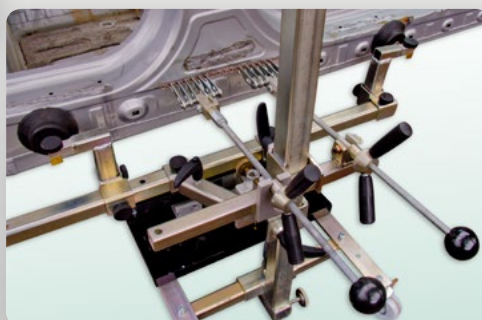
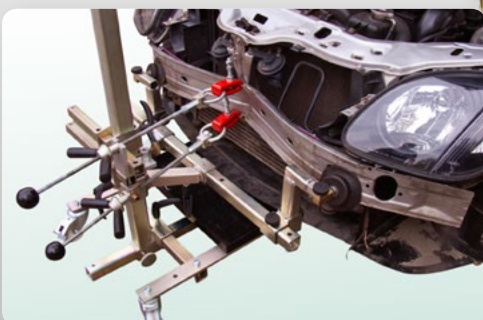


SmartPuller

DENT PULLING SYSTEM



www.smartpuller.com

+ Technology
from FINLAND

**BODY REPAIR
TOOLS**

Dent Puller on Castor Wheels

Autorobot Finland has developed a new dent pulling system called SmartPuller. The new innovation makes the straightening of vehicle panels and box structures faster and more economical. SmartPuller is easy and quick to use and it enables the dent pulling of almost any area throughout the car body in all needed directions.

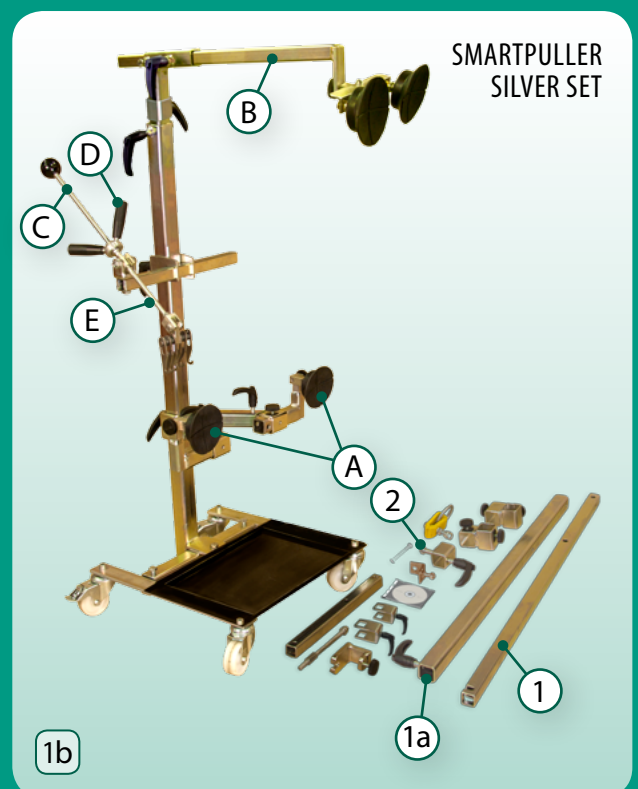
Quick dent pulling of various parts

An easy use of the equipment has been achieved with the movable stand with the wheels and the adjustable rubber pads. Both rubber pads can be set to the strong areas of the body which allows the best support for each area to be straightened. Compact structure of SmartPuller enables easy use. All equipment needed for support and dent pulling can be adjusted to correct height, where they stay without holding. Autorobot SmartPuller needs a resistance welder for fixing the washers or welding wire to the area to be pulled.

The specialty of SmartPuller is its ability to pull dents almost all over the body in all needed directions.

