Car Care Specialties, Inc.

CLEANING YOUR ENGINE:

Why should you clean the engine compartment? Rust prevention, early oil/fluid leak detection, early belt wear detection and cosmetics are among the prime reasons. (There is a rumor that certain series of German mid/rear engine cars have a factory designed engine oil leakage feature to assist in rust prevention for the non-galvanized rear quarter panels and trunk areas.)

To soften the grease and grunge collected on your engine compartment, start the engine, let it warm up for a few minutes and shut it off. The proper cleaning temperature of the engine is warm but not hot. If you can just hold your hand to the engine without burning it, then it is warm enough to clean. As the engine cools to proper temperature, use the time to cover the few openings on the motor that dislike ingesting water. The air intake/air filter, the distributor, the coil and the oil dipstick/breather are among the few sensitive areas.

Use plastic Baggies and rubber bands to cover the air intake/air filter(s) and the distributor/coil. Place a double layer of Baggies over the air intake and secure with a couple of rubber bands. Use a pair of two-gallon size Baggies to cover the distributor and plug wires around the distributor cap. This may be difficult to seal, but the idea is to prevent significant amounts of water possibly shorting out the distributor. If the cap is in good condition, it will be "waterproof", so this is only a preventative measure. The coil is also "waterproof", so Baggies are again a preventative measure. Check the tightness of the oil filler cap, the power steering filler cap, windshield washer fluid cap, oil dip stick, battery filler caps and all other engine compartment opening caps and secure baggies over them with rubber bands.

Now that your engine is warm and sealed, spray the entire engine/engine compartment with a quality, non-petroleum based degreaser. Try to start from the bottom and work up. This way you don't have the degreaser dropping on your face as you clean the underside areas. My two favorite citrus based engine cleaners are P21S Total Auto Wash and Wurth Citrus Degreaser. I find that either of these two citrus products will clean thoroughly and not harm the paint or finish of the aluminum components and are biodegradable. One note of caution, all degreasers will remove your nice coat of wax. If you get the engine cleaner on the waxed areas, plan on rewaxing. Allow the degreaser about 3-5 minutes to work and then use a 100% cotton towel or a "SOFT" brush to "GENTLY" agitate the heavily soiled areas. Respray and rebrush any areas that need additional cleaning. Once the entire engine/engine compartment has been cleaned, rinse thoroughly with water. There is a debate as to the optimum force of spray to rinse the degreaser. Some say a gentle spray is all that is necessary, while others advocate the use of a high-pressure spray. Use your common sense. The stronger the spray, the more likely you will get water in sensitive parts. If all areas are properly protected, you should have no problems with a stronger spray. If any areas need additional cleaning, repeat as necessary.

Once the engine/engine compartment is clean, immediately remove all of your plastic baggies/rubber bands. Dry any "puddles" and aluminum parts with a soft 100% cotton towel. Use paper towels to thoroughly dry the battery (if it is in the engine compartment). Start the engine and allow it to warm up. This will dry the rest of the engine and evaporate any moisture that may have collected in sensitive components.

I am not a fan of steam cleaning. I have found that the high pressure steam has a nasty tendency to infiltrate the electrical connections and cause havoc. The modern engine has numerous sensors that continually feed precise information to the computers. If steam penetrates these sensors and corrodes the electrical connections, electrical signals may be disrupted and cause the engine to run erratically or not at all. The amount of time it takes to disassemble, clean and reconnect all these sensors is incredible.

Once everything is dry and has completely cooled, you may wish to apply a coating of rubber protectant to the rubber hoses, rubber, plastic shields and rubber gaskets. One Grand Exterior Rubber & Vinyl Treatment, 3M Rubber Treatment, Meguiar's #40 Vinyl/Rubber Treatment or Wurth Rubber Care Spray all work extremely well. I do not recommend treating the underside of the rubber belts, as this makes them reluctant to turn their respective pulleys, with somewhat interesting results. (This is somewhat like waxing brake pads.)

