

Material: W24TS00019



KIT WIPER (PASSENGER) V4215 RTV

Batch #:



Qty: 1

Storage Bin: C25 – A – A01

TO #: 0000292393

TO Item: 0004



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**V4267A LEFT HAND PARK WIPER KIT - for driver's side
or
V4215A RIGHT HAND PARK WIPER KIT - for passenger's side**

FITS RTV-900 AND RTV-1140 CABS

INSTALLATION & OWNER'S MANUAL

The contents of this envelope are the property of the owner.
Be sure to leave with the owner when installation is complete.

ELECTRIC WIPER INSTALLATION

BEFORE YOU START

HELPFUL REMINDERS:

- A. Read and understand all instructions before beginning.
- B. If installing with an overhead console, finish wiring to the overhead console before bolting roof in place.

APPROXIMATE INSTALLATION TIME: 1 HOUR

TOOLS REQUIRED:

SCREWDRIVER (PHILLIPS OR REGULAR)
ADJUSTABLE WRENCH (MEDIUM)
WIRE CUTTERS
WIRE STRIPPERS
WIRE CRIMPING TOOL
SAFETY GLASSES
ALLEN WRENCH (2.5 mm)

1. WINDSHIELD PREP

- 1.1 Remove the rubber plugs from the windshield by inserting a screwdriver into the plugs from inside the cab and pushing them out, see fig. 1.1. **WARNING: Avoid damage! Do not pry against the windshield to remove the plugs from outside the cab.**

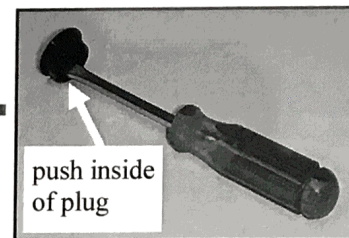


FIG. 1.1

2. INSTALL WIPER MOTOR

NOTE: make sure V4267A LEFT HAND PARK WIPER KIT is used on the driver's side only and V4215A RIGHT HAND PARK WIPER KIT is used on the passenger's side only. See windshield diagram on page 5 for final park positions of driver's side and/or passenger's side wiper arms.

- 2.1 Per fig 2.1, remove the large hex nut, plastic cup washer, and rubber washer from the motor shaft (Note: leave the black plastic standoff on the motor shaft). Place the large white nylon bushing on the motor shaft and slide it down against the black plastic standoff (oriented as shown in Figure "A" on the next page).
- 2.2 (See Fig. "A" on next page) Route and hold the wire over the top of the motor (between the motor shaft and the cast-in standoff in the body of the housing). From inside the cab, insert the motor shaft out through the larger mounting hole in the windshield until the shoulder of the white nylon bushing is against the windshield. From outside the cab, replace the rubber washer, plastic cup washer, and large hex nut on the motor shaft. Do not tighten.
- 2.3 From inside the cab, place the small nylon bushing into the smaller mounting hole in the windshield (oriented as shown in Fig. "A" on the next page), then pivot the wiper motor to align with the bushing. With the internal tooth lock washer on the 1/4-20 hex head bolt, insert the bolt through the motor bracket, nylon bushing, and windshield. Next, from outside the cab, install the rubber washer, plastic cup washer, and cap nut.
- 2.4 Carefully tighten the large hex nut on the motor shaft to 30 in./lbs., and the small 1/4-20 hex head bolt to 75 in./lbs. **WARNING: Avoid damage! Over tightening wiper motor mounting hardware can damage windshield glass.**
- 2.5 If installing a passenger side wiper, repeat steps 1.1 - 2.4.
- REMINDER: only V4215A RIGHT HAND PARK WIPER KIT should be installed on passenger's side. REF.: V4267A LEFT HAND PARK WIPER KIT is for driver's side installation only.**

