

Motor Flush - 1.



Performa Motor Flush is a proprietary blend of solvents, detergents and dispersant additives that will effectively dissolve oil contaminants to aid in their removal from the engine. Motor Flush will thin out heavily-oxidized or thickened oil and break down sludge and varnish deposits which can then be drained out with the used oil.

Varnish, sludge and thickened engine oil in the crankcase and lubrication system can result in sticking hydraulic lifters, restricted lubricant supply, and partial seizure between pistons and cylinder walls, crankcase and camshaft journals and bearings. This may result in cranking overload, scoring or total seizure of the engine.

Motor Flush can be used in any vehicle with a 4 cylinder, 6 cylinder & 8 cylinder with up to a 6 liter oil capacity, inclusive of cars, 4 x 4 and small commercial trucks, product can be used in both petrol and diesel engines. Add the product to the dirty oil and run the vehicle for 10/15 minutes, drain the oil from the vehicle and contaminants are quickly and effectively flushed away.

Oil Treatment - 2



Performa oil treatment has been designed to maintain the additive levels in the engine oil, to promote the designed-in oil detergency, dispersancy and wear protection, especially under severe service conditions of high load and high operating temperatures, in other words it prevents oxidization and thickening of the engine oil under even the most severe stop and go high temperature driving conditions.

Oil Treatment matches the viscosity of modern lower viscosity engine oils (ordinary oil is upgraded to semi-synthetic and semi-synthetic to synthetic). Increased engine oil consumption, noisy valve train (rockers, followers and lifters) and premature engine wear will result from oil viscosity breakdown, contaminant & acid build up from severe duty driving cycles and infrequent oil changes. Lubricants used in the manufacture of this product are to the highest grade of lubricants used in today's synthetic oils. This product works to its optimum when added to vehicles with an oil capacity of up to 6 L, recommended every 10,000 KM and is turbo and super charger safe.

Fuel System Service - 3



Performa Fuel System Service is a fuel additive which removes and prevents the formation of fuel related deposits throughout the fuel system, in turn this improves driveability and improves power and performance. Regular use will maintain the cleanliness of the intake valves and ports, intake manifold, fuel injectors and combustion chambers. Effective as a fuel stabilizer for fuel storage. Fuel System Service contains the latest generation of DCA (deposit control additive) available.

Petrol related deposits, such as gums and varnishes, will form in the fuel system, from the fuel tank to the fuel lines and fuel pump to the injectors (and carburetor float bowls and jets on older engines). These deposits can build up to the point of causing fuel flow restrictions which will result in poor engine driveability and decreased performance.

Water contamination is common in all petrol, it can be caused by water running into the fuel tank in the petrol stations or condensation in high humidity. Water is heavier than petrol and therefore naturally falls to the bottom of the tank, Performa Fuel System Service is formulated to absorb this water so that it can pass through the fuel system along with the fuel, preventing corrosion of the fuel system due to moisture. This product is safe to use in fuel injected vehicles for all emissions components such as oxygen sensor, catalytic converter and EGR valve, it contains lubricants to prevent potential wear or scoring of the fuel system components which can be caused by pure-alcohol fuel dryers. This product is can only be applied to petrol vehicles and can be added to any vehicle with a tank capacity of up to 80 L, it is recommended every 8,000 – 10,000 km in areas where fuel is poor quality.

Emission Kit - 123



The motor flush, oil treatment & fuel system service as one service pack, used every 20,000 km this service reduces sludge and varnish, moisture in fuel, maintains clean injectors & increased lubrication protection, stabilizing compression, increasing vehicle performance and fuel consumption.

Automatic Transmission Flush Machine:

Automatic Transmission Fluid Services are often the most neglected service and even when they are performed are often incomplete. This can lead to automatic transmission shifting problems and premature repairs and replacements. 90% of AT failures are due to overheating and fluid contamination. A typical transmission drain and fill service only replaces about 40% of the old contaminated ATF (automatic transmission fluid). The remainder of the fluid gets trapped inside the valve bodies, the torque converter and transmission cooler lines. When new transmission oil is added it can often loosen damaging sludge and varnish deposits leading to shift problems and transmission failure.



