



*Experience makes the difference*

## Astro Crimp Tool M22520/2-01 Maintenance and Lubrication Guide

This guide provides the information required for basic maintenance of the Astro Crimp Tool M22520/2-01 as modified by C. Davis Systems & Software, LLC's (CDSS) for use in our GWT and LC lines of Crimping Machines.

NOTE: the Astro Crimp Tool M22520/2-01 is a hand tool modified by CDSS for use in our various automated Crimping Machines. Although the tool was designed by Astro to be 'maintenance free,' the extremely high cycle counts and throughput of automated crimping in our customer's various wire processing applications necessitate periodic maintenance, especially cleaning and lubrication.

We recommend Krytox GPL 206 Grease for all Crimp Tool lubrication. Krytox is stable at high temperatures, chemically inert, insoluble in most common solvents, non-flammable, and compatible with plastics, metal, rubber and ceramics.



## Step 1: Disassembly & Cleaning of the Astro M22520/2-01



To disassemble the Astro M22520/2-01, you will first need to disassemble the crimp head itself. Start by removing the funnel jaws: first remove the Funnel Jaw Strap (or shoulder-bolts on some models), and then lift the law assemblies off of their dowel pins:



At this point the four Philips screws which hold the crimp tool to the Positioner are exposed. Unbolt the clevis from the handle of the Astro Tool and then unscrew the cylinder and the clevis. Remove the Philips screws CAREFULLY and CAREFULLY remove the Positioner from the back of the Astro Crimp tool being careful not to damage the delicate tip of the Positioner. The Astro Tool should now be attached to the baseplate, but be otherwise accessible:



You should now be able to remove the Astro Tool's Lever Arm which contains the Indenters:



After removing the Lever Arm, remove the Indenter housing, Indenters and Springs. Be careful when removing the housing as the Indenter springs are compressed and can launch the Indenters a surprising distance. BE CAREFUL TO NOTE THE ORIENTATION OF THE INDENTOR CAM LOBES AND THE ORIENTATION OF THE LEVER ARM IN RELATION TO THEM PRIOR TO DISSASSMBLY.

At this point, for the purposes of basic maintenance, cleaning and lubrication, the Astro Tool is completely disassembled:



**Carefully clean the Lever Arm, Indenter Housing, Indenters and Springs, using a solvent like rubbing alcohol alcohol being sure to remove all old grease, and any debris or particulate. Be especially sure to carefully clean the passages in the Indenter Housing and the cam grooves on the Lever Arm. Compressed air is especially good for this task. You should also examine all components for wear -- excessive wear to the Indentors or cams will result in out-of-spec crimps. These parts cannot be repaired -- if excessively worn the, crimp tool must be replaced. However, regular cleaning and lubrication will greatly extend the life of the crimp tool.**

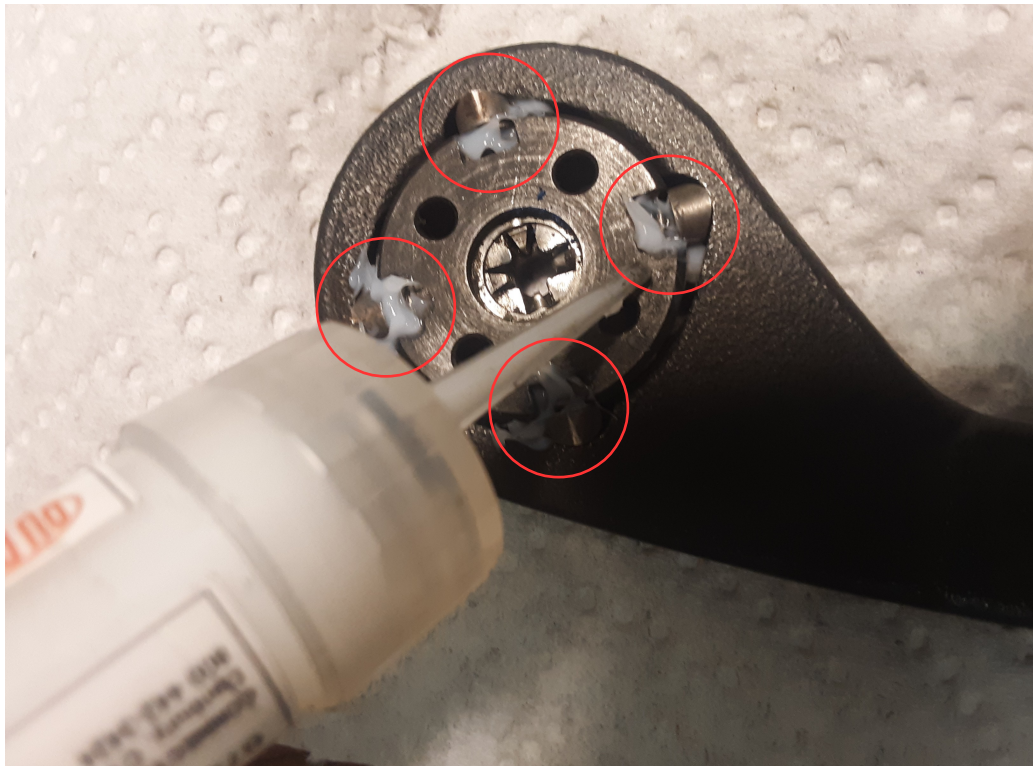
## Step 2: Lubrication of the Astro M22520/2-01

