

2017-2021 Milwaukee 8 Installation Guide



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TOOLS REQUIRED:

**DRIP PAN OR SOMETHING TO
COLLECT**

SMALL AMOUNT OF OIL

**H.D. OIL FILTER WRENCH 3"
OR**

**FILTER STRAP WRENCH
DEEP WELL 7/8" SOCKET
EXTENSION FOR SOCKET**

ALLEN WRENCH SET

PHILLIPS SCREW DRIVER

9/16" OPEN END WRENCH

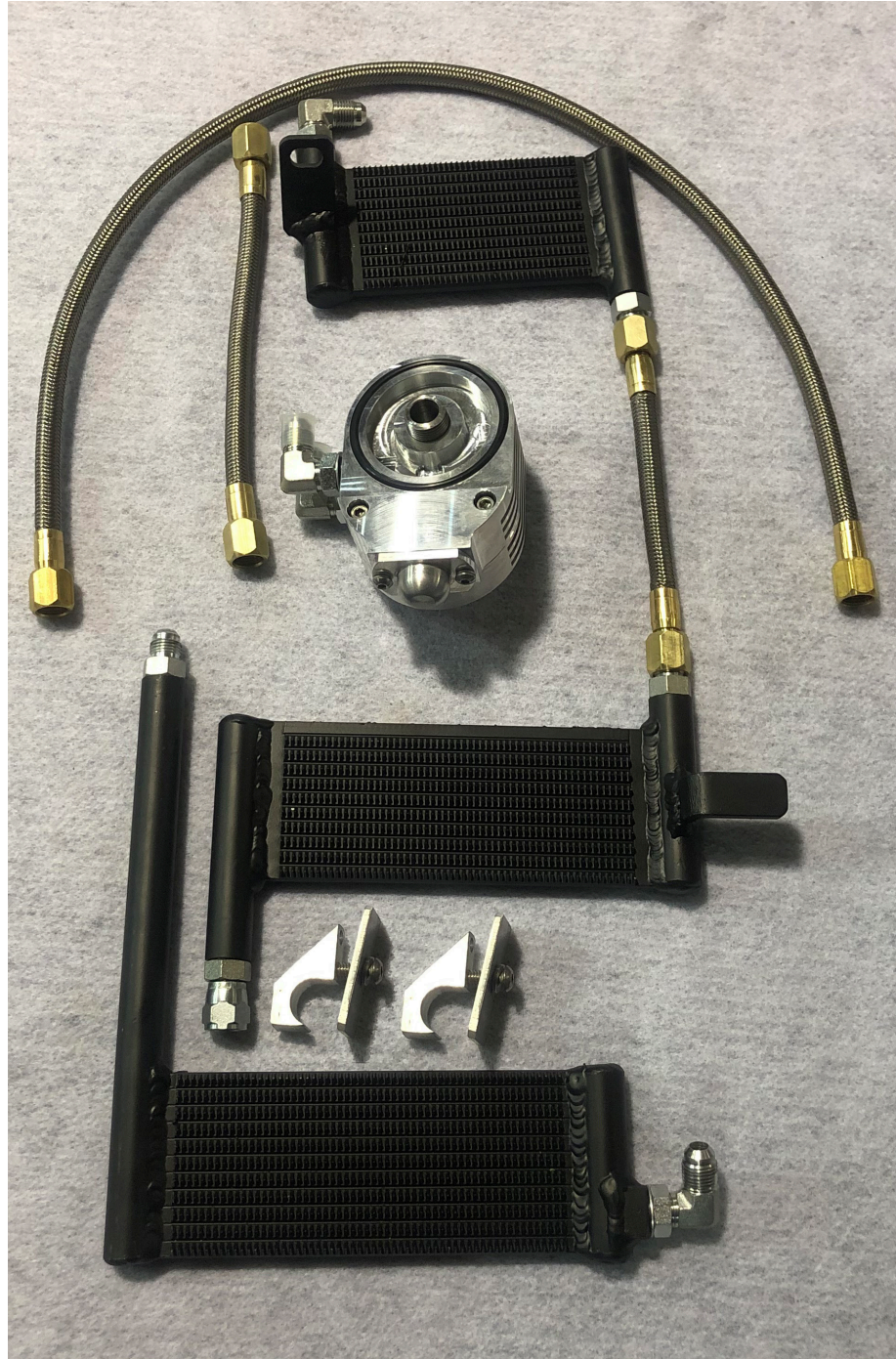
**TWO-11/16" OPEN END
WRENCHES**

**-RECOMMENDED-
PLIERS & SNIPS**

HEAT GUN

WOBBLE ALLEN WRENCH

MILWAUKEE 8 KIT



STEP 1

REMOVE OIL COOLER COVER. IT WILL PULL OFF FROM THE BOTTOM, AND IS HOOKED ON THE TOP. REMOVE BOTTOM PLASTIC COVER.



STEP 2

REMOVE HOSE CLAMP OFF OF THE TOP OIL COOLER TUBE AND REMOVE RUBBER HOSE. (SOME OIL WILL SPILL FROM THE TUBE.)