The painted areas of your engine compartment (not the engine) should be waxed. If the uncoated aluminum areas are dull or have whitish corrosion, a mild metal polish will help restore the finish. My favorite is P21S Multi Surface Finish Restorer Polish. Use a soft, 100% cotton flannel cloth and work a small amount into the surface and then buff off with another 100% cotton flannel cloth. Check the battery terminals, to insure that they are clean. If not, disconnect the cables and clean both the cable terminals and battery posts with a wire brush. Reconnect the terminals and retighten. Wurth makes a nifty Battery Terminal Spray that protects the terminals from corrosion and changes from pink to blue if there is battery acid leakage.

All of the hinges, throttle cables, cruise control cables and hood shocks should receive a thin coating of non-silicone lubricant such as Wurth HHS-2000 Spray Lube. Lastly, check all fluid levels, remove any stray Baggies and you are finished!

If you have any questions or wish clarification of any of topics, please give us a call.

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Product ID: 10407 **Category:** Bug & Sap

Removers

P21S Total Auto Wash - 1 Liter Pump Spray Kit **Description:** 1 Liter Bottler with Pump Spray Ignore the name, P21S Total Auto Wash is a citrus based, biodegradable cleaner for tree sap, bug spatters, bird droppings, engines, wheel wells, rocker panels, floor mats and other grimy areas. To remove bug remains, tree sap, bird presents from your paint or wax residue from exterior rubber/vinyl trim, spray on a soft cloth, dab the spot, let it work for a moments, dab on more, let it work and then hose off. To clean engines, mats, wheel wells, etc., spray on, allow to clean for a few minutes, gently brush heavily soiled areas and then rinse off with water. Leaves the finish sparkling clean with a fresh orange scent. Won't damage paint, chrome, aluminum, rubber or plastic. Do not use any degreaser on a hot surface. When used straight, it will remove old wax and may also be diluted with water for specific cleaning projects. (Our favorite citrus degreaser.)



Product ID: 11301 Category: Citrus Degreasers Wurth Citrus Degreaser - 16 oz Bottle Description:

A multi-purpose, citrus base, concentrated degreaser that emulsifies grease and oil without harsh acids or alkalis. The unique, 100% biodegradable formula out performs hazardous solvent degreasers. One of the best products to remove built up grim from engines, wheel wells and undercarriages. Dilute with water to the desired strength for a particular job. May be used straight or diluted to remove wax residue from rubber and vinyl trim. Apply a small amount to a soft terry cloth, carefully rub the trim to remove the wax residue, gently brush if necessary, rinse thoroughly, dry and follow with a quality rubber protectant.



Product ID: 10229 **Category:** Favorite Products **One Grand Ext. Rubber & Vinyl - 16 oz Pump Spray Description:**

One of the best dressings for exterior rubber/vinyl trim and tires that will not chalk or turn brown. Use on tires, bumpers, exterior trim and vinyl tops. Spray on a soft cloth or sponge, work a thin coat evenly onto the surface, allow to penetrate for a few minutes and then buff off the excess with another soft cloth. A few applications about a week apart will help restore the deep color to the rubber and vinyl trim as well as enhance the longevity. Leaves a rich medium gloss finish that lasts. Our co-favorite exterior rubber/vinyl conditioner.



Product ID: 10171 **Category:** Favorite Products **3M Rubber Treat. & Tire Dressing-16 oz Pump Spray Description:**

A rich, emollient oil base, conditioner that cleans, protects and restores all exterior rubber and vinyl. Spray on a soft cloth, apply a thin even coat to the tire or rubber/vinyl trim and allow it to penetrate for a few minutes. Then buff off the excess with another soft cloth. Leaves a medium-gloss finish without any greasiness. May be used on all non-painted exterior rubber and vinyl trim. Several applications over time will help restore the black patina to slightly faded exterior rubber. (Our co-favorite exterior rubber/vinyl conditioner.)



