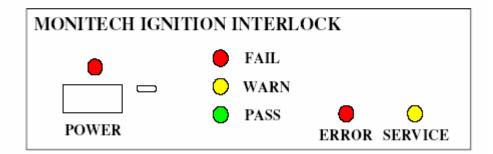
Monitech Ignition Interlock System Model LJ-1

User's Manual



Monitech, Inc. 3948 Browning Place, Suite 337 Raleigh, NC 27609 November, 1998 Version 7.2

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MONITECH MODEL LJ-1 INTERLOCK

The Model LJ-1 Ignition Interlock has two parts that are connected by a coily cord. The *Control Module* is the larger box with the different indicator lights (power, pass, warn, fail, error and service) and the power or "on" button. You never have to turn the ignition interlock off because it shuts off automatically after about an hour of non-use.

The *Sample Head* is the smaller, hand held piece that you actually blow into when it's time to take an alcohol test. The sample head has a blow hole, a red "ready" light, and a button that is used to enter your identification (I.D.) code.

After interlock installation, you must pass an alcohol test (by blowing) and an I.D. code (by pressing and releasing the I.D. button in a learned sequence) before vehicle startup. This is called a standing retest.

While the vehicle is running, you will occasionally (perhaps twice per hour) be required to pass the alcohol test (by blowing). This is called a rolling retest. No I.D. code is required.

A standing retest is required every 60 to 70 minutes.

The following sections of this manual will give you more complete details about all phases of the interlock testing procedures and the interlock program in your jurisdiction. Please read this manual carefully and mark any areas you do not understand.

The service technician will answer all of your questions and make sure you are comfortable with the testing procedure before you leave the interlock service center.

GETTING READY TO TEST

If the control module's red "power" light is not on when you enter the vehicle, press the power button. After a brief warm-up period, the control module will beep and the "ready" light on the sample head will blink, indicating the interlock is ready for a breath test. ANY time the sample head "ready" light is flashing, it's okay to begin testing.

Remember to remove gum, candy, smokeless tobacco, and foodstuffs, etc. from your mouth and to clear your lungs / mouth of any cigarette smoke or other fumes **before taking the test.** The LJ-1 interlock will not fail you for substances other than alcohol, but other substances (especially cigarette smoke) can damage the interlock. **BE CAREFUL;** YOU WILL BE CHARGED FOR ANY DAMAGE TO THE INTERLOCK CAUSED BY CIGARETTE SMOKE OR OTHER FOREIGN SUBSTANCES BLOWN, SPRAYED, POURED, OR SPILLED INTO THE UNIT.

Before blowing, be sure there is a clear plastic mouthpiece in the blow hole on the sample head. When you replace a mouthpiece, be sure not to screw or twist the plastic mouthpiece into the blow hole. Gently snug the mouthpiece straight down into the blow hole where it can just as gently be removed.

IMPORTANT: Most participants will be required to complete the following One-Second identification code using the I.D. button on the sample head. Others may be required to perform a HUM code by emitting a low, "humming" sound while blowing into the mouthpiece. Still others may be required to perform a different I.D. code or combination of codes.

 \Box This box will be checked if you are required to perform an alternate identification procedure. Directions for the alternate procedure will then be attached to the back of this manual.

TAKING THE TEST

To begin, take a deep breath and blow a firm, steady stream of air into the mouthpiece while holding **down** the I.D. button on the sample head. If you're blowing correctly, the interlock will emit a soft hum tone for several seconds.

HINT: The hum does not start sounding until you have been blowing a half second or so.

When the soft hum stops, you stop blowing but continue to hold down the I.D. button for one additional second. Your timing of one second can be improved by softly saying "One-thousand-and-one" in a straightforward manner.

At the end of the one second, release the button for one full second ("one-thousand-and-one").

At the end of that one second, press the button down again and hold for one second ("one-thousand-and-one") before releasing for the last time.

