

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 N30403 Full Size Windshield	Model:	Honda® Pioneer 700
Part Number:	N30004-WK	Installation Time:	60-90 min.

N30403-WK PARTS LIST

ITEM	PART NO.	DESCRIPTION	QUANTITY
A	80-875150-000	Wiper Motor Assembly with Switch	1
B	80-875153-000	Wiper Assembly Arm, 350mm (13.78")	1
C	80-875154-000	Wiper Assembly Blade, 350mm (13.75")	1
D	44-447167-000	Rubber Grommet	1
E	44-441927-000	Inline Check Valve for Washer Tubing	1
F	80-830326-000	Wire Harness and Switch	1
G	80-875156-000	Spindle Hardware Kit	1
H	80-875157-000	M8 Stud Hardware Kit	1
I	44-442523-000	Reservoir & Pump Assembly	1
J	37-373687-000	Reservoir Mounting Bracket	1
K	55-562600-000	Machine Screw, Panhead, Slotted, 10-32 x 5/8	2
L	49-490543-000	Flat Washer, .253 x .875 x .05	2
M	42-450024-000	Nylok Hex Nut, 10-32	2
N	44-448710-000	Wire Tie, 11.00"	2
O	44-448726-000	Wire Tie, 7.50" x .18	10

BAG#1245

P	55-550260-000	Self-Tapping Hex Screw, 8-18 x 1/2"	4
Q	44-448829-000	Rubber Push-In Bumper	2
R	44-448760-000	Wire Tie, 14.00"	7

TOOLS REQUIRED FOR ASSEMBLY

Flat Blade Screwdriver
#2 or #3 Phillips Screwdriver or Phillips Bit for Drill
T-25 Torx Wrench
1/4" 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.

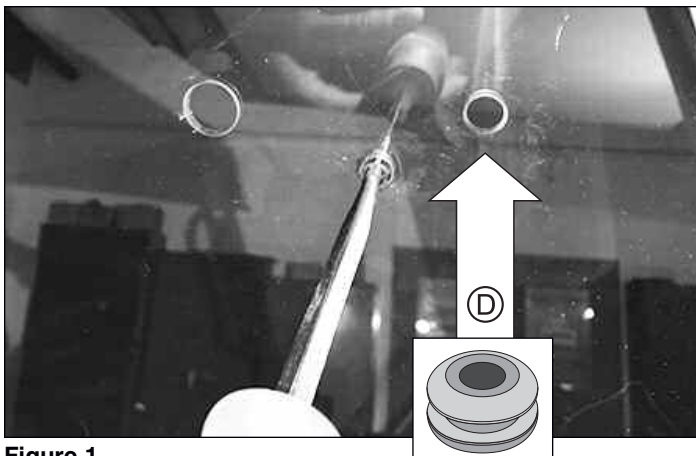


Figure 1

INSTALL THE WIPER MOTOR

It is recommended that you begin by removing the existing N30004 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 (D) 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.

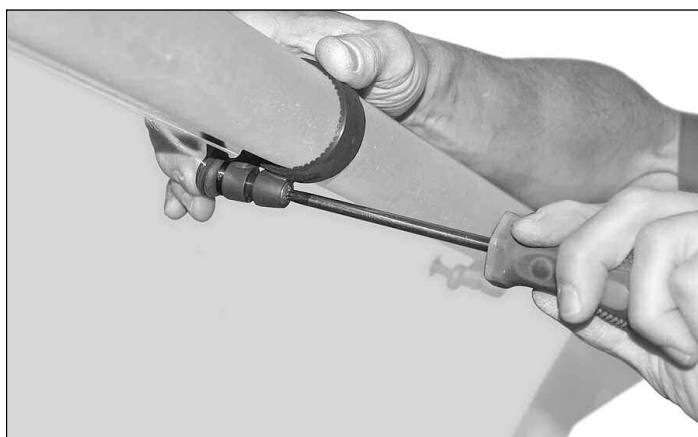


Figure 2

Illustration A

Open the Spindle Hardware Kit (G) and M8 Stud Hardware Kit (H) 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.

