



# **e\*thirteen**

## **12 SPEED CASSETTE**

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### **& UPGRADE KIT**

#### **TOOLS AND PARTS INCLUDED:**

TRS Plus 9-46t 12 speed cassette

Derailleur pulley spacers (2)

Derailleur cage bolts: 1 long, 1 short

12 speed shift ratchets: X1™/GX™/X01™ (1 dot ) & XX1™ (2 dots)

Shift spool w/two bearings

Pivot bolt

Washer (for GX™/X1™/X01™ shifters only)

Shifter assembly fixture "the Claw"

12 speed chain and quick link

2.5mm hex

3mm hex

4mm hex

T25 Torx bit

SQ2 square bit

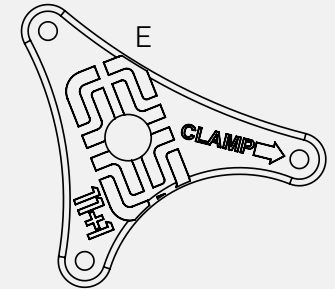
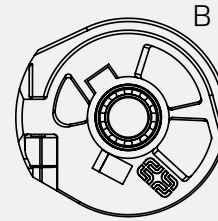
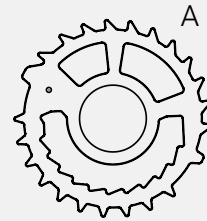
1/4" hex and bit holder

Shift cable and 2000mm cable housing

Grease tube

# GX™/X1™/X01™ SHIFTER MODIFICATION: REQUIRED PARTS AND TOOLS

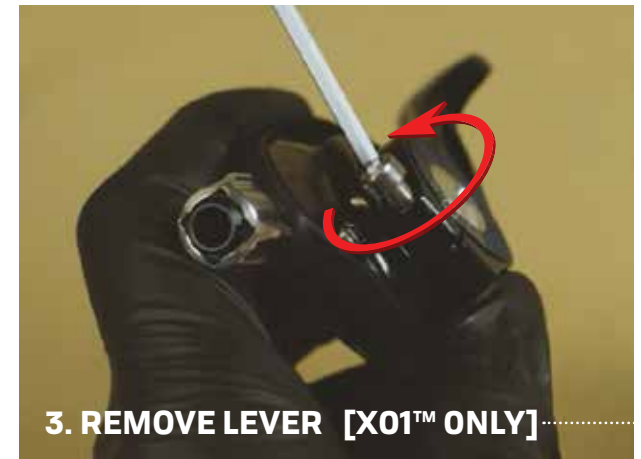
- T25 TORX
- 2.5MM HEX
- 3MM HEX
- 4MM HEX
- CLAW TOOL (E)
- GX™/X1™/X01™ RATCHET (A) [1 DOT]
- GX™, X1™ OR X01™ 11 SPEED SHIFTER
- PIVOT BOLT (C)
- WASHER (D)
- SPOOL (B)
- CABLE & HOUSING



