

# N2590, N2591 DEFLECTOR SCREEN™ with RAKE ADJUST™ OWNERS MANUAL and ASSEMBLY INSTRUCTIONS

Tips for facilitation of operation, control, adjust-

### SPECIAL NOTE

Dealers – if installing this Deflector Screen for a customer, please give him or her this manual. It contains the instructional and reference material needed to properly maintain and use this product.

This manual is designed for complete product knowledge. Take the time to become familiar with your Deflector Screen and its hardware to obtain the best results in use.

#### IMPORTANT

Please report any missing parts to your dealer or directly to National Cycle. The following information is necessary: bag number and serial number located on the outside of the plastic bag, and place of purchase.

NOTE

ment and maintenance



#### ATTENTION

Special notes and cautionary measures which can prevent damage to the accessory or the motorcycle



Kit UUE contains hardware for both 7/8" (22mm) and 1" (25mm) handlebars.

Complete kit cost: \$43.95

Bag #135		Complete bag cost: \$15.95
QTY.	PART NO.	DESCRIPTION
2	37-410110	7/8" (22mm) U-Clamp
2	37-410210	1" (25mm) Ú-Clamp
2	52-521010	Eyebolt, 3/8"
2	42-432010	WhizLok Nut, 3/8-16
4	49-493110	Beveled Washer
2	49-492310	Internal Lock Washer
2	49-496110	Indented Cup Spacer
Bag #56		Complete bag cost: \$19.00
QTY.	PART NO.	DESCRIPTION
1	44-440810	Ball End Rake Adjustment Arm, Left
1	44-440800	Ball End Rake Adjustment Arm, Right
1	44-440730	Rod Clamp, 3/8", Left
1	44-440720	Rod Clamp, 3/8", Right
4	51-515300	10-32 x 1/2" Hex Cap Screw
2	44-440900	Wing Knob
1	59-515110	5/32" Short Arm Hex Key
Loose in Kit		Each: \$4.25
QTY.	PART NO.	DESCRIPTION
2	34-344500	Upright, 3/8", 90° Bend

#### **OPTIONAL BAGS #47 and #62**

Needed for motorcycles with non-tubular handlebars.

Bag #47		Complete bag cost: \$22.50
QTY.	PART NO.	DESCRIPTION
2	41-410500	Flat Under Plate
2	37-370300	Right Angle Bracket
1	37-410400	Square Bar Clamp, Left
1	37-410300	Square Bar Clamp, Right
2	50-505710	5/16-18 x 5/8" Hex Cap Screw
2	49-492210	Internal Lock Washer, 5/16"
4	42-430010	WhizLok Nut, 1/4-20
Bag #62		Complete bag cost: \$7.50
QTY.	PART NO.	DESCRIPTION
2	52-521110	Eyebolt, Short, 3/8"



### **ORDERING PARTS AND ACCESSORIES**

All National Cycle parts and accessories can be purchased or ordered through your dealer. If direct ordering is necessary, send check or money order with your parts order to National Cycle, Inc., 2200 Maywood Drive, P.O. Box 158, Maywood, IL 60153-0158 U.S.A. Illinois residents please add 7.75% Cook County sales tax.

1. OPEN ALL HARDWARE BAGS: Check contents against Parts List and Diagrams #1 and #2.

2. RAKE ADJUST ASSEMBLY: From Uprights and Bag #57, sort parts into left and right Rake Adjustment Arm assemblies (see Diagram #1). When left and right Rake Adjust hardware is properly assembled, the Wing Knobs will face to the inside of the Rake Adjust hardware. This will allow convenient access to the Rake Adjust feature when installed on the motorcycle.

To assemble, insert the short ends of the **Uprights** into the pivot ends of the **Rod Clamps**. Start the hex screws, but do not tighten. Attach the **Ball End Rake Adjustment Arms** (left and right) to the Rod Clamps at the pivot points, using the Wing Knobs. See **Diagram #1** for correct alignment. Tighten Wing Knobs securely.

**3. INSTALL HARDWARE ONTO SCREEN:** (The following steps must be performed in an air temperature of at least 60-65°F.) Place the screen front down on a scratch-free, well-supported surface (a blanket or towel on a tabletop or floor). Moisten the **Ball Ends** of the **Rake Adjustment Arms** with water or saliva only – no oils or lubricants.



# ATTENTION

Any oils, silicones, greases or lubricants will adversely affect the impact release feature.

Firmly press the Ball Ends of the Rake Adjustment Arms into the screen's **Ball Sockets** until fully seated (see **Diagram #3**). It may be necessary to slightly warm the Ball Sockets with a hair dryer to ease assembly. Once assembled, the serrated pivots should be toward the top of the screen, and both Wing Knobs facing toward the center of the screen.

**4. U-CLAMP ASSEMBLY:** (Installation and initial alignment will be easier with the motorcycle on its centerstand.) Determine whether your motorcycle has 7/8" (22mm) or 1" (25mm) handlebars. Measure and select the correct size of U-Clamps from **Bag #135** before proceeding.

Place each **U-Clamp** around a vertical section of the handlebar with the open side of the clamp facing toward the rider. Put an **Indented Cup Spacer** and an **Internal Lock Washer** on each of the **Eyebolts**. Slip Eyebolts through the U-Clamps from the bike's center. At the same time, insert two **Bevel Washers** (bevels facing each other) inside each U-Clamp so that the Eyebolt passes through them (see **Diagram #4**).

