

# Indian

OWNER'S MANUAL

# THE INDIAN MOTORCYCLE COMPANY OWNER'S MANUAL 2ND FDITION **PART NUMBER 80611106** All rights reserved by The Indian Motorcycle Company, Culver City, California. No part of this work may be reproduced or copied in any form or by any means - graphic, electronic, or mechanical, including phtocopying, recording, taping, or information and retrieval systems - without permission of the publisher. © 1975 by The Indian Motorcycle Co. No liability can be accepted for any inaccuracies or omissions within this publication. All procedures and specifications subject to change without notice.

## **FOREWORD**

you.

The Indian motorcycles covered in this Owner's Manual are designed and engineered with safety in mind for the rider. The Owner's Manual is your Rider's Handbook. It will become your best friend while operating your Indian on the street, track or trail. The procedures contained in this manual have been carefully prepared to acquaint you with all the proper handling and servicing procedures that you will require to keep your motorcycle in top operating condition.

If you have any questions at any time, the Indian Dealer will be happy to assist

INDIAN MOTORCYCLE COMPANY 2535 S. Fairfax Avenue Culver City, Calif. 90230

## SAFE RIDING TIPS

Read and understand owner's manual before driving your motorcycle.

Prior to starting your motorcycle, perform a general inspection to make sure that it is in good, safe riding condition.

Always wear a helmet and protective clothing.

Before you ride your motorcycle be sure you are thoughly familiar with all the controls and their operation. Practice riding in an area away from traffic. Know the capabilities of your machine.

DRIVE SAFELY: When maneuvering, always use the proper signals. Don't tailgate, Never operate at high speed in unfamiliar terrain, Never drive beyond your ability to control the motorcycle. Never drink and drive!

PRESERVE NATURE: Ride your motorcycle to enjoy and preserve wildlife. Respect private property. Don't be a litter bug!

# CONTENTS

CONTLINIS	pg.
OPERATING TIPSHIGH SPEED OPERATION, STOPPING, PARKING, GEAR	
STARTING	
ADJUSTING CARBURETOR	9
ENGINE STOP SWITCH OPERATION	10
ADJUSTING THROTTLE	10
INSPECTING AND ADJUSTING BRAKES	11-12
CHANGING OIL	
ADJUSTING CLUTCH	
CLEANING AND ADJUSTING SPARK PLUGS	
CLEANING MUFFLER · · · · · · · · · · · · · · · · · · ·	17
CLEANING AIR FILTER	17
BATTERY SERVICE PROCEDURE	
ADJUSTING CHAIN DRIVE	18
SEAT OPERATION	·····19°
PERIODIC INSPECTION	20-21
SERVICE PARTS	22

#### OPERATING TIPS

ENGINE WARM-UP. Always warm-up the engine at a low speed for two minutes before riding. This will allow oil to begin proper circulation.

RACING THE ENGINE. Do not race the engine at high speed without a load. The engine, if run under these conditions, will be seriously harmed.

STARTING THE MOTORCYCLE AND SHIFTING GEARS. Start the motorcycle gently in accordance with instructions in this manual. Excessive high speed upon starting is harmful to your engine.

CHANGE GEARS GENTLY. Gently change gears by pressing or pulling the gear change lever lightly with your toe while the clutch is engaged. Do not change gears roughly since rough handling will result in rapid wear of the transmission.

OPERATION WITH AIR CLEANER REMOVED. Do not ever operate your motorcycle with the air cleaner removed from the carburetor. If you do, dirt and dust will be inhaled into the engine causing very rapid wear.

TIRE PRESSURE. The recommended front tire pressure is 25 lbs., and rear tire pressure is 28 lbs.

BREAK-IN TIPS. Do not ride at high speeds, carry heavy loads, or operate your motorcycle for long periods of time for the first 500 miles. Half throttle operation is recommended for this break-in period. NOTE: Use a 16:1 gas to oil mixture for the first 20 hours of running time.

GASOLINE RECOMMENDATIONS. Use only premium gasoline. Use only SAE 2 stroke motorcycle oil, premix gas to oil at 20:1 (unless equipped with automatic oil-injection unit). This mixture can be used in your motorcycle from the time of break-in period. Assure that dirt, dust or water does not become mixed with the fuel.

TRANSMISSION OIL RECOMMENDATIONS. Use only SAE 30 weight, nondetergent oil or an equivalent weight transmission lubricant in your motorcycle. Always drain oil before refilling. After filling, double check the oil filler plug, drain plug and oil inspection screw for tightness.

#### HIGH SPEED OPERATION

For high speed riding on your motorcycle, it is recommended that a spark plug with a "colder" heat range be used.

