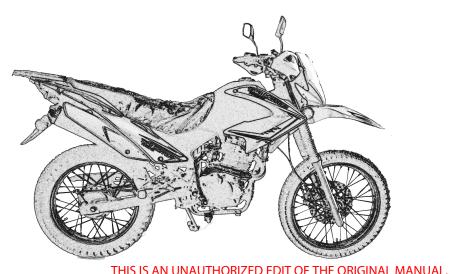
# TBR7 Owner's Manual





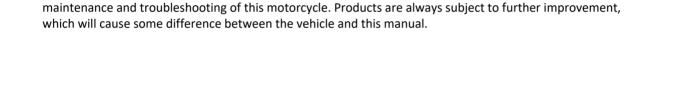
IT HAS BEEN EDITED FOR SPELLING AND CLARITY AND IS IN NO WAY ENDORSED OR ACKNOWLEDGED BY TAO MOTOR. THE EDIT IS INTENDED TO ENHANCE THE ORIGINAL MANUAL AND NOT REPLACE IT.

READ THIS MANUAL CAREFULLY! It contains important safety and service information.

# Please read carefully before operating this vehicle!



This vehicle should only be assembled and prepped by an authorized Tao Motor Dealer or professional motorcycle mechanic. You should never try or attempt assembly of this vehicle; it should be done by professionals. Death or serious injury could result from failure to follow these warnings and instructions.



This manual covers the main data, basic structure, and main procedures of operation, adjustment,

Thank you for your purchasing the Tao Motor TBR7 motorcycle.

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#### SAFETY INFORMATION

### Important Safety Information

Take responsibility for your own safety and understand the challenges you can meet while riding.

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

## **Always Wear a Helmet**

Helmets significantly reduce the number and severity of head injuries, so always wear an approved motorcycle helmet and make sure your passenger does the same. We also recommend that you wear eye protection, motorcycle boots, gloves, and other protective gear.

## Learning how to ride your motorcycle

Take time to become familiar with how this motorcycle works and handles. Practice in a safe area until you build your skills and get accustomed to the motorcycle's size and weight.

Because many accidents involve inexperienced or untrained riders, we urge all riders to take a certified course approved safety learning class. Developing off-road riding skills is a gradual step-by-step process. Start by practicing at low speeds in a safe area and slowly build your skills.

### **On-Road Riding**

The most frequent motorcycle collision happens when a car turns left in front of a motorcycle. Another common situation is a car moving suddenly into your lane.

Always pay attention to other vehicles around you, and do not assume that other drivers see you. Be prepared to stop quickly or make an evasive maneuver.

Make yourself more visible, wear bright reflective clothing, position yourself so other drivers can see you, signal before turning or changing lanes, and use your horn when it will help others notice you.

### Be Alert for Off-Road Hazards

The terrain can present a variety of challenges when you ride 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.

#### SAFETY INFORMATION

#### **Ride Within Your Limits**

Pushing limits is another major cause of motorcycle accidents. Never ride 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 ride safely.

#### Don't Drink and Ride

Alcohol and riding 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 ride, and don't let your friends drink and ride either.

## **Keep Your TBR7 In Safe Operating Condition**

It's important to keep your motorcycle properly maintained and in safe riding condition. Having a breakdown can be difficult, especially if you are stranded off-road far from help. To help avoid problems, inspect your motorcycle before every ride and perform all recommended maintenance. Never exceed load limits.

### Modification

Modifying your motorcycle or using non OEM parts or accessories can make your motorcycle unsafe. Before you consider making any modifications or adding an accessory, be sure to read the following information.

Improper accessories or modifications can cause a crash in which you can be seriously hurt or killed.

Follow all instructions in this owner's manual regarding accessories and modifications.

Tao Motor recommends that you use only genuine OEM accessories that have been specifically designed and tested for your motorcycle.

#### SAFETY INFORMATION

## **Helmets and Eye Protection**

A helmet is your most important piece of riding gear because it offers the best protection against head injuries. A helmet should fit your head comfortably and securely. A bright-colored helmet and reflective strips can make you more noticeable in traffic.

An open-face helmet offers some protection, but a full-face helmet offers more. Regardless of the style, look for a DOT (Department of

Transportation) sticker in any helmet you buy (USA only). Always wear a face shield or goggles to protect your eyes and help your vision.

## Warning

Not wearing a helmet increases the chance of serious injury or death in a crash.

Be sure you and your passenger always wear a helmet, eye protection, and other protective apparel when you ride.

## **On-Road Gear**

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

- Motorcycle boots with non-slip soles to help protect your feet and ankles.
- Leather gloves to help protect your hands.
- A motorcycle riding suit or jacket for comfort as well as protection.

Bright-colored and reflective clothing can help make you more noticeable in traffic. A void loose clothes that could get caught on any part of your motorcycle.

## **Rider Training**

Developing your riding skills is an on-going process. Even if you have ridden other motorcycles, take time to become familiar with how this motorcycle works and handles. Practice riding the motorcycle in a safe area to build your skills. Do not ride in traffic until you get accustomed to the motorcycle's controls, and feel comfortable with its size and weight.

## **WARNING & SAFETY LABELS**

Please read and understand all of the labels on your TBR7. These labels contain important information for safe and proper operation. Never remove any labels from your motorcycle. If a label becomes difficult to read or comes off, request a new replacement label from your local Tao Motor dealer.

VEHICLE EMISSION CONTROL INFORMATION ENGINE FAMILY: KTMMC.229MCA PERMEATION FAMILY: KTMMPMETALM1 IMPORTED BY TAO MOTOR INC ENGINE DISPLACEMENT: 229cc



THIS VEHICLE CONFORMS TO USEPA REGULATION APPLICABLE TO 2019 MODEL YEAR NEW HIGHWAY MOTORCYCLES AND IS CERTIFIED TO 1.0 GIKM HC, 12.0GIKM CO ENGINE FAMILY EXHAUST EMISSION STANDARD.

