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M-Series Vehicle (Truck/SUV)

Vehicle Management Codes: K187, K194, K196, K197



QUALIFICATION TRAINING PACKAGE

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Section 1—OVERVIEW

1.1. Overview.

1.1.1. Send comments and suggested improvements on AF Form 847, *Recommendation for Change of Publication*, through Air Force Installation and Mission Support Center (AFIMSC) functional managers via e-mail at AFIMSC.IZSL.VehicleOps@us.af.mil.

1.1.2. How to use this plan:

1.1.2.1. Instructor:

1.1.2.1.1. Provide overview of training, **Section 2** and **Section 3**.

1.1.2.1.2. Instructor's lesson plan for trainee preparation, give classroom lecture, **Section 4**.

1.1.2.1.3. Instructor's lesson plan for knowledge training, **Section 5**.

1.1.2.1.4. Instructor's lesson plan for demonstration, **Section 6**.

1.1.2.1.5. Instructor's lesson plan for performance and evaluation, **Section 7**.

1.1.2.2. Trainee:

1.1.2.2.1. Reads this entire lesson plan prior to starting lecture.

1.1.2.2.2. Follows along with lecture using this lesson plan and its attachments.

1.1.2.2.3. Uses **Attachment 3** as a guide for vehicle inspection.

1.1.2.2.4. Takes performance test.

Section 2—RESPONSIBILITIES

2.1. Responsibilities.

2.1.1. The trainee shall:

2.1.1.1. Ensure the trainer explains the Air Force Qualification Training Plan (AFQTP) process and the responsibilities.

2.1.1.2. Review the AFQTP/Module/Unit with the trainer.

2.1.1.3. The trainee should ask questions if he/she does not understand the objectives for each unit.

2.1.1.4. Review missed questions with the trainer.

2.1.2. Instructor shall:

2.1.2.1. Review the AFQTP with the trainee.

2.1.2.2. Conduct knowledge training with the trainee using the AFQTP.

2.1.2.3. Grade the review questions using the answer key.

2.1.2.4. Review missed questions with the trainee to ensure the required task knowledge has been gained to complete the task.

2.1.2.5. Sign-off the task(s).

2.1.3. The Certifier shall:

2.1.3.1. Evaluate the Airman's task performance without assistance.

2.1.3.2. Sign-off the task(s).

Section 3—INTRODUCTION

3.1. Objectives.

3.1.1. Given lectures, demonstrations, hands-on driving session and a performance test, trainees will be able to perform operator's inspection and complete the performance test with zero instructor assists.

3.1.1.1. Train and qualify each trainee in safe operation and preventive maintenance of the various m-series vehicles.

3.1.1.2. This training will ensure the trainee becomes a fully qualified m-series vehicle operator; an operator who has the knowledge and skills to operate an m-series vehicle in a safe and professional manner.

3.2. Desired Learning Outcomes.

3.2.1. Understand the safety precautions to be followed pre-, during-, and post- operation of the M-series vehicle.

3.2.2. Understand the purpose of the M-series vehicle and its role in the mission.

3.2.3. Know the proper operator maintenance procedures of the M-series vehicle, in accordance with (IAW) applicable technical orders (TOs) and use of AF Form 1800, *Operator's Inspection Guide and Trouble Report* (General Purpose Vehicles).

3.2.4. Safely and proficiently operate the M-series vehicle.

3.3. Lesson Duration.

3.3.1. Recommended instructional and hands on training time is 4 hours:

Figure 3.1. Recommended Training Time for Training Activities.

Training Activity	Training Time
Trainee's Preparation	1 Hour
Instructor's Lecture and Demonstration	1 Hour
Trainee's Personal Experience (to build confidence and proficiency) <ul style="list-style-type: none">▪ Perform Operator Maintenance▪ Operate the Vehicle	1 Hour
Trainee's Performance Evaluation	1 Hour

Note: This is a recommended time; training time may be more or less depending how quickly a trainee learns new tasks.

3.4. Instructional References.

3.4.1. Risk Management (RM) and Safety Principles IAW Air Force Pamphlet (AFPAM) 90-803, *Risk Management (RM) Guidelines and Tools*.

3.4.2. Applicable TOs or Manufacturer's Operator's Manual.

3.4.2.1. T.O. 36A12 series

3.4.3. Air Force Manual (AFMAN) 24-306, *Operation of Air Force Government Motor Vehicles*.

3.4.4. AFI 13-213, *Airfield Driving*.

3.4.5. Air Force (AF) Form 1800.

3.4.6. AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*.

3.5. Instructional Training Aids and Equipment.

3.5.1. M-Series Vehicle Lesson Plan.

- 3.5.2. M-series vehicle.
- 3.5.3. Applicable TO or manufacturer's operator's manual.
- 3.5.4. AF Form 1800.
- 3.5.5. Videos (if locally produced).
- 3.5.6. Suitable training area.
- 3.5.7. Traffic cones.

Section 4—TRAINEE PREPARATION

4.1. Licensing Requirements.

- 4.1.1. Trainee must have in his/her possession a valid state driver's license.
- 4.1.2. AF Form 171, *Request for Driver's Training and Addition to U.S. Government Driver's License* IAW Air Force Instruction (AFI) 24-301, *Ground Transportation*.
- 4.1.3. Applicable local licensing jurisdiction requirements.

4.2. Required Reading.

- 4.2.1. Read this entire lesson plan.
- 4.2.2. Read AFMAN 24-306.
- 4.2.3. Read manufacturer's operator's manual for the vehicle being trained on.
- 4.2.4. Read recommended references:
 - 4.2.4.1. T.O. 36A12 series

Section 5—KNOWLEDGE LECTURE AND EVALUATION

5.1. Knowledge Overview.

- 5.1.1. The AF uses a variety of different of M-series vehicles. The primary purpose varies by vehicle type (passenger movement, cargo movement, emergency services support, etc.).

