

PROBLEM SOLVING GUIDE

Petrol Petrol and diesel Diesel Cooling Oil Problem solver Problem prevention Problem	Cause	PETROL TREATMENT	PETROL INJECTOR CLEANER	PETROL DETOX PRO	OCTANE BOOSTER	STARTING FLUID SPRAY	NTAKE & COMBUSTION CHAMBER CLEANER	EGR, TURBO & INTAKE CLEANER	DRY FUEL	DIESEL TREATMENT	DIESEL INJECTOR CLEANER	DPF CLEANING KIT	DPF REGENERATION AID	DIESEL DETOX PRO	DIESEL ANTI BACTERIA	DIESEL ANTI FREEZE	RADIATOR SEALER & CONDITIONER	RADIATOR CLEANER	ENGINE FLUSH		MOTOR OIL TREATMENT + MOS2	CERAMIC ENGINE PROTECTOR	HYDRAULIC VALVE LIFTER TREATMENT	BORTEC FRICTION FIGHTER
Poor cold starting	Water contamination in the fuel tank	-	-			<i>√</i>	_	ш	□								LE.	<u> </u>			_			
Tool cold Starting	Carbon build-up on injectors/poor spray pattern	•	~	~		>	~	•	Ť		~			~										
	Deposit build-up in combustion chamber	~	~	>		>	~	•		~	~			~										
	Dirty fuel system and/or carburettor	•	~	>		>	~	•		•	~			~										
	Diesel crystallization								~															
Heavy fuel consumption	Carbon build-up on injectors/poor spray pattern	•	~	>			~	•		•	~			~										
	Deposit build-up in combustion chamber	~	~	~			~	•		~	~			~										
	Dirty fuel system and/or carburettor	•	~	~						•	~			~										
	Contaminated air intake / restricted airflow			•			~	~						•										
	Contaminated / non-functioning EGR system			•			~	~						•										
Poor performance	Carbon build-up on injectors/poor spray pattern	•	~	>			~	•		•	~			~										
, con personnance	Fuel octane rating (RON) below requirement				~																			
	Dirty fuel system and/or carburettor	•	~	~						•	~			~										
	Contaminated air intake / restricted airflow			•			~	~						•										
	Contaminated / non-functioning EGR system			•			•	~						•										
Stalling / Hesitation / Flatspots	Carbon build-up on injectors/poor spray pattern	•	~	>			~	•		•	~			~										
	Deposit build-up in combustion chamber	~	~	>			~	•		v	~			~										
	Dirty fuel system and/or carburettor	•	~	>						•	~			~										
	Contaminated air intake / restricted airflow						~	~						•										
	Contaminated / non-functioning EGR system			•			•	~						•										
Rotten egg smell	Incomplete fuel combustion	~	~	~			•	•		~	~			~										
Pinking & pre-ignition	Fuel octane rating (RON) below requirement			>	~																			
	Deposit build-up in combustion chamber	~	~	~			~	•		~	~			~										
Wear of diesel fuel pump	Low sulphur diesel									~	~			Y										
Diesel knock / Cabin noise	Carbon build-up									~	~			~										
Coolant leaks	Haircracks in cooling system																~							
Inefficient cooling/heating	Contamination build-up in cooling system																	~						
	Insufficient heat transfer via cooling liquid																~	~						
High exhaust emissions	Incomplete fuel combustion, incorrect air/fuel ratio	•	~	~			~	~		•	~			~						_	_			
Blue smoke at start-up	Oil seeping past inlet valves, degradiation of valve stem oil seals																			~	V		~	
Blue smoke when	Worn engine components																				~	~		~
accelerating or changing gear	Oil seeping past piston rings & burning in combustion chamber	•		>			~			•				~					~		~	•		•
White smoke	Water contamination in fuel tank								~															
Black smoke (petrol)	Carbon build-up in injectors / poor spray pattern	•	~	>																				
	Deposit build-up in combustion chamber	~	~	>																				
Black smoke (diesel)	Diesel mixture too rich						~			•	~			~										
	High soot particle emissions						~			•	~			~										
Blue or black smoke	Oil burning in combustion chamber / by-passing piston rings			•			~							•					~		~	~		~
	Oil seeping past inlet valves, degradation of valve stem oil seals																			~	~		~	
Excessive oil consumption	Oil burning in combustion chamber / by-passing piston rings			•			~							•					~		~	~		~
	Oil seeping past inlet valves, degradation of valve stem oil seals																			~	~		~	
Engine oil leaks	Degraded seals in the oil system																			~				
Low compression or oil pressure	Sludge and carbon deposit build-up on piston rings	•	•	~			~			•	•			~					~					
<u> </u>	Engine wear																				~	~		~
Black sludgy oil on dipstick	Sludge and carbon deposit build-up in oil system	•	•	•			•			•	•			•					Y					
Tannot noise / Sticking	New oil contaminates quickly			~			•	•						~					~					
Tappet noise / Sticking hydraulic valve lifters	Lacquer build-up in tappets, valve lifters / lash adjusters			•			~	~						•					~				~	
Top end engine rattle	Engine wear																					~		~
DPF warning light on	High soot loading in filter, regeneration required											~	~	~										
Clogged DPF	High soot loading in filter, no regeneration possible											~	•	•										