

FORWARD

The Michigan Department of State Police is responsible for administration of the state's breath alcohol testing program, including the development of training programs. The programs provide guidelines for training state and local jurisdictions having traffic safety and law enforcement responsibilities. The department intends that the programs be of the highest quality and that they address the high-priority training needs of agencies that provide highway safety services. An especially important training need arises when new technology becomes available to augment law enforcement services.

The preparation of this training manual is in response to such a technological development. The Breath Alcohol Testing (BAT) Mobile Unit provides a means of improving a police officer's ability to process suspected alcohol law violators. The BAT MOBILE will lead to more effective O.W.I. enforcement and, in turn, the reduction of alcohol related traffic fatalities.

The Michigan Department of State Police, Alcohol Enforcement Unit, developed this training program to provide the instruction necessary for the proper verification and operation of the BAC DataMaster breath tester placed in the mobile unit.

The purpose of this manual is to train law enforcement personnel the proper procedure for verifying the mobile breath testing instrument. Upon successful completion of this training program, a qualified operator will be able to perform the test procedures and sequences necessary to verify the proper operation of the BAC DataMaster breath alcohol tester in the mobile unit.

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CHAPTER 1 INTRODUCTION

BREATH ALCOHOL TESTING MOBILE UNIT

CLASS IIIB OPERATOR TRAINING MANUAL

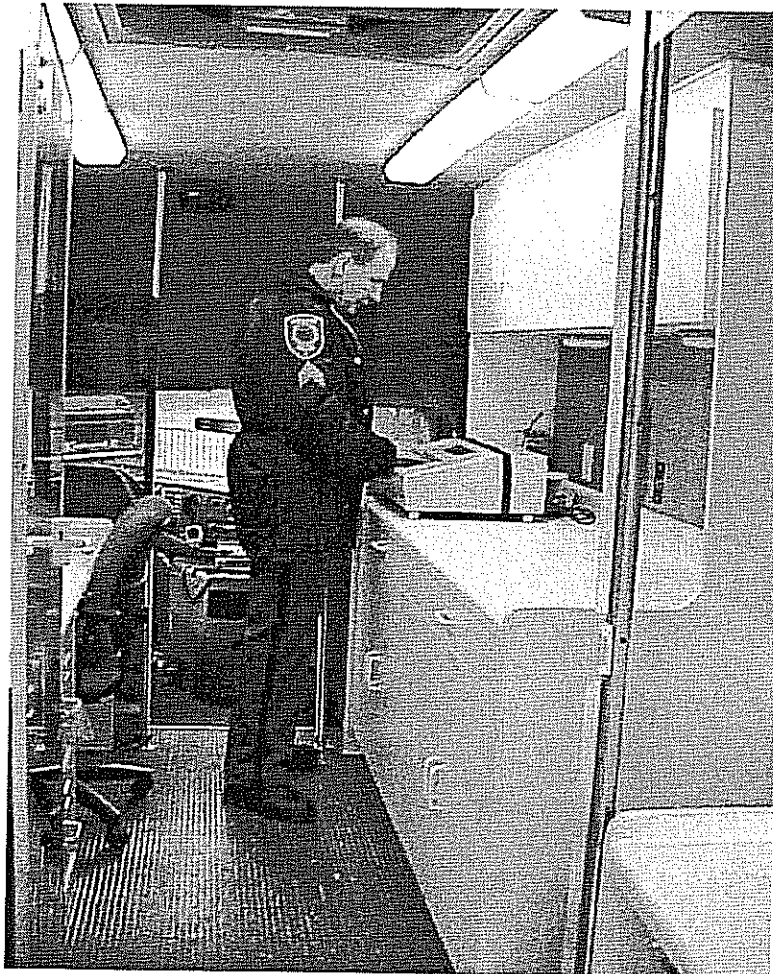
CHAPTER 1 – INTRODUCTION

The Breath Alcohol Testing (BAT) Mobile Unit was introduced in Michigan in April, 2001. The BAT Mobile Unit is a 20-foot Diamond Bus that has been customized by Clock Conversions in Grand Rapids, Michigan. The vehicle and equipment were purchased with funds provided by the Michigan Office of Highway Safety Planning and the Michigan Drunk Driving Prevention Equipment and Training Fund.

