MDOT
Michigan Department of Transportation

TRUCK OPERATIONS

Study Guide

FOR
WORK ELEMENTS
2142, 2501 & 3569

Revised: January 2000

Prepared by
Maintenance Division

FOREWORD

This Study Guide is designed to provide some basic safety guidelines and operating procedures for operators of large maintenance trucks. At this time the Department uses trucks from several different manufacturers with a variety of transmissions. They all do the same job, but the controls and maintenance procedures vary somewhat from one truck to another. This guide covers basic operation in general terms. The operator must use the manufacturer's manual(s) to cover the detailed operation and safety precautions of a specific unit.

It is presumed the operator has a current Michigan Commercial Driver's License (CDL), with a Group "A" designator and an "N" endorsement. The operator should have adequate knowledge of the Michigan Vehicle Operator's Code and know and abide by the rules of the road regarding courtesy and safety behind the wheel.

When performing any task all applicable Department, MIOSHA and OSHA policies, rules and regulations must be followed.

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SAFE DRIVING RULES

1. Operators must be in top mental and physical condition. Get adequate sleep and exercise. Avoid or use care and moderation in consuming tobacco or alcohol. Be aware of the effects of prescribed or over-the-counter medications. Federal regulations and state law prohibit a driver from possessing, using, or being under the influence of any drug or other substance likely to adversely affect the ability to drive safely.

2. Maintain firm control of your emotions. It is easy to get upset at inconsiderate drivers or abusive citizens. If you can't handle that stress, it is likely to cast doubt on your ability to control heavy, powerful equipment.

3. If you aren't thoroughly familiar with the roads in your area, it would be wise to carry maps. Besides helping you do your job more efficiently, they could help you provide information to answer a citizen's question.

4. Courtesy can be critical. Your courtesy behind the wheel and on the job can help create a positive public opinion. It is the public whose taxes pay our salaries, and it is good to keep them as happy as we can. The orange trucks and MDOT logo let unhappy folks know where to complain.

. 5. Be sure of your footing and hand-holds. Try to use a three-point stance when climbing–two hands and one foot or two feet and one hand. Before changing the position of a hand or foot, make sure you have a firm, stable position. Remember that steps, handles, gratings, and other surfaces can become **extremely** slippery from the accumulation of oil, water, mud, or ice. Use extra caution in poor weather.

6. Make allowances for poor weather. Reduce speed when your visibility or traction is limited by fog, rain, snow, ice, etc. It is very hazardous to stop or turn sharply on slippery road surfaces. Try to anticipate what lies ahead and take your foot off the accelerator to slow down gradually rather than suddenly stabbing the brakes. Most authorities recommend that in an absolute crisis situation you either brake hard or steer evasively. Doing both often results in complete loss of control.

PRE-OPERATIONS CHECK LIST

1. Before starting and ending each shift, certain items must be checked for safe operation to protect both the equipment and the operator. The Keller Premium Driver's Vehicle Inspection Report (illustrated below) helps you do this in a systematic manner.

DRIVER'S VEHICLE INSPECTION REPORT

AS REQUIRED BY THE D.O.T. FEDERAL MOTOR CARRIER SAFETY REGULATIONS

CARRIER: _____

ADDRESS: _____

DATE: _____ TIME: _____ A.M. _____ P.M.

CHECK ANY DEFECTIVE ITEM AND GIVE DETAILS UNDER "REMARKS"

