



HANDS-ON TRAINING — SERVICE TROUBLESHOOTING



July 22, 2025 10:30 AM – 12:00 PM Fran White / John Williams



Hands-On Training — Service Troubleshooting Single Phase

- 1. Prior to setting the single phase (residential) meter (new service installation).
 - a. Depending on your utility's procedures, there may be more things to test than this, but at a minimum.
 - i. Visual inspection:
 - 1. Are the wires the proper gauge and color.
 - 2. Make sure that the conduit connections are secure and flush (no water leakage).
 - 3. Make sure that there is enough service loop in the wires (particularly with underground installations).

ii. DVM checks:

- 1. Check to make sure that the neutral wire is connected properly.
- 2. Make sure that the meter enclosure is properly bonded to ground.
- 3. Check for the correct voltages on the line side:
 - a. Line to line
 - b. Line to neutral (both sides)
- 4. Ensure that there is no existing voltage on the load side.
 - a. Upside down wiring
 - b. Generator or "stolen" power (Diversion).
- 5. Check for grounding faults on the load side jaws.
- 6. If all the pre-checks are good, set the meter and confirm that it is operational, and the crawler is moving in the right direction.





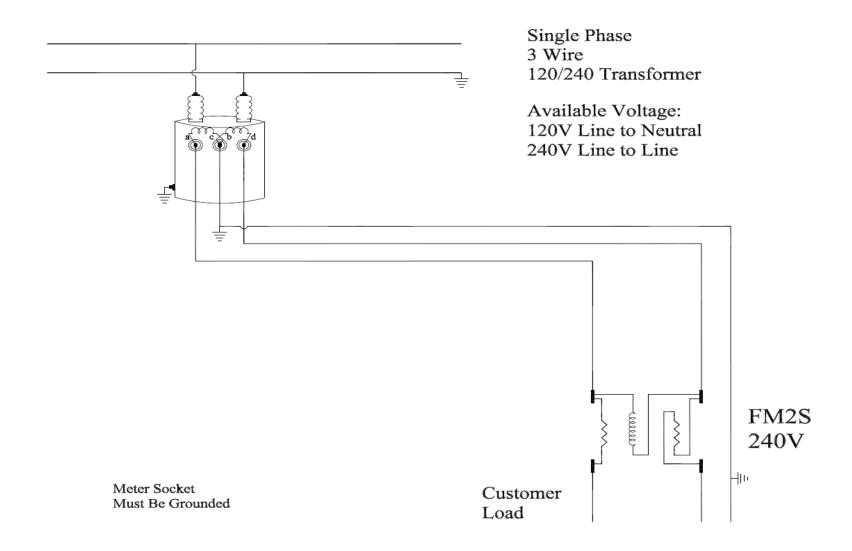
HANDS-ON TRAINING — SERVICE TROUBLESHOOTING POLYPHASE

- 1. Prior to setting the polyphase phase meter (new service installation).
 - a. Depending on your utility's procedures, there may be more things to test than this, but at a minimum.
 - i. Visual inspection:
 - 1. Are the wires the proper gauge and color.
 - 2. Make sure that the conduit connections are secure and flush (no water leakage).
 - 3. Make sure that there is enough service loop in the wires (particularly with underground installations).
 - ii. DVM checks:
 - 1. Check to make sure that the neutral (if used) wire is connected properly.
 - 2. Make sure that the meter enclosure is properly bonded to ground.
 - 3. Check for the correct voltages on the line side:
 - a. Line to line
 - b. Line to neutral (each phase)
 - 4. Ensure that there is no existing voltage on the load side.
 - a. Upside down wiring
 - b. Generator or "stolen" power (Diversion).
 - 5. Check for grounding faults on the load side jaws.
 - 6. Check for proper phase rotation coming into the line side jaws.
 - 7. If all the pre-checks are good, set the meter and confirm that it is operational, and the crawler is moving in the right direction.



