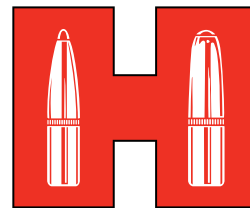
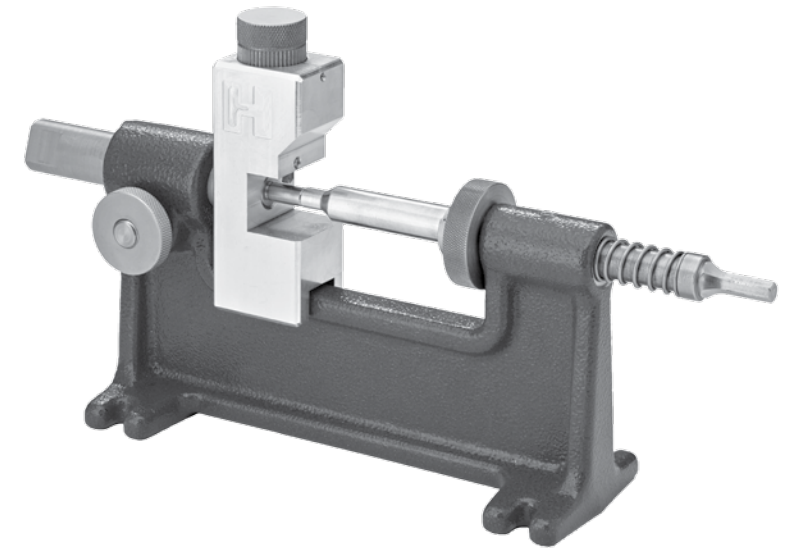


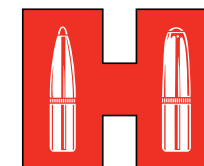
ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	398210	Cam Lock Trimmer Frame	1
2	399393	Neck Turn Tool Spindle	1
3	399390	Neck Turn Body	1
4	399391	Neck Turn Cutting Bit	1
5	399392	Shell Holder Spindle	1
6	399394	Knurled Shell Lock	1
7	399395	Adjustment Knob	1
8	399396	8-32 x 1/2 Set Screw	1
9	399397	O Ring - BUNA 020	1
10	399398	Spindle Return Spring	1
11	399399	Cutter Spring	1
12	399400	Detent Spring	1
13	399401	3/32 Bearing Ball	1
14	390724	8-32 x 1/8 Set Screw	1
15	398212	Trimmer Spindle Lock	1
16	398246	Knob Lock Spindle Trimmer	1
17	3919XX	Neck Turn Mandrel (Not Included)	-
18	390XXX	Shell Holder (Not Included)	-

Lock-N-Load® Neck Turn Tool



Hornady
Accurate. Deadly. Dependable.

P.O. Box 1848 • Grand Island, NE 68802-1848
308-382-1390 • 800-338-3220
www.hornady.com • Hornady.com/contact_us



Hornady
Accurate. Deadly. Dependable.

Setup/Assembly

Ensure that all components on the exploded view are present, keeping in mind that some parts are pre-installed and will not be visible. It is recommended that you bolt or clamp your Neck Turn Tool frame to your work bench with ¼ inch bolts or C-clamps.

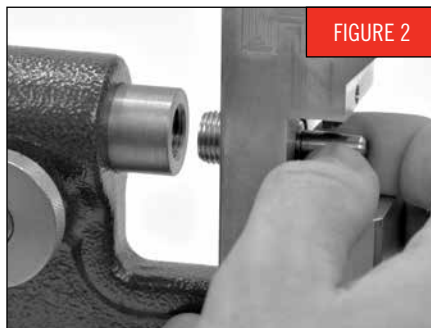
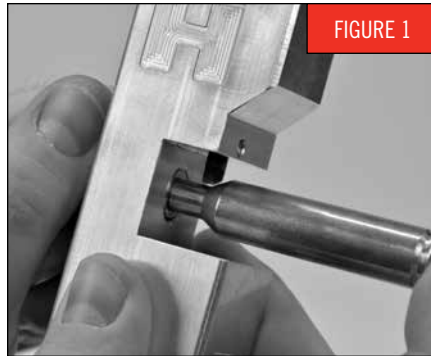
Unlock the tool spindle (2) by unscrewing the knob lock (16) about 1 turn. You may need to push in on the knob lock to unlock the spindle.

