



Boom

15. Remove the Do Not Operate Tags from both the ignition key switch and the steering wheel.
16. Install the previously removed attachment to the quick coupler assembly. Refer to Section 3.9, "Quick Coupler Assembly."

3.5 BOOM SECTION REMOVAL/INSTALLATION

3.5.1 Second and Third Boom Section Removal

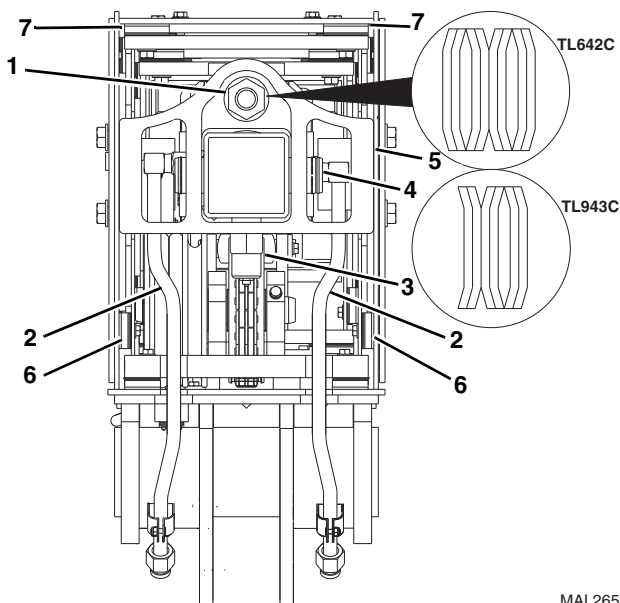
Note: Refer to Section 3.14.2, 3.16. "Push Beam Temporary Brackets," for diagrams of the Temporary Extend Bracket and Temporary Retract Bracket designed to hold the chains in place on the push beam during disassembly and reassembly.

These brackets are NOT a purchasable part and must be manufactured locally.

They are solely designed to aid in the removal and installation of the push beam assembly.

Note: Refer to Section 8.8, "Hydraulic Cylinders," for general tilt cylinder removal.

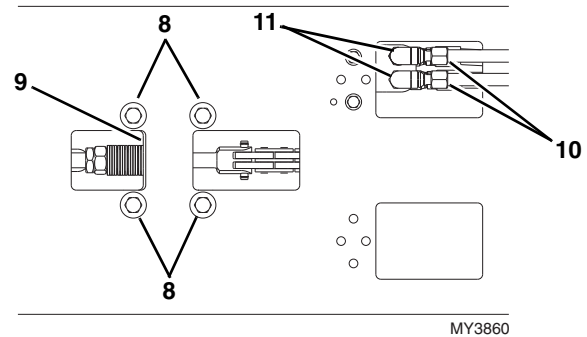
1. Remove the access cover from the rear of the first boom section.



2. Remove the locknut, adjustment nut and six belleville washers (1) from the extend chain clevis rod at the rear of the boom.
3. Loosen and remove both extend/retract cylinder tubes (2) from the rear of the boom. Cap and/or plug

all open hoses, tubes and/or fittings to prevent dirt and debris from entering the hydraulic system.

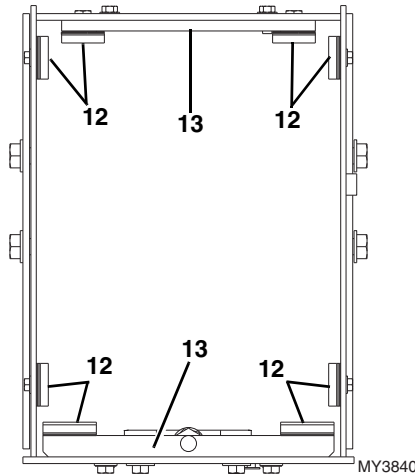
4. Slowly loosen and remove the extend/retract cylinder counterbalance valve (3). Plug (M27x1.5) the open port on the extend/retract cylinder to prevent dirt and debris from entering the hydraulic system.
5. Remove the retaining clips from the extend/retract cylinder mounting pin (4), remove the extend/retract cylinder pin.
6. Remove the four mounting bolts securing the strong back (5) to the first boom section.
7. Remove the strong back (5) from the rear of the boom.
8. Remove the right or left side wear pads, shims and backing plates (6) from the rear of the second boom section. Label and tag each set of wear pads being removed.
9. Remove the top wear pads, shims and backing plates (7) from the rear of the second boom section. Label and tag each set of wear pads being removed.



