

Assembly Instructions and Owner's Manual





Quantum® is a registered trademark of National Cycle Inc.

Thank you for purchasing a National Cycle product. Read these instructions carefully and thoroughly before beginning work. Dealers, if installing this windshield for a customer, please give them this manual upon completion. It contains information needed to properly maintain and use this product.

Description:	Wash'n'Wipe Kit for N30006 Full Size WIndshield	Model:	Honda® Pioneer 1000
Part Number:	N30006-WK	Installation Time:	60-90 min.

N30403-WK PARTS LIST					
ITEM	PART NO.	DESCRIPTION QUA	NTITY		
_					
Α	80-875150-000	Wiper Motor Assembly with Switch	1		
В	80-875153-000	Wiper Assembly Arm, 350mm (14.00")	1		
С	80-875155-000	Wiper Assembly Blade, 400mm (16.00")	1		
D	44-442523-000	Reservoir & Pump Assembly	1		
E	37-373694-000	Reservoir Mounting Bracket	1		
F	75-766830-000	Gasket, 54.75" (139cm)	1		
G	75-766831-000	Gasket, 26.5" (67cm)	1		
BAG#	1324				
Н	80-830326-000	Wire Harness and Switch	1		
ï	80-875157-000	M8 Stud Hardware Kit	1		
J	80-875156-000	Spindle Hardware Kit	1		
ĸ	44-447167-000	Rubber Grommet, Small	1		
Ĺ	44-441927-000	Inline Check Valve for Washer Tubing	1		
M	44-448726-000	Wire Tie, 7.50" x .18	6		
N	55-562600-000	Machine Screw, Panhead, Slotted, 10-32 x 5			
0	49-490543-000	Flat Washer, .253 x .875 x .05	2		
P	42-450024-000	Nylok Hex Nut, 10-32	2		
Q	5207	Wellnut	2		
R	55-581009-000	Screw, 10-32x.875 Stainless	2		
S	44-449375-000	Wraparound Clamp	1		
Т	75-764022-000	Rubber Clamp Spacer, .75x6.0	1		
U	44-449380-000	Grommet Retaining Pin	1		
٧	44-447159-000	Rubber Grommet, Large	1		
W	44-448705-000	Cable Clamps	1		
X	55-563131-000	Screw, 12x.125, Stainless	1		

TOOLS REQUIRED FOR ASSEMBLY

Flat Blade Screwdriver
#2 or #3 Phillips Screwdriver or Phillips Bit for Drill
T-25 Torx Wrench
1/4", 5/16" and 7/16" Wrench or Socket
10mm Wrench for Battery
Metal Scribe or Marker
X-Acto® Knife, or similar
Wire Cutters
Power Drill with 3/4" (19mm) hole saw or step drill bit
Small Drill Bits (1/16" or 3/32", 1/8") for pilot holes
Torque Wrench

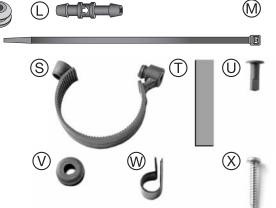












PREPARATION

Carefully unpack your Wash'n'Wipe™ Kit, sort the parts, and make sure you have everything required to complete the assembly.



ATTENTION: Special notes and cautionary measures which can prevent damage to the accessory or vehicle.



NOTE: Tips for facilitation of operation, control and adjustment, as well as maintenance work.

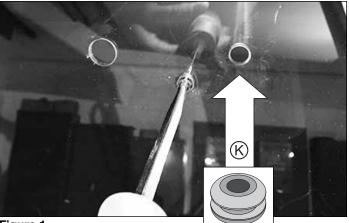


Figure 1

INSTALL THE WIPER MOTOR

It is recommended that you begin by removing the existing N30006 Windshield prior to installing the Wiper Motor.

Figure 1

From the inside of the Windshield, push out the three Plugs in the top center of Windshield. (Any Conveniently Pointed Tool) Install Grommet **(K)** into the far right hole as shown.

