

1. Your Panther system was designed for minimal maintenance and adjustment requirements. Periodically your maintenance staff or equipment operators should do the following:
2. Ensure the equipment's AC power is turned OFF before performing any kind of maintenance on your Panther system. This includes the print engine. (Follow in-plant lock-out/tag-out procedures for safety.)
3. Each time the labels are changed, clean the Print Engine print head/rollers and the applicator tamp head. Cleaning the print head ensures the print quality remains constant. Use isopropyl or denatured alcohol to clean these components. Ensure these chemicals can be used within your facility prior to use! Follow MSDS documentation for use of these and all chemicals for safe handling.
4. Make sure the applicator surface or tamp head is clean and free from any adhesive build-up.
5. Make sure there is no debris in the applicator rack's teeth or fan housing.
6. Clean the Print Engine feed rollers monthly or as necessary when paper dust accumulates on the feed rollers. This affects traction for the paper feed.
7. Check the paper supply, take-up, and dancer arm assembly for unnecessary drag. Too much drag in the label delivery and waste take-up system can shorten the life of the print engine's drive components.
8. Properly follow the print engine manufacturer's recommendations for print engine routine maintenance.

PREVENTATIVE MAINTENANCE SCHEDULE

EVERY LABEL OR RIBBON CHANGE	
Clean Print Head	Use alcohol wipe (denatured or isopropyl) and swipe the print head and printer platen roller.
Check Inside of Print Engine	Make sure rollers are free and clear of debris and paper jams. Make sure gap sensor does not have labels blocking it. Check for adhesive build up on peel bar and nip assembly
Check Applicator Tamp Head/ Applicator Rack	Check to make sure labels are not stuck on the tamp head/in the applicator rack's teeth. Clean with isopropyl alcohol or plastic safe adhesive remover

EVERY SHIFT	
Clean Tamp Head	Use isopropyl alcohol or a plastic safe adhesive remover. Apply to cleaning rag and clear off any adhesive or label remnants left from last shift. Be sure to clean the head on all sides.
Check Rollers Inside Print Engine	With Printer turned OFF check rollers inside print engine for any debris including adhesive build up and label jams. Check for cuts gouges, or wear to the platen rollers. <i>NOTE: NEVER USE SHARP OBJECTS OR KNIVES TO CLEAR ROLLERS, most paper jams can be cleared by pulling on one end of the jam. Cutting the roller will adversely affect the print quality!</i>
Clean Take-Up Roller (May be done at label change)	Use cleaner to scrape off labels used to hold waste take-up on reel. If necessary remove roller (via two set screws) and soak in water to remove build up. Do not use labels to affix backing to take-up roller. Simply wrap the backing material around itself until tight.

MONTHLY	
Check Sensors (both on Predator and within the Print Engine)	Make sure label gap sensor (within Print Engine) is free of label buildup/blockage. Check to make sure low label sensor is functioning/connected to the control box and not blocked. Make sure home sensor is functioning (i.e. causes an error when tamp arm is held away from home) and not blocked by any labels or debris.
Check that the applicator assembly is tightened properly and motor is seated properly with the applicator rack	Make sure applicator arm extends as desired and make sure label vacuum holds label securely by feeding a label onto the tamp head. The vacuum fan may need to be blown out on occasion to ensure too much dust doesn't inhibit fan functionality. Follow the electric applicator preventative maintenance document for ensuring that the applicator guide collar set screws are tight, the motor is properly seated with the applicator rack and that the tamp head is positioned properly.
Check Take-Up Belt	Make sure take-up roller is functioning, and belt is tight and secure with no tears along its surface. Make sure safety guard is securely in place around take-up pulleys. Simply wrap the backing material around itself until tight.
Check Tower Lamp	Make sure bulbs are working and are not blown out.
Check Electrical System	Make sure user display is functioning correctly, and that touch screen is reactive to touch and accurate to touch location. Check fuse in fuse tray. Check AC plug and look for frayed or loose connections. Check motor connections that extend from applicator motor to ensure they are secure.
Check Mechanical Positioning	Ensure that labels feed evenly onto tamp head by checking the print head alignment with the peel bar of the printer. Make sure all applicator location adjustment bolts are tight. Make sure mounting bolts are tight and machine has not mechanically shifted. Check pitch and yaw of machine and make sure tamp head aligns with your product properly. Check to make sure all bolts and screws are securely fastened and in place.

MONTHLY OR QUARTERLY BASED ON SYSTEM USAGE

Swap out Print Engine

Swap print engines before you have a downtime situation. First, record all print engine settings. Remove installed print engine by disconnecting the power cable, communication cable, and the Printer/Panther interface cable from the back of the print engine. Remove the four bolts securing the print engine and pull it out of the machine. Install back-up print engine by reversing the order of these instructions. Make sure the settings of the new print engine match those of the old. Bench inspect the old print engine for wear items like belts, platen/feed rollers. Send the print engine in for service to Panther Industries as needed. Refer to print engine repair documentation for more information.

13.1 Electric Applicator Preventative Maintenance

A separate preventative maintenance document has been created for the electric applicator portion of your system. This document is located on your distribution DVD that came with your system's manual. This maintenance should be performed every 2 – 3 months to ensure the applicator is in good working condition.