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Labor Time Guide Foreword

Introduction

This Labor Time Guide (hereinafter called "LTG") is designed for those who file Mobility Ventures LLC warranty claims. We hope that this Guide will enable you to correctly file claims that accurately and completely reflect the warranty repairs you perform. Only in this way can you be assured that you will be completely reimbursed for the parts you use and the labor time you spend on Mobility Ventures LLC warranty work.

The layout and sections of the LTG coincide with those of the Mobility Ventures LLC MV-1 Parts and Service manuals, and will be standard for MV-1s of all model years.

Page Layout

The page layout for this LTG has been structured to read from left to right, starting with "Operation Description" and its qualifiers, followed by the "Operation Numbers" and ending with a chart on the right hand side of the page. The chart gives labor hours based on the vehicle's engine type.

Policy Codes

Following is a listing of the one-letter Policy Codes used in this publication. These codes appear as notes under the major operation descriptions to which they apply.

A - The operation always requires specific authorization.

E - The operation is related to emissions control. An emissions-related operation may be performed without special authorization, even after the bumper-to-bumper warranty expires, provided that it is performed within the applicable emissions warranty period. Please refer to the Policies and Procedures Manual for the terms and duration of these warranties.

T - Towing can be expected for this operation.

Certain labor operations are commonly sublet to speciality facilities. These operations are eligible for additional administrative allowance when repairs are completed at the sublet location and the Dealer moved the vehicle to and from that location. See the Policies and Procedures Manual for the warranty terms of these situations.

Index

An alphabetical list of operation descriptions is included in this publication to help in finding labor operations.

Labor Operations and Labor Time

Labor Operations

All repair jobs that have a labor operation number (such as 04M010) are classified as Labor Operations. On a warranty claim a labor operation is referred to as a "Primary labor operation." The more involved labor operations are described step-by-step in the Service Manual. Simpler labor operations are considered self-explanatory. The time shown in this LTG for a labor operation is sufficient time for a certified technician to correctly perform all the steps of the operation. The time necessary to access the parts involved is built into the labor time guide.

Labor Time

The principal purpose of this LTG is to show the time allowed for the performance of the described labor operations. Most of the time allowances published in this guide are based on studies of the actual time

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required to complete the operation. No connection with the technicians' wages is implied since wages are dependent upon the service center technician pay plan in use.

The time allowances published have been determined by performing the operation a sufficient number of times to establish an average time or to determine that a fair and equitable time has been determined. Standard technicians' hand tools and dealer essential and available tools are used in performing time studies. No power-operated wrenches are used for time studies. Procedures outlined in Service Manuals or other Service Publications, and good shop practices are used as a guide when performing the work necessary to establish time allowances.

The time allowance includes the actual time required to perform the operation plus an additional allowance to provide for operating variables. Time allowances do not include time to remove and replace special equipment other than manufacturer operations and accessories.

It is reasonable to assume that additional time (beyond the time shown and not cited in the "ADD" sections of this manual) may be required when unusual conditions are encountered while performing a "Replace," "R & R," or "R & R or Replace." Such additional time is covered below as X-time (or OTHER LABOR HOURS described below).

Types of Labor Time

There are three kinds of labor time:

L-time. This is the labor time given in this Labor Time Guide. It is also known as "base time" or "flat rate time" or default time. A warranty claim usually involves labor time, but if a claim is for parts or materials only, the L line on a claim should be omitted. Entering zero hours or leaving the hours field blank causes the computer to enter the base time for the operation. The computer will accept any L-time from .01 hour up to the base time, but it will not accept any time over the base time. For such time use Y-time or X-time.

Y-time. Additional time may be required to perform or to supplement a labor operation if certain conditions are present. This additional time is called Y-time and is listed in the "ADD" section of this LTG under "OPERATION DESCRIPTION." Each "ADD" situation is listed with a letter designation, such as A, B, C etc. This letter should appear on the dealer's repair order (R/O) with the five- or six-character labor operation number if the additional time is used. This "ADD" time is entered on warranty claims as Y-time, which is also known as "ADD time" or "Additional time." Since a claim can have only one line of Y-time, and several ADD letters may apply, a line of the total Y-time should be followed with a note citing the letters of the "ADD." If an operation shows no Add time in this LTG, the computer will not accept any Y-time in a claim for that operation. If more time is needed, above the L-time and the Y-time, use X-time.

