

Assembly Instructions for the Feed Chopper on the CFR 651 with Fast Flail Drum

Note: These instructions are for a CFR651 that have a fast flail drum.

- Before beginning installation verify that the sheave on the flail drum (front tub wall) has an outside diameter of 12.4" (12-13/32").



Park the CFR 651 on level ground.

Lower the forks to the ground for additional stability.

Disconnect the drive shaft and hydraulic lines from the tractor before beginning any work.

Disconnect the CFR 651 from the tractor hitch.

1. Ensure the CFR 651 upper discharge door is locked in the upright position.

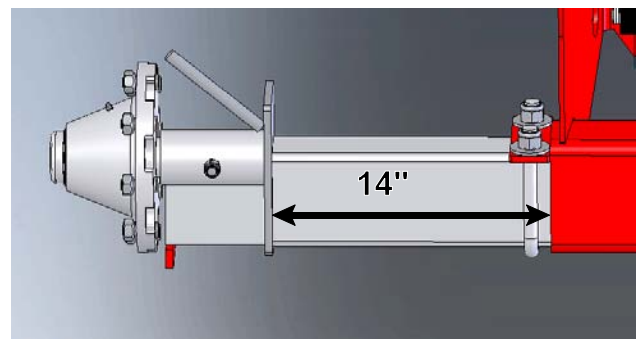


Raise Upper Discharge Door

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2. Extend the left axle.

- Jack up the left wheel.
 - Place the jack under the cylinder mount and support.
 - Do not jack on the fork frame.
- Loosen the left axle u-bolt.
- Slide the axle to be 14" from the frame to the axle plate.
- Tighten the u-bolt to 250 ft-lb (340 Nm).
- Lower the machine.



Extend the Left Axle

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3. Remove the rear hose clamp to allow the feed chopper shaft to slide into the processor wall.

- The hose clamp will be re-installed later.

4. Remove the directing door (8) by removing the handle (9) and fasteners.

- Discard the door (8), handle (9) and fasteners.

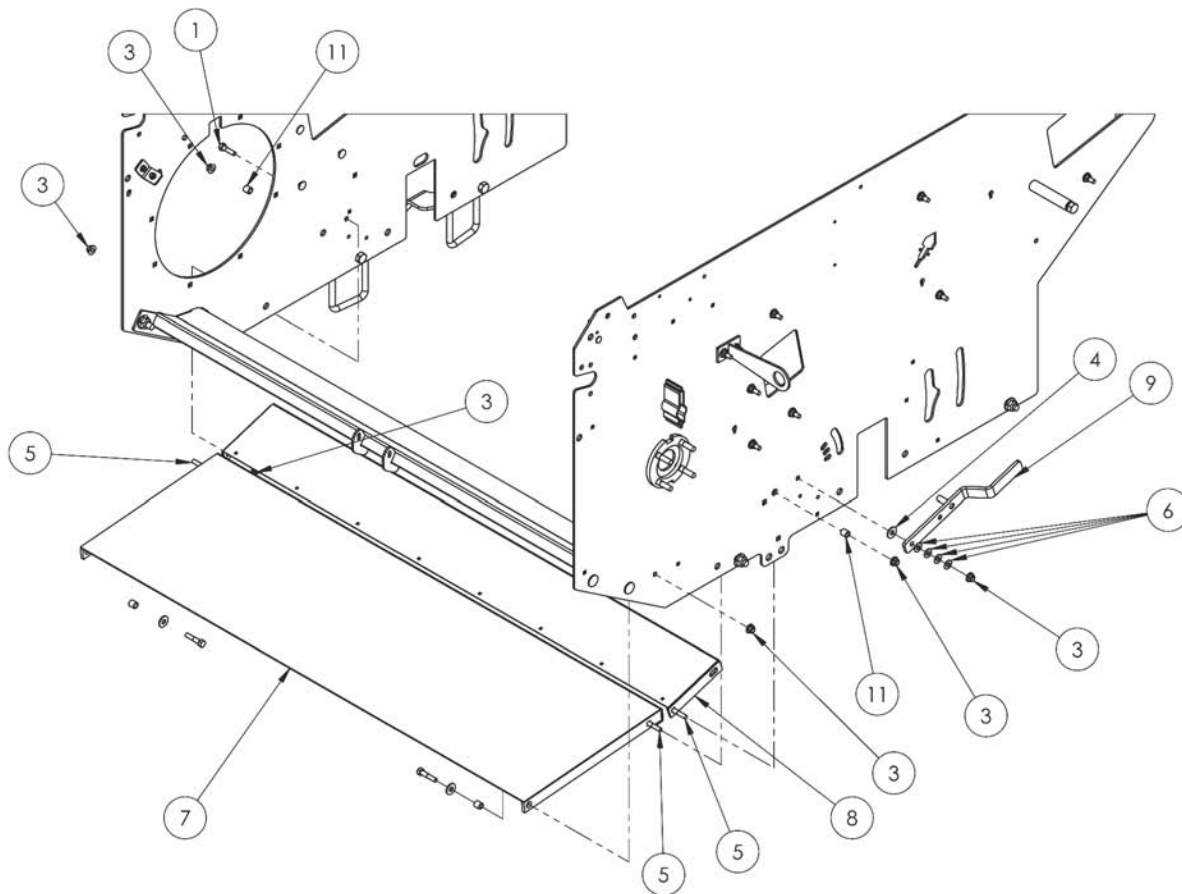


Remove The Rear Hose Clamp

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5. Remove the fasteners (5,3) from the lower door (7).

