

CHAPTER 4

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4.00 Introduction

The Division of Maintenance, Office of Maintenance Equipment is responsible for monitoring District Maintenance compliance with all requirements in this chapter.

The Division of Equipment (DOE) is delegated the authority by the Department of General Services (DGS) to oversee all Mobile Fleet, component, and non Mobile Fleet accessories purchases. Items affected are listed in the Division of Procurement and Contracts (DPAC) Acquisition Manual.

All mobile pieces of automotive, maintenance, and construction equipment are purchased and maintained by the Division of Equipment and assigned to districts or the Headquarters Maintenance pool. This equipment is designated as Mobile Fleet equipment and normally is assigned a seven (7) digit identification number (ID). Equipment types are identified by a five (5) digit Maintenance Class (MC). This five-digit number is used to identify the type and size of each piece of equipment in the fleet.

Streets and Highways Code Section 140.3 “A” contains the legislated definition of the Department’s Mobile Fleet. The definition is as follows: “Mobile Equipment” means devices owned by the Department by which any person or property may be propelled, moved, or drawn on or off highway and that are used for employee transportation or material movement, or for construction or maintenance work relating to transportation, including, but not limited to, passenger vehicles, heavy duty trucks, boats, trailers, motorized construction equipment, and “slip in” accessories or attachments that are used by more than one functional unit.

For further clarification of approvals (internal and external) related to equipment purchases, see the Department’s Acquisition Manual, which is available on the Administration Intranet web site.

Rental rates are established and maintained by the Division of Equipment and the Division of Accounting.

4.01 License Requirements

Supervisors shall ensure that each operator of equipment has a valid driver’s license and any special endorsements required for the specific type of equipment operated. Each supervisor shall maintain a file for each employee that contains the training records (electronic storage of training records is acceptable), and a current Department of Motor Vehicles (DMV) pull notice as required by the Biennial Inspection of Terminal (BIT) Program. Each DMV pull notice requires the supervisor’s signature and date received.

4.01.1 Defensive Driver Training

This is a mandated course for all employees who drive a State or personal vehicle on State business at least once every two (2) weeks. This course is required in accordance with the State Administrative Manual, Section 0751, and Management Memo 03-07, to be taken at least once every four (4) years. The Maintenance Field Defensive Driver Training, G21439, meets the Department of General Services, Office of Risk and Insurance Management mandated requirement for new and current field Maintenance/Equipment employees. This four (4) hour course incorporates California driving laws and Caltrans collision statistics and data, with driver safety instruction and a refresher on defensive driving rules and techniques. This course is for Maintenance/Equipment field employees. Employees who exhibit a need for additional training will be enrolled in an individualized State DDT course (one on one).

Note: As of June 16, 2003, the agreement between the Department of General Services, Office of Risk and Insurance Management, and the Department of Transportation, that exempted Maintenance employees from the Defensive Driver Training, if they attended the Maintenance Equipment Training Academy (META) every three (3) years, dated May 03, 1979, has been rescinded.

4.02 Assignment of Equipment

The District Equipment Manager shall continually analyze use of equipment assigned to a Maintenance region or area. The Equipment Manager shall move equipment within the district to affect the best usage possible.

Districts should use Integrated Maintenance Management System (IMMS) reports and Division of Equipment meter readings to aid in analysis of equipment use.

4.03 Equipment Catalog

The Division of Equipment (DOE) publishes a catalog of equipment available to the districts. This catalog was created to assist the Department in requesting the equipment best suited for the job. The catalog is available on the Division of Equipment Intranet web site. The catalog is updated as items are added or removed.

The majority of the available units of equipment are included in the catalog. With rare exceptions, all requests shall be from the catalog.

4.04 Care and Responsibility of Mobile Fleet

The Division of Equipment as the owning agency with responsibility for the purchase, maintenance, and repair of the Mobile Fleet, also has the following responsibilities:

Ensures that the equipment catalog developed by the Division of Equipment provides the Department with typical equipment and associated options to safely and efficiently maintain the State highway infrastructure. The equipment provided shall be of a size and configuration necessary to accomplish its intended task as safely and efficiently as possible, recognizing that quick and efficient operations on the travelway reduces employee exposure and traffic delays.

