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PTI/APWA. Equipment Management  
Information System, Forms  
Completion Instructions

Public Technology, Inc, Washington, D C

Prepared for

Department of Housing and Urban Development, Washington, D C. Assistant  
Secretary for Policy Development and Research

1977

**FILE COPY**

**PB 274 164**

**PTI/APWA EQUIPMENT MANAGEMENT  
INFORMATION SYSTEM**

**FORMS COMPLETION INSTRUCTIONS**

**U.S. Department of Housing and Urban Development  
Office of Policy Development and Research**

PUBLIC TECHNOLOGY, INC., WASHINGTON, D.C. AND SAN JOSE, CA.

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16. Abstracts <p>This document is one of a series comprising documentation for the PTI/APWA Equipment Management Information System; a system tailored to the special needs of local governments, developed by Public Technology, Inc. and the American Public Works Association.</p> <p>The Forms Completion Instructions describe in detail the manner in which each field on each form used for input to the Equipment Management System should be completed.</p>				
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PTI/APWA EQUIPMENT MANAGEMENT SYSTEM

FORMS COMPLETION INSTRUCTIONS

U.S. Department of Housing and Urban Development  
Office of Policy Development & Research  
Washington, D.C.

Prepared Under Contract #H-2106R

by

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Washington, D.C. 20036

1977

1 (a)

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## INTRODUCTION

This volume provides the instructions to be followed in completing each field on each of the recommended forms used for input to the Equipment Management System.

Instructions are included for forms used during system implementation as well as for forms used in the day to day operation of the system. Refer to the system User's Guide and the Implementation Handbook for information about the purpose and use of the various forms.

Where formats of the forms described in this volume are altered in a jurisdiction, the new field on the new form should still be completed following the instructions in this volume.

The forms presented in this volume are samples. A jurisdiction may want to redraw these forms for mass printing. PTI technical assistance is available for questions on the modification of these forms to more properly accommodate the operations in a particular jurisdiction.

EQUIPMENT INVENTORY MODULE FORMS



DATE / /

1 (80)

APWA CODE (8-15) DATE RECEIVED (16-21) MO DAY YR

ESTIMATED LIFE: 1 = MONTHS, 2 = MILES, 3 = HOURS (22-24) P.O. AMOUNT (31-38)

DEPRECIATION DATA: SALVAGE VALUE (26-30)

ASSIGNED PM LOC. (25) ACCIDENT REPAIRS - RENTAL BILL USER DIRECT CHARGE = D Y OR N (65)

PM INTERVAL (MILES OR HOURS) (45-46) MONTHS (47-51) METER UNIT (64) H, M, OR X (65)

BILLING BASIS = R (66) INSURANCE SCHEDULE(S) (67-69)

ASSIGNED ORGANIZATION CODE (39-44) NORMAL DUTY HOURS PER MONTH (70-72)

2 (80)

FLAT RATE (8-13) M = MONTHS, D = DAY, C = CLOCK HR. PER (14) BASIC USE RATE (15-20)

USE RATE B (21-26) USE RATE C (32-37)

UNITS (U, N, T, S)

OLD EQUIP. NO. (43-48) DATE ON UNIT REPLACED BY THIS UNIT (49-54) MO DAY YR

DATE RELEASED (55-62) OLD P.C. NUMBER

GVWR (POUNDS) (63-68) IMPROVEMENTS ADDED (\$) (69-75)

FUEL TANK CAPACITY (76-78) FUEL TYPE (79)

3 (80)

DESCRIPTION (8-27) FUND NUMBER (28-39)

STATE INSPECTION EVERY (40-41) MO. (42-45)

ASSIGNED SERV. LOCATION (46)

CHASSIS DATA

CHASSIS MFR. CODE (47-50) MODEL NUMBER (51-57)

SERIAL NUMBER (58-77)

MODEL YEAR (78-79)

4 (80)

TITLE NUMBER (8-16) PROPERTY CONTROL NUMBER (17-24)

PURCHASE ORDER NUMBER (25-32)

LICENSE TAG NUMBER (33-41)

DOMICILE CODE (42-45) BODY DATA (IF DIFFERENT FROM CHASSIS DATA) (46-57)

MODEL NUMBER (58-77) SERIAL NUMBER (78-79)

MODEL YEAR (80-83)

## EQUIPMENT INVENTORY FORM

### Completion Instructions

The Equipment Inventory Form is divided into four major sections. Data entered in each section is transferred to a separate punched card. The numbers under each field on the form indicate card columns. Arrows indicate whether the data in the field should be left or right justified. Where an arrow indicates right justification, fill in zeroes to the left of the data. Where an arrow indicates left justification, leave blanks to the right of the data.

#### CARD 1 \_\_\_\_\_

On this section of the form, all fields with the exception of "Insurance Schedule(s)" (card cols. 67-69) must be completed.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Transaction Type	(1)	Enter "2" for all equipment entered into the system for the first time. Enter "5" for the equipment already in the system, when the entries on the form are intended to modify the previously input data.
Equipment Number	(2-7)	Each piece of equipment in the fleet is assigned a permanent equipment number that is <u>never changed</u> , even when equipment is reassigned from one organization to another.  Enter the appropriate equipment number. Up to six alphanumeric, characters, can be accommodated. Right justify.
APWA Class	(8-15)	Enter the appropriate code designation, following the specifications for the APWA Equipment Code (American Public Works Association Publication No. EC-200, 1973--reprinted in the <u>User's Guide</u> , Appendix C.)  Complete <u>all eight positions</u> . The <u>Equipment Code</u> is very specific as to the contents of each position of the code.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>						
Date Received	(16-21)	Enter the month, day, and year when the jurisdiction received this piece of equipment. If the exact day of delivery is not known, assume the first of the month. Fill all positions in the field (e.g., March 9, 1976 = <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>0</td><td>3</td><td>0</td><td>9</td><td>7</td><td>6</td></tr></table> ).	0	3	0	9	7	6
0	3	0	9	7	6			
Estimated Life	(22-24, 25)	<p>"Estimated Life" is the expected economic life of a piece of equipment, calculated from the "Date Received" until the date when the equipment will have depreciated to its salvage value. "Estimated Life" is not necessarily the age of the equipment when fully depreciated. For example, if a jurisdiction acquires a one year old vehicle that is expected to be fully depreciated when it is three years old, the "Estimated Life" will be 24 months, not 36.</p> <p>Enter the estimated life in card columns 22-24, in terms of months, thousands of miles, or hundreds of hours—whichever is appropriate. Indicate months, miles, or hours in card column 25.</p> <p>Examples: 30,000 miles is entered as "030" in card columns 22-24, and "2" in card column 25. 48 months is entered as "048" in card columns 22-24, and "1" in card column 25.</p>						
Salvage Value	(26-30)	<p>Enter the lowest value the equipment should reach in its lifetime, expressed in dollars only (no cents). This figure can be based on experience, blue book value, etc.</p> <p>Numerics only; right justify.</p>						
P. O. Amount	(31-38)	<p>(Purchase Order Amount) Enter the actual gross purchase price, including taxes and dealer charges (do not subtract trade-in).</p> <p>The solid triangle (<math>\triangle</math>) indicates the decimal position; do not write in a decimal point. Numerics only; right justify.</p>						

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Assigned Organization Code	(39-44)	<p>This code designates the using agency to which equipment is assigned, and to which all equipment-associated costs should be attributed. All organizations and their respective code designations are entered on the Organization Codes Form. Motor pool equipment are given a unique organization code.</p> <p>Enter the code for the organization to which direct or rental charges will be billed.</p> <p>Numerics only, right justify.</p>
PM Interval		<p>Enter the number of months between PM's in card columns 45 and 46. If a unit requires preventive maintenance once a month or more, (e.g., a police vehicle,) enter the value "01".</p> <p>Enter the number of miles or hours between PM's. If such an interval is irrelevant (e.g., for lawnmowers), place "99999" in this field.</p> <p>If equipment is not to be PM'ed at all, place "99" in the "Months" field and "99999" in the "Miles or Hours" field.</p>
PM Sequence	(52-59)	<p>For most equipment, varying levels of preventive maintenance are performed in sequence. Usually PM levels are classified as follows:</p> <p>Class A - Includes all lubrication and mechanical services recommended by the manufacturer, plus inspection and checking of all components and parts related to the safe operation of the equipment.</p> <p>Class B - Includes all the elements of the A plus a check and inspection of components having a high rate of wear or deterioration or a proven need for frequent adjustment.</p> <p>Class C - Includes all the elements of the A and B inspections plus a thorough check and inspection of all remaining components and assemblies of the unit.</p>

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
(continued)		<p>Indicate the order in which these PM types should be performed by entering a sequence of the letter "A", "B", and "C". * Whatever pattern is used, code <u>one</u> letter per space, beginning with the first available space on the left. <u>Do not</u> include any blanks within the sequence, but leave spaces to the right if less than 8 characters are used.</p> <p>If the equipment is not to be PM'ed, place an 'A' in the first position of this field.</p>
Assigned PM Location	(60-63)	<p>Shop facilities and their code designations are entered on the Shop (Facility) Codes Form.</p> <p>Enter the code for the facility at which this unit is normally PM'ed. If the equipment is not PM'ed, place "9999" in this field.</p>
Meter Unit	(64)	<p>Enter "M" for equipment with an odometer, "H" for equipment with an hourmeter, or "X" for unmetered units (trailer without engines, mowers, etc.).</p>
Accident Repairs: Bill User	(65)	<p>Enter a "Y" to charge an agency directly for accident repairs to equipment normally billed on a "rental basis". Otherwise, enter an "N". Note that individual repair or maintenance charges can still be billed to the user organization if the appropriate box is checked on the repair order when the work is done. (User agencies are always billed for repairs and maintenance performed on "direct charge" equipment.)</p>

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\* For a more complete explanation of this type of PM schedule, see APWA's Equipment Management Manual, Part 3, "Preventive Maintenance," available from the American Public Works Association, 1313 East 60th Street, Chicago, Illinois 60637

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Billing Basis	(66)	Enter an "R" if the assigned organization is billed for use of the equipment on a "rental" basis, i. e., on the basis of miles or hours operated, and/or at a flat rate per unit of time. Enter a "D" if the assigned organization is billed on a "direct charge" basis; i. e., billed directly for the expenses incurred in repairing, maintaining, and operating the equipment.
Insurance Schedules	(67-69)	Complete this field only if insurance costs are included in the calculation of monthly equipment operating costs. If not applicable, leave this field blank.

