

Installation Instructions for 81742

Throatless Shear



Warning Cut Hazard

This tool has moving parts and sharp blades that can cause injury or loss of fingers.

Always place the handle in the down position when not in use. If left upright it may cause the blade to unexpected close resulting in injury.

Safety glasses should be worn when in use. Sharp edges and metal particles may be present.

Setup

- This throatless shear must be attached to a securely mounted table/stand/base that is capable of handling the stress of tool usage.
- Use the three mounting holes on the base as a template. Drill your holes and bolt the shear to your chosen base. (Figure 1)
- Slide the handle onto the handle stub and use the supplied M8-1.25 bolt to secure it.

Operation

- To ensure the greatest cutting force and most control, place the material to be cut at the point where the two blades meet. (Figure 2)
- Straight Cuts: Place the metal flat against the shear deck as you bring the handle downward. Once the first cut has been made, raise the handle and slide the uncut portion to the point where the two blade meet and continue until finished.
- Curved Cuts: Turn the metal in the direction of the desired curve as you bring the handle downward. Once the first cut has been made, raise the handle, slide the uncut portion to the point where the two blade meet and continue cutting your curve until finished.
- Place the handle in downward position when finished.



Figure 1

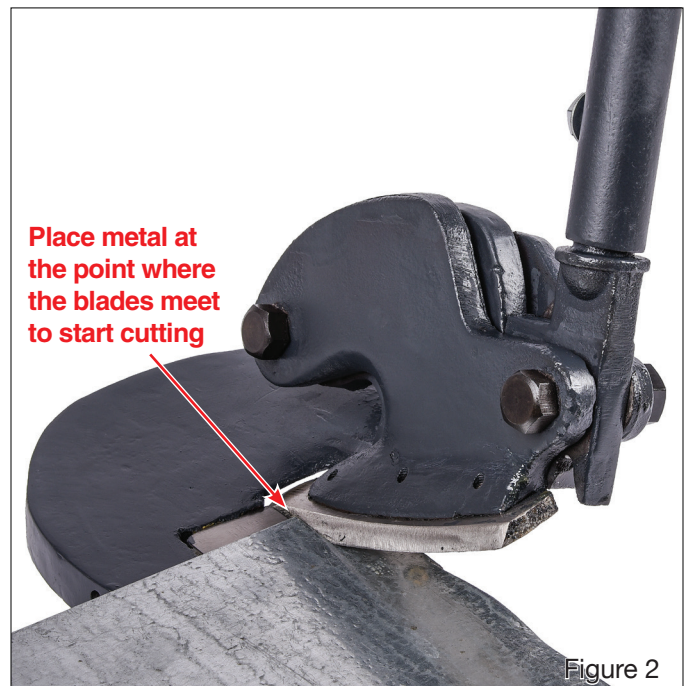


Figure 2

Blade Adjustment

- On this shear, all adjustment is made on the lower blade; the upper blade is fixed.
- Ideally, the blade gap should be $\frac{1}{4}$ in. of the subject material thickness.
 - 14-gauge steel = 0.019 in. gap
 - 20-gauge steel = 0.0094 in. gap
- You can also use a piece of paper to set the gap. Once the paper cuts clean, without tears or folds, you are ready for the subject material.
- The easiest way to check the gap is by using a feeler gauge.
- To adjust the gap, loosen the lower blade clamp bolt at the front of the shear. (Figure 3)
- Using the supplied screwdriver turn the (2) two set screws to increase or decrease the blade gap
 - Clockwise: decreases the gap
 - Counter-clockwise: increases the gap
- Make sure to turn both screws an equal amount, and limit adjustments to at most a $\frac{1}{4}$ turn at a time.
- Once you are satisfied with the adjustment, tighten the lower blade clamp bolt.

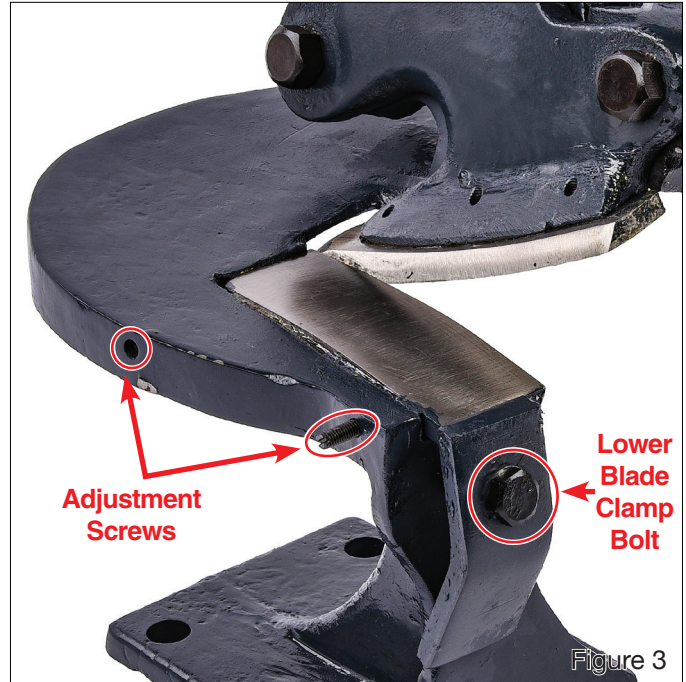


Figure 3

Upper Blade Removal

- Raise upper blade and remove handle.
- Loosen (3) three philips screws in blade. (Figure 4)
- Carefully remove.

