



**TOMOS AUTOMATIC BULLET A 3 SP
TOMOS AUTOMATIC BULLET A 3 GM
TOMOS AUTOMATIC SILVER BULLET A 3 SP
TOMOS AUTOMATIC SILVER BULLET A 3 SP oil injection
TOMOS AUTOMATIC SILVER BULLET A 3 GM oil injection**

**MAINTENANCE
MANUAL &
INSTRUCTION BOOK**

PLEASE NOTE THAT THIS TABLE REPLACES THE TABLE ON PAGE 5, WHICH WAS PRINTED BY MISTAKE.

PLEASE EXCUSE THIS ERROR.

CHARACTERISTICS

MODEL	SILVER BULLET A3 SP BULLET A3 SP	SILVER BULLET A3 GM BULLET A3 GM
Max. engine output	1.8 HP at 5500 r.p.m.	1.5 HP at 4800 r.p.m.
Max. speed	48 km/h (30 m.p.h.)	40 km/h (25 m.p.h.)
2 nd gear engagement	18 km/h (11 m.p.h.)	16 km/h (10 m.p.h.)
Max. climbing ability with 80 kg (177 lb) load	20 %	20 %
Neutral gear at approx.	1300 r.p.m.	1300 r.p.m.
Fuel consumption	2 L/100 km (7 pints p. 100 miles)	1.8 L/100 km (6 pints p. 100 miles)

F O R E W O R D

Though the TOMOS AUTOMATIC 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 AUTOMATIC 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
T O M O S K O P E R
Y U G O S L A V I A

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TOMOS MOTORIZED BICYCLES:

	Model marking
TOMOS AUTOMATIC BULLET A 3 SP	01
TOMOS AUTOMATIC BULLET A 3 GM	02
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TOMOS AUTOMATIC SILVER BULLET A 3 GM oil injection	05
TOMOS AUTOMATIC SILVER BULLET A 3 SP	07
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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 AUTOMATIC SILVER BULLET A3 SP, SILVER BULLET A3 SP oil injection, SILVER BULLET A3 GM oil injection, BULLET A3 SP and BULLET A3 GM, are of relatively light construction, with sheet frame forming one single unit with fuel tank. Engine with two-speed automatic gearbox. Controls are limited to throttle twist grip with incorporated cold start button. 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 AUTOMATIC 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 ccm (3 cu. in)
Compression ratio:	8.5 : 1

CARBURETOR

Carburetor ENCARVI is equipped with air filter, fuel strainer and main jet 50, intake dia of carburetor is 12 mm (0.472 in).

Idling is set with adjusting screw on top end of throttle control cable. Cold engine starting with button located at throttle twist grip.

ELECTRICAL EQUIPMENT

Flywheel magneto 6 V — 25/15 W

Ignition timing 1.8 — 2 mm BTDC. (0.07 — 0.079 or 24° BTDC)

Contact breaker points gap 0.35 — 0.45 mm (0.0137 — 0.0177 in)

Spark plug BOSNA F 75, or HITACHI M 44, AET S 125 E2, BOSCH W 225 TI, AUTOLITE AE 3, NKG B 7 HS

Spark plug gap 0.5 mm (or 0.02 in)

Headlamp: bulb 6 V 21 W

Tail light: bulb 6 V 5 W

Brake light: bulb 6 V 10 W

Trafficator bulb 6 V 18 W (SILVER BULLET 04, 05, 07)

Engine is switched ON and OFF by kill switch which is situated on right hand of handlebar in the same housing with trafficator switch. On the left side of the handlebar is light 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 x 3/16".

FUEL TANK AND FUEL

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

Fuel: Pre-Mix regular Gas and Oil for two stroke engine ~~or any motor oil SAE 30 in the ratio 50 : 1 (2%) also during running in.~~*

Models TOMOS Automatic SILVER BULLET A3 SP and SILVER BULLET A3 GM are equipped with oil tank (Fig. 5/1) and oil pump (Fig. 5/2). For this reason the fuel tank (Fig. 5/3) must be filled with regular gas and the oil tank (Fig. 5/1) with the twostroke oil.

In case of oil pump damage, dismount pump clutch between magneto and crankedshaft. Fill fuel tank with the aforesated pre-mix gas and oil.

FRAME AND SUSPENSION

Sheet frame.

Front telescopic fork, rear swinging arm with heavy duty shock absorbers and sheet 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	60 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

MODEL	SILVER BULLET A3 GM BULLET A3 GM	SILVER BULLET A3 SP BULLET A3 SP
Max. engine output	1.8 HP at 5500 r.p.m.	1.5 HP at 4800 r.p.m.
Max. speed	48 km/h (30 m.p.h.)	40 km/h (25 m.p.h.)
2 nd gear engagement	18 km/h (11 m.p.h.)	16 km (10 m.p.h.)
Max. climbing ability with 80 kg (177 lb) load	20%	20%
Neutral gear at approx.	1300 r.p.m.	1300 r.p.m.
Fuel consumption	2 L/100 km (7 pints p. 100 miles)	1.8 L/100 km (6 pints p. 100 miles)

WEIGHT AND DIMENSIONS

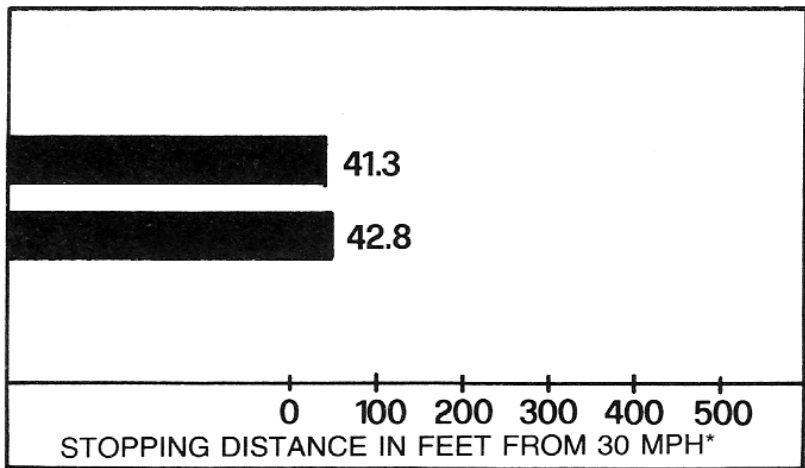
Wheelbase	1080 mm (42 1/2 in)
Overall length	1640 mm (64 1/2 in)
Dry weight	44 kg (97 lb.)
Load	80 kg + 25 kg Luggage (177 lb. + 55 lb.)

