

PEDAL START

TOMOS

**TOMOS A3 E BULLET
TOMOS A3 E GOLDEN BULLET
TOMOS A3 E BULLET TT
TOMOS A3 E GOLDEN BULLET TT LX**

**MAINTENANCE
MANUAL &
INSTRUCTION BOOK**

TOMOS

FOREWORD

Though the TOMOS A3 looks delicate and small, and at the same time robust and fully reliable as all Tomos products are, we recommend you to read this booklet carefully as it is also the user's manual. Although riding a TOMOS A3 is quite easy, you will find in this booklet, in addition to the operating instructions, the most important things about maintenance of your cycle, and useful hints on how to find faults and rectify them. We trust that every new owner of this popular vehicle will find in this booklet many pieces of advice which will help him to upkeep his cycle correctly in order to ensure long years of faithful service and pleasant riding.

TOVARNA MOTORNIH VOZIL
TOMOS KOPER
YUGOSLAVIA

TOMOS

LIMITED WARRANTY

Owner's name

Address

Model

V.I.N. No.

Date of
delivery

Distributor name
and address

UNITED TRADE REPRESENTATIVE INC.
222 BRIDGE PLAZA SOUTH, SUITE 208,
FORT LEE, NEW JERSEY 07024

SALES OFFICE FOR EAST COAST:
SPARTANBURG, S.C. 29301

Note: Read this folder carefully. Present it to an authorized TOMOS dealer when warranty service is required. It should remain with your motorized bicycle when you sell it so subsequent owner will know of any remaining warranty coverage.

What is covered

TOMOS distributor warrants all parts of your TOMOS motorized bicycle except those listed under the caption "What is not covered". This warranty covers any repairs needed to correct defect in materials or workmanship.

How long is the warranty

The warranty is effective for 4 months, beginning with the date of delivery of the motorized bicycle to the original purchaser.

What is not covered

This warranty does not cover:

1. Any parts and labour costs incurred in connection with required or recommended maintenance services as outlined in your Owner's Manual.
2. Normal maintenance services such as carburettor tune up, replacement of filters, lubricants or gaskets and other such services. Normal wear items after 300 miles such as bulbs, control cables, tubes, tyres, brake shoes, contact breaker points, spark plugs.
3. Damages or failures resulting from:
 - accident, theft, fire or misuse (proper use is outlined in your Owner's Manual),
 - use of improper or dirty fuel or lubricants,
 - lack of performance of proper maintenance service is outlined in your Owner's Manual,
 - use of parts not equivalent in quality or desing to parts supplied by TOMOS distributor,
 - alteration, tempering or improper repair,
 - racing or speed contests.
4. Normal deterioration of appearance due to wear, exposure or other environmental conditions.
5. **Incidental or consequential damages such as loss of use, inconvenience or commercial loss.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

What you must do

You must properly use, maintain and care for your motorized bicycle as outlined in your Owner's Manual.

In order to obtain warranty service you must deliver your motorized bicycle to an authorized TOMOS outboard motor distributor or dealer. The name and address of authorized TOMOS dealer's are included in a separate Dealer Directory.

What TOMOS distributor will do

Warranty repairs will be made at no charge for parts or labor. Any needed parts replacement will be made with new parts.

Other warranty terms and state laws rights

Any implied warranty of merchantability and fitness for a particular purpose shall be limited to the duration of this written warranty.

Some states do not allow limitations and how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

TOMOS distributor does not authorize any person to create for it any other warranty, obligation or liability in connection with this product.

TOMOS A3 E BULLET
TOMOS A3 E GOLDEN BULLET
TOMOS A3 E BULLET TT
TOMOS A3 E GOLDEN BULLET TT LX

MAINTENANCE
MANUAL &
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TOMOS MOTORIZED BICYCLES:

	Model marking
TOMOS A3 E BULLET	29
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TOMOS A3 E GOLDEN BULLET TT LX	30
TOMOS A3 E BULLET TT	41

MEET EPA NOISE EMISSION REQUIREMENTS OF 70 dBA AT 6500 RPM BY THE FEDERAL TEST PROCEDURE.

MODIFICATIONS WHICH CAUSE THIS MOTORCYCLE TO EXCEED FEDERAL NOISE STANDARDS ARE PROHIBITED BY FEDERAL LAW.

Model marking

The model marking is impressed on fifth (5 th) and sixth (6 th) digits of the vehicle identification number (V.I.N.).

DESCRIPTION AND TECHNICAL DATA

Motorized bicycles TOMOS A3 BULLET, TOMOS A3 GOLDEN BULLET, TOMOS A3 BULLET TT and TOMOS A3 GOLDEN BULLET TT LX are of relatively light constructions, with sheet frame forming one single unit with fuel tank (only with the A3 BULLET). The BULLET TT and BULLET TT LX have incorporated a special fuel tank. Engine with two-speed automatic gearbox. Controls are limited

to throttle twist grip and choke lever on the carburettor. Engine is started by rotating pedals backward (kick start), by rotating pedals forward motorized bicycle is moving off.

Suspension front telescopic fork, rear with heavy duty shock absorbers. TOMOS A3 are very comfortable to ride due to good suspension, simple operation and extremely good climbing ability.

ENGINE

Single-cylinder, two-stroke, in common housing with gearbox, cooled by direct air current.

