

# Autorobot® B20



**Technology  
from FINLAND**

# Autorobot® B20

Next generation straightening bench provides new techniques for today's high technology vehicles

## Benefits of B20

### ◆ Quicker ◆ Smarter ◆ Stronger

- ◆ Super fast vehicle mounting with patented chassis fasteners. Chassis fasteners can be moved hydraulically, following to the length of the vehicle
- ◆ New instant support fastening for small damage (for cars without pinch weld).
- ◆ Efficient, versatile working possibilities with the new generation pull tower (quick straightening with combination of hydraulic push/pull).
- ◆ Equal pull force of 10 ton up and down of the whole height of the pull tower. Handles reinforced structures easily.
- ◆ Hydraulically extending straightening bed (optimal length for short and long vehicles).
- ◆ High lift eases up straightening work (ideal height for all working phases).
- ◆ B20 sets are suitable for cars, vans and SUVs
- ◆ Mechanic or electronic 3D measuring system available for chassis and body.



The picture shows B20 Gold set and Starblock fasteners as well as chassis fasteners for Pick up and mechanical/electronic measuring



The picture shows B20 Gold set and Starblock fasteners as well as chassis fasteners for MB



The picture shows B20 Gold set and mechanical/electronic measuring system

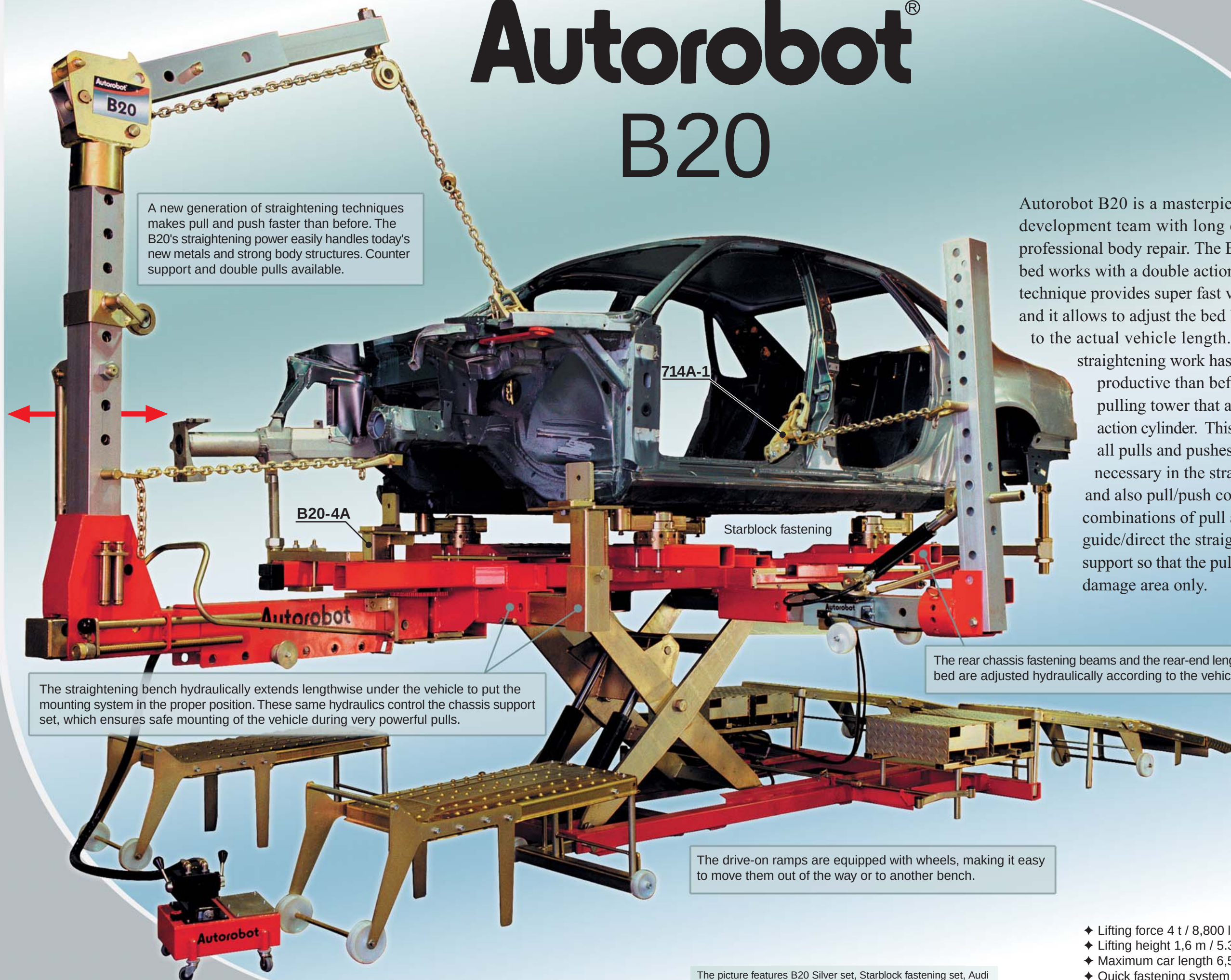
Pat.pend.

