SKYJACK

SERVICE MANUAL

SJ61T, SJ66T

TELESCOPIC BOOMS



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ANSI/CSA, CE, AS

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Table of Contents

Section 1 – Scheduled Maintenance 13

1.1 Read and Heed 13

1.1-1 Mobile Elevating Work Platform (MEWP) Definition 13

1.1-2 Purpose of Equipment 13

1.1-3 Use of Equipment 13

1.1-4 Manual 13

1.1-5 Service Policy and Warranty 13

1.1-6 Operator Safety Reminders, Warnings and Precautions 13

1.2 Maintenance and Service 14

1.2-1 Maintenance Inspection Schedule 14

1.2-2 Owner's Annual Inspection Record 14

1.2-3 Replacement Parts 14

1.2-4 Maintenance and Service Safety Tips. 14

1.2-5 Hydraulic System & Component Maintenance and Repair 15

1.2-6 Hydraulic Maintenance Hints 15

1.2-7 Railing Maintenance and Repair. 16

1.3 Scheduled Maintenance 17

1.3-1 Service Bulletins 17

1.3-2 Maintenance and Inspection 17

1.3-3 Maintenance Instructions 17

1.4 Owner's Annual Inspection Record 18

1.5 Pre-Delivery/Maintenance Inspection Checklist 19

1.6 Scheduled Maintenance Inspections 20

1.6-1 Electrical 20

1.6-2 Hydraulic 20

1.6-3 Manuals & Required Documents (B) 20

1.6-4 Labels (B) 20

1.6-5 Limit Switches (B) 21

1.6-6 Engine Compartment 21

1.6-7 Control Compartment 24

1.6-8 Base 26

1.6-9 Platform Assembly 28

1.6-10 Boom Assembly 29

1.6-11 Optional Equipment/Attachments 31

1.7 Function Tests 32

Section 2 – Maintenance Tables and Diagrams 33

2.1 Standard Hose Numbering System 33

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Service Manual | Publication 2... Order the manual at mid-west-tech.com >

2.2 MEWP Torque Specifications 35
2.3 Axle Torque Specifications 36
2.4 Torque Specifications for Fasteners (US) 37
2.5 Torque Specifications for Fasteners (Metric) 38
2.6 Torque Specifications for Hydraulic Couplings & Hoses 39
2.7 Axle Maintenance Intervals 40
2.8 Tire Specifications 41
2.9 Floor Loading Pressure 42
2.10 Hydraulic Specifications & Gear Oil 43
2.11 Specifications and Features - Dimensional Data 44
2.12 Specifications and Features - Performance & Speeds 45
2.13 Engine Specifications 46
2.14 Dimension and Reach Diagram - SJ61T 48
2.15 Dimension and Reach Diagram - SJ66T 49
2.16 Axle Oscillation Diagrams 50

Section 3 – System Component Identification and Schematics 51

3.1 Electrical Symbol Chart 52
3.2 Hydraulic Symbol Chart 53
3.3 Wire Number and Color Code 54
3.4 Wire Numbers and Color Codes - Additional 55
3.5 Hydraulic Parts List 56
3.6 Electrical Parts List 59
3.7 Rotary Manifold Port Identification 63
3.8 Brake Manifold Port Identification 64
3.9 System and Drive Pumps and Port Identifications 65
3.10 System Pump and Port Identifications 66
3.11 Drive Pump and Port Identifications 67
3.12 Drive Motors and Port Identifications 68
3.13 Platform Rotate Valve and Port Identification - SJ61T 69
3.14 Jib & Platform Rotate Valve and Port Identification - SJ66T 70
3.15 Main Manifold Port Identification 71
3.16 Main Manifold Electrical Component Identification 72
3.17 Main Manifold Hydraulic Component Identification 73
3.18 Generator Control Valves and Port Indentifcations 74
3.19 Main Harness Wiring Diagram 75
3.20 ECU Engine Wiring Diagram - Deutz 76
3.21 Glow Plug and EGR Harnesses - Deutz 77
3.22 Engine Interface Harness - Deutz TD2.9L 78
3.23 Harnesses 79
3.24 Platform Control Cables 80
3.25 Limit Switch Connections 81
3.26 Load Sensing Cable Connection - CE 82