Bore:	38 mm (1.496 in)
Stroke:	43 mm (1.692 in)
Piston displacement:	49 cm ³ (3 cu. in)
Compression ratio:	8.5 : 1

CARBURETTOR

Carburettor DELL'ORTO is equipped with air filter, fuel strainer and main jet 51, intake dia of carburettor is 12 mm (0.472 in).

Idling is set with adjusting screw on top end of throttle control cable and with adjusting screw on the carburettor. Cold engine starting with choke lever located on the carburettor.

ELECTRICAL EQUIPMENT

Flywheel magneto 12 V 28 W — (BULLET), 12 V 75 W (BULLET TT LX and GOLDEN BULLET), 12 V 50 W — (BULLET TT)

Ignition timing 1.8 — 2 mm BTDC (0.07 — 0.08 in or 24° BTDC)

Contact breaker points gap 0.35 — 0.45 mm (0.013 — 0.017 in)

Spark plug BOSNA F 75, CHAMPION L 85, NGK B6H, BOSCH W7AC

Spark plug gap 0.5 mm (or 0.02 in)

Headlamp bulb 12 V 21 W (all models), 12 V 25 W (BULLET TT only)

Tail light: bulb 12 V 5 W

Brake light: bulb 12 V 10 W

Trafficator bulb 12 V 10 W (TOMOS A3 GOLDEN BULLET TT LX and TOMOS A3 GOLDEN BULLET)

Engine is switched ON and OFF by kill switch which is situated on right hand of handlebar in the same housing with headlamp switch. On the left side of the handlebar is trafficator switch with horn button.

POWER TRANSMISSION

In gearbox is two-step gear with two centrifugal clutches. Power is transmitted from engine to rear wheel by chain $1/2 \times 3/16$ ".

FUEL TANK AND FUEL (TOMOS A3 BULLET)

Fuel tank forms part of frame, capacity 4 l (1 gallon), reserve 0.5 l (1 pint). Fuel feed tap with the following positions of lever: rightward-closed, downward-open, leftward-reserve.

Fuel: Pre-Mix regular Gas and Oil for two stroke engine in the ratio 50 : 1 (2%) also during running-in.

Models TOMOS A3 BULLET TT, A3 GOLDEN BULLET TT LX and A3 GOLDEN BULLET are equipped with oil tank (Fig. 6/1) and oil pump (Fig. 6/2). For this reason the fuel tank must be filled with regular gas and the oil tank (Fig. 6/1) with the twostroke oil.

NOTE: Fuel tank separate from frame, capacity 6,7 litres (reserve 0,5 litre). Fuel feed tap with the following positions of button: upward-reserve, forward-closed, downward-open. In case of oil pump damage, fill fuel tank with the aforested pre-mix gas and oil.

FRAME AND SUSPENSION

Sheet frame.

Front telescopic fork, rear swinging arm with heavy duty shock absorbers and tubular center stand.

Swinging arm bedded in sliding bushes.

WHEELS AND SUSPENSION

Size of tires

2 1/4 — 16 (20 × 2.25")

Tire pressure: front

1.5 atm (21 lb/psi)

rear

2.2 atm (31 lb/psi)

Front forks play

70 mm (2 3/8 in)

Heavy duty shock absorbers play

40 mm (1 9/16 in)

Brake drums dia

90 mm (3 17/32 in)

Brake shoes width

18 mm (23/32 in)

CHARACTERISTICS

Max. engine output	1.8 Hp at 5500 r.p.m.
Max. speed	30 MPH
Max. climbing ability with 80 kg (177 lb) load	20%
Fuel consumption	2l/100 km (7 pints p. 100 milies)

WEIGHT AND DIMENSIONS

Wheelbase	1080 mm (42½ in)
Overall length	1640 mm (64½ in)
Dry weight	46 kg — 52 kg (depends on model)

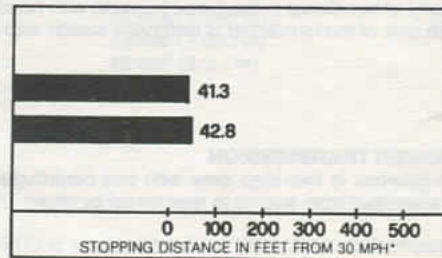
CONSUMER INFORMATION

THIS FIGURE INDICATES BRAKING PERFORMANCE THAT CAN BE MET OR EXCEEDED BY THE VEHICLES TO WHICH IT APPLIES, UNDER DIFFERENT CONDITIONS OF LOADING AND WITH PARTIAL FAILURES OF THE BRAKING SYSTEM. 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: TOMOS A3.

A. FULLY
OPERATIONAL
SERVICE BRAKE
LOAD

LIGHT	41.3
MEDIUM	42.8



* The maximum speed attainable by accelerating at maximum rate from a standing start for 1 mile.

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 30 MPH. THE HIGH SPEED PASS ASSUMES AN INITIAL SPEED OF 50 MPH AND A LIMITING SPEED OF 80 MPH.

SUMMARY TABLE

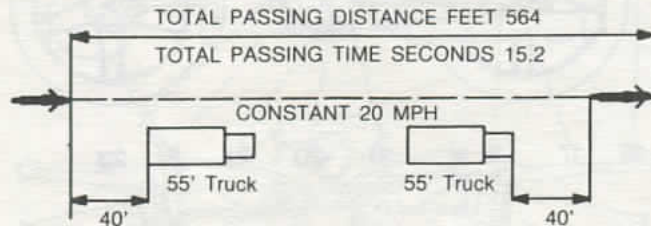
LOW SPEED PASS 564 FEET, 15.2 SECONDS

HIGH SPEED PASS — FEET — SECONDS (NOT CAPABLE)

LOW SPEED

INITIAL SPEED 20 MPH

LIMITING SPEED 30 MPH



DESCRIPTION OF VEHICLES TO WHICH THIS TABLE APPLIES:
TOMOS A3.