Product ID: 10560 **Category:** Vinyl Care, Interior **Meguiars #40 Vinyl & Rubber Conditioner - 16 oz**

Description: 16 oz Pump Spray

Thoroughly cleans, penetrates, rejuvenates and protects against drying and cracking on both exterior vinyl and rubber surfaces. Contains a UV protectant to help screen out harmful ultraviolet rays. Leaves a slightly gloss finish, not a greasy or silicone slippery finish. Spray a small amount on a soft clean cloth, work into the surface, allow to penetrate for a few minutes and then buff off the excess with another soft clean cloth. Use on tires, rubber/vinyl trim, vinyl tops and under the hood rubber/vinyl detailing.



Product ID: 11303 Category: Rubber & Vinyl Care, Exterior Wurth Rubber Care Spray - 300 ml Aerosol Description:

Restores and revitalizes rubber gaskets, rubber parts, bumper casings or body side moldings. Rubber Care will also help remove wax residue, buffing compounds, dirt and grime from rubber and vinyl trim. The non-silicone formula enhances the resiliency of rubber gaskets to help prevent water leaks. This non-silicone product leaves a lasting, natural shine to rubber and will not harm paint. Spray a small amount onto a soft cloth, apply a thin coating to the rubber, allow it to penetrate and then buff off the excess with another soft cloth. (Ground Shipment Only.)



Product ID: 10417

Category: Motorcycle Cleaners
P21S Multi-Surface Finish Restorer
Polish

Description: 75 ml Tube.

A gentle, yet effective metal polish that brightens aluminum, magnesium, stainless steel, chrome, brass and other tarnished metals, yet mild enough to be used on painted surfaces and to help clear clouded plastic windows. Apply a small amount to a soft 100% cotton flannel cloth, rub into the surface until the shine begins to appear and then buff off with another soft 100% cotton flannel cloth. P21S Multi-Surface buffs out easier than ordinary polishes and has no unpleasant ammonia smell. May be combined with 3M Imperial Hand Glaze to help remove minor paint scratches or swirls. Our favorite multi-surface polish.



Product ID: 17608

Category: Favorite Products

Detailers Choice 100% Cotton Flannel

Polishing Cloth

Description: 13" x 23" Cloth.

A super-soft, 100% cotton flannel cloth that is our absolute favorite to buff and/or apply waxes, glazes, paint cleaners or metal polishes. Each 13" x 23" cloth is bound on all four edges with cotton thread to reduce fraying. They are also great for applying vinyl/leather protectants, cleaning clear plastic windows, dusting, etc. The uses are almost unlimited and they are so handy, you can't have too many of them. May be washed and used over and over and the more times they are washed, the softer they become. Wash in warm water on the gentle cycle with detergent only and dry in the dryer with no antistatic towels. Wash before first use to remove excess lint and fabric sizing.



Product ID: 11353 **Category:** Battery Care-Chemicals **Wurth Battery Terminal Spray - 14 oz Aerosol Description:**

A multipurpose spray that will clean the battery posts and terminals, neutralize acid, retard electro-chemical corrosion and assure optimum power output. Make sure that the battery caps are tight. Spray a light coating over the surface, allow it to clean for a few minutes, then gently brush with a nylon bristle brush and rinse thoroughly with water. Repeat as necessary. Once the battery is clean and dry, spray a thin coating on both battery terminals to prevent corrosion. The pink color will detect leaks by reacting with acid and turning bright blue. (**Ground Shipment Only.**)



Product ID: 11302 **Category:** Favorite Products **Wurth HHS-2000 Spray Lubricant - 500 ml Aerosol Description:**

A unique, synthetic, heat-resistant, all purpose lubricant that penetrates quickly and adheres completely. It sprays on as a liquid and then dries to a clear semi-solid that does not dry out. HHS 2000 is very water resistant and does not attract dust like silicone based products. This is the ultimate lubricant for sticking or squeaky radio antennas, hinges, suspension bushings, hood shocks, motorcycle/bicycle chains, wire cables, mechanical linkages, etc. (Our favorite all around lubricant for thousands of jobs.) (Ground Shipment Only.)