

# Owner's Manual

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## Parts Manual

**Twister**  
Hammerhead

READ THIS MANUAL CAREFULLY,  
IT CONTAINS IMPORTANT SAFETY INFORMATION.

*GT150IIR*

**MINIMUM  
RECOMMENDED  
OPERATOR AGE: 16**



### **FOR OFF-ROAD USE ONLY**

This vehicle is designed and manufactured for off-road use only.

USA only:

It does not conform to Federal Motor Vehicle Safety Standards, and in regards to operation on public streets, roads, or highways is illegal.

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## PARTS MANUAL

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# A FEW WORDS ABOUT SAFETY


In order to keep everyone safe, you must take responsibility for the safe operation of your Kart.

To help you make informed decisions about safety, we have provided operating procedures and other information on labels and in this manual. This information alerts you to potential hazards that could hurt you or others.

It is not practical or possible to warn you about all hazards associated with operating or maintaining a Kart. You must use your own good judgment.

You will find important safety information in a variety of forms, including:

**Safety Labels** – On the Kart.

**Safety Messages** – Preceded by a safety alert symbol  and one of two signal words: **WARNING**, or **CAUTION**.

**These signal words mean:**



Physical harm may result from failure to adhere to the instructions that are described within the **WARNING** labels.

**Safety Headings** — such as Important Safety Reminders or Important Safety Precautions.

**Safety Section** — such as Kart Safety.

**Instructions** — how to use this Kart correctly and safely.

This entire manual is filled with important safety information—please read it carefully.

# IMPORTANT SAFETY INFORMATION

Your Kart will provide you with many years of service and pleasure. Providing you take responsibility for your own safety and understand the challenges you can meet while driving.

There is much that you can do to protect yourself while operating your kart. You'll find many helpful recommendations throughout this manual. The following are a few that we consider most important.

## **Follow the Age Recommendation**

Adult Supervision should be present for all people under the age of 16.

## **Always Wear a Helmet**

It's a proven fact: helmets significantly reduce the number and severity of head injuries. Always wear an approved motorcycle helmet. We also recommend that you wear eye protection, sturdy boots, gloves, and other protective gear.

## **Drive Off-Road Only**

Your Kart is designed and manufactured for off-road use only. The tires are not made for pavement, and the Kart does not have turn signals and other features required for use on public roads. If you need to cross a paved or public road, get off and walk your Kart across.

## **Take Time to Learn & Practice**

Even if you have driven other Karts, take time to become familiar with how this Kart works and handles. Practice in a safe area until you build your skills and get accustomed to this Kart's size and weight.

Because many accidents involve inexperienced or untrained drivers, we urge all drivers to take a training course approved by the Go-Kart Safety Institute. Check with your dealer for more information on training courses.

## **Be Alert for Off-Road Hazards**

The terrain can present a variety of challenges when you drive off-road. Continually "read" the terrain for unexpected turns, drop-offs, rocks, ruts, and other hazards. Always keep your speed low enough to allow time to see and react to hazards.

# IMPORTANT SAFETY INFORMATION

## **Drive within Your Limits**

Pushing limits is another major cause of Kart accidents. Never drive beyond your personal abilities or faster than conditions warrant. Remember that alcohol, drugs, fatigue, and inattention can significantly reduce your ability to make good judgments and drive safely.

## **Don't Drink and drive**

Alcohol and driving don't mix. Even one drink can reduce your ability to respond to changing conditions, and your reaction time gets worse with every additional drink. So don't drink and drive, and don't let your friends drink and drive either.

## **Do not operate this Kart at night.**

Dark vision can greatly reduce a driver's visibility and judgment. So driving at night is dangerous and can increase the possibility for an accident.

## **Never run your Kart indoors.**

The exhaust from the engine contains a tasteless, odorless and poisonous gas called carbon monoxide.

## **Keep away from moving parts of the Kart**

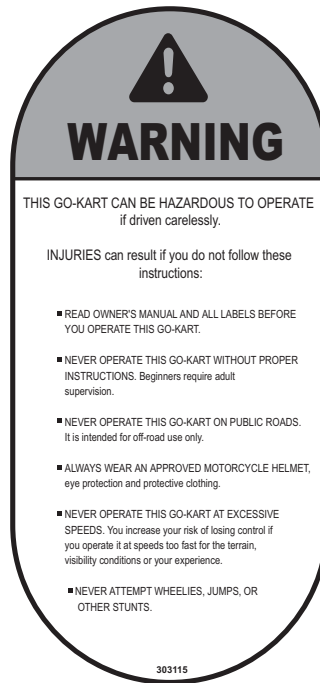
The operator of the Kart should never place their hands or other parts of their body near any moving part of the Kart. Failure to adhere to this warning will cause physical harm to your body.

## **Skidding or Sliding**

The terrain surface can be a major factor affecting turns. Skidding in a turn is more likely to occur on slippery surfaces such as snow, ice, mud and loose gravel. If you skid on ice, you may lose all directional control. To avoid skidding on slippery terrain, keep your speed low and drive carefully.

This section presents some of the most important information and recommendations to help you drive your Kart safely. Please take a few moments to read these pages.

The labels should be considered permanent parts of the Kart. If a label comes off or becomes hard to read, contact your dealer for warning label replacements.



# ARE YOU READY TO DRIVE ?

Before each drive, you need to make sure that you and your kart are both ready to drive. To help get you prepared, this section discusses how to evaluate your driving readiness, what items you should check on your kart, and adjustments to make for your comfort, convenience, or safety.

Before you drive your kart for the first time, we urge you to:

- Read this owner's manual and the labels on your kart carefully.
- Make sure you understand all the safety messages.
- Know how to operate all the controls.

Before each drive, be sure:

- You wear your seat belt at all times while driving your kart.
- You feel well and are in good physical and mental condition.
- You are wearing an approved motorcycle helmet (with chin strap tightened securely), eye protection, and other protective clothing.
- You don't have any alcohol or drugs in your system.

## Protective Apparel

For your safety, we strongly recommend that you always wear an D.O.T. approved motorcycle helmet, eye protection, boots, gloves, long pants, and long-sleeved shirt or jacket whenever you drive.

Although complete protection is not possible, wearing proper gear can reduce the chance of injury should you have an accident.

The following suggestions will help you choose the proper protective gear.

## Helmets and Eyes Protection

Your helmet is your most important piece of protective gear because it offers the best protection against head injuries. A helmet should fit your head comfortably and securely.

An open-face helmet offers some protection, but a full-face helmet offers more. Regardless of the style, look for a D.O.T. (Department of Transportation) sticker on any helmet you buy. Always wear a face shield or goggles to protect your eyes and help your vision.

### **WARNING**

**Operating this kart without wearing an approved motorcycle helmet, eye protection, and protective clothing could increase your chances of head and/or eye injury, and the possibility of death in the event of a severe accident.**

**Always wear an approved motorcycle helmet that fits properly and wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket and long pants.**

# ARE YOU READY TO DRIVE ?

## Additional Driving Gear

In addition to a helmet and eye protection, we also recommend:

Sturdy off-road motorcycle boots to help protect your feet, ankles, and lower legs.

Off-road motorcycle gloves to help protect your hands.

Driving pants with knee and hip pads, a driving jersey with padded elbows, and a rider protector.

## Driver Training

Developing your driving skills is an on-going process. Even if you have driven other karts, before take time to become familiar with how this kart works and handles. Practice driving the kart in a safe area to develop your skills. Do not drive on rough terrain until you get accustomed to the kart's controls, and feel comfortable with its size and weight.

### **WARNING**

**Operating this kart without your seat belt could cause you to be thrown from the kart, causing serious injury or death.**

## No Alcohol or Drugs

Alcohol, drugs and karts don't mix. Even a small amount of alcohol can impair your ability to operate a kart safely. Likewise, drugs—even if prescribed by a physician—can be dangerous while operating a kart. Consult your doctor to be sure it is safe to operate a vehicle after taking medication.

### **WARNING**

**Operating this kart after consuming alcohol or drugs can seriously affect your judgment, cause you to react more slowly, affect your balance and perception, and could result in serious injury or death.**

**Never consume alcohol or drugs before or while operating this kart.**

# IS YOUR VEHICLE READY TO DRIVE?

Before each drive, it is important to inspect your kart and make sure any problems you find are corrected. A pre-drive inspection is a must, not only for safety, but because having a breakdown, or even a flat tire, can be a major inconvenience.

If your kart has overturned or has been involved in a collision, do not drive it until your kart has been inspected by your dealer. There may be damage or other problems that you can not see.

### **WARNING**

**Improperly maintaining this kart or failing to correct a problem before driving can cause a crash in which you can be seriously hurt or killed.**

**Always perform a pre-drive inspection before every drive and correct any problems.**



# SAFE DRIVING PRECAUTIONS

## Off-Road Use Only

Your kart and its tires are designed and manufactured for off-road use only, not for use on paved surfaces. Driving on paved surfaces can affect the kart handling and control.

### **WARNING**

**Operating this kart on paved surfaces may seriously affect handling and control of the kart, and may cause the vehicle to go out of control.**

**Never operate the kart on any paved surfaces, including sidewalks, driveways, parks lots and streets.**

When driving off-road, also remember to always obey local off-road driving laws and regulations. Obtain permission to drive on private property. Avoid posted areas and obey "no trespassing" signs.

You should never drive your kart on public streets, roads or highways, even if they are not paved. Drivers of street vehicles may have difficulty seeing and avoiding you, which could lead to a collision.

### **WARNING**

**Operating this kart on public streets, roads or highways could cause a collision with another vehicle.**

**Never operate this kart on any public streets, roads or highways, whether they are dirt, gravel or paved surfaces.**

## Keep Hands and Feet on Controls

When driving your kart, always keep both hands on the steering wheel and both feet on the foot controls. It is important to maintain your balance and to control the kart. Removing hands or feet away from the controls can reduce your ability to react and control the kart.

### **WARNING**

**Removing your hands from the steering wheel or feet from the foot controls during operation can reduce your ability to control the kart or could cause you to lose your balance and fall off the kart.**

**Always keep both hands on the steering wheel and both feet on the foot controls of your kart during operation.**

# SAFE DRIVING PRECAUTIONS

## Control Speed

Driving at excessive speed increases the chance of an accident. In choosing a proper speed, you need to consider the capability of your Kart, the terrain, visibility and other operating conditions, plus your own skills and experience.



### **WARNING**

**Operating this Kart at excessive speeds increases your chances of losing control of the Kart, which can result in an accident.**

**Always drive at a speed that is proper for your Kart, the terrain, visibility and other operating conditions, and your experience.**

## Use Care on Unfamiliar or Rough Terrain

Before driving in a new area, always check the terrain thoroughly. Don't drive fast on unfamiliar terrain or when visibility is limited. (it's sometimes difficult to see obstructions like hidden rocks, bumps, or holes in time to react.)



### **WARNING**

**Failure to use extra care when Operating this Kart on unfamiliar terrain could result in the Kart overturning or going out of control.**

**Go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the Kart.**

Never drive past the limit of visibility. Maintain a safe distance between your Kart and other off-road vehicles. Always exercise caution and use extra care on rough, slippery and loose terrain.



### **WARNING**

**Failure to use extra care when operating on excessively rough, slippery or loose terrain could cause loss of traction or vehicle control, which could result in an accident, including an overturn.**

**Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the Kart on such terrain. Always be especially cautious on these kinds of terrain.**

## Do Not Perform Stunts

You should always operate your Kart in a safe and reasonable manner. When driving, always keep all four wheels on the ground.



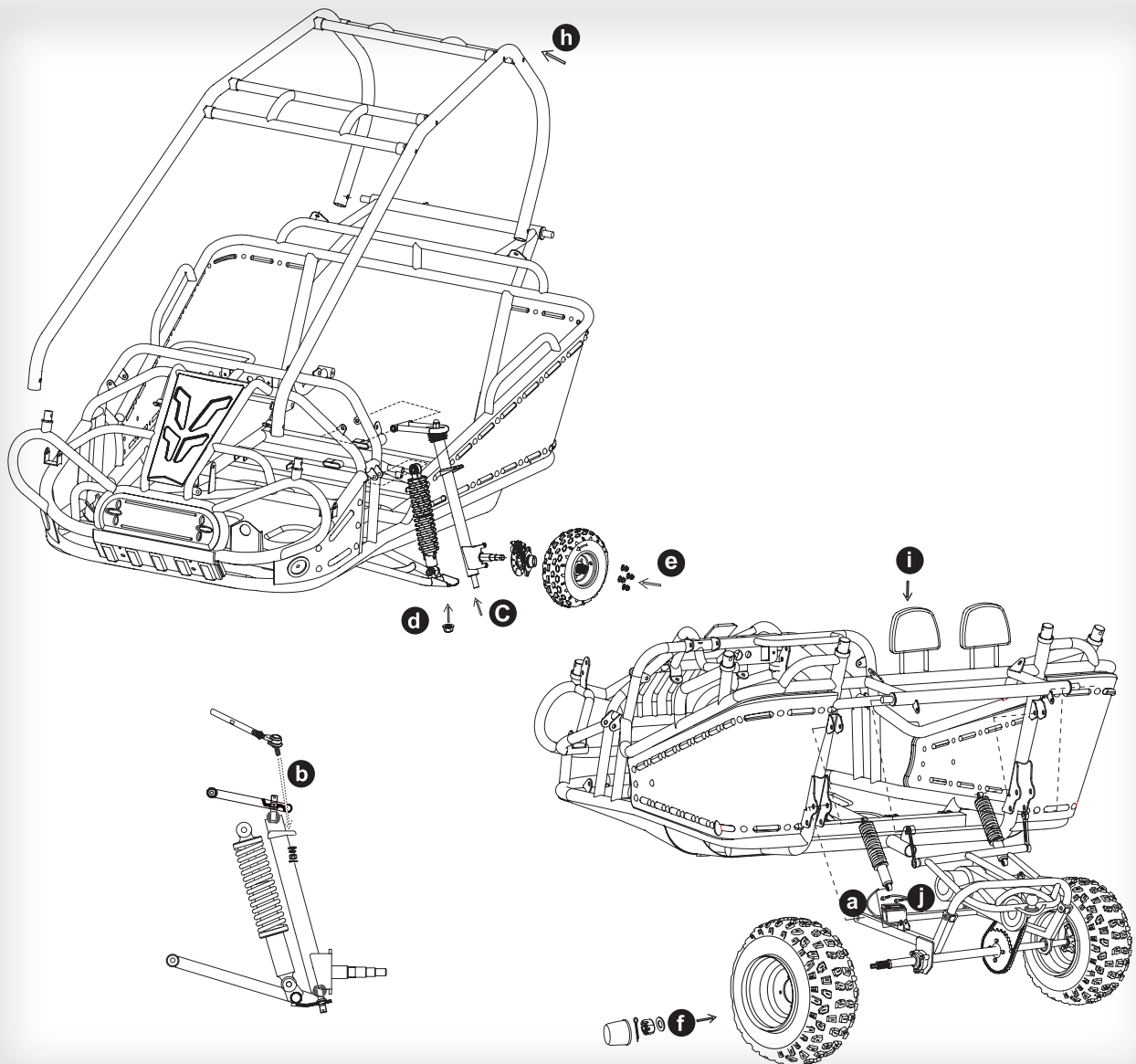
### **WARNING**

**Attempting wheelies, jumps, and other stunts increases the chance of an accident, including an overturn.**

**Never attempt stunts, such as wheelies or jumps. Don't try to show off.**

# P.D.I.

- a. Install RR. Shocks and tighten the nuts.
- b. Install Ball Head, Tie Rod, tighten the Castle Nut and insert the cotter Pin.
- c. Install Dust Seals, align the Ball Head Bolt, Knuckle Support to the square hole on the Lower A-Arm.
- d. Install Flange Nut and tighten it (> 88.9 foot lbs)
- e. Install Front Tires and tighten the nuts.
- f. Install Rear Tires, tighten the nuts, insert cotter Pin and put on the Rubber Cover.
- h. Install C.B.C custom bar cage RR., put on R-Washer.
- i. Install Head-Rest.
- j. Check all nuts and bolts, wiring, cables, fuel line, switches and tire pressure.
- k. Fill battery with Acid and charge, check and fill the engine with the recommended oil.
- l. Fill fuel tank with Unleaded Gasoline, and turn on the ignition switch to start the engine.



## DIMENSIONS

Overall Length -----	85 in. (2160mm)
Overall Width -----	53 in. (1346mm)
Overall Height -----	57.4 in. (1458mm)
Wheelbase -----	59 in. (1500mm)
Front Track -----	45.7 in. (1160mm)
Rear Track -----	39.4 in. (1000 mm)
Ground Clearance -----	6.7 in. (170mm)

## ENGINE

Type -----	Forced air-cooled. 4-Stroke
Engine capacity -----	150cc
Bore / Stroke -----	57.4mm x 57.8mm
Displacement -----	149.6cm <sup>3</sup>
Corrected compression ratio -----	9.2:1
Carburator -----	KF,CB24J
Output Power -----	7.4Kw/7500rpm
Maximum Torque -----	13/5500 foot lbs/r/min
Starting -----	Electric
Ignition -----	C.D.I.
Lubrication -----	Force & Splash
Transmission -----	Automatic (C.V.T system)
Spark plug -----	C7HSA(NGK)
Plug gap -----	0.6-0.7mm
Fuel Type -----	RQ90 (unleaded)
Lubricate oil -----	SAE-10W/40

## CAPACITIES

Maximum load-----	Double Seats/400lbs
Fuel tank -----	1.75 Gal
Engine oil -----	30 Oz
Starting -----	<5s
Climbing -----	20 -25
Battery -----	12V 10Ah
Head Light -----	12V 35W/35W
Tail Light -----	12V 21W/5W
Fuse -----	10A

# SPECIFICATIONS

Brake Track ----- < 7 m@20miles/h  
Top speed ----- 30 miles/h(or limited as customers require)

## CHASSIS

Front, Rear brake ----- Hydraulic disc, left foot control  
Front tire ----- 20 x 7-8  
Rear tire ----- 22 x 10 -10  
Front Suspension ----- Independent Dual A-Arm  
Rear Suspension ----- Swing Arm/Double Oil Damped Shock  
Restraint System ----- Dual 4-point Harness  
Final Drive Chain ----- (KMC) O-Ring Chain

## TIRE PRESSURE

Front -----147kPa 1.5kg/cm<sup>2</sup> 21.3psi  
Rear -----196kPa 2.0kg/cm<sup>2</sup> 28.4psi

## WEIGHT

Net Weight ----- 465 lbs

## A. Operation controls

**WARNING** - Do not attempt to start or operate the engine until completely familiar with the location and use of each control necessary to operate this vehicle. The operator must know how to stop this machine before starting and driving it.

### a. Throttle

The right foot pedal is the throttle that controls the Kart speed. As the engine speed increased above idle, the clutch automatically engages and moves the vehicle forward. To disengage the clutch at any time, allow the throttle to return to the idle position.

(See Fig. 1)

## ! WARNING

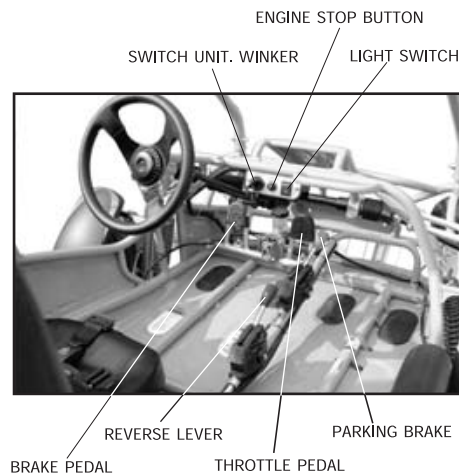
**Each time prior to starting the engine, check the throttle assembly to ensure that when the pedal is pushed all the way forward the assembly is working smoothly and returns to idle when released. Do not operate if pedal or engine throttle linkage fail to return to idle. If unable to correct the problem through lubrication, adjustment or replacement of worn parts, contact your dealer for assistance.**

### b. Brake

The brake is located on the left side of the kart (See Fig.1). Applying pressure to the pedal draws the brake caliper around the brake pump at the rear wheel and slows or stops the kart.

### c. Start engine

Insert the key into key-switch, turn the key clockwise, release the key when the engine starts. The engine will warm up within 5 minutes and the engine choke will close automatically and operate at the normal RPM (Warning: Don't crank starter more than 5 seconds at one time).



### d. Engine stop button

Important-stop button test.

