

**LUBRICATION GUIDE**

**Volume**

**1**

**GOKARTSUSA**

---

**GY6 150, CN250**

GOKARTSUSA.COM

GOKARTSUSA.COM

# **Engine Lubrication**

GY6 150, CN250 DUNE BUGGY

# Engine Lubrication Guide

---



© GOKARTSUSA.COM  
2000 Highway 50 • S. Lake Tahoe, CA 96150  
Phone 800.603.1437

**GokartsUSA is a Nationwide Supplier of Powersports Products**

# Table of Contents

## CHAPTER 1

<b>Engine Lubrication</b>	<b>4</b>
<b>How to change the Engine Oil</b>	<b>5</b>
<b>Drain Engine Oil</b>	<b>5</b>
<b>Fill Engine Oil</b>	<b>5</b>

## CHAPTER 2

<b>CVT Gearbox Lubrication</b>	<b>6</b>
<b>Drain Gear Oil</b>	<b>6</b>
<b>Fill with Gear Oil</b>	<b>7</b>

## CHAPTER 3

<b>How the Reverse Gearbox Works</b>	<b>8</b>
<b>Reverse Gearbox Lubrication</b>	<b>8</b>
<b>Fill Reverse Gear Box</b>	<b>9</b>

## Chapter

# 1

## Engine Lubrication

*The leading cause of engine failure is overheating due to improper lubrication. Follow all of these procedures before operating your Buggy.*

Operating your Buggy for without proper lubrication is the fastest way to severely damage your engine and transmission. Even just a few minutes of running the engine with low or no oil can cause engine failure. Your engine and transmission can give you many years of reliable service, provided you follow these important steps outlined in this guide.

This Guide is intended to provide general information and is not model or manufacturer specific. Consult the OEM for specific information regarding your vehicle. The GY6 is a Honda designed engine that has been around since the mid-1980s when Honda entered into a business relationship with Lifan China to manufacture the engine. There are now over 20 companies that make this type of engine in China, Korea and Taiwan. This engine is a proven work horse and is the only four stroke scooter and buggy engine of these sizes that is currently imported from China to the U.S. The engine is manufactured in 50cc, 125cc, 150cc and 170cc with big bore kits available in several sizes. The information contained in this manual also applies to the CN and CF 250 Engines.

**Components** GY6 and CN engines have three major components which require lubrication. **The Engine, CVT Gear Box and Reverse Gear Box** all require proper lubrication prior to operation.

---

### COMPONENTS

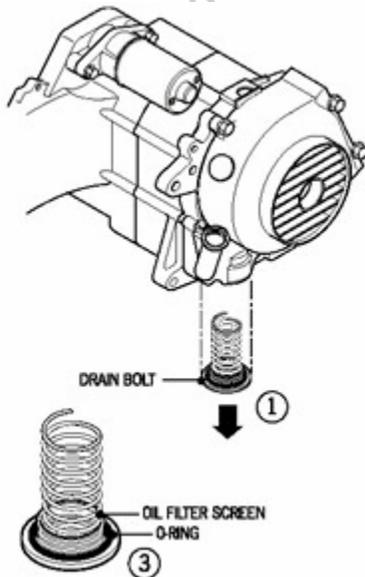
---

- Engine
  - CVT Gear Box
  - Reverse Gear Box
-

## How to Change the Engine Oil

### Drain Engine Oil

Locate the oil drain screw on the bottom of the engine crankcase. Place an oil container underneath the drain screw. Loosen and remove the drain screw and allow all of the oil to drain. Replace the drain screw and wipe the oil off of the bottom of the engine.

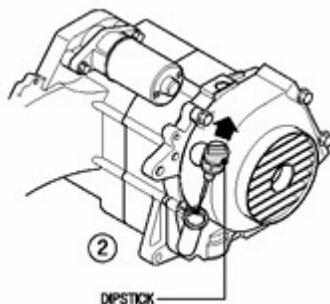


### Engine Oil

The Engine requires 15W/40 Engine oil in the Summer and 10W/30 in the Winter.

### Fill Engine Oil

Make sure the Buggy is on level ground. Locate the oil filler cap and dipstick. Remove and set aside. Add oil to the upper level limit on the dipstick.



