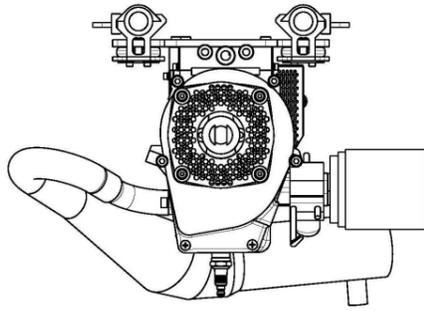


Richen Power

H2plus UAV Generator manual for SELF MAINTENANCE

MAINTENANCE



H2plus



English

This manual can be downloaded from the following website:

<http://www.richenpower.com/services/>

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Or scan the QR code to have the manual and service/repair information on Alibaba.com



Alibaba Shop

Kit replacement Video:

<https://youtu.be/GDY0uclHRdl>

Item	After use	A Every 75h	B Every 150h	C Every 225h	Remarks	Part list A	Part list B	Part list C
LiPo 12s Battery	Balance Charge	Balance Charge	Balance Charge	Balance Charge	TATTU 12s 1800mah 75C			
Intake	Air filter	Inspection	Replace	Replace		✓	✓	✓
Muffler	Exhaust	Clean	Clean	Clean				
	Screw	Inspection	Inspection	Inspection				
Carburetor	Push Primer pump				Walbro WT-1107			✓
Fuel filter		Replace	Replace	Replace	Walbro in tank filter wool felt	✓	✓	✓
Spark plug		Replace	Replace	Replace	NGK-CMR7H	✓	✓	✓
Cylinder kit	Cylinder		Replace	Replace		✓	✓	✓
	Piston Gasket		Replace	Replace				
Crankshaft			Replace	Replace			✓	✓
Tachometer			Replace	Replace			✓	✓
Digital servo			Replace	Replace	KST-BLS815		✓	✓
AC-DC			Replace				✓	
Ignition coil				Replace				✓

Maintenance

1 BACKUP LIPO BATTERY

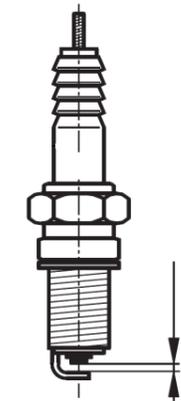
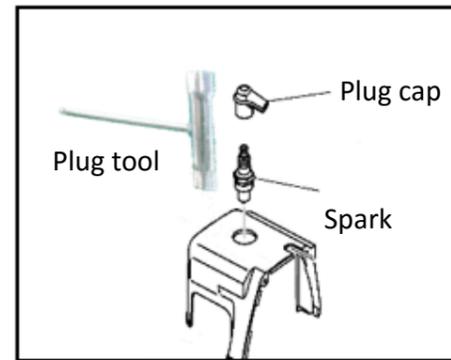
- Inspection before use:
LiPo Tattu 1800mAh 6s 75C x 2
nominal voltage: 49.5±0.5 V/All
3.9~4.2 V/Cell

If total voltage is below 49 V, please keep H2 at RUN position to charge it. If below 48 V or voltage differences between cells bigger than 0.3 V, balance charge is required.

- Balance Charge after service intervals:
Balance Charge by LiPo charger.
Recommended recharger: iMAX-B6 shipped with H2.

2 SPARK PLUG

- Replacement: NGK-CMR7H
Use M10 (P=1.0) screw with torque 10.8 N.m (Limit 8.8~12.8 N.m)