# Autorobot® B20

A new generation of straightening techniques makes pull and push faster than before. The B20's straightening power easily handles today's new metals and strong body structures. Counter support and double pulls available.

Autorobot B20 is a masterpiece from a development team with long experience in professional body repair. The B20 straightening bed works with a double action cylinder. This technique provides super fast vehicle mounting and it allows to adjust the bed length following to the actual vehicle length. With B20 the

straightening work has been made more productive than before with the new pulling tower that also has a double action cylinder. This technique allows all pulls and pushes which become necessary in the straightening work, and also pull/push combinations. The combinations of pull and push help to guide/direct the straightening and support so that the pull force affects the damage area only.



The straightening bench hydraulically extends lengthwise under the vehicle to put the mounting system in the proper position. These same hydraulics control the chassis support set, which ensures safe mounting of the vehicle during very powerful pulls.

The rear chassis fastening beams and the rear-end length of the straightening bed are adjusted hydraulically according to the vehicle length.

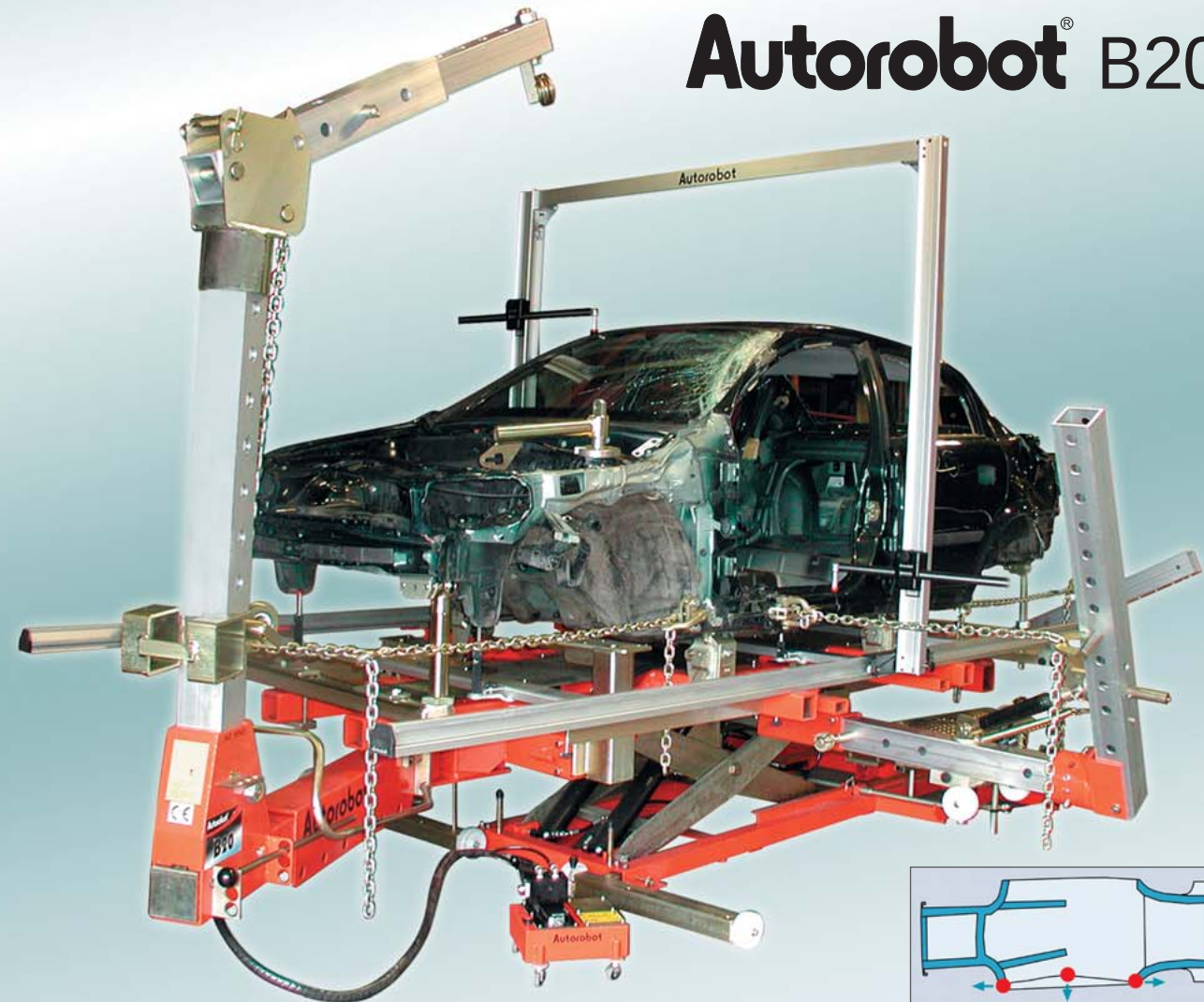
Pat. pend.

