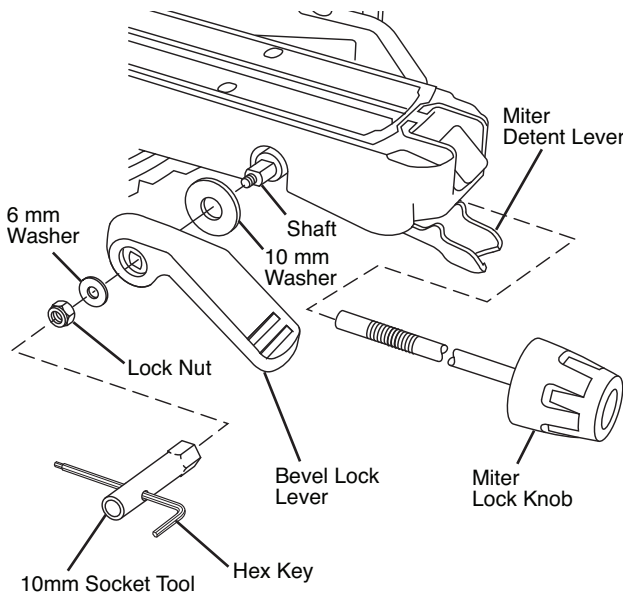


# Assembly

## Attaching Loose Parts

**WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustments or repairs.



**Figure 1**

**Attaching the Bevel Lock Lever** – This miter saw is packaged with the saw head locked at 0° bevel angle. The bevel lock lever must be attached before operating the tool.

1. Slide the 10 mm flat washer over the shaft (area with flats).
2. Slide the bevel lock lever over the shaft, aligning the flats on the shaft to the flats on the lever's mounting hole. The lever should be horizontal with the handle to the front (see Figure 1).
3. Slide the 6 mm flat washer over the shaft (area with screw threads) and against the recessed wall of the lever.
4. Finger-tighten the 10mm lock nut on the shaft. Use the 10mm socket tool to tighten the lock nut. NOTE: The 6/4mm hex key is placed through the holes in the socket tool to assist in tightening.
5. Lift the bevel lock lever and push back down to check that the lever is securely in place.

**Attaching the Miter Lock Knob** – Locate the miter lock knob from among the loose parts.

1. Look under the turntable's front arm above the lock lever and locate the 10mm hole (see Figure 1).
2. Insert the long shaft of the miter lock knob through this hole until it stops.
3. Turn the knob clockwise (about 10 full revolutions) until it is tight or "locked."

4. Loosen the knob 1/2 turn to unlock it. The table is now free to be moved on the base.

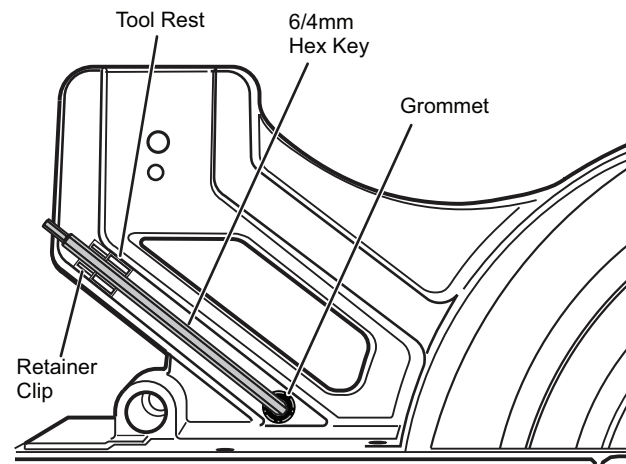
### Using the Miter Lock Knob –

1. Loosen the miter lock knob.
2. While holding the knob in your palm, reach down with your index or middle finger and pull up the detent lever. While gripping knob, rotate table left or right to needed miter angle and release the lever.
3. Tighten the knob once you are at the correct angle.

NOTE: It is recommended to tighten the miter lock knob before all cuts. It is required to tighten the knob before cutting at any angle between detent engagements or when the miter detent override system is in use.

**Storing the 6/4mm Hex Key** – There is a storage location on the saw to store the 6/4mm hex key. Insert the short leg of the hex key through the rubber grommet as shown. Place the long leg into the tool rest and press down into the retainer clip (see Figure 2).

NOTE: The 6/4mm hex key is needed to change the blade and to make tool adjustments. If lost, two separate hex keys may be substituted: a 4mm hex key and a 6mm hex key.



**Figure 2. Hex Key Storage**

# Assembly

## Removing and Installing Blades

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustments or repairs.

### Moving Guard Assembly

1. Position the saw in the UP position and at 0° bevel. If in the DOWN position, press down slightly on the saw head assembly and pull out the head assembly lock pin (item 43, page 9); then allow the saw head to come up (see Figure 3).
2. Unscrew the link knob (item 28, page 9) by hand from the pivot post and allow the link assembly to hang. The link knob will stay on the link.
3. Loosen front cover plate screw two turns using the 6/4mm hex key. Do not remove screw. A 4mm hex key may be used as an alternate.
4. Loosen rear plate screw six full turns using the 6/4mm hex key. Do not remove screw.
5. Slide the cover plate down and out from the rear screw. Rotate the cover plate and lower guard counterclockwise around the front screw. While holding the lower guard up against the upper guard, move the link so its round hole can go over the rear screw – let go and the lower guard assembly will be held out of the way (see Figure 4).

