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FAQs for Proventia FTF THERMO KING TRAILER TRUs

(Rev. 11/4/2010)

Is the Proventia FTF for 1985-2003 THERMO KING (SB, SUPER II, SENTRY) Trailer TRUs CARB Verified?

Yes. A copy of CARB's original Executive Order DE-08-001 verifying the Proventia FTF for 1985-2003 SB, Super II, and Sentry Thermo King Trailer TRUs (reefers) is attached at the end of this document. The FTF brings 2003 and older Thermo King TRUs into compliance through December 31, 2015 (until December 31, **2017** for 2003 models).

After I install the Proventia FTF, how do I verify the installation with CARB?

There are 4 steps to follow. First, during installation, place the VDECS serial number label provided with your FTF installation kit onto the engine where it's readily visible to a CARB inspector when opening the TRU service doors. (See Owner's Manual - Installation section for instructions and illustrations, available online at www.proventiafilters.com/owners_manuals.html.)

Second, the owner of the TRU must also verify that the installer has complied with all of the CARB requirements by completing the "Warranty Registration and Installer's Checklist" mail-in card or online at http://proventiafilters.com/warranty.html. (See your FTF Owner's Manual for a copy of the checklist information needed to complete the online registration form.)

Third, the owner of the TRU should then apply for a CARB IDN (this step is mandatory for California-based TRUs, and recommended for TRUs based out-of-state or out-of-country):

Register online using CARB's Equipment Registration (ARBER) system, which immediately issues an IDN for fully compliant TRU/TRU gensets. Visit: http://www.arb.ca.gov/diesel/tru/tru.htm

For additional help, contact the TRU ATCM toll-free helpline at 1-888-878-2826.

Fourth, permanently affix or paint the ARB IDN on both sides of the chassis housing in clear view. The ARB IDN (nine numeric digits) must be preceded by the letters "ARB" and the numbers and letters must contrast sharply in color with the color of the background surface so that they are readily legible during daylight hours from a distance of 50 feet while the unit is stationary.

Can I apply for a CARB IDN if my reefer is based out-of-state or out-of-country?

Yes, and this is recommended. While the CARB IDN is not mandatory for reefers based out-of-state or out-of-country, it will make the inspection process go faster for you when your reefer is inspected for compliance within California.

What happens if I'm based out-of-state and I'm inspected, but I don't have a CARB IDN?

Inspection at California weigh stations will take considerably longer. First, the inspector will try to find the VDECS serial number, which is on the CARB VDECS label provided with your filter kit and is to be placed onto the engine during installation. (See Owner's Manual - Installation section for instructions and illustrations.) If the sticker is missing, the inspector will have to climb on top of the TRU (reefer) and try to find the same serial number that's laser cut into the end of the filter. If you have a CARB IDN, none of these steps will be necessary.

Can the FTF be retrofit on a TK Super II or TK Sentry TRU? How about reefers with the older Isuzu di2.2 engine?

Yes, kits are available for all TK models manufactured from 1985-2003 affected by the CARB regulation. The FTF and kit contents are unique for each reefer model: SB, Super II, and Sentry. NOTE: SB and Sentry models with Isuzu di2.2 engines (manufactured from 1985-1993) require a special installation kit. See the Proventia document, "How to Identify Your Reefer Engine Year & Model" to determine if your reefer has an Isuzu di2.2 engine.

I've installed a remanufactured engine in my reefer. Do I still need to install your FTF in order to be compliant?

If the engine was remanufactured to a **pre-Tier 1** spec, then the effective model year will be the last year before Tier 1, which is 1998. So, this engine will need to be retrofit with an FTF by **July 16, 2009**.

If the engine was remanufactured to a **Tier 1** spec, then the effective model year will be the last year of the Tier 1, which is 2003. So, this engine will need to be retrofit with a ULETRU VDECS by **December 31, 2010**.