Figure 2

Loosen and remove the Panhead Philip Screws from the Wraparound Clamps securing Windshield to the vehicle frame.

Loosen the Velcro® on the bottom section and carefully remove the Windshield, making sure you don't lose the Retaining Pins, Spacing Washers or the cable guides. Place the Windshield on the floor away from the vehicle.



Figure 2

Illustration A

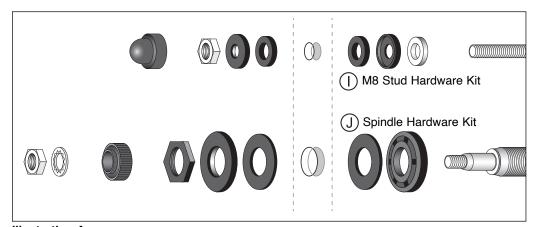
Open the Spindle Hardware Kit (J) and M8 Stud Hardware Kit (I) and lay out the parts in order.

Note: The rubber washers will go against both inside and outside of the Windshield.

Onto the Stud and Spindle of the Wiper Motor, assemble the parts that go to the inside of the Windshield as shown between the motor and the silkscreened motor outline.

Illustration B (next page)

Hold the Wiper Motor up to the inside of the Windshield and insert the wiper motor Stud and Spindle through the holes in the Windshield per the diagram, and assemble the remaining kit hardware located outside of the Windshield.



The nut on the stud (smaller) shaft needs to be torqued to 3 ft-lbs. (4 N-m). (Torque Wrench)

The nut on the spindle (larger) shaft needs to be torqued to 4.5 ft-lbs. (6 N-m). (Torque Wrench)

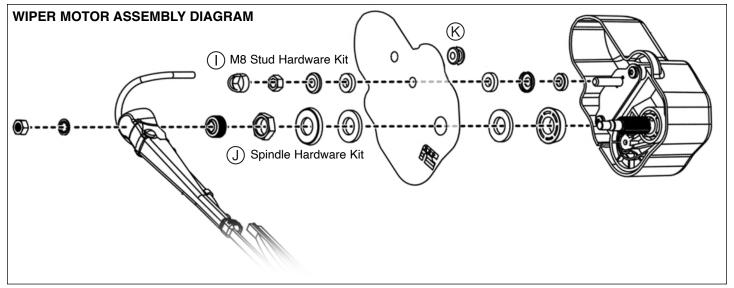


Illustration B

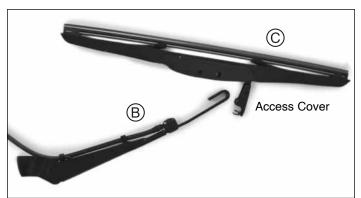


Figure 3

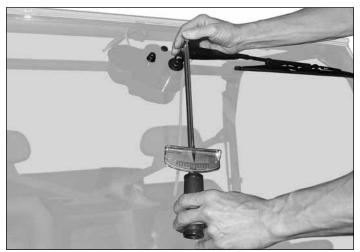


Figure 4

INSTALL THE WIPER ARM

Figure 3

Open the small access cover on the Wiper Blade **(C)**. Place the J-hook of the Wiper Arm **(B)** over the Blade's plastic mounting clip until it clicks and locks into place. Close the small access cover.

Figure 4

Open the access cover of the Wiper Arm as shown.

Assemble the Wiper Arm onto the Wiper Motor Spindle so that it is horizontal on the driver's side, then install its lock washer and nut as shown in Illustration B.



Hold the Wiper Arm horizontal while tightening the nut. Torque to 16 ft.-lbs. (22 N-m). (Torque Wrench)

Close the Wiper Arm cover over the nut.