The drive-on ramps are equipped with wheels, making it easy to move them out of the way or to another bench.

The picture features B20 Silver set, Starblock fastening set, Audi fasteners, B20-4 chassis support set and 714A-1 double gripper.

- ◆ Lifting force 4 t / 8,800 lb
- ◆ Lifting height 1,6 m / 5.3 ft
- ◆ Maximum car length 6,5 m / 21 ft
- ◆ Quick fastening system minimizes mounting time for vehicles needing minor repairs

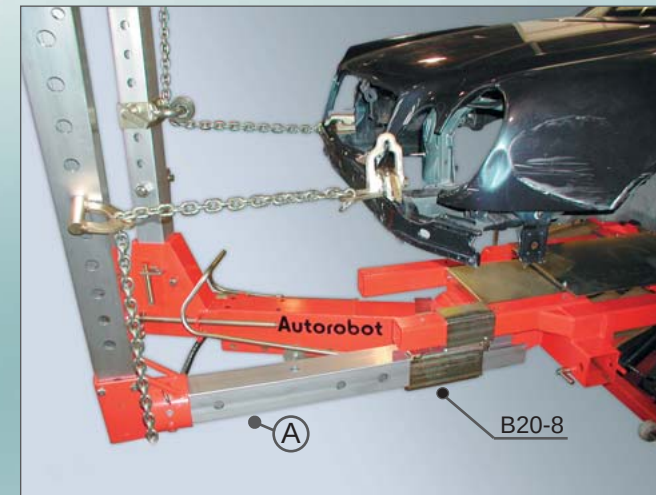
# Autorobot® B20



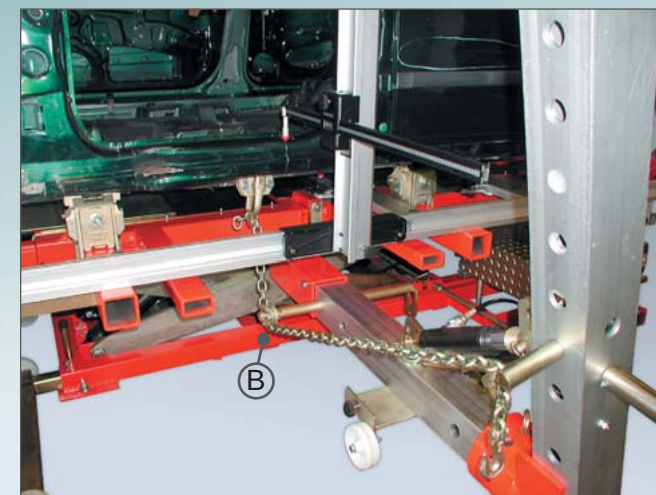
The straightening technique of the B20 can't be compared with anything else available on the market. The machine handles both the easy and the demanding tasks with a speed you haven't seen before. A few examples of this:

|                                                                                          |                        |
|------------------------------------------------------------------------------------------|------------------------|
| Change horizontal pulling angle for the pull/push tower                                  | 45° ~4 s<br>180° ~10 s |
| Assemble horizontal beam to straighten vehicle side structures, for example the B-pillar | ~ 5 s                  |
| Move chain to upper wheel for an upward pull (bed in lowest position)                    | ~ 20 s                 |

