

Owner's Manual

Parts Manual

Twister
Hammerhead

**READ THIS MANUAL CAREFULLY,
IT CONTAINS IMPORTANT SAFETY INFORMATION.**

UM250 II R

**MINIMUM
RECOMMENDED
OPERATOR AGE: 16**



OFF-ROAD USE ONLY

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

USA only:

This vehicle does not conform to Federal Motor Vehicle Safety Standards, and its use on public streets, roads, or highways is illegal.

250

UM250IIR Limited Warranty

This warranty policy only applies to go-karts unloaded from their shipping containers, set up and delivered by an authorized dealer, and that under normal use and service is found to have defects in parts or workmanship under the following terms and conditions. This warranty covers the kart and engine related components for a period of 90 days.

This warranty does not apply to any part, which in opinion of seller was defective because of improper maintenance, improper assembly, alterations, abuse, negligence or accident.

Should warranty service be required on your UM250IIR during the 90 days warranty period, please contact your nearest authorized dealer for repairs.

What is not covered under this warranty

Damage or faults caused by misuse, negligence, alterations, accidents or any abnormal use including the use of non genuine parts, renting or leasing, competition or racing. This warranty does not cover loss of use of the unit or loss of time, or inconvenience or normal wear and deterioration of consumable items such as spark plugs, chain, brake shoes, fuses, clutch plates, sprockets, light bulbs, battery and tires.

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PARTS MANUAL

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Thank you for purchasing our kart. We hope you will enjoy it. Before you start to operate the kart, please read through this Owner's Manual carefully as it contains important safety and maintenance information. Failure to follow the warnings contained in this manual can result in serious injuries or death.

Be sure to follow the recommended maintenance schedule and service your kart accordingly. Preventive maintenance is extremely important to the longevity of your kart.

Beginners should seek instruction from their dealer or qualified instructors before and during initial use of the kart. It is also recommended to practice in a large flat open area to familiarise yourself with operations of this kart.

We hope you will have a pleasant experience with our products and thank you again for choosing our kart.

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 all carefully.

IMPORTANT SAFETY INFORMATION

Your kart will provide you with many years of use and pleasure. Providing you take responsibility for your own safety and that of any one else using your kart or near to the kart when it is being used and understand the challenges you can meet while driving.

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

Follow the Age Recommendation

The kart should not be driven by anyone 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 use on pavements, 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. 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.

Operating in the 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.

SAFETY LABELS

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 a replacement.



WARNING

NO LONG HAIR

ALL HAIR MUST BE TIED UP AND SECURED AT OR ABOVE SHOULDER LENGTH. ALL LOOSE CLOTHING MUST BE SECURED. ALL NECKLACES AND SCARVES MUST BE SECURED.

WARNING

THIS GO-KART CAN BE HAZARDOUS TO OPERATE if driven carelessly.

INJURIES can result if you do not follow these instructions:

- READ OWNER'S MANUAL AND ALL LABELS BEFORE YOU OPERATE THIS GO-KART.
- NEVER OPERATE THIS GO-KART WITHOUT PROPER INSTRUCTIONS. Beginners require adult supervision.
- NEVER OPERATE THIS GO-KART ON PUBLIC ROADS. It is intended for off-road use only.
- ALWAYS WEAR AN APPROVED MOTORCYCLE HELMET, eye protection and protective clothing.
- NEVER OPERATE THIS GO-KART AT EXCESSIVE SPEEDS. You increase your risk of losing control if you operate it at speeds too fast for the terrain, visibility conditions or your experience.
- NEVER ATTEMPT WHEELIES, JUMPS, OR OTHER STUNTS.

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WARNING

NO RIDING

WARNING

Loss of control, collision, or getting caught in moving parts can result in serious injuries.

Not to be operated by person under 16 years old
 Wear a D.O.T. approved motorcycle helmet
 Secure long hair and loose clothing
 Wear protective eye wear and clothing
 Keep arms, legs and feet inside kart
 Do not use alcohol or drugs

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CAUTION

THIS VEHICLE MANUFACTURED FOR OFF-ROAD USE ONLY. DO NOT OPERATE ON PUBLIC STREETS, ROADS OR HIGHWAYS.

WARNING

Seat Belt Must Be Worn At All Times

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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 Clothing

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 chest/shoulder protector.

Driver Training

Developing your driving skill 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.

Pre-Drive Inspection

Always carry out the Pre-Drive Inspection detailed on Page 16 before getting in your kart.

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. You should not drive your kart on paved surfaces.

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 pavements, driveways, car parks 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. In many states it is illegal to operate karts on public streets, roads and highways.

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.

Control Speed

Driving at excessive speed increases the chances of an accident. In choosing an appropriate speed, you need to consider the capability of your kart, the terrain, visibility and other operating conditions, plus your own skill 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 appropriate for your kart, the terrain, visibility and other operating conditions, and your experience.

SAFE DRIVING PRECAUTIONS

Use Kart 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.

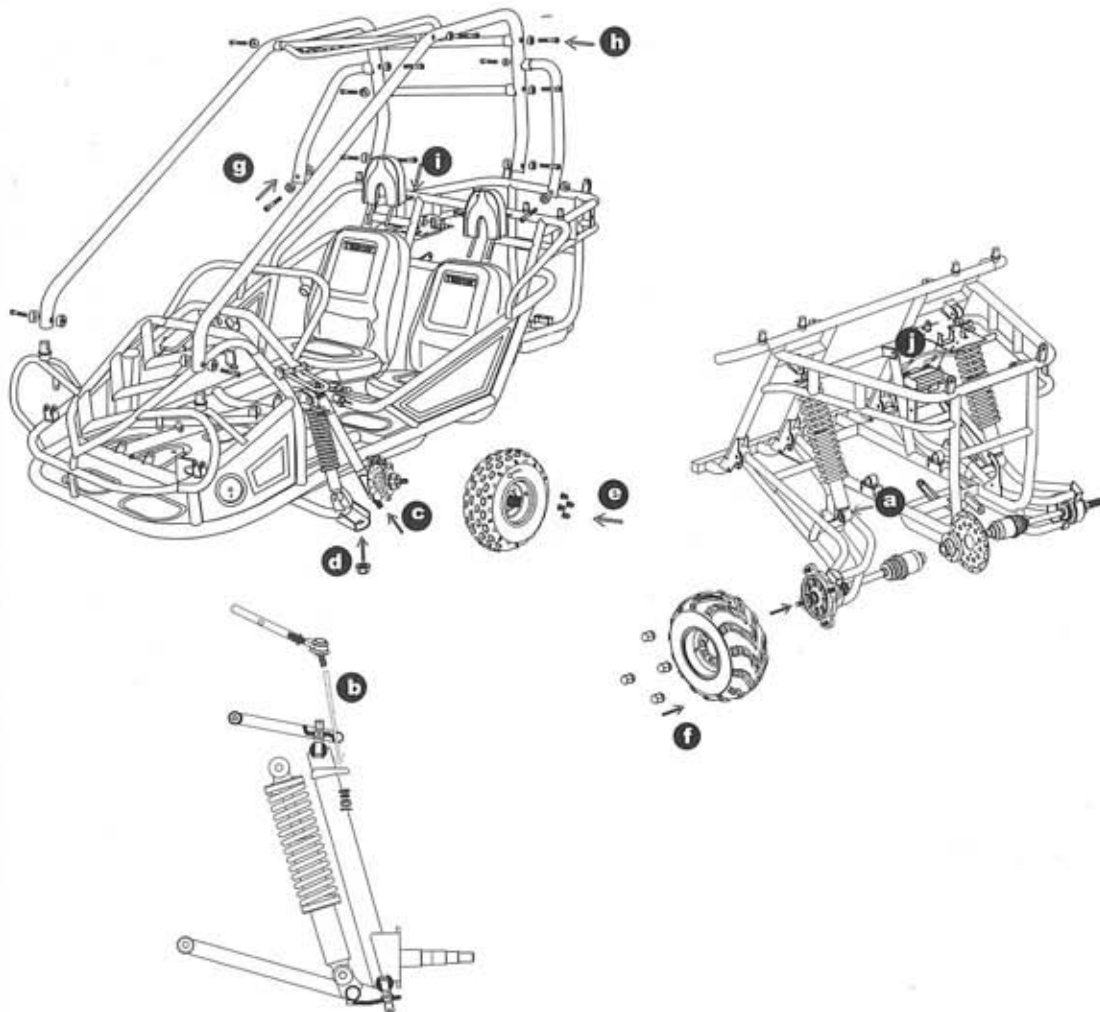
Never attempt stunts, such as wheelies or jumps. Don't try to show off.

Radiator Indicator Lamp

During the driving, you should always keep close contact with this red indicator lamp. This indicator lamp will tell you when your engine coolant system is getting too hot. To keep from causing any damage, you should stop the kart and turn the key off. Check if there is any leak. At this time do not open the radiator cap, allow your coolant system and engine to cool down before opening the radiator cap.

If you find the coolant completely gone, you should check if the radiator, hoses or engine has such leaks.

- 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.
- g. Raise the C.B.C. bar as the picture shows.
- h. Install C.B.C. bar 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.



SPECIFICATIONS

DIMENSIONS

Overall Length	87 in. (2210mm)
Overall Width	53.5 in. (1346mm)
Overall Height	56.6 in. (1438mm)
Wheelbase	66.1 in. (1680mm)
Front Track	45.7 in. (1160mm)
Rear Track	42.7 in. (1085mm)
Ground Clearance	8.5 in. (215mm)

ENGINE

Type	Water cooled. 4-Stroke
Engine capacity	250cc
Bore / Stroke	72mm x 60mm
Displacement	244ml
Corrected compression ratio	10:1
Carburator	VEKS4 & CV30
Output Power	10.5Kw/7000rpm
Maximum Torque	17.6N.m/5500rpm
Starting	Electric
Ignition	C.D.I.
Lubrication	Force & Splash
Transmission	Automatic (C.V.T system)
Spark plug	DPRSEA-9(NGK)
Plug gap	0.6-0.7mm
Fuel Type	RQ90 (unleaded)
Lubricate oil	SAE 15W-40/SF

DRIVE COMPONENTS

Gear box oil	MoS ₂ & W-2DW-4D
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CAPACITIES

Maximum load	Double Seats/400lbs
Fuel tank	2.25 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 ----- 75 km/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 ----- Full Independent Rear Suspension/Oil Damped Shocks
Restraint System ----- Dual 4-point Harness
Final Drive ----- CV-Shafts

TIRE PRESSURE

Front -----150kPa 1.5kg/cm² 21.3psi
Rear -----200kPa 2.0kg/cm² 28.4psi

WEIGHT

Net Weight ----- 280 kg
Gross Wight ----- 326 kg

A. Operation controls

WARNING - Do not attempt to start or operate the engine until complete 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 increases above idle, the clutch automatically engages and moves the vehicle forward. (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 the left foot pedal (See Fig.1). Applying pressure to the pedal 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 choke will close automatically allowing operation at normal RPM (Warning: Don't crank the starter for 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 ensure 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.

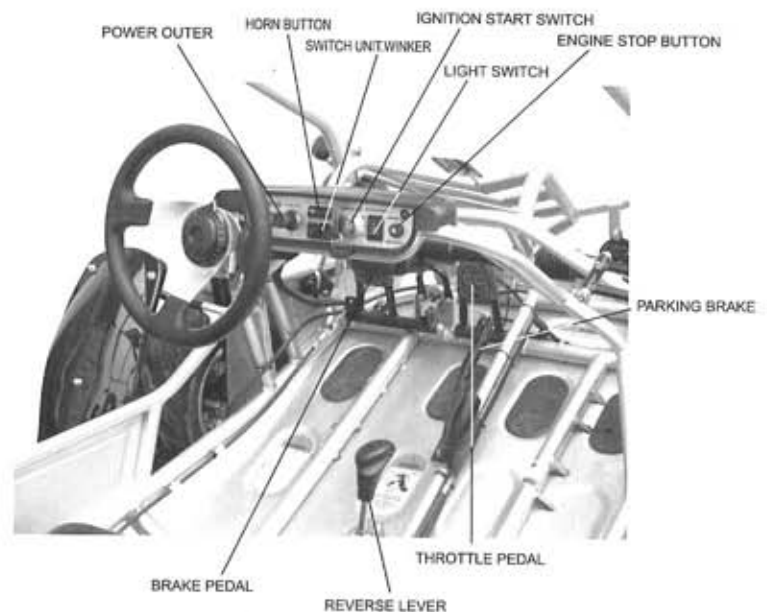


Figure 1

OPERATION

B. Pre-Drive Inspection



WARNING

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

- a. Check the engine oil level is between the bottom of the dipstick and the "0" mark. Check for leaks. Add oil if required.
- b. Check the Fuel Level. Add fuel as necessary and do not overfill. Check for leaks. Ensure the fuel filler cap is securely fastened.
- c. Check the Brakes. Depress the left brake pedal several times, and check for adequate brake pedal freeplay. Make sure there is no brake fluid leakage.
- d. Check the tires. Check their condition for damage or excessive wear and pressure.
- e. Check the Throttle Cable. Check for smooth operation. Ensure the throttle snaps back to idle when released and moves smoothly without sticking.
- f. Check the Engine Stop Button. While the engine is running press and hold the engine stop button for 2 seconds. Make sure the engine stops.
- g. Check all Nuts, Bolts, and Fasteners. Check the wheels to see that all axle nuts and lug nuts are tightened properly. Check and tighten as necessary all other nuts, bolts and fasteners.
- h. Check the C.B.C. Bar. Ensure all C.B.C. bars are in place before operating the kart.
- i. Check the Lights. Check the headlights, brake light and tail light are all working.
- j. Check the Steering. Check that the steering wheel moves freely in both directions but without any unusual looseness.
- k. Check all Cable Housings. Check these for wear and the fitting for any looseness.
- l. Check the underbody and exhaust system. Remove all dirt, vegetation and mud and check for any damage due to impact with rocks or uneven terrain.
- m. Check the Air Cleaner Housing Drain Tube. Check the deposits in the drain tube. If necessary, check the tube and air cleaner housing.
- n. Check Leaks and Loose Parts. Walk around your kart and look for anything that appears unusual, such as a leak or loose cable.
- o. Check the Parking Brake. Make sure the kart does not move forward or backward when the parking brake is applied.
- p. Check the Radiator. Make sure there is no leak of radiator or hoses before you start the engine. Check the water level.
- q. Check the radiator to see if the level of the coolant is full. Refill the coolant as needed or your engine would burn up and cost you in repairs. Never open the radiator cap when engine is running. Allow the engine to cool down, and then refill the coolant.

Component locations

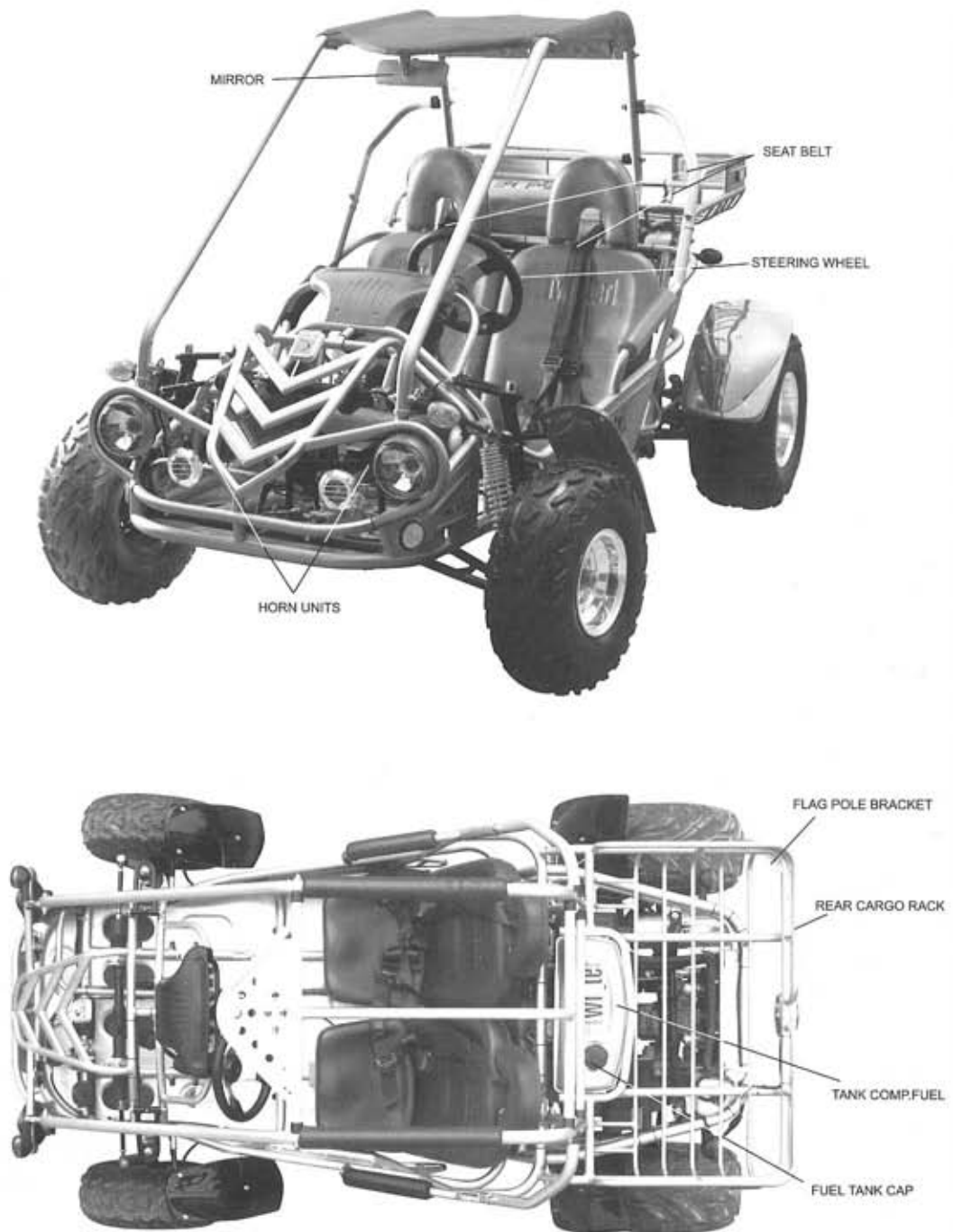


Figure 2

OPERATION

C. Passengers

The vehicle is designed for two people only. The combined maximum weight of the driver and the passenger should not exceed 200kg or 440lbs.

D. Seat Adjustment

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

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



Figure 3

WARNING

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

WARNING

Never operate this kart when the seat is not securely in place, to do so could result in personal injury or loss of life.

E. Forward and Reverse Gear

a. Push the brake pedal down. The brake pedal must be pushed in to change the gear settings.

b. Push the lever forward to the "D" position for the kart to move forward.

c. Each time you need to apply the brake to change the setting to go backwards apply the brake and move the lever to the "R" for the kart to go backwards note!

Your kart is set up with 3 settings (See Fig.4):

"D" Forward

"N" Nutraul

"R" Revears



Figure 4

WARNING

Always stop the kart before changing gears. Your kart shifter will only change after the kart is stoped and not moving!