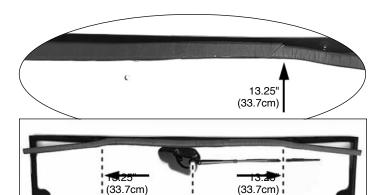


Figure 5



Figure 6

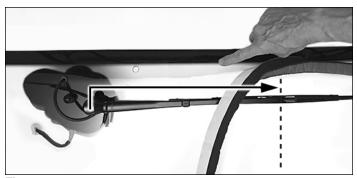


Figure 7

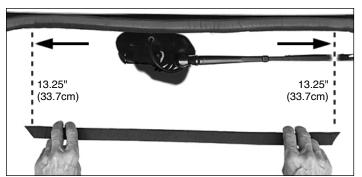


Figure 8

INSTALL GASKETS TO WINDSHIELD



Gaskets are applied to the outside surface of the Windshield.

Figure 5

Start at the Wiper Motor Spindle and measure a point 13.25" (33.65cm) to the left and right. Mark these points with tape.

Figures 6-7

Measure 2.00" (5.0cm) down from top edge. This is where you will start the top edge of the Gasket.

Peel back the pre-mask from one end of the longer Gasket (F). Install Gasket at the 2.00" vertical mark to the 13.25" horizontal mark, stopping directly above the Spindle.

Peel back more pre-mask and continue installation to the opposite 13.25" mark.

Figure 8

Remove the pre-mask from the shorter Gasket **(G)**. Install Gasket **(G)** on the top of the longer Gasket **(F)**, centering it between the opposing 13.25" marks.

Set the Windshield aside for later reinstallation.

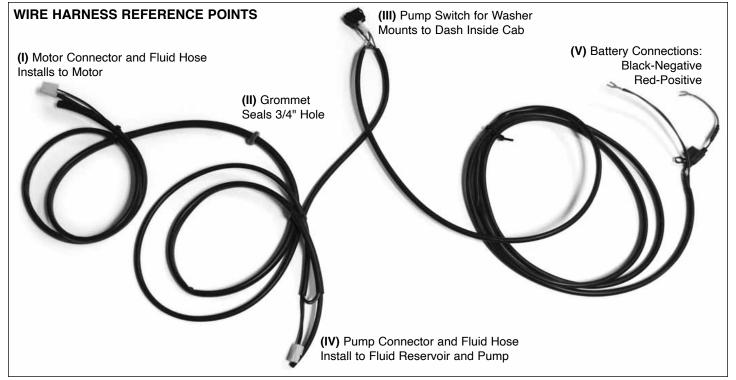


Illustration C



Figure 9

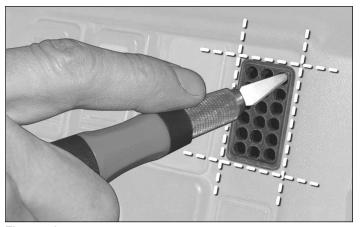


Figure 10

PREPARE THE VEHICLE FOR WIRING CUTTING THE PUMP SWITCH HOLE

Figure 9

The installation of the Pump Switch on this vehicle will be on the front dashboard as indicated in Figure 5.

Scribe or draw a 17/32" x 1-1/8" (13.5mm x 28.5mm) guide as indicated.

Using a power drill, drill a series of holes in the plastic cover as starting guides for cutting.

Figure 10

Then use an X-Acto® knife to cut out the cover's face to the scribed edges shown.

(Power Drill and Bit for pilot holes, and X-Acto Knife)



Use care when cutting the hole to avoid overcutting, and to prevent possible injury.



Figure 11

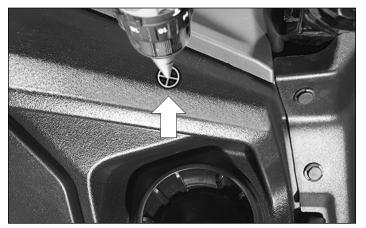


Figure 12

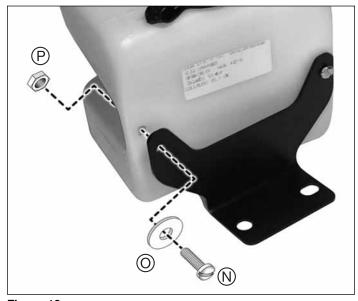


Figure 13

PREPARE THE VEHICLE FOR WIRING; CONT'D. CUTTING THE 3/4" PASSAGE HOLE

Figure 11

On the hood of the vehicle, near the front right frame post, measure a point 2.75" (69.8mm) from the right edge and 1.25" (31.7mm) forward of the dash. Mark that location (as indicated with the circle) for center of the drill hole.

