

Universal Extraction Set for Intramedullary Nail Systems



Features.

1. Expeditious and safe extraction of all types of conventional intramedullary nails
2. No pre-operative identification of the implanted type of intramedullary nail
3. Easy positioning and tightening
4. Significant reduction of intraoperative extraction time
5. Including several handles, allen wrench, cardan joint and mallet
6. Functional and convenient storage in a specially designed and fully autoclavable container system



For a number of reasons it is often not possible to remove implanted pins without problems:

The corresponding removal device with the original threaded rod must be available to match the relevant pin, since each type of pin differs in diameter and thread pitch in the projection used.

This means that it is first necessary to determine the type of pin had that been implanted in the case of patients who had been treated in other clinics, and the corresponding instrument must be obtained. This often requires a great deal of time and expense.

When removing the pin using the original instrument, it is necessary to show precisely where the pin entered, in other words, all the bony and soft tissue that blocks the path to the projection on the pin or is over the threaded part must be removed,

When the threaded rod is screwed into the projection in the pin, the instrument must be applied precisely in the axis of the pin so that the thread can “start”. This is regularly made more difficult by soft parts, such as at the proximal femur, or as a result of the position of the patella at the tibia.

If the threaded rod is skewed when it is screwed into the pin, it is possible in extreme cases for the removal of the pin to fail completely.

Last but not least, there are a number of different sizes of Allen keys that are used for the locking bolt.

The universal removal device introduced here is suitable for removing all types of pins quickly and with certainty, and thus guarantees trouble-free extraction.

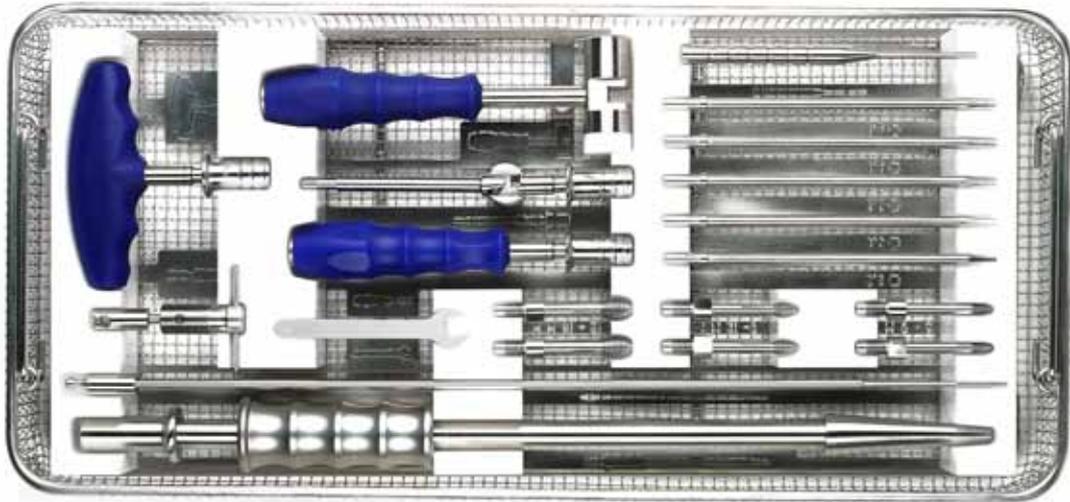
The instrument consists of a tube with a sliding hammer and a sliding rod that passes into the tube by means of a fine thread. A tip projection that has been selected to match the diameter of the pin locator is spread apart in the same way as a dowel by the conical tip of the sliding rod. The tension of the sliding rod is maintained by a spring set in the rear part.

The tensioning range of the tip projections means that just three sizes are enough to grip all types of pins that are used. Note that the size of the tip should be selected such that it fits into the hole in the pin with as little play as possible. This produces the most stable possible combination of extractor and pin.

In addition, the instrument has a straight and a jointed handle for a set of long Allen key bits in steps of 0.5 mm from 2.5 to 5.5 mm. The bits are suitable for removing screws with the corresponding Allen nuts. The top of the bits converge slightly at the tip to make it easier to engage the bit into the Allen nut of the locking part and to clamp it, and to allow it to be removed with difficulty.

The instrument is suitable for reliably removing all type of pins with short times in the operating room and without any special preparation.





The extraction set includes following items:

1 pcs	CONTAINER	53-48-55-0000
1 pcs	STERILISATION TRAY	54-09-55-0000-30
1 pcs	EXTRAKTOR	30-09-55-1800
2 pcs	ADAPTER FOR NAIL EXTRACTOR GR1 von 6-9mm	30-09-55-1800-11
2 pcs	ADAPTER FOR NAIL EXTRACTOR GR 2 von 9-12mm	30-09-55-1800-12
2 pcs	ADAPTER FOR NAIL EXTRACTOR GR 3 von 12-15mm	30-09-55-1800-13
1 pcs	WRENCH	30-06-10-1806
1 pcs	DRIVER HEXAGONAL SW 2,5	30-06-25-1803
1 pcs	DRIVER HEXAGONAL SW 3,0	30-06-30-1803
1 pcs	DRIVER HEXAGONAL SW 3,5	30-06-35-1803
1 pcs	DRIVER HEXAGONAL SW 4,0	30-06-40-1803
1 pcs	DRIVER HEXAGONAL SW 4,5	30-06-45-1803
1 pcs	HEMOSAT	30-05-15-1800
1 pcs	QUICK COUPLING T-HANDLE	30-06-10-1805
1 pcs	QUICK COUPLING HANDLE	30-06-18-1800
1 pcs	UNIVERSAL QUICK COUPLING CARDAN JOINT LONG FOR T-HANDLE AND HANDLE	30-06-17-1808
1 pcs	MALLET	30-01-19-1801



QUICK COUPLING T-HANDLE
30-06-10-1805



QUICK COUPLING HANDLE
30-06-18-1800



UNIVERSAL QUICK COUPLING LONG CARDAN JOINT
30-06-17-1808



MALLET
30-01-19-1801



DRIVER HEXAGONAL SW 2,5	30-06-25-1803
DRIVER HEXAGONAL SW 3,0	30-06-30-1803
DRIVER HEXAGONAL SW 3,5	30-06-35-1803
DRIVER HEXAGONAL SW4,0	30-06-40-1803
DRIVER HEXAGONAL SW 4,5	30-06-45-1803



HEMOSAT
30-05-15-1800



ADAPTER FOR NAIL EXTRACTOR GR 1 von 6-9 mm
30-09-55-1800-11



ADAPTER FOR NAIL EXTRACTOR 2 von 9-12 mm
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ADAPTER FOR NAIL EXTRACTOR GR 3 von 12-15 mm
30-09-55-1800-13



WRENCH
30-06-10-1806



SPARE STEEL DISCS
30-01-19-1801-03



SPARE NYLON DISCS
30-01-19-1801-04