TRACTOR/ TRUCK NO. _____ ODOMETER READING _____

- ☐ Air Compressor
- ☐ Air Lines
- ☐ Battery
- ☐ Body
- ☐ Brake Accessories
- ☐ Brakes, Parking
- ☐ Brakes, Service
- ☐ Clutch
- ☐ Coupling Devices
- ☐ Defroster/Heater
- ☐ Drive Line
- ☐ Engine
- ☐ Exhaust
- ☐ Fifth Wheel
- ☐ Frame and Assembly
- ☐ Front Axle
- ☐ Fuel Tanks
- ☐ Generator
- ☐ Horn
- ☐ Lights
  - Head - Stop
  - Tail - Dash
  - Turn Indicators
- ☐ Mirrors
- ☐ Muffler
- ☐ Oil Pressure
- ☐ Radiator
- ☐ Rear End
- ☐ Reflectors
- ☐ Safety Equipment
  - Fire Extinguisher
  - Reflective Triangles
  - Flags - Flares - Fusees
  - Spare Bulbs & Fuses
  - Spare Seal Beam
- ☐ Suspension System
- ☐ Starter
- ☐ Steering
- ☐ Tachograph
- ☐ Tires
- ☐ Tire Chains
- ☐ Transmission
- ☐ Wheels and Rims
- ☐ Windows
- ☐ Windshield Wipers
- ☐ Other

TRAILER(S) NO.(S) _____

- ☐ Brake Connections
- ☐ Brakes
- ☐ Coupling Devices
- ☐ Coupling (King) Pin
- ☐ Doors
- ☐ Hitch
- ☐ Landing Gear
- ☐ Lights - All
- ☐ Roof
- ☐ Suspension System
- ☐ Tarpaulin
- ☐ Tires
- ☐ Wheels and Rims
- ☐ Other

Remarks: _____

☐ CONDITION OF THE ABOVE VEHICLE IS SATISFACTORY

DRIVER'S SIGNATURE: _____

☐ ABOVE DEFECTS CORRECTED

☐ ABOVE DEFECTS NEED NOT BE CORRECTED FOR SAFE OPERATION OF VEHICLE

MECHANIC'S SIGNATURE: _____ DATE _____

DRIVER'S SIGNATURE: _____ DATE _____

ORIGINAL

BEFORE STARTING ENGINE

1. Checking these items is critical to proper operation. If there are any discrepancies, do not start the engine until they are corrected. Report them to your supervisor or mechanic. Be **sure** you add the proper fluid. If you're not **positive**, ask someone. If you make a mistake, **stop**; don't use the equipment. Tag it and get help.

   A. Engine coolant level

   B. Engine lubricant level

   C. Power steering fluid level

   D. Transmission fluid level

   E. Hydraulic fluid level

   F. Windshield washer fluid level

   G. Fill air tanks from the garage supply, if available

   H. Tires
      1. Air pressure. Radial tires **must** be kept at maximum pressure. Check the sidewall of the tire or ask your mechanic.
      2. Tread depth
      3. Wheel lug nuts
      4. Lock rings (if applicable)
      5. Mud flaps

   I. Belts
      1. Air compressor
      2. Alternator
      3. Fan
      4. Steering

   J. Any fluid leaks–check the floor for signs of water, fuel, lubricants, hydraulic fluid, etc.

AT WARM-UP AND AT END OF SHIFT

Check the following items during and after the truck's warm-up period and at the end of the shift.

1. Transmission fluid level. After the engine is warmed and the shift lever has been moved through all positions. Check again during cool-down period, see the owner's manual.

2. Fuel

3. Cab interior

   A. Two-speed axle in low range

   B. Fire extinguisher

   C. First-aid kit

   D. Flares/reflector warning devices

   E. Windshield wipers/washers

   F. Mirror adjustment

   G. Window cleanliness

   H. Radio operation (transmission and reception)

   I. Lights
      1. Headlights - high beam and low beam
      2. Tail lights
      3. Brake lights
      4. Hazard warning (four-way flashers)
      5. Turn signals
      6. Clearance lights
      7. Strobe or beacon
      8. Other (plow lights, blade lights, spreader/spinner lights, etc.)

   J. Gauges–check these during warm-up and regularly during operation.
      1. Air pressure
      2. Oil pressure
      3. Temperature
      4. Voltmeter
      5. Other

   K. General cab cleanliness, storage (no loose tools, tow chains, trash etc.)

   L. Make sure all controls are working properly and that you **know** what the function of each is before leaving the garage.