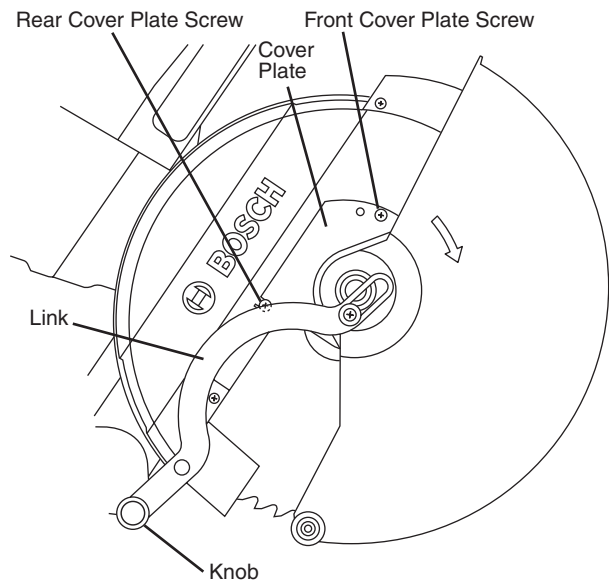


Figure 3

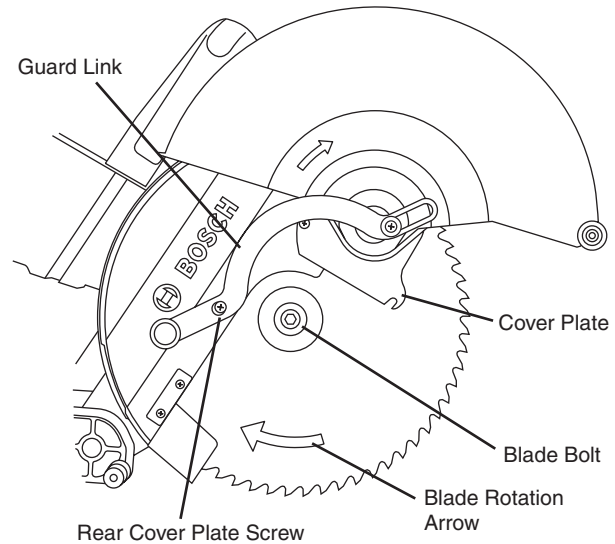


Figure 4

### Removing Blade

1. Press and hold the arbor lock (red button on opposite side of upper guard – item 42, page 9). Rotate the blade slowly while pressing the arbor lock until it fully seats into its lock position.
2. Using the 6/4mm hex key, loosen the blade bolt by firmly turning it **clockwise**. NOTE: This bolt has left-hand threads.
3. Remove the blade bolt and outer washer. Carefully grab the blade. Slide the blade away from the inner washer and off the arbor shaft, then down and away from the saw. Leave the inner washer on the arbor shaft (see Figure 5).

# Assembly

## Removing and Installing Blades

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustments or repairs.

### Installing 12" Blade

**⚠ WARNING** To avoid injury, do not use a blade larger or smaller than 12" diameter and 1" arbor. The blade's maximum plate thickness is 0.100".

**⚠ WARNING** To reduce risk of injury, use saw blade rated 3800/min (RPM) or greater.

1. Follow all "Moving Guard Assembly" and "Removing Blade" steps.
2. Carefully handle the new blade. Check that the rotation arrow on the blade matches the rotation arrow on the lower guard. Slide the blade up and between the sides of the chip deflector and over the arbor shaft. Move the blade so its arbor hole goes around the support ring of the inner washer (see Figures 4 and 5).
3. Place the outer washer over the arbor shaft and finger-tighten the blade bolt (counterclockwise). Check that the blade remained on the inner washer's support ring.
4. Rotate the blade slowly while pressing the arbor lock until it fully seats into its lock position.
5. Using the 6/4mm hex key, firmly tighten the blade bolt **counterclockwise**. NOTE: This bolt has left-hand threads. Do not over tighten. A 6mm hex key may be used as an alternate.
6. Remove the lower guard link from the rear cover plate screw. Rotate the lower guard and cover plate around the front cover plate screw until the cover plate's slot slides under the rear cover plate screw head. Fully tighten both cover plate screws using the 6/4mm hex key.
7. Place the lower guard link back to the original position, then firmly finger-tighten the link knob to the pivot post. It may be necessary to retract the lower guard while tightening the link knob.
8. Be sure the arbor lock is released so the blade turns freely.
9. Place the 6/4mm hex key back in storage area.

**⚠ WARNING** Tighten the cover plate screws. Loose cover plate screws may interfere with and hang up lower blade guard. Never use saw without cover plate securely in place. Lower guard will not function properly.

**⚠ WARNING** After installing a new blade, make sure the blade does not interfere with the table insert at 0° and 45° bevel positions. Lower the blade into the blade slot and check for any contact with the base or turntable structure. If the blade contacts base or table, seek authorized service.

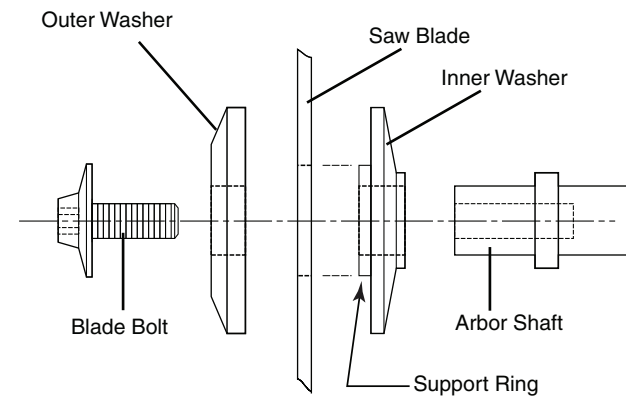


Figure 5. Blade Hardware

# Assembly

## Assembling Dust Collection System

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustments or repairs.

The dust collection system used on this tool is unique because it is not attached to the upper guard. This placement provides superior dust collection for the majority of cuts. When adjusting or removing any dust collection components, be sure the saw is unplugged.

### Elbow

The elbow is attached to the top of the dust chute. **NOTE:** It is recommended that the elbow is always in place before operating the tool – it is required to direct dust and debris away from the operator. The elbow can be rotated in place. The elbow supports the dust bag or can be connected to a vacuum cleaner.

**Removing Elbow** – For cleaning, the elbow may be removed by pulling up and twisting until it is free of the dust chute. Reattach the elbow by pressing and twisting until it snaps over the chute's molded-in retaining ring. Always reattach before using the saw.

### Attaching and Adjusting the Dust Bag

**Attaching (and Removing) Dust Bag** – The elbow has pins on the top and bottom of the exit port which will engage the coupler end of the dust bag assembly. To attach the dust bag, align the coupler's slots with the elbow's pins, then push and twist it clockwise. To remove the dust bag, twist the coupler counterclockwise, then pull off – always leave the elbow on the dust chute (see Figure 6).

**Adjusting Dust Bag** – After attaching the bag, it is recommended to do a "dry cut" before cutting with the saw – this means: unplug the tool, preset it for intended cut and practice the cut. For some bevel cuts, the sliding fence may have to be moved or removed to avoid being cut or making contact with the dust bag. The bag's position may also need a rotating adjustment if it contacts the workpiece during a slide cut.

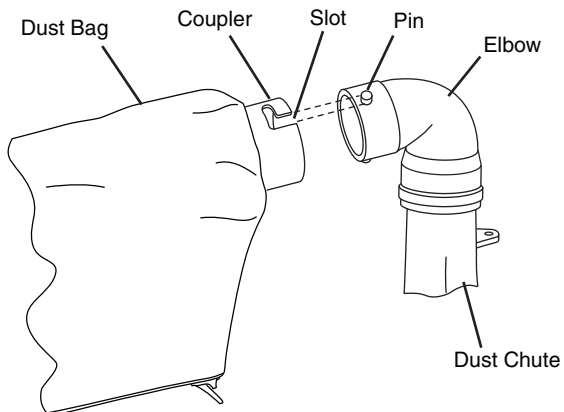


Figure 6

### Using and Cleaning the Dust Bag

**Using Dust Bag** – Attach the clean bag to the elbow. Adjust the elbow and dust bag, if necessary, so they do not interfere with the tool during the intended cutting operation.

