Group 05 - Safety

Safety—Summary of References

- Recognize Safety Information
- Understand Signal Words
- Follow Safety Instructions
- Handle Fluids Safely—Avoid Fires
- Prevent Battery Explosions
- Prepare for Emergencies
- Prevent Acid Burns
- Service Cooling System Safely
- Avoid High-Pressure Fluids
- Park Machine Safely
- Support Machine Properly
- Wear Protective Clothing
- Work in Clean Area
- Service Machines Safely
- Work In Ventilated Area
- Illuminate Work Area Safely
- Replace Safety Signs
- Use Proper Lifting Equipment
- Service Tires Safely
- Avoid Harmful Asbestos Dust
- Avoid Heating Near Pressurized Fluid Lines
- Remove Paint Before Welding or Heating
- Use Proper Tools
- Dispose of Waste Properly
- Live With Safety

Recognize Safety Information

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Engine

Engine—Summary of References

- John Deere Engine Repair
- Remove Engine (5055E, 5060E, 5065E amd 5075E)
- Remove Engine (5050E)
- Install Engine (5055E, 5060E, 5065E amd 5075E)
- Install Engine (5050E)
- Engine Disassembly Sequence
- Sealant Application Guidelines
- Engine Re-Assembly Sequence
- Engine Break-In Guidelines

Service Equipment and Tools

→NOTE:

Order tools according to information given in the service manual.

Specifications

Item	Measurement	Specification
Engine to Front Support Top Cap Screws	Torque	290 N·m (214 lb-ft)
Engine to Front Support Nut	Torque	165 N·m (122 lb-ft)
Center Control Console Cap Screws	Torque	70 N·m (52 lb-ft)

John Deere Engine Repair



Component Technical Manual

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Fuel System

Fuel System—Summary of References

- Injection Pump, Nozzle and Governor Repair—Use CTM8
- Remove, Inspect and Install Fuel Tank
- Replace Fuel Filter (5055E, 5060E, 5065E and 5075E)
- Replace Fuel Filter Inserts (5050E)
- Remove and Install Fuel Filter/Primer Pump Assembly (5055E, 5060E, 5065E and 5075E)
- Remove and Install Fuel Filter Assembly (5050E)
- Remove, Inspect and Install Fuel Cooler
- Remove, Inspect and Install Water Separator
- Remove Fuel Injection Nozzle
- Clean Fuel Injection Nozzle
- Fuel Injection Nozzle Disassembly
- Install Fuel Injection Nozzle

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Battery, Starter and Alternator

Battery, Starter and Alternator—Summary of References

- Starter Repair—Use CTM77
- Remove and Install Battery
- Remove and Install Starter
- Alternator/Regulator Repair—Use CTM77
- Replace Alternator/Regulator

Starter Repair—Use CTM77



Component Technical Manual

For complete repair information the component technical manual (CTM) is also required. Use the component technical manual in conjunction with this machine manual.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Clutch Housing

Clutch Housing—Summary of References

- Separate Engine from Clutch Housing
- Install Engine to Clutch Housing
- Replace Clutch Housing Seal
- Inspect and Repair Clutch Pedal and Linkage

Service Equipment and Tools

Other Material

Number	Name	Use
Moly High Temperature EP Grease	Apply to PTO and traction clutch shafts	

Specifications

Item	Measurement	Specification
Engine-to-Clutch Housing Cap Screw	Torque	290 N•m (214 lb-ft)
Engine-to-Clutch Housing Nut	Torque	290 N•m (214 lb-ft)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Steering Repair

Steering Repair—Summary of References

- Remove and Install Steering Column and Valve
- Disassemble and Inspect Steering Valve - Sauer Danfoss
- Assemble Steering Valve - Sauer Danfoss
- Remove and Install Steering Cylinder (Global Front Axle)
- Remove and Install Steering Cylinder—2WD Axle
- Disassemble, Inspect and Assemble Steering Cylinder (Global Front Axle)
- Disassemble, Inspect and Assemble Steering Cylinder—2WD Axle
- Remove, Inspect and Install Tie Rod Assembly—2WD

Other Material

Number	Name	Use
Moly High Temperature Ep Grease.	Apply to 2WD axle tie rod sleeve.	

