# 1795 Planter with MaxEmerge 5 Row Units



TECHNICAL MANUAL

1795 Planter with MaxEmerge
5 Row Units

TM131719 24JUL23 (ENGLISH)

## Introduction

#### **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.

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.

KC01776,0001914 -19-17JAN17-1/1



### Contents

#### Section 210—General Information

Group 10—Acronym Table

Group 5A—How to Use This Manual

Group 5B—Safety

Group 5C—Lubricants

Group 5D—Recommended Tools for Diagnostics

Group 5E—Basic Diagnostics

Group 5F—Diagnostic Information for Electrical Components

Group 5G—Diagnostic Information for Hydraulic Components

Group 5H—Maintaining Hydraulic Systems and Components

Group 5I—Standard Torque Chart Procedures

#### Section 211—Diagnostic Trouble Codes

Group 10A—Accessing Diagnostic Trouble Codes

Group 10B—Closing Wheel Controller (CWC) Codes

Group 10C—Planter Main 1 (PM1) Codes

Group 10D—Planter Main 2 (PM2) Codes

Group 10E—Planter Auxiliary 1 (PA1) Codes

#### Section 212—Observable Symptoms and System Diagnostics

Group 10—Observable Symptoms

#### Section 240—Electrical

Group 05—General Information

Group 20—Theory of Operation

Group 30A—Schematics - Frame

Group 30B—Schematics - CAN Bus

Group 30C—Schematics - Enhanced Monitoring

Group 30D—Schematics - Pneumatic Downforce

Group 30E—Schematics - Row Command

Group 30F—Schematics - Seed Monitoring

Group 50—Diagnostics

#### Section 245—Electronic Control Units

Group 10A—Accessing Diagnostic Addresses

Group 10B—Diagnostic Addresses by Control Unit

Group 50—Diagnostics

#### Section 249—Electrical Component Information

Group 40A—Electrical Assemblies

Group 40B—Sensors

Group 40E—Lights

Group 40F—Fuses

Group 40G—Charging

Group 40K—Relays

Group 40M—Motors

Group 40S—Switches

Group 40V—Diodes

Group 40X—Interconnects and Ground Points

Group 40Y—Electrically Actuated Mechanical Devices

#### Section 270—Hydraulics

Group 20—Theory of Operation

Group 30—Schematics

Group 50—Diagnostics

#### Section 279—Hydraulic Component Information

Group 40C—Cylinder, Actuator, or Piston

Group 40D—Check Valve

Group 40F—Filter

Group 40G—Valve Block, Assembly, or Gearcase

Group 40H—Cooler

Group 40M—Motor

Group 400—Orifice
Group 40R—Reservoir Tank
Group 40V—Valve

Group 40X—Diagnostic Receptacle or Coupler

Group 40Y—Solenoid Valve

#### Section 280—Pneumatics

Group 20—Theory of Operation

Group 30—Schematics

Group 50—Diagnostics

#### Section 289—Pneumatic Components

Group 40A—Accumulators

Group 40B—Sensors

Group 40D—Check Valves

Group 40F—Filters

Group 40G—Assembly Groups

Group 40P—Pumps

Group 40R—Reservoirs

Group 40S—Switches

Group 40V—Valves

Group 40X—Couplers or Diagnostic Receptacles

Group 40Y—Solenoid Valves

Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

i

COPYRIGHT © 2023 DEERE & COMPANY Moline, Illinois All rights reserved.
A John Deere ILLUSTRUCTION ™ Manual Previous Editions Copyright © 2013



# Section 210 General Information

#### Contents

	Page		
Group 10—Acronym Table			Page
Acronym Table	210-10-1	Observe Maximum Transport	
,		Speed	210-5B-17
Group 5A—How to Use This Manua	I	Wear Protective Clothing	
Information is Available in Sections,		Precautions for Welding	
Groups and Subgroups	210-5A-1		
1 3 1		Handle Agricultural Chemicals Safely	210-5B-19
Group 5B—Safety		Service and Operate Chemical	
Work In Ventilated Area	210-5B-1	Sprayers Safely	210-5B-20
Recognize Safety Information		Relieve Hydraulic Pressure	
Avoid Backover Accidents		Safely	210-5B-21
Prevent Machine Runaway		Use Steps and Handholds	
Avoid Contact with Agricultural		Correctly	210-5B-21
Chemicals	210-5B-2	<b>,</b>	
Clean Vehicle of Hazardous		Group 5C—Lubricants	
Pesticides	210-5B-2	Grease	210-5C-1
Use a Safety Chain		Gear Oil 1	
Work in Clean Area		Alternative and Synthetic	
Decommissioning — Proper		Lubricants	210-5C-2
Recycling and Disposal of Fluids		Lubricant Storage	
and Components	210-5B-4	230 todak otorago	210 00 2
Prepare for Emergencies		Group 5D—Recommended Tools for	or Diagnostics
In Case of Fire		Recommended Tools	210-5D-1
Use Safety Lights and Devices		Trocommonaca rocio	210 00 1
Avoid High-Pressure Fluids		Group 5E—Basic Diagnostics	
Use Proper Lifting Equipment	210-5B-6	Seven Basic Steps	210-5F-1
Illuminate Work Area Safely		Troubleshooting Unresolved	
Live With Safety		Problems	210-5F-2
Support Machine Properly		1 100101110	
Freeing a Mired Machine		Group 5F—Diagnostic Information	for
Protect Against Noise		Electrical Component	
Remove Paint Before Welding or		Electrical Designators	
Heating	210-5B-9	Visually Inspect Electrical System	
Park Machine Safely		violatily mopost Electrical Cycleminis	
Prevent Acid Burns		Group 5G—Diagnostic Information	for
Follow Safety Instructions		Hydraulic Component	
Use Proper Tools		Hydraulic Designators	
Keep Riders Off Machine		Troubleshooting Tips	
Service Tires Safely		Visually Inspect Hydraulic	210 00 1
Stay Clear of Rotating Drivelines	210-5B-12	System	210-5G-2
Construct Dealer-Made Tools	210-30-12	Gystem	210-30-2
Safely	210-5B-13	Group 5H—Maintaining Hydraulic	Svetome
Practice Safe Maintenance		and Components	oyotomo
Understand Signal Words		Hydraulic Components	210-5H-1
Replace Safety Signs		Oil Storage and Filling	
Prevent Battery Explosions	210-5B-14	Oil Filtration	
Protect Against High Pressure	210-30-14	On I intration	210-311-1
Spray	210-5R-15	Group 5I—Standard Torque Chart	Procedures
Avoid Heating Near Pressurized	210-30-13	Unified Inch Bolt and Screw Torque	i i ocedales
Fluid Lines	210-5R-15	Values	210-51 1
Tow Loads Safely		Metric Bolt and Screw Torque	2 10-31-1
Transport Towed Equipment at	210-30-13	Values	210-51-2
Safa Spoods	210 5D 16	values	2 10-01-2