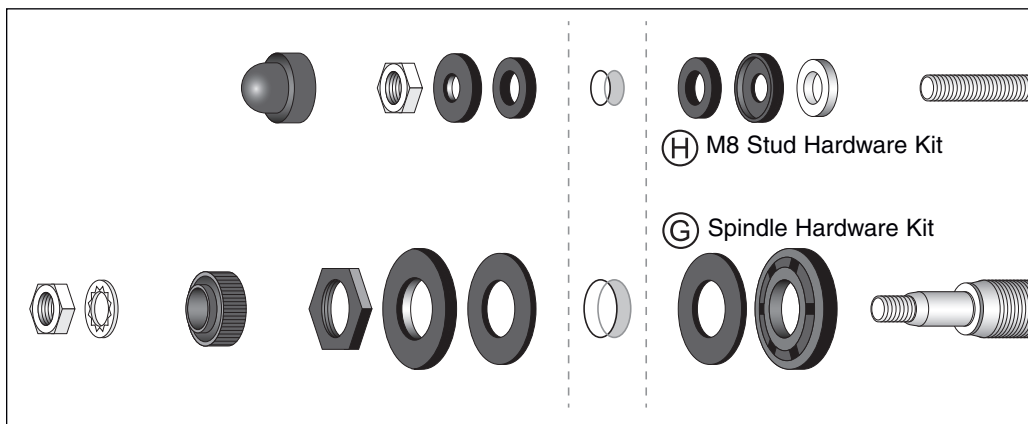


Illustration A

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*)

WIPER MOTOR ASSEMBLY DIAGRAM

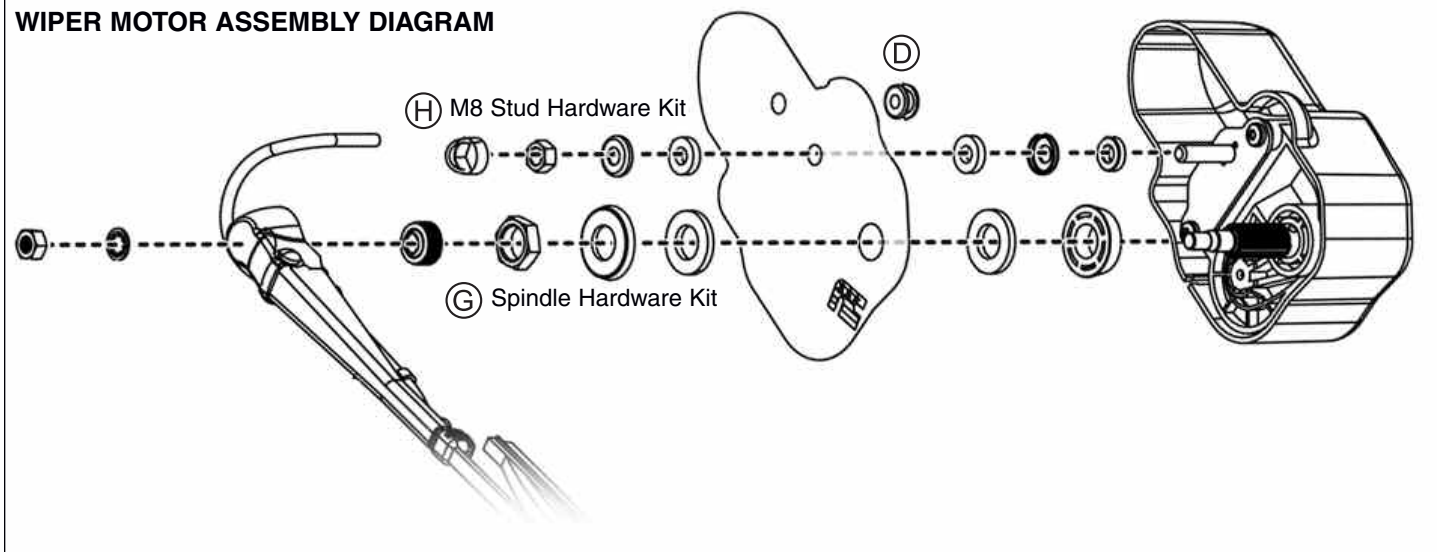


Illustration B

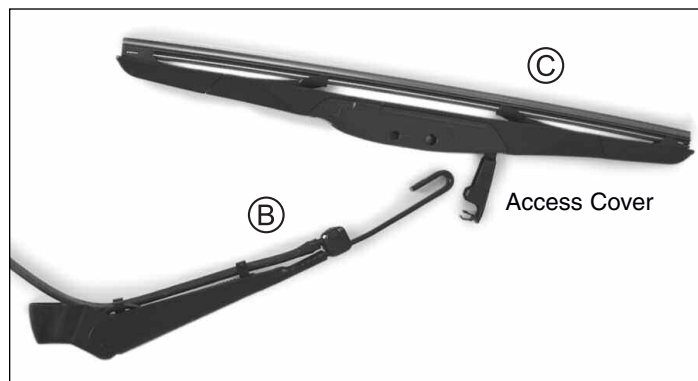


Figure 3

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.



