A tree bench is a circular bench constructed around a tree. The bench in this plan is approximately 6 feet in diameter and can be placed around any young tree in a community park or garden. Made of 2” X 6” pine wood, bolted and bracketed together to form a sturdy unit, the bench can seat about 8 adults or 12 small children. It allows one to sit facing the tree with enough leg room to keep free of the tree trunk or to sit looking out from under the shade of the tree.

### Tools Needed
- 1 Saw (Hand or Power)
- 1 Hammer
- 40 Machine Bolts (Lag head or oval) 3/8” X 3”
- 1 Power Drill
- 40 Nuts
- 2 Bits – 3/8” & 5/8”
- 1 Wrench or Pliers
- 10 Brackets – 5”
- 30 Nails – 6d
- 1 Can Polyurethane Clear

### Material List
- 40 Machine Bolts (Lag head or oval) 3/8” X 3”
- 40 Nuts
- 40 Screws – 1½” - #8
- 10 Brackets – 5”
- 30 Nails – 6d
- 1 Can Polyurethane Clear

### Wood
- 20’ X 2” X 10” Pine
- 24’ X 2” X 6” Pine

### Cutting
- 2” X 10” – 10 pieces – 23” (Seat)
- 2” X 6” – 10 pieces – 16” (Legs)
- 2” X 6” – 5 pieces – 28” (Leg & Seat support)

**INSTRUCTIONS:**

**Cutting:**
If you purchase new lumber you may have it precut at extra cost as follows:

- 2” X 10” – 10 pieces – 23” – these will need ends cut at a 30 degrees angle.
- 2” X 6” – 10 pieces – 16” – most lumber yards will not make this cut.
- 5 pieces – 28”

If using scrap lumber select the best possible pieces (without splits, splinters, or warps.)
Make seat section first – cut your piece the right length and angle. Cut about four (4) pieces and lay them flat to see if cuts are accurate. If some pieces are not cut correctly do not panic; corrections can be made by cutting the next angles shorter or longer. After all seat section are cut lay all ten sections in position. (Figure #1) A tissue pattern may help – you can make one out of newspaper.

**Drilling and bolting:**
Center one support section at the bottom of one seat with equal room at each end to bolt the ends of the next seat. Hold in this position with a “C” clamp and turn over with seat resting on support. Mark position so that holes can be drilled through the top of seat and support at the same time. But first counter-sink hole with 5/8” bit ½ inch deep to hide head of bolt.
The holes must be drilled about 2 inches from each end of seat section. After holes are drilled for one seat, place the three inch bolts into the holes down through the support section. Nuts should be tightened slightly. Remove “C” clamps.
Start the next seat at the right of the first support by holding second seat against the first and on top of end support. Clamp together and drill two holes through seat and support. Place bolt through both seat and support. Tighten slightly. Do the same with the next seat on the left. You now have three seats held together with one support. However, the end of seat 2 and 3 are not bolted. (Figure #4) Continue with the same above steps until all sections are connected.

**Legs:**
Each leg should be nailed to the end of support sections with two nails. This can be done more easily by removing the supports from seat and nailing all legs first. After nailing the legs and supports they can be reattached to the seat bottom. If you like you can make some of the legs longer and sink them into the ground as you would fence posts.

**Brackets:**
The brackets are used to give the legs more stability and strength. They are connected to the sides of the legs and also to the underside of the support section with 1½ screws.

**Finishing:**
Assemble complete section around tree before bolting the final piece in place. You may need to sand rough edges down and paint with one or two coats of outdoor polyurethane paint.

Note: The illustration in Fig. # 1 has eight sides. However, this plan is for a 10 sided bench.