

# OWNERS Manual With Installation Instructions A part of the control of the contr

# Banks Techni-Cooler System

2008-2010 Ford Power Stroke 6.4L Turbo-Diesel Pickup F-250/350/450 Trucks

THIS MANUAL IS FOR USE WITH KITS 25984

Gale Banks Engineering 546 Duggan Avenue • Azusa, CA 91702 (626) 969-9600 • Fax (626) 334-1743

Product Information & Sales: (888) 635-4565 Customer Support: (888) 839-5600 Installation Support: (888) 839-2700

bankspower.com



08/16/10 PN 96781 v.3.0

### Also Available from Banks Power



### **Banks iQ System**

- 5" touchscreen interface that can control the Banks Diesel Tuner and/or SpeedBrake on the fly.
- Interchangable gauge display, read and clear codes, monitor engine diagnostics, log data, time your vehicles runs and much more.

# Banks Ram-Air Intake System (P/N 42185)

- Increases your airflow over stock.
- Adds power, improves fuel economy, lowers EGTs and reduces smoke.

# Banks Monster® Exhaust System Single & Dual (P/N 49780-49787)

 Increases exhaust flow, cuts backpressure, lowers exhaust gas temperatures (EGTs) and increases power.

# Banks Exhaust Brake (P/N 55469)

 Increases the stopping power of your truck and extends the service life of your brakes

# Banks SpeedBrake (P/N 55464)

 Allows for controlled hill decent at a user defined vehicle speed.

#### Banks Diesel Tuner Six-Gun (P/N 63907)

- Adds power safely to your vehicle
- Engine and transmission safeguards
- Change power levels on-the-fly

## OttoMind Programmer (P/N 66063)

- Contains Banks tunes that boost your vehicles HP, Torque and MPG.
- Displays a host of critical engine functions
- Provides "service technician" diagnostic capabilities
- Has upgradeable functionality, so it will never be out of date

# For More Information please call (888) 635-4565 or Visit us online @ www.bankspower.com

### Six-Gun Bundle (P/N 46652-46655) Contains:

- Monster Exhaust (single and dual)
- Ram-Air Intake
- Six-Gun Tuner w/ Banks iQ

### Big Hoss Bundle (P/N 46656-46659) Contains:

- Monster Exhaust (single and dual)
- Ram-Air Intake
- Six-Gun Tuner w/ Banks iQ
- Techni-Cooler

### **General Installation Practices**

#### Dear Customer.

If you have any questions concerning the installation of your Banks Techni-Cooler System, please call our **Technical Service Hotline** at (888) 839-2700 between 7:00am and 5:00pm (PST). If you have any questions relating to shipping or billing, please contact our Customer Service Department at (888) 839-5600.

Thank you.

- **1.** Before starting work, familiarize yourself with the installation procedure by reading all of the instructions.
- **2.** The exploded views provide only general guidance. Refer to each step and section diagram in this manual for proper instruction.
- **3.** Throughout this manual, the left side of the vehicle refers to the driver side, and the right side to the passenger side.
- **4.** Disconnect the negative (ground) cable from the battery (or batteries, if there are two) before beginning work.
- 5. Route and tie wires and hoses a minimum of 6" away from exhaust heat, moving parts and sharp edges. Clearance of 8" or more is recommended where possible.
- **6.** When raising the vehicle, support it on properly weight-rated safety stands, ramps or a commercial hoist. Follow the manufacturer's safety precautions. Take care to balance the vehicle to prevent it from slipping or

falling. When using ramps, be sure the front wheels are centered squarely on the topsides. When raising the front of the vehicle, put the transmission in park (automatic) or reverse (manual), set the parking brake, and block the rear wheels. When raising the back of the vehicle, be sure the vehicle is on level ground and the front wheels are blocked securely.

CAUTION: Do not use floor jacks to support the vehicle while working under it. Do not raise the vehicle onto concrete blocks, masonry or any other item not intended specifically for this use.

- **7.** During installation, keep the work area clean. Do not allow anything to be dropped into intake, exhaust, or lubrication system components while performing the installation, as foreign objects will cause immediate engine damage upon start-up.
- **8.** Save this Owner's Manual as a reference for system maintenance and service.

