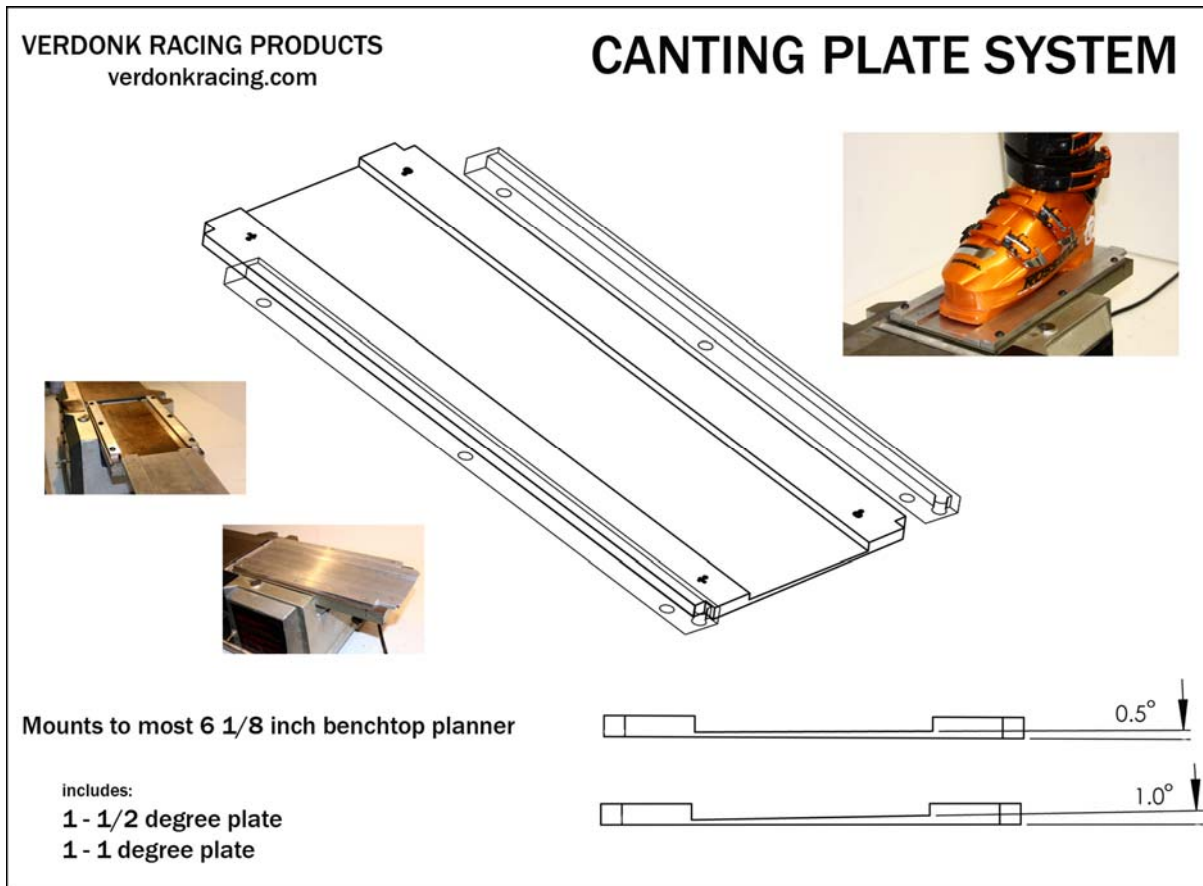


CANTING PLATE INSTALLATION & USE



Following are the instructions on how to install and use the Verdonk Racing Products Planner Plate System on a 6 1/8 inch or larger bench top or self standing planner. Using the Planner Plate System will change the original DIN dimension of the boot as it was intended from the manufacture, which currently complies with ISO standard 5355. After sole planning a boot it is the responsibility of the installer/boot technician to make modifications to the DIN height (done by adding lifters or adding material to the DIN binding contact surfaces), so it complies with ISO standard 5355. This compliance to the standard is important for the boot/binding system to function as intended. Do not use the Planner Plate System if you do not have the proper protective gear, tools and the skills necessary to complete the modification procedure.

As with any modification to the toe and heel DIN surfaces, boot sole, mounting system or binding adjustment, you must complete a system inspection with a mechanical testing device.

