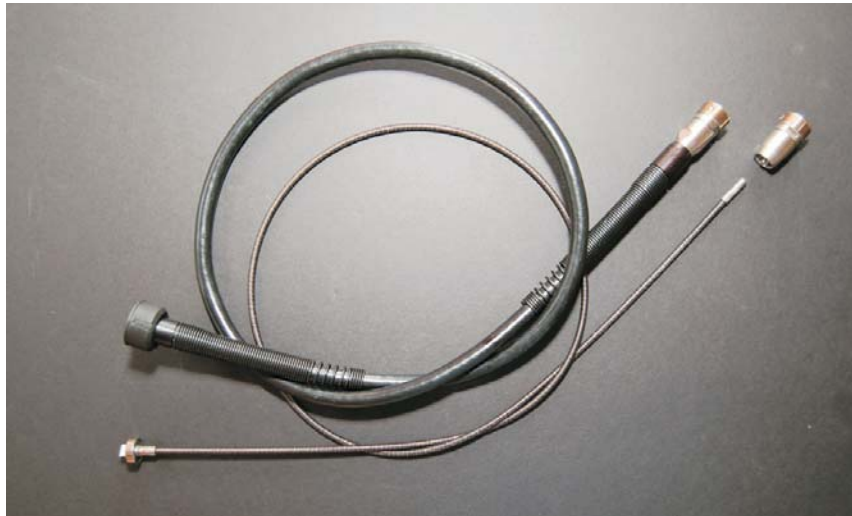


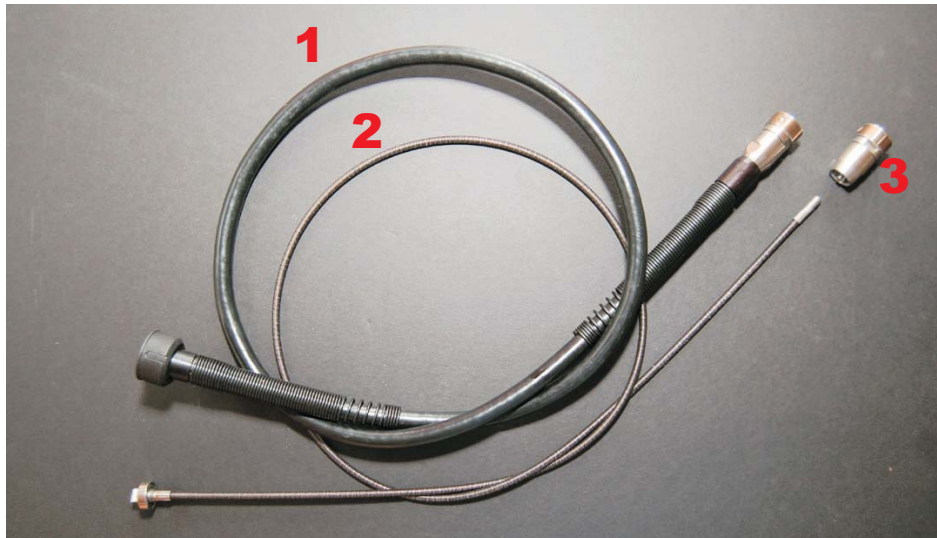


Instruction manual for HDE reinforced flexshaft: cable replacement procedure





1. Equipment



This manual describes the procedure for changing the cable (2) of the flexshaft (1) of the HDE dentistry system.

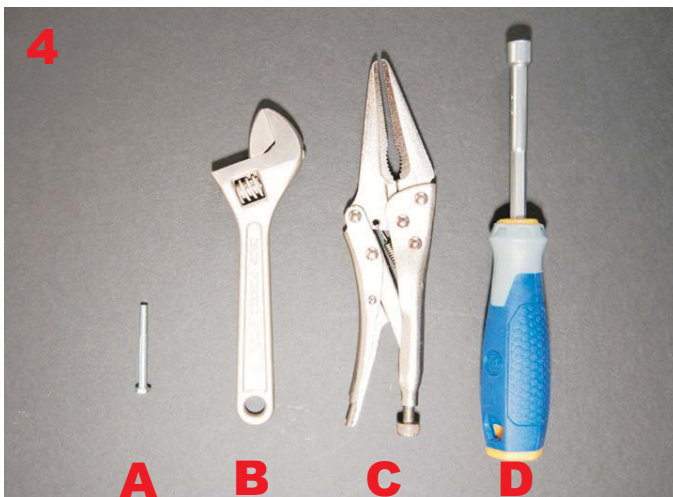
The quick release adapter (3) for the hand pieces usually does not need to be replaced and it is not included in the replacement cord kit. There is a bearing inside the quick release adapter. Call if you need a replacement quick release adapter #3.

