

# FIGHTER X12 OWNER'S HANDBOOK

SERVICE ITINERARY





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Version:		
Vehicle fra		
	registered:	
Owner:		
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Town/pos	tal code:	
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#### 1. INTRODUCTION

#### THANK YOU FOR PLACING YOUR TRUST IN OUR COMPANY AND FOR PURCHASING A BOOM TRIKE

#### **CAUTION: PLEASE READ CAREFULLY**

A trike is a fascinating vehicle. It gives its rider a feeling of freedom, with power at his fingertips. However, you should always be aware of and accept the limits which trike riding dictates. You should carry out regular care and maintenance as a matter of course, ensuring that your trike is always in perfect condition.

You must take care not only of your trike, but also to protect yourself. You will only be able to stay in control of the vehicle if you are healthy and if you feel healthy. Substances such as alcohol, drugs of any kind, including those medically prescribed, should always be kept out of play, all the more so when you are riding a trike. It is important for you as a trike rider to always be in top form. Even consuming a small amount of alcohol increases the likelihood that you will take risks.

Riders of trikes and motorcycles should always choose the best in protective clothing: at the very least a full-face helmet, a full leather suit, leather boots and a good pair of gloves should be worn. But do not let your biking gear goad you into a false sense of security. Always remember: a good trike rider always exercises caution. Always observe this rule to make sure you keep out of harm's way even if others make mistakes.

A trike is likely to handle in a way which is different to other road vehicles, especially in rainy or bad weather conditions. Only an experienced car driver / motorcycle rider should take charge of a trike. We urgently recommend that you take part in a trike rider's safety course.

Note: When you sell your trike on, please be sure to hand this booklet on to the new owner.

#### Before you take your trike out on the road always check:

- the oil level,
- the tyre pressures,
- the fuel tank for sufficient petrol,
- for play in the steering head bearings. The front fork may only be dismantled by the manufacturer, BOOM TRIKES, as incorrect maintenance may result in subsequent damage, for which we shall take no responsibility. A number of cap nuts and bolts have been secured with sealing compound.

Before you take your trike out on the road always check the brake fluid level.

Also check the vehicle to ensure that it is in roadworthy condition, that the lights are in working order, and that all external parts are properly secured.

Polish chrome parts regularly using an appropriate cleaning agent, as otherwise the warranty on these parts of the vehicle will become void. All aluminium parts are highly susceptible to corrosion, and depending on the degree to which the vehicle is exposed to salt in the atmosphere, or to other corrosive influences, will require more or less frequent cleaning.

Due to continuous improvements to BOOM trikes it is possible that certain details of the trike delivered to you may deviate from the specifications contained in this handbook.

As most parts are manufactured by hand, quality standards must necessarily be accepted as being below those of mass-produced items.

# 2. THE FIGHTER X12





#### 3. CHECKS BEFORE YOU RIDE YOUR TRIKE

**Caution:** Failure to observe the section entitled "Checks before you ride your trike" may

lead to accidents or damage to the vehicle.

Check your trike regularly before your ride it. The checks listed below take very little time to complete and in the long term will help to protect both your wallet and your life.

1. Engine oil level: Check the oil level and if necessary top up. Check the engine for oil leaks.

2. Fuel: Always refuel in good time. Check the fuel lines for leaks.

3. Front/rear brakes: Check that the brakes are in good working order. Ensure that there are no brake fluid leaks.

- 4. Tyres: Check the tyre pressures and the condition of the tyres.
- 5. Throttle:

Ensure that the throttle action is smooth while turning the handlebars from lock to lock.

6. Lighting equipment and horn: Check that headlamp, tail lamp, brake light, indicators, warning lights and horn are in working order.

Caution: Never let the engine run in an enclosed space. The exhaust fumes contain poisonous carbon monoxide which may cause loss of consciousness and ultimately death.

Never press the electric starter button for longer than 5 seconds at a time. Always wait for at least 10 seconds before attempting to start the engine again.

#### 4. RUNNING IN

The required running-in distance is 1250 miles / 2000 km. Use only a moderate throttle during this period, and do not run at high engine speeds.

Keep to a maximum of 3/4 of normal running speed in each gear.

Always change gear in time, paying particular attention to well-timed downward changes. Never use full throttle when running in.

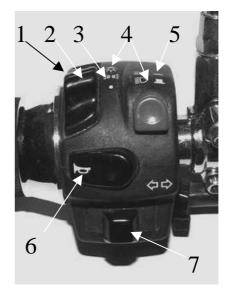
Only briefly warm up the engine at tickover. You are advised to avoid travelling short distances, as otherwise the engine will not reach its correct running temperature.

# 5. CONTROLS, SWITCHGEAR AND WARNING LIGHTS

#### Handlebar controls:

#### Functions:

- 1. Headlight flasher (at front)
- 2. Light switch
- 3. Parking light
- 4. Dipped beam
- 5. Main beam
- 6. Horn
- 7. Indicator



# Switchgear and instruments X12:

#### Functions:

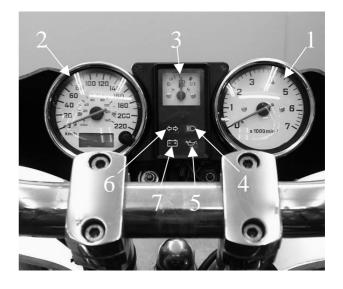
- 1. Ignition switch
- 2. Handbrake/brake fluid warning light
- 3. Engine fault warning light
- 4. Fuel gauge
- 5. Water temperature gauge
- 6. Hazard warning light switch
- 7. Rear fog light switch, with warning light



# **Electronic instrument panel**

#### - X12 S 2.0 L

- 1. Tachometer
- 2. Speedometer
- 3. Fuel gauge
- 4. Main beam warning light
- 5. Oil pressure warning light
- 6. Indicator warning light
- 7. Alternator warning light



# **Parking lock**

To activate the parking lock, turn the handlebars to the right. Insert the key, turning the barrel of the lock to the right, then lock. Unlock in reverse order.

#### Passenger carriage

Before driving pay attention to that the locking bolts of the retaining brackets are locked and the belts are closed. Also the passenger foot rests must be adjusted correctly and must be locked.





## 6. WARNING LIGHTS, VEHICLE MALFUNCTIONS - X12 S (OBD)

If a warning light goes on when the engine is running, and then either remains on or flashes, then the component in question has developed a malfunction.

CONSULT AN AUTHORISED BOOM TRIKES DEALER, A PEUGEOT DEALER OR A SPECIALIST DEALER

#### Alternator warning light:

This light goes on every time you turn on the ignition. If it goes on while the engine is running it can mean the following:

- a malfunction in the battery charging circuit,
- the connections to the battery or starter motor terminals are loose,
- a slipping or broken fan belt,
- alternator failure

CONSULT AN AUTHORISED BOOM TRIKES DEALER, A PEUGEOT DEALER OR A SPECIALIST DEALER

#### Oil pressure warning light:

This light goes on every time you turn on the ignition.

If this light goes on while the engine is running, stop the vehicle immediately and switch off the engine. It means that:

- engine oil pressure is critically low,
- there is not enough oil in the engine. Top up with oil.

CONSULT AN AUTHORISED BOOM TRIKES DEALER, A PEUGEOT DEALER OR A SPECIALIST DEALER WITHOUT DELAY

#### **Engine fault warning light:**

This light goes on every time you turn on the ignition.

If this light goes on while the engine is running it means that there is a malfunction in the fuel injection or ignition system, or in the exhaust system. If the vehicle is equipped with a catalytic converter, then damage may occur to it.

CONSULT AN AUTHORISED BOOM TRIKES DEALER, A PEUGEOT DEALER OR A SPECIALIST DEALER

#### Handbrake/brake fluid warning light

If this light goes on it means that:

the handbrake has not been released properly.

If you have checked and released the handbrake and the light remains on, then the brake fluid level is critically low, which in turn indicates that there is a malfunction in the braking system.

**STOP THE VEHICLE IMMEDIATELY!** CONSULT AN AUTHORISED BOOM TRIKES DEALER, A PEUGEOT DEALER OR A SPECIALIST DEALER

### 7. STARTING THE ENGINE (MANUAL GEARBOX)

Insert the ignition key and turn it to the right. The oil pressure and alternator warning lights will go on. To start the engine turn the ignition key further to the right. Release the key immediately the engine has started.

#### 8. CHANGING GEAR - X12 S



Use of the gears is similar to gearchanging practice on cars. The lever is located on the left-hand side of the frame.

1<sup>st</sup> gear: press lever down and forwards 2<sup>nd</sup> gear: press lever down and backwards 3<sup>rd</sup> gear: from neutral move lever forwards 4<sup>th</sup> gear: from neutral move lever backwards 5<sup>th</sup> gear: pull lever up and move forwards

Select reverse gear by pulling the lever up and moving it backwards.

## 9. OPENING THE VEHICLE BODY







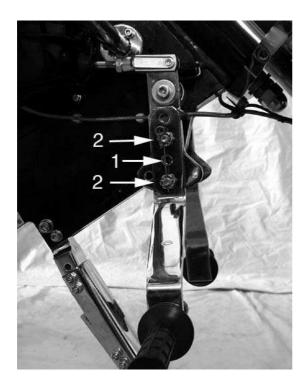
To open the seat you must unscrew both Allen screws of the tailgate. Afterwards the seating is openable.

The integrated hubmatic extends and holds up the seating .

For closing first pull up the seating, so that the hubmatic gets unlocked.

Caution: When operating the vehicle or when transporting it on an open trailer, the damper arm or an alternative securing mechanism must always be locked.

# 10. ADJUSTABLE BRAKE AND CLUTCH PEDALS, ADJUSTABLE FOOTREST MOUNTING PLATES





Remove the cotter pin (1) and nut (2). Using the available holes you can now adjust the pedals and footrest mounting plate to suit your requirements.

Loosen the nut on the footrest mounting plate and remove the bolts. You can now adjust the footrest mounting plate .

Check that there is sufficient ground clearance.

#### 11. Brakes

#### **REAR BRAKES:**

A) Rear disc brakes: BOOM TRIKES rear disc brakes are self-adjusting.

Regularly check brake fluid level, brake pad wear and the condition of the discs.

! Brake discs should be run in over a distance of approximately 125 miles / 200 km before the rider uses full braking force.

Avoid emergency stops before the vehicle has completed this distance.

After leaving a car wash, or in rainy and generally wet road conditions gently press the brake pedal to remove moisture from the disc.