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Hydraulic Pump and Filter

Hydraulic Pump and Filter—Summary of References

- Remove, Inspect, and Install Hydraulic Oil Pick-Up Screen
- Remove and Install Hydraulic Pump
- Remove Hydraulic Pump External Components
- Disassemble and Inspect Hydraulic Pump
- Assemble Hydraulic Pump
- Install Hydraulic Pump External Components
- Install Hydraulic Pump External Components
- Remove and Install Hydraulic Oil Filter/Manifold
- Inspect and Replace Hydraulic Supply and Suction/Return Lines

Essential Tools



.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Front Axle

Front Axle—Summary of References

- Remove and Install Front Axle — 2WD
- Remove and Install Front Axle — MFWD
- Inspect and Replace Pivot Pin and Bushings — 2WD
- Remove and Install Spindle Assembly of Fixed Front Axle — 2WD
- Remove and Install Spindle Assembly of Adjustable Front Axle — 2WD (If Equipped)
- Inspect and Replace Spindle Shaft Bushings of Fixed Front Axle — 2WD
- Inspect and Replace Spindle Shaft Bushings of Adjustable Front Axle — 2WD (If Equipped)

Specification

Item	Measurement	Specification
Axle	End Play	0.8 mm (0.030 in.)
2WD Axle Pivot Pin Retainer Cap Screw	Torque	135 N·m (100 lb-ft)
Front Wheel Cap Screw	Torque	175 N·m (129 lb-ft)
Spindle Nut	Torque	415 N·m (306 lb-ft)
Tie Rod End Nut	Torque	165 N·m (122 lb-ft)
MFWD Mounting Cap Screw	Torque	675 N·m (500 lb-ft)
Mounting Cap Screw, MFWD Drive Shaft Cover	Torque	13 N·m (10 lb-ft)
Hydraulic Hose to Cylinder	Torque	50 N·m (37 lb-ft)
Wheel Cap Screws	Torque	310 N·m (228 lb-ft)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Seat and Support

