



asi 750/840/925 Service Manual

**Offered by
Signature Automotive Products**

Removal and Installation of Glass Panel



Cycle the glass panel to the vent position.



Remove the left and right hand mechanism cover using an interior trim clip removal tool.



Deflect the glass tension spring downwards from the glass bracket.

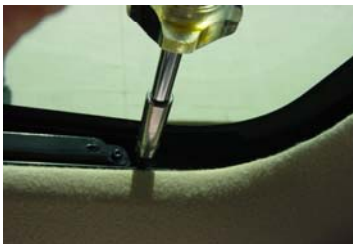
Note: Make sure that you set the spring onto the control links so not to scratch the track section.

Remove the two (2) rear 8mm nuts and loosen the two (2) front 8mm nuts on the glass panel bracket.

Remove glass panel from the vehicle.

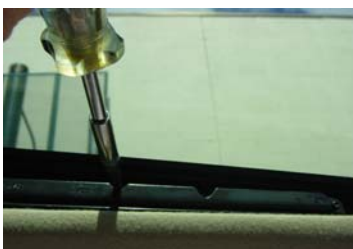
To install, reverse the removal procedures.

Glass Panel Adjustment



Remove the left and right hand mechanism cover using an interior trim clip removal tool.

FRONT: Adjust the front of the glass panel by loosening the two (2) front T-25 torq screws. Adjust the glass panel so the front edge is flush with the trim ring and tighten the screws.



REAR: Adjust the rear panel by loosening the rear T-25 torq screw. Adjust the rear edge so the glass panel is between 1mm higher or flush with the trim ring, then tighten the T-25 torq screw.

Fore and Aft Adjustment



Put the glass in the vent position.

Remove the left and right hand mechanism cover using an interior trim clip removal tool.

Loosen all four (4) 8mm retaining nuts.

Put the glass in the closed position and center the glass to the opening.

Adjust and tighten the rear 8mm retaining nuts one at a time. Place the glass panel in the vent position and tighten the front 8mm retaining nuts.

After the glass panel is adjusted, re-install the mechanism covers.

Initialization of Glass Panel

Place the glass panel in the vent position.

Once the glass has reached the full vented position, release and hold the vent button. The glass will kick back, indicating re-initialization has been completed.

Cycle the glass panel to insure proper function.

Note: If the glass stops short in its travel, hold the vent button for six (6) seconds until the glass panel cycles. After the glass panel cycles, it will be necessary to repeat the initialization.

Removal and Installation of Wind Deflector



Position the panel in the open position.

Remove the left and right track plug by removing two (2) T-10 torq screws from each side and lift out the track plug.

NOTE: Observe the track plug orientation before removal; label and mark if necessary.

Inspect foam tape seal on the track plug. Replace if necessary.

Remove the wind deflector. Pull the deflector tabs slightly inboard to release from the molding.

To install, reverse the removal procedure.

CAUTION: When installing the track plug, make sure the plugs' rear edge is not higher than the mating edge of the track section (screws too tight), or that the attaching screws are not protruding (screws too loose). Otherwise, the panel will retract into

Front Guide Removal



Remove the glass panel while in the vent position. (Follow the glass removal procedure.)

Remove the wind deflector. (Follow the wind deflector removal procedure.)

Remove the two (2) T-25 torq screws from the pivot plate and remove the glass panel bracket by sliding it rearward.

Remove the T-10 screw that holds the front guide and control link together.

Remove the front guide.

To install, reverse the removal procedure.

Cam Slide Mechanism Removal



Remove the glass panel while in the vent position. (Follow the glass removal procedure.)

Remove the front guide control link by removing the two (2) T-10 torq screws.

Remove the wind deflector. (Follow the wind deflector removal procedure.)

Remove the front guides. (Follow the front guide removal procedure.)

Cycle the cable mechanism approximately 1/2" from the front edge of the track by holding the vent button until the cam slides forward.

Disengage the cable end from the cam sides.

NOTE: Using a small pointed tool, pull the cable end out of the cam slide sideways.

To install, reverse the removal procedure.

Rear Panel Slide and Bushing Removal



Remove the glass panel while in the vent position. (Follow the glass removal procedure.)

Remove the tension spring from the glass panel bracket and place on the control link.

Remove the two (2) front T-25 torq screws from the front glass panel bracket. Slide the glass panel bracket rearward.

Replace the slide bushing, making sure the slide bushing is placed on the cam link with the rounded side rearward and the curved side down. All parts should be properly lubricated.

When reinstalling, make sure the bushing does not rotate causing interference.

To install the glass slide, reverse the removal procedure.

Control Link Removal Procedure



Cycle the glass panel into the vent position.

Remove the left and right hand mechanism cover using an interior trim clip removal tool.

Remove 9mm nuts and the T-10 torq screw retaining control link to front guide and trough assembly.

To install, reverse the removal procedures.

