

Motorcycle Required Materials and Tools

Required Uniform



Head	Safety glasses/goggles
Top	Advanced Transportation and Manufacturing shop shirt quantity: 3-5
Bottom	black pants
Footwear	closed toe, closed heel, slip resistant, and oil resistant shoes/boots

Required Textbooks

ISBN: 978-1566374798	Motorcycles: Fundamentals, Service, Repair (1999)
ISBN: 978-0133994612	Automotive Technology, Principles, Diagnosis & Service, 5th edition (2015)

Recommended

Laptop or tablet

Specialty Tools | Required Courses

MCYCMEK 210 | Motorcycle Fuel Induction and Pollution Control

TOOL	TOOL DETAIL
☐ Adjustable wrench (crescent wrench)	14" or larger flat feeler gauges (.002" on minimum size)
☐ Air gun	
☐ Ball peen hammer	
☐ Combination wrenches (open end)	Sizes: 8-15 mm, 17 mm, & 19 mm 12 pt. box
☐ Diagonal cutters	
☐ Extensions	3/8" drive Sizes: 3" & 6"
☐ Flashlight	
☐ Golf tees	
☐ Hand impact driver with bits (3/8 drive preferable)	
☐ Hex keys (Allen wrenches)	Sizes: 2- 8mm, 10mm, & 12mm
☐ Locking pliers (vise grips)	
☐ Needle nose pliers	
☐ Plastic freezer bags	
☐ Ratchet	3/8" drive
☐ Screwdrivers	Sizes: various flat blade
☐ Screwdrivers	Sizes: Phillip's # 1, #2 (various lengths), & #3
☐ Sockets set	3/8" drive Sizes: 8-15mm, 17mm, & 19mm 6 point
☐ Spark plug gauges	
☐ Spark plug sockets	3/8" drive Sizes: 13/16" & 18 mm
☐ Tire inflator	
☐ Tire pressure gauge	
☐ Tongue and groove pliers (Channel-Locks)	Size: 12"
☐ Tool Box, Lockable	

MCYCMEK 212 | Motorcycle Tune-up and Chassis Maintenance

TOOL	TOOL DETAIL
☐ Air impact wrench with metric sockets	
☐ Auxiliary fuel tank	
☐ Chain breaker/riveter set	
☐ Dead blow hammer	
☐ Die grinder	
☐ Motorcycle vacuum gauges	
☐ Punches, chisels	
☐ Socket mounted Allen wrenches	
☐ Soft drifts	brass and aluminum
☐ Torque wrench	
☐ X-ACTO knife	

MCYCMEK 214 | Motorcycle Electrical Principles and Repair

TOOL	TOOL DETAIL
☐ Analog multimeter	
☐ Deep sockets	3/8" drive Sizes: 8-15mm, 17mm, & 19mm 6 point
☐ Digital multimeter	
☐ Inductive tachometer	
☐ Inductive timing light	
☐ Nitrite gloves	
☐ Soldering gun	
☐ Soldering wire	60/40 rosin core for electrical
☐ Test leads	
☐ Thread repair kit (Time-Sert style)	Size: 6 X 1.0mm
☐ Wrist pin extractor	

MCYCMEK 216 | Motorcycle Engine Overhaul and Diagnosis

TOOL	TOOL DETAIL
☐ Calipers	
☐ Micrometers	
☐ Oversize/undersize sockets	Sizes: up to 36mm
☐ Oversize/undersize wrenches	Sizes: up to 36mm
☐ Specialty rotor pullers	
☐ Tools specific to certain models	

Specialty Tools | Major Elective Courses

AUTORTK 122 | Electrical/Electronic Systems Theory, Inspection & Repair

TOOL	TOOL DETAIL
☐ 12 volt test light	
☐ 16 gauge Jumper wires with alligator clips	quantity: 8 Min. length: 3 Feet
☐ Wire crimpers/wire stripper	MAC tool #TCT 2000 or equivalent
☐ Check Major Elective General List PART 1 for additional tools	See column 122

AUTORTK 123 | Fuel & Emissions Systems Theory, Inspection & Repair

TOOL	TOOL DETAIL
☐ Check Major Elective General List PART 1 for additional tools	See column 123

AUTORTK 135 | Computer Control and Fuel Injection Heating and Air

TOOL	TOOL DETAIL
☐ Back Probe Pins	quantity: 4
☐ PCM scanner	
☐ Check Major Elective General List PART 1 for additional tools	See column 135

Major Elective General Tools

PART 1 | Tools used in multiple courses

TOOL	TOOL DETAIL	course numbers		
		122	123	135
☐ Cylinder leak down tester / cylinder compression tester			X	
☐ Digital Volt - Ohm - Meter (DVOM)		X	X	X
☐ Flashlight	Telescoping gauge			X
☐ Hand vacuum pump kit with gauge	MityVac #4000		X	
☐ Heavy-duty remote starter switch	MAC# SS25 or equivalent	X	X	

PART 2 | Tools used in all Major Elective Courses

TOOL	TOOL DETAIL
☐ Adjustable pliers	Size: 9" (<i>Channel-Lock™</i>)
☐ Adjustable wrench	Size: 10"
☐ Ball peen hammer	Size: 24 ounce
☐ Bar, rolling head	Size: 18"
☐ Caliper (dial/digital optional)	Size: 6"
☐ Center punch	Size: 1/2" X 4 1/2"
☐ Cold chisel	Size: 5/8" cut
☐ Combination wrench set	Sizes: 1/4" to 1"
☐ Combination wrench set	Sizes: 6 mm to 19 mm
☐ Common pliers	Size: 6"
☐ Diagonal cutting pliers	Size: 7"
☐ Feeler gauge set	Sizes: .0015" to .035" (MAC # FG002 or equivalent)
☐ Feeler gauge set	Sizes: .038mm to .889mm (MAC # FG002 or equivalent)
☐ File handles (2 each)	
☐ Gasket scraper	
☐ Hacksaw	
☐ Hacksaw blades	Sizes: 18 tooth & 32 tooth
☐ Metric socket set	1/4" drive Sizes: 5 mm to 14 mm (6 point)
☐ Metric socket set	3/8" drive Sizes: 6 mm to 19 mm (6 point)
☐ Metric socket set	1/2" drive Sizes: 10 mm to 27 mm (6 point)
☐ Mill file	Size: 11 1/2"
☐ Needle nose pliers	Size: 6"
☐ Nylon parts cleaning brush	
☐ Pin punch set	
☐ Screwdriver	Size: 4" flat blade
☐ Screwdriver	Size: 6" flat blade
☐ Screwdriver	Size: 8" flat blade
☐ Screwdriver	Size: 12" flat blade
☐ Screwdriver	Size: 4" Phillips #1
☐ Screwdriver	Size: 4" Phillips #2
☐ Socket adapter	Sizes: 3/8" drive to 1/2" drive
☐ Socket adapter	Sizes: 1/2" drive to 3/8" drive
☐ Socket adapter	Sizes: 1/4" drive to 3/8" drive
☐ Soft face hammer	Size: 24 ounce
☐ Spark plug gap gauge, wire type	
☐ Spark plug sockets	3/8" drive Sizes: 5/8" & 13/16"
☐ Steel rule	Size: 6" with cross bar (combination inches & metric)
☐ Toolbox or rollaway cart w/secure lock	
☐ Trigger type oil can	
☐ Vise Grip™ pliers set	