**Cleaning Dust Bag** – After the dust bag is 2/3 to 3/4 full, remove it from the saw. Bring the bag to a proper container and pull open the zipper located on the bottom of the bag. Hold the bag by the coupler end and shake it vigorously until all the dust and debris fall from it. Close zipper and reattach the bag. **NOTE:** Clean the bag at the end of the cutting session and before transporting or storing the saw (see Figure 7).

**⚠ WARNING** Be extremely careful when disposing of dust. Materials in fine particle form may be explosive. Do not throw sawdust on an open fire. Spontaneous combustion, in time, may result from the mixture of oil or water with dust particles.

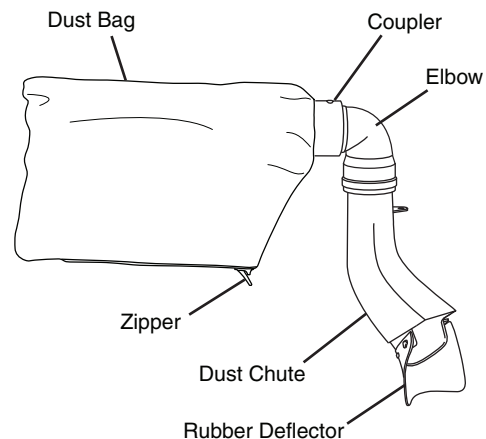


Figure 7

# Assembly

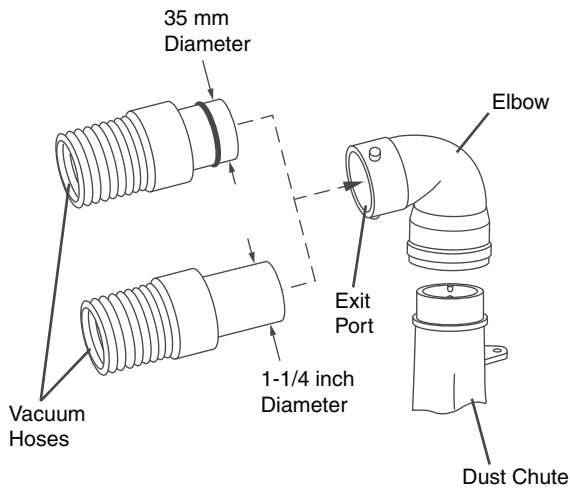
## Assembling Dust Collection System

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustments or repairs.

### Attaching a Vacuum Cleaner

The elbow has an exit port which will accept a standard 35mm diameter vacuum fitting or a 1-1/4" tube diameter. The 35mm diameter fitting is the standard size used on the Bosch Airsweep™ Vacuum Cleaners, Models 3931 and 3931A. For larger vacuum tube sizes, use an adaptor.

**Attaching to Vacuum** – Insert the vacuum fitting or tube into the elbow's exit port as far as it will go. Check to see that the vacuum hose is free from the mechanism and cutting path before plugging saw into power source.



**Figure 8. Attaching Vacuum Cleaner**

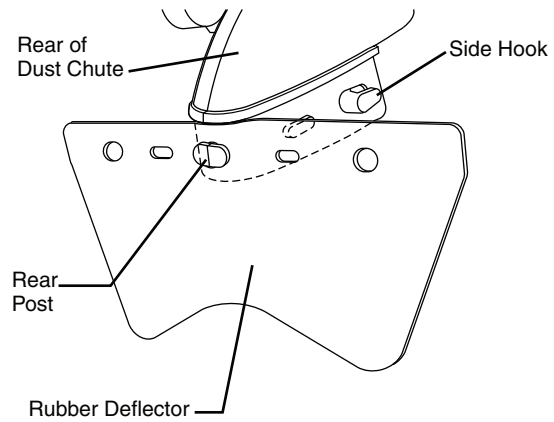
### Repositioning or Removing the Rubber Deflector

The rubber deflector extends the range of dust and debris collection and should be left on the tool for maximum dust pickup efficiency. When slide cutting extra-tall materials (more than 2-13/16" high), the rubber deflector will contact and flex over these materials. It will also contact and flex when the saw is pulled back before the cut. It will return to its original shape after the cut.

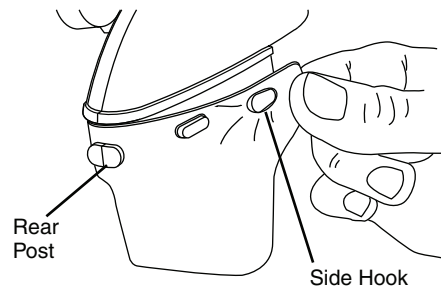
**Repositioning Deflector** – If the operator wants to avoid the contact of the rubber deflector with the material, the deflector can be temporarily folded up and over the back of the dust chute. If the operator permanently wants no contact of the deflector with the material being cut, the deflector may be removed.

**Removing Deflector** – Pull one of the deflector's tabs to the front and then sideways until it comes off one of the dust chute's side hooks (see Figure 9). Unhook the opposite side. Then unhook the deflector from the rear post of the chute by pulling and stretching until it is free. NOTE: Removing the deflector lowers dust collection capability.

**Attaching Deflector** – Start by stretching and hooking the deflector over the rear post, followed by hooking over each side hook (see Figure 10).



**Figure 9. Attaching Rubber Deflector on Rear Post**



**Figure 10. Attaching Rubber Deflector on Side Hooks**



# Adjustments

## Using the Head Assembly Lock Pin

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustments or repairs.

### Head Assembly Lock Pin

The head assembly lock pin (item 43 - page 9) is located on the right side of the pivot post (item 34 - page 9). It is used to hold the saw's head assembly in the DOWN position. This position prevents the head from bouncing up and down during transportation. This also makes the saw more compact for lifting and storage. This position is also required for some calibrating procedures.

### To Engage the Head Assembly Lock Pin

1. Check that the depth stop plate (item 33 - page 9) is disengaged, or pressed in to the left position.
2. Grasp the saw's main handle (item 3 - page 8) and press down on the head assembly.
3. While pressing the saw head down, push in on the head assembly lock pin. Release the head assembly. The head will be locked in the DOWN position (see Figure 11).

### To Disengage the Head Assembly Lock Pin

1. Grasp the main handle and press down on the head assembly.
2. While pressing the head down, pull out the head assembly lock pin. Release the lock pin, but maintain your grip on the main handle. Slowly allow the spring-loaded saw head to come up to the top of its travel and then release the handle.

