



RIDE YOUR DREAM

MUSCLE TRIKES
(LOW RIDER & FAMILY)

OWNER'S HANDBOOK
AND
SERVICE ITINERARY



Certificated Management
System



RIDE YOUR DREAM

CONTENTS:

	Introduction	Page 5
1.1	The 2 Trike model ranges	Page 6
1.2	Controls, switches, warning lights, instruments panel, steering lock	Page 7-8
1.3	Checks before starting off	Page 9
1.4	Running-in	Page 9
1.5	Starting the engine	Page 9
1.6	Warning lamps information	Page 10
1.7	Advice on anti-theft device	Page 10
1.8	Switching mechanism	Page 11
2.0	Body	Page 12-13
2.1	Pedals	Page 13
3.0	Servicing and maintenance	Page 14-15
3.1	Brakes	Page 15-16
3.2	Fuel system	Page 16
3.3	Type of fuel	Page 17
3.4	Driving with controlled catalytic converter	Page 17
3.5	Battery	Page 17
3.5.1	Vehicles with controlled catalytic converter	Page 18
3.6	Air filter	Page 18
3.7	Oil level of engine	Page 18-20
3.8	Clutch	Page 20
3.9	Tyres	Page 21
3.10	Wheel- and camber alignment	Page 21-25
3.11	Headlights	Page 26
3.12	Coolant	Page 27
4.0	Cleaning	Page 27-28
4.1	Cleaning the wheels	Page 28
5.0	Maintenance and Service	Page 28
5.1	Maintenance checklist	Page 29-30
5.2	Servicing record	Page 31-34
6.0	Terms of warranty / General terms and conditions of business	Page 35-38
7.0	Advice on putting the vehicle in storage	Page 39
8.0	Technical data	Page 40
8.1	Engine	Page 41
8.2	Gearbox	Page 42
9.0	Electrical circuit diagramm	Page 42
9.1	Plan of fuses	Page 43-44
9.2	Circuit diagrams	Page 45-55
10	Additional loads, accessories	Page 56
10.1	Oils, lubricants and fluids	Page 57
10.2	Jacking up the vehicle	Page 57
	Useful information when making refuelling stops	Page 58



VEHICLE DETAILS:

Model:

Version:

Vehicle identifications
no.:

First registration:

Keeper:

Street:

Post code/Town:

Phone:

Key no.:

Radio code:

Colour:

WE ARE PLEASED THAT YOU HAVE DECIDED TO PURCHASE A BOOM TRIKE AND FOR THE CONFIDENCE THAT YOU HAVE PLACED IN US.

Important: please read carefully !

Trikes are fascinating vehicles, giving a feeling of freedom and power. However, you must accept the limitations imposed by your trike. Proper care and maintenance are essential, and the trike should always be in top condition. This applies not only to the vehicle but to the rider too. You can only control your vehicle properly if you are healthy and fit. Alcohol, drugs and medication etc. should be avoided at all times, and this applies even more to trikes than to other types of vehicle. The rider must be fit and alert at all times. Alcohol, even in small quantities, leads to greater risk-taking.

Like motorcycles, riding a trike requires the right protective clothing. Integral helmet, a full set of leathers, leather boots and good gloves are the minimum requirement when riding. Wearing good protective clothing does not mean you should relax your vigilance. Remember to ride defensively at all times, avoiding trouble even if another road user makes a mistake.

The trike will handle differently in rain and bad weather. Trikes should only be ridden by experienced drivers or motorcyclists.

Important: If you are selling your trike, please ensure that the new owner receives this manual.

Carry out the following checks before each journey:

- Oil level
- Tyre pressure
- Fuel
- Play in the fork bearings.
Forks may only be dismantled at the BOOM Trikes factory, because of the risk of damage if they are handled by someone without the requisite knowledge. In such cases we can assume no liability. Various dome nuts and bolts are additionally secured by the application of Loctite.

Check the brake fluid level before each journey.

In addition the general safety of the vehicle should be checked before going on the road.

This includes ensuring that the lighting system is operating correctly and that all bolts and other fastenings are tight. Chrome parts must be treated with a suitable chrome polish, because otherwise the warranty for these parts will be invalid.

BOOM trikes are constantly being improved. Consequently the trike supplied to you may differ in some respects from the details given in the brochure.

Due to the high percentage of hand-produced parts, their quality may be slightly below that of high-volume, mass-produced parts.

1.1 THE 2 TRIKE MODEL RANGES



Low Rider



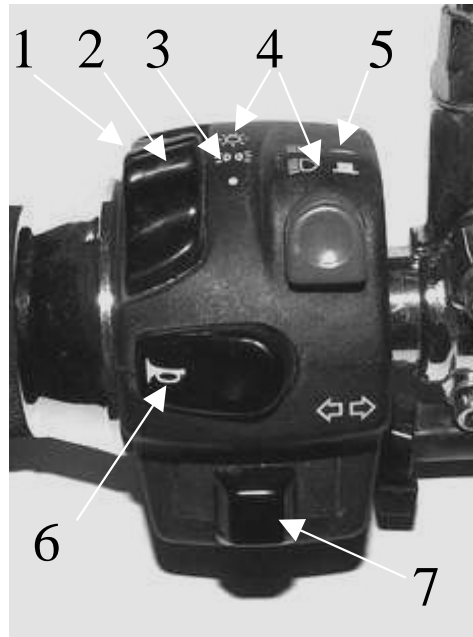
Family

1.2 CONTROLS, SWITCHES AND CONTROL LAMPS

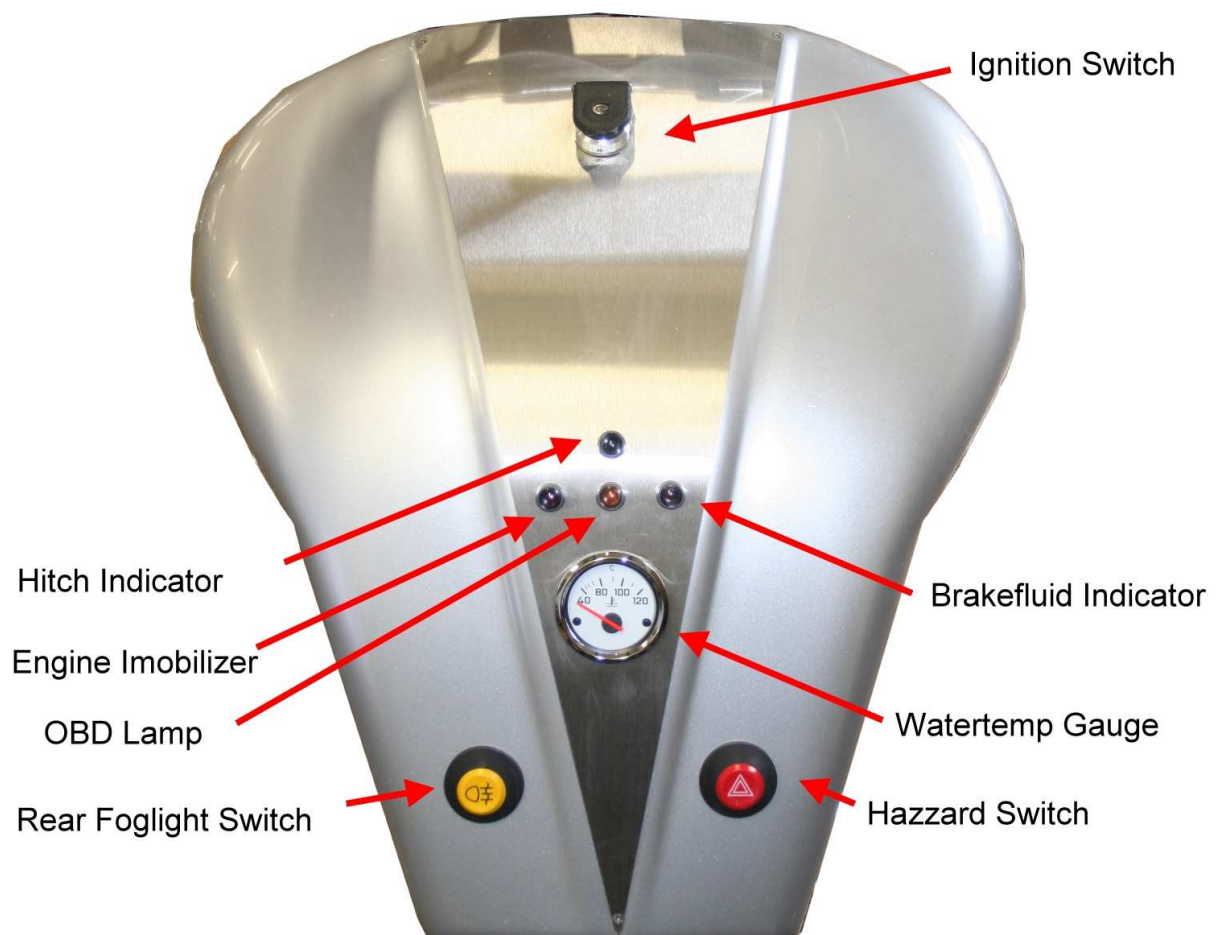
Handlebar-mounted switches:

Functions:

1. Headlamp flasher (front)
2. Light switch
3. Parking light
4. Dim light
5. Full beam switch
6. Horn
7. Direction indicators

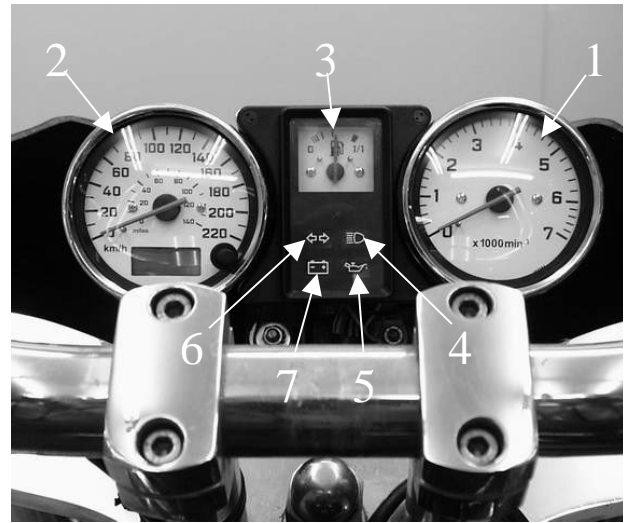


Tank with operating unit.



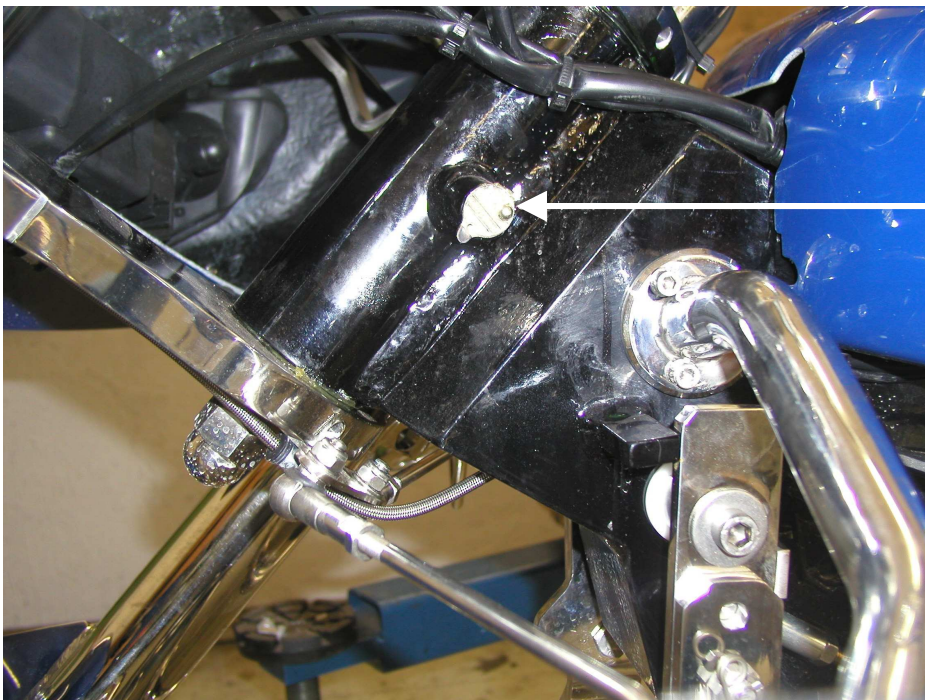
Electronic instrument panel

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



Steering wheel lock:

To activate the steering lock, turn forks to right. Turn key in cylinder clockwise, press in and lock in position. To release, repeat these actions in reverse.