Mark that location and drill a pilot hole with a 1/8" drill bit. (Scribe or Marker, Power Drill with 1/8" Bit)

Figure 12

Insert a step drill bit into your drill (or 3/4" hole saw) and drill a 3/4" (19mm) hole in the body cover at that location.

(Power Drill with 3/4" Hole Saw)

INSTALL FLUID RESERVOIR BRACKET TO RESERVOIR

The installation of the Fluid Reservoir and Mounting Bracket on this vehicle is under the front hood.

Figure 13

Use two Machine Screws (N), Flat Washers (O) and Nylock Hex Nuts (P) to Mount the Bracket (E) to the Fluid Reservoir (D) on both sides.

(Flat Blade Screwdriver, 5/16" Box Wrench)



Figure 14



Figure 15



Figure 16



Figure 17

PREPARE THE VEHICLE FOR WIRING; CONT'D. INSTALL THE RESERVOIR/PUMP ASSEMBLY

Figure 14

Move to under the front hood. The installation of the Reservoir on this vehicle is in the accessory compartment as shown.

Figure 15

Place the Reservoir/Pump Assembly into the vehicle's accessory compartment. Scribe or mark the center of the drill hole locators. Remove Reservoir/Pump Assembly, prior to drilling.

Figure 16

Drill a 3/8" hole at the two marked locations. (Power Drill with 3/8" Drill Bit)

WIRE HARNESS INSTALLATION

Figure 17

Locate the Motor Connector and Fluid Hose terminal (I) of the Wire Harness. Tape the ends together.

Figure 18

Route Motor Connector and Fluid Hose terminal (I) up to the hole drilled in the right side of vehicle in Figure 12.

Figure 18 Insets

Follow the Frame Tube, pulling enough length through the 3/4" (19mm) hole so Motor Connector and Fluid Hose terminal (I) reaches 4-5" (10-12cm) past the half-way point of the upper frame tube. This is where the Wash'N'Wipe Motor will be located.

Use the 5/8" Rubber Grommet (II) attached to the wire harness to seal the hole.



Figure 18



Figure 19



Figure 20

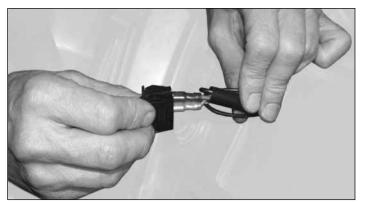


Figure 21



Figure 22

WIRE HARNESS INSTALLATION; CONT'D. INSTALL DASH PANEL ROCKER SWITCH

Figure 19

Locate the section of Wire Harness that terminates in the Pump Switch (III). Temporarily remove the Pump Switch. Tape the strands together, and thread the wiring toward the hole you cut in the dash in Figure 10.

Figure 20

Thread the Wire Ends through the hole.

Figure 21

Reattach the Pump Switch to the two Nylon Pin Connectors (polarity doesn't matter) and then push the Pump Switch firmly into the cutout.

STORE EXCESS WIRE HARNESS

Figure 22

Inside the front compartment under the hood, coil the excess Wire Harness, leaving loose enough length of the Battery Terminals (V) and Pump Connector/Fluid Hose (IV).

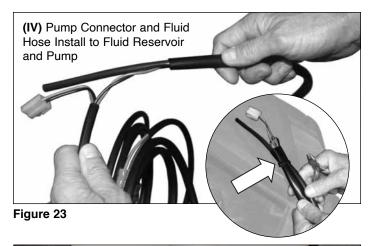




Figure 24



Figure 25



Figure 26

WIRE HARNESS INSTALLATION; CONT'D. PUMP CONNECTOR AND FLUID HOSE

Figure 23

Take Pump Connector and Fluid Hose section (IV) of the Wire Harness and locate the terminal with the Rubber Hose and the Large Nylon 2-Pin Electrical Connector with red and black wires. Fold the Pump Connector section against the Rubber Hose sec-

tion, as shown. Secure the two sheaths with a Wire Tie (M) and trim the excess tie. (Wire Cutters)

Figure 24

Connect the Rubber Hose of Terminal (IV) to the bottom of the Reservoir's Electrical Pump.

