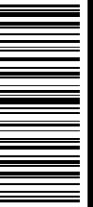


# 644K 4WD Loader Engine 6090HDW13 (IT4)



## OPERATION AND TEST MANUAL

**4WD Loaders with Engines 6090HDW13 models 644K (PIN:  
1DW644KZ\*\*E634315-658064)**

**TM12105 22 FEB 16 (ENGLISH)**

**For complete service information also see:**

644K 4WD Loader (PIN: 1DW644KZ__E634315-) Repair	TM12107
JLink (MTG) Technical Manual	TM114519
JDPS Master Tool Manual	TM111119
TMIV1200 - 1400 Series Inboard Planetary Axles	CTM442
120 Series Hydraulic Cylinders	CTM114519
185 Series Hydraulic Cylinders	CTM109319
120 Series Hydraulic Cylinders	CTM104819
125 Series Hydraulic Cylinders	CTM10006
6090 PowerTech Diesel Engine (Interim Tier 4) Level 21 ECU	CTM104819
JDLINK/ZXLINK Machine Monitoring System	CTM10006



## Table of contents

### **FOREWORD**

### **MANUAL IDENTIFICATION—READ THIS FIRST!**

#### **Section 9000 - GENERAL INFORMATION**

Group 01 - Safety Information

#### **Section 9001 - DIAGNOSTIC TROUBLE CODES (DTCS)**

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

Group 20 - Transmission Control Unit (TCU) Diagnostic Trouble Codes

Group 30 - Vehicle Control Unit (VCU) Diagnostic Trouble Codes

Group 40 - Sealed Switch Module (SSM) Diagnostic Trouble Codes

Group 50 - Advanced Display Unit (ADU) Diagnostic Trouble Codes

Group 60 - Radar Object Detection (ROD) Diagnostic Trouble Codes

Group 70 - Ground Speed Radar (RDR) Diagnostic Trouble Codes

Group 80 - Joystick Steering Valve (JSV) Diagnostic Trouble Codes

Group 90 - Joystick Steering Controller (JSC) Diagnostic Trouble Codes

Group 100 - Tire Pressure Monitoring (TPM) System Diagnostic Trouble Codes

#### **Section 9005 - OPERATIONAL CHECKOUT PROCEDURE**

Group 10 - Operational Checkout Procedure

#### **Section 9010 - ENGINE**

Group 05 - Theory of Operation

Group 15 - Diagnostic Information

Group 20 - Adjustments

Group 25 - Tests

#### **Section 9015 - ELECTRICAL SYSTEM**

Group 05 - System Information

Group 10 - System Diagrams

Group 15 - Sub-System Diagnostics

Group 16 - Monitor Operation

Group 20 - References

#### **Section 9020 - POWER TRAIN**

Group 05 - Theory of Operation

Group 15 - Diagnostic Information

Group 20 - Adjustments

Group 25 - Tests

#### **Section 9025 - HYDRAULIC SYSTEM**

Group 05 - Theory of Operation

Group 15 - Diagnostic Information

Group 20 - Adjustments

Group 25 - Test

#### **Section 9031 - HEATING AND AIR CONDITIONING**

Group 05 - Theory of Operation

Group 15 - Diagnostic Information

Group 25 - Tests



## 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:**

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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.

## Manual Identification—READ THIS FIRST!

### IMPORTANT:

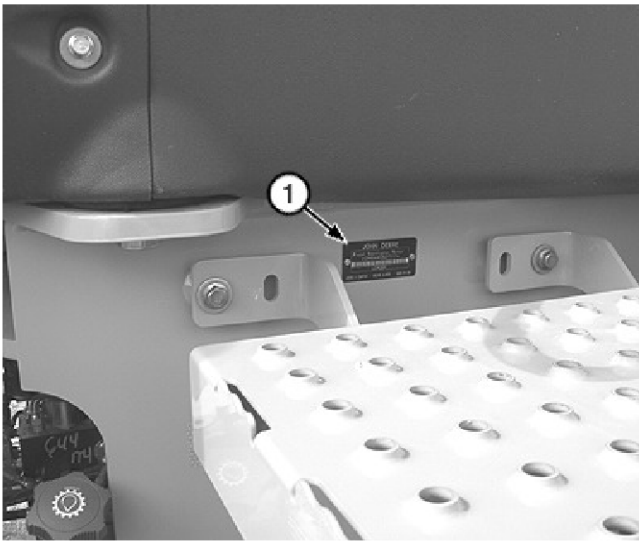
*Use only supporting manuals designated for your specific machine. If incorrect manual is chosen, improper service may occur. Verify product identification number (PIN) and engine model number when choosing the correct manual.*

### Choosing the Correct Supporting Manuals

John Deere four wheel drive (4WD) loaders are available in different machine configurations based on the various markets into which they are sold. Different supporting manuals exist for different machine configurations.

When necessary, product serial numbers and engine model numbers are listed on the front covers of 4WD loader manuals. These numbers are used to identify the correct supporting manual for your machine.

### Product Serial Number Identification



**PIN Plate Location**

### LEGEND:

- |   |                  |
|---|------------------|
| 1 | PIN Plate        |
| 3 | 17-Character PIN |



### PIN Plate (17-character)

The product identification number (PIN) plate (1) is located on left side of machine frame under the cab door. Each machine has a 17-character PIN (3) shown on PIN plate. The last 6 characters of the PIN represent the machine's product serial number.

The PIN identifies the producing factory, machine model number, machine option, year of manufacture, engine emission level, and machine serial number.

**PIN Identification Table**

17-Character PIN Example																
(3)			(4)				(5)	(6)	(7)	(8)	(9)					
1	D	W	6	4	4	K	Z	_	D	E	X	X	X	X	X	X

- **(3)—World Code** —Identifies location where machine is manufactured.
- **(4)—Machine Model Identifier** —Identifies model number.
- **(5)—Machine Option Code** —Identifies which major machine option is equipped. This character will change from one machine to another.
- **(6)—Check Letter** —This is a random character assigned by the factory. This is not used in machine identification.
- **(7)—Manufacturing Year Code** —Identifies year of machine manufacture.
- **(8)—Engine Emission Code** —Represents engine emission certification.
- **(9)—Machine Serial Number** —Identifies machine serial number. This character will change from one machine to another.

The following is an example for a 644K machine that meets Interim Tier 4 and Stage III B emission levels:

**PIN Identification**

**1DW644KZ \_ DEXXXXXX**

**1DW** .....

1DW .....

1T8 .....

1T0 .....

**644K** .....

**Z** .....

Z .....

H .....

P .....

**\_** .....

**D** .....

C .....

D .....

E .....

F .....

G .....

**E** .....

C .....

D .....

E .....

F .....

**XXXXXX** .....

**World Code** (manufacturing location)

Davenport Works

Thibodaux Works

Dubuque Works

**Machine Model Identifier**

**Machine Option Code** (variable)

Z Bar Linkage

High Lift Linkage

Powerlifel<sup>™</sup> Linkage

**Check Letter** (variable)

**Manufacturing Year Code** (variable)

2012

2013

2014

2015

2016

**Engine Emission Code**

Tier 2 and Stage II

Tier 3 and Stage III A

Interim Tier 4 and Stage III B

Tier 4

**Machine Serial Number**



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