



**NUMBER:** 23-040-04

**GROUP:** Body

**DATE:** October 5, 2004

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**SUBJECT:**

Rear Spoiler Service Parts And Procedures

**MODELS:**

2004-2005 (ZH) Crossfire Coupe/Crossfire Roadster

**DISCUSSION:**

It may be unnecessary to replace the entire spoiler assembly when the spoiler is inoperative or damaged. Replacement service parts are available from Mopar as listed below. The service procedures for the rear spoiler are attached at the end of this bulletin.

**PARTS REQUIRED:**

Qty.	Part No.	Description
1	05161796AA	Drive Shaft Kit, Spoiler Kit Contains: 1 - Left Drive Shaft 1 - Right Drive Shaft 2 - Locking Pins
1	05161797AA	Motor Kit, Spoiler Kit Contains: 1 - Motor Mount 1 - Motor 4 - Damper 2 - Collar 1 - Gear Wheel 4 - Nut 2 - Lock Washer 2 - Flanged Bearing (MFM-0912-08) 1 - Flanged Bearing (GFM-1517-04) 2 - Cable Tie 2 - Micro Switch Assy .2 - Screw 2 - Rubber Support 2 - Bracket 1 - Connector 1 - Screw
1	05161798AA	Isolator Kit- Coupe Kit Contains:

Qty.	Part No.	Description
		2 - Spoiler Rest Upper 2 - Spoiler Rest Lower 2 - Rubber Stop, Upper 2 - Rubber Stop, Lower
1	05161799AA	Isolator Kit - Roadster Kit Contains: 2 - Spoiler Rest Upper 2 - Spoiler Rest Lower 2 - Rubber Stop, Upper 2 - Rubber Stop, Lower
1	05161800AA	Pin Kit, Drive Shaft Locking Coupe/Roadster Kit Contains: 2 - Locking Pins
1	1CE53TZZAB	Panel, Outer Spoiler - Roadster
1	1BN35TZZAB	Panel, Outer Spoiler - Coupe
1	05161967AA	Switch Kit, Micro-switch, Spoiler - Coupe/Roadster Kit Contains: 1 - Lock Washer 2 - Cable Ties 1 - Micro Switch Assembly

**TIME ALLOWANCE:**

Refer to Quick Labor Operations.

# REAR SPOILER

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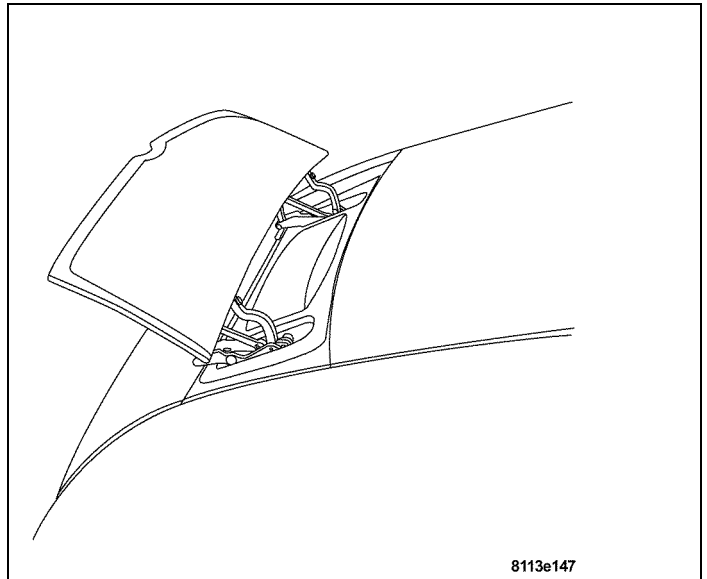
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## REAR SPOILER

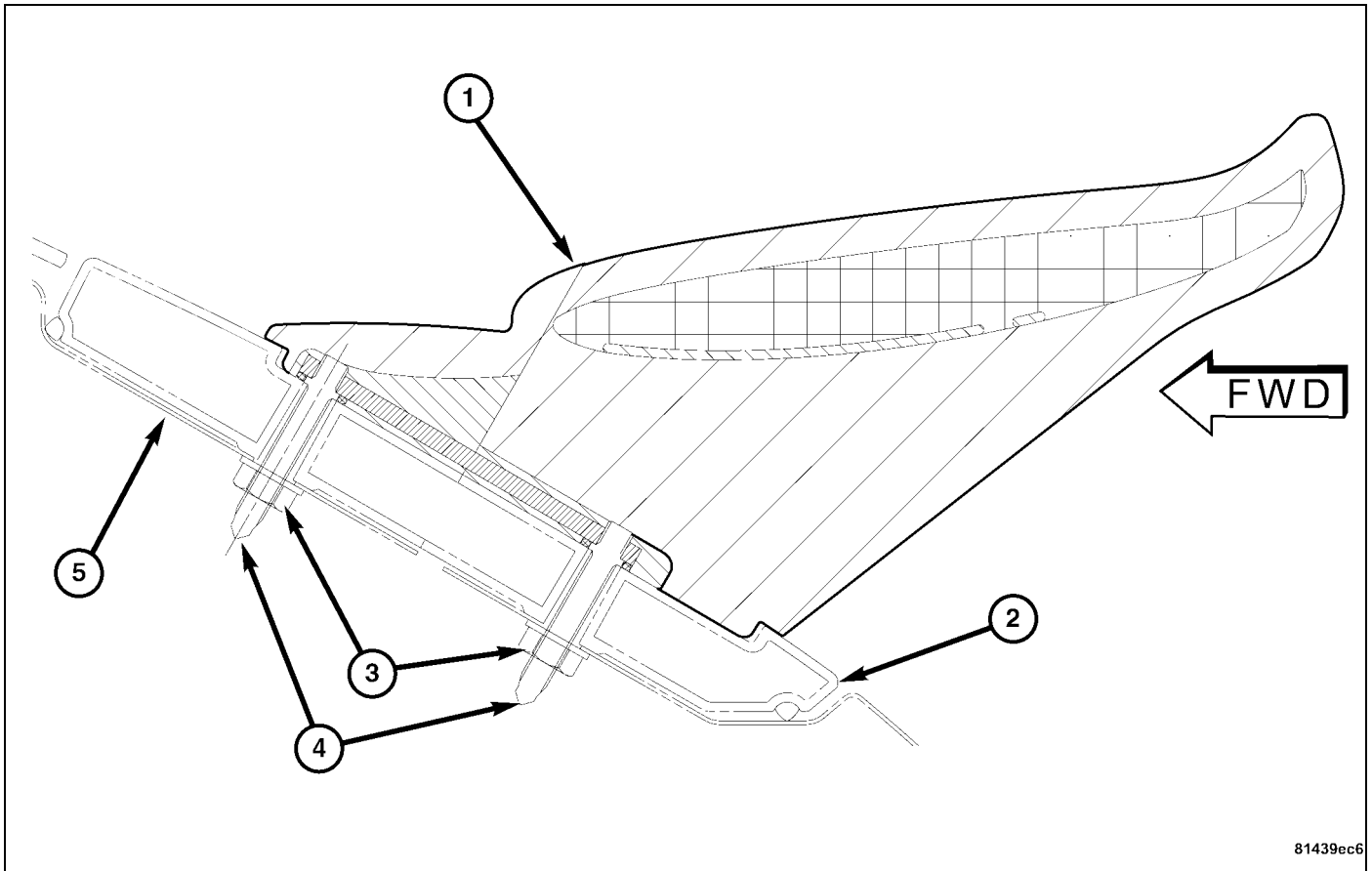
### DESCRIPTION

### DESCRIPTION

A deployable rear spoiler enhances the vehicle's stability. Powered by an electric motor, it deploys automatically when the vehicle speed reaches 62 MPH (102 km/h) to provide 40 Lbs. (356 Newtons) of aerodynamic downforce to the rear of the vehicle at 80 MPH (129 km/h).



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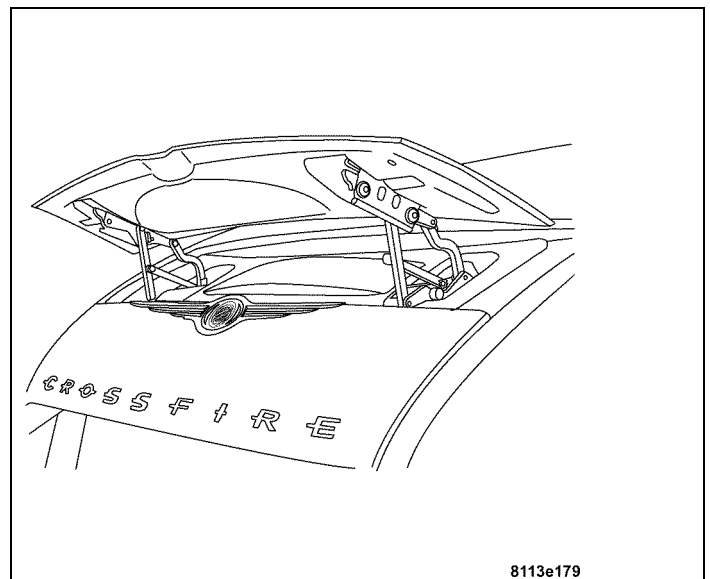
**DESCRIPTION - SRT**

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The SRT has a fixed wing spoiler (1). The spoiler wing (1) is attached to the liftgate (5) by a mounting plate (2), mounting studs (4), and mounting nuts (3).

