



## **CALTRANS HEAVY EQUIPMENT MECHANIC**

**Exam Code: 2TR99**

**Department(s):** Department of Transportation

**Opening Date:** End of December, 2012

**Closing Date:** Continuous

**Type of Examination:** Departmental Open, Non-Promotional

**Salary:** \$3,852.00 to \$4,440.00

**Tenure/Time-base:** Permanent Full-time  
Permanent Part-time  
Permanent Intermittent  
Limited Term Full-time  
Limited Term Part-Time  
Limited Term Intermittent

**Location(s):** Dist. 01 Caltrans Eureka  
Dist. 02 Caltrans Redding  
Dist. 03 Caltrans Marysville  
Dist. 04 Caltrans Oakland  
Dist. 05 Caltrans San Luis Obispo  
Dist. 06 Caltrans Fresno  
Dist. 07 Caltrans Los Angeles  
Dist. 08 Caltrans San Bernardino  
Dist. 09 Caltrans Bishop  
Dist. 10 Caltrans Stockton  
Dist. 11 Caltrans San Diego  
Dist. 12 Caltrans Irvine  
Sacramento County

### **EQUAL EMPLOYMENT OPPORTUNITY**

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right of family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding and related medical conditions), and sexual orientation.

### **DRUG-FREE STATEMENT**

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal

drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

### WHO SHOULD APPLY?

Applicants who meet the Minimum Qualifications as stated on this bulletin may apply for and take this Training and Experience Examination at any time.

Once you have taken the Training and Experience Examination, you may not reapply for twelve (12) months.

### SPECIAL TESTING ARRANGEMENTS

If you have a disability and/or need special testing arrangements you will be able to request a reasonable accommodation during the filing and self-scheduling process.

If you have questions, please contact:

California Department of Human Resources Selection Division

1-866-844-8671

California Relay Service (7-1-1)

Telecommunications Device for the Deaf (TTY) (916) 654-6336

TTY is a telecommunications device that is reachable only from phones equipped with a TTY device.

### ELIGIBLE LIST INFORMATION

A departmental open eligible list will be established for the Department of Transportation in all districts and Sacramento County. The names of successful competitors will be merged onto the eligible list in order of final score regardless of test date. Eligibility expires twelve (12) months after it is established. Competitors must then retake the Training and Experience Examination to reestablish eligibility. A candidate may test only once during a twelve (12) month period.

### REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

**NOTE:** All applicants must meet the education and/or experience requirements as stated on this examination bulletin as of the date the test is taken.

### MINIMUM QUALIFICATIONS

Caltrans Heavy Equipment Mechanic requires possession of a valid Class C driver license. (Applicants who do not possess the license will be allowed to compete in the examination, but the license must be obtained prior to appointment.) **and**

#### **Either I**

Completion of a recognized apprenticeship as a gas- and diesel-powered truck mechanic, or a heavy construction equipment mechanic. (Apprentices who are within six months of completing their apprenticeship program may be admitted to the examination, but they must present evidence of completion of a recognized apprenticeship before they may be appointed.)

#### **Or II**

Four years of varied mechanical experience consisting of diagnosis, repair and overhaul of major components on gas- and diesel-powered trucks or heavy construction equipment. An Associate of Arts Degree in Heavy Equipment Maintenance, Diesel Mechanics, or Heavy Equipment Mechanics or a certificate of completion from an accredited community college or equivalent degree or certificate approved by the California Superintendent of Public Instruction under the provisions of California Education Code Section 94310 may be substituted for two years of the required experience. (Students who are within six months of completing their degree will be admitted to the examination but must present evidence of completion prior to appointment.)

#### POSITION DESCRIPTION

Under direction, an incumbent inspects equipment to locate and determine the extent of necessary repairs and the corrective action necessary; maintains and repairs automobiles, trucks, tractors, personnel hoists, graders, snowplows, pumps, air compressors, diesel and gasoline engines and similar equipment; constructs new special equipment or modifies existing equipment including body frames and running gear; makes installation of, or repairs to, special equipment; operates and maintains tools and machinery used in the repair and maintenance of heavy maintenance and construction equipment; advises in the selection of parts and equipment; estimates repair costs; instructs operators in the proper operation and servicing of equipment; performs welding and brazing work; keeps simple records and completes reports; uses computer equipment to input time spent and tasks performed; may assist in instructing or giving direction to helpers, apprentices, Service Assistants (Automotive), or other employees; and performs other related work.