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: BULLET A 3 SP, SILVER BULLET A 3 SP, SILVER BULLET A 3 SP oil injection

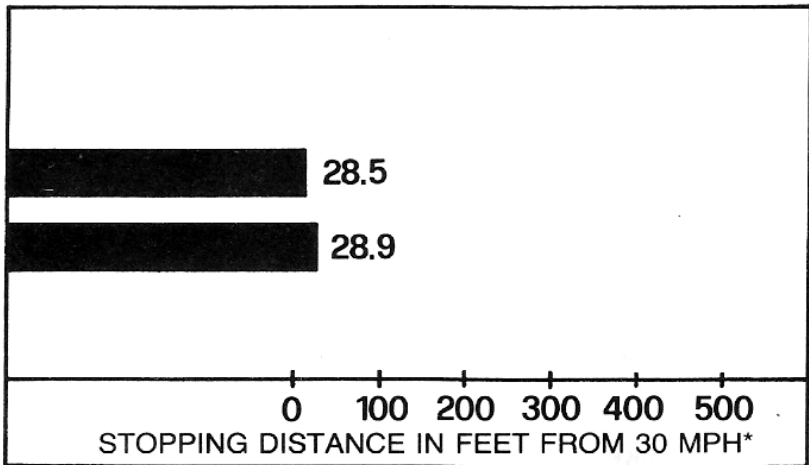
A. FULLY OPERATIONAL SERVICE BRAKE LOAD



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

DESCRIPTION OF VEHICLES TO WHICH THIS TABLE APPLIES: SILVER BULLET A3 GM oil injection, BULLET A 3 GM

A. FULLY OPERATIONAL SERVICE BRAKE LOAD



* 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.

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: BULLET A 3 SP, SILVER BULLET A 3 SP, SILVER BULLET A 3 SP oil injection

SUMMARY TABLE

LOW SPEED PASS 564 FEET, 15.2 SECONDS

HIGH SPEED PASS – FEET – SECONDS (NOT CAPABLE)

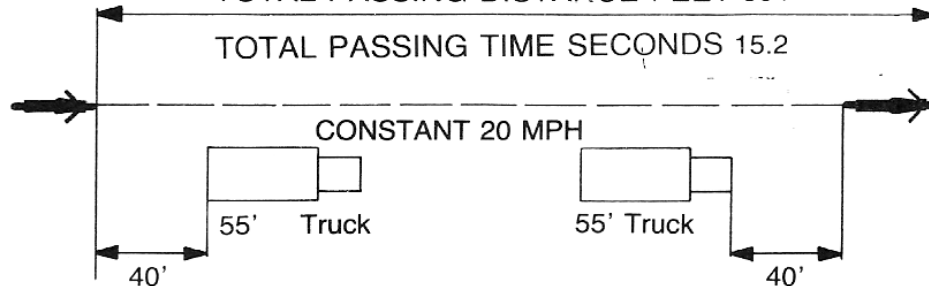
LOW SPEED

INITIAL SPEED 20 MPH

LIMITING SPEED 30 MPH

TOTAL PASSING DISTANCE FEET 564

TOTAL PASSING TIME SECONDS 15.2



DESCRIPTION OF VEHICLES TO WHICH THIS TABLE APPLIES: BULLET A 3 GM, SILVER BULLET A 3 GM oil injection

SUMMARY TABLE

LOW SPEED PASS 738 FEET, 21.7 SECONDS

HIGH SPEED PASS – FEET – SECONDS (NOT CAPABLE)

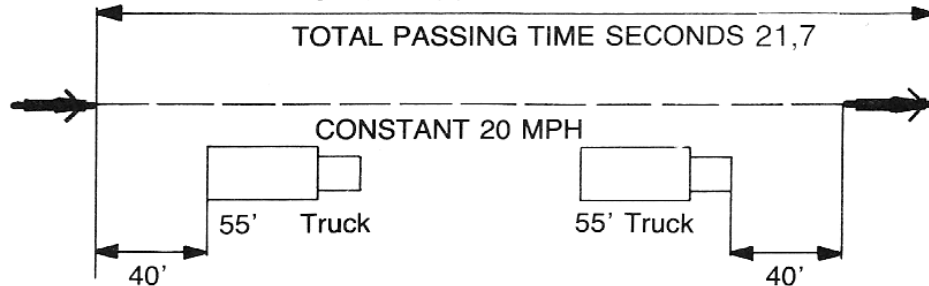
LOW SPEED

INITIAL SPEED 20 MPH

LIMITING SPEED 30 MPH

TOTAL PASSING DISTANCE FEET 738

TOTAL PASSING TIME SECONDS 21,7



CONTROLS AND EQUIPMENT (Figs. 1, 2, 3, 4)

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 button (choke)
7. Combined switch for lights and horn
8. Switch for switching on and off the engine and trafficators
9. Mirror
10. Throttle twist grip
11. Trafficator (SILVER BULLET 04, 05, 07)
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. Carburetor main jet (on L.H.)
24. Front brake adjusting screw
25. Battery (SILVER BULLET 04, 05, 07)

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.

