

Service Call:

Removing the 3rd Cylinder Hose Carrier

Tools Required:

7/16", 1/2", 11/16", 3/4" wrenches

1/4 Allen wrench

3/8 JIC caps and plugs

Pry bar

Large C clamp

Model(s):

L4000, C4000, C5000, C6000, C7000

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.

H23877B

Overview

This procedure provides step-by-step instructions to remove the extension system for the 3rd extension cylinder without having to remove the inner boom assembly from the main boom.

Step 1

Check the unit specific maintenance manual and parts manual to verify the correct factory OEM parts are used. These parts will be listed under the Extension System Assembly under the Boom Assembly.

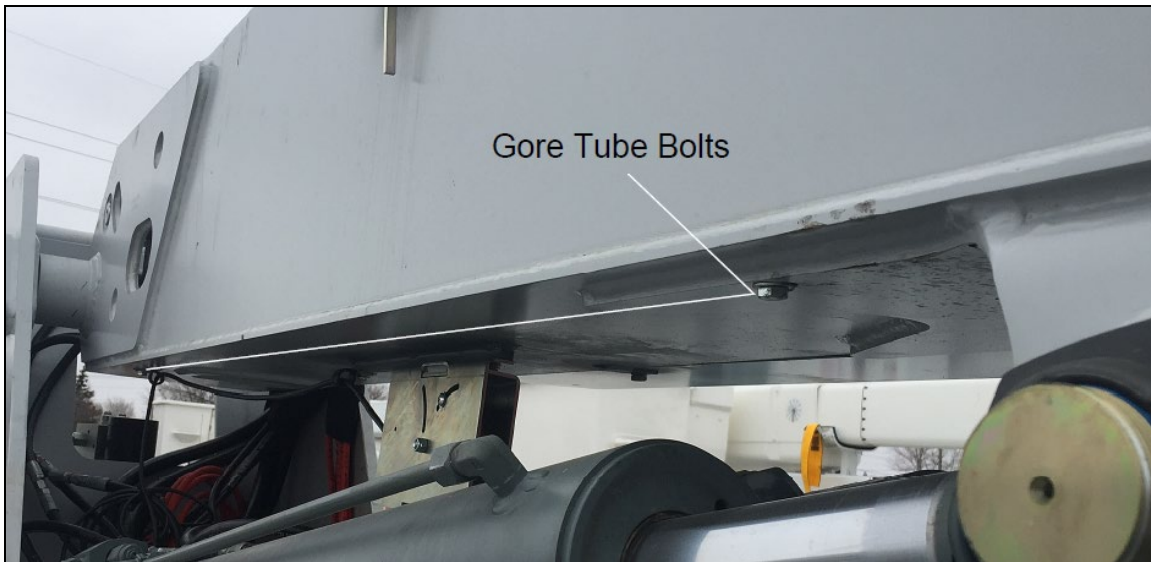
0464463	<u>BOOM ASSY,C6060,TM TXFR HYD FG 3RD</u>
0402471	<u>TANDEM ROLLER ASSY</u>
0046018	<u>ROLLER ASSY</u>
0440470	<u>MANUAL PIN ASSY</u>
0464478	<u>EXT CYL ASSY 6060 156"</u>
0066868	<u>VALVE D/L (VMI-KANBAN)</u>
0419419	<u>OIL,HYDRAULIC,ISO 15</u>
0464483	<u>SHEAVE ASSY LOWER 6000</u>
0464484	<u>SHEAVE ASSY UPPER 6000</u>
0464794	<u>EXT SYS ASSY 6000</u>

Step 2

Find a suitable area to properly set up the unit for operation according to the operator's manual. In some situations and configurations, such as corner mount units, it may be easier to rotate the unit off the back of the chassis for easier accessibility.

Step 3

Remove the bolts along the bottom of the boom on the right-hand side. These are fastened to the tube which attaches to the catrac looping back to the cylinder for the 3rd.

