

**DIGGA**

# AUGER DRIVE

## SERVICE KIT

FOR PD6-PD12 & PD4HF-PD10HF DRIVES

# INSTRUCTION GUIDE

### IN THIS GUIDE:

- ▶▶ The importance of using the correct gearbox oil
- ▶▶ Service intervals & Digga service centres
- ▶▶ What happens when you don't change the oil in your auger drive
- ▶▶ Step by step guide -  
How to perform a service  
on your auger drive





## DO YOU KNOW THE IMPORTANCE OF THE OIL IN YOUR DIGGA DRIVE?

- THE GEAR OIL IN YOUR DRIVE UNIT IS INDEPENDENT OF YOUR MACHINE'S HYDRAULIC SYSTEM.
- OIL FROM YOUR MACHINE DOES NOT LUBRICATE YOUR DRIVE UNIT.

**YOUR AUGER DRIVE REQUIRES REGULAR OIL CHANGES TO REMAIN IN ITS OPTIMAL WORKING CONDITION.**

DIGGA OIL IS HIGH QUALITY, EXTREME PRESSURE, ISO 320 GRADE MINERAL OIL

### STANDARD OPERATING CONDITIONS

First oil change (Service)	Within 3 months OR initial 50 hours of use
Second oil change & subsequent oil change (Service)	After 500 hours of use or 12 months

### SEVERE OPERATING CONDITIONS (EXTREME HEAT / CONTINUOUS DRILLING IN HARD GROUND)

First oil change (Service)	Within initial 30 hours of use
Second oil change & subsequent oil change	After 300 hours of use & thereafter



## CHANGING OF OIL & REGULAR SERVICING IS CRUCIAL TO THE LONGEVITY OF YOUR AUGER DRIVE

### GEAR IN GOOD CONDITION

This is a gear from a drive which has been serviced as per the operators manual and shows very little wear with no more than bedin wear after 10 years of simulated augering.



### WORN GEAR

The same drive submitted to the same work load as above over 10 years, with the oil changed only once - at 5 years. While the drive unit shows no decrease in performance, the gear shows visible wear which will deteriorate quickly, leading to total failure.



### FAILED GEAR

This drive has never been serviced. The image shows the damage to the gear, which causes total failure of the gearbox.





# YOU WILL NEED...

## TOOLS & CONSUMABLES

### **ENSURE YOU HAVE THE CORRECT TOOLS YOU NEED BEFORE YOU BEGIN**

Torque wrench  
Socket / spanner – 16mm  
Allen key – 8mm  
Chisel  
Dead blow hammer  
Scraper / scourer  
Wire brush  
Screwdriver  
Flat metal plate – At least 1" thickness (minimum size of shaft seal)  
Magnet (optional)

### **CONSUMABLES**

Cleaning rags  
Loctite 243 medium strength thread locker (or equivalent)  
Loctite 567 sealant (or equivalent)  
Heavy duty grease  
Alcohol-based cleaner  
Marker - Light colour

### **PERSONAL PROTECTION (PPE)**

Gloves  
Safety glasses  
Ear plugs

### **SERVICE KIT CONTENTS (PD6-PD12 & PD4HF-PD10HF)**

### **CHECKLIST\***

Instruction Guide  
Gear Oil (2.5L)  
Shaft Seal  
O-rings  
Next Service Sticker



**\*NOTE** Not all O-rings may be required, depending on your auger drive model



# PD6-PD12 / PD4HF-PD10HF

## GUIDE FOR SQUARE SHAFTS



WHEN SERVICING YOUR DIGGA AUGER DRIVE, YOU WILL BE OPENING UP THE DRIVE UNIT TO INSPECT THE GEARS AND BEARINGS FOR SIGNS OF WEAR & TEAR - IF METAL FRAGMENTS ARE FOUND IN THE SHAFT SEAL, OR THE GEARSET, PLEASE PHONE DIGGA SERVICE FOR ADVICE.



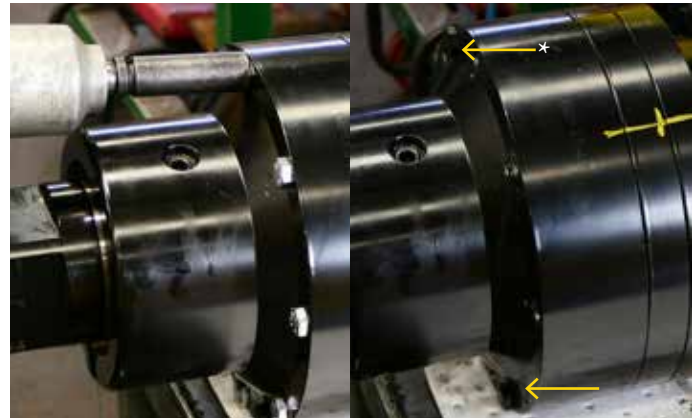
1. Lay the drive unit on the ground with the oil bung fill facing up. Mark a line on the hood & gearbox lining up with the center point of the hoses.



