

The Cost Waiver Criteria Will Be Uniform in 2011

Effective January 1, 2011, statutory changes to the Wisconsin Vehicle Inspection Program will adjust the waiver repair cost limit to \$788 for vehicles kept in Sheboygan County. This adjustment will bring Sheboygan's repair cost limit to the same level as it is in the other six counties where the program operates.

Sheboygan County has had lower repair cost limits since its nonattainment classification established in 1992 was at a lower level than that for the other six counties. However, ozone levels in Sheboygan County have not improved as much as in the other six counties. Presently, Sheboygan County has the highest ozone levels in the seven-county vehicle inspection program area. Raising the repair cost limit for Sheboygan County to the level used for the other six I/M program counties should enable Sheboygan County to achieve the ozone-pollution reduction goals.

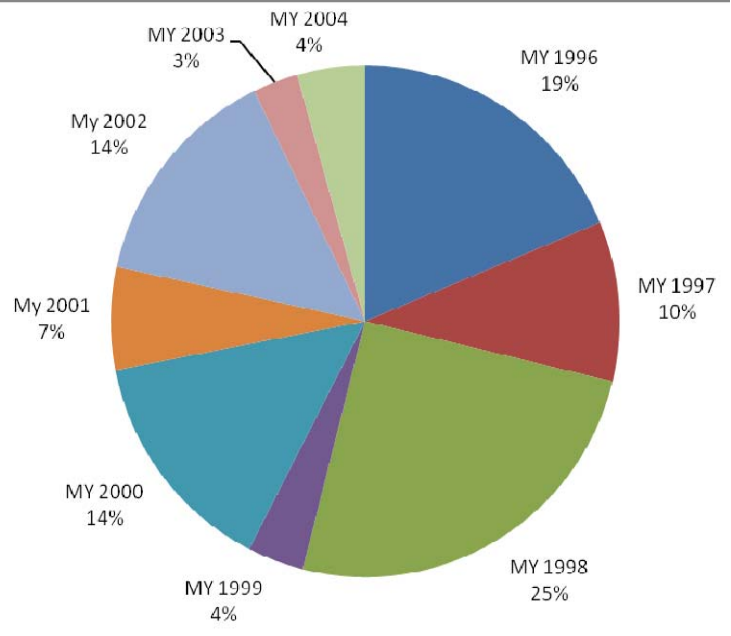
A motorist may request a waiver from further inspection requirements, for the current inspection cycle, if the vehicle fails a second test after repairs. In general, a waiver may be granted if the motorist exceeds the cost limit on emission-related repairs that are made at a recognized repair facility. The waiver repair cost limit excludes emission system warranty repairs and the repair/replacement of tampered emission control devices identified during the equipment check.

A vehicle is eligible for a waiver when the following conditions are met:

1. The vehicle has failed an emissions inspection and following repair and reinspection, it still does not meet test requirements. Repairs made over 180 days prior to the expiration of the license plate cannot be applied to the waiver repair cost limit.
2. The vehicle has passed a waiver emission equipment inspection to determine if emission control equipment is missing, modified or disconnected. The equipment inspection includes the Check Engine Light operating properly during a Key On, Engine Off Inspection.
3. The Vehicle Inspection Reports (VIRs) have been presented to the Waiver Investigator at the time a waiver is requested. The REPAIR DATA section of these reports has been completed in accordance with instructions provided on the report form. Motorists must bring their vehicle and itemized receipts for parts and labor to verify the emission related repairs.
4. Please refer to the blue "Emission Repair Facility Report," for more information on locating a repair facility in your area. **The owner must have emission related repairs performed on the vehicle at a recognized repair facility to qualify for waiver consideration.**
5. The actual costs of emission related repairs and adjustments exceed the repair cost limit. Only repairs that are related to the vehicle's cause of failure can be used to apply for a cost waiver. Costs covered by any warranty or costs to repair/replace emission control equipment that has been removed, modified or disconnected are excluded.
6. Effective for calendar year 2011, the repair cost limit is \$788 for all counties of the inspection program. This figure is adjusted annually by the DNR per NR 485.045.

Waivers Issued In 2009 By Model Year

In 2009, there were 139 cost waivers issued. The following chart illustrates the cost waivers granted in 2009 by model year. Since even model year vehicles were tested in 2009, they account for the majority of the waivers.



Let's Be Specific About Generic OBD Communications

Some of you have probably encountered a vehicle that comes to your repair facility for repairs after it has been rejected for non-communications at the test station. You take your manufacturer specific scanner, plug into the vehicle and it communicates just fine. What seems to be occurring?

To answer that question, let's first look at how the vehicles are tested at the Wisconsin Vehicle Inspection Stations. The test station utilizes PIN 5, the signal ground, as opposed to PIN 4, which is the chassis ground. Many OEM scan tools use PIN 4. If PIN 5 is not working properly, this would affect communications to the test station's equipment. This may be as simple as PIN 5 backing out or not seating properly in the vehicle's Diagnostic Link Connector. It is also important to note that if a vehicle has been rejected for non-communications, it was actually tested two times on different test equipment at the station prior to issuing a reject test result.