X-time. This is the labor time needed in addition to the L-time and any Y-time that may apply. It is also called "Other Labor Hours" (OLH) or "unscheduled labor hours." If you claim up to .50 hour of X-time, authorization is not necessary, but an explanatory note following the line of X-time is required. If you claim more than .50 hour of X-time, you need specific authorization.

Other Labor Terms

Base Time - This is the labor time as shown in the LTG. It is also called default time or flat rate time. In warranty claims it is called L-time.

Flat Rate Time - Same as base time.

Manual Time - Same as base time.

OLH - Same as Other Labor Hours. In warranty claims it is called X-time.

Other Labor Hours - Same as OLH.

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Punch Time - This is a term used by some service centers to mean the time between the start of a job and the end of a job, as calculated from the time the technician punched in and out for the job. It is the time actually spent by the technician to do the job.

Straight Time - Same as punch time.

Unscheduled Labor Time - Any labor time not found in the LTG, usually this term means OLH.

Action Words

The name of each labor operation has been established using specific action words (or phrases considered to be words) to clearly identify the repair that is allowable on a component. These words and phrases with their definitions are given below.

Replace (a single word)

A major operation description that uses the word "REPLACE" is an operation that replaces a part. The replacement part must be on the warranty claim. If the claim does not contain a part, a note must be included to explain why no part was replaced.

R & R (a single word)

A major operation description that uses the word "R&R" is an operation that removes, repairs, and reinstalls a repairable part. All such operations include "ADD" conditions covering all possible repair situations. These operations can be labor-only operations, with no replacement parts on the warranty claim.

Repair

Align (a single word)

Adjust

Tighten

The four above actions describe the repair work to be performed. The operations with these words in their descriptions can be labor-only operations.

Repair or Replace

R & R or Replace

The above two actions indicate that the part or assembly can be repaired, aligned, or tightened on the vehicle; or it can be removed, repaired, and/or reinstalled or replaced, depending on the extent of failure. These operations can be labor-only operations if no replacement part or assembly is needed. If the claim does not contain a part, a note should be included to explain why no part was replaced.

Recondition

When "RECONDITION" is used in the operation description, it means that an assembly is removed from the vehicle, disassembled, and cleaned. All parts are inspected. Then the assembly is rebuilt with the same or new parts, reinstalled in the vehicle, and adjusted. When "RECONDITION" is used in an "ADD" operation, it does not include removal and re-installation, but only that work necessary to recondition the assembly once it is removed from the vehicle.

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Includes

Some major operations have the word "INCLUDES" (abbreviated "INC") after the operation description. The operations listed after the word "INC" are provided to assist you in knowing whether or not certain items or functions are included within the operation. These operations are necessarily not all-encompassing because to place all such data in the Guide would make it difficult to use. If there are any questions as to whether something is included or not, see the Service Manual's description of the operation.

Changes or Suggestions

If you have issues or suggestions concerning a labor operation or anything else in this LTG, use the Mobility Ventures LLC Manual Suggestion Form or the Suggested New Operation Form to question or recommend changes. These forms are found at the end of this publication. You can mail them or fax them to us. The mailing address is at the bottom of the forms; the fax number is 574-254-2202.

The Three C's

Warranty repairs involve reading or listening to the customer's complaints, analyzing and observing the situation, diagnosing the problem, repairing the problem, and testing to see if the repairs eliminated the problem. The principal parts of this process are commonly referred to as the "three C's".

All warranty work should show these "three C's":

- The **C** omplaint (problem),
- The **C** ause (malfunction),
- The **C** orrective Action (the labor operation).

If the claim is labor only (no parts), a note must be added to explain the claim.

The Complaint

Typically the customer comes to the service center with a list of complaints. He thinks something is not as it should be, he can describe symptoms, but he may not know the cause of the condition. In a warranty claim the complaint is summarized in the "Problem" field.

The Cause

It is the responsibility of the repair team (the service writer, the service manager, the technician) to analyze the symptoms reported by the customer or observed by the repair team, to investigate and diagnose the problem, and to propose a solution. This process seeks to determine the cause of the problem and what the repair team can do to solve it. In a warranty claim the cause is entered in the "Malfunction" field.

