



Serious Solutions for Stuck Fasteners

IRWIN® Tools has the solution to deal with a stuck fastener, a rounded or broken head, a snapped stud, or a stripped screw or fitting. Five different styles of extractors give you extra gripping power to remove problem fasteners without damaging workpieces.

Remove the Guesswork in Fastener Extraction

Fasteners vary widely in composition and hardness. That's why IRWIN has many different products for removing damaged fasteners and parts. Each extraction tool is specifically designed to take into account the material involved in order to make removal easier. The guidelines below will help you choose the tool that will deliver the optimal results for your particular situation.

| Extractor Type | Benefits | Fastener Size Range | Drive Tool |
|---|---|------------------------|--|
| Straight Flute | Extracts without expanding material Ideal for pipes and fittings Works on left-hand or right-hand threads | 3/16" - 7/8" | Tap Wrench Wrench Socket Wrench VISE-GRIP® Locking Pliers IRWIN Tap Adaptors |
| Spiral Screw | Spiral bites into harder materials with increasing torque Flutes embed deeper with each turn | 3/32" - 2-1/2" | Tap Wrench Wrench Socket Wrench VISE-GRIP Locking Pliers IRWIN Tap Adaptors |
| Multi-Spline Screw | Low profile enables use in confined areas Provides most torque of internal extractors Engages fastener without a deep hole | 1/8" - 7/8" | Flat WrenchSocket WrenchVISE-GRIP Locking Pliers |
| Bolt Extractor | Engages rusted-over, painted-on, and stripped-out bolts Grips broken, worn, or stubborn fasteners Drive with a variety of tools | 1/4" - 1" | Socket WrenchWrenchVISE-GRIP Locking Pliers |
| POWER-GRIP™ Screw & Bolt Extractors | Grips rusted, painted, stripped, and even round-head fasteners and screws Easily fits into drill or power driver with quick change shank | 3/16" - 1/2" | Power DrillVISE-GRIP Locking Pliers |

Guide for Using Screw Extractors

Drill a hole in the threaded part or fastener to be removed. Drill deep enough for the extractor to grip without bottoming out. For best results, use a left-handed drill bit. Insert the extractor and turn with a wrench or drive tool.



HANSON® Straight Flute 536/526 Series



52605

- Extracts without expanding material
- Ideal for pipes and fittings
- Works on left-hand or right-hand threads

| Description | Recommended Tap Wrench | Use Drill Size | Removes Bolts & Screws | Carded Item # | Bulk Item # |
|-------------|---------------------------|-------------------|---|------------------|----------------|
| ST-1 | TR-88 | 9/64" | 3/16" - 5/16", 5 mm - 8 mm, No. 10 | 53601 | 52601 |
| ST-2 | TR-88 | 3/16" | 3/8", 10 mm | 53602 | 52602 |
| ST-3 | TR-88 | 15/64" | 7/16" and 1/8" NPT, 10 mm, 1/8" BSP | 53603 | 52603 |
| ST-4 | TR-98 | 5/16" | 1/2" - 9/16" and 1/4" NPT, 12 mm - 14 mm, 1/4" BSP | 53604 | 52604 |
| ST-5 | TR-98 | 3/8" | 5/8" and 3/8" NPT, 16 mm, 3/8" BSP | 53605 | 52605 |
| ST-6 | TR-98 | 15/32" | 3/4" and 1/2" NPT, 20 mm, 1/2" BSP | 53606 | 52606 |
| ST-7 | TR-98 | 9/16" | 7/8", 22 mm, 5/8" BSP | 53607 | 52607 |

HANSON Straight Flute Extractor Sets 536/526 Series



53625

| Description | Contents | Carded Item # |
|-------------|-------------|------------------|
| 4-pc Set | ST-2 - ST-5 | 53625 |
| 5-pc Set | ST-1 - ST-5 | 53635 |
| 6-pc Set | ST-1 - ST-6 | 53645 |

HANSON 10-piece Straight Flute Extractor & Cobalt Drill Bit Set



11118

| Description | Contents | | | Carded Set Item # 11118 |
|--|------------------|------------------|-------------|----------------------------|
| 10-pc Extractor & Cobalt Drill Bit Set in Vinyl Pouch | Straight Flute E | xtractors/Item # | Drill Bits/ | Item # |
| | ST-1 | 52601 | 9/64" | 63109 |
| | ST-2 | 52602 | 3/16" | 63112 |
| | ST-3 | 52603 | 15/64" | 63115 |
| | ST-4 | 52604 | 5/16" | 63120 |
| | ST-5 | 52605 | 3/8" | 63124 |

