

# Puch Magnum Owners Manual

Puch Magnum Owners Manual



## **Dear Puch Owner,**

This is your riding, maintenance and warranty guide. By following the instructions described in this booklet, we at Puch know you will enjoy many miles of pleasurable Moped Riding. Thank you for joining the Puch family, please ride safely and have fun.

*Steyr Daimler Puch of America Corporation*

Greenwich Office Park      Box 7777      Greenwich, Ct. 06830

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## **THE WARRANTY – Terms & Conditions**

Subject to the terms set forth below, the Puch motorized bicycle is warranted to be free from defects in material and workmanship for a period of ninety days from the date of original consumer purchase. While under this warranty, Steyr Daimler Puch of America, hereafter SDPA, will, at its discretion, replace or repair without charge, any product or part which an authorized service representative determines is defective in material or workmanship.

This warranty only applies to the original consumer purchaser.

This warranty gives the original consumer purchaser specific legal rights. The original consumer purchaser may also have other rights which vary from state to state.

## EXTENT OF WARRANTY COVERAGE

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The warranty will not be extended to any machine that has been subject to mis-use, negligence, alteration, use of non-authorized spare parts, improper maintenance (including improper fuel mix ratio, lack of oil, or use of poor quality oil) or modification of assembly. Additionally, this warranty will not apply if the machine is damaged by fire, flood, accident, acts of God or any other cause of a similar nature beyond SDPA's control.

Under no circumstances will SDPA be liable for damages due to loss of use, loss of business or profits or for any other incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply.

This warranty will be **null and void** if:

1. Any part of the serial numbers are removed, defaced or altered;
2. If any unauthorized modification or alteration is made;
3. If any unauthorized or non-standardized spare part is installed;
4. If any maintenance or repair is performed during the warranty period by anyone other than an authorized Puch Dealer.

## **Exclusions:**

Tires, tubes, bulbs, lenses and spark plugs are not covered under this warranty.

No one has the authority to orally change the terms, conditions or exclusions of this warranty or make any representations or express warranties other than those contained here.

SDPA is proud and confident of its dealers and products, and wants to assure that each new Puch owner receives full satisfaction. In the event satisfaction is not obtained at the dealer level however, the original consumer is invited to contact SDPA directly at P.O. Box 7777, Greenwich, Connecticut 06830 or phone (203) 661-2202.

## **WARRANTY REGISTRATION**

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Parts 1 and 2 of the Warranty Registration form must be completed by the original consumer purchaser.

Part 1 should be kept by the original purchaser in his/her possession.

**Any claim made under this warranty must be accompanied by Part 1 of the Warranty Registration Form.**

Part 2 which is self-addressed and stamped, must be mailed to Steyr Daimler Puch of America Corporation, P.O. Box 7777, Greenwich, Connecticut 06830, and mailed not later than ten (10) days after purchase. We strongly recommend that both parts of the Warranty Registration form be completed in the store at the time of purchase, where the dealer is available for assistance.

All information on the Form must be written legibly. The numbers on the Registration Form must agree with the serial numbers on the Moped.

**A) SERIAL NUMBER LOCATION**

The engine number is stamped on the top of the crankcase on the right-hand side.

1-Speed MAGNUM XK



2-Speed MAGNUM MK II



The vehicle identification plate is fixed to the steering head.





The frame serial number is stamped on the steering head, just above the vehicle identification plate.

**IMPORTANT!**

Write down your key-number at once. This saves money, time and annoyance if the key is lost.



My key number

No.

## B) OPERATING CONTROLS

The position of the controls is indicated in the technical data sheet enclosed.

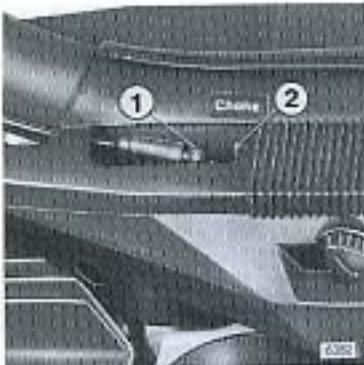
### Locking your moped

To lock, move the handlebar to the right, insert the key in the lock, turn the key to the left, push in, turn the key to the right and remove. Unlocking is accomplished by reversing the procedure.



