

**CAUTION:** When using the dust collection attachment do not operate the unit without a hose connected and a dust collector in operation.

## OPERATION

**WARNING:** To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/installing attachments or accessories.

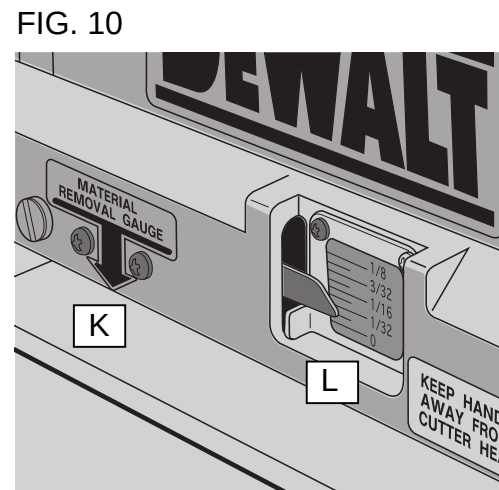
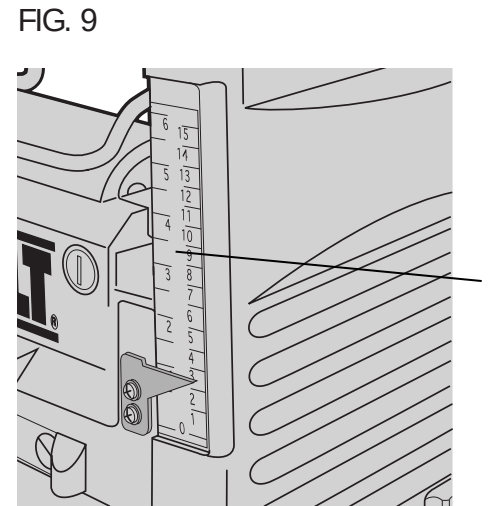
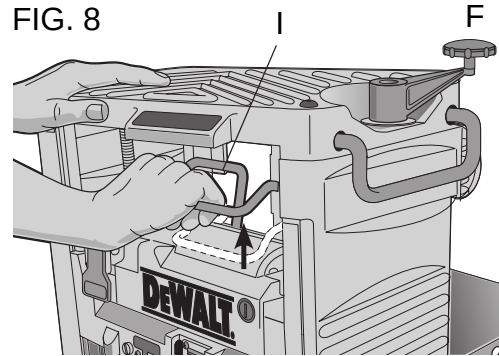
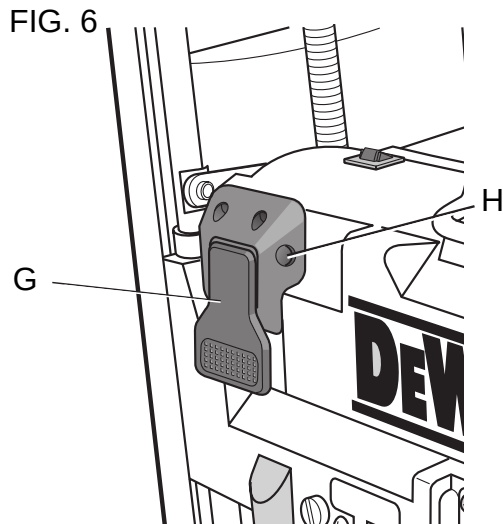
### On/Off Switch (Fig. 6)(below)

To turn the planer on, lift up the switch (G). The planer locks on automatically. To turn the tool off, press the switch down. A hole (H) is provided in the side of the switch housing for locking off the planer with a padlock.

### Table Extensions

Before using your planer, fold down the table extensions in the front and back of the tool (Fig. 7). After extended use, the table extensions may be slightly out of level. See Leveling the Table Extensions in the Maintenance section of this manual.

**NOTE:** The outside edges of the extension tables are level with the base while the inside edges (closest to the cutter head) are below the edge of the base. This is set at the factory to reduce unnecessary friction between the material and the table while providing adequate support at the two points (those farthest from the cutter head) on the tables that are integral to snipe prevention.



### Carriage Head Lock

Your planer is equipped with a carriage head lock lever (I) located on top of the motor (Fig. 8). This device secures the carriage that holds the cutter head to the four posts of your planer. By locking the carriage to the four posts, the movement that causes snipe is drastically minimized.

