

# INSTRUCTIONS

-J00373 REV. 2-1-94

Kit Numbers 62497-82A and 62515-82A

# OIL COOLER KIT – 1982 AND LATER SPORTSTERS

# General

This kit is designed for installation on 1982 and later Sportster model motorcycles.

| 62497-82A | Black  |  |
|-----------|--------|--|
| 62515-82A | Chrome |  |

A Service Parts list is located at the end of this Instruction Sheet. This kit contains the following components:

| QTY | DESCRIPTION       |
|-----|-------------------|
| 4   | Reflector, yellow |
| 1   | Oil cooler        |
| 2   | Clamp, large      |
| 5   | Clamp, small      |
| 1   | Hose, 5 ft.       |
|     |                   |

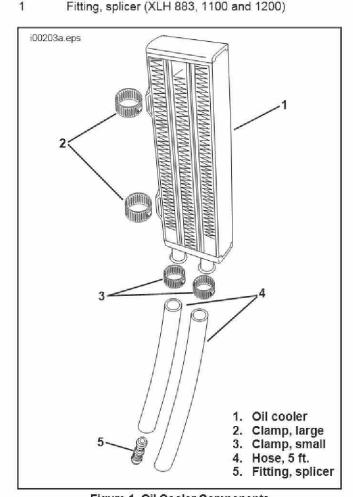


Figure 1. Oil Cooler Components (Reflectors not shown)

# **A**CAUTION

All oil coolers and lines are installed in the part of the oil flow loop that returns engine oil to the oil tank. The oil cooler outlet must direct oil flow into the return to the oil tank.

### NOTE

On oil coolers without a built-in thermostat, either side can be inlet/outlet. Be sure you remember what you decide is the inlet/outlet. The cooler(s) in this Instruction Sheet do not have a built-in thermostat. In this Instruction Sheet, the nipple closest to the frame downtube is designated the outlet.

Although the cooler must be in the oil flow return loop, it can be installed either before or after the oil filter.

This instruction sheet explains how to install the oil cooler before the filter on 1985 and earlier model Sportsters and after the filter on 1986 and later model Sportsters.

Carefully layout and measure oil lines before cutting the bulk oil line in this kit. The approximate lengths given in this Instruction Sheet can vary slightly from motorcycle to motorcycle because of individual variations of accessories.

### ACAUTION.

- Connect all oil lines properly or oil loss can cause engine damage.
- Installing oil cooler systems will require adding 1/2 to 1 pint of oil. Check oil supply before operating motorcycle. Fill up to, but not above, upper mark on dipstick.
- For motorcycle operation in temperatures below 50° F, use an oil cooler cover to allow the engine to warm up to normal operating temperature.

# Installation- Mounting Oil Cooler

On all models, begin the kit installation by mounting the oil cooler to the left frame downtube, in accordance with the following instructions. Hose hook-up and routing differs for the various models. Follow the instructions that apply to your motorcycle.

### NOTE

On all 1991 and later XLH models, the reflector on the left front frame downtube may interfere with the oil cooler installation. See Figure 11. Remove the reflector from the left front frame downtube and install two of the reflectors from kit on the left front fender brace. The remaining two reflectors may be installed on the right front fender brace.

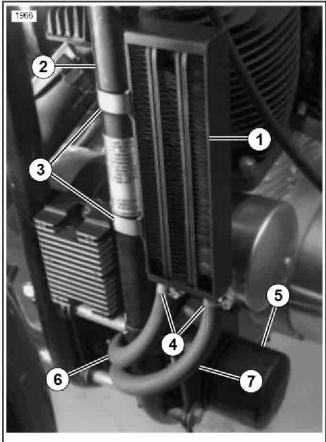
 See Figure 2. Slide two large clamps through slots on side on oil cooler. Mount oil cooler on left frame downtube, below frame weldment. Tighten clamp securely.

# **A**CAUTION

Oil cooler must be mounted below frame weldment, or oil cooler damage may occur when clamps are tightened.

