BIMOTA TESI H2

Motorcycle
Assembly & Preparation Manual

Foreword

For so special bike we decide to delivery also if not so efficiency nearly fully assembled but good setup procedures can prevent needless warranty claims and give customers a greater sense of confidence in Bimota and their Bimota Dealers. This Assembly and Preparation Manual explains step by step procedures of the following items for all Bimota TESI H2.

1. Uncrating
2. Preparation

The selling dealer assumes sole responsibility for any unauthorized modifications prior to sale. Refer to your Service Binder for any Service Bulletins specifying Factory Directed Modifications (Special Claims) which must be performed before the vehicle is ready for sale.

Whenever you see the following symbols heed their instructions! Always follow safe operating and maintenance practices.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

NOTE

○ *NOTE indicates information that may help or guide you in the operation or service of the vehicle.*

Bimota spa accepts no liability for any inaccuracies or omissions in this publication, although every possible measure has been taken to make it as complete and accurate as possible. All procedures and specifications subject to change without notice.

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Uncrating

Opening Crate

⚠ WARNING

Crates have sharp edges and may have nails or screws that can cause cuts and injury. Always wear protective gloves, boots and eye protection when uncrating to prevent injury.

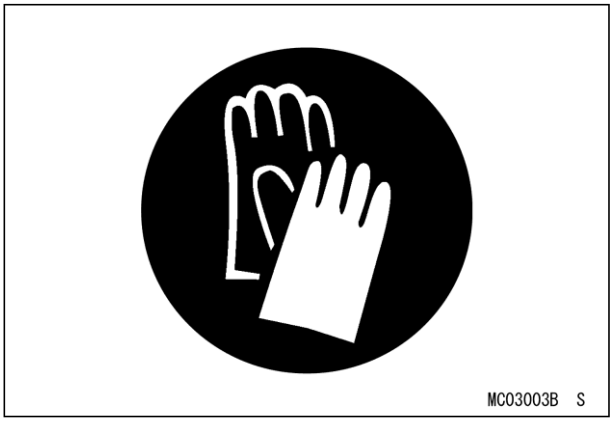


Figure 1 Screwdriver

⚠ WARNING

Figure 2 Torx wrench adapter

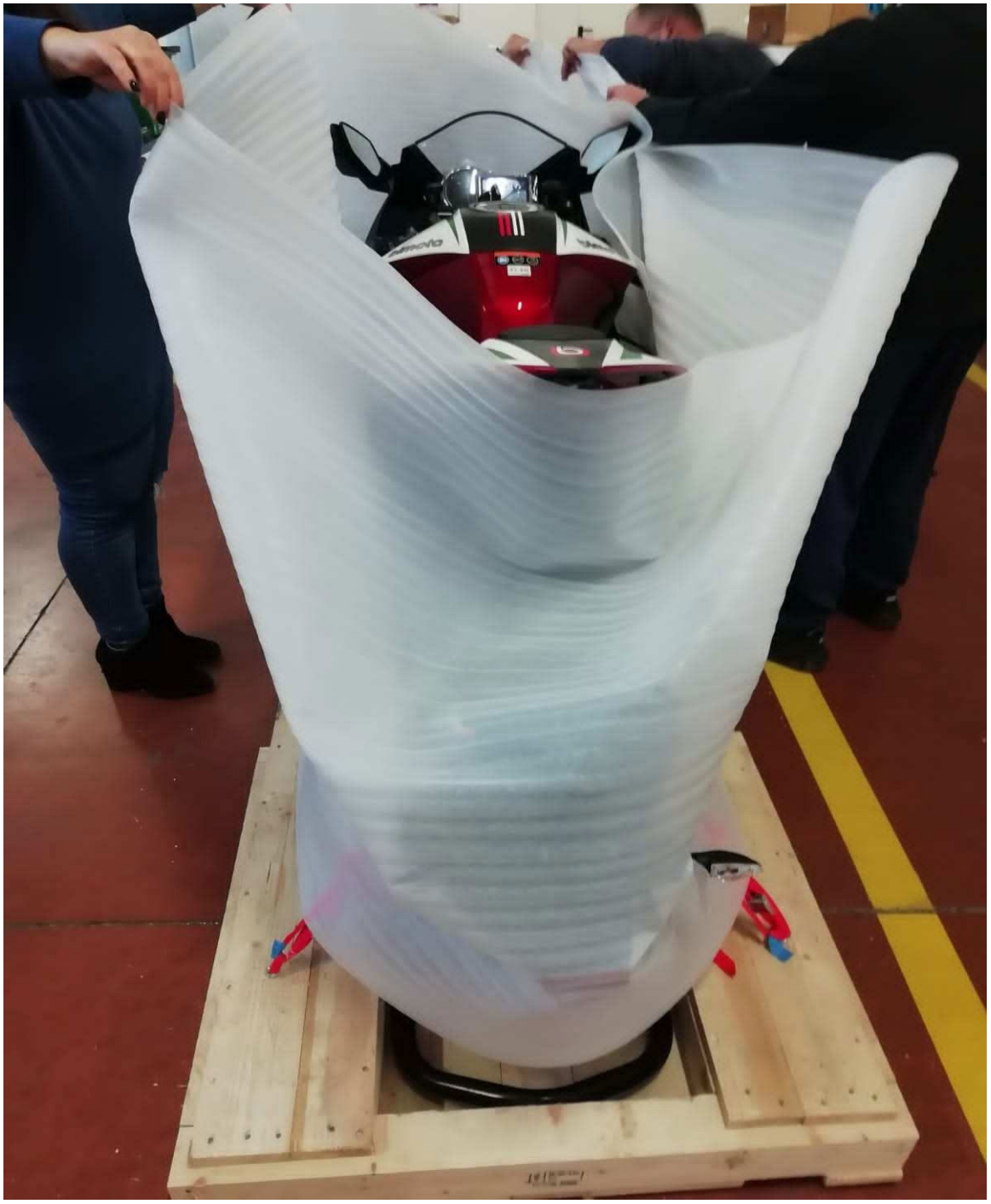
The steel crate panel plates and fasteners have sharp edges. Always wear protective gloves, boots and eye protection when uncrating to prevent injury.

