# **U.S. DEPARTMENT OF TRANSPORTATION**

# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

# LABORATORY TEST PROCEDURE

# FOR

# **REGULATION PART 575.103**

**Truck-Camper Loading** 



SAFETY ASSURANCE Office of Vehicle Safety Compliance Room 6115, NSA-30 400 Seventh Street, SW Washington, DC 20590

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#### 1. PURPOSE AND APPLICATION

The Office of Vehicle Safety Compliance (OVSC) provides contracted laboratories with Laboratory Test Procedures (TPs) which serve as guidelines for obtaining compliance test data. The data are used to determine if a specific vehicle or item of motor vehicle equipment meets the minimum performance requirements of the subject Federal Motor Vehicle Safety Standard or in this case, Regulation Part 575.103. The purpose of the OVSC Laboratory Test Procedures is to present a uniform testing and data recording format, and provide suggestions for the use of specific equipment and procedures. Any contractor interpreting any part of this OVSC Laboratory Test Procedure to be in conflict with Regulation Part 575.103 or observing any deficiencies in a Laboratory Test Procedure is required to advise the Contracting Officer's Technical Representative (COTR) and resolve the discrepancy prior to the start of compliance testing.

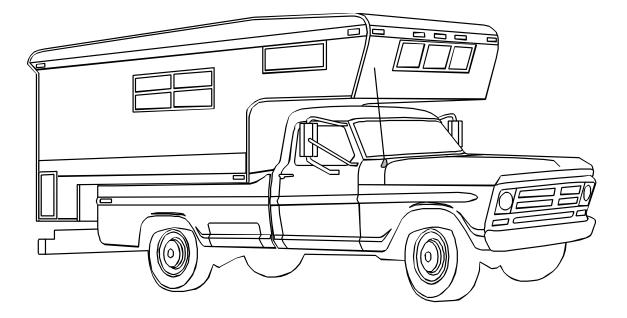
Contractors are required to submit a detailed test procedure to the COTR before initiating the compliance test program. The procedure must include a step-by-step description of the methodology to be used.

The OVSC Laboratory Test Procedures are not intended to limit or restrain a contractor from developing or utilizing any testing techniques or equipment, which will assist in procuring the required compliance test data.

**NOTE:** The OVSC Laboratory Test Procedures, prepared for use by independent laboratories under contract to conduct compliance tests for the OVSC, are not intended to limit the requirements of the applicable FMVSS(s). In some cases, the OVSC Laboratory Test Procedures do not include all of the various FMVSS or Regulation minimum performance requirements. Sometimes, recognizing applicable test tolerances, the Test Procedures specify test conditions, which are less severe than the minimum requirements of the standards themselves. Therefore, compliance of a vehicle or item of motor vehicle equipment is not necessarily guaranteed if the manufacturer limits certification tests to those described in the OVSC Laboratory Test Procedures.

## 2. GENERAL REQUIREMENTS

REGULATION PART 575.103 requires manufacturers of slide-in campers to affix a label to each camper that contains information relating to certification, identification, and weight of the camper with standard equipment. Camper manufacturers must provide detailed loading information and the longitudinal center of gravity (CG) in the owner's manual.



#### 3. SECURITY

The contractor shall provide appropriate security measures to protect the OVSC test vehicles and items of motor vehicle equipment from unauthorized personnel during the entire compliance-testing program. The contractor is financially responsible for any acts of theft and/or vandalism, which occur during the storage of test vehicles and items of motor vehicle equipment. Any security problems, which arise, shall be reported by telephone to the Industrial Property Manager (IPM), Office of Contracts and Procurement (OCP), within 2 working days after the incident. A letter containing specific details of the security problem will be sent to the IPM (with copy to the COTR) within 48 hours.

The contractor shall protect and segregate the data that evolves from compliance testing before and after each vehicle or item of motor vehicle equipment test. No information concerning the vehicle or equipment item safety compliance testing program shall be released to anyone except the COTR, unless specifically authorized by the COTR or the COTR's Branch or Division Chief.

**NOTE:** NO INDIVIDUALS, OTHER THAN CONTRACTOR PERSONNEL DIRECTLY INVOLVED IN THE COMPLIANCE TESTING PROGRAM, SHALL BE ALLOWED TO WITNESS ANY VEHICLE OR EQUIPMENT ITEM COMPLIANCE TEST UNLESS SPECIFICALLY AUTHORIZED BY THE COTR.

#### 4. GOOD HOUSEKEEPING

Contractors shall maintain the entire vehicle or item of motor vehicle equipment compliance testing area, test fixtures and instrumentation in a neat, clean and painted condition with test instruments arranged in an orderly manner consistent with good test laboratory housekeeping practices.