The system accepts monthly rates for up to three types of insurance coverage (e. g. collision, liability, fire and theft). Each rate is represented by a single letter code established on the Insurance Cost Codes Form. The field contains three columns; each column should be assigned to one type of coverage.

In the appropriate column, enter the cost code for each type of coverage.

Example: The city of Sampleville carries collision and liability insurance for its equipment. Monthly collision and liability rates are coded as follows on the Insurance Costs Code Form:

Cost Code (cc 1)	Cost Per Month (cc 2-7)
A	0   0   1   .   5   0
B	0   0   2   .   2   5
C	0   0   5   .   0   0
D	0   0   7   .   0   0
E	0   0   8   .   6   0
F	0   1   3   .   0   0
G	0   2   6   .   0   0

For a 1973 FORD Sedan with insurance costs of \$7 per month collision and \$5 per month liability insurance, the "Insurance Schedules" field would be filled in this manner:

D	C	
67	68	69

For a 1970 CHEVROLET pick-up truck with insurance costs of \$13 per month collision and \$7 per month liability, the field would be completed in this manner:

F	D	
67	68	69

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Normal Duty Hours Per Month	(70-72)	The system uses this figure to determine how much operating time is lost due to maintenance and repairs.  Enter the average number of hours during which this equipment is used each month. For example, 176 duty hours per month would be entered for equipment operated eight hours a day, five days a week based on an average of 22 working days in a month.

#### CARD 2

If rental billing is indicated on Card 1 (i. e., "R" is entered in card column 66), the "Flat Rate" and/or the "Basic Rate" fields must be completed.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Flat Rate	(8-14)	Equipment may be billed to its assigned organization on a "rental" basis; i. e., on the basis of a flat rate per unit of time and/or on the basis of use (i. e., miles or hours operated). A flat rate is normally used to recover fixed costs associated with a piece of equipment.  If equipment is to be billed at a flat rate (fixed amount per month, day, or clock hour), enter the cost per month, day, or clock hour. Two decimal places are allowed for; do not write in a decimal point, indicated by the solid triangle (▲).

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Basic Use Rate	(15-20)	A use rate is normally used to recover costs related to equipment usage. If the equipment is to be billed to its assigned organization at a rate per mile (or hour) or, at a rate per mile (or hour) plus a flat rate, the use should be entered in this field. Three decimal positions are allowed for. Do not write in a decimal point, indicated by the solid triangle(▲).
Use Rate B 1	(21-31)	This field allows for charging a second use rate for all mileage (or hourage) above a specified threshold.  Enter the second use rate in card columns 21-26. Specify in card columns 27-31 the number of miles (or hours) beyond which the new rate applies. (See example below).
Use Rate C	(32-42)	This field allows for yet a third use rate to be charged for all mileage (or hourage) above a specified threshold.  Enter the third use rate in card columns 32-37. Specify in card columns 38-42 the number of miles (or hours) beyond which this rate applies. (Example follows.)

Example:

A vehicle is assigned a basic use rate of \$ .050 per mile; a use rate B of \$ .060 per mile over 1000 miles; a use rate C of \$ .075 per mile over 2500 miles.

If operated less than 1000 miles in a given month, the vehicle is billed at 5 cents per mile. If operated between 1000 and 2500 units it is billed at 5 cents for the first 1000 miles (\$50.) and 6 cents for all miles greater than 1000. If operated over 2500 miles in a given month, it is billed at 5 cents for the first 1000 miles (\$50.), 6 cents for the next 1500 miles (\$90.), and 7½ cents per mile for all miles over 2500.

Old Equipment No.	(43-48)	Enter the number of the equipment replaced by this unit. If not applicable, leave blank.
Date Released (old unit)	(49-54)	Enter the month, day, and year when the replaced unit was released. If not applicable, leave blank.



<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Old P. C. Number	(55-62)	Enter the old property control number for the replaced unit. If not applicable, leave blank.
GVWR (pounds)	(63-68)	Enter the Gross Vehicle Rating in pounds.
Improvements Added	(69-75)	Enter the value of any improvements added after purchase. Do not include the value of improvements already figured into the purchase price. (The purchase price is entered in the "P.G. Amount" field, card #1, card column(s) 31-38).
Fuel Tank Capacity	(76-78)	Enter the fuel tank capacity in gallons as listed in manufacturer's specifications.
Fuel Type	(79)	Enter the proper fuel type as indicated in the manufacturer's specifications.

CARD 3

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If any of the following fields are not applicable, leave them blank.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Description	(8-27)	Enter a description of the vehicle. A uniform format for the description would be best; for example; color, number of doors, style (e. g. , BL 4DR SED).
Fund Number	(28-39)	Charges to user organization can be broken down on system reports by fund number or by project number.  Enter the fund number, Federal project number, or any other appropriate number to which rental or direct charges should be attributed.
State Inspection	(40-41)	Enter the number of months between state inspections. If no state inspections are required, enter "99".
Assigned Service Location	(42-45)	Enter the code for the garage facility to which this vehicle will normally be brought for repairs. All such facilities and their code designations are entered on the Shop (Facility) Code Form.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Highway Code	(46)	This field can be used to determine the amount of non-highway fuel consumed, to aid in the calculation of state fuel tax rebates.  Enter the code reflecting the predominant use of this vehicle.
Chassis Data	(47-50, 51-57, 58-77, 78-79)	Enter a four character maximum, alpha-numeric code for the chassis manufacturer; a suggested code list is presented in Appendix A.  Enter the model number, serial number, and model year.

#### CARD 4

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If any of the following fields are not applicable, leave them blank.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Title Number	(8-16)	Enter the equipment title number.
Property Control Number	(17-24)	Enter the assigned property control identification number.
Purchase Order Number	(25-32)	Enter the number of the purchase order for this piece of equipment.
License Tag Number	(33-41)	Enter the license tag number for this piece of equipment.
Domicile Code	(42-45)	Enter a code to indicate where this equipment is normally located when not in use (e.g., at user organization parking lot, common parking lot, employee's home, etc.).
Body Data	(46-79)	Enter a four character maximum, alpha-numeric code for the body manufacturer.  Enter the model number if appropriate, serial number, and model year.

Form No: EMD#2

PTI/APWA Equipment Management System  
METER/STATUS CHANGE FORM

DATE \_\_\_\_\_

TRANSACTION TYPES

- 1 = remove from fleet
- 3 = deactivate
- 4 = reactivate
- 6 = meter reading change

Transaction Type	Equipment Number	Equipment Number	Organization Code	Corrected Meter Reading	Meter Reading at Failure
(1)	(2-7)	(8-13)	(14-19)	(20-26)	(27-33)

## METER/STATUS CHANGE FORM

### Completion Instructions

Enter the date in the space provided in the upper right corner (for data control purposes).

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Transaction Type	(1)	Indicate the nature of the transaction: 1 = Remove from fleet 3 = De-activate 4 = Re-activate 6 = Meter reading change  Each of these four transactions are explained in the <u>User's Guide</u> , Section 2.1, "Equipment Inventory Module Description."
Equipment Number	(2-7, 8-13)	Place the equipment number on the form twice, in card columns 2-7 and 8-13. Right justify. (The two equipment number entries minimize the possibility of entering the wrong equipment number on the form; an incorrect number would result in a status change for the wrong piece of equipment.)
Organization Code	(14-19)	Enter the code for the organization to which this equipment is currently assigned. Right justify; zero fill to the left.
Corrected Meter Reading	(20-26)	Complete this field only for transaction type "6", meter reading change. Enter the corrected meter reading (in miles or hours). One decimal place is allowed for; do not write in a decimal point, indicated by the solid triangle (▲).
Meter Reading at Failure	(27-38)	Enter the meter reading before correction. One decimal place is allowed for; do not write in a decimal point, indicated by the solid triangle (▲).

EQUIPMENT INVENTORY REPORT REQUEST FORM

Date of Request / /

Needed by / /

SUMMARY "S"  
OR  
DETAIL "D"  
(1)

EQUIPMENT NO.  
OR  
"ALL"  
(2-7)

APWA  
CODE  
(8-15)

ORGANIZATION  
CODE  
(16-21)

Vertical grid for SUMMARY "S" OR DETAIL "D" (1)

Vertical grid for EQUIPMENT NO. OR "ALL" (2-7)

Vertical grid for APWA CODE (8-15)

Vertical grid for ORGANIZATION CODE (16-21)

FLEET SUPERINTENDENT SIGNATURE

## EQUIPMENT INVENTORY REPORT REQUEST FORM

### Completion Instructions

In the space provided enter the date of this request, and the date by which the requested report is needed.

This form is used to request information about individual pieces of equipment, about all fleet equipment, or about specified groups of equipment. To request information about individual units, or about all fleet equipment, complete only the "Equipment No. or 'ALL'" field.

To request information about specified groups of equipment, complete only the "APWA Code" and/or the "Organization Code" fields. If only the "APWA Code" field is completed, all equipment meeting the criteria specified in this field are presented on the report. If only the "Organization Code" field is completed, all equipment assigned to the specified organization are presented on the report. If both of these fields are completed, equipment meeting both conditions (i. e., equipment meeting the APWA Code criteria, and assigned to the specified organization) are presented on the report.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>						
Summary "S" or Detail "D"	(1)	Place an "S" in the space provided to request the 'Equipment Inventory Summary Report'. Place a "D" in this space to request the 'Equipment Inventory Detail Report'.						
Equipment Number or "ALL"	(2-7)	To produce the report for a particular piece of equipment, enter the equipment number in this space. Right justify. To produce the report for all equipment in the fleet, print the word "ALL" in the three left-most columns of this field, that is: <table border="1"><tr><td>A</td><td>L</td><td>L</td><td></td><td></td><td></td></tr></table> .	A	L	L			
A	L	L						

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
APWA Code	(8-15)	To produce the report for a group of equipment specified by the APWA code, enter the appropriate combination of code characters. Refer to the APWA Equipment Code (APWA Publication No. EC-200, 1973--reprinted in the User's Guide, Appendix C.)