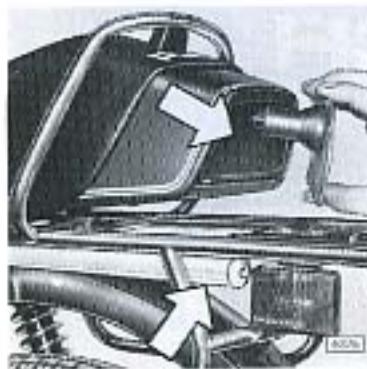
### Fuel valve

The fuel valve is located on the left side of the fuel tank. The positions are clearly indicated on the tank. In the event you should run out of fuel, the reserve position should give you adequate range to get you to a filling station. Always turn the fuel valve to the „off” position when the moped is not in use.



#### Carburetor

- 1) Primer (see starting engine).
- 2) The choke is operated by depressing the rod extending through the left engine cover.

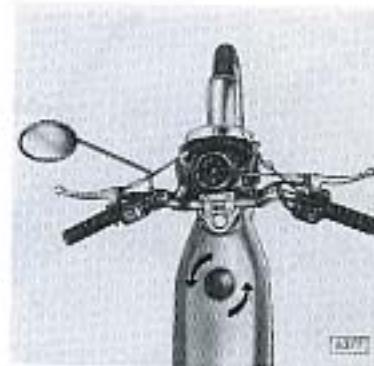


#### Air pump and tools

The air pump is located on the left side of the luggage carrier.  
The tool kit is stored behind the cover in the rear of the seat.

**Fuel tank filler cap**

To open turn filler cap counter clockwise.



**Starting lever**

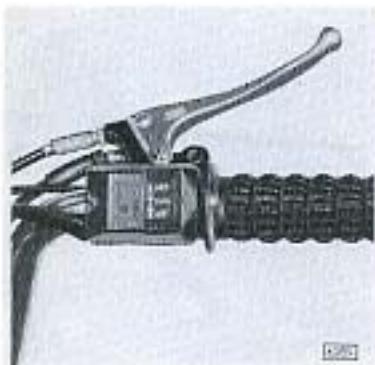
The starting lever is located on the left hand side of the handlebar and is used for starting the engine. (See starting the engine, page 17).





#### **Light and horn switch**

This combination switch is located on the left side of the handlebar. The thumb lever on the end of the switch activates the lights, and the small push button operates the horn.

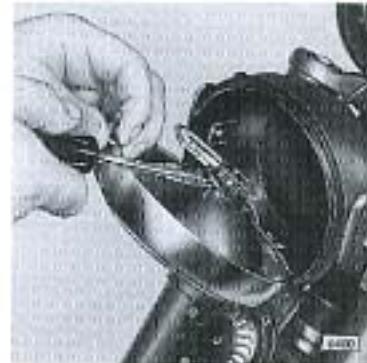


#### **Engine kill switch**

This two position thumb switch is located on the right side of the handlebar. The center position indicates RUN and is used to start and run the engine. When the switch is rocked off the center position ignition is interrupted and the engine stops.

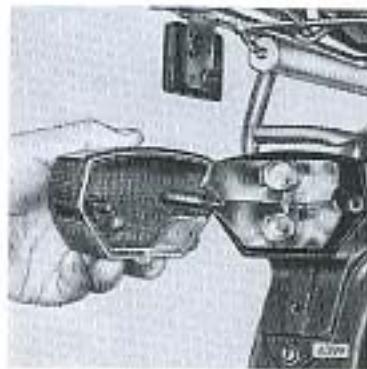
### **Headlamp**

To replace the headlamp bulb, remove screw from chrome rim. Lift bulb holder lock, twist holder to left and remove bulb and holder assembly.



### **Tail/Stoplight**

Remove two lens screws and lift off lens.  
Remove bulbs counter-clockwise.





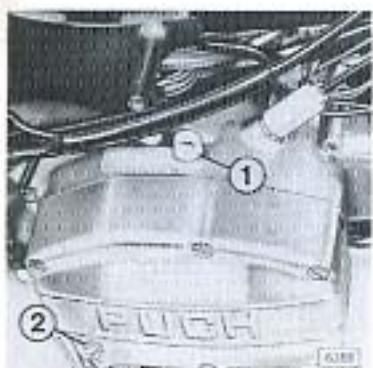
### C) BREAK-IN PROCEDURES

#### Checking the gearbox oil level

1-speed automatic

An oil level screw(1) (which also serves as the filler plug) is located in the clutch cover on the right side of the engine.