**OPERATION**

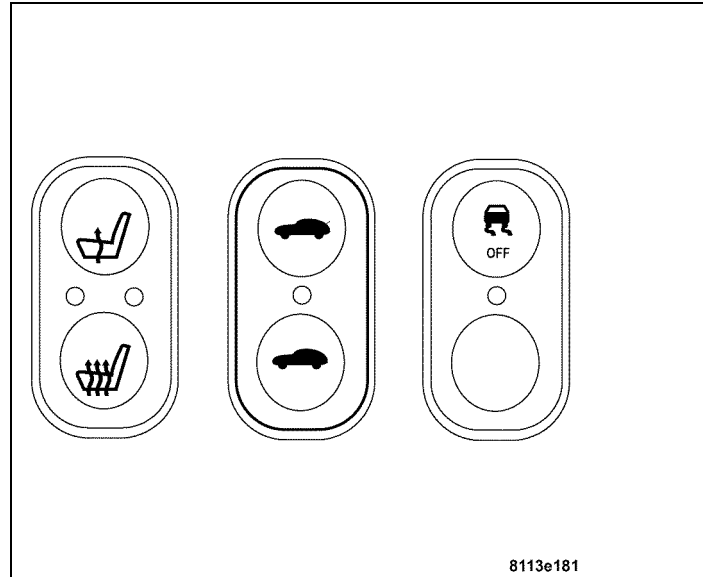
The rear spoiler is powered by an electric motor located directly below the spoiler wing in the spoiler assembly. When the vehicle reaches 62 MPH (102 km/h), the rear spoiler deploys, giving the vehicle 40 Lbs. (356 Newtons) of downforce at 80 MPH (129 km/h). As the vehicle decelerates, the rear spoiler starts to retract at a speed of 39 MPH (62 km/h). When retracted, the spoiler nestles between the rear quarter panels and the rear liftgate window.



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The spoiler can be manually deployed at lower speed using the override switch mounted in the center console. Pushing the switch up raises the rear spoiler. Pushing the switch down lowers the rear spoiler.

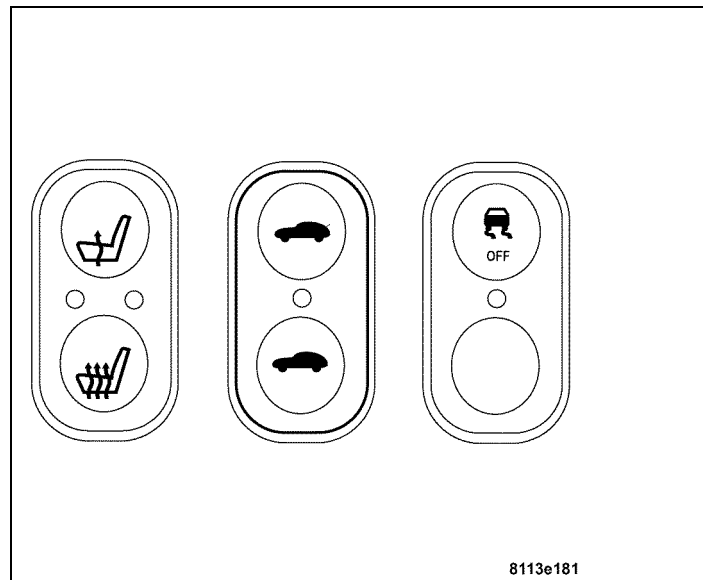
To prevent injury, the rear spoiler retracts in defined steps to allow time to pull any hands or foreign objects that may be in the path of the rear spoiler before it is all the way down. If the rear spoiler gets disturbed while retracting automatically or while retracting manually, the rear spoiler is automatically driven up again and will lock in the up position. During manual retraction, if you let up on the switch, the rear spoiler will be driven to its up position. When retracting the rear spoiler manually, a single audible chime is produced to indicate to the driver that the rear spoiler is in the fully retracted position. A warning signal (LED) on the spoiler override switch illuminates, indicating a malfunction to the driver. A malfunction that prevents the spoiler from deploying illuminates a red warning lamp in the override switch.



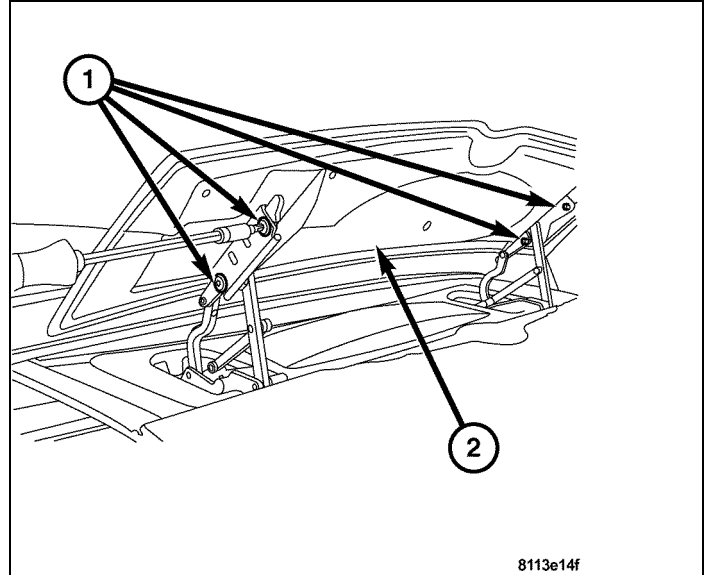
## REMOVAL

### REMOVAL - SPOILER WING

1. If the rear spoiler is not already in the up position, raise the rear spoiler by pushing the top of the manual override switch (1).

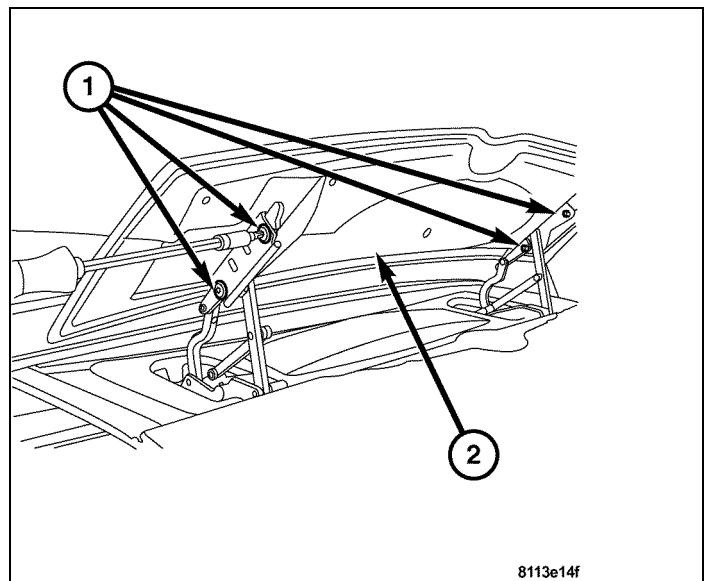


2. Remove the mounting bolt covers from both sides of the rear spoiler.
3. Remove the four screws (1) then remove the rear spoiler wing (2) from the rear spoiler linkage.

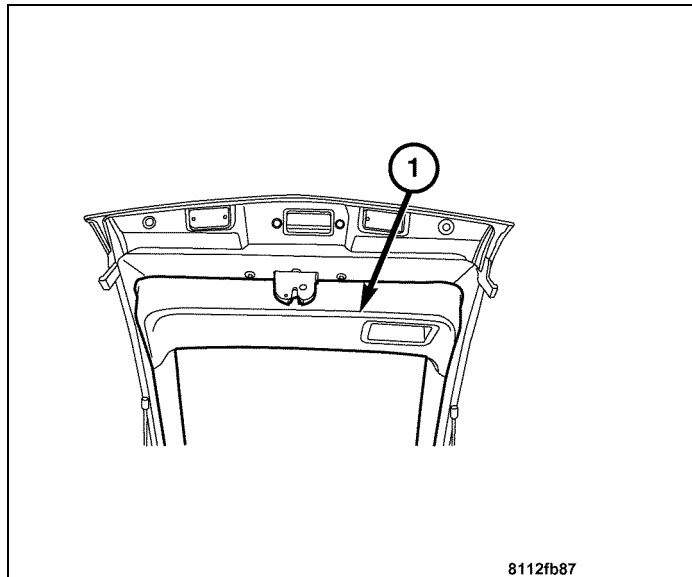


### REMOVAL - MOUNTING PLATE

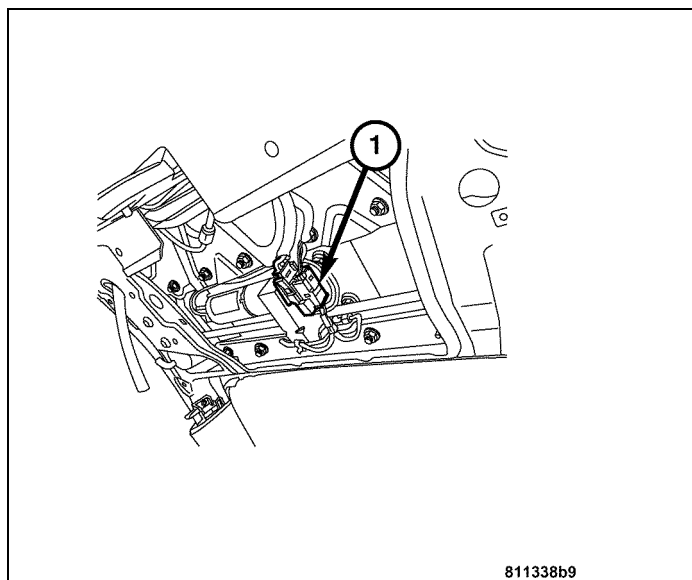
1. Remove the spoiler wing (2) from the linkage. (Refer to 23 - BODY/EXTERIOR/SPOILER - REMOVAL).



