

# 900 Series Tachometer

Calibration Switch Settings

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The eight DIP switches on the back of AMETEK's 900 Series tachometers must be set to the correct positions for the tachometer to function properly. To determine the correct positions and set the calibration switches, perform the steps in Figure 1.

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Note major changes for Revision D:

- The gauge now has LED backlighting and will only backlight on ignition
- Lamps are not changeable
- The gauge calibrates upon every start up and will drive the pointer below zero
- The gauge is more accurate and will respond more quickly to prolonged and minor speed variations.

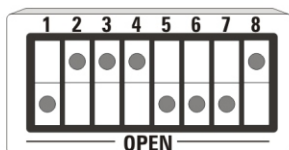
1. Most Freightliner applications will have an electronic engine. If this is valid, set switches S5 and S6 ON and the others OFF.
2. If the vehicle is not a Freightliner with an electronic engine, count the number of teeth on the flywheel and proceed to step 3.
3. Locate the number of teeth on the flywheel in the left column of the 900 Series Tachometer Calibration Table, and set the switches shown in the right column ON.

**EXAMPLE:** Suppose your vehicle is equipped with a Caterpillar 3406B engine and there are 113 teeth on the flywheel for this particular engine. The right column in the 900 Series Tachometer Calibration Table shows switches 2, 3, 4, and 8 should be ON. The rest should be OFF.

### Calibration Switches

Both switch arrays are shown with switches 2, 3, 4, and 8 ON.


#### Typical Rocker Switch



A switch is **ON** or closed when the end nearest the numbers is down (as indicated by the ●).

#### Typical Slide Switch



A switch is **ON** or closed when the  is up.

*Note: If your tachometer has rocker-type switches, press the appropriate end of the switch with a suitable tool (NOT a pencil!) that is not likely to break off inside the tachometer. Pressing in at the top of the switch turns the switch ON, pressing in at the bottom of the switch turns the switch OFF. If your tachometer has slide-type switches, slide them in the appropriate direction.*

**Figure 1**

# 900 Series Tachometer Calibration Table

| # Flywheel Teeth | Set These Switches ON |
|------------------|-----------------------|
| 12               | 5,6                   |
| 75               | 2,5,7,8               |
| 76               | 2,5,6                 |
| 77               | 2,5,6,8               |
| 78               | 2,5,6,7               |
| 79               | 2,5,6,7,8             |
| 80               | 2,4                   |
| 81               | 2,4,8                 |
| 82               | 2,4,7                 |
| 83               | 2,4,7,8               |
| 84               | 2,4,6                 |
| 85               | 2,4,6,8               |
| 86               | 2,4,6,7               |
| 87               | 2,4,6,7,8             |
| 88               | 2,4,5                 |
| 89               | 2,4,5,8               |
| 90               | 2,4,5,7               |
| 91               | 2,4,5,7,8             |
| 92               | 2,4,5,6               |
| 93               | 2,4,5,6,8             |
| 94               | 2,4,5,6,7             |
| 95               | 2,4,5,6,7,8           |
| 96               | 2,3                   |
| 97               | 2,3,8                 |
| 98               | 2,3,7                 |
| 99               | 2,3,7,8               |
| 100              | 2,3,6                 |
| 101              | 2,3,6,8               |
| 102              | 2,3,6,7               |
| 103              | 2,3,6,7,8             |
| 104              | 2,3,5                 |
| 105              | 2,3,5,8               |
| 106              | 2,3,5,7               |
| 107              | 2,3,5,7,8             |

| # Flywheel Teeth | Set These Switches ON |
|------------------|-----------------------|
| 108              | 2,3,5,6               |
| 109              | 2,3,5,6,8             |
| 110              | 2,3,5,6,7,            |
| 111              | 2,3,5,6,7,8           |
| 112              | 2,3,4                 |
| 113              | 2,3,4,8               |
| 114              | 2,3,4,7,              |
| 115              | 2,3,4,7,8             |
| 116              | 2,3,4,6               |
| 117              | 2,3,4,6,8             |
| 118              | 2,3,4,6,7             |
| 119              | 2,3,4,6,7,8           |
| 120              | 2,3,4,5               |
| 121              | 2,3,4,5,8             |
| 122              | 2,3,4,5,7             |
| 123              | 2,3,4,5,7,8           |
| 124              | 2,3,4,5,6             |
| 125              | 2,3,4,5,6,8           |
| 126              | 2,3,4,5,6,7           |
| 127              | 2,3,4,5,6,7,8         |
| 128              | 1                     |
| 129              | 1,8                   |
| 130              | 1,7                   |
| 131              | 1,7,8                 |
| 132              | 1,6                   |
| 133              | 1,6,8                 |
| 134              | 1,6,7                 |
| 135              | 1,6,7,8               |
| 136              | 1,5                   |
| 137              | 1,5,8                 |
| 138              | 1,5,7                 |
| 139              | 1,5,7,8               |
| 140              | 1,5,6                 |
| 141              | 1,5,6,8               |

| # Flywheel Teeth | Set These Switches ON |
|------------------|-----------------------|
| 142              | 1,5,6,7               |
| 143              | 1,5,6,7,8             |
| 144              | 1,4                   |
| 145              | 1,4,8                 |
| 146              | 1,4,7                 |
| 147              | 1,4,7,8               |
| 148              | 1,4,6                 |
| 149              | 1,4,6,8               |
| 150              | 1,4,6,7               |
| 151              | 1,4,6,7,8             |
| 152              | 1,4,5                 |
| 153              | 1,4,5,8               |
| 154              | 1,4,5,7               |
| 155              | 1,4,5,7,8             |
| 156              | 1,4,5,6               |
| 157              | 1,4,5,6,8             |
| 158              | 1,4,5,6,7             |
| 159              | 1,4,5,6,7,8           |
| 160              | 1,3                   |
| 161              | 1,3,8                 |
| 162              | 1,3,7                 |
| 163              | 1,3,7,8               |
| 164              | 1,3,6                 |
| 165              | 1,3,6,8               |
| 166              | 1,3,6,7               |
| 167              | 1,3,6,7,8             |
| 168              | 1,3,5                 |
| 169              | 1,3,5,8               |
| 170              | 1,3,5,7               |

Note: Do not use a setting that is not on this chart. It could result in a false reading.

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