Before driving this vehicle, test the Engine Stop Button to assure that it is operating properly. With the engine running, push and hold the Engine Stop Button for two seconds for the engine to shut down.

**Figure 1**

## B. Pre-Drive Inspection



### **WARNING**

**Perform this pre-drive inspection everyday before driving vehicle. If not performed, serious damage to the vehicle or personal injury may result.**

- a. Check for Engine Oil Level. Check for leaks, add oil if required.
- b. Check for Fuel Level. Add fuel as necessary and do not overfill. Check for leaks.
- c. Check for Brakes. Depress the rear brake pedal several times, then check for proper brake pedal freeplay. Make sure there is no brake fluid leakage. Adjust if necessary.
- d. Check Tires. Check tires condition and pressure. The pressure on both Front and Rear tire is 5 and 8 lbs respectively.
- e. Check Drive Chain. Check for drive chain's condition and tension. Lubricate if necessary.
- f. Check Throttle. Check for smooth operation. Assure throttle "snaps" back to idle.
- g. Check Engine Stop Button. Perform engine stop button test. Repair as necessary.
- h. Check all Nuts, Bolts, and fasteners. Check wheels to see that all axle nuts and lug nuts are tightened properly. Check and tighten as necessary all other fasteners to specified condition.
- i. Check C.B.C Bar. Ensure all protective C.B.C bars are in place before operating the Kart.
- j. Check Brake Light. Check for proper operation.
- k. Check Wheels. Check for tightness of wheel nuts and axle nuts; check that axle nuts are secured by cotter pins.
- l. Check Steering. Check for free operation for any unusual looseness in any area.



### **CAUTION**

**Always follow rules for safe operation and wear a helmet.**

Component locations

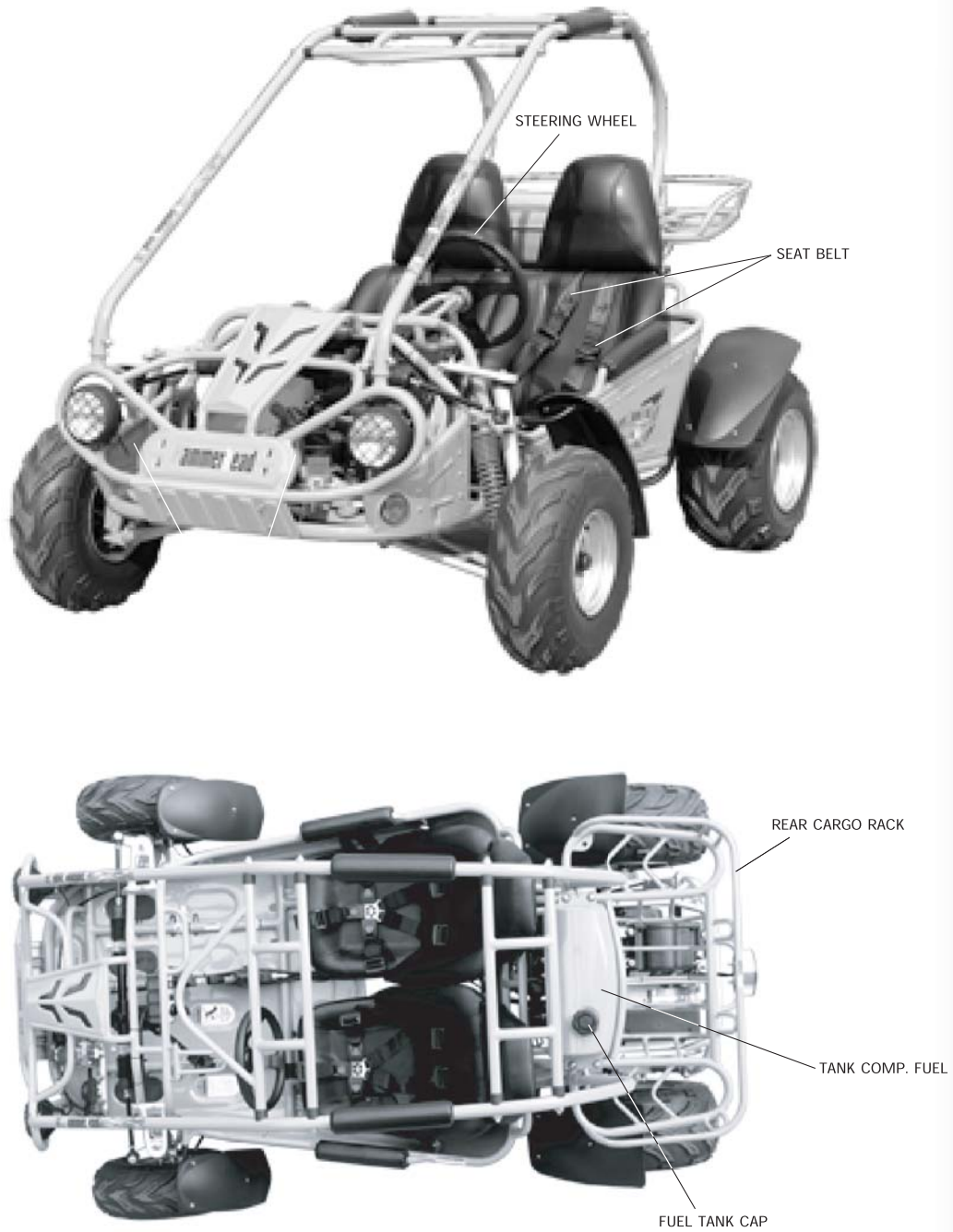


Figure 2



# OPERATION

## C. Passengers

The vehicle allows for two riders only. Combine maximum weight of driver and the passenger should not exceed 180kg or 400lbs.

## D. Seat Adjustment

The seat must always be securely fastened in the position which best affords the operator control of the foot pedals, steering wheel, and the remote stop button.

- Pull seat adjustment handle upward to disengage seat slide.
- Move seat to desired position.
- Be sure seat adjustment handle snaps back into place and that seat is locked into position.

Figure 3



Before attempting to adjust the seat, ensure that kart engine is stopped.



Never operate this Kart when the provided seat is not securely fastened, to do so could result in a strong possibility of severe personal injury or loss of life. Before attempting to adjust the seat, ensure the kart engine is stopped.

## E. Reverse Adjustment

a. Push forward the reverse lever to the "D" position so that the unit can move forward, pull back the lever to "R" so that the unit can move backward. (See Fig.4)

b. When reverse lever is in the drive position, there need to be 1/2 inch of freeplay in the reverse level. If the adjustment is not correct, then loosen the lock nut #2, then adjust lock nut #1 to the proper amount of freeplay.

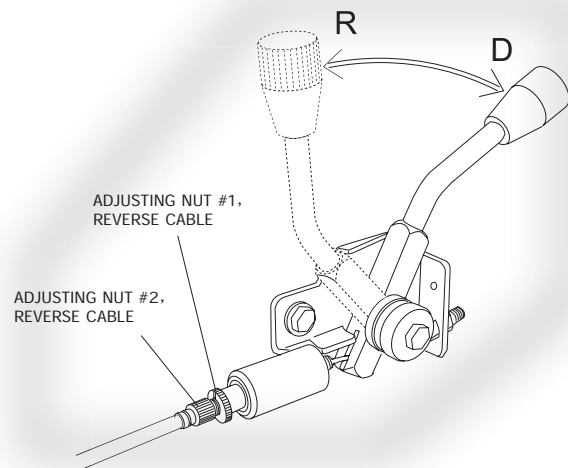


Figure 4

Always stop the kart before changing gears.

# OPERATION/SERVICE INSTRUCTIONS

## F. Starting And Operating Instructions

- a. Before starting the engine, be sure that the driver is seated properly in the Kart with the seat belt.
- b. Testing the Kart in an open space at the beginning to learn how to start, turn and stop.
- c. Operate the Kart slowly until you are familiar with it.
- d. The turning radius of this Kart is small and agile, so the centrifugal force is very high when turning at high speed. Slow down to a more controllable speed when turning to prevent the Kart from rolling over.

- e. To prevent vehicle from rolling over, be sure to only turn the vehicle at a slow more controllable speed. Heel on the ramp of the main board when turning. (See Fig.5) Keep your leg rely on the foot pedal, you can feel the kart is stable because of the gravity is adjusted and won't roll over.



Figure 5

## SERVICE INSTRUCTIONS

### A. Service Air Cleaner

Service air cleaner every 20 hours

NOTE: Service more often under dusty conditions.

- a. Remove cleaner cover
- b. Remove air cleaner element 2 (See Fig.6)
- c. Fill the non-flammable cleaning agent into a basin and dip the element in it.
- d. Dry it after cleaning.

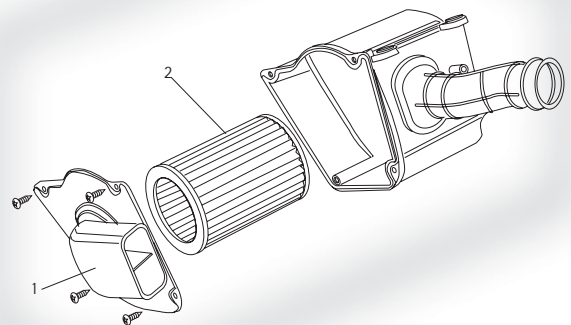


Figure 6

# SERVICE INSTRUCTIONS

## B. Engine Lubrication

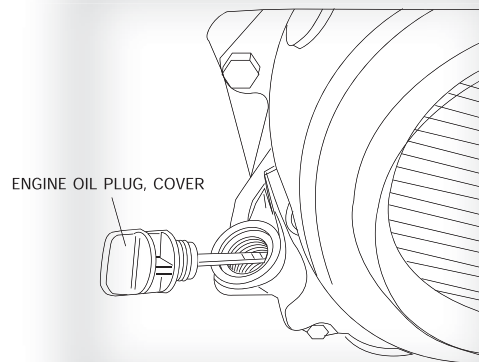
You must change the oil in the crankcase after the first 5 hours of operating of your new engine (See Fig. 7) and after 10 hours of use thereafter. That will insure proper lubrication of internal parts and prevent costly repairs due to excessive wear.



**! WARNING**

**Used Oil Must Be disposed of at a proper collection Center**

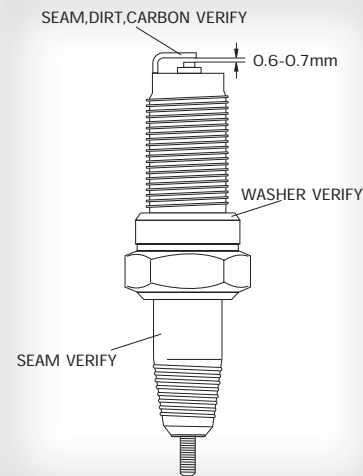
- a. Remove drain plug located on the right rear side of engine. Tip kart backwards slightly by blocking up the front end and drain oil into suitable container.
- b. Remove and clean Oil Screen.
- c. Replace drain plug and tighten securely. Place kart in a level position.
- d. Refill crankcase (approximately 1 1/4 pint) to top of filler neck with SAE 10W40 oil. Use same grade of oil as used originally.
- e. Check oil level before each use of kart or after each 10 hours of operation. Add oil to bring up to proper level. Do not mix various grades of oil.



**Figure 7**

## C. Spark Plug

- a. Remove the spark plug and inspect it each time you change the oil. (Use a spark plug wrench) The electrodes should be kept clean and free of carbon. The presence of carbon or excess oil will greatly reduce proper engine performance. If possible, check the spark plug gap (area between electrodes) using a wire feeler gauge. This specification is 0.6~0.7mm.
- b. Before installing spark plug coat threads lightly with graphite grease if possible, to ensure easy removal next time the spark plug needs inspection.
- c. It is advisable to replace the spark plug at least once a year to insure easy starting and good engine performance.



**Figure 8**

## D. Carburetor Adjustment

Never make unnecessary adjustments. The factory recommended settings are correct for most applications.

- a. Warm up the engine (5~10min)
- b. Tighten the air screw gently. Backout 2-3/8 turns counter clockwise.
- c. Connect the tachometer, adjust the throttle to limit the idle speed. The standard value is (1400RPM).
- d. Turn the air screw counter clockwise slowly and observe the RPM of the engine, stop adjusting as the RPM reaches the top speed.
- e. Adjust the screw and adjust the idle speed to an ideal value.
- f. Recheck and readjust the idle speed if necessary.

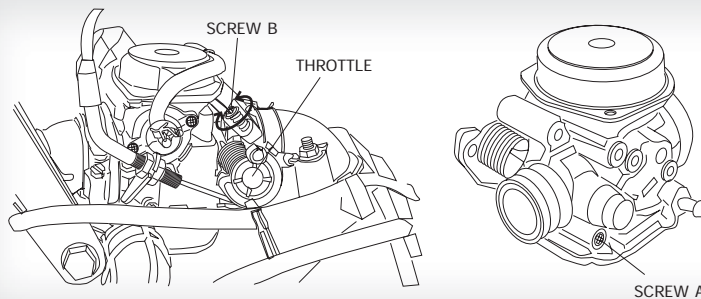


Figure 9

## E. Cleaning Instructions

Keep your kart clean. With a clean rag, wipe off any dirt and oil from around controls. Wipe off any spilled fuel and oil. Keep the engine clean of foreign objects, and be sure to check that air intake fan is free of debris for proper cooling.

## F. Kart Lubrication

Lubricate vehicle every 90 days of use. Lubrication should be done sooner, if kart is used everyday.

## G. Chain Lubrication

To increase chain life, it should be lubricated with a spray on type chain lubricant. (See Fig. 10)

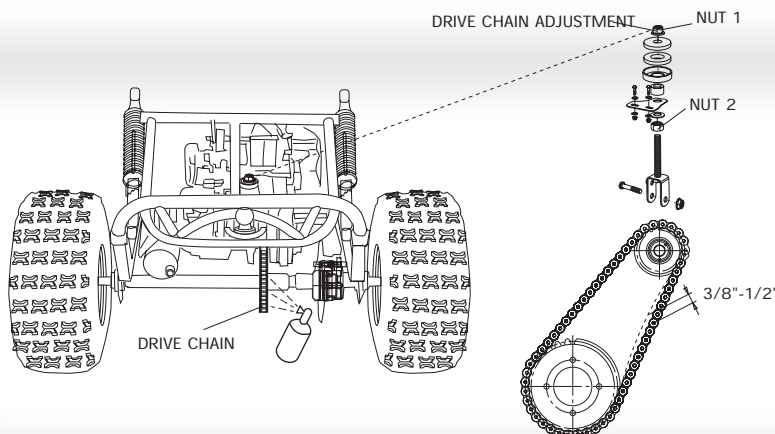


Figure 10

# SERVICE INSTRUCTIONS

## H. Chain Adjustment

Check the chain adjustment after first two hours of use. Readjust if it has more than 1/2" flex.

- a. Loosen Nut #1
- b. Adjust Nut #2. Turn Nut #2 clockwise in 1/2 turn increments, then turn nut #1 until tight.

Follow this procedure until chain is at proper tension (See Fig. 10).

- c. Repeat the above two steps until chain is adjusted to desired fit.

## I. Adjustment of Front And Rear Shock

There are five adjustable positions on each shock. The default position is in the middle set by manufacturer (See Fig. 11)

Use a round nut wrench as you adjust the shock, the tension of shock spring will increase as you screw to left, decrease as you screw to right. Adjust according to the weight of the riders.

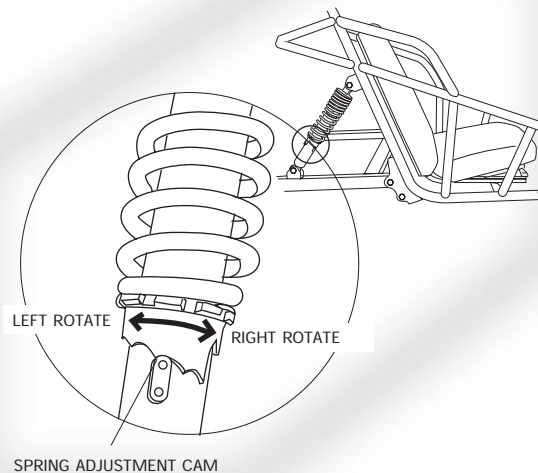


Figure 11

## J. Storage Instruction

In the event your kart is not to be operated for a period in excess of 30 days or at the end of each driving season prepare for storage as follows:

- a. Drain fuel tank and carburetor by allowing engine to run out of fuel, and use a fuel stabilizer.
- b. Lubricate engine cylinder by removing the air cleaner, then spray engine fogging oil through the carburetor until motor dies.
- c. Do not save or store gasoline over winter. Using old gasoline, which has deteriorated from storage, will cause hard starting and affect engine performance.

### **WARNING**

Do not drain fuel while engine is hot. Be sure to move Kart outside before draining fuel.

## A. Front Wheel Replacement

**Do not disassemble the castle nuts when you replace the front wheels.**

It is only necessary to remove the 4 lug nuts to remove the wheel. (See Fig. 12)

Tighten the nuts after replacing the wheels.

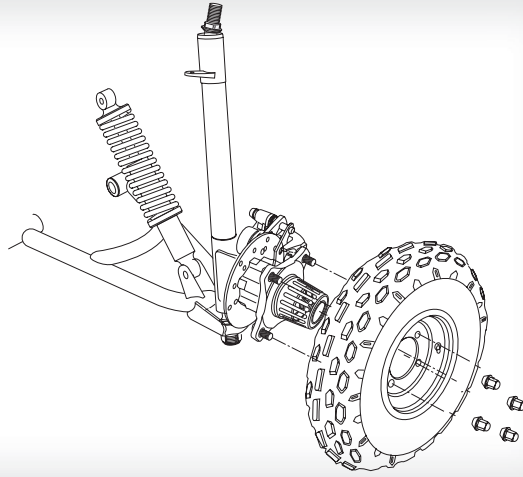


Figure 12

## B. Rear Wheel Replacement

**Do not disassemble the castle nuts when you replace the rear wheels and hub assembly.**

Remove the cotter pin and then 24mm nut. Then slide off wheel and hub assembly.

It is only necessary to remove the 4 lug nuts to remove the wheel by itself. (See Fig.13)

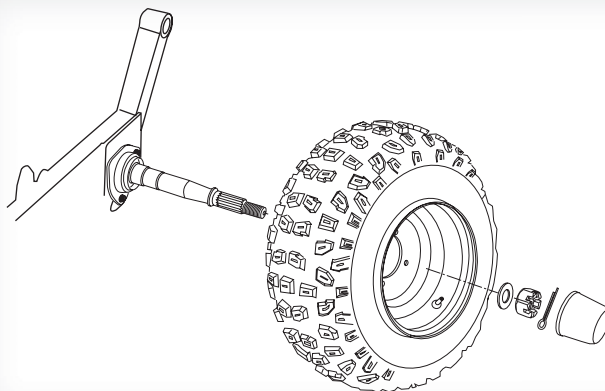


Figure 13

## C. Front Wheel Alignment

a. The front wheels should be “toe-in” from 1/8” to 1/4”. To check for alignment, measure distance A and B between the centerline (CL) of the wheels. The proper toe-in dimension A should be 1/8” – 1/4” greater than dimension B.

b. To adjust the alignments, loosen the lock nuts on both sides of Front Tie Rods. To make Dimension B smaller, turn the rod to left. Adjust the rod to right direction to make Dimension B larger. After adjusting to the desired length, tighten the lock nut against the rod end. Recheck the dimensions for proper alignment.