The process of finding the source/cause of a defined problem or condition should be based on a systematic and logical approach. As an example, finding the source of an electrical problem might involve following trouble trees and/or diagnostic charts, or finding a drivability problem using a Scan Tool and following the trouble code diagnostic charts.

The Corrective Action

The repair work necessary to correct the problem is the corrective action. Depending on the diagnosis arrived at during the search for the cause of the problem, this work is described in the service manual and can be found in this LTG, with the standard time allowance given. On a warranty claim this corrective action is implicit in the labor operation title and is shown in the "Primary Labor Operation" field.

All repairs logically end with a testing procedure to verify that the repair solved the problem. The time for such testing is included in the base time allowance for the labor operation.

Examples of repair testing are:

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- Plastic gauge of bearings
- Rear axle backlash
- Rear axle side bearing shim selection
- Use of common measurement tools such as gauge blocks, micrometers, or dial indicators as specified in the Service Manual procedure.

Paint

For reimbursement all warranty paint operations require prior authorization from Mobility Ventures LLC. The labor time allowance given in "Hours" in the Paint Sections include time for cleaning, preparing, and finishing the particular area involved. The time has been increased to cover the cost of paint and materials required for the complete repair operation, so only labor and hard parts (panels, door seals, etc.) are allowed on paint warranty claims. Materials and sublet lines on a paint warranty claim are not allowed. There are two types of warranty paint operations, spot and complete.

Spot Paint

This type of paint repair is used to correct the following types of problems:

- Thin or mottled paint
- Off color
- Rub-through
- Shallow scratches
- Dirt in paint

These types of problems do not respond to "Finesse sand and buff." The repairs include the mechanical removal of the base color from as much as 50% of the panel surface area, but do not require disturbing the factory primer. While it is still appropriate to make spot repairs and color blending repairs in an open panel, it is nearly impossible to blend the clear coat in an open panel without leaving a halo effect or other evidence of the repair. Therefore, when you do a Base/Clear Coat repair, clear coat is to be applied to the entire panel and you should select the COMPLETE labor operation.

Complete Paint

This type of paint repair is described as "removing the finish (color/clear, or primer) from more than 50% of the panel area." IT DOES NOT MEAN "REMOVE ALL FINISH TO SUBSTRATE (i.e., BARE METAL)." Stripping is necessary only in unusual cases. As a good general rule, you should avoid removing factory primer coats; therefore do not use chemical removers.

Any chemicals that remove the base color and clear coats will attack the primer and some non-metal body parts. The appropriate method of stripping is to machine sand or plastic media blast to remove the affected layers without removing excessive amounts of factory primer. In these unusual cases where it is necessary to strip the panel, it is appropriate to charge more than COMPLETE time allowance. The additional labor (normally 25% to 40% of the refinish time allowance) should be added to the warranty claim as OLH. Naturally, these additional charges require appropriate and specific authorization.

VIN System Identification (Sample)

This sample chart explains the VIN. The data plate with the VIN is located on the left front corner of the dashpad.

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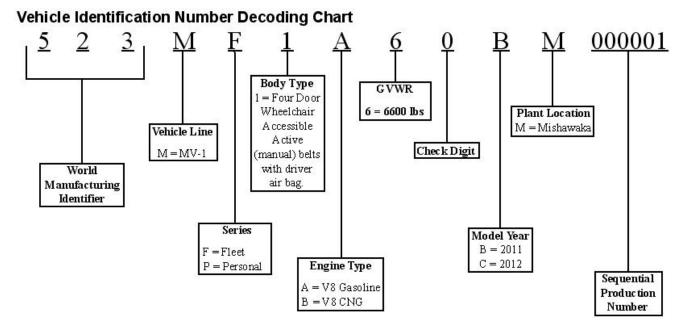