ENGINE EXHAUST EMISSION CONTROL SYSTEM: OC(2).PAIR

ENGINE TUNEUP SPECIFICATIONS; (READ OWNER'S MANUAL FOR MORE DETAILS)
IDLE SPEED: 1500:1150rpm IDLE MIXTURE: NON ADJUSTABLE VALVE CLEARANCE: 0.04-0.06 IN & EX
SPARK PLUG: NOK/DEEA SPARK PLUG GAP: 0.6-0.8 rmm LUBRICANT: SP 15W:40
THIS VEHICLE IS CERTIFIED TO DEPRATE ON UNIEADED GASOLINE. FUEL: GASOLINE 91 OCTANE OR HIGHER
MANUFACTURED BY ZHEJIANO TAOTAO VEHICLES CO.LTD. MADE IN CHINA

Motorcycle Noise Emission Control Information

This 2019 Tao Motor Inc. TBR1 / TBR7 Motorcycle meets the EPA noise Emission requirements of 70dBA at 7115 RPM. Modifications which cause this motorcycle to exceed federal noise standards are prohibited by federal law. See owner's manual. Void if label is renoved.



Improper loading can cause a crash and you may be seriously hurt or killed.
See owner's manual for more information.

For your protection, always wear your helmet while riding this motorcycle. Read owner's manual carefully before this riding motorcycle.

MFD: ZHEJIANG TAOTAO VEHICLES CO. LTD DATE OF MEG. [ GVWR · 75KG FRONT GAWR RIUS AT COLD WITH TIRES 56Kg 90/90-19 19X1 85 225KPa REAR GAWR WITH TIRES RIUS AT COLD 17X2 15 84Kg 110/90-17 280KPa THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANLFACTURE SHOWN ABOVE VIN: TYPE: MOTORCYCLE

# **SPECIFICATIONS**

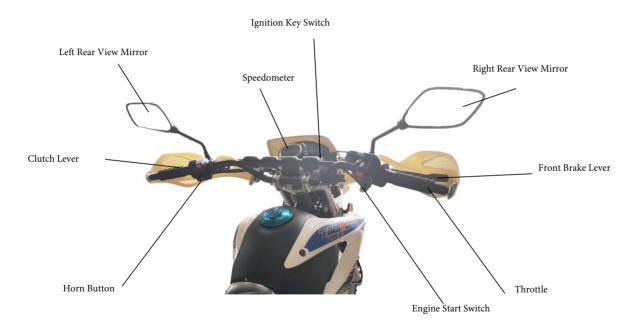
Model	TBR 7	Displacement	229cc
Overall Length	2040mm	Cylinder Bore×Stroke	67mm×65mm
Overall Width	840mm	Compression Ratio	9.1:1
Overall Height	1200mm	Power Output/Max. RPM	11kW/6500 RPM
Wheelbase	1345mm	Maximum Torque @ RPM	17.5N.m @ 5500 RPM
Dry Weight	130 kg	Idle RPM	1500 RPM ±150
Max. Load	150kg(including the driver)		
Front Wheel	90/90-19	Spark Plug	D8EA
Rear Wheel	110/90-17	Spark Plug Gap	0.6mm~0.8mm
Maxiumum Speed	≧90km/h	Valve Clearance	Intake Valve:0.04mm $\sim$ 0.06mm
Braking Distance	≦7m(30km/h)	valve Clearance	Exhaust Valve:0.04mm $\sim$ 0.06mm
Max. Incline	≧20°		_

Continued...

# **SPECIFICATIONS**

Volume of Lubricating Oil	1. 1L	Fuse	10A
Fuel Tank Capacity	12. 5L	Battery	12V9Ah
Transmission Gear Ratios		Ignition Type	C. D. I
1st gear	2. 909		
2nd gear	1. 867		
3rd gear	1. 389		
4th gear	1. 150		
5th gear	0. 9545		

# **DESCRIPTION**



# **DESCRIPTION**

The VIN is on the right side of the frame.

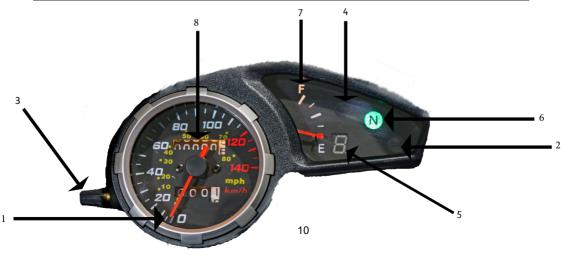


# **DESCRIPTION**



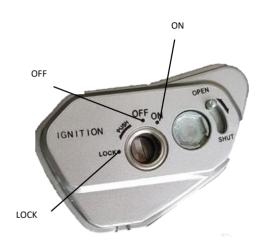
# **INSTRUMENT CLUSTER**

No.	Name	Description
1	Speedometer	Shows speed in mph and km/h.
2	Turn Signal Indicator	Indicates turn signal operation.
3	Trip Odometer Reset Knob	Turn the knob to reset the trip odometer.
4	High Beam Indicator	Lit when high beam is on.
5	Gear Position Display	Shows currently selected gear.
6	Neutral Indicator	Comes on when the transmission is Neutral.
7	Fuel Level Display	Indicates fuel level.
8	Odometer	Total distance ridden.



# **IGNITION SWITCH**

Position	Function	Remarks
OFF	To stop the vehicle engine. (Turns off the electrical system.)	The key can be removed.
ON	For starting or riding the vehicle. (Turns on the electrical system.)	The key cannot be removed
LOCK	Locks the steering.	The key can be removed.



## **FUEL COCK/VALVE**

#### FUFI TANK

The fuel tank capacity is 12.5L in total including 1.1L of Reserve. 91 Octane or higher unleaded fuel is required for this motorcycle.

To fuel the vehicle, support the vehicle by the main stand, unlock fuel cap with ignition key and fill with fuel. Close fuel tank cap and remove key.

#### **FUEL COCK/FUEL VALVE**

The fuel cock/valve supplies fuel from the tank to the carburetor.

The fuel cock/valve lever positions are explained as follows and shown in the illustrations.

#### **FUEL OFF:**

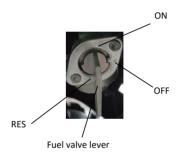
Arrow mark positioned over "OFF" position. Fuel is off and fuel will not flow to the carburetor. Always turn the fuel valve to the "OFF" position and allow the engine to idle until it burns remaining fuel in the line when the vehicle is being stored. Once the fuel in the line has been cleared, drain the carburetor bowl. Following this procedure will help reduce corrosion and carburetor damage.

