SKYJACK

SERVICE MANUAL

SJ1044 TH, SJ1044 THS, SJ1056 TH, SJ1056 THS, SJ1256 THS

TELEHANDLERS



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Table of Contents

Section 1 – Scheduled Maintenance 11

1.1 Read and Heed 11

1.1-1 Telehandler Definition 11

1.1-2 Purpose of Equipment 11

1.1-3 Use of Equipment 11

1.1-4 Manual 11

1.1-5 Service Policy and Warranty 11

1.1-6 Operator Safety Reminders, Warnings and Precautions 11

1.2 Maintenance and Inspection Schedule 12

1.2-1 Owner's Annual Inspection Record 12

1.2-2 Replacement Parts 12

1.2-3 Maintenance and Service Safety Tips 12

1.3 Hydraulic System & Component Maintenance and Repair 13

1.3-1 Maintenance Hints 13

1.4 About this Section 14

1.4-1 Service Bulletins 14

1.4-2 Maintenance and Inspection 14

1.4-3 Maintenance Instructions 14

1.5 Scheduled Maintenance Inspections 16

1.5-1 Labels - A 16

1.5-2 Electrical 16

1.5-3 Mirrors - A 16

1.5-4 Hydraulic 16

1.5-5 Cylinders - A 17

1.5-6 Frame 17

1.5-7 Engine Compartment 20

1.5-8 Transmission 21

1.5-9 Boom - A 21

1.5-10 Lifting Attachment - A 21

1.5-11 Grease Fittings - B 22

1.5-12 Operator's Cab 22

1.6 Function Tests 24

MidWestTech | Skyjack SJ1044 TH, SJ1044 THS, SJ1056 TH, SJ1056 THS, SJ1256 THS T... Order the manual at mid-west-tech.com >

Section 2 – Maintenance Tables 25

2.1 Standard and Optional Equipment 26
2.2 Specifications and Features 28
2.3 Recommended Fluids/Lubrications 30
2.4 Tire/Wheel Specifications 32
2.5 Pressure Settings 33
2.6 Standard Hose Numbering System 34
2.7 Torque Specifications for Fasteners (US) 36
2.8 Torque Specifications for Fasteners (Metric) 37
2.9 Torque Specifications for Hydraulic Couplings & Hoses 38
2.10 Air Conditioner Temperature/Pressure Chart 39

Section 3 – System Component Identification and Schematics 41

3.1 Electrical Symbol Chart 42
3.2 Hydraulic Symbol Chart 43
3.3 Electrical Components Parts List 44
3.4 Hydraulic Components Parts List 47
3.5 Hydraulic Pump and Return Filter Ports Identification 52
3.6 Steering Control Unit Ports Identification 53
3.7 Service Brake Actuator (Brake Pedal) Ports Identification 54
3.8 Auxiliary Block Ports Identification 55
3.9 Joystick Port Identifications 56
3.10 Premium Joystick Port Identifications 57
3.11 Premium Joystick Manifold Port Identifications 58
3.12 Rear Axle Stabilization Manifold Port Identification 59
3.13 Outrigger Manifold Port Identifications 60
3.14 Reserve Brake Manifold Port Identifications (Option) 61
3.15 Anti-Cavitation Relief Valve (SJ1256 THS Only) 62
3.16 Major Components Identification and Location 63
3.17 Main Manifold Port Identification 64
3.18 Enclosed Cab Harness & Wiring Diagram 67
3.19 Glow Plug Harness & Wiring Diagram 68
3.20 Road Lights Harness & Wiring Diagram 69
3.21 Work Lights Harness & Wiring Diagram 70
3.22 Boom Lights Harness & Wiring Diagram 71
3.23 Beacon Light Harness & Wiring Diagram 72
3.24 RAS System Schematic and Wiring 73
3.25 Elevate Telematics Harness 74
3.26 A/C Harness 75
3.27 Heater & A/C Harness 76
3.28 Transmission Electrical Connections 77
3.29 Console Harness and Layout 74 HP 79
3.30 Console Harness Wiring Diagram 74HP 80