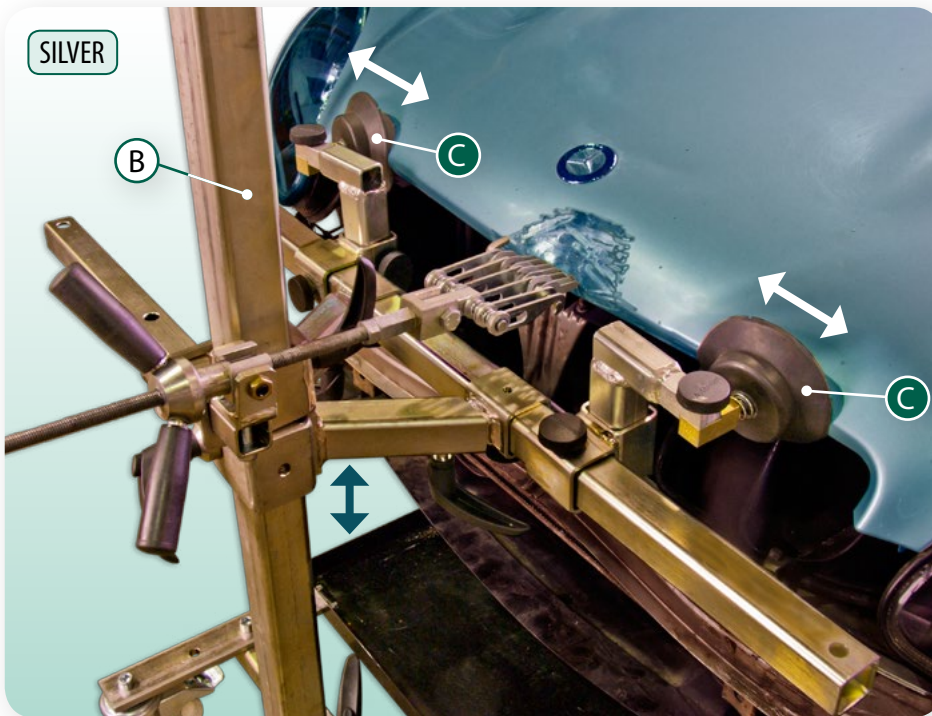
Great efficiency at dent pulling

According to the information from the insurance companies, approximately 80 % of all damages are surface panel ones. The surface damage often appears on the box structures which cannot be pulled from inside of the car. An exterior straightening with the use of SmartPuller means remarkable saving to working time because the doors and other body structures will not need to be disassembled and reassembled. The advantages of SmartPuller can be best noticed in the repair of the large dents on the welded sides of the car and the roof. This is why SmartPuller is one of the most important equipment in the modern body shops.



The Figure 1 and 1b. The lower rubber pads (A) of SmartPuller have been adjusted to the proper width and height, after which it has been pushed to the strong point near the area to be pulled. The straightening support (B) has also been set to the roof structure of the car in the height and width direction. After this, the pulling screw (C) has been adjusted to the place that is to be pulled. The actual pulling is done with the crank handle (D). A grapple such as welding wire for pulling, pulling gripper or adhesive cup holder can be attached to the holder on the end of the screw (E), based on the kind of target area to be pulled.