Using the correct size mandrel for the caliber you are going to neck turn, thread the mandrel into the back side of the neck turn body (3), making sure there is enough clearance that the mandrel will not contact the cutting bit (4).

Make sure that there is ample clearance for the thickness of a cartridge neck between the mandrel and cutting bit. Slide a cartridge onto the mandrel until its mouth contacts the flat at the beginning of the mandrel's threads. Adjust the depth that the cutting bit will run down the length of the case neck by threading the mandrel in or out. This depth is ultimately up to the individual reloader, but a general guideline is to cut until the bit just makes contact with the cartridge shoulder (FIGURE 1). **WARNING:** Cutting into the shoulder of the case will weaken it and could cause damage to the case and firearm during firing. Maintaining a constant trim length will help minimize this issue.

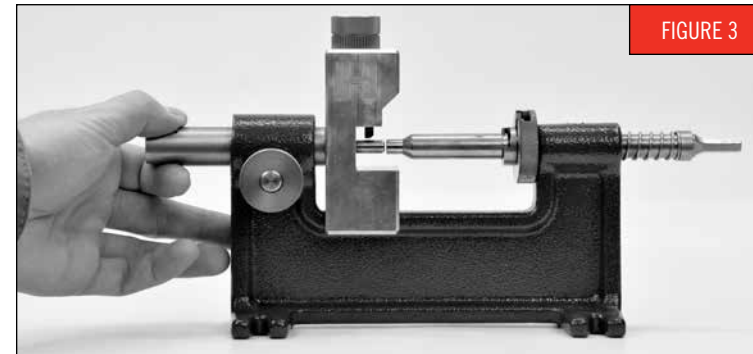
Being careful to hold the mandrel in place, thread the neck turn tool onto the tool spindle (FIGURE 2). Using a 5/8 wrench on the flats, snug the tool spindle but do not over tighten.

Loosen the knurled shell lock and insert the correct Hornady® shell holder.



Tighten the knurled shell lock until the end of the shell holder spindle is almost flush with the shell holder.

Insert a cartridge case into the shell holder. Without pushing in on the shell spindle, adjust the neck turn tool spindle so that the cartridge mouth sits just shy of the end of the mandrel (FIGURE 3). There should be just enough room to remove and insert cartridge cases. Lock the tool spindle.



Cutter Setup/Using the Tool

Attach your electric drill to the ¼ inch drill adapter on the shell holder spindle. If your drill has a 2 speed gear box, it is advisable to use the low speed gear until you are familiar with how everything works. In addition, it is easiest to unlock and lock cartridge cases by holding the shell lock stationary and spinning the shell spindle with the drill.

With a cartridge in the shell holder, slide the shell spindle forward until the mouth of the case is over the mandrel. Tighten the shell lock. This is best accomplished by holding the shell lock with your fingers and using your thumb to hold the cartridge case in the shell holder (FIGURE 4).



The cutter should already be set so it does not remove any material from the case neck. At this point, it is advisable to add a small amount of lubrication to the inside and outside of the case neck—a shot of case lube or cutting fluid will work. Run the case onto the mandrel as far as it can go, and spin it slowly with the drill. Tighten down (turn clockwise) the cutter adjustment knob (7) until the cutter begins removing material from the case neck. This is your baseline cutter setting. From this setting, based on how thin you would like your case necks, you may increment the adjustment knob as many clicks as necessary to get to this thickness. Keep in mind that each click is .0005". Use the formula below to determine clicks necessary. Use the Hornady® Neck Wall Thickness Gauge 041223 to accurately measure neck thickness.

$$\text{Clicks} = (\text{Current Thickness} - \text{Target Thickness}) / .0005$$

Example: You begin cutting material off the case neck and measure the neck thickness to be .018". Your target neck thickness is .0145".

$$\text{Clicks} = (.018 - .0145) / .0005 = 7 \text{ Clicks}$$

NOTE: Cartridge case necks are not entirely concentric from the factory. The tool may begin cutting material off certain spots on the neck but not others. This may affect initial neck thickness measurements.

Once you have the cutter set and begin turning cases, some experimentation may be necessary to achieve optimal consistency and surface finish. Remember to always keep the case spinning while in contact with the cutter. Some adjustments that may affect performance are:

- Drill speed (Revolutions per Minute)
- Feed rate of cutter down the length of the case neck
- Lubrication on the case neck (a shot of case lube or cutting fluid may help)
- Amount of material being removed- if you wish to remove a large amount of neck thickness, it may be best achieved by cutting in multiple passes, reducing the thickness on each pass.