Note: Leave the door fasteners near the outside of the processor as pivot points.



Remove the Directing Door and Handle

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6. Support the feed chopper housing on a lifting jack.

- The chopper housing will need to be moved under the processor frame and lifted up.



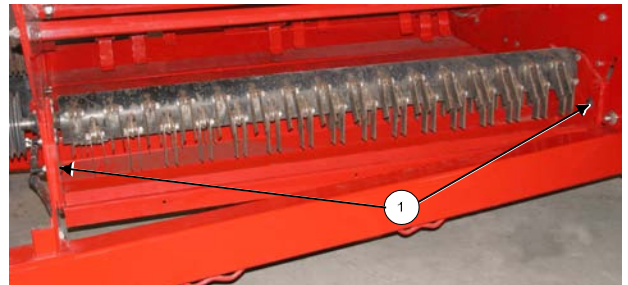
Support The Chopper Housing

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7. Lift the feed chopper housing.

Note: There is a remote grease line attached to the front bearing.

- Slide the housing between the end walls of the CFR 651.
- Align the mounting holes of the chopper housing with the mount holes in the tub wall.
- Fasten both ends with 2 of 3/4" x 2" carriage bolts and locking nuts (1).
 - Place the heads of the bolts in the chopper chamber.



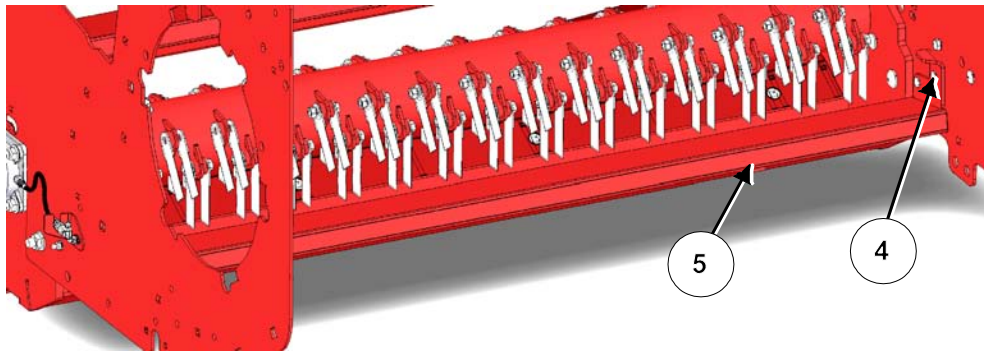
Slide the Housing Between the Tub Walls

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8. Install the filler panel (5) between the tub walls.

- Install between the feed chopper and the flail drum.
- Fasten in place with 4 of 3/8" x 1-1/4" carriage bolts and flange locknuts (4).

Note: The upper front wall bolt will have the remote grease line tab on it. See the next step.

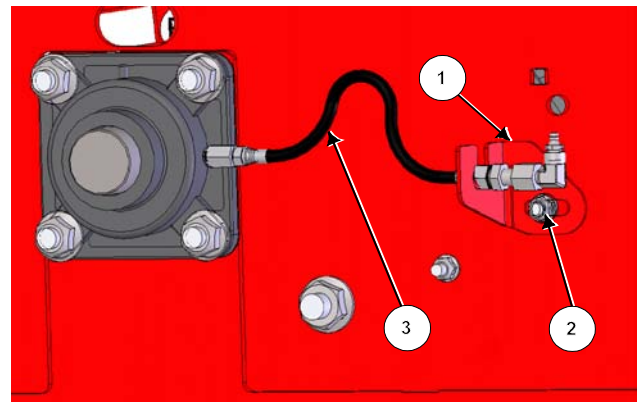


Install the Filler Panel near the Feed Chopper (Flail Drum not shown for Clarity)

2210449C

9. Install the remote grease line.

- Install the bracket (1) onto the upper bolt holding the filler panel.
- Fasten with a 3/8" flange locknut.
- Attach the grease line (3) to the bracket (1).