The Performa ATS machine is a fully automatic and easy to operate (no valves or flow adjustments to regulate). The machine incorporates the latest micro-computer technology available. It calculates the flow of the used fluid from the vehicle and simultaneously pumps the exact amount of new fluid, eliminating any possibility of over filling the transmission. This is extremely important when servicing a sealed transmission unit. This machine has the capability to empty a preset amount from the transmission pan for a spill free filter change. It has the capability to perform a 98% fluid exchange and a built in timer for the flushing cycle. Instructions and operating manual for the machine are on the next 3 pages. You may be asked at some stage about reverse flushing, this is impossible as the vehicle is running throughout the service – there is no way that fluid can be driven through the system in reverse...

Automatic Transmission Flush & Conditioner – 15 & 4:



Automatic Transmission Flush chemical should be added to the transmission, this chemical goes through the transmission for 10 minutes using the ATS machine (be sure and follow machine instructions carefully). The flush chemical is formulated to safely and effectively remove sludge, varnish, clutch deposits and other harmful contaminants from the transmission cooler and torque converter. It is recommended every 40,000 Km or as per manufacturer specifications. This service will improve oil circulation, extends the life of the new fluid (as contaminants have been removed) & improves performance.

Automatic Transmission Conditioner prevents premature degradation of the new ATF, is compatible with all types of Transmission Fluid, when used on every ATF service with new fluid will condition vital seals, improves smoother shifting of gears, frees up sticking rings and promotes a cooler operating temperature.

Cooling System Flush Machine

Every time a vehicle is driven, the radiator uses up coolant and water mixture to help lower the temperature in the vehicle's engine system. A vehicle's heating and cooling system is necessary in preventing the vehicle from breaking down due to incredibly high operating temperatures. The longer and the faster the vehicle is driven, the bigger the stress on the engine, allowing temperatures to skyrocket to incredible heights leading to the increase of the likelihood of overheating. Because of the coolant's crucial role in maintaining the engine's efficiency, it is vital that the coolant is correct and free of contaminants which may affect its efficiency.

Coolant, like all the other fluids used by a vehicle has a tendency to break down over time. Up to 60% of used contaminated fluid remains in the system during a normal drain and fill service. Engine block, heater cores, hoses & water pumps are not typically drained during a traditional cooling system drain & fill. This leaves contaminated oil with damaging scale, deposits and acidic by products, in the system, which in turn means more stress is placed on the radiator and the engine begins to run hotter than normal. Dirt and mineral deposits also build up under your vehicle's hood, effectively reducing your vehicle's overall performance. Prolonged use of bad coolant can also result to radiator damage, requiring premature replacement of the radiator.



Performa Cooling System Flush Machine removes the old coolant while simultaneously refilling with new coolant, this keeps the cooling system full throughout the exchange, eliminating the possibility of air locks in the system. The unique tank design enables operator to evacuate entire system. This machine has the capacity to complete a 98% fluid exchange, quick coupler fittings and there are no messy spills. Instructions of how machine is hooked up to the vehicle are on the next page. This service is recommended every 30,000 km.

Cooling Flush & Conditioner – 5 & 6:



Cooling System Flush is a formulation which safely removes rust, scale, silica, sludge and other harmful contaminants from the entire cooling system & heater core. Flush chemical is added to the system and then the vehicle is left on idle for ten minutes. This service improves coolant flow, extends the life of the radiator, heater core and water pump and vehicle will have optimum heating and cooling.

Cooling System Conditioner is compatible with all types of coolant, has a high grade of lubricant to lubricate the water pump, keeps the pH balanced, protects against damage caused by acidity and electrolysis, (electrolysis is the systematic removal of the protective layer on the inside of the radiator tubes due to improper grounding in the electrical system. Electrical grounding problems can stem from poor installation of aftermarket accessories or incorrect vehicle collision damages) protects the heater / cooling system against corrosion, scale and rust. It stabilises the coolant.

Injector Flush Kit:

Before explaining the flushing mechanism for the fuel injectors, below is a small definition of them and their role in the internal combustion cycle. From the name itself, fuel injectors are the devices that "inject" fuel in the fuel-air mixture required for combustion. It atomizes the fuel and turns it into a fine mist by pushing it forcibly through a tiny nozzle in a high-pressure manner. This is sprayed onto the intake valves and into the engine's combustion chamber.

As for the amount of fuel pushed inside the fuel injector, it is determined by the engine control unit (ECU), which monitors the amount of air flowing inside the engine, the oxygen in the exhaust, the throttle valve position, the coolant temperature, the system voltage, the engine speed, and many other things.

