

CHAIN BREAKER AND RIVET TOOL KIT REF.: 1613



Characteristics:

Universal application for use on motorcycle drive chains and cam chains on cars.
For breaking and joining most drive chains with chain sizes between 25 and 530.
The kit includes 3 pin sizes to fit most chains: 2.2 mm, 2.9 mm, and 3.8 mm.
Recommended for light to medium-duty tasks.
For riveting hollow nose master links.
Pin material: Alloy steel.

Each kit contains one each of the following parts shown in the image:



Number	Description
1	Spring for use with all pins and riveter
2	2.2mm breaker pin for use with cam chains
3	2.9mm breaker pin for use with 420 size chains
4	3.8mm breaker pin for use with 428, 520, 525, 530(50), 532, 630 size chains
5	Tool body
6	Lower pin guide for use with 2.2mm pin
7	Riveter pin
8	Lower press plate - slotted - for use on 520, 525, 530(50) size chains
9	Top press plate - 2 holes - for use on 520, 525, 530(50) size chains
10	Small anvil for use while riveting link on cam chain
11	Large anvil for use while riveting link on 520, 525, 530(50), 532, 630 size chains
12	Alignment bolt
13	Push-bolt
14	Handle
15	Slide lever

BREAKING CHAIN

Warning:

DO NOT USE POWER TOOLS at any time to tighten or loosen any part of this tool.

Every procedure performed with this tool should only be done by hand using the supplied slide lever or a 14mm wrench. Do not use a wrench extension or breaker bar. Doing so may damage the tool.

Be sure the tool is clean before each use. Tool threads should be lubricated to ensure smooth operation and to allow tactile 'feel' for any binding or excessive tension while in use.

Improper use or installation may result in damage to the chain and/or total chain failure causing damage to the vehicle and/or severe injury or death.

It is recommended that only qualified motorcycle service technicians attempt any chain modification.

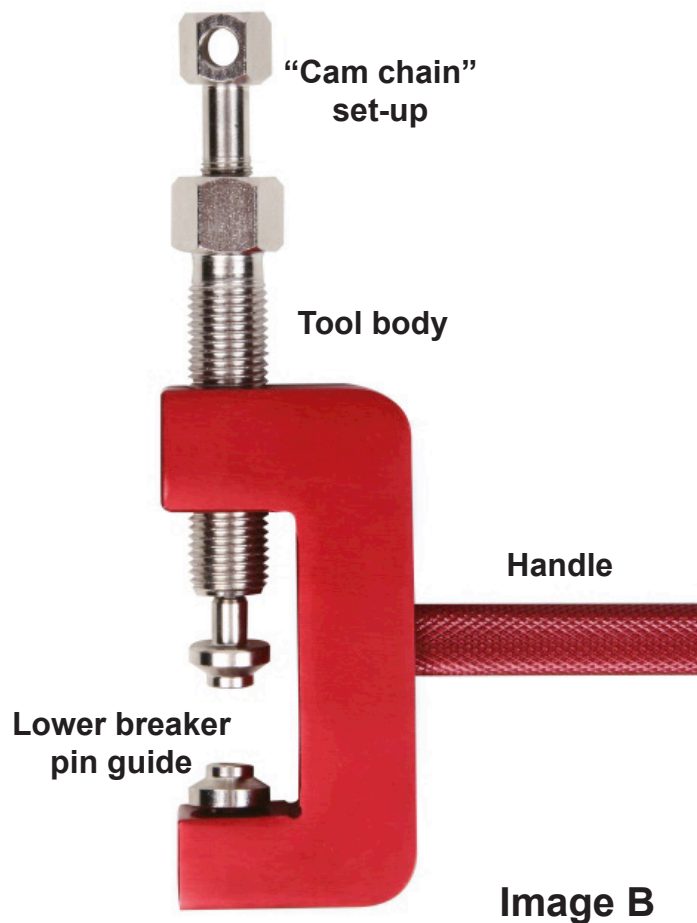
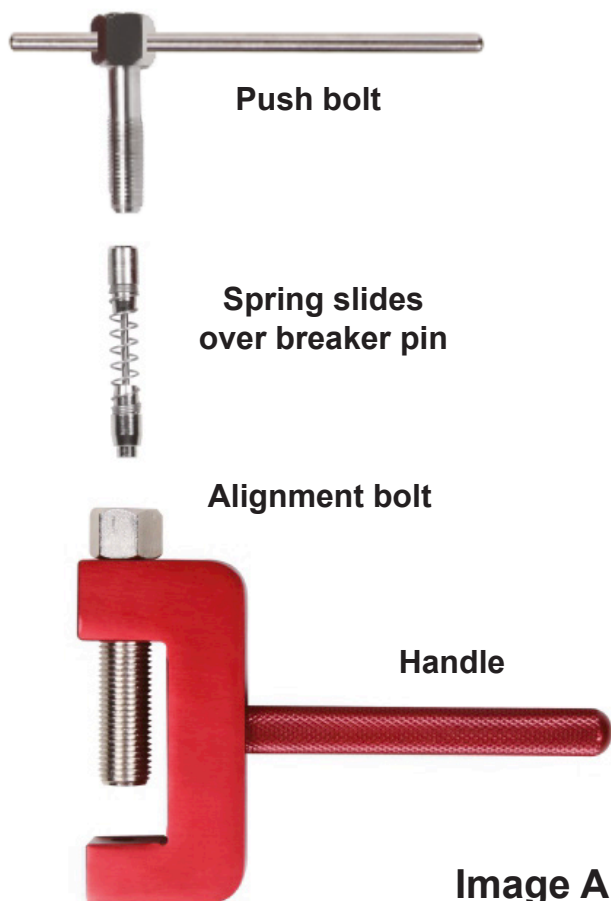
Proper selection of the correct breaker pin is critical. Please refer to the list below for the correct breaker pin size.

