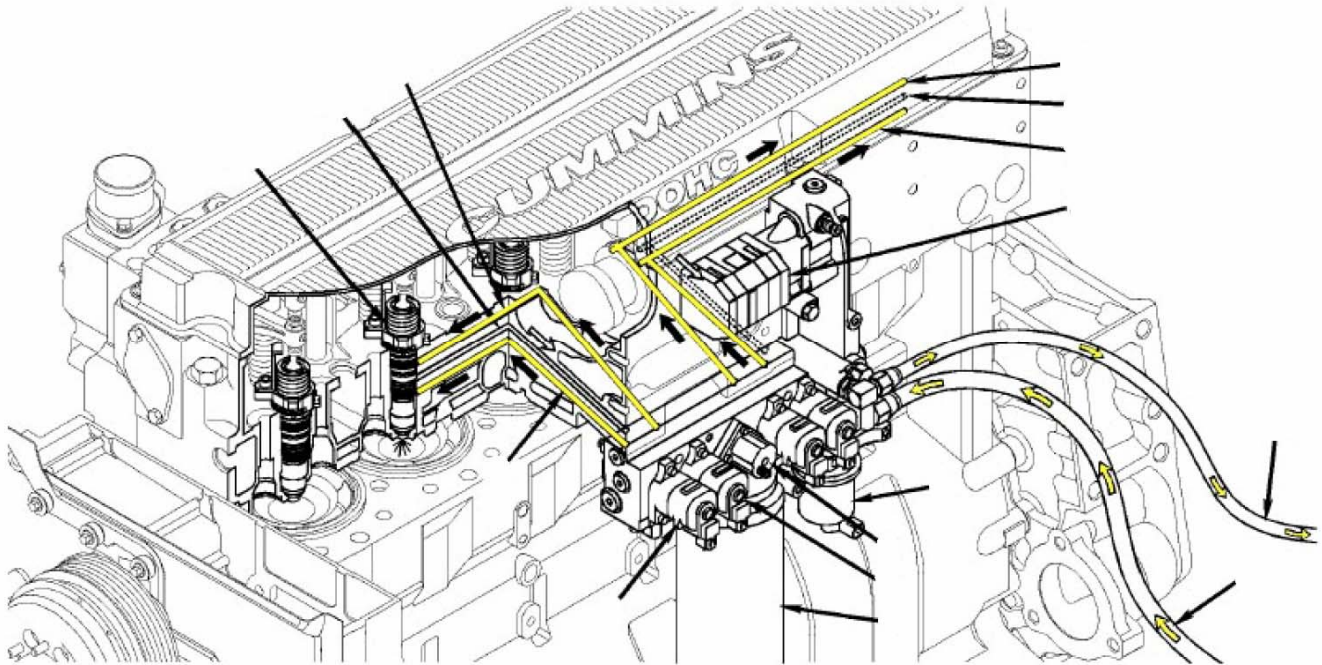# Cummins ISX (With EGR) & INSITE 7.x Familiarization

Name: _____

Date: _____

1. Identify the following component locations using numbers written beside the corresponding arrow (Draw new arrows if necessary):

1. Fuel Supply from Tank
2. Fuel Lift Pump
3. Fuel Pump
4. Pressure Fuel Filter
5. Fuel Shutoff Valve
6. Fueling Actuator
7. Timing Actuator
8. Fueling Supply to Injector
9. Timing Fuel Supply to Injector
10. Injector
11. Fuel Drain to Tank.

2. Using INSITE 6.x connect/communicate with the ECM and monitor the following data parameters. Record values for KOER (Key on engine running) at idle and during a snap acceleration.

	@ Idle (Units)	**@ High Idle (Units)**	
Turbo speed	_____	_____	
Intake Boost	_____	_____	
EGR Pressure	_____	_____	
Rail Pressure	_____	_____	**What is this value in psi?** _____
Fuel Rate (GPH)	_____	_____	
Exhaust Temp (EGR)	_____	_____	
Exhaust Pressure	_____	_____	

3. Perform the following diagnostic/functional tests

- **Cylinder cut-out** _____ **(ok/not ok)**
- **Cylinder performance** _____
- **EGR valve functioning** _____
- **Turbo actuator test** _____

4. Change or record the following engine feature/programmable parameter:

Gear down protection _____ Driver Reward _____

Engine hours _____ Torque Limit 1st gear _____

Idle time _____ Maximum Vehicle speed wo Vss _____

Total idle fuel used_____ Engine Protection shutdown _____

Governor Type _____ Engine Idle speed _____

5. Trace the flow of exhaust gases through the EGR system

6. Does the engine have a load based speed control programmable parameter enabled? Look-up the purpose of this programmable parameter using "Power Spec".