1. RELEASE SPRING TENSION ■



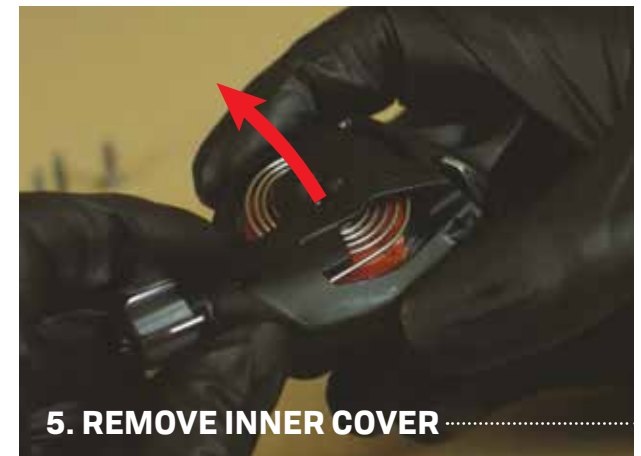
2. REMOVE OUTER COVER ■



3. REMOVE LEVER [X01™ ONLY]



4. REMOVE SCREWS ■



5. REMOVE INNER COVER



6. ALIGN THE CLAW



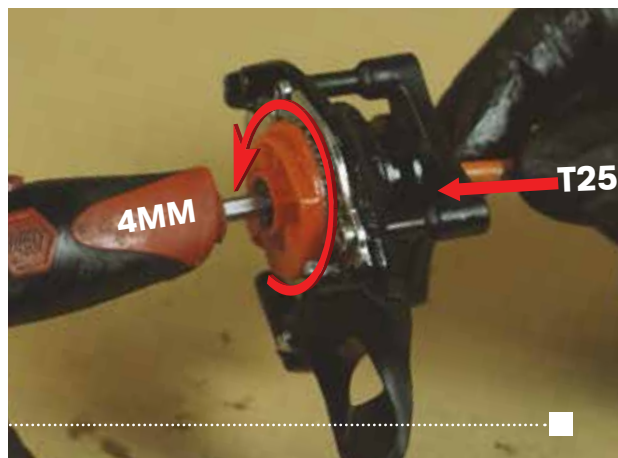
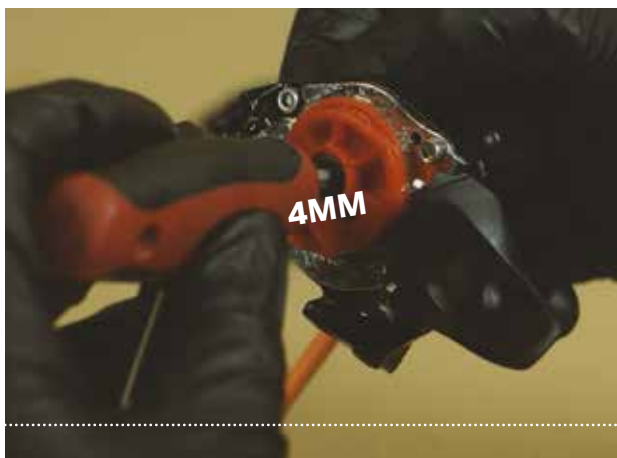
7. INSTALL SCREWS ON TOP

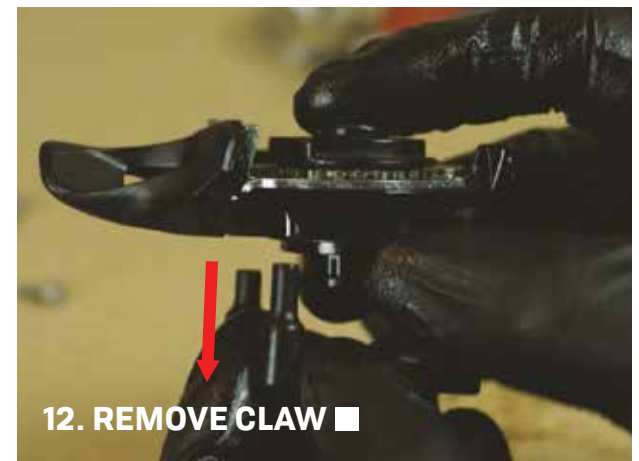
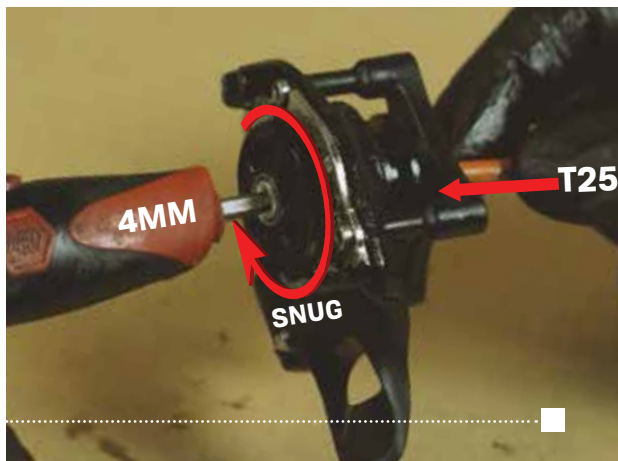
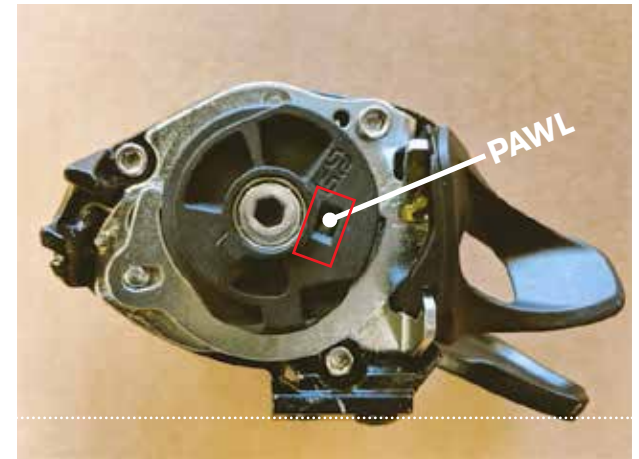
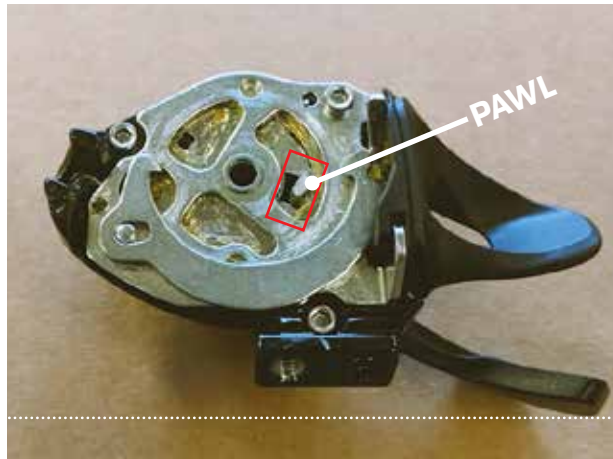
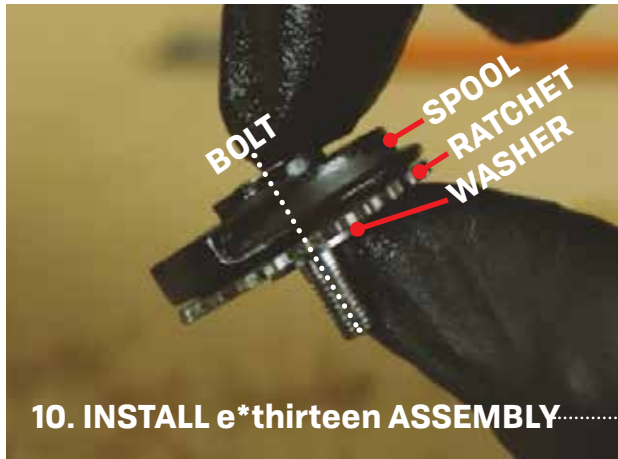