F. Starting and Operating Instructions

- a. Before starting the engine, the driver must be seated properly in the kart with the seat belt on.
- b. Practice in the kart in an open space at the beginning to learn how to start, turn and stop the vehicle.
- c. Drive slowly until you are familiar with the operation of the kart.
- 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. The driver should keep their heels on the ramp of the main board when turning. (See Fig.5) Keeping their leg on the foot pedal, the driver can feel that the kart is stable and won't roll over.



POSITION FOR HEEL **Figure 5**

SERVICE INSTRUCTIONS

A. Air Cleaner

Service the air cleaner every 20 hours

NOTE: Service is required more often in dusty conditions.

- a. Remove cleaner cover 1.
- 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. Replace check for cracks or holes. It needs to be replaced with new filter.

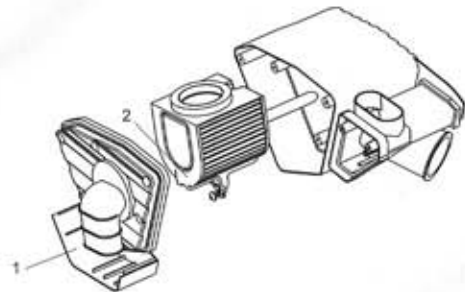
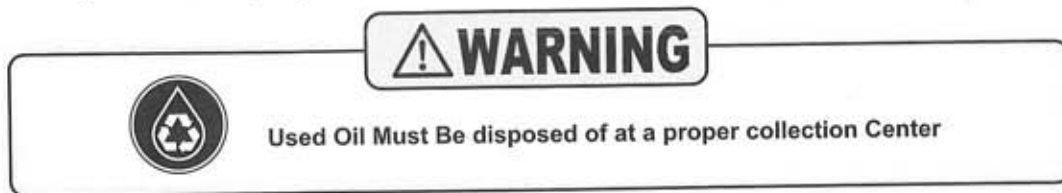


Figure 6

SERVICE INSTRUCTIONS

B. Engine Lubrication

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



- Remove the drain plug located on the right rear side of the engine. Tip the kart backwards slightly by blocking up the front end and drain the oil into suitable container.
- Remove and clean the oil filter.
- Replace the drain plug and tighten securely. Place the kart in a level position.
- Refill the crankcase (approximately 1 1/4 pint) to the top of the filler neck with SAE 10W40 oil.
- Check the oil level before each use of the kart or after each 10 hours of operation. Add oil when necessary to keep the level between the bottom of the dipstick and the "0" mark. Do not mix various grades of oil.

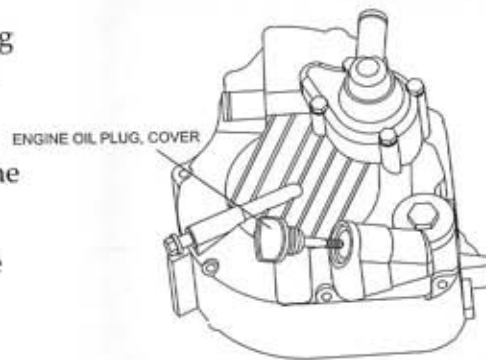


Figure 7

C. Spark Plug

- 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 engine performance. If possible, check the spark plug gap (area between electrodes) using a wire feeler gauge. This specification is 0.6-0.7mm.
- Before installing the spark plug coat the threads lightly with graphite grease if possible, to ensure easy removal next time the spark plug needs inspection.
- It is advisable to replace the spark plug at least once a year to ensure easy starting and good engine performance.

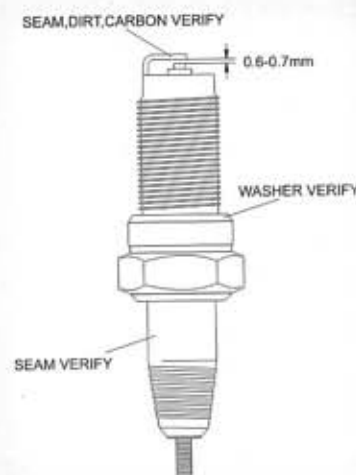


Figure 8

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.

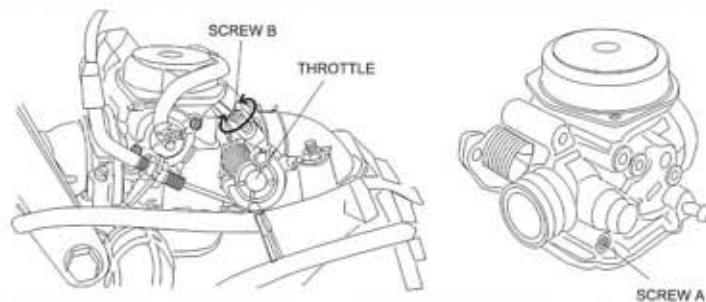


Figure 9

E. Cleaning Instructions

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

F. Kart Lubrication

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

G. Adjustment of Front And Rear Shock

There are five positions on each shock. The default position is in the middle set by the manufacturer (See Fig. 10)

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

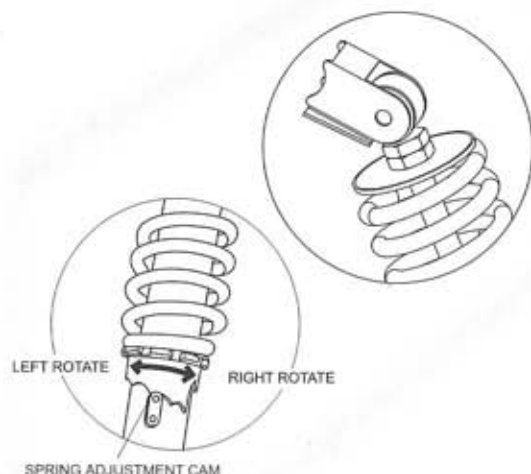


Figure 10

SERVICE INSTRUCTIONS

H. 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 the fuel tank and carburetor by allowing the engine to run out of fuel.
- b. Lubricate engine cylinder by removing the air spark plug and pouring a small amount of oil into the plug hole, then re-fit the plug.
- c. Do not save or store gasoline over winter. Using old gasoline, which has deteriorated from storage, will make the engine difficult to start and affect engine performance.



WARNING

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

REPAIR

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. 11)

Tighten the nuts after replacing the wheels.

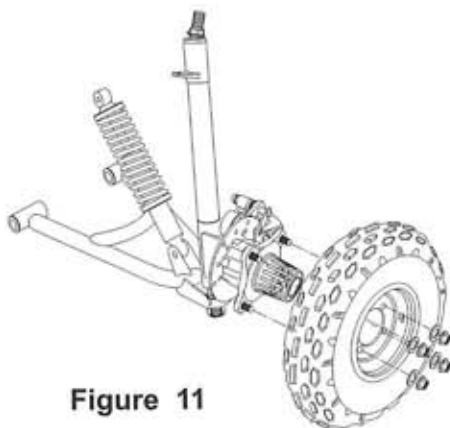


Figure 11

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 the wheel and hub assembly. It is only necessary to remove the 4 lug nuts to remove the wheel. Tighten the nuts after replacing the wheels.

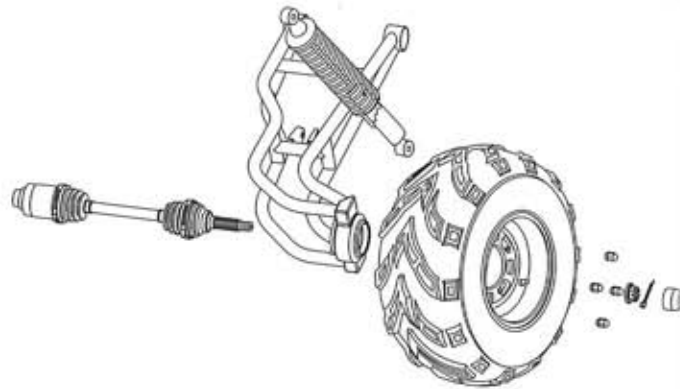


Figure 12

C. Front Wheel Alignment

- a. The front wheels should toe-in from 1/8 to 1/4 inch. 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 to 1/4 inch 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.

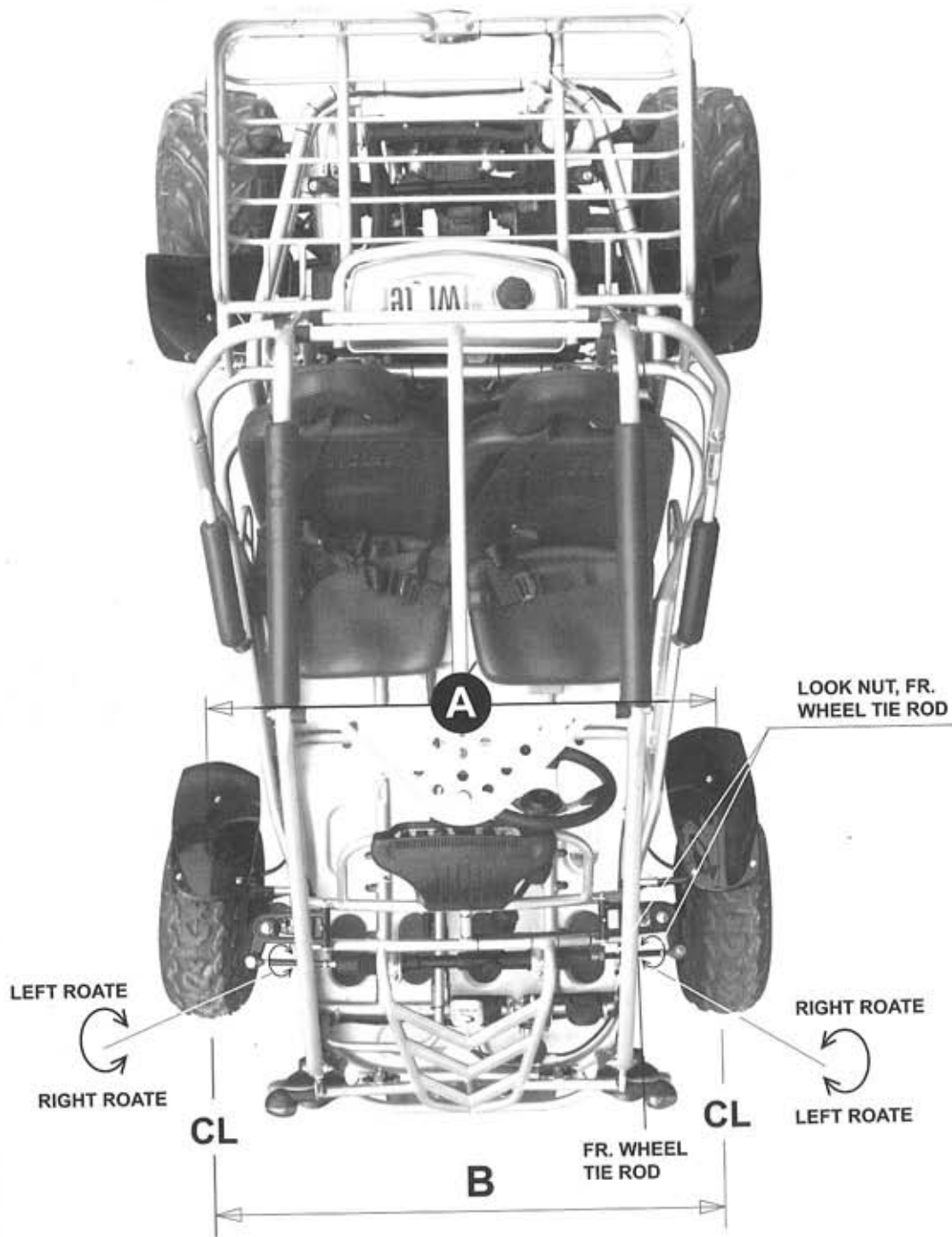


Figure 13

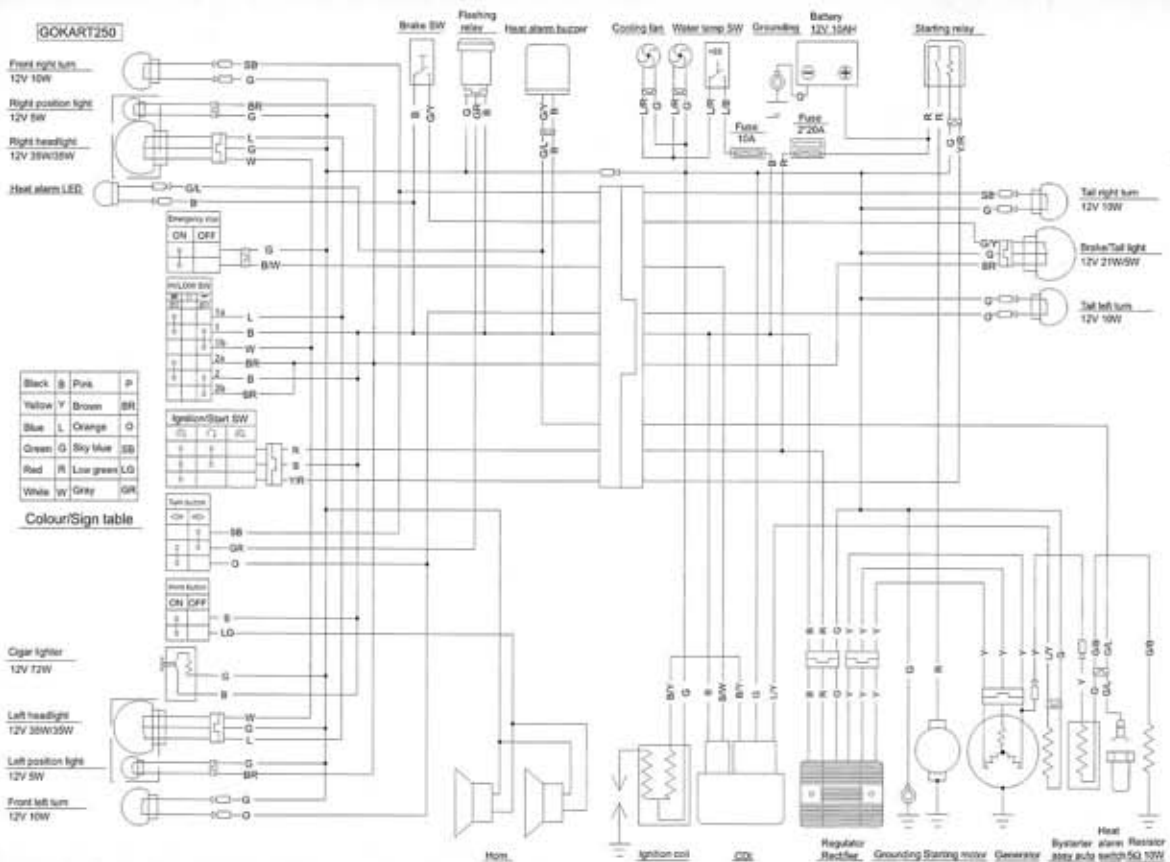
PERIODICAL CHECK AND SERVICES

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

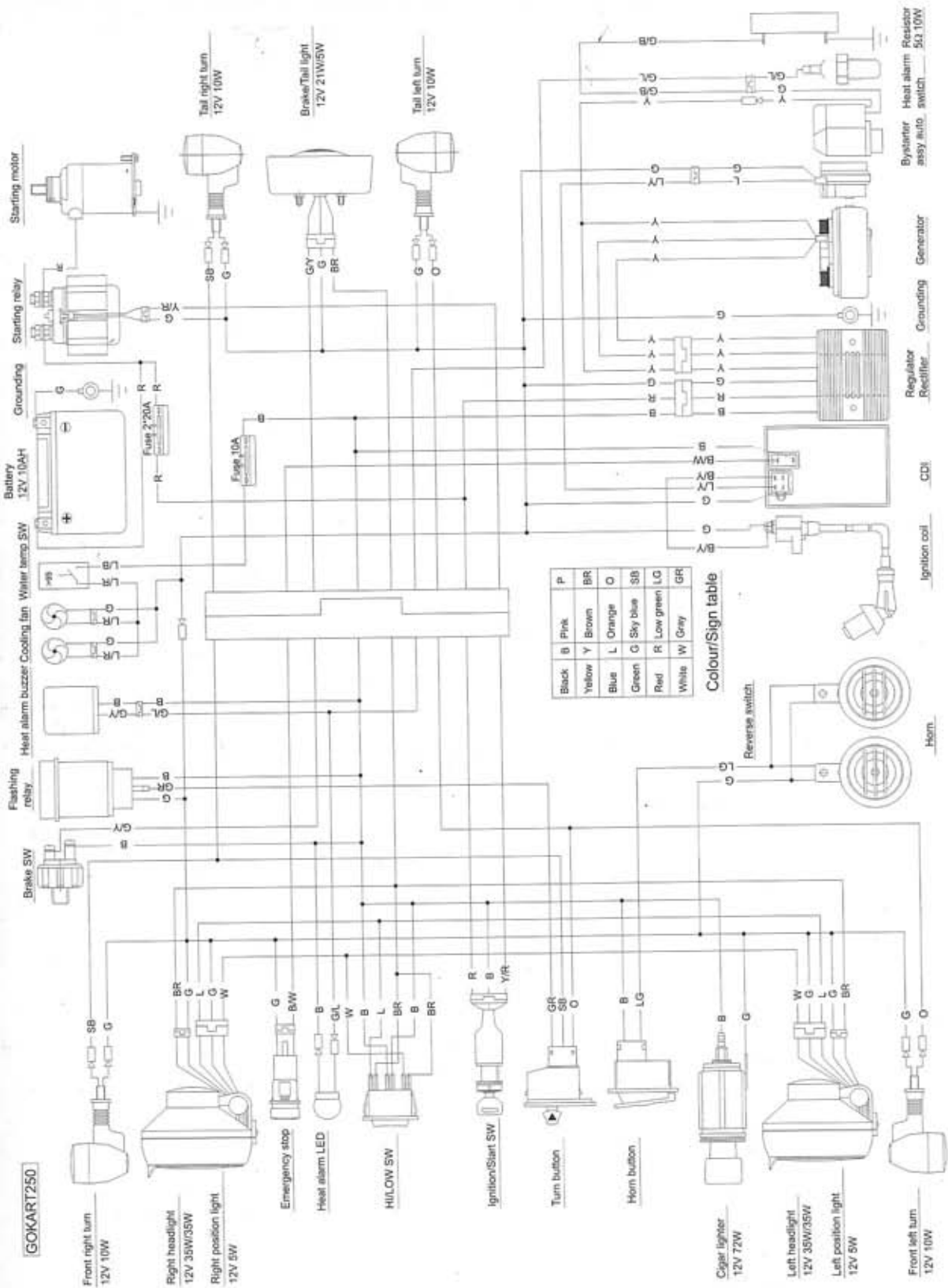
Items	Time of service	Initial service (first week)	Monthly	Quarterly	Yearly
Tire pressure/wear		I	I		
Brake performance		I	I		
Tightness of screws		I	I		
Air cleaner			C		R
Carburetor		I			C
Spark plug				C, A	
Coolent					
Brake oil		I	I	I	
Replace gearbox oil			C, I	R	
Chassis		I	I	L	
Fuel switch/fuel tank			I		C
Battery				I	
Valve clearance of engine				A	

