

EXTRACTORS & PULLERS

Bahco offers a range of pullers and extractors for a wide variety of applications. Made of special steel with a galvanized finish, they allow the quick, easy, non-damaging removal of pulleys, gears, ball bearings etc. The standard two-, three- and multi-arm pullers are ideal for both internal and external jobs, with features such as flat legs and bodies for work in confined spaces.

The range includes hydraulic pullers and rams, ball-joint pullers, stud extractors, hub pullers, pullers for separators, nut splitters and extractors for specialist operations.

Bahco also offers sets developed for car maintenance, including special pry bars for cylinder heads and gears, and for loosening rust-bound parts and ball bearings.

More pullers and extractors can be found in the chapter on Automotive Speciality Tools and Equipment.



Chapter Index

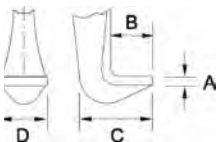
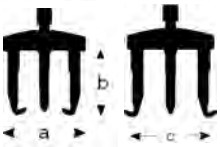
| | |
|------------|---------|
| EXTRACTORS | 742-761 |
| PRY BARS | 762-763 |





4532

UNIVERSAL 2 ARM PULLERS

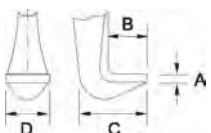
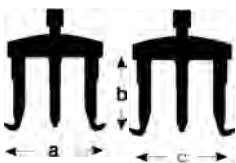


- Extractor: 2 arms
- Finish: Galvanised, with induction hardened spindle from 4532-C, D, E, F, G and H
- Arms and yokes are drop-forged
- Material: Special steel
- By reversing the arms, the extractor can be used as internal or external
- The large claw surfaces offer many advantages for careful and quick removal of pulleys, gears, ball bearings etc.
- Arms always grip parallel to each other
- Arm tip is flat and leg body is narrow

| | | | a | b | c | max | max | max | A | B | C | D | | | |
|--------|---------|---|---------|-----|---------|-----|------|-----|----|----|----|----|-----------------|----|-------|
| | 731415 | | mm | mm | mm | Nm | Tn | KN | mm | mm | mm | mm | mm | mm | g |
| 4532-A | 1082109 | 1 | 25-80 | 100 | 70-130 | 80 | 4.5 | 45 | 3 | 13 | 25 | 20 | M14x1.5x135 | 17 | 1000 |
| 4532-B | 1082116 | 1 | 25-130 | 100 | 80-180 | 80 | 4.5 | 45 | 3 | 13 | 25 | 20 | M14x1.5x135 | 17 | 1200 |
| 4532-C | 1082123 | 1 | 50-160 | 150 | 105-220 | 190 | 6.5 | 65 | 4 | 16 | 35 | 25 | R1/2"x14Gg.x210 | 22 | 3000 |
| 4532-D | 1082130 | 1 | 60-200 | 150 | 120-270 | 190 | 6.5 | 65 | 4 | 16 | 35 | 25 | R1/2"x14Gg.x210 | 22 | 3200 |
| 4532-E | 1082147 | 1 | 80-250 | 200 | 160-330 | 360 | 11.0 | 110 | 5 | 25 | 54 | 35 | R3/4"x14Gg.x265 | 27 | 7000 |
| 4532-F | 1082154 | 1 | 80-350 | 200 | 160-420 | 360 | 11.0 | 110 | 5 | 25 | 54 | 35 | R3/4"x14Gg.x265 | 27 | 8000 |
| 4532-G | 1082161 | 1 | 110-520 | 200 | 195-600 | 360 | 13.0 | 130 | 5 | 25 | 54 | 35 | R3/4"x14Gg.x265 | 27 | 14000 |
| 4532-H | 1719999 | 1 | 170-640 | 225 | 260-715 | 400 | 18.0 | 180 | 10 | 33 | 55 | 50 | R1"x11Gg.x305 | 36 | 23000 |

4532-0

UNIVERSAL 2 ARM PULLERS

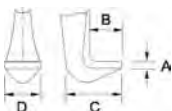


- Extractor: 2 arms
- Finish: Galvanised
- Arms and yokes are drop-forged. Leg tips in gunmetal finish
- Material: Special steel
- By reversing the arms, the extractor can be used as internal or external
- The claw is milled to a slender and pointed form for easy access in confined spaces, for use in the automotive industry
- Legs always grip parallel to each other
- Leg tip is flat, leg body is narrow







| | | | a | b | c | max | max | max | A | B | C | D | | | |
|--------|---------|---|-------|-----|--------|-----|-----|-----|-----|----|----|----|-------------|----|------|
| | 731415 | | mm | mm | mm | Nm | Tn | KN | mm | mm | mm | mm | mm | mm | g |
| 4532-0 | 1719722 | 1 | 20-90 | 100 | 70-130 | 80 | 4.5 | 45 | 3.6 | 6 | 13 | 27 | M14x1.5x135 | 17 | 1000 |

4532K0

UNIVERSAL 2 ARM PULLERS

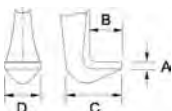


- Pair of spare arms in standard length 4532 series
- Finish: Galvanised, leg tips in gunmetal finish
- Material: Special steel







|  |  731415 |  |  |  L mm | A mm | B mm | C mm | D mm |  g |
|---|---|---|--|---|------|------|------|------|--|
| 4532K0 | 1720063 | 1 | 4532-0 | 100 | 3.6 | 6 | 13 | 27 | 500 |