Clean fuel injectors are necessary for fuel economy and peak engine performance. After a certain number of miles, the fuel injector can get clogged, causing it to misfire or sputter. Leftover fuel in fuel injector nozzles tends to solidify after the engine is turned off. This is called "heat soak" where the fuel residue from the nozzle evaporates and a wax-like residue remains. Heat soak occurs during the cool down process of the vehicle. Every time you stop a hot engine a small amount of residue adds to the already present build up, this is because no air or fuel flows through the engine to cool and wash it away. The more frequent the stops, the more rapidly the build-up accumulates. This accumulation eventually reduces the flow of fuel through the injector and disrupts its spray pattern, causing the engine to run lean. This can manifest itself in a number of ways, although the most common is driveability problems such as flat spots and hesitations.



This is hooked up to the fuel rail of the vehicle, the vehicle actually runs off the chemical in the canister if the pressure has to be adjusted to keep the vehicle running. Machine comes with quick coupler connections, fuel pressure gauge, complete set of adaptors, "S" adaptor for the air induction cleaning.

Valve & Injector Cleaner – 8



This is a heavy duty cleaner for use in the automotive service industry, it is a pressurized application where the vehicle runs off the product as it is connected to the fuel rails, it cleans deposits from the fuel injectors caused by “heat soak”, to restore fuel delivery efficiency and reduce fuel consumption, it helps to remove deposits from intake valves and the fuel induction system to improve the fuel / air mixture in the engine, it removes deposits from the combustion chamber which prevents pinging, knocking and run-on, reduces engine octane requirements and prevent octane requirement increase (ORI) (Octane rating or octane number is a standard measure of the performance of a motor or aviation fuel. The higher the octane number, the more compression the fuel can withstand before detonating (igniting). In broad terms, fuels with a higher octane rating are used in high performance petrol engines that require larger compression ratios. Petrol engines rely on ignition of air and fuel compressed together as a mixture without ignition, which is then ignited at the end of the compression stroke using spark plugs. Therefore, high compressibility of the fuel matters greatly for only petrol engines. Use of petrol with lower octane numbers may lead to the problem of engine knocking.)

In contrast, fuels with lower octane numbers (but higher cetane numbers) are ideal for diesel engines, because diesel engines (also referred to as compression-ignition engines) do not compress the fuel but rather compress only air and then inject the fuel into the air heated up by compression.

Air Induction Service - 7



There is a way you can restore your vehicle to peak performance in no time. Air induction service is advised on a regular maintenance basis, but is often especially effective with vehicles operating under severe driving conditions.

When a vehicle is not performing properly, hesitating or exhibiting signs of emissions problems, then an air induction service is recommended. Heat causes build-up of carbon and varnish in the vehicle’s engine, and the crusted deposits act as a sponge soaking up fuel and restricting air flow. The results are poor engine efficiency, high stress on critical engine components and higher levels of toxic emissions. The Performa Air Induction Service is entered into the air induction through the Intake Manifold while the vehicle is running using “S” adaptor, enters in the form of a fine mist, safely and effectively removing gum, varnish, soft carbon and other harmful contaminants from the throttle plate, throttle bore, EGR valve and combustion chamber. Recommended every 15,000 km. Cleans butterfly throttle valve and idle air control valve, is safe for all makes and models, improves vehicle performance, improves fuel efficiency, helps to reduce emissions. The overall life of the vehicle’s engine may be prolonged.

If a performance service is carried out where the Air Induction is serviced and then the Valve and Injectors it is highly recommended that an Engine Flush is carried out, this will ensure to eliminate any contaminants or carbon deposits.

Power Steering Flush Machine:

The first sign that there is a problem in a vehicles power steering system is when the steering becomes extremely heavy shortly after the vehicle is started, this is essentially noticeable in cold weather. Power steering operates under high pressure. Contamination and operating temperature affect the fluid. Because of these demanding conditions, power steering fluid can break down and loose its protective lubricating properties, resulting in excessive wear which can lead to hard steering. Power Steering Fluid should be changed at 40,000 km or manufacturer specifications. Historically, power steering system fluid service has been neglected often due to lack of convenient method for providing such a flush or fluid change service. Previous methods for flushing the power steering system or replacing the power steering fluid were difficult, time consuming and often inefficient and incomplete.

Service neglect can lead to power steering system complaints including poor handling, hard or sluggish steering and noise. These complaints can often be attributed to fluids that have thickened due to oxidization, thinned due to viscosity improved breakdown, become contaminated or under-gone performance additive degradation. Fluid that has thickened due to oxidation often results in hard steering when the fluid is cold – this has commonly become known to technicians as “morning sickness”. Once the viscosity of the fluid is broken down this can cause leakage.