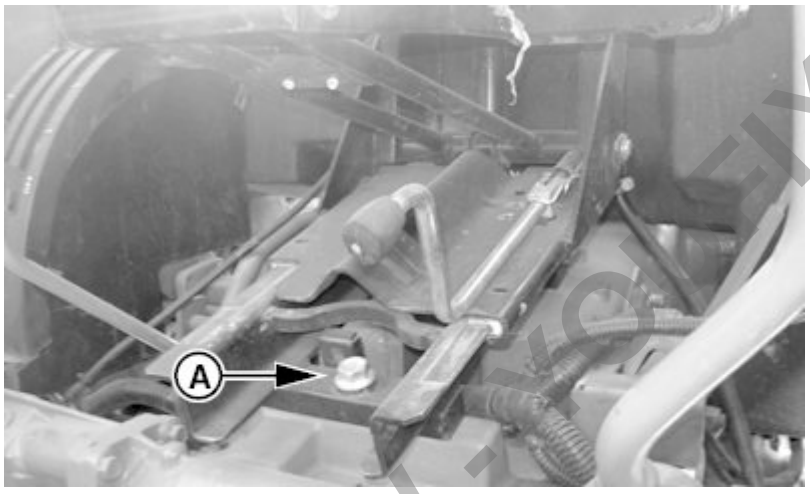
Seat and Support—Summary of References

- Remove and Install Seat and Support

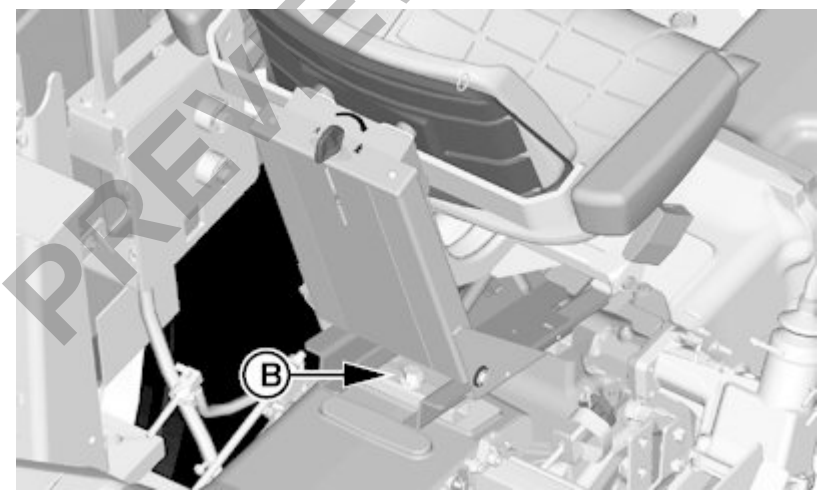
Specifications

Item	Measurement	Specification
Deluxe Seat Mounting Cap Screws	Torque	125 N˙m (92 lb-ft)

Remove and Install Seat and Support



Seat



Seat

LEGEND:

A Support Front Cap Screw (1 used)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 10 - Operational Checkout Procedures

Operational Checkout Procedures—Summary of References

- Operational Checkout Procedure Information
- Engine Oil Level and Condition Check
- Coolant Level and Condition Check
- Transmission and Hydraulic Oil Check
- Fan and Belt Check
- Fuel System Check
- Air Intake System Check
- Electrical System Check
- Hydraulic System Check
- Indicator Lamps Check
- Engine Start Check
- Transmission Park Position Start Check
- Engine Fast and Slow Idle Operation
- Power Steering Check
- Differential Lock Check
- Clutch Check
- Transmission Shift Check
- Range Lever Shift Check
- Brake Check
- Rockshaft Check
- Selective Control Valve Check
- Miscellaneous Checks

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Component Location

Component Location—Summary of References

- Engine External Components—Left-Hand Side (5055E, 5060E, 5065E and 5075E)
- Engine External Components—Left-Hand Side (5050E)
- Engine External Components—Right-Hand Side (5055E, 5060E, 5065E and 5075E)
- Engine External Components—Right-Hand Side (5050E)

Component Location Information

This group contains component location drawings for the following engine system components:

Engine External Components

- Left-Hand Side
- Right-Hand Side

Use the drawings when diagnosing an engine problem to help locate the components to be tested.

Engine External Components—Left-Hand Side (5055E, 5060E, 5065E and 5075E)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Component Location

Component Location—Summary of References

- Fuel System Components
- Air Intake System Components

Component Location Information

This group contains component location drawings for the following fuel/air system components:

- Fuel System
- Air Intake System

Use the drawings when diagnosing a fuel/air problem and to help locate the components to be tested.

Fuel System Components

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Component Location

Component Location—Summary of References

- Engine Electrical Components—Right-Hand Side
- Engine Electrical Components—Left-Hand Side
- Dash And Center Control Console Electrical Components

Component Location Information

This group contains component location drawings for the following electrical components:

- Engine Components
- Dash Components
- Machine Components

Use the drawings when troubleshooting an electrical problem to help locate the components to be tested.

Engine Electrical Components—Right-Hand Side

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Component Location

Component Location—Summary of References

- Power Train Components
- Clutch Components—Dual
- Transmission Components—SyncShuttle™
- Transmission Components—CollarShift
- Final Drive Components
- Rear 540 PTO Components
- Rear 540/540E PTO Components––If Equipped
- Reverse PTO Components––If Equipped

Component Location Information

This group contains component location drawings for the following power train components:

- Power Train Components
- Clutch
- Transmission—CollarShift
- Final Drive
- Rear PTO

Use the drawings when diagnosing a power train problem and to help locate the components to be tested.