#### **B) Handbrake**

The handbrake should be fully effective at the fourth brake notch. If not, then access the linkage nuts depicted below to re-adjust. If this produces no results, then the brake pads require replacement (Fig. 15).



#### Front disc brake:

The front brake is a legal requirement. However, its capabilities are extremely limited. Unlike a motorcycle, 90 % of braking loads are transmitted to the rear wheels, even at high speeds. At the most, the front brake accounts for approximately 10 % of the trike's overall braking performance.

Caution: The brakes should be maintained by an authorised specialist dealer only.

## 12. FUEL SYSTEM, NOTES ON HANDLING FUEL

All the latest BOOM trikes are equipped with an instrument panel with a built-in fuel gauge, eliminating the need for a reserve tap.

Always refuel in good time, even if the fuel gauge needle has not reached "reserve". Always check the fuel gauge before you ride the vehicle.

#### Caution:

Petrol is highly inflammable and under certain conditions may cause explosions. Refuelling must always take place in a well ventilated space, and the engine must be switched off. Never smoke while refuelling or when in a fuel storage area; make sure that there are no naked flames nearby and that sparks cannot occur. Do not overfill the fuel tank (no fuel should remain within the filler nozzle).

After refuelling make sure to close the filler cap properly. Do not spill any fuel. Petrol fumes and spilled petrol are easily ignited. If spillage occurs, then make sure that the area in question is dry before you start the engine. Avoid repeated or prolonged contact with skin and do not inhale petrol fumes.

Keep out of reach of children!

#### 13. TYPE OF FUEL

#### Use unleaded petrol, minimum 95 octane, preferably 98 octane

#### Caution:

Vehicles equipped with a catalytic converter may use unleaded petrol only. If by mistake you have filled up with leaded petrol, then on no account start the engine (even if the amount of petrol filled in was minor), as this will damage the catalytic converter beyond repair.

BOOM TRIKES accepts no responsibility for damage caused by the use of leaded petrol. Such damage shall be excluded from the conditions of warranty. If you have filled the tank with leaded fuel by mistake, then please consult an authorised BOOM TRIKES dealer, or a specialist dealer.

#### 14. CATALYTIC CONVERTER

Never allow petrol to enter the catalytic converter, especially when the engine is hot.

- Never use up all the petrol in the tank
- Avoid prolonged attempts at starting the engine
- Use battery jump leads
- Never turn off the ignition while the vehicle moving

**Caution:** If the ignition system malfunctions or if performance is below normal, consult an authorised BOOM TRIKES dealer, or a specialist dealer. Do not use full throttle.

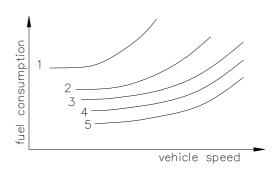
#### Riding the trike

#### **Petrol consumption**

To enable comparisons of vehicle fuel consumption, all European car manufacturers obtain their data using the same accepted test methods which are subject to monitoring and are in accordance with EC Directive 80/1268 EEC.

Fuel consumption and CO2 emission levels depend on variables such as the type of engine, the gearbox used, tyre sizes, vehicle weight. Actual fuel consumption also depends on

Vehicle speed and corresponding gear



As the speed of the vehicle increases, fuel consumption goes up quite considerably. Use of the lower gears (i.e. when accelerating) also has a significant effect on the amount of fuel used.

#### The right engine temperature

Frequent cold starts and travelling short distances which prevent the engine from warming up will lead to high fuel consumption.

#### Road and traffic conditions

Riding in heavy traffic, on roads with frequent bends, up and down hills, as well as on bad road surfaces all lead to higher fuel consumption.

#### Good riding practices

Good road sense, anticipating traffic situations in advance, leaving ample space between yourself and the vehicles ahead, as well as avoiding unnecessary braking and acceleration all help to reduce fuel consumption and noise levels.

When stopping at railway crossings or at traffic lights in built-up areas it makes sense to switch off the engine. Letting the engine idle for three minutes is equal to travelling just over half a mile.

#### Loads

The heavier the loads carried, the higher the amount of fuel the trike will use.

#### Condition of the vehicle

Low tyre pressures or a badly maintained engine and vehicle lead to higher fuel consumption.

#### Hints on how to save fuel and protect the environment:

- Always move off after starting the trike. This is the quickest way to warm up the engine.
- Always accelerate smoothly, not abruptly.
- Change up through the gears at the earliest opportunity, keeping engine speeds down.
- Stay in top gear as long as possible, and change down only when the engine no longer pulls smoothly.
- Avoid constant full throttle. Running the engine at ¾ of the available power reduces petrol consumption by up to 50 %.
- Adjust your riding style to suit traffic conditions, and avoid unnecessary acceleration or braking.
- Regularly check tyre pressures.
- Ensure regular maintenance of the trike by your local dealer.

#### Steep descents

On steep descents always change down gears in good time. Be aware that the brakes fitted to trailers have only a limited effect. Only use the brake pedal intermittently.

#### **TOWING A TRAILER**

Your vehicle documents will specify the maximum tow loads permissible. Do not exceed the maximum overall load for the combined weight of vehicle and trailer. In the interest of your own safety and that of others, never exceed the maximum tow load and the safe working load. Exceeding these limits can lead to a deterioration in vehicle handling. Technically speaking, the maximum tow load and the safe working load are limited to going up or down a 12% gradient and to travelling at a height of 3300 ft. (1000 m) above sea level.

#### Caution:

Do not exceed the maximum speed for towing a trailer.

When riding in mountainous regions, the thinner air will lead to a decrease in engine performance.

#### Observe the following basic formula:

Upwards of 3300 ft. (1000 m) above sea level, for every additional range of 3300 ft. (1000 m), reduce the maximum combined weight of the vehicle and trailer by 10 %.

#### Example:

If you are travelling at a maximum of 7,900 ft. (2,400 m), then reduce the overall combined weight of the vehicle and trailer by 20 %.

#### 15. BATTERY

This vehicle is equipped with a 12 volt, 43 ampere, maintenance-free battery built to quality standard DIN 390 A. No checking of electrolyte levels is required.

#### Caution:

Batteries produce vapours which can cause explosions. Keep the battery away from sparks, naked flames, and burning cigarettes. Whenever you charge or use the battery in an enclosed space, ensure adequate ventilation. This battery contains sulphuric acid (electrolyte). Human contact with sulphuric acid can cause severe burns. Protect skin and eyes. When handling batteries wear protective clothing and a face mask.

If electrolyte comes into contact with skin, then rinse skin thoroughly with water. If electrolyte comes into contact with eyes, then rinse eyes with water for at least 15 minutes and call a doctor immediately.

Electrolyte is poisonous!

If by mistake electrolyte is swallowed, then drink large quantities of water or milk, then swallow milk of magnesia or vegetable oil and consult a doctor.

#### 16. MAINTENANCE - SERVICE INTERVALS- VEHICLE CARE

Vehicle servicing may be carried out only by an authorised BOOM TRIKES dealer, Peugeot dealer or specialist dealer.

The following service instructions assume that the trike is used exclusively as the manufacturer originally intended. If you ride it at consistently high engine speeds, or in unusually wet or dusty conditions, or rent the vehicle out, then it will require attention more frequently than specified in the service itinerary.

Your authorised BOOM TRIKES dealer will be able to advise you on the appropriate service itinerary for your trike, depending on your requirements. Regular servicing will ensure that your trike maintains its value and roadworthiness.

#### **Lubrication points**

- Grease gear change mechanism and handbrake cables
- Grease front fork
- Grease vehicle body shell lock

#### For details of engine maintenance see Peugeot service itinerary

- Drain and replace engine oil, remove and replace oil filter
- Check air filter, replace if necessary. See maintenance chart
- Tighten exhaust manifold nuts
- Check spark plugs, replace if necessary. See maintenance chart
- Check general condition of toothed cam belt. Check for correct tension
- Check general condition of alternator drive belt. Check for correct tension
- Read out error log
- Check clutch adjustment

#### Front fork

- Check fork bushes. Adjust if necessary
- Check fork nuts are tightened
- Check handlebar movement
- Check fork action is smooth

#### **Brakes**

- Check brake pads for uneven wear and general condition
- Adjust handbrake (handbrake must be fully effective at fourth/fifth notch).
- Drain and replace brake fluid once every year or every 12,500 miles / 20,000 km, whichever occurs first.

#### **Electrical system**

- Renew penetration spray film on wiring connections and connectors in fuse box
- Check location of wiring and that wiring and connectors are neither pinched nor damaged

#### After test riding the vehicle

- Check wheel nuts and tighten to correct torque
- Check tyre pressures
- Check engine oil level
- Wash vehicle if necessary

#### Service documentation (see last two pages of handbook)

#### Caution:

Ensure that service documentation includes details of mileage and service date and is stamped twice. At the latest 2 weeks after the service date send the detachable stub with a dealer's stamp to:

BOOM TRIKES Fahrzeugbau GmbH, Bächinger Str. 7, D-89567 Sontheim/Brenz

Failure to do so will lead to loss of warranty cover.

Service documentation must be supplied in the event of a customer warranty claim affecting the dealer / manufacturer. In the event of damage occurring as a result of vehicle servicing being neglected, we reserve the right to refuse / investigate the warranty claim in question by appointing an independent certified vehicle expert.

#### Service intervals

The service intervals for your Fighter trike have been extended.

A vehicle service is required every 6,250 miles / 10,000 km, or once a year. An engine service is required according to a separate service itinerary (12,500 miles / 20,000 km, or once a year).

The extended service intervals mean that the engine oil should be checked on a regular basis. It is quite normal if the engine requires oil in between oil changes. We therefore recommend that you have the vehicle checked between service intervals. Your specialist dealer will carry out a quick check and if necessary top up any oils / fluids (oil, coolant, brake fluid).

A low engine oil level can result in considerable engine damage (depending on running conditions you should check the oil level at least every 625 miles/1,000 km, or 1250 miles/2000 km).

The extended service intervals are the result of vehicle development and improved lubricants:

# FOR THIS REASON ONLY LUBRICANTS WHICH HAVE BEEN RECOMMENDED AND APPROVED BY PEUGEOT MAY BE USED (see pages 24 - 25)

#### <u>N.B.:</u>

A number of important components on your vehicle have different service intervals. Drain and replace the brake fluid once every year or every 12,500 miles / 20,000 km, whichever occurs first. Drain and replace the engine coolant every 5 years or every 75,000 miles / 120,000 km, whichever occurs first.

