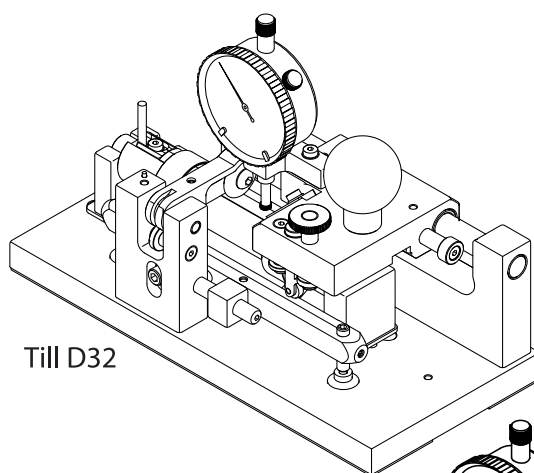
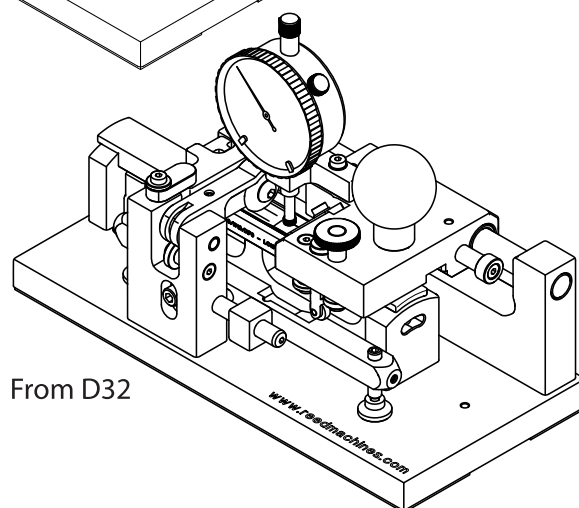


Bagpipe Profiler Manual



Till D32



From D32

Preface

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Reed Machines V.O.F. can continue the development of the bagpipe profiler, its components and the manuals without a notice to customers.

Although Reed Machines V.O.F. tried to make this manual correct and up to date, there can be errors. Tell us, if you find an error or if you think that information is missing. This information helps Reed Machines V.O.F. to increase the quality of the manual.

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1

About this manual

1.1

Purpose of this manual

The manual gives a description of the bagpipe profiler and gives the day-to-day procedures to operate the machine safely.

The manual includes these topics:

- Safety information.
The safety information gives warnings about safety and gives a description to the functions of the machine that have a relation to safety.
- Description.
Description of the bagpipe profiler. This section gives information about the hardware layout of the machine and the most important parts of the machine.
- Operational procedures.
The operational procedures give the information for the operational tasks that an operator is permitted to do.
- Maintenance procedures.
The maintenance procedures give information for the maintenance tasks that an operator is permitted to do.



Note

This manual describes the following two versions of the bagpipe profiler:

- The till D32 version
- The from D32 version

The main difference between the two versions is the shape of the cylinder set. If necessary, these differences are indicated in the illustrations.

1.2

Audience

The target audience for this manual is the user of the bagpipe profiler. The procedures in this manual include the tasks for the operator role in accordance with the operator and maintenance philosophy of Reed Machines V.O.F..

1.3



Note

Note – Gives more information on a topic.



Caution

CAUTION – Gives information about a situation that can cause damage to the machine. Obey the instruction to prevent this situation.



Warning

WARNING - Warns you about a situation that can cause serious injury. Obey the instruction to prevent this situation.

1.4

Additional information

Refer to the support page on the website of [Reed Machines](#) for more information about:

- Product updates
- Manual updates, corrections and additions
- Presets and adjustment examples

Every effort has been made to make this manual as accurate and complete as possible. However, if you find any errors or omissions, it would be appreciated if these were brought to the attention of Reed Machines.

2

Introduction

2.1

Contents of the delivery

The box of the bagpipe profiler contains the following tools and accessories:

Contents of the delivery:

- 1 bagpipe profiler
- 1 cylinder set
- 1 template set
- 1 Allen key 2,5 mm
- 1 Allen key 3 mm
- 1 Allen key 4 mm
- 1 analog dial indicator
- 1 dial indicator adaptor



Note

In case of transport damage, contact your supplier.



Danger

Keep packing materials away from children because of choking danger.

2.2

About the bagpipe profiler

The bagpipe profiler scrapes the profile of the reed. The bagpipe profiler is not a tip profiler so it does not make a finished reed tip. Depending on the settings of the template set and the type of cylinder set the profiler can do this for all types of bagpipe reed.

Features of the bagpipe profiler:

- Available in two different versions:
 - Till D32, for reed diameters till 32 mm.
 - From D32, for reed diameters from 32 mm.
- Marking set for the center line of the reed.
- Possible adjustments:
 - Overall thickness of the profile.
 - Length of the scrape.
 - Difference between the thickness of the tip and the back.
 - A pre-fab of the reed tip can be activated and positioned.
- Can hold a variation of cylinder sets which each result in a specific difference between the middle and the sides of the reed.

2.3

- Can hold different template sets for easy and efficient exchange between different profiles.
- The difference between the thickness of the tip and the back can be measured and set with the help of the dial indicator.

Specifications

The bagpipe profiler has the following specifications:

Length:	244 mm
Width:	114 mm
Height:	131 mm
Weight:	2,4 kg

2.4

Reed shapes and characteristics

Refer to the manufacturers website for more information about reed shapes and characteristics.

<https://reedmachines.com/support/bagpipe/profiler>

3

Safety

3.1

General safety information

This section gives information about the safety of the bagpipe profiler.

General:

- Use the bagpipe profiler only for the intended use.
- Read this manual before you operate or do maintenance on the bagpipe profiler.

3.2

Mechanical hazards

If incorrectly used the bagpipe profiler can cause injury. Always obey the instructions below.



Warning

Never position your fingers between moving parts and the knife.



Warning

Be careful when you pick-up, exchange or position a knife.



Warning

Never hold or touch the knife at the cutting edge.



Caution

Install the profiler on a horizontal and even nonslip surface to prevent that it slips away or falls.



4

Description

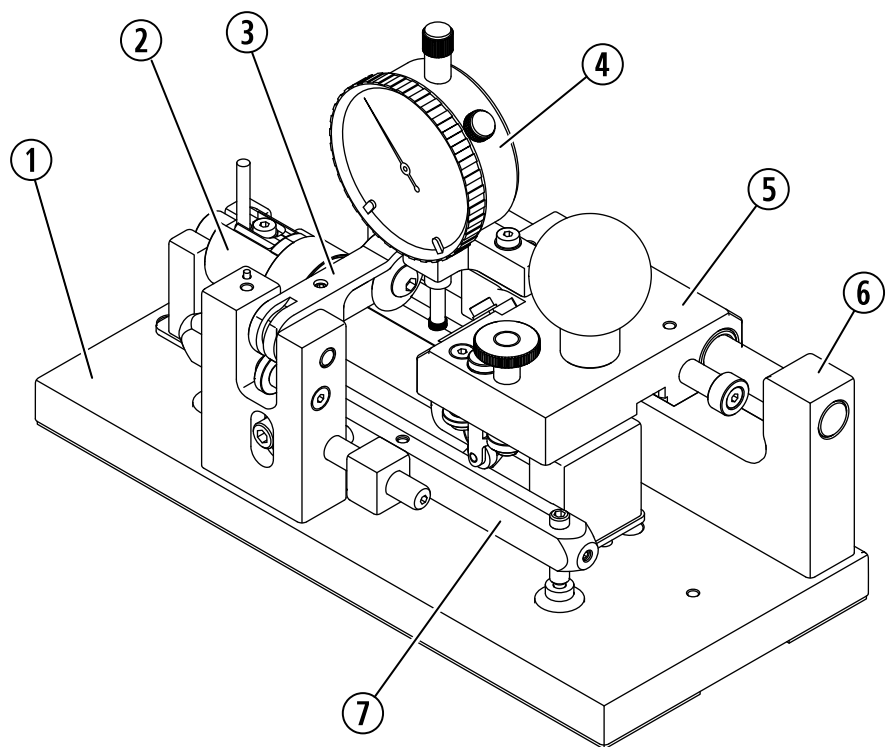
4.1

Overview

4.1.1

Overview of the bagpipe profiler [Till D32]

Structure of the profiler (Till D32)



