

## 齒輪箱拆解作業

### Gearbox disassembly procedure



1. 刀塔回到 1 號刀位置並在鎖緊狀態

Turret rotates to T1 station is on clamping status.



2. 請將刀盤鎖上吊環, 並用吊具固定刀盤, 以免更換過程刀盤掉落. 拆除刀盤前方螺絲.

Install hooks on tool disc and lift it up by crane to avoid it from falling down. Remove all screws on front cover of the tool disc.



M8 螺絲扭力為 41Nm \ M8 torque is 41Nm

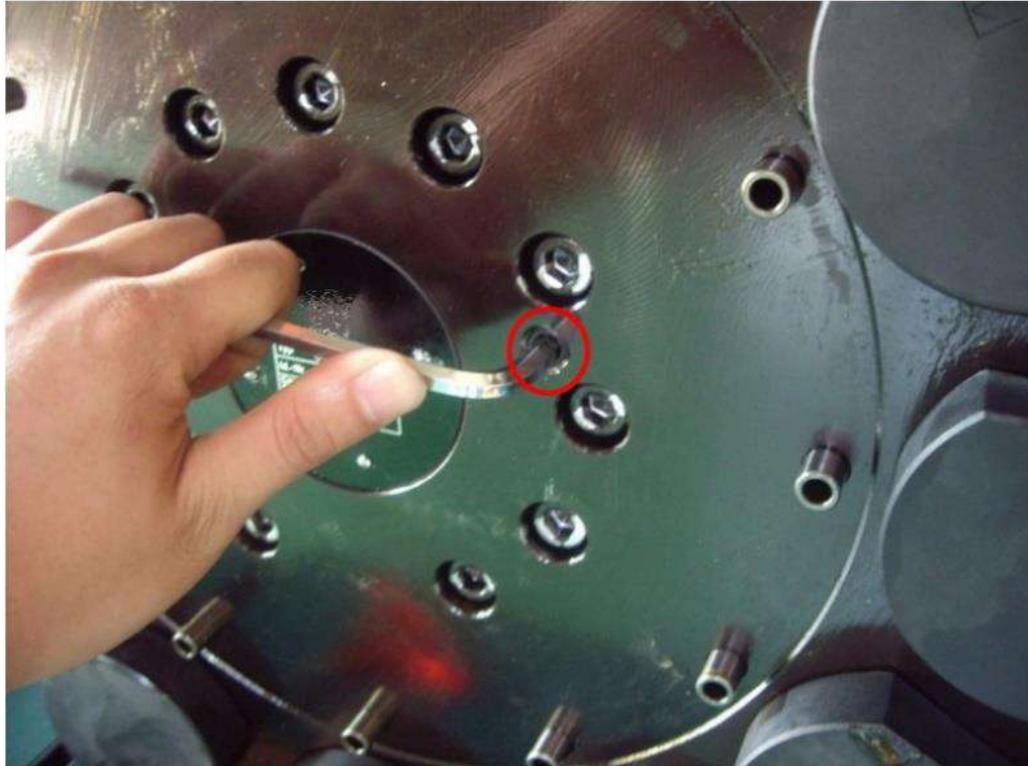
M10 螺絲扭力為 83Nm \ M10 torque is 83Nm

M12 螺絲扭力為 135Nm \ M12 torque is 135Nm



3.將塞頭螺絲拆下

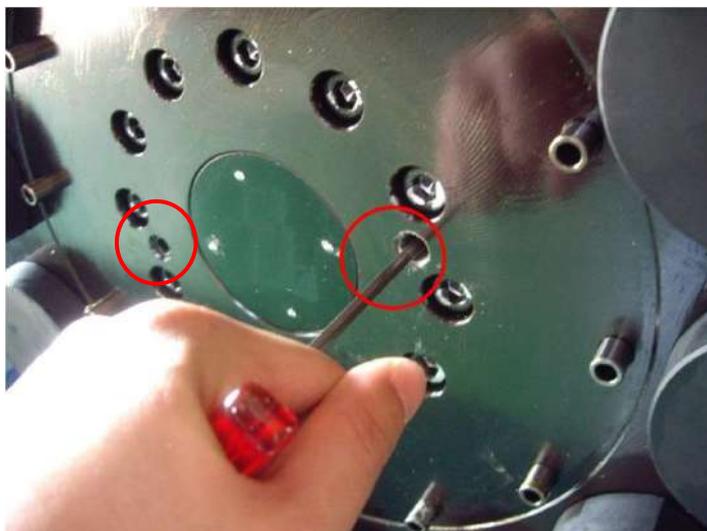
Remove screw plug



4.使用六角 T 型扳手將破緊螺絲往內鎖進(紅圈處)·使刀盤向外推開拆下刀盤

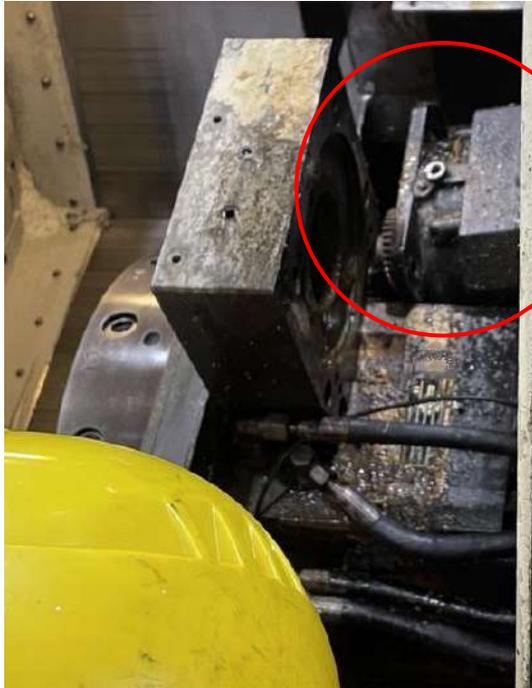
4.Use hexagonal T-shape wrench to fastening screw inward (red circle)

and allow the tool disc to be removed.



5. 移除動力刀馬達並放置安全處

Remove tool drive motor and place it in a safe place.



6. 把機台油壓切斷後，將耦合齒的油管及固定座移除。固定座可用束帶先固定於刀塔上，注意不要拉到 sensor 的線路。

