



MVX110

4-Speed Automatic Off Road Dirt Bike

OWNERS MANUAL



MINIMUM AGE 16

Younger riders require adult supervision.

Important Information. Read thoroughly before driving the first time.

Attaching handlebars:
See page 7.

MOTOVOX.COM

VISIT US ON THE WEB FOR MORE INFORMATION

TROUBLE? DO NOT RETURN TO STORE contact us!

888-488-MOTO (6686) or email info@motovox.com

If you have any problems with this product
DO NOT RETURN TO THE STORE
contact us and we will make it right every time.
888-488-MOTO (6686)
or email info@motovox.com

WARNING

The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

MVX110

This operators manual contains important safety information and maintenance information. Read it carefully before using this vehicle. Failure to follow the warnings contained in this operators manual could result in INJURY or DEATH.

Keep this manual in a safe place. It is very important that this owners manual be reviewed by any rider and it should remain with the vehicle when transferred to a new owner.

All information, images and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or production changes, there could be discrepancies in this manual. Motovox reserves the right to make product changes at any time, without notice and without obligation to make the same or similar changes to any vehicle previously built or sold.

Avoid operating this vehicle on paved surfaces including, but not limited to highways, parking lots, sidewalks and driveways. Never operate this or any designated off-road vehicle on a public street, road or highway where it will be in violation of local traffic laws and restrictions.

No part of this owners manual may be reproduced or copied without express written permission from Motovox.

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CONTENTS

PRODUCT WARRANTY	1
INTRODUCTION	2
IMPORTANT SAFETY INFORMATION	3 - 6
OPERATING CONTROLS	7 - 11
BEFORE RIDING	12 - 13
BASIC OPERATION AND RIDING TECHNIQUE	14 - 17
Starting and Stopping the Engine	14 - 15
Shifting Gears	16
Braking Technique	17
Parking & Post Ride Inspection	17
MAINTENANCE OF YOUR MVx110	18 - 33
Maintenance Schedule	19
Fuel & Engine Oil	21 - 23
Air & Fuel Filters	23
Throttle Free play Adjustment	24
Idle Speed Adjustment	24
Spark Plug	24 - 25
Clutch Adjustment	26
Brake Adjustment	26 - 27
Suspension Inspection	28
Wheels and Tires	29 - 30
Drive Chain	31 - 33
TROUBLESHOOTING	34 - 37
RESOLVING THE UNEXPECTED	38 - 39
EMISSION CONTROL SYSTEM WARRANTY	40 - 41
REGISTER YOUR MVx110	42 - 43

PRODUCT WARRANTY

PLEASE SEE PAGE 41 FOR EMISSIONS CONTROL WARRANTY

Motovox warrants to the first buyer of the Product ("Buyer") that on the date of purchase of the Product, as shown on Buyer's sales receipt ("Purchase Date"), the Product shall be free from defects in material or workmanship subject to and in accordance with the terms and conditions set forth herein. The duration of this Limited Warranty is ninety (90) days from the Purchase Date (the "Warranty Period"). Motovox will correct, at its option, by repair or by furnishing replacement parts, any parts determined in Motovox's sole discretion to have a defect in material or workmanship of the Product reported to Motovox during the Warranty Period, subject to the terms, conditions and limitations of this Limited Warranty. At its option, Motovox may require the Buyer to return to Motovox, at its address set forth below, at Buyer's expense, the part claimed to be defective for Motovox's inspection. Motovox's sole obligation under this Limited Warranty is to repair and/or replace parts on the Product. If Motovox determines that any claimed defect or problem reported by Buyer is not covered by this Limited Warranty, Buyer shall pay Motovox its then existing charge for any repair or replacement made by Motovox.

TO QUALIFY FOR WARRANTY SERVICE:

- 1. You must present a copy of the sales receipt.**
- 2. This product can not be used for rental or commercial use.**
- 3. This product can not be used for competition.**

LIMITATIONS OF LIABILITY

- This Limited Warranty is non-transferable after the Product's initial sale.
- No unapproved modifications can be made to the Product, its performance or otherwise, in order for this Limited Warranty to remain in effect.
- No reimbursement is provided for towing, loss of time, loss of use, inconvenience, incidental or consequential damages.
- This Limited Warranty covers only parts and labor due to manufacturer defect. Damage due to misuse or neglect, use other than as specified in the Owner's Manual, or use under abnormal conditions are not covered by this Limited Warranty.
- Motovox makes no warranty with respect to products or trade accessories not made by Motovox, including, but not limited to, engines, tires, wheels, batteries and transmissions, such products or trade accessories, such items being subject to the manufacturer's warranty, if any.
- This Limited Warranty does not cover minor surface blemishes, rips, tears, or other cosmetic damages due to normal use, or other intentional or unintentional damage to the Product.
- This Limited Warranty will not cover any damage which results from the application of improper cleaners, solvents or chemicals to the Product, or from smoke or soot, or from exposure to saltwater, sea breeze or salt.
- This Limited Warranty will not cover any damage which results from aging, such as fading of paint, deterioration of plated surfaces, deterioration of rubber or plastics, or rusting.
- This Limited Warranty does not cover improper repair or misdiagnosis of problem.

OWNER'S WARRANTY RESPONSIBILITIES

As the vehicle owner, you are responsible for the performance of the required maintenance. You should maintain a record of all maintenance performed your vehicle and retail all receipts covering maintenance on your vehicle. You may not be denied a warranty claim solely because of your failure to ensure the performance of all scheduled maintenance or lack of maintenance records or receipts. As the vehicle owner, you should be aware that you may be denied your warranty coverage if your vehicle or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.

For any issue regarding your Motovox product, call toll free 1-888-488-MOTO (6686)

INTRODUCTION

Congratulations on choosing your Motovox Platinum Series dirt bike, the MVx110.

Your Motovox dirt bike was designed as a recreational motorcycle for off-road use only and by a single rider only. This motorcycle is ideal for younger riders with basic experience.

Before riding, please take your time to get acquainted with your dirt bike and how it works. To protect your investment we urge you to keep it well maintained. In addition to regular maintenance it is important to observe and perform all pre ride and periodic checks outlined in this manual. In this manual you will find helpful safety information, instructions and helpful tips. To make it easier to use, there is a table of contents at the beginning and an index at the end of the manual.

As you read through this manual you will find information that is noted with a NOTICE symbol. This is to point out key bits of information that will help you avoid damage to your dirt bike and property around you. This manual covers basic maintenance procedures as well. For problems with your dirt bike that are not covered in this manual, please refer to an authorized Motovox Service Center, which can be located at Motovox.com.

Read the warranty page carefully so that you understand your rights and responsibilities.

Whenever you ride, tread lightly by staying on established trails and in approved areas. Protect the environment and keep off-road riding areas open for future use.

Please be sure to register your Motovox product and notify us of any address changes so we may contact you in the future with any important product information.

Enjoy your Motovox dirt bike!


IMPORTANT SAFETY INFORMATION

Your personal safety and the safety of those around you is our primary concern. Operating this dirt bike safely is an important responsibility and should not be taken lightly.

Motovox has provided you with safe operating procedures and warning labels on your dirt bike and in this manual. This information will alert you to potential hazards that could harm you or others.

It is understood that it is not practical or possible to warn you about all possible hazards associated with off-road riding and maintaining your dirt bike. You must always use your own best judgement.

Safety information is presented in a variety of forms, including:

- Safety labels and tags on the dirt bike
- Safety messages preceded by a safety symbol  and one of these three signal words: DANGER, WARNING and CAUTION.

 **DANGER**

 **WARNING**

 **CAUTION**

Any of the above labels can indicate a danger where you or someone around you can be KILLED or SERIOUSLY INJURED if the instructions that it accompanies are not followed carefully.

- Safety Headings such as important safety reminders and/or precautions.
- Safety Sections, such as Motorcycle Safety
- Instructions, such as Riding Techniques or Braking Techniques

This manual is filled with important safety information, please read it carefully and be sure that you understand it.



IMPORTANT SAFETY INFORMATION

A motorcycle can provide many years of service and pleasure, provided you take responsibility for safety, proper maintenance and understand the challenges you may encounter while riding.

This motorcycle has been designed for younger riders. However, not all young riders meet the physical and emotional needs for safe riding. Before parents allow any children to ride this motorcycle, we strongly recommend that they read this entire manual to be fully informed before making the determination if their children are ready to ride. Listed below are some of the most important safety measures one should take before and when riding.

⚠ DANGER Never ride without a helmet. Helmets significantly reduce the number and severity of head injuries. An approved DOT motorcycle helmet is the most important part of your safety gear. Choose one that fits properly and is snug on your head. Motorcycle dealers can help in selecting a good quality helmet with proper fit.

⚠ DANGER Never carry a passenger. This dirt bike was designed for one rider at a time only. There are no passenger foot pegs, foot rests, handles or seat room for a passenger. Riding with a passenger can impair the driver's ability to operate the dirt bike which may result in serious injury or death.

⚠ DANGER Ride off-road only. This dirt bike has been designed and built for off-road riding only. It is not equipped with a headlight, signals, brake lights or horn which are all required for public road usage. The tires are not designed for pavement and could become unstable. If you have to cross a paved area or road, dismount and walk the bike across the pavement.

⚠ DANGER Ride within your limits. Never attempt to operate this dirt bike in a manner that is beyond your skill level. It takes time to learn off-road riding skills. Learn to ride step-by-step. Start by riding on safe terrain at slow speeds and gradually build your skills. Instruction from a more experienced rider is strongly recommended.

⚠ DANGER Be alert for hazards. Any area you ride can present many hazards. Always scan the terrain ahead of you continuously. Watch for unexpected turns, drop-offs, ditches, rocks, low-hanging limbs and other riders. Always maintain a low enough speed to stop under control and react to hazards.