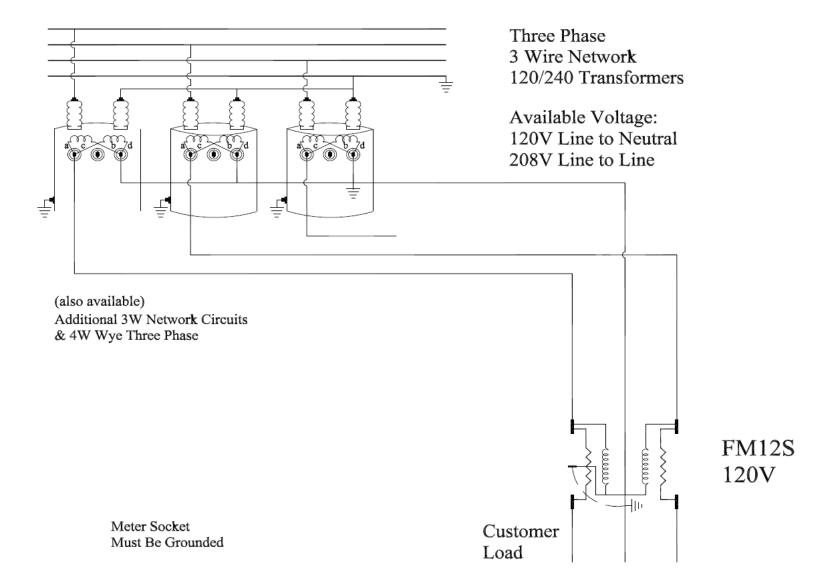


HANDS-ON TRAINING - SERVICE TROUBLESHOOTING POLYPHASE





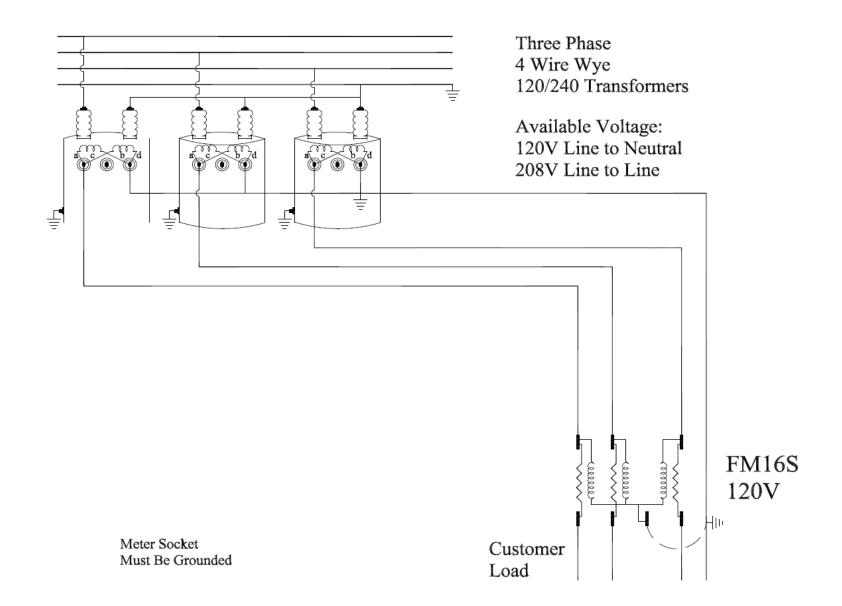
HANDS-ON TRAINING - SERVICE TROUBLESHOOTING POLYPHASE



tescometering.com



HANDS-ON TRAINING - SERVICE TROUBLESHOOTING POLYPHASE







Please Take a Few Minutes To Provide Feeback About The Course & Instructor

Track 3 - Hands On Training
Service Troubleshooting 72225
10:30AM Fran/John/Harold





QUESTIONS AND DISCUSSION

Fran White

Senior Meter Technician

TESCO Metering

Bristol, PA

215.228.0500



This presentation can also be found under Meter Conferences and Schools on the TESCO website: tescometering.com

ISO 9001:2015 Certified Quality Company ISO 17025:2017 Accredited Laboratory



QUESTIONS AND DISCUSSION

John Williams

Vice President of Engineering

TESCO Metering

Bristol, PA

215.228.0500



This presentation can also be found under Meter Conferences and Schools on the TESCO website: tescometering.com

ISO 9001:2015 Certified Quality Company ISO 17025:2017 Accredited Laboratory