INSTALLATION INSTRUCTIONS
Part # 770-1700

Please read these instructions completely before beginning installation.

KIT CONTENTS	
Qty.	Description
1	Jagg Deluxe DiamondCut oil cooler
3 pair	Jagg frame clamps (1 1/4”, 1 1/2”, and 1 3/8”)
2 sets	Bolt + nut set for frame clamps: 5/16”-18 x 1”
1	Jagg 4501 Oil filter adapter
1	Large O-ring, square profile
2	NPT 1/8” pipe plugs
2	adapter fittings - 1/8” NPT to 3/8” push-on hose barb
4	7/8” black worm drive hose clamps
3ft	Jagg 30R7spec black oil hose
1	Hose separator

TOOLS REQUIRED
Strap wrench or oil filter removal tool
3/8” ratchet & ratchet extension
7/8” deep well socket
1/8” hex key tool
Adjustable wrench
Hose cutters or sharp knife
¼” nut driver (for hose clamps)

Operation Summary

The Jagg #4501 oil filter adapter is used to access oil supply for the installation of a Jagg Oil Cooler on a Harley-Davidson motorcycle using the Milwaukee Eight (M8) motor.

Pre-Installation

- Remove spin-on oil filter and clean the filter mounting surface thoroughly.
- 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.

1. Prepare oil filter adapter for installation

CAUTION: If PTFE tape is used, more than two turns of tape may cause distortion or cracking of the port.

- Apply Teflon pipe sealant (e.g., Loctite 592) to the male pipe threads of the NPT plugs. 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.
- Screw the NPT plugs into the ports on the top, flat side to finger tight.
- Wrench tighten the plugs 2-3 turns-from-finger-tight (T.F.F.T.).
- Apply Teflon pipe sealant (e.g., Loctite 592) to the 1/8” male pipe threads of the provided hose fittings.
- Install the fittings into the female NPT ports on the face of the oil filter adapter to finger tight.
- Wrench tighten the fittings to 2-3 turns-from-finger-tight (T.F.F.T.).
- Put a few drops of oil into the O-ring channel on the back side of the oil filter adapter and place the O-ring into the channel.
- Set aside oil filter adapter until it is needed.

Installing the automatic fan switch
(*If using a fan assisted oil cooler)

The Jagg WeatherTek fan operates via the included automatic fan switch. The automatic fan switch installs into the included street-tee pipe fitting to access hot oil flow from the oil filter adapter to activate the fan.

- Apply Teflon pipe sealant (e.g., Loctite 592) to the 1/8" male pipe threads on one of the provided hose fittings.
- Install one hose barb adapter fitting into the right-side port of the oil filter adapter to finger tight.
- Wrench tighten the hose barb adapter fitting to 2-3 turns-from-finger-tight (T.F.F.T.).
- Apply Teflon pipe sealant to the 1/8" male pipe thread on the **ported** hose fitting.
- Install the NPT male of the ported hose fitting into the left port of the oil filter adapter to finger tight.

TIP: At this time, test fit the oil filter adapter to the motorcycle to determine the proper "clocking" orientation of the ported pipe fitting and fan switch to ensure clearance of any obstruction. See image at right for approximate position.

- Once a final position is determined, wrench tighten the fitting to 2-3 turns-from-finger-tight (T.F.F.T.) to arrive at the desired position.
- Apply Teflon pipe sealant to the 1/8" male pipe thread on the automatic fan switch.
- Install the 1/8" male pipe thread end of the automatic fan switch into side of the NPT port fitting to finger tight.
- Wrench tighten the automatic fan switch to 2-3 turns-from-finger-tight (T.F.F.T.).

2. Re-route the clutch cable

- Run the clutch cable up the frame tube on opposite side from the oil filter. Route it behind the headlight and up through the hole in the top triple tree located in between the 2 handlebar risers, and then over to clutch lever.

3. Install the oil cooler

- Remove the cover and the mounting bolt for the factory oil cooler.
- Install the frame tube mounting clamps on the oil filter side of the bike so that the hexagonal screw hole faces towards the rear tire.
- Mount the oil cooler to the frame tube mounting clamps with the bars face down and with the top of the oil cooler in line with the cross brace of the frame tubes; securely fasten the screws.

4. Install the oil filter adapter

- Oil the O-ring that is in the oil filter adapter and place the adapter onto the oil filter landing plate so that the flat side of the adapter faces upward and indexes the front cylinder head.
- Install the oil filter center nut.

5. Install the oil hoses

- Cut two pieces of hose to desired lengths.
- Put hose clamps on the end of the hoses before pushing onto barb fittings.
- Tighten hose clamps until they slightly compress hose against fittings.
- *the hoses should route to left of filter, down 90 degrees, and 180 degree back up to the oil cooler.
- Due to the looped routing of the hoses, the hose separator should be used here to keep the hoses uniformly spaced

If installing a fan assisted oil cooler

- We recommend using a H-D Accessory Wire Harness Kit (**Part#: 69201599A**).
- Run wiring back along frame under tank, ground to frame, & connect under seat using H-D Accessory Wire Harness Kit.
- Attach female wire leads to the thermal switch on the oil filter adapter.

6. Reinstall a clean oil filter

- Put a few drops of oil onto the O-ring of the oil filter.
- Screw the oil filter back on to oil filter adapter.

7. Reinstall the factory oil cooler mounting screw and factory oil cooler cover.

- Clean off any residual oil, start your bike, and allow it to reach operating temperature to ensure that all new fitments are properly sealed.
- Once you are sure that all components are soundly sealed and you have detected no leaks, resume normal riding.
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Thank you for choosing a Jagg oil cooler!

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 attempting installation; failure to comply can result in injury and/or damage to equipment.