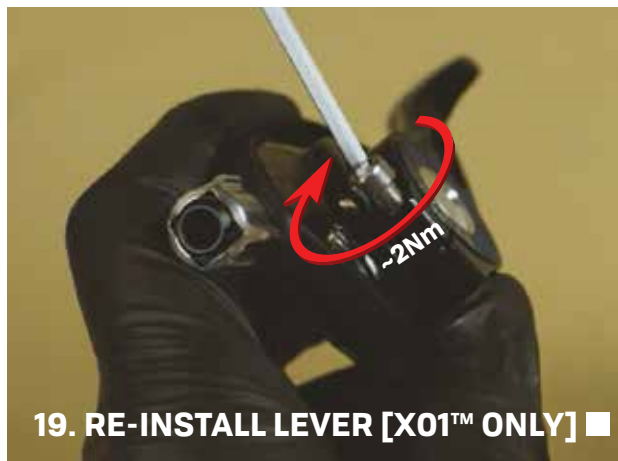
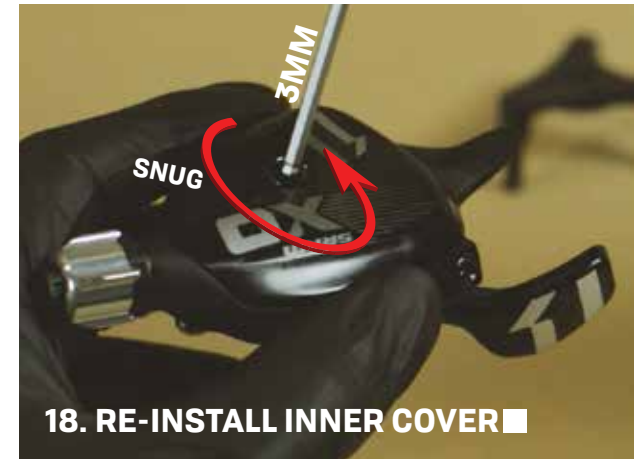
8. REMOVE SPRING



9. REMOVE RATCHET ASSEMBLY

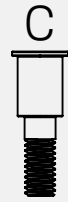
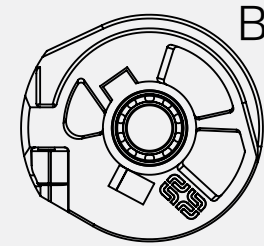
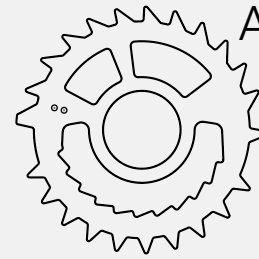