The complete I.D. code goes like this:

- BUTTON DOWN DURING LONG BLOW AND ONE SECOND AFTER.
- BUTTON UP FOR ONE SECOND.
- **BUTTON DOWN FOR ONE SECOND AND RELEASE.**

WARNING: Attempting to instruct and/or allow any person underage or without a valid drivers license to perform the ignition interlock testing procedure is a direct violation of Program rules and will result in removal of the interlock and subsequent license revocation.

After the test, wait until you get a PASS light on the front of the control module and a gentle, multi-syllable tone before you turn the key to start the vehicle.

HINT: Don't try to understand all of the "tonal sounds" described in this manual. As you use the interlock, the different tones will become very familiar to you. Almost immediately, you'll recognize the PASS sound and the FAIL or ABORT sound. And that's all you need the first day!

IMPORTANT: If the *ERROR* light comes on *with* the PASS light or any of the other lights, *the vehicle will not start*. Do not turn the key. Instead, look in the back of this manual and find the Guide for Troubleshooting on what to do next.

If you get a WARN light (instead of a PASS) *with no error light,* you may start your vehicle, but first you are required to press and release the POWER button on the front of the control module.

HINT: Do not get mixed up about the power button; it has more than one purpose.

A WARN light (without error) indicates the interlock has detected some alcohol in your breath test, but not enough to fail you. You may choose not to press the power ("warn") button and not to start your vehicle.

By pressing the power button, you accept the presence of alcohol in your mouth, lungs, or bloodstream and admit that you still want to drive. You also accept the possibility that the alcohol presence may continue to INCREASE to a FAIL level at your next retest, while you are underway or "rolling." A rolling retest ALCOHOL FAIL requires you to stop and turn the vehicle off--even if you have not reached your destination.

The rolling retest will be fully explained in a later section of this manual.

If you have not had an alcoholic beverage to drink in the past 24 hours, you should resolve what caused the alcohol reading and eliminate it before testing again.

WARNING: You can be arrested and convicted of DWI even though you might pass the ignition interlock test with a level of alcohol in your body that is normally not prohibitive. This is especially true if you are involved in a traffic accident or stopped for driving or other vehicular violations. Even a small amount of alcohol causes impairment in decision-making and coordination activities, especially driving.

Ultimately, it is your choice whether to drive after drinking alcohol. *The ignition interlock does not relieve you of the legal responsibilities related to driving after drinking any amount of alcohol and can not be used as a legal defense in a court of law.*

A flashing red FAIL light with a solid error means you have failed for the detection of excessive alcohol. Related FAIL and LOCKOUT tones will also be heard immediately after the alcohol failure. See Alcohol Failure in the next section of this manual.

TEST FAILURES

The interlock may not always allow you to finish a test. Too much air or pressure or not enough air pressure or unsteady air pressure can cause the unit to sound a harsh negative beep. Incorrect timing of the I.D.code can also cause test failure and the harsh negative beep.

Read this section very carefully: While the most serious test failure is for the detection of alcohol, it is also possible to fail the test for improper breath pressure, for technique, or for bad "timing"

You'll hear the "fail" signal (the harsh, negative sounding beep) as soon as an error is made. When you hear this tone, quit testing and note the combination of lights that appears on the front of the control module.

HINT: In the back of this manual, there are "line drawings" of the ignition interlock lights for you to mark with a pencil after failing.

Simply mark the lights as they appear on your interlock immediately after failure;

Use a (B) to represent a blinking light. Use a (S) to represent a solid light.

(Try to remember how many "syllables" the tone has and how long the tone lasts.) Then take your time in identifying the same combination of lights and sounds in the Troubleshooting Guide on pages 21 and 22.

ABORT FAILURE

If you get the "fail" sound before completing the initial five second blow, you've probably given an "abort" test. An abort test is usually caused by not blowing hard enough or by blowing too hard.

Check the lights on the control module; if you get a solid ERROR light and a flashing PASS light, it's a BLOW SOFTER ABORT. Try blowing a little softer the next time. If the error light flashes along with a flashing pass light during the long blow, it's a BLOW HARDER ABORT. Blow with more force when the ready light comes on again.