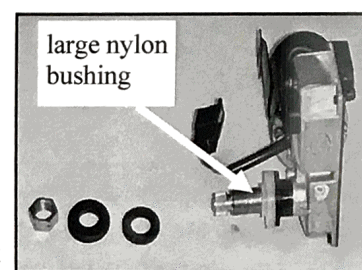
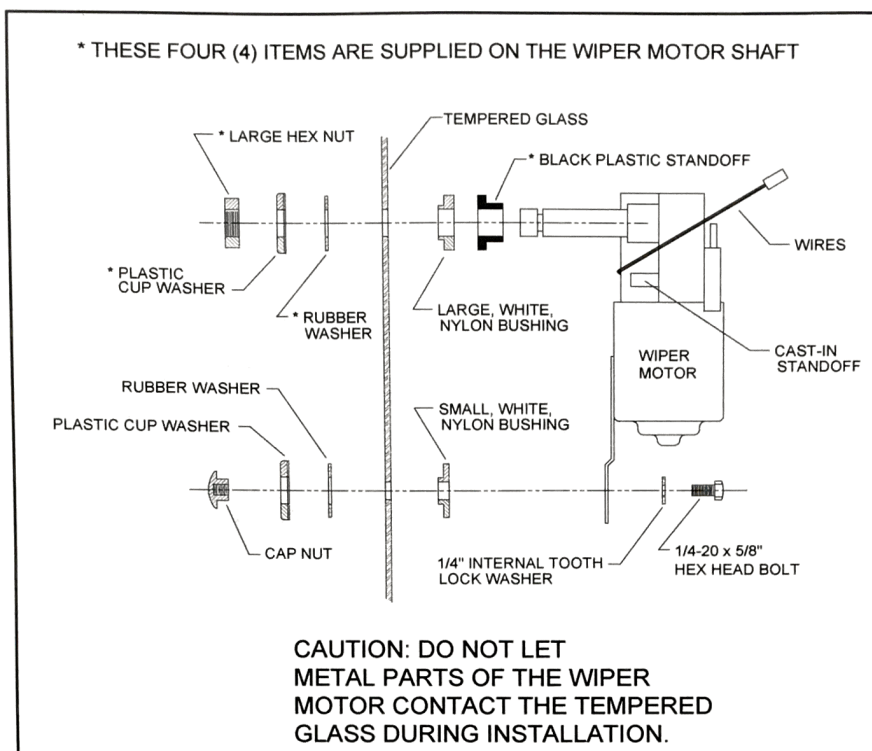


FIG. 2.1

Fig. "A"



3. WIRING DIRECT. (RTV-900 ONLY)

(WITHOUT OVERHEAD CONSOLE)

- 3.1 Disconnect negative battery cable. **CAUTION: ALWAYS WEAR SAFETY GLASSES WHEN WORKING AROUND BATTERIES.**
- 3.2 Per fig. 3.2, insert the wire harness connector plug into the wiper motor connector receptacle until the locking tabs snap together.
- 3.3 Route the wires along the lip at the top of the windshield then down the left side of the windshield and under the vehicle hood.
- 3.4 If installing a passenger side wiper, repeat steps 3.2 and 3.3.
- 3.5 Route the black wire(s) to a ground source and connect. Per figure 3.5, cut the in-line fuse wire in the middle, install a butt connector on one end and a 5/16" ring terminal on the other and install the supplied fuse. Connect the ring terminal end of the in-line fuse wire to a positive feed. Connect the open end of the red power lead to the butt connector on the in-line fuse wire.
- 3.6 Cover wire(s) in split loom. Secure to left side windshield with p clamps and self-drilling screws. Per figure 3.6, secure to the lip at the top of the windshield above the wiper motor with a wire tie using one of the two holes in the center of the lip or by drilling a hole in the lip if necessary. **NOTE:** make sure there is enough slack in the wire to allow the windshield to open.
- 3.7 Re-connect the negative battery cable.
- 3.8 Test switch operation.