# STOPPING AND PARKING

## Stopping

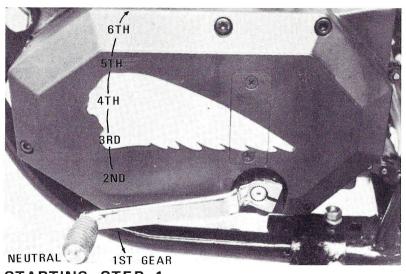
Apply front and rear brake at the same time to stop or brake your motorcycle. The motorcycle may skid or slide if only the rear brake is applied during quick stops. The front brake is hand-operated. The rear is foot controlled.

#### **Parking**

- 1. Turn the ignition switch off.
- 2. Close the fuel cock lever.

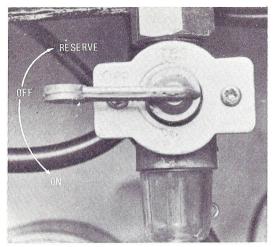
#### GEAR CHANGING

- 1. Pull in clutch lever fully and change gears by moving gear change lever gently up or down with toe to change gears.
- 2. To engage low gear, press gear change lever down one time from neutral. To engage second, third, fourth, fifth, and top gear, pull up with toe to the position above neutral. The operating angle between low and neutral and between neutral and second is approximately one-half that between other gears to allow for rapid gear changing.
- 3. The number of gears, whether four, five or six will depend upon the individual model type.



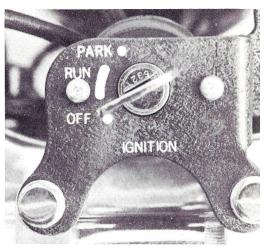
STARTING: STEP 1

Make sure that the gear shift lever is in neutral position.



FUEL COCK

The fuel cock has a screen and sediment bowl to remove impurities from the gasoline both should be cleaned periodically



**IGNITION SWITCH** 

# STARTING: STEP 2

Turn the fuel cock lever and ignition switch to the "ON" position.

Position	Operation	Key
OFF	OFF(All electrical circuits turned off)	Can be removed
RUN	Riding and start- ing engine (All safety deivces such as head light, tail light and stop light turned on)	Çan not be removed
PARK	Tail lamp only	Can be removed

# **HEADLIGHT**

 When the switch key is turned to position "RUN" the head light is turned on while the engine is running.

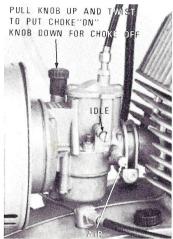
# STOP LIGHT

1. The stop light operates when the ignition key is in "RUN" position.

# TAIL LIGHT

 The tail light turns on when the ignition key is in postion "RUN" or "PARK".

# CHOKE FOR P4-AND P6-70 ENGINE



STARTING: STEP 3

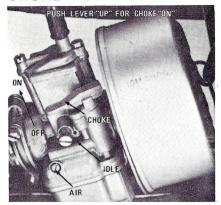
Choke the engine.

NOTE: Choke is not necessary if the engine is warm.

# CHOKE FOR 100cc and 175cc ENGINE



# CHOKE FOR 125cc ENGINE



# STARTING: STEP 4

Open the throttle about  $\frac{1}{8}$  to  $\frac{1}{4}$  turn and kick the kick starter.

NOTE: After the engine fires, warm up the engine at medium speed. When the engine is sufficiently warm, open the choke.

## ADJUSTING CARBURETOR

- 1. Use the air screw to adjust the carburetor.
  - a. Turn air screw (clockwise) lightly down onto its seat.
  - b. Back air screw out  $\frac{3}{4}$  to  $1\frac{1}{2}$  turns.
- 2. Start engine, if engine does not run smoothly, turn air screw  $\frac{1}{4}$  turn in or out and adjust engine idle for 1000 rpm operation with throttle stop screw.
  - a. Turn throttle stop screw in to increase RPM.
  - b. Turn throttle stop screw out to decrease RPM.

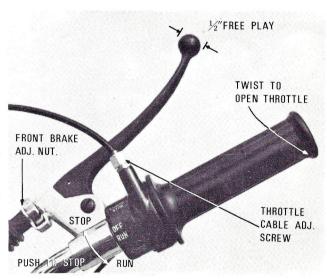
Adjust carburetor when the engine is warm.

# **ENGINE STOP SWITCH**

The engine stop switch is located on the throttle control assembly. To operate, push fore ward.

# ADJUSTING THROTTLE

- 1. Sitting in riding position slowly twist grip a assembly and assure that engagement of throttle is felt after  $\frac{1}{8}$  "movement of grip.
- 2. Adjust throttle cableadjustment screw as necessary.