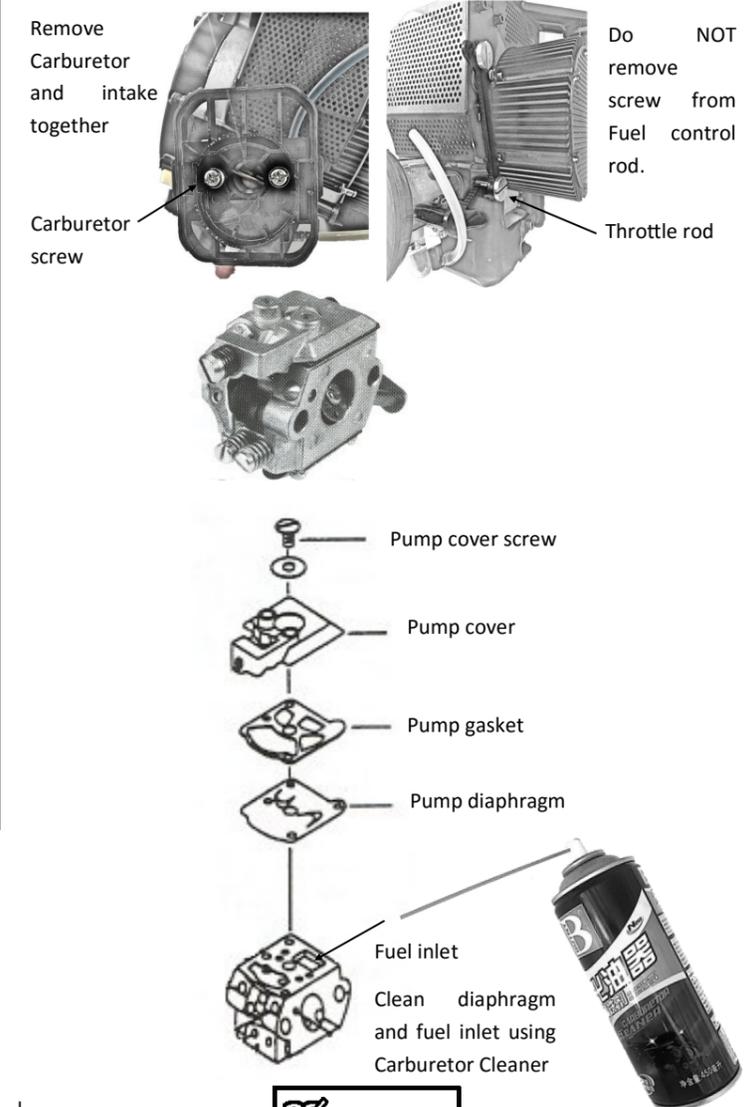


- Inspection:
Visual inspection of the spark plug for carbonation, oil fouling and discoloration of the electrode. Clean the electrode.
Check the electrode gap of the spark plug with a feeler gauge and adjust if required to s=0.6~0.7 mm.

3 CARBURATOR & FUEL FILTER

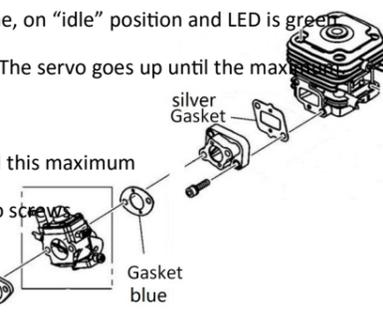
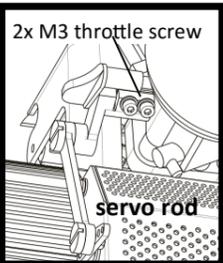
- Cleaning:
1. Screw carburetor from H2.
2. Remove fuel pump cover screw and pump cover
3. Remove fuel pump gasket and pump diaphragm
4. Inspect pump diaphragm. REPLACE if it deformed.

- Clean pump diaphragm using Carburetor Cleaner.
- Clean pump fuel inlet using Carburetor Cleaner.
- Reassemble the pump cover.



NOTES
Do NOT remove Digital servo or servo rod during Carburetor replacement

- Replacement:
1. Remove the air filter
2. Loosen the two M3 throttle screws and remove throttle rod.
3. Replace the carburetor and silver & blue gasket.
4. Assemble the throttle rod:
a. Power on without start the engine, on "idle" position and LED is green
b. On "run" position and LED is off. The servo goes up until the maximum position.
c. Only loose these two M3 screws.
d. Open the throttle with hand until this maximum position. And tighten one of the two screws.
e. On "idle" position the servo goes back to idle. Tighten the two screws.

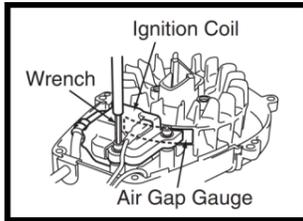


4 CYLINDER KIT

● Replacement:

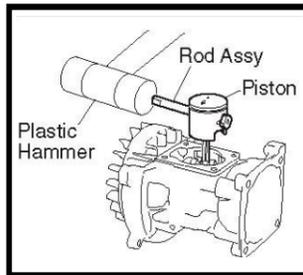
First clean the surface of piston and cylinder. They may be dirtied during transportation.