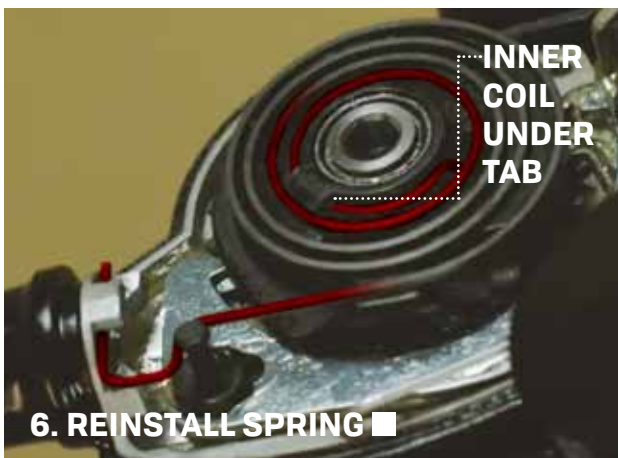
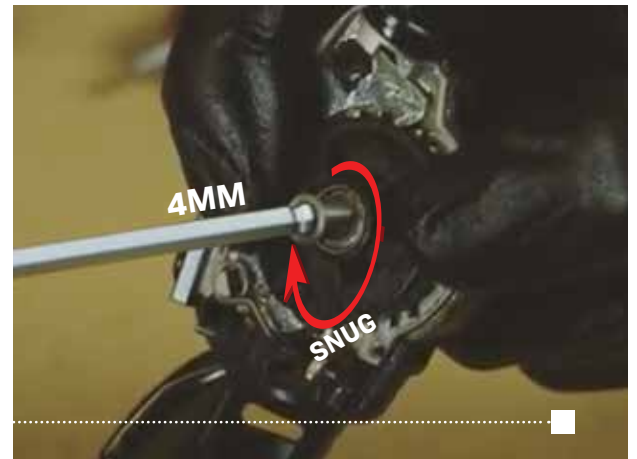
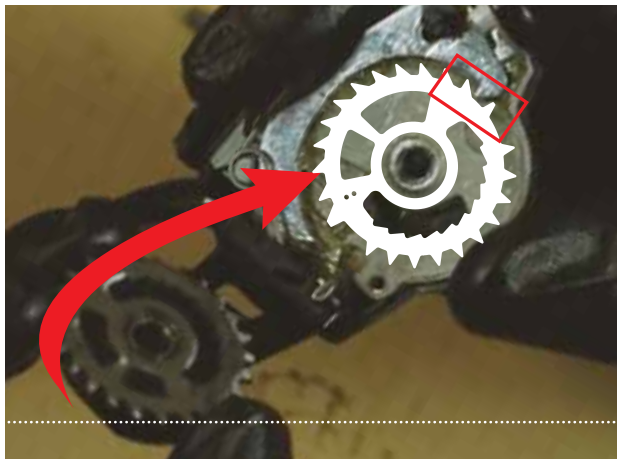
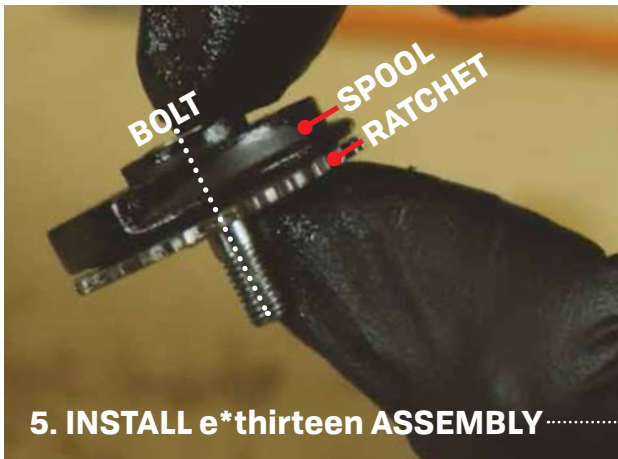
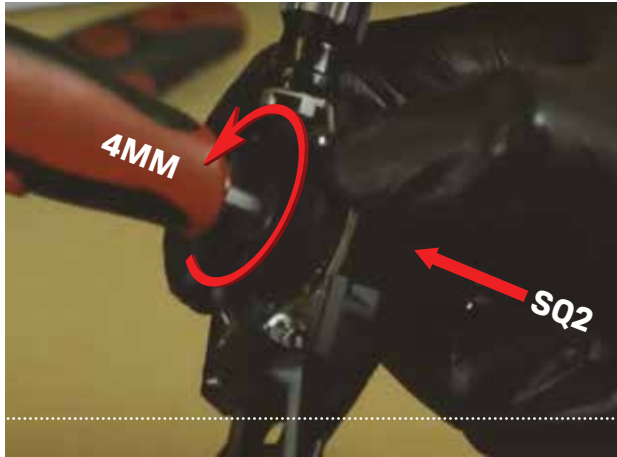