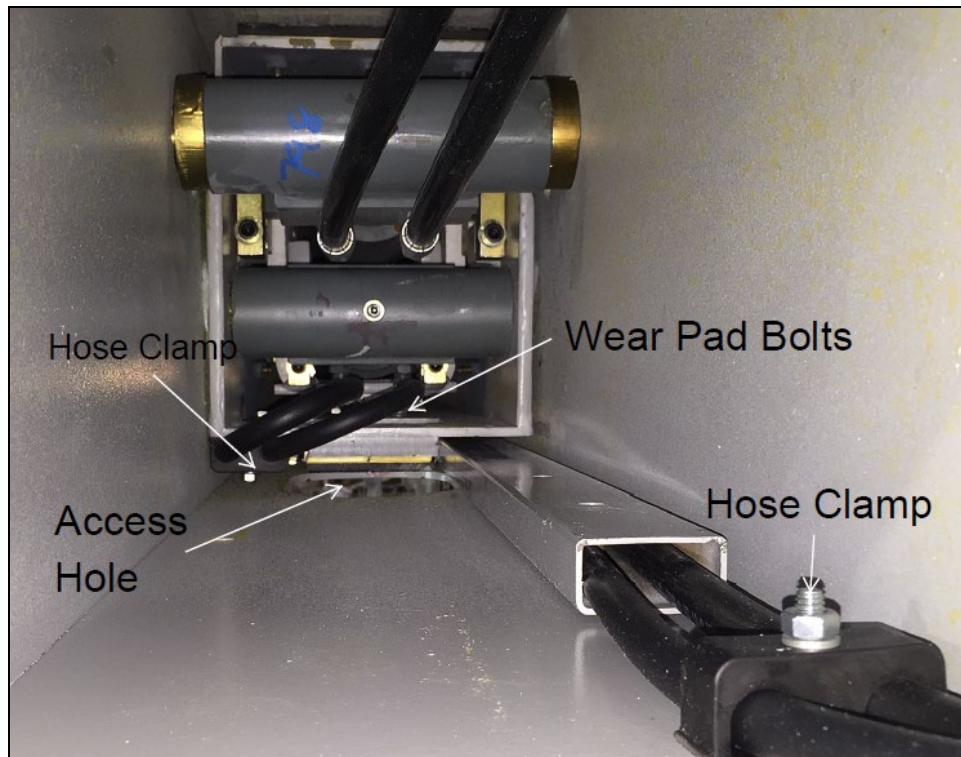


Step 4

Remove all the hose clamps that are attached to the stinger or 2nd boom section.

