



Thank you for your purchase of the Tamer holeshot device. The installation process takes 30 minutes or less. Questions? Just call Tamer at 402-420-9557 BEFORE you drill holes and possibly ruin your fork guard.

DOUBLE BUTTON X-WING HOLESHOT DEVICE INSTALLATION INSTRUCTIONS

Before you begin the installation process, PLEASE read through all of these instructions to familiarize yourself with the installation steps. If you feel that this project is above your skill level, please seek the services of your local bike shop or a professional mechanic.

Specialty tools to make install easier



This is a 1/2" 82 degree countersink bit, used to drill the 1/2" holes and chamfer the 3/16" small holes from the backside of fork guard. Search 1/2" 82 degree countersink bit at Home Depot, Lowes, or Menards.



This is a deburring tool. Search deburring tool at Home Depot, Lowes, or Menards. Both of these tools are worth having in your toolbox.

TOOLS NEEDED

- Drill
- Loc-tite
- Sharpie Marker
- Masking Tape
- Metric Allen Wrench Set
- Tape Measure
- Phillips Screwdriver
- 1/2" drill bit or countersink bit
- 3/16" drill bit and 1/8" drill bit
- Deburring Tool (Part #100012507)

INCLUDED IN DOUBLE BUTTON X-WING PACKAGE



- 1 - Ring & Bolt
- 2 - Clamshell with Instruction QR Code
- 3 - Base Screws-Short (4)
- 4 - Base Screw-Long (1)
- 5 - Drill Template
- 6 - X-Wing Bracket
- 7 - Double Button Base

You can purchase an Install Kit consisting of both specialty tools, at tamermx.com (Part #: FHH-1K) The specialty tools have many uses such as deburring plastic & graphics.



OPTIONAL FORK GUARD BRACKET

*SEE PAGE 8 FOR FORK GUARD BRACKET INSTALLATION



IMPORTANT INFORMATION



- DO NOT** leave device latched while the bike is on a stand. Once latched, the plastic forks are under pressure, because the forks are trying to rebound. This situation can damage the plastic fork guard unless the bike's tires are on a solid surface. **DO NOT** place your head directly on or near the handlebars while the device is latched, as this may result in injury.
- VERY IMPORTANT** - Make sure you form the area behind your gate ensuring a smooth ramp of dirt over the starting gate when the gate drops. If there is a large bump at the starting gate, and the front wheel hits the bump, or the gate, the device may disengage too soon, defeating the purpose of the starting device.
- IMPORTANT** - Wash the button area of the device to remove dirt and debris. Be sure to clean and lubricate the push rod at the springs with WD-40 or similar after each wash and before each use. No other maintenance or disassembly is required. The Tamer device is a very simple system.

DOUBLE BUTTON SETTING CHART

CONDITIONS	BUTTON POSITION
DRY SLICK DIRT	TOP BUTTON
CONCRETE PAD	TOP BUTTON
SLOPPY MUD	DON'T USE
STICKY MUD	TOP BUTTON
DIRT w/ LITTLE MOISTURE	BOTTOM BUTTON
GOOD TRACTION	BOTTOM BUTTON
REALLY TACKY/STICKY DIRT	BOTTOM BUTTON
METAL GRATE START PAD	BOTTOM BUTTON



**DO NOT LATCH DEVICE
UNTIL BEHIND START GATE**

HOW THE DOUBLE BUTTON SYSTEM WORKS

- The top button is for moderate fork compression, ideal for limited traction situations such as on concrete, sand, loose soils, or dry-slick starts. The top button is easily latched.
- The bottom button is for maximum fork compression for high traction situations such as tacky dirt, sticky dirt, and metal grate pads. For optimal device performance, the bottom button should take more effort to latch and will require assistance.

RING PLACEMENT ON FORKS

A

Find your year, make, and model of bike on either this page or the next page. This will show you where to mount the fork ring on your fork. Then verify that you have the correct fork ring for your application by comparing the part # to these instructions. The part # is machined into the top surface of the ring at the location of the pinch bolt.



