



## INSTALLATION INSTRUCTIONS

Part # 750-1000-0323

Please read these instructions completely before beginning installation.

### KIT CONTENTS

QTY.	DESCRIPTION
1	Jagg Deluxe Oil Cooler
1 pair/ size	Jagg frame clamps in sizes 1-1/8", 1-1/4", 1-3/8", 1-1/2"
2 sets	Bolt + nut set for frame clamps: 5/16"-18 x 1"
1	Jagg 4702 Offset Oil Filter Adapter Body
1	Jagg 4702 Offset Oil Filter Adapter Faceplate
3	10-24 x 5/16" countersunk flat-head hex-drive screw for 4702 Faceplate
1	Jagg 4702 steel LOCNUT with 3/8" ratchet cutout
1	Large O-ring, square profile
1	1/8" NPT pipe plug
2	adapter fittings - 1/8" NPT to 3/8" push-on hose barb
4	7/8" black wormdrive hose clamps
1	anti-rotation device
2	10-24 x 5/16" button-head hex-drive screw for anti-rotation device
3 ft	Jagg 30R7spec black oil hose



### TOOLS REQUIRED

strap wrench or oil filter removal tool

3/8" ratchet & ratchet extension

7/8" deep well socket

1/8" hex key tool

1/4" hex key tool

Hose cutter or sharp knife

1/4" nut driver for hose clamps

### Operation Summary

The Jagg #4702 offset oil filter adapter is used to access the oil supply for the installation of a Jagg oil cooler. The #4702 directs oil through the filter first for optimal flow characteristics. After filtration, the oil may either travel to the oil cooler or by-pass the oil cooler, according to the built-in Viscosity Regulated Flow (VRF) plug function. Cold, viscous oil will by-pass the oil cooler, speed-

ing warmup to standard operating temperature.

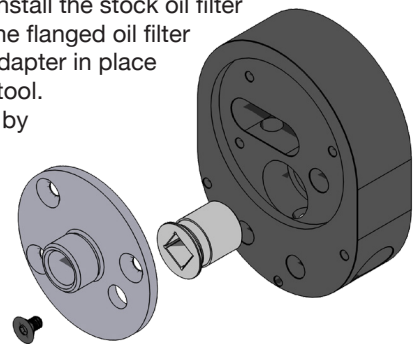
As the engine reaches operating temperature and oil reaches optimal viscosity range, the VRF plug will keep the #4702's by-pass hole closed, sending hot, filtered oil to the oil cooler, and delivering cool, clean oil to the engine.

Oil flow direction from adapter: oil feeds the oil cooler from the fitting on the left side and returns to the fitting on the right side, as viewed from front with oil filter adapter fittings at bottom.

### Part 1: Install Jagg Offset Oil Filter Adapter

#### Pre-installation steps

1. Remove spin-on oil filter, and clean the filter mounting surface thoroughly.
2. Using a 7/8" deep well socket, remove the stock oil filter stem. If removing and upgrading a factory Harley-Davidson oil cooling system, uninstall the stock oil filter adapter by removing the flanged oil filter nipple that holds the adapter in place using a 7/16" hex key tool.
3. Disassemble the 4702 by removing the three countersunk flat-head hex-drive screws from the front face of the adapter using a 1/8"

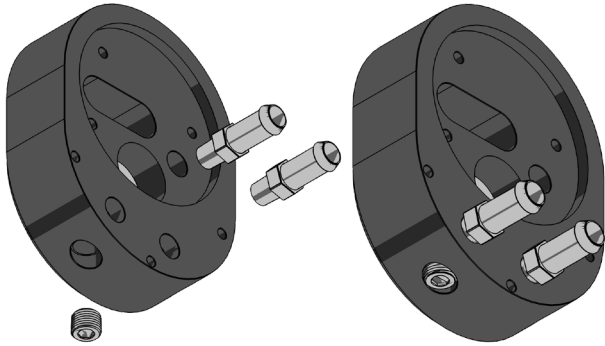


**Warning:** Installation should only be attempted by those with mechanical skills and experience working on vehicles. Standard safety precautions consistent with the tools and dangers of automotive work should be followed to protect from injury. Specifically, wear protective equipment, take care to stabilize the vehicle on a level surface or supportive lift, and allow vehicle to cool before attemptation installation; failure to comply can result in injury and/or damage to equipment.

hex key tool. Then, remove the faceplate from the adapter and remove the LOCNUT from within.