For more information see CARB advisory #08-05: http://www.arb.ca.gov/diesel/tru/advisories.htm

Can I use 100% biodiesel fuel, instead of an FTF, in order to be compliant?

No. No biodiesel producer has begun the verification process for B100 biodiesel yet. If a biodiesel producer began a verification right now, it would still be 2010 before the verification could be completed. For more information see CARB advisory #08-08 at http://www.arb.ca.gov/diesel/tru/advisories.htm

Do I have to remove the reefer from the trailer in order to install the new FTF?

No, the FTF installation is designed to be done with the reefer mounted on the trailer. The installation of the FTF, exhaust tubes, insulation, and controller are easily accessible with the reefer mounted on the trailer. The installation of the exhaust manifold insulation would be easier with the reefer removed from the trailer, but is still accessible with the reefer on the trailer. See your installation manual (also available online at www.proventiafilters.com/owners_manuals.html) for more details on the exhaust manifold insulation.

Do all the FTF kits mount inside the current reefer cowling? Do any installations require cutting the reefer frames?

The SB and Sentry FTF mount horizontally inside the current reefer cowling. The Super II FTF mounts vertically outside of the cowling, on the right side above the roadside service access door. **NOTE:** None of the FTF installations require any cutting of the reefer frames or access doors.

How long does FTF installation take?

The first time the mechanic does the FTF installation, it may take 3 hours, and injector replacement may take an additional 1-2 hours. As familiarity is gained, the installation time is closer to 2 hours total, for both filter and injector installation combined.

What's included in the FTF kits?

Each kit for an SB, Super II, or Sentry is unique, but they all have these types of components:

- FTF with mounting brackets
- Exhaust tube with backpressure fittings
- Insulation pieces for exhaust tubing between the engine and the FTF
- Exhaust manifold insulation, with bolts, washers, stainless steel band wraps
- FTF controller with wiring harness
- Pressurizer for testing the FTF controller
- ULSD label for fuel tank
- CARB label with FTF serial number
- Owner's Manual with installation instructions (http://proventiafilters.com/owners_manuals.html)

Whom do I contact to purchase the Proventia FTF kits?

Contact Proventia at 1-800-609-7686 (toll free within the U.S.), 612-284-8106 (international), or by email at proventiafilters@gmail.com, or purchase online 24/7 at http://www.proventiafilters.com/purchase.html. Prices start at $4295 for one filter (plus $30 shipping). State sales taxes apply in California, Massachusetts, & Minnesota. We accept credit cards (Visa, Mastercard, Discover, American Express), check, money order, and cashier's checks.

What is the shipping cost? How long does delivery take? How big are the packages? How much does the kit weigh?

Ground shipping is $30 per filter. Expedited shipping is available for an additional charge. Each kit weights about 24-32 pounds, depending on the model, and is 10"x10"x38"

Do I have to verify normal oil consumption before I install the FTF?

Yes, it is a verification requirement of the Executive Order issued by CARB for this FTF that oil consumption rates of at least 1.5 hours/ounce be verified according to the FTF Owner's Manual prior to installation of the FTF. If the oil consumption rate exceeds the recommended guideline of at least 1.5 hours/ounce, the engine must be serviced to fix the oil consumption problem before the FTF is installed. Excessive oil consumption can cause the FTF to become clogged with ash (from the burning of the oil) requiring the FTF to be cleaned frequently. **NOTE:** Recent service records (within 90 days of filter installation) documenting normal oil consumption of at least 1.5 hours/ounce (or from which this normal oil consumption can be calculated) can be used in place of the 50-hour oil consumption test.

Do I have to change the injectors before I install the FTF?

Yes, it is a requirement of the Executive Order issued by CARB for this FTF that the injectors (specifically the injector nozzles) be replaced prior to installation of the FTF. Worn injector nozzles can result in excessive soot in the exhaust, which will cause the FTF to become clogged with soot, requiring the FTF to be cleaned frequently. The injectors do not need to be changed again after the initial installation. (Remanufacturing injectors by replacing the nozzles offers the lowest cost solution.)