#### FUEL ON:

Arrow mark positioned over "On" position. Fuel is on and fuel will flow to the carburetor.

#### RESERVE:

With the handle of the fuel cock set to the "RES" position, the fuel is supplied from the reserve. (Note:The reserved fuel can only be used when the normal supply is run out.)In this case, refueling should be done as soon as possible, there is only 1.1L of fuel left for use.



#### STORAGE:

Drain gasoline from the fuel tank and carburetor if being stored for more than over 48hrs.

#### STARTING ENGINE

### STARTING ENGINE (COLD)

- 1. Turn the fuel valve lever to the "ON" position.
- 2. Turn the ignition key to the "ON" position.
- 3. Set "RUN () " position on main switch.
- Set Gear box to "Neutral" position. "N" will be displayed on the instrument cluster.
- 5. Set the choke lever to the cold start position (all the way up).
- 6. Press and hold start button until the engine starts.

Manual start can be accomplished by pushing down on kick start lever rapidly until the engine starts.

Never hold the start button for more than 10 seconds per try. It may be necessary to twist the throttle lever a small amount to start the engine.

7. When engine warms up, move the choke lever down.

Choke lever must be in the off position (all the way down) in order to operate the vehicle .

## STARTING ENGINE (WARM)

- 1. Turn the fuel valve lever to "ON" position.
- 2. Turn the ignition key to the "ON" position.
- 3. Set "RUN \(\Omega\) "position on main switch.
- Set Gear box to "Neutral" position. "N" will be displayed on instrument cluster.
- 5. Set the choke lever to the warm start position (all the way down).
- Press and hold start button until the engine starts, or push down on kick start lever rapidly until the engine starts.

Never hold the start button for more than 10 seconds per try. It may be necessary to twist the throttle lever a small amount to start the engine. 13

NOTE Engine can also be started in any gear by depressing clutch lever and pressing the start button at the same time

NOTE We recommend starting the engine in Neutral gear only.

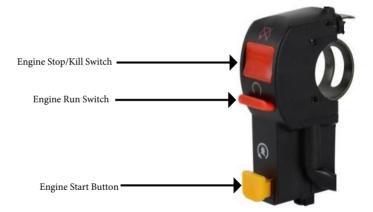
## **MAIN SWITCH**

## Engine Start/Stop Switch

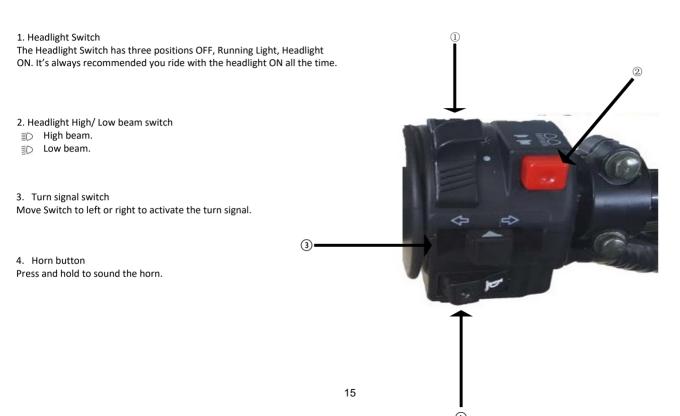
Set this switch to "Run  $\quad \bigcap \quad$  " position before starting the engine.

### Start Button

Push start button to crank the engine with starter. See the starting instructions on the previous page before starting the engine.



# HEADLIGHT, HORN, TURN SIGNAL SWITCH ASSEMBLY



## **GEAR SHIFTER**

Your motorcycle transmission has 5 forward gears in one-down, four-up shift pattern.

Start the engine and let it warm up at idle speed. Apply the clutch lever and select 1st gear, slowly releasing the clutch lever. A small amount of throttle may be needed to move forward.

## Gear Select Lever Up



Gear Select Lever Down

#### ENGINE OIL

The engine oil level should be checked before each ride. In addition, always follow the maintenance schedule for oil changes as shown in the maintenance schedule.

 $\begin{tabular}{ll} NOTE & Your new vehicle's engine comes with shipping oil. Shipping oil must be changed before the engine $(A)$ and $(A)$ is a substitution of the engine of the en$ is started for the first time. Please see the specification chart for the recommended oil type.

## To check the engine oil level:

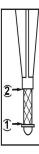
- 1. Place the motorcycle on a level surface.
- 2. Check the engine oil level on a cold engine.
- 3. Remove the engine oil filler cap, and then wipe the engine oil dipstick off with a clean rag.
- 4. Slowly thread the dipstick back in the filler hole, and then remove it again to check the oil level.
- 5. If the engine oil is at or below the minimum level mark, add sufficient oil of the recommended type to raise it to the correct level. NOTICE: Be sure the engine oil is at the correct level, otherwise engine damage may result.
- 6. Check the 0-ring for damage, and replace it if necessary.
- 7. Insert the dipstick into the oil filler hole, and then tighten the engine oil filler cap.

TIP

If the engine was started before checking the oil level, be sure to warm up the engine sufficiently, and then wait at least ten minutes until the oil settles for an accurate reading.

TIP

The engine oil dip stick is located on the right side of the vehicle next to kick starter lever.



# **A** WARNING

Only add engine oil into the dipstick filler hole. Never pour engine oil anywhere else other than dipstick filler hole.

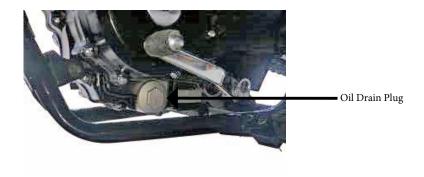
- 1. Minimum Oil Level Mark
- 2. Maximum Oil Level Mark



#### **ENGINE OIL CHANGE**

- 1. Place the motorcycle on a level surface.
- 2. Place an oil pan under the engine to collect the used oil.
- 3. Remove the engine oil filler cap, and then remove the engine oil drain bolt to drain the oil from the crankcase.
- 4. Clean oil filter screen and spring.
- 5. Reinstall filter screen, spring drain plug to the specified torque.(14 Nm / 10 ft/lbs).
- 6. Refill engine with specified amount of the recommended engine oil. Recommended engine oil is SF 15W40 and oil capacity is 1.1L
- 7. Start the engine, and then it let it idle for a few minutes .
- 8. Turn off engine and check engine dip stick for correct engine oil level .