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

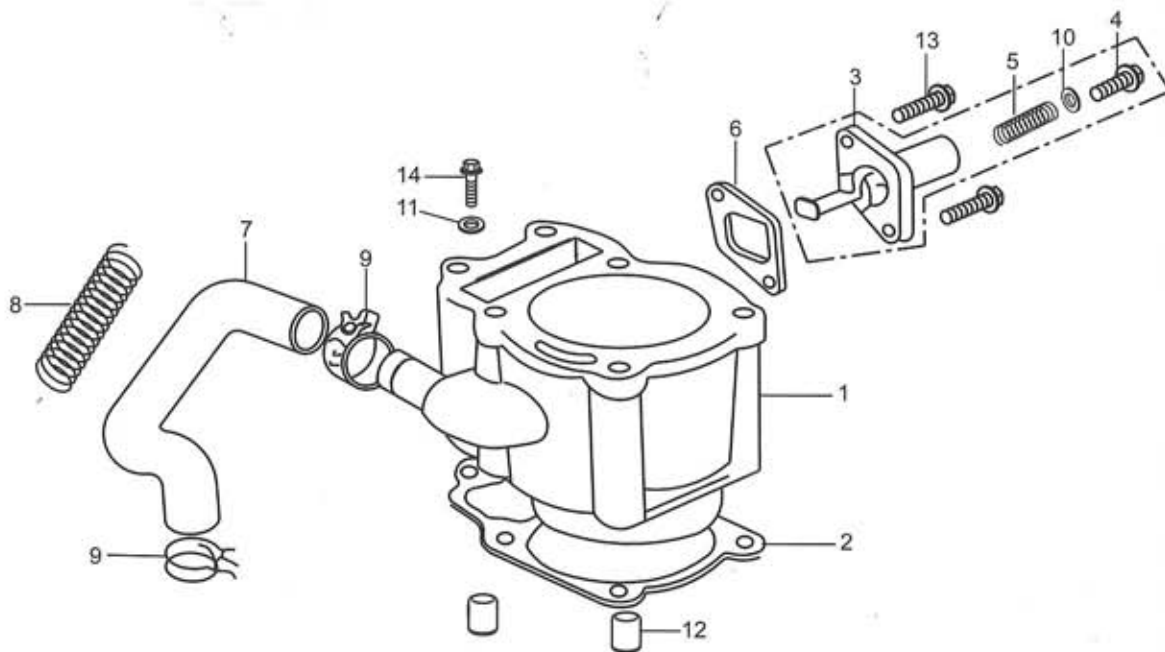
WIRING DIAGRAM



WIRING DIAGRAM



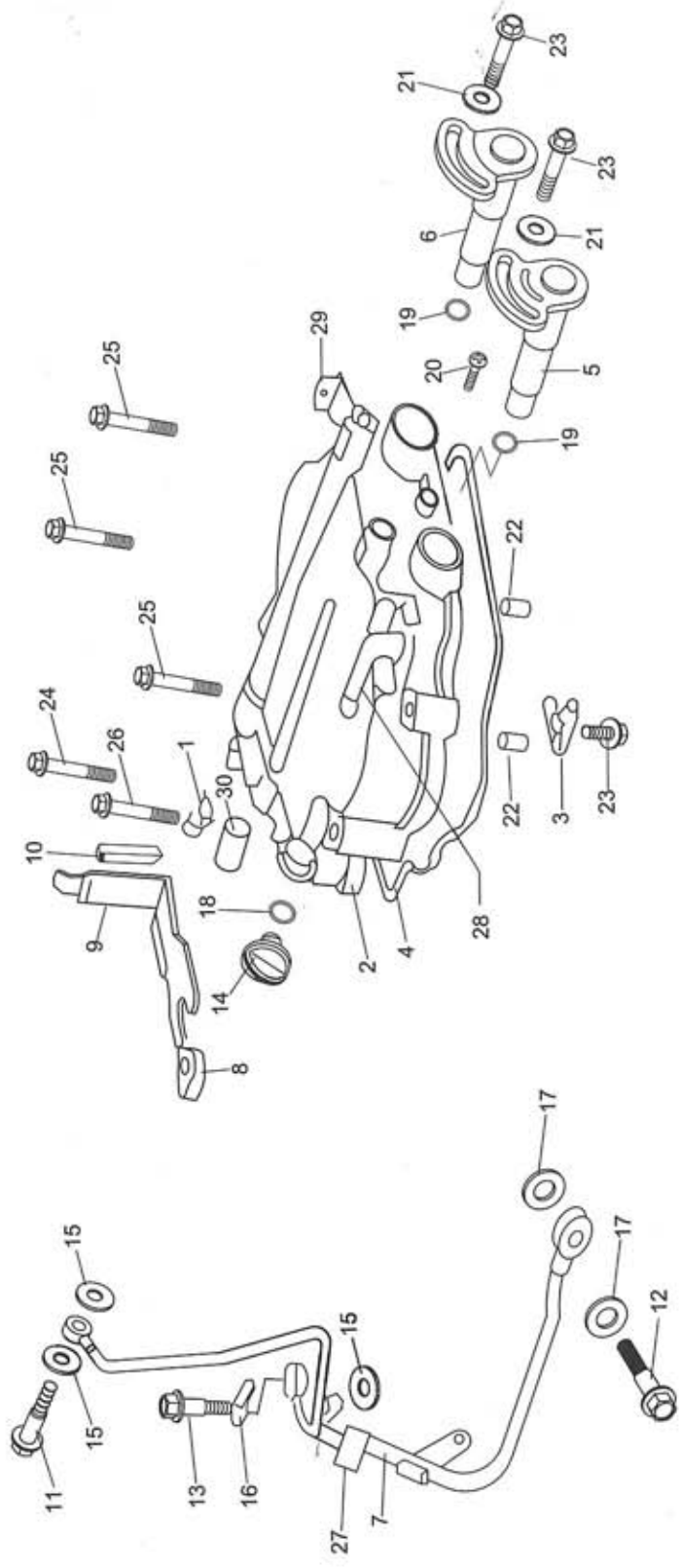
CYLINDER COMP.



CYLINDER COMP.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	172MM-023100	CYLINDER COMP	1	
2	172MM-023002	CYLINDER SEAL	1	
3	152MI-023300	TENSIONER	1	
4	152MI-023003	SPRING SEAT FLANGE BOLT	1	
5	152MI-023002	SPRING	1	
6	152MI-023004	TENSIONER SEAL	1	
7	172MM-023007	WATER INFLOW RUBBER TUBE	1	
8	172MM-023009	WATER TUBE SHEATH	1	
9	QC/T621-1999-B24	WIRE CLAMP	2	
10	152MI-023009	WASHER 8.5	1	
11	GB/T848-85-6-D	SMALL WASHER	1	
12	152MI-021005	DOWEL PIN 10 X 14	2	
13	152MI-023008	FLANGE BOLT M6 X 18	2	
14	152MI-080013	FLANGE BOLT M6 X 22	1	

FIG.2

CYLINDER COVER ASSY.(1)



CYLINDER COVER ASSY.(1)			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	172MM-021009	OIL TUBE CLIP	1
2	172MM-021001	CYLINDER COVER	1
3	172MM-021006	PLATE	1
4	152MI-021011	CYLINDER COVER SEAL	1
5	172MM-021100	INLET ROCKER SHAFT	1
6	172MM-021200	EX ROCKER SHAFT	1
7	172MM-021400	OUTER OIL TUBE	1
8	152MI-021001	RUBBER RING	1
9	172MM-021431	OIL TUBE HOLDER	1
10	152MI-021003	SHOCK ABSORPTION RUBBER BAR	1
11	152MI-021004	BOLT M8 x 25	1
12	152MI-021015	BOLT M12 x 1.25	1
13	152MI-021013	BOLT M8 x 25	1
14	152MI-021008	VISION HOLE CAP	1
15	152MI-021016	WASHER 8	3
16	152MI-021012	EAR WASHER	1
17	152MI-021014	WASHER 12	2
18	152MI-021009	VISION HOLE CAP SEAL	1
19	152MI-021010	ROCKER SHAFT SEAL	2
20	GB/T818-2000	CROSS FLANGE BOLT	1
21	GB/T848-85-6	SMALL WASHER	2
22	152MI-021005	DOWEL PIN 10 x 14	2
23	152MI-021019	FLANGE BOLT M6 x 12	3
24	152MI-021017	FLANGE BOLT M6 x 25	1
25	152MI-013010	FALNGE BOLT M6 x 50	3
26	152MI-021018	FLANGE BOLT M6 x 55	1
27	172MM-021404	SHOCK ABSORPTION BUSH	1
28	172MM-021002	AIR TUBE JOINT	1
29	172MM-021300	AIR CLEANER HOLDER	1
30	172MM-021008	STOPPLE	1

FIG.3

CYLINDER COVER ASSY.(2)

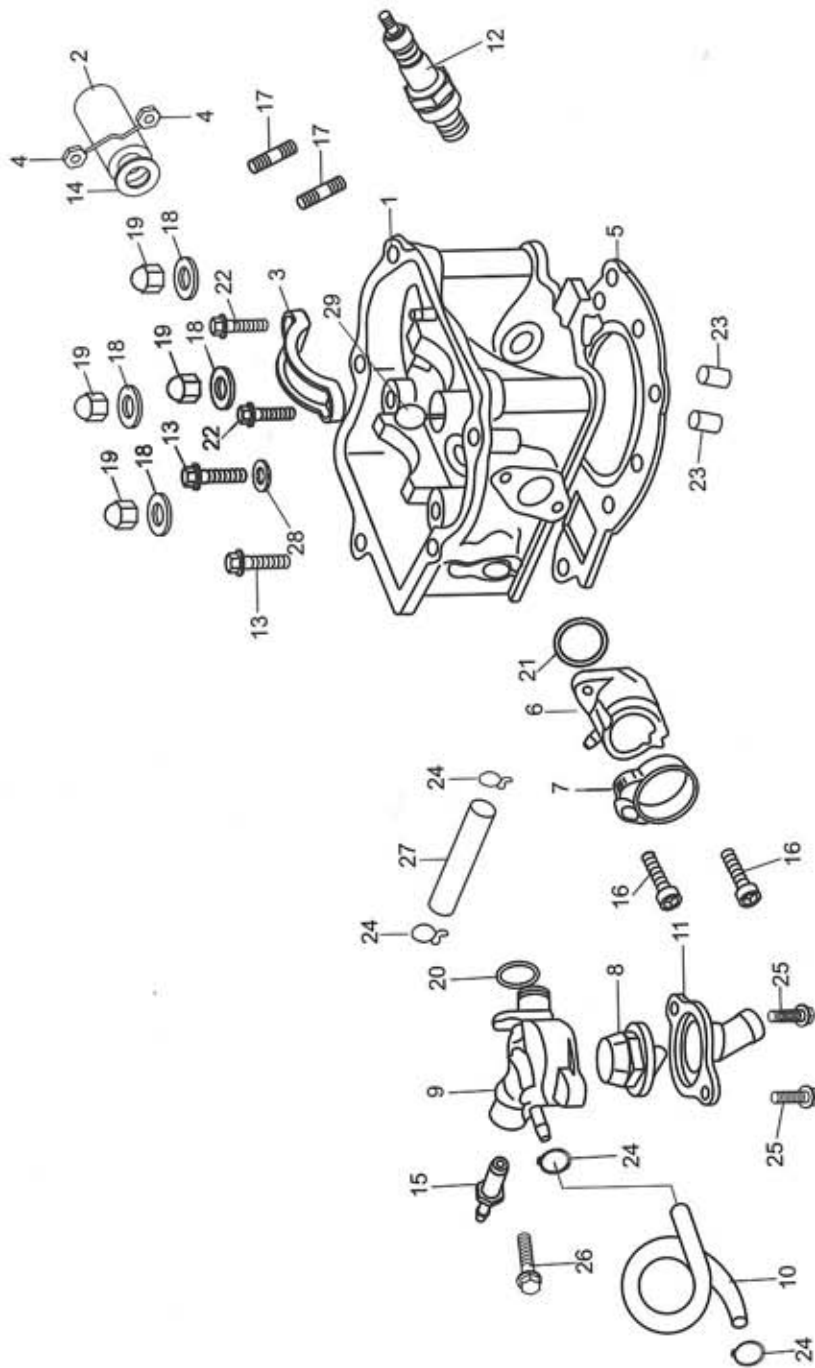
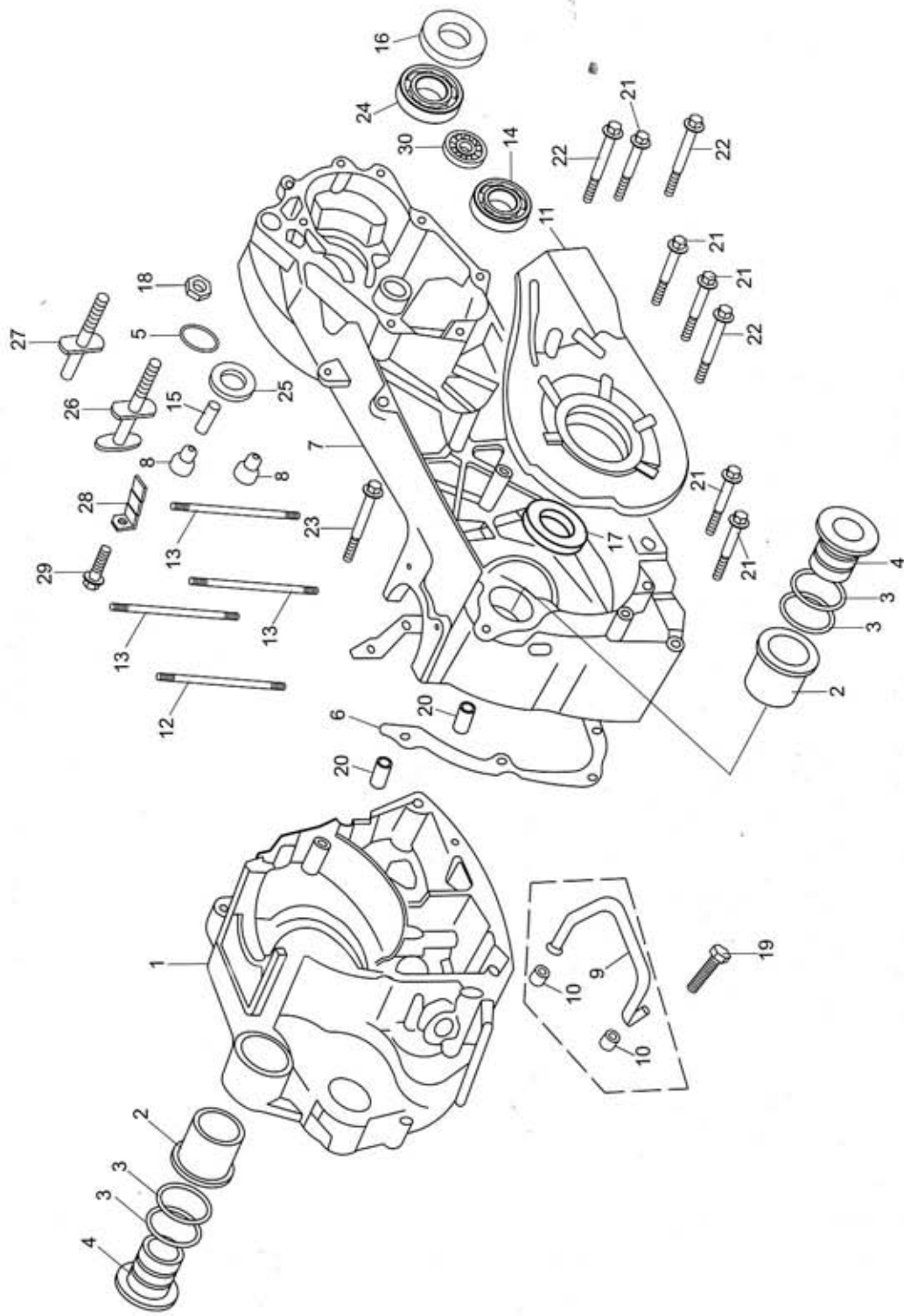


FIG.4

CRANKCASE ASSY.

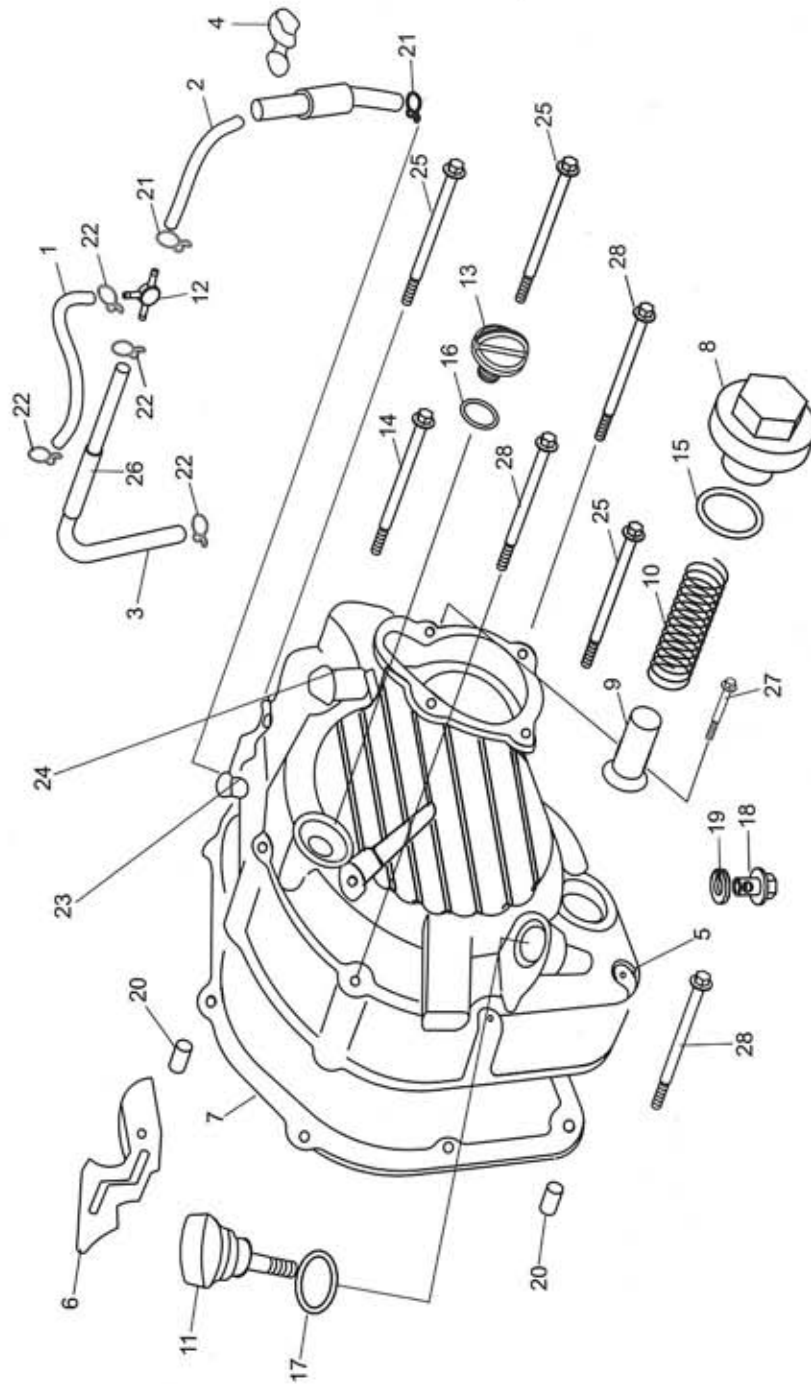


CRANKCASE ASSY.