Is an injector removal tool available?

A convenient injector removal tool is provided at no charge with your initial FTF order. (There is a charge for each additional tool.) The tool fits both the Isuzu or Yanmar engine. It's designed to work within the tight clearances above the Yanmar and Isuzu engines installed in the reefer.

Can I order injector nozzle kits or remanufactured injectors through Proventia?

Yes. However, for the best remanufactured injector prices, or for locations where you can get your existing injector nozzles replaced, visit: http://www.diesel.org/Content.asp?ID=1216. Just select your state for vendors near you. If you'll be purchasing replacement injectors, be sure to ask for remanufactured injectors **with a core** to get the lowest price quote available.

Both injector nozzle kits and remanufactured injectors are also available from Proventia by calling 1-800-609-7686 (International 612-284-8106) or online at www.proventiafilters.com/purchase.html.

Nozzle replacement kits are $195 and include all the parts needed to replace the nozzles: 4 complete injector assemblies for either Isuzu (same injector for di2.2 and se2.2) or Yanmar engines, injector bleed fuel lines, and copper gasket and o-ring for the Isuzu, or gasket and nozzle shield for the Yanmar. Nozzle installation is available from local reman shops starting at $20-$25 per injector and takes about 1 hour per set of 4 injectors.

Remanufactured injectors are $400 per set of 4, plus an additional $300 core charge ($75 per injector) until you return your old injectors ***in reusable condition***. (There is no core charge for nozzle replacement kits.)

If I purchase injectors from Proventia, how do I return the injector cores to gain credit for the $300 core charge?

The injector sets include a mailing label that includes your return authorization for the injector cores. You can use the same packing materials to return the cores. Once the cores are received ***in reusable condition***, your core charge will either be applied to any outstanding balance or refunded to you.

How soon after the oil consumption test and injector replacement do I need to install the FTF?

Within 4 weeks.

When I install the exhaust manifold insulation, some of the bolts might snap off. What will I do then?

The preferred installation method for the exhaust manifold insulation on the Isuzu se2.2 and Yanmar engines is to remove the existing exhaust manifold heat shield and install the new exhaust manifold insulation using new bolts/washers included in the FTF kit. If the old bolts snap off, the kit also includes three stainless steel band wraps that can be used to hold the new exhaust manifold insulation onto the exhaust manifold, as an alternative method.

On the Isuzu di2.2, there are no bolts to remove, and the exhaust manifold insulation is held onto the engine with the stainless steel band wraps.

My shop does not do repairs. If I buy your filters, who can I get to install them?

Installation is very simple and can be done by anyone who regularly services your vehicles, including whoever does your injector replacement. For a 3-minute installation video showing the ease of installation, visit www.proventiafilters.com/ownersmanuals.htm. Actual first-time installation requires about 2-3 hours for the FTF, and 1-2 hours for the injector replacement. One an installer is familiar with the process, total time for both filter and injector installation typically drops to just 2 hours total.

Do I have to use ULSD fuel if I install the FTF?

Yes, the Ultra Low Sulfur Diesel fuel is required for proper operation of the FTF, and **we recommend you begin using ULSD before you install the FTF, so that you are running only ULSD through your reefer by the time you install the filter**. The higher sulfur levels in regular off-road diesel fuel will clog the platinum catalyst inside the FTF, and shorten the time until FTF becomes clogged with ash and has to be cleaned out (under normal operation the FTF will go at least 3000-4000 hours before ash would need to be removed from the filter). You can apply for road tax credit for any ULSD fuel that is used for the reefer.

How often will I have to clean the FTF of ash?