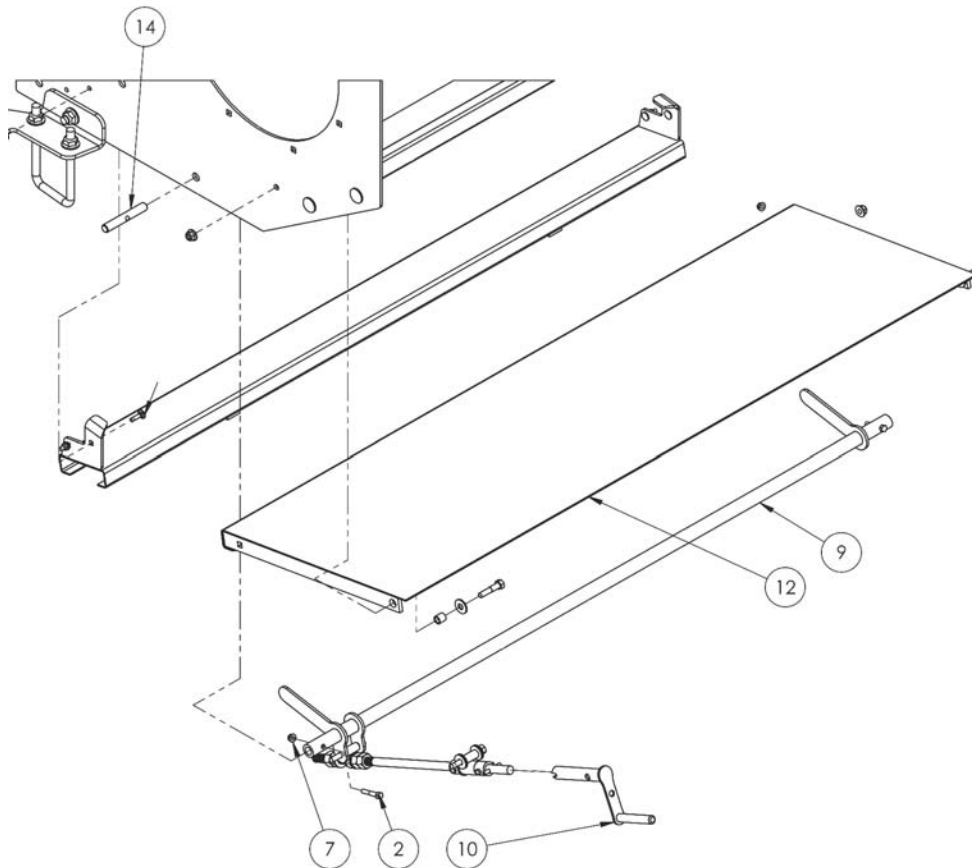
Install the Remote Grease Line

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Assembly Instructions for the Feed Chopper on the CFR 651 with Fast Flail Drum

10. Install the chopper bottom door follower (9 according to the chart and diagram.

ITEM	DESCRIPTION
2	BOLT,HEX,3/8X2,UNC,GR5,ZP
7	NUT,FLG,LOCK,3/8,UNC,GR5,ZP
9	FOLLOWER,BOTTOM DOOR
10	CRANK,BOTTOM DOOR
12	BOTTOM DOOR
14	PIN,RND,HR,3/4



