

**Agastat To Siemens Timer  
Conversion**

|                              |   |                          |           |
|------------------------------|---|--------------------------|-----------|
| <b>Equipment:</b>            | Agastat timer SSFR90A, Astec P/N 039998       | <b>Date Issued:</b>      | 7-31-2003 |
| <b>Additional Reference:</b> | none  | <b>Revised:</b>          | no        |
| <b>By:</b>                   | R. L. Worth Jr. , Service Support Coordinator | <b>Revision #:</b>       | 0         |
|                              |   | Astec Service Department |           |

**PURPOSE:**

The purpose of this letter is provide instructions for replacing an Agastat SSFR90A, universal timing relay, with a Siemens 3RP1505-1BQ30.

**This conversion should only be performed by qualified individuals.**

**PARTS REQUIRED** (for each replacement):

| Quantity | Astec part number | Description   |
|----------|-------------------|---|
| 1        | 054734            | Siemens Sirius relay, Siemens item # 3RP1505-1BQ30. |
| 1        | 054735            | 3RP1901-QB, Label                                   |

**GETTING STARTED:**

Before un-wiring and removing the Agastat timer, make sure all wires are labeled.

Remove the Agastat timer from the DIN rail. Mount the Siemens in it's place.

Use your current electrical schematics to determine the current configuration you have. The terminal numbers on the new Siemens relay are identified differently than those on the Agastat. Refer to the following examples for wiring instructions. After the conversion is made it will be helpful to note the changes on your electrical schematics.

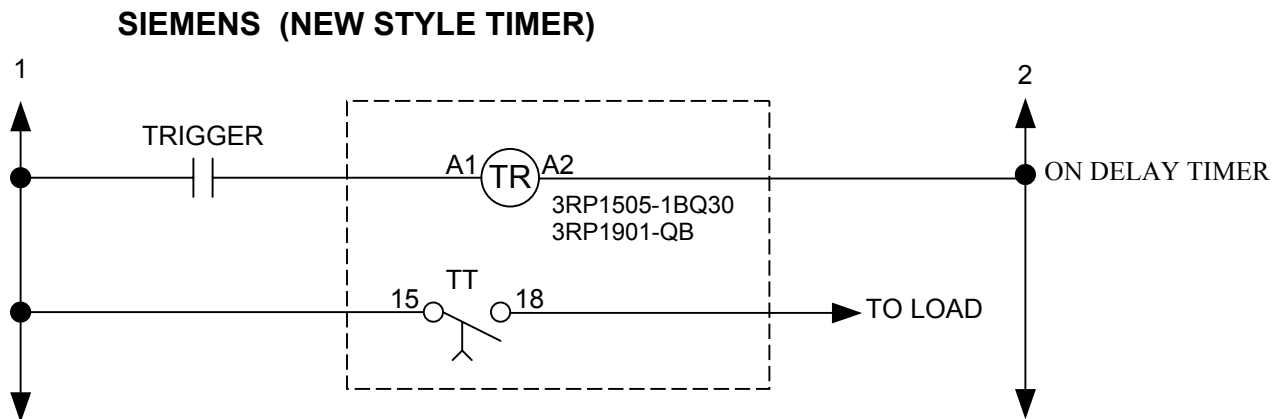
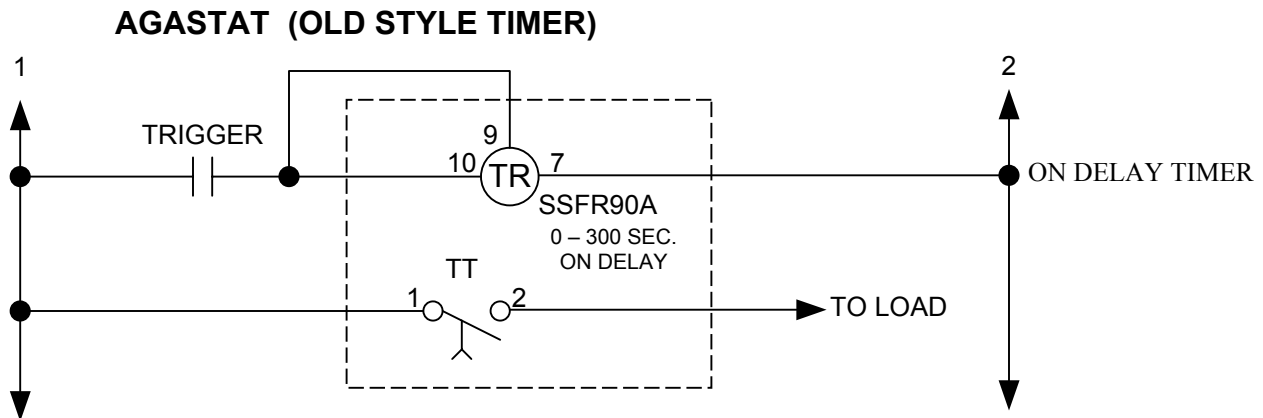
The new Siemens relay will perform the same as the Agastat, once it is configured properly. Please refer to the following examples for configuration instructions.

