

TABLE 2. CLASS 150 STUD & BOLT SPECIFICATIONS

| Valve Size | | Diameter | TPI | Wafer Stud Min. Length | Quantity | Lug Bolt Length | Quantity | Torque |
|------------|------|----------|----------|------------------------|----------|-----------------|----------|---------|
| (in) | (dn) | (in) | (UNC-2B) | (in) | (total) | (in) | (total) | (ft-lb) |
| 2 | 50 | 5/8" | 11 | 5.50 | 4 | 1.50 | 8 | 90 |
| 2.5 | 65 | 5/8" | 11 | 5.50 | 4 | 1.75 | 8 | 90 |
| 3 | 80 | 5/8" | 11 | 5.50 | 4 | 1.75 | 8 | 90 |
| 4 | 100 | 5/8" | 11 | 5.50 | 8 | 1.75 | 16 | 90 |
| 5 | 125 | 3/4" | 10 | 6.50 | 8 | 2.00 | 16 | 150 |
| 6 | 150 | 3/4" | 10 | 6.50 | 8 | 2.00 | 16 | 150 |
| 8 | 200 | 3/4" | 10 | 6.50 | 8 | 2.25 | 16 | 150 |
| 10 | 250 | 7/8" | 9 | 7.50 | 12 | 2.50 | 24 | 240 |
| 12 | 300 | 7/8" | 9 | 7.50 | 12 | 2.50 | 24 | 240 |
| 14 | 350 | 1" | 8 | 9.00 | 12 | 3.00 | 24 | 368 |
| 16 | 400 | 1" | 8 | 9.00 | 16 | 3.00 | 32 | 368 |
| 18 | 450 | 1-1/8" | 8 | 11.00 | 16 | 3.50 | 32 | 533 |
| 20* | 500 | 1-1/8" | 8 | 11.00 | 20 | 3.50 | 40 | 533 |
| 24* | 600 | 1-1/4" | 8 | 13.00 | 20 | 4.50 | 40 | 750 |

* Valves have blind holes adjacent to stem, requiring hex bolts in place of studs.

TABLE 3. CLASS 300 STUD & BOLT SPECIFICATIONS

| Valve Size | | Diameter | TPI | Wafer Stud Min. Length | Quantity | Lug Bolt Length | Quantity | Torque |
|------------|------|----------|----------|------------------------|----------|-----------------|----------|---------|
| (in) | (dn) | (in) | (UNC-2B) | (in) | (total) | (in) | (total) | (ft-lb) |
| 2 | 50 | 5/8" | 11 | 5.50 | 8 | 1.750 | 16 | 90 |
| 2.5 | 65 | 3/4" | 10 | 6.00 | 8 | 2.000 | 16 | 150 |
| 3 | 80 | 3/4" | 10 | 6.00 | 8 | 2.000 | 16 | 150 |
| 4 | 100 | 3/4" | 10 | 7.00 | 8 | 2.250 | 16 | 150 |
| 5 | 125 | 3/4" | 10 | 7.00 | 8 | 2.500 | 16 | 150 |
| 6 | 150 | 3/4" | 10 | 7.00 | 12 | 2.500 | 24 | 150 |
| 8 | 200 | 7/8" | 9 | 8.00 | 12 | 3.000 | 24 | 240 |
| 10 | 250 | 1" | 8 | 10.00 | 16 | 3.500 | 32 | 368 |
| 12 | 300 | 1-1/8" | 8 | 10.50 | 16 | 3.750 | 32 | 533 |
| 14* | 350 | 1-1/8" | 8 | 11.50 | 20 | 3.750 | 40 | 533 |
| 16* | 400 | 1-1/4" | 8 | 12.50 | 20 | 4.000 | 40 | 750 |
| 18* | 450 | 1-1/4" | 8 | 14.00 | 24 | 5.000 | 48 | 750 |
| 20* | 500 | 1-1/4" | 8 | 14.00 | 24 | 5.000 | 48 | 750 |
| 24* | 600 | 1-1/2" | 8 | 16.00 | 24 | 6.000 | 48 | 1200 |

* Valves have blind holes adjacent to stem, requiring hex bolts in place of studs.