GASGAS, HUSQ., KTM

RING P/N - HH-17



GasGas 21-23 MC-E3, MC-E5 Elec, MC50, MC65 - Husq 16-23 TC50, TC65 20-23 TC EE3, TC EE5 Elec - KTM 20-23 SX-E3, SX-E5 Elec, 12-23 50SX, 50SX FE, 50SX Mini, 65SX

RING P/N - HH-07



OEM FORK ONLY
21-23 GasGas MC85, MC85 BW - 14-23 Husq. TC85/Big Wheel - 12-23 KTM 85SX/Big Wheel

RING P/N - HH-08



WP XACT/XPLOR Pro FORK ONLY
21-23 GasGas MC85, MC85 BW - 20-23 Husq. TC85/Big Wheel - 20-23 KTM 85SX/Big Wheel

RING P/N - HH-18



'08-'23 KTM 125-250SX, 250-450SX-F, 125XC-500 EXC-F

'14-'23 HUSQ TC125/250, FC250/350/450, TE, FE Models, TX300i, FX350/450

'21-'23 GAS GAS MC125, MC250/450F, EC & EX Models

GASGAS, HUSQ., KTM

RING P/N - HH-18



'20-'23 WP Xact Pro/Xplor Pro Fork 125cc & Larger

RING P/N - HH-18



'16-19 WP Cone Valve Forks

COBRA

RING P/N - HH-15



20-23 Cobra CX-E5 Electric, 12-23 Cobra CX50 P3, CX50 Jr, CX50 Sr, CX50 FWE

RING P/N - HH-07



2012 - 2023 Cobra CX65

KAWASAKI

RING P/N - HH-17



2006-2023 Kawasaki KX85/100
2023 Kawasaki KX112

RING P/N - HH-15



KX85/100 Showa A Kit

RING P/N - HH-08



2007-2019 Kawasaki KX250F KYB
2007-2023 Kawasaki KX450F KYB

RING P/N - HH-08



20-23 Kawasaki KX250F SHOWA
22-23 Kawasaki KX450SR SHOWA

HONDA

RING P/N - HH-08



2011-2023 Honda CRF250/450R, CRF450R Works Edition, Anniv.

RING P/N - HH-06



1998-2007 Honda CR125/250
2004-2010 Honda CRF250R/450R

RING P/N - HH-15



2007-2023 Honda CR150R

BETA

RING P/N - HH-10



'18-23 BETA 125 & Larger

YAMAHA

RING P/N - HH-07



2018 - 2023 Yamaha YZ65
2019 - 2023 Yamaha YZ85

RING P/N - HH-16



2002-2018 Yamaha YZ85

RING P/N - HH-06



'07-23 Yamaha YZ250/450F
'07-23 Yamaha YZ125/250

RING P/N - HH-14



2002 - 2006 Yamaha YZ125/250
2002 - 2006 Yamaha YZ250/450F

SUZUKI

RING P/N - HH-07



2002 - 2023 Suzuki RM85

RING P/N - HH-08



2011-2023 Suzuki RM-Z450
Showa Forks

RING P/N - HH-06



2016-2023 Suzuki RM-Z250 KYB

RING P/N - HH-08



2011-2015 Suzuki RM-Z250
KYB Forks

OHLINS FORKS

RING P/N - HH-18



Ohlins TTX 10 Cartridge Fork

RING P/N - HH-18



Ohlins RFX48 Fork

TM

RING P/N - HH-08



2017-2023 TM MX85/100/112

RING P/N - HH-06



2017 - 2023 TM 125CC & UP

INSTALLATION INSTRUCTIONS

SHOWA/KYB A KIT

RING P/N - HH-18

RING LOCATION



SHOWA A KIT FORK

RING P/N - HH-08

RING LOCATION



KYB A KIT FORK

- 1 You DO NOT need to remove the fork leg. GENTLY flex the ring around the fork tube. DO NOT BEND IT OPEN, just let it flex. If you do not feel comfortable flexing the ring around the fork, remove the fork leg from the bike. Slide the Tamer fork ring down the fork tube into the correct placement for your application (see page 2-3 for year/ make/model of bike). **MAKE SURE THE GROOVE OF THE RING IS FACING UPWARD.**
- 2 DO NOT tighten the ring bolt. DO NOT remove fork guard. IF YOU CHOOSE TO REMOVE FORK TO INSTALL RING, you may have to flex the ring slightly, to pass over the upper part of fork tube. Finally, you must install fork leg and front wheel back onto the bike per manufacturer's specifications.
- 3 Next, make sure that the bike is taken off of the stand. Have the rider sit on the bike in the start position. Activate the front suspension by pushing down on the handlebars/crossbar a few times while having the rider fully squeezing the front break lever. Now, make sure that the front forks are in a slightly compressed position, and hold that position.