Example: The field might be completed in the following ways:

To produce the report for:	Enter code:
8 cylinder general purpose sedans	1   A   A
Rear loading refuse compactors	3   C
1976 Dump Trucks	2   E   A             S

Organization Code	(16-21)	To produce the report for equipment assigned to a particular organization, enter the appropriate organization code designation.  Right justify; zero fill to the left.
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PTI/APWA Equipment Management System

'FLEET INVENTORY ASSIGNMENT SUMMARY' REQUEST FORM

DATE: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

DATA PROCESSING: Produce the Fleet Inventory Assignment Summary Report  
(EMIR12) using the most current data available.

Signature: \_\_\_\_\_

Telephone: \_\_\_\_\_



'FLEET INVENTORY ASSIGNMENT SUMMARY' REQUEST FORM

Completion Instructions

In the upper left-hand corner enter the date on which the form is forwarded to the Data Processing Agency.

Provide an authorizing signature and telephone number where the person requesting the report can be reached.



ORGANIZATION CODES FORM

Completion Instructions

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
	(1)	(For data processing purposes only.)
Assigned Organization Code	(3-8)	Enter a numeric code for each organization to which equipment may be assigned, or which may otherwise incur costs for equipment use or repair. This organization code may coincide with account codes used by the jurisdiction. Motor pool equipment must have a unique organization code.  Right justify; zero to the left.
Organization Title	(10-24)	Enter a descriptive title of the organization corresponding to the "Assigned Organization Code" entry, up to 15 characters. Left justify; leave un-used columns blank.

Figure 5

INSURANCE COST CODES FORM

Cost Code (cc 1)	Cost Per Month (cc 2-7)
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

# INSURANCE COST CODES FORM

## Completion Instructions

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Cost Code	(1)	Enter a unique letter of the alphabet for each "cost per month" listed.
Cost Per Month	(2-7)	<p>The system uses rates listed on this form to calculate monthly insurance costs for fleet equipment. Rates may apply to one, two, or three types of insurance coverage (e.g., collision, liability, fire and theft).</p> <p>Enter up to 26 cost figures in the fields provided. A cost figure should be entered only once, even if it may appear on more than one insurance schedule.</p>

FUEL MODULE FORMS

22-A

PTI/APWA Equipment Management System

FUEL TRANSACTION FORM

<b>FUEL TICKET</b>		City of Sample- ville	
1	3	4	9
Pump Number		Ticket Number	
16	21	22	28
Vehicle Number		Vehicle Meter Reading	
29	31	34	35
Fuel (gal)	Oil (qts)	Trans. Fluid (qts)	Anti-Freeze (qts)
31	32	33	36
Fuel (gal)	Oil (qts)	Trans. Fluid (qts)	Anti-Freeze (qts)
38	39	38	39
Hyd. Fluid (qts)	Hyd. Fluid (qts)	Hyd. Fluid (qts)	Hyd. Fluid (qts)
Date			
10	15		
Mon	Day	Year	
Driver Signature			
Department			
Attendant Signature			
Fuel Dispensing Location			

## FUEL TRANSACTION FORM

### Completion Instructions

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Pump Number	(1-3)	Enter the identification code for the pump from which the fuel is being dispensed. If only oil, transmission fluid, anti-freeze, and/or hydraulic fluid) is being dispensed, enter any valid pump number. Left or right justification is allowed, as long as the format exactly matches that used on the Fuel Pumps Data Collection Form (EMFD06) .
Ticket Number	(4-9)	Fuel tickets are usually pre-numbered. Every transaction should be identified by a unique number, right justified.
Date	(10-15)	Enter month, day, and year of the fuel transaction.
Vehicle Number	(16-21)	Enter the equipment number. Right justify.
Vehicle Meter Reading	(22-28)	Enter the current odometer (or hourmeter) reading. Right justify. Enter 10ths of a mile or hour to the right of the decimal point, indicated by the solid triangle (▲). Do not write in a decimal point.
Fuel	(29-31)	Enter gallons of fuel dispensed. Right justify. Enter 10ths of a gallon to the right of the decimal point, indicated by the solid triangle (▲). Do not write in a decimal point.
Oil	(32-33)	Enter quarts of oil dispensed. Right justify. Enter 10ths of a quart to the right of the decimal point, indicated by the solid triangle (▲). Do not write in a decimal point.
Transmission Fluid	(34-35)	(Same as for oil.)
Anti-freeze	(36-37)	(Same as for oil.)
Hydraulic Fluid	(38-39)	(Same as for oil.)

The "Driver Signature," "Department," "Attendant Signature," and "Fuel Dispensing Location" fields are for internal control purposes and are not used by the system.



PTI/APWA Equipment Management System

FUEL PUMP READING FORM

Date: / /  
Mo Day Yr

Location: \_\_\_\_\_

Pump Number	Beginning Pump Reading	Beginning Date		Ending Pump Reading	Ending Date		REMARKS												
		Mon	Day		Year	Mon		Day	Year										
1	2 3 5	12	14	15	16	17	18	19	21	--	--	28	30	31	32	33	33	37	

Note: 1) Place "X" under "Bypass" (Column 37) if pump reading faulty, otherwise leave blank. If faulty, explain under "Remarks" column. 2) Position to right of decimal (Columns 12 and 28) are for tenths of a gallon.

## FUEL PUMP READING FORM

### Completion Instructions

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Pump Number	(1-3)	Enter the appropriate fuel pump identification number. Right justify. Zero fill to the left.
Beginning Pump Reading	(5-12)	Enter the pump meter reading (in gallons) taken at the beginning of the reporting period. Enter 10ths of gallons to the right of the decimal point.
Beginning Date	(14-19)	Enter the month, day, and year when the beginning pump meter reading is taken.
Ending Pump Reading	(21-28)	Enter the pump meter reading (in gallons) taken at the end of the reporting period. Enter 10ths of gallons to the right of the decimal point.
Ending Date	(30-35)	Enter the month, day, and year when the ending pump reading is taken.
Pump Reading Bypass Flag	(37)	Enter an 'X' in this column for any faulty pump readings (e. g. , due to meter or pump breakdown, or meter turnover), otherwise leave blank. The 'X' instructs the computer program not to validate the pump readings. Explain the reason for any faulty readings under "REMARKS".



'FUEL TRANSACTIONS BY EQUIPMENT NUMBER'  
REPORT REQUEST FORM

Completion Instructions

In the upper right hand corner enter the date on which the form is forwarded to the Data Processing Agency. (This date is not entered into the system.)

1. Indicate the time interval for which fuel transaction listings are requested. The system can list transactions for as far back as the Data Processing Agency maintains fuel transaction files.

Enter the beginning and ending date in the space provided. If transactions are to be requested for one day, enter that date as both the beginning and ending date for the period.

2. To request information for all equipment (fleet-wide), print the word "ALL" in the three left-most positions (A L L) in the top row of the left-most column. Do not enter data in any other row.

To request information for less than all equipment in the fleet (up to 100 pieces of equipment), enter individual equipment numbers beginning in the top left row, proceeding down the column. Right justify.

PTI/APWA Equipment Management System

'FUEL TRANSACTIONS BY PUMP NUMBER' REPORT REQUEST FORM

Date: / /  
mo. day yr.

Specify the dates for which data is requested: From / / To / /  
mo. day yr. mo. day yr.

Print the word A in the top row of the left column if data is requested for all pumps; otherwise enter the pump numbers (up to 100) for which data is requested.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

'FUEL TRANSACTIONS BY PUMP NUMBER  
REPORT REQUEST FORM

Completion Instructions

In the upper right hand corner enter the date on which the form is forwarded to data processing. (This date is not entered into the system.)

1. Indicate the time interval for which fuel transactions for the specified equipment is requested. The system can list transactions for as far back as data processing maintains fuel transaction files.

Enter the beginning and ending dates in the space provided. If transactions are to be requested for one day, enter that date as both the beginning and ending date for the period.

2. To request information for all fuel pumps in the jurisdiction, print the word "A L L" in the three left-most positions in the top row of the left-most column. Do not enter data in any other row.

To request information for less than all pumps in the jurisdiction (up to 100 pumps), enter individual pump number beginning in the top left row, proceeding down the column. Pump numbers, must be entered exactly as they appear on the Fuel Pumps Data Collection Form.

P/TI/APWA Equipment Management System

FUEL/COMMODITY COST FORM

Date: / /  
Mo Day Yr

APPROVED BY: \_\_\_\_\_  
(Authorizing Signature)

Sl. No.	COST	FUEL/COMMODITY NAME	REMARKS	IDENT
(1)	(3-6)	(8-25)		(77-80)
A	10	REGULAR (GALS)		F.C
B	10	HO-LEAD (GALS)		F.C
C	10	HI-TEST (GALS)		F.C
D	10	DIESEL (GALS)		F.C
E	10	KEROSENE (GALS)		F.C
F	10	OIL (QTS)		F.C
G	10	ANTI-FREEZE (QTS)		F.C
H	10	HYDRAULIC FLUID (QTS)		F.C
I	10	TRANS. FLUID (QTS)		F.C
	10			F.C
	10			F.C
	10			F.C
	10			F.C
	10			F.C
	10			F.C
	10			F.C
	10			F.C
	10			F.C
	10			F.C

# FUEL/COMMODITY COST FORM

## Completion Instructions

In the upper left-hand corner enter the date on which the form is submitted to the Data Processing Agency. (This date is not entered into the system.)

Cross out the entire line for any fuel or other commodity for which no cost is supplied.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Cost	(3-6)	Enter current cost per gallon for each relevant fuel type, and per quart for oil and other commodities. Enter cents to the right of the decimal point. Enter a zero to the left of the decimal point if the cost is less than one dollar.
Remarks	N/A	Enter any comments about the costing of the fueling commodity. This field is not used by the system.





# FUEL PUMPS DATA COLLECTION FORM

## Completion Instructions

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Fuel Type	(1)	Enter the appropriate letter code for the type of fuel dispensed from each pump, ( <u>A</u> through <u>E</u> are legitimate codes.)
Pump Number	(3-5)	Enter the pump number for each pump. Numeric; zero fill to the left.
Pump Location	N/A	Enter the pump location for reference purposes. (This field is not used by the system.)
	(79-80)	(For data processing purposes only.)

