

This bolt hole project can be classified as an advanced programming exercise, although it looks quite simple.

The purpose of this project is to spot drill and drill two parts - *Part A* and *Part B*, using *one main* program and *one subprogram*. Both parts are made from the same drawing:

*Part A* with all holes, *Part B* with several holes skipped.

Subprograms are covered in **Chapter 39** of the *CNC Programming Handbook*.

➔ Please follow these requirements:

- Set X0Y0 at the center of the ring, Z0 at the top of the ring, *NOT* the lugs
- Start with the first tool in the spindle (use T01 for the spot drill and T02 for the drill)
- Machine holes in the order numbers in the drawing
- **PART A** - Machine all 12 holes, with the block skip switch set to **OFF**
- **PART B** - Machine only holes 1-2-3-5-6-9-10-12 (skip holes 4-7-8-11), using the same subprogram, with the block skip switch set to **ON**
- User R-level at 2 mm above the *ring* surface.