2. Then it is the turn of the small panels: the case looks like in the image on the side.

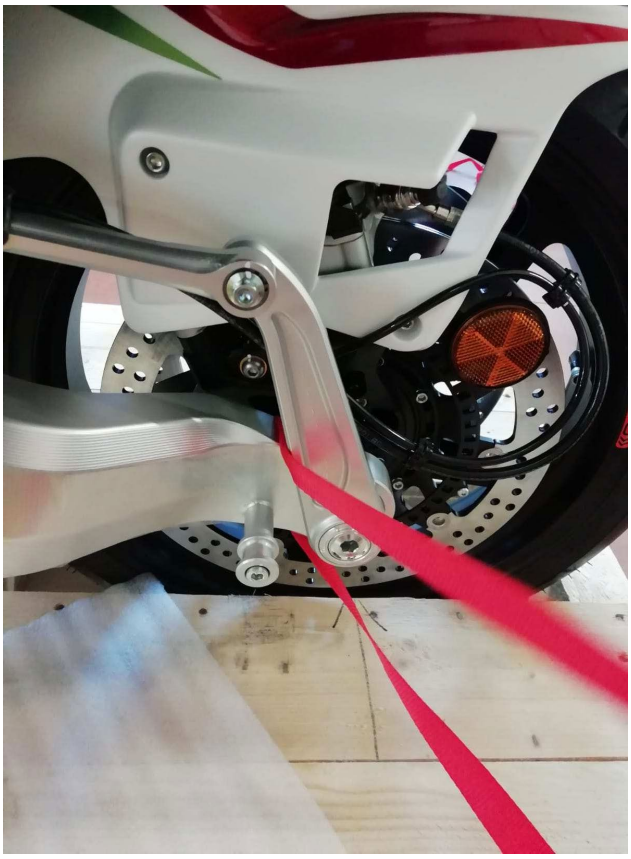
3) The wooden frame is connected with screws to the side panels in the points identified by the arrows and therefore to open the case you need to unscrew these screws.

4. Then unscrew the screws that connect the wooden frame to the base of the crate.

5) Then remove the bubble wrap film that wraps the bike.



6) The 4 anchoring straps are removed, 2 per wheel.



Inside the case, in addition to the unit itself, there's the kit supplied by Bimota which consists in the Arrow titanium exhaust, the Bimota bikes cover , the Tesi main stand , the tool to adjust eccentric of footrest and seat eight

To open safely the wooden case you need a Phillips screwdriver.
1) The top panel is the first that has to be removed by unscrewing the screws on all edges.

Parts Check

●Open the parts box, and check the parts against the illustrations.

No	Part Name	Qty
1	Titanium exhaust system	1
2	Tesi main stand rear wheel	1
3	Tesi main stand front/rear wheel	1
4	Bike cover	1
5	Eccentric tool adjuster	1
6	Front wheel disassembly tool	1

Titanium exhaust system

Tesi main stand rear wheel

Tesi main stand fornt/rear wheel

Bike cover

Eccentric tool adjuster

Front wheel disassembly tool

Preparation

Battery Service

The battery used in this motorcycle is a sealed type and never needs to be refilled. Follow the procedure for activating a new battery to ensure the best possible battery performance.

Seat

The seat need to be removed to reach the battery.

