MONTGOMERY COUNTY GOVERNMENT **Class Code:004469**
ROCKVILLE, MARYLAND **Grade:20**
CLASS SPECIFICATION **FLSA: N**

TRANSIT BUS MECHANIC TECHNICIAN, LEAD

DEFINITION OF CLASS:

The work of this class is to perform advanced skilled inspection, maintenance and repairs on diesel, alternative fuel and/or gasoline powered buses and related equipment and may function as a lead worker.

DISTINGUISHING CHARACTERISTICS:

The Transit Bus Mechanic Technician, Lead is the advanced level class in the Mechanic Technician series. It is distinguished from Mechanic Technician II in that incumbents of the latter are not required to provide lead direction to a group of Mechanic Technicians or possess and maintain a ASE Master Technician Certification in Transit Bus.

MAJOR DUTIES:

An employee in this class, working under general supervision, is responsible for exercising independent, advanced level judgment to carry out preventive maintenance tasks in the inspection, preventive maintenance, and repair of a wide variety of transit buses. The employee determines causes of transit bus operating problems by diagnosing problems across the full array of transit bus systems. The diagnosis includes: engines, fuel systems, exhaust systems, clutches, manual transmissions, automatic transmissions, power distribution systems, starting and charging systems, steering systems, air and hydraulic braking systems, air and hydraulic antilock braking systems, heating, ventilation and air conditioning [HVAC] systems, and chassis; and selecting and safely using proper tools, equipment, devices, manuals, references, and efficient procedures and techniques to make needed repairs.

EXAMPLES OF DUTIES: (Illustrative Only)

- Performs preventive maintenance checks and services on equipment; checks tire wear, lubricates parts, replaces seals/wear rings, replaces filters, etc.
- Troubleshoots problems with, and repairs, engines, fuel systems, exhaust systems, clutches, manual transmissions, automatic transmissions, power distribution systems, starting and charging systems, steering systems, air and hydraulic braking systems, air and hydraulic antilock braking systems, HVAC systems, and other major systems.
- Selects and safely uses proper tools, equipment, devices, manuals, references, and efficient procedures and techniques to make needed repair.
- Tears down and rebuilds components and assemblies of diesel powered (or alternatively powered) vehicles by fitting and installing such parts as pistons, valves, bearings, gears, and cylinders to appropriate tolerances; makes changes or modifications in accordance with specifications and guidelines; connects, meshes, aligns, and adjusts items and systems to assure proper operation of the complete system or vehicle; rebuilds equipment or fabricates parts that are unavailable; road/performance tests vehicles and equipment during and upon completion of work.
- Handles refrigerants and hazardous waste properly.
- Maintains records of work and time and materials used.
- Stays abreast of technology pertinent to the equipment serviced and the trade.

- As assigned, guides/instructs lesser skilled employees.
- Requests parts and checks them for compliance with manufacturers' specifications
- Road tests vehicles and performance tests equipment (such as wheel chair lifts when assigned to transit buses).
- Rebuilds equipment, parts, and materials needed for repair work; and fabricates parts, hydraulic hoses, and tools when unavailable.
- Provides brief, informal training to bus operators, on the mechanical aspects of various equipment they use.
- As assigned, provides roadside assistance.
- May participate in investigation of vehicle collisions to determine whether any mechanical failure or malfunction contributed to a collision, or to identify the full extent of the damage.
- Maintains work area in a clean and orderly manner and performs various "shop-keeping" tasks.
- Performs related duties as required.

SUPERVISORY CONTROLS:
At this level, the employee having developed expertise in the repair and maintenance of transit buses, is responsible for planning and carrying out the assignment, resolving most of the conflicts which arise, coordinating the work with others as necessary and interpreting policy on their own initiative in terms of established objectives.

SUPERVISION EXERCISED:
This position serves a lead worker and may periodically provide on-the-job-training and instruction to less experienced Mechanic Technicians, including equipment sub-systems.

GUIDELINES:
The Transit Bus Mechanic Technician, Lead plans and carries out the successive steps and handles problems and deviations in the work, using advance level judgment (based on experience and training), in accordance with guidelines i.e., manufacturers' specifications, repair/service manuals, service bulletins, and schematics. Selects and applies the right guide(s) and, as work situations require, researches and troubleshoots beyond limited guides to identity, specify or fabricate solutions.

COMPLEXITY:
Complexity of the work derives from work on diesel, compressed natural gas and hybrid electric- diesel powered buses or gasoline and diesel engine vehicles and equipment that include hydraulic, pneumatic, mechanical, electrical, electronic and computer-controlled utility systems, controls, and features. The work involves conditions and elements to identify and analyze to discern interrelationships.

SCOPE AND EFFECT:
The impact of properly performed work is vehicles and equipment that are ready for safe, operationally- and legally-compliant day-to-day use, as designed.

CONTACTS:
Contacts are primarily with employees in the immediate work area, crew/shift, to which an employee is assigned for the purpose of receiving information and instructions; and with manufacturers' representatives to discuss incomplete/inaccurate schematics and repair/service manuals, and replacement parts and systems.

PUBLIC ASSISTANCE:
This class of work may entail some public service/assistance, but it is incidental to the primary focus of the work performed.

