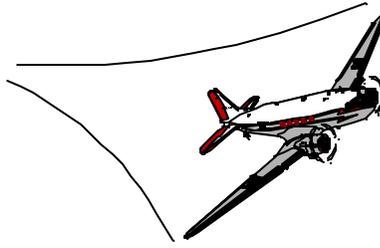


# SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

No. CE-01-24  
May 30, 2001

Aircraft Certification Service  
Washington, DC

*We post SAIBs on the internet at "av-info.faa.gov"*

*This is information only. Recommendations are not mandatory.*

## **Introduction**

This Special Airworthiness Information Bulletin (SAIB) provides you, an owner or operator of Rolladen-Schneider Models LS-6, LS-7 and LS-8, with safety information received from the German Civil Airworthiness Authority (Luftfahrt-Bundesamt) identifying a potential safety problem on the following:

- Potential of Canopy Jamming - Technical Bulletin (TB) Numbers 6036/2, 7011/2 and 8004/2

## **Background**

The Luftfahrt-Bundesamt issued Airworthiness Directives 1999-266/2, 1999-267/2 and 1999-268/2, for the models listed above identifying the potential of the canopy jamming while being jettisoned during flight. These sailplane models do not have a US Type Certificate.

NOTE: The Model LS-6c has a U.S. type certificate. We issued Airworthiness Directive (AD) 2000-01-06 for the Model LS-6c.

This safety issue however, is the same whether or not the sailplanes are type certificated. **The FAA highly recommends that you comply with the TBs listed above.** We have enclosed copies of the foreign ADs and TBs.

## **General Information**

We do not issue ADs for sailplanes without a U.S. type certificate. We will not track or enforce this safety issue, and will not use an SAIB to track all safety related items for non-type certificated products.

## **For Further Information Contact**

Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106; telephone: (816) 329-4144; facsimile: (816) 329-4090



**Airworthiness  
Directive  
1999-266/2**

**Luftfahrt-Bundesamt**  
Airworthiness Directive Section  
Hermann-Blenk-Str. 26  
38108 Braunschweig  
Federal Republic of Germany

**Rolladen-Schneider**

**Effective Date: March 15, 2001**

**Affected:**

Kind of aeronautical product: Sailplane  
Manufacturer: Rolladen-Schneider, Egelsbach, Germany  
Type: LS 6  
Models affected: All  
Serial numbers affected: All

**Note:**

Please consider notes in the Technical Bulletin

German Type Certificate No.: 357

**Subject:**

Obstruction of emergency canopy jettison and avoidance of possible injuries

**Reason / Action:**

A deflector on the upper instrument panel edge avoids possible jamming of the instrument panel between the canopy mounted panel cover after actuation of the canopy emergency jettison. Install an edge protector on the deflector, if not already has been done.

The actions must be done in accordance with the instructions given in the Technical Bulletin.

**Compliance:**

Before the next flight.

**Technical publication of the manufacturer:**

Rolladen-Schneider Technical Bulletin No. 6036/2 dated February 12, 2001 which becomes herewith part of this AD and may be obtained from Messrs.:

Rolladen-Schneider  
Flugzeugbau GmbH  
Mühlstrasse 10

D- 63329 Egelsbach  
Federal Republic of Germany  
Phone: ++ 49 6103 204126  
Fax: ++ 49 6103 45526

**Accomplishment and log book entry:**

Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.

**Note:**

This AD supersedes the AD-No. 1999-266 dated July 06, 1999..

**Holders of affected aircraft registered in Germany have to observe the following:**

As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

**Instructions about Available Legal Remedies:**

An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig.