> **⚠ WARNING**
>
> The muffler quickly becomes very hot soon after the engine is started and can cause serious burns. To avoid burns, be careful not to touch the muffler when op- erating the seat lock.

A. Left screws
B. Rear screw

- Unscrew the 7 screws (3 left side, 3 right side, 1 rear) and remove upper body

A. Fuse
B. Battery
C. Rubber support
D. Dignostic connector
E. Starting relay

The battery installed in this motorcycle is sealed type, so it is not necessary to check the battery electrolyte level or add distilled water. Connect the positive (+) cable to the Positive (+) terminal, and black cable to the negative (-) terminal.

Battery Maintenance

It is the owner's responsibility to keep the battery fully charged. Failure to do so can lead to battery failure and leave you stranded.
If you are riding your vehicle infrequently, inspect the battery voltage weekly using a voltmeter. If it drops below 12.8 volts, the battery should be charged using an appropriate charger (check with your Bimota dealer). If you will not be using the motorcycle for longer than two weeks, the battery should be charged using an appropriate recharger. Do not use an automotive type quick charger that may over-charge the battery and damage it.

NOTE

- Leaving the battery connected causes the electrical components (clock etc.) To make the battery discharged, resulting the overdischarge of the battery. In this case, the repair or replacement of the battery is not included in the warranty. If you do not drive for four weeks or more, disconnect the battery from the vehicle.

NOTICE
Installing the negative (–) cable to the positive (+) terminal of the battery or the positive (+) cable to the negative (–) terminal of the battery can seriously damage the electrical system.

Battery Charging

Charge the battery following the instructions of your battery charger. The charger will keep the battery fully charged until you are ready to reinstall the battery in the motorcycle (see Battery Installation).

Clean the battery using a solution of baking soda and water.
Be sure that the cable connections are clean. Put a light coat of grease on the terminals to prevent corrosion.

Cover the positive (+) terminal with the red cap ed install seat.

Engine Oil

Oil Level Inspection

- If the engine is cold, start the engine and run it for several minutes at idle speed.
- Stop the engine, then wait several minutes until the oil settles.

NOTICE

Racing the engine before the oil reaches every part can cause engine seizure.

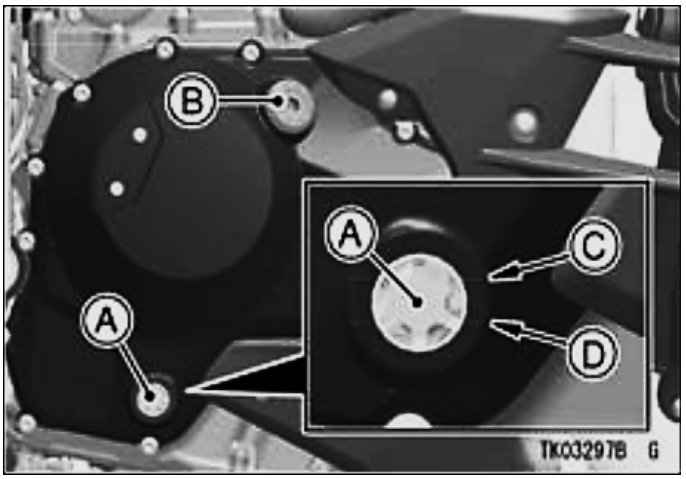
- Check the engine oil level through the oil level inspection window. With the motorcycle held level, the oil level should come up between the upper and lower level lines next to the oil level inspection window.
- When installing the oil filler cap, replace its O-ring with a new one.

Oil and/or Oil Filter Change

- The oil change and oil filter replacement should be done by an authorized Bimota dealer.

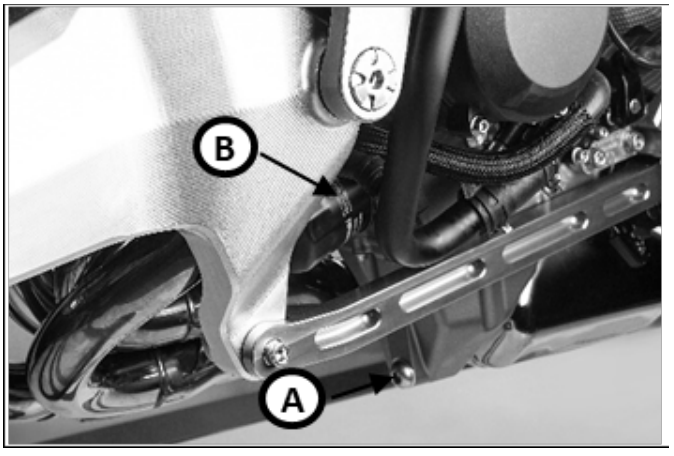
⚠ WARNING

Engine oil is a toxic substance. Dispose of used oil properly. Contact your local authorities for approved disposal methods or possible recycling.