Steering wheel lock

1.3. CHECKS BEFORE STARTING OFF



Ignoring the “Checks before starting off” may lead to accidents or damage to the vehicle.

Check your trike regularly before use. It takes very little time to run through the items in this checklist, and in the long term you will save time and money, and it may even save you from injury or death.

1. Engine oil level: check the oil level and top up if necessary. Check the engine for oil leaks.
2. Fuel level: always ensure you have sufficient fuel. Check the fuel system for leaks.
3. Front and rear brakes: check that the brakes are working effectively, and ensure that the brake fluid is not leaking.
4. Tyres: check the condition and pressure of the tyres.
5. Throttle twist grip: check that it opens and closes easily in all positions of the handlebars
6. Lights and horn: check to ensure correct functioning of headlights, rear lights, brake light, direction indicators, illuminated display and horn.

Important:

Never run the engine in an enclosed space. The exhaust contains poisonous carbon monoxide, which can cause unconsciousness and death.

Do not use the starter for more than 5 seconds at a time. Wait at least 10 seconds before attempting to start the engine again.

1.4 RUNNING IN

The trike should be run in for the first 2,000 km. During this period do not subject the engine to excessive stress or open the throttle fully. The maximum speed in each gear should not exceed $\frac{3}{4}$ of the normal speed. Change gear at the appropriate engine speed: this applies especially when changing down. Never open the throttle fully during the running-in period. Only briefly run the engine in neutral to warm up. Try to avoid short journeys, because the engine does not have time to reach its correct operating temperature.

1.5 STARTING THE ENGINE

Insert ignition key and turn it to the right. The oil and generator lights will come on. Turn it further to the right to activate the starter motor. Once the engine has started let go of the key at once. The key can be turned to the left to allow the radio to be used without turning on the ignition.

1.6 WARNING LAMPS INFORMATION

The red oil pressure warning light should go out a few seconds after the engine has fired. If it stays on, turn the engine off immediately and check the oil level. Running the engine with insufficient oil pressure can cause serious damage.

! BRAKE WARNING LIGHT:

If this light comes on, immediately fill the brake fluid container up to the “max.” mark. Contact the nearest BOOM TRIKES-approved repair shop or specialist workshop to have the brakes checked. Drive with care!!

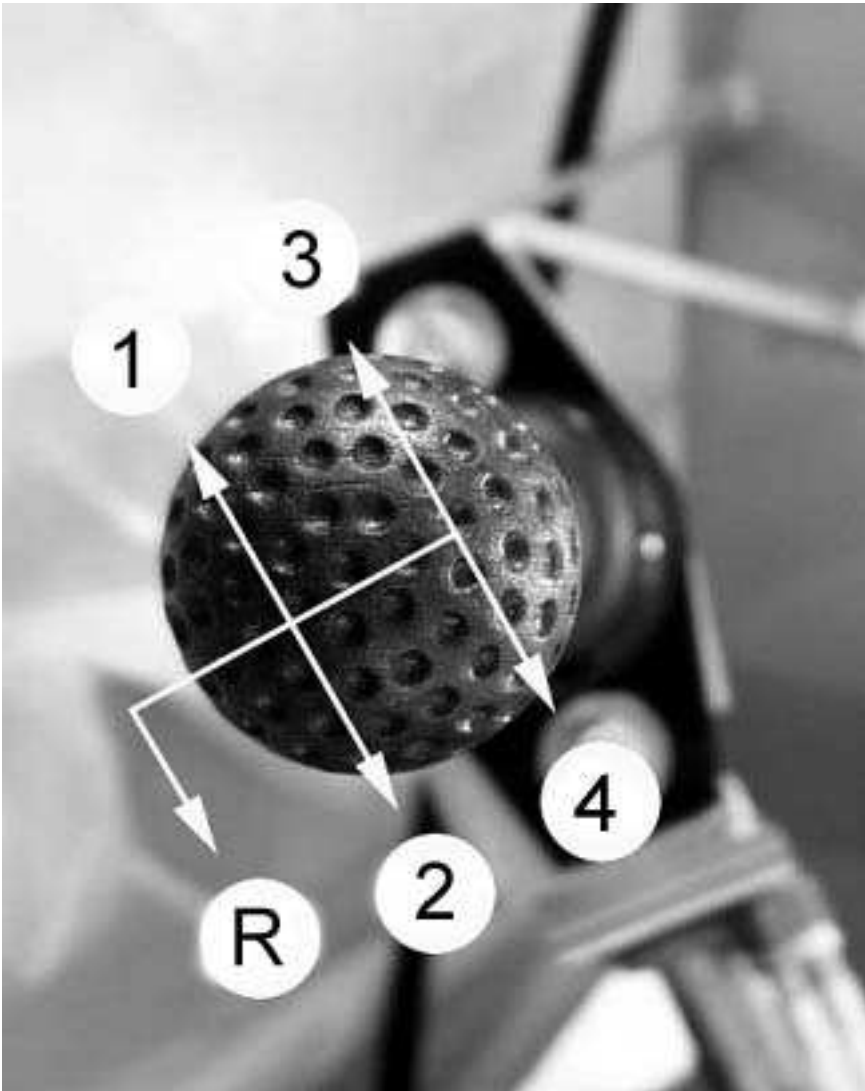
! BATTERY CHARGE WARNING LIGHT:

If this light comes on while the engine is running, or fails to come on when the ignition is turned on, it indicates that the battery is discharging. Turn off any electrical items of equipment that are not needed, and contact the nearest BOOM TRIKES-approved repair shop or specialist workshop.

1.7 ADVICE ON ANTI-THEFT DEVICE

1. Always lock the steering, and never leave the key in the ignition.
This may sound obvious, but is something that can easily be overlooked.
2. Ensure that all the vehicle documents for your trike are complete and up to date.
3. If possible keep your trike in a locked garage.
4. Enter your name, address and telephone number in this manual.

1.8 SWITCHING MECHANISM



The gearshift has the same H arrangement as that used in cars, and is mounted on the frame on the rider's left.

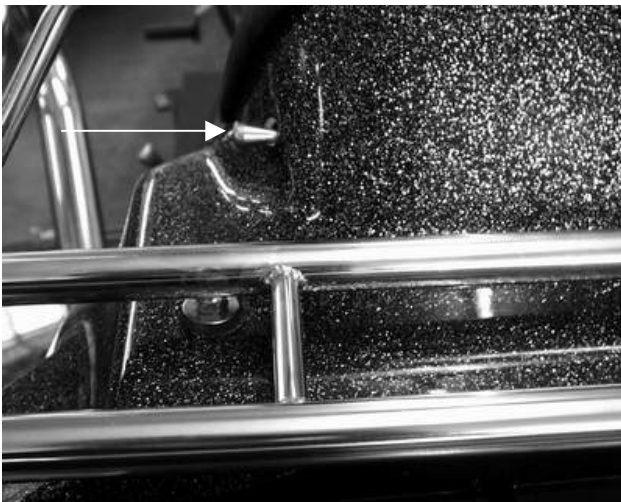
Reverse is selected by pressing down on the gear knob and pushing it back and to the left.

2.0 Body



On Low Rider models push the lever which locks the body section to the right.

On Family models the body section is secured to the subframe by bolts which must first be removed.



Once the bodywork has been released it can be raised.

The inbuilt "Liftomatic" supporting device is automatically extended to hold the body up.

Because the "Liftomatic" locks in position, when lowering the body first raise it slightly to release.



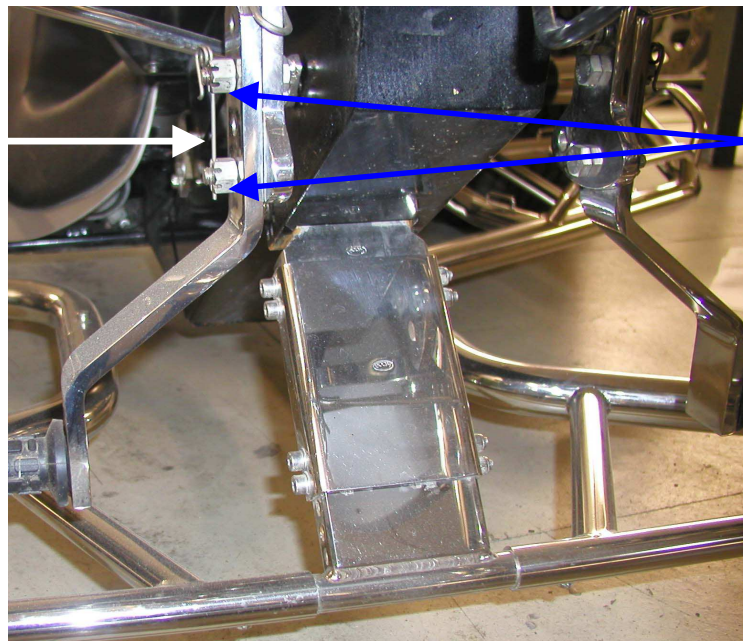
Ensure that the handlebars are not turned too far and that the handbrake is on, otherwise the bodywork cannot be fully raised and may be damaged



Important: The liftomatic and the present locking mechanism respectively has to be locked in any case while the Trike is driven or transported

2.1 PEDALS: ADJUSTABLE BRAKE AND CLUTCH PEDALS AND FOOTREST MOUNTING

remove cotter pin and



disconnect nut

The pedals and footrest mounting can now be adjusted using the holes provided.
Release nut on footrest mounting and remove screws, allowing the mounting to be adjusted.

Ensure there is sufficient ground clearance!

3.0 SERVICING AND MAINTENANCE

Servicing must be carried out by authorised workshops, Bosch servicing depots or by BOOM TRIKES service centres.

The following instructions assume that the trike is only used for its intended purpose. If the trike is run at higher speeds for long periods, under unusually wet or dusty conditions, servicing must be carried at more frequent intervals than those specified in the servicing schedule. Consult your BOOM TRIKES authorised dealer about any special measures to be undertaken to meet your own needs and requirements.

Regular servicing and maintenance will help your vehicle to hold its value, and make it safer to ride too.

See point 5 - you can find a detailed Maintenance Checklist

Greasing / Lubrication

- Lubricate headset bearing
- Lubricate bodywork lock

Engine

- Change engine oil, clean or replace oil filter screen
- Replace air filter every 20,000 km
- Tighten up exhaust bolts.
- Check spark plugs and replace if necessary.
- Check idle-running speed and exhaust gas and adjust if necessary.

Forks

- Check the play of the fork bearing bushes and adjust if necessary.
- Check that the fork nuts are seated firmly.
- Check that the handlebars will turn fully both ways.
- Check that the forks move freely.

Brakes

- Check brake pads and ensure that they pull evenly.
- Adjust handbrake (should hold on 4th or 5th notch).
- Replace brake fluid annually. If annual mileage is higher, replace every 30,000 km.

Electronics

- o Sight check on laying and damaging of cable and plugs.

After test ride

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

Serve documentation

Important: Service coupon together with milage and date should be stamped twice and the tear-off section should be sent in an envelope within two weeks of the inspection to BOOM TRIKES Fahrzeugbau GmbH, Bächinger Str. 7, D-89567 Sontheim OT Brenz.

Failure to do so will render the warranty invalid.

3.1 BRAKE

REAR BRAKES:

a) . Discs: BOOM TRIKES disc brakes are self-adjusting.

