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Paige® irrigation spec

P7407D – Rev 2

Decoder Cable Fuse Device (DCFD)™

1.0 SCOPE:

1.1 These products were specifically designed as electrical isolation devices to help with troubleshooting of damaged or non-functioning 2-Wire irrigation systems. Single or multiple sections of the electrical circuit can be disconnected or isolated by simply removing a fuse, without cutting wires or undoing splices/joints. Models with lightning protection are also available. **Patent Pending**.

2.0 CONSTRUCTION:

2.1 ***Quick-disconnect Isolation:***
Splits the incoming signal from the central computer into In-line (270DCFD1 and 270DCFD1L), Two-way (270DCFD and 270 DCFDL) or Three-way (270DCFD3 and 270DCFD3L) directions. See Typical Installation.

2.2 ***Fuses:***
Standard 20-amp Mini Automotive fuses are utilized to act as circuit switches when they are inserted (closed/on) or removed (open/off.) The fuses also provide lightning protection when the electrical surges exceed the capacity of the 20-amp fuse(s.) 5-amp fuses are also included for those who wish to have a more sensitive circuit during a lightning strike. The isolation of circuit sections eliminates or minimizes electronic component failure.

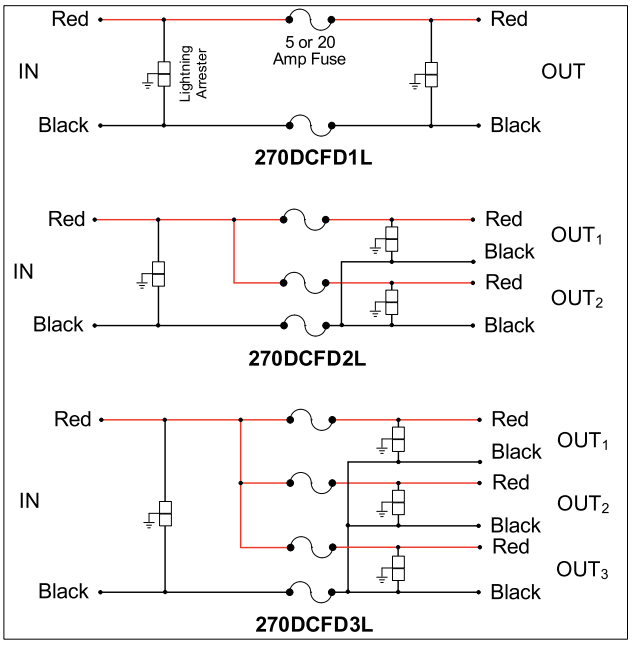
2.3 ***Test Posts:***
These posts, on the sides of the fuses, are accessible when the threaded cap is removed from the body of the DCFD. This allows the measurements of voltage and current flow. It may be necessary to use a "True RMS" multi-meter to perform these tests. Consult with the manufacturer of the decoder system.

- Voltage can be measured by connecting the probes of the meter to the Red/Black posts
- Current flow can be measured when a fuse is removed and the probes of an in-line amp meter are connected to the Red-Red or Black-Black posts.

2.4 ***Water Tight:***
A resin is used to waterproof the wire leads.

2.5 ***Wire Leads:***
All wires are 14 AWG, Type UF/TWU direct burial, 36" long. This allows the assembly to be brought above grade when troubleshooting and accessing the fuses.

2.6 ***O-Ring Seal:***
Provides a waterproof capsule. Cap is unscrewed to access the fuses.



2.7 ***ACME Threads:***
Minimizes binding of threads due to soil.

2.8 ***Lighting Protection Models:***
These models incorporate lightning arresters on the input and outputs wires. These should be spaced along the two wire paths such that no decoder is more than 500 feet away from one of these types of DCFDs.