At least 3000-4000 hours. In field tests, the FTF has gone at least 3000 hours without need for ash cleaning. It's possible to go even longer depending on the duty cycle of your reefer. High-speed operation helps to keep the FTF clean, so that means more door openings and daily loading/unloading of the trailer will generally keep the FTF in the cleanest condition. Long periods of time operating at low speed operation are the most difficult duty cycle in which to keep the FTF clean, however the FTF controller is designed to force the reefer into high speed operation if it has run too long at low speed.

How do I clean the FTF of ash?

Clean the FTF by removing the FTF from the reefer and blowing compressed air into the FTF outlet in the direction opposite of the exhaust flow. IMPORTANT: The ash that is blown out of the FTF must be collected into a chamber with a HEPA filter that collects all of the removed particulates, for eventual disposal as a hazardous waste.

When cleaning the FTF of ash, is the residue considered a hazardous waste and how do I dispose of it?

Yes, it is considered a hazardous waste. Follow ash handling guidelines as prescribed by CARB at: http://www.arb.ca.gov/diesel/tru/documents/ashguide.pdf

Does the FTF increase fuel consumption or engine backpressure?

The effect on fuel consumption is not measurable (less than a 1% increase). The FTF does cause the average engine backpressure to increase slightly, however this small increase has no effect on the engine components or engine wear. The FTF controller is designed to clean the filter when the engine backpressure reaches 2.5 psi during low speed operation. By comparison, an engine with a muffler (and without an FTF) will normally run with about 1-1.5 psi engine backpressure. In engine tests, no ill effects on engine performance have been observed at backpressure levels exceeding 20-25 psi.

Does the FTF make the engine run hotter? Will it affect reefer engine performance?

No, the FTF does not make the engine run hotter, cause any loss of horsepower, or have any other effect on reefer engine performance.

There is a slight increase in ~~exhaust~~ temperature of about 10-20F, due to the increase in engine backpressure. The Proventia insulation that is installed on the exhaust tubing between the engine and the FTF is designed to keep the heat in the exhaust so that the FTF will burn itself clean.

How does the FTF controller integrate with the reefer controller? Will the FTF controller set a code on the reefer controller? At what backpressure does the regeneration begin?

The FTF controller does not integrate with the reefer controller. The FTF controller will directly apply a 12V signal to the speed solenoid in order to force the reefer into high speed operation for 10 minutes, if the reefer has been running for too long at low speed operation (soot can accumulate within the FTF during extended low speed operation). The reefer controller does not generate any code from this. (CONTINUED ON NEXT PAGE)

The FTF controller contains a pressure switch that detects when the engine exhaust backpressure reaches 2.5 psi during low speed operation. At 2.5 psi, the FTF timer will energize the high speed solenoid for 10 minutes to force the reefer into high speed operation, which will burn off, and regenerate the accumulated soot within the FTF.

Can the FTF cause engine seals to blow?

No. Engine crankshaft seals are primarily affected by the amount of exhaust blowby gas (the exhaust that leaks past the piston rings, due to worn rings), not by the exhaust backpressure.

Why is there a small hole in the FTF where exhaust is coming out? Why is there a hole in the bent tube?

These are both to eliminate the intrusion of rainwater into the engine. The hole in the FTF that is blowing exhaust is on the 'clean' side of the FTF.

If my reefer averages between 2000 to 3000 hours per year, how long will the FTF last?

The FTF doesn't ever get used up, it will last indefinitely. The FTF contains a metal filter medium that is catalyzed with platinum. The platinum is not used up or depleted over time, however it does become coated with ash residue over time. Under recommended operating conditions, the FTF will need to have the ash residue cleaned out after 3000-4000 hours or longer. After the ash is cleaned out, the FTF returns to like-new condition and functioning.

NOTE: Fuel additives, high sulfur fuel, and excessive burning of engine oil can cause excessive ash production, which results in the need for more frequent cleaning of the FTF.

If oil consumption rates increase as the engine ages, the FTF may need to be cleaned more frequently, due to the increased levels of burned engine oil and resulting accumulated ash.

