

I-03

TOOLMAKER TRAINING

TRAINER'S GUIDE

Duty I: Jig Bore
I-03: Set Up Jig Bore
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Instructions To The Trainer

1. The Learner will contact you when ready to practice setting up a jig bore.
2. Be prepared to demonstrate the steps for this task.
3. Ask the Learner to contact the Evaluator when ready for the Skill Check.



Skill Objective

Upon receiving a process sheet for a job requiring a high degree of accuracy and a part that must be secured for jig bore work, set up the jig bore.

Task Standards

1. Work surfaces must be free of dirt, metal scraps, and other debris.
2. Setup must be indicated when measured with a dial indicator.
3. The machine origin must be set.
4. All safe practices must be demonstrated during the setup procedure.

What The Learner Will Need

This section contains the safety information, tools, and resources you will need before setting up a jig bore.

SAFETY FIRST

DON'T TAKE
CHANCES

- Follow all Caterpillar facility safety standards when performing this task.
- Be aware of axis motions, rotating equipment, and unexpected machine movement.
- Machine spindle must be placed in neutral during the setup procedure.



- jig bore machine with round and tilt table
- dial indicator (tenths)
- indicating chair
- shop towels
- gauge blocks
- corner knee
- V-block
- clamps
- sine bar
- taper pot
- hand tools
- gage roll



- sample piece part
- tool room prints (PX numbers)



Practice Set-Up

The Learner may perform the following practice to help prepare for the Skill Check. Set up the practice for the Learner. Assist the Learner during the practice, if necessary; answer any questions concerning the task; and be prepared to demonstrate the task to the Learner. Make sure the Learner follows safe work practices while practicing the task.

Practice

Have prints available, which require using the following setup devices:

corner knee, clamp-to-table, parallels, tilt table, round table, v-blocks, sine bar, taper pots

Tools and equipment for the practice

jig bore equipped with round and tilt tables, corner knee, parallels, v-blocks, sine bar, clamps, taper pots, prints, parts, dial indicator

Practice Objective

Set up the equipment, including indicating equipment and set the machine origin or reference point. All safe practices must be demonstrated during the setup.

Next Step

Allow the Learner to continue practicing and developing skills needed to demonstrate the task. The Learner should ask the Evaluator to schedule a Skill Check when ready to demonstrate the task unaided and meet all the task standards and safe work practices.