



PULLERS

Extra durability

Unior pullers, available with two, three or five adjustable arms, with a sliding hammer or pulling chuck, or in several other versions, are made of carbon tool steel. The special forging process guarantees their extra durability.

Easy to use

Unior pulling systems enable safe and effective removal of bearings, bushings and sprockets. All pullers are easy to use, flexible and extremely long-wearing.



A special procedure for the manufacture of pullers

HEAD (BODY)

- Cutting:** Cutting material is the first operation in the technological procedure of wrench manufacturing. Optimum design of a cut provides optimal use of material.
- Forging:** Forging technology at Unior ensures excellent strength characteristics of wrenches. Notably, it maintains appropriate fiber orientation in a forged part, leaving it uninterrupted and the same as in a rolled blank. That characteristic of forged parts is vital for achieving the characteristics of products exposed to heavy and dynamic loads.
- Trimming:** Superfluous material around a forged part is removed using a special-purpose trimming tool; material is trimmed to the desired shape, always making the weight of trimmings as low as possible.
- CNC working:** A CNC machine is used to accurately work the head of the puller, which ensures smooth movement of the small handles.
- Threading:** The accurate threading of the internal trapezoid thread ensures the smooth movement of the spindle and thus enables rapid adjustment when using the puller.
- Heat treatment (quenching and tempering) and sanding:** The heat treatment with hardening and tempering is intended to improve the structure of the steel, to provide greater hardness and toughness of the product and other properties required to overcome the strain that work with such products requires.
- Sanding:** Cleaning the surface before chroming is important for the sake of quality and durable surface protection.
- Chroming:** The handle of the puller is plated with a thin, hard coating of chromium oxide, which protects against corrosion and wear and other mechanical damage. At the same time, it gives the entire Unior puller a glossy appearance.

SPINDLE

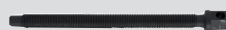
- Forging part:** The forging part is made by warm upsetting, which provides the shape of the spindle head
- CNC working:** The CNC machine is used to accurately work the spindle that is the basis for thread rolling.
- Thread rolling:** Is carried out on a special machine with special rollers. The resulting trapezoid thread is intended for use under greater strain.
- Heat treatment (quenching and tempering) and sanding:** The heat treatment with hardening and tempering is intended to improve the structure of the steel, to provide greater hardness and toughness of the product and other properties required to overcome the strain that work with such products requires.
- Sanding:** Cleaning the surface before chroming is important for the sake of quality and durable surface protection.
- Burnishing and oiling:** Burnishing gives a spindle a proper professional appearance and, together with the right oil, the necessary surface protection.

SMALL HANDLE

- Forging and trimming a small handle:** A forged part is made using drop forging technology. Drop forging provides various ergonomic product shapes. Suitable forging procedures maintain appropriate fiber orientation, leaving it the same as in rolled blanks. Superfluous material around a forged part is removed using a special-purpose trimming tool; material is trimmed to the desired shape, always making the weight of trimmings as low as possible.
- Hole broaching and CNC treatment:** Broaching shapes the tip of the jaw. The latter must have optimal thickness for the necessary functionality of the broach. That is followed by CNC treatment of small handles that provides the necessary positioning of the broach assembly.
- CNC working:** CNC working of the small handles provides accuracy and thus improves the functioning of the entire product.
- Heat treatment (quenching and tempering) and sanding:** Heat treatment with annealing and tempering is intended to enhance the structure of steel, product strength and toughness, and other properties required to withstand the loads to which such a product is exposed to. Sanding is used to clean the surface for further operations.
- Sanding:** Cleaning the surface before chroming is important for the sake of quality and durable surface protection.
- Chroming:** The handle of the puller is plated with a thin, hard coating of chromium oxide, which protects against corrosion and wear and other mechanical damage. At the same time, it gives the entire Unior puller a glossy appearance.

ASSEMBLY

- Final assembly:** The trained, skilled and meticulous workers performing the final assembly assemble the product into a solid whole that ensures the functioning and high quality of the Unior puller.



Premium Flex +

Premium Flex Plus Carbon Steel

Efficiency and durability under considerable crushing and deformation stress

Construction and trade steels have special properties that guarantee their appropriate hardness, ductility and elasticity, as is required for tools such as setters, hammers and screw clamps, which are exposed to great force during hammering and clamping. Steels with a medium carbon content that are used to make tools have a higher carbon content, resulting in better durability. A suitable manganese content increases the tensile strength and ductility of the material, which is particularly important under high load conditions. The chrome content reduces the susceptibility to cracking, while the silicon content increases the elasticity of tool materials subjected to strong forces.

