# John Deere 470GLC (SN.from D473001) Excavator Operation & Test Technical Service Manual (TM14154X19)

## 470GLC Excavator Operation and Test

(PIN: 1FF470GX_ _D473001—)

JOHN HARE

COLLECTION

## OPERATION & TEST TECHNICAL MANUAL

## 470GLC Excavator (PIN: 1FF470GX_ _D473001—)

TM14154X19 01DEC18 (ENGLISH)

For complete service information also see:





Worldwide Construction and
Foresty Division

**Covers:** 470GLC,1FF470GX_,_D473001)

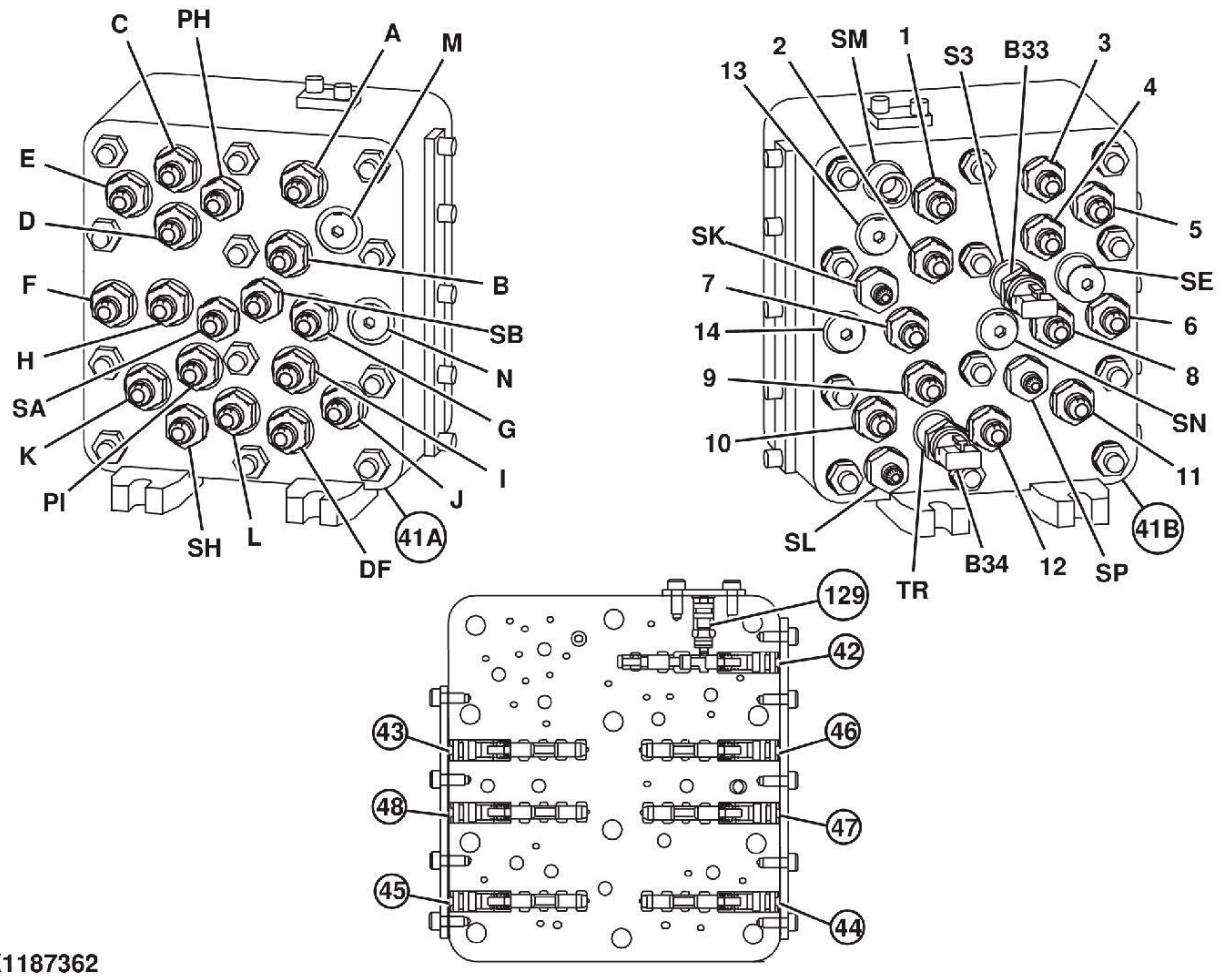
**Type:** Service Manual
**Language:** English
**Pages:** 618
**Format:** PDF
**Features:** Bookmarked, searchable, printable
**Compatibility:** Windows/Mac/Tablet/Mobile
This service manual contains important information for the maintenance, troubleshooting and servicing of the **John Deere 470GLC (SN.from D473001) Excavator Operation & Test Technical Service Manual (TM14154X19)**

