Congratulations and Welcome!

Whether this is your first time changing tires, or you're a seasoned mechanic, take the first step to mastering the No-Mar technique now and visit our Video Library to view our latest instructional videos:

NoMarTireChanger.com

Our Video Library is the single most important resource available for:

- Tire Changer Assembly
- Tire Changing Technique ("How To…")
- Avoiding Common Mistakes ("How NOT To…")
- Keeping Wheels Scratch-Free
- Saving Money by Maximizing Consumable Life

MADE IN USA

No-Mar Enterprises, LLC ● 1160 Reco Ave ● Saint Louis, Missouri 63126 ● 888-986-6627

Cycle Hill® HD Plus Motorcycle Tire Changer
Assembly Introduction

Assembly Preparation

<u>We recommend unpacking and assembling your tire changer in the following order:</u>

1. Box **A** - Mount/Demount Bar (save 5/32" Hex ("Allen") Wrench for use with Box L).
2. Box **E** - Stand Assembly (if you will be using our Hitch Mount instead of the stand post, see the separate instructions provided with the Hitch Mount. You will still need the 3/16" Hex ("Allen") Wrench from the Stand Assembly box to complete tire changer assembly.)
3. Box **G** - Frame Assembly
4. Box **J** - Upper Arm Assembly

Each of the sub-assembly boxes noted above has its own set of instructions included.

Assembly Notes and Tips:

1. All set screws (sometimes called "grub" screws) and select other screws have been pre-installed in their specifiedlocations at the factory to aid in identification and assembly. Remaining hardware needed for assembly is included in the hardware pack inside of Box **G**.
2. Some screws may be more difficult than others to turn in due to excess powder coating residue in the threads. In these cases, a drop of oil or other lubricant (such as WD-40®) can aid in installation, as well as partially tightening and then loosening gradually until the screw is completely fastened.
3. We **<u>strongly</u>** recommend using only the provided Hex ("Allen") Wrenches to install/tighten hex-drive screws, and hand tools (ratchet or combination wrench) for other bolts. Using power tools (even battery powered) can cause threads to strip or hex sockets to round out.

Tools Required for Assembly:

- 5/32" Hex (Allen) Wrench - Included in Lube Box inside of Box A
- *3/16" Hex (Allen) Wrench - Included inside of Box B or E (depending on model)*
- *3/4" (or 19mm) Wrench - Socket w/Ratchet, Combination or similar*
- *7/16" (or 11mm) Wrench - Socket w/Ratchet, Combination or similar*
- *1/2" (or 13mm) Wrench - Socket w/Ratchet, Combination or similar*

For mounting your Tire Changer to the floor, we recommend using 1/2" x 3+1/2" (or 12mm x 100mm) Concrete Wedge anchors (Power-Stud+® SD1 or similar) drilled to a minimum depth of 2+3/4" (or 70mm) and installed per manufacturer directions with nuts and washers.

Help & Support

If you have any difficulty assembling your tire changer or changing tires, the instructional videos on our website are extremely thorough and helpful (and are also the primary method of learning how to change your own motorcycle tires). We also have an extensive Frequently Asked Questions (FAQ) page on our website for common tire changing issues.

If you require further assistance or technical support, please call us at 888-98-NOMAR (888-986-6627) and we will be happy to assist you!

Stand Box 'E'

Assembly Instructions

Figure 1

Hardware Pack Contents:

a. (18) 1" Flat Cap Screw 

b. (16) Serrated Flange Nut 

c. (2) 3/4" Shoulder Bolt 

d. (2) Nylock Nut 

e. 3/16" Hex ("Allen") Wrench 

Step 1:

Remove all items from the box. Using the provided 3/16" Hex Wrench attach the non-marring Bead Breaker Block to the Stand Base tab using (2) 1" Flat Cap Screws (*do not over-tighten!*).

Step 2:

Using the provided 3/16" Hex Wrench and a 1/2" (13mm) wrench, attach the Stand Base to the Stand Post using (8) 1" Flat Cap Screws and (8) Serrated Flange Nuts. Orient the parts so that the vertical tab on the Stand Post is facing the same direction as the Bead Breaker Block and at the opposite end of the Stand Post from the Stand Base, and so that the nuts will be on the top of the Stand Post flange (See Figure 1).

The screws attaching the Stand Base to the Stand Post will not sit completely flush with the bottom of the Stand Base and this is by design.

Step 3:

Using the provided 3/16" Hex Wrench and a 1/2" (13mm) wrench, attach the Stand Triangle to the Stand Post using (8) 1" FSHCS and (8) Serrated Flange Nuts. Orient the parts so that "point" of the triangle is on the opposite side of the Stand Post from the vertical tab, and so that nuts will be on the bottom of the Stand Post flange (See Figure 1).

The Flat Cap Screws attaching the Stand Triangle to the Stand Post will not sit completely flush with the top of the Stand Triangle and this is by design.