# XX1™ SHIFTER MODIFICATION: REQUIRED PARTS AND TOOLS

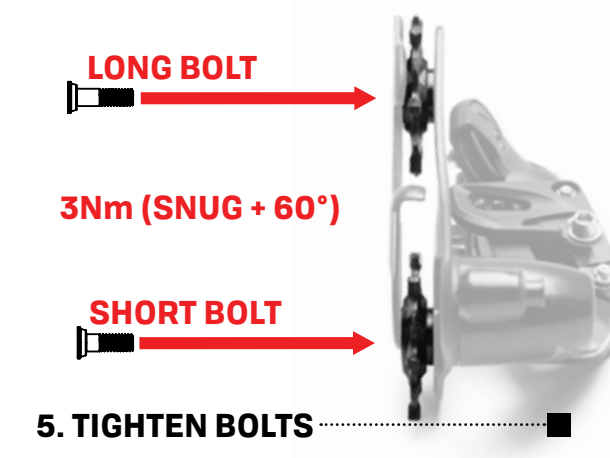
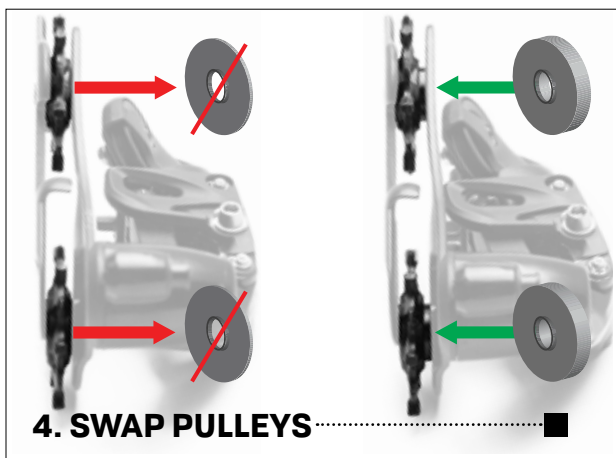
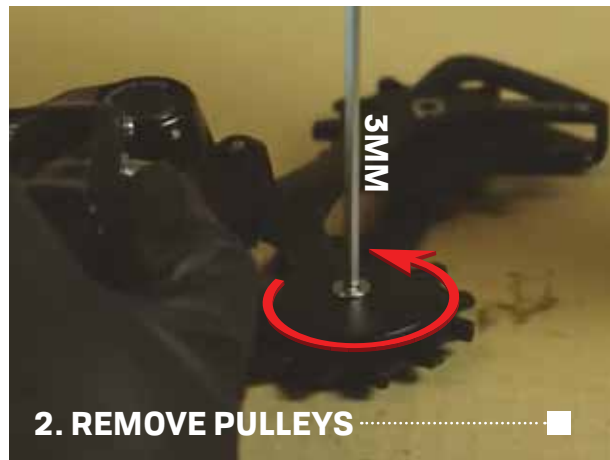
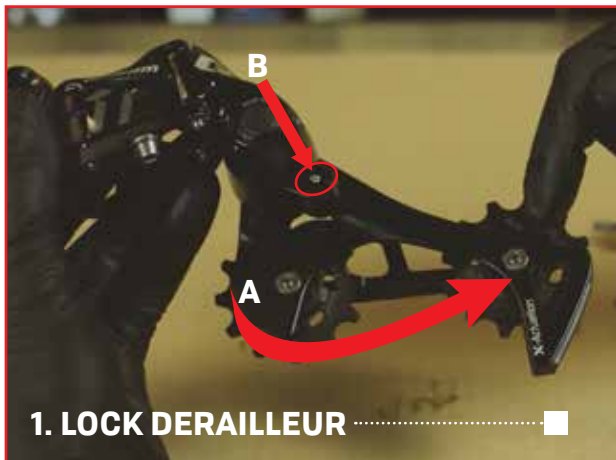
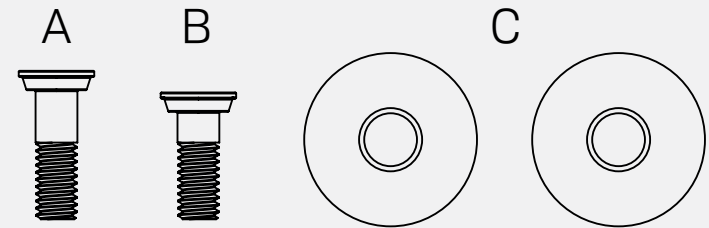
- T25 TORX
- 2.5MM HEX
- 3MM HEX
- 4MM HEX
- SQ2 SQUARE BIT
- XX1™ RATCHET [ 2 DOTS ] (A)
- SPOOL (B)
- PIVOT BOLT (C)
- CABLE & HOUSING
- XX1™ 11 SPEED SHIFTER