2. Using an 8mm Allen key, remove the bung.



3. Rotate the unit until the oil fill hole is facing the ground and drain the oil. Apply Loctite 567 thread sealant to the oil bung, and reinsert, after the oil has completely drained.



4. Remove the hood bolts with a 16mm socket or spanner and remove the hood. Note: PD6 & PD7 feature 2 extra bolts\* which fasten the hood spacers to the gearset housing - **Do not remove until step 6**. For PD4HF-PD10HF & PD12: These have 2 rows of bolts. Remove all outer bolts to remove the hood. Continue alignment mark onto the motor.



WATCH THE STEP-BY-STEP VIDEO  
[WWW.DIGGA.COM](http://WWW.DIGGA.COM)

OR SCAN  
THE QR CODE:



# DIGGA





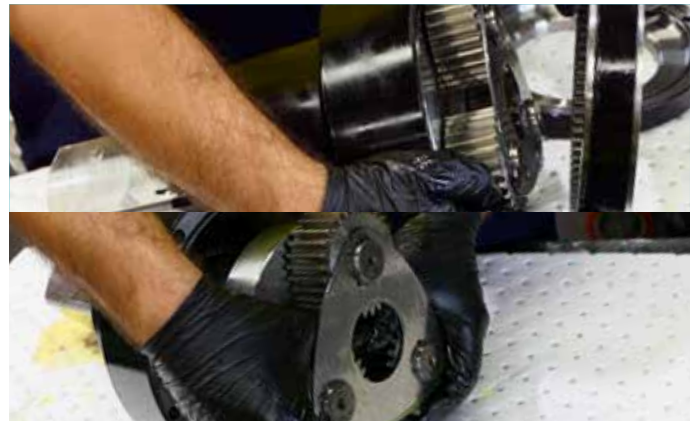
5. Remove the motor bolts and the motor with a 16mm socket or spanner. For PD4HF-PD10HF & PD12, proceed with caution, as afterwards, there will be no bolts holding the housing together.



6. Remove the sun gear. On PD6 & PD7 drive units, unfasten the last 2 bolts from the gearset assembly housing to release input housing and ring gear (Skip step for PD4HF-PD10HF & PD12).



7. Remove the old O-ring from the motor and clean up the surface. Replace with a new O-ring.



8. Remove the ring gear, planet gears, and the gearset spacer. Clean & inspect parts.



9. Unscrew the lock nut using a chisel and hammer until it fully reveals the steel key.



10. Remove the key by either placing the entire assembly up-side down, or by using a magnet. Remove the lock nut.



11. Push the shaft out (it may require a hammer to tap it out). With a clean rag, clean the inside of the input housing.



12. Tap out the shaft seal using a screwdriver and hammer. Remove the bearing (To avoid bearing damage, do not hit the outer roller). Note: For PD4FH-PD10HF & PD12, remove seal protector first.





13. Remove lower bearing.



Ensure the surface is clean and free of any sharp edges. It may damage the new seal when reinstalling.

14. After the shaft seal has been removed, clean and inspect the parts. Return the lower bearing inside the housing.



15. Apply Loctite (243 Thread locker, medium strength) around the outside of the shaft seal.



16. Place the shaft seal in position ensuring it is level & tap it in with a flat metal plate and hammer, so it sets evenly.



17. Apply grease to the inside of shaft seal.  
Note: For PD4HF-PD10HD & PD12, you will then need to reinstall the seal protector.



Before replacing the shaft, ensure the shaft surface is clean and free of any sharp edges. It may damage the new seal when reinstalling.

18. Using a flat metal plate and hammer, tap the shaft back into the housing, until the shaft is fully inserted.



19. Turn the housing over and stand it on the shaft. Reinsert the upper bearing.



20. Screw the lock nut into place with flat side up. Do this whilst turning the housing until the bearing begins to feel firm. This will also line up the shaft key-way.





21. Insert the key and turn nut recess to make sure the shaft recess and lock nut recess no longer line up. This will secure the key (a chisel & hammer can be used).



