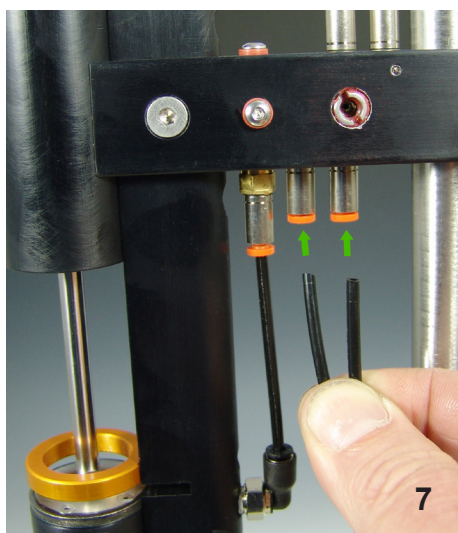
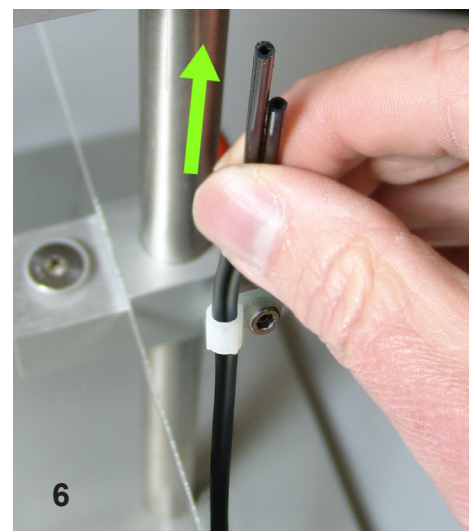
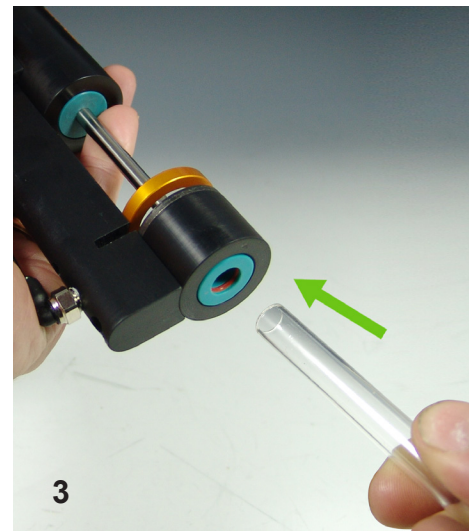
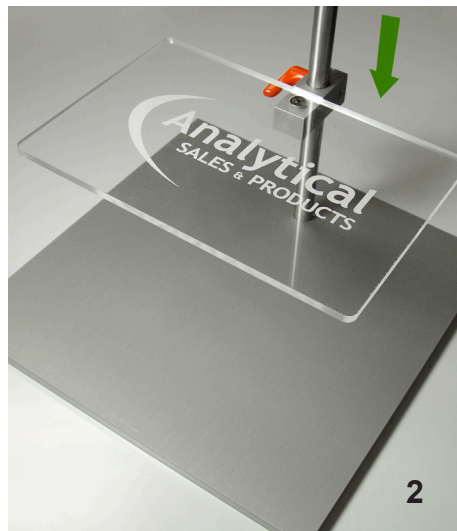
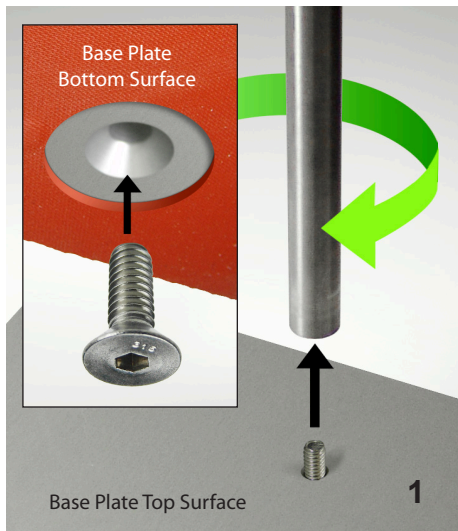