HANSON® Spiral Screw Extractor 534/524 Series



52405

- Designed to remove broken studs, bolts, socket screws and fittings
- Aggressive left hand spiral design for extra gripping power

| Description | Recommended Tap Wrench | Use Drill Size | Removes Bolts & Screws | Carded Item # | Bulk Item # |
|-------------|---------------------------|-------------------|--|------------------|----------------|
| EX-1 | TR-88 | 5/64" | 3/32" - 5/32", 2.5 mm - 4 mm, No. 3 - No. 6 | 53401 | 52401 |
| EX-2 | TR-88 | 7/64" | 5/32" - 7/32", 4 mm - 6 mm, No. 6 - No. 12 | 53402 | 52402 |
| EX-3 | TR-88 | 5/32" | 7/32" - 9/32", 6 mm - 8 mm, No. 12 | 53403 | 52403 |
| EX-4 | TR-88 | 1/4" | 9/32" - 3/8", 1/8" NPT, 1/8" BSP, 8 mm - 10 mm | 53404 | 52404 |
| EX-5 | TR-98 | 19/64" | 3/8" - 5/8", 1/4" NPT, 1/4" BSP, 10 mm - 16 mm | 53405 | 52405 |
| EX-6 | TR-98 | 13/32" | 5/8" - 7/8", 3/8" NPT, 3/8" BSP, 16 mm - 22 mm | 53406 | 52406 |
| EX-7 | TR-98 | 17/32" | 7/8" - 1-1/8", 1/2" NPT, 1/2" BSP, 22 mm - 27 mm | 53407 | 52407 |
| EX-8 | - | 13/16" | 1-1/8" - 1-3/8", 3/4" NPT, 3/4" BSP, 27 mm - 36 mm | - | 52408 |
| EX-9 | _ | 1-1/16" | 1-3/8" - 2", 1" NPT, 1" BSP, 36 mm - 52 mm | _ | 52409 |
| EX-10 | - | 1-15/16" | 2-1/8" - 2-1/2", 1-1/4" NPT, 1-1/4" BSP, 52 mm - 68 mm | - | 52410 |

HANSON Spiral Screw Extractor & Drill Bit Combo Packs 537 Series



53704

 High speed steel drill bit ensures fast, clean drilling

| Description | Carded Item # |
|-------------------------|------------------|
| EX-1 + 5/64" Drill Bit | 53701 |
| EX-2 + 7/64" Drill Bit | 53702 |
| EX-3 + 5/32" Drill Bit | 53703 |
| EX-4 + 1/4" Drill Bit | 53704 |
| EX-5 + 19/64" Drill Bit | 53705 |
| EX-6 + 13/32" Drill Bit | 53706 |

| Description | Contents | | | Carded Item # 53700 |
|--|---------------------------|--------|------------|------------------------|
| 6-pc Extractor & HSS Drill Bit Set in Vinyl Pouch | Straight Screw Extractors | Item # | Drill Bits | Item # |
| | EX-1 | 52401 | 5/64" | 60105 |
| | EX-2 | 52402 | 7/64" | 60107 |
| | EX-3 | 52403 | 5/32" | 60110 |

| Description | Contents | Carded Item # | Bulk Item # |
|-------------|-------------|------------------|----------------|
| 4-pc Set | EX-2 - EX-5 | - | 52425 |
| 5-pc Set | EX-1 - EX-5 | 53535 | 52435 |
| 6-pc Set | EX-1 - EX-6 | 53545 | 52445 |
| 9-nc Set | EX-1 - EX-9 | _ | 52490 |

HANSON Spiral Screw Extractor Sets



53535

HANSON® 10-piece Spiral Screw Extractor & Drill Bit Set



| Description | Contents | | | Item # 11119 |
|--------------------------|----------------|------------------|-----------|--------------|
| 10-pc Set in Metal Index | Spiral Screw I | Extractors/Item# | Drill Bit | s/Item # |
| | EX-1 | 52401 | 5/64" | 30505 |
| | EX-2 | 52402 | 7/64" | 30507 |
| | EX-3 | 52403 | 5/32" | 30510 |
| | EX-4 | 52404 | 1/4" | 30516 |
| | EX-5 | 52405 | 19/64" | 30519 |