# SRAM™ DERAILLEUR MODIFICATION: REQUIRED PARTS AND TOOLS

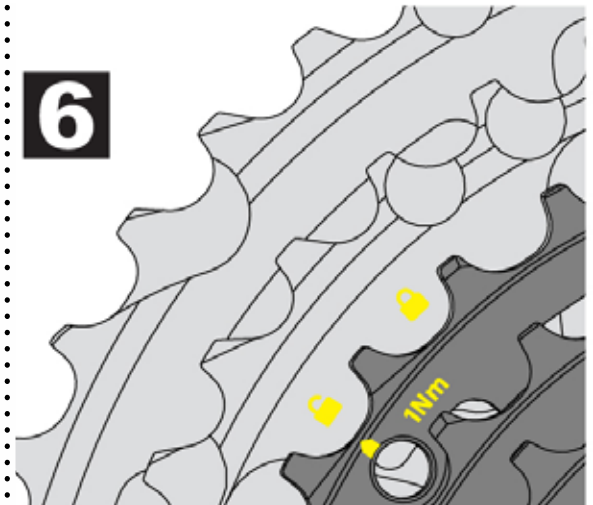
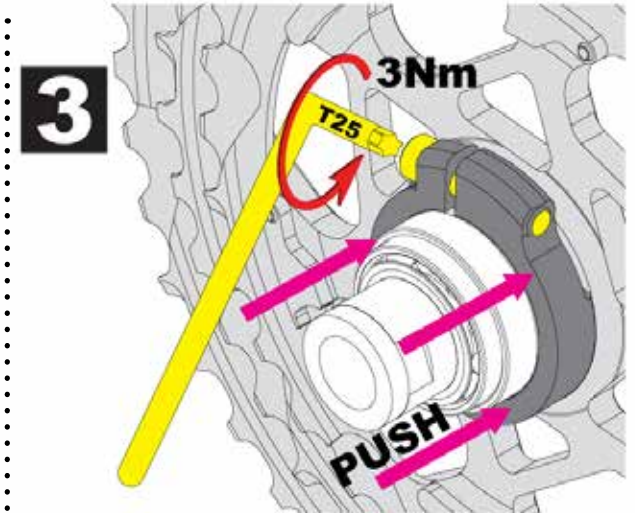
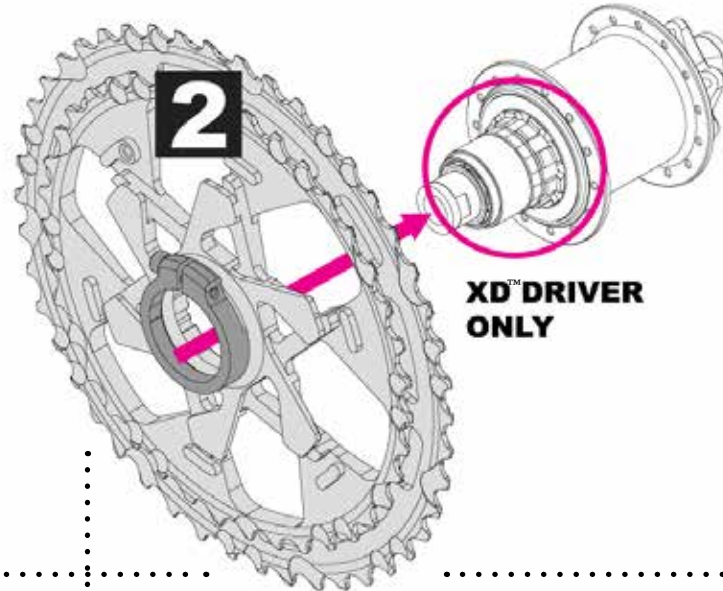
- 3MM HEX
- E13 LONG DERAILLEUR BOLT (A)
- E13 SHORT DERAILLEUR BOLT (B)
- E13 DERAILLEUR SPACERS X 2 (C)
- ANY SRAM™ 11 SPEED MTN DERAILLEUR