Power Train Components

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Component Location

Component Location—Summary of References

- Steering System Components
- Brake System Components

Component Location Information

This group contains component location drawings for the following steering and brake system components:

- Steering System
- Brake System

Use the drawings when troubleshooting steering and brake problems to help locate the components to be tested.

Steering System Components

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Group 05 - Component Location

Component Location—Summary of References

- Hydraulic System Components

Component Location Information

This group contains component location drawings for the following hydraulic components:

- Hydraulic System

Use the drawings when diagnosing a hydraulic problem and to help locate the components to be tested.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

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.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Install Valves

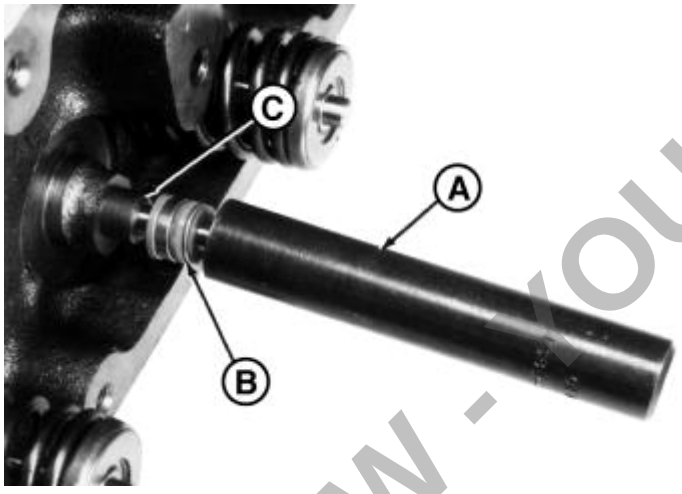
[1] - Apply engine oil to valve stems and guides.

[2] - Insert valves in head (in same location as found during removal).

→NOTE:

Valves must move freely and seat properly.

[3] -



Slide Seal onto Valve Guide Tower

LEGEND:

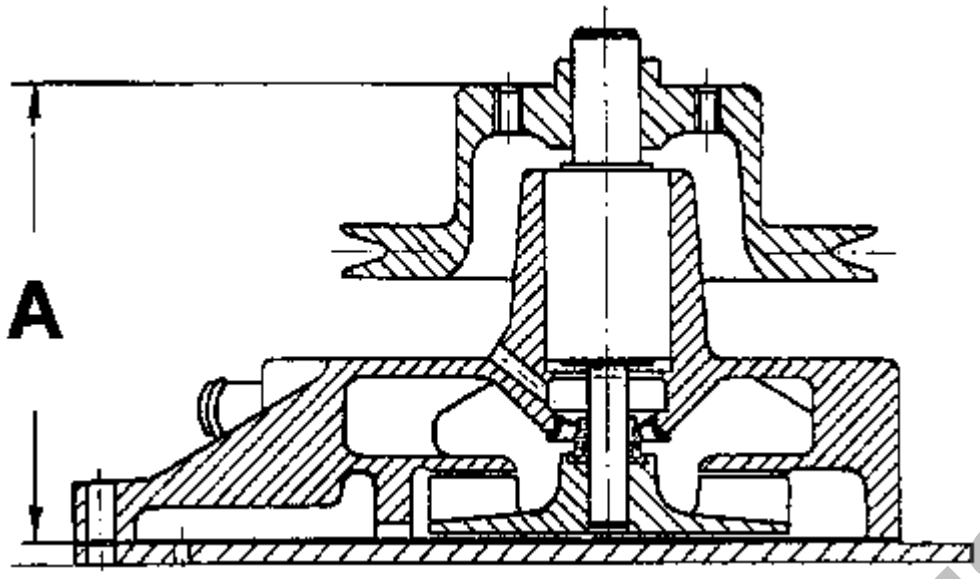
A JDG678 Valve Stem Seal Installer
B Stem Seal
C Valve Guide Tower

Using JDG678 Valve Stem Seal Installer (A), slide seal (B) over valve stem and onto valve guide tower (C).