#### 5. TEST SCHEDULING AND MONITORING

The contractor shall submit a test schedule to the COTR prior to testing. Tests shall be completed as required in the contract. Scheduling shall be adjusted to permit sample motor vehicles to be tested to other FMVSS as may be required by the OVSC. All testing shall be coordinated to allow monitoring by the PART 575.103 COTR.

#### 6. TEST DATA DISPOSITION

The contractor shall make all vehicle and equipment item preliminary compliance test data available to the COTR on location within 4 hours after the test. Final test data shall be furnished to the COTR within 5 working days. Additionally, the contractor shall analyze the preliminary test results as directed by the COTR. All backup data sheets, technical notes, etc., shall be either sent to the COTR or destroyed at the conclusion of each delivery order, purchase order, etc.

## 7. GOVERNMENT FURNISHED PROPERTY (GFP)

#### ACCEPTANCE OF SLIDE-IN CAMPER

The Contractor has the responsibility of accepting the slide-in camper from either a dealer or a slide-in camper transporter. In both instances, the contractor acts in the OVSC's behalf when signing an acceptance of the slide-in camper. If a dealer delivers the camper, the contractor must check to verify the following:

- A. All options listed on the "sticker" are present on the camper.
- B. There are no dents or other interior or exterior flaws.
- C. The camper has been properly prepared.
- D. The camper contains an owner's manual, warranty document, consumer information, and extra set of keys.

If a government-contracted transporter delivers the slide-in camper, the contractor should check for damage, which may have occurred during transit.

A "Slide-In Camper Condition" form will be supplied to the contractor by the COTR when the camper is transferred from the dealer/distributor/manufacturer or between test contracts. The upper half of the form describes the camper in detail, and the lower half provides space for a detailed description of the posttest condition. Slide-In Camper Condition forms must be returned to the COTR with the copies of the Final Test Report or the reports will NOT be accepted.

#### NOTIFICATION OF COTR

The COTR must be notified within 24 hours after a slide-in camper has been delivered.

#### 8. CALIBRATION OF TEST INSTRUMENTS

Before the contractor initiates the safety compliance test program, a test instrumentation calibration system will be implemented and maintained in accordance with established calibration practices. Guidelines for setting up and maintaining such calibration systems are described in MIL-C-45662A, "Calibration System Requirements". The calibration system shall be set up and maintained as follows:

- A. Standards for calibrating the measuring and test equipment will be stored and used under appropriate environmental conditions to assure their accuracy and stability.
- B. All measuring instruments and standards shall be calibrated by the contractor, or a commercial facility, against a higher order standard at periodic intervals NOT TO EXCEED TWELVE (12) MONTHS! Records, showing the calibration trace ability to the National Institute of Standards and Technology (NIST), shall be maintained for all measuring and test equipment.
- C. All measuring and test equipment and measuring standards will be labeled with the following information:
  - (1) Date of calibration
  - (2) Date of next scheduled calibration
  - (3) Name of the technician who calibrated the equipment
- D. A written calibration procedure shall be provided by the contractor, which includes as a minimum the following information for all measurement and test equipment:
  - (1) Type of equipment, manufacturer, model number, etc.
  - (2) Measurement range
  - (3) Accuracy
  - (4) Calibration interval
  - (5) Type of standard used to calibrate the equipment (calibration trace ability of the standard must be evident)
- E. Records of calibration for all test instrumentation shall be kept by the contractor in a manner, which assures the maintenance of established calibration schedules. All such records shall be readily available for inspection when requested by the COTR. The calibration system will need the acceptance of the COTR before the test program commences.

## 9. PHOTOGRAPHIC DOCUMENTATION

Photographs shall be black and white, 8 x 10 inches, and legible. A tag, label, or placard identifying the slide-in camper model and NHTSA number shall appear in each photograph and be legible. Each photograph shall be labeled as to subject matter. As a minimum, the following photographs shall be included:

- A. 3/4 frontal view of slide-in camper being weighed
- B. Full side view of slide-in camper balancing on a knife-edge determining the center of gravity.
- C. Close-up of slide-in camper CG measurement showing actual CG measured.
- D. Close-up of slide-in camper certification label
- E. Close-up of information label (if information required by S5.1.2 is found on a label adhered to inside of camper)

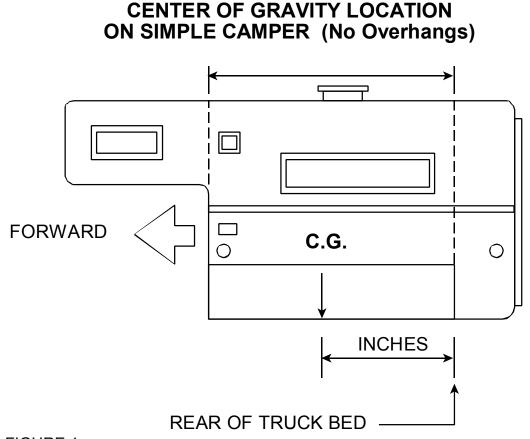
#### 10. DEFINITIONS

#### CAMPER WEIGHT

Maximum weight of a slide-in camper when it contains standard equipment, \_\_\_\_ gallons of water, \_\_\_\_ pounds of bottled gas, and \_\_\_\_ cubic foot refrigerator (or ice box with \_\_\_\_ pounds of ice, as applicable). This weight does not include any optional items, which may be installed in the vehicle.

