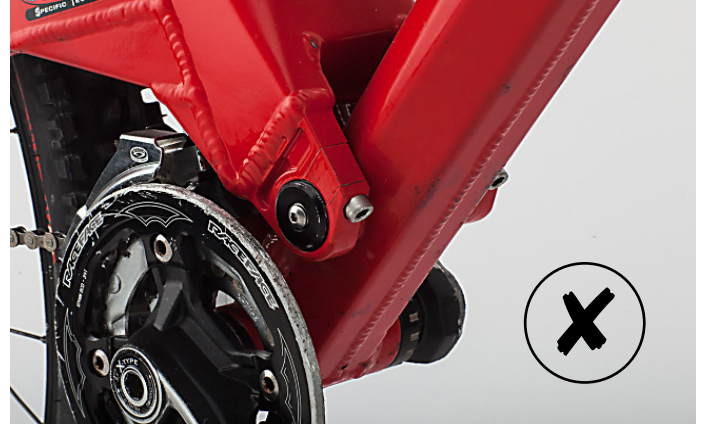


ORANGE PIVOT TOOL INSTRUCTIONS

This is a guide of how to change the pivot bearings on an Orange frame with a bore style pivot axle.



Bore Type Pivot Axle



Horiz-Hold Type Pivot Axle

Please read the instructions fully before starting on the work. Only undertake the task if you are fully confident. If you are not happy to do the work yourself, a local Orange bikes dealer will be able to help by having their qualified mechanic perform the work for you. Any damage caused by improper bearing changes will not be covered by warranty.

Please ensure your bike is clean and dry before starting any maintenance.



Tool includes

- A. Handle and Drift
- B. Inside Bearing Puller
- C. Bearing Press inside
- D. Bearing Press Outside
- E. M10 Bolt and Washer
- F. Bearing Puller Cup
- G. Pivot locator
- H. Sacrificial Rubber washers (x 4)

Please ensure you have the correct size Orange Pivot Tool and Pivot Bearing kit for the bike you are working on.

- OPT32 – 32mm Bearings P646SPA - [Buy](#)
- OPT28 – 28mm Bearings P571SPA - [Buy](#)
- P6510SPA – 10x 28mm Rubber Washers - [Buy](#)
- P6511SPA – 10 x 32mm Rubber Washers - [Buy](#)



Tools required

- Pivot bearing kit
- Masking Tape
- 2x 4mm Allen Key
- 2x 5mm Allen Key
- 1x 8mm Allen Key
- Orange Pivot bearing tool kit including pivot locator
- Plastic Hammer
- Side Snips

You will also need:

- Rag or paper towel
- Bearing lock
- Loctite 243
- Anti-Seize Grease or Copper Slip

SWINGARM REMOVAL

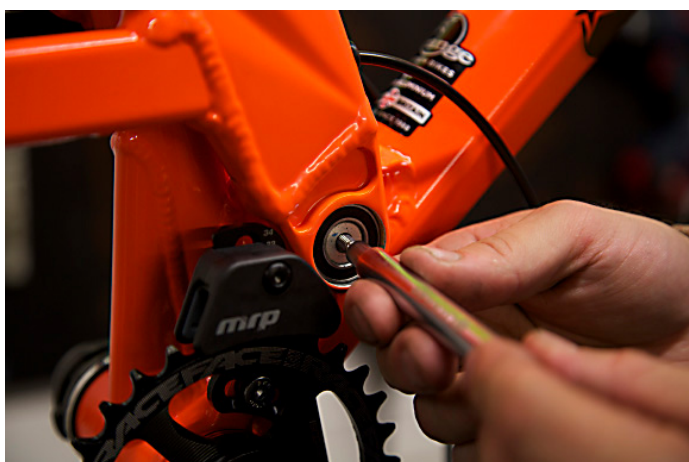


◀ **Step 1:** Begin by removing components going between the front and the rear. This is to make removing the swing arm easier.

Some protection is advised between the two halves.

Note: Depending on if you have internal or external cable routing the brake hose and cable outer may need removing to make the job easier. Bearing changes without removal of hose and cable are possible but not advised for home mechanics.

Take 2x 4mm Allen key. Place one in each side of the pivot end cap bolts and turn anti-clockwise to loosen. Fully remove each bolt and bearing end cap.



◀ **Step 2:** The end of the pivot axle will now be exposed through the end of the bearing.

Take the handle/drift from the pivot tool kit.

Fully screw the thread of the handle into one side of the pivot axle.



◀ **Step 3:** Take a plastic hammer and drift the pivot axle out of the frame. While doing this take care to support the swingarm as it will become free from the front triangle as the pivot axle is removed.

Top Tip: There is a spacer between the inside of the bearing and the front. Watch for these spacers they are often covered in grease and stick to the inside of the swing arm but they may fall out. They will need to be put back in during reassembly so need keeping safe.



◀ **Step 4:** The swingarm will now be free from the front triangle. Carefully remove it, taking care not to damage either parts of the frame.

