

## Damaged implant removal

# Challenges and solutions (Option 1)

### Tasks

#### 1 Destroyed coupling mechanism

Insert conical extraction bolt (a) in screw head and try to remove screw

#### 2 Broken screw removal procedure

Remove bone around screw with appropriate sized hollow reamer (b)

Use extraction tube (c) to remove screw shaft

### Learning outcomes

- Identify the function of different instruments to aid screw removal
- Remove screw with destroyed coupling mechanism
- Remove broken screw

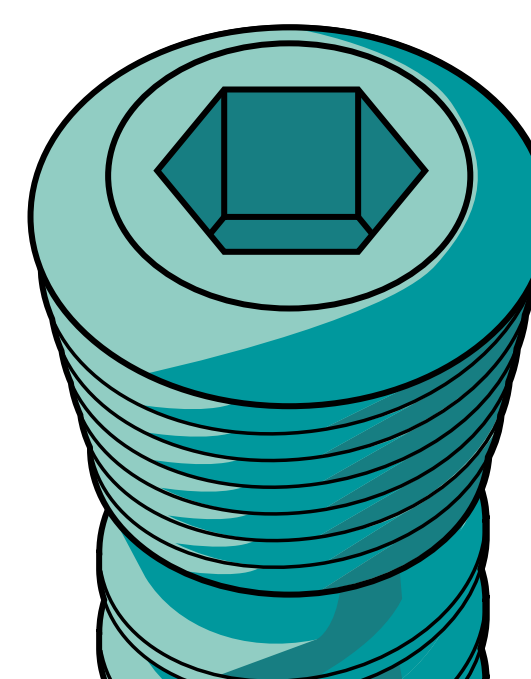
### Take-home message

- Use undamaged screw driver
- Clean hexagonal coupling mechanism of screw head
- Everything in the removal set is left threaded

