How to Cut a Handlebar for Installation of PadLoc Grips
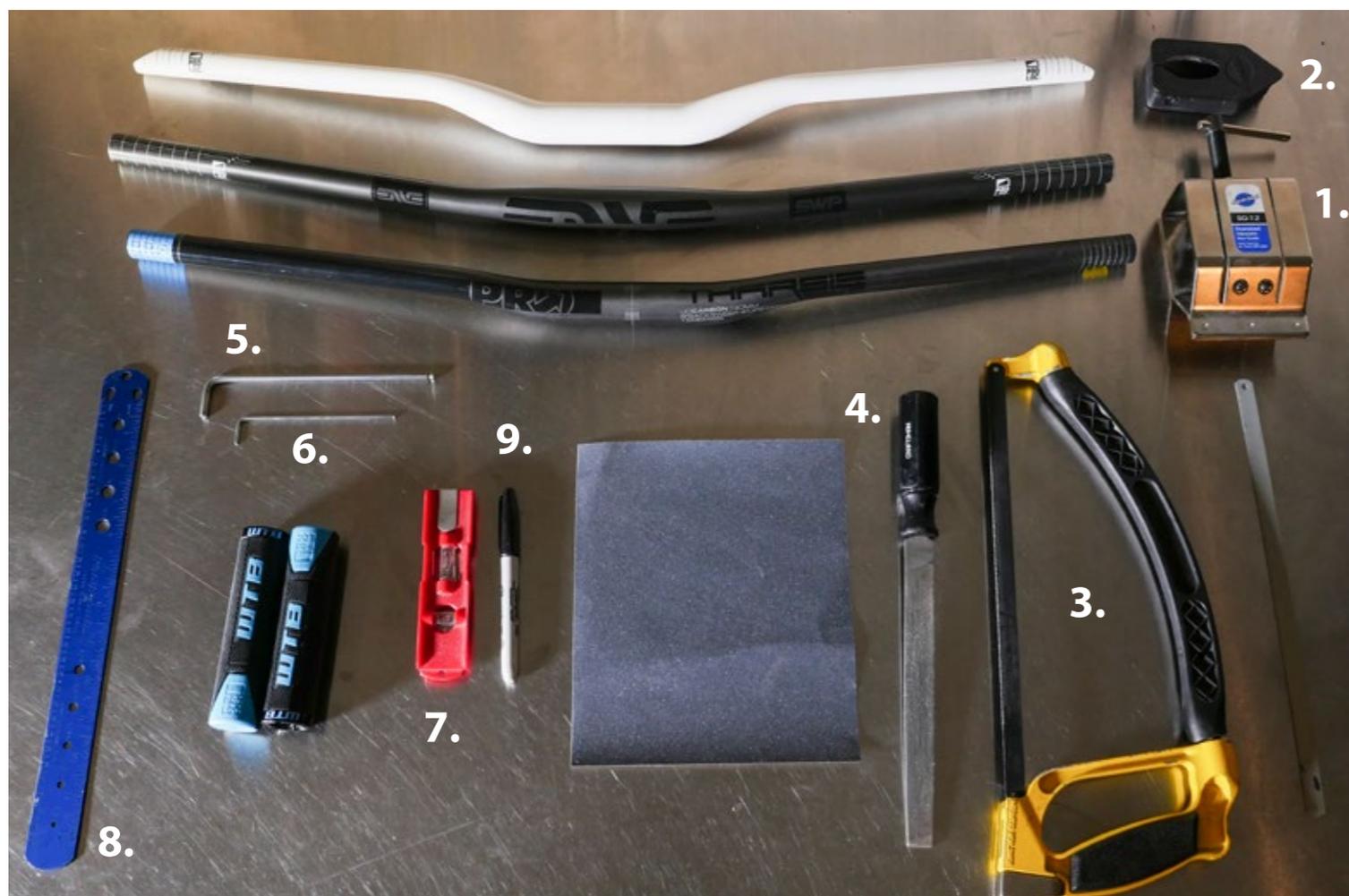
Bars with PadLoc Markings