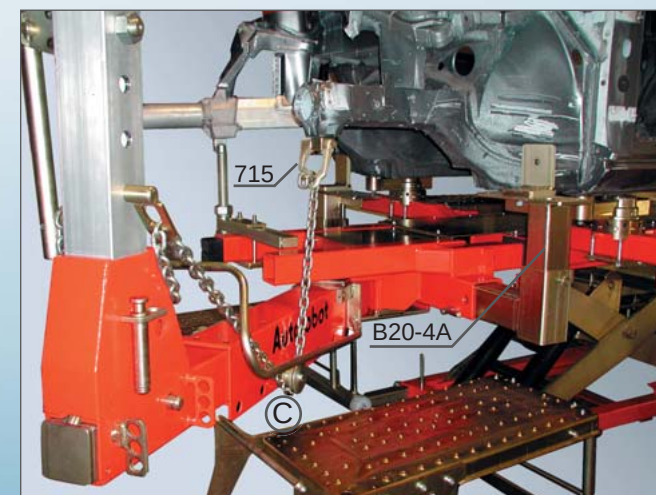
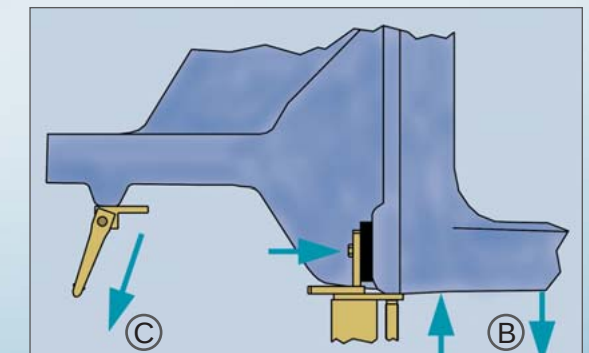
The support arm B assembled in the pull/push tower in the picture can for example provide support above the wheel suspension during the straightening work. The actual pulling of the front frame is done by using a pulling wheel in the beam C installed in the tower A.



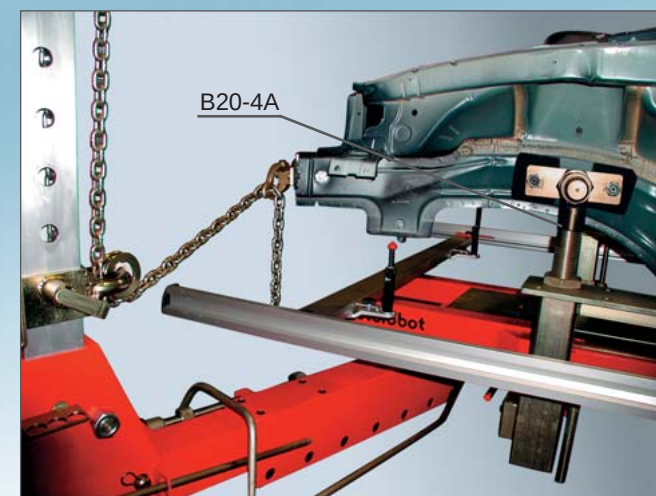
With the B20 Gold set a 2-point pull at the vehicle front or rear end can be effected by using the pull/push tower of the B20 together with the tower A installed in the straightening unit with the help of an adapter (No. B20-8). The tower A pull movement comes from the hydraulics of the straightening unit. Alternatively, it is possible to use an additional tower No. B20-6 instead of the tower A. The additional tower incorporates hydraulics.



Picture features a downwards pull of rocker panel by using a downward pulling wheel and an axle which can be moved in the car's lengthwise direction.



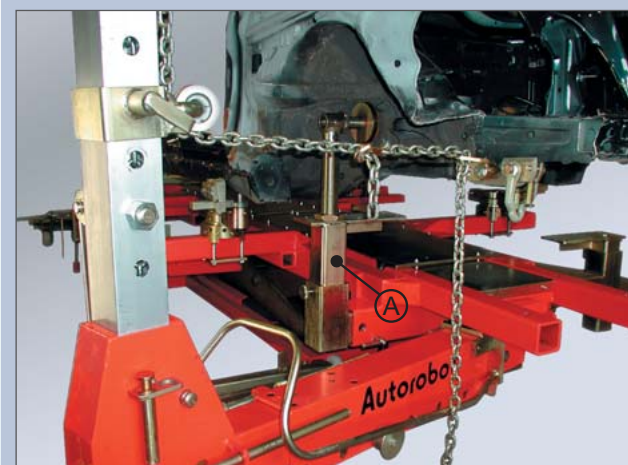
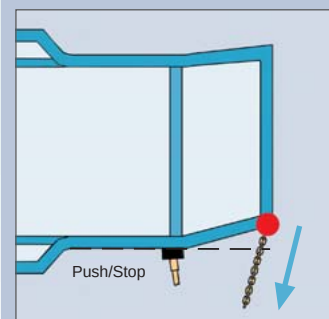
With the help of the straightening unit's (picture) hydraulics the support beam B20-4A has been moved to support target under the car's frame structure. Then the downwards pull is effected with the straightening fastener for multiple pulling angles N:o 715, which is installed to the car frame with a screw.