HINT: If the Error occurs during the long blow and you're sure the *I.D. button was down, turn off any cellular phones and/or two-way redios.* In any case, make sure you blow with a *constant* pressure. The interlock will allow you to continue testing over and over if you are blowing "aborts." However, if you can not at least complete the long blow part of the test after a few attempts, stop and try to determine what is wrong.

HINT: A steady, sufficient blow can sometimes be achieved by taking a deep breath and then **not** breathing out. Instead, moderately release or blow the inhaled air through "pursed" lips into the mouthpiece. Other people seem to do better if they just

blow hard on the mouthpiece much as they would in blowing up a balloon. Always take a deep breath prior to blowing into the mouthpiece.

I.D. CODE FAILURE

A fail signal during the I.D. code sequence generally indicates bad timing with the I.D. button. Before attempting to retest, verify that it is an I.D. code failure by looking for the solid error light on by itself. Remember the I.D. code can be failed if you forget to press the I.D. button during the long blow, or if you release the button during the long blow.

You should pause to seriously consider how to correct a timing error (I.D. code) before attempting a new test, because **three successive timing failures will result in a 5-minute lockout.** A 5-minute lockout means you'll have to wait 5 minutes before taking another test and is indicated by a solid ERROR light and a flashing WARN light.

After more than one timing failure, go back and reread the directions on performing the identification test (Taking the Test, page 3). Also, remember you can consciously count "one-thousand-one" out loud or in your head to time the one-second intervals.

HINT: Relax. Don't attempt to vary your timing. Failure of the I.D. code usually occurs when you are late and in a hurry or perhaps stressed over other difficulties that are part of everyday life. Even worse, each time you fail the I.D. code, your frustration and/or anger level goes up. With each failure, it becomes much more difficult to perform the I.D. code successfully.

If the interlock unit detects that you are having extreme difficulty with the I.D. code (eight consecutive lockouts), it will automatically enter EARLY RECALL. Early recall requires the vehicle to be taken into a Monitech service center within 7 days. A better solution if you continue to fail I.D. code is to just leave the vehicle alone for a couple of hours and perhaps find alternate transportation. If you come back to the vehicle and you are still failing, then call the emergency number.

HINT: It helps to understand the I.D. code is not included just to make the test more difficult for you. The I.D. code is designed to discourage "curbside assistance" for drinking drivers.

ALCOHOL FAILURE

If you fail for alcohol detection, the interlock will emit a series of 15 low beeps, and the fail light will begin flashing along with a solid error light. You will be forced to wait until the excessive alcohol level has evaporated from your body.

IMPORTANT: Every person's body metabolism is different and will even vary from day to day in the same person. The only way to guarantee your ability to pass the alcohol test is to avoid alcohol intake for 24 hours prior to testing.

Since all alcohol failures will be recorded as part of your permanent record with Monitech (and the agency or court ordering your interlock probation), it is strongly recommended that you avoid testing AND DRIVING with any level of alcohol in your body.

IMPORTANT: There is a chance that certain alcohol-based substances (mouthwash, cough medicine, etc.) may cause test failure if such "innocent" substances are still fresh on your breath. If this occurs, *rinse with water and take several deep breaths* to make sure the substance in question is thoroughly removed from your mouth before testing again.

SUCH ALCOHOL CONTAMINATION IS TEMPORARY AND IS NOT ACCEPTED BY THE DIVISION OF MOTOR VEHICLES OR OTHER JURISDICTIONS AS A VALID REASON FOR ALCOHOL TEST FAILURE.

YOU MUST REMOVE ALL ALCOHOL CONTAMINATION FROM THE BREATH BEFORE TESTING. THE SAFEST WAY

OF AVOIDING SUCH A FAILURE IS TO SIMPLY NOT TO TEST WITH ANY SUBSTANCE OR "AFTERTASTE" IN YOUR MOUTH.