# DBS

## Assembly & Operation Manual

# Assembly (see back for parts list)

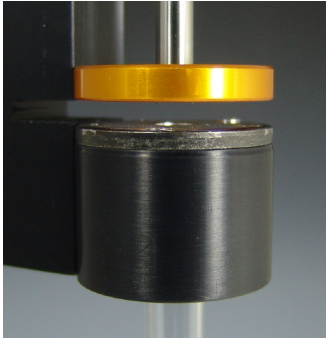


1. Attach the Stand Rod to the Base Plate. Start by inserting the Stand Rod Screw through the beveled hole in the Base Plate. The screw head should be counter-sunk and flush with the Base Plate bottom surface. Thread the Stand Rod onto the Stand Rod Screw and tighten with a hex wrench.
2. Slide the Adjustable Shelf onto the Stand Rod. Let the Shelf rest on the Base Plate for now - you will adjust and tighten it later.
3. Insert the glass pipette into the punch pod. Lubricate with IPA if needed.
4. Slide the Punch Pod onto the Stand Rod. Set it to your desired height and tighten with the orange handle.
5. Adjust the height of the Shelf and tighten with the orange handle. Remember to leave enough room for your collection plate (optimal distance between collection plate surface and pipette is about 1/8").
6. Connect the small black "double" air hose from the Foot Pedal to the Punch Pod. Start by threading the hose upward through the hose bracket located on the side of the Stand Rod (attached to the Adjustable Shelf mount).
7. Insert the ends of the double hose into the connectors located on the bottom of the punch pod armature.
8. Connect the 1/4" hose from the foot pedal (labeled "IN") to your regulated air supply. Make sure your air supply is set to 90 - 110 psi. **Note: operating with air pressure outside this range may cause performance issues.** You are now ready to operate your DBS.

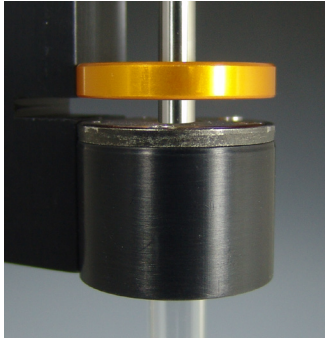
# Operation

1. Turn on your air supply and watch the punch carefully.

**IMPORTANT:** If the punch stays up, skip ahead to **step 3**;  
if the punch immediately shoots down, follow steps **2a-2d** below:



Punch is up, proceed to **step 3**



Punch is down, follow steps below

2a. Turn your air supply off

2b. Release the air pressure in the DBS unit by repeatedly pressing the foot pedal until the punch stops moving.



2c. Swap the positions of the two 1/8" "OUT" hoses on the foot pedal. **Note:** to remove hose, push in on the orange locking ring and then pull the hose out.

2d. Turn your air supply back on and observe the punch, it should be in the "up" position. Proceed to step 3.