Medium carbon steel C45R, according to EU directive 2000/53/EC and the EN 10083-2 standards

- 0,45% carbon for higher tensile strength and better tempering
- 0,70% manganese for higher tensile strength and ductility
- 0,35% chrome for higher tensile strength and lower susceptibility to cracking
- 0,20% silicon for higher elasticity

Pullers with two adjustable arms

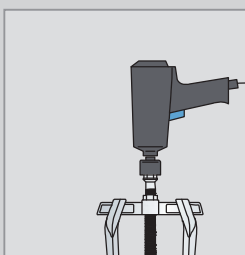
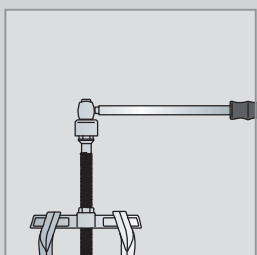
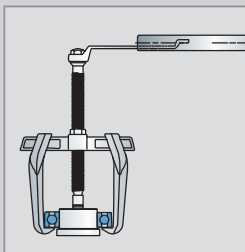
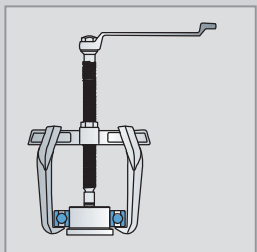
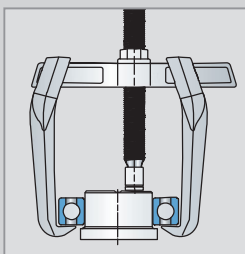
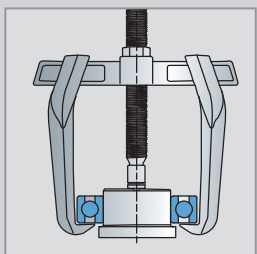
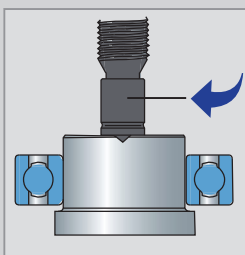
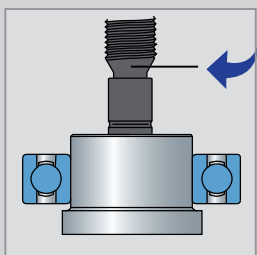
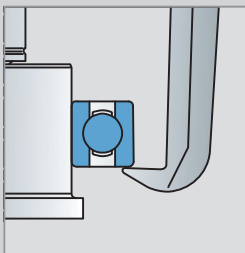
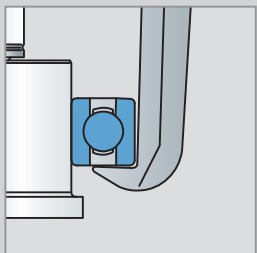
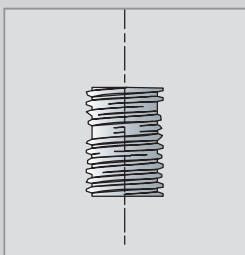
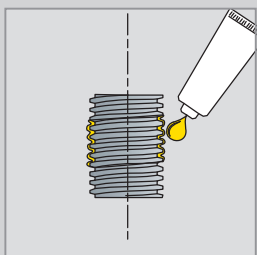
175 - 176

Pullers with three adjustable arms

176

Other pullers

177 - 181



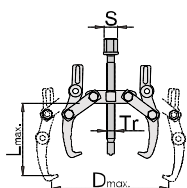


680/2

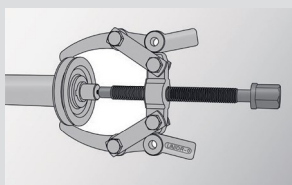
Puller with two adjustable arms

680/2MS

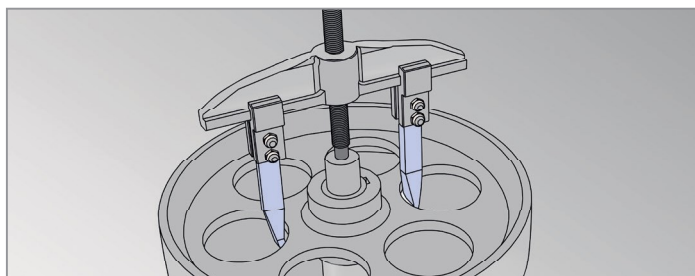
Set of pullers with two adjustable arms



- material: body from premium flex plus carbon steel, arm from premium chrome vanadium steel
- drop forged, entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened
- arms adjustable in two positions
- lever action claws fit closely under the part to be removed