HANSON 10-piece Spiral Screw Extractor & Drill Bit Combo Packs



11117

| Description | Contents | | Item # 11117 | |
|--------------------------|----------------|-----------------|-------------------|--|
| 10-pc Set in Metal Index | Spiral Screw E | xtractors/Item# | Drill Bits/Item # | |
| | EX-1 | 52401 | 5/64" 63105 | |
| | EX-2 | 52402 | 7/64" 63107 | |
| | EX-3 | 52403 | 5/32" 63110 | |
| | EX-4 | 52404 | 1/4" 63116 | |
| | EX-5 | 52405 | 19/64" 63119 | |

HANSON 35-piece Spiral Screw Extractor & Drill Bit Set



| Description | Conte | Contents Item # 11135ZR | | | | |
|-------------|-----------------------------------|-------------------------|--------|-------|-----------------------------|-------------|
| 35-pc Set | Spiral Screw Extractors/Item # | | | | Left-Hand Cobalt Drill B | lits/Item # |
| | EX-1 | 52401 | 1/8" | 53201 | 5/64" | 30505 |
| | EX-2 | 52402 | 5/32" | 53202 | 7/64" | 30507 |
| | EX-3 | 52403 | 3/16" | 53203 | 1/8" | 30508 |
| | EX-4 | 52404 | 7/32" | 53204 | 5/32" | 30510 |
| | EX-5 | 52405 | 1/4" | 53205 | 3/16" | 30512 |
| | EX-6 | 52406 | 9/32" | 53206 | 7/32" | 30514 |
| | | | 5/16" | 53207 | 1/4" | 30516 |
| | | | 11/32" | 53208 | 9/32" | 30518 |
| | | | 3/8" | 53209 | 19/64" | 30519 |
| | | | 13/32" | 53210 | 5/16" | 31520 |
| | | | 7/16" | 53211 | 11/32" | 30522 |
| | | | 15/32" | 53212 | 3/8" | 30524 |
| | | | 1/2" | 53213 | 13/32" | 30526 |
| | | | | | 7/16" | 30528 |
| | | | | | 15/32" | 30530 |
| | | | | | 1/2" | 30532 |

HANSON 48-piece Master Extractor Set



- IRWIN's most complete extractor kit
- For use with fasteners above, below, or flush with the work surface

| Description | Conte | nts | | | | | Item # | 3101010 |
|------------------|----------|-----------|-----------|----------|----------------|-------|------------|----------|
| 48-pc Master Set | Spiral S | | Multi Spl | | Bolt | | | d Cobalt |
| 40 pc master oct | Extracto | rs/Item # | | s/Item # | Extractors/lte | em # | Drill Bits | /Item # |
| | EX-1 | 52401 | 1/8" | 53201 | 1/4" | 53901 | 5/64" | 30505 |
| | EX-2 | 52402 | 5/32" | 53202 | 5/16"-8mm | 53902 | 7/64" | 30507 |
| | EX-3 | 52403 | 3/16" | 53203 | 3/8" | 53903 | 1/8" | 30508 |
| | EX-4 | 52404 | 7/32" | 53204 | 10mm | 53904 | 5/32" | 30510 |
| | EX-5 | 52405 | 1/4" | 53205 | 7/16"-11mm | 53905 | 3/16" | 30512 |
| | EX-6 | 52406 | 9/32" | 53206 | 12mm | 53906 | 7/32" | 30514 |
| | | | 5/16" | 53207 | 1/2" | 53907 | 1/4" | 30516 |
| | | | 11/32" | 53208 | 13mm | 53908 | 9/32" | 30518 |
| | | | 3/8" | 53209 | 9/16"-14mm | 53909 | 19/64" | 30519 |
| | | | 13/32" | 53210 | 5/8"-16mm | 53910 | 5/16" | 31520 |
| | | | 7/16" | 53211 | 17mm | 53911 | 11/32" | 30522 |
| | | | 15/32" | 53212 | 11/16" | 53912 | 3/8" | 30524 |
| | | | 1/2" | 53213 | 3/4"-19mm | 53913 | 13/32" | 30526 |
| | | | | | | | 7/16" | 30528 |
| | | | | | | | 15/32" | 30530 |
| | | | | | | | 1/2" | 30532 |