Dent Pulling of Vehicle Front



Accessories

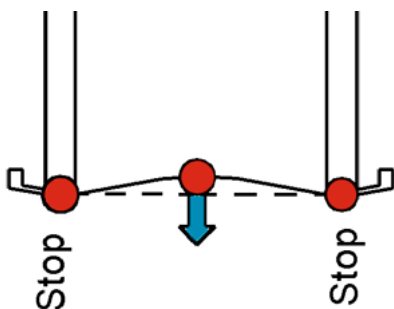


A-11+1

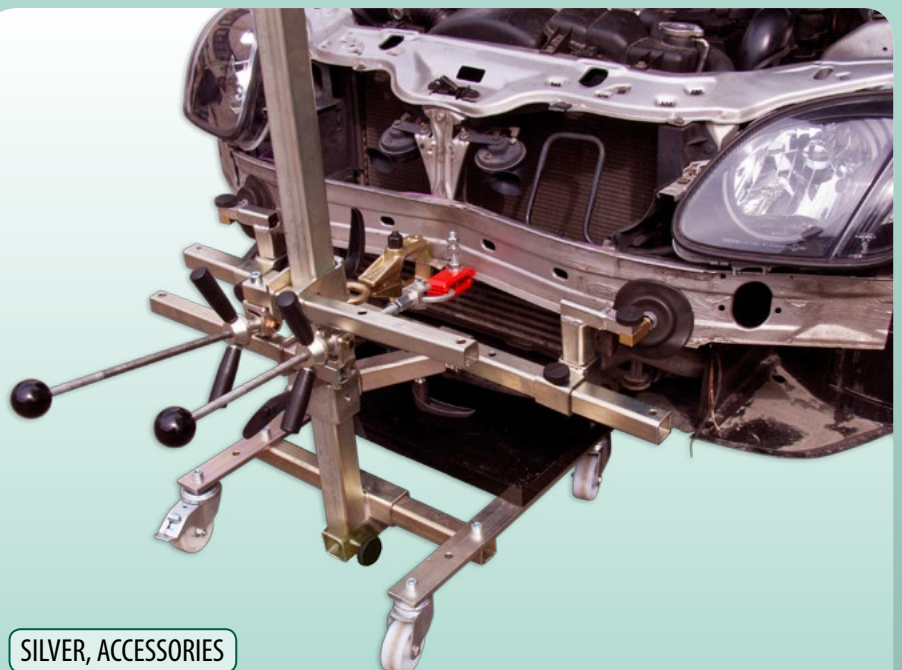


H28

Rubber pads (C) equipped with adjustment and located in the vertical beam (B) of SmartPuller enable fast straightening support. This allows various dent pulling jobs without the need to mount the vehicle onto the collision repair system.



The possibility for double pull enables wider usage area of SmartPuller for even more demanding dent pulling jobs. In the picture you can see in use a second pulling screw set including gripper (available as accessory).