The Division of Equipment and the assigned equipment user are responsible for the care and proper use of all mobile equipment from the time it is received until it is returned to the Division of Equipment.

The Division of Equipment is responsible for scheduled lubrication, preventative maintenance, and accurately maintaining service records. The Division of Equipment will notify equipment users of the next Preventative Maintenance due date. It is the responsibility of the user to notify the Division of Equipment in advance of any service needs prior to any pre-programmed service dates, and mutually arrange access for service. There may be occasions when Maintenance personnel will assist in servicing a vehicle.

The Division of Equipment is responsible for maintaining the fleet as it was originally provided in as good an operational condition as possible.

The Division of Equipment will provide the Department with a safe and functional equipment fleet that complies with all the requirements of the California Code of Regulations, California Vehicle Code, Cal-OSHA, and other regulatory agencies.

The Division of Equipment schedules all service and repair work to the Mobile Fleet as overall district priorities dictate. After performing repairs, the Division of Equipment representative shall inform the unit supervisor. The unit supervisor will normally arrange to have unit picked up promptly and returned to service. The Division of Equipment representative shall provide the unit supervisor repair documentation on the signed Repair Request. The Division of Equipment is also responsible for documenting all repairs and services in the Permanent Equipment Maintenance Record (PEMR), unless the repairs are made by the operator.

The Division of Equipment provides Divisions with a monthly State equipment rental expenditure report. This report shall be itemized at the cost center level.

The Division of Equipment provides Mobile Fleet equipment meter readings upon request.

Chief, Division of Maintenance

The Chief, Division of Maintenance, has the overall responsibility for the Division of Maintenance statewide. His responsibilities include the following:

- Evaluate the future needs of the Maintenance Division and prepare Budget Change Proposals as necessary.
- Establish and maintain a management system that efficiently utilizes equipment and funding resources to the fullest possible extent.
- Determine equipment resource allocations for the districts.

Chief, Office of Maintenance Equipment

The Office Chief of Maintenance Equipment reports to the Chief, Division of Maintenance and has the following responsibilities:

- Oversight of statewide safety training on equipment.
- Make recommendations regarding optimal allocation of equipment resources between districts by communicating with Deputy District Directors, Maintenance, or their designee.
- Anticipate future equipment needs by communicating with Deputy District Directors, Maintenance or their designees, and with other Division of Maintenance Office Chiefs.
- Evaluate existing policy and make recommendations for change when appropriate.
- Responsible for statewide fleet management and application of fleet standards.

Statewide Equipment Manager

The Statewide Equipment Manager reports to the Chief, Office of Maintenance Equipment, and has the following responsibilities:

- Provide information and consultation to the District Equipment Managers.
- Manage the statewide equipment pool.
- Review legislation that affects Maintenance Mobile Fleet and provide analysis.
- In conjunction with the Division of Equipment, monitor Inter-Agency Service Agreements (Form 13-A), and invoices.
- Monitor equipment rental (Object Code 007) expenditures statewide.
- Oversee statewide fleet to ascertain meeting of usage goals.
- Responsible for statewide fleet management and application of fleet standards.

Deputy District Director, Maintenance

The Deputy District Director, Maintenance has the following responsibilities:

- Prepare and submit the annual Equipment Budget Requests (EBR).
- Is responsible for the equipment resource management within the districts.
- Keep the Chief, Division of Maintenance apprised of equipment resource utilization and, if necessary, make recommendations and researches future equipment needs.
- Provide Division of Equipment's resident mechanics with safe, compliant, and functional facilities for the work conducted.

Field Maintenance Region Managers

The Field Maintenance Region Managers have the following responsibilities:

- Evaluate equipment availability and its impact on regional work plans.
- Plan, schedule, and effectively utilize the equipment fleet under regional control.
- Enforce compliance with all policies related to fleet management.
- Work with the Division of Equipment to set priorities for vehicle inspections and repairs for the Maintenance fleet.
- Review vehicle accident data pertinent to their regions and make recommendations or changes as needed.

District Equipment Managers

The District Equipment Managers have the following responsibilities:

- Make periodic field reviews observing the pre-trip/post-trip inspections of equipment by the crews, inspect for general condition, unauthorized modifications, and general cleanliness. A report of these reviews will be made to district Maintenance management and the local Shop Superintendent.
- Will provide input to district and Headquarters management on equipment needs identified by field Maintenance forces.
- Manage the district Maintenance equipment pool.
- Manage and move district equipment to meet usage goals.
- Help prioritize repairs for the Maintenance fleet.