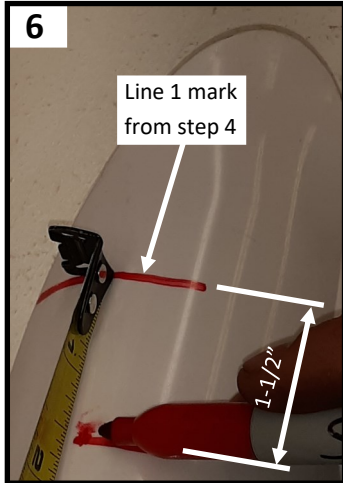
- 4** While still holding the slightly compressed position, mark a horizontal line on the plastic of the fork guard where the top of the ring meets the fork guard.



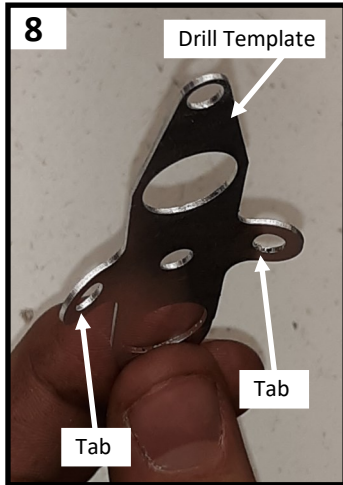
VERY IMPORTANT. THIS METHOD TAKES INTO ACCOUNT THE RIDER'S WEIGHT AS WELL AS THE SUSPENSION SPRING RATE, FOR OPTIMAL PERFORMANCE OF THE DEVICE. There is NO one-size-fits-all for an effective device!



- 6** From line made in **STEP 4**, measure down 1-1/2" on fork guard and mark a second horizontal line.



- 8** Find the 5 base screws and metal template in the packaging. With your fingers, slightly bend the 2 tabs on the template into an arc shape so that it will fit the contour of your fork guard.



- 10** Make sure the template is vertical and straight on the fork guard. Once vertically straight, tape over the entire template to hold it firmly in place.

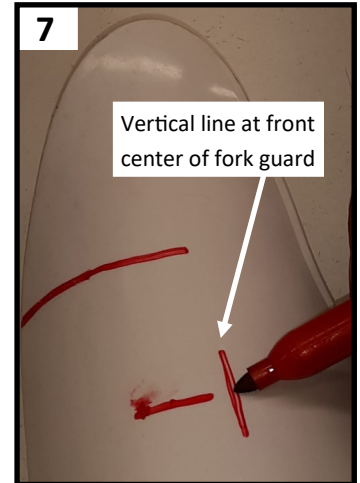
You will still be able to see the holes of the metal template through the tape. To aid with this, press the masking tape down into the holes before drilling.



- 5** Remove the plastic fork guard from the fork.



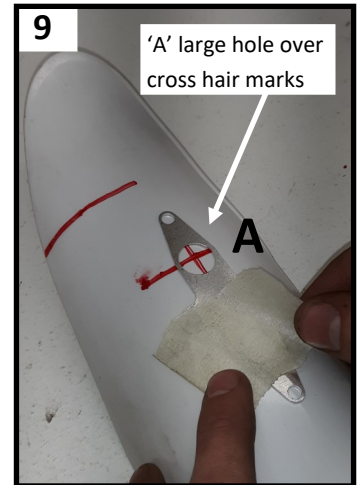
- 7** Find center of fork guard and draw a vertical line at the 2nd horizontal line making a crosshair mark.