The 2-speed automatic has an oil level screw (2) located in the clutch cover, and the filler hole (1)is through the top of the r.h. crank case.



#### CAUTION

Do not overfill. The moped must be upright when filling. It is highly recommended by Puch to change the gearbox oil after the first 300 miles of operation.

Please refer to the lubricant chart for quality of oil.

#### Checking the tire pressure

Correct tire pressure information is contained in the enclosed data sheet. It is also clearly marked on a placard on the bike.

### Filling up with two stroke mixture

(Models without oil pump)

Gas/oil mixture

Most of the Puch engines must be run with a gas/oil mixture (regular gas). The recommended mixing ratio is 50 : 1 when using special Maxi Mix two stroke moped oil. If another oil used please refer to the fuel mixing chart.

**NOTE: DO NOT USE UNLEADED GASOLINE**

**PUCH MAXI MIX**

**50 : 1 OIL MIXING TABLE**

To 5 gallons gasoline add 12 oz. (355 cc's) oil

To 1 gallon gasoline add 2,4 oz. (71 cc's) oil

To 1 quart gasoline add 0,6 oz. (18 cc's) oil

**NOTE:**

To reduce carbon build-up within the engine and exhaust system, we strongly recommend the use of the special 2 stroke (MAXI MIX) oil, 50 : 1 ratio. However as an emergency measure, a regular 2 stroke oil can be mixed in a 25 : 1 ratio as shown below.

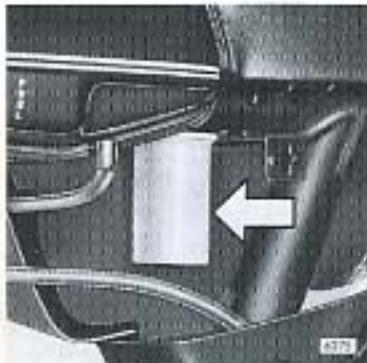
**25 : 1 OIL MIXING TABLE (REGULAR TWO STROKE OIL)**

To 5 gallons of gasoline add 25,6 oz. (757 cc's) oil

To 1 gallon of gasoline add 5,1 oz. (151 cc's) oil

To 1 quart of gasoline add 1,3 oz. (38 cc's) oil



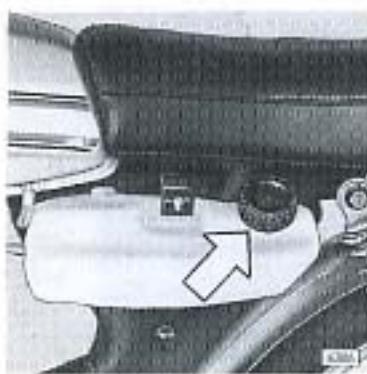


#### **Using the container to measure gas/oil mixing ratio**

(Model without oil pump)

When measuring the gas/oil mixture, use one capful of Maxi Mix per gallon of gasoline.

NOTE: When using other grades of 2 stroke oil, please refer to the oil mixing chart for proper ratio (see page 15).



#### **CAUTION:** (Model with oil pump)

Use only (regular grade) pure gasoline and check oil level in your oil tank each time you refill with gasoline.

If the oil level reaches the middle of the tank oil must be refilled.

If you notice that no oil is in oil pipe although oil tank is full, fuel 50 to 1 gas/oil mixture and contact nearest PUCH dealer.

#### **WARNING**

NEVER REFUEL WITH THE ENGINE RUNNING!  
DO NOT SMOKE OR ALLOW OPEN FLAMES OR SPARKS  
IN THE AREA, WHERE YOUR MOPED IS REFUELED  
OR WHERE GASOLINE IS STORED!

## D) RIDING INSTRUCTIONS

### Starting the engine

1. Unlock the fork.
2. Turn the fuel valve to the ON position.
3. Be sure that the engine kill switch is in the RUN position.
4. If the engine is cold, depress the choke and depress the primer button on the carburetor until fuel drips from the carburetor.

