



January 30, 2006

Dear AutoFish Users,

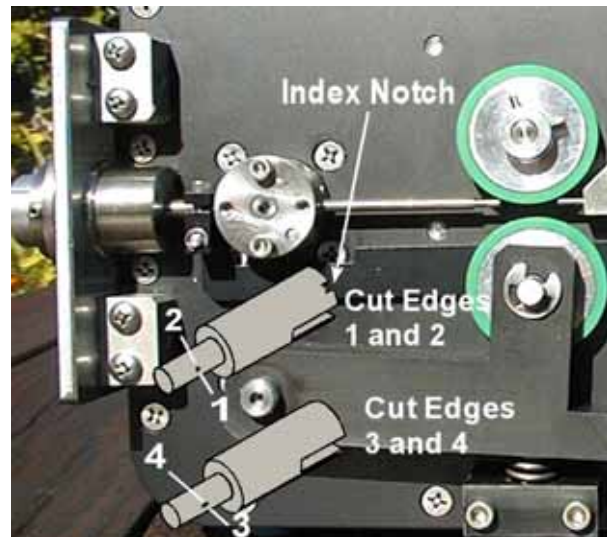
Welcome again to another marking and tagging season! We look forward to working with you this coming spring. This newsletter is a brief reminder of some of the important aspects of the MKIV tag injector including cut edge selection and proper injector disinfection protocols. Please feel free to contact NMT with any questions regarding the following information.

MKIV Cut Edge Selection

A MKIV cutter will routinely cut 300,000 to 400,000 tags if properly maintained. Factors that determine the life of a cutter include maintenance of the wire path and slight variances in the carbide itself. Writing the cutter's serial number, the cut edge currently being used, and the injector's total tag count in the log book whenever changing to a new cut edge is useful in monitoring the life of a cutter.

To make sure the cutter is always installed on the intended cutting edge, follow the steps below.

1. Turn on the MKIV Injector.
2. Go to the 'ADJ' menu and use the '+1' or '-1' keys to scroll through the menu to the 'CUT EDGE [X]' option. X represents the cut edge (1-4) that the MKIV is currently set on. Take note of this number.
3. Cycle the injector once by pressing the 'TAG' key. Ignore the 'No Wire or Stuck' error message.
4. Locate the index notch on the cutter pin as shown in the diagram to the right.
5. Orient the pin's index notch according to the diagram, depending on the cut edge noted in step 3. The notch should be up when using cut edges 1 or 2 and down when using cut edges 3 and 4.



6. Secure the cutter sleeve over the pin and insert the cutter into the cutter block.
7. Fasten the cutter flange to the cutter block.
8. The cutter is now installed in the MKIV in the correct orientation. Select the desired cut edge in the adjustment menu (step 2) and cycle the injector once.

AutoFish System



MKIV Cut Edge Inspection

Tag quality is a key indicator of the condition of a cutter. Laying tags on a piece of tape is an easy way to inspect tag quality and length. Standard length tags should be between .040"-.042". Cut tags should also be free of burs.

The picture to the right shows the inside of the cutter sleeve. The sleeve only has 2 cut edges as the pin has 4 unique cut edges. The cutter pin's cut edges 1 and 3 share a cut edge within the sleeve and cut edge 3 and 4 share the other edge of the sleeve. The picture shows heavily used edges 1 and 3 and unused edges 2 and 4. The wear shown here on edges 1 and 3 is normal.



It is good practice to divide the wear on the sleeve equally between all of the edges of the pin. This can be achieved by switching cut edges every 50,000 to 100,000 tags.

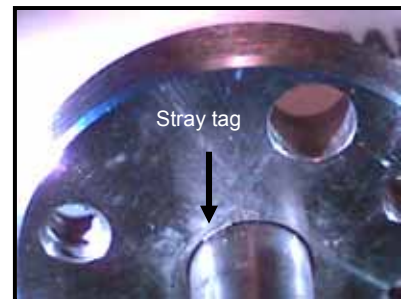


The picture to the left shows the cut edges on one side of the pin. This is normal wear. The used edge shown could cut thousands more tags. Start checking the quality of the tags more frequently or switch cut edges. If half length tags are being cut, then the condition of the cut edge becomes more critical.