- 9** Place the top large hole (A) of the metal template at the crosshair lines made on the fork guard in **Step 7**. With a small piece of masking tape, tape the template in place.



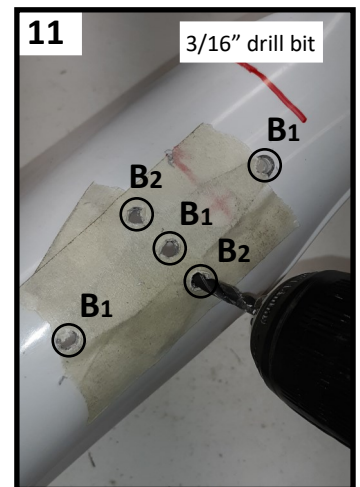
TEMPLATE IS TAPED ON THE FRONTSIDE OF THE FORK GUARD, NOT THE BACKSIDE.



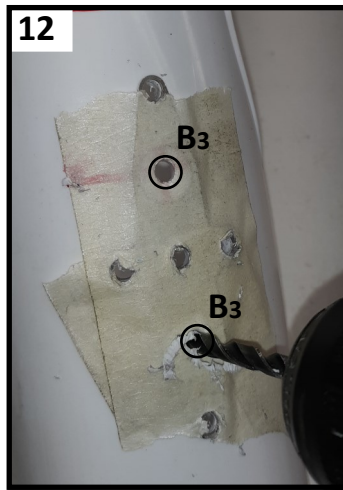
- 11** Drill the first three 3/16" holes, labeled B1 in picture, through the metal template and on through the plastic of the fork guard. The top and bottom holes are the very top and very bottom holes of the metal template.



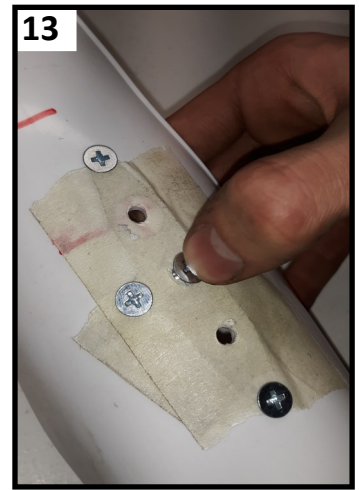
Drill the next two 3/16" holes, labeled B2 in picture, tilting the drill slightly to ensure that the bit is perpendicular to the curved surface of fork guard.



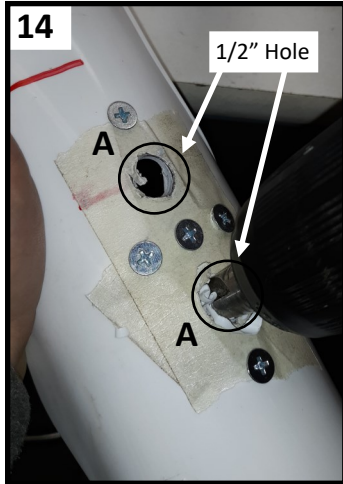
12 Drill the remaining 3/16" holes, labeled B3 in the picture, (1/2" holes location) as close to center of the hole as possible, acting as a pilot hole. This will allow the 1/2" hole to drill much easier.



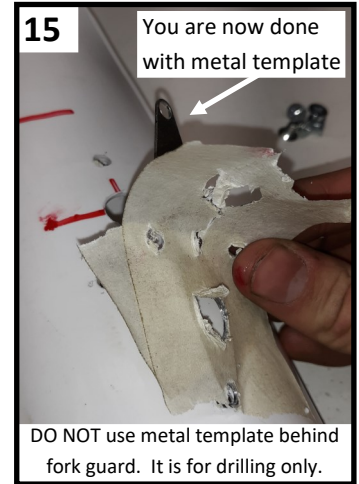
13 Place the 5 small base screws through the template holes B1 and B2 (image 11) from the frontside of the fork guard, in order to secure the template while drilling the 2 larger 1/2" holes.



