



## Tooling and Resource List

### Workshop equipment

#### General

- Waste disposal and recycling facilities
- Exhaust extraction equipment
- Machinery lifts – suitable lifting & jacking equipment suitable for the range of tasks to include trolley & bottle jacks, axle stands, engine & wheel cranes, lifting slings & chains, blocks
- Separate working stations with work bench and access to writing areas, surface/ benches with fixed vice
- Hydraulic press
- Mechanical measuring equipment to i.e. vernier, micrometre, feeler gauges, DTI, pressure gauges; pneumatic and hydraulic (flow and pressure), measuring jugs & funnels
- Electrical measuring equipment i.e. volt meter, ohm meter, ammeter
- General servicing tools to include antifreeze testers
- Torque wrench (s)
- Inspection lamp
- Hand tools to include a range of suitable; spanners, sockets/ ratchets, hammers, screwdrivers, soldering equipment etc. for the range of plant and machinery
- Pry bars
- Basic engineering tools to support cutting, filing, joining and drilling activities, thread repair equipment
- Cleaning materials; cleaning cloths, tissues, sweeping brushes, shovel, spillage materials, waste bin suitable for the range of tasks
- Workshop sundries, a range of; insulation tape, sealants, electrical wire & connectors, split pins, nuts, bolts & washers
- Fluids, lubricants and drainage equipment for; engine, driveline and hydraulic systems
- PPE equipment; safety glasses, gloves, hard hats, respiratory masks, hand washing facilities

#### Specialised

- Diagnostic equipment capable of reading fault codes and providing live data and code resetting ability
- Oscilloscope (if not within scan/ diagnostic tool capabilities)
- Engine cylinder leakage tools
- Engine cooling system pressure tester
- Pressure testers for; mechanical equipment, fuel & hydraulic fluids
- Manufacturer's specialist tools for engine, chassis, and transmission, hydraulic and electrical diagnostic and repairs (if required)
- Battery tester & charger
- Parts washer
- Workshop cleaning materials as required per task
- Spare parts and price catalogues
- Use of IT system to calculate invoices and access technical information



### Technical data required for all machinery, equipment and testing rigs within the workspace

- Manuals or technical data to cover all tolerances, adjustments, repair time and manufacturer's specifications
- Wiring diagrams
- Hydraulic system schematic diagrams
- Service / inspection schedules

### Machinery, equipment and testing rigs

- A range of machinery with hydraulic braking systems
- A range of machinery with serviceable hydraulic systems for maintenance, testing and diagnostic purposes
- A range of machinery or rigs with modern engine management systems which must include:
  - Multi point injection
  - Common rail diesel
  - Emission reduction catalyst systems
  - Exhaust gas recirculation systems
  - Diagnostic plug in
- A range of machinery or rigs with electrical systems which must include:
  - Manual or automatic wiper systems
  - Electrically controlled systems
  - Safety Restraint Systems
  - Lighting systems
  - Starting systems
  - Charging systems
  - Comfort and convenience systems
  - Diagnostic plug in

### Other requirements

- Have sufficient workspace, workshop and candidate facilities which are clean, tidy and well maintained
- Have private and quiet breakout areas
- Maintain a full set of tools and resources as defined above
- Facilities to conduct online assessments in-line with IMI Operating Manual  
<http://awarding.theimi.org.uk/Centres/Operating-Manuals>



For Office Use Only		
Version and date	Change detail	Section/page
Issue 1 01.07.2018		
File route J:abdev/masterdocs Owner: Product Department		