

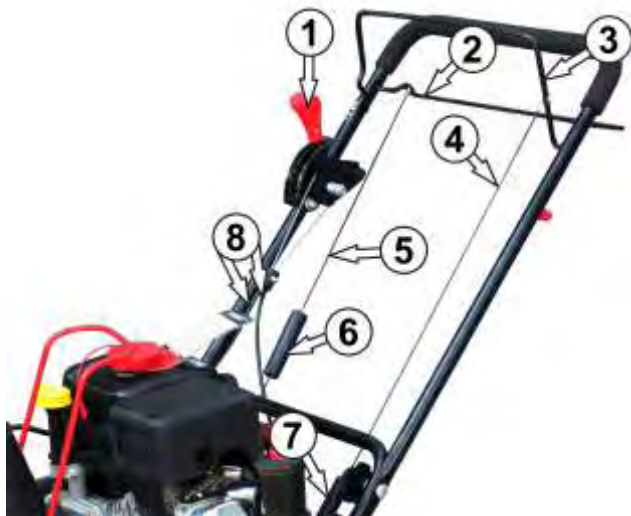
Auger Belt Tension Adjustment – DB7659

WARNING Entanglement Hazard - *Before performing any adjustment procedures, make sure the engine is off and remove the spark plug wire from the spark plug to ensure the engine cannot accidentally start. Never adjust belt tension with the engine running.*

Note: During operation the augers turn at a slower speed than the impeller, this is normal. The augers are used to chop and cut the snow and direct it into the impeller which is rotating at a high speed to throw the snow up and out of the chute.

Over time, the auger cable tension may loosen and or the auger belt may stretch. The auger cable will require periodic adjustment to compensate for these changes. Ideally, the cable should just be barely tight when the auger handle is in the released (disengaged) position.

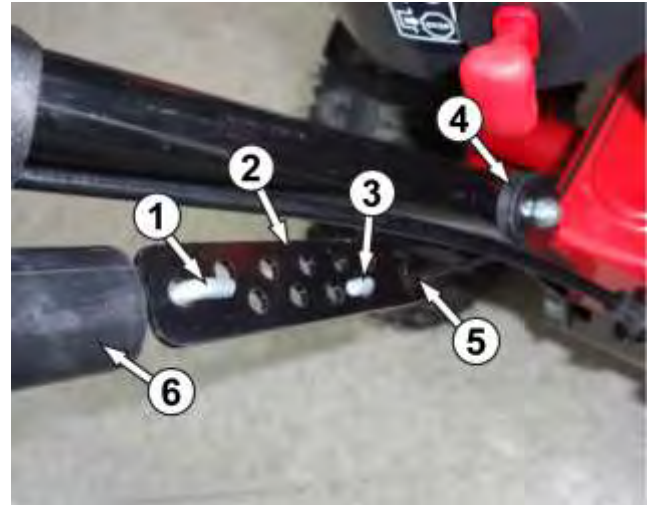
Note: The proper operating tension for a typical V-belt drive is - the lowest tension at which the belt will not slip under a loaded condition.



DB7659 Controls and Cables

1. Drive Speed Control Lever
2. Drive Control Engagement Handle
3. Auger Control Engagement Handle
4. Auger Control Cable
5. Drive Control Cable
6. Drive Control Cable Adjustment Plate Slip Cover
7. Auger Control Cable Adjustment Plate Slip Cover
8. Drive Speed Cables

The auger cable is located on the left side (when standing behind the snow blower) and is made up of an upper and lower cable connected by an adjustment plate. The adjustment plate is located in-line with the cable below the control handle and is covered by a black plastic slip cover. The adjustment plate is used to adjust auger belt tension.