REPAIR MODULE FORMS

34-A



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PTI/APWA Equipment Management System

Form No: EMRD0

### REPAIR ORDER FORM

Form AV 132 Rev 6/75

EQUIP NUMBER	R O NUMBER	METER READING		FACILITY	LABDR		LABOR		PARTS	TOTAL COST	REPAIR TYPE		TOTAL \$	LABOR \$		PARTS \$	TOTAL \$	TOTAL \$	TOTAL \$	TOTAL \$	TOTAL \$	TOTAL \$	TOTAL \$	TOTAL \$	
		A A	1314	7-12	15-18	13-25	10																		
CN OFF	EMPLOYER NUMBER	INS.	IC	REPAIR TYPE	UNIT COST	REPAIR TYPE	REPAIR TYPE	REPAIR TYPE	REPAIR TYPE	REPAIR TYPE															
714	PART #	JOB OR DESCRIPTION	UNIT COST	REPAIR TYPE	REPAIR TYPE	REPAIR TYPE	REPAIR TYPE	REPAIR TYPE	REPAIR TYPE	REPAIR TYPE															
INSTRUCTIONS:	REASON BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	
INSTRUCTIONS:	REASON BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	
INSTRUCTIONS:	REASON BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	
INSTRUCTIONS:	REASON BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	WHY WE BROUGHT IN (IC-Check one only)	REPAIR COVERED BY WARRANTY (V)	ROAD CALL (V)	BILL TO USER (V)	USER ORG.	W/M, DT SC.	

# REPAIR ORDER FORM

## Completion Instructions

Many data items included on this form are not entered into the system, but facilitate internal recordkeeping and repair shop operations.

### GENERAL DATA

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Equipment Number	(1-6)	Enter the equipment number. Right justify.
Repair Order Number	(7-12)	Repair orders should be numbered sequentially for identification purposes. Preprint numbers to the left of the letters "AA".  A continuation repair order may be required due to lack of space on the original Repair Order Form, or because the original was closed out at the end of a reporting period. For a continuation repair order, cross out the preprinted number and the letters "AA;" enter the number from the original form in the space below, adjacent to the letters "BB." (The letters "BB" will identify this form as a continuation of the original.)
Shop Number	(15-18)	Enter the shop number where the work is performed. [Valid shop numbers are entered on the Shop (Facility) Code Form.]
Meter Reading	(19-25)	Enter the equipment odometer (or hourmeter) reading. Right justify; zero fill to the left.
Work Class	(26)	Check the appropriate work class (one only). <ul style="list-style-type: none"><li>• X-SCHEDULED - Repair work prearranged; no disruption of shop work.</li><li>• Y-NON-SCHEDULED - Work not prearranged; unit needed back on the job; work to begin as soon as mechanic can be assigned.</li></ul>

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
(continued)		<p>• Z-EMERGENCY - Work not prearranged; service delivery disrupted, mechanic(s) diverted from other priority work.</p> <p>The "User Org." and "Veh. Desc." fields are not used by the system.</p>
Bill to User	(27)	Enter a "Y" in the box to charge the assigned organization directly for repairs resulting from equipment misuse or other reasons; otherwise, leave blank. (Use this field only if the repair would not otherwise be billed to the assigned organization; i. e., the equipment is billed on a "rental" basis.)
Road Call	(28)	Enter "Y" to indicate that this repair required a road call; otherwise, leave blank.
Repair Covered by Warranty	(29)	Enter "Y" in the box if the cost of this work is covered by warranty; otherwise, leave blank.
Reason Brought In	(30)	Check the appropriate box for the reason brought in (one only).
		<p>Definitions:</p> <p>A. <u>Breakdown</u> - equipment or component has failed. Excludes work failures resulting from unsatisfactory quality of recently performed work (code K) and work for which warranty reimbursement is expected (code U).</p> <p>B. <u>Accident</u> - damage to any part of equipment due to collision with a vehicle or stationary object.</p> <p>C. <u>Damage in Operation</u> - damage to equipment caused by improper, hazardous, or extreme operating procedure.</p> <p>D. <u>Theft/vandalism</u> - damage inflicted by persons other than authorized users.</p> <p>E. <u>Daily schedule</u> - regularly scheduled adjustments or parts replacements made on a daily basis (other than PM).</p>

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
(continued)		<p>F. <u>Noted in PM or other work</u> - conditions diagnosed in the course of PM inspection or other work. Conditions (1) were outside the scope of that work authorization, and (2) were ordered to be performed separately for scheduling purposes.</p> <p>G. <u>Seasonal preparation</u> - overhaul or other maintenance for seasonal equipment, such as snow blowers. Includes mounting of seasonal equipment on standard vehicles.</p> <p>H. <u>Driver's request</u> - work requested by operator of equipment to correct conditions noticed during regular operation or driver inspection. Excludes breakdowns (Code A), legitimate rework complaints (code K), and warranty work (code U).</p> <p>I. <u>Management request</u> - work requested by management to improve performance of otherwise operable equipment.</p> <p>J. <u>Rework</u> - work required due to unsatisfactory quality of recently performed work.</p> <p>K. <u>Pre-delivery/make ready</u> - preparation of newly acquired equipment for operation. Excludes major modifications (see code M).</p> <p>L. <u>Modifications</u> - alteration of a vehicle without revising its basic characteristics or functions, especially to increase the capital value of the equipment.</p> <p>M. <u>Conversion</u> - permanent change in basic configuration or functions of a vehicle, such as stripping police sedans for pool use, or replacing a dump body with a tank.</p> <p>N. <u>Special study</u> - special examination or alteration of equipment for a special management decision, or when a study is being performed for an outside organization.</p>

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
(continued)		<p>O. <u>Preventive Maintenance</u> - PM is to be performed on this equipment.</p> <p>P. <u>Recall</u> - work performed under a manufacturer recall program, which will be reimbursed as under warranty.</p> <p>Q. <u>State Inspection</u> - state inspection is to be performed on this equipment. <u>(If PM and state inspection are both to be performed, check state inspection only).</u></p> <p>R. <u>Warranty</u> - work performed for which compensation is expected from manufacturer or dealer.</p>
Work Started	(31-39)	Enter the date and time work is begun. Transfer this date and time to any continuation Repair Order Forms.
Work Completed	(40-48)	<p>Enter the date and time when the repair is completed.</p> <p>When closing out an incomplete repair order at the end of a reporting period, enter the close out date and time.</p>
Operating Time Lost	(49-53)	Enter the number of hours and minutes of operating time lost while equipment is in the shop. Refer to the Equipment Utilization Table.* (E.g., if a vehicle is repaired over a weekend when it wouldn't normally be in service, report no operating time lost.)

The following general data fields are not used by the system:

- "Instructions"
- "Mechanic Comments"
- "Total Job Cost"
- "Out of Service"
- "Work Authorization"
- "Work Completed (Approval)"

\*An Equipment Utilization Table is prepared in Task 5, Step 3 of the implementation process (refer to the Implementation Handbook).



<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
(continued)		"Repair Types" listed down the right side of the Repair Order Form are for information only. Appropriate repair type codes are entered in "Labor," "Parts," and "Commercial Cost" fields.

#### LABOR DATA

The "On," "Off", "Cost", and "Total Direct Labor" fields are not used by the system.

Employee Number (3 per card)	N/A	Enter the identification number(s) for the employee(s) performing each repair type.
Labor Hours (3 per card)	N/A	Enter the number of hours and tenths of an hour of labor by the designated employee on each repair type listed.
Repair Type (3 per card)	N/A	Enter the code for each repair type for which labor hours are listed.

#### PARTS DATA

The "Qty", "Part #", "No. or Description", "Unit Cost", and "Total Materials" fields are not used by the system.

Repair Type (5 per card)	N/A	Enter the code for each repair type requiring parts.
Total Cost (5 per card)	N/A	Enter the cost of each part used on this repair type. Multiple entries per repair type are acceptable.

#### COMMERCIAL COSTS DATA

The "Vendor Name", "Invoice #", "Labor \$", "Parts \$", and "Total Commercial" fields are not used by the system.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Repair Type (5 per card)	N/A	Enter the repair type code for which the commercial costs were incurred.
Total \$ (5 per card)	N/A	Enter the cost of the commercial work expended on this repair type.

DATE \_\_\_\_\_

PTI/APWA Equipment Management System

EMPLOYEE RATE SETTING FORM

EMPLOYEE NUMBER (1-9)	HOURLY RATE (10-13) *	EMPLOYEE NAME	Check One		
			A	C	D

\* - Triangle indicates decimal in hourly rate  
 \*\* - A = Add, C = Change, D = Delete

\_\_\_\_\_  
 Authorized Signature

## EMPLOYEE RATE SETTING FORM

### Completion Instructions

In the upper left-hand corner enter the date on which the form is submitted to the Data Processing Agency. (This date is not entered into the system.) An authorization signature should be entered at the bottom of the form.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Employee Number	(1-9)	Enter an identification number for each employee who can report labor hours on a repair order. Right justify. Zero fill to the left.
Hourly Rate	(10-13)	Enter the hourly rate for this employee. The solid triangle (▲) indicates the decimal position for the dollar amount; do not write in a decimal point.
Employee Name	N/A	(This field is for reference purposes only and is not input to the computer.)
Add-Change-Delete	N/A	(This field is used by the Data Processing Agency to determine whether to add, change, or delete the employee information supplied.) Check the appropriate box for each completed line on the form.

DATE    /    /   

Form No: EMRD03

PTI/APWA Equipment Management System

'MAINTENANCE AND REPAIR ACTIVITY LISTING' REQUEST FORM

1. Specify dates for which data is requested

From:    /    /     
        mo   day   yr.

TO    /    /     
     mo   day   yr.

2. Do you want information for equipment all or only selected equipment?  
(check appropriate box)

ALL VEHICLES

SELECTED VEHICLES

If you checked the selected vehicles box, submit a list of equipment numbers  
in the space provided below (Maximum of 50 vehicles).

Card Columns					
1	2	3	4	5	6

Card Columns					
1	2	3	4	5	6

Card Columns					
1	2	3	4	5	6

**'MAINTENANCE AND REPAIR ACTIVITY LISTING'  
REPORT REQUEST FORM**

**Completion Instructions**

In the upper left-hand corner enter the date on which the form is forwarded to the Data Processing Agency. (This date is not entered into the system.)

1. Indicate the time interval for which information is requested. The system can list repair and maintenance activity for as far back as the Data Processing Agency maintains repair history files.

Enter the beginning and ending date in the space provided. If information is to be requested for one day only, enter that date as both the beginning and ending date for the period.

2. To request information for all equipment fleet-wide, check the "ALL Equipment" box. Otherwise, check the "SELECTED" Equipment" box and list equipment numbers in the fields provided. Right justify.