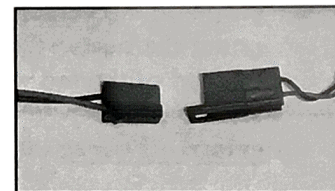


FIG. 3.2



FIG. 3.5



FIG. 3.6

4. WIRING WITH OVERHEAD CONSOLE, (RTV-900) ONLY

- 4.1 If the wiper is installed in conjunction with an overhead console, then plug into the provided lead labeled "wiper" on the back side of the overhead console. Loom and secure wires with wire ties. There is a designated switch and circuit breaker for the wiper.
- 4.2 To install a second wiper, wire it to the same switch or to an accessory switch.
- 4.3 Test switch operation. Remember that there is an integral switch on the wiper motor housing that needs to be in the "on" position.

5. WIRING, (RTV-1140 ONLY)

- 5.1 Disconnect negative battery cable. **CAUTION: ALWAYS WEAR SAFETY GLASSES WHEN WORKING AROUND BATTERIES.**
- 5.2 Per fig. 5.2, insert the wire harness connector plug into the wiper motor connector receptacle until the locking tabs snap together.
- 5.3 Route the wires along the lip at the top of the windshield, then down the right side of the roll bar, and through the rubber boot at the bottom of the roll bar and under the vehicle hood. See fig. 5.3
- 5.4 If installing passenger side wiper, repeat steps 5.2 and 5.3
- 5.5 Per fig. 5.5, route the black wire(s) over to the ground stud under the hood, cut to length, install a 5/16" ring terminal and attach to ground stud.
- 5.6 Route red wire(s) under the vehicle, toward the battery which is under the rear seat on the passenger side. Per fig. 5.6, crimp male bullet connectors to the end of the harness and attach the red accessory wire(s), which already have female bullet connector installed. Route other end of red wire to battery compartment area.
- 5.7 Per fig. 5.7, locate the female bullet connector on the red wire with green stripe on the vehicle harness. (The wire is located above the battery and under the fuses.) Cut wire to length and install a male bullet connector on the end of the red wire. Attach to female bullet connector on the red wire with green stripe. **NOTE: If installing two wiper kits and or a heater, crimp all wires into the male bullet connector and then attach.**
- 5.8 Cover wire(s) in split loom. Per fig. 5.8, secure to roll bar and under vehicle with wire ties provided. **NOTE:** Make sure there is enough slack in the wire harness to allow the windshield to open.