4. Check hydraulic hoses and connections for damage or leaks. **Caution**: Hydraulic fluid is under very high pressure and a leak can cause major injuries.

5. Check mud flaps for tearing or excessive wear.

6. Verify operation of the underbody blade–raise/lower and swing. Check for positive locking in the full-swing position, if applicable.

7. Check the parking brake release.

8. Check the service and parking brakes under engine power–make sure the vehicle doesn't move.

9. Report any defects so they can be corrected/repaired.

NOTE: A detailed MDOT Vehicle Inspection Guide is located on the last page of this study guide.

MOVING OPERATIONS

GENERAL

1. Operators of Department vehicles must abide by the same traffic laws as any other motorist.

2. Seat belts are to be used at all times.

3. The amber rotating or strobe warning light is to be used whenever the truck is a hazard to traffic or when traveling at less than the posted minimum speed.

4. When using the truck only for transportation, traveling at highway speeds, the warning light should not be used.

5. Avoid using an expressway crossover if an interchange is nearby.

6. When using a crossover, do not slow down in the traffic lane. Median shoulders should be used for deceleration and acceleration

7. When climbing steep grades, keep well to the right and use four-way flashers. If there is a lane for slow vehicles, use it. Don't pass traffic going uphill unless you are able to do so quickly and smoothly without blocking others. If you notice that you are backing up a line of traffic, consider pulling off the road to allow them to pass easily. Such courtesy can produce considerable positive public goodwill.

8. Pass only where permitted and when you can do so safely without being a hazard to other traffic.

9. Signal your intention to pass and to return to the traffic lane after you've overtaken the other vehicle. Flashing your headlights is not a recognized signal.

10. Do not attempt to pass more than one vehicle at a time.

11. When you are being passed, be prepared to slow down in case the other driver has misjudged something. Give way rather than causing an accident. Never speed up in an attempt to prevent another vehicle from passing.

12. At night, be sure to dim your headlights as soon as you've been passed. Don't let the glare from your lights blind the other driver.

13. When two or more trucks are traveling together, leave room between vehicles so faster traffic can overtake and pass. Use the tandem plowing guideline and leave 2,500' (one-half mile) between trucks.

14. Railroad crossings are always hazardous. Don't rely on automatic signals– they may malfunction. Reduce speed and look in both directions before crossing.

15. Crossings are often rough. Reduce speed out of consideration for the equipment and yourself. Raise the underbody blade or plow, if applicable.

16. Never try to race an oncoming train to a crossing. Your truck may be bigger and tougher than most cars, but it wouldn't stand a chance against a diesel freight train.

17. Do not shift gears while crossing railroad tracks.

18. Double tracks require a double check. Your visibility may be blocked by one train; make sure there isn't a second one you can't see behind the first one.

19. Posted speed limits apply only to ideal road, weather, and visibility conditions. Never drive faster than a speed which will allow you to stop within the distance you can see ahead.

20. Reduce speed in rain, fog, at night, on snow or icy roads, or other conditions of reduced visibility or traction.

21. Make safe, gradual stops; give following traffic adequate warning. Sudden stops increase the probability of being struck.

22. If it is necessary to park on the highway, pull off as far to the right as possible. Ideally, your truck should be completely off the traveled portion of the road.

23. When applying the parking brake in a vehicle equipped with a manual transmission, leave the vehicle in the lowest gear or reverse; with an automatic, shift into neutral. Shift the two-speed axle to low-range. Never use the trailer hand valve or tractor protection valve to hold a parked unit.

24. Prolonged idling is not recommended for diesel engines. If you must idle for long periods, run the engine at 1,000 rpm to assure proper temperature regulation and lubrication.

25. When parking on level ground or when headed downhill, turn the front wheels towards the curb. When headed uphill, turn the front wheels away from the curb.

