**3T CASSETTE**

**CASSETTE ASSEMBLY**

**TOOLS NEEDED**
- Cog wrench with 3mm hex key bit
- Chain whip
- Shimano cassette tool TL-V930 or compatible

**11th COG INSTALLATION**
- Please make sure the X01™/X01™-DH driver body is clean and covered with a light film of waterproof grease
- Using a X01™ body, make sure the 7.8 mm spacer ① is inserted all the way in on the freewheel before the cassette (Fig. 03)

- Hold the 12T/11T cog assembly all the way in, then fully pull greater. See Fig. 04 for alignment

**COGS ASSEMBLY INSTALLATION**
- Make sure the holes on the 10 cogs assembly are greased with waterproof grease (Fig. 03)
- A bearing preload bushing can be either inside the assembly or separate. Either way, just make sure it’s clean and greased before it’s installed onto the X01™/X01™ body or inside the assembly of 11th cog

- If the bearing is inside the assembly (Fig. 03), just slide the whole pack onto the X01™/X01™-DH body (Fig. 03)
- If not, insert the bushing into the cog assembly (Fig. 04)
- Then insert the cog assembly into the bearing onto X01™/X01™ body (Fig. 03)

**ALIGNMENT**
- The assembly of 10 cogs has a clockwise bearing type engagement with the 32T/11T cog (Fig. 06), and a safety screw (Fig. 07) that is tightened after the engagement, so it’s important that the alignment is correct when sliding the assembly onto the X01™/X01™ body

- You will notice a small thread hole on the 32T/11T cog, and a single tag hole on the 10th cog, the assembled of ten cogs should be aligned (Fig. 08), when inserted, so that a single click is rotation block the cassette mount and position the two holes on the same axis (Fig. 09)

- With the assembly of ten cogs engaged, hooked to the 32T/11T cog, the two holes will be aligned (Fig. 11)
CASSETTE REMOVAL

To remove the cassette, remove the safety bolt first with a 3mm Allen key (Fig. 13).

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- Screw in the safety bolt up to 3Nm using the 3mm Allen key. The bolt is treated with Nylok if over time Nylok wears out, 3T cassette can hold prevent loosening. (Fig. 12)

- Hold the 11th cog with a chain whip, then disengage the 10 cogs assembly using another chain whip or a cassette tool (Fig. 15)

- Extract the assembly of 10 cogs (Fig. 17)

- Final, unscrew the clamping bolt and extract the 11th cog and extract it from the XD™/XR™ driver body (Fig. 18)

CARE AND MAINTENANCE

Clean the cassette with a bike-specific product, dry it out and always relubricate it immediately to prevent rust and corrosion from forming. Periodically remove the cassette, clean, lubricate and reassemble. Check for slippage after reinstallation. Chain slippage under pedaling force is the first sign that the cassette needs to be replaced.