Don't hesitate to contact us if you have any difficulties with the changing procedure. (877) 794 7735



← motor

hand piece →



The following equipment is needed:

- A. 4mm x 40mm metric screw
- B. 6" adjustable wrench
- C. 6" long nose locking pliers
- D. 5/16" nut driver

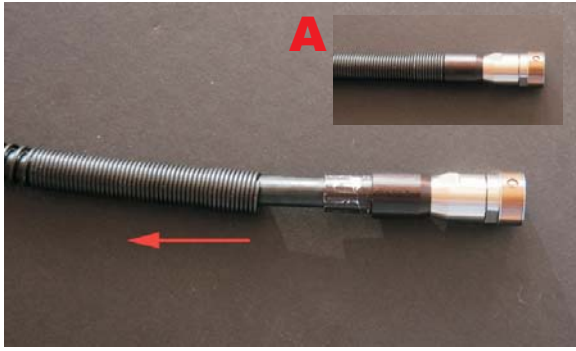
The long nose locking pliers #C are part of the regular HDE dentistry set and not included in the maintenance set for the flex shaft.

Picture #5 describes the use of the pliers #C. The pliers have a quick adjust screw (arrow) to adjust the opening of the jaws, and they lock when closed. The quick release lever (double arrows) is used to release the locked jaws.

The pliers have a dual function. They are used to change or replace the shear pins in the quick release adapter #3 as shown in picture #6. In this manual they are used additionally to change the cable of the flex shaft.



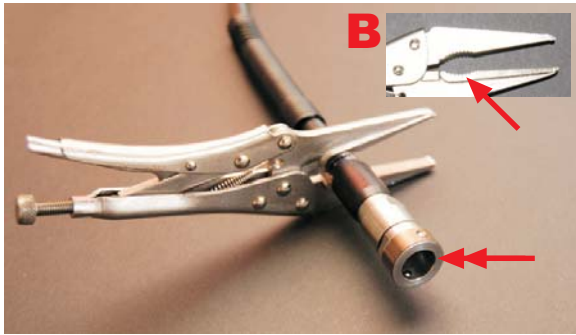
2. Changing procedure



1 Getting ready

It is recommended to use a clean large working area (4x6' or larger) for the changing procedure. The procedure can be done alone, but a helper will make some steps of the procedure much easier.

Start by pulling the spring protection back over the flex shaft (arrow). This can be done without the use of any tools. The small picture A shows the starting position.



2 Grasping the black metal sleeve of the flex shaft

In order to unscrew the quick release adapter (double arrow) the black metal sleeve needs to be held in place using the pliers.

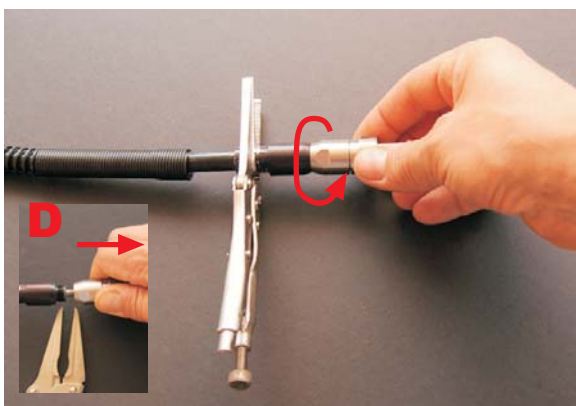
Use the rounded area of the jaws (arrow in small picture B) to hold the sleeve. Adjust the opening of the jaw appropriately and lock the jaws. Make sure the pliers have a tight and good grip of the sleeve.



3 Unscrew the quick release adapter

Use the adjustable wrench to unscrew the quick release adapter. Open the wrench as shown in the small picture C to have a tight fit on the adapter.