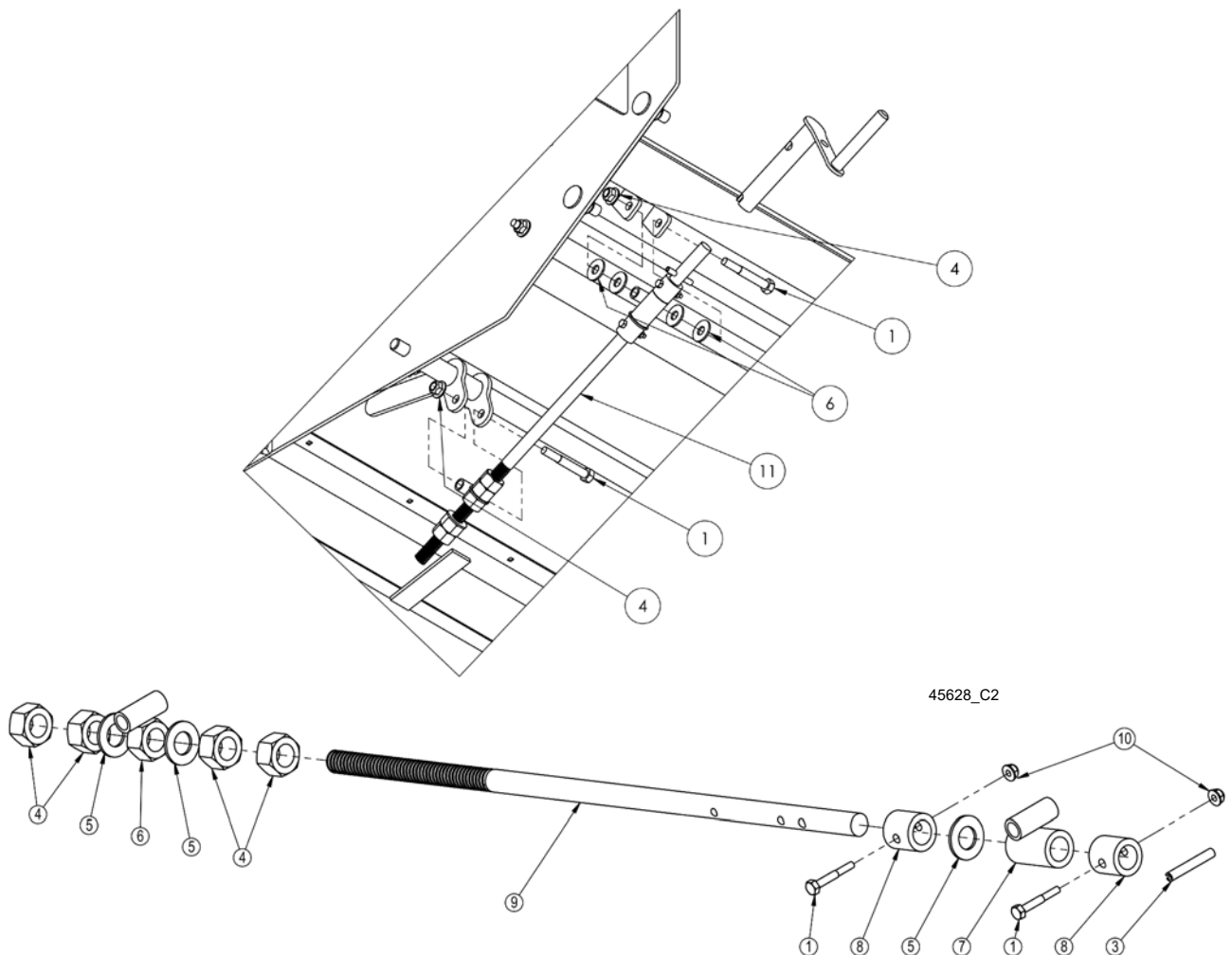
Install the Door Follower

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Assembly Instructions for the Feed Chopper on the CFR 651 with Fast Flail Drum

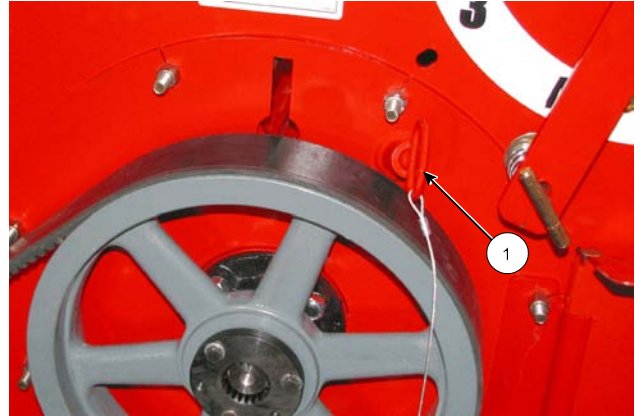
11. Install the adjustment shaft according to the chart and diagrams.

ITEM	DESCRIPTION
1	BOLT, HEX, 1/4X1-3/4, UNC, GR5, ZP
3	PIN, SPRING, 5/16x2
4	NUT, ACME, 3/4, 6TPI, RH, PLAIN
5	WASHER, FLAT, 3/4, NYLON
6	LOWER LINKAGE, BTM DOOR
7	UPPER LINKAGE, BTM DOOR
8	PIPE, COLLAR, BOTTOM DOOR
9	SHAFT, ADJ, BOTTOM DOOR
10	NUT, FLG, LOCK, 1/4, UNC, GR5, ZP



Install the Adjustment Shaft

12. On the front tub wall, lock the flail drum.
- Place the flail drum lock pin (1) into the tube on the front tub wall.
 - Allow the lock pin to slide into the processing chamber.



Lock Flail Drum With Pin

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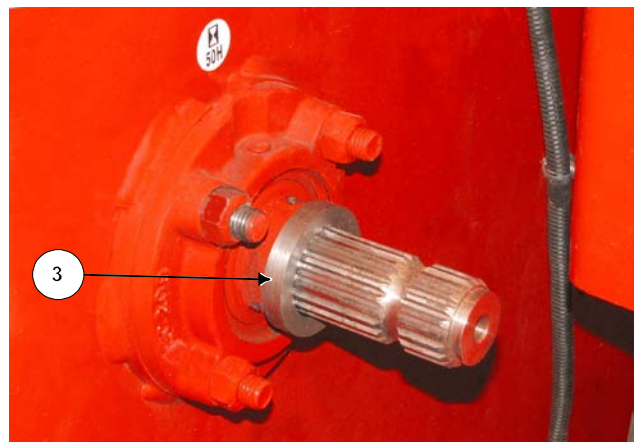
13. Remove the rear flail drum shaft cover located on the back tub wall.
- Remove the nuts (2) holding the cover tabs onto the bearing bolts.
 - Replace the nuts onto the bearing bolts.



Remove Rear Flail Shaft Cover

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14. Place the drive spacer ring (3) onto the rear flail drum shaft.



Place Drive Spacer Ring on Shaft

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15. Place the retaining plate over the spacer ring.



Retaining Plate Over The Spacer Ring

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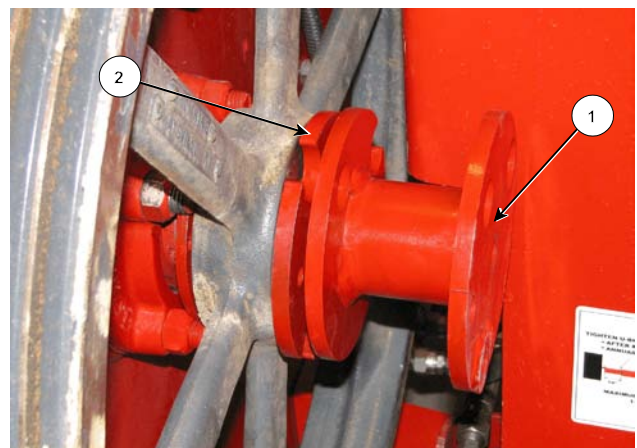
16. Place the sheave onto the flail drum shaft.



