



## ● **50-140, 50-142 GEARBOX ASSEMBLY**

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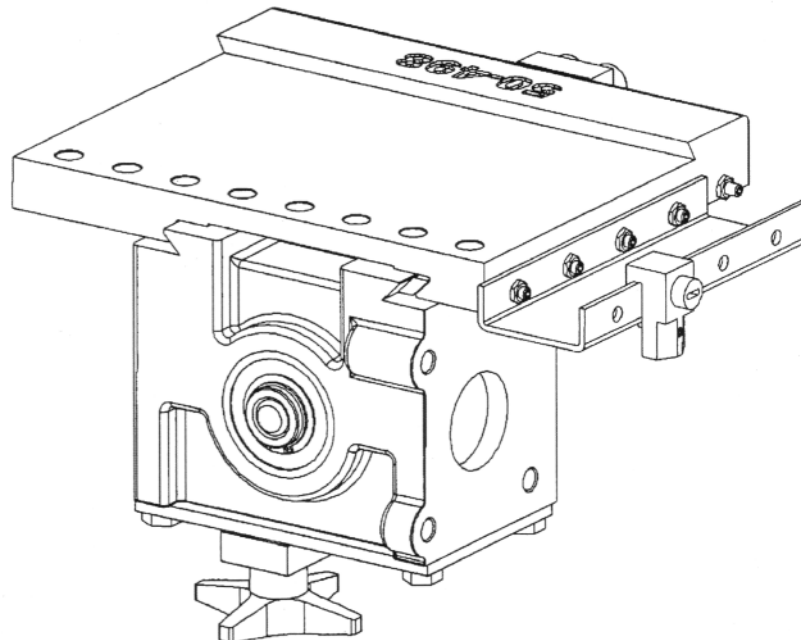
The **50-140** Gearbox Assembly varies from the **50-142** Gearbox only in the width of the shutoff cam rail. The narrower version (50-073) on the 50-140 assembly allows the 50-140 Gearbox to function on the PFM 9.2 Series and VBG 610/620 Series.

### **INTRODUCTION:**

The new 50-140 and 50-142 gearbox assemblies offer the following improvements:

- Greater inboard reach—21mm/0.84" more
- Increase in disc diameter capacity—an increase of 19mm/0.75" to 350mm 13.75" [355mm/14" absolute maximum at zero clearance] on 9.0/900 & 610/620 series lathes.
- Substantially wider slides (28.5mm/1.12")—increased stability and damping, smoother travel
- Improved gib design—better contact area—less frequent gib adjustment required.

**Contact the Pro-Cut Service Department with any questions: 800-543-6618.**



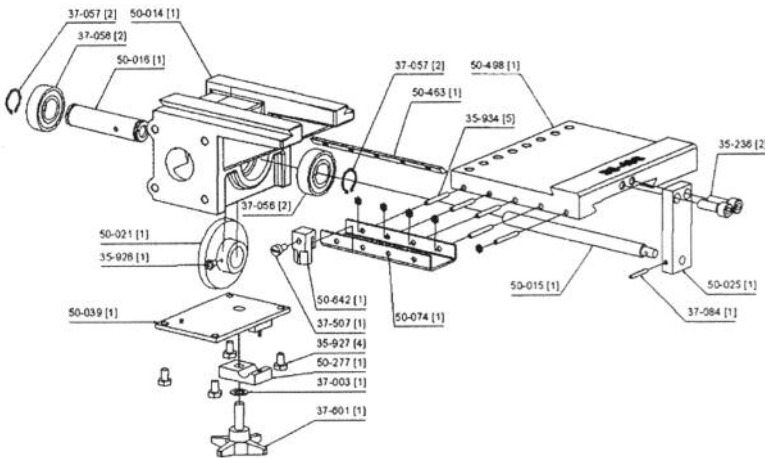
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Perfect Brake Job. Every time.

**MODELS:** • PFM 9.2  
• PFM 9.0  
• PFM900  
• VBG620

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## TECHNICAL NOTES

To achieve the increase in rotor diameter, the plastic gear's position was reversed, moving it away from the rotor. By changing to a left-hand thread for the feed screw and nut, the feed direction was maintained without the need for any other modifications. Feed rate is unchanged.

The gib screws have different style tips than those in the old **50-640** assembly and the gib has redesigned tip screw pockets, resulting in greater area in contact between the gib and the gearbox slides. This increases the service interval as the wear rate is lower. Neither the shutoff cam rail, gib, nor

gib screws from the old assembly are compatible with the new design (although the thread size on the gib screws is unchanged: M4).

Parts compatible with the older **50-640** assemblies include the bearings, gear, snap rings, and feed block (**50-025**). The slide plates (**50-499** from the older design and **50-498** from the new design) are not interchangeable, nor are the gib and gib screws.

This assembly cannot be retrofit to an existing lathe body without also replacing the feed shaft assembly with a new feedshaft (**50-661** or **50-668**—explanation follows below) due to the greater space between the mounting surface and the white plastic gear. Feed shaft replacement is not recommended for end users as the alignment process of the two white plastic gears is critical. If performed, it should be done by properly trained Pro-Cut representatives. Concentric rings in the rotor may result if gears are not properly aligned.

## RETROFIT KITS:

There are two different retrofit kits that will be available from Pro-Cut. These two kits are combinations of feedshaft and gearbox assemblies.

There are two different feedshaft lengths. The **50-661** is the proper length for the PFM 9.0/900, CROS-700, and PFM 9.2 Series lathes. The shorter **50-668** feed shaft assembly fits the VBG 610/620 Series lathes.

The two kits are as follows:

- **50-201** — This kit fits the VBG 610/620 Series lathes. It consists of a **50-668** feed shaft and a **50-140** Gearbox Assembly.
- **50-202** — This kit fits the PFM 9.0/900 and CROS700 Series lathes. It consists of a **50-661** feed shaft and a **50-142** Gearbox Assembly.