

TORRANCE UNIFIED SCHOOL DISTRICT

CLASS TITLE: LEAD MECHANIC

BASIC FUNCTION:

Under the direction of the Supervisor-Transportation, oversee evening shift operations, participate in major and minor repairs of school buses and a variety of District automotive and mechanical equipment, perform journey-level repair, maintenance and overhaul of gasoline and diesel engines in District vehicles including buses and trucks; plan, assign and review the work of others during an assigned shift.

REPRESENTATIVE DUTIES:

Perform journey-level diagnosis, repair, maintenance and overhaul of gasoline and diesel engines, high tech diesel and compressed natural gas (CNG) engines. **E**

Assist Supervisor-Transportation with shop operations, diagnose and repair fuel delivery systems on gasoline, diesel, propane and natural gas vehicles. **E**

Determine priority of work to be performed during assigned shift; organize, lay out, assign and review work to be performed by assigned personnel. **E**

Provide work direction and train staff when needed; inspect completed work. **E**

Communicate with vendors; order and pick up parts; maintain the garage area in a clean, orderly and safe working condition. **E**

Coordinate with other maintenance personnel for scheduling service and repair of District maintenance vehicles. **E**

Inspect buses and other automotive vehicles to assure compliance with health and safety standards and regulations; use diagnostic equipment to evaluate operation and repair of engines and electrical and automotive systems and equipment. **E**

Balance and align wheels; change oil and rotate tires; fit pistons and rings and calibrate engine parts to meet established specifications; replace clutches, repair or rebuild transmissions as well as rear differentials. **E**

Inspect, adjust and repair ABS Braking System, electrical circuit and air systems, ABS Hydraulic Systems; tune up diesel & CNG engines; perform monthly inspections on school buses; assure buses meet California Highway Patrol inspection requirements. **E**

Perform road test using laptop computer or other electrical or mechanical aides to determine malfunctions; determine out of service criteria for school buses and other District vehicles. **E**

Steam clean engine and chassis of school buses; prepare school buses for annual CHP inspections. **E**

Ability to weld and fabricate metal parts; operate brake lathe; use micrometer to measure brake drums and rotors. **E**

Estimate time and material costs needed to repair and maintain engines and parts. **E**

Operate engine and electrical diagnostic equipment a variety of power and hand tools and other equipment used in an automotive repair shop including a personal computer or laptop computer to diagnose problems with electronically controlled engines. **E**

Prepare and maintain records related to work performed, including hours and materials purchased and used. **E**

Replace, rebuild front suspension, independent front suspension and straight axle, kingpin bushings, leaf springs and shackles and related parts. **E**

Repair air ride suspensions, front and rear axles, valves and air bags; adjust for height. **E**

Repair and adjust school bus wheel chair lifts, electrical and hydraulic systems, springs and related parts; inspect to assure safe operation. **E**

Repair or replace glass windows or windshields; repair floors and seat cushions or make seat cushion covers. **E**

Perform minor to major body repairs to school buses that include metal shaping and welding. **E**

Respond to emergency road service calls; perform needed repairs or determine if vehicle should be towed. **E**

Assist other maintenance personnel as assigned.

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:**KNOWLEDGE OF:**

Methods, equipment and materials used in journey-level mechanical maintenance and repair.

Operation and use of hand and power tools and equipment used in gasoline and diesel engine repair and the repair and maintenance of related parts and equipment including CNG and high tech diesel engines.

Principles of internal combustion engines as well as high tech diesel and CNG engines.

Applicable health and safety laws, regulations and procedures.

Interpersonal skills using tact, patience and courtesy.

Inventory methods and practices.

Proper lifting techniques.

Record-keeping techniques.

ABILITY TO:

Perform journey-level maintenance and repair on gasoline and diesel engine equipment.

Weld and fabricate metal parts.

Operate brake lathe and flywheel resurfacing machines.

Use measuring devices such as the micrometer.

Diagnose mechanical difficulties.

Estimate labor costs of materials for repairs.

Repair of natural gas vehicles and natural gas storage containers.

Read and interpret mechanical and electrical diagrams.

Plan and organize work.

Train and provide work direction to others during an assigned shift.

Work independently with little direction.

Meet schedules and time lines.

Maintain records and prepare reports.

Operate tools and equipment used in the skilled diagnosis and repair of internal combustion engines and related equipment.

Understand and follow oral and written directions.

Establish and maintain cooperative and effective working relationships with others.

Observe health and safety regulations.

Add, subtract, multiply and divide quickly and accurately.

Observe legal and defensive driving practices.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: three years journey-level mechanical maintenance experience.

LICENSES AND OTHER REQUIREMENTS:

Valid California Class B driver's license. Employees in this classification must maintain insurability at the District's standard rate during the term of employment.

WORKING CONDITIONS:

ENVIRONMENT:

Shop environment.

PHYSICAL ABILITIES:

Bending, pushing, moving, lifting objects weighing up to 75 pounds, hand and finger dexterity to operate mechanical tools, seeing to observe diagnostic tools, hearing to listen to engine operation, bending, and reaching above shoulder, overhead and horizontally.

HAZARDS:

Exposure to fumes, vapors, dust, vehicle exhaust, noise, and compressed natural gas; working around and with machinery having moving parts; and working in cramped or restrictive work chambers.