## SHOP (FACILITY) CODES FORM

### Completion Instructions

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
	(1)	(This field is for Data Processing Agency use only.)
Shop Number	(3-6)	Codes listed on this form are entered into the "Assigned PM Location" and the "Assigned Service Location" fields on the Equipment Inventory Form.  Enter a numeric code for each repair or preventive maintenance facility. One code may represent several separate buildings treated as one facility for reporting purposes. Right justify; zero fill to the left.
Shop Description	(10-29)	Enter a descriptive title for each shop, up to 20 characters. Left justify; leave un-used columns blank.



BILLING MODULE FORMS

47-A

PTI/APWA Equipment Management System  
MOTOR POOL TICKET

<input type="checkbox"/> P 1	Equipment Number 2 3 4 5 6 7	Organization Code 8 9 10 11 12 13
Date Out		
Mon	Day	Year
14	19	20
Time Out		
Hour	Min	AM (A) PM (P)
20	23	24
Date In		
Mon	Day	Year
25	30	31
Time In		
Hour	Min	AM (A) PM (P)
31	34	35
Start Meter		
36	37	38
Stop Meter		
39	40	41
42	43	44
45	46	47
48	49	50

BY: \_\_\_\_\_  
(Authorizing Signature)

DATE: \_\_\_\_\_

## MOTOR POOL TICKET

### Completion Instructions

Enter a date and authorizing signature at the bottom of the form. These are not entered into the system.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Equipment Number	(2-7)	Enter the appropriate equipment number. Right justify.
Organization Code	(8-13)	Enter the code for the user organization. This must be a valid code listed on the Organization Codes Form.
Date Out	(14-19)	Enter the month, day, and year the vehicle is signed out from the motor pool.
Time Out	(20-23, 24)	Enter the time the vehicle is signed out; indicate "A" for AM, "P" for PM. E. g., 9:15 AM = <u>01911151 1A</u>
Start Meter	(36-42)	Enter the meter reading of the vehicle when it is signed out from the motor pool. Enter 10ths of a mile (or hour) to the right of the solid triangle ( $\blacktriangle$ ); do not enter the decimal point. Zero fill to the left.
Date In	(25-30)	Enter the month, day, and year the vehicle is returned to the motor pool.
Time In	(31-34, 35)	Enter the time the vehicle is returned to the motor pool; indicate "A" for AM, "P" for PM.
Stop Meter	(43-49)	Enter the meter reading of the vehicle when it is returned to the motor pool. Enter 10ths of a mile (or hour) to the right of the solid triangle ( $\blacktriangle$ ); do not enter the decimal point. Zero fill to the left.

ROW DATE: MAY 2, 1976

CITY OF SANDEWILLE  
PTI/ADA EQUIPMENT MANAGEMENT INFORMATION SYSTEM

PAGE NO:

PROGRAM NUMBER: 24890  
REPORT NUMBER: 24890

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\*\*\* MONTHLY METER REPORT/FORM \*\*\*

ASSIGNED ORGANIZATION - 016008 - PUBLIC WEIHPAR

TRANSACTION TYPE (1)	EQIP. NUMBER (2-7)	ORGN. NUMBER (8-13)	STARTING DATE (14-19)	ENDING DATE (25-30)	STARTING METER READING (36-42)	ENDING METER READING (43-49)	VEHICLE DESCRIPTION ←-THIS LINE FOR USE BY DATA PROCESSING	VEHICLE LICENSE NO.
M	001034	016008	04/01/76	---	37519.8	---	62 CHEV 1/2 TON PU	11690
M	001678	016008	04/01/76	---	65142.3	---	67 VAL 2 DR SEDAN	16749
M	001000	016008	04/01/76	---	98293.0	---	67 VAL 2 DR SEDAN	2063
M	002226	016008	04/01/76	---	46712.1	---	68 VAL 4 DR SEDAN	10726
M	002216	016008	04/01/76	---	55545.3	---	69 CHEV 4 DR SEDAN	19993

TO BE USED WHEN A VEHICLE IS ASSIGNED TO YOUR ORGANIZATION

M	---	016008	--/--/--	---	---	---	---	---
M	---	016008	--/--/--	---	---	---	---	---
M	---	016008	--/--/--	---	---	---	---	---
M	---	016008	--/--/--	---	---	---	---	---
M	---	016008	--/--/--	---	---	---	---	---

'MONTHLY METER REPORT'/FORM

Completion Instructions

The following instructions apply for equipment listed on the report/form, assigned to the organization indicated at the top of the report form as of the beginning of the reporting period.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Ending Date	(25-30)	Enter the reporting period ending date (month, day, and year). For equipment transferred from the organization during the reporting period, enter the date of transfer.
Ending Meter Reading	(43-49)	Enter the meter reading (miles or hours) at the end of the reporting period, or on the day a piece of equipment was transferred from the organization. Indicate 10ths of a mile or hour to the right of the decimal point. Zero fill to the left.

The following instructions apply for equipment transferred into the organization during the month.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Equipment Number	(2-7)	Enter the equipment number for the transferred equipment.
Starting Date	(14-19)	Enter the month, day, and year on which the equipment was assigned to the organization.
Ending Date	(25-30)	Enter the reporting period ending date (month, day, and year). If the equipment was transferred from the organization during the reporting period, indicate the date of transfer.
Starting Meter Reading	(36-42)	Enter the meter reading at the time of equipment was assigned to the organization. Indicate 10ths of a mile or hour to the right of the decimal point. Zero fill to the left.
Ending Meter Reading	(43-49)	Enter the meter reading at the end of the reporting period or at the date on which the equipment was transferred from the organization. Indicate 10ths of a mile or hour to the right of the decimal point. Zero fill to the left.

PREVENTIVE MAINTENANCE MODULE FORMS

51-A

The repair order form is used by submitting preventive maintenance data to the system. See the instructions for completing the Repair Order Form (EMRD01), page 34.

GENERAL MODULE FORMS

52-A



DATE      /      /     

PTI/APWA Equipment Management System  
EXCEPTION CONDITION LIMITS FORM

APWA CLASS . . .

Note: Place an asterisk in the left most position of any limit for which no information is requested.

CONDITION

LOW METER UNITS-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
HIGH METER UNITS-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
COST PER MILE/HOUR-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
WITHIN (X) DOLLARS OF SALVAGE VALUE, (X) = . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
HIGH OIL CONSUMPTION (QUARTS)-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
MORE THAN Y REPAIR TYPES THIS MONTH, Y = . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
DOWN TIME (HOURS)-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
REWORK (NUMBER)-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/>
TOTAL COST OF REPAIRS-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
COMMERCIAL COST FOR ROAD CALLS-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
FUEL CONSUMPTION (GALLONS)-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
PERCENT PARTS COST OF TOTAL REPAIR COST-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
TOTAL COST OF ACCIDENTS-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
TOTAL NUMBER OF ACCIDENTS-CM . . . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

CM = CURRENT MONTH

## EXCEPTION CONDITION LIMITS FORM

### Completion Instructions

One copy of this form is to be filled out for each major APWA class of equipment. Major classes are identified by the first two digits of the APWA Equipment Code, e.g., 1A = sedans, 1B = station wagons, etc.

All fields are numeric and should be right justified. Zero fill to the left. Do not enter decimal points, which are indicated by the solid triangle ( $\blacktriangle$ ).

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
APWA Class	N/A	Enter the major APWA class (e.g., 1A = sedans, 1B = station wagons, etc.)
Low Meter Units (Current Month)	N/A	Enter a minimum number of miles (or hours). Equipment operated less than this minimum during a month, will be listed on the 'Exception Condition Report' with a message to this effect.
High Meter Units (Current Month)	N/A	Enter a maximum number of miles (or hours). Equipment exceeding this maximum during a month will be listed on the 'Exception Condition Report' with a message to this effect.
Cost Per Mile/Hour (Current Month)	N/A	Enter a maximum cost per mile (or hour). Equipment exceeding this maximum during a month will be listed on the 'Exception Condition Report' with a message to this effect.
Within (X) Dollars of Salvage Value	N/A	Enter a dollar figure ( $\blacktriangle$ ). Equipment that has depreciated to within (X) dollars of its salvage value (as specified on the Equipment Inventory Form) will be listed on the 'Exception Condition Report'.
High Oil Consumption (Quarts) - Current Month	N/A	Enter a maximum number of quarts of oil. Equipment consuming more than this maximum during a month (not including oil used during oil change or PM) will be listed on the 'Exception Condition Report'.

<u>Field Name</u>	<u>Card Colur. n(s)</u>	<u>Instructions</u>
More Than Y Repair Types This Month	N/A	Enter a maximum number of repair types. Equipment requiring more than this number of repair types during a month will be listed on the 'Exception Condition Report'.
Downtime (Hours) - Current Month	N/A	Enter a maximum number of downtime hours. Equipment exceeding this maximum during a month will be listed on the 'Exception Condition Report'.
Rework (Number of Times) - Current Month	N/A	Enter a maximum number of rework repairs. Equipment exceeding this maximum during a month will be listed on the 'Exception Condition Report'.
Total Cost of Repairs- Current Month	N/A	Enter a maximum cost for all repairs. Equipment exceeding this maximum during a month will be listed on the 'Exception Condition Report'.
Commercial Cost for Road Calls - Current Month	N/A	Enter a maximum cost for commercial costs associated with road calls. Equipment exceeding this maximum during a month will be listed on the 'Exception Condition Report'.
Fuel Consumption (Gallons) - Current Month	N/A	Enter a maximum number of gallons of fuel. Equipment consuming more than this maximum during a month will be listed on the 'Exception Condition Report'.
Percent Parts Cost of Total Repair Cost - Current Month		Enter a percentage for parts cost in relation to total repair cost. Equipment for which parts costs exceeds this percentage during a month will be listed on the 'Exception Condition Report'.
Total Cost of Accidents- Current Month - Card Column -	N/A	Enter a dollar maximum for accident costs. Equipment exceeding this maximum during a month will be listed on the 'Exception Condition Report'.
Total Number of Accidents- Current Month- Card Column-	N/A	Enter a maximum number of accidents. Equipment with more than this number of accident repairs during a month (as reported on separate repair orders) will be listed on the 'Exception Condition Report'.

