

STARTING DEVICE INSTALLATION GUIDE

You may view and/or print these instructions in color by .PDF format at www.tamermotocross.com under the support tab, then scroll down to instructions. The installation process takes 15 minutes or less. Before you begin the installation process, please read through these entire instructions to be familiar with the installation procedure. If you feel this project is above your ability, please seek the services of your local bike shop or a professional mechanic. Any questions, please call Tamer at 402-420-9557.

HOW THE REAR SYSTEM WORKS

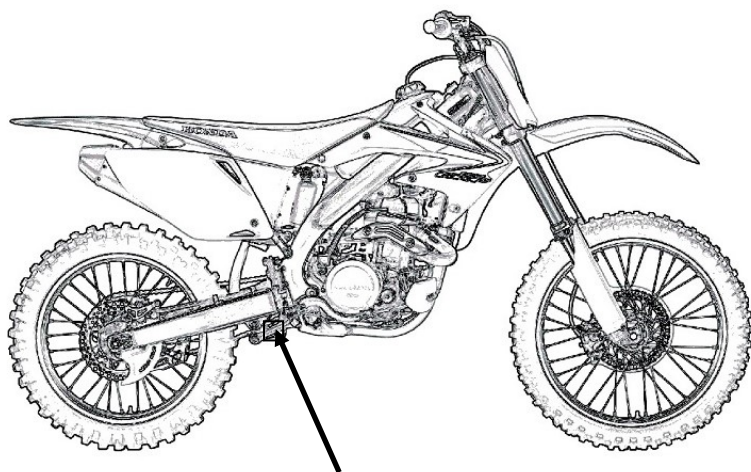
The Tamer rear starting device is designed to remove the sag from the rear shock allowing all of the motor energy to be transferred to the forward motion of the bike when leaving the starting gate. As soon as your rear wheel makes contact with the starting gate, the Tamer device will release. The Tamer rear system is a 3 working part system:

STEP 1 - Removes the initial sag or drop of rear of bike when bike first launches off start line.

STEP 2 - When rear wheel makes contact with starting gate, the rear device unlatches. By being compressed 5-1/4", the rear shock forces the rear wheel into the ground when rebounding avoiding the bike losing traction from the gate and losing rear wheel contact with the ground and not allowing the shock to compress again from gate.

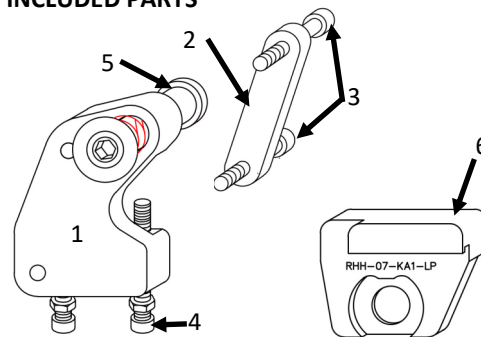
STEP 3 - Then, the area of the gate that is not allowed to be touched, the rear wheel is being forced into the ground provided added traction

You must have a front starting device to make the rear starting device perform correctly. The Tamer double Button front starting device is the perfect match and gives you the biggest advantage on the starting line when using the rear starting device. Go to www.tamermotocross.com to purchase.



The Tamer rear starting device mounts on the rear shock linkage arm on right side of bike.

INCLUDED PARTS



TOOLS NEEDED

8-17mm wrench
3mm Allen Wrench
Straight screw Driver
Sharpie marker
Tape measure
File or Dremel tool with sanding drum
Blue Loctite

ITEM	PART	QTY
1	A Style Base	1
2	Backer Plate - Thin	1
3	Backer Plate Bolt - 20mm Length	2
4	Base Mounting Bolt with Jam Nut - 25mm Length	2
5	Connecting Plunger	1
6	Latch	1

HOW TO LATCH SYSTEM

To latch the system, bounce up and down while sitting on the bike and have a second person latch the button. Or you can lean over the bike from the chain side, bounce up and down a few times and lean over, hold the button and push it in. It is a timing issue. You have to travel past the latch before pushing the plunger in and then once you push it in, hold it there until the bike rebounds and the plunger catches the latch area and holds the rear suspension compressed.

Although the Tamer rear Holeshoot Hookup device is designed to stay latched while kick starting your bike, there may be times it will unlatch during the starting process. Simple re-latch the device after the bike is started.

IMPORTANT

1 - VERY IMPORTANT - Make sure you farm the area behind your gate ensuring a smooth ramp of dirt over the starting gate when the gate drops. This is important for the front and rear starting device to prevent it from unlatching when it hits the gate. If there is a large bump at starting gate, this may deactivate either starting device before the desired unlatch time defeating the purpose of the devices.

2 - WASHING - It is recommended to wash the latch area thoroughly making sure to remove dirt and mud from the latch area and wash the button device to remove dirt and debris from the plunger and spring. Be sure to clean and lubricate the plunger and spring with WD-40 or similar after each wash and before each use. Other than that, there is no maintenance or disassembly required.

HOW DO I KNOW IF I HAVE THE LATCH POSITIONED CORRECTLY ON THE LINKAGE ARM?

