

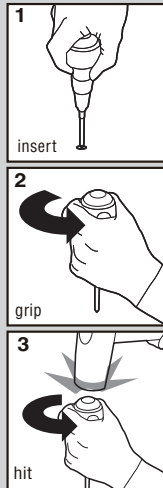
IMPACT & OUT™



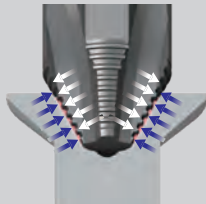
Blade turns 12° counterclockwise when striking with a hammer

How to unscrew

- ① Align the bit tip to the screw recess groove.
- ② Grip the screwdriver firmly and press into the screw
- ③ While pressing, strike the end of the screwdriver strongly with a hammer to loosen the screw. Remove carefully once loosened.



IMPACT & OUT™ Mechanism



Cam-out prevention:
Insert IMPACT & OUT™
Insert screwdriver bit completely into
the screw before removal.



Wedge-shaped tip
Inserts deep into the
recess, grooves are
formed



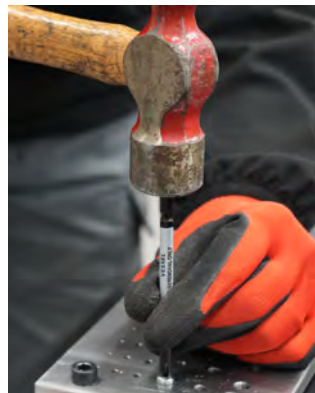
※The bolster helps apply more force when using a spanner. This is needed for the big hex socket head bolt.

Screw Removing Bits can be used with electric impact drivers!



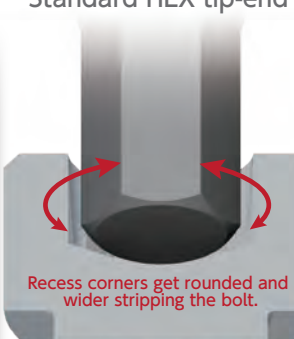
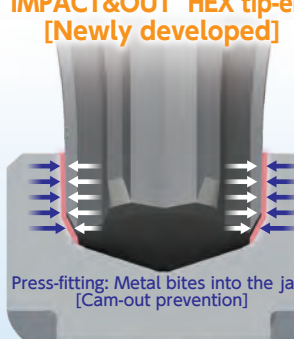
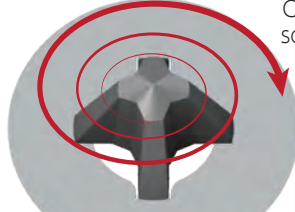

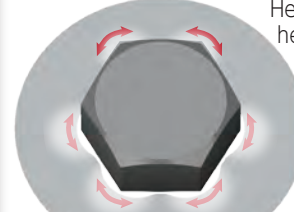
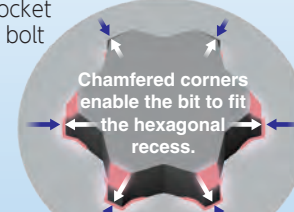
How to use

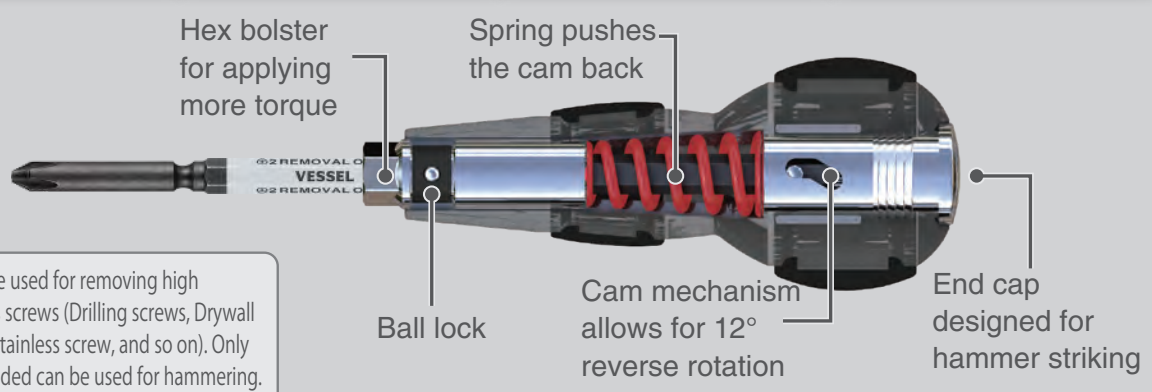
- ① Insert the bit into the screw recess.
- ② Tap the bit with a hammer carefully so that the tip-end bites into the screw.
- ③ Secure the electric impact driver to the bit.
- ④ Apply force gradually using low speed.
To prevent damage to the screw, turn and remove it when it feels loosened.

More technical details are on the following page.



VESSEL's new Impact & OUT tip-end enables stuck screw removal!

Standard ⊕ tip-end	"IMPACT&OUT" ⊕ tip-end [Newly developed]	Standard HEX tip-end	"IMPACT&OUT" HEX tip-end [Newly developed]
 <p>Bit slips out along diagonal grooves...</p>	 <p>Press-fitting: Metal bites into the jags [Cam-out prevention]</p>	 <p>Recess corners get rounded and wider stripping the bolt.</p>	 <p>Press-fitting: Metal bites into the jags [Cam-out prevention]</p>
 <p>Cross screw</p> <p>Since the cross recess is stripped and the bit wings don't grip the screw, the bit spins.</p>	 <p>Flat</p> <p>Bit enters deep into the recess but doesn't reach the bottom. [Wedge-shaped tip]</p>	 <p>Hex socket head bolt</p> <p>Attempts to forcibly turn the screw will further deform it...</p>	 <p>Chamfered corners enable the bit to fit the hexagonal recess.</p> <p>Grooves form by press-fitting [Wedge-shaped tip]</p>
<p>Cross-recess screws have the disadvantage of cam-out. If you don't press into the screw hard enough, the tip-end slips out and shaves off some of the cross-recess of the screw.</p>	<p>(1) Reduce cam-out. By striking the bit, the 4 jagged wings are firmly pushed into the cross-recess. The deformed metal of the screw twists around the wings of the bit so it doesn't easily slip.</p> <p>(2) The tip-end flat surface does not reach the bottom of the screw recess. Even if metal shavings are accumulated during bit insertion, they do not affect the screw removal process.</p>	<p>The stripped recess has its corners shaved and rounded off. When turned with a regular hex wrench, the corners of the wrench and screw recess do not hook together, making the roundness worse.</p>	<p>(1) Chamfered corners fit the screw recess corners. Easy fitting with our chamfered corner design reduces mistakes in bit size selection.</p> <p>(2) By press-fitting, the bit bites into the rounded hexagonal recess. When the bit is struck, the wings of the bit shave off the internal sides of the screw and firmly wedge into the recess.</p>



Note: Cannot be used for removing high hardness screws (Drilling screws, Drywall screws, Stainless screw, and so on). Only bits included can be used for hammering.