Student Tracker

Engine Block Internal Re-Assembly (EBIR)

Name: ₋		
and too compet		ies using the proper procedures, service information, eacher what you did. After completion of each o each number.
1.	Demonstrate how to clean engine	block and internal parts before re-assembly.
	Hone piston bores	
	Ridge ream bores (if neces	ssary)
	Chase all threads	
	Clean oil galleys in block a	nd crankshaft.
	Clean piston ring grooves.	
	Wash engine block and int	ernal parts.
	Check engine block for cra	cks
	Demonstrate how to properly re-asblock.	ssemble engine block internal components in engine
	Crankshaft bearing cap tor	que spec:
	Connecting rod cap torque	spec:
	Install oil galley and freeze	plugs
	Install new camshaft bearing	ngs
	Install crankshaft bearings	check for proper clearances, and install bearing caps
	(and possibly front	and/or rear main seals)
	Check piston ring gap	

Install piston rings on pistons

Install pistons and connecting rods in bore (remember to protect those rod bolts!)

Install connecting rod bearings, check for proper clearances, and install rod caps

Install camshaft

Install timing chain components (pay attention to timing marks!)

3. Demonstrate how to check/measure engine block internal components for proper re-assembly.

Measure crankshaft endplay

Measure connecting rod spacing

Turn crankshaft (does it bind, does it turn smooth, does it make any noises, etc.)