Adjustment Plate

1. Upper Auger Cable (Always in upper center hole)
2. Adjustment Plate
3. Lower Auger Cable
4. Cable Pulley
5. Adjustment Plate Lower Cable Opening
6. Slip Cover

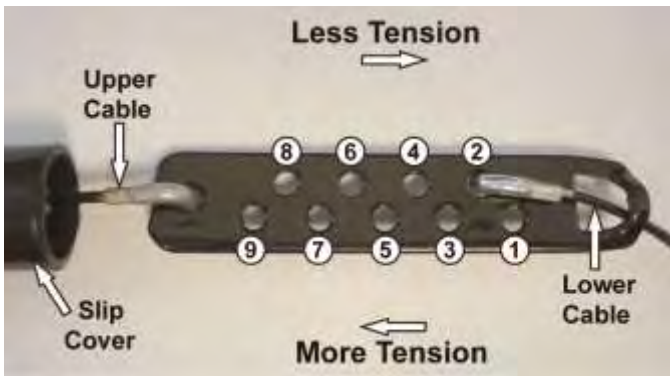
1. Stop the engine.

2. Disconnect the upper cable from the auger control handle.



Upper Auger Cable Connection

3. Slide up the slip cover to access the adjustment plate.



Cable Adjustment Plate

4. Adjustment is made by changing the position of the lower cable in the adjustment plate holes (1 to 9). Only move the lower cable diagonally one hole at a time from its original position.

Note: The upper cable end must be in the upper single center hole of the adjustment plate. Do not change the position of the upper cable.

4. Connect the upper cable to the control handle.

5. Start the engine and engage the auger to test the operation of the auger.

Note: *With the auger control handle at the full released position, the cable should be barely tight. Some slack in the cable may be required to ensure the auger pulley tension pulley is not engaging the belt. There should be no auger movement with the auger handle released. If the auger is turning when the auger handle is released, loosen the belt tension by readjusting the cable as necessary. Do not over tension the cable.*

Auger Belt Removal – DB7659

WARNING Entanglement Hazard - *Before performing any service procedures, make sure the engine is off and remove the spark plug wire from the spark plug to ensure the engine cannot accidentally start.*

Note: Record component position before disassembly, to assist in reassembly.

1. Disconnect the upper cable from the auger control handle.



2. Remove 2 hex head screws and remove belt cover.



3. Loosen the belt guide pin hex head screw (installed on engine crankcase) and rotate the pin away from the pulley.



4. Left Side - Loosen the hex screws attaching the auger housing to the main frame.



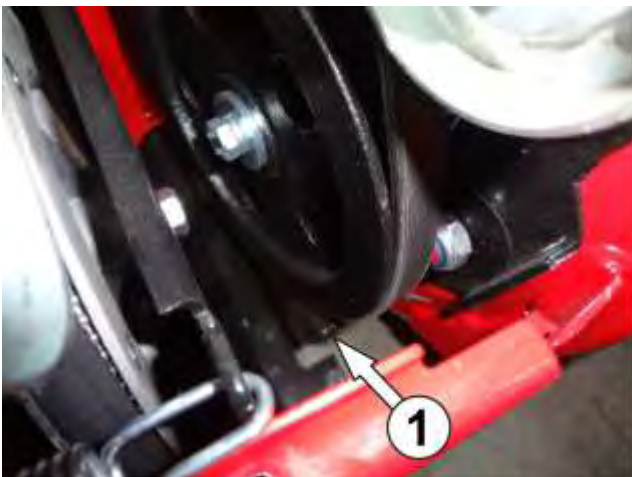
5. Right Side – Remove the hex screws, lock washers and flat washers attaching the auger housing to the main frame.



6. Remove the belt from the drive pulley while pulling the right side of the auger housing away from the main frame just enough to access the belt and auger pulley.



7. Push the auger tension pulley arm to move the auger brake away from the belt to allow removal of the belt.



1. Auger Brake

8. Remove the auger belt.

Auger Belt Installation – DB7659

WARNING Entanglement Hazard - *Before performing any service procedures, make sure the engine is off and remove the spark plug wire from the spark plug to ensure the engine cannot accidentally start.*

NOTICE: Before installing the auger belt, see **Auger Belt and Related Component Inspection** and repair or replace any components as required.

1. Inspect the new belt to ensure it is the correct size and type.

- Original - Gates Truflex G 4LXP655
- Alternate – MTD 954-0219

2. Push the auger tension pulley arm to move the auger brake to allow access for installation of the belt into the auger pulley.