1. Park SG-7.2 Saw Guide (metal cutting guide)
2. Park SGI-7 Cutting Jig (black plastic insert)
3. Hacksaw with sharp metal blade (for cutting aluminium) or a carbon blade (for cutting carbon)
4. Sandpaper (220-grit suggested) or file (for aluminum)
5. 2.5mm hex
6. 5mm hex

Bars without PadLoc Markings

1. Park SG-7.2 Saw Guide (metal cutting guide)
2. Park SGI-7 Cutting Jig (black plastic insert)
3. Hacksaw with sharp metal blade (for cutting aluminium) or a carbon blade (for cutting carbon)
4. Sandpaper (220-grit suggested) or file (for aluminum)
5. 2.5mm hex
6. 5mm hex
7. Level
8. Ruler
9. Marking pen which will be visible on the handlebar surface (we suggest a silver Sharpie)

Handlebar types

A. PadLoc pre-cut handlebar

PadLoc pre-cut handlebars do not need modification and are ready to use with PadLoc grips. If you need to adjust the overall length of a PadLoc handlebar, cut the bar to your desired length, and then proceed to step 5 on page 6.
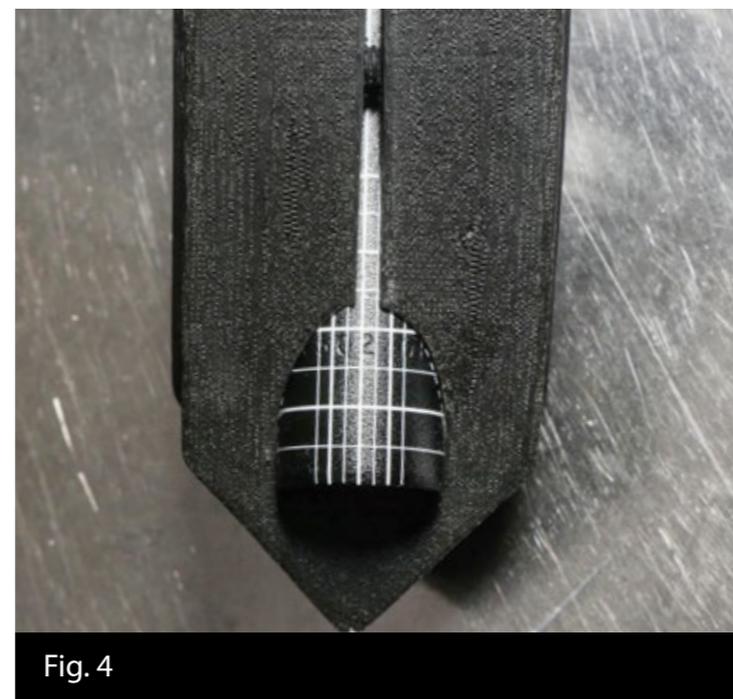
B. Round handlebar with PadLoc markings

C. Round handlebar with no markings

Attention: Before starting procedure, please note that the additional subframe and rubber compound on the end of the PadLoc grip system will add 6mm of width to each side of the handlebar, compared to a traditional lock-on grip installed on the same handlebar. Both sides add up to 12mm of additional width over a traditional handlebar and grip setup. Ensure the customer is okay with having their grip position being slightly wider than before. If they want the width to remain the same as their current handlebar and grip setup, cut 6mm of material off each end of the handlebar before beginning the PadLoc handlebar cutting procedure.