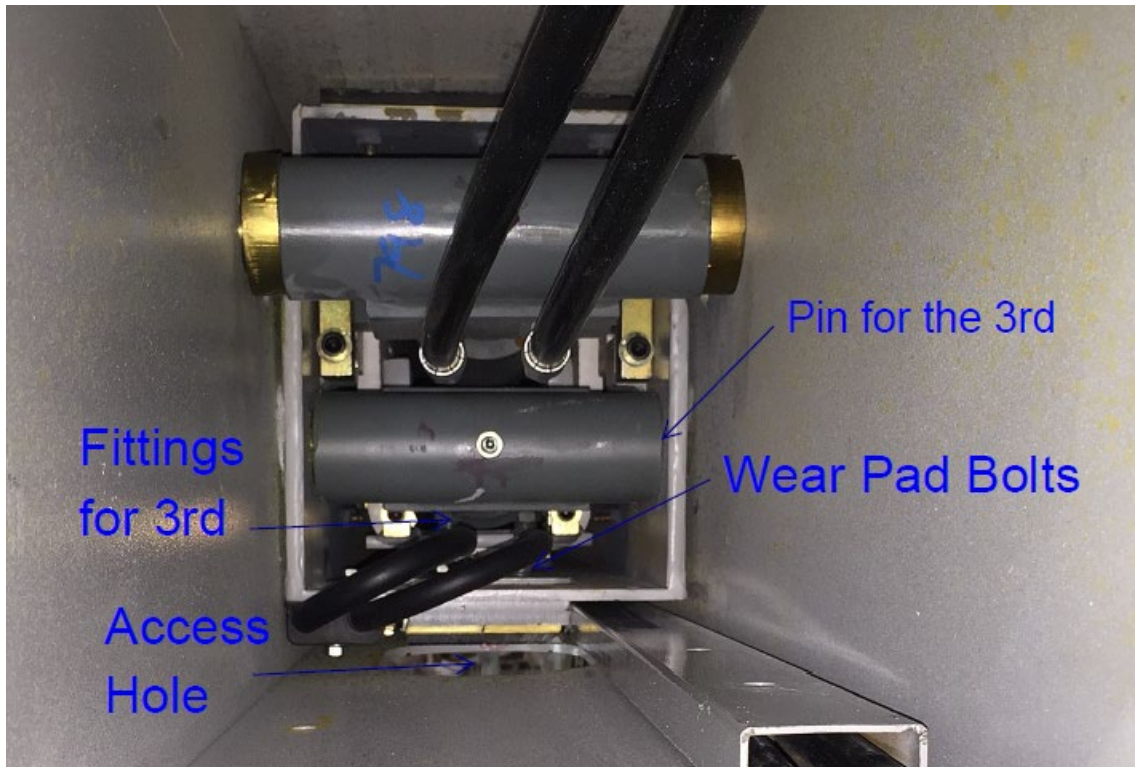
Step 5

To allow more room to access the wear pad bolts, extend the 3rd boom section, disconnect the hoses, and install a set of jumper hoses. In some units, such as a C4047, the wear pad bolts can be reached through the access hole.



Step 6

Support the 3rd from drifting out by strapping it to the main boom or stinger. Unpin the cylinder on the 3rd and extend it before disconnecting the jumper hoses.



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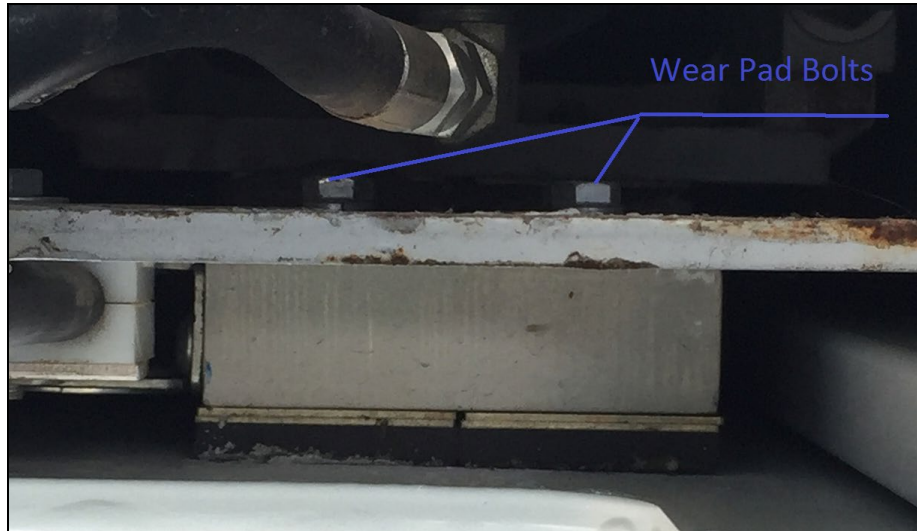
Step 7

If this is not an option because of the boom configuration, then remove the hoses and the fittings from the cylinder on the 3rd section.