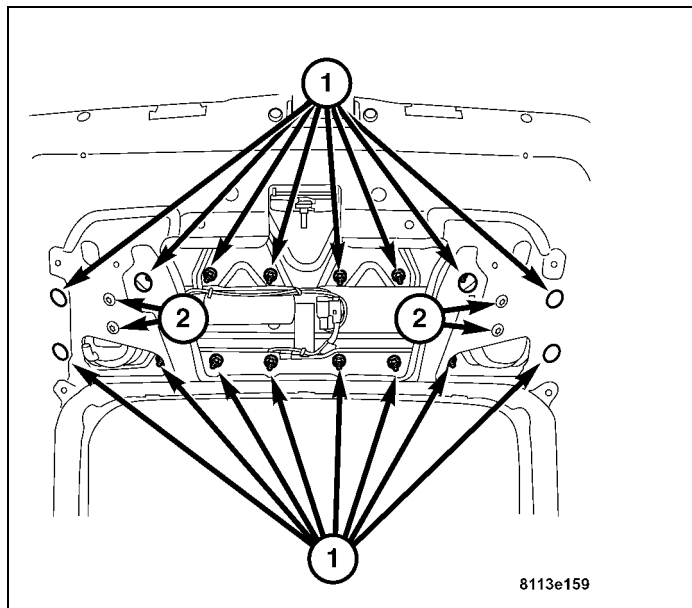
2. Open the rear liftgate.
3. Remove the lower trim panel (1). (Refer to 23 - BODY/DECKLID/HATCH/LIFTGATE/TAILGATE/TRIM PANEL - REMOVAL).



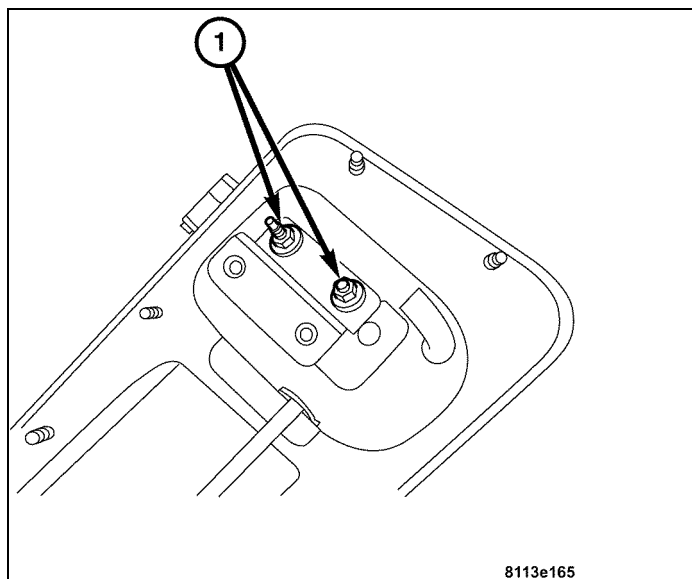
4. Disconnect the spoiler electrical connectors (1).



5. Remove the two drain tubes from the mounting plate.
6. Remove the mounting plate nuts (1) from the rear liftgate.
7. Remove the mounting plate nuts (2) from the rear liftgate.
8. Lower the liftgate down and pull the mounting plate out of the rear liftgate.

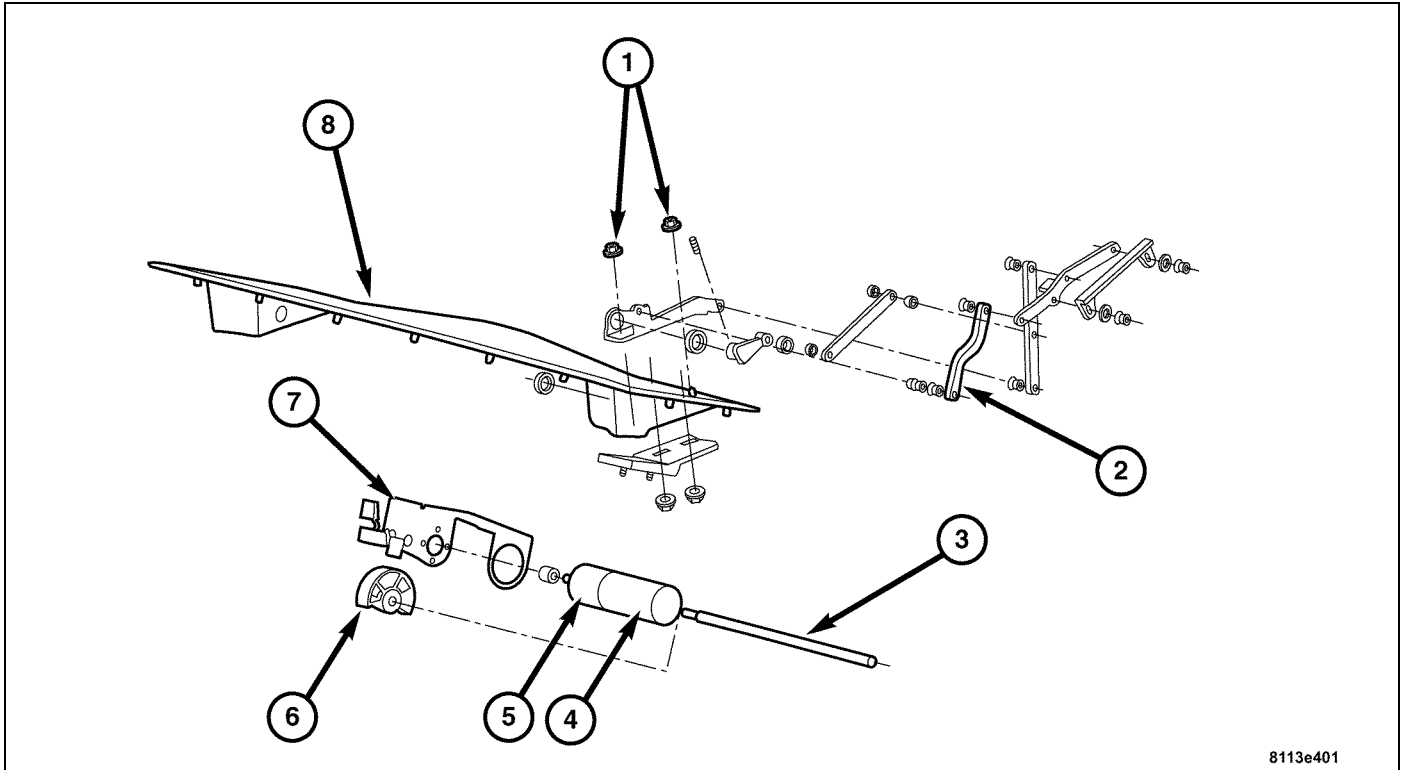


9. Remove the mounting bracket from the mounting plate by removing the retaining nuts (1).

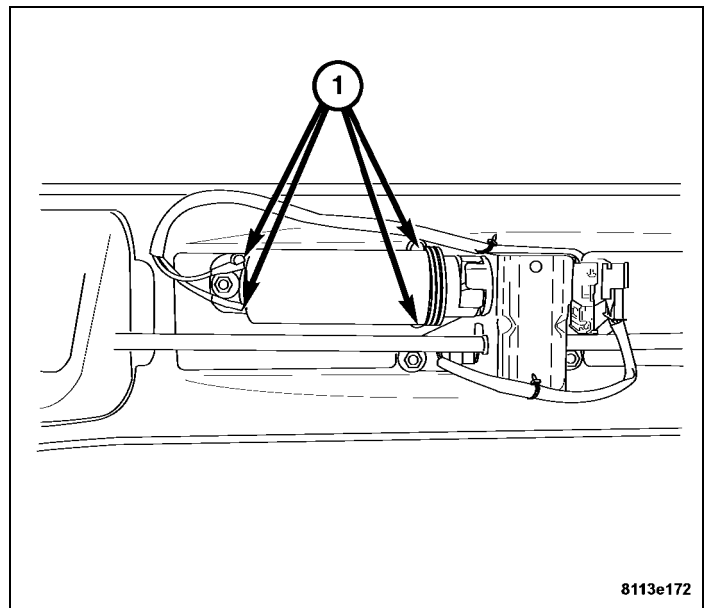




## REMOVAL - MOTOR

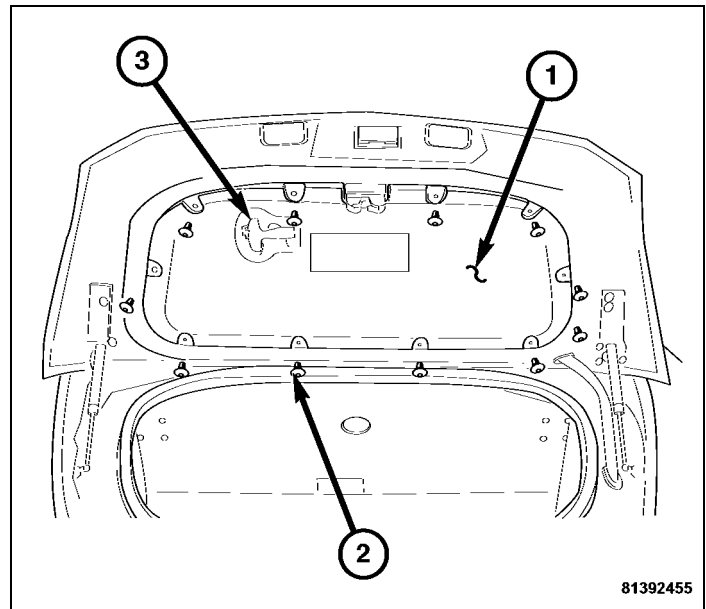


1. Disconnect the negative battery cable.
2. Remove the lower liftgate trim panel. (Refer to 23 - BODY/DECKLID/HATCH/LIFTGATE/TAILGATE/TRIM PANEL - REMOVAL).
3. Disconnect the electrical connectors from the motor.
4. Remove any tie straps (if equipped) securing the motor to the motor bracket.
5. Remove the 4 screws (1) attaching the motor to the bracket.

