


PARTS MANUAL (ANSI/CSA)

# ROUGH TERRAIN SCISSORS

MODELS SJ7127 RT SJ7135 RT

167318AE October 2, 2023

SKYJACK

MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >

# Table of Contents


## 1.0 Platform Related Parts

1.1 Entrance Gate ..... 8
1.2 Gate Latch Assembly ..... 11
1.3 Main Platform Railing ..... 12
1.4 Extension Platform Railing ..... 14
1.5 Quick Release Pins ..... 16
1.6 Main Platform Assembly ..... 18
1.7 Extension Platform Assembly ..... 19
1.8 Safety D–Ring Assembly ..... 20
1.9 Platform AC Outlet ..... 21
1.10 Platform Control Console Assembly – Hardware ..... 22
1.11 Platform Control Console Assembly – Switches ..... 24
1.12 Drive/Steer Controller Assembly ..... 26
1.13 Scissor Control Cable Assembly ..... 28

## 2.0 Scissor Related Parts

2.1 Scissor Assembly (Model 7127) ..... 32
2.2 Scissor Assembly (Model 7135) ..... 36
2.3 Scissor Arm Mounting Hardware ..... 40
2.4 Scissor Arm Connecting Hardware ..... 42
2.5 Horn, Light & Beeper Assembly ..... 44
2.6 Scissor Limit Switch Assemblies ..... 45
2.7 Lift Cylinder Assembly ..... 46
2.8 Hydraulic Hose & Electrical Connections – Lift Cylinder ..... 48
2.9 Splitter Manifold Assembly – Lift Cylinder ..... 49
2.10 Holding Valve Assembly – Lift Cylinder ..... 50

## 3.0 Base Related Parts

3.1 Base Assembly ..... 52
3.2 Tire Assemblies ..... 56
3.3 Cabinet Door Assembly ..... 58
3.4 Fuel Tank Assembly ..... 60
3.5 Hydraulic Reservoir Assembly ..... 62
3.6 Hydraulic Connections – Base ..... 64
3.7 Hydraulic/Electrical Cabinet Assembly ..... 66
3.8 Hydraulic Hose Connections – Hydraulic/Electrical Cabinet ..... 70
3.9 Cushion Valve Assembly ..... 72
3.10 Emergency Lowering Valve Assembly ..... 73
3.11 Brake Valve Assembly ..... 74
3.12 Motion Control Valve Assembly ..... 75
3.13 Main Manifold Assembly ..... 76
3.14 Electrical Panel Assembly ..... 78
3.15 Main Manifold Harness ..... 82
3.16 Base Control Assembly ..... 83
3.17 Propane Tank Tray Assembly ..... 84

## 4.0 Axle Related Parts

4.1 Front Axle Hardware ..... 86
4.2 Front Axle Assembly ..... 88
4.3 Steer Cylinder Assembly ..... 92





MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >

# Table of Contents


4.4 Front Driveshaft Assembly ..... 93
4.5 Center Drive Assembly ..... 94
4.6 Drive Motor Assembly ..... 96
4.7 Brake Mount and Brake Assembly ..... 97
4.8 Rear Drive Assembly ..... 98
4.9 Rear Axle Assembly ..... 100

**5.0 Engine Related Parts**

5.1 Engine Rollout Tray Assembly (Kubota Engine) ..... 104
5.2 Battery Assembly ..... 108
5.3 Engine Control Panel ..... 110
5.4 Engine Tray Lock Assembly ..... 113
5.5 Kubota Diesel Engine Assembly (D1105) ..... 114
5.6 Air Intake Filter Assembly (Kubota Diesel Engine D1105) ..... 118
5.7 Exhaust Manifold Assembly (Kubota Diesel Engine D1105) ..... 119
5.8 Kubota Diesel Engine Harness (D1105) ..... 120
5.9 Hydraulic Pump Assembly ..... 122
5.10 Fuel Line & Filter Mounting Assembly (Kubota Diesel Engine D1105) ..... 124
5.11 Kubota Dual Fuel Engine Assembly (DF972) ..... 126
5.12 Air Cleaner Assembly (Kubota DF972) ..... 132
5.13 Exhaust Assembly (Kubota DF972) ..... 133
5.14 Kubota Fuel Hose Connection (DF972) ..... 134