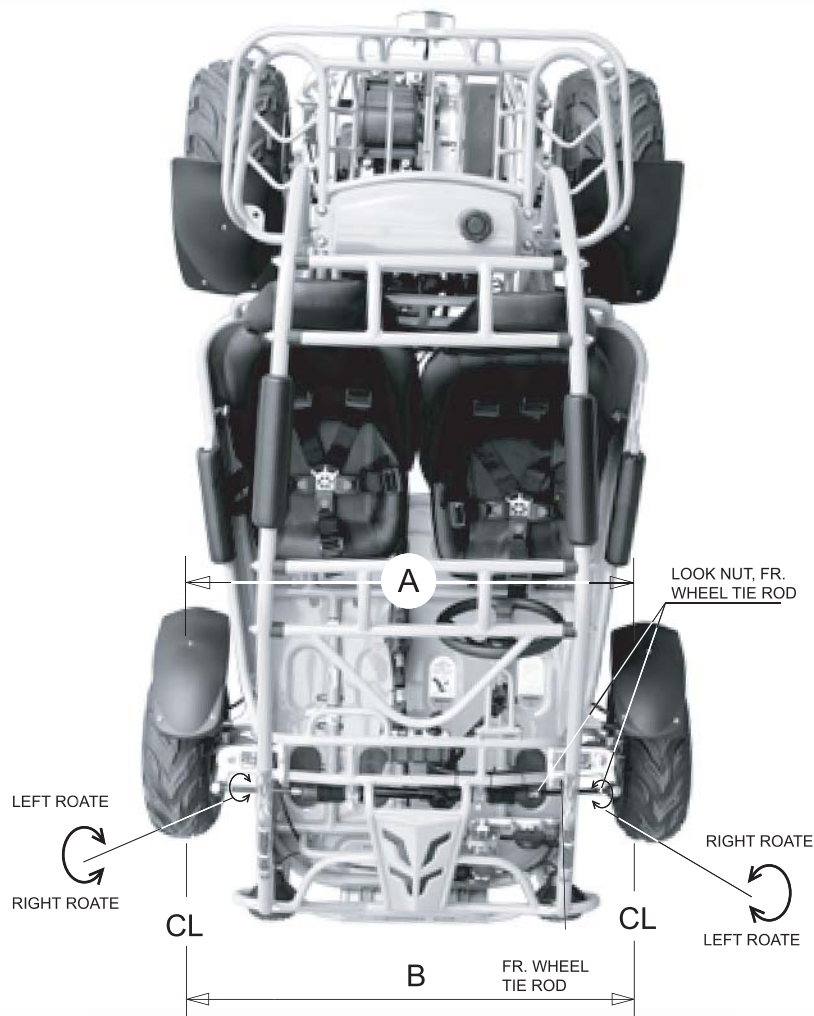
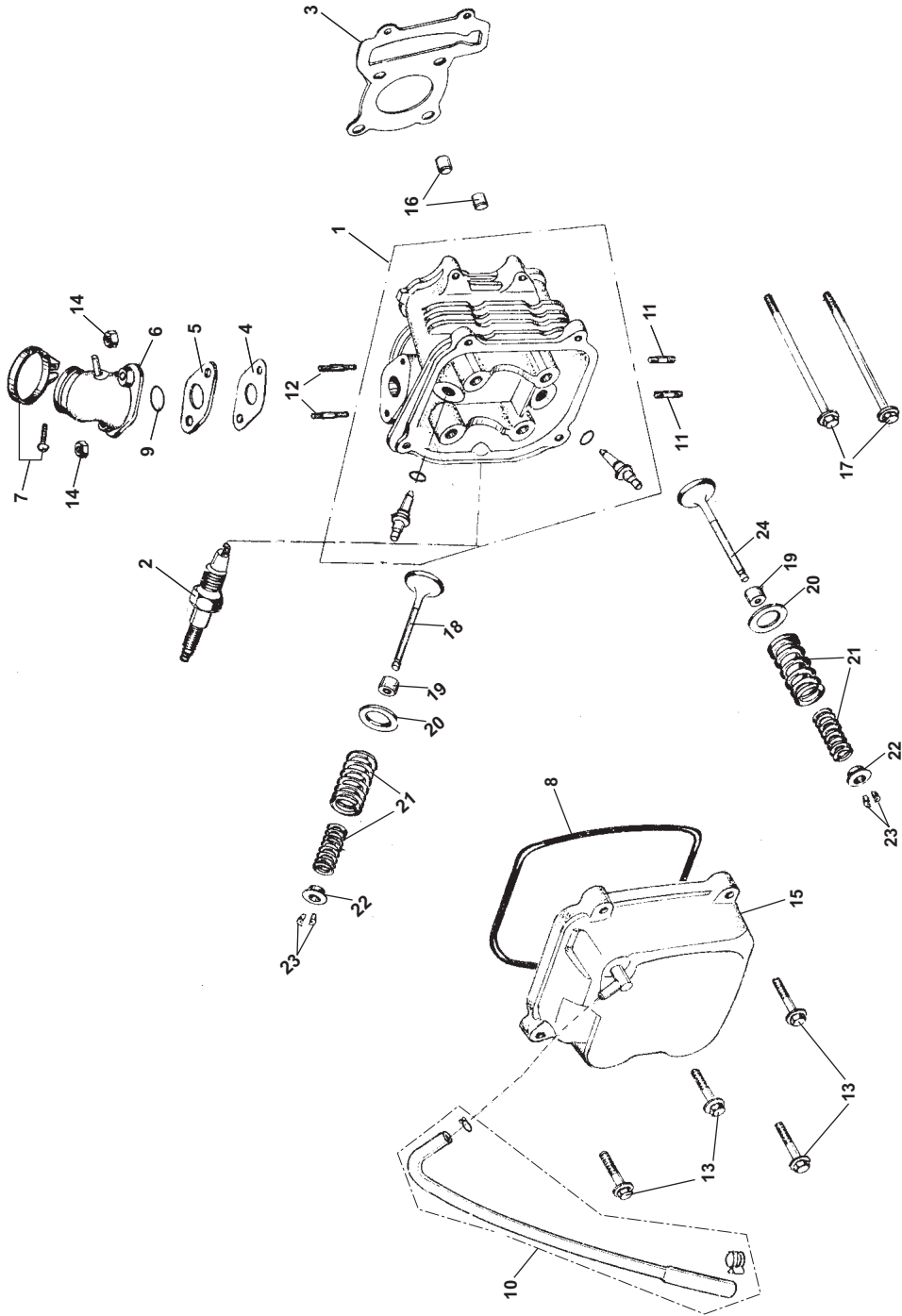


Figure 14

# FIG.1

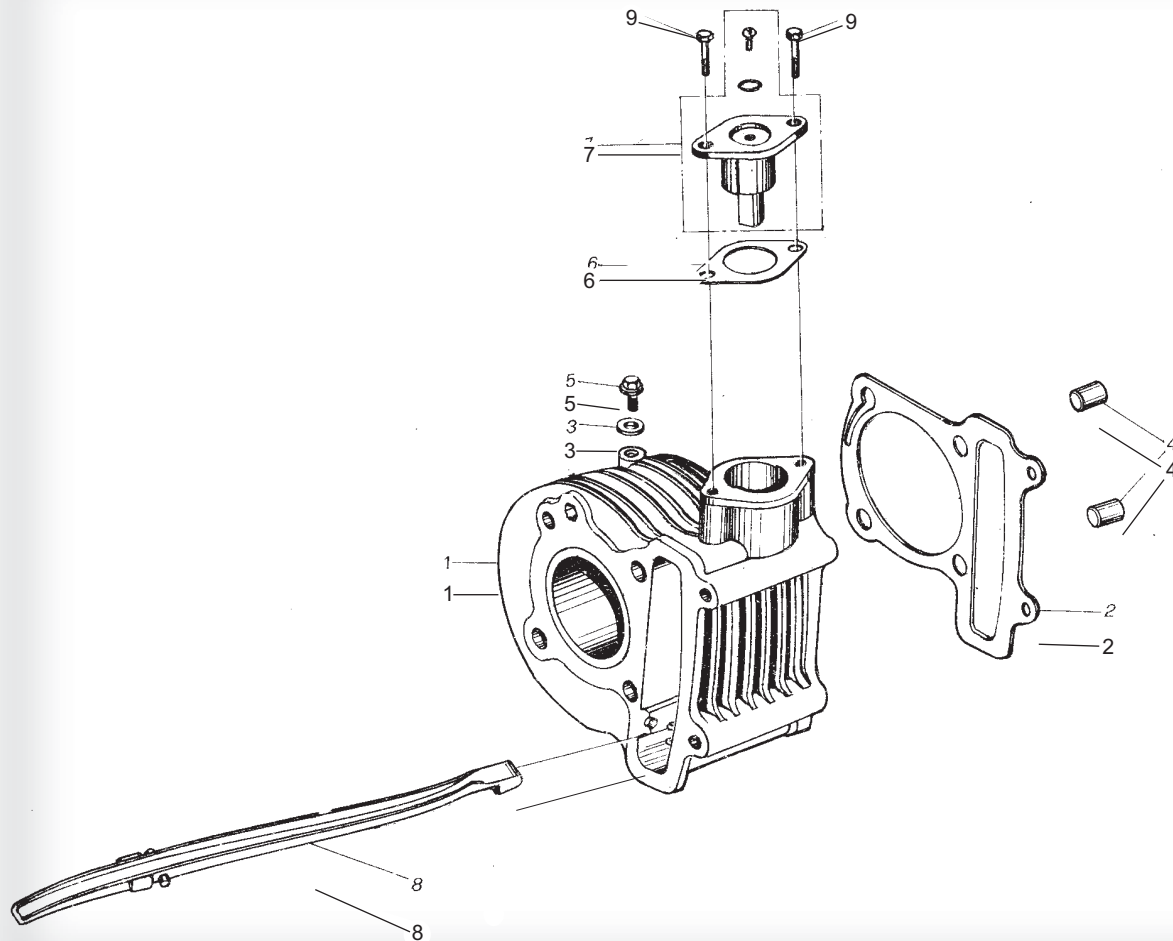
## CYLINDER HEAD ASSY.





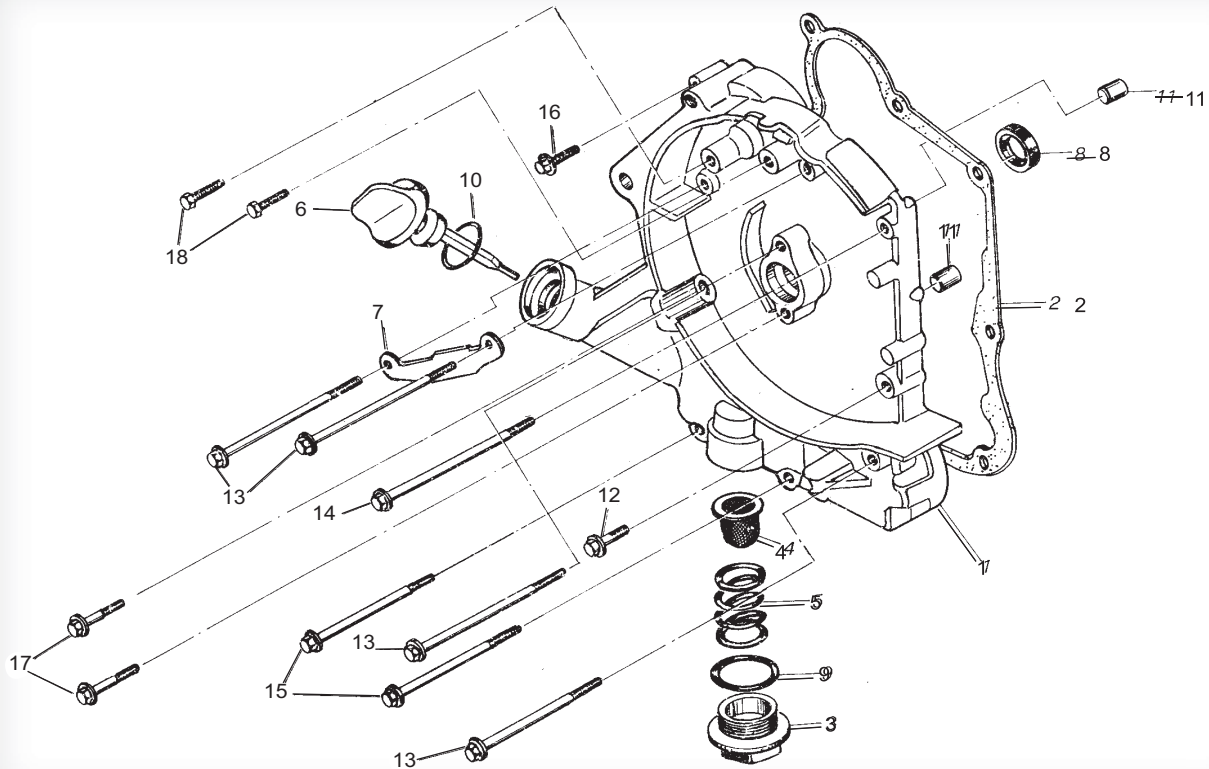
<b>CYLINDER HEAD ASSY.</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	M150-100-1320	CYLINDER HEAD SUBASSY	1	
2	98056-57713-00	SPARK PLUG (C7HSA NGK)	1	
3	M150-1001010	CYLINDER HEAD GASKET	1	
4	M150-1001004	CARBURETOR INSULATOR GASKET	1	
5	M150-1001005	CARBURETOR INSULATOR	1	
6	M150-1001210	PIPE COMP. IN	1	
7	M150-1001220	INSULATOR BAND	1	
8	M150-1001103	HEAD COVER GASKET	1	
9	M150-1001201	O-RING 27X2	1	
10	M150-1001001	BREATHER TUBE	1	
11	M150-1001011	STUD BOLT M6X18	2	
12	M150-1001006	STUD BOLT M6X50	2	
13	M150-B-1003075	FLANGE BOLT M6X25	4	
14	95500-06001-KAS	NUT FLANGE M6-ZN. D	2	
15	M150-1001100	CYLINDER HEAD COVER COMP.	1	
16	M150-1001007	DOWEL PIN 10X16	2	
17	M150-1003007	CYLINDER HEAD BOLT FLANGE M6X100	2	
18	M150-1001301	IN VALVE	1	
19	M150-1001310	VALVE STEM SEAL	2	
20	M150-1001302	VALVE SPRING OUTER SEAT	2	
21	M150-1001303	VALVE OUTER, INNER SPRING	2	
22	M150-1001305	VALVE SPRING RETAINER	2	
23	M150-1001306	VALVE COTTER	4	
24	M150-1001307	EX. VALVE	1	

## CYLINDER ASSY.



CYLINDER ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	M150-1002200	CYLINDER COMP.	1	
2	M150-1002001	CYLINDER GASKET	1	
3	90442-06000-KAT	WASHER SEALING 6	1	
4	M150-1001007	DOWEL PIN 10X16	2	
5	96001-06012-KAT	FLANGE BOLT M6X12-ZN. D	1	
6	M150-1002002	GASKET TENSIONER LIFTER	1	
7	M150-1002100	TENSIONER LIFTER ASSY.	1	
8	M150-1002300	CAM CHAIN GUIDE COMP.	1	
9	96001-06020-KAT	FLANGE BOLT 6X20	2	

**CRANKCASE ASSY. (1)**

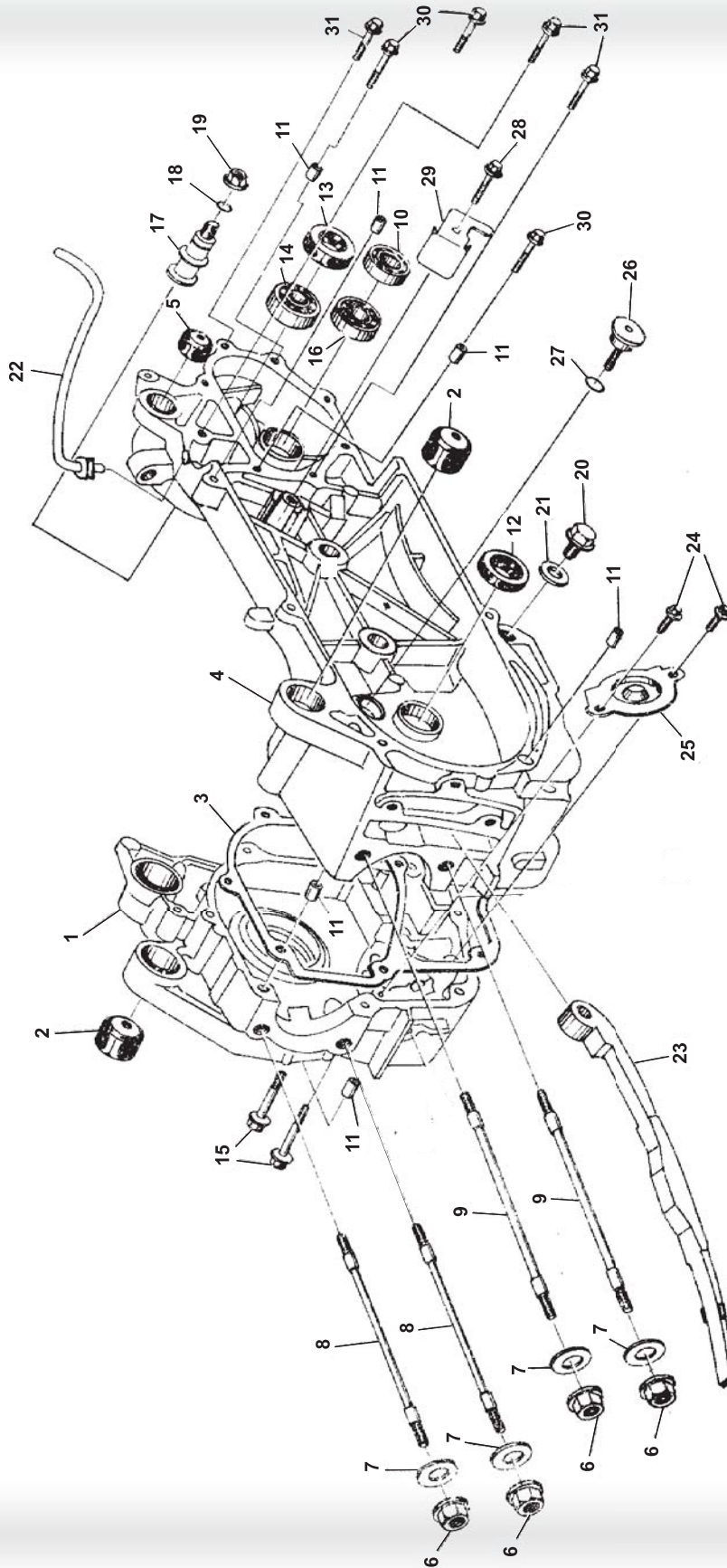


**CRANKCASE ASSY.(1)**

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1003101-B	R CRANKCASE COVER COMP.	1
2	M150-1003013	CRANKCASE COVER GASKET	1
3	M150-1003104	CAP TAPPET ADJUSTING HOLE	1
4	M150-1003120	OIL FILTING SCREEN	1
5	M150-1003102	OIL FILTING SCREEN SPRING	1
6	M150-1003105	OIL LEVEL GAUGE	1
7	M150-1003006	AC GENERATOR CORD CLAMPER	1
8	M150-1003110	OIL SEAL 19.8X30X5	1
9	M150-1003103	O-RING 30.8X3	1
10	M150-1003307	O-RING 18X3	1
11	M150-1003005	DOWEL PIN 8X14	2
12	96001-06032-KAT	FLANGE BOLT M6X28	1
13	M150-1003012	FLANGE BOLT M6X95	4
14	M150-1003007	FLANGE BOLT M6X100	1
15	M150-1003008	FLANGE BOLT M6X110	2
16	M150-1003034	FLANGE BOLT M6X35	1
17	M150-1003106	FLANGE BOLT M6X20	2
18	92101-05012-OH	HEX BOLT M5X12-ZN.D	2

