



EndoCowboy®

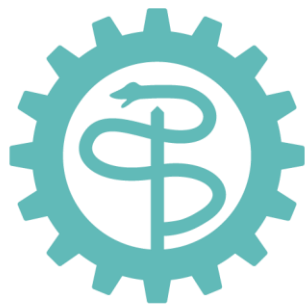
REF 15100

LassoTip

REF 15101 to 15103

Manual

English



KÖHRER
MEDICAL ENGINEERING

Dear dentist,

thank you for choosing the EndoCowboy® for separated file retrieval. EndoCowboy® is a device that enables the removal of separated instruments from root canals with the lasso technique. For more information, visit our website:

<http://endocowboy.com/>

Lasso the file ...

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1. Scope of application

Endodontic treatments. The EndoCowboy® is an endodontic instrument for removing broken root canal file segments from root canals. The separated instrument is removed by placing a wire loop (*Lasso-Tip additionally available*) projecting from a needle at the end of the EndoCowboy® around the fractured end of the file, after which the loop can be tightened around it, securing it around the file segment to be removed.

Any other use is prohibited and may cause endangerment.

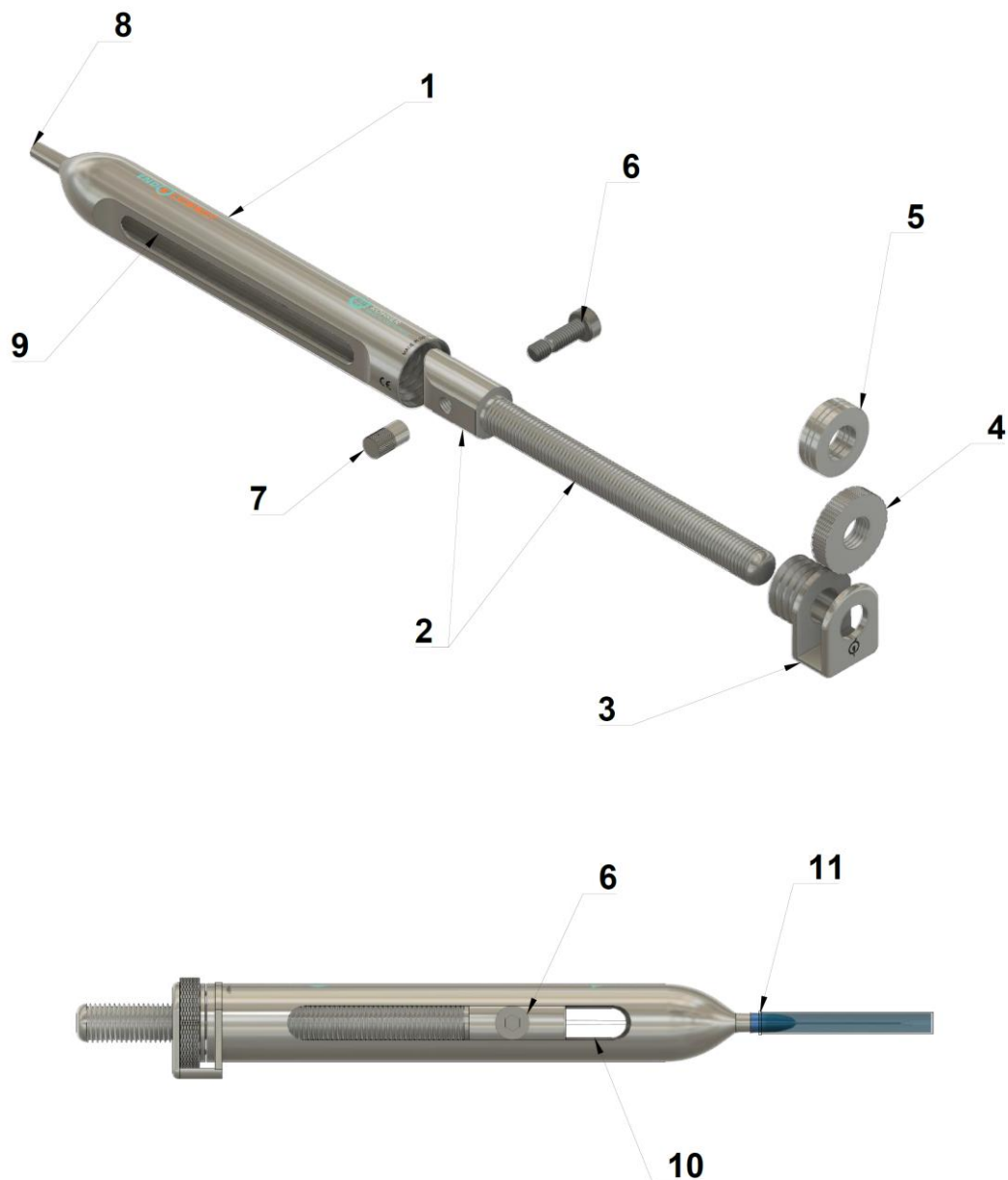
This medical device complies with EU Directive 93/42/EEC as amended by Directive 2007/47/EC and may only be used by trained and experienced dental professionals and for the applications described, taking into account the applicable accident prevention and health and safety regulations and the instructions for use. The cleaning and maintenance of this medical device may only be carried out by persons who have training in the handling of infectious diseases contaminated materials or parts.

