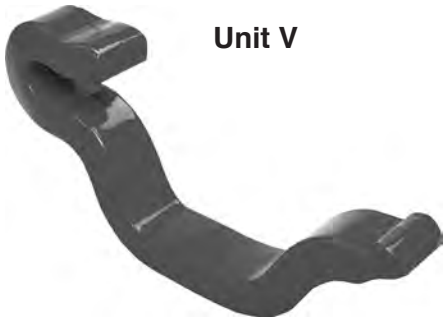
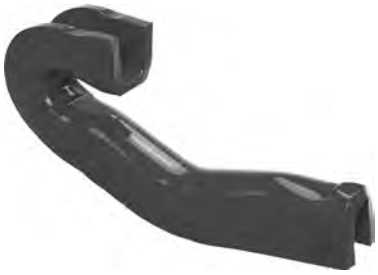
# RAIL ANCHORS, TIE PLATES

**Improved Fair**

**Unit V**



**Channeloc**

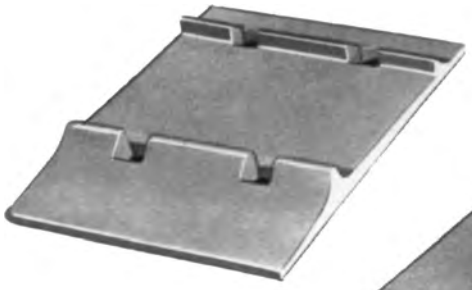


Riemsarail anchors are made as a single piece from spring steel or equivalent material, heat-treated to prevent track creepage. They offer a wide bearing surface against both the rail base and the tie, reducing cutting and wear, which helps extend the lifespan of wooden ties. All Riemsarail anchors listed above are the "drive-on" type, installed using a standard spike maul.

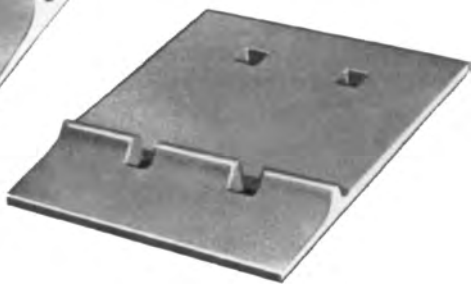
Using single or double shoulder tie plates enhances track stability and significantly increases the longevity of wooden ties. Fabricated from hot-rolled steel sections through punching and shearing, these plates ensure proper cant, a consistent rail-bearing surface, and improved load distribution to the ties. They maintain proper rail gauge, promote even rail head wear, and prevent excessive tie wear. Tie plates are designed with a long (field) end positioned outside the rails. For single shoulder plates, the shoulder is on the field end, while the shorter (gauge) end is placed inside the rails.

When placing an order, specify the rail section or rail base width. High-quality relay tie plates (hand-sorted and palletized) are easily accessible and provide significant cost savings compared to new plates. Tie plates come in various sizes and punching patterns, which may include both "line holes" and "hold-down holes." The plates shown above feature four line holes aligned with the rail base edge. Many also include hold-down (or "anchor") holes positioned between the line holes and the plate edges.

**Double Shoulder**



**Single Shoulder**



**Standard Plate Sizes**

| Rail Base Width | AREMA Plan | SS DS | Plate Weight* | Plate Length |
|---|---|---|---|---|
| 4-7/16 to 5-1/8 | 1 | SS | 11.63 | 10 |
| 5-1/8 to 5-1/2 | 2 | SS | 12.93 | 11 |
| 5-3/8 | 3 | DS | 15.86 | 12 |
| 5-1/2 | 4 | DS | 13.45 | 11 |
| | 5 | DS | 16.25 | 12 |
| | 7 | DS | 19.60 | 13 |
| | 8 | DS | 22.90 | 14 |
| 6 | 9 | DS | 14.94 | 12 |
| | 10 | DS | 17.87 | 13 |
| | 12 | DS | 21.47 | 14 |
| | 13 | DS | 23.32 | 14-3/4 |
| | UP/CN | DS | 27.67 | 16 |

*weight based on 8-hole 7-3/4” wide plate, except plan 1 and 2
UP/CN 16” plate is 6-hole