MidWestTech | Skyjack SJ1044 TH, SJ1044 THS, SJ1056 TH, SJ1056 THS, SJ1256 THS T... Order the manual at mid-west-tech.com >

3.31 Console Harness and Layout 107 HP - THS Models . . . 81
3.32 Console Harness Wiring Diagram 107 HP - THS Models . . . 82
3.33 Engine Harness 74 HP . . . 83
3.34 Engine Harness 74 HP Wiring Diagram . . . 84
3.35 Engine Harness Diagram 107 HP - THS Models . . . 85
3.36 Engine Harness Wiring Diagram 107 HP . . . 86
3.37 Chassis Harness . . . 87
3.38 Chassis Harness Wiring Diagram . . . 88
3.39 Electrical Schematic 74 HP - SJ1044 TH & SJ1056 TH . . . 89
3.40 Electrical Schematic 74 HP Premium Joystick - SJ1044 TH & SJ1056 TH . . . 92
3.41 Electrical Schematic 107 HP - SJ1044 THS & SJ1056 THS . . . 95
3.42 Electrical Schematic 107 HP, Premium Joystick- SJ1044 THS & SJ1056 THS . . . 98
3.43 Electrical Schematic - SJ1256 THS . . . 101
3.44 Hydraulic Schematic - SJ1044 TH/THS & SJ1056 TH/THS . . . 104
3.45 Hydraulic Schematic (Reserve Brake Option) - SJ1044 TH/THS & SJ1056 TH/THS . . . 105
3.46 Hydraulic Schematic, Premium Joystick - SJ1044 TH/THS & SJ1056 TH/THS . . . 106
3.47 Hydraulic Schematic Premium Joystick (Reserve Brake Option) - SJ1044 TH/THS & SJ1056 TH/THS . . . 107
3.48 Hydraulic Schematic - SJ1256 THS . . . 108
3.49 Hydraulic Schematic (Reserve Brake Option) - SJ1256 THS . . . 109
3.50 Hydraulic Schematic for Premium Joystick- SJ1256 THS . . . 110

Section 4 – Troubleshooting Information . . . 111

4.1 Introduction . . . 111
4.2 Electrical System . . . 113
4.2-1 Engine Will Not Crank . . . 113
4.2-2 Engine Cranks But Will Not Run . . . 114
4.2-3 All Electrical Controls Inoperative . . . 114
4.2-4 Park Brake Will Not Release . . . 115
4.2-5 Transmission Will Not Engage . . . 116
4.2-6 No Forward Drive . . . 116
4.2-7 No Reverse Drive . . . 116
4.2-8 No 1st Speed Range . . . 117
4.2-9 No 2nd Speed Range . . . 117
4.2-10 No Boom Up, Front Steer Mode Only . . . 118
4.2-11 Front Steer Mode Only . . . 118
4.2-12 No 4W (Round) Steer Mode . . . 118
4.2-13 No Crab Steer Mode . . . 118
4.2-14 No Boom Up . . . 119
4.2-15 Frame Will Not Tilt Over 40° With Boom Below 40° . . . 120
4.2-16 No Frame Level . . . 121
4.2-17 RAS remains fully locked (RAS indicator remains illuminated) . . . 124
4.2-18 RAS remains locked . . . 125

MidWestTech | Skyjack SJ1044 TH, SJ1044 THS, SJ1056 TH, SJ1056 THS, SJ1256 THS T... Order the manual at mid-west-tech.com >