Figure 25

Push the Nylon Quick-Connector of Terminal (IV) onto the two pins on top of the Reservoir's Electrical Pump.

Figure 26

Position the Reservoir and Mounting Bracket assembly into the vehicle, aligning the holes in the Mounting Bracket with the two 3/8" holes drilled in Figure 16.

Push two Wellnuts **(Q)** through the Mounting Bracket holes and into the two 3/8" drilled holes. Lip of Wellnuts will rest on top of Mounting Bracket.

Inser two Screws (R) and tighten firmly. (Phillips Screwdriver)

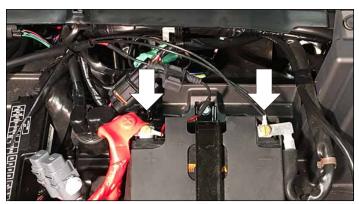


Figure 27



Figure 28

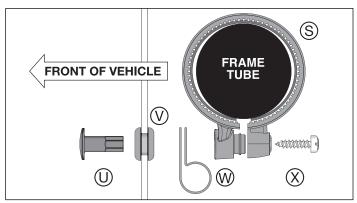


Figure 30

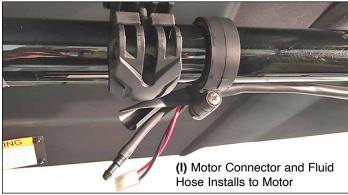


Figure 31

WIRE HARNESS INSTALLATION; CONT'D. CONNECT TO BATTERY

Figure 27

Loosen the negative terminal nut of the vehicle's battery with a 10mm Wrench. Locate Terminal (V) of the Wire Harness and slip the Brass Open Ring Connector of the black wire under the negative terminal nut and tighten securely. (10mm Wrench)

Repeat for the positive battery terminal with the Brass Open Ring Connector of the red wire.

Figure 28

Check that the excess Wire Harness is coiled and secured. Secure Wire Harness sheaths with Wire Ties (M).

ROUTE MOTOR CONNECTOR/FLUID HOSE

Figure 29

Insert the Rubber Clamp Spacer (T) inside the Wraparound Clamp (S) as shown. Attach the Clamp to the top middle of the vehicle's frame tube.

Figure 30

Assemble the parts as shown to the top Wraparound Clamp. When reinstalling the Windshield and the Wraparound Clamps, tuck the Wire Harness section of



Figure 29

Terminal (I) between the Clamps and the Windshield.

Figure 31

Thread the Motor Connector/Fluid Hose Terminal (I) through the Cable Clamp (W) and toward the Wiper Motor (A).



Figure 32



Figure 33



Figure 34

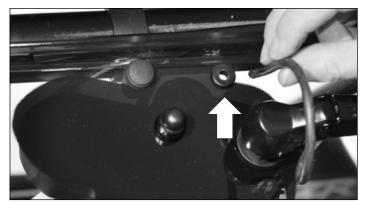


Figure 35

WIRE HARNESS INSTALLATION; CONT'D REINSTALL THE VEHICLE WINDSHIELD



Follow the installation guide in Windshield Installation Instruction Sheet 10-118016-000.pdf.

Need the instructions? Go to www.nationalcycle.com and insert N30006 into the search box on the top right of the home page. Click the product listing, then click on the N30006 Installation Instructions PDF link.

Figure 32

Place Windshield on vehicle with bottom gasket on the hood of the vehicle. Check that the Windshield is centered on the front of the vehicle and the bottom gasket fits snugly.