⚠ DANGER Never drink alcohol and ride. Even one drink can impair your ability to ride safely and each additional drink worsens your ability to do so. Remember, it is illegal to operate a motorcycle while intoxicated, including off-road motorcycles.

IMPORTANT SAFETY INFORMATION

As a parent, your child's safety is your first priority. Riding a dirt bike is very fun, but just like riding a bicycle, bad decisions can result in injury or death. As a parent you can prevent accidents by making informed decisions about if, when and how your child will ride. Always supervise your child when he/she is riding.

Before you allow your child to ride you need to determine if he/she is ready. Riding readiness can vary from one person to another. Age and size are not the only factors that help to determine riding readiness. There are three other factors that you should consider before deciding if your child is ready to ride.

First, consider your child's physical ability. A rider must be able to hold the dirt bike up, get on and sit comfortably with both feet on the ground. The rider must also be able to reach all of the controls on the handlebars and work the brake lever.

Second, consider your child's athletic ability. Your child should also be good at riding a bicycle before riding a dirt bike. Determine if your child is a good judge of speed and distance while riding a bicycle and that they react with proper foot and hand actions. Any person who does not have good coordination, balance and agility should not attempt to ride this dirt bike.

Finally, determine your child's mental maturity. It is imperative that you are honest with yourself when you answer the following questions: Does your child think through problems and come to logical conclusions? Does your child obey the rules when they ride their bicycle? If your child makes bad judgements, takes unnecessary risks and ignores the rules, they should not ride this dirt bike.

If you have determined that your child is ready to ride please remember the following points:

- Never let your child ride without a helmet.
- Your child's safety is your responsibility. Do not take it lightly.
- Never push you child to try things before they are ready.
- Always supervise your child when they are riding.
- Proper maintenance and upkeep of the dirt bike is key to safe riding.

⚠ DANGER Any modifications or improper accessories added to the dirt bike with parts that are not manufactured by Motovox can make it unsafe. Motovox strongly recommends that you do not remove any of the original equipment or make any modifications that alter the design and/or operation of the dirt bike.

IMPORTANT SAFETY INFORMATION

This page will show you where to find safety warning label on your MVx110. You will find that some labels warn you of potential hazards. Others will provide important safety and maintenance information. Please read them carefully and do not remove them. If your label wears off or becomes hard to read, contact Motovox for a replacement.



OPERATING CONTROLS

When you operate a dirt bike you need to be able to operate the throttle, brakes and other controls without stopping to look at them. Please study the image below carefully to become familiar with the function and the location of each control.

Engine Kill Switch

Front Brake Lever



Throttle

ATTACHING THE HANDLEBARS

Your MVx110 dirt bike is shipped with the handlebars NOT bolted on. To attach the handlebars follow these steps:

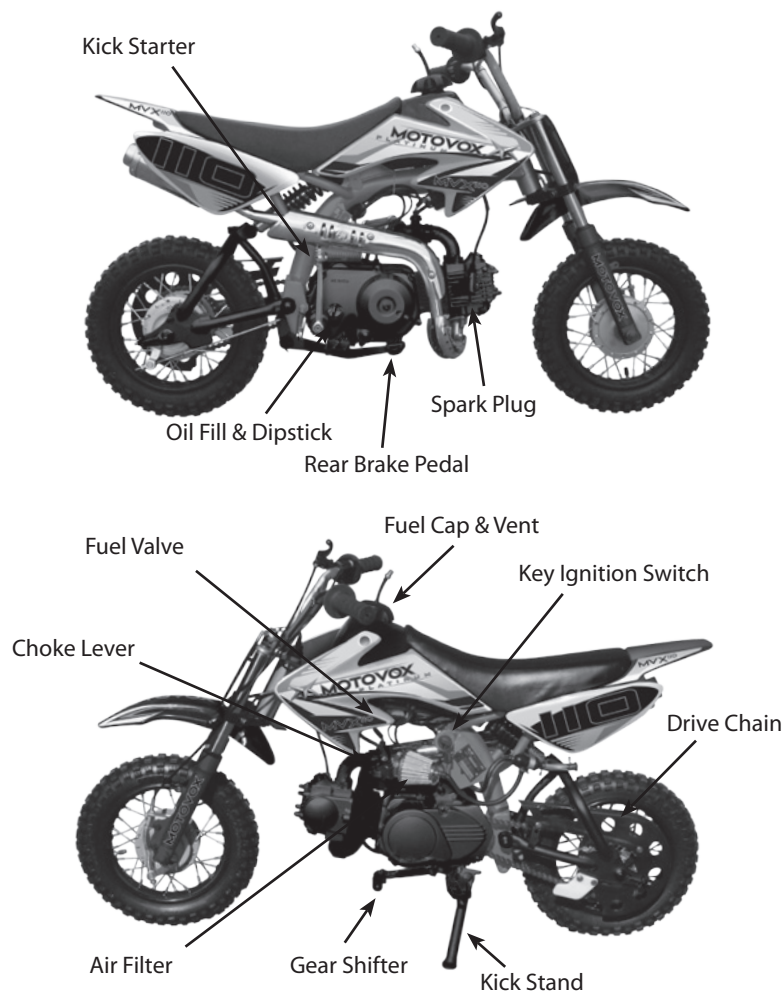
1. After unpacking your dirt bike, stand it on the kick stand on a level surface.
2. Locate the handlebar mounting bolts at the bottom of the handlebar assembly.
3. Remove the locking nuts and washers from the handlebar mounting bolts and set aside.
3. Insert bolts into holes in upper triple clamp.
4. From underneath, put washers and locking nuts onto bolts (pictured at right).
5. Tighten securely.



Mounting bolts and lock nuts.

OPERATING CONTROLS

MAJOR COMPONENT LOCATIONS



OPERATING CONTROLS

BEFORE STARTING

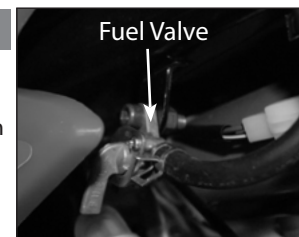
Before starting your MVX110, be sure these four components are in the RUN position:

1. Fuel Valve 2. Choke Lever 3. Engine Kill Switch 4. Ignition Key Switch

The location and operating information for each of these controls is shown below:

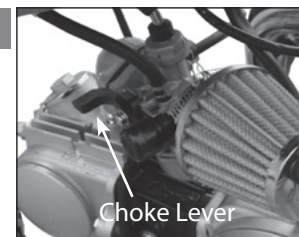
FUEL VALVE

The two-way fuel valve is used to control the flow of fuel to the engine. The valve is located on the left side under the fuel tank. Turning the lever to the ON position allows fuel to flow to the carburetor and turning it to the OFF position stops the flow. Always keep the fuel valve in the OFF position when not using the dirt bike.



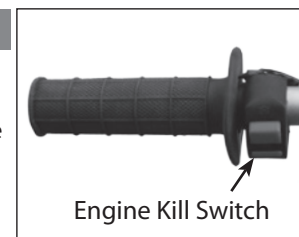
CHOKE LEVER

The choke lever is used to start the engine when it is cold and is located on the left side of the carburetor. It is used to restrict the amount of air in the fuel mixture to start easier and warm up. Flip the lever up to the FULL position to start, and then as the engine warms up move the lever down to the OFF position.



ENGINE KILL SWITCH

The engine kill switch is located next to the left hand grip on the handlebars. The kill switch must be in the START/RUN position for the engine to start. To stop the engine, flip the button down to the STOP position.



IGNITION KEY SWITCH

The Ignition Key Switch is used to start the engine and is located on the left side of the dirt bike, under the fuel tank. Before attempting to start the engine, be sure the key is in the START/RUN position which is indicated by a red dot. When finished riding switch the key to the OFF position, indicated by a blue dot.



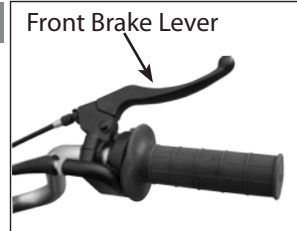
OPERATING CONTROLS

When operating your MVx110 there are several key operating controls that allow you to operate your dirt bike. Their location and operation information is shown below.

1. Front Brake Lever 2. Throttle 3. Shift Lever 4. Rear Brake Pedal

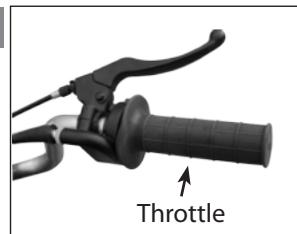
FRONT BRAKE LEVER

The Front Brake Lever is used to apply braking to the front wheel. When you pull the lever back, braking power is applied to the front wheel. The harder it is pulled, the more braking power is applied to the wheel. To release the front brake, release the front brake lever.



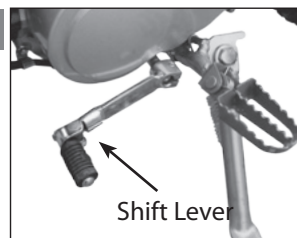
THROTTLE

The Throttle controls the speed of the engine and is located in the right grip on the handlebars. To increase the engine speed, twist the throttle grip toward you, or downward. To decrease the engine speed, twist the grip away from you, or upward. The throttle grip is spring loaded so it will return to the lowest position as you release it.



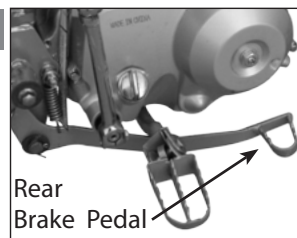
SHIFT LEVER

The Shift Lever is used to change the gears and is located ahead of the left foot peg. To select the next higher gear, pull up until it clicks. To select the next lower one, push down until it clicks. The MVx110 is equipped with four gears and does not use a clutch. Be sure to let off on the throttle when shifting.



