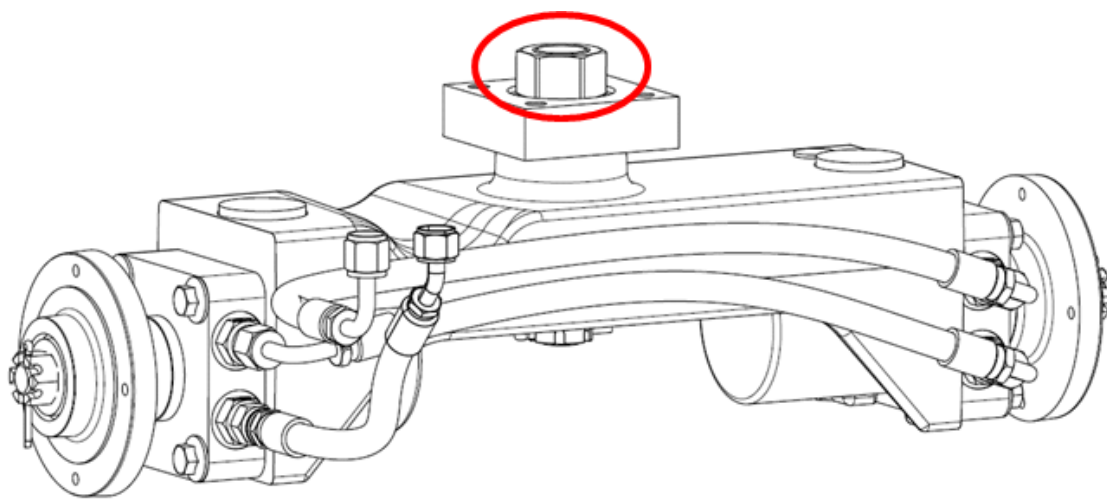


SB, FS 7000, Loose Axle nut, 2023-10

SYMPTOM/DESCRIPTION

It was detected that FS7000 machines built between 20220801 and 20230823 have an under-torqued nut on the rear axle (PN 581098201). This could cause the nut to loosen and the axle to drop down.



AFFECTED UNITS

FS7000 – All variants

Serial numbers affected are: 1398482001 through 1405849001

Date: Affected units built are between 20220801 and 20230823

CORRECTIVE ACTION

The nut needs to be reworked with proper torquing following the procedures identified below. Rework is to be done on all products in local stock and to be checked on all products withing serial number range.

PROCEDURE

FS7000 – see Appendix: “FS 7000 Axle Nut Rework”

PARTS INFORMATION

Affected part: 587623501 Kit, Repair-Rear Axle

WARRANTY INFORMATION

The normal warranty policy applies.

Revision History

Rev.	Date	Order id.	Description
A	2023-10	00033628	Created

1

FS7000/FS7000DL

Axle Nut Rework Procedure

The following manual is intended for rework of new equipment as written.

For used equipment the Axle nuts, bushings, shaft and block should be inspected for damage and wear. Especially if top nut is loose. The recommendation is to replace any component that shows damage or wear.

Please inspect any parts or hardware and replace if needed.

2



Lift saw securely to prevent falling or dropping. Once saw is secure, access area under rear axle to remove cotter pin from castle nut. Then loosen nut about two turns.

(36mm Combination Wrench and Diagonal Side Cutter)

FS 7000 Axle Nut Rework

3



With Saw securely raised or lifted, loosen jam nuts and lower depth adjustment bolts all the way down.

(2x 19mm Combination Wrench)

4



Lower saw on work area so all the wheels are on the ground or table. Place a block under the frame in front of the blade shaft. This will help to prevent saw from tipping when cowl is removed.

FS 7000 Axle Nut Rework

5



Remove Side panels from both sides of saw.
(Flat Head Screwdriver)

6



The pointer rope will need to be moved so its not wrapped around the cowl.

7



Disconnect the Battery negative cable.
(10mm Combination Wrench)

8



Remove Left Protection Bracket.

(13mm Combination Wrench and 13mm Socket on a 3/8" Drive Ratchet)

9



Disconnect HMI Cable to Cowl. Remove zip tie holding hose near the cables on the Left Engine mount.
(Diagonal Side Cutters)

10



Remove protection brackets from right side of saw.
(13mm Combination Wrench and 13mm Socket on a 3/8" Drive Ratchet)

11



Remove Protection Brackets from back side of fuse panel. Cut Zip ties that holds harness to cowl.

