

PARTS MANUAL (ALL STANDARDS)

VERTICAL MAST

MODELS SJ12 SJ16

160606AGA June 2024

SKYJACK

MidWestTech | Skyjack SJ12, SJ16 Vertical Mast Lift Parts Manual | Publication 160606AGA

Order the manual at mid-west-tech.com >

Table of Contents

Section 1 – PLATFORM 7

1.1 Chain Entrance 8
1.2 Lower Platform. 9
1.3 Upper Platform. 10
1.4 Railings 12
1.5 Gate 13
1.6 Saloon Gate 14
1.7 Platform Control Cable 15
1.8 Platform Control Console 16
1.9 Controller 18
1.10 Platform Limit Switches 20

Section 2 – MAST - SJ12 23

2.1 Mast 1 - SJ12 24
2.2 Mast 2 - SJ12 26
2.3 Mast 3 - SJ12 28
2.4 Mast 4 - SJ12 30
2.5 Mast Electrical Assembly - SJ12 32
2.6 Chain - SJ12. 34
2.7 Mast Lift Cylinder Assembly - SJ12 35
2.8 Lift Cylinder - SJ12 36

Section 3 – MAST - SJ16 37

3.1 Mast 1 - SJ16 38
3.2 Mast 2 - SJ16 40
3.3 Mast 3 - SJ16 42
3.4 Mast 4 - SJ16 44
3.5 Mast 5 - SJ16 46
3.6 Mast Electrical - SJ16 48
3.7 Mast Lift Cylinder Assembly - SJ16 50
3.8 Lift Cylinder - SJ16 51
3.9 Chain - SJ16. 52

Section 4 – BASE 53

4.1 Base Cover. 54
4.2 Base 56
4.3 Pothole Protection. 58
4.4 Pothole Cylinder 60
4.5 Clevis 61
4.6 Brake Manifold. 63

MidWestTech | Skyjack SJ12, SJ16 Vertical Mast Lift Parts Manual | Publication 160606AGA

Order the manual at mid-west-tech.com >

Table of Contents

4.7 Main Manifold 64
4.8 Drive and Steer Assembly 66
4.9 Steer Cylinder 68
4.10 Wheel Motor and Brake 69
4.11 Powerpack 70
4.12 Battery Charger 71
4.13 Base Electrical Components 72
4.14 Hydraulic Hoses 74
4.15 Base Control Centre 76
4.16 Terminal Strip 78
4.17 Circuit Breaker and Horn 79
4.18 Main Harness 80
4.19 Batteries 82
4.20 Wheels 84

Section 5 – ATTACHMENTS & OPTIONS 85

5.1 Pipe Rack 86
5.2 Tool Tray 88
5.3 Tube Caddy 89
5.4 Flashing Light 90
5.5 Biodegradeable Hydraulic Oil 91
5.6 Charger/Inverter 92

Section 6 – LABELS 93

6.1 Label Kits 95
6.2 Rear 96
6.3 Left Side 97
6.4 Front 98
6.5 Right Side 99
6.6 Platform Control Console 100
6.7 Base View 1 101
6.8 Base View 2 102

Section 7 – TABLES 103

7.1 Standard Hose Numbering System 104
7.2 Fluids Table 106

MidWestTech | Skyjack SJ12, SJ16 Vertical Mast Lift Parts Manual | Publication 160606AGA

