

Expedient Airborne Infection Isolation

5 Bed Demonstration Kit

Assembly Instructions

Point of Contact: CAPT Ken Mead

Ph: 513-841-4385

Email: kmead@cdc.gov

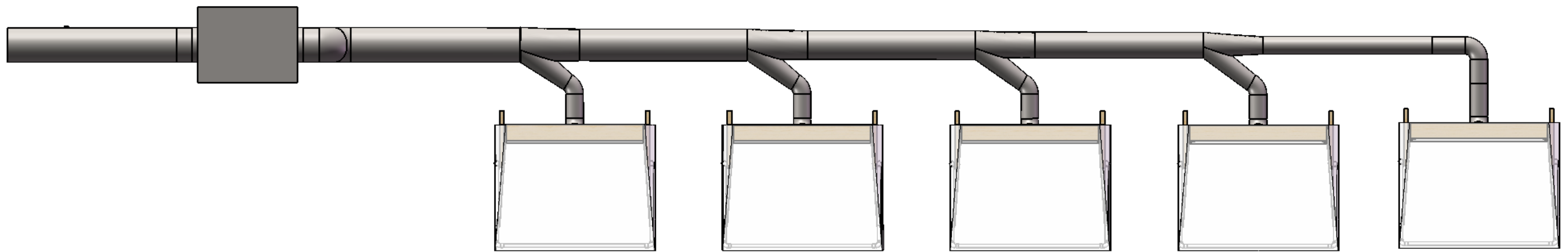
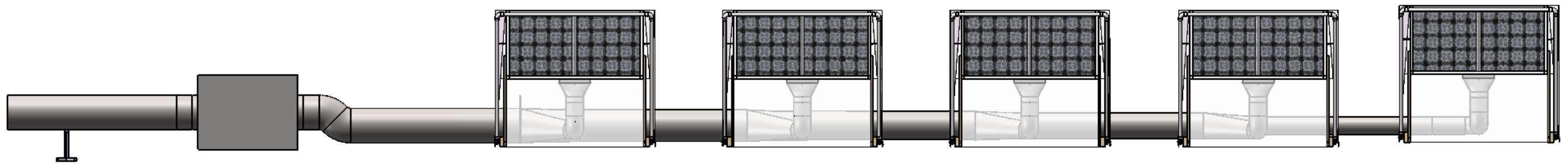
Graphics By: Nick Trifonoff

The following assembly instructions are used to assemble a 5-cot expedient airborne isolation demonstration kit. The kit incorporates 5 ventilated headboards along with a central duct, fan & HEPA filtration system. For convenience, the duct system referenced here uses a quick “clamp-together” system that facilitates assembly and tear down. The ventilated headboards in this kit are designed for use with FMS-cots from the strategic national stockpile, although the headboards can be built to accommodate most cot or bed systems. Instructions for constructing the ventilated headboards are included in a separate document.

Parts used in 5 hood configuration using ACSI Force Air 2000 EC fan.