**EXAMPLES:**

| RELAY FUNCTION | EXAMPLE # | PAGE # |
|----------------|-----------|--------|
| ON DELAY       | #1        | 2      |
| OFF DELAY      | #2        | 3      |
| LATCHED        | #3        | 4      |
| PULSE SHAPING  | #4        | 5-6    |

For identification of the Siemens relay components, please refer to the figure on page 7.

EXAMPLE # 1, **On Delay:**



For ON Delay:

With power to the relay off.

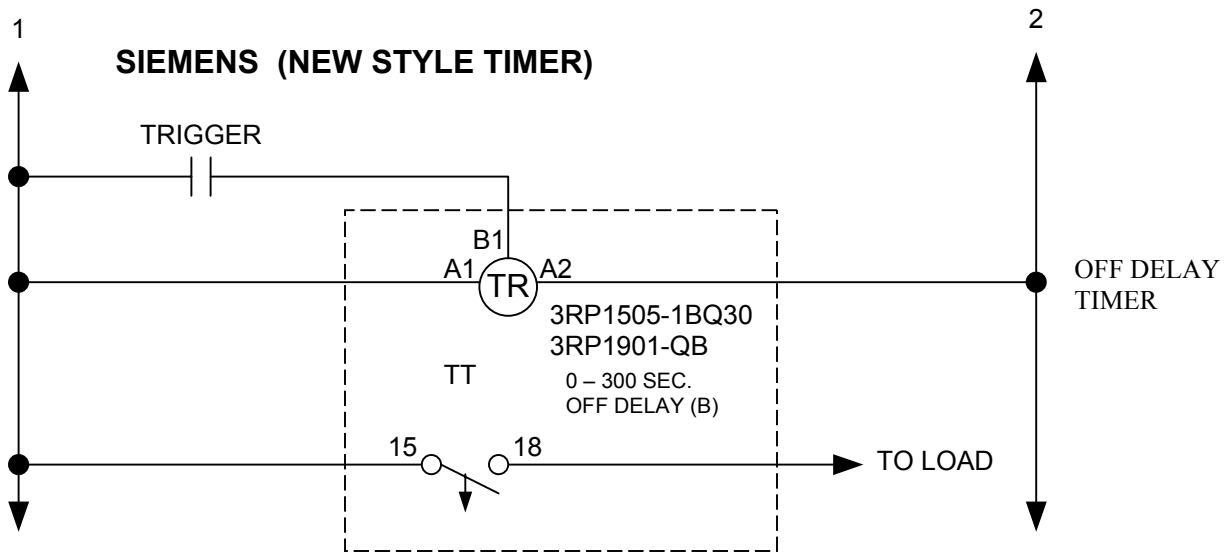
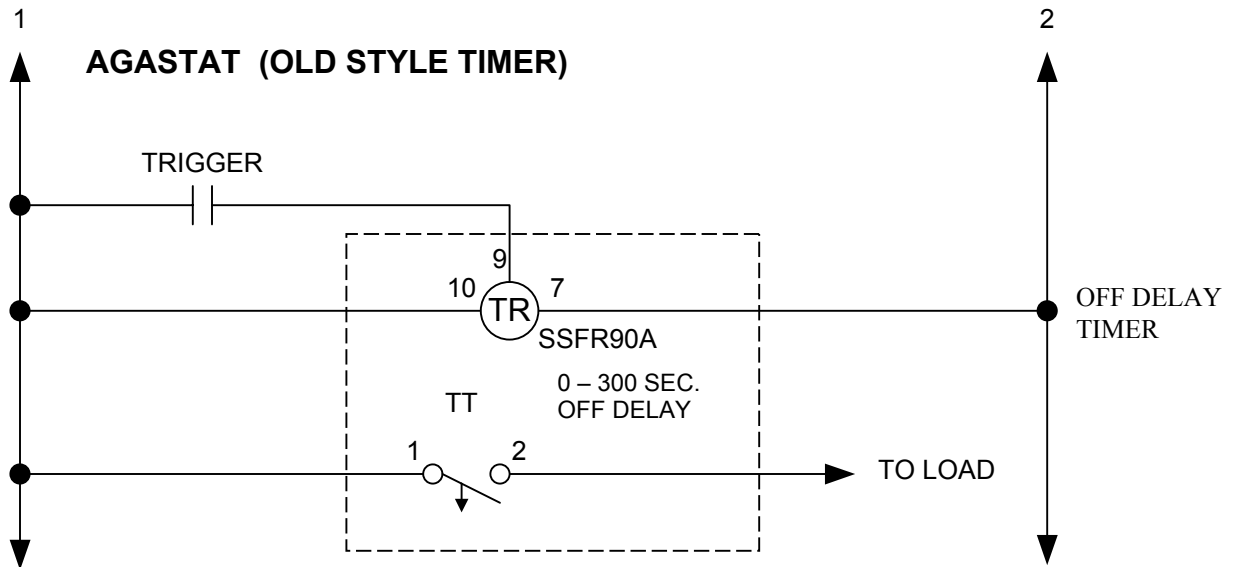
Set the MODE SELECTOR SWITCH to **A**. This configures the relay as an ON Delay.