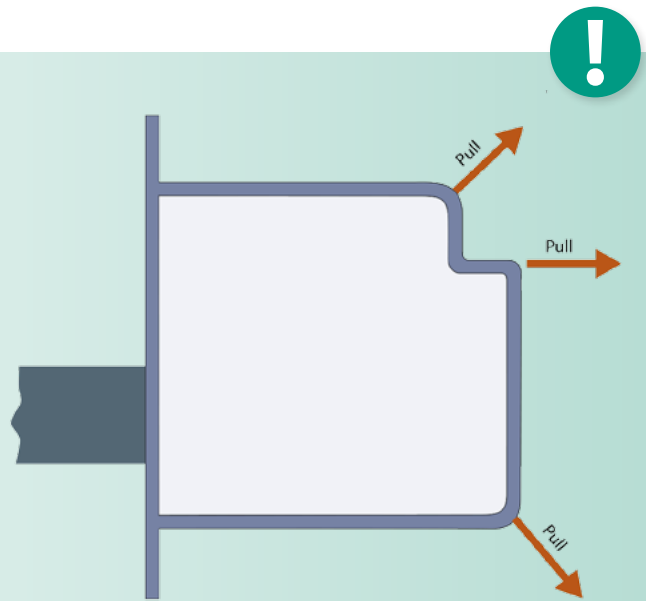


SILVER, ACCESSORIES

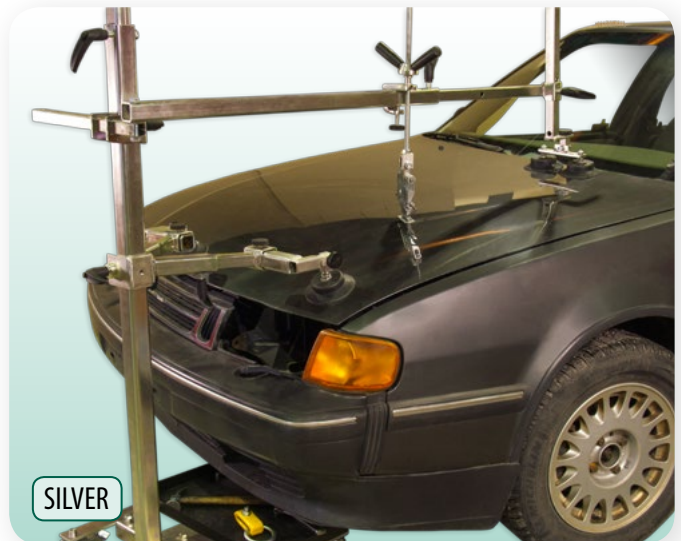
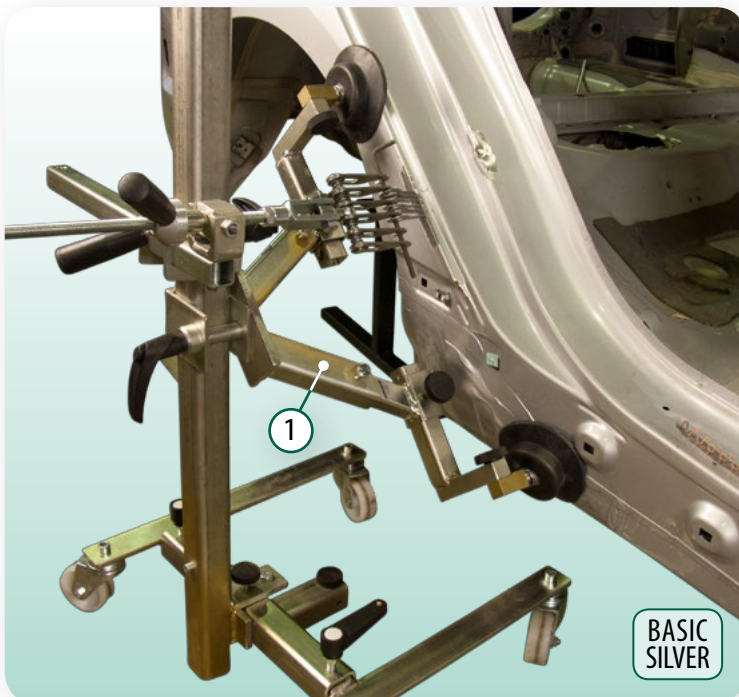
Dent Pulling of Box Structures