**6.0 Optional Equipment**

6.1 Front and Rear Outrigger Mounting Assembly ..... 138
6.2 Outrigger Assembly ..... 140
6.3 Outrigger Cylinder Assembly ..... 142
6.4 Hydraulic Hose Connections – Outrigger Hydraulic System ..... 143
6.5 Outrigger/Hydraulic Generator Control Console Assembly ..... 144
6.6 Outrigger Electrical Connections ..... 146
6.7 GP-108 Controller ..... 148
6.8 Flashing Light Relay Harness ..... 149
6.9 Outrigger Manifold Assembly ..... 150
6.10 Cold Start Option ..... 151
6.11 3500 W Generator and Oil Cooler Hydraulic Hose Connections ..... 152
6.12 12 kW Generator and Oil Cooler Hydraulic Hose Connections ..... 154
6.13 Hydraulic Generator and Oil Cooler Electrical Connections ..... 156
6.14 Hydraulic Generator and Oil Cooler ..... 158
6.15 12 kW Generator Breaker Box Assembly ..... 160
6.16 12 kW Generator Mounting Assembly ..... 161
6.17 Hydraulic Hose Connections – 12 kW Generator ..... 162
6.18 Hydraulic Valve Assembly – 12 kW Generator ..... 163
6.19 Welder Option ..... 164
6.20 Dual Flashing Light Option ..... 166
6.21 Air Hose to Platform Option ..... 167
6.22 Telematics – M6 UR ..... 168
6.23 GPS Ready Harness ..... 169
6.24 Positive Air Shut Off ..... 170
6.25 Gate Hand Rail Kit ..... 172





MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >

# Table of Contents


6.26 Heavy Duty Pipe Rack ..... 173
6.27 Tool Caddy Kit ..... 174

**7.0 Labels**

7.1 Label Kit ..... 179
7.2 Labels – Left and Right Sides ..... 180
7.3 Labels – Front and Back ..... 181
7.4 Labels – Miscellaneous ..... 182
7.5 Labels – Control Consoles ..... 184
7.6 Labels – Outriggers ..... 186

**8.0 Tables**

8.1 Fluid Tables ..... 188





MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >

| Index No. | Skyjack Part No. | Qty. | Description |
|---|---|---|---|
| | | | **NOTE:** Part Numbers followed by a "DG" indicate dark grey painted parts. |
| 1 | 128807DG | 1 | STEER CYLINDER GUARD ASSEMBLY |
| | 128802DG | 1 | • GUARD, Front axle |
| | 103907 | 3 | • BOLT, Hex head (1/2"–13 x 1.5", Gr. 5) |
| | 103471 | 3 | • NUT, Hex head (1/2"–13, Gr. 5) |
| | 103470 | 3 | • WASHER, Lock (1/2") |
| 2 | (Ref.) | 1 | COVER & ROLLOUT ENGINE GUARD ASSEMBLY |
| | | | (For components, refer to Section 5.1) |
| 3 | 133242DG | 1 | WELDMENT, Hose carrier |
| | 101632 | 3 | BOLT, Hex head (3/8"–16 x 3/4", Gr. 5) |
| | 103999 | 3 | WASHER, Lock (3/8") |
| 4 | 126872 | 1 | HARDWARE, Cabinet mounting |
| | 101297 | 8 | • BOLT, Hex head (3/8"–16 x 1.25", Gr. 5) |
| | 103472 | 16 | • WASHER, Flat (3/8") |
| | 103999 | 8 | • WASHER, Lock (3/8") |
| | 103978 | 8 | • NUT, Hex head (3/8"–16, Gr. 5) |
| 5 | 133181DG | 1 | CABINET, Hydraulic reservoir & fuel tank |
| 6 | 110007 | 14" | GUARD, Edge |
| 7 | 155859DG | 1 | WELDMENT, Base |
| 8 | (Ref.) | – | TANK, Propane |
| | | | (For components, refer to Section 3.17) |
| 9 | (Ref.) | – | PROPANE TRAY ASSEMBLY |
| | | | (For components, refer to Section 3.17) |
| 10 | 105395 | 4 | BUMPER, Scissor |
| 11 | 103938 | 4 | BOLT, Socket Head (3/8-16" x 1-1/2", Gr. 5) |
| 12 | (Ref.) | – | OUTRIGGER MANIFOLD ASSEMBLY |
| | | | (For components, refer to Section 6.9) |
| | 103922 | 2 | BOLT, Socket head (#10–24 x 3", Gr. 5) |
| | 103987 | 2 | NUT, Machine (#10–24, Gr. 5) |
| | 104694 | 2 | WASHER, Flat (#10) |
| | 104185 | 2 | WASHER, Lock (#10) |
| 13 | (Ref.) | 1 | TIRE ASSEMBLY |
| | | | (For components, refer to Section 3.2) |
| 14 | 155385 | 1 | WELDMENT, Ladder (Model 7127) |
| | 155848 | 1 | WELDMENT, Ladder (Model 7135) |
| | 103473 | 4 | BOLT, Hex head (3/8"–16 x 1", Gr. 5) |
| | 103472 | 4 | WASHER, Flat (3/8") |
| | 103999 | 4 | WASHER, Lock (3/8") |
| 15 | (Ref.) | – | AXLE REAR DRIVE ASSEMBLY |
| | | | (For components, refer to Section 4.8) |
| 16 | (Ref.) | – | ELECTRICAL/HYDRAULIC CABINET ASSEMBLY |
| | | | (For components, refer to Section 3.7) |
| 17 | 127708 | 1 | LOWERING BAR ASSEMBLY |
| | 132477 | 1 | • BAR, Emergency lowering access |
| | 119920 | 2 | • CLIP, Coated spring |
| | 103964 | 2 | • BOLT, Machine (#10–32 x 1/4") |
| | 124160 | 2 | • LOCKING PIN ASSEMBLY |
| | | | **Parts list continued on the following page.** |



MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >

| Index No. | Skyjack Part No. | Qty. | Description |
|---|---|---|---|
| A | – | – | MACHINES WITH KUBOTA DIESEL ENGINE |
| B | – | – | MACHINES WITH KUBOTA DUAL FUEL ENGINE |
| 1 | (Ref.) | – | HYDRAULIC OIL RESERVOIR<br>(For components, refer to Section 3.5) |
| 2 | 113352 | 1 | HOSE ASSEMBLY (3/8" diameter x 56" ) |
| 3 | 134342 | 1 | HOSE, Suction (1" diameter x 68") |
| 4 | 103320 | 2 | CLAMP, Gear (#16) |
| 5 | 114233 | 1 | HOSE ASSEMBLY (1/4" diameter x 100") |
| 6 | 141514 | 1 | FITTING, Straight (06 MJ 04 MB with pressure plug) |
| 7 | (Ref.) | 1 | BRAKE CALIPER ASSEMBLY<br>(For components, refer to Section 4.7) |
| 8 | (Ref.) | – | MANIFOLD, Lift<br>(For components, refer to Section 2.8) |
| 9 | (Ref.) | – | HOSE, Main manifold to lift manifold hydraulic<br>(For components, refer to Section 2.8) |
| 10 | (Ref.) | – | MAIN MANIFOLD<br>(For components, refer to Section 3.13) |
| 11 | 114383 | 1 | HOSE ASSEMBLY (1/4" diameter x 96") |
| 12 | (Ref.) | – | AUTO RESET BRAKE MANIFOLD<br>(For components, refer to Section 3.11) |
| 13 | (Ref.) | – | MOTION CONTROL MANIFOLD<br>(For components, refer to Section 3.12) |
| 14 | 129179 | 2 | HOSE ASSEMBLY (1/2" diameter x 45") |
| 15 | 112545 | 2 | HOSE ASSEMBLY (1/2" diameter x 157") |
| 16 | 103090 | 21" | PROTECTOR, Wire (3/4") |
| 17 | (Ref.) | – | HYDRAULIC DRIVE MOTOR ASSEMBLY<br>(For components, refer to Section 4.6) |
| 18 | (Ref.) | – | HYDRAULIC PUMP ASSEMBLY<br>(For components, refer to Section 5.9a) |
| 19 | 112543 | 2 | HOSE ASSEMBLY (1/4" diameter x 116") |
| 20 | (Ref.) | – | STEER CYLINDER ASSEMBLY<br>(For components, refer to Section 4.3) |
| 21 | 114326 | 8 | CLAMP, Hose |
| 22 | 123676 | 1 | TUBE, Pump suction |
| 23 | 128614 | 1 | HOSE, Suction (1.25" diameter x 51.5") A |
| | 132825 | 1 | HOSE, Suction (1.25" diameter x 47.5") B |
| 24 | 127477 | 1 | TUBE, Suction |
| 25 | 128613 | 3 | HOSE, Tank truck (1.25" diameter x 7") |

