DRAEGER INTERLOCK®

IGNITION INTERLOCK SYSTEM

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, Inc., Breathalyzer Division, or an authorized service technician.
Only original Draeger spare parts may be used.
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OVERVIEW

What does the Draeger Interlock do?

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

How does it work?

• The Interlock device 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 Interlock device will also ask you to blow other 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. These events are uploaded each time you go to the service center for monitoring.

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 page 17 for your service requirements.

FOR YOUR SAFETY

Do

• Read and follow all instructions on using and caring for the device.
• Contact your Service Technician with any questions or concerns.
• Avoid products containing alcohol.

Don't

• Tamper with the Interlock device.
• Misuse, abuse, and/or neglect the device.
• Try to fix or repair the Interlock device.

NOTE:

BAC = Breath Alcohol Concentration

WARNING

Leave the tamper-evident label in place. Any attempt to remove the label is considered non-compliance with the Interlock Program!
USING THE INTERLOCK

TURNING ON THE SYSTEM

- Insert key in the ignition switch.
- Turn key to the "ON" position (usually two clicks). Turn key back to the "OFF" position. The Interlock will display "WAIT" on the screen as shown in Figure 2.
- When the device is ready for the test, it will display "PLEASE BLOW" (Figure 2) and make a fast beeping noise.
- Push a clean, dry mouthpiece in all the way (Figure 3).
- Align the notch of the mouthpiece with the groove on the handset (Figure 3).
TAKING THE BREATH TEST

At the "PLEASE BLOW" prompt, take a few normal, even breaths, then...

- Remove chewing tobacco, candy and gum from your mouth.
- Remove the Interlock from its holster or storage area.
- Breathe evenly and normally for three full breaths.
- Take a deep breath, filling your lungs to nearly full and put your lips around the mouthpiece.
- Give a short, sharp suck back (less than a half second), then an immediate steady blow into the mouthpiece.
- Do not pause between the suck and the even blow.
- As you blow into the device, it will make a fast beeping noise. This sound means you are blowing correctly, so DON'T STOP.
- When the fast beeping stops, the test is over and you can stop blowing.

NOTE:
If you turn key to the "ON" position just to get enough power to roll up your windows, etc. and you see "PLEASE BLOW", you do not need to take the test. Simply turn key to the "OFF" position.

TEST RESULTS

The Interlock will display "PASSED" or "FAILED" if the blow pattern was correct.

PASSED: After a test with no alcohol is detected, the "PASSED" message is replaced with OK START. Wait until you see "OK START" before you start the vehicle. When you turn the key, you will see CRANKING, followed by a scrolling dot.

NOTE: You have at least a minute to start the vehicle after passing a breath test. If you do not start the vehicle within that time, you must pass another test.

NOTE: If the device message remains on "OK START", turn off the vehicle and restart it. An engine run is indicated by a scrolling dot.

FAILED: After a test with alcohol is detected in the breath sample, the device shows "FAILED". The vehicle will not start.

NOTE: You must not smoke during a breath test.

Trouble with the blow pattern? See page 12.

You have at least a minute to start the vehicle after passing a breath test. If you do not start the vehicle within that time, you must pass another test.

If the device message remains on "OK START", turn off the vehicle and restart it. An engine run is indicated by a scrolling dot.
WHAT HAPPENS IF I FAIL THE BREATH TEST?

- If the screen shows "FAILED" after the breath test, the vehicle will not start. The word "DISABLED" will flash on the screen for the number of minutes set in your program. If the alcohol content of your breath was very high, the device may be disabled for longer.

- Return the ignition key to the "ON" position and then turn it back to the "OFF" position. The device will prepare for another test as soon as possible. BE SURE TO TAKE ANOTHER TEST!

- When the device starts beeping fast and displays "PLEASE BLOW", try the test again.