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	172MM-011200	CRANKCASE, R.	1
2	152MI-011010	HANGER OUTER BUSH	2
3	152MI-011008	O-RING 15.8 x 2.4	4
4	152MI-011009	HANGER INNER BUSH	2
5	152MI-011013	O-RING 7.5 x 1.5	1
6	172MM-011003	CRANKCASE SEAL	1
7	172MM-011100	CRANKCASE, L.	1
8	172MM-011014	BRAKE SHOE SHOCK ABSORPTION WASHER	2
9	172MM-011400	INNER OIL TUBE	1
10	172MM-011002	INNER OIL TUBE SEAL	2
11	172MM-011300	INSULATION GASKET	1
12	172MM-011005	CYLINDER STUD BOLT B	1
13	172MM-011004	CYLINDER STUD BOLT A	3
14	NTN: TMB301	ROLL BEARING	1
15	172MM-011007	BRAKE SHOE BUSH, DOWEL PIN	1
16	172MM-011009	OIL SEAL 34 x 52 x 5	1
17	172MM-011001	OIL SEAL 28 x 40 x 8	1
18	152MI-011700	STOP NUT M8	1
19	152MI-021019	FLANGE BOLT M6 x 12	1
20	152MI-021005	DOWEL PIN 10 x 14	2
21	152MI-011017	FLANGE BOLT M6 x 60	5
22	152MI-011018	FLANGE BOLT M6 x 70	3
23	152MI-011016	FLANGE BOLT M6 x 125	1
24	NTN: 6205LLU	ROLL BEARING	1
25	172MM-011008	OIL SEAL 14 x 20 x 3.5	1
26	172MM-011010	BRAKE SHOE DOWEL PIN	1
27	172MM-011006	REAR SWING AXLE	1
28	172MM-011011	BRAKE CABLE PLATE	1
29	152MI-090005	FLANGE BOLT M6 x 16	1
30	NTN: HMK1416	NEEDLE BEARING	1

FIG.5

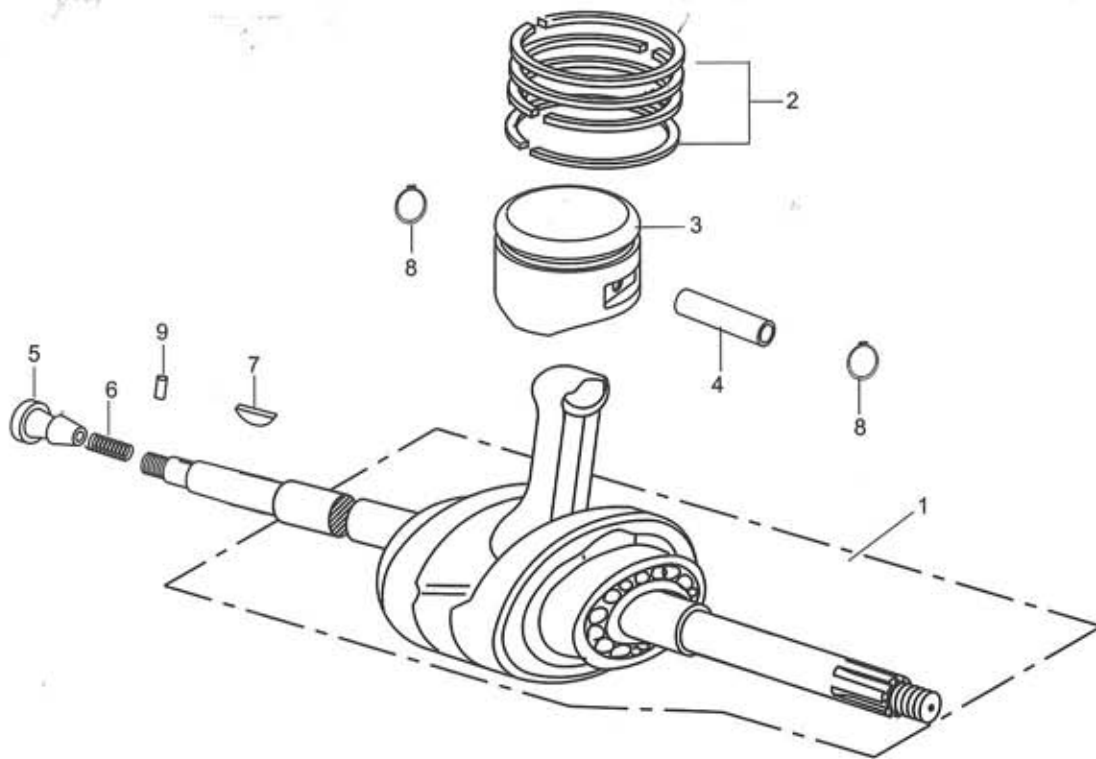
RIGHT SIDE COVER ASSY.



RIGHT SIDE COVER ASSY.

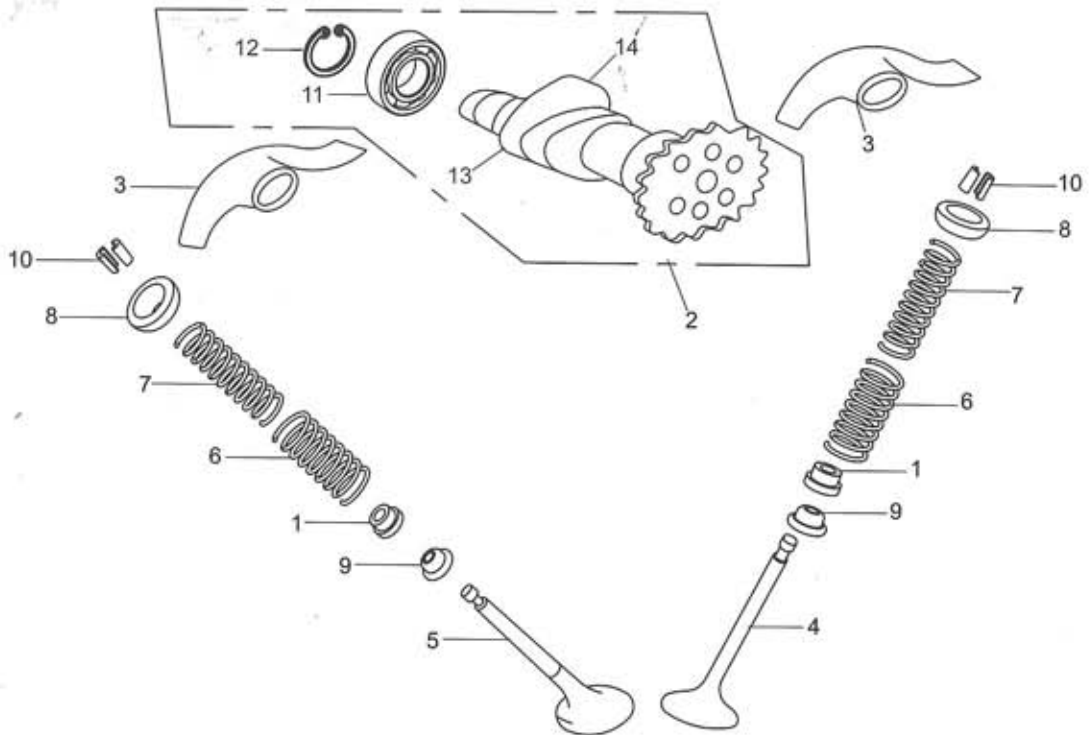
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	172MM-013013	RUBBER HOSE (LINKED WITH CYLINDER COVER)	1	
2	172MM-013100	RUBBER HOSE (LINKED WITH RIGHT SIDE COVER)	1	
3	172MM-013015	RUBBER HOSE (LINKED WITH AIR CLEANER)	1	
4	172MM-013016	RUBBER HOSE CLIP	1	
5	172MM-013002	RIGHT SIDE COVER	1	
6	172MM-013008	PLATE	1	
7	172MM-013012	RIGHT SIDE COVER SEAT	1	
8	172MM-013007	OIL FILTE SCREEN LID	1	
9	152MI-013100	FILTE CORE	1	
10	172MM-013006	SPRING	1	
11	172MM-013001	DIPSTICK	1	
12	172MM-013019	EXHAUST THREE JOINT	1	
13	152MI-021008	VISION HOLE CAP	1	
14	172MM-013031	FLANGE BOLT M6 x 80	1	
15	172MM-013028	O-RING 30 x 3.55	1	
16	152MI-021009	VISION HOLE CAP SEAL	1	
17	172MM-013030	O-RING 18 x 3.55	1	
18	172MM-013005	OIL DISCHARGE BOLT M12 x 1.5	1	
19	152MI-021014	WASHER 12	1	
20	152MI-080008	DOWEL PIN 8 x 14	2	
21	QC/T621-1999-A10	WIRE CLIP ROUND	2	
22	QC/T621-1999-A12	WIRE CLIP ROUND	4	
23	172MM-013010	VENTILATION JOINT	1	
24	172MM-013009	WATER DISCHARGE JOINT	1	
25	152MI-013009	FLANGE BOLT M6 x 40	3	
26	172MM-013026	RUBBER TUBE LINED WITH AIR CLEANER BUSH	1	
27	152MI-071007	FLANGE BOLT M6 x 28	1	
28	152MI-011018	FLANGE BOLT M6 x 70	3	

CRANKSHAFT CON'ROD & PISTON ASSY.



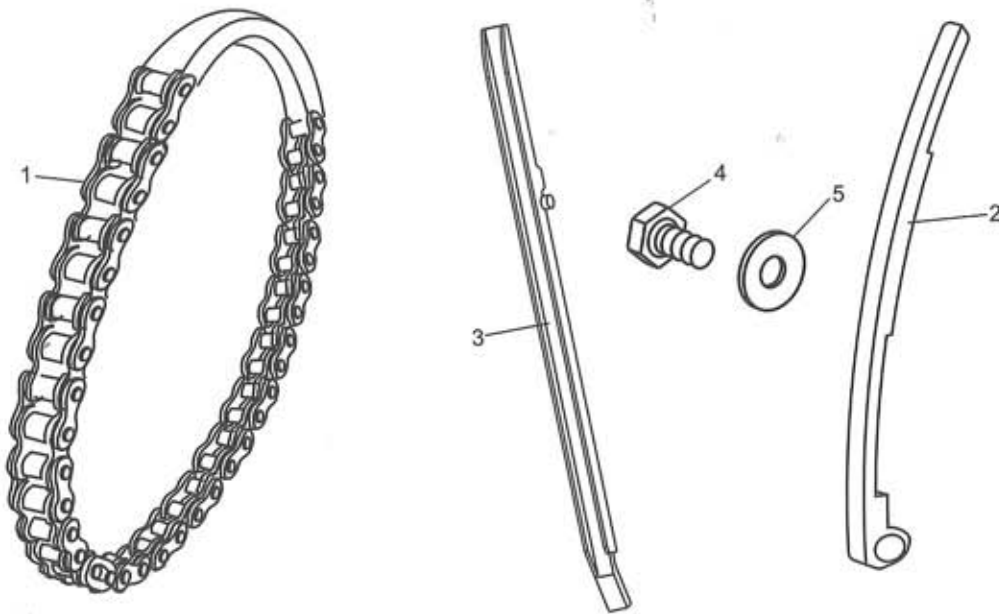
CRANKSHAFT CON'ROD & PISTON ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	172MM-041000	CON'ROD ASSY.	1	
	172MM-040008	THE FIRST PISTON RING	1	
	172MM-040009	THE SECOND PISTON RING	1	
2	172MM-042000	OIL RING ASSY.	1	
3	172MM-040005	PISTON	1	
4	172MM-040007	PISTON PIN	1	
5	152MI-040011	OIL TUBE JOINT	1	
6	152MI-040010	OIL TUBE JOINT SPRING	1	
7	152MI-040006	WOODRUFF KEY	1	
8	172MM-040006	PISTON PIN CIRCLIP	2	
9	GB/T119-2000	COLUMN PIN 2 x 14	1	

VALVE TRANNY ASSY.(1)



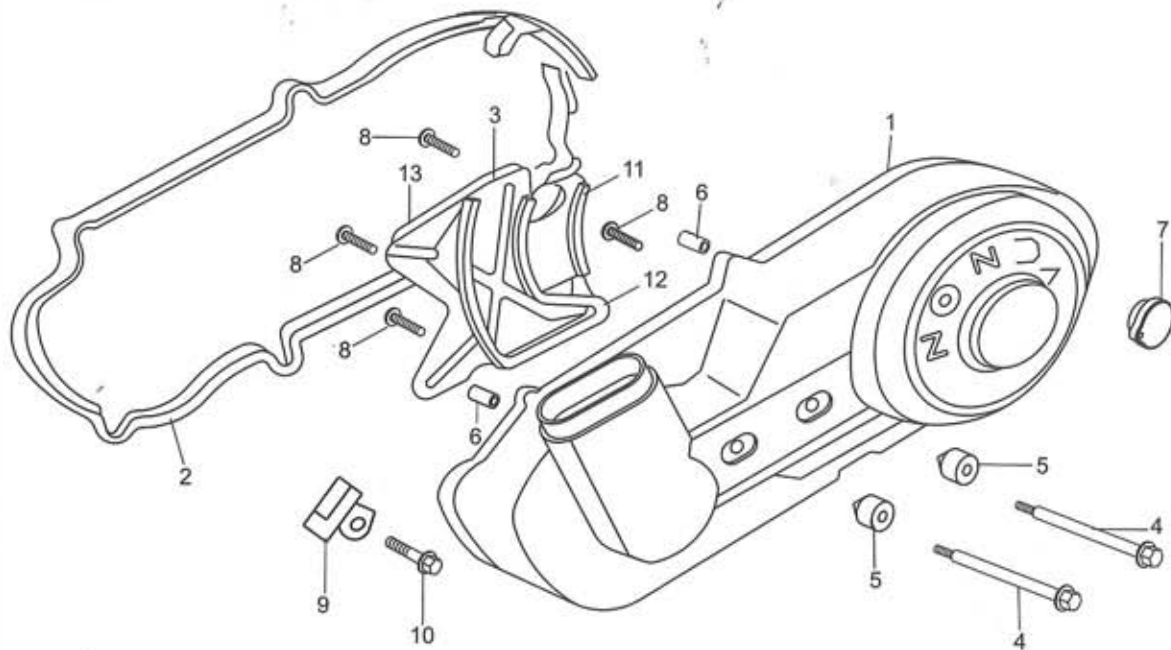
VALVE TRANNY ASSY.(1)				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	152MI-022500	VALVE TAPPET SEAL	2	
2	172MM-022300	VALVE CAM	1	
3	152MI-021007	ROCKER	2	
4	172MM-022001	INLET VALVE	1	
5	172MM-022005	EX. VALVE	1	
6	172MM-022002	OUTER VALVE SPRING	2	
7	172MM-022003	INNER VALVE SPRING	2	
8	152MI-022005	SPRING VALVE DISC	2	
9	152MI-022001	SPRING VALVE SEAT	2	
10	152MI-022006	VALVE CLIP LOCK	4	
11	NTN: 16002	ROLL BEARING	2	
12	GB894 1-86-15	BEARING CIRCLIP	1	
13	172MM-022310	CHAIN WHEEL	1	
14	172MM-022301	CAMSHAFT	1	

VALVE TRANNY ASSY.(2)



VALVE TRANNY ASSY.(2)				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	172MM-022200	TIME CHAIN	1	
2	172MM-023200	TENSIONER	1	
3	172MM-023001	CHAIN GUIDE PLATE	1	
4	GB96-85-6-D. Zn	BIG WASHER	1	
5	GB/T5781-2000	HEX FLANGE BOLT M6 x 12	1	

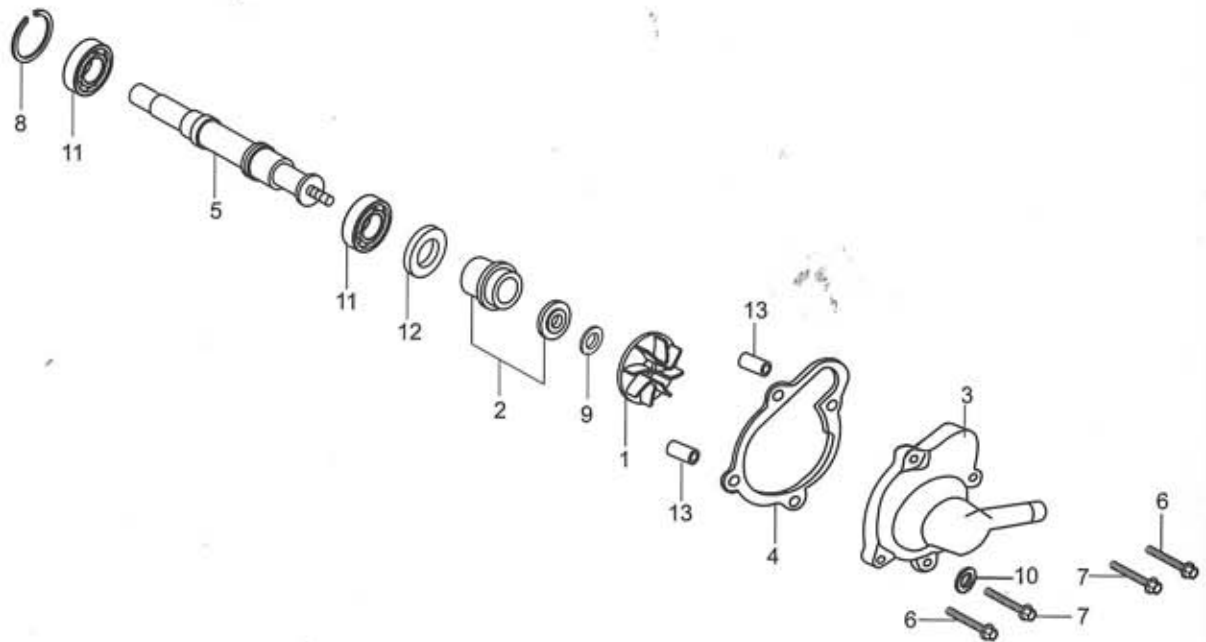
LEFT SIDE COVER ASSY.



LEFT SIDE COVER ASSY.