The performa power steering fluid exchanger is a quick and effective way of removing and replacing power steering fluid using high performance pumps and plumbing in the design. It has a twenty liter waste tank and portable. It is a 12 Volt DC (direct current) system, which carries out a 95 % fluid exchange.

Power Steering Flush Kit – 11 & 12



The power steering flush will help to break down any contaminants in the system and any such contaminants, deposits and impurities will be removed along with the flush fluid, the conditioner will help to eliminate and prevent noise, helps to prevent and cure steering problems and stiffness (morning sickness), prevents unnecessary wear and tear in the power steering system. **CAUTION: Do not carry out this procedure on a system which is leaking badly as seals may be already broken.**

SMART ENGINE OIL FLUSH MACHINE



The smart engine oil flush machine uses the latest technology, compatible with most vehicles, new flush chemical and 5 micron fibre filter for each flushing cycle. Machine works using high pressure to penetrate all areas of the engine while the engine is not running thus eliminating any possible damage to engine components.

Flushing Chemical – is formulated to safely and effectively remove gum, varnish, sludge and other harmful contaminants from vital engine components.

- Ensures optimum performance of the engine;
- Improves oil circulation;
- Reduces sludge and contaminants, left behind during a conventional oil change;
- Completely cleans petrol engines in 8-10 minutes;
- Extends life span for engine components, ie., valves, pistons & rings;
- Restores vehicle power;

THE PROCEDURES AND ADVANTAGES TO THE SMART ENGINE OIL FLUSH MACHINE

Drain the oil from the vehicle completely.

Remove oil filter. Select suitable adaptor from the Smart Engine Oil Flush Machine adaptor selection and attach to the oil filter seat.

Connect red supply hose to the adaptor.

Select suitable adaptor from the selection and install to the drain plug hole beneath the oil pan.

Connect black drain hose to this adaptor.

Adding Performa Smart Engine Flush Solution to the Smart Engine Oil Machine

Open the filter cap on the solution holding tank on the back of the machine

Add 1 Gallon of the Smart Engine Oil Flush Solution to the tank.

The process of flushing using this machine takes 7 – 10 minutes. The working pressure of the machine is 60 PSI.

Advantages:

- 1.) The flush chemical alone is driven through the engine system using air. Vehicle is not running therefore is not harmful to engine vital parts.
- 2.) Product is SMT 2 Fortified, (Synthetic Metal Treatment) lubricates as it cleans.
- 3.) Dirty oil is not used in this flushing system therefore no extra contaminants. Most other machines use the dirty engine oil + chemical moving any sludge or grime through engines moving parts.
- 4.) No topping up of oil on the vehicle prior to engine flush cycle.
- 5.) Machine has two filters, one which is removed after each flush.
- 6.) Machine is not connected to the vehicles battery, avoiding any possible battery draining or electrical problems or power surges, no danger of damaging ECU.

DIESEL EGR SYSTEM & FUEL RAIL INJECTOR CLEANING



This machine is unique.... It cleans both the intake and the outlet side of the vehicles fuel system. Carbon is the main cause of problems with diesel engines.

Main problems with diesel vehicles occur when:

1. EGR Valve getting fouled;
2. Variable Vein Turbo getting clogged up.

Features of Machine:

- Versatile – connects to all diesel systems;
- No spill or mixing system;
- Easy to use;
- Quick to hook up;
- Hoses with quick couplers and fittings;
- Comprehensive adaptor kit;
- 12V D. C. and shop air;
- 2 Fluid tank;
- No need to replace or remove DPS;
- Pressure regulator;
- Compact design;
- Operations manual.

BEFORE AND AFTER TREATMENT



TURBOCHARGER

- Dissolves carbon deposits to free up turbo's
- Frees up variable vane
- Cleaning turbo fins and improving turbo boost



EGR VALVES

- Cleans EGR valve to eliminate loss of turbo boost



DIESEL INJECTORS

- **Improves fuel economy and emissions**
- **Improves difficult start up on vehicles**



ERG COOLERS

- **Cleans carbon build up which is the major cause of cooler cracking, eliminating coolant seepage**