Figure 4

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.

WIRE HARNESS REFERENCE POINTS

(I) Motor Connector and Fluid Hose
Installs to Motor

(II) Grommet
Seals 3/4" Hole

(III) Pump Switch for Washer
Mounts to Dash Inside Cab

(V) Battery Connections:
Black-Negative
Red-Positive

(IV) Pump Connector and Fluid Hose
Install to Fluid Reservoir and Pump

Illustration C



Figure 5

PREPARE THE VEHICLE FOR WIRING CUTTING THE PUMP SWITCH HOLE

Figure 5

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 6

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 avoid possible injury.

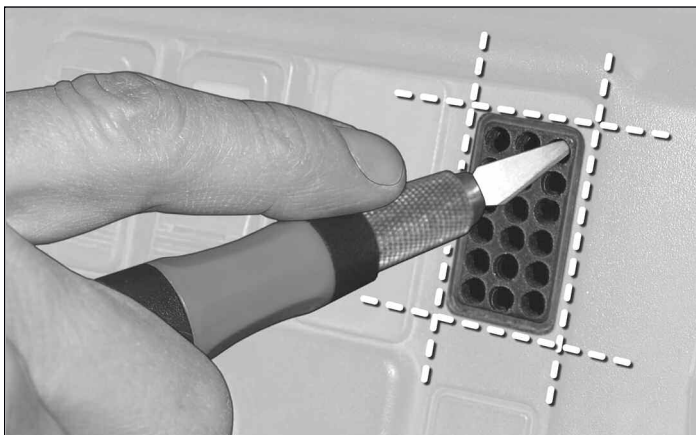


Figure 6

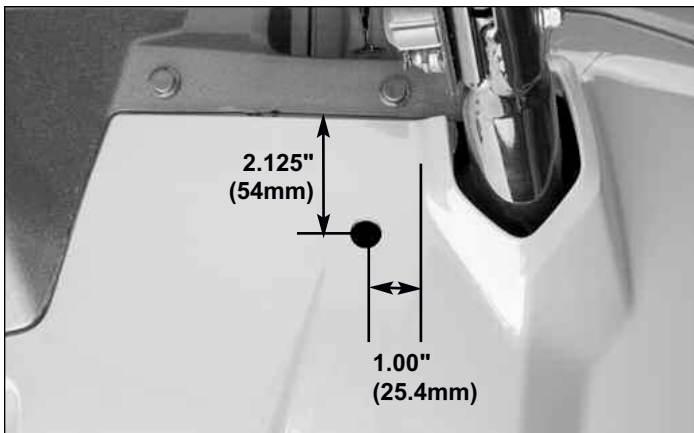


Figure 7

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

Figure 7

On the hood of the vehicle on the driver's side, measure a point 1.00" (25mm) from the frame on driver's side (left) of vehicle, and 2.125" (54mm) from the edge of the hood panel.

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

Figure 8

Insert a step drill bit into your drill as shown (or 3/4" hole saw) and drill a 3/4" (19mm) hole in the body panel at the location marked in Figure 7.

(Power Drill with 3/4" Step Drill Bit or Hole Saw)



Figure 8

INSTALL FLUID RESERVOIR AND MOUNTING BRACKET

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

Figure 9

Insert Rubber Bumpers (Q) into the base of the Mounting Bracket (J) as shown.

Figure 10

Position the Mounting Bracket (J) behind the vehicle's fan belt cover as shown. Align the Bracket with edge of the frame cross bar. Mark the four drill points and then drill the holes.
(Marker, Power Drill with 1/8" Drill Bit)

Install the Bracket using four Self Tapping Hex Screws (P).
(1/4" Socket or Wrench, or Phillips Screwdriver)