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:
TOMOS A3.

CONTROLS AND EQUIPMENT (Fig. 1, 2, 3, 4, 5)

1. Headlamp
2. Headlamp height adjusting screw
3. Speedometer
4. Front brake lever (on R.H.)
5. Rear brake lever (on L.H.)
6. Cold starting lever (choke) on the carburettor
7. Combined switch for trafficators
8. Switch for switching on and off the engine and lights
9. Mirror
10. Throttle twist grip
11. Trafficator (TOMOS A3 GOLDEN BULLET TT LX and A3 GOLDEN BULLET)
12. Reflector
13. Fuel feed tap
14. Seat
15. Luggage carrier
16. Tail light
17. Chain tension adjuster
18. Rear brake adjusting screw

- 19. Oil filling plug (on R.H.)
- 20. Oil level checking plug (on R.H.)
- 21. Oil drain plug (on R.H.)
- 22. Air filter
- 23. Carburettor main jet (on L.H.)
- 24. Front brake adjusting screw

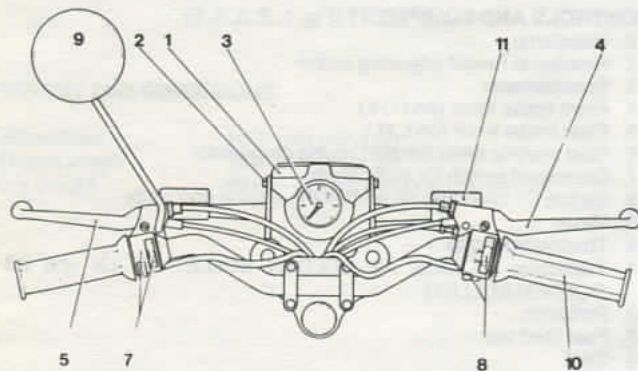


Fig. 1 A3 GOLDEN BULLET TT LX

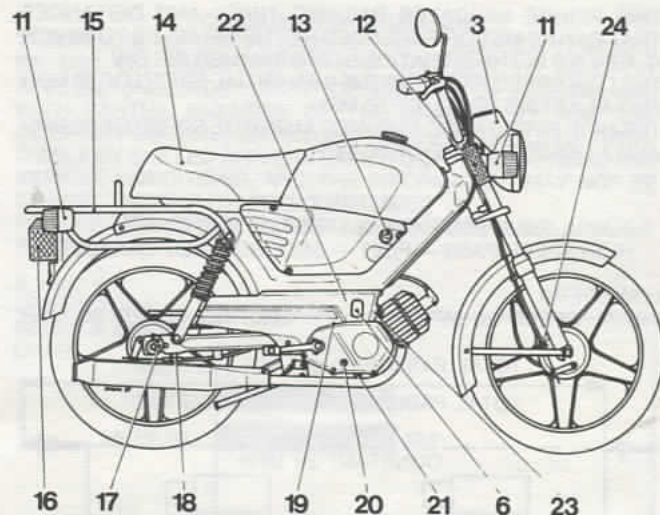
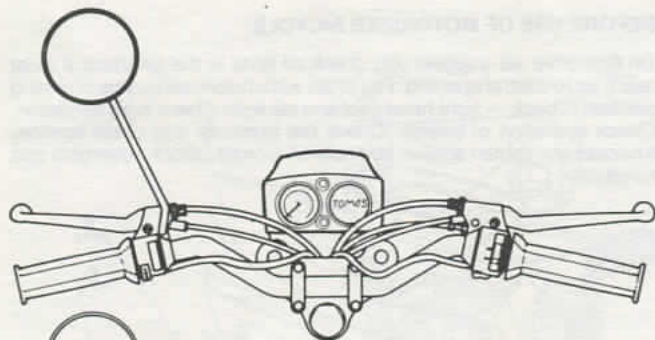


