# Federal Wage System Job Grading Standard for Mobile Equipment Metal Mechanic, 3809

# **Table of Contents**

WORK COVERED	2
WORK NOT COVERED	
TITLES	
GRADE LEVELS	
HELPER AND INTERMEDIATE JOBS	
NOTES TO USERS	
MOBILE EQUIPMENT METAL WORKER, GRADE 8	
MOBILE EQUIPMENT METAL MECHANIC. GRADE 10	
MOBILE EQUIPMENT METAL MECHANIC. GRADE 10	4

#### **WORK COVERED**

This standard covers the nonsupervisory work of maintaining and repairing mobile equipment bodies and mainframe groups. The work requires a knowledge of mobile equipment body construction, the ability to determine the extent of damage and most economical methods of repair, and the skill to remove, fabricate, reshape and replace or repair such damage as, dents, tears, wrinkles, cuts and creases by cutting, knocking out, welding, filling and sanding. Work is performed on such mobile equipment as passenger cars, trucks, buses, warehouse tractors, fork lifts, ambulances, cranes, fire trucks, and mobile construction equipment.

#### **WORK NOT COVERED**

- Reupholstering or painting of mobile equipment or components (See Job Grading Standards for <u>Upholstering</u>, 3106 or <u>Painting</u>, 4102.)
- Sheet metal or welding work when such trade skills are paramount and constitute the primary purpose of the position. (See Job Grading Standards for <u>Sheet Metal Mechanic</u>, 3806, or <u>Welding</u>, 3703.)

#### **TITLES**

Jobs graded by this standard at grade 10 and above are to be titled *Mobile Equipment Metal Mechanic*.

Jobs graded below grade 10, other than Helper and Intermediate Jobs, are to be titled *Mobile Equipment Metal Worker*.

### **GRADE LEVELS**

This standard does not describe all possible grades for this occupation. If jobs differ substantially from the level of skill, knowledge, and responsibility described in the grade levels of this standard, they may be graded above or below the grades described based on the application of sound job grading methods.

#### **HELPER AND INTERMEDIATE JOBS**

Helper and intermediate mobile equipment metal workers are covered by the <u>Job Grading</u> <u>Standards for Trades Helper</u> and <u>Intermediate</u> Jobs. (Grade 10 in this standard is to be used as the "journey level" in applying the Intermediate Job Grading Table.)

#### **NOTES TO USERS**

The mobile equipment metal mechanic occupation is characterized by the requirement for a knowledge of mobile equipment body and mainframe construction characteristics and the ability to determine the best method of repairing damage to such components. This knowledge and ability is combined with skill in a variety of related trade methods such as the use of sheet metal and welding tools and equipment required in the repair, fabrication or replacement of damaged metal parts and assemblies. Positions performing sheet metal or welding work where a knowledge of standard mobile equipment construction is not a paramount requirement are not directly covered by this standard. (See <a href="Work Not Covered">Work Not Covered</a> statement.) Some workers in this occupation may work with fiberglass or polyurethane materials. They may also perform some final painting with brush or spray gun equipment. When such work is incidental to the primary purpose of the job, classification to this occupation is appropriate and would normally not be grade controlling.

## **MOBILE EQUIPMENT METAL WORKER, GRADE 8**

General: The work at this grade involves the repair of mobile equipment metal body components such as fenders, panels, hood, cowls, and truck beds, including associated parts such as brackets, covers, clamps, and braces. Grade 8 mobile equipment metal workers straighten, knock out dents and creases, weld small cuts and holes, and smooth, fill, sand and finish damaged body components using such tools as dolly sets, hammers, grinders, sanders, and gas and electric arc welding equipment. They handform and fabricate simple parts from wood or metal such as safety bars, gas tank straps, truck bed stakes and floors. They replace broken or damaged windows and windshields using standard factory replacements, or by cutting and grinding flat stock to size.

*Skill and Knowledge*: Grade 8 workers have a basic knowledge of mobile equipment construction and know how various components and parts are installed; i.e., bolted, soldered, riveted or welded. They have the ability to install pre-cut or factory replacement window glass in vehicle bodies or doors and adjust raising or opening mechanisms.

Grade 8 mobile equipment metal workers are sufficiently skilled in the use of gas and arc welding equipment to cut out damaged or deteriorated areas, remove rusted nuts and bolts, strengthen brackets and braces, weld simple cuts and breaks, and apply heat to bend, reshape and lead fill damaged areas. This work is normally performed on vertical or horizontal planes.