1. Base set

5. Carriage set

2. Cylinder set

6. Guide set

3. Marking set

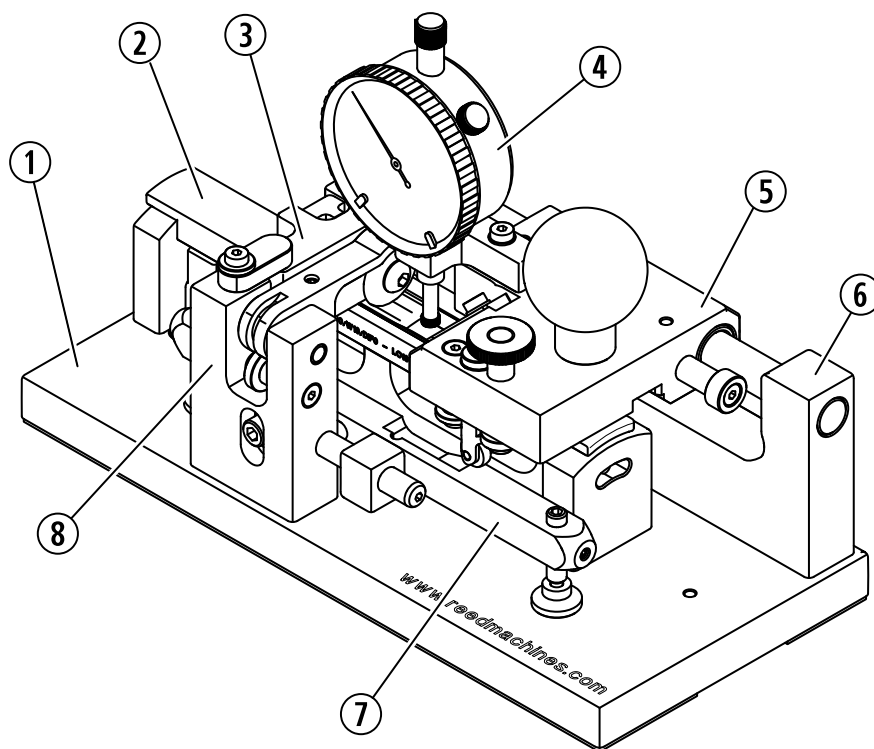
7. Template set

4. Dial indicator set

4.1.2

Overview of the bagpipe profiler [From D32]

Structure of the profiler (From D32)



1. Base set

5. Carriage set

2. Cylinder set

6. Guide set

3. Reed pusher set

7. Template set

4. Dial indicator set

8. Marking set

4.2

Working principle

The cylinder set holds the reed and has to be turned a little bit after each scraping stroke of the knife. This cycle has to be repeated until the profile has the overall thickness that is set by the overall thickness adjustment. The profile is scraped in a few depth steps.

The template set defines the shape of the profile in the length direction. A curve wheel copies the shape of the template thru the knife to the reed. The cylinder set defines the shape of the profile in the cross direction. The template can be adjusted and there are different types of cylinder sets. The combination of template set setting and cylinder set makes the profiler suitable for all types of bagpipe reed.

The profiler has a marking knife for the center line.



Caution

We advise to scrape the reed when it is dry.

However, the reed can also be scraped when it is wet. The knife is not completely corrosion resistant.

When you scrape the reed when it is wet you have to dry the knife after use.

4.3

Components of the bagpipe profiler

4.3.1

Base set

The base set of the bagpipe profiler supports the guide set, marking set, carriage set, template set and cylinder set.

To prevent that the bagpipe profiler unexpectedly moves away when a force is applied to operate it, there is an anti-slip plate under the bagpipe profiler.

4.3.2

Carriage set

The carriage set holds the knife, the curve wheel, the stroke stops and the depth adjustment set. The depth adjustment set has an adjustment for the overall thickness of the profile and a spindle to control the depth steps of the scraping process. The carriage set can be turned outwards around the guide shaft for access to the reed and cylinder set.

4.3.3

Guide set

The guide set holds the shaft which is used to guide the carriage set.

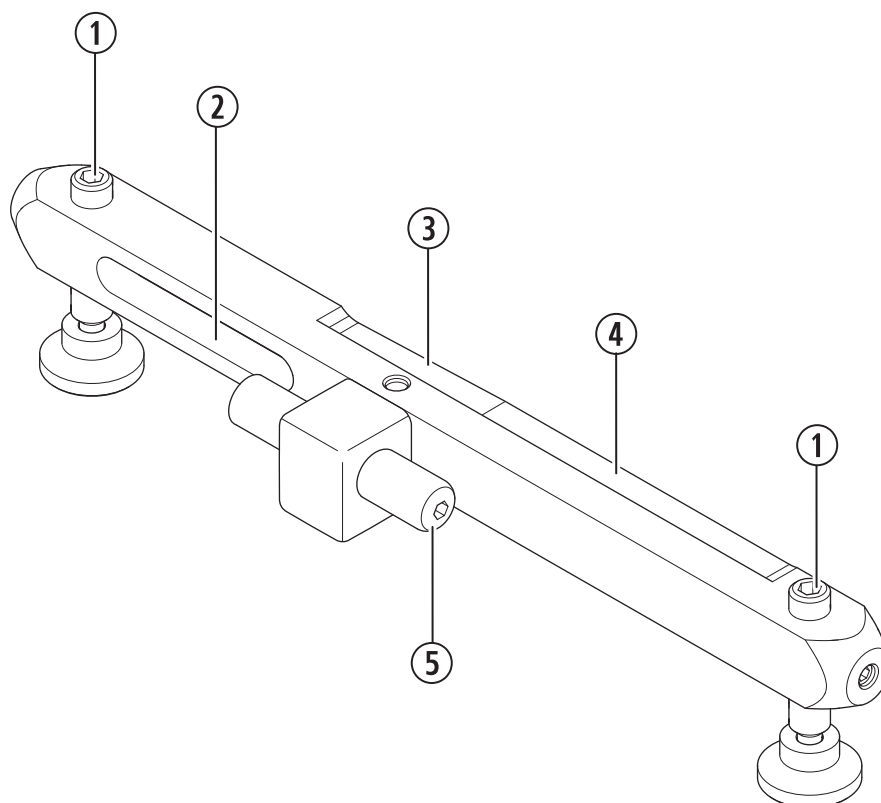
4.3.4

Template set

The template set defines the difference between the tip thickness and the back thickness. The template set has an extra angle to make a tip pre-fab. The start position of the tip pre-fab is adjustable and can be made inactive. When the profiler is used frequently for 2 different reed types it is advisable to use 2 template sets. A template set can be taken from the

profiler and put back at the same position easily. This will save repeating adjustment time.

Template set



① Leveler

④ Profile part

② Length adjustment slot

⑤ Length stop

③ Tip pre-fab part

4.3.5

Cylinder set

The cylinder set holds the reed and is available in different variants to fit each type of bagpipe reed. Each cylinder set is made for a nominal reed length and a specific difference between the middle and the sides of the profile. A length stop (on the Till 32 cylinder set) makes it easy to position the reed on the cylinder. The length

stop is adjustable for plus or minus 6 mm in relation to the nominal reed length.



Note

For actual detailed information about cylinder sets see the [support page](#) of the Reed Machines website. How to exchange the cylinder set, see the section [Preparations](#) (on page 21).

For the bagpipe, two different types of cylinder are available:

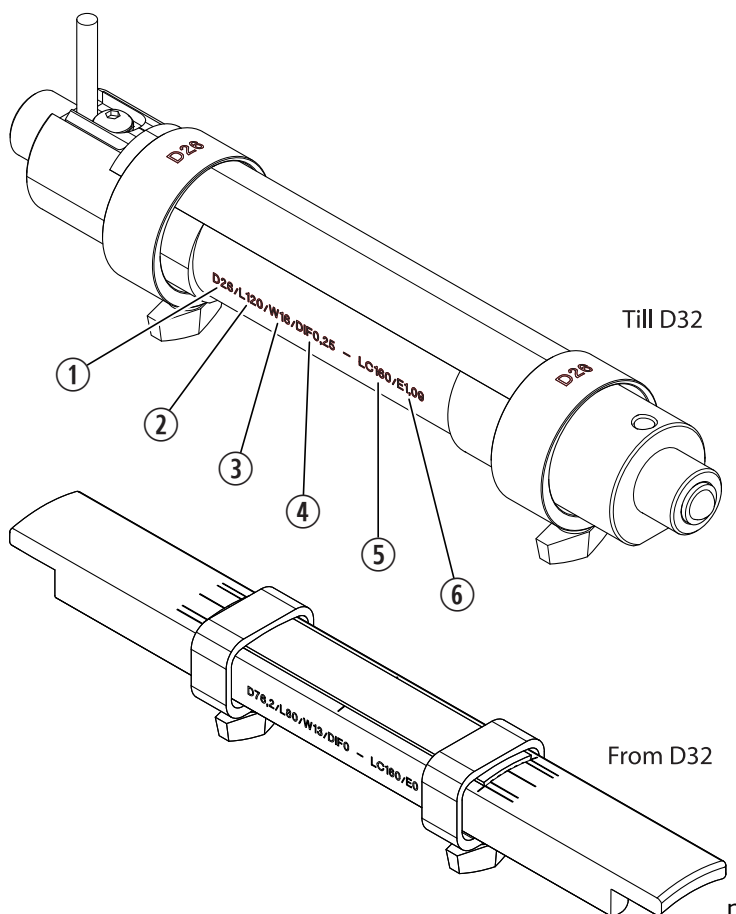
- Cylinder set for bagpipes with inner reed diameters till D32.
 - the blank is hold by 2 clamping rings.
 - the maximum cylinder diameter is 32 mm.
- Cylinder set for bagpipes with inner reed diameters from D32.
 - the blank is hold by 2 clamps.
 - due to the shape the cylinder can hold blanks with unlimited diameters.