NOTE:
- Do not use mouthwash or any product containing alcohol for 15 minutes before testing.
- Repeated failed tests could result in the device going into "LOCKOUT".
- Do not have food in your mouth while presenting a breath test.

LOCKOUT

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

- If you FAILED your first tests, wait a few seconds after seeing "LOCKOUT" followed by "DISABLED" on the display (Figure 5).

- The display will show you how many minutes and seconds remain in the LOCKOUT period. Plan to take another test.

- During the countdown, the word "DISABLED" will alternate with the remaining time on the display.

- After the LOCKOUT is over, the device will turn itself off. Take another breath test. Turn key to the "ON" position and then off again. Wait for "PLEASE BLOW".

Figure 5
Lockout Mode
**PROBLEMS WITH THE BREATH TEST**

**TOO SOFT**
- If you hear two (2) long beeps during the test, stop and look at the display.
- "TOO SOFT" means that you did not blow hard enough or long enough.
- The Interlock will automatically prepare for the next test.
- Take the test again and blow a little harder or longer.

**TOO HARD**
- If you hear two (2) long beeps during the test, stop and look at the display.
- "TOO HARD" means that you blew too forcefully.
- The Interlock will automatically prepare for the next test.
- Take the test again and blow a little softer.

**SUCKBLOW**
- If you hear two (2) long beeps during the test, stop and look at the display.
- "SUCKBLOW" means that you did not do the suck-portion of the breath test correctly.
- The Interlock will automatically prepare for the next test.
- Take the test again.
- Remember: The suck portion of the BAC test should be very short (See page 6).

**ROLLING RETEST**

**IMPORTANT:**
A Rolling Retest is required by your State. 
The time interval is set by your State.

What is a Rolling Retest?
The Interlock program requires that you take additional tests during the journey. You must give additional breath tests at random intervals - perhaps several times before you turn off your vehicle.

The Rolling Retest is easy to do:
- When the Interlock prompts a retest, it will make a fast beeping sound.
- The Interlock will display "RE-TEST REQUIRED" twice, then "PLEASE BLOW".
- Take the test exactly as you do when you start your vehicle.
- Do the test within the specified time.
- When you see "PASSED", put the device back in its storage area and continue your trip.
- The roaming dot will return to the display.
- The dot will remain for the duration of the trip or until the next random Retest.
ROLLING RETEST

HINT: Remember that you have several minutes to take the Retest. 
If you do not take and pass the Retest within a few minutes, you will hear a reminder beep from the handset and the vehicle's horn may honk twice. 
The beeps are a reminder to take the test.

Should you not feel confident in presenting the Retest while driving, bring the car to a halt, away from traffic and in a safe area, and then perform the Retest.

What happens if I turn my vehicle off during the Rolling Retest?
• Once the device asks for a retest, you must take and pass the Retest.
• A violation will be recorded if you don't take the retest in the time allowed.
• The device may continue to request the Retest.

What happens if I don't hear the Rolling Retest prompt?
• Your vehicle's horn may honk twice briefly to alert you.
• The vehicle's horn may continue to remind you that the Retest is required.
• The device may continue to request the Retest.

What happens if I don't take the Retest in time?
• The vehicle's horn may honk on and off and the headlights may also flash.
• You must pass the retest in order to turn off the horn (and lights, if applicable).
• The device may continue to request the Retest.

What happens if I fail the Rolling Retest?
• Don't panic! Make sure your mouth is free of alcohol vapors, food and smoke.
• The device may request another sample.
• If the alcohol level was low, the device will automatically start another Retest. When you see "WAIT" then hear the fast beeps, take the test as before.
• If the alcohol level was too high, the device may go into the LOCKOUT mode. If you see "LOCKOUT", you must pull over and turn off the engine immediately. Wait for the LOCKOUT timer to count down, then take the test again. BE SURE TO TAKE THE TEST AGAIN.
SERVICE REQUIRED

The device:

- Must be serviced periodically.
- Will remind you of an upcoming service appointment by starting a countdown; it will not tell you the exact time and date.
- Will display “DEVICE LOCKOUT IN XX DAYS” before your next appointment. You will see it each time you start your vehicle. If you see this message and you have not made an appointment for service, call the service provider number to make your appointment.
- Will remind you before it locks out permanently.
- On the last day before it disables the vehicle for lack of service, you will see “DEVICE LOCKOUT IN 01 DAYS”.