REMOVING THE BEARINGS



◀ **Step 2:** Take the bearing removal tools from the pivot bearing tool kit.

Parts A, B, E, F and 1x H

Assemble the tool for removal as per the picture.

Parts A, B, E, F and 1x H

Top Tip: To prevent paint damage add 3-4 layers of masking tape to the face/outer facing front of the pivot housing on the swingarm.



◀ **Step 2:** Place a rubber washer (H) on the outside of the pivot bearing housing on the swingarm. Then line up the bearing puller cup (F) over the washer.

Place the large M10 bolt with metal washer (E) through the centre of the puller cup and screw into the bearing puller (B).

Place the removal tool handle (A) into the threaded hole in the puller (B).

Finger Tighten ensuring the cup and tool are parallel with the swingarm.

Place the 8mm Allen key into the head of the M10 bolt.

Hold the puller handle securely and turn the Allen key clockwise. This tightening will pull the bearing out of the housing and into the puller cup. This will be stiff at first, so it is best to rest the swingarm upside down on a flat surface when doing this step.

You will feel the resistance disappear when the bearing is fully removed.



◀ **Step 3:** Unscrew the bolt and remove the bearing from the puller cup.

The rubber washer will have been destroyed. It is a sacrificial part to help protect paintwork so please use a new washer for every bearing removed.

Now repeat the process for the other bearing in the opposite bearing housing of your swingarm.

Clean both pivot housings with a rag ready for the new bearings to be fitted.

FITTING THE NEW BEARINGS



◀ **Step 1:** Assemble the pivot tool ready for use as a press as per the picture.

Parts. E, D, C and A.

Apply bearing lock to the inside of the bearing housing you are going to fit the bearing into first.

Take a new bearing and line it up with the outside bearing press tool D.

Take the bearing press inside (C) with the handle (A) threaded into the threaded hole and place on the inside of the pivot housing.



◀ **Step 3:** Take the M10 bolt and washer (E) and put through the tools from the outside to the inside.

Screw the bolt up finger tight aligning the tool and bearing parallel with the housing as you tighten.

Take your 8mm Allen key and place into the head of the M10 bolt.

Hold the tool handle securely and turn the Allen key clockwise to tighten. This will press the bearing into the swingarm.

Start slowly and ensure the bearing presses in squarely to the pivot housing.

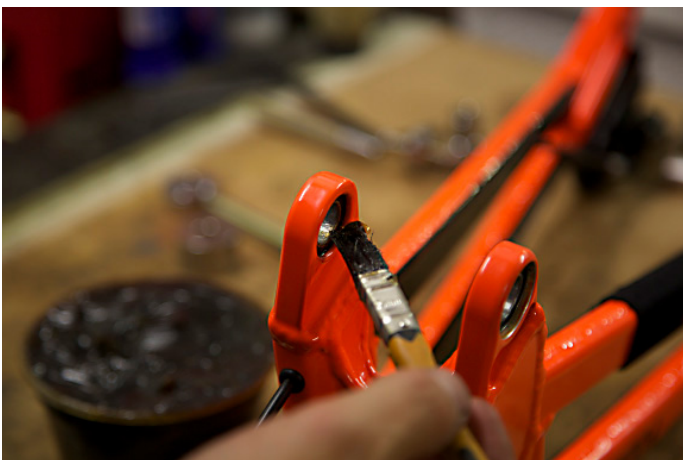
Keep tightening until the bearing is fully seated and can not be pressed in any further.

Loosen and remove the tools.

Look from the inside of the housing to visually check the bearing is fully seated into the swing arm and there is no gap between the inside edge of the bearing and the swingarm bearing housing.

Repeat this process for the opposite bearing and swingarm pivot housing.

REFITTING THE SWINGARM



◀ **Step 1:** Replace the spacers to the inside of the bearings.

Top Tip: To help keep the spacers in place while refitting the swingarm, apply a small amount of grease to the washers and they should then stick into position.



◀ **Step 2:** Use the pivot locator (G) to align the swingarm with the front. The tapered end of the pivot locator makes this a lot easier than using the pivot axle at this point.

The locator going through the centre of the bearing in the swingarm and into the pivot axle bore hole in the frame.

Top Tip: Remember your protection around the seat tube to protect the front and rear from colliding as you refit the swingarm.



◀ **Step 3:** Put a small amount of anti-seize grease or copper slip onto the pivot axle.

Line the pivot axle up with the end of the pivot locator. Use the pivot axle to push the pivot locator all the way through the front and the pivot axle into the frame. The locator will be pushed out the opposite side.

You will need to use the plastic hammer to tap the axle into the frame, this will be a tight fit.



◀ **Step 4:** Now the swingarm is refitted to the front, the pivot needs finally centralising and tightening.

Add some Loctite 243 to the pivot cap bolts to ensure they stay in place and at the correct torque.



◀ **Step 5:** Take the 2x 4mm Allen keys and tighten the end caps evenly to a torque of 14Nm.

Now refit the components to the swingarm and you are ready to hit the trails once again!