# Removing and Installing Hoses- 1982 to Early 1984 Models (Generator Equipped)

- Cut two sections of hose, one approximately 9 in. long and one approximately 14 in. long.
- See Figures 3 and 4. Disconnect the oil return line at the oil pump and oil filter inlet. Use a pan to catch any oil that may spill.



- 1. Oil cooler
- 2. Frame downtube
- 3. Clamp, large
- 4. Clamp, small
- Oil filter
- 6. Hose, outlet
- 7. Hose, inlet
- Figure 2. Oil Cooler Mounting (Typical)

- See Figures 2 and 3. Connect 14 in. hose to oil pump return fitting. Route hose forward and through hole in right front engine mount and up to oil cooler inlet fitting. Secure connections with small clamps from kit.
- See Figure 4. Connect 9 in. hose to inlet fitting on oil filter mount and outlet fitting on oil cooler. Secure with small clamps from kit.

# **A**CAUTION

- Tie wrap oil line(s) to upper, inside of frame tube to prevent oil line from hanging outside, below frame tubes. Do not over-tighten tie wraps. Overtightening could collapse hose, restrict oil flow and cause engine damage. Clip off tie wrap loose ends.
- Do not route hose below frame tubes or hose could be damaged by debris.
- Start and run engine. Check all connections, clamps and hose fittings for oil leaks. Add oil if necessary.

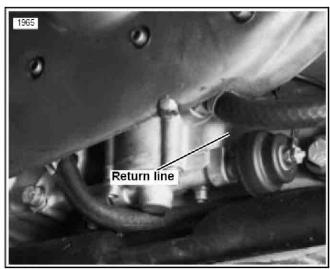


Figure 3. Oil Pump Hose Identification - 1982 to 1985

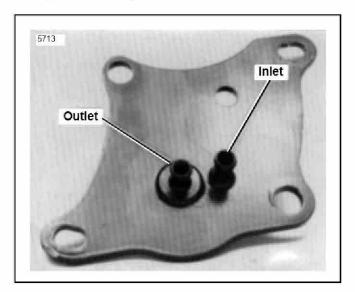


Figure 4. Oil Filter Fittings - Late 1982 to Early 1984 (Generator Equipped)

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# Removing and Installing Hoses - Late 1984 to 1985 Models (Alternator Equipped)

- Cut two sections of hose, one approximately 9 in. long and one approximately 14 in. long.
- See Figures 3 and 6. Disconnect the oil return line at the oil pump and oil filter inlet. Use a pan to catch any oil that may spill.
- See Figure 6. Connect 9 in. hose to inlet fitting on oil filter mount and outlet fitting on oil cooler. Secure with small clamps from kit.
- See Figures 2 and 3. Connect 14 in. hose to oil pump return fitting. Route hose forward and through hole in right front engine mount and up to oil cooler inlet fitting. Secure connections with small clamps from kit.

# return line

Figure 5. Oil Pump Hose Identification - 1982 to 1985

## **A**CAUTION

- Tie wrap oil line(s) to upper, inside of frame tube to prevent oil line from hanging outside, below frame tubes. Do not over-tighten tie wraps. Overtightening could collapse hose, restrict oil flow and cause engine damage. Clip off tie wrap loose ends.
- Do not route hose below frame tubes or hose could be damaged by debris.
- Start and run engine. Check all connections, clamps and hose fittings for oil leaks. Add oil if necessary.