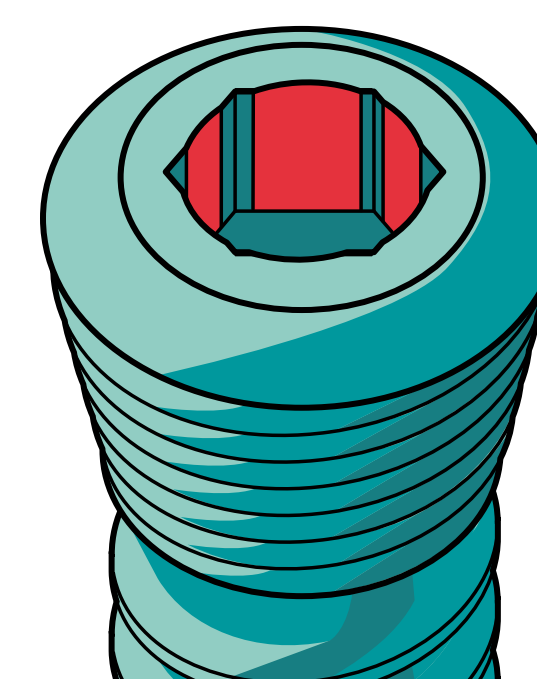


#### Problem 1

Destroyed hexagonal coupling mechanism of screw head



Intact



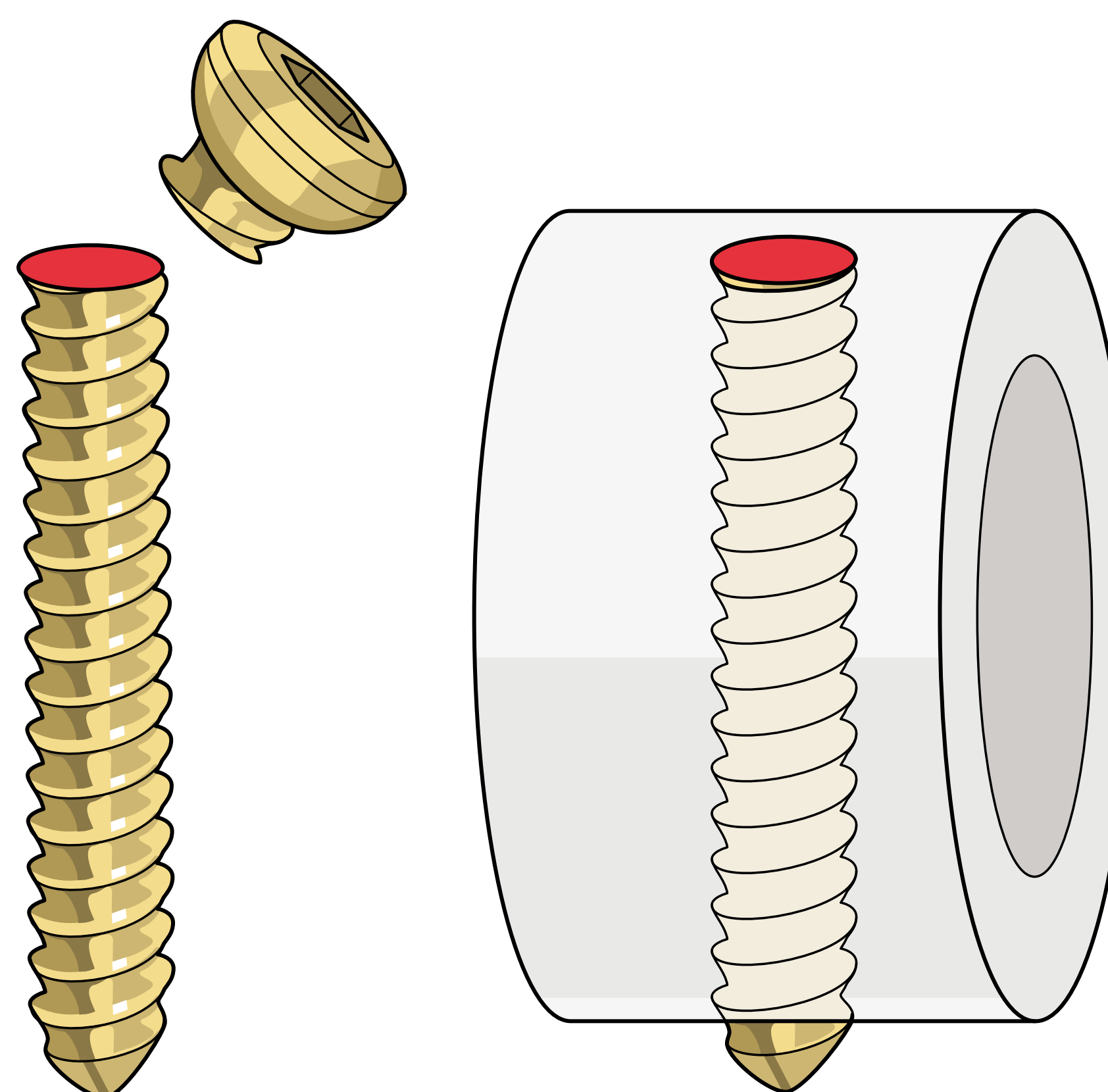
Destroyed



a

#### Problem 2

Broken screw, screw shaft stuck inside bone



b



c



## Damaged implant removal

# Challenges and solutions (Option 2)

### Tasks

#### 1 Destroyed coupling mechanism

Insert conical extraction bolt (a) in screw head and try to remove screw

#### 2 Broken screw removal procedure

Remove bone around screw with appropriate sized hollow reamer (b)

### Learning outcomes

- Identify the function of different instruments to aid screw removal
- Remove screw with destroyed coupling mechanism
- Remove broken screw

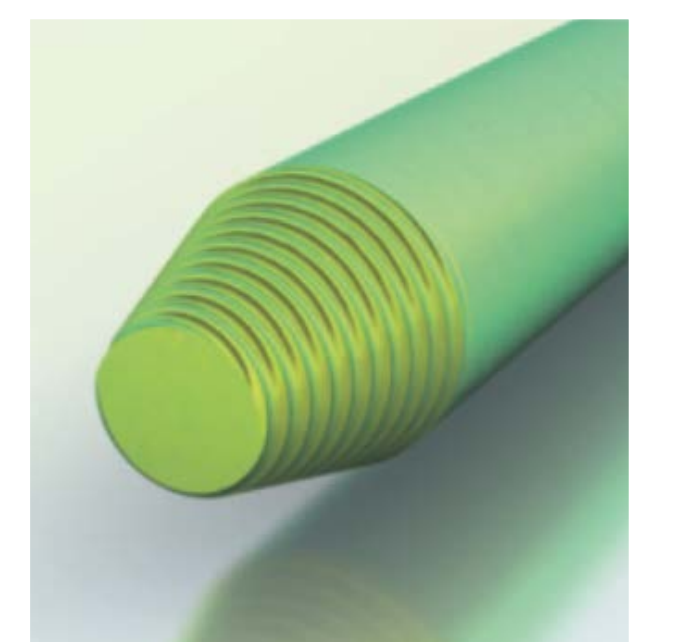
### Take-home message

- Use undamaged screw driver
- Clean hexagonal coupling mechanism of screw head
- Do not use a power drill