Cutting a handlebar with no markings

Fig.1

80 mm in length
Fig. 2

Fig. 3

Fig. 4
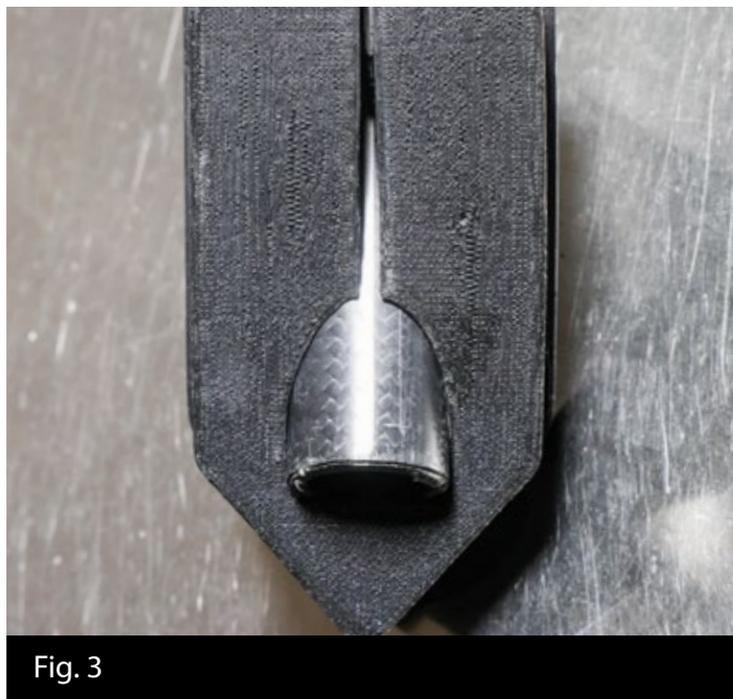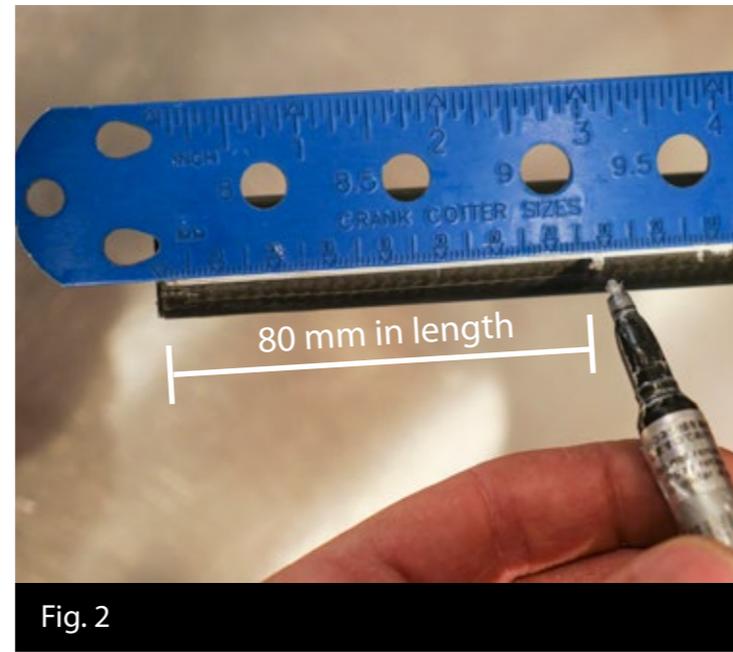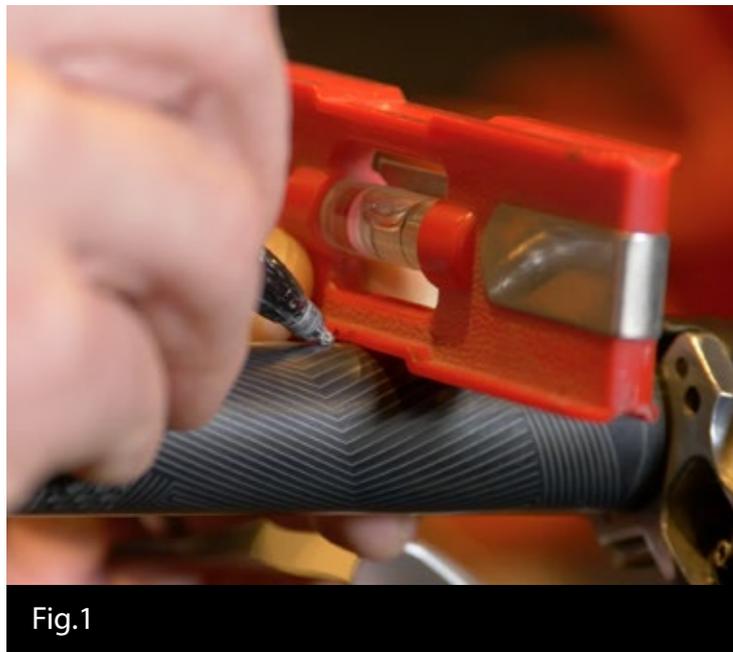
Bars without PadLoc markings

