

## **2-1 MAINTENANCE AND TUNE-UP PROCEDURES**

### **PERIODICAL CHECKS AND SERVICES**

The maintenance intervals in the following table are based upon average riding conditions. Riding in unusually dusty areas require more frequent servicing.

<b>Interval</b>	<b>Initial service (first week)</b>	<b>Monthly</b>	<b>Quarterly</b>	<b>Yearly</b>
IDLE SPEED ADJUSTMENT (p. 14)	I	I		
SPARK PLUG (p. 14)			C, A	I
TIRE PRESSURE/WEAR (p. 14)	I	I		
BRAKE FLUID AND PERFORMANCE (p. 14)	I	I		
AIR CLEANER (p. 15)		C	C	I
CHASSIS NUTS AND BOLTS (p. 16)	I	I		
FUEL SWITCH (PETCOCK)/ FUEL FILTER (p. 16)		I		C, I, R
FINAL GEAR OIL (p. 16)		I	R	
ENGINE OIL (p. 17)	R (5hr)	R (10 hr)		
CHASSIS (p. 18)		C, I	L	
CARBURETOR (p. 18)	I	A		C
VALVE CLEARANCE (p. 18)			A	
SHIFTER ADJUSTMENT (p. 18)				
CHAIN TENSION (p. 18)	I	I	C, A, L	
BATTERY (p. 18)	I		I	

**A:** adjust **C:** clean **I:** inspect, clean or replace if necessary. **L:** lubricate **R:** replace

## **2-2 PERIODIC MAINTENANCE AND TUNE-UP PROCEDURES**

### **MAINTENANCE AND TUNE-UP PROCEDURES**

This section describes the servicing procedures for each item in the Periodic Maintenance requirements.

#### **IDLE SPEED ADJUSTMENT**

Over time, engine idle speed may become too high or too low and hinder proper vehicle performance. If this happens, proper adjustments must be made to the components that affect the idle speed. The three main components that directly affect idle speed are the Throttle Pedal, Throttle Cable, and Carburetor. Indirectly, the Fuel Line and Fuel Cock may also affect idle speed.

#### **SPARK PLUG**

Clean up the carbon around the spark plug to prevent it from dropping into the cylinder when removing the spark plug.

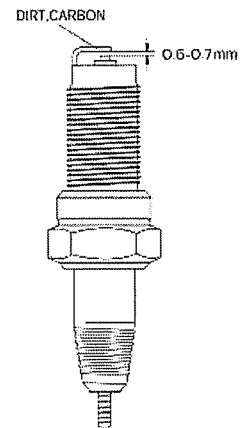
Remove the spark plug

In general, this process should be performed after the engine has cooled.  
If the spark plug is too tight to remove, spray penetrating oil on the spark plug washer and the threads, rotate the spark plug after soaking.

Clean up the filth and carbon accumulation on the spark plug with a steel brush or a blade.

Inspect the spark plug gap, in general it should be about 0.6 ~ 0.7mm.

When the carbon accumulation and wear of the spark plug are advanced, replace the spark plug. Replace with a spark plug of the same specification.



#### **TIRE PRESSURE/WEAR**

Check the tire pressure every time the kart is ridden. The tire pressure is very important for the stability of the ride.

For proper tire pressure ratings, see sections 1-2 and 1-3.

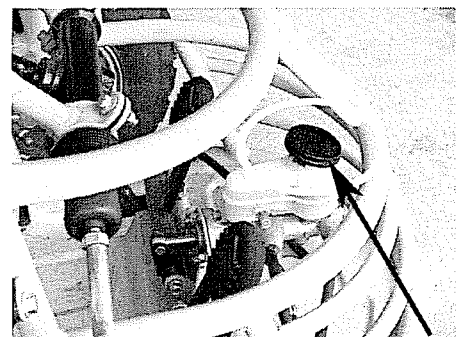
#### **BRAKE FLUID AND PERFORMANCE**

Always check that there is plenty of brake fluid in the brake fluid reservoir.

Ensure brake fluid looks clean and brake hoses are in good condition

Check that the front (7150 only) and rear brake pads are in good condition.

Check the brake rotors for abnormal wear.



## **2-3 PERIODIC MAINTENANCE AND TUNE-UP PROCEDURES**

### **AIR CLEANER**

Clean quarterly or more if the vehicle is driven in dusty conditions.