[4] -

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



Dimension ”A”

Place pump housing under a press and support on impeller end of shaft.

[7] - Install pulley or hub to the specified dimension ”A”. (See Specifications in this group.)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Machine Pressure Plates

LEGEND:

A PTO Clutch Pressure Plate
B Traction Clutch Front Pressure Plate
C Traction Clutch Rear Pressure Plate

Machine drive surfaces of pressure plates, if necessary, until surface is free of scores, cracks and heat discoloration.

[17] - Measure the thickness of pressure plates at dimensions (A, B and C). Replace parts that are not within specification.

Item	Measurement	Specification
Clutch Pressure Plate		
PTO Clutch Pressure Plate	Thickness	16.2 mm (0.638 in.) minimum
Traction Clutch Front Pressure Plate	Thickness	26.7 mm (1.051 in.) minimum
Traction Clutch Rear Pressure Plate	Thickness	15.8 mm (0.622 in.) minimum

[18] -

→NOTE:

PTO LEVER is only available as an assembly.

Traction clutch finger assemblies are serviced as separate kits. Kits are available through the parts catalog.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

be stable on the floor jack when cap screws (B) are removed.

[6] - Disconnect hydraulic hoses (A). Close all openings using caps and plugs.

[7] - Remove cap screws (B) and lower axle.

[8] - Make repairs as necessary.

[9] - Raise axle into position and install cap screws. Tighten cap screws to specification.

Item	Measurement	Specification
MFWD Axle-to-Frame Cap Screw	Torque	650 N˙m (479 lb-ft)

[10] - Connect hydraulic hoses.

[11] - Install front wheels. Tighten wheel nuts to specification.

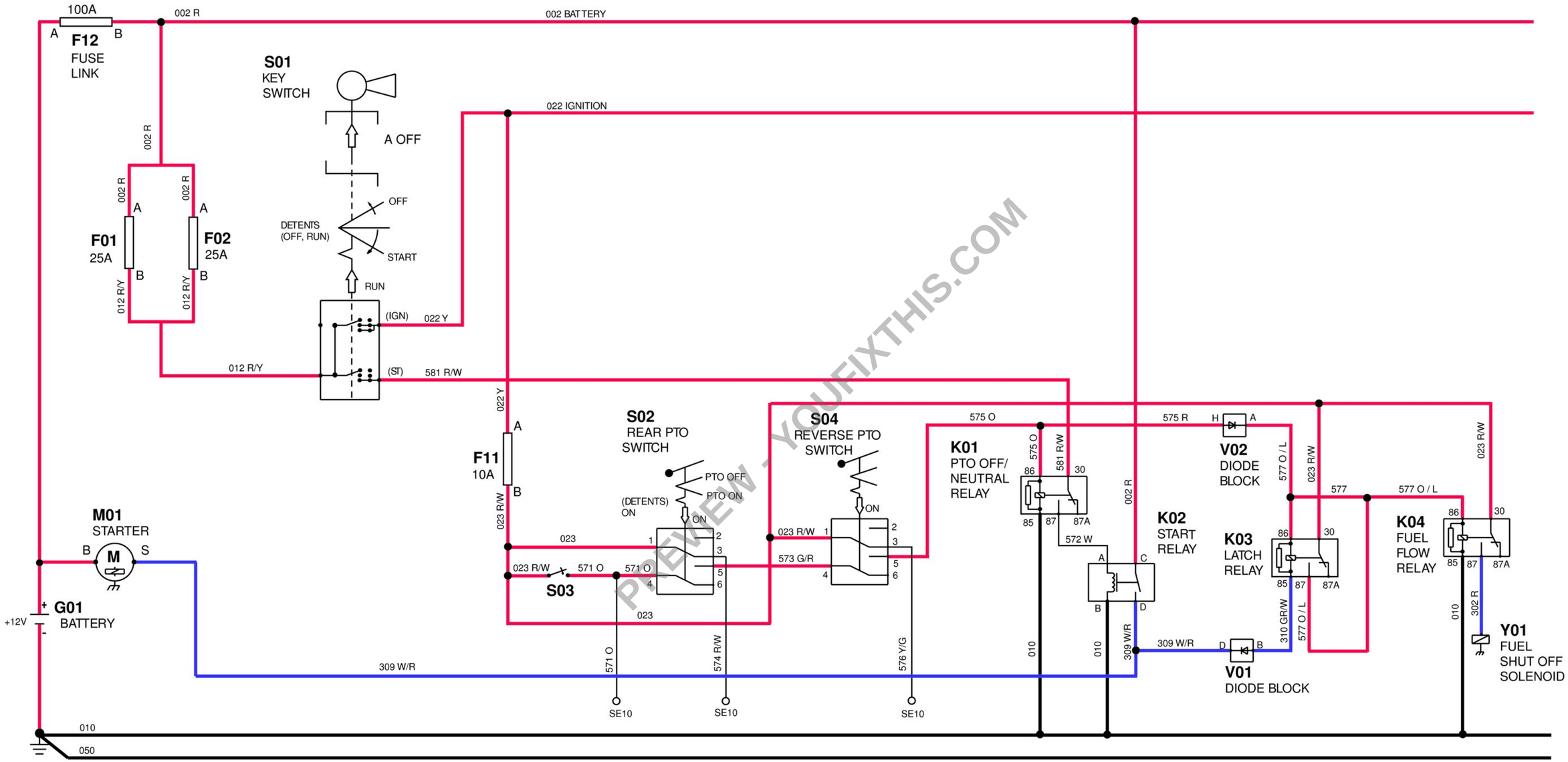
Item	Measurement	Specification
MFWD Front Wheel Nut	Torque	300 N˙m (220 lb-ft)