Then select the desired TIME RANGE SELECTOR to the desired time range.

Then select the proper PERCENT (%) of time range, on the PERCENT OF TIME RANGE DIAL.

Turn power back on.

**EXAMPLE # 2, OFF Delay:**



For OFF Delay:

With power to the relay off.

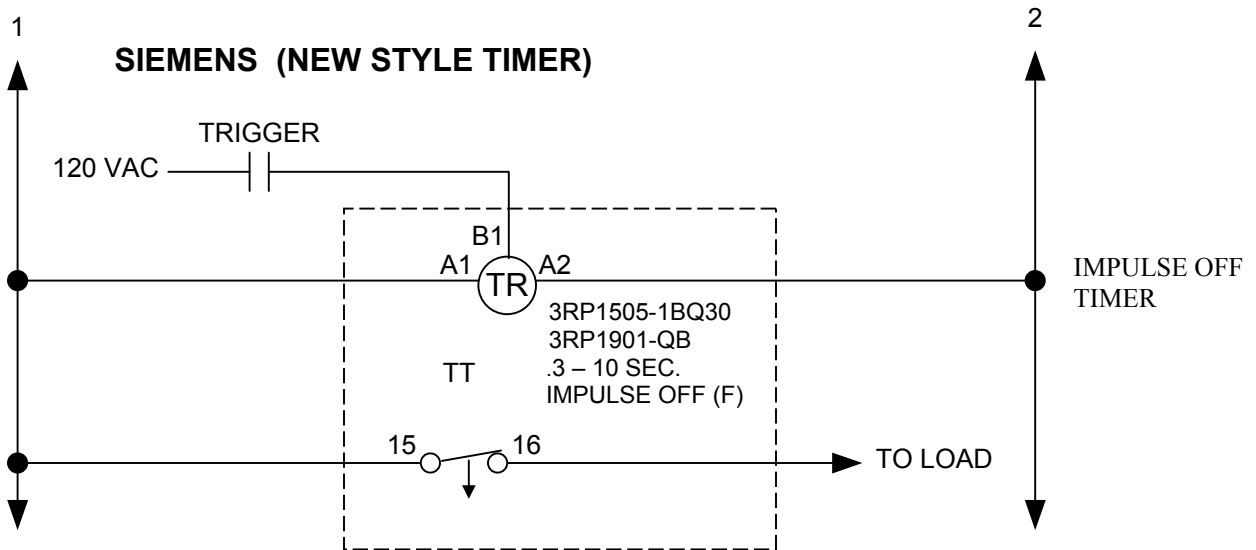
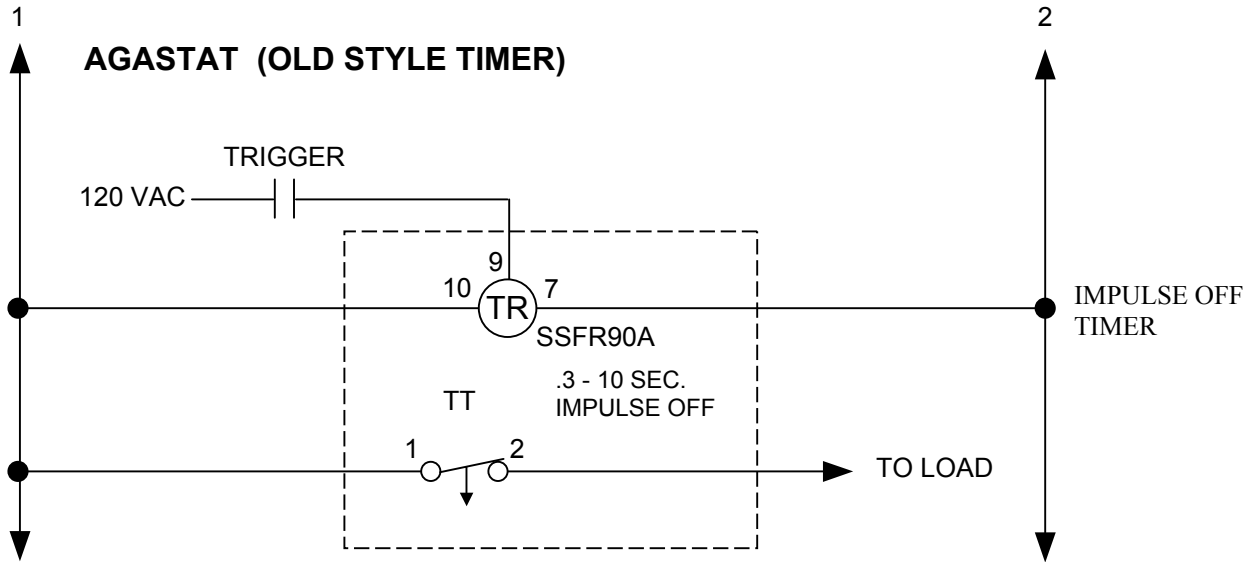
Set the MODE SELECTOR SWITCH to **B**. This configures the relay as an OFF Delay.