Upper Blade Installation

- Hold upper blade in place while installing philips head screws. Tighten until secure.
- Lower blade and reinstall handle.

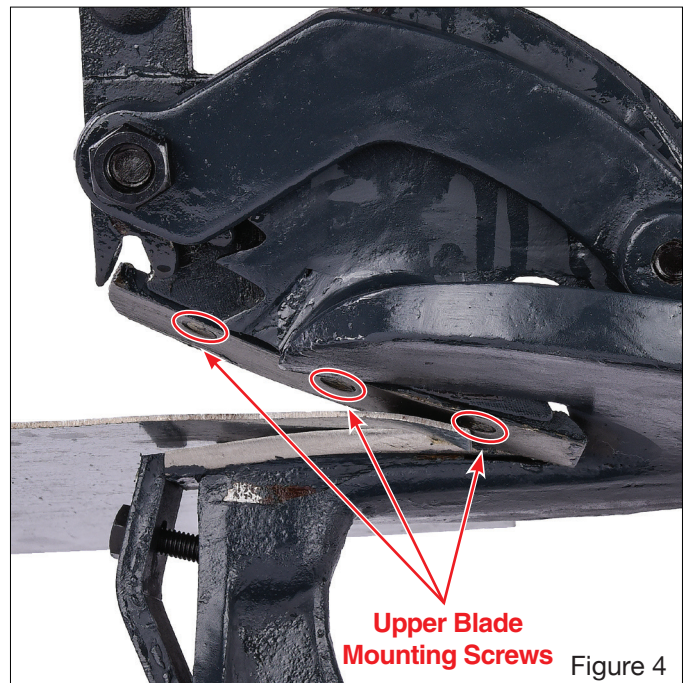


Figure 4

Lower Blade Removal

- Raise upper blade and remove handle.
- Loosen lower blade clamp bolt (Figure 5)
- Carefully remove.

Lower Blade Installation

- Replace blade and apply pressure against adjuster screws.
- Tighten lower blade clamp bolt.
- It is important to note that when replacing blades you will also have to readjust the blade gap.

Maintenance

- Regularly check hardware tightness, adjust as necessary.
- Lubricate moving parts and pivot points with a lubricating oil. Check for binding.
- Inspect components for damage, such as cracks in blades.
- Clean dirt and debris from shear deck and blades.

Troubleshooting

- Here are some potential causes of rough cuts, jagged edges, or the inability of the shear to make a cut
 - Worn blades = Replace blades
 - Material beyond shear capacity = Check maximum capacities
 - Adjustment issues = Readjust

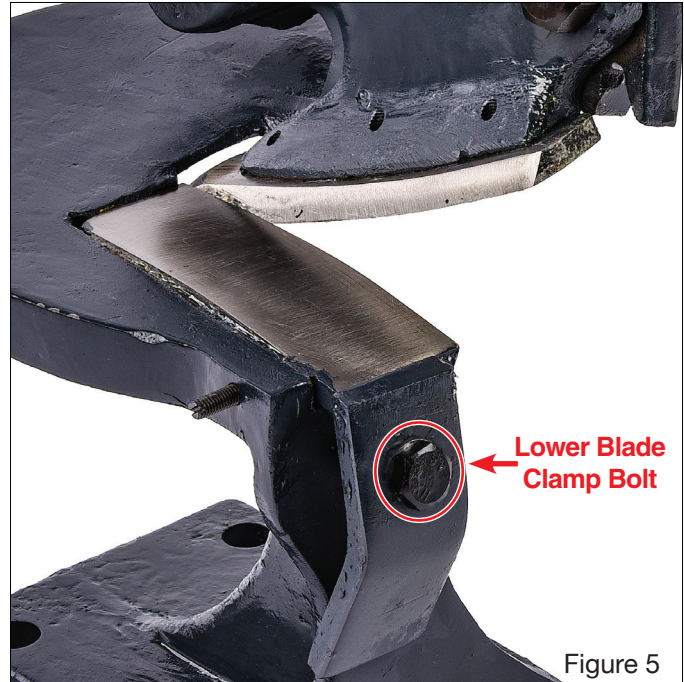


Figure 5