PTI/APWA Equipment Management System

MONTH-END DATA FORM

1. Period ending date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (For use on all month-end reports)
2. Start of new year processing  YES  NO
3. Overhead Costs (all shops) 

--	--	--	--	--	--	--	--	--	--
4. Available Labor Hours (all shops) 

--	--	--	--	--	--	--	--	--	--
5. Available Employees (all shops) 

--	--	--	--	--	--	--	--	--	--
6. Shop Numbers with number of employees in each (maximum of 20 shops)

Shop #	# of employees	Shop #	# of employees								
1	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					5	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
8	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					12	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
15	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					19	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
22	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					26	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
29	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					33	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
36	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					40	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
43	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					47	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
50	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					54	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
57	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					61	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				
64	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>					68	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr></table>				

7. Unless otherwise specified - the 'Monthly Meter Report'/Form will be produced only for equipment billed on a rental basis.

Option 1 - Direct Charge (D)

Option 2 - Rental and Direct (B)

## MONTH-END DATA FORM

### Completion Instructions

In the upper left-hand corner enter the date on which the form is forwarded to the Data Processing Agency. (This date is not entered into the system.)

1. Enter the month, day, and year for the ending date of the reporting period.
2. Check the appropriate box to indicate if this is the first period in a new reporting year.
3. Enter the total dollar amount for overhead costs for all shops. This figure will appear on the 'Fleet Summary Report'.

This is a numeric field, right justified. Triangle ( $\Delta$ ) indicates the decimal position: do not enter a decimal point.

4. Enter the total number of labor hours available in all shops for the current month. Include the labor hours for all personnel who were available to report labor hours on repair orders during this reporting period. This information will appear on the 'Fleet Summary Report'.
5. Enter the total number of employees available for repair work at all shops.
6. For each shop, enter the shop identification number and the number of employees that were available for repair work at that shop during the reporting period. Total number of employees should equal the number of employees for ALL shops entered above. Right justify. Zero to the left.
7. Normally the 'Monthly Meter Report'/Form is produced listing only rental equipment. To produce the report for Direct Charge Vehicles, check Option 1. To produce the report for both Rental and Direct Charge, check Option 2.

Date: / /  
 Mo. Day Yr.

MASTER FILE MAINTENANCE FORM  
 (FOR USE BY DATA PROCESSING ONLY)

Form No: EMGD

6 EQUIP. NO.	8 ORG. CODE	13 Use Status Code	15 Field No. *	17 19 NEW DATA*	21 NEW DATA*	29 NEW DATA*	31 DELE. CODE

-57- \*These fields must be left justified

## MASTER FILE MAINTENANCE FORM

### Completion Instructions

This form is intended for completion by data processing personnel only.  
Data entered on this form directly replaces data maintained on the Equipment Inventory Master File.

<u>Field Name</u>	<u>Card Column(s)</u>	<u>Instructions</u>
Equipment Number	(1-6)	Enter the equipment number as it appears on a master file record that is to be altered.
Organization Code	(8-13)	Enter the organization code for this equipment as it appears on the master file record that is to be altered.
Use Status Code	(15)	Enter the use status code for this piece of equipment as it appears on the master file record that is to be altered.
Field Number	(17-19)	Enter the field number for the master file record field that is to be altered. Refer to the master file record layout provided in the <u>Program Documentation</u> for the General Module (Volume 1: Update/File Maintenance).  <u>Do not enter data in this field if the "Delete Code" field (cc 31) is to be used</u> (see the discussion of this field below).
New Data	(21-29)	Enter the data to be placed into the specified field. Beginning in column 21 place the data exactly as it is to appear in the master file record field. Make sure the new data has exactly the correct number of characters (no more, no less) as shown in the master file record layout in the <u>Program Documentation</u> . All positions to the right of the new data must be blank.  <u>Do not enter data in this field if the "Delete Code" field (cc 31) is to be used.</u>
Delete Code	(31)	Enter a "D" in this field if the master file record in question is to be deleted entirely.

Field Number

Column(s)

Instructions

from the master file.

Exercise extreme caution in the use of this field, so as not to erroneously delete equipment master records. Do not place any data in this field if the "Field Number" (cc 17-19) or the "New Data"(cc 21-29) fields have been completed.



APPENDICES

APPENDIX A  
VEHICLE MANUFACTURER'S CODES

A-0

The following vehicle codes are taken from the National Crime Information Center's (NCIC) vehicle code list.

APPENDIX A  
MANUFACTURERS' CODES

AUTOMOBILES

<u>MANUFACTURER</u>	<u>MANUFACTURERS' CODE</u>	<u>MANUFACTURER</u>	<u>MANUFACTURERS' CODE</u>
Abarth	ABAR	Bocar	BOCA
AC	AC	Bond	BOND
Acadian	ACAD	Borgward	BORG
Adette	ADET	Brasincia	BRAS
Aerocar	AERA	Bristol	BRIS
Alfa Romeo	ALFA	Bugatti	BUGA
Allard	ALLA	Buick	BUIC
Allstate	ALLS	Butterfield Musketter	BUTT
Alma	A.I.M.A		
Alpine	ALPI	Cadillac	CADI
Alta	ALTA	Capri	CAP
Alvis	ALVI	(Imported by Lincoln-Mercury)	
American Motors	AMER	Chaika	CHAI
(Also see make: RAMB)		Checker	CHEC
Amphicar	AMPH	Chevrolet	CHEV
Argonaut State Limousine	ARGO	Chin-Kan-Shan	CHIN
Arista	AIRS	Chrysler	CHRY
Armstrong Siddeley	ARMS	Cisitalia	CISI
Arnolt-Bristol	ARNO	Citroen	CITR
ASA	ASA	Clua	CLUA
Ascort	ARSC	Colt	
Ashley	ASHL	(See make: DODG)	
Aston-Martin	ASTO	Connaught	CONN
Auburn	AUBU	Contessa	CONS
Audi	AUDI	Continental	CONT
Austin	AUST	(Also see make: LINC)	
Austin-Healy	AUIH	Cooper	COOP
Autobianchi	AUTA	Cord	CORD
Autobleu	AUTB	Cricket	
Autocar	AUTO	(See make: PLYM)	
Autocarrier & A.C.	AUTR	Crofton Cub	CROF
Auto Union	AUTU	Crosley	CROS
Avia	AVIA	Cubster	CUBS
		Cunningham	CUNN
Bantam	BANT		
Beaumont	BEAU	Daihatsu	DAIH
Bedford	BEDF	Daimler	DAIM
Bentley	BENT	Datsun	DATS
Bergantin	BERG	Davis	DAVI
Berkeley	BERK	D.B.	DB
Bianchina		Debonair	DEBO
(See make: AUTA)		Deep Sanderson	DEEP
Bizzarrini	BIZZ	Dellow	DELL
B M C	BMC	Denzel	DENZ
B M W	BMW	DeSoto	DESO
Bobbi-Kar	BOBB	De Tomaso	DETO

AUTOMOBILES (Cont.)

<u>MANUFACTURER</u>	<u>MANUFACTURERS' CODE</u>	<u>MANUFACTURER</u>	<u>MANUFACTURERS' CODE</u>
Di Tella	DITE	Goliath	GOLI
Diva	DIVA	Gordon	GORD
DKW	DKW	Graciela	GRAC
Dodge	DODG	Graham	GRAH
Dong Feng (East Wind)	DONG	Graham-Paige	GRAP
Duel	DUEL	GSM	GSM
Duesenberg	DUES		
Dune Buggy		Heinkel	HEIN
Durant	DURA	Henry J	HENR
		Hickey Trail-Blazer	HICK
Edsel	EDSE	Hillman	HILL
Elva	ELVA	Hindustan	HIND
EMW	EMW	Hino	HINO
English Ford	ENGF	Holden	HOLD
(British)		Honda	HOND
Envoy	ENVY	Hongki or Hong-Chi	HONG
Enzmann	ENZM	Hotchkiss	HOTC
Erskine	ERSK	HRG	HRG
Eshelman Sportabout	ESHL	Hudson	HUDS
Essex	ESSE	Humber Surrey	HUME
Excalibur	EXCL	Humber	HUMB
		Hupmobile	HUPM
Facellia	FACL		
Facel-Vega	FACE	I.A.M.E.	IAME
Fairthorpe	FAIR	I.K.A.	IKA
Falcon (British)	FALC	I.M.P. (U.S.)	IMPB
Felber	FELB	Imperial	IMPE
Ferrari	FERR	Innocenti	INNO
Fiat	FIAT	International	INTL
Fiat-Abarth	FIAA	(Harvester)	
FNM	FNM	Isetta	ISET
Ford	FORD	Iso	ISO
(Also see		Isuzu	ISU
English,		Italian Ford	ITAF
French, and			
Italian Ford)		Jaguar	JAGU
Frazer	FRAZ	Jeep	JEP
Frazer-Nash	FRNA	Jensen	JENS
French Ford	FREF	Jetmobile	JETM
Frisky	FRIS	Jowett	JOWE
Gaz	GAZ	Kaiser	KAIS
Giannini	GIAN	Karmann-Ghia	KARG
Gilbern	GILB	King Midget	KIML
Ginetta	GINE	Kurtis Kraft	KURT
Gitane	GITA		
Glas	GLAS	Lagonda	LAGO
Goggomobil	GOGO	Lamborghini	LAMO

AUTOMOBILES (Cont.)