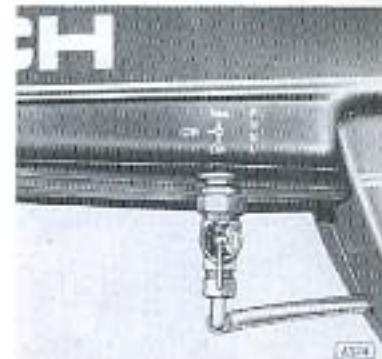
**CAUTION:** After completing step 4 do not open the throttle control, as this will deactivate the choke. After the engine has started, the throttle control should be gently opened as the engine warms, to the full throttle position. This will ensure that the choke will be completely disengaged.

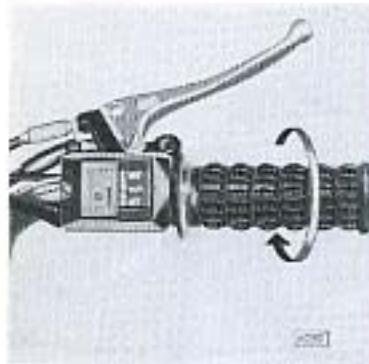
5. Prop the moped on its stand.

Keep both hands on the handlebars with the weight of the moped centered on the front wheel. Hold the front brake on and fully depress the starting lever located on the left control. While holding the starter lever, push the pedal to start the engine. It may require some effort, so position the pedal to your best advantage.

7. Alternate starting method.

The moped may also be started by pedalling as a bicycle. When momentum has been gained, pull the start lever and gently open the throttle. Release the start lever after the engine starts.





### Throttle

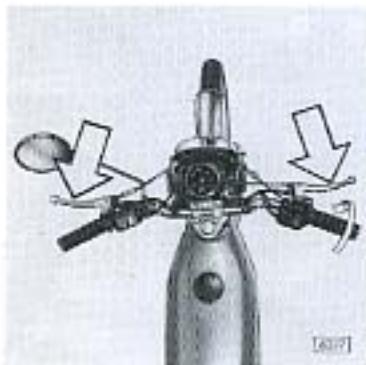
The speed of the moped is controlled by an automatic return twist grip on the right control group. To accelerate twist the throttle towards you; to decelerate slowly release.

NOTE: Magnum MK II

Engaging of first and second gear follows automatically by increasing or decreasing of engine R.P.M.

### Braking

When slowing down, release the throttle control and apply both brake controls with equal pressure. Application of both brakes at the same time is essential to prevent premature brake wear, and/or loss of control.



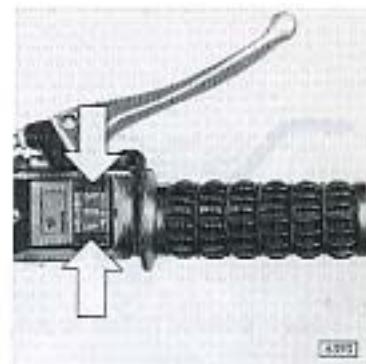
**CAUTION:** Be alert when riding on wet or sandy surfaces. Loss of friction between the tire and the road can be expected under these conditions. Be careful when braking, turning or accelerating under adverse conditions.

### WARNING

After the engine has been run the exhaust pipe and muffler will become hot. Avoid contact with them.

### To stop and park

Release the throttle and simultaneously apply both brakes to stop. Turn off the engine kill switch.  
Close the fuel valve.



### Lock your moped

(See page 9)  
A high security locking device is recommended, see your Puch dealer for advice.





#### Riding Instructions

After reaching maximum speed, reduce the throttle opening to 3/4. While the decrease in speed will hardly be noticeable, fuel consumption will be considerably reduced.

When riding downhill, the engine will slow the bike when the throttle is closed. On long hills, to ensure engine lubrication, it is essential to occasionally open the throttle.

It is suggested, when you are riding your moped, to wear bright clothing, utilize eye protection, proper shoes or boots and be sure to switch on your headlamp when visibility is low.



Wearing a helmet is optional in most areas. Your Puch dealer can advise you where to purchase one if you so desire.

The moped is designed to carry ONE person. Do not carry a passenger or cargo that is very heavy. Approved Puch saddle bags and baskets are available through your dealer.

Obey all laws and traffic regulations. Use hand signals when turning or changing lanes. Please respect property of others and ride carefully. Keep your feet on the pedals at all times, and keep the pedals level especially on turns.