Fig. 2 GOLDEN BULLET TT LX



BULLET TT

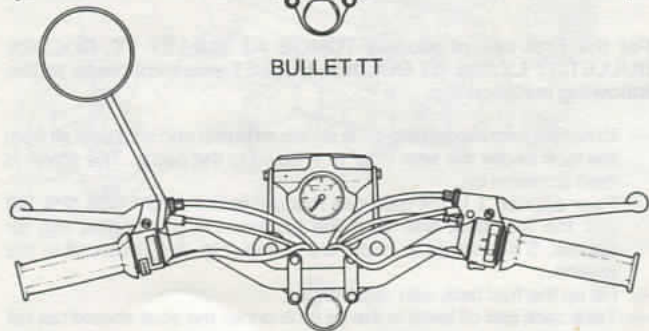


Fig. 3 A3 BULLET

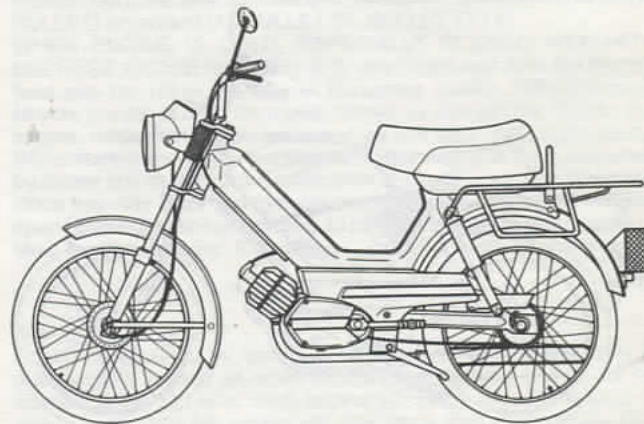


Fig. 4 A3 BULLET

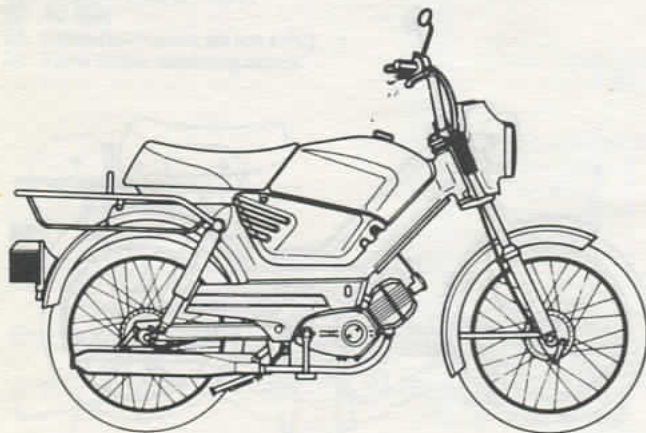


Fig. 5 A3 BULLET TT

BEFORE USE OF MOTORIZED BICYCLE

On first drive we suggest you check oil level in the gearbox; it must reach up to control opening, Fig. 2/20, with motorized bicycle in resting position. Check — front head light and tail light. Check horn operation. Check operation of brakes. Check tire pressure and chain tension. If necessary, tighten screws and nuts on wheels, shock absorbers and handlebar.

For the first use of models TOMOS A3 BULLET TT, GOLDEN BULLET TT LX and A3 GOLDEN BULLET you must keep to the following instructions:

- Unscrew vent screw (Fig. 6/3) on the oil pump and wait until oil from the tank under the seat (Fig. 6/1) flows to the pump. The screw is then screwed on.
- Pour approx. 1 l (1/4 gall) gas mixture in the ratio 1 : 50 (2% oil) into the fuel tank and start the engine. Let the engine run for approx. 5 min so as to make the pump (Fig. 6/2) push oil to the engine.
- Fill up the fuel tank with regular gas.
- Take care lest oil level in the oil tank under the seat should not fall under the lower edge of the window on the tool box.

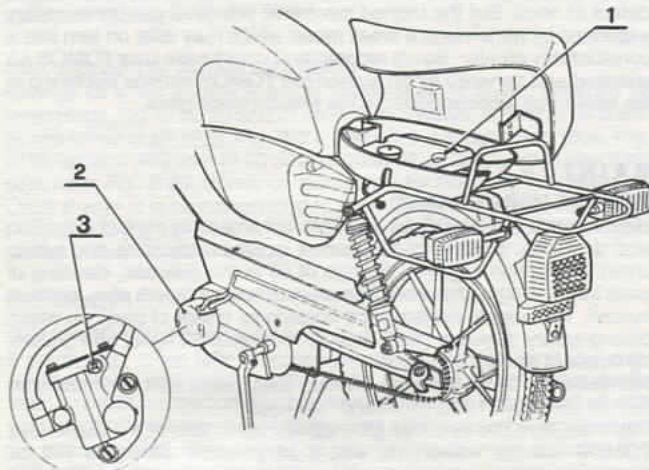


Fig. 6

STARTING THE ENGINE

Open fuel feed tap, Fig. 2/13, lever facing downward. If there is not enough fuel in the tank, turn the lever leftward — reserve (A3 GOLDEN BULLET) or upward (A3 BULLET TT, BULLET TT LX).

WHEN ENGINE IS COLD, ESPECIALLY IN COLD WEATHER, DEPRESS CHOKE lever (Fig. 2/6) downward and twist the throttle twist grip for 1/3 in the way of increasing throttle. With motorized bicycle you move off in the same manner as with bicycle. To start the engine, rotate with pedals backward, as kick start, until engine starts. When starting the motorized bicycle, do not step on it, if it is supported by center stand. Excessive application of choke is not recommended since fuel may overflow cylinder and wet spark plug which may fail spark. In these cases engine should be started at full throttle in order to blow through cylinder. If necessary, unscrew spark plug and dry it.

DRIVING

Speed is regulated by means of throttle twist grip. Choke lever is automatically turned off when throttling up. Throttle should not be opened jerkily. On level road, engine will easily engage the second gear. On climbing hill, engine will after some time automatically shift down to first gear.

If it takes too long to shift at a definite load and ascent, especially in the beginning when oil in gearbox is still cool and dense, by shortly throttling down a quicker shifting up or down is made possible.