Maintenance Area Superintendents

Maintenance Superintendents have the following responsibilities:

- Responsible for the proper use and care of equipment assigned to their areas.
- Identify and arrange equipment training for operators and supervisors. Will support policies regarding operation, maintenance, and minor repair of equipment as taught to operators and supervisors at the Maintenance Equipment Training Academy (META).
- Shall enforce the use of the pre-trip/post-trip checklist book and Permanent Equipment Maintenance Record (PEMR) books.
- Will provide Division of Equipment personnel with equipment and access to Maintenance stations, and maintain safe, compliant, and functional facilities for work performed.
- Make every effort to work with the Division of Equipment and resident or Field Mechanics to set priorities for vehicle inspections and repair of the Maintenance fleet.

Maintenance Supervisors and Leadworkers

Maintenance Supervisors and Leadworkers have the following responsibilities:

- The Maintenance Supervisor, through the equipment operator, is responsible for shift inspection and minor preventive maintenance repairs. Operators are responsible for detecting the first signs of faulty equipment. They shall use the pre-trip/post trip checklist for reporting any signs of problems to their supervisors. The supervisor is responsible for making arrangements for repair.
- The pre-trip/post-trip checklist books are available through Material Operations Warehouse.
- Pre-trip inspections and post-trip checks shall be made and recorded on the pre-trip/post-trip checklist by each operator at the beginning and end of each shift. This requirement applies to all equipment rated $\frac{3}{4}$ ton and larger. Units rated smaller than $\frac{3}{4}$ ton shall have a pre-operational check once a week.
- If repairs are requested, trouble symptoms shall be recorded on the pre-trip checklist. If the repairs are minor and within the capability of the operator, the operator can make the repair, noting any repairs on the pre-trip form, and in the Permanent Equipment Maintenance Record (PEMR) book. If repairs are beyond the capability of the operator, the pre-trip checklist will be submitted to the supervisor. The supervisor shall decide to operate as is, or park and schedule the vehicle for repair. Operators shall follow the instructions on the pre-trip/post-trip book cover. The pre-trip/post-trip book shall be kept in or on the vehicle.

- Supervisors may only authorize the use of a vehicle with non-safety related defects until the date on the repair request portion. If there are safety-related defects, the supervisor will ground the vehicle until repairs are completed.
- Are responsible for the appearance and condition of equipment assigned to or used by their cost centers.
- Will enforce the policies of equipment operations, minor adjustments, and repair as instructed by META.
- Will ensure that personnel under their supervision follow prescribed Lube Folio instructions regarding proper servicing of equipment when required. Provide adequate cabinet or space to store a supply of parts and accessories for use by equipment operators.
- Provide proper storage for lubricants with correct product number decals on containers. Provide dust free storage for swing-spout oil dispensers.
- Will identify and advise management of operator training needs.
- Shall perform a safety inspection of each unit in his or her cost center. The safety inspection will be performed bi-annually, and the inspection date will be recorded in the PEMR book. When using pool assigned equipment, the supervisor will ensure that the inspection is current, and will perform an inspection if one is due. The PEMR book shall be kept with the vehicle.
- Provide Division of Equipment personnel with access to Maintenance stations and vehicles.
- Inform District Equipment Manager of all equipment transfers and movement.

Operators

Operators (all employees who operate equipment) have the following responsibilities:

- Shall follow prescribed methods of equipment operation as instructed by META and their supervisors.
- Shall perform the required pre-trip/post-trip checks. Shall follow appropriate Lube Folio chart instructions for shift, 40 hour, or minor and major service when required (or use manufacturer's operator's manual if no Lube Chart exists), and shall log 40 hour services where designated on pre-trip form. Pre-op book covers provide specific record keeping instructions and shall be followed to ensure proper pre-trip and post-trip records are kept.

- The signature of the person making the pre-trip/post-trip checks is required in the space provided. The user shall also print his or her last name for identification purposes.
- Shall record major and minor vehicle service in the operator service section of the PEMR book, including the operator's initials in the space provided.
- A Permanent Equipment Maintenance Record book will be maintained for each piece of Mobile Fleet equipment and shall be kept in the equipment at all times. Major and minor servicing, repairs, brake adjustments, and inspections on the vehicle will be recorded in the book. The Division of Equipment supplies these books.