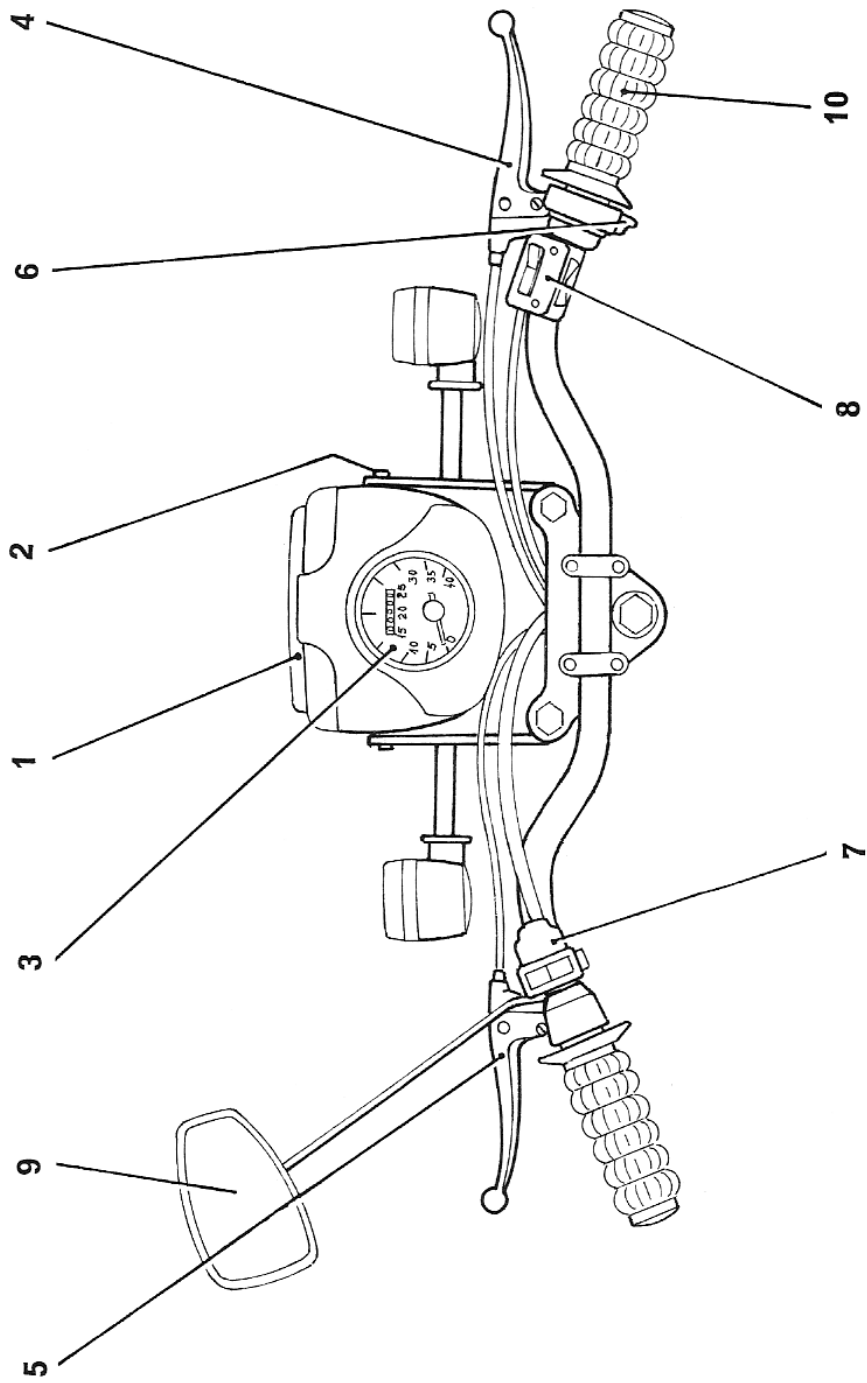


Fig. 1 SILVER BULLET 04, 05, 07

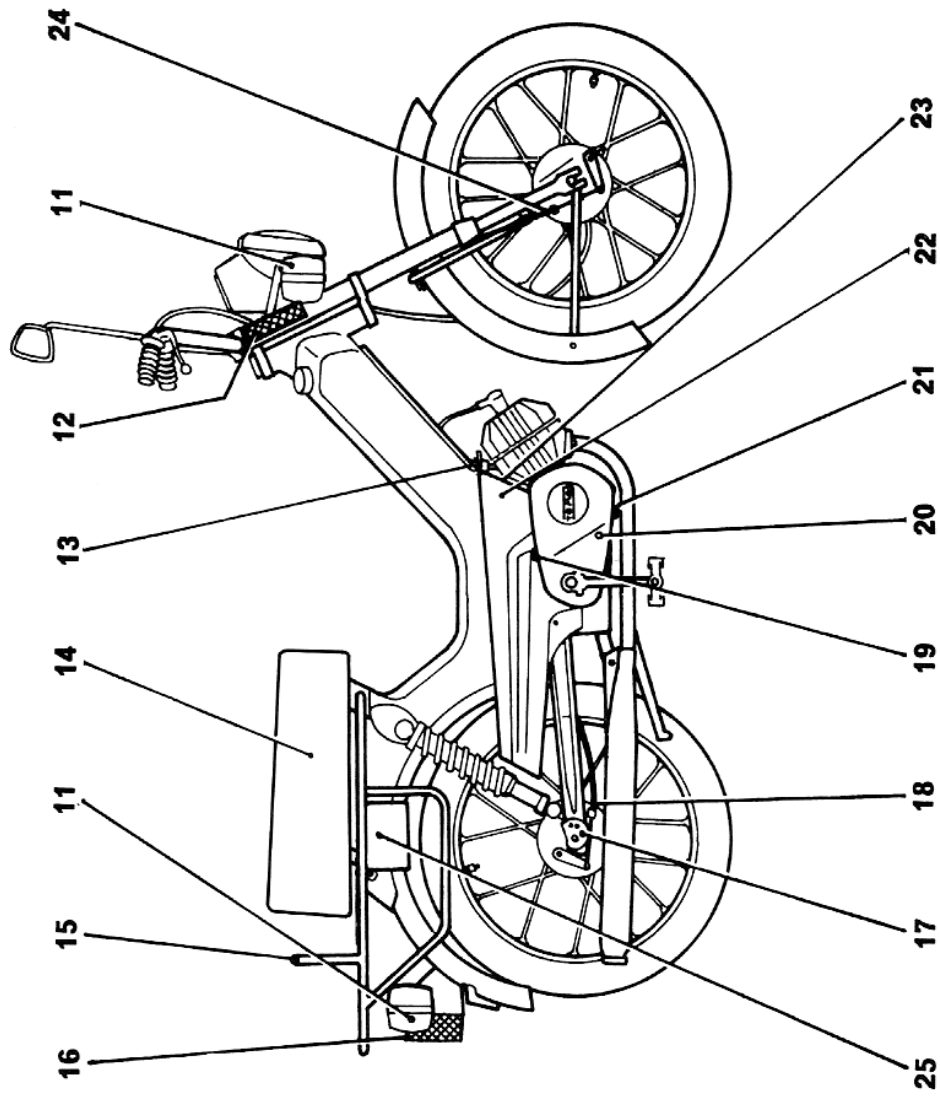


Fig. 2 SILVER BULLET 04, 05, 07