Model SJ1256 THS		
Engine		
Fuel Type		Ultra Low Sulfur Diesel (EN 590, ASTM D975) or Biodiesel B20
Fuel Tank Capacity		35 gal (132 L)
Recommended Oil Type		SAE 15W40
Engine Oil Capacity		9.5 quart (9.0 L)
Coolant Type (Standard)		COOLANT-ANTIFREEZE 50/50 PREMIX *
Coolant Type (Cold Weather Option)		COOLANT-ANTIFREEZE 60/40 PREMIX *
Coolant Tank Capacity		4.2 gal (16 L)
DEF		Diesel Exhaust Fluid (DEF)
DEF Tank Capacity		2.4 gal (9.4 L)
Transmission		
Powershift	Oil Type	ATF DEXRON III
	Capacity	14.2 quart (13.5 L)
Axles		
Differential		SAE 80W/90 LS
Front Axle Capacity		13.7 quart (13 L)
Rear Axle Capacity		13.7 quart (13 L)
Planetary Wheel Ends		SAE 80W/90
Front Wheel Hub Capacity		1.9 quart (1.8 L) per hub
Rear Wheel Hub Capacity		1.9 quart (1.8 L) per hub
Hydraulic Oil		
Standard Factory Fill		ATF Dexron III
Type		ATF Dexron III or Equivalent
Tank Capacity		43.85 gal (166 L)
Grease Points		
Type		EP2 Grease

** Refer to manufacturer's manual.*

1233AH

⚠ WARNING

Do not mix hydraulic oil of different types or use oils of types other than those originally supplied with this equipment. Doing so can severely damage hydraulic components. A full hydraulic oil system flush must be performed prior to adding a new type of hydraulic oil. Consult Skyjack service department.

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Index No.	Skyjack Part No.	Qty.	Description
D221	9-102921	1	DIODE, Chassis Harness
D15	9-102921	1	DIODE, Engine Harness
D250	9-102921	1	DIODE, Road light Harness
D251	9-102921	1	DIODE, Road light Harness
D60-1	9-102921	1	DIODE, Console harness
D15A	9-102921	1	DIODE, Console harness
D16	9-102921	1	DIODE, Console harness
-	9-190547	2	SENSOR, Inductive proxi - mm
-	9-166700	2	SENSOR, Pressure
2H-19A	9-159821	1	COIL, #8
2H-57	9-159821	1	COIL, #8
2H-221	9-159821	1	COIL, #8
2H-28	9-159821	1	COIL, #8
2H-28A	9-159821	1	COIL, #8
4H-223	9-159821	1	COIL, #8
4H-223-1	9-159821	1	COIL, #8
4H-47	9-159821	1	COIL, #8
4H-47-1	9-159821	1	COIL, #8
3H-26	9-168057	1	COIL, #10
4H-217	9-168057	1	COIL, #10
4H-218	9-168057	1	COIL, #10

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4.3-8 Park Brake Will Not Engage

3. Defective park brake C11.	**Repair or replace as necessary.**
4. Park brake valve SV3 stuck in shifted position.	**Check valve. Replace if defective.**

4.3-9 Service Brake Will Not Engage

1. Service brake actuator stuck or defective	**Clean valve. Check operation of valve. Repair or replace valve as required**
2. Load sense check valve CV6 blocked or defective	**Clean valve. Check operation of valve. Repair or replace valve as required**
3. Bypassing or defective brake seals in axle.	**Check seals, replace as necessary. Replace if defective**
4. PR2 pressure reducing valve misadjusted or defective **(SJ1256 THS only)**	**Adjust pressure, replace if defective**

4.3-10 Outriggers Inoperative

With following conditions:

- Right outriggers up and/or down Inoperative

1. Stuck or defective right outrigger valve V28 (4H-225 and 4H-226).	**Clean valve. Check operation of valve. Repair or replace valve as required.**
2. LS check valve CV19 blocked or defective	**Clean valve. Check operation of valve. Repair or replace valve as required**
3. Stuck or defective counterbalance valves CB10	**Clean valve. Check O-rings on valve. Repair or replace valve as required.**
4. Stuck or defective lift counterbalance valves CB11	**Clean valves. Check O-rings on valve. Repair or replace valve as required.**
5. Defective telescope cylinder C11.	**Check seals on cylinder. Replace as necessary. Replace cylinder if defective**

With following conditions:

- Left outriggers up and/or down inoperative

1. Stuck or defective left outrigger valve V25 (4H-227 and 4H-228).	**Clean valve. Check operation of valve. Repair or replace valve as required.**
2. LS check valve CV18 blocked or defective	**Clean valve. Check operation of valve. Repair or replace valve as required**
3. Stuck or defective counterbalance valves CB8	**Clean valve. Check O-rings on valve. Repair or replace valve as required.**
4. Stuck or defective lift counterbalance valves CB9	**Clean valves. Check O-rings on valve. Repair or replace valve as required.**
5. Defective telescope cylinder C10.	**Check seals on cylinder. Replace as necessary. Replace cylinder if defective**

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3. Remove cross pin from sleeve as shown in figure below.

