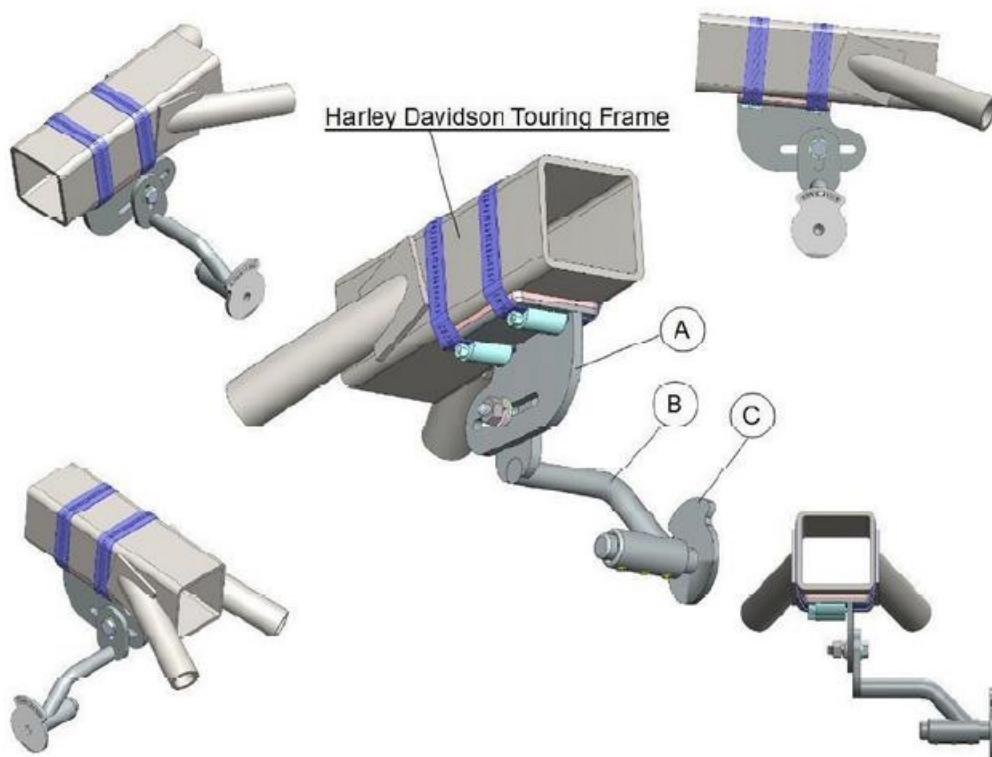


DUAL COOL

VIBRATION TAMER INSTALLATION INSTRUCTIONS

WARNING! Failure to follow these directions step by step, can result in personal injury or Dual Cool failure due to unwanted contact with gas line and/or wires.



STEP 1. Remove your seat by removing the screw located behind the seat. Lift the rear of the seat and pull the seat towards the rear of the bike. **STEP 2.** Disconnect the gas line hose **IMPORTANT.** This is a quick disconnect fitting, that works like an air hose fitting. Push the chrome collar up towards the tank, and pull the elbow down and it will easily disconnect. Only a couple of drops of gas will spill from the tank. **IMPORTANT.** Do not try to unscrew the nut on the bottom of the tank. Doing that will cost you \$75. for a destroyed plastic tube located inside the tank, and a an hour of labor. Now, disconnect the tubes and electric plug connections, at the base of the tank. **IMPORTANT.** Make sure all the connections have been disconnected before you remove your gas tank. It is also possible on most bikes to raise the tank turn it 90-180 degrees and set it down in the seat area with all the wires and hoses still connected. Make sure you put a towel or two in the seat area before placing the tank. **Tip... It is easier to remove your gas tank when it is empty or near empty.** **STEP 3.** Remove the Chrome Acorn nut that attaches your horn and horn cover assembly to the mounting bracket. Disconnect the two wires from the horn. Put this assembly aside for now. **STEP 4.** Remove the two large bolts that attach the Harley Horn Bracket to the engine. You will not re-use this Harley horn bracket. **STEP 5.** Attach bracket "A" as shown in the drawings. Place the bracket on the bottom of the bike's frame with the rounded and protruding section facing the rear of the bike. (See drawing) **Tip.** Securing the A bracket to the bottom of the frame is really simplified if you temporarily zip tie the bracket to the frame, to hold it in position while you are installing the worm clamps. Center the bracket between the two heads. The placement is not too critical because there is a lot of adjustment in any direction that allows you to easily position your Dual Cool perfectly.

Loosen the worm drive screw completely. Important. Feed the now unattached end over the top of the metal frame, and under the plastic trough from the Air cleaner side. Next, route the unattached end of the clamp through the slot in the base of the bracket. Insert the loose end of the clamp back into the hub of the clamp and turn the screw clockwise to catch the teeth. Important. The hub of the clamp must be positioned on the bottom of the frame as shown in the drawing.

WARNING: DO NOT POSITION THE HEAD OF THE CLAMP ON THE SIDES OF THE FRAME. GAS TANK RUPTURE WILL RESULT AND COULD CAUSE AN EXPLOSION CAUSING SERIOUS INJURY OR DEATH.