Figure 33

Pull enough harness length through passage hole so that Terminal (I) follows the vehicle's frame to the top center where Wiper Motor will be located.

Figure 34

On the driver's side, route Wire Harness/Fluid Hose underneath Windshield (inside of cab) but over the two side Wraparound Clamps as shown.

At the top of the vehicle frame, route the Wire Harness/Fluid Hose through the Cable Clamp **(W)** attached to the back of the top center Wraparound Clamp.

TERMINAL CONNECTIONS TO WIPER MOTOR

Figure 35

Check that the Wiper Arm Fluid Hose is threaded through the Grommet in the Windshield to the inside of the cabin. If it is not, do this now.

Figure 36

Connect the Wiper Arm Fluid Hose to the fluid hose from Wiring Harness Terminal (I) with the Inline Check Valve (L). A little moisture on the Check Valve ends will make the hoses join easier.



The arrow on the Inline Check Valve **(L)** must point towards the Wiper Motor, not towards the Fluid Reservoir.

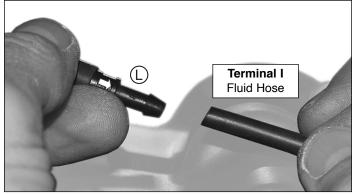


Figure 36

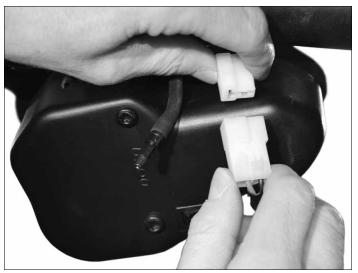


Figure 37

Figure 38



Figure 39

WIRE HARNESS INSTALLATION; CONT'D. TERMINAL CONNECTIONS TO WIPER MOTOR

Figure 37

Join the Connectors from the Wiper Motor and fromTerminal (I). Tuck excess wiring behind the Wiper Motor assembly.

Figure 38

The completed Wiper Motor installation should appear as shown.

Figure 39

Close the cabin roof of the vehicle so that it is securely latched. Make sure that the Gaskets that were applied in Figures 5-8 form a tight seal between the Windshield and the overhang of the roof.

FILL THE FLUID RESERVOIR

Fill the Reservoir **(D)** with plain water during warm weather, and glycol-based automotive windshield washer fluid in freezing weather.



DO NOT run the pump dry. Minimum amount of fluid to maintain in the Reservoir is 12 oz. (.35L) or to a depth of 1-1/2" (38mm).



Please refer to Pages 13-14 for operation, replacement parts and warranty.

Enjoy Your New Wash'n'Wipe™ Windshield!



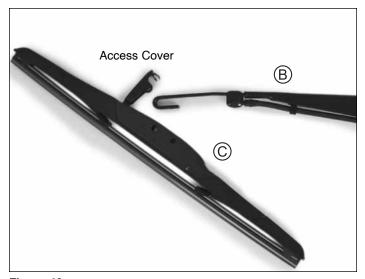


Figure 40



Figure 41

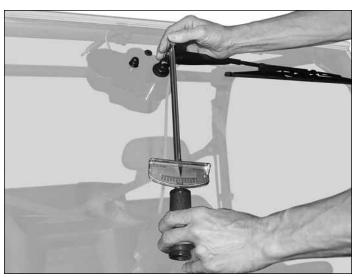


Figure 42

WINDSHIELD WIPER OPERATION



The Wiper is intended for use with the wash cycle or during rain. DO NOT use the Wiper on a dry windshield. DO NOT run the Pump without fluid.

The Wiper Motor has an on/off Rocker Switch. Turn the switch on and verify that the Wiper works as expected

The newly installed dash panel Rocker Switch controls the fluid spray. Momentarily hold the Switch in the on position to spray water from the Wiper Arm. It should spray in four separate directions.

The four spray jets can be manually (but carefully) redirected.

WIPER ARM AND BLADE

Your Wash'n'Wipe Windshield is equipped with a quality silicone Wiper Blade. Replacement Wiper Blades are available from your local dealer or by contacting National Cycle.

