

CHECK AND ADJUST

INFORMATION

WARNING

- ※ Do not start the engine at a close zone, because the exhaust gases from the engine including some noxious emission such as CO, HC, NO_x... etc. that can result serious damage for health.
- ※ Strictly prohibit using any flammable thing in the working zone, because that can rise fire easily.

ENGINE :

ITEM	SPECIFICATION	REMARK
Spark Plug Gap	0.6~0.7 mm	
Spark Plug Type	DR8EA	without resistance
Valve Gap	0.08mm	intake valve
	0.12mm	exhaust valve
Idle Speed	1400±100 rpm	
Engine oil type	SAE 10W/40	Synthetic
Engine Oil Capability	1.6 L	At oil change
	2.0 L	After engine overhaul
Compression Pressure	13 kg/cm ²	1400 rpm
Ignite Timing	17° BTDC	1400±100 rpm

CHASSIS :

ITEM	SPECIFICATION	REMARK
Parking brake lever free play	10~20 mm	
Left lever free play	5~10 mm	
Throttle free play	2~6 mm	
Front Tire Pressure	10 psi	Check the mark on tire
Rear Tire Pressure	10 psi	Check the mark on tire
Torque of Front Rim Nut	14 kg-m	
Torque of Rear Rim Nut	14 kg-m	

- * Detailed tire pressure specification please check the marking on tires.

CHECK AND ADJUST

MAINTENANCE SCHEDULE

Please follow the maintenance schedule to do the routine maintenance.

Service Interval

C : Clean up

L : Lubricate or Grease

R : Replace

I : Inspection, check, adjust and replace if necessary

D : Need some special tools or techniques, suggest to be serviced on dealers site.

Inspection parts / System	(1)	(2)	(3)	Ref.
Air cleaner element		C	C	(Note 1)
Spark plug		I	I	
Petrol filter/Fuel tube	I		I	D
Valve clearance	I	I	I	D
Engine oil	R	R	R	
Eng. oil filter screen			C	D
Engine idle speed	I	I	I	
Drive chain	I,L		I,L(Note 3)	(Note 1,2)
Brake shoe wear / Brake system		I	I	(Note 2)
Clutch system	I	I	I,D	
Suspension		I	I	
Re-tighten up bolts and nuts	I		I	
Tire and Wheel	I	I	I	
Steering system and shaft bearing			I	

Service Interval

(1) Initial Service...20 hours or 150km either earlier time for new vehicle

(2) Regular Check...Every 100 hours or 1000km, earlier time

(3) Regular Check...Every 200 hours or 2000km, earlier time

Note 1 : Used in dusty, sandy, snow area need to be inspected.

Note 2 : Used in rainy, muddy condition need to be inspected.

Note 3 : Used after 50 hours or 500km need to be inspected.

Note :

- (1) If the ATV is new then the motor oil have to replace at the first initial service.
- (2) For safety reason, we suggest the maintenance should be done at local service center.
- (3) If the driving condition is very abominable such as rainy, dust zone or heavy load...that we suggest operating maintenance more frequency.

CHECK AND ADJUST

PARKING BRAKE LEVER

- Pull the right brake lever will perform brake function.
- Push the locking will lock the brake.



The main adjusting nut for throttle play is located under the handle bar

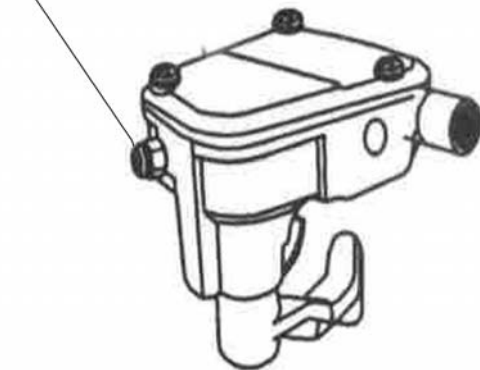
- Loose the fixed nut and adjust the play nut to proper position.



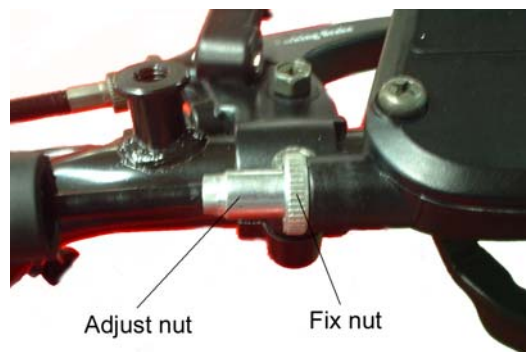
The throttle lever control bolt is located on the throttle base.

