



GO-GDE-PAV-015

MAINTENANCE GUIDE AND SCHEDULE

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Graco LineLazer V ES 2000 25U686

Maintenance reference for the battery LineLazer V ES 2000 HP Auto, 230 V, two automatic guns. It covers the daily checks, the service schedule, the jobs your own workshop can do, and the jobs that come to GO Industrial as a Graco authorised service agent. Every interval and part number is read from Graco manuals 3A9033, 310643 and 311254.

2 x 50 Ah

lithium batteries, 12 VDC
pack

379 kPa

rear tyre pressure (55
psi)

3 785 L

sprayer stall check
interval

What you are actually maintaining

This machine is two halves with very different service lives. The fluid section is a displacement pump, throat and piston packings, two filters, two auto guns, tips and hose. It is the same hardware a petrol LineLazer carries and it does nearly all of the wearing. The power section is two lithium batteries, an inverter and charger, and an electric motor, and it barely wears at all.

Why the list is short

There is no engine on this machine, so no engine oil, no air filter, no spark plug, no fuel and no exhaust. There is no hydraulic circuit either, so no hydraulic oil, no oil filter, no hydraulic rod to keep clear and no drive belt to check or replace. What is left is the fluid section, and it needs the same daily discipline as any airless striper: TSL in the packing nut, clean filters, and Pump Armour at the end of the shift.

• WHO DOES WHAT

Daily checks, filters, tips, TSL, flushing, wheel greasing, caster adjustment and charging are workshop jobs your own crew can do with hand tools. Pump repacking, pressure transducer and control board faults, inverter and charger faults, battery pack replacement, auto gun solenoid and trigger sensor work, and anything under warranty come to GO Industrial as a Graco authorised service agent.



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Every shift, before you spray

- Fill the throat packing nut with TSL through the fill point. This is the cheapest maintenance on the machine and the one most often skipped. Dry packings are what turns a good pump into a rebuild.
- Inspect and clean both filters: the manifold filter (25A465, 50 mesh) and the fluid inlet strainer (187147).
- Inspect the motor shield vents for blockage. A blocked vent cooks the motor.
- Check the hose for wear and damage, check the gun safety works, and check the prime and drain valve works.
- Check caster wheel alignment, then verify calibration. Set the rear tyres to 379 plus or minus 34 kPa (55 plus or minus 5 psi) first: calibration is measured off the tyre, so a soft tyre puts every measured line out.
- Check the pack state of charge in the battery app before you start, not when the machine slows down.

Pressure relief, every time

- Switch the machine OFF, turn the pressure control to its lowest setting, then trigger every gun.
- Engage all gun trigger locks and turn the prime valve down.
- If you suspect a clogged tip or hose, loosen the tip guard retaining nut or the hose coupling VERY slowly to bleed pressure, then loosen it fully and clear the blockage.

● DO NOT WASH IT DOWN

Graco is explicit on this one: do not expose the sprayer to rain or wash-down, because water gets into the electrical components. Store and transport it covered or indoors. The pressure-wash clean-down a petrol striper shrugs off will cost you an inverter on this machine. Wipe it down instead, and keep the flush confined to the fluid path.





Charging

- Charge in a dry, well ventilated spot away from paint, solvent and anything else that burns. Park it with the wheels on a properly earthed surface, not on pavement.
- Power switch OFF, then plug the charging cord into the port on the machine and into a properly earthed outlet. Do not modify the plug to make it fit.
- 230 V units draw 230 VAC, 50/60 Hz, 7 or 9 A, single phase. Extension leads must be 3-wire, 2.5 mm² (12 AWG) minimum, with an undamaged earth pin.
- The voltmeter turns on and climbs while charging. The pack charges to 14.6 to 14.8 V, then settles back to about 13.6 V when it is full. Unplug it then.
- New batteries ship at about 50% capacity. Charge before first use.
- Charge between 0 and 45°C (32 to 113°F). The machine runs from -10 to 60°C (14 to 140°F) but will not charge outside that narrower window.