Align the Cup Spacer indentations with the "eyes" of the Eyebolts. With the U-Clamps aligned evenly on each side of the handlebars, slide the Uprights of the assembled screen with Rake Adjust Arms through the Eyebolts (see **Diagram #5**).

Carefully align the screen so that it sits slightly above and not directly on the headlight. Now install and tighten the **WhizLok Nuts** onto the threaded portion of the Eyebolts. When the desired height and rake of the screen is adjusted, carefully move the front forks left and right to make sure the Uprights DO NOT contact the frame or gas tank. If the uprights are too long, they can be trimmed with a fine hacksaw blade and touched up with a rust-inhibiting black paint.

**5. CHECK ALL FASTENERS FOR TIGHTNESS:** When the desired height and rake of your Deflector Screen is achieved, check and tighten (a) the four hex screws in the Rod Clamps, (b) the two Wing Knobs, and (c) the two WhizLok nuts.



**6. FURTHER ADJUSTMENTS:** (See **Diagram #6** on next page). The rake of your Deflector Screen can now be changed at any time by simply loosening the two Wing Knobs, pivoting the screen on its mounts, and retightening the Wing Knobs.

To maintain absolute rigidity, the screen should be "preloaded" against some point of the headlight shell. With both Wing Knobs loose, lift on the left Upright with your left hand, and use your thumb to push the screen more vertical at the Rake Adjustment Arm, one notch at a time. This will force the gasket on the screen's lower lip into contact with the headlight shell. Tighten the left Wing Knob. Repeat this procedure on the right side to balance the preload adjustment.

If the degree of rake is too great after preloading, repositioning of the Uprights in the U-Clamps will realign the screen to your desired angle. Loosen the WhizLok Nuts, move the Uprights higher or lower in the Eyebolt holes, and re-tighten the WhizLok Nuts.

### SCREEN REMOVAL

To remove the screen, loosen the Whizlock Nuts on the Eyebolts in the U-Clamps, and pull the Uprights free from the motorcycle. Re-tighten the WhizLok Nuts to leave the U-Clamp assemblies on the handlebars for later re-installation of the screen.



## NOTE

The double Ball End Rake Adjustment Arms are not to be used as a removal point, and should not be disassembled repeatedly. If you need to remove the Uprights from the screen, detach at the Wing Knobs.

### CLEANING

Pre-rinse your screen with water to remove surface grit. Use mild, non-abrasive liquid soap, warm water, and a clean, soft cloth/sponge or wet chamois to wash the screen. Rinse again, as all residue must be removed. Wipe dry with a chamois or soft sponge to prevent water spots.

#### PAINT, GLUE OR GREASE REMOVAL

Moisten a ball of cotton or soft cloth with naphtha or turpentine and gently scrub to remove paint, glue or grease. Follow with a soap and water wash as described above.



# WARNING

DO NOT USE ALCOHOL SOLUTIONS OR GLASS CLEANERS to clean your screen. DO NOT use rain protective products on this screen. Alcohol solutions, brake fluids, and strong solvents will permanently damage the screen.

#### HAIRLINE SCRATCHES AND ABRASIONS

Small scratches can be removed or minimized with a mild automotive glazing compound or a high quality plastic polisher. NOTE: Test on a small sample area first. Recommended polishing products include Novus 2 Fine Scratch Remover, McGuiar's Mirror Glaze MGH-17, and The Wax Shop's Safe Cut Swirl & Haze Remover. Flannel or chamois make good polishing cloths. We recommend hand buffing for best results. Keep moving across the scratch while buffing. Try not to concentrate on a small area, which can distort the windscreen's optics.



## CAUTION

Never ride your motorcycle with loose windshield mounting hardware. Check the hardware for tightness regularly.

Today's motorcycles are built with enough frame rigidity to withstand the moderate loads placed on them by the foreseeable addition of a windshield.

If the addition of an accessory(ies) adversely affects your motorcycle's stability, immediately remove the accessory(ies). **Do not ride a motorcycle that exhibits unsafe handling characteristics**. Have experienced service personnel correct any problems before riding with the accessory(ies) installed. For further questions concerning handling problems associated with an accessory(ies), contact your dealer, motorcycle manufacturer, or accessory manufacturer.



Sunlight reflected off the inside curvature of a windshield can, at certain times of the day, cause extreme heat buildup on the motorcycle's instruments and possibly even melt them. Exercise care in parking to avoid this. Park facing the sun or place an opaque object over this area.

National Cycle windshields and fairings are designed to provide wind protection and enhanced comfort, but not protection in the event of a collision with another vehicle, the road, or any other object.

Some of our products use certain features, patented and otherwise, that may minimize injury in certain accidents, but the possibility of injury exists if the windscreen is broken.

The acrylic sheet that is used in our Deflector Screen<sup>™</sup> is almost 30X more impact resistant than glass. If it is subject to impact beyond its resistance, it breaks into comparatively large pieces, and does not normally shatter into small slivers.

All of our products are made in conformance and exceed the requirements of D.O.T. SS205,Z26.1, classifications AS6 and AS7, which cover all safety glazing for motorcycle applications.

Plexifairing GT, Plexifairing 3, Plexistar 2, Deflector Screen, Deflector Screen DX, Streetshield, Streetshield EX, FlyScreen, QuickSet3, Rake Adjust, and No-Hole Ballsocket are covered by one or more of the following patents: 4082345, 4168098, 4379584, 4489973, 5732965, 578833, 6254166, 6484914.

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