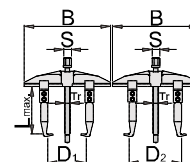
Barcode	Nº	Lf	Df	M	S			
612603	0	90	90	Tr 10 x 1.5	14	405	IIH	1
601762	1	160	130	Tr 14 x 2	17	915	IIH	1
601763	2	230	190	Tr 18 x 2	22	1905	III	1
601764	3	300	250	Tr 26 x 3	32	4075	IIH	1



Barcode	Nº	Lf	Df	M	S			
612655	4	10153	1F	1				
680/2 (0 x 90 x 90, 1 x 160 x 130, 2 x 230 x 190, 3 x 300 x 250), 980P2 (240 x 200 x 430)								

681/2

Puller with two sliding arms



- material: body from premium flex plus carbon steel, arm from premium chrome vanadium steel
- drop forged, entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened

Advantages:

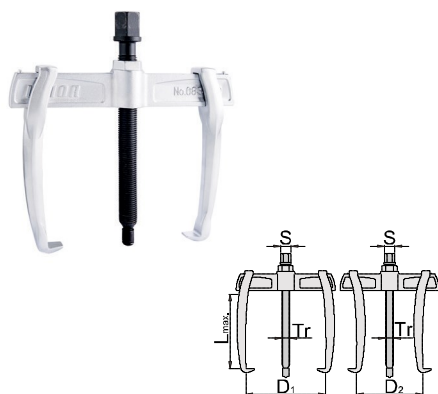
- by reversing the arms, the puller can be used as internal or external puller
- sturdy design for very heavy duty work

Barcode	Nº	B	D1	D2	Lf	M	S			
601765	300	280	70 - 220	110 - 260	150	Tr 18 x 2	22	3355	III	1
601766	400	450	110 - 360	190 - 450	200	Tr 26 x 3	32	8725	III	1



683/2

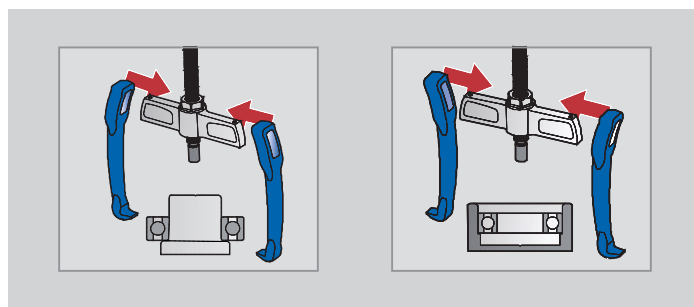
Puller with two sliding arms



- material: premium chrome vanadium steel
- drop forged, entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened
- lever action claws fit closely under the part to be removed

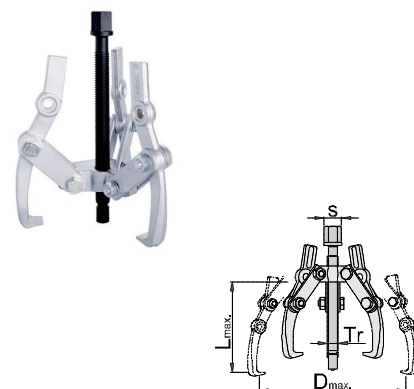
Advantages:

- by reversing the arms, the puller can be used as internal or external puller



682/2

Puller with three adjustable arms



- material: body from premium flex plus carbon steel, arm from premium chrome vanadium steel
- drop forged, entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened
- arms adjustable in two positions
- lever action claws fit closely under the part to be removed

Barcode	Nº	L	D	M	S	Weight	Material	Notes
612604	0	90	90	Tr 10 x 1,5	14	305	1H	1
601767	1	130	160	Tr 14 x 2	17	1725	1H	1
601768	2	190	230	Tr 18 x 2	22	2570	1H	1
601769	3	250	300	Tr 26 x 3	32	5100	1H	1

682/2MS

Set of pullers with three adjustable arms



Barcode	Nº	L	D	M	S	Weight	Material	Notes
622805	4	14000					1K	1

682/2 (0 x 90 x 90, 1 x 130 x 160, 2 x 190 x 230, 3 x 250 x 300), 980P3A (283 x 329 x 428)

