

# HCP1284 XJ Series Spin-On Oil Filter Conversion Kit Installation Instructions

Congratulations (and thanks!) on your purchase of our XJ Spin-On Oil Filter Conversion Kit. This kit is very simple to install and will greatly increase the oil filtering performance that your engine receives, while also simplifying future oil filter changes. Typical installation on stock bikes will require about 30-45 minutes time and some simple hand tools.



Although it is recommended that you perform this swap in conjunction with an oil change, that is not absolutely necessary although you will lose a bit of oil when removing your old oil filter unit. Draining your oil before you start will make things less messy.

Although the basic installation is very similar between all models, there are some minor differences between installing this system on a factory oil cooler equipped model (XJ650 Turbo and XJ900RK models, as well as some European XJ750 models, etc.) and standard, non-factory oil cooler equipped models (all XJ650 except Turbo, all XJ700 models, all XJ750 models except European with factory oil coolers). All XJ550 models will also have one extra step involved.

The parts included within this kit are:

- (1) oil filter adapter plate
- (1) threaded stud
- (1) special too for installing the threaded stud
- (1) oil filter stud thin retaining nut
- (1) adapter plate-to-engine block round rubber o-ring
- (1) [HCP278](#) K&N oil filter, [HCP277](#) Purolator oil filter or [HCP279](#) Amsoil oil filter depending on which kit you ordered

**Tools & Supplies needed:**



HCP1267 Semi-permanent thread-locking compound



HCP1264 anti-seize compound



Torque wrench, if you are so inclined (and you should be)





Appropriate-sized wrench or socket to remove your current oil filter housing bolt (12 or 17mm depending on model), plus a 14mm for the special tool to install the threaded stud



30mm open end wrench or deep socket



32mm open end wrench or socket (XJ550 models only)



Fresh oil as needed



Cleaning fluid (spray carb or brake cleaner works well) as needed



Rags, towels, etc. as needed



**XJ550 models (non factory oil cooler equipped versions):**

**Overview:**



A) Remove the entire factory oil system, as you would do when performing an oil change.



It is recommended that you save all these pieces (cover, bypass valve/cover mounting bolt, filter element spring and washer plate) in a plastic baggie or similar container. You won't need to reuse any of these, but why throw away good used parts?



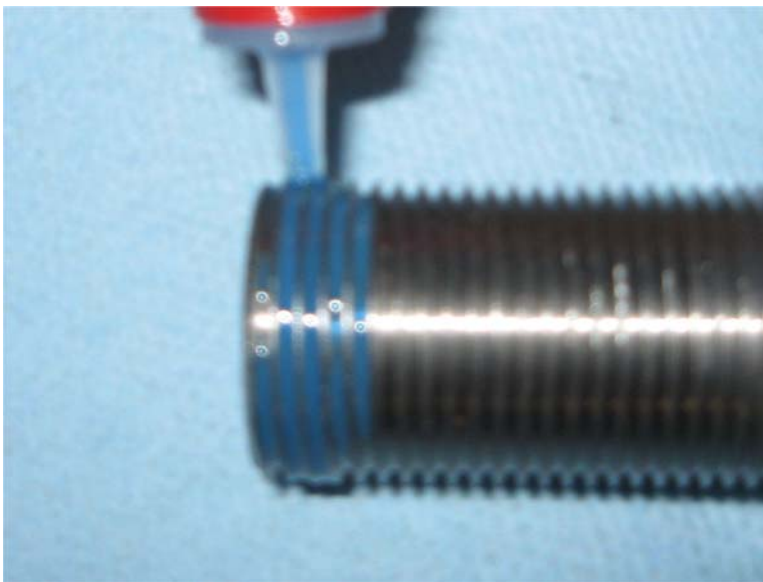
B) Remove the large 32mm union bolt that is screwed into the engine case oil passage hole (note: it's in there tight!). This is the internally/externally threaded bolt hole that the cover housing bolt you just removed threads into. Save this bolt; you won't need to reuse it, but why throw away good used parts?

(Again, this is for the 550 only; other models without oil coolers do not have this bolt installed. Plus, if you do have an oil cooler, you won't need to remove it.)



Previous versions of the kit used a pair of jam nuts to help install the stud into the oil passage; to make installation easier, we now use a special adapter that fits into a pair of notches cut into the threaded stud.

Before we install it, however, we need to do a little bit of prep work.



C) Put a small amount of HCP1267 thread-locking fluid onto the other end of the stud (the end without the notches; in other words, the end of the stud that you're going to thread into the engine case oil passage hole). Be conservative with it; just cover 4-5 threads of the stud with the thread-locking fluid.



Coat the rest of the stud threads with HCP1264 anti-seize grease. (Contrary to popular belief, putting loctite and anti-seize on the same bolt is not like mixing matter and anti-matter.)





D) Thread the stud into the engine case oil passage hole until it seats, hand tight, at the bottom of the hole. If it won't go in all the way by hand, gently use the special tool, and a ratchet with a 14mm socket.



E) Now use the torque wrench with the special tool to tighten the threaded stud into the engine case oil passage hole to 20 foot-pounds.

You may now set the special tool aside; it has served its one and only purpose in life.

(I said, "Set it aside", not "throw it away" – if you ever need to snug that stud down again, or want to remove it for whatever reason, you'll be wanting to have the tool onhand.)