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Service Manual | Publication 2... Order the manual at mid-west-tech.com >

3.27 Generator and Oil Cooler Harness Connections. 83
3.28 Generator Wire Kit Connections. 84
3.29 Generator Connection - 12 kW 85
3.30 SGE Schematic 86
3.31 SGE Platform Control Box Wiring. 87
3.32 Differential Lock Harness 88
3.33 Hydraulic Schematic - serial number 97 002 687 and above 89
3.34 Hydraulic Schematic - serial number 97 002 686 and below 90
3.35 Platform Controls Wiring - SJ61T ANSI/CSA - Deutz & Perkins 91
3.36 Platform Controls Wiring - SJ61T ANSI/CSA - Kubota 92
3.37 Platform Controls Wiring - SJ66T ANSI/CSA - Deutz & Perkins 93
3.38 Platform Controls Wiring - SJ66T ANSI/CSA - Kubota 94
3.39 Platform Controls Wiring - SJ66T CE - Deutz TCD2.2. 95
3.40 Platform Controls Wiring - SJ66T CE - Deutz TD2.9L & D2011. 96
3.41 Platform Controls Wiring - SJ66T AS - Deutz 97
3.42 Base Controls Wiring - SJ61T ANSI/CSA - Deutz TD2.9L - S/N 97 003 631 & above. 98
3.43 Base Controls Wiring - SJ61T ANSI/CSA - Deutz TD2.9L - S/N 97 003 630 & below. 99
3.44 Base Controls Wiring - SJ61T ANSI/CSA - Deutz TD2.9L with Positive Air Shut-Off Option - S/N 97 003 631 & above 100
3.45 Base Controls Wiring - SJ61T ANSI/CSA - Deutz TD2.9L with Positive Air Shut-Off Option - S/N 97 003 630 & below 101
3.46 Base Controls Wiring - SJ61T ANSI/CSA - Deutz D2011 - S/N 97 003 631 & above 102
3.47 Base Controls Wiring - SJ61T ANSI/CSA - Deutz D2011 - S/N 97 003 630 & below 103
3.48 Base Controls Wiring - SJ61T ANSI/CSA - Deutz D2011with Positive Air Shut-Off Option - S/N 97 003 631 & above 104
3.49 Base Controls Wiring - SJ61T ANSI/CSA - Deutz D2011 with Positive Air Shut-Off Option - S/N 97 003 630 & below 105
3.50 Base Controls Wiring - SJ61T ANSI/CSA - Perkins - S/N 97 003 631 & above. 106
3.51 Base Controls Wiring - SJ61T ANSI/CSA - Perkins - S/N 97 003 630 & below. 107
3.52 Base Controls Wiring - SJ61T ANSI/CSA - Kubota - S/N 97 003 631 & above 108
3.53 Base Controls Wiring - SJ61T ANSI/CSA - Kubota - S/N 97 003 630 & below 109
3.54 Base Controls Wiring - SJ66T ANSI/CSA - Deutz TD2.9L - S/N 97 003 631 & above. 110
3.55 Base Controls Wiring - SJ66T ANSI/CSA - Deutz TD2.9L - S/N 97 003 630 & below. 111
3.56 Base Controls Wiring - SJ66T ANSI/CSA - Deutz TD2.9L with Positive Air Shut-Off Option - S/N 97 003 631 & above 112
3.57 Base Controls Wiring - SJ66T ANSI/CSA - Deutz TD2.9L with Positive Air Shut-Off Option - S/N 97 003 630 & below 113
3.58 Base Controls Wiring - SJ66T ANSI/CSA - Deutz D2011 - S/N 97 003 631 & above 114
3.59 Base Controls Wiring - SJ66T ANSI/CSA - Deutz D2011 - S/N 97 003 630 & below 115
3.60 Base Controls Wiring - SJ66T ANSI/CSA - Deutz D2011 with Positive Air Shut-Off Option - S/N 97 003 631 & above 116
3.61 Base Controls Wiring - SJ66T ANSI/CSA - Deutz D2011 with Positive Air Shut-Off Option - S/N 97 003 630 & below 117
3.62 Base Controls Wiring - SJ66T ANSI/CSA - Perkins 2.2TA - S/N 97 003 631 & above 118

