

FACT SHEET

MONTANA DRIVER EDUCATION AND TRAINING





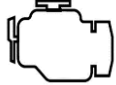



Module 2.1 - Preparing to Drive

Alert and Warning Lights Instrument Panel

- It is essential to know what the alert lights, warning lights, and gauges on the instrument panel mean and where they are located. Some warning lights are accompanied by warning sounds to alert the driver to take immediate action. When you first turn on your vehicle, each of these warning lights should briefly light up to confirm they are working properly, but should turn off while you're driving the vehicle.
- When any of these or other warning lights illuminate and stay on for a period of time, your vehicle is trying to tell you something. *It is important to have the problem diagnosed as soon as possible.*
- Become familiar with your vehicle by reading the owner's manual or by asking a mechanic or car dealer. This will help prevent you from being caught off-guard should a problem arise.

Alert & Warning Symbols

Symbol	System	What it means	What you should do if it comes on
	Coolant Temperature	This light warns you when the coolant in the engine is too hot or too low.	If it comes on, pull off the road when safe and get professional help. <i>Caution: never attempt to remove the radiator cap when the engine is hot. Run the heater to draw heat off the engine.</i>
	Oil Pressure	This red light warns you when the oil is not circulating at the proper pressure or there is not enough oil. This light/gauge does not tell you the amount of oil in the engine.	STOP! If the oil pressure light stays on, pull safely off the road and shut off the engine. Check the oil level in the vehicle and correct the problem. <i>Caution: If the vehicle runs without enough oil in the engine, irreversible damage could occur.</i>
	Alternator/Generator	Your vehicle's electrical system is in trouble if this light comes on or the gauge shows "discharge" while the engine is running. ➤ Discharge occurs when the alternator is not generating enough electricity to charge the battery. ➤ Be aware that if this happens the engine must use electricity stored in the battery.	Turn off as many electrical devices as possible (i.e., the radio, heater/AC, etc.) <i>Caution: Have this checked without delay. If the battery is drained, the car can shut off.</i>
	Brake System	This warning light serves two purposes: ➤ To show the parking brake is set before moving the vehicle. ➤ To alert you that some or all of the braking system is not working properly or in some vehicles, the brake fluid is too low.	Release the parking brake. If the light stays on the brake system is not working properly. Have your brakes checked. If brakes fail, try pumping brakes to build pressure, downshift to a lower gear, gradually engage the parking brake to slow and steer to the road edge to stop. Have the vehicle towed, and the problem corrected. <i>Caution: Do not drive the vehicle if this light comes on.</i>

	Anti-lock braking system (ABS)	This alert light advises if the ABS is functioning properly. If the warning light comes on while driving, it indicates a problem with the system.	Should this occur, have the problem corrected at a service center (i.e., car dealership, service station, etc.).
	Air Bag Functioning	<p>This alert/warning light advises if the air bags are in proper working condition.</p> <ul style="list-style-type: none"> ➤ When the ignition is turned on, the air bag alert light comes on for a few seconds, and then goes off. ➤ This alert light should come on when the ignition is on, but the engine is not running. 	If the air bags are not in proper operating condition, the warning light will stay on. Have this problem corrected at a service center.
	Fasten Seat Belt	This warning light advises if the driver of the vehicle has not fastened their seat belt. Some vehicles have sensors that also indicate if any passengers have not fastened their seat belts.	If this light comes on, the driver is advised to buckle up to minimize risk in the event of a motor vehicle crash. All passengers should also be properly buckled. Infants or children should also be safely restrained in a correctly installed booster or car seat.
	Tire Pressure	Newer model vehicles may have a tire pressure monitoring system (TPMS) to indicate when tire pressure is too high or too low, and can be touchy when weather extremes vary greatly.	If this light comes on, check the tire pressure in all four tires and correct the problem. Otherwise, you risk a blowout as well as uneven wear, increased rolling resistance and fuel consumption.
	Check Engine	A computer monitors operation of a vehicle's fuel, ignition, and emission control systems. If the alert light does not come on when you start the vehicle, have the system fixed right away.	<p>If the warning light stays on, or it comes on while driving, the computer is indicating that there is a problem. Take the vehicle to a service center.</p> <p>A flashing or blinking check engine light may indicate a misfire in the engine that will cause mechanical damage and needs immediate attention.</p>
	Door Ajar Light	This comes on if a door(s) is not closed completely.	The warning light will stay on until this is corrected. <i>Caution: Do not try to open and close the door that is ajar while driving.</i>
	Low Fuel	<p>The fuel gauge advises how much fuel is in the tank when the ignition is on:</p> <p>E is for empty, get some fuel; F is for Full</p> <p>◀ Indicates fuel door location on side of car</p>	When the low fuel light activates, stop and refuel as soon as possible. The amount of fuel remaining when the light comes on may vary from vehicle to vehicle.
	Stability Control Indicator	Some vehicles are equipped with stability control that adjusts throttle, brakes, and/or suspension when there is a peripheral slip in the tires, keeping the vehicle stable and preventing or minimizing "fishtailing."	When lit, it means the vehicle is running without the stability control enhancement. A light that is on constantly or flashes may indicate a more severe problem that needs attention.