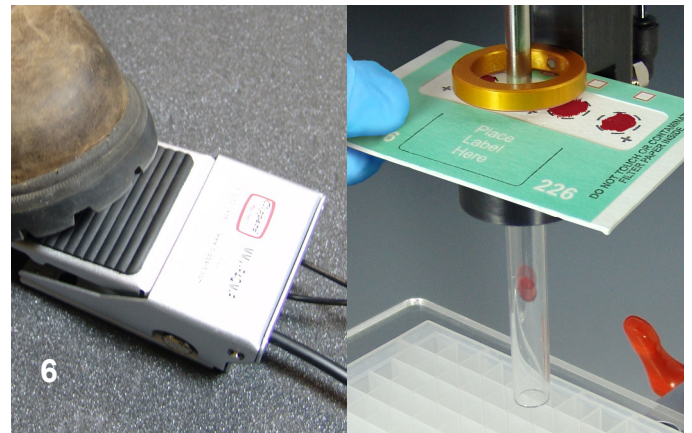
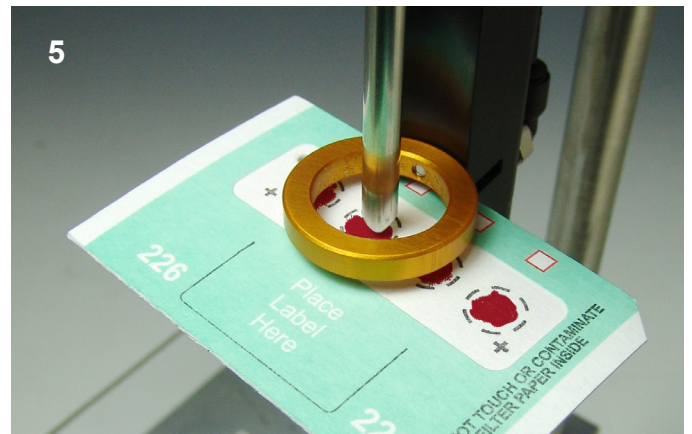
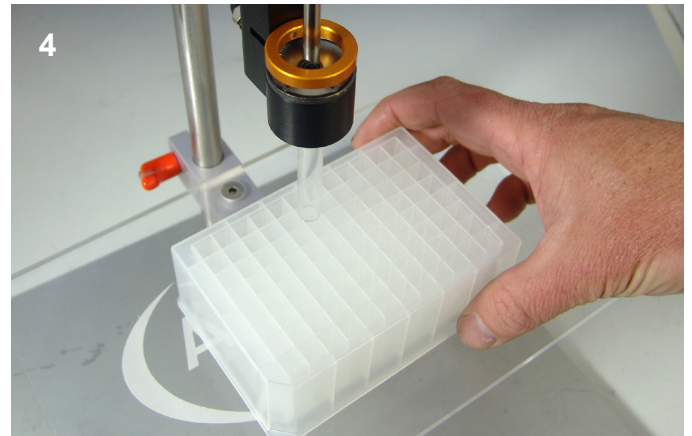
3. Press the foot pedal 5-10 times and make sure the punch is functioning properly and going through the die smoothly.

4. Place a collection plate on the Adjustable Shelf, and line up the target well under the pipette.

5. Insert your dried blood spot sample card into the slot on the front of the Punch Pod. Align the target area on the card with the punch head.