26. Signal turns well in advance. In town, 100' or one block ahead; in rural areas, 500' (one-tenth mile).

27. Make turns from the proper lane. For left turns, use the lane next to the center line. For right turns, stay as close as possible to the right-hand edge, curb or parked cars. If you make a wide, sweeping right turn, cars may try to cut between you and the parked cars or curb.

28. Never change lanes or turn without being sure the way is clear. Use the mirrors and turn your head to check the blind spot to your left. Continue to check traffic as you make the turn.

29. When making turns at places other than intersections, make sure you signal your intentions clearly, as the other traffic is not expecting it.

30. If a tire blows out while your vehicle is in motion, you are much more likely to lose control if it is a front (steering) tire than a rear one. Avoid palming the steering wheel.

UNDERBODY BLADING

1. Check the replaceable cutting blade for wear. Replace the entire set, when worn to within 1 inch of the mold board (steel hardened or tungsten).

2. While blading with a manual locking underbody blade, it should be in a fully swung position and locked to prevent accidental rotation.

3. Be aware of obstacles which, if struck by the underbody blade, could damage it or cause you to lose control of the truck

4. The operator must at all times be aware of blade pressure and the volume and force of the discharged material. Slow down in congested areas. Watch for pedestrians. Don’t blade snow and ice off overpasses onto roadways or railroad tracks or into rivers below.

5. When blading in tandem, leave adequate space between trucks for traffic to move freely (2500'–one half mile).

6. Make certain the blade discharges on the proper side for the lane being maintained (right side for driving lane, left side for passing lane).

LOADING OPERATIONS

1. Don’t overload. Loading more than the truck was designed to carry will cause inadequate braking ability and difficult maneuverability. Loads should be placed evenly and in the center of the box. Keep the weight low in the box for maximum stability. The law places responsibility for not exceeding size and load restrictions on the driver, not on the person that loaded the truck for you.

2. When carrying a full load, don’t pile the material so high that it will spill over the edges. There should be 6" of sideboard above the load.

3. All loads of loose material that may blow off must be covered with a tarp before roadway travel. Loads of salt do not have to be covered when the vehicle is being used in ice and snow removal.

4. When using a front end loader, the truck’s underbody blade should be in the full swing position, with the discharge end on the side opposite the loading operation. This will prevent the loader tires from striking the blade end.

5. Be especially careful not to overload the truck when hauling bulky, dense materials like logs or broken concrete.

6. Make sure the load is secure before moving the truck. If the load requires the use of approved securement devices use them properly.

7. When a load extends beyond the end of the bed 4' or more, a red flag at least 12" square must be attached so the entire flag is visible to traffic approaching from the rear.

8. At night a projecting load must be marked with a red light visible to the sides and rear, in place of the flag.

DUMP BOX OPERATIONS

1. Close the small gate opening before loading. (If applicable)

2. Be sure the tailgate is locked before traveling.

3. Be sure to hook the spreader chains before performing gravel spreading operations on gravel shoulders.

4. **Roll up the tarp before the spreading operation starts.**

5. Be very careful about clearances around the raised box. This includes bridges, wires, signs, low-hanging limbs, etc.

6. Exercise special care when raising or lowering the box on unstable, uneven ground, especially when the box has material in it.

7. Don't travel with the tailgate down.

BACKING

1. Plan your route to keep backing at a minimum.

2. Avoid backing at all, if possible, but try especially to avoid backing into traffic.

3. Inspect your route before backing. Even though back-up alarms are required to warn others, you may want to use a helper or a spotter to assist you.

4. Even if you use a helper, the responsibility for safe operation falls on you, the driver.

DIESEL TROUBLESHOOTING

When experiencing the following conditions, check the items listed to see if the problem can be identified and corrected.

When the ambient air temperature is extremely cold, diesel fuel that is not properly treated may gel causing loss of power, stalling and an engine that won't start.

