

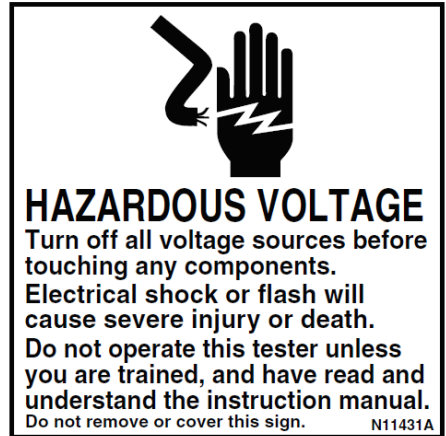


# DARRAH ELECTRIC COMPANY

## DST5000 SEMICONDUCTOR TESTER - QUICK START GUIDE

### HIGH VOLTAGE (PRV/PFV) TEST

1. With the tester in the OFF position insert the High Voltage test cables into the appropriate socket on the tester.
2. Insert the power cord into the tester. Turn the tester ON. The green power light should illuminate.
3. Determine the Voltage rating of the Semiconductor you are about to test. If it is 2.5kV or less, select the 2.5kV setting on the voltage selector switch. If it is between 2.5kV & 5kV select the 5kV option.
4. Determine what Leakage Current rating of the Semiconductor you are about to test is rated at. If it is 10 mA or less, select the 10 mA setting on the current Selector switch. If it is between 10 mA & 100 mA select the 100 mA option.
5. Select the "High Voltage Test" option.
6. Select REV (VRRM) or FWD (VDRM) in the High Voltage Testing portion of the front panel.
7. Connect the Anode (BLACK) and Cathode (RED) leads to the semiconductor being tested. See the instruction manual for details.
8. Turn the tester ON. The Green Power light should illuminate.
9. The Green Test Ready light should be illuminated.
10. Note: The Voltage control dial must be turned all the way counterclockwise, or the test cannot begin. Press and Hold the "Push To Test" button in the High Voltage test section. The yellow Active light will illuminate.
11. Slowly turn the Voltage control dial clockwise until the rated voltage of the device is reached. Under no circumstances must the rated voltage of the device be exceeded.
12. Note the leakage current at rated voltage.
13. Return the Voltage Control Dial to Zero.
14. Turn off the power prior to removing the leads.





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## GATE TEST

1. With the tester in the OFF position insert the Gate Test cables into the appropriate socket on the tester.
2. Insert the power cord into the tester. Turn the tester ON. The green power light should illuminate.
3. Determine the Gate Voltage rating of the Semiconductor you are about to test. The min/max turn-on characteristics can be found on the device manufacturer's datasheet in the Gate Trigger section.
4. Select the "Gate Test" option.
5. Connect the Anode (BLACK), Cathode (RED) & Gate (WHITE) leads to the semiconductor being tested. See the instruction manual for details.
6. Turn the tester ON. The Green Power light should illuminate.
7. Press and Hold the "Push To Test" button in the Gate test section. The green Active light will illuminate.
8. Slowly turn the Voltage control dial clockwise until the Blue Gate Trigger Light illuminates. Under no circumstances must the rated current of the device be exceeded. Note the Gate Voltage ( $V_{gt}$ ) & Gate Current ( $I_{gt}$ ) just prior to the light illuminating.
9. Return the Voltage Control Dial to Zero.
10. Turn off the power prior to removing the leads.