4532K

PAIR OF SPARE ARMS IN STANDARD LENGTHS

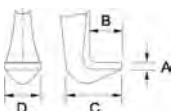


- Pair of spare arms in standard length 4532 series
- Finish: Galvanised, leg tips in gunmetal finish
- Material: Special steel







|  |  731415 |  |  |  L mm | A mm | B mm | C mm | D mm |  g |
|---|---|---|--|---|------|------|------|------|--|
| 4532K1 | 1082185 | 1 | 4532-A-B | 100 | 3 | 13 | 25 | 20 | 500 |
| 4532K2 | 1082192 | 1 | 4532-C-D | 150 | 4 | 16 | 35 | 25 | 1300 |
| 4532K3 | 1082208 | 1 | 4532-E-G | 200 | 5 | 25 | 54 | 35 | 3200 |
| 4532K4 | 1720148 | 1 | 4532-H | 225 | 10 | 33 | 55 | 50 | 4300 |

4532LK

PAIR OF SPARE ARMS IN SPECIAL LENGTHS



- Pair of spare arms in special lengths 4532 series
- Finish: Galvanised, leg tips in gunmetal finish
- Material: Special steel








|  |  731415 |  |  |  L mm | A mm | B mm | C mm | D mm |  g |
|---|---|---|--|---|------|------|------|------|--|
| 4532LK1 | 1082215 | 1 | 4532-A-B | 200 | 3 | 13 | 25 | 20 | 1000 |
| 4532LK2 | 1082222 | 1 | 4532-C-D | 300 | 4 | 16 | 35 | 25 | 2400 |
| 4532LK3 | 1082239 | 1 | 4532-E-G | 300 | 5 | 25 | 54 | 35 | 4500 |
| 4532LK4 | 1082246 | 1 | 4532-E-G | 400 | 5 | 25 | 54 | 35 | 5400 |
| 4532LK5 | 1720223 | 1 | 4532-E-G | 500 | 5 | 25 | 54 | 35 | 7000 |

4532/S

SPARE SPINDLES



- Spare spindle, with round steel ball
- Finish: Gunmetal finish, induction hardened and wear resistant spindle on 4532-CD/S 4532-EFG/S and 4532-H/S

|  |  731415 |  |  |  mm |  mm |  g |
|---|---|---|--|---|---|--|
| 4532-OAB/S | 1818050 | 1 | 4532-O,-A,-B,4537-1,4528-M1 4541-A,4542-A,4552-1 | M14 x 1,5 x 135 | 17 | 175 |
| 4532-CD/S | 1818067 | 1 | 4532-C,-D,4552-2,4552-3 | G 1/2"x14 Gg.x210 | 22 | 575 |
| 4532-EFG/S | 1838386 | 1 | 4532-E,-F,-G | G 3/4"x14 Gg.x280 | 27 | 1275 |
| 4532-H/S | 1838393 | 1 | 4532-H | G 1"x 11 Gg.x310 | 36 | 2230 |



4532ST/5

2 ARM PULLER SET SALES DISPLAY



- 5 set display of 2 arm pullers
- Finish: Galvanised
- Material: Special steel
- 4532-A to -E

| | | | |
|----------|------------|---|-------|
| | 731415 | | g |
| 4532ST/5 | 1720490 | 1 | 16700 |

4533

3 AND MULTI-ARM PULLER



- Extractors: 3 legs and multi-arms
 - To be used as a 2, 3 or 4 arm puller due to moveable and interchangeable yoke arms
 - The arms can be moved radially on the yoke and can be fixed at the desired span
 - As the arms can be reversed, the puller can be used both for internal and external jobs
- 4533HP** hydraulic system
- spindle male thread: G1" x 11 x 365
- 4533M** mechanical system with induction hardened and wear resistant spindle
- spindle male thread: G1" x 11 x 365



| | | | | | | | | |
|--------|------------|---|----------------|----------------|---------------|---------------|---------------|-------|
| | 731415 | | a mm | b mm | max Nm | max Tn | max KN | g |
| 4533HP | 1793043 | 1 | 150-700 | 185 | 70 | 15 | 150 | 47100 |
| 4533M | 1793050 | 1 | 150-700 | 200 | 400 | 15 | 150 | 42500 |

4529

HYDRAULIC RAMS



- Hydraulic rams
- Finish: Galvanised
- Material: Special steel
- Increases the forward thrust in combination with mechanical pullers, especially suited for tightly jammed parts
- Operation: For hydraulic ram between working piece and puller spindle with spindle drawn back
- Hydraulic system works by tightening spindle
- If piston stroke is insufficient, release spindle and tighten same; Continue to operate spindle as described before








| | | | | | | | | |
|---------|------------|---|------------------|------------------|--------|---------------|-------------|-------|
| | 731415 | | Max Tn | Max KN | mm | max Nm | H mm | g |
| 4529-8 | 1719562 | 1 | 8 | 80 | 8 | 60 | 51 | 800 |
| 4529-15 | 1719647 | 1 | 15 | 150 | 12 | 70 | 75 | 1800 |

4541

2 ARM PULLERS



- Extractor: 2 arms
- Finish: Galvanised
- Material: Special steel
- Double sided arms, one end broad and the other end narrow

|  |  731415 |  | a mm | b mm |  max Nm |  MAXI Tn |  MAXI KN |  g |
|---|---|---|---------|---------|--|---|---|--|
| 4541-A | 1082413 | 1 | 20-150 | 85 | 50 | 3,5 | 35 | 900 |
| 4541-B | 1082420 | 1 | 40-220 | 130 | 60 | 4 | 40 | 2200 |

4537

2 ARM PULLERS










1 - 2



3 - 4



- Extractor: 2 arms - heavy duty
- Finish: Galvanised
- Material: Special steel
- Especially suited for pulling ball bearings, pulleys, gears, etc.