5.2. Overview of Training and Requirements.

5.2.1. Training objectives:

5.2.1.1. Given lectures, demonstrations, hands-on driving session and a performance test, trainees will be able to perform operator's inspection and complete the performance test with zero instructor assists.

5.2.1.2. Train and qualify each trainee in safe operation and preventive maintenance of the various M-series vehicles.

5.2.1.3. This training will ensure the trainee becomes a qualified M-series vehicle operator—an operator who has the knowledge and skills to operate an M-series vehicle in a safe and professional manner.

5.2.2. Desired learning outcomes:

5.2.2.1. Understand the safety precautions to be followed pre-, during-, and post-operation of the M-series vehicle.

5.2.2.2. Understand the purpose of the M-series vehicle and its role in the mission.

5.2.2.2.1. Purpose various based on vehicle type (cargo movement, passenger movement, emergency services support, etc.).

5.2.2.2.2. Role in the mission (Unit/Base/Community (during natural disasters)/Air Force).

5.2.3. M-series vehicle design. The design of an M-series vehicle varies depending on the vehicle type. Refer to the manufacturer's operator's manual for additional information on the specific M-series vehicle being operated, and to the data plate for safe load capacity guidance.

5.3. Vehicle Inspection.

5.3.1. Pre-trip vehicle inspection test. Use **Attachment 3** as a walk around guide along with AF Form 1800.

5.3.1.1. The following items must be checked when the vehicle is picked-up:

5.3.1.1.1. Ensure all correct documentation is in the package when the vehicle is picked up.

5.3.1.1.1.1. AF Form 1800 Form. Ensure the following are annotated on it:

5.3.1.1.1.1.1. Signatures for tire pressure check/stencil verification.

5.3.1.1.1.1.2. Miles/hours of vehicle/date. Record off-base mileage slip (Write down mileage when leaving/returning from base). Off base fuel is taxed).

5.3.1.1.1.1.3. No open write-ups.

5.3.1.1.1.1.4. Note any discrepancies found on the space provided inside Form 1800 and notify Vehicle Maintenance personnel.

5.3.1.1.1.1.5. Ensure that the fire extinguishers have been signed off for the month.

5.3.1.1.1.2. Waiver Card.

5.3.1.1.1.3. Vehicle Accident Report.

5.3.1.1.1.4. Accident ID Card.

5.3.2. A Seven-Step Inspection Method will help ensure the inspection is the same each time it is conducted, and that nothing is left out. See **Attachment 3** for the Seven-Step Inspection Method.

5.3.3. Types of Vehicle Inspection. If discrepancies are found they must be reported to the Vehicle Control Officer/Vehicle Control Non Commissioned Officer (VCO/VCNCO), the supervisor, and/or vehicle maintenance:

5.3.3.1. Pre-trip inspection – find items/problems that could cause accident or breakdown.

5.3.3.1.1. Vehicle maintenance to authorize continued use for all other maintenance discrepancies.

5.3.3.1.2. Cleanliness/damage/missing items.

5.3.3.1.3. Leaks (fuel/oil/coolant/hydraulic/air).

5.3.3.1.4. Fluid Levels; ensure level is within limits:

5.3.3.1.4.1. Engine oil.

5.3.3.1.4.2. Coolant.

5.3.3.1.4.3. Power steering fluid.

5.3.3.1.4.4. Transmission fluid.

5.3.3.1.4.5. Antifreeze.

5.3.3.1.5. Battery; security, fluid, damage and corrosion.

5.3.3.1.6. All wheel rims (cracks, splits, etc.); check for loose or missing lug nuts.

5.3.3.1.7. All tires.

5.3.3.1.7.1. Proper inflation. **Note:** Notify VCO/VCNCO, the supervisor, and/or vehicle maintenance if split rim is completely flat.

