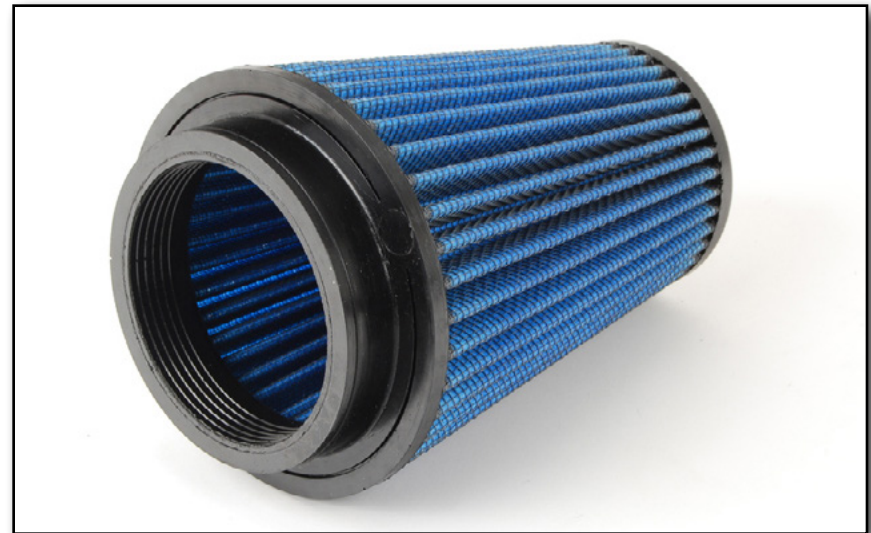




## Oiled And Non-Oiled Reusable Air Filter Cleaning Instructions



Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

## INTRODUCTION

Cleaning your air filter is a very simple job which can be easily completed in an afternoon, and only requires basic skills. Before you begin, familiarize yourself with these instructions and make sure you have all of the required tools to remove your air filter. These instructions will explain in detail how to clean (and oil if applicable) your reusable air filter element. These instructions do not apply to most factory installed air filters, and should only be followed on reusable air filters.

## ECS Difficulty Gauge



**1 - Easy**

2 - Moderate

Pro - 4

Advanced - 3

## TABLE OF CONTENTS

Shop Supplies and Materials.....	<a href="#">pg.3</a>
Installation and Safety Information .....	<a href="#">pg.4</a>
Oiled Type Filter Element.....	<a href="#">pg.5</a>
Non-Oiled Type Filter Element .....	<a href="#">pg.8</a>
Schwaben Tools .....	<a href="#">pg.11</a>

## SHOP SUPPLIES AND MATERIALS

**Standard Shop Supply Recommendations:** We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser - [Click Here](#)
- Pig Mats - for protecting your garage floor and work area from spills and stains - [Click Here](#)
- Spray detailer - for rapid cleaning of anything that comes into contact with your paint such as brake fluid - [Click Here](#)
- Micro Fiber Towels - for cleaning the paint on your car - [Click Here](#)
- Latex Gloves - for the extra oily and dirty jobs - [Click Here](#)
- Medium and High Strength Loctite Thread lock compound - to prevent bolts from backing out - [Click Here](#)
- Anti-Seize Compound - to prevent seizing, galling, and corrosion of fasteners - [Click Here](#)
- Aerosol Brake/Parts Cleaner - for cleaning and degreasing parts
- Shop Rags - used for wiping hands, tools, and parts
- Penetrating oil - for helping to free rusted or stuck bolts and nuts
- Mechanics wire - for securing components out of the way
- Silicone spray lube - for rubber components such as exhaust hangers
- Paint Marker - for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties - for routing and securing wiring harnesses or vacuum hoses
- Electrical tape - for wrapping wiring harnesses or temporary securing of small components

## INSTALLATION NOTES

- **RH** refers to the *passenger side* of the vehicle.
- **LH** refers to the *driver side* of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

## GENERAL PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety. Please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- If using an automotive lift, be sure and utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- When lifting a vehicle using a jack, always utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear. **ALWAYS** support the vehicle with jack stands.
- Always read and follow all safety information and warnings for the equipment you are using.



**NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.**



## OILED TYPE FILTER ELEMENT

### Step 1:

Apply cleaner to both sides (inside and outside) of the filter element, and let the cleaner soak into the filter for 10 minutes. Do not allow the cleaner to dry on the air filter.



The majority of oiled type filter elements are pleated like the one we are using for these instructions. If you have an oiled filter that is not pleated, the cleaning procedure will be the same, only the oiling procedure will differ.

