

May 5, 1997

Machine Electrical Systems Schematics with New Format

1400

All Machine Schematics Drawn with New PRO/E Format

Reference: Electrical Schematic; SENR9412; "D11 R"

Some Caterpillar machines use a new format for the electrical system schematics. The new format provides additional information on wire, connector, component identification and a new symbol for splices.

1. Wire labels

The previous method of wire labeling provided the circuit identification number, the wire color and may have included the wire gauge if it differed from the standard gauge used on the schematic. The new wire number format includes the circuit identification number, harness identification code, wire color and wire gauge.

Example: Wire "C980-H4 YL-16" is Circuit "C980", wire number "4" in harness "H", yellow wire and is 16 gauge.

2. Connectors

The previous method of designating connectors uses only the harness identification letter. The new format includes the harness identification letter, a serializing code, and the connector part number.

Example: The connector in the new schematic sample is identified as "G-C1 3E3379", where the "C" stands for connector. This is connector number "1" in harness "G", and the plug assembly connector part number is "3E-3379".

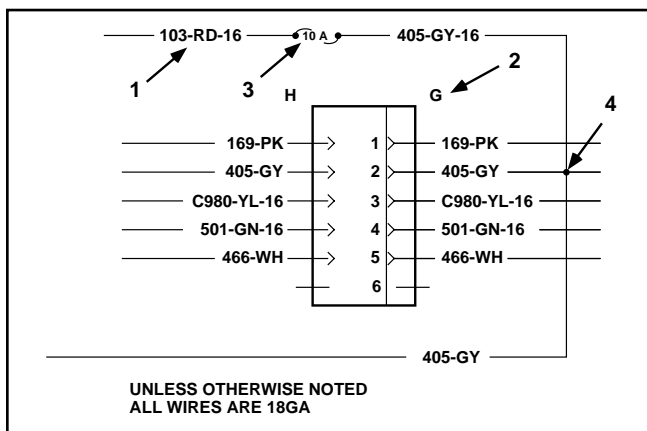


Illustration 1. Sample of old format schematic symbols: (1) Wire label. (2) Connector label. (3) Component label. (4) Old splice symbol.

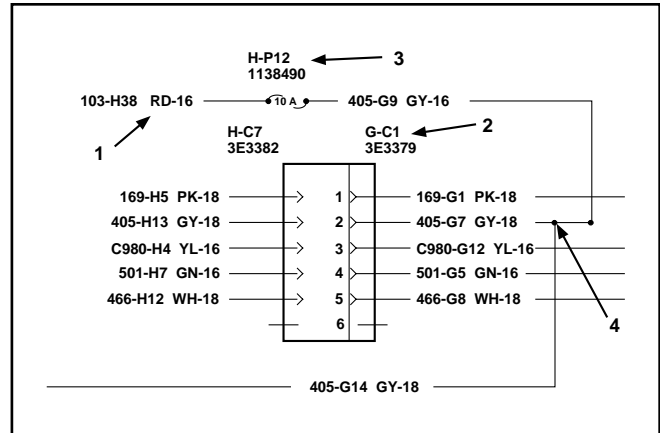


Illustration 2. Sample of new format schematic symbols: (1) Wire label. (2) Connector label (3) Component label (4) New splice symbol.

3. Components

The previous method of component labeling on the schematic shows a component descriptive name and component part number. On some new schematics, components may be identified using a harness identification letter, a serializing code, and the component number.

Example: A component in the new schematic sample is identified as "H-P12 1138490", Where "P" stands for part. This is part is "12" in harness "H", the component part number is "113-8490".

4. Splices

The old splice symbol uses a simple filled-in dot. This does not provide information about which side of the splice each wire exits from. The revised symbol for the splice uses two connection points to indicate which side a given wire exits.

Example: The new schematic sample shows that in harness "G", wire "405-G9 GY-16" is spliced into two wires, "405-G7 GY-18" and "405-G14 GY-18".