- 2.2mm breaker pin for use with cam chains
- 2.9mm breaker pin for use with 420 size chains
- 3.8mm breaker pin for use with 428, 520, 525, 530(50), 532 and 630 size chains

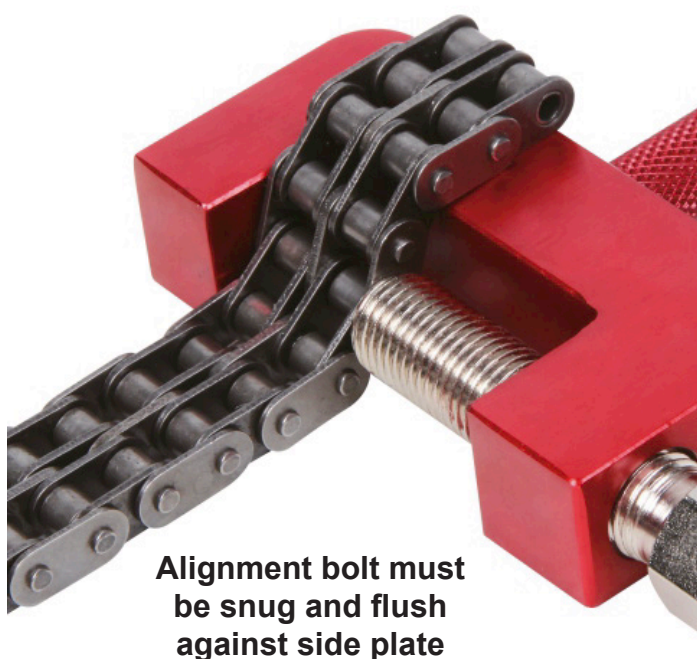
When breaking a chain size 520, or larger, it is recommended - but not necessary - to grind off the rivet head of the chain roller pin. Doing so can minimize stress on the tool and may help reduce the chance of damaging the breaker pin.