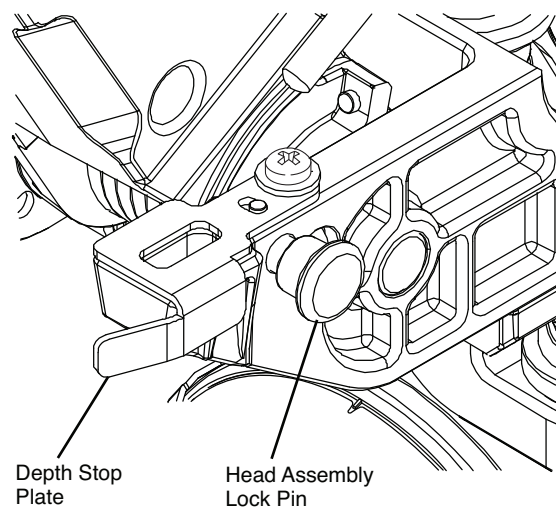


Figure 11

## Using the Glide Movement Controller

### To Adjust the Glide Movement Controller

The glide movement controller is attached to the upper joint of the glide mechanism; it is designed to control the smoothness of the saw's glide action. When assembled at the factory, the controller is not adjusted; therefore, the movement is very smooth. To adjust the glide mechanism's smoothness, slightly tighten or loosen the two screws at the top by using the 6/4mm hex key or a 4mm hex key (see Figure 12).

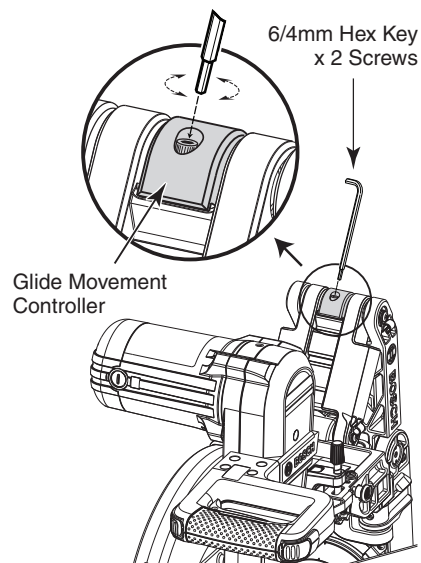


Figure 12

# Adjustments

## Using the Mechanism Lock Lever

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustments or repairs.

### Mechanism Lock Lever

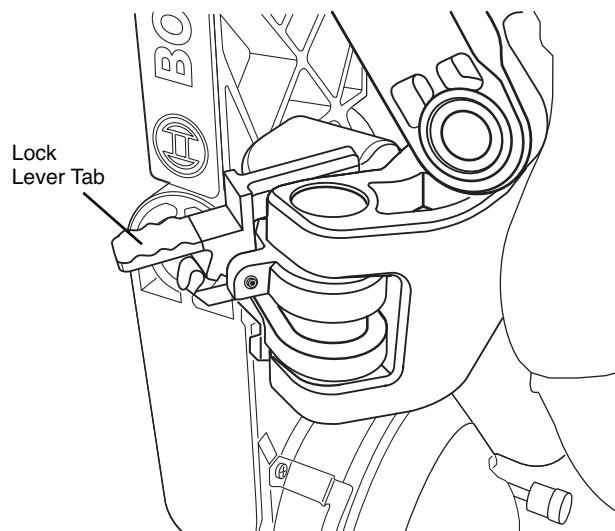
The lock lever (item 27 - page 9) is located on the rear left side of the mechanism.

When engaged, it locks the system (item 35 - page 9) in either the full forward or the full back position and prevents movement while transporting the saw. When held in the full back position, the saw is more compact for lifting and storage. The full back position is often used while performing chop cuts.

### To Engage the Lock Lever

#### With Saw in the Full Back Position –

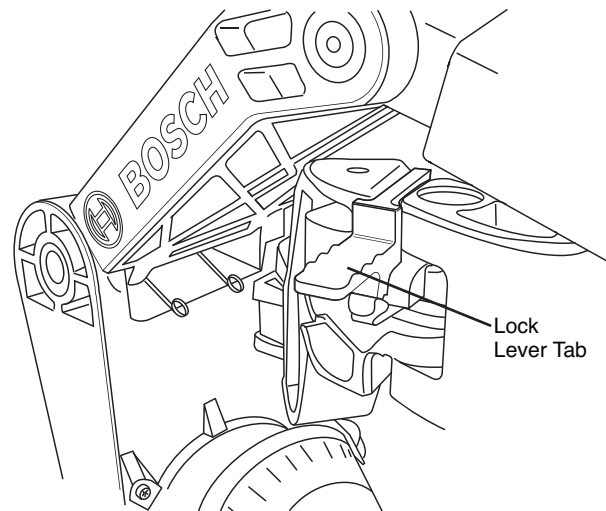
1. Grasp the saw's main handle (item 3 - page 8) and push (slide) the head assembly back as far as it goes. The upper housings will be upright and closed.
2. Lift the tab on the lock lever to engage its wedge into the joint area between the two lower housings. Release the lock lever tab and the main handle. The head assembly will be locked in the full back position.



**Figure 13.**  
To Engage in Back Position

#### With Saw in the Full Forward Position –

1. Grasp the main handle (item 3 - page 8) and pull (slide) the head assembly toward you as far as it goes. The mechanism will be fully extended.
2. Lift the tab on the lock lever to engage its wedge into the joint area between the two lower housings. Release the lock lever tab and the main handle. The head assembly will be locked in the full forward position.

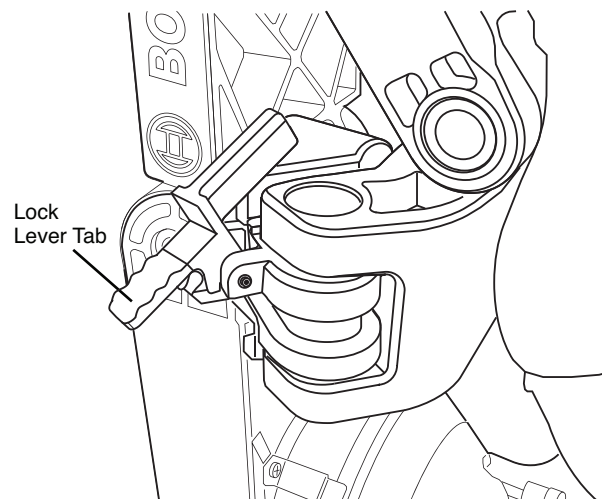


**Figure 14**

### To Release the Lock Lever

#### From Back or Forward Positions –

1. Grip the tab on the lock lever and press down until its wedge comes out from between the two lower housings. Release your grip; the mechanism is now free to slide forward and back.



**Figure 15.**  
To Release in Front or Back Position

# Adjustments

## Depth of Cut Adjustment

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustments or repairs.

When a new blade is installed, it may be necessary to check the clearance of the blade to the turntable structure. The depth stop plate is a feature provided to allow for (normal) full-depth cuts or non-through cuts used to cut grooves.