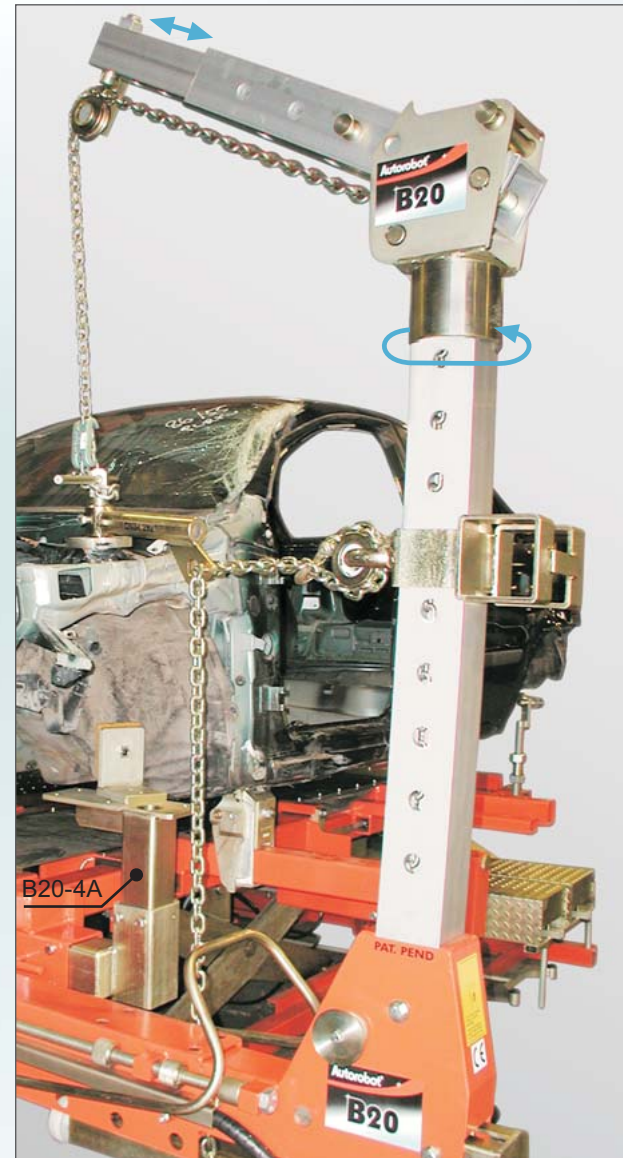
The straightening work gets easier when you use the chassis support (jig) set No. B20-4A and a mechanic or electronic measuring device, which shows how the straightening is progressing.

# Autorobot® B20

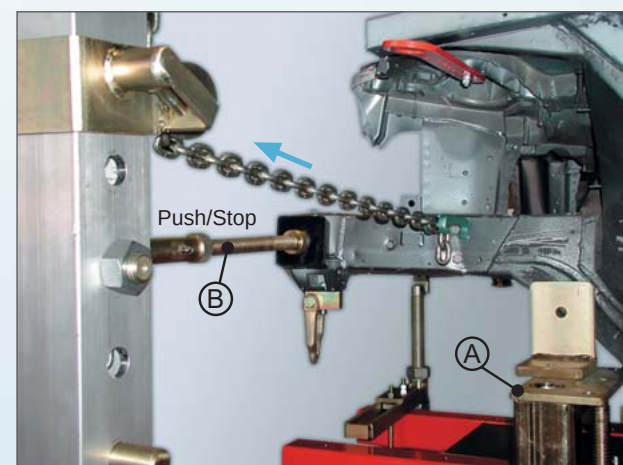
Autorobot's research and testing team has developed a new, faster technique for straightening the vehicle chassis and body. With the new push/pull technique hydraulic support is targeted to the area where the damage starts and this helps to get the vehicle straightened better. The support prevents the pulling force from effecting the undamaged area and mounting points. The new technique makes it possible to use quick lock fastening for speedy repairs of minor damage. The biggest advantage of the new push/pull method is the capability to repair the new, stronger body materials.