It is not recommended to drive on full throttle for a long period of time between first and second gears, since one clutch skids and wears. In such case, frequent shifting up and down occurs, this is repeated until

ascent has changed. It is better to throttle down and drive in lower gear. When driving downhill, throttle up from time to time, to make mixture lubricate moving parts of the engine and to permit strong enough illumination at night ride. When driving downhill with idling engine, the gearbox is disengaged only for lower speeds till approx. 18 km. p.h., at higher speeds 2nd gear clutch is engaged which starts to brake or starts the engine. This should be no reason for worry as such is normal course. **FUEL FEED TAP SHOULD BY ALL MEANS BE OPEN, WITH THE ABOVE DRIVE.** Motorized bicycle is stopped by throttling down and applying front and rear brakes at the same time. Engine stops when throttle is reduced and kill button is turned OFF, Fig. 1/8. After that fuel feed tap should be closed.

TRAFFICATOR

Your TOMOS A3 GOLDEN BULLET TT LX, and A3 GOLDEN BULLET, are equipped with trafficator system to make riding safer.

OIL PUMP AND TANK

As mentioned before the models TOMOS A3 BULLET TT, GOLDEN BULLET TT LX, and A3 GOLDEN BULLET are equipped with oil pump supplying oil to the cylinder from a special tank located under the seat.

The pump is connected to magneto nut on the crankshaft by a special clutch. The clutch is pasted onto the oil pump.

RUNNING-IN

Engine life depends on the manner as it has been run-in. Do not use full throttle too often before first 500 km (300 miles) have been covered. After 500 km (300 miles) oil in the gearbox should be changed in one of TOMOS services.

A USEFUL PIECE OF ADVICE

Unless you are an expert yourself, you will not be able to detect certain defect at once. But the trained mechanic will save you unnecessary expenses by performing a small repair which may later on turn into a considerably greater. So we recommend you to have your TOMOS A3 checked and serviced by an authorized TOMOS service workshop in the sequence recommended in the Maintenance chart.

MAINTENANCE

ROUTINE MAINTENANCE

Maintenance of TOMOS A3 is simple but vital to its perfect operation and durability. Routine maintenance includes adjusting and lubing chain, lubrication of joints, change of oil in the gearbox, cleaning of parts influencing undisturbed operation of engine (spark plug, exhaust system, fuel supply system) and occasional check of parts on which driving safety depends (tire pressure, operation of lights and brakes, tightness of screws and nuts).

Maintenance chart provides various jobs performed on motorized bicycle after 300, 1000, 2000 and 3000 mls.

You may have the foreseen jobs carried out in one of the authorized TOMOS service workshops where all possible damages will be removed and necessary advice and instructions furnished. The first service check is at approx. 300 miles.

LUBRICANTS

For gearbox use oil for automatic gearbox ATF type A Suffix A.

For lubricating other parts than gearbox (see Maintenance chart), we suggest you apply standard motor oil SAE 30 and grease of good quality as MOBIL GREASE BRB.

CHANGE OF OIL IN THE GEARBOX

Change oil when engine is warm. Remove R. H. cover, unscrew all three plugs, Fig. 2/19, 20 and 21 on R. H. crankcase and let all oil drain. Screw on oil drain plug, Fig. 2/21, and pour through filling plug, Fig. 2/19, approx. 300 ccm (0,63 pint) of fresh oil up to the rim of checking bore hole. Fig. 2/20. Screw on also screw for checking and filling oil. Once a year it is recommended to flush the gearbox with oil cleaner prior to pouring fresh oil, so that engine runs with motorized bicycle placed on center stand for 5 to 10 minutes.

CLEANING

CLEANING CYLINDER HEAD

If spark plug often fails in consequence of soot bridging the gap, cylinder head and piston crown need cleaning. Dismount cylinder head and remove carbon deposits and residues of incrustated oil with wire brush. Clean also exhaust channel orifice upon having lowered the piston to BDC. Care should be taken not to damage surfaces and prevent soot entering the engine. Clean also spark plug and check spark plug point gap, which must be 0.02 in.

CLEANING EXHAUST SYSTEM

Carbon deposits in exhaust system obstruct passage of exhaust gases and reduce engine output. Unscrew screw on the rear part of

exhaust tube, extract baffling pipe, Fig. 7/15, and clean it. From time to time, clean cylinder exhaust pipe port, Fig. 7/16. Remove exhaust pipe and clean passages of carbon deposits.

CLEANING FUEL SUPPLY SYSTEM

The following parts in the fuel supply system may occasionally need cleaning: main jet, air filter and strainer in fuel feed tap. Main jet (on L.H. of carburettor) should never be cleaned with wire but only blown through. Fuel strainers should also be only air cleaned. Strainer is accessible by unscrewing inlet coupling on fuel tank.

Air filter is located in rubber coupling on carburettor port. Dismount coupling, wash filter in petrol, blow it through and then slightly oil it.

CLEANING THE MOTORIZED BICYCLE

Cleaning of outer surfaces of motorized bicycle also makes part of routine maintenance. Avoid washing these surfaces with a strong jet of water or else, water may enter brakes, carburettor and electrical installation.

Upon having washed the motorized bicycle wipe it dry. To protect painted surface apply any type of protective agent.

After cleaning has been completed, make sure engine, lights and brakes which may have been soaked, operate properly. Wet brakes are dried by riding the motorized bicycle for a few minutes and applying brakes several times so that brake linings warm and dry. Lube chain.

CONTROLS AND SETTINGS

LIGHTING

Electric installation should always be in perfect operating condition. Light should be adjusted so as to make road lighted only up to 40 m (44 yds). Headlamp fixing screw, Fig. 1/2, serves also as adjusting screw for light beam.