|  |  731415 |  | a mm | b mm |  max Nm |  MAXI Tn |  MAXI KN |  g |
|---|---|---|---------|---------|--|---|---|--|
| 4537-1 | 1720650 | 1 | 20-170 | 130 | 50 | 3,5 | 40 | 1000 |
| 4537-2 | 1720735 | 1 | 20-230 | 200 | 60 | 4 | 40 | 2300 |
| 4537-3 | 1720810 | 1 | 50-300 | 250 | 120 | 6 | 60 | 5400 |
| 4537-4 | 1721039 | 1 | 50-350 | 350 | 120 | 6 | 60 | 6100 |

4542

3 ARM PULLERS



- Extractor: 3 arm
- Finish: Galvanised
- Material: Special steel
- Especially suited for pulling ball bearings, pulleys, gears, etc
- Double sided arms, one end broad, other end narrow

|  |  731415 |  | a mm | b mm |  max Nm |  MAXI Tn |  MAXI KN |  g |
|---|---|---|---------|---------|--|---|---|--|
| 4542-A | 1082451 | 1 | 20-150 | 85 | 60 | 4.0 | 40 | 1200 |
| 4542-B | 1082468 | 1 | 40-220 | 130 | 70 | 4.5 | 45 | 2900 |



4528M

3 ARM PULLERS



M1 - M2



M3 - M5



- Extractor: 3 arms - heavy duty
- Finished: Galvanised
- Material: Special steel
- Especially suited for pulling ball bearings, pulleys, gears, etc.

| | 731415 | | a mm | b mm | max Nm | max Tn | max KN | |
|--------|------------|---|---------|---------|---------------|---------------|---------------|------|
| 4528M1 | 1718916 | 1 | 20-170 | 130 | 60 | 4.0 | 40 | 1300 |
| 4528M2 | 1719050 | 1 | 20-230 | 200 | 70 | 4,5 | 45 | 3100 |
| 4528M3 | 1719135 | 1 | 50-300 | 250 | 220 | 10 | 100 | 7000 |
| 4528M4 | 1719210 | 1 | 50-350 | 350 | 220 | 10 | 100 | 8300 |
| 4528M5 | 1719487 | 1 | 50-400 | 400 | 220 | 12 | 120 | 8800 |

4528

HYDRAULIC 3 ARM PULLERS



- Extractor: 3 arm hydraulic - heavy duty
- Due to a hydraulic cylinder, this puller reaches a pulling force of 15 t with a stroke of approx 12 mm
- Hydraulic spindle male thread: R1" x 11
- K1-K5 = Spare arms

| | 731415 | | a mm | b mm | max Nm | max Tn | max KN | |
|--------|------------|---|---------|---------|---------------|---------------|---------------|-------|
| 4528-1 | 1718671 | 1 | 50-350 | 135 | 70 | 15 | 150 | 12500 |
| 4528K1 | 1837662 | 1 | 50-300 | 135 | - | 15 | 150 | 3700 |
| 4528K2 | 1837679 | 1 | 50-350 | 235 | - | 15 | 150 | 5000 |
| 4528K3 | 1837686 | 1 | 50-400 | 285 | - | 15 | 150 | 5500 |
| 4528K4 | 1837693 | 1 | 50-450 | 335 | - | 15 | 150 | 6000 |
| 4528K5 | 1837709 | 1 | 50-500 | 385 | - | 15 | 150 | 6500 |

4543

2 AND 3 ARM PULLERS



4543-1



4543-10



- Extractor: 2 and 3 arms
- Finish: Galvanised
- Material: Special steel
- Handy puller for light duty work, such as on terminals, gears, ball bearings, pulleys etc
- 4543-10 to -30 with 3 arms
- 4543-1 to -3 with 2 arms







| | 731415 | | a mm | b mm | max Nm | max Tn | max KN | |
|---------|------------|---|---------|---------|---------------|---------------|---------------|-----|
| 4543-1 | 1082499 | 1 | 10-60 | 40 | 18 | 1.0 | 10 | 160 |
| 4543-2 | 1082505 | 1 | 10-70 | 74 | 20 | 1.2 | 12 | 200 |
| 4543-3 | 1721381 | 1 | 10-90 | 84 | 24 | 2.0 | 20 | 300 |
| 4543-10 | 1721466 | 1 | 10-60 | 40 | 20 | 1.2 | 12 | 200 |
| 4543-20 | 1721541 | 1 | 10-70 | 74 | 21 | 1.3 | 13 | 300 |
| 4543-30 | 1721626 | 1 | 10-90 | 84 | 40 | 2.5 | 25 | 500 |

4543/S

SPINDLE



- Spare spindle with round steel ball
- Finish: Gunmetal finish

|  |  731415 |  |  |  mm |  g |
|---|---|--|---|---|--|
| 4543-1/S | 1818623 | 1 | 4543-1 /-10, | 10 | 35 |
| 4543-2/S | 1818661 | 1 | 4543-2-20 | 10 | 35 |
| 4543-3/S | 1818708 | 1 | 4543-3 /-30, 4614-1 | 12 | 65 |








4544

2 AND 3 ARM PULLERS



- Extractor: 2 and 3 arm
- Finish: Galvanised
- Material: Special steel
- Solid extractor transmission and self-centring arms
- 4544-1 - 4544-4 with 2 arms
- 4544-10 - 4544-40 with 3 arms



|  |  731415 |  | a mm | b mm |  max Nm |  max Tn |  max KN |  g |
|---|---|---|---------|---------|--|--|--|--|
| 4544-1 | 1844004 | 1 | 10-100 | 80 | 25 | 2.5 | 25 | 680 |
| 4544-2 | 1844011 | 1 | 10-120 | 120 | 35 | 3.0 | 30 | 1140 |
| 4544-3 | 1844028 | 1 | 20-160 | 160 | 45 | 3.5 | 35 | 2000 |
| 4544-4 | 1844035 | 1 | 20-200 | 200 | 50 | 4.0 | 40 | 3500 |
| 4544-10 | 1844042 | 1 | 10-100 | 80 | 25 | 2.5 | 25 | 910 |
| 4544-20 | 1844059 | 1 | 10-120 | 120 | 35 | 3.0 | 30 | 1450 |
| 4544-30 | 1844066 | 1 | 20-160 | 160 | 45 | 3.5 | 35 | 2500 |