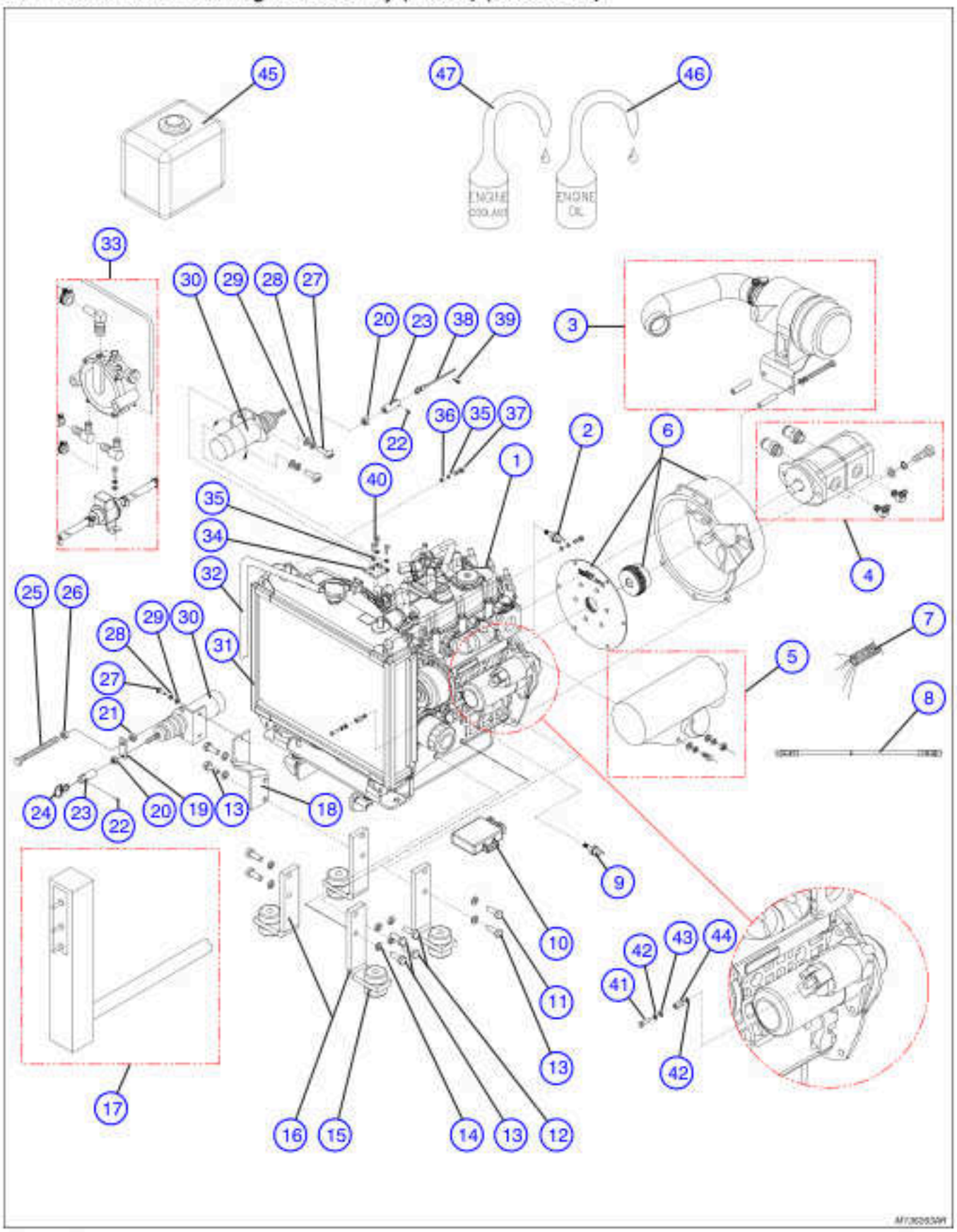


MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >

| Index No. | Skyjack Part No. | Qty. | Description |
|---|---|---|---|
| | | | **NOTE:** Part Numbers followed by a "DG" indicate dark grey painted parts. |
| 1 | (Ref.) | 1 | CENTER DRIVE & HYDRAULIC MOTOR ASSEMBLY<br>(For components, refer to Section 4.5) |
| 2 | 103470 | 4 | WASHER, Lock (1/2") |
| 3 | 111420 | 4 | BOLT, Hex head (1/2"–13 x 4.5, Gr. 5) |
| 4 | 126669 | 1 | REAR DRIVESHAFT ASSEMBLY |
| 5 | 155764 | 1 | BRAKE, Disc |
| 6 | 103977 | 4 | NUT, Hex head (7/16"–14, Grade B) |
| 7 | 104636 | 4 | WASHER, Lock (7/16") |
| 8 | 119313 | 4 | WASHER, Flat (7/16") |
| 9 | 111117DG | 1 | WELDMENT, Brake skid bottom |
| 10 | 702960 | 4 | NUT, Hex head (7/16"–20, Gr. 8) |
