



## JK INJECTION SYSTEMS INSTRUCTION MANUAL

### PERSONAL SAFETY

1. Product is designed only for specified purpose and manner of use outlined in the instructions. Any different manner or purpose of use, modification and/or alteration of the product should not be undertaken. A user who does so assumes all risk for his/her actions and the manufacturer disclaims responsibility from any and all harm arising from any such action.
2. Manufacturer disclaims responsibility from any illegal/harmful use by the buyer or a third party. Any product user should take reasonable steps to ensure product use is legal and that user's use will not cause harm to him or others.
3. Product must be used with extreme caution as injector system is sharp and can puncture or cut skin if used improperly. If skin is punctured, the herbicide may be injected into the skin resulting in serious bodily injury or death – seek immediate emergency care.
  - Manufacturer disclaims any responsibility for improper use of the product that can cause skin to be punctured, cut, or scraped. Manufacturer disclaims any responsibility for delay in seeking emergency medical care by a user or third party who receives a puncture, cut or scrape wound from the product.
4. Always utilize safety precaution equipment when using the Japanese Knotweed Injector System. Such equipment includes: safety goggles, gloves, construction-type hard toed shoes, long pants, long-sleeved shirts, etc...
  - Manufacturer disclaims responsibility from any and all injury or harm resulting from lack of use of safety equipment or adequacy of any safety equipment used.
5. Product should not be accessible to minors, animals, or those who cannot use the product according to its instructions. Store in a safe place.
  - Manufacturer disclaims any and all injury or harm resulting from product not being stored in a safe place and/or being accessible to minors, animals, or those who cannot use the product according to its instructions.
6. Product contains herbicide. Do not come into direct contact with the herbicide such as: ingesting, inhaling, touching, rubbing contaminated parts or materials into eyes, etc...}, aim at people or animals, use in crowded or busy public places, store in easily accessible area, or fill injector system with anything other than the specified weed killing herbicide.
  - Manufacturer disclaims any and all injury or harm resulting from user coming into direct contact with the herbicide, the product being aimed at people or animals, used in a crowded or busy public place, store in an easily accessible area or filled with anything other than the specified weed killing herbicide.
7. **Install needle in coupler with the hole pointing down.**
8. Place needle safely in the measuring tube between injecting sites and carrying it in the field. **Holsters make it much safer when carrying a tool on rugged or steep terrain, allowing the use of both hands for support.**

### TOOL USE AND CARE

1. The optimum time for injecting canes is June through first frost, in most areas.
2. Before injecting the Japanese Knotweed family of canes in the United States, adjust the amount of cc's by turning the 9/64 Allen head under trigger and squirting into measuring tube (provided) to **4 cc's when using glyphosate** of 53% active ingredient, and 5 cc's when using a glyphosate with active ingredient of 41% "undiluted", to affect a kill of the rhizomes. If working around water, use an aquatic glyphosate. In

countries, other than the United States, you will need to follow your Government and herbicide manufactures requirements.

3. Connect the injection needle into the Quick disconnect only, when you are at the infestation site and ready to inject. This system was designed with your safety in mind.
4. Inject canes that are **3/4 inch or larger between 1<sup>st</sup> and 3rd node above root crown, at a 90 degree angle.**
5. After using your JK Injection Tool, fill the cup with water and squirt until empty. Rinse or soak cap with water to clean out check valve. Failure to clean the 3 check valves used in the JK Injection tool will prevent the tool from functioning and is not covered under the warranty.
6. When JK Injection tool is not in use, store the needle in the ml measuring tube to prevent physical injury. The holsters are available for housing the tool and needles.

## **WARRANTY**

The JK Injection Tool has a limited warranty for one year from date of purchase.

## **TROUBLE SHOOTING TIPS**

- What do I do if the JK tool does not calibrate consistently?
  1. The front valve could be contaminated with dirt or salt crystals. You will need to replace the coupler valve.
- The cylinder wall is scored and the herbicide is flowing past the seals.
  1. Replace the cylinder.
  2. Seals may be worn, so you will need to replace seals.
  3. The silicone lubricant may be lacking.
- The cylinder threads are stripped or compressed. What do I do?
  1. Replace the cylinder.
- The cylinder housing appears cracked. What do you suggest?
  1. You will need to replace the cylinder.
- The canister has been leaking fluid, what should I do?
  1. The canister or lid has been over tightened.
    - ✓ Only **tighten 1/4 turn** on the canister and lid.
  2. There is back pressure from a plugged front valve.
- When using the holster insert, what is your suggestion for using the marking system?
  1. When using the marking system with the JK tool, cut off the bottom 2 inches of the blue insert and insert down into the holster.
- **The tool and needles have been upgraded since 2012.** The tool has a new style brass tube barrel, longer and better front valves, and a new canister (white) that provides visibility to see the level of herbicide in the canister. There is a heavier molding on the treaded portion of the canister and cylinder.
- When rebuilding older tools that have the copper barrels, they will need to be replaced with brass barrels and cylinder, as well as the front valve.



## SERVICING THE JK INJECTION SYSTEM

When finished using your injection tool for the season, the tool needs to be thoroughly cleaned and checked for wear or damaged parts. The piston seals should also be re-lubricated at this time.

To check the front valve (located in the brass tube just behind the coupler)

1. Fill the canister with water.
2. Disconnect any needle in the coupler and store in the plastic vile.
3. Place the lid back on the canister and pull the trigger.
4. While pulling the trigger, look to see if the water shoots straight out of the coupler or off to an angle. If the water shoots off to an angle, the valve has dirt, grass particles or a buildup of herbicide residue. In this case, the valve should be replaced.

To replace a front valve;

1. Grasp the brass tube with a pair of pliers and unscrew the tube from the gun housing.
2. Holding the tube with the pliers, take a 9/16th wrench, loosen and remove the coupler.
3. Remove the valve in the tube with a screw driver. Place the screw driver into the open end of the tube and push to force the valve out.
4. Insert new valve into the tube. Push down slowly to seat the valve about 1/8th inch from end of tube.

To disassemble the injection tool;

1. Remove canister and four Allen head screws.
2. Separate gun and remove cylinder.
3. While holding the piston in position (located in the cylinder), push out trigger steel pin. Release the tension slowly because the cylinder is under spring tension.
4. Once the piston is removed, clean and check the cylinder wall for scratches and cracks. If either is present, it should be replaced.
5. Once the trigger is removed from the cylinder, replace the adjustment screw with the new Nylock screw.
6. Check both seals for wear and tear. Replace if necessary.
7. Grease both seals and fill the cavity between the seals with grease.
8. Ready for reassembly. When finished, make sure the spring in the cylinder is centered in the cylinder base.
9. Oil the collar on the quick disconnect.