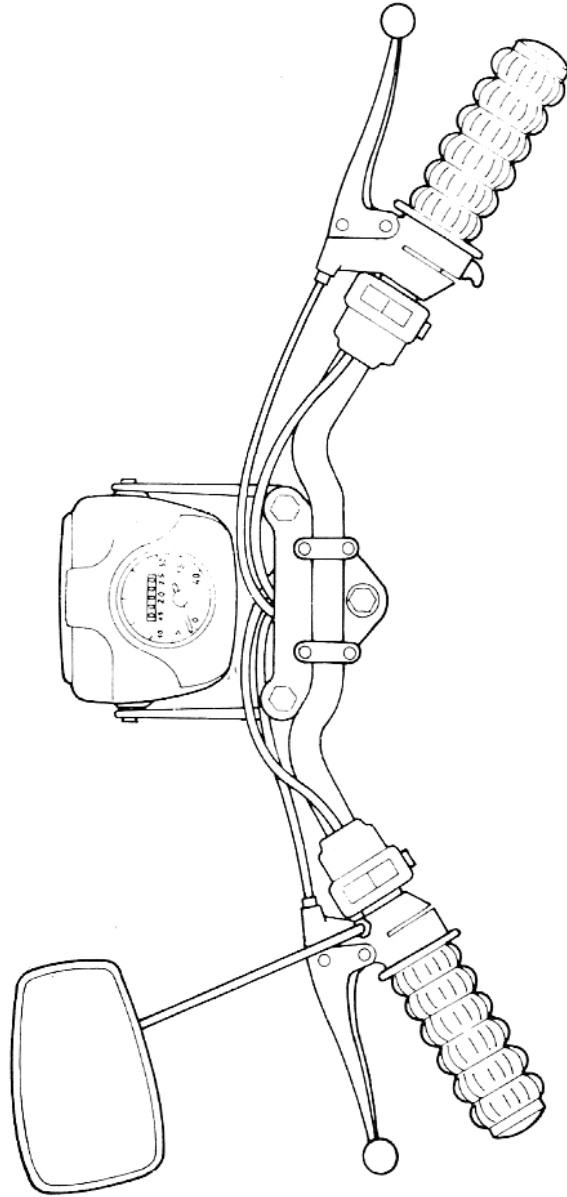


Fig. 3 BULLET SILVER BULLET 08, 09

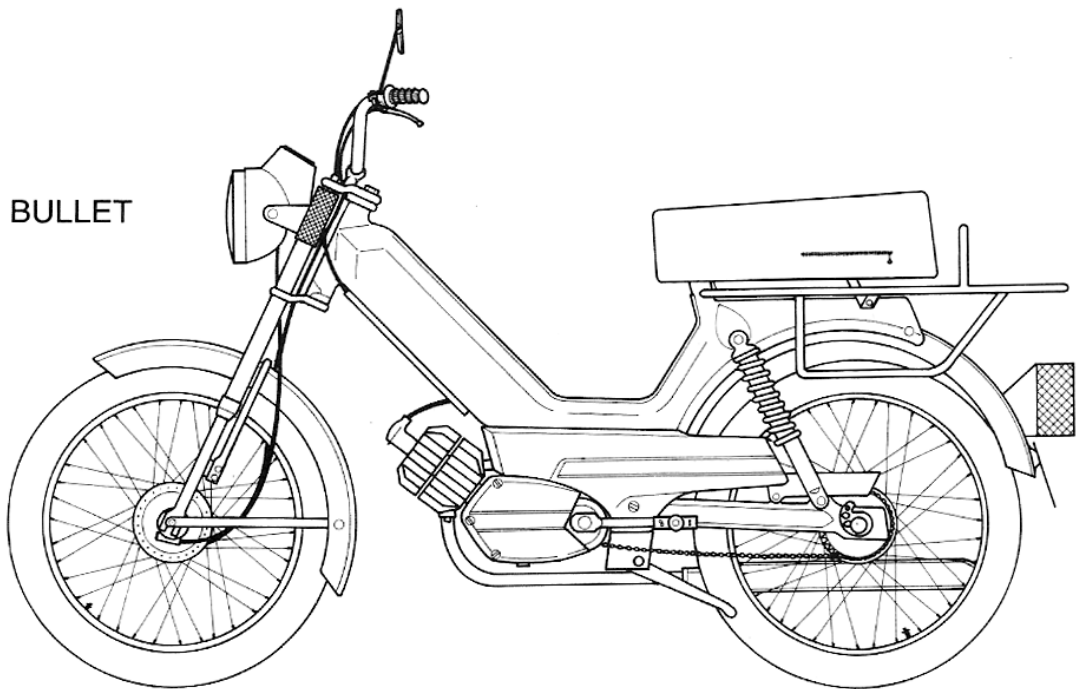
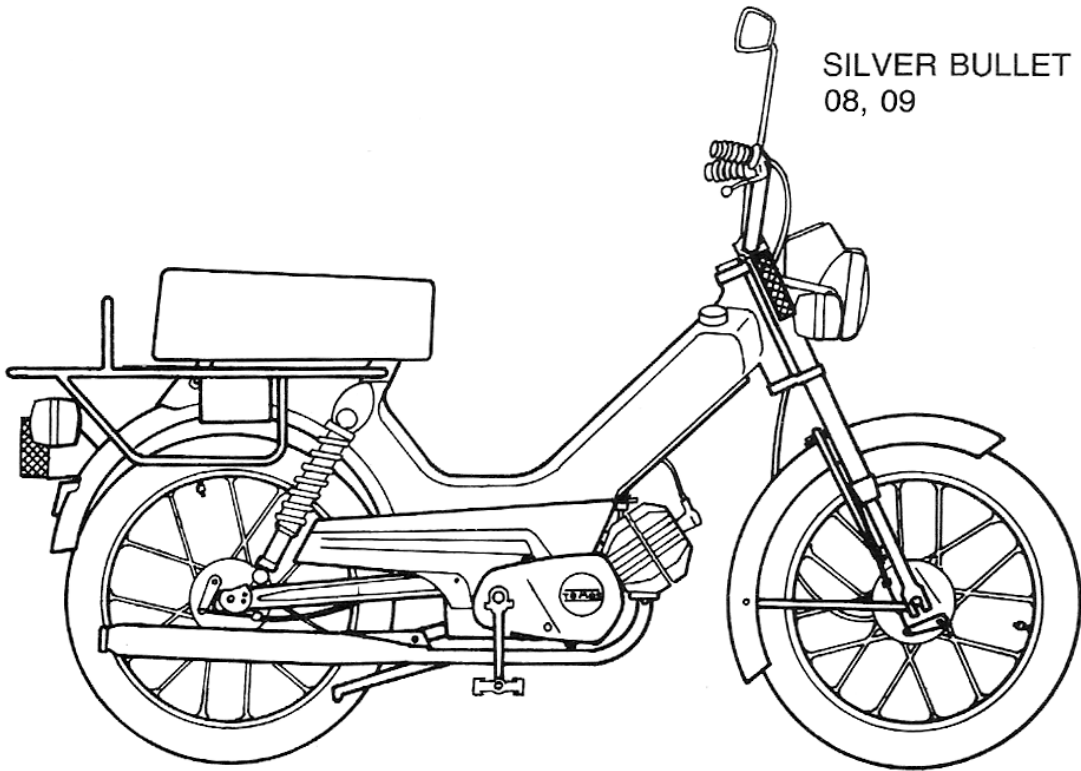