The mobile unit will be equipped with a Michigan approved DataMaster Breath Testing Instrument, FAX machine, cellular phone, officer workstations and other equipment necessary to process OWI suspects.

The BAT mobile unit is physically located on site for breath testing during multi jurisdictional impaired driving saturation patrols. This advantage reduces the time and travel for officers transporting an OWI suspect to a breath testing facility.

The BAT mobile unit will also be made available to other agencies to use during enforcement or community events in their area.



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CHAPTER 2
ADMINISTRATIVE RULES

BREATH ALCOHOL TESTING MOBILE UNIT

CLASS IIIB OPERATOR TRAINING COURSE

Chapter 2 – Administrative Rules

The Michigan Department of State Police has been granted mandatory rule-making power by the drunk driving statute. An administrative rule promulgated under this authority carries the full weight of the law.

The Administrative Rules titled, "Tests for Breath Alcohol," were filed with the Secretary of State on September 16, 2003, and became effective September 30, 2003, at 12:01 a.m. Highlights of the administrative rules are outlined below.

RULE 1 – Definitions

- Class I Operator – PBT Operator
- Class II Operator – Evidential Breath Test Operator
- Class IIIA Operator – Evidential Breath Test Operator plus PBT Operator, PBT instructor, and PBT calibrator
- Class IIIB Operator – Evidential Breath Test Operator plus limited service technician
- Class IV Operator – All of the above plus instructor for all classes of operator and a full-service technician

RULE 2 – Approved Equipment

- All breath alcohol test equipment shall meet federal model specifications and appear on the conforming products list published by the U.S. Department of Transportation in the Federal Register.
- Equipment and accessories shall be approved by the Michigan Department of State Police.

RULE 3 – Equipment Accuracy

- An evidential breath tester shall be verified for accuracy at least once each calendar week.
- Accurate test results shall be 0.076 to 0.084 inclusive.
- A PBT shall be verified for accuracy once each month.
- An evidential breath tester shall be inspected, verified for accuracy, and certified by a Class IV operator or the instrument manufacturer's authorized representative within 120 days of the previous inspection.

RULE 4 - Equipment Maintenance

- Installation, maintenance, and repair of evidential breath test instruments and PBTs are the responsibility of Class IV operators or the instrument manufacturer's authorized representatives approved by the department.

RULE 5 - Techniques and Procedures

- Only certified operators shall operate evidential breath test instruments.
- Prior to testing, a subject shall be observed for at least 15 minutes during which time he/she shall not have smoked, regurgitated, or placed anything in his or her mouth, except the mouthpiece.
- A second breath test shall be requested, but may be refused. This test is used to confirm the first test. The allowable variation is as follows:

0.00 - 0.14.....	± 0.01
0.15 - 0.24.....	± 0.02
0.25 - 0.34.....	± 0.03
0.35 - or more	± 0.04

- If the variation is more than that allowed, a third test must be requested. If this test does not conform to the allowable variation of either the first or second test, a blood or urine test shall be requested.
- Results of a subject test shall be expressed as grams of alcohol per 210 liters of breath.
- Results of a subject test shall be truncated to the second decimal place.
- If a subject tests at 0.35 or more, medical assistance shall be obtained.

RULE 6 - Operator Certification

- A certification card shall be issued to evidential breath alcohol test instrument operators who successfully complete a course of instruction that is approved by the Department of State Police.

RULE 7 - Recertification of Operators – Rescinded

RULE 8 - Class IV Operators

- Defines the role of the Class IV operator.