3. Route the belt to the inside of the tension pulley and install the auger belt onto the drive pulley while pulling the auger housing into position with the main frame.



4. Install and/or tighten the hex screws attaching the auger housing to the main frame. Tighten all fasteners securely, do not over tighten.

5. With the belt installed on both pulleys and tension pulley in position, move the belt guide pin to within 3/16 to 3/8 in. from the belt seated in the pulley and tighten the pin in position.



Note: The belt guide pin helps keep the belt in the pulley when the belt is disengaged. The pin should not be tight to the belt. The pin should be loose enough to allow the belt to spin freely but not allow the belt to jump off the pulley.

6. Connect the lower auger cable to the cable adjustment plate.

7. Adjust auger belt tension; see **Auger Cable Tension Adjustment DB7659**.

WARNING - Ensure the belt cover is installed and all safety guards are in place before the engine is started and at all times when the engine or machine are operating.

8. Install belt cover using 2 hex head screws. Make sure the auger cable is routed outside the belt cover as shown.



NOTICE: After initial belt installation and adjustment, re-adjustment of the belt is recommended after a period of operation. Belt tension should be checked periodically to ensure proper tension is maintained.

A loose belt will cause:

- Premature belt wear / damage /cracking / fraying
- Belt slipping (“squealing may also be heard”)
- No or erratic/slow auger operation – poor performance

A tight belt will cause:

- Premature belt wear / damage / breaking /stretching
- Belt overheat / burning
- Loss of auger engagement control (always engaged)
- Tension pulley damage
- Pulley bearing damage

Auger Belt and Related Component Inspection

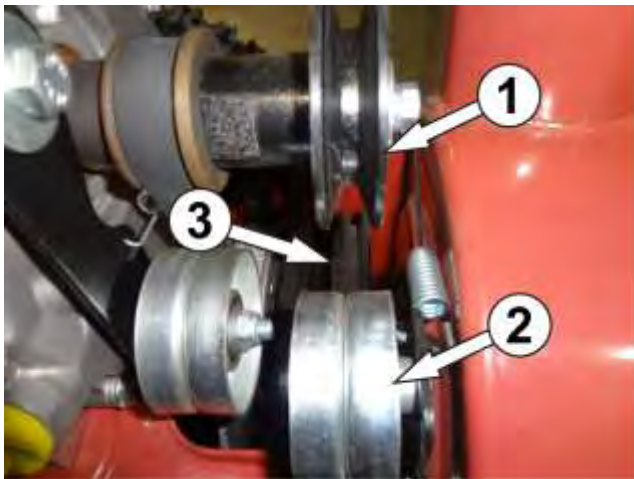
When replacing your snow blower auger belt it is important to determine the cause of the failure (if applicable) and take corrective action to avoid repeated failure.

Inspect the belt:

- Correct size and type
- Fraying or peeling apart
- Missing pieces
- Cracks and tears
- Burning
- Uneven wear patterns
- General damage
- Foreign material on belt, oil, grease, dirt etc

Inspect the auger pulleys:

- Broken sheave or hub
- Loose or missing mounting bolts
- Bent or "out-of-round" condition (pulley does not spin true on shaft)
- Misaligned pulleys



Pulley Alignment

1. Drive Pulley
2. Tension Pulley
3. Auger Pulley

- Foreign material on pulleys, oil, grease, dirt etc
- Misaligned tension pulley
- Tension pulley loose or damaged
- Tension pulley and arm assembly operation

- Does the tension arm move freely in both engage and disengage directions without binding?
- Misaligned tension pulley, the pulley should move parallel to the belt and be centered to the belt
- Check return spring operation and tension

Inspect the auger engagement handle and cable:

- Cable and connection damage
- Free movement (from engage to disengaged positions)
- Binding or improperly routed cable
- Cable pulley(s) damage, misalignment and binding
- Cable adjustment plate damaged or improper installation
- Handle damaged or binding at pivot