Note

An optional cylinder suspension set (D26) is available to hold cylinder sets with cylinder diameter 26 mm.

Cylinder sets till and from D32



The numbers on the cylinder have the following meaning:

- ① D: Diameter of the cylinder.
- ② L: Nominal length of the reed.
- ③ W: Width for which below mentioned difference is valid.
- ④ DIF: Difference from the middle to the sides of the profile.
- ⑤ LC: Length of the cylinder.
- ⑥ E: Eccentricity of the cylinder sets.

4.3.6

Marking set

The marking set holds the knife that can make the center line mark. The knife is adjustable in depth and length direction, refer to [Adjust center line mark position](#) (on page 35).

4.3.7

Reed pusher set

Some bagpipe reeds have a very flat cross section of the gouged cane and very thin parts in the profile (like a GHB ridge cut reed). These reeds are very flexible and can easily be pulled up by the knife when they are profiled. When this happens the reed becomes

damaged. Profilers for such reeds have a reed pusher set which prevents the reed from being pulled up during profiling.

4.3.8

Knife

The knife is made of hardened steel, so it will stay sharp for a long time. When the knife wears, it becomes less sharp which can result in bad cutting properties. Therefore, it can be exchanged. Refer to [Exchange knife](#) (on page 26).

4.3.9

Dial indicator

The dial indicator has to be used on the cylinder set without a reed. The dial indicator has to be assembled on the carriage set. The dial indicator set is used to set the difference between the thickness at the tip and the thickness at the back of the reed. The dial indicator set is only used to set the profiler. During the scraping process the dial indicator set has to be taken from the profiler. The profiler is delivered with an analog dial indicator. A digital dial indicator is optional. Refer to [Install the dial indicator](#) (on page 28).



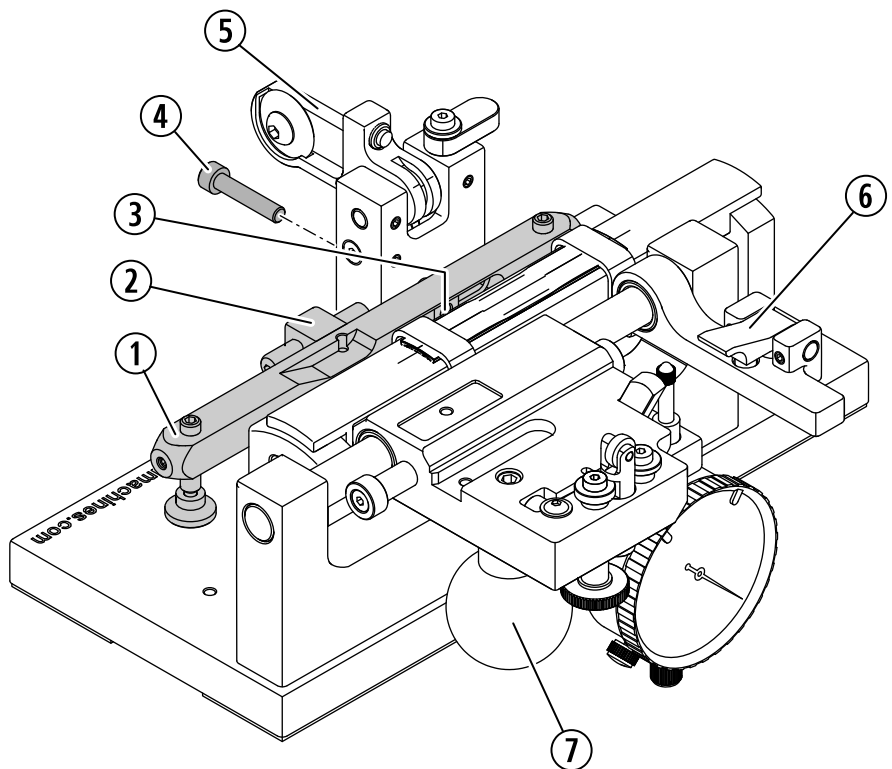
5

Preparations

5.1

Exchange template set

Install / change template set



When you use the profiler for multiple types of reed, you can use different template sets. The design of the bagpipe profiler enables you to change templates sets and place them back on exactly the same position. The length stop prevents repeating adjustment work.

To exchange the template set:

1. If needed, turn the center line marking set ⑤ outwards.
2. If needed, turn the reed pusher set ⑥ outwards.
3. Turn the carriage set ⑦ outwards.



Warning

Risk of injury. Be careful when the carriage set is turned outwards. The upwards facing knife is very sharp and can cause serious injuries. Always turn the carriage set inwards as soon as possible.

4. Remove the template set clamp screw ④.
5. Take out the template set ①.



Note

Take care not to lose the T-nut ③ which clamps the template set to the base block ⑥ of the marking set.

1. Position another template set
 2. Position the T-nut ③ in the slot of the template.
-



Note

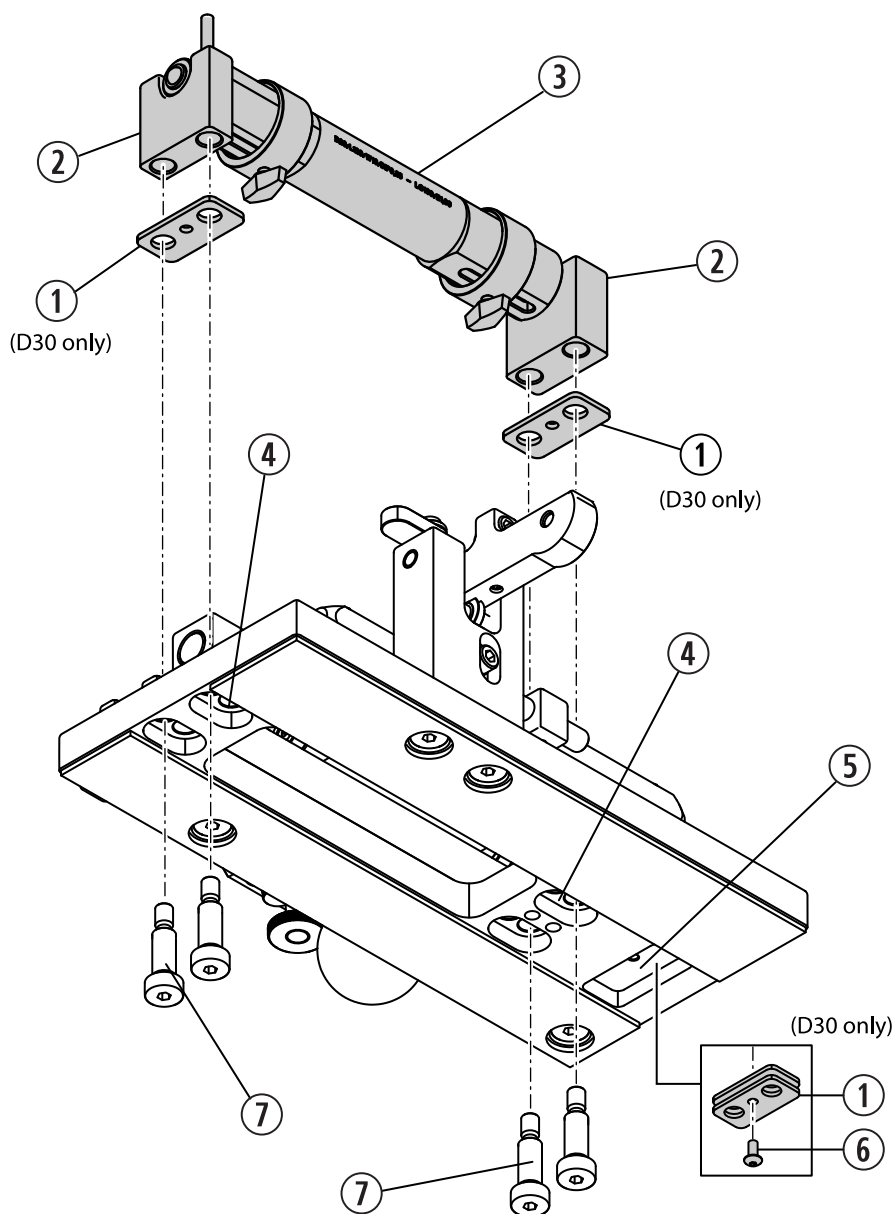
Use one finger to keep the T-nut in the slot of the template and in line with the hole in the base block ⑥ of the marking set.