[12] - Remove all supports and lower tractor.

[13] - Install drive shaft. (See Remove, Inspect and Install MFWD Drive Shaft in this Group.)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



PREVIEW - YOUFIXTHIS.COM

Ⓐ Ⓑ Ⓒ

Download full manual at youfixthis.com

Connector Layout and Wire Connections for X04

Connector Layout and Wire Connections for X04			
No.	Circuit	Color	Gauge
1	115	Grey	1.00
2	136	Yellow/Light Blue	1.50
3	118	Brown	1.00
4	125	Yellow	1.00
5	145	Violet	2.00
6	303	Orange/White	0.75
7	023	Red/White	1.50
8	571	Orange	0.50
9	574	Red/White	0.50
10	575	Red	1.00
11	576	Yellow/Green	0.50
12	537	Purple/White	1.00
13	150	Black	1.50
14	—	—	—
15	—	—	—
16	—	—	—

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

The differential transmits power from the differential drive shaft to the final drive pinion shafts. It allows each wheel to rotate at varying speeds and still pull its own load.

MAJOR COMPONENTS:

- Differential Drive Shaft
- Differential Ring Gear
- Differential Carrier Assembly
- Final Drive Pinion Shafts
- Final Drive Ring Gear
- Planetary Carrier Assembly
- Axle Shaft

THEORY OF OPERATION:

Power from the differential drive shaft (A) is transmitted through the differential assembly to the final drive pinion shaft (F). The final drive pinion shaft is in mesh with the three small gears on the planetary carrier assembly (D). These small gears walk around the inside of final drive ring gear (G). The result is rotation of the axle shaft (E).

The differential assembly is a ring gear (C) bolted to the carrier (I). Inside the carrier are two bevel gears (H) and four bevel pinions (B).

When the tractor turns sharply, one axle is held stationary. The result is that the bevel pinions rotate on their own axis and walk around the stationary bevel gears. The turning ring gear transmits power through the pinion to the opposite bevel gear.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 24 of 1713 pages

The full manual includes:

- All 1713 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

John Deere 5310, 5210, 5050E, 5055E, 5060E, 5065E, 5075E Repair Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual