

## **Replacing Mower Drive Belt (STX30 and STX38 SN 100001 - ) and Mower Blade Drive Belt (STX38 SN 100001 - )**

### **REPLACING MOWER DRIVE BELT (STX30)**

1. STOP engine.
2. LOCK park brake.
3. Lower mower to surface.

**⚠ CAUTION:** Lever is spring loaded. To prevent pinching of fingers:  
• Grip firmly when pulling lever out so it does not snap back.

4. Move belt tension lever (A) OUT to loosen belt.

*NOTE: Mower removed from tractor for clarity. Mower does not have to be removed to replace drive belt.*

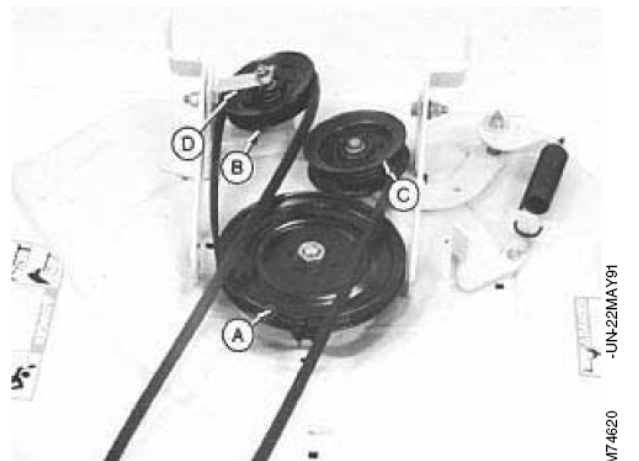
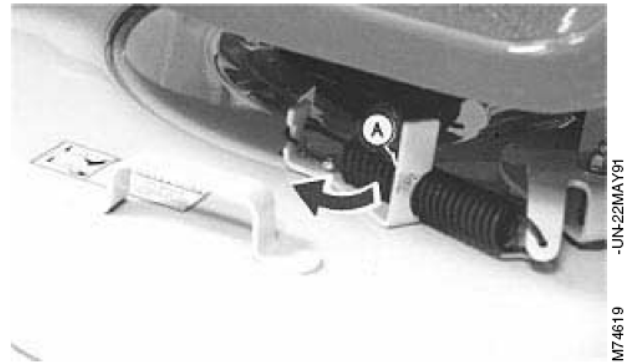
5. Remove belt from under belt guide (B).
6. Remove old belt.

*NOTE: Flat side of belt should go around idler (C).  
• Mower removed from tractor for clarity. Mower does not have to be removed from tractor to replace drive belt.*

7. Install new belt around mower drive sheave (A), idler sheaves (B) and (C).

**IMPORTANT:** Make sure belt is routed under belt guide (D).  
• Belt guide **SHOULD NOT** be touching belt.

8. Cross belt and install on tractor PTO clutch sheave.
9. Move belt tension lever IN to tighten belt.



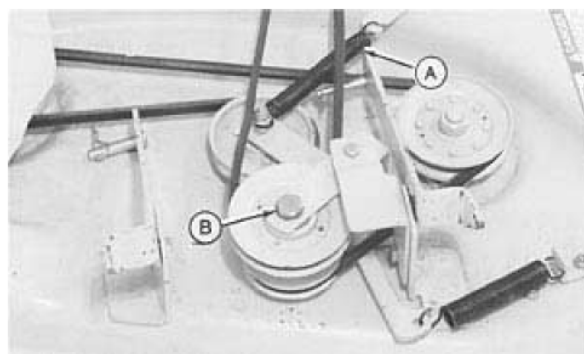
A—Mower Drive Sheave  
B—Idler Sheave  
C—Idler Sheave  
D—Belt Guide