NOTICE: When removing the engine oil drain bolt the O-ring may fall out. Take care not to lose these parts. NOTICE: Before installing the engine oil drain bolt, be sure to install the O-ring, and then engine drain bolt.



### SPARK PLUG

Checking the spark plug

The spark plug is an important engine component which is easy to check. The spark plug should be removed and checked in accordance with the periodic maintenance and lubrication chart.

## To remove the spark plug

- 1. Remove the spark plug cap.
- Remove the spark plug with the spark plug wrench.
- 3. Turn the spark wrench counterclockwise wise to loosen and remove the spark plug.

## To check the spark plug

- 1. Check that the porcelain insulator around the center electrode of the spark plug to see if it's worn out.
- 2. Check the spark plug for electrode erosion and excessive carbon or other deposits, and replace it if necessary.
- 3. Measure the spark plug gap with a wire thickness gauge and, if necessary, adjust the gap to specification.

## To install the spark plug

- 1. Clean the surface of the spark plug gasket and its mating surface, and then wipe off any grime from the spark plug threads.
- 2. Install the spark plug with the spark plug wrench by turning it clockwise, to the specified torque.
- 3.Install the spark plug cap.

OEM manufacturer specified spark plug is NGK/D8EA.

- 4. Tightening torque: Spark plug:
- 12 N•m (1.2 kgf•m, 8.7 lb•ft)



#### AIR FILTER ELEMENT

The air filter element should be serviced at the intervals specified in the periodic maintenance and lubrication chart. Clean and replace as needed. Clean and replace air filter more frequently if used in dusty or dirty areas.



Never use low-flash-point solvents or gasoline to clean the air filter element because the engine could catch fire or explode.

NOTICE

Make sure that the air filter element is properly seated in the air filter case. Never operate the engine with the air filter element removed. This will allow unfiltered air to enter the engine, causing rapid engine wear and possible engine damage. Additionally, operation without the air filter element will affect carburetor jetting with subsequent poor performance and possible engine overheating.

The air filter element should be cleaned every 20-40 hours. It should be cleaned and lubricated more often if the vehicle is operated. In extremely dusty areas. When servicing the air filter element, be sure to check the air inlet of the air filter case for obstructions.

- 1. Park the vehicle on a level surface.
- 2. Remove the seat.
- 3. Remove the air filter cover by removing the phillips screws .
- 4. Remove the air filter element.
- 5. Check the air filter element and replace it if damaged.
- 6. Insert the air filter element into the air filter housing .
- 7. Install the air filter cover and the phillips screws.
- 8. Install the seat.

### THROTTLE CABLE

Throttle cable inspection Inspect throttle cable for excessive wear, kinking or fraying. Ensure cable moves freely.

NOTE The throttle cable must be replaced if any signs of wear, fraying or other damages found.

THROTTLE CABLE ADJUSTMENT Check throttle lever free play, adjust if necessary.

**NOTE** Please check with Tao Motor dealer if throttle cable cannot be adjusted properly.

Normal throttle free play is 2mm to 6mm

TIP Lubricate cable using silicone cable lubricant to reduce premature wear and to ensure proper movement of the cable.

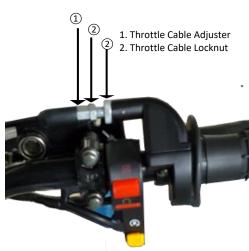
To adjust throttle cable,

- 1. Pull rubber dust covers back to inspect and adjust throttle cable.
- 2. Loosen lock nut.
- 3. Turn throttle cable adjuster to make proper adjustments of throttle cable.
- 4. Tighten locking nut and reinstall rubber dust cable covers.

NOTE Measure throttle free play at the tip of the lever.

Check proper throttle cable adjustment by turning handlebars completely to the left and right. If RPM increases when turning, then re-adjust throttle cable to increase lever free play. Check throttle cable routing to make sure there is no cable binding when turning handlebars.

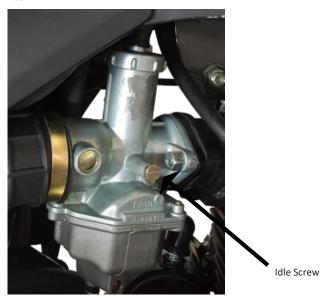
NOTF The handlebar should move left to right without change in engine RPM.



## **ENGINE IDLE ADJUSTMENT**

If it is necessary to adjust the carburetor idle screw due to changed outside environmental conditions, to adjust carburetor idle screw as follows;

- 1. Warm up the engine by running the vehicle in "Neutral" gear position.
- 2. Adjust the carburetor idle screw until the desired idle RPM is reached. Turning the idle screw in (clockwise) to raise RPM. Turning the screw out (counterclockwise) will lower RPM.
- 3. The standard idle RPM is 1500 ±150.



## **CLUTCH LEVER ADJUSTMENT**

Checking the clutch lever free play

Free play at the clutch lever:

Check the clutch cable for kinks or signs of wear. If necessary have it replaced by your Tao Motor dealer.

Lubricate the clutch cable with a commercially available cable lubricant to prevent premature wear and corrosion.

**NOTF** Improper free play adjustment can cause premature clutch wear.

Adjusting the clutch lever free play

- 1. Pull back the rubber dust cover.
- 2. Loosen the upper lock nut.
- 3. Turn the clutch cable adjuster until the free-play is 10 to 20mm.
- 4. Tighten the lock nut and check the free play again.
- 5. Install the rubber dust cover.



## HYDRAULIC FRONT BRAKE



**▲** WARNING

New brakes will not perform to their maximum efficiency until after their initial break-in is complete. Use extra caution.

Brake fluid replacement or brake system maintenance and repairs should be performed by an authorized Tao Motor dealer.

The brakes can be very hot after prolonged use of the vehicle and can cause burns. Wait for the brakes to cool down.