Figure 1-1. VIN Chart

Abbreviations

Abbreviatio		Abbreviation	Description		
A/C	Air Conditioning	MTD	Mounted		
ADJ	Adjust	NEC	Necessary		
ASSY	Assembly	NO	Number		
AUTO	Automatic	NVI	New Vehicle Inspection		
BTSI	Brake Transmission Shift Interlock	OLH	Other Labor Hours		
BTW	Between	P/B	Power Brake		
CD	Compact Disc	PCM	Powertrain Control Module		
CONT'D	Continued	PCV	Positive Crankcase Ventilation		
CTR	Center	PROM	Programmable Read Only Memory		
CV-JOINT	Constant Velocity Joint	P/S	Power Steering		
CYL	Cylinder	PTO	Power Take Off		
D & C	Disconnect and Connect	P/W	Power Windows		
DIFF	Differential	QTR	Quarter		
DIST	Distributor	RH	Right Hand		
DR	Door	R&R	Remove and Reinstall		
EE PROM	Electronically Erasable Programmable Read Only Memory	RR	Rear		
EGR	Exhaust Gas Recirculation	SPD	Speed		
ENG	Engine	SRTA	Service Replacement Transmission Assembly		
ETR	Electronically Tuned Radio	ST	Straight Time		
EVAC	Evacuate	TBI	Throttle Body Fuel Injection		
EXC	Except	TCC	Torque Converter Clutch		

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FRT	Front		ТСМ	Transmission Control Module	
HEI	High Energy Ignition		TPS	Throttle Position Sensor	
HVAC	· ·	١r	TRANS	Transmission	
INC	Conditioning Includes	_	U-JOINT	Universal Joint	
_	includes			Universal Joint	
I/P	Instrument Panel		VIN	Vehicle Identification Number	
LH	Left Hand		VOR	Vehicle Off Road (Incapacitated)	
LTG	Labor Time Guide		W/	With	
LWR	Lower		W/B	Wheel Base	
MAN	Manual		WDO	Window	
MAP	Manifold Absolute Pressure		WHL	Wheel	
MLDG	Molding		W/O	Without	
			W/S	Windshield	

Malfunction Codes

Code	Cause of Problem	Code	Cause of Problem	
1A	Bent	4X	Worn	
1B	Casting Defect	4Z	Wrong Part	
1C	Compression	5A Paint - Acid Rain		
1D	Broken	5C	Chrome Plating Defective	
1E	Burned	5G	Paint - Crazing/Cracking	
1F	Carbon Deposit	5L	Paint - Peeling	
1G	Chipped*	5P	Paint - Dirt/Foreign Material	
1H	Clogged/Restricted/Blocked	5R	Paint - Primer Shows Through	
1J	Collapsed	5T	Poor Metal Finish/Discolored	
1K	Cracked*	5W	Rusted/Corroded	
1L	Cut	6B	Component - Ground	
1M	Dented*	6C	Component - Inoperative	
1N	Burrs	6D	Component - Intermittent	
1P	Discharged	6E	Component - Missing	
1Q	Chatter	6F	Component - Intermittent	
1R	Does not Match*	6G	Component - Shortened	
1W	Condensation/Moisture	6H	Component - Bent/Damaged	
1X	Fade	6J	Connector - Corroded	
1Y	Foreign Material*	6L	Connector - Missing	
2A	Glass Cracked/Broken	6M	Connector - Disconnected	
2C	Glazed	6N	Connector - Partially Connected	
2E	Clearance - Excessive	6P	Connector - Seal Damaged	
2F	Clearance - Too Tight	6R	Lamp (Bulb) - Improperly Installed	
2G	Improperly Cut	6S	Lamp (Bulb) - Defective	
2H	Improper Installation	6T	Lamp (Bult) - Contains Moisture	
2J	Improperly Padded	6U	Overcharged	
2K	Improperly Seated	6W	Socket - Broken	
2L	Incorrect Pressure	6X	Socket - Corroded	
2N	Insufficient Lubrication	6Y	Socket - Open	
2P	Insufficient Sealant	6Z	Socket - Shortened	
2S	Kinked	7A	Socket/Lamp Disconnected	
2T	Improper Torque	7B	Terminal - Backed Out	
2V	Leaks, Explain	7C	Terminal - Bent or Damaged	