The 9.7 volt trap

- Below 9.7 V the on-board charger will not charge the pack at all. You need an external charger to lift it above 10.0 V before the on-board charger takes over. Left flat long enough, the battery gets replaced instead.
- The low battery alarm is 11.0 V and the trip is 10.5 V. Minimum start voltage is 10.0 V. Do not run it to the trip and then leave it standing over a weekend.
- Charge at the end of every shift rather than when the machine starts feeling slow. Depth of discharge is what sets how many cycles the pack gives you.

Battery reference

ITEM	SETTING
Battery type switch	Position 2, Power Sonic Lithium.
Charge temperature	0 to 45°C (32 to 113°F).
Operating range	-10 to 60°C (14 to 140°F).
Storage	Indoors, dry and covered. Never out in the rain.
Disposal	Not general waste. Use a licensed battery recycler.





Maintenance schedule

INTERVAL	TASK	WHO
Every shift	Fill the throat packing nut with TSL.	Workshop
Every shift	Clean the manifold filter and strainer.	Workshop
Every shift	Check motor shield vents, hose, gun safety, drain valve.	Workshop
Every shift	Check caster alignment. Verify calibration off correct tyre pressure.	Workshop
Every shift	Charge to full. Unplug when done.	Workshop
End of shift	Flush, then fill the pump with Pump Armour.	Workshop
Monthly	Grease the caster wheel bearing.	Workshop
Yearly	Caster nut: tighten until the spring washer bottoms, back off 1/2 to 3/4 turn.	Workshop
Yearly	Service inspection: pump, packings, guns, hose, calibration, battery.	GO
Every 3 785 L	Stall check. Pump must stall and stay stopped with the gun released.	Workshop
As needed	Tighten the packing nut.	Workshop
After ~380 L	Repack the pump. Kit 248212.	GO
On fault	Transducer, control board, inverter, battery pack, gun solenoid.	GO

• WHERE THESE INTERVALS COME FROM

The every-shift, monthly, yearly caster, 3 785 L stall check and packing-adjustment lines are Graco's own, published in the maintenance table of manual 3A9033. The end-of-shift Pump Armour line and the yearly service inspection are GO Industrial's recommendation. Flushing is in Graco's cleanup procedure but is not given an interval, and on Australian pavement work it is the single thing that decides whether a pump lasts.





Jobs your own workshop can do

TSL, every shift

Squeeze TSL into the top centre of the throat packing nut until it is full. Cheapest job on the machine, most often skipped.

Flush and store

Relieve pressure, pull the guard and tip, remove the filter and refit the cap without it, flush, then fill the pump with Pump Armour.

Tyres and calibration

Rear tyres 379 plus or minus 34 kPa (55 plus or minus 5 psi). Calibration is measured off the tyre, so soft tyres put every line out.

Filters

Manifold filter 25A465 (50 mesh) and inlet strainer 187147. Run a 100 mesh manifold filter with LL5213 and LL5215 tips.

Packing nut

When it weeps, remove the spacer o-ring and tighten the nut until the leak stops. That buys about 380 L before a repack.

Caster wheel

Grease the bearing monthly. Yearly, tighten the nut under the dust cover until the spring washer bottoms, then back off 1/2 to 3/4 turn.

Quick checks before you call anyone

SYMPTOM	FIRST THING TO CHECK
Pump output low	Worn or clogged tip, then filters, then strainer.
Spitting from the gun	Air in pump or hose. Tighten every fluid joint.
Hard to prime	Air in the line, or a leaking intake valve.
Paint in the wet cup	Packing nut loose. Tighten just enough to stop it.
Pump keeps stroking	Prime valve leaking, or the pump needs service.
Will not charge	Pack under 9.7 V. Needs an external charger first.
Status light blinking	Control board fault code. Book it in.

• WHAT NOT TO TOUCH

The pressure transducer, control board, inverter and charger are not workshop items, and neither is a pump repack: the packing nut torques to 11.3 plus or minus 1.1 N·m (100 plus or minus 10 in·lb) and the intake valve to 90.8 plus or minus 6.8 N·m (67 plus or minus 5 ft·lb), and getting either wrong writes off a new kit. Auto gun trigger sensors and the distance sensor both need recalibration after any work.