CENTER OF GRAVITY (CG)

Longitudinal center of gravity of a slide-in camper when loaded as defined by "camper weight" measured from the point that contacts the rear end of the truck bed. If no point is defined, it shall be measured from the rear of the camper as shown in Figure 1.



#### FIGURE 1

SLIDE-IN CAMPER

Camper having a roof, floor and sides, designed to be mounted on and removable from the cargo area of a truck by the user.

#### 11. PRETEST REQUIREMENTS

#### VISUAL INSPECTION

Before a slide-in camper is tested, the contractor shall perform a visual inspection to ensure that required information is present with the slide-in camper and to identify optional equipment installed on camper. If the information is not present, the COTR shall be contacted immediately before testing begins. The camper must have a certification label, as shown in Figure 2, affixed to it including its weight. If no label is present the COTR will contact the manufacturer to obtain a label for the camper. The label will be sent to the laboratory where the contractor will be responsible for preparing the camper surface and affixing the label in a location designated by the COTR.

MFG. BY: Camper Manufacturer's Name Month and Year of Manufacture				
THIS CAMPER CONFORMS TO ALL APPLICABLE FEDERAL				
MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE				
DATE OF MANUFACTURE SHOWN ABOVE.				
CAMPER WEIGHT IS LBS. MAXIMUM				
WHEN IT CONTAINS STANDARD EQUIPMENT,				
GAL. OF WATER, LBS. OF BOTTLED GAS,				
AND CUBIC FT. REFRIGERATOR (OR ICE				
BOX WITH LBS. OF ICE, AS APPLICABLE).				
CONSULT OWNER'S MANUAL (OR DATA SHEET, AS APPLICABLE)				
FOR WEIGHTS OF ADDITIONAL OR OPTIONAL EQUIPMENT.				
Vehicle Identification Number				

#### FIGURE 2

An owner's manual and/or other document must be present with the longitudinal center of gravity (CG) for the slide-in camper.

If optional equipment is present it shall be noted. Where practical this equipment shall be removed. For items, which remain and weigh over 20 pounds their weight and the distance from the point that contacts the rear end of the truck bed shall be recorded. The weights and distances shall be taken into account when determining the weight of the camper and CG for the camper with standard equipment.

#### 11. PRETEST REQUIREMENTS....Continued

#### TEST DATA LOSS

A compliance test is not to be conducted unless all of the various test conditions specified in the applicable OVSC Laboratory Test Procedure have been met. Failure of a contractor to obtain the required test data and to maintain acceptable limits on test parameters in the manner outlined in the applicable OVSC Laboratory Test Procedure may require a retest at the expense of the contractor. The retest costs will include all costs associated with conducting the retest.

The Contracting Officer of NHTSA is the only NHTSA official authorized to notify the contractor that a retest is required. The retest shall be completed within two (2) weeks after receipt of notification by the Contracting Officer that a retest is required. If a retest is conducted, no test report is required for the original test.

## 12. COMPLIANCE TEST EXECUTION

CERTIFICATION LABEL

Results from this section are to be recorded on DATA SHEET 1.

Verify the following:

A. The camper has a certification label, with the information in the order and form shown in Figure 2.

_

FIGURE 2

- B. The label contains the following information:
  - (1) Name of camper manufacturer. The full corporate or individual name of the actual assembler of the camper shall be spelled out, except that such abbreviations as "Co.," or "Inc.," and their foreign equivalents, and the first and middle initials of individuals may be used. The "Manufactured By" or Mfd By" shall be preceded by the name of the manufacturer.
  - (2) Month and year of manufacture. It may be spelled out (e.g., "June 1973"), or expressed in numerals (e.g., "6/73").
  - (3) The statement "This camper conforms to all applicable Federal Motor Vehicle Safety Standards in effect on the date of manufacture shown above." The expression "U.S." or "U.S.A." may be inserted before the word "Federal".

## 12. COMPLIANCE TEST EXECUTION....Continued

(4) The following statement completed as appropriate: "CAMPER WEIGHT IS\_\_\_LBS. MAXIMUM WHEN IT CONTAINS STANDARD EQUIPMENT, GAL. OF WATER, \_\_\_LBS. OF BOTTLED GAS, AND \_\_\_CUBIC FT. REFRIGERATOR (or ICE, as applicable). CONSULT OWNER'S MANUAL (or DATA SHEET as applicable) FOR WEIGHTS OF ADDITIONAL OR OPTIONAL EQUIPMENT."