Secure the pliers (holding the black sleeve) with one hand and unscrew the adapter with the wrench with the other hand. Un-screw in the regular counter-clock way.

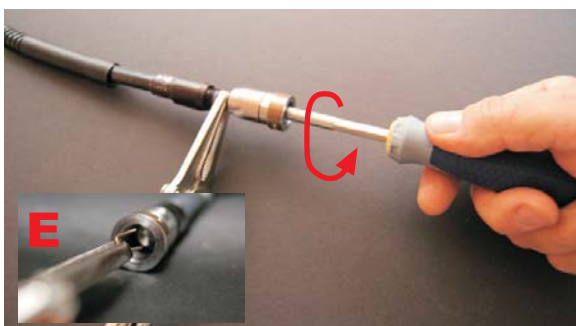


4 Unscrew the quick release adapter (cont)

Completely unscrew the adapter with your hands.

If the cable is broken in two pieces, the adapter will come off.

If the cable is intact, it will prevent the adapter from coming off. In this case you can pull the adapter away from the flex shaft (see small picture D) and create a space between adapter and the black metal sleeve, allowing the pliers to hold the cable (see next step)



5 Unscrew the quick release adapter (cont)

Use the 5/16" nut driver to unscrew the central screw inside the quick release adapter. Make sure there is no shear pin inside the adapter (see small picture E) or the nut driver will not be able to hold the central screw.

The central screw of the quick release adapter is screwed into the end part of the flex shaft cable. To unscrew the adapter, it is necessary to hold the cable with the pliers very tightly.

Now the quick release adapter will come off the flex shaft. Put it aside, it will be used again. If the adapter is damaged, call for a replacement part, as it is not included with the replacement cord.

Replace the cord

At this point the old cord can be removed and the new cord is inserted into the flex shaft.

Apply a moderate amount of the grease along the new cord before inserting. The grease is supplied with the cable.

Insert new cable into flex shaft

Make sure the new cable is completely inserted into the flex shaft. This is done best with the cord in a straight position and not curled up. The bearing should partially be inserted into the metal sleeve at the motor side of the flex shaft (arrow).

On the other side of the flex shaft (A) the other end of the cable should become visible with the threaded hole near the opening of the black metal sleeve (see small picture A)

Quick release adapter attachment

Insert the 4mm screw into the threaded hole of the cable and tighten by hand as shown in the picture.

Quick release adapter attachment (cont)

Pull the new cord out of the metal sleeve with the help of the adjustable wrench in an almost closed position around the non-threaded portion of the screw, locking onto the head of the screw.

The end of the cable should stick out enough to secure it with the locking pliers and still have about 1/8" free space (double arrow) to screw on the quick release adapter.

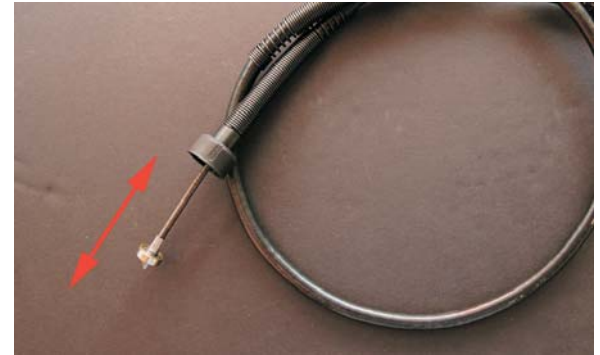
This step is done best with the help of a second person to hold the flex shaft.

Quick release adapter attachment (cont)

Use the 5/16" nut driver to screw on the quick release adapter onto the cable.

Hold the locking pliers with one hand and tighten the central screw of the quick release adapter with the help of the nut driver with the other hand (small picture C).