FITTING CONTROL CABLES

Adjust throttle control cable with warm running engine with the adjusting screw, located on the cable next to throttle twist grip. Set free play only with closed throttle control cable and disengaged choke button to keep number of RPM as low as possible while the engine runs normally. Clutch should not engage and disengage or move the motorized bicycle. Upon setting having been accomplished, secure with lock nut.

Adjust front and rear brakes control cables with adjusting screw, Fig. 2/24 — 2/18, on brake plates. Brake control cables are properly adjusted when brakes levers have 10 — 15 mm (1/2 in) free play. Thereupon secure with lock nut.

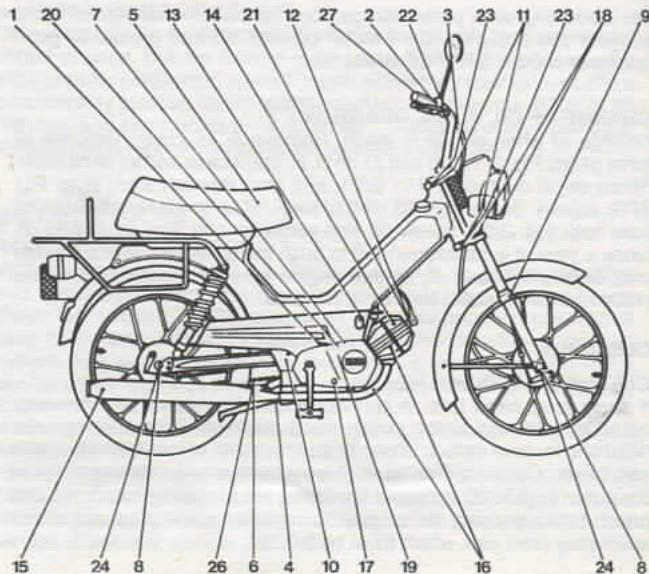


Fig. 7 A3 GOLDEN BULLET

MAINTENANCE CHART

	First maintenance at 300 mls. or 2 mths.	1000 mls. or 3 mths. (WHICHEVER SOONEST)	2000 mls. or 6 mths.	3000 mls. or 12 mths.
LUBRICATION WITH OIL				
1 — Change of oil in gearbox	x	x	x	x
2 — Control lever joints	x	x	x	x
3 — Control cables — inner wire	x		x	x
4 — Center stand axle	x	x	x	x
5 — Seat axle		as required		
6 — Chain	x	x	x	x
7 — Felt strap (in magneto)	x	x	x	x
LUBRIFICATION WITH GREASE (USE MOBIL GREASE BRB)				
8 — Wheel bearings	x	x	x	x
9 — Front fork sliding tubes	x	x	x	x
10 — Swinging arm bearing bushes	x	x	x	x
11 — Handlebar bearings	x	x	x	x
CLEANING				
12 — Spark plug	x	x	x	x
13 — Air filter (to be oiled)	x	x	x	x

	First maintenance at 300 mls. or 2 mths.	1000 mls. or 3 mths. (WHICHEVER SOONEST)	2000 mls. or 6 mths	3000 mls. or 12 mths.
14 — Cylinder head, piston crown and exhaust channel	x		x	x
15 — Exhaust silencer				
16 — Cylinder and exhaust pipe		x	x	x
CONTROLS AND FITTINGS				x
17 — Oil lever in gearbox				
18 — Horn and lights	x	x	x	x
19 — Contact breaker gap (0.0137 — 0.0177 in)	x	x	x	x
20 — Ignition advance (timing) (0.07 — 0.079 in)		x	x	Replace
21 — Spark plug gap 0.020 in		x	x	x
22 — Operation of brakes and adjustment	x	x	x	x
23 — Handlebar bearing clearance	x	x	x	x
24 — Wheel bearing clearance	x	x	x	x
25 — Tire pressure (front 21, rear 31 lb/psi)	x	x	x	x
26 — Chain sag (3/8 in up and down)	x	x	x	x
27 — Tightening of screws and nuts	x	x	x	x

CHAIN SAG

Chain should have 10 mm (3/8 in) up and down movement. This is obtained by rotating chain tension adjusters. Fig. 2/17, round rear wheel axle after having slackened nut on axle. Upon having completed adjustment, retighten nuts.

HANDLEBAR BEARINGS CLEARANCE

Check handlebar bearings clearance by putting the motorized bicycle on its center stand and by gripping front sliding tubes with both hands, move them forward — backward. No clearance should be felt with this check, while the handlebar turning leftward — rightward should be free of torsion. If setting is incorrect, somewhat slacken crown nut on fork lug at handlebar stem and screw on nut under fork lug then slacken it to eliminate clearance and torsion in bearings. Finally, tighten crown nut.

WHEEL ALIGNMENT AND BALANCING

Check wheel alignment by a lath leant against front and rear wheels. When alignment is not correct, adjust it by moving rear wheel spindle. Wheel centering can be accomplished without dismantling wheels with corresponding tightening or slackening of spoke nipples.

TIGHTENING SCREWS AND NUTS

Tightness check for screws and nuts is effected from time to time on more important parts such as wheels, handlebar, rear shock absorbers, swinging arm axle, engine fixing to frame and drain plug under gearbox.

PRESERVATION OF MOTORIZED BICYCLE AND PREPARING IT FOR REPEATED USE

If motorized bicycle is not to be used for longer period of time, it should be protected against corrosion.