**NOTE:**

The message "DEVICE LOCKOUT IN 01 DAYS" means that the device will lock out at 12:00 AM (midnight) that night. You MUST have the device serviced that day or it will LOCKOUT permanently.

You must go to your Service Provider:

- When Service is required.
- When the device displays "SERVICE REQUIRED" meaning it has gone beyond its service date.
- When the vehicle cannot be started due to permanent lockout.

The Service Technician will collect the stored information and:

- Note the odometer reading.
- Check the Interlock for evidence of tampering.
- Check wiring and connections.
- Calibrate the Interlock at the specified interval.
- Collect your payment.
- Schedule your next appointment.
VIOLATION RESET

The Interlock is programmed to require monitoring 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
- Trying to circumvent the Interlock

If you see "DEVICE LOCKOUT IN XX DAYS", and you know that you are more than about a week from your next appointment, contact your Service Provider and make an appointment for service. There is an additional fee for violation reset.

IMPORTANT:
The device will lock out permanently if not serviced when required.

LOCKOUT RESULTING FROM MISSED SERVICE

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

- If you do not get the device serviced in time, it will go into permanent lockout. When you try to start your vehicle, you will see "SERVICE REQUIRED".

If the device is in permanent lockout, you must either:

- Schedule a service technician to perform a service call at your expense, or
- Tow the vehicle to a Draeger-authorized Service Provider of your choice at your expense.

NOTE:
In some cases, you may be required to tow your vehicle to the service center if you do not have the device serviced as required.
PROPER INTERLOCK CARE

Give clean breath samples

- Make sure you take several normal breaths in and out before taking any test. If you have been smoking right before a test, take a couple more deep breaths to clear your lungs of smoke. Make sure the cab area is clear of thick smoke.

- If you have used mouthwash, toothpaste, anything containing alcohol, or anything that can produce alcohol, you should wait at least 15 minutes before taking the breath test.

Use a clean, dry mouthpiece

- A little fog on the inside of the mouthpiece is normal, BUT if you see droplets of water, change the mouthpiece. Allow the wet one to dry before using it again.

- If a mouthpiece becomes dirty inside or out, wash it with hot, soapy water. Let the mouthpiece dry before using it again.

Keep it dry

- Like a radio or cellular phone, the Interlock will not work properly when it is wet.

To keep it dry:

- Keep the Interlock in a secure place in the vehicle.
- Make sure your windows and sunroof are closed when you are away from your vehicle.
- DO NOT spill anything onto 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.

NOTE:
You will be held liable for the costs to replace or repair the device if it gets wet.
PROPER INTERLOCK CARE

Exterior care

- Use a lightly dampened cloth to wipe off dirt if the outside of the handset becomes dirty.
- Never use a cleanser or soap on the handset.
- For a soiled or dirty handset, please request that the Service Technician clean it for you at your next monitoring appointment.

Misuse, Abuse, and/or Neglect

- Take care of the Interlock while you are renting it and it is in your possession.
- Treat the Interlock with care as you would any portable electronic device.
- Always place the handset in a secure place in the vehicle.
- You will be held liable for damage which the Service Provider/Manufacturer believes has been caused by misuse, abuse, and/or neglect.

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.
Vehicle Malfunctions or Repairs and What To Do

**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 Interlock technician for instructions.

"OK START"
If the vehicle battery is low, the battery terminals are loose or corroded, the alternator belt is slipping, or the alternator is bad, the interlock may stay on "OK START". It will ask for a test every few minutes due to abnormal voltage. Have the battery tested. Clean the terminals. Tighten the battery terminals. Replace the terminal cable, if required. Have the alternator tested. Check the alternator belt.