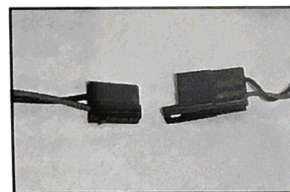


FIG. 5.2

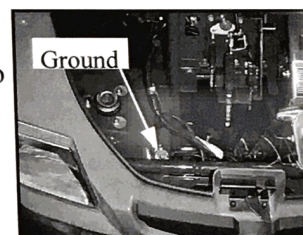


FIG. 5.5



FIG. 5.6



FIG. 5.7

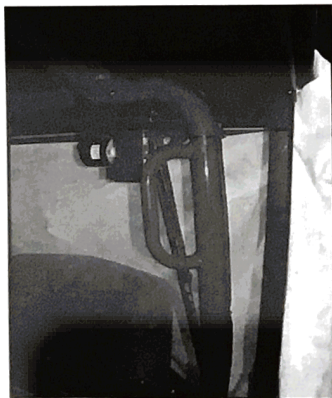


FIG. 5.8

6. INSTALL WIPER ARM AND BLADE

- 6.1 Remove the screw and locknut from the wiper arm. Reference figure 6.1
- 6.2 Insert the screw through the upper mounting hole in the wiper blade, then the wiper arm, then fasten with the locknut. reference figure 6.1
- 6.3 Lift the locking tab located on the underside of the wiper arm, extend the wiper arm so that it is 13 1/2" long then push the tab down to lock the position. See figure 6.3.
- 6.4 Loosen the small bolt on the wiper arm, turn the blade approximately 5 degrees clockwise from the arm, and tighten bolt.
- 6.5 **IMPORTANT: Turn the wiper motor off using the integral switch on the wiper motor housing so that it will cycle to a parked position and stop.** If the wiper motor is turned off using the console switch, it will stop immediately (and not necessarily in it's meaningful parked position.)
- 6.6 Press the wiper arm onto the driver's side wiper motor shaft positioned so that the arm is 5 degrees from horizontal as shown in the diagram below (when viewed from the outside of the vehicle). If also installing a passenger side wiper, position this arm 10 degrees from vertical as shown. REMINDER: V4267A LEFT HAND PARK WIPER KIT is for the driver's side only and V4215A RIGHT HAND PARK WIPER KIT is for the passenger's side only.
- 6.7 Turn the wiper motor on and test operation. (If necessary, adjust arm sweep by turning wiper blade, adjusting arm length, or removing wiper arm and reinstalling in a different position.) **NOTE: if installing two wipers on windshield, be sure wiper sweeps do not interfere with each other.**

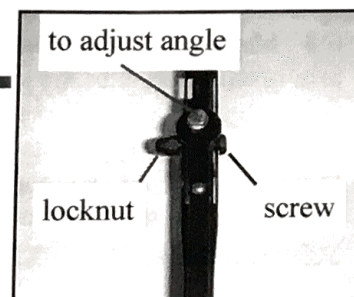


FIG. 6.1

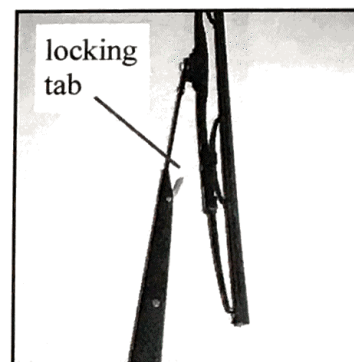
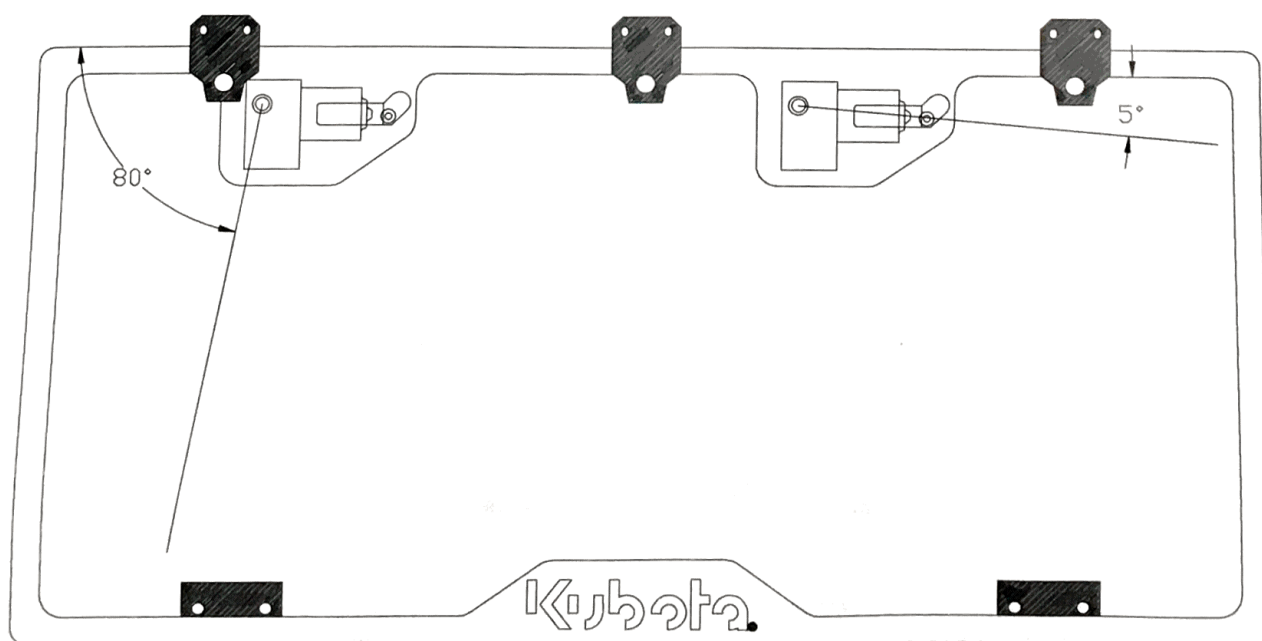