5.3.3.1.7.2. Tread to include depth.

5.3.3.1.7.3. Cuts and abrasions.

5.3.3.1.8. Transmission.

5.3.3.1.9. Drive belts; tension and fraying.

5.3.3.1.10. Air restriction gauge.

5.3.3.1.11. Hydraulic hoses/cylinder (damage).

5.3.3.1.12. All hoses and wiring.

5.3.3.1.13. Differential, shocks and brakes for leaks.

5.3.3.1.14. Suspension and springs.

5.3.3.1.15. Towing connection.

5.3.3.1.16. Fuel door and fuel cap; intact, not broken or damaged.

5.3.3.1.17. Horn operation.

5.3.3.1.18. Heater/defroster.

5.3.3.1.19. Wiring/lights/reflectors (interior and exterior).

5.3.3.1.20. Mirrors.

5.3.3.1.21. Windshield and windshield wipers/washers.

5.3.3.1.22. Doors.

5.3.3.1.23. Windows.

5.3.3.1.24. Hood latches.

5.3.3.1.25. Seatbelts.

5.3.3.1.26. Fire Extinguisher.

5.3.3.2. During-operation.

5.3.3.2.1. All gauges and warning lights for proper operations.

5.3.3.2.1.1. Warning lights.

5.3.3.2.1.2. Gauges (oil pressure, fuel gauge, water temperature, voltage).

5.3.3.2.1.3. Indicators.

5.3.3.2.2. Listen for any unusual sounds.

5.3.3.2.3. Stay alert for any unusual smells or odors.

5.3.3.2.4. Stay alert for any abnormal vibrations or handling problems.

5.3.3.2.5. Controls for proper operation:

5.3.3.2.5.1. Steering wheel.

5.3.3.2.5.2. Steering wheel tilt control.

5.3.3.2.5.3. Parking brake control.

5.3.3.2.5.4. Accelerator control pedal.

5.3.3.2.5.5. Ignition switch.

5.3.3.2.5.6. Service brakes.

5.3.3.3. Post-trip inspection and report.

5.3.3.3.1. Ensure vehicle and components are cleaned.

5.3.3.3.2. Equipment is properly stowed.

5.3.3.3.3. Refueled.

5.3.3.3.4. Parked.

5.3.3.3.5. Apply brakes.

5.3.3.3.6. Place transmission in neutral (park for an automatic).

5.4. Vehicle Safety and Equipment.

5.4.1. Hazards and human Factors:

5.4.1.1. Jerky starts and stops.

5.4.1.2. Traveling too fast and turning too sharply.

5.4.2. Safety clothing and equipment:

5.4.2.1. Safety steel-toed boots must be worn.

5.4.2.2. Gloves will be worn during cargo loading and unloading (take off rings/jewelry first).

5.4.2.3. Raingear, cold weather gear, etc.

5.4.2.4. Reflective belt during hours of reduced visibility and on flight line.

5.4.2.5. AF Form 1800.

5.5. Driving Safety and Precautions.

5.5.1. General safety guidelines:

5.5.1.1. Safe operation of the M-series vehicle is the responsibility of the operator.

5.5.1.2. Never start the M-series vehicle from any place other than the driver's position.

5.5.1.3. Always keep all parts of the body in the operator's area when the vehicle is in motion.

5.5.1.4. The operator and all passengers must wear seatbelts when the vehicle is in operation.

5.5.1.5. Place wheel chocks (if required) when vehicle is parked.

5.5.2. Tire changing safety.

5.5.2.1. Ensure the following tools/equipment are used while changing the damaged/flat tire:

5.5.2.1.1. Vehicle jack w/jack handle.

5.5.2.1.2. Lug wrench.

5.5.2.1.3. Jack stand.

5.5.2.1.4. Wheel chocks.

5.5.2.1.5. Hand/eye/hearing protection/safety/steel-toed boots/shoes, as required.

5.5.2.1.6. Loosen, do NOT remove, lug nuts.

5.5.2.1.7. Jack the vehicle up until the tire clears the ground with no more than an extra inch to allow replacement of the tire.

5.5.2.1.8. Place the jack stand under the frame of the vehicle to support the vehicle in case the jack's hydraulics should leak and/or fail.

5.5.2.1.9. Remove the vehicle's lug nuts.

5.5.2.1.10. Remove the vehicle's flat/damaged tire.

Note: If the inside dual tire is flat and/or damaged the operator must remove the separation ring and remove the inside wheel studs/spacers (if equipped) in order to remove the damaged/flat tire. Caution – Dual tires studs/spacers can stick when under pressure causing them to become projectiles during removal resulting in injuries and property damage.

5.5.2.1.11. Place replacement tire into the vehicle's axle.

5.5.2.1.12. Replace the vehicle's lug nuts to hand tightness.

5.5.2.1.13. Jack the vehicle up and remove the jack stand.

5.5.2.1.14. Lower the vehicle until it makes contact with the ground.

5.5.2.1.15. Tighten vehicle's lug nuts in a star pattern.

5.5.3. Off-road driving. For more information on off-road driving and safe vehicle operation guidance, refer to AFMAN 24-306.

5.5.4. Foreign Object Damage (FOD). Vehicle operators will remove FOD from tires during the vehicle inspection. Before entering the airfield, a physical check for loose/unsecured objects and an inspection of the tire treads for FOD will be accomplished, with the exception of emergency vehicles responding to actual situations.

5.5.4.1. Any vehicle which has been driven on an unpaved surface will have a tire FOD inspection accomplished prior to re-entering the airfield area. Vehicles that frequent the flight line will be equipped with a FOD picker and a covered FOD container.

5.5.4.2. FOD picker will be etched with the vehicle number painted in red or orange (or have a red streamer attached).

5.5.4.3. FOD picker will be annotated on vehicle inspection form.

5.5.4.4. FOD containers will be identified with the letters "FOD" and will be emptied daily.

5.5.4.5. FOD checks are performed so that aircraft damage can be kept at a minimum.

5.6. Vehicle Operation.

5.6.1. Start the engine.

5.6.2. Set parking brake (if not already set).

5.6.3. Insert key into starter ignition switch and turn key to RUN or use the combat start.

Note: Do not turn the key to START position until the WAIT light goes out.

5.6.4. Once WAIT light goes out:

5.6.4.1. If temperature is more than 32°F, press the accelerator pedal halfway to the floor and hold.

5.6.4.2. If temperature is less than 32°F, press the accelerator pedal to the floor and hold.

Note: If the engine does not start after cranking for 10 to 15 seconds, release the ignition key. Wait 5 seconds and then attempt to start the engine again. If the engine fails to start, refer to the troubleshooting table in the manufacturer's operator's manual. Do not tow or push start the vehicle.

