

**MODEL 10 TYPE 3  
AND  
MODEL 10-C TYPE 3  
INSTRUCTIONS**

**AC CLAMP-ON AMMETER ADAPTER**

These adapters allow measurement of AC current with a VOM. They are attached to the VOM with an extension lead. They may also be attached to the top of the 310 series VOMs directly as shown on Page 2.

**SPECIFICATIONS**

**Ranges:** 0 - 6, 12, 30, 60, 120, 300 AC Amperes

**Accuracy:** ±3% of Full Scale on 12, 30, 60, 120 and 300 Amp Range (Calibrated at 77°F or 25°C)  
±5% of Full Scale on 6 Amp Range (Calibrated at 77°F or 25°C) with conductor at the end of jaws.

**Frequency:** Calibrated for 60 Hz.

**VOM Range and Sensitivity:**

Model 10: 3 AC Volts at 5,000 ohms/volt.  
Model 10-C: 3 AC Volts at 15,000 ohms/volt.

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**MODEL 10  
AND  
MODEL 10-C  
ADAPTER**



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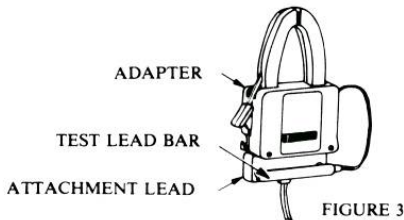
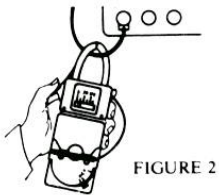
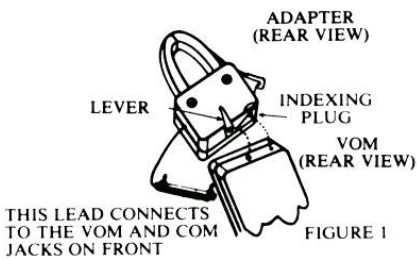
**AC CURRENT MEASUREMENTS**

Using the adapter on top of Triplet Model 310 series VOMs —

1. Rotate the lever on the bottom of the adapter until it points straight out (See Figure 1).
2. Install the adapter on the top of the VOM. Rotate the lever back against the adapter.
3. Plug the test lead bar from the adapter into the VOM and COM jacks of the VOM. (Polarity of leads is not important).
4. Set the VOM switch to AC AMPS or 3 AC VOLTS.
5. Set the adapter switch to 300 AMPS.
6. Press the handle on the side of the adapter to open the jaws. Place the jaws around ONE conductor and release the handle (See Figure 2).
7. Adjust the adapter switch for maximum meter deflection without going off-scale.
8. Read AC Amperes on the AC AMPS or 3 AC VOLTS scale as directed below.

| Adapter Range<br>AC Amperes | Reading on 3 AC<br>VOLTS Scale | Reading on<br>AC AMPS Scale |
|-----------------------------|--------------------------------|-----------------------------|
| 6                           | 0-3 (x 2)                      | 0-6                         |
| 12                          | 0-3 (x 4)                      | 0-12                        |
| 30                          | 0-3 (x 10)                     | 0-30                        |
| 60                          | 0-3 (x 20)                     | 0-6 (x 10)                  |
| 120                         | 0-3 (x 40)                     | 0-12 (x 10)                 |
| 300                         | 0-3 (x 100)                    | 0-30 (x 10)                 |

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### AC CURRENT MEASUREMENTS

Using the adapter with the attachment lead —

1. Rotate the lever on the bottom of the adapter until it points straight out (See Figure 1).
2. Install the adapter on the top of the attachment lead. Rotate the lever back against the adapter (See Figure 3).
3. Plug test lead bar into attachment lead (See Figure 3).
4. Plug attachment lead into VOM (+) and COM (-) jacks of VOM (polarity of leads is not important).
5. Set the VOM switch to AC AMPS or 3 AC VOLTS.
6. Set the adapter switch to 300 AMPS.
7. Press the handle on the side of the adapter to open the jaws. Place the jaws around ONE conductor and release the handle (See Figure 2).
8. Adjust the adapter switch for maximum meter deflection without going off-scale.
9. Read AC Amperes on the AC AMPS or 3 AC VOLTS scale as directed below.