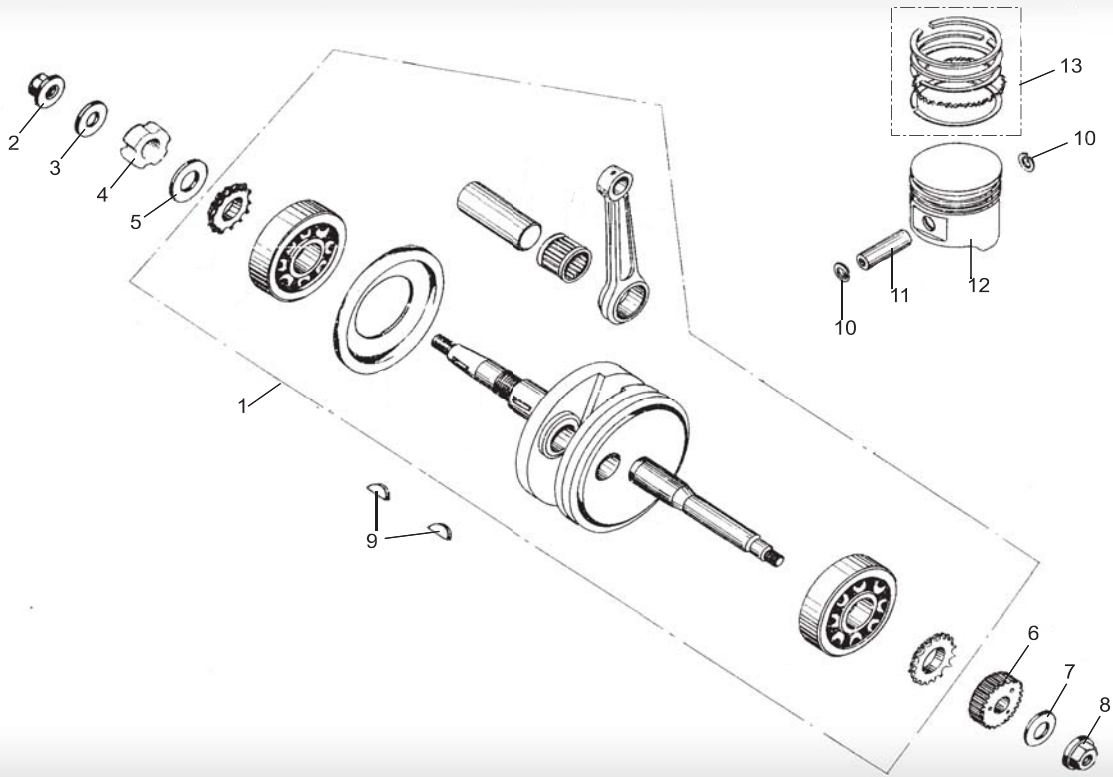
# FIG.4

## CRANKCASE ASSY. (2)

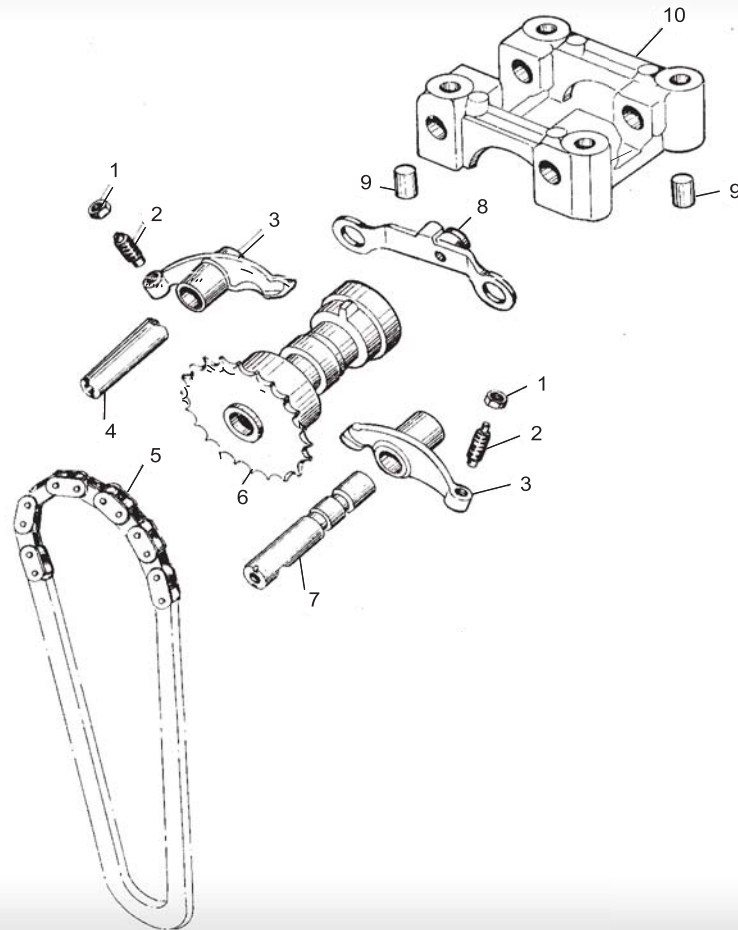


<b>CRANKCASE ASSY.</b>				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	M150-1003210-B	CRANKCASE ASSY. R	1	
2	M150-1003320	ENGINE HANGER RUBBER BUSH	2	
3	M150-1003014	CRANKCASE GASKET	1	
4	M150-1003310	CANKCASE ASSY. L	1	
5	M150-1003330	RR CUSHION UNDER RUBBER BUSH	1	
6	M150-1003003	FLANGE NUT M8	4	
7	M150-1003004	WASHER $\Phi$ 8	4	
8	M150-1003001	STUD BOLT M8X187.5	2	
9	M150-1003002	STUD BOLT M8X195.5	2	
10	91004-E6002-KAT	RADIAL BALL BEARING E6002	1	
11	M150-1003005	DOWEL PIN 8X14	6	
12	M150-1003110	OIL SEAL 19.8X30X5	1	
13	M150-1003340	OIL SEAL 27X42X7	1	
14	91004-E6004-2RS	RADIAL BALL BEARING E6004-2RS	1	
15	M150-1003032	FLANGE BOLT M6X50	2	
16	91004-E6301-KAT	RADIAL BALL BEARING E6310	1	
17	M150-1003015	BRAKE SHOE ANCHOR PIN	1	
18	M150-1003016	OIL SEAL 7.5X15	1	
19	M150-1003600	FLANGE NUT M8	1	
20	M150-1003018	DRAIN PLUG BOLT M12	1	
21	M150-1003019	DRAIN PLUG WASHER $\Phi$ 12	1	
22	M150-1003400	BREATHER TUBE	1	
23	M150-1003500	CAM CHAIN TENSIONER	1	
24	M150-1003203	FLANGE BOLT M6X12	2	
25	M150-1003202	OIL SEPARATOR	1	
26	M150-1003022	CAM CHAIN TENSIONER PIVOT	1	
27	M150-1003023	OIL SEAL 15.2X12	1	
28	96001-06014-KAT	FLANGE BOLT M6X14	1	
29	M150-1003021	KICK RETURN STOPPER PLATE	1	
30	M150-1003009	FLANGE BOLT M6X35	3	
31	M150-1003011	FLANGE BOLT M6X25	3	

## CRANKSHAFT CON'ROD & PISTON ASSY.

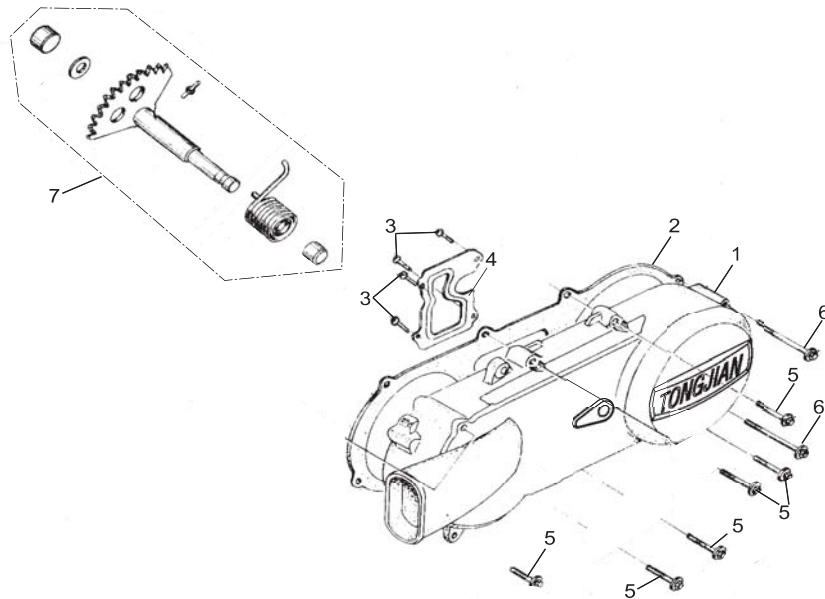


<b>CRANKSHAFT CON'ROD &amp; PISTON ASSY.</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	M150-1004100	CRANKSHAFT & CONROD ASSY.	1	
2	M150-1004007	NUT M12X1.25	1	
3	M150-1004011	WASHER 12-149HV 12-140HV	1	
4	M150-1004009	LOCKING NUT	1	
5	M150-1004013	WASHER	1	
6	M150-1004012	KICK DRIVE GEAR	1	
7	M150-1040005	WASHER $\Phi$ 12	1	
8	M150-1004008	NUT M12	1	
9	M150-1004002	WOODRUFF KEY	2	
10	M150-1004003	PISTON PIN CLIP	2	
11	M150-1004006	PISTON PIN	1	
12	M150-1004001	PISTON	1	
13	M150-1004200	PISTON RING SET	1	

**CAMSHAFT ASSY.**

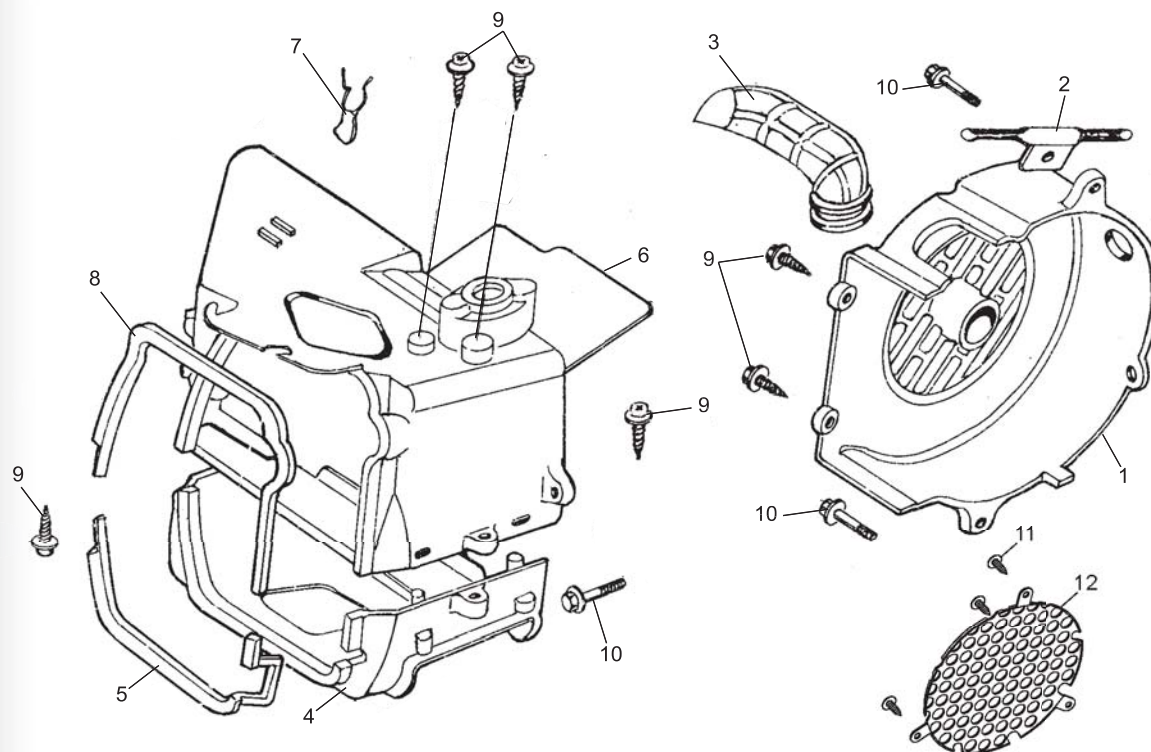
<b>CAMSHAFT ASSY.</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	M150-1005004	TAPPET ADJUSTING NUT	2	
2	M150-1005003	TAPPET ADJUSTING SCREW	2	
3	M150-1005002	VALVE ROCKER ARM	2	
4	M150-1005005	EX ROCKER ARM SHAFT	1	
5	M150-1005400	CAMSHAFT CHAIN	1	
6	M150-1005300	CAMSHAFT COMP. 16T	1	
7	M150-1005200	IN ROCK ARM SHAFT COMP.	1	
8	M150-1005100	STOPPER PLATE COMP.	1	
9	M150-1001007	DOWEL PIN 10X16	2	
10	M150-1005001	CAMSHAFT HOLDER	1	

## LEFT COVER ASSY.



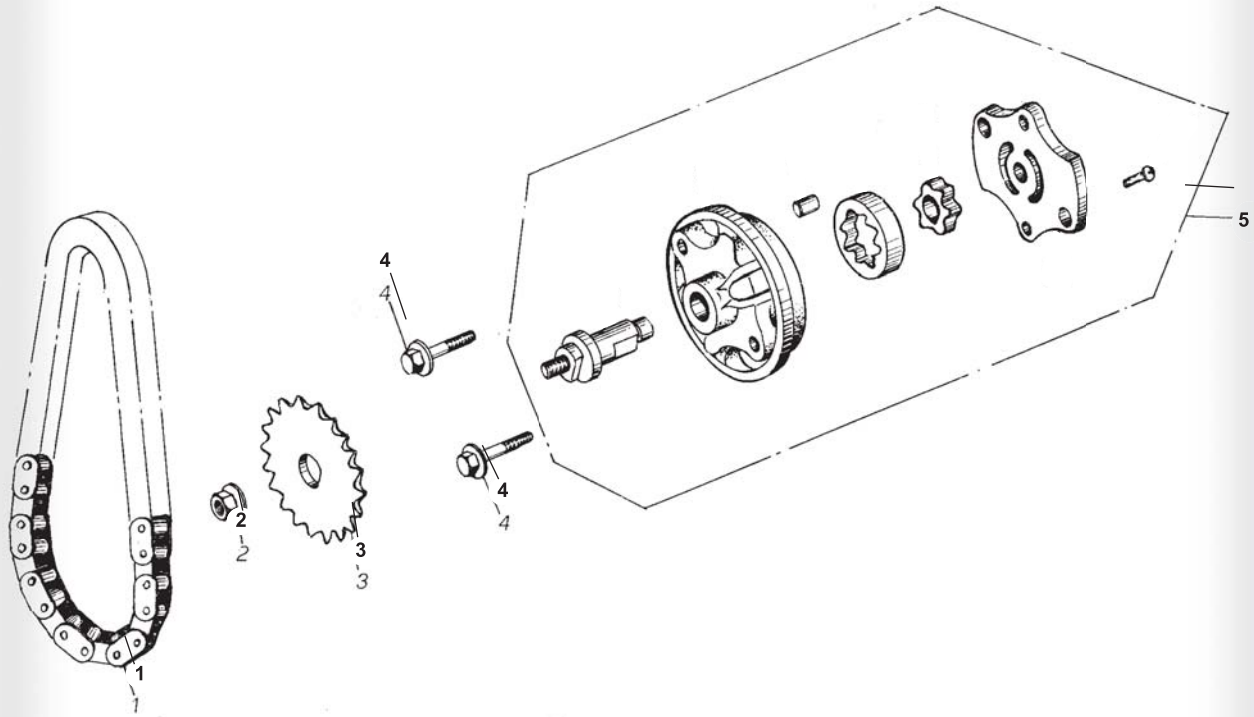
LEFT COVER ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	M150-1008101	COVER L	1	
2	M150-1008005	L COVER GASKET	1	
3	93903-00428-KAT	TAPPING SCREW ST4.2X8-F-H	4	
4	M150-1008102	L COVER PLATE	1	
5	M150-1003034	FLANGE BOLT M6X40	6	
6	M150-1008006	FLANGE BOLT M6X65	2	
7	M150-1008200	KICK STARTER ASSY. SPINDLE COMP.	1	



**FAN COVER AND SHROUD ASSY.****FAN COVER AND SHROUD ASSY.**

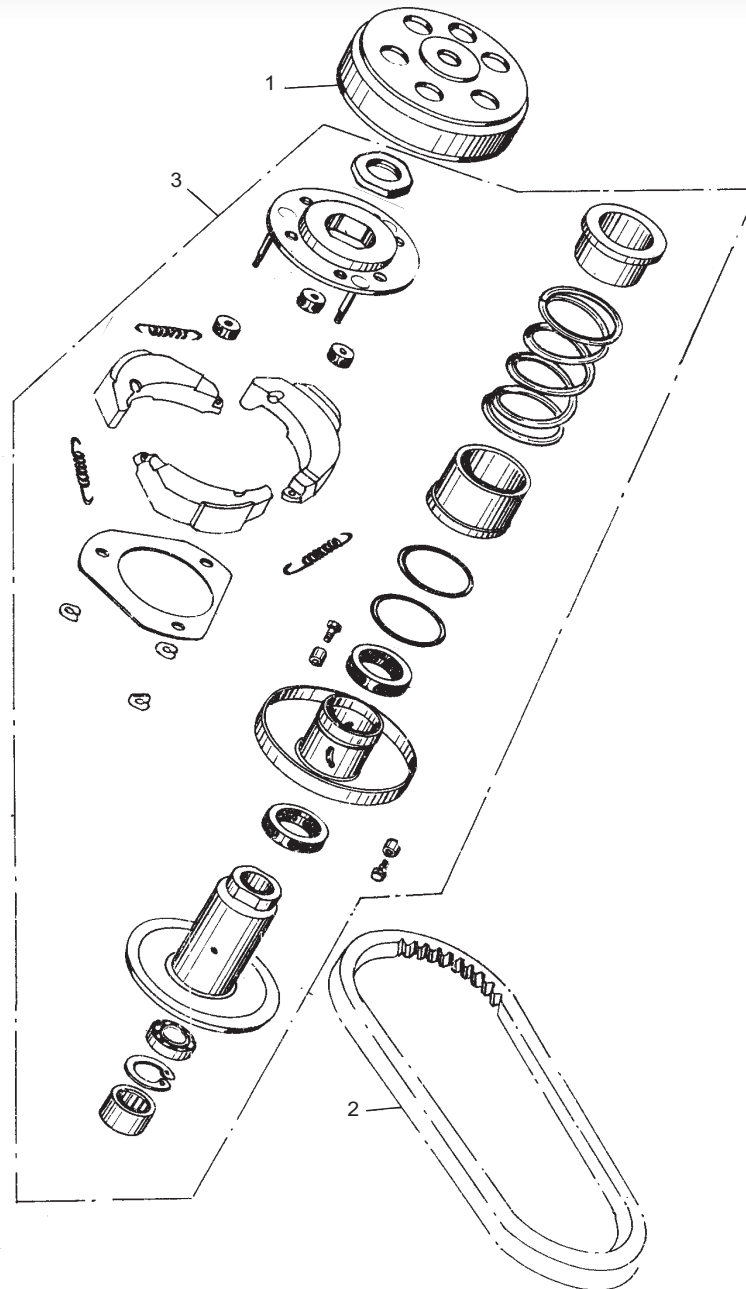
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	M150-1009410	FAN COVER COMP.	1	
2	M150-1009002	STARTER CABLE CLAMPER	1	
3	M150-1009401	FAN SHROUD COOLING DUCT	1	
4	M150-1009301	LOWER SHROUD	1	
5	M150-1009302	LOWER SHROUD SEAL	1	
6	M150-1009110	UPPER SHROUD COMP.	1	
7	M150-1009103	HIGH TENSION CORD CLIP	1	
8	M150-1009102	UPPER SHROUD SEAL	1	
9	M150-1009402	SCREW ST4.8X16-F	6	
10	M150-1003075	BOLT M6X25	3	
11	ST3.5X13 GB845	SCREW ST3.5×13-F	3	
12	8.020.179	DUST COVER	1	

## OIL PUMP ASSY.



OIL PUMP ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	M150-1021000	CHAIN OIL PUMP	1	
2	M150-1020002	NUT FLANGE M6	1	
3	M150-1020001	SPROCKET OIL PUMP DRIVEN	1	
4	M150-B-1003075	BOLT M6X25	2	
5	M150-1022000	OIL PUMP SUB ASSY.	1	