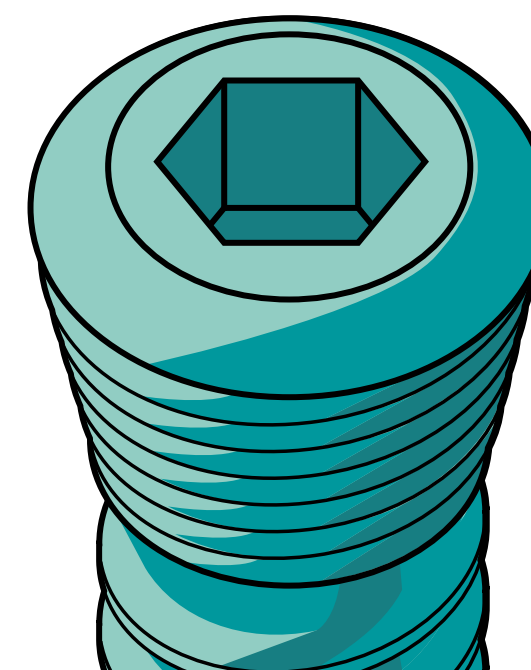


#### Problem 1

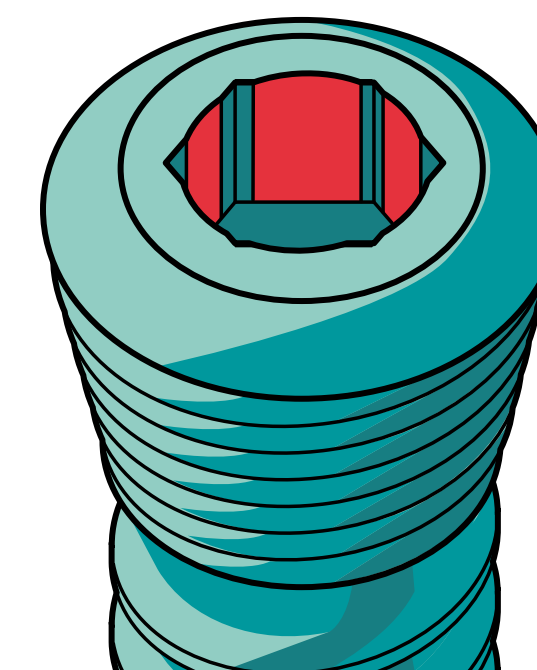
Destroyed hexagonal coupling mechanism of screw head



