

Service Manual
U.S Edition

The H-Trap Professional Horse Fly Control System

Please read this manual carefully before setting up and using your unit!

BEFORE ASSEMBLING your horse fly trap, please be aware that not all flies that bite your horses and family are horse flies. The H-Trap is specifically designed to catch flies from the Tabanidae family; these include horse flies, also known as greenheads, yellow flies, deer flies, and those larger black "B-52 bombers." (See Figure 4 for identification.) The H-Trap will **NOT** catch other biting flies that bother horses, such as stable flies and horn flies (from the Muscidae family); these are smaller than a typical tabanid (horse fly), but also can help carry vector borne diseases like a horse fly. Consider these other distinguishing features at a glance: Horse fly eggs and larvae are found in wet, swampy areas. Stable fly and horn fly eggs and larvae are found in fecal matter, urine-soaked bedding, or in the wet, decomposing straw found around hay bales. Another difference is the way these types of flies bite. Signs of horse fly bites are trails of blood from the wound that the horse fly leaves after cutting the skin and pumping in a substance that allows the blood to flow. Stable fly and horn fly bites tend to be less bloody, with much smaller 'dots' of blood left after feeding. Please also note that dark colored horses may be more attractive to horse flies than the H-Trap. In that case, we recommend an integrated pest management program, adding lures, white fly sheets, etc. to your regimen. Please also see Section I about meeting expectations.

The manufacturer reserves the right to change the construction and/or configuration of the product at any time without obligation to modify earlier versions of the product.

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A) Receipt of the H-Trap:

Before unpacking and installing your horse fly trap unit, please verify that you have tabanids (horse flies). Should you have **ANY** uncertainties about the flies at your property after reviewing our fly identification chart (Figure 4), and need help in identifying them, please use the information on the back page to contact us.

While unpacking your unit, please check for any signs of shipment damage. If found, notify both the shipping carrier and supplier in writing within eight (8) days after receipt, listing full details of any damage that has occurred. Retain the equipment and packing materials for inspection and/or returns. Check that you have received all parts identified in Figure 1. Remove and store all packing materials before use.

B) Required assembly tools:

- Hammer.
- Wrenches (two are provided).
- Pump (a hand pump is provided; using an air compressor will damage the ball by over inflation and void the warranty).
- Steel rod or equivalent to test ground before installation of base pipe.

C) Placement options:

Install the H-Trap either in the ground with the three-piece frame that comes with the unit or against a wall or pole with a bracket (not supplied) in a sunny vicinity where animals rest and feed and humans congregate. Horses are especially curious animals and may want to nibble at the plastic funnel if placed directly in their enclosures. Avoid this situation by placing the H-Trap just outside fenced in areas or by erecting a barrier within the paddock. If affixing the unit to a wall or fence, have the ball sit at the height it normally would when using the base pipe (approximately 26" from the ground).

D) Optimum placement:

- To maximize your horse fly catches, identify likely flight pathways to your property, usually from damp or wet areas such as ponds, river banks, and boggy areas where larvae will develop and adult flies emerge. (Adults typically emerge in 1-3 years).
- Position your horse fly trap between the identified breeding sites and where humans and animals congregate. The H-Trap must be located in a hot, sunny location.
- If you are not catching horse flies, but are certain your flies are positively tabanids, reposition the trap. Trial and error and patience are the key to a successful location, and repositioning may take place several times. Be aware that some objects may get hotter than the ball and compete with it, including metal (roofs, troughs), plastic around the pool (toys, slides, covers), blue liners, etc.; avoid placement next to these. Please call us if you need help finding the ideal spot. We use Google Maps for analysis.
- Determine if more than one horse fly trap is required for coverage depending on the horse fly population present and the number of humans and/or animals needing protection. One horse fly trap will cover 5 horses or about 2.5 acres.
- Set out your horse fly trap(s) just before the first adult horse flies emerge in your area.
- To move the H-Trap to alternative locations, unbolt the base pipe (1) from the middle pipe (2). This will allow you to more easily pull up the base pipe without damaging the ground anchor of the base pipe, and carry the remaining unit in place. Additional anchor rods can be purchased for ease when regularly moving horses/traps to different pastures, etc.