Work that comes to GO Industrial

- Pump repacking. Repair kit 248212 for the 277069 displacement pump. Both torque figures are tight and a pump assembled loose leaks straight back out.
- Transducer replacement and low stall pressure that survives a full clockwise knob.
- Control board faults. A blinking or dark status light with power to the machine is a coded fault, not a loose plug.
- Inverter and charger faults, including a pack that will not come up to 10.0 V on an external charger.
- Battery pack replacement. Two 12 V 50 Ah lithium batteries, changed as a set, with the type selector left on position 2.
- Auto gun work: solenoid, trigger sensor, gun cable and straight line adjustment.
- Distance sensor replacement, and the calibration that has to follow it.
- Anything under warranty. Graco ANZ covers 2021 and later LineLazer ES and V machines for 3 years on all components, and GO lodges the claim for you. Cover holds only where the machine has been maintained to Graco's written recommendations.

What to send with the machine

DETAIL	WHY WE NEED IT
Serial number	Off the ID plate. Month letter, then the year.
The symptom	Low output, spitting, will not prime, will not charge.
Fault code	The control board status light pattern, if there is one.
Last flush	What it was flushed with, and how long ago.
Battery reading	Pack voltage and state of charge from the app.

• SERVICE AND WARRANTY

GO Industrial is a Graco authorised service and warranty agent. We service on site, in our workshop, or by nationwide freight collection, and we will walk a fault through on a video call before anything moves. Call 07 3204 2240 or email sales@goind.com.au.



What the ES 2000 does not need serviced

Both machines share the entire fluid section. The difference is the power unit.

ITEM	ES 2000 25U686	200HS 17K583 (PETROL)
Power unit	2 x 50 Ah lithium, 12 V	Honda petrol, hydraulic
Engine oil	None fitted	Daily check. 20 h, then 100 h
Air filter	None fitted	Weekly. Daily in dust
Spark plug	None fitted	NGK BPR6ES, 0.7 to 0.8 mm gap (0.028 to 0.031 in.)
Fuel	None. Plug it in	Checked and filled daily
Hydraulic oil	None fitted	ISO 46, VI 154 or higher
Hydraulic filter	None fitted	246173, 500 h or 3 months
Hydraulic rod	None fitted	Clear debris weekly
Drive belt	None fitted	Replace yearly or 2 000 h
Exhaust	None fitted	Hot surface, keep clear
Where it runs	Indoors or outdoors	Outdoor use only
Charging	Daily, to full	Not applicable

What both machines still need

ITEM	ON BOTH MACHINES
Throat packing	TSL every shift. Adjust, then repack on wear.
Fluid pump	Same wear item. It does most of the wearing.
Filters	Manifold filter and inlet strainer.
Guns and tips	LL5 SwitchTips, guards and seals. Same range.
Hose	Checked daily for wear and damage.
Caster wheel	Greased monthly, nut adjusted yearly.



What the difference is worth

On the petrol striper you are buying engine oil, an air filter, a spark plug, fuel, hydraulic oil and a hydraulic filter, and you are booking an engine service every hundred hours and a drive belt every year. On the ES 2000 none of that exists. What is left is the fluid section, which both machines share, and the fluid section only stays cheap if the packing nut gets TSL every shift and the pump gets flushed and filled with Pump Armour at the end of it.

Parts and fluids to keep on the shelf

ITEM	PART NUMBER
Manifold filter	25A465, 50 mesh. 100 mesh for LL5213 and LL5215 tips.
Inlet strainer	187147.
Displacement pump	277069. Repack kit 248212.
Throat seal liquid	206994, 206995 or 206996 by size.
Pump Armour	243104 or 245133.
Tip guard	243161 RAC 5 HandTite.
Tip seals	243281 waterborne, 224081 solvent.
Rear wheel	255162.
Front caster	114549.
Battery	2 x 12 V 50 Ah lithium, replaced as a set.
Tips	LL5 range. LL5421 and LL5319 cover most council work.

• WHERE THIS GUIDE COMES FROM

Every interval and part number here is read from Graco manual 3A9033 for the LineLazer ES 1000 and ES 2000 Lithium, 310643 for the displacement pump, and 311254 for the Silver and Flex Plus guns. The petrol comparison is read from manual 3A3426 for the LineLazer V 200HS and 200DC. Check the current manual revision before a warranty claim. GO Industrial, 07 3204 2240, sales@goind.com.au, goind.com.au.