REAR BRAKE PEDAL

The Rear Brake Pedal is used to apply braking to the rear wheel and is located ahead of the right foot peg. When you push the pedal down, braking power is applied to the rear wheel. The harder it is pushed, the more braking power is applied to the wheel. To release the rear brake, release the rear brake pedal.



OPERATING CONTROLS

When operating your MVx110 there are several key operating controls and components that allow you to operate your dirt bike and perform routine maintenance.

Their location and operation information is shown below.

1. Kick Starter 2. Air Filter 3. Spark Plug 4. Kick Stand

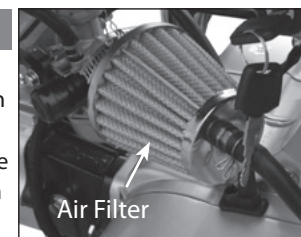
KICKSTARTER

The kickstarter is used to start the engine and is located on the right side of the engine behind the right foot peg. To use the kickstarter flip it outward from its stored position, hold the bike firmly while straddling the bike. Place your right foot on the kickstarter and push down quickly. The kickstarter will return to its stored position when released.



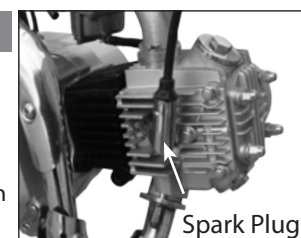
AIR FILTER

The air filter is used to keep dirt and debris out of the carburetor air supply. Examine the air filter before each ride to be sure that it is not clogged with dirt and dust to keep your dirt bike running well. The air filter can be removed and tapped gently on a hard surface to clean out most of the dust. Replace the air filter periodically.



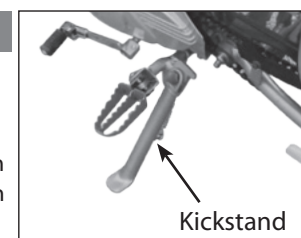
SPARK PLUG

The spark plug is used to provide spark to the engine to make it run. You should never touch the spark plug when the engine is running as you could be shocked. The spark plug will become worn or plugged after many hours of operation. Refer to the servicing section of this manual for cleaning/replacing instructions.



Kick Stand

The Kickstand is used to support the dirt bike when it is parked and is located on the left side of the bike below the left foot peg. To operate it, use your foot to swing the kickstand to its downward position and lean the bike onto it. Be sure to raise the kickstand up when riding or serious injury can result.



BEFORE RIDING

Before you ride you must be certain that you and your dirt bike are ready to ride. Below is your pre-ride checklist. Be sure to review all the topics and determine your readiness to ride.

PRE-RIDE CHECKLIST

1. Have you completely read and do you thoroughly understand this owners manual?
2. Have you found all the safety messages on your dirt bike and do you understand them?
3. Do you understand the location of, and how all the operating controls on your dirt bike work?
4. Are you in good mental and physical condition?
5. Are you drug and alcohol free?
6. Are you wearing a DOT-approved helmet that fits properly?
7. Are you wearing eye protection?
8. Are you wearing sturdy shoes and protective clothing?

Additional suggested protective clothing.

1. Gloves to protect your hands.
2. Sturdy riding boots that support your ankles.
3. Riding pants with knee and hip pads.
4. Riding jersey with elbow pads and chest/shoulder protection.

As a reminder:

⚠ DANGER Never ride without a helmet. Helmets significantly reduce the number and severity of head injuries. An approved DOT motorcycle helmet is the most important part of your safety gear. Choose one that fits properly and is snug on your head. Motorcycle dealers can help in selecting a good quality helmet with proper fit.

BEFORE RIDING

Before you ride you must be certain that you and your dirt bike are ready to ride. Below is your pre-ride checklist. Be sure to review all the topics and determine your readiness to ride.

PRE-RIDE INSPECTION

1. Check tire pressure with a tire gauge. Recommended tire pressure is 32psi for the front tire and 36psi for the rear.
2. Check spokes and rims to make sure spokes are tight and rims are not bent or damaged.
3. Inspect the engine for oil or fuel leaks.
4. Check engine oil level and add if needed.
5. Check the level of fuel in the gas tank.
6. Check the drive chain to see if it needs to be lubed or tightened.
7. Check the brakes to be sure they are working properly.
8. Look over the entire bike for loose nuts and bolts.
9. Check the throttle to be sure it rotates freely and returns to the low position on its own when released.
10. Be sure that the handlebars turn freely.

⚠ DANGER Failure to properly maintain your dirt bike can lead to a crash in which you can be seriously injured or killed. Always perform a pre-ride inspection on your dirt bike and keep it in good condition to get the most out of your Motovox dirt bike.

STARTING THE ENGINE

The following section of the manual provides some basic information on how to begin riding your dirt bike. We will cover how to start and stop the engine, how to use the throttle and brakes, shift gears and what you should do when you stop riding.

SAFE RIDING PRECAUTIONS

Before riding this dirt bike, be sure that you have read and understand this entire owners manual up to this point, including the sections that are titled Important Safety Information and Before You Ride. Even if you have ridden other motorcycles in the past, take time to become familiar with how this dirt bike runs and how it handles. Different bikes have different handling characteristics. Always practice in a safe area until you feel comfortable with how this dirt bike runs.

⚠ DANGER For your safety, always avoid running the engine in an enclosed space with poor ventilation, such as a garage. The dirt bike's exhaust contains poisonous carbon monoxide which can collect rapidly and cause illness or death.

⚠ DANGER Not equipped with lights. Do not ride after dark.

STARTING THE ENGINE

1. Turn the Key Ignition to the ON position.
2. Move the engine kill switch to the ON position.
3. Make sure the engine is in neutral.
4. Turn the fuel valve to the ON position.
5. If the engine is cold, flip the choke lever up into the FULL position.
If the engine is warm, you may not need to use the choke at all.
6. Stand over the dirt bike, flip the kick starter out and hold the handlebars.
7. Twist the throttle down some, to give it a little gas.
8. Using your right foot push the kickstarter down swiftly. It may take a few tries.

NOTE: To avoid damage to the side case of the motor, don't let the kickstarter flip back into its neutral position from the bottom of the stroke.

BASIC OPERATION

9. Once the engine starts to run, let it warm up by operating the throttle up and down for about 20 seconds, then move the choke lever down to the OFF position.
10. Be patient and let it warm up a little. Once the engine is warm, the idle will smooth out and it will be ready to ride.

NOTE: Extended running with the choke fully on will cause the engine to run poorly and can cause damage to the spark plug and cylinder wall.

A FLOODED ENGINE

If the engine fails to start after repeated attempts, it may mean that it is flooded with excess fuel. A common indication of a flooded engine is a strong smell of fuel around the dirt bike. Follow the steps below to clear a flooded engine.

1. Move the engine kill switch to the OFF position.
2. Switch the choke lever to the off position.
3. Twist the throttle all the way down to the full open position.
4. Using the kickstarter, crank the engine over 10 or 15 times.
5. Move the kill switch back to the ON position.
6. Start the dirt bike using the kickstarter and NO CHOKE.

STOPPING THE ENGINE

To stop the engine, move the kill switch located on the left hand grip to the OFF position. The engine will stop.

NOTE: Be sure to switch the Key Ignition off, close the Fuel Valve and lean the bike over onto the kickstand when done riding.

SHIFTING GEARS

This dirt bike has four forward gears. To start riding, after the engine is fully warmed up and the kickstand is raised, follow these steps.

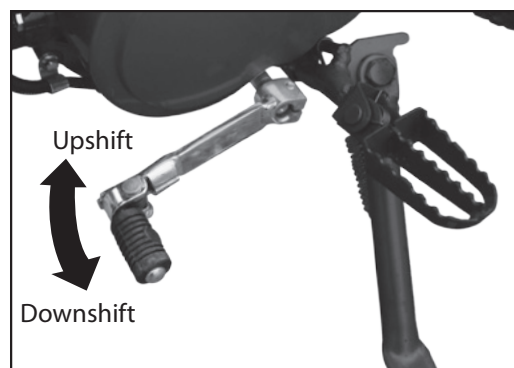
STARTING AND UPSHIFTING

1. With the engine running at idle speed, squeeze the front brake tightly.
2. Pull the shift lever up with your foot until you feel it click into first gear, then release the lever and let it return to its neutral position.
3. Release the front brake and open the throttle gently to increase the engine speed. You will feel the dirt bike start to ease forward.
4. As the bike speed increases, let off on the throttle and pull up on the shift lever again until you feel it click into second gear. Once again, let the shifter return to its neutral position and open the throttle a little to increase your speed.
5. To go faster, repeat this process to get to third and fourth gears.

NOTE: Learning when to shift up or down will come with experience and practice. Shift up when you feel that the engine speed is getting high and you want to go faster. Shift down when you want to slow the dirt bike down.

DOWNSHIFTING AND STOPPING

To downshift to a lower gear and slow down, let off on the throttle and push down on the shift lever until you feel it click. This will be the next lower gear.



The neutral position is before first gear. To return the dirt bike to neutral when it is in gear, click down on the gear shifter as many times as needed to reach neutral.

⚠ DANGER Never attempt to start the engine when the dirt bike is in gear. Doing so could cause a crash that could result in serious injury or death.

BRAKING TECHNIQUE

This section will cover basic braking technique for your dirt bike. To slow or stop the bike, squeeze the front brake lever and push down on the rear brake pedal firmly and smoothly. You can use engine speed to slow the bike along with braking power by downshifting at the same time. Gradually increase your braking pressure as you feel it is needed. The more pressure you apply to the brakes, the more braking power will be applied. When you come to a full stop, put your left foot on the ground first so that your right foot can remain on the brake pedal as needed.

