

PARTS MANUAL

TELESCOPIC BOOMS

MODELS SJ61T SJ66T

168892AI January 15 2026

SKYJACK

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >

Table of Contents

1.0 PLATFORM

1.1 Platform 8
1.2 Railing Assembly 10
1.3 Platform Base Assembly (ANSI/CSA) 12
1.4 Platform Base Assembly (CE) 13
1.5 Swing Gate Assembly 14
1.6 Drop Bar Gate 15
1.7 Railing Extension (No Gate) 16
1.8 Footswitch 17
1.9 Platform Control Console 18
1.10 Boom / Turret Controller Assembly (Dual Axis) 22
1.11 Drive / Steer Controller Assembly (Single Axis) 24
1.12 Platform Terminal Strip 26

2.0 BOOM

2.1 Boom Assembly 28
2.2 Main Boom Assembly 30
2.3 Fly Boom Assembly 31
2.4 Mid Boom Assembly 32
2.5 Power Track Carrier Assembly 34
2.6 Jib Assembly - 66T 36
2.7 Rotary Actuator Mounting - 61T 38
2.8 Rotary Actuator Assembly 39
2.9 Jib Lift / Platform Rotate Valve Assemblies 40

3.0 CYLINDERS

3.1 Extension Cylinder Hardware 44
3.2 Extension Cylinder Assembly 46
3.3 Lift and Master Cylinder Hardware 48
3.4 Lift Cylinder Assembly 49
3.5 Master Cylinder Assembly 50
3.6 Slave Cylinder Assembly 51
3.7 Jib Cylinder Assembly 52
3.8 Axle Lockout Cylinder Assembly 53

4.0 TURRET

4.1 Cowling Assembly - Engine Side 56
4.2 Cowling Assembly - Control Side 58
4.3 Cowling Assembly - Center 60
4.4 High Pressure Filter Assembly 61
4.5 Turret Assembly 62
4.6 Manifold Hardware 64
4.7 Main Manifold Assembly 66
4.8 Brake Manifold Assembly 68
4.9 Pressure Reducing Manifold 70
4.10 Rotary Manifold Assembly 72
4.11 Hydraulic Tank Assembly 74
4.12 No Generator and Oil Cooler Hose Fittings 76
4.13 Turret Swing Drive Assembly 77
4.14 Fuel Tank Assembly (GM Dual Fuel Engine) 78

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >

Table of Contents

4.15 Fuel Tank Assembly (Deutz Diesel Engine) 80
4.16 Battery Cable Assembly 81
4.17 Battery and Lockout Switch Assembly 82
4.18 Auxiliary Pump 83
4.19 Base Control Console Assembly - Deutz TD2.9L Engine 84
4.20 Base Control Console Assembly - Deutz D2011 & GM Engines 88
4.21 Base Terminal Strip - Deutz TD2.9L Engine 92
4.22 Base Terminal Strip - Deutz D2011 & GM Engines 93

5.0 ELECTRICAL HARNESSES

5.1 Main Electrical Harness 96
5.2 Battery Cables 98
5.3 Control Cable Harnesses 100
5.4 Jib & Platform Rotate Harnesses 101
5.5 110/220V Outlet Harness 102
5.6 ECU Harnesses - Deutz D2011 103
5.7 Glow Plug Harness (Deutz TD2.9L Engine) 104
5.7 Glow Plug Harness (Deutz D2011 Engine) 105
5.8 Engine Interface Harness - GM Engine 106
5.9 Engine Interface Harness - Deutz TD2.9L Engine 108

6.0 BASE

6.1 Base Assembly 112
6.2 Counterweight Assembly 114
6.3 Axle Hardware 116
6.4 Rear Axle Assembly 118
6.5 Differential Assembly - Rear Axle 120
6.6 Central Housing Assembly - Rear Axle 122
6.7 Gear Box - Rear Axle 124
6.8 Hydraulic Drive Motor 127
6.9 Front Axle Assembly 128
6.10 Differential Assembly - Front Axle 130
6.11 Central Housing Assembly - Front Axle 132
6.12 Steering Assembly 133
6.13 Trunnion Assembly - Front Axle 134
6.14 Axle Drive Shaft 135
6.15 Brake Assembly - Front & Rear Axle 136
6.16 Propane Tank Assembly 140
6.16 Propane Tank Assembly 142
6.17 Tires 144

7.0 ENGINES

7.1 Engine Assembly - Deutz TD2.9L Engine 146
7.2 Radiator Assembly - Deutz TD2.9L 150
7.3 Engine Assembly - Deutz D2011 152
7.4 Engine Assembly - GM Dual Fuel 156
7.5 Engine Tray Assembly 160
7.6 Drive and System Pump Assembly 162
7.7 Engine Coupling Assembly 164

