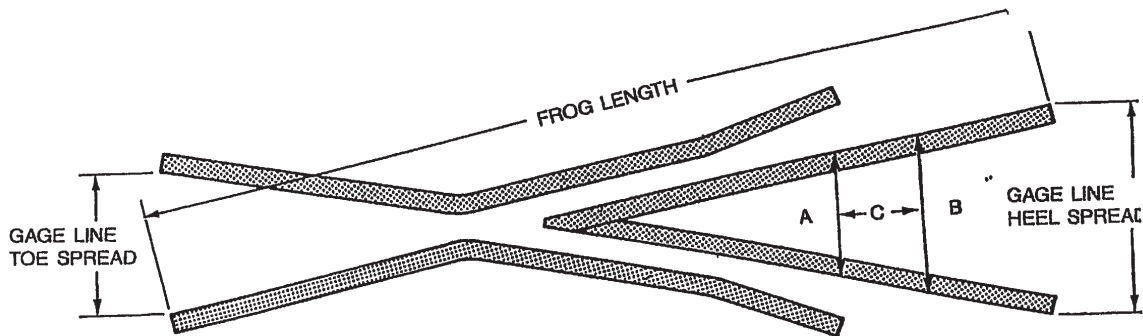


Frogs

Frogs permit wheel flanges to cross opposing rails in turnouts and crossings, while providing support for the wheels. The end of the frog nearest the switch is the toe of the frog, the other end is the heel.

Frogs are referenced by angle which is converted to a number. For example, a number 8 frog creates an angle of 7 degrees 9 minutes and 10 seconds or an angle of 1-8. To put it more simply, for every increase of 8" on the gauge line, the spread or distance between gauge lines increases 1"

HOW TO DETERMINE FROG NUMBER FOR STRAIGHT FROGS ONLY



METHOD 1

The frog number is the ratio of its length to its width.

Formula (all dimensions in inches)

$$\frac{\text{Total frog length}}{\text{Gauge line toe spread} \div \text{Gauge line heel spread}} = \text{Frog Number}$$

Example: For an AREA 623, No. 10:

$$\frac{16\text{ft. } 6 \text{ in.}}{7 \frac{3}{16} \div 12 \frac{5}{8}} = \frac{198 \text{ in.}}{19 \frac{13}{16} \text{ in.}} = 10$$

METHOD 2

The frog number is the ratio of its length to spread in the heel section of the frog.

Step 1. Measure the spread at any point on the heel. Mark the gauge line, A.

Step 2. Mark a second gauge line, B, where the spread is one inch greater than at A.

Step 3. Measure the distance, C, from A to B to get the frog number.

Example

Spread A = 5 in.

Spread B = 6 in.

Distance C = 10 in.

Therefore, the frog is a No. 10