22. Remove the old O-rings from the input housing and ring gear. Clean both surfaces with a clean rag. Insert the new O-rings into the input housing and ring gear.



23. Re-insert the shaft spacer and ensure the flat side points towards the gearset. Replace the gearset.



24. Replace the ring gear, and for PD6-PD10, the input housing, lining up the previously made marks.



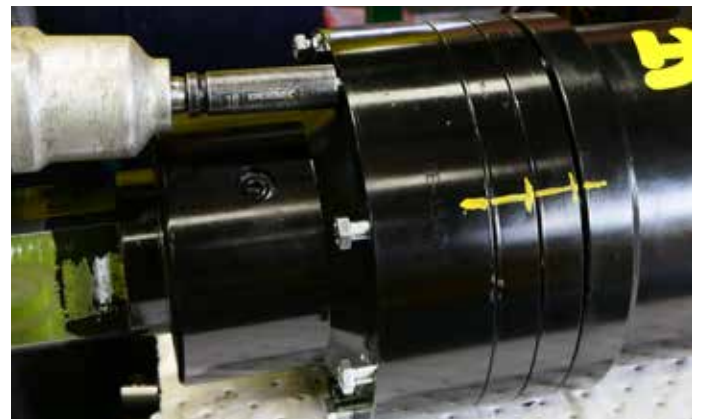
25. (PD6 / PD7 only) Insert the 2 longer bolts into the unevenly spaced holes on the gearbox housing (Use medium strength 243 thread locker). Secure the top-most ring above ring gear.



26. Fill with oil to 5mm below the top of the ring gear\*, and allow time for it to settle to the bottom. For ease of assembly, clamp shaft with a vice or similar.



27. Replace the motor and motor bolts lining up previously marked alignment lines (optional: Loctite 243 Thread locker - medium strength on bolts).



28. Replace the hood by guiding the hoses through the hood hole. Replace the hood bolts and torque to 55Nm - Loctite 243 medium strength thread locker may be used.

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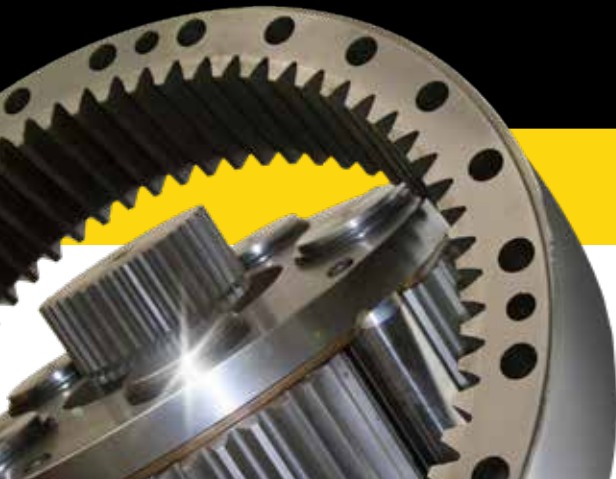
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PH: 1300 2 DIGGA  
34442

## ORDER YOUR NEXT DIGGA SERVICE KIT

SERVICE KIT TYPE	INCLUSIONS	ORDER CODE
PDD-PD5 Kit (Oil Change)	Gear Oil (1L), Oil Change Guide, Next Service Sticker	SER-000056
PD6-PD12 Kit (Oil Change)	Gear Oil (2.5L), Oil Change Guide, Next Service Sticker	SER-000057
PD15-PD50 Kit (Oil Change)	Gear Oil (5L), Oil Change Guide, Next Service Sticker	SER-000061
PDD-PD5 Kit (Service)	Gear Oil (1L), Shaft Seal, O-rings, Service Guide, Next Service Sticker	SER-000082
PD6-PD12 (Service)	Gear Oil (2.5L), Shaft Seal, O-rings, Service Guide, Next Service Sticker	SER-000083
PD15-PD22 (Service)	Gear Oil (5L), Shaft Seal, O-ring, Service Guide, Next Service Sticker	SER-000084
PD25-PD50 (Service)	Gear Oil (5L), Shaft Seal, O-rings, Service Guide, Next Service Sticker	SER-000085



## DIGGA SERVICE

YOU CAN BOOK A SERVICE WITH DIGGA AT ONE OF OUR SERVICE CENTRES LOCATED IN BRISBANE, MELBOURNE & SYDNEY. ALTERNATIVELY, PURCHASE A DIGGA DRIVE SERVICE KIT & FOLLOW OUR STEP BY STEP GUIDE.