Check the brake fluid level, the thickness of the linings and the condition of the discs at regular intervals.

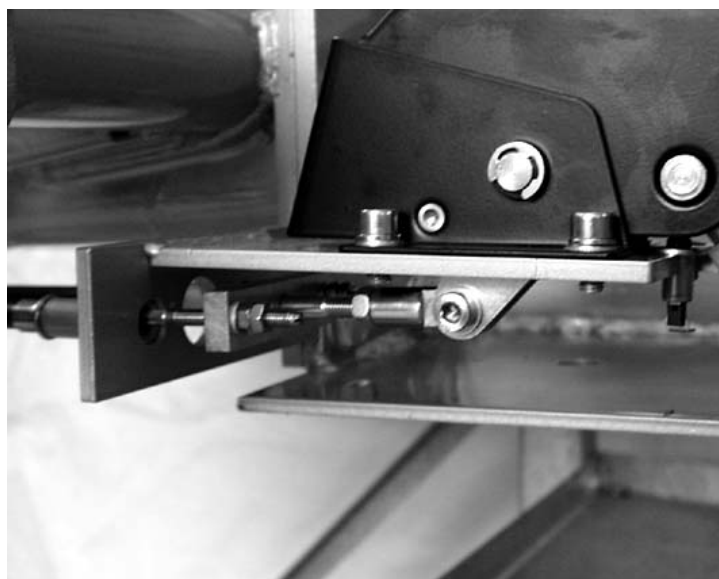


To ensure maximum efficiency of the disc brakes they should first be run in for about 200 km. During this time hard braking should be avoided!

On leaving a car wash, in heavy rain or in slush, lightly touch the brake pedal to prevent a film of water forming.

b) Handbrake (parking brake)

The handbrake should hold effectively when the 4th notch is reached. If this is not the case, adjust the brake using the screw provided.



Front disc brake:

The provision of a brake on the front wheel is a mandatory requirement. It only contributes slightly to slowing the vehicle down. Unlike motorcycles, approximately 90% of the braking forces are concentrated on the rear axle, and the maximum deceleration provided by the front brake is only about 10%.

! **Important: Only authorised workshops are allowed to work on the brake system.**

3.2 FUEL SYSTEM

All the models in the latest generation of BOOM TRIKES are fitted with a combined display with integral fuel gauge, eliminating the need for a reserve fuel cock. Fill up well before the tank is empty, even if the fuel gauge is not on reserve. Check the fuel gauge before each journey.

Filler neck: This is located at the Low Rider under the passenger seat and at the Family under the middle seat pad.

Important:

Petrol is highly inflammable and may explode under certain conditions. Refuelling should be done in a well ventilated space, with the engine turned off. Do not smoke when refuelling or in areas where fuel is stored. Naked flame and sparks must be avoided. Do not overfill the tank (there should be no petrol left in the filler tube). After refuelling ensure that the filler cap is properly closed. Do not spill fuel while refuelling because spillage or fuel vapours are inflammable. If fuel has been spilt, check that the area is dry again before starting the engine. Avoid repeated or extended skin contact with fuel, and do not inhale the vapours.

! **Important: Never let the fuel pump run dry!**
→it would immediately destroy the fuel pump(no warranty)

Take care when undoing the fuel hoses (when replacing fuel filter) because there may still be residual pressure in the line!

Only use the specified fuel filters (see engine data).

3.3 TYPE OF FUEL

Super unleaded petrol ROZ95

! Important: Only use unleaded petrol in vehicles fitted with a catalytic converter. If leaded or diesel petrol is added by mistake, do not under any circumstances start the engine (even if there is only the smallest amount), because this will cause lasting damage to the catalytic converter.

.

BOOM TRIKES accepts no responsibility for damage caused when filling up with leaded petrol or diesel.

The warranty does not apply in such cases. If you have put in leaded or diesel petrol by mistake you should contact a BOOM TRIKES dealer or specialist repair shop.

3.4 DRIVING WITH CONTROLLED CATALYTIC CONVERTER

Never allow petrol into the catalytic converter (especially when the engine is warm):

- never run the tank empty
- Avoid prolonged attempts to start the engine
- Use battery jumper cable if necessary
- Never turn off the ignition while in motion.

! In the event of faulty ignition or reduced power, contact a BOOM TRIKES repair shop. Do not open the throttle fully.

3.5 BATTERY

Your vehicle is fitted with a low-maintenance 12 V 44 AH battery which conforms to DIN 205A. It's not necessary to check the level.

! Batteries produce explosive gases. Protect them from exposure to sparks, flame or lighted cigarettes. If charging or using a battery in an enclosed space ensure that it is adequately ventilated. The battery contains sulphuric acid (electrolyte), which can cause severe acid burns. Ensure that eyes and skin are protected. When dealing with batteries always wear protective clothing and face protection.

If any electrolyte gets on the skin it should be rinsed off with water.

If any electrolyte gets in the eyes it should be rinsed with water for at least 15 minutes and medical assistance should be sought immediately.

Electrolyte is poisonous!

If electrolyte is accidentally swallowed, drink large quantities of water or milk and seek medical treatment immediately.

3.5.1 VEHICLES FITTED WITH CONTROLLED CATALYTIC CONVERTER

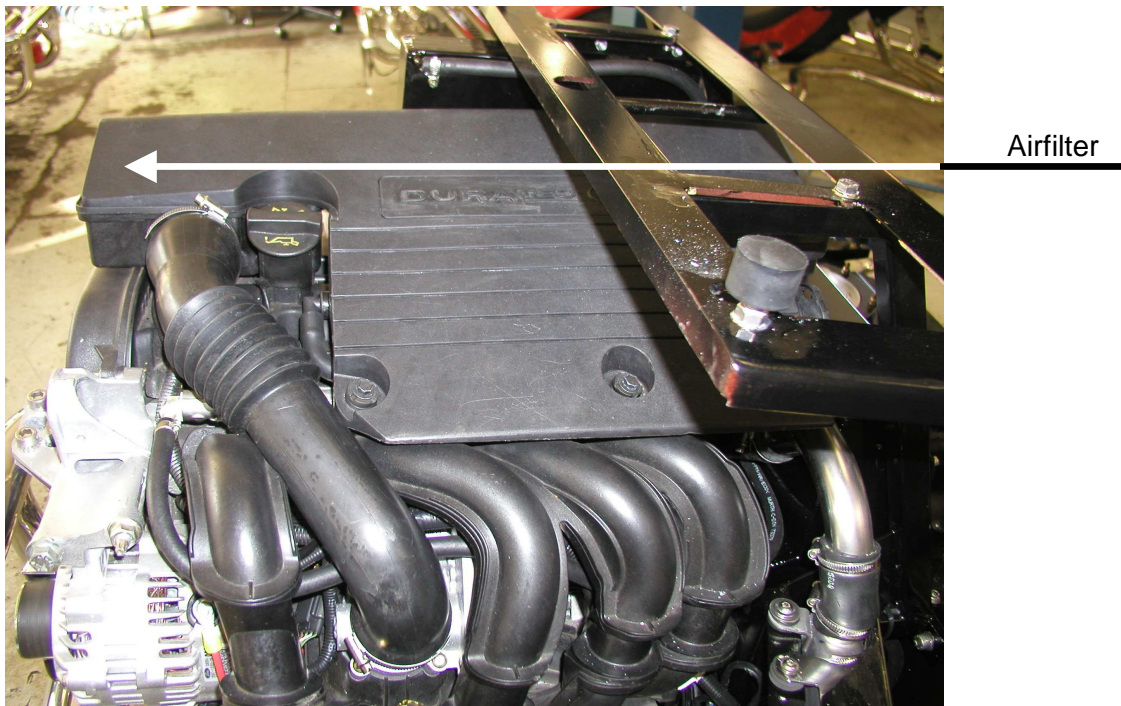
Fuel-injected engines with controlled catalytic converter:

When the battery is reconnected these models must be driven for a certain distance (approx. 8 km) to allow the module to be reprogrammed.

During this time the engine may run unevenly, but this is not a cause for concern.

3.6 AIR FILTER

The position of the airfilter is under the big plastic faceplate (see Picture)



3.7 ENGINE OIL LEVEL

Check at intervals of approx. 1,000 km, and, most importantly, before any long journey.

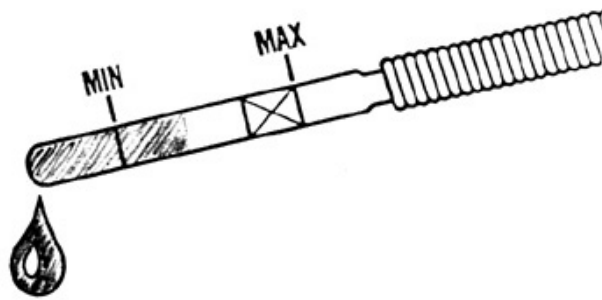
Check oil level: Turn off the engine and wait for several minutes to allow the oil to flow back into the sump.
Remove dipstick and wipe with a clean cloth, replace and remove again.
The oil level should be between the “Min-Max” markings.
If the oil is at the “Min” mark it should be topped up.

Oil at “Min” mark: fill up oil.

Important: Do not overfill. The level should **never** exceed the “Max” mark!!!

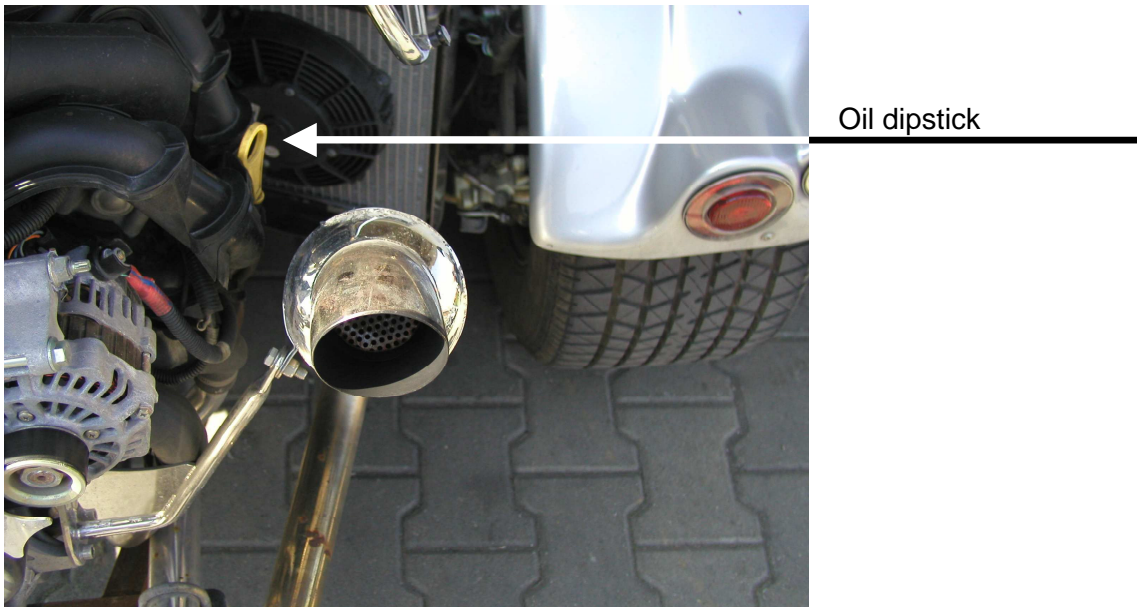
The difference between „Min- and Max markings“ is ca. 0,75 litres.
(see next page)

! Do not overfill. The level should never exceed the „Max“ mark!!!



Fill in oil:

When topping up between oil changes always use the same type of oil as that already being used in the engine. Never allow the oil to exceed the “Max” level.



Use engine oil SAE 5W30 which is in accordance to the Ford specification WSS-M2C913-B.

Not the price of the engine oil is the crucial factor but the regularity of the intervals of change.

- !** The operation of the engine with deficient oil quantity can cause heavy engine failure.
- As well as too much oil can cause heavy damages too.