E) Pre-test the soil before assembly:

To avoid damage to the base pipe (1) in rocky and root laden soils, first pre-test the area by using a steel rod or equivalent to make a pilot hole. See Figure 2.

F) Key features:

- Galvanized, corrosion proof steel construction.
- Weather-proof design.
- Easy and fast installation.
- Single leg for easy grounds keeping.
- Environmentally friendly.
- Ergonomic design, allows easy handling of the trap.
- Effective and easy control of horse flies.
- 2-year warranty on manufacturer's defects.*

[*Disclaimer: The two-year warranty period does not cover damage due to extreme weather conditions, including but not limited to high winds, hurricanes, and storms. We advise if these weather conditions are anticipated, bring the ball, collection bin, and funnel assembly indoors until good weather prevails. Using an air compressor to inflate the ball will void the warranty.]

G) Periodic maintenance:

- Whether you add water to the collection bin to drown your catches or instead allow horse flies to dehydrate and die, check the collection bin regularly, and clean out the collected flies every few days to allow light to penetrate the trap from above. Studies indicate that multiple layers of dead flies will block out light, which is a factor in effectiveness. After cleaning, secure the bin by turning/locking the lid in place.
- Be sure that the ball stays inflated at approximately 23-25 inches in diameter.
- While the top bracket of the H-Trap has been designed to move with the wind, unusual storms and high winds may have an impact on the H-Trap's frame. Check the framework and hardware periodically and after storms.
- Unclip the ball hook from the metal holder when removing the inflated ball and funnel.
- Store the unit inside during the winter months.
- If deflating the ball, remove the ball plug with the white plastic plug clip that is included.

H) Key specifications:

Dimensions : 4 ft. wide x 6.4 ft. high (approximate)

Frame : corrosion proof steel dipped in hot zinc, under 1/8th in. thick

Net Weight : 30 lbs.

Materials/Color : black inflatable ball, green UV proof plastic funnel and bin Tools Included : manual ball pump, ball plug, ball plug clip, and 2 wrenches

Packing box : 45 in. long x 9 in. high x 9 in. wide

I) Meeting expectations:

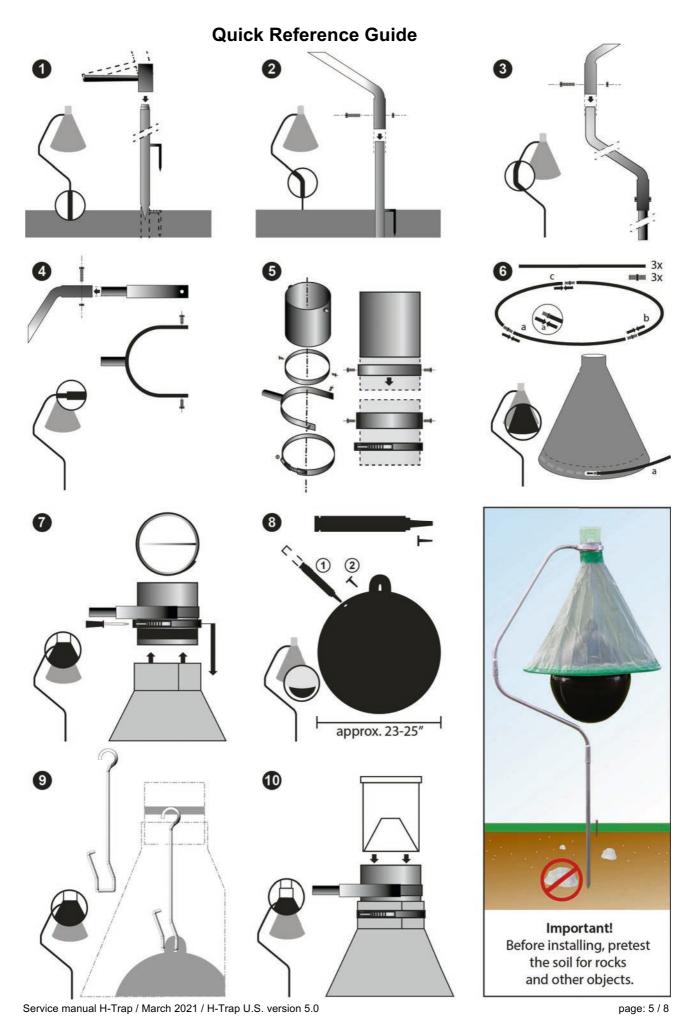
- Some buyers may begin catching horse flies almost immediately after installation. As a rule, however, you should not expect a horse fly trap to eliminate horse flies in a short period of time. It may take weeks or more to collapse a population over time.
- Horse flies have evolved to find (and bite!) horses and other mammals, including us. Any horse fly trap on the market is, at best, a close second choice for the female horse fly who is looking for a blood meal in order to reproduce and lay eggs. Therefore, as long as there are still horse flies in your environment, no horse fly trap will entirely prevent you or your animals from getting bitten. In that case, an integrated pest management program- adding lures, light colored fly sheets and clothing, and fly sprays- may become necessary. Note darker animals may be more prone to bites.
- Our goal is to give you the best experience possible in helping you to reduce the
 populations of horse flies (tabanids) at your property. Your reviews and feedback allow
 us to give you the best service and product improvements. No question is too small.
- Please contact us for assistance using the information on the back of this manual.

Installation Instructions

(See Quick Reference Guide and Figure 1: "Exploded view" for part number references.)

- 1. Use a hammer to drive the base pipe (1) into the ground until the top of the anti-rotation anchor is completely touching the soil. (See Figure 2.)
 - Once the base pipe is set, build the remaining portion of the trap on the ground (our recommendation) or in place. If you choose the former method, save Step No. 2 until the end of assembly and have a partner help you lift the remaining frame and parts onto the base pipe in order to finish the installation.
- 2. Mount the middle pipe (2) onto the base pipe (1) and line up the holes before inserting the long bolt (4) and nut (5). Tighten the stainless steel hardware with the two wrenches (6) supplied or use your own tools.
- 3. Mount the top pipe (3) onto the middle pipe (2) and line up the holes before inserting the long bolt (4) and nut (5) and tightening. (Before assembling the remaining frame pipes, review Figure 1 to distinguish the shapes between (2) & (3) and align ends accordingly.)
- 4. Mount the bracket (7) onto the top pipe (3) and line up the holes before inserting the long bolt (4) and nut (5) and tightening. (Note: The stabilizing ring (8) and bracket (7) usually come pre-connected with one set of M8 bolts (17)).
- 5. Connect the metal holder (11) to the stabilizing ring (8) by unscrewing and using the two stainless steel M8 bolts (17) attached to the metal holder (11).
- 6. Before attaching the green plastic funnel (10) to the metal holder (11), insert the plastic pipe connectors (14) and funnel reinforcement pipes (15) into the opening found at the bottom inside edge of the funnel; feed one section at a time. (See Figure 3: #s 14 and 15 are typically preconnected.) The final connection will be made when all three pipes and connectors are in place. (Note: For easier assembly, have one person feeding the tubes through the bottom slot, and the other leading and keeping the flat pathway open. Also applying a very small amount of food oil onto a cloth and wiping the tube sections beforehand will help slide these plastic parts through more easily.)
- 7. Secure the funnel (10) onto the metal holder (11) by means of the Velcro band (12). The expandable clamp (18) is an optional feature to keep the funnel in place on the Velcro (12).
- 8. Inflate the ball (9) using only the pump included, and have the white plastic plug handy. (Using an air compressor will void the warranty.) Since the new ball is not perfectly symmetrical, ideal inflation dimensions will vary between 23 to 25" in diameter for models 2018 and after.) A soft, saggy ball after initial inflation will not affect tabanid catches as hot outdoor temperatures will help further expand the ball.
- 9. Lift up the funnel (10) to mount the ball (9) onto the metal holder (11) using the ball hook (13). First attach the curved end of the ball hook to the hole in the metal holder (11). The elongated end of the ball hook (14) attaches to the ball.
 - If you have assembled the H-Trap on the ground, now connect the middle pipe (2) to the base pipe (1). See Step No. 2 above.
- 10. Set the collection bin (16) atop the holder (11) and be sure the lid is locked into place. If adding water inside the bin, note the minimum and maximum markings on the sides.