14 Drill two 1/2" holes (A) with 1/2" countersink bit or 1/2" drill bit through the larger holes in metal template.



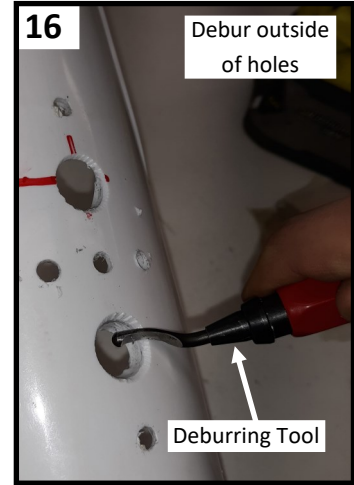
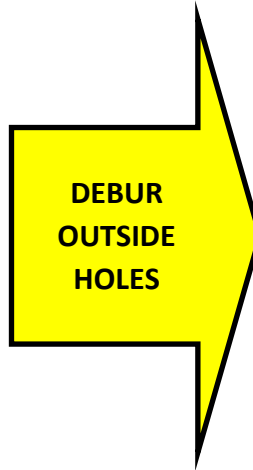
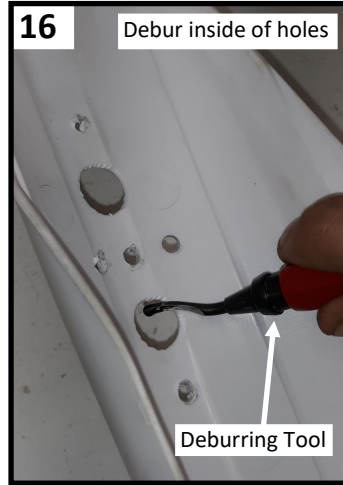
15 Remove the metal template. **You are done with it. DO NOT MOUNT TEMPLATE ON FRONTSIDE OR BACKSIDE OF FORK GUARD - IT IS USED FOR DRILLING ONLY**



BE CAREFUL IF USING DRILL BIT, IT WILL BITE & TWIST. USE A VERY SLOW SPEED AND PRESSURE WITH THE DRILL. TAKE YOUR TIME HERE!



16 Deburr any plastic from the 2 large holes inside and out. 1/2" holes need to be round and smooth. You can use a razor blade or preferably, a deburring tool. The picture is showing the use of the deburring tool.



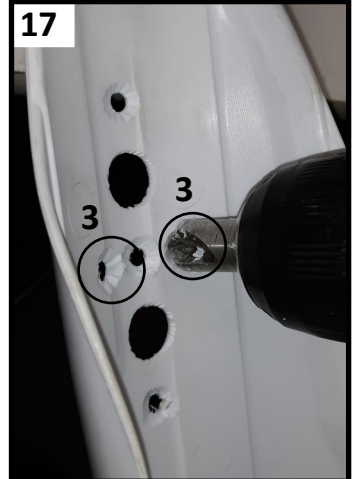
See TOOLS NEEDED on page 1 for this tool at Home Depot.

17 **THIS STEP IS VERY IMPORTANT** - Countersink the 5 small holes from the backside of plastic fork guard using the 1/2" countersink bit as shown in the picture. If using 1/2" drill bit, **DO IT BY HAND**, so it does not grab and go through the plastic guard, trust us here! If this happens, you are buying a new fork guard.

When countersinking the 2 holes for the X-Wing bracket (SEE #3 IN PICTURE), take care to make sure that the bit is perpendicular to the curve of the plastic on the backside of the fork guard.

The base screws **MUST** be flush with the plastic when tight. Take your time and do it right.

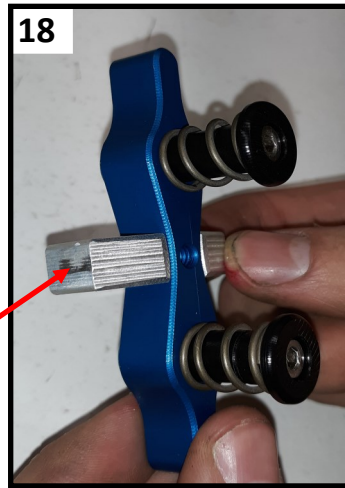
DO NOT ALLOW THE SCREWS TO COUNTERSINK THE PLASTIC FOR YOU. THIS WILL PUSH OUT THE PLASTIC AND YOUR BUTTON WILL PULL THROUGH THE PLASTIC. YOU HAVE TO COUNTERSINK THE HOLES WITH A TOOL OR DRILL BIT BEFORE INSTALLING THE BASE SCREWS.



