SKYJACK

# PARTS MANUAL

## SJ45 AJ+

ARTICULATING BOOM



**238271AGA**
July 20 2026
ANSI/CSA, CE, AS

MidWestTech | Skyjack SJ45 AJ+ Articulating Boom Lift Parts Manual | Publication 238271...
Order the manual at mid-west-tech.com >

# Table of Contents


**Foreword** . . . . . 7

General . . . . . 7
Parts Ordering Information . . . . . 7
Method of Listing . . . . . 7
Quantities . . . . . 7
How To Order Repair Parts . . . . . 7
Recommended Service Parts . . . . . 8

**Section 1 – Platform** . . . . . 11

1.1 Platform with Drop Bars . . . . . 12
1.2 Platform with Swing Gate . . . . . 14
1.3 Railings . . . . . 16
1.4 Rotary Actuator Mount with Load Cell . . . . . 18
1.5 Drop Bar Gate . . . . . 20
1.6 Swing Gate . . . . . 22
1.7 Platform Control Box . . . . . 24
1.8 Boom / Turret Controller . . . . . 28
1.9 Drive / Steer Controller . . . . . 30
1.10 Riser Controller . . . . . 32
1.11 Platform Terminal Strip . . . . . 33
1.12 SGE . . . . . 34
1.13 Footswitch . . . . . 35
1.14 Power to Platform - CE & AS . . . . . 36
1.15 Power to Platform - ANSI/CSA . . . . . 38

**Section 2 – Boom** . . . . . 39

2.1 Riser . . . . . 40
2.2 Main Boom . . . . . 42
2.3 Fly Boom . . . . . 44
2.4 Cable Track . . . . . 46
2.5 Jib . . . . . 48
2.6 Jib Manifold . . . . . 50
2.7 Limit Switches . . . . . 52
2.8 Rotary Actuator . . . . . 54

**Section 3 – Cylinders** . . . . . 55

3.1 Extension Cylinder . . . . . 56
3.2 Lift Cylinder . . . . . 58
3.3 Riser Cylinder Mounting . . . . . 59





MidWestTech | Skyjack SJ45 AJ+ Articulating Boom Lift Parts Manual | Publication 238271... Order the manual at mid-west-tech.com >

| Index No. | Skyjack Part No. | Qty. | Description |
|---|---|---|---|
| 1 | (Ref.) | 1 | MAIN MANIFOLD<br>*(For components, refer to 4.8 Main Manifold)* |
| 3 | (Ref.) | 1 | BRAKE MANIFOLD<br>*(For components, refer to 4.9 Brake Manifold)* |
| - | 213881 | 1 | LINE BODY VALVE |
| 4 | 163182 | 1 | • VALVE ASSEMBLY, Check |
| | 166075 | 1 | • • BLOCK, Check Valve |
| | 159815 | 1 | • • VALVE, Check |
| 5 | 163183 | 1 | • VALVE ASSEMBLY, Check |
| | 166075 | 1 | • • BLOCK, Check Valve |
| | 166066 | 1 | • • VALVE, Check |
| 6 | 228312 | 1 | • FITTING, Straight (06JIC-06ORBM, 0.67 orifice) |
| 7 | 114581 | 2 | • FITTING, Tee (06 JICM - 06 ORBM - 06 JICM) |
| 8 | 103069 | 1 | • FITTING, Straight (06 JICM - 06 ORBM) |
| 9 | 125959 | 2 | WASHER, Flat hardened (3/8") |
| 10 | 138736 | 2 | BOLT, Hex head (0.375"-16 x 6.00 gr 5) |
| 11 | 103995 | 2 | WASHER, Flat (1/4") |
| 12 | 103859 | 2 | BOLT, Hex head (1/4"-20 x 1.50" Grade 5) |
| 13 | 103996 | 8 | WASHER, Flat (5/16") |
| 14 | 103984 | 3 | NUT, Lock (5/16"-18, Grade 5) |
| 15 | 138762 | 3 | BOLT, Hex head (5/16"-18 x 5.00", Grade 5) |



MidWestTech | Skyjack SJ45 AJ+ Articulating Boom Lift Parts Manual | Publication 238271... Order the manual at mid-west-tech.com >