Assemble the tool as shown in **Image A**

1. Thread the alignment bolt into the tool body.
 2. Choose the correct breaker pin for the chain that it is being used on.
 3. Slide the spring up the shaft of the correct breaker pin.
 4. If you are breaking a cam chain you must thread the upper pin guide onto the alignment bolt and insert the bottom pin guide into the tool body hole as shown in **Image B. Use of the 2.2mm breaker pin without the guides will damage or destroy the breaker pin. NOTE: Be sure to cover the cam chain tunnel with a clean rag or towel to prevent parts from dropping in.**
 5. Insert the breaker pin and spring into the alignment bolt.
 6. Warning: Thread the push-bolt into the alignment bolt. Only thread a few turns. DO NOT tighten. The breaker pin should still be recessed in the alignment bolt at least 2mm as shown in **Image C.**
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1. Place the tool over the chain as shown in **Image D** and proceed to break the chain.
 2. The breaker pin must be recessed in the alignment bolt at least 2mm. If less than 2mm alignment bolt may bind.
 3. Place one side of the chain roller pin in the center of the hole in the tool body.
 4. On the opposite side of the link, lower the alignment bolt over the chain roller pin.
 5. Tighten the alignment bolt by hand or with a 14mm wrench for a snug, secure fit. DO NOT over tighten. The alignment bolt must be flush with the chain side plate. Over tightening may misalign the chain roller pin causing damage to the breaker pin. The alignment bolt will self-center over the chain roller pin as it is secured.
 6. Begin to tighten the push-bolt using the supplied slide lever or a 14mm wrench to drive out the chain roller pin. There will be some tension on the bolt as you begin to drive out the chain roller pin. This should feel smooth and not take a lot of force or effort. If you feel it is taking too much effort, STOP, loosen the push-bolt, then loosen the alignment bolt, and restart at step 1. If too much force is used the breaker pin may be damaged or destroyed. The effort will lessen as the chain roller pin is driven out. The chain roller pin will fall out of the tool body hole when completed.
 7. After the chain roller pin has been successfully removed loosen the push-bolt completely.
 8. Loosen the alignment bolt to remove the tool from the chain.



Chain breaker and riveter tool kit



PRESSING SIDE PLATES ON

Warning:

Every chain is different. Refer to the chain manufacturer for the correct specifications for proper master link installation and chain roller pin clearance.

Improper use or installation may result in damage to the chain and/or total chain failure causing damage to the vehicle and/or severer injury or death.

It is recommended that only qualified motorcycle service technicians attempt any chain modification

Assemble the tool as shown in **Image E**.

1. Thread the alignment bolt into the tool body. Make sure the breaker pin, spring and push-bolt are removed.
2. Insert the top press plate with holes into the bottom of the alignment bolt.
3. Insert the bottom press plate with slot into the hole of the tool body.

Place the tool over the chain as shown in **Image F** and proceed to press the side plates.

1. Assemble the chain and master link to the manufacturer's specifications. Be sure to install all o-rings if applicable.
2. Insert the side plate with the chain roller pins installed by the manufacture into the bottom press plate. The chain roller pins should be inside the bottom press plate slot.
3. Turn the alignment bolt by hand or with a 14mm wrench against the side plate of the master link. Be sure to align the holes of top press-plate so that the chain roller pins slide freely inside.
4. Once both side plates are properly aligned inside the tool begin to press the side plate by slowly tightening the alignment bolt with a 14mm wrench. **DO NOT OVER TIGHTEN.**

Check that the plates are properly pressed on.

1. Loosen the alignment bolt and remove tool from chain.
2. Refer to the manufacturer's specifications and insure that the master link side plates are properly installed.

The master clip should slide properly into the groove on the chain roller pins for a clip-style master link. The chain roller pin should be able to properly flare and rivet for a rivet-style master link.