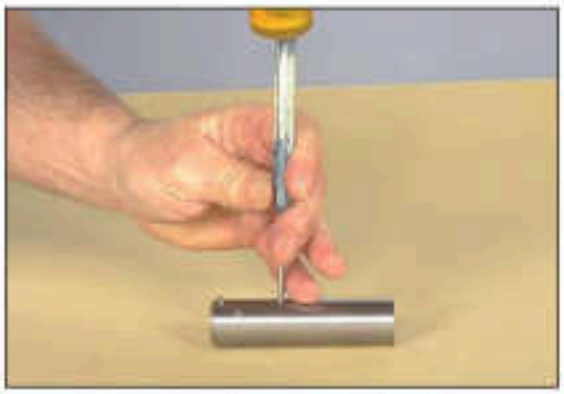


Figure 113 *Remove Cross Pin*

4. Remove regulator spool, spring, retainer spring and spacer spring from housing sleeve as shown in figure below.



Figure 114 *Remove Components from Housing Sleeve*

5. Install spring spacer in spring retainer as shown in figure below.



Figure 115 *Install Spring Spacer*

6. Install spring in spring retainer as shown in figure below.

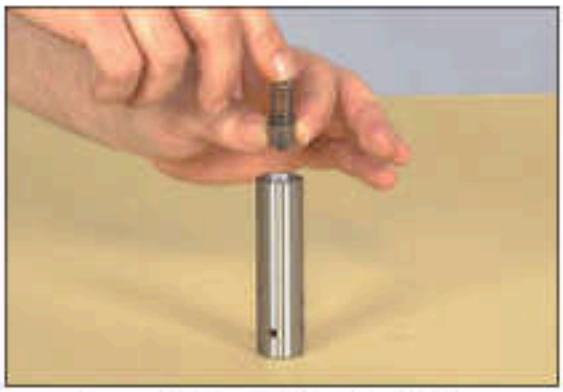


Figure 116 *Install Spring in Retainer*

7. Check orifice in regulator spool to be free and clear of any foreign material as shown in figure below.



Figure 117 *Verify Orifice is Clear of Debris*

8. Install spring retainer, spring and regulator valve in sleeve against inner cross pin as shown in figure below.

