Service Call:
Bleeding Air out of Power Assist Controls

Tools Required:
5/16\textsuperscript{th} wrench, 1/8\textsuperscript{th} inch tubing 12” long, oil container

Model(s):
5FA, 5FB, 5FC, 5HP, 5TC, 5TCX, 6TC, 6EHV, 6H, RM-HL, Sidekick, Scrambler (Pre “95) & units converted to Power Assist Controls
Danger

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury. Many of the hazards identified in the operator’s manual are also safety hazards when maintenance and repair procedures are performed.

Do Not Perform Maintenance Unless:

- You are trained and qualified to perform maintenance on this machine.
- You read, understand and obey:
  - manufacturer’s instructions and safety rules
  - employer’s safety rules and worksite regulations
  - applicable governmental regulations
- You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this tech tip is a supplement to the service manual. Consult the appropriate service manual of your machine for safety rules and hazards.

**WARNING**

Escaping fluid under pressure can penetrate skin causing serious injury.

Relieve pressure before disconnecting hydraulic lines. Keep away from leaks and pin holes. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

Fluid injected into skin must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene will result.
Step 1
At the lower control valve, locate the three valve sections: rotate, upper boom, and lower boom. On each valve section there will be two bleeder ports, one on each side of the work lines for the function. Each bleeder should be bled independently from the other. Adapt a length of 1/8” tubing over the bleeder screw to capture oil during the bleeding process.
**Tech Tips**

**Step 2**
Start truck engine, complete procedure for engaging the PTO and pump, set your outriggers, and select for unit controls.

**Step 3**
Undo the boom tie downs and verify that the selector near the lower control valve is in upper control mode.
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From the lower controls open one of the bleeder screws with the tubing attached for bleeding. With container under bleeding tube, push and hold the red interlock button located close to the lower control valve. A stream of oil mixed with air will come out of the tube. Close bleed screw when no air is present in the oil coming out the tube attached to the bleeder screw.
Step 5

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Repeat Step 4 for the remaining bleeder screws. Fully operate all boom functions from the upper controls checking for boom function responsiveness. Sluggish controls indicate that air is still present in the lines and the process needs to be repeated.

Step 6

Below is a drawing of a valve that was used on a older unit. The same process can be used. The thumb screws are the bleeders and the oil will come out of a weep hole just above or below the thumb screw.
Step 7
On units with a lift you will need to enable the controls from the basket and bleed the controls the same as above.