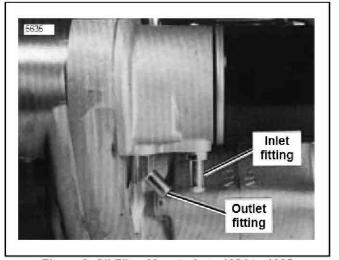


Figure 6. Oil Filter Mount - Late 1984 to 1985 (Alternator Equipped)

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# Removing and Installing Hoses- 1986 to 1990 XLH 883, 1100 and 1200 Models

- See Figures 7 and 8. Disconnect oil return line at the oil pump. The return line is located at the front, top of the oil pump and is secured with a hose clamp. Use a pan to catch any oil that may spill.
- 2. Cut a section of hose approximately 14 in. long.
- See Figure 2 and 8. Connect 14 in. inlet hose to oil cooler inlet fitting. Route hose down and back between front engine mounts and connect to oil pump return fitting. Secure connections with small clamps from kit.
- 4. Install splicer fitting into end of hose removed from oil pump return in Step 1. Secure hose on fitting with small clamp. Install new outlet hose from kit on other end of splicer fitting. Secure hose to fitting with small clamp from kit. Route hose forward and up to oil cooler outlet fitting, cut to length and secure with small clamp.

# **A**CAUTION

- Tie wrap oil line(s) to upper, inside of frame tube to prevent oil line from hanging outside, below frame tubes. Do not over-tighten tie wraps. Overtightening could collapse hose, restrict oil flow and cause engine damage. Clip off tie wrap loose ends.
- Do not route hose below frame tubes or hose could be damaged by debris.

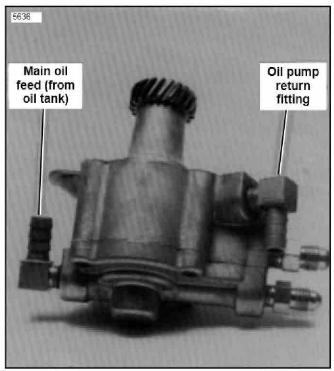


Figure 8. Oil Pump - 1986 to 1990 XLH Models

Start and run engine. Check all connections, clamps and hose fittings for oil leaks. Add oil if necessary.

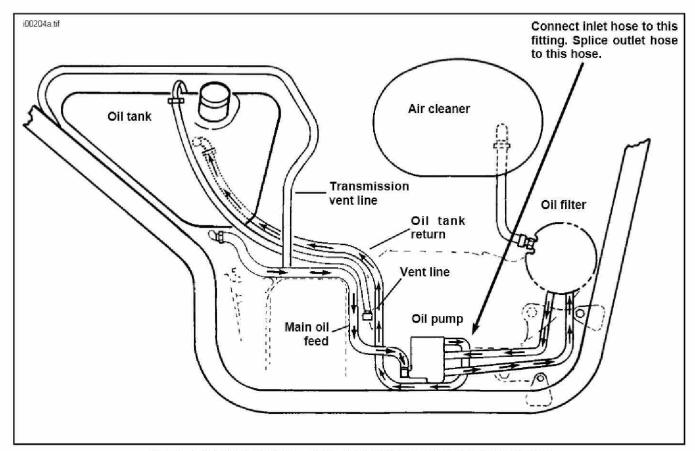


Figure 7. Oil Hose Routing - 1986-1990 XLH 883, 1100 and 1200 Models

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# Removing and Installing Hoses- 1991 and Later XLH Models

- Remove entire exhaust system, including muffler support system, following instructions in appropriate Service Manual.
- Lower, but do not remove oil pump by following procedures in appropriate Service Manual.
- See Figures 8 and 10. Disconnect oil return line at the oil pump. The return line is located on the angled fitting at the front of the oil pump and is secured with a hose clamp. Use a pan to catch any oil that may spill.
- Cut a length of hose will reach from oil return fitting on pump to inlet fitting on oil cooler.
- Connect one end of hose to pump oil return fitting using worm drive clamp included with kit. Connect other end of hose to oil cooler inlet and secure with clamp.
- Replace oil pump gasket and install oil pump following instructions in appropriate Service Manual.

### **A**CAUTION

- Tie wrap oil line(s) to upper, inside of frame tube to prevent oil line from hanging outside, below frame tubes. Do not over-tighten tie wraps. Overtightening could collapse hose, restrict oil flow and cause engine damage. Clip off tie wrap loose ends.
- Do not route hose below frame tubes or hose could be damaged by debris.