#### **Maintenance**

#### **ENGINE OIL LEVEL**

#### Oil check:

Check the engine oil at regular intervals, topping up between oil changes. Maximum oil consumption should be 1 Imp. pint / 0.5 ltrs. per 625 miles / 1,000 km. Check the oil when the engine is cold and with the vehicle standing on a level surface.

The dipstick has 2 markings:

A = maximum oil level

B = minimum oil level

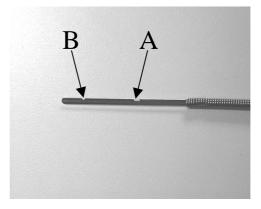


Fig. 16

#### **COOLING SYSTEM**

Only use coolant which has been recommended and approved by Peugeot. When the engine is warm a fan regulates the engine temperature. Even after the engine has been switched off it is possible that the fan will continue to run, hence the liquid in the cooling system will still be under pressure and may only be accessed one hour later, at the earliest.

If you need to top up coolant while the engine is warm, undo the filler cap until resistance is felt on the turn, in order to release pressure. After excess pressure has been released remove the cap completely and top up with coolant.

#### **FUEL FEED CUTOUT**

In the event of a serious impact a special mechanism cuts off fuel to the engine. To restore the fuel feed to the engine, press the button located behind the fuse box .

#### Oil change

In accordance with the manufacturer's service itinerary:

- Oil dipstick: Never exceed the level at marking A (maximum).

#### Oil viscosity:

Oil viscosity must conform to the standards and specifications approved by Peugeot.

#### Oil filter:

Remove and replace the oil filter at regular intervals according to the recommendations of the service itinerary.

#### Used oil:

Avoid prolonged skin contact with used oil. Never dispose of used oil in public drains or let it seep into the ground. To ensure a long life of the engine and the catalytic converter, never use any additives in the engine oil.

#### Manual gearbox:

No oil change is required. Check oil level according to the manufacturer's service itinerary.

#### Air filter:

Always replace the air filter at regular intervals. If the vehicle is used in dusty road conditions then replace the air filter twice as often as recommended.

#### Brake pads:

Brake pad wear depends on the rider's driving habits. Vehicles which are used frequently in town or on short journeys, or which are ridden hard, may also require a brake pad check in between service intervals.

#### Hydraulic brake fluid:

Brake fluid requires changing or topping up depending on how fast it deteriorates. Brake fluid is hygroscopic, i.e. absorbs moisture from the atmosphere, which reduces its boiling point, which in turn can lead to brake failure under heavy braking (e.g. on steep climbs/descents). Changing or topping up of hydraulic brake fluid may only be carried out by an authorised dealer or specialist dealer.

#### Types of service checks

Every vehicle has its own maintenance cycle which the manufacturer specifies based on the technical characteristics of the vehicle in question. This cycle consists of the 2 service checks "A" and "C", intermediate checks, and various types of additional maintenance which your vehicle requires at certain intervals.

These are the most important stages in the life of your Fighter trike.

When you pick up your trike after its warranty service, and thereafter after each successive service, your BOOM TRIKES dealer or specialist dealer will inform you which type of check and what maintenance is required the next time you bring your trike in for a service.

#### Maintenance cycle - engine and gearbox

Once every year or every 12,500 miles / 20,000 km

Mileage/ kilometres	20,000 km	40,000 km	60,000 km	80,000 km
Warranty service at 10,000 km or after 6 months (applies to engine only) mandatory to ensure warranty	A Z	C z	A Z	С
100,000 km	120,000	140,000	160,000	180,000
100,000 KIII	km	km	km	km
A *	C *	Α _	С	Α
	Z	Z	Z	

Replace hydraulic brake fluid once every year or every 12,500 miles / 20,000 km.

When replacing the engine oil, semi-synthetic oils or fully synthetic oils must be used, alternatively low-friction engine oils.

# Maintenance checklist (excluding engine and gearbox)

	Service intervals: at the latest every 12 months / every 10,000 km							
at	500 km	or at the latest 4 weeks after vehicle was purchased						
at	5,000 km	or at the latest 3 months after vehicle was purchased						
at	10,000 km	or at the latest 6 months after vehicle was purchased						
		thereafter every 10,000 km or once every year, at BOOM TRIKES, or at						
		BOOM TRIKES authorised dealerships or authorised specialist dealers.						
inter	rmediate check	every six months or 10,000 km						

Engine maintenance every 20,000 km according to separate itinerary

	Mechanical maintena	nce	G	Α	С	Z	ok	not ok	adj.
K	Adjust and grease stee	•	•	•	•				
K	Check parking lock is		•	•					
K	Adjust fork bushes / chany play, check fork ca	•	•	•	•				
K	Grease front fork			•	•				
K	, •	unting bolt to 90 mkg and handlebar bolts llebar movement from lock to lock	•	•	•	•			
K	Tighten front wheel nu Check wheel runs free	ts. ly, check for bearing play.	•	•	•	•			
K	Check the following are in full working order:	All lighting equipment Warning and instrument lights Instruments Horn and additional equipment (alarm)	•	•	•	•			
K	Upper side of vehicle:	Check grips, pedals, throttle cable, brake lines, wiring loom for pinching / damage	•	•		0			
K	Clutch adjustment:	Ensure 2 mm play at actuating lever	•	•	•	O			
<b>K</b> *	Engine:	Check location of pipes, lines, hoses and wiring, check for leaks or damage	•	•	•	0			
K*	Exhaust manifold nuts	: Check nuts are tightened correctly	•	•					
K	Throttle/clutch cable:	Lubricate/grease gearchange mechanism		•	•				
K	Brake pads:  Disc brakes (front/rear):	Check for wear (if necessary remove wheels)		•	•	0			
K	Underside of vehicle:	Gearbox, pipes, lines, hoses and wiring, drive shafts and gaiters, check condition, correct location, leaks and damage	•	•	•	O			
K	-	Check tyre pressures according to tyre pressure table (see page 24) Check tyres are mounted in correct direction, check for damage	•	•	•	•			
K	· •	Tread depth: Front Left_ Right	•	•	•	•			
K	Wheel nuts:	Tighten to correct torque (130 mkg)	•	•	•	•			
K		em*: Run diagnostic program Diag 2000		•	•				

	Engine and gearbox	G	Α	С	Z	ok	not ok	adj.
W*	- Change engine oil every 20,000 km or once a year		•	•				
<b>A</b> *	- Replace oil filter every 20,000 km or once a year		•	•				
<b>A</b> *	- Replace petrol filter every 40,000 km or every 3 years			•				
<b>A</b> *	- Replace air filter every 20,000 km or as required			•				
<b>A</b> *	- X12 replace spark plugs every 40,000 km			•				
F*	- Engine oil (check oil level + top up)	•			•			
F*	Gearbox oil, manual gearbox (check oil level + top up)	•		•				
F	<ul> <li>Battery (check electrolyte level + top up if non- maintenance free)</li> </ul>		•	•				
F*	<ul> <li>Coolant (check coolant level + top up)°C</li> </ul>	•	•	•	•			
F	- Brake fluid (check brake fluid level + top up)	•	•	•				
K	- Check condition of lamps, reflectors and rear view mirrors		•	•				
K	- Check horn		•	•				
K*	<ul> <li>Check condition and tension of belts operating any additional units</li> </ul>		•	•				
K	- Check handbrake is fully functional		•	•				
K*	<ul> <li>Check condition of hydraulic systems, check for leaks (hoses, casing, oil sump)</li> </ul>		•	•				
K	<ul> <li>Check condition and play of hubs, joints, rubber mounts</li> </ul>			•				
K	- Check shock absorbers for leaks			•				
K	- Conduct visual check of entire vehicle	•	•		•			
Test	ride the vehicle on the road		•	•				

• = Under all operating conditions O = Under special operating conditions

W = change

G = warranty service A = check "A" in service itinerary C = check "C" in service itinerary Z = intermediate check A = replace = item OK ok F = oil/fluid level not ok = item not OK = item adjusted K = check adj.

\* = see engine

	Mechanical maintenance	G	Α	С	Z	ok	not ok	adj.
	Additional maintenance work (by customer request and subject to additional charge)							
W	Annual hydraulic brake fluid change (DOT 4)		•	•	O			
K	When changing brake fluid or replacing front/rear brake pads/discs, check general condition of entire brake system and for any leaks.		•	•	O			
K	Programming / check settings		•	0	0			
W	Change coolant every 4 years or every 140,000 km		•	•				
W*	X12, replace cam belt every 120,000 km / 5 years		•	•	•			
W*	X12, replace V-ribbed belt every 100,000 km		•	•	•			

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#### Recommended and approved engine oils / brake fluids

The oils listed in the table below are approved for use under most operating conditions. "Higher quality" synthetic oils may also be used (see small print).

If semi-synthetic / fully synthetic oils are not available, then oils which are to API SH/SJ standard (for use in petrol engines) may also be used. In this case you must observe the special service itinerary for "special operating conditions" which prescribes shorter service intervals. Do not hesitate to request advice from an authorised BOOM Trikes dealer, Peugeot or specialist dealer in order to maintain your vehicle's roadworthiness and to minimise service costs.

#### Other approved oils / fluids:

Brake fluid	DOT 4
Coolant, 50% - 50% (distilled water / anti-freeze)	PROCOR 3000 or REVKOGEL 107 PRESCRIBED Anti-freeze protection to −35℃
Engine oil - Peugeot	5 W 30, or 10 W 40

# Engine oil brands in Europe which are recommended and approved for use (1)

Country	ESSO		TOTAL	
France	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL ACTIVA 7000 TOTAL ACTIVA 9000	10W-40 5W-40
Belgium, Luxembourg	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 5W-40
Netherlands	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 5W-40
Denmark, Sweden			TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 0W-40/5W-40
England, Ireland	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 5W-40
Greece	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40/15W50 10W-50
Austria	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 5W-40
Germany	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 0W-40/5W-40
Switzerland	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 5W-40
Italy	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 5W-40/10W- 50
Norway	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000	10W-40 0W-40/5W-40
Portugal	ESSO Ultra ESSO Ultron	10W-40 5W-40/0W- 30	TOTAL QUARTZ 9000	5W- 40/10W50
Spain	ESSO Ultra ESSO Ultron	15W-50 5W-40/0W- 30	TOTAL QUARTZ 7000 TOTAL QUARTZ 9000 oved: ACEA A3 –96 and AP	15W-50 5W-40/10W50

<sup>1.</sup> Minimum approved quality standard, petrol engine approved: ACEA A3 -96 and API SH/SJ

#### MAINTENANCE AND VEHICLE CARE

#### Service

For work which affects the overall working order and roadworthiness of the trike, always refer to the maintenance intervals prescribed by the service itinerary.