THE PROCEDURE AND ADVANTAGES OF DIESEL SYSTEM & FUEL RAIL INJECTOR CLEANER

- The machine is connected up to the vehicle fuel system with proper fuel rail hook up;
- The EGR side of the machine is hooked up to the vehicle using the proper adaptors for that specific application;
- The vehicle is then started and actually runs off the machine which is equipped with a 12 V motor and has a regulator to adjust the pressures needed;
- The EGR product which is used to clean the intake and exhaust sides of the system is water based, it dissolves the carbon into a liquid and is then taken through the entire system to clean the EGR, cooler, turbo and also the DPF;
- The main problem with most diesel vehicles is the Variable Vein turbo, the reason for this is it gets clogged up with Carbon until the engine loses Turbo Boost because the Turbo cannot expand and contract as it is designed to do.....;
- This problem is dealt with when doing the exhaust side, as the product dissolves the carbon and frees up the turbo;
- On the intake side, it will be taken through the valves and clean them first, then goes down through the firing chamber to clean it, while at the same time creating steam which goes through the DPF and then out through the exhaust;
- The EGR induction Cleaner is the secret to this process, it is designed to dissolve carbon on contact. There is a rust inhibitor in this solution so as not to harm the engine and its parts;
- This can be demonstrated dramatically to the technician by removing the EGR valve and placing in the solution while the service is running, it will show the technician exactly what the product is doing during the service;
- The Carbon Cleaner is diesel fuel mixed with cleaners, this is circulated through the fuel rails, injectors, and then back through a filter in the machine and back into the vehicle, cleaning at the same time that it is running the engine;
- The Rinse is a mild cleaner which neutralises any trace of the EGR Induction Cleaner;
- Carbon is removed from both sides of the vehicle fuel system

Air Intake Cleaner – 9:



Some other manufactures call a product such as this “Throttle Body Cleaner”. Why is it required to clean the throttle body? What is the throttle body? The throttle body is the part of the air intake system that controls the amount of air flowing into the engine, in response to driver accelerator pedal input in the main. The throttle body is usually located between the air filter box and the intake manifold, and it is usually attached to, or near, the mass airflow sensor. It contains the throttle control plate that opens to control the amount of air flowing into the engine. This should be cleaned out periodically because carbon will build up inside of it causing a poor idle and sluggish performance. Performa Air Intake Cleaner is a high pressurized aerosol with convenient 360 degree spray nozzle, this product will safely and effectively remove gum, varnish and other harmful contaminants from throttle plate, throttle bore and combustion chamber, as this is an aerosol the main difference between this and the performa 7 is that the vehicle cannot be running when an aerosol is being sprayed into the manifold. This product will clean the butterfly throttle valve and idle air control valve, improves performance and fuel consumption.

Brake Cleaner – 10:



This product will quickly and effectively free brake parts from brake dust, grime and brake fluid build-up enabling the brakes to function properly without any mechanical hindrance. Can also be used to safely clean electric connectors, starter motors, alternators and clutch components. No CFCs and CARB approved. This is a non-chlorinated product which evaporates fast, has a low odour, very quick cleaning action and is safe on rubber and plastic parts.

Penetrating Lube - 13



Frees and lubricates rusted and sticking parts. Ideal for automotive, farm equipment, marine and household. Use to start wet engines. Penetrates and lubricates, prevents rust and corrosion, disperses water.

Diesel Fuel Conditioner – 14



This is an advanced formulation which helps stabilize diesel fuel, contains lubricants, detergents, dispersants and fuel flow improvers which will impact the following benefits to the diesel fuel, helps to remove and prevent injector deposits, lowers cold flow properties of diesel fuels by preventing wax build up in the cold weather, excellent dispersing properties for sludge and carbon deposits, provides lubricity to low sulphur diesel fuels, helps to improve fuel economy, reduces emissions and particles from the exhaust reduces exhaust smoke, improves performance (increases power and torque).

Extreme Lube – 17:



Multi-functional formulation can be used to protect and / or lubricate all metal surfaces in the most corrosive environments. Extreme Lube is a silicone, alcohol, Teflon and solvent free. Ideal for extended protection and critical lubrication in hard to reach areas. Extreme Lube has many applications in the automotive, agriculture, aviation, marine and manufacturing industries. Advantages to this product are its water displacement, will not dry out and crack, performs in extreme weather conditions, long lasting adhesive properties, will not evaporate.

Carbon Blaster – 19:



Carbon Blaster is an upper engine cleaner in an easy to use aerosol format which quickly and effectively removes harmful deposits which cause poor performance, knocking and engine run on. Product is oxygen sensor and catalytic converter safe, safe for use on all makes and models. It is designed for use on sluggish engines, purges carbon, gum varnish and sludge from internal parts, improves performance, improves fuel consumption, reduces emissions.