Check, repair and clean the motorized bicycle. Remove carbon deposits from exhaust system and inflate tires. With warm engine replace oil in gearbox with anticorrosion agent. Pour 2 L (1/2 gallon) of mixture of petrol and 10 % anticorrosion oil into previously emptied fuel tank. Start the engine and let it run for 5 minutes (on center stand). Then stop the engine and shake the fuel tank vigorously. Some parts may be sprayed or smeared over with agent for exterior preservation. Cover motorized bicycle and store it in a dry place.

Once monthly repeat shaking mixture in the fuel tank and start engine, placing motorized bicycle on center stand.

Before using motorized bicycle again, drain mixture from fuel tank, fill it with fresh standard mixture and clean the spark plug. Replace oil in gearbox with standard oil. Rinse exterior greasy surfaces with diluted detergent. Check operation of engine, lights, horn and brakes.

TRACING TROUBLES AND REMOVING TROUBLES IN FUEL SUPPLY SYSTEM

If engine fails to start or falters it may be due to:

- Choked fuel supply:
Check if there is enough fuel in the fuel tank and if feed tap is open.
- Choked fuel strainer:
Blow through fuel stainer on fuel feed tap.
- Main jet in carburettor choked:
Unscrew and blow through main jet.

- Incorrect use of choke button:
Follow instructions for cold starting.
- Incorrect mixture:
Drain off fuel tank and fill it with standard mixture.
- Incorrect setting of free play:
Increase number of engine R.P.M. by help of adjusting screw on throttle control cable.

TROUBLES IN IGNITION SYSTEM

If engine fails to operate and this is not due to damage in fuel supply system, fault should be traced in ignition system. Check sparking. If there is no spark on plug:

- Wet spark plug or bridged points:
Clean spark plug.
- Spark plug points worn:
Set correct gap or replace plug.
- Incorrectly fitted cable plug or grounded:
Fit well cable plug or replace it.
- Incorrect contact breaker point gap and incorrect spark plug gap:
Set correct gap.
- Condenser, ignition coil or contact breaker are not perfect:
Have them checked and repaired by a service workshop.

TROUBLES CAUSING LOSS OF ENGINE POWER

Loss of engine power may be due to:

- Spark plug or cylinder head not tightened:
Screw spark plug and nuts on cylinder head.
- Air filter on carburettor clogged:
Rinse it in petrol, blow it through and slightly oil it.

- Exhaust system clogged:
Clean it by following instructions.
- Wheel brakes sliding:
Oil brakes control cables and adjust them by following instructions.
- Incorrectly set ignition advance (timing):
Have it set by service workshop.
- Worn out or broken piston rings:
Have them replaced by service workshop.

TROUBLES IN GEARBOX

- When starting, engine runs in neutral gear and also with higher number of revs clutch does not engage:
Throttle down and restart engine (oil is still cool and dense). When driving off, throttle up gradually to reduce jerks. In case of frequent troubles, have the fault checked by service workshop.
- Clutch skidding (especially in cool weather):
Incorrect oil in gearbox — replace oil with standard.
- Clutch not shifting from the 1st into 2nd or not engaging at all:
Engine not powerful enough — clean exhaust and air cleaner.
Clutch seized — try to operate clutch at higher number of revs with motorized bicycle supported by stand.
Excessive oil in gearbox — check level.
Brakes not disengaging — grease control cables.
- When shifting to 2nd gear, clutch shakes:
Chain sagged — tighten chain or rear wheel.
Not enough oil in the gearbox — fill up to the required level.
- With engine disengaged, the motorized bicycle is difficult to move forward-backward:
Have the fault examined by a service workshop.

KEYS TO SAFE RIDING

The major keys to safe riding are the exercise of common sense and defensive riding. Don't exceed your riding capabilities and always be alert. A part of defensive riding is personal protection. To avoid serious injury of an accident it is a good idea to wear an approved safety helmet. There are many hazards to your eyes such as insects, gravel and rocks; therefore, it is suggested you wear protective glasses,

goggles or face shield to avoid injury to your eyes and prevent a possible accident.

We would like to take this opportunity to thank you for selecting a TOMOS product and to assure you of our continuing interest in your safe and pleasant motorcycling.

- Incorrect use of choke button:
Follow instructions for cold starting.
- Incorrect mixture:
Drain off fuel tank and fill it with standard mixture.
- Incorrect setting of free play:
Increase number of engine R.P.M. by help of adjusting screw on throttle control cable.

TROUBLES IN IGNITION SYSTEM

If engine fails to operate and this is not due to damage in fuel supply system, fault should be traced in ignition system. Check sparking. If there is no spark on plug:

- Wet spark plug or bridged points:
Clean spark plug.
- Spark plug points worn:
Set correct gap or replace plug.
- Incorrectly fitted cable plug or grounded:
Fit well cable plug or replace it.
- Incorrect contact breaker point gap and incorrect spark plug gap:
Set correct gap.
- Condenser, ignition coil or contact breaker are not perfect:
Have them checked and repaired by a service workshop.

TROUBLES CAUSING LOSS OF ENGINE POWER

Loss of engine power may be due to:

- Spark plug or cylinder head not tightened:
Screw spark plug and nuts on cylinder head.
- Air filter on carburettor clogged:
Rinse it in petrol, blow it through and slightly oil it.

