

Tools needed in Fitting & Machining Workshop

- Tool bits (3/8, 1/2) high speed steel
- Tool bit holders to suit American type tool post
- Grinding wheel dresser
- Thread gauge (imperial and metric)
- Taper shank drill (1/2 to 2 inches)
- Taper shank drill sleeves
- Cutter grinder
- Sanding disc (#24 to #150)
- Milling machine arbors (machine type : Ex-Cell -0) vertical mill
- End mill cutters
- Vertical milling machine cutters e.g. Side and face cutter
- Micrometer Sets
- Drill chuck with milling machine arbor (machine type : Ex-Cell -0) vertical mill
- Oxy- Acetylene gauges.

Tools needed in Agri.-Auto Mechanic Workshops

- Portable Drilling Machine - To Seat Valves Etc.
- Engine Compression Tester
- Air Chuck
- Battery Charger
- Dial Test Indicator
- Hydraulic Lift (3 Tons)
- Digital Multi-meter
- Battery Load Tester 12v
- Distiller -
- Piston Ring Expander
- Piston Ring Compressor
- Spring Clamps
- Grease Gun
- Inside Micrometer Metric
- Outside Micrometer Metric
- Valve Suction Tool
- Cooling System Pressure Test Kit
- Oil Pressure Tester
- Flaring Tool Kit
- Hex (Allen Keys) Set
- One Complete Tool Kit (For Medium – Heavy Duty)
- Feeler Gauge
- Hydraulic Test Kit
- On Board Diagnostic Tool - 2
- Valve Spring Compressor

Tools needed in Basic Year Workshop

Arc Welding Holders
Arc Welding Clamps
Arc Welding Shield (with various number lenses)
Chipping Hammer
Welding Torches
Welding Tips (various numbers)
Cutting torch
Welding Goggles (various lenses)
Lighters
Tip Cleaners
Combination Gas Welding Spanner
Welding Gloves
Different types of Tongs for Forging
Gas Welding Regulators
Needle Files
Rivet Set and Snap -1/8", 3/16", 1/4"
Electric Pen/Engraver-with spares tips
1/4" Square and Round Files
3/8"HSS Tool Bits
4" Drill Vice
0.5mm-12mm HSS Drill Set
1/2" Capacity Drill Chuck and Key
Pistol grip Drill 1/4" Capacity
Hand Shears (Straight and Curved)
Hand Leaver Punch Set
Hollow Punches
Wooden Mallets
Pop Rivet gun-Heavy Duty
Pop Rivets-various sizes
Steel Rules
Hand Grovers - 1/4", 5/16", 3/8"
Sheet metal electric shears
SWG Gauges
Odd Leg Caliper
Trammel Points
Hacksaw blades
Metric Tap and Die Set
Ring/Hold Cutters for metal
Bevel Gauge Protractor
Scribing Block
Digital Vernier Caliper
Letter Punch -A-Z
Number Punch -0-9
Radius Gauge Sets -various sizes

Combination Squares
 Centre Squares
 Drill Set-1/32"-1/2" HSS
 Hand Drilling Machine
 Scribers
 1/2" BSW Taps and Dies
 3/8" BSW Taps and Dies
 5/16" BSW Taps and Dies
 1/4" BSW Taps and Dies
 Electrical Hand Power Circle Saw
 Engineers Blue
 Disc Cutting Machine
 Diamond Tip Wheel Dresser-Grinding Wheels

Sports Equipment Needed

Basketballs
 Basketball Back Board
 Basketball Hoops and Nets
 Table Tennis Racquets
 Table Tennis Balls
 Volleyballs
 Dominoes
 Concrete Cricket Balls
 Badminton Racquets
 Badminton Shuttles
 Lawn Tennis Net
 Lawn Tennis Balls
 Lawn Tennis Racquets
 Darts Sets
 Footballs (Soccer)
 Badminton Net
 Chess Sets