### Step 2:

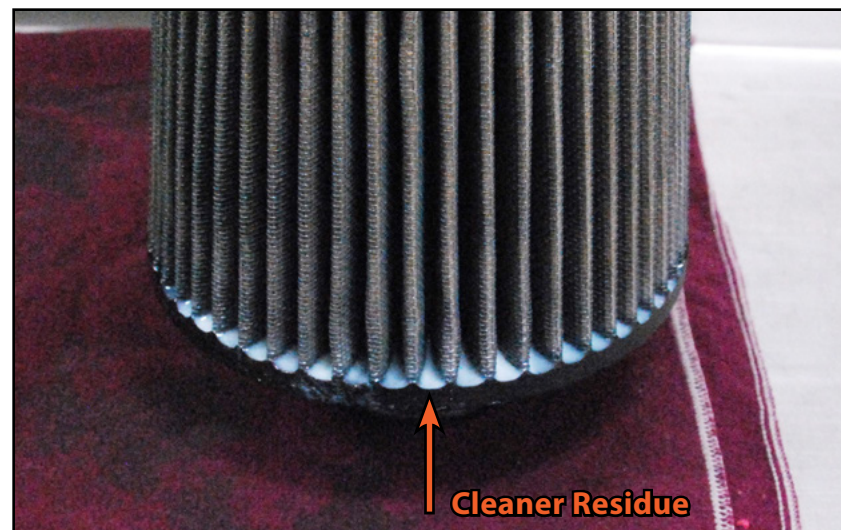
Rinse with cool, low-pressure water from the clean side of the filter, this will ensure that dirt is lifted and removed on the dirty side. The cleaner will appear milky-white while rinsing, be sure to rinse until all traces of cleaner are gone.



## OILED TYPE FILTER ELEMENT

### Step 3:

Clean and rinse the filter again if necessary. Ensure that all traces of cleaner are gone. If you see traces of cleaner as shown in this photo, it needs to be rinsed again.



### Step 4:

Allow the filter to dry completely, do not apply heat or blow dry with compressed air.



## OILED TYPE FILTER ELEMENT

### Step 5:

Apply a light coat of oil to the crown of each pleat as shown in the photo, allowing the oil to evenly soak into the element. Many oils are colored like the one shown to ensure even coverage on the element.



If you have an oiled filter that is not pleated, apply the oil evenly to the entire surface of the filter, allow to soak for 10-15 minutes, and gently blot away any excess oil.

### Step 6:

Allow the oil to soak into the filter for 15-20 minutes. Touch up as necessary for a uniform application. Your air filter is now ready to install on the vehicle.



A properly oiled filter will have even coverage on the entire filter, without any runs or drips. Do not over oil the filter element as this can cause a loss of performance, and possible damage to the Mass Air Flow Sensor(s).





## NON-OILED TYPE FILTER ELEMENT

### Step 1: Soft Bristle Brush

Using a soft bristle brush, gently brush away excess dirt and dust. Use light pressure while brushing so the filter does not tear.



We are using a non-pleated filter for this demonstration. If you have a non-oiled filter that is pleated, the cleaning procedure will be the same.



### Step 2:

Wash the filter with soapy water, a sink is generally the best place to accomplish this. Work the soap in by hand and massage the dirt out of the filter.





## NON-OILED TYPE FILTER ELEMENT

### Step 3: Soft Scrub Brush

A soft scrub brush can be used for hard-to-remove dirt and debris, be sure to use appropriate pressure to keep from damaging the filter.



### Step 4:

Rinse with warm, low-pressure water from the clean side of the filter, this will ensure that dirt is lifted and removed from the dirty side.



## NON-OILED TYPE FILTER ELEMENT

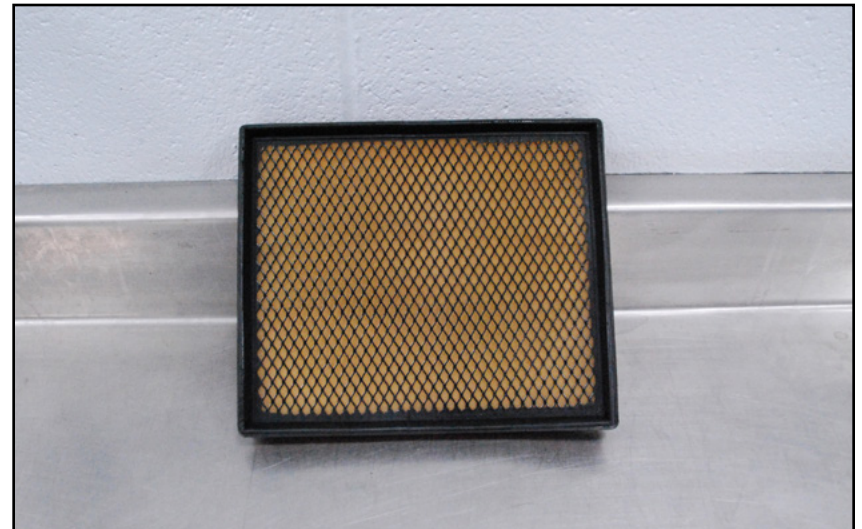
### Step 5:

Gently shake off any excess water and allow the filter to dry naturally, do not apply heat.



