

ROOF SHEET METAL REPAIRS (G2394465)

SPECIFICATIONS



NOTES:

- Breakstem Fastener (BSF) installation involves using the Jaguar Land Rover (JLR) approved BSF installation tool and requires a hole diameter of 6.5 mm.
- Self Piercing Rivet (SPR) installation requires using the JLR approved SPR tool.
- Make sure the JLR approved Self Piercing Rivets (SPRs), die type and load are used during installation.
- Flow Form Rivet (FFR) installation requires using the JLR approved FFR installation tool.

Required fixings - Roof sheet metal repairs.

Roof Panel - Vehicles Without: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF G	N/A	N/A	LR044288	x 2	W780389 SJ46
Breakstem Fastener	BSF L	N/A	N/A	LR147840	x 35	W781047 SJ90
Breakstem Fastener	BSF M	N/A	N/A	LR147841	x 12	W780579 SJ90
Breakstem Fastener	BSF N	N/A	N/A	LR147842	x 2	W781049 SJ90
Self Piercing Rivet	SPR L6C	Flat	50 kN	LR043557	x 7	W709936 S900

Rear Roof Panel - Vehicles With: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF L	N/A	N/A	LR147840	x 16	W781047 SJ90
Self Piercing Rivet	SPR L5F	Flat	45 kN	LR043553	x 2	W708716 S900
Self Piercing Rivet	SPR L6C	Flat	50 kN	LR043557	x 8	W709936 S900
Self Piercing Rivet	SPR L21L	Pip	70 kN	LR099826	x 14	W780566 SJ91

Windshield Header Panel Upper - Vehicles With: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF E	N/A	N/A	LR044287	x 4	W780388 SJ46
Breakstem Fastener	BSF G	N/A	N/A	LR044288	x 6	W780389 SJ46
Breakstem Fastener	BSF M	N/A	N/A	LR147841	x 16	W780579 SJ90
Self Piercing Rivet	SPR L5	Flat	50 kN	LR043553	x 8	W708716 S900
Self Piercing Rivet	SPR L15G	Flat	40 kN	LR099824	x 2	W780564 SJ91
Self Piercing Rivet	SPR L25AS	Shallow	50 kN	LR146802	x 6	W781941 SJ91
Flow Form Rivet	FFR S5	N/A	55 kN	.	x 2	.

Windshield Header Panel Upper - Vehicles Without: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF E	N/A	N/A	LR044287	x 4	W780388 SJ46
Breakstem Fastener	BSF G	N/A	N/A	LR044288	x 2	W780389 SJ46
Breakstem Fastener	BSF M	N/A	N/A	LR147841	x 16	W780579 SJ90
Self Piercing Rivet	SPR L5	Flat	50 kN	LR043553	x 8	W708716 S900
Self Piercing Rivet	SPR L15G	Flat	40 kN	LR099824	x 2	W780564 SJ91
Self Piercing Rivet	SPR L25AS	Shallow	50 kN	LR146802	x 6	W781941 SJ91
Flow Form Rivet	FFR S5	N/A	55 kN	.	x 2	.

Windshield Header Panel Lower

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF M	N/A	N/A	LR147841	x 6	W780579 SJ90

Rear Header Panel Upper

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF K	N/A	N/A	LR147839	x 10	W781165 SJ90
Breakstem Fastener	BSF L	N/A	N/A	LR147840	x 12	W781047 SJ90
Flow Form Rivet	FFR S2	N/A	55 kN	LR146794	x 2	W585442 SJ50
Flow Form Rivet	FFR S3	N/A	55 kN	LR146795	x 2	W585443 SJ50

Rear Header Panel Lower

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF M	N/A	N/A	LR147841	x 2	W780579 SJ90
Self Piercing Rivet	SPR L3	Flat	30 kN	LR043551	x 4	W708711 S900

Front Roof Reinforcement Panel - Vehicles Without: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF M	N/A	N/A	LR147841	x 6	W780579 SJ90

Front Center Roof Reinforcement Panel - Vehicles Without: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF M	N/A	N/A	LR147841	x 4	W780579 SJ90

Rear Center Roof Reinforcement Panel - Vehicles Without: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF L	N/A	N/A	LR147840	x 4	W781047 SJ90

Rear Roof Reinforcement Panel - Vehicles Without: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF K	N/A	N/A	LR147839	x 12	W781165 SJ90

Rear Roof Reinforcement Panel - Vehicles With: Roof Opening Panel

FIXING TYPE	CODE	DIE TYPE	LOAD (KN)	PART NUMBER	AMOUNT REQUIRED	WERS NUMBER
Breakstem Fastener	BSF K	N/A	N/A	LR147839	x 12	W781165 SJ90