# tm12435 - 310K Backhoe Loader Technical Manual

# **Main Sections**

### Foreword

Manual Identification—READ THIS FIRST!

**General Information** 

Safety

#### **Diagnostics**

Engine Control Unit (ECU) Diagnostic Trouble Codes

Engagement and Monitor Unit (EMU) Diagnostic Trouble Codes

Transmission Control Unit (TCU) Diagnostic Trouble Codes

Vehicle Control Unit (VCU) Diagnostic Trouble Codes



**Operational Checkout Procedure** 

#### Engine

**Theory of Operation** 

**Diagnostic Information** 

Adjustments

Tests

# **Electrical System**

**System Information** 

**System Diagrams** 

**Sub-System Diagnostics** 

**Monitor Operation** 

References

### **Power Train**

**Theory of Operation** 

**Diagnostic Information** 

Adjustments

Tests

### **Hydraulic System**

**Theory of Operation** 

**Diagnostic Information** 

Adjustments

Tests

# **Heating and Air Conditioning**

**Theory of Operation** 

**Diagnostic Information** 

Tests

# tm12435 - 310K Backhoe Loader

# **Table of Contents**

### Foreword

### Manual Identification—READ THIS FIRST!

# **Section 9000: General Information**

#### Group 01: Safety

Recognize Safety Information
Follow Safety Instructions
Operate Only If Qualified
Wear Protective Equipment
Avoid Unauthorized Machine Modifications
Inspect Machine
Stay Clear of Moving Parts
Avoid High-Pressure Oils
Avoid High-Pressure Fluids
Work In Ventilated Area
Prevent Fires
Prevent Battery Explosions
Handle Chemical Products Safely
Decommissioning — Proper Recycling and Disposal of Fluids and Components
Prepare for Emergencies
Use Steps and Handholds Correctly
Start Only From Operator's Seat
Use and Maintain Seat Belt
Prevent Unintended Machine Movement
Prevent Unintended Machine Movement—If Equipped With Pilot Controls
Avoid Work Site Hazards

**Keep Riders Off Machine** 

Avoid Backover Accidents
Avoid Machine Tipover
Add and Operate Attachments Safely
Use Special Care When Operating
Operating or Traveling On Public Roads
Inspect and Maintain ROPS
Park and Prepare for Service Safely
Service Cooling System Safely
Remove Paint Before Welding or Heating
Make Welding Repairs Safely
Drive Metal Pins Safely
Service Tires Safely

### Section 9001: Diagnostics

Group 10: Engine Control Unit (ECU) Diagnostic Trouble Codes

Engine Control Unit (ECU) Diagnostic Trouble Codes

000029.03 - Hand Throttle

000029.04 - Hand Throttle

000029.14 - Hand Throttle

000091.03 - Foot Throttle

000091.04 - Foot Throttle

000091.14 - Foot Throttle

000111.07 - Engine Coolant Level

000190.16 - Engine Speed

000237.31 - Vehicle ID Number

000628.12 - Memory Error

000647.03 - Engine Fan Driver

000647.05 - Engine Fan Driver

001075.06 - Fuel Pump Control

001321.05 - Starter Relay



# Thank you very much for your reading. Please click here to get more information.