RAVIN®

Electric Drive Assembly Instructions

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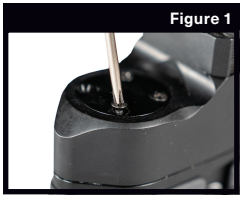
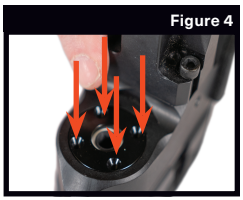
A. PARTS AND COMPONENTS

1. Sleeve (1)
2. Screws (4)
3. Accessory Cap (1)
4. Gear with sleeve installed (1)
5. Motor Assembly (1)
6. Battery (1)
7. Charger (1)

B. DRIVE GEAR ASSEMBLY

1. Remove the 4 Phillips head screws in the Accessory Cap Cover on the front of the gearbox (**Figure 1**).
2. Remove the Accessory Cap Cover.
3. Insert the drive gear into the hole, sleeve end first until it seats in the hole at the backside of the gearbox (**Figure 2**). You may have to rotate the drive gear slightly to align with the clutch gear and fully seat into position.
4. Place the sleeve on the drive gear, flange side first (**Figure 3**).
5. Place the Accessory Cap on top of the sleeve and align the four holes with the screw holes in the gearbox (**Figure 4**).
6. Use a Phillips head screwdriver to tighten the 4 screws. DO NOT OVERTIGHTEN.





C. ELECTRIC DRIVE INSTALLATION

Figure 5

Figure 6

1. Install the Electric Drive housing on the bottom of the guide, near the rear of crossbow.
2. Locate the mounting slots on the side of the rail (**Figure 5**).
3. Align the Electric Drive housing between the slots and slide the electric drive housing rearward (**Figure 6**). You may need to use the draw handle to align the gear and the motor shaft.
4. Tighten the locking knob to hold the Electric Drive housing in place (**Figure 7**).

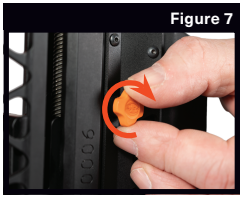


Figure 7

D. ELECTRIC DRIVE - COCKING

1. **Cocking -** If the TTFS is attached to the string skip **Step 2**.
2. Press the decocking button (**Figure 8**) to advance the TTFS towards the string. When the clasp clips onto the string release the decocking button. If the green light turns on, wait 30 seconds until it turns off to cock the crossbow.
3. Press the cocking button (**Figure 9**) and the Electric Drive will retract the TTFS until it reaches the rearmost position. The Electric Drive will automatically shut off and you must release the cocking button. The unit will time out for 30 seconds before it can be used again.
4. Your Ravin Crossbow is now fully cocked and ready to load with the Ravin Arrow recommended for your Ravin Crossbow. If the TTFS does not stay in the rearmost position contact Ravin Service Department immediately.

Figure 8

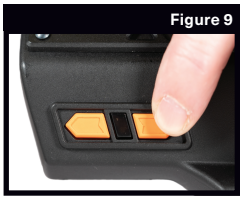


Figure 9

E. ELECTRIC DRIVE - DECOCKING

1. Point your Ravin Crossbow in a safe direction.
2. Visually confirm the safety is in the SAFE position (pointing at white dot). If the safety is not engaged, push the safety to the Safe position.
3. Unload your Ravin Crossbow as explained in SECTION 7 – LOADING & UNLOADING of the R500 Series Owner's Manual before uncocking your Ravin Crossbow.
4. If the Electric Drive is mounted on the crossbow, skip to **Step 6**.
5. Install the Electric Drive on the bottom of the guide, near the back of crossbow. Locate the mounting slots on the side of the rail (**Figure 5**). Align the Electric Drive housing between the slots and slide the housing rearward (**Figure 6**). Tighten the locking knob to hold the housing in place (**Figure 7**).
6. Depress the decocking button (**Figure 8**) to advance the TTFS towards the string stops. When the string contacts the sting stops release the decocking button.
7. Your Ravin Crossbow is now fully uncocked.

F. BATTERY INSTALLATION/REMOVAL

Figure 10

1. Align battery with the opening in the back end of the electric drive.
2. Insert until the starred tabs on the battery clip to the electric drive housing.
3. To remove the battery, squeeze the two starred tabs and pull rearward.

G. BATTERY CHARGING

1. Plug the charger into a 110/120v power supply.
2. Insert the battery into the charging unit (**Figure 10**).
   - Solid red – battery is charging
   - Solid green – battery is charged
   - Flashing red - battery is too cold
   - Flashing red/green – bad battery

H. ELECTRIC DRIVE SAFETY CONTROLS

1. If the cocking or decocking button is not released when the TTFS has reached the rearmost position or the string stops the motor will “torque out” and automatically shut off. A green LED between the buttons illuminates and the motor will not operate for 30 seconds, until the green LED goes out.
2. If the Electric Drive runs longer that 30 continuous seconds it will shut off. The red LED between the buttons illuminates and the motor will not operate for 30 seconds, until the red LED goes out.
3. If the Electric Drive overheats the orange flashing LED will illuminate between the buttons and the unit will shut off. The Electric Drive will not operate until it cools down and the flashing LED goes out.

FIELD NOTES

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