Order the manual at mid-west-tech.com >

Index No.	Skyjack Part No.	Qty.	Description
-	159421	1	PLATFORM CONTROL CONSOLE ASSEMBLY
-	151469	1	• CONTROL BOX
1	147051	1	• • HEAD, Emergency stop
2	147058	1	• • HEAD, Pushbutton (Horn)
3	122093	1	• • INDICATOR, Battery charge
4	156884	1	• • PLATE, Control Box (Top)
5	111181	1	• • GUARD, Switch
6	144016	1	• • SEAL, Bushing
7	116382	1	• • SWITCH, Toggle, 4NT1-1
8	147373	1	• CONTROL BOX ASSEMBLY
9	103632	9	• SCREW, Hex head self tapping (1/4"-14 x 3/4")
10	103957	1	• SCREW, Round head machine (#8-32 x 1/2")
11	112249	1	• WASHER, Lock (#8)
12	103986	1	• NUT, Hex head (#8-32)
13	102956	2	• PLUG (7/8")
14	(Ref.)	1	• CONTROLLER ASSEMBLY *(For components, refer to Section 1.9 Controller)*
15	-	1	• SWITCH, Horn
	147056	1	• • LATCH
	147054	1	• • • BLOCK, Contact (N.O.)
16	-	1	• • SWITCH, Emergency stop
	147056	1	• • • LATCH
	147053	2	• • • BLOCK, Contact (N.C.)
	147061	1	• • • LED BLOCK, 24V (Red)
17	116993	1	• • HOUSING, Male connector (9 pin)
18	(Ref.)	1	• CONTROL CABLE ASSEMBLY (16 pin) *(For components, refer to Section 1.7 Platform Control Cable)*

Order the manual at mid-west-tech.com >

Index No.	Skyjack Part No.	Qty.	Description
A	158149DG	1	DRIVE/STEER ASSEMBLY - ANSI/CSA
B	158316DG	1	DRIVE/STEER ASSEMBLY - CE, AS, KC
1	107912	4	• HUB, Wheel
2	103199	20	• BOLT, Wheel (1/2"-20 x 1.5625")
3	151246DG	1	• WELDMENT, Motor (Left hand)
4	151326	2	• PIN, Steer
5	151650	2	• RETAINER, Washer
6	110853	4	• SCREW, Flat head cap (1/4"-20 x 5/8", Grade 5)
7	100050	2	• BUSHING, Fibreglide
8	151260DG	1	• WELDMENT, Steer arm (Left-hand)
9	107951	2	• SCREW, Hex socket shoulder (5/8" x 1.25")
10	107949	2	• NUT, Hex head jam (1/2"-13, Grade 5)
11	107143	2	• END, Rod
12	106450	2	• NUT, Hex head jam (3/4"-16, Grade 5)
13	(Ref.)	1	• CYLINDER, Steer *(For components, refer to Section 4.9 Steer Cylinder)*
14	103789	2	• WASHER, Int tooth lock (1")
15	107947	2	• NUT, Hex head jam (1"-14, Grade 5)
16	151259DG	1	• WELDMENT, Steer arm (Right hand)
17	151247DG	1	• WELDMENT, Motor (Right hand - Control box side)
18	132565	2	• CAP, Grease (GC5)
19	701956	1	• FITTING, Straight Connector (-6 SAE -4 JIC)
20	(Ref.)	1	• WHEEL MOTOR AND BRAKE ASSEMBLY *(For components, refer to Section 4.10 Wheel Motor and Brake)*
21	(Ref.)	1	• POWERPACK ASSEMBLY *(For components, refer to Section 4.11 Powerpack)*

Order the manual at mid-west-tech.com >

Index No.	Hose P/N	From		To	
		Description	Port	Port	Description
1	H 31040028 2	Brake manifold	B1	-	Left brake
2	H 34060019 0	Main manifold	L	-	Emergency lowering valve
3	H 31040022 0	Main manifold	B	B	Brake manifold
4	H 31040022 0	Main manifold	PH	-	Pothole cylinder
5	H 31040022 0	Main manifold	SR	-	Steering cylinder
	H 31040022 0	Main manifold	SL	-	Steering cylinder
6	H 34060036 0	Main manifold	M2	A	Left drive motor
7	H 34060035 0	Main manifold	F	B	Left drive motor
8	H 34060034 0	Main manifold	R	B	Right drive motor
9	H 34060037 0	Main manifold	M1	A	Main manifold
10	H 34060014 0	Main manifold	T	T	Powerpack
	H 34060014 0	Main manifold	P	P	Powerpack
11	H 31040011 0	Brake manifold	B2	-	Right brake

Index No.	Skyjack Part No.	Qty.	Description
12	131285	2.67'	GUARD, Spring (5/8" x 10")