## REPLACING MOWER DRIVE BELT (STX38)

1. STOP engine.
2. LOCK park brake.
3. Remove mower from tractor. (See REMOVING MOWER in this section).

**CAUTION:** Use locking pliers and wear eye protection when disconnecting and connecting idler spring.

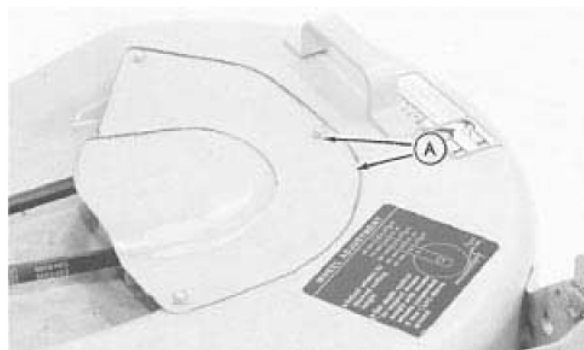
4. Disconnect idler spring (A).
5. Remove cap screw (B).
6. Remove sheave and old belt. Install new belt.
7. Install cap screw (B). Tighten cap screw to 70 lb-ft (95 N·m).
8. Connect spring (A).



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## REPLACING MOWER BLADE DRIVE BELT (STX38)

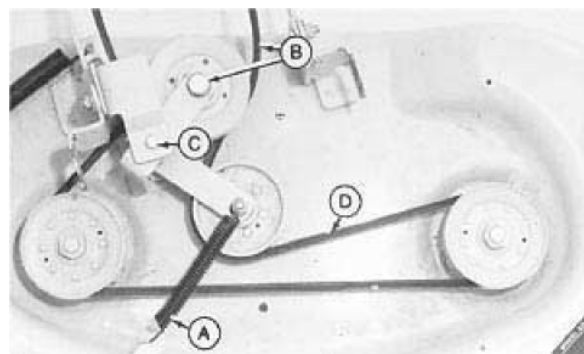
1. STOP engine.
2. LOCK park brake.
3. Remove mower from tractor. (See REMOVING MOWER in this section.)
4. Remove three screws and belt shield (A).



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**CAUTION:** Use a locking pliers and wear eye protection to disconnect and connect idler spring (A).

5. Disconnect idler spring (A).
6. Remove cap screw, sheave and belt (B).
7. Remove cap screw and idler assembly (C).
8. Remove old belt (D). Install new belt.
9. Install idler assembly and cap screw (C).
10. Install sheave, belt and cap screw (B). Tighten cap screw to 70 lb-ft (95 N·m).
11. Connect idler spring (A).



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A—Idler Spring  
B—Cap Screw, Sheave and Belt  
C—Idler Assembly  
D—Old Belt

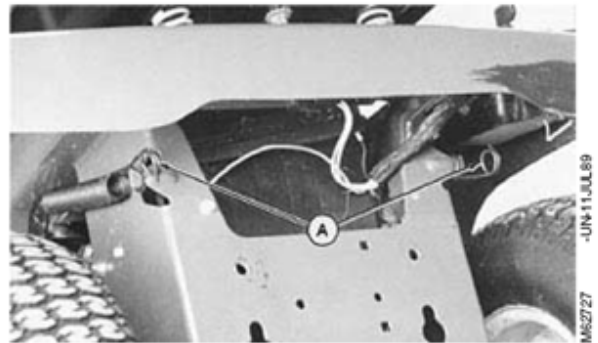
## Removing Mower

1. STOP tractor engine and LOCK park brake.

**⚠ CAUTION: When connecting or disconnecting lift assist springs:**  
• Wear eye protection.

2. Raise mower to maximum height with mower lift lever.

3. Disconnect lift assist springs (A).



STX30 Tractor Mower

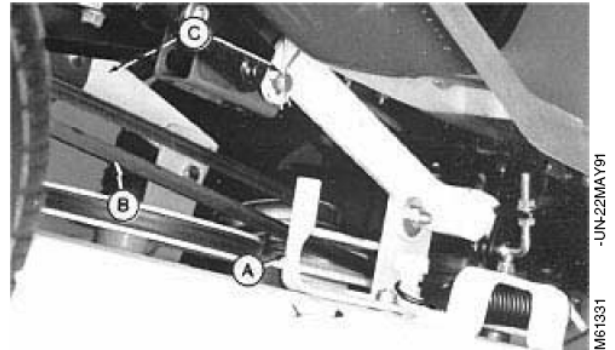
4. Lower mower to surface.

5. Move belt tension lever (A) OUT to relieve belt tension:

- Lever is on left-hand side of mower on STX30.
- Lever is on right-hand side of mower on STX38.

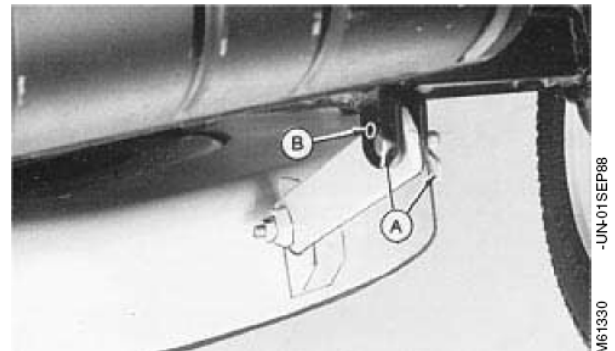
6. Remove drive belt (B) from tractor PTO clutch drive sheave.

7. Remove spring locking pin and drilled pin (C) from each side of tractor.



8. Remove spring locking pin and drilled pin (A) from each side of tractor. There are two holes in each axle bracket:

- STX30 Tractor Mower is attached to front hole (A).
- STX38 Tractor Mower is attached to rear hole (B).

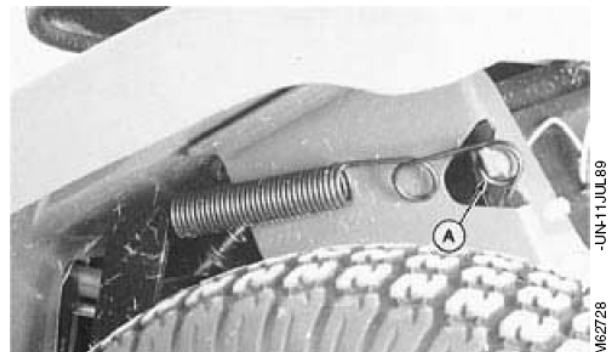


9. Turn tractor front wheels to extreme left.

10. Move mower lift lever to highest (COMPLETELY RAISED) position.

11. Slide mower out from right side of tractor.

12. If mower will not be installed immediately, connect lift assist springs (A) in rear spring storage loop as shown.

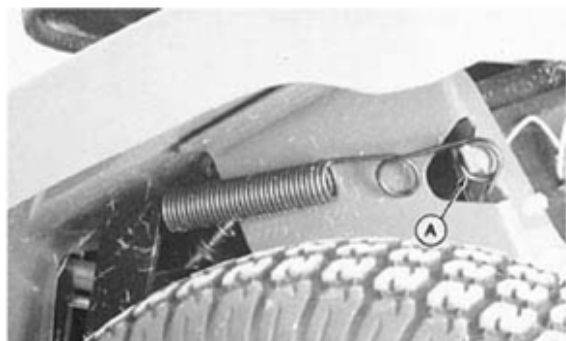


## **Installing Mower**

1. STOP tractor engine and LOCK park brake.
2. Turn tractor front wheels to extreme left.

**⚠ CAUTION: When connecting and disconnecting lift assist springs:**  
 • Wear eye protection.

3. Put mower lift lever in highest (COMPLETELY RAISED) position.
4. Disconnect lift springs (A).



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5. Slide mower under right side of tractor.
6. Put mower lift lever in lowest (COMPLETELY DOWN) position.
7. Align rear lift links (C) with slots in lift arms (D). Move mower back until ends of lift links are in slots in lift arms.
8. Attach each mower front draft arm to tractor bracket with drilled pin and spring locking pin (A):

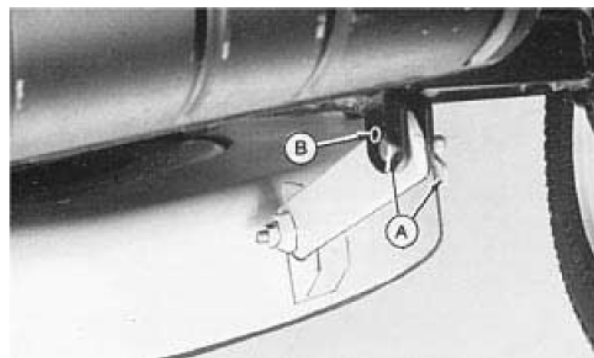
- STX30 Tractor mower arms should be attached to front holes in brackets.

- STX38 Tractor mower arms should be attached to rear hole (B).

9. Put mower lift lever in LOWEST position. Put 1-in. (25 mm) blocks under each side of mower.

10. Attach each lift link to tractor bracket with drilled pin and spring locking pin (E).

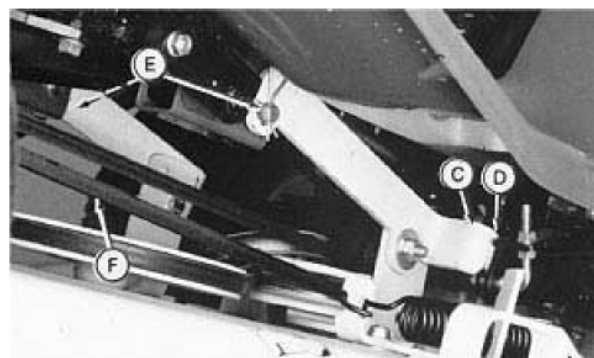
11. Put mower drive belt (F) on tractor PTO clutch sheave.



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STX30 Tractor Mower



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A—Spring Locking Pins  
 B—Rear Hole (STX38)  
 C—Rear Lift Links  
 D—Lift Arms  
 E—Spring Locking Pins  
 F—Mower Drive Belt

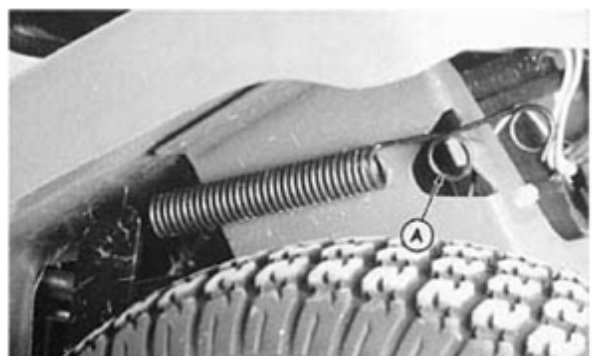
12. Move belt tension lever IN to tighten belt.
13. Raise deck to maximum height with mower lift lever.

**CAUTION:** When connecting and disconnecting lift assist springs:

- Wear eye protection.

14. Connect lift assist springs (A) in front loop hole of spring located near rear tire.

15. Level mower.



## Checking Tire Pressure

Check tires for damage.

Check tire pressure with an accurate gauge.

Level mower after you check tire pressure. (See ADJUSTING MOWER LEVEL in Operating Mower section.)

### TIRE PRESSURE SPECIFICATION

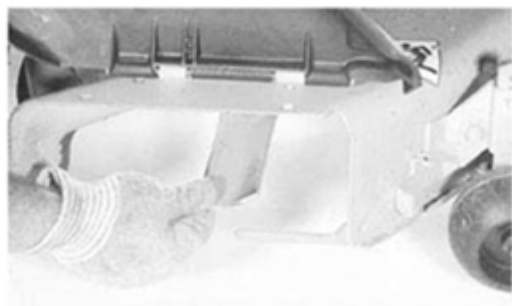
| Tire Size         | Pressure         |
|-------------------|------------------|
| Front:            |                  |
| 13 x 5.00-6 ..... | 12 psi (83 kPa)  |
| 13 x 6.50-6 ..... | 12 psi (83 kPa)  |
| Rear:             |                  |
| 18 x 6.50-8 ..... | 14 psi (100 kPa) |
| 18 x 8.50-8 ..... | 8 psi (55 kPa)   |

## Adjusting Mower Level (Side-to-Side)

**CAUTION:** Before you adjust mower:

- STOP engine.
- Remove key.