#### **Owner checklist**

Regularly check and top up all oil and fluid levels. Check for correct tyre pressures, check that brakes, lighting equipment and warning lights are in proper working order. Refer to the service itinerary. Transparent reservoirs for brake fluid and coolant make the job of carrying out regular checks easy.

#### Caution:

Always turn off the ignition before starting work on the engine. The fan can still be triggered automatically even when the ignition is off. For this reason always keep garments such as ties or scarves well away from the area of the fan and the fan belt.

Electronic ignition systems use very high voltages. Never touch these parts when the engine is running or when the ignition is switched on.

Cleaning the engine will cause petrol, grease and oil to be washed off.

Only clean the engine in designated areas where depositing oil, grease and petrol will not harm the environment.

Please dispose of used oil, brake fluid, coolant, batteries and tyres in a manner which is not harmful to the environment, or when purchasing the appropriate replacement, request the dealer to do so. On no account should these fluids/ parts be disposed of in public drains or along with normal household waste.

The environment is ours to protect and keep. Every little effort helps.

#### Oil dipstick

A number of factors have an influence on engine oil consumption. On a new engine, normal oil consumption levels are reached after approximately 3000 miles / 5000 km. High-performance engines use a little more oil. Heavy engine loads also cause a slight increase in the amount of oil an engine uses.

Check the oil level at regular intervals, for instance after filling up with petrol and before long journeys. The vehicle must be standing on a level surface. Switch off the engine and wait a few minutes to allow the oil to run down into the oil sump (in cold ambient temperatures or if the engine has not warmed up properly, this can take some time). Do not start a cold engine if you intend to check the oil level. Remove the dipstick, wipe with a lint-free rag, replace the dipstick as far as it will go, remove it again and check the oil level.

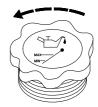
The oil on the dipstick should be between the markings on the stick. If the oil is hot, then due to fluid expansion the MAX level marking may be exceeded by a few millimetres.

If the oil level has reached the MIN level marking, then top up with oil. The difference between MIN and MAX level markings is approximately 1.3 Imp. pints / 0.75 ltrs. When topping up with oil, only fill up to the MAX level marking.

#### Oil filler cap

The oil filler cap is of the screw-on type.

Never unscrew the cap when the engine is running.



#### Caution:

Do not use oil additives. There is no necessity for them, and in the event of engine damage their use can lead to the warranty becoming void.

To close, turn the filler cap clockwise until it audibly clicks into place.

Empty oil cans should not be disposed of as household waste; please dispose of cans and used oil in an appropriate manner which is not harmful to the environment.

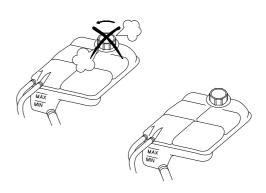
#### Cooling system

#### Caution:

Never open the filler cap when the engine is hot.

Checking the coolant level from the outside is easy as the material of the reservoir is transparent. When the engine is cold the coolant should between the MIN and MAX level markings. Heat causes the coolant to expand and exceed the MAX level marking.

As a rule, top up coolant when the engine is cold. If topping up becomes necessary when the engine is hot, then wait for 10 minutes to allow it to cool down. Unscrew the filler cap one quarter of a turn to release excess pressure. Wait for a moment, then open the cap fully. Top up with 50 % water and 50 % anti-freeze.



#### Caution:

Take care not to spill coolant on engine parts.

Top up coolant according to recommendations.

#### A word about coolant (anti-freeze)

#### Caution:

Avoid contact with skin and eyes. In the event of contact, rinse thoroughly with water and if necessary call a doctor.

A correct mixture of coolant and water protects your engine from corrosion and freezing the entire year round. Low-quality coolants lose their protective properties at very high temperatures.



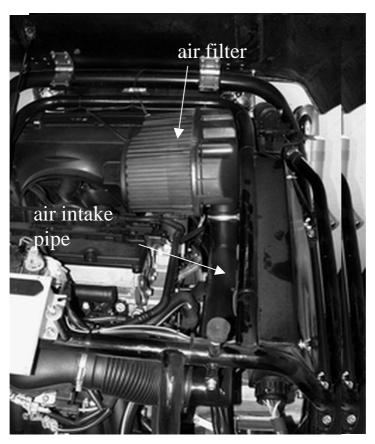
Only use coolants recommended by Peugeot, and to specifications approved by Peugeot.

# 17. **A**IR FILTER

To replace the air filter:

Remove the cover, take out the filter and if contaminated replace with a new air filter.





#### 18. CLUTCH

Clutch adjustment may be necessary if any of the following situations occur: if you engage a gear and the engine stalls, if you change gear and the vehicle lurches forward, if gear changes are noisy, if changing gear is difficult, or if the clutch slips.

Minor adjustments can be made by turning the locknuts on the clutch actuating lever.

There should be 2 -3 mm play at the clutch actuating lever.

Screw the locknut either in our out and check that the adjustment is correct. Start the engine, press the clutch pedal to the floor and engage a gear. Make sure that the engine does not stall and that gear changes can be made with ease. Slowly release the clutch pedal and open the throttle. The trike should move off smoothly and accelerate briskly.

#### 19. TYRES

Always keep the tyres inflated to the recommended tyre pressures. Check them at least once a month and before you start out on a longer trip.

Incorrect tyre pressures cause uneven tread wear and are a danger to your safety on the roads. Low tyre pressure can cause a tyre to slip off the wheel rim, or detach itself completely, resulting in a loss of vehicle control. It is dangerous to ride the trike with badly worn tyres. This will also negatively affect traction and handling characteristics.

After a wheel change tighten the wheel nuts to 130 Nm.

Caution: Retighten all wheel nuts after 30 miles / 50 km.

Replace tyres before minimum tread depths are reached:

minimum	tread depth 1.6 mm	1		
Tyre pressure:	Front wheel:	170/60	0-17	2,3 bar
		200/50	0-17	2,3 bar
	Rear wheels:	295/50	0-15	2,5 bar
		295/35	5-18	2,5 bar
		335/30	D-18	2,5 bar
		335/30	0-20	2,5 bar

#### 20. HEADLAMPS



To change the H4 halogen bulb and the parking light:

Loosen off the chrome headlamp ring and remove the beam unit. Detach the bulb connector and rubber shroud, and lift off the bulb retaining bracket. You can now remove the bulb. Never touch the glass surface of a halogen bulb. Always hold the metal base. Parking light: 12V / 5 W, metal base, bayonet fitting

Your specialist dealer will set up the headlamp beam projection on your trike.

# **Swivelling headlamps**

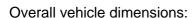


Changing an HB3 light bulb with a bayonet fitting.

#### 21. TECHNICAL SPECIFICATIONS

#### Type identification plate:

The type Identification plate is located on the right-hand side of the frame. The frame number is stamped on the frame near the identification plate.



Length: 3700 mm

Width: 1985 mm (max.)

Height: 1355 mm



Weights in kg:

Max. axle load / front:250Max. axle load / rear:850Basic vehicle weight:850Max. overall weight:1100Max. additional weight:250Towing capacity:425Safe working load:30

Capacities:

Engine oil, EW10J4L4 RFN 2.0 ltr. 4.20 ltrs. 10W40 fully synthetic oil

Gearbox oil: 2.00 ltrs. SAE 75 W 80 W

Hydraulic braking system: approx. 0.25 ltrs. DOT 4

Fuel tank: 48 ltrs.

Coolant: approx. 7 I. Procor 3000 or Revkogel 107 –35°

**Torque settings:** 

Exhaust manifold nuts: 20 mkg
Fan belt 60 mkg
Alloy rim: 130 mkg

Lighting system:

Front headlamps: H4 halogen bulb, 12 V 60W / 55W,

parking light, 12V 4 W, bayonet fitting

Headlamp, swivelling: HB3 12 V 60 W

Indicator, front:12V 21W, yellow, sphericalIndicator, rear:12V 21W, yellow, sphericalBrake light:12V 21W, clear, sphericalSide light:diodes, non-replaceable

Number plate light: 12V 5W, festoon Rear fog light: 12V 21, spherical Reverse light: 12V 21, spherical

#### 22. ENGINE SPECIFICATIONS

#### EW10 14 standard petrol engine

Cubic capacity 1997 cm³
Bore x stroke 85 x 88 mm
Fuel injection Multijet

Number of valves 4 per cylinder

Maximum power output 103 kW (140 bhp) at 5,500 rpm

Maximum torque 190 mkg at 4,000 rpm

Dry weight 137.5 kg

Engine layout 4 cylinders, in-line

Engine block alloy Cylinder head alloy

Camshaft DOHC / cam belt

Compression ratio 10.8:1

**Caution:** Basic engine settings can only be carried out using Peugeot Diag 2000 testing equipment.

Any alterations of the basic settings can lead to complete engine failure. Fault diagnosis and basic settings can only be carried out by a Peugeot dealer.

If a sensor is defective then the engine management automatically activates a safe running program. In such a situation an engine will run and perform poorly. The yellow engine fault warning light will go on. Consult your nearest specialist dealer. Do not use full throttle as this risks damaging the catalytic converter.

We hereby advise you that BOOM TRIKES Fahrzeugbau GmbH shall not be liable for any damages occurring as a result of any manipulation or improper use. The same applies in the case of improper maintenance carried out by unauthorised persons

N.B.: Error in diagnostic check X12 S 2.0L: **radiator fan control.**This is normal, as the radiators are not 100% compatible with the control device.

#### 23. CLEANING YOUR TRIKE

Clean your trike at regular intervals. This is always a good opportunity to check the vehicle for wear and tear.

**Caution:** Using high air or water pressure to clean the vehicle may damage certain parts. Washing the exhaust system when the engine is hot can lead to material tension and consequent fracturing of components.

The following areas of the vehicle may not be cleaned using high water pressure (as in a car wash):

Wheel hubs
Ignition switch
Master brake cylinder
Instruments
Handlebar controls
Ends of exhaust pipes
Electrically locked safe compartment
Air filter
Alternator

Use ample amounts of clear water to wash off cleaning agents which if left on alloy metal surfaces may lead to corrosion. Wipe the vehicle dry, switch on the engine and let it run for several minutes.

Caution: Braking performance may be affected immediately after washing. Ensure a safe distance to other vehicles in order to avoid an accident.

Test the brakes before you ride the trike. If necessary make short stops to restore braking performance to normal.

#### 24. CLEANING THE WHEELS

Corrosion on metal surfaces and aluminium is accelerated if they come into contact with road dust, mud, salt etc. After riding the vehicle, clean the wheels with a wet sponge and soapy water or with a car shampoo. Wash the cleaning agents off the surfaces thoroughly using clear water and wipe them dry with a clean cloth.