### **TOOLS REQUIRED:**

- 1/2" and 3/8" drive ratchets with inch and metric sockets and 1/2" and 3/8" drive extension
- Standard & Phillips screwdriver
- Clean shop towels or rags
- Needle nose pliers
- Inch-pound and foot-pound torque ratchets

### BANKS TECHNI-COOLER INSTALLATION





- **1.** Disconnect the negative (ground) cable from the battery (or batteries, if there are two) before beginning work. Secure the cables so that they do not come in contact with the battery posts during installation.
- **2.** From the right front side of the vehicle, disconnect the upper Charge Air Cooler (CAC) tube from the CAC. Remove the staples from the clamps. Loosen both clamps to allow the hose clamp to slide over the CAC tube away from the CAC. See **Figure 2**.
- **3.** From under the front driver side of the vehicle disconnect the lower CAC tube from the CAC. Remove the staples from the clamps. Loosen both clamps to allow the hose clamp to slide over the CAC tube away from the CAC. See **Figure 3**.
- **4.** Disconnect the factory fuel cooler radiator from the CAC by removing the two (2) bolts. One above the fuel cooler radiator and the other half way down on the left side of the vehicle. Retain all hardware for reuse. Lift the fuel cooler radiator just enough to clear the lower slot bracket and set the fuel radiator to the side. See **Figure 4 & 5**.
- **5.** Remove the two upper bolts that attach the CAC to the radiator Grille support. See **Figure 6**.

### CAUTION: Hold the CAC to prevent it from swinging forward or damage may result.

**6.** Remove the CAC from the vehicle and set on a stable surface.

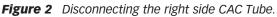




Figure 3 Disconnecting the Driver Side CAC Tube



Figure 4



Figure 5



Figure 6



**7.** Remove the lower air deflector fastener on the bottom of the CAC. See **Figure 7**. Remove the air deflector and retain for re-use.

Note: An upholstery tool can ease remove of air deflector fasteners.

- **8.** Locate the Banks Techni-Cooler and install the lower air deflector using the supplied push-in fastener to the bottom of the Techni-Cooler. The push-in retainers that secure the air deflector are secured by inserting the retainer with the center pin pulled out. Once the retainer is inserted, press the center pin down to secure the retainer.
- **9.** Remove the rubber grommets from the top of the factory CAC and install them on the Banks Techni-Cooler. Orient the rubber grommets in the same direction when installing on the Banks Techni-cooler.
- **10.** Install the Banks Techni-Cooler. Slide the lower Techni-Cooler outlet into place first by tilting the cooler slightly.

Note: Before installing Banks Techni-Cooler check to see if both rubber mounts are still in place. If not check the Stock CAC and remove the rubber mounts. Install in the rubber mount location. See **Figure 8**.

CAUTION: Make Sure that the lower mounts on the Banks Techni-Cooler are properly installed into the rubber mounts and sit full in place or damage may result. You may need to lift the lower air deflector on the radiator for proper installation.

- **11.** Fasten the top of Banks Techni-Cooler to the Radiator Grille support using the factory hardware and tighten to 16 lb-ft.
- **12.** Connect the Fuel Cooler Radiator to Banks Techni-cooler. Slide the lower support tab into place and fasten the Fuel Cooler Radiator using the two (2) factory bolts. Tighten hardware to 9 lb-ft. See **Figure 9**.

Figure 7 Removal of lower air deflector

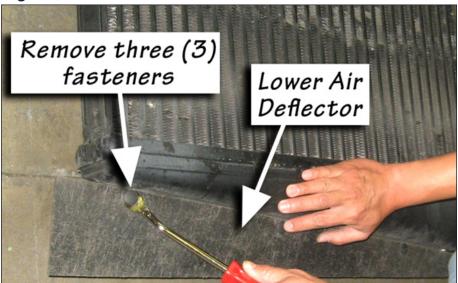


Figure 8 Check Lower Rubber Mounts



Figure 9 Connecting Fuel Cooler Radiator to Banks Techni-Cooler



- NOTE: Before slipping any hose clamps into position, ensure that all connection ends are clean and free of any oil residue and contaminates. Clean Techni-Cooler outlets and all connection points with a non-oil based solvent such as Acetone, Mineral Spirits, Denatured Alcohol or Lacquer Thinner. Read and follow the manufactures operation instruction for non-oil based solvent cleaner.
- **13.** Insert the lower left side CAC tube to Banks Techni-cooler from under the vehicle. Slide the hose clamp and hold in place when tightening the factory clamps to 9 lb-ft.

- **14.** Insert the top right side CAC tube into place. Slide the flex tube and hold in place when tightening the factory clamps to 9 lb-ft.
- **15.** Your system includes two (2) Banks Power decals designed to complement the Ford emblem on your truck. Use the provided measurements to position the logos for a clean factory look. See **Figure 10.**
- **16.** Reconnect the negative battery cable(s).
- **17.** Banks Techni-Cooler installation is now complete.

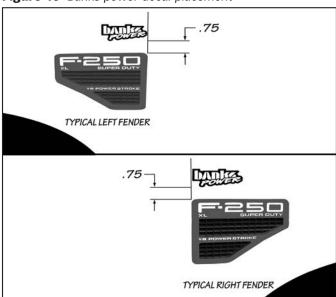


Figure 10 Banks power decal placement

### **NOTES**

Gale Banks Engineering 546 Duggan Avenue • Azusa, CA 91702 (626) 969-9600 • Fax (626) 334-1743

Product Information & Sales: (888) 635-4565 Customer Support: (888) 839-5600 Installation Support: (888) 839-2700

bankspower.com