### Setting Blade Depth for Normal Full-Depth Cuts

1. When making normal full-depth cuts, push the depth stop plate in toward the saw head (see Figure 16). This will allow the depth stop screw to pass through the hole in the plate.
2. Check for full depth of cut:
  - Set table at 0° miter and push saw fully back.
  - Pull out head assembly lock pin to the release position.
  - Push down saw head and watch the depth stop screw pass through the stop plate without any binding or contact with the plate.

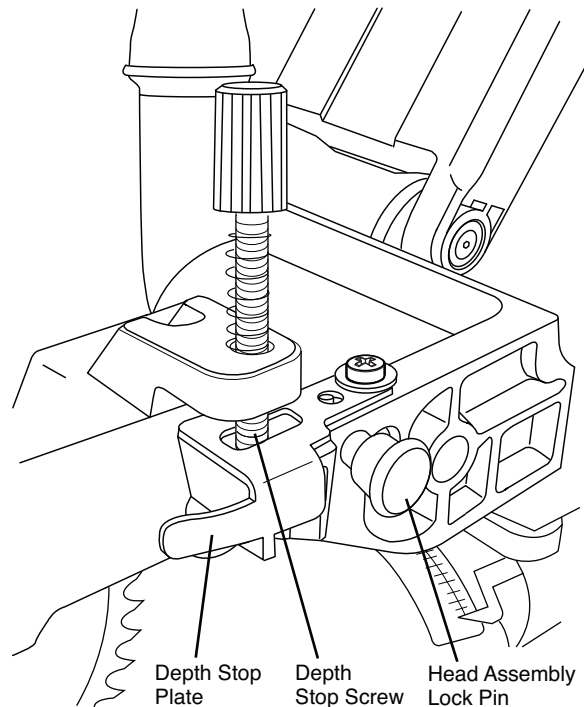


Figure 16

### Setting Blade Depth for Non-Through Cuts for Cutting Grooves

NOTE: For best results, Bosch recommends the use of a table saw with an optional dado blade set for cutting grooves and non-through cuts. In the event this is not available, the feature described below is a convenient alternative.

1. Release (pull out) the head assembly lock pin and allow the saw head to move fully up. Slide saw head to the full back position.
2. Pull the depth stop plate out away from the saw head (see Figure 17).
3. Grip the main handle (item 3, page 8) and push down the saw head while watching the depth stop screw contact the top surface of the depth stop plate. The screw will not pass through the hole in the plate.
4. Turn the knob at the end of the depth stop screw (while the threaded end is in contact with stop plate) and watch the bottom of the saw blade move. This adjustment sets the depth of cut.

See page 44 for "Cutting Grooves" instructions.

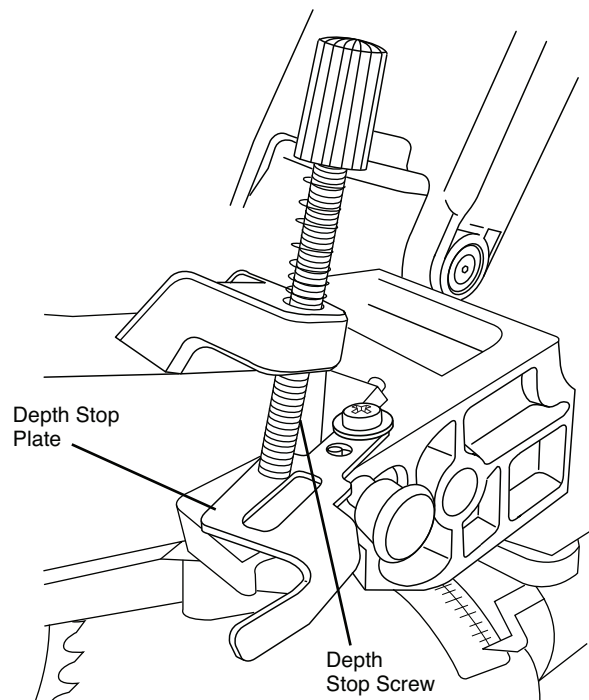


Figure 17



# Adjustments

## Miter Detent System – Adjustment Procedure

### Calibrating Miter Detent System

1. Engage the miter detent at the 0° position. Loosen the miter lock knob 1/2 turn.
2. Look for four round holes in the miter scale plate. In each hole is a screw. Use the small end of the 6/4mm hex key or a 4mm hex key to loosen all four screws 1 to 2 turns. This will loosen the miter detent plate (see Figure 18).

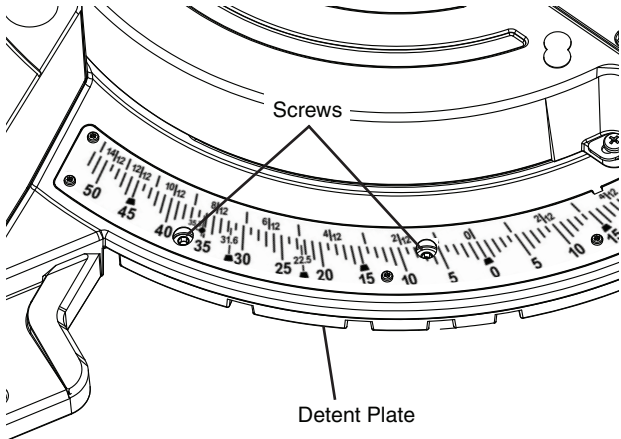


Figure 18

3. Lock saw down using the head assembly lock pin (item 43 – page 9).
4. Hold one side of a 90° combination square against the fence and rotate the table (and detent plate) until the side of the saw blade is in full contact with the other side of the square.

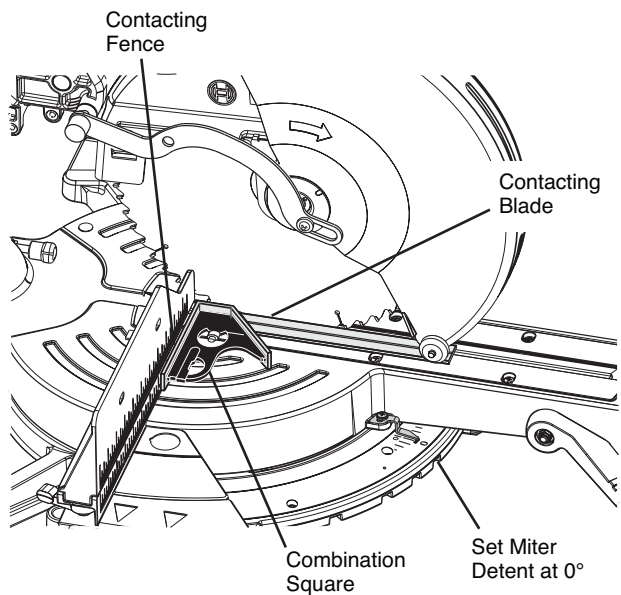


Figure 19

5. Tighten all four screws – loosen and reset the miter scale pointer to the “0” position.

### Miter Scale Pointer Adjustment

1. Rotate table to 0° position and lock in place.
2. Raise the head assembly to the full UP position.
3. Loosen the pointer adjust screw that holds the miter scale pointer in place (see Figure 20).
4. Position the pointer to align with the 0° line. Tighten the screw.