| Adapter Range<br>AC Amperes | Reading on 3 AC<br>VOLTS Scale | Reading on<br>AC AMPS Scale |
|-----------------------------|--------------------------------|-----------------------------|
| 6                           | 0-3 (x 2)                      | 0-6                         |
| 12                          | 0-3 (x 4)                      | 0-12                        |
| 30                          | 0-3 (x 10)                     | 0-30                        |
| 60                          | 0-3 (x 20)                     | 0-6 (x 10)                  |
| 120                         | 0-3 (x 40)                     | 0-12 (x 10)                 |
| 300                         | 0-3 (x 100)                    | 0-30 (x 10)                 |

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### SAFETY FIRST

DO NOT ALLOW TEST LEAD BAR to hang loose. When the adapter is not in use, remove it from the VOM.

FOLLOW ALL SAFETY RULES, PRECAUTIONS, AND WARNINGS in the VOM instruction manual.

### MODEL 10/MODEL 10-C USAGE CHART

| VOM Model<br>Number  | Adapter<br>Model Number | Attachment Lead<br>Catalog Number |
|----------------------|-------------------------|-----------------------------------|
| 60 (All Types)       | 10                      | 79-417                            |
| 60-A (All Types)     | 10                      | 79-417                            |
| 60-NA Type 1         | 10-C                    | 79-417                            |
| 60-NA Type 2         | 10                      | 79-417                            |
| 310 (All Types)      | 10                      | 79-416                            |
| 310-C (All Types)    | 10-C                    | 79-416                            |
| 310-FET (All Types)  | 10                      | 79-416                            |
| 310-T (All Types)    | 10                      | 79-416                            |
| 615 (All Types)      | 10                      | 79-415                            |
| 630 Type 4           | 10                      | 79-417                            |
| 630 (Other Types)    | 10                      | 79-415                            |
| 630-A Type 4         | 10                      | 79-417                            |
| 630-A (Other Types)  | 10                      | 79-415                            |
| 630-APL (All Types)  | 10                      | 79-415                            |
| 630-APLK (All Types) | 10                      | 79-415                            |
| 630-NA (All Types)   | 10                      | 79-415                            |
| 630-NS (All Types)   | 10-C                    | 79-415                            |
| 630-PL (All Types)   | 10                      | 79-415                            |
| 630-PLK (All Types)  | 10                      | 79-415                            |

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## OPERATING NOTES



FIGURE 4

Do not place the jaws of the adapter around more than one wire. An incorrect reading will result.

When reading is below half scale on the 6 AC Ampere range, greater accuracy can be achieved by wrapping the conductor around the jaws twice (Figure 4). This would double the sensitivity of the adapter, and the actual current flowing would be half that indicated by the meter. Likewise, more turns can be added around the jaws of the adapter for increased sensitivity. The actual current in each case is the indicated current divided by the number of turns around the jaws.

Best accuracy is obtained by hanging the Model 10 on the single wire conductor.

Do not try to change ranges by changing the switch on the VOM. The adapter is calibrated to work on the AC AMPS or 3 AC VOLTS ranges only.

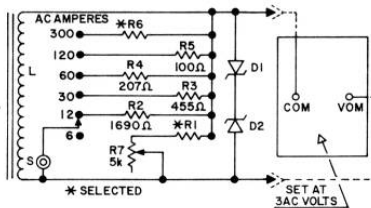
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## MAINTENANCE

The jaw surfaces must be kept clean. If film appears, clean the jaw with a very fine grade of sandpaper.

Inspect test leads before use. Replace any worn, frayed or cracked test leads.