3.0 PRODUCT DIMENSIONS & PACKAGING:

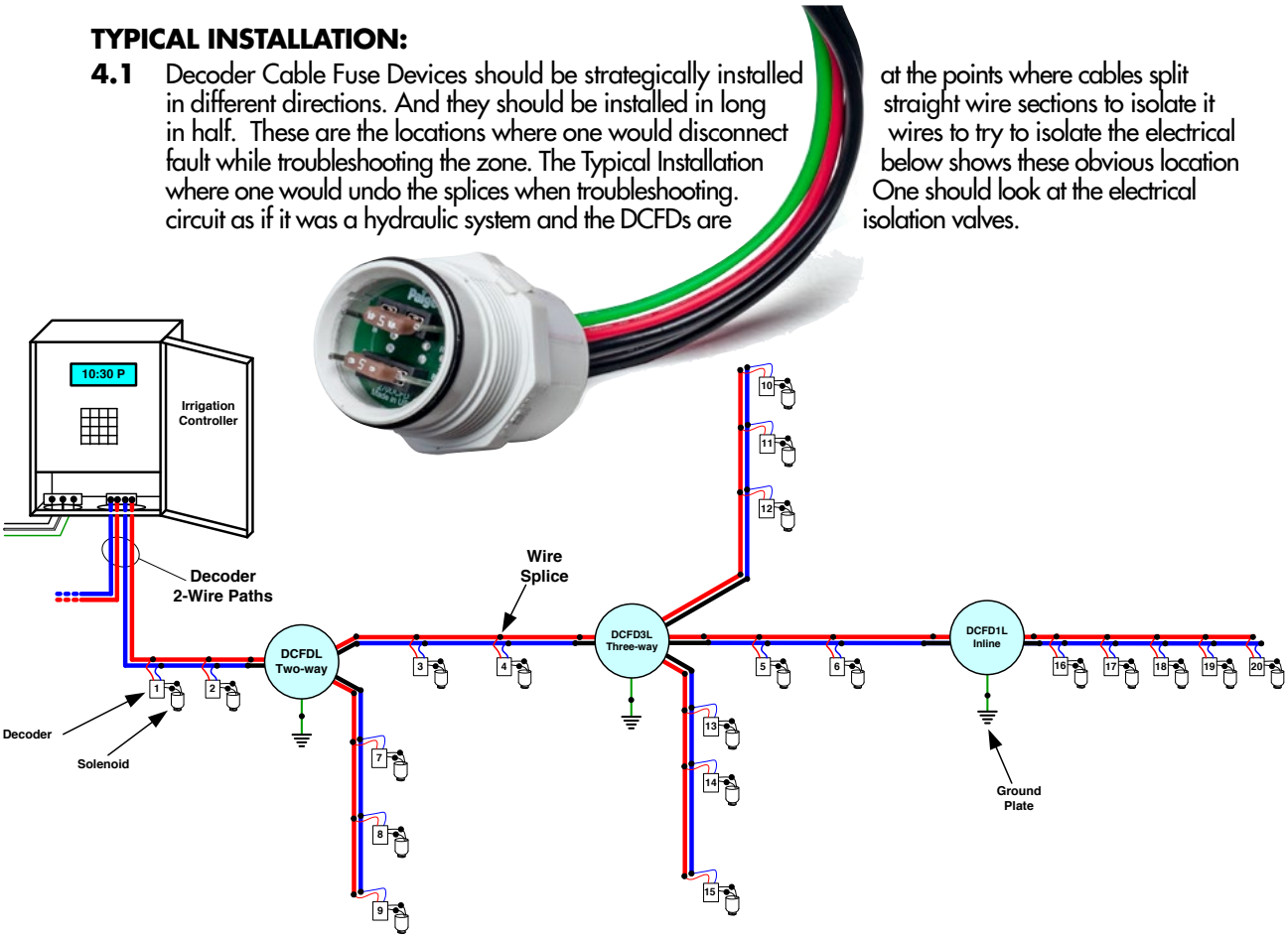
3.1

Part No.	Description	Diameter	Height	Quantity per Case	Pounds Each	Box Dimensions
270DCFD1	In-line	2-3/16″	3-1/16″	5	1.0	9″x12″x5″
270DCFD1L	In-line with Lighting Protection					
270DCFD	Two-way split					
270DCFDL	Two-way split with Lighting Protection					
270DCFD3	Three-way split	2-3/8″	3-1/4″			
270DCFD3L	Three-way split with Lighting Protection					

4.0

TYPICAL INSTALLATION:

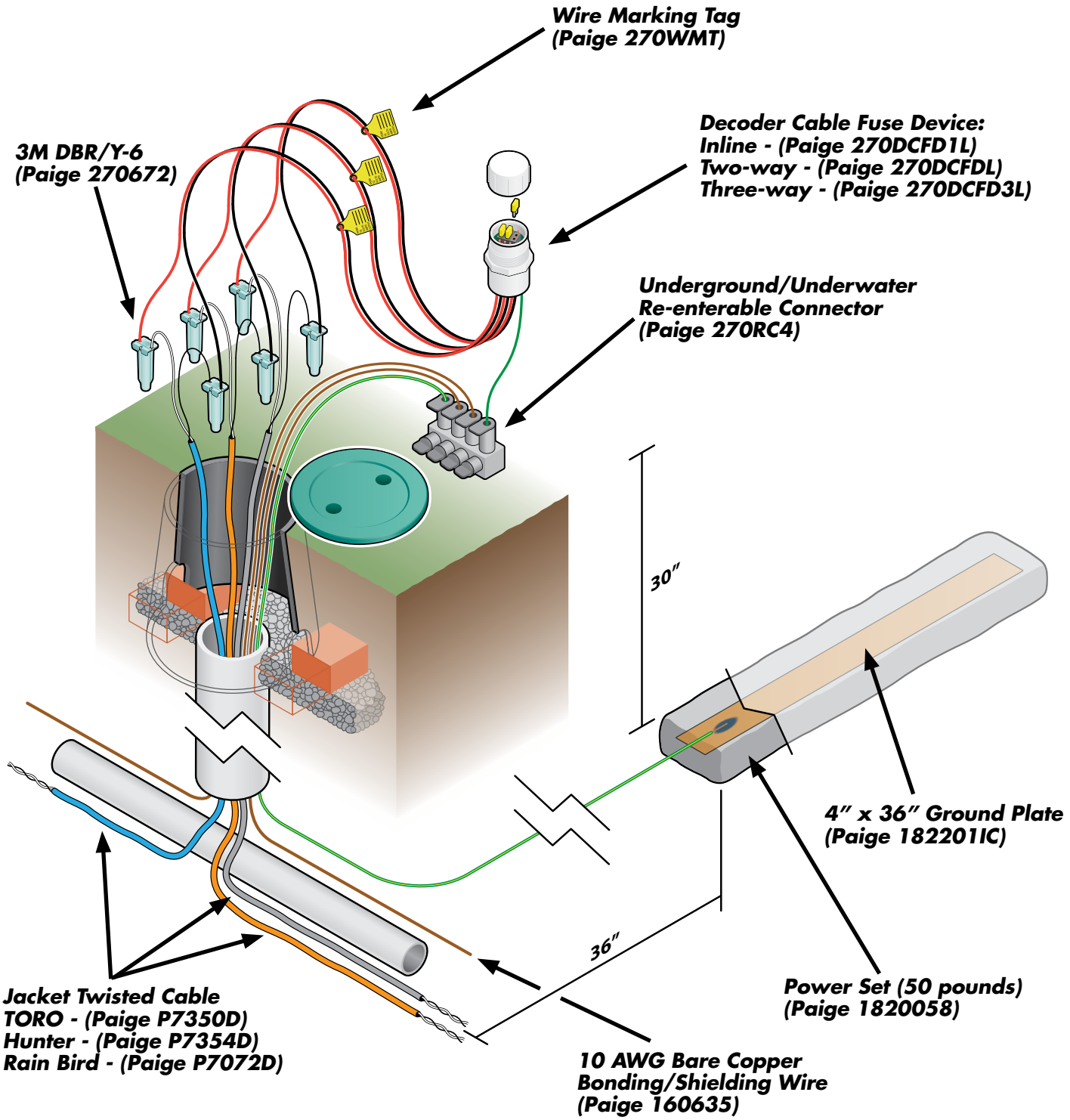
4.1 Decoder Cable Fuse Devices should be strategically installed at the points where cables split in different directions. And they should be installed in long straight wire sections to isolate it in half. These are the locations where one would disconnect wires to try to isolate the electrical fault while troubleshooting the zone. The Typical Installation below shows these obvious location where one would undo the splices when troubleshooting. One should look at the electrical circuit as if it was a hydraulic system and the DCFDs are isolation valves.



5.0 TYPICAL SPECIFICATIONS:

5.1 The Paige Electric Decoder Cable Fuse Devices shall be installed at strategic locations of a Decoder/2-Wire/2-Core system such that it can isolate certain sections of cables for purposes of troubleshooting. The DCFD shall be installed inside an accessible irrigation valve box. Each location shall be clearly shown on the as built drawings. The wire connections shall be made using the connectors shown in the Installation Details. No alternates.

6.0 *Installation Detail Using Bare Copper Bonding/Shielding Wire:*



7.0 *Installation Detail Using Green Insulated Bonding/Shielding Wire:*