

Our Spark Traps tumble grinding sparks and embers through a torturous path giving them time to burn out before exiting. Due to this patented design, there are no space requirements between the spark trap and the dust collector.



LEGEND

# Spark Trap

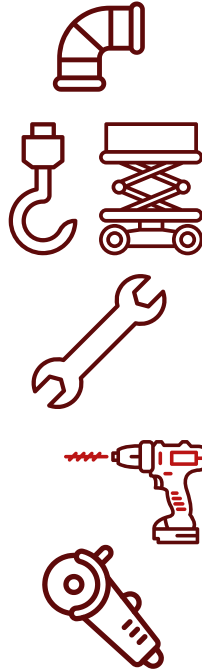
## INSTALL INSTRUCTIONS



### Safety

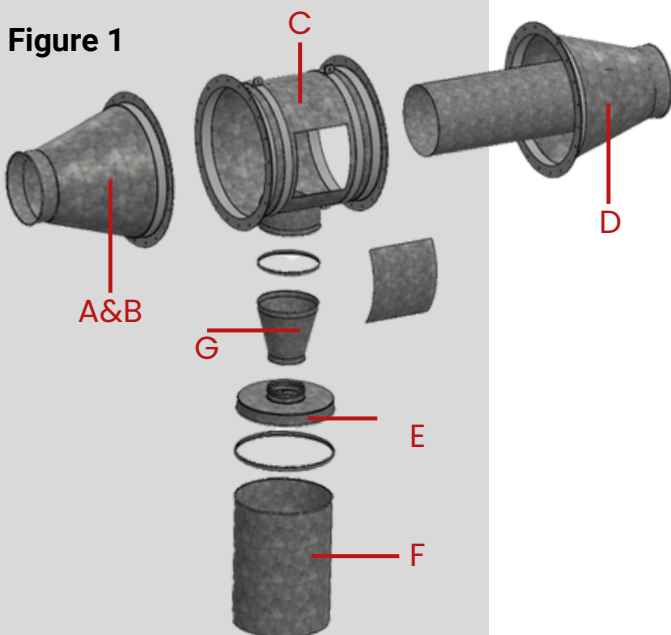
- Service and Repair should only be performed by US Duct & US Duct trained partner installers
- Use sufficient climbing gear and safety guards when working on a higher level than 6 feet (local restrictions may apply).
- Never install the product in front of entrances and exits which must be used for emergency services.
- Make sure the wall, ceiling or support systems are strong enough to support the weight of the product being mounted.

### Tools Needed



- Ductwork that matches the inlet and outlet of the spark trap and Drop kit is recommended.
- Lifting and climbing gear; e.g.
  - Sling
  - Fork-lift truck and pallet
  - Scissor lift
- Box spanner (or wrench):
  - 9/16 wrench, ratchet, and/or impact with 9/16 socket
- Electric drill + self-taping screws
- Existing duct:
  - Angle grinder; or
  - Jigsaw + electric drill

Figure 1



### Components

- A. Inlet
- B. 10-Blade cyclone
- C. Duct clamp or angle ring
- D. Outlet
- E. Dustbin cover including connection clamp and hose
- F. Dustbin
- G. Reducer
- H. Clean out door (not pictured)

### Optional Drop-out Kit

24-44" Horizontal Spark Trap DROP OUT KIT \_\_\_1-18" RL-6"RL \_\_\_5-6" Clamps, \_\_\_1-6" Sleeve, \_\_\_3-6" Pipe, \_\_\_1-6" Hose Adapter, \_\_\_2-6" Worm Clamps, \_\_\_2ft of 6" Flex Hose, \_\_\_1-16"RL barrel (w/\_\_\_1-6" Hose Connection), \_\_\_1-16" Clamp.



## Unpacking

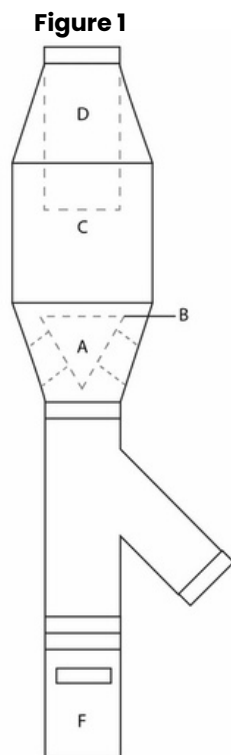
1. Check that the product is complete. The package should contain.
2. One complete unit sizes 3" through 14" or one main body, Figure 1 A and B as one part and Figure 1 C and D as the other part. The optional drop-out kit will be boxed and arrive separately.
3. For the duct connection of the spark trap, you will match the inlet and outlet of the spark trap in Figures 1 A and D.
4. For connection to vertical, you must install the inlet towards the bottom and connect it to a lateral 45-degree branch with a dump bin clamped to the bottom of the branch. You must have a maintenance plan in place for cleaning. Please see a Duct guy for proper sizing of your ducting.