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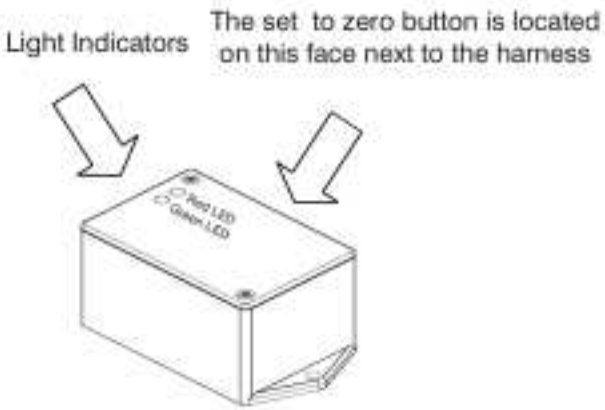
Table 2.13 Engine Specifications

			SJ61T & SJ66T
Deutz TD2.9L	RPM Settings		900 Low / 1600 / 2600 High
	Horsepower @ 2600 rpm (intermittent)		55.4 kW / 75 hp
	Fuel Type		Diesel
	Fuel Tank Capacity		47 gal (170.3 L)
	Standard Oil Factory Fill	0°F to 115°F (-18°C to 45°C)	SAE 15W-40 API CF/CG/CH-6
	Cold Lube Oil Option	-20°F to 90°F (-29°C to 32°C)	SAE 0W-30 API CF/CG/CH-6
	Arctic Lube Oil Option	-40°F to 115°F (-40°C to 45°C)	SAE 0W-40 API CF/CG/CH-6
	Standard & Arctic Coolant	-40°F to 115°F (-40°C to 45°C)	Delo 50/50 Extended Life Coolant
	Coolant Capacity		3.0 gal (11.4 L)
	Lube Oil Sump Capacity		2.64 gal (10.0 L)
Deutz TCD2.2	RPM Settings		1200 Low / 1600 / 2600 High
	Horsepower @ 2600 rpm (intermittent)		55.4 kW / 75 hp
	Fuel Type		Diesel
	Fuel Tank Capacity		47 gal (170.3 L)
	Standard Oil Factory Fill	0°F to 115°F (-18°C to 45°C)	SAE 15W-40 API CF/CG/CH-6
	Standard Coolant	-40°F to 115°F (-40°C to 45°C)	Delo 50/50 Extended Life Coolant
	Coolant Capacity		3.0 gal (11.4 L)
	Lube Oil Sump Capacity		2.11 gal (8.0 L)
Deutz D2011	RPM Settings		1600 Low / 2100 / 2675 High
	Horsepower @ 2600 rpm (intermittent)		48 kW / 65 hp
	Fuel Type		Diesel
	Fuel Tank Capacity		47 gal (170.3 L)
	Standard Oil Factory Fill	0°F to 115°F (-18°C to 45°C)	SAE 15W-40 API CF/CG/CH-6
	Cold Lube Oil Option	-20°F to 90°F (-29°C to 32°C)	SAE 0W-30 API CF/CG/CH-6
	Arctic Lube Oil Option	-40°F to 115°F (-40°C to 45°C)	SAE 0W-40 API CF/CG/CH-6
	Lube Oil Sump Capacity		2.64 gal (10.0 L)
Perkins 2.2TA	RPM Settings		1700 / 2675 High
	Horsepower @ 6800 rpm (intermittent)		50 kW / 67 hp
	Fuel Type		Diesel
	Fuel Tank Capacity		30 gal (114 L)
	Standard Oil Factory Fill	0°F to 115°F (- 18°C to 45°C)	SAE 15W-40 API CF/CG/CH-6
	Cold Lube Oil Option	-20°F to 90°F (- 29°C to 32°C)	SAE 10W-30 API CF/CG/CH-6
	Arctic Lube Oil Option	-40°F to 115°F (-40°C to 45°C)	SAE 0W-40 API CF/CG/CH-6
	Standard & Arctic Coolant	-40°F to 115°F (-40°C to 45°C)	Delo 50/50 Extended Life Coolant
	Coolant Capacity		1.0 gal (4.2 L)
	Lube Oil Sump Capacity		2.8 gal (10.6 L)