**NOTICE** The front brake system is a hydraulic type and no adjustment is required. Use the following checklist before each use to maintain the brake system in good operation condition:

- Brake Fluid level.
- Brake system for fluid leaks.
- Brake cleanliness.
- Brake disk for excessive wear and surface condition.
- Brake pads for wear, damage, or looseness.

NOTICE Have your local Tao Motor dealer inspect brakes system for wear or damage.

Always contact your local Tao Motor Dealer if you have any concerns after inspecting your hard.

Always contact your local Tao Motor Dealer if you have any concerns after inspecting your brake system for wear or damage.

Recommended Brake Fluid

Always use brake fluid type DOT 3 or 4.

Brake Fluid Level

Always check for the proper brake fluid reservoir level as follows;

Brake fluid reservoir is located on the handlebar assembly right side. With the vehicle on a level surface, check brake fluid in reservoir for proper level. The fluid should above the MIN mark. Add fluid as required, but never overfill and clean filler cap before removing.

NOTICE The Reservoir is full when the fluid reaches the top of the window. A low fluid level may indicate leaks or worn brake pads.

Fluid Level

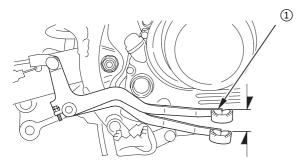
- 1. Maximum Fluid
- 2. Level Minimum



## **REAR BRAKE**

## Rear Brake Pedal Free Play Inspection

- 1. Place your motorcycle on its side stand.
- 2. Check free play by slowly depressing the brake lever (1) until the brake starts to engage.



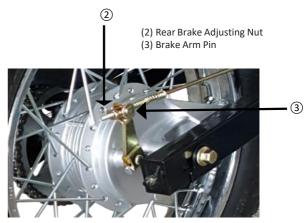
1. Rear Brake Pedal

Free play: 20-30mm

If necessary, adjust to the specified range.

## Adjustment

- 1. Turn the rear brake adjusting nut (2). Make sure the cut-out on the adjusting nut is seated on the brake arm pin (3).
- 2. Apply the brake, release it, and then spin the wheel and check that it rotates freely. Repeat this procedure several times.
- 3. Check the free play. If you can't adjust the free play properly, see your Tao Motor  $\,$  dealer.



(counterclockwise ) Increase Free Play (clockwise) Decrease Free Play

## Inspections & Lubrication

Check that the rear pedal assembly is positioned properly and the securing bolts are tight.

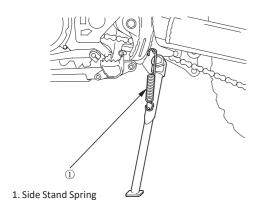
Make sure the brake rod, brake arm, spring, and fasteners are in good condition.

25

## SIDE STAND

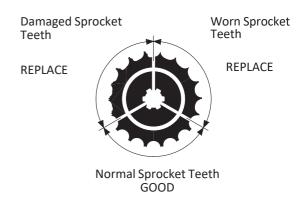
- 1. Check the side stand spring (1) for damage and loss of tension.
- 2. Check the side stand assembly for freedom of movement.

If the side stand is stiff or squeaky, clean the pivot area and lubricate the pivot bolt with clean engine oil.



## Sprocket

Inspect the front and rear sprocket teeth for excessive wear or damage. If necessary, have your Tao Motor dealer replace a worn sprocket.



NOTICE: Use of a new chain with worn sprockets will cause chain wear.

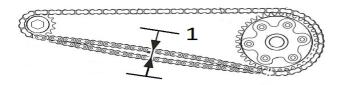
#### **DRIVE CHAIN**

The service life of the chain depends on proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain or sprockets.

Under severe usage, or when the motorcycle is ridden in unusually dusty or muddy areas, more frequent maintenance will be necessary. Before servicing your drive chain, turn the engine OFF, lower the side stand, and check that your transmission is in "Neutral". It is not necessary to remove or replace the drive chain to perform the recommended service in the Maintenance Schedule.

## Inspection

1. Check slack in the lower drive chain (1) run midway between the sprockets. Drive chain slack should allow the following vertical movement by hand: (20-30 mm)



1. Drive Chain Slack

2. Check drive chain slack at several points along the chain. The slack should remain constant. If it isn't, some links may be kinked and binding. Lubricating the chain will often eliminate binding and kinking.

NOTICE: Excessive chain slack may allow the drive chain to damage the engine case.

- 3. Inspect the drive chain for:
- Damaged rollers
- Loose pins
- Dry or rusted links
- Kinked or binding links excessive wear
- Damaged or missing O-rings

Replace the drive chain if it has Excessive chain slack may allow the drive chain to damage the engine case.

Lubricate any kinked or binding links and work them free. Adjust chain slack if needed.

4. Replace the drive chain if chain slack is excessive when the rear axle is moved to the farthest limit of adjustment. Excessive slack indicates the chain is worn beyond its service limit.

## **CHAIN ADJUSMENT**

- 1. Hold the rear axle shaft (1) and loosen the rear axle nut (2).
- 2. Turn both the right and left chain adjusters clockwise or counterclockwise (3) equally to increase or decrease chain slack.
- 3. After adjusting, be sure the chain adjusters are equal in length on both sides of the swing arm (4).
- 4. Tighten the rear axle nut.
- 5. Recheck drive chain slack.

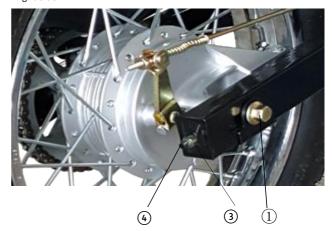
Check rear brake pedal free play and adjust if necessary.

- 1. Rear Axle Shaft
- 2. Rear Axle Nut
- 3. Chain Adjuster Lock nut
- 4. Chain Adjusters

Left Side

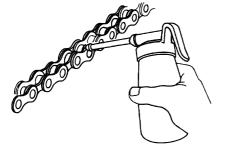


Right Side



## **DRIVE CHAIN LUBRICATION**

Lubricate every 300 miles (500 km) or sooner if chain appears dry. The O-rings in this chain can be damaged by steam cleaning, high pressure washers, and certain solvents.



Always use high qulity all-condition lube that is compatible with all O-ring and non-O-ring chains.

## Removal, Cleaning & Replacement

Your motorcycle chain should only be removed or replaced by your Tao Motor dealer.