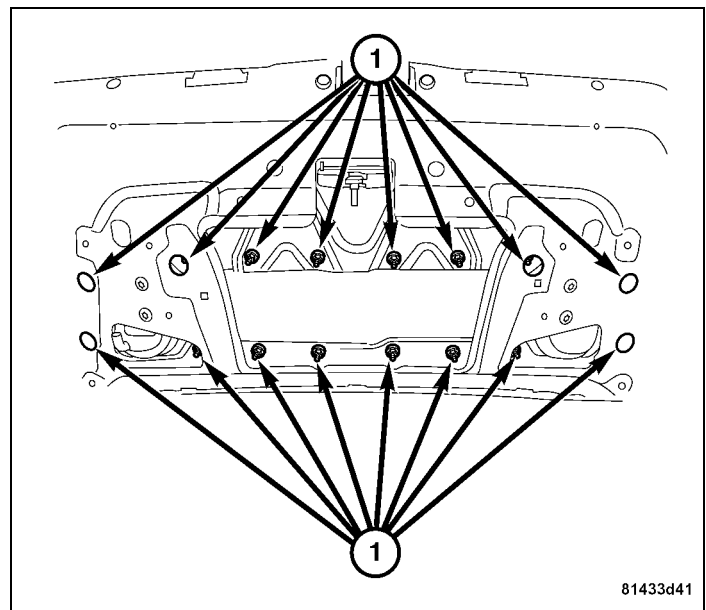


**REMOVAL - SRT-ROADSTER**

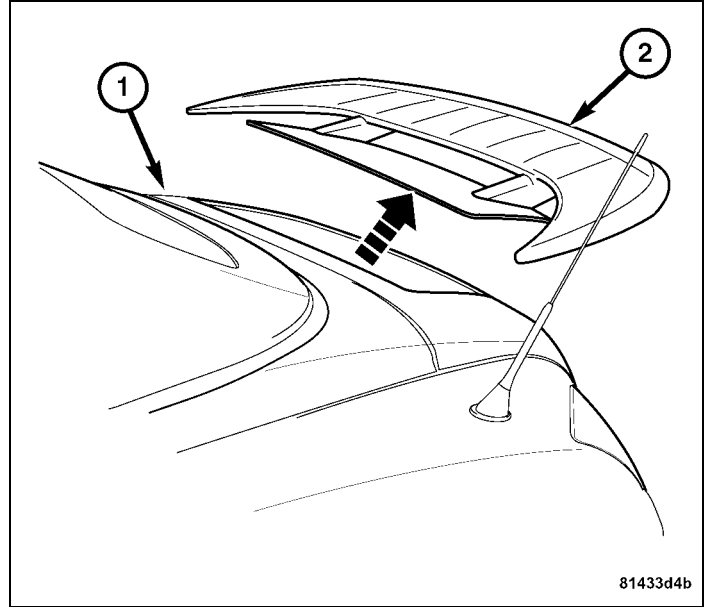
1. Open the decklid and remove the decklid trim panel (1). (Refer to 23 - BODY/DECKLID/HATCH/LIFT-GATE/TAILGATE/TRIM PANEL - REMOVAL).



2. Remove the retaining nuts (1) securing the spoiler assembly to the decklid.



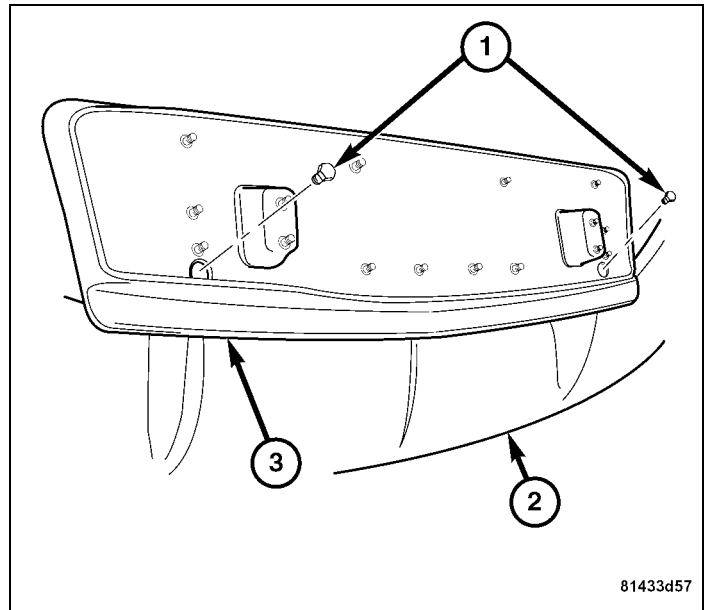
3. Remove the spoiler assembly (2) from the decklid (1).



4. Set the spoiler wing assembly down on a clean dry surface.
5. Remove the two bolts (1) attaching the spoiler wing (2) to the spoiler mounting plate (3).

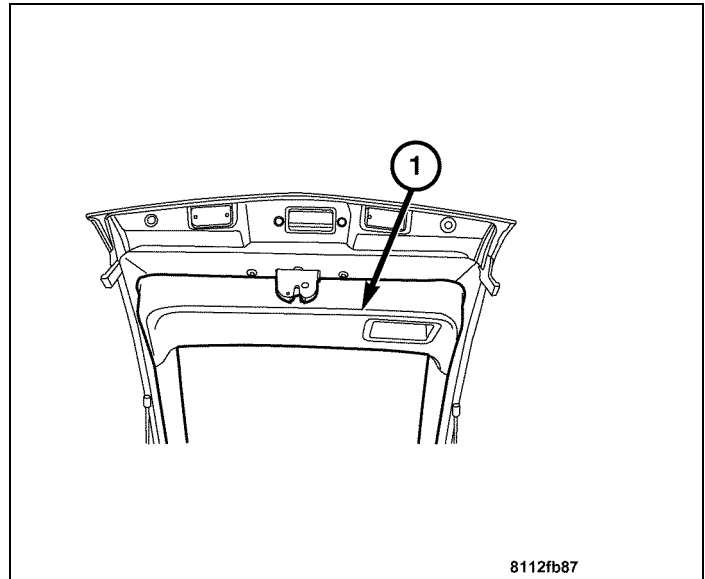
**CAUTION: Be careful not to damage any paint when removing the spoiler wing. The spoiler wing studs will be removed with the spoiler wing.**

6. Carefully separate the spoiler wing from the mounting plate.



**REMOVAL - SRT-COUPÉ**

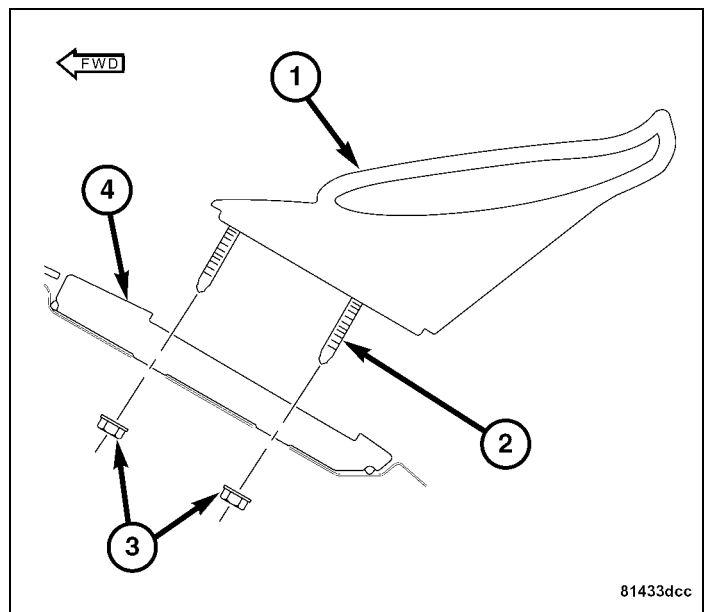
1. Open the liftgate and remove the lower liftgate trim panel (1). (Refer to 23 - BODY/DECKLID/HATCH/LIFTGATE/TAILGATE/TRIM PANEL - REMOVAL).