Caution: Alloy wheels in particular require a great deal of care. If you ride the trike in the winter or in an area by the sea, then especially polished alloy 4.50 x 17 and 5.50 x 17 front wheels must be washed off daily with clear water or be cleaned, as these wheels have no protective finish to maintain their polished appearance.

#### 25. ELECTRICAL SYSTEM, WIRING DIAGRAM

If an electrical component fails, you should first check the fuses and whether the wiring to the part in question is connected properly. If a short circuit occurs, disconnect the battery by undoing the nut securing the earth lead.

The fuse box contains a main fuse. In the event of a short circuit this prevents a fire in the wiring harness in the circuit which accesses the fuse box (connector no. 30). If this fuse blows, consult your nearest specialist dealer immediately.

#### **FUSE CIRCUITS:**

To open the fuse box undo the winged nuts, tilt the metal cover forwards and remove.

```
Fuse, parking light, left = 7.5 A
F2
    Fuse, parking light, right = 7.5 A
F3 Fuse, dipped beam, left = 7.5 A
F4 Fuse, dipped beam, right = 7.5 A
F5 Fuse, main beam, left = 7.5 A
F6 Fuse, main beam, right = 7.5 A
F7 Fuse, power supply, connector no. 15 = 10 A
F8 Fuse, power supply, connector no. 15 = 10 A
F9 Fuse, power supply, connector no. 30 = 10 A
F10 Fuse, jet lights (special equipment) = 20 A
F11 Fuse, jet lights (special equipment) = 20 A
F12 Engine management = 10 A
F13 Engine management, electronics=10A
F14 Reverse light / special equipment =10A
F15 Fuel pump = 15 A
F16/F17 Radiator fan = 30 A
F18 Engine management = 15 A
F20 Main fuse = 60 A
```

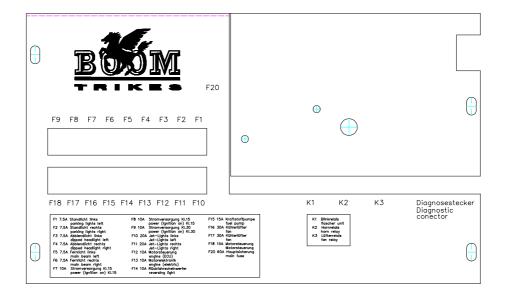
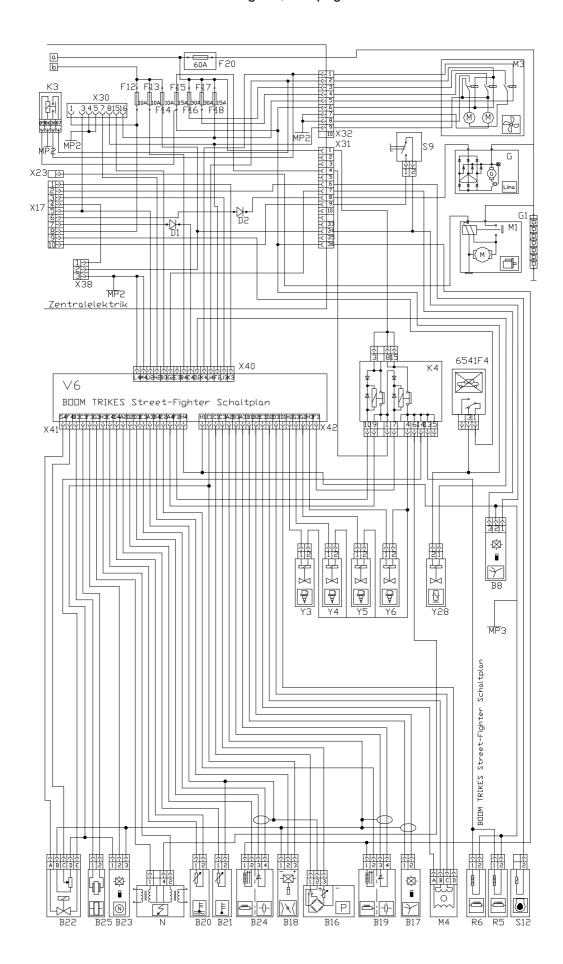
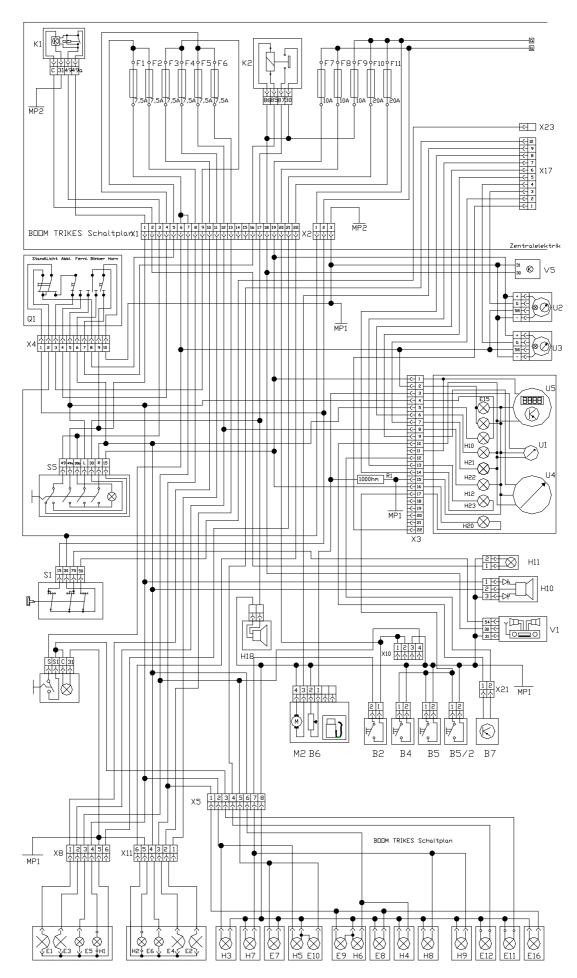


Fig. 23

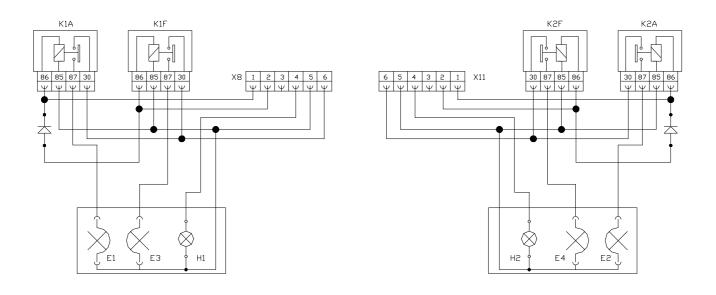
2.0L - 103.8 kW engine for legend, see page 38

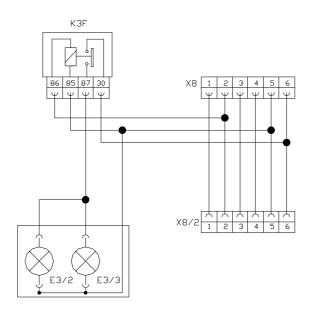


# Lightings and instruments for legend, see page 38



# Jet light system (special equipment) and headlamp fairing for legend, see page 38





# Legend, wiring diagram for 2.0L engine, pages 35-37

	Power supply
S1	Ignition switch
G	Alternator
G1	Battery
F1	Fuse, parking light, left
F2	Fuse, parking light, right
F3	Fuse, dipped beam, left
F4	Fuse, dipped beam, right
F5	Fuse, main beam, left
F6	Fuse, main beam, right
F7	Fuse, instruments and warning lights
F8	Fuse, brake light and additional instruments
F9	Fuse, alarm system, hazard warning lights, radio
F10	Fuse, Jet lights, left
F11	Fuse, Jet lights, right
F12	Engine test, 55kW = 10A
F13	Engine management = 10A
F14	Reverse light / special equipment (X38) = 10A
F15	Fuel pump, fan control, heater for catalytic converter
	sensors = 20A
F16/F17	Fan = 30A
F18	Test, fan control = 60A
F20	Main fuse = 60A

	Lighting equipment / brake light
01	Switch, handlebar
S3	Switch, fog light
S9	Switch, reverse light
B2	Switch, brake light
E1	Dipped beam, left
E2	Dipped beam, right
E3	Main beam, left
E3/2	Additional headlamp
E3/3	Additional headlamp
E4	Main beam, right
E5	I/h parking light inside headlamp
E6	r/h parking light inside headlamp
E7	Tail lamp, left
E8	Tail lamp, right
E9	Side light, right, on wing
E10	Side light, left, on wing
E11	Rear fog light
E12	Reverse light
E15	Instrument lights
E16	Number plate light
H7	Brake light, left
H8	Brake light, right
H9	Additional brake light
H12	Main beam warning light
K1A	Additional relay, dipped beam, left, Jet lights
K1F	Additional relay, main beam, left, Jet lights
K2A	Additional relay, dipped beam, right, Jet lights
K2F	Additional relay, main beam, right, Jet lights
K3F	Additional relay, main beam, fairing

	Indicators/hazard warning lights/horn
	+ -
S5	Hazard warning lights
K1	Indicator relay
H1	Indicator, left, at headlamp
H2	Indicator, right, at headlamp
H3	Indicator, left, rear
H4	Indicator, right, rear
H5	Indicator, left, on wing
H6	Indicator, right, on wing
H10	Indicator warning light
H10/2	Indicator buzzer
H11	Indicator warning light, trailer
H18	Horn
V5	Alarm system
V1	Radio

	Warning lights / additional
	instruments
B4	Sensor, handbrake warning light
B5/2	Sensor, master brake cylinder
B5	Sensor, brake fluid level
B6	Sensor, fluid level
B7	Speedometer sensor, front fork
U1	Sensor, fluid level
U2	Water temperature gauge
U3	Oil temperature gauge
U4	Tachometer
U5	Speedometer
H6	Oil pressure gauge
H20	Brake fluid warning light
H21	Alternator warning light
H22	Oil pressure warning light
H23	Engine test warning light
R1	Resistor, 122 ohms, fluid level