When the drive chain becomes extremely dirty, it should be cleaned prior to lubrication.

- Clean the side surfaces of the chain with a dry cloth.
   Do not brush. Brushing will damage the O-ring chain.
   Use of a solvent may also damage the O-rings.
- 2. Inspect the drive chain for possible wear or damage. Replace the drive chain if it has damaged rollers, loose fitting links, or otherwise appears unserviceable.
- 3.Inspect the sprocket teeth for wear or damage. We recommend replacing the sprocket whenever a new chain is installed. Lubricate the drive chain.

### **BATTERY**

### **Battery Removal**

- 1. Make sure the ignition switch is set to the "OFF" position.
- 2. Remove rear left side cover.
- 3. Disconnect the negative cable from the battery by unscrewing battery terminal holt.
- 4. Disconnect the positive cable from the battery by unscrewing battery terminal bolt.
- 5. Remove battery from battery tray.

## **Battery Installation**

- 1. Insert battery into battery tray with battery terminal nuts and bolts already installed on the battery.
- 2. Remove battery terminal bolts.
- 3. Connect positive cable and re-screw battery terminal bolt.
- 4. Connect negative cable and re-screw battery terminal bolt.
- 5. Reinstall rear left side cover.

NOTICE Positive (+) cable is red in color.

Negative(-) cable is in black in color.

This motorcycle has two positive (+) cables red in color. NOTICE

Both attach to positive terminal on the battery.



Battery

# **▲** WARNING

Battery electrolyte is poisonous and dangerous, and contains sulfuric acid, which can cause severe burns. Avoid contact with skin, eyes or clothing. Always shield your eyes when working near batteries. EXTERNAL: Flush with water.

INTERNAL: Call a physician Immediately and get medical attention.

EYES: Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes or other sources of ignition away. Ventilate when charging or using in an enclosed space.

KEEP OUT OF REACH OF CHILDREN.

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#### **BATTERY CHARGING**

- 1. Before charging the battery, set ignition key to the "OFF" position.
- 2. Remove rear left battery cover.
- 3. Attach battery charger clamps to battery terminals.
- 4. Connect low-voltage battery charger to AC outlet. Use GFI AC Type outlet if possible for additional electrical safety.
- 5. Check charging level and if charging is complete every 4 to 8 hours to prevent dangerous overcharging of battery.
- 6. When charging complete unplug battery charger from wall outlet.
- 7. Disconnect battery charger cables from battery terminals.
- 8. Reinstall battery cover.

# **▲** WARNING

DO NOT charge battery with more than a 2 Amp trickle charger. DO NOT charge the battery any longer than 8 hours.

If you notice battery is swelling or bubbling, disconnect battery charger immediately. DO NOT continue to charge battery or attempt to recharge.

DO NOT jump start this motorcycle by using a car battery or any other vehicles.

Main Fuse Location

## CHANGING FUSE

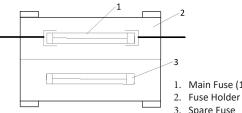
The fuse box is located behind the body on the rear left of the motorcycle.

- 1. Set ignition key to the "OFF" position.
- 2. Remove the blown fuse, check for any shorts or electrical issues and then install a new fuse of same amperage as specified. And then install a new fuse of the specified amperage.
- 3. Set ignition key to the "ON" position, to check if all the devices are operating.
- 4. Reinstall rear left cover.

electrical repair.



Always use a fuse of the specified rating. Never use any substitute fuses or larger amp fuses than the original rated fuels. Any improper fuse or substitute fuse can cause electrical damage or fire and will invalidate your vehicle's warranty.



1. Main Fuse (10 Amp)

- 3. Spare Fuse

## WASHING VEHICLE

We recommend the use of a garden hose to wash your motorcycle. High pressure washers can damage certain parts of your motorcycle. If you use a high pressure washer, avoid spraying the following areas:

wheel hubs

- Muffler outlet
- Under seat area
- Engine stop button
- Brake master cylinder
- Drive chain
- Carburetor

Washing Your Motorcycle with a Mild Detergent

- ${\bf 1}.$  Rinse your motorcycle thoroughly with cool water to remove loose dirt.
- 2.Fill a bucket with cool water. Mix in a mild, neutral detergent, such as dish washing liquid or a product made especially for washing motorcycles or automobiles.
- 3. Wash your motorcycle with a sponge or a soft towel. As you wash, check for heavy grime. If necessary, use a mild cleaner/degreaser to remove the grime.
- 4.After washing, rinse your motorcycle thoroughly with plenty of clean water to remove any residue.
- 5 .Dry your motorcycle with a soft towel.
- Lubricate the drive chain to prevent rusting.
- $\,$  6. Start the engine and let it idle for several minutes. The engine heat will help dry moist areas.

As a precaution, ride at a slow speed and apply the brakes several times. This will help dry the brakes and restore normal braking performance.



## **MAINTENANCE SCHEDULE**

- For vehicles equipped with an odometer or an hour meter, follow the km (mi) or hours maintenance intervals. However, keep in mind that if the vehicle isn't used for a long period of time, the month maintenance intervals should be followed.
- Items marked with an asterisk should be performed by a dealer as they require special tools, data and technical skills.

The following items are critical to	o keep your Ta	o Motor vehicle	performing correctly			
Mileage	1000km	3000km	6000km 6 Months	12,000km 12 Months	18,000km 18 Months	Check Prior to Each Ride
Fuel Line			Inspect	Inspect	Inspect	
Fuel Filter			Replace	Replace	Replace	
Air Cleaner			Replace	Replace	Replace	
Spark Plug		•	Inspect	Replace	Inspect	
Valve Gap			Inspect	Inspect	Inspect	
Engine Oil	Replace	Replace	Replace Every	3000km	"	Inspect
Oil Filter			Replace	Replace	Replace	
Carburetor Idle Speed Adjustment			Adjust	Adjust	Adjust	
Cooling System	Inspect	Inspect	Inspect	Inspect	Inspect	
Drive Belt		Inspect Ev	very 12 Months			
Transmission Oil		Replace e	very 6000kms oi	6 Months		
Braking System	Inspect		Inspect	Inspect	Inspect	Inspect
Throttle operation			Inspect	Inspect	Inspect	
Throttle control system			Inspect	Inspect	Inspect	
Headlight Adjustment			Inspect			
Tighten all Nuts & Screws	Inspect		Inspect 33	Inspect		