Operators are also responsible for making the following minor repairs and adjustments:

- Change light bulbs, fuses, and lenses.
- Simple adjustment or replacement of fan belts.
- Replace battery, cables, and clean battery connections when trained to do so.
- Replace wiper blades.
- Perform scheduled services when instructed to as outlined in the PEMR and/or Lubrication Interval Standards in File Section 10 of the Lube Folio, using the proper Lube Chart (or manufacturer's operator's manual if no Lube Chart exists) as a guide. Lube charts are available on the DOE web site.

The above in no way is meant to limit the operator to those repairs. He or she may make other minor repairs, but not modifications, as needed at the discretion of his or her supervisor with the approval of a Field Mechanic, Shop Supervisor, or District Shop Superintendent.

Equipment, which cannot be returned nightly to the Maintenance station must be parked in a safe place and be locked. Do not leave valuable parts unprotected if easily removable from the equipment.

4.05 Transferring Equipment

To ensure that equipment is used to the maximum extent possible and to meet usage goals, districts shall move equipment within their own district (intra-district), between other districts (inter-district), and to other State agencies when needed in accordance with established procedures.

Utilizing the Motor Pool Module of Fleet Management dispatching between districts and other Divisions may be arranged by the districts. Form DM-E87E shall be completed for each permanent transfer. The District Equipment Managers of the districts involved may handle inter-district movement of equipment. The local Shop Superintendents must be told of permanent transfers of equipment so proper location code changes can be made.

The Division of Maintenance, Statewide Equipment Manager can assist on inter- and intra-district moves, and may be involved in movement of equipment that involves the Division of Maintenance and other governmental agencies. Rental of equipment to or from other governmental agencies should be accomplished through use of an Inter-Agency Service Agreement and Invoice (Form 13A).

4.06 Warning Lights

Warning lights shall be provided for Maintenance vehicles which are routinely operated on the traveled way at lower traffic speeds and are not equipped with arrow boards. (Reference: Caltrans Safety Manual and Chapter 8 of Maintenance Manual, Volume 1).

Warning lights shall not be turned on when deadheading at prevailing speeds.

Units not regularly engaged in operations requiring amber lights may occasionally need portable warning lights not permanently mounted on the vehicle. These “plug-in” units will be supplied by the local Equipment Shop with a proper Local Request. Warning lights of this type will be supplied at the expense of the operating unit and will become its property. The Local Request must include the charge district, unit, and E-FIS Project ID. All Local Requests for portable warning lights for Maintenance will be approved by the District Equipment Manager. The local Equipment Shop will provide a dollar estimate for installation and associated costs, prior to approving the Local Request.

4.07 Red Warning Lights

Red warning lights are permitted only on an “authorized emergency vehicle” defined in Section 165 of the California Vehicle Code.

Department of Transportation vehicles classified as “emergency” are those complying with Section 165 of the Vehicle Code.

4.08 Cost Responsibility-General

In general, the Division of Equipment will furnish all typical motor vehicles and construction equipment. This equipment will be complete with accessories, devices, or services that are standard, ordinarily used, or legally required, and are provided as necessary in the operation of the unit. Available equipment units are in the Equipment Catalog along with a list of optional equipment.

4.09 Local Request-Review

Districts shall comply with the latest policies and procedures when unusual working conditions require special devices, accessories, or modification to units.

The requesting department shall provide appropriate charge codes to the Shop Superintendent for Local Request work.

When an item not listed in the catalog is requested, follow the approval process as outlined on Figure 4-1. All improvements or modifications become the property and repair responsibility of the Division of Equipment, with the exception of items defined as “plug ins” as in Section 4.06.

Improvements or modifications are sometimes required due to changes in the industry, or to enable a Mobile Fleet unit or its components to perform the functions for which they were originally intended. Examples of such improvements include larger engines, improved suspension, and retarder retrofits. Improvements or modifications are subject to the approval process. There shall be no improvements or modifications made to Mobile Fleet equipment except by the Division of Equipment employees or approved vendors, unless authorized by the Shop Superintendent or Headquarters Division of Equipment as appropriate.