Drain Trough Removal Procedure



Remove the glass panel while in the vent position. (Follow the glass removal procedure.)

Remove the control link. (Follow the control link removal procedure.)

Using a screw driver, deflect the rear guide tab inboard, allowing the guide to disengage from the notch. Slide the guide and trough assembly forward, allowing access to the trough screws.

Remove the two (2) T-20 torq screws.

To install, reverse the removal procedures.

Removal of Rear Guide Shoe Assembly



Remove the drain trough assembly. (Follow the complete mechanism removal procedures.)

Remove the rear guide shoe by sliding the guide forward until it disengages from the track section. Slide the track plug out.

Install the new rear guide, making sure that the leaf spring is attached to the guide.

CAUTION: *The leaf spring must be attached to the rear guides for the unit to function properly.*

To install, reverse the removal procedures.

Removal and Installation of Cable Assembly



Remove the glass panel while in the vent position. (Follow the glass removal procedure.)

Remove the rear cam. (Follow the cam removal procedure.)

Detach the headliner from the side rail, carefully separating the headliner from the rails or factory hardboard headliner, allowing access to the drive assembly.



Remove the three (3) T-20 torq screws attaching the motor to the housing.

Deflect the motor gear away from the drive cables.

Pull the cable from the track section.

Lubricate the new cable assembly prior to installing.

Insert the drive cables into the track section, by pushing the cables into the drive tubes.

Install the cable ends to the cam slides.

Slide the left and right hand cams rearward so that the rear portion of the cam assembly aligns with the notch in the track section.

Install the front guide. (Reverse the front guide removal procedure.)

Attach the wind deflector. (Reverse the wind deflector removal procedure.)

Install the motor assembly. (Reverse the electric drive assembly removal procedure.)

Cycle the unit making sure that the cables are properly aligned.

To install the control link and panel, reverse the removal procedure.



Motor Removal / Install



Loosen the headliner in order to gain access to the motor and SCU.

Operate the sunroof to the full vent position. If the motor can not operate electronically use override on the motor.

Disconnect the negative side of the vehicle's battery and the sunroof motor wire from the SCU.

To remove the motor, loosen and remove the three (3) T-20 screws and pull the motor away from the mounting bracket.



Install the new motor with the insert screws provided.

Reconnect the vehicle's battery and the sunroof motor wire to the SCU

Switch the ignition on and operate the sunroof to the open position. Close, vent and re-initialize the SCU (follow the reinitialization process. Refer to the trouble shooting guide.)



Reinstall the headliner.

Removal and Installation of Glass Panel Seal



Remove the glass panel while in the vent position. (Follow the glass removal procedure.)

Using a suitable tool, separate the seal tape from the glass panel.

NOTE: Be careful not to damage the molding.

Remove all residue from the old seal from the molding.

Clean the molding with alcohol to remove any grease or oily film.



Apply an adhesive promoter to the surface, which will make contact with the tape.

Apply the new replacement seal slightly past the front center. Wrap completely around, overlapping the starting point. Cut both seals at the same time in the center of the glass. Dab a small amount of proper bonding adhesive to the cut ends of the seal to



NOTE: To avoid adhesive contamination, do not remove tape backing until necessary.

Once the seal is applied, press firmly to assure proper adhesion.

Install the glass panel.

Sunshade Removal and Installation



Remove the left and right hand mechanism cover using an interior trim clip removal tool.

Remove the glass panel while in the vent position. (Follow the glass removal procedure.)

Remove the control link assembly. (Follow the control link removal procedure.)

After the rear guide is disengaged, move the trough assembly forward, allowing access to the trough screws.

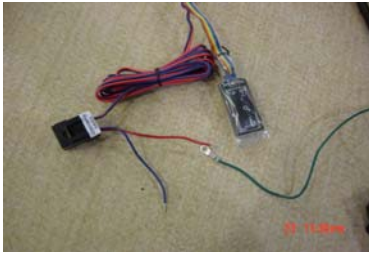


Remove the two (2) T-20 torq screws that are holding the trough assembly to the rear guides.

Slide the sunshade forward through the slot on the right hand side of the track.

Remove the sunshade through the sunroof opening.

To install, reverse the removal procedures.

Electrical

Connector	Power with ignition off	Power with ignition on
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Wire Number 1 (Red)	12V	12V
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Wire Number 2 (Green)	Ground	Ground
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Wire Number 3 (Blue)	ZERO V	12V
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Reconnect the vehicle's battery and test cycle the moonroof to verify it is fully functional. Initialize SCU (see the initialization procedure).

SCU Removal / Install

Disconnect the battery by disconnecting the negative side of the battery.

Loosen the headliner in order to gain access to the motor and SCU.

Using a T-20 torq driver remove the mounting screw.

Disconnect the power, switch and motor wires from the SCU.

Remove the SCU by sliding it towards the motor.

