



## *Genuine Thermo King Filters*

*Maximum filter effectiveness.*





# Genuine Thermo King Filters

reduce operating costs while  
keeping your fleet running clean!



- Reduce labor costs associated with frequent filter changes
- Reduce clean-up and disposal costs
- Reduce environmental impact with less spillage and waste
- Extend your engine life with maximum filtration efficiency
- Free up inventory by reducing the need to stock excess filters

Thermo King saves you money by engineering specifically-designed filters with unmatched:



**Construction.** Designed uniquely for Thermo King applications, these filters meet our customers demanding needs.



**Capacity.** Increases the life of the filter to match our Extended Maintenance Interval (EMI) for Thermo King units.

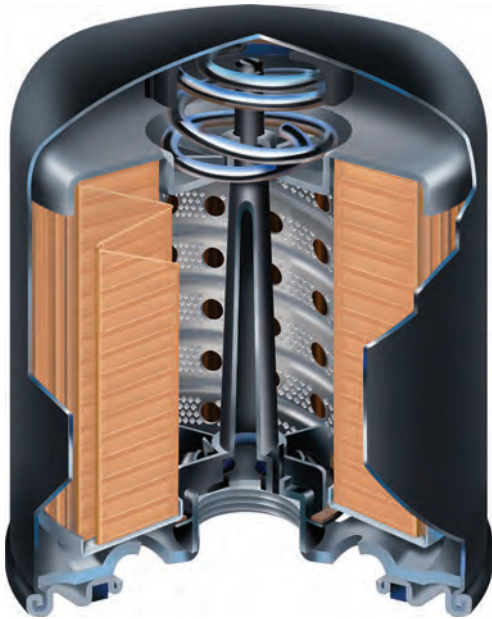


**Efficiency.** We maximize the amount of particles that can be captured in the filter to ensure your engine keeps running for a long time.

# Genuine Thermo King Fuel Filters

*offer you maximum protection against the unwanted water and impurities found in fuel.*

## EMI-3000 Fuel Filters



### Deliver maximum protection through:

- ✓ Coated and lined canisters to prevent corrosion
- ✓ Spring insulator to reduce electrolysis and corrosion inside the can
- ✓ Patented automatic drainage returns water to fuel tank, eliminating the risk that water may enter the fuel pump and injectors
- ✓ High strength gasket that resists heat and distortion for extended seal life
- ✓ Heavy-duty baseplate with double-roll tuck-lock seam that resists seal leakage due to pressure distortion
- ✓ High strength cellulose/glass media that offers superior contaminate filtering capacity and efficiency
- ✓ Water stripping media that removes water before it can damage the fuel system
- ✓ Heavy-duty, epoxy coated housing is impervious to cracking and corrosion

*A fuel filter's job is to trap contaminants large enough to damage the fuel injection system. Damaging water, impurities and contaminants can be harsh enough to oxidize steel components within your engine and ultimately cause corrosion and rust.*

Protect yourself against costly engine repairs or replacement  
- use only Genuine Thermo King Fuel Filters.

# Genuine Thermo King Oil Filters

*provide your engine maximum protection against dirt and particles that can cause costly damage.*

## EMI-3000 Oil Filters



*An oil filter's job is to trap contaminants large enough to immediately damage the engine, while also capturing smaller particles (such as soot) that can affect lubrication and efficiency of your engine.*

### Deliver maximum protection through:

- ✓ Designed specifically for Thermo King applications with maximum capacity and efficiency to prevent excessive engine wear and damage
- ✓ High strength gasket that resists heat and distortion for extended seal life
- ✓ Heavy-duty baseplate with double-roll tuck-lock seam that resists seal leakage due to pressure distortion
- ✓ Spiral center tube that prevents media breakdown to maximize flow
- ✓ Robust cellulose/glass media that offers superior contaminant filtering capacity and efficiency
- ✓ Patented two-stage arrangement with a built-in by-pass section to remove finer contaminants
- ✓ Steel spring that maintains pressure on seal while keeping oil from bypassing filter element
- ✓ Heavy-duty, epoxy coated housing is impervious to cracking and corrosion