Rolladen-Schneider Flugzeugbau GmbH LBA-Nr. EB-4 / I-B16	Technical Bulletin No. 6036 / 2	LS6	Page 1 of 2 Edit. 12.Feb.2001
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Subject: Obstruction of emergency canopy jettison and avoidance of possible injuries

Effectivity: **All LS6 models.**

(Versions LS6, LS6-a, LS6-b, LS6-c, LS6-c18, LS6-18w)

- a) Serial numbers affected, as far as equipped with 40 cm (15.75 in) wide instrument panels during production, see page 2.
- b) Further serial numbers may be affected due to modification to this panel version.
- c) The 27 cm (10.6 in) wide panel version may be affected due to lateral extensions.

Accomplishment: Before next flight

Reason: A deflector on the upper instrument panel edge avoids possible jamming of the instrument panel between the canopy mounted panel cover after actuation of the canopy emergency jettison.

When the plane is already equipped with a reflector according to TB 6036, this should be shortened by 10 mm (0.4 in) and be covered with an edge protector. Details and view see working instruction.

- Material and Instructions:
1. Rivet **deflector with edge protector** according to drawing 3R7-73a to upper instrument panel edge for above mentioned cases using 3 blind rivets 4mm Ø and washers.
  2. Fix placard "**Minimum Cockpit Load**" to under side of this deflector.
  3. Nuts and bolts protruding from the instrument panel cover underside (for instance due to compass fittings) should be covered by a deflector according to drawing 4R7-74.
  4. Lateral instrument panel extensions may require further measures depending on case or removal of extensions.
  5. In any case of doubt, a jettison test should be performed together with a helper, as outlined on page 2.

Weight and Balance: Not affected.

Remarks: Technical Bulletin may be performed by owner, operator or national authority approved repair station.

Accomplishment must be entered into TB-AD-Accomplishment List in Maintenance Manual and signed by inspector.

LBA-approved:



13.03.01

*He*

(TM6036 / 2)

Erstellt: 12. Feb. 2001

*He*

Gepüft:

*Whapka*

*This page is not altered compared to TB 6036*

**Inspection of Canopy Emergency Jettisson**

- a) Remove spring of rear canopy temporary hinge at rear canopy end after checking force required to lift canopy out of temporary hinge. **Reference value between 8 and 15 kg (17.6 to 33 lbs)**. When force is below reference, spring must be adjusted before re-assembly. (Required tool: hexagon head key 2.5 mm)
- b) "Pilot" with spring gauge in seat.
- c) Both canopy locking levers in open position.
- d) Force required to actuate jettisson 15 kg (33 lbs) maximum. With force too high, the following places should be lubricated:
  - Bushes of 4 canopy locking pins using grease
  - Bowden cable from canopy separation to handle using engine oil
  - Engaging lever and bolt in region of rotation using grease
- e) With a helper at the canopy front end, canopy lifting speed due to gas strut can be reduced enough to visualize the system in operation. The instrument panel should in no case jam between canopy frames.
- f) To connect the opening mechanism with the canopy, the pilot holds it at both locking levers in fully open position. The helper pushes the spring loaded engaging bolt upward and connects both units by turning the engaging lever counter clockwise.
- g) Re-assemble possibly adjusted spring of temporary hinge at rear canopy end.

The following serial numbers of **LS6 / LS6-a** have been delivered with the 40 cm (15.75 in) wide instrument panel:

6001	6003	6004	6007	6009	6013	6014	6015
6017	6018	6019	6020	6022	6028	6030	6032
6035	6036	6039	6040	6041	6046	6058	6065
6068	6076	6078	6081	6082	6084	6085	6087
6093	6094	6097	6101	6115	6125	6133	6166

The delivery status of the following S/N **LS6 / LS6-a** could not be verified:

6000	6005	6006	6008	6010	6012	6016	6021
6023	6024	6025	6026	6027	6029	6034	6038
6042	6043	6044	6047	6048	6052	6054	6057
6059	6073	6079	6099	6153	6161	6166	6176
6186	6194						

The following serial numbers **LS6-b** have been delivered with the 40 cm (15.75 in) wide instrument panel:

6130	6132	6134	6137	6141	6142	6151	6153
6157	6162	6169	6179	6185	6186	6188	6202

The delivery status of the following S/N **LS6-b** could not be verified:

6161	6176	6186	6146	6147
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The following serial numbers **LS6-c / LS6-c18 / LS6-18w** have been delivered with the 40 cm (15.75 in) wide instrument panel:

6149	6196	6198	6205	6208	6216	6219	6225
6226	6230	6266	6274	6289	6290	6300	6313
6319	6324	6325	6326	6345	6346	6352	5353
6361	6378	6380					

The delivery status of the following S/N **LS6-c / LS6-c18 / LS6-18w** could not be verified:

6235	6257	6276	6278	6284	6299	6302	6317
6322	6335	6337	6338	6342	6343	6363	6365
6367							

(TM6036 / 2)

Erstellt: 12. Feb. 2001

*Heuck*

Geprüft:

*Whapha*

Rolladen-Schneider Flugzeugbau GmbH LBA-Nr. EB-4 / I-B16	Working Instruction for Technical Bulletin No. 6036 / 2	LS6	Page 1 of 1 Edit. 12.Feb.2001
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### Modification of the Deflector

1. Drill blind rivets. If need be, unscrew upper instruments (Hexagon head 2.5 mm und ratchet with 7mm socket) and place them on top of the second row.
2. Mark new fixing holes 10mm (0.4 in) offset from originals and drill. This enables to use the existing holes at the instrument panel edge.
3. Shorten straight edge of deflector by 10 mm, soften edge and paint black. Maximum depth of deflector after trimming is 100 mm (3.94 in).
4. Rivet deflector back to top of instrument panel, facing towards the pilot (Blind rivets  $\varnothing$  4mm\*6.5, large washers  $\varnothing$ 4.3 \* 12 \* 1mm DIN 9021-St).
5. Push edge protector (as long as instrument panel allows) onto deflector edge.

### Deflector with edge protector:



Should the instrument panel cover be too short to allow the protector to fit underneath, contact manufacturer stating model and serial number.

(TM6036 / 2)

Erstellt: 12. Feb. 2001

*Heuck*

Geprüft:

*Wapka*



**Airworthiness  
Directive  
1999-267/2**

**Luftfahrt-Bundesamt**  
Airworthiness Directive Section  
Hermann-Blenk-Str. 26  
38108 Braunschweig  
Federal Republic of Germany

**Rolladen-Schneider**

**Effective Date: March 15, 2001**

**Affected:**

Kind of aeronautical product: Sailplane  
Manufacturer: Rolladen-Schneider, Egelsbach, Germany  
Type: LS 7  
Models affected: All  
Serial numbers affected: All  
**Note:**  
Please consider notes in the Technical Bulletin  
375

German Type Certificate No.:

**Subject:**

Obstruction of emergency canopy jettison and avoidance of possible injuries

**Reason / Action:**

A deflector on the upper instrument panel edge avoids possible jamming of the instrument panel between the canopy mounted panel cover after actuation of the canopy emergency jettison. Install an edge protector on the deflector, if not already has been done.

The actions must be done in accordance with the instructions given in the Technical Bulletin.

**Compliance:**

Before the next flight.

**Technical publication of the manufacturer:**

Rolladen-Schneider Technical Bulletin No. 7011/2 dated February 12, 2001 which becomes herewith part of this AD and may be obtained from Messrs.:

Rolladen-Schneider  
Flugzeugbau GmbH  
Mühlstrasse 10

D- 63329 Egelsbach  
Federal Republic of Germany  
Phone: ++ 49 6103 204126  
Fax: ++ 49 6103 45526

**Accomplishment and log book entry:**

Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.

**Note:**

This AD supersedes the AD-No. 1999-267 dated July 06, 1999..

**Holders of affected aircraft registered in Germany have to observe the following:**

As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

**Instructions about Available Legal Remedies:**

An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig.