"Gal. of water" refers to the volume of water necessary to fill the camper's fresh water tanks to capacity. "Lbs. of bottled gas" refers to the weight of gas necessary to fill the camper's bottled gas tanks to capacity. The statement regarding a "Refrigerator" or "Icebox" refers to the capacity of the refrigerator with which the vehicle is equipped or the weight of the ice with which the icebox may be filled. Any of these items may be omitted from the statement, if the corresponding accessories are not included with the camper, provided the omission is noted in the camper owner's manual.

- (5) Vehicle Identification Number. Each slide-in camper shall have a number assigned by its manufacturer for identification purposes consisting of Arabic numerals, roman letters, or both.
- C. The label is plainly visible on an exterior rear surface other than the roof, steps, or bumper extensions.
- D. Measure the printing, which appears to be the smallest. Information must be in English, lettered in block capitals and numerals at least 3/32 inch high. The instrument used to measure the letter height shall be capable of measuring to the nearest 1/64 inch.
- E. The printing color contrasts with background color.
- F. The label cannot be removed without defacing or destroying it. Attempt to remove the label to determine if it will deface or destroy.

## MANUAL REQUIREMENTS

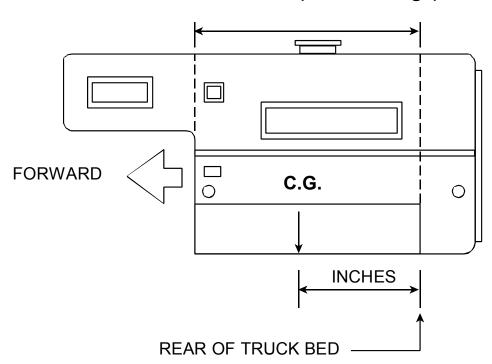
Results from this section are to be recorded on DATA SHEET 2. A copy of the owner's manual or data sheet, which supports the results, shall be placed in SECTION 6 of the report.

Verify the following:

A. An owner's manual, label, or other document is provided with the required information. Identify the document, which provides the information.

#### 12. COMPLIANCE TEST EXECUTION....Continued

- B. The manual contains the following:
  - (1) The statement and information provided on the certification label specified in Regulation Part 575.103. A manufacturer may use the statements, "See camper certification label (located on camper's rear exterior surface) for month and year of manufacture and for the Vehicle Identification Number" and "This camper conforms to all applicable Federal Motor Vehicle Safety Standards in effect on the date of manufacture."
  - (2) A list of other additional or optional equipment that the camper is designed to carry, and the maximum weight of each if its weight is more than 20 pounds when installed.
  - (3) The statement "To estimate the total cargo load that will be placed on a truck, add the weight of all passengers in the camper, the weight of installed additional or optional camper equipment, and the manufacturer's camper weight figure. Select a truck that has a cargo weight rating that is equal to or greater than the total cargo load of the camper, and whose manufacturer recommends a cargo center of gravity zone that will contain the camper's center of gravity when it is installed." Until October 1, 1973, the phrase "total load" may be used instead of "total cargo load."
  - (4) The statements: "When loading this camper store heavy gear first, keeping it on or close to the camper floor. Place heavy things far enough forward to keep the loaded camper's center of gravity within the zone recommended by the truck manufacturer. Store only light objects on high shelves. Distribute weight to obtain even side-to-side balance of the loaded vehicle. Secure loose items to prevent weight shifts that could affect the balance of your vehicle. When the truck-camper is loaded, drive to a scale and weigh on the front and on the rear wheels separately to determine axle loads. The load on an axle should not exceed its gross axle weight rating (GAWR). The total of the axle loads should not exceed the gross vehicle weight rating (GVWR). These weight ratings are given on the vehicle certification label that is located on the left side of the vehicle, normally on the dash panel, hinge pillar, door latch post, or door edge next to the driver on trucks manufactured on or after January 1, 1972. If weight ratings are exceeded, move or remove items to bring all weights below the ratings."
  - (5) A picture showing the location of the longitudinal center of gravity of the camper within an accuracy of 2 inches under the loading conditions specified in Regulation Part 575.103 as shown in Figure 3. The measurement should be shown from the point that contacts the rear end of the truck bed.



## CENTER OF GRAVITY LOCATION ON SIMPLE CAMPER (No Overhangs)

## **FIGURE 3**

(6) A picture showing the proper match or a truck and slide-in camper as shown in Figure 4.