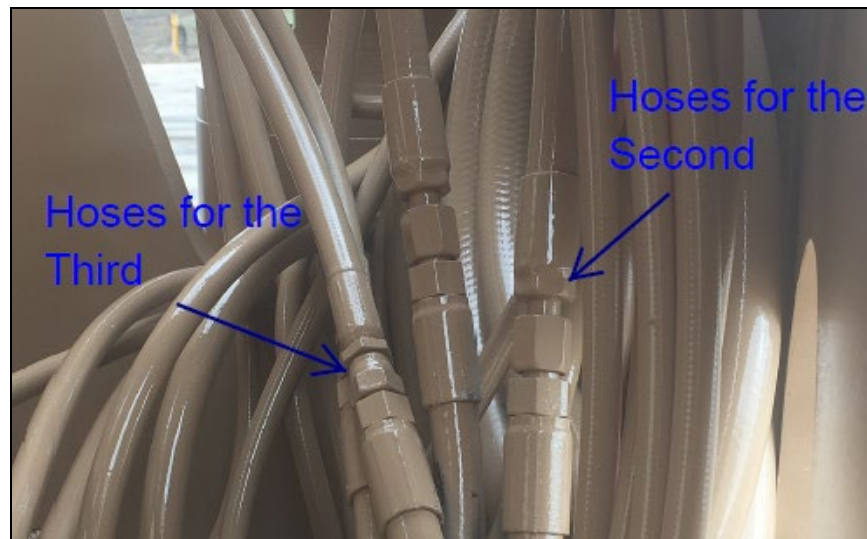
Step 8

Remove the 4 bolts holding the wear pad assembly to the second stage.



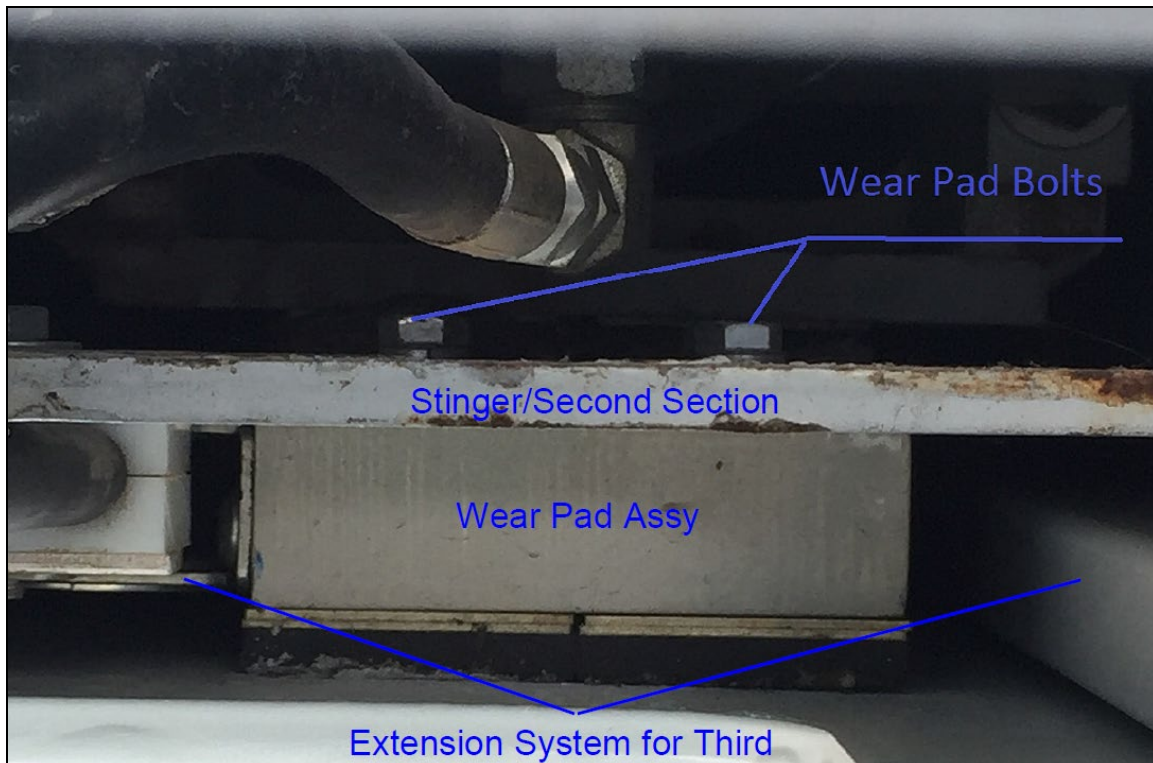
Step 9

Disconnect the hoses for the extension system in the pedestal above rotation.