Rolladen-Schneider Flugzeugbau GmbH LBA-Nr. EB-4 / I-B16	Technical Bulletin No. 7011 / 2	LS7	Page 1 of 2 Edit. 12.Feb.2001
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Subject: Obstruction of emergency canopy jettison and avoidance of possible injuries

Effectivity: **All LS7 models.**

(Versions LS7, LS7-WL)

- a) Serial numbers affected, as far as equipped with 40 cm (15.75 in) wide instrument panels during production, see page 2.
- b) Further serial numbers may be affected due to modification to this panel version.
- c) The 27 cm (10.6 in) wide panel version may be affected due to lateral extensions.

Accomplishment: Before next flight

Reason: A deflector on the upper instrument panel edge avoids possible jamming of the instrument panel between the canopy mounted panel cover after actuation of the canopy emergency jettison.

When the plane is already equipped with a reflector according to TB 6036, this should be shortened by 10 mm (0.4 in) and be covered with an edge protector. Details and view see working instruction.

- Material and Instructions:
1. Rivet **deflector with edge protector** according to drawing 3R7-73a to upper instrument panel edge for above mentioned cases using 3 blind rivets 4mm Ø and washers.
  2. Fix placard "**Minimum Cockpit Load**" to under side of this deflector.
  3. Nuts and bolts protruding from the instrument panel cover underside (for instance due to compass fittings) should be covered by a deflector according to drawing 4R7-74.
  4. Lateral instrument panel extensions may require further measures depending on case or removal of extensions.
  5. In any case of doubt, a jettison test should be performed together with a helper, as outlined on page 2.

Weight and Balance: Not affected.

Remarks: Technical Bulletin may be performed by owner, operator or national authority approved repair station.

Accomplishment must be entered into TB-AD-Accomplishment List in Maintenance Manual and signed by inspector.

LBA-approved:



13.03.01

(TM7011 / 2)

Erstellt: 12.Feb.2001

Geprüft:

*This page is not altered compared to TB 7011*

**Inspection of Canopy Emergency Jettisson**

- a) Remove spring of rear canopy temporary hinge at rear canopy end after checking force required to lift canopy out of temporary hinge. **Reference value between 8 and 15 kg (17.6 to 33 lbs)**. When force is below reference, spring must be adjusted before re-assembly. (Required tool: hexagon head key 2.5 mm)
- b) "Pilot" with spring gauge in seat.
- c) Both canopy locking levers in open position.
- d) Force required to actuate jettisson 15 kg (33 lbs) maximum. With force too high, the following places should be lubricated:
  - Bushes of 4 canopy locking pins using grease
  - Bowden cable from canopy separation to handle using engine oil
  - Engaging lever and bolt in region of rotation using grease
- e) With a helper at the canopy front end, canopy lifting speed due to gas strut can be reduced enough to visualize the system in operation. The instrument panel should in no case jam between canopy frames.
- f) To connect the opening mechanism with the canopy, the pilot holds it at both locking levers in fully open position. The helper pushes the spring loaded engaging bolt upward and connects both units by turning the engaging lever counter clockwise.
- g) Re-assemble possibly adjusted spring of temporary hinge at rear canopy end.

The following serial numbers of **LS7** and/or **LS7-WL** have been delivered with the 40 cm (15.75 in) wide instrument panel:

7004	7017	7018	7033	7067	7073	7077	7079
7087	7090	7097	7102	7112	7121	7128	7137
7142	7147	7154	7159	7161			

The delivery status of the following serial numbers could not be verified:

7001 7002 7022 and 7140

Rolladen-Schneider Flugzeugbau GmbH LBA-Nr. EB-4 / I-B16	Working Instruction for Technical Bulletin No. 7011 / 2	LS7	Page 1 of 1 Edit. 12.Feb.2001
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### Modification of the Deflector