# 7.3 Engine Fuse Box - Kubota D1305

| Index No. | Skyjack Part No. | Qty. | Description |
|---|---|---|---|
| - | 236168 | 1 | FUSE BOX |
| 1 | 198654 | 1 | • COVER, Fuse box - bottom |
| 2 | 198646 | 1 | • BLOCK, Fuse box - dual ISO relay |
| 3 | 198647 | 1 | • BLOCK, Fuse box - ISO relay, 6 fuses |
| 4 | 198651 | 1 | • COVER, Fuse box - top |
| 5 | 198652 | 1 | • BRACKET, Fuse box - RH |
| 6 | 198653 | 1 | • BRACKET, Fuse box - LH |
| 7 | 198649 | 1 | • SPACER, Half module - mini fuse |
| 8 | 198650 | 1 | • SPACER, ISO relay |
| 9 | 170626 | 2 | • FUSE, ATM - 10A |
| 10 | 198727 | 1 | • FUSE, ATM - 30A |
| 11 | 198725 | 1 | • FUSE, ATM - 5A |
| 12 | 127131 | 3 | • RELAY, 12V 40 AMP |
| 13 | 198657 | 4 | • TERMINAL, Female - ISO relay (14/16 AWG) (not shown) |
| 14 | 198658 | 4 | • TERMINAL, Female - ISO relay (18/20 AWG) (not shown) |
| 15 | 198662 | 1 | • TERMINAL, Female - mini fuse (18/20 AWG) (not shown) |
| 16 | 198661 | 5 | • TERMINAL, Female - mini fuse (14/16 AWG) (not shown) |
| 17 | 198648 | 1 | • SPACER, Half module - ISO relay |
| 18 | 198655 | 4 | • TERMINAL, Female - ISO relay (10/12 AWG) (not shown) |
| 19 | 198660 | 2 | • TERMINAL, Female - mini fuse (10/12 AWG) (not shown) |
| 20 | (Ref.) | 1 | • LABEL, Fuse box<br>*(For components, refer to 10.3 Labels - Left & Right Sides)* |



MidWestTech | Skyjack SJ45 AJ+ Articulating Boom Lift Parts Manual | Publication 238271... Order the manual at mid-west-tech.com >

| Index No. | Skyjack Part No. | Qty. | Description |
|---|---|---|---|
| - | 238446 | 1 | POSITIVE AIR SHUT-OFF ELECTRICAL KIT - *Kubota D1305* |
| 1 | 222023 | 1 | • PLATE, Mount - rev limiter |
| 2 | 217392 | 2 | • BOLT, Hex head (M6 x 1 x 16, cl 8.8) |
| 3 | 600190 | 4 | • WASHER, Flat (M6) |
| 4 | 800354 | 4 | • NUT, Hex head (M6-1) |
| 5 | 118369 | 2 | • WASHER, Lock (M4) |
| 6 | 223180 | 2 | • WASHER, Flat (M4) |
| 7 | 217394 | 2 | • BOLT, Hex head (M6 x 1 x 20, cl 8.8) |
| 8 | 232526 | 4 | • BOLT, Button head cap screw (M4 x 0.7 x 6, cl 10.9) |
| - | 238641 | 1 | • HARNESS, Posi air (not shown) |
| 9 | 171900 | 1 | • • PLUG, Connector - 10 way |
| 10 | 171901 | 7 | • • CONTACT, Connector - female crimp terminal |
| 11 | 167722 | 3 | • • PLUG, Cavity - MX150 |
| 12 | 156114 | 1 | • • CONNECTOR, 3F W/P |
| 13 | 156138 | 3 | • • TERMINAL, Female - sealed (3.0-2.0 mm W/P) |
| 14 | 124369 | 3 | • • SEAL, Wire - W-P |
| 15 | 105359 | 3 | • • TERMINAL, Female - blue (14-16GA) |
| 16 | 13955 | 2 | • • TERMNAL, Ring - blue (14-16 GA #6) |
| 17 | 102936 | 2 | • • TERMINAL, Ring - blue (14-16 GA #10) |
| 18 | 102941 | 2 | • • TERMINAL, Ring - blue (14-16 GA 3/8") |
| 19 | 105360 | 1 | • • TERMINAL, Male (14-16 GA 1/4") |
| 20 | 213308 | 1 | • LIGHT, LED - red 12 V |
| 21 | 169937 | 1 | • LABEL, Posi air shut off |
| - | 171908 | 1 | SHOCKER PASS KIT - *Kubota D1305* |
| 22 | 171821 | 1 | • LIMITER, Automatic rev - R5 |
| 23 | 171899 | 1 | • BREAKER, Circuit - auto-reset (20 amp) |
| 24 | 171823 | 1 | • VALVE, Auto shut-off (1-3/4") |
| 25 | 171826 | 1 | • COVER, Safety - red |
| 26 | 115574 | 1 | • SWITCH, Toggle |
| 27 | 196529 | 1 | • INSULATOR, Stud mount - red |
| 28 | 133222 | 2 | CLAMP, Gear |