683/2MS

Set of pullers with two sliding arms



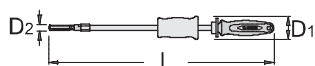
Barcode	Nº	L	D	M	S	Weight	Material	Notes
615082	6	13859					1F	1

683/2 (60, 90, 130, 180, 250, 350), 980P2S (240 x 250 x 430)



689/2BI

Inner bearing puller



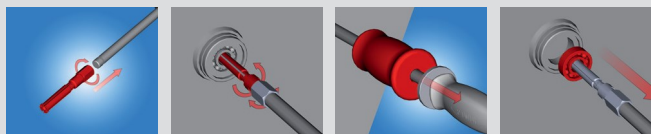
- material: premium chrome vanadium steel
- drop forged, entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2005
- ergonomic heavy duty double component handle

Advantages:

- Set includes 6 pcs of arm for inner bearing dimensions 6.5-8, 10-12, 12-15, 17-20, 22-28, 30-36

Usage:

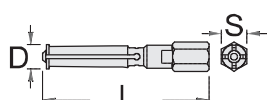
- It is used for pulling different types of bearings. The bearing is gripped from the inside side and pulled out.
- the bearing is extract with a 1 kg weight



Barcode	D1	D2	D2	L	L	Weight	Material	Quantity
622587	52	6,5	36	495	555	3300	1G	1

689.1/4

Arm for 689/2BI

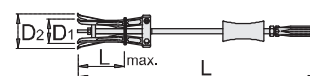


Barcode	D	L	S	Weight	Material	Quantity
623089	5,5 - 8	81	14	38	1G	1
623090	10 - 12	83	14	53	1E	1
623091	12 - 15	92	14	65	1E	1
623092	17 - 20	102,5	14	125	1G	1
623093	22 - 28	125	17	269	1E	1
623094	30 - 36	140	22	525	1G	1



685/2

Universal extractor with sliding hammer



- material: body from premium flex plus carbon steel, arm from premium chrome vanadium steel
- claws drop forged, entirely hardened and tempered
- jaw entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened

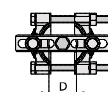
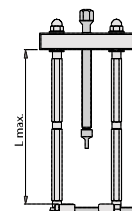
Advantages:

- in set with arms, for small and large diameters
- used for inaccessible areas
- ergonomic heavy duty double component handle

Barcode	D1	D2	L	L	Weight	Material	Quantity
601771	30 - 80	120 - 180	125	600	2625	1H	1

2026/2

Separator puller



- The separator is made of high quality steel.
- Surface finish of screws: burnished, other parts are chrome-plated
- The separator puller is a tool designed to efficiently dismount various machine parts attached to shafts.
- It is indispensable for tasks requiring the safe and deformation-free dismounting of firmly fixed machine parts.
- Our product range includes three sizes of pullers used for taking off objects from shafts. They range from Ø5mm to Ø115mm.

Advantages:

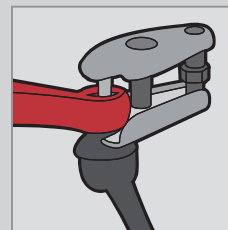
- The separator puller consists of a yoke, a spindle, two arms and a gripper assembly, which together allow uniform dismounting.
- The separator puller is designed to allow easy and safe operation



Barcode	D	L	Weight	Material	Quantity
619273	5 - 60	229	2160	1G	1
619274	12 - 75	234	2930	1G	1
619275	22 - 115	325	7180	1G	1

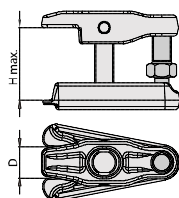


2032/2



2032/2

Ball joint puller



- material: premium flex plus carbon steel
- jaw capacity: 23mm
- maximal height: 53mm
- for extracting ball joints from steering wheel and suspensions