A. Oil Level Inspection Window
B. Oil Filler Cap
C. Upper Level Line
D. Lower Level Line

- If the oil level is too high, remove the excess oil through the oil filler opening using a syringe or some other suitable device.
- If the oil level is too low, add oil to reach the correct level. Use the same type and brand of oil that is already in the engine.



A. Engine Oil Drain Bolt

B. Oil Filter

Tightening Torque

Engine Oil Drain Bolt:
25 N·m (2.5 kgf·m, 18 ft·lb) Oil
Filter:
17 N·m (1.7 kgf·m, 13 ft·lb)

Recommended Engine Oil

Type: API SG, SH, SJ, SL or SM with JASO MA, MA1 or MA2 rating Viscosity: SAE 10W-40

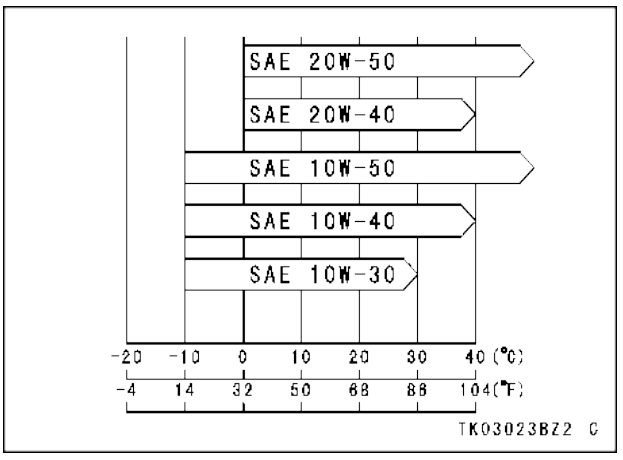
NOTE

- *Do not add any chemical additives to the oil. Oils fulfilling the above re-quirements are fully formulated and provide adequate lubrication for both the engine and the clutch.*

Engine Oil Capacity

3.9 L (4.1 US qt) [when filter is not removed] 4.4 L (4.7 US qt) [when filter is removed]

Although 10W-40 engine oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric conditions in your riding area.



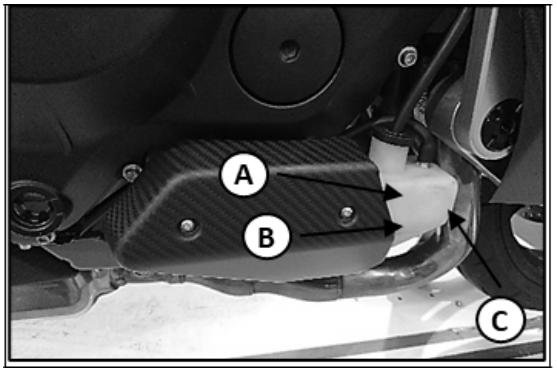
Coolant

Coolant Level Inspection

- Position the motorcycle so that it is perpendicular to the ground
- Check the coolant level through the coolant level gauge on the reserve tank located to the behind of the right middle fairing. Should be between the F (Full) and L (Low) level lines.
- If the amount of coolant is insufficient, add coolant into the reserve tank.

Coolant Filling

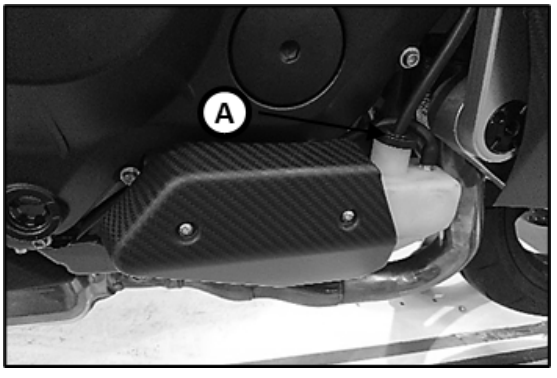
- Remove the tank cap.



A.F (Full) Level Line

B.L (Low) Level Line

C.Reserve Tank



A. Tank cap

- Remove the cap from the reserve tank and add coolant through the fill- er opening to the F (Full) level line.

Coolant Requirement

⚠WARNING

Coolant containing corrosion inhibitors for aluminum engines and radiators include harmful chemicals for human body. Drinking coolant can result in serious injury or death. Use coolant in accordance with the instructions of the manufacturer.

Use a permanent type of antifreeze (soft water and ethylene glycol plus corrosion and rust inhibitor chemicals for aluminum engines and radiators) in the cooling system. On the mixture ratio of coolant, choose the suitable one referring to the relation between freez- ing point and strength directed on the container.

