Dräger safety

DRAEGER INTERLOCK° XT



User Manual

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Safety

For correct and effective use of the described instrument, it is essential to read and strictly follow the instructions contained in this document. The described instrument is to be used only for the purposes specified herein.

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Maintenance

Repairs of the described instrument may only be performed by Draeger Safety Diagnostics, Inc., or an authorized service technician.

Only original Draeger spare parts may be used.

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OVERVIEW

What does the Draeger Interlock do?

NOTE: BAC = Breath Alcohol Concentration

- It allows you to start your vehicle when you blow a breath sample without alcohol.
- Use it correctly and you can continue to drive your vehicle.

How does it work?

- The system measures and records your BAC level before you start your vehicle. When your BAC level is below the set limit, your vehicle will start. If your BAC level is too high, your vehicle will not start.
- The system will also require you to submit additional breath tests while you drive.
- The Interlock records all BAC readings, vehicle starts, engine shut-offs, violations, etc., as well as the date and time of each event. A computer records these events each time you go to the service center for a service check.

Does the device have to be serviced after installation?

- Yes! The Interlock will indicate when service is due. You will not be able to start your vehicle if you do not have the device serviced as required.
- Make sure you get the device serviced as required. See back inside cover for your service requirements.

IMPORTANT DO'S AND DONT'S

Leave the tamper-evident label in place. Any attempt to remove the label is a violation!

WARNING

- For correct operation of the Interlock:
 - DO keep the unit clean and dry at all times.
 - DO use a clean, dry mouthpiece when providing breath tests.
 - DO contact your Service Technician with any questions or concerns.
 - DO NOT consume alcohol, use alcohol-based products (such as mouthwash), or smoke for 15 minutes before using the Interlock. Alcohol remaining in the mouth shortly after drinking can produce high readings.
 - DO NOT place the Interlock unit on the vehicle floor. If the device is not secured, it may interfere with the pedals and the safe operation of the vehicle.
 - DO NOT use the Interlock while driving if you are at all unsure about your safety. If you are asked for a breath test while driving, you will have enough time to pull over, stop the vehicle and present the breath test.
 - DO NOT attempt to disable the Interlock, or fail to undergo a proper Retest. This will shorten the service interval and these actions are recorded in memory.
 - DO NOT tamper with, abuse, misuse and/or neglect the Interlock device.

USING THE INTERLOCK

Turning on the System:

- Put out your cigarette (if applicable) and remove chewing tobacco, candy, gum, or any other food product from your mouth.
- Always use a clean, dry mouthpiece.
- Make sure the mouthpiece is inserted properly as shown in Figure 1.
- Insert key into the ignition switch.
- Turn key to the "ON" position (usually two clicks).
 Turn key back to the "OFF" position.
 The Interlock will display "Warming Up PLEASE WAIT" on the screen as shown in Figure 2.
- When the Interlock is ready for the BAC test, it will display "Ready for Test PLEASE BLOW" on the screen as also shown in Figure 2 and the yellow light will flash.

TURNING ON THE SYSTEM



TAKING A BREATH TEST

At the "Ready for Test - PLEASE BLOW" prompt, take a few normal, even breaths, then....

- Take a deep breath and put your lips around the mouthpiece.
 DO NOT smoke
- Provide a steady blow into the mouthpiece (exhaling normally) during a breath test.
- As you blow into the Interlock, the buzzer will sound. This means you are blowing correctly, so DON'T STOP.
- When the buzzer sound stops (you may hear a "click"), give an immediate short, sharp suck back.
- Do not pause between the blow and the suck back.

NOTE: If you turn the vehicle's key to the "**ON**" position just to get enough power to roll up your window (with no plan to drive) and you see "**PLEASE BLOW**", you do not need to take the test. Simply turn key to the "**OFF**" position. The initial test will be aborted. Keep the handset at least 12" from radio, cell phone or pager.

The Interlock will display "Test Passed" or "TEST FAILED" if the blow pattern was correct.

<u>TEST PASSED:</u> If little or no alcohol is detected in the breath test, the message "**Test Passed**" will appear (Figure 3). The vehicle will now start.

<u>TEST FAILED</u>: If alcohol is detected in the breath sample, the message "**TEST FAILED**" will appear (Figure 4). The vehicle will not start.





WHAT HAPPENS IF I FAIL THE BREATH TEST?

