

# SERVICE MANUAL

## T4.80F / T4.80V / T4.90F / T4.90V T4.100F / T4.100V / T4.110F / T4.110V Tier 4A (interim) Tractor

*T4.80F with cab PIN ZGLH01657 and above; T4.80F without cab PIN ZGLH01068 and above;  
T4.80V with cab PIN ZFLJ01935 and above; T4.80V without cab PIN ZFLJ02353 and above;  
T4.90F with cab PIN ZGLH01601 and above; T4.90F without cab PIN ZGLH00695 and above;  
T4.90V with cab PIN ZGLJ03134 and above; T4.90V without cab PIN ZGLJ02059 and above;  
T4.100F with cab PIN ZGLH00384 and above; T4.100F without cab PIN ZGLH00644 and above;  
T4.100V with cab PIN ZGLJ02249 and above; T4.100V without cab PIN ZGLJ02246 and above;  
T4.110F with cab PIN ZFLH00040 and above; T4.110F without cab PIN ZFLH02101 and above;  
T4.110V with cab PIN ZGLJ01295 and above; T4.110V without cab PIN ZFLJ00805 and above*

**Part number 51430128**

1<sup>st</sup> edition English  
December 2017





## **SERVICE MANUAL**

**T4.100F With cab [ZGLH00384 - ], T4.100F Without cab [ZGLH00644 - ],  
T4.100V With cab [ZGLJ02249 - ], T4.100V Without cab [ZGLJ02246 - ],  
T4.110F With cab [ZFLH00040 - ], T4.110F Without cab [ZFLH02101 - ],  
T4.110V With cab [ZGLJ01295 - ], T4.110V Without cab [ZFLJ00805 - ],  
T4.80F With cab [ZGLH01657 - ], T4.80F Without cab [ZGLH01068 - ], T4.80V  
With cab [ZFLJ01935 - ], T4.80V Without cab [ZFLJ02353 - ], T4.90F With  
cab [ZGLH01601 - ], T4.90F Without cab [ZGLH00695 - ], T4.90V With cab  
[ZGLJ03134 - ], T4.90V Without cab [ZGLJ02059 - ]**

## Link Product / Engine

Product	Market Product	Engine
T4.100F With cab [ZGLH00384 - ]	North America	F5DFL413K*A010
T4.100F Without cab [ZGLH00644 - ]	North America	F5DFL413K*A010
T4.110F With cab [ZFLH00040 - ]	North America	F5DFL413J*A011
T4.110F Without cab [ZFLH02101 - ]	North America	F5DFL413J*A011
T4.80F With cab [ZGLH01657 - ]	North America	F5DFL413A*E009
T4.80F Without cab [ZGLH01068 - ]	North America	F5DFL413A*E009
T4.90F With cab [ZGLH01601 - ]	North America	F5DFL413L*A007
T4.90F Without cab [ZGLH00695 - ]	North America	F5DFL413L*A007
T4.100V With cab [ZGLJ02249 - ]	North America	F5DFL413K*A010
T4.100V Without cab [ZGLJ02246 - ]	North America	F5DFL413K*A010
T4.110V With cab [ZGLJ01295 - ]	North America	F5DFL413J*A011
T4.110V Without cab [ZFLJ00805 - ]	North America	F5DFL413J*A011
T4.80V With cab [ZFLJ01935 - ]	North America	F5DFL413A*E009
T4.80V Without cab [ZFLJ02353 - ]	North America	F5DFL413A*E009
T4.90V With cab [ZGLJ03134 - ]	North America	F5DFL413L*A007
T4.90V Without cab [ZGLJ02059 - ]	North America	F5DFL413L*A007

# Contents

---

## INTRODUCTION

<b>Engine</b> .....	<b>10</b>
[10.001] Engine and crankcase .....	10.1
[10.114] Pump drives .....	10.2
[10.216] Fuel tanks .....	10.3
[10.206] Fuel filters .....	10.4
[10.220] Throttle linkage.....	10.5
[10.202] Air cleaners and lines .....	10.6
[10.254] Intake and exhaust manifolds and muffler .....	10.7
[10.501] Exhaust Gas Recirculation (EGR) exhaust treatment.....	10.8
[10.400] Engine cooling system .....	10.9
[10.414] Fan and drive .....	10.10
[10.310] Aftercooler.....	10.11
[10.304] Engine lubrication system.....	10.12
<b>Clutch</b> .....	<b>18</b>
[18.100] Clutch mechanical release control .....	18.1
[18.104] Clutch hydraulic release control.....	18.2
[18.110] Clutch and components .....	18.3
<b>Transmission</b> .....	<b>21</b>
[21.114] Mechanical transmission .....	21.1
[21.130] Mechanical transmission external controls.....	21.2
[21.100] Mechanical transmission hydraulic components .....	21.3
[21.140] Mechanical transmission internal components.....	21.4
[21.112] Power shuttle transmission.....	21.5
[21.134] Power shuttle transmission external controls .....	21.6
[21.104] Power shuttle transmission hydraulic components .....	21.7
[21.154] Power shuttle transmission internal components .....	21.8