1. Starting trouble
    - A. Battery power may be low
    - B. Starter motor may need replacing
    - C. Check for correct viscosity of engine oil
    - D. Cold-start equipment may have been used incorrectly
2. Engine misfire
    - A. Blocked fuel line/filter
    - B. Check for air in fuel system
3. Lack of power
    - A. Is the vehicle overloaded
    - B. Tire pressure may be too low
    - C. Check to see if the brakes are binding
    - D. Clutch may be malfunctioning
    - E. Fuel system may be blocked/restricted
    - F. Exhaust system could have a restriction
    - G. Turbocharger:
        1. Poor boost pressure
        2. Excessive air intake
        3. Restricted turbine exhaust
        4. Improper air delivery
        5. Low oil pressure
4. Black exhaust
    - A. Insufficient air
    - B. Restricted air induction manifold

5. Blue/White Exhaust

   A. Wrong lubricating oil
   B. Faulty cold-start equipment
   C. Dirty air cleaner
   D. Bad head gasket
   E. Bad piston
   F. Bad piston rings

6. Poor compression

   A. Restricted induction system
   B. Leaking head gasket
   C. Poor valve seating

SHUT DOWN PROCEDURES

1. Shift the two-speed axle to low range.

2. Idle at 1,000 rpm for three to five minutes. This will help maintain good lubrication during this cool-down period.

3. Bleed the air tanks at the end of each work shift.

4. Check lights, transmission and other fluid levels, just as when starting up.

5. When parking, leave the truck in a “ready-to-operate” condition for the next driver.

6. Report any malfunction or problem you can’t correct to your leadworker, foreman or mechanic. If it is a serious problem, place a warning tag on the steering wheel.

TRAILER OPERATIONS

1. Check tire pressure regularly. Most large utility trailer tires require from 95 to 120 lbs. air pressure.

2. Lubricate grease fittings regularly. Most large utility trailers have 9-12 grease fittings. Check wheel hub oil level regularly (if applicable).

3. Check trailer bed. Repair or replace loose boards.

4. When the trailer is equipped with brakes, they must be connected to and operate in conjunction with those of the towing vehicle.

5. Trailers are equipped with safety chains. They must be used. If the hitch should fail, the chains will keep the two vehicles connected.

6. Make the proper air line hook-up. Blue is the supply line, red is the emergency line. Replace rubber seals when signs of wear are observed.

7. Check that all trailer lights work properly.

8. To check the operation of the trailer air brakes, step on the truck brake pedal and listen for the exhaust as you release it. Pull forward slightly with the brakes applied to prove they hold. Use the trailer brake handle in the yard only, not on the road.

9. Remember that if the truck loses air pressure, the trailer brakes will lock-up.

10. Drain the air tank after each work shift.

11. When storing the trailer, replace the glad-hand dust covers.

12. Block the trailer wheels in the event of an air bleed-down.

13. When loading the trailer:

    A. Position the ramps at the proper width to suit the equipment being loaded.

    B. For safety reasons, back the equipment aboard the trailer.

    C. Place the loaded equipment's transmission in neutral, set the neutral safety lock (if applicable), set the parking brake, shut down the engine, bleed hydraulic pressure, close all windows, doors and hatches.

D. If applicable to the unit being carried, position and pin the safety lock device.

E. Secure the load with approved securement devices. Locate the binders on the driver's side, so you can keep an eye on them in the mirror.

F. The maximum allowable height for your load is 13' 6". Make sure this is not exceeded. Be extremely cautious at bridges, overhead signs and wires, low-hanging limbs, etc. Ice and snow build-up may decrease posted clearances. A load which meets the 13' 6" limit on the level may actually become too high if the road changes elevation sharply, such as at the crest or foot of a hill.

FIRE EXTINGUISHER OPERATIONS

1. General Information

   A. Know the type(s) and location of fire extinguishers in your garage and on your truck or other equipment.

   B. Read the instructions before a fire. Be aware of how the extinguisher works.

   C. Keep extinguishers clean and readily accessible. Most extinguishers mount in brackets which hold them upright.

   D. If you notice an extinguisher with low pressure or an unsealed lock pin, report it at once.

   E. Dry chemical extinguishers may pack down from vibration. Occasionally remove it from the bracket, turn upside down and shake firmly or strike the bottom with the heel of your hand or a rubber mallet.