1. Insert the template set clamp screw ④ and turn it in the T-nut for a few revolutions.
2. Push the template set with the length stop ② against the base block ⑥ of the marking set.
3. Tighten the template clamp screw.
4. Turn the carriage set inwards.
5. If needed, turn the center line marking set inwards.
6. If needed, turn the reed pusher set inwards.

5.2

Exchange cylinder set [Till D32 version]

Install / change cylinder set



There are different types of cylinder sets. The cylinder set ③ depends on the type of bagpipe reed for which the profiler is used. To hold all these types of reed, the cylinder set supports ② can be mounted on different positions and with or without fill plates ①.

To exchange the cylinder set:

1. If needed, turn the pusher set outwards.
2. If needed, turn the center line marking set outwards.
3. Turn the carriage set outwards.



Warning

Risk of injury. Be careful when the carriage set is turned outwards. The upwards facing knife is very sharp and can cause serious injuries. Always turn the carriage set inwards as soon as possible.

Cylinder specifications and position of the supports

Cylinder length	Position of the supports
LC160	Inner hole's
LC180	Outer hole's
Cylinder diameter	Fill plates required?
D26	Yes
D30	No

When the new cylinder set has the same diameter and length as the cylinder set that is in the profiler:

1. Take the cylinder set ③ out of the profiler.
2. Position the new cylinder set in the profiler.

When the new cylinder set has the same diameter but a different length than the cylinder set that is in the profiler:

1. Take the cylinder set out of the profiler.
2. Untighten the cylinder support screws ⑦ and take away the cylinder supports ②. If there are fill plates ① under the cylinder supports also take away the fill plates ①.
3. Position the cylinder support screws in the hole's ④ that corresponds to the length of the new cylinder set.
4. If there were fill plates, position them over the cylinder support screws.
5. Position the cylinder supports over the cylinder support screws and tighten them.

When the new cylinder set has a different diameter and length than the cylinder set that is in the profiler:

1. Take the cylinder set out of the profiler.
2. Untighten the cylinder support screws ⑦ and take away the cylinder supports ②. If there are fill plates ① under the cylinder supports also take them away.

3. Position the cylinder support screws in the right hole's.
4. If there were fill plates, store them in the slot ⑤ under the base plate and tighten them with screw ⑥.
5. If there were no fill plates, untighten screw ⑥ and take the fill plates out of the slot
6. Tighten screw ⑥.
7. Position the fill plates and / or the cylinder supports ② over the cylinder support screws and tighten them.

When the new cylinder set has a different diameter but the same length than the cylinder set that is in the profiler:

1. Take the cylinder set out of the profiler.
2. Untighten the cylinder support screws ⑦ and take away the cylinder supports ②. If there are fill plates ① under the cylinder supports also take them away.



Note

Leave the cylinder support screws in the current holes.

3. If there were fill plates, store them in the slot ⑤ under the base plate and tighten them with screw ⑥.
4. If there were no fill plates, untighten screw ⑥ and take the fill plates out of the slot
5. Tighten screw ⑥.
6. Position the fill plates and / or the cylinder supports ② back over the cylinder support screws and tighten them.

Finishing:

1. Position the new cylinder set in the profiler.
2. Turn the carriage set inwards.
3. If needed, turn the center line marking set inwards.



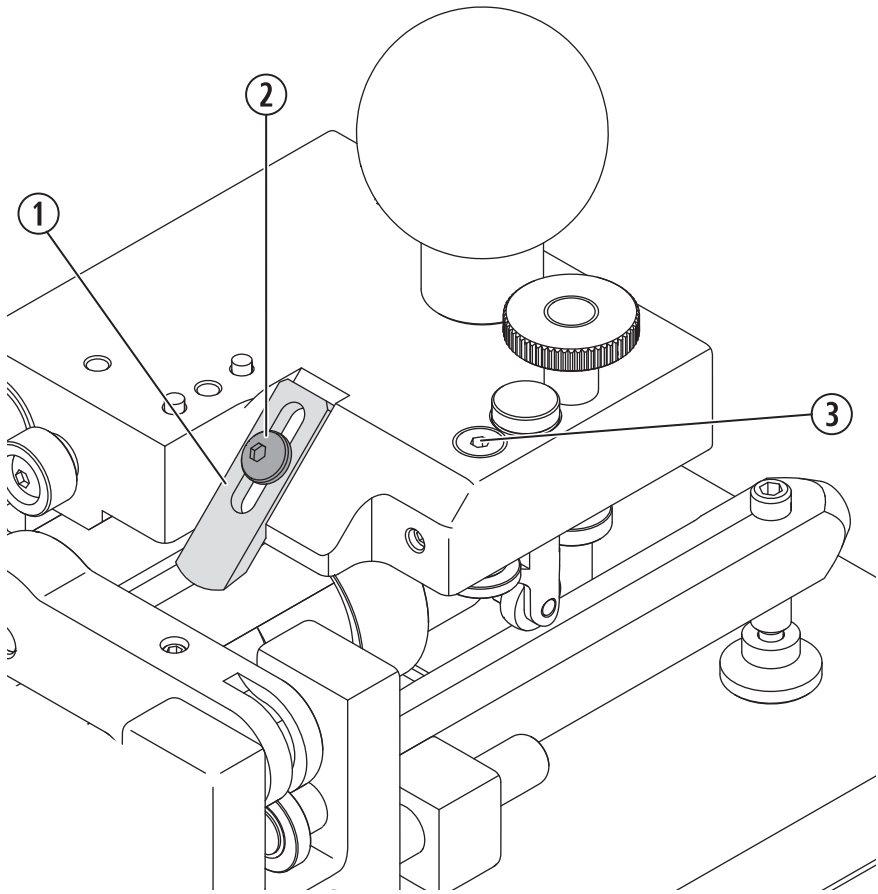
Note

Cylinder sets with D26 **always** need fill plates. Cylinder sets with D30 **never** need fill plates.

5.3

Exchange knife

Install / exchange knife



Warning

Risk of injury. Be careful when you handle the knife. The blade is very sharp. Always handle the knife by the center and do not touch the sharp edges as this can cause serious injury to hands and fingers.



Note

With below mentioned procedure the new knife is positioned on the same position as the old knife so the settings of the profiler do not change.

To exchange the knife:

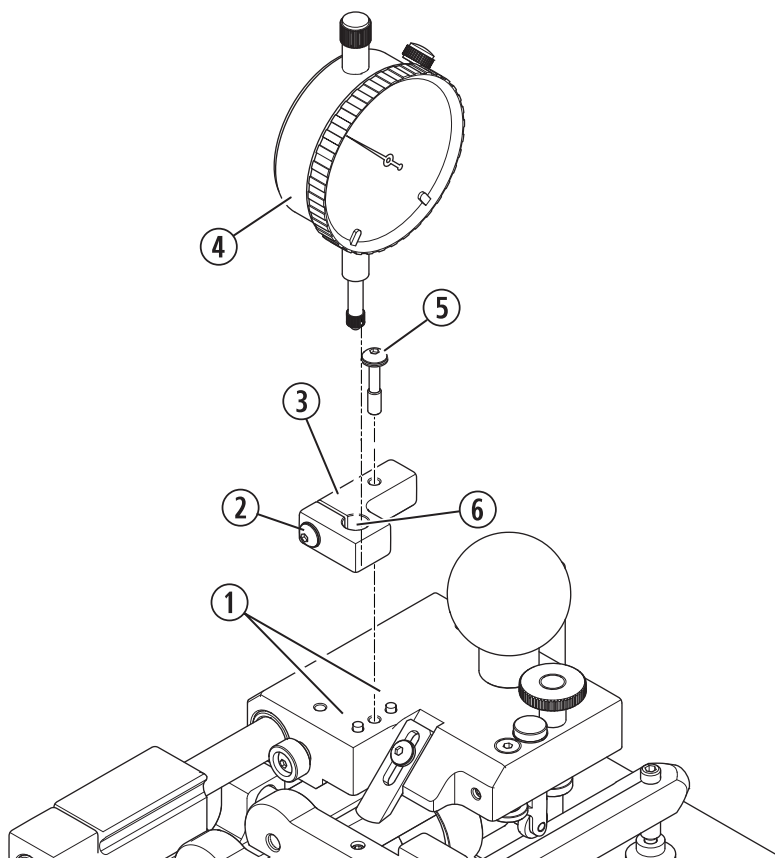
1. Profile a reed with the old knife and do not take the reed from the cylinder set.
2. Untighten the knife clamp screw ② counter clockwise and take away the old knife ①.
3. Position a new knife a little bit above the profiled reed and hand tighten the knife clamp screw.
4. Make a stroke movement with the carriage set and knife. Tap on the back of the knife every time you make a stroke until the knife starts to scrape the profiled reed.