Your H-Trap is now ready for use and catching horse flies!



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Figure 1: Exploded view

Part No.	Part Name	Qty
1	Base pipe (with Anti-rotation anchor)	1
2	Middle pipe	1
3	Top pipe	1
4	Long bolt	3
5	Nut for long bolt	3
6	Wrench	2
7	Bracket	1
8	Stabilizing ring	1
9	Ball	1
10	Funnel	1
11	Metal holder	1
12	Velcro band	1
13	Ball hook	1
14	Pipe connector	3
15	Reinforcement pipe	3
16	Collection bin	1
17	M8 bolt	4
18	Expandable Clamp	1

Figure 2: Before hammering the base pipe (with Anti-rotation anchor) into the ground, test the soil and remove any rocks and other hard objects.

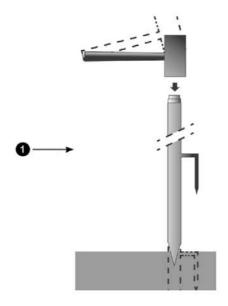


Figure 3: The pipe connector (14) comes assembled with the reinforcement pipe (15).

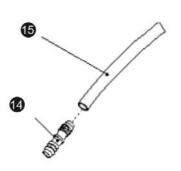
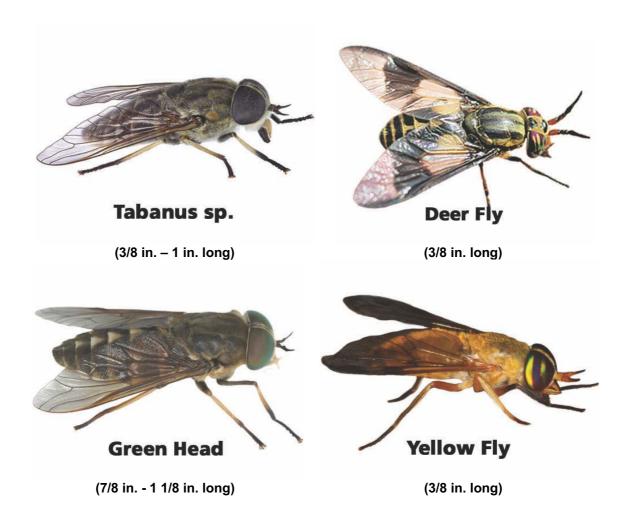
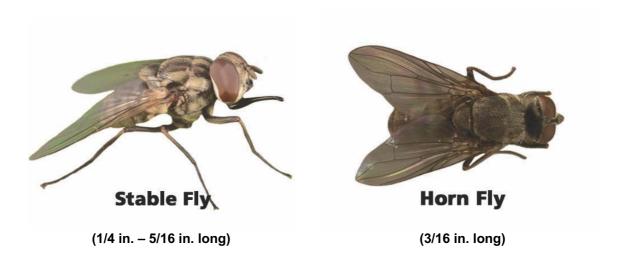


Figure 4: Horse Flies (Tabanids) the H-Trap Catches:



Biting Flies the H-Trap Does NOT Catch:



Note: The biting flies depicted here are not in scale. Typical size is in parenthesis.



Bite-Lite® would like to thank you for your H-Trap purchase. We look forward to hearing from you about your horse fly experience.