Unbeatable variety of pulling angles

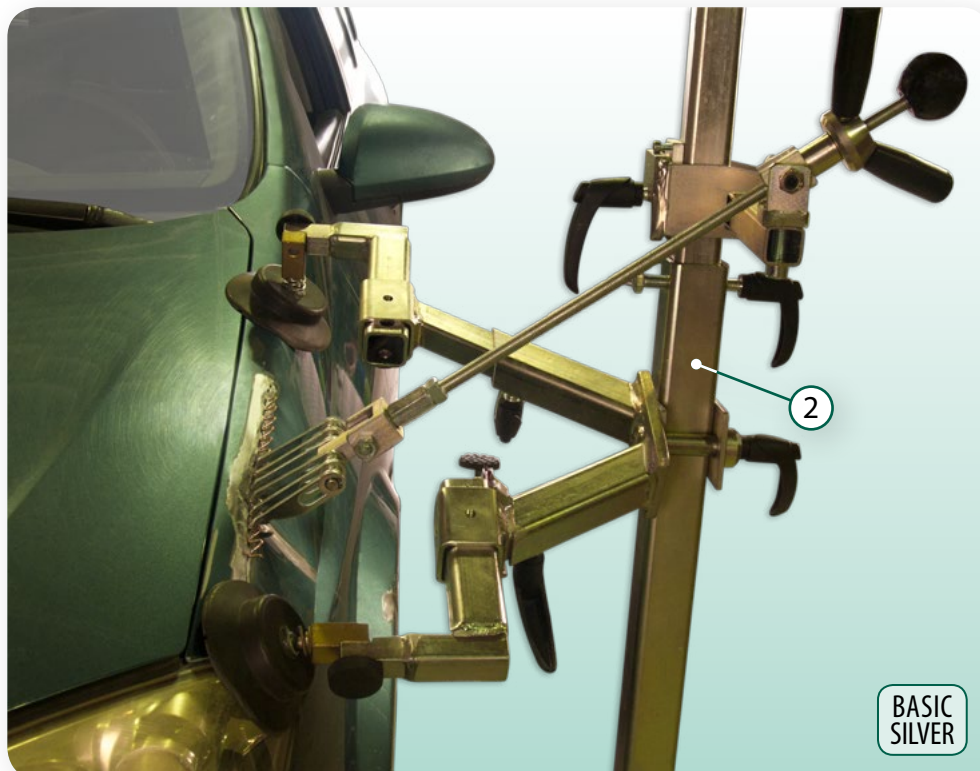
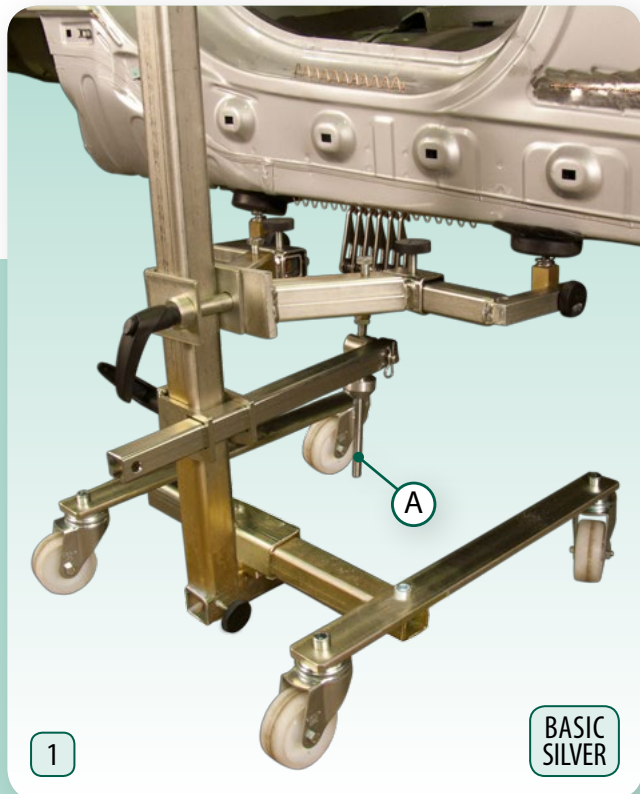
SmartPuller technology enables e.g. dent pulling of box structures to all needed directions. The structure of adjustable rubber pads allow them to take a shape that will not damage the supporting area. For more demanding dent pulling it is possible to use two pulling screws. For the targets that have little pulling space only, a short pulling screw (A) can be used (see picture 1).



Dent Pulling



The straightening support (1) of SmartPuller is placed on the strong body area to achieve the best possible dent pulling result. Dent pulling direction can be freely chosen.



The straightening support is easily adjustable in the vertical beam (2) as well as adjusting the straightening rubber pads downwards, which allows straightening pull to the right direction. Choosing stepless pulling line speeds up the straightening.