The throttle lever free play : 2~6 mm

throttle adjust bolt



- Loose the fixed nut and adjust the screw to get proper position.



CHECK AND ADJUST

SPARK PLUG

- Pull to remove the spark plug cap.
- Use tools come with the vehicle to remove the spark plug.
- If the spark plug grimy or with carbon residue then using the copper brush to clean it.

Spark plug specification

DR8EA : Resistance

Check the gap of spark plug

Gap : 0.6~0.7 mm

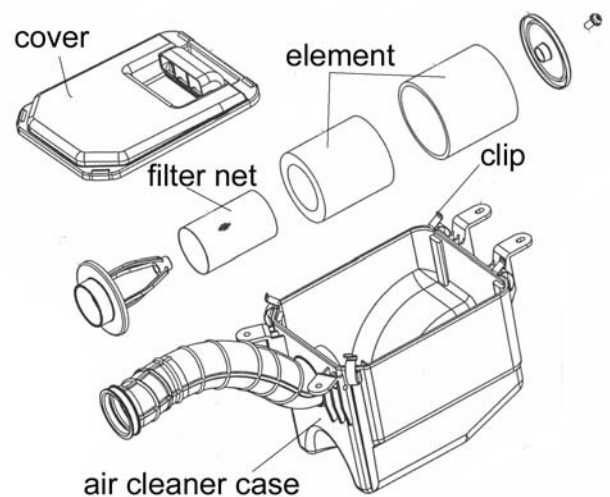


AIR CLEANER

- Remove the seat.
- Pull to open 4 clips on air cleaner cover and remove the cover.
- Take-out the air filter.
- Check the filter whether is dirty or damaged. If it's dirty or damaged then clean it or change a new one.

Attention :

- ※ Clean the element and frame in a high flash point solvent , squeeze the solvent out of the foam and let the guide and element dry completely.



Check period :

- ※ If the ATV often driving at the rainy or abominable surroundings, please check the filter more frequently.

CHECK AND ADJUST

VALVE ADJUSTING

Attention :

※ When you check or adjust the valve, do it when the engine temperature is low (below 35°C)

- Remove the timing hole plug and the crankshaft hole plug with screwdriver.
- Rotate the flywheel and keep the “T” line aim at the centerline of the inspection hole.
- Measure valve clearance with a feeler gauge of the specified thickness.
- To adjust the valve clearance, loosen the locknut and turn the adjuster.

Attention :

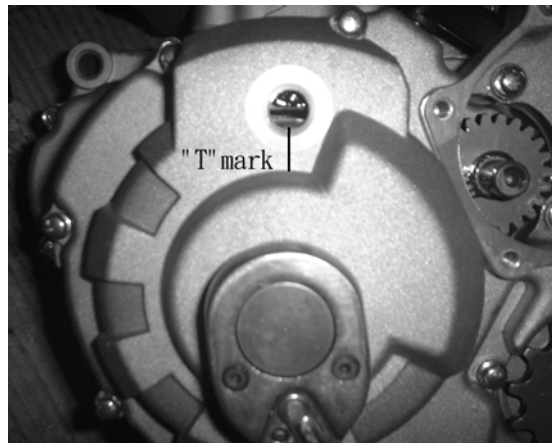
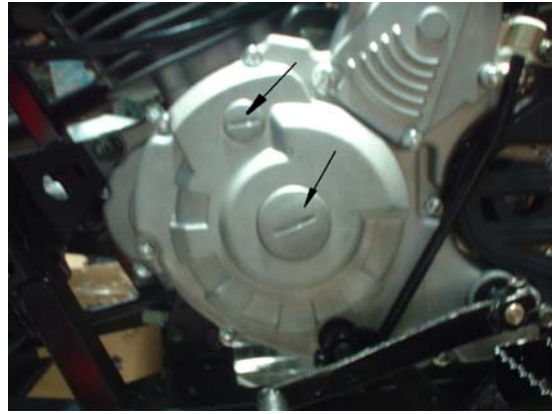
※ When you adjusting the valve, don't invert the crankshaft, otherwise cannot adjust the exhaust valve.

Valve gap check and adjust

Valve gap : IN. : 0.08 mm

EX. : 0.12 mm

- Loose the fixed nut and rotating the adjusting nut reach to the proper gap.
- Tie up the fixing nut and check the gap again.
- Using the valve gap tool to adjust the valve gap.



CHECK AND ADJUST

ADJUSTING IDLE SPEED

※ Engine idle speed adjustment has to do it when the engine is warm.

- Connect with the rpm meter then starting the engine.
- Before adjusting the idle speed, make sure the spark plug gap is correct. Also, turn the handlebars from left to right and note whether the idle speed changes. If it does, the throttle cable may be incorrectly routed. Be sure to correct this problem before proceeding.