All Requests for improvements or modifications to Mobile Fleet equipment from the operating Divisions must be supported by a properly justified and approved request with appropriate E-FIS Project ID's and E-FIS Reporting Code.

Any improvement or modification option requested for a Mobile Fleet unit that would require a Maintenance Class Number change shall be done with the concurrence of the appropriate Statewide Equipment Manager, Division of Equipment, Office of Shop Operations and Field Liaison, and Office of Fleet and Business Services prior to the work being accomplished.

See Figure 4-1 for a matrix that illustrates the responsible parties and appropriate actions to be taken when requesting modification or improvement of Mobile Fleet equipment.

Requests to Modify or Improve Mobile Fleet Equipment

ITEM/SITUATION	UNIT/ACTION
Requests to retrofit Mobile Fleet units. With options listed in Equipment Catalog	<ol style="list-style-type: none"> 1. District Equipment Manager makes initial review and/or recommendation. 2. Equipment Manager discusses with Shop Superintendent. 3. Shop Superintendent provides estimates, recommendations and pursues needed approvals with the Division of Equipment. The Division of Equipment determines the delegated authority of the Shop Superintendent.
Requests for non-catalog options, or improvements.	<ol style="list-style-type: none"> 1. District Equipment Manager makes initial review and/or recommendation. 2. District Equipment Manager discusses with Shop Superintendent; proper charge is determined. 3. Shop Superintendent provides recommendations, estimates, and pursues needed approvals with the Division of Equipment. The Division of Equipment. Determines the delegated authority of the Shop Superintendent.

Figure 4-1: Requests to Modify or Improve Mobile Fleet Equipment

There shall be no modifications or improvements of Caltrans Mobile Fleet equipment that is nearly obsolete or nearing replacement unless legally required to keep the unit in operation.

Any repair work done on district owned non-Mobile Fleet or Maintenance equipment such as lawn mowers, small pumps, and chain saws is not the responsibility of the Division of Equipment, and shall be arranged by Maintenance through private vendors or other means.

There shall be no modifications or additions made to Caltrans Mobile Fleet Equipment by Caltrans Maintenance employees unless approved by the Division of Equipment, or as delegated to the Shop Superintendent and District Equipment Manager.

4.10 Lost or Stolen Accessories

The cost or replacement of lost or stolen accessories or loss due to theft, vandalism, abuse, or neglect while such equipment is in the possession of a district shall be charged to the Division.

Disciplinary action may be taken when damage or loss is a result of operator's negligence or abuse.

4.11 Changes in Location of Accessories.

Accessories and equipment that are the property of the Division of Equipment are not to be altered or moved from one vehicle to another without first complying with requirements of Section 4.09.

4.12 Repair

One of the main functions of the Division of Equipment is to perform all necessary repairs to equipment. These repairs will be made promptly by one of the Division of Equipment shops, or the shop may give authorization to have the work accomplished in a suitably equipped commercial shop. For minor repairs, authorization may be given to Maintenance Division employees to perform the work.

A Shop Superintendent of Equipment has authority to request release of equipment for repairs when, in his or her opinion, the equipment should be removed from service to prevent progressive mechanical damage. During an emergency, an Equipment Shop Superintendent may permit continued use of equipment despite this damage if a district is unable to make satisfactory substitution.

4.13 Inspection of Steam Boilers and Unfired Pressure Vessels

Every steam boiler or unfired pressure vessel must be inspected at designated intervals if it is over six (6) inches in diameter, has a holding volume of more than one and one half cubic feet, or operates at more than 30 pounds pressure per square inch. The inspector must have a certificate of competency issued by the Department of Industrial Relations, Division of Industrial Safety.

Steam boilers and unfired pressure vessels inspections on Mobile Equipment are to be handled through the Division of Equipment. Districts are responsible for all other steam boilers and unfired pressure vessels and shall ensure that these inspections are done.

Operators shall drain air tanks completely of accumulated moisture at least once during each shift of operation. Air brake reservoirs must be drained to remove moisture and contaminants, even when a tank is equipped with an air dryer. To ensure the proper function of one-way check valves on dual brake system, tanks must be drained in the following order:

- (A) Supply (wet) reservoir.
- (B) Front service reservoir.
- (C) Rear service reservoir.

