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# INSTRUCTIONS

## **MOTION PRO PBR CHAIN TOOL™ PART # 08-0470**

The Motion Pro PBR Chain Tool is designed to perform chain maintenance procedures quickly and easily by simply positioning the PBR anvil block and installing the rivet tips as needed to Press, Break and Rivet 50 series roller chains with hollow nose or quad stake type master links.

### **TO BREAK CHAIN:**

The PBR chain tool is assembled in the “Break” configuration from the factory. In this configuration, the body bolt, extractor bolt, extractor pin and spring will be threaded into the tool body and the anvil block engaged in the tool body with the “B” on the anvil block aligned with the word “Break” on the tool body. (**Fig 1**). Unscrew the extractor bolt from the body bolt until the extractor pin has withdrawn 3 to 4mm into the body bolt (**Fig 2**). Position the chain pin to be removed between the hole in the body bolt and the corresponding hole in the anvil block. Using a 17mm wrench, lightly tighten the body bolt until it rests securely against the side plate of the chain (**Fig 3**). Next, while holding the tool handle, tighten the extractor bolt with a 14mm wrench until the extractor pin has pushed the chain pin completely out the opposite side of the chain (**Fig 4**). Unscrew the extractor bolt and then the body bolt to allow the chain to be removed from the PBR tool.



### **TO INSTALL SIDE PLATE:**

Unscrew the extractor bolt from the body bolt until the extractor pin has withdrawn 3 to 4mm into the body bolt (**Fig 2**). Position the anvil block on the body bolt so the “P” on the anvil block is aligned with the word “Press” on the tool body (**Fig 5, page 2**). Set the chain in place on both front and rear sprockets, apply grease to the pins of the master link and install the link onto the chain. Apply grease to both sides of the chain side plate and position the chain in the tool body (check that all O-rings are in place if an O-ring type chain). Position the side plate between the master link pins and the anvil block and finger tighten the body bolt until the side plate is held firmly in position and the holes are properly aligned with the master link pins (the extra grease will help hold the side plate in place on the anvil block). Using a 17mm wrench, lightly tighten the body bolt until the side plate is pressed onto the master link pins to the proper position (**Fig 6, page 2**).



**CAUTION:** *Be careful to only press the side plate on far enough to allow for proper riveting of the chain. Excessive pressing of the side plate will cause the chain to bind and/or damage the O-rings, leading to possible chain failure. Refer to chain manufacturer specification for proper side plate placement. If a clip type master link is used, remove the tool and install the master link clip.*

**TO RIVET HOLLOW NOSE MASTER LINKS** (Master links with recessed dimple on the end of the pin):

Unscrew the extractor bolt from the body bolt until the extractor pin has withdrawn 3 to 4mm into the body bolt (**Fig 2, page1**). Position the anvil block in the tool body so the “R” on the anvil block is aligned with the word “Rivet” on the tool body and place the round hollow nose rivet tip onto the body bolt (**Fig 7**). Position the chain in the tool body at the pin to be riveted. Tighten the body bolt until the ball on the hollow nose rivet tip is in contact with the center of the hollow nose pin on the master link pin. Flare the end of the master link pin to the chain manufacturer specification by lightly tightening the body bolt with a 17mm wrench (**Fig 8**). Repeat procedure for the other master link pin.

**Important Note:** The specification of the flare may vary depending on the grade and make of the chain. Follow the chain manufacturer specifications for proper flare amount.

**CAUTION: DO NOT ATTEMPT TO RIVET CLIP TYPE MASTER LINKS!**

**Warning:** It is recommended that this procedure be done by an experienced trained mechanic in accordance with the chain manufacturer specification. Improper assembly or riveting of the chain could result in unexpected chain failure, great bodily injury or death.

**TO RIVET MASTER LINKS WITH ANNEALED SOLID PINS**

(Master links without recessed dimple in end of pin):

Unscrew the extractor bolt from the body bolt until the extractor pin has withdrawn 3 to 4mm into the body bolt (**Fig 2, page1**). Position the anvil block in the tool body so the “R” on the anvil block is aligned with the word “Rivet” on the tool body and place the rectangular quad stake rivet tip onto the body bolt (**Fig 9**). Position the chain in the tool body at the pin to be riveted. Tighten the body bolt until the square feature on the quad stake rivet tip is squarely in contact with the solid nose pin on the master link pin. Sufficiently tighten the body bolt with a 17mm wrench until the quad stake impression is formed into the solid nose of the master link pin as recommended by the chain manufacturer (**Fig. 10**). Repeat procedure for the other master link pin.

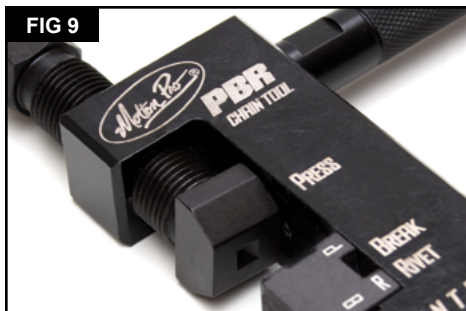
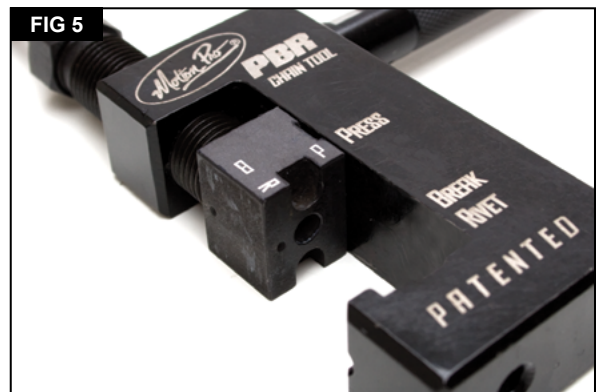
A 17mm socket with breaker bar may also be used if more torque is required (**Fig 11**).

**Important Note:** Refer to chain manufacturer specifications for proper quad stake flare.

**CAUTION: DO NOT ATTEMPT TO RIVET CLIP TYPE MASTER LINKS!**

**Warning:** It is recommended that this procedure be done by an experienced trained mechanic in accordance with the chain manufacturer specification. Improper assembly or riveting of the chain could result in unexpected chain failure, great bodily injury or death.

**MAINTENANCE TIP:** Periodically clean the threads on the tool body, body bolt and extractor bolt and apply a thin layer of grease to keep the tool working smoothly and reduce wear to the components.



## MOTION PRO PBR CHAIN TOOL™ COMPONENTS



## MOTION PRO PBR CHAIN TOOL™ REPLACEMENT COMPONENTS

ORDER ON MOTIONPRO.COM	PART# C08-0470B	Anvil Block
ORDER ON MOTIONPRO.COM	PART# C08-0470C	Extractor Pin
ORDER ON MOTIONPRO.COM	PART# C08-0470D	Extractor Bolt
ORDER ON MOTIONPRO.COM	PART# C08-0470E	Body Bolt
ORDER ON MOTIONPRO.COM	PART# C08-0470F	Handle
ORDER ON MOTIONPRO.COM	PART# C08-0470I	Spring
ORDER ON MOTIONPRO.COM	PART# C08-0470L	Hollow Nose Rivet Tip
ORDER ON MOTIONPRO.COM	PART# C08-0470M	Quad Stake Rivet Tip