2. General safety instructions

Before use, check that the instrument has not been damaged and that all components are present and correctly installed. No modifications to the instrument may be made without the express permission of the company.

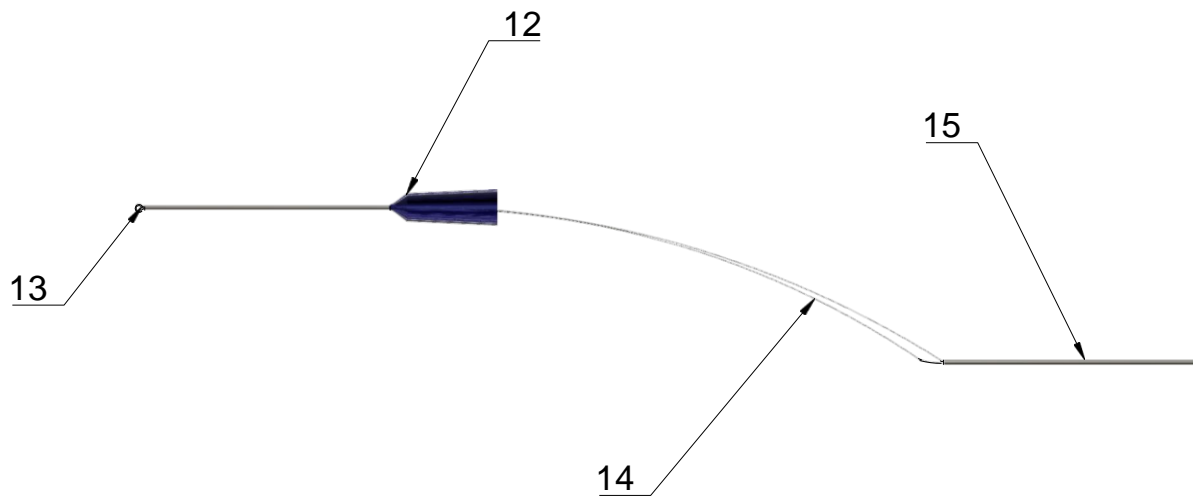
3. Construction of the EndoCowboy® and Lasso-Tip

EndoCowboy®



- | | |
|-----------------------------|-----------------------------------|
| 1. Body housing | 7. Fixing nut |
| 2. Threaded rod with slide | 8. Coupling for Lasso-Tip |
| 3. Adjusting wheel abutment | 9. Side access window with recess |
| 4. Adjusting wheel | 10. Lateral guide rail |
| 5. Axial ball bearing | 11. Lasso-Tip |
| 6. Guidance screw | |

Lasso-Tip



- 12. Needle
- 13. Lasso
- 14. Wire
- 15. Lasso-insertion aid

4. Assembly and disassembly of the EndoCowboy®

Caution: When unscrewing, all parts of the adjustment wheel mechanism come loose. The disassembly should be done on a secure surface to avoid damage to the components.