- If the screen shows "**TEST FAILED**" after the breath test, the vehicle will not start. The screen will then display a countdown of the time before another breath test can be taken.
- If the alcohol content of your breath was very high, the device may be disabled (temporary lockout) longer.
- Once the temporary lockout has been completed, return the ignition key to the "**ON**" position. The device will prepare for another test.
- When the yellow light starts flashing and the display shows "Ready for Test PLEASE BLOW", try the test again.

NOTE:

Do not use mouthwash or any product containing alcohol for 15 minutes before testing. Repeated failed tests may also result in the device going into "**Temporary Lockout**".

TEMPORARY LOCKOUT

What happens if the device goes into the "Temporary Lockout" mode before I start my vehicle?

- If you failed your breath test, the Interlock may enter the "Temporary Lockout" mode.
- The display will show you how much time (hours, minutes and seconds) remain in the "Temporary Lockout" period as shown in Figure 5. The red LED light will also be on.
- After the "**Temporary Lockout**" is over, the device will turn itself off. If you want to try another breath test, turn the ignition key to the "**ON**" position.



PROBLEMS WITH THE BREATH TEST (Figure 6)

Blow Longer

- If you hear beeping during a test, stop and look at the display.
- **"Blow longer!**" means that you did not blow long enough.
- The red light will flash.
- Press the **OK** button and the Interlock will prepare to test again.
- Take the test again and blow until the buzzer stops sounding.

Blow Stronger

- If you hear beeping during a test, stop and look at the display.
- "Blow stronger" means that you need to blow harder.
- The red light will flash.
- Press the **OK** button and the Interlock will prepare to test again.
- Take the test again and blow a little harder.

Suck after Blow

- If you hear beeping during a test, stop and look at the display.
- "Suck after Blow" means that you did not do the suck back correctly.
- The red light will flash.
- Press the **OK** button and the Interlock will prepare to test again.
- Take the test again.









ROLLING RETEST

What is a Rolling Retest?

To make sure you stay sober while driving, the Interlock requires you to take additional tests while you drive. You must give additional breath tests at random intervals – perhaps several times before you turn off your vehicle. (See back cover for how often you will take the Retest.)

- When the Interlock prompts for a Retest, you will hear a beep and the yellow light will flash.
- The Interlock will display "Retest required PLEASE BLOW".
- Take the breath test exactly as you do when you start your vehicle.
- Give the Retest within the specified time.
- When you see "**TEST PASSED**", put the device back on the Hook and Loop Tape and continue your trip.
- The "Drive Safely!" message will return to the display and remain on the display for the duration of the trip or until the next random Rolling Retest.

What happens if I just turn my vehicle off during the Retest?

- Once the device asks for a Retest, you must take the Retest.
- A violation will be recorded if you don't take the Retest in the time allowed.

What happens if I don't hear the Retest prompt?

- At certain times, the Interlock's buzzers will start beeping continuously to alert you.
- To stop the buzzers, press the **OK** button and take the Retest.

What happens if I don't take the Retest in time?

- The message "Retest VIOLATION" will be displayed.
- The Interlock's buzzers will beep continuously.
- The vehicle's horn may repeatedly honk and/or the headlights may continuously flash.
- You must pass the Retest or turn off the vehicle in order to deactivate the horn and/or lights.

REMEMBER

You have several minutes to take the Retest. If you are in heavy traffic or on a dangerous section of road, wait to take the test until you can safely follow correct testing procedures. For safety reasons and certain road laws, you may choose to pull over at the Retest prompt, and park the vehicle off the road (away from traffic in a safe position). Leave the motor running during the Retest.

What happens if I fail the Retest?

- Don't panic! Make sure your mouth and vehicle are free of alcohol vapors and smoke.
- If the alcohol level was low, the device will automatically start another Retest. When you see "**Retest Required - PLEASE BLOW**" and the yellow light is flashing, take the breath test as before.
- If the alcohol level was high, the device may go into the "**TEMPORARY LOCKOUT**" mode. If you see "**TEMPORARY LOCKOUT**", you must pull over and turn the engine off. Wait for the "**TEMPORARY LOCKOUT**" timer to count down, then take the breath test again.

SERVICE REQUIRED

The Interlock:

- Must be serviced periodically. (See inside back cover to see how often you need to bring the vehicle back to the service location so that the Interlock can be serviced).
- Will remind you of an upcoming service appointment after you switch the ignition key to the "**ON**" position.
- Will display "Service Required in XX day(s)" a few days before your next appointment. You will see it each time you switch the ignition key to the "ON" position to begin an initial test. If you see this message and you have not made an appointment for service, call your technician to make your appointment.
- Will remind you before it locks out permanently.
- Will display "Service Lockout in 1 day" on the last day before it disables the vehicle for lack of service.

