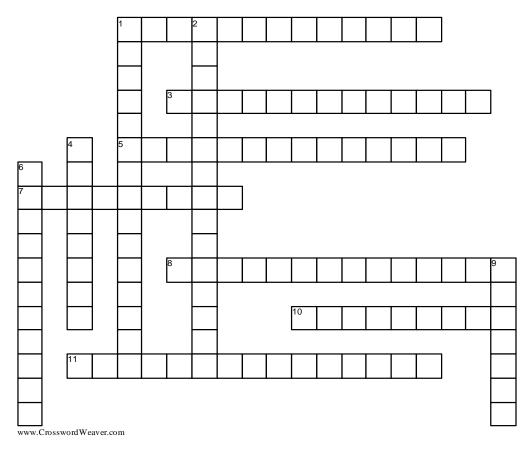
# Air Induction and EGR Systems

### Chapter 10



#### **ACROSS**

## 1 The glow plug system on most current model vehicles

	is controlled by the glow plug
3	sensor is a sensor that allows
	the powertrain con troll module (PCM) to monitor the
	air pressure in the intake manifold.
5	sensors are two-wire negative
	temperature coefficient (NTC) thermistors that
	measure the temperature of the exhaust gasses being
	recirculated back into the intake air system.
7	assembly Includes the air filter, mass air
	flow/temperature sensor assembly and an air filter
	minder.
8	An heater is used to warm the air
	as it enters the engine during a cold start and the
	subsequent warm-up period.
10	are used to assist in starting the engine
	during cold weather conditions

show the difference between atmospheric pressure and the air pressure in the filter housing under maximum load and to alert the driver or service technician when the filter element needs to be

\_\_\_ is a gauge designed to

#### **DOWN**

1	is a heat exchanger that is
	mounted between the turbocharger and the inlet side
	of the engine.; sometimes referred to as the
	intercooler.
2	Diesel engines produce little to no intake manifold
	vacuum. As a result, many manufacturers add an
	electronic throttle valve to induce greater EGR flow
	through the manifold. This valve is called the EGR ai
	flowvalve.
4	an is a valve that meters the flow of nor
	combustible exhaust gases into the intake manifold.

6	The	sensor is used to measure the
	amount of	intake air the engine is using.
9	i	s a condition where small dust and dirt

particles enter the air induction system by bypassing the filter.