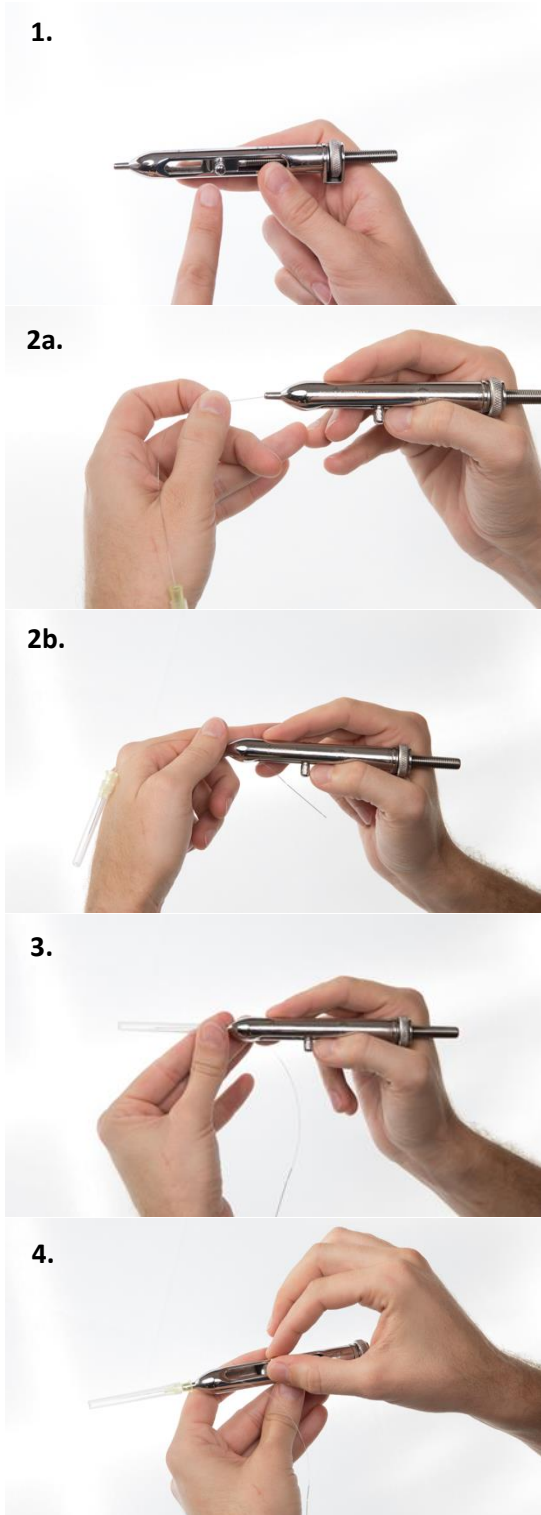
The EndoCowboy® can be completely disassembled if necessary. To disassemble the EndoCowboy®, the fixing nut (7) must first be unscrewed. The enclosed hex key can be used to remove the guidance screw (6). Then remove the adjusting wheel abutment (3) by unscrewing. After this, the threaded rod with slide (2) can be pulled out of the body housing (1). By unscrewing the threaded rod (2) from the adjusting wheel abutment (3) the adjusting wheel (4) and the axial ball bearing (5) are released.

When mounting, make sure that the guidance screw (6) is screwed in, on the side of the lateral guide rail (10). So that the guidance screw (6) lies in the lateral guide rail (10). This ensures that the fastening mechanism for the wire is easily accessible via the side access window with recess (9). Insert the axial ball bearing (5) into the recess of the adjusting wheel (4).

5. Assembly of the Lasso-Tip onto the EndoCowboy®

Videos for installation at: www.endocowboy.com/the-technique

The Lasso-Tip must be mounted before treatment.



1. For this purpose, it is recommended to move the threaded rod (2) with the adjusting wheel (4) to the middle position (middle of the side access window with recess (9)) to allow sufficient space for threading the insertion aid (15).

2. The insertion aid (15) is guided through the bore of the coupling (8) and received on the side of the access window with recess (9). This works best when the EndoCowboy® is held down with the side access window with recess (9). The threaded rod with slide (2) thus automatically guides the insertion aid (15) to the side access window with recess (9).

3. The wire (14) is then carefully pulled through and the needle hub (12) is pushed with some pressure on the coupling.

Caution: The wire (14) should not be pulled too hard so that the lasso (13) does not close before use.

4. The fixing nut (7) should only be loosened by about half a turn.



5. With light pull on the insertion aid (15), the wire (14) is to be threaded through the gap between the locking nut (7) and slide (2) and then to be wound about 90 ° around the lead screw (6).



6. Tighten the locking nut (7). The lasso-insertion aid (15) can be cut with a scissor.



7. Now the wire (14) can be tightened by turning the adjusting wheel (4) in a clockwise direction.

6. Setup of the EndoCowboy®

Setup videos at: www.endocowboy.com/the-technique



8. The needle (12) of the Lasso-Tip can be present as required to provide better access to the cavity of the tooth to be treated.



9. For the safe placement of the lasso (13) around the separated instrument, a bend of the lasso (13) by about 45 ° is recommended. This works best with the tip of a DG 16 endo explorer.