1. Remove Cylinder from H2.
2. Remove Piston pin
3. Install piston
4. Apply gaskets



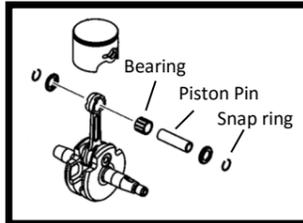
Remove Cylinder

1. Insert the gauge (0.3mm) in between the rotor magnet metal and the coil. Tighten screws while pressing the coil against the rotor.
2. Remove Cylinder
Air Gap 0.3~0.4mm

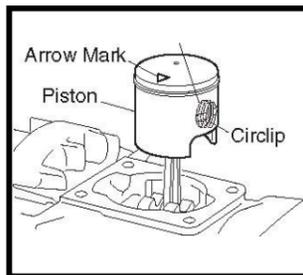


Remove Piston pin

1. Remove snap rings from both sides of the piston pin.
2. Engage the rod assy to the piston pin and gently tap with a plastic hammer to push out the pin while holding piston firmly.



3. Replace bearing, piston pin and snap rings. Apply oil on them when assembling.

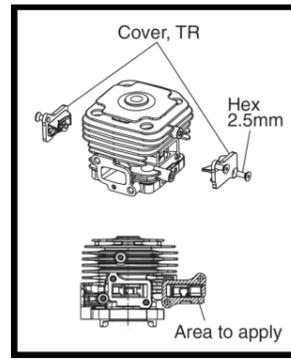


Install piston

1. Make sure to point the arrow mark on the piston to the exhaust side.
2. Fit the circlip in the groove so as to face the end gap below.

NOTES

Deformed circlip may come off during engine operation and damage the engine.

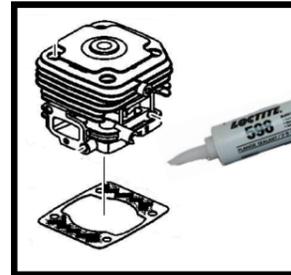


Apply liquid gasket

Apply the liquid gasket (Three Bond TB1217F or equivalent) when taking the Cover, TR on or off.

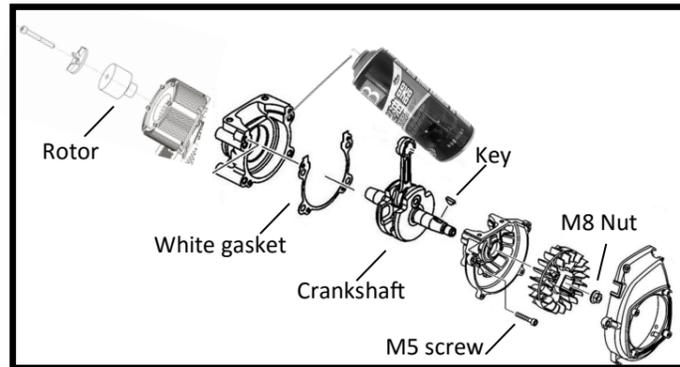
Important

Apply a thin layer. Do not let the liquid gasket enter the cylinder. This could cause damage to the engine.



Apply the liquid gasket (Loctite 598 or Kafuter K-586) on both side of cylinder gasket. Apply a 0.1~0.2 mm thin layer.

5 CRANKSHAFT

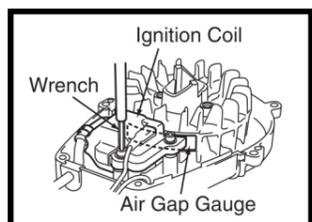


● Replacement:

1. Remove the rotor.
2. Remove the cover, fan, M8 nut, M5 screw and crank case
3. Remove the key and replace the crankshaft and white gasket.
4. Clean the crank case bearing with carburetor cleaner.
5. Reassemble the crank case, cover and rotor.

NOTES Replace damaged gaskets. Damaged gaskets could cause gas leakage or lack of power.