NOTE:

The message "Service Lockout in 1 day" means that the device will lock out at 12:00 AM (midnight). You MUST have the device serviced that day or else you will be required to have your vehicle towed to the service center at your expense.

SERVICE REQUIRED

You must take your car to the Service location:

- When Service is required.
- When the device displays "Service Lockout".

The Service Provider will collect the stored information and:

- Log the odometer reading.
- Inspect the Interlock for evidence of tampering.
- Check the wiring and connections.
- Calibrate the Interlock at the State- or Manufacturer-specified interval.
- Schedule your next appointment.

VIOLATION RESET

The Interlock is programmed to require servicing earlier than usual if it detects violations. "VIOLATION RESET" might be caused by:

- A failed Breath Alcohol Test.
- A skipped Retest.
- A failed Retest.
- Tampering with the Interlock.
- Trying to circumvent the Interlock.

If you see "Service Lockout in XX day(s)", and you know that you are more than about a week from your next appointment, you should contact your Service Provider and make an appointment for service.

IMPORTANT

The device will lock out permanently if not serviced when required and you will not be able to start your vehicle.

LOCKOUT RESULTING FROM MISSED SERVICE

What happens if the Interlock locks out from lack of service?

• If you do not get the device serviced, it will go into permanent lockout. When you try to start your vehicle, you will see "**Service Lockout**" (Figure 7).

If the device is in permanent lockout, you must:

• Tow the vehicle to the Draeger-authorized service location of your choice at your expense.



PROPER INTERLOCK CARE

Keep it dry

- Like a radio or cellular phone, the Interlock cannot work properly when it is wet.
- Keep the Interlock on the Hook and Loop Tape attached to you car interior console.
- Make sure your windows are always closed when you are away from your vehicle.
- DO NOT spill anything onto or into the Interlock.

If you spill something onto or into the Interlock, contact your service technician immediately. DO NOT turn the key to the "ON" position to start a breath test.

NOTE: You must pay the costs to replace or repair the Interlock if it gets wet.

Exterior Care

- Use a lightly dampened cloth to wipe off dirt if the outside of the Handset becomes dirty.
- Never use a cleaner or soap on the Handset.
- For a very soiled or dirty Handset, request that the service technician clean it for you at your next Service appointment.

Misuse, Abuse and/or Neglect

- Take care of the Interlock while it is in your possession.
- Treat the Interlock as you would a cellular phone or other portable electronic device.
- Always place the Handset on the Hook and Loop Tape when not in use.
- You will be held liable for damage for which the Service Provider, Service Technician or Manufacturer believes has been caused by misuse, abuse and/or neglect of the Interlock.

DISCONNECTING THE HANDSET (Only if and when Pre-approved)

IMPORTANT

With authorization only, you may be instructed to remove the handset only when temperatures are extreme. The handset must not be disconnected while driving, or while the interlock is requesting a retest. If the Handset is disconnected at these times, it will result in a Violation.

Extremely cold temperatures can increase the time for the Interlock device to allow a breath test. To lessen wait times in extremely cold temperatures, the handset should be disconnected and taken out of the car. The Interlock should be placed in a location where the temperature is roughly room temperature.

In extremely hot temperatures, the unit may not start until it is cooler. Therefore, if approved, you must temporarily remove the handset from the vehicle and place it in a location where the temperature is roughly room temperature.



To remove the Handset from the vehicle, unplug the modular plug cable that is located at the bottom of the handset by pressing down on the lever and gently pulling the cord out of the handset.

Figure 8 Disconnecting the Handset

VEHICLE MALFUNCTIONS OR REPAIRS AND WHAT TO DO

Charging a dead (flat) or weak battery

Your interlock will detect a loss of power. Document the date and time that the battery went flat. Give this information, in writing (on an 8 1/2 x 11" sheet of paper) to the technician. If the battery really should be replaced, purchase a new battery and replace it on the same day.

Remove both the positive and negative terminals from the battery. Consult a manual of the vehicle battery charger for the correct method of charging the battery.

Disconnecting Battery

Your interlock will detect a loss of power. Document the time and date that you disconnected your battery and the reason. Give this information in writing (on an 8 1/2 x 11" sheet of paper) to the technician. Make copies of all receipts for parts purchased to make a repair or add a component to your vehicle. Give the copies to your interlock technician.