# **GENERAL MAINTENANCE AND LUBRICATION CHART**

		WHICHEVER COM		IRST		INITIA	L EVERY	
		CHECK OR MAINTENANCE JOB	km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
No.	ITEM			(200)	(800)	(1600)	(1600)	(3200)
1	Drive Chain Lubrication	• Lubricate	ı	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
2	Front Brake*	Check operation and correct if necessary.		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
		Replace brake pads.			Whenev	er worn to	the limit	
3	Rear Brake*	<ul> <li>Check operation and correct if necessary.</li> <li>Check brake pedal free play and adjust if necessary.</li> <li>Check fluid and motorcycle for fluid leaks, age, and correct if necessary.</li> </ul>			<b>√</b>	<b>√</b>	<b>√</b>	√
		Replace brake pads.			Whenev	er worn to	the limit	
4	Brake Hoses*	Check for cracks or other damage, and replace i	Check for cracks or other damage, and replace if necessary.			✓	<b>√</b>	✓
		• Replace.				very 2 yea	ars	
5	Rear Brake Hose Protectors*	Check for wear, cracks or other damage, and replace if necessary.			✓	✓	<b>√</b>	√
6	Wheels*	Check runout for damage. Replace if necessary.			✓	<b>√</b>	<b>√</b>	✓
7	Tires*	Check tread for depth and for damage, and rep     Check air pressure and balance, and correct if n	,	✓	✓	<b>√</b>	<b>√</b>	√

# GENERAL MAINTENANCE AND LUBRICATION CHART CONTINUED

			WHICHEVER COMES F	IRST		INITIAI	L EVERY	
		CHECK OR	km (mi)	320	1300	2500	2500	5000
		MAINTENANCE JOB	KIII (IIII)	(200)	(800)	(1600)	(1600)	(3200)
No.	ITEM							
8	Wheel Hub Bearings*	Check for looseness or damage, and replace if n	ecessary.	✓	<b>√</b>	✓	✓	✓
9	Chassis Fasteners*	Make sure that all nuts, bolts, and screws are pre-	Make sure that all nuts, bolts, and screws are properly tightened.			<b>√</b>	✓	✓
10	Shock Absorber Assemblies*	Check operation and correct if necessary. Check for oil leakage and replace if necessary.				✓	✓	✓
11	Stabilizer Bushings*	Check for cracks or other damage, and replace if necessary.				<b>√</b>	✓	✓
12	Rear Knuckle Pivots*	Lubricate with lithium-soap-based grease.				✓	✓	✓
13	Steering Shaft*	Lubricate with lithium-soap-based grease.				<b>√</b>	✓	✓
14	Steering System*	<ul><li>Check operation and repair or replace if damaged.</li><li>Check toe-in and adjust if necessary.</li></ul>			✓	✓	✓	✓
15	Engine Mount*	Check for cracks or other damage, and replace i	f necessary.			<b>√</b>	✓	✓

## GENERAL MAINTENANCE AND LUBRICATION CHART CONTINUED

			WHICHEVER COMES F	IRST		INITIAI	LEVERY	
		CHECKOD						
		CHECK OR MAINTENANCE JOB	km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
No.	ITEM							
16	Moving Parts and Cables*	Lubricate	Lubricate			✓	✓	✓
17	Throttle Lever Housing and Cable*	Check operation and correct if necessary. Check throttle cable free play and adjust if necessary. Lubricate throttle lever housing and cable.			<b>√</b>	<b>√</b>	<b>√</b>	✓
18	Front and Rear Brake Switches*	• Check operation and correct if necessary.		✓	<b>√</b>	✓	✓	✓
19	Lights and Switches*	<ul><li>Check operation and correct if necessary.</li><li>Adjust headlight beams.</li></ul>		<b>√</b>	✓	<b>√</b>	✓	✓
20	Drive Chain Lubrication	• Lubricate		✓	✓	✓	✓	✓

CARBURETOR: Tao Motor recommends using a fuel stabilizer at all times to prevent the buildup of residue from stale or deteriorated fuel. If the vehicle is not in operation for 20 days or more fuel residue can form in jets and passages causing the vehicle not to start.

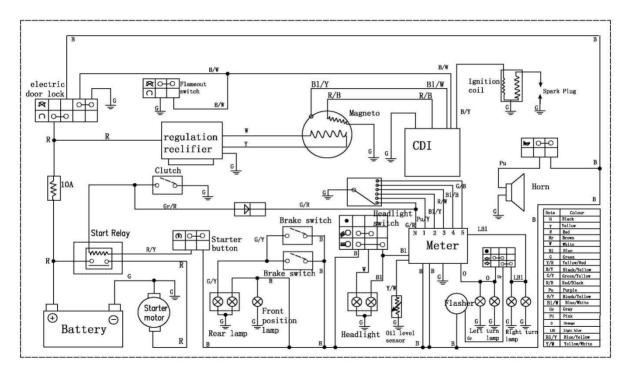
BATTERY: The battery should be charged with a trickle charger when the vehicle is not in regular use. Otherwise, it may discharge and become damaged from sulfation. Batteries are not covered under the vehicle warranty.

For more information on service and maintenance go to www.taomotor.com

# PERIODIC MAINTENANCE RECORD

MAINTENANCE INTERVAL PERFORMED	SERVICING DATE	SERVICING DEALER OR PERSON	REMARKS
		37	

## **ELECTRICAL DIAGRAM**



#### **EMISSION CONTROL SYSTEM WARRANTY**

Your new Tao Motor vehicle complies with the U.S. EPA emission regulations. Tao Motor Inc. provides the emission warranty coverage for engines in the United States and its territories. In the remainder of this Emission Control System Warranty, Tao Motor Inc. will be referred to as Tao Motor.

#### YOUR WARRANTY RIGHTS AND OBLIGATIONS

Tao Motor are pleased to explain the emission control system warranty on your 2019 Highway Motorcycle. New motor vehicles must be designed, built and equipped to meet EPA standards. Tao Motor must warrant the emission control system on your motorcycle for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your motorcycle. Your emission control system may include parts such as the carburetor or fuel injection system, the ignition system, catalytic converter and engine computer, if it is equipped. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, Tao Motor will repair your motorcycle at no cost to you including diagnosis, parts and labor.

