected properly.**

Most people want to hook up to their tractor which would require a Generator head and the couplers.

We carry curved jaw couplers in metric sizes

If you need metric on one side and inch sizes on the other

for running water pumps or fans, or other equipment that require inch size,

We can help you get the proper LoveJoy coupler.

