AMR-350 TROUBLESHOOTING MANUAL

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Classification: CONFIDENTIAL

1. INTRODUCTION AND SCOPE

1 This Troubleshooting Manual ("Manual") is the proprietary and confi

2 This Manual is protected under U.S. and international intellectual pr

2. DEFINITIONS

1 "Error Codes" refers to the standardized diagnostic codes generated

2 "NaviCore(TM)" refers to the proprietary navigation and control softw

3 "Safety Systems" refers to the integrated collision avoidance, emerg

3. SAFETY WARNINGS AND COMPLIANCE

1 All troubleshooting procedures must comply with:

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ANSI/RIA R15.06-2012 Safety Requirements

ISO 10218-1:2011 Robot Safety Standards

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CE Machinery Directive 2006/42/EC

2 Personnel conducting troubleshooting must be certified in NaviFloor

4. DIAGNOSTIC PROCEDURES

1 Primary System Check

-

Verify NaviCore(TM) boot sequence

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Confirm LiDAR sensor calibration

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Test emergency stop circuit functionality

-

Validate wireless communication links

2 Error Code Resolution Matrix

Code	Description	Primary Action	Secondary Action
E-101	Navigation Sensor Fault	Recalibrate LiDAR	Replace sens
E-102	Motor Controller Error	Reset drive system	Check power di
E-103	Path Planning Failure	Clear mapping cache	Reinstall Navi

5. MECHANICAL TROUBLESHOOTING

1 Drive System

-

Check motor encoder alignment

-

Verify wheel tensioner settings

-

Inspect suspension dampers

-

Test emergency brake engagement

2 Payload Interface

-

Validate load cell readings

-

Check stabilizer deployment

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Inspect mounting brackets

-

Test weight distribution sensors

6. SOFTWARE DIAGNOSTICS

1 NaviCore(TM) System Recovery

a) Access diagnostic portal via secure connection

b) Download system logs

c) Execute recovery sequence

d) Validate terrain mapping accuracy

2 Network Connectivity

-

Verify mesh network status

-

Test failover protocols

-

Confirm fleet management interface

-

Validate security certificates

7. MAINTENANCE REQUIREMENTS

1 Scheduled Maintenance Intervals

-

Daily visual inspection

-

Weekly sensor calibration

Monthly drive system check

-

Quarterly software updates

2 Documentation Requirements

-

Log all troubleshooting actions

-

Record replaced components

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Document software modifications

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Maintain calibration records

8. WARRANTY AND LIABILITY

1 This Manual is provided "as-is" without any warranties, express or i

2 The Company shall not be liable for any damages arising from the u

3 Warranty coverage may be voided by unauthorized modifications or

9. PROPRIETARY NOTICE

1 The information contained in this Manual constitutes valuable trade

2 No part of this Manual may be disclosed to third parties without writ

10. DOCUMENT CONTROL

1 Revision History

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v3.2: January 2024 - Updated safety protocols

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v3.1: October 2023 - Added E-103 resolution

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v3.0: July 2023 - Major revision for NaviCore(TM) 4.2

2 Distribution Control

This document is controlled by NaviFloor Technical Documentation D

APPROVAL AND VALIDATION

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