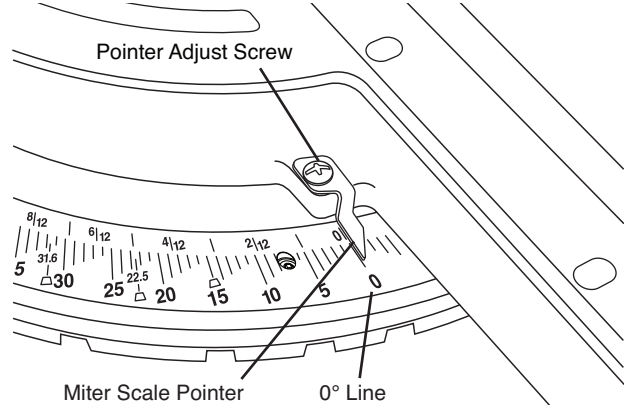


Figure 20. Miter Scale Adjustment

### Kerf Insert Adjustment

The kerf inserts should be adjusted close to the blade, but without touching the blade, to avoid tear-out on the bottom of the workpiece.

1. Hold the saw head assembly down and push in the head assembly lock pin (item 43 – page 9) to keep the saw in the DOWN position.
2. Loosen the six kerf screws using a #2 Phillips screwdriver.
3. Adjust the kerf inserts as close to the blade (teeth) as possible without touching the blade.
4. Tighten the kerf screws.

NOTE: At extreme bevel angles, the saw blade may slightly cut into kerf insert.

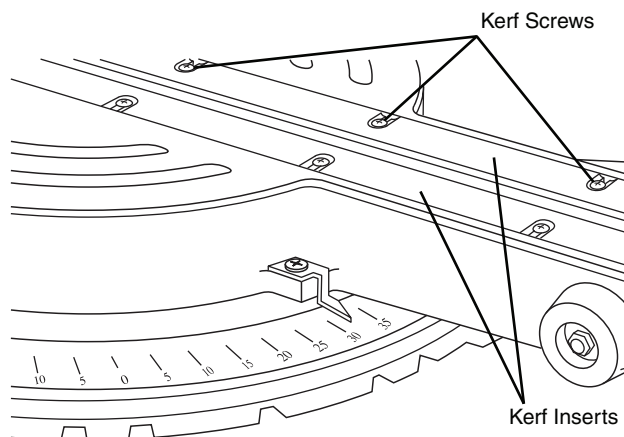


Figure 21. Kerf Inserts

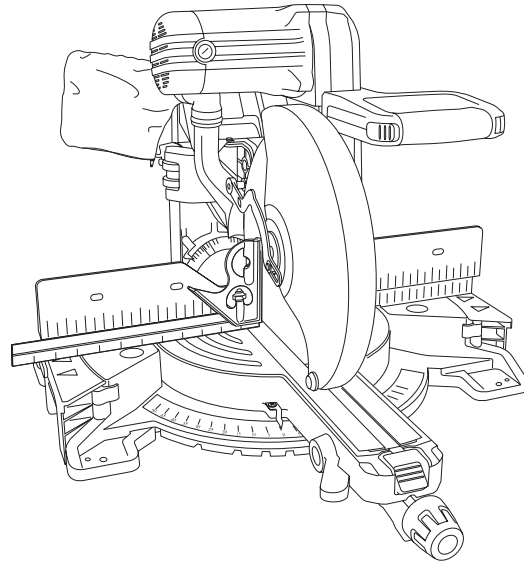
# Adjustments

## 0° Bevel Stop – Adjustment Procedure

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustment or repair.

### Checking 0° Bevel Stop Setting

1. Hold the saw head assembly down and push in the head assembly lock pin (item 43 – page 9) to keep the saw in the DOWN position.
2. Slide the head assembly completely to the back and engage the lock lever (item 27 – page 9) by lifting up the finger tab.
3. Rotate the table to the 0° miter position.
4. Pull up the bevel lock lever to loosen.
5. Check the position of the bevel range selector knob; it should be at the “0-45° Left” position.
6. Tilt the saw assembly to the left (counterclockwise), then rotate to the right (clockwise) until it hits the stop in the vertical position – this is where the saw is currently set to make a 0° cut.
7. Push down the bevel lock lever to lock the angle position.
8. Use a combination square to check that the blade is 90° (square) to the table. Place the square’s ruler edge against the table and slide it to contact the blade with the vertical side of the square’s head (see Figure 22).



**Figure 22**

9. Check that the saw blade’s plate (not teeth) is touching the square’s 90° side. If the saw blade’s plate is not in full contact with the square’s body 90° side, follow the “Adjusting 0° Bevel Stop” procedures.

# Adjustments

## 0° Bevel Stop – Adjustment Procedure

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustment or repair.

### Adjusting 0° Bevel Stop (Blade 90° to Table)

1. Pull up the bevel lock lever to loosen.
2. Loosen bolt heads “A” and “B” using a 10mm open end wrench or socket (with socket wrench). Loosen bolts at least one full turn (see Figure 23).
3. Loosen set screw “D” using the 4mm end of the 6/4mm hex key (provided with tool, but may also use a standard 4mm hex key). Loosen screw at least three full turns.

4. Place combination square on table and against blade (see Figure 22).
5. Using the 4mm end of hex key, turn set screw “C” and watch the saw blade tilt. Turn screw “C” until the blade is aligned (full contact) with the square’s body’s edge. After aligning, remove hex key.
6. Tighten set screw “D” using 4mm hex key.
7. Tighten bolt heads “A” and “B” using 10mm open end wrench.
8. Adjust bevel scale pointers (item 36 – page 9) to be in line with the bevel scale’s 0° lines.
9. Push down the bevel lock lever to lock.