In this manual you will find detailed specifications, illustrations, schematics, diagrams and step-by-step procedures to properly service and diagnose the machine to the manufacturer's standards.

**Contents:**
- General Information
- Specifications
- Serial Number Location
- Engine Specifications
- Engine Diagnostics
- Engine Tests and Adjustments
- Engine Repair
- Power Train
- Transmission
- Axles
- Differential
- PTO
- Hydraulic System
- Electrical System
- Electrical Tests and Diagnostics
- Wiring Diagram / Schematic
- Ignition and Charging
- Steering
- Brakes
- Wheels
- Operator's Platform
- Body Panels
- Disassembly and Assembly
- Diagnostics, Tests and Adjustments
- Troubleshooting
- and much more...

Please note this manual is in **downloadable PDF format only.** If you have any questions about this product or would like to request sample pages, please contact us and reference the product name or SKU.

## Pilot Signal Manifold Operation




**TX1187362**

TX1187362-UN: Pilot Signal Manifold Pilot Valves and Ports

LEGEND:

**1, A-Boom Up**
**2, B-Boom Down**
**3, C-Arm Out**
**4, D-Arm In**
**5, E-Swing Left**
**6, F-Swing Right**
**7, G-Bucket Curl**
**8, H-Bucket Dump**
**9, I-Left Travel Forward**
**10, J-Left Travel Reverse**
**11, K-Right Travel Forward**
**12, L-Right Travel Reverse**
**13, M-Plug (auxiliary)**
**14, N-Plug (auxiliary)**
**41A-Pilot Control Valve Side of Pilot Signal Manifold**
**41B-Control Valve Side of Pilot Signal Manifold**
**42-Boom Down Shockless Valve**
**43-Arm 1 Flow Rate Pilot Valve (port SE)**
**44-Travel Flow Combiner Pilot Valve (port SL)**
**45-Swing Park Brake Release Pilot Valve (port SH)**
**46-Bucket Flow Rate Pilot Valve (port SK)**
**47-Pump 2 Flow Rate Pilot Valve (port SB)**
**48-Pump 1 Flow Rate Pilot Valve (port SA)**
**129-Orifice**
**B33-Swing Pressure Sensor (marked S3)**
**B34-Travel Pressure Sensor (marked TR)**
**DF-To Hydraulic Oil Tank**
**PH-To Pilot Shutoff Solenoid Valve Manifold (port HT)**
**PI-From Pilot Shutoff Solenoid Valve Manifold (port A4)**
**S3-B33 Swing Pressure Sensor**
**SA-To Pilot Check Valve Manifold (port SA)**
**SB-To Pilot Check Valve Manifold (port SB)**
**SE-To Arm 1 Flow Rate Control Valve**
**SH-To Right and Left Swing Park Brake**
**SK-Plug**
**SL-To Travel Flow Combiner Valve**
**SM-To Hydraulic Oil Tank**
**SN-Plug (not used)**
**SP-To Solenoid Valve Manifold (port DP)**
**TR-B34 Travel Pressure Sensor**

NOTE:

The numbers 1—14 and letters A—N, DF, TR, S3, SA, SB, SE, SH, SK, SL, SM, SN, SP, PH, and PI are next to the respective ports on the pilot signal manifold.

The pilot signal manifold is in the pilot system between the pilot control valves and the control valve and regulators. The manifold receives a pilot signal from the pilot control valves and sends the signal on multiple paths. One path is used to shift the spools in the control valve and the other routes pilot oil through pump 2 flow rate pilot valve (47) and pump 1 flow rate pilot valve (48). This is done simultaneously so there is little lag between operation of the pilot control valves, pump stroke, and function movement. The manifold also houses additional pilot valves that provide pilot oil for various other functions.

See Hydraulic System Schematic. (Group 9025-15.)