

ENGINEERING AND RELATED DESIGN WORKSHOP MATERIAL 2024

ITEM NO	DESCRIPTION	QUANTITIES	DESCRIPTION/SPECIFICATIONS
1	POWER BAR OR T-BAR	5	Gedore Power Bar 450mm 1/2dr 1997
2	RATCHET	5	Grip 1/2 Inch Ratchet (250mm)
3	SOCKET SET	5	Mastercraft 1/2" Drive Socket Set (24 Piece)
4	EXTENSIONS BAR	5	Grip 1/2 Inch Extension Bar (250mm)
5	UNIVERSAL COUPLING/JOINT	5	FIXMAN UNIVERSAL JOINT 1/2 DRV
6	SPARK PLUG SOCKET (16&21)	5	SPARK PLUG SOCKET (16&21)
7	UNIVERSAL JOINT	5	Grip 3/4 Inch Universal Socket Joint
8	REDUCERS: (MALE TO FEMALE) 3/8" TO 1/4" & 1/2" TO 3/8"	5	GAV Male to Female Reducer (1/2 - 3/8 Inch)
9	SIDE CUTTERS	5	Fragram TOOP1406A Side Cutter (200mm)
10	COMBINATION PLIERS	5	Grip pliers combination 200mm
11	LONG NOSE PLIERS	5	Mastercraft GS5071510 Long Nose Pliers (200mm)
12	WATER PUMP PLIERS	5	Fixman FIX A1202 Water Pump Pliers (250mm)
13	CIR-CLIP PLIERS (SET OF 4: 2* STRAIGHT; 2* BENT; 2* INTERNAL; 2* EXTERNAL)	5	Fixman FIX A0205 Professional Bent Long Nose Pliers (200mm)
14	PLIERS CIR-CLIP FLAT NOSE EXTERNAL (FOR HORSESHOE CIR-CLIP)	5	Mastercraft GS5071511 Flat Mini Pliers (115mm)
15	VICE-GRIP	5	Grip 250mm Straight Jaw Vice Grip
16	SCREW DRIVER SET: FLAT AND PHILLIPS	5	S/DRIVER SET 6PCE SOFT GRIP 1000V INSUL
17	COMBINATION SPANNERS/WRENCH SET	5	Yato YT-0365 25 Piece Combination Spanner Set
18	CROWFOOT WRENCHES FOR DIESEL PIPES	5	Grip pipe wrench 450mm
19	ALLEN KEY WRENCH SET	5	Tork Craft NT2507 30 Piece Metric and Imperial Allen Key Set
20	TORQUE WRENCH/SCREW DRIVERS SET OR SOCKETS MALE	5	Grip GML149 149 Piece Socket Wrench Set
21	TORQUE WRENCH/SCREW DRIVERS SET OR SOCKETS FEMALE	5	Grip GMS030 30 Piece Socket Wrench Set (1/4 Inch)
22	MULTI-SPLINE WRENCH/SCREW DRIVERS SET OR SOCKET MALE	5	Grip Socket Wrench Set - (46 Piece)
23	MULTI-SPLINE WRENCH/SCREW DRIVERS SET OR SOCKET FEMALE	5	Gedore D19TMZ Socket Set
24	LEAD LIGHT	5	Universal Electric Work Light - Red (60W)
25	EXTENSIONS LEAD	5	Proton Extension Reel (30m)
26	PRY BARS	5	Grip Wrecking Bar - Orange (600 x 19mm)
27	CALIPER FOR BRAKE DRUMS OR LARGE VERNIER CALIPER	5	ACCUD AC111-012-12 Digital Caliper (300mm)
28	VENIER CALIPER (INCLUDING DEPTH GAUGE) 150mm OR 300mm	5	Accud AC171-006-11 Digital Depth Caliper - Blue (150mm)
29	STEEL RULER	5	Grip GR6203 Stainless Steel Ruler (600mm)
30	TAPE MEASURE	5	
31	INSIDE-MICROMETER SET	5	MAC AFRIC 5 - 100 MM Inside Micrometre Set
32	OUTSIDE MICROMETER SET	5	Tork Craft 50-75mm Digital Micrometer