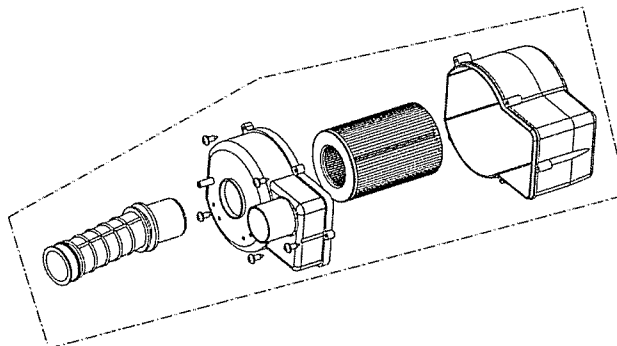
If the air cleaner is clogged with dust, performance will be severely decreased and if left unserviced, engine damage can occur. Check and clean in the following manner.

#### **PAPER FILTER MAINTENANCE**

Remove the air cleaner from its housing.

Tap filter on an object knocking dust from filter.

Replace the element if it is wrinkled torn.



#### **FOAM FILTER MAINTENANCE**

Remove foam filter from steel cage

Wash in non-flammable cleaning solvent

Submerge in oil and squeeze to remove excess oil

Install the element back into the air box.

#### **CAUTION!**

Before and during cleaning, inspect the element for tears. A torn element must be replaced.

Make sure the element is seated properly and no foreign material can pass by it.

### **CHASSIS NUTS AND BOLTS**

Inspect first week and every month thereafter

Always pay attention to the karts nuts and bolts. Some loosening after use is normal and should not be left unchecked for an extended period of time.

## 2-4 PERIODIC MAINTENANCE AND TUNE-UP PROCEDURES

### TIGHTENING TORQUE CHART

Bolt Diameter (mm)	Conventional marked bolt			8.8 marked bolt		
	N.m	Kg.m	Ib-ft	N.m	Kg.m	Ib-ft
4	1 ~2	0.1 ~0.2	0.7 ~1.5	1.5 ~3	0.15 ~0.3	1.0 ~2.0
5	1 ~4	0.2 ~0.4	1.5 ~3.0	3 ~6	0.3 ~0.6	2.0 ~4.5
6	4 ~7	0.4 ~0.7	3.0 ~5.0	8 ~12	0.8~1.2	6.0 ~8.5
8	10 ~16	1.0 ~1.6	7.0 ~11.5	18 ~28	1.8 ~2.8	13.0 ~20.0
10	22 ~35	2.2 ~3.5	16.0~25.5	40 ~60	4.0 ~6.0	29.0 ~43.5
12	35 ~50	3.5 ~5.5	25.5 ~40	70 ~100	7.0 ~10.0	50.5 ~72.5
14	50 ~80	5.0 ~8.0	36.5 ~58	110 ~160	11.0 ~16.0	79.5 ~115.5
16	80 ~130	8.0 ~13.0	58 ~94	170 ~250	17.0 ~25.	123.0 ~181.0
18	130 ~190	13.0~19.0	94 ~137.5	200 ~280	20 ~28.0	144.5 ~202.5

### FUEL SWITCH (PETCOCK)

This vehicle is equipped with an automatic fuel petcock. There is no need to turn off the fuel, since this happens when the engine is not running.

Check for any leaks or seeping fuel.

Replace the petcock if there are any leaks found.

### FUEL FILTER

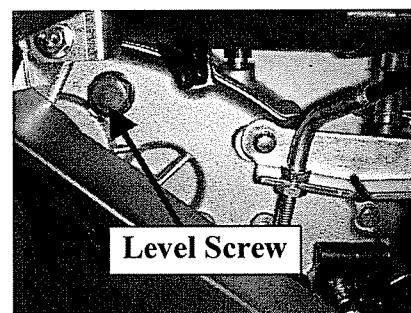
Ensure the fuel filter is in an upright position, so that no air can get pulled into the carburetor. Also, visually inspect the filter for debris, damage, or leaking. Replace filter at specified interval.

### FINAL GEAR OIL

Inspect monthly and change quarterly.

To check level, remove level screw on the right rear of engine case.

To drain oil, remove the drain plug at the rear bottom of the engine

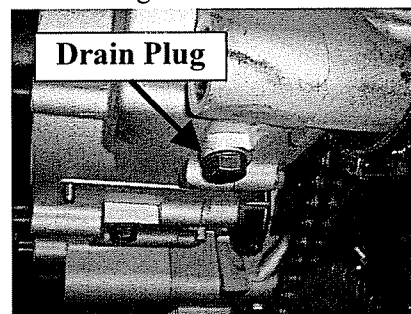


## 2-5 PERIODIC MAINTENANCE AND TUNE-UP PROCEDURES

case. It is recommended to warm the engine for 10 minutes or more before draining final drive oil.

**NOTE:**

80/90 wt. Gear oil is recommended in the final drive case. However, in extreme cold weather conditions, you may experience the kart to be hard to push. In this case, lighter viscosity oil may be used, such as 75 wt., or equivalent motorcycle transmission fluid.

