

1 INSERT SCREW NOT LOOSENING



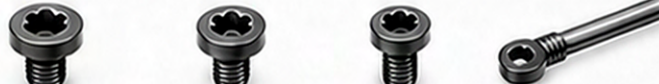
PROBABLE CAUSES

- ❗ Wrong Torx key size
- ❗ Worn or rounded Torx key
- ❗ Insert pocket clogged with chips
- ❗ Thread locker residue jammed inside
- ❗ Screw head damaged

CORRECTIVE ACTIONS

- ✅ Use correct Torx size (T7/T8/T15 depending on tool)
- ✅ Replace worn Torx key immediately
- ✅ Clean insert pocket using air blow + brush
- ✅ Apply mild heat (if thread locker is used) to soften
- ✅ If screw head is damaged, remove with extractor and replace screw

2 INSERT SCREW STRIPPING / ROUNDING



PROBABLE CAUSES

- ❗ Excessive tightening torque
- ❗ Using incorrect or worn Torx key
- ❗ Poor alignment of Torx key when applying force

CORRECTIVE ACTIONS

- ✅ Use controlled torque (typically 3-5 Nm for small screws, 5-8 Nm for medium)
- ✅ Always insert Torx key fully into screw head
- ✅ Replace worn key immediately
- ✅ Replace screw after any sign of deformation

3 INSERT NOT SEATING PROPERLY



PROBABLE CAUSES

- ❗ Chip contamination under insert
- ❗ Damaged seating surface
- ❗ Using incorrect insert type/size
- ❗ Clamping screw bottoming out before locking

CORRECTIVE ACTIONS

- ✅ Clean pocket thoroughly
- ✅ Inspect and replace toolholder if seating surface is worn
- ✅ Verify insert code matches tool holder specification
- ✅ Replace screw if too long / threads damaged

4 SCREW BREAKING DURING TIGHTENING



PROBABLE CAUSES

- ❗ Over-tightening
- ❗ Using wrong screw length
- ❗ Poor screw material quality
- ❗ Cross-threading

CORRECTIVE ACTIONS

- ✅ Follow correct torque values
- ✅ Use screws supplied by manufacturer
- ✅ Start screw by hand to avoid cross-threading
- ✅ Replace whole screw set at regular service intervals

5 INSERT MOVING DURING CUTTING



PROBABLE CAUSES

- ❗ Under-tightened screw
- ❗ Worn screw head
- ❗ Poor insert seating
- ❗ Incorrect screw type

CORRECTIVE ACTIONS

- ✅ Tighten to correct torque
- ✅ Replace screw
- ✅ Re-clean seating area
- ✅ Verify screw type (flat-bottom, conical, etc.)

6 TORX KEY SLIPPING WHILE CLAMPING



PROBABLE CAUSES

- ❗ Key worn or rounded
- ❗ Using L-key instead of flag Torx for tight spaces
- ❗ Wrong orientation forcing uneven pressure
- ❗ Oil/coolant contamination on screw head

CORRECTIVE ACTIONS

- ✅ Replace Torx key
- ✅ Use flag-type Torx for better leverage
- ✅ Clean screw head before tightening
- ✅ Push Torx fully into recess before force application

7 INSERT DAMAGED DURING CLAMPING



PROBABLE CAUSES

- ❗ Tightening screw too much
- ❗ Hitting insert with key tip
- ❗ Using incorrect insert geometry
- ❗ Pocket wear causing stress

CORRECTIVE ACTIONS

- ✅ Reduce torque
- ✅ Insert Torx carefully to avoid hitting insert
- ✅ Use correct insert geometry only
- ✅ Recondition or replace worn pocket

8 DIFFICULTY TO TIGHTEN SCREW



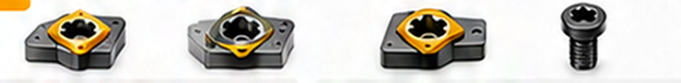
PROBABLE CAUSES

- ❗ Screw threads dirty / rusted
- ❗ Holder threads damaged
- ❗ Coated threads inside threads
- ❗ Screw not matching thread pitch

CORRECTIVE ACTIONS

- ✅ Clean threads using tap
- ✅ Apply light oil
- ✅ Replace screw
- ✅ Check thread pitch before installation

9 INSERT TILTING OR NOT LEVEL



PROBABLE CAUSES

- ❗ Seating surface uneven
- ❗ Chip packing
- ❗ Wrong screw angle
- ❗ Insert worn on bottom surface

CORRECTIVE ACTIONS

- ✅ Clean seating surface
- ✅ Replace insert
- ✅ Inspect pocket for wear or impact damage
- ✅ Ensure screw angle matches pocket design

10 INSERT POPPING OUT DURING HEAVY CUTS



PROBABLE CAUSES

- ❗ Screw insufficient torque
- ❗ Negative insert used in positive pocket or vice-versa
- ❗ Vibration in tool setup
- ❗ Damaged insert seat

CORRECTIVE ACTIONS

- ✅ Retighten to recommended torque
- ✅ Use correct insert geometry
- ✅ Improve tool rigidity / reduce overhang
- ✅ Inspect and replace damaged seat



HIGH QUALITY



SECURE HOLD



PRECISION PERFORMANCE



RELIABLE RESULTS