Sheave on the Flail Drum Shaft

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17. Place the clutch into the sheave.
- Align the teeth of the spline in the clutch body to the spline of the flail drum shaft.
 - Gently tap on the clutch body (1) until the clutch engage plate (2) almost contacts the sheave.



Clutch Into the Sheave

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18. Fasten the clutch body to the flail drum shaft with $\frac{1}{2}$ " x $3\frac{1}{2}$ " bolt and lockwasher.

- Apply Loctite Blue to bolt.
- Torque to 78 ft-lb.

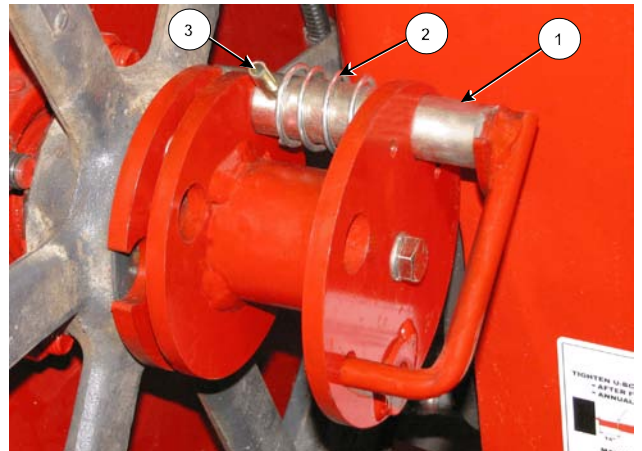


Fasten Clutch Body to Flail Drum Shaft

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19. Insert the clutch pin (1) into the front plate of the clutch body.

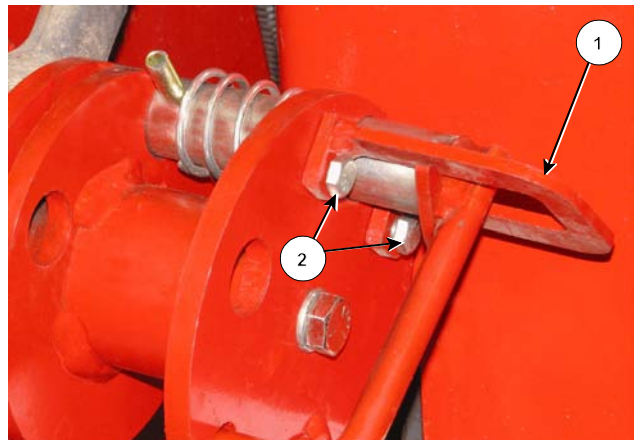
- Place the spring (2) over the clutch pin.
- Insert a $\frac{5}{16}$ " x 2" roll (3) pin into the clutch pin to hold the spring.



Assemble the Clutch Pin into the Clutch Body

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20. Fasten the pin retainer (1) to the clutch front plate using 2 of $\frac{1}{4}$ " x 1" bolts and locknuts (2).



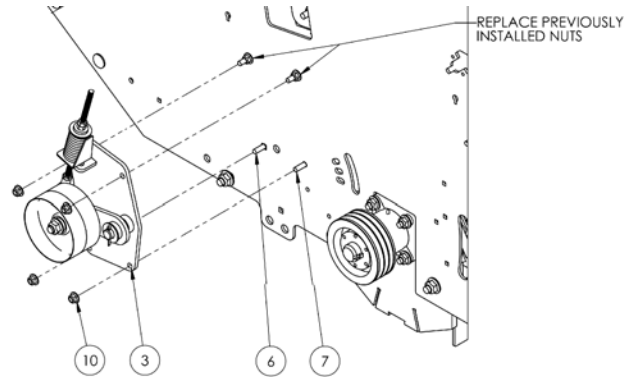
Fasten Pin Retainer to Clutch Front Plate

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21. Mount the belt tensioner onto the rear tub wall using the fasteners listed below.

ITEM	DESCRIPTION
3	ASSY,TENSIONER,SPRING,FC,651
6	BOLT,CARR,1/2X1-1/2,UNC,GR5,ZP
7	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP
10	NUT,FLG,LOCK,1/2,UNC,GR5,ZP



Mount The Belt Tensioner

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22. Replace the hose clamp.
- Place the hoses so that they do not interfere with the chopper sheave.



Replace the Hose Clamp

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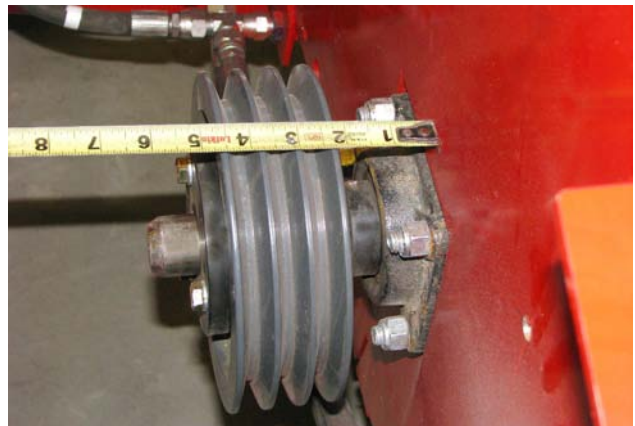
23. On the large sheave, measure the distance from the tub wall to the side to the sheave.
- This distance will be used to set the small sheave in place.