*Protect yourself against costly engine repairs or replacement  
– use only Genuine Thermo King Oil Filters.*

# Genuine Thermo King Air Filters

*offer ultimate protection against contaminants that can cause damage and reduce fuel efficiency.*

## EMI-3000 Air Filters



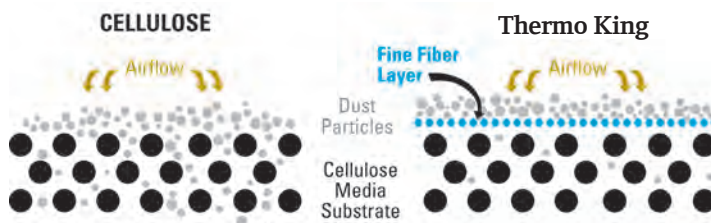
### Deliver maximum protection through:

- ✓ Patented built in cyclonic separator that filters heavier particles which get automatically discharged through the evacuation valve, preventing 75% of particles from reaching media
- ✓ Built in sonic choke for intake silencing
- ✓ Unique and patented filter media specially designed for Thermo King units and constructed for on-highway application
- ✓ Thermo King filter media holds up to five times more contaminant than standard cellulose air filters
- ✓ Durable polypropylene housing

## Thermo King High Efficiency Filtration

The patented filter media in the Thermo King EMI-3000 air filter does not allow submicron contaminants to disperse throughout the depth of the filter. Therefore, in on-highway applications, where the contaminant is primarily soot (submicron in size), the Thermo King air filter has less restriction than filters with cellulose media. The smaller, interfiber spaces of filter media deliver higher efficiency and capture more contaminant.

### Filter Media Comparative Cross Section

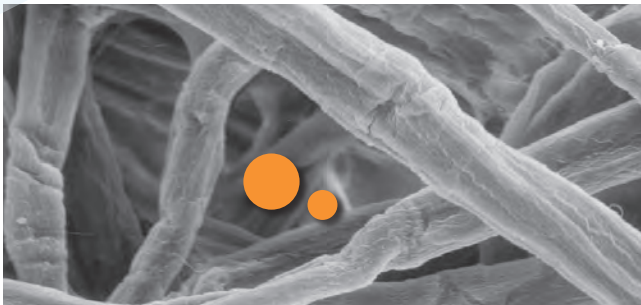




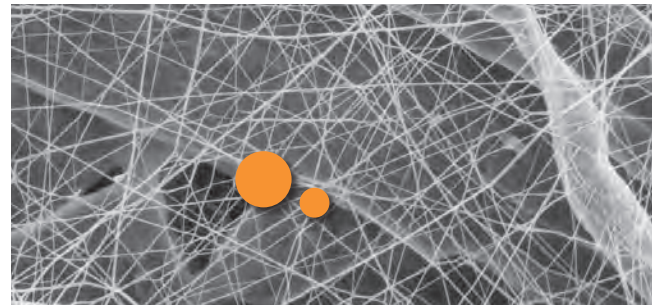
# EMI 3000 Air Cleaner Assembly & Filter System



Orange circles represent the diameter of a 2 $\mu$  and a 5 $\mu$  particle.



Cellulose fibers are larger and have larger spaces between the fibers, causing contaminant to load in the depth of the media and plug the airflow path; resulting in higher restriction and less capacity.



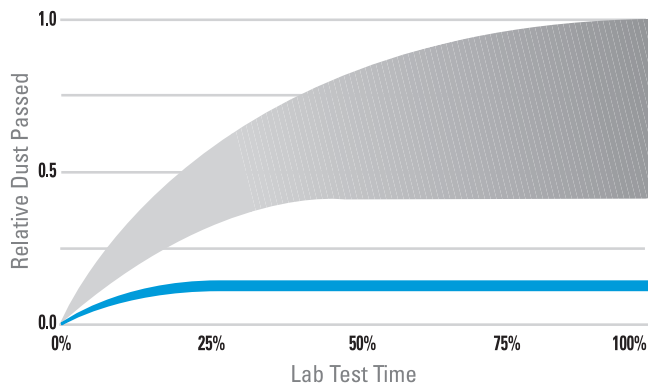
The fibers in the Thermo King filter media have submicron diameter and small interfiber spaces, which result in more contaminant being captured on the surface of the media and lower restriction.