CHAPTER 3
ADMINISTRATIVE FORMS

BREATH ALCOHOL TESTING MOBILE UNIT

CLASS IIIB OPERATOR TRAINING COURSE

CHAPTER III - FORMS

SOD-84A BREATH ALCOHOL TESTING MOBILE UNIT INSPECTION REPORT

USE:

1. Whenever an inspection is completed on a Breath Alcohol Testing Mobile Unit, the SOD-84A shall be used to document the inspection results.

INSTRUCTIONS FOR COMPLETION OF THE SOD-84A

1. BAT Mobile Location – Enter the location of the Breath Alcohol Testing Mobile Unit where subject testing is completed.
2. Location Change – This box is to be checked if the BAT Mobile is moved to a different location where subject testing will be performed during the shift of operation.
3. Simulator Serial Numbers – Enter the serial numbers of the four simulators used in verifying the DataMaster
4. Instrument Serial Number – Enter the serial number of the DataMaster mounted in the mobile unit.
5. Simulator Solution Lot Numbers – Enter the lot numbers for the three simulator solutions used.
6. Check this box after the Date and Time has been checked on the DataMaster.
7. Check this box after you have performed the Diagnostic Check.
8. Check this box after you have performed all three simulator tests and recorded the results on the SOD-84A.
9. Enter the test results of the 0.04 simulator test.
10. Enter the test results of the 0.080 simulator test.
11. Enter the test results of the 0.200 simulator test.
12. Check this box after you have performed the acetone simulator test.
13. Check this box after you have performed the radio frequency interference test. (RFI).

14. Check this box after you have signed and recorded the simulator test results on the Evidential Breath Testing Log (OD-33). **WILL BE ENTER THE TEST ON THE LOG**
15. Check this box after you have co-mpleted the BAT Mobile Inspection Report (SOD-84A).
16. Signature – The person completing this form is to sign his/her name.
17. Date – Write in date form is completed.
18. Comments – Please write any comments reference this report in this section.

FACE THIS SIDE DOWN - THIS EDGE IN FIRST

Evidence Ticket

STATE OF MICHIGAN
DEPARTMENT OF STATE POLICE

INSTRUMENT 900002

MARCH 19, 2001

TIME 09:42

— DIAGNOSTIC CHECK —

COMPUTER: OKAY
PROGRAM: (12/29/00) OKAY

HEATERS
SAMPLE CHAMBER: 49c

FLOW DETECTOR: OKAY

PUMP
HIGH SPEED: OKAY

DETECTOR: OKAY

FILTERS: OKAY

QUARTZ STANDARD: OKAY

CALIBRATION: OKAY

PRINTER TEST

!@#\$%&'()*+,-./0123456789:;<=>?`AB CDEFG
HIJ KLMNOPQRSTU VWXYZ[\]^_`abc defghijklmno
pqrstu vwxyz{|}~

START IS MIN. OBSERVATION

OPERATOR SIGNATURE

AUTHORITY: 15MR FAS30
COMPLIANCE: REQUIRED
PENALTY: DECEITFULNESS OF INSTRUMENT

OD-33 EVIDENTIAL BREATH TESTING LOG

USE:

1. Whenever a certified operator performs a simulator test, the results shall be entered on the Evidential Breath testing Log (OD-33).
2. If an instrument is taken out of service, an entry shall be made to that effect.
3. Each log sheet shall contain entries for a one month period.
4. A new log sheet shall be used for each month.
5. Distribution and retention of the form is described in Chapter 5.

OD-80 EVIDENCE TICKET

USE:

1. Whenever a subject or simulator is performed on the DataMaster, the OD-80 form (Evidence Ticket) shall be used to document the results of that test.