	Engine 103,8 kW
B8	Vehicle speed sensor
B16	Air meter sensor
B12	Oil pressure switch
B17	Engine speed sensor
B18	FI butterflies, potentiometer
B19	Sensor in front of catalytic converter
B20/21	Water temperature sensor
B22	Magnetic valve, exhaust gas recirculation
B23	Cylinder recognition sensor
B24	Sensor after catalytic converter
B25	Mixture sensor
D1	Diode, test warning light
D2	Diode, alternator warning light
N	Ignition coil
M1	Electric starter
M2	Fuel pump
М3	Radiator
M4	Stepping motor, idling speed
K4	Control unit, power supply relay
R5	Heating rheostat, butterfly housing
R6	Heating rheostat, oil breather
S11	Water temperature thermostat
S12	Oil pressure switch
S20	Inertia switch
Y3-Y6	Fuel injection valves
Y28	Fuel breather valve
V6	Electronic control unit

	Connectors
X1	22-pin, in central electrical system
X2	3-pin, in central electrical system
X3	22-pin, to cockpit
X4	10-pin, to handlebar controls
X5	8-pin, beside rear light control switch
X8	6-pin, to lighting, front I/h
X8/2	6-pin, main beam, fairing
X10	4-pin, connects to additional speedometer
X11	6-pin, to lighting, front r/h
X17	10-pin, in central electrical system to engine
X21	2-pin, to speedometer sensor
X23	1-pin, in central electrical system to starter
X30	16-pin, in central electrical system = test equipment conn.
X31	23-pin, in central electrical system to 55kW up to 03/03
	36-pin, in central electrical system to 55kW from 04/03
	36-pin, in central electrical system to 100kW engine
X32	10-pin, in central electrical system to radiator
X38	3-pin, in central electrical system for accessories
X40	At electronic control unit from vehicle
X41	At electronic control unit from engine
X42	At electronic control unit from engine
MP1	Earth connection on frame
MP2	Earth connection, central electrical system
MP3	Earth connection on engine

### MAGCODE POWERSYSTEMPRO 12/24V

# Important informations for the outdoor use of the Power System 12/24 V (Hints by Company MagCode):

To extend the operational life span of this product, the following measures should be taken:

- after the outdoor use of the Port clean it quickly with a cloth
- from time to time remove cutting debris on the side of the contact of Port and Clip with an adhesive strip.
- Every 1 2 months spray some contact spray on Port- and Clip contacts.

### Attention:

The MagCode PowerSystemPro 12/24V is outfitted with a mechanic bayonet cap. It can be cut without unlocking under load, what can cause damages and/or a malfunction of the system. Thus always unlock manual!

### **NEW:**

As of now available - retrofittabel problem-free:

Covering for Code PowerPort 12V/24V and MagCode PowerPortPro 12V/24V.

More detailed product informations (f. e. installation manual) on our Homepage (www.magcode.com).

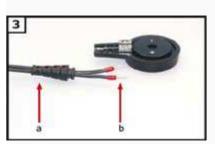
### **MagCode**PowerClip



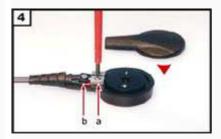
1. Cut-off existing plug - notice polarity.



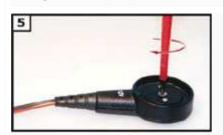
2. Open **MagCode**PowerClip and remove pull relief.



3. Cut grommet to size for thicker cables (3a) and apply multicore wiring sleeves (3b).



4. Fix cable ends in screw terminals (4a)(notice polarity) and mount pull relief (4b) and grommet.



5. Close housing with screw - Ready!

### 26. CHECKING THE VEHICLE AFTER AN ACCIDENT

### Caution:

If your trike is involved in an accident, then you should check control levers, cables, brake lines, accessories and other important parts for damage. Do not ride the trike if damaged parts render safe driving of the vehicle doubtful. Have your dealer check important parts such as the frame, suspension and steering for correct alignment and any damage which you are unable to detect yourself. After accident repairs have been carried out, or after assembling the vehicle from a kit, you must carry out a complete inspection of the vehicle using the checklist below.

### **CHECKLIST - FINAL VEHICLE CHECK AFTER ACCIDENT REPAIRS**

Final check after vehicle completion / following accident repairs

Check

- **1.** Type ID plate fitted and Type ID no. stamped in.
- 2. Steering head bearings adjusted correctly and greased. Tapped head bearings secured with locking screw.
- **3.** Parking lock checked and in proper working order, keys to parking lock and ignition key on same key ring.
- **4.** Handlebar controls tightened correctly, steering head nuts tightened correctly, handlebar movement from lock to lock checked.
- **5.** Front fork bushes adjusted correctly, front fork checked for play and smooth action, fork cap nuts tightened correctly.
- **6.** Front fork greased.
- Front wheel handbrake fastened securely and brake system bled.
   Front wheel handbrake adjusted.
- 8. Front wheel handbrake checked for smooth action.
- 9. Handlebar mounting bolt tightened to 90 mkg, handlebar bolts to 30 mkg, handlebar angle adjusted, steering turns from lock to lock.
- **10.** Rear view mirrors fastened securely and adjusted.
- 11. Headlamps adjusted and fastened securely (beam unit positioned correctly in lamps). If Jet-Lights: checked for smooth action.
- 12. Mudguard mounted securely and adjusted correctly to clear tyres.
- **13.** Front wheel nuts tightened correctly. Wheel must rotate freely, checked for no play in wheel bearings.
- 14. Tyres checked for correct pressures (see page 20)

  Tyres mounted in correct direction and checked for damage.

- Speedometer mounting tightened correctly.
   Speedo cable fastened and tightened correctly.
   Speedo drive mounted correctly and greased (ONLY analogue speedo)
   At electronical speedo: sensor adjusted, 1 2 mm wheel diameter programmed.
- 16. Rear mudguard mountings tightened correctly.
  Mountings clear tyres by at least 20 mm.
  Locking screws tighten securely.
- **17.** Shock absorbers tightened correctly (70 mkg). Lock nut countered.
- **18.** Rubber washers fitted to mudguard mounting bolts. (Not at sticked version).
- **19.** Mudguard cables mounted correctly. Mudguards clear tyres by at least 10 mm..
- 20. Rear wheel (130 mkg) tightened rear tyres mounted in correct direction, checked for damage.
  Make sure wheel nuts are retightened after 30 miles / 50 km
- **21.** Fuel tank fastened securely, fuel lines checked for leaks. Fitted fuel filter.
- 22. Fuel line located properly and secured with jubilee clips.
- 23. Brake and clutch pedals fitted securely (30 mkg). 4 white spacers under clutch pedal, 1 white spacer under brake pedal, brake pedal play adjusted (at least 2 mm).
- **24.** Clutch adjusted with approx. 3 mm play, clutch cable ball end greased, fastened securely.
- **25.** Footrest plates mounted correctly, individually adjusted, tightened correctly.
- 26. Hydraulic brake fluid checked, brake system checked for leaks, brake lines checked and located correctly, (minimum clearance between brake lines and frame = 5 mm). (When checking for leaks press brake pedal with 3/4 of maximum braking force for 30 seconds).
- 27. Throttle cable located correctly, fastened securely and lubricated, twist grip greased to ensure smooth action, cable fastened securely to handlebar and frame with cable ties.
- **28.** Entire electrical system located correctly and checked, in particular between mudguards and bodywork, and tested to be in full working order.
- **29.** All connectors checked and secure.
- **30.** Multiplug connectors coated with vaseline or penetration spray.
- **31.** Engine set up, read out the fault recorder after test drive, Engine properly installed, checked for leaks.
- **32.** Alternator checked and in proper working order.

- **33.** Ignition cables located correctly and tightened Check for clearance between exhaust parts.
- 34. Exhaust system checked for correctly tightened screws.

  Check silencer for smooth action between engine protection bar or bumper (Fighter).

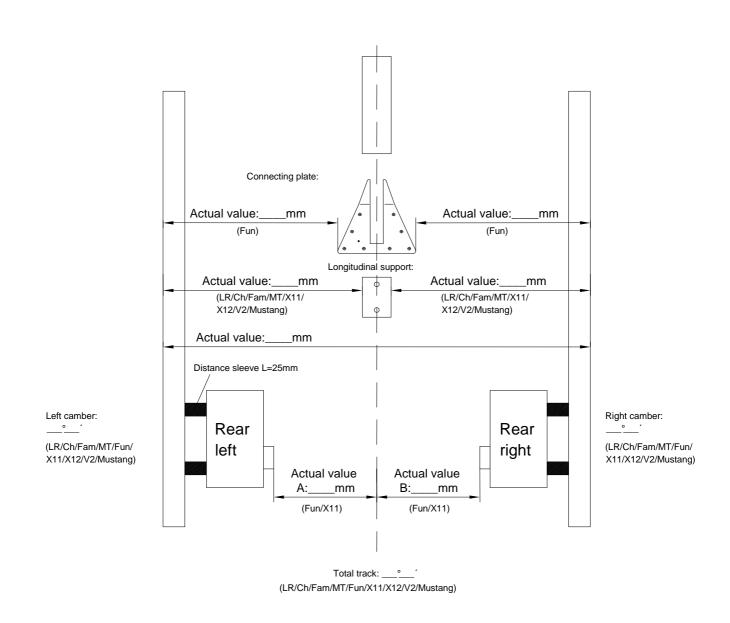
  Pay attention to marking.
- **35.** Engine oil checked (oil change), gearbox oil level checked.
  Cooling water checked (Fighter/Fun Trike/Muscle).
- **36.** Trike bodywork fitted correctly, grab rails and seats fastened securely, important: ignition switch secured against rotating in mounting.
- **37.** Bodywork, seats and chrome and all external parts checked for damage and proper working order.
- **38.** Handbrake checked for even distribution of braking load, cable anchor bolts secured properly, handbrake fully effective at 4 notches, cables move freely and checked for smooth action.
- **39.** Vehicle brakes checked for even distribution of braking load. Vehicles with disc brakes work self-adjusted.
- **40.** All gears including reverse checked and in proper working order, checked for smooth gear changes.
- 41. Visual overall impression alright.
- **42.** Flanges of bodywork and mudguards trimmed.
- 43. Vehicle test ridden. Vehicle tested for straight-line handling.

  Test ride for a distance of at least 15 miles / 25 km. Brief check after test ride.

  Caution: randomly check that bolts are secure and if necessary, retighten.
- **44.** Wash bodywork, clean chrome parts with chrome polish, attach **BOOM TRIKES sticker**.
- **45.** Wheel track and wheel camber checked and adjusted. At X11: after the wheel alignment check the side clearance from gear box to semi-trailing link. See data sheet.