## CAMPER WEIGHT

- A. Before the camper is weighed read the certification label and determines the weight for water, gas, and ice. Any of these standard equipment items may be omitted if they are not included with the camper, provided that the omission is noted in the owner's manual. Ballast the camper with the weight for these items in the location of these items. In lieu of using ballast the specified amount of water, gas and ice may be used.
- B. The scale or instrument used to weigh the camper shall have a minimum accuracy of 1 percent. The weight of the camper is determined by weighing the camper at the front of the box and the rear of the box (point designed to contact the rear of the truck bed). The sum of these weights is the weight of the camper. If no optional equipment is installed this weight should be compared to the weight on the certification label and recorded on Data Sheet No. 3.
- C. If optional equipment is installed on the camper the total weight of the options must be subtracted from the weight determined previously. This weight should be compared with the weight on the certification label and recorded on Data Sheet 3.

#### 12. COMPLIANCE TEST EXECUTION....Continued

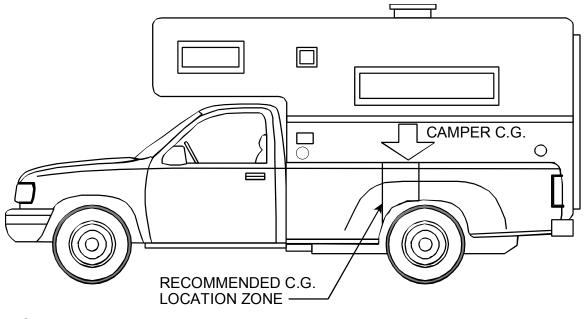


FIGURE 4

CENTER OF GRAVITY

The longitudinal Center of Gravity (CG) shall be determined by two methods. The CG obtained by these methods cannot have a difference greater than 0.5 inches.

A. Method 1 — Calculate the moment of inertia about the point on the camper, which is designed to contact the rear of the truck bed. All measurements of length shall be made with an instrument having an accuracy of at least 0.125 inches (see Figure 5).

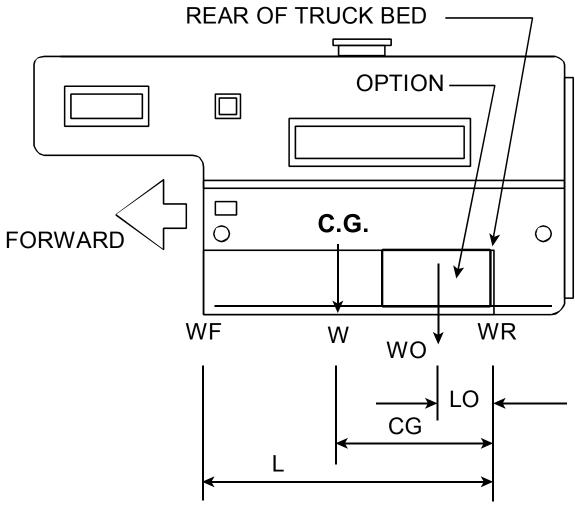
WHERE: W Weight of camper without options

- WF Weight front of camper
- WR Weight rear of camper
- WO Weight of installed optional item
- L Box length of camper
- LO Optional item length from point that contacts rear of truck bed
- CG Longitudinal center of gravity

(W)(CG)+(WO)(LO) = (WF)(L)

CG = [(WF)(L) - (WO)(LO)]/W

## **MEASUREMENT OF CENTER OF GRAVITY**



#### **FIGURE 5**

Compare with CG stated by manufacturer and record on DATA SHEET 3.

B. Method 2 — Balance the camper on transverse horizontal rod or knife-edge. Measure the distance from the point that is designed to contact the rear of the truck bed or the end of the camper if there is no such design point to the center of the knife-edge. Record on DATA SHEET 3.

#### 13. POST TEST REQUIREMENTS

Remove ballast, clean and lock camper.

#### 14. REPORTS

#### 14.1. MONTHLY STATUS REPORTS

The contractor shall submit a monthly Test Status Report and a Camper Status Report to the COTR. The Camper Status report shall be submitted until all campers are disposed of. Samples of the required reports are found in the report forms section.

#### 14.2. APPARENT TEST FAILURE

Any indication of an test failure shall be communicated by telephone or to the COTR within 24 hours with written notification mailed within 48 hours (Saturday and Sunday hours excluded). A Notice of Test Failure (see report forms section) with a copy of the particular compliance test data sheet(s) and preliminary data plot(s) shall be included. If possible repeat that portion of the test where the failure was noted to ensure that there is a test failure. In the event of a test failure, a posttest calibration check of some critically sensitive test equipment and instrumentation may be required for verification of accuracy. The necessity for the calibration shall be at the COTR's discretion and shall be performed without additional costs to the OVSC.

#### 14.3 FINAL TEST REPORTS

#### 14.3.1 COPIES

In the case of an apparent test failure, SEVEN (7) copies of the Final Test Report shall be submitted to the COTR for acceptance within 3 weeks of test completion. The Final Test Report format to be used by all contractors can be found in the "Report Section".