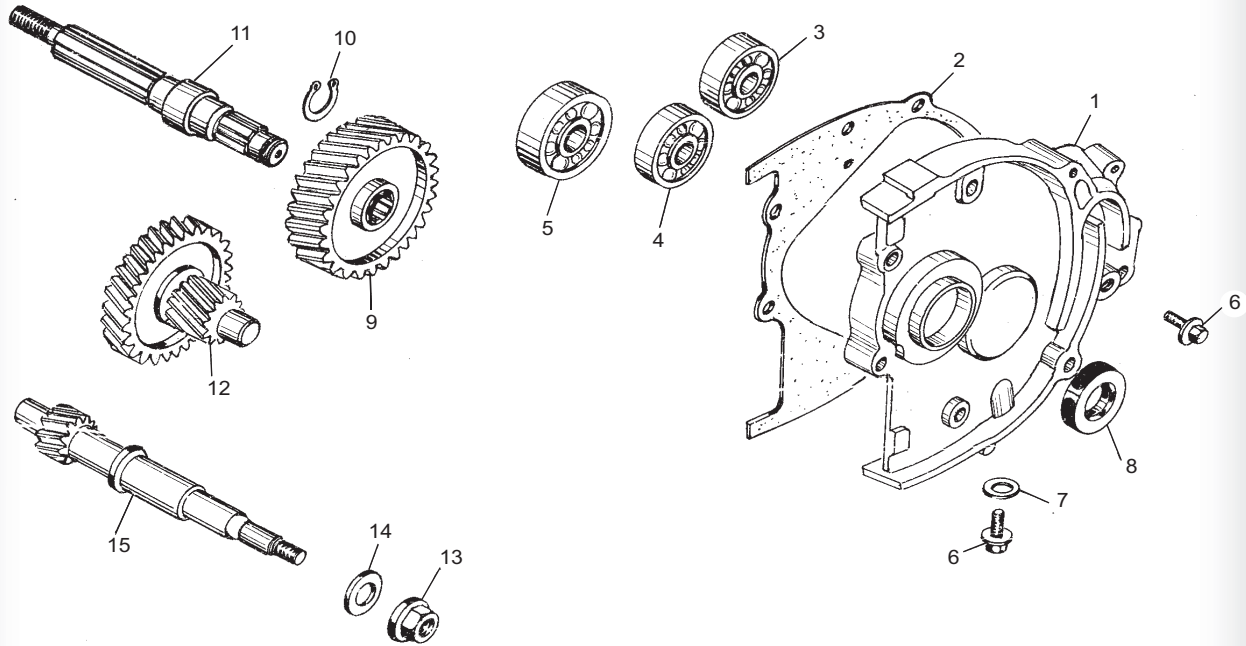
**DRIVEN PULLEY AND CLUTCH SUBASSY.**



**DRIVEN PULLEY AND CLUTCH SUBASSY.**

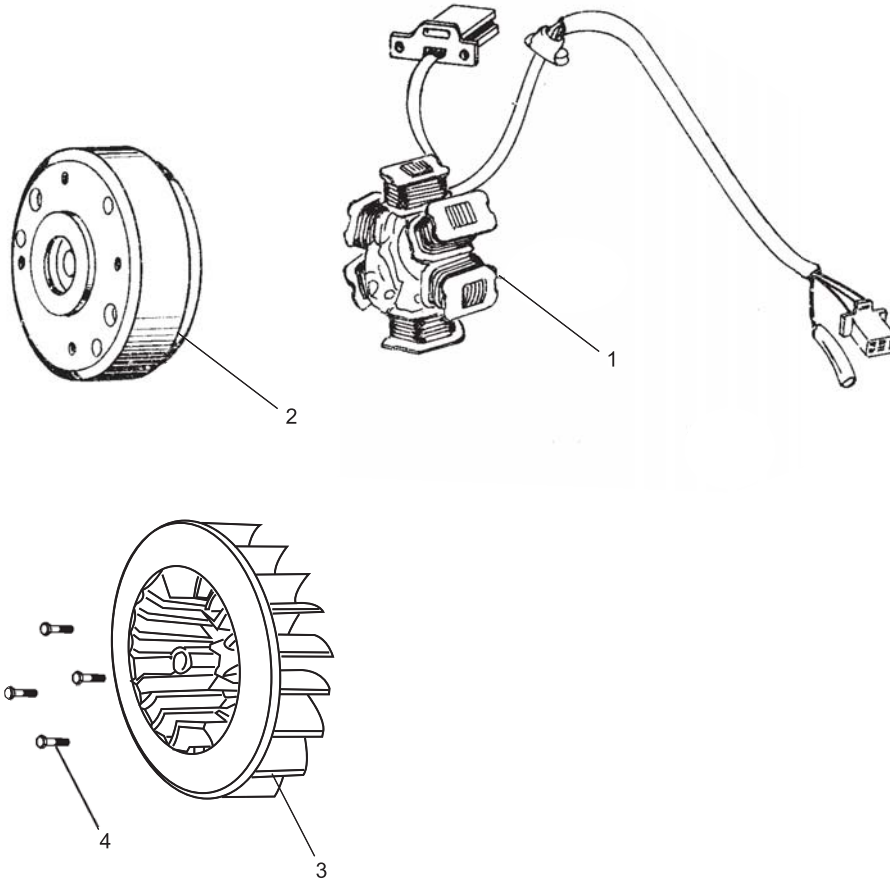
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1032000	CLUTCH ASSY. OUTER	1
2	M150-1033000	DRIVE BELT	1
3	M150-1031000	DRIVEN PULLEY ASSY.	1

**TRANSMISSION ASSY.**



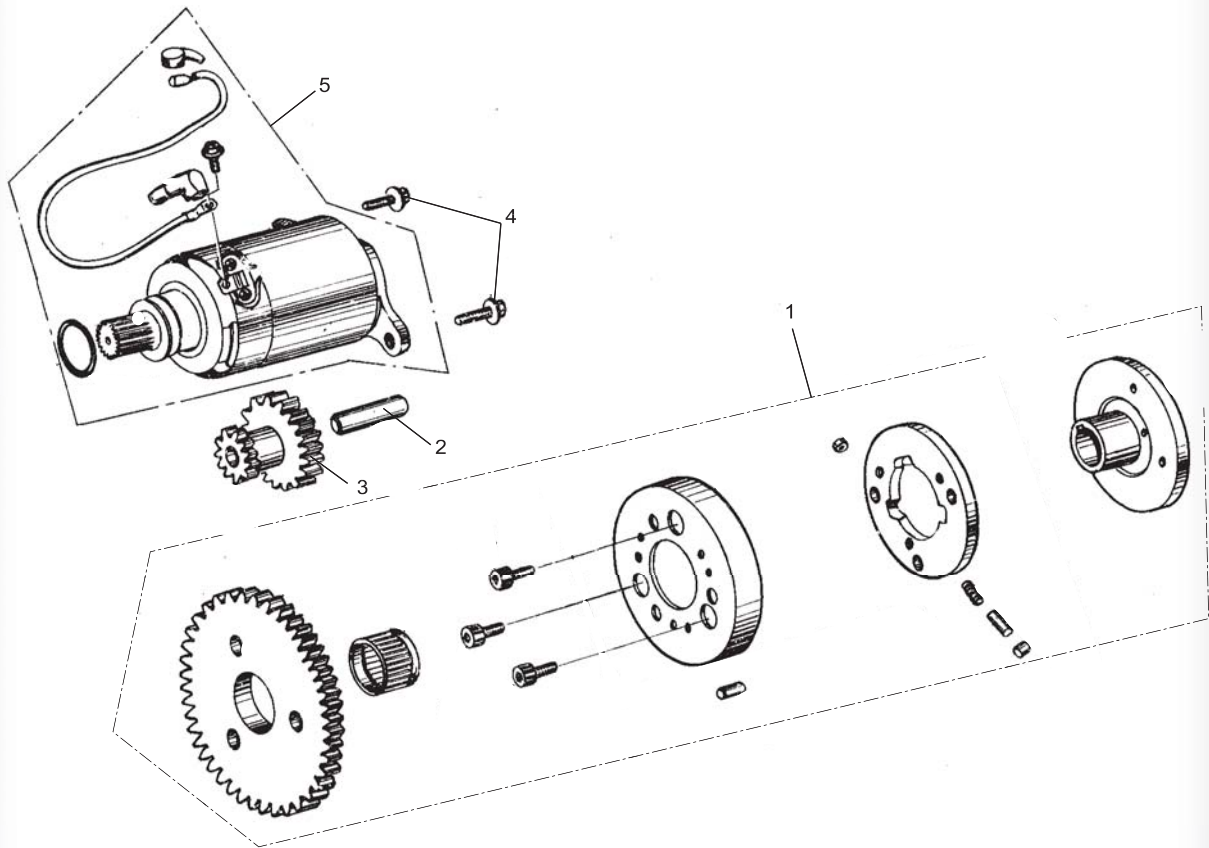
<b>TRANSMISSION ASSY.</b>			
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>
1	M150-1040001	TRANSMISSION COVER	1
2	M150-1041000	TRANSMISSION COVER GASKET	1
3	91004-E6203-KAT	RADIAL BALL BEARING E6203	1
4	91004-E6202-KAT	RADIAL BALL BEARING E6202	1
5	91004-E6204-KAT	RADIAL BALL BEARING E6204	1
6	M150-1040008	SPECIAL BOLT M8X12	2
7	M150-1040002	WASHER Φ8	1
8	M150-1042000	OIL SEAL 20X32X6	1
9	8.010.225	FINAL GEAR	1
10	94510-20000	EXTERNAL CIRCLIP 20	1
11	M150-1040003	FINAL SHAFT	1
12	8.010.226	COUNTER SHAFT COMP.	1
13	M150-1040007	COMPRESSOR FLANGE NUT M12	1
14	M150-1040005	WASHER Φ12	1
15	8.010.227	DRIVE SHAFT	1

**ELECTRIC SYSTEM**



<b>ELECTRIC SYSTEM</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	M150-1051200-8	STATOR COMP.	1	
2	M150-1051100	FLYWHEEL COMP.	1	
3	M150-1051100-3	COOLING FAN COMP.	1	
4	M150-1051100-4	FLANGE BOLT M6x18	4	

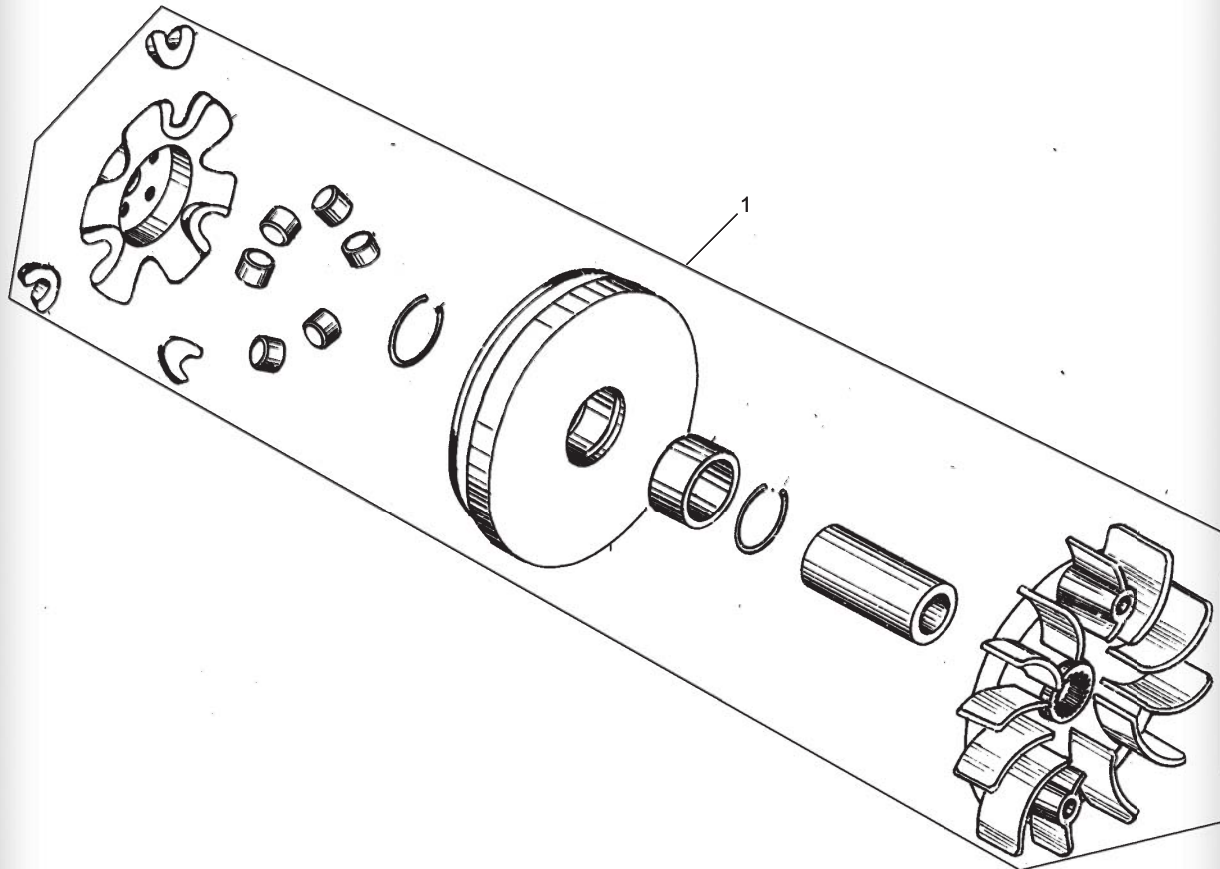
# ELECTRIC STARTER ASSY.



## ELECTRIC STARTER ASSY.

REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	M150-1060001	FLANGE STARTING CLUTCH	1	
2	M150-1060002	STARTER REDUCTION GEAR SHAFT	1	
3	M150-1060003	STARTER REDUCTION GEAR	1	
4	M150-1060005	FLANGE BOLT M6X16	2	
5	M150-1064000	STARTER MOTOR ASSY.	1	

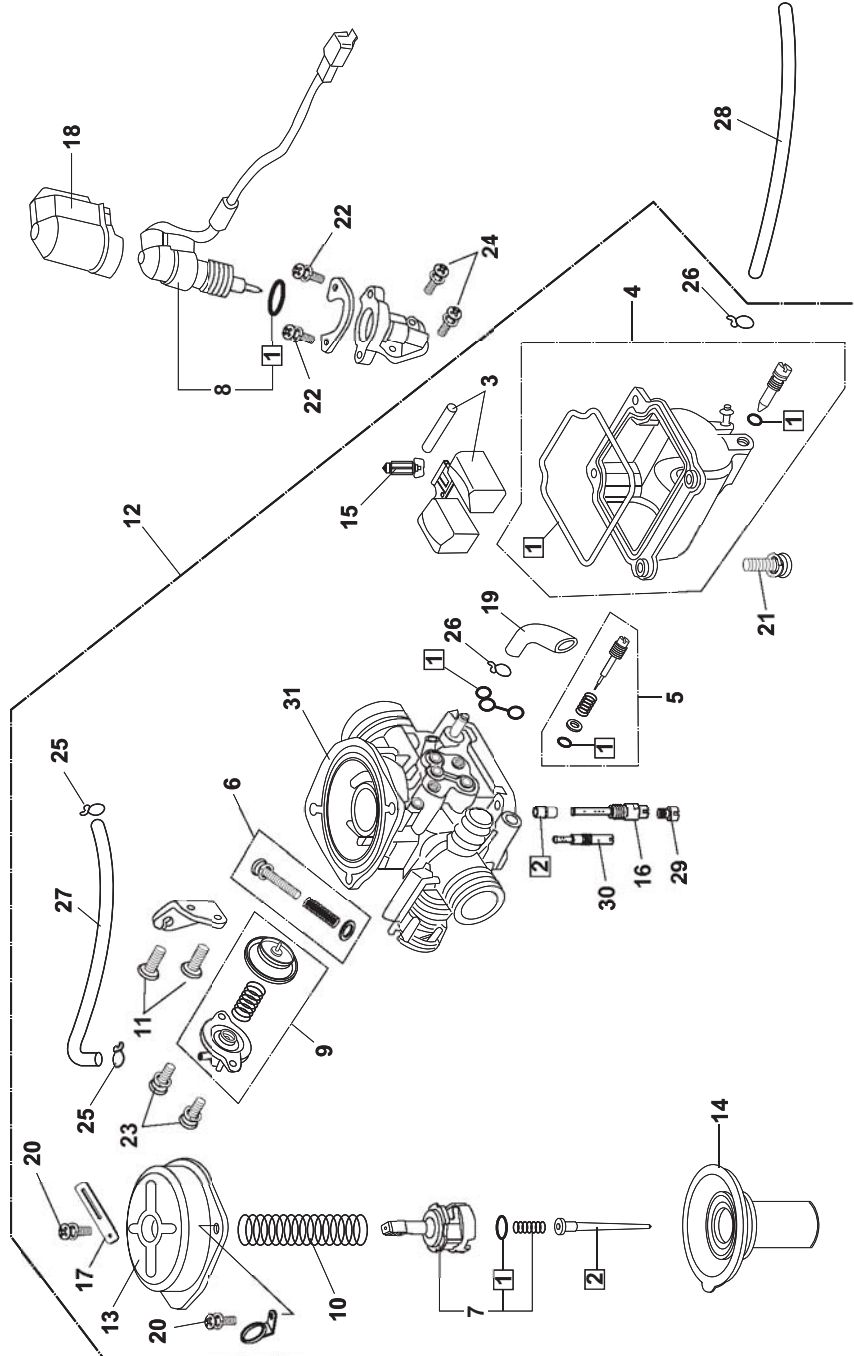
**DRIVE PULLEY SUBASSY.**



<b>DRIVE PULLEY SUBASSY.</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	M150-1071000	MOVABLE DRIVE PULLEY ASSY.	1	
2	M150-1071002	CLUTCH WEIGHTS	6	

# FIG.15

## CARBURETOR

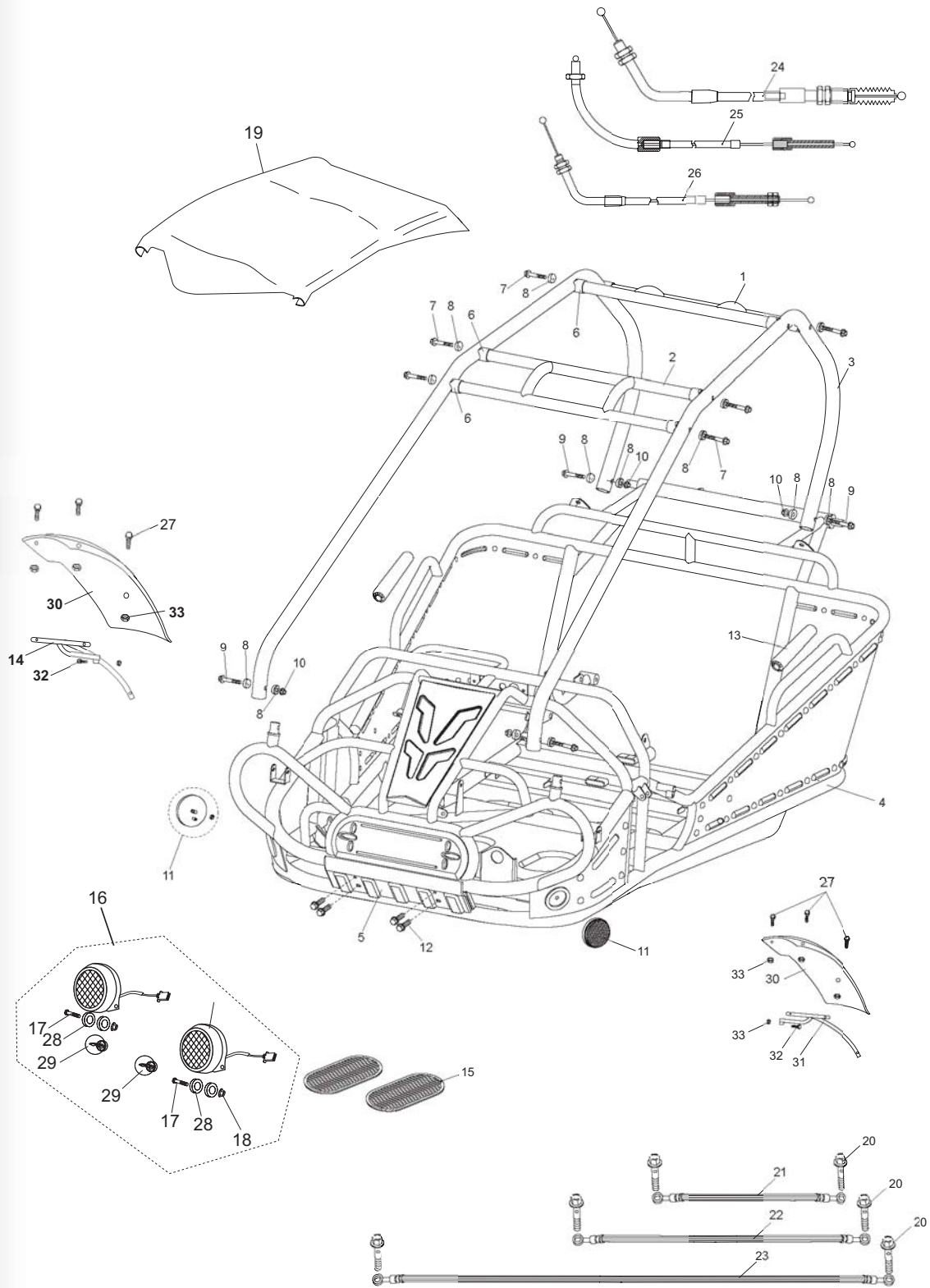




<b>CARBURETOR</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	16010-KAT-901	GASKET SET A	1	
2	16012-KAT-903	JET NEEDLE SET	1	
3	16013-KAT-904	FLOAT SET	1	
4	16015-KAT-905	FLOAT CHAMBER SET	1	
5	16016-KAT-906	SCREW SET A	1	
6	16028-KAT-907	SCREW SET B	1	
7	16037-KAT-908	VALVE PLATE SET	1	
8	16046-KAT-909	AUTO BYSTARTER ASSY.	1	
9	16048-KAT-910	AIR CUT VALVE SET	1	
10	16050-KAT-911	COMPRESSION COIL SPRING	1	
11	16080-KJ9-003	PAN SCREW M5x12	1	
12	16100-KAT-913	CARBURETOR ASSY.	2	
13	16107-KAT-914	TOP	1	
14	16111-KAT-915	VACUUM PISTON COMP.	1	
15	16155-KAT-902	FLOAT VALVE COMP.	1	
16	16165-KAT-916	NEEDLE JET HOLDER	1	
17	16179-KAB-670	BINDER	1	
18	16190-GJ2-004	HOLDER CAP.	1	
19	95005-45270-50	TUBE	1	
20	93500-04008	PAN SCREW M4x8	1	
21	93500-04014-1H	PAN SCREW M4x14	2	
22	93892-04008-18	SCREW-WASHER M4x8	4	
23	93892-04010-18	SCREW-WASHER M4x10	2	
24	93892-05012-18	SCREW-WASHER M5x12	2	
25	95002-02079	TUBE CLIP (B7)	2	
26	95002-02089	TUBE CLIP (B8)	2	
27	95005-35200-21	TUBE 3.5x210	2	
28	16199-GT8-600	TUBE	1	
29	99101-GHB-0112	MAIN JET 112#	1	
30	99103-GY6-0350	SLOW JET 35#	1	
31	16100-KAT-923	CARBURETOR BODY	1	