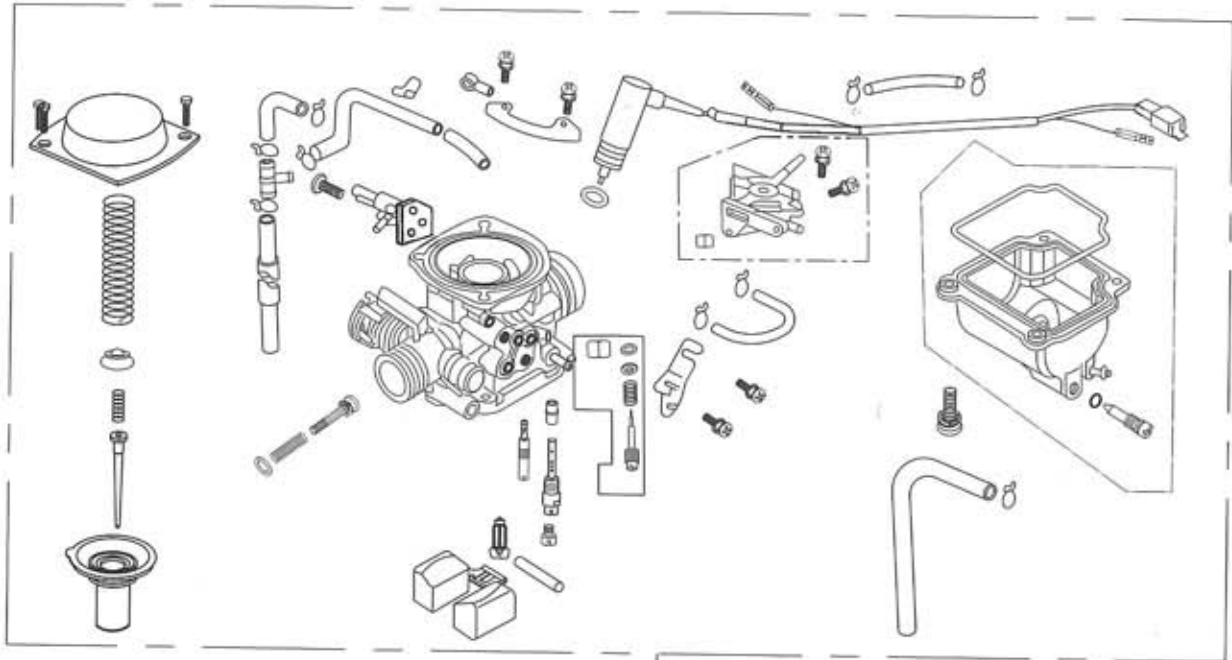
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	172MM-012001	LEFT SIDE COVER	1
2	172MM-012007	LEFT SIDE COVER SEAL	1
3	172MM-012004	PLATE	1
4	172MM-012003	FLANGE BOLT	2
5	152MI-012200	SHOCK ABSORPTION BLOCK ASSY.	2
6	152MI-011007	DOWEL PIN $\Phi 10 \times 16$	2
7	172MM-012008	OIL DISCHARGE BOLT VISION HOLE CAP	1
8	GBT818-2000-M5X8	CROSS FLANGE BOLT	4
9	172MM-012100	WIRE CLAMP	1
10	152MI-090005	FLANGE BOLT M6 x 16	1
11	172MM-012002	DUST-PROOF BAR 1	1
12	172MM-012006	DUST-PROOF BAR 2	1
13	172MM-012005	WOOL MAT	1

WATER PUMP ASSY.



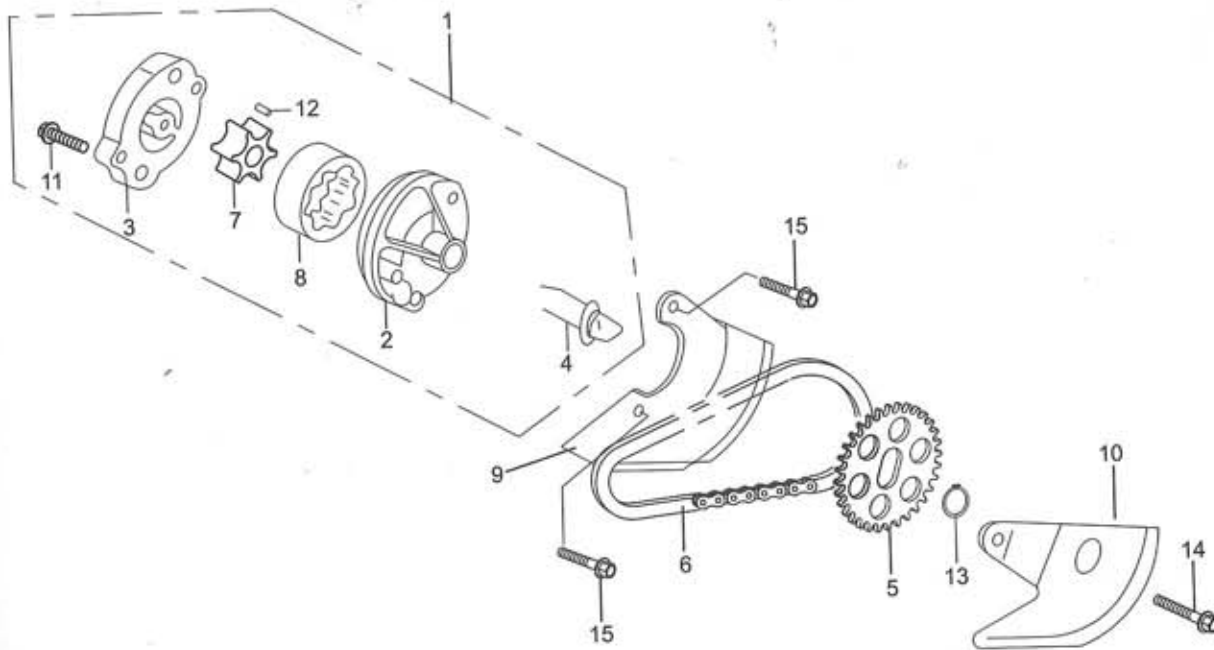
WATER PUMP ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	172MM-080004	WATER PUMP IMPELLER	1	
2	152MI-081000	WATER SEAL	1	
3	172MM-080003	WATER PUMP HOUSING	1	
4	172MM-080002	WATER PUMP HOUSING SEAL	1	
5	172MM-080001	WATER PUMP SHAFT	1	
6	152MI-013009	FLANGE BOLT M6 x 40	2	
7	152MI-02017	FLANGE BOLT M6 x 25	2	
8	GBT893 1-86-19	CIRCLIP	1	
9	152MI-080007	WASHER 7.5 x 13 x 1.2	1	
10	152MI-080011	WASHER 6 x 12 x 1	1	
11	NTN:6800	ROLL BEARING	2	
12	172MM-080005	OIL SEAL 10 x 20 x 5	1	
13	152MI-080008	DOWEL PIN 8 x 14	2	

CARBURETOR COMP.



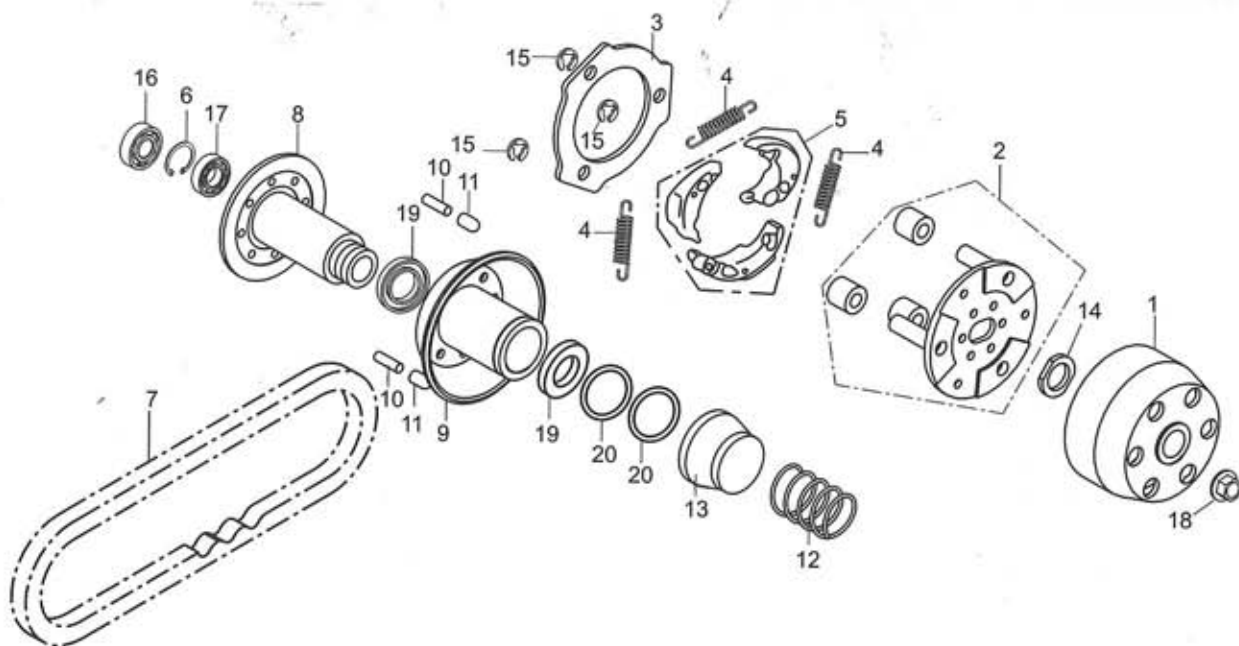
CARBURETOR COMP.			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	172MM-100000	CARBURETOR COMP.	1

OIL PUMP ASSY.



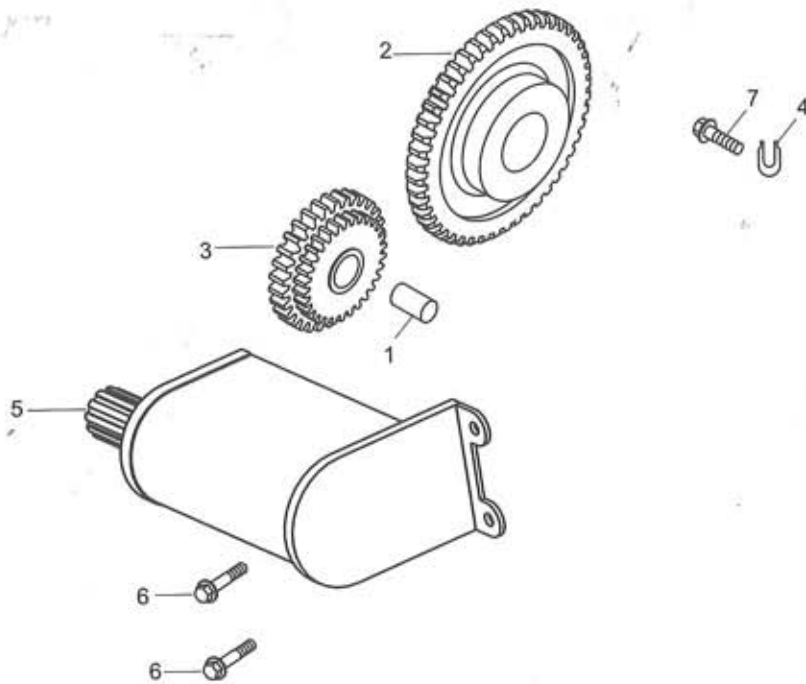
OIL PUMP ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	152MI-071000	OIL PUMP ASSY.	1	
2	152MI-071002	OIL PUMP	1	
3	152MI-071003	OIL PUMP COVER PLATE	1	
4	152MI-071001	OIL PUMP SHAFT	1	
5	152MI-070001	OIL PUMP SPROCKET	1	
6	152MI-073000	OIL PUMP CHAIN	1	
7	152MI-071004	INNER OIL PUMP ROTOR	1	
8	152MI-071005	OUTER OIL PUMP ROTOR	1	
9	152MI-070002	OIL PUMP DIVISION PLATE A	1	
10	152MI-072000	OIL PUMP DIVISION PLATE B	1	
11	GB878-85	FLANGE BOLT M3 x 12	1	
12	152MI-0710006	DOWEL PIN 4 x 6.5	1	
13	GB897 1-86-10	CIRCLIP	1	
14	152MI-021019	FLANGE BOLT M6 x 12	1	
15	152MI-071007	FLANGE BOLT M6 x 28	2	

CLUTCH ASSY.



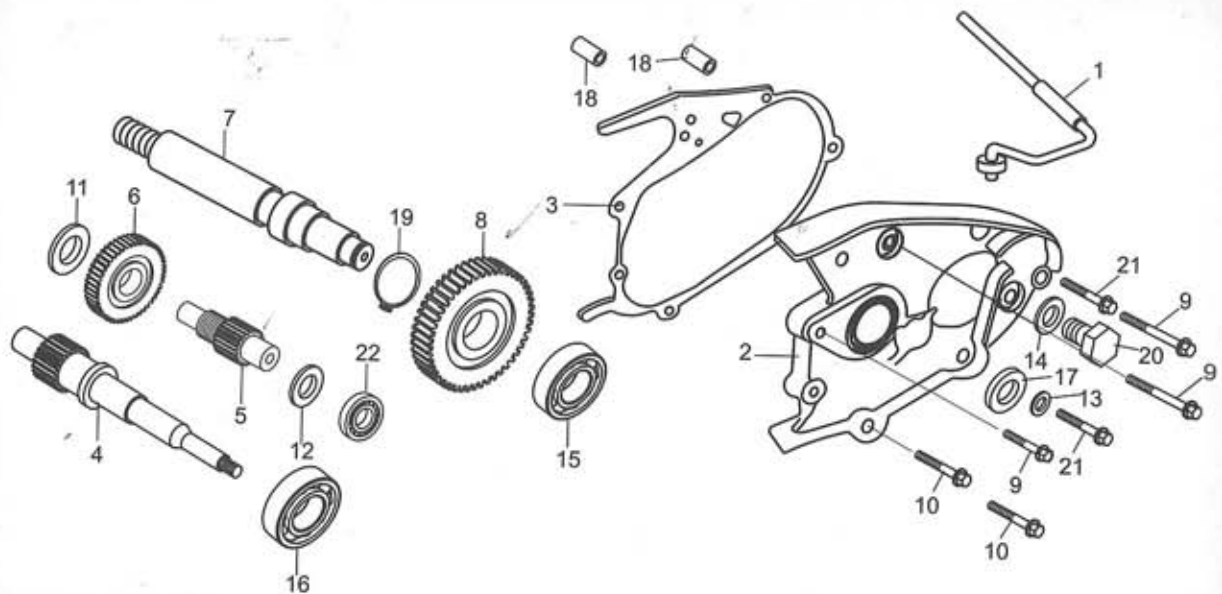
CLUTCH ASSY.			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	172MM-052500	OUTER WHEEL CLUTCH	1
2	172MM-052400	DRIVEN DISC	1
3	172MM-052003	SIDE DISC	1
4	172MM-052006	CLUTCH RETURN SPRING	3
5	172MM-052600	CENTRIFUGAL BLOCK	3
6	GB/T8931-86-28	CIRCLIP	1
7	172MM-052700	DRIVE BELT	1
8	172MM-052300	DRIVEN WHEEL	1
9	172MM-052100	MOVABLE DRIVEN WHEEL	1
10	172MM-052002	GUIDE COLUMN PIN	4
11	172MM-052001	GUIDE ROLLER	4
12	172MM-052004	CLUTCH SPRING	1
13	172MM-052200	SEAL BUSH	1
14	172MM-052005	FLAT NUT M30 x 1	1
15	GB/T896-86-6	CIRCLIP	3
16	GB278-89-1060902	ROLL BEARING	1
17	172MM-052310	NEEDLE BEARING 22 x 29 x 18	1
18	172MM-052008	NUT M12 x 1.25	1
19	172MM-052104	DRIVEN WHEEL OIL SEAL	2
20	GB3452.1-82	O-RING 46.2 x 1.8	2

ELECTRIC STARTER ASSY.



ELECTRIC STARTER ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	172MM-090001	DOUBLE-GEAR AXLE	1	
2	172MM-092000	DRIVEN GEAR	1	
3	172MM-091000	DOUBLE-GEAR	1	
4	172MM-090007	FIX PLATE	1	
5	172MM-093000	START MOTOR	1	
6	152MI-080013	FLANGE BOLT M6*22	2	
7	172MM-090008	FLANGE BOLT M6*14	1	

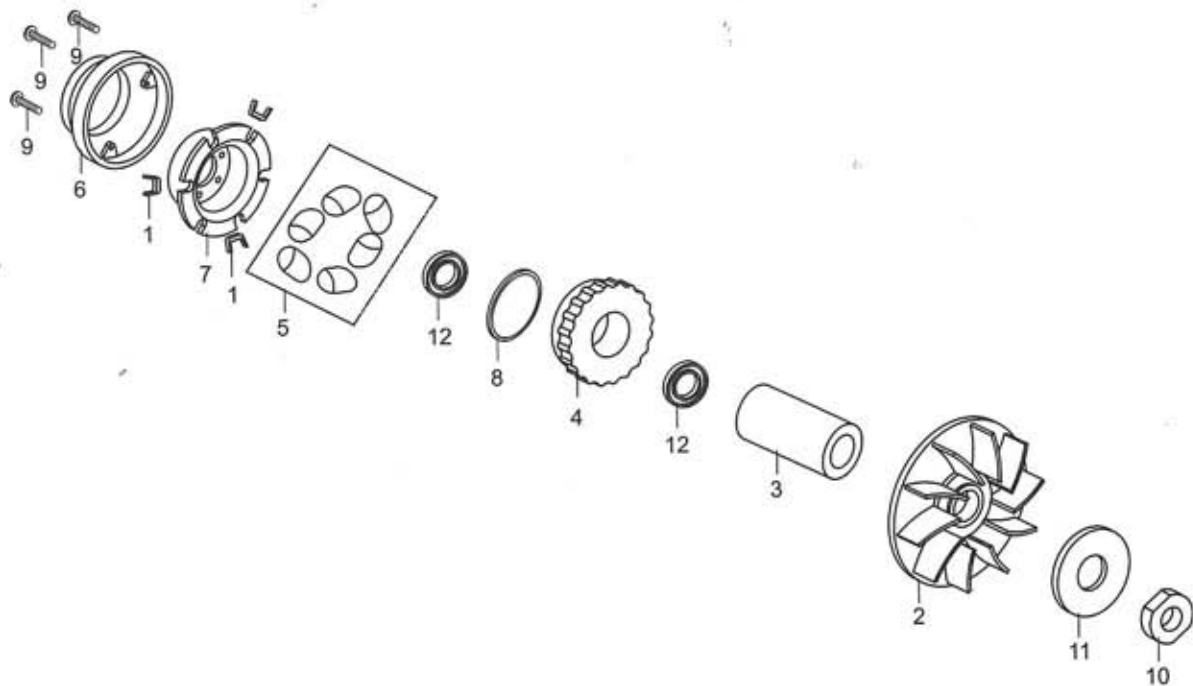
REDUCTION BOX ASSY.



REDUCTION BOX ASSY.