Oil filter

The oil filter sit on the left side at the engine. Change cartridge filter every 20.000 km.



Oil filter

3.8 CLUTCH

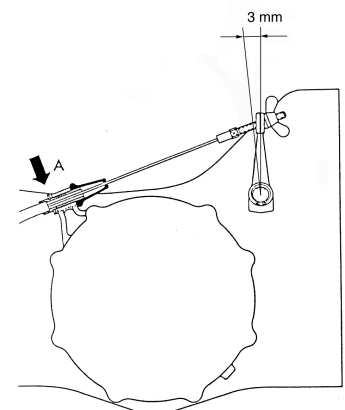
It may become necessary to adjust the clutch in any of the following cases:

If the engine cuts out when a gear is selected, if there is jolting when changing gear, if the gears crunch, if the gear change becomes stiff, or if the clutch slips.

Small adjustments can be made by using the wing screws on the clutch release lever.

There should be 3 mm of play in the clutch release lever.

Either tighten or release the wing nuts, and then check the setting. Start the engine, press the clutch pedal all the way down, and select a gear. Check that the engine does not cut out and that the gears can be easily selected. Slowly release the clutch pedal and open the throttle. The trike should move off easily and accelerate rapidly.



3.9 TYRE

It is essential to maintain the specified tyre pressures. They must be checked every month, and before any long journey. Running at the wrong pressure will cause abnormal wear on the treads and make the vehicle dangerous to drive. Insufficient pressure can cause the tyres to slip off the rims, or come off the rims altogether, leading to loss of control of the vehicle. Badly worn tyres can be dangerous too, with negative effects on traction and handling.

When changing wheels tighten the wheel nuts to a torque of 130 Nm.



Important: tighten all wheel nuts after 50 km !!

Replace tyres before the tread on the cap of the tyre has worn down to the following minimum depths:

Minimum tread depth: **1,6 mm**

Tyre pressure:

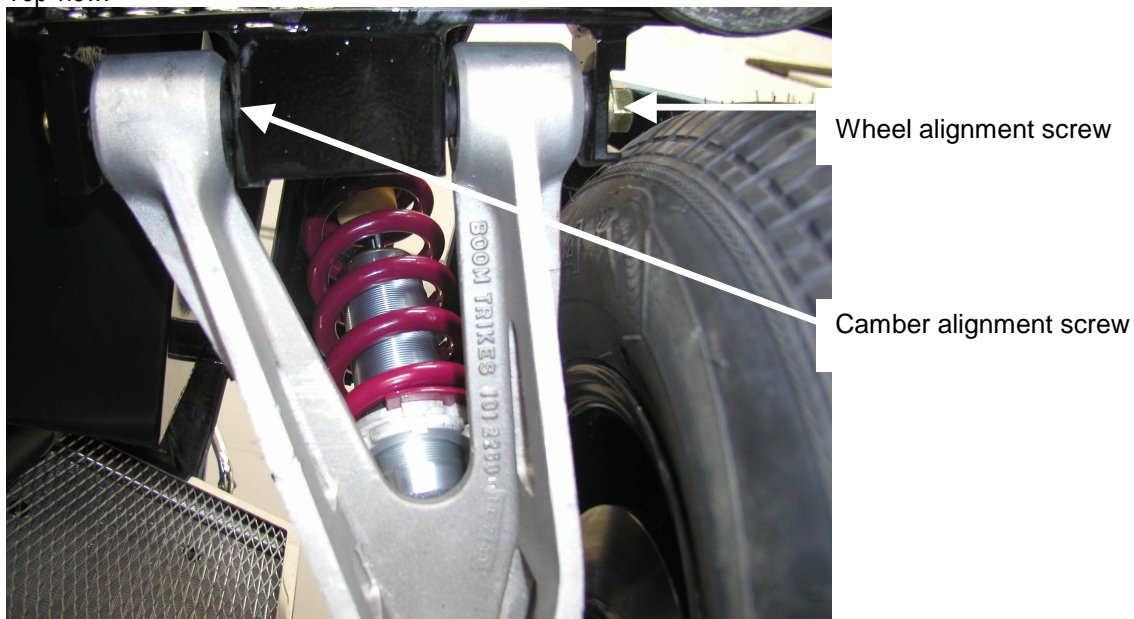
Front tyres:	170/60 H 17	2,2 bar
	200/50 H 17	2,4 bar
Rear tyres:	295/50-15	2,6 bar
	295/30-18	2,5 bar
	295/35-18	2,5 bar
	335/30-18	2,5 bar
	335/30-20	2,5 bar

3.10 Wheel- and camber alignment

1. Camber alignment:

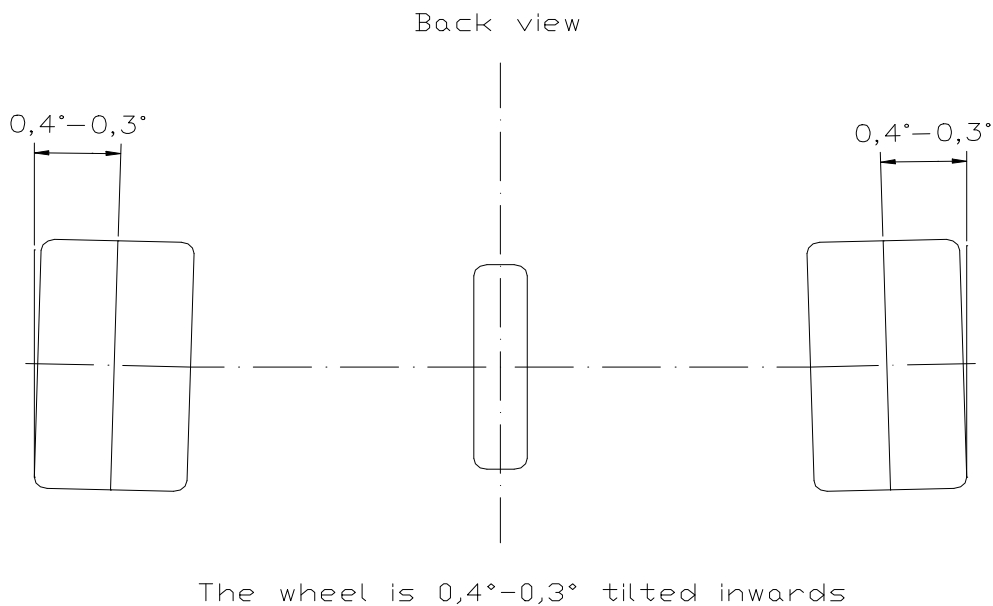
The alignment takes place by means of eccentric bolts, whereby the interior screws are relevant for the camber adjustment and the outside screws are relevant for the wheel alignment.

Top view:



Tightening torque excentric screw: 80 Nm

Camber alignment:
(should be always made before wheel alignment)



Wheel is tilted inwards 0,5° +/- 0,2° (negative fall l)

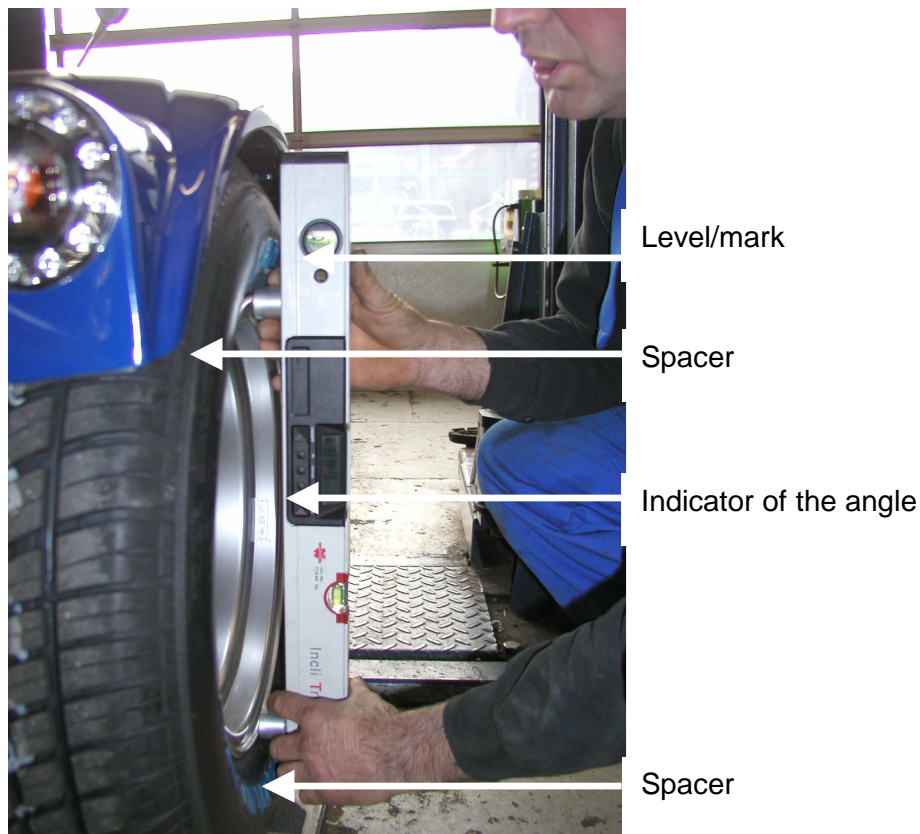
For the camber adjustment use an electronic water-level (Picture).

Please notice the following points before alignment:

- vehicle must stand on level ground
- place rear wheels if possible on turn-tilt plate
- vehicle bottoming
- release brake
- air pressure

At adjustment please proceed as following:

- Apply same spacer (+/- 0.1 mm) under the water-level and wheel rim
- Check with electronic water-level (angle default 89,5 grade)
- The level of the water-level must indicate in the direction of the outer mark.
- The deviation of the level as well as a deviation of the angle must be as above. Adjust the camber at the interior excentric screw (see picture previous page) until the indicator of the angle is in the range of 89,5 grade and the level shows in the direction of the outer mark. After that tighten the excentric screw and repeat the same proceed at the other wheel.



Advantages for the tangential deviation of the wheel:

- Tension of the wheel flank and for this reason the reduction of the slip angle
- Advancement of the driveability in a straight line.
- Advancement of the cornering ability
- Less scuffing of the wheels

2. Wheel alignment:

Before alignment please consider the following points:

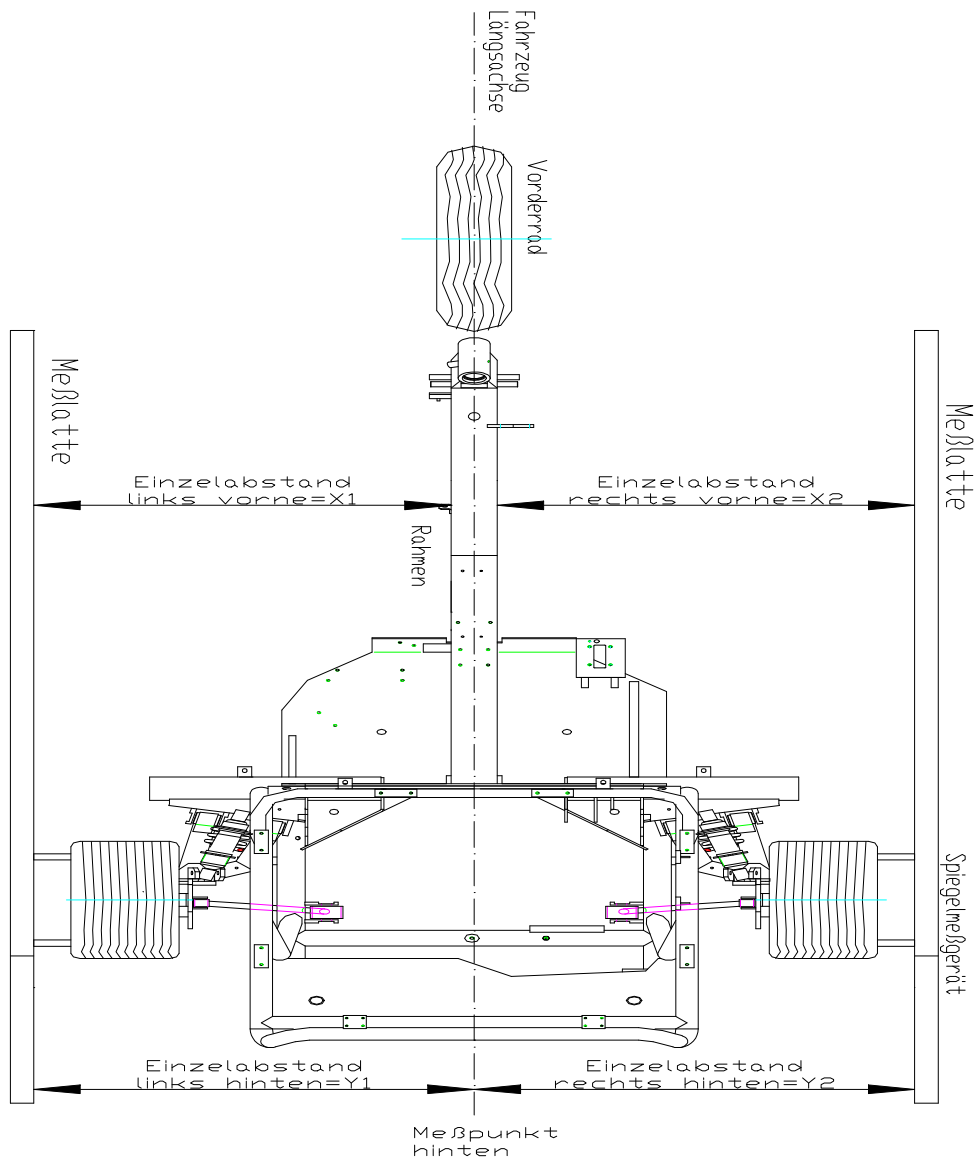
- vehicle must stand on level ground
- place rear wheels if possible on turn-tilt plate
- vehicle bottoming
- release brake

You make the adjustment of the wheel alignment over the outer excentric screw.

You should use for the adjustment an applicable wheel alignment analyser (graduated measuring rod, Laser-axle-analyser etc.)

After the adjustment tighten again the excentric screws (80 Nm)

Set value: Single wheel alignment 0 grade until max. $-0,25$ grade (wheel opens minimal to the front)



(Levelling rule or measuring band)
in extension of the frame's front end or calibrated middle of the vehicle

Wheel track measurement of Trikes

Pull up levelling rule at the rear wheels and measure the single distance front and rear.

Reference axis for the wheel track width is the longitudinal axle of the vehicle (centerline). The single distance left front (X1) and right front (X2) can be measured on the frame, which is considered as a safe reference for the longitudinal axle. X1 and X2 must have the same size.

That applies too the distance of the single distance Y1 und Y2. Also they get measured in reference to the centerline and must have the same size.

Now the single track can be adjusted.

3. Alignment threaded suspension strut

Tension of damper in mm (gauge x)

At Fighter 1,4 S und 2,0 S 30 mm

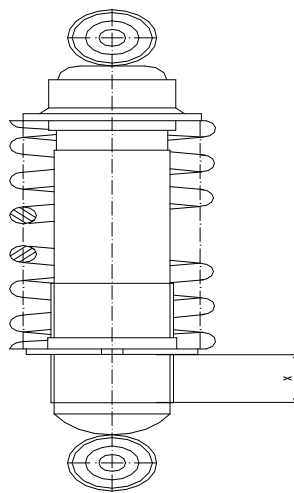
At Fighter 2,0 A 60 mm

At alloy semi-trailing axle VW 20 mm

At alloy semi-trailing axle with Ford engine 25 mm

At alloy semi-trailing axle Fun-Trike 0 mm / no tension

Measured by lower edge of the set screw to thread end part on the damper housing



3.11 HEADLIGHTS

a) Replacing the H4 headlight and parking light:

Release chrome ring and remove lamp insert. Take off the plug and rubber cover, and open the clamp. The lamp can now be taken out.

Hold the lamp by the cap and never touch the glass of a halogen lamp.

Parking light: 12V 5 W, metal cap, bayonet fitting.



The headlight setting should be adjusted by a qualified mechanic.

B) Swinging Headlights system

Loosening cap and put out lamp liner. Take off the plug and steel cap to access the bulb. Now you can pull out the bulb.

Hold the bulb by the cap and never touch the glass of a halogen bulb.
Change of the HB3 bulb with bajonett fitting.



3.12 COOLANT

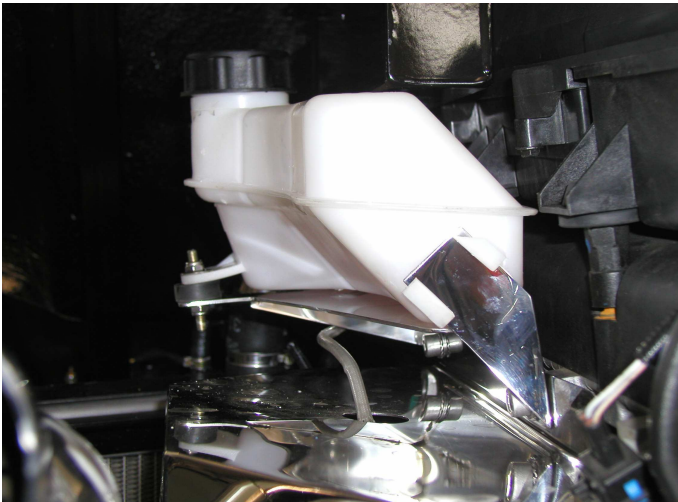
You can see the coolant capacities from the outside.

The air-fluid level should be at a cooled of engine between the MIN and MAX mark.
Generally refill at cool engine.

If you should have to fill up at hot engine you have to wait first 10 minutes to cool down the engine. First loosen the cap only a quarter rotation to leack the overpressure. Wait a little bit than you can open it completely. Refill 50% water and 50% coolant-concentrate (see technical data).



Never open at hot engine!



4.0 CLEANING

Clean your trike regularly, taking the opportunity to check for damage or wear.

Important:

Certain parts of the trike can be damaged by high water or air pressure.

The following items should not be cleaning with a high pressure hose (e.g. in coin-operated vehicle wash installations):

- Wheel hubs
- Ignition switches
- Main brake cylinders
- Instruments
- Handlebar-mounted controls
- Silencer aperture
- Electrosafe
- Air filter
- Generator
- Engine electronics

After cleaning the trike it should be thoroughly rinsed with fresh water. Cleaning agent residues can cause alloy parts to corrode. Wipe the trike dry, start the engine, and allow it to run for several minutes.

Important:

The braking efficiency of the trike may be affected immediately after washing. To avoid any risk, wait for a while before using.

Check the brakes before riding the trike. It may be necessary to allow the brakes to drag briefly to restore them to normal effectiveness.

4.1 CLEANING THE WHEELS

Metal and aluminium corrode faster if they are allowed to come into contact with dust, mud, salt etc. After use, clean the wheels with a wet sponge and mild soapsuds or car shampoo. Rinse off thoroughly afterwards with water and wipe dry using a clean cloth.

5.0 MAINTENANCE AND SERVICING

Maintenance work should only be carried out by authorised repair shops, Bosch servicing depots or by BOOM TRIKES service centres.

The following instructions assume that the trike is only used for its intended purpose. If the trike is run at higher speeds for longer periods, or under unusually wet or dusty conditions, servicing must be carried at more frequent intervals than those specified in the servicing schedule. Consult your BOOM TRIKES authorised dealer about any special measures to be undertaken to meet your own needs and requirements.

! If your trike has been involved in an accident, check all levers, cable linkages, brake pipes, fittings and other important parts for damage. Do not ride the trike if its safe use is adversely affected by damaged parts. Let your BOOM TRIKES authorised dealer check important items such as the chassis, suspension and steering for excessive play or damage that you cannot identify yourself.

Try to avoid to drive your Trike "in salt"

→ **Corrosion risk specially at alloy parts (winter/salt-water/seawater).**

Of course you can not avoid salt if you drive your Trike in the winter time. In this case please conserve all vulnerable parts very good and clean your Trike at least 1 time per week.

5.1 SERVICE-CHECKLIST

Maintenance intervals: No longer than 12 months – Inspection from 10.000 km on every 10.000 km
at 500 km or no later than 4 weeks after acquiring the vehicle at 10.000 km or no later than 12 months after acquiring the vehicle
and subsequently every 10.000 km or annually, to be carried out at the BOOM TRIKES factory, by BOOM TRIKES representatives, by a specialist repair shop authorised by BOOM TRIKES.

Mechanical work	ok	Not ok	Correct.
Top handlebar bracket bearing adjusted and greased			
Steering lock operation tested			
Fork bearing bushes correctly adjusted and forks checked for ease of action and freedom from play, domed fork nuts checked to ensure tightness.			
Forks greased			
Handlebar retaining bolt tightened to 90 Nm and handlebar bolts tightened to 30 Nm, handlebars checked for full movement in both directions. Driving mirror checked for tight fit.			
Mudguards tight fit (See that the distance to the wheel is min. 10 mm) Mudguard bolts must be underlaid with rubber disks. Mudguard mountings checked to ensure tightness, min. distance to the wheel (rear 20 mm)			
Damper bolts with 70 Nm checked and if necessary retightening.			
Tightening tork of rear wheel bolts 130 Nm It's necessary to retightening them after 50 km and check shaft drive (45 Nm)			
Look for running direction of the rear wheels			
Front wheel nut fixed by a locknut. Wheel must be smooth running and free from play.			
Function tests: - - lights / adjust if necessary - warning and monitoring lights - instruments - horn and additional equipment (alarm system)			
Check fluid levels: - brake fluid - gear oil - coolant / antifreeze			
Top side of vehicle: twist grips, pedals, brake lines, main wiring harness, visual checks for damage			
Clutch play: check to ensure 3 mm of play in release lever Ensure pedal (30 Nm) grease ball-shaped head			
Battery: check levels and charge, and correct if necessary			
Engine: check lines, hoses and wiring are correctly positioned, tight and undamaged			
Switching mechanism: check mode of operation and smooth running.			
V-belts: check tension and replace if necessary			
Air filter: replace if dirty, no later after every 60.000 km			
Crankcase venting: check/clean			
Exhaust bolts: check for tightness			
Accelerator/Clutch: oil, re-grease gearshift cables and linkage:			
Valve play, carb-urettor engine: set at 0.15 mm / with engine cold, inlet and exhaust			
Valve play, inj. engine: adjustment not required (hydro-tappet)			
Spark plugs: check and replace if necessary, no later after every 60.000 km			
Distributor cap, ignition leads			
Fuel tank: check for leak tightness . Look for chafe marks and if necessary replace lines.			

Fuel filter:	replace every 40,000 km			
Engine oil and oil filter:	replace every 20,000 km SAE 5w-30 (SAE 10W-40, SAE 5W-40) According to Ford specification WSS-M2C913-B ACEA A1/B1 and/or ACEA A3/B3)			
Body work:	check body, relay and seat on tight fit and damages			
Brake system:	Visual examination for lining wear (if necessary remove wheels)			
Main brake (front/rear):	Visual examination for lining wear (also discs) Check for smooth running and for constant pull Ensure air play brake pedal min. 2mm (30 Nm) Check brake fluid level Check leak tightness (step ca. 30 seconds with ¾ load on the pedal) Check lines for chafe marks (min. distance to frame ca. 5mm)			
Fixing brake:	Check on evenly movement. The fixing brake should be completely tightened after 4 rasters. Check brake cables (laying/damaging)			
Electrical system:	Check connection assembly, mode of operation and laying.			
Any modification at the electrical system leads to lose the guarantee!				
Underside of vehicle:	Check gearbox, lines, hoses, wiring, axle shafts and packing to ensure they are correctly positioned, tight and undamaged Rubber panel in front of starter			
Wheels and tyres:	Check air pressure according to tyre type and check tyres for damage and running direction			
Check tyre tread:	Tread depths: F: _____ RR: _____ RL: _____			
Wheel nuts:	Tighten to specified torque (130 Nm)			
Fuel injected engine:	Error diagnosis with Ford (compatibel) diagnosis instrument			
Make a test drive, at least 25 km and clean vehicle.				