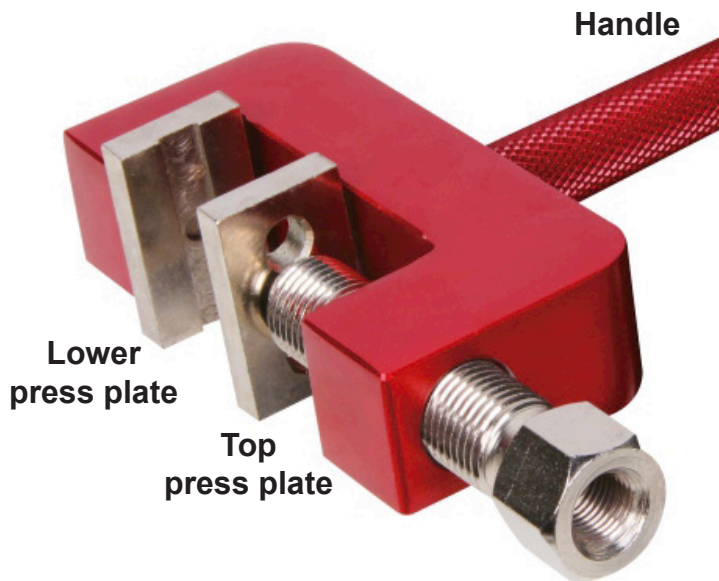


Image E

Alignment bolt



**Align holes over
chain roller pins**

Image F

RIVETING MASTER LINK

Warning:

Every chain is different. Please refer to the chain manufacturer for the proper installation of the rivet link.

This tool is designed to rivet master links with a hollowed end on the chain roller pin. (No solid pins)

NEVER reuse a rivet link!

Proper selection of the correct anvil is critical. Please refer to the list bellow for the correct anvil size.

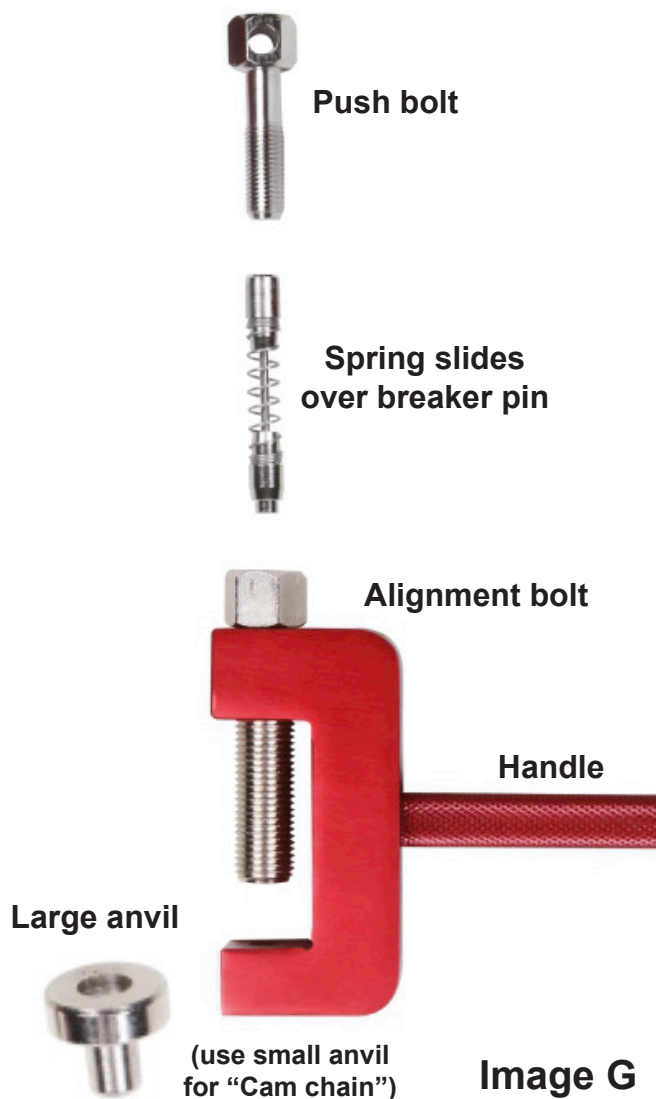
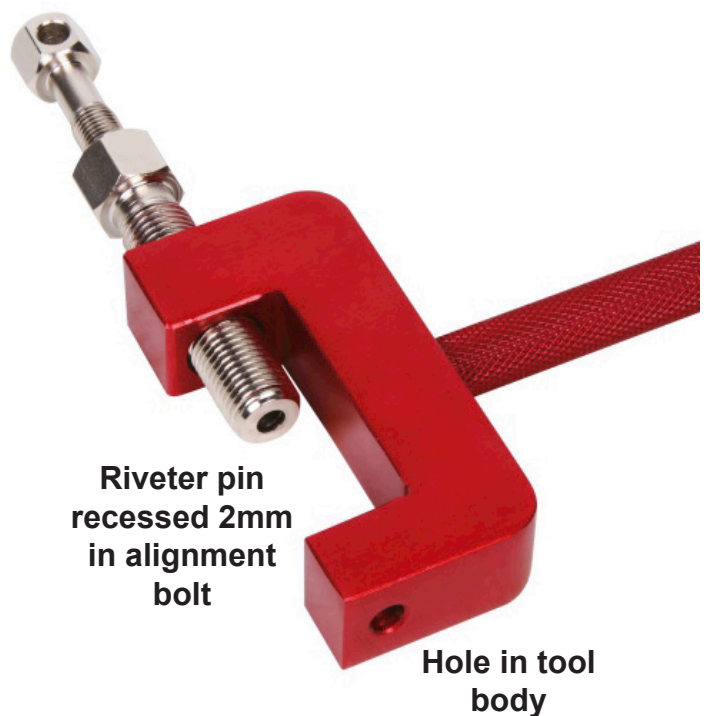
- Small anvil for use while riveting link on cam chain
- Large anvil for use while riveting link on 520, 525, 530(50), 532 and 630 size chains

