DIGGA

AUGER DRIVE

SERVICE KIT

FOR PDD-PD5 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

FOR MORE INFORMATION VISIT WWW.DIGGA.COM

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 or 17mm depending on model
Allen key – 8mm
Chisel
Dead blow hammer
Scraper / scourer
Wire brush
Screwdriver
Flat metal plate – At least 1" thickness (minimum size of shaft seal)

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 (PDD-PD5)

*CHECKLIST**

Instruction Guide
Gear Oil (1L)
Shaft Seal
O-rings
Tab Washer
Next Service Sticker

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

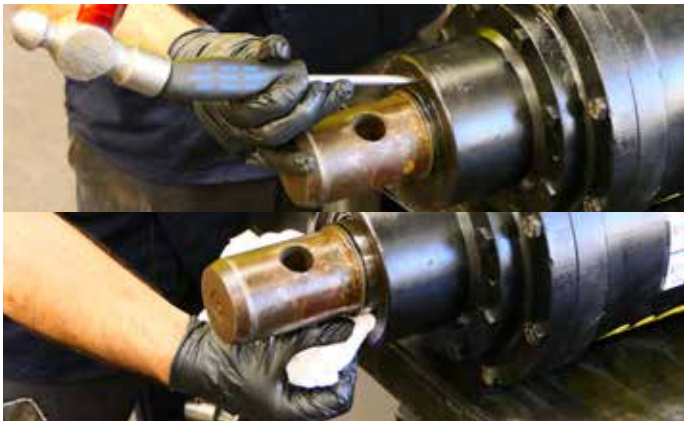
PDD-PD4

GUIDE FOR ROUND SHAFTS

NOTE: DURING THIS PROCEDURE, YOU WILL BE INSPECTING FOR SIGNS OF WEAR & TEAR - IF METAL FRAGMENTS ARE FOUND IN THE SHAFT SEAL, THE GEARSET AND SHAFT WILL REQUIRE REMOVAL, AND FURTHER INSPECTION (FOLLOW INSTRUCTIONS OVERLEAF). IF THIS OCCURS, PLEASE PHONE DIGGA SERVICE FOR ADVICE. IT IS RECOMMENDED THAT YOUR AUGER DRIVE WITH A ROUND SHAFT BE DISASSEMBLED AS PER THE SQUARE SHAFT SERVICE INSTRUCTIONS OVERLEAF, EVERY 2 SECOND SERVICE.

1. Lay the drive unit flat on the ground with the oil bung fill facing up. Using an 8mm Allen key, remove the bung.

2. Rotate the unit until the oil fill hole is facing the ground. Drain the oil.



3. Use a screwdriver to remove the shaft seal. Clean the area where the shaft seal sits. It is recommended to clean the surface area with an alcohol-based cleaner.

4. Apply grease to the inside of the supplied shaft seal. Add Loctite (243 Thread Locker, medium strength) around the outside of the shaft seal.

5. Insert new shaft seal and tap it into place with a hammer and level metal plate, until the seal is level with the housing.

6. Rotate the unit so the oil fill hole is at a 60-degree angle (or 2 o'clock position) to fill. Add Digga oil until it reaches the fill hole. Add thread sealant to the oil bung, and replace when full.

PDD-PD5

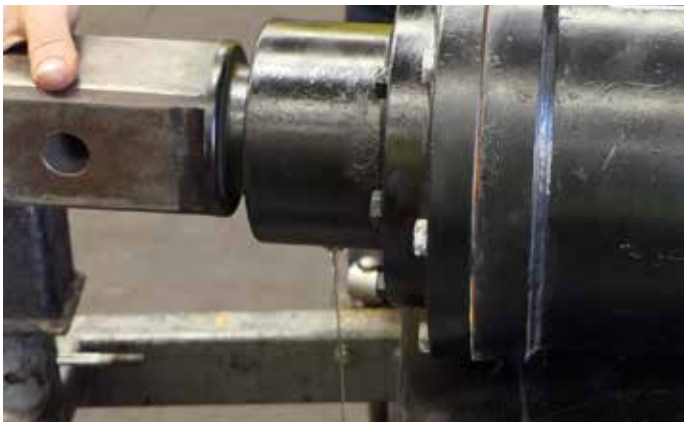
GUIDE FOR SQUARE SHAFTS

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.

THIS GUIDE MAY ALSO BE USED FOR AUGER DRIVES WITH ROUND SHAFTS.

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. Reinsert the bung after oil has completely drained (use thread sealant). If disassembling PDD units, disconnect hoses.

4. Remove the hood bolts with a 16mm socket or spanner. Remove the hood. When disassembling a PDD unit, this action will also free the motor.