5.6.5. Turn key in ignition switch to START. When engine starts, release key and allow it to return to the RUN position.

5.6.6. Move service light/blackout (BO) toggle switch to ON position.

5.6.7. Driving the vehicle forward.

5.6.7.1. Check the instruments:

5.6.7.1.1. Voltmeter reading.

5.6.7.1.2. Oil pressure, engine coolant temperature, low coolant, and generator lights should be out.

5.6.7.2. Shift transfer case control lever at the appropriate range (2H for normal driving conditions).

5.6.7.2.1. Shift transmission gearshift lever to the desired forward gear, drive (D), for normal driving conditions.

5.6.7.2.2. Release parking brake.

5.6.7.2.2.1. Depress service brake pedal.

5.6.7.2.2.2. Release parking brake by pulling on the T-handle brake release.

5.6.7.2.2.3. Release service brake pedal.

5.6.7.2.3. Depress accelerator pedal gradually to move the truck.

5.6.8. Stopping the vehicle.

5.6.8.1. Release the accelerator pedal.

5.6.8.2. Depress and hold the service brake pedal to bring the vehicle to a complete stop.

5.6.9. Driving the vehicle in reverse.

5.6.9.1. Bring the vehicle to a complete stop.

5.6.9.2. Keeping a foot on the service brake pedal, shift the transmission gearshift lever to reverse (R).

5.6.9.3. Release service brake pedal and gradually depress the accelerator pedal.

Note: The vehicle's speedometer does not indicate reverse speeds. The operator must estimate the vehicle's speed and use good judgment when driving in reverse.

5.6.10. Drive the vehicle in four-wheel drive (4WD).

5.6.10.1. Shift from two-wheel drive (2WD) to 4WD by shifting the transfer case from 2H to 4H.

5.6.10.2. Drive the truck forward.

Note: If it is not possible to move vehicle to shift transfer case, it can be shifted by shifting the transmission gearshift lever to neutral (N) then shifting the transfer case control lever firmly but not forcefully. If shifting the transfer case is difficult, it may be necessary to temporarily shift the transmission gearshift lever to D then back to N and try again to shift the transfer case.

5.6.10.3. Shift the transfer case from 2H to 4H to 4L.

Table 5.1. Transfer Case Gears.

Gear	Description
2H	Used for driving on normal, improved roads. Only the rear wheels are driving the vehicle.
4H	This gear is for driving in 4WD through snow and mud but road conditions are not severe.
4L	This gear is for driving in 4WD when conditions are severe. Example – Off-road through several inches of mud or when pulling a towed trailer through mud or when the vehicle is stuck in mud or snow.

5.6.10.4. Stop the vehicle and set the parking brake.

5.6.10.5. Shift transmission gearshift lever to N.

5.6.10.6. Release parking brake.

5.6.10.7. Shift the transfer case control lever firmly, but not forcefully, to 4L.

5.6.10.8. Return to 2WD from 4WD.

5.6.10.8.1. Return 2H from 4H.

5.6.10.8.2. Shift the transmission gearshift lever to D or appropriate forward gear.

5.6.10.8.3. With the vehicle in motion, momentarily release the accelerator and, firmly but not forcefully, shift the transfer case control lever according to the pattern indicated on the lever.

5.6.10.9. Return to 2H or 4H from 4L.

5.6.10.9.1. Stop the vehicle and set the parking brake.

5.6.10.9.2. Shift the transmission gearshift lever to N.

5.6.10.9.3. Shift the transfer case control lever to 2H or 4H according to the pattern indicated on the lever.

5.6.11. Park vehicle and shutdown the engine.

Note: Do not shift transmission gearshift lever to park (P) on a hill before setting parking brake. This puts force on the transmission and makes it difficult to shift the transmission gearshift lever out of P. Make sure that the transfer case is in gear.

5.6.11.1. Bring vehicle to a complete stop.

5.6.11.2. Set parking brake by depressing the service brake pedal with right foot, and holding it while setting parking brake with left foot.

Caution: If the transfer case control lever is in N, the transfer case is disengaged and shifting the transmission gearshift lever to P will not stop the truck from moving and result in injury or property damage.

5.6.11.3. Ensure that the transfer case is in gear.

5.6.11.4. Shift the transmission gearshift lever to P.

5.6.11.5. Move all switches to the OFF position.

5.6.11.6. Turn the key in ignition to LOCK and remove the key. The vehicle does not require a cooldown period.

Section 6—EXPLANATION AND DEMONSTRATION.

6.1. Instructor's Preparation.

6.1.1. Establish a training location.

6.1.2. Obtain appropriate vehicle operator's manual.

6.1.3. Schedule/reserve a vehicle.

6.1.4. Ensure trainee completes AF Form 171.

6.2. Safety Procedures and Equipment.

6.2.1. The following safety items should be followed by both the instructor and trainee.

6.2.1.1. Chock wheel (if required) when vehicle is parked.

6.2.1.2. Remove all jewelry and identification tags.

6.2.1.3. Personal protective equipment (PPE) and equipment items.

- 6.2.1.3.1. Safety steel-toed boots must be worn.
- 6.2.1.3.2. Gloves will be worn during cargo loading and unloading.
- 6.2.1.3.3. First aid kit, if required.
- 6.2.1.3.4. Raingear, cold weather gear, etc.
- 6.2.1.3.5. Reflective belt during hours of reduced visibility or on the flightline.
- 6.2.1.3.6. Hearing protection, if required.
- 6.2.1.3.7. Eye protection, if required.
- 6.2.1.4. Walk around vehicle to familiarize and the trainee with all warning labels and signs.
- 6.2.1.5. Ensure trainee wears seatbelts.
- 6.2.1.6. Properly adjust driver's seat and all mirrors.
- 6.2.1.7. Throughout demonstration, practice M-series vehicle safety.
- 6.2.2. Practice basic RM process during demonstration:
 - 6.2.2.1. Identify hazards.
 - 6.2.2.2. Assess hazards.
 - 6.2.2.3. Develop controls and make decisions.
 - 6.2.2.4. Implement controls.
 - 6.2.2.5. Supervise and evaluate.

6.3. Operator Maintenance Demonstration.

- 6.3.1. With trainee, accomplish vehicle inspection using AF Form 1800. The vehicle inspection will follow the seven-step method as described in **Attachment 3**.

