PREVENTIVE MAINTENANCE SCHEDULE

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AUTOMATED STORAGE UNITS

Polar Dynamics Robotics, Inc.

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Effective Date: January 15, 2024

1. GENERAL PROVISIONS

1 This Preventive Maintenance Schedule ("Schedule") establishes the

2 This Spchedule shall be implemented in conjunction with the Compa
2. MAINTENANCE INTERVALS
1 Daily Inspections
-
Visual inspection of chassis integrity
-
Battery charge level verification
-
Navigation sensor calibration check
-
Temperature monitoring system validation
-
Emergency stop system functionality test

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Obstacle detection system verification

2 Weekly Maintenance

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Drive system lubrication

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Thermal insulation integrity check

-

Power distribution system diagnostic

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Software system logs review

-

Wireless communication strength test

-

Load capacity sensor calibration
3 Monthly Service Requirements
-
Complete diagnostic scan of BlueCore(TM) system
-
Firmware updates implementation
-
Battery performance analysis
-
Motor efficiency testing
-
Structural integrity assessment
-
Environmental seal inspection

4 Quarterly Major Service
-
Full system optimization
-
Navigation system recalibration
-
Power system overhaul
-
Chassis stress testing
-
Complete software architecture review
-
Safety system certification

3. COMPONENT-SPECIFIC PROCEDURES

1 Blue Core (TM) Navigation System

Sensor cleaning every 48 hours

Alignment check weekly

Full calibration monthly

Hardware inspection quarterly

Performance validation bi-annually

2 Power Management System

Cell voltage monitoring daily

Charging circuit inspection weekly

Thermal management system check bi-weekly

Battery replacement assessment quarterly

Power efficiency analysis semi-annually

3 Environmental Protection Systems

Seal integrity check weekly

Condensation prevention system inspection bi-weekly

Temperature regulation validation monthly
-
Thermal barrier assessment quarterly
-
Complete environmental stress test semi-annually
4. DOCUMENTATION REQUIREMENTS
1 Maintenance Records
1 Maintenance Necords
All maintenance activities must be logged in the Company's digital ma
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Records must include date, technician ID, service performed, parts re
-
Digital photographs of any identified issues must be uploaded

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All diagnostic reports must be archived for minimum of 5 years
2 Compliance Reporting
-
Monthly maintenance compliance reports required
-
Quarterly performance analysis submissions
-
Annual certification documentation
-
Incident reports within 24 hours of occurrence

5. QUALIFIED PERSONNEL

1 Maintenance activities shall only be performed by:
- Certified Polar Dynamics technicians
- Authorized service partners
- Customer maintenance personnel with Level 2 certification or higher
- BlueCore(TM) certified specialists for navigation system service
2 Certification Requirements
Minimum 40 hours initial training
- Annual recertification

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Cold environment safety certification

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BlueCore(TM) systems specialist certification for advanced maintenar

6. PARTS AND MATERIALS

- 1 Only Company-approved replacement parts shall be used for maint
- 2 Critical components must have OEM certification
- 3 Parts inventory must be maintained at specified minimum levels
- 4 All replacement parts must be rated for operation at -40 C or lower

7. SAFETY PROTOCOLS

1 All maintenance activities must comply with:

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Company Safety Standards (PDR-SS-2023-003)
-
OSHA cold storage workplace requirements
-
Relevant electrical safety standards
-
Robotics Industry Association safety protocols
8 MODIFICATIONS

Chief Technology Officer

1 This Schedule may be modified only by written authorization from:

Chief Reportics Officer

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Director of Engineering

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Quality Assurance Director

AUTHORIZATION

APPROVED AND ADOPTED this 15th day of January, 2024

Ву:

Marcus Chen

Chief Technology Officer

Polar Dynamics Robotics, Inc.

By: - 13 -

Dr. James Barrett

Chief Robotics Officer

Polar Dynamics Robotics, Inc.