The first failure for alcohol detection will result in a 5-minute lockout, which gives the participant time to determine if "innocent" alcohol contamination is at fault and to take corrective steps. A second failure, and each additional failure after that until you pass, will result in a 30-minute lockout.

WARNING: Attempts to test and start the interlock vehicle after drinking are considered extremely serious by the Division of Motor Vehicles and other adjudicating agencies and courts. Continuous readings of alcohol at any level or detection OF high BAC levels can result in removal from the interlock program and revocation of your driving privilege.

IMPORTANT: If the interlock detects a BAC level of .08% or more, then an EARLY RECALL will be initiated.

The SERVICE LIGHT will start blinking after the HIGH BAC FAILURE and you will have seven days to bring the interlock vehicle into one of the Monitech service centers to have the system downloaded. A printout of the excessive alcohol level(s) will then be forwarded to the Division of Motor Vehicles or related jurisdiction for review and action.

Failure to bring the vehicle into a Monitech service center for EARLY RECALL will result in a permanent lockout and your vehicle's ignition interlock will require special service at your expense before allowing vehicle startup again.

WARNING: Do not test or attempt to drive if you have been drinking even small amounts of alcoholic beverage. Excessive alcohol intake can require 12 to 24 hours before evaporation takes place.

ROLLING RETESTS

After a random period of 5 to 15 minutes from the time you first pass the startup or *standing* test, the interlock will call for a *Rolling Retest*. This test is designed to be simple enough to take while the vehicle is in motion. When the unit is ready for the **first** retest, a **green** (PASS) light will begin flashing and the unit will continuously emit a series of **TWO** beeps. *You have three minutes to successfully complete the rolling retest*.

HINT: People often have rolling retest aborts because they forget to take a deep breath before blowing.

You may ignore a rolling retest request if you are about to turn the vehicle off.

As soon as it is safe, take the rolling retest by blowing into the sample head just as you would for the five-second blow of a regular test.

Forget the I.D. code button for a rolling retest.

The green PASS light will come on temporarily after you successfully pass a rolling retest.

The interlock will request a second rolling retest at a random time that is 15 to 45 minutes from the initial starting of the vehicle. For the **second** retest, a **yellow** (WARN) light will begin blinking and the same series of **TWO** beeps will sound. Again, the green PASS light will come on temporarily after you successfully pass a rolling retest.

IMPORTANT: Do not take a rolling retest if you can not perform the test and still drive safely. If you can not safely take a rolling retest or if you run out of time (three minutes), the unit will simply request a standing retest (described below). There is no penalty for choosing to stop for a standing retest rather than attempting an unsafe rolling retest.

Ultimately, it is your choice of whether to attempt a rolling retest or to find a safe location in which to stop and perform the test.

If a WARN level of alcohol is detected during a rolling retest, then periodic rolling retests will be required at a much higher occurrence rate than normal. In short intervals, a **yellow** (WARN) light will begin blinking and the same series of **TWO** beeps will sound. The testing pattern will return to normal only after a PASS level is successfully tested.

If you FAIL a rolling retest, a red (FAIL) light will begin blinking and the interlock will emit a series of four beeps. At this point, you must find a safe place to stop and turn off the vehicle. Wait for the ready light on the sample head to blink and give you another test. FAILURE TO STOP AND RETEST WILL RESULT IN THE HORN BLOWING AND THE INTERLOCK ENTERING EARLY RECALL.

Early recall requires the vehicle to be brought into a Monitech service center within 7 days for service and client explanation.

WARNING: DO NOT ATTEMPT ANOTHER TEST WHILE THE DANGER OF ALCOHOL STILL EXISTS.

STANDING RETESTS

One hour after first starting the vehicle, the interlock will require a Standing Retest. This test is identical to a "beginning" standing test and requires the driver to find a safe place to stop and turn the vehicle OFF. You will be given a 10 minute warning to find a safe place to stop for the standing retest.

After turning the ignition off, wait five seconds, press the Power button, and the sample head ready light will begin blinking for another test. For the **standing retest** warning, a **red** (FAIL) light will begin blinking and the interlock will emit a series of **four beeps**.

