

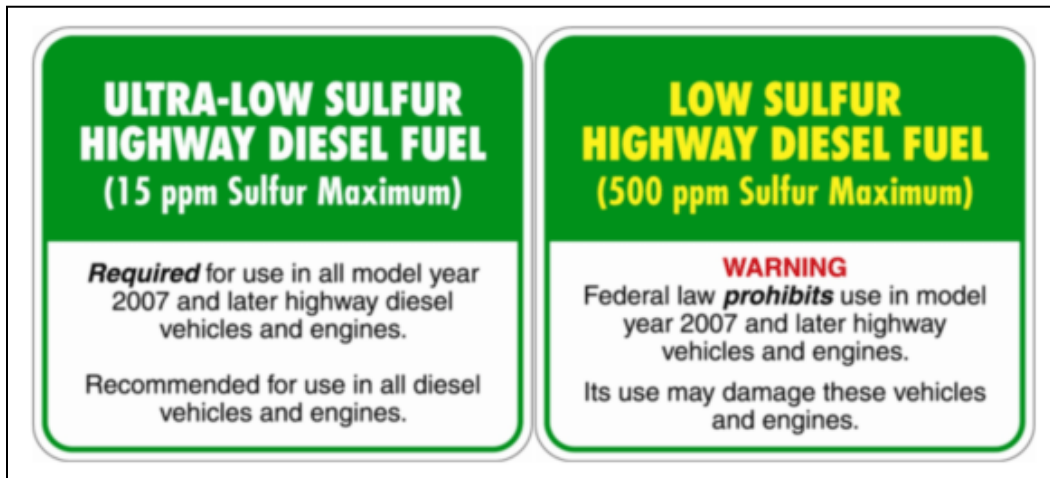
Diesel Fuel Injection

All Diesel Powered Vehicles, New Diesel Fuels / Labels

There will be a new formulation of On-Highway Diesel fuel available. It is referred to as **Ultra Low Sulfur Diesel (ULSD)** and must contain less than 15 ppm (parts per million) of sulfur. It can be identified by a **WHITE** lettered sticker affixed to the Service Station pump. Diesel vehicles built starting in 2007 **MUST** use **ULSD**; however **ALL** Diesel vehicles built prior to 2007 can use it if they choose.

The existing formulation of On-Highway Diesel fuel is referred to as **Low Sulfur Diesel** and must contain fewer than 500 ppm (parts per million) of sulfur. It can be identified by a **YELLOW** lettered sticker affixed to the Service Station pump. Diesel vehicles built starting in 2007 **MAY NOT** use this fuel; however **ALL** Diesel vehicles built until 2006 can use **Low Sulfur Diesel** if they choose.

The stickers will appear as follows:



There will be 3 different timelines for the **ULSD** rollout:

Canada: Starting June 1st, 2006 (refinery level) and continuing until October 15th, 2006 (retail level).

United States (except California): Starting June 1st, 2006 (refinery level) and continuing until October 15th, 2006 (retail level).

California: Starting June 1st, 2006 (refinery level) and continuing until September 1st, 2006 (retail level).

DIECYL PLUS

AUTO-CAMPING LTD
2760 SHEFFIELD RD #9
OTTAWA ONTARIO
K1B 3V9



SPECIALITIES
Diesel additive

DEFINITION

DIECYL PLUS is a multipurpose additive for diesel, specially designed to:

- lubricate injection systems and keep them perfectly clean,
- improve the combustion properties of engine diesels.

USES

For all Diesel engines:

- Pour one measure of **DIECYL PLUS** into the tank for every 25 liters of diesel or
- In storage tanks: use 1 liter of **DIECYL PLUS** for every 500 liters of diesel.

When running in: double the dose.

PROPERTIES

- **DIECYL PLUS** improves the cetane index of diesel oil, giving the following advantages:
 - improves combustion, significantly reducing combustion smoke and is environment-friendly,
 - increases efficiency and therefore provides better performance,
 - reduces Diesel noise and engine vibrations, improving driving flexibility,
 - allows the engine to reach operating speeds faster.
- **DIECYL PLUS** limits the wear of precision injection system components.
- **DIECYL PLUS** dissolves gum deposits present in the injection pump and injectors. It also stabilizes the diesel and prevents the formation of new harmful deposits, thus preventing injector needle blocking.
- **DIECYL PLUS** prevents the formation of carbon around the injector nose; injection angle remains optimal guaranteeing perfect atomization.
- **DIECYL PLUS** aids perfect combustion, prevents the formation of carbon deposits in the piston ring grooves and on valve stems and seats. Piston rings can then move freely in their grooves and valve closing is hermetic.
- **DIECYL PLUS** has anti-foaming properties.

CHARACTERISTICS

DIECYL PLUS	
Color, aspect	Yellow, liquid
Density at 15°C	0,890
Viscosity at 20°C, mm ² /s	1,4
Flash point Cleveland, °C	62
Pour point, °C	-42

The typical characteristics mentioned represent mean values.

TOTAL LUBRIFIANTS
16, rue de la République
92800 PUTEAUX
1/1
April 2004

DIECYL PLUS



This lubricant, when used in accordance with our recommendations and for the application for which it is intended, does not constitute a special hazard
A safety data file conforming to the requirements of current EC legislation is available from your local trade consultant

AUTO-CAMPING LTD.