YOU SHOULD BE ABLE TO SIT ON THE BIKE, PUT YOUR GOGGLES ON AND MOVE AROUND A SLIGHT BIT WITHOUT THE DEVICE UNLATCHING. YOU MOST LIKELY WILL NOT BE ABLE TO KICKSTART YOUR BIKE WITH THE DEVICE LATCHED UNLESS IT IS A LIGHT KICK AND THE BIKE STARTS EASILY.

IF YOU BARELY MOVE AND IT COMES UNLATCHED, THEN IT NEEDS TO LATCH LOWER. IF YOU CAN MOVE AROUND A LOT AND KICKSTART YOUR BIKE REALLY HARD 3-4 TIMES AND IT STAYS LATCHED, THEN IT IS LATCHING TOO LOW AND NEEDS TO LATCH HIGHER.

REMEMBER, THIS DEVICE NEEDS TO UNLATCH AS THE REAR TIRE MAKES CONTACT WITH THE FALLEN STARTING GATE ON THE GROUND, SO MAKE SURE YOU BUILD A RAMP.

INSTALLATION STEPS

- 1) Take a suspension measurement while the bike is on the stand and record the measurement. Make sure your mark on the fender where you measured from so you can be sure it is in the same spot when you do it again. **WRITE DOWN THIS MEASUREMENT.**
- 2) Remove rear linkage bolt and swing linkage arm down giving you access to lower shock nut & bolt - Leave the front linkage bolt in place.

INSTALLATION STEPS

- 3) Remove lower shock nut and bolt. Make sure the lower shock bolt is installed from the right side (throttle side) of the bike. **IF NOT, you MUST rotate the lower shock shaft 180 degrees** so that the lower shock bolt is installed from the throttle side of the bike in order to secure latch correctly to lower shock mount as the picture shows. **NO EXCEPTIONS.** This can be done with a screwdriver by just rotating the lower shaft 180 degrees.
- 4) Install latch on lower shock mount with OEM shock bolt. Apply Loc-tite to OEM bolt threads and install OEM nut and tighten to specified OEM recommended torque.
- 5) Using a file or Dremel with sanding drum, remove the casting line on the front side and the back side of linkage arm on right side only until it is smooth. This procedure is only required on stock (OEM) linkage arms. This must be done or the latch plate could catch the latch and rip the device off your linkage arm.
- 6) On outside face of linkage arm, measure from the centerline of the front linkage bolt back on the arm and place a mark at 2".
- 7) Remove all Tamer hardware and apply a small amount of Loctite to all 4 bolts. Not too much as you may need to remove the part at a later time.
- 8) Install the 2 base mount bolts with jam nuts and install the backer plate with the top backer plate bolt until backer plate is about 1/8" away from base.
- 9) Mount Base on linkage arm with the front side edge of base at the mark you made on the linkage arm & snug the 2 Base Mount Bolts first securing the Base to the linkage arm. Make sure you hold the Tamer base square to the arm during this procedure. **DO NOT** let it rotate as you snug the 2 bolts (A). As you snug the 2 bolts (A), they try to rotate the device away from the linkage arm. **DO NOT TIGHTEN THESE 2 BOLT YET, JUST SNUG SO THAT IT HOLDS IN PLACE.**
- 10) Install the 2nd bolt into backer plate and measure placement again. If measurement is correct, then completely tighten the backer plate bolts. The backer plate will actually bend around the OEM linkage arm as you tighten the 2 bolts. The backer plate will touch or almost touch the back of the button base (1). **10B) Bolts must be tightened equally. Make sure they appear through front of base holes the same distance as each other. IF NOT EQUAL, THE BACKER PLATE CAN CATCH THE LATCH.**
- 11) After the Backer Plate Bolts are tight, then tighten the 2 Base Mount Bolts (B). Tighten 2 Jam Nuts (C) **LAST** on both Base Mount Bolts (B) with 8mm wrench against bottom of base.

IMPORTANT – When you tighten the lower base mounting bolts, these bolts will actually spread the base apart a little bit due to the pressure applied by the 2 bolts. If you tighten these 2 bolts first before installing the backer plate and bolts, then the backer plate bolts are very difficult to install as the holes will not be align correctly.

- 12) Swing linkage arm into place and install rear linkage bolt and tighten the nut to specified torque. You may have to raise the rear wheel up higher to allow the arm into place and then lower the rear wheel back down for alignment. The spacer in the linkage can shift from side to side, so you may need to shift the spacer back and forth to allow the linkage arm to swing into the correct position. It will seem like something is hitting, but it is the shifting of the spacer in the linkage that won't allow the linkage arm to swing into place.
- 13) Bounce up and down on bike making sure there is no resistance or rubbing noise. If all is OK, latch the system. **SEE "HOW TO LATCH THE SYSTEM" on page 1.**
- 14) Once device is latched, while bike is sitting on the ground, measure the suspension distance again using the same marks from Step 1. Record this measurement. Now subtract this measurement from step 1 measurement. This final number should be between 5" to 5-1/2" — If the total distance is more than 5-1/2", then you need to move the button system back on the linkage arm by 1/8" at a time. If the total is less the 5", then you need to move the button system forward on the linkage arm by 1/8" at a time.

Things that will contribute to you having to move the button on the arm are: 1) Aftermarket linkage arm that is taller than the OEM linkage arm, 2) A lightweight rider with less than typical sag settings such as 80mm or 90mm of sag instead of the standard 100mm to 115mm, 3) A rider who rides really stiff suspension and the 5" to 5-1/2" compression is too hard to latch.