Where there has been no indication of an apparent noncompliance, THREE (3) copies of each Final Test Report shall be submitted to the COTR for acceptance within 3 weeks of test completion. No payment of contractor's invoices for conducting compliance tests will be made prior to the Final Test Report acceptance by the COTR. Contractors are requested to NOT submit invoices before the COTR is provided with copies of the Final Test Report.

Contractors are required to submit the first Final Test Report in draft form within 1 week after the compliance test is conducted. The contractor and the COTR will then be able to discuss the details of both test conduct and report content early in the compliance test program.

Contractors are required to PROOF READ all Final Test Reports before submittal to the COTR. The OVSC will not act as a report quality control office for contractors. Reports containing a significant number of errors will be returned to the contractor for correction, and a "hold" will be placed on invoice payment for the particular test.

#### 14. **REPORTS....Continued**

#### 14.3.2 REQUIREMENTS

The Final Test Report, associated documentation (including photographs), is relied upon as the chronicle of the compliance test. The Final Test Report will be released to the public domain after review and acceptance by the COTR. For these reasons, each final report must be a complete document capable of standing by itself.

The contractor should use **detailed** descriptions of all compliance test events. Any events that are not directly associated with the standard but are of technical interest should also be included. The contractor should include as much **detail** as possible in the report.

Instructions for the preparation of the first three pages of the final test report are provided for standardization.

## 14.3.3 FIRST THREE PAGES

A. FRONT COVER —

A heavy paperback cover (or transparency) shall be provided for the protection of the final report. The information required on the cover is as follows:

- (1) Final Report Number such as 575-ABC-9X-001, where:
  - 575 is the REGULATION 575.103 tested
  - ABC are the initials for the laboratory
  - 9X is the Fiscal Year of the test program (or 0X after 1999)
  - 001 is the Group Number (001 for the 1st test, 002 for the 2nd test, etc.)
- (2) Final Report Title And Subtitle such as

SAFETY COMPLIANCE TESTING FOR PART 575.103 Truck-Camper Loading

> XYZ Camper Co. 199X Weekender NHTSA No. CX1401

(3) Contractor's Name and Address such as

COMPLIANCE TESTING LABORATORIES, INC. 4335 West Dearborn Street Detroit, Michigan 48090

#### 14. **REPORTS....Continued**

NOTE: DOT SYMBOL WILL BE PLACED BETWEEN ITEMS (3) AND (4)

- (4) Date of Final Report completion
- (5) The words "FINAL REPORT"
- (6) The sponsoring agency's name and address as follows

U. S. DEPARTMENT OF TRANSPORTATION National Highway Traffic Safety Administration Safety Assurance Office of Vehicle Safety Compliance 400 Seventh Street, SW Room 6115 (NSA-30) Washington, DC 20590

#### 14.3. REPORTS....Continued

#### B. FIRST PAGE AFTER FRONT COVER —

A disclaimer statement and an acceptance signature block for the COTR shall be provided as follows

This publication is distributed by the U. S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

Prepared By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Approval Date: \_\_\_\_\_

FINAL REPORT ACCEPTANCE BY OVSC:

Accepted By: \_\_\_\_\_

Acceptance Date:

#### 14.3. REPORTS....Continued

#### C. SECOND PAGE AFTER FRONT COVER —

A completed Technical Report Documentation Page (Form DOT F1700.7) shall be completed for those items that are applicable with the other spaces left blank. Sample data for the applicable block numbers of the title page follows.

Block 1 — REPORT NUMBER

575-ABC-9X-001 or 575-ABC-0X-001 (after year 1999)

Block 2 — GOVERNMENT ACCESSION NUMBER

Leave blank

Block 3 — RECIPIENT'S CATALOG NUMBER

Leave blank

Block 4 — TITLE AND SUBTITLE

Final Report of PART 575.103 Compliance Testing of 199X XYZ Weekender Camper, NHTSA No. CX1401

Block 5 — REPORT DATE

March 1, 199X or March 1, 200X

#### Block 6 — PERFORMING ORGANIZATION CODE

ABC

Block 7 — AUTHOR(S)

John Smith, Project Manager Bill Doe, Project Engineer

#### Block 8 — PERFORMING ORGANIZATION REPORT NUMBER

ABC-DOT-XXX-001

Block 9 — PERFORMING ORGANIZATION NAME AND ADDRESS

ABC Laboratories 405 Main Street Detroit, MI 48070 Block 10 — WORK UNIT NUMBER

Leave blank

Block 11 — CONTRACT OR GRANT NUMBER

DTNH22-9X-D-12345

#### Block 12 — SPONSORING AGENCY NAME AND ADDRESS

US Department of Transportation National Highway Traffic Safety Administration Safety Assurance Office of Vehicle Safety Compliance 400 Seventh Street, SW, Room 6115 (NSA-30) Washington, DC 20590

Block 13 — TYPE OF REPORT AND PERIOD COVERED

Final Test Report Feb. 15 to Mar. 15, 199X (or 200X)

Block 14 — SPONSORING AGENCY CODE

**NSA-30** 

Block 15 — SUPPLEMENTARY NOTES

Leave blank

Block 16 — ABSTRACT

Compliance tests were conducted on the subject 199X XYZ Weekender camper in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP575-0X for the determination of PART 575.103 compliance.