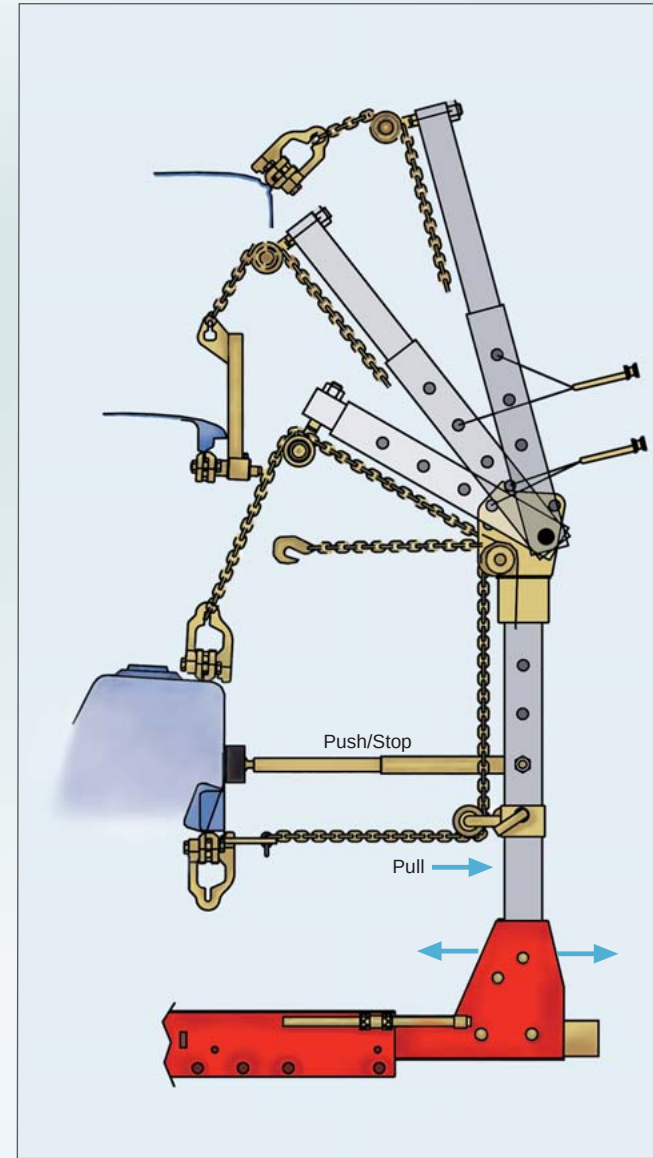
One of the special features of B20 is the hydraulic straightening unit. The unit can move the support beam (A) lengthwise to the point where the damage area begins. This point must stay in place (unchanged) when the car body is pulled sideways according to the picture.



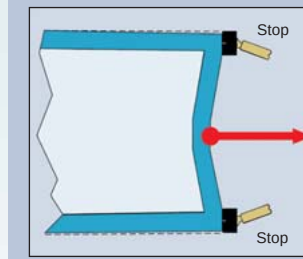
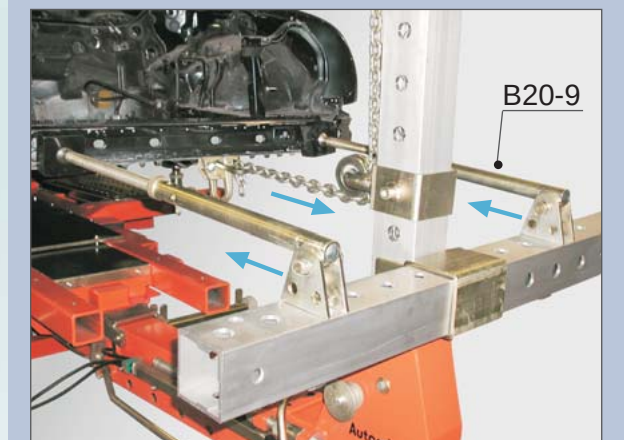
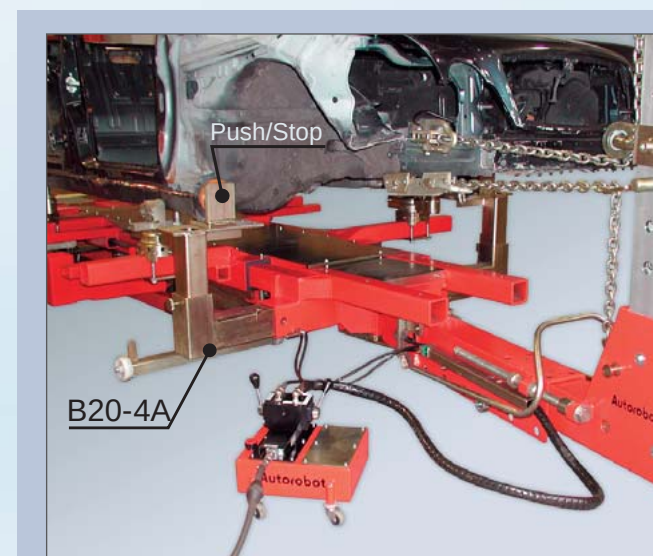
The pull/push tower of B20 straightening bench provides simultaneous horizontal and vertical pulls. B20-4A support beam protects the vehicle frame from changing its form during demanding pulls. Fast upward pulls are possible thanks to the round case and telescopic structure of the overhead tower.



