

ECO-SE Air Cleaner

Instruction Part Number C-1500-85 Rev D



Installation and Service

Replace the air cleaner every 12 months or when the air cleaner service indicator shows restriction of 20-25 inches of water (depending on engine requirements).

Note: The shelf life of an ECO filter is three (3) years. Do not install an ECO filter on your application if the manufacture date is older than three (3) years.

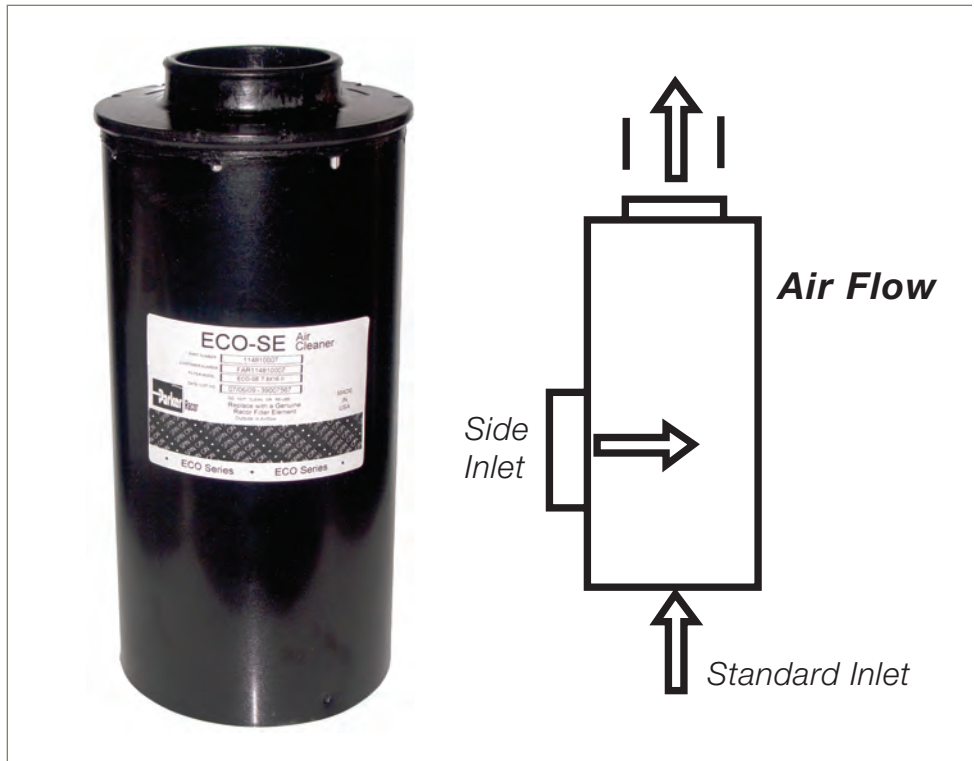
The ECO-SE is the perfect air cleaner for today's smaller fleet and stationary engines up to 350 HP. Its compact size, lightweight, ease of service and high efficiency, combine to provide the critical engine protection and simplified maintenance cost-conscious equipment operators now require.

Totally self-contained spin-on oil filters revolutionize maintenance problems during oil changes. The ECO-SE air cleaner utilizes that same self-contained, easy service, totally disposable concept with a number of unique extra advantages.

Fleet studies of engine oil samples show that when most air filters are changed, silicon (wear producing dirt) almost always enters the engine. With the ECO-SE, all dirt is contained in the fully disposable air cleaner assembly. Increased silicon levels have not been found in oil samples of fleets using the ECO-SE air cleaner.

Just loosen the clean air outlet clamp, unsnap the quick-release mounting brackets and slip the air cleaner out. All of the dirt is captured inside the filter, protecting the engine. Removal and replacement takes less than 10 minutes. There are no gaskets to lose or replace.

ECO-SE air cleaners provide an air cleaning efficiency of 99.9% (per SAE J726). The same media used in our air cleaners for



off-highway trucks, mining equipment and other critical applications is also used in the ECO-SE. A unique, locked-in-place pleated media design assures top performance in all kinds of weather, throughout its long service life.

Low air flow restriction means more usable horsepower, better fuel economy and longer service life.