Replacement Wiper Blade Part Number is N30900. Replacement Wiper Arm Part Number is N30911.

REPLACING THE WIPER BLADE AND WIPER ARM Figure 40

Open the small access cover on the Wiper Blade (C) and pull the blade towards the motor end of Wiper Arm to loosen blade.

To install a new Wiper Blade, join the end of the Wiper Arm (B) to the Wiper Blade. Place the J-hook of the Arm over the Blade's plastic mounting clip until it clicks and locks into place. Close the small access cover.

Figure 41

To remove the Wiper Arm **(B)**, open the Wiper Arm cover and remove the Internal Tooth Lock Washer and Small Mounting Nut of M8 Stud Hardware Kit **(J)**. Then remove the Wiper Arm from the Wiper Motor **(A)** Spindle.

To replace the Wiper Arm back on the Spindle, reinstall the Internal Tooth Lock Washer and Small Mounting Nut.

Figure 42

Use a torque wrench to tighten the Small Mounting Nut to 16 ft.-lbs. (22 N-m). Then swivel the mount cover of the Wiper Arm back to its closed position. (*Torque Wrench with 13mm Socket*)



Ask for Shield Wash™ and RainZip® at your local dealer or visit www.nationalcycle.com.

CLEANING AND MAINTENANCE

To clean your windshield, wash with a clean soft cloth and plenty of warm water and, if necessary, a non-abrasive soap such as dishwashing liquid. Flannel or soft chamois make good cleaning cloths. **Paint, glue residue or grease removal:** Moisten cotton wad with naphtha or turpentine followed by a wash as above.

National Cycle **Shield Wash™** (N1401-01) makes a good daily cleaner and comes with a handy travel-size bottle. Shield Wash is safe for all windshields and helmet visors

Do not clean polycarbonate in hot sun or high temperatures. Do not clean the screen with household glass cleaners.

Do not allow brake fluid, alcohol, or strong solvents to contact the windshield.

RAIN REPELLENT

Do not use rain protective products made for glass. We recommend National Cycle's **RainZip®** (N1410-01) to keep your windshield clear in rainy weather.



National Cycle 3-Year Limited Warranty

Register Your Windshield Online at www.nationalcycle.com

National Cycle hereby warrants to the original registered owner of a National Cycle polycarbonate windshield for a period of three years from the date of purchase against breakage. This limited warranty is expressly limited to the replacement of the polycarbonate windscreen. This limited warranty does not include scratches, coating failure, cosmetic wear and tear, replacement of hardware, or any consequential damages or expenses including labor cost of installation, removal and/or replacement, inconvenience, inbound freight expenses or damage to any other component of the vehicle or any other accessories. Certain chemicals, generally known as acidic hydrocarbons, are known to cause polycarbonate damage and will not be covered under this limited warranty. Please refer to the cleaning instructions supplied with all National Cycle windshields. Visit www.nationalcycle.com for further details or call or write National Cycle Inc.

WARNING

Never operate your vehicle with loose accessory mounting hardware. Check the hardware for tightness regularly.

UTVs are built with enough frame rigidity to withstand the moderate loads imposed on them by the foreseeable addition of an accessory(ies). If an accessory(ies) adversely affects your vehicle's stability, immediately remove the accessory(ies). Do not operate a vehicle that exhibits unsafe handling traits.

Have experienced service personnel correct any problem before driving with the accessory(ies) installed. For further questions concerning handling problems associated with an accessory(ies), contact your dealer, UTV manufacturer, or accessory manufacturer.

Caution: Do not clean polycarbonate in hot sun or high temperatures. Do not clean the screen with glass cleaners. Certain chemicals, generally known as acidic hydrocarbons, are known to cause polycarbonate damage. Do not allow brake fluid, alcohol, or strong solvents to contact the screen.

Caution: Do not use rain protective products made for glass. We recommend National Cycle's rainZip® (N1410-01) to help shed water in rainy weather.

Caution: Always face windshield forward (in direction of travel) while carrying on truck or trailer.