6 TACHOMETER & IGNITION COIL



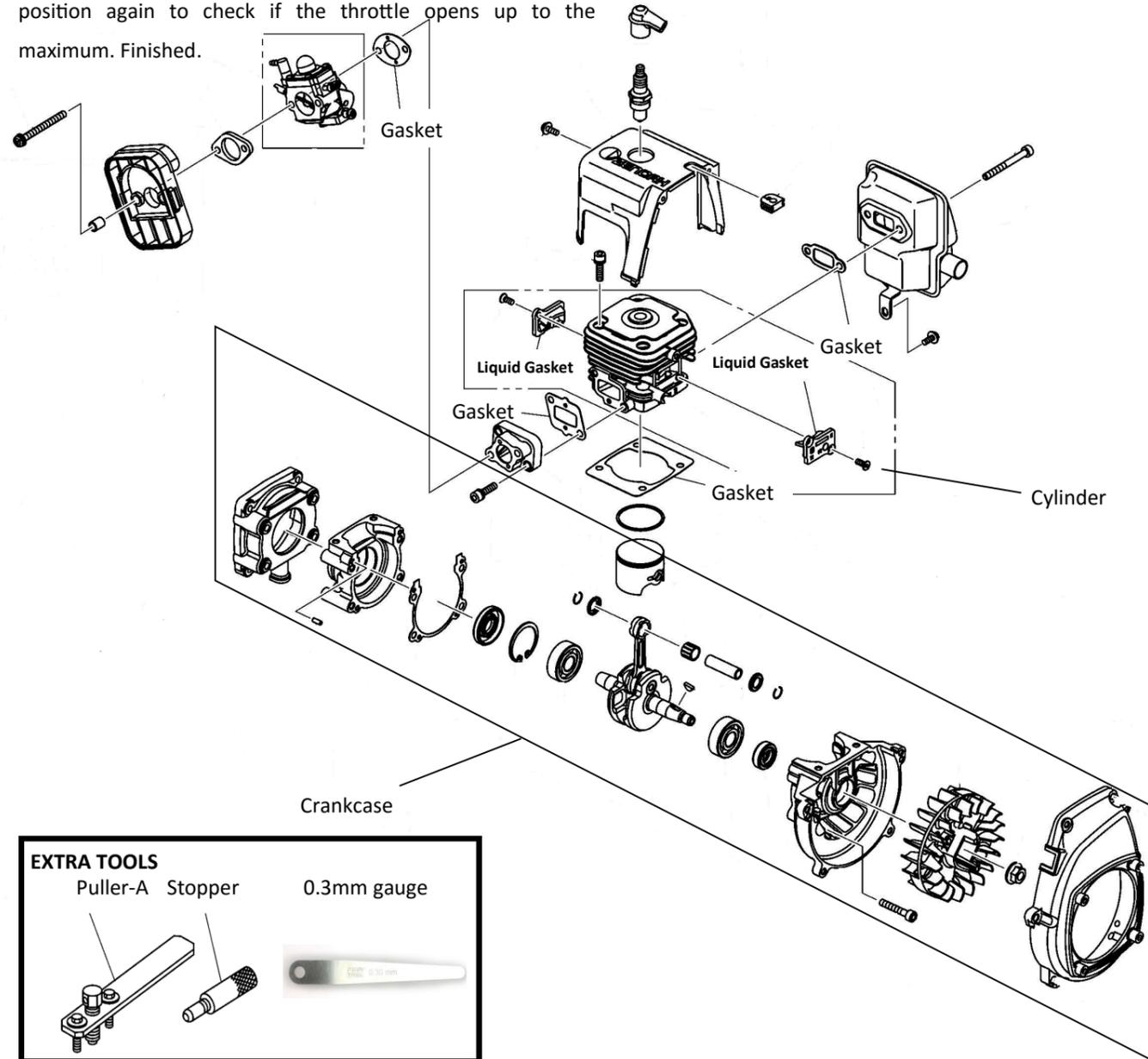
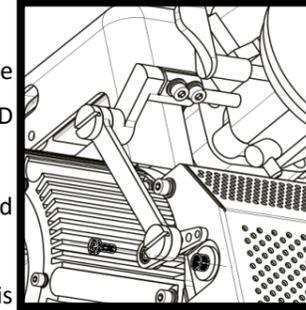
1. Apply the 0.3 mm gauge between the fan and ignition coil.
2. Replace the tachometer or ignition coil with screw torque 3.5 nm. Loctite272 glue is recommended.
3. Connect #3 wire to the wire bus.

7 DIGITAL SERVO

NOTES

Do NOT remove or loose throttle or throttle rod during Servo replacement

1. Remove the servo rod screw. Replace the servo.
2. Power on without start the engine, on "idle" position and LED is green.
3. Open the throttle with hand until this maximum position.
4. On "run" position and LED is off. The servo goes up until the maximum. Adjust th servo rod gear and reinstall the screw.
5. On "idle" position the servo goes back to idle. On "run" position again to check if the throttle opens up to the maximum. Finished.



8 AC-DC

Before replacement, take a picture of the wire sequence. Make sure the wires with different colors are correctly reinstalled.

Apply Industrial Adhesive onto the wire beezers after replacement. Do NOT apply between wire beezers and AC-DC. Kafuter® K-5707W Industrial Adhesive is recommended.

9 RUNNING IN

Before fly, install H2 into drone or test bench. 40 minutes running in at "idle" position is needed.

Takeoff without running in will damage the engine.