If a vehicle is talking to you but not the test station, you'll need to verify power on PIN 16 and the ground on PIN 5. The results of those tests will probably answer your questions regarding the inability of the vehicle to communicate with the test lane's computers.

Even if a vehicle's communications can be established, a vehicle can still be rejected for unset monitors. Vehicles are unable to be tested if the following number of monitors are not set:

- ◆ Model Years 1996—2000: over 2 not set,
- ◆ Model Year 2001 and newer: over 1 monitor not set

It's More Than Just A Light On The Dashboard

Occasionally, we get phone calls from motorists who are surprised that their vehicle has failed the inspection or were disqualified for a waiver due to a burnt out check engine light (MIL).

During the vehicle's inspection, the light is tested during a Key On, Engine Off (KOEO) procedure. If the Check Engine Light does not illuminate when the key is turned to the on position while the engine is off, the vehicle fails that portion of the inspection.

What makes this Check Engine Light so important? Every vehicle manufactured in the U.S. has to first pass an Environmental Protection Agency (EPA) test called the Federal Test Procedure (FTP). This sets the acceptable limits of wear and/or failure for the emission control system. This also defines what conditions will ultimately cause a Check Engine Light to illuminate. If the emission control system is faulty and the vehicle is polluting the air (1.5 times the FTP emission standard), the Check Engine Light illuminates to alert the driver of this condition. Without a properly working Check Engine Light, the early warning system to alert motorists of a potential problem is broken.

It can be argued that the check engine light is one of the most important emission control components on their vehicle. Without it working properly, motorists may be unaware of potential problems with their vehicle's emission control components. Additionally, the Check Engine Light needs to function properly before the vehicle will pass an inspection or qualify for a waiver.



Most Common Diagnostic Trouble Codes (DTCs) Associated with MIL Commanded On Failures In 2009

The following table illustrates the 10 most common trouble codes present on vehicles failing the inspection in 2009. Some vehicles failed for multiple DTCs.

DTC	DTC Description	Total #	Percentage
P0420	Catalyst System Efficiency Below Threshold (Bank 2)	4,630	6.6%
P0171	System Too Lean (Bank 1)	3,976	5.7%
P0401	Exhaust Gas Recirculation Flow Insufficient	3,233	4.6%
P0300	Random/Multiple Cylinder Misfire Detected	3,082	4.4%
P0442	Evaporative Emission Control System Leak Detected (Small Leak)	3,041	4.4%
P0440	Evaporative Emission Control System Malfunction	2,394	3.4%
P0133	Oxygen Sensor Slow Response (Bank 1, Sensor 1)	2,263	3.2%
P0141	Oxygen Sensor Heater Circuit Malfunction (Bank 1, Sensor 2)	2,257	3.2%
P0455	Evaporative System Leak Detected (no purge flow or large leak)	1,651	2.4%
P0135	Oxygen Sensor Heater Circuit Malfunction (Bank 1, Sensor 1)	1,460	2.1%
P0102	Mass or Volume Air Flow Circuit Low Input	1,335	1.9%

Technical Assistance Centers

When a vehicle is repaired at a shop with emission-trained technicians and still fails a reinspection, the motorist may take it to one of two program-operated Technical Assistance Centers (TACs). Appointments are made through the emission testing facilities.

The TACs are staffed by master technicians who can assist in identifying the causes of excessive vehicle emissions. While the master technicians provide free vehicle diagnostic services, they do no repair work. They share diagnostic analysis results with the motorist, who may pass them on to a hired repair technician. Additional repairs can then be performed and the vehicle returned to a station for reinspection.

A study was conducted in 2009 to evaluate the use of the Technical Assistance Centers in an OBDII only inspection environment. The objective of this study was to determine overall utilization level of technical assistance resources, utilization levels of specific modes of assistance, and outcomes of vehicles subject to various modes of technical assistance.

The study evaluated the diagnostic appointments between July 1, 2008 – June 30, 2009. There were 713 documented appointments used to service 630 unique vehicles between the two TACs

The following table summarizes reasons recorded for the documented appointments. The increase in TAC activity beginning in March 2009 was a direct result of outreach efforts at the inspection facilities to refer motorists whose vehicles received a "REJECT" inspection result to a TAC for assistance.