Use a ¼" drive ratchet, extension, and socket to tighten the clamp, tapping the band with a plastic hammer, to form the band around the corners. When the two clamps have been tightened, check to make sure that the assembled bracket is straight, secure, and tight to the frame. Now, that the clamps have been installed, you can snip or cut the excess material of the clamps if you wish. or zip tie each tail to the clamp and tuck it behind the plastic. (Recommended) so no contact with the gas tank is possible.

STEP 6. Using the hardware provided, attach bracket "B" as shown in the drawings. When the brackets have been bolted together, it's a good idea to check that the assembled bracket is firmly attached to your frame, Use two fingers to grab the bottom of the bracket and check if there is any movement when you jiggle it in all directions.) This Super Heavy Duty, Solid Stainless Steel bracket has to support a mere Five Pounds! Our Frame Mount Bracket has been Engineered to exceed that load requirement by a factor of 20-1. NOTE: It is easier to assemble the Dual Cool, horn/cover, and Harley chrome horn mount bracket assembly on a table.

STEP 7. Remove the two 1/4" bolts that fasten the horn to the Harley chrome bracket, You will not re-use these bolts.

Sandwich the Dual Cool main frame between the Harley chrome horn bracket and the horn cover. Assemble the parts in this order, from the rear to the front. 1. New stiffener bracket supplied with your Dual Cool. 2. Harley chrome horn mount bracket. 3. Dual Cool. 4. Horn cover. Bolt the four parts together, using the new 1/4" X 5/8" long bolts supplied, leave the bolts finger tight until you look at the front of the assembled unit and check for equal spacing of the horn between the Fan enclosures. Also check that the Harley chrome horn mounting bracket is pointing straight up. When you are pleased with the alignment of the four parts, tighten the two 1/4 inch bolts securely.

Next step is to screw the new vibration damper into the Dual Cool "C" bracket. Apply red Loctite to the stud that is being screwed into the "C" bracket. After you have screwed the vibration damper with the maximum force generated by your two hands, place your plier as close to the bracket as possible so you will be squeezing the rear steel disc and not just the center rubber. To avoid scratching the Stainless Steel chrome name plate, apply masking or electrical tape before using a wrench. Do not tighten the rubber vibration damper by the rubber disc alone. Do not over-tighten by twisting the rubber excessively. Future failure could be the result. . Do not apply Loctite to the front threads of the new vibration damper. Use red loctite on the rear stud only.

STEP 8. Attach the Dual Cool and horn assembly, to the stud on the new Vibration Damper, with the previously removed, Harley chrome acorn nut and flat washer.

STEP 9. Slide the now complete Dual Cool and horn assembly including the “C” bracket into the tube of the “B” bracket. Make sure everything is straight. Tighten the three set screws with the included allen wrench. Bolt this entire assembly to the previously installed “A” bracket, with the 1/4” bolt, flat washer, lock washer and nut included in the kit. Check to make sure that the Dual Cool wiring harness is 3/4” or more away from the engine. **WARNING.** Make sure you do not install the “B” bracket so low that it is resting on the fuel line. Leave at least 1/8” clearance so there is ample clearance, so no chaffing or fuel line rupture is even remotely possible. Check the tightness of the bolt that connects brackets A & B together, after the first 10 hours of initial use.

CHECK ALL THE NEWLY INSTALLED PARTS TO MAKE SURE THAT THE GAS LINE AND WIRES ARE NOT TOUCHING ANY PART OF THE BRACKETS OR ENGINE.

WIRING INSTRUCTIONS

Harley Touring bikes with an accessory switch on the dash. Locate the Harley accessory plug included with your bike which is located under your seat. It will be tucked down a couple of inches at the front of the battery. Remove the rubber dust plug.

Route the Dual Cool harness up under the gas tank and secure the harness to existing wires with the included wire ties. Run the rest of the harness under your seat and plug it into the Harley accessory plug.

Make sure the wire harness is not touching the engine or too close to the engine. 1” is the minimum recommended clearance. Use the included wire ties to secure the harness to areas that are appropriate to position the harness to avoid any unwanted contact from heat and vibration sources. Also, make sure the harness will not be crushed when you re-install the seat. Turn on the ignition, then your accessory switch located on your dash, to make sure the fans are operational before you install the gas tank and the seat.

Wiring Dual Cool directly to the battery.

Cut off the plug from the “Dual Cool” wiring harness. Connect the red wire to the positive (+) terminal of the battery with the included terminals.

WARNING-Do not connect the red/positive wire to the (+) battery terminal, without installing the 15 AMP in-line fuse provided. Connect the black wire to the negative (-) terminal of your battery. Turn on the switches on the “Dual Cool to activate the fans.

Re-install the gas tank.

Re-install the seat.

BEFORE STARTING ENGINE, CHECK ALL THE NEWLY INSTALLED PARTS TO MAKE SURE THAT EVERYTHING HAS BEEN PROPERLY TIGHTENED AND THAT THE GAS LINE AND WIRES ARE NOT TOUCHING OR TOO CLOSE TO ANY PART OF THE BRACKETS OR ENGINE.

Enjoy your cooler running engine!