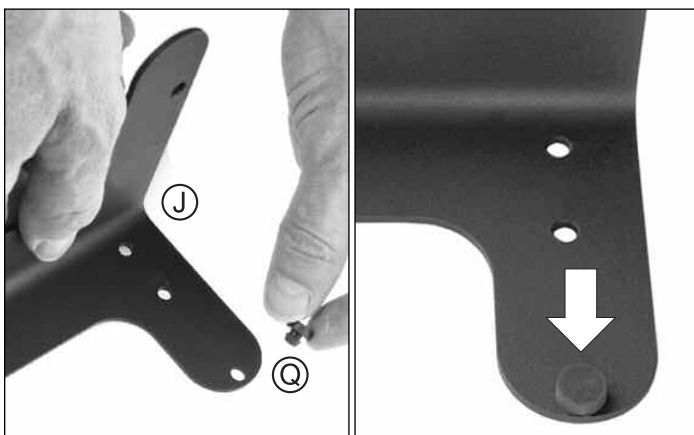


Figure 9



Figure 10



Figure 11

PREPARE THE VEHICLE FOR WIRING; CONT'D. INSTALL FLUID RESERVOIR AND MOUNTING BRACKET

Figure 11

Mount the Fluid Reservoir to the Mount Bracket using two Panhead Slotted Screws (K), Flat Washers (L) and Nylok Hex Nuts (M) from Bag#1245. (Flat Blade Screwdriver, 3/8" Socket or Wrench)

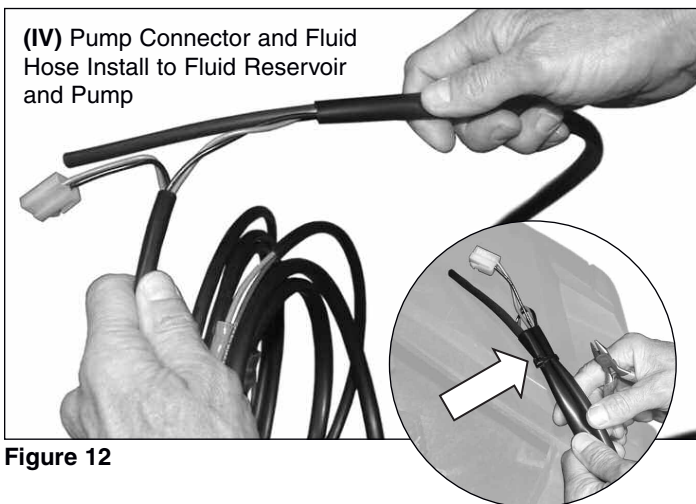
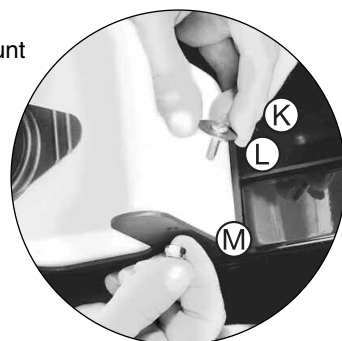


Figure 12

WIRE HARNESS INSTALLATION: PUMP CONNECTOR AND FLUID HOSE



Place Wire Harness under the vehicle's hood for initial terminal connections. Excess will be secured when wiring is complete.

Refer to "WIRE HARNESS REFERENCE POINTS" on Page 4.

Figure 12

Take Pump Quick Connector Terminal IV of the Wire Harness and locate the end of the Rubber Hose and the Large Nylon 2-Pin Electrical Quick-Connector with red and black wires.

Inset 12

Take the Quick-Connector section and fold it against the Rubber Hose section as shown. Secure the two sheaths with a 7.5" Zip-Tie (P) and trim the hose excess. (Wire Cutters)



Figure 13

Figure 13

Connect the Rubber Hose to the bottom of the Reservoir's Electrical Pump.

Inset 13

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

MOTOR CONNECTOR AND FLUID HOSE

Find the Motor Connector and Fluid Hose section of the Wiring Harness (Terminal I) and thread it through the 3/4" (19mm) hole cut into the vehicle's body from Page 5.

Use the 5/8" Rubber Grommet (II) attached to this section of the wiring harness to plug the hole.

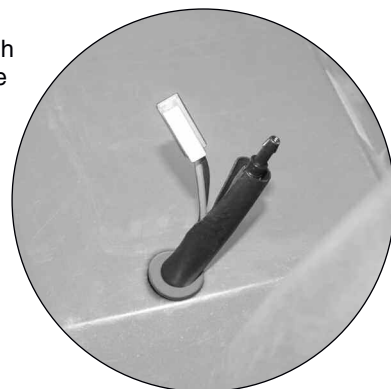




Figure 14



Figure 15



Figure 16

REINSTALL THE VEHICLE WINDSHIELD



Follow the installation guide in **Windshield Installation Instruction Sheet 10-118014-000**.

Need the instructions? Go to www.nationalcycle.com and insert **N30004** into the search box on the top right of the home page. Click the product listing, then click on the *N30004 Installation Instructions PDF link*.