Remember, the Standing Retest requires both the long blow and the identification code.

WARNING: Never pull to the "shoulder" of a highway or into the emergency lane or median of a major highway to take a standing retest. If you can not find a safe place to stop for a standing retest within the allotted 10 minutes, continue driving until a safe location is found. Under normal driving circumstances, it is rare that a safe location can not be found if the participant begins looking as soon as the alert is sounded.

It is recommended that you plan for standing retests (especially on long trips) by taking advantage of rest areas, fuel stops, and to use the rest room, etc., rather than waiting until the last minute when an appropriate stopping place is much more difficult to find.

IMPORTANT: Failure to stop for the standing retest in the allotted 10 minutes will result in the horn blowing and EARLY RECALL. Early recall requires the vehicle to be brought into a Monitech service center within 7 days for service and client explanation.

You may ignore a standing retest request if you are about to turn the vehicle off.

WHAT TO DO IF YOU HAVE A PROBLEM

Relax as much as possible, Monitech will be glad to assist you with any difficulties you may encounter!

The ignition interlock is normally very reliable, and as a rule, will not develop any major defects under normal user conditions. Most often, any difficulties you encounter can be solved quickly by a short phone call to the toll-free emergency number. But before you call the emergency number, please be sure and go through this simple checklist:

Before taking the test:

1. Remember that the interlock can fail you for <u>any</u> amount of alcohol you may have consumed within the past 24 hours. If you are failing for alcohol, you will not be able to start your vehicle until the PASS level has been reached.

2. Consider any substances that you might have consumed that contain alcohol or ethanol derivatives. Mouthwash, some marinated foods, enclosed vegetables that may have lightly fermented, cold and cough medicines, some inhalants, even cakes and pies can contain small amounts of alcohol. Make sure that you're giving the interlock a clean test.

If you're failing the test:

1. If you don't make it through the first five second blow, you're probably not blowing long enough or not supplying the interlock with a firm, steady flow of air. Try again, making sure you blow with a constant pressure, but do not blow <u>too</u> hard. Don't stop blowing until the "long blow tone" stops sounding.

2. If you seem to be failing the identification code, go back to page 3 in the beginning of this manual and reread the section on taking the test properly. Remember to verbally count "one thousand and one" to time the series of one second button presses and releases.

Potential problems with the vehicle:

1. If the ignition interlock will not allow a test, check the indicator lights against the BATTERY FAULT message found in the troubleshooting section. ERROR flashing and WARN solid means the interlock is not getting enough voltage to allow a test. Check your battery, terminals, and charging system.

2. If you pass the interlock test, but your vehicle will not start, there is a high probability of a fault in your starting system (although sometimes a low battery voltage can be the problem). This difficulty is often in the starter, starter-solenoid, the ignition switch, or the connections in between. Such problems should be addressed by a qualified automotive mechanic.

3. If the interlock does not even power up, the battery may be completely dead. Try charging or replacing the battery. However, if the interlock stops powering up after other repair work has taken place on the vehicle, call Monitech immediately.

4. Did the problem appear after other work took place on the vehicle? Check the fuses. Have you installed a stereo, telephone, or any other option that could have caused other wires to come loose or a fuse to go bad.

5. Remember that the ignition interlock can only prevent your car from starting. Once your vehicle is running, the ignition interlock can not make your vehicle shut off. If your vehicle is running rough, stalling out while underway, or won't start even though the starter is clicking or "turning over," the difficulty can not be the ignition interlock. Such problems should be addressed by a qualified automotive mechanic. Other easily solved problems:

1. If the error light is flashing and the fail light is on solid, you're getting a "sample head fault". Check the cord that connects the sample head to the control module to ensure that it's inserted properly, and the locking screw cap is tight.

2. If the error light is flashing, and the pass light is on solid, you're getting a "key fault." Check to make sure that your ignition switch is in the "off" position.