Replacing Battery

Your interlock will detect the loss of power. Purchase a new battery and replace it on the same day. Give a copy of the receipt to the technician at your next appointment.

NOTE:

If you are replacing a battery yourself, bring a copy of the receipt for the purchase of the battery to your next monitoring appointment. Documentation is required. Do not move a battery from one vehicle to another. Give this information in writing (on an 8 1/2 x 11" sheet of paper) to the technician. If an automotive repair facility replaces the battery, bring a copy of the full receipt for the charges (parts and labor) to your next appointment.

Body Work

It is your responsibility to keep the interlock clean. Cover the handset with a clean sock or towel while the vehicle is in the body shop. If your vehicle will be in the shop for an extended amount of time, you may be advised to seek authorization from your monitoring agent for a temporary disconnect of the interlock. Ask the body shop to contact the Draeger Safety Diagnostics technician for instructions.

VEHICLE MALFUNCTIONS OR REPAIRS AND WHAT TO DO

REMINDER:

Do not leave the key in the ON position for the initial test. Wait for "Free start time:" DO NOT start the car on "PASSED". If you start the car and the handset does not display "Drive Safely!", turn off the vehicle, count to five, and then start the engine again while revving the engine a little. Make sure "Drive Safely!" is going across the screen before driving off.

Vehicle Service Maintenance (minor services, such as oil change) Please stay with the vehicle for this type of quick service. Ensure that alcohol-free solvents are used in your vehicle. If not, be sure the vehicle is aired-out before you take an initial test.

Vehicle Service (major repairs, including replacing alternator, starter and starter relay) Ask the automotive technician to contact the Draeger Interlock technician for instructions. Ensure that alcohol-free solvents are used in your vehicle. If not, be sure the vehicle is aired-out for at least 15 minutes before you take an initial test.

If your vehicle repairs take more than a few days, you may be required to make up time on your interlock program.

DISPLAYED MESSAGES



The DRAEGER INTERLOCK[®] XT device installed in your vehicle is programmed as follows:

- The device must be serviced every days.
- The vehicle will continue to operate for _____ day(s) after the above service period. During these last few days, you will see the message "Service Lockout in XX days", where xx is the number of days until the device renders the vehicle inoperable. When you see "Service Lockout in 1 day", that means the vehicle will stop working at midnight that night. You must make immediate arrangements to have the device serviced. If the vehicle stops working because you did not bring it in for service as required, it will be your responsibility to tow the vehicle into the service center at your expense.
- The device will display "Failed" and temporarily disable the vehicle when there is alcohol present in the breath sample.
- If you fail ______ test(s) in a row, the device will enter the Lockout period.
- The **First Lockout** period is _____ minutes long. After this time has expired, you may try the test again.
- If you fail another _____ test(s) in a row, the device will enter the **Second Lockout** period for _____ minutes. After this time has expired, you may try the test again.
- The High Bac Lockout period is _____ minutes long.
- If you do the test incorrectly _____ times in a row, the device will enter the First Lockout period. After this time has expired, you may try the test again. If you do the test incorrectly another few times, it will enter the Second Lockout period. After this time has expired, you may try the test again.
- You have _____ minute(s) to start the vehicle after you pass the breath test.
- The device will ask you for the first Retest ______ to _____ minutes after you start the engine. After that, the device will ask you for other Retests every ______ to _____ minutes.
- You have _____ minute(s) to pass the **Retest**. Failure to pass a **Retest** within this time will result in a **Violation** and, if the engine is running, honk the horn and/or flash the headlights as well.
- If your vehicle stalls or you turn it off, you may restart it within _____ minute(s) without having to pass another breath test.
- The device will enter the Violation Reset mode after ______ violation(s). If not serviced within _____ day(s), your vehicle will become disabled. You will see only "Service Lockout" displayed on the Interlock.

CONTACT INFORMATION

For appointment information, please call	

Your Program Number is	Please have this number available whenever you
call your Service Provider.	

For emergencies only, please call ______ to page a service representative. Please allow up to 45 minutes for the call to be returned. Do not block unknown telephone numbers on your telephone line.

Remember:

- Before you page a service representative, please make sure you know exactly which message is being displayed on the Interlock. If necessary, write the message down and take it inside with you so it will be handy when the call is returned.
- After you page, please stay off the line until the call is returned.
- Do not page multiple times within 45 minutes.
- Most pay phones will not accept incoming calls.
- If your telephone will not accept calls from phones whose number is blocked, you must temporarily disable this feature in order for your call to be returned.