WATCH THE STEP-BY-STEP VIDEO
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OR SCAN
THE QR CODE:

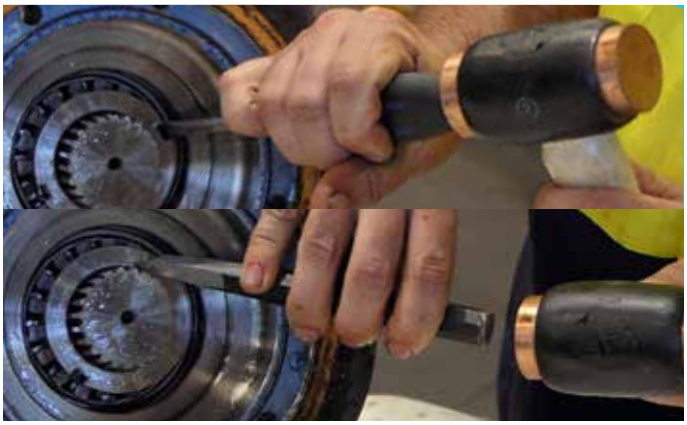
DIGGA

5. Continue the alignment mark to match the previous mark at the center of the motor.

6. Remove the motor bolts and the motor with a 16mm socket or spanner and 17mm on the opposite side. Skip step for PDD.

7. Remove the gearset. Skip this step for PDD.

8. Remove the ring gear. A hammer and chisel may be necessary. Skip this step for PDD.



9. Push the locking tab down & unscrew the lock nut using a chisel and hammer.

10. Push the shaft out and remove the tab washer.

11. Tap out the shaft seal using a screwdriver and hammer. Remove the bearing. Do not hit outer roller as it may cause bearing damage.

12. Remove lower bearing.

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

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

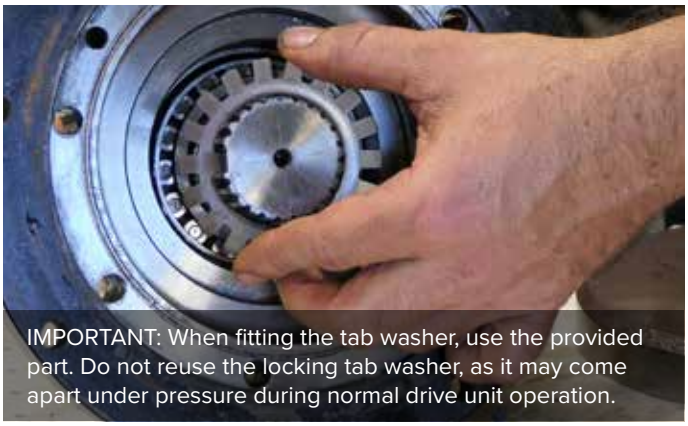
15. Place the shaft seal in position ensuring it is level & tap it in with a flat metal plate and hammer, so it sets evenly.

16. Apply grease to the inside of shaft seal.

17. Remove the old O-rings from the gearbox & motor, scrub with a steel brush & wipe clean. PDD units have a motor O-ring only.

18. Place housing on the shaft and, using a metal plate and hammer, tap housing until the shaft is fully inserted.

19. Reinsert the upper bearing.



20. Place the provided locking tab washer over the shaft, lining up the internal tabs.

21. Screw the nut into place with flat side up to approx 170Nm. With a chisel & hammer, turn nut recess so it lines up with locking tabs.

22. Lock the nut and bend the tab washer tabs into the recess of the nut.

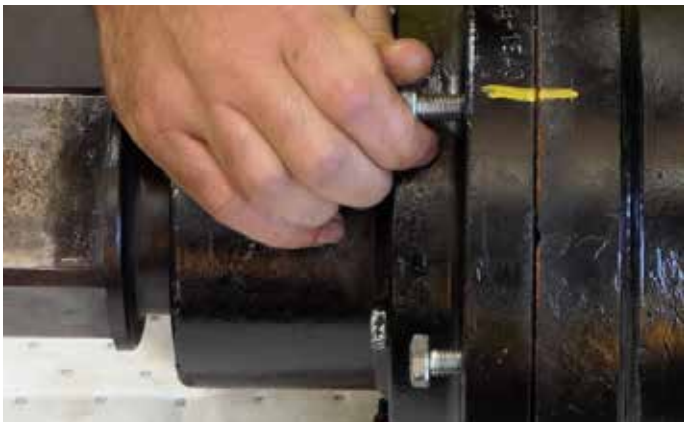
23. Place the new O-rings in gearbox and motor (optional use of blue gasket sealer). PDD units only require the motor O-ring.

24. Replace the gearset. Skip step for PDD.

25. Replace the ring gear by using a bolt to help guide it into place. Skip step for PDD.

26. Fill with oil to 5mm below the top of the ring gear* (PDD: below the lip) 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 (Loctite 243 Thread locker - medium strength on bolts). PDD: Motor bolts not applicable.



28. Guide hoses through the hood to replace the hood and replace hood bolts (torque: 55Nm) lining up previously marked alignment lines. PDD: Replace hood and hood bolts.

SERVICE NOTES:

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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.