Fig. 4

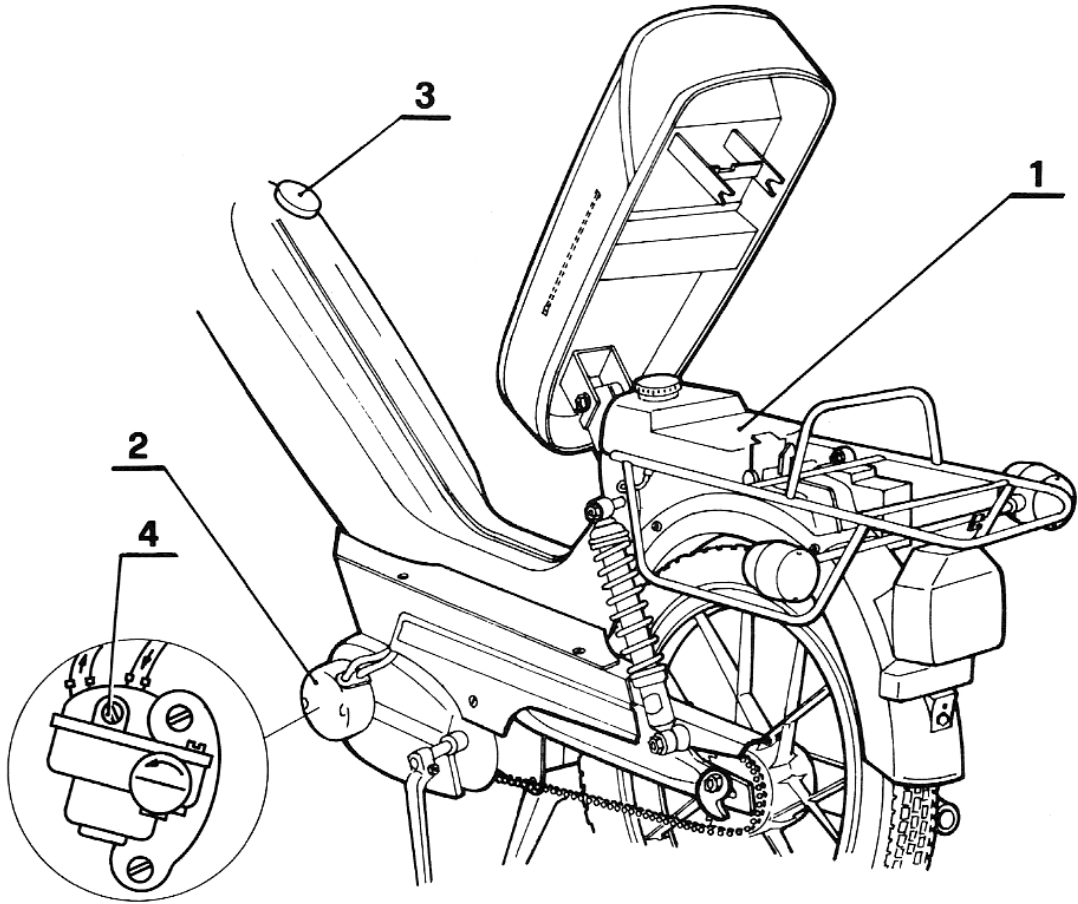


Fig. 5

For the first use of models SILVER BULLET A3 SP and SILVER BULLET A3 GM you must keep to the following instructions:

- Unscrew vent screw (Fig. 5/4) on the oil pump and wait until oil from the tank under the seat (Fig. 5/1) flows to the pump. The screw is then screwed on.
- Pour approx. 1 l (1/4 gall) gas mixture in the ratio of 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. 5/2) 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 marking MIN.

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 upward — reserve.

WHEN ENGINE IS COLD, ESPECIALLY IN COLD WEATHER, DEPRESS CHOKE BUTTON, FIG. 1/6, AND AT THE SAME TIME TURN THROTTLE TWIST GRIP, FIG. 1/10, ALL THE WAY AWAY FROM RIDER. 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 button 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—lever facing rightward.

TRAFFICATOR

Your TOMOS AUTOMATIC SILVER BULLET is equipped with trafficator system and dry battery to make riding safer.

When the kill switch is switched On current flows from dry battery to either left or right winker which will function.

BATTERY

In the battery box are dry NiCd 6 V — 1.5 Ah battery, relay 6 V and fuse 15 A. It is not recommended to charge dry battery by using standard charger, because current higher than 2 A may damage battery. It is enough to charge new dry battery by running engine for about 15 minutes. After that the battery is ready for use. Dry NiCd battery is completely closed so that no special maintenance is required.

OIL PUMP AND TANK

As mentioned before the two models SILVER BULLET A3 SP and SILVER BULLET A3 GM 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.

When mounting the oil pump always make sure that the clutch is properly incorporated or otherwise several engine damage may occur.

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 Silver Bullet checked and serviced by an authorized TOMOS service workshop in the sequence recommended in the Maintenance chart.