2. How to use an extinguisher

   A. Remove the extinguisher from the mounting bracket.

   B. Pull the lock pin on the trigger. This usually means breaking a plastic or thin wire safety seal.

   C. If the extinguisher has a nozzle on a hose or a pivoting tube, unclip it and raise it into position.

   D. Approach the fire with the wind at your back, if possible. This will help keep you out of the smoke and heat and allow you to get as near to the fire as you can.

   E. Aim the nozzle at the base of the fire.

F. Squeeze the trigger and sweep the fire from side-to-side.

G. When the flames are out, stand by for a while, in case of reignition.

3. Engine Fires

A. Lift the hood only far enough to insert the nozzle.

B. Squeeze the trigger.

C. If possible, disconnect the battery to prevent sparks and possible re-ignition.

After use, replace the used extinguisher with a charged one and turn in the empty one for refilling. Don't place the empty one back in the rack. You could forget to take care of it later. If the next person who needs to use the extinguisher finds it empty, there could be a tragic result.

ACCIDENTS HAPPEN

1. If you are involved in an accident:

A. **Stop: Failure to stop at the scene of an accident in which you are involved is a criminal offense.**

B. The immediate concern is to keep matters from getting worse. What you do first will depend on exactly what happened, traffic volume, the number of people available to help, your condition, etc. You may find yourself in a situation where a different sequence is more appropriate. Use your best judgment.

1. Check for injuries. Is anyone's life threatened? Is a car on fire? Is there major blood loss? Has anyone stopped breathing? Routine care for minor injuries can wait a few minutes, but these cases cannot. You need to get the facts to make a good report.
2. Protect against further collisions. Use reflective triangles, warning lights and four-way flashers, or bystanders to warn approaching traffic. This will be of more concern on high-volume roads, areas of poor or limited visibility and when one or more vehicles remain on the roadway.
3. Request the appropriate (police, fire, EMS) help immediately. Use the radio if it is not damaged, otherwise use a nearby telephone or send a reliable person to notify emergency units. **If you are involved, you should not leave the scene before the police arrive.**

4. When requesting help make your report as complete as possible–exact location, number of vehicles, and your best assessment of any injuries. If the emergency units responding make an unnecessary lights-and-siren run, they've put themselves, their equipment and the public at risk–for nothing. If you can report that there are no injuries or only minor ones, they can respond more calmly. On the other hand, if six people are seriously hurt and one car is on fire, report that too, so enough help can be sent the first time.

C. Render such emergency care to the injured as your training, your resources and your physical condition permit.

D. If you have not reported in such a way that your leadworker or supervisor knows about the accident, make that notification now.

E. Since the position of the vehicles involved may be vital to an accident investigator, do not move your truck until directed to do so by the police.

F. You will have to complete the accident worksheet (Form 10) as soon as possible and before leaving the scene. Take the name and addresses of all witnesses and other parties actually involved. The other driver(s) has a right to know your name and address, too.

G. You will be required to complete an accident report (Form 07) for immediate submission to your supervisor.

2. If you are not involved:

A. If you are not involved, but come upon the scene after the accident occurred, your activities should be guided by Department Regulation 1200.11.

B. If you come upon a scene after an accident, park on the shoulder, out of traffic. Use all warning lights on the truck to help warn other drivers.