#### EXAMINATION INFORMATION

##### **Training and Experience Examination – Weighted 100%**

The examination will consist solely of a Training and Experience Examination. To obtain a position on the eligible list, a minimum score of 70% must be attained. An applicant will receive his/her score upon completion of the Training and Experience Examination process.

[Click here to preview the Training and Experience Examination.](#)

#### KNOWLEDGE AND ABILITIES

Knowledge of:

1. Highway maintenance and construction equipment and vehicle construction and repair (e.g., identification of component parts, collision repair techniques, frame repairs).
2. Diagnostic methods and systems (e.g. steering, suspension systems, transmissions, brakes, hydraulics, fuels, ignitions, emission controls, cooling and air conditioning) used in the construction, assembly, overhaul, repair, and adjustment of gas- and diesel-powered equipment and highway construction and maintenance equipment.
3. Preventive maintenance methods and systems (e.g. steering, suspensions, transmissions, brakes, hydraulics, fuels, ignitions, emission controls, cooling and air conditioning) used in the construction, assembly, overhaul, repair, and adjustment of gas- and diesel-powered equipment and highway maintenance and construction equipment.
4. Repair methods (e.g. steering, suspension systems, transmission, brake, hydraulic, fuel, ignition,

emission control, cooling and air conditioning) used in the construction, assembly, overhaul, repair, and adjustment of gas- and diesel-powered equipment (e.g., buses, automobiles/trucks) and highway construction and maintenance equipment.

5. The operation and diagnosis of computerized vehicle management systems (e.g., antilock brakes, engines, transmissions, controls) and use of diagnostic tools (e.g., scanners, laptops, meters, digital volt ohm meter (DVOM)) used in the construction and maintenance of highways.
6. The proper care, accountability and usage of equipment and electronic and computerized tools (e.g. hand, pneumatic, hydraulic) used for diagnostic, preventive maintenance, repair, construction, assembly, overhaul, and adjustment of all gas- and diesel-powered equipment including buses, automobiles/trucks, highway maintenance and construction equipment.
7. Materials (e.g. fuel, oils, filters, metals, cleaning chemicals/solvents, welding rods, replacement parts) used for preventive maintenance and repair, construction, assembly, overhaul, and adjustment of gas- and diesel-powered equipment (e.g., buses, automobiles/trucks) and highway maintenance and construction equipment.
8. The procedures to jack, crib, and suspend highway equipment in compliance with maintenance plans, departmental codes of safe practices and the State and federal Occupation Safety and Health Administration (OSHA).
9. Metal welding, fabricating, and cutting techniques and processes for various equipment and systems (e.g., highway maintenance and construction equipment, marine vessels, gas- and diesel-powered and alternative-fuel automobiles and trucks, and electronic systems) in compliance with departmental codes of safe practices and the State and federal Occupation Safety and Health Administration (OSHA).
10. Safety regulations and practices (e.g., departmental codes of safe practices, Material and Safety Data Sheets (MSDS), Operators Manuals, Injury and Illness Prevention Programs, California Vehicle Code: Title 13) to protect and maintain the safety of persons and property.

Ability to:

1. Use advanced electronic and computerized diagnostic equipment (e.g., scanners, laptops, meters, digital volt ohm meters (DVOM)) for the diagnosis, testing, and repair of highway maintenance and construction equipment.
2. Operate powered materials handling equipment (e.g., forklifts, cranes, lifts) used in the diagnosis, preventive maintenance, repair, and construction of highway maintenance and construction equipment.
3. Use machine shop equipment (e.g., brake lathes, engine lathes, milling machines, and welding equipment) used in the preventive maintenance repair, and construction of highway maintenance and construction equipment.

#### **VETERANS' PREFERENCE POINTS**

Veterans' Preference will be granted for this examination. Effective January 1, 2014, in accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, widow or widower of a veteran, or spouse of a 100 percent-disabled veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligibility list. This section shall not apply to any veteran who has been dishonorably discharged or released.