ROBERT CHARTRAND

OTTAWA

2760 SHEFFIELD ROAD UNIT 9
OTTAWA ONTARIO K1B 3V9

tel: 613.321.1477 fax: 613.321.1480
toll free: 1.866.881.7422

Audi-Volkswagen BMW Mercedes-Benz Volvo

Technical Bulletin



Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
All	1999 - 2007	All with TDI	All	All	All

Condition

Diesel Fuel, Cold Weather Conditioning for Driving at Temperatures below 0°C (32°F)

Poor diesel engine performance in ambient air temperatures below freezing (0°C (32°F)) may be caused by a condition known as diesel fuel clouding (gelling/waxing), a result of improperly winterized/conditioned diesel fuel provided by fuel suppliers.

Water contamination in diesel fuel can also cause similar conditions as the result of ice accumulation in the vehicle's fuel system.

20 07 01 Jan. 18, 2007 2001847 Supersedes T. B. Group 20 number 03-01 due to additional models and model years.

Technical Background

Cold weather diesel fuel conditioner available.

Production Solution

No production change required.

Technical Bulletin



Service



WARNING

When working on ANY fuel system, ALWAYS read and follow Repair Manual CAUTIONS and WARNINGS !



To help prevent this condition from occurring, recommend to diesel powered vehicle owners that a quality diesel fuel winterizer/conditioner be used during winter months. Volkswagen of America, Inc. recommends using Stanadyne™ One Shot Performance Formula All Season Diesel Fuel Conditioner in the correct amount per tank full of fuel as listed below.



Note:

DO NOT use diesel fuel additives containing alcohol! Alcohol WILL NOT address fuel clouding (gelling/waxing) conditions. Using alcohol will damage the diesel injection pump.

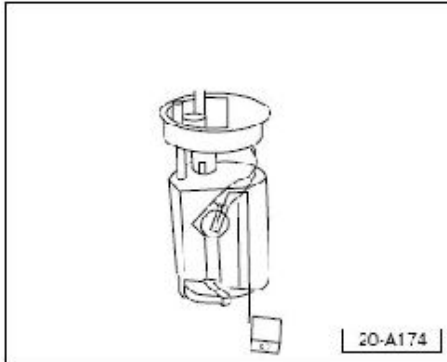
- Add 8 oz. (235ml.) per 15 gallons (60ltr) diesel fuel of Stanadyne™ One Shot Performance Formula All Season Diesel Fuel Conditioner directly to fuel tank. Part No: ZVW340002.



Note:

For vehicles which will be operated at temperatures below -30°C (-22°F) add 12oz. (355ml.) per 15 gallons (60 ltr) of diesel fuel.

To determine if condition is due to diesel fuel clouding (fuel gelling/waxing) or water (ice/ moisture) contamination in the fuel system tank, lines, fuel filter) use the following:



Diesel fuel system, inspecting condition

- Check fuel system for small air leaks i.e. air bubbles in:
Fuel filter (insertion hole of regulator valve out of round)
Fuel lines
- Repair or replace as necessary.

Fuel with water contamination:

If fuel is contaminated with water (ice/moisture):

- Drain fuel system (tank, lines).
- Replace fuel filter.
- Add 8 oz. (235ml.) per 15 gallons (60ltr) diesel fuel of Stanadyne™ One Shot Performance Formula All Season Diesel Fuel Conditioner directly to fuel tank. Part No: ZVW340002.
- Close fuel system, reinstall fuel gauge sensor/fuel reservoir assembly.
- Add new clean diesel fuel from a known winterized source.

Note:

Fuel contamination, which includes water accumulation is not covered by Warranty.

Fuel, clouding

If fuel is clouding (gelling/waxing):

- Close fuel system, reinstall fuel gauge sensor/fuel reservoir assembly
- Allow vehicle to sit indoors long enough to bring fuel temperature up to approx. 13°C (55°F) (may take several hours).
- Remove fuel gauge sensor/fuel reservoir assembly again and observe fuel condition again.

Cloudiness (gelling/waxing) should no longer be seen.

- Add the correct amount (8 oz. (235ml.) per 15 gallons (60ltr) of diesel fuel) of Stanadyne™ One Shot Performance Formula All Season Diesel Fuel Conditioner directly to fuel tank.

Technical Bulletin



 **Note:**

For vehicles which will be operated at temperatures below -30°C (-22°F) add 12oz. (355ml.) per 15 gallons (60 ltr) of diesel fuel.

Fuel conditioning is a result of improperly winterized/conditioned diesel fuel provided by fuel suppliers, and is not covered by Warranty.

- Thoroughly mix the additive with the fuel.

Additive, ensuring distribution throughout fuel system

- Start and run engine approx. 10 minutes to ensure conditioned fuel has circulated throughout the system.

Warranty

Information only.

 **Tip:**

Fuel contamination which includes water accumulation is not covered by Warranty.

Fuel clouding (gelling/waxing) is a result of improperly winterized/conditioned diesel fuel provided by fuel suppliers and is not covered by Warranty.

- Review with your customer, the necessity of obtaining fuel from a known winterized source during colder weather.

Required Parts and Tools

Description	Part No:	Quantity
Fuel Conditioner	ZVW340002*	1

* Call Volkswagen Tools and Equipment Program (EQS), which is Equipment Solutions, at 1-800-892-9650 for product.

No Special Tools required.