Step 10

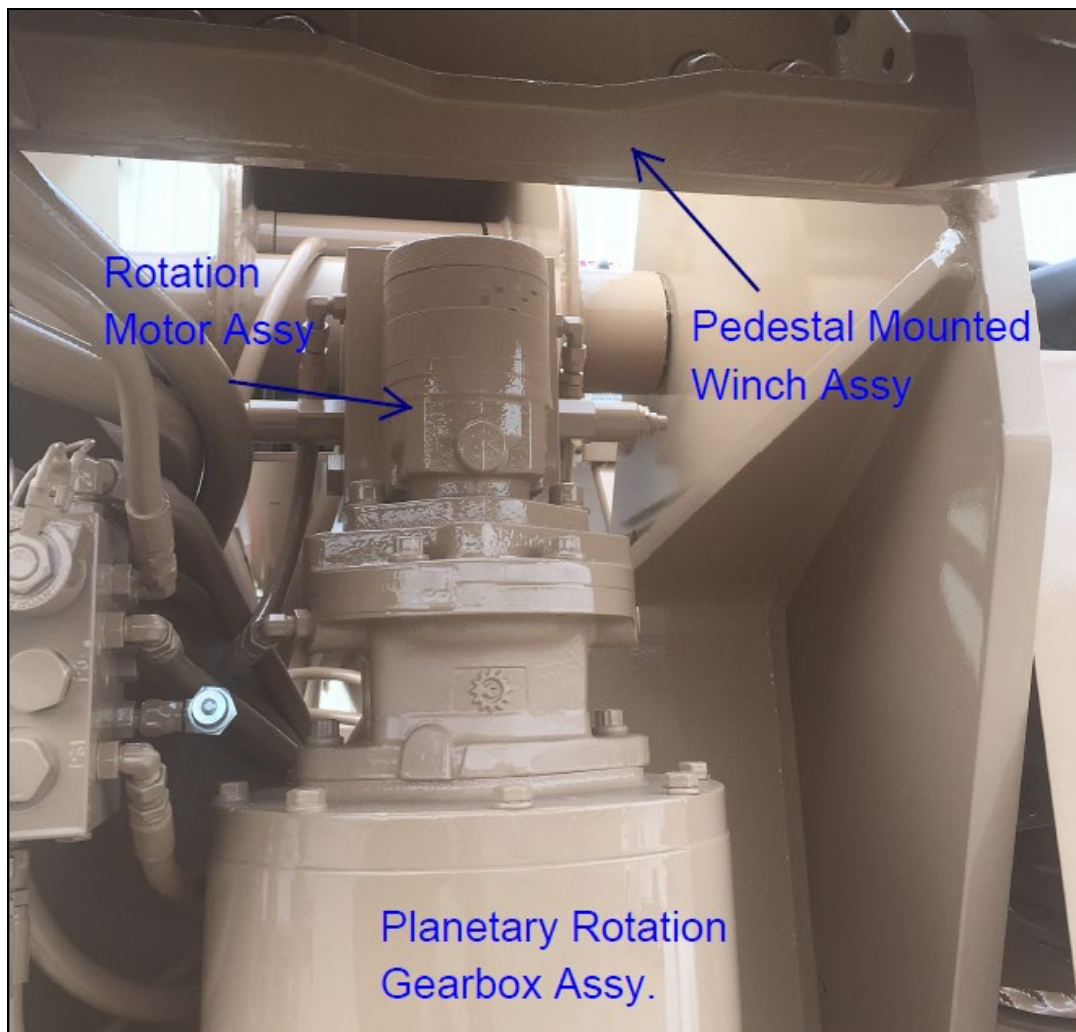
To take the weight off the rear of the second section, reinstall the fittings for the 3rd. Disconnect the hoses off the extension cylinder for the 2nd and connect them to the extension cylinder for the 3rd. Run the 2nd retract function and re-pin it to the cylinder. Extend the 3rd section out using the 2nd extend function and winch down until the 3rd is all the way out. Slide the extension assembly out the back of the boom.



Step 11

On units with a planetary rotation system, the rotation motor assembly may need to be removed to allow enough room to slide the extension assembly out.

Also if the unit has a pedestal mounted winch the boom may need to be raised for the extension system removal.



Step 12

Once the assembly has been removed, install the wear pad assembly to the new catrac assembly and then install the new assembly.



Step 13

Reinstall the components in the reverse order that they were removed in. Consult the unit specific manual or lubrication chart for lubrication requirements of components such as the wear pads.

Step 14

Perform a full operational test on the Digger Derrick before putting the unit back in service.