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Reprogramming the Existing Tilt Switch



NOTE

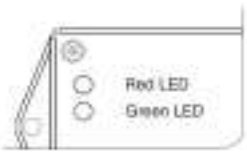
The tilt circuit is only powered when the controls are powered up.

1. Turn the main disconnect switch to the ON position.
2. Turn the base/off/platform key switch to the base position.
3. Pull out both emergency stop buttons.
4. Verify the switch is powered (the red or green LED will be solid).



5. Reprogram the tilt switch.

   a. Press and hold the set to zero button for 5 seconds.
   Results: Both LEDs are OFF.



   b. Both LEDs flash.



IMPORTANT

Step "c" must be completed within a 5 second period, or the switch will automatically exit program mode and return to normal operation using the previously stored data.

   c. Press and release the set to zero button 3 times.
   d. If the 5 second period has expired prior to completion, repeat steps "a", "b" and "c".
   e. Observe the program delay / stabilization time (only the red LED blinks for 4 seconds).



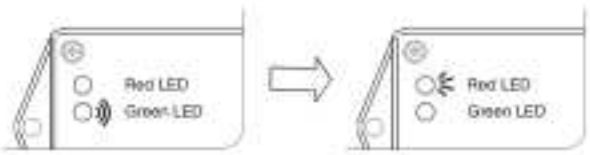
   f. Both LEDs flash for 1 second.
   Results: The switch is learning the new zero position.



   g. Both LEDs turn on solid for 1 second.
   Results: The new zero position has been learned.



   h. The green LED flashes and then the red LED turns on solid for 2 seconds.
   Results: The switch is verifying the new zero position.



   i. The green LED turns on solid.
   Results: The switch is ready for normal operation.



6. Turn the main power disconnect switch to the off position.
7. Push in the emergency stop buttons.
8. Proceed to Verify the Tilt Circuit.

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5.5-8 Deutz TCD2.2 Diagnoses and Error Codes