619736	D	HT			
619736	23	53	780	1G	1

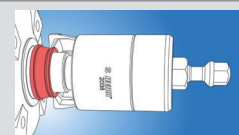


2038

Inner bearing race puller



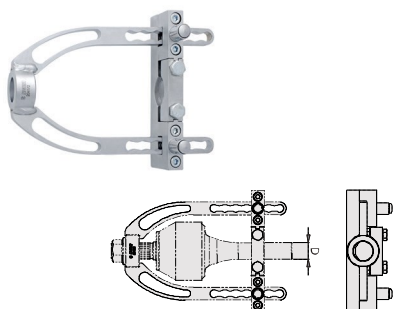
- It is used to easily, quickly and cleanly remove inner bearings from the wheel hub. The tool is designed to remove the inner bearing race without the risk of any damage and without needing any additional tools such as files, hammers or cutters. The tool has 4 track bushes that are used to remove bearing races with diameters from Ø40 to Ø60 mm. The track bush clasps the bearing race firmly and thus prevents any kind of slippage. The tool can be used for: Audi, BMW, Ford, Mercedes-Benz, Peugeot, Renault, Toyota, VW, etc.
- with 4 jaws; dimension 1 - from Ø40 to Ø45, dimension 2 - from Ø45 to Ø50, dimension 3 - from Ø50 to Ø55, dimension 4 - from Ø55 to Ø60



620228				
620228	3585	1G		1

2041/2

Homokinetic joint puller

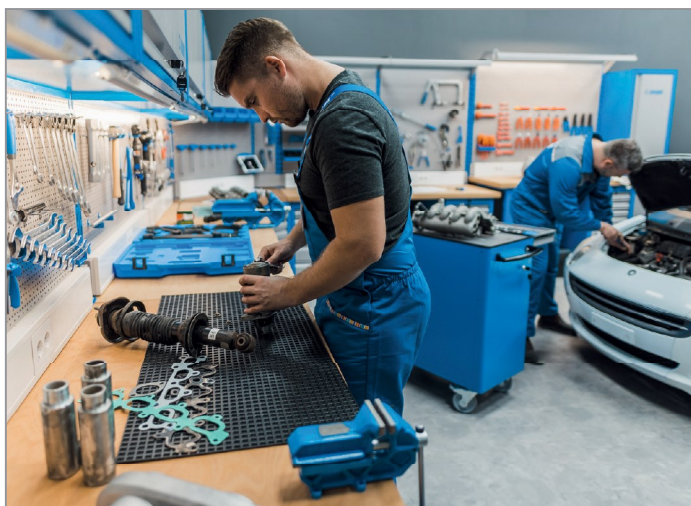


How to use the tool:

- The puller is used to dismount or repair homokinetic joints of various sizes. Before dismantling the joint, check whether the homokinetic joint can be dismantled. First, remove the top adjustable holder and then insert the joint through the ring and by mounting the top adjustable holder clamp the joint into the puller. The homokinetic joint includes a nut which can be used to screw in or dismount the joint. Before screwing in the nut, remove the circlip that is holding the upper and lower part of the joint. By simultaneously pressing two buttons, the holder can be adjusted to the suitable length of the joint. Advantages: the tool can be used on cars, it does not damage the joint, it saves time when dismantling the joint etc.

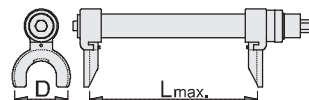


	D			
620232	18 - 36	2130	1G	1



2051/4

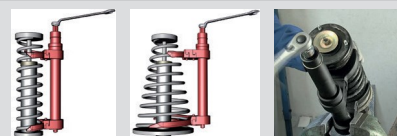
Suspension compressor for shock absorber springs



- This Unior professional tool, under article number 2051, is intended for the removal of car shock absorbers and is mainly used to compress the springs in MacPherson struts. Since the number of versions of the MacPherson strut is always increasing, the tool set contains three different pairs of grippers that almost completely cover the range of different MacPherson struts. The tool set also includes a spacer bar for conical springs, which increases the usefulness of the Shock Absorber Remover. Development of this tool took safety into account as the large forces involved in removing shock absorbers may present a risk of injury to the user. For this reason, all grippers in the set feature enlarged grip edges to firmly grip the spring in the tool thus prevent any possibility of slipping, which could injure the tool user. The recommended load for the tool is 9000 N. The maximum load for the tool is up to 37000 N. The tool is supplied in a durable PVC case that enables easier and safer transportation.
- in set 2 cups 80 - 115, 2 cups 110 - 150 in 2 cups 140 - 195

How to use the tool:

1. Select the appropriate cup for your spring.
2. Place the remover on the spring.
3. START compressing the shock absorber spring.



	Lf		D		
619279	300	21	80 - 195	14600	1G

179





2052/4

Compressor for shock absorber springs, light version

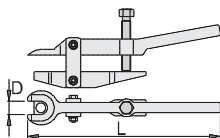


- intended for the removal of car shock absorbers.
- the maximum load for the tool is up to 11000N
- UNIOR is already selling a suspension compressor for shock absorber springs (No. 2051), however, many smaller car repair shops do not need to use such a professional tool on a regular basis. This is where the light version comes in - it functions the same as the tool under art. No 2051, but has recommended load for the tool 2750 N. To prevent any bending and the springs falling out of the cups, this tool features a safeguard that enables the parts of the tool used for removing to always operate in parallel.