5. When the knife starts to scrape the reed tighten the knife clamp screw ② firmly.
6. If needed, fine tune the final depth position of the knife with spindle ③.

5.4

Install the dial indicator

Install the dial indicator



To install the dial indicator:

1. Be sure that the carriage set is resting with the curve wheel on the template set and that the carriage set is on the final depth position, see step 10 of [Profile the reed](#) (on page 43).
2. Position the cylinder set in the middle position.
3. Position the dial indicator adaptor ③ over the locating pins ① of the carriage set and tighten the dial indicator adaptor screw ⑤.
4. Position the dial indicator ④ in the position hole ⑥ of the dial indicator adaptor and tighten the dial indicator clamp screw ② just enough to slightly clamp the dial indicator.
5. Move the carriage set to the end point at which the knife is at the center line position.
6. Move down the dial indicator by rotating it a little bit to the left and right while pushing it down. Continue this until the pointer of the dial indicator made about 1 revolution and is facing upwards.
7. Rotate the outer ring of the dial indicator until the zero mark of the dial indicator is at the pointer.

6

Adjustments



Caution

When adjusting the profiler always take care that the cutting edge of the knife does not hit any part of the profiler because this can damage the knife.



Note

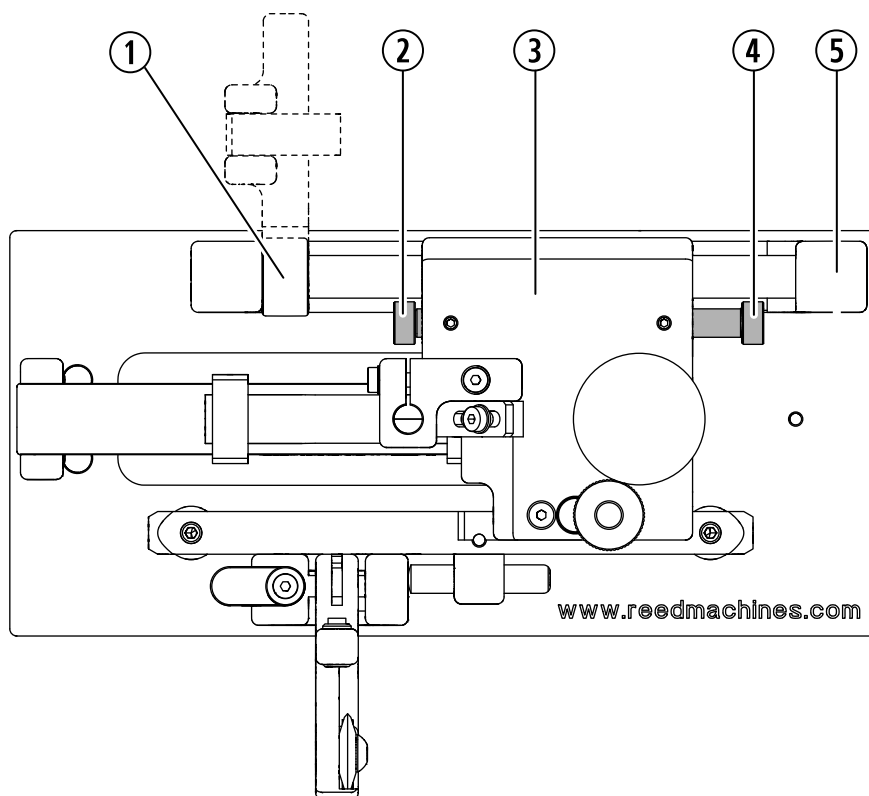
If the reed would be profiled to the final depth in one scrape sequence the reed would be damaged because too much cane would be taken of in one scrape. In order to prevent this the reed is scraped in multiple depth steps. For more information, refer to [Profile the reed](#) (on page 43).

Note

All adjustment explanations assume that the position of the point of the knife is equal to the bottom surface of the carriage set.

6.1

Adjust stroke length



The stroke of the carriage set ③ and so the knife is controlled by 2 stroke stops. Stroke stop ② controls the end point of the scrape (tip) and stroke stop ④ controls the start point of the scrape (the back of the reed).

To adjust the stroke:

1. Move the carriage set ③ to the left till stroke stop ② is against the stop block ① (or reed pusher set when applicable). This is the end point (tip) of the scrape.
2. If the knife is not at the center line position, move the carriage set ③ away from the stop block ⑤ and adjust the position with stroke stop ②.



Note

Turn stroke stop ② clock wise to move the knife to the left.

Turn stroke stop ② counter clock wise to move the knife to the right.

3. Repeat step 1 and 2 until the knife is at the center line.
4. The length of the stroke is equal to the distance between stroke stop ④ and the guide base ⑤.

5. If the distance is not equal to the needed stroke adjust the stroke with stroke stop ④.



Note

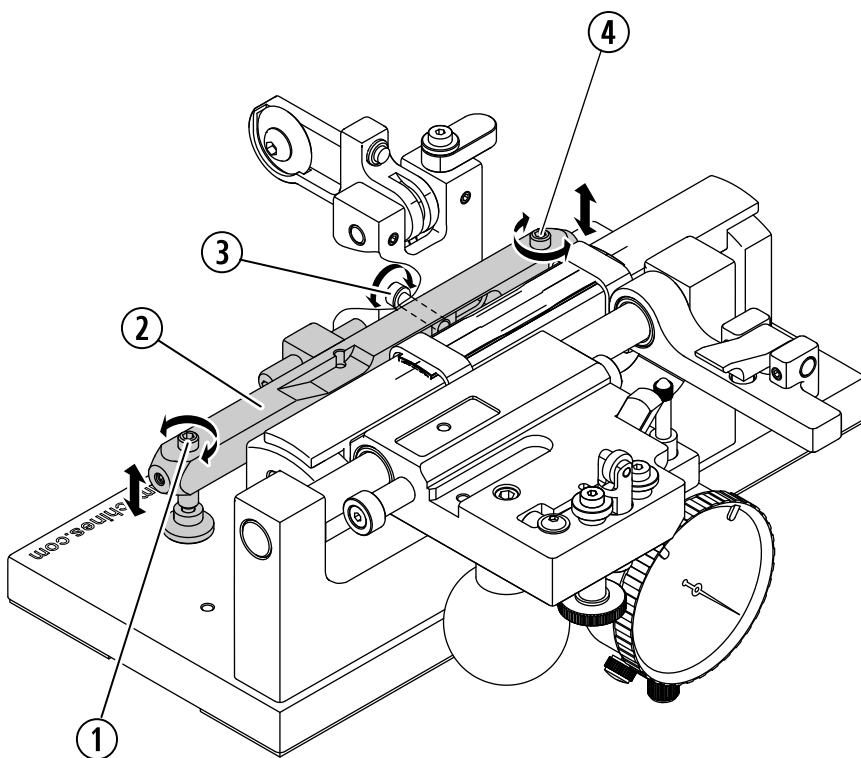
Turn stroke stop ④ clock wise to make the stroke bigger.

Turn stroke stop ④ counter clock wise to make the stroke smaller.

6.2

Adjust difference between tip and back thickness

The angle of the template set ② defines the difference between the tip thickness (end of the scrape) and the back thickness (begin of the scrape).



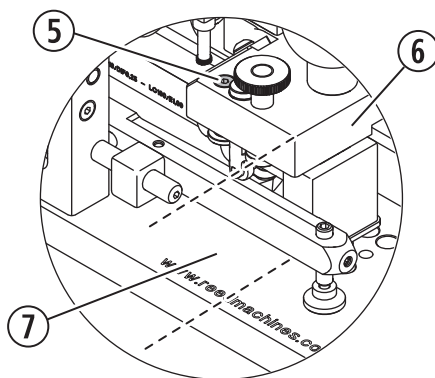


Note

When the top of the spindle ⑤ is equal to the top surface of the carriage set, the carriage set ⑥ must be parallel to the base plate ⑦.

If this is not the case, adjust the levelers ① and ④ of the template set:

- Turn the 2 levelers clockwise with the same amount to raise the template set and so the carriage set.
- Turn the 2 levelers counter clockwise with the same amount to lower the template set and so the carriage set.