Figure 14

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 15

On the driver's side, route harness wiring/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 harness wiring/fluid hose through the two Cable Clamps attached to the back of the top driver-side and top center Wraparound Clamps.

WIRE HARNESS INSTALLATION.

TERMINAL CONNECTIONS TO WIPER MOTOR

Figure 16

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 17

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



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

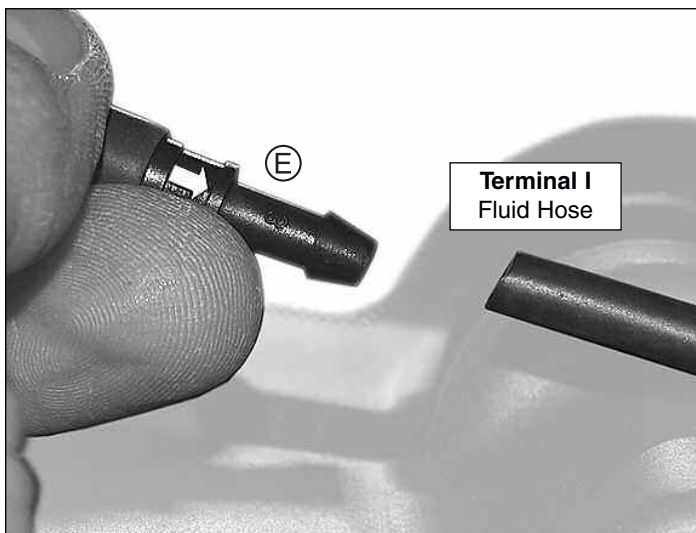


Figure 17



Figure 18



Figure 19



Figure 20

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

Figure 18

Join the power connectors from the Wiper Motor and from **Terminal I**.

Tuck excess wiring behind the Wiper Motor assembly.

Figure 19

The completed Wiper Motor installation should appear as shown.

ROCKER SWITCH TO DASH PANEL

Refer to "WIRE HARNESS REFERENCE POINTS" on Page 4.

Locate the section of Wire Harness (**Terminal III**) that ends in the Two-Way Rocker Switch. Temporarily remove the Rocker Switch from the Wiring Harness.

Route **Terminal III** over the steering column and behind the dashboard and through the hole you cut in Figures 5-6 on Page 4.

Figure 20

Re-attach the Two-Way Rocker Switch to the two Nylon Pin Connectors (polarity doesn't matter) and then push the Rocker Switch into the dash-board hole.

Figure 21

Completed dash panel Rocker Switch should appear as shown.

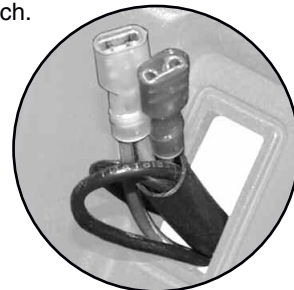


Figure 21



Figure 22

WIRE HARNESS INSTALLATION; CONT'D CONNECTIONS TO BATTERY TERMINALS

Refer to "WIRE HARNESS REFERENCE POINTS" on Page 4.

Figure 22

Locate the Battery **Terminal V** on the Wiring Harness.

Figure 23

Remove seat from vehicle to access the battery compartment.

Figure 24

Take the **Terminal V** end and follow the vehicle's OEM wire harness rearward along the lower frame rails.

Figure 25, 26, 27

Follow the lower frame rails and insert **Terminal V** into the battery compartment under the seat.