EXTRACTORS

HANSON® Hex Head Multi-Spline



53225

- Designed to remove broken studs, bolts, socket screws and fittings for high torque applications
- Aggressive left-hand spiral design for extra gripping power

| Description | Hex Head Size | Bolt Diameter | Recommended Drill Bit Diameter | Carded Item # | Bulk Item # |
|-------------|------------------|------------------|--------------------------------------|------------------|----------------|
| 1/8" | 1/2" | #12 | 1/8" | 52201ZR | 53201 |
| 5/32" | 1/2" | 1/4" | 5/32" | 52202 | 53202 |
| 3/16" | 1/2" | 5/16" | 3/16" | 52203 | 53203 |
| 7/32" | 1/2" | 3/8" | 7/32" | 52204 | 53204 |
| 1/4" | 1/2" | 7/16" | 1/4" | 52205 | 53205 |
| 9/32" | 1/2" | 1/2" | 9/32" | 52206 | 53206 |
| 5/16" | 1/2" | 9/16" | 5/16" | 52207 | 53207 |
| 11/32" | 1/2" | 5/8" | 11/32" | 52208 | 53208 |
| 3/8" | 1/2" | 11/16" | 3/8" | _ | 53209 |
| 13/32" | 1/2" | 3/4" | 13/32" | _ | 53210 |
| 7/16" | 5/8" | 13/16" | 7/16" | _ | 53211 |
| 15/32" | 5/8" | 7/8" | 15/32" | _ | 53212 |
| 1/2" | 5/8" | 15/16" | 1/2" | _ | 53213 |
| 17/32" | 3/4" | 1" | 17/32" | _ | 53214 |
| 9/16" | 3/4" | 1-1/16" | 9/16" | _ | 53215ZR |
| 19/32" | 3/4" | 1-1/8" | 19/32" | - | 53216 |
| 5/8" | 3/4" | 1-3/16" | 5/8" | _ | 53217 |
| 21/32" | 7/8" | 1-1/4" | 21/32" | _ | 53218 |
| 11/16" | 7/8" | 1-5/16" | 11/16" | _ | 53219 |
| 23/32" | 7/8" | 1-3/8" | 23/32" | - | 53220 |
| 3/4" | 7/8" | 1-7/16" | 3/4" | _ | 53221 |
| 25/32" | 1" | 1-1/2" | 25/32" | _ | 53222 |
| 13/16" | 1" | 1-9/16" | 13/16" | _ | 53223 |
| 27/32" | 1" | 1-5/8" | 27/32" | - | 53224 |
| 7/8" | 1" | 1-11/16" | 7/8" | _ | 53225 |

HANSON Hex Head Multi-Spline



53226

| Description | Contents | Item # |
|----------------------|---------------------|---------|
| 10-pc Set | 1/8" through 13/32" | 53226 |
| Empty Case for 53226 | - | 53226MT |
| 15-pc Set | 1/8" through 9/16" | 53228 |
| Empty Case for 53228 | - | 53228MT |
| 25-pc Set | 1/8" through 7/8" | 53227 |
| Empty Case for 53227 | _ | 53227MT |



HANSON® BOLT-GRIP® Bolt Extractors



53910

- Reverse spiral flutes bite into bolt
- For use with 3/8" socket drive, VISE-GRIP® Locking Pliers, or wrench.

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # |
|----------------------------------|------------------------------|------------|--------|
| 1/4" | 6 mm | 3/8" | 53901 |
| 5/16" | 8 mm | 3/8" | 53902 |
| 3/8" | - | 3/8" | 53903 |
| - | 10 mm | 3/8" | 53904 |
| 7/16" | 11 mm | 3/8" | 53905 |
| _ | 12 mm | 3/8" | 53906 |
| 1/2" | _ | 3/8" | 53907 |
| _ | 13 mm | 3/8" | 53908 |
| 9/16" | 14 mm | 3/8" | 53909 |
| 5/8" | 16 mm | 3/8" | 53910 |
| _ | 17 mm | 3/8" | 53911 |
| 11/16" | - | 3/8" | 53912 |
| 3/4" | 19 mm | 3/8" | 53913 |
| 3/4" | 19 mm | 1/2" | 53914 |
| 13/16" | 21 mm | 1/2" | 53915 |
| 7/8" | 22 mm | 1/2" | 53916 |
| 15/16" | 24 mm | 1/2" | 53917 |
| 1" | _ | 1/2" | 53918 |

HANSON BOLT-GRIP 9-piece Fractional Bolt Extractor Set



54009

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # 54009 |
|----------------------------------|------------------------------|------------|-----------------|
| 1/4" | 6 mm | 3/8" | 53901 |
| 5/16" | 8 mm | 3/8" | 53902 |
| 3/8" | - | 3/8" | 53903 |
| 7/16" | 11 mm | 3/8" | 53905 |
| 1/2" | _ | 3/8" | 53907 |
| 9/16" | 14 mm | 3/8" | 53909 |
| 5/8" | 16 mm | 3/8" | 53910 |
| 11/16" | - | 3/8" | 53912 |
| 3/4" | 19 mm | 3/8" | 53913 |