[21.145] Gearbox internal components.....	21.9
[21.160] Creeper .....	21.10
[21.162] Reverser .....	21.11
[21.168] Hi-Lo unit .....	21.12
[21.109] Transmission cooler and lines.....	21.13
[21.118] Transmission/Rear drive .....	21.14
[21.182] Differential.....	21.15
<b>Four-Wheel Drive (4WD) system .....</b>	<b>23</b>
[23.202] Electro-hydraulic control .....	23.1
[23.304] Four-Wheel Drive (4WD) gearbox .....	23.2
[23.314] Drive shaft.....	23.3
<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
[25.310] Final drives .....	25.4
[25.400] Non-powered front axle .....	25.5
<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
[31.142] Front Power Take-Off (PTO) control .....	31.2
[31.146] Front Power Take-Off (PTO) .....	31.3
<b>Brakes and controls .....</b>	<b>33</b>

[33.202] Hydraulic service brakes .....	33.1
[33.110] Parking brake or parking lock .....	33.2
<b>Hydraulic systems.....</b>	<b>35</b>
[35.000] Hydraulic systems.....	35.1
[35.104] Fixed displacement pump.....	35.2
[35.204] Remote control valves .....	35.3
[35.100] Main lift system.....	35.4
[35.114] Three-point hitch control valve .....	35.5
[35.160] Front hitch controls and lines .....	35.6
[35.162] Front hitch cylinders and lines .....	35.7
<b>Hitches, drawbars, and implement couplings.....</b>	<b>37</b>
[37.110] Rear three-point hitch .....	37.1
[37.162] Front hitch.....	37.2
[37.166] Front hitch linkage.....	37.3
<b>Frames and ballasting .....</b>	<b>39</b>
[39.140] Ballasts and supports .....	39.1
<b>Steering.....</b>	<b>41</b>
[41.101] Steering control .....	41.1
[41.200] Hydraulic control components.....	41.2
[41.216] Cylinders .....	41.3
<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
[50.300] Cab pressurizing system.....	50.4

Electrical systems .....	55
[55.100] Harnesses and connectors .....	55.1
[55.525] Cab engine controls .....	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
[55.011] Fuel tank system .....	55.7
[55.010] Fuel injection system .....	55.8
[55.014] Engine intake and exhaust system .....	55.9
[55.989] Exhaust Gas Recirculation (EGR) electrical system .....	55.10
[55.640] Electronic modules .....	55.11
[55.513] Cab transmission controls .....	55.12
[55.024] Transmission control system .....	55.13
[55.021] Transmission pressure sensors .....	55.14
[55.541] Cab Front-Wheel Drive (FWD) controls .....	55.15
[55.040] Four-Wheel Drive (4WD) control system .....	55.16
[55.542] Cab axle controls .....	55.17
[55.522] Cab Power Take-Off (PTO) controls .....	55.18
[55.048] Rear Power Take-Off (PTO) control system .....	55.19
[55.049] Front Power Take-Off (PTO) control system .....	55.20
[55.030] Service brake electrical system .....	55.21
[55.031] Parking brake electrical system .....	55.22
[55.512] Cab controls .....	55.23
[55.035] Remote control valve electric control .....	55.24
[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls .....	55.25
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system .....	55.26
[55.523] Cab hitch controls .....	55.27

[55.130] Rear three-point hitch electronic control system .....	55.28
[55.518] Wiper and washer system.....	55.29
[55.404] External lighting .....	55.30
[55.405] External lighting switches and relays .....	55.31
[55.514] Cab lighting .....	55.32
[55.408] Warning indicators, alarms, and instruments .....	55.33
[55.DTC] FAULT CODES.....	55.34
<b>Platform, cab, bodywork, and decals.....</b>	<b>90</b>
[90.150] Cab.....	90.1
[90.151] Cab interior.....	90.2
[90.160] Cab interior trim and panels.....	90.3
[90.154] Cab doors and hatches .....	90.4
[90.156] Cab windshield and windows .....	90.5
[90.110] Operator platform less cab .....	90.6
[90.118] Protections and footboards.....	90.7
[90.114] Operator protections .....	90.8
[90.120] Mechanically-adjusted operator seat.....	90.9
[90.124] Pneumatically-adjusted operator seat.....	90.10
[90.100] Engine hood and panels .....	90.11



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)