**E) TROUBLE SHOOTING**

<b>Cause</b>	<b>Remedy</b>
	Engine will not start or stops running
1. Fuel valve closed	Open fuel valve or switch valve to reserve position
2. Fuel tank empty	Switch valve to reserve or refill tank (gas/Maxi/Mix)
3. Stop switch in off-position	Model with oil pump use pure (regular grade) gasoline.
4. Spark plug is fouled	Switch to on-position
5. Spark plug defective	Clean spark plug or replace Replace Note: Spark plug gap .016-.020 in (or 0.4-0.5 mm)
6. Ignition cable has worked loose from spark plug	Reconnect it to spark plug
7. Engine is too cold	Apply choke
8. Engine is flooded	Clean spark plug
9. Fuel valve is clogged or main jet is clogged	Have it cleaned at your Puch dealer

Poor Performance

Cause	Remedy
1. Choke working all the time	Disengage it by fully opening throttle
2. Exhaust is clogged	Have dealer clean exhaust
3. Spark plug defective or fouled	Clean or replace
4. Clutch slips	See your Puch dealer
5. Air filter is clogged	Clean air filter
6. Fuel mixture incorrect	Drain tank and refuel with correct mixture Note: see mixture chart Model with oil pump use pure (regular grade) gasoline

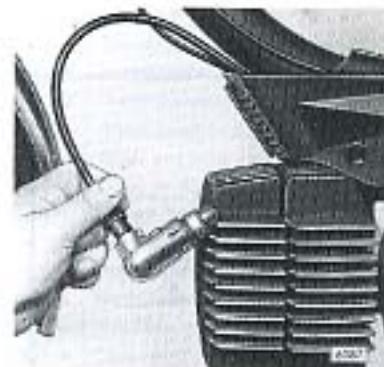
When you have questions about your Puch, always refer them to your authorized Puch dealer. He is trained and qualified to properly service your machine and can advise you on its maintenance and care.

## F) OWNER MAINTENANCE

### Spark plug

To check if plug is functioning properly, proceed as follows:

- Disconnect plug wire from plug
  - Unscrew plug
  - Reconnect plug wire and touch plug body to ground.
  - Proceed as if starting engine and watch to see if a strong blue spark appears at plug electrode.
  - If not, clean or replace fouled plug
- Note: Gap .016-.020 in.  
(0.4-0.5 mm)

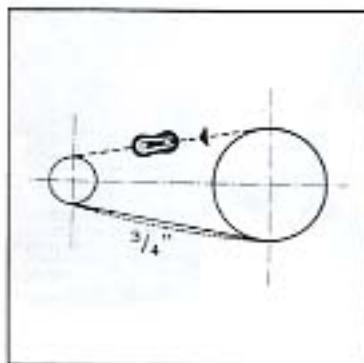


### Alternative plugs

	Puch 1 HP	1,5 HP	2 HP
Bosch	W 10 A (W 95 T 1)	W 7 A (W 175 T 1)	W 7 A (W 175 T 1)
NGK	B-4H	B-6H or B-6HS	B-6H or B-6HS
Champion	L 90	L 86	L 86

## **Chains**

Both engine drive and pedal chains should be kept clean. Every few hundred miles wipe chains thoroughly with a cloth, and using a small brush, lubricate with chain oil lubricant.



Always keep chains properly adjusted. The proper slack of the drive chain should be  $\frac{3}{4}$ ".

To adjust the chains, loosen the axle nuts and tighten or loosen the rear adjuster nuts. Once chains are properly adjusted, tighten the axle nuts. Make sure that wheels are always aligned.

### **NOTE:**

Chain adjustment has to be made with laden weight.

Note: If pedal tensioner catches or travels roughly as pedals are operated, adjust as above to realign rear wheel so that the tensioner travels smoothly.

Always keep brake cables properly lubricated and adjusted to ensure safe riding. The play in the brake levers should not exceed  $\frac{3}{4}$ " after adjustment.

### G) SUGGESTED MAINTENANCE AND LUBRICATION CHART

A regular maintenance and lubrication schedule will help to ensure a long, useful life for your moped. Please refer to the mileage and lubrication charts.