**NOTE: Check the oil level when the dipstick is unscrewed and pulled out**

## Chapter

# 2

### How to Change CVT Gear Box oil

Your Buggy may arrive with little or no Gear Oil in the CVT Gear Box. It is very important to properly install Gear Oil before operation. Failure to do so can cause serious damage to your engine and may void your warranty. You must drain any residue Gear Oil and fill the CVT with fresh Gear Oil.

#### You will need

A 10mm wrench, a Pistol Grip Oil Can, a Measuring Cup and a bottle of Gear Oil. The manufactures recommend using AP/GL4 SAE 75W/85 Gear Oil. After the break-in period, many users report good results using a good **Synthetic 80W-90 Gear Oil**.

#### CVT Gear Box: Drain and Fill Screw Locations.



**Drain the Gear Oil.** Locate the Drain Screw at the bottom of the Final Drive

section of the CVT Gear Box. On the CVT Gear Box, you will also see a bolt about halfway up the final drive section. This is the Fill / Inspection hole for the gear oil. Place measuring cup under the drain screw. Use a 10mm wrench to remove the Drain Screw and the Fill Screw and let the oil completely drain into the measuring cup. Removing the Fill Screw at this time will allow the oil to drain faster. Using a measuring cup allows you to see if you have lost some oil. Once the oil is fully drained, replace the Drain Screw and wipe the oil off of the bottom of the gear box.

## Fill CVT Gear Box with Oil

Fill the Oil Gun with about 3.7 ounces of Gear Oil. This amount may vary depending upon your engine. Insert the tube of the Oil Gun in the filler hole and squirt the oil gently into the box. Do not squirt so fast that the oil does not have time to flow into the box. Fill the Gear Box until oil begins to flow from the fill hole. You cannot over fill the Gear Box. Pull the oil gun tube out and allow the excess oil to flow out. Replace the Fill Screw and wipe off the excess oil from the Gear Box and check for leaks. Take a short ride and check for leaks again.



**Pistol Grip Oil Can:** Using a Pistol Grip Oil Can will make the job much easier

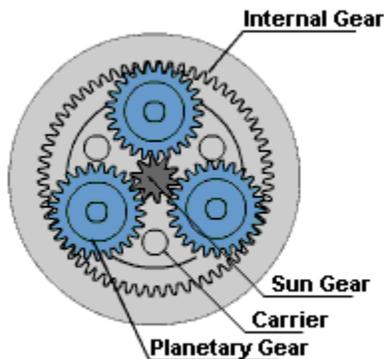
## Chapter

# 3

## Reverse Gearbox

### How the Reverse Gearbox works

The external reverse gearbox setup found on most 150cc and 250cc buggies is actually a rather simple piece of machinery compared to most other gearbox designs. The reverse cable is connected inside the gearbox to a yoke which is responsible for pulling an internal planetary gearset into REVERSE. A large spring is also held on this yoke to return the gear set into FORWARD position when tension on the cable is released. The gearbox receives power from and physically rests on the transmission output shaft, which turns due to the workings within the engine and transmission.



### Reverse Gearbox Lubrication

The Reverse Gearbox is lubricated with 90W Gear Case Lube at installation time.

**Note:** This is NOT the same Gear Oil used in the CVT Gearbox. Removing the

Gearbox and taking it apart is the best way to add or replace the Gear Lube. There is also a screw at the top which can be removed to add Gear Lube, but this is a bit difficult since there is no way to see how much to add. Insert the Pistol Tube into the hole and pump in some 90W Gear Case Lube. You cannot overfill it.

## Service Intervals

---

**SERVICE**

---

- |                    |            |
|--------------------|------------|
| • Engine Oil       | 300 miles  |
| • CVT Gear Box     | 600 miles  |
| • Reverse Gear Box | 1000 miles |
- 

Consult owner's manual or the OEM for either normal or severe oil service intervals.

Note: Check and service the gear oil frequently when water contamination is possible.

Gear oils should be changed more frequently when operating vehicles or equipment in dusty or dirty conditions unless the gear system is properly sealed and equipped with membrane type breathers.

**SYNTHETIC GEAR OIL** is compatible with synthetic and conventional gear oils, however mixing oils reduces the benefits and nullifies the extended service life recommendations.