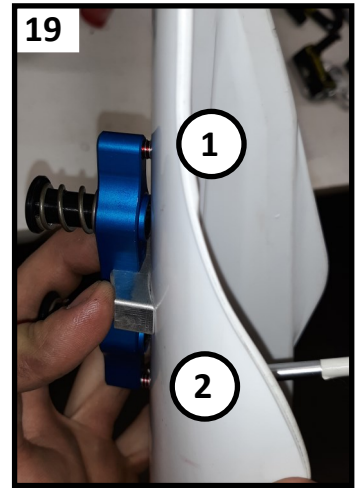
18 Install the X-Wing bracket onto the button by aligning the slots with each other allowing the X-Wing bracket to lock into the button.

Apply Loc-tite to threads of all 5 base screws. **NOTICE ONE BASE SCREW IS LONGER. SET LONGER BASE SCREW TO SIDE.**

X-WING BRACKET




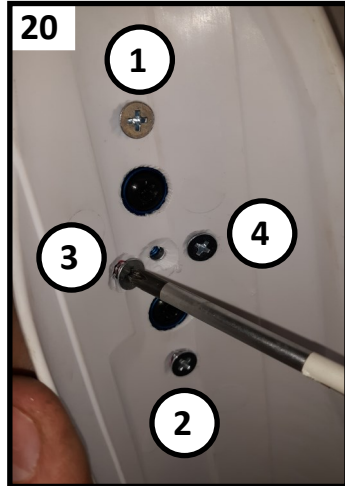
19 Hold base and X-Wing to frontside of fork guard and install top and bottom base screws (#1 and #2) through smaller holes drilled in fork guard from the backside. **DO NOT TIGHTEN.**



20 Install the two side base screws (#3 and #4) into the X-Wing.


NOW, Tighten all four base screws starting with the upper and lower base screws first (#1 and #2), then the next (#3 and #4). **DO NOT overtighten, only snug**, as the Loc-tite will hold the base screws in place.

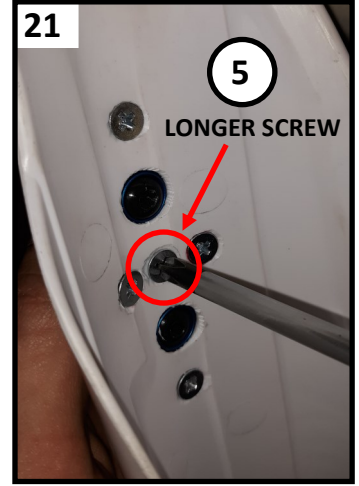
 If the base screws begin to bulge the plastic material outward, **STOP** and countersink the holes a tad bit deeper.



21 Install the longer base screw into the remaining center hole and tighten (See #5). **DO NOT LEAVE THIS BASE SCREW OUT. IT IS THE MAIN SECURING BASE SCREW.**



 Make sure all 5 base screw heads are flush with plastic fork guard surface so that the fork ring or fork will not rub and catch the screws.



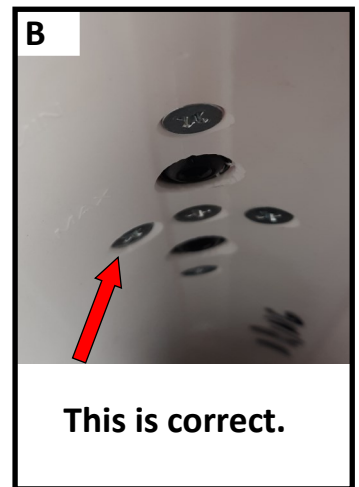
22 Base screw heads cannot protrude past the backside face of your fork guard. If they do, they will catch the ring and/or the fork and will make a mess of things and can cause the button to rip out.