STEP 3

REMOVE THE 4 ALLEN SCREWS AT THE TOP AND BOTTOM BRACKET THAT HOLDS ON THE VOLTAGE REGULATOR.



STEP 4

UNPLUG ELECTRICAL CONNECTORS FROM REGULATOR. (THE HOOD WILL FLIP UP WITH FLAT SCREWDRIER.) SEPARATE AND MOVE OUT OF THE WAY.



STEP 5

REMOVE OIL FILTER AND NUT THAT HOLDS ON THE FILTER WITH A 7/8" SOCKET.



STEP 6

INSTALL 90° FITTING ONTO INNER HALF OF THE ADAPTOR PLATE (JUST SNUG FOR NOW).
INSTALL O-RING ON THE INSIDE FACE OF THE INNER HALF OF THE ADAPTOR PLATE. (USE
A BIT OF GREASE TO HOLD IN PLACE.)



STEP 7A

TAKE THE SUPPLIED TUBE NUT AND INSTALL THE INNER PLATE. (CLOCK THE PLATE UNTIL IT TOUCHES THE CYLINDER FINNS.) TIGHTEN TO 40FT/LBS



STEP 7B

MAKE SURE O-RINGS ARE IN THE ADAPTOR, BOTH LARGE AND SMALL ON THE OTHER SIDE OF ADAPTOR ARE IN PLACE. KEEPING THE O-RING IN PLACE, INSTALL THE ALLEN BOLTS INCLUDING LOCK WASHERS. THE TWO LOWER ALLEDN SCREWS ARE THE SHORTER (1") ONES. TIGHTEN THE ALLEN SCREWS IN A BALANCED MANNER. THE BACK SIDE OF THE ADAPTOR PLATE WILL REQUIRE A WOBBLE ALLEN WRENCH TO TIGHTEN THE SCREWS. (LOOSENING THE FRONT EXHAUST SHROUD MIGHT MAKE IT EASIER TO TIGHTEN SCREWS.

STEP 8

INSTALL LONG HOSE: START AT THE FRONT OF BIKE AND RUN HOSE BETWEEN RUBBER OIL LINE AND ENGINE. THREAD ON (THROUGH) INSIDE FRAME AND OVER FRAME BRACE OUT THE BACK OF THE FRAME. NOW CONNECT HOSE ON THE INSIDE FITTING ON ADAPTOR PLATE AS SHOWN ON PIC. (WARNING: YOU HAVE TO HAVE CLEARANCE BETWEEN REGULATOR PLUGS AND HOSE FITTINGS.)



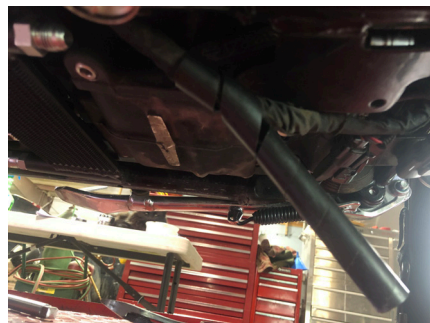
STEP 9

INSTALL REAR/MIDDLE COOLER ELEMENTS: INSTALL FITTINGS AS SHOWN. TIGHTEN STRAIGHT FITTINGS ONLY. PUT REAR ELEMENT TUBE OVER FRAME BRACE AND LET HANG DOWN. NOW HOOK MIDDLE ELEMENT BRACKET ON TOP OF RIGHT FRAME RAIL. CONNECT REAR AND MIDDLE JIC FITTINGS TOGETHER (LEAVE LOOSE FOR NOW).



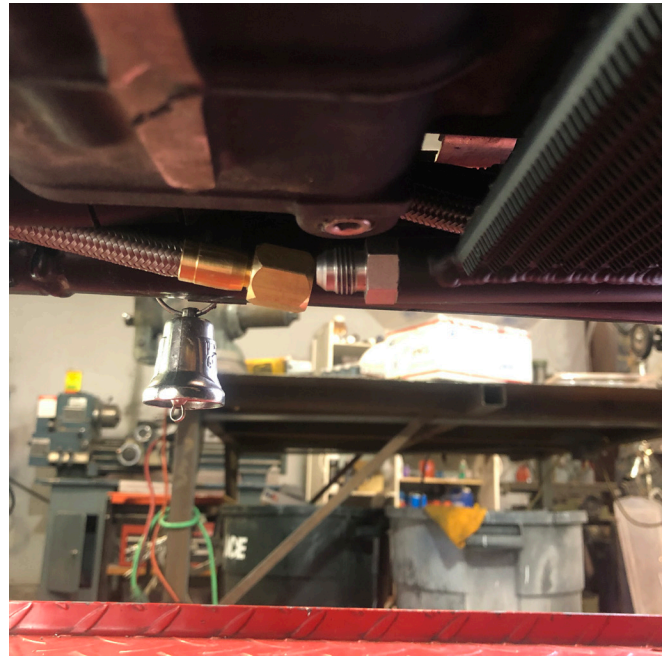
STEP 10

MOVE WIRES AND ELECTRICAL PLUGS. CAREFULLY REMOVE CRANK SENSOR PLUG FROM STEEL BRACKET. RE-INSTALL ON OTHER SIDE OF BRACKET. BY PUSHING THE PLASTIC RETAINER PIN IN. REMOVE THE PLASTIC RETAINER PIN FROM WIRE BUNDLE ON RIGHT SIDE OF FRAME. REMOVE THE FRONT ZIP TIE THAT HOLDS THE WIRE BUNDLE TO FRAME. INSTALL INCLUDED WIRE WRAP AROUND WIRE BUNDLE. THAT WILL GIVE WIRE EXTRA PROTECTION.