Step 4:

Using the 5/32" Hex Wrench from Box **A** and a 7/16" (11mm) wrench, attach the Bead Breaker Arm to the top hole in the tab as shown in Figure 1 using a 3/4" Shoulder Bolt and a Nylock Nut. There will be some play to this joint once tightened, and this is by design. Some narrow tires may require re-locating the Bead Breaker Arm to a lower hole in the tab, which can be a trial-and-error process with some tires.

Step 5:

Using the 5/32" Hex Wrench from Box **A** and a 7/16" (11mm) wrench, attach Bead Breaker "Tee" to the Bead Breaker Arm using a 3/4" Shoulder Bolt and Nylock Nut. Verify proper alignment of the tee so that the curve of the tee aligns with the curve on a wheel as shown in Figure 1. There will be some play to this joint once tightened, and this is by design.

Congratulations, your Stand Post assembly is complete! Keep all tools handy and proceed to assemble tire changer frame (Box F, G, H, or K depending on model purchased).

NOTE: Never use the Mount/Demount Bar with the ground-level bead breaker arm. Only use the 1" OD Center Post from the tire changer.

Classic® HD Frame Box 'C'
Cycle Hill® HD Plus Frame Box 'G'
Assembly Instructions

Hardware Pack Contents:

a. (12) 1/2" Flat Cap Screw 

b. (3) 1" Hex Bolt 

c. (3) Flat Washer 

d. (1) Shoulder Bolt* 

e. (1) Nylock Nut* 

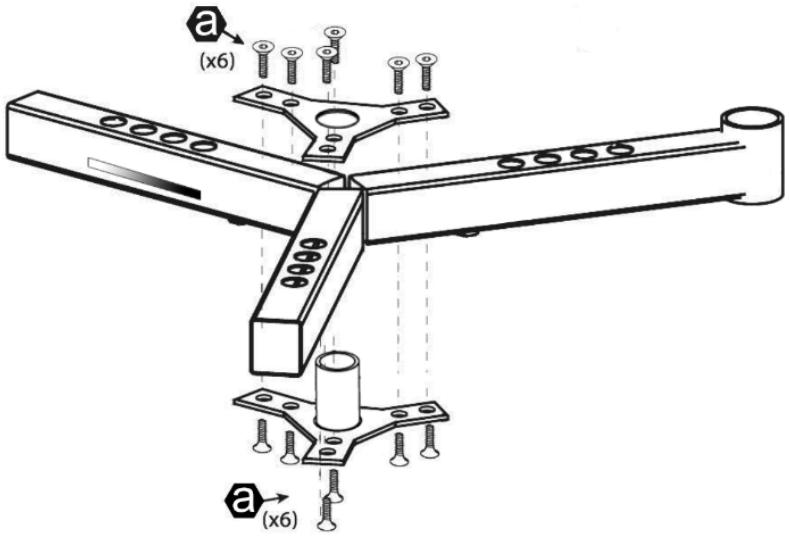
*(*Shoulder Bolt and Nylock Nut (parts 'd' and 'e') are only included with Classic® HD models or with waist-high bead breaking upgrade.)*

Step 1:

Remove all items from the box and remove any wrapping/strapping from components in the box.

Step 2:

Attach all 3 Frame Arms together using 2 "Y-plates" as shown. The bottom Y-plate has a welded cup, and the top Y-plate has an open hole. Using the 3/16" Hex Wrench from the stand box, install 6 Flat Cap Screws (a) on top and 6 screws (a) on bottom (leave screws loose until all 12 screws are threaded in place). The single threaded boss on each frame arm must face downward. Note the orientation of the left frame arm as indicated by the wheel size decal. Tighten screws in an alternating pattern from the inside to outside.



Step 3:

Place the completed frame arm assembly on the triangle of the Stand Post or Hitch Mount and align the three holes in the triangle with the three threaded bosses on the frame arm assembly (the frame arm with the welded collar is the rear frame arm and should be aligned with the rear "point" of the triangle).

Step 4:

Install a Flat Washer (c) on each of the 3 Hex Bolts (b). Thread each Hex Bolt with Flat Washer through holes in the Stand Post or Hitch Mount triangle into the threaded boss on each frame arm by hand. Once all 3 Hex Bolts are started, tighten with a 3/4" (19mm) wrench.

Step 5:

Install wheel clamps on to the frame arms. For Classic® HD models, install the locking Cam Block (the block with the handle pre-installed) in the right front frame arm, and 2 Dog Blocks in the left front and rear frame arms. The Dog Block in the rear frame arm should be installed in the hole marked with a Yellow dot or laser-cut hole on the side of the frame arm indicating the proper position for waist-high bead breaking.

Congratulations, your Frame assembly is complete! Keep any remaining unused parts and all tools handy and proceed to assemble the Upper Arm (Box D or J depending on model).