1. Park tractor on a hard, level surface.
2. Tire pressure must be correct. (See CHECKING TIRE PRESSURE in Service section.)
3. Adjust cutting height to 2-in. (50 mm).

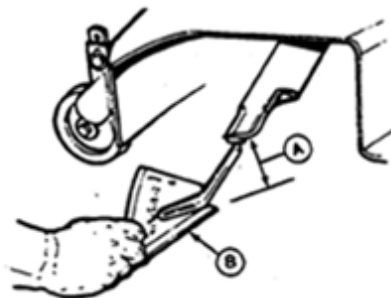


**NOTE:** STX30 Tractor mower has only one blade.

4. Turn left blade by hand parallel to tractor axle. Hold drive belt and turn right blade parallel to axle.

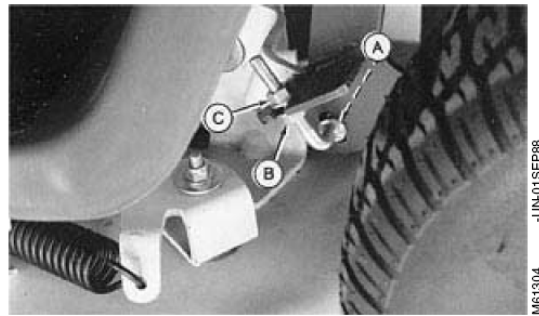
**NOTE:** A convenient leveling gauge (B) is available from your John Deere dealer.

5. Measure from each outside blade tip (A) to level surface. Difference between measurements MUST NOT be more than 1/8-in. (3 mm).



*NOTE: Adjusting bolt is on left-hand rear side of mower.*

6. Loosen inside nut (A).
7. Loosen lower nut (B).
8. Turn top nut (C) clockwise to raise left side of mower.
- Turn nut counterclockwise to lower left side.
9. Tighten lower nut (B) and inside nut (A) after adjustment.



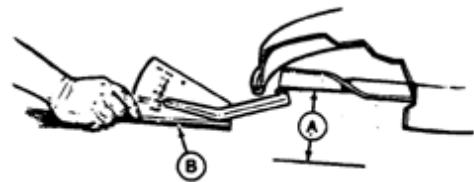
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## **Leveling Mower (Front-to-Rear)**

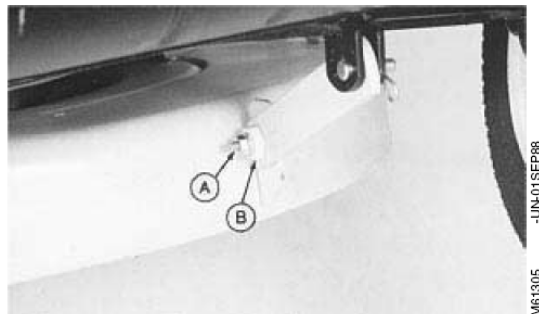
1. Turn blade (or blades) to point straight ahead.
2. Measure from front blade tip to floor—Dimension (A):
  - STX38—Measure right blade for Dimension (A) first.

*NOTE: Use leveling gauge (B) or short ruler to level blade.*

3. Measure from rear blade tip to floor.
4. Dimension (A) on rear blade tip should be 1/4—1/2-in. (6—13 mm) more than Dimension (A) on front blade tip.
5. Loosen cap screws (A) on both draft arms.
6. Turn both draft arm adjusters (B) equally until adjustment is correct.
7. If adjustment cannot be made, move draft arms to a different hole in mower deck and follow Steps 5 through 8.
8. Tighten cap screws after adjustment is made.



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