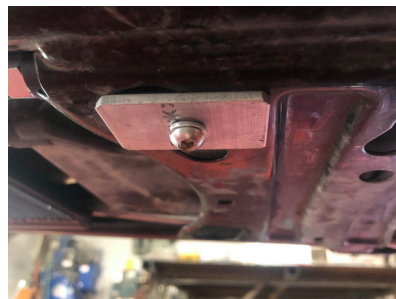


STEP 11

INSTALL FRONT ELEMENT TO MIDDLE TIGHTEN FRONT HOSE TO ELEMENT. FROM THE RIGHT SIDE OF THE BIKE, PUSH THE BRAIDED HOSE UNDER THE WIRE BUNDLE. NOW SCREW THE TWO ELEMENTS TOGETHER.



FINISH COOLER ELEMENT HOOK-UP. DO NOT TIGHTEN YET. INSTALL RETAINER CLAMPS TO BRACE AND REAR ELEMENT TUBE, SNUG ONLY. NOW HOOK UP HOSE TO REAR ELEMENT.



PUSH ELEMENT INTO PLACE. WARNING- NOTE: THERE MUST BE ROOM BETWEEN THE MIDDLE COOLER ELEMENT AND THE ENGINE CRANKCASE. THE ENGINE WILL SHAKE BECAUSE OF A RUBBER MOUNTING AND CANNOT BE ALLOWED TO RUB ON COOLER ELEMENT.

STEP 12

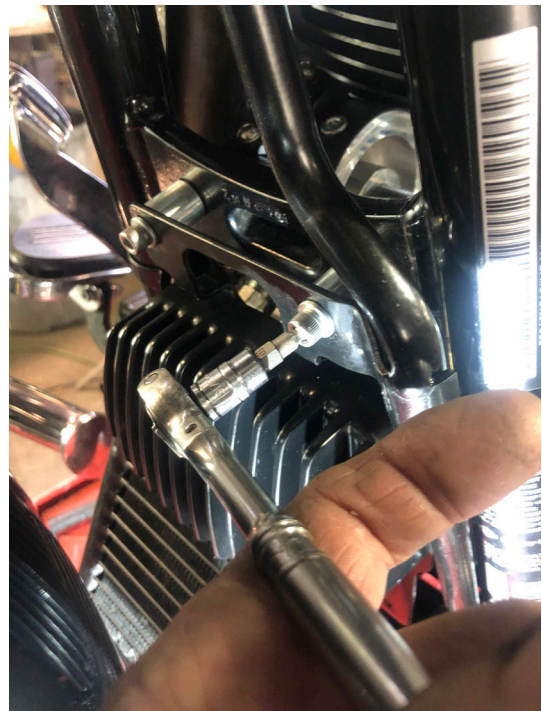
HOOK UP FRONT HOSE TO ADAPTOR FITTING (OUTER). TAKE SUPPLIED 1"X5/16" ALLEN AND BOLT OEM OIL COOLER/REGULATOR BRACKET AND SMALL ELEMENT TO FRAME (WOBBLE ALLEN WORKS GREAT) .. JUST IN 2-3 THREADS.

NOW TIGHTEN ALL HOSES AND FITTINGS. DO THE SAME TO RIGHT SIDE, THEN PLUG IN RIGHT AND LEFT ELECTRICAL CONNECTORS.



STEP 13

NOW TAKE THE SUPPLIED BOLTS AND SPACERS AND FASTEN THE TOP OF THE BRACKET TO THE FRAME. TIGHTEN ALL FOUR. NOTE: CHECK TO MAKE SURE YOU HAVE CLEARANCE BETWEEN FITTING ON ADAPTOR AND BRACKET. MAKE SURE HOSES ARE NOT RUBBING ON ELECTRICAL CONNECTORS.



STEP 14

PUT HEAT SHRINK CLAMP OVER TOP OIL HOSE.
PUSH ON THE OIL HOSE AT THE TOP OF THE COOL-
ER. (USE A HEAT GUN TO SHRINK.) TIGHTEN ALL
FITTINGS AND BOLTS AND INSTALL OIL FILTER.



FINAL CHECK UP STEPS

CHECK REAR ELEMENT AND THAT IT HAS CLEARANCE FROM CRANKCASE
(ADJUST REAR CLAMPS AS NEEDED)

REINSTALL THE OEM OIL COOLER COVER.

CHECK ALL CONNECTIONS AND FASTERS.

START THE BIKE AND MAKE SURE THERE IS OIL PRESSURE AND THERE ARE
NO LEAKS.

YOU ARE READY TO RIDE!!!!