



Service Bulletin

no. 77-5

Date: March 8, 1977

Subject: Fuel tank rubber mount

Serial nos: From 7865 000725 to
7865 001400 incl.

Models: Qualifier 250

At pre-delivery or during inspection, check that the fuel tank rubber mounts are properly tightened.

If loose, proceed as follows:

Disconnect the fuel line at the carburetor.

Remove the seat and unfasten the fuel tank rubber mount retaining nuts. Remove the fuel tank and ensure that the mounts are securely tightened into the fuel tank.

Re-install the gas tank and torque the retaining nuts to .4-.5 kg-m (3-4 ft-lbs).

Re-install the seat and connect the fuel line to the carburetor.

THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES.

TECHNICAL INFORMATION CENTRE



Service Bulletin

no. 77-6

Date: March 8, 1977

Subject: Front wheel brake drum

Serial nos: All

Models: All

◆ **WARNING:** Prior to assembly it is imperative that the antirust spray inside the front wheel brake drum be removed.

When the motorcycle is crated, it is sprayed with an antirust solution.

Your mechanics and assembly men must be advised immediately to clean the brake drum. Use lacquer thinner or alcohol to remove any/or all oil film.

◆ **WARNING:** Always perform this procedure in a well ventilated area.

THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES.

TECHNICAL INFORMATION CENTRE



Service Bulletin

no. 77-6

Date: March 8, 1977

Subject: Front wheel brake drum

Serial nos: All

Models: All

- ◆ **WARNING:** Prior to assembly it is imperative that the antirust spray inside the front wheel brake drum be removed.

When the motorcycle is crated, it is sprayed with an antirust solution.

Your mechanics and assembly men must be advised immediately to clean the brake drum. Use lacquer thinner or alcohol to remove any/or all oil film.

- ◆ **WARNING:** Always perform this procedure in a well ventilated area.

THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES.

TECHNICAL INFORMATION CENTRE



Service Bulletin

no. 77-7

Date: March 17, 1977

Subject: Ignition coil output to spark plug test

Serial nos: All

Models: All

For all the vehicles equipped with a plastic Bosch system electronic box (black).

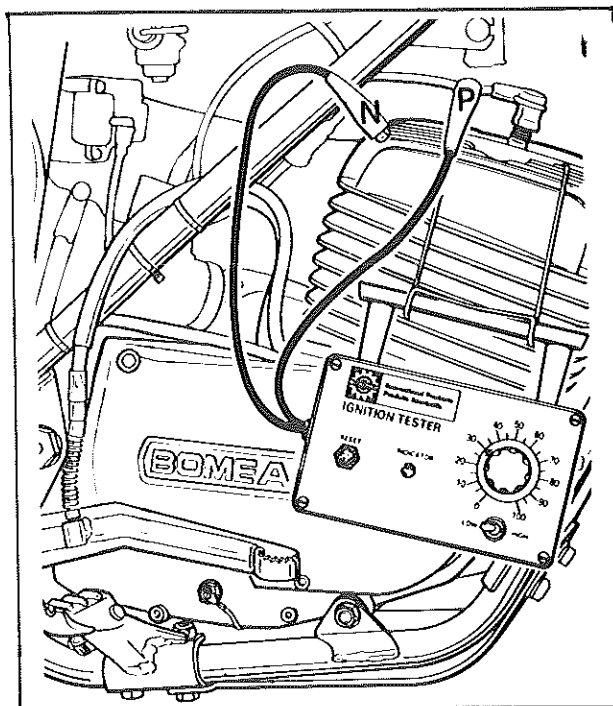
Make sure to proceed as follows to obtain an accurate reading, while testing the ignition coil output to spark plug.

BOSCH C.D. IGNITION

Test no. 1: Ignition Coil Output to Spark Plug

○ NOTE: To obtain accurate readings it is necessary to install a new, correctly gapped, spark plug. However, if test is performed on engine before spark plug is changed, a low or no reading could indicate a fouled or faulty spark plug. Replace by a new one and recheck.

1. Attach tester P lead over spark plug wire, directly behind spark plug cap. Connect N lead to a good engine ground.
2. Set tester switch at LOW position and dial at 30.



3. Select transmission neutral position, place emergency stop switch in RUN position and turn ignition key to IGNITION. Kick start pedal down vigorously.

.../2

- A. Indicator lamp lights: Coil output to spark plug is up to specifications. Repeat test at least three (3 times) to verify reading and check for consistency.
- B. Indicator lamp does not light: Coil output is low or spark plug is faulty. Refer to previous "NOTE" or proceed to test no. 2 and no. 3.

○ NOTE: Please make the necessary changes in the ignition tester manual.

THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES.