If you check everything on this list and still can't get your vehicle started, please contact Monitech at the toll free emergency number. So that we may assist you quicker, please try to have certain information available before calling:

1. Write down the exact nature of the problem. If you're having problems passing the test, be sure to include the exact part of the test that's giving you trouble.

2. Carefully observe the lights on the front of the interlock, and mark the exact lights you're getting on the line drawings in the back of this manual. Remember to indicate which lights are flashing and which are solid. Try to remember any tone you may hear.

If there is an actual defect in the ignition interlock that can not be solved immediately by telephone, Monitech will initiate a service call to the vehicle's location anywhere in North Carolina within 24 hours. Of course there will be no charge to you.

If you request a service call that is determined to be a user or vehicle problem, *you will be charged for the service call*.

Monitech personnel are available for emergency calls *requiring immediate startup assistance* 24-hours a day, seven days a week. Please direct all other questions, requests, appointment changes, etc. to the Monitech office during regular business hours.

MONITORING CHECKS

Before you leave the installation facility, please be sure to schedule your first monitor check appointment at the Monitech service center of your choice. Although we do have service centers throughout the state, all appointments are scheduled through our Raleigh office, which you can contact during regular business hours. The Raleigh number appears on your appointment card. Please be sure to call this number if you ever need to reschedule your monitoring appointment.

Remember that all monitoring checks are performed by appointment and in the order they're scheduled. While we will do everything possible to make your visit go as smoothly as possible, previously scheduled appointments will often prevent us from being able to service your interlock at a time other than your scheduled appointment. For that reason, it is not recommended that you arrive too early. Of course, when possible, we will be glad to service your vehicle early and get you on your way.

Anytime you wish to come for an appointment other than the scheduled time, BE SURE to call the Raleigh office. Because of the number of service centers, it is not always safe to assume that there will be a service technician available if you just "show up."

When it is time to have your interlock serviced you will see a flashing yellow light (service) located on the front of the control module. This signifies that you have seven days to return to a service center for a monitoring check. Please note that if the interlock is emitting a special tone and the service light is on continuously, you must have a monitoring check that is due within *three* days.

Assuming that no problems are encountered, a monitoring check will generally last 15 to 20 minutes. During this time, the interlock is tested and calibrated, the internal clock is reset to allow another two months driving time, and a *data logger report* (listing of the interlock's memory) is downloaded to determine if any violations and/or alcohol failures have occurred in the past two months.

If any violations are encountered, Monitech personnel will inform you of the nature of the violations, and you'll be given the chance to complete a "client response form." This will allow you the chance to offer an explanation for the violations before your records are turned in to DMV.

ALL information recorded by the ignition interlock and/or collected by Monitech is the property of the North Carolina Division of Motor Vehicles. Each participant's records are periodically reviewed by Monitech and DMV personnel to determine a participant's compliance with the regulations that apply to your conditional restoration of driving privileges.

ANY time you fail to show up for a monitoring check, you are in direct violation of your *conditional reinstatement of driving privileges* agreement, and you must contact the Monitech office immediately to avoid revocation of your driving privileges.

If you don't return to a Monitech service center within 7 days of the time your service light began flashing, the interlock will enter a permanent lockout state which will prevent you from starting your vehicle under any circumstances. You can tell the interlock has entered permanent lockout when all lights come on solid and then the interlock shuts down.

Once the interlock has entered permanent lockout, you must contact the Monitech office to arrange for a time to have your vehicle towed into a service center, or to have Monitech personnel make a service call to reactivate the interlock. In either case, the towing or service call will be *at your expense*.

If you don't show up for a monitoring check and likewise don't contact the Monitech office to offer an explanation, you will be listed as in violation of your *additional conditions for reinstatement* agreement. Your driving privileges will be revoked immediately, and civil warrants will be issued for return of the interlock.

THE SERVICE LIGHT

Normally the service light will start blinking 7 days before your regularly scheduled monitoring appointment. If you miss the appointment, the service light will stay solid for 3 days and then the interlock will enter permanent lock-out state. BEWARE THE SERVICE LIGHT COMING ON IF IT IS NOT TIME FOR YOUR REGULAR APPOINTMENT.