1. Drill blind rivets. If need be, unscrew upper instruments (Hexagon head 2.5 mm und ratchet with 7mm socket) and place them on top of the second row.
2. Mark new fixing holes 10mm (0.4 in) offset from originals and drill. This enables to use the existing holes at the instrument panel edge.
3. Shorten straight edge of deflector by 10 mm, soften edge and paint black. Maximum depth of deflector after trimming is 100 mm (3.94 in).
4. Rivet deflector back to top of instrument panel, facing towards the pilot (Blind rivets Ø 4mm\*6.5, large washers Ø4.3 \* 12 \* 1mm DIN 9021-St).
5. Push edge protector (as long as instrument panel allows) onto deflector edge.

### Deflector with edge protector:



Should the instrument panel cover be too short to allow the protector to fit underneath, contact manufacturer stating model and serial number.

(TM7011 / 2)

Erstellt: 12.Feb.2001

*Geuerke*

Geprüft:

*Wapka*



**Airworthiness  
Directive  
1999-268/2**

**Luftfahrt-Bundesamt**  
Airworthiness Directive Section  
Hermann-Blenk-Str. 26  
38108 Braunschweig  
Federal Republic of Germany

**Rolladen-Schneider**

**Effective Date: March 15, 2001**

**Affected:**

Kind of aeronautical product:	Sailplane
Manufacturer:	Rolladen-Schneider, Egelsbach, Germany
Type:	LS 8
Models affected:	All
Serial numbers affected:	All
	<b><u>Note:</u></b>
	Please consider notes in the Technical Bulletin
German Type Certificate No.:	402

**Subject:**

Obstruction of emergency canopy jettison and avoidance of possible injuries

**Reason / Action:**

A deflector on the upper instrument panel edge avoids possible jamming of the instrument panel between the canopy mounted panel cover after actuation of the canopy emergency jettison. Install an edge protector on the deflector, if not already has been done.

The actions must be done in accordance with the instructions given in the Technical Bulletin.

**Compliance:**

Before the next flight.

**Technical publication of the manufacturer:**

Rolladen-Schneider Technical Bulletin No. 8004/2 dated February 12, 2001 which becomes herewith part of this AD and may be obtained from Messrs.:

Rolladen-Schneider  
Flugzeugbau GmbH  
Mühlstrasse 10

D- 63329 Egelsbach  
Federal Republic of Germany  
Phone: ++ 49 6103 204126  
Fax: ++ 49 6103 45526

**Accomplishment and log book entry:**

Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.

**Note:**

This AD supersedes the AD-No. 1999-268 dated July 06, 1999.

**Holder of affected aircraft registered in Germany have to observe the following:**

As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

**Instructions about Available Legal Remedies:**

An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig.

Rolladen-Schneider Flugzeugbau GmbH LBA-Nr. EB-4 / I-B16	Technical Bulletin No. 8004 / 2	LS8	Page 1 of 2 Edit. 12.Feb.2001
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Subject: Obstruction of emergency canopy jettison and avoidance of possible injuries

Effectivity: **All LS8 models.**

(Versions LS8, LS8-a and LS8-18)

- a) Serial numbers affected, as far as equipped with 40 cm (15.75 in) wide instrument panels during production, see page 2.
- b) Further serial numbers may be affected due to modification to this panel version.
- c) The 27 cm (10.6 in) wide panel version may be affected due to lateral extensions.

Accomplishment: Before next flight

Reason: A deflector on the upper instrument panel edge avoids possible jamming of the instrument panel between the canopy mounted panel cover after actuation of the canopy emergency jettison.

When the plane is already equipped with a reflector according to TB 6036, this should be shortened by 10 mm (0.4 in) and be covered with an edge protector. Details and view see working instruction.