WORK SHEET

Module 2.1

Alert/Warning Symbols and Controls Diagrams

Name _____

Date _____

Score _____

A.	F.	K.	P.
B.	G.	L.	Q.
C.	H.	M.	R.
D.	I.	N.	S.
E.	J.	O.	T.
U.	Z.	EE.	JJ.
V.	AA.	FF.	KK.
W.	BB.	GG.	LL.
X.	CC.	HH.	MM.
Y.	DD.	II.	NN.



WORK SHEET

Module 2.1 Alert Symbols, Warning Symbols and Control Devices

Name _____ Date _____

Score _____

Review the Alert/Warning Symbols and Controls Diagrams (Work Sheet 2.1) and write the meaning of the symbols below.

- | | | |
|----------|-----------|-----------|
| A. _____ | O. _____ | CC. _____ |
| B. _____ | P. _____ | DD. _____ |
| C. _____ | Q. _____ | EE. _____ |
| D. _____ | R. _____ | FF. _____ |
| E. _____ | S. _____ | GG. _____ |
| F. _____ | T. _____ | HH. _____ |
| G. _____ | U. _____ | II. _____ |
| H. _____ | V. _____ | JJ. _____ |
| I. _____ | W. _____ | KK. _____ |
| J. _____ | X. _____ | LL. _____ |
| K. _____ | Y. _____ | MM. _____ |
| L. _____ | Z. _____ | NN. _____ |
| M. _____ | AA. _____ | |
| N. _____ | BB. _____ | |



WORK SHEET

Module 2.1

Family Vehicle Control and Information Device Symbols

Name _____ Date _____

Score _____

Use this worksheet to determine whether your family vehicle or that of a friend is equipped with the following Safety, Communication, Comfort, and Convenience devices and if so equipped, where the control levers, switches, or buttons are located.

<u>Equipped</u>	<u>Yes/No</u>	<u>Location of control lever or switch</u>
Tilt steering wheel	_____	_____
Auto. Transmission	_____	_____
Manual Transmission	_____	_____
Parking Brake	_____	_____
Cruise Control	_____	_____
Mirror Controls	_____	_____
Hazard Flasher	_____	_____
Headlights	_____	_____
Instrument Panel Light Switch	_____	_____
Hood Release	_____	_____
Trunk Release	_____	_____
Seat Control Manual	_____	_____
Seat Control Electric	_____	_____
Separate Turn Indicator Lever	_____	_____
Windshield Wiper Switch	_____	_____
Windshield Washer Switch	_____	_____
Air Bag Cut Off Switch	_____	_____
Electric Door Locks	_____	_____
Electronic Stability Control (ESC)	_____	_____
Childproof Rear Door Locks	_____	_____