What kind of warranty does the Trailer FTF have?

Four years or 2400 hours, whichever comes first.

(Continued on next page)

Is a CARB-verified filter available for Thermo King Bobtail Reefers?

Yes, CARB's Executive Order DE-08-001-02 verifying the Proventia FTF for Thermo King Bobtail (straight truck) TRUs was issued on May 18, 2009, and modified on October 14, 2010. Proventia's Bobtail FTF brings all 1987-2004 Thermo King Bobtail TRUs (including CD, JD, KD, MD, RD, TD, TS, and XDS) into compliance as follows:

2001 and older models:	Compliant through 2015
2002 models:	Compliant through 2016
2003 models:	Compliant through 2017
2004 models:	Compliant through 2018

No special skill or training is required for installation (which takes 2.5-3 hours including injectors; reducing to 1.5-2 hours with experience).

The price is $3145 plus $30 shipping (add sales tax in CA). For more information, contact Proventia at 1-800-609-7686 (toll free within the U.S.), 612-284-8106 (international), by email at proventiafilters@gmail.com, or on the web at www.proventiafilters.com.

Is a CARB-verified filter available for CARRIER Bobtail Reefers?

Yes, CARB's Executive Order DE-08-001-05 verifying the Proventia FTF for CARRIER Bobtail (straight truck) TRUs was issued on October 14, 2010. The Proventia CARRIER Bobtail filter fits **ALL 1994-2004** Supra and Multi-Temp (R70/R90) models and provides compliance as follows:

2001 and older models:	Compliant through 2015
2002 models:	Compliant through 2016
2003 models:	Compliant through 2017
2004 models:	Compliant through 2018

No special skill or training is required for installation (which takes 1-2 hours including injectors; reducing to 1 hour with experience).

Price is $3195 plus $30 shipping (add sales tax for filters shipped to CA and MN). For more information or to purchase, call 1-800-609-7686 (toll free within the U.S.), 612-284-8106 (international), or visit www.proventiafilters.com/purchase.html.

Is a CARB-verified filter available for APUs?

Yes, Proventia's EHDPF for APUs is CARB-Verified at Level 3, achieving more than 85% PM reduction. It will be available for Thermo King Tri-Pac APUs in September 2011.

The EHDPF APU filter must be installed by an authorized dealer or installer; installation takes 3 hours. For more information contact Proventia at 1-800-609-7686 (toll free within the U.S.), 612-284-8106 (international), or by email at proventiafilters@gmail.com.

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER DE-08-001-02
(Supersedes EO DE-08-001-01)

Pursuant to the authority vested in the California Air Resources Board (ARB) by Health and Safety Code, Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code section 39515 and 39616 and Executive Order G-02-003;

Relating to Exemptions under section 27156 of the Vehicle Code and Verification under sections 2700 through 2710 of title 13 of the California Code of Regulations:

Proventia Emission Control Oy
Proventia FTF™ and Proventia Bobtail FTF™

ARB has reviewed Proventia Emission Control Oy's request for verification of the Proventia FTF™ and Proventia Bobtail FTF™ flow-through filters. Based on an evaluation of the data provided and pursuant to the terms and conditions specified below, the Executive Officer of the ARB hereby finds that the Proventia FTF™ and Proventia Bobtail FTF™ reduce emissions of diesel particulate matter (PM) consistent with a Level 2 device (greater than or equal to 50 percent reductions) (California Code of Regulations (CCR), title 13, sections 2702 (f) and (g) and section 2708(b)) for off-road applications and is compliant with the 20 percent nitrogen dioxide (NO_2) emissions limit for 2009 (13 CCR section 2706(a)) and as such merits designation as a "Level 2 Plus" system per section 2702(f).