6.4. Operation Demonstration.

- 6.4.1. Throughout demonstration:
 - 6.4.1.1. Allow for questions.

6.4.1.2. Repeat demonstrations as needed.

6.4.2. For all M-series vehicles, within the training area, demonstrate and explain the following. **Note:** Use information contained on the data plate and/or the operator's manual.

6.4.2.1. Specific M-series truck capacities: Explain parking brake as they apply to M-series truck being used.

6.4.2.2. M-series truck controls.

6.4.2.2.1. Shifting pattern.

6.4.2.3. Point out the items to be inspected during operations.

6.4.2.3.1. Instruments.

6.4.2.3.2. Temperature gauges.

6.4.2.3.3. Pressure gauges.

6.4.2.3.4. Ammeter/voltmeter.

6.4.2.3.5. Mirrors.

6.4.2.3.6. Tires.

6.4.3. Demonstrate the following M-series vehicle operations:

6.4.3.1. Forward stop/start.

6.4.3.2. Turns (right/left).

6.4.3.3. Intersections.

6.4.3.4. Backing. Use a spotter when backing. Spotters must be trained IAW AFMAN 24-306 regarding standard AF spotter hand signals and safety guidance.

6.4.3.5. Parking.

6.4.4. Show trainee the after operation inspection and report.

6.4.4.1. Ensure vehicle is cleaned.

6.4.4.2. Cargo straps and chains are properly stowed.

6.4.4.3. Refuel vehicle.

6.4.4.4. Following manufacturer's shut-down procedures.

6.4.4.5. Park.

6.4.4.5.1. Apply brakes.

6.4.4.5.2. Place transmission in neutral (park for an automatic).

6.4.4.6. Perform a walk around inspection.

6.4.4.7. Annotate any discrepancies found on AF Form 1800.

6.4.5. Conclude by allowing time for questions and any requested re-demonstrations.

Section 7—TRAINEE PERFORMANCE AND EVALUATION

7.1. Trainee Performance.

7.1.1. Instructor will:

7.1.1.1. Ensure safety at all times. **Note:** Stop training when safety items are violated. Proceed only when the trainee fully understands how to avoid repeating the safety infraction(s).

7.1.1.1.1. Chock wheel (if required) when M-series vehicle is parked.

7.1.1.1.2. Remove all jewelry and identification tags.

Note: If available, mark vehicle with magnetic sign indicating "Driver-in-Training" or "Trainee Operator."

7.1.1.2. PPE and other items:

7.1.1.2.1. Safety steel-toed boots must be worn.

7.1.1.2.2. Gloves will be worn during cargo loading and unloading.

7.1.1.2.3. First aid kit, if required.

7.1.1.2.4. Reflective belt during hours of reduced visibility or on the flightline.

7.1.1.2.5. Raingear, cold weather gear, etc.

7.1.1.2.6. Hearing protection, if required.

7.1.1.2.7. Eye protection, if required.

7.1.1.3. Pay particular attention to the cautions and warnings listed in the operator's manual.

7.1.1.4. Ensure trainee wears seatbelt.

7.1.1.5. Properly adjust driver's seat and all mirrors.

7.1.1.6. M-series vehicle safety items/procedures.

7.1.1.7. Ensure the driver is aware of driving situations he/she is to perform.

7.1.1.8. Conduct during/after-action reviews with the trainee (demonstration may need to be re-accomplished).

7.1.2. Trainee Performance.

7.1.2.1. Conduct operator maintenance (have trainee explain items being inspected).

Note: Allow trainee to use **Attachment 3** as a guide while performing inspection.

7.1.2.1.1. Pre-inspection.

7.1.2.1.2. During-inspection.

7.1.2.2. Ensure AF Form 1800 is properly documented.

7.1.2.2.1. Establish a road course that will have the following: (if the course does not have one of the following, then the trainee should be able to explain the correct driving techniques).

7.1.2.2.1.1. Forward stop/start.

7.1.2.2.1.2. Turns (right/left).

7.1.2.2.1.3. Intersections.

7.1.2.2.1.4. Backing.

7.1.2.2.1.5. Parking.

7.1.2.2.2. Continue until trainee can show proficiency in operating.

7.1.2.3. Perform after-operation inspection.

- 7.1.2.3.1. Ensure vehicle cleaned.
- 7.1.2.3.2. Refueled.
- 7.1.2.3.3. Following manufacturer's shut-down procedures.
- 7.1.2.3.4. Park.
- 7.1.2.3.5. Apply brakes.
- 7.1.2.3.6. Place transmission in neutral (park or an automatic).
- 7.1.2.4. Perform a walk around inspection.
- 7.1.2.5. Report any discrepancies found on AF Form 1800.

7.2. Performance Evaluation.

7.2.1. Trainee will perform performance evaluation found in **Attachment 2**.

7.2.1.1. Instructor and trainee will review **Attachment 2**.

7.2.1.2. Instructor will answer trainee's questions.

Note: If available, mark vehicle with magnetic sign indicating "Driver-in-Training" or "Trainee Operator".