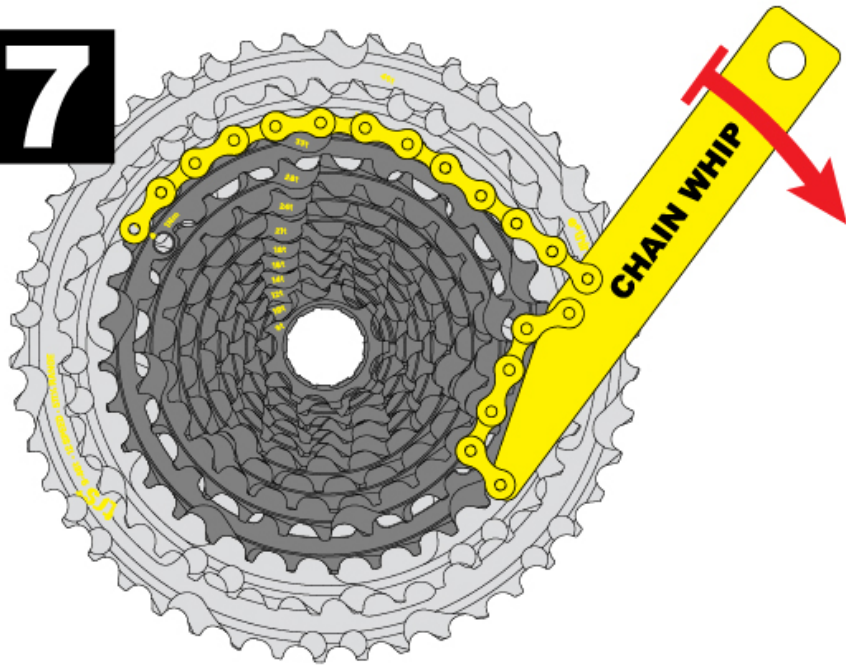


# TRS+ CASSETTE INSTALLATION: REQUIRED PARTS AND TOOLS

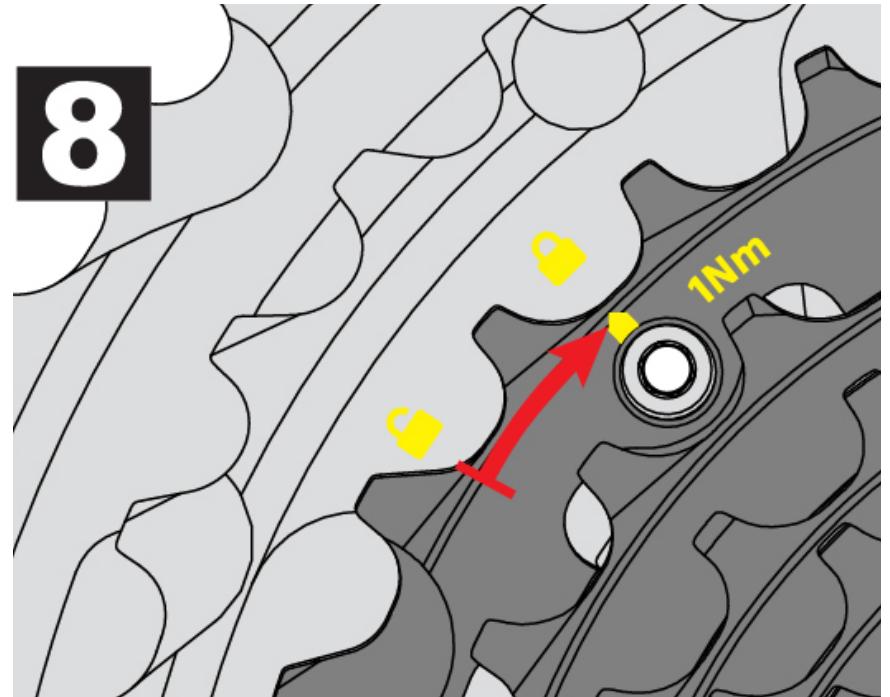
- 3MM HEX
- TRS+ 12 SPEED CASSETTE
- CHAINWHIP
- GREASE
- XD DRIVER



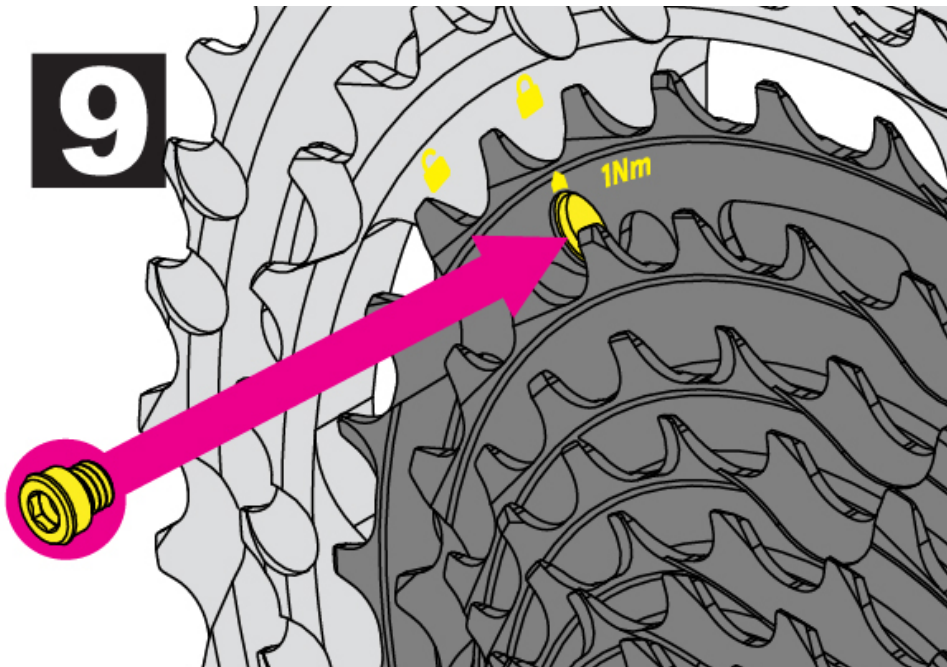