Figure 23



Figure 24

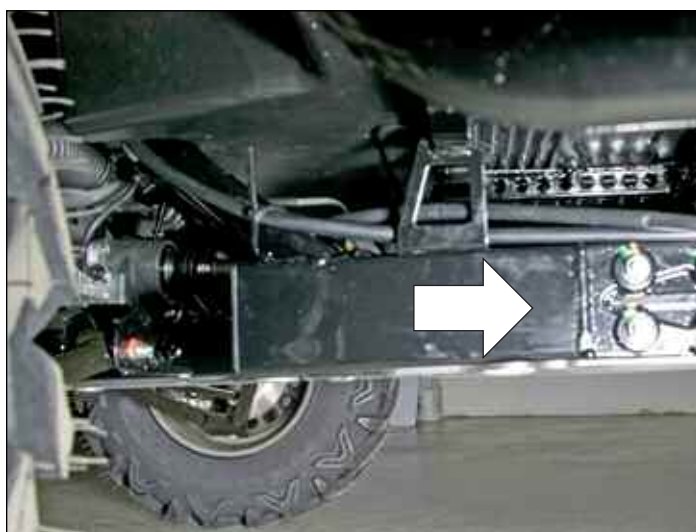


Figure 25



Figure 26



Figure 27

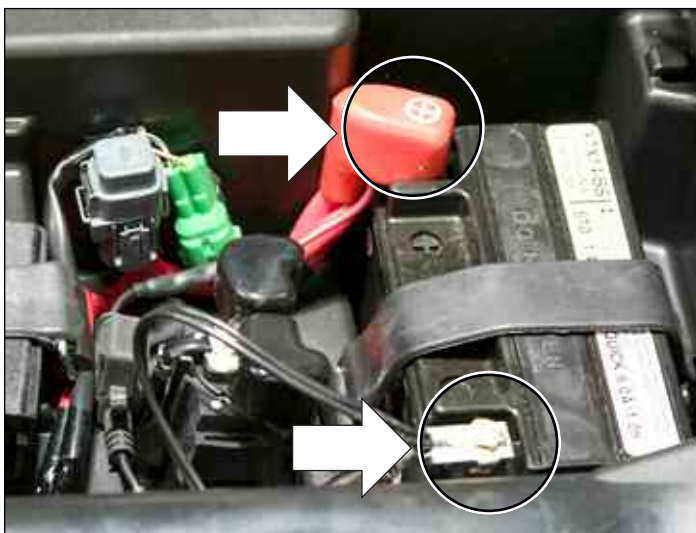


Figure 28



Figure 29

WIRE HARNESS INSTALLATION; CONT'D CONNECTIONS TO BATTERY TERMINALS

Figure 28-29

Loosen the negative terminal nut of the vehicle's battery with a Philips screwdriver or a 10mm wrench. Slip the Brass Open Ring Connector (Black Wire) under the negative terminal nut and tighten securely.

Repeat for the positive terminal with the other Brass Open Ring Connector (Red Wire). (Phillips Screwdriver or 10mm Wrench)

FINAL WIRE HARNESS ADJUSTMENTS

Adjust the Wiring Harness to remove all slack at:

- Terminal I to Wiper Motor
- Terminal III to Dashboard Switch
- Terminal IV to Fluid Reservoir
- Terminal V to Battery Compartment

Use the 11.00" Zip-Ties (N) and 7.50" Zip-Ties (O) to coil and secure the Wire Harness and excess wiring length thoroughly within the vehicle:

- Under the Hood
- Along the Lower Frame Rails
- In the Battery Compartment

Reinstall the vehicle's seat.

FILL THE FLUID RESERVOIR AND PLACE INTO BRACKET

Illustration D

Fill the Reservoir (I) 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 Page 11 for operation, replacement parts and warranty.

Illustration D



Enjoy Your New Wash'n'Wipe™ Windshield!



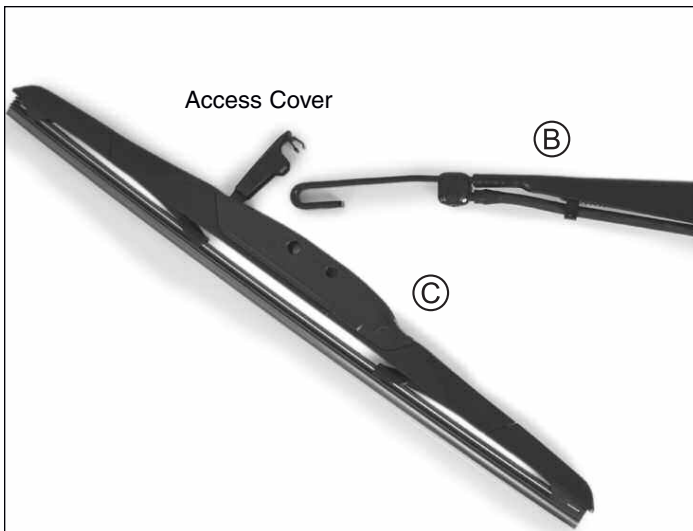


Figure 27



Figure 28



Figure 29

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 27

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 28

To remove the Wiper Arm (B), open the Wiper Arm cover and remove the Internal Tooth Lock Washer and Small Mounting Nut (M8 Stud Hardware Kit H). 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.

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)*

WASH'N'WIPE™



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 cham-
ois make good cleaning cloths. **Paint, glue residue or grease removal:** Moisten cot-
ton 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.