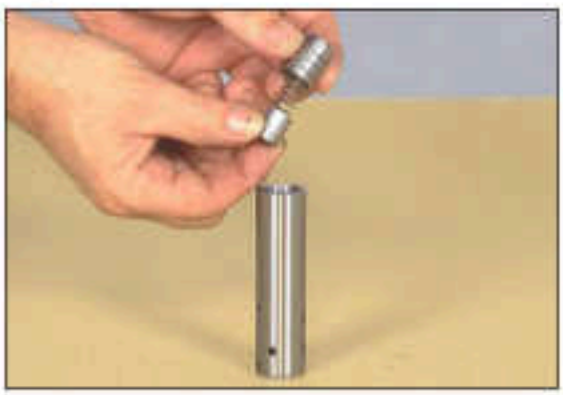


Figure 118 *Install Component in Sleeve*

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Remove Boom Hoses

1. Remove end of Fork Tilt hoses at front bulkheads on main boom assembly.

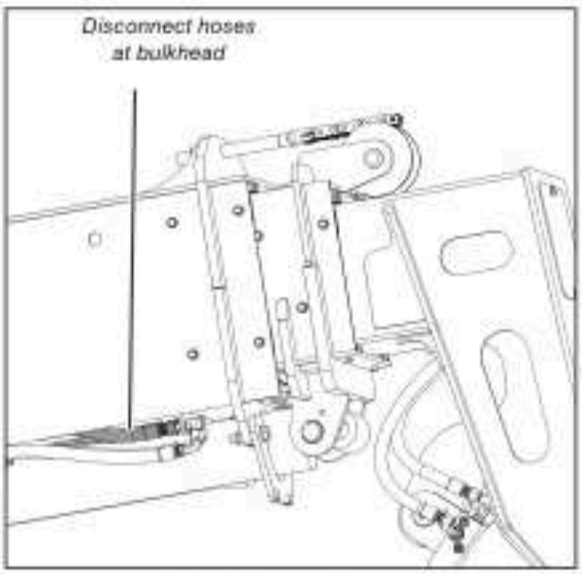


Figure 70 *Fork Tilt Hoses Removal at Bulkhead*

2. Cap/plug all open lines and fittings.
3. Remove other end of Auxilliary Hydraulics hoses at front bulkheads on main boom assembly.

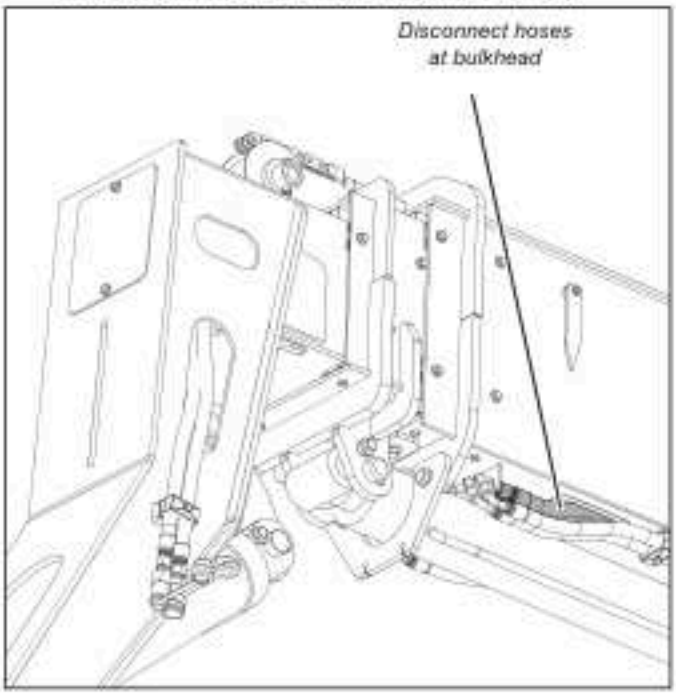


Figure 71 *Aux. Hydraulics Hoses Removal at Bulkhead*

4. Cap/plug all open lines and fittings.

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5. Start engine and extend the boom approximately 3 feet to gain acces to side acces hole on fly boom section.



