SPEIDEL WEED WIPER OPERATING INSTRUCTIONS

- READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY BEFORE USING THE SPEIDEL WEED WIPER
 READ AND FOLLOW ALL INSTRUCTIONS ON THE HERBICIDE LABEL
- <u>ALWAYS WEAR PROTECTIVE CLOTHING AS RECOMMENDED BY THE HERBICIDE MANUFACTURER</u>

MOUNTING

- 1. The Speidel Weed Wiper may be mounted on any carrying device which provides a means of keeping the applicator above a desired crop. Examples include tractor loaders, 3 point hitches, high clearance machines, 3 and 4 wheel cycles, pull carts, cultivators, sprayers, commercial frames, and homemade lift carriers.
- 2. An arrow on top of the "T" fitting on the end indicates direction of travel. Since the "T" fitting is not counted in the wiping length, the "T's" should normally be positioned to the outside ends of a two-piece applicator. The capped ends can be butted up to each other. The "T" fitting on the center section of a three-piece unit should be overlapped.
- 3. To avoid sagging or bending, the applicator pipe should be supported along its length with an angle iron, square tube, small channel iron, 2x4, or other sufficiently strong device. The support should be long enough so its ends rest on the plastic "T" fitting. If it isn't, care should be taken to prevent the ends of the support from wearing on the canvas wiping surface. Approximate maximum full weight is 2 ½ lbs. per foot.
- 4. The support should be positioned along the top or up-per back portion of the applicator pipe so it won't interfere with weeds rubbing on the front and especially on the bottom of the applicator.
- 5. For proper wetting action, the applicator should be attached to the support so the "T" and faucet valve assembly on the ends are straight up at average operating height. It is not necessary to keep the applicator at the same angle while raising or lowering. Flow rate will be somewhat faster when the "T" is tilted for-ward and somewhat slower if it is tilted back.
- 6. The applicator pipe should be firmly attached to the support by any material that will not cut or wear the canvas surface, such as hose clamps, rubber straps, nylon ties, or u-bolts.

FILLING

- 1. * Until it is broken in, the canvas on a new applicator will be slow to soak up the first time it is used and will need to be soaked completely through before filling by thoroughly spraying with water pressure from a hose nozzle or pressure washer. Filling the pipe with water, putting a slight pressure into the pipe, and scrubbing the canvas with a scrub brush will also help get a new canvas flowing. *
- 2. The Speidel Weed Wiper is designed for using Round-up herbicide, normally at a ratio of 2 to 4 parts water to 1 part Roundup for broadleaf weeds and 4 to 6 parts water to 1 part Roundup for grass type weeds, depending on growing conditions, weed maturity, etc. Other herbicides like 2, 4-D or other carriers like diesel fuel are not recommended since the oil base slows soaking rate considerably. Dyes or wetting agents are also not recommended. <u>USING AN OLD, CARRIED OVER WATER-ROUNDUP MIXTURE IS DEFINITELY NOT RECOMMENDED,</u> but if it is used, it should be thoroughly strained through a tight cloth first or it will plug up the canvas wiping surface.
- 3. Mix clean water and Roundup before pouring into the applicator. Approximate capacities per section are: 6 ft. 9 in.: 1.3 gallons, 8 ft.: 1.5 gallons, 9 ½ ft.: 1.8 gallons, 10 ½ ft.: 2 gallons.
- 4. Unscrew the faucet valve-bushing assembly on each section of the applicator to provide a 1 ½ inch fill opening. Pour an equal amount of solution into each section of applicator pipe. The applicator will work to nearly empty so it is recommended that no more water and herbicide be mixed than will be used in the immediate future. Depending on weed type and density and wetness desired, a gallon of Roundup may cover from less than 20 acres to over 40 acres.
- 5. <u>Teflon or pipe thread compound should be applied to bushing threads for a good air-tight seal.</u> Re-place the faucet valve-bushing assembly and hand tighten. The top curve of the faucet valve should point rearward to avoid having dirt or debris enter the valve during use.
- 6. Keep faucet valves closed to prevent dripping until field is reached.