TECHNICAL INFORMATION CENTRE



Service Bulletin

no. 77-8

Date: March 31, 1977

Subject: Carburetor float adjustment

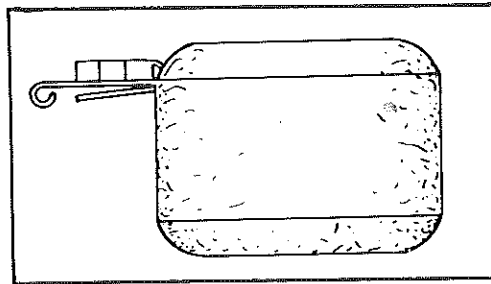
Serial nos: 7851, 7861, 7854,
7864, 7845, 7855 & 7865

Models: All T'NT, Qualifier and MX-3

This year on the above mentioned models, we have two series of carburetors.

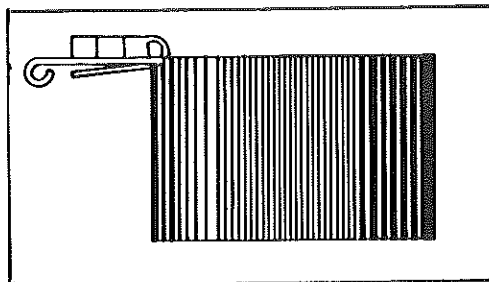
One series is equipped with white floats. The float height adjustment mentioned in the technical data, operator manual, etc..., is correct and applies only to the white floats model.

25mm (1")



white float type

The other series is equipped with black floats, (its height must be adjusted to 22.5mm (.885")).



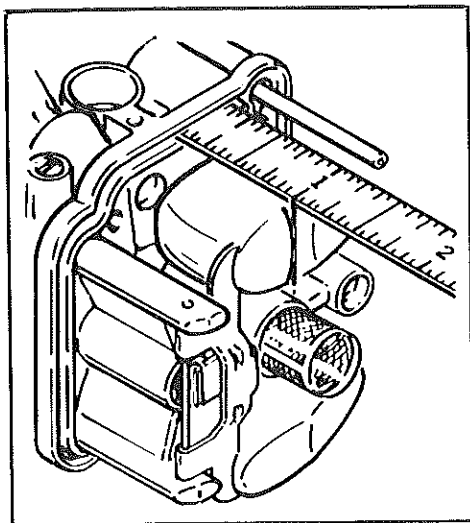
black float type

▼ **CAUTION:** Improper adjustment of the float height can result in an overrich or lean mixture.

ADJUSTMENT PROCEDURE

With carburetor on its side and with float adjustment tab just touching needle, measure distance between top of float and float chamber body (from the bottom of gasket groove).

To adjust, carefully bend adjustment tab of float arm until specified height is reached.



measure the height of
the float from the
bottom of gasket
groove

○ NOTE: If no measuring device is available position the top of the float parallel with the carburetor body (this applies to both float models).

THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES.

TECHNICAL INFORMATION CENTRE



Service Bulletin

no. 77-12

Date: April 6, 1977

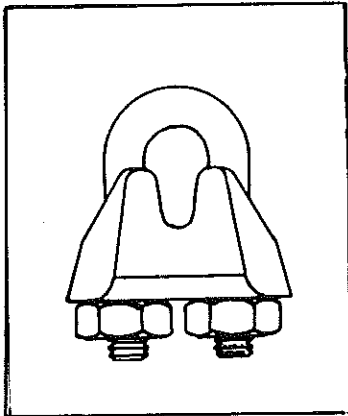
Subject: Center stand retaining cable

Serial nos: 7845, 7855, 7865

Models: Qualifier 125, 175, 250

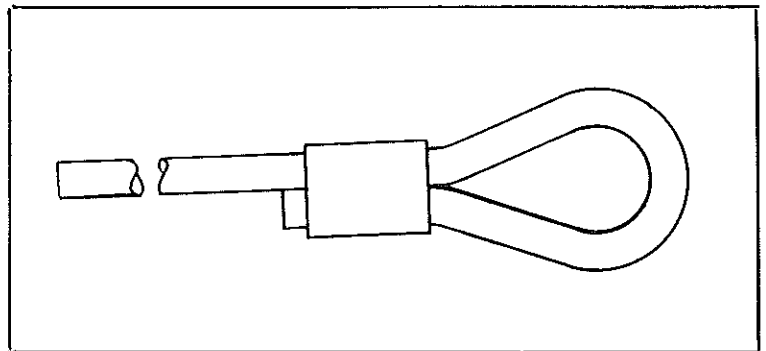
Replacement retaining cable parts are available under the following part numbers.