Warning

Risk of injury. Be careful when the carriage set is turned outwards. The upwards facing knife is very sharp and can cause serious injuries. Always turn the carriage set inwards as soon as possible.

To adjust the difference between the tip thickness and the back thickness:

1. Install the dial indicator set, see [Install the dial indicator](#) (on page 28). The dial indicator pointer has to point to zero when the carriage set is moved completely to the center line end point.
2. Move the carriage set from one end point to the other end point of the stroke to read the difference from the dial indicator.
3. If necessary, untighten the clamp screw ③ to adjust the difference.
4. Hand tighten the clamp screw.

5. Adjust the difference with leveler ① and or ④.
-



Note

To increase the difference, turn leveler ① counter clockwise and/or leveler ④ clockwise.

To decrease the difference, turn leveler ① clockwise and/or leveler ④ counter clockwise.

Note

When a leveler is turned counter clockwise, be sure to push down the template set thru the clamping force of the hand tight clamp screw ③ so the leveler keeps contact with the base plate.

6. Move the carriage set from one end point to the other end point of the stroke to read the new difference from the dial indicator.
 7. Repeat step 5 and 6 until the desired difference is reached.
 8. Position the knife at the center line position.
 9. The indicator should indicate '0'.
 10. When the indicator shows a different value, turn the 2 levelers to the same direction with the same amount in order to move the pointer of the dial indicator to the zero position.
-

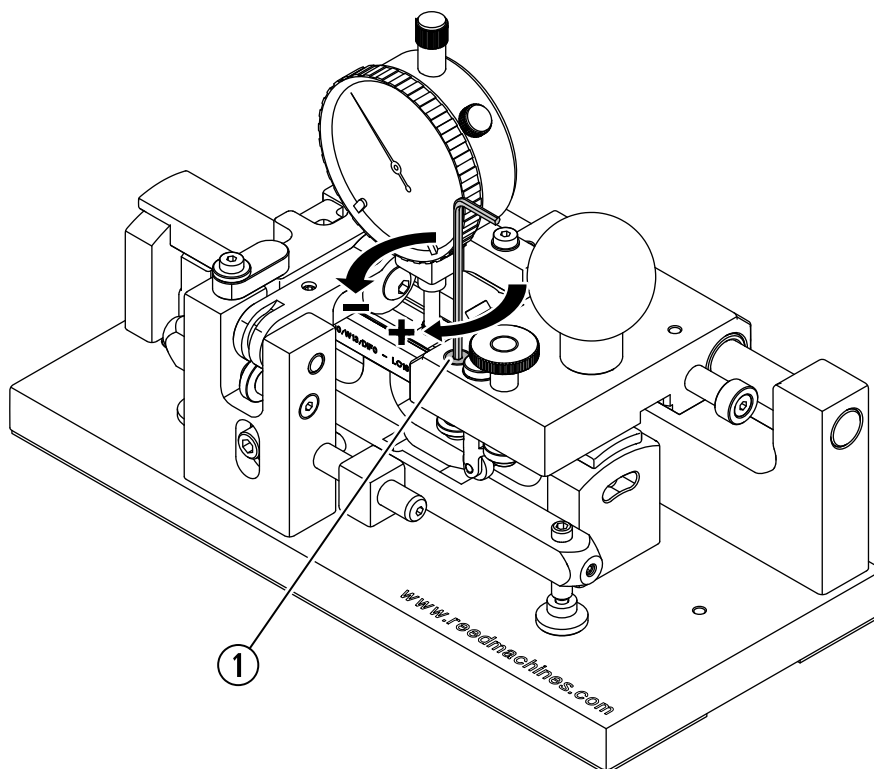


Note

With step 10 the tip thickness with the new difference is equal to the tip thickness with the old difference.

6.3

Adjust tip thickness



Note

When adjusting the tip thickness the carriage set has to be on the final depth position, see step 10 of Profile the reed.

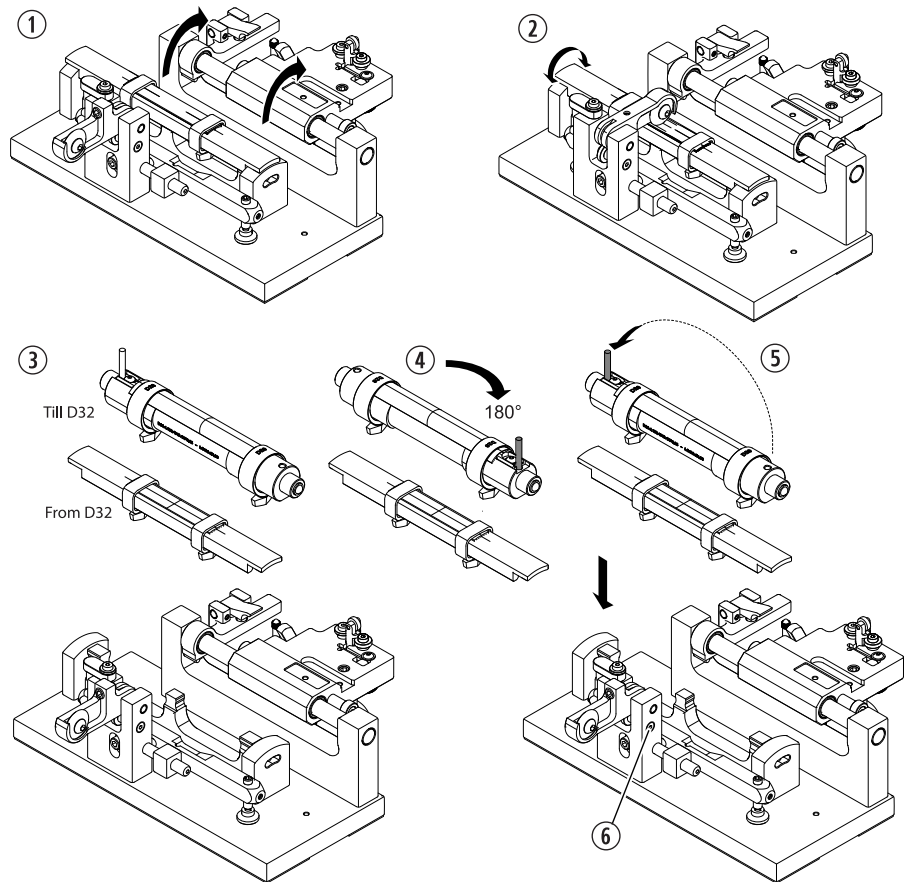
To adjust the tip thickness:

1. Position the dial indicator set, see [Install the dial indicator](#) (on page 28).
2. Turn spindle ① clockwise to make the tip thicker.
3. Turn spindle ① counter clockwise to make the tip thinner.

The amount that the thickness of the tip changes can be read from the dial indicator.

6.4

Adjust center line mark position



The center line is the line where the chips release from the reed during profiling and the line where the reed will be folded.

To adjust the position of the center line mark:

1. Turn the carriage set outwards ①.



Warning

Risk of injury. Be careful when the carriage set is turned outwards. The upwards facing knife is very sharp and can cause serious injuries. Always turn the carriage set inwards as soon as possible.

2. Push the knife of the center line marker onto the reed ②.
3. Make a first center line mark and mark it with a pencil.
4. Take out the cylinder set ③, turn and insert the cylinder set 180° ④, reposition the pin ⑤ and insert the cylinder set .
5. Make a second center line mark.



Note

The second center line mark should be on exactly the same position as the first center line mark.

6. If the two center mark lines are not on the same position, use the Allen key to adjust the center line marking set with spindle ⑥.