For maximum braking, let off completely on the throttle and firmly apply both front and rear brakes at the same time while downshifting with your left foot at the same time. Remember that on any motorcycle, the front brake provides 60% - 70% of the braking power while the rear provides the rest, so most of your braking power comes from the front brake. Just be careful to apply it carefully to avoid sending the bike into a front wheel skid which will cause you to lose control.

If you apply the brakes too quickly and start to skid, release the brakes to regain control and then apply braking power carefully.

When riding on wet, or loose rocky conditions your braking power can be reduced greatly and it will be much easier to put the bike into a skid and lose control. If the surface is wet or loose, you must reduce your speed and allow more room to stop safely.

Avoid jamming on the brakes suddenly or accelerating too quickly as either of these actions can cause you to lose control of the dirt bike.

When descending a long, steep grade use engine compression to slow your dirt bike by downshifting and using the brakes at the same time.

PARKING AND POST-RIDE INSPECTION

With the bike stopped, switch it off with the kill switch, flip down the kickstand and lean the bike over on it to park. Turn the Key Ignition to the off position and turn the fuel valve to OFF. Always park your dirt bike on a flat surface to avoid tipping over.

If you are going to store the dirt bike for an extended period of time, close the fuel valve with the engine still running until it stops. This will burn all the fuel out of the carburetor and reduce fuel system problems in the future.

MAINTAINING YOUR MVx110

Keeping your MVx110 in perfect operating condition is absolutely essential to your safety. It is the best way to protect your investment, get maximum performance, avoid breakdowns and have the most fun you can have. To help keep your motorcycle well maintained, this section includes a maintenance schedule for required service procedures along with step by step instructions on how to perform certain maintenance tasks. Also, see our website for easy to follow, step-by-step maintenance videos that will make taking care of your MVx110 easier. In this section you will also find important safety precautions, information on oil and tips to keep your MVx110 looking great.

Careful pre-ride inspections and good maintenance are important because your MVx110 is designed to be ridden over rough, off-road terrain. Refer to the maintenance schedule on the next page to help you properly care for your MVx110. The service intervals in this section are based on average riding conditions. If your riding conditions are more severe such as racing or especially dusty or wet, your MVx110 may require more frequent service. Frequent checks of the air cleaner will be required to maintain maximum performance and to protect your engine.

⚠ DANGER Improper maintenance of this motorcycle or failing to correct a problem before you ride can cause a crash in which you could be seriously hurt or killed. Always follow the inspection and maintenance recommendations and schedules in this manual.

Remember that proper maintenance is the responsibility of the owner. Be sure to inspect your motorcycle before each ride and follow the maintenance schedule on the next page.

Note to parents: As a parent, it is up to you to make sure the motorcycle is properly maintained and kept in safe operating condition. For youngsters, learning how to take care of a motorcycle and perform basic maintenance can be an important part of their riding experience. However, if you allow a youngster to perform or assist in any maintenance task, such as re-fueling the tank with gasoline, you need to provide close supervision and make sure the task is performed safely.

⚠ DANGER Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed. Always follow the instructions in this manual carefully.

IMPORTANT SAFETY PRECAUTIONS

Make sure that the engine is off before you begin any maintenance or repairs. This will help to eliminate the following hazards:

- 1. Carbon Monoxide poisoning from engine exhaust** - Be sure you have adequate ventilation whenever you operate the engine.
- 2. Burns from hot engine components** - Let the engine and exhaust system cool off before you touch them.
- 3. Injury from moving parts** - Do not perform maintenance procedures to the engine unless instructed to do so.

Read all instructions carefully and watch the online maintenance videos before on our website before you start a procedure. Make sure you have all the tools you need and the knowledge required. To help prevent the motorcycle from falling over, park it on a firm level surface. Using the side stand or a maintenance stand to provide support. To reduce the chance of fire be extra careful when working around gasoline. Use only a low-flammable solvent such as Simple Green to clean parts. Keep open flames away from all fuel related parts.

MAINTENANCE SCHEDULE

To keep your motorcycle safe and reliable when you ride, regular inspections and service is required. Below you will find a maintenance schedule that describes when components need to be inspected or serviced. The maintenance schedule lists items that can be performed with basic mechanical skills and hand tools. In addition, the maintenance schedule will list items that involve more extensive procedures and could require special training, tools, and/or equipment.

Because this motorcycle does not have an odometer, service intervals in the maintenance schedule are expressed in terms of riding days. To avoid missing required maintenance, we suggest that you develop a good way to record the amount of the time you spend riding your motorcycle. If you do not feel capable of performance any of the procedures described in this manual or if you need assistance, please contact your nearest Motovox dealer. If you decide to do your own maintenance, use only replacement parts that you have purchased directly from Motovox, Inc. This will ensure the best quality and reliability for your motorcycle.

Always perform the pre-ride inspection described on page 13 at each scheduled maintenance interval.

Each item on the maintenance schedule requires some mechanical knowledge. You will find that some items in the table (marked * and **) may require a higher level of mechanical skill and special tools. If you do not feel capable of performing any procedure, please consult Motovox.

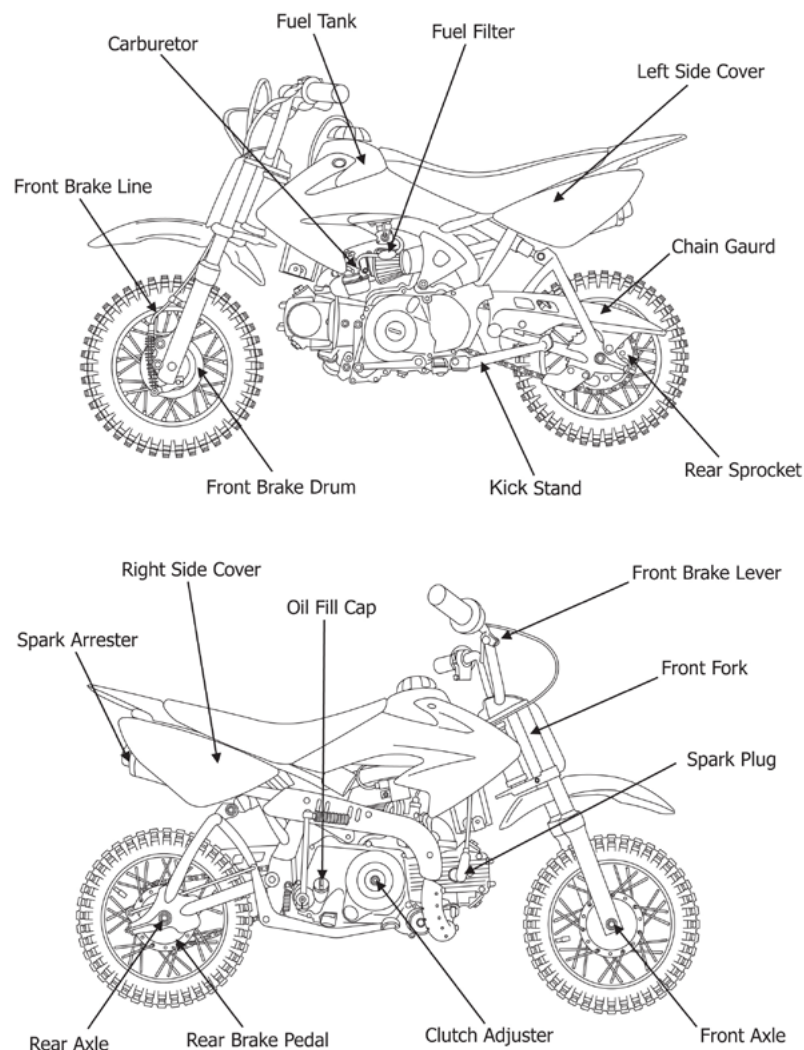
Note: Service your motorcycle more frequently when you ride in wet or dusty conditions.

	After First 2 Hours	Every Use	First Month (20 Hours)	Every 3 Months	Every 6 Months	Every Year (200 Hours)
Check engine oil		✗				
Change engine oil*	✗		✗		✗	
Check air filter		✗				
Clean air filter*				✗		
Change air filter*						✗
Clean carburetor sediment cup*				✗		
Clean and adjust spark plug*					✗	
Replace spark plug*						✗
Clean & lubricate drive chain				✗		
Check/adjust valve clearance**						✗
Clean fuel tank and filter*						✗
Check fuel tube						✗
Tighten all nuts and bolts				✗		
Check/adjust chain tension		✗				
Check brakes		✗				
Check throttle		✗				

* Can be performed by owner with proper tools and knowledge, otherwise consult with a service center.

** Recommended to be performed by authorized service center.

COMPONENT LOCATIONS



MAINTENANCE PROCEDURES

FUEL

Fuel Recommendation - Unleaded gasoline with an octane of 87 or higher.

The engine in your MVx110 has been designed to run on any gasoline with an octane rating of 87 or higher. Most service stations will display the octane rating on a sticker right on the pump. Although it is not required, Motovox recommends using premium unleaded to ensure maximum performance and reliability.

The use of lesser gasoline can cause pre-detonation in the engine. When this occurs, you will hear a "pinging" noise or spark "knock" which, if severe, can cause engine damage. It is not a cause for concern however, if you hear it occasionally when the engine is under hard acceleration, such as climbing up a hill. If pinging occurs under normal load and steady engine speed, switch to a better grade of gasoline. Using unleaded fuel is recommended because it produces fewer deposits and extends the life of the engine.