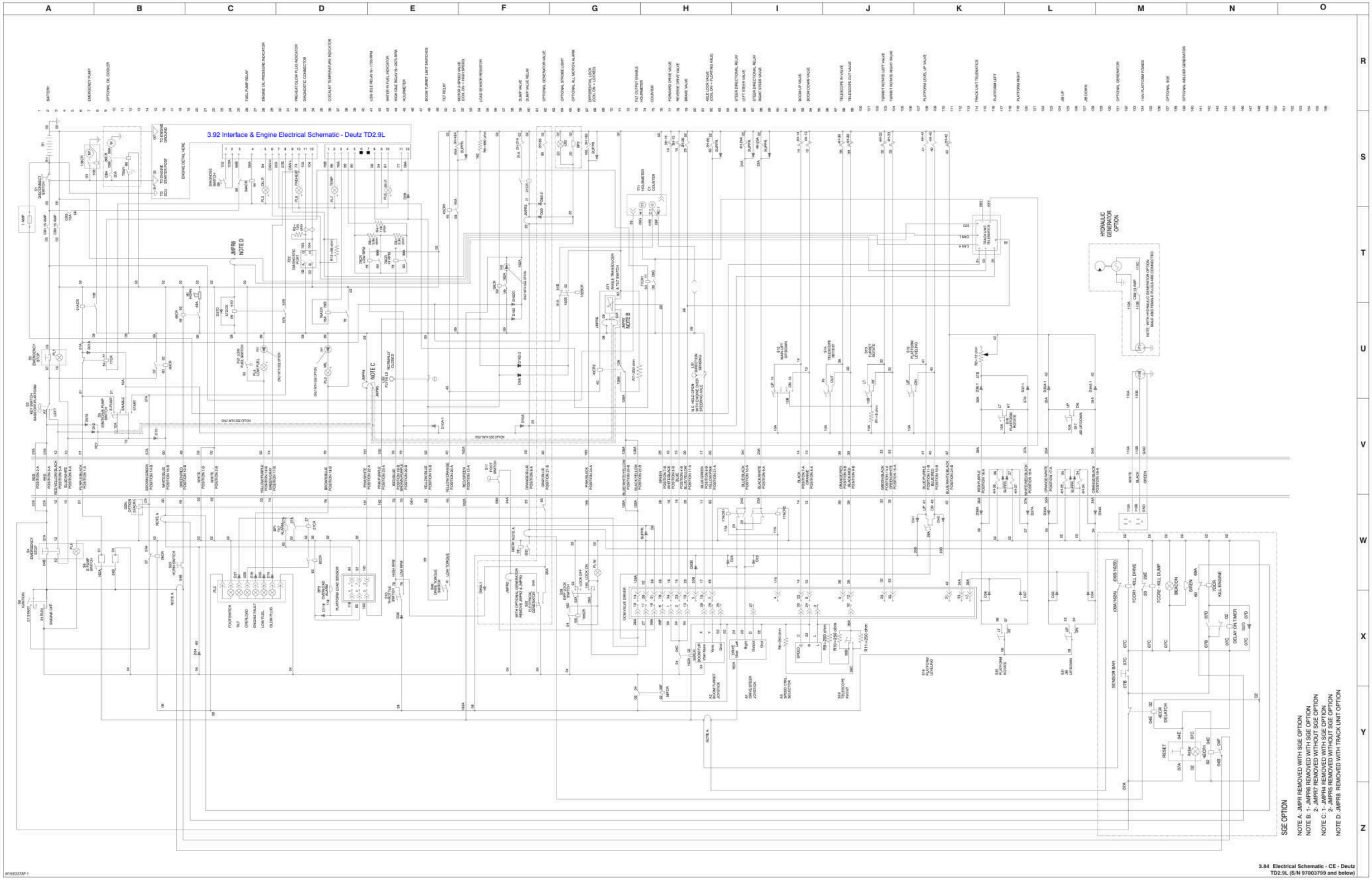
Code	FTB	SPN	FMI	Error Identification
818	0	5360	5	Open load on the power stage of injection valve 2.
819	0	5361	5	Open load on the power stage of injection valve 3.
820	0	5362	5	Open load on the power stage of injection valve 4.
821	0	5363	5	Open load on the power stage of injection valve 5.
822	0	2797	6	Short circuit of the HDEV power stage high-side (bank0 error).
823	0	2798	6	Short circuit of the HDEV power stage high-side (bank1 error).
824	0	5358	6	Short circuit of the power stage low-side (cylinder error 0).
825	0	5359	6	Short circuit of the power stage low-side (cylinder error 1).
826	0	5360	6	Short circuit of the power stage low-side (cylinder error 2).
827	0	5361	6	Short circuit of the power stage low-side (cylinder error 3).
828	0	5362	6	Short circuit of the power stage low-side (cylinder error 4).
829	0	5363	6	Short circuit of the power stage low-side (cylinder error 5).
83	0	111	1	Coolant level too low.
830	0	5358	6	Short circuit between high-side and low-side of the power stage (high-side non plausible error).
831	0	5359	6	Short circuit between high-side and low-side of the power stage (high-side non plausible error).
832	0	5360	6	Short circuit between high-side and low-side of the power stage (high-side non plausible error).
833	0	5361	6	Short circuit between high-side and low-side of the power stage (high-side non plausible error).
834	0	5362	6	Short circuit between high-side and low-side of the power stage (high-side non plausible error).
835	0	5363	6	Short circuit between high-side and low-side of the power stage (high-side non plausible error).
836	0	105	3	Signal Range Check high for intake valve upstream temperature.
837	0	105	4	Signal Range Check Low for intake valve upstream temperature.
838	0	2797	14	Check of missing injector adjustment value programming (IMA) injector 1.
839	0	2798	14	Check of missing injector adjustment value programming (IMA) injector 2.
840	0	4257	14	Check of missing injector adjustment value programming (IMA) injector 3.
841	0	4258	14	Check of missing injector adjustment value programming (IMA) injector 4.
853	0	0	0	
854	0	7103	5	Open load diagnosis of MeUn power stage.
855	0	7103	3	Short circuit to battery on the high side power stage of MeUn.
856	0	7103	3	Short circuit to battery on the low side power stage of MeUn.
857	0	7103	4	Short circuit to ground on the high side power stage of MeUn.
858	0	7103	4	Short circuit to ground on the low side power stage of MeUn.
859	0	7103	6	Short circuit between high side and low side power stage of MeUn.
868	0	629	12	Function monitoring: fault of ECU ADC - Null Load Test Pulse.

