

**Service Call:**

Bleeding Upper Control Pilot Lines on a  
TM Series

**Tools Required:**

5/16<sup>th</sup> wrench

1/8<sup>th</sup> inch tubing 12" long

Oil container

**Model(s):**

TM

## Tech Tip Safety Rules




### 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.

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Units built on or before 2007 require 2 people to bleed the air out of the lines. One technician operates the controls from the platform while the second technician cracks the bleeders at the lower control valve.

[Click on this link](#) or go to the last page in this document for units built after 2007.

## Step 1

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

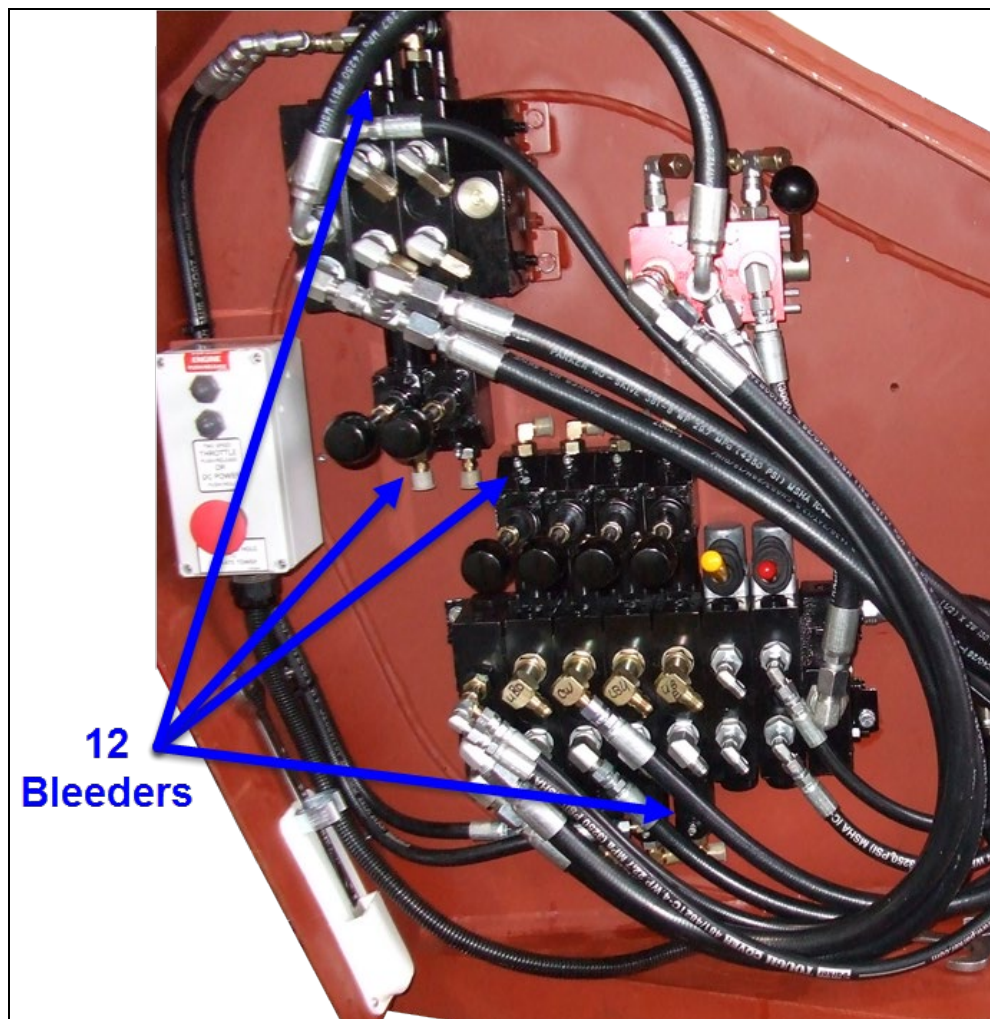
## Step 2

Undo the boom tie downs and verify that the selector near the lower control valve is in upper control mode.