34	TELESCOPIC GAUGE	5	MAC AFRIC 6 PCS Telescopic Gauge Set
35	SMALL-HOLE GAUGE SET(MEASURE VALVE GUIDES INTERNAL BORE)	5	RS PRO Gauge Set, Steel, 4 piece
36	BORE GAUGE	5	MAC AFRIC Professional Dial Bore Gauge Set (50 - 160MM)
37	DIAL GAUGE WITH MAGNETIC STAND	5	MAC AFRIC Magnetic Base for Dial Indicator (Steel Arm) BASE ONLY
38	FEELER GAUGE	5	Accud 100 mm 20-Leaf Feeler Gauge 0.02 - 1 mm
39	TYER TREAD GAUGE	5	Mac Afric Digital Tyre Tread Gauge
40	TYER PRESSURE GAUGE	5	MAC AFRIC Digital Tyre Pressure Gauge
41	MULTIMETER	5	Compact Digital Multimeter
42	HIGH-CURRENT AMP-CLAMP METER DC	5	
43	THERMOMETER	5	MAC AFRIC Infrared Thermometer (50-1300 C)
44	METERING CONTAINER	5	MAC AFRIC 10L Plastic Petrol Jerry Can
45	OIL PRESSURE TESTER	5	MAC AFRIC 12 piece Oil Pressure Tester Kit
46	FUEL PRESSURE GAUGE TESTER	5	MAC AFRIC Fuel Injection Pump Pressure Tester Gauge Kit
47	VALVE SPRING LOAD TESTER	5	MAC AFRIC Universal Valve Spring Compressor Kit
48	HAMMER SOFT FACE	5	Rubber Dead Blow Hammer
49	PUNCH SET	5	Fixman 10 Piece Nail and Centre Punch Set - Black/Orange
50	OIL FILTER WRENCH (LEATHER STRIP/THREE LEG OR CHAIN TYPE)	5	MAC AFRIC Steel Tape with Chain Filter Wrench (2.5" - 4.5")
51	OIL DRAINING EQUIPMENT	5	MAC AFRIC 18 Gallon Oil Drain Tank With Dolly Paper Carton
52	RING REMOVER/EXPANDER (CORRECT SIZE FOR PISTONS USED)	4	MAC AFRIC Piston Ring Pliers (110 - 160 MM)
53	PISTON RING COMPRESSOR 165 - 175 mm, 57 - 125 mm	5	MAC AFRIC Piston Ring Compressor Plier Set
54	STRAIGHT EDGE	5	MAC AFRIC 2000 MM Aluminium Straight Edge Darby
55	VALVE LIFTER (CORRECT SIZE FOR CYLINDER HEADS USED)	5	MAC AFRIC Overhead Valve Spring Compressor
56	V-BLOCKS FOR CRANKSHAFTS (TWO PER SHAFT)	4	MAC AFRIC Precision Micro 90 Degree V-Block & Clamp Set (65 MM)
57	ENGINE COMPRESSION TESTER GAUGE (PETROL WITH NECESSARY FITTINGS)	5	MAC AFRIC Petrol Compression Tester Kit
58	ENGINE COMPRESSION TESTER GAUGE (DIESEL WITH NECESSARY FITTINGS)	5	MAC AFRIC Diesel Engine Compression Test Kit
59	TORQUE ANGLE GAUGE DRIVE	5	MAC AFRIC 1/2" IN Drive Torque Angle Gauge