## CAREER CREDITS

Three (3) Career Credits will be added to the final score of all competitors who are successful in this examination, and who qualify for and have indicated so on their examination. Career Credits are granted as follows:

- State employees with permanent civil service status **or**
- Full-time employees of the State who are exempt from State civil service pursuant to the provisions of Section 4 of Article VII of the California Constitution, and who meet all qualification requirements specified by the Board and have twelve (12) consecutive months of service in an exempt position **or**
- Individuals who have served one full year in, or are graduates of, the California Conservation Corps (eligibility shall expire 24 months after graduation from the California Conservation Corps)

## ADDITIONAL DESIRABLE QUALIFICATIONS

A valid Class A or Class B driver license.

## CONTACT INFORMATION

If you have any questions concerning this examination bulletin, please contact:

California Department of Transportation  
Office of Examinations and Recruitment Services  
P.O. Box 168036, MS 86  
Sacramento, CA 95816-8036  
(916) 227-7858  
California Relay Service: 1-800-735-2929 (TTY), 1-800-735-2922 (Voice)

TTY is a Telecommunications Device for the Deaf or hard of hearing, and is reachable only from phones equipped with a TTY Device.

## DRUG TESTING REQUIREMENTS

Applicants for a position in this class are required to pass a drug screening test. Testing of current employees who are applicants in an examination or who are transferring is permitted only if the person does not have a current appointment to a class for which drug testing is a requirement.

## GENERAL INFORMATION

**Applications are available** at [www.jobs.ca.gov](http://www.jobs.ca.gov) and local offices of the Employment Development Department.

**If you meet the requirements** stated on this examination bulletin, you may take this examination, which is competitive. Possession of the entrance requirements does not assure a place on the eligible list. Your

performance in the examination described on this bulletin will be rated against a predetermined job-related rating, and all candidates who pass will be ranked according to their scores.

**The Department of Transportation** reserves the right to revise the examination plan to better meet the needs of the service, should the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules, and all competitors will be notified.

**Candidates needing special testing arrangements** due to a disability must mark the appropriate box on the application and/or contact the testing department.

**General Qualifications:** Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, the ability to work cooperatively with others, and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history, and fingerprinting may be required.

**Eligible Lists:** Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) departmental open, and 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

**Career Credits:** In open, nonpromotional examinations, career credits are granted to: 1) State employees with permanent civil service status. 2) full-time employees of the State who are exempt from State civil service pursuant to the provisions of Section 4 of Article VII of the California Constitution, and who meet all qualification requirements specified by the Board and have twelve (12) consecutive months of service in an exempt position. and 3) individuals who have served one full year in, or are graduates of the California Conservation Corps (eligibility shall expire 24 months after graduation from the California Conservation Corps). Three points are added to the final test score of those candidates who meet the above criteria, and who are successful in the examination. Such examinations cannot be for managerial positions described in Government Code Section 3513. Competitors not currently employed in State civil service who have mandatory reinstatement rights may also be eligible for career credits, but they must explain their civil service status in the appropriate section of the application form STD-678. (Section 4 of Article VII of the California Constitution is posted at the State Personnel Board, 801 Capitol Mall, Sacramento, CA 95814)

**Veterans' Preference:** Effective January 1, 2014, in accordance with Government Codes 18973.1 and 18973.5, Veterans' Preference will be awarded as follows: 1) Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference. 2) An entrance examination is defined, under the law, as any open competitive examination. And 3) Veterans' Preference is not granted once a person achieves permanent civil service status.

Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Veterans' Preference Application (Std. Form 1093), which is available at <http://jobs.ca.gov/Job/VeteransInformation>, and the Department of Veterans Affairs.

Bulletin Revision Date: 12/22/2016

## FILING INSTRUCTIONS

Final Filing Date: Continuous

Where to Apply: Click the link at the bottom of this bulletin.

## TAKING THE EXAM

**When you click the link below, you will be directed to the Training and Experience Examination. At the end of the Training and Experience Examination, once you click on “Score My Exam”, it will be instantly scored. You will not be able to go back to review and/or change your answers.**

**[Click here to go to the Training and Experience Examination.](#)**