Never use old or contaminated gasoline. Never use gasoline that has been mixed with oil. Avoid getting dirt or moisture in your fuel tank.

REFUELING PROCEDURE

1. With the engine off, twist the fuel tank cap counter-clockwise and remove from the tank.
2. Using a funnel, add fuel to the tank until the level reaches about two inches from the top.
3. Replace the cap until you feel it click.
4. Be sure the breather tube is connected to the cap and unobstructed.

⚠ WARNING Gasoline is highly flammable and explosive and can cause severe burns or death. Be sure that the engine is not running when you refuel. Do not refuel in an enclosed area because fumes can overtake you. Clean up all spills immediately.

ENGINE OIL RECOMMENDATION

Engine oil recommendation - SAE 10W-30 Motor Oil.

This is the oil that is recommended for normal temperatures. Please see the oil/air temperature chart to help you choose the right oil for your climate.

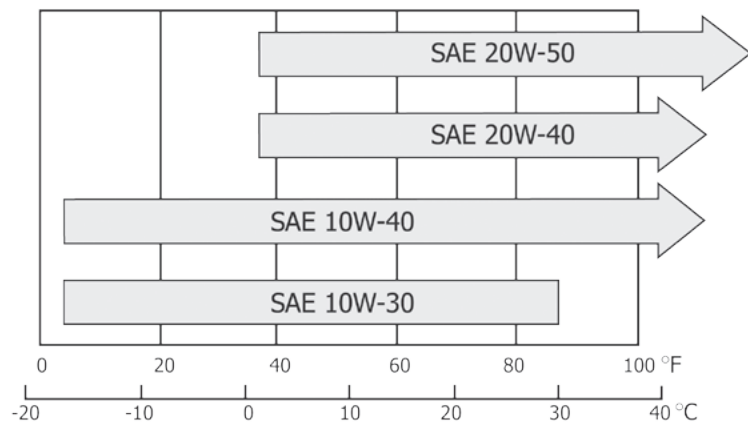
⚠ WARNING The motor oil that comes in your motorcycle out of the box is a break-in oil. Motovox highly recommends that you change this oil after the first two hours of operation.

⚠ WARNING Your motorcycle does not need oil additives. Do not use oils that are treated with graphite or molybdenum additives as they may adversely affect the clutch operation. Also, do not use oils that are labeled as "Energy Saving" as they may affect the clutch operation.

MAINTENANCE PROCEDURES

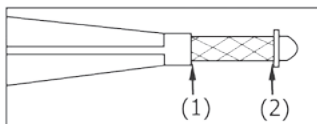
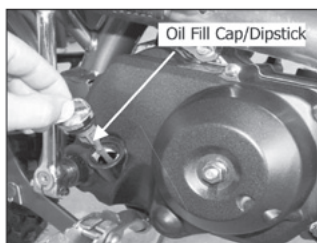
ENGINE OIL RECOMMENDATIONS *(continued)*

Other viscosities shown in the chart below can be used when the average temperatures in your riding area are within the indicated range.



CHECKING AND ADDING OIL

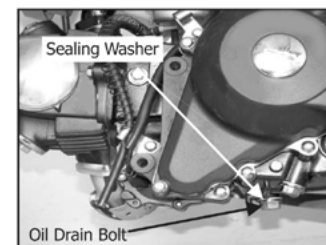
1. Park the motorcycle on a firm level surface.
2. Clean around the oil fill cap and all nearby surfaces.
3. Unscrew the oil fill cap and wipe it clean.
4. Hold the motorcycle upright so that it is level and not resting on the kickstand.
5. Insert the oil fill cap back into the fill hole until it seats, but do not screw it in.
6. Pull it back out and check the oil level. If it is at or near the upper mark (1) you do not need to add any oil. If it is at or near the lower mark (2) add the recommended oil until it reaches the upper mark. Do not overfill.
7. Insert the oil cap and screw it in tightly.
8. Start the engine and check for oil leaks.



MAINTENANCE PROCEDURES

CHANGING ENGINE OIL

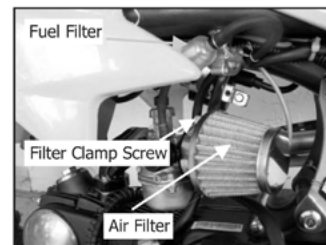
1. Park the motorcycle on a firm level surface.
2. Unscrew the oil fill cap and wipe it clean.
3. Place an oil drain pan under the engine.
4. Unscrew and remove the oil drain bolt.
5. Allow the oil to drain into the pan completely, it is a good idea to lean the motorcycle toward the oil drain hole to allow as much oil to drain out as possible.
6. Examine the sealing washer on the drain bolt for damage and replace if needed.
7. Install the oil drain bolt back into the drain hole and tighten to 18 foot pounds.
8. Pour the recommended oil into the engine slowly until it reaches the correct level.
9. Screw the oil fill cap back in and tighten.
10. Start the engine and let it run for a few minutes, watching for oil leaks.
11. Shut off the engine and check oil level.
12. Dispose of used oil properly. Failure to do so is harmful to the environment and illegal in most states.



AIR FILTER

Proper air filter maintenance is extremely important for off-road vehicles because of the dusty and dirty conditions that they operate in. Dirty, water-soaked or defective air filters will allow dirt and other contaminants to pass into the engine and cause damage. If you are riding in wet or dusty conditions you should check and service the air filter more frequently. Always replace the air filter with genuine Motovox replacement filters. Failure to do so can cause the engine to run poorly and can cause damage to the engine and/or spark plug.

1. Unscrew the filter clamp using a flat screwdriver.
2. Remove the air filter.
3. Clean the filter element by tapping the dirt off and blowing from the inside out with forced air. You can also clean it carefully with soapy water and allow it to dry thoroughly before replacing on the bike.
4. Replace the filter if you see any tears or holes.
5. Apply a good quality air filter oil to the element when dry.
6. Re-install the air filter and tighten the air filter clamp screw.
7. Replace the fuel filter every 12 months or when it is clogged. Contact Motovox for a replacement.



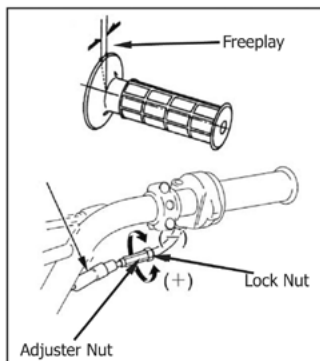
MAINTENANCE PROCEDURES

THROTTLE FREEPLAY

The throttle freeplay should be 1/4" or less (< 5mm). To make an adjustment to the throttle freeplay, follow these steps:

1. Loosen the lock nut on the throttle cable mechanism.
2. Turn the adjuster nut in the direction needed to obtain proper throttle free play.
3. Tighten the lock nut.
4. After the adjustment, check the throttle for smooth operation from fully closed to fully open in all steering positions.

If you can not adjust the throttle free play to your satisfaction, contact your local Motovox Service Center for assistance.

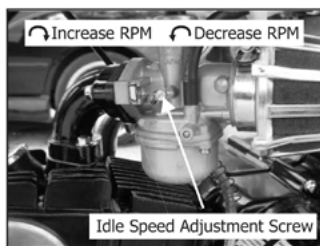


ENGINE IDLE SPEED ADJUSTMENT

To check or adjust the idle speed, be sure that the engine is at normal operating temperature. 5 minutes of operating the engine is enough to reach normal temperature. Keep in mind that once the engine is at normal operating temperature, many parts will be hot enough to cause severe burns. NOTE: If you are not comfortable working on a running engine and near hot engine parts, contact your local Motovox Service Center for assistance.

Idle speed - 1,400 rpm (+/- 100)

1. With the engine at normal operating temperature, shift the bike into neutral and place a block under the frame, ahead of the rear wheel to raise the rear wheel off of the ground.
2. Connect a tachometer to the engine following the instructions provided by the tachometer manufacturer. If you do not have a tachometer, see your local auto parts store to purchase one.
3. Adjust the idle by turning the idle speed adjustment screw in small increments until your desired speed is reached. The idle adjustment screw is located on the left side of the carburetor as pictured to the right.



SPARK PLUG MAINTENANCE

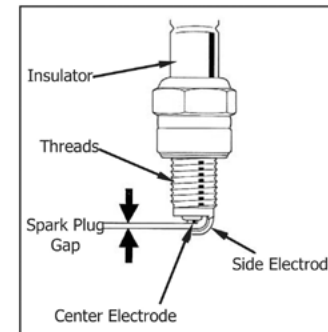
The **NGK C7HSA** spark plug that is provided with your MVx110 is a good one for most normal riding conditions. However, if you plan to ride for extended periods of time at high speed or high engine RPM in hot climates, or plan to ride in very cold climates, a different plug may be recommended. See your local Motovox Service Center for assistance.

MAINTENANCE PROCEDURES

SPARK PLUG MAINTENANCE (continued)

A fouled (dirty) spark plug can cause your motorcycle to run poorly and lose performance or not start at all. Follow the steps below to inspect, clean or replace the spark plug if needed.

1. Clean any dust and dirt away from the spark plug area.
 2. Disconnect the spark plug cap.
 3. Remove the spark plug using a 5/8" socket or wrench.
 4. Using the photos below as reference, examine the plug to determine the condition. If the plug is a normal color go on to step 6. If the plug is fouled, go to step 5.
 5. Using a medium grit sandpaper (220-400), sand between the center electrode and the side electrode until all carbon and deposits are removed. Motovox recommends that you use a spark plug cleaner or a new spark plug if the plug is fouled.
 6. Inspect the electrodes for wear. The center electrode should have squared edges and the side electrode should not be eroded at all. The insulator should not have any cracks or chips. Replace the plug if any of these conditions are present.
 7. Check the spark plug gap using a plug gapper. Gappers can be purchased at an auto parts store. The plug gap should be set at .02 to .03. Always check the gap of a new plug before installing it.
 8. Be sure the plug hole area is clean and install the plug by hand to prevent stripping the threads. Use a 5/8" socket or wrench to securely tighten the spark plug. Do not over-tighten as stripped threads can ruin the cylinder head.
- NOTICE: Improperly tightened spark plugs can damage the engine. Too loose can burn a hole in the piston, too tight can damage the threads.