MAINTENANCE

ROUTINE MAINTENANCE

Maintenance of TOMOS AUTOMATIC 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, 900, 1800 and 3600 miles.

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 gearboxes MOBILE OIL VALVOMATIC type A Suffix A or any other multigrade oil SAE 10 W — 30.

For lubricating other parts than gearbox (see Maintenance chart), we suggest you apply standard motor oil SAE 30 and grease of good quality as MOBILE 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. 220 ccm (1/2 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

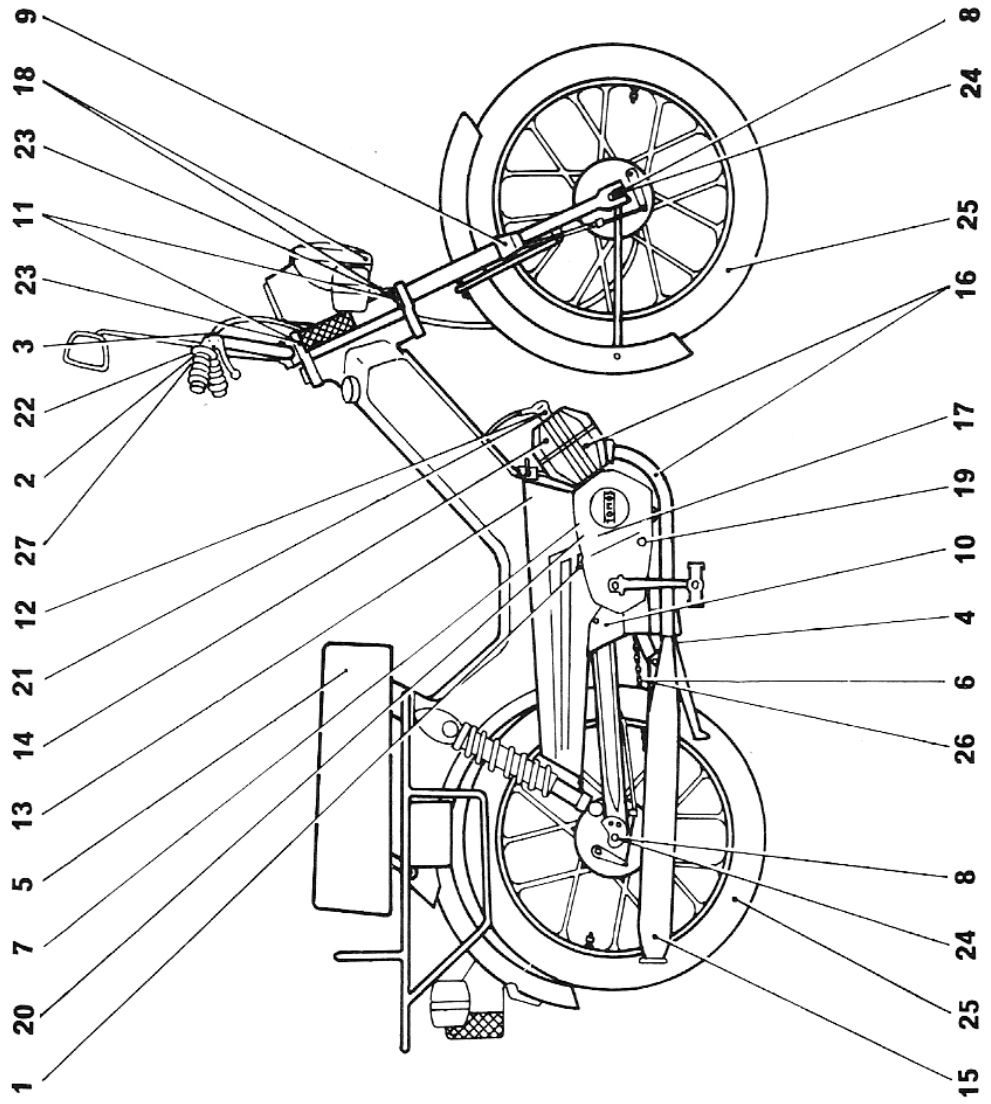


Fig. 6

MAINTENANCE CHART (Fig. 6)

O Made by Tomos service workshop
 X Made by owner

	Every 300 miles	Every 900 miles	Every 1800 miles	Every 3600 miles
LUBRICATION WITH OIL				
1 — Change of oil in gearbox	X			
2 — Control lever joints		X	O	
3 — Control cables—inner wire	X		O	
	O	X		
		X		
	O	X		
wheel	O			X

LUBRICATION WITH GREASE (USE MOBIL GREASE BRB)

8 — Wheel bearings				X or O
9 — Front fork sliding tubes	O		X	
10 — Swinging arm bearing bushes				X or O
11 — Handlebar bearings				X or O

CLEANING

12 — Spark plug	O as	required		
13 — Air filter (to be oiled)	O		X	
14 — Cylinder head, piston crown and exhaust channel	O		X	
15 — Exhaust silencer		X		
16 — Cylinder and exhaust pipe				X

	Every 300 miles	Every 900 miles	Every 1800 miles	Every 3600 miles
CONTROLS AND FITTINGS				
17 — Oil level in gearbox	X			
18 — Horn and lights	X			
19 — Contact breaker gap (0.0137—0.0177 in)				X Replace
20 — Ignition advance (timing) (0.07—0.079 in)				X or O Replace
21 — Spark plug gap 0.020 in	O		X	
22 — Operation of brakes and adjustment	O	X		
23 — Handlebar bearing clearance	O			X
24 — Wheel bearings clearance	O			X
25 — Tire pressure (front 21, rear 31 lb/psi)	O	X		
26 — Chain sag (3/8 in up and down)	O	X		
27 — Adjusting neutral gear	O as	required		
28 — Tightening of screws and nuts	O		X	
29 — Test of motorized bicycle	O			

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. 6/15, and clean it. From time to time, clean cylinder exhaust pipe port, Fig. 6/16. 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 carburetor) 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 carburetor 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, carburetor 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.

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 dismounting 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 strainer on fuel feed tap.
- Main jet in carburetor 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.