Additional maintenance (in consultation with customer and subject to separate charge)	OK	n. OK	Cor.
Replace brake fluid annually (DOT 4)			
When replacing brake fluid or when changing front or rear brake linings/discs, carry out visual examination of entire brake system to ensure it is not leaking and is in good condition			

5.2 SERVICE RECORD

Warranty 2 years*

*except for vehicles used for rentals:
1 year

500 Km inspection	
Or at the latest 4 weeks after acquiring the vehicle. Service stamp:	
Odometer reading (in km):	Date:

10.000 km inspection	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

20.000 km inspection	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

30.000 km inspection	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

40.000 km inspection	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

Counterfoil for vehicle seller

(send to BOOM TRIKES within 2 weeks after service)

500 Km inspection	
Or at the latest 4 weeks after acquiring the vehicle. Service stamp:	
Odometer reading:	Date:
Name:	Chassis-number:

10.000 km inspection	
Or annually. Service stamp:	
Odometer reading:	Date:
Name:	Chassis-number:

20.000 km inspection	
Or annually. Service stamp:	
Odometer reading:	Date:
Name:	Chassis-number:

30.000 km inspection	
Or annually. Service stamp:	
Odometer reading:	Date:
Name:	Chassis-number:

40.000 km inspection	
Or annually. Service stamp:	
Odometer reading:	Date:
Name:	Chassis-number:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Warranty 2 years*

*except for vehicles used for rentals:

1 year

50.000 km inspection	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

60.000 km Service	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

70.000 km Service	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

80.000 km Inspection	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

90.000 km Inspection	
Or annually. Service stamp:	
Odometer reading (in km):	Date:

Counterfoil for vehicle manufacturer

(send to BOOM TRIKES within 2 weeks after service)

----- ✂

50.000 km Inspection	
Or annually. Service stamp:	
Odometer reading: Date:	
Name:	Chassis-number:

60.000 km Inspection	
Or annually. Service stamp:	
Odometer reading: Date:	
Name:	Chassis-number:

70.000 km Inspection	
Or annually. Service stamp:	
Odometer reading: Date:	
Name:	Chassis-number:

80.000 km Inspection	
Or annually. Service stamp:	
Odometer reading: Date:	
Name:	Chassis-number:

90.000 km Inspection	
Or annually. Service stamp:	
Odometer reading: Date:	
Name:	Chassis-number:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

Name:

Street:

Postal code/city:

Phone:

1.registration:

purchased at:

at:

✂ -----

5.5 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 10.000 km, or at the latest 12 months after purchase of the vehicle
 - cc) and after that every 10.000 km or annually
 - dd) For Fighter X11/12, Fun 500, Mustang, V1/V2, Intruder, Shadow, Sportster 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.

7.0 ADVICE ON PUTTING THE VEHICLE IN STORAGE

Special precautions should be undertaken before storing the vehicle for an extended period of time, e.g. during the winter, to avoid any negative consequences of such storage. Furthermore any repairs that are necessary should be carried out before putting the vehicle in storage. If this is not done the need to carry out the repairs may be forgotten when the trike is used again.

Taking the vehicle out of service

1. Wash and dry the trike. Wax all painted surfaces. Wipe rust-inhibiting oil on all chrome parts, or treat them with chrome polish.
2. Fill up the fuel tank, and replace filler cap.
3. Remove battery and store away from frost or direct sunlight. Slowly charge battery once a month.
4. Pump up tyres to recommended pressures.
5. Store trike in an unheated room, free of dampness and with minimal daily temperature fluctuations.

Important:

If the vehicle is to be stored for more than six months it is advisable to place the vehicle on blocks to relieve the load on the rear tyres (disconnect fuel tap and let the engine run out until standstill).

Returning the Vehicle to Normal Service:

1. Clean the trike. Change engine oil if the vehicle has been in storage for more than 3 months.
2. If necessary charge and install the battery.
3. Carry out all the necessary checks before riding. Test-ride the trike with reduced throttle in a secure, traffic-free area.
4. In the case of models with fuel injection, a journey of approx. 8 km is required in order to reprogram the module.

8.0 TECHNICAL DATA

Type plate:

The type plate is located on the right hand side of the chassis.

The chassis number is stamped next to the type plate.



Vehicle dimensions:

Length: 355 cm
Width: 182 cm
Height: 125 cm (depending on rake of forks), 145 cm if trunk is installed

Weights in kg:

	Family	Low Rider
perm. axle load, front	250	250
perm. axle load, rear	750	750
unladen weight	700	700
perm. weight fully laden	1000	1000
max. load	300	300
drawbar load	350	350

Capacities:

braking system	0.25 ltr. DOT 4
main tank	38 ltr.

Torque settings:

Exhaust bolts	20 Nm
Aluminium rim	130 Nm

8.1 ENGINE

Technical data:

Engine:	Ford Zetec SE FY3A55 / 75 PS	Ford Zetec SE FYJA / 100 PS
Cubic capacity:	1596 ccm	1596 ccm
Engine power at 1/min:	55 kW (75 hp) 5250	74 kW (100 hp) 6000
Max torque at 1/min:	128 Nm 3300	146 Nm 4000
Essential fuel:	Super lead-free ROZ 95	Super lead-free ROZ 95
Max rev 1/min:	6450	6450
Max overspeed short-term 1/min:	6800	6800
Idle-running speed 1/min:	700	700
Fuel-mixture generation:	Einspritzanlage	Einspritzanlage
Firing order:	1,3,4,2	1,3,4,2
Spark plug:	Motorcraft AYFS 32CJ	Motorcraft AYFS 32CJ
Spark gap:	1,3	1,3
Ignition system:	Electronic	Electronic
Valve play (cold):	Hydraulic	Hydraulic
Oilfilter	Motorcraft EFL 10	Motorcraft EFL 10
Fuel consumption:	7 – 9 l/100 km	7 – 9 l/100 km

Filling quantity:

Engine oil with filter:	4,05 l SAE 5W30	4,05 l SAE 5W30
without filter:	3,75 l compl. synthesised	3,75 l compl. synthesised
Kühlsystem:	5,0 litre 50 % water and 50 % Motorcraft Super Plus 2000 according to Ford specification WSS-M97 B44-D	5,0 litre 50 % water and 50 % Motorcraft Super Plus 2000 according to Ford specification WSS-M97 B44-D

 Alterations to the basic setting may cause complete engine failure. Fault identification and basic setting can only be carried out by a specialist Ford dealer.

If a sensor fails the control unit will automatically switch to the emergency running program. This will be apparent because the engine will run irregularly with substantially reduced performance. A specialist repair shop should be sought immediately.

Do not apply full throttle as this may damage the catalytic converter!

BOOM TRIKES wishes to point out that it does not accept liability in the event of any unqualified alterations or adjustments or incorrect operation or for any ensuing damage. The same applies to incorrect maintenance by unauthorised persons!

8.2 GEARBOX

Gearbox	Control gear 113
Code letter:	AH, AT
Transmissions (with numbers of teeth)	
1. gear:	3,78 (9:34)
2. gear:	2,06 (17:35)
3. gear:	1,26 (50:63)
4. gear:	0,93 (58:54)
Reverse gear:	3,79 (12:17) x 15:40)
Axle drive:	3,875 (8:31)
Filling quantity (litres)	
New filling:	3,0
Changing:	2,5
Full synthetic oil	
SAE 75 W 90	

9.0 ELECTRICAL CIRCUITS

If any component or section of the electrical system fails, first check the fuses, and ensure that wires to the part in question are properly connected. In the event of a short circuit isolate the battery by releasing the nut on the earth strap.

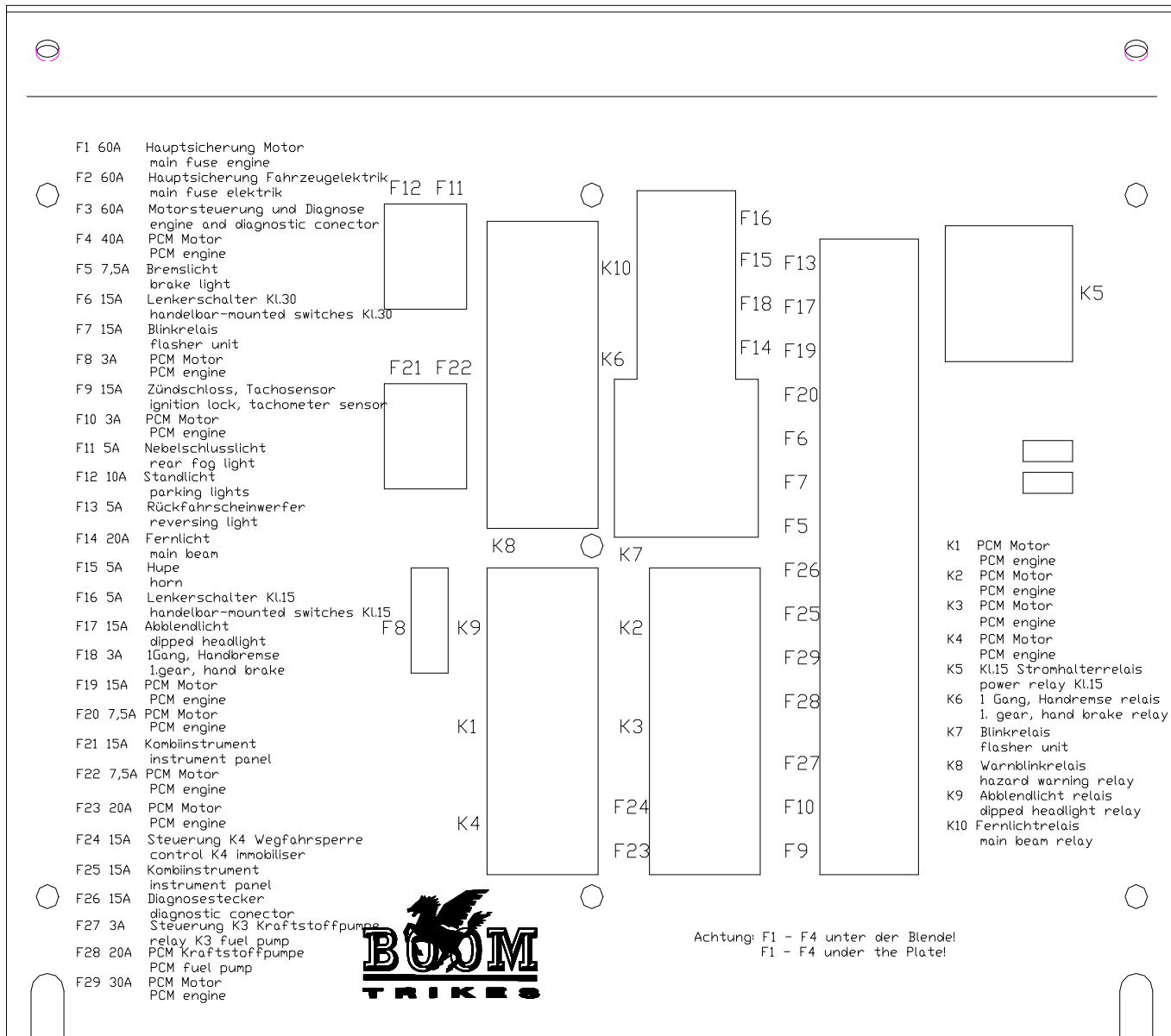


Any modifications at the electronical system leads to lose the guarantee!

Any additional incorrect installation of radio, fanfare etc. can cause the complete damage of the control unit!

9.1 PLAN OF FUSES

To open the fusebox unscrew the screws of the glass cover.