NOTICE

If hard water is used in the system, it causes scale accumulation in the water passages, and considerably reduces the efficiency of the cooling system.

NOTE

- *A permanent type of antifreeze is installed in the cooling system when shipped. It is mixed at 50% and has the freezing point of–35°C(–31°F).*

Drive Chain

Drive Chain Lubrication

Lubrication is necessary after riding through rain or on wet roads, or any time that the chain appears dry.

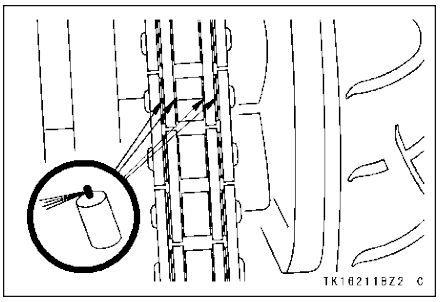
Use a lubricant for sealed chains to

Prevent deterioration of chain seals. If the chain is especially dirty, clean it using a cleaner for sealed chains following the instructions supplied by the chain cleaner manufacturer.

- Apply lubricant to the sides of the Rollers so that it will penetrate to the Rollers and bushings.

  Apply lubricant to the seals so that the seals will be coated with lubricant. Wipe off any excess lubricant.

  Wipe off any lubricant that gets on the tire surface.



Drive Chain Slack Inspection

Set the motorcycle up on its side stand.

- Clean the chain if it is dirty, and lubrificate.
- Rotate the rear wheel to find the position where the chain is tightest, and

  Measure the maximum chain slack by pulling up and pushing down the chain midway between the engine sprocket and rear wheel sprocket

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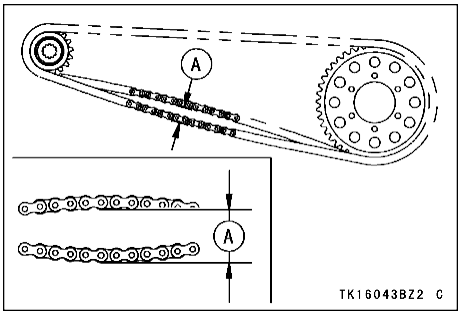


A. Chain Slack

- If the drive chain is too tight or too loose, adjust it so that the chain slack is within the standard value.

Drive Chain Slack

Standard: 25~35mm (1~1.35in.)

Drive Chain Slack Adjustment

Loosen the rear wheel axle

- Adjust left and right chain bolt to Realize the right tigh of chain
- Check that the mark on the chain adjuster are at the same position on the left and right side
- Rotate the wheel, measure the chain slack again at the tightest position, and readjust if necessary.
- Rotate both chain adjuster bolts to get right alignment of wheel.

⚠ WARNING
A loose clamp bolt can lead to an accident resulting in serious injury or death. Tighten the clamp bolts to the proper torque.

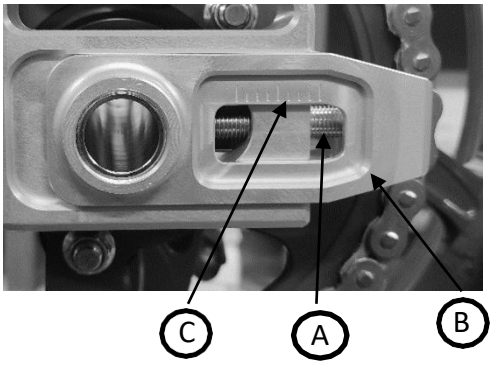
- Check the rear brake (see Brakes section in this chapter).

Brakes

If you feel there is something wrong when applying the brakes, have the brake system checked by an authorized Bimota dealer immediately.

Brake Fluid Level Inspection

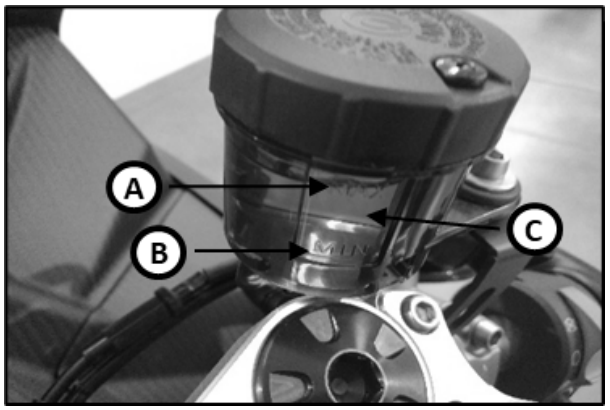
With the brake fluid reservoirs held horizontal, the brake fluid level must be kept between the upper and lower level lines.