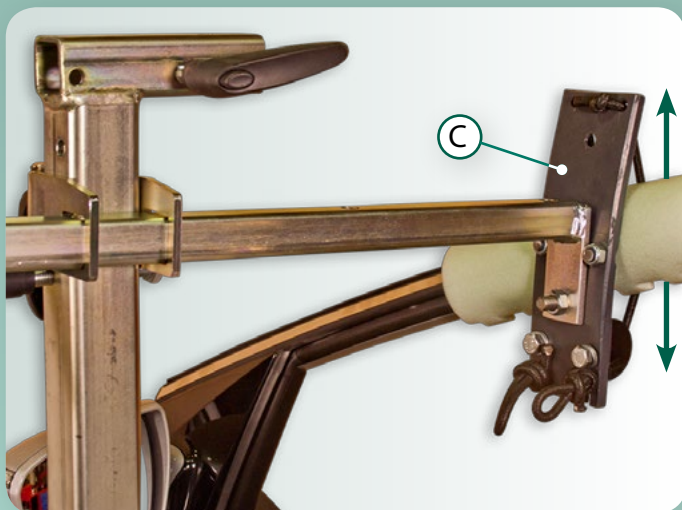
Additional set for door handling



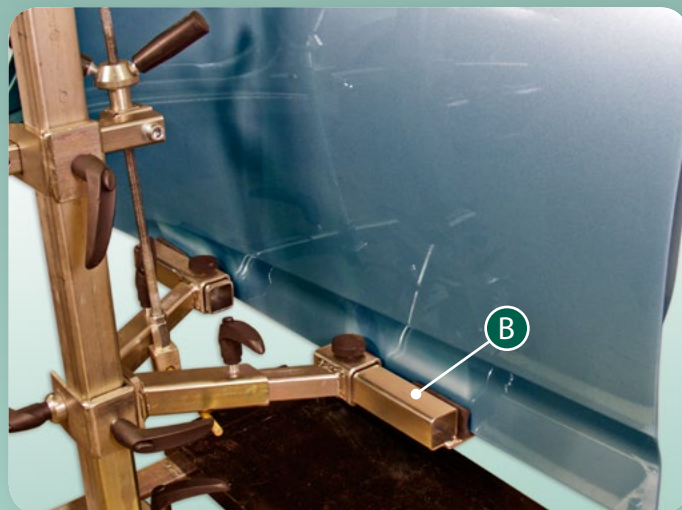
A-14+11-14



Additional set of SmartPuller makes handling of doors very easy, e.g. when changing doors. Placing the door is easy when you can adjust the door height with screw (A).



The picture shows how in the upper holder (C) the frame of the door can be raised or lowered in padded holder when adjusting the height.



The lower holder (B) of the door is equipped with padding, thanks to which the set works well also with painted doors.

SmartPuller Accessories

Equipment

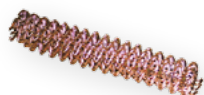
A-14+2A (1701391)



A-14-400



A-13-20



WB-11



A-14-3

A-14+2A Dent puller set includes:

A-14-400	Spotter PRO 400 incl. Puller max. 3800A
A-13-20	Electrode
WB-11	Filler wire, wavy, 50 pcs, for 7 pull hooks
A-14-3	Panel Puller

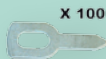
Optional



876424
RingMatic incl. 50 pcs
straight pit



876428
Contact clamp

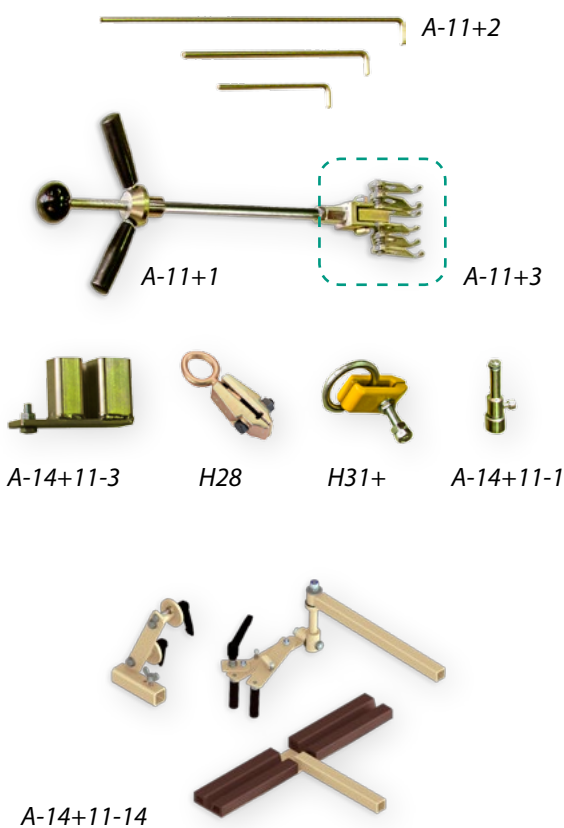


HSK-814
Pull plate (100pcs) PIT
straight pit



876429
Air gun adapter for gun

A-14+11-4 (207155)