7.2.2. Instructor will:

7.2.2.1. Ensure safety at all times.

7.2.2.1.1. Place wheel chocks (if required) when M-series vehicle is parked,

7.2.2.1.2. Remove all jewelry and identification tags.

7.2.2.2. PPE and other items.

7.2.2.2.1. Safety steel-toed boots must be worn.

7.2.2.2.2. Gloves will be worn during cargo loading and unloading.

7.2.2.2.3. First aid kit, if required.

7.2.2.2.4. Reflective belt during hours of reduced visibility or on the flightline.

7.2.2.2.5. Hearing protection, if required.

- 7.2.2.2.6. Eye protection, if required.
- 7.2.2.3. Ensure trainee wears seat belt.
- 7.2.2.4. Properly adjust driver's seat and all mirrors.
- 7.2.2.5. M-series vehicle items/procedures.
- 7.2.3. Explain driving techniques.
- 7.2.4. Evaluate the trainee on the following items:
 - 7.2.4.1. Conduct operator maintenance (have trainee explain items being inspected).
Note: Allow trainee to use **Attachment 3** as a guide while performing inspection.
 - 7.2.4.1.1. Pre-inspection.
 - 7.2.4.1.2. During-inspection.
 - 7.2.4.1.3. Ensure AF Form 1800 is properly documented.
 - 7.2.4.2. Road test:
 - 7.2.4.2.1. Forward stop/start.
 - 7.2.4.2.2. Turns (right/left).
 - 7.2.4.2.3. Intersections.
 - 7.2.4.2.4. Backing.
 - 7.2.4.2.5. Parking.
- 7.2.5. Conduct after-action reviews with the trainee.
- 7.2.6. Trainee is not allowed any instructor assists to pass performance evaluation.
- 7.2.7. Evaluation checklist provided in **Attachment 2**.
- 7.2.8. Retraining; retrain No-Go's.
 - 7.2.8.1. Re-demonstrate "No-Go" items.
 - 7.2.8.2. Have trainee re-perform until they show proficiency in operating, critique weaknesses as observed.

7.2.8.3. Re-evaluate.

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 24-301, *Ground Transportation*, 1 November 2018

AFI 13-213, *Airfield Driving*, 1 June 2012

AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, 12 June 2012

AFMAN 24-306, *Operation of Air Force Government Motor Vehicles*, X January 2017

AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*, 11 February 2013

Adopted Forms

AF Form 171, *Request for Driver's Training and Addition to U.S. Government Drivers*, 1 November 2018

AF Form 847, *Recommendation for Change of Publication*, 22 September 2009

AF Form 1800, *Operator's Inspection Guide and Trouble Report*, 1 April 2010

Abbreviations and Acronyms

AF—Air Force

AFI—Air Force Instruction

AFIMSC—Air Force Installation and Mission Support Center

AFMAN—Air Force Manual

AFQTP—Air Force Qualification Training Plan

BO—Blackout

FOD—Foreign Object Damage

IAW—In Accordance With

PPE—Personal Protective Equipment

PSI—Pounds Per Square Inch

RM—Risk Management

TO—Technical Order

VCNCO—Vehicle Control Non Commissioned Officer

VCO—Vehicle Control Officer

2WD—Two-Wheel Drive

4WD—Four-Wheel Drive

Attachment 2

PERFORMANCE TEST

A2.1. Desired Learning Outcome.

A2.1.1. Understand the safety precautions to be followed pre-, during-, and post-operation of the M-series vehicle.

A2.1.2. Understand the purpose of the M-series vehicle and its role in the mission.

A2.1.3. Know the proper operator maintenance procedures of the M-series vehicle, IAW applicable TOs and use of AF Form 1800.

A2.1.4. Safely and proficiently operate the M-series vehicle.

A2.2. Instructions. Before beginning the performance test, the trainer will brief the trainee on the scenario the trainee will need to accomplish. He/she will be given additional directions and instructions as needed to proceed through the scenario.

A2.3. Scoring.

A2.3.1. The trainer examiner will be scoring on M-series vehicle operations and also the general safe driving practices. The examiner will give directions and instructions to the trainee in sufficient time for to execute a driving maneuver. He/she will not be asked to drive in an unsafe manner.

A2.3.2. The examiner will be making various marks on the performance test checklist. This does not necessarily mean the trainee have done anything wrong. It is in the best interest to concentrate on the operation of the M-series vehicle. The trainer will explain the test results to the trainee at the conclusion of the performance test.

A2.3.3. Tasks being graded are listed on the following page; the trainee will be required to successfully pass all items.

A2.3.4. The instructor will stop the test at any time safe M-series vehicle operations are not being followed or as deemed necessary for safety concerns.

Figure A2.1. Performance Test Checklist:

PERFORMANCE TEST			
Trainees Name:		Date:	
Event	Go	No Go	Notes
1. PRE, DURING, AND POST- OPERATION INSPECTION			
1.1. Operator has required PPE.			
1.2. Follows general pattern of pre-trip checklist.			
1.3. Performs brake component check			
1.4. Signs AF Form 1800 to signify accomplishment of complete inspection.			
1.5. Cleans windshield, windows, mirrors, lights and reflectors			
1.6. Continues during operations inspection checks.			
1.7. Knows use of jacks, tools, emergency devices, tire chains, fire extinguishers, etc.			
1.8. Performs post trip inspection and reports malfunctions to Vehicle Management.			
Event	Go	No Go	Notes
2. ON-ROAD DRIVING TEST			
2.1. General - safety belt is used; obeys all traffic signs, signals, and laws; completes test without an accident or moving violation.			
2.2. Turns - checks traffic in all directions; uses turn signals and safely get into the lane needed for the turn; slows down smoothly, changes gears as needed to keep power; checks mirrors to ensure proper clearance; vehicle should not move into oncoming traffic.			
2.3. Intersections - checks traffic in all directions; decelerate gently, brakes smoothly and, if necessary, changes gears; if necessary, comes to a complete stop (no coasting) behind any stop signs, signals, sidewalks, or stop lines.			