Textbooks Required - Set of Twenty (20) + Instructor Copy

Agri. Mechanic/Auto Electrical Section		
Qty	Book Title	Author
21	Fundamentals of Motor Vehicle Technology	V.A.W. Miller
21	Fundamentals of Service (FOS) Engines	
21	Fundamentals of Service (FOS) Power Trains	
21	Fundamentals of Service (FOS) Electrical Systems	
21	Fundamentals of Service (FOS) Air Conditioning	

21	Fundamentals of Service (FOS) Hydraulics	
21	Haynes Automotive Electrical Manual	John H. Haynes & Others
21	Motor Vehicle Calculation & Science Technician	Zamit
21	Motor Vehicle Calculation & Science Book 1	Chapman & Arnold
21	Motor Vehicle Calculation & Science Book 2	Chapman & Arnold
21	Electrical Installation Calculations Vol. 1	A.J. Watkins & R.K. Parton
21	Motor Vehicle Technology Part I & II (combine)	J. A. Dolan
21	Automobile Electrical & Electronic Equipment	Young, Griffiths & Fardon

Basic Year & Fitting and Machining Section

Qty	Book Title	Author
21	Mechanical Engineering Craft Studies Part 1, 2 & 3	A. Greer, H. Howell
21	Workshop Technology Part 1, 2 & 3	W.A.J. Chaptman
21	Workshop Technology Part 1, 2, 3 & 4	R.T. Pritchard
21	Technology of Machine tools	Steve F. Krar, J William Oswald
21	Machine Tool Practices	Richard R. Kibbe, John E. Neely, Roland O. Meyer, Warren T. White
21	Interpreting Engineering Drawings	Cecil Jensen, Raymond Hines
21	Basic Technical Drawing	Henry Cecil Spencer, John Thomas Dygdon
21	Engineering Drawing	Frank Zozzorra
21	Engineering Drawing and Design	Cecil Jensen, Jay D Hesel
21	Machine Shop Training	S. K. Krar, J.E. St.Aamand
21	Workshop Processes, Practices & Materials	Bruce J. Black
21	Mathematics for Machine Technology	Robert D. Smith
21	Engineering Science	E. Hughes & C. Hughes
21	Science for Mechanical	G.L. Houpt
21	Engineering Technician	
21	Certificate Mathematics	A. Greer and C.E. Layne.
21	A Comprehensive English Course CXC English A	Roy Nareshsingh, Uriel Nareshsingh
21	Outline of English Grammar	J.C. Nesfield
21	Engineering Maths	J.O. Bird
21	Mathematics - A complete Course With CXC questions Volume 1 & 2	Raymond Tulsie

Instrument Section

Qty	Book Title	Author
21	Guide to Supervisory Control and Data Acquisition (SCADA) and Industrial Control System Security	

21	Basic Instrumentation Measuring Devices and Basic PID Controls.	
21	Transactions- In Measurement and Control	
21	Volume 1 Non-Contact Temperature Measurement	
21	Volume 2 Data Acquisition	
21	Volume 3 Force Related Measurement	
21	Volume 4 Flow and Level Measurement	
21	Control Valve Hand Book- 3rd Edition	
21	Electronic for Electrician	
21	Introduction to Programmable Logic Controllers	

Electrical Section

Qty	Book Title	Author
21	Electrical Installation Calculation Vol. 1, 2 & 3	Watkin
21	Electrical Installation Works	T.G Francis
21	Electrical Engineering Science	Bolton
21	Electrical Theory and Regulations	Lewis
21	Electrical I.E.E Regulation Outline	Withfield
21	Electrical Installation Technology	Thompson
21	Wiring of Electric Motor	Rosenburg
21	Electrical Installation Practices Vol. 1, 2 & 3	H.A. Miller
21	Electrical Installation Work Vol. 1 & 2	Scaddan
21	Mathematics for Technicians	A. Geer
21	Engineering Science	Huges
21	NEC 2008 Code Book	
21	NEC 2008 Hand Book	
21	Engineering Mathematics	A. Geer
21	Electrical Engineering Work Questions and Answers	Lewis
21	Huges Electrical Technology	Huges

Technical Drawing Section

Qty	Book Title	Author
26	Introduction to Technical Drawing	Normal Stirling
26	Foundation of Technical Drawing -Metric and Third Angle Edition	A.C. Parkinson