**Installing NPT pipe plug & hose barb adapter fittings**

- Apply thread sealant to male pipe threads if not pre-applied. If PTFE tape is used, it should be wrapped 1-1/2 to 2 turns in clockwise direction when viewed from the pipe thread end. **CAUTION:** More than two turns of tape may cause distortion or cracking of the port.
- Screw the NPT plug into the port to finger tight.

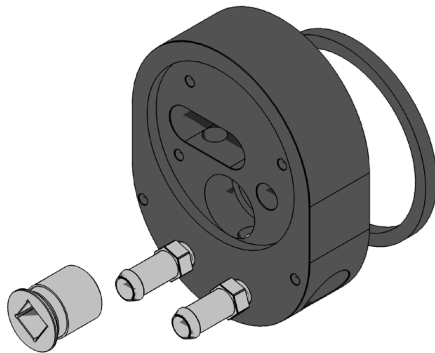


- Wrench tighten the plug to 2-3 turns-from-finger-tight (T.F.F.T.).

**Installing 4702 to engine oil filter mount**

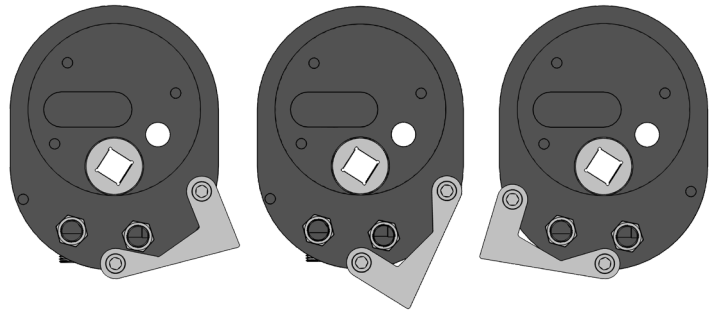
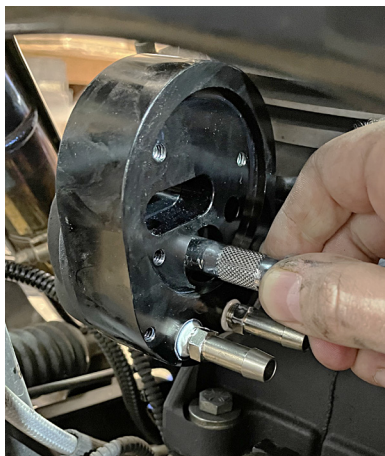
- Lubricate the large O-ring with a slight smear of oil and insert into O-ring groove on the rear of the 4702 body.

- With the fittings-end of the adapter at the bottom and the O-ring sealing side facing toward the engine, place the 4702 body over the oil filter mount on the engine. Using a 3/8" ratchet extension inserted into the included LOCNUT, insert the LOCNUT through the center hole of the 4702 body and tighten to finger-tight.



- If an anti-rotation device is being used, locate part #4600AR-C Jagg anti-rotation device now. Installation of this device will ensure the 4702 offset oil filter adapter will not rotate during future oil filter removal.

- Place the anti-rotation device against the face of the adapter in the



*EVO fitment*

*T-C Touring & Dyna fitment*

*T-C Softail fitment*

orientation shown that matches your motorcycle model.