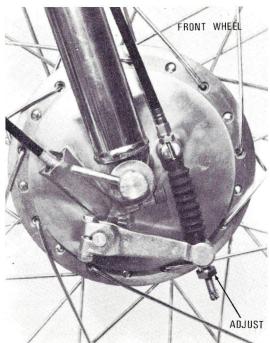


# INSPECTING AND ADJUSTING BRAKES

#### Front Brakes

The front brake lever should have only  $\frac{1}{2}$  "of play between tip of lever and tip of handlebar. Check the amount of play as follows:

- 1. Sit on motorcycle in riding position.
- 2. Check lever play of front brake lever by squeezing lever and measuring play.
- 3. To assure that lever engages front brake properly, squeeze lever tightly and using feet try to push motorcycle forward.
- 4. If front brake lever play is more than  $\frac{1}{2}$ " or brake does not engage properly, simply adjust the handlebar lever screw or the adjuster on the front wheel.



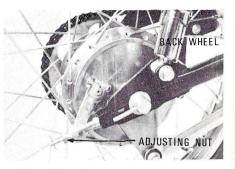
#### Rear Brakes

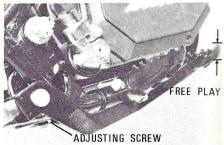
The correct free play of the rear brake pedal is about 1 in. (20-30mm), adjust by turning the adjusting nut at the end the rear brake rod a half turn at a time.

The highest position of the brake pedal can be changed by turning the adjusting screw at rear of brake pedal. After adjusting the brakes, make sure the brake light is working. If not, readjust the stop light switch. After adjusting check the brake lining indicator. If it approaches "O" when the brakes are fully applied, replace brake shoes

## CAUTION:

The brakes are your "Life Line".Be sure to check them every time you ride your motorcycle.





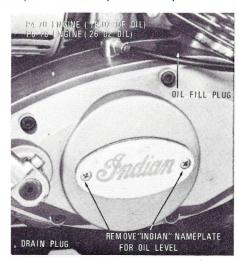
# CHANGING OIL

- 1. Remove drain plug.
- 2. Remove filler plug.
- 3. Drain oil.
- 4. Replace drain plug.
- 5. Pour in 30 weight, non-detergent oil in filler hole.
- 6. Replace filler plug.
- 7. Check for presence of oil level at Indian nameplate with motorycle in upright position. (Or use oil level screw or dip stick.)

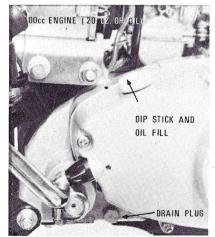
#### HELPFUL HINTS

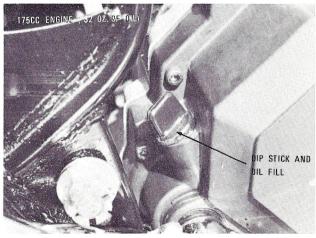
- 1. Drain oil when oil in engine is warm.
- 2. Do not operate with dirty oil. Check periodically and change as required. Frequent oil changes result in excellent operation.

3. Remove drain plug and drain oil. Replace drain plug. Remove "Indian" nameplate and pour in oil. Replace nameplate.



P4-70 ENGINE (18 OZ. OF OIL) P6-70 ENGINE (26 OZ. OF OIL) 100cc ENGINE (20 OZ. OF OIL) 125cc ENGINE (48 OZ. OF OIL) 175cc ENGINE (32 OZ. OF OIL)



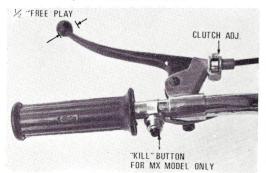


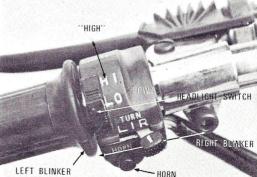
# ADJUSTING THE CLUTCH

a. Squeeze clutch lever and check play at end of clutch lever. There should be ½ inch of play at end of clutch lever before the clutch begins to disengage.
 b. To adjust clutch lever, adjust clutch cable adjuster on clutch lever.

# CAUTION:

There must be at least  $1 \nearrow 16$  inch of free play at clutch actuating rod or the clutch will be seriously damaged. If sufficient adjustment cannot be obtained see your Indian Dealer.



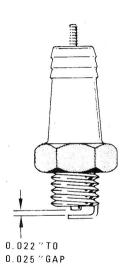


# CLEANING AND ADJUSTING SPARK PLUGS

- 1. To clean spark plug:
  - a. Remove spark plug from engine.
  - b. Clean with cleaning solvent using a wire brush.
  - c. Wipe dry with a clean shop rag.
- 2. To adjust the spark plug:
  - a. Check spark plug gap:
  - b. If gap is not within  $0.022~^{\prime\prime}$  to  $0.025~^{\prime\prime}$  set as required.