**Reasons for Technical Assistance Center Appointments
July 1, 2008 – June 30, 2009**

Month	DTCs	Monitors	Non Com	Other	Repair Validation	Retest	Test	Total	% of Total
Jul-08	11	8	4	2	6	2		33	4.60%
Aug-08	11	14	4	2	6	2		39	5.50%
Sep-08	17	13			2			32	4.50%
Oct-08	19	21		3	5	1		49	6.90%
Nov-08	9	19			3			31	4.30%
Dec-08	13	10	2	2	2			29	4.10%
Jan-09	15	21	2	3	7	1	1	50	7.00%
Feb-09	15	31	1		2		1	50	7.00%
Mar-09	28	51	4	3		2	2	90	12.60%
Apr-09	31	89	8	2	5	1		136	19.10%
May-09	36	57	8	3	1		1	106	14.90%
Jun-09	12	52	3	1				68	9.50%
TOTALS	217	386	36	21	39	9	5	713	100.00%

While not part of the TAC Study, the following chart illustrates the activity by appointment categories for July-December 2009. Readiness monitor issues continued to be the leading issue for motorists requesting Technical Assistance Center diagnostic services.

**Reasons for Technical Assistance Center Appointments
July 1, 2009 – December 31, 2009**

Month	DTCs	Monitors	Non-Com	Other	Repair Validation	Retest	Test	Total	% of Total
Jul-09	22	52	1	15	0	9	1	100	20.04%
Aug-09	18	49	6	11	0	7	0	91	18.24%
Sep-09	18	30	4	6	0	9	0	67	13.43%
Oct-09	28	43	7	8	2	1	0	89	17.84%
Nov-09	22	40	7	8	0	3	0	80	16.04%
Dec-09	29	32	1	10	0	0	0	72	14.03%
TOTALS	137	246	26	58	2	29	1	499	100.00%

Upcoming Holiday Schedule

The Wisconsin Vehicle Inspection Program Facilities Will Be Closed During The Following Holidays:

2010 Holidays Last Quarter

Friday, December 24	Christmas Eve Day
Saturday, December 25	Christmas Day
Friday, December 31	New Year Eve's Day

2011 Holidays First Quarter

Saturday, January 1	New Years Day
Monday, January 17	Martin Luther King Day

The WIVIP Analyzer

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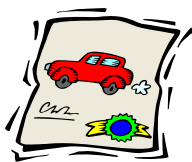
The WIVIP Analyzer is published by the Wisconsin Department of Transportation, Division of Motor Vehicles, Bureau of Vehicle Services, Inspection/Maintenance Unit. Inquiries may be directed to Joe Paulick, c/o the Wisconsin Vehicle Inspection Program, 1001 W. St. Paul Ave, Milwaukee WI 53233(1-414-881-6241) or Joseph.paulick@dot.wi.gov

www.wivip.com

The information contained in this publication is for information purposes only.

Training Classes

As an ongoing service to the repair industry, The WIVIP Analyzer will publish a list of private and public training centers that offer courses in automotive repair technology.



The following is just a sampling of training courses available to you. The WIVIP Analyzer is not recommending any specific course and would encourage you to contact us at 414-358-3905 if you are aware of other training opportunities.

Ken Dotzler
Horizon Center
4940 88th Street
Kenosha, WI 53144
262/770-1713

Joe Paulick WisDOT
414-881-6241

Other Training

Tim Houghtaling
Automotive Seminars Inc.
800/450-0402

Wells Technical Services
Wells Manufacturing Corporation
920/929-6258
Technician Hotline (Free)
1-800-558-9770 Press 3

WISETECH Providers

Margie Stewart
Milwaukee Area Technical College
5555 West Highland Road
Mequon, WI 53092
262/238-2449

Automotive Organizations In Southeastern Wisconsin

If you are interested in becoming involved in an automotive organization, the following contact information is found below:

Organization	Contact Info
Automotive Technicians of Southeastern Wisconsin (ATSEW)	Dennis Dalton, President 719 Grand Avenue Racine, WI 53403 262-459-8676
Wisconsin Auto Testers (WATS)	Rick Gilmore, President (414) 774-8863 watseminars@gmail.com wiautotech.com
Automotive Dealers of Mega Milwaukee (ADAMM)	10810 W Liberty Drive Milwaukee, WI 53224 414-359-9000 Adamm.com
Wisconsin Auto and Truck Dealers Association (WATDA)	105 E Gilman, Suite A PO Box 5345 Madison, WI 53705-0345 608-251-5577 Watda-info@watda.org

Automotive Related Websites

WWW.CCAR-GREENLINK.ORG
WWW.I-ATN.COM
WWW.AUTO-TALK.COM
[WWW.SAE.ORG/ABOUT/PROGRAM OFFICES/STPO.HTM](http://WWW.SAE.ORG/ABOUT/PROGRAMOFFICES/STPO.HTM)
WWW.ASTTRAINING.COM

Wisconsin Technical Assistance Hotline

414-358-3905
800-335-5088

Technical Assistance Center Hours:

M, T, Th Fr: 8:30 am—5:30 pm
Saturday: 8:00 am—12:00 noon

Inspection Station Hours:

M, T, Th Fr: 8:30 am—5:30 pm
Saturday: 8:00 am—1:00 pm
Closed Wednesdays, Sundays and State Holidays