- Exhaust system clogged:
Clean it by following instructions.
- Wheel brakes sliding:
Oil brakes control cables and adjust them by following instructions.
- Incorrectly set ignition advance (timing):
Have it set by service workshop.
- Worn out or broken piston rings:
Have them replaced by service workshop.

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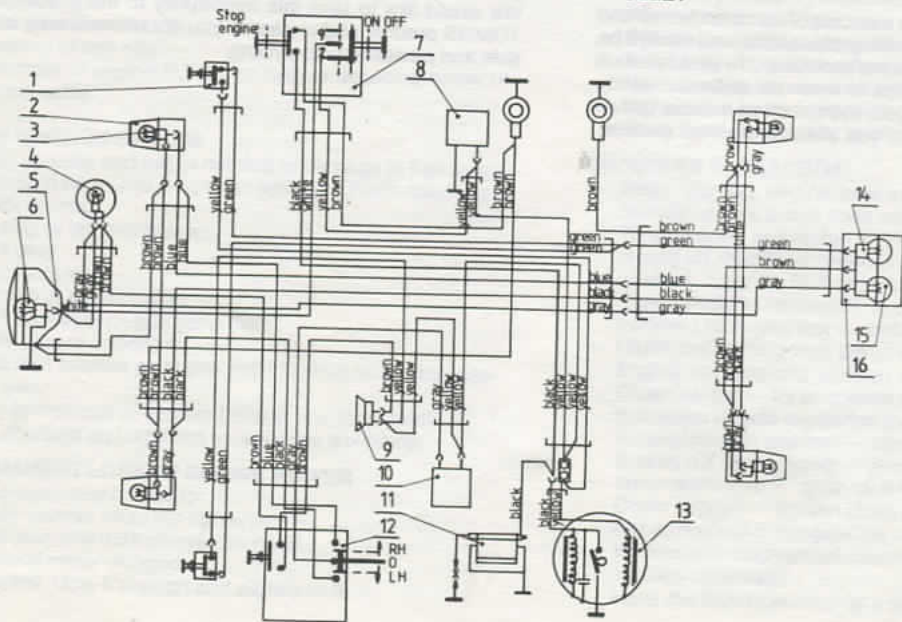
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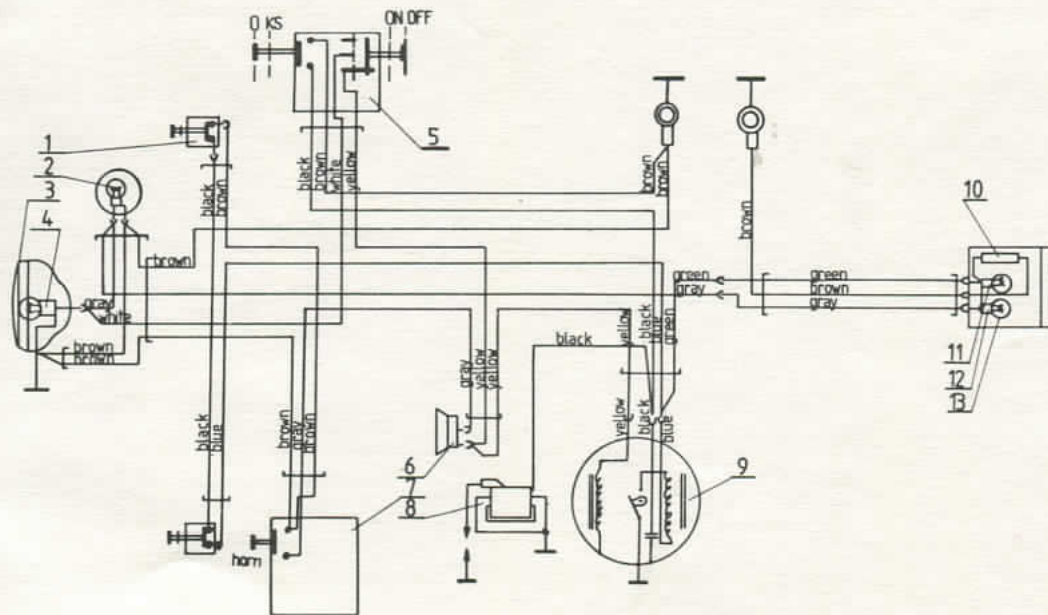
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WIRING DIAGRAM FOR TOMOS A3 GOLDEN BULLET TT LX AND A3 GOLDEN BULLET



1. Stop switch
2. Trafficator
3. Bulb 12 V 10 W BA 15s
4. Bulb 12 V 1,2 W W2 x 4,6d
5. Headlamp
6. Bulb 12 V 21 W BA 15s
7. Switch CEV-RH
8. Voltage regulator
12 V 60 W
9. Horn 12 V 18 W
10. Flasher relay 12 V 45 W
11. Ignition coil
12. Switch CEV-LH
13. Magneto 12 V 75 W
14. Bulb 12 V 10 W BA 15s
15. Bulb 12 V 5 W BA 15s
16. Tail light

WIRING DIAGRAM FOR A3 BULLET TT



1. Stop switch
2. Bulb 12 V 1,2 W W2 × 4,6 d
3. Headlamp
4. Bulb 12 V 25 W BA 15S
5. Switch CEV-RH
6. Horn 12 V 18 W
7. Switch CEV-LH
8. Ignition coil
9. Magneto 12 V 28 W
10. Resistance
11. Bulb 12 V 10 W BA 15s
12. Bulb 12 V 5 W BA 15s
13. Tail light