

821E Wheel Loader

Service Manual

Part Number

71114025

Ist Edition

English 02/2016





SERVICE MANUAL

**821E Tier3 Z-bar. [N7AE13000 -]
821E ZBAR SUGAR**

Link Product / Engine

Product	Market Product	Engine
821E Tier3 Z-bar. [N7AE13000 -]	Latin America	F4HE9684E*J100
821E ZBAR SUGAR	Latin America	F4HE9684E*J100

Contents

INTRODUCTION

Engine.....	10
[10.001] Engine and crankcase	10.1
[10.400] Engine cooling system	10.2
[10.310] Aftercooler.....	10.3
Transmission.....	21
[21.113] Powershift transmission	21.1
[21.135] Powershift transmission external controls.....	21.2
[21.155] Powershift transmission internal components.....	21.3
[21.145] Gearbox internal components.....	21.4
Front axle system	25
[25.100] Powered front axle	25.1
[25.102] Front bevel gear set and differential	25.2
[25.108] Final drive hub, steering knuckles, and shafts	25.3
Rear axle system.....	27
[27.100] Powered rear axle.....	27.1
[27.106] Rear bevel gear set and differential.....	27.2
[27.120] Planetary and final drives	27.3
Brakes and controls	33
[33.202] Hydraulic service brakes	33.1
Hydraulic systems.....	35
[35.000] Hydraulic systems.....	35.1
[35.359] Main control valve.....	35.2
[35.701] Front loader arm hydraulic system.....	35.3
Steering.....	41
[41.910] Auxiliary steering	41.1

Wheels	44
[44.511] Front wheels	44.1
Cab climate control	50
[50.200] Air conditioning	50.1
Electrical systems	55
[55.000] Electrical system	55.1
[55.100] Harnesses and connectors	55.2
[55.015] Engine control system	55.3
[55.201] Engine starting system	55.4
[55.301] Alternator	55.5
[55.302] Battery	55.6
[55.202] Cold start aid	55.7
[55.011] Fuel tank system	55.8
[55.012] Engine cooling system	55.9
[55.519] Cab brake controls	55.10
[55.030] Service brake electrical system	55.11
[55.031] Parking brake electrical system	55.12
[55.512] Cab controls	55.13
[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls	55.14
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system	55.15
[55.047] Steering control system	55.16
[55.524] Cab controls (Lift arm, Boom, Dipper, Bucket)	55.17
[55.415] Loader arm and bucket control system	55.18
[55.518] Wiper and washer system	55.19
[55.510] Cab or platform harnesses and connectors	55.20
[55.408] Warning indicators, alarms, and instruments	55.21
[55.DTC] FAULT CODES	55.22
Platform, cab, bodywork, and decals	90

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.
You can download the most
perfect and complete manual in
the world immediately.

Our support email:
ebooklibonline@outlook.com