TABLE 4. CLASS 600 STUD & BOLT SPECIFICATIONS

| Valve Size | | Diameter | TPI | Wafer Stud Min. Length | Quantity | Lug Bolt Length | Quantity | Torque |
|------------|------|----------|----------|------------------------|----------|-----------------|----------|---------|
| (in) | (dn) | (in) | (UNC-2B) | (in) | (total) | (in) | (total) | (ft-lb) |
| 3 | 50 | 3/4" | 10 | 7.0 | 8 | 2.500 | 16 | 150 |
| 4 | 65 | 7/8" | 9 | 8.5 | 8 | 3.000 | 16 | 240 |
| 6 | 80 | 1" | 8 | 9.5 | 12 | 3.500 | 24 | 368 |
| 8 | 100 | 1-1/8" | 8 | 11.5 | 12 | 4.500 | 24 | 533 |
| 10 | 125 | 1-1/8" | 8 | 12.5 | 16 | 4.500 | 32 | 533 |
| 12 | 150 | 1-1/4" | 8 | 14.0 | 20 | 5.500 | 40 | 750 |

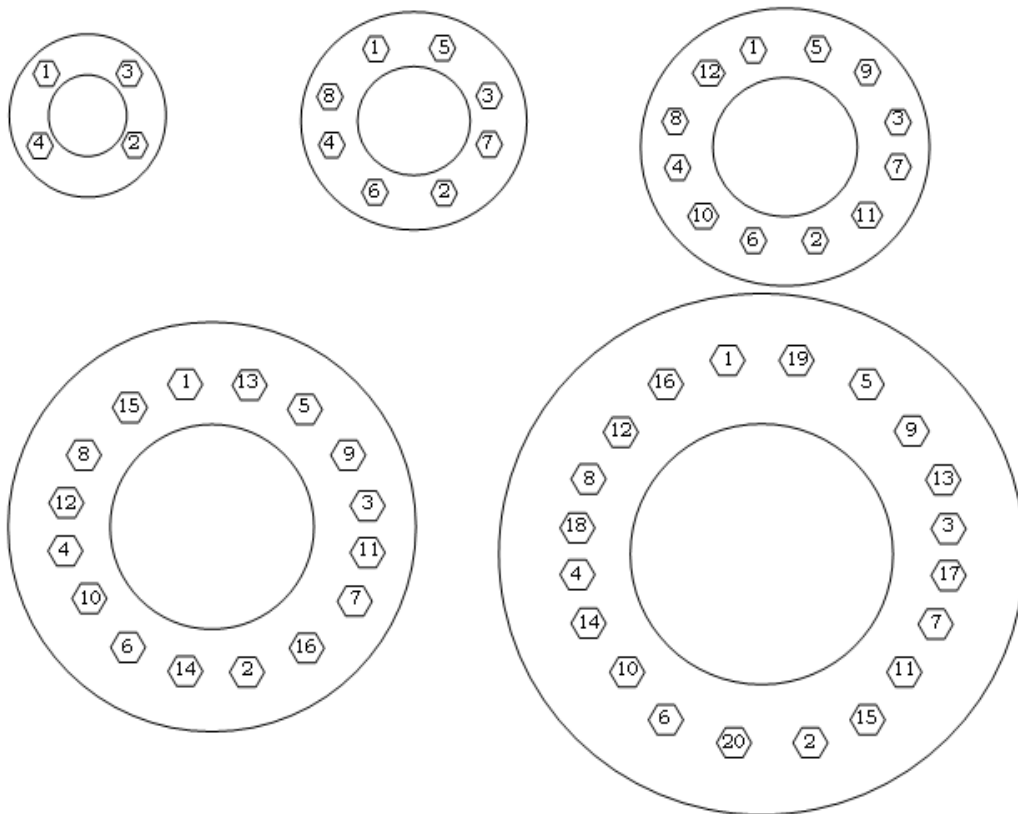


FIGURE 4. FLANGE BOLT TIGHTENING SEQUENCE