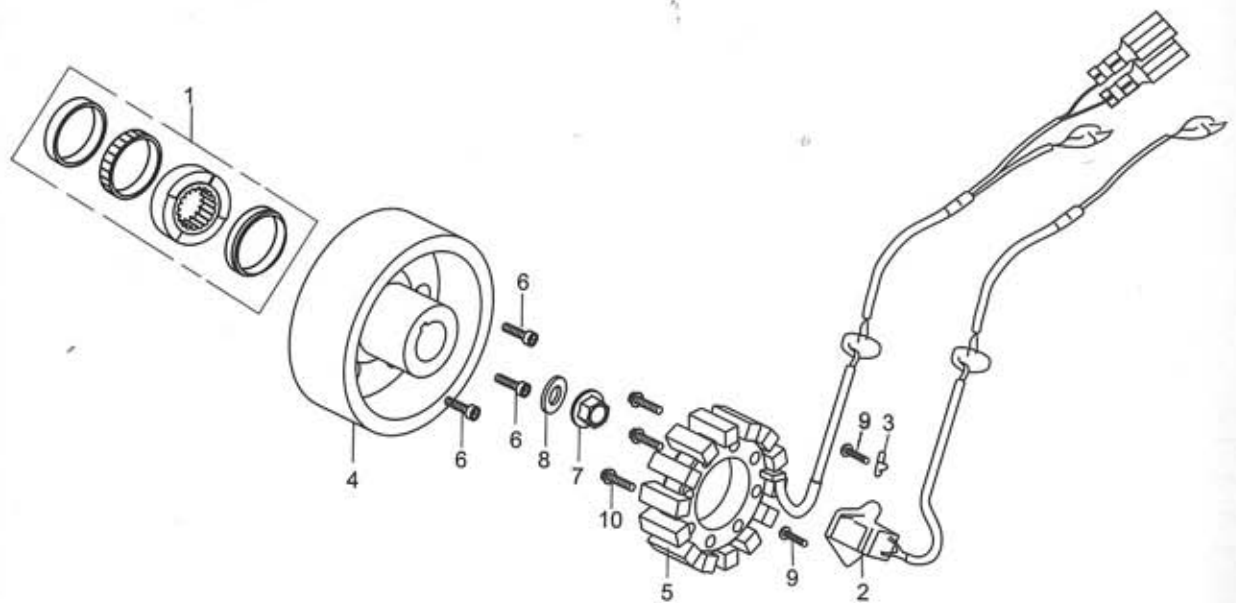
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	172MM-062000	VENTILATION PIPE	1
2	172MM-060009	REDUCTION BOX CAP	1
3	172MM-061000	REDUCTION CASE CAP SEAL	1
4	172MM-060001	CHIEF SHAFT	1
5	172MM-060003	SECONDARY SHAFT	1
6	172MM-060006	SECONDARY GEAR SHAFT	1
7	172MM-060007	OUTPUT SHAFT	1
8	172MM-060008	OUTPUT GEAR	1
9	172MM-060010	FLANGE BOLT M8 x 38	3
10	172MM-060011	FLANGE BOLT M8 x 28	2
11	152MI-060003	STOP GASKET 14	1
12	172MM-060004	STOP GASKET 14	1
13	152MI-060009	WASHER 6	1
14	152MI-060010	WASHER 10	1
15	NTN: 6304	ROLL BEARING	1
* 16	172MM-060002	ROLL BEARING 22 x 50 x 14	1
17	GB9877.1-88	OIL SEAL 22 x 35 x 5	1
18	152MI-021005	DOWEL PIN 10 x 14	2
19	GB/T894.1-86-24	CIRCLIP	1
20	152MI-060011	FLANGE BOLT M10 x 1.25 OIL DISCHARGE	1
21	152MI-080012	FLANGE BOLT M6 x 32	2
* 22	NTN: HMK1416	NEEDLE BEARING	1

GEARBOX ASSY.



GEARBOX ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	172MM-051004	SLIDE BLOCK	3	
2	172MM-051005	DRIVE WHEEL	1	
3	172MM-051003	DRIVE WHEEL BUSH	1	
4	172MM-051100	MOVABLE DRIVE WHEEL	1	
5	172MM-051200	CENTRIFUGAL ROLLER	6	
6	172MM-051001	DRIVE WHEEL CAP	1	
7	172MM-051002	SLOPE PLATE	1	
8	GB3452 1-82	O-RING	1	
9	GB9074 14-88	FLANGE BOLT	3	
10	172MM-051007	NUT M14 x 1.5	1	
11	172MM-051006	WASHER 14.5 x 30 x 2	1	
12	152MI-051103	OIL SEAL 27 x 34 x 3.5	2	

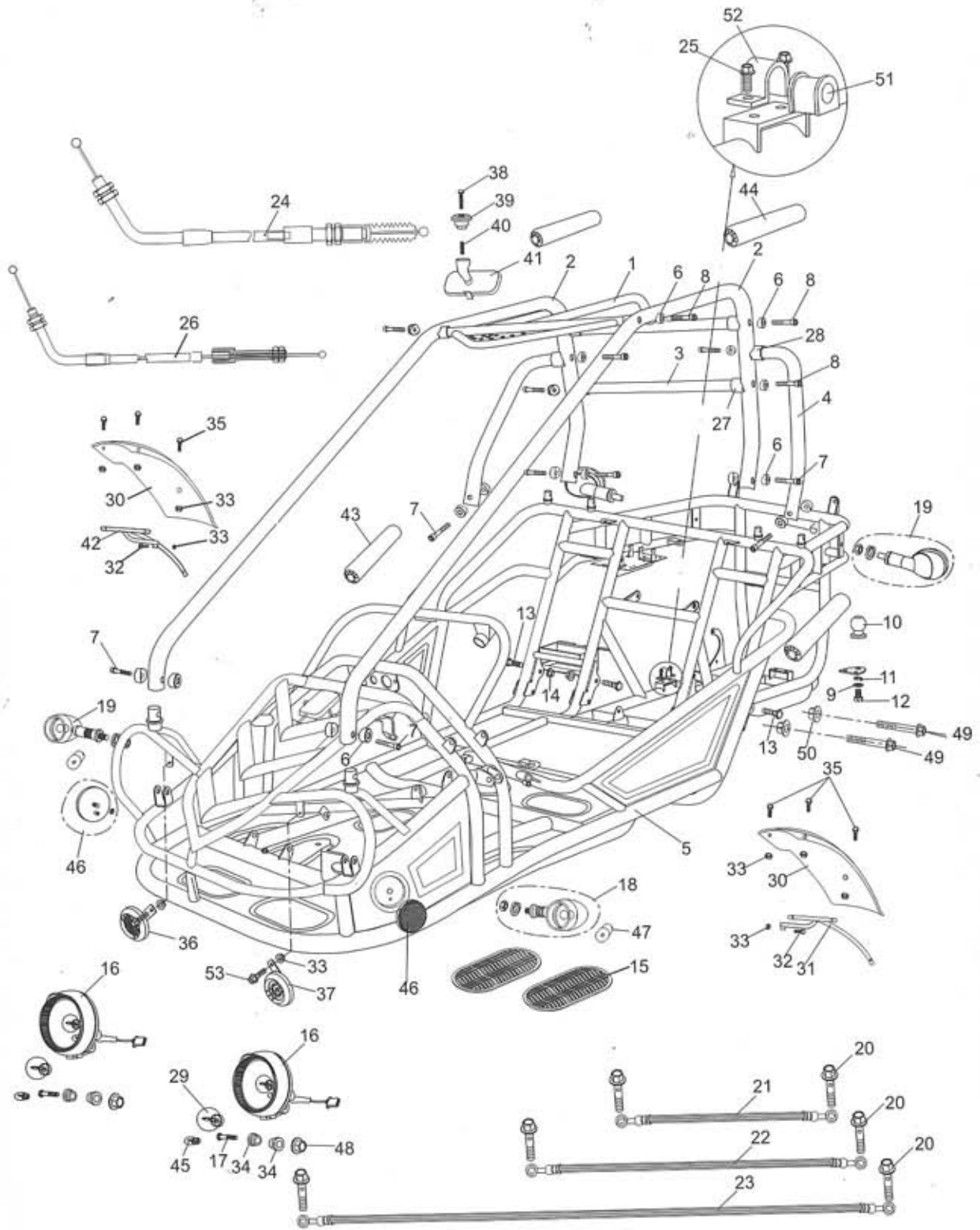
MAGNETO COMP.



MAGNETO COMP.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	172MM-094000	CLUTCH	1	
2	172MM-033000	IGNITION COIL	1	
3	172MM-013008	WIRE PLATE	1	
4	172MM-031000	FLYWHEEL	1	
5	172MM-032000	STATOR	1	
6	GB/T70 1-2000	INNER HEX FLANGE BOLT M8 X 18	3	
7	172MM-040001	NUT M16 x 1	1	
8	172MM-040002	WASHER 16.3 x 30 x 2	1	
9	152MI-030002	FLANGE BOLT M5 x 16	2	
10	152MI-060012	FLANGE BOLT M6 x 30	3	

FIG.18

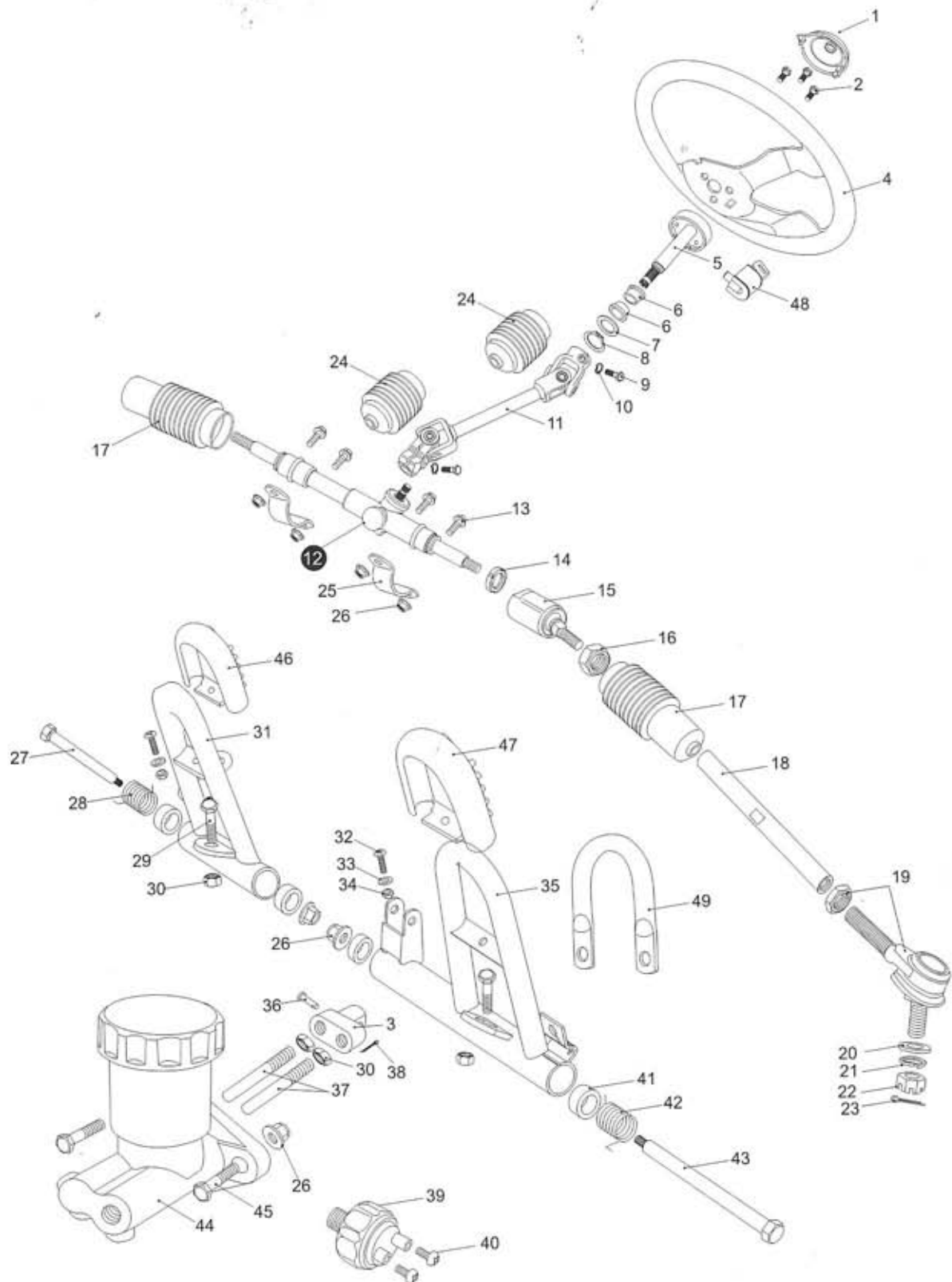
FRAME GROUP



FRAME GROUP				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	6.000.061	C.B.C. CROSS BAR, FR (B.R.S.)	1	
2	8.070.034	C.B.C. BAR CAGE (B.R.S.)	2	
3	8.080.033	C.B.C. CROSS BAR, RR (B.R.S.)	1	
4	8.070.035	C.B.C. BAR, L./R. SIDE (B.R.S.)	2	
5	2.000.045	FRAME COMP. (B.R.S.)	1	
6	8.010.047	R-WASHER	18	
7	9.908.050N	SOCKET BOLT M8 x 1.25 x 50	6	
8	9.908.055N	SOCKET BOLT M8 x 1.25 x 55 "	10	
9	9.300.016	WASHER Φ 16	1	
10	2.200.001	TOW BALL	1	
11	9.400.016	LOCK WASHER Φ 16	1	
12	9.101.625	BOLT M16 x 25	1	
13	9.112.025	BOLT-WASHER M12 x 1.25 x 25	4	
14	9.220.012	LOCKING FLANGE NUT M12	4	
15	7.020.012	RUBER FOOT PLATE	2	
16	6.000.104	HEADLIGHT UNIT	2	
17	9.108.050	BOLT-WASHER M8 x 1.25 x 50	2	
18	6.000.155	WINKER LIGHT ASSY. L. FR./R.RR.	2	
19	6.000.156	WINKER LIGHT ASSY. R. FR./L.RR.	2	
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	6.000.230	BRAKE HOSE ASSY. RR. 80"	1	
24	6.000.232	THROTTLE CABLE COMP.	1	
25	9.106.012	BOLT M6 x 12	2	
26	6.000.231	PARKING BRAKE CABLE COMP.	1	
27	7.010.017	TUBE SEAT Φ 25	6	
28	7.010.016	TUBE SEAT Φ 32	2	
29	9.090.003	HEADLIGHT BULB 35W/35W/ 12V	2	
30	7.010.034	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 M6	10	
34	7.020.049	HEADLIGHT RUBBER MOUNT	4	
35	9.106.014	BOLT-WASHER M6 x 14	6	
36	6.000.135	HORN, H.	1	
37	6.000.136	HORN, L.	1	
38	9.100.525	BOLT M5 x 25	1	
39	8.010.086	REAR MIRROR MOUNT	1	
40	8.040.005	REAR VIEW MIRROR SPRING	1	
41	6.000.084	REAR MIRROR ASSY.	1	
42	6.000.102	FRONT FENDER BRACKET, R.	1	
43	6.000.083	FOAM PADDING-1	2	
44	6.000.116	FOAM PADDING-2	2	
45	9.000.004	POSITION LIGHT BULB 3W 12V	2	
46	6.000.114	FRONT REFLECTOR	2	
47	9.090.006	WINKER BULB 10W 12V	4	
48	9.220.008	LOCKING FLANGE NUT M8	2	
49	9.110.110	BOLT M10 x 1.25 x 110	2	
50	9.220.010	LOCKING NUT M10 x 1.25	2	
51	2.100.001	SWAY BAR BRACE BUSHING	1	
52	2.100.002	SWAY BAR BRACE	1	
53	9.106.012	BOLT M6 x 12	2	

FIG.19

STEERING SHAFT ASSY.

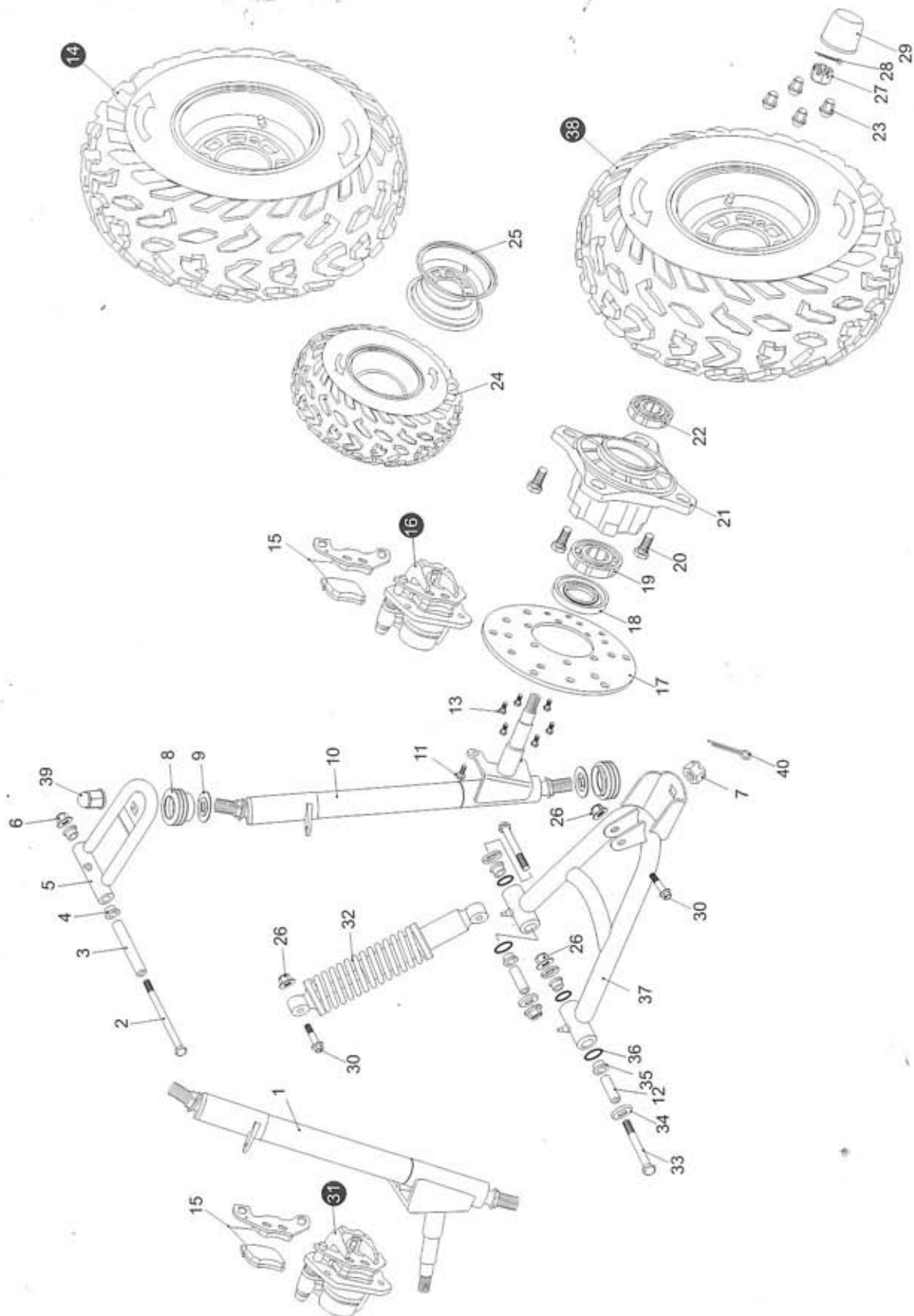


STEERING SHAFT ASSY.