This verification is subject to the following terms and conditions:

- The engine must be a diesel engine in its original configuration having one of the engine model years and engine family numbers listed in Attachment 1;
- The engine must be used in a Thermo King transport refrigeration unit (TRU) application;
- The engine must not employ exhaust gas recirculation;
- The engine must not have a pre-existing oxidation catalyst;
- The engine must not have a pre-existing diesel particulate filter;
- The engine must be four-stroke;
- The engine must be naturally-aspirated;
- The engine must be well maintained and not consume lubricating oil at a rate greater than one quart per 50 engine hours;
- Proventia Emission Control Oy, their distributors or installers shall review actual operating conditions prior to retrofitting an engine with the Proventia FTF™ or Proventia Bobtail FTF™ to ensure compliance

with the terms and conditions of this Executive Order. Proventia Emission Control Oy shall supply a TRU engine inspection checklist and data sheet with each FTF™, to ensure compatibility. Using the checklist, the installer shall review the FTF™ candidate engine actual operating conditions (e.g. lube oil consumption) prior to retrofitting the TRU with the Proventia FTF™ or Proventia Bobtail FTF™, specifically, to determine if the candidate engine is suitable for installation of an FTF™. Proventia Emissions Control Oy will also conduct training for installers on an as-needed basis. The installer shall record the results on the data sheet and the data sheet must be retained by the dealer point of sale for a minimum of four (4) years (warranty period).

- Fuel injectors must be replaced at time of Proventia FTF™ or Proventia Bobtail FTF™ installation to maintain proper combustion and operation of the FTF™. Replacement injectors shall be new original equipment manufacturer (OEM) (Isuzu or Yanmar) injectors or rebuilt/remanufactured injectors with new OEM wear components. Parts manufactured by other companies are not allowed unless they have been confirmed by Proventia to meet the OEM's dimensional and material specifications.
- The engine must be fueled with CARB ultra-low sulfur diesel fuel (less than 15 parts per million sulfur) or biodiesel blends;
- Lube oil, or other oil, must not be mixed with the fuel;
- The product must not be operated with fuel additives, as defined in section 2701 of title 13 of the CCR, unless explicitly verified for use with the fuel additive(s);
- The product must not be used with any other systems or engine modifications without ARB and manufacturer approval; and
- The other terms and conditions specified below.

The Proventia FTF™ consists of a catalyzed knitted wire mesh flow-through filter with backpressure control system, an exhaust system insulation package, and a backpressure warning indicator. The Proventia FTF™ may be installed only on engine model years and engine family numbers listed in Attachment 1 in the 25 to 50 horsepower category. These components shall be installed exactly as described in Proventia's Application for Verification of Proventia TRU Level 2 Plus Filter, dated April 18, 2008. The parts list for the Proventia FTF™ is included in Attachment 2.

The Proventia Bobtail FTF™ consists of a catalyzed knitted wire mesh flow-through filter and a backpressure warning indicator. The Proventia Bobtail FTF™ may be installed only on engine model years and engine family numbers listed in Attachment 1 in the less than 25 horsepower category. These components shall be installed exactly as described in Proventia's Application for Extension of Engine Control Group for Proventia TRU Level 2 Plus FTF, dated

March 18, 2009. The parts list for the Proventia FTF™ is included in Attachment 3.

This Executive Order is valid provided that the warranty on the replacement fuel injectors installed at Proventia FTF™ or Proventia Bobtail FTF™ installation is at least one year.

This Executive Order is valid provided that the owners manual includes an operators daily/pre-trip inspection of the backpressure indicator gauge to determine if service is needed. In addition, the owners manual shall include periodic maintenance to check the Proventia FTF™ or Proventia Bobtail FTF™ system:

- For the Proventia FTF™, check to see if the TRU is being forced into high-peed operation frequently by the FTF backpressure controller (cycle would be repeating 10 minutes high speed and 5 minutes low speed), indicating excessive accumulation of soot or ash;
- For the Proventia FTF™ or Proventia Bobtail FTF™, check to see if the backpressure indicator gauge is in the red service range while running in the high-speed mode, indicating excessive accumulation of soot or ash; and
- For the Proventia FTF™ or Proventia Bobtail FTF™, check to see if black smoke is visible during steady speed operation, indicating injectors need to be serviced or replaced (e.g. check spray pattern and dripping on a nozzle test stand and check nozzle opening pressure).