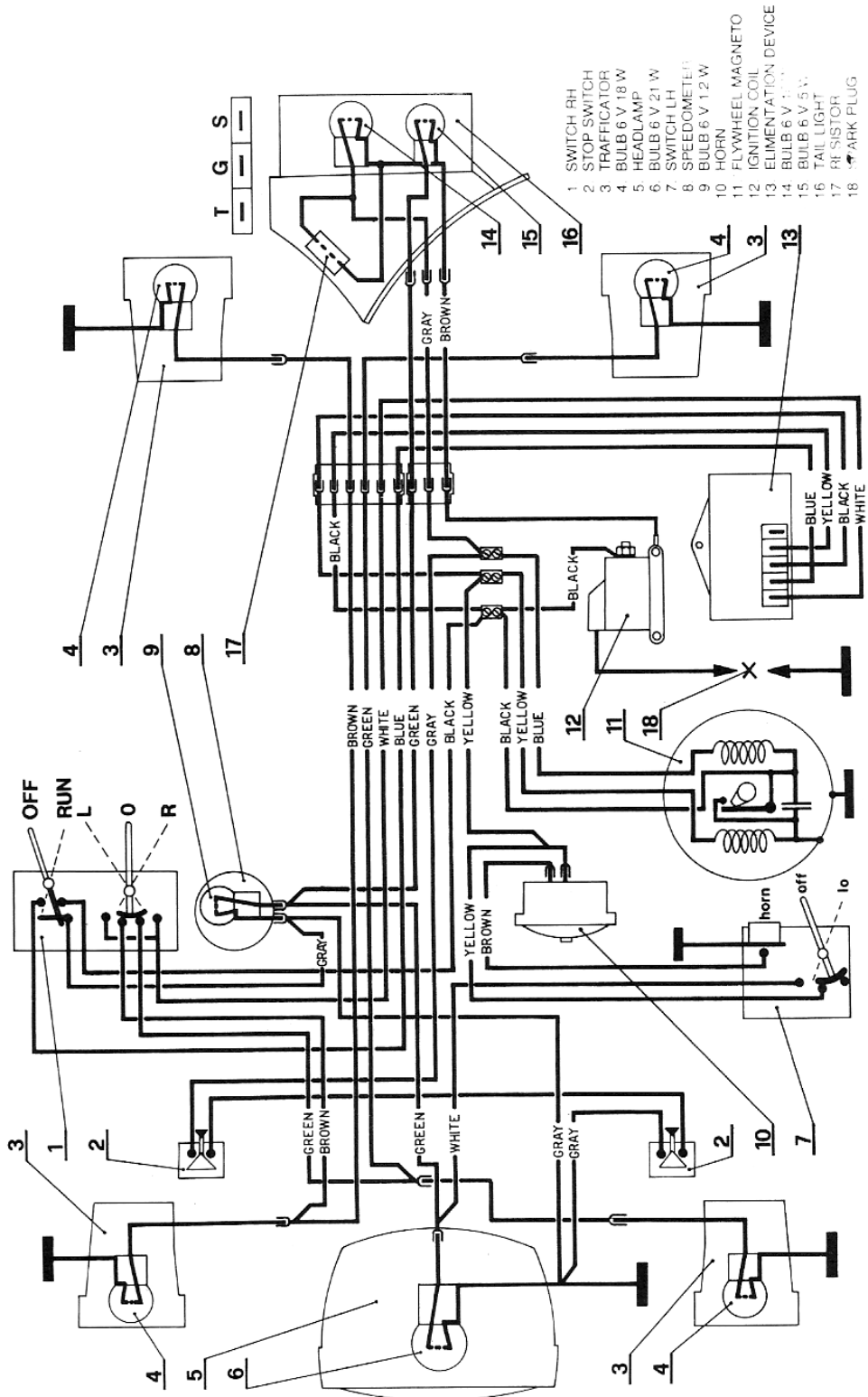
TROUBLES IN GEARBOX

- 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-rearward:
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.



- 1 SWITCH RH
- 2 STOP SWITCH
- 3 TRAFFICATOR
- 4 BULB 6 V 18 W
- 5 HEADLAMP
- 6 BULB 6 V 21 W
- 7 SWITCH LH
- 8 SPEEDOMETER
- 9 BULB 6 V 12 W
- 10 HORN
- 11 FLYWHEEL MAGNETO
- 12 IGNITION COIL
- 13 ELIMINATION DEVICE
- 14 BULB 6 V 18 W
- 15 BULB 6 V 5 W
- 16 TAIL LIGHT
- 17 RESISTOR
- 18 PARK PLUG