After switching off hydraulic pressure, remove coupling oil pipe and fixing seat. The fixing seat can be temporarily secured to the turret by using a cable tie. Be careful not to pull sensor wires.

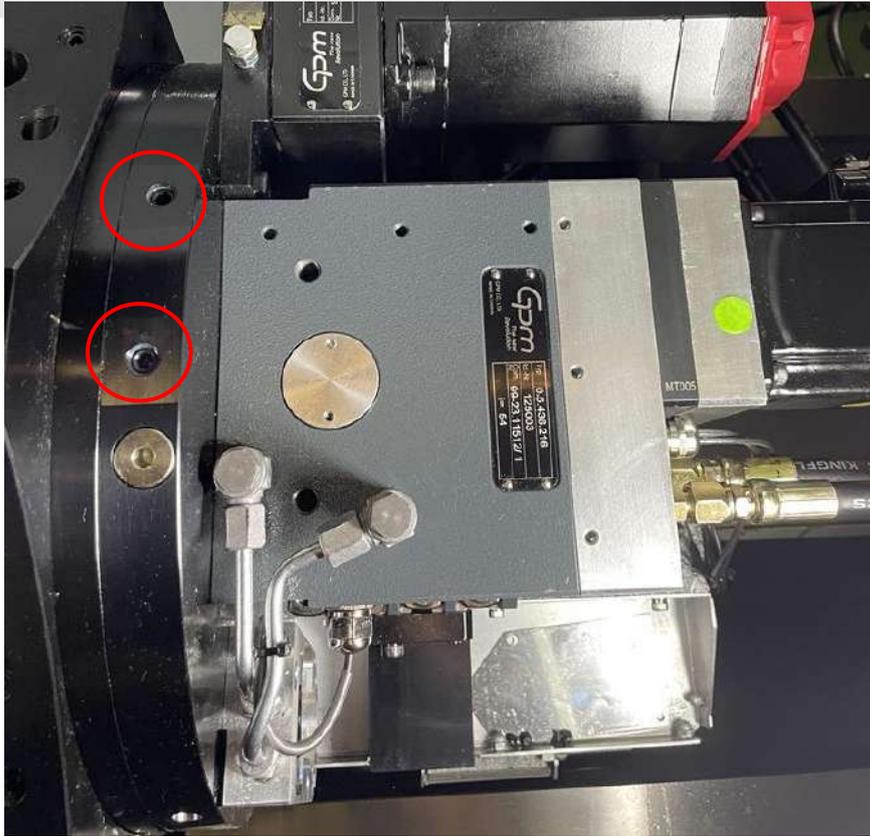




7.齒輪箱上方鎖上吊環, 用天車先吊掛住

Install hooks on top of gear box and hang it up by crane.





放鬆齒輪箱內圈 4 支螺絲(紅圈處)後，將固定銷 2 支(黃圈處)移除

Loosen 4 \* screws located in the inner ring of the gearbox (marked in red)  
and then remove 2\* fixing pins (marked in yellow).

註：依齒輪箱型號不同固定銷的位置也不同，螺絲長短需注意

Note: The position of fixing pins may be different depending on the  
gearbox model. Also pay attention to the lengths of the screws.





M6:16Nm / M8:41Nm

齒輪箱螺絲回裝時必須清洗乾淨,並上螺絲膠.

When reinstalling the gearbox screws - make sure all screws are washed and clean; and thread-locking adhesive shall be applied.

8.因動力刀馬達及耦合齒已拆下，利用膠槌敲擊齒輪箱後方取下，吊掛時移除切削液管路.

Tool drive motor and coupling teeth have been removed, tap the rear part of the gearbox with a rubber hammer for removal. Remove coolant tube when hanging up the gearbox.