This Executive Order is valid provided that the diesel fuel used in conjunction with the device complies with title 13, California Code of Regulations (CCR), sections 2281 and 2282, and if biodiesel is used, the biodiesel blend shall be 20 percent or less subject to the following conditions:

- The biodiesel portion of the blend complies with the ASTM International specification D6751 applicable for 15 ppm sulfur content;
- The diesel fuel portion of the blend complies with title 13, CCR, sections 2281 and 2282; and
- The use of biodiesel applies to devices verified to reduce only diesel particulate matter.

Other alternative diesel fuels such as, but not limited to, ethanol diesel blends and water emulsified diesel fuel are excluded from this Executive Order.

This Executive Order is valid provided that installation instructions for the Proventia FTF™ or Proventia Bobtail FTF™ do not recommend tuning the engine to specifications different from those of the engine manufacturer.

IT IS ALSO ORDERED AND RESOLVED: That installation of the Proventia FTF™ and Proventia Bobtail FTF™ have been found not to reduce the effectiveness of the applicable engine pollution control system, and therefore, Proventia FTF™ and Proventia Bobtail FTF™ are exempt from the prohibitions in section 27156 of the Vehicle Code for installation on the TRU engines listed in Attachment 1. This exemption is only valid provided the engines meet the aforementioned conditions. Changes made to the design or operating conditions of the Proventia FTF™ or Proventia Bobtail FTF™, as exempted by ARB, which adversely affect the performance of the engine's pollution control system, shall invalidate this Executive Order.

No changes are permitted to the design of the Proventia FTF™ or Proventia Bobtail FTF™. ARB must be notified in writing of any changes to any part of the Proventia FTF™ or Proventia Bobtail FTF™. Any changes to the device must be evaluated and approved by ARB. Failure to do so shall invalidate this Executive Order.

Marketing of the Proventia FTF™ or Proventia Bobtail FTF™ using identification other than that shown in this Executive Order or for an application or operating conditions other than that listed in this Executive Order shall be prohibited unless prior approval is obtained from ARB.

This Executive Order shall not apply to any Proventia FTF™ or Proventia Bobtail FTF™ advertised, offered for sale, sold with, or installed on a TRU prior to or concurrent with transfer to an ultimate purchaser.

As specified in the Diesel Emission Control Strategy Verification Procedure (title 13 CCR section 2706 (g)), ARB assigns each diesel emission control strategy a family name. The designated family name for the verification, as outlined above is:

CA/PEC/2008/PM2+/N00/OF/FTF01

Additionally, as stated in the Diesel Emission Control Strategy Verification Procedure, Proventia Emission Control Oy is responsible for honoring the required warranty (CCR, title 13, section 2707) and conducting in-use compliance testing (section 2709).

In addition, ARB reserves the right in the future to review this Executive Order, the exemption, and verification provided herein to assure that the exempted and verified add-on or modified part continues to meet the standards and procedures of CCR, title 13, section 2222, et seq and CCR, title 13, sections 2700 through 2710.

Systems verified under this Executive Order shall conform to all applicable California emissions regulations.

This Executive Order does not release Proventia Emissions Control Oy from complying with all other applicable regulations.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order.

Executed at Sacramento, California, this 14th day of May 2009.

James N. Goldstene
Executive Officer
by

Robert D. Fletcher, Chief
Stationary Source Division

Attachment 1: Proventia FTF™ and Proventia Bobtail FTF™ Engine Family List
Attachment 2: Proventia FTF™ Parts List (Confidential)
Attachment 3: Proventia Bobtail FTF™ Parts List (Confidential)