

Review: Ken Freund

Love Jugs Electric Cooling Fans

Soon after I added a 2008 Harley-Davidson Road King FLHP to my small motorcycle fleet, I became aware of the amount of heat a 103ci V-twin could give off. Sitting at long traffic lights and inching along in city traffic in triple-digit temperatures had me wishing I was on another bike. The air-cooled engine would get so hot it would ping under load and perform poorly, not to mention the withering heat rising around and over the rider!

To solve this dilemma I recently installed a Love Jugs kit, which is designed for cooling hot Harley twins. It consists of a pair of hefty electric fans and the mounting bracketry needed for installation. The stock horn is temporarily removed and relocated onto the special mount, which holds both fans and the horn. After assembling the fans onto the mounts, the unit is mounted on the left side of the engine below the gas tank.

There are several mounting options, depending on year and model. Big twin models through 2008 can use the Vibration Master bracket, which mounts to the stock horn-mounting points. For 2009 and later touring models, the Frame Mount Kit allows the fans to be mounted from the left upper frame tube under the gas tank.

The manufacturer of Love Jugs states that their products are the most powerful and effective fans available for Harleys and are waterproof. They're rated at 252 CFM, which is said to be twice as much air as the nearest competitor. Having two separate fans allows them to be aimed directly at the individual cylinders and heads. The fan body is aircraft-quality stainless steel, polished to a high luster, and unlike painted or chromed metals, it can't blister, chip, or rust. There's also no welding used in the manufacturing process, which helps avoid metal fatigue in a high-vibration environment such as on a Harley engine.

Installing Love Jugs is simple enough for many do-it-yourselfers to tackle and complete, and mounting instructions are pro-



vided. The installation, including wiring and installing a switch, may take an hour or two, depending on the bike and the installer's skills. The Frame Mount Kit (for 2009 and newer models) requires gas tank removal and will take longer. For those mechanically-challenged folks, a Harley dealer or independent motorcycle shop should be able to do the job.

I removed the horn, assembled the fans to the bracket unit, and installed it to the cylinder heads in less than an hour. My expolice bike had an unused wire near the battery, which used to be for the pursuit lights, with a switch and indicator lamp on the dash. This only required snipping off the old plug and installing two crimp-type wire terminals. Some touring models also have an accessory wire in the underseat area, which could supply power (the fans also have individual power switches that can be used to control them). However, I recommend routing power to the fans through the ignition/accessory switch circuit, so they turn off when the bike is unattended. This can prevent on-off switch tampering, which may result in a dead battery.

When the fans are switched on, they build up speed gradually until they emit a high-pitched whine along with a strong flow of air. The sound can just be heard above the engine (with stock exhaust) at idle; on the road the fans cannot be heard.

Right away I noticed the engine had better response in these hot conditions, and it also cranks over much more smoothly after a brief shutdown and heat soak, such as when refueling. When in traffic, or anytime the weather is very hot and I'm not cruising down the highway, I switch on the fans.

Using a handheld digital spot temperature indicator, I found that after the fans were

switched on in hot weather, the external cylinder head temperature dropped significantly. In a period of less than two minutes with the engine idling, the head temperature dropped from 303.0 degrees F to 241.8 degrees. Results will vary depending on ambient temperature, engine operating conditions, and how long it is left on. With my digital oil temperature gauge, I also noticed that Love Jugs helps reduce high oil temperatures, an important concern on air-cooled engines in hot weather.

Now, I often leave the ignition on accessory to let the fans continue to run for a few minutes if I will be restarting again soon. I'd like to see a control unit offered, which would monitor cylinder head temperature and switch the fans on and off as needed, and continue to run the fans after engine shutdown for several minutes until the engine cools down.

The kit components appear to be well designed and nicely made from quality materials. Love Jugs are rated for a minimum of 20,000 hours of life and come with a one year warranty on electrical components and a three year warranty on all other parts. They can also be returned within 30 days for any reason.

Love Jugs are available in bright metal or black finishes, in Bullet, Slot, and Cool-Master styles, priced at \$349 to \$429 including shipping. The optional Vibration Master provides a steady mount for fans and horn; add \$79. Alternatively, the 2009 and newer Frame-mounting Kit adds \$79.50 to the total price.

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Colors: Bright metal or black finishes
Price: \$349 - \$429
www.love-jugs.com