60	VALVE SPRING TENSION TESTER	5	MAC AFRIC C-Clamp Valve Spring Compressor Set
61	VACUUM GAUGE AND PUMP	5	MAC AFRIC Hand Held Brake Bleeder Vacuum Pump
62	AIR-CON LEAK TESTER EQUIPMENT (SNIFFER OR ULTRA-VIOLET LIGHT)	5	Lasting Manifold Gauge Set Refrigeration
63	COIL SPRING COMPRESSOR	5	MAC AFRIC Coil Spring Compressor Kit
64	COOLING SYSTEM PRESSURE TESTER INCLUDING CAP TESTER	5	MAC AFRIC 33pce Radiator Pressure Cap Leak Test Kit
65	REFRACTOR METER (COOLANT SG METER)	5	REFRACTOR METER (COOLANT SG METER)
66	DIFFERENTIAL SIDE BEARING ADJUSTER SPANNER	3	DIFFERENTIAL SIDE BEARING ADJUSTER SPANNER
67	PINION FLANGE HOLDER FPR DIFFERENTIAL	3	PINION FLANGE HOLDER FPR DIFFERENTIAL
68	DIESEL PUMP TIMING DIAL TESTER (ROTARY PUMPS)	3	DIESEL PUMP TIMING DIAL TESTER (ROTARY PUMPS)
69	WHEEL BALANCING MACHINE	3	MAC AFRIC CB-800A Wheel Balancer
70	DIAGNOSTIC TOOL (FAULT CODE READER	2	GT-X96 Auto Tracking Intelligent 3D Wheel Alignment
71	BATTER LOAD TESTER	5	DIAGNOSTIC TOOL (FAULT CODE READER)
72	BATTER CHARGER (UP TO 40A)	2	WHEEL ALIGNMENT (BRAKE LOCK, STEERING LOCK, TURNABLES PAIR)
73	AIR COMPRESSOR WITH AIR SUPPLY LINE IN WORKPLACE	3	OSCILLOSCOPE (CAN BE PART OF THE DIAGNOSTIC TOOL)
74	VEHICLE JACK 3TON	5	AIR CONDITIONING RE-GASSING MACHINE
75	PETROL VEHICLE RUNNING	2	MAC AFRIC 12V CCA Digital Automotive / Car Battery Tester
76	RUNNING PETROL ENGINE EFI ON A STAND FOR FAULT FINDING	2	RUNNING TURBO DIESEL ENGINE COMMON RAIL MULTIJET 16 V DIRECT INJECTION - ON A STAND
77	RUNNING DIESEL ENGINE CRD ON A STAND -FOR FAULT FIND PURPOSE	1	RUNNING DIESEL ENGINE COMMON RAIL MULTIJET 16 V INDIRECT INJECTION - MOUNT ON STAND
78	RUNNING DIESEL ENGINE ROTARY PUMP(VEHICLE OR ON A STAND)	1	RUNNING PETROL ENGINE - CARBURATOR - MOUNTED ON A TRESTLE WITH SAFETY PROTECTIONS
79	COMPLETE ENGINE FOR STRIPPING AND VALVE TIMING(NOT NECESSARILY RUNNING)	2	RUNNING PETROL ENGINE (MULTI POINT INJECTION - 4 STROKE, 4 CYLINDERS)
80	FRONT WHEEL DRIVE GEARBOX	3	FRONT WHEEL DRIVE GEARBOX
81	REAR WHEEL DRIVE GEARBOX	3	REAR WHEEL DRIVE GEARBOX
82	REAR WHEEL DRIVE FINAL DRIVE(ADJUSTABLE)	4	REAR WHEEL DRIVE FINAL DRIVE(ADJUSTABLE)
83	MACPHERSON STRUT WITH SPRING	3	Macpherson Ride Control Complete Suspension Strut and Coil Spring Assembly MP3335797R
84	WIRING BOARD	4	Prototype Paper Copper PCB Universal Experiment Matrix Circuit Board

85	FUNCTIONING AIR-CON SYSTEM(CAN BE PART OF THE VEHICLE OR STANDALONE)	4	FUNCTIONING AIR-CON SYSTEM(CAN BE PART OF THE VEHICLE OR STANDALONE)
86	SOLVENT (TESTING OF CYLINDER HEAD VALVE LEAKING)	4	ARAN 375 ML Combustion Leak Detection Fluid
87	PLASTIC GAUGE	4	MAC AFRIC Welding Apron
88	SAFETY SIGNAGE	4	GAUNTLETS FOR WELDING
89	LEATHER APRON FOR WELDING	4	
90	GAUNTLETS FOR WELDING	4	
91	RUBBER APRON FOR WORKING WITH ACID	4	Thick Rubber Apron, 47.2 Inch x 33.5 Inch Waterproof Apron, Long Chemical Resistant Apron, Adjustable Work Aprons for DishWashing, Cleaning Fish, Gard
92	RUBBER GLOVES FOR WORKING WITH ACID	5	MAC AFRIC Mini Sandblaster Gloves (for GCABSB000)
93	SAFETY GLASSES	4	
94	FLOOR MAT COVERS	4	
95	WORK BENCHES WITH 150mm VICE (WITH PROTECTED SOFT JAWS)	3	College Design
96	STRIPPING TRAYS FOR SMALLSPARES	4	
97	LOCK UP STORE FOR ALL SPECIAL TOOLS	3	College Design
98	INSTALLATION OF EQUIPMENT INTO 15 WORK BAYS		College Design