CH100HD®-Plus & CH200HD®
Upper Arm Box 'J'
Assembly Instructions

Hardware Pack Contents:

a. (1) Female T-Knob 

b. (1) 3" Carriage Bolt 

c. (1) Flat Washer 

Step 1:

Remove all items from the box and remove any wrapping/strapping from components in the box. Have the 5/32" Hex ("Allen") Wrench from Box 'A' handy.

Step 2:

Orient Back Post with Aluminum Tee so that it is upside-down (protect powder coat finish on aluminum tee by resting on cardboard, carpet or other soft surface).

Step 3:

Identify the Rear of the Back Post. Approximately 1/2" inch (13mm) from the edge of the aluminum tee there will be a set screw installed in the Back Post tube. This set screw identifies the rear of the Back Post.

Step 4:

Install Tool Collar on to Back Post. Make sure that the two bent tangs for holding the Mount/Demount Bar are facing down, towards the Aluminum Tee. Orient the tool collar so that the collar is aligned to the rear of the Back Post and the two set screws to secure the Back Post are on the front side of the Back post. Tool Collar should be up against the bottom of the aluminum tee by gravity only (do not push tightly together). Tighten the two set screws in the Tool Collar using the 5/32" Hex Wrench.

*For Cycle Hill HD-Plus models, please skip ahead to **Step 6**. For CH200 models, continue with **Step 5**.*

Step 5:

Install SpoonBar® Collar (from Frame **Box H**) on back post approximately 10 inches from the Tool Collar. Hand-tighten one 3" bolt temporarily as this collar will be re-positioned later.

Step 6:

Compare Back Post configuration to photo to ensure components are arranged correctly

(SpoonBar® collar and bolts applicable to CH200HD® models only):

Step 7:

Pick up Back Post and turn right-side-up so the Aluminum Tee is on top. Install bottom of Back Post into rear Frame Arm of tire changer so that there is 4 inches of Back Post exposed below the bottom of the frame arm collar.

Rotate the Back Post as needed so that the Tool Collar is aligned to the rear of the tire changer. Tighten the 4 set screws on the rear frame arm collar to secure the Back Post in position.

Never configure Back Post with less than 4 inches exposed below the rear frame arm collar as this risks damage to tire changer and personal injury!

*For Cycle Hill HD-Plus models, please skip ahead to **Step 9**. For CH200 models, continue with **Step 8**.*

Step 8:

For CH200HD® models, align the SpoonBar® collar so that one bolt is pointing straight backwards, and the second bolt is pointing to the left (approximately the 9 o'clock position). Tighten SpoonBar® bolts with a 1/4" Hex Wrench. Usually, the rear-facing bolt is used for storing SpoonBars, and the second bolt is used to hold a SpoonBar® in place while working on the tire. SpoonBar® Collar height can be adjusted as needed to accommodate the particular tires you are working with.

Step 9:

Install the rear of the Slide Arm into the Aluminum Tee. The front of the slide arm has the knob which you will orient on the right side during installation. Depending on powder coat thickness, a rubber mallet may be needed to get the slide arm into position. Align the large hole in the slide arm with the cup in the center of the frame assembly.

Step 10:

Install the Carriage bolt (b) in the left side of the Aluminum Tee (the square hole), then install the flat washer (c) and T-Knob (a). Tighten the T-Knob hand-tight only; there is no need to over-tighten and doing so will damage the T-Knob.

CH100HD®-Plus & CH200HD®
Upper Arm Box 'J'
Assembly Instructions

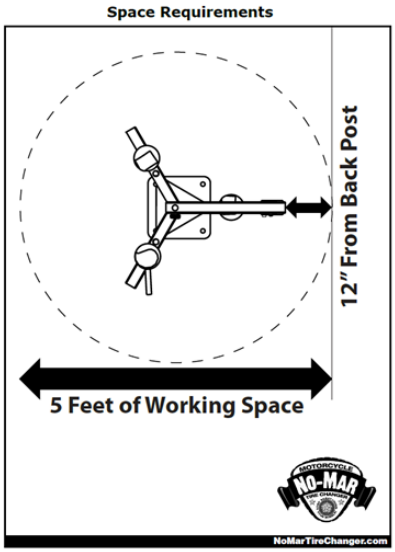
Step 11:

Install the Center Post through the large hole in the Slide Arm with the non-marring bushing and axle pin facing down. Tighten the T-Knob on the side of the Slide Arm to secure the Center Post in place. (Note when changing tires, the Center Post will not completely go through most axle bearings – that is what the eccentric pin and non-marring bushing are for. Engage the pin in the bearing with the bushing to protect the bearing seal. The pressure from the pin against the bearing while changing a tire is far less than the pressures exerted on the bearing when installed on a bike.)

Congratulations, your Upper Arm assembly is complete and your tire changer is almost ready to use! Once your tire changer is securely mounted to the floor, you're ready to change tires! Ride safe!

CH100HD®-Plus

CH200HD®



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