5. The spark trap, consisting of inlet(A), Cyclone(B) and outlet(D), connected by duct clamp(C)

- Dustbin 5 gal. (F)
- Dustbin cover incl. connection flange and hose(E).

6. For the spark trap's duct connection, simply use the same size duct as your inlet and outlet and clamp the RL or bolt the flanged connection.

7. Collection bin: reducer, elbow, and ducting as needed to the hose and collection bin.



*If parts are missing or damaged, contact us.*

## Mounting

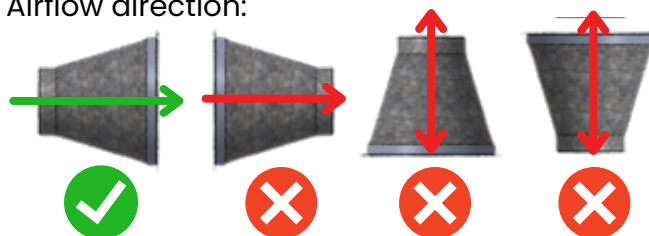
1. Our spark trap can be mounted:
  - a. During installation of new ductwork.
  - b. Afterwards in an existing duct.
  - c. Allow sufficient space between the duct and the wall to install the spark trap

## Airflow Direction

To mount the spark trap, proceed as follows:

**Figure 2**

Airflow direction:



4. Loosen all duct clamps(B).
5. Slide a duct clamp(B) over both of our spark trap (C).

### Duct imperial size (inch):

- Place a reducer metric-imperial (A) in both duct ends and fasten them using self-tapping screws (min. 6).
6. Lift the spark trap (C) in line with the duct and mount it to the connection rings using the duct clamps
    - (B). Tighten the clamps using a box wrench.

**Note: there is no required length of duct your spark trap has to be away. Mounting and installation is as simple as lifting it up and snapping it in place.**

## INSTALL INSTRUCTIONS



1. Determine where in the duct you would like to install your spark trap. The beauty of the US Duct trap is that you can install it anywhere in the system!

2. Ensure the dropout is positioned on the bottom of the trap and access to clean out is unobstructed. To properly collect heavier particles, it must be the lowest point.

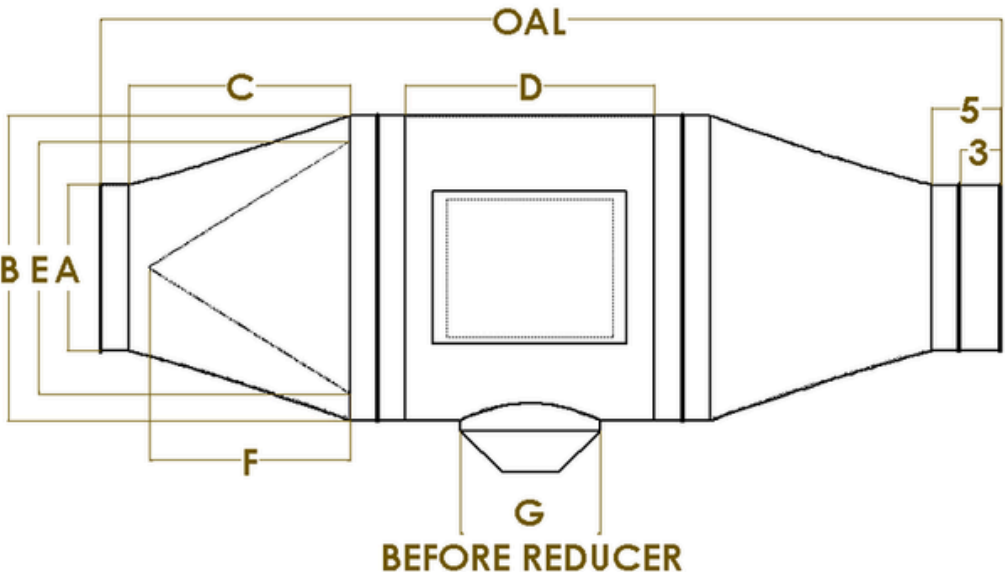
3. Connect in line using US Duct's rolled lip or flanged connections.

