

Troubleshooting

(Retention stud)

	Details of the trouble	Cause	Pulled out of holder. Unable to attach fast to spindle or holder in case of MT shank.
1	Unable to set in completely or install pull stud.	① Seized or adhered chip and dust to holder and pull stud screw part.. ② Scratch and dent in holder and pull stud screw part. ③ Difference in screw size between holder and pull stud.	① Cleaning of holder and pull stud screw part. ② Replacement of holder or pull stud. ③ Check screw size.
2	Unable to attach or install holder to spindle tightly.	① M/C-specified pull stud is not used. ② Pull stud is not installed properly. • Seized or adhered chip and dust to end surface. • Insufficient tightening torque. ③ Indentation at pull stud drawing part is terrible.	① Use of M/C-specified pull stud. ② • Cleaning of pull stud and holder attachment part. • Tightening at recommended tightening torque. ③ Replacement of pull stud.
3	Loosened pull stud.	① Insufficient tightening torque. ② Adhesive agent is not applied.	① Tightening at recommended tightening torque. ② Application of adhesive agent.
4	Coolant leakage is generated. Coolant is not provided.	① M/C-specified pull stud is not used. ② Deterioration of O ring. ③ Pull stud is not specified for center through.	① Use designated retention stud for M/C. ② Replacement of O ring. ③ Use of pull stud specified for center through. (Use of M/C-specified pull stud.)
5	Poor ATC repeat accuracy.	① M/C-specified pull stud is not used. ② Expansion of BT shank because of over-tightening retention stud ③ Indentation at pull stud drawing part is terrible.	① Use designated retention stud for M/C. ② Keep recommended torque value for tightening retention stud. ③ Replacement of pull stud.
6	Indentation produced by pull stud is terrible.	① Machine's drawing direction is biased. ② Machine's drawing force is strong. ③ M/C-specified pull stud is not used.	① Contact the manufacturer. ② Check machine's drawing force. (Contact the manufacturer.) ③ Use designated retention stud for M/C.
7	Pull stud is broken.	① Bending moment is too large. ② Machine's drawing force is strong or weak.	① • Revision of cutting conditions (Decrease cutting resistance.) a : Higher rotation speed or lower feed rate (Approx. 20%) b : Lower cutting depth • Use bigger tool holder • Shorter tool projection length ② Check machine's drawing force. (Contact the manufacturer.)