Measure the Sheave Distance

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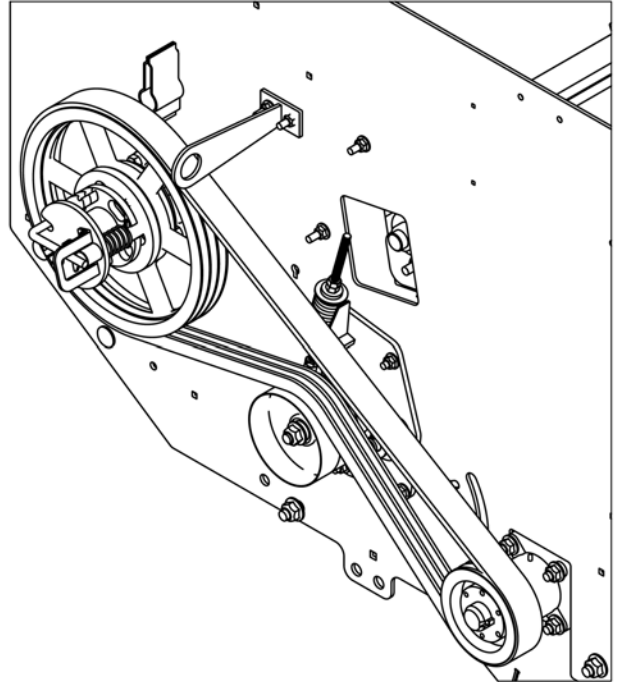
24. Position the small sheave the same distance from the tub wall as the large sheave.
- Fasten the sheave in place by tightening the sheave bolts.



Position the Small Sheave

213062

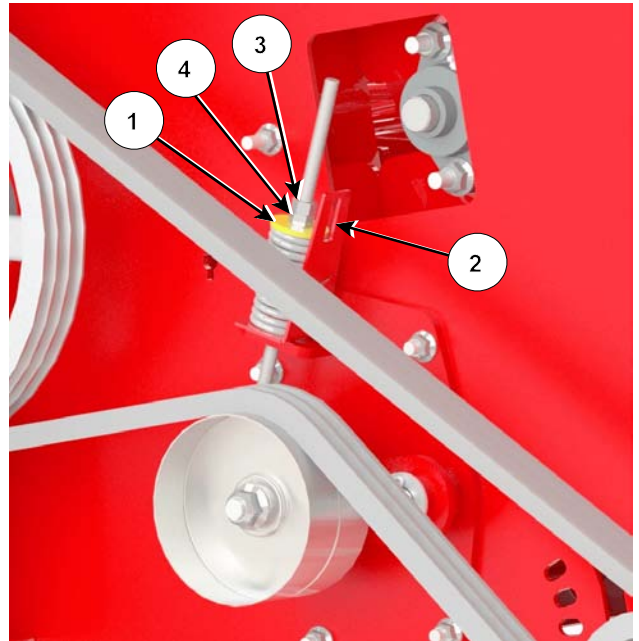
25. Install the drive belt around the large sheave, over the tensioner and around the chopper sheave.



Install the Drive Belt

44433_A2

26. Adjust the belt tension:
- Adequate belt tension is achieved when the spring washer (1) is showing in the cut out window (2).
 - Turn the nut (4) next to the spring washer to adjust the spring so it shows in the cut out window (2).
 - Tighten the jam nut (3).



Belt Tension Adjustment

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27. Lay the chopper door on top of the rotor.