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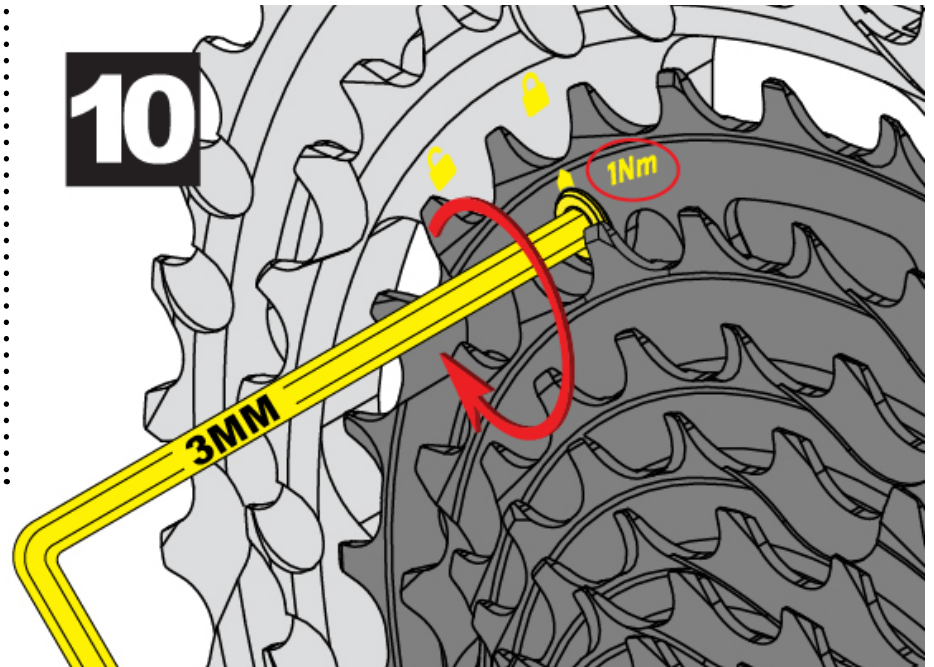
**8**



**9**



**10**



# TRS+ CASSETTE REMOVAL: REQUIRED PARTS AND TOOLS

- 3MM HEX
- TRS+ 12 SPEED CASSETTE
- 2 CHAINWHIPS - OR - 1 CHAINWHIP & 1 CASSETTE LOCKRING TOOL