Kit Contents



- | | |
|---------------------------------------|---------------------------|
| 2 – Slide rails (1 left, 1 right) | 1 – Allen key |
| 1 – 1 degree Plate | 1 – Transfer center punch |
| 1 – ½ degree Plate | 1 – Drill bit |
| 6 – Mounting screws | 1 – Tap |
| 1 – Paper shim (long thin white shim) | 1 – Tap wrench |

Additional Tools needed

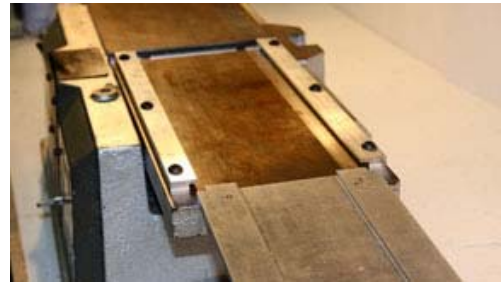
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| Electric or Cordless Drill | Hammer |
| 2 – Quick clamps or C-Clamps | Cutting lubricant (WD-40 or similar will work) |

Installation Instructions

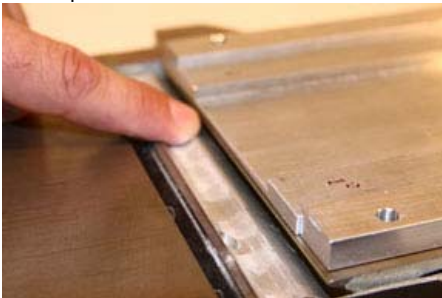
1. Make sure to wear and use the proper safety equipment such as eye protection and ear protection.
2. Read instructions full before proceeding with installation.
3. Perform installation with the planner unplugged from power.
4. Lay out 2 rails and 1 of the plates on the planner's adjustable in feed table. The in feed table is usually the table that is on the left and has the adjustable handle/knob connected to it to allow cutting height to be set.



5. The wider portion of the rail facing up creating a channel underneath, the 2 channels should face each other. Make certain you have the rails on the correct sides. The plates will slide in and out of these 2 rails. Make sure that the plate hits the stops and does not protrude past the end of the in feed table.



6. Position the 2 rails and a plate so that when the plate is touching the stops in the rails, that the plates is roughly flush or shy 1/8 of an inch from the end of the in feed table. You may have to move the rails and plate around so that the drill hole does not effect any moving parts of the in feed table.



7. Once you are satisfied with the systems position, fix one of the rails to the planner with quick clamps or C- clamps. Remove the plate and other rail.



8. Carefully mark the middle hole of the rail with the included transfer punch and a hammer.



9. Remove clamps and rail. Drill the center punched mark as straight as possible and make sure to drill exactly in the center of the punch mark. You only need to drill through the surface for the plate...no need to go too deep, use caution when about to break through the underside of the in feed table.



10. Tap the drilled hole with the included tap and tap wrench, be conscious of tapping as straight as possible. Use cutting oil or a spray lubricate. Make sure you have tapped the entire thickness of the in feed table.



11. Clean out tapped hole and make sure in feed table is clean.
12. Mount the rail to the in feed table at the middle hole with 1 of the mounting screws
13. Align the rail parallel with the in feed table and clamp the 2 ends
14. Repeat steps 8 through Steps 11 for the front hole of the rail. Leave the middle screw in for center punching; this will help you make sure you are centered. Remove the rail, drill and tap hole. Repeat steps for the rear hole.
15. Clean in feed table and mount the 1st rail with all three screws. Make sure the rail is flush lengthwise and widthwise on the in feed table.



16. Place 1 of the canting plates into the rail you just mounted and slide the provided long thin paper shim in between plate and the mounted rail (this is a temporary shim to create the correct spacing to allow the plates to slide in the rails easily)



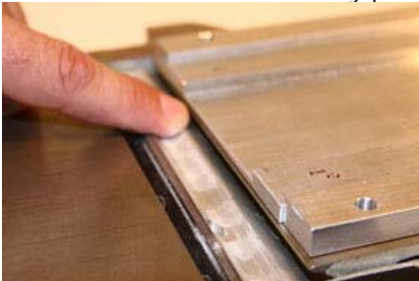
17. Place the 2nd rail up against the plate and light push towards the 1st mounted rail.



18. Insure that the 2nd rail is in alignment on the 1st rail.
19. While holding light pressure against full length of 2nd rail against the plate and 1st rail and making sure alignment is correct, carefully mark the middle hole of the 2nd rail with the included transfer punch and a hammer.