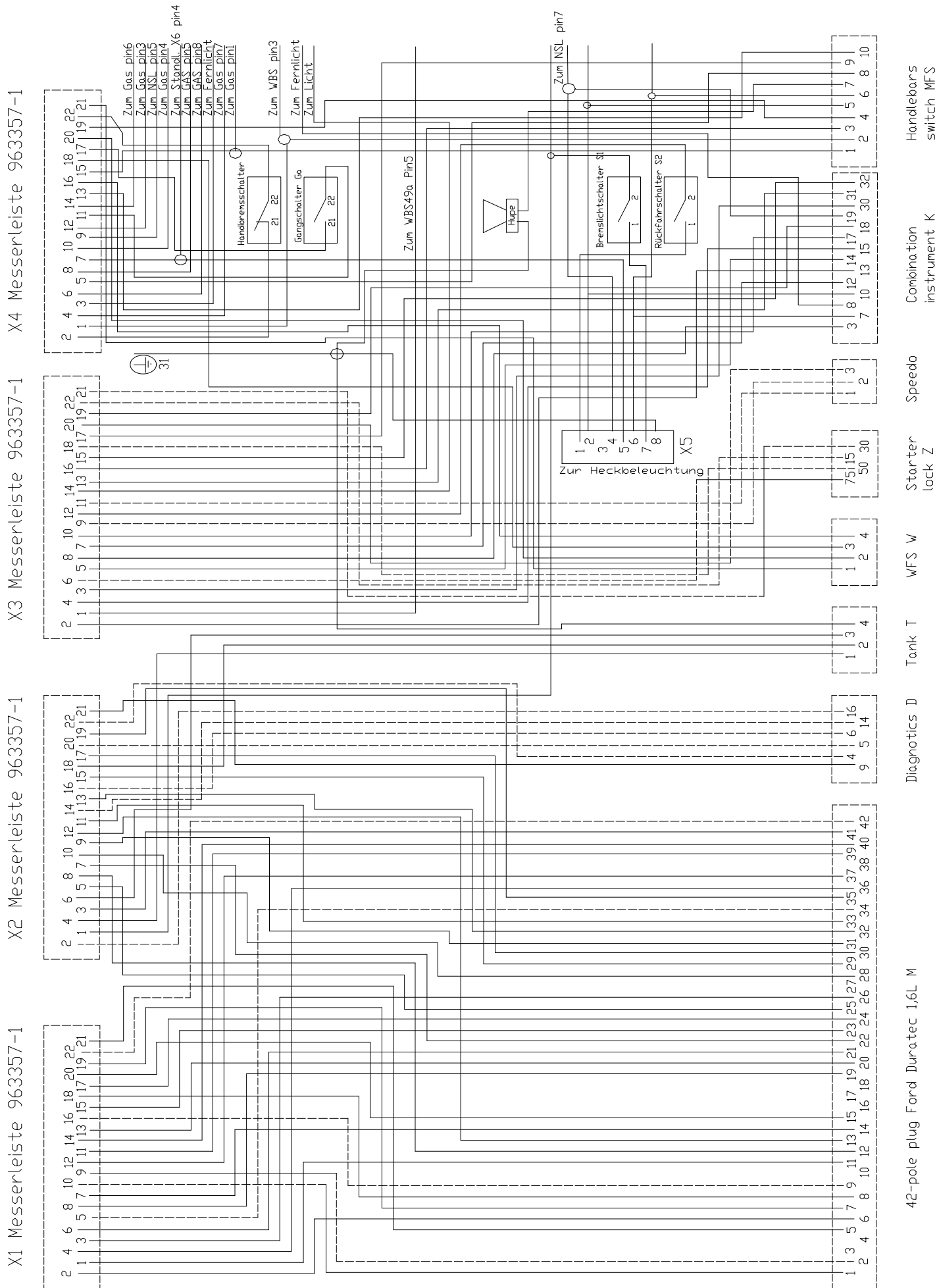


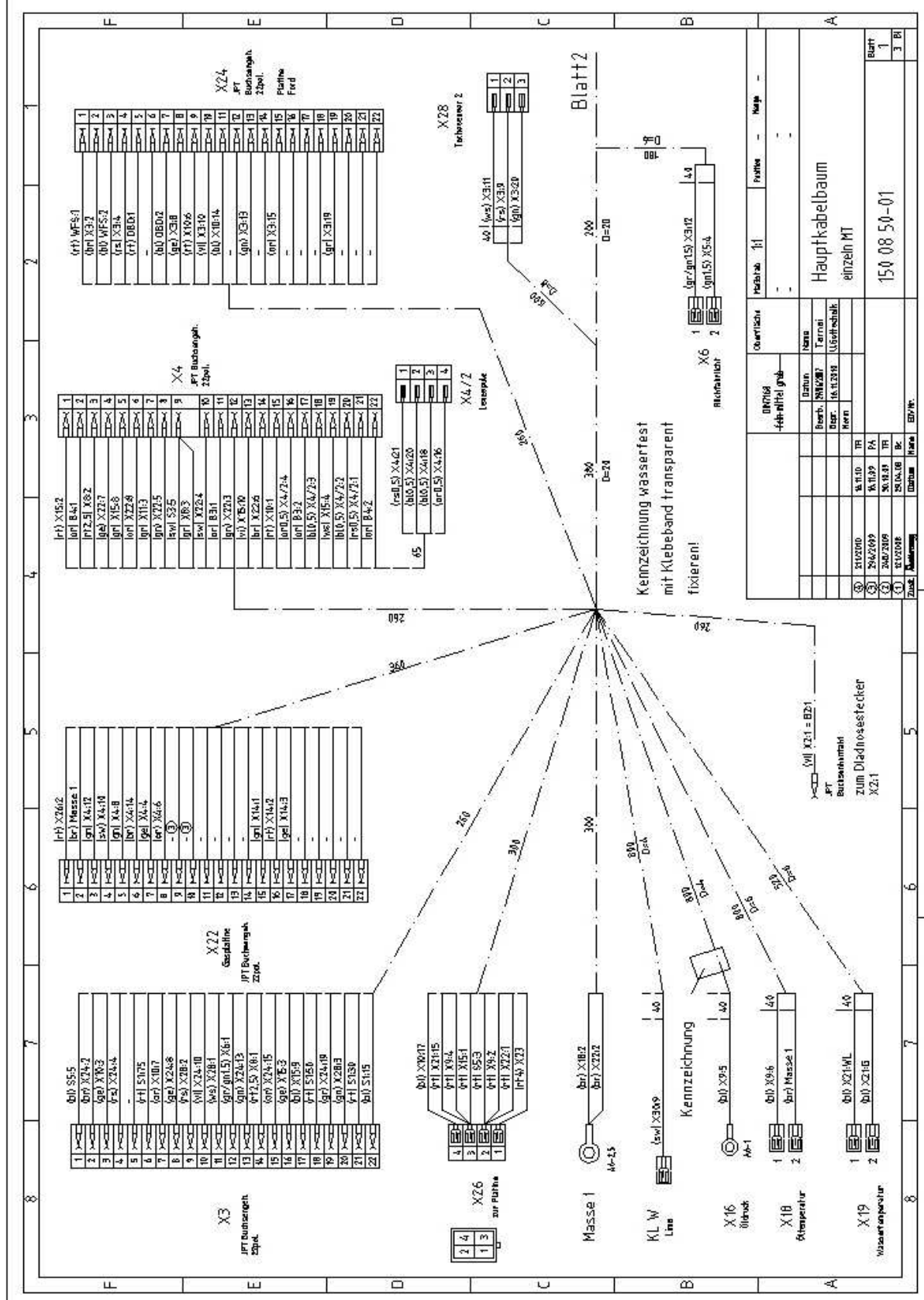
Fuses- and relay table

Fuse number	Ampere	Operation
F1	60A	Main fuse engine
F2	60A	Main fuse control circuit
F3	60A	Engine control unit and diagnostic
F4	40A	PCM engine
F5	7,5A	Brake light
F6	15A	Steady plus handle bar switch
F7	15A	Control flashing light relay
F8	3A	PCM engine
F9	15A	Ignition lock speed sensor
F10	3A	PCM engine
F11	5A	Rear fog lamp
F12	10A	Parking light
F13	5A	Reverse light
F14	20A	Full beam
F15	5A	Horn
F16	5A	Handlebar-mounted switches clamp 15
F17	15A	Dipped headlight
F18	3A	Control 1. Gear hand brake
F19	15A	PCM engine
F20	7,5A	PCM engine
F21	15A	Instrument panel
F22	7,5A	PCM engine
F23	20A	PCM engine
F24	15A	Control K4 immobiliser
F25	7,5A	Instrument panel
F26	15A	Diagnostic connector
F27	3A	Control relay K3 fuel pump
F28	20A	PCM fuel pump
F29	30A	PCM engine

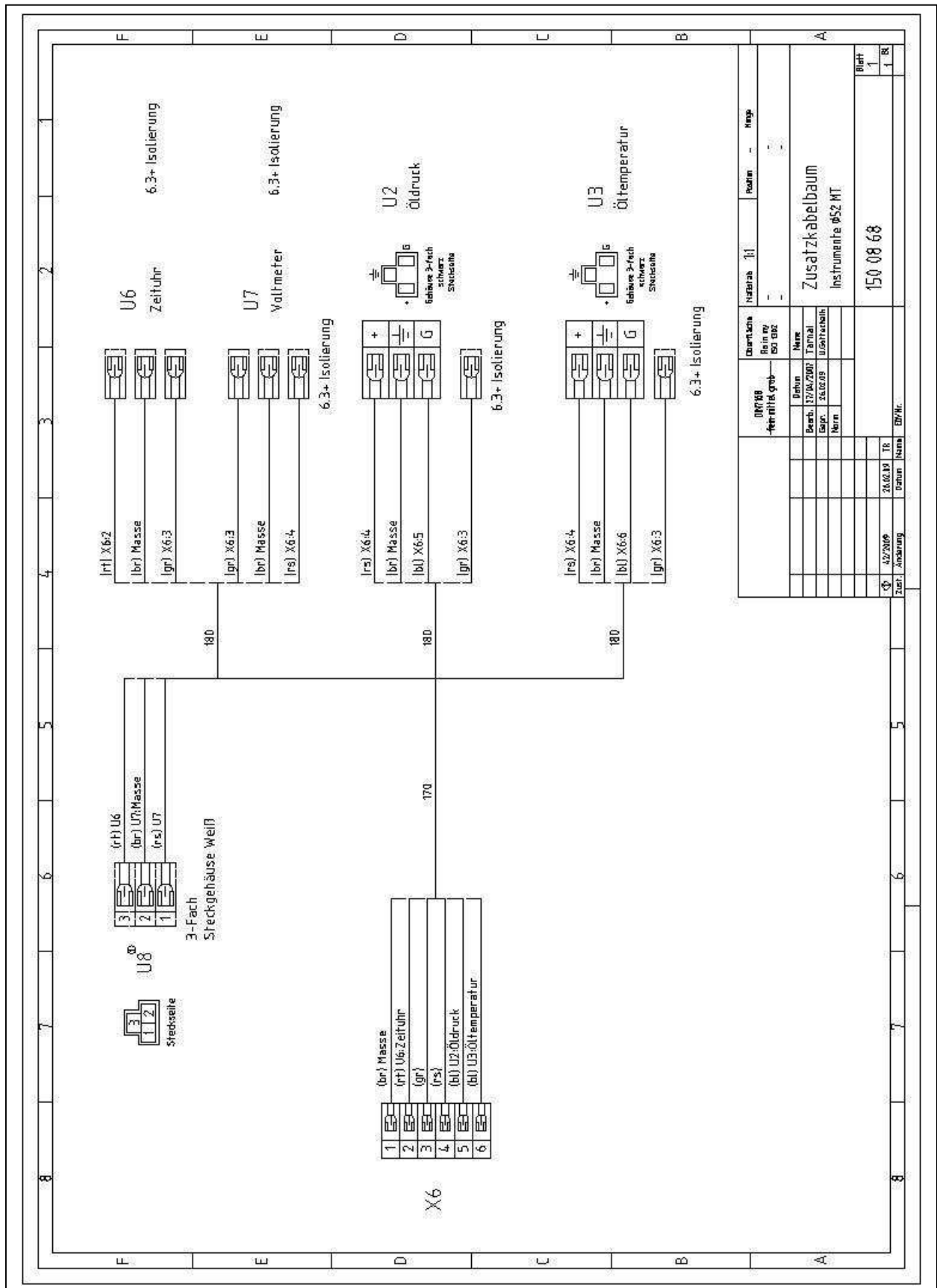
Relay number	Operation
K1	PCM engine
K2	PCM engine
K3	PCM engine
K4	PCM engine
K5	Control clamp 15 high current relay
K6	Control 1. Gear hand brake
K7	Flashing light relay
K8	Control warning lights
K9	Light
K10	Full beam