Wire rope clip



P/N 748 035 001

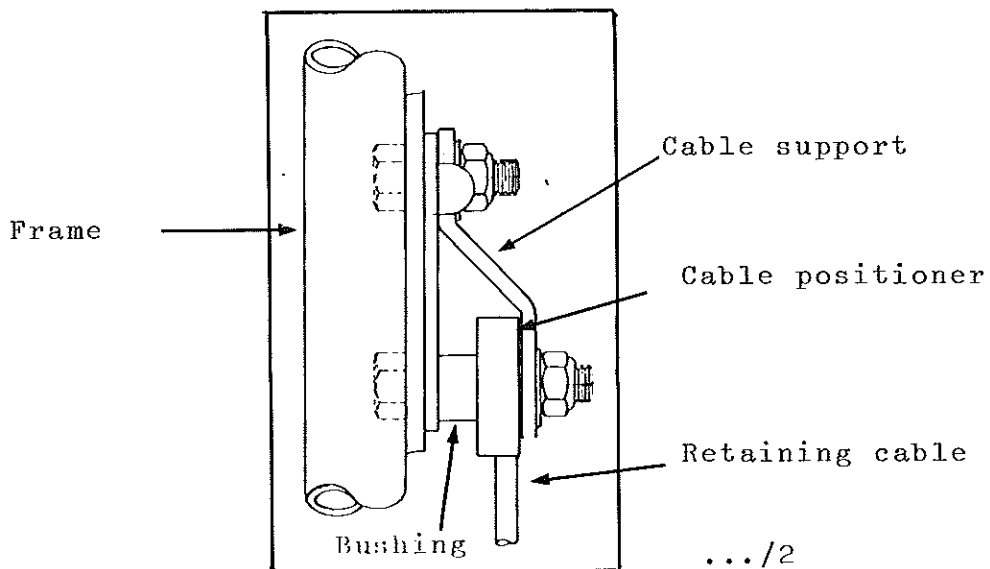
Retaining cable
14 inches long (one end looped)



P/N 746 103 000

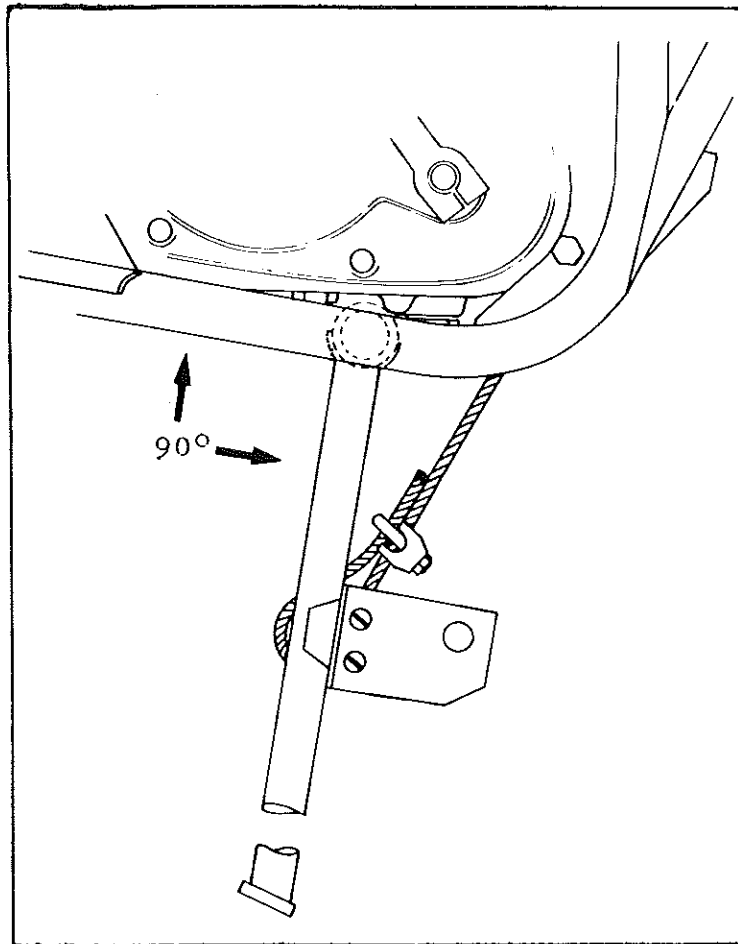
INSTALLATION PROCEDURE

Secure the looped end of the cable to the frame.
Torque the retaining nuts to 2-2.8 kg-m (15-20 ft-lbs).



.../2

Route the straight end of the cable under the center stand cross tube and loop it over. Install and tighten the rope clip with the retaining nut facing backwards. Ensuring that the stand legs are forming a 90° angle with the frame.



THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES.

TECHNICAL INFORMATION CENTRE



Service Bulletin

no. 77-15

Date: June 13, 1977

Subject: Optional Marzocchi fork springs and installation instructions

Serial nos: 7864

Models: MX-3 250

An optional fork spring is available for the Marzocchi fork under part number 742 009 011.

The spring rate is 21-29 lbs/in. progressive, 23 inches long.

Proceed as follows to properly install the fork spring into the forks.

Mount the motorcycle on a box or a stand.

Remove the handlebar.

Loosen the top fork crown retaining screw.