4518

UNIVERSAL HUB PULLER



- Universal hub extractor
- Finish: Galvanised
- Material: Special steel
- Sturdy construction for heavy duty work on car and truck hubs
 - 4518-3 3 arms
 - 4518-4 4 arms
 - 4518-5 5 arms

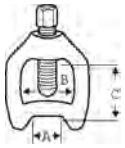


|  |  731415 |  | a mm | b mm |  max Nm |  max Tn |  max KN |  g |
|---|---|---|---------|---------|--|--|--|--|
| 4518-3 | 1716547 | 1 | 225 | 140 | 280 | 14 | 140 | 3800 |
| 4518-4 | 1716622 | 1 | 225 | 140 | 280 | 14 | 140 | 4300 |
| 4518-5 | 1716899 | 1 | 225 | 140 | 280 | 14 | 140 | 4900 |



4545

BALL JOINT PULLERS



- Ball joint extractor
- Finish: Galvanised
- For removing ball joints during dismantling of ball joints on tie-rods etc
- Non-damaging and easy operation

| | 731415 | | A mm | B mm | C mm | max Nm | g |
|--------|------------|---|---------|---------|---------|---------------|-------|
| 4545-1 | 1082543 | 1 | 18 | 40 | 40 | 50 | 300 |
| 4545-2 | 1082550 | 1 | 25 | 50 | 50 | 120 | 700 |
| 4545-3 | 1082567 | 1 | 29 | 60 | 60 | 160 | 1000 |
| 4545-4 | 1722272 | 1 | 40 | 80 | 80 | 280 | 2100 |
| 4545-5 | 1722357 | 1 | 45 | 90 | 100 | 400 | 2800 |

4545-N

UNIVERSAL BALL JOINT PULLERS



4545-N1



4545-N2

- Universal ball joint extractor
- Material: Special steel
- Finish: Galvanised
- A special tool for removing ball pins during dismantling of ball joints on tie-rods etc
- Gripping capacity
- 4545-N1 adjustable up to 50 mm (2") with an opening of 18-22 mm (23/32-7/8")
- 4545-N2 two steps up to 50 mm (2") with an opening of 24 mm (30/32")

| | 731415 | | g |
|---------|------------|---|-------|
| 4545-N1 | 1722432 | 1 | 800 |
| 4545-N2 | 1804947 | 1 | 1300 |

4551

SEPARATORS



- Separator
- Finish: Galvanised
- Material: Special steel









| | 731415 | | mm | | g |
|--------|------------|---|--------|--------|-------|
| 4551-A | 1082628 | 1 | 10-60 | 4552-1 | 400 |
| 4551-B | 1722784 | 1 | 15-75 | 4552-1 | 700 |
| 4551-C | 1082642 | 1 | 35-115 | 4552-2 | 1900 |
| 4551-D | 1082659 | 1 | 40-150 | 4552-3 | 4200 |

4552

PULLERS FOR SEPARATORS

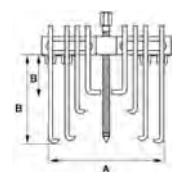


- Extractor for separator
- Operation: The sharp tapered cutting edges of separator No. 4551 are pressed behind the part to be removed when tightening the stud nuts
- Use puller No. 4552 to withdraw separator and part from the shaft by tightening the rod nuts
- Opening capacity/span depth in mm:
 - 4552-1: 45-140/150
 - 4552-2: 55-200/210
 - 4552-3: 90-260/315





|  |  731415 |  |  max Nm |  MAX Tn |  MAX KN |  |  g |
|---|---|---|---|--|--|---|--|
| 4552-1 | 1722944 | 1 | 40 | 2.5 | 25 | 4551-A-B | 1100 |
| 4552-2 | 1723088 | 1 | 70 | 4 | 40 | 4551-C | 2700 |
| 4552-3 | 1723163 | 1 | 90 | 5 | 50 | 4551-D | 5200 |

4540

MULTIPLE EXTRACTORS



- Multiple extractor
- Can be used as internal or external puller
- Hooks can be bolted to get extended reach

|  |  731415 |  | A mm | B mm |  g |
|---|---|--|---------|---------|--|
| 4540-17 | 0125005 | 1 | 30-170 | 65-140 | 2630 |
| 4540-25 | 0125012 | 1 | 75-250 | 77-180 | 5800 |



