

MOTION PRO, INC. 3171 Swetzer Road Loomis, CA 95650 Tel 650.594.9600 Fax 650.594.9610 www.motionpro.com

# INSTRUCTIONS

## **MOTION PRO CHAIN BREAKER P/N 08-0001**

This is Motion Pro's 1st Chain Breaking tool, it seems simple to use at first look. But is one of the tools we get the most calls about from customers, so a quick explanation of correct tool usage is in order. This article will inform you of some of the tricks and techniques to using the 08-0001 Chain Breaker, so that you can get many years of use out of a great and handy tool.

First, let's look at what the tool was designed for, and what chains it was designed to work with. The tool was built with 420-530 size chain in mind.

Chain hardness and durability has increased greatly in recent years, where a top line chain of just 5 years ago is now a medium grade chain in most manufacturers' lines. Due to this, Motion Pro increased the specification of the 08-0001 chain breaker with an upgraded pin, to better deal with the higher stresses induced working with high grade chains. Still, some very high grade chains, such as used on large displacement sport bikes, are so strong that it is recommended that the pins be filed or ground down before using any of our chain breakers when possible. Other available chain tools from Motion Pro are the 08-0358 our light weight Trail Chain Tool, perfect for fanny packs, 08-0058 Chain Breaker and Riveting Kit and the professional grade 08-0135 Jumbo Chain Breaker recommended for heavy-duty use. Okay, now that we have some idea of what chain is compatible with the Chain Breaker, let's get to work.

### Setting up the Chain Breaker:

There is not a lot to do here, but there is one very important setup step that needs to be addressed. Obviously you have to retract the body bolt far enough so that you can put the breaker over the chain, but it is also critical to have the pin positioned in the right spot. This is with the pin retracted into the body bolt by about 1mm (fig.1). A simple step, but if you retract the pin TOO far (fig.2), the pin can drop out of its guide hole, and get hung up inside the tool. If this happens, when you try to break the chain, the pin is not pressing out the chain pin, it is just pushing inside the body bolt, and this will break the body bolt near the end of the threads. It sounds like an unlikely occurrence, but can happen if care is not taken.

### Placing the Breaker on the chain:

Once the pin is set up correctly, now it's time to attach the breaker to the chain. The breaker body bolt has a recess in the end of the body bolt that will go over the exposed chain. When tightening the body bolt (fig.3), all that is needed is a snug torque on the body bolt. Too loose or too tight, and the tool can walk a bit on the chain plate, and will cause the breaker pin to be misaligned on the chain pin. If this happens, it is possible to chip, bend or break the extractor pin.

### Breaking the chain:

Now it is all set to break the chain. By advancing the extractor bolt (fig.4), the extractor pin is driven forward, and will push out the chain pin (fig.5). The amount of torque on the extractor bolt to do this is pretty high, but if you can't do it with just a wrench and the breaker in your hand there is something wrong. Never use extensions of any kind on the handle of the chain breaker! Another hint is to advance the extractor pin by about 1 turn once it contacts the chain pin, and then back the body bolt off the chain to make sure that the extractor pin is centered on the chain pin. This way, if the tool was misaligned, you can correct it before something goes wrong. By now, everything has gone smoothly and you have broken your chain, and are ready to complete the rest of your work. Good job!



YES! GOOD TO GO!



NO! INCORRECT PIN DEPTH



(fig.1)



(fig.3)

(fig.4)



(fig.5)