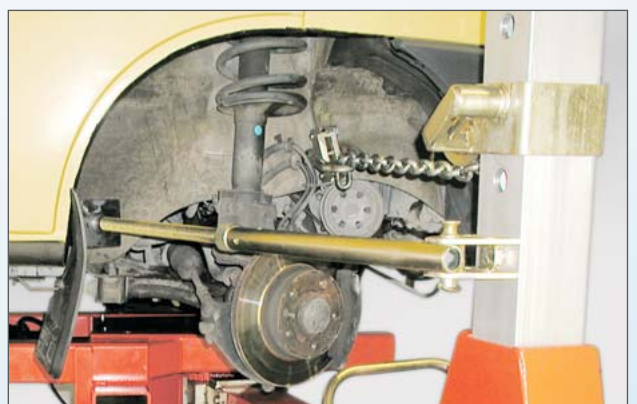
Double counter support is possible with B20. The support beam A on the straightening bed and the support arm B of the push/pull tower secure correct straightening of the vehicle frame.



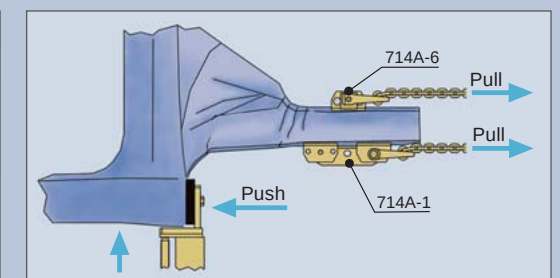
The overhead tower turns in horizontal plane and it can be turned heightways in three different positions. In its upward position the tower is high enough for straightening the roofs of raised vans.



The push/pull straightening technique of B20 works also at the vehicle front or rear ends: place first the support arms like shown in the picture, and after this commence the actual chain pull with the hydraulic pull tower.



The B20's pull/push tower includes an adjustable support arm, which is mounted to the bending point of the vehicle frame with the help of the tower hydraulics.

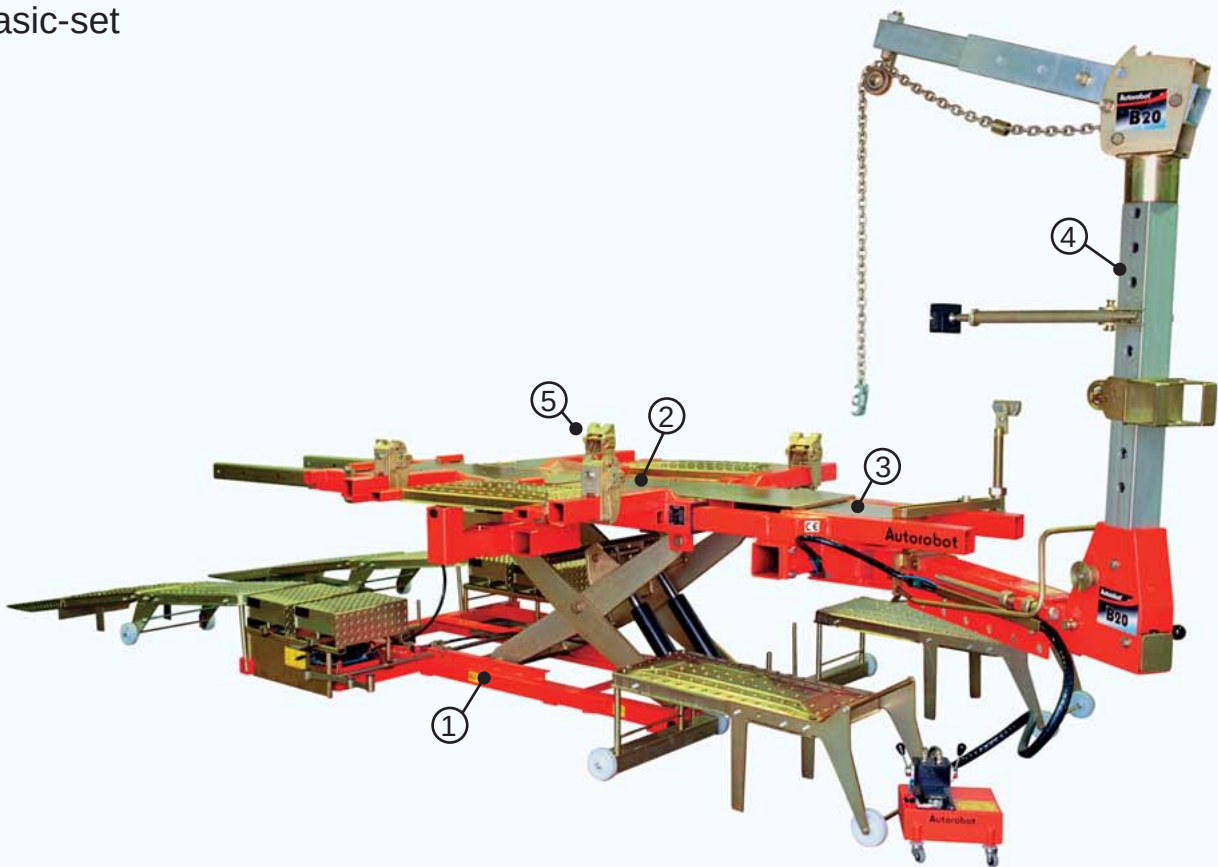


Over 10 t counter pull can be achieved with the push/pull tower of the B20 straightening unit. Counter pull is needed for straightening the frame structures of strong bodies. The Gold set includes B20-4A support beams, which are mounted to the ends of the rocker panel to ensure safe mounting of the vehicle on the straightening bed.