The ECO-SE, with its self-contained housing is ideal where space is limited. A flexible urethane outlet simplifies service in tight locations.

Contact Information

Parker Hannifin Corporation
Racor Division
PO Box 3208
3400 Finch Road
Modesto, CA 95353

phone 800-344-3286
209-521-7860

fax 209-529-3278
racor@parker.com

parker.com/racor



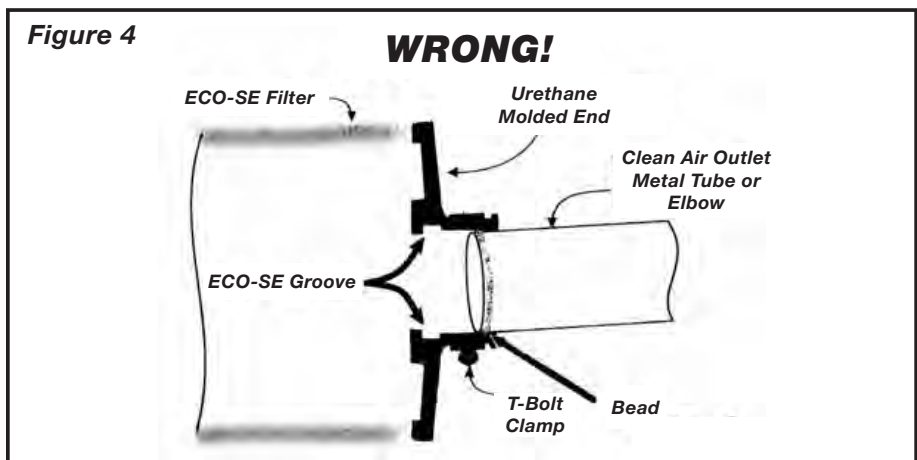
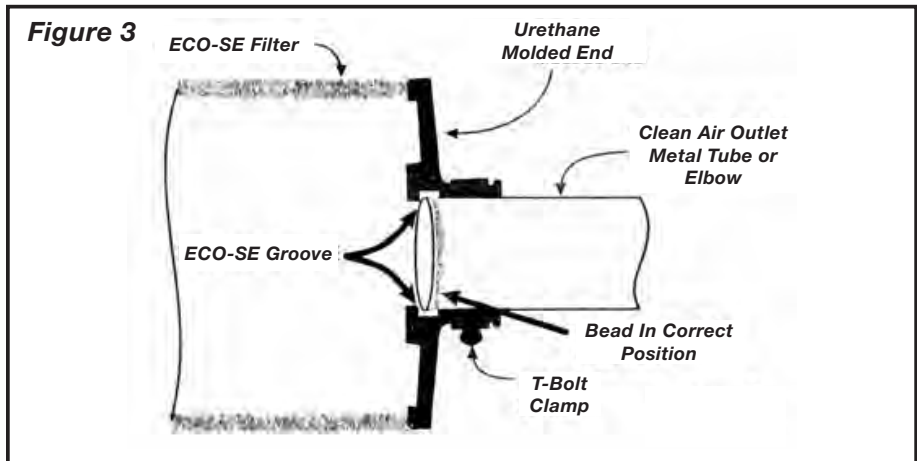
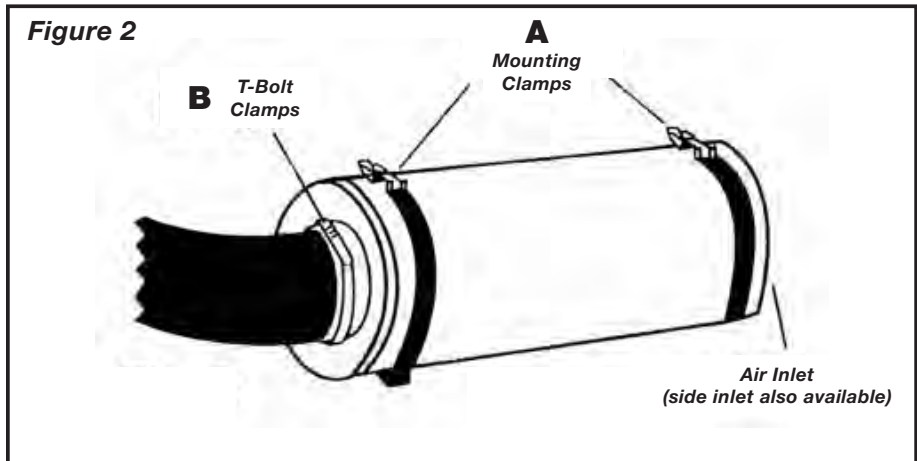
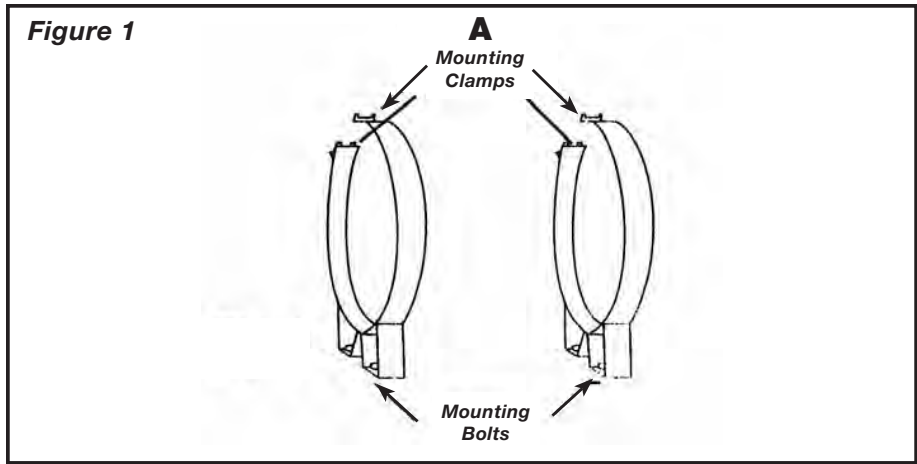
ENGINEERING YOUR SUCCESS.