4521N



BALL BEARING INTERNAL EXTRACTORS

- Ball bearing internal extractors
- Finish: Gunmetal finish
- Material: Special steel
- The extractor shank has multiple slots (1-4) which allows uniform spreading on the periphery and safe removal of the ball bearing
- For extracting ball bearings from housings, ball bearing outer races, bushings and oil seals

| | 731415 | | mm | ↑ | mm | | g |
|----------|------------|---|--------|-------|--------|--------|-------|
| 4521N-00 | 1837716 | 1 | 5-7 | 1 | 30 | 4522-1 | 50 |
| 4521N-0 | 1837723 | 1 | 7-9 | 1 | 30 | 4522-1 | 50 |
| 4521N-A | 1837730 | 1 | 9-12 | 1 | 30 | 4522-1 | 60 |
| 4521N-B | 1837747 | 1 | 10-13 | 4 | 30 | 4522-1 | 60 |
| 4521N-C | 1837754 | 1 | 13-17 | 4 | 50 | 4522-1 | 80 |
| 4521N-D | 1837761 | 1 | 14-19 | 4 | 60 | 4522-1 | 90 |
| 4521N-E | 1837778 | 1 | 16-21 | 4 | 60 | 4522-1 | 90 |
| 4521N-F | 1837785 | 1 | 18-23 | 4 | 60 | 4522-1 | 110 |
| 4521N-G | 1837792 | 1 | 20-25 | 4 | 60 | 4522-1 | 110 |
| 4521N-H | 1837808 | 1 | 25-30 | 4 | 60 | 4522-1 | 120 |
| 4521N-I | 1837815 | 1 | 30-37 | 4 | 70 | 4522-1 | 280 |
| 4521N-K | 1837822 | 1 | 35-42 | 4 | 70 | 4522-1 | 280 |
| 4521N-L | 1837839 | 1 | 38-45 | 4 | 70 | 4522-1 | 290 |
| 4521N-M | 1837846 | 1 | 43-50 | 4 | 70 | 4522-1 | 310 |
| 4521N-S | 1839789 | 1 | 40-75 | 3 | 100 | 4522-2 | 760 |
| 4521N-T | 1839796 | 1 | 70-115 | 3 | 130 | 4522-2 | 1400 |

4522



COUNTER STAY DEVICES

- Extractor: 2 arms
- To be used with 4521
- Finish: Galvanised
- 4522-1 fits 4521N-00 to -M
- 4522-2 fits 4521N-S and -T

| | 731415 | | g |
|--------|------------|---|-------|
| 4522-1 | 1081591 | 1 | 700 |
| 4522-2 | 1081614 | 1 | 1500 |

4521N/7

COMPLETE WORKSHOP PULLER ASSORTMENT



- Extractor set 9 pcs
- Finish: Galvanised and gunmetal finish
- Material: Special steel
- Metallic box: Size 400 x 310 x 70 mm

| | | | |
|---|---|---|---|
|  |  731415 |  |  |
| 4521N/7 | 1839802 | 1 | 6800 |

4521N-B
4521N-D, 4521N-G, 4521N-H, 4521N-I, 421N-L, 4521N-S



4522-1, 4522-2



4523G

SLIDING HAMMER PULLING BAR



- Sliding hammer
- Finish: Gunmetal finish
- Material: Special steel
- To be used with 4521N-00 to E






| | | | | |
|---|---|---|---|---|
|  |  731415 |  |  mm |  |
| 4523G | 1846695 | 1 | Ø10x170 | 400 |

4524G

SLIDING HAMMER PULLING BAR



- Sliding hammer 1.3 kg
- Finish: Galvanised
- Material: Special steel
- To be used with 4521N-F up to -M

| | | | | |
|---|---|---|---|---|
|  |  731415 |  |  mm |  |
| 4524G | 1718596 | 1 | Ø16 x 250 | 1300 |



4581N-4583N

BALL BEARING PULLERS WITHOUT ARMS



- Ball bearing extractor without arms
- Finish: Galvanised
- Material: Special steel
- This puller removes ball bearings that are inside a housing and mounted on a shaft

| | 731415 | | | g |
|---------|------------|---|-------------------------|-------|
| 4581N-1 | 1724139 | 1 | 4581NA, 4581NB | 300 |
| 4582N-1 | 1724214 | 1 | 4581NB2, 4581NC, 4582NA | 400 |
| 4582N-2 | 1724481 | 1 | 4581NC, 4582NA, 4582NB | 500 |
| 4583N-1 | 1724566 | 1 | 4582NA, 4583NA, 4583NB | 900 |
| 4583N-2 | 1724641 | 1 | 4582NA, 4582NB, 4583NB | 1200 |

4581NA-4583NB

SPARE ARMS



- Extractor spare arms - set of 4 pcs
- Finish: Galvanised
- Material: Special steel

| | 731415 | | mm | | g |
|---------|------------|---|--------|------------------|-------|
| 4581NA | 1301200 | 1 | 120 | 4581N-1 | 100 |
| 4581NB | 1301217 | 1 | 120 | 4581N-1 | 100 |
| 4581NB2 | 1724726 | 1 | 130 | 4582N-1 | 200 |
| 4581NC | 1301224 | 1 | 130 | 4582N-1, 4582N-2 | 200 |
| 4582NA | 1301248 | 1 | 150 | 4582N-1, 4583N-2 | 300 |
| 4582NB | 1301255 | 1 | 150 | 4582N-2, 4583N-2 | 400 |
| 4583NA | 1301279 | 1 | 190 | 4583N-1 | 600 |
| 4583NB | 1301286 | 1 | 190 | 4583N-1, 4583N-2 | 800 |

4580N/7

SET OF BALL BEARING PULLERS

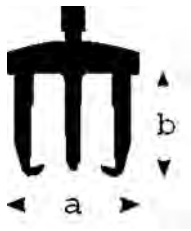


- Ball bearing extractor set
- Finish: Galvanised
- Material: Special steel
- For ball bearings 6000-6012, 6200-6212, 6300-6311, 6403-6406
- Pullers No. 4581NB-1, 4582N-1, 4582N-2, 4583N-1, 4583N-2
- 8 arm set, 4 pcs each No. 4581NA through 4583NB








| | 731415 | | mm | g |
|---------|------------|---|------------|-------|
| 4580N/7 | 1301361 | 1 | 287x192x66 | 8000 |