(13mm Combination Wrench or 13mm Socket on a 3/8" Drive Ratchet, Diagonal Side Cutters)

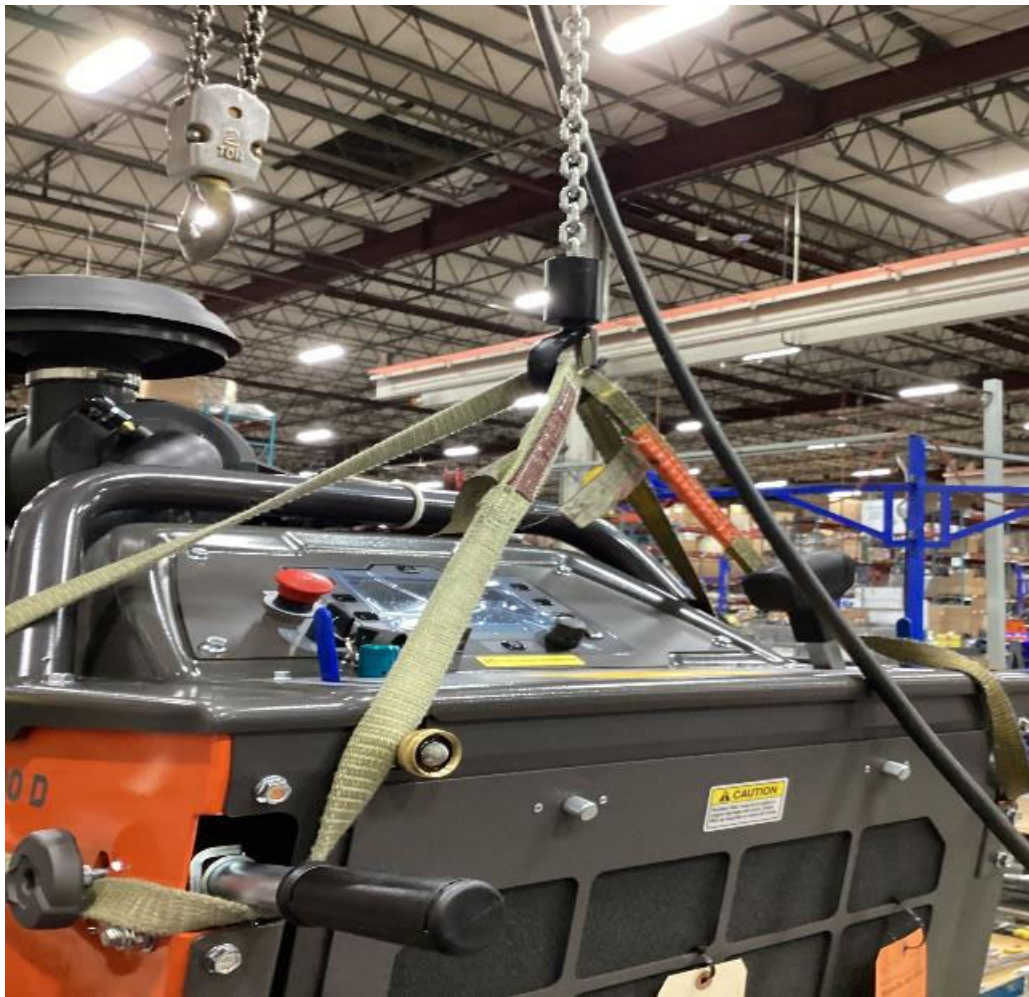
12



Remove top nut and bolt from right upper blade guard spade holding fuel hose clamp.

(13mm Combination Wrench or 13mm Socket on a 3/8" Drive Ratchet)

13



Secure Cowl with overhead hoist. Saw should be sitting stable on all four wheels and a 4 x 4 block or equivalent under front as shown on page 4.