HAZARDS:
Performance of the work of the class regularly involves exposure to loud noises, vibrations, dust, dirt, and grease. The work requires employees to push, pull, turn, position and otherwise move parts, assemblies, components, equipment and tools often near or immediately adjacent to running engines where employees are exposed to compressed air, electrical current, belts, pulleys, fan blades and sharp edges. Additional hazards include spring-loaded parts, lifts, and presses on wet/greasy floors, hot hydraulic fluids and oils, acetylene and oxygen cutting torches near flammable substances, battery acid and cleaning solvents, and working at heights of from ten to twenty feet above the ground or floor level. Performance of the work of the class may occasionally expose employees to human/animal waste and/or body fluids. These hazardous working conditions require employees to strictly follow safety procedures and regularly employ safety equipment including safety glasses, rubber and leather gloves, hearing protection, eye and face shields, respiratory masks, and steel toe shoes.

MINIMUM QUALIFICATIONS:
Education: High school diploma or equivalent (GED or High School Proficiency Examination)
Experience: Prior experience serving as a Mechanic Technician II, with six (6) years of verifiable, progressively responsible experience in problem diagnosis, repair, maintenance and inspection of transit buses.
Equivalency: None
Licenses, Registrations, Certifications, or Special Requirements:
Possession and maintenance of:

- Automotive Service Excellence (ASE) Master Technician Certification in Transit Bus (H1-H8), and;
- A Class "A" or "B" Commercial Driver's License (CDL) with Passenger and Air Brake Endorsements, issued by applicant's state of residence; and;
- US Environmental Protection Agency Air Conditioning Certification (Clean Air Act, 1990, Section 608 and 609); and
- Occupational Safety and Health Administration (OSHA) Industrial Forklift Certification; and
- Certificate of Completion for the Fleet Management Services Mechanic Technician Training Program (FMSMTTP).

Knowledge, Skills, and Abilities:
Advanced Knowledge of:

- The mechanical makeup, operation, and working relationships of a variety of transit bus systems assemblies and parts, including such major systems as diesel, compressed natural gas and hybrid electric-diesel engines and fuel systems; exhaust systems; clutches; manual transmissions; automatic transmissions; power distribution systems; starting and charging systems; steering systems; a:ir and hydraulic braking systems; air and hydraulic antilock braking systems; HVAC systems, chassis and gear reduction systems, including those with torque converters, planetary gears, and multiple gear ranges; and hydraulic lifting, loading,-turning, positioning and stabilizing systems (including their mechanical, hydraulic, pneumatic and electronic controls).

Examples of application of this body of knowledge include skill in removing and tearing down major components and assemblies including engines, transmissions, and power take-offs;

- How computer, electrical, transistorized, and other non-mechanical systems tie in with and affect the operation of mechanical systems to perform diagnoses and other advance level Mechanic Technician functions.
- Regulations and practices governing the condition of the vehicles and equipment repaired and maintained (including recalls), knowledge of environmental requirements governing refrigerant use/hazardous waste disposal and knowledge of related functional regulations, policies and procedures altogether at sufficient levels to work in compliance with guidelines.
- The (a) equipment standards and (b) tools, equipment, diagnosis, and test procedures and practices used in the repair and preventive maintenance of transit buses, and/or to perform advance level technician functions; this includes skill in use of- computerized diagnostic and performance tuning software. _
- The occupational hazards and safety precautions of the transit bus mechanic trade to work safely.

Skill in:

- Problem solving to select, organize and logically process relevant information (verbal, numerical or abstract) to solve a problem. This includes the ability to recognize subtle aspects of problems and identify relevant information. Examples include skill in planning and laying out one's work; in diagnosing mechanical, electrical and electronic malfunctions (including problems related to multiplex electrical systems common to high-performance medium and heavy trucks; in interpreting schematics; and in applying technical and industry standards to perform advance level work in the heavy equipment mechanic trade.
- Skill in rebuilding, adjusting, re-installing, aligning and meshing components and assemblies; and skill troubleshooting and repairing power take-off equipment.
- Oral communication to understand verbal information (including instructions, descriptions and ideas), and to express such information verbally to others so they will understand.
- Written communication to understand written information, draw inferences, form hypotheses and develop logical arguments, and to express such information in writing so that others will understand. Examples include reading ·understanding service manuals/bulletins and other technical information and completing records of work performed.
- Working as a team member to provide excellent customer service.
- Using a computer/laptop and various office- suite (such as MS Office), enterprise (such as Oracle) and stand-alone software/systems to communicate (email), word process, requisition; manage records (such as work orders), conduct research (Internet) as in searching for technical information and staying abreast of technology, and perform other functions (such as program updates, tab selections and USB link set up and diagnosis).

Ability to:

- operate safely all vehicles/equipment maintained/repaired and their respective components.
- Use and wear personal protective clothing and equipment ·when exposed to dust, fumes, and other irritants to eyes, nose, ears, skin and respiratory system.
- Distinguish between color-coded objects such as electrical wiring.
- Complete manufacturer training, online and hands-on.

Work Environment:

Must be able to perform repair work in any weather conditions and in all of the following settings: a centralized vehicle maintenance facility, machine shop, highway maintenance depot, on the road, landfills, or wherever a break down occurs.

Physical Demands:
The ability to work in tiring and uncomfortable positions for long periods, and must continuously bend, reach, stretch, lift, stoop, climb and crouch often on top of, in, and under vehicles and engines in cramped and awkward positions. Performance of the work of the class regularly involves exposure to loud noises, vibrations, dust, dirt and grease. Employees must be able to perform physically strenuous work while standing, lying down, or sitting; and pull, push, lift and carry items which weigh up to 100 pounds, and occasionally in excess of 100 pounds.

PROBATIONARY PERIOD:
Individuals appointed or promoted to a position in this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL PROTOCOL: Core Exam II and Drug/Alcohol Screen

CLASS SPECIFICATION HISTORY:

Class Established: March, 2018