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >

Table of Contents

8.0 HOSE CONNECTIONS

8.1 Standard Hose Numbering System 166
8.2 Hydraulic Hose Connection - Cylinders 168
8.3 Hydraulic Hose Connection - Control Compartment 170
8.4 Hydraulic Hose Connection - Pumps & Swing Drive 172
8.5 Hydraulic Hose Connection - Base and Axles 174
8.6 Fuel Line Hose Connection - Deutz TD2.9L Engine 176
8.7 Fuel Line Hose Connection - Deutz D2011 Engine 178
8.8 Fuel Line Hose Connection - GM Engine 180
8.9 Turret Grease Hose Connections 182

9.0 OPTIONAL EQUIPMENT

9.1 Generator and Oil Cooler - 3.5kW 184
9.2 Generator Assembly - 3.5kW 186
9.3 Oil Cooler with No Generator 188
9.4 Oil Cooler Assembly 189
9.5 Hydraulic Hose Connection - Generator and Oil Cooler - 3.5kW 190
9.6 Generator and Oil Cooler Wiring 192
9.7 Generator and Oil Cooler -12 kW 194
9.8 Generator Assembly - 12kW 196
9.9 Hydraulic Hose Connection - 12kW Generator and Oil Cooler 198
9.10 Welder and Mounting Assembly 200
9.11 Glazier Package Option 204
9.12 Cold Start Engine Option 206
9.13 Arctic Package Option 207
9.14 Cold & Arctic Package Load Circuit - Deutz TD2.9L 208
9.15 Block Heater - Deutz TD2.9L 210
9.16 Oil Quick Drain 211
9.17 SGM Assembly 212
9.18 SGE Assembly 214
9.19 External Platform Railing Assembly 216
9.20 Flashing Light 217
9.21 Air Hose To Platform Option 218
9.22 Residucal Current Device (RCD) 219
9.23 Control Box Cover 220

10.0 LABELS

10.1 Label Kits 225
10.2 Labels - Platform Control Console 226
10.3 Labels - Front and Bottom 227
10.4 Labels - Engine Side 228
10.5 Labels - Controls Side 230
10.6 Labels - Controls Compartment 232
10.7 Labels - Engine Compartment 233
10.8 Labels - Platform 234
10.9 Labels - Engine Fuel 236

11.0 TABLES

11.1 Fluids Table 238
11.2 Grease Locations - Axle 239
11.3 Grease Locations - Gears 240

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >

Index No.	Skyjack Part No.	Qty.	Description
-	164634	-	MANIFOLD ASSEMBLY
1	164633	1	• BRACKET, Manifold mounting
2	(Ref.)	1	• MANIFOLD, Main (For components, refer to Section 4.7)
3	(Ref.)	1	• MANIFOLD, Brake (For components, refer to Section 4.8)
4	103996	5	• WASHER, Flat (0.312")
5	103404	3	• WASHER, Lock (0.312")
6	103869	3	• BOLT, Hex head (0.312"-18 x 4.5" Grade 5)
7	103472	12	• WASHER, Flat (0.375")
8	101297	3	• BOLT, Hex head (0.375"-16 x 1.25" Grade 5)
9	104606	6	• NUT, Hex head nylon lock (0.375"-16 Grade 5)
10	133369	3	• BOLT, Hex head (0.375"-16 x 7.00" Grade 5)
11	(Ref.)	1	• MANIFOLD, Pressure reducing (For components, refer to Section 4.9)
12	103865	2	• BOLT, Hex head (0.312"-18 x 2.00" Grade 5)
13	103984	2	• NUT, Hex head nylon lock (0.312"-18 Grade 5)

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >

Index No.	Skyjack Part No.	Qty.	Description
-	138218	-	REAR AXLE ASSEMBLY (with gear box)
1	141078	2	• CASE, Axle
2	141079	32	• BOLT
3	141082	2	• SEAL
4	141018	2	• SEAL
5	141019	4	• BEARING
6	141021	16	• STUD, Wheel
7	141020	2	• HUB, Wheel
8	140970	2	• O-RING
9	141031	16	• NUT
10	140969	4	• PLUG
11	141033	4	• BOLT, Countersunk
12	141081	2	• PLATE, Locking
13	141027	16	• NUT
14	141026	16	• STUD
15	140968	2	• PLUG, Magnet
16	141080	2	• SHAFT, Half
17	(Ref.)	-	• CENTRAL HOUSING ASSEMBLY (For components, refer to Section 6.6)
18	(Ref.)	-	• DIFFERENTIAL ASSEMBLY (For components, refer to Section 6.5)
19	(Ref.)	-	• BRAKES - REAR AXLE (For components, refer to Section 6.15)
K1	141042	2	KIT, Ring gear support
K2	141034	2	KIT, Planet gear carrier