FIG. 6.3



(view from front of vehicle)

6. INSTALL WIPER ARM (cont'd.)

6.8 Make sure wiper arm is fully seated on wiper motor shaft. See figures 6.8 and 6.8.1 for improper and proper wiper arm installation onto the splined shaft of the wiper motor. Note: fig. 6.8 may give the impression that the wiper arm is fully engaged and will not come off, but that is not the case until the conditions in fig. 6.8.1 are met (**spring clip fully behind the splines**). Note: a mirror was used in both photos in order to clearly see and confirm the spring clip engagement. It is strongly suggested to double check the spring clip engagement using a mirror as illustrated. It may be necessary to lightly tap the arm with a rubber mallet to fully seat the arm. **CAUTION: to avoid breaking the polycarbonate windshield, support the wiper motor with your hand when tapping the arm.**

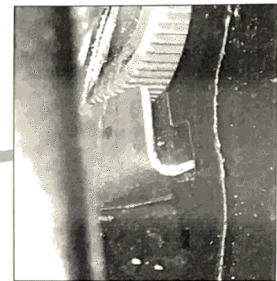
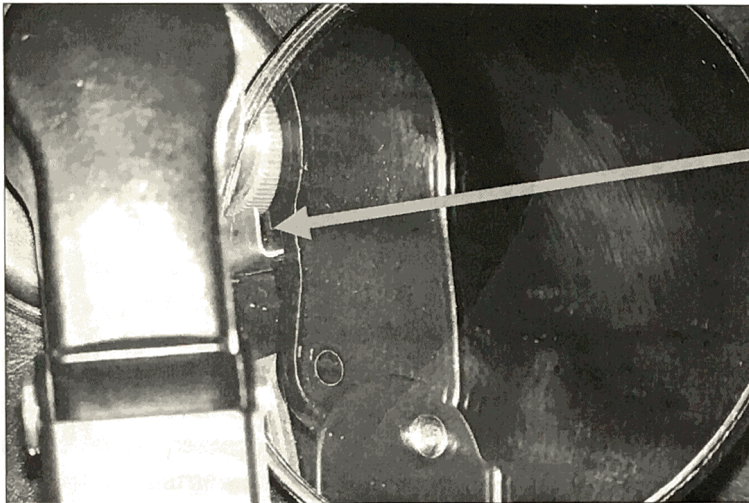


Fig. 6.8 shows the wiper arm **not properly installed** (spring clip has not sprung down behind/below the raised splines)

