

ShieldDrive QUICK START GUIDE



Dual-Stage Oil-Sealed Rotary Vane Vacuum Pump (Magnetic Coupling)
Models SD2 / SD8 / SD12

START-UP STEPS

1. Place the pump on a flat, level surface in a clean, dry, well-ventilated area. Leave 4–6 in. of clearance around the pump for cooling airflow.
2. Remove the oil fill cap on top. Slowly pour in the NAVAC vacuum oil until the level sits between the MIN and MAX marks on the sight glass. Replace the fill cap.
3. Connect the inlet to your vacuum system. Make sure the line is clean, leak-tight, and the system is not pressurized. Leave the exhaust open or routed to your exhaust line.
4. Set the gas ballast to the closed setting for normal operation. Use the open position only when pumping condensable vapors (water, solvents).
5. Plug the pump into a properly grounded single-phase outlet matching the voltage on the nameplate.
6. Verify the exhaust port is unobstructed. Switch the pump ON. The pump will start immediately.
7. Let it warm up for ~15 minutes, then re-check the oil level through the sight glass. Top up if below the MIN line. Engage Eco Mode once your system has reached working vacuum to reduce noise and energy use.

AT A GLANCE

AT-A-GLANCE	ShieldDrive
Power	Single Phase, 115V, 60 Hz
Inlet / Exhaust	KF16 (SD2) / KF25
Oil	NAVAC vacuum oil (NPO46)
Oil Capacity	0.33 – 1.0 L*
Ult. Vacuum	1.5×10^{-3} Torr
Ambient	10 to 40 °C
Cooling	Air-cooled
Eco Mode	YES

BEFORE YOU START — SAFETY

- The pump must be SWITCHED OFF before filling oil. Never add oil to a running pump.
- Keep the inlet hose as short as possible — long lines reduce pumping speed and ultimate vacuum.
- Do not pump liquids, flammable gases, or explosive vapors. Use a dirt trap for dusty applications.
- Surfaces stay hot during operation and for up to 1 hour after shutdown. Do not touch.
- If the overheat protector trips, disconnect power before the pump auto-restarts to investigate the cause.

Need help?

NAVAC Technical Support: +1 877.MY.NAVAC Ext. 2 • techsupport@navacglobal.com • Full manual at navacvacuum.com
This Quick Start Guide is a summary. Always read the full User Manual before installation, operation, or service.