## Step 3

At the lower control valve locate the bleeders on each boom function: rotate, upper boom, lower boom, upper boom extend, winch, and lower boom extend. On each valve section there will be two bleeder ports, one on each side of the work lines for the function. Adapt a length of 1/8" tubing and attach over the bleeder screw to capture the oil during the bleeding process.



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## Step 4

Position the boom out of the rest and in the proper position to allow the operation of all functions without running into any obstructions.

## Step 5

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With a technician in the platform and the second technician at the lower control valve, slowly crack the bleeder at the lower control valve and then enable and operate that function from the platform controls. Continue to operate the function until all air is out.

## Step 6

Once all the air is out, slowly close the bleeder. When the bleeder is closed the function will begin to operate and the function must be released.



The technician at the platform must release the function once the bleeder is closed and the function begins to operate to control unnecessary boom movement.

## Step 7

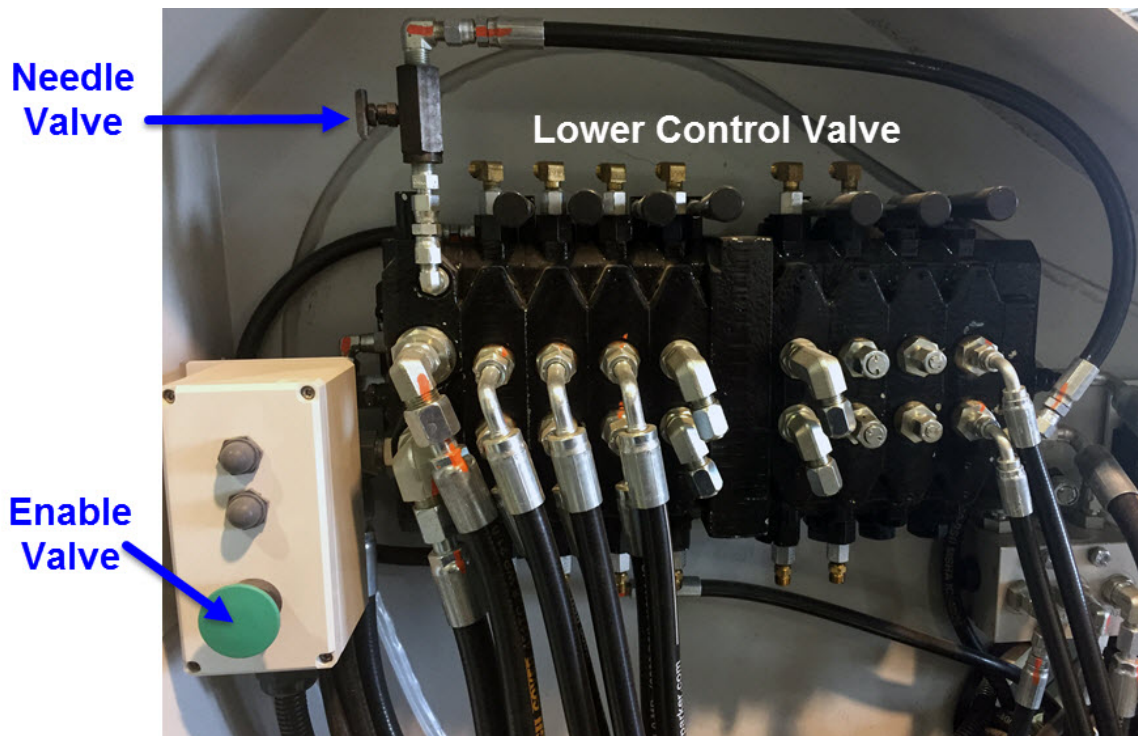
Repeat steps 5 and 6 on all other pilot operated functions.



Units built after 2007 only requires one person to complete.

## Step 1

Locate the needle valve at the lower control valve.



## Step 2

Push and hold the enable button. While holding the enable button open the needle valve. Wait several minutes and when all air has been removed, close the needle valve and release button.