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >

Index No.	Skyjack Part No.	Qty.	Description
			Parts list continued from the previous page.
-	165903	1	• AIR INTAKE ASSEMBLY
17	164543	1	• • AIR DAM, Deutz
18	163243	1	• • AIR CLEANER
	165949	1	• • • ELEMENT, Primary
	165950	1	• • • ELEMENT, Secondary
	194405	1	• • • CAP, Air cleaner
19	163245	1	• • BRACKET, Air cleaner
20	163248	1	• • CONNECTOR, 90°
21	163249	1	• • CONNECTOR, 90°
22	163250	1	• • INDICATOR, Service
23	168345	1	• • TUBE, Air intake
24	106049	2	• • BOLT, Carriage (5/16"-18 x 1 1/4" Grade 5)
25	103984	2	• • NUT, Hex lock (5/16"-18 Grade 5, Nylon)
26	121869	4	• • GEAR CLAMP, SAE No. 40, 2 1/16" - 3")
27	103892	6	• • BOLT, Hex head (1/4"-20 x 5/8" Grade 5)
28	104000	6	• • WASHER, Lock (1/4")
29	149357	120"	• • SEAL, Bulb
-	165905	1	• EXHAUST ASSEMBLY
30	164525	1	• • ADAPTER, Exhaust
31	164553	1	• • TAILPIPE, Deutz
32	148377	1	• • CLAMP, Exhaust (2")
33	194346	1	• • BRACKET, Exhaust
34	133174	3	• • BOLT, Hex head (M8-1.25 x 20 gr 8.8)
35	133232	3	• • WASHER, Flat (M8)
36	165602	1	• CABLE, Alternator
37	(Ref.)	1	• RADIATOR

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >

Label Kits

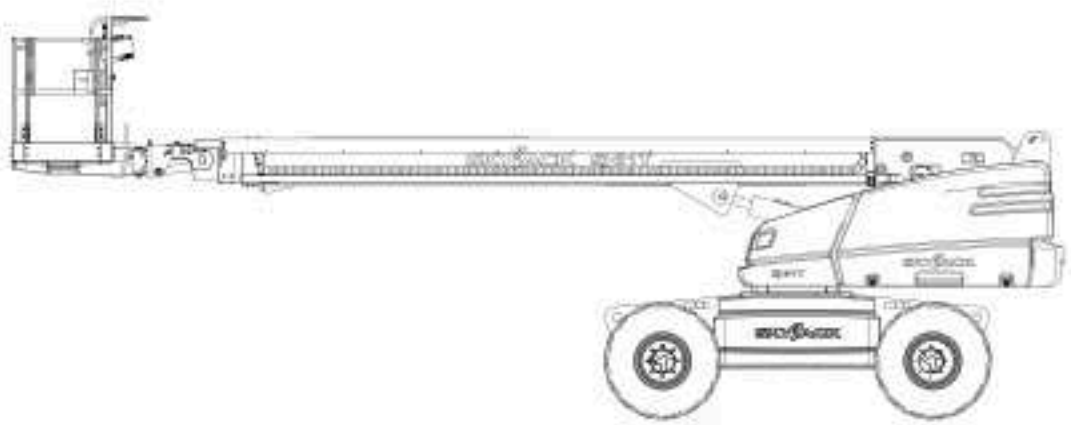
The following label kit is for models SJ 61T and 66T. It contains labels that are common to both machines.

It excludes:

- *Serial numbers*
- *Platform capacities*
- *Model designations*
- *Control consoles*

Supply model number, country and language when ordering complete machine labels.

Label Kits		
MODELS	ANSI/CSA	CE
	Part 166307	Part 166308
SJ 61T	97,000,918 & Above	97,000,918 & Above
SJ 66T	97,000,918 & Above	97,000,918 & Above



SKYJACK

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >

Fitting Arrangement Schedule (Continued from the previous page)

HOSE PREFIX	HOSE END FITTING	HOSE END FITTING	S.A.E. HOSE SPECIFICATION
H16	NO FITTING	NO FITTING	100R4
H17	NO FITTING	NO FITTING	300 PSI
H18	REUSABLE, FEMALE, 37° JIC, SWIVEL	NO FITTING	300 PSI
H19	LONG 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R13
H20	FEMALE, SHORT 37° JIC, SWIVEL	SHORT 90°, FEMALE, 37° JIC, SWIVEL	100R4
H21	FEMALE, SHORT 37° JIC, SWIVEL	SHORT 90°, FEMALE, 37° JIC, SWIVEL	100R2AT
H22	FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R2AT
H23	FEMALE, LONG 37° JIC, SWIVEL	LONG 90°, FEMALE, 37° JIC, SWIVEL	100R2AT
H24	FEMALE, SHORT 37° JIC, SWIVEL	SHORT 90°, FEMALE, 37° JIC, SWIVEL	100R13
H25	FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R4
H26	SHORT 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H27	LONG 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H28	FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H29	SHORT 45°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H30	MEDIUM 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H31	FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H32	SHORT 45°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H33	MEDIUM 45°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H34	SHORT 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H35	MEDIUM 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H36	LONG 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H37	SHORT 45°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R4
H38	SHORT 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R4
H39	LONG 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R4
H40	SHORT 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R16
H43	FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R16
H51	FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H52	SHORT 45°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H53	MEDIUM 45°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H54	SHORT 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H55	MEDIUM 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17
H56	LONG 90°, FEMALE, 37° JIC, SWIVEL	FEMALE, 37° JIC, SWIVEL	100R17

MidWestTech | Skyjack SJ61T, SJ66T Telescopic Boom Lift Parts Manual | Publication 168... Order the manual at mid-west-tech.com >