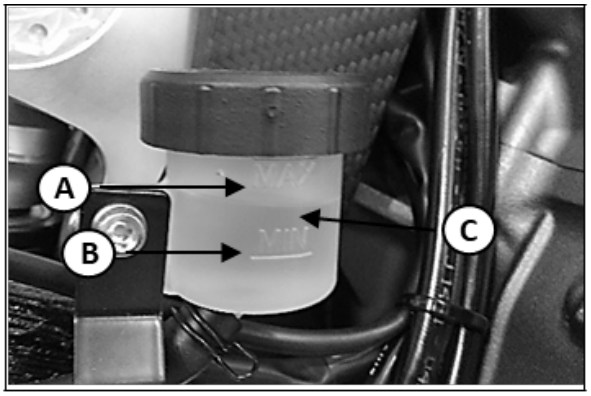
A.Chain Adjuster Bolt
B.Chain Adjuster
C.Marks

⚠ WARNING
Misalignment of the wheel will result in abnormal wear, and may result in an unsafe riding condition. Align the rear wheel using the marks on the swingarm or measuring the distance between the center of the axle and swingarm pivot.

⚠ WARNING
Air in the brake lines diminish braking performance and can cause an accident resulting in injury or death. If the brake lever or pedal feels mushy when it is applied, there might be air in the brake lines or the brake may be defective. Have the brake checked immediately by an authorized Bimota dealer.



A.Front Brake Fluid Reservoir
B.Upper Level Line
C.Lower Level Line



A.Rear Brake Fluid Reservoir
B.Upper Level Line
C.Lower Level Line

- If the fluid level is lower than the lower level line it may indicate that the fluid is leaking. In this case, have the brake system inspected by an authorized Bimota dealer.

Brake Light Switches

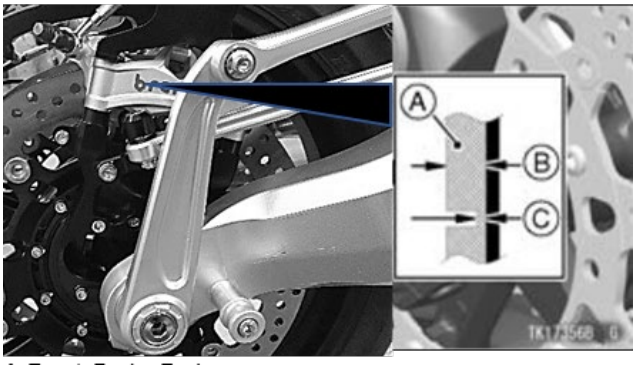
Brake Light Switch Inspection

Turn the ignitions witch on.

- The brake light should go on when the front brake is applied and or the rear brake is applied.
- I fit does not, ask your authorized Bimota dealer to inspect the front Brake lights witch and or the rear brake light switch.

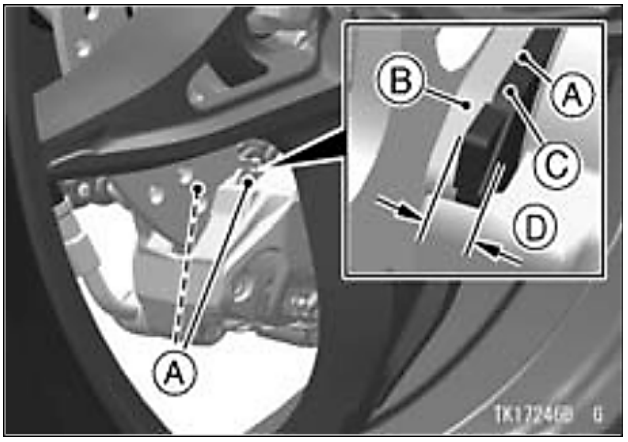
Brake Pad Wear Inspection

Inspect the brakes for wear. F or front disc brake caliper, if the thickness of either pad lining is less than 1 mm (0.04 in.), replace both pads in the caliper as a set. Pad replacement should be done by an authorized Bimota dealer.



A.Front Brake Pads
B.Pad Lining
C. 1 mm (0.04 in.)

For rear disc brake caliper, if the thickness of either pad lining including back plate is less than 4.5 mm (0.18 in.), replace both pads in the caliper as a set. Pad replacement should be done by an authorized Bimota dealer



A.Rear Brake Pads
B.Pad Lining
C.Back Plate D. 4.5 mm (0.18 in.)

Suspension System

Front shock absorber

There is no mounting instruction because the original Bimota setting is given as for this shock absorber.

Öhlins can accept the overhaul of your shock absorber at your cost. However, if the setting parts of the absorber is changed, it shall be excluded from Bimota warranty.