**Reminder:**
Do not leave the key in the ON position for the initial test. Wait for the "OK START"; DO NOT start the car on "PASSED". If you start the car and the handset displays "OK START", turn off the vehicle, count to five, and then start the engine again while revving the engine a little. Make sure the running dot 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.
INDEX OF DISPLAYED MESSAGES

**DEVICE LOCKOUT**

- **hh:mm:ss**
  - Device has indicated LOCKOUT time remaining. Wait for countdown to finish. Turn key to "ON" and try test again.

**DEVICE LOCKOUT IN XX DAYS**

- Device will LOCKOUT in XX days. Contact your Service Technician immediately to make a service/monitoring appointment. If the Interlock shows DEVICE LOCKOUT IN 01 DAYS, it will lock out permanently at midnight.

**DISABLED**

- Device is not ready to accept a breath test. Wait.

**Dot moving across screen**

- Engine is running. If you are done driving, turn off the vehicle.

**OK START**

- Vehicle can be started.

**RFI**

- Radio Frequency Interference. Move handset at least 12" from cellular phone and radio. Try the breath test again.

**FAILED**

- Device detected alcohol in the breath sample. Vehicle will not start. Wait for device to prompt "PLEASE BLOW", then take the test again.

**LOCKOUT**

- Device will not allow a breath test. Wait for Lockout time to expire.

**PASSED**

- Breath test passed.

**PLEASE BLOW**

- Device is ready to accept a breath test. Blow sample into mouthpiece using correct breath pattern.

**RE-TEST REQUIRED**

- Rolling Retest is required. Blow sample into mouthpiece using correct pattern.
INDEX OF DISPLAYED MESSAGES

**SERVICE REQUIRED**

Device must be serviced. Vehicle can't be started. Contact Service Technician.

**SUCKBLOW**

Incorrect suck-blow pattern. Try the breath test again. Remember that the suck-portion is very short, followed by a steady, even blow.

**TOO HARD**

Breath sample was too hard. Try the breath test again, but blow a little softer.

**TOO SOFT**

Breath sample was too soft or too short. Try the breath test again, but blow a little harder or longer.

**WAIT**

Device is preparing itself for the test. Wait for the Interlock to display "PLEASE BLOW", then take the test.

**CALL SERVICE PROVIDER**

Device has detected a need for service. Promptly contact Service Technician.

**DEVICE SERVICE RESET**

Device must be exchanged. Contact Service Technician.
The Draeger Interlock® device installed in your vehicle is programmed as follows:

- The device must be serviced every ________ week(s).

- The vehicle will continue to operate for ________ day(s) after the above service period. During these last few days, you will see the message "DEVICE LOCKOUT IN XX DAYS", where XX is the number of days left for the vehicle to start. When you see "DEVICE LOCKOUT IN 01 DAYS", 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/hours 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/hours. After this time has expired, you may try the test again.

- The HIGH BAC LOCKOUT period is ________ minutes/hours 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 BAC 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 being recorded and, if the engine is running, it may honk the horn and/or flash the headlights.

- If your vehicle stalls or you turn it off for any reason, 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 REQUIRED" displayed on the interlock.
CONTACT INFORMATION

For appointment information, please call ____________________________.

Your Program Number is ___________________. You will need this number whenever you call your service provider.

For emergencies only, please call ___________________ to contact a service representative. Please allow up to 45 minutes for the call to be returned. Make sure your phone allows incoming calls from a cell phone or unknown telephone number.

Remember:

• Before you phone a service technician, please make sure you know exactly which message is being displayed on the interlock. Write the message down and take it with you so it will be handy when the call is returned.
• After you phone, please stay off the line until the call is returned.
• Phoning multiple times will not reduce the response time.
• 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.