#### Lubrication & Maintenance Chart

- to be performed by owner
- to be performed by dealer at owner's expense
- + Magnum MK II (hydraulic front fork).

**NOTE:** Above time schedule applies to moped use on dry paved surfaces. If moped is used in wet, muddy or sandy areas, maintenance should be more frequent. Always check controls and lightening before any trip.

#### Frequency

	First 300 miles	Every miles	300	900	1800	3600	7200	OPERATIONS TO PERFORM
RECOMMENDED SERVICE								Tire wear and condition
	•		•	•	•	•	•	Throttle cable adjustment
	★			•	•	•	•	Check tire pressure
	★			•	•	•	•	Check gearbox oil level
	★			•	•	•	•	Clean and lubricate chain
	★			•	•	•	•	Clean air filter
	★			•	•	•	•	Change gearbox oil
	★			•	•	•	•	Check spark plug
	★			•	•	•	•	Decarbonize engine
	★			•	•	•	•	Clean exhaust muffler
	★			•	•	•	•	Tighten screws and nuts
	★			•	•	•	•	Clean gasoline petcock and lines
	★			•	•	•	•	Clean carburetor
	★			•	•	•	•	Idle speed adjustment
	★			•	•	•	•	Check ignition timing
	★			•	•	•	•	Adjust clutch
	★			•	•	•	•	Check brakes / linings
	★			•	•	•	•	Check / lubricate hub bearings
	★			•	•	•	•	Lubricate control cables
	★			•	•	•	•	Lubricate front fork +
	★			•	•	•	•	Adjust chain tension

**CONSUMER INFORMATION**

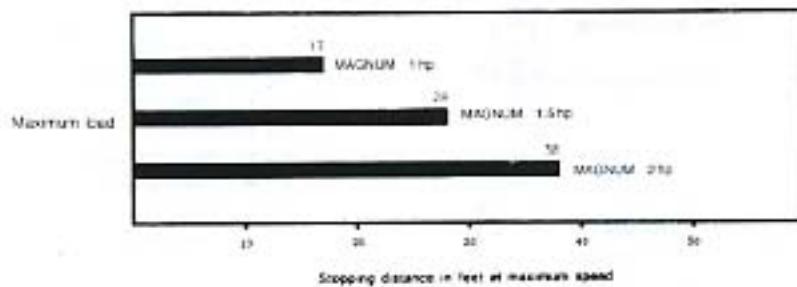
**Stopping Distance and Passime**

**Vehicle minimum stopping distance on dry ground**

This figure indicates braking performance that can be met or exceeded by the vehicles to which it applies, without locking the wheels, under maximum condition of loading. The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

Description of vehicles to which this table applies: MAGNUM

**Fully Operational Service Brake**



ACCELERATION AND PASSING ABILITY

THIS FIGURE INDICATES PASSING TIMES AND DISTANCES THAT CAN BE MET OR EXCEEDED BY THE VEHICLES TO WHICH IT APPLIES IN THE SITUATIONS DIAGRAMMED BELOW.

THE LOW-SPEED PASS ASSUMES AN INITIAL SPEED OF 20 MPH AND A LIMITING SPEED OF 35 MPH.  
THE HIGH-SPEED PASS ASSUMES AN INITIAL SPEED OF 50 MPH AND A LIMITING SPEED OF 80 MPH.

NOTICE: THE INFORMATION PRESENTED REPRESENTS RESULTS OBTAINABLE BY SKILLED DRIVERS UNDER CONTROLLED ROAD AND VEHICLE CONDITIONS, AND THE INFORMATION MAY NOT BE CORRECT UNDER OTHER CONDITIONS.

DESCRIPTION OF VEHICLES TO WHICH THIS TABLE APPLIES: MAGNUM

SUMMARY TABLE

MAGNUM 2 1/2	MAGNUM 13 1/2	MAGNUM 17 1/2
LOW-SPEED PASS* NOT CAPABLE	50 FEET/7.1 SECONDS	LOW-SPEED PASS** NOT CAPABLE
HIGH-SPEED PASS	105 FEET/13 SECONDS	HIGH-SPEED PASS*** NOT CAPABLE

\* Maximum speed attainable is 20 mph.

\*\* Maximum speed attainable is 25 mph.

\*\*\* Maximum speed attainable is 20 mph.