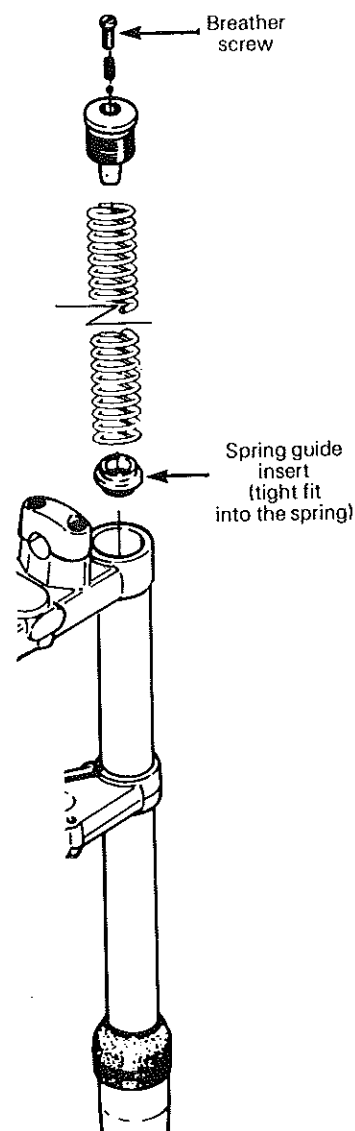
Slacken the fork cap breather screw and remove the fork cap. Pull out the fork spring and remove the spring guide insert and fit it to the new fork spring bottom.

▼ **CAUTION:** Prior to installation, always ensure that the spring guide insert is installed on the bottom of the spring. Damage to the damper rod piston could occur, if not installed. The spring guide insert has a tight fit into the spring.

Install the fork spring and the fork cap. Tighten the fork cap breather screw and torque the fork cap to 4.1-5.5 kg-m (30-40 ft-lbs).

Finally torque the top crown retaining screw to 4.1-5.5 kg-m (30-40 ft-lbs).

Reinstall the handlebar and torque the retaining screws to 1.4-1.6 kg-m (10-12 ft-lbs).



THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES.

TECHNICAL INFORMATION CENTRE



Service Bulletin

no. 77-16

Date: JUNE 23rd, 1977

Subject: LIGHTING SYSTEM

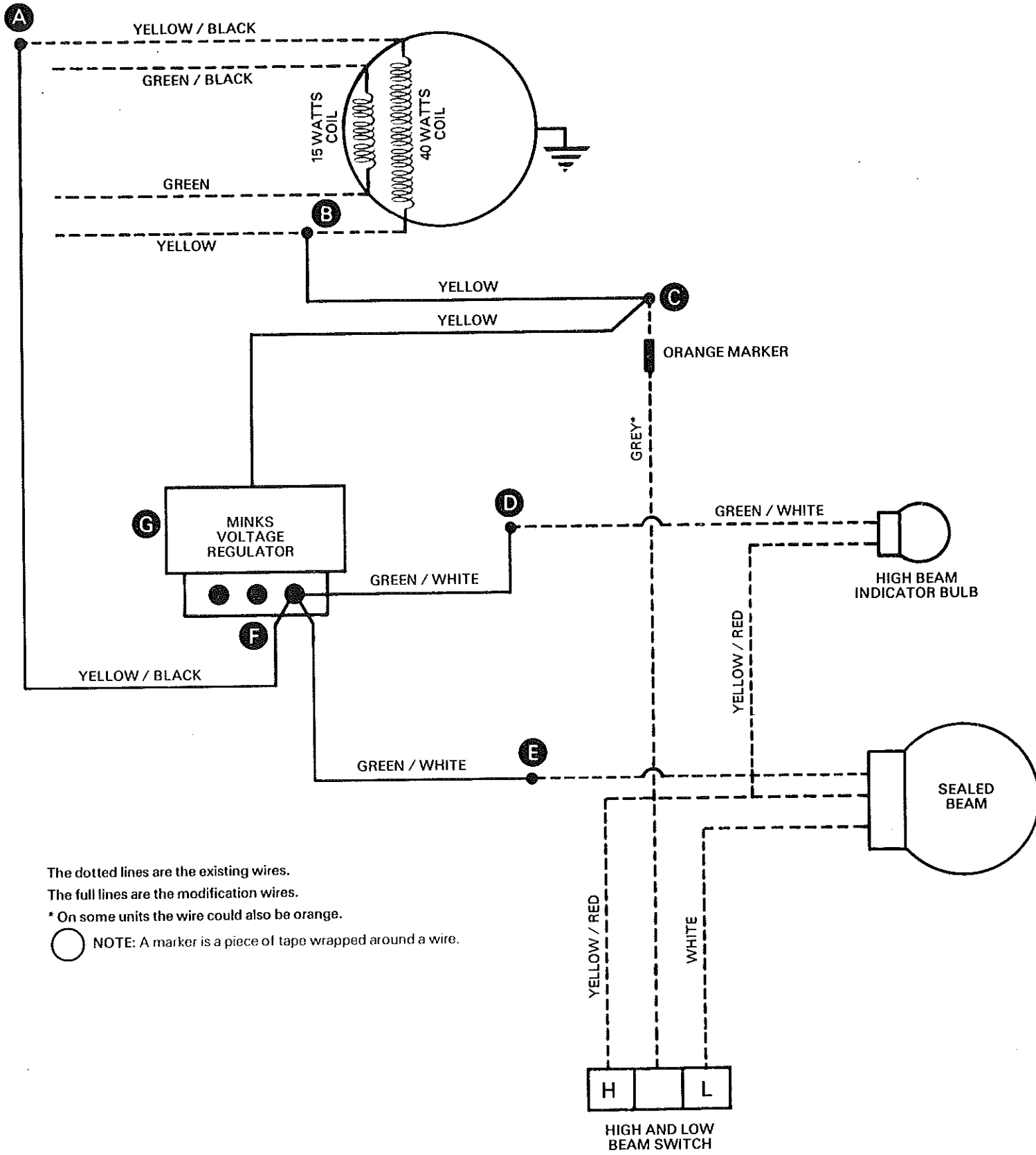
Serial nos: ALL

Models: ALL T'NT MODELS

A modification can be made by connecting the head-lamp sealed beam and the high beam indicator lamp on a separate circuit, (directly to the lighting coil) therefore increasing battery charging.