INSTALLING THE ECO-SE

(ORIGINAL INSTALLATION)

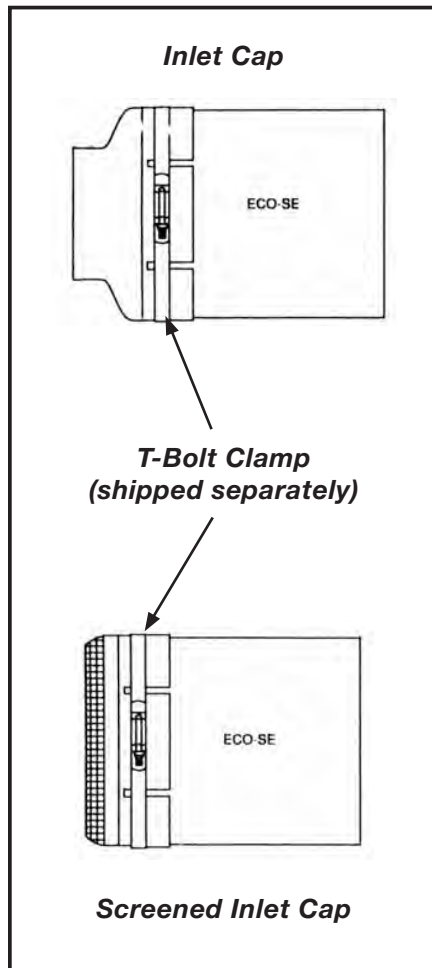
NOTE: Always use the following sequence on original installations. Otherwise, misalignment of the air cleaner may result.

1. Position the two quick release mounting clamps (A) by inserting mounting bolts into field-installed mounting brackets. Tighten bolts finger-tight only (see Fig. 1).
2. Insert ECO-SE air cleaner into the mounting clamps (A) (see Fig. 2).
3. Slide beaded air outlet tube or elbow (metal) into molded urethane outlet until bead is positioned into groove (see Fig. 3). Do not tighten T-bolt clamp yet.
4. **CAUTION!** If beaded tube or elbow is not positioned into molded urethane outlet groove (see Fig. 4) when clamp is tightened, a positive seal may not be obtained, causing dirt to by-pass filter and go into engine. **In this case catastrophic damage to the engine may occur.**
5. Snap shut the quick release mounting clamps (A) to secure the air cleaner in place.
6. Tighten the T-bolt clamp (B) on the clean air beaded outlet tube or elbow.
7. Securely tighten the four bolts on the mounting clamps (A).
8. Install air inlet accessory, if used, per instructions on back.
9. Recheck all clamps for tightness, especially on the clean air side all the way to the engine.
10. Install a Racor "Filter Minder" gauge (sold separately, part number 014440-001) in clean air piping.