## Filtration Performance Comparison

Thermo King EMI 3000 vs. Conventional Cellulose Air Filters

### Efficiency (Tested with Submicron Particles)

- Thermo King EMI 3000 Air Filters
- Range of Conventional Cellulose Media

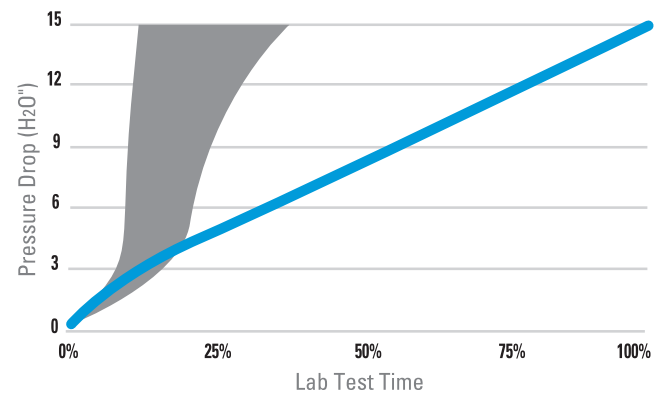


### Longer Engine Life

In laboratory and field tests conducted by Thermo King, air filters with this new filter media deliver better engine protection by allowing less contaminant to pass through the media than cellulose air filters. The filter media in the Thermo King filter also reaches a 99.99% initial efficiency faster than cellulose filters.

### Capacity (Tested with Submicron Particles)

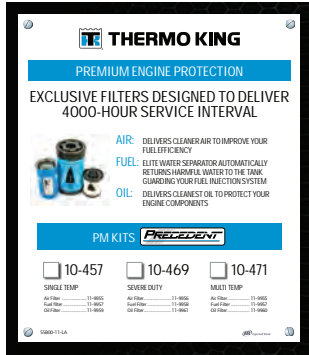
- Thermo King EMI 3000 Air Filters
- Range of Conventional Cellulose Media



### Longer Filter Life

The Thermo King air filter holds up to five times more contaminant than cellulose air filters, making it ideal for 3,000 hour extended maintenance intervals of the Thermo King Extended Maintenance Interval product line.

## PM Filter Kits (Precedent)



	10-457 (Single Temp)	10-469 (Severe Duty)	10-471 (Multi-Temp)
Oil Filter	11-9959	11-9961	11-9960
Air Filter	11-9955	11-9956	11-9955
Fuel Filter	11-9957	11-9958	11-9957

## PM Filter Kits (SB Series)



	10-449 (with 5 micron fuel filter)	10-417 (with standard fuel filter)
Oil Filter	11-9182	11-9182
Air Filter	11-9300	11-9300
Fuel Filter	11-9954	11-9342

## PM Filter Kits (TriPac)



	10-393 (TriPac w/rubber fuel lines)	10-395 (TriPac w/nylon fuel lines built after 12/06)	10-473 (TriPac Evolution)
Oil Filter	11-6182	11-6182	11-6182
Air Filter	11-9059	11-9059	11-9059
Air Filter	13-658	13-658	92-5701
Fuel Filter	11-9342	11-9342	11-9342
Fuel Filter	13-649	13-864	



Ingersoll Rand's Climate Solutions sector delivers energy-efficient HVACR solutions for customers globally. Its world class brands include Hussmann, a manufacturer of refrigeration and food merchandising solutions, Thermo King, the leader in transport temperature control and Trane, a provider of energy efficient heating, ventilating and air conditioning systems, building and contracting services, parts support and advanced controls for commercial buildings and homes.