

Maintenance & Inspection Manual

TIDYNE Marine Lift Appliance · Rev. 02

Inspection Schedule

Routine inspection is critical to safe operation. The following schedule defines minimum required intervals. Higher operational tempos may require more frequent inspection at the discretion of TIDYNE Inc. service support.

Interval	Inspection Scope	Performed By
Pre-shift	Pre-operation checklist (see Safety Procedures, Section 2)	Operator
Weekly	Wire rope, hook, mounting hardware, control LEDs	Operator / Supervisor
Monthly	Brake torque verification, telemetry log review, battery health	Trained technician
Quarterly	Full diagnostic, firmware update, lubrication, fastener torque	TIDYNE service tech
Annually	Full recertification, load test, replace consumables	TIDYNE certified tech

Critical Component Replacement Intervals

Wire Rope	Replace at first visible wear, kink, or 5-year service life — whichever comes first
B1 Motor Brake Pads	Replace at 5,000 cycles or 3 years
B2 Band Brake	Inspect annually; replace at wear indicator
B3 Gravity Brake	No consumables; inspect linkage annually
Battery Pack	5-year nominal life; replace if capacity drops below 70%
Servo Motor	Lifetime component; replace on diagnostic fault only
Control Unit Firmware	Update quarterly via TIDYNE Inc. service portal

Lubrication Points

- Worm gear reducer — synthetic gear oil per spec sheet; check level monthly, change at 2,000 cycles.
- Chain and sprocket — marine chain lubricant weekly; clean and re-lube monthly.
- Wire rope drum bearings — marine grease quarterly.
- Mounting clamp threads — anti-seize compound on every re-installation.

Record Keeping

A complete maintenance log must be kept for each TIDYNE unit, including cycle counts, inspection findings, parts replaced, and any anomalies. Telemetry data is automatically synced to the TIDYNE Inc. service cloud and available for download via the operator portal.

Service & Support

All maintenance under lease agreement is provided by TIDYNE Inc. at no additional cost. For service requests, fault diagnosis, or parts orders, contact solutions@tidyne.com. Emergency support is available 24/7 for any safety-critical issue.