7. Usage of the EndoCowboy®

Videos for use at: www.endocowboy.com/the-technique

Prior to application of the EndoCowboy®, an access cavity to the separated instrument must be created, approximately ISO 70 (0.7 mm). The size of the access depends on the size and location of the separated instrument. After this, the head of the instrument should be exposed at least 1 mm with an ultrasonic or sonic preparation so that the lasso (13) can be placed around the fractured instrument.

Now the EndoCowboy® can be used. The EndoCowboy® should be held like a handpiece. The thumb comes to rest in the front area of the side access window with recess (9). After placing the lasso (13) around the separated instrument, the lasso must be closed by tensioning the wire (14). One of the unique characteristics of EndoCowboy® function is that the dental assistant, by turning the adjusting wheel (4) clockwise, is in charge of tensioning the lasso. This allows the doctor to fully concentrate on placing the lasso around the separated instrument. Due to the built-in ball bearing (5), the tension of the wire (14) can be adjusted very precisely with the adjusting wheel (4). In order to be able to exert enough tension on the separated instrument, the lasso (13) must be pulled tightly around the instrument. Too much tension of the lasso (13), however, must be avoided, since otherwise it can lead to tearing of the wire (14). We recommend practicing the procedure with the assistant before the first application on an extracted tooth or plastic block.

8. Hygiene and maintenance of the EndoCowboy®

8.1 Cleaning and disinfection

The EndoCowboy® is completely made out of stainless steel and can be prepared in accordance with all common cleaning and disinfection procedures in the dental practice. Please observe the applicable regulations or the national or regional legal regulations.

8.2 Care

After cleaning and disinfection, the moving parts – adjusting wheel (2), threaded rod (4) and axial ball bearing (5) should be oiled with a suitable instrument oil (e.g. medicinal white oils; vapor-stable; free of oxidation and residue). This ensures the long operability and precise adjustment of the adjusting wheel during the application.

8.3 Sterilization

The EndoCowboy® is autoclaveable. We strongly recommend the use of a class B autoclave (DIN EN 13060, 134 °C, 2.1 bar, at least 5 min). Only use sterile bags according to the standard NF EN 868, which are adapted to the EndoCowboy® and the autoclave. Observe the instructions of the autoclave manufacturer. Only sterilize instruments that have been disinfected, cleaned, oiled and tested. Ensure a clean and dry storage.

9. Lasso-Tip Hygiene

The Lasso-Tips are not delivered sterile. Before use, the batch must be sterilized. We strongly recommend the use of a class B autoclave (DIN EN 13060, 121 °C, 1.1 bar, at least 20.5 min, gentle program). Use only sterile bags, according to standard NF EN 868, adapted to the lugs and the autoclave. Observe the instructions of the autoclave manufacturer. Only sterilize instruments that have been disinfected, cleaned, oiled and tested. Ensure a clean and dry storage.



Lasso-Tips are for single use only and should be disposed after use!

10. Repairs

In the event of a malfunction, contact your local distributor or Köhrer Medical Engineering Customer Service. All repairs must be carried out with the manufacturer's approved spare parts and assemblies. For repairs, please send in the complete EndoCowboy®. Please enclose with your return a document that briefly describes the error that occurred and that contains the complete personal data of the user. In the case of warranty claims, please enclose a copy of the invoice or the delivery note.

Return to:

Köhrer Medical Engineering Service
Adolf-Flecken-Strasse 10
41460 Neuss
Germany
Phone: +49 2131 1511717
Mail: info@endocowboy.com

11. Accessoires

Lasso-Tips in different sizes:

Due to the different sizes of the Lasso-Tip (0.8 mm, 0.1 mm, 0.12 mm), the loop size can be adapted to the particular case treatment.

12. Warranty

We grant a warranty of 12 months from date of invoice on this medical device. Any modification or addition to the product without the express permission of Köhrer Medical Engineering will void the warranty. Failure to observe the supplied technical instructions will invalidate the warranty. Köhrer Medical Engineering accepts no liability for damage or consequential damage resulting from normal wear and tear, improper use, cleaning or maintenance, failure to comply with regulations regarding use or commissioning, calcification or corrosion, unusual or inconsistent with the user manual and other instructions of the manufacturer applications.

13. Safety and liability

It is the responsibility of the user to check the products prior to use to ensure that they are suited for the intended purpose. In case of contributory negligence by the user, Köhrer Medical Engineering

GmbH partially or totally declines liability for all resulting damages, particularly if these are due to non-observance of our recommendations for use or warning as well as inadvertent misuse by the user.

Store products out of children's reach.

For dental use only.

Please announce special occurrences and malfunctions to Koehrer Medical Engineering GmbH.

14. Disposal

The relevant statutory provisions regarding the disposal of medical waste apply.