| 11 | 123856 | 8 | NUT, Hex head (1/2"–13, Grade C) |
| 12 | 126286 | 8 | WASHER, Lock (1/2", Gr. 8) |
| 13 | (Ref.) | – | REAR AXLE ASSEMBLY<br>(For components, refer to Section 4.9) |
| 14 | 126361 | 8 | BOLT, Hex head (1/2"–13 x 1.75", Gr. 8) |
| 15 | 100309 | 2 | BUSHING, Fiberglide (1" dia.) |
| 16 | 100695 | 4 | BUSHING, Fiberglide (1–1/2" dia.) |
| 17 | 128801 | 4 | BOLT, Hex head (7/16"–14 x 1.75, Gr. 5) |
| 18 | (Ref.) | – | BRAKE MOUNT & BRAKE ASSEMBLY<br>(For components, refer to Section 4.7) |
| 19 | 107949 | 4 | NUT, Hex head (1/2"–13) |
| 20 | 104636 | 4 | WASHER, Lock (7/16") |
| 21 | 300603 | 4 | BOLT, Hex head (7/16"–20 x 2, Gr. 8) |
| 22 | 300603 | 4 | BOLT, Hex head (7/16"–20 x 2, Gr. 8) |
| 23 | 900542 | 1 | BOOT, Output shaft |