Warning :

Use screw driver to adjust the idle speed to avoid injury.

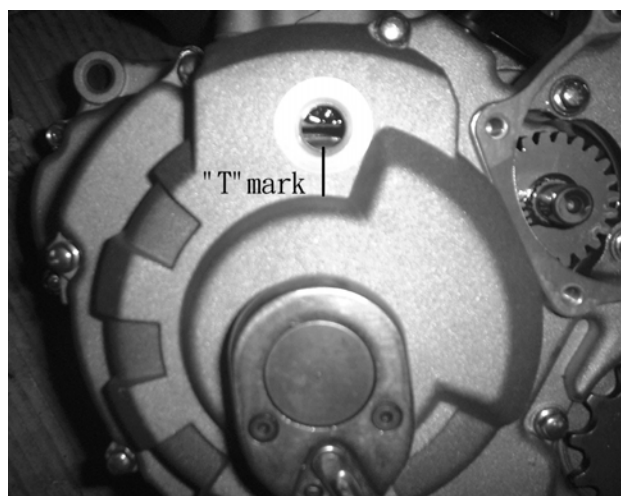
- Adjust the idle speed adjust screw reach to the normal idle speed.

The idle speed is about
1400±100 rpm.

IGNITION TIMING

The ignition system of this ATV is controlled by C.D.I unit, thus don't need to adjust anything. If the ignition timing isn't correct then checking the ignition system whether normally.

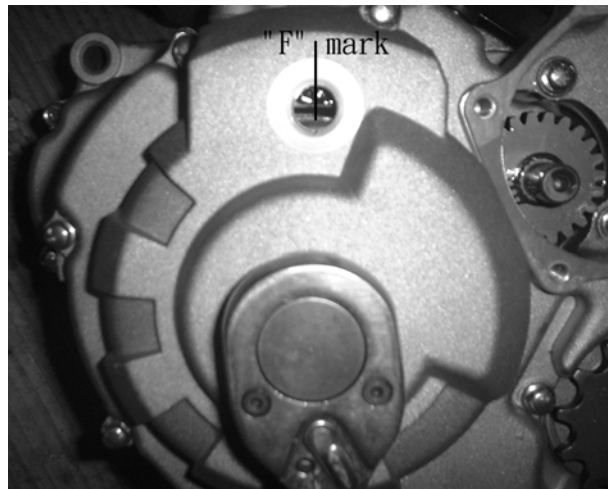
- Remove the 14 mm A.C.G. cap.
- Using the timing light to check the ignition timing. When the engine speed running at idle, the "F" mark of flywheel should aim at the inspection hole.



CHECK AND ADJUST

IGNITION TIMING

- Using the timing light to check the ignition timing.
- Keep the engine speed about 4000 rpm, if 2 mark-lines on flywheel aim at center of inspection hole then the ignition timing is correct.



CYLINDER PRESSURE

- Remove the spark plug cap and spark plug.
- Install the pressure gauge.
- Rotate the throttle and press the electric start button.

The normal cylinder pressure is 12~14 kg/cm².



If the cylinder pressure is too low then check the following items :

- Valve leakage?
- Valve gap is too tie?
- Cylinder head gasket is damage?
- Piston ring wear-out?
- Piston, cylinder wear-out?

If the cylinder pressure is too high then check the combustion chamber and the top face of piston whether with too much carbon residue.



CHECK AND ADJUST

ENGINE OIL

※ When you check the quantity of oil, the vehicle has to stay at the ground (flat) level.

- Stop the engine and remove the oil level gauge.
- Unscrew the engine oil filler cap from the right front corner of the engine and pull out the dipstick.

If the oil level is stay within bottom mark of the gauge, then the oil quantity is enough.

Refill the engine oil if it's too less.

The standard oil type is SAE 10W/40

Re-install the oil level gauge.

Change the engine oil :

- Take-out the oil level gauge.
- Remove the oil-release bolt underneath the engine and release the oil.
- Install the oil-release bolt.
- Fill the engine oil.

※ Confirm the washer of the bolt whether damaged.

Engine oil quantity :

disassemble : 2.0 Lit

change : 1.6 Lit

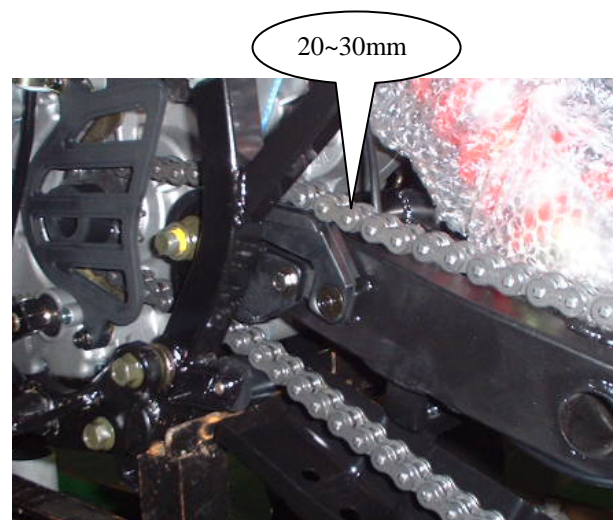
- Check all parts whether leaking, after assembly.