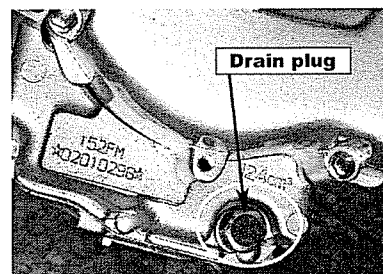


Final drive capacity	750ml 80/90wt
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### ENGINE OIL

Inspect before riding, every time. Replace monthly.

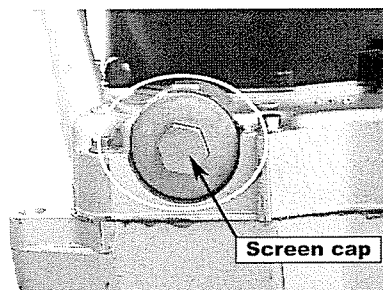
Remove the drain plug from the left side bottom of the engine. Drain into oil pan for disposal. If the kart is equipped with an oil filter, remove the filter and discard any existing oil in an approved container



Replace oil drain plug.

Remove the large cap on the right bottom of the engine and remove the screen.

Wash the screen with cleaning solvent and refit, making sure the O-ring is still in good condition. Re-install the screen and cap.



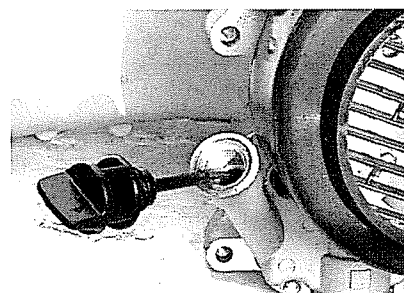
Refill the engine with 30oz of 10W-40 engine oil.

If your kart is equipped with an oil filter, add additional new oil to the filter, until the oil is 2mm or so from the top of the filter, then install the filter. (See Section 3-46, OIL SYSTEM INSPECTION AND SERVICING (W/ OIL FILTER))

Start and run engine for 5 minutes, ensuring there are no oil leaks present.

Allow time for oil to return to oil pan, then check oil level on the filler cap stick to assure proper level.

The cap needs to be screwed in to check.



## **2-6 PERIODIC MAINTENANCE AND TUNE-UP PROCEDURES**

### **CHASSIS**

Grease chassis bushings and bearings with grease quarterly to assure smooth operation and extended life of the bushings and the components.

If used in extreme wet and muddy conditions or dusty conditions, it is recommended more often.

### **CARBURETOR**

Refer to Section 3-21, CV CARBURETOR.

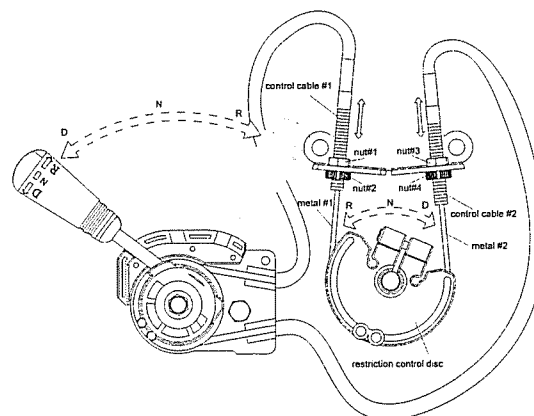
### **VALVE CLEARANCE**

Refer to Section 3-7, VALVE CLEARANCE ADJUSTMENT.

### **SHIFTER ADJUSTMENT**

Your unit may require an occasional adjustment in the shift cables due to typical stretch found during normal operation of the kart. To make shift adjustments refer to the following procedure:

- Push the shift lever to the “D” position
- Check the restriction control disc found just behind the oil level dipstick to ensure that it has rotated forward all the way (looking for any slack in control cable #1)
- Loosen adjustment nuts #1 and #2, pulling the housing to draw the cable tight. Re-tighten the nuts when the cable is properly tensioned.
- Shift the lever to the “R” position and check the control disc to ensure that it has rotated full towards the rear of the kart.
- Loosen adjustment nuts #3 and #4, pulling the cable housing to draw the #2 control cable tight.
- Re-tighten nuts #3 and #4 when the cable is properly tensioned.



### **CHAIN TENSION**

Refer to Section 5-4, CHAIN ADJUSTMENT

### **BATTERY**

Inspect the battery for signs of leakage, damage to the terminals or casing, and loose connections. Refer to Section 4-2, BATTERY CHARGING for details on charging. Do not allow battery to drain completely, as this causes damage to the battery and may prevent proper charging. Only use a charger that meets the specifications described in Section 4-2, BATTERY CHARGING.