Figure 72 *Boom Side Access Hole*

6. Shutdown engine and remove key from ignition switch.
7. Disconnect hoses at the rear of bulkhead as shown below.

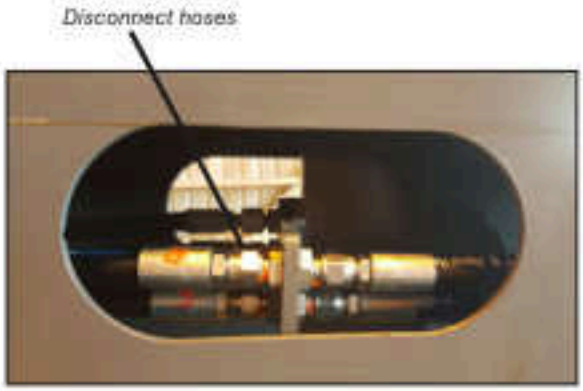
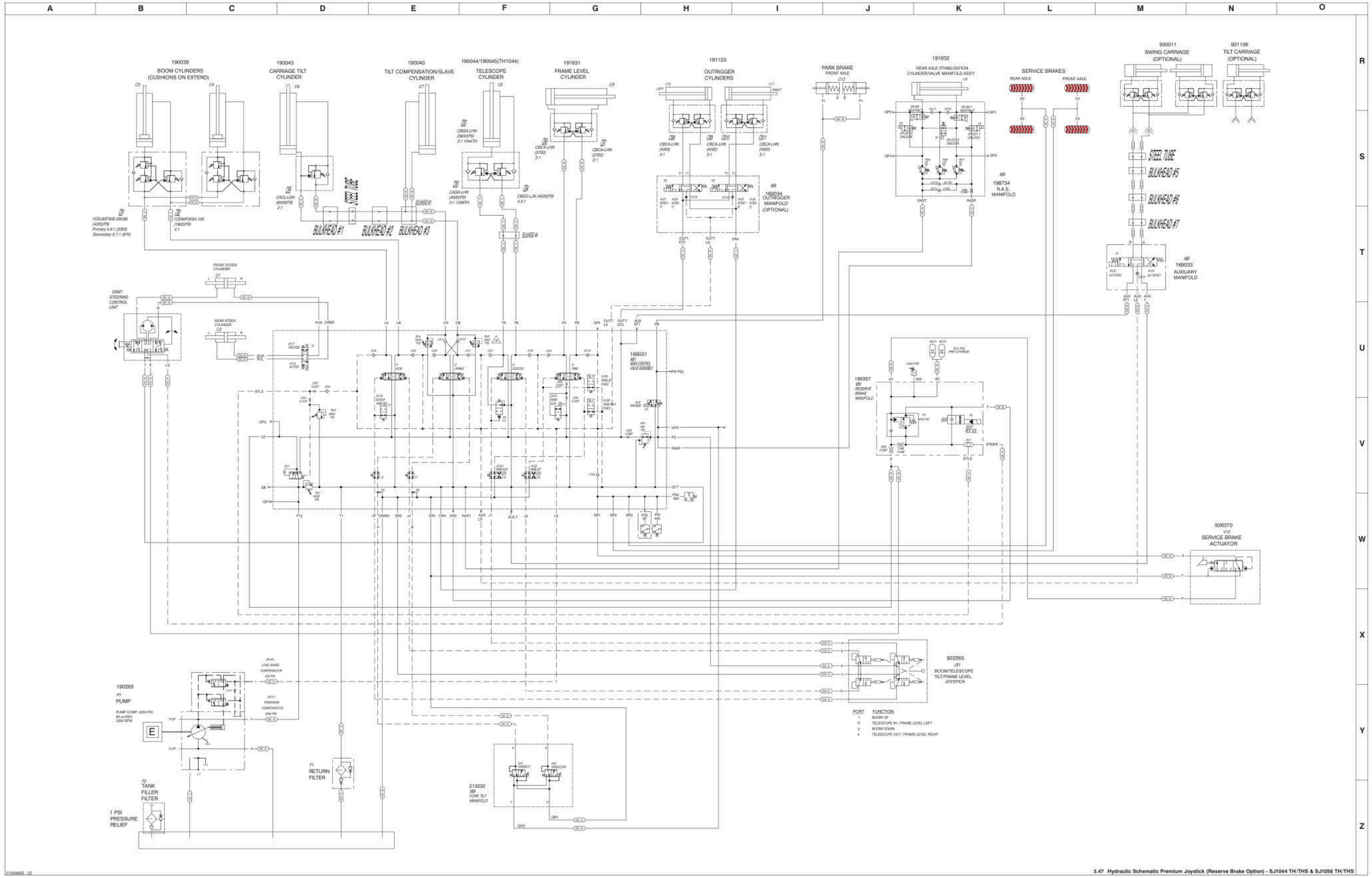


Figure 73 *Fork Tilt Hoses Removal*

8. Cap/plug all open lines and fittings.
9. Remove the hoses at the rear of bulkhead fittings on the other side of the boom.
10. Cap/plug all open lines and fittings.
11. Start the engine and fully retract the boom.
12. Shutdown engine and remove key from ignition switch.
13. With rear access cover plate removed, pull the hoses out of boom assembly and thoroughly inspect all hoses. Replace hoses if needed.

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