- 1. When the field is reached, the faucet valve should be opened according to the weed density and travel speed; only very slightly for thinner weeds and more for thicker weed infestations. The more the valves are opened allowing more air to enter the applicator pipe, the faster the herbicide solution will soak through the canvas. When the canvas wiping surface is soaked, the applicator is ready to go. Travel speed will be influenced by the height difference between the weeds and crop, roughness of the ground, stability of the carrying vehicle, etc.
- 2. It is recommended that the faucet valves be set for the average weed density of a field and travel speed changed to slower for thick, denser patches or faster for thinner areas. For fields with scattered weeds or wide variations from thick to thin weed densities, it is recommended that on-the-go changes in flow rate be made at the operator's seat by running any small hose from each valve on the applicator to a small "T" fitting at the center, with a single hose running from the "T" to a valve at the operator's seat. Avoid a sag in the hose near the faucet valves to prevent solution, which might splash up out of the valve, from sitting in the hose and cutting off air to the pipe which would stop flow.
- 3. If the herbicide solution is dripping off the Speidel Weed Wiper while moving through a field, weeds are not wiping off as much liquid as is soaking through, so the valves need to be closed down to reduce the rate of flow, or travel speed can be increased. The goal should be to have the wiping surface as wet as possible without dripping. To prevent dripping in very thin weeds, the applicator can be operated with the valve closed. Open the valve occasionally for just a few seconds to recharge the canvas and then close it again. Experience will soon allow the operator to judge where to set the valves. Flow rate will be somewhat faster when the pipe is full and slower when it is near empty.
- 4. To avoid dripping when stopped, close the faucet valves. If solution drips out when the valves are closed, air is getting into the pipe. Check that bushings, hose connections, and faucet valves are air tight. A loose seam, a hole in the canvas, or dry canvas could also let in air.
- 5. If the flow rate becomes consistently slower: there is a buildup of Roundup residue in the canvas and a good cleaning is required; an oil base material has been put into the applicator and a good cleaning is required; a valve is plugged; there is a kink or liquid in the hose running to the operator's seat which is shutting off air to the pipe; or an old water-Roundup mixture has been put into the applicator which may require recovering with new canvas. Using an unclean solution or leaving solution in the pipe could cause sediment to build up in the canvas or pipe holes.
- 6. Two passes in opposite directions may be necessary on some weeds like velvetleaf and sunflowers since they are harder to kill with Roundup. Better results will be achieved when weeds are young and actively growing. Avoid applications during hot, dry conditions when weeds will not readily absorb the herbicide.

DRAINING AND CLEANING

- 1. To avoid sediment from hard water, etc. settling in the pipe holes, it is recommended that the applicator be emptied at the end of the day and the canvas hosed off with water. Roundup Ultra is quicker to get gummy, so rinsing before leaving in the sun or overnight is important.
- 2. Empty each section separately by loosening it on the support and turning it upside down. The herbicide solution may be drained into a jug from the faucet valve, or the faucet valve-bushing assembly may have to be removed and the solution emptied out the 1 ½ inch fill opening to allow enough air to enter the pipe so that the solution can run out freely.
- 3. *IF THE APPLICATOR WILL NOT BE USED FOR SEVERAL DAYS, THE INSIDE OF THE PIPE SHOULD BE RINSED OUT WITH WATER AND THE CANVAS WIPING SURFACE THOROUGHLY AND COMPLETELY WASHED OFF WITH WATER FROM A HOSE NOZZLE OR PRESSURE WASHER TO REMOVE AS MUCH OF THE HERBICIDE RESIDUE FROM THE CANVAS AS POSSIBLE. KEEP WASHING THE CANVAS ALL THE WAY AROUND, INCLUDING UNDER THE SUPPORT, UNTIL NO MORE SUDS APPEAR. To check the completeness of cleaning, force air through the wet canvas from the inside. If dense foam appears on the outside, keep cleaning. LEAVING HERBICIDE RESIDUE IN THE CANVAS DURING STORAGE COULD CAUSE THE GLUE ON THE TOP CANVAS SEAM TO WEAKEN OR FLOW RATE PROBLEMS THE NEXT YEAR. Do not clean over desirable vegetation or near a water source.*

STORAGE

1. Clean up the Speidel Weed Wiper and store it in a dry place inside, off the ground and out of the sun and weather. It is suggested the applicator be stored in a manner to avoid sag or bend in the pipe.

REPAIRS

1. Small holes or tears can be repaired with a patch kit. Speidel Applicator can recondition and recover applicator pipes with new canvas if necessary. Cost and re-covering time is less in the fall and winter.