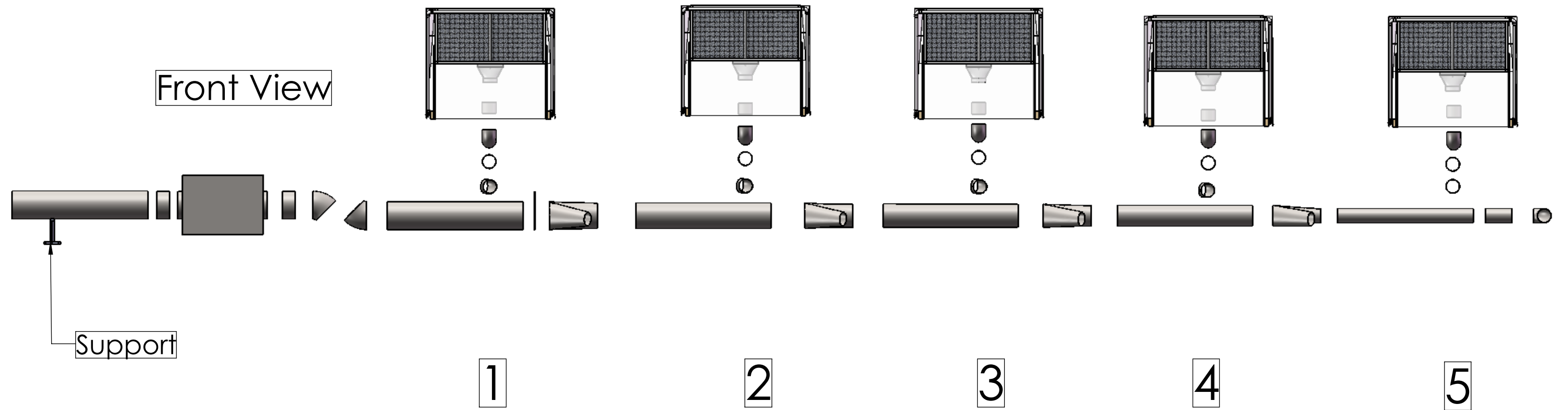
Part #	Part	Quantity	
D	6" 60° Elbow	4	
B	6" 90° Elbow	6	
I	12" 45° Elbow	2	
H	6" Adjustable Nipple	2	
C	6" Butterfly Damper Valve	5	
A	6" Machine Adapter	5	
J	12" Machine Adapter	2	
5F	6"x 59.25" Pipe	1	Pipes and and Branches decrease in size further away from the fan. See drawing and select appropriate pipe for each hood.
4F	9" x 59.06" Pipe	1	
3F	10" x 58.75" Pipe	1	
2F	11" x 58.75" Pipe	1	
1F	12" x 58.75 Pipe	2	
4E	Branch (Detail: A=9", B=6", C=6" at 30°)	1	
3E	Branch (Detail: A=10", B=9", C=6" at 30°)	1	
2E	Branch (Detail: A=11", B=10", C=6" at 30°)	1	Clamps used for all pipe connections, select appropriate clamp for each pipe size.
1E	Branch (Detail: A=12", B=11", C=6" at 30°)	1	
G	6" Clamp with Pin	23	
G	9" Clamp with Pin	2	
G	10" Clamp with Pin	2	
G	11" Clamp with Pin	2	
G	12" Clamp with Pin	6	

