

TYPICAL STANDBY GENERATOR INSTALLATION

GENERATOR SAFETY WARNING

It is important for the safety of our linemen that we know if you will be using a permanent or portable generator in your home or shop. Backfeed onto the power line from a generator can be fatal to a lineman restoring power. Please call our office to let us know if you will be using a generator in your home or shop.

GENERATOR INSTALLATION

The only recommended method to connect a generator to house wiring is by having a qualified electrician install a power transfer switch. This switch must be installed in accordance with the National Electrical Code® (NEC), which is published by the National Fire Protection Association, and all applicable state and local electrical codes. Call a qualified electrician or check with us for installation recommendations.

For power outages, permanently installed stationary generators are better suited for providing backup power to the home. Even a properly connected portable generator can become overloaded. This may result in overheating or stressing the generator components, possibly leading to a generator failure. Be sure to read instructions that come with the generator to make sure you operate it within its limitations for power output.

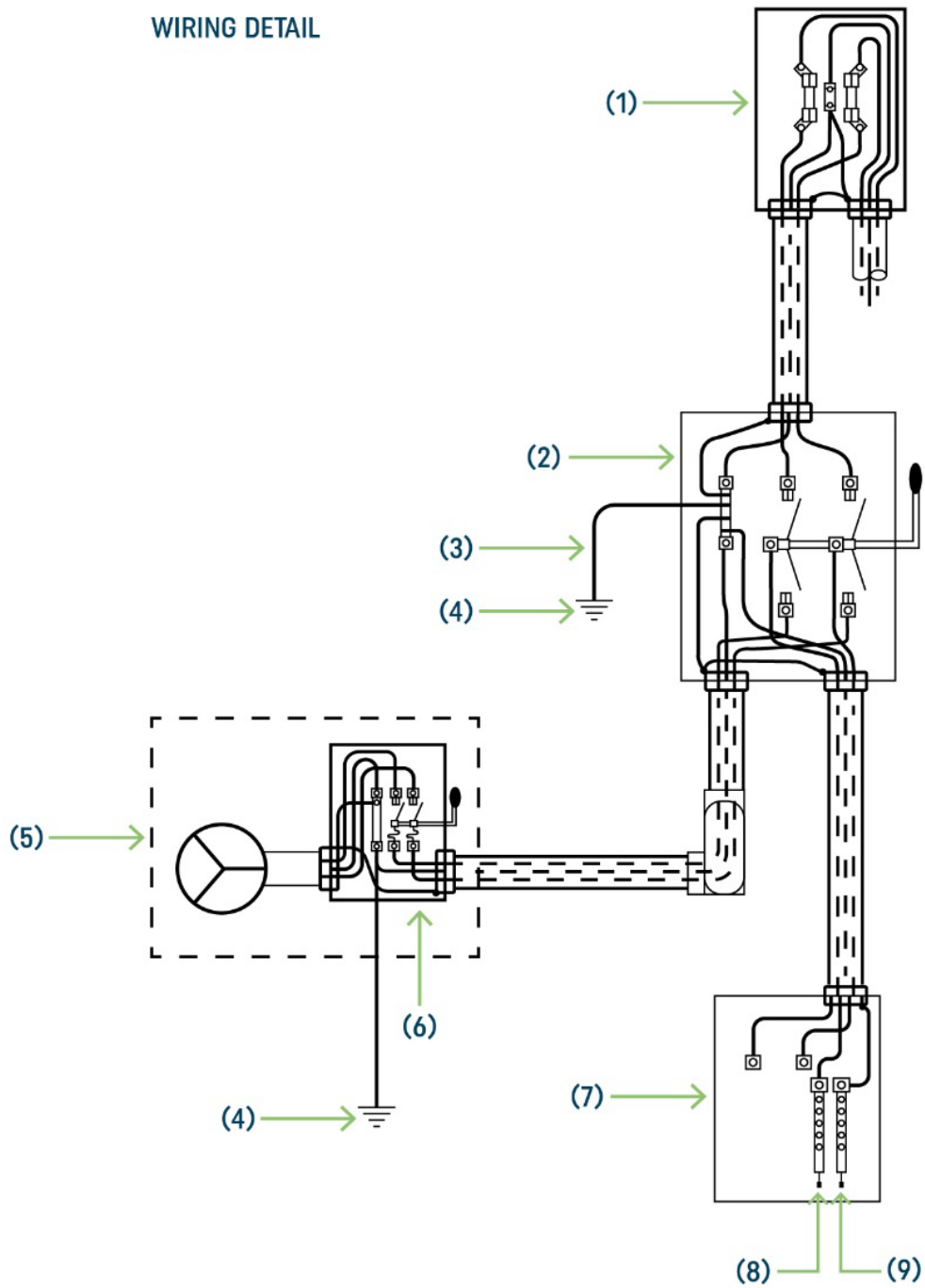
NOTES FOR STANDBY GENERATOR INSTALLATION:

- 1) **100 and 200 amp meter base furnished for new construction and installed by the customer or contractor.**
- 2) **Manual transfer switch must be identified by the manufacturer as "Suitable For Service Equipment" when it is used as the main disconnect.**
- 3) **#6 solid copper wire attached to a dedicated ground lug in the service equipment and attached to the ground rod with an approved clamp encased in 1/2" thin wall or electrical PVC. All metallic components of service equipment must be bonded together in accordance with the National Electrical Code, Section 250.**
- 4) **Ground rod or other National Electrical Code approved grounding electrode. Rod to be 1/2 inch by 10 feet copperweld or equivalent.**
- 5) **Standby generator unit.**
- 6) **Fused generator disconnect.**
- 7) **Customer's distribution panel.**
- 8) **Grounded neutral buss.**
- 9) **Separate equipment grounding buss.**
- 10) **All work to be done in accordance with the National Electrical Code and local codes.**

Refer questions to the Jasper County REMC Line Superintendent.

Application: Manual transfer switch used as the main disconnect.

WIRING DETAIL



PURPOSE

The purpose of these electric service rules, which apply to Jasper County REMC member's wiring installations, is to provide Jasper County REMC members and their electricians and wiremen with a guide for use in planning for electric service. These applications apply to 200 amp or less. Any service larger than 200 amp consult with the Cooperative.

CODES AND RULES

The Indiana State Electrical Code specifies the minimum requirements for all wiring installations in Indiana. The cooperative imposes few additional requirements. The cooperative is not required to inspect any member's wiring, equipment, or devices to safety suitability, or compliance with code requirements. The cooperative may refuse or disconnect service to any installation which does not conform to an applicable cooperative rule. All national, state, county, city Codes must be adhered to along with REMC requirements.

SERVICE DROPS AND SERVICE ENTRANCES

Service drops

- It is the member's responsibility to have the meter base installed before calling for an appointment to install the electrical service.
- The cooperative will furnish and install an overhead service to an acceptable point of support or yard pole on the member's premises, or furnish and install an underground service, except trenching, to an acceptable metering point wherever it is deemed feasible.

Ownership and location

- In all cases the member furnishes and installs the service entrance and is responsible for its upkeep and repair. The cooperative, after consulting with the member, designates the location of the service entrance and meter.

Attachment of service drops

- If a structure to which an overhead service drop is to be run is not high enough to give the required clearance to the ground, the member shall furnish and install a higher support strong enough to withstand severe ice and wind loading, which will give the required ground clearance.
- The cooperative will connect the service entrance wires to the service drops. No one else shall make these connections.

Capacity and disconnects

- All wiring, including entrance conductors and switches, should be of ample capacity of any load that may reasonably be expected to develop, and in all cases shall be of sufficient capacity to meet Code Requirements.
- Service entrance conductors, disconnects and devices of at least 100 ampere capacity are required.
- A single disconnecting means is required on all services. This single disconnect (fusible or breaker) must be ten (10) feet or less of wire length from the meter socket.

Meter locations

- Meter sockets, enclosures, or cabinets shall be installed on a substantial building or on a suitable yard pole, treated post or meter pedestal. In no case may they be installed on insecure supports or where they will be liable to mechanical injury or vibrations.
- All service meters, meter sockets and meter loops shall be accessible outdoor installations and shall be kept accessible for meter reading and testing.

Yard poles

- For overhead service installations where it is impractical to install the meter on a building, the member may purchase a pole from the Cooperative in accordance with Cooperative policy. The member's metering equipment and distribution wires may be installed on this pole which supports the Cooperative's service drop termination.

Meter Sockets

- The cooperative will provide the 100 and 200 amp meter base for new construction, if the cooperative has them in stock. Any cabinets and enclosures shall be furnished by the member. They shall be wired in a manner that will not interfere with mounting and sealing the meter and be properly grounded. Meter sockets shall be mounted plumb and at approximately 5 to 5 ½ feet above ground, except as noted otherwise.
- If any knock outs are removed and not enclosed, the member shall furnish a plug.
- The cooperative will connect the service entrance wires to the service drops. No one else shall make these connections.

Underground Services

- For underground services where the cooperative extends its service wires to the meter socket, the member will furnish and install suitable conduit or raceway to the meter socket for protection of the cooperative's service wires. Also, a 90 degree long sweeping elbow and horizontal conduit, not less than twenty (20) feet out from building, or as required to clear all above or below ground obstacles.
- Underground services crossing any type of walkway, driveway, or roadways does require conduit furnished by the member.

Grounding

- All sockets, disconnects, etc. shall be grounded in accordance with applicable codes. Grounding rods and clamps must be approved types. Copperweld rods and bronze clamps are recommended. One ground is required except as noted.
 - 100 amp service 6 copper
 - 200 amp service 4 copper
 - 400 amp service 4 copper

Notes

1. On single family residences 120-240 volt service equipment must have 10,000 ampere interrupting capacity rating.
2. Insulated neutral conductors shall be identified from other conductors according to Code.