

# Z225, Z245, Z235, Z255 EZtrak Residential Mower Diagnostic and Repair



## TECHNICAL MANUAL

**EZtrak Mower models Z225, Z245 (SN. 100001-); Z235, Z255 (SN. 130001- )**

TM112919 28 JAN 16 (ENGLISH)



## Table of contents

### **FOREWORD**

#### **Section 10 - GENERAL INFORMATION**

- Group 05 - Safety
- Group 10 - General Specifications
- Group 15 - Fuel and Lubricants
- Group 20 - Machine Specifications

#### **Section 20 - SINGLE CYLINDER ENGINE REPAIR**

- Group 10 - Engine Single Cylinder

#### **Section 30 - V-TWIN ENGINE REPAIR**

- Group 10 - Repair Engine V-Twin

#### **Section 40 - ELECTRICAL REPAIR**

- Group 10 - Component Location
- Group 20 - Wiring Harness

#### **Section 50 - POWER TRAIN REPAIR**

- Group 10 - Component Location
- Group 20 - Repair

#### **Section 60 - ATTACHMENTS REPAIR**

- Group 10 - Component Location
- Group 20 - Repair

#### **Section 70 - MISCELLANEOUS REPAIR**

- Group 10 - Component Location
- Group 20 - Repair

#### **Section 220 - SINGLE CYLINDER DIAGNOSIS, TESTS, AND ADJUSTMENTS**

- Group 10 - Diagnosis
- Group 20 - Tests and Adjustments

#### **Section 230 - V-TWIN ENGINE DIAGNOSIS, TESTS, AND ADJUSTMENTS**

- Group 10 - Diagnosis
- Group 20 - Tests and Adjustments

#### **Section 240 - ELECTRICAL DIAGNOSIS, TESTS, AND ADJUSTMENTS**

- Group 10 - Theory of Operation
- Group 20 - Diagnosis
- Group 30 - Tests and Adjustments
- Group 40 - Wiring Schematics
- Group 50 - Connector Information

#### **Section 250 - POWER TRAIN DIAGNOSIS, TESTS, AND ADJUSTMENTS**

- Group 20 - Theory of Operation
- Group 30 - Diagnosis
- Group 40 - Tests and Adjustments

#### **Section 260 - ATTACHMENTS DIAGNOSIS, TESTS, AND ADJUSTMENTS**

- Group 20 - Diagnosis
- Group 30 - Tests and Adjustments

#### **Section 299 - SERVICE TOOLS AND KITS**

- Group 10 - Service Tools



## Foreword

This manual is written for an experienced technician. Essential tools required in performing certain service work are identified in this manual and are recommended for use.

Live with safety: Read the safety messages in the introduction of this manual and the cautions presented throughout the text of the manual.

**CAUTION:**

---

This is the safety-alert symbol. When you see this symbol on the machine or in this manual, be alert to the potential for personal injury.

Technical manuals are divided in two parts: repair and operation and tests. Repair sections tell how to repair the components. Operation and tests sections help you identify the majority of routine failures quickly.

Information is organized in groups for the various components requiring service instruction. At the beginning of each group are summary listings of all applicable essential tools, service equipment and tools, other materials needed to do the job, service parts kits, specifications, wear tolerances, and torque values.

Technical Manuals are concise guides for specific machines. They are on-the-job guides containing only the vital information needed for diagnosis, analysis, testing, and repair.

Fundamental service information is available from other sources covering basic theory of operation, fundamentals of troubleshooting, general maintenance, and basic type of failures and their causes.

## Section 10 - GENERAL INFORMATION

### Table of contents

<b>Group 05 - Safety</b> .....	1
Recognize Safety Information .....	1
Understand Signal Words .....	1
Follow Safety Instructions .....	1
Practice Safe Maintenance .....	3
Use Proper Tools .....	3
Handle Fluids Safely—Avoid Fires .....	4
Drain Gasoline When Storing Machine .....	4
Prevent Acid Burns .....	6
Prevent Battery Explosions .....	6
Handling Batteries Safely .....	7
Prepare for Emergencies .....	9
Park Machine Safely .....	9
Support Machine Properly .....	9
Wear Protective Clothing .....	11
Work in Clean Area .....	11
Service Machines Safely .....	12
Work In Ventilated Area .....	12
Illuminate Work Area Safely .....	12
Replace Safety Signs .....	13
Use Proper Lifting Equipment .....	13
Follow Tire Recommendations .....	13
Decommissioning: Proper Recycling and Disposal of Fluids and Components .....	14
Protect Against High Pressure Spray .....	15
Live With Safety .....	15
<b>Group 10 - General Specifications</b> .....	16
Service Recommendations for O-Ring Boss Fittings .....	16
Service Recommendations For Flat Face O-Ring Seal Fittings .....	18
Metric Cap Screw Torque Values—Grade 7 .....	19
Metric Bolt and Screw Torque Values .....	20
Unified Inch Bolt and Screw Torque Values .....	21
<b>Group 15 - Fuel and Lubricants</b> .....	22
Summary of References .....	22
Gasoline Engine Oil .....	23
Oil Filters .....	24
Gasoline Fuel for 4-Cycle Engines .....	24
Transaxle Oil .....	24
Grease .....	24
Mixing of Lubricants .....	25
Alternative and Synthetic Lubricants .....	25
Lubricant Storage .....	25
Gasoline and Engine Storage .....	27
Carburetor Cleaning .....	29
Carburetor Cleaning Methods .....	30
<b>Group 20 - Machine Specifications</b> .....	31
Machine Specifications Z225 and Z245 (S.N. -130000) .....	31
Machine Specifications Z235 and Z255 (S.N. 130001- ) .....	33
Product Identification Number Location (S.N. -130000) .....	34
Product Identification Number Location (S.N. 130001- ) .....	34



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