2.4. Stopping - decelerates smoothly, brakes evenly, changes gears as necessary; brings vehicle to a full stop without coasting.			
2.5. Starting - checks traffic, avoids jerky starts.			
Event:	Go	No Go	Notes
3. BACKING/PARKING:			
3.1. Backing			
Positions truck properly.			
Inspects truck before backing.			
Post guide before backing and uses spotters properly.			
Uses mirrors properly.			
Avoids blind side backing.			
Controls speed.			
3.2. Parking.			
Checks traffic position before parking.			
Secures truck properly.			
Parks legally and safely.			
Pulls completely off pavement when possible.			
Knows proper use of emergency warning devices.			
Uses emergency warning devices.			
CERTIFIER COMMENTS:			

Attachment 3

SEVEN-STEP INSPECTION PROCESS

Figure A3.1. Seven-Step Inspection Process.

Seven-Step Inspection Process	
Step	Procedure
1. Vehicle Overview	<ul style="list-style-type: none"> ● Review the AF Form 1800. ○ Ensure any discrepancy has been corrected. ○ Vehicle Management annotated the discrepancy was completed. ○ Approaching the vehicle. <ul style="list-style-type: none"> ▪ Damage or vehicle leaning to one side. ▪ Fresh leakage of fluids. ▪ Hazards around vehicle.
2. Check Engine Compartment	<ul style="list-style-type: none"> ● Note: Check that the parking brakes are on and/or wheels chocked. The operator may have to raise the hood, tilt the cab (secure loose things so they don't fall and break something), or open the engine compartment door. ● Check the following: <ul style="list-style-type: none"> ○ Engine oil level. ○ Coolant level in radiator; condition of hoses. ○ Power steering fluid level; hose condition (if so equipped). ○ Windshield washer fluid level. ○ Battery fluid level, connections and tie-downs (battery may be located elsewhere). ○ Automatic transmission fluid level (may require engine to be running). ○ Check belts for tightness and excessive wear (alternator, water pump, air compressor)--learn how much "give" the belts should have when adjusted right. ○ Leaks in the engine compartment (fuel, coolant, oil, power steering fluid, hydraulic fluid, battery fluid). Cracked, worn electrical wiring insulation.

3. Start Engine and Inspect Inside	<ul style="list-style-type: none"> ● Get in cab and start engine. ● Make sure parking brake is on. ● Put gearshift in neutral (or park if automatic). Start engine; listen for unusual noises. ● Look at the gauges. <ul style="list-style-type: none"> ○ <u>Oil pressure</u>. Should come up to normal within seconds after engine is started. ○ <u>Ammeter and/or voltmeter</u>. Should be in normal range(s). ○ <u>Coolant temperature</u>. Should begin gradual rise to normal operating range. ○ <u>Engine oil temperature</u>. Should begin gradual rise to normal operating range. ○ <u>Warning lights and buzzers</u>. Oil, coolant, charging circuit warning, and antilock brake system lights should go out right away. ○ Check condition of controls. Check all of the following for looseness, sticking, damage, or improper setting: <ul style="list-style-type: none"> ▪ Steering wheel. ▪ Clutch. ▪ Accelerator (gas pedal). ▪ Brake controls. ▪ Foot brake. ▪ Trailer brake (if vehicle has one). ▪ Parking brake. ▪ Transmission controls. ▪ Horn(s). ▪ Windshield wiper/washer. ▪ Lights. ▪ Headlights. ▪ Dimmer switch. ▪ Turn signal. ▪ Four-way flashers. ▪ Parking – clearance – identification – marker switch (switches). ● Check mirrors and windshield. ○ Inspect mirrors and windshield for cracks, dirt, illegal stickers, or other obstructions to seeing clearly. Clean and adjust as necessary.
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	<ul style="list-style-type: none"> ● Check emergency equipment. ○ Check for safety equipment: <ul style="list-style-type: none"> ▪ Spare electrical fuses (unless vehicle has circuit breakers). ▪ Three red reflective triangles, 6 fuses or 3 liquid burning flares. ▪ Properly charged and rated fire extinguisher. Check for optional items such as: <ul style="list-style-type: none"> ▪ Chains (where winter conditions require). ▪ Tire changing equipment. ▪ List of emergency phone numbers ○ Accident reporting kit (packet). ○ Check safety belt. Check that the safety belt is securely mounted, adjusts; latches properly and is not ripped or frayed.
4. Turn-off Engine	<ul style="list-style-type: none"> ● Make sure the parking brake is set, turn-off the engine, and take the key with. ● Turn-on headlights (low beams) and four-way emergency flashers, and get out of the vehicle.
5. Do Walk-Around Inspection	<ul style="list-style-type: none"> ● General. <ul style="list-style-type: none"> ○ Go to front of vehicle and check that low beams are on and both of the four-way flashers are working. ○ Ensure blackout lights are working. ○ Push dimmer switch and check that high beams work. ○ Turn-off headlights and four-way emergency flashers. ○ Turn-on parking, clearance, side-marker, and identification lights. ○ Turn-on right turn signal, and start walk-around inspection. ○ Walk around and inspect. <ul style="list-style-type: none"> ▪ Clean all lights, reflectors, and glass as while doing the walk-around inspection. ● Left front side. <ul style="list-style-type: none"> ○ Driver's door glass should be clean. ○ Door latches or locks should work properly. ● Left front wheel.