# FIG.16

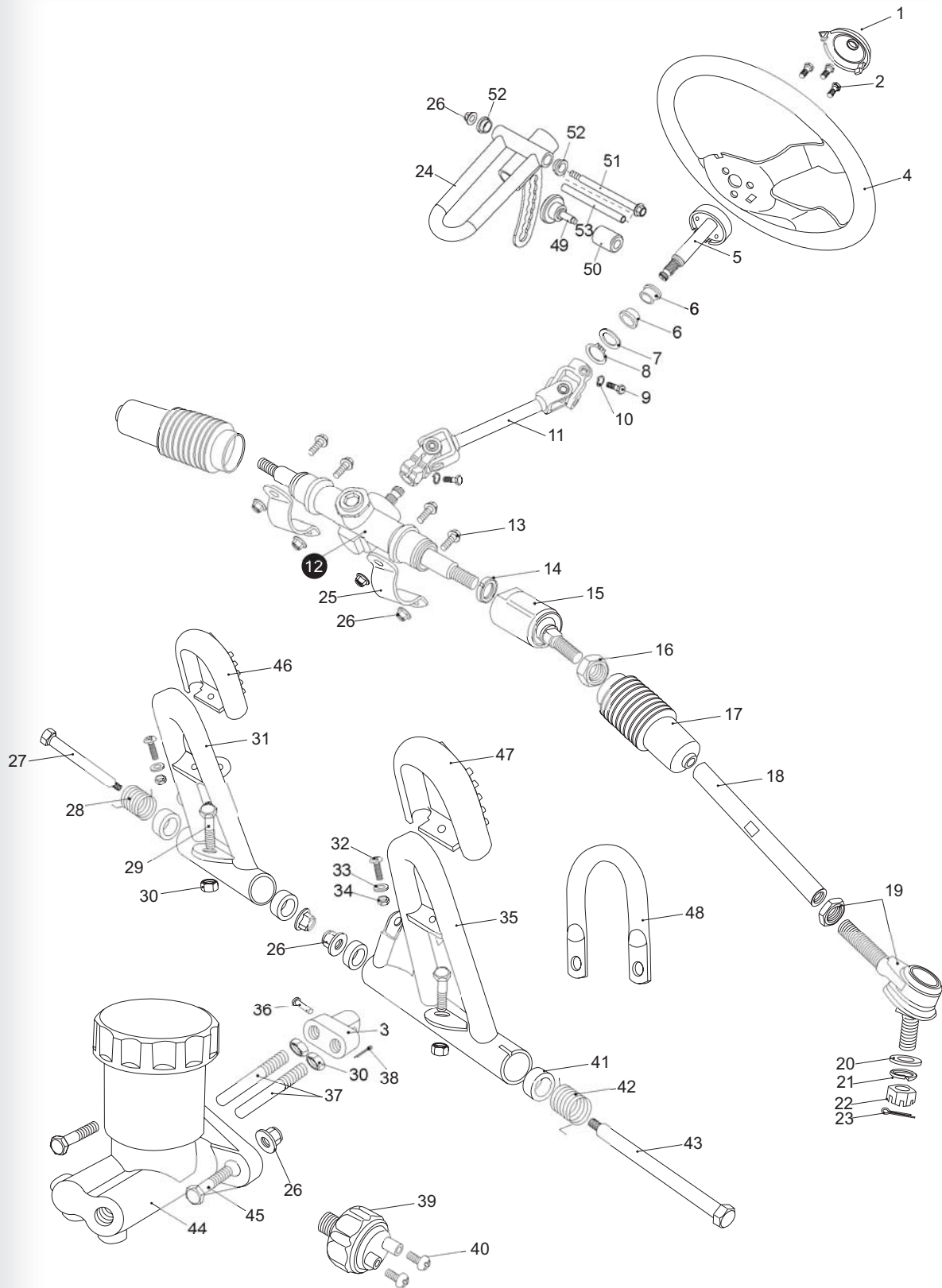
## FRAME GROUP



<b>FRAME GROUP</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	8.070.063	C.B.C. CROSS BAR	1	
2	8.070.064	MIDDLE C.B.C. CROSS BAR	1	
3	8.070.065	C.B.C. BAR CAGE(B.R.S)	2	
4	8.070.066	FRAME COMP.(B.R.S.)	1	
5	8.020.222	FRONT PLATE	1	
6	7.010.017	TUBE SEAT Φ25	8	
7	9.908.055N	SOCKET BOLT M8X1.25X55	8	
8	8.010.047	R-WASHER	16	
9	9.908.050N	SOCKET BOLT M8X1.25X50	4	
10	9.220.008	LOCKING FLANGE NUT M8	4	
11	6.000.144	FRONT REFLECTOR	2	
12	9.106.016	NUT M6X16	1	
13	6.000.083	FOAM PADDING	2	
14	6.000.102	FRONT FENDER BRACKET,R.	1	
15	7.020.012	RUBBER FOOT PLATE	2	
16	6.000.009	HEADLIGHT SET ***hardware not included	1	
17	9.108.045	FLANGE BOLT M8 x 1.25 x 45	2	
18	9.220.008	NUT M8	2	
19	6.000.269-GT	BIKINI TOP	1	
20	9.700.004	BANJO BOLT M10x24	6	
21	6.000.089	BRAKE HOSE ASSY. L. 34"	1	
22	6.000.090	BRAKE HOSE ASSY. R. 43"	1	
23	6.000.091	BRAKE HOSE ASSY. RR. 75"	1	
24	6.000.232	THROTTLE CABLE COMP.	1	
25	6.000.040	REVERSE CABLE COMP.	1	
26	6.000.050	PARKING BRAKE CABLE COMP.	1	
27	9.106.014	FLANGE BOLT M6X14	6	
28	8.010.049	HEADLIGHT RUBBER MOUNTING	4	
29	9.090.001	HEADLIGHT BULB 35W/35W/ 12V	2	
30	7.010.034-SS	FENDER, FR.	2	
31	6.000.067	FRONT FENDER BRACKET, L.	1	
32	9.100.640	BOLT M6 x 40	2	
33	9.210.008	LOCKING FLANGE NUT M8	10	

# FIG.17

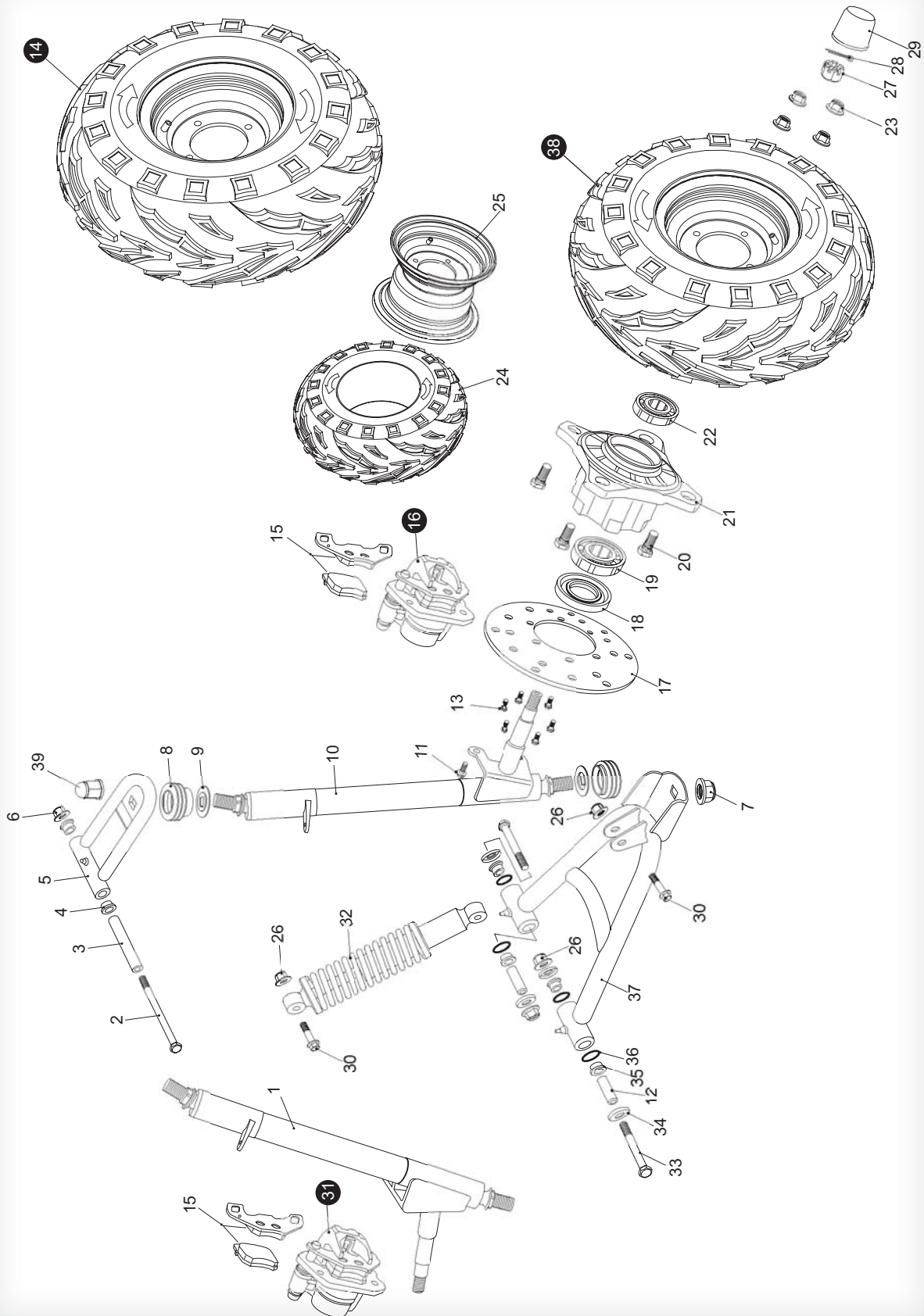
## STEERING SHAFT ASSY.



<b>STEERING SHAFT ASSY.</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	7.010.041	STEERING BOLT COVER	1	
2	9.100.612	BOLT STRAP M6x12	3	
3	8.030.024	SPINDLE BRACKET	1	
4	7.020.010-GT	STEERING WHEEL	1	
5	6.000.122	STEERING SHAFT	1	
6	7.010.026	BUSH. STEERING SHAFT	2	
7	9.700.020	SPECIAL WASHER $\Phi$ 20	1	
8	9.700.120	CIRCLIP $\Phi$ 20	1	
9	9.100.825	BOLT M8x25	2	
10	9.400.008	LOCKING WASHER $\Phi$ 8	2	
11	6.000.093-250	STEERING KNUCKLE	1	
12	4.000.008-250	STEERING GEAR	1	
13	9.108.025	FLANGE BOLT M8x1.25x25	4	
14	9.900.016	ROUND NUT M16x1.5	2	
15	4.000.008	STEERING BALL JOINT	2	
16	9.200.010	NUT M10	2	
17	7.020.002-250	BALL JOINT DUST COVER. L.	2	
18	8.010.157-250	TIE ROD	2	
19	6.000.062-250	ROD END	2	
20	9.300.010	FLAT WASHER $\Phi$ 10	2	
21	9.400.010	LOCKING WASHER $\Phi$ 10	2	
22	9.800.010	CASTLE NUT M10	2	
23	9.500.215	COTTER PIN $\Phi$ 2x15	2	
24	4.000.051	TILT STEERING HOUSING	1	
25	8.020.014	STEERING GEAR BRACKET	2	
26	9.220.008	LOCKING FLANGE NUT. M8	8	
27	9.708.145	THROTTLE PEDAL BOLT M8x1.25x145	1	
28	8.040.001	THROTTLE PEDAL RETURN SPRING, L	1	
29	9.108.040	FLANGE BOLT M8x1.25x40	2	
30	9.200.008	NUT M8	2	
31	4.000.016	THROTTLE PEDAL COMP.	1	
32	9.600.515	PAN SCREW M5x15	2	
33	9.300.005	FLAT WASHER $\Phi$ 5	2	
34	9.210.005	NYLON LOCK NUT M5	2	
35	4.000.015	BRAKE PEDAL COMP	1	
36	9.700.624	PIN 6x24	1	
37	8.010.081	SPINDLE PIN	2	
38	9.500.212	COTTER PIN 2X12	1	
39	6.000.063	BRAKE LAMP SWITCH ASSY.	1	
40	9.600.306	PAN SCREW M3x6	2	
41	7.010.004	PEDAL BUSH	4	
42	8.040.007	BRAKE PEDAL RETURN SPRING, R	1	
43	9.708.222	BRAKE PEDAL BOLT M8x1.25x222	1	
44	6.000.076	MASTER CYLINDER	1	
45	9.108.035	BOLT-WASHER M8x1.25x35	2	
46	7.020.036	THROTTLE PEDAL PAD	1	
47	7.020.037	BRAKER PEDAL PAD	1	
48	8.070.044	MASTER CYLINDER BRACKET	2	
49	8.010.220	ADJUSTING NOB	1	
50	8.010.221	ADJUSTING NOB BLOCK	1	
51	9.108.110	TILT STEERING BOLT	1	
52	7.010.003	TILT STEERING LOCKING BUSH	2	
53	8.010.222	COLLAR	1	

# FIG.18

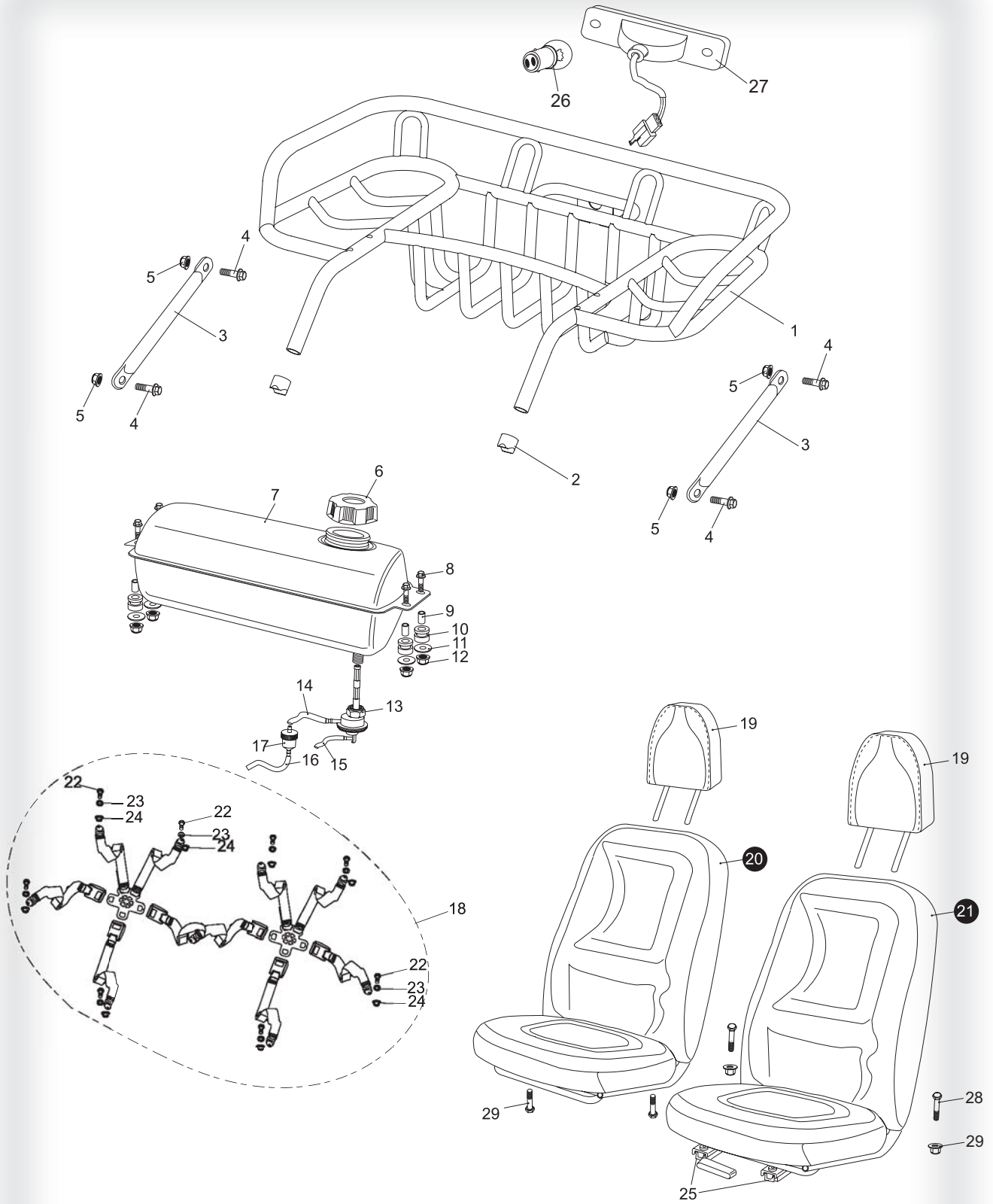
## SUSPENSION ARM ASSY.