14



With Cowl secured from overhead. Remove the bolt from rear lift bail bracket connected to cowl. Then remove 4 bolts holding the cowl to the baseplate.
(17mm Socket, 3/8" Cordless Impact, 17mm Combination Wrench, 16mm Socket, 6" extension and 3/8" Drive Cordless Impact)

15



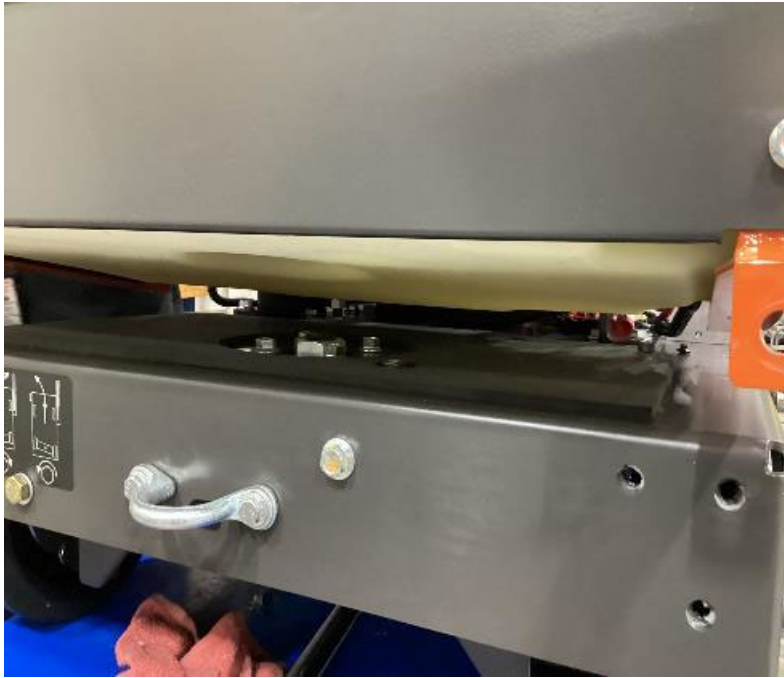
Carefully lift cowl up and back slightly about 3-4" from baseplate.

16



As you lift, watch fan blade and position blades like shown to get maximum clearance from fuel tank. Do not stretch hoses and cables too far.

17



Remove back two flange bolts from baseplate to axle.
(16mm Combination Wrench or 16mm Socket and 3/8' Drive Ratchet)

18



Use an insulated pad and an extension tube to position heat gun over nut. Heat nut to a minimum 120°C/250 Fahrenheit to release Loctite from nut. Be very cautious and protect fuel tank and insulator pad from heat. (Heat gun with Ext tube, Infrared Thermometer)

19

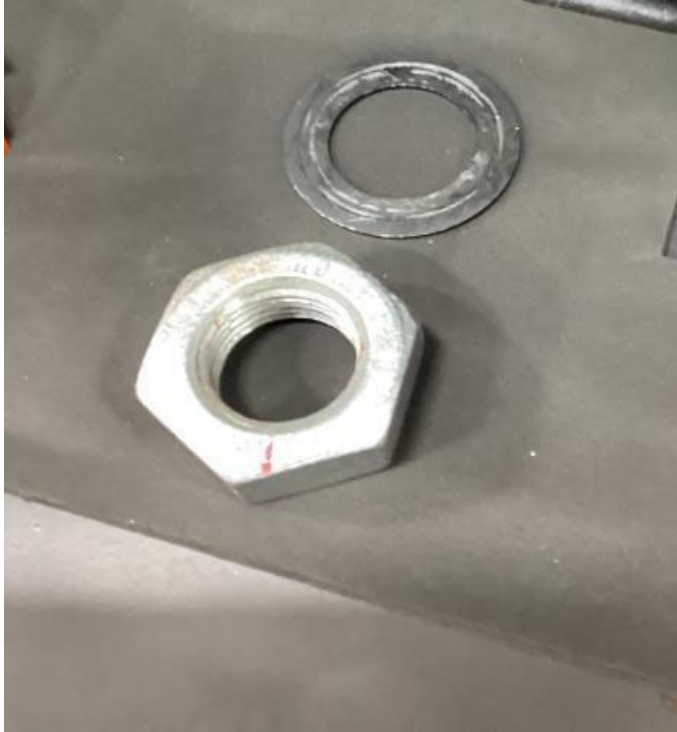


If nut is loose already, inspect parts for damage or wear. Replace any parts that are suspect.

With nut loose on the bottom from page 2, and the nut heated up work quickly. Put a wrench on and tighten the nut about a $\frac{1}{8}$ " of a turn. This will snug the shaft in the housing. Then remove nut. Remember nut will be extremely hot. Use Caution when handling. This task might require a second person to hold machine in place while turning wrench.

(46mm Combination Wrench)

20



Nut and washer must be cleaned of any Loctite residue. Clean or replace nut to ensure new Loctite will perform as expected. Once the parts are clean reapply Loctite 263 to threads on nut. Just enough to coat the grooves of the threads. Tighten nut with wrench then Torque to **280 Nm**.