5 Hood System Collapsed



5 Hood System Exploded

Front View



1

2

3

4

5

F-Pipe

K-Fan

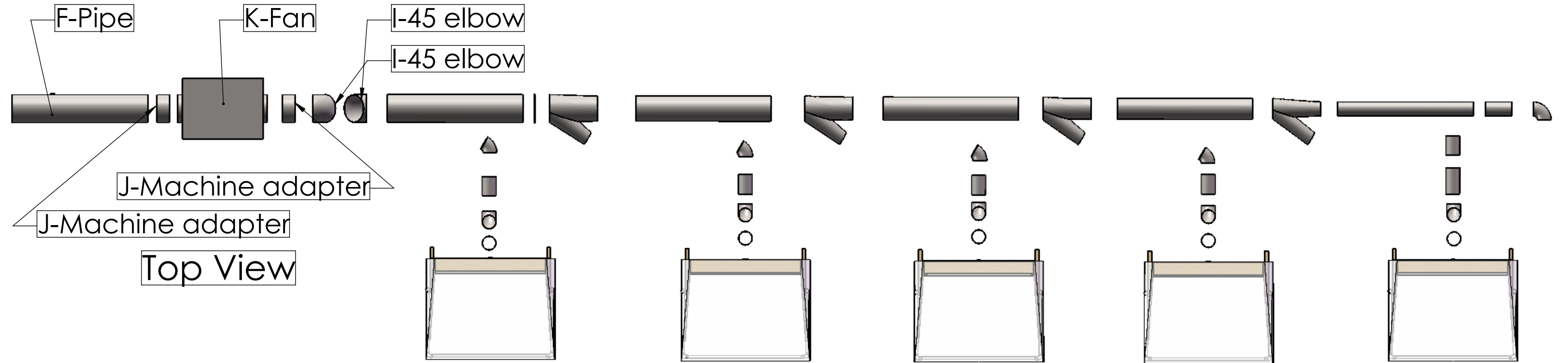
l-45 elbow

l-45 elbow

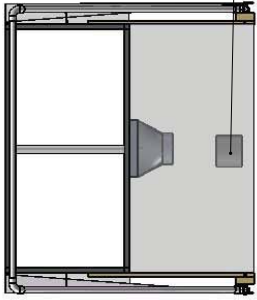
J-Machine adapter

J-Machine adapter

Top View



Hoods 1-4



A - Machine Adapter

B - 90 Elbow

C - Butterfly Valve

D - 60 Elbow

E - Branch

F - Pipe

G - Clamp



G - Clamp

F - Pipe

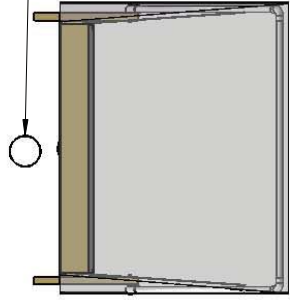
E - Branch

D - 60 Elbow

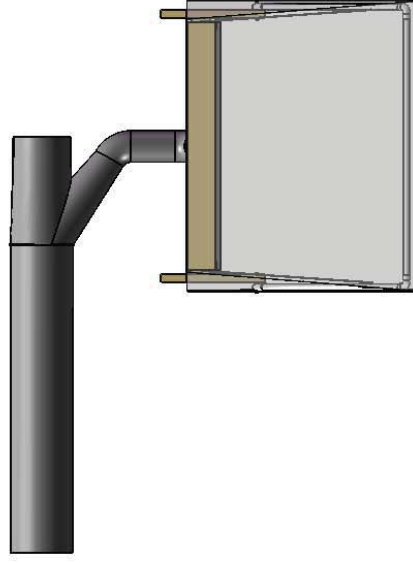
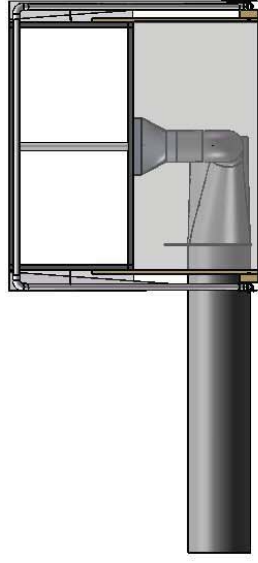
C - Butterfly Valve

B - 90 Elbow

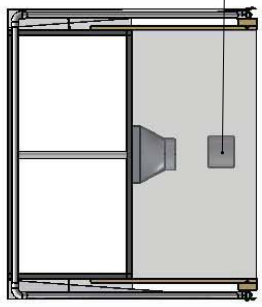
A - Machine Adapter



(6" dia.)