2. Remove the four nuts (3) attaching the spoiler wing (1) to the liftgate (4).

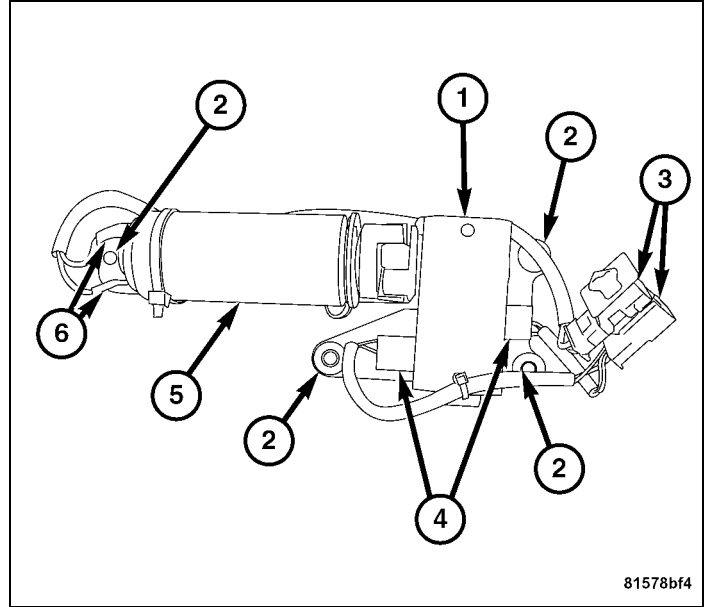
**NOTE: Be careful not to damage any paint when removing the spoiler wing. The spoiler wing studs (2) will be removed with the spoiler wing.**

3. Remove the spoiler wing from the liftgate.

**REMOVAL - SPOILER MOTOR HARNESS**

1. Disconnect the negative battery cable.
2. Remove the lower liftgate trim panel. (Refer to 23 - BODY/DECKLID/HATCH/LIFTGATE/TAILGATE/TRIM PANEL - REMOVAL).

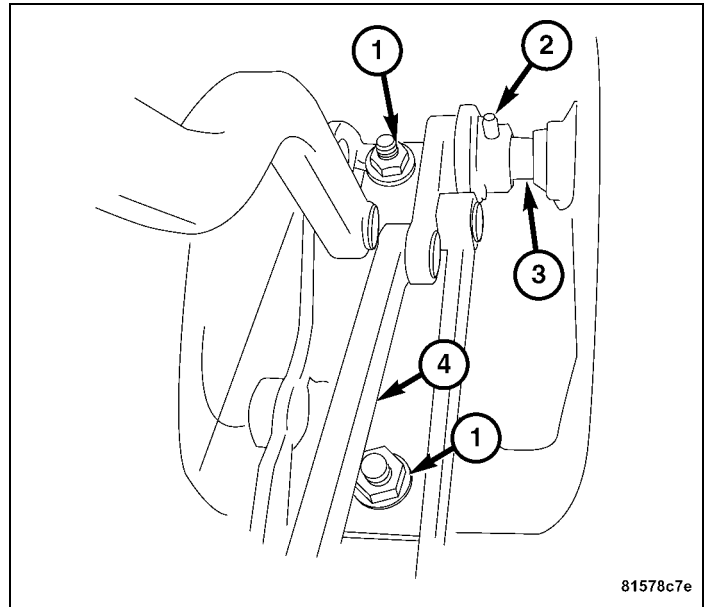
3. Disconnect the spoiler motor electrical connectors (3), and separate the connectors from the bracket (1).
4. Remove the 4 spoiler motor bracket nuts (2) to gain access to the microswitch retainers.
5. Remove the retainers from the rear of the microswitches (4).
6. Disconnect the harness (6) from the spoiler motor (5), and remove the harness.



### REMOVAL - DRIVESHAFT

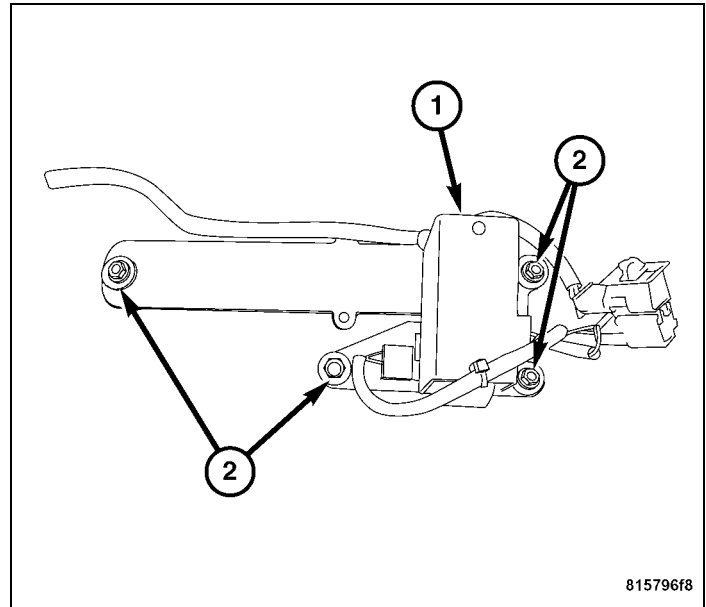
**NOTE: Only one side is shown. The procedure is the same for both sides.**

1. Remove the spoiler mounting plate from the vehicle (Refer to 23 - BODY/EXTERIOR/SPOILER - REMOVAL).
2. Remove the spoiler motor from the mounting plate (Refer to 23 - BODY/EXTERIOR/SPOILER - REMOVAL).
3. Rotate the spoiler wing frame so the roll pin (2) is parallel to the mounting plate.
4. Using a roll pin punch, remove the roll pin (2).
5. Remove the spoiler wing frame nuts (1), and rotate the spoiler wing frame (4) up and out from the driveshaft (3).
6. Release the driveshaft (3) from the spoiler transmission and remove the driveshaft.



## REMOVAL - MOTOR BRACKET

1. Remove the spoiler motor (Refer to 23 - BODY/EXTERIOR/SPOILER - REMOVAL).
2. Remove the driveshafts (Refer to 23 - BODY/EXTERIOR/SPOILER - REMOVAL).
3. Remove the 4 nuts (2) and the spoiler motor bracket (1).



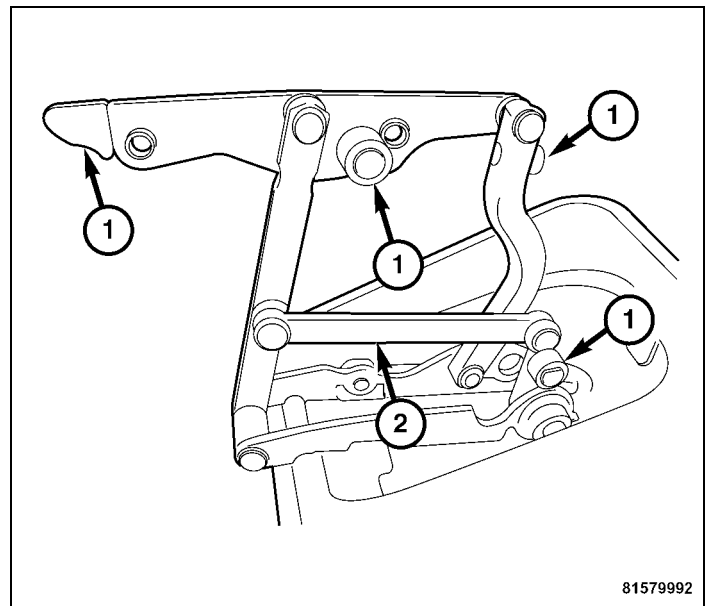
## REMOVAL - SPOILER DAMPENERS

**NOTE:** Left side is shown. Right side is similar.

1. Remove the spoiler wing (Refer to 23 - BODY/EXTERIOR/SPOILER - REMOVAL).

**NOTE:** With the spoiler motor removed, the spoiler wing frame can be moved as needed to access the spoiler dampeners.

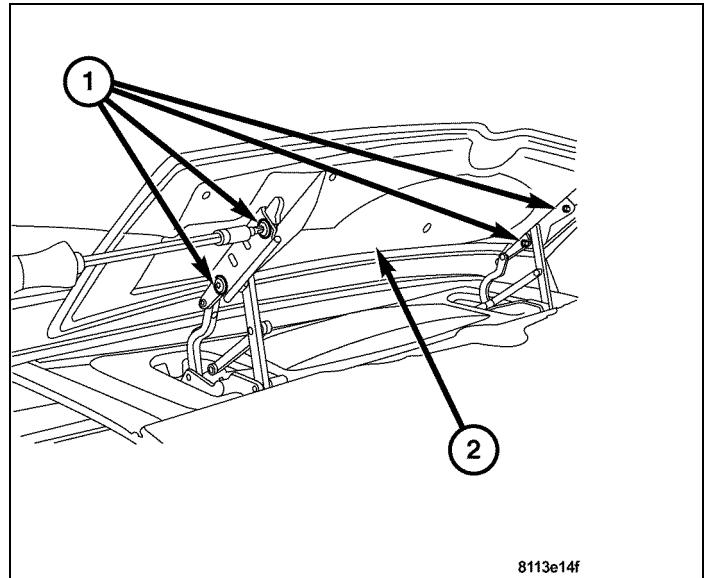
2. Remove the spoiler motor (Refer to 23 - BODY/EXTERIOR/SPOILER - REMOVAL).
3. Remove the spoiler dampeners (1) from the spoiler wing frame (2).