4. Install supports near the spark trap \*by contractor/customer\*

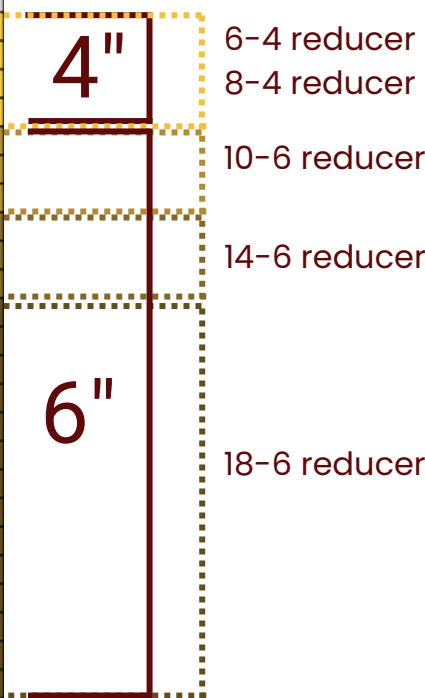
5. Drop out installation

- Lay out the drop-out kit. NOTE: You may not use all the pieces included.
  - Each contains:
    - (3) pieces of clamp together duct
    - (1) Adjustable sleeve
    - (1) hose adapter
    - (1) Cut-off/Slide gate
    - (1) 2' piece of clear flex hose
    - (2) worm clamps
    - (1) collection canister with lid
    - (1) Reducer (no reducer for 4" or 6" traps)
    - (8) Clamps
  - Assemble drop-out kit
    - a. Measure clearance from the bottom of the drop-out to the ground.
    - b. Clamp the reducer to the trap.
    - c. Clamp straight duct sections to the reducer.
    - d. On the duct closest to the ground—measure, cut and utilize the adjustable sleeve to ensure proper length. Slide the pipe inside the sleeve, roll over the o-ring, then clamp.
    - e. Clamp the slide gate to the sleeve
    - f. Clamp the hose adapter to the slide gate
    - g. Slide the hose over the hose adapter
    - h. Slide the opposite end of the hose over the canister lid
    - i. Clamp the canister lid to the canister body
    - j. NOTE: If elbows are needed for dropout positioning, the degree is 45.
6. Power up the dust collection system.





A	B	C	D	E	F	G	OAL	CFM @ 3500 FPM
Inlet	Body	Inlet Length	Body Length	Cone Diam.	Cone Length	Dropout Diam.	Overall Length ***	
4	8	6.4	12	6	5.75	4	40	305
6	10	6.4	12	8	5.75	4	40	687
8	14	9.6	14	11	8.75	6*	48	1222
10	18	12.8	15	14	11.5	8*	56	1909
12	22	16	18	17	14.5	10**	65	2749
14	24	16	21	20	14.5	10**	68	3742
16	28	19.2	24	22	17.25	10**	77	4887
18	32	22.4	28	26	20	14**	88	6185
20	34	22.4	30	28	20.25	14**	90	7636
22	38	25.6	34	32	23	14**	100	9239
24	42	28.8	36	34	26	18**	109	10996
26	46	32	38	37	28.75	18**	117	12905
28	48	32	42	40	28.75	18**	121	14966
30	52	35.2	46	42	31.75	18**	131	17181
32	56	38.4	48	46	34.5	18**	140	19548
34	60	41.6	52	48	37.5	18**	150	22068
36	62	41.6	54	50	37.5	18**	152	24740
38	66	44.8	56	54	40.25	18**	161	27565
40	70	48	58	56	43.25	18**	169	30543
42	74	51.2	60	58	46	18**	177	33674
44	76	51.2	62	62	46	18**	179	36957
46	80	54.4	64	64	49	18**	188	40393
48	84	57.6	66	68	51.75	18**	196	43982
50	88	60.8	68	70	54.75	18**	205	47724



\* Includes Reducer to 4" Hose for Collection Barrel  
 \*\* Includes Reducer to 6" Hose for Collection Barrel

\*\*\* Overall length will vary slightly depending on requested end conditions and variations in stock items; +/- 1". Length based on average width of connections at 2".

4-14" RL (Clamps) | 15"+ FIG Connection  
 4-10" spark traps will have a 4" drop kit assembly and 12"+ spark traps is 6"