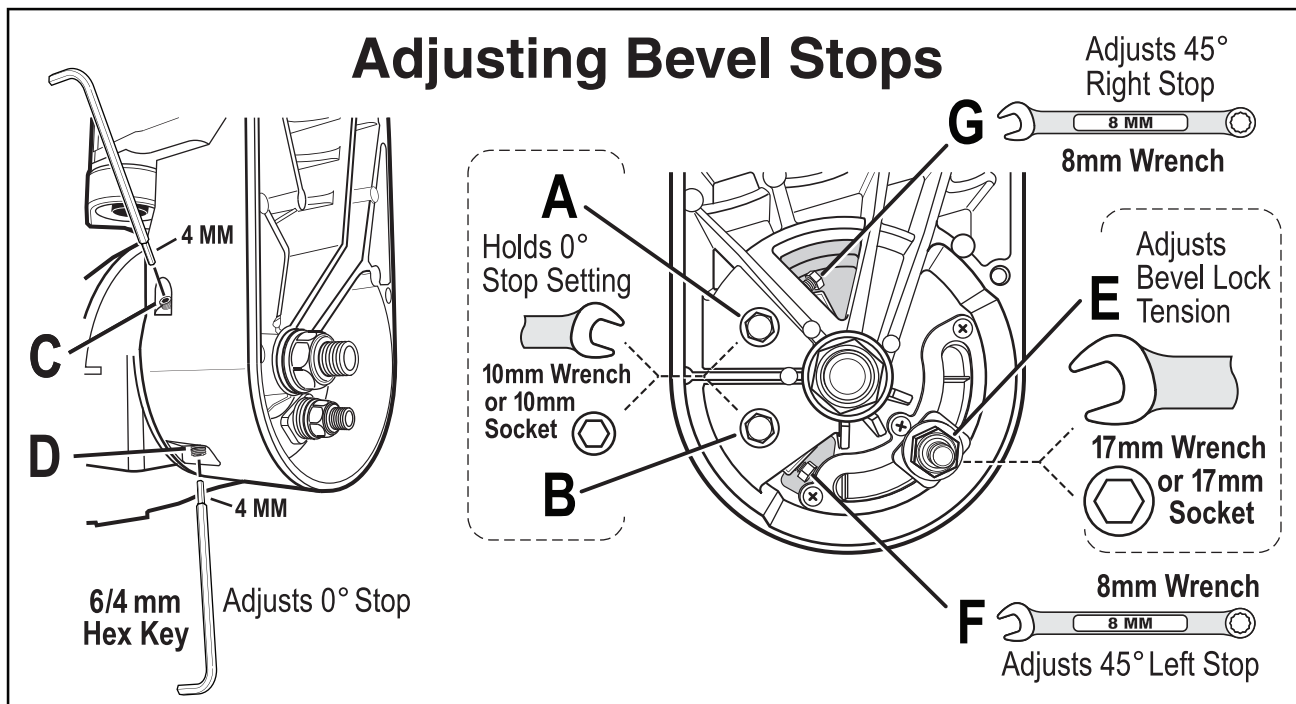


Figure 23

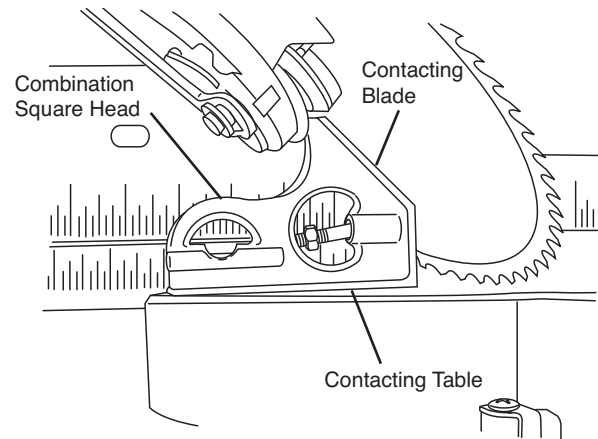
# Adjustments

## 45° Bevel Stop – Adjustment Procedure

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustment or repair.

### Checking 45° Bevel Stop Setting

1. Hold the saw head assembly down and push in the head assembly lock pin (item 43 – page 9) to keep the saw in the DOWN position.
2. Slide the head assembly completely to the back and engage the lock lever (item 27 – page 9) by lifting up the finger tab.
3. Rotate the table to the 0° miter position.
4. Pull up the bevel lock lever to unlock. Move the left sliding fence fully to the left.
5. Check the position of the bevel range selector knob; it should be at the “0-45° Left” position.
6. Tilt the saw assembly to the left (counterclockwise) until it hits the 45° stop – this is where the saw’s 45° stop is set to make a 45° left bevel cut.
7. Use a combination square to check that the blade is 45° to the table. Remove the rule blade from the combination square. Place only the combination square’s head on the saw’s table with its long flat side resting on the table and its 45° side against the tilted blade (see Figure 24).



**Figure 24**

8. Check that only the saw blade’s plate (not teeth) is touching the square’s 45° side. If the saw blade’s plate is not in full contact with the square’s head 45° side, follow the “Adjusting 45° Bevel Stop” procedures.

# Adjustments

## 45° Bevel Stop – Adjustment Procedure

**⚠ WARNING** To avoid possible injury, disconnect plug from power source before performing any assembly, adjustment or repair.

### Adjusting 45° Bevel Stop (Saw Blade 45° to Table)

1. Pull up the bevel lock lever to unlock. Move the left sliding fence fully to the left.
2. Tilt the saw assembly to the left (counterclockwise) until it hits the 45° stop.
3. Place only the combination square's head on the saw's table with its long flat side resting on the table and its 45° side against the tilted blade.
4. Place an 8mm open end wrench on bolt head "F" (see Figure 25).
5. While turning bolt "F," watch the blade tilt – turn "F" until the saw blade plate is in full contact with the 45° side of the square's head (see Figure 24).
6. If needed, adjust bevel scale pointers (item 36 – page 9) to be in line with the bevel scale's 45° lines. First, adjust right bevel pointer; then tilt saw head to the right 45° stop position (see page 41 – "Bevel Range 2 = 0-45° Right") and adjust the left bevel pointer. Tilt the saw head to the 0° position – both pointers should be on the bevel scale's 0° lines.
7. Push down the bevel lock lever to lock at the desired bevel angle.