Anytime the service light comes on EARLY and remains on once the car is started, an appointment must be made to bring the vehicle to the nearest Monitech Service Center. Call Monitech immediately upon seeing the service light on continuously!

A SOLID service light allows only 72 hours of driving before the interlock must be serviced or enters permanent lockout.

A BLINKING service light allows only 7 days of driving before the interlock must be serviced or enters permanent lockout.

There are many reasons why the interlock will require you to bring the vehicle back to Monitech for review.

Reasons most likely to cause you to have to bring the vehicle in early for review / service:

1) Intentional (or accidental) circumvention of the test.

- 2) Failure to perform a standing retest.
- 3) High BAC Failure
- 4) Continuous I.D. Code failures.

5) Leaving the ignition switch turned on without starting the vehicle. NEVER LEAVE KEY TURNED TO "ON" POSITION WITHOUT STARTING VEHICLE.

- 6) Tampering with any interlock wiring.
- 7) Vehicle problems that could cause interlock malfunction.

DO'S AND DON'TS OF THE PROGRAM

1. Do contact Monitech emergency service if the vehicle must be used by untrained persons in an emergency situation or if the emergency has caused you to be unable to successfully complete the test.

2. Don't attempt to "hot wire," "cross-ground," or "roll start" your vehicle in an attempt to CIRCUMVENT the ignition interlock. The interlock will record such actions, go into IMMEDIATE RECALL and the horn will blow. The charging system of your vehicle may be damaged. License revocation is probable.

3. Don't allow mechanical work that might require vehicle startup in your absence without providing the Monitech toll free number to the service technician. Instruct all involved that Monitech must be contacted BEFORE any related wiring is detached and / or a service CIRCUMVENTION is attempted.

4. Don't avoid a monitoring appointment because of financial difficulty. Call the Monitech office to make special indigency arrangements. Your appointments must be kept.

5. Don't leave your telephone station when contacting emergency service after hours. Return calls are normally made within 15 minutes. Call emergency service back if you are not contacted within 20 minutes.

6. Do keep the service manual, next appointment date and emergency number in your vehicle at all times.

7. Don't disconnect any wiring that might be related and / or connected to the ignition interlock in any way. Call Monitech before disconnect if there is any doubt.

8. Do keep the ignition interlock clean, dust-free and totally dry at all times.

9. Don't allow anyone who might have alcohol content on their breath to attempt a test "just for fun." All alcohol readings are assumed to belong to the participant.

10. Don't allow anyone to drive the vehicle if you are not willing to accept responsibility for any alcohol readings that might result.

11. Do remember to plan ahead for standing retest stops. Do look for safe, lighted areas -away from traffic flow -when stopping for a standing retest.

12. Don't attempt to "open" either component of the ignition interlock.

13. Don't leave the ignition switch "ON" without starting the vehicle.

14. Don't test the interlock while operating a cellular phone or two-way radio.

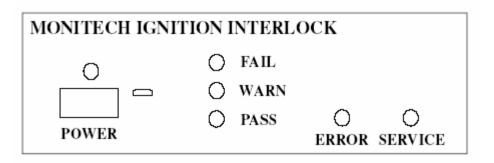
15. Do review the Interlock Manual periodically.

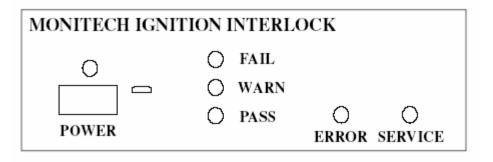
TROUBLESHOOTING SUMMARY

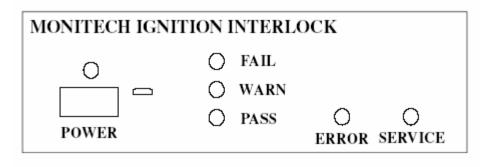
Whenever you have a problem with the interlock, remember to check the lights on the front of the control module and mark the corresponding lights on a line drawing in the back of this manual. Compare them with this chart and try the *Recommended Solution*.