(1/2" Drive Torque Wrench and 46mm Open End Crow's Foot)

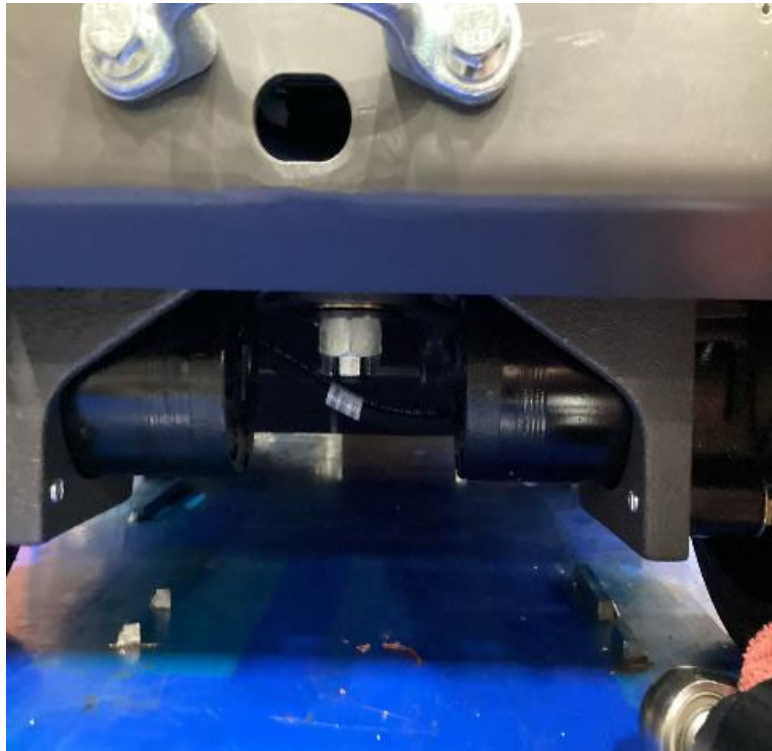
21



Lower Cowl back down onto baseplate. Install 4 bolts back into baseplate, then reattach Lift bail to cowl bracket. Torque Lift bail bolt to **50 Nm**. Torque The 4 cowl bolts to **81 Nm**.

(16mm Socket, 17mm Socket, 3/8" Drive adjustable Torque Wrench and a 17mm Combination Wrench)

22



Tighten lower nut on rear axle. Nut should turn at least a $\frac{1}{4}$ turn after contact but no more than half a turn. Line up hole in shaft with slots in castle nut to secure with cotter pin. Insert cotter pin and bend as shown. (36mm Combination Wrench and Adjustable Pliers)

23



Reattach harness to cowl with the zip ties. Trim tails off zip ties.
(Diagonal Side Cutters)

24



Reattach Top right Protection Bracket. Then reattach lower right Protection Bracket.

(13mm Combination Wrench and 13mm Socket on a 3/8" Drive Ratchet)

25



Reconnect HMI Cable to Cowl. Replace zip tie holding cables to Left Engine mount. Trim off zip tie tails.
(Diagonal Side Cutters)

26



Reinstall Left Protection Bracket.

(13mm Combination Wrench and 13mm Socket on a 3/8" Drive Ratchet)

27



Reinstall side panels. Lift saw and return depth stop bolts to proper height for blade.

(Flat Head Screwdriver and 2x19mm Combination Wrenches)

28

Tools Required

Tool	Quantity
¼" - Nut Driver	1
5/16"- 3/8" Drive Socket	1
10mm - 3/8" Drive Socket	1
13mm - 3/8" Drive Socket	1
16mm - 3/8" Drive Socket	1
3/8" Drive Ratchet	1
10mm Combination Wrench	1
13mm Combination Wrench	1
17mm Combination Wrench	1
19mm Combination Wrench	2
46mm ½" Drive Open End Crow's Foot	1
36mm Combination Wrench	1

Tool	Quantity
46mm Combination Wrench	1
50 Nm 3/8" Drive Torque Wrench	1
81 Nm 3/8" Drive Torque Wrench	1
280 Nm ½" Drive Torque Wrench	1
3/8" Drive Cordless Impact	1
3/8" Drive Cordless Ratchet	1
Diagonal Side Cutters	1
Flush Cut Pliers	1
Flat Head Screwdriver	1
Heat Gun	1
Infrared Thermometer	1

FS 7000 Axle Nut Rework

[illegible]