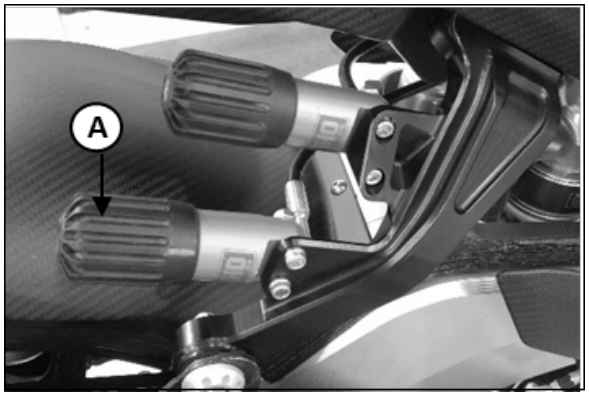
Spring Preload Adjustment

The adjuster is located above the muffler.

Standard

2mm In from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise to increase spring preload
- Turn the adjuster counterclockwise to decrease spring preload



A. Spring Preload Adjuster

Rebound Damping Force Adjustment

The adjuster is located at the upper end of the rear shock absorber.

Standard

14 clicks Out from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise with hexagonal wrench to increase damping force.

NOTICE
Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.

A. Rebound Damping Force Adjuster

Compression Damping Force Adjustment
The adjuster is located at the upper end of the rear shock absorber.

Standard

12 clicks Out from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise with hexagonal wrench to increase damping force.

NOTICE
Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.

A. compression Damping Force Adjuster

Rear Shock Absorber

⚠ WARNING
• Adjusting the Öhlins TTX36 shock absorber outside the spring preload and damper adjuster usable range could effect suspension balance and result in an unsafe riding condition. Adjust the spring preload and the damping only within the adjustable usable range. • When making spring preload and damping adjustments, change the adjuster only one click at a time and confirm the effect from the adjustment before making additional changes. Go back to the standard setting if necessary.

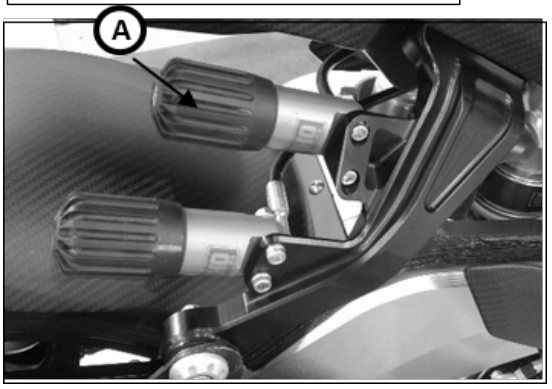
There is no mounting instruction be- cause the original Bimota setting is given as for this shock absorber.
Öhlins can accept the overhaul of your shock absorber at your cost. However, if the setting parts of the absorber
is changed, it shall be excluded from Bimota warranty.

Spring Preload Adjustment
The adjuster is located above the muffler.
Standard

2mm In from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise to increase spring preload
- Turn the adjuster counterclockwise to decrease spring preload

NOTICE
Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.



A. Spring Preload Adjuster

Rebound Damping Force Adjustment
The adjuster is located at the upper end of the rear shock absorber.

Standard

14 clicks Out from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise to increase damping force.
- Turn the adjuster counterclockwise to decrease damping force.

NOTICE
Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.

Front shock absorber Damping Force Settings

		Softest setting limit	Standard	Hardest setting limit
Adjuster Position:	Rebound	22 clicks**	14 clicks**	0*
	Compression	22 clicks**	12 clicks**	0*
Damping Force		Weak	←→	Strong
Setting		Soft	←→	Hard
Load		Light	←→	Heavy
Road		Good	←→	Bad
Speed		Low	←→	High

*: This position is the fully seated position (turned fully clockwise).
**: Out from the fully seated position (turned fully clockwise). This adjustment range may not exactly match the number shown in the table due to small tolerance of production.

NOTICE
Do not exceed 25 clicks or the adjusting mechanism may be damaged.

Front Shock Absorber Spring Preload Setting

	Softest setting limit	Standard	Hardest setting limit
Adjuster Position	0	2 mm	8 mm
Spring Action	Weak	←→	Strong
Setting	Soft	←→	Hard
Load	Light	←→	Heavy
Road	Good	←→	Bad
Speed	Low	←→	High

Rear shock absorber Damping Force Settings

		Softest setting limit	Standard	Hardest setting limit
Adjuster Position:	Rebound	22 clicks**	12 clicks**	0*
	Compression	22 clicks**	14 clicks**	0*
Damping Force		Weak	←→	Strong
Setting		Soft	←→	Hard
Load		Light	←→	Heavy
Road		Good	←→	Bad
Speed		Low	←→	High

*: This position is the fully seated position (turned fully clockwise).
**: Out from the fully seated position (turned fully clockwise). This adjustment range may not exactly match the number shown in the table due to small tolerance of production.