HANSON BOLT-GRIP 9-piece Metric Bolt Extractor Set



54019

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # 54019 |
|----------------------------------|------------------------------|------------|-----------------|
| 5/16" | 8 mm | 3/8" | 53902 |
| - | 10 mm | 3/8" | 53904 |
| 7/16" | 11 mm | 3/8" | 53905 |
| - | 12 mm | 3/8" | 53906 |
| _ | 13 mm | 3/8" | 53908 |
| 9/16" | 14 mm | 3/8" | 53909 |
| 5/8" | 16 mm | 3/8" | 53910 |
| - | 17 mm | 3/8" | 53911 |
| 3/4" | 19 mm | 3/8" | 53913 |

HANSON BOLT-GRIP 13-piece Professional Industrial Set



54113

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # 54113 |
|----------------------------------|------------------------------|------------|-----------------|
| 1/4" | 6 mm | 3/8" | 53901 |
| 5/16" | 8 mm | 3/8" | 53902 |
| 3/8" | _ | 3/8" | 53903 |
| = | 10 mm | 3/8" | 53904 |
| 7/16" | 11 mm | 3/8" | 53905 |
| - | 12 mm | 3/8" | 53906 |
| 1/2" | _ | 3/8" | 53907 |
| - | 13 mm | 3/8" | 53908 |
| 9/16" | 14 mm | 3/8" | 53909 |
| 5/8" | 16 mm | 3/8" | 53910 |
| _ | 17 mm | 3/8" | 53911 |
| 11/16" | - | 3/8" | 53912 |
| 3/4" | 19 mm | 3/8" | 53913 |

HANSON® BOLT-GRIP® 5-piece Lugnut Specialty Set



54125

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # 54125 |
|----------------------------------|------------------------------|------------|--------------|
| 3/4" | 19 mm | 1/2" | 53914 |
| 13/16" | 21 mm | 1/2" | 53915 |
| 7/8" | 22 mm | 1/2" | 53916 |
| 15/16" | 24 mm | 1/2" | 53917 |
| 1" | _ | 1/2" | 53918 |

5-piece HANSON BOLT-GRIP Base Set



- 394001
- Includes most commonly used sizes
- Engineered to grip bolts in almost any condition
- Case accommodates Expansion Set (#394002)

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # 394001 |
|----------------------------------|------------------------------|------------|---------------|
| 3/8" | - | 3/8" | 53903 |
| 7/16" | 11 mm | 3/8" | 53905 |
| 1/2" | _ | 3/8" | 53907 |
| 9/16" | 14 mm | 3/8" | 53909 |
| 5/8" | 16 mm | 3/8" | 53910 |

5-piece HANSON BOLT-GRIP Expansion Set



 Provides additional diameters to address a complete range of fastener sizes

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # 394002 |
|----------------------------------|------------------------------|------------|---------------|
| 5/16" | 8 mm | 3/8" | 53902 |
| - | 10 mm | 3/8" | 53904 |
| _ | 13 mm | 3/8" | 53908 |
| 11/16" | - | 3/8" | 53912 |
| 3/4" | 19 mm | 3/8" | 53913 |

394002

5-piece HANSON BOLT-GRIP Deep Well Set



- Longer profile and smaller head to fit in smaller areas
- Reaches recessed fasteners and fits over exposed studs

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # 3094001 |
|----------------------------------|------------------------------|------------|----------------|
| 3/8" | _ | 3/8" | 59903 |
| 7/16" | 11 mm | 3/8" | 59905 |
| 1/2" | _ | 3/8" | 59907 |
| 9/16" | 14 mm | 3/8" | 59909 |
| 5/8" | 16 mm | 3/8" | 59910 |

3094001

7-piece HANSON POWER-GRIP™ Set



- Reverse spiral teeth provide maximum gripping power
- 1/4" hex shank fits most drills and Quick Change Adaptors

| Removes Fractional Size Bolts | Removes Metric Size Bolts | Drive Size | Item # 394100 |
|----------------------------------|------------------------------|------------|---------------|
| 3/16" | _ | 1/4" | 394100A |
| 1/4" | - | 1/4" | 394101A |
| 5/16" | 8 mm | 1/4" | 394102A |
| 3/8" | - | 1/4" | 394103A |
| _ | 10 mm | 1/4" | 394104A |
| 7/16" | 11 mm | 1/4" | 394105A |
| 1/2" | _ | 1/4" | 394107A |

394100