a



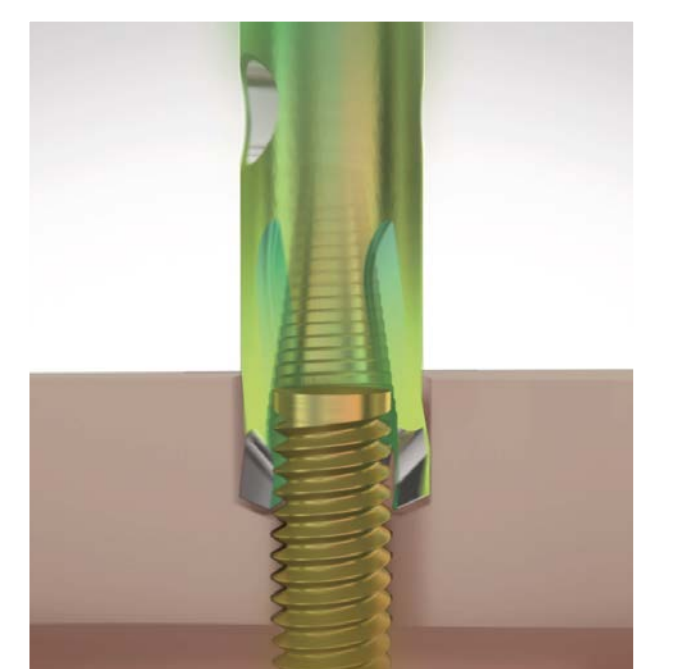
Intact



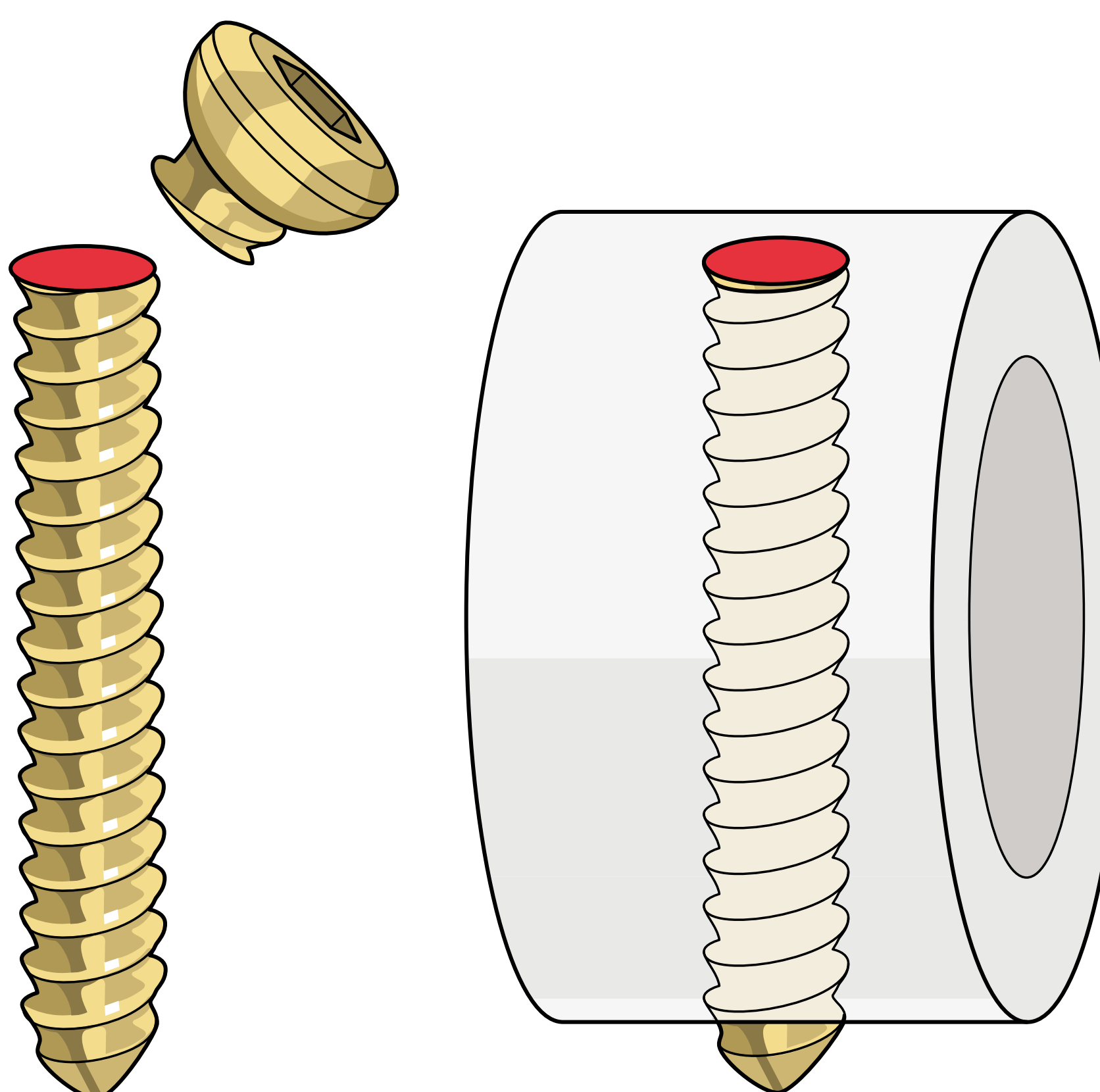
Destroyed

#### Problem 2

Broken screw, screw shaft stuck inside bone



b



**This option is available in Europe and the Middle East only.**