4614

2 ARMS PULLERS



- Extractor: Scissor type
- Finish: Galvanised, induction hardened and wear-resistant spindle
- Material: Special steel
- Application: Due to the shearing action, the arm's clamping force is increased when pulling; The claws are pointed at one end which makes this puller well suited for work in confined spaces
- 4614-1 particularly suited for armature bearings on 3-phase current generators








|  |  731415 |  | a mm | b mm |  max |  max Tn |  max KN |  g |
|---|---|---|---------|---------|--|--|--|--|
| 4614-1 | 1725457 | 1 | 6-100 | 70-85 | 25 | 1.5 | 15 | 400 |
| 4614-2 | 1725532 | 1 | 10-140 | 85-120 | 60 | 3.5 | 35 | 900 |

4519

PULLERS WITH CLAMP



- Extractor: 2 arms with clamp
- Finish: Galvanised
- To remove axle bearings, ball bearing races, pinions etc
- Double-side use of arms
- Both claws are slim which makes the tool ideal for work in confined spaces







|  |  731415 |  | a mm | b mm |  max |  max Tn |  max KN |  g |
|---|---|---|---------|---------|--|--|--|--|
| 4519-1 | 1716974 | 1 | 20-110 | 80-170 | 120 | 5 | 50 | 2300 |
| 4519-2 | 1717193 | 1 | 40-150 | 90-270 | 120 | 6 | 60 | 4100 |
| 4519-3 | 1717278 | 1 | 40-150 | 90-330 | 150 | 8 | 80 | 4500 |

4519/S

SPARE SPINDLES



- Spare spindle, with round steel ball
- Finish: Gunmetal finish

|  |  731415 |  |  |  mm |  g |
|---|---|---|---|---|--|
| 4519-1/S | 1843762 | 1 | 4519-1, 4542-B, 4583N-1 4537-2, 4528M2, 4541-B | 19 | 48 |
| 4519-2/S | 1843977 | 1 | 4519-2, 4519-3, 4528M3, 4528M4 4528M5, 4537-3, 4537-4 | 22 | 73 |



EXTRACTORS

4610

NUT SPLITTERS HYDRAULIC



- Hydraulic nut splitter
- Finish: Galvanised and gunmetal finish
- Material: Special steel
- For nuts up to type 10
- For removing jammed nuts without damaging the stud thread
- The double swan-neck tool permits working in confined spaces
- Due to a hydraulic system, a minimum of effort is required for the operation
- The chisel will not retract automatically after use
- Max load 50 KN

| | | | | | | |
|--------|------------|---|--------|--------|---------------|-------|
| | 731415 | | | mm | max Nm | g |
| 4610-1 | 1724993 | 1 | M4-M14 | 7-22 | 45 | 800 |

4611

NUT SPLITTERS MECHANICAL



- Mechanical nut splitter
- Finish: Galvanised and gunmetal finish
- Material: Special steel
- For nuts up to type 6
- For removing jammed nuts without damaging the stud thread

| | | | | | |
|--------|------------|---|---------|--------|-------|
| | 731415 | | | mm | g |
| 4611-3 | 0125043 | 1 | M16-M24 | 6-36 | 300 |

4553

STUD REMOVERS



- Stud remover
- Finish: Galvanised
- Material: Vanadium-extra
- Head thickness 10 mm

| | | | | | |
|------|------------|---|--------|--------|-------|
| | 731415 | | mm | mm | g |
| 4553 | 1830649 | 1 | 315 | 5-20 | 390 |



4591-4593

STUD REMOVERS



- For tightening and loosening left and right-hand threaded studs
- Finish: Galvanised and gunmetal finish
- Due to the eccentric and knurled clamping disc, short studs can be removed
- Drive SW 19 mm

| | 731415 | | mm | max Nm | g |
|------|------------|---|--------|---------------|-------|
| 4591 | 1804039 | 1 | 5-15 | 120 | 360 |
| 4592 | 1804046 | 1 | 10-19 | 120 | 400 |
| 4593 | 1804053 | 1 | 18-28 | 120 | 450 |

4574

SET OF PULLER AND SEPARATOR ASSORTMENT



- Extractors and separators set
- Finish: Galvanised
- Material: Special steel

| | 731415 | | mm | g |
|------|------------|---|-------------|-------|
| 4574 | 1799014 | 1 | 360x300x105 | 16000 |

4532
4532-A, -C



4551-C



4532LK
4532LK1, & LK2



4529-15





4577

SET OF PULLERS FOR CAR MAINTENANCE



- Extractor set for car maintenance
- Finish: Galvanised
- Material: Special steel

| | | | | |
|------|------------|---|------------|-------|
| | 731415 | | mm | 9 |
| 4577 | 1838348 | 1 | 440x400x90 | 10500 |

4565N



4545-N2



4532-B



4614-1



4521N
4521N-B, 4521N-D,
4521N-G 4521N-H,
4521N-I, 4521N-L



4523G



4522-1








1420-1424

STUD EXTRACTORS FOR BROKEN-OFF SCREWS, BOLTS AND STUDS



- Stud extractors for broken-off screws, bolts and studs
- Finish: Blasted
- Material: Chrome-vanadium





|  |  731415 |  | \varnothing mm | L mm |  |  g |
|---|---|---|---------------------|-----------|---|--|
| 1420-1.4 | 1696337 | 1 | 1.4-3.6 | 50 | M 3-6 | 3 |
| 1421-2.1 | 1696412 | 1 | 2.1-4.9 | 57 | M 6-8 | 7 |
| 1422-3.1 | 1696689 | 1 | 3.1-6.5 | 65 | M 8-11 | 15 |
| 1423-4.8 | 1696764 | 1 | 4.8-8.8 | 70 | M11-14 | 25 |
| 1424-6.2 | 1696849 | 1 | 6.2-11.0 | 80 | M14-18 | 45 |