Install the new SCU by locating the mounting tab and pushing the SCU away from the motor. Reinstall the T-20 screw.

Reconnect the power, switch and motor wires to the SCU. Switch the ignition on and operate the sunroof to open, close and vent positions and re-initialize the SCU (follow the reinitialization process).

Reinstall the headliner.

**Removal and Installation of Sunroof Switch**

Depending on where the switch is located, pull downwards and disengage the switch from the retaining bracket.

Pull the switch down, exposing the wire harness and connector.

Disconnect the switch from the wire harness.

Replace the defective switch.

Cycle the sunroof, making sure all functions are in working condition.

To reinstall, follow the removal procedure.

Mechanical Failures

Problem	Possible Cause	Solution
Panel misaligned LH/RH	Timing of drive cables incorrect	Re-time drive cables
Panel misaligned side to side	No contact of seal to one side	Loosen panel screws and reposition panel
Glass panel stops prematurely	Obstacle in mechanism or guide rail	Remove obstacle
Cable ratcheting	Check the motor and cable tube at motor bracket and motor insert	Align cable tube to motor bracket and reinstall motor properly

Electrical Failures

Problem	Possible Cause	Solution
Operating of the sunroof is possible, no auto close, no one touch	SCU in degraded mode due to malfunction	Reinitialize SCU by running glass panel to full vent position
SCU makes clicking noise but panel will not move	Low voltage	Check power supply
Panel is sliding too slowly. With a 13.5v power supply, the panel should not take more than 7sec. to close from fully opened position	Weak battery Misaligned panel creating drag Weak motor Dirty mech	Change or replace motor Clean and grease mechanism or replace

Rattling Noise

Problem	Possible Cause	Solution
Front guide rattle	Worn front guide	Replace front guide
Substrate rattle	Clips loose No pad between substrate and housing	Silicone substrate and secure push pins Pad between headliner and bottom of housing
Wind deflector rattle	Loose or misadjusted Hits glass and rattles Hits front cross member	Tighten and adjust Add felt pad to glass Readjust and add felt pad
Sunshade rattle	Sunshade handle hits water trough	Add velcro to plastic handle
Wire Harness rattle	Harness rattles against kit	Tighten wire ties Tape and secure wires
Drain Channel rattle	Check if insulation tape is applied between drain channel and sunshade	Check for felt pads on drain channel, add felt pads
Rattle in motor area	Loose screws on motor	Tighten screws or replace
Self tapping neb screws	Screw is stripped Screw is loose	Replace or retap screw hole Tighten screws

Wind Noise

Problem	Possible Cause	Solution
Excessive wind noise when the glass panel is in the closed position	Panel seal not tight to trim ring	Readjust the panel or replace seal or fill out seal
Excessive wind noise when the glass panel is in the full open position	Application in to vehicle	Reference pre-program glass stop in owner's manual

Water Leaks

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Problem	Possible Cause	Solution
Water coming through panel opening area or headliner is wet	Blocked drain tubes	Remove material
	Improper routing of drain tubes	Re-route or replace drain tubes
	Front cross member seal broken	Seal seam
	Rear end caps seal broken	Reseal end caps using silicone
	Glass panel out of adjustment	Adjust glass panel
	Improper seal compression	Adjust seal or replace seal section

Testing Electrical Components

Make sure that the Inalfa asi Moonroof is connected to a 12V source during the test of electrical components .

If the moonroof is installed in a car, the battery needs to be connected and operable. During the test period, the ignition/accessory switch must be on. This test can be accomplished with a voltage meter or test light.

Inspect and make sure that the fuses are not blown. Refer to the filled out portion of the owner's manual for location.

The cable harness and motor inspection requires the removal of the headliner.

Fuse

Refer to the filled out portion of the owner's manual for the location.

Wire Harness SCU to Battery

Connector	Power on wire if ignition is off	Power on wire if ignition is on
Wire number 1 (red)	12V	12V
Wire number 2 (black)	Ground	Ground
Wire number 3 (blue)	ZERO V	12V

Motor

Disconnect the motor wire from the SCU. If the mechanism is jammed, remove the motor from the rear beam. Use a double wire of sufficient length, connect it directly to the battery and inspect the motor for proper operation in both directions.

SCU

Testing is covered in the electronic

- ASI 750/840/925
- Moonroof does not function
- One Touch function inoperative
- Programmable position cannot be programmed (push both switch buttons at the same time)
- Auto Close function inoperative

The SCU must be reinitialized after replacement. Proceed with the electronic

Reinitialization of the SCU

The first time the SCU is connected to the power supply, the maximum vent position must be defined.

Turn the ignition on

Open the glass panel to the full vent position, using continuous mode. Continue to vent the glass panel until the glass panel moves (a few mm) to close and returns (max five (5) seconds).

To complete the reinitialization process, the glass panel must be moved to the fully opened position using One Touch™ mode.