Test failures identified were as follows:

NONE

**NOTE:** Above wording must be shown with appropriate changes made for a particular compliance test. Any questions should be resolved with the COTR.

#### 14.3. REPORTS....Continued

Block 17 — KEY WORDS

Compliance Testing Safety Engineering REGULATION PART 575.103

Block 18 — DISTRIBUTION STATEMENT

Copies of this report are available from ---

NHTSA Technical Information Services (TIS) Room 5108 (NAD-40) 400 Seventh St., SW Washington, DC 20590 Telephone No.: 202-366-4946

Block 19 — SECURITY CLASSIFICATION OF REPORT

Unclassified

#### Block 20 — SECURITY CLASSIFICATION OF PAGE

Unclassified

Block 21 — NUMBER OF PAGES

Add appropriate number

Block 22 - PRICE

Leave blank

#### 14.3. REPORTS....Continued

#### 14.3.4 TABLE OF CONTENTS

Final test report Table Of Contents shall include the following:

- Section 1 Purpose of Compliance Test
- Section 2 Test Data Summary
- Section 3 Test Data
- Section 4 Test Equipment List and Calibration Information
- Section 5 Photographs
- Section 6 Copy of Owner's Manual or other document
- Section 7 Notice of Test Failure (if applicable)

## 15. DATA SHEETS

## DATA SHEET 1 SUMMARY OF RESULTS

TEST DATE:					
CAMPER MANUFACTURER:					
MODEL NAME/NUMBER:					
CAMPER BOX LENGTH:; CAMPER NHTS	SA NO. :				
VIN:					
WEIGHT GIVEN BY MFR -	LBS.				
ACTUAL WEIGHT-	LBS.				
CG GIVEN BY MFR	INCHES				
CALCULATED CG	INCHES				
ACTUAL CG-	INCHES				
RESULTS:					
CAMPER PASSED ALL TESTS					
CAMPER FAILED THE FOLLOWING TES	TS:				
1					
2					
3					
4					
5					
RECORDED BY:;	DATE:				
APPROVED BY:					

## 15. DATA SHEETS....Continued

## DATA SHEET 2 SLIDE-IN CAMPER INFORMATION

CAMF	PER NH	ITSA NO.:; TEST DATE:		
CAMF	PER MO	DDEL YEAR/MFR/MODEL:		
A.	PRET	EST INFORMATION	YES	NO
	1.	Is label required by Part 575.103 affixed?		
	2.	Is a manual or document provided?		
	3.	Does vehicle have optional equipment installed?		
		LOCATION MEASURED FROM POINT THAT CONTRACTS REAR		
	ITEM	WEIGHT END OF TRUCK BI	ED	
В.	DATA	FROM LABEL		
	1.	Label furnishes the following information:		PASS/FAIL
		"THIS CAMPER CONFORMS TO"		
		D. The Following Statement is complete		

PASS/FAIL

	Fill	In Da	ita-
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CAMPER WEIGHT IS \_\_\_ LBS. MAXIMUM WHEN IT

CONTAINS STANDARD EQUIPMENT, \_\_\_\_ GAL. OF

WATER, \_\_\_\_ LBS. OF BOTTLED GAS, AND \_\_\_\_\_

CUBIC FT. REFRIGERATOR (OR ICE BOX WITH \_\_\_\_\_

LBS. OF ICE, AS APPLICABLE). CONSULT OWNER'S

MANUAL (OR DATA SHEET AS APPLICABLE) FOR

WEIGHTS OF ADDITIONAL OR OPTIONAL EQUIPMENT.

E. VIN Number Given (Fill In Number)

2.	Label is on a Rear Exterior Surface
	other than the Roof, Steps, or Bumper Extension

Location:

3. Printing is in English and at least 3/32" in height

4. Printing Contrasts with Background Color

Print Color:

Background Color:

- 5. Label is Permanently Attached
- C. DATA FROM OWNER'S MANUAL OR OTHER DOCUMENT
  - 1. A Manual or Document is provided

Information contained in:

## 15. DATA SHEETS....Continued

2.