1435/5

STUD EXTRACTOR SET



- Stud extractors set 5 pcs
- Finish: Blasted
- Material: Chrome-vanadium
- Covers screws M3 to M18

|  |  731415 |  |  g |
|---|--|---|--|
| 1435/5 | 1040734 | 1 | 145 |

1420 1421 1422 1423 1424







1435/8

STUD EXTRACTOR SET



- Set with 8 stud extractors
- Finish: Blasted
- Material: Chrome-vanadium
- For screws M3 to M45

|  |  731415 |  |  g |
|---|--|---|--|
| 1435/8 | 1040741 | 1 | 740 |

1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427





1411-1415

STUD EXTRACTORS



- Finish: Black finish
- Material: Vanadium-extra

| | 731415 | | mm | mm | mm | " | | g |
|----------|------------|---|--------|--------|--------|-------|---------|-------|
| 1411-3.2 | 1040437 | 1 | 10 | 60 | 3.2 | 1/8 | M5-M6 | 12 |
| 1412-4.8 | 1040444 | 1 | 11 | 70 | 4.8 | 3/16 | M8 | 20 |
| 1413-6.4 | 1040451 | 1 | 13 | 80 | 6.4 | 1/4 | M10 | 32 |
| 1414-8 | 1040468 | 1 | 14 | 85 | 8.0 | 5/16 | M12 | 45 |
| 1415-8.7 | 1040475 | 1 | 17 | 95 | 8.7 | 11/32 | M14-M16 | 65 |

1418S

SET OF STUD EXTRACTORS FOR BROKEN-OFF SCREWS, BOLTS AND STUDS



- Set of stud extractors for broken-off screws, bolts and studs
- Finish: Black finish
- Material: Vanadium-extra
- In a plastic case

| | 731415 | | g |
|-------|------------|---|-------|
| 1418S | 1040604 | 1 | 620 |

1411 1412 1413 1414 1415



G220 HSS-M
3.2, 4.8, 6.4, 8, 8.7 mm DIN 338 RN



1418
A, B, C, D, E, F, G, H, I, K



1418A-K

SET OF STUD EXTRACTORS FOR BROKEN-OFF SCREWS, BOLTS AND STUDS



- Guide bushes
- Finish: Black finish
- Material: Vanadium-extra

| | 731415 | | g |
|-------|------------|---|-------|
| 1418A | 1040505 | 1 | 4 |
| 1418B | 1040512 | 1 | 7 |
| 1418C | 1040529 | 1 | 11 |
| 1418D | 1040536 | 1 | 14 |
| 1418E | 1040543 | 1 | 14 |
| 1418F | 1040550 | 1 | 13 |
| 1418G | 1040567 | 1 | 17 |
| 1418H | 1040574 | 1 | 22 |
| 1418I | 1040581 | 1 | 15 |
| 1418K | 1040598 | 1 | 20 |

1419/4



SET OF STUD EXTRACTORS FOR BROKEN-OFF SCREWS, BOLTS AND STUDS

- Set of stud extractors for broken-off screws, bolts and studs including 4 sizes: M5-M10; M8-M14; M12-M20; extractors M16-M24

| | | | |
|---|--|---|--|
|  |  731151 |  |  g |
| 1419/4 | 0125036 | 1 | 300 |

1460M/1



SETS OF THREAD-CUTTING TOOLS

- Finish: Polished, taps with ground flanks, in lacquered metal box and with wooden insert
- Material: Taps and dies of HSS
- Taps DIN 352/ISO 6H, dies DIN 223/ISO 6 g, adjustable tap wrench DIN 1814, 4-9, die stocks DIN 225
 - For metric ISO standard threads M 5 6 7 8 9 10 11 12
- Contents: 37 pcs
 - 24 taps = 8 sets of 3 taps (taper, plug, bottoming)
 - 8 round dies, pre-slotted
 - 1 adjustable tap wrench, size 2
 - 4 die stocks, 20 x 7, 25 x 9, 30 x 11, 38 x 14

| | | | |
|---|--|---|--|
|  |  731415 |  |  g |
| 1460M/1 | 1041090 | 1 | 5000 |

1460M/2



SETS OF THREAD-CUTTING TOOLS

- Finish: Polished, taps with ground flanks, in lacquered metal box and with wooden insert
- Material: Taps and dies of HSS
- Taps DIN 352/ISO 6H, dies DIN 223/ISO 6 g, adjustable tap wrench DIN 1814, 4-9, die stocks DIN 225
 - For metric ISO standard threads, M 5 6 7 8 9 10 11 12 14 16 18 20
- Contents: 55 pcs
 - 36 taps = 12 sets of 3 taps (taper, plug, bottoming)
 - 12 round dies, pre-slotted
 - 2 adjustable tap wrenches, size 1, DIN 1814, 2-6,3 size 3, DIN 1814, 4,9-12
 - 5 die stocks, 20 x 7, 25 x 9, 30 x 11, 38 x 14, 45 x 18

| | | | |
|---|--|---|--|
|  |  731415 |  |  g |
| 1460M/2 | 1041106 | 1 | 8100 |