Hood 5



A - Machine Adapter

B - 90 Elbow

H - Adjustable Nipple

C - Butterfly Valve

F - Pipe

H - Adjustable Nipple

B - 90 Elbow



B - 90 Elbow

H - Adjustable Nipple

F - Pipe

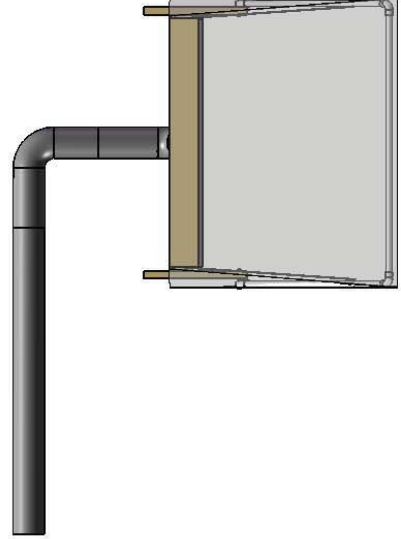
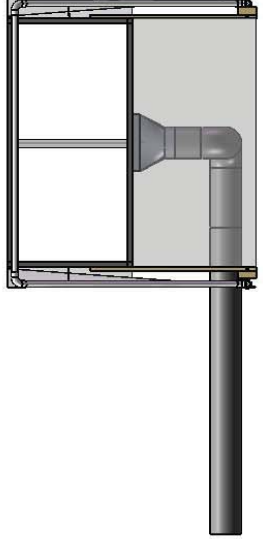
C - Butterfly Valve

H - Adjustable Nipple

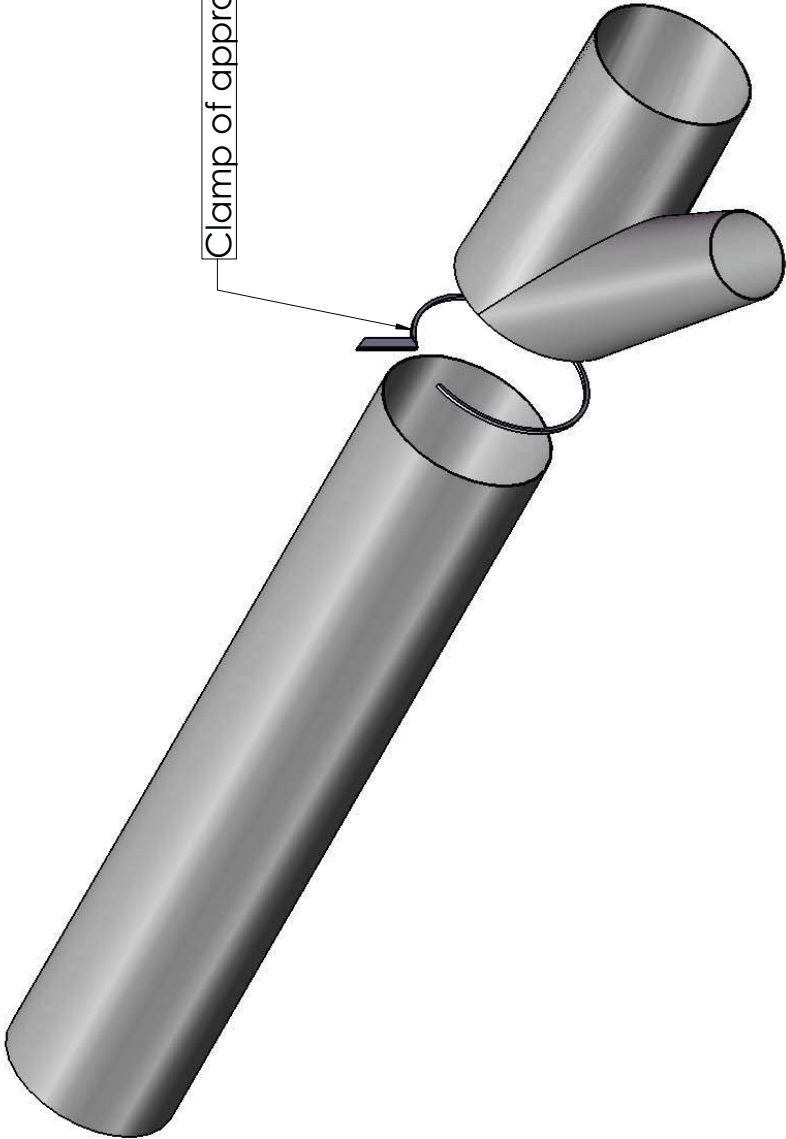
B - 90 Elbow

A - Machine Adapter

(6" dia.)



Clamp Connection Diagram



Clamp of appropriate size used for all connections.