## CIRCUIT DIAGRAM



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## REPLACEABLE PARTS LIST

| Circuit Symbol | Description                 | Part Number |             |
|----------------|-----------------------------|-------------|-------------|
|                |                             | Model 10    | Model 10-C  |
|                | Case Ass'y., Back           | 10-2935     | 10-2935     |
|                | Case, Front                 | 10-2937     | 10-2938     |
|                | Stud, Special 6-32          | 86-539      | 86-539      |
|                | Screw Nylon 6-32            | 24-499      | 24-499      |
|                | Switch Ass'y., Slide        | 22-714      | 22-714      |
|                | P. C. Board W./Components   | 87-482      | 87-482      |
|                | Resistor Selected           | 15-C-323    | 15-C-323    |
| R1             | Resistor, 1.69k Ohms 1%     | 15K-1691TB4 | 15K-1691TB4 |
| R2             | Resistor, 455 Ohms 1%       | 15K-4550TB4 | 15K-4550TB4 |
| R3             | Resistor, 207 Ohms 1%       | 15K-2070TB4 | 15K-2070TB4 |
| R4             | Resistor, 100 Ohms 1%       | 15K-1000TB4 | 15K-1000TB4 |
| R5             | Resistor Selected           | 15-C-329    | 15-C-329    |
| R6             | Resistor, Variable, 5K Ohms | 16-300      | 16-300      |
| R7             | Coil Ass'y.                 | 2542-118    | 2542-118    |
| L              | Diode, Zener, 12V           | 127-66      | 127-66      |
| D1-D2          | Lead Ass'y., Test Bar       | 79-414      | 79-414      |
|                | Clamp Ass'y., Repair        | 64-102      | 64-102      |

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\*If any of these are replaced, recalibration may be required.

### **REPAIR OR SERVICE**

In the event repair or service is required, the Adapter may be sent to Triplet Corporation, Bluffton, Ohio 45817 or contact factory for nearest Service Station.

Please outline the nature of the difficulty. Triplet can supply more efficient service by your providing this information.

### **LIMITED WARRANTY**

The Triplet Corporation warrants instruments and test equipment manufactured by it to be free from defective material or factory workmanship and agrees to repair or replace such products which, under normal use and service, disclose the defect to be the fault of our manufacturing, with no charge for parts and service. If we are unable to repair or replace the product, we will make a refund of the purchase price. Consult the Instruction Manual for instructions regarding

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the proper use and servicing of instruments and test equipment. Our obligation under this warranty is limited to repairing, replacing or making refund on any instrument or test equipment which proves to be defective within one year from the date of original purchase.

The warranty does not apply to any of our products which have been repaired or altered by unauthorized persons in any way so as, in our sole judgment, to injure their stability or reliability, or which have been subject to misuse, abuse, misapplication, negligence or accident or which have had the serial numbers altered, defaced, or removed. Accessories, including batteries, not of our manufacture used with this product are not covered by this warranty.

To register a claim under the provisions of this warranty, return the instrument or test equipment to Triplet Corporation, Bluffton, Ohio 45817, transportation prepaid. Upon our inspection of the product, we will advise you as to the disposition of your claim.

**ALL WARRANTIES IMPLIED BY LAW ARE HEREBY LIMITED TO A PERIOD OF ONE YEAR, AND THE PROVISIONS OF THE WARRANTY ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES EXPRESSED OR IMPLIED.**

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The purchaser agrees to assume all liability for any damages and bodily injury which may result from the use or misuse of the product by the purchaser, his employees, or others, and the remedies provided for in this warranty are expressly in lieu of any other liability Triplet Corporation may have, including incidental or consequential damages.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. No representative of Triplet Corporation or any other person is authorized to extend the liability of Triplet Corporation in connection with the sale of its products beyond the terms hereof.

Triplet Corporation reserves the right to discontinue models at any time, or change specifications, price or design, without notice and without incurring any obligation.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

**TRIPLET CORPORATION**  
Bluffton, Ohio 45817

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