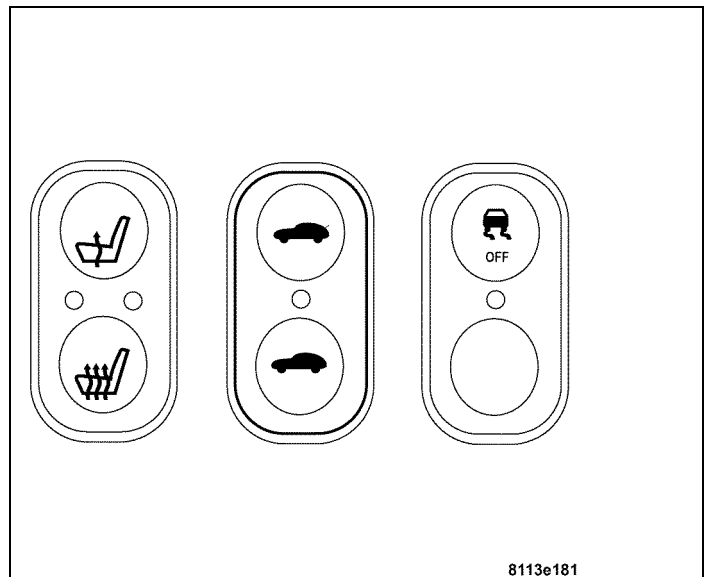
## INSTALLATION

### INSTALLATION - SPOILER WING

1. Install the rear spoiler wing (2) onto the spoiler linkage.
2. Install the four screws (1) attaching the rear spoiler wing the linkage. Tighten to 8 N·m (71 in. lbs.).
3. Install the mounting screws covers on both sides of the rear spoiler.

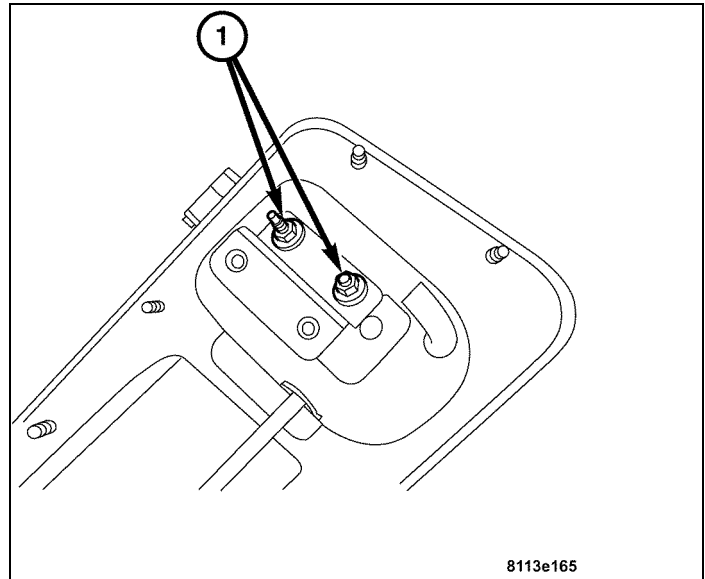


4. Move the spoiler to the down position and verify the spoiler wing alignment to the vehicle body.

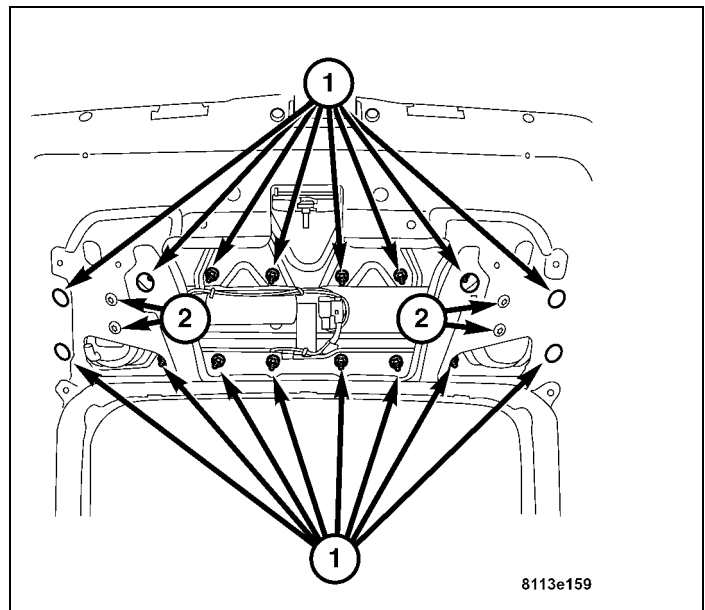


## INSTALLATION - MOUNTING PLATE

1. Install the mounting bracket to the mounting plate.  
Tighten the retaining nuts to 8 N·m (71 in. lbs.).

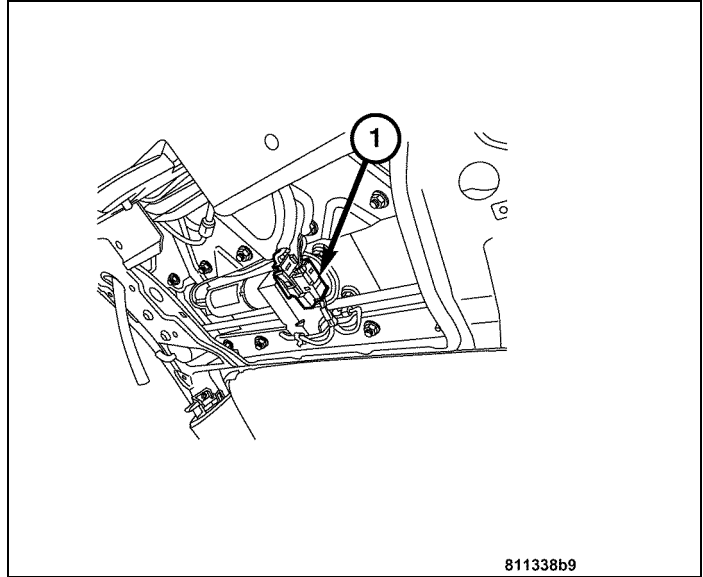


2. Install the mounting plate to the rear liftgate.
3. Install the mounting nuts (1) attaching the mounting plate to the rear liftgate. Tighten to 2.5 N·m (19 in. lbs.).
4. Install the mounting nuts (2) attaching the mounting plate to the rear liftgate. Tighten to 2.5 N·m (19 in. lbs.).
5. Install the two drain tubes.

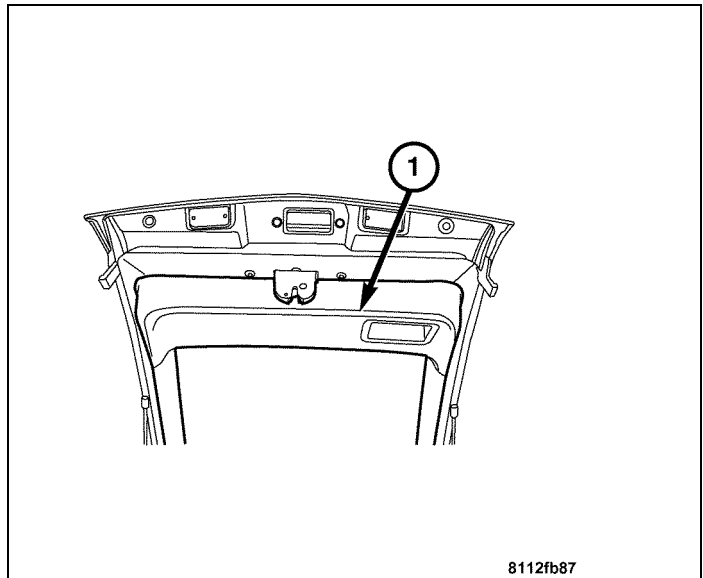




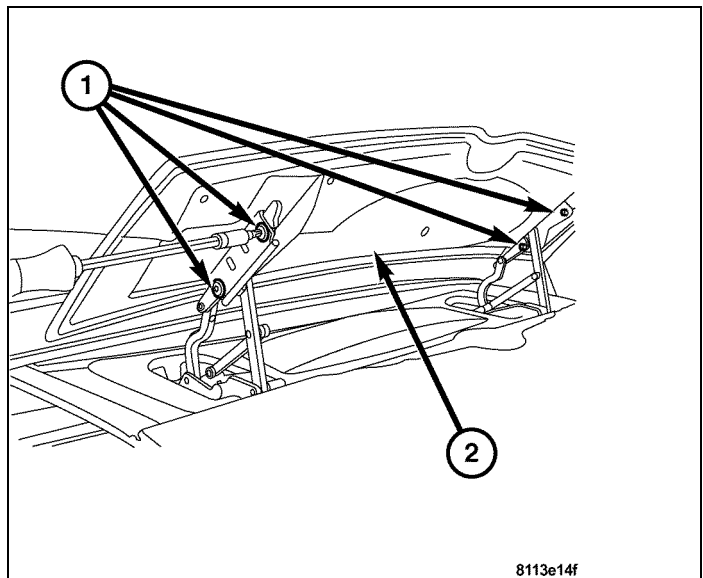
6. Connect the spoiler electrical connectors (1).



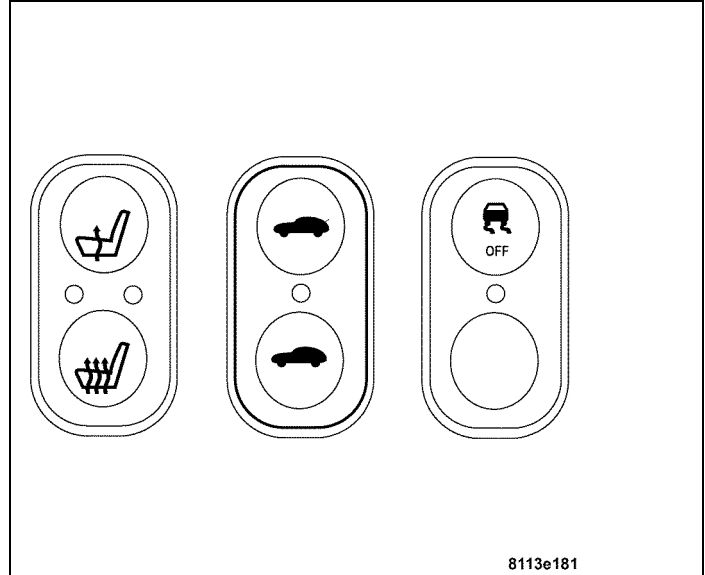
7. Install the lower trim panel (1). (Refer to 23 - BODY/DECKLID/HATCH/LIFTGATE/TAILGATE/TRIM PANEL - INSTALLATION).