### Depth Adjustment

The depth adjustment scale (J) indicates the finished thickness of your workpiece (Fig. 9). One rotation of the depth adjustment crank is equal to 1/16" (1.6 mm); half a rotation is equal to 1/32" (0.8 mm), etc.

#### TO SET THE FINISHED THICKNESS

1. Raise head lock lever (I) to unlock the cutter head (Fig. 8). This allows the cutter head to be adjusted.
2. Adjust the thickness. Turn the depth adjustment handle (F) clockwise to lower the cutter head. Turn the handle counter-clockwise to raise the cutter head. One full rotation of the handle moves the cutter head 1/16" (1.6 mm).
3. Depress the head lock lever to re-lock before planing.

**NOTE:** Do not attempt to adjust the carriage height while the carriage lock is engaged. You may damage the machine.

#### FINE ADJUSTMENTS

The depth adjustment handle allows for fine adjustments, from 1/64" (0.4 mm) to 1/16" (1.6 mm).

Fine adjustments are ideal for "shaving" small amounts from your material. For example, if your planed workpiece measures 3-1/16" (77.8 mm) thick, but should be 3" (76.2 mm) thick, adjust your planer to remove the excess 1/16" (1.6 mm) as follows:

1. Plane and measure your workpiece. In this example, the starting thickness is 3-1/16" (77.8 mm).
2. Turn the circular label on the depth adjustment handle until the "0" mark aligns with the arrow on the top of the tool. Do not make any other adjustments to the planer.
3. Turn the depth adjustment handle clockwise until the 1/16" (1.6 mm) mark aligns with the arrow.
4. Plane your workpiece. The final thickness should be 3" (76.2 mm).

### Material Removal Gauge

Your planer is equipped with a material removal gauge. It is used to indicate the amount of wood that will be removed in one pass with the carriage set at its current height.

#### TO USE THE MATERIAL REMOVAL GAUGE

**WARNING:** DO NOT SWITCH THE UNIT ON WITH THE MATERIAL POSITIONED UNDER THE CARRIAGE. SERIOUS INJURY COULD RESULT.

1. Slide approximately 3" (76.2 mm) of your material under the arrow (K) located in the middle of the carriage (Fig. 10).
2. The wood must lay flat against the base of the planer. If the material is inserted at an angle, the reading may be inaccurate.

3. Unlock and crank the carriage down on the material until the material removal bar engages the wood. The red indicator (L) moves up the scale indicating the amount of material to be removed with the carriage at that height.
4. Adjust the carriage height until the desired depth of cut appears on the gauge.
5. Pull the material out from under the carriage.
6. Lock the carriage lock lever.
7. Turn the unit on and feed your material into the cutter head.

NOTE: Do not exceed the recommended depth of cut for various widths of material recommended on the material removal gauge (Table A).

DEPTH OF CUT	WIDTH
1/8"	3"
3/32"	6"
1/16"	9"
1/32"	13"
0"	0"

### Turret Stop

Your planer is equipped with a turret stop (M), shown in Figure 11, for repetitive planing of pre-set depths. Stops are set at 0", 1/4" (6.4 mm), 1/2" (12.7 mm) and 3/4" (19.0 mm). Use the 0" setting when planing between 1/8" (3.2 mm) and 1/4" (6.4 mm).

#### TO SET A PLANING DEPTH

1. Be sure the carriage is set above 1-1/4" (31.8 mm) before trying to set the turret stop.
2. Turn the turret stop until the desired measurement shows (Fig. 11).
3. Unlock the head lock lever (Fig. 8). Turn the depth adjustment crank, lowering the carriage by the desired increments, until it contacts the turret stop.

NOTE: DO NOT USE FORCE TO CRANK THE CARRIAGE BELOW THE LEVEL THAT THE TURRET STOP INDICATES. PERMANENT DAMAGE TO THE HEIGHT ADJUSTMENT SYSTEM ON YOUR PLANER WILL RESULT.

NOTE: The 3/4" (19.0 mm) turret stop can be adjusted for other planing thicknesses. Adjusting the 3/4" (19.0 mm) turret stop does not affect the other turret stop settings.

