

**SUBJECT:** Vehicle Preventive Maintenance and Safety

**REGULATORY STANDARD:** None

**DATE:** May, 2000

## **Introduction to Vehicle Safety Maintenance**

Your safety and comfort on the road depend upon the condition of your vehicle, so whatever you can do to ensure its best operation is to your advantage. Report anything unusual about the vehicle that you notice during pre-trip and post-trip inspections or during operation. You can save Montana Tech money in maintenance costs and save yourself aggravation and wasted time by simply being alert. Vehicle mishaps are a major cause of work-related injuries, so help keep the vehicles operating safely and at their peak, through careful observation and inspection.

### **Listen**

Listen for unusual or abnormal equipment sounds such as thumps, bumps, squeaks, squeals, rattles, and air leaks. These noises can spell trouble or potential trouble. Report them promptly and describe them accurately to your maintenance people.

### **Smell**

Smell for unusual odors like burning insulation, rubber or wood, scorched fabric, hot oil and other abnormal smells. Once again, these unusual odors could indicate potential problems.

### **Feel**

Feel for changes in your vehicle's operation that affect steering, shifting, braking, or other handling operations. If the vehicle does not respond in its usual manner, report this promptly so that maintenance can check things out.

### **Observe**

Observe all aspects of your equipment carefully during routine pre-trip and post-trip inspections. Monitor the gas gauge. Check for defects in lights, wiring, cables, tires, splash guards, locks, air lines, coupling devices, brakes, muffler, windshield wipers, windshield wiper fluid, blinkers, windshield glass, seatbelts, horn, and heater/air conditioning operation.

### **Safety Statistics**

- Using headlights during the daytime can decrease collisions by as much as 10%.
- Using the lap/shoulder safety belts reduce the risk of fatal injury to front seat occupants by 45%.
- People who are thrown from vehicles are 25 times more likely to be killed than ones who are held securely in their seats.
- The majority of all car accidents occur within 25 miles of home, and 80% of all serious injuries and fatalities occur in cars going 40 miles per hour or slower.

## Do it Yourself Motor Vehicle Inspection

Before you get behind the wheel, use this simple checklist to be sure everything is in good working order. A few minutes spent conducting a safety check is well worth the time.

REMINDER: When you're driving, if something *seems* wrong with the vehicle, it probably *is* wrong. Pull off the road and check these items.

### TIRES:

- r Are any of them flat or low on air?
- r Are they inflated to the proper pressure?
- r How is the tread?

### LIGHTS:

- r Do the headlights work? (including hi-beams and low-beams)
- r Do the tail lights and brake lights work?
- r Do the back up lights work?
- r Do the turn signals and emergency flashers work?

### WINDSHIELD WIPERS:

- r Are they in good condition?
- r Does the windshield washer work?
- r Is there plenty of washer fluid?

### FLUIDS:

- r Is the gas tank full?
- r Proper oil level?
- r Proper brake fluid level?
- r Proper coolant/antifreeze level?

### BELTS AND HOSES:

- r Are they in good condition?
- r Are they adjusted properly?

### BATTERY:

- r Are connections tight?
- r Is there excessive corrosion around terminals?

### LOADS:

- r Are you carrying a heavy load?
- r Is it too heavy for the vehicle? A heavy load can make a vehicle difficult to stop or maneuver safely.
- r Is the load properly secured?
- r Does it block your view?

## **Driver Preparation Are YOU in a Safe Condition to Drive?**

Besides vehicles, drivers should be in tip-top condition and should be safety-checked before driving.

### **Check yourself before you get behind the wheel:**

#### **FATIGUE:**

☐ Are you sleepy? Don't drive if you're too tired. Pull over and take a nap.

#### **EMOTIONS:**

☐ Are you distracted because of being angry or upset? That can lead to reckless driving or being too distracted to pay attention to the road.

#### **FAMILIARITY WITH VEHICLE:**

- ☐ Do you know where everything is and how to operate it?
- ☐ Are you used to driving a different size vehicle? Get proper training before you drive an unfamiliar vehicle.

#### **DIRECTIONS:**

- ☐ Do you have a map? Study it before you leave.
- ☐ Do you know exactly how to get where you are going? If not, pull off the road and look at your map.

#### **ALCOHOL AND DRUGS:**

- ☐ Drinking, drugs, and driving don't mix. **DON'T!!**
- ☐ Are you taking any medications that make you drowsy? Check labels for warnings.

**Safe drivers are smart drivers.  
Be smart – know when not to drive.**