Drain each completely before closing drain valve and proceeding to the next. If any reservoir is empty when a valve is first opened (with engine off and system charged), the brake system may be defective. Notify supervisor or Equipment Shop staff before further operation.

4.14 Overweight or Oversize Loads

State equipment carrying overweight or oversize loads must carry a transportation permit authorizing the movement. Annual permits for Maintenance and other Divisions can be obtained through the Office of Commercial Vehicle Operations and Permits.

4.15 Fire Extinguisher on Equipment

- (A) Fuel trucks, paint strippers, and asphalt kettles shall be equipped with a 20: BC rated dry chemical or carbon dioxide fire extinguisher.
- (B) Any truck or truck-tractor used to transport hazardous materials shall be equipped with a fire extinguisher having a rating of 10: BC or more.
- (C) Any truck or tractor-trailer combination exceeding 40 feet in length will require a fire extinguisher having a rating of 5: BC or more.
- (D) Any 3-axle truck will require a fire extinguisher having a rating of 5: BC or more.
- (E) Any truck or bus used primarily for hauling seven (7) or more employees to and from the job site will require a fire extinguisher having a rating of 4: BC or more.
- (F) All tow trucks will require a fire extinguisher having a rating of 4: BC or more.

- (G) All certifiable mobile cranes shall have a fire extinguisher rated at 5: BC or more, readily accessible to the operator station.
- (H) All personnel lifts shall be equipped with a fire extinguisher having a rating of 5: BC or more, to be located in truck cab.
- (I) Fire extinguishers are required to be visually inspected during pre-trip inspection by the operator. They should be serviced and tested every five (5) years. Functional units are responsible for the service and testing costs.
- (J) Alternate equivalent protection shall be provided when portable extinguishers are removed from service for maintenance and recharging.
- (K) Where portable extinguishers have been provided for employee use in the workplace, an educational program shall be provided by the functional unit to familiarize employees with the general principles of fire extinguisher use, and fire fighting hazards.

4.16 Use of State Vehicle

Board of Control Rule 847(D) requires that State employees who frequently store State vehicles at or near their residences must have a Home Storage Permit. The district office can provide further information about this requirement, and the process for obtaining a Home Storage Permit.

4.17 Rental of Non-State-owned Equipment

When equipment is not available from within Caltrans, the Division of Equipment is required to make the effort to obtain equipment from another governmental agency prior to renting from a non-governmental source.

Equipment rented un-operated or fully operated and maintained must meet the minimum safety requirements established by Cal/OSHA.

Authority to rent equipment is delegated to the districts in conformance with the following procedures:

- (A) Equipment is not Within Immediate Area

If needed equipment is not available in the immediate area, notify the District Equipment Manager. He or she will look for the units within the district.

(B) Equipment is not Within the District

If the equipment is not available in the district, the District Equipment Manager shall look statewide for Caltrans equipment or for equipment from other governmental agencies. The Division of Maintenance Statewide Equipment Manager will assist in this search.

(C) Equipment not Within Caltrans or Other Governmental Agencies

If the equipment is not available within Caltrans or other governmental agencies using district procedures, prepare an equipment rental contract or the Equipment Manager may use his or her Equipment Rental Calcard. Make every effort to obtain rented equipment un-operated. The contract should include a justification that indicates the efforts made to obtain equipment either through Caltrans or another government agency. The contract should also include an approval signature by the District Equipment Manager.

The Division of Equipment is not responsible for any repairs to rented equipment. Transporting and repairs should be included in the contract and provided by the rental agency.

There are two basic principles involved in considering use of contract equipment:

- (1) Use Caltrans or other governmentally owned equipment whenever it is reasonably available for maintenance work.
- (2) Do not rent operated equipment to do work that is the normal function of Maintenance employees.

When looking for needed equipment, always work through your District Equipment Manager. He or she will make the required contacts.

Equipment rental contracts should not be requested for the rental of haul trucks to haul materials such as asphalt concrete, cinders, sand, and aggregate. Such materials purchased from a vendor should be delivered by the vendor, or by State forces utilizing State owned equipment. Vendor delivery is generally the preferred approach.

An emergency condition is defined as an unforeseen happening or state of affairs requiring prompt action to protect the health, safety, and welfare of the public. Emergency work is defined as remedial measures required to; immediately avert, alleviate, repair, or restore damaged property having a public and State interest.