1460Z/2



SETS OF THREAD-CUTTING TOOLS

- Finish: Polished, taps with ground flanks
- Material: Taps and dies of HSS
- Taps DIN 352/ISO 6H, dies DIN 223/ISO 6 g, adjustable tap wrench DIN 1814,4-9, die stocks DIN 225
- For American threads:
 - **N.F.** (S.A.E.) 1/4 5/16 3/8 7/16 1/2 9/16 5/8 3/4 in.
 - 28 24 24 20 20 18 18 16 threads per inch
 - **N.C.** (U.S.S.) 1/4 5/16 3/8 7/16 1/2 9/16 5/8 3/4 in.
 - 20 18 16 14 13 12 11 10 threads per inch
- Contents: 54 pcs
 - 32 taps = 8 sets of 2 N.F. taps (taper, bottoming) = 8 sets of 2 N.C. taps (taper, bottoming)
 - 16 round dies, pre-slotted
 - 1 adjustable tap wrench, size 3 DIN 1814, 9-12
 - 5 die stocks, 20 x 7, 25 x 9, 30 x 11, 38 x 14, 45 x 18

| | | | |
|---------|-------------------|---|-------|
| | | | |
| 1460Z/2 | 731415 1041120 | 1 | 10500 |

600



TAP WRENCH

- With reversible ratchet: Forward-reverse-locked
- Parallel clamping action
- Hardened jaws
- Sliding handle
- Chrome plated steel

| | | | | | |
|-------------|-------------------|---|------------|----------|-----|
| | | | | | |
| 600.003.010 | 841281 4600000 | 1 | mm 3-10 | mm 85 | 195 |
| 600.005.012 | 4600017 | 1 | 5-12 | 110 | 329 |


1450D-ISO

DOUBLE THREAD RESTORERS, METRIC



- Double thread restorers for internal and external threads, Metric
- Finish: Galvanised
- Pitch Metric thread

| | |
|------|------------|
| mm | mm |
| 0.80 | 5 |
| 1.00 | 6 and 7 |
| 1.25 | 8 and 9 |
| 1.50 | 10 and 11 |
| 1.75 | 12 |
| 2.00 | 14 and 16 |
| 2.50 | 18, 20, 22 |
| 3.00 | 24 and 27 |

| | | | | |
|---|---|---|---|--|
|  |  731415 |  |  mm |  g |
| 1450D-ISO | 1040970 | 1 | 230 | 117 |






1450D-WW

DOUBLE THREAD RESTORERS, INCH



- Double thread restorers for internal and external threads, Inch
- Finish: Galvanised
- Whitworth

| Threads/inch | BSF thread | BSW thread |
|--------------|--------------|--------------|
| 24 | 3/16 | - |
| 20 | 1/4 | 3/8 |
| 18 | 5/16 | 7/16 |
| 16 | 3/8 | 1/2 and 9/16 |
| 14 | 7/16 | 5/8 |
| 12 | 1/2 and 9/16 | 3/4 |
| 11 | 5/8 | 7/8 |
| 10 | 3/4 | 1 |

| | | | | |
|---|---|---|---|--|
|  |  731415 |  |  mm |  g |
| 1450D-WW | 1040987 | 1 | 230 | 117 |

1450D/2

SET



- Double thread restorers set
- In wooden box
- With thread table

| | | | |
|---|---|---|--|
|  |  731415 |  |  g |
| 1450D/2 | 1040963 | 1 | 300 |

1450D-ISO



1450D-WW





PRY BARS

2632 COMBINATION COTTER PIN EXTRACTOR AND SPREADER



- Finish: Working surfaces fine-polished, made of 8 mm hexagon stock
- Material: Vanadium-extra

| | | | | |
|------|-------------------|---|----------------|---------|
| | | | | |
| 2632 | 731415 1065706 | 1 | L mm 170 | g 55 |

3680 SPECIAL PRY BAR



- For prying of cylinder heads and gears, loosening rust-bound parts, seating and deseating ball bearings

| | | | | |
|------|-------------------|---|----------------|----------|
| | | | | |
| 3680 | 731415 1075835 | 1 | L mm 400 | g 500 |

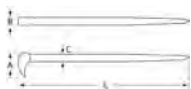
3683 SPECIAL PRY BAR



- 90° special lever
- With convex 90° offset head, suitable for work in confined spaces such as behind gears

| | | | | |
|------|-------------------|---|----------------|----------|
| | | | | |
| 3683 | 731415 1075866 | 1 | L mm 400 | g 410 |

3681 SPECIAL PRY BAR



- With a long tapered end for alignments and a rolling head for prying
- Finish: Black phosphated with polished head
- Material: Hardened special alloy steel






| | | | | | | | |
|---------|-------------------|---|---------|---------|---------|----------------|----------|
| | | | A mm | B mm | C mm | | |
| 3681-11 | 731415 0132980 | 1 | 35 | 13 | 11 | L mm 304 | g 230 |
| 3681-16 | 0132997 | 1 | 44 | 14 | 14 | 406 | 450 |
| 3681-20 | 0133000 | 1 | 58 | 17.5 | 17 | 508 | 835 |

3684

SPECIAL PRY BAR



- With long-tapered end for alignments and a flat end used for lifting and bending heavy parts
- Finish: Manganese phosphated
- Material: Hardened chrome-vanadium steel
- Shape: Hexagon shank





|  |  731415 |  | A mm | B mm | C mm |  L mm |  g |
|---|---|---|---------|---------|---------|--|--|
| 3684-16 | 0133017 | 1 | 21 | 19 | 12.7 | 406 | 360 |
| 3684-18 | 0133024 | 1 | 29 | 22.5 | 15.8 | 457 | 625 |
| 3684-24 | 0133031 | 1 | 37 | 26 | 19 | 609 | 1250 |
| 3684-30 | 0133048 | 1 | 38 | 32 | 22.2 | 762 | 2140 |

2484/S4

PRY BAR, SETS



- Set of pry bars for easy prying and bending
- Plastic handles with lightweight design offers a comfortable grip as well as powerful leverage potential
- L: 200, 300, 450 and 600 mm

|  |  731151 |  |  mm |  g |
|---|---|---|---|--|
| 2484/S4 | 8276553 | 10 | 640x115x35 | 1500 |