## Test sheet wheel alignment

Vehicle type:	
Front wheel:	
Rear wheels:	
Name of controller:	



## Data sheet wheel alignment

		Set po	oints	
Vehicle type:	Camber	Track in degree	Camber in mm	Nachlauf
Fighter X12 S	-89,5° bis – 90,0°	-0°10′ bis - 0°15′		X

### Adjustment rear axle X12 with manual transmission:

Set points:

 $A = 208\pm3$  mm lay-on surface fender retainer to gearbox housing

**B** = 208±3 mm lay-on surface pulley crankshaft

Check at deflected state with adjusted track and camber.

Measuring after adjustment of rear axle.

Critical measuring is 44,0 cm. This should not be exceeded under no circumstances.

### 27. SAFE LOADS AND ACCESSORIES

If you equip your trike with accessories and ride it carrying luggage, then great care must be taken in order to avoid accidents. Fitting accessory parts and riding with luggage can severely affect a trike's handling stability, vehicle performance and safe handling characteristics, and may require you to significantly reduce riding speeds. Consider also that the above effects on safe handling may become even worse if you fit accessories made by other manufacturers, if the loads you are carrying are distributed unevenly, if the tyres are worn, if the trike is poorly maintained, if road or weather conditions are bad etc. Always take these considerations into account before you equip your trike with accessories or load it up with luggage.

Make sure that together with a pillion, luggage and accessories your trike does not exceed the maximum overall weight (see technical specifications).

### **Accessories**

Original BOOM TRIKES accessories have been specially developed and tested to be compatible with your trike. BOOM TRIKES have not conducted any tests on accessories made by other manufacturers to find out whether they adversely affect the handling characteristics of your vehicle. It is therefore your responsibility to find out about the safety risks and any accident risk involved if you equip your trike with accessories made by other manufacturers.

Always observe the following:

- 1. Check the accessory part thoroughly to make sure that it does not cover up any lights, impair ground clearance, obstruct handlebar turns or the use of any of the controls.
- 2. Accessory parts which modify the riding position, thus increasing the distance between hands and feet and the controls, may have an adverse affect on the rider's reaction times in a potentially dangerous road situation.
- Do not fit any electrical parts which overload the trike's electrical system. If a fuse blows, resulting in night-time failure of lights, or if the engine cuts out in heavy traffic, a potentially dangerous situation may arise.

### Caution:

Any modifications to the trike or removal of original parts may lead to the vehicle being unsafe to ride and may also contravene existing laws. Please observe all road traffic regulations.

### 28. PUTTING THE VEHICLE INTO STORAGE

If you take your trike off the road for an extended period, e.g. during the winter months, then you must take certain precautions to prevent damage / deterioration while the vehicle is not in use. Any necessary repairs should be carried out beforehand to avoid putting a vehicle which is not fully roadworthy back into service.

### BEFORE YOU PUT THE VEHICLE INTO STORAGE

- 1. Wash the trike and wipe it dry. Wax and polish all painted surfaces. Apply penetration spray to stainless steel parts or clean them with stainless steel polish.
- 2. Make sure that the fuel tank is full. Close the filler cap.
- 3. Remove the battery and store it in a safe place at temperatures constantly above 0°C /32°F and away from direct sunlight. Once a month trickle charge the battery.
- 4. Inflate the tyres to the recommended pressures.
- 5. Store the trike in an unheated space where there is no damp and where temperatures are more or less constant.

### TAKING THE VEHICLE OUT OF STORAGE

- 1. Clean the trike. Change the engine oil if the vehicle was out of service for more than 6 months
- 2. Charge the battery, if necessary, and install.
- 3. Conduct all vehicle checks before riding it. Test ride the trike at low engine speeds in a safe area away from traffic.
- 4. Fuel injection engines will need to be driven for approximately 5 miles / 8 km in order for the module to reprogram itself.

### 29. TERMS OF WARRANTY / GENERAL CONDITIONS AND TERMS OF BUSINESS

### I: Conditions - scope of application

Deliveries, services/performances and offers made by us shall be governed solely by the following general terms and conditions of business. These shall also be valid for all future business dealings, even if no express reference is made to them. These conditions shall be considered as accepted, at the latest, at the time of acceptance of the service rendered. Any reference by customers or suppliers to their own general terms and conditions and conditions of purchase which are contrary to the terms and conditions mentioned above, are hereby rejected.

## II: Conclusion of a purchase agreement / transfer of the buyer's rights and obligations; resale of the object prior to receipt

- 1. The buyer is bound by the purchase order for a maximum of 4 weeks. A purchase agreement shall be considered concluded if, within the period stated above, the vendor confirms, in writing, that he has accepted a purchase order for a specific object, or if delivery has taken place. If the vendor does not accept the purchase order, however, he is obliged to inform the buyer without delay.
- 2. Any transfer of the buyer's rights and obligations arising from the purchase agreement, and any resale of the object prior to its receipt shall require the written permission of the vendor. In the case of a breach or attempted breach of this provision, the vendor may withdraw from the purchase agreement, in writing and without notice.

#### **III: Prices**

- 1. The price of the object of purchase is the manufacturer's price, plus delivery fees and VAT, the sum total being the purchase price. Additional services/ performances will be charged separately.
- 2. Following conclusion of the purchase agreement, the buyer is obliged to make a payment equal to 20 % of the goods' sale value. If the vendor does not receive the payment as agreed, then after issuing a reminder to pay the agreed sum within a reasonable period of time, he shall be entitled to withdraw from the purchase agreement or to claim indemnity from the buyer due to non-fulfilment of obligations.

### **IV: Payment**

- 1. The purchase price and prices for additional services/performances shall be paid in full upon delivery of the object of purchase and upon delivery of the invoice or other billing documents personally or by any other means.
- 2. The buyer may offset the demands of the vendor only if the buyer's counterclaim is undisputed or on the basis of an existing legally enforceable claim. A right of retention may only be asserted on the basis of claims arising from the purchase agreement.

### V: Delivery and delayed delivery

- 1. Delivery dates or delivery deadlines, which may be binding or non-binding subject to agreement, shall be confirmed in writing. Delivery deadlines apply from the date on which the purchase agreement is concluded.
- 2. If six weeks elapse after an agreed non-binding delivery date or non-binding delivery deadline without delivery of the ordered object, then the buyer is entitled to demand that the vendor deliver the object of purchase. The vendor shall be in default as from receipt of this demand. If the buyer is entitled to claim indemnity for damages arising from default, this will be restricted to a maximum of 5 % of the agreed purchase price in the case of ordinary negligence on the part of the vendor. If the buyer also decides to withdraw from the purchase agreement and/or claim indemnity in lieu of fulfilment, following expiry of the six-week deadline and in accordance with sentence 1, he is obliged to set the vendor a reasonable delivery deadline. If the buyer is entitled to claim indemnity in lieu of fulfilment, this shall be restricted to a maximum of 25 % of the agreed purchase price in the case of ordinary negligence on the part of the vendor; if the buyer is a legal entity in the public sector, or represents a public sector special fund, or is a business person who was acting in a commercial capacity or in his capacity as a self-employed person when he concluded the agreement, there shall be no entitlement to indemnity in the case of ordinary negligence. In the event of the vendor being unable to deliver the object of purchase through no fault of his own whilst still in default, he will be obliged to offer indemnity in accordance with the limitations stated above. The vendor shall not be liable to offer indemnity if the damages would have also occurred even if that fulfilment had taken place on time.
- 3. If a binding delivery date or a binding delivery deadline elapses without the purchase object being delivered, the vendor shall automatically be in default. The rights of the buyer shall then apply in accordance with Item 2, sentences 3 to 6 of this Section.
- 4. Acts of God, or disturbances affecting the business operations of the vendor or his supplier, which temporarily prevent the vendor through no fault of his own from delivering the object of purchase on the agreed date or by the agreed delivery deadline, have the effect of suspending the dates and deadlines stated in items 1 to 3 for the duration of the disturbance caused by such circumstances. If the disturbance causes fulfilment to be suspended for more than four months, the buyer shall be entitled to withdraw from the purchase agreement. All other rights in respect of withdrawal from the agreement shall remain unaffected.
- 5. The manufacturer shall reserve the right to alter the vehicle specifications, make modifications to the shape and colour, and to change the scope of the delivery, providing that, taking into account the interests of the vendor, the buyer can be reasonably expected to tolerate the aforesaid changes or modifications.
- 6. If the customer is a business person, then, unless he has previously obtained a written statement of our consent, he shall not be permitted to resell to countries outside the EU, either direct or indirectly, the goods which we have delivered.
- 7. All risks shall be transferred to the customer as soon as the goods are in the charge of the person responsible for their transport, or as soon as the goods have left the vendor's storage facilities for subsequent carriage and delivery.

### VI: Acceptance of the object of purchase

1. The buyer is obliged to accept delivery of the object of purchase within 8 days following notification of delivery. In the event that the buyer does not accept delivery of the object of purchase the vendor is entitled to assert his legal rights in this connection.

2. If the vendor claims indemnity, this shall be equal to 15 % of the agreed purchase price. The final amount may vary, subject to the vendor proving damages to be greater, or the buyer proving damages to be less.

### VII: Reservation of ownership

- 1. The object of purchase shall remain the property of the vendor until all rightful demands of the vendor arising from the purchase agreement are fulfilled. If the buyer is a legal entity in the public sector, or represents a public sector special fund, or is a business person who was acting in a commercial capacity or in his capacity as a self-employed person when he concluded the agreement, the same reservation of ownership also applies in respect of the vendor's demands towards the buyer in the ongoing business relationship, until such time as the vendor's rightful demands in connection with the said purchase have been fulfilled. If the buyer so requests, the vendor is obliged to renounce his reservation of ownership on condition that the buyer has indisputably fulfilled all the demands existing in connection with object of purchase, and on condition that adequate collateral exists as cover for other demands arising from an ongoing business relationship. For the time period in which he still has reservation of ownership, the vendor has the right of ownership of the vehicle registration documents.
- 2. In the case of default of payment on the part of the buyer, the vendor is entitled to withdraw from the purchase agreement. If the vendor is also entitled to claim indemnity in lieu of fulfilment and retakes possession of the object of purchase, then vendor and buyer agree that the vendor shall reimburse the normal resale value of the object of purchase at the time when the object is returned. At the request of the buyer, who is entitled to make such a request only immediately following return of the object of purchase, the buyer may select a publicly appointed and certified vehicle expert, e.g. from Deutsche Automobil Treuhand GmbH (DAT), in order to determine the normal resale value. The buyer shall bear all the costs in connection with the return and sale of the object of purchase. Unless proved otherwise, the additional costs for re-sale shall be equal to 5 % of the normal resale value. The final amount may vary, subject to the vendor providing proof of higher costs, or the buyer providing proof of lower costs.
- 3. For the time period in which the vendor retains the right of ownership, the buyer has no right to resell the object of purchase, nor may he contractually permit any third parties to make use of the object of purchase.