Grade 8 workers are skilled in the use of such trade equipment as, dolly sets, hammers, grinders and sanders to remove dents and creases in mobile equipment body components and return metal to original contour with minimum stretch or added dents. They have the ability to apply body filler to build up depressed areas, and the skill to smooth by grinding and sanding, until the contour is uniform with adjoining areas. They have the ability to apply primer paint with brush or spray gun equipment.

Grade 8 workers use a knowledge of arithmetic to calculate and scribe patterns in the fabrication of wood or metal parts having predominantly straight lines or regular curves.

*Responsibility*: Grade 8 workers receive clear cut work orders and instructions from a supervisor or higher graded worker. They use predetermined work methods, materials and equipment. The work is spot checked in progress and inspected upon completion for compliance with instructions and adherence to established trade practices and standards. A supervisor or higher graded employee is available for advice on unusual problems.

*Physical Effort:* Grade 8 mobile equipment metal workers perform frequent lifting, pushing, pulling, carrying and handling of objects weighing 14 to 23 kilograms (35 to 50 pounds), and occasionally up to 34 kilograms (75 pounds). The work requires prolonged standing, stooping, kneeling, bending and climbing. At this level, mobile equipment metal workers also frequently must reach in hard-to-get-at places and work in tiring and uncomfortable positions.

Working Conditions: Work is usually performed on concrete floors in industrial shop area around machinery. Workers are exposed to dirt, dust, grease, odors, smoke, gases, and high noise levels. Sanding, grinding or welding duties require the wearing of goggles, respirator, welding mask, apron or gloves. Mobile equipment metal workers are exposed to possible burns, eye injury from infrared and ultra violet rays, and cuts, bruises, abrasions, and electric shock.

## **MOBILE EQUIPMENT METAL MECHANIC, GRADE 10**

*General*: In comparison with grade 8 workers who repair and replace such damaged body components as fenders, panels, windows, and truck beds, grade 10 mechanics also repair damage to mainframes and body structural members such as door posts, door frames, skeletal frame work, and main support members. The work at this level requires working to closer tolerances than at the grade 8 level, in the fitting of body to frame, doors, window channels, hoods, trunk lids and other parts. In addition to the type of work performed by workers at the grade 8 level, mechanics at the grade 10 level make more difficult repairs on damaged parts such as folds, wrinkles, and large tears in fenders, doors, hoods, and roofs.

Skill and Knowledge: Grade 10 mobile equipment metal mechanics must have a knowledge of metal body construction to determine the total extent of damage, and the ability to estimate labor and material requirements. In comparison to Grade 8 workers, grade 10 mechanics must be able to determine the methods, equipment, material, and techniques required and whether to repair damaged parts or replace them with fabricated or factory replacement parts. Grade 10 mobile equipment metal mechanics apply a greater knowledge of metals and skill in the use of welding equipment, including acetylene and electric arc, in performing a variety of work such as cutting, brazing, welding and bending a variety of metal stock. Work may be performed in an overhead position as well as on vertical and horizontal planes as described at the grade 8 level. For example, they cut out and reweld body panels, weld large tears and breaks in body parts and frames, weld reinforcements in place, and apply heat to straighten frames, whereas grade 8 workers perform less skilled work such as cutting out, straightening, and lead filling. More skill

in the use of sheet metal working equipment is required to cut, bend, form, and shape irregular curves, angles and pitch in the fabrication or modification of components and specialized parts than grade 8 workers who work with straight lines and regular curves.

Grade 10 mobile equipment metal mechanics must have the ability to interpret work orders, blueprints, sketches, and drawings, and the ability to plan and lay out work including the determination of material, equipment, and parts required. They use shop mathematics and standard handbook formulas in fabricating parts and estimating material and labor requirements.

Responsibility: Grade 10 mobile equipment metal mechanics are assigned work orally or through work orders. In comparison to grade 8 workers who receive specific instructions as to methods, tools and materials required for each job, grade 10 mechanics plan and lay out the work from sketches, blueprints, or specifications and make independent judgments and decisions within accepted trade practices and procedures. Work is spot checked upon completion for quality of workmanship and compliance with work orders. The supervisor is called upon for advice on unusual problems.

*Physical Effort*: Physical effort required at this grade is the same as that described at the grade 8 level.

Working Conditions: Working conditions at this grade are the same as those described at the grade 8 level.