#### TO ADJUST THE 3/4" (19.0 MM) STOP FOR OTHER THICKNESSES

1. Unlock the head lock lever (Fig. 8) and turn the adjustment handle (F) counterclockwise to raise the cutter head.
2. From the back of the tool, locate the turret adjustment bolt (N) shown in Figure 11. This bolt is set for a 3/4" (19.0 mm) depth of cut at the factory. Use the crescent wrench provided to loosen the jam nut. Adjust the bolt up or down to reach the desired planing depth.
3. Turn the depth adjustment crank, lowering the carriage by the desired increments, until it contacts the turret stop.

## PLANING BASICS

### Proper Planing Technique

⚠WARNING: DO NOT TURN THE UNIT ON WITH THE MATERIAL ALREADY INSERTED UNDER THE CARRIAGE.

FIG. 10

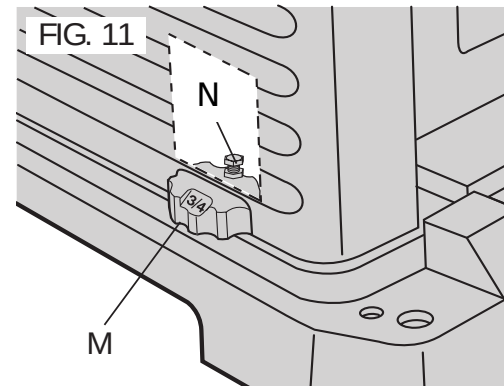
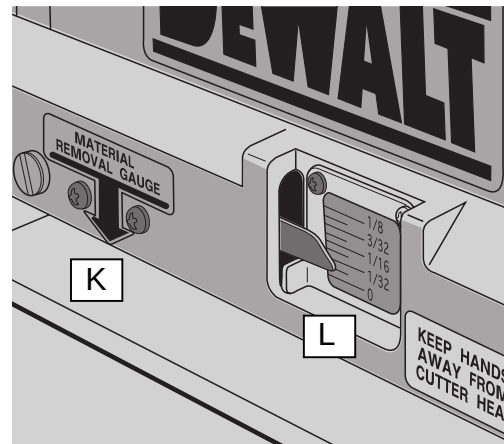
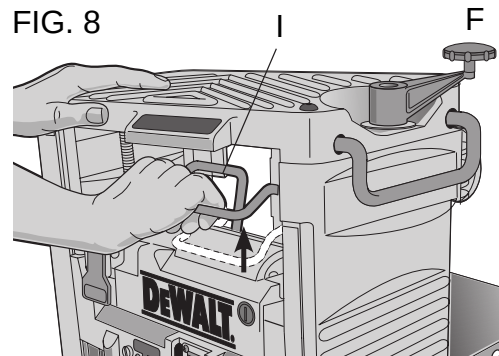


FIG. 8



WAIT UNTIL THE ROLLERS AND CUTTER HEAD ARE UP TO FULL SPEED BEFORE FEEDING YOUR MATERIAL INTO THE MACHINE.

#### TO PLANE YOUR MATERIAL

Your planer works best on lumber with at least one flat surface. If both sides of your workpiece are rough, use a jointer to level one face.

Support the workpiece adequately at all times. The maximum depth of cut your planer can take in one pass is 1/8" (3.2 mm) [on material less than 6" (152 mm) wide]. Never attempt to modify your planer to take a deeper cut. Follow the depth/width of cut guidelines shown in Table A for best results.

1. Lower the carriage to the desired height for your first pass.
2. Turn the unit on and feed the material into the feed rollers.
3. Examine the finished cut and adjust the carriage to the appropriate height for your next pass.

See the Troubleshooting Guide at the end of this section for more information.

⚠WARNING: Do not place your body between the workpiece and a stationary structure while the material is feeding out. Personal injury and/or damage to the work piece may occur.

⚠WARNING: This tool is designed to plane only wood. Do not try to plane materials other than wood.

⚠WARNING: Never plane wood which is shorter than 12" (304.8 mm) in length.

⚠WARNING: Plane only wood that is free from foreign objects, with no loose knots and as few tight knots as possible. Do not plane wood that is severely warped, twisted, knotted or bowed.

⚠WARNING: Do not feed wood across the grain, always feed wood in the direction of the wood grain.