INSTRUCTIONS FOR USE OF THE (OD-80) EVIDENCE TICKET:

1. Insert the Evidence Ticket into the opening labeled "Insert Ticket" on the DataMaster when the command on the display prompts "Insert Ticket"
2. Upon completion of the test, the "Evidence Ticket" will automatically be ejected from the instrument.
3. The operator must sign his/her name on the bottom of the form and print his/her five-digit certification number following the signature.
4. Distribution and retention of the form is described in Chapter 5.

CHAPTER 4
BREATH TESTER VERIFICATION PROCEDURE

BREATH ALCOHOL TESTING MOBILE UNIT

CLASS IIIB OPERATOR TRAINING COURSE

Chapter 4

BREATH ALCOHOL TESTING MOBILE UNIT INSPECTION REPORT PROCEDURES

Normal standby display: **"MONTH DAY TIME"**
"READY PUSH RUN" flashing)

- Step 1: Prepare a 0.04, 0.080 and a 0.200 ethanol standard solutions according to established procedures (see Chapter 4 in the Michigan Breath Test Operator Training Manual).
- Step 2: Prepare an additional 500ml water solution and add four (4) drops of 100% pure acetone.
- Step 3: Fill in boxes one (1) through five (5) on the SOD-84A.
- Step 4: Check Time and Date on the DataMaster if correct check box number (1) on the SOD-84A. If incorrect follow the procedures in Chapter 9 of the Michigan Breath Test Operators Training Manual to set the correct Time and Date.
- Step 5: Perform Diagnostic Check on DataMaster.

After the instrument has warmed up and the normal display of **"MONTH DAY TIME,"** **READY PUSH RUN** is (flashing). Push the "TST" (test) key on the DataMaster. "PASSWORD" will appear on the screen. Type in the password. Push the "ENTER/RETURN" key. Display will show "DIAGNOSTIC CHECK" when the DataMaster has completed the diagnostic check "INSERT TICKET" will appear on the screen. Insert the evidence ticket (OD-80) per instructions on the form into the "INSERT TICKET" slot. The results of the test will automatically be printed on the ticket. Operator must sign the "Evidence Ticket" and print his/her five digit operator certification number following the signature.

The following checks must read "OKAY"

COMPUTER:	OKAY
PROGRAM: (date in parenthesis)	OKAY
HEATERS SAMPLE CHAMBER:-this check must show a temperature of 45c to 55c inclusive	
FLOW DETECTOR:	OKAY
PUMP HIGH SPEED:	OKAY
DETECTOR:	OKAY
FILTERS:	OKAY
QUARTZ STANDARD:	OKAY
CALIBRATION:	OKAY

Check "PRINTER TEST" to be sure all letters, and symbols are working.

- a. If any of these diagnostic checks does not indicate "OKAY" or if the temperature of the "HEATER SAMPLE CHAMBER" is less than 45c or higher than 55c notify a service representative at 1-800-800-8143.
- b. If told to take the instrument out of service by the service representative place a sign on the unit "OUT OF SERVICE". And make an entry in the log book "OUT OF SERVICE" with the date and time.

Step 6: Perform the three (3) simulator solution test (0.040, 0.080, 0.200) on the instrument (follow the instructions in Chapter 7- Simulator Test Sequence in the Michigan Breath Test Operators Training Manual). The test results shall be within the allowable range printed on the SOD-84A.

- a. Record the results of the three test on the SOD-84A.
- b. If the test results are high or low (outside the allowed range) follow the procedures on page 4-6 in the November 2003 Michigan Breath Test Operators Training Manual.
- c. The operator must sign the "Evidence Ticket" and print his/her five-digit certification number following the signature.

Step 7: Perform the "Check for Acetone Interference" test on the unit. The Simulator with the distilled water and added acetone is used to perform this test on the instrument (follow the instructions in Chapter 7-Simulator Test Sequence in the Michigan Breath Test Operators Training Manual)

- a. After the sample has been accepted the screen will display "INTERFERENCE DETECTED". When display reads "INSERT TICKET" insert ticket and instrument will automatically print the results on the Evidence Ticket. Operator must sign the "Evidence Ticket" and print his/her five-digit certification number following the signature.
- b. Mark the "Box Check for Acetone Interference".