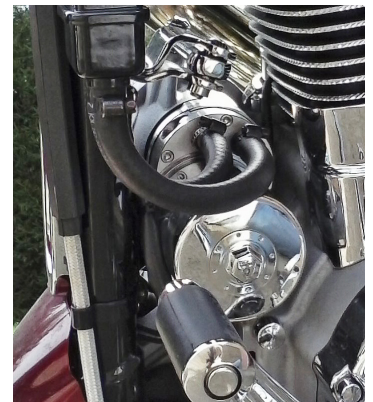
- Install the two #10-24 button-head hex-drive screws included with the anti-rotation device through the appropriate holes on the oil filter adapter as shown.
- Rotate the entire adapter counter-clockwise until the anti-rotation device makes contact with the engine case.
- Using a 3/8" ratchet extension, securely tighten the LOCNUT so the 4702 will not rotate and the sealing O-ring is tight against the stock filter mount.



**NOTE:** On rubber-mounted engine models, allow adequate clearance to ensure that the adapter will not strike any object when the motor shakes.

**APPLICATION NOTE: Sportster models**

- Some Sportster models may require rotating the mounting of the #4702 offset oil filter adapter 180 degrees, placing the hoses above the filter (see photo at right).
- In these installations, the anti-rotation device is not required.

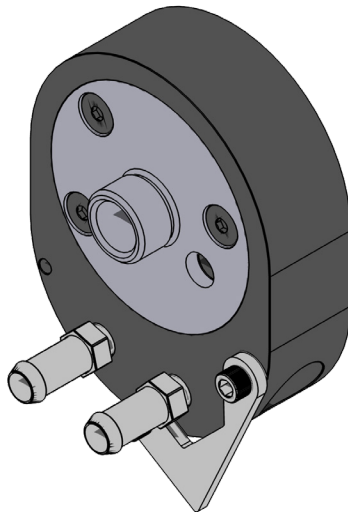


*This mounting orientation may be required on some Sportster models*

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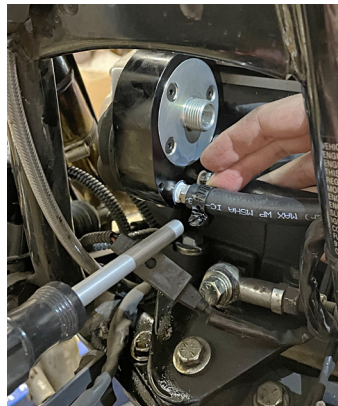


14. Insert the 4702 Faceplate in the 4702 body and secure it using the three included 10-24 x 5/16" countersunk flat-head hex-drive screws. If using a thread-locking compound, please choose a medium strength and use it on the screws at this step.



**SERVICE NOTE:**

Inspect adapter and screws for tightness at each oil filter change. To ensure proper seal, replace O-ring any time the 4702 is removed.



ensure hose clamps do not interfere with oil filter installation.

**Part 2: Oil Cooler Mounting**

15. Determine oil cooler placement on left frame tube by holding the oil cooler to approximate height of desired location.
16. Choose the appropriate size clamps for your application according to specific frame diameter at the point of mounting.
17. Spread clamps and place around left frame tube.
18. Position oil cooler vertically on the left frame tube with oil inlet and outlet pointing downward.
19. Align the bolt holes in the oil cooler with the holes in the mounting clamps and install the nuts and bolts.
20. Carefully slide oil cooler and clamps up or down to position of desired height. Keep clamps free from any braces or indents that may interfere with a clean fitment. Ensure oil cooler is mounted at a 90° orientation (straight out) from the motorcycle to allow clean airflow.
21. Tighten bolts in frame clamps using a 1/4" hex key tool. Oil cooler should be firmly mounted now.