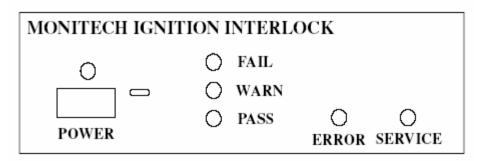
Error Message:	PROBLEM/ Recommended Solution:
ERROR solid PASS flashing	BLOW SOFTER ABORT Decrease breath pressure. Maintain constant pressure.
ERROR flashing PASS flashing (fail <i>during</i> five second blow	 BLOW HARDER ABORT Increase breath pressure. Maintain constant pressure.
ERROR flashing	ID CODE FAILURE Remember to count "one thousand and one" for each second press/release.
ERROR solid WARN flashing	ID CODE LOCKOUT Wait five minutes for another test; <i>see above</i> .
ERROR solid FAIL flashing	ALCOHOL FAILURE Wait five minutes (30 minutes for multiple failures) before attempting additional tests.
ERROR flashing WARN solid	BATTERY FAULT Recharge/Replace vehicle's battery. Have a mechanic test vehicle electrical system.

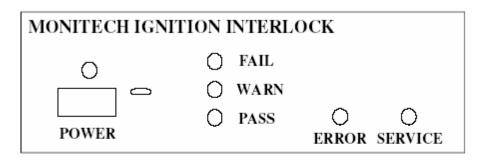
Error Message:	PROBLEM/ Recommended Solution:
ERROR flashing FAIL solid	SAMPLE HEAD FAULT Make sure the cord is properly connected to control module.
ERROR flashing PASS SOLID	KEY FAULT Turn ignition to "off" position.
SERVICE SOLID ERROR flashing PASS, WARN, FAIL alternating	IGNITION VIOLATION The vehicle has been started without a breath test. You MUST Report to a Service Center within 3 days.
ALL LIGHTS SOLID	PERMANENT LOCKOUT Call Monitech's main office. The vehicle will have to be towed in for a monitoring check.
SERVICE FLASHING	7 DAY REMINDER or EARLY RECALL Report to Service Center within seven days. Call Monitech's main office if you don't have a scheduled monitor within this time period.
SERVICE SOLID	3 DAY REMINDER or IMMEDIATE RECALL Report to Service Center within three days. Call Monitech's main office if you don't have a scheduled monitor within this time period.

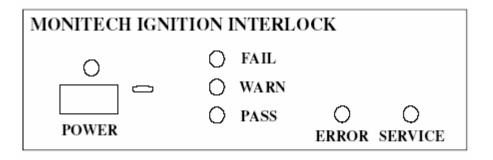


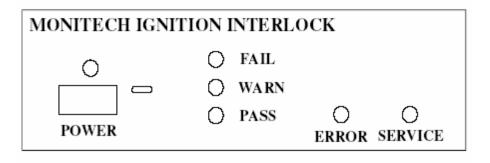


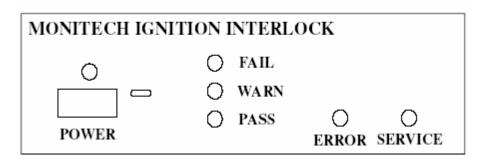












FOR OFFICE USE ONLY

•	•
	•
	ENTER FIRST PHASE:
I.	ENTER SECOND PHASE:
	ENTER THIRD PHASE:
	•
′.	DATE: TIME:
7.	DATE: TIME:

Monitech Technician's Name: ______.

REVIEW THIS MANUAL OFTEN!

Monitech, Inc. 3948 Browning Place, Suite 337 Raleigh, NC 27609

(919) 781-4246

FAX: (919) 781-2524

EMERGENCY NUMBER: 1-800-521-4246

Your assigned Service Center Is: ______. Your assigned technician / counselor is: ______.