- Material and Instructions:
1. Rivet **deflector with edge protector** according to drawing 3R7-73a to upper instrument panel edge for above mentioned cases using 3 blind rivets 4mm Ø and washers.
  2. Fix placard "**Minimum Cockpit Load**" to under side of this deflector.
  3. Nuts and bolts protruding from the instrument panel cover underside (for instance due to compass fittings) should be covered by a deflector according to drawing 4R7-74.
  4. Lateral instrument panel extensions may require further measures depending on case or removal of extensions.
  5. In any case of doubt, a jettison test should be performed together with a helper, as outlined on page 2.

Weight and Balance: Not affected.

Remarks: Technical Bulletin may be performed by owner, operator or national authority approved repair station.

Accomplishment must be entered into TB-AD-Accomplishment List in Maintenance Manual and signed by inspector.

LBA-approved:



13.03.01

*[Handwritten signature]*

(TM8004 / 2)

Erstellt: 12.Feb. 2001

*[Handwritten signature]*

Geprüft:

*[Handwritten signature]*

**Inspection of Canopy Emergency Jettisson**

- a) Remove spring of rear canopy temporary hinge at rear canopy end after checking force required to lift canopy out of temporary hinge. **Reference value between 8 and 15 kg (17.6 to 33 lbs)**. When force is below reference, spring must be adjusted before re-assembly. (Required tool: hexagon head key 2.5 mm)
- b) "Pilot" with spring gauge in seat.
- c) Both canopy locking levers in open position.
- d) Force required to actuate jettisson 15 kg (33 lbs) maximum. With force too high, the following places should be lubricated:
  - Bushes of 4 canopy locking pins using grease
  - Bowden cable from canopy separation to handle using engine oil
  - Engaging lever and bolt in region of rotation using grease
- e) With a helper at the canopy front end, canopy lifting speed due to gas strut can be reduced enough to visualize the system in operation. The instrument panel should in no case jam between canopy frames.
- f) To connect the opening mechanism with the canopy, the pilot holds it at both locking levers in fully open position. The helper pushes the spring loaded engaging bolt upward and connects both units by turning the engaging lever counter clockwise.
- g) Re-assemble possibly adjusted spring of temporary hinge at rear canopy end.

The following serial numbers of **LS8-a** and/or **LS8-18** have been delivered with the 40 cm (15.75 in) wide instrument panel:

8036	8038	8039	8047	8056	8059	8060	8061
8066	8076	8077	8079	8080	8094	8097	8104
8106	8118	8119	8130	8137	8146	8147	8148
8150	8151	8152	8153	8159	8169	8171	8173
8174	8175	8178	8180	8181	8195	8197	8198
8199	8200	8202	8212	8214	8215	8217	8218
8221	8222	8223	8224	8225	8226	8227	8232
8243	8244	8245	8246	8249	8250	8295	8296
8268	8305	8309	8317	8322	8337		

For serial numbers 8001, 8002, 8004, 8005, 8040, 8044, 8055 8095, 8258, 8259, 8267, 8268, and 8297 the delivery status could not be verified.

(TM8004 / 2)

Erstellt: 12.Feb. 2001

*Wolf Henke*

Gepüft:

*W. Henke*

### Modification of the Deflector

1. Drill blind rivets. If need be, unscrew upper instruments (Hexagon head 2.5 mm und ratchet with 7mm socket) and place them on top of the second row.
2. Mark new fixing holes 10mm (0.4 in) offset from originals and drill. This enables to use the existing holes at the instrument panel edge.
3. Shorten straight edge of deflector by 10 mm, soften edge and paint black. Maximum depth of deflector after trimming is 100 mm (3.94 in).
4. Rivet deflector back to top of instrument panel, facing towards the pilot (Blind rivets  $\varnothing$  4mm\*6.5, large washers  $\varnothing$ 4.3 \* 12 \* 1mm DIN 9021-St).
5. Push edge protector (as long as instrument panel allows) onto deflector edge.

### Deflector with edge protector:



Should the instrument panel cover be too short to allow the protector to fit underneath, contact manufacturer stating model and serial number.