<b>SUSPENSION ARM ASSY.</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	2.000.028	STRUT AND SPINDLE SUPPORT, R	1	
2	9.108.105	FLANGE BOLT M8x1.25x105	2	
3	8.010.015	UPPER SUSPENSION ARM COLLAR	2	
4	7.010.003	UPPER SUSPENSION ARM BUSHING	4	
5	4.000.004	UPPER SUSPENSION ARM	2	
6	9.220.008	LOCKING FLANGE NUT. M8	2	
7	7.010.140	LOCKING FLANGE NUT. M12	4	
8	7.020.025	BALL HEAD DUST SEAL	4	
9	8.020.053	BALL HEAD SPACER	4	
10	2.000.027	STRUT AND SPINDLE SUPPORT, L	1	
11	9.908.014	BOLT STRAP M8x14	4	
12	8.010.014	LOWER SUSPENSION ARM COLLAR	4	
13	9.906.012	BOLT STRAP M6x12	12	
14	6.000.097-GT	FRONT WHEEL ASS'Y. R 19x7-8	1	
15	7.020.016	PAD SET. FR. BRAKE CALIPER	2	
16	6.000.028	FRONT BRAKE CALIPER. L	1	
17	8.010.054	FRONT DISC BRAKE	2	
18	9.040.002	DUST SEAL 47x25-7	2	
19	9.030.002	BEARING 6204-Z	2	
20	9.710.031	TIRE BOLT M10x1.25x31	8	
21	8.010.085B	FRONT WHEEL HUB	2	
22	9.030.010	BEARING 6202-Z	2	
23	9.220.010	LOCKING FLANGE NUT M10	8	
24	7.020.033	FRONT TIRE 19x7-8	2	
25	6.000.096	FRONT RIM L/R	2	
26	9.220.010	LOCKING FLANGE NUT M10	16	
27	9.800.012	CASTLE NUT M12	2	
28	9.500.220	COTTER PIN $\Phi$ 2x20	2	
29	7.020.039	FR. HUB COVER.	2	
30	9.110.040	FLANGE BOLT M10x1.25x40	4	
31	6.000.095	FRONT BRAKE CALIPER. R	1	
32	6.000.325	CUSHION ASSY. FR L=325	2	
33	9.110.080	FLANGE BOLT M10x1.25x80	4	
34	8.020.034	LOWER SUSPENSION ARM DUST CAP	8	
35	7.010.002	LOWER SUSPENSION ARM BUSHING	8	
36	9.040.001	O-RING $\Phi$ 21.2x2.65	8	
37	4.000.023	LOWER SUSPENSION ARM ASSY.	2	
38	6.000.003-GT	FRONT WHEEL ASSY. L 19X7-8	1	
39	8.010.140	ACORN NUT M12	2	

# FIG.19

## REAR CARGO RACK/SEAT/BELT

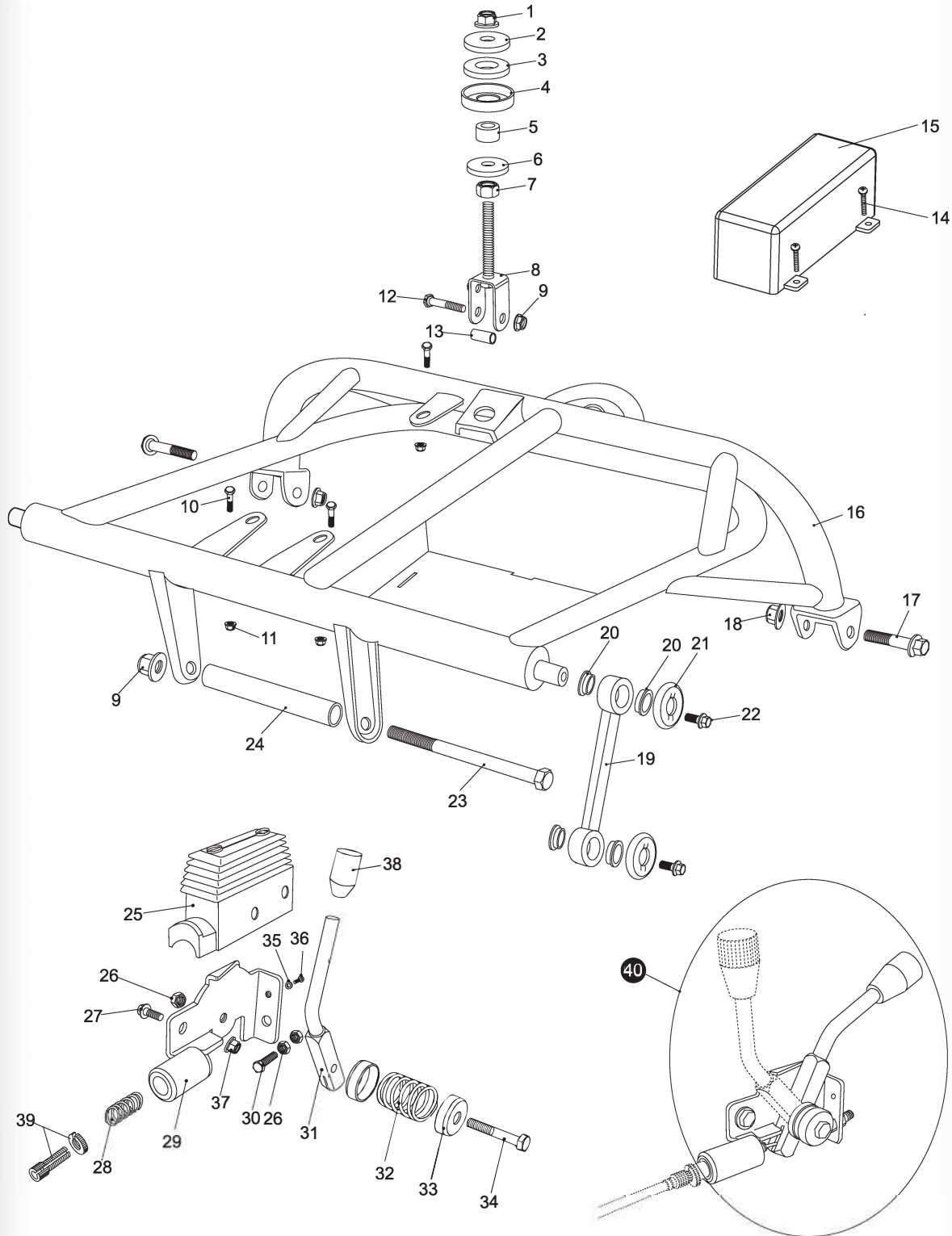




<b>REAR CARGO RACK/SEAT/BELT</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	2.000.061	REAR CARGO RACK (B. G. R. )	1	
2	7.010.017	TUBE SEAT $\varnothing$ 25	2	
3	8.080.051	RACK SUPPORT ARM (B. G. R. )	1	
4	9.108.020	FLANGE BOLT M8x1.25x20	4	
5	9.220.008	LOCKING FLANGE NUT. M8	4	
6	6.000.145	FUEL TANK CAP COMP.	1	
7	4.000.029	FUEL TANK COMP.	1	
8	9.108.025	FLANGE BOLT M8x1.25x25	4	
9	8.010.034	TANK COLLAR	4	
10	7.020.005	RUBBER MOUNT	4	
11	9.300.008	FLAT WASHER $\varnothing$ 8	4	
12	9.210.008	NYLON LOCKING FLANGE NUT M8	6	
13	6.000.046	AUTO FUEL COCK ASS'Y.	1	
14	7.020.021	FUEL TUBE COMP. #1	1	
15	7.020.031	VACUUM TUBE COMP.	1	
16	7.020.022	FUEL TUBE COMP. #2	1	
17	6.000.056	FILTER	1	
18	6.000.354	SAFETY BELT COMP.	1	
19	6.000.376	HEAD-REST	2	
20	6.000.378	SEAT COMP	1	
21	6.000.377	SEAT COMP. L	1	
22	9.700.001	SPECIAL BOLT, M7/16"x28	1	
23	9.700.002	WASHER BELT $\varnothing$ 12	9	
24	9.700.003	BELT NUT M7/16"	9	
25	6.000.379	SEAT RAIL SET.	1	
26	9.090.002	TAIL LIGHT BULB	1	
27	6.000.387	TAIL LIGHT	1	
28	9.900.840	BOLT SHARP M8X1.25X40	2	
29	9.220.008	NUT M8	4	
			2	

# FIG.20

## REAR SWING ARM ASSY. UPPER

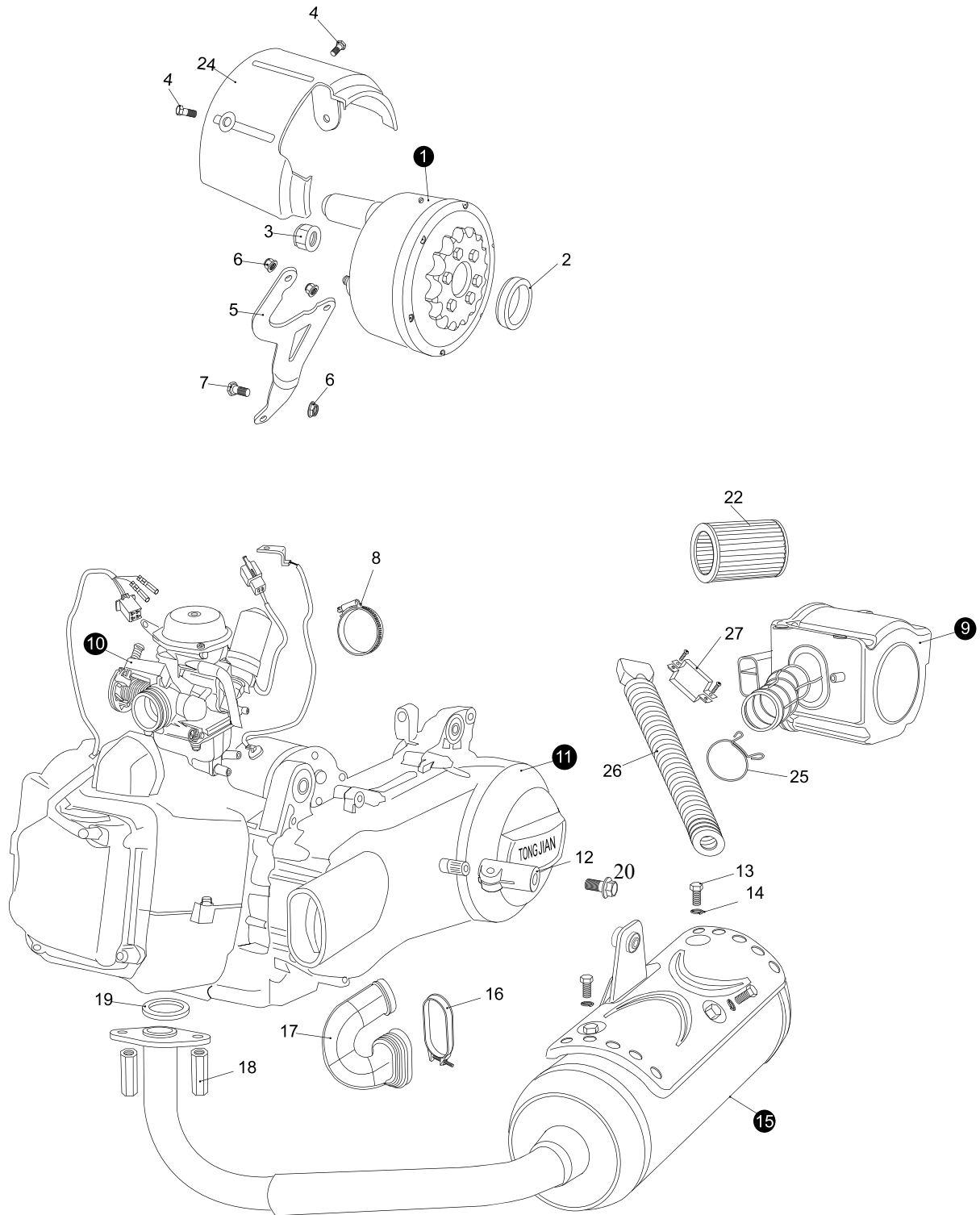


**REAR SWING ARM ASS'Y. UPPER**

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	9.220.012	LOCKING FLANGE NUT. M12	1
2	8.010.042	WASHER. ENGINE MOUNT LINK	1
3	7.020.001	CUSHION. ENGINE MOUNT LINK	1
4	8.020.045	SPACER. ENGINE MOUNT LINK	1
5	8.010.041	COLLAR. ENGINE MOUNT LINK	1
6	9.300.012	WASHER. FLAT $\Phi$ 12	1
7	9.200.012	NUT M12	1
8	6.000.026	ENGINE MOUNT BOLT PLATE	1
9	9.220.010	LOCKING FLANGE NUT. M10	1
10	9.106.022	BOLT-WASHER M6x22	3
11	9.220.006	LOCKING NYLON NUT. M6	3
12	9.110.045	BOLT-WASHER M10x1.25x45	1
13	8.010.076	COLLAR. ENGINE MOUNT BOLT PLATE	1
14	9.600.655	SCREW. PAN M6x55	2
15	7.010.029	COVER. ELECTRIC ASS'Y.	1
16	2.000.062	REAR SWING ARM ASS'Y. UPPER	1
17	9.112.060	BOLT-WASHER M12x1.25x60	2
18	9.220.012	LOCKING FLANGE NUT. M12	2
19	8.030.001	SWING ARM DOG BONE	2
20	7.010.008	BUSH. CON' ROD	8
21	8.020.013	SPACER. CON' ROD	4
22	9.108.016	BOLT-WASHER M8x1.25x16	4
23	9.710.195	BOLT-WASHER M10x1.25x195	1
24	8.010.025	COLLAR. ENGINE MOUNT	1
25	7.020.024	COVER. REVERSE LEVER	2
26	9.220.008	LOCKING NYLON NUT. M8	6
27	9.108.020	BOLT-WASHER M8x1.25x20	2
28	8.040.004	SPRING. CABLE	2
29	6.000.064	BRACKET. LEVER	2
30	9.108.030	BOLT M8x30	1
31	6.000.065	LEVER. REVERSE, PARKING BRAKE	2
32	8.040.003	SPRING. LEVER	2
33	8.020.082	SPACER. LEVER	4
34	9.108.040	BOLT-WASHER M8x1.25x40	2
35	9.300.005	WASHER FLAT $\Phi$ 5	2
36	9.600.512	SCREW. PAN M5x12	2
37	9.220.008	LOCKING FLANGE NUT. M8	4
38	7.020.026	COVEV. LEVER. GREEN / BLACK	2
39	6.000.051	ROD ADJUSTING. CABLE	2
40	6.000.042	PARKING BRAKE/REVERSE LEVER ASS'Y.	2

# FIG.21

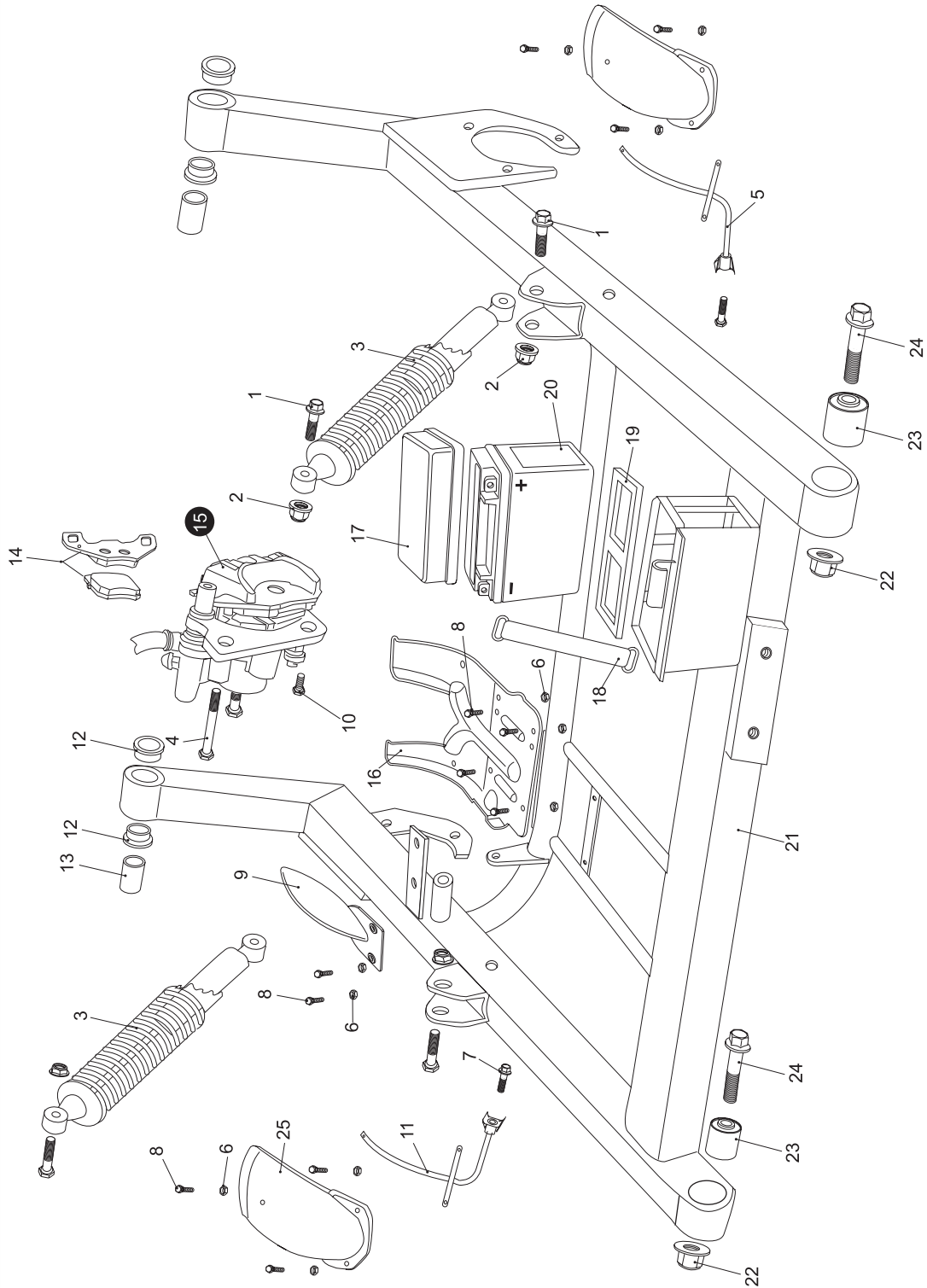
## ENGINE/MUFFLER/AIR CLEANER



<b>ENGINE/MUFFLER/AIR CLEANER</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	6.000.157	REVERSE ASSY.	1	
2	8.010.122	INTERNAL COLLAR REVERSE	1	
3	9.220.016	LOCKING FLANGE NUT M16	1	
4	9.106.012	FLANGE BOLT M6X12	2	
5	8.020.173	REVERSE BRACKET	1	
6	9.220.008	LOCKING FLANGE NUT M8	3	
7	9.108.040	BOLT STRAP, M8X1.25X40	1	
8	8.020.056	AIR CLEANER CLAMP	1	
9	4.000.055	AIR CLEANER ASSY.	1	
10	6.000.024	CARBURETOR W/ELECTRIC CHOKE	1	
11	N.L.A.	EXTERNAL REVERSE 150CC ENGINE	1	
12	8.030.037	MUFFLER RACK SUPPORT (m10 threads)	1	
13	9.106.012	BOLT, M6X12	3	
14	9.400.006	LOCKING WASHER $\phi 6$	3	
15	6.000.074	MUFFLER COMP. EX	1	
16	8.020.055	BOOT CLAMP	1	
17	6.000.162	SIDE CASE BOOT	1	
18	9.040.027	MUFFLER JOINT NUT, M6	2	
19	M150-3050354	EX. PIPE GASKET	1	
20	9.110.020	Flange Bolt m10x20	1	
21			4	
22	6.000.151	AIR CLEANER ELEMENT	1	
23			1	
24	7.010.033	CHAIN PROTECTOR, RR.	1	
25	8.040.013	AIR CLEANER CLIP	1	
26	N.L.A.	AIR CLEANER DUCT	1	
27	N.L.A.	AIR CLEANER CLAMP	1	
28	9.108.040	FLANGE BOLT, M8X1.25X40	1	

