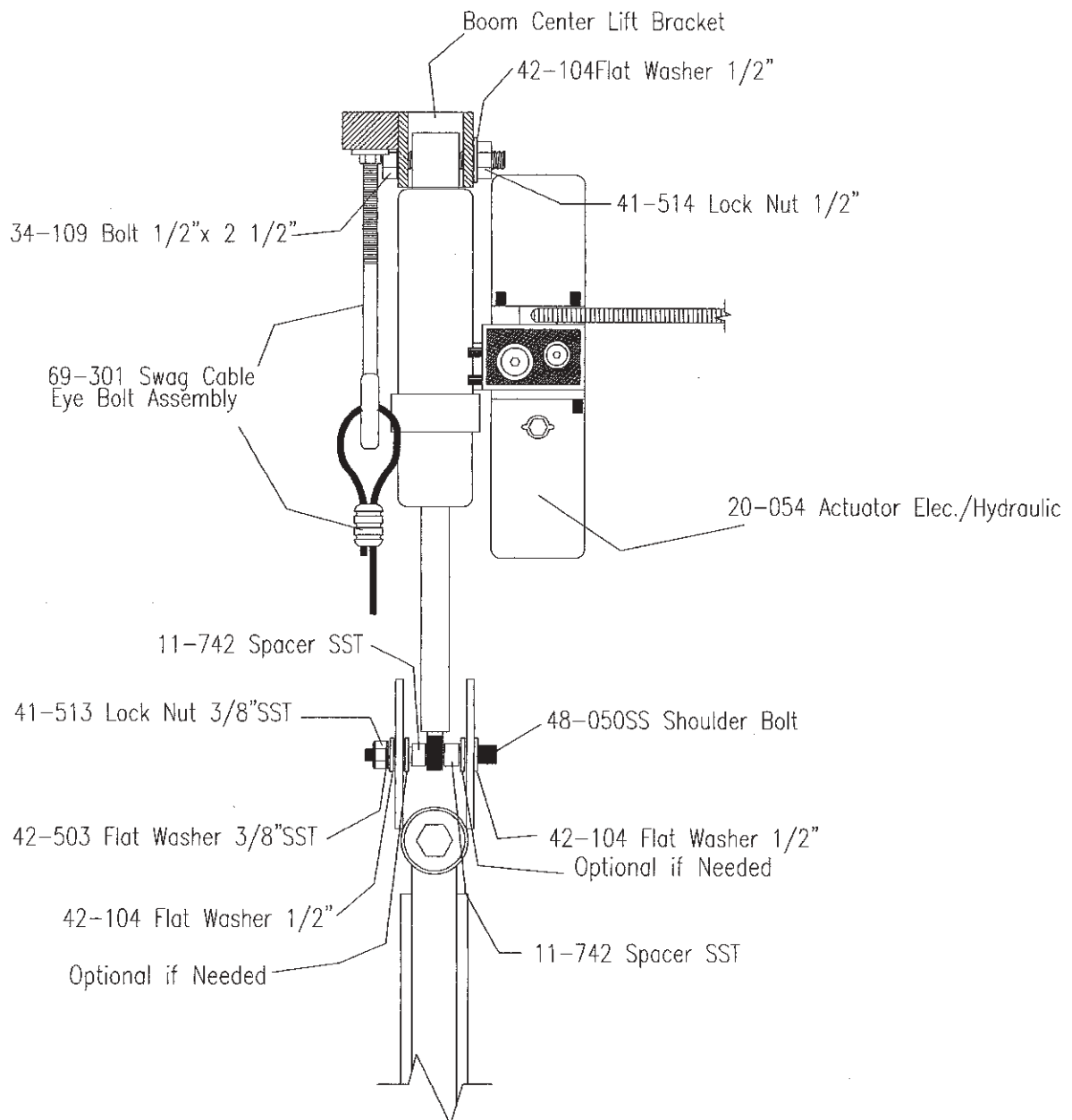


**Supplied W/ELA2-KIT2 and
the ELA2-KIT2AFRV Only**

**SDI ELA2 Assembly
Diagram**

PI397/1111jj

Detail A of left side of OTB boom -
Top view looking straight down:



SDI ELA2

Item Number	Part Number	Description	Qty
1	56-023-3	Switch and Harness Assembly (Supplied with the ELA2-KIT2, ELA2-KIT2AFRV and 4119059 <i>only</i>).	1
2	20-054	Actuator	2
5	48-050SS	Shoulder Bolt	2
6	42-104	Flat Washer 1/2"	4
7	11-742	Spacer SS	4
8	42-503	Flat Washer 3/8"	2
9	41-513	Lock Nut 3/8" SS	2
10	41-514	Lock Nut 1/2"	2
12	34-109	Lock Bolt 1/2 x 2-1/2"	2
13	31-503	Bolt	1
14	11-781	Boom Arm Rest	2
15	11-784	Boom Fork Adjustment Bracket	2
16	11-761	Upright and Cross Member Assembly	1

**SDI Optional Electric Lift Kits - instructions
for the following:**

ELA2-KIT2 ELA2-KIT2AF
ELA2-KIT2AFRV 4119054
4119059

Above accessories are options to add Power Lifts to SDI Optimum Turf Booms, OTB15-21/21-3, OTB15/20-3, OTB15/10-3, 4132044, 4132046 and 4132048. A 12 volt power source is required for these assemblies. Each kit is for two boom wings.

Note: The spray boom must be completely assembled and set up on the sprayer/vehicle before installing the lift kit. (see spray boom set-up instructions).

ELA2-KIT2 Set Up Instructions

1. After attaching the boom to the sprayer, manually lower both wings to their spray positions and check that they are level.

If the boom wings are not level, adjust the eyebolt assembly (Part #69-301) until they are level.

2. Actuators must be in the fully extended position for installation; they are shipped in the retracted position.
 - a. If the wire harness has not been installed, temporarily connect the two leads to a 12 volt source and operate to fully extend the rod.
 - b. If a wire harness is already installed, connect the two leads to the two leads on the actuator. Using the switch on the control box (use the switch for the side of the boom you are working on), extend the rod fully. When the actuator is fully extended, disconnect the harness assembly from the actuator.

3. Place the fixed end of the actuator (Part #20-054) on the boom center section with the actuator motor facing to the rear of the sprayer (see drawing). Attach the fixed end using the 1/2" x 2-1/2" supplied bolts (Part #34-109) and the lock nuts (Part #41-514).
4. Next, at the other end of the actuator slip a 1/2" flat washer (Part #42-104) on the shoulder bolt and slide the shoulder bolt through the slot in the breakaway hinge just enough to slip another 1/2" flat washer (Part #42-104) then a spacer (Part #11-742) on to the shoulder bolt. Then slide the shoulder bolt through the eye of the actuator shaft just enough to add another spacer (Part #11-742) and a 1/2" flat washer (Part #42-104). Slide the shoulder bolt fully through the slot on the opposite side of the breakaway hinge. Add a 1/2" flat washer (Part #42-104) on the shoulder bolt and a 3/8" flat washer (Part #42-503), then thread on the 3/8" lock nut (Part #41-513).

Repeat the above procedure for the other boom wing.

5. Connecting the wire harness to the actuators:

a. ELA2-KIT2AF and 4119054 - for use with the All Function Control box and wire harness:

- i. If the all function control system is used, connect the actuator leads to the wire harness leads. The yellow and green wires operate the left side actuator, the red and brown wires connect the right side actuator.

b. ELA2-KIT2AFRV and 4119059 - for use with the All Function Control harness and the Raven Control system:

- i. Same as ELA2-KIT2AF and 4119054, except an actuator control box is added and plugged into the All Function harness.

c. ELA2-KIT2 - includes wire harness and control box.

- i. Before connecting the wire harness to the 12 volt power source, connect the harness assembly to the wire connector from the actuators. The yellow and green wires operate the left side actuator, the red and brown wires connect the right side actuator.
- ii. Route the wire harness assembly forward to the operator area. Mount the switch box in a convenient location for the operator (typically near spray boom controls). Connect the battery clips from the switch box to the 12 volt power supply (red to positive, brown to negative).

5. When all connections are complete, flip the switches one at a time and raise boom wings to their up position. If boom moves in the opposite direction, switch the wires at the actuator.

With the boom wing in the up position, loosen the 5/16 x 1" bolt (Part #31-503) on the boom upright and cross member. Adjust the boom fork out until there is no play when the boom wing is resting in the boom fork. Make the same adjustment on the opposite side.

NOTE: Low voltage at the battery or insufficient wire size can cause the actuator to overheat, operate slowly and/or fail prematurely.

Helpful hints for proper operation and long actuator life:

1. With vehicle running, test battery voltage. A fully charged battery should read 14 volts DC. If battery voltage is low, test the battery and charging system.
2. Amperage draw at the actuator should not exceed 18 amps per actuator. The highest amp draw will be the first few feet of lift. To accurately test the current draw, test at the actuator with an amp meter.
3. All power leads need to be 12 gauge wire.
4. Check all connectors for loose connections.
5. It is recommended that an anti-corrosion compound be applied to all electrical connections. Also, sealing all connections with a clear RTV silicone will prevent moisture penetration.