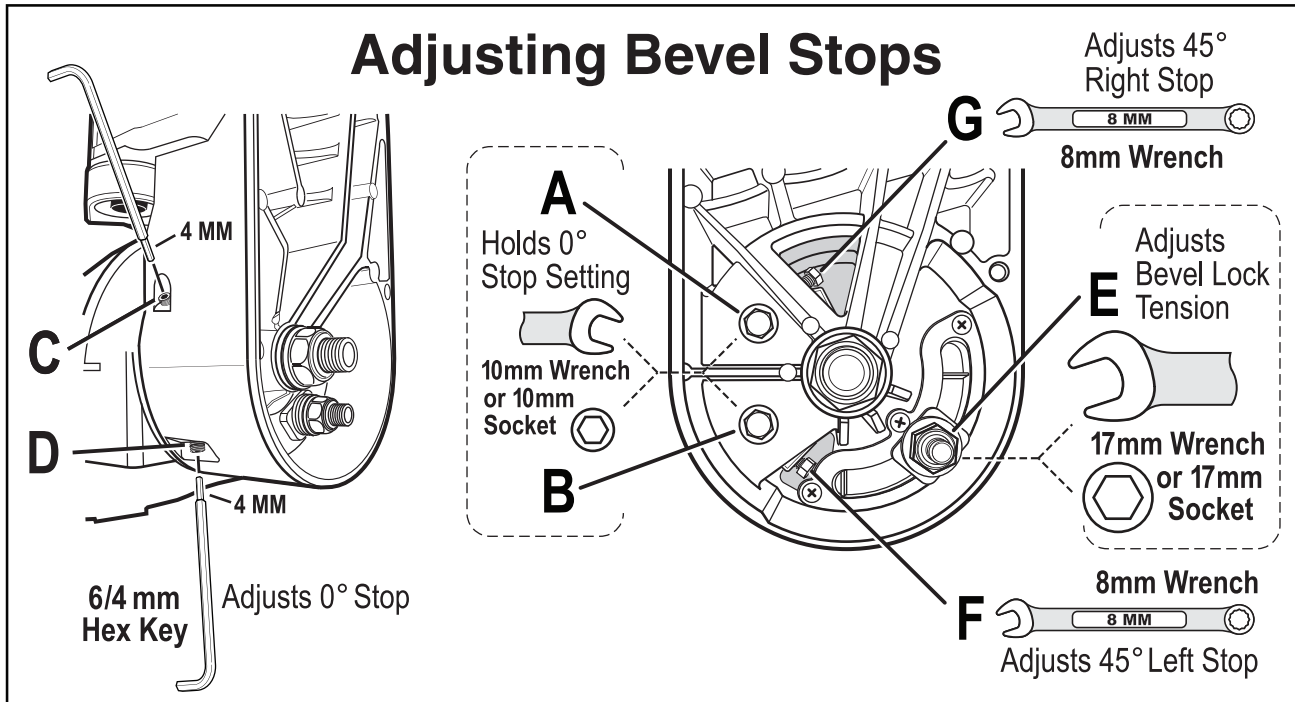


Figure 25



# Adjustments

## Adjusting Bevel Lock Tension

### Checking Bevel Lock Tension

1. Pull up the bevel lock lever to release tension. If it feels too hard to pull up, an adjustment may be required.
2. Check the tilt resistance. Grab main handle and slowly tilt the saw to the left. While tilting, some resistance should be felt. At approximately 30°, the resistance should become lower. If little or no resistance is felt, an adjustment may be required.
3. Check bevel lock tension. Push down on the bevel lock lever – normally more pressure is needed at the start; then the lever should go fully down to the lock position with a “thump”.
  - A) If it is too hard to push the lever fully down, then it may require tension adjustment.
  - B) Check locking power: Tilt the saw to about 30° and push down on bevel lock lever. Firmly press on the right side of the saw head - If the saw head tilts more than 1/2° from the locked position, then the bevel lock tension needs adjustment.

### Adjusting Bevel Lock Tension

The bevel lock lever tension has been set at the factory. After extensive use of the tool, it may require an adjustment. Before adjusting tension, the tilt resistance should be set.

1. Pull up the bevel lock lever to release tension.
2. **Adjusting Tilt Resistance** (see step 2 above).
  - A) If resistance is too low, slightly tighten (1/16th turn) the large lock nut “H” using a 24mm socket or wrench.
  - B) If resistance is too high, slightly loosen (1/16th turn) the large lock nut “H” using a 24mm socket or wrench.

3. **Adjusting Tension** (see steps 1 and 3 above) Pull up and push down the bevel lock lever.
  - A) If the lever is too hard to pull or push, the tension can be decreased by using a 17mm socket or wrench to loosen lock nut “E” (1/8th turn). Check again.
  - B) If the lever is too easy to pull or push or if the saw head does not fully lock at a bevel setting, then the tension can be increased by using a 17mm socket or wrench to tighten lock nut “E” (1/8th turn). Check again.

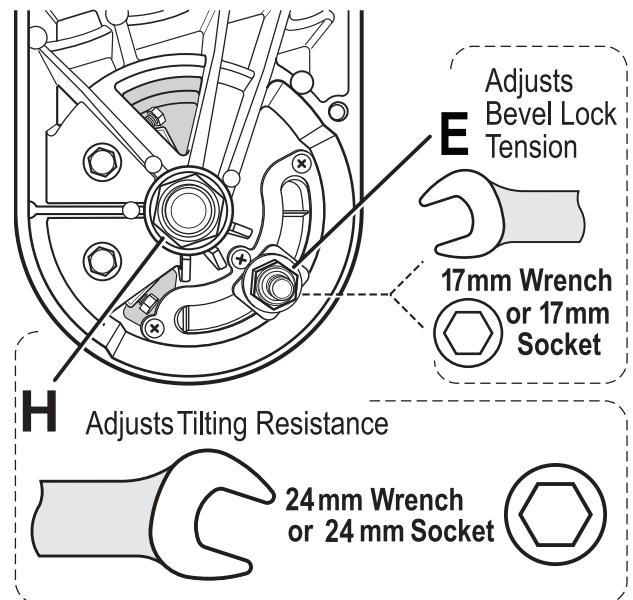


Figure 26

## Adjusting Front Stabilizing Bolt

The front stabilizing bolt is located on the bottom of the saw's base near the 0° miter detent slot (Figure 26a). It provides additional support when making slide cuts.

The stabilizing bolt has been factory set. If it is loose or needs adjustment, follow these steps:

1. Move the saw so that you have easy access to the bolt area. Loosen the stabilizing bolt and the jam nut using a 10mm wrench.
2. Place the saw back on your work table. Unscrew the stabilizing nut until it contacts the table.
3. Move the saw again so that you have access to the bolt area. While holding the head of the bolt with a 10mm wrench or pliers, use a 10mm open end wrench to fully tighten the jam nut against the boss in the saw's base.

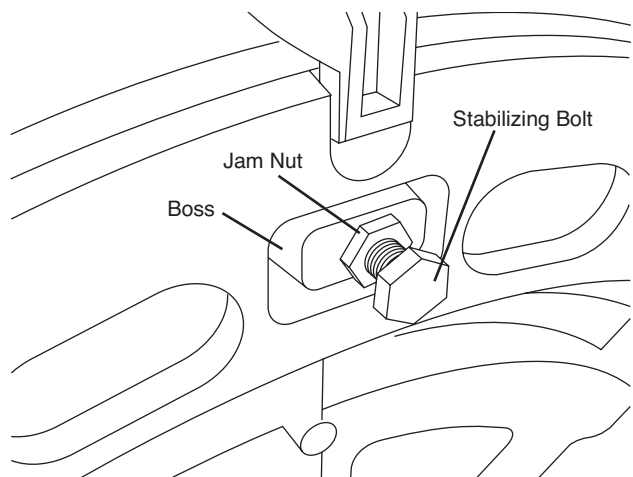


Figure 26a