8. Install the spoiler wing (2) to the linkage (1). (Refer to 23 - BODY/EXTERIOR/SPOILER - INSTALLATION).

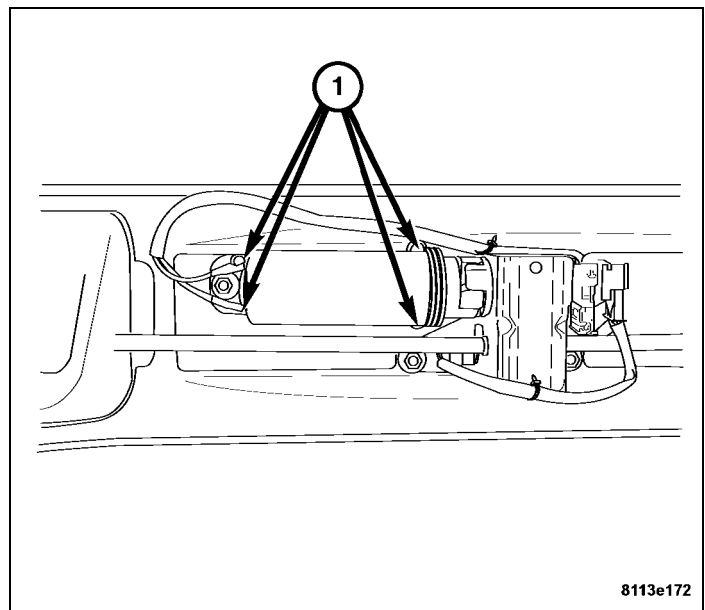


9. Verify the rear spoiler operation by using the manual override switch to operate the spoiler making sure there is smooth operation and proper alignment.



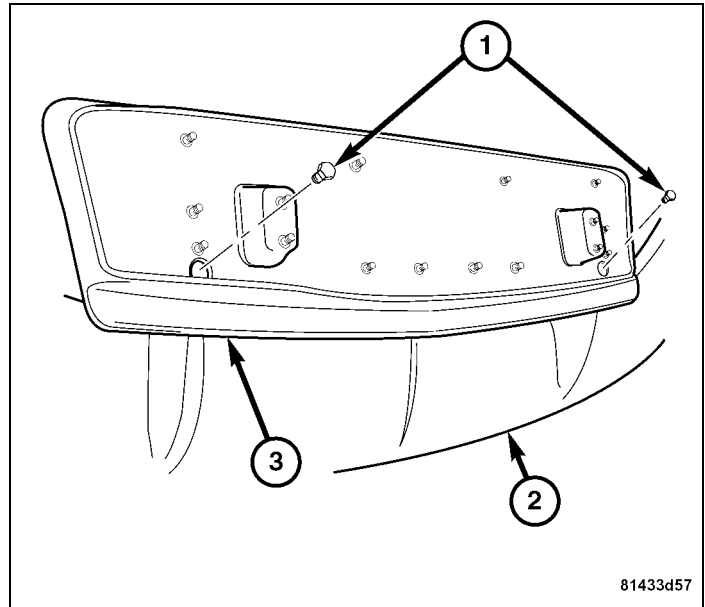
## INSTALLATION - MOTOR

1. Install the 4 screws (1) attaching the motor to the bracket.
2. Connect the electrical connectors.
3. Install tie straps (as necessary) to secure the wiring harness to the motor.
4. Install the lower liftgate trim panel (Refer to 23 - BODY/DECKLID/HATCH/LIFTGATE/TAILGATE/DECKLID - INSTALLATION).
5. Connect the negative battery cable.
6. Operate the rear wing spoiler and check for proper operation.

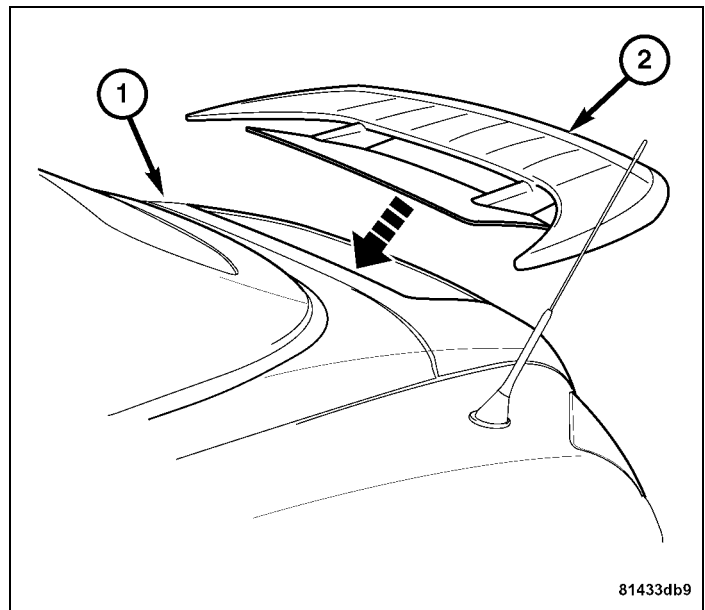


## INSTALLATION - SRT-ROADSTER

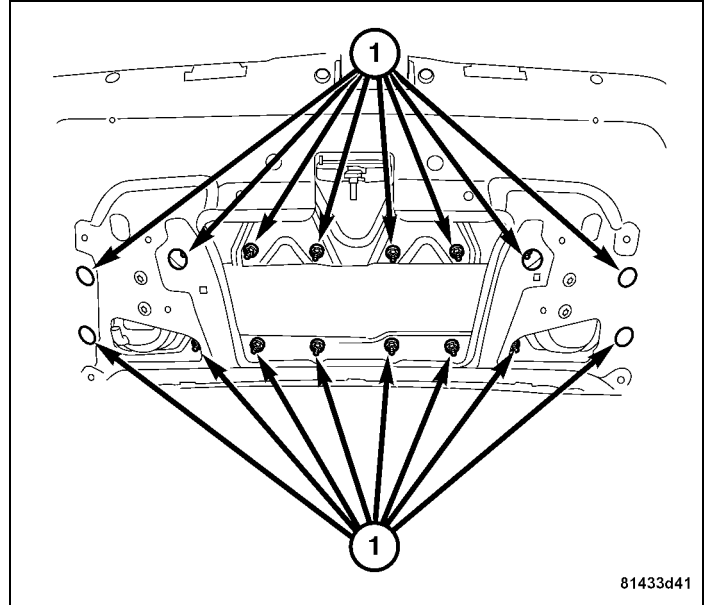
1. Install the spoiler wing (2) onto the mounting plate (3).
2. Install the two bolts (1) attaching the spoiler wing (2) to the mounting plate (3). Tighten to 8 N·m (71 in. lbs.).



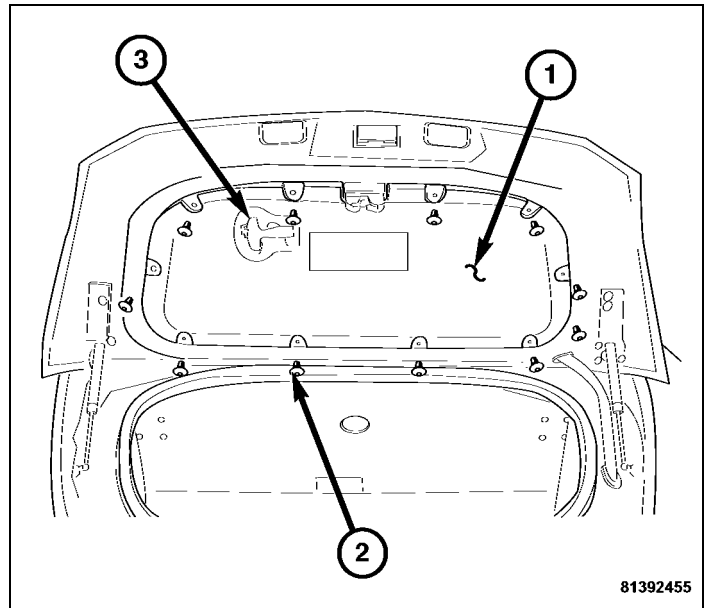
3. Install the spoiler assembly (2) the decklid.