Parts required to use maximum charging rate efficiency from the existing magneto.

- 2 length of green / white wire (12" long)
- 1 length of yellow wire (12" long)
- 1 length of yellow wire (60" long)
- 1 length of yellow / black or (yellow / green) wire (60" long)
- 2 409 9004 00 joint connector
- 3 409 0022 00 open barrel (toothed)
- 3 730 201 001 receptacle (female)
- 3 730 100 001 shur plug (male)
- 3 730 451 000 plastic cover
- 1 730 200 000 3-way receptacle
- 1 730 450 000 plastic cover
- 1 410 9076 00 Minks voltage regulator
- 2 222 062 015 Hex. screw M6 x 100 x 20
- 2 365 9006 00 Self tapping screw 12 x 3/4"
- 1 block insulator 72 mm x 19 mm wide x 16 mm thick (4" long x 3/4" wide x 5/8" thick)



The dotted lines are the existing wires.

The full lines are the modification wires.

* On some units the wire could also be orange.

NOTE: A marker is a piece of tape wrapped around a wire.

JUNCTION (A)(B)

Connect the wires at the rectifier level underneath the battery using joint connectors.

JUNCTION (C)

Locate the grey wire (leading from high / low beam switch) and disconnect it from the existing harness connections inside the headlamp housing. Using the 3-way receptacle. Connect the yellow wire leading from the lighting coil, the yellow wire leading from the MINKS® voltage regulator and the grey wire together. Ensure to install the large plastic cover.

JUNCTION (D)

Locate the green / white wire leading from the speedometer wiring and disconnect it from the existing harness connections inside the headlamp housing. Connect one of the 12" long green / white wire (using a female receptacle and a plastic cover) to the green / white wire leading from the speedometer harness.

JUNCTION (E)

Locate the green / white wire leading from the sealed beam socket and disconnect it from the existing harness connections inside the headlamp housing. Connect one of the 12" long green / white wire (using a female receptacle and a plastic cover) to the green / white wire of the sealed beam socket.

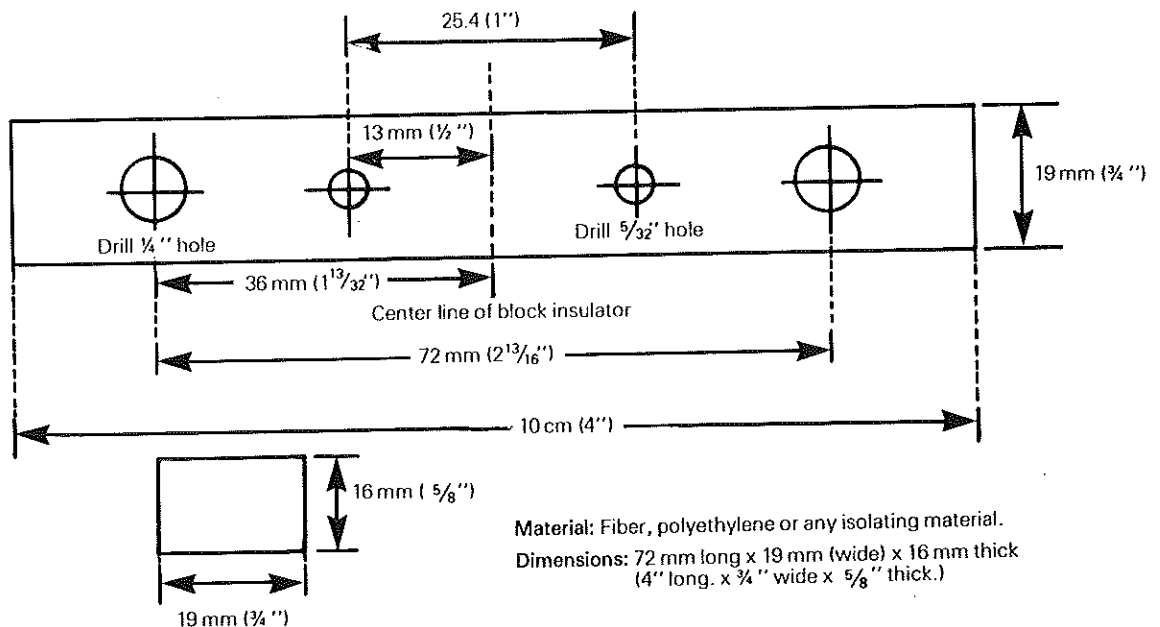
JUNCTION (F)

Three wires are connected to the MINKS® voltage regulator retaining screw.