619733	19	4070	1G	1

686/2

Professional ball joint puller

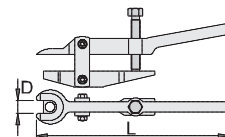


- material: body from premium flex plus carbon steel, arm from premium chrome vanadium steel
- drop forged, entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened
- for cars

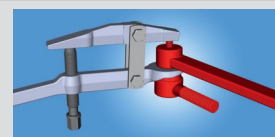
	D	L	S			
601772	16	260	17	925	1H	1

686/2A

Professional ball joint puller



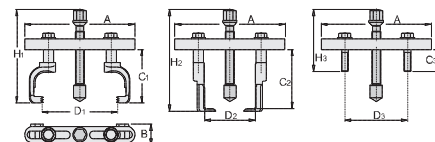
- material: body from premium flex plus carbon steel, arm from premium chrome vanadium steel
- drop forged, entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened
- for trucks



	D	L	S			
602369	18	260	17	1055	1H	1

2208

Ribbed driver pulley puller



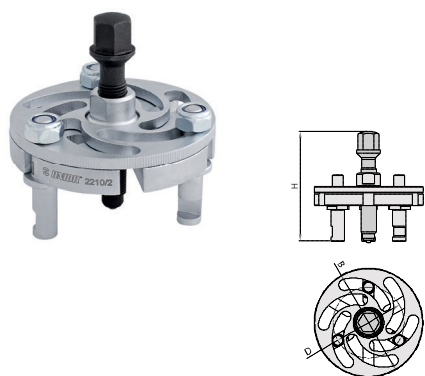
- The puller is used to dismount pulleys of various shapes, in particularly those used in passenger cars. The tool is suitable for pulleys with the following diameters: min. Ø45 mm; max. Ø235 mm. The puller is useful for effectively removing pulleys from hard-to-reach areas, and especially without the risk of any damage to the pulley. The tool has two types of pulling paws, suitable for various types of pulleys.

	A	B	C1	C2	C3	D1	D2	D3	H1	H2	H3			
620223	171	32	60-82.5	69-91	34	80-150	40-120	40-150	200	213	152	2340	1G	1

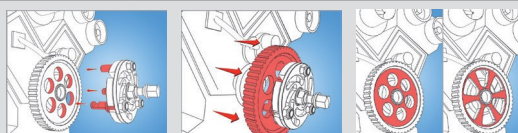


2210/2

Timing pulley puller



- material: premium flex plus carbon steel
- entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened
- for removing pulleys with 3, 6, 9 slots
- This tool is designed for removing drive pulleys with face grooves. The tool removes a pulley absolutely free of any risk of damage. The tool is adaptable to different pulley diameters, as the legs are adjustable.

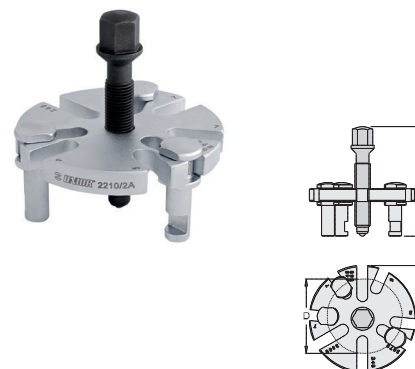


620226	B	D	H			
620226	100	48 - 82	135	1085	1G	1

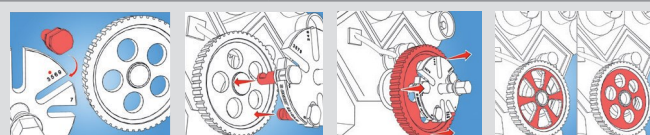


2210/2A

Universal timing pulley puller



- material: premium flex plus carbon steel
- entirely hardened and tempered
- surface finish: chrome plated according to ISO 1456:2009, screw blackened
- for removing all types of pulleys with 2, 3, 4, 5, 6, 7, 8, 9 slots
- This tool is designed for removing drive pulleys with face grooves. The tool removes a pulley absolutely free of any risk of damage. The tool is adaptable to different pulley diameters, as the legs are adjustable.



621780	B	D	H			
621780	100	48 - 82	135	800	1G	1