Note

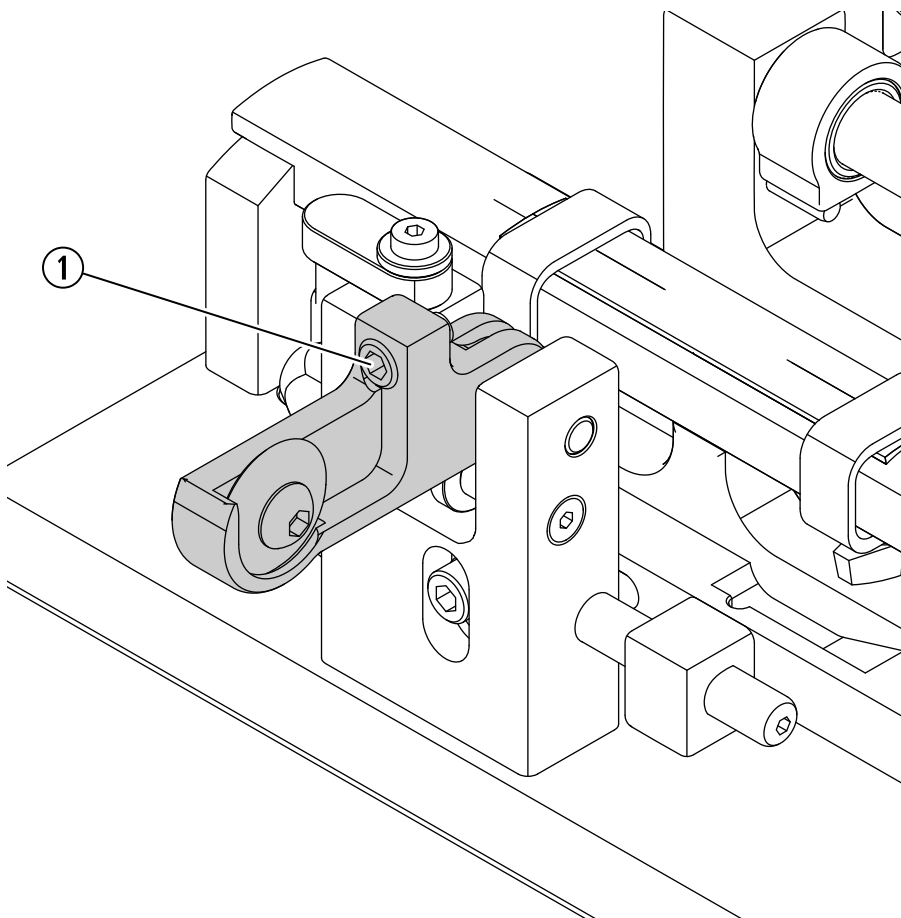
Turn spindle ⑥ clockwise to move the center line marking set to the left.

Turn spindle ⑥ counter clockwise to move the center line marking set to the right.

7. Repeat step 2 to 6 until the two center line marks are on the same position.
8. Turn the carriage set inwards.

6.5

Adjust depth of center line mark



Adjust depth of center line mark:

1. Turn the marking set of the center line outwards.
2. Use the supplied Allen key to adjust the depth of the back line mark with spindle ①.



Warning

Risk of injury. Be careful when the carriage set is turned outwards. The upwards facing knife is very sharp and can cause serious injuries. Always turn the carriage set inwards as soon as possible.



Caution

Take care with adjusting the depth of the center line mark to a deeper position because the marking knife can hit the cylinder which can result in damages of the marking knife and the cylinder.



Note

Turn spindle ① clockwise to make the center line mark less deep.
Turn spindle ① counter clockwise to make the center line mark more deep.



7

Operating instructions

7.1

Preparation

Before starting the profiling process:

1. Position the bagpipe profiler on a horizontal and non-slip surface.
2. Make sure that the cylinder supports are clean.

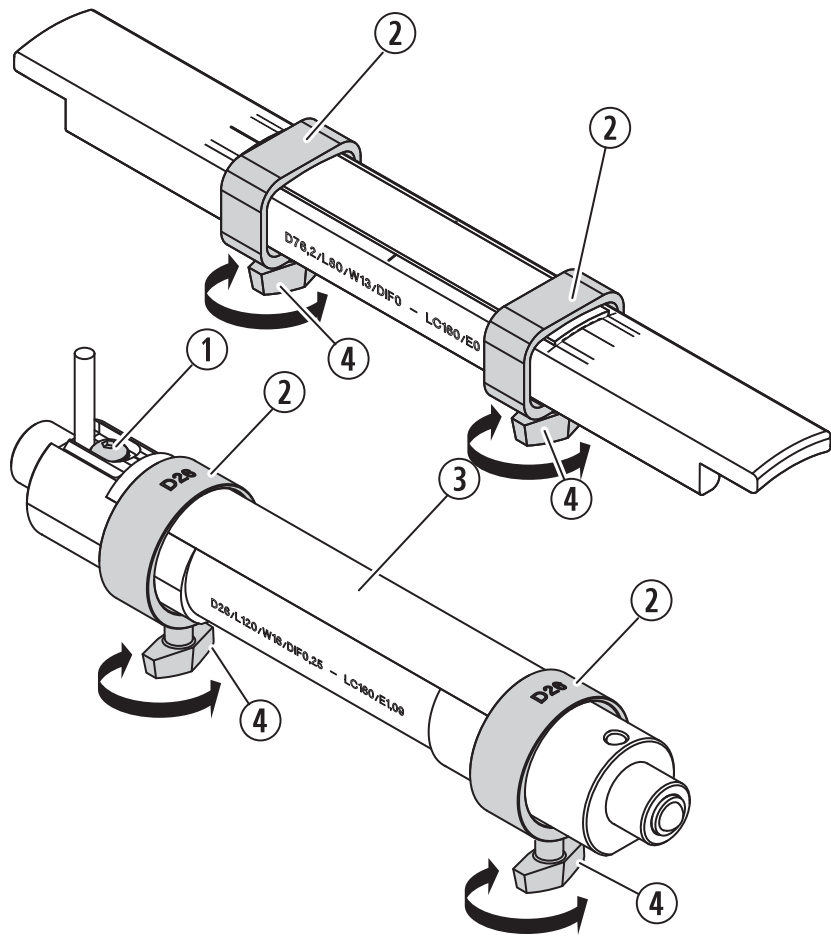


Note

Reeds do not need to be wet when they are profiled. If reeds are wet when they are profiled be sure to dry the knife before storing the profiler.

7.2

Position a reed



To position a reed, first prepare the profiler:

1. If needed, turn the center line marking set outwards.
2. If needed, turn the pusher set outwards.
3. Turn the depth step spindle clock wise to the position that the knife is above the reed when the carriage set is turned inwards.
4. Turn the carriage set outwards.



Warning

Be careful when the carriage set is turned outwards. The upwards facing knife is very sharp and can cause serious injuries. Always turn back the carriage set inwards as soon as possible.

5. Take the cylinder set out of the profiler.
6. Untighten the winged screws (4) of the reed clamps (2) and move the reed clamps outwards as far as possible.
 - Till D32 version only: Position the reed against the length stop (1) and symmetrical in relation to the width lines.

1. Hold the reed in this position by clamping the reed to the cylinder at the center line position.



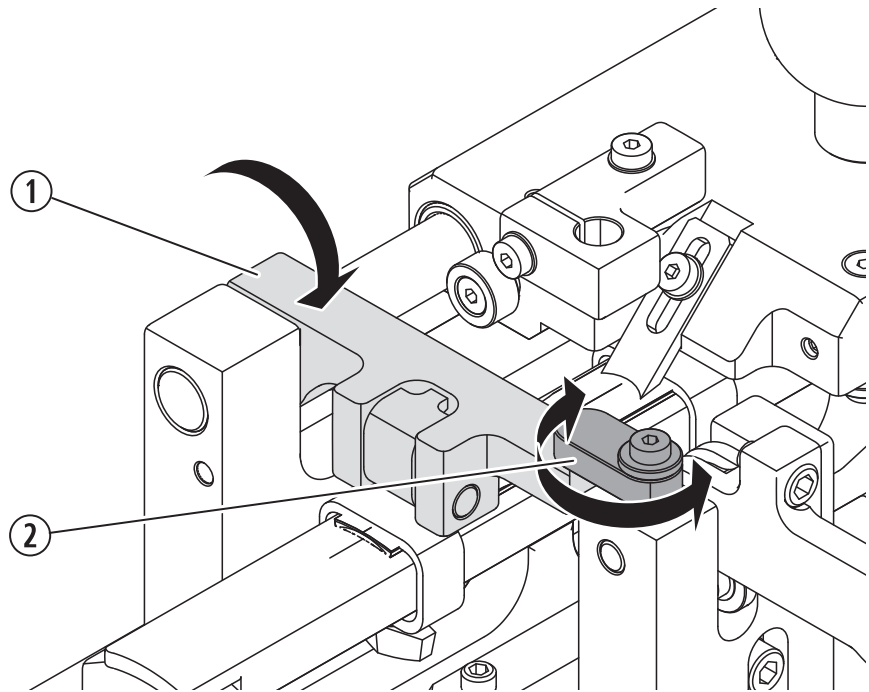
Note

The distance between the length stop and the center line of the cylinder should be half the length of the reed.

2. Move the reed clamps ② over the reed to the middle of the cylinder as far as possible and tighten the winged screws ④.
3. Position the cylinder set in the profiler.
4. Turn the carriage set inwards.

7.3

Use the reed pusher set



The following explanations assumes there is a cylinder set with reed in the profiler.