Normal Spark Plug (light brown center)	Lean Spark Plug (White center)	Fouled Spark Plug (Heavy carbon buildup)	Fouled Spark Plug (Heavy oil buildup)

When you inspect the spark plug, generally it will fit into one of the four categories shown above. A normal/clean spark plug will have a light brown center and will display no wear on the electrodes. A spark plug with a bright white center indicates a lean condition in the engine. If your spark plug looks like this you should have it serviced by a Motovox technician immediately. A carbon fouled plug will be completely black and dull. An oil-fouled plug will appear black and shiny and is caused by oil slipping past the piston rings into the combustion chamber. If your motorcycle consistently fouls plugs you should have it serviced by a Motovox technician.

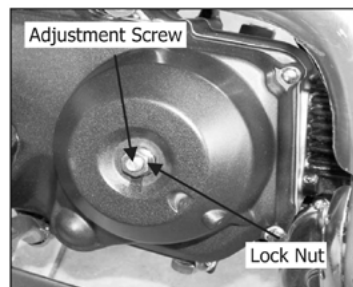
MAINTENANCE PROCEDURES

CLUTCH ADJUSTMENT

In order to ensure the best possible performance and durability from the clutch, always be sure you have the proper clutch adjustment. As the clutch disks wear, the clutch will need adjustment. Adjust the clutch only when you feel it slipping under hard acceleration. Follow the steps below to make a clutch adjustment.

Clutch freeplay - 1/16" - 1/4" (2-6mm)

1. Loosen the clutch adjuster lock nut.
2. Turn the adjuster screw clockwise one full turn. Do not turn excessively.
3. Slowly turn the adjusting screw counter clockwise until resistance is felt.
4. Turn the adjusting screw 1/8 turn clockwise and tighten the lock nut while holding the adjusting screw.
5. Check that the clutch is not slipping and is properly disengaging by test riding.



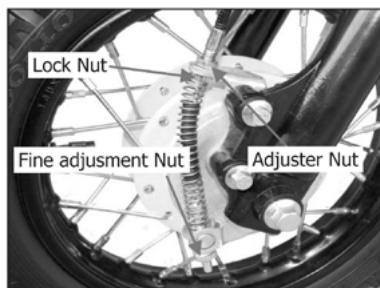
If adjustment of the clutch fails to solve the problem, it is likely that the clutch discs have worn excessively and/or an unapproved lubricant was used in the engine. Contact your Motovox technician to have it serviced.

FRONT BRAKE ADJUSTMENT

The front brake has two adjustment points, one for major adjustments and one for minor adjustments. Follow the procedures below to adjust the front brake. If adjustment fails to solve the braking problem it is possible that the brake shoes are worn out. Contact your Motovox service technician to have your brake pads replaced.

Major Adjustment

1. Loosen the cable adjust lock nut.
2. Turn the adjuster nut clockwise to increase the braking ability and counter clockwise to reduce the braking ability.
3. Tighten the adjuster lock nut and test the front brake. The front wheel should spin freely when the front brake is not applied.

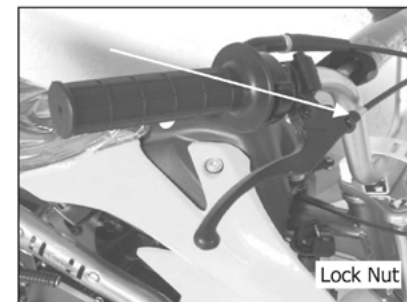


MAINTENANCE PROCEDURES

FRONT BRAKE ADJUSTMENT (continued)

Minor Adjustment

1. Loosen the cable adjust lock nut on the brake lever.
2. Turn the barrel adjuster counter clockwise (out) to increase braking power and clockwise (in) to reduce braking power.
3. Tighten the adjuster lock nut and test the front brake. The wheel should spin freely when the brake is not applied but should stop firmly when brake is applied.



⚠ DANGER Never ride the motorcycle when the brakes are not working properly. If you can not adjust the brakes properly, take the Motorcycle to your Motovox service technician for repair.

REAR BRAKE ADJUSTMENT

Adjustment

1. Place the bike on the side stand with the engine off.
2. Locate and turn the adjustment nut clockwise (in) to increase braking power.
3. Turn the adjustment nut counter clockwise (out) to reduce braking power.



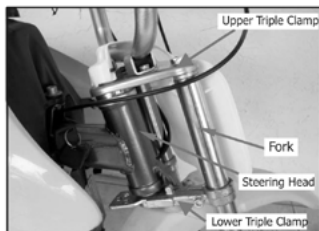
Once you have adjusted the rear brake, test ride the motorcycle to be sure it is working properly. The rear wheel should spin freely when the brake is not applied and stop firmly when the brake is applied.

⚠ DANGER Never ride the motorcycle when the brakes are not working properly. If you can not adjust the brakes properly, take the Motorcycle to your Motovox service technician for repair.

MAINTENANCE PROCEDURES

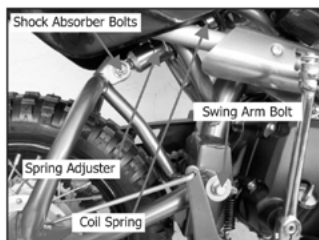
FRONT SUSPENSION INSPECTION

1. Check the operation of your fork by squeezing the front brake lever and pushing down on the fork to compress it several times. The movement of the suspension should feel smooth and clean, and it should bounce back up after compression.
2. Check the lower end of the fork near the wheel for oil leakage.
3. Inspect the upper and lower triple fork clamps to be sure they are tight. Examine them for cracks or any other type of damage.
4. Be sure that there is no freeplay in the steering head by holding the front brake and rocking the bike forward and back. If you feel a slight clunk, your steering head may be loose.



REAR SUSPENSION INSPECTION

1. Sit on the motorcycle and hold the handlebars firmly, then push the motorcycle side to side. Feel for any free play in the rear swingarm bearings and bushings.
 2. Check the shock absorber mounting bolts and swingarm mounting bolts for tightness.
 3. Pump the rear suspension up and down and be sure that it moves smoothly.
 4. Examine the coil spring for cracks or damage.
 5. Check the shock absorber for oil leakage.
 6. Check the spring adjuster for tightness.
- If you find problems with any of the above, contact Motovox.



Rear Suspension Adjustment

The rear suspension of your motorcycle comes from the factory set at the softest setting. If you wish to have it firmer follow the steps below. You will need a spring adjustment wrench.

1. Place the bike on a maintenance stand.
2. Turn the spring adjuster ring counter-clockwise to make the rear suspension firmer. Turn it clockwise to make it softer. Notches in the spring allow for 5 positions of adjustment.
3. Place the bike on a level surface and pump the rear suspension to be sure it is working properly.

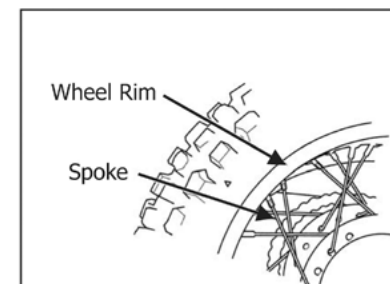
MAINTENANCE PROCEDURES

WHEEL RIMS & SPOKES

Maintaining spoke tension and wheel trueness is important for safe operation. During the first 100 miles of riding, your spokes may become loose due to the initial seating of the wheel components. Excessively loose spokes will cause bike to become unstable at high speeds and could cause loss of control. Loose spokes can also cause damage to the wheel if they are not addressed properly.

Wheel Inspection Procedure

1. Inspect the wheel rims and spokes for damage. Squeeze the spokes together and feel for loose spokes.
2. Tighten any loose spokes with a small adjustable wrench or with a spoke wrench, available at any motorcycle shop.
3. Elevate each wheel off the ground, one at a time and spin the wheel. Watch for a wobble in the wheel as it rotates. If you notice a wobble, your wheel has become bent and needs to be trued. See your Motovox Service Center for help.



TIRE AIR PRESSURE

Properly inflated tires will provide you with the best combination for handling, tread life, traction and riding comfort. Under inflated tires will wear quickly and be unstable at high speeds, especially when turning. Overinflated tires will ride rough, will not have as much traction on rough and rocky terrain, and will be more prone to damage from rocks and other obstacles.

⚠ WARNING Using tires that are excessively worn or improperly inflated can cause a crash in which you could be seriously hurt or killed. Follow the instruction below regarding proper tire pressure.

Make sure the valve stem caps are secure, if lost or damaged, install a new cap. Always check tire pressure when the tires are cool, before you ride. Hotter tires will show a higher pressure and not give you an accurate reading. The correct cold tire pressures are listed below. Correct tire pressures are also listed on the side of the tire. If you replace the tires on your MVs110, they may have different recommended pressures.

TIRE PRESSURE FRONT (COLD)	32 PSI
TIRE PRESSURE REAR (COLD)	36 PSI

MAINTENANCE PROCEDURES

TIRE INSPECTION

A flat tire or blowout can be very inconvenient or can cause an accident. Take the time to inspect your tires and wheels before you ride. For more information about handling a flat tire, refer to the section of this manual entitled [Resolving the Unexpected](#).