# **HELPFUL HINTS:**

- When installing spark plug, first screw plug in by hand and then tighten securely with spark plug wrench.
- 2. Do not attempt clean plugs by burning the electrode.



# CLEANING THE MUFFLER

- 1. Remove inner core from tail pipe and remove fiberglass packing from core.
- 2. Remove carbon with wire brush.
- 3. Replace fiberglass packing with new fiberglass.
- 4. Replace inner core assembly in tail pipe and replace holding screws and tighten.

# HELPFUL HINTS

Muffler should be cleaned every 500 miles.

## CLEANING AIR FILTER

- 1. Remove the air cleaner cover and then remove the cleaning element.
- 2. Soak in solvent to clean. squeeze dry.
- 3. Oil the element with 20 weight oil and squeeze out excess oil.
- 4. Replace the air cleaner in the reverse order of removal.

# BATTERY SERVICING PROCEDURE

- 1. Assure that ignition switch is in the off position (fully counterclockwise).
- 2. Disconnect the battery from motorcy cle wiring harness.
- 3. Disconnect battery strap and remove battery.
- 4. Being extremely careful, fill battery with distilled water to "upper level-mark"
- Replace and tighten the three access plugs.
- 6. Replace battery in battery holder and insert overflow tube down between top and bottom engine mounts.
- 7. Replace rubber battery strap.

- 8. Reconnect per wiring diagram.
- 9. Replace side plate covers.

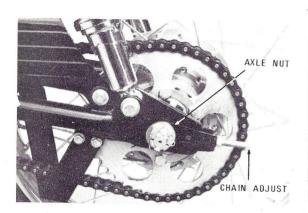
## ADJUSTING DRIVE CHAIN

To Adjust Drive Chain:

- Loosen rear axle nuts and inspect the drive chain.
- 2. There should be  $\frac{1}{2}''$  to  $\frac{3}{4}'$  of slack in the drive chain midway between the sprockets.
- 3. Adjust chain adjuster screws in or out to obtain proper slack.

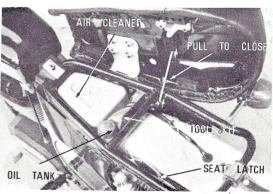
NOTE: Screws must be adjusted evenly for proper adjustment.

- 1. Tighten the rear axle nuts.
- 2. Wash the chain with solvent and lubricate it with oil or chain grease



periodically. Lack of proper lubrication can cause stiff chain links and will result in unusual sprocket wear.

# SEAT OPERATION



Push up on latch to open seat.

PERIODIC INSPECTION	Mileage 200 Or 1 mo.	Mileage 500 Or 1 mo.	Regular Maint		
			_	**************************************	
Change gear box oil	X	X	Every 1000	Miles	
Check and Adjust Clutch	Х	X	Every 1000	Miles	
Check and Adjust Throttle	X	X	Every 1000	Miles	
Check and Adjust Hand	Χ	Χ	Every 1000	Miles	
Brake Levers					
Check and Adjust Foot	Χ	Χ	Every 1000	Miles	
Brake Travel					
Check and Adjust		Χ	Every 1000	Miles	
Carburetor	1				
Check and Clean Air	X	X	Every 1000	Miles or	
Cleaner			sooner if used in dirt		
Clean Carbon from		X	Every 500 N	/liles	
Muffler and Inner pipe					

PERIODIC INSPECTION  Item	Mileage 200 Or 1 mo.	Mileage 500 Or 1 mo.	Regular Maintenance Intervals After Break-in
Clean, Adjust, and Oil Chain	Χ	Х	Every 1000 Miles
Inspect and Tighten Spokes	Χ	Χ	Every 1000 Miles
Check for and Tighten Loose Hardware	X	Х	Daily & Every 1000 Miles
Clean Spark Plug	Χ	Χ	Every 500 Miles
Inspect Tire and Pressure	Χ	Χ	Daily & Every 300 Miles
Check Battery Level	X	X	Every 1000 Miles
Check Head Light, Tail	Χ	X	Daily & Every 1000 Miles
Light and Bracke Light			*~

Return the Motorcycle to your Indian Dealer for the proper service check.

For additional information on servicing or repairing your cycle, your Indian dealer makes available the following items:

- parts books
- service manuals
- professional tool kits
- clothing and accessories

Your Indian motorcycle undergoes rigid factory tests to assure you long and satisfactory performance. However, if something should go wrong, immediately consult your authorized Indian dealer for advice.

Always use genuine Indian parts and not substitute brands. Indian parts are manufactured to meet the factory's exacting standards of precision and quality.

Parts may be ordered through your local dealer, in the event that these parts are not available from your dealer you may order them directly from:

INDIAN MOTORCYCLE COMPANY 2535 S. Fairfax Avenue Culver City, Calif. 90230 Attention Parts Dept.



P/N 80611106