#### MANUFACTURER'S WARRANTY COVERAGE

The 2019 and later model year highway motorcycle are warranted for 18,000 km or for 5 years, whichever comes first. If any emission-related part on your vehicle is defective, the part will be repaired or replaced by Tao Motor. This is your emission control system DEFECTS WARRANTY.

#### OWNER'S WARRANTY RESPONSIBILITIES

As the vehicle owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Tao Motor recommends that you retain all receipts covering maintenance on your vehicle, but Tao Motor cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

You are responsible for presenting your vehicle to the Tao Motor' dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. As the vehicle owner, you should be aware that Tao Motor may deny your warranty coverage if your vehicle or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you have any questions regarding your warranty rights and responsibilities, you should contact Tao Motor Inc., 2201 Luna Road, Carrollton, TX 75006, TEL: (888)908-3816

#### WARRANTY COVERAGE

Tao Motor warrants that each new 2019 and later Tao Motor motorcycles:

- **A.** is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency and
- **B.** is free from defects in material and workmanship which cause such vehicle to fail to conform with applicable regulations of the United States Environmental Protection Agency for the periods specified above.

The emission control system warranty period for this vehicle begins on the date the vehicle is delivered to the first purchaser other than an authorized dealer, or the date it is first used as a demonstrator, lease, or company vehicle, whichever comes first and continues for the period of time listed above. This warranty is transferable to each subsequent purchaser for the duration of the warranty period.

Warranty repairs will be made without charge for diagnosis, parts, or labor. All defective parts replaced under this warranty become the property of Tao Motor. A list of warranted parts is included in this warranty statement. Normal maintenance items, such as spark plugs and filters that are on the warranted parts list are warranted up to their required replacement interval only.

Only Tao Motor approved replacement parts may be used in the performance of any warranty repairs and must be provided without charge to the owner. The use of replacement parts not equivalent to the original parts may impair the effectiveness of your engine emission control system. If such are placement part is used in the repair or maintenance of your engine, and an authorized Tao Motor dealer determines it is defective or causes a failure of a warranted part, your claim for repair of your engine may be denied. If the part in question is not related to the reason your engine requires repair, your claim will not be denied.

#### TO OBTAIN WARRANTY SERVICE

All Tao Motor Inc. dealers must warranty emission control system components free of charge to end users. This includes parts and labor. All fees associated with this repair will be reimbursed by Tao Motor Inc. Please check Tao Motor Inc. website (www.taomotor.com) for the latest news on any recalls, updates to relevant regulations. If recall is issued Tao Motor Inc, will notify all dealers and reregistered owners via E-Mail or letters by mail. The notifications will instruct the end user where to take the unit for repair and what parts will be changed. All the repairs will be done free of charge to the customer.

You need to take your Tao Motor Vehicle, along with your sales receipt or other proof of original purchase date, at your expense, to any Tao Motor dealer or service shop who is authorized by Tao Motor to sell or service that Tao Motor product during his normal business hours. Claims for repair or adjustment found to be caused solely by defects in material or workmanship will not be denied because the vehicle was not properly maintained and used.

To find a local dealer or a service shop in your area, please call our toll free number (888)908-3816 or E-mail service@taomotor.com. If you located more than 100 miles from an authorized dealer or service shop, You have to contact our service department, we will either reimburse you for shipping costs to and from the nearest authorized dealer, or send a service technician to visit you to make the warranty repair, or reimburse for the repair to be made at a local non-authorized repair shop.

If you are unable to obtain warranty service, or are dissatisfied with the warranty service you received, contact the owner of the dealership involved. Normally this should resolve your problem. However, if you require further assistance, write or call the Tao Motor Inc Customer Service Department.

#### **FXCLUSIONS AND LIMITATIONS**

This Emission Control System Warranty shall not cover any of the following:

- A. Repair or replacement as a result of
- (1) accident,
- (2) misuse.
- (3) repairs improperly performed or replacements improperly installed,
- (4) use of replacement parts or accessories not conforming to Tao Motor's specifications which adversely affect performance and/or
- (5) use in competitive racing or related events.
- B. Inspections, replacement of parts and other services and adjustments required for required maintenance.
- Any vehicle equipped with an odometer or hour meter on which the odometer mileage or hour meter reading has been changed so that actual mileage cannot be readily determined.

#### LIMITED LIABILITY

- A. The liability of Tao Motor under this emission control system warranty is limited solely to the remedying of defects in material or workmanship by an authorized Tao Motor dealer at its place of business during customary business hours. This warranty does not cover in convenience or loss of use of the vehicle or transportation of the vehicle to or from the Tao Motor dealer. Tao Motor shall not be liable for any other expenses, loss or damage, whether direct, incidental, consequential or exemplary arising in connection with the sale or use of or inability to use the vehicle for any purpose. Some states do not allow the exclusion or limitation of any incidental or consequential damages, so the above limitations may not apply to you.
- B. No express emission control system warranty is given by us except as specifically set forth herein. Any emission control system warranty implied by law, including any warranty of merchantability or fitness for a particular purpose, is limited to the express emission control system warranty terms stated in this warranty. The foregoing statements of warranty are exclusive and in line of all other remedies. Some states do not allow limitations on how long an implied warranty lasts so the above limitations may not apply to you.

SYSTEMS COVERED BY THIS WARRANTY:	PARTS DESCRIPTION:
Fuel Metering	Carburetor assembly (includes starting enrichment system)
Air Induction	Air filter housing, Air filter element*
Exhaust	Catalytic Convertor, Air Injection Valve
Ignition	Ignition coil assembly, Ignition control module, Spark plug cap, Spark plug*
Crankcase Emission Control	Crankcase breather tube, Crankcase Breather Separator (PCV)
Miscellaneous Parts	Tubing, fittings, seals, gaskets, and clamps associated with these listed systems.

Tao Motor, Inc. 2201 Luna Road Carrollton, TX 75006 Tel: (888) 908-3816





Find important product information and how-to videos on our website www.taomotor.com

