SUPER COOLER KIT
(P/N M5146062)

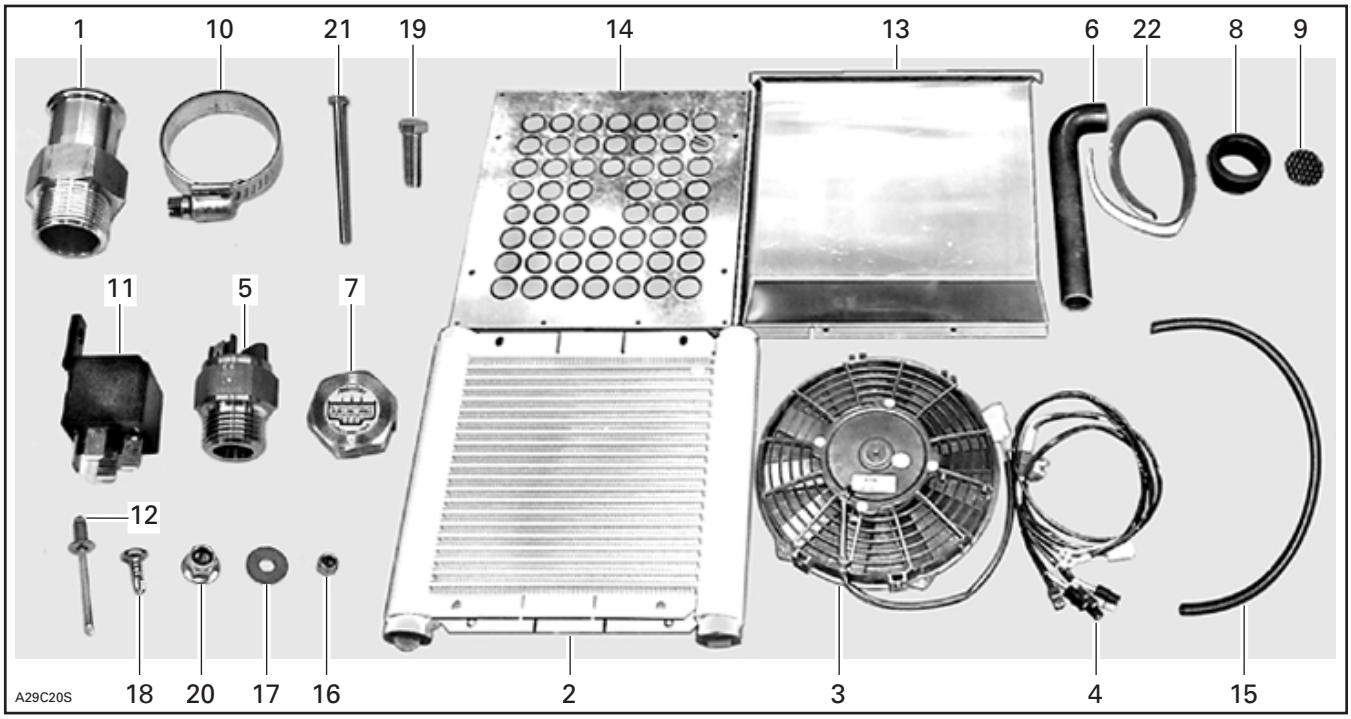
⚠ WARNING

For safety reasons, this kit must be installed by an authorized Ski-Doo® snowmobile dealer. Should removal of a locking device (e.g. lock tabs, self-locking fasteners, etc.) be required when undergoing disassembly/assembly, always replace with a new one. Torque wrench tightening specifications must strictly be adhered to; refer to table at the end of this document. This instruction sheet should be given to the purchaser.

This kit is designed for specific applicable models only (your authorized Ski-Doo snowmobile dealer will confirm models). It is not recommended for units other than those for which it was sold.

NOTE: Installation time is approximately **4.0** hour.

PARTS TO BE INSTALLED



1. Hose Joint (2)
2. Radiator
3. Axial Fan
4. Wiring Harness
5. Sensor
6. Hose (2)
7. Aluminum Plug with Gasket
8. Tube (4)
9. Grill (4)
10. Gear Clamp (2)
11. Relay
12. Rivet (8)
13. Cover Plate
14. Protective Plate
15. Protector Tubing (0.5 m (20 in))
16. M4 Flanged Elastic Nut (4)
17. M4 Flat Washer (4)
18. Self-Tapping Screw (4)
19. M6 x 20 Hexagonal Screw (4)
20. M6 Flanged Elastic Nut (4)
21. M4 x 50 Hexagonal Screw (4)
22. Gasket (0.5 m (20 in))
23. M5 x 20 Hexagonal Screw (not illustrated)
24. M5 Flat Washer (not illustrated)
25. M5 Flanged Elastic Nut (not illustrated)

INSTRUCTION

Open seat.

Remove tool box bracket.