1



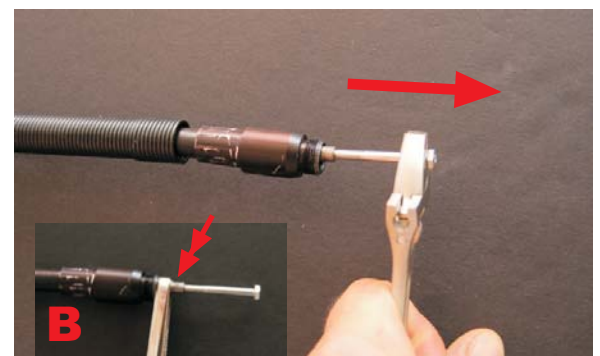
2



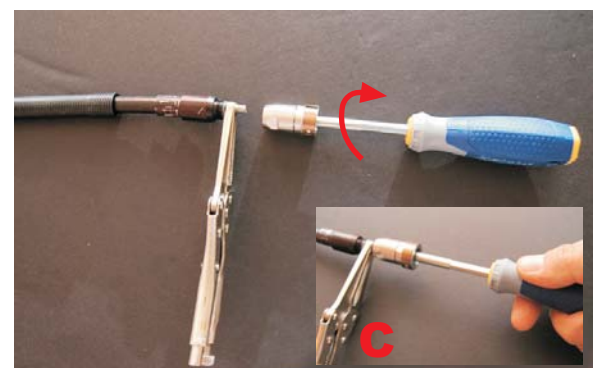
3



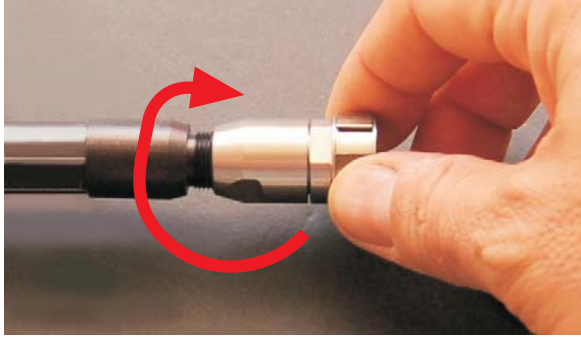
4



5



Changing procedure continue

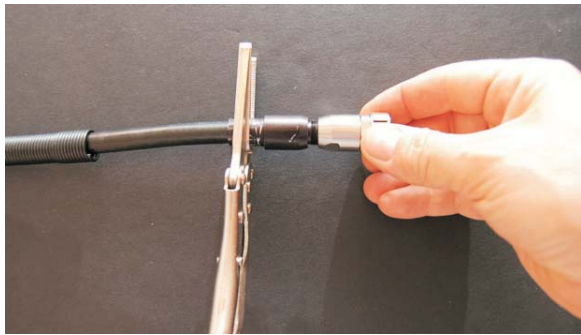


1

Quick release adapter attachment (cont)

Release all the tools. Remove the locking pliers carefully and avoid damaging the thread of the black metal sleeve.

Screw the quick release adapter onto the black metal sleeve by hand as shown on the picture.



2

Quick release adapter attachment (cont)

Use the locking pliers to hold and secure the black metal sleeve. Apply the pliers in the same way as before when removing the quick release adapter.

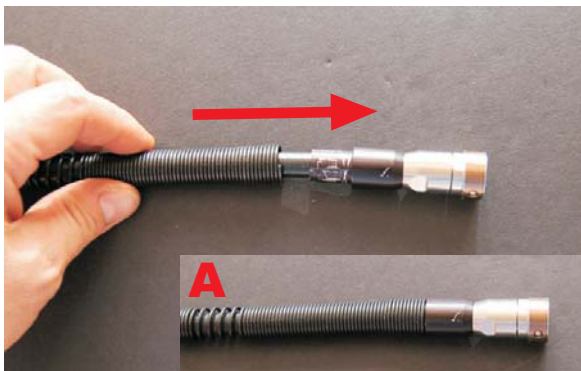


3

Quick release adapter attachment (cont)

Tighten the quick release adapter using the adjustable wrench as shown in the picture.

Make sure the locking pliers are tightly secured and don't slip and scratch the metal sleeve.



4

Finishing steps

Reposition the spring protection by hand over the black metal sleeve as shown in the small picture A.

Rotating the protection might help performing this step.



5

Finishing steps

Insert a new shear pin into the two holes of the quick release adapter - and continue your dentistry work.

Please don't hesitate to call for assistance if you have any questions. Doing so before you actually have to replace a cable might be advised.

Swissvet Veterinary Products - 877 794 7735 toll free US/Canada, or 865 540 8899