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	7.010.041	STEERING BOLT COVER	1
2	9.100.612	BOLT STRAP M6 x 12	3
3	8.030.024	SPINDLE BRACKET	1
4	7.020.038	STEERING WHEEL	1
5	6.000.122	STEERING SHAFT	1
6	7.010.026	STEERING SHAFT BUSH	2
7	9.700.020	SPECIAL WASHER Φ 20	1
8	9.700.120	CIRCLIP Φ 20	1
9	9.100.825	BOLT M8 x 25	2
10	9.400.008	LOCK WASHER Φ 8	2
11	6.000.093	STEERING KNUCKLE	1
12	84.000.014	STEERING GEAR	1
13	9.108.025	BOLT-WASHER M8 x 1.25 x 25	4
14	9.900.016	ROUND NUT M16 x 1.5	2
15	4.000.008	STEERING BALL JOINT	2
16	9.200.010	NUT M10	2
17	7.020.002	BALL JOINT DUST COVER	2
18	8.010.157	TIE ROD	2
19	6.000.062	ROD END	2
20	9.300.010	FLAT WASHER Φ 10	2
21	9.400.010	LOCK WASHER Φ 10	2
22	9.800.010	CASTLE NUT M10	2
23	9.500.215	COTTER PIN Φ 2 x 15	2
24	7.020.066	STEERING KNUCKLE DUST COVER	2
25	8.020.014	STEERING GEAR BRACKET	2
26	9.220.008	LOCKING FLANGE NUT M8	8
27	9.708.145	THROTTLE PEDAL BOLT M8 x 1.25 x 145	1
28	8.040.001	THROTTLE PEDAL RETURN SPRING, L.	1
29	9.108.040	BOLT-WASHER M8 x 1.25 x 40	2
30	9.200.008	NUT M8	2
31	4.000.016	THROTTLE PEDAL COMP.	1
32	9.600.515	PAN SCREW M5 x 15	2
33	9.300.005	FLAT WASHER Φ 6	2
34	9.210.005	NYLON LOCK NUT M5	2
35	84.000.015	BRAKE PEDAL COMP.	1
36	9.700.624	PIN Φ 6 x 24	1
37	8.010.081	SPINDLE PIN	2
38	9.500.212	COTTER PIN Φ 2 x 12	1
39	6.000.063	BRAKE LAMP SWITCH ASSY.	1
40	9.600.306	PAN SCREW M3 x 6	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 M8 x 1.25 x 222	1
44	6.000.076	MASTER CYLINDER	1
45	9.108.035	BOLT-WASHER M8 x 1.25 x 35	2
46	7.020.036	THROTTLE PEDAL PAD	1
47	7.020.037	BRAKE PEDAL PAD	1
48	6.000.134	STEERING WHEEL LOCK	1
49	8.070.044	MASTER CYLINDER BRACKET	1

FIG.20

FRONT SUSPENSION ARM ASSY.



FRONT SUSPENSION ARM ASSY.

REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	2.000.028	STRUT AND SPINDLE SUPPORT, R.	1	
2	9.108.105	BOLT-WASHER M8 x 1.25 x 105	2	
3	8.010.015	UPPER SUSPENSION ARM COLLAR	2	
4	7.010.003	UPPER SUSPENSION ARM BUSH	4	
5	4.000.004	UPPER SUSPENSION ARM	2	
6	9.220.008	LOCKING FLANGE NUT M8	2	
7	9.800.012	CASTLE NUT M12	2	
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	9.908.104	BOLT STRAP M8 x 14	4	
12	8.010.014	LOWER SUSPENSION ARM COLLAR	4	
13	9.906.012	BOLT STRAP M6 x 12	12	
14	6.000.141	FR. WHEEL ASSY., R. 20 x 7-8	1	
15	7.020.016	FR. BRAKE CALIPER PAD SET	2	
16	6.000.028	FRONT BRAKE CALIPER, L.	1	
17	8.010.054	BRAKE DISC.	2	
18	9.040.002	DUST SEAL 47 x 25-7	2	
19	9.030.002-Z	BEARING 6204-Z	2	
20	9.710.031	TIRE BOLT M10 x 1.25 x 31	8	
21	8.010.085	WHEEL HUB	2	
22	9.030.010-Z	BEARING 6202-Z	2	
23	8.010.118	CAP LUG NUT M10	8	
24	7.020.050	TIRE, FR. 20 x 7-8	2	
25	6.000.142	RIM, FR.	2	
26	9.220.010	LOCKING FLANGE NUT M10	8	
27	9.800.014	CASTLE NUT M14	2	
28	9.500.220	COTTER PIN $\Phi 2 \times 20$	2	
29	7.020.039	HUB COVER	2	
30	9.110.040	BOLT-WASHER M10 x 1.25 x 40	4	
31	6.000.095	FRONT BRAKE CALIPER, R.	1	
32	6.000.325	CUSHION ASSY., FR. L=325	2	
33	9.110.080	BOLT-WASHER M10 x 1.25 x 80	4	
34	8.020.034	LOWER SUSPENSION ARM DUST CAP	8	
35	7.010.002	LOWER SUSPENSION ARM BUSH	8	
36	9.040.001	O-RING $\Phi 21.2 \times 2.65$	8	
37	4.000.023	LOWER SUSPENSION ARM ASSY.	2	
38	6.000.140	FR. WHEEL ASSY., L. 20 x 7-8	1	
39	8.010.140	ACORN NUT M12	2	
40	9.500.200	COTTER PIN $\Phi 3.2 \times 26$	2	

FIG.21

FULL SHIFTING ASSY.

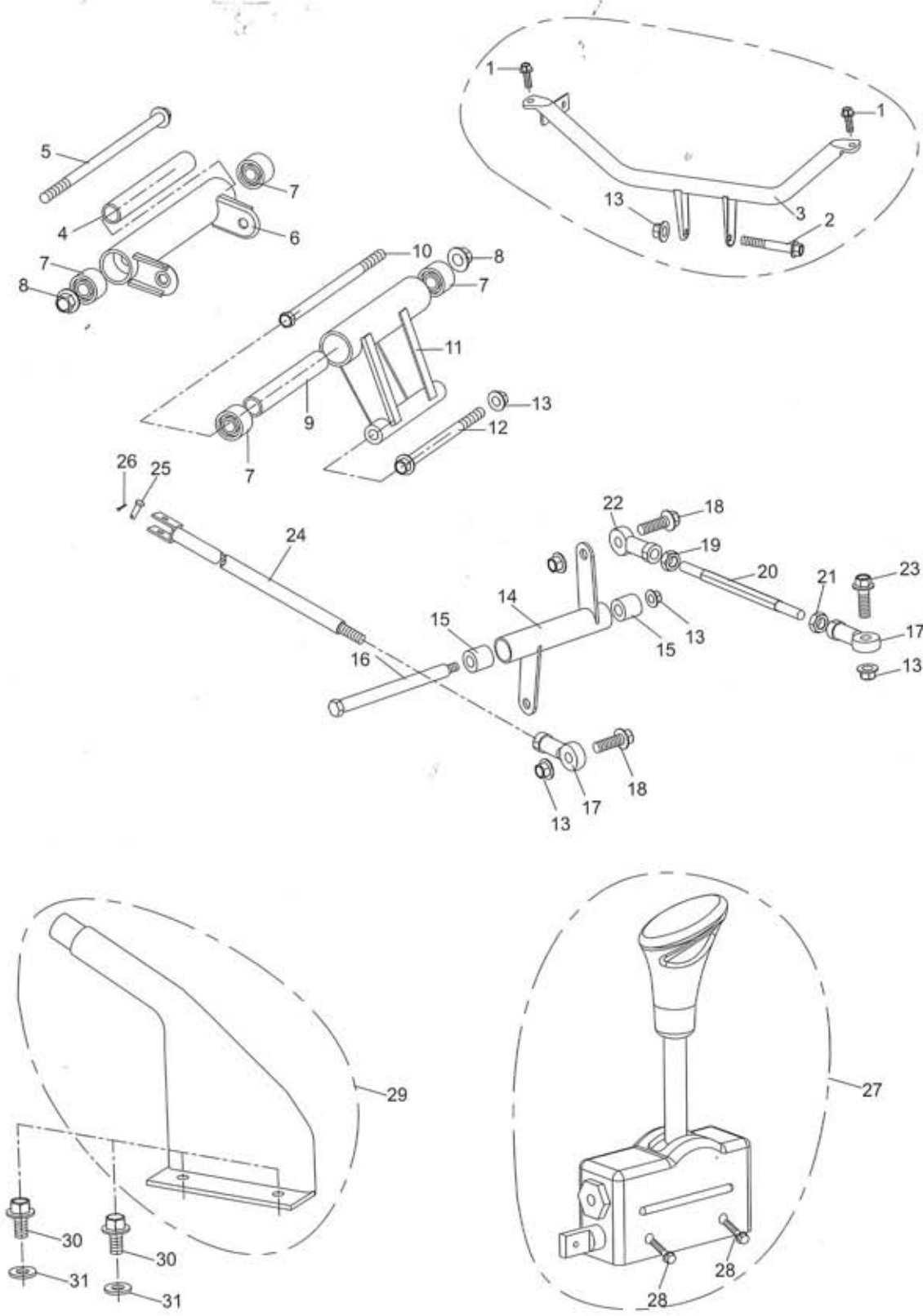


FIG.22

REAR CARGO RACK/ SEAT/ BELT

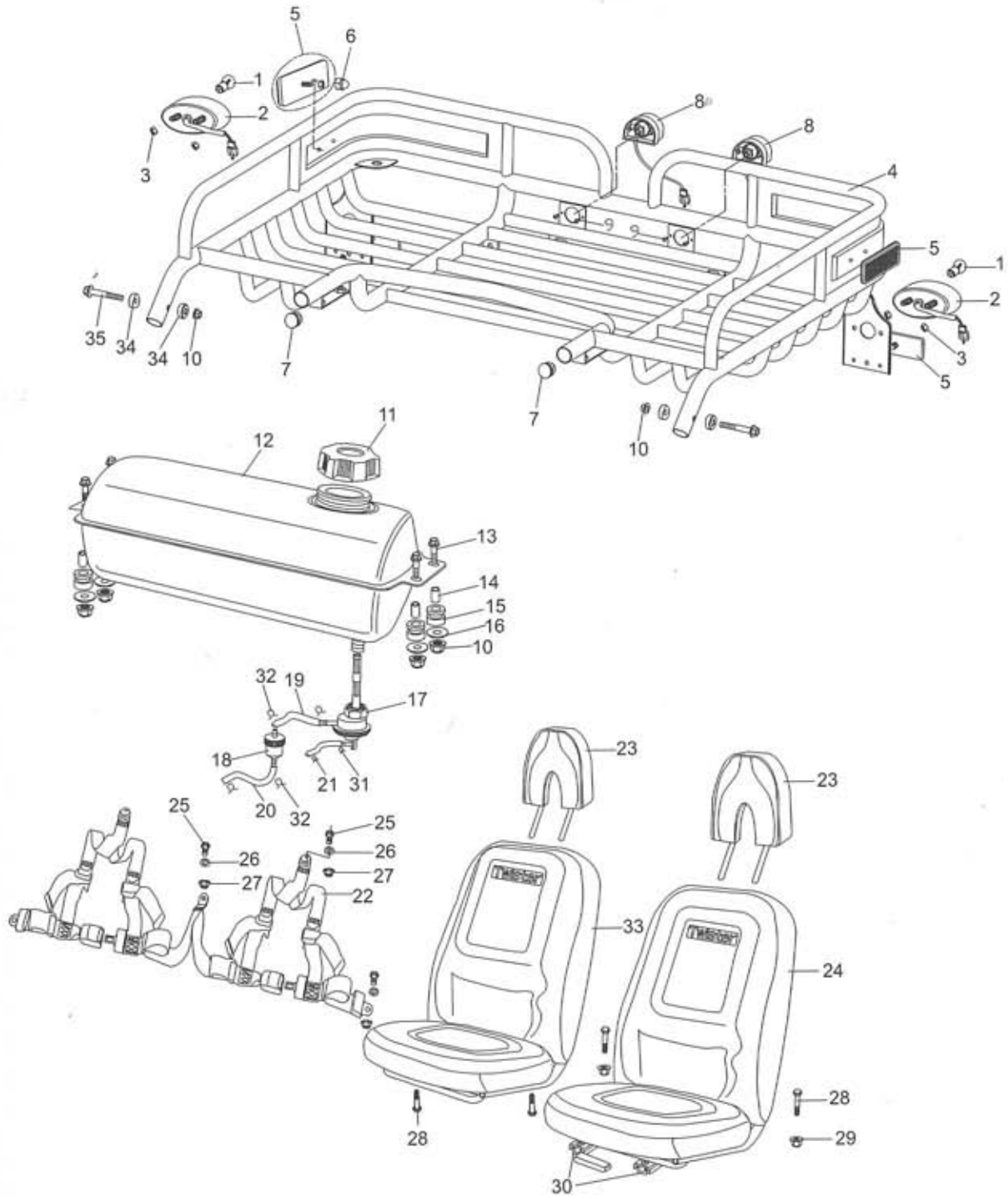
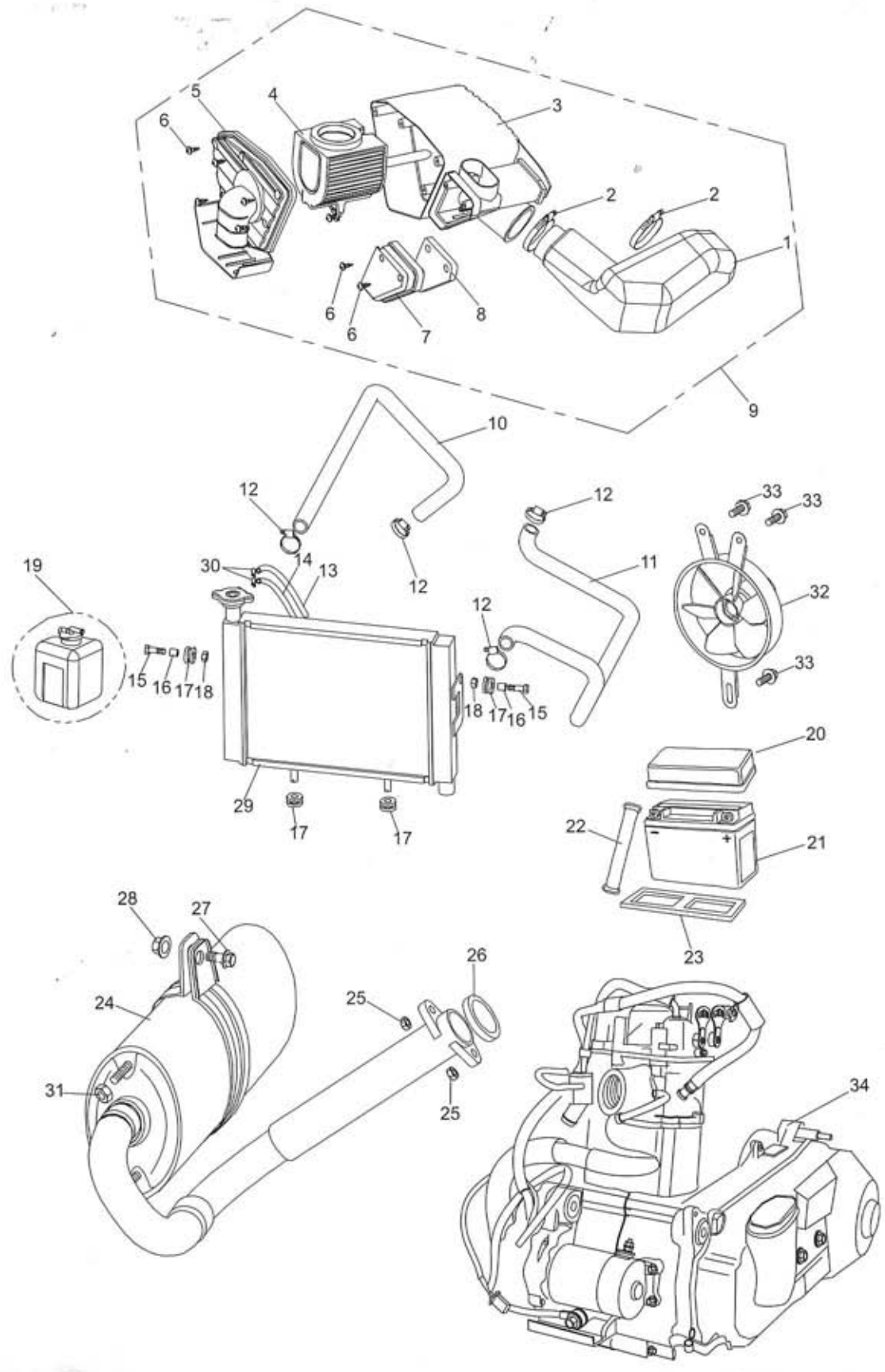


FIG.23

AIR CLEANER/ RADIATOR/ BATTERY/ MUFFLER ASSY.

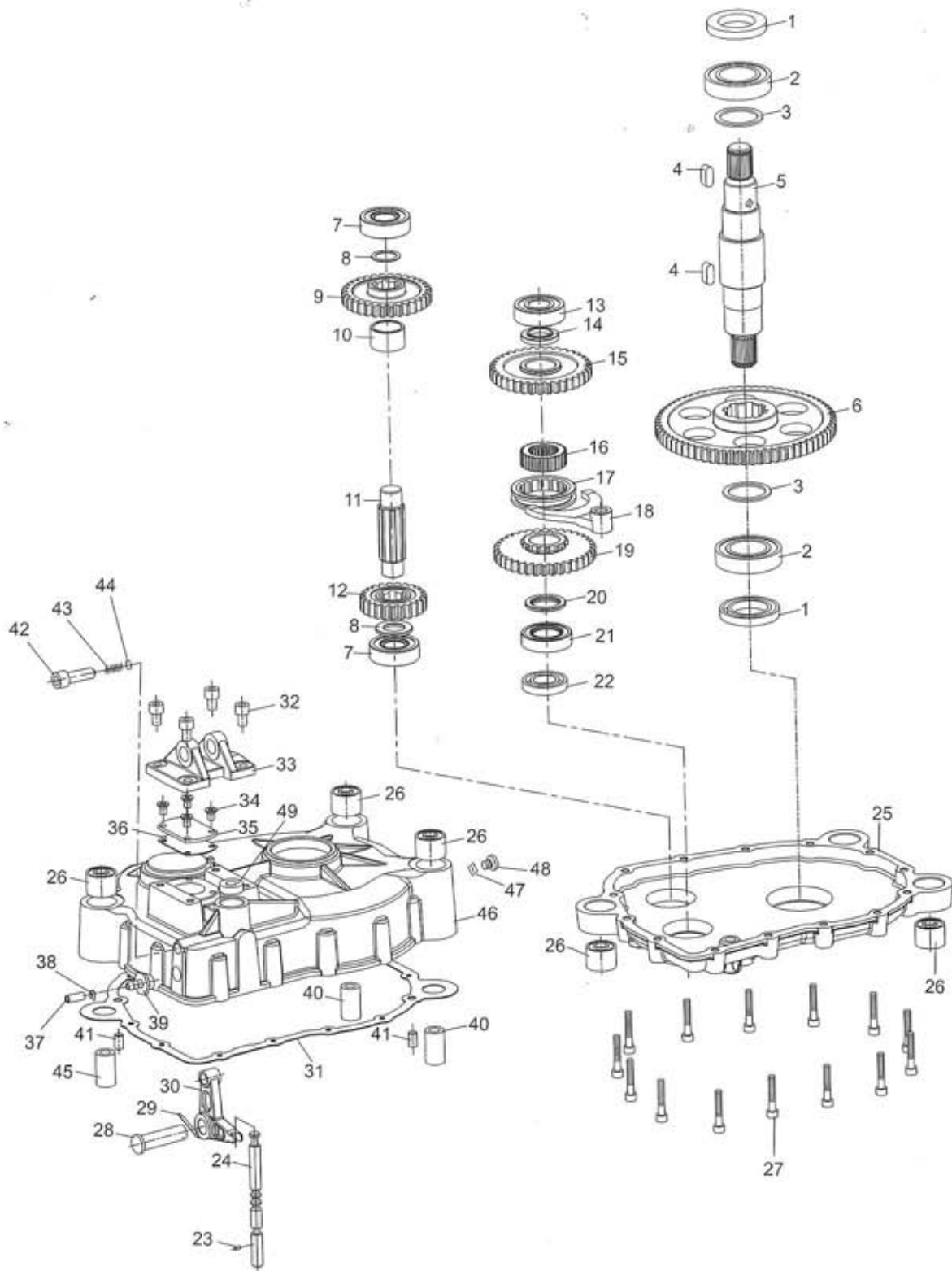


AIR CLEANER/ RADIATOR/ BATTERY/ MUFFLER ASSY.

REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	7.090.035	AIR CLEANER DUCT	1	
2	7.090.036	AIR CLEANER CLAMP	2	
3	7.090.037	AIR CLEANER CASE COMP.	1	
4	7.090.038	AIR CLEANER ELEMENT	1	
5	7.090.039	AIR CLEANER COVER	1	
6	9.805.003	TAPPING SCREW M5 x 16	7	
7	7.090.040	AIR CLEANER GAUZE COVER	1	
8	7.090.041	AIR CLEANER ELEMENT GAUZE	1	
9	4.000.032	AIR CLEANER ASSY.	1	
10	7.090.042	TUBE COMP. WATER 1#	1	
11	7.090.043	TUBE COMP. WATER 2#	1	
12	7.090.044	TUBE CLAMP	4	
13	7.090.045	TUBE COMP. WATER 3#	1	
14	7.090.046	TUBE COMP. WATER 4#	1	
15	9.100.830	BOLT M8 x 30 x 1.25	2	
16	7.090.047	RADIATOR COMP. COLLAR	2	
17	7.020.069	RUBBER MOUNT	2	
18	9.200.008	NUT M8	2	
19	6.000.248	COLLANT TANK	1	
20	7.010.028	BATTERY COVER	1	
21	6.000.085	BATTERY (YTX12-BS)	1	
22	7.021.023	BATTERY BAND	1	
23	7.020.020	BATTERY LOWER	1	
24	7.090.049	MUFFLER COMP. EX.	1	
25	9.040.027	MUFFLER JOINT NUT M6	2	
26	7.090.050	EX. PIPE GASKET	1	
27	9.110.030	BOLT-WASHER M10 x 1.25 x 30	1	
28	9.020.010	NUT M10	1	
29	4.000.033	RADIATOR COMP.	1	
30	7.090.051	TUBE CLAMP	2	
31	9.200.006	NUT M6	2	
32	6.000.249	FAN COMP.	1	
33	7.090.052	BOLT	6	
34	2.000.047	250CC ENGINE	1	

FIG.24

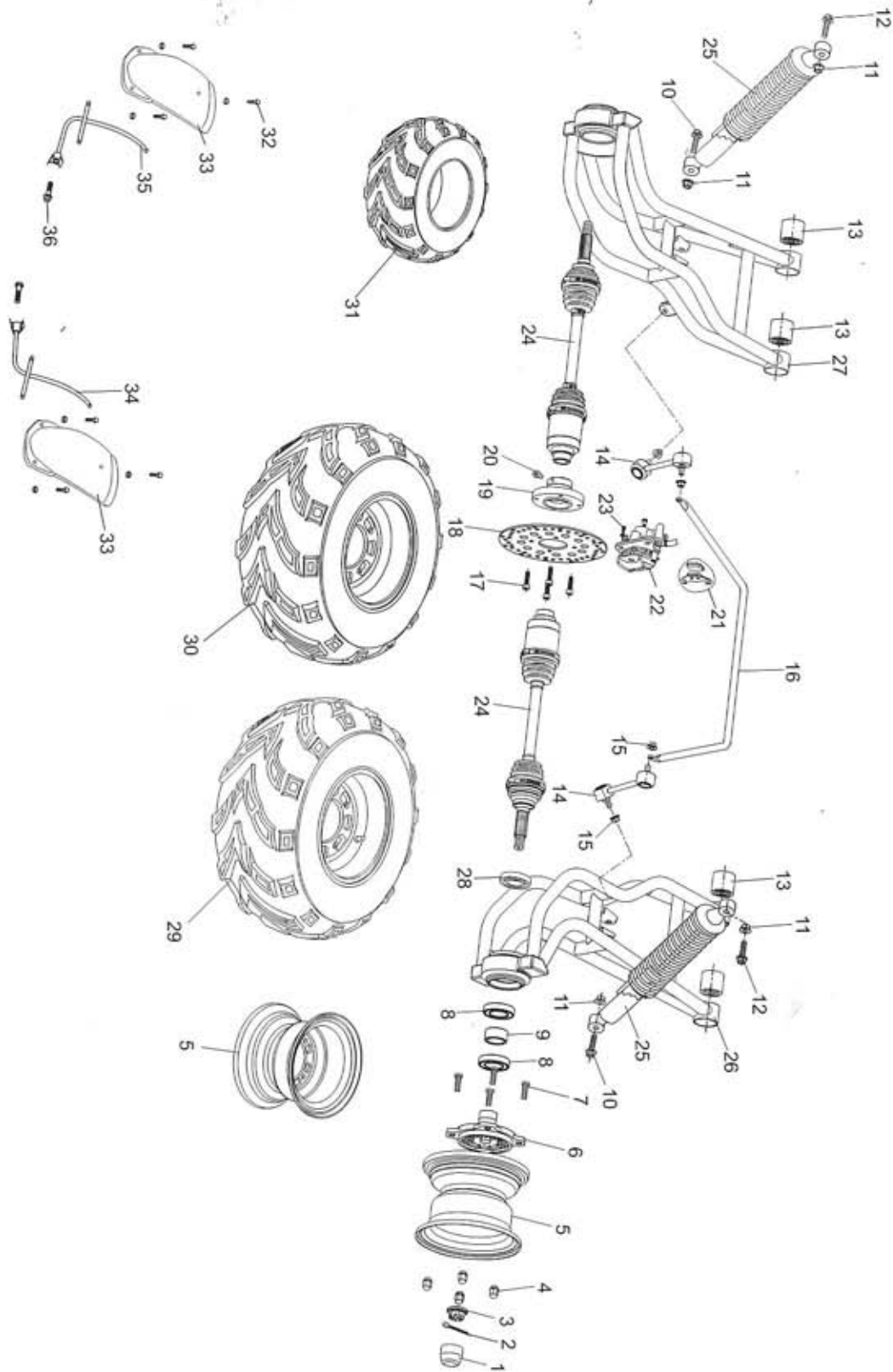
GEAR BOX ASSY.



GEAR BOX ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	9.040.012	DUST SEAL $\Phi 56 \times 35 \times 10$	2	
2	9.030.011	BEARING RADIAL BALL E6007	2	
3	7.090.001	WAHSER $\Phi 45 \times 35 \times 2$	2	
4	7.090.002	KEY STOCK	2	
5	7.090.003	FINAL SHAFT	1	
6	7.090.004	FINAL GEAR	1	
7	9.030.002	BEARINGN RADIAL BALL E6204	2	
8	7.090.005	WAHSER $\Phi 35 \times 20.5 \times 2$	2	
9	7.090.006	COUNTER GEAR A	1	
10	7.090.007	COLLER	1	
11	7.090.008	COUNTER SHAFT	1	
12	7.090.009	COUNTER GEAR B	1	
13	9.030.005	BEARING RADIAL BALL E6005	1	
14	7.090.010	WASHER $\Phi 35 \times 20 \times 5.5$	1	
15	7.090.011	IN PUT GEAR A	1	
16	7.090.012	INTERNAL GEAR	1	
17	7.090.013	SLIDER COLLAR	1	
18	7.090.014	PIVOT ARM SLIDER	1	
19	7.090.015	IN PUT GEAR B	1	
20	7.090.016	WASHER $\Phi 35 \times 25 \times 4$	1	
21	7.090.017	BEARING RADIAL BALL E6204	1	
22	9.040.013	DUST SEAL $\Phi 42 \times 25 \times 8$	1	
23	7.090.018	LOCKING PIN IN/OUT $\Phi 4 \times 8$	1	
24	7.090.019	PIVOT GEAR SHIFT	1	
25	8.030.041	L-SIDE CASE COVER	1	
26	7.090.020	SWING ARM CUSHION BUSH	6	
27	9.106.040	BOLT-WAHSER M6 x 40	14	
28	7.090.021	PIVOT SHAFT PIN	1	
29	9.500.408	COTTER PIN $\Phi 4 \times 8$	1	
30	7.090.022	PIVOT ARM SHAFT	1	
31	7.090.023	GEAR CASE COVER GASKET	1	
32	9.108.020	BOLT-WASHER M8 x 20	4	
33	7.090.024	OUTER SHIFT BRACKET	1	
34	9.100.610	BOLT M6 x 10	4	
35	7.090.025	GASKET PLANE	1	
36	7.090.026	GASKET	1	
37	7.090.027	AIR TUBE	1	
38	7.090.028	TUBE CLIP	1	
39	7.090.029	AIR VENT	1	
40	7.090.030	COLLAR A	2	
41	7.090.031	DOWEL PIN $\Phi 8 \times 20$	2	
42	9.101.025	BOLT M10 x 25	1	
43	7.090.032	SPRING	1	
44	7.090.033	STEEL BALL	1	
45	7.090.035	COLLAR B	1	
46	8.030.040	GEAR CASE	1	
47	9.700.008	WASHER $\Phi 8$	1	
48	9.100.812	BOLT M8 x 12	1	
49	9.040.014	DUST SEAL $\Phi 22 \times 10 \times 7$	1	

FIG.25

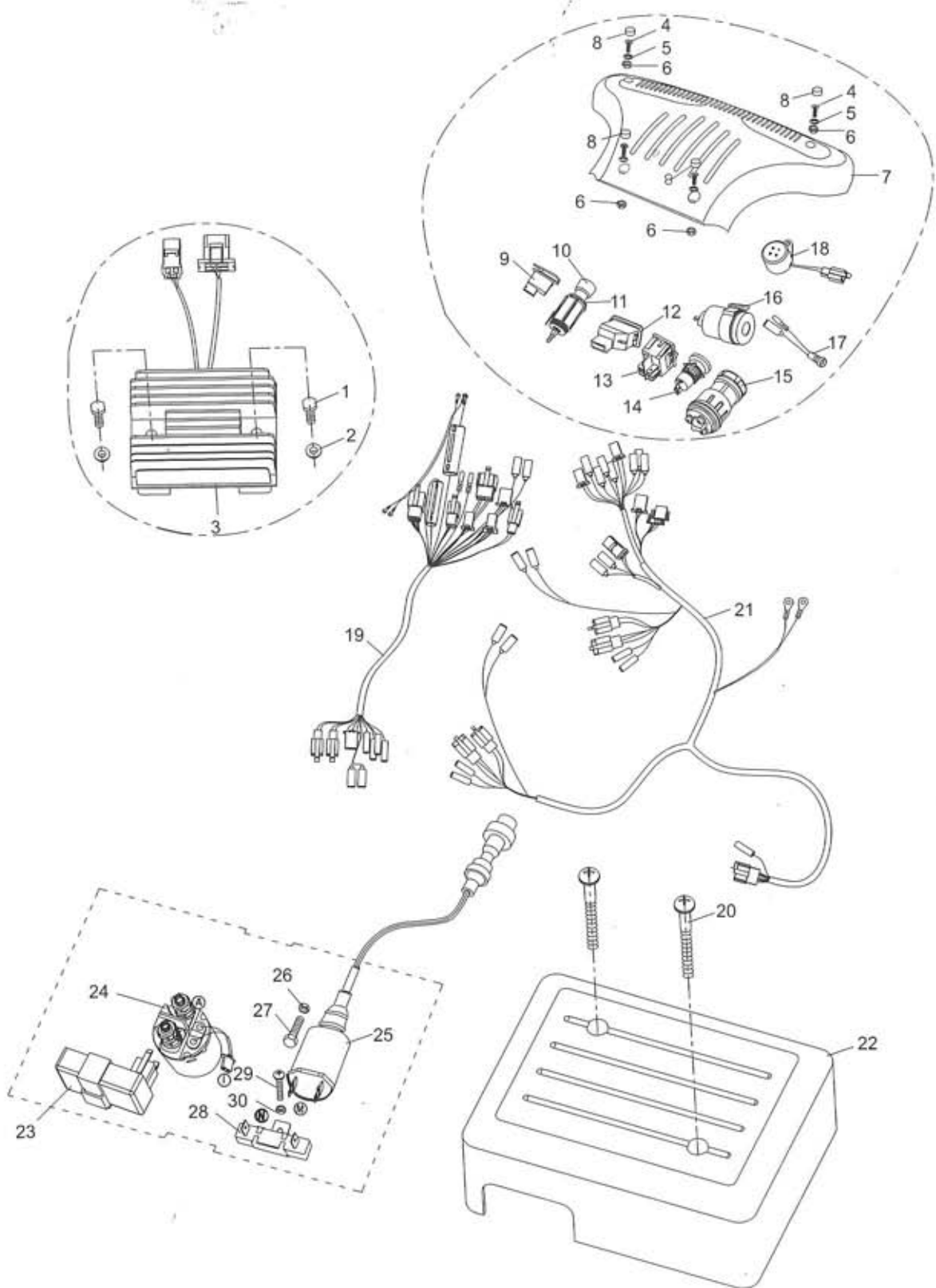
REAR SUSPENSION ASSY.



REAR SUSPENSION ASSY.			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	7.020.039	RR. HUB COVER	2
2	9.500.430	COTTER PIN Φ4 x 30	2
3	9.800.018	CASTLE NUT M18	2
4	8.010.118	LUG NUT CAP M10	8
5	6.000.143	RIM, RR.	2
6	8.010.169	REAR WHEEL HUB	2
7	9.710.031	TIRE BOLT M10 x 1.25 x 31	8
8	9.030.007	BEARING 6007	4
9	8.010.170	COLLAR	2
10	9.112.055	BOLT-WASHER M12 x 1.25 x 55	2
11	9.220.012	LOCKING FLANGE NUT M12 x 1.25 x 50	4
12	9.112.050	BOLT-WASHER M12 x 1.25 x 50	2
13	7.020.008	SWING ARM CUSHION BUSH	4
14	6.000.242	BALANCE LEVER LINK ROD	2
15	9.220.010	LOCKING FLANGE NUT M10 x 1.25	2
16	6.000.243	BALANCE LEVER	1
17	9.108.020	BOLT-WASHER M8 x 20 x 1.25	4
18	8.010.053	RR. BRAKE DISC.	1
19	8.030.036	BRAKE DISC. BASE	1
20	9.101.018	BOLT M10 x 1.5 x 18	1
21	7.020.022	RR. BRAKE PAD SET	1
22	6.000.229	CALIPER HYDRAULICAL BRAKE, RR.	1
23	9.908.014	ALLEN HEAD BOLT M8 x 1.25 x 16	2
24	6.000.244	CV/ SHAFT JOINT	2
25	6.000.245	CUSHION ASSY., RR. L=480	2
26	6.000.247	SWING ARM COMP. R.	1
27	6.000.246	SWING ARM COMP. L.	1
28	9.040.011	DUST SEAL Φ62 x 44 x 10	2
29	6.000.148	REAR WHEEL ASSY., R.	1
30	6.000.147	REAR WHEEL ASSY., L.	1
31	7.020.052	TIRE, RR. 22 x 10-10	1
32	9.906.016	BOLT-WASHER M6 x 16	6
33	7.010.059	FENDER, RR.	2
34	6.000.068	REAR FENDER BRACKET, R.	1
35	6.000.101	REAR FENDER BRACKET, L.	1
36	9.108.045	BOLT-WASHER M8 x 1.25 x 45	2

FIG.26

WIRE HARNESS/ELECTRICAL



WIRE HARNESS/ELECTRICAL

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	9.100.630	BOLT M6 x 30	2
2	9.200.006	NUT M6	2
3	6.000.250	REGULATE RECTIFIER COMP.	1
4	9.600.615	PAN SCREW M6 x 15	4
5	9.300.006	WASHER $\Phi 6$	4
6	9.210.005	LOCKING NYLON NUT M6	2
7	7.010.038	SWITCH PANEL COVER	1
8	7.010.061	BOLT COVER	4
9	6.000.079	HORN SWITCH	1
10	7.020.051	POWER OUTLET COVER	1
11	6.000.087	POWER OUTLET	1
12	6.000.113	WINKER SWITCH UNIT	1
13	6.000.160	DIMMER SWITCH UNIT	1
14	6.000.159	ENGINE STOP BUTTON	1
15	6.000.158	IGNITION START SWITCH	1
16	6.000.153	RELAY COMP. AUDIBLE PILOT & WINKER	1
17	6.000.251	TEMPERATURE BUZZER	1
18	6.000.252	HORN RECTIFIER	1
19	6.000.253	SOCKET COMP.	1
20	9.600.655	PAN SCREW M6 x 55	2
21	6.000.254	WIRE HARNESS	2
22	7.010.029	ELECTRIC ASSY. COVER	1
23	6.000.255	C.D.I. UNIT COMP.	1
24	6.000.256	STARTING RELAY	1
25	6.000.257	IGNITION COIL COMP.	1
26	9.210.006	LOCK NYLON NUT M5	1
27	9.600.525	PAN SCREW M5 x 25	1
28	6.000.038	RESISTOR COMP. 10W 10	1
29	9.600.410	PAN SCREW M4 x 10	1
30	9.210.004	LOCK NYLON NUT M4	1

WARNING STICKERS



WARNING STICKERS			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	9.090.007	LABEL. PARKING BRAKE	1
2	9.090.008	LABEL. REVERSE LEVER	1
3	9.090.023	LABEL.GEAR CASE	1
4	9.090.010	LABEL. NO LONG HAIR	1
5	9.090.011	LABEL. WARNING	1
6	9.090.012	LABEL. NO CLIMBING	1
7	9.090.013	LABEL. WARNING	1
8	9.090.014	LABEL. SEAT BELT	1
9	9.090.024	LABEL.RADIATOR	1
10	9.090.016	LABEL. TWISTER	3
11	9.090.017	LABEL. WARNING	1
12	9.090.025	LABEL.HAMMERHEAD 250	1
13	9.090.026	LABEL.HAMMERHEAD 250 R.SIDE	1
14	9.090.027	LABEL.HAMMERHEAD 250 L.SIDE	1