An emergency situation, however, does not relieve Caltrans of the requirement to look at its equipment as well as that of other governmental agencies prior to obtaining an outside rental. A copy of all equipment rental contracts shall be forwarded to the Division of Maintenance Equipment Manager, who is also responsible to forward the required notification of rental to the Department of General Services.

To expedite the rental of equipment, the district should advertise quarterly for and maintain a current bidders' list of equipment normally rented by the district. This procedure will drastically reduce time required to process an equipment rental.

Equipment rental should be minimized whenever possible through proper scheduling of work and sharing of equipment.

4.18 Towing Equipment

No equipment shall be towed on the traveled way at road speeds when the weight of the towed unit is more than the towing vehicle, unless the towed unit is equipped with brakes controlled by the towing vehicle. The drawbar or chain length should not exceed 15 feet, and the vehicle cannot be towed with a chain beyond the nearest exit from a freeway. (CVC 29005-29006).

4.19 Maintenance Equipment Training Academy

The Maintenance Equipment Training Academy (META) is the Caltrans Equipment Operator training program located at McClellan Park in Northern California.

All Caltrans Maintenance personnel whose duties include operation of equipment, and their supervisors, are required to attend the training facility and learn the basic fundamentals for the proper inspection, preventive maintenance, service, and operation of Caltrans equipment.

The training program includes a mix of classroom, laboratory, and "hands on" equipment operating time.

4.20 Equipment Budget

The District Shop Superintendent has responsibility for preparation and submission of the annual District Equipment Budget including Maintenance.

Each District shall include complete a self-supporting justification for each addition, upgrade or downgrade, change in mix, or replacement request that is included on the Equipment Budget Request (EBR). There may be special exemptions or justifications needed (e.g. Air/Water Quality Districts).

In addition, the following shall be accomplished before submitting a budget item:

- (A) Identify all units of equipment previously requested and approved that are in process or already purchased, but have not yet been received in the district. Forward a copy of this list to the Headquarters Division of Maintenance.
- (B) Fully describe the circumstances that have created the need for upgrade, change in mix, or additional equipment, including the estimated dollar and person year savings, and potential change in rental costs.

Describe why a piece of equipment that meets disposal criteria and is proposed for replacement cannot be eliminated from the fleet.

- (C) Deputy District Directors, Maintenance and District Equipment Managers should consult the Maintenance Region Manager regarding the equipment needs for Area Superintendent areas, based on the number and types of equipment required to effectively accomplish the total workload. This should take into account the Area Superintendent's present equipment inventory, equipment "in process" but not yet received, units predicted for disposal, and district and Headquarters pool units available on a loan basis. This process should separate true "needs" from "wants."
- (D) Permanent transfer of low usage units and increased sharing within the district shall be considered before a request for equipment is submitted.
- (E) Question each special attachment or feature to be provided with a requested unit.

Anything added increases initial cost, and may require a larger vehicle, thereby further increasing initial cost, operating cost, and fuel consumption. Offsetting benefits should be quantified whenever possible.
- (F) Consult with the District Shop Superintendent regarding how special features will affect the size and weight of requested units. Avoid requesting larger units not compatible with the existing fleet.
- (G) Requests for equipment which are found to be incomplete and/or lack justification will be disapproved in the Division of Maintenance Equipment Budget Request review process
- (H) Comply with any other special Equipment Budget Request instructions used by the Division of Maintenance.

All Mobile Equipment, except in very rare cases, shall be ordered from the Caltrans Equipment Catalog in accordance with Department of General Services and Departmental procurement procedures. See the Department's Acquisition Manual for details.

4.21 Parking

No vehicle shall be left by the driver without first engaging the transmission into the lowest gear, unless otherwise instructed in the operator's manual. In the case of some automatic transmission equipped vehicles, put vehicle into park, apply the parking brake, and shut off the engine.

Dozer blades, log grapples, tongs, and buckets on front end loaders, elevating dump bodies, and other components capable of vertical movement by gravity shall be lowered to the ground, blocked, or set on a solid support when the machine is parked. Such components shall be mechanically locked or securely blocked to prevent movement before employees are permitted to perform any work on them.

The use of chock blocks with vehicles other than aerial lift units is an option of district management.