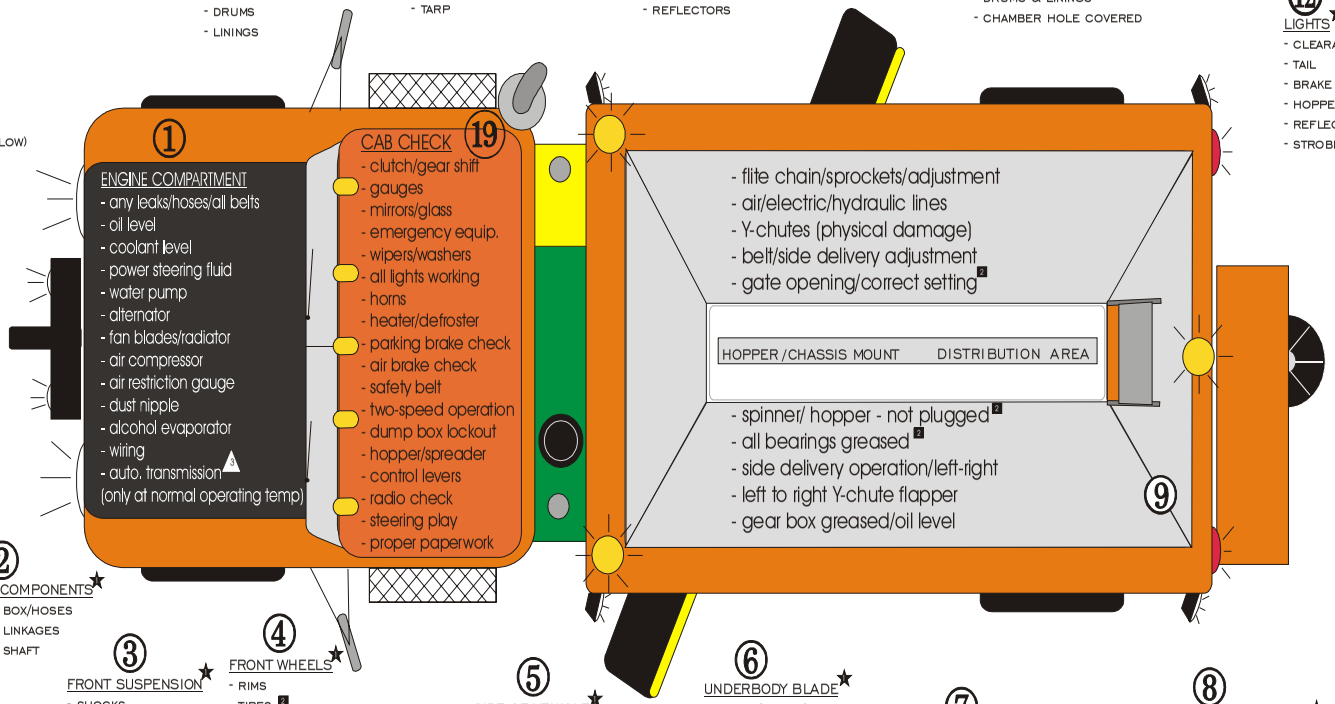
ALWAYS

WHEN APPROACHING VEHICLE LOOK FOR:

- loose wires/hoses
- broken lights/mirrors/glass
- truck leaning
- oil puddles/leaks
- loose components
- body damage

PRE-TRIP / POST-TRIP VEHICLE INSPECTION GUIDE

MAINTENANCE
MDOT
Michigan Department of Transportation
DIVISION
1999



(1) ENGINE COMPARTMENT
- any leaks/hoses/all belts
- oil level
- coolant level
- power steering fluid
- water pump
- alternator
- fan blades/radiator
- air compressor
- air restriction gauge
- dust nipple
- alcohol evaporator
- wiring
- auto. transmission ⚠ (only at normal operating temp)

(19) CAB CHECK
- clutch/gear shift
- gauges
- mirrors/glass
- emergency equip.
- wipers/washers
- all lights working
- horns
- heater/defroster
- parking brake check
- air brake check
- safety belt
- two-speed operation
- dump box lockout
- hopper/spreader
- control levers
- radio check
- steering play
- proper paperwork

- flite chain/sprockets/adjustment
- air/electric/hydraulic lines
- Y-chutes (physical damage)
- belt/side delivery adjustment
- gate opening/correct setting [2]