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2V1	Leaks - Engine Coolant	7D	Wire - Shortened to Ground		
2V2	Leaks - Engine Oil	7E	Terminal - Crimped over Insulation		
2V3	Leaks - Transmission	7F	Terminal - Not Crimped/Soldered		
2V5	Leaks - Differential	7G	Wire - Burned, External Heat		
2V6	Leaks - Power Steering	7H	Wire - Burned, Internal Heat		
2V7	Leaks - Brakes	7J	Wire - Chaffed		
2W	Loose	7K	Wire - Crossed in Connector		
3A	Misadjusted/Misaligned	7L	Wire - Cut/Broken/Open		
3C	Misrouted	7M	Wire - Misrouted		
3D	Missing	7N	Wire - Missing		
3F	Not Connected/Poor Engagement	7M	Wire - Misrouted		
3G	Not Drilled	7P	Wire - Not Long Enough		
ЗН	Noisy/Rattles	7R	Wire - Pinched		
3J	Oil Soaked	7S	Wire - Ring Terminal Disconnected		
3K	Balance/Imbalance	7T	Wire - Ring Terminal Loose		
3L	Out of Calibration	7W	Electrical Interference		
3M	Out of Round	70	Fumes		
3N	Poor Machining	79	Surge		
3P	Poor Release	80	Hard Start (Cold)		
3Q	Overheated	8A	Ramp - B3698 Length Control Defective		
3R	Porosity	8B	Ramp - B3663 Control Switch Defective		
3W	Punctured	8C	Ramp - B2707 Gearshift Lock Defective		
3X	Registers Incorrectly	8D	Ramp - B3660 Motor Inoperative		
3Z	Ruptured	8E	Ramp - B3696 Return Switch Defective		
4A	Scored	8F	Ramp - B3669 Motor Feedback Noise		
4B	Scratched*	81	Hard Start (Hot)		
4C	Soiled/Stain/Split Seam	84	NVI/PDI		
4D	Sheared	85	Enhancements		
4E	Slips	86	Campaigns		
4F	Shifts Hard	9Z	No Trouble Found		
4G	Stripped	91	Stalled		
4H	Torn	92	Won't Start		
4J	Seized	93	Special Policy		
4N	Warped/Wavy	94	Goodwill		
4Q	Weak	95	Scheduled Services		
4R	Weld Broken	97	Freight		
4S	Weld Omitted				
4T	Twisted				
4U	Vibrates				
4V	Wind Noise		*Also applies to paint repairs.*		

Claim Type Codes

Code Description

A. Regular Warranty - requires authorization only if required by individual labor operation.

B. Parts Warranty - requires authorization.

C. **Over-the-Counter Parts Warranty** - parts department sale only. Pays only for part(s) and not labor. Requires authorization.

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E. Emissions Warranty - this warranty mileage and period may vary from vehicle warranty.

F. **Freight/Postage Reimbursement** - covers freight/postage for those parts requested to be returned to the factory or for approved VOR shipments of parts.

G. Goodwill Adjustment - out-of-warranty policy adjustment. requires authorization.

- H. Delivery Inspection new vehicle inspection/pre-delivery inspection.
- I. Campaigns (requires complaint code) covers factory directed updates.
- J. Safety Recalls (requires complaint code) as directed by NHTSA.

Customer Assistance

If you have any questions regarding ownership, warranty coverage, or service information, refer to the Warranty section of the Owner's Manual, or call toll-free 1-800-874-1370.

ADMINISTRATIVE ALLOWANCE					
OPERATION DESCRIPTION	OPERATION NUMBER	ENGINE			
OPERATION DESCRIPTION	OPERATION NUMBER	GAS	CNG		
PRIMARY LABOR OPERATION FOR:					
TOWING	01M010				
ROADSIDE - JUMP START	01M011				
ROADSIDE - LOCK OUT	01M012				
ROADSIDE - OUT OF FUEL	01M013				
ROADSIDE - FLAT TIRE ASSISTANCE	01M014				
ROADSIDE - RESCUE SERVICE CALL	01M015				
SUBLET	01M020				
Policy A					
FREIGHT	01M030				
CHANGE OF ADDRESS/OWNERSHIP	01M040	.1	.1		
Note: To be used as a separate claim for change of address and/or ownership only.		<u>.</u>			

NEW VEHICLE INSPECTION					
OPERATION DESCRIPTION	OPERATION NUMBER	ENGINE			
OPERATION DESCRIPTION	OFERATION NOMBER	GAS	CNG		
PREDELIVERY INSPECTION	01M000	1.0	1.0		
Note: See Policies and Procedures Manual.					

MODULE FLASHING				
		ENGINE		
OPERATION DESCRIPTION	OPERATION NUMBER	GAS	CNG	
MODULE, FLASH, ALL	01M110	0.3	0.3	