Install the open barrel (toothed) to the three following wires: yellow / black wire leading from the lighting coil, the two green / white wires leading from the high beam indicator bulb and the sealed beam socket, and secure it to the voltage regulator.

INSTALLATION (G)

An isolating block is needed to attach the voltage regulator to the motorcycle.



Fasten the voltage regulator to the block insulator using the two self tapping screws. Ensure to insert the three wires with the open barrel (toothed) on one side.

▼ **CAUTION:** Ensure that the self tapping screws are not in contact with the fork crown.

Fasten the voltage regulator / block insulator to the lower crown, into the fender embossement forward retaining holes.

Secure the block insulator with the two M6 x 1.00 x 20 screws. Apply a light coat of Loctite no. 242 (medium strength) or equivalent, and torque to 0.5 kg-m (4 ft-lbs).

▼ **CAUTION:** Ensure that the headlamp housing ass'y and wiring harness are not squeezing the voltage regulator.

Install the gas tank.

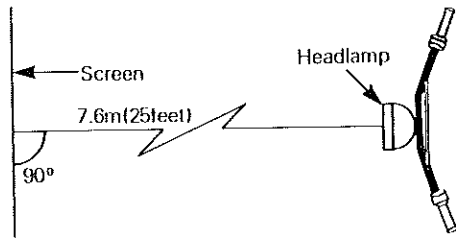
○ **NOTE:** Ensure to connect the wiring harness ground wire (green / white) to the gas tank retaining stud.

Install the R.H. number plate and the seat.

Install the sealed beam and adjust the headlamp aiming as follows:

Place the vehicle on a flat surface with the front wheel in the vehicle axis at 7.6 m (25 feet) distance from a wall or

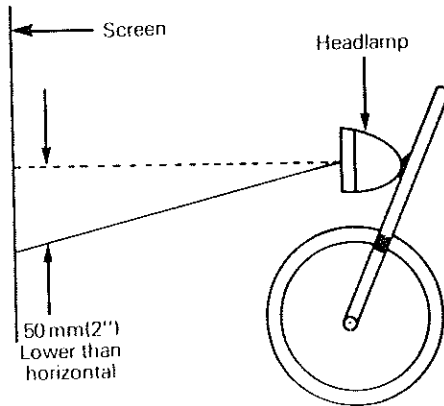
screen, making sure the vehicle and the wall forms a 90° angle.



If adjustment is needed loosen the two retaining nuts and reposition.

○ NOTE: Make sure the reflectors are properly positioned: locating boss (back of reflectors must be in a vertical axis).

With the driver in a riding position and the headlamp on (hi beam). The beam aiming is correct when beam center (high intensity zone) is 50 mm (2") lower than the horizontal line (on the wall) at a distance of 7.6 m (25 feet).





Service Bulletin

no. 77-17

Date: August 4, 1977

Subject: Clutch dragging

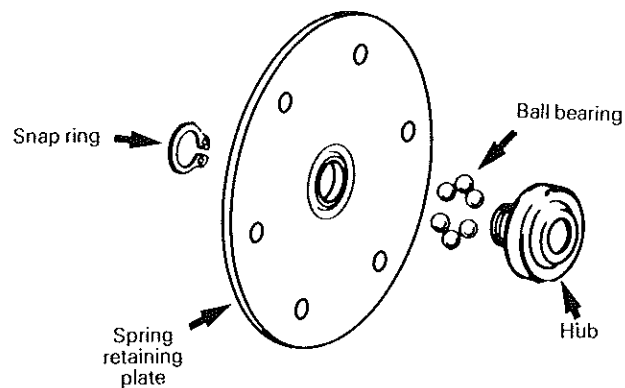
Serial nos: All

Models: All

The clutch adjusting screw should always be adjusted to 1/4 turn away (counter-clockwise) from the point of contact.

An improperly adjusted clutch can apply a constant pressure to the clutch spring retaining plate hub, and may cause clutch dragging.

Under constant pressure, the ball bearings overheat, deform and groove the clutch spring retaining plate and causes the clutch to drag. Once this occurs, parts are damaged and require replacement.



THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES.

TECHNICAL INFORMATION CENTRE



Service Bulletin

no. 77-18

Date: **SEPTEMBER 21, 1977**

Subject: **SHOCK SPRING SELECTION**

Serial nos: **7845, 7855, 7865,
7854, 7864**

Models: **QUALIFIER AND MX 3**

The rear shock spring can be preloaded to increase the carrying capacity. This adjustment is performed by turning the cam adjuster, (located at the bottom of the shock) to the right to increase and to the left to decrease the preload.

CAUTION: The choice of preload must be carefully selected to prevent any coil binding. The spring collapsed length must always be shorter than the space between the spring retainer and the cam adjuster when the shock is fully collapsed.