NOTE: For best results, plane both sides of the workpiece to reach a desired thickness. For example, if you need to remove 1/8" (3.2 mm) from your workpiece, remove 1/16" (1.6 mm) from each side. This not only allows the workpiece to dry with an even moisture content, it also produces finer cuts.

NOTE: Always plane in the direction of the grain. Planing material less than 3/4" (19.0 mm) wide is not recommended. If you must plane narrow material, group the pieces together and plane them as one wide workpiece whenever possible.

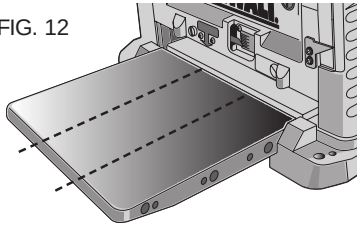
#### MINIMUM/MAXIMUM WIDTH/HEIGHT/DEPTH

NOTE: There is a certain area on the carriage of your planer that will allow the 1/8" (3.2 mm) depth of cut on material less than 6" (152.4 mm) wide. See Figure 12 for an approximate location of this area. Your material must move under this section of the carriage or planer will not take a 1/8" (3.2 mm) depth of cut. If the material is wider than 6" (152.4 mm), it will not fit through this area with an 1/8" depth cut.

### Snipe

Snipe is a depression made when an unsupported end of your material bends downward, causing the opposite end

FIG. 12



to lift up into the cutter head. If you are planing material that is especially long, the use of additional material support is recommended.

**TO AVOID SNIPE**

Feed the workpiece into the planer so it is level and remains flat against the base at all times.

Keep long workpieces level throughout planing operation by receiving or “catching” them from the rear of the planer.

**▲WARNING:** Do not place your body between the workpiece and a stationary structure while the material is feeding out. Personal injury and/or damage to the work piece may occur.

**Twisted, Cupped and Bowed Wood**

If both sides of your material are very rough or if the material is cupped, bowed or twisted, the planer may not produce the desired result. Ideally, you should have at least one level face/surface on your material before you plane. Your thickness planer will work best with material that has been run through a jointer to produce one flat surface. If you do not have at least one flat surface or a jointer, see the following recommendations:

FIG. 13



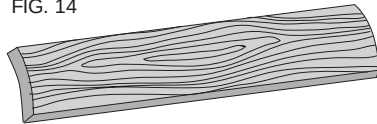
**TO PLANE TWISTED WOOD (FIG. 13)**

**▲WARNING:** TWISTED WOOD MAY JAM YOUR THICKNESS PLANER. IF A JAM OCCURS, TURN THE POWER OFF, DISCONNECT THE POWER SUPPLY AND RAISE THE CARRIAGE TO RELEASE THE MATERIAL FROM THE CUTTER HEAD.

To plane only slightly twisted material:

Plane both sides alternating from one to the other until the desired thickness is reached.

FIG. 14



**TO PLANE CUPPED WOOD (FIG. 14)**

To obtain the best possible results with cupped wood: Rip the material down the middle and plane it as two separate pieces.

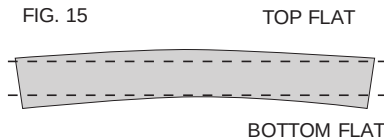
**NOTE:** Ripping the material reduces the severity of the cup and allows the machine to deliver better results. More material will be removed on cupped wood to achieve the desired thickness than on a normal board.

If ripping the material is not an option:

Plane one side of the material until flat, then plane the opposite side until flat (Fig. 15).

**NOTE:** Do not flip the board back and forth between each pass as recommended by the general planing directions.

FIG. 15

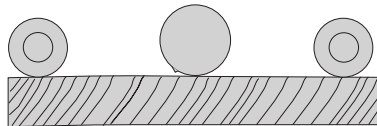


**TO PLANE BOWED WOOD (FIG. 16)**

The feed rollers and cutter head in your planer will push the bow out of the material as it feeds. When the material exits the planer, the pressure of the rollers and cutter head will release allowing the wood to spring back into a bowed formation. To properly remove the bow, use a jointer.

FIG. 16

**BOWED WOOD WILL BE FLATTENED BY FEED ROLLERS AND CUTTER HEAD...**



**...BUT BOW WILL RETURN AFTER WOOD IS PLANED**