4. Install the mounting nuts (1) attaching the spoiler assembly to the decklid. Tighten to 2.5 N·m (19 in. lbs.).



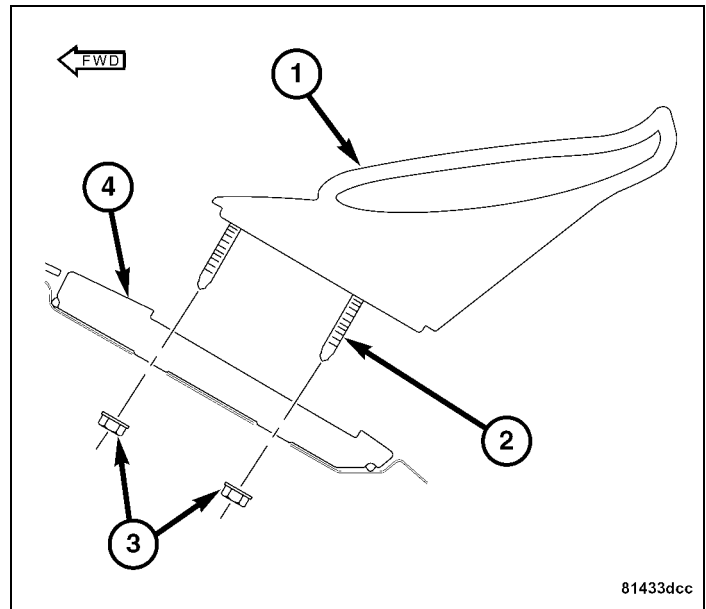
5. Install the decklid trim panel. (Refer to 23 - BODY/ DECKLID/HATCH/LIFTGATE/TAILGATE/TRIM PANEL - INSTALLATION).



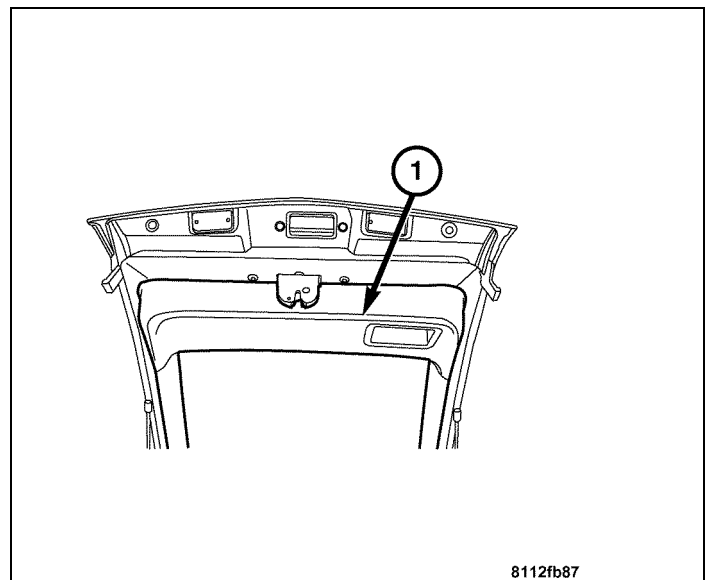
## INSTALLATION - SRT-COUPE

**NOTE:** Be sure not to damage any paint while guiding the spoiler wing studs (2) through the holes in the liftgate (4).

1. Guide the spoiler wing studs (2) through the holes in the liftgate (4) installing the spoiler wing (1) onto the liftgate (4)
2. Install the four nuts (3). Tighten to 8 N·m (71 in. lbs.).



3. Install the lower liftgate trim panel. (Refer to 23 - BODY/DECKLID/HATCH/LIFTGATE/TAILGATE/TRIM PANEL - INSTALLATION).

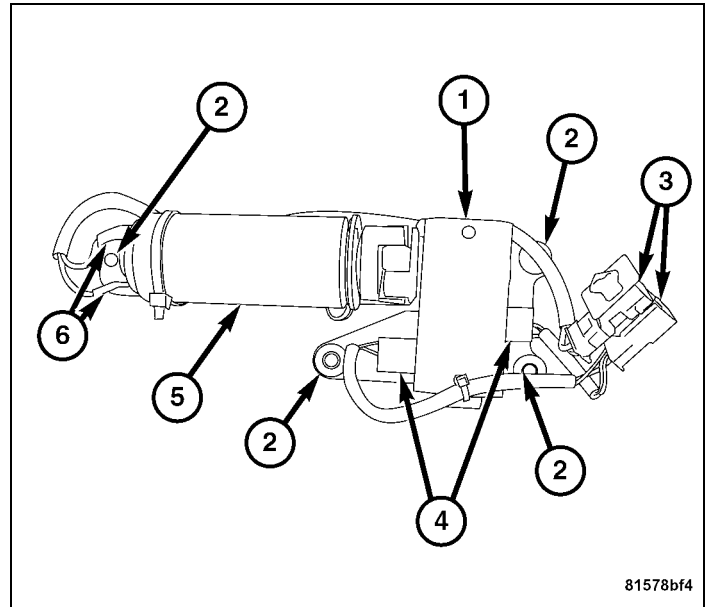


## INSTALLATION - SPOILER MOTOR HARNESS

1. Connect the harness (6) to the spoiler motor (5).
2. Attach the harness connectors (3) to the spoiler motor bracket (1).

**NOTE: Be sure the microswitches are aligned properly with the cams on the spoiler motor.**

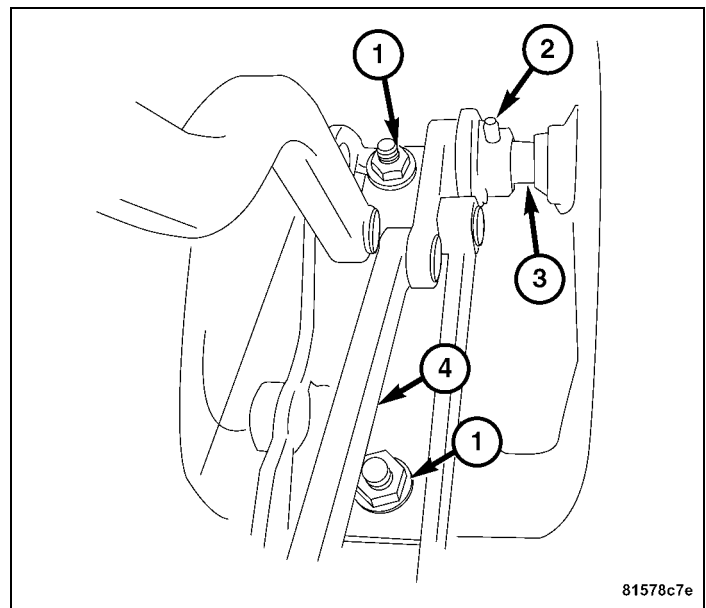
3. Position the microswitches (4) and install new retainers.
4. Position the spoiler motor bracket and install the 4 nuts (2).
5. Connect the electrical connectors (3).
6. Install the lower liftgate trim panel (Refer to 23 - BODY/DECKLID/HATCH/LIFTGATE/TAILGATE/TRIM PANEL - INSTALLATION).
7. Connect the negative battery cable.
8. Operate the spoiler and check for proper operation.



## INSTALLATION - DRIVESHAFT

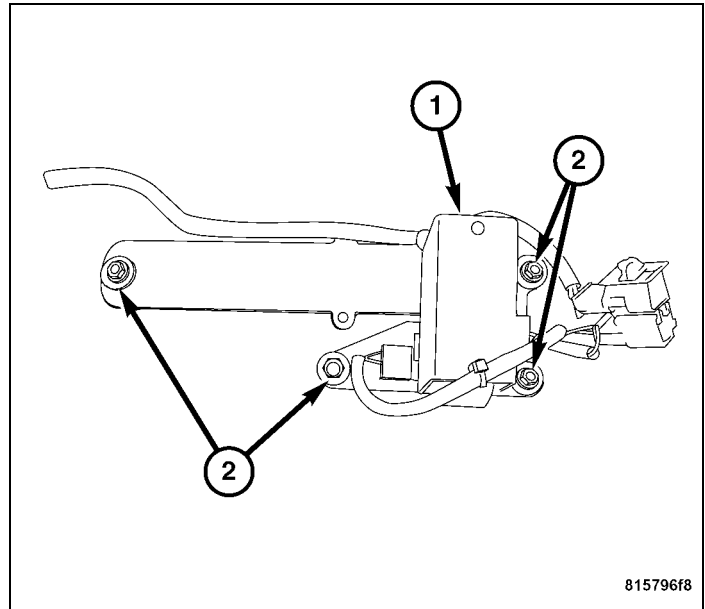
**NOTE: Only one side is shown. The procedure is the same for both sides.**

1. Insert the driveshaft end through the hole in the mounting plate, then connect it to the spoiler transmission.
2. Position the spoiler wing frame (4) over the driveshaft end (3) and install the nuts (1).
3. Rotate the spoiler wing frame to access the roll pin hole, and install the roll pin (2).
4. Rotate the spoiler frame to the full open position.
5. Install the spoiler motor (Refer to 23 - BODY/EXTERIOR/SPOILER - INSTALLATION).
6. Install the spoiler wing (Refer to 23 - BODY/EXTERIOR/SPOILER - INSTALLATION).



### INSTALLATION - MOTOR BRACKET

1. Position the spoiler motor bracket (1) and install the 4 nuts (2).
2. Install the spoiler driveshafts (Refer to 23 - BODY/ EXTERIOR/SPOILER - INSTALLATION).
3. Install the spoiler motor (Refer to 23 - BODY/EXTE- RIOR/SPOILER - INSTALLATION).
4. Operate the spoiler and check for correct operation.



### INSTALLATION - SPOILER DAMPENERS

**NOTE:** Left side is shown. Right side is similar.

**NOTE:** With the spoiler motor removed, the spoiler wing frame can be moved as needed to access the spoiler dampeners.

1. Install the spoiler dampeners (1) onto the spoiler wing frame (2).
2. Install the spoiler motor (Refer to 23 - BODY/EXTE- RIOR/SPOILER - INSTALLATION).
3. Install the spoiler wing (Refer to 23 - BODY/EXTE- RIOR/SPOILER - INSTALLATION).
4. Operate the spoiler and check for correct operation.