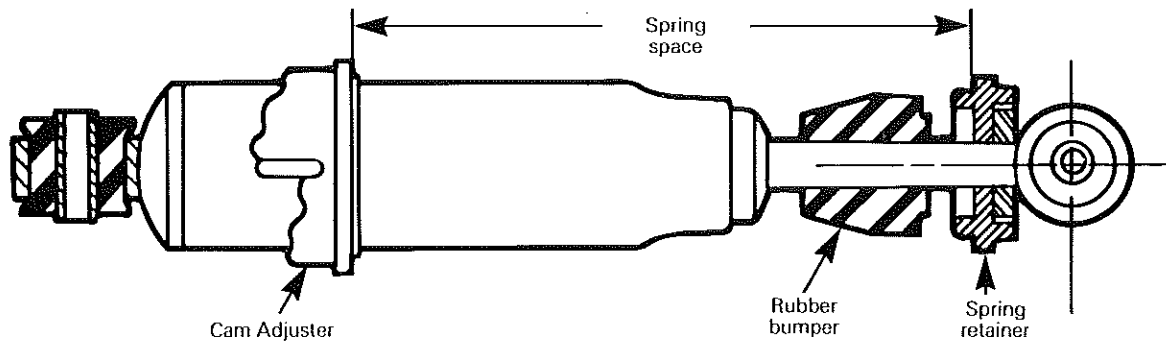
SHOCK SPRING SPECIFICATIONS

SPRING RATE LB / IN.	COLOR CODE	WIRE DIAMETER (INCHES)	SPRING LENGTH (INCHES)	INSIDE DIAMETER (INCHES)	TOTAL COILS	SPRING COLLAPSED LENGTH (INCHES)
75	green	.281"	11"	1.840" 1.500"	14	3.793"
85	green / red	.306"	11"	1.840" 1.500"	16.5	4.896"
100	purple / white	.306"	11"	1.840" 1.500"	14	4.131"
110	orange / white	.312"	11"	1.840" 1.500"	14	4.212"

CAUTION: The shock spring 85 lb / in. must not be preloaded more than the 2nd position on the MX-3 175 and not more than the 1st position on the MX-3 250, coil binding will occur and cause damage.

The following chart gives the remaining space between the spring retainer and the cam adjuster with the cam at various position and the shock fully collapsed.

CAM POSITION	QUALIFIER			MX-3 175	MX-3 250
	125	175	250		
5th (Highest)		5.575"		4.626"	4.496"
4th		5.731"		4.782"	4.652"
3rd		5.887"		4.938"	4.808"
2nd		6.043"		5.094"	4.964"
1st (lowest)		6.200"		5.250"	5.120"



CAUTION: The spring collapsed length must always be shorter than the space between the spring retainer and the cam adjuster when the shock is fully collapsed.

The following chart demonstrates the reaction force of each shock spring at three different shock travel positions (fully extended, mid-travel, fully collapsed) and with the cam adjuster at the lowest and the highest position.

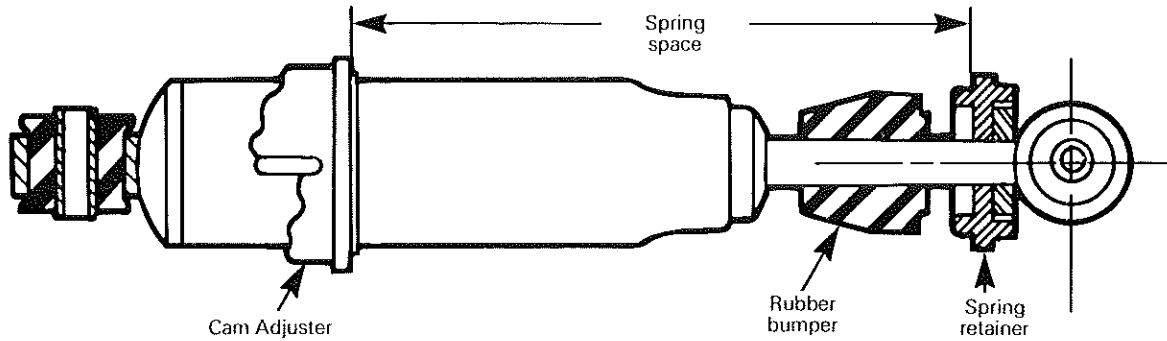
SPRING RATE LB / IN	POSITION OF CAM ADJUSTER	SHOCK TRAVEL POSITION 1 fully extended 2 mid travel 3 fully collapsed	SPRING CAM ADJUSTMENT QUALIFIER	PRELOAD AT DIFFERENT TRAVEL POSITION	
				MX-3 175	MX-3 250
75	Lowest position (first)	1	5 lbs	29 lbs	26 lbs
		2	182 lbs	236 lbs	233 lbs
		3	360 lbs	444 lbs	441 lbs
	Highest position (fifth)	1	52 lbs	76 lbs	73 lbs
		2	229 lbs	283 lbs	280 lbs
		3	406 lbs	490 lbs	487 lbs
85	Lowest position (first)	1	6 lbs	33 lbs	30 lbs
		2	207 lbs	268 lbs	265 lbs
		3	408 lbs	503 lbs	500 lbs
	Highest position (fifth)	1	59 lbs	not applicable	
		2	260 lbs	-----	
		3	461 lbs	-----	

