

QUANTUM® 80F
QUANTUM® 90F
QUANTUM® 100F
QUANTUM® 110F
Tractor

PIN HLRQ010FEJLU00031 and above

SERVICE MANUAL

Part number 51526024

English

November 2018



Link Product / Engine

Product	Market Product	Engine
Quantum® 100F With cab [HLRQ010FEJLU00031 -]	Latin America	F5DFL413K*C001
Quantum® 100F With cab [HLRQ010FEJLU00031 -]	Australia New Zealand	F5DFL413K*C001
Quantum® 100F Without cab [HLRQ010F*JLU***** -]	Australia New Zealand	F5DFL413K*C001
Quantum® 100F Without cab [HLRQ010F*JLU***** -]	Latin America	F5DFL413K*C001
Quantum® 110F With cab [HLRQ011FCHLU05201 -]	Latin America	F5DFL413J*C002
Quantum® 110F With cab [HLRQ011FCHLU05201 -]	Australia New Zealand	F5DFL413J*C002
Quantum® 110F Without cab [HLRQ011F*JLU***** -]	Latin America	F5DFL413J*C002
Quantum® 110F Without cab [HLRQ011F*JLU***** -]	Australia New Zealand	F5DFL413J*C002
Quantum® 80F With cab [HLRQ080FKHLU10308 -]	Australia New Zealand	F5DFL413B*H001
Quantum® 80F With cab [HLRQ080FKHLU10308 -]	Latin America	F5DFL413B*H001
Quantum® 80F Without cab [HLRQ080FJJLU00045 -]	Latin America	F5DFL413B*H001
Quantum® 80F Without cab [HLRQ080FJJLU00045 -]	Australia New Zealand	F5DFL413B*H001
Quantum® 90F With cab [HLRQ090FTHLU07802 -]	Australia New Zealand	F5DFL413L*C001
Quantum® 90F With cab [HLRQ090FTHLU07802 -]	Latin America	F5DFL413L*C001
Quantum® 90F Without cab [HLRQ090F*JLU***** -]	Australia New Zealand	F5DFL413L*C001
Quantum® 90F Without cab [HLRQ090F*JLU***** -]	Latin America	F5DFL413L*C001

Contents

INTRODUCTION

Engine	10
[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
[10.202] Air cleaners and lines	10.5
[10.254] Intake and exhaust manifolds and muffler	10.6
[10.501] Exhaust Gas Recirculation (EGR) exhaust treatment.....	10.7
[10.400] Engine cooling system	10.8
[10.414] Fan and drive	10.9
[10.310] Aftercooler.....	10.10
[10.304] Engine lubrication system.....	10.11
Clutch	18
[18.100] Clutch mechanical release control	18.1
[18.104] Clutch hydraulic release control.....	18.2
[18.110] Clutch and components	18.3
Transmission	21
[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
[21.160] Creeper	21.9

[21.162] Reverser	21.10
[21.168] Hi-Lo unit	21.11
[21.109] Transmission cooler and lines.....	21.12
[21.118] Transmission/Rear drive	21.13
[21.182] Differential.....	21.14
Four-Wheel Drive (4WD) system	23
[23.202] Electro-hydraulic control	23.1
[23.304] Four-Wheel Drive (4WD) gearbox	23.2
[23.314] Drive shaft.....	23.3
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
[25.310] Final drives	25.4
[25.400] Non-powered front axle	25.5
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
[27.126] Spur gear and final drives.....	27.4
Power Take-Off (PTO).....	31
[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
Brakes and controls	33
[33.202] Hydraulic service brakes	33.1
[33.110] Parking brake or parking lock	33.2

[33.220] Trailer brake hydraulic control.....	33.3
[33.204] Front axle brake.....	33.4
Hydraulic systems.....	35
[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
[35.124] Three-point hitch hydraulic adjustment.....	35.6
[35.160] Front hitch controls and lines.....	35.7
[35.162] Front hitch cylinders and lines.....	35.8
Hitches, drawbars, and implement couplings.....	37
[37.110] Rear three-point hitch.....	37.1
[37.120] Rear three-point hitch linkage.....	37.2
[37.162] Front hitch.....	37.3
[37.166] Front hitch linkage.....	37.4
Frames and ballasting.....	39
[39.140] Ballasts and supports.....	39.1
Steering.....	41
[41.101] Steering control.....	41.1
[41.200] Hydraulic control components.....	41.2
Wheels.....	44
[44.511] Front wheels.....	44.1
[44.520] Rear wheels.....	44.2
Cab climate control.....	50
[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 and switches	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
[55.519] Cab brake controls	55.21
[55.030] Service brake electrical system	55.22
[55.031] Parking brake electrical system	55.23
[55.032] Trailer brake electrical system	55.24
[55.512] Cab controls.....	55.25
[55.035] Remote control valve electric control	55.26

[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls.....	55.27
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system.....	55.28
[55.523] Cab hitch controls	55.29
[55.130] Rear three-point hitch electronic control system	55.30
[55.518] Wiper and washer system.....	55.31
[55.404] External lighting	55.32
[55.405] External lighting switches and relays	55.33
[55.514] Cab lighting	55.34
[55.510] Cab or platform harnesses and connectors.....	55.35
[55.408] Warning indicators, alarms, and instruments	55.36
[55.DTC] FAULT CODES.....	55.37
Accessories	88
[88.100] Accessories	88.1
Platform, cab, bodywork, and decals.....	90
[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
[90.110] Operator platform less cab	90.5
[90.118] Protections and footboards.....	90.6
[90.114] Operator protections	90.7
[90.120] Mechanically-adjusted operator seat.....	90.8
[90.124] Pneumatically-adjusted operator seat.....	90.9
[90.100] Engine hood and panels	90.10

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