Fig. 7 WIRING DIAGRAM FOR TOMOS SILVER BULLET 04, 05, 07

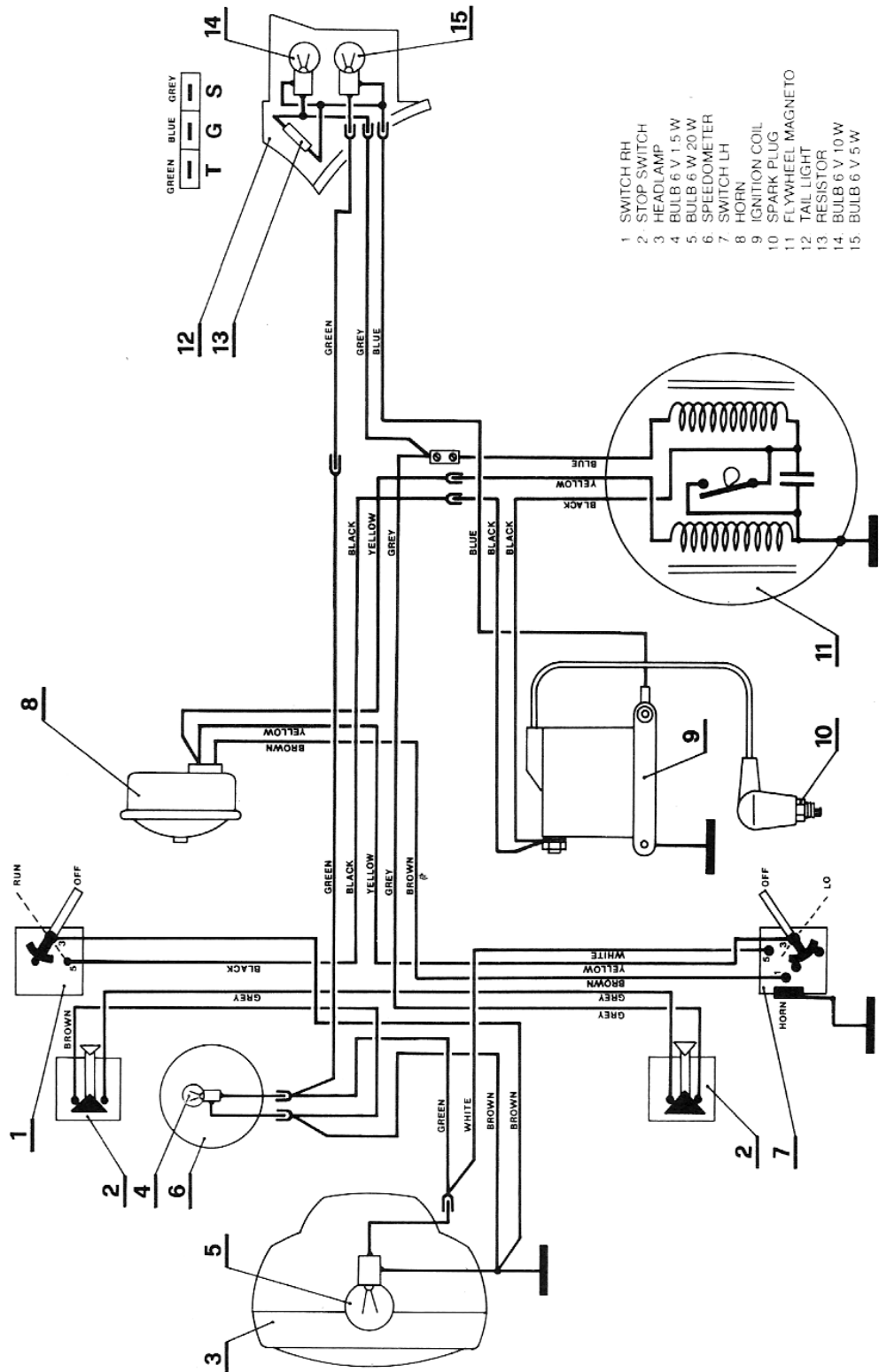
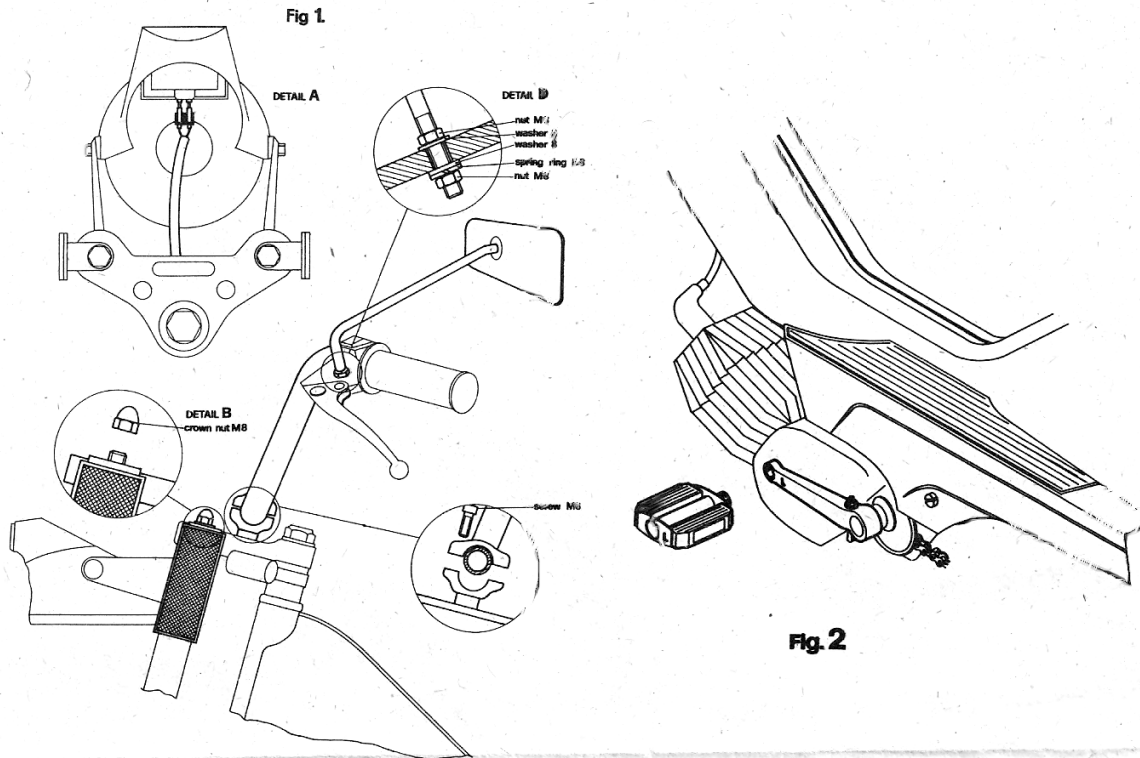


Fig. 8 WIRING DIAGRAM FOR TOMOS BULLET AND SILVER BULLET 08, 09

TOMOS

ASSEMBLY INSTRUCTIONS TOMOS AUTOMATIC BULLET A3 SP, A3 GM, A3 SL TOMOS AUTOMATIC SILVER BULLET A3 SP, A3 GM, A3 SL without traffic lights



ALL REQUIRED PARTS ARE ON THE LUGGAGE CARRIER OF THE MOPED

Fig. 1

Detail A

Connect both connectors for speedometer lighting.

Adjust the headlamp and tighten two screws with spanner 10.

Detail B

Unscrew both crown nuts on the upper fork lug, remove two washers and fix both reflectors. Screw on the crown nuts.

Detail C

Mount the handlebar on the two handlebar carriers and fix it with two handlebar holders and four allen bolts.

Assure that the cables and wiring are not twisted or crossed.

Detail D

Unscrew the mirror lower nut (M8). And remove the two washers. Place the mirror on the front brake lever (LH) and fix it as shown in the fig.

Fig. 2

Install the pedals.

Caution: Pedals are marked with letter D (right) and L (left), which means that the right pedal is mounted on RH side of the moped and left pedal on the LH side.

Pedal cranks and pedals are threaded with the LH threads. Use an open spanner 15 mm.