20. Remove plate and 2nd rail
21. Drill and tap middle hole of 2nd rail as you did the 1st rail
22. Repeat steps 8 through 13 for the front hole and rear hole of the 2nd rail. Make sure to leave the long thin paper shim in place during all of these steps.
23. Remove paper shim and canting plate
24. Clean in feed table and mount the 2nd rail with all three screws. Make sure the rail is flush lengthwise and widthwise on the in feed table.
25. Check that both plates slide in and out of your mounted rails easily and smoothly. A slight tight spot is ok, but the plates should slide all the way to the rail stops.
 - If you can not slide plate all the way forward to the rail stops and the plate feels tight.
First make sure that the rails are flat and flush with the in feed table.
Sometimes when you thread the screws a small piece of metal will curl up and effect the way the rail sits on the table, causing pressure on the plates. Remove the rail and countersink with a countersink drill bit each hole and remount the rail.
 - If the plates are still tight
Enlarge the 3 holes on 1 of the rails with a 17/64 or 9/32 inch drill bit. This will make the hole larger and allow you to manipulate the rail angle/position and/or pull it away from the plate.
 - If after this if you still need more slide, repeat step above on the 2nd rail.
26. Before you plug the planner into power make sure and double check that the planner plate will not hit or obstruct the cutters or any part of the rotating shaft.



27. Make sure planner cutters are true. Follow your planner's instructions for truing cutters. Make sure to unplug machine when performing truing operation. If the cutters are not true it will affect the cant you produce on the boot.
28. Congratulations! You are finished the installation and are now ready to use your Canting Plate System. Refer to "Use of Planner Plate System" on how to properly use the planner plates.

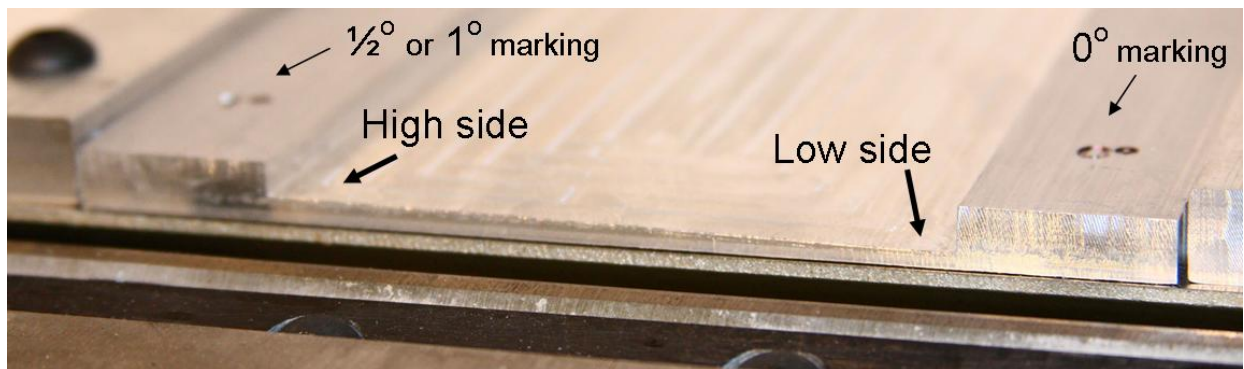
Use of Planner Plate System



- Use proper eye wear and ear protection. Follow your planner's safety guidelines.
- Ensure that you are not wearing loose clothing that could get sucked into the planner.
- Make sure you operate the planner in a clean and unobtrusive work area. Planners are very powerful machines and do not give second chances...make sure the area you work in is free and clear of distractions and other people.
- It is recommended to acquire several practice boots, to become comfortable with the cutting depths of your particular planner and the orientation of the cant plates.

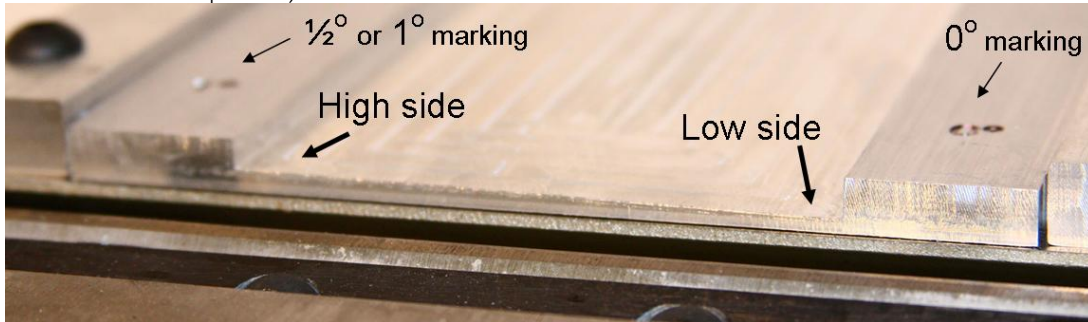
Setting cutting depth – Unplug planner for this step!

