Troubleshooting

（Straight drill chuck）

	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 mount collet.	① Wrong choice of collet.	① Check collet's type and size.
2	Unable to mount to spindle.	① Spindle dimension is different from standard dimension. ② SSMA nut is different from drilling chuck in size in case of using drilling chuck. ③ Tr nut is used in case of using drilling chuck.	① Check spindle dimension. ② Check the size of SSMA nut and drilling chuck. ③ Use of SSMA nut in case of using drilling chuck.
3	Tool is pulled out during operation	① Large cutting resistance to chucking force. ② Insufficient tightening of cap nut ③ Insufficient tightening of cup nut fromrotor ring's malfunction ④ Insufficient tightening of cup nutbecause of increased friction. （Collapse of collet is not big enough.）	① ・Revision of cutting conditions (Decrease cutting resistance.) a : Higher rotation speed or lower feed rate (Approx. 20%) b : Lower cutting depth ・Shorter tool projection length ・Shorter chuck length ② ・Keep recommended torque value for tightening cap nut. ・Use torque wrench. ③ Replacement of cap nut ④ Apply oil (grease) on the thread part.
4	Poor runout accuracy during cutting	① Poor chucking accuracy of collet ② Dust seizing in collet insertion area ③ Scratch or dent in chuck ID ④ Scratch or dent on collet ID and OD ⑤ Insufficient chucking length ⑥ Insufficient chucking length ⑦ Dust seizing in cap nut thread ⑧ Malfunction of rotor ring of cap nut (Rotor ring will not rotate smoothly.)	① Replacement of collets ② Cleaning of collet insertion area ③ ・Replacement of chuck or tool ・Touching up of area in question（rubbing off with sand paper #1000 and above） Correction (grinding) by NT TOOL is not possible. ・Ask NT for repair. ④ Replacement of collets ⑤ Keep minimum insertion length. (collet ID length must be filled.) ⑥ Replacement of tools ⑦ Cleaning of thread part, applying grease ⑧ ・Cleaning of cap nut （so that rotor ring will rotate smoothly） ・Replacement of cap nuts
5	Chattering	① Cutting resistance is too high in comparison with chuck's rigidity.	① ・Revision of cutting conditions (Decrease cutting resistance.) a : Higher rotation speed or lower feed rate (Approx. 20%) b : Lower cutting depth ・Shorter tool projection length ・Shorter chuck length

6	Unable to lock when combined with drilling chuck.	① Tr nut is used.	① Use of SSMA nut.