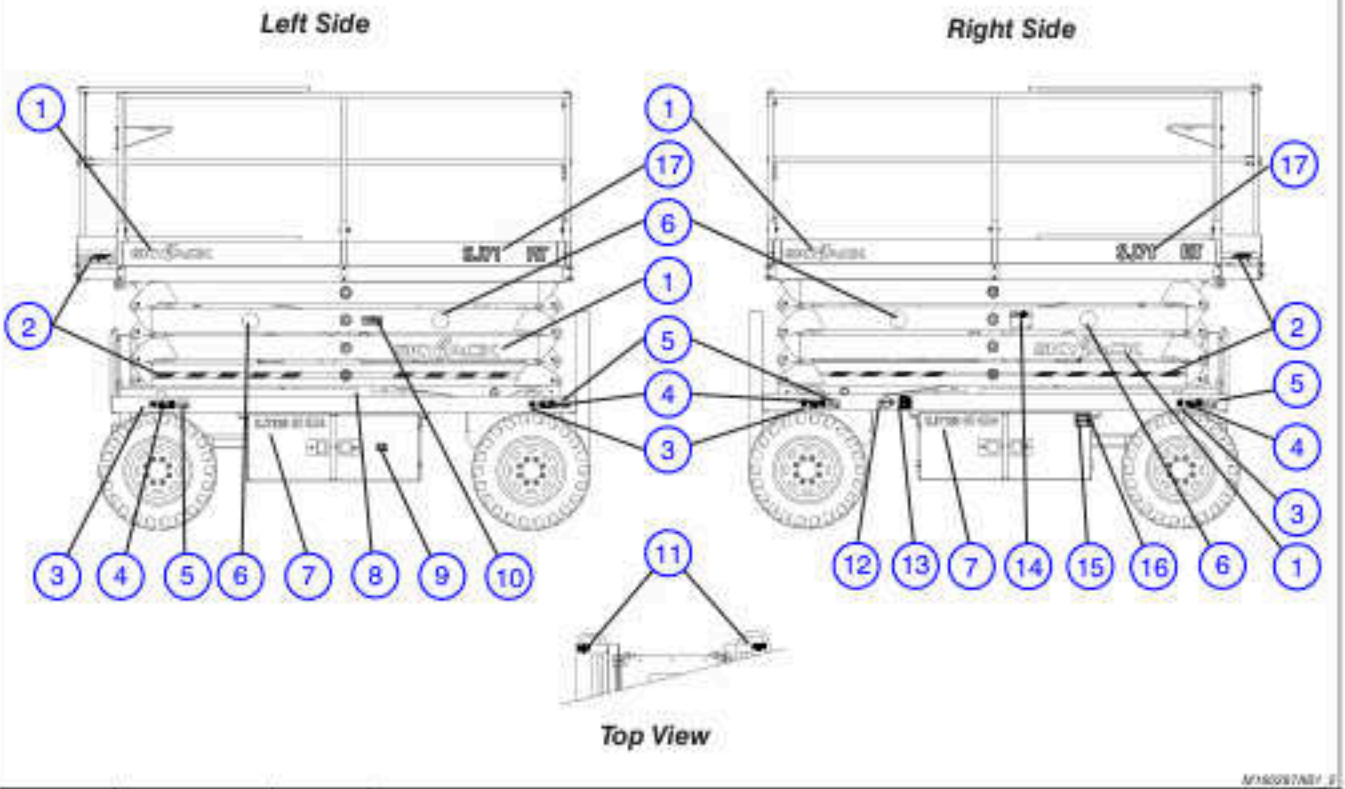
MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >






MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >

## 7.2 Labels – Left and Right Sides




| Index No. | Skyjack Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 158554 | 4 | LABEL, Skyjack (21") |
| 2 | 119803 | AR | TAPE, Caution 1" wide |
| 3 | 132736 | 4 | LABEL, Wheel load (1860 kg/4100 lb) |
| 4 | 124631 | 4 | LABEL, Wheel offset/pressure |
| 5 | 126928 | 4 | LABEL, Tire pressure 75 psi (air tires) (not included in label kit) |
| | 142384 | 4 | LABEL, Foam fill (foam tires) (not included in label kit) |
| 6 | 139855 | 4 | LABEL, Stay away |
| 7 | 165749 | 2 | LABEL, SJ7127 RT 4X4 (not included in label kit) |
| | 165764 | 2 | LABEL, SJ7135 RT 4X4 (not included in label kit) |
| 8 | 156613 | 1 | LABEL, Do not alter |
| 9 | 123628 | 1 | LABEL, Manual box |
| 10 | 156441 | 1 | LABEL, Annual Inspection |
| 11 | 124767 | 4 | LABEL, Tie down/lift lugs |
| 12 | 120390 | 1 | LABEL, Propane (dual fuel) |
| 13 | 103023 | 2 | LABEL, LPG fuel (dual fuel) |
| 14 | 158908 | 1 | LABEL, Maintenance bar procedure |
| 15 | 147042 | 1 | LABEL, Do not use heater above freezing (cold start) (not included in label kit) |
| 16 | 147041 | 1 | LABEL, Do not leave heater plugged in (cold start) (not included in label kit) |
| 17 | 159544 | 2 | LABEL, SJ7127RT (not included in label kit) |
| | 159547 | 2 | LABEL, SJ7135RT (not included in label kit) |




MidWestTech | Skyjack SJ7127 RT, SJ7135 RT Rough Terrain Scissor Lift Parts Manual |... Order the manual at mid-west-tech.com >