<u>MANUFACTURER</u>	<u>MANUFACTURERS' CODE</u>	<u>MANUFACTURER</u>	<u>MANUFACTURERS' CODE</u>
Lanchester	LANC	Oldsmobile	OLDS
Lancia	LNCI	Opel	OPEL
Lea-Francis	LEAF	Osca	OSCA
Lincoln	LINC	Osi	OSI
Lloyd	LLOY	Otosan	OTOS
Locomobile	LOCO	Overland	OVER
Lola	LOLA		
Loodcraft	LOOD	Packard	PACK
Lotus	LOTU	Panhard	PANH
		Peace	PEAC
Marcos	MARC	Peel	PEEL
Marlin (A.M.C.)		Peerless	PEER
See make: AMER)		Pegaso	PEGA
Maserati	MASE	Peugeot	PEUG
Matra	MATA	Phoenix	PHOE
Mazda	MAZD	Pierce Arrow	PRCA
M.B.M.	MEM	Poitier	POIR
Mean	MEAN	Playboy	PLAY
Mercedes-Benz	MERZ	Plymouth	PLYM
Mercury	MERC	Pontiac	PONT
Messerschmitt	MESS	Pontiac (Canadian)	PONI
Meteor (Canadian)	METE	(For other models see	
Metropolitan	METR	make: PONT)	
MG	MG	Porsche	PORS
Mikasa	MIKA	Prairie Schooner	PRAI
Mikrus	MIKR	Prince Motors	PRMO
Mistral	MIST	Progress	PROG
Mitsubishi	MITS	PTV	PTV
Monarch	MONA	Puch	PUCH
Moretti	MORE		
Morgan	MORG	Rambler	RAMB
Morris	MORR	(Also see make: AMER)	
Moskvitch	MOSK	Ramses	RAMS
Muntz	MUNT	Reliant	RELA
MZMA	MZMA	Renault	RENA
		Reo	REO
Nardi-Danese	NARD	Riley	RILE
Nash	NASH	Rochdale	ROCH
Nash-Healy	NAHE	Rockne	ROK
Neckar	NECK	Rolls-Royce	ROL
Nissan	NISS	Rootes	ROOT
NSU	NSU	Rover	ROV
NSU-Fiat	NSUF	Ryca	RYCS
Oakland	OAKL	Saab	SAA
Ogle	GGLE	Sabra	SABR
Ohta	OHTA	Seat	SEAT

AUTOMOBILES (Cont.)

<u>MANUFACTURER</u>	<u>MANUFACTURERS' CODE</u>	<u>MANUFACTURER</u>	<u>MANUFACTURERS' CODE</u>
Sera	SERA	Unicar	UNIC
Shelby American	SHEB	Unipower	UNIP
Siata	SIAT		
Sila Autoretta	SILA	Val	VAL
Simca	SIM	Vanden Plas	VNDN
Singer	SIN	Vanguard (Canada)	VANG
Skoda	SKOD	Vauxhall	VAUX
Sovam	SOVA	Veritas	VERI
Special Vehicle	SPEC	Vespa	VESP
Standard	STAN	Volga	VOGA
Star	STAR	Volkswagen	VOLK
Steyr-Puch	STEY	Volvo	VOLV
Strale	STRA		
Studebaker	STU	Warszawa	WARS
Stutz	STUZ	Wartburg	WART
Subaru	SUBA	Warwick	WARW
Sunbeam	SUNB	Watford	WATF
Super Two	SUPT	Wendax	WEND
Suzulight Su	SUZU	Whippet	WHIP
Suzuki	SUZI	Willys-Overland	WILL
Syrena	SYRE	Wilson	WILS
		Wolseley	WOLS
Tama	TAMA	Woodill Wildfire	WOOD
Tatra	TATR	Worthington Champ	WORT
Taurus (German Ford)	TAUN		
Tchaika	TCHA	YLN (Yue Loong Motor Co.)	YLN
Terraplane	TRPE		
Tjaarda	TJAA	Zagato	ZAGA
Tornado (British)	TORN	Zaporozhets	ZAPO
Toyopet	TOYP	Zar Car	ZARC
Toyota	TOYT	Zeta	ZETA
Trabant	TRAB	ZIL (Formerly ZIS)	ZIL
Triumph	TRIU	Zim	ZIM
Trojan	TROJ	Zundapp	ZUND
Tucker	TUCK	Zwickau	ZWIC
Turner	TURN		
TVR	TVR		
TZ	TZ		

**TRUCKS**  
(Including Motorized Homes, Tractors, etc.)

<u>MAKE</u>	<u>CODE</u>	<u>MAKE</u>	<u>CODE</u>
Air-O-Motor Rome	AIRO	Fiat	FIAT
Allis Chalmers	ALLI	Flexible	FLEX
Arrow	ARRO	Ford	FORD
Austin	AUST	Freightliner	FRHT
Autocar	AUTO		
Automatic	AUTT	G M C	GMC
Available	AVAL	Galion	GALI
		Gradall	GRAD
B M C	BMC		
Barrett	BARR	Hackney	HACK
Beechwood Motor Home	BEEH	Hahn	HAHN
Bolens	BOLE	Hendrickson	HEND
Brockway	BRCC	Hough	HOUG
Bros	BROS	Huber-Warco	HUWA
Brown	BROW	Hudson	HUDS
Bug	BUG	Hyster	HYST
Buffalo Springfield	BUSP		
		Indiana	INDI
Case	CASE	International	INTL
Caterpillar	CAT	(International Harvester)	
Chevrolet	CHEV	Jacobsen	JACO
Chinook Mobilodge	CHNO	Jeep	JEP
Clark	CLAR		
Colt	CLT	Kamp King Utopian	KAKI
Condor Coach	CONO	Kassborh	KASB
Corbitt	CORB	Kenworth	KW
Cortez Motor Home	COTZ	KW Dart	KWDT
Craftsman	CRAF		
Crane	CRAN	LeTourneau, R.G.	LETO
Crosley	CROS	Lewis-Shepard	LEWI
DAF	DAF	Mack	MACK
Datsun	DATS	Marmon Herrington	MAHA
Deere	DEER	Massey-Ferguson	MASS
Diamond T	DIAT	Mercedes-Benz	MERZ
Divco	DIVC	MK 5-1400 Motor Home	MKMH
Dodge	DODG	Michigan	MICH
Dreainer Motor Home	DREM	Motor Coach Industries	MCIN
Duplex	DUPL		
		Nash	NASH
Euclid	EUCL	Norris Motor Home	NORS
		Northwest	NORH
FWD	FWD		
Fargo	FARG	Oliver	OLIV
Federal	FEDL	Oshkosh	OSHK

TRUCKS (Including Motorized Homes, Tractors, etc.) (Cont.)

<u>MAKE</u>	<u>CODE</u>	<u>MAKE</u>	<u>CODE</u>
Peterbuilt	PTRB	Thames	THAM
Phoenix Motor Home	PHON	Toro	TORO
Pontiac	PONT	Tour-A-Lodge	TOLO
		Toyota	TOYT
RC Motor Home	RCMH	Traveo Corp. M.H.	TRVC
Redi-Go Traveler	REDI	Travel Home	TRVL
Reo	REO	Traveliner Motor Home	TRVM
Roaming Home	ROAM	Trojan	TROJ
Rover	ROV		
Royal Land Yacht	ROLY	Ultra Van	ULVA
Sabra	SABR	Vanette	VANT
Sani-Cruiser	SANC	Volkswagen	VOLK
Sears	SERS		
Space Motor Home	SPAA	Wagner	WAGN
Sterling	STER	Walter	WALT
Stewart	STI W	Ward La France	WALA
Streamline Motor Home	STRM	Webeo-Le Tourneau	WELE
Studebaker	STU	Wheel Horse	WHEE
Sunbeam Funwagon	SUNF	White	WHIT
		Willys	WILL
		Winnebago M.H.	WINN
		Wizzard	WIZZ



MOTORCYCLES

<u>MAKE</u>	<u>CODE</u>	<u>MAKE</u>	<u>CODE</u>
A.J.S.	AJS	Edwins	EDWN
A.J.W.	AJW	Excelsior	EXCR
Allstate (also see SEARS)	ALLS		
AMBASSADOR	AMB	F H L	FHL
American Eagle	AEAG	F.N.	FN
Argyle	AGYL	Foremost	FOMO
Ariel	ARIE	Francis-Barnett	FRBA
Artie	ARTI	Fruin	FRUN
Augustana	AUG	Fuji Robbt Jr	FUJI
		Garelli	GARE
B.M.W.	BMW	Gilera	GILE
BSA	BSA	Go Kart	GOKT
Balkan	BALK	Gogomobile	GOGO
Benelli	BENE	Golfmobile	GLMB
Bianchi	BIAN	Greeves	GREV
Blazer	BLAE	Guazzoni	GUZO
Bond	BOND	Guizzo	GUIZ
Bonanza	BNZA		
Bridgestone	BRID	Harley-Davidson	HD
Broncco	BRON	Hawthorne	HAWT
Bultaco	BULT	Heath	HEAT
Burrito	BURO	Heinkel	HEIN
		Hercules	HERC
Campus Bike	CABK	Hiawatha	HIAW
Caper Cycle	CACY	Hodaka	HODA
Capri	CAPR	Hoffman	HOF
Capriolo	CALO	Homemade	HOMD
Carabella	CAAR	Honda	HOND
Centaur	CENT	HOREX	HORX
Cezetta	CEZE	Hummel	HUML
Cimatti	CIMA	Husqvarna	HUSQ
Continental	CONT		
Cotton	COTN	Indian	IND
Cushman	CUSH	Itom	ITOM
Cyclescoot	CYSC		
CZ	CZ	J. B. Motoscooter	JB
		James	JMS
D K R	DKR	Jawa	JAWA
D K W	DKW	Jet-Mini Cycle	JMCY
Danuvia	DANU		
Darwin	DARW	Kawasaki	KAWK
Dot	DOT	Kit Kat	KITK
Ducati	DUCA	Komar	KOMR
Dynacycle	DYNA		

**MOTORCYCLES (Cont.)**

<u>MAKE</u>	<u>CODE</u>	<u>MAKE</u>	<u>CODE</u>
Lambretta	LAMB	Pacemaker	PACE
Lancer	LANR	Pannonia	PANN
Laverda Gemini Twin	LAVE	Panther	PANT
Lectracan	LECT	Parilla	PARI
Lil' Indian	LILN	Paris	PAIS
Lilac	LILA	Pegaso	PEGA
Lombard	LOM	Penton	PENT
Lucky	LUKY	Peugelot	PEUG
		Phoenix	PHNX
M D S	MDS	Piazo	PIAZ
M.V. Augusta	MVAU	Pointer	POIN
MZ	MZ	Ponycycle	PONY
Maico	MAIC	Powell	POWL
Malyette	MALY	Progress	PROG
Manet	MANE	Puch	PUCH
Marusho	MARU		
Massey	MASY	Rabbit	P.ABB
Matchless	MTCH	Rabbit Jr.	RABJ
Matrette	MATR	Reconstructed	RECO
Maverick	MAV	Rex	REX
Miniscooter	MINI	Riverside	RIVS
Mobyette	MOBY	(Montgomery Ward)	
Mojave	MOJA	Rokon	ROKN
Mondial	MOND	Rollfast	ROLL
Montessa	MOTS	Royal Enfield	ROEN
Montgomery Ward	RIVS	Royal Sovereign	ROSO
Moto Guzzi	MOGU	Rumi	RUMI
Moto Morini	MOMO	Rupp	RUPP
Moto Rumi	MORU	Rutman	RUTM
Moto-Beta	MOBE		
Motobic	MOBI	S F M	SFM
Motom	MOTM	S H L	SHL
Motorette	MRTE	Sachs	SACH
Muhlberg	MUHL	Safti	SAFT
Mustang	MUST	Salsbury	SALB
		Scat Kitty	SCAT
N.S.U.	NSU	Scotalong	SCOA
Norman	NORM	Scott	SCOT
Norton	NORT	Scrambler	SCRM
		Sears (Roebuck & Co)	SEAR
Omega	OMEG	Servicar	SECR
Opel	OPEL	Servicycle	SECY
Ossa	OSSA	Silver Pigeon	SILP

MOTORCYCLES (Cont.)

