

# 2012 Technical Service School DCA Generator - Level 1 Training

Multiquip's DCA Generator-Level 1 Service School focuses on the rental industry's most popular construction grade generators. The classes are available to both MQ dealers and end users looking to increase their knowledge on MQ Power DCA model generators. With technical training that includes electrical fundamentals, electrical safety, generator theory, schematic interpretation, components identification, generator troubleshooting and engine fault code reading, you're guaranteed to increase your product and technical knowledge on the most reliable generators in the industry. (See page 2 for course description).

MQ's DCA Generator-Level 1 Service School will prove beneficial for both the entry level and the experienced technician in the industry. An interest and investment into your technician's continued training is an investment into your business that will result in less equipment down time.

<u>Service School Dates and Locations</u>		
Location	Dates	Class
Carson, CA	Jan 31-Feb 1, 2012	DCA generator - Level 1
Lewisville, TX	Feb 21-22, 2012	DCA generator - Level 1

DCA Generator - level 1 training class is a 2 day class.

Day 1: 8:00am – 4:30pm.

Day 2: 8:00am – 3:00pm.

*Attendance is limited to 12 students per class. Sign up to reserve your spot today!*

Please fax this page to Heather Ward @ 310-632-6197 For more information, call 800-421-1244

Customer & Contact at store: \_\_\_\_\_

Attendee Name: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_ # of hotel nights requesting: \_\_\_\_\_

Phone/Fax: \_\_\_\_\_ Driving  Flying\*

*\* If flying, please fax us your flight itinerary ASAP. Student should arrange flights to arrive the day before the class begins. Return flights should be arranged for 3 hours after the close of class on the last day.*

- **Classes may be cancelled if there are not enough registered students.**
- **Multiquip pays for two night of lodging, breakfast & lunch**
- **Dinner will be the student's responsibility**

By enrolling, the dealer/attendee agrees that in the event a class is cancelled, Multiquip will make every attempt to accommodate the attendees in the next available class. Multiquip is not responsible for refunding the cost of unused airline tickets or charges imposed by the airlines for changing itineraries. Once enrollment is confirmed, a credit card will be required to guarantee your hotel reservations. All attendees will receive a packet with arrival instructions and confirmation by fax or email.

Signature: \_\_\_\_\_



www.multiquip.com  
800 421-1244

# DCA Generator - Level 1 Training Course Description

The following is a general agenda of the course. However, course agenda may change due to new products, product availability and overall student interest in various products and topics.

## DAY 1

- **Electrical Safety:** Electricity must be treated with caution. An electrical safety review lays the foundation for technician awareness of electrical systems and power generation safety.
- **Basic Electrical Fundamentals & Generator Theory:** Knowing the fundamentals is important for a qualified power generation service technician. Review why Ohms Law and voltage drops are key fundamentals in troubleshooting. Learn to identify series, parallel circuits and the rules between them. Direct current and alternating current fundamentals. Understand the components and the functions that make up the generator end.
- **Component ID:** This section outlines the generator's components and their functions. Learn the flow of current through the generator that is essential for proper excitation. Understanding **how it works** is essential for the technician to troubleshoot in an accurate manner. Detailed training on rotors, stators, fields, armatures, OPEN DELTA winding, AVR operation, V-leg relay, voltage selector switch, high/low WYE winding configurations, change-over board, circuit breakers, current transformer, over current relay, engine protection devices, auto-start controllers, CAN BUS and engine code readers. Learn to read the DCA wiring schematics for troubleshooting circuits.
- **Troubleshooting:** Various faults and troubleshooting processes are discussed. No and Low voltage, Low Voltage on 1 leg, automatic voltage regulator, voltage selector switch testing and current flow through the switch, Resistance testing wings are all explored.
- **Hands on:** Take the theory to the shop and review component ID on the units. There is a demonstration of excitation current and voltage and troubleshooting.

## DAY 2

- **Day 1 Review:** A review of information from the previous day, component ID and troubleshooting start day two.
- **John Deere- Isuzu Tier 3:** A Powerpoint presentation will lead you through the basics of Tier 3 engines with a focus on reading Isuzu flash code and CAN BUS J1939 code reader. Murphy PowerView and OTC.
- **Hands on:** A demonstration of engine code faults where students will be tested on flash code reading and also have an opportunity to use the Murphy PowerView code reader.
- **Testing:** The class closes after a final quiz testing students on their knowledge of DCA units.