CAUTION: The 85 lbs / in spring preload must not exceed the 2nd cam adjuster position on the MX-3 175 and the 1st cam adjuster position

100	Lowest position (first)	1	7 lbs	39 lbs	35 lbs
		2	243 lbs	315 lbs	311 lbs
		3	480 lbs	592 lbs	588 lbs
	Highest position (fifth)	1	69 lbs	101 lbs	97 lbs
		2	306 lbs	378 lbs	395 lbs
		3	542 lbs	654 lbs	650 lbs
110	Lowest position (first)	1	8 lbs	43 lbs	38 lbs
		2	268 lbs	347 lbs	343 lbs
		3	528 lbs	651 lbs	647 lbs
	Highest position (fifth)	1	76 lbs	112 lbs	107 lbs
		2	336 lbs	416 lbs	411 lbs
		3	596 lbs	720 lbs	715 lbs

THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES ONLY.

TECHNICAL INFORMATION CENTRE



CAUTION: The spring collapsed length must always be shorter than the space between the spring retainer and the cam adjuster when the shock is fully collapsed.

The following chart demonstrates the reaction force of each shock spring at three different shock travel positions (fully extended, mid-travel, fully collapsed) and with the cam adjuster at the lowest and the highest position.

SPRING RATE LB / IN	POSITION OF CAM ADJUSTER	SHOCK TRAVEL POSITION 1 fully extended 2 mid travel 3 fully collapsed	SPRING CAM ADJUSTMENT QUALIFIER	PRELOAD AT DIFFERENT TRAVEL POSITION	
				MX-3 175	MX-3 250
75	Lowest position (first)	1	5 lbs	29 lbs	26 lbs
		2	182 lbs	236 lbs	233 lbs
		3	360 lbs	444 lbs	441 lbs
	Highest position (fifth)	1	52 lbs	76 lbs	73 lbs
		2	229 lbs	283 lbs	280 lbs
		3	406 lbs	490 lbs	487 lbs
85	Lowest position (first)	1	6 lbs	33 lbs	30 lbs
		2	207 lbs	268 lbs	265 lbs
		3	408 lbs	503 lbs	500 lbs
	Highest position (fifth)	1	59 lbs	not applicable	
		2	260 lbs	-----	
		3	461 lbs	-----	

CAUTION: The 85 lbs / in spring preload must not exceed the 2nd cam adjuster position on the MX-3 175 and the 1st cam adjuster position

100	Lowest position (first)	1	7 lbs	39 lbs	35 lbs
		2	243 lbs	315 lbs	311 lbs
		3	480 lbs	592 lbs	588 lbs
	Highest position (fifth)	1	69 lbs	101 lbs	97 lbs
		2	306 lbs	378 lbs	395 lbs
		3	542 lbs	654 lbs	650 lbs
110	Lowest position (first)	1	8 lbs	43 lbs	38 lbs
		2	268 lbs	347 lbs	343 lbs
		3	528 lbs	651 lbs	647 lbs
	Highest position (fifth)	1	76 lbs	112 lbs	107 lbs
		2	336 lbs	416 lbs	411 lbs
		3	596 lbs	720 lbs	715 lbs

THIS BULLETIN IS PUBLISHED FOR INFORMATION PURPOSES ONLY.

TECHNICAL INFORMATION CENTRE



BOMBARDIER
CORPORATION

Service Bulletin

CAN-AM

SERVICE BULLETIN NO. 17

RE: 1. KICK STARTER HUB
2. MX-3, 250 FORKS

MARCH 4, 1977

1. Kick starter hub breakage is due, majorly, to the loosening of the bolt that secures the hub to the kick starter shaft. At predelivery of the motorcycle, make certain that the bolt is tight and make certain that you instruct your customer to check the security of the bolt as a part of his regular daily maintenance routine. The hub has been redesigned using a stronger material, but it is still imperative to keep the bolt tight. Please notify your customers of this easy maintenance tip.

Show your customer the proper way to start his Can-Am. Some owners attack the kick starter as if it's attached to a Harley 74. Tell him to gently engage the kick starter then give it a firm push. Wild leaping and kicking just isn't needed at least until the 366 arrives on the scene, so till then, clue in your customers.

2. Good news! The advertising information currently out notes that the MX-3, 250 is equipped with 222 mm (8.75") travel Marzocchi forks. The bikes will, in fact, be fitted with the 240 mm (9.45") travel Marzocchi forks. Be sure to let your customers know of this further improvement to the already incredible MX-3, 250.



BOMBARDIER

CORPORATION

Service Bulletin

CAN-AM

SERVICE BULLETIN NO. 18

RE: QUALIFIER 125-175-250
COMPETITION SET UP

MARCH 8, 1977

Recently you received Bombardier Limited's Can-Am Competition Bulletin No. 77-1. The bulletin suggests the addition of two additional gear clamps on the center stand mount. This greatly reduces the chance of tearing off the gear clamps in extremely rocky conditions.

We would like to note an alternate method of attaching the center stand for competition purposes.

Simply run a 3/8" weld at both ends and both sides of the split tube (see drawing).

