

# Cutting Tool Solutions

## Pilot Pins

The pilot pin or centre pin as it is also known, forms an integral function of the annular broaching cutter.



1. **Centralises** the position of the hole on the pre-marked steel.
2. **Lubricates** the cutter internally by acting as a flow tap for the coolant as it retracts into the spring loaded machine arbor, increasing tool life and ensuring slug ejection.
3. **Ejects** the solid slug of steel on completion of the hole.



JEI's range of pilot pins are fully CNC ground to ensure correct fitting to the cutter, and maximum deferral of breakage.

PART NUMBER	OVERALL LENGTH (MM)	DIAMETER Ø	USE WITH JEI CUTTERS (IF APPLICABLE)
JEIPIN1213S	77	4.74	
JEIPILOT1	77	6.35	Turbo Steel 1" D.O.C. 12 mm-65 mm Ø
JEIPILOT1/TCTS	90	6.35	Turbo Tough 35 mm D.O.C. < 18 mm Ø
JEIPILOT1/8MM	90	7.98	Turbo Tough 35 mm D.O.C. 18 mm-65 mm Ø
JEIPILOT1/8MM/W	108	7.98	Turbo Steel 1" D.O.C. > 65 mm Ø + Turbo Tough 35 mm D.O.C. > 65 mm Ø +
JEIPIN1213L	103	4.74	
JEIPILOT2	103	6.35	Turbo Steel 2" D.O.C. < 65 mm Ø Turbo Tough 55 mm D.O.C. < 18 mm Ø
JEIPILOT2/8MM	108	7.98	Turbo Tough 55 mm D.O.C. 18 mm-65 mm Ø
JEIPILOT2/8MM/W	130	7.98	Turbo Tough 55 mm D.O.C. > 65 mm Ø
JEIPILOT3	130	6.35	Turbo Steel 75 mm D.O.C. < 66 mm Ø
JEIPILOT3/8MM	130	7.98	Turbo Tough 80 mm D.O.C. < 66 mm Ø
JEIPILOT3/8MM/W	155	6.35	Turbo Tough 80mm D.O.C. > 66 mm
JEIPILOT4	155	6.35	Turbo Steel 4" D.O.C. < 66 mm Ø
JEIPILOT4/8MM	160	7.98	Turbo Tough 110 mm D.O.C. < 66 mm Ø
JEIPILOT4/8MM/W	205	7.98	Turbo Tough 110 mm D.O.C. > 66 mm Ø
JEIPILOT6	205	6.35	Turbo Steel 6" D.O.C. < 66 mm Ø
JEIPILOT6/8MM	205	7.98	Turbo Tough 150 mm D.O.C. < 66 mm Ø
JEIPILOT6/8MM/W	205	7.98	Turbo Tough 200 mm D.O.C. < 66 mm Ø

## Detachable Pilot Pins

When cutting through a solid plate with a thickness of more than 50 mm, the standard pilot pin will not retract further into the machine arbor. At this stage, the pilot pin is normally removed and replaced with a shorter version to complete the hole operation, or the operator will simply not use a centre pin for the hole, an option which will almost definitely result in cutter breakage.

**JEI's solution is the 2 part detachable pilot pin which will allow cutting of solid steel up to 150 mm (6") thick without completely having to remove the pin during operation.**

PART NUMBER	OVERALL LENGTH (MM)	DIAMETER Ø	USE WITH JEI CUTTERS (IF APPLICABLE)
JEIPILOT3/8MMD	130 / 80	7.98	Turbo Tough 80mm D.O.C 20mm-66mm Ø
JEIPILOT4/8MMD	157 / 107	7.98	Turbo Tough 100mm D.O.C 20mm-66mm Ø
JEIPILOT6/8MMD	221.5 / 174	7.98	Turbo Tough 150mm D.O.C 20mm-66mm Ø



### STEP 1

Fit the 2 part pin into the cutter and begin the cut.

### STEP 2

Cut to the maximum depth until the cutter can't continue further.

### STEP 3

**IMPORTANT - TURN OFF MACHINE ENSURE CUTTER IS NOT TURNING.**

Retract the machine arbor and remove the end of the pilot pin.

### STEP 4

Continue the cutting process and the slug will be ejected at the end of the cut.