# FIG.22

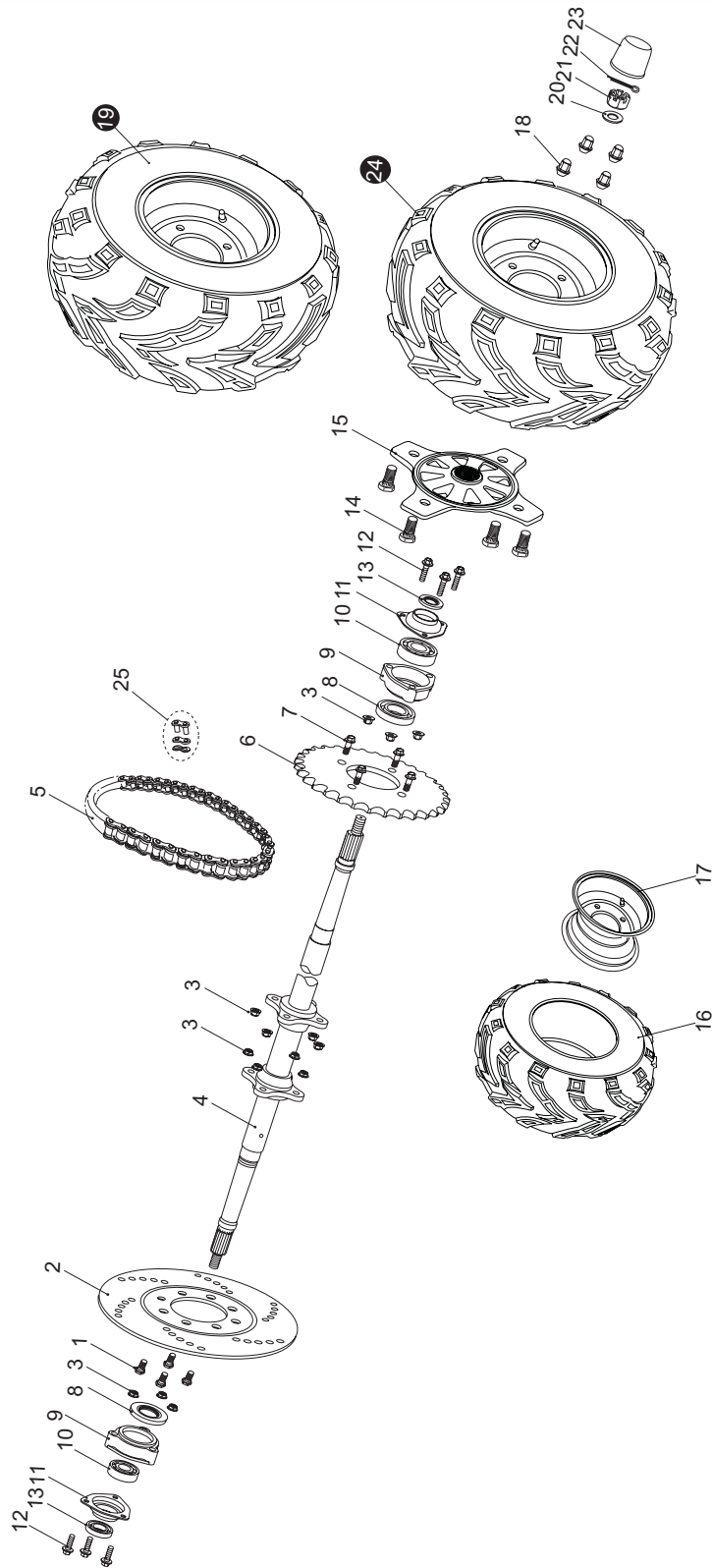
## REAR SWING ARM



<b>REAR SWING ARM</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	9.110.040	FLANGE BOLT M10x1.25x40	4	
2	9.220.010	LOCKING FLANGE NUT M10	4	
3	6.000.006	CUSHION ASSY. RR	2	
4	9.908.100	BOLT STRAP M8x1.25x100	1	
5	6.000.101-SS	REAR FENDER BRACKET, L	1	
6	9.210.006	LOCKING NYLON NUT M6	12	
7	9.108.045	FLANGE BOLT M8x1.25x45	2	
8	9.906.016	FLANGE BOLT M6x16	12	
9	7.010.031	DISC. RR COVER	1	
10	9.908.012	BOLT STRAP M8x1.25x12	1	
11	6.000.068-GT	REAR FENDER BRACKET, R	1	
12	7.010.006	SWING ARM BUSHING	4	
13	8.010.028	SWING ARM COLLAR	2	
14	7.020.022	RR. BRAKE PAD SET	1	
15	6.000.229	CALIPER ASSY. RR	1	
16	7.010.032	CHAIN DISC GUARD	1	
17	7.010.028	BATTERY COVER	1	
18	7.020.023	BATTERY BAND	1	
19	7.020.020	BATTERY LOWER CUSHION	1	
20	6.000.382	BATTERY (YTX12-BS)	1	
21	2.000.042	RR. LOWER SWING ARM COMP.	1	
22	9.220.012	LOCKING FLANGE NUT M12	2	
23	7.020.008	SWING ARM CUSHION BUSHING	2	
24	9.112.060	FLANGE BOLT M12x1.25x60	2	
25	7.010.064	REAR FENDER L/R	2	

# FIG.23

## REAR HOUSING

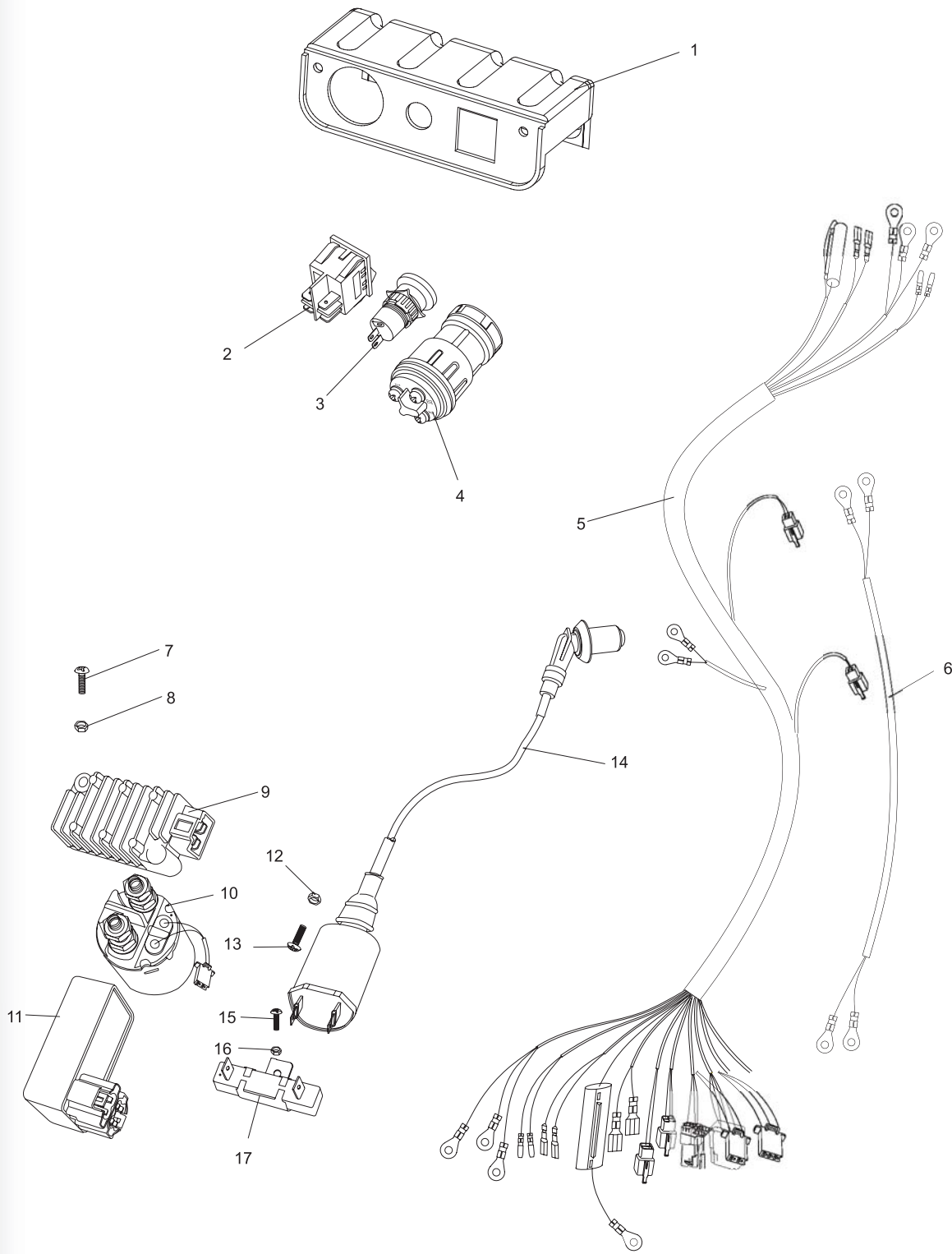




<b>REAR HOUSING</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	9.108.022	BOLT-WASHER M8x1.25x22	4	
2	8.010.053	DISC. RR. BRAKE	1	
3	9.220.008	LOCK FLANGE NUT. M8	14	
4	8.010.057	REAR AXLE	1	
5	9.070.002	CHAIN O-RING DRIVE.	1	
6	8.010.077	REAR SPROCKET	1	
7	9.108.027	BOLT-WASHER M8x1.25x27	4	
8	9.040.006	DUST SEAL 50X34-7	2	
9	8.030.008	COMP. HOUSING RR. AXLE BRG	2	
10	9.030.006	BEARING 6206	2	
11	8.020.028	BEARING BASE	2	
12	9.108.040	BOLT-WASHER M8x1.25x40	6	
13	9.040.007	DUST SEAL 42X30-7	2	
14	9.710.031	BOLT. TIRE M10x1.25x31	8	
15	8.010.056	HUB. REAR AXLE	2	
16	7.020.035-GT	TIRE. RR 21x10-10	2	
17	6.000.105	RIM. RR	2	
18	8.010.118	LUG NUT. CAP M10	8	
19	6.000.052-GT	REAR. WHEEL ASSY. R	1	
20	9.700.016	SPACER. RR. WHEEL 16	2	
21	9.800.016	CASTLE NUT. M16	2	
22	9.500.430	COTTER PIN. 4X30	2	
23	7.020.039	COVER. RR. HUB	2	
24	6.000.383	REAR WHEEL ASSY.	1	
25	6.000.149	MASTER LINK. CHAIN	1	

# FIG.24

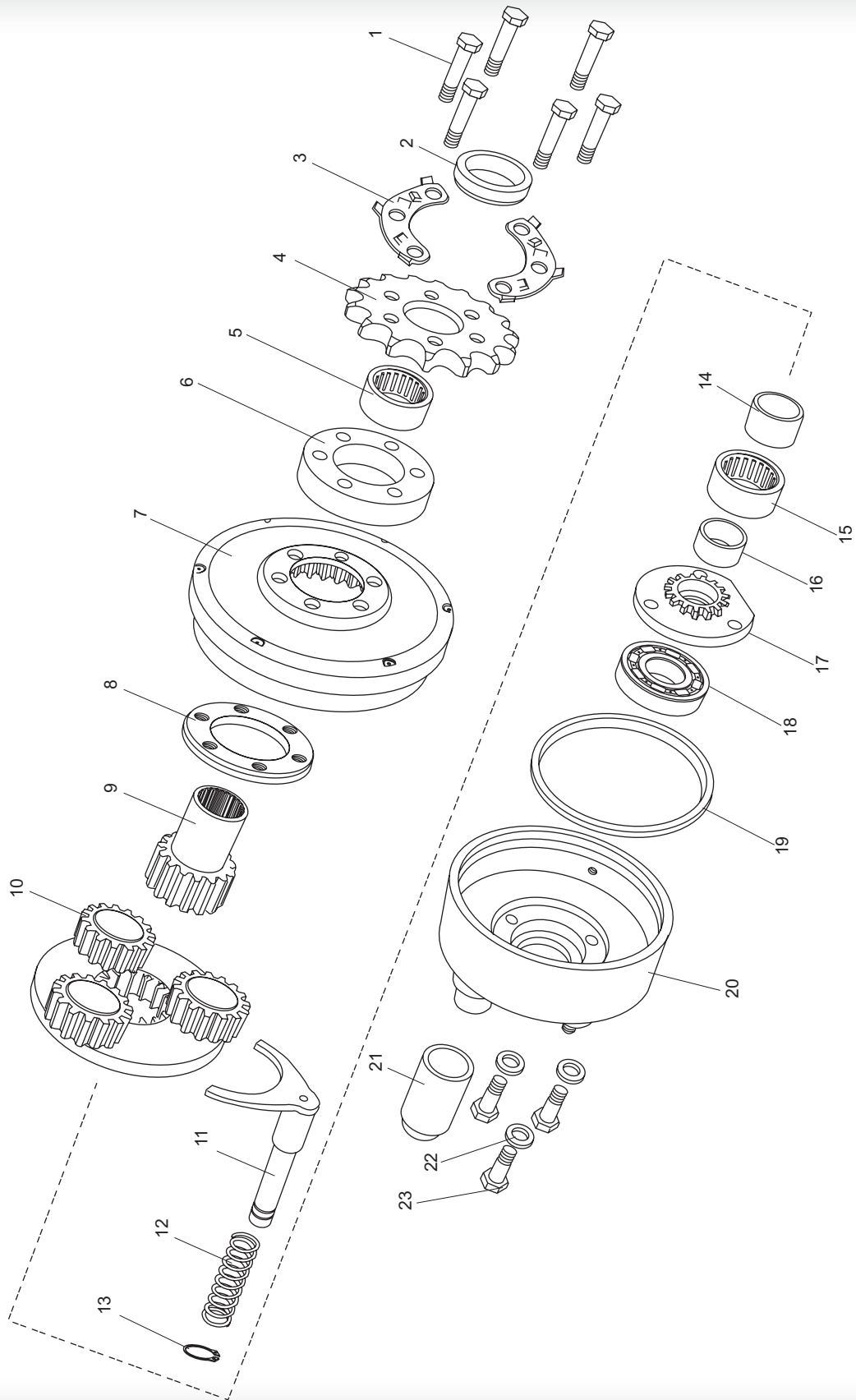
## WIRE HARNESS/ELECTRICAL



<b>WIRE HARNESS/ELECTRICAL</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	7.010.027	SWITCH PANEL COVER	1	
2	6.000.058	HEADLIGHT SWITCH	1	
3	6.000.159	ENGINE STOP BUTTON	1	
4	6.000.020-J	IGNITION START SWITCH	1	
5	6.000.380	WIRE HARNESS.	1	
6	6.000.381	SOCKET COMP	1	
7	9.100.620	BOLT M6x20	2	
8	9.210.006	NYLON LOCKING NUT M6	2	
9	6.000.124	REGULATE RECTIFIER COMP.	1	
10	6.000.035	STARTING RELAY	1	
11	6.000.267	C.D.I. UNIT COMP.	1	
12	9.210.005	NYLON LOCKING NUT M5	1	
13	9.600.525	ROUND HEAD BOLT M5x25	1	
14	6.000.025	IGNITION COIL COMP.	1	
15	9.600.410	ROUND HEAD BOLT M4x10	1	
16	9.210.004	NYLON LOCKING NUT M4	1	
17	6.000.038	RESISTOR COMP 10W 10Ω	1	

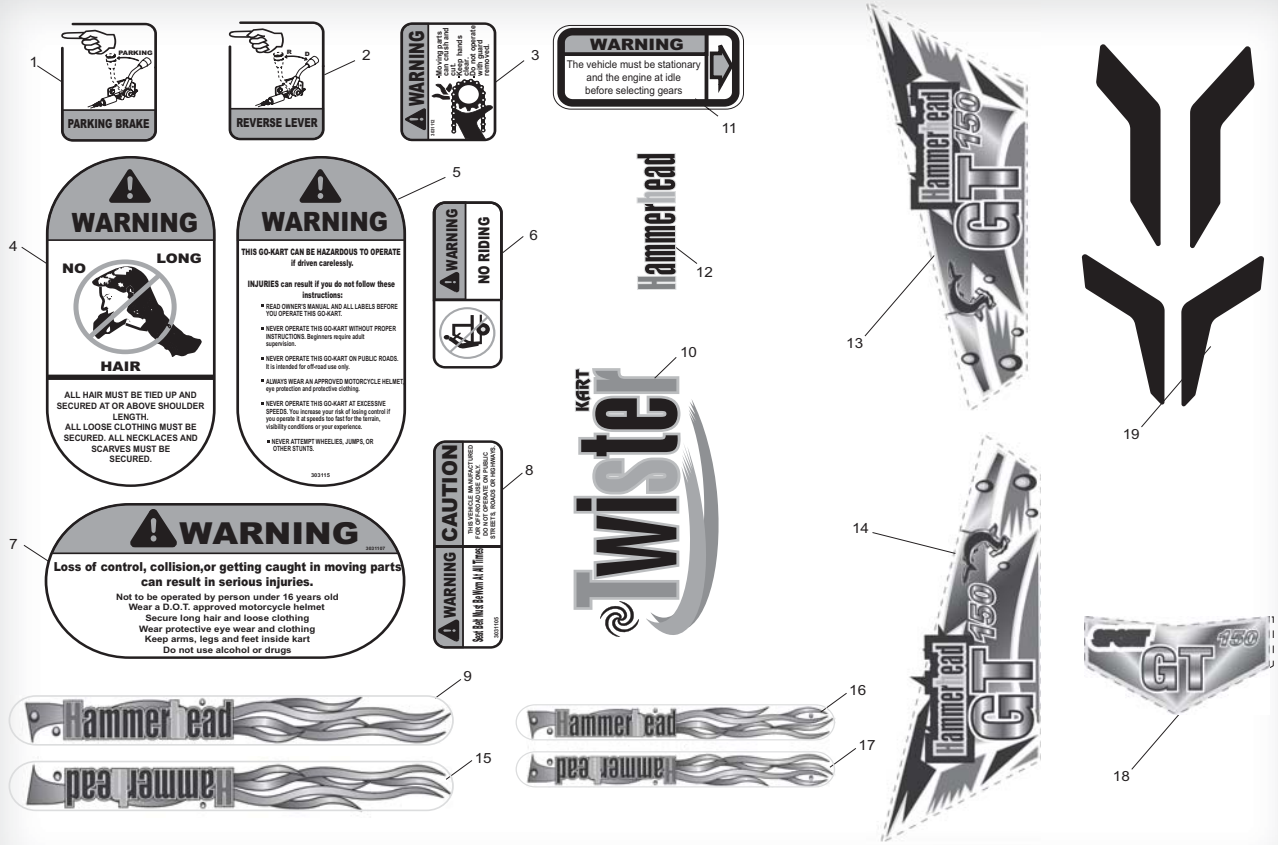
# FIG.25

## REVERSE ASSY.



<b>REVERSE ASSY.</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	9.100.625	BOLT M6x25	6	
2	8.010.122	INTERNAL COLLAR	1	
3	8.020.167	KEEPER	6	
4	8.010.123	DRIVE SPROCKET	1	
5	9.030.007	NEEDLE BEARING 26x35x20	1	
6	8.010.119	BEARING FLANGE PLATE	1	
7	8.010.169	GEAR CASE. L	1	
8	8.010.170	GEAR CASE FLANGE PLATE	1	
9	8.010.124	DRIVE GEAR	1	
10	6.000.222	COUNTER GEAR SHAFT COMP	1	
11	8.010.125	GEAR SHIFT YOKE	1	
12	8.040.012	GEAR SHIFTING YOKE SPRING	1	
13	9.700.112	CIRCLIP $\Phi$ 12	1	
14	8.010.121	DRIVE GEAR BUSHING	1	
15	9.030.008	NEEDLE BEARING 22x30x14	1	
16	8.010.126	BUSHING. DRIVE GEAR	1	
17	8.030.029	GEAR SEAT	1	
18	9.030.003	BEARING 6003 DDU	1	
19	7.020.055	RUBBER OIL SEAL	1	
20	8.030.028	GEAR CASE. R	1	
21	8.010.127	SHIFTING YOKE COVER	1	
22	9.400.008	LOCK WASHER $\Phi$ 8	3	
23	9.100.821	SCREW PAN M8x21	3	

**WARNING STICKERS**



<b>WARNING STICKERS</b>				
<b>REF NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REGD NO.</b>	
1	9.090.007	PARKING BRAKE LABEL	1	
2	9.090.008	REVERSE LEVER LABEL	1	
3	9.090.009	CHAIN GUARD LABEL	1	
4	9.090.010	NO LONG HAIR LABEL	1	
5	9.090.011	WARNING LABEL	1	
6	9.090.012	NO CLIMBING LABEL	1	
7	9.090.013	WARNING LABEL	1	
8	9.090.014	SEAT BELT LABEL	1	
9	9.090.015	R. SIDE C.B.C. LABEL A	1	
10	9.090.016	TWISTER LABEL	3	
11	9.090.017	WARNING LABEL	1	
12	9.090.018	FUEL TANK LABEL	1	
13	9.090.070	SIDE PLATE LABEL	1	
14	9.090.071	SIDE PLATE LABEL	1	
15	9.090.072	L. SIDE C.B.C. LABEL A	1	
16	9.090.073	R. SIDE C.B.C. LABEL B	1	
17	9.090.074	L. SIDE C.B.C. LABEL B	1	
18	9.090.075	FRONT PLATE A	1	
19	9.090.076	FRONT PLATE B		