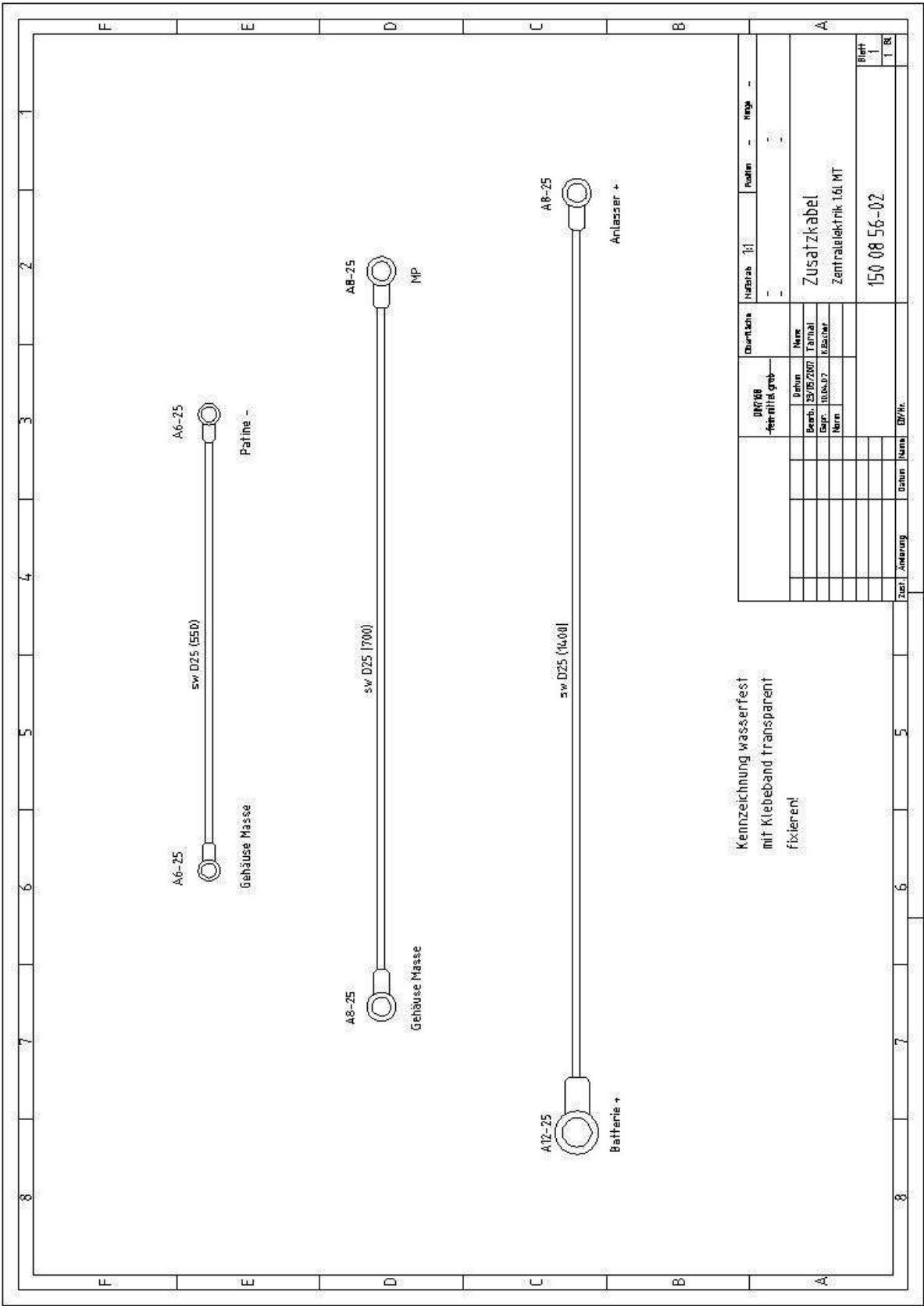
9.2 CIRCUIT DIAGRAMMS

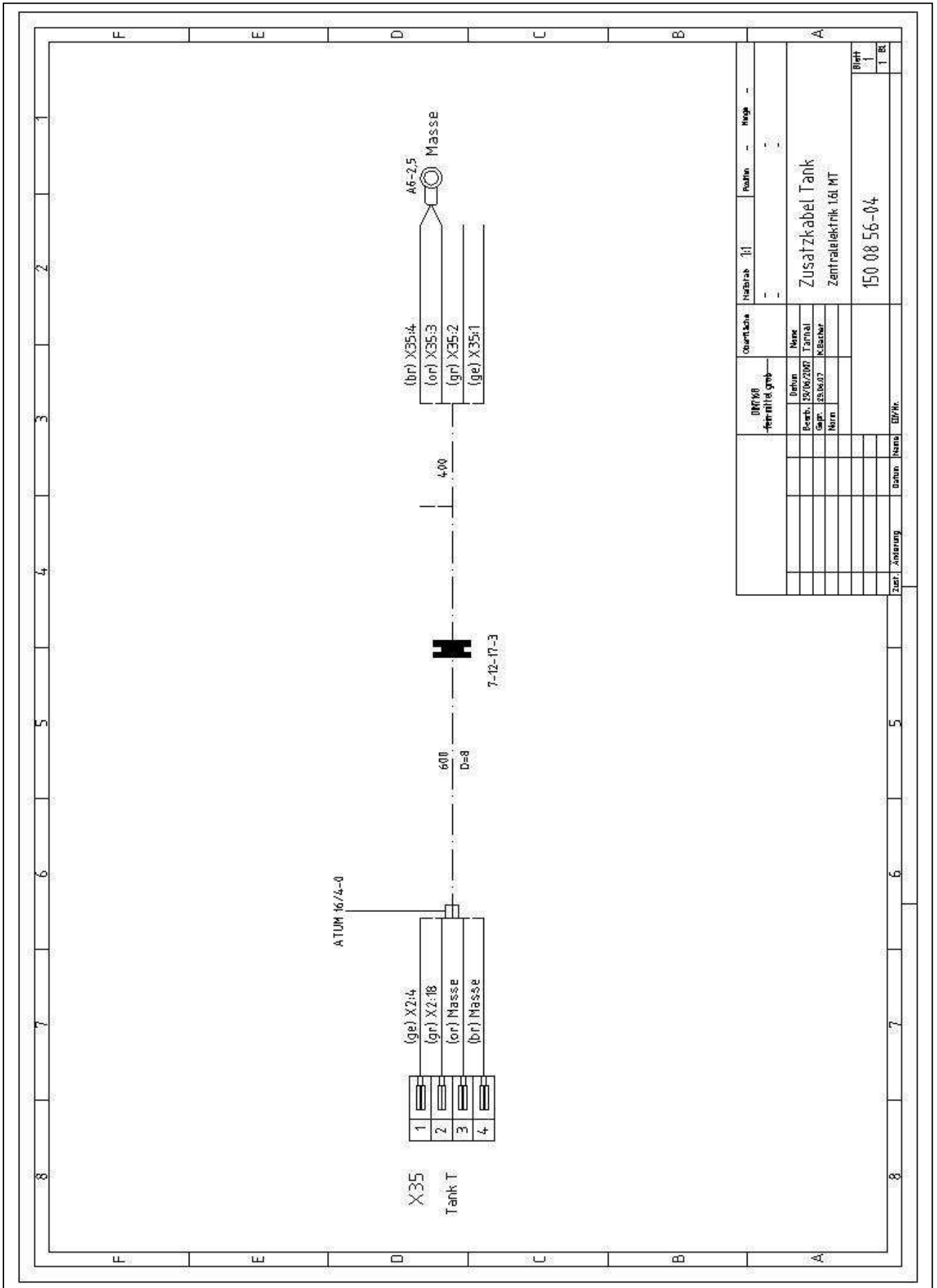












10.0 ADDITIONAL LOADS, ACCESSORIES

When attaching and riding with accessories and luggage the utmost care must be taken to avoid accidents. Additional accessories and luggage can adversely affect the stability, performance and safe handling of a trike, which should be ridden at a considerably reduced speed. Remember that the factors referred to above can impair the safe operation of the vehicle on the road even more by the use of non-standard accessories, if the vehicle is incorrectly loaded, if the tyres are badly worn, if the trike is not maintained properly, or if the roads are in a poor condition, during bad weather etc. You should consider all these factors before adding accessories or loading luggage onto your trike.

The total weight of the rider, passengers, luggage and accessories must not exceed the permitted maximum load:

300 kg in the case of the Low Rider/Family*

*according to equipment

If only one passenger is carried on the Family, he or she should be seated in the middle behind the driver.

Accessories

All original BOOM TRIKES accessories available for your trike have been specially developed for that model and tested on it. BOOM TRIKES have not tested your vehicle to establish whether its handling is adversely affected by adding non-standard accessories. It is therefore your responsibility to find out about the risks and hazards caused by using non-standard accessories.

The following factors must be taken into account:

1. Check carefully to ensure that the accessory does not obscure any lights, affect ground clearance, free movement of the handlebars, or the operation of any control levers.
2. In dangerous situations any accessories that affect the seating position, causing the hands or feet to be further away from the controls, may delay reaction times.
3. Do not install any electrical accessories which could overload the electrical system. Especially at night, a blown fuse may cause the lights to fail, or could cause the engine to cut out in heavy traffic.

Alterations to the trike or the removal of original parts may make the trike unsafe or illegal. The Road Traffic Regulations must be observed at all times.



**In no case fit the chromed luggage rack on the mudguards!
→ it can lead to a breakage of the rear mudguards mountings!**

10.1 OILS, LUBRICANTS AND FLUIDS

Engine oil:	SAE 5 W 30	Ford WSS-M2C913-B / ACEA A1/B1 or ACEA A3/B3
Gear box oil:	Full synthetic oil SAE 75 W 90	
Cooler fluid:	Motorcraft Super Plus 2000 WSS-M97 B44-D , according to Ford specification mixing.	
Steering head/ Wheel bearing grease:	Multi-purpose, NLGI category 2, K2K-30 to DIN 51502	
Clutch/throttle cable:	Lubricate with non-acid penetrating oil	
Brake fluid:	DOT 4	

When cleaning the vehicle, use only mild soapy water
(carwash / steam-cleaning equipment).

If using steam-cleaning equipment **do not allow steam/water to come into direct contact** with the following parts:

Air filter, e-safe, wheel bearings, generator, steering head bearings,
any switchgear components.

Clean chrome and stainless steel parts with chrome polish, for bodywork use normal car wax.

10.2 Jacking points

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



USEFUL INFORMATION WHEN MAKING REFUELLING STOPS

As a source of useful information when refuelling, you can enter the details about your own vehicle in the following table:

Fuel	Super unleaded ROZ 95 of course Super Plus unleaded (98 octane) can also be used
------	--

Tank capacity:	38 litres
----------------	-----------

Engine oil	Grade (viscosity)
------------	-------------------

	<input type="text"/>
--	----------------------

Max. pressure of cold tyres in bar = kp/cm^2
--

<input type="text"/>	Front
----------------------	-------

<input type="text"/>	Rear
----------------------	------

Tyre size:	<input type="text"/>	Front
------------	----------------------	-------

<input type="text"/>	Rear
----------------------	------