- Inspect both tires carefully for bumps and bulges in the sidewall or tread. Replace any tire that you find bumps or bulges on.
- Also look closely for cuts, slits or holes in the tires. Replace any tire that shows severe cutting or if any of the tire threads are showing through.
- Check for, and remove rocks that are embedded in the tire tread. Also watch for nails, screws or glass.
- Measure the tread depth periodically and replace tires when they get below 1/8" in depth.
- Check the valve stems to make sure that they are not tilted. A tilted valve stem indicates that the tube is slipping inside of the tire and must be corrected before the stem breaks and the tire goes flat.

TUBE & TIRE REPLACEMENT

If a tube has been punctured it should be replaced immediately. You may repair the tube using a patch kit but keep in mind that it may not have the same reliability as a new one and could fail on your next ride. For more information on a temporary repair, refer to the section of this manual entitled [Resolving the Unexpected](#).

Always use replacement tubes that are the same size as the original. We recommend that you have tubes changed at your Motovox Service Center or at a local motorcycle shop. Replacement of the tube requires removal and reinstallation of the wheel. Any time you have the tube replaced you should perform the tire inspection listed at the top of this page. The tires that came on your MVx110 are designed to provide a good combination of handling, braking, durability and comfort across a wide range of riding conditions.

⚠ WARNING Installing improper tires on your MVx110 can affect the handling and stability, which, if severe, can cause a crash in which you can be seriously hurt or killed. Always use the size and type of tires recommended in this owners manual.

TIRE SIZE, FRONT AND REAR	2.5 x 10
TIRE TYPE, FRONT AND REAR	Bias Ply, Tube Type

- Use a replacement tire that is equal in size and type to the original tires.
- Replace the tube any time you replace a tire. Old tubes tend to stretch and if installed in a new tire could fail.
- We recommend that tires and tubes be replaced at your local Motovox Service Center.

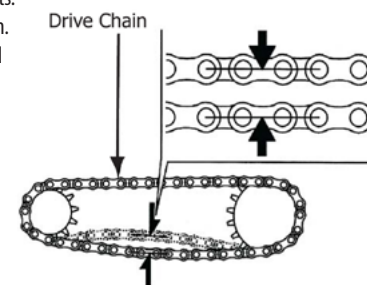
MAINTENANCE PROCEDURES

DRIVE CHAIN INSPECTION

The life of your drive train will depend upon good chain maintenance. A dry, worn chain will cause damage to the sprockets and cause them to prematurely fail. If you ride aggressively or if you ride in particularly dusty or muddy conditions it will be necessary to inspect, clean, adjust and lubricate your drive chain more frequently.

Drive Chain Maintenance

1. Park the bike with the engine OFF on a hard level surface.
2. Using your finger check the slack in the chain by moving the lower portion of the chain up and down between the sprockets. There should be no more than 1/2" of movement up and down. An excessively loose chain can come off while riding and could break the engine case or cause other damage to the bike. An overly tight chain can wear prematurely. See instructions on the following page for how to adjust your chain.
3. Inspect the chain carefully watching for loose pins, damaged links or stiff links that won't rotate when the chain rolls.
4. Lubricate the chain if it appears dry. Instructions for proper chain lubrication are found on the following page.
5. The drive chain should be replaced when you can no longer adjust the slack out. Contact Motovox to purchase a new chain.

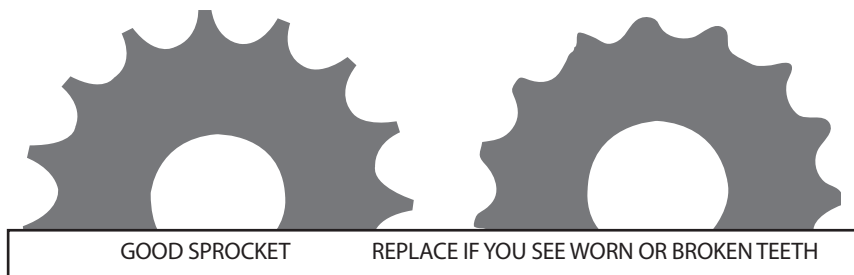


See Motovox.com for chain maintenance and other step-by-step instructional maintenance videos.

MAINTENANCE PROCEDURES

SPROCKET INSPECTION

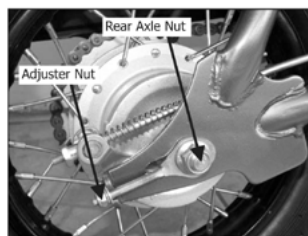
Use the diagram below to determine if your sprockets need to be replaced. Never use a new chain with worn or damaged sprockets as damage will occur to the new chain.



DRIVE CHAIN SLACK ADJUSTMENT

Follow the procedure below to adjust the tension on your drive chain and set the proper slack. Visit us on the web at motovox.com for step-by-step maintenance videos for drive chain care and many other topics.

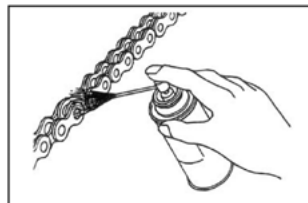
1. Park the bike on a firm, level surface.
2. Loosen the rear axle nut.
3. Turn the chain adjuster bolts clockwise (in) to tighten the chain and counter-clockwise to loosen the chain. Be sure to turn both bolts equally to maintain proper wheel alignment.
4. Check the slack on the chain, be sure it shows 1/4" to 1/2" in movement for proper slack.
5. Tighten the rear axle nut to 40 foot pounds.



DRIVE CHAIN LUBRICATION

Lubricating the drive chain is a critical part of your routine motorcycle maintenance. A dry chain will wear out quickly and damage the sprockets prematurely.

Use a good quality spray or liquid chain lube that can be purchased at any auto parts store or motorcycle dealer. Apply a liberal coat of lube to the entire chain surface and spin the rear tire several times to work it in. Then wipe off the excess lube with a rag.

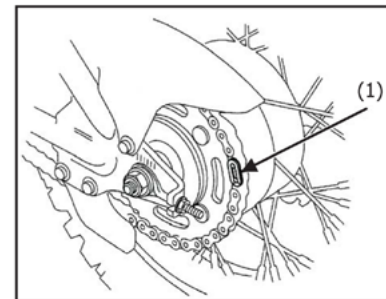


MAINTENANCE PROCEDURES

DRIVE CHAIN CLEANING

If you have been riding in extremely muddy or dusty conditions, the drive chain should be removed and cleaned before you apply lubricant. Follow the procedure below to remove and clean or replace the drive chain.

1. Remove the master link retaining clip (1) with needle nose pliers. Do not bend or twist the clip. Remove the master link and remove the drive chain.
2. Clean the chain with a solvent or degreaser and a soft brush and allow to dry.
3. Inspect the drive chain for wear or damage. Replace the drive chain if it has any damaged rollers, loose pins or any other damage.
4. Inspect the sprockets for wear or damage. Motovox recommends that you replace the sprockets when you install a new chain.
5. Place the chain over the sprockets and join the ends of the chain with the master link. For easy of assembly, hold the chain ends against adjacent rear sprocket teeth while inserting the master link. Install the master link retaining clip so the open end faces rearward vs. chain rotation.
6. Lubricate the chain.



The master link is the most critical element of drive chain security. Master links are reusable as long as they are in good condition. A new master link comes with a new drive chain.

WASHING YOUR MVx110

To clean the motorcycle, use water and a mild soap. Never use high pressure spray or heavy duty degreasers or cleaners, as damage may result. Avoid chemical solvents that can damage the paint and plastic on your motorcycle.

We recommend you use a garden hose to wash your motorcycle. If you use a high pressure washer, avoid spraying the graphics, wheel hubs, under the seat, the engine stop switch and the carburetor. Never wash the motorcycle when the engine is running and always lubricate the drive chain after you wash the motorcycle.

TROUBLESHOOTING

ENGINE DOES NOT START

1. Examine the carburetor. Be sure there is fuel flowing into the carburetor.
Is there fuel flowing into the carburetor?
NO
 - clogged fuel line
 - clogged fuel valve
 - clogged fuel tank breather hose
 - stuck carburetor floatYES
 - see step 2
2. Examine the spark plug.
Is the spark plug in good working condition?
NO
 - clean the spark plug or replace the spark plugYES
 - see step 3
3. Spark test. Test for ignition spark by removing the plug and inserting it into the spark plug cap. Place the open end of the spark plug on a metal part of the engine and kick start. You should see a blue spark on the end of the spark ne.
Hold it by the spark plug cap. Is there a good spark?
NO
 - fouled or faulty spark plug
 - bad spark plug wire or cap
 - bad ignition coil
 - faulty CDI box
 - broken or shorted engine stop switchYES
 - see step 4
4. Engine stalls shortly after starting.
YES
 - improper choke operation
 - carburetor needs adjustment
 - intake manifold leak
 - dirty or contaminated gasoline
 - SEE MOTOVOX SERVICE CENTER

TROUBLESHOOTING

ENGINE LACKS POWER

1. Examine the drive train. Does the rear wheel spin freely?
NO
 - break dragging, adjust brakes
 - damaged wheel bearings
 - bent axelYES
 - see step 2
2. Check tire pressure. Is the tire pressure correct?
NO
 - properly inflate tiresYES
 - see step 3
3. Clutch inspection. Does the engine speed decrease when you shift from first to second gear?
NO
 - slipping clutch, adjust
 - worn out clutch discs, replace
 - contaminating additive in the engine oil, change oilYES
 - see step 4
4. Engine performance inspection. Does the engine accelerate properly?
NO
 - clogged air filter
 - clogged fuel line
 - clogged muffler
 - choke is on
 - clogged fuel tank breather hoseYES
 - see step 5
5. Spark plug inspection. Is the spark plug in good working condition?
NO
 - replace plug
 - check plug gapYES
 - see step 6
6. Engine oil. Is the engine oil level correct and in good condition?
NO
 - oil level too high or too low, change oilYES
 - see step 7
7. Carburetor inspection. Is the carburetor dirty?
YES
 - disassemble and clean carburetorNO
 - see step 8
8. Engine condition. Does the engine knock when accelerating?
YES
 - put in higher octane gasolineNO
 - contact Motovox service center

RESOLVING THE UNEXPECTED

GENERAL GUIDELINES

If you encounter trouble during a ride, the first thing you should do is stop as soon as it is safely possible. Do not continue to ride if you have a flat tire, if you hear an unusual noise, or if your motorcycle does not feel right. If you continue to ride, you will cause additional damage to the motorcycle and endanger your own safety.