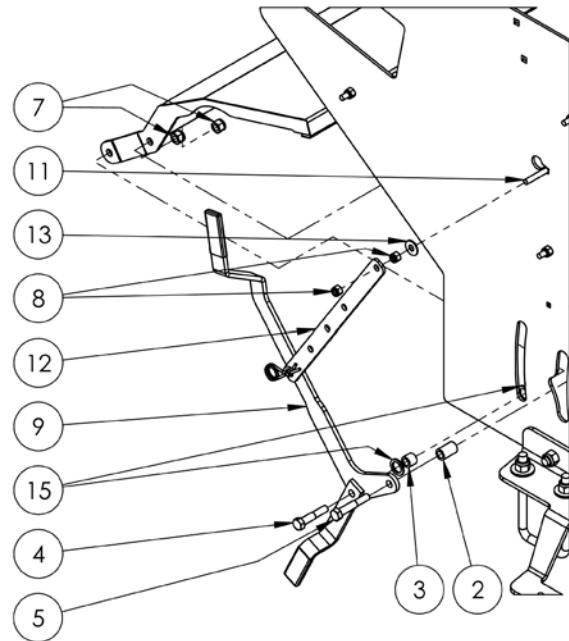


Door On Top of Rotor

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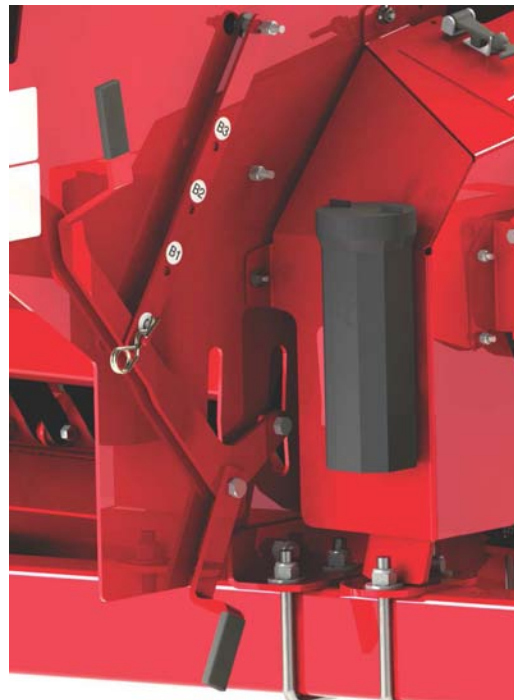
28. Install the chopper door front adjustment handle using the fasteners listed below.

ITEM	DESCRIPTION	QTY
4	BOLT,HEX,5/8X3,UNC,GR5,ZP	2
5	BOLT,HEX,5/8X3-1/2,UNC,GR5,ZP	2
7	NUT,NYLOCK,5/8,UNC,ZP	4
8	NUT,NYLOCK,1/2,UNC,ZP	3
9	ASSY,HANDLE,FRONT,DOOR,FC	1
11	BOLT,CR,1/2X2-3/4,UNC,G5,FT,ZP	1
12	HANGER,FC DOOR,FRONT	1
13	WASHER,FLAT,1/2,ZP	1
15	WASHER,UHMW,1"X 1/8"	4



Install Door Front Handle

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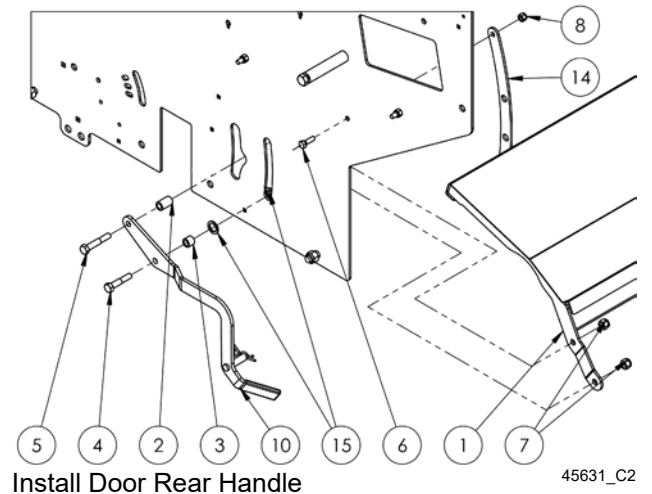
Door Front Handle

215204

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29. Install the chopper door rear adjustment handle using the fasteners listed below.

ITEM	DESCRIPTION	QTY
1	DOOR,FEED CHOPPER	1
2	BUSHING,1X1.80X1-9/16L	2
3	BUSHING,1X.180X13/16L	2
4	BOLT,HEX,5/8X3,UNC,GR5,ZP	2
5	BOLT,HEX,5/8X3-1/2,UNC,GR5,ZP	2
6	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	1
7	NUT,NYLOCK,5/8,UNC,ZP	4
8	NUT,NYLOCK,1/2,UNC,ZP	3
10	ASSY,HANDLE,REAR,DOOR,FC	1
14	HANGER,FC DOOR,REAR	1
15	WASHER,UHMW,1"X 1/8"	4



Rear Handle

215205

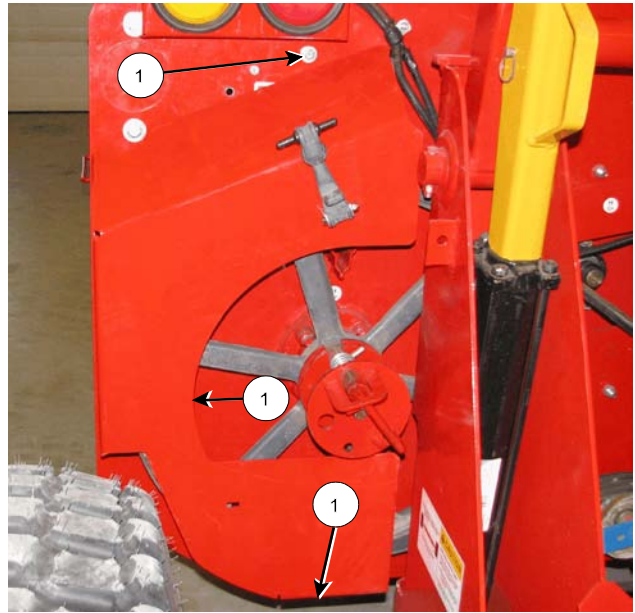


Rear Handle Inside Wall

215206

30. Install the base of the left shield.

- Fasten in 3 locations:
 - Top of shield
 - Inside shield
 - Bottom underside of shield
- Fasten with 3 of 3/8" x 1" carriage bolts, flat washers and locknuts (1).