Starting from most forward outer rivet of original right side radiator hose adapter, draw a 490 mm (19-9/32 in) line toward rear, parallel to side wall and 90 mm (3-1/2 in) away from it.

At that point, draw a 260 mm (10-15/64 in) line toward right side at a 90° angle.

At that point, draw a 230 mm (9-1/16 in) line toward front at a 90° angle.

At that point, rejoin first line drawn toward left side, at a 90° angle.

Cut the rectangle given by all these lines.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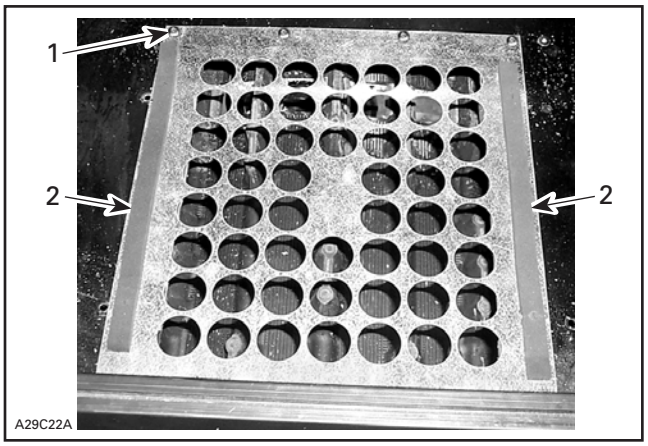
Install protective plate **no. 14** and drill four 4.8 mm (3/16 in) holes on right side and four 4.8 mm (3/16 in) holes on left side using protective plate as template.

Secure protective plate with rivets **no. 12**.

Again using protective plate as template, drill 2 forward and 2 rear holes through frame with a M6 drill.

Cut gasket **no. 22** in half, stick both halves on protective plate and pierce gasket at forward and rearward holes, as shown in next photo.



1. Rivets (4 on each side)
2. Gaskets (2)

Install axial fan **no. 3** onto radiator **no. 2** using M4 x 50 hexagonal screws **no. 21**, M4 flat washers **no. 17** on screw head side and M4 flanged elastic nuts **no. 16**.

CAUTION: Open the holes between radiator segments for the retaining screws with a screwdriver taking care not to damage segments.

Remove red plastic plugs and install hose joints **no. 1** onto radiator after having applied teflon tape or Loctite† Pipe Sealant with Teflon (Loctite 592, P/N 293 800 018) onto joints threads.

Remove yellow plastic plugs and install temperature sensor **no. 5** and aluminum plug with gasket **no. 7** onto radiator after having applied teflon tape or Loctite Pipe Sealant with Teflon (Loctite 592, P/N 293 800 018) onto their threads.

Remove both rear suspension rear arm M10 x 30 socket screws and lift rear of vehicle so suspension stays on the ground; this will ease radiator installation.

Secure radiator to frame through protective plate using M6 x 20 hexagonal screws **no. 19,** head underneath frame, and M6 flanged elastic nuts **no. 20**.

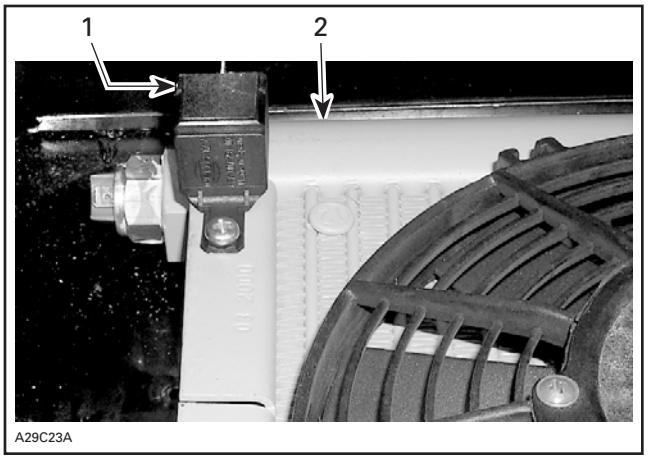
Lower rear of vehicle until tunnel holes align with rear suspension rear arm and secure using previously removed M10 x 30 socket screws.

Fasten relay **no. 11** to radiator bracket, using M5 x 20 hexagonal screw **no. 23**, M5 flat washer **no. 24** and M5 flanged elastic nut **no. 25**.

† Loctite® is a trademark of Loctite Corporation.