DRIVE CHAIN

Check the drive chain condition.

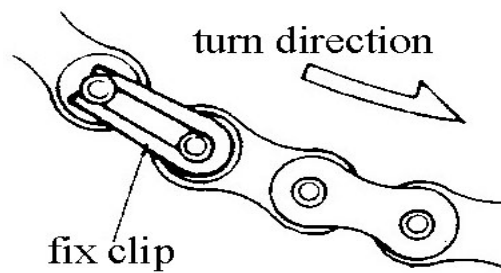
- The drive chain should be check, adjust, and lubricate regularly.
- Inspect the drive chain at a point on the lower run about halfway between the sprockets.

The free play of the drive chain should be between 20~30mm up and down.



CHECK AND ADJUST

- Inspect the front sprocket teeth for excessive wear; mark sure there's no play in the sprocket.
- When install the chain clip, beware the clip direction.



BRAKE SYSTEM

Parking brake and rear brake

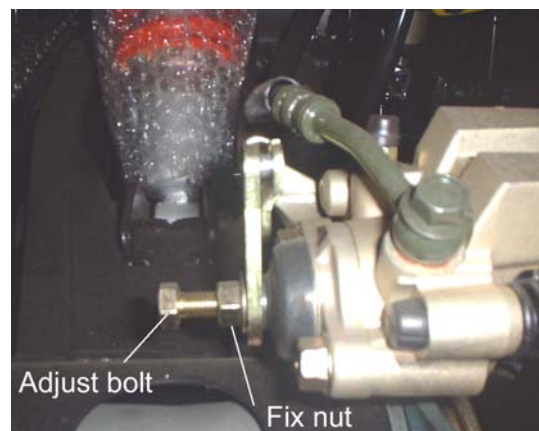
- Check all the brake shoes. If the brake shoes have any dint or wearing very serious then change it.

Check the play of brake lever

normal play : 10~20 mm

- If the brake lever play is too much, adjust the fix bolts on right brake lever.
- If the play of the rear brake over the normal value then adjust the adjusting nut of rear brake caliper on swing arm.

※ Adjusting nut must be aligned with pin, any slight deviation may result in braking play change cause danger as brake applied.



STEERING

- Turning the steering from right side to left side, check the steering operation.

Be sure the wiring and cable does not affect the steering handle.



CHECK AND ADJUST

FIXING OF NUTS AND BOLTS

- Check the fixing nuts, bolts on all parts.
If the nuts, bolts loosen then tie-up with certain locking torque.

SUSPENSION

Front

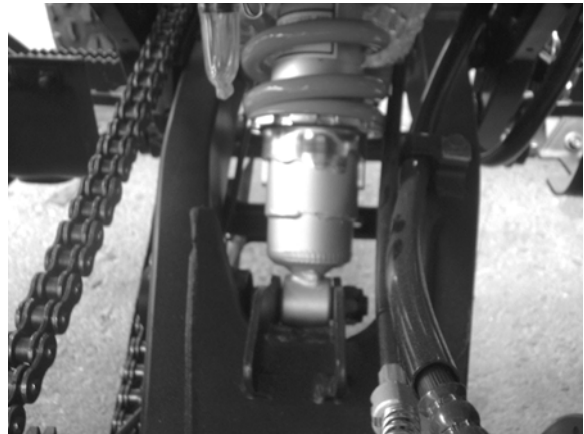
- Holding the brake and push the handle bar.
Check the fork movement and other parts if is loose or oil leaking.



Rear

- Check the damping of rear suspension
- Check the suspension bush function normally.

※ Inspect all suspension fasteners before riding.



TIRE, RIM

- Check the tires whether have any nail, broken...etc.
- Check tire pressure with a gauge that will read accurately at the low pressure used in ATV tires.
- The tire pressure can be very depends on different operation condition. Please check the mark on tire for operation pressure tolerance.



CHECK AND ADJUST

- Checking the shaft and nut of front wheel whether loosen.
- Checking the nut of rear wheel whether loosen.

Locking Torque:

Front wheel 18mm nut : 14 kg-m

Rear wheel 18mm nut : 14 kg-m



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