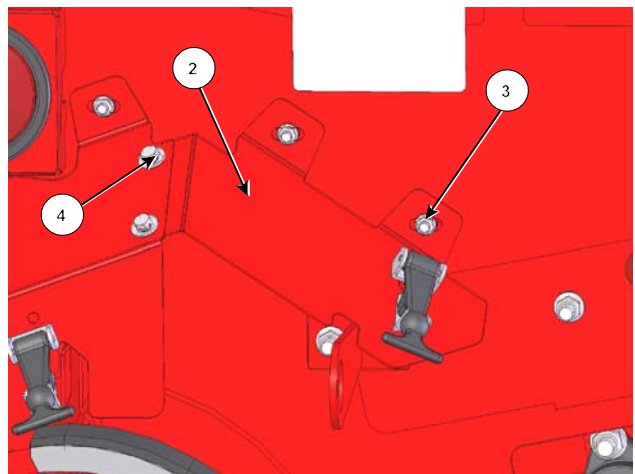


Install the Left Shield

213080C

31. Install the upper right shield support.

- Place the shield support (2) onto the rear tub wall and under the left shield.
- Fasten to the tub wall with 2 of 3/8" x 1" carriage bolts (3) and flange locknuts.
- Fasten to the left shield (1) with 2 of 3/8" x 3/4" hex bolts, (4) washers and flange locknuts.

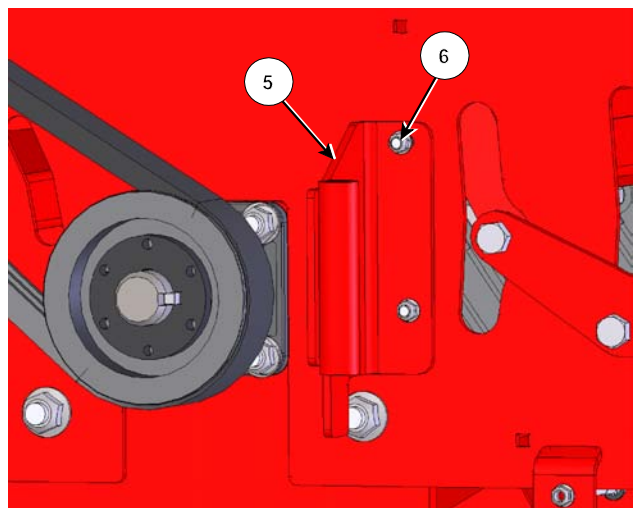


Install Upper Right Shield Support

219392C

32. Install the hinge for the right door.

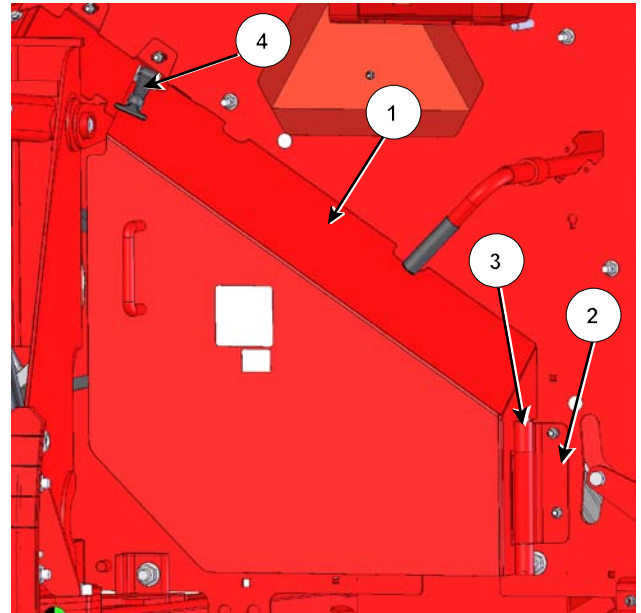
- Fasten the hinge (5) for the right door to the rear tub wall with 2 of 3/8" x 1" carriage bolts (6) and 3/8" flange locknuts.



Install the Hinge for the Right Door

219393C

33. Install the right rear door.
- Place the door (1) into the hinge (2).
 - Install the hinge pin (3).
 - Fasten the right door with the rubber latch (4).



Install the Right Rear Door

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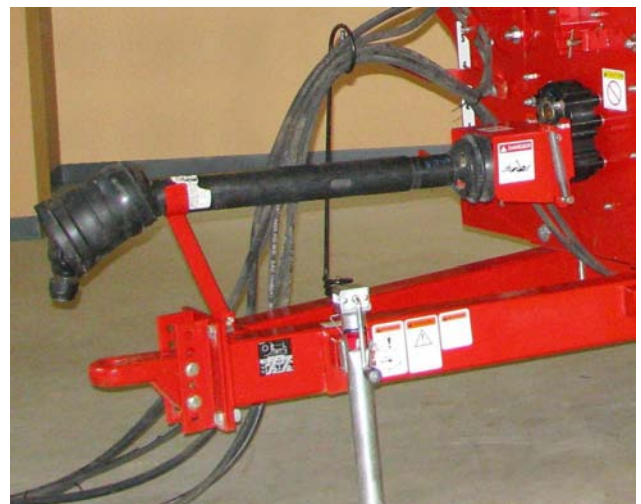
34. Fold up the left door and fasten with the rubber latch.



Latch the Clutch Door

213081

35. Remove the Category 4 driveline from the flail drum drive box.
- Install the new driveline (if supplied) that is required when a feed chopper is installed.



Install New Driveline (if supplied)

211204