DO NOT use any objects on the backside of the fork guard, such as washers, to try and keep the screws from pulling through plastic.

The Tamer X-wing is designed to minimize this issue.



Picture B - Base screws are installed the correct way. The heads of the base screws are recessed into the plastic. Some fork guards are thinner plastic, so it may be difficult to completely countersink the head of the base screws as shown in picture B, but, the base screw heads need to be at a minimum, flush with the backside plastic surface of the fork guard.



IMPORTANT - DO NOT USE THE WORKS CONNECTION OR THE PRO TAPER CUPPED WASHER WITH THE TAMER SYSTEM. IT DOES NOT WORK. IT DOESN'T WORK FOR THEM AND IT DOESN'T WORK WITH TAMER. YOU ABSOLUTELY, POSITIVELY, CANNOT HAVE ANY ITEMS PROTRUDING FROM THE SURFACE OF THE BACKSIDE OF YOUR FORK GUARD.....THOSE ITEMS WILL MAKE CONTACT WITH YOUR FORK LEG AND WILL CAUSE DAMAGE.

WORKS CONNECTION AND PRO TAPER MACHINE RUB TABS INTO THEIR RINGS TO TRY AND PREVENT THIS SITUATION FROM HAPPENING.....THE RUB TABS WEAR DOWN AFTER 6 WEEKS OF RIDING AND WILL NO LONGER PROVIDE THIS NEEDED PROTECTION. PLEASE, DO NOT USE CUPPED WASHERS WITH THE TAMER SYSTEM. OUR DESIGN WORKS. THERE IS NO NEED FOR CUPPED WASHERS.

23

2022.5 - 2023 KTM, Husqvarna & 2023 Gas Gas 450 FE Fork Guard Trimming

2019 - 2023 Honda CRF Wrap Around Style Fork Guard Trimming

IF YOU DON'T HAVE THE MAKE AND MODEL LISTED ABOVE, MOVE TO STEP #29 ON PAGE 7

On the inside, the side closest to the tire, of the fork guards of the bikes listed above, Tamer suggests removing a portion of the wrap around style of the plastic fork guard. This fork guard design is causing the fork guard to flex while the forks compress and rebound, causing the wrap around portion to catch the bottom side of the fork leg at the dust seal location. The catching can ruin the dust seal leading to leaking fork seals. The wrap around portion can also catch the holeshoot ring. We suggest removing the wrap around portion from both fork guards. The wrap around portion serves no purpose and adds additional weight to a flimsy part. Removal is simple to do and takes less than 5 minutes.

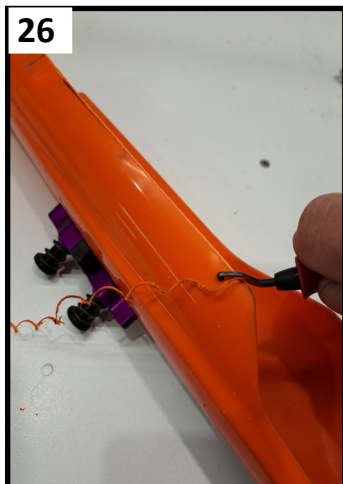
24 On the fork guard, you will see a mold line on the side that faces the tire. Using a Sharpie marker, draw a line on top of this mold line. Both the Honda and the KTM style fork guards will have this mold line.



25 Using the blade only of a hack-saw, cut along the Sharpie line to remove the plastic wrap around fork guard piece.



26 Using the deburring tool from the Tamer Install Kit (Part #: FHH-1K), debur the outside and inside edge of the cut plastic, for a nice, smooth, finished look.



27 The finished product. No more worrying about the wrap around portion of the fork guard catching your fork while riding and racing.



29 Install plastic fork guard back onto fork.

30 Make sure the button unit is now in line with the ring groove. If the button and ring groove are not in line, rotate the ring so that the push button will land within the groove. Tighten the ring bolt. **RECOMMENDED TORQUE FOR RING BOLT IS 48 in-lb (4 ft-lb).** Compress the suspension and make sure the ring is not rubbing on any of the screws. The fork guard must be removed if any rubbing is present, and any screws must be countersunk as instructed. There should NOT be any metal against metal sound. **RING BOLT MUST BE TIGHT BEFORE LATCHING THE DEVICE.**

31 After all is tight, remove bike from stand, sit on bike and hold the front brake. Push down on the front suspension with a rocking motion and while pushing down, latch the upper button in place. Now hold front brake and compress front forks to release the device.