**Part 3: Oil Cooler Plumbing**

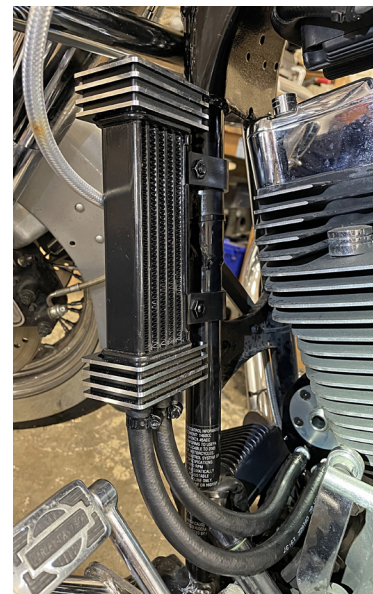
22. Cut the provided oil hose into two lengths.
23. Install the oil hoses onto the hose fittings on the oil cooler. Using a 1/4" nut driver, secure hose over the fittings with the 7/8" black hose clamps included in the kit so the hose cannot pull over the barb on the fitting. The flow orientation of the oil cooler is non-directional, so either hose fitting will allow proper flow as an inlet or an outlet.

**TIP:** Install the 7/8" black hose clamps loosely onto the hoses before installing the hoses onto the oil cooler's fittings. A touch of oil on the barbed fittings will assist in pushing the hoses onto the fittings.

24. Measure, cut, route, and attach the oil hoses to the oil filter adapter fittings. Using a 1/4" nut driver, secure the hoses over the fittings using the 7/8" black hose clamps onto the oil filter adapter inlet and outlet so the hose cannot pull over the barb on the fitting. A touch of oil on the oil filter adapter inlet and outlet allows the hoses to push on easily.

**NOTE:** It may be necessary to rotate hose clamps to

**CAUTION:** Take care to make gentle bends in oil hose routing from the oil cooler to the adapter. Sharp bends may collapse under heat load and cause restriction to oil flow.



25. Install oil filter onto the threaded stem of the oil filter adapter. Tighten per factory/service manual recommendations.

**Part 4: Final Inspection**

26. Inspect the oil hoses to ensure there are no tight bends that may restrict oil flow and that they are not contacting any moving parts. If necessary secure the new hoses to the frame with plastic zip-ties.
27. Refill the engine with the correct amount and type of oil. Check the oil level per factory/service manual recommendations.
28. Start the engine and let it idle. Check all oil hose connections for any leakage. Tighten any hose clamps that may be leaking.

**NOTE:** Over-tightened hose clamps may cut into oil lines and cause oil leaks.

29. After installation completion and engine warm-up, shut the engine down and recheck the oil level. Correct the oil level if necessary, but do not over-fill.

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SERVICE & UPGRADE ITEMS AVAILABLE	
PART NO.	DESCRIPTION
11-RU77-34	<b>Jagg HyperFlow Lifetime Oil Filters</b> Originally designed for race vehicles, these cleanable/reusable filters employ a stainless steel woven element to offer greater flow and greater filtration than OEM filters.
SK4400	<b>Gasket service kit for Jagg # 4702 offset oil filter adapter</b> Includes: Large O-rings (x2)
21-SSN06-B	<b>Stainless-steel Braided Hose</b> High performance 3/8"(-06) Nitrile rubber oil hose with stainless-steel braided jacket
22-HF06-SI (silver) 22-HF06-BK (black)	<b>Jagg Hose Finishers</b> Hose Finishers with integrated worm-drive hose clamps dress up the terminal ends of your oil hose to resemble high-performance racecar compression fittings without the installation hassle.  7/8" integrated hose clamps, suitable for 3/8" (-06) plain or braided oil hose.  Available in black or silver anodized finish.
22-HS06-SI (silver) 22-HS06-BK (black)	<b>Jagg Hose Separators</b> Keep your oil lines separated, provide extra structure, and look trick! Pair with hose finishers for a complete, finished look.  Machined from billet aluminum and anodized either bright silver or black, these items install in a snap.
08-0069	<b>Oil Filter Strap Wrench</b> Simply one of the easiest oil filter wrenches to use. Takes virtually no space in the toolbox or the saddlebag.
11-0064	<b>Oil Filter Magnet</b> Catch harmful metals in your oil.

See these items and more at:  
[www.jagg.com](http://www.jagg.com)

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