When you have finished cleaning the components, reassemble the Indenters and Springs in the Indenter Housing, WITH CARE TO RETURN THE INDENTER CAM LOBES TO THE CORRECT ORIENTATION. You are now ready to reinstall the Indenter assembly in the Lever Arm.

Reinstalling the Indenter assembly in the Lever Arm is tricky as the Indenter's Cam lobes must be correctly oriented and the springs must all be simultaneously compressed. We have found that the best way to accomplish this tricky operation is to compress the assembly (taking care to preserve cam lobe orientation) with a zip tie, and then insert it into the Lever Arm compressed:

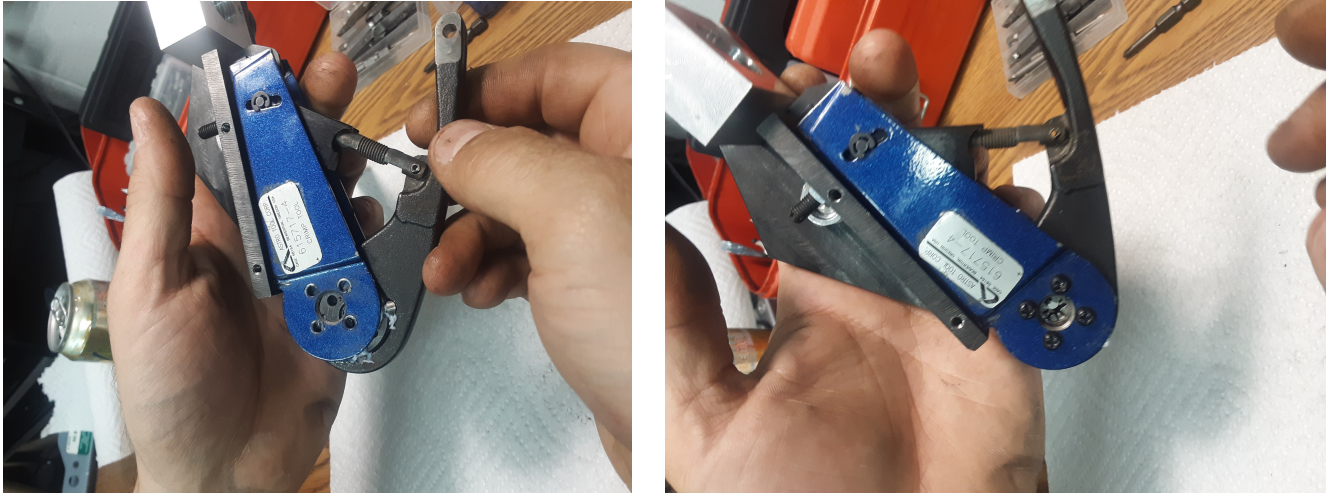


After cleaning the innards of the Crimp Tool and reassembling the Lever Arm, apply fresh Krytox Grease to the Indenter cams, the Indenter springs, and the body of the Indenter Housing. At this point the key moving parts have been cleaned and freshly lubricated:



### Step 3: Reassembly of the Astro M22520/2-01

After completing cleaning and lubrication, reassemble the tool by reversing the steps described above. Take special care when returning the assembled Lever Arm to the handle, being sure to insert the Ratchet Arm into the housing prior to pressing the Indenter Housing into place:



After reassembly, cycle the crimp tool manually to confirm function. The tool should articulate freely, the ratchets should engage and disengage smoothly, and the crimp depth selector should function as before.

**NOTE:** if the crimp tool is sticky, articulates poorly, requires excessive pressure to close or sticks in position a piece of debris may have gotten caught on the cams or springs -- disassemble and clean tool again with careful attention to debris which may be caught in the Indenters, the cams or the Indenter springs. If this occurs the tool must be disassembled, cleaned and lubricated again.

After confirming good function, re-install tool into your CDSS Automated wire termination machine and resume crimping.