# Autorobot® B20

## Basic + Bronze -sets and their properties

### Basic-set



### Bronze-set



|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 1 | <b>4 t lifting unit with drive-on ramps.</b> The scissor lift elevates the straightening bed with its chassis fasteners so that the car weight lies completely on the clamps. When lifting is further continued, the car wheels rise from the drive -on ramps. This technique patented by Autorobot years ago considerably reduces the fastening stages, which means shorter repair time. The front and rear drive-on ramps are connected to the frame of the lifting unit and they can be easily moved with their wheels. The wheels make it possible to use the same ramps in other straightening benches as well. | 1 |
| 2 | <b>Basic part of the straightening bed</b> incorporates the chassis clamp beams. Two of the beams are adjustable to the car length. With the help of an additional module B20-3A (In Gold- and Silver-sets) the adjustable beams move hydraulically, which makes car mounting faster and more comfortable than before.                                                                                                                                                                                                                                                                                               | 1 |
| 3 | <b>Hydraulically driven front of the straightening bed</b> adjusts the bed to the car length and brings the pulling tower and the support set B20-4A (an additional module, which belongs to Gold- and Silver-sets) to the right length. Furthermore, it operates in lengthwise straightening of the car.                                                                                                                                                                                                                                                                                                            | 1 |
| 4 | <b>Pull/push straightening tower</b> , which can be adjusted 180° and locked very quickly. 10 t double pulls, upward/downward pulls. 10 t pull, 6 t push and push/pull combinations for demanding straightening.                                                                                                                                                                                                                                                                                                                                                                                                     | 1 |
| 5 | <b>4 pcs quick assembly sill clamps</b> for vehicles with pinch weld. The one-bolt chassis clamps can stay fixed (ready for operation) on the outer edge of the fastening beams even when the car is driven on the ramps. The ease of use helps in making the fastening of the car super quick. For vehicles without pinch weld, such as MB, BMW, Audi, Nissan Micra, Renault Megane, Rover 75, Pick-up/frame type vehicles, there are patented Starblock special fasteners available.                                                                                                                               | 4 |

## Additional modules and their properties



**B20-4A Chassis support (jig) set**, which hydraulically directs additional support to the car chassis so that the straightening of the damage can be controlled better than with conventional methods. The support set can be used to secure the immobility of the car in the chassis fasteners during powerful pulls. It can be used as a quick lock set for vehicles without pinch weld and frame-type vehicles together with B20-7 series. This method is used for repairing small damages.

Gold  
Silver

1 1



**B20-3A Hydraulically driven rear end of straightening bed** extends the straightening bed to the car length and moves the rearmost chassis fasteners to the right place in lengthwise direction. Furthermore, the same hydraulics can be used in straightening work.

1 1

**B20-6 Additional straightening tower with 11 ton hydraulics and chain.** An additional tower is needed for simultaneous pulls from both ends of the car, or when you want to pull both sides of the car at the same time, e.g. counter pull and the actual straightening pull.

1 1  
(2)



**676B-2 Two-point support (jig) set** for demanding repairs to keep a certain part of the car in its place during straightening work. Due to the robust structure of the second support it can be used also in horizontal straightening of frame. The threaded rods of the straightening set can be used for vertical pulls. Chassis support is needed also during roof structure renovations.

1



**B20-7 Lifting pad and fastening set** for lifting the car and for small repairs. During straightening work the set is used together with B20-4A series or with the support unit of the straightening tower.

1



**B20-9 Pull and push set** supports vehicle structures and works with push straightening and chainless pulls. Straightening hook and gripper included.

1



**B20-8 Tower adapter** makes it possible to use a second pull tower in the front of the B20. A double pull is necessary when you need to pull the car frame on the left and on the right at the same time.

1

# Autorobot® B20

Super fast vehicle mounting with patented chassis fasteners and hydraulically extending straightening bed



With B20 bench lifted in upmost position, the repairer has a good working position when repairing the car chassis. Small damage can be handled very fast with the instant support kit No. B20-4+.



The B20 lift is lowered down to give good access for pulling the vehicle upper structures. The push/pull tower of the B20 straightens damage quickly with push & hold technique.



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Seller: