

**PUMA® 185**  
**PUMA® 200**  
**PUMA® 220**  
**PUMA® 185 CVT**  
**PUMA® 200 CVT**  
**PUMA® 220 CVT**  
**PUMA® 240 CVT**  
**Tier 4B (final)**  
Tractor

## SERVICE MANUAL

**Part number 47936452**

1<sup>st</sup> edition English

February 2016

**CASE II**  
AGRICULTURE



## **SERVICE MANUAL**

**PUMA® 185 CVT , PUMA® 185 , PUMA® 200 CVT , PUMA® 200 , PUMA® 220  
CVT , PUMA® 220 , PUMA® 240 CVT**

# Link Product / Engine

---

<b>Product</b>	<b>Market Product</b>	<b>Engine</b>
PUMA® 185 CVT	North America	F4DFE613K*B006
PUMA® 200 CVT	North America	F4DFE613J*B006
PUMA® 220 CVT	North America	F4DFE613H*B003
PUMA® 240 CVT	North America	F4DFE613B*B006
PUMA® 185	North America	F4DFE613K*B006
PUMA® 200	North America	F4DFE613J*B006
PUMA® 220	North America	F4DFE613H*B003

# Contents

---

## INTRODUCTION

<b>Engine</b> .....	<b>10</b>
[10.001] Engine and crankcase .....	10.1
[10.216] Fuel tanks .....	10.2
[10.218] Fuel injection system.....	10.3
[10.254] Intake and exhaust manifolds and muffler .....	10.4
[10.500] Selective Catalytic Reduction (SCR) exhaust treatment.....	10.5
[10.400] Engine cooling system .....	10.6
[10.414] Fan and drive .....	10.7
[10.408] Oil cooler and lines.....	10.8
[10.101] Cylinder heads .....	10.9
<b>Clutch</b> .....	<b>18</b>
[18.112] Slip clutch or flywheel damper .....	18.1
<b>Transmission</b> .....	<b>21</b>
[21.113] Powershift transmission .....	21.1
[21.155] Powershift transmission internal components.....	21.2
[21.160] Creeper .....	21.3
[21.166] Overdrive.....	21.4
[21.504] Continuously Variable Transmission (CVT) .....	21.5
[21.505] Continuously Variable Transmission (CVT) external controls.....	21.6
[21.507] Continuously Variable Transmission (CVT) internal components.....	21.7
[21.506] Continuously Variable Transmission (CVT) lubrication system .....	21.8
[21.109] Transmission cooler and lines.....	21.9
<b>Four-Wheel Drive (4WD) system</b> .....	<b>23</b>
[23.202] Electro-hydraulic control .....	23.1
[23.314] Drive shaft.....	23.2

<b>Front axle system .....</b>	<b>25</b>
[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
[25.122] Axle suspension control .....	25.4
<b>Rear axle system.....</b>	<b>27</b>
[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
[27.126] Spur gear and final drives.....	27.4
<b>Power Take-Off (PTO).....</b>	<b>31</b>
[31.101] Rear mechanical control .....	31.1
[31.104] Rear electro-hydraulic control.....	31.2
[31.114] Two-speed rear Power Take-Off (PTO) .....	31.3
[31.116] Three-speed rear Power Take-Off (PTO) .....	31.4
[31.119] Four-speed rear Power Take-Off (PTO).....	31.5
[31.146] Front Power Take-Off (PTO) .....	31.6
<b>Brakes and controls .....</b>	<b>33</b>
[33.202] Hydraulic service brakes .....	33.1
[33.110] Parking brake or parking lock .....	33.2
[33.220] Trailer brake hydraulic control.....	33.3
[33.224] Trailer brake pneumatic control .....	33.4
[33.350] Anti-lock Brake System (ABS) .....	33.5
<b>Hydraulic systems.....</b>	<b>35</b>
[35.000] Hydraulic systems.....	35.1
[35.300] Reservoir, cooler, and filters.....	35.2
[35.106] Variable displacement pump .....	35.3
[35.102] Pump control valves.....	35.4

[35.105] Charge pump.....	35.5
[35.230] Priority valves .....	35.6
[35.322] Regulated/Low pressure system.....	35.7
[35.204] Remote control valves .....	35.8
[35.220] Auxiliary hydraulic pump .....	35.9
[35.114] Three-point hitch control valve .....	35.10
[35.162] Front hitch cylinders and lines .....	35.11
<b>Pneumatic system .....</b>	<b>36</b>
[36.100] Pneumatic system.....	36.1
<b>Hitches, drawbars, and implement couplings.....</b>	<b>37</b>
[37.120] Rear three-point hitch linkage.....	37.1
[37.110] Rear three-point hitch .....	37.2
[37.162] Front hitch.....	37.3
[37.106] Automatic pickup hitch .....	37.4
<b>Frames and ballasting .....</b>	<b>39</b>
[39.100] Frame .....	39.1
<b>Steering.....</b>	<b>41</b>
[41.101] Steering control .....	41.1
[41.106] Tie rods.....	41.2
[41.200] Hydraulic control components.....	41.3
[41.216] Cylinders .....	41.4
[41.432] Autoguidance steering .....	41.5
<b>Wheels .....</b>	<b>44</b>
[44.511] Front wheels.....	44.1
[44.520] Rear wheels.....	44.2
<b>Cab climate control .....</b>	<b>50</b>
[50.100] Heating.....	50.1

[50.104] Ventilation .....	50.2
[50.200] Air conditioning .....	50.3
<b>Electrical systems .....</b>	<b>55</b>
[55.000] Electrical system .....	55.1
[55.100] Harnesses and connectors .....	55.2
[55.640] Electronic modules .....	55.3
[55.015] Engine control system .....	55.4
[55.301] Alternator .....	55.5
[55.302] Battery .....	55.6
[55.011] Fuel tank system .....	55.7
[55.010] Fuel injection system .....	55.8
[55.988] Selective Catalytic Reduction (SCR) electrical system .....	55.9
[55.513] Cab transmission controls .....	55.10
[55.020] Transmission speed sensors .....	55.11
[55.021] Transmission pressure sensors .....	55.12
[55.022] Transmission temperature sensors .....	55.13
[55.023] Transmission position sensors .....	55.14
[55.610] Ground speed control .....	55.15
[55.045] Front axle control system .....	55.16
[55.048] Rear Power Take-Off (PTO) control system .....	55.17
[55.049] Front Power Take-Off (PTO) control system .....	55.18
[55.031] Parking brake electrical system .....	55.19
[55.035] Remote control valve electric control .....	55.20
[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls .....	55.21
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system .....	55.22
[55.047] Steering control system .....	55.23
[55.523] Cab hitch controls .....	55.24
[55.130] Rear three-point hitch electronic control system .....	55.25
[55.911] Global Positioning System (GPS) .....	55.26

[55.408] Warning indicators, alarms, and instruments .....	55.27
[55.350] Anti-lock Brake System (ABS) electrical system .....	55.28
[55.512] Cab controls .....	55.29
[55.030] Service brake electrical system .....	55.30
[55.510] Cab or platform harnesses and connectors .....	55.31
[55.DTC] FAULT CODES .....	55.32
<b>Platform, cab, bodywork, and decals .....</b>	<b>90</b>
[90.100] Engine hood and panels .....	90.1
[90.150] Cab .....	90.2



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](mailto:ebooklibonline@outlook.com)