		PASS/FAIL
The I	Manual furnishes the following information:	
(A)	Certification Label Information (If certain label information has been omitted, it is noted as such)	
(B)	List of Optional Equipment camper can carry	
(C)	The following Statement present:	
	"TO ESTIMATE TOTAL CARGO LOAD"	
(D)	The Following Statement Present:	
	"WHEN LOADING THIS CAMPER STORE HEAVY GEAR FIRST"	
(E)	Picture showing Location of C	
(F)	Picture showing Proper Match for Truck-Camper	

**REMARKS**:

RECORDED BY: \_\_\_\_\_\_; TEST DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_

#### DATA SHEET 3 TEST RESULTS AND CALCULATIONS

CAMPER NHTSA NO.: \_\_\_\_\_\_; TEST DATE: \_\_\_\_\_\_;

CAMPER MODEL YEAR/MFR/MODEL:

- A. Determination of Camper Weight by weighing at each end of camper box on a level surface.
  - 1. FRONT = \_\_\_\_ LBS. 3. TOTAL (A1 + A2) = \_\_\_\_ LBS.
  - 2. REAR = \_\_\_\_ LBS. 4. WEIGHT ON LABEL = \_\_\_\_ LBS.

DIFFERENCE (A4 - A3) = \_\_\_\_\_ LBS.

- B. Determination of Camper Longitudinal Center of Gravity (CG). (CALCULATED)
  - 1. BOX LENGTH OF CAMPER, L = \_\_\_\_ INCHES
  - 2. WEIGHT OF CAMPER FRONT = \_\_\_\_ LBS. (see A1)
  - 3. WEIGHT OF CAMPER = \_\_\_\_ LBS. (see A3)
  - 4. CG STATED BY MANUFACTURER = \_\_\_\_ INCHES
  - 5. CG = (B1 x B2)/B3 = \_\_\_\_ INCHES
  - 6. DIFFERENCE = B4 B5 = \_\_\_\_ INCHES
- C. Determination of Camper Longitudinal CG by balancing on a knife-edge.

CG STATED BY MANUFACTURER	INCHES
CG MEASURED	INCHES
DIFFERENCE	INCHES

RECORDED BY:	 ;	TEST DATE:	
APPROVED BY:			

## 15. DATA SHEETS....Continued

DATA SHEET NO. 3A (OPTIONAL EQUIPMENT INSTALLED) TEST RESULTS AND CALCULATIONS

- A. Determination of Camper Weight by weighing at each end of camper box on a level surface.
- FRONT = \_\_\_\_ LBS. 1. 4. OPTIONAL EQUIP. = \_\_\_\_ LBS. REAR = LBS. 5. STD. WEIGHT = LBS. (A3 - A4) 2. 3. 1 + 2 = LBS. 6. WEIGHT ON LABEL = LBS. DIFFERENCE (A6 - A5) =\_\_\_\_\_LBS. Β. Determination of Camper Longitudinal Center of Gravity (CG). (CALCULATED) BOX LENGTH OF CAMPER, L = \_\_\_\_ INCHES 1. WEIGHT OF CAMPER FRONT = \_\_\_\_ LBS. (see A-1) 2. WEIGHT OF CAMPER = LBS. (see A-3) 3. 4. WEIGHT OF OPTION, WOn = \_\_\_\_ LBS. 5. LENGTH TO OPTIONS, LOn = INCHES 6. CG STATED BY MANUFACTURER = INCHES
  - 7. CG = [(B1 x B2) (WOn)(LOn)]/A5 = \_\_\_\_ INCHES
  - 8. DIFFERENCE = (B6 B7) = \_\_\_\_ INCHES
- C. Determination of Camper Longitudinal CG by balancing on a knife-edge.

CG STATED BY MANUFACTURER	INCHES
CG MEASURED	INCHES
DIFFERENCE	INCHES

RECORDED BY:	-	TEST DATE:	
		_	

APPROVED BY: \_\_\_\_\_

LABORATORY NOTICE OF TE	ST FAILURE TO OVSC
REGULATION PART 575.103	TEST DATE:
LABORATORY:	
CONTRACT NO.:;	DELV. ORDER NO.:
LABORATORY PROJECT ENGINEER'S NAME:	
SLIDE-IN CAMPER DESCRIPTION:	
CAMPER NHTSA NO.:; VIN:	
CAMPER MANUFACTURER:	
TEST FAILURE DESCRIPTION:	
REG. REQUIREMENT:	
NOTIFICATION TO NHTSA (COTR) :	
DATE:; BY:	
REMARKS:	

NO.	CAMPER NHTSA NO., MAKE & MODEL	COMPLIANCE TEST DATE	PASS/ FAIL	DATE REPORT SUBMITTED	DATE INVOICE SUBMITTED	INVOICE PAYMENT DATE		
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

#### MONTHLY TEST STATUS REPORT REGULATION PART 575.103 DATE OF REPORT:

## 16. FORMS....Continued

## MONTHLY CAMPER STATUS REPORT REGULATION PART 575.103 DATE OF REPORT: \_\_\_\_\_

NO.	CAMPER NHTSA NO., MAKE & MODEL	DATE OF CAMPER DELIVERY	TEST START DATE	TEST COMPLETE DATE	CAMPER SHIPMENT DATE	CONDITION OF CAMPER
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						