Step 6.9. Tighten set screws

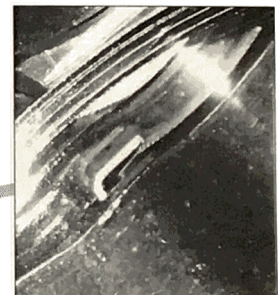
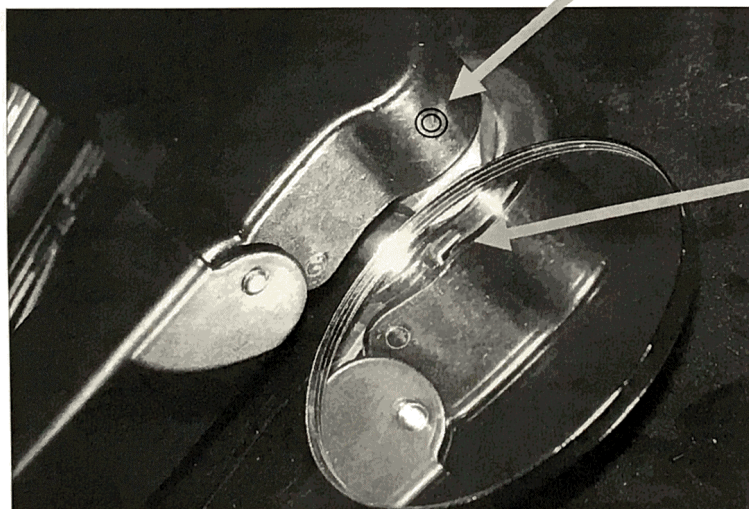


Fig. 6.8.1 shows the wiper arm properly installed (spring clip has sprung down behind/below the raised splines)

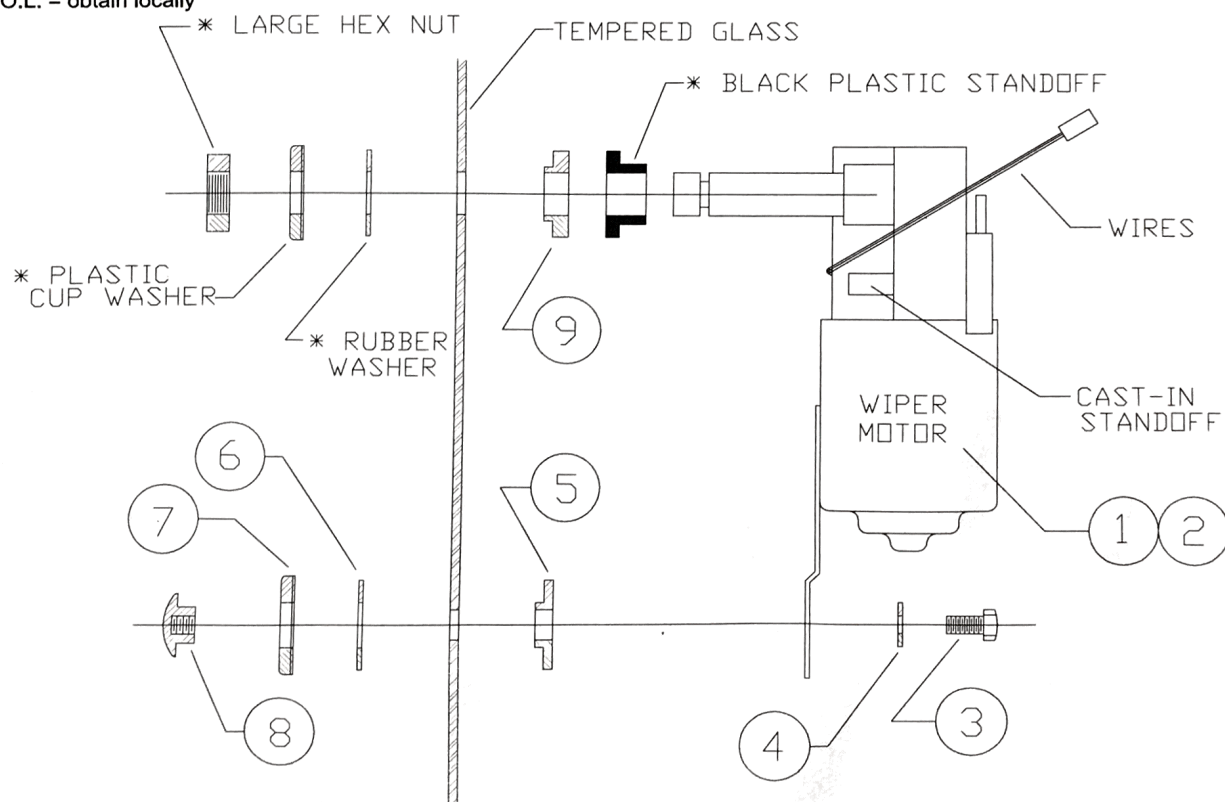
6.9 Two set screws have been provided (180 degrees apart) to ensure that the arm does not work its way off the splined shaft of the motor. Tighten at least one of the two set screws (tighten both set screws if accessible and possible). Tighten to 2 foot-pounds max. (or 24 inch-pounds max.).