A standard chock block configuration has been established and is shown in plate 4-2 at the end of this chapter. Those districts that have an established chock block policy shall supply and use the standard chock blocks for their vehicles. All new vehicles coming into service will have chock block holders that will match the chock blocks shown in Figure 4-2. These are to be installed by the Division of Equipment using the Local Request procedure as outlined in section 4.09.

4.22 Operator Qualification

Operator qualification testing and training is administered by META. Qualification modules exist for most equipment in the Caltrans fleet.

Equipment for which modules exist can only be operated by qualified and properly licensed operators. Equipment for which modules do not exist can be operated if the operator is properly licensed, trained, and has the proper position classification.

The Qualification Program includes time for training in order to prepare for the required testing.

4.23 Abnormal Equipment Failure

Guidelines and reporting information procedures can be found on form DM-E 253 (Rev. 4/98).

The identification of the failure can be made by Maintenance or the Division of Equipment. However, the record of discovery on form DM-E 253 (Rev 4/98) will be signed off by both the District Shop Superintendent and the District Equipment Manager.

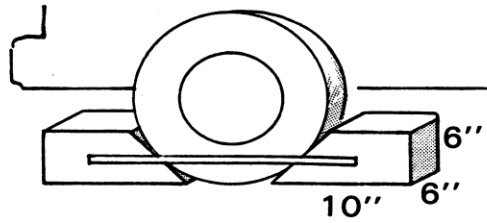
It is the responsibility of the District Equipment Manager to consult with the functional unit manager to pursue the investigation and report findings.

The Deputy District Director, Maintenance has the responsibility to pursue the investigation and report the findings to the Chief, Division of Maintenance.

These guidelines supersede all previous directions and/or policy and procedures.

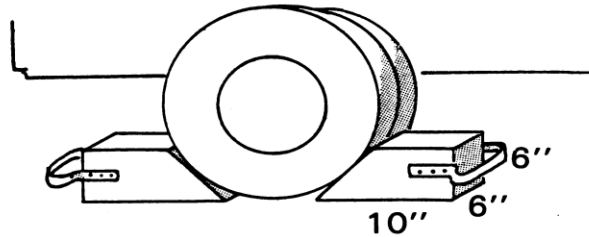
Use of Chock Blocks

Figure 1



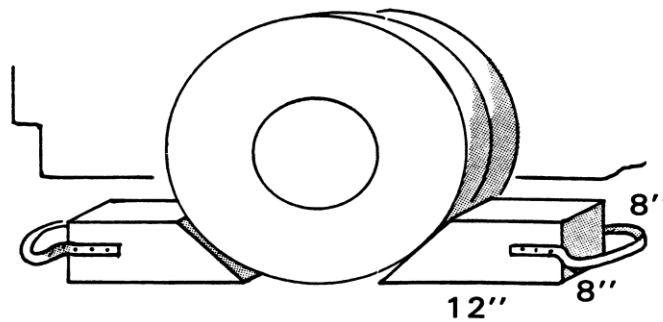
6" x 6" x 10"
@ 45°

Figure 2



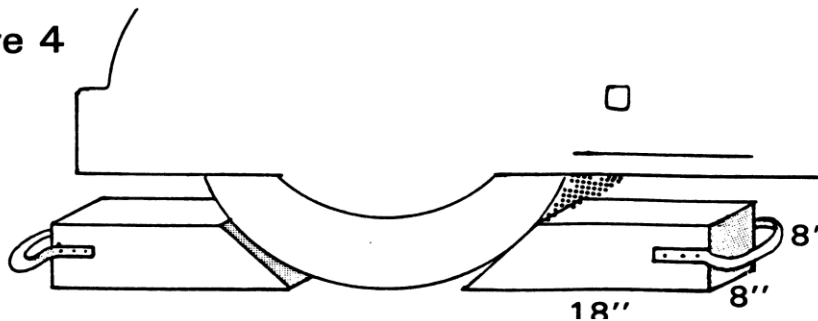
1 Ton
6" x 6" x 10"
@ 45°

Figure 3



1 1/2 Ton
& over
8" x 8" x 12"
@ 45°

Figure 4



Iron Wheel
Roller
8" x 8" x 18"
@ 30°

Figure 4-2: Use of Chock Blocks