RECOMMENDATIONS



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Practical Maintenance Guide for your Fischer GL4 & GL4K Mowers

In addition to the operating manual from the manufacturer, please find following some practical tips for getting your mower started and maintained.

A description of how to change the drive belts is available on request.

Recommended operating speed: 2.5 - 4.5 Km/h Recommended PTO speed: 400 - 480rpm, max. 540rpm @ tractor refs of approx. 1750rpm

ARRIVAL & FIRST USE OF YOUR NEW GL4/GL4K Mower

1. Your new Fischer GL4/GL4K will be delivered on a wooden or metal pallet frame.

Note: In both cases, it can be unloaded with a forklift, or simply hooked onto the #point linkage of the tractor and lifted off the frame. In some cases one needs to cut-off the upright metal frame panels with an angle grinder.

Special care is required to position the forks in-between the cutting bars and the base plate of the slasher!

DO NOT LIFT THE MACHINE WITH FORKLIFT THINES ON THE CUTTING BARS!

For general transport it is recommended to lift it with a lifting-sling using the lifting points as shown in the operating manual.

2. Undo and remove all transport wiring

3. Fitting of the PTO Shaft:

Grease the input axel of the center gear-drive and slide the PTO clutch-end over the shaft - position the clutch, that the safety pin-shaft is horizontal, slightly up and on top pointing to to the access hole in the plastic safety hood. Insert the safety pin from the left by sliding the clutch forth and back to find the spot where the pin falls into place - the pin may need to be turned a little to fall into it's perfect position, effortlessly right. Then install the washer and Nyloc nut while still holding the pin in place - use an extended 19mm socket to fully tighten the nut.

The access hole in the plastic safety cover also provides access to grease the mechanical over-run, grease-nipple located behind the clutch.

As part of general maintenance - we recommend to use THREADLOCKER (LOCTITE 243, or equivalent) on ALL nuts & bolts!

- 4. Check if there is oil in the gearboxes before using the machine by removing the top breather cap and check with a clean object it contains 1.2L, 90W-120 or 85W-140 gearbox oil for topping up, fill to the level screw on the side of the gearbox we recommend to check the oil level regularly!
- 5. Adjust the Sensor Rods to your choice of hight and angle, then set the sensor distance to a safe setting of **180mm to start off** measured from the edge of the swivel arm disc to the sensor rod in line with the centre top grease nipple of the disc bearing.

Before adjusting the sensor rod, undo the bolt, open the gap of the sensor bracket by tapping a screwdriver into the gap to avoid rubbing off the grip – set distance, remove the screwdriver and <u>thoroughly</u> tighten the high tensile bracket bolt.

To use the GL4 in high grass, one needs to set the sensor rods high to let the sensor go past the grass at it's flexible end - if set low, the sensor will be triggered by the grass The sensor bracket can be turned around and inserted from the top to gain more height caution is recommended by allowing more tolerance from disc to sensor-rods at high settings to allow for uneven trunks.

- 6. Top Linkage **use a heavy duty chain** with big enough links to fit over the top pin of the 3 point linkage and 1 big shackle to fit it to the tractor pin as tight as possible! The machine is designed to run on the ground using the rollers to adjust the working height. This will allow free movement for the mower to tilt backward, drive safely into steep vine-rows and to follow uneven terrain.
- 7. Roller adjustment if your machine is equipped with brackets to achieve extra working hight, remove the extension plates (if not required) and attach the back roller to the base bracket use Loctite 243 on the two 24mm bolts-threads holding the back roller.
- 8. The GL4 has (unless specified differently) metal front rollers to change the hight remove outer locknut and pull-out the axle from the grease-point end you may require vice-grip pliers to pull the axle out change the wheel to a different hole-setting and re-tighten the lock-nut using Loctite.

The poly-foam filled rubber wheels on the GL4K have an internal axle which stays in the wheel - remove side-bolts, change hole setting and re-tighten - we recommend to use Loctite 243!

9. Attach the hydraulic connections to the tractor, assuring for the leavers (inside the tractor) and the swivel arm action; right and left and in and out to be synchronised to your liking - you may colour code the hydraulic hoses on the mower and the tractor hydraulic outputs using colored cable ties.

Reduce the hydraulic oil-flow to a minimum to avoid hammer action by setting the reduction valves - make sure to tighten the small Allen Key screw after adjusting!