<u>MAKE</u>	<u>CODE</u>	<u>MAKE</u>	<u>CODE</u>
Simplex	SMLX	Triumph	TRIU
Simson	SIMS	Tule Trooper	TUTR
Solex	SOLX	Twister	TWST
Sparta	SPAR	TWN	TWN
Springcycle	SPCY		
Sprite	SPRE	Valiant	VALI
Sun	SUN	Van Tech	VATC
Sunbeam	SUNB	Velocette	VLCT
Super Flea	SUFL	Velosolex	VELO
Suzuki	SUZI	Venus	VENU
		Vespa	VESP
Tacquito	TACQ	Victoria	VICT
Tempo	TEMP	Villiers	VILL
Tessy	TSSY	Vincent	VINC
Testi	TESI		
Tohatsu	TOHA	W S K	WSK
Torrot	TORR	Wayne	WAYN
Tote Gote	TG	White	WHIT
Trail-Breaker	TRBR	Whizzer	WHZR
Trail Boss	TRBO	Wilson	WILS
Trans-Sport	TRSP		
Travis	TRVS	Yamaha	YAMA
		Yankee	YANK
		Yardman	YARD
		Zanella	ZNEL
		Zundapp	ZUND

APPENDIX B  
REPAIR TYPE CODES

B-0

## REPAIR TYPE DEFINITIONS

### BODY AND MAINTENANCE

01 HEATING & VENTILATION

Include heater core, hoses, ductwork and fan associated with the heating, and ventilation of the cab.

02 CAB FIXTURES

Include all cab items such as reflectors, mirrors, seats, hardware, and interior equipment.

03 INSTRUMENTS & GAUGES

Include all instruments, gauges, and warning devices.

04 GLASS

Include all windows and window cranking mechanism.

05 AIR CONDITIONING

Include compressor, condenser, dehydrator, suction valve, evaporator, fan, and plumbing associated with the air conditioning of the cab.

06 CAB METAL

Include all sheet metal and structures required to cover the passenger compartment and to cover the major vehicle components. This category includes all integral bodies and pickup type beds normally supplied by the vehicle manufacturer. It does not include special bodies such as dumps, refuse packers, etc.

07 MOUNTED BODY

Includes the sheet metal, structural components, and doors of special bodies (excluding the passenger compartment) that are not normally supplied by the original equipment manufacturer. This includes dumps, refuse packers, tank bodies, etc.

### CHASSIS

11 AXLES-FRONT

Include axle, king-pin assembly steering-knuckle assembly. Does not include springs or wheel bearings.

12 AXLES-REAR

Include axle but not springs, wheel bearings, or hubs.

13 BRAKES

Includes adjustments and repairs to the brake system, replacement of

brake shoes, drums, wheel cylinders, brake chambers, reservoirs, lines compressor, or brake control valve.

14 FRAME

Include all structural members, bumpers, engine and body mounts, and necessary mounts for attaching components. Do not include suspension brackets.

15 STEERING

Include steering-wheel assembly, steering-gear assembly, idler arm, tie-rod ends, and tie-rod adjusters.

16 SUSPENSION

Include brackets necessary for attaching the suspension to the frame, the suspension itself, the shock absorbers, and parts necessary for attaching the suspension to the axle.

17 TIRES/TRACKS

Rubber-tired vehicles--includes new tires and the labor and material needed to repair and change tires and tubes on vehicles. Crawler units--include track support rollers and bogies.

DRIVE TRAIN

23 CLUTCH

Include adjustments and repairs to clutch and clutch controls. Do not include flywheel.

24 DRIVE SHAFT(S)

Include drive shafts, universal joints, and support bearings.

25 POWER TAKE OFF

Include PTO unit and all related components.

26 TRANSMISSION - MAIN

Include all work on or replacement of case, cover, and all internal parts and controls.

28 TRANSMISSION - AUXILIARY AND TRANSFER CASE

Include case, cover, and all internal parts of auxiliary transmission.

29 CHAIN DRIVES

Include any chain drives and sprockets of tracked vehicles.

ELECTRICAL SYSTEMS

31 CHARGING SYSTEM

Include the generator/alternator, voltage regulator, related wiring

harness, and any other components necessary to the charging of the vehicle.

32 CRANKING SYSTEM

Include the starting motor and all necessary wires and cables for cranking the engine. Do not include the battery.

33 IGNITION SYSTEM

Include the ignition switch, coil, condenser, points, rotor, distributor spark plugs, and all wiring necessary for these components.

34 LIGHTING SYSTEM

Include all wiring, bulbs, switches, and wiring harnesses necessary to illuminate the vehicle.

35 BATTERY

Include the battery.

ENGINE

41 AIR INTAKE SYSTEM

Include all items between the air inlet port through the intake manifold (exclude carburetor). Included also are the air cleaners, turbochargers, blowers, and superchargers.

42 COOLING SYSTEM

Include radiator surge tank, shutters, shutter controls, fan and shroud, thermostat and housing, hoses, and water pump.

43 EXHAUST SYSTEM

Include exhaust manifold, heat riser, exhaust pipe, muffler, tail pipe, and all gaskets, clamps, and supports.

44 FUEL SYSTEM

Include the fuel tank, lines, pumps, filters, carburetor or fuel injectors, and controls.

45 POWER PLANT

Include adjustments, rebuild or replacement of the block or any of the components of the block.

46 POLLUTION CONTROL

Include maintenance and/or replacement of all pollution control devices such as PCV valves and EGR valves. Excludes air cleaners, mufflers, and catalytic converters.

## ACCESSORIES/ATTACHEMENTS

- 51 ACCESSORIES-GENERAL  
This code may be used for those items not included elsewhere in the system (also see next code).
- 52 ACCESSORIES-ELECTRICAL  
This code may be used for those electrical items not included elsewhere in the system.
- 53 EXPENDABLE ITEMS  
Include mud flaps, chains, flares, fire extinguishers, etc.
- 55 POWER TAIL GATE  
Include platform, controls, hydraulic cylinder, lines, and all mounting hardware.
- 56 RADIO EQUIPMENT  
Include radios and two-way communication devices.
- 58 WINCHES  
Include controls, wiring, mounting, hardware, and the winch itself.
- 59 VEHICLE COUPLING SYSTEM  
Include fifth wheel, fifth wheel plate, pintle hooks, clevis connections, tow hooks, draw bars, and all related items.
- 61 BUCKETS  
Include front-end loader buckets, cherry-picker buckets, etc. and the structure which connects the bucket to the unit.
- 62 BLADES  
Include grader blades, bulldozer blades, snow plow blades, etc. and the hardware which connects the blade to the unit.
- 63 BROOMS/BRUSHES  
Include brooms and brushes used on street cleaning and sweeping equipment.
- 64 CABLES  
Include any cables used on the system, such as crane cables.
- 65 HOISTING DEVICES  
Include hoisting devices such as those used on load-packer bodies.
- 69 HEATING & REFRIGERATION-CARGO  
Include all the components designed to maintain the cargo within a given



temperature range.

#### HYDRAULIC PRESSURE SYSTEMS

- 71 PUMP  
Includes any type of pump being used in a pressure or product transfer system.
- 72 CYLINDERS & FRAME  
Includes the cylinders, pistons, pins, bushings, hinges, and all parts associated with pivot points of the frame and supports system. Also includes the structural frame and its supporting components.
- 73 LINES & CONTROLS  
Includes the lines, hoses, and fittings used to carry the hydraulic fluid from the pump to the hydraulically operated components. Also includes the controls, valves, and meters of the hydraulic system as well as the system's fluid reserve tanks.
- 74 BLOWERS  
For all parts of a blower associated with a bulk product transfer system.
- 75 COMPRESSOR  
Include any compressor appropriate to the system.

#### AUXILIARY POWER SYSTEMS

- 81 APS POWER PLANT  
Include adjustments, rebuild, or replacement of the auxiliary engine block or any of its components.
- 82 APS COOLING SYSTEM  
Include radiator, surge tank, shutters, shutter controls, fan and shroud, thermostat and housing, hoses, and water pump for the auxiliary power system.
- 83 APS FUEL SYSTEM  
Include the fuel tank, lines, pumps, filters, carburetor or fuel injectors, and controls for the auxiliary power system.
- 84 APS ELECTRICAL SYSTEM  
Include all components of the charging, cranking, and ignition systems and the battery (as described in codes 31, 32, 33, and 35) for the auxiliary power system.

85 APS TRANSMISSION

Include all work on or replacement of case, cover, and all internal parts and controls of the auxiliary power system transmission.

86 APS CLUTCH

Include adjustments and repairs to clutch and clutch controls of the auxiliary power system. Do not include flywheel.

OTHER ACTIVITIES

90 CLEANING/WASHING

The removing of excess dirt, grime, and discoloration which cannot be removed in the ordinary washing process.

91 PAINTING

Include painting all or part of the equipment.

92 TOWING

Include towing and/or "drive away" of equipment not in operational use.

93 DIAGNOSIS/ROAD TESTING

Include the time spent in diagnosing vehicle problems and in road testing the unit during or after the repairs are completed.

94 LUBRICATION

Include lubrication of the unit and change of engine oil and/or filters when not performed as part of a PM inspection.

95 PM-A

Record "A" level preventative maintenance inspection.

96 PM-B

Record "B" level preventative maintenance inspection.

97 PM-C

Record "C" level preventative maintenance inspection.

98 MOUNTED SYSTEM LUBRICATION

Include lubrication of the mounted system and any oil and/or filters used in the mounted system when not involved in a PM of the mounted system.

99 MOUNTED SYSTEM PM

For the periodic inspection and preventative maintenance of the mounted system.

END

DATE

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