After you stop, take time to carefully look over your motorcycle and identify the problem. Always consider all of options before you make a decision. Sometimes a problem can be relatively minor to repair on the trail if you have the tools, supplies and skills needed. Or you may make a temporary repair and ride carefully back to your base where you can fix it properly.

When a problem appears to be more serious, or you lack the tools, supplies and skills needed to make the repair, you will need to choose a safe way to get yourself and your motorcycle back to your base.

Whatever the problem may be, always remember to put safety first.

ENGINE QUILTS OR WON'T START

First, check the fuel system:

1. Make sure you have fuel in the gas tank and the fuel valve is set to the ON position
2. Check the fuel tank breather hose to be sure it is not pinched or clogged
3. Turn the fuel valve to the OFF position. Disconnect the fuel line from the carburetor and momentarily turn the fuel valve to the ON position. If fuel does not flow out, there is an obstruction in the fuel tank, fuel filter, or the fuel line.

If the fuel system appears to be okay, check the ignition system

1. Check the spark plug cap to be sure that it is not loose or disconnected
2. Disconnect the spark plug cap and remove the spark plug. Insert the spark plug into the spark plug cap. Place the threaded end of the spark plug on a metal part of the engine. Kick the kick starter while you watch the spark plug. If there is no spark, either replace the spark plug or there is a problem with the ignition system. See your Motovox service center.

RESOLVING THE UNEXPECTED

IF YOU HAVE A FLAT TIRE

How you handle a flat tire on the trail will depend on the severity of the damage and what tools and supplies you have with you. If you have a slow leak or a minor puncture, there are two ways you can make a temporary repair.

1. Use an aerosol tire sealer to seal the puncture and inflate the tube. This can be done without removing the wheel.
2. Use a tube repair kit to patch the hole in the tube. This requires removal of the wheel and tire.

If the leak is more severe, or a temporary repair does not hold, you will need to replace the inner tube. If the tire is also severely damaged, it will need to be replaced as well.

If you cannot repair the flat tire on the trail, you will need to push the motorcycle back to your base or send for help. Do not ride on a flat tire, as the motorcycle will be difficult to handle, and if the tire comes off the rim, it can lock up the wheel and cause you to crash.

IF YOU CRASH

Personal safety is the first priority after an accident. If you or anyone else has been injured, take the time to assess the severity of the injuries and determine if it is safe to continue riding. If you cannot ride safely, send someone for help. Do not ride if you will risk further injury or if your motorcycle has been damaged.

If you decide you are capable of riding safely, carefully inspect the motorcycle for damage. Check the condition of critical components, such as handle bars, control levers, brakes and wheels. If there is minor damage, or if you are not sure about possible damage, but decide to ride back to your base, ride slowly and cautiously.

Sometimes crash damage is hidden or not immediately apparent. Once you get home, go over your motorcycle thoroughly and fix any problem you find. Also be sure to have your Motovox service center inspect the frame and suspension after a serious crash.

IF A COMPONENT FAILS

The drive chain master link, control cables, brake controls and other components can be damaged if you ride in dense brush or over rocky terrain. As mentioned earlier, making the repair on the trail will depend on the severity of the damage, tools, supplies and skills that you have.

1. If the drive chain comes apart, you may be able to repair the chain with a new master link, however, if the chain is broken or causes damage when it comes off, you may not be able to make a trailside repair.
2. If any component of the front braking system is damaged, you may be able to ride back to your base carefully using the rear brake for slowing and stopping. Likewise, if a component of the rear braking system fails, you can use the front brake for slowing and stopping.
3. If you damage the throttle cable or some other critical component, the motorcycle may be unsafe to ride. Carefully assess the damage and make any repairs that you can. If you have any doubts, it is best to be conservative and safe.

EMISSION CONTROL WARRANTY

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The manufacturer warrants that each new 2010 and later vehicle:

- 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.
- 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 or the California Air Resources Board for the periods specified below.

The emission control system warranty period for this vehicle is 30 months, which applies to the owner and each subsequent purchaser, begins on the date the vehicle is delivered to the first purchaser provided there has been no modification, abuse, neglect or improper maintenance of your vehicle. Where a warrantable condition exists, the manufacturer will repair your vehicle at no cost to you, including diagnosis, parts and labor. This is your emission control defects warranty.

EMISSION CONTROL WARRANTY INFORMATION

Your emission control system warranty covers components whose failure would increase an engine's emission, including electronic controls, carburetor, the ignition system, or any other system utilized in this vehicle to control emission if it is originally equipped. Also included may be hoses, connectors and other emission-related assemblies. Replacing or repairing other components (including parts, labor, and other costs) not covered by this emission control system warranty or the standard warranty is the responsibility of the owner.

Coverage of repairs under this emissions warranty applies when repairs are completed at a dealer repair facility or person of the owner's choosing for the maintenance, replacement or repair of emissions-related devices. The Distributor will not cover repairs performed outside of an authorized dealer or repair facility. The use of replacement parts not equivalent to the original parts may impair the effectiveness of your vehicle's emission control system. If such a replacement part is used and an authorized dealer determines it is defective or causes a failure of a warranted part, your claim for repair to bring your vehicle into compliance with applicable standards may be denied.

MODIFICATION OF ANY EMISSION CONTROL COMPONENT OR SETTING IS STRICTLY PROHIBITED BY LAW AND CAN RESULT IN SUBSTANTIAL PENALTIES AND FINES.

THIS EMISSION CONTROL SYSTEM WARRANTY IS IN ADDITION TO THE STANDARD PRODUCT WARRANTY.

EMISSION CONTROL WARRANTY

EMISSIONS CONTROL WARRANTY EXCLUSIONS AND LIMITATIONS

This warranty does not cover the following:

- Failures or malfunctions of the emission control systems caused by abuse, alteration, accident, misuse or the use of leaded gasoline.
- Replacement of expendable maintenance items unless they are original equipment defective in material or workmanship under normal use, and the first required replacement interval for the item has not been reached.

Expendable maintenance items include but are not limited to spark plugs, filters and lubricants.

- Replacement of parts and other services and adjustments for required maintenance.
- Repairs or replacements as a result of
 - Accident
 - Misuse
 - Use of replacement parts or accessories not conforming to the original specifications which adversely affect performance
 - Physical damage, corrosion, or defects caused by fire, explosions or similar causes beyond the control of the Distributor.
 - Failures not caused by a defect in material or workmanship.
- Use of this vehicle in any type of competitive racing, rental or any commercial use completely voids this and all other warranties.

LIMITED LIABILITY

The liability of the manufacturer under this Emission Control System Warranty is limited solely to the remedying of defects in material workmanship by an authorized dealer at its place of business during customary business hours. This warranty does not cover inconvenience or loss of use of the vehicle or transportation of the vehicle to/from the authorized dealer. The Distributor is not liable to any person for incidental, consequential or special damages of any description, whether arising out of express or implied warranty or any other contract, negligence or other tort or otherwise.

No express emission control system warranty is given by the manufacturer except as specifically set forth therein. 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 lieu of all other remedies. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply if it is inconsistent with the controlling state law.

No dealer is authorized to modify this Emission Control System Warranty. If you have any questions regarding your warranty rights and responsibilities, you should contact Motovox by calling (888)488-MOTO (6686).

TROUBLE? DO NOT RETURN TO STORE contact us!

888-488-MOTO (6686) or email info@motovox.com

Register your Motovox MVx110 Dirt Bike so that we can provide you fast solutions to any problems you may have with your product and so that we can keep in touch with you regarding any product updates.

Simply detach the registration form on the next page, fill it out and mail it to

Motovox
8844 Hillcrest Road
Kansas City, Missouri 64138

Or go to motovox.com and click on **ACTION** to fill out your registration form online.



Motovox MVx110 Product Registration

Please complete and mail this card within 10 days of purchase.

Name _____ Age _____

Address _____

City _____ State _____ Zip _____

Email _____

Home Phone _____

Work Phone _____

Purchase Date _____ Purchased from _____

VIN Number _____

Male _____ Female _____ Occupation _____

Is this your first Motovox product? _____

Other similar product owned before _____

How did you hear about the MVx110? _____

How do you plan to use your MVx110?

Just for fun ☐ Work ☐ Sport ☐ Commuting ☐

Complete this form and mail it to:



8844 Hillcrest Road, Kansas City, Missouri 64138
Attention: Product Registration

TROUBLE? DO NOT RETURN TO STORE contact us!

888-488-MOTO (6686) or email info@motovox.com

Motovox would sincerely like to thank you for choosing one of our fine products and we hope you will have many years of safe, fun enjoyment with your new dirt bike!





MBX II

IF YOU HAVE TROUBLE
DO NOT RETURN TO STORE
CALL MOTOVOX AND WE WILL MAKE IT RIGHT.

Motovox Motorsports
8844 Hillcrest Road, Kansas City, MO 64138-3759
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