To close the reed pusher set:

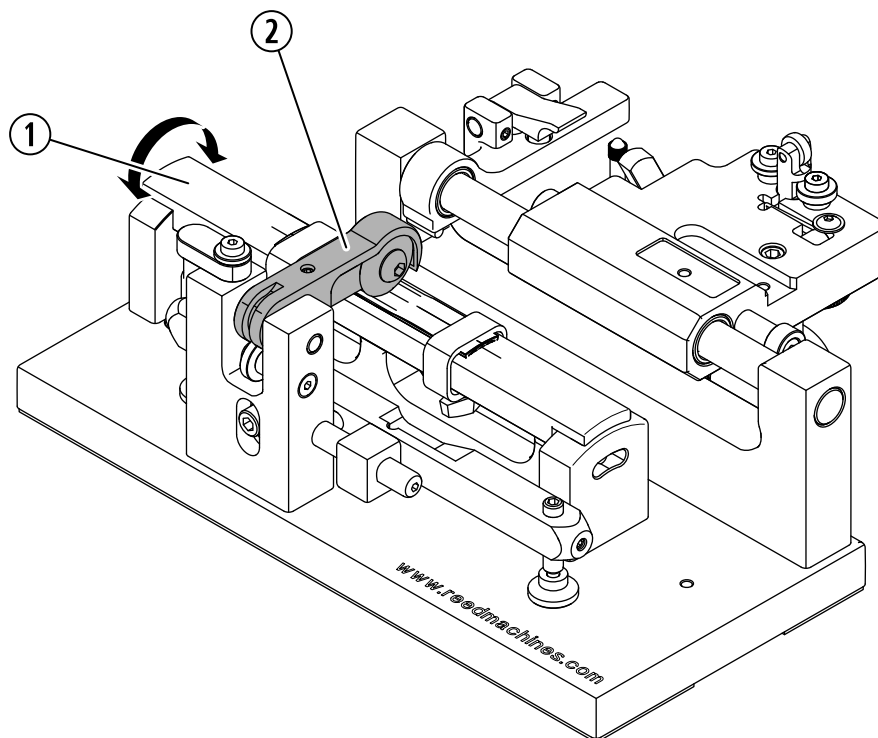
1. Turn the reed pusher set ① inwards.
2. Push the reed pusher set down against the pusher spring force.
3. Close the pusher set lock ② by turning it 90° clock wise.

To open the reed pusher set:

1. Push the reed pusher set down against the pusher spring force.
2. Open the pusher set lock by turning it 90° counter clock wise.
3. Turn the reed pusher set outwards.

7.4

Make center line mark



The following explanation assumes the profiler has a cylinder set and a reed that needs to be profiled.

Make a center line mark:

1. Turn the carriage set outwards.



Warning

Risk of injury. Be careful when the carriage set is turned outwards. The upwards facing knife is very sharp and can cause serious injuries. Always turn the carriage set inwards as soon as possible.

2. Turn the center line marking set ② inwards.
3. Rotate the cylinder set a few times while pressing on the center line marking set.
4. Turn the center line marking set outwards.
5. Turn the carriage set inwards.

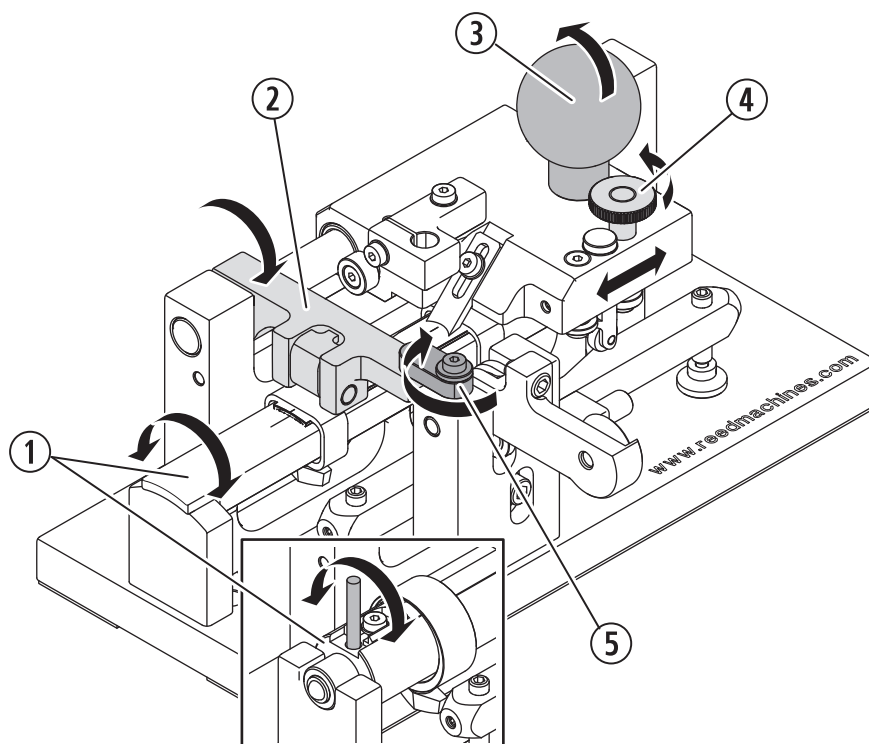


Note

The center line mark cannot be made to the final depth in one time. When a scraping sequence (see [Profile the reed](#) (on page 43)) is done, repeat the center line mark sequence.

7.5

Profile the reed



Profiling a reed consists of 2 well timed movements which need a certain rhythm. Mastering this technique can take some time.

The 2 profiling movements are:

- The scrape (length) movement which is controlled by the carriage set ①.
- The cross movement which is controlled by the cylinder set ①.



Note

The following explanation assumes there is a cylinder set with reed that needs to be profiled in the profiler.

Note

Before starting the profiling process be sure that the depth step spindle ④ is in the position that the knife is above the reed during the complete stroke.

To profile a reed:

1. If necessary and / or applicable, close the reed pusher set. See [Use the reed pusher set](#) (on page 41).
2. Hold the cylinder set and so the profiler with the left hand and align the middle of the reed with the middle of the knife (see drawing).

3. Move the carriage set and so the knife to the end point (center line) of the stroke and back to the start point of the stroke with the right hand (see drawing).



Note

If the stroke is not completely finished the scrape is not made completely to the tip of the reed

Note

If the knife did not take a chip from the reed lower the knife by turning the depth step spindle ④ counter clock wise for about ½ revolution (about 180°) and make a new stroke. Repeat this until the knife takes a chip from the reed.

4. Move the reed for about 1mm by rotating the cylinder set.



Note

Big movements result in a coarse profiled surface. In order to get a smooth profiled surface it is necessary to make small movements during the last scraping sequence.

5. Repeat step 3 and 4 until the complete profile is scraped.
6. If necessary, open the reed pusher set.
7. Turn the carriage set ③ outwards.



Warning

Be careful when the carriage set is turned outwards. The upwards facing knife is very sharp and can cause serious injuries. Always turn back the carriage set inwards as soon as possible.

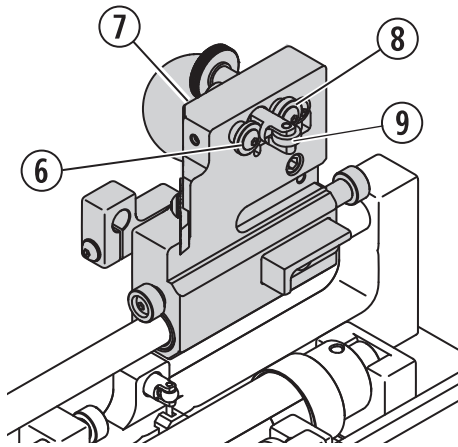
8. Take the cylinder set out of the profiler, turn it 180° and put it back in the profiler.
9. Turn the carriage set inwards.
10. If necessary, close the reed pusher set.
11. Repeat step 3 and 4 until the complete profile is scraped.
12. Lower the knife by turning the depth step spindle ④ counter clock wise for about ½ revolution (about 180°).



Note

Big depth steps result in high scraping forces with the risk to damage the reed. It will also result in a coarse profiled surface. In order to get a smooth profiled surface it is necessary to make a small depth step for the last scraping sequence.

13. Repeat step 3 to 12 until the complete profile is scraped to the final thickness. The final thickness is reached when curve wheel set ⑨ is resting on the steel disc ⑥ of spindle ⑦ and not on the plastic disc ⑧.





8 Maintenance

8.1 Cleaning

Remove chips frequently from the profiler during use. Use a brush or a soft cloth.

8.2 Storage

When the profiling process is finished:

- Remove chips from the profiler.
- Make the profiler dry.



9

Optional accessories

9.1

Optional accessories

- Digital dial indicator
The digital dial indicator fits in the same adaptor as the analog dial indicator. The digital dial indicator shows the measured value on a display.



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