1461AA-8

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5.4-6 Turret Rotation Gear Bolt Torque Sequence . . . 240
5.4-7 Electronic Tilt Switch Setup Procedure . . . 241
5.4-8 Check the Rotation Bearing for Axial Wear . . . 243
5.5 Deutz Diesel Engines . . . 244
5.5-1 Replace the Engine Oil and Filter . . . 244
5.5-2 Replace the Fuel Filter . . . 245
5.5-3 Replace the Air Filter . . . 245
5.5-4 Check the Engine Belt . . . 245
5.5-5 Check the Oil Cooler (Deutz D2011 only) . . . 245
5.5-6 Retrieve Engine Fault Codes - Deutz TD2.9L . . . 246
5.5-7 Deutz TD2.9L Fault Codes . . . 247
5.5-8 Deutz TCD2.2 Diagnoses and Error Codes . . . 267
5.6 Kubota WG2503 Dual Fuel Engine . . . 278
5.6-1 Engine Parameter Display (KAntrak 1700) . . . 278
5.6-2 Diagnostic Trouble Codes . . . 279
5.6-3 Diagnostic Trouble Codes . . . 280
5.6-4 Diagnostic Trouble Codes . . . 281
5.6-5 Diagnostic Trouble Codes . . . 282
5.6-6 Diagnostic Trouble Codes . . . 283
5.6-7 ECU Pin Reference Chart - Kubota WG2503 . . . 284
5.6-8 Fuse Box - Kubota WG2503 . . . 285
5.6-9 MAP Sensor - Kubota WG2503 . . . 286
5.6-10 IAT Sensor - Kubota WG2503 . . . 286
5.6-11 ECT - Kubota WG2503 . . . 287
5.6-12 TPS & Engine Speed - Kubota WG2503 . . . 287
5.6-13 Fuel Temperature Sensor - Kubota WG2503 . . . 288
5.6-14 Oil Pressure Sensor - Kubota WG2503 . . . 288
5.7 Hydraulic Tank . . . 289
5.7-1 Hydraulic Oil Replacement . . . 289
5.7-2 Hydraulic Filter Replacement . . . 289
5.8 Manifold and Hydraulic Pumps . . . 290
5.8-1 Hydraulic Brake Pressure Adjustment . . . 290
5.8-2 Hydraulic Standby Pressure Adjustment . . . 291
5.8-3 Hydraulic High Pressure Adjustment . . . 292
5.8-4 Hydraulic System Relief Valve Adjustment . . . 293
5.8-5 Turret Rotate Relief Valve Adjustment . . . 294
5.8-6 Platform Level Relief Valve Adjustment . . . 294
5.8-7 Fly Boom Relief Valve Adjustment . . . 295
5.8-8 Test Charge Pump Pressure on Drive Pump . . . 295
5.8-9 Test Forward Drive Pressure on Drive Pump . . . 296
5.8-10 Test Reverse Drive Pressure on Drive Pump . . . 296
5.9 Axles . . . 297
5.9-1 Change the Oil in the Axles . . . 297

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3.84 Electrical Schematic - CE - Deutz TD2.9L (S/N 97003799 and below)

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