NOTICE
Do not exceed 25 clicks or the adjusting mechanism may be damaged.

Rear Shock Absorber Spring Preload Setting

	Softest setting limit	Standard	Hardest setting limit
Adjuster Position	0	2 mm	8 mm
Spring Action	Weak	←→	Strong
Setting	Soft	←→	Hard
Load	Light	←→	Heavy
Road	Good	←→	Bad
Speed	Low	←→	High

Wheels

Tire Pressure Inspection

Remove the air valve cap.

- Check the tire pressure often, using an accurate gauge.
- Make sure to install the air valve cap securely.

NOTE

- *Measure the tire pressure when the tires are cold (that is, when the motorcycle has not been ridden more than1.6 km(1mile) during the past 3 hours).*
- *Tire pressure is affected by changes in ambient temperature and altitude, and so the tire pressure should be checked and adjusted when your riding involves wide variations in temperature or altitude.*

Front	250 kPa (2.50 kgf/cm², 36 psi)
Rear	290 kPa (2.90 kgf/cm², 42 psi)

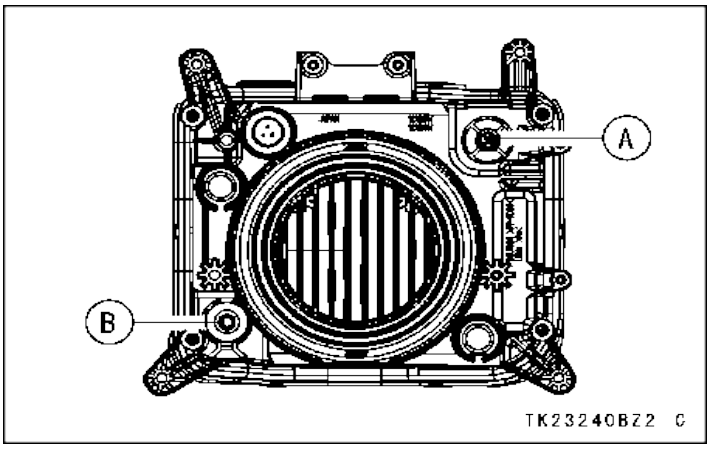
Headlight

Headlight aiming should be done by an authorized Bimota dealer.

Horizontal Adjustment

The headlight beam is adjustable horizontally. If not properly adjusted horizontally, the beam will point to one side rather than straight ahead.

- Turn the horizontal adjuster in or out until the beam points straight ahead.

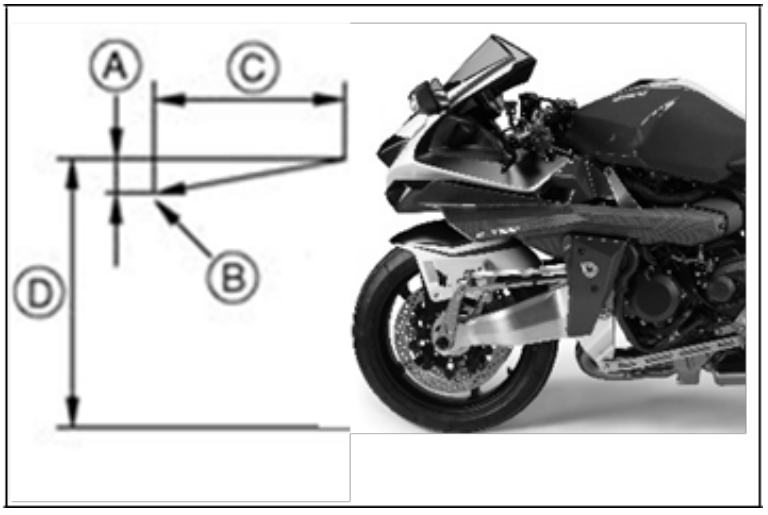


A.Horizontal Adjuster
B.Vertical Adjuster

Vertical Adjustment

The headlight beam is adjustable vertically. If adjusted too low, neither low nor high beam will illuminate the road far enough ahead. If adjusted too high, the high beam will fail to illuminate the road close ahead, and the low beam will blind oncoming drivers.

- Turn the vertical adjuster in or out to adjust the headlight vertically.



A. 50 mm (2.0 in.)
B. Center of Brightest Spot C. 7.6 m (25 ft)
D. Height of Headlight Center

Cleaning from anticorrosive treatments

Clean the front and rear brake discs, swingarm, plate, right footrest support and left footrest support using alkaline solvent.

WARNING

An anticorrosive treatment applied to the brake discs will increase braking distance and can cause an accident resulting in serious injury or death. Remove the anticorrosive treatment using an oilless solvent.