32 To latch the lower button, hold front brake and push on front suspension with a rocking motion while having another person pull down on the handle bars. While you are pushing and the second person is pulling down, have the second person latch the lower button. For optimal performance, the lower button should take more effort. This is one of the benefits of the Tamer double button system. **MAKE SURE RING TRAVELS PAST THE BUTTON BEFORE PUSHING PIN TO LATCH. Now, go rip your next start!**

28 The wrap around portion of the Honda fork guard is shown inside the yellow area in the picture. This is the portion to be cut away.

HONDA CRF



Once latched, the Tamer Holeshoot Hookup will hold down your forks until the front wheel impacts a bump or the forks dive from using the front brake, releasing the system.

DO NOT PANIC. Although it seems the lower button is hard to latch, the device will disengage, providing excellent traction.

FORK GUARD BRACKET INSTALLATION INSTRUCTIONS

FORK GUARD BRACKET INSTALLATION FOR HONDA, KAWASAKI & YAMAHA

For added security, you can install 2 Fork Guard Brackets on your fork guard. SEE #2 IN EACH PIC FOR 2ND BRACKET PLACEMENT



- 1 Verify you have the correct Fork Guard Bracket for your application with the part numbers above. FGB-401 has a step, FGB-402 is flat.
- 2 Remove any fork guard from bike that will have a hoeshot device on it.
- 3 All Fork Guard Brackets for the Honda, Kawasaki and Yamaha brands will be mounted in the center bolt hole of the fork guard.
- * **YAMAHA ONLY** - Some of the Yamaha fork guards (OEM) have a raised area where the Fork Guard Bracket mounts. Lay the Fork Guard Bracket in place and trace lines with a marker on each side of the Fork Guard Bracket on the raised area of the plastic. This raised area of plastic will need to be removed so that the Tamer Fork Guard Bracket lays flat and flush on the plastic. Remove the plastic hump with a file, a small belt sander, or a knife. **BE CAREFUL IF USING A KNIFE. DO NOT mount the fork guard bracket unless you have removed the plastic hump. The hump will cause other issues if not filed flat.**
- 4 Install Tamer bracket and install OEM bolt through hole to keep Tamer Fork Guard Bracket in place. Now tape the bracket in place.
- 5 Using a 1/8" drill bit, drill through the screw hole in the bracket, and through the plastic of the fork guard. Remove the bracket and set aside.
- 6 Drill a 3/16" hole through the 1/8" hole and countersink the hole from the backside of the fork guard, recessing the screw head.
- 7 Apply Loc-tite to screw threads and install screw through plastic from the backside of the fork guard and tighten the bracket in place.
- 8 Apply Loc-tite to threads of fork guard bolt. Install plastic fork guard back onto motorcycle fork.

FORK GUARD BRACKET INSTALLATION FOR KTM, HUSQVARNA & GAS GAS



- 1 Verify you have the correct Fork Guard Bracket for your application with the part number above.
- 2 Remove any fork guard from bike that will have a hoeshot device on it.
- 3 Install spacers into plastic fork guard. Longer side of spacer inserts into the fork guard bolt holes. Install the bracket onto spacers. Spacers will ONLY fit one way. Install the included Tamer bolts through the holes to keep the bracket in place. Tape the bracket to further secure it in place.
- 4 Using a 1/8" drill bit, drill through the two screw holes in the bracket and through the plastic of the fork guard. Remove the bracket and set aside.
- 5 Drill 3/16" holes through the 1/8" holes and countersink the holes from the backside of the fork guard, recessing the screw heads.
- 6 Apply Loc-tite to screw threads and install screws through plastic from backside of the fork guard and tighten the bracket in place.
- 7 Apply Loc-tite to threads of Tamer supplied fork guard bolts. Install plastic fork guard back onto motorcycle fork.