V4267A AND/OR V4215A ELECTRIC WIPER KIT

SERVICE PARTS

REF. NO.	KUBOTA P/N	CODE NO.	QTY.	DESCRIPTION
1	70000-01056	9PWM852	1	85° WIPER MOTOR (V4215A - RIGHT HAND PARK WIPER KIT - for passenger's side only)
2	70000-01169	9PWM852L	1	85° WIPER MOTOR (V4267A - LEFT HAND PARK WIPER KIT - for driver's side only)
3	70000-01064	AC1002	1	1/4-20 x 5/8" LONG HEX HEAD BOLT
4	70000-01066	AC1004	1	1/4" INTERNAL TOOTH LOCK WASHER
5	70000-01063	AC1001	1	SMALL GLASS INSULATING BUSHING
6	70000-01070	AC1008	1	RUBBER WASHER
7	70000-01072	AC1010	1	PLASTIC CUP WASHER
8	70000-01067	AC1005	1	1/4-20 CAP NUT
9	70000-01062	AC1000	1	LARGE GLASS INSULATING BUSHING
-	70000-01055	9PWB20-FB	1	20" FLEX WIPER BLADE
-	70000-01054	9PWA14/16	1	WIPER ARM
-	70000-01068	AC1006	1	BUTT CONNECTOR
-	70000-01069	AC1007	1	WIPER WIRE HARNESS
-	70000-01081	AC1020	1	PUSH-ON SPADE CONNECTOR - FEMALE
-	70000-01073	AC1011	2	7 FT. 1/4" LOOM
-	70000-01074	AC1012	1	8-AMP FUSE
-	O.L.	V4215P2	1	IN-LINE FUSE HOLDER
-	70000-01075	AC1013	2	5/16" RING TERMINAL
-	70000-01076	AC1014	2	TIE STRAP (SMALL)
-	70000-01077	AC1015	3	LOOM CLAMPS
-	70000-01078	AC1016	3	#10 x 1/2" LONG SELF-TAPPING SCREWS
-	70000-01168	V4215P1	1	INSTALLATION INSTRUCTIONS, ELECTRIC WIPER KIT
-	70000-01084	AC1026	1	ACCESSORY WIRE HARNESS
-	70000-01079	AC1017	4	8" WIRE TIES
-	70000-01147	V4218P2	1	BULLET CONNECTOR - FEMALE
-	70000-01083	AC1022	3	BULLET CONNECTOR - MALE

O.L. = obtain locally



* THESE FOUR (4) ITEMS ARE SUPPLIED ON THE WIPER MOTOR SHAFT

Wiper Arm Installation Update for

Standard wiper arm p/n: 9PWA14/16
or
Pantograph wiper arm p/n: 9PWA18-PGS

To improve product performance, the wiper arms are now supplied with one or two set screws (depending upon the arm style) for additional retention in addition to the retention provided by the existing spring clip. Before fully pressing the wiper arm deeply and fully onto the splined shaft of the wiper motor, make sure the full window sweep is agreeable by cycling the wiper motor on for one full sweep pattern. Once satisfied that the sweep is good, fully seat the wiper arm onto the splined shaft of the wiper motor deep enough so that the spring clip engages properly (engaged over the bottom of the spline), then tighten the one or two set screws provided (2 foot-pounds max. torque). Ref.: the M5 set screws require a 2.5mm Allen wrench.