	<ul style="list-style-type: none"> ○ Condition of wheel and rim--missing, bent, broken studs, clamps, lugs, or any signs of misalignment. ○ Condition of tires--properly inflated, valve stem and cap OK, no serious cuts, bulges, or tread wear. ○ Hub oil level OK, no leaks. Left front suspension. ○ Condition of spring, spring hangers, shackles. ○ U-bolts. ○ Shock absorber condition. ● Left front brake. ○ Condition of brake drum or disc. ○ Condition of hoses. ● Front. ○ Condition of front axle. Condition of steering system. ○ No loose, worn, bent, damaged or missing parts. ○ Must grab steering mechanism to test for looseness. ○ Condition of windshield. ○ Check for damage and clean if dirty. ○ Check windshield wiper arms for proper spring tension. ○ Check wiper blades for damage, "stiff" rubber, and securement. ○ Lights and reflectors. ○ Parking, clearance, and identification lights clean, operating, and proper color (amber at front). ○ Reflectors clean and proper color (amber at front). ○ Right front turn signal light clean, operating, and proper color (amber or white on signals facing forward). ● Right side ○ Right front: check all items as done on left front. ○ Fuel tank(s). ○ Securely mounted, not damaged, or leaking. Fuel crossover line secure. ○ Tank(s) contain enough fuel. Cap(s) on and secure.
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	<ul style="list-style-type: none"> ○ Condition of visible parts. Rear of engine--not leaking. ○ Transmission--not leaking. ○ Exhaust system--secure, not leaking, not touching wires, fuel, or air-lines. ○ Frame and cross members--no bends or cracks. ○ Spare tire carrier or rack not damaged (if so equipped). ○ Spare tire and/or wheel securely mounted in rack. ○ Spare tire and wheel adequate (proper size, properly inflated). ○ Cargo securement (trucks). ○ Canvas or tarp (if required) properly secured to prevent tearing, billowing, or blocking of mirrors. ○ If oversize, all required signs (flags, lamps, and reflectors) safely and properly mounted ● Right rear. ○ Condition of wheels and rims--no missing, bent, or broken spacers, studs, clamps, or lugs. ○ Condition of tires--properly inflated, valve stems and caps OK, no serious cuts, bulges, tread wear, tires not rubbing each other, and nothing stuck between them. ○ Tires same type, e.g., not mixed radial and bias types. ○ Tires evenly matched (same sizes). ○ Wheel bearing/seals not leaking. ○ Suspension. ○ Condition of spring(s), spring hangers, shackles, and U-bolts. ○ Axle secure. ○ Powered axle(s) not leaking lube (gear oil). Condition of torque rod arms, bushings. ○ Condition of shock absorber(s). ○ Brakes. ○ Brake adjustment. ○ Condition of brakes ○ Condition of hoses--look for any wear due to rubbing.
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	<ul style="list-style-type: none"> ○ Lights and reflectors. ○ Side-marker lights clean, operating, and proper color (red at rear, others amber). ○ Side-marker reflectors clean and proper color (red at rear, others amber). ● Rear. <ul style="list-style-type: none"> ○ Lights and reflectors. ○ Rear clearance and identification lights clean, operating, and proper color (red at rear). ○ Reflectors clean and proper color (red at rear). ○ Taillights clean, operating, and proper color (red at rear). ○ Right rear turn signal operating, and proper color (red, yellow, or amber at rear). ○ License plate(s) present, clean, and secured. ○ Splash guards present, not damaged, properly fastened, not dragging on ground, or rubbing tires. ○ Cargo secure (trucks). ○ Canvas or tarp (if required) properly secured to prevent tearing, billowing, or blocking of either the rearview mirrors or rear lights. ○ If over-length, or over-width, make sure all signs and/or additional lights/flags are safely and properly mounted ● Left side. <ul style="list-style-type: none"> ○ Check all items as done on right side, plus: ○ Battery (batteries) (if not mounted in engine compartment). ○ Battery box (boxes) securely mounted to vehicle. Box has secure cover. ○ Battery (batteries) secured against movement. Battery (batteries) not broken or leaking. ○ Fluid in battery (batteries) at proper level (except maintenance-free type).
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	<ul style="list-style-type: none"> ○ Cell caps present and securely tightened (except maintenance-free type). ○ Vents in cell caps free of foreign material (except maintenance-free type).
6. Check Signal Lights	<ul style="list-style-type: none"> ● Get in and turn-off all lights. ● Turn-on stop lights (apply trailer hand brake or have a helper put on the brake pedal). ● Turn-on left turn signal lights. ● Get out and check lights. ● Left front turn signal light clean, operating and proper color (amber or white on signals facing the front). ● Left rear turn signal light and both stop lights clean operating, and proper color (red, yellow, or amber). ● Get in vehicle. ○ Turn-off lights not needed for driving. ○ Check for all required papers, trip manifests, permits, etc. ○ Secure all loose articles (they might interfere with operation of the controls or hit the operator in a crash). ○ Start the engine.
7. Start the Engine and Check Test for Hydraulic Leaks	<ul style="list-style-type: none"> ● Brake system. ● Test parking brake. ○ Fasten safety belt. ○ Set parking brake. ○ Gently pull forward against parking brake to make sure the parking brake holds. ○ If it doesn't hold vehicle, it is faulty; get it fixed. ● Test service brake stopping action. ○ Go about 5 miles per hour. ○ Push brake pedal firmly. ○ "Pulling" to one side or the other can mean brake trouble. ○ Any unusual brake pedal "feel" or delayed stopping action can mean trouble.

	<ul style="list-style-type: none"> ○ If the trainee finds anything unsafe during the Vehicle inspection, get it fixed. Federal and state laws forbid operating an unsafe vehicle. ● Check vehicle operation regularly: <ul style="list-style-type: none"> ○ Instruments. ○ Tires. ○ Cargo, cargo covers. Lights, etc. ○ If the trainee sees, hears, smells, or feels anything that might mean trouble, he/she should check it out. ● Safety inspection. ● Document any discrepancy on AF Form 1800. Sign-off AF Form 1800 to signify accomplishment of inspection.
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