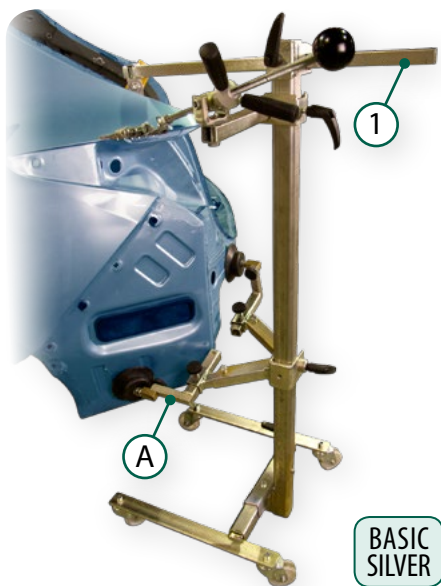
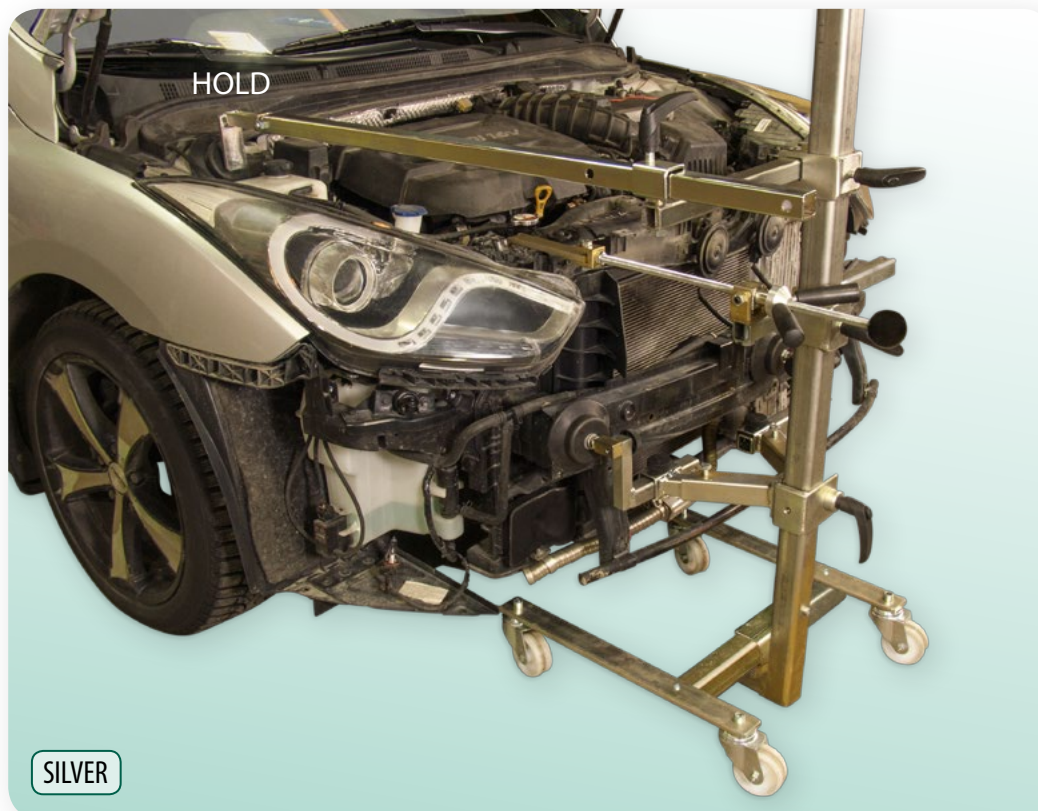


A-14+11-4 SmartPuller accessories set includes:

A-11+2	Pulling hook set
A-11+1	Pulling screw for double pull
A-14+11-3	Beam holder
H28	Gripper, 5 tons
H31+	Gripper + pulling ringe
A-14+11-1	Fastening set McPherson (incl. fastening arm + cup)
A-14+11-14	Door handling set

SmartPuller

DENT PULLING SYSTEM



The figure shows the dent pulling of the rear edge of a car. This is possible because the straightening support (A) can also be turned, which makes it possible to set the rubber pads to a supporting part of the car. Furthermore the additional beam (1) is needed here and a pulling gripper is attached to the end of the beam; the gripper is attached to the edge of the frame of the car's right-hand rear door. After this, even a difficult pull like the one in the picture is possible.

For the targets needing stronger pulling power, two pulling screws can be used. The force of two pulling screws is over 1000 kg, which often is sufficient for the targets shown in the pictures. The second pulling screw must be ordered as accessory.



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