1. With the handlebar installed on the bike in the rider's preferred position, take a level and mark the topmost point on the outer end of th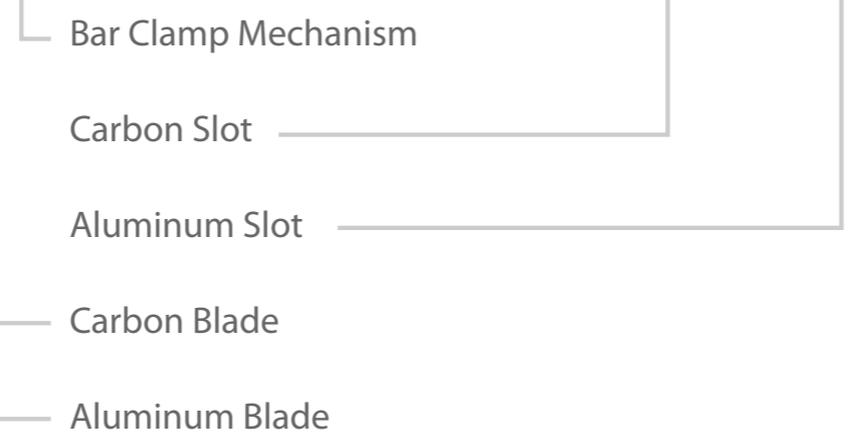e handlebar. Make a second mark on the topmost area of the handlebar roughly in the region of the inner locking ring (Fig 1).

2. Using a ruler, draw a straight line centered at the top of the bar (using your marks for the previous step) to connect the inner and outer marks. The line must be at least 80mm long so the technician can see it when the bar is inserted into the Park SGI-7 Cutting Jig (Fig 2 and Fig 3).

3. Insert the handlebar into the SGI-7 Cutting Jig. Push the bar in until it stops. If the handlebar does not bottom out on the final stop, the cut will not be correct. As a result, the PadLoc grips will not work properly and should not be ridden.

4. Center the line in the open slot on the SGI-7 Cutting Jig. The line must be visible through the entire length of the slot (Fig 3). If your handlebar is pre-marked with PadLoc markings, simply align the 0-degree line, or the line of your preferred position, with the slot of the SGI-7 Cutting Jig (Fig 4).

Fig. 5

Fig. 6

Fig. 7

Bar Clamp Mechanism

Carbon Slot

Aluminum Slot

Carbon Blade

Aluminum Blade

Fig. 8

5. Tighten the SGI-7 Cutting Jig using a 5mm hex. Tighten it enough to hold the handlebar snugly in place and keep it from rocking in the SGI-7 Cutting Jig (Fig 5). To confirm the tool is tightened correctly, the handlebar should be able to be inserted and removed from the SGI-7 Cutting Jig without having to loosen/re-tighten the 5mm hex bolt.

6. Unscrew the Bar Clamp mechanism until it is backed all the way out (Fig 6). The Bar Clamp is not used in the PadLoc cutting process, therefore it is best to keep it out of the way. If the Bar Clamp mechanism is screwed all the way in, Step 8 cannot be completed.

7. With the handlebar inserted into the SGI-7 Cutting Jig, insert the SGI-7 Cutting Jig into the Park SG-7.2 Saw Guide (Fig 6). Be sure to press the SGI-7 Cutting Jig all the way into the SG-7.2 Saw Guide, so that it sits flush against the surface of the guide (Fig 7).

7a. The SG-7.2 Saw Guide has a wide slot for cutting carbon and a narrow slot for cutting aluminum (Fig 7). Be sure to press the SGI-7 Cutting Jig into the appropriate side for the material you are cutting. Carbon cutting blades are different than aluminum cutting blades, so be sure you are using the correct type of blade before making the cut (Fig 8).

Cutting a handlebar with or without markings

Fig.9

Fig.10

Fig.11
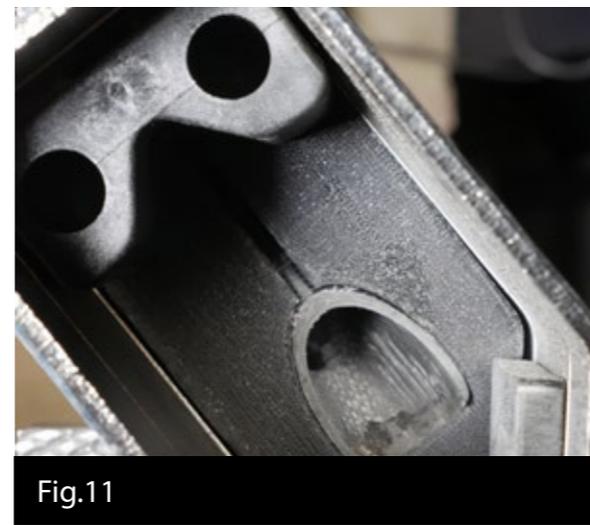
8. With the handlebar inserted into the SGI-7 Cutting Jig and the SGI-7 Cutting Jig inserted into the SG-7.2 Saw Guide, clamp the SG-7.2 Saw Guide into a bench vise (Fig 9). The SG-7.2 Saw Guide should be tilted (at roughly a 45-degree angle) in order to increase the clamping surface. This will ensure the SGI-7 Cutting Jig does not move during cutting. Clamp the vise tight enough to hold the SGI-7 Cutting Jig securely in place, but not so tight that the cutting slot of the SG-7.2 Saw Guide is restricted.

9. Before cutting, double-check to ensure the handlebar is bottomed out in the SGI-7 Cutting Jig and that the previously marked line protrudes from the slot opening on the exterior side of the SGI-7 Cutting Jig. Proceed with the cut (Fig 10). Check the success of the cut by looking through the open end of the SG-7.2 Saw Guide (Fig 11).

Fig.12

Fig.13

Fig.14

Fig.15

10. Once the cut is complete, (Fig 12) shows the handlebar protruding slightly from the SGI-7 Cutting Jig. This is correct. Remove handlebar and inspect the work. If a low quality or old cutting blade was used, or if the cut was made in an inconsistent motion, the handlebar might be left with a slight step at the end of it (Fig 13). This step must be sanded off using a piece of sandpaper on a flat surface (Fig 14). Refer to (Fig 15) for an example of what the finished product should look like. Check the drawing in (Fig 16) for required dimensions.
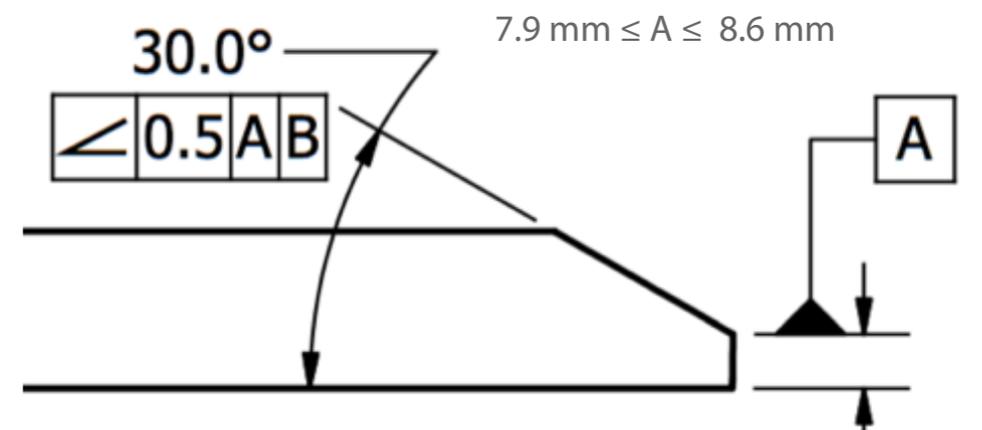

7.9 mm ≤ A ≤ 8.6 mm

30.0°

0.5 A B

A

Fig.16

11. With the handlebar cut at the appropriate angle, slide the PadLoc grip onto the bar. Make sure the wedge is facing upwards.

12. Tighten PadLoc grip with a 2.5mm hex to the torque of 2 newton meters (Nm). Confirm the grip is firmly in place by squeezing it tightly and attempting to rotate it.