#### VIII: Material defects

1. With regard to material defects, in the case of new vehicles or new parts (excluding kits), in accordance with the provisions in law the buyer's warranty rights expire after two years following delivery of the object of purchase (exception: Item 7). In deviation from the above, in the case of new vehicles being used for rentals, and in the case of kits or export vehicles, warranty rights expire after one year if the buyer is a legal entity in the public sector, or represents a public sector special fund, or is a business person, who was acting in a commercial capacity or in his capacity as a self-employed person when he concluded the agreement.

In the case of used vehicles or used parts, the buyer's warranty rights in respect of material defects expire after one year following delivery of the object of purchase to the customer. In the case of malicious non-disclosure of the existence of defects, or agreement to grant a guarantee for the condition of the objects, all other rights remain unaffected.

- 2. With regard to the rectification of defects, the following shall apply:
- a) The buyer has the right to demand rectification of defects by either the vendor or by any other recognised service centre appointed by the manufacturer/ importer to repair or carry out maintenance of the object of purchase; in the latter case the buyer is obliged to make this circumstance known to the vendor. In the case of the buyer informing the vendor verbally of claims, the vendor shall give written confirmation to the buyer that he has received appropriate notification.
- b) If the object of purchase is out of working order due to a material defect, the buyer may, subject to agreement by the vendor, seek help from a certified vehicle service centre capable of providing assistance and closest to the location of the object of purchase, on condition that the object of purchase which is out of working order is at a location over 100 km away from the vendor's facilities.
- c) Parts which are removed and replaced shall become the property of the vendor.
- d) The buyer shall be entitled to claim warranty rights for replacement parts fitted for the purpose of rectifying material defects up until expiry of those warranty rights arising from the purchase agreement which apply to the object of purchase.
- 3. Changes of ownership shall not affect the right to demand rectification of defects.
- 4. The vendor ensures that the object of purchase has been manufactured in accordance with recognised technical guidelines based on the technologies employed in limited series manufacturing, and not in mass production.
- 5. If the buyer does not observe the manufacturer's operating and maintenance instructions, or uses replacement parts or materials/fluids/lubricants which do not conform to the original specifications, he shall forfeit all warranty rights.
- 6. In the case of excessive and improper use of the object of purchase, i.e. use in motor sporting events, or for example excessive off-road use etc., the buyer shall also forfeit all warranty rights.
- 7. In the case of reconditioned engines, and reconditioned or used gearboxes, even if fitted to new vehicles, any warranty rights applying to material defects shall always expire after a period of 12 months, regardless of whether the buyer is a private customer or a business person.
- 8. Acceptance of a job order to carry out repairs is not in itself tantamount to accepting the customer's demand for recognition of warranty rights.
- 9. Rules of maintenance:
- a) General notes and instructions:

All fibreglass parts are laminated by hand, therefore minor irregularities in shape and deviations in colour must necessarily be tolerated by the customer. Uneven tyre wear is inherently caused by the nature of the vehicle's constructional design. Trike and motorcycle riders should always wear suitable protective gear (full-face helmet, leathers, leather boots, leather gloves).

b) Maintenance intervals:

The following vehicle maintenance and servicing intervals should be observed:

- aa) after 500 km, or at the latest 4 weeks after purchase of the vehicle
- bb) after 5000 km, or at the latest 3 months after purchase of the vehicle
- cc) after 10000 km, or at the latest 6 months after purchase of the vehicle
- dd) and annually for every subsequent 5000 km
- ee) For Fighter X11, X12, FT, MT models, a separate maintenance guide applies
- c) Operating instructions:

Before each journey you must:

- aa) check the oil level
- bb) check the tyre pressures
- cc) check the petrol tank for sufficient fuel
- dd) check for play in the steering head bearings (the forks may only be dismantled by the manufacturer)
- ee) check the brake fluid level
- ff) check that all lights are in working order
- gg) check that all external vehicle parts are secure.

#### IX: Liability

1. If the vendor is legally required to pay compensation for damage resulting from ordinary negligence, and taking into consideration these terms and conditions, the extent of his liability shall be limited as follows:

The vendor shall only be liable if he has neglected important obligations arising from the purchase agreement, and shall only be liable to compensate for damage of a typical nature and of a kind which is foreseeable at the time of the purchase agreement was concluded. This limitation does not apply in the case of bodily harm and damage to life and health. Insofar as the damage is covered by an insurance taken out by the buyer (excepting endowment insurance), the vendor shall be liable only for subsequent disadvantages experienced by the buyer, e.g. higher insurance premiums, or lost interest until such time as a settlement has been effected by the insurance company. The vendor shall not be liable for any damage resulting from defects to the object of purchase arising out of ordinary negligence.

- 2. Regardless of whether the vendor is at fault or not, in the case of malicious non-disclosure of the existence of defects, as arising due to acceptance of a guarantee or a purchase risk and in accordance with product liability law, any liability on the part of the vendor shall remain unaffected.
- 3. With regard to the question of liability arising out of delayed delivery, Section V shall apply.
- 4. Legal representatives, persons carrying out obligations for the vendor, and the vendor's business associates shall under no circumstances be made personally liable for damage as a result of ordinary negligence on their part, respectively.

### X: Vehicle expert arbitration proceedings (applies only to used vehicles)

- 1. If the motor vehicle company bears the membership insignia of the guild of certified motor vehicle experts "Meisterbetrieb der Kfz-Innung", in the case of any disputes concerning the purchase agreement except for disagreement over the purchase price the parties may call upon the arbitrator appointed at the vendor's place of business to mediate in affairs concerning motor vehicles or concerning the trading of used vehicles. The application calling upon the arbitrator to mediate must be made in writing and must be filed immediately as soon as the point at issue becomes known, or at the latest, prior to 13 months after delivery of the object of purchase.
- 2. The decision of the arbitrator shall not prevent the parties from referring the matter to a court of law.
- 3. In the event that the arbitrator is called upon to mediate, the statutory period of limitation is suspended for the duration of the arbitration proceedings.
- 4. The arbitration proceedings are governed by the respective rules and regulations and codes of procedure, which may be presented to the disputing parties at their request.
- 5. It is not possible to call upon the arbitrator to mediate if the matter has already been referred to a court of law. If the parties refer the matter to a court of law while arbitration is ongoing, the arbitrator will terminate his proceedings.
- 6. The instigator of the arbitration proceedings is not required to pay the arbitrator any fees.

### XI: Place of fulfilment, place of jurisdiction and applicable law

- 1. The place of fulfilment in respect of delivery of the object of purchase is the place of business of the vendor.
- 2. The place of business of the vendor shall be the sole place of jurisdiction in connection with all current and future claims arising from business dealings with business persons, including claims in connection with bills of exchange or cheques.
- 3. The same place of jurisdiction applies if no general place of jurisdiction in Germany applies in the case of the buyer, or if his place of abode or the place where he is ordinarily resident ceases to be Germany after conclusion of the purchase agreement, or if his place of abode or his ordinary place of residence at the time of commencement of legal proceedings is not known. In the case of the vendor filing claims against the buyer, the place of jurisdiction is the place of abode of the buyer.
- 4. The UN Convention on the International Sale of Goods dated 11 April 1980 does not apply here.

### 31. IN THE EVENT OF A BREAKDOWN

### Safety switch fuel-injection system

The vehicle is equipped with a safety switch, which stops the fuel supply at an accident. This happens primarily for your own safety. The deactivation could also happen because of an aprubtly vibration (f. e. crash at parking).

### Caution:

Don't activate the security switch when there's a leakage of the wiring system, after an accident and/or a smell of fuel.

### Switch-on order:

- Place ignition lock on position "0".
- Check fuel system for leackage.
- If the fuel system is alright, then press the button of the security switch.
- Place ignition lock for some seconds on position "II" and afterwards back on position "I".
- Check fuel system once again for leackage.

### 31. OBTAINING REPLACEMENT PARTS

BOOM TRIKES guarantees a supply of replacement parts for a period of 5 years, beginning as of the day of purchase. When ordering replacement parts the general terms and conditions of business apply. If changes are made to the model in question, then accordingly new parts will be supplied. (The customer shall be reasonably expected to tolerate minor modifications and changes to the vehicle specifications).

### 32. SPECIAL CONSIDERATIONS

The bodywork of the trike and the mudguards are laminated by hand, therefore minor faults may occur which must necessarily be tolerated by the customer.

In the event of differences arising over the nature of a warranty claim or over the extent / cost of the damage/ defect, before carrying out repairs we reserve the right to consult an independent vehicle expert. If he agrees with the customer's warranty claim, then we will bear the vehicle expert's costs. Conversely, if his report favours our view of the matter, then the customer shall bear his costs.

### 33. JACKING POINTS

Before jacking up the vehicle be sure to secure it against unintentional movement. Pull the handbrake and/or use wheel chocks. To raise the vehicle, always use only the designated jacking points (see figures below).



### 34. BASIC VEHICLE INFORMATION

(to be filled out by the owner)

For your own information	tion you can fill in vehicle de	etails below.	
Type of fuel Fuel tank capacity:	10 Imp. gallons / 48 ltrs.		95 octane petrol alternatively 98 octane
Engine oil			oil viscosity
Tyre pressures (cold tyres) bar = kp/cm <sup>2</sup>			front
Tyre sizes:			front
			rear
Engine number:		Gearbox num	nber:

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### 35. SERVICE ITINERARY

Warranty\*

2 years

\*except vehicle rentals: latest 2 weeks after the service date) 1 year -----× 500 Km service 500 km service or at the latest 4 weeks after or at the latest 4 weeks after vehicle purchase vehicle purchase Dealer's stamp Dealer's stamp Km: Date: Name: Frame number: 5,000 km service 5,000 Km service or at the latest 3 months after or at the latest 3 months after vehicle purchase vehicle purchase Dealer's stamp Dealer's stamp Km: Frame number: Date: Name: -----× 10,000 km service 10,000 km service or at the latest 6 months after or at the latest 6 months after vehicle purchase vehicle purchase Dealer's stamp Dealer's stamp Km: Date: Frame number: Name: Intermediate check Intermediate check Km: Date: Name: Frame number: 20,000 km service 20,000 km service Km: Date: Name: Frame number:

Detachable stub for manufacturer

(to be sent to BOOM TRIKES at the

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Date registered	Date registered
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