Then select the desired TIME RANGE SELECTOR to the desired time range.

Then select the proper PERCENT (%) of time range, on the PERCENT OF TIME RANGE DIAL.

Turn power back on for changes to take place.

EXAMPLE # 3, **IMPULSE OFF**



For IMPULSE OFF TIMER:

With power to the relay off.

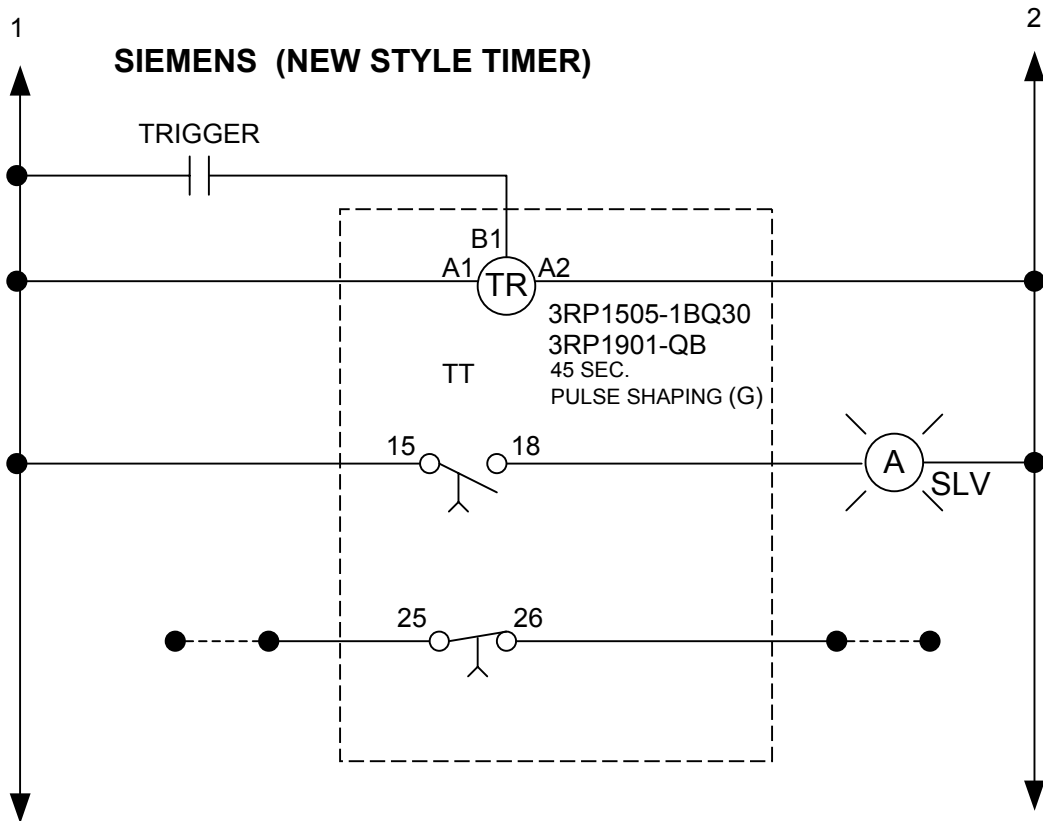
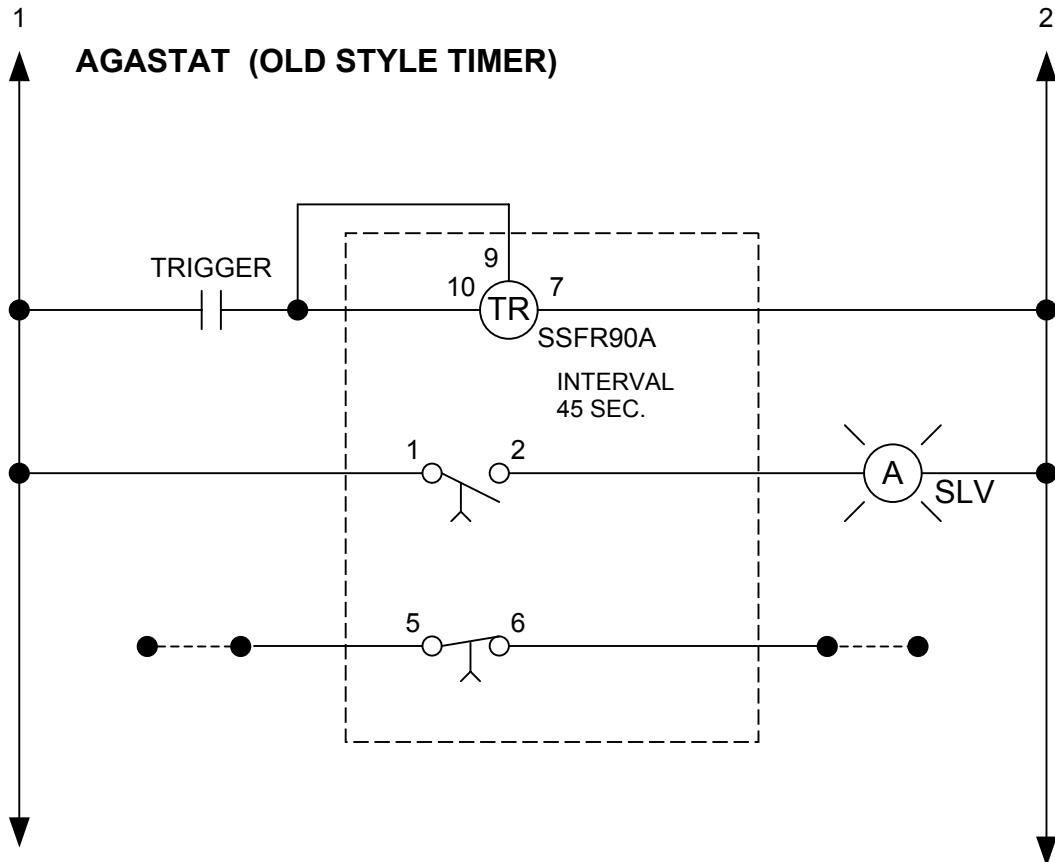
Set the MODE SELECTOR SWITCH to **F**. This configures the relay as an IMPULSE OFF TIMER.

Then select the desired TIME RANGE SELECTOR to the desired time range.

Then select the proper PERCENT (%) of time range, on the PERCENT OF TIME RANGE DIAL.

Turn power back on for changes to take place.

EXAMPLE # 4, LATCHED INTERVAL / PULSE SHAPING:



For PULSE SHAPING (replaces latched interval):

With power to the relay off.

Set the MODE SELECTOR SWITCH to **G**. This configures the relay for PULSE SHAPING.

Then select the desired TIME RANGE SELECTOR to the desired time range.

Then select the proper PERCENT (%) of time range, on the PERCENT OF TIME RANGE DIAL.

Turn power back on for changes to take place.

If you have any questions please contact the Astec service department.

Please refer to the following figure for a general description of the Siemens relay components.

**Siemens relay component identification:**