Inspecting the flange and cutter block surfaces for stray tags can prevent wire jams and possible damage to the cutter.

An Arkansas stone can be used to take down any high spots from dents created by tags caught between the flange and cutter block surfaces.

The MKIV head mold setscrew holes should also be checked periodically for stray tags. Tags that have been flushed into these holes can create difficulties when loosening setscrews to replace or reposition a head mold. If one of the head mold setscrews becomes difficult to remove, there may be a tag lodged in the threads. Regular cleaning and maintenance of the head mold holder will help prevent tag buildup that may cause problems in these areas.





MKIV Injector Disinfection Protocol

Except on the interior mechanisms of the MKIV, a 200ppm chlorine solution is recommended for use as a disinfectant. Typically, household bleach (or sodium hypochlorite) comes in a concentration of five percent, so to achieve the desired concentration; dilute an ounce of bleach into two gallons of water. In order to reduce corrosion, alcohol (70-90%) is recommended for the cleaning and disinfection of the interior mechanisms of the MKIV.

1. Rinse the exterior surfaces of the MKIV using water and clean with a sponge.
2. Rinse all exterior surfaces with bleach solution including power switch and attendant cords.
3. Remove the head mold and clean with chlorine disinfectant (alcohol may damage the surface material).
4. Open the injector and remove the needle, needle carrier, clamping nut, and cutter. Immerse these parts into a container of chlorine disinfectant.
5. Remove the screws holding the head mold and immerse in the same solution.
6. Immerse tools, and other contents of the kit including the case into the chlorine disinfectant.
7. Remove the lower drive roller pressure arm and the rear wire guide.
8. There is an E-clip holding the needle arm on the drive cam. Remove it and the needle arm.
9. Spray the alcohol solution onto the exposed interior surfaces (including the case) taking care to included drive rollers, wire guides, tension spring, drive roller latch (in both the up and down positions), hinges, lower drive roller arm, and all screws.
10. With alcohol wetted Q-tips, thoroughly clean all surfaces and orifices/ tubes of the head mold holder, needle carrier, needle carrier clamp, vertical inspection hole, cutter motor drive pin, cutter motor block including hole for cutter pin, and alignment pin. Shift the moving parts to and fro during the process to insure that all surfaces are exposed to the cleansing agent.
11. Spray the caps from the electrical outlets and the electrical connections with alcohol solution.
12. Rinse the soaking injector parts, tools and case in distilled water.
13. Remove any debris adhering to cutter parts. Using a length of tagging wire dipped in alcohol; probe the holes in the cutter sleeve and cutter pin to clear them of any material.
14. Insert the tagging needle into a 20 gauge barrel of an alcohol-loaded syringe and force a stream through the tagging needle.
15. After removing the hypodermic needle from the loaded syringe, force alcohol through the tagging needle carrier.
16. Remove the soaking parts and tools, spray with alcohol, and reassemble the parts using disinfected tools.
17. After replacing the 20 gauge hypodermic needle onto the loaded syringe, fit it over the refitted tagging needle and force alcohol through the needle, toward the interior of the injector, until a steady stream reaches through to the driver rollers.
18. Using the same syringe, insert it into the wire guide leading to the drive rollers, and force alcohol through until a steady stream reaches the driver rollers.
19. Allow the equipment to dry prior to storage.

MKIV Repair and Service

When a MKIV is sent to NMT for repair or service, providing pertinent information with the machine is helpful for quick and successful service. The machine should also be returned with the cutter, the needle carrier, and a repair request form describing the specifics of the failure mode. Since the AutoFish trailers are always on the move, make sure and update the shop when return addresses change.

Contacts

NMT takes pride in providing great customer service. Please never hesitate to contact us with any trouble or concern that you may have concerning AutoFish operations. During the busy season, we realize that we may be difficult to contact so we will include alternate contact numbers on voice mail when we are out of cell coverage.

Brian (360) 770-3606
Joel (360) 870-7710

We wish you all a happy and healthy tagging season and look forward to working with you!

Sincerely,

The NMT AutoFish Crew