MidWestTech | Skyjack SJ45 AJ+ Articulating Boom Lift Parts Manual | Publication 238271... Order the manual at mid-west-tech.com >

| Index No. | Skyjack Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 231407 | 2 | PLATE, Wear pad |
| 2 | 149419 | 4 | BOLT, Hex head (M12 x 1.75 x 25mm, Grade 8.8) |
| 3 | 104379 | 4 | WASHER, Flat hardened (1/2") |
| 4 | 146773 | 4 | BOLT, Hex head (3/4"-10 x 5", Grade 8) |
| 5 | 702194 | 8 | WASHER, Flat hardened (3/4") |
| 6 | 700575 | 8 | NUT, Torque lock (3/4"-10, Grade C) |
| 7 | 152304 | 2 | FITTING, Straight (08 JICM - M18 DIN 3852-1) |
| 8 | 706812 | 2 | FITTING, Straight (08 JICF - 04 JICM) |
| 9 | 148866 | 2 | U-BOLT, Axle mount |
| 10 | 144128 | 1 | FITTING, 90° (04 JICM - 04 BSPPM) |
| 11 | 149181 | 1 | FITTING, Straight (06 JICM - M14 ISO6149) |
| 12 | 139126 | 1 | SEAL, British bonded (04BSPPM) |
| 13 | 152333 | 1 | CLAMP, Tube (5/8" cus double 17/32 hole) |
| 14 | 138734 | 1 | BOLT, Hex head (M14 x 2 x 30 mm, grade 8.8) |
| 15 | 702875 | 1 | FITTING, Straight (04JICM-04JICFS) |
| 16 | 218895 | 1 | FRONT AXLE ASSEMBLY, ***serial number A301 100 090 and above*** |
| | 148701 | 1 | FRONT AXLE ASSEMBLY, ***serial number A301 100 089 and below*** |
| | (Ref.) | 2 | • HUB REDUCTION - FRONT AXLE<br>*(For components, refer to 5.3 Hub Reduction - Front Axle - S/N A301 100 090 & above)*<br>*(For components, refer to 5.4 Hub Reduction - Front Axle - S/N A301 100 089 & below)* |
| | (Ref.) | 2 | • DIFFERENTIAL - FRONT AXLE<br>*(For components, refer to 5.5 Differential - Front Axle)* |
| | (Ref.) | 1 | • CENTRAL HOUSING<br>*(For components, refer to 5.6 Central Housing - Front Axle)* |
| | (Ref.) | 1 | • STEERING ASSEMBLY<br>*(For components, refer to 5.7 Steering Assembly)* |
| | (Ref.) | 1 | • TRUNNION - FRONT AXLE<br>*(For components, refer to 5.8 Trunnion)* |
| 17 | 148916 | 1 | REAR AXLE ASSEMBLY (with gear box) |
| | (Ref.) | 2 | • HUB REDUCTION - REAR AXLE<br>*(For components, refer to 5.10 Hub Reduction - Rear Axle)* |
| | (Ref.) | 2 | • DIFFERENTIAL ASSEMBLY<br>*(For components, refer to 5.11 Differential - Rear Axle)* |
| | (Ref.) | 1 | • BRAKES - REAR AXLE<br>*(For components, refer to 5.12 Brake - Rear Axle)* |
| | (Ref.) | 1 | • CENTRAL HOUSING - REAR AXLE<br>*(For components, refer to 5.13 Central Housing - Rear Axle)* |



MidWestTech | Skyjack SJ45 AJ+ Articulating Boom Lift Parts Manual | Publication 238271... Order the manual at mid-west-tech.com >