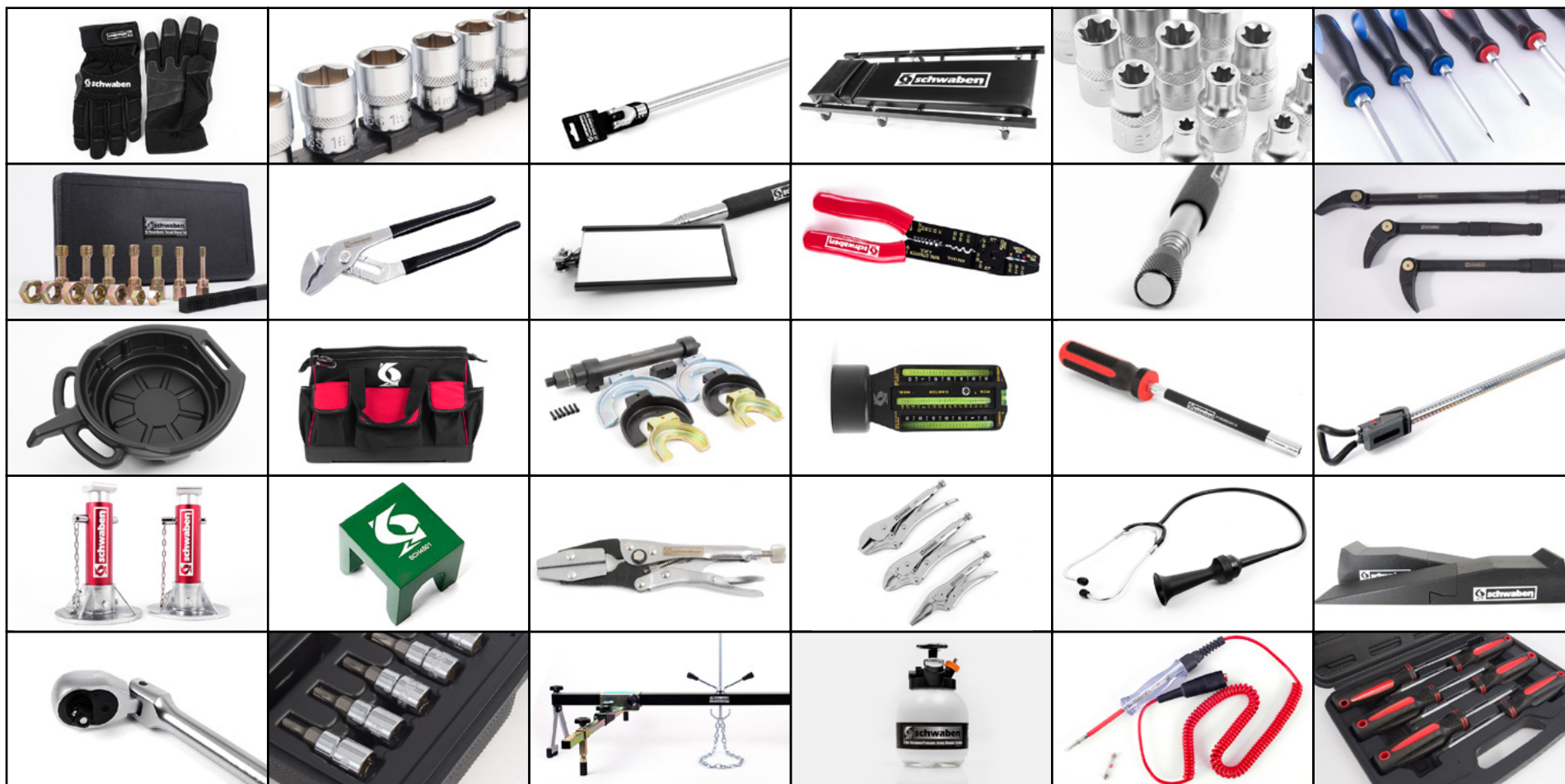
### Step 6:

Your air filter is now ready to install on the vehicle.



## SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

At ECS Tuning, we carry a line of high quality Schwaben Tools and Equipment to help you build your ultimate tool collection. Never before has affordability and quality been so closely related. Our entire Schwaben line is subjected to strict in house testing for strength and durability. See what we have to offer and equip your garage without breaking the bank.





**Your air filter cleaning is complete!**



**These instructions are provided as a courtesy by ECS Tuning**

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

Although this material has been prepared with the intent to provide reliable information, no warranty (express or implied) is made as to its accuracy or completeness. Neither is any liability assumed for loss or damage resulting from reliance on this material. SPECIFICALLY, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS MADE OR TO BE IMPLIED WITH RESPECT TO THIS MATERIAL. In no event will ECS Tuning, Incorporated or its affiliates be liable for any damages, direct or indirect, consequential or compensatory, arising out of the use of this material.