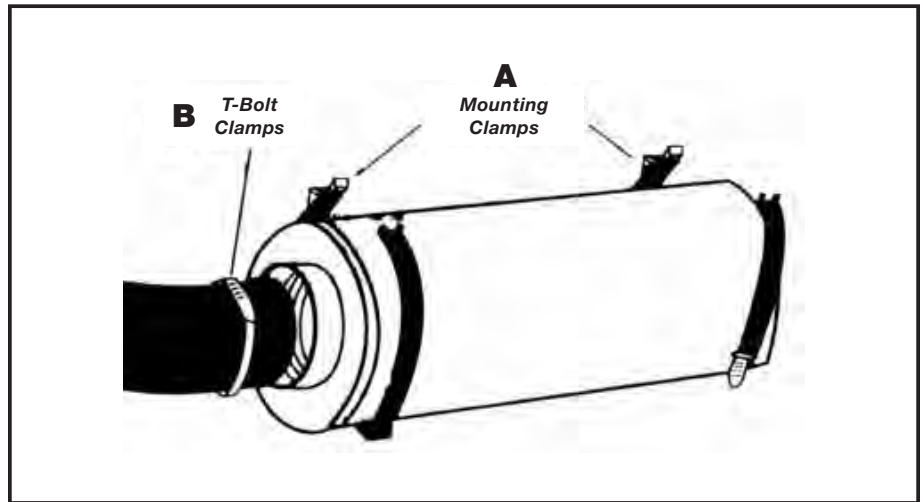


Installing a Regular or Screened Inlet Cap:

1. Place T-bolt clamp (shipped separately from the inlet cap) loosely around the cap. **Note:** *T-bolt clamp must be ordered as a separate item on all inlet cap installations.*
2. Slide inlet cap over ECO-SE filter, aligning the rivets on the filter with the slots in the cap. Insert cap fully until it seats on filter housing.
3. Tighten T-bolt clamp around cap using a ratchet or wrench. Make sure the clamp is securely tightened. **Caution:** *over tightening can cause filter damage.*



Removal and Servicing



1. Loosen T-bolt clamp at the clean air outlet (B).
2. Unsnap quick release mounting clamps (A).
3. Loosen T-bolt clamp at the air inlet cap or pre-cleaner, if used. Clean inlet accessory as required to remove dirt or foreign objects.
4. Slip the used air cleaner out and dispose.
5. Install new ECO-SE air cleaner following. Also, re-install the cleaned air inlet cap or pre-cleaner, if used.
6. Recheck clamps for tightness, especially on the clean air side all the way to the engine.
7. Reset Filter Minder service gauge to zero, if used.

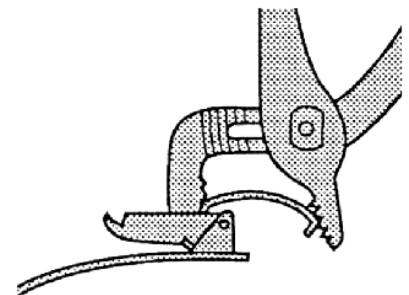
IMPORTANT: When servicing your ECO-SE air cleaner, never attempt to open filter housing, clean, or re-use filter - damage to the engine may result. Before installing new filter, inspect ducting and fittings for visible damage. Check hose clamp for tightness. Inspect new filter for any shipping damage.

Adjusting Clamp Tension

Adjusting positive action quick release clamps on your ECO-SE may require a minor tolerance adjustment. This is quickly accomplished by following these instructions:

To Increase Tension - length of latch must be slightly shortened. To do this, simply increase curve (arc) of "spring latch" by gently squeezing with water pump pliers.

To Decrease Tension - length of latch must be slightly increased. Reduce curve (arc) of "spring latch" a little at a time by placing it on a flat surface and applying slight pressure from above until reduced arc provides adequate minimum tension when installed.



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