







## DEPARTMENT OF MECHANICAL ENGINEERING

### CENTRE FOR BOSCH AUTOMOTIVE RESEARCH

## STANDARD OPERATING PROCEDURE

Name of the Lab./facility	BOSCH ROBINAIR A/C MACHINE
Purpose	To provide training for students about the
	automobile Vehicle Air Conditioning System And
	Function.
Scope	To find A/C recovery, Evacuation and Recycling Machine
Responsibility	Faculty i/c of the facility, HOD/MECH

- Diagnostic a A/C recovery, Evacuation and Recycling Machine.
- Super automatic unit with two Electronic Refrigerant Scales for recovery, Evacuation and Recycling Machine
- Fully Automatic System
- An LCD display shows what you have done so far and what needs to be done.
- Discharge of exhaust oil
- Introduction of pure oil in the A/C system
- Control of the operating pressure of the A/C system

### PRECAUTIONS TO BE FOLLOWED

- Wear the gloves and handle the tool safely.
- Place the components properly
- Do not wear watches (or) bracelets while working in the equipment.
- Do not remove safety guards or parts of any equipment.

## RECORD TO BE MAINTAINED

- Laboratory Manual containing the experiments that can be performed with the equipment
- Maintenance Record

HOD/MECH









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# STANDARD OPERATING PROCEDURE

Name of the Lab./facility	AUTO ELECTRICAL TEST BENCH
	To provide training for students about the automobile
Purpose	Auto Electrical System (Starter, Alternator, And Battery).
Scope	To find out Working of starter, Working of starter and battery
Responsibility	Faculty i/c of the facility, HOD/MECH

- Working of starter motor and individual component testing.
- Working of starter and individual component testing
- Testing vehicle the battery charging and testing
- Place the each dismantled parts on the tray
- Clean the parts by diesel.
- Check the condition of the parts.
- Replace the worn out parts.
- Assemble the parts as instructed in manual.

### PRECAUTIONS TO BE FOLLOWED

- Do not conduct an experiment without the complete knowledge of its operating procedure.
- Wear tight fitting clothes and thick leather shoes.
- In case of any injury, use the FIRST AID KIT.
- Report any fault (or) damage in the equipment to inform the lab in charge.
- Do not remove safety guards or parts of any equipment.

### RECORD TO BE MAINTAINED

- Laboratory Manual containing the experiments that can be performed with the equipment
- Maintenance Record

HOD/MECH









## DEPARTMENT OF MECHANICAL ENGINEERING

### CENTRE FOR BOSCH AUTOMOTIVE RESEARCH

STANDARD OPERATING PROCEDURE

Name of the Lab./facility	BOSCH SCANNER KTS 590
Purpose	To provide training for students about the automobile Vehicle Diagnostics Basics And System Diagnostics.
Scope	To find out vehicle connection and diagnosing on vehicle
Responsibility	Faculty i/c of the facility, HOD/MECH

- vehicle connection and diagnosing on vehicle with our diagnostic tester
- Introduction Bosch in engine management system.
- Introduction To ECU
- Sensors & Actuator
- Practical training on sensor testing.
- Check the condition of the parts.
- Replace the worn out parts.
- Assemble the parts as instructed in manual.

## PRECAUTIONS TO BE FOLLOWED

- Wear the gloves and handle the tool safely.
- Check the connection properly.
- Place the components properly
- In case of any injury, use the FIRST AID KIT.

## RECORD TO BE MAINTAINED

- Laboratory Manual containing the experiments that can be performed with the equipment
- Maintenance Record

HOD/MECH