10. AFTER FIRST 8-HOUR SERVICE MAINTENANCE:

Make absolutely sure that this following operation is carried out with the machine disconnected from the tractor PTO.

Cleaning out the belt cavity, tightening the belts and checking all related bolts and nuts!

- a) Remove the hydraulic ram on the swivel arm by undoing the 30mm bolt or nuts on some models now you can move the swivel arm freely in and out.
- b) Remove the safety cover on the swivel arms.
- c) Clean out the belt cavity using compressed air, water or both.
- d) Loosen all 6 x 19mm nuts connecting the disc to the swivel arm from underneath by fixing the bolt head with a 19mm spanner from above (do not take bolts off).
- e) Tighten the belt tension to 8 10mm slack, measured in the middle of the belt using the adjustment screw located at the end of the swivel arm.

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f) Once the belt is tight, undo and re-tighten all 6 nuts of the bolts one by one, applying Loctite 243 to the inside of the nuts - check the 8 (4+4) nuts/bolts underneath the main unit in the same way also.

We are recommending tightening the belts at the beginning and half way through the season!

The belt cavity should be cleaned weekly, especially if used in dry & dusty conditions.

- g) Re-fit safety covers by finding an even position and tighten the holding down screws using Loctite 243.
- h) Re-fit the hydraulic ram by re-inserting the ram-eye pin **apply grease to the pin and Loctite 243 to the security bolt**.
- 11. Your GL4/GL4K may be equipped with an oil flow regulator which allows you to regulate the speed of the in and out action of the swivel-arms please note that we recommend to reduce the pressure if the GL4 is operated in reduced width circumstances (in = closed / out = open)!
- 12. To change the blades you may need to heat the Blade-Bolt Nuts to remove them always use Loctite 243 after replacing new or used Blade Bolt Nuts!
- 13. PTO, Clutch & Free Run your GL4/GL4K is equipped with a high quality PTO shaft, an inclosed clutch (1200NM) to avoid corrosion and exposure to dust, plus an over-run to eliminate reverse force into the gearbox of your tractor while the mower is running out.

Please ensure, that the Over-Run Mechanism is occasionally getting greased also!

Ensure that there is adequate play in the length of the PTO shaft when first connected to your tractor. The length of the 3 point linkage arms vary between different tractor brands – a gap of approximately 100mm is adequate to avoid the shaft from pushing into the gearbox while traveling over uneven terrain – if necessary, you may need to shorten the shaft using a metal drop saw.

14. Grease Points: There are 15 Grease Points on the GL4 - 6 either side on the GL4 plus 2 on the PTO shaft, and 1 on the over-run behind the clutch:

The GL4K features 6 poly-foam filled rubber wheels with grease-points located on one side of the axel plus 4 x extra grease-points on the 4 hinge axles - and 1 each on the CV Joints between the gearboxes - all others, are the same as on the GL4.

- #1 On the back roller (1 either side / 2+2 if you have tandem rollers), on either side, if your machine has rubber wheels, they are located inside the hex-nut of the wheel axle.
- #2 On each sliding Disc (bearing) underneath the swivel arm disc, on either side.
- #3 On each pulley/shaft bearing on swivel arm disk, on the top of the shaft, on either side.
- #4 On each fine sensor bearing, sensor bracket on either side.
- #5 On each swivel arm (swivel-arm connecting to main mower) below side gear boxes.
- #6 On each front rollers (in inner side of axle) / on either side.
- #7&8 On 4 x NEW greasable hydraulic ram pins.
- 15. Driving Pattern: To achieve an optimal result, all rows need to be driven/mowed in opposite direction we recommend a 1 by 4 driving pattern.
- 16. Turning on Headlands: To avoid damaging the back-roller assembly (dragging), it is required to lift the machine off the ground while turning into the next row.

We recommend to clean and grease the GL4 & GL4K daily!

THOROUGHLY GREASE ALL GREAS POINTS AFTER WASH-DOWN - THE GREASE WILL PUSH OUT EXCESS WATER WHICH MAY HAS FOUND IT'S WAY INTO THE BEARINGS!

DO NOT STORE YOUR GL4/GK4K OUTDOORS - DO NOT STORE IN WET CONDITIONS!