HOPPER/CHASSIS MOUNT DISTRIBUTION AREA

- spinner/ hopper - not plugged [2]
- all bearings greased [2]
- side delivery operation/left-right
- left to right Y-chute flapper
- gear box greased/oil level

(2) STEERING COMPONENTS ★
- STEERING BOX/HOSES
- STEERING LINKAGES
- STEERING SHAFT

(3) FRONT SUSPENSION ★
- SHOCKS
- SPRINGS
- MOUNTS
  - FRONT
  - CENTER
  - REAR

(4) FRONT WHEELS ★
- RIMS
- TIRES [2]
- HUB OIL SEAL
- LUG NUTS
- VALVE STEM CAPPED
- VALVE STEM CENTERED

(5) SIDE OF VEHICLE ★
- DRAIN AIR TANKS [2]
- AIR DRYER SYSTEM
- DOOR/MIRROR
- FRAME
- GATE LOCK LEVER
- FUEL TANK/FUEL CAP
- DRIVE SHAFT/COMPONENTS
- HYDRAULIC FLUID LEVEL
- BATTERY/BOX/COVER
- DROP-ON ACTUATOR LEVER - ON/OFF

(6) UNDERBODY BLADE ★
- CIRCLE/STOPS/HANGER PLATES
- HYDRAULIC LINES
- SWING CYLINDER
- BLADE LOCKS
- CUTTING EDGE/BOLTS

(7) REAR WHEELS ★
- RIMS/SLIPPAGE
- TIRES [2]
- AXLE SEALS
- LUG NUTS
- SPACERS
- VALVE STEM CAPPED
- VALVE STEM CENTERED

(8) REAR SUSPENSION ★
- SPRINGS
- MOUNTS (F-C-R)
- OVERLOAD SPRINGS

(9)

(10) TRAILER COUPLING AREA
- GLAD HAND/COVERED
- TRAILER WIRING PLUGS COVERED
- PINTLE HITCH GREASED

(11) REAR OF VEHICLE
- MUD FLAPS
- BACK-UP ALARM
- STEPS
- HAND SHOVEL
- LOCKING BAR SECURED
- TAILGATE (SUMMER) PINS/CHAINS

(12) LIGHTS ★
- CLEARANCE
- TAIL
- BRAKE
- HOPPER
- REFLECTORS
- STROBES

(13) REAR BRAKES ★
- STROKE INDICATOR
- SLACK ADJUSTERS
- CHAMBERS
- HOSES
- DRUMS & LININGS
- CHAMBER HOLE COVERED

(14) LIGHTS ★
- CLEARANCE
- BLADE
- REFLECTORS

(15) SIDE OF VEHICLE ★
- EXHAUST/RAIN CAP
- HYDRAULIC TANK
- DIVERTER VALVE
- HOPPER TIE-DOWN
- STEPS
- TARP

(16) FRONT BRAKES ★
- SLACK ADJUSTER
- CHAMBER
- HOSES
- DRUMS
- LININGS

(17) LIGHTS ★
- CLEARANCE
- HEADLIGHTS (HIGH/LOW)
- TURN SIGNALS
- FOUR WAYS
- REFLECTORS
- STROBES
- PLOW

(18) FRONT OF VEHICLE
- HYDRAULIC CYLINDER/LINES
- PLOW JACK/BOLTS
- RELEASE ARM
- HYDRAULIC PUMP/HOSES

SPECIFICATIONS

LUGNUT TORQUE:
- Budd Rims - 500 ft. lbs.
- Dayton/ Spoke Rims - 240 ft. lbs.

TIRE PRESSURE:
- Radials - 120 p.s.i. (front), 110 p.s.i. (rear)

FLUIDS AND OILS:
When adding lubricants, make certain to use only those specified on the Oil Recommendation Chart.

NOTES:
- ★ Both passenger and driver side of vehicle must be inspected.
- [2] Performed on pre-trip only.
- ⚠ Performed on post-trip only.