Assemble the tool as shown in **Image G**.

1. Thread the alignment bolt into the tool body.
2. Slide the spring up the shaft of the riveter pin. NEVER use the breaker pin.
3. Insert the riveter pin and spring into the alignment bolt.
4. Thread the push bolt into the alignment bolt. Only thread a few turns. DO NOT tighten. The riveter pin should still be recessed in the alignment bolt at least 2mm as shown in **Image H**.
5. Select the correct anvil for the chain size being riveted and insert it into the hole of the tool body. (Image G)

Place the tool over the chain as shown in Image I and proceed to rivet the chain roller pin.

1. The riveter pin must be recessed in the alignment bolt at least 2mm as shown in **Image H**. If less than 2mm alignment bolt may bind.
2. Insert the backside of the chain roller pin to be riveted into the center of the anvil.
3. Lower the alignment bolt over the chain roller pin to be flared and riveted. (**Image I**)
4. Tighten the alignment bolt by hand or with a 14mm wrench for a snug, secure fit. DO NOT over tighten. The alignment bolt must be flush with the chain side plate. Over tightening may cause pin damage. The alignment bolt will self-center over the chain roller pin as it is secured.
5. Begin to tighten the push bolt using the supplied slide lever, or a 14mm wrench, to flare out the tip of the hollow chain roller pin. Do not over tighten. Tighten a little bit at a time and check the amount of flare often. Do not over flare the chain roller pin. Doing so may damage the tool, chain roller pin and/or side plate. A properly riveted chain roller pin will flare just enough to secure the side plate. This is a very small flare that is not easily seen except under close examination.
6. Once the proper flare has been achieved loosen the push bolt completely
7. Loosen the alignment bolt to remove the tool from the chain.
8. Refer to the chain manufacturer's specifications and measure the amount of flare. If more flare is required restart at step 1.

**Image G****Image H**