10. Loosen and remove the four bolts (8) securing the retract chain anchor plate (9).
11. Between the bottom front of the first and second boom sections, feed a rope or wire to the retract chain anchor plate and secure to the second or third boom section.
12. Disconnect both tilt tubes (10) and (if equipped) both auxiliary tubes from the fittings on the hose retainer brackets (11) at the bottom front inside the boom. Plug the tube ends to prevent dirt and debris from entering the hydraulic system.
13. Disconnect both tilt hoses (not shown) and (if equipped) both auxiliary hoses from the hose retainer brackets at the bottom front inside the boom. Plug the hose ends to prevent dirt and debris from entering the hydraulic system.
14. Loosen and remove the hose retainer brackets (11) and (if equipped) both auxiliary take-up brackets.

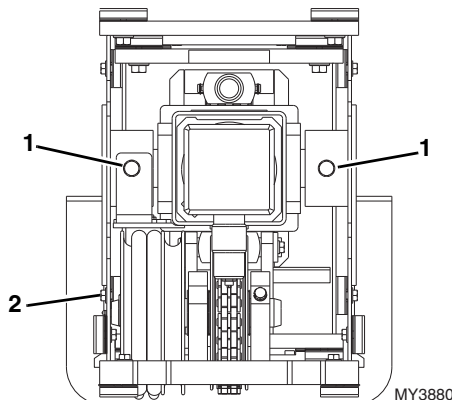


15. Between the bottom front of the first and second boom sections, feed a rope or wire to both tilt hoses (not shown) and (if equipped) both auxiliary hoses and secure to the second or third boom section.
16. Place a suitable sling around the second boom section. Slowly pull the second and third boom sections approximately 25% out of the first boom section. Lower the second and third boom sections onto a suitable support.



17. Remove all wear pads, shims and backing plates (12) from the front inside of the first boom section. Label and tag each set of wear pads being removed.
18. Remove the top and bottom mounting plates (13) from the front inside of the first boom section. Label and tag each mounting plate being removed.
19. Relocate the sling or using two slings for better stability, balance the two boom sections and slowly pull them out of the first boom section being careful not to damage the hydraulic hoses or chains. Lower the second and third boom sections onto suitable supports.

3.5.2 Third Boom Section Removal

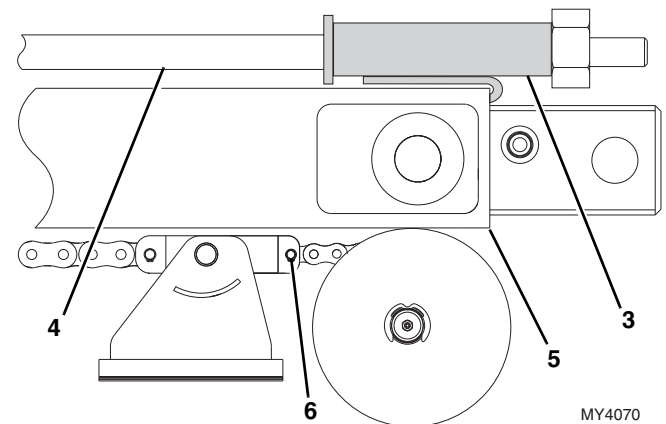


1. Loosen and remove the tilt cylinder hose guide (1) and if equipped, the auxiliary hose guide from the rear of the third second section.

Note: The hose guide mounting bolts also hold the push pin beams in place.

2. Loosen and remove all retract chain sheave components (2) and the hydraulic hose rollers and components.

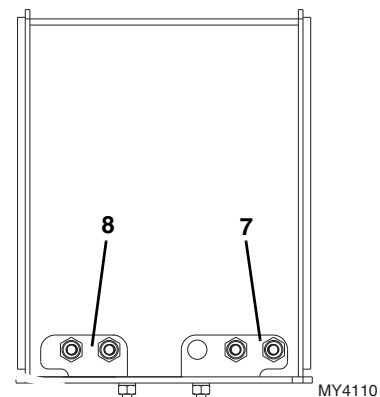
Note: Offset the extend chain rod to the left or right of the push beam assembly allowing the push beam to be raised enough to allow the removal of the chain and hose sheaves.



3. Attach the Temporary Extend Chain Retention Bracket (3) between the extend chain rod (4) and the push beam tube (5). Snug in place. Do Not tighten.

Note: Refer to Section 3.16, "Push Beam Temporary Brackets," for Temporary Extend Chain Bracket diagram.

4. At the rear of the boom, remove the retract chain (6) from the chain clevis.



5. Loosen and remove the tilt hoses and (if equipped) auxiliary hoses from the hose retainers (7 & 8) at the front of the third boom section.