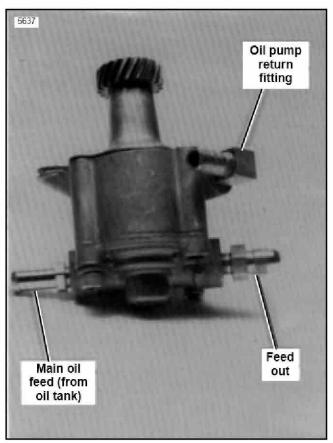


Figure 9. Oil Pump - 1991 and Later XLH Models

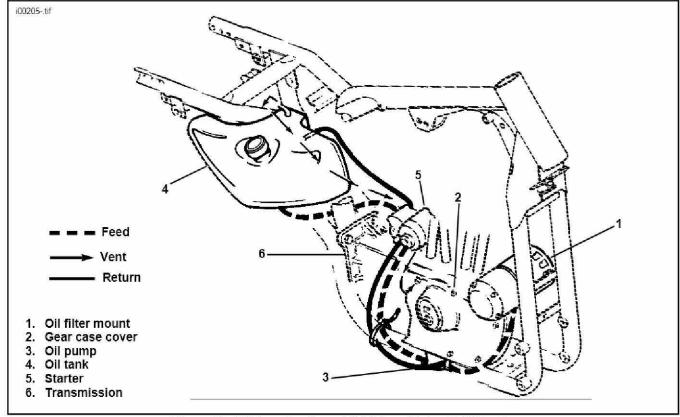


Figure 10. Oil Hose Routing - All 1991 and Later XLH Models

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- Install splicer fitting into end of hose removed from oil pump in Step 3. Secure hose on fitting with worm drive clamp. Install new length of hose from kit on other end of splicer fitting. Route hose forward and up to oil cooler outlet fitting, cut to length and secure with clamp.
- Be sure hose is properly routed along top of frame tubes and away from exhaust pipes. Secure hose to frame with tie wraps included in kit.
- Install exhaust system following instructions in appropriate Service Manual.
- See Figure 11. Remove wax and dirt from fender brace. Remove paper backing from reflector(s) and press reflector(s) vertically onto fender brace(s). If desired, repeat this procedure on opposite side of fender.

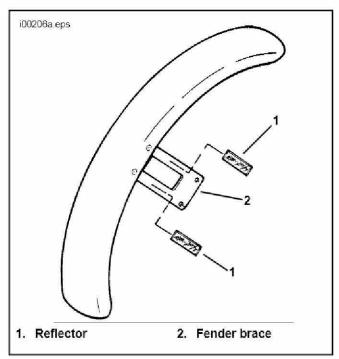
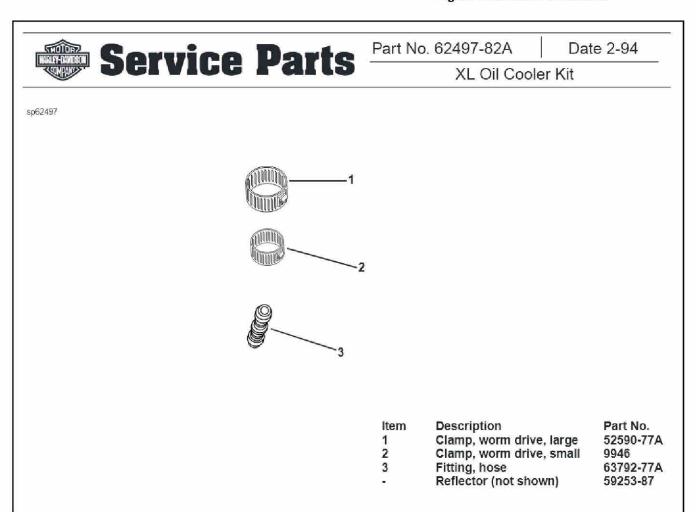


Figure 11. Reflector Installation



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