1. Set cutting depth by laying a straight edge on the out feed table of the planner in the area of the highest part of the cant plate angle tray. Using the in feed table cutting height adjuster lower or raise the in feed table until the straight edge matches the highest portion of the angle. For best results you can make this height measurement roughly 1/2 inch inside of the angle trays highest point.



Running the boot through the angle tray

1. You can run the boot either way you feel most comfortable 1 – toe to heel or 2 – heel to toe
2. The plates can be installed into the rails either way and allow for 1- highside towards you or 2 – highside away from you. The orientation of the high/low side of the plate will dictate which way you have to run the boot. To reverse this pull the plate out turn it 180 degrees and reinstall
The "0°" is the low side and the direction the boots cant will go after planning. "1°" or "1/2°" is the highside (similar to the highside of the row of tape in the tape method would work on a planner).



3. Each pass will equal the degree marked on the plate. To make larger cants continue to run the boot in a combination of passes.

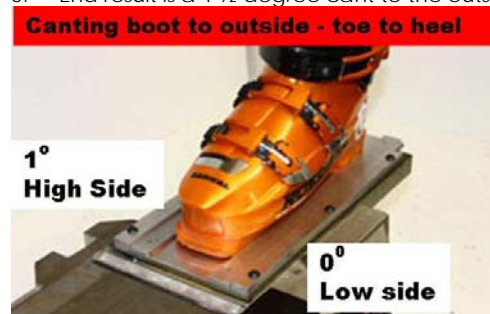
For Example if you wanted a 2 1/2 degree cant to the inside:

1. You would have the boot in the tray of the "1°" plate with the inside edge of the boot on the "0°" side of the tray.
2. Pass the boot 2 times with the "1°" plate
3. Install the "1/2°" plate and reset cutting depth – Unplug machine for this step!
4. Pass the boot 1 time
5. End result is a 2 1/2 degree cant to the inside.



Another Example if you wanted a 1 1/2 degree cant to the outside:

1. You would have the boot in the tray of the "1°" plate with the outside edge of the boot on the "0°" side of the tray.
2. Pass the boot 1 time with the "1°" plate
3. Install the "1/2°" plate and reset cutting depth – Unplug machine for this step!
4. Pass the boot 1 time
5. End result is a 1 1/2 degree cant to the outside.



4. Place the boot in the in feed table plate tray. Turn on planner. With light downward pressure guide boot across the cutter, keep hands away from cutter assembly. The material being removed will be the respective cant and the boot will exit on the out feed table completely flat. As the first portion of the boot is planned/canted it becomes the angle reference for the second half of the boot, so make sure to continue to guide the boot flat and straight on the out feed table until the boot has completely finished crossing the cutter.

Running the boot on planner to flatten without angle tray

1. Remove plate and raise in feed table until almost flush with out feed table
2. Run boots (hint: normally the heels, although they may be cupped they are usually true to the angle. Due to the way the boot comes out of its mold when made the toe is what is normally wrapped. To reduce the amount of material removed, you can easily just flatten a boot by setting the heel on the out feed table and running only the toe of the boot over the cutter)

Finishing Boot – Mandatory – returning boot to ISO 5355 standard

After sole planning a boot it is the responsibility of the installer/boot technician to make modifications to the DIN height (done by adding lifters or adding to the DIN binding contact surfaces), so it complies with ISO standard 5355. This compliance to the standard is important for the boot/binding system to function as intended.

1. Sand the DIN angle back into the bottom surfaces of the toe and the heel per the ISO 5355 Standard.



2. Mount lifters to re-add the required height removed from sole planning. Ensure that the DIN angle on the boot's toe and heel matches the DIN angle of the toe and heel lifters.



3. Rout the toe and heel DIN surface parallel and to the correct ISO 5355 Standard height with the proper DIN Router Bit
4. Measure the boot toe and heel heights and ensure that they comply with the ISO standard 5355. It is absolutely imperative that you check that the boot's toe and heel are back to the DIN height standards of the ISO standard 5355.
5. When you have determined that the boot toe and heel heights comply with the ISO standard 5355. Use a sanding wheel attachment on a Foredom or other grinding tool and sand a small radius in the freshly cut lip on the front edge of the toe and heel lug.
6. Check the boot to binding adjustments and perform the mechanical binding tests as you would normally do.