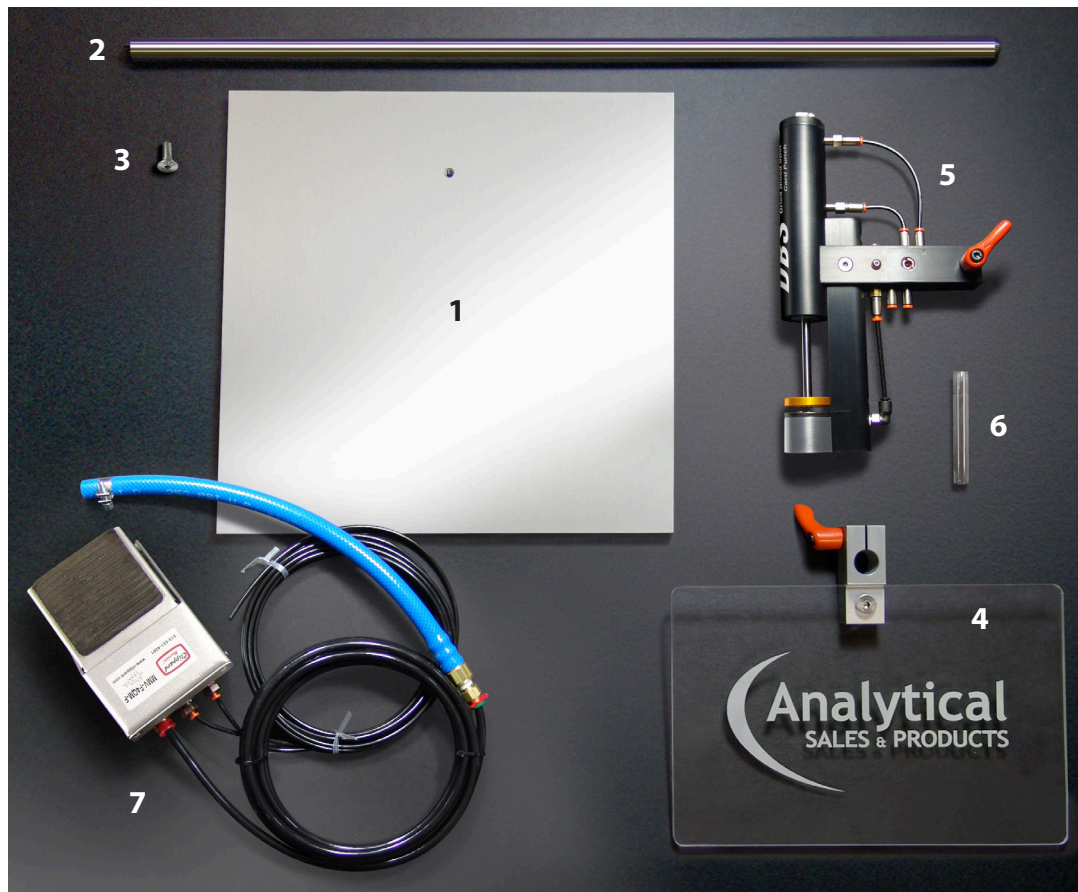
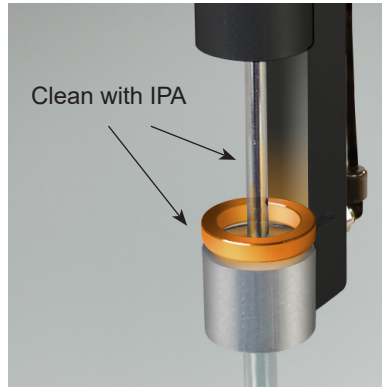
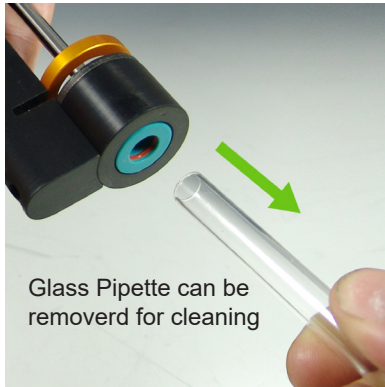
6. Using your foot, press down on the Foot Pedal firmly and completely. Take your foot completely off the foot pedal to reset before your next punch.

7. Move your card to the next target position(s) and repeat the punching procedure as needed.



# Maintenance/Cleaning

- Before doing **any** maintenance, always **DISCONNECT OR TURN OFF SUPPLY AIR**
- Glass pipette may be removed for cleaning. Lubricate with IPA to aid removal. Use IPA to clean.
- Wash cutter, die, and pipette area with IPA
- Reinsert glass pipette if previously removed. Lubricate with IPA to aid reinsertion.
- Check to make sure all 1/8" OD air lines are pressed firmly into push-to-connect fittings before operating
- Reconnect or turn on supply air



## Parts

1. Base Plate
2. Stand Rod
3. Stand Rod Screw
4. Adjustable Shelf
5. Punch Pod
6. Glass Pipette
7. Foot Pedal with Air Hoses

**Air pressure requirement:  
90 - 110 psi**