F) Lubricate the supplied o-ring with engine oil or a similar substance



G) Fit the o-ring into the bottom of the adapter plate, as shown here, in the machined groove designed for this purpose. This side of the adapter plate installs towards the engine block.



The spin-on “can” oil filter element will make contact with the top side of the adapter plate, which has the recessed area.

H) Install the adapter plate over the threaded stud, bottom side with the o-ring towards the engine, and seat it fully against the engine case.

If you don't see a recessed area, it's on backwards.  
If you see the words “ENGINE SIDE”... it's on backwards.

If you see the o-ring... it's on backwards!



I) Now take the thin nut, thread it down over the stud, and tighten against the adapter plate, thus securing the plate firmly against the engine block.





Using a 30mm open wrench or deep socket, tighten the thin nut to 12-16 ft-lbs. Our thinwall [HCP10298](#) 6-point or [HCP10299](#) 12-point socket work well here. If you don't already have a 1/2" drive torque wrench and extension, our [HCP10300](#) 3/8-to-1/2" adapter would be recommended.



J) You're almost done! Wet the rubber gasket on the base of the oil filter with some engine oil, install the filter onto the stud, and tighten the filter to the appropriate setting per the manufacturer recommendations, which is normally 1/4 to 1/2 turn past the first contact of the filter's rubber seal to the adapter plate surface. NOTE: overtightening the filter can lead to oil leaks, gasket failure, and can make removing the filter from the stud (during future oil filter changes) very difficult.

Although it can be a little messy if spilled, it is recommended that the filter be filled with as much fresh oil as possible (which will probably be about 1/2 full) before installing it.



If you have fully drained the oil in your bike before you began this procedure, then fill the crankcase with the proper amount of fresh oil for your model. NOTE: the following capacities are quoted from the factory service manuals for a “Full Oil Change with Filter Change”... which is exactly what you’re performing during this swap. The total maximum oil capacity for the different bikes is slightly higher (normally by about ½ US quart, or 400cc), but since a regular oil/filter change never actually drains ALL of the oil from the engine, these are the proper starting point refill capacities to use:

XJ550:	2.6 US Quart/2500cc
XJ650 non-Turbo:	2.8 US Quart/2650cc
XJ650 Turbo:	3.1 US Quart/2900cc
XJ700 all:	3.0 US Quart/2800cc
XJ750 all:	3.0 US Quart/2800cc
XJ900RK:	3.0 US Quart/2800cc

K) Start the engine and check for leaks. If there are any, check for proper tightening of components and proper alignment of the o-ring seal between the adapter plate and the engine block.

L) Check the engine oil level and adjust as necessary. The spin-on oil filter unit will require about the same amount of total system oil volume as your stock paper filter system. Once the conversion kit is installed, fill your bike with the specified amount of oil for your engine (per factory specs) and then check the oil level in your bike (the proper way, with the bike on the CENTER stand – not on the SIDE stand) and add oil as necessary to bring it to the proper level in the sight window on the bottom of the clutch cover.

M) Dispose of your old oil appropriately, in accordance with local regulations.

N) Clean up the area and put your tools away.

O) Go riding and enjoy the finest oil filtration system that can be used on your bike!

#### **XJ650/700/750 models (non factory oil cooler equipped versions):**

Your installation procedure is exactly the same as the XJ550 models described above, except your bike does **NOT** use the “union bolt” described in Step B, and thus there is no bolt to remove!

To install your kit onto these bikes, follow ALL of the above instructions for the XJ550 models, except ignore Step B.

#### **XJ650 Turbo/900/other factory oil cooler equipped versions:**

Your installation procedure is exactly the same as the XJ550 models described above, except your bike has an “Oil Cooler Adapter Plate”, secured by the Union Bolt described above in Step B. This Union Bolt and the adapter plate will **NOT** be removed during installation. In your system, our HCP272 spin-on oil filter adapter plate fits on top of your existing oil cooler adapter plate. You will still be replacing your entire original oil filter element finned outer cover (and all its mounting and internal pieces). Nor will you have any need to remove the oil cooler adapter plate, unless you want to replace the o-ring between the plate and the engine block. (By the way, now would be the perfect time to do just that. It’s actually the same [HCP2283](#) o-ring used in this kit). In that case, you follow the normal factory procedure for doing so, which is:

- 1) Remove the union bolt
- 2) Replace the o-ring
- 3) Reinstall the bolt and tighten to 36 ft-lb.



Okay, so to install your kit onto a factory oil cooler-equipped model, follow all of the above instructions for the XJ550 models except:

1) Ignore step B

2) since you will be installing the threaded stud into the internally threaded Union Bolt and not the engine case oil passage hole, Step C becomes:

“D) You will now install the threaded stud into the Union Bolt.”

Anywhere in Steps D or E where it refers to the “engine case oil passage hole”, substitute the phrase “union bolt”. The key difference is this: on factory oil cooler-equipped models, that Union Bolt is threaded into the engine case oil passage hole, and the stud that comes with the kit threads into that union bolt (instead of the engine case oil passage hole, which is occupied by the union bolt). Thus, the internal threads of the union bolt become the internal threads of the engine case oil passage hole, if that makes any sense!

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[info@xj4ever.com](mailto:info@xj4ever.com)