Step 8: Perform the "Check for Radio Frequency Interference"

- a. The check is to be performed with a portable (hand held) radio. The Operator is to push the "RUN" key as if performing a "SUBJECT TEST" on the instrument. When the prompt "SUBJECT'S NAME" appears type in "RADIO/CHECK" then push enter for the other prompts until "OPERATORS NAME" appears, type in your name and "CERTIFICATION NUMBER". The instrument will start through its cycle when the instrument displays "PLEASE BLOW". The operator is to hold the portable radio approximately five (5) feet from the instrument push the "Push to Talk Button" then slowly move the radio (while activated) towards the instrument until the instrument "ABORTS" the test. The display will indicate "RADIO INTERFERENCE". After the instrument clears the interference and displays "INSERT TICKET". Insert the ticket and the instrument will automatically print the test results on the Evidence Ticket. The Operator must sign his/her name and print his/her five-digit certification number following the signature. Mark the box "Check for Radio Interference" (RFI).

Step 9: Carefully review the SOD-84A to be sure that the form is filled out completely including your signature and the date. Attach the OD-80's for the three simulator test, the acetone test, diagnostic check, and radio interference check. If the form is completed mark the box "Complete Inspection Form".

Once you have completed the SOD-84A and the BAC DataMaster in the Mobile Breath Alcohol Testing Unit has been verified you are ready to begin performing breath test on OUIL suspects.

FACE THIS SIDE DOWN - THIS EDGE IN FIRST

Evidence Ticket

STATE OF MICHIGAN
DEPARTMENT OF STATE POLICE

INSTRUMENT VALUE

THE END

CONFIDENTIAL CHECK

COMPUTER: EKT
PAGE: 10/23/88 EKT

ENTER
PAGE THREE

FLU DETECTOR: OFF

HIGH SPEED: OFF

DETECTOR: 13.44

FILTER: OFF

CLARTZ STAMPEL: DIER

SUBJECT: [REDACTED] **DATE:** [REDACTED]

PRINTER TEST

```
int main() { char s[10] = "abcdefghijkln";  
    printf("%c\n", *s);  
    return 0; }
```

STAFF: 100% 232545% 100%

DATE OF RECEIPT

10-1-3417 10-1-3418
 10-1-3419 10-1-3420
 10-1-3421 10-1-3422

CHAPTER 5
RECORD KEEPING
Distribution and Retention

BREATH ALCOHOL TESTING MOBILE UNIT

CLASS IIIB OPERATOR TRAINING COURSE

Record Keeping - Distribution and Retention

Distribution

1. Subject print-outs (Evidence Ticket OD-80) - 3 copies
 - a. White copy is attached to the master complaint.
 - b. Yellow copy is to be given to the prosecutor.
 - c. Pink copy is to be given to the arrested subject.
2. Simulator print-outs (Evidence Ticket OD-80) - 3 copies
 - a. White and yellow copies are to be kept with the log in the BAT Mobile.
 - b. Pink copy may be discarded.
3. OD-33 Evidential Breath Testing Log
 - a. To be used to record weekly simulator tests only.
 - a. A new sheet shall be used for each calendar month.
4. SOD - 84A Breath Alcohol Testing Mobile Unit Inspection Report
 - a. To be used by a Class IIIB Operator to perform an Inspection on the DataMaster in the BAT Mobile.
 - b. A new sheet shall be used for each Inspection.

Retention

1. Subject printouts
 - a. Retain per your department's retention policy.
2. Simulator printouts
 - a. Current year plus one year.
3. OD-33 Evidential Breath Testing Log
 - a. Current year plus seven years.
4. SOD-84A Breath Alcohol Testing Mobil Unit Inspection Report
 - a. Current year plus seven years.