Plug relay to harness wires **no. 4** according to the following:

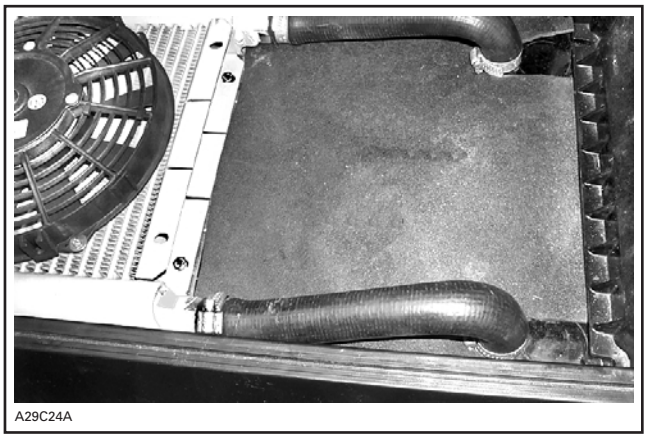
WIRE COLOR	TERMINAL NO.
Red	1 and 5
Blue	2
White	3



1. Relay
2. Radiator

Before proceeding with next operation, drain antifreeze from system and keep it to be reused.

Remove and discard existing hose, install and secure hoses **no. 6** onto radiator with gear clamps **no. 10** and with gear clamps taken from already existing hose. Cut hoses at the right length.



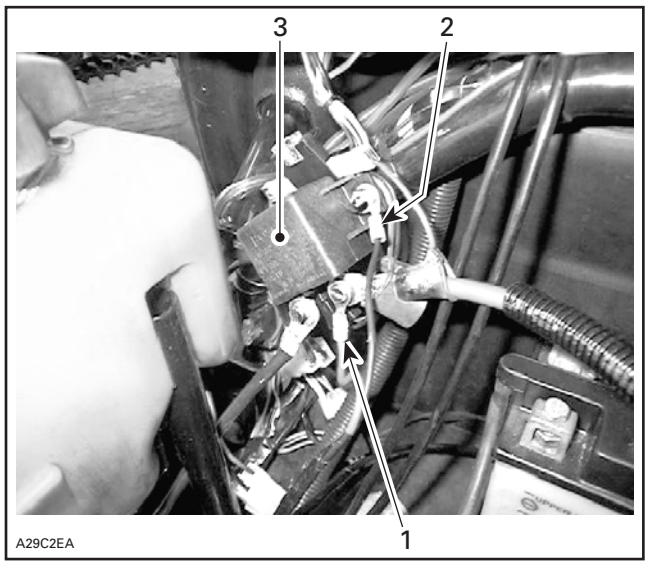
Cover wiring harness **no. 4** with protector tubing **no. 15** and connect same to sensor.

Remove air intake and battery.

Using a metal wire as a fish-wire, pull wiring harness under fuel tank.

On 1998 thru 2000 Models

Plug wires on starter relay as per next photo.



1. RED positive wire
2. BLACK negative wire
3. Starter relay

On Models Later than 2000

Connect to battery poles (RED wire on positive terminal and BLACK wire on negative terminal).

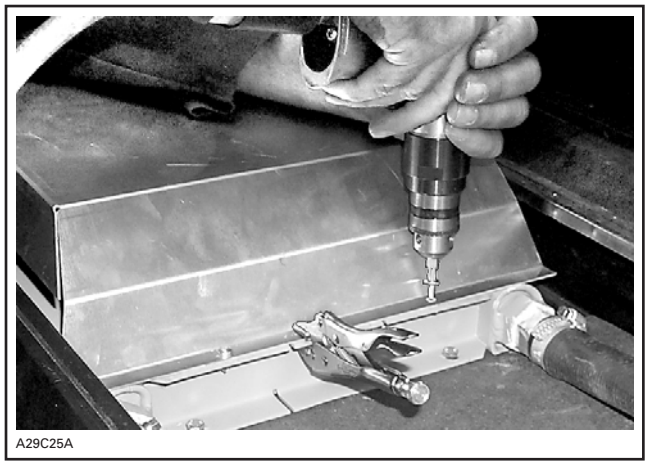
⚠ WARNING

Always connect the battery cables exactly in the specified order. Connect RED positive cable first, then BLACK negative ground cable.

All Models

Reinstall battery and air intake silencer.

Install cover plate **no. 13** using self-tapping screws **no. 18**.



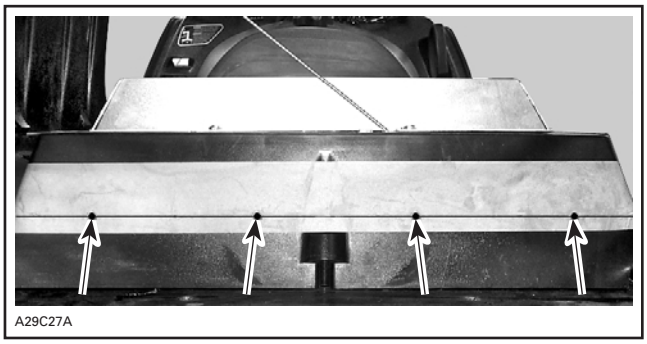
The following operation requires to locate the true center height of seat box rear wall. True center should be around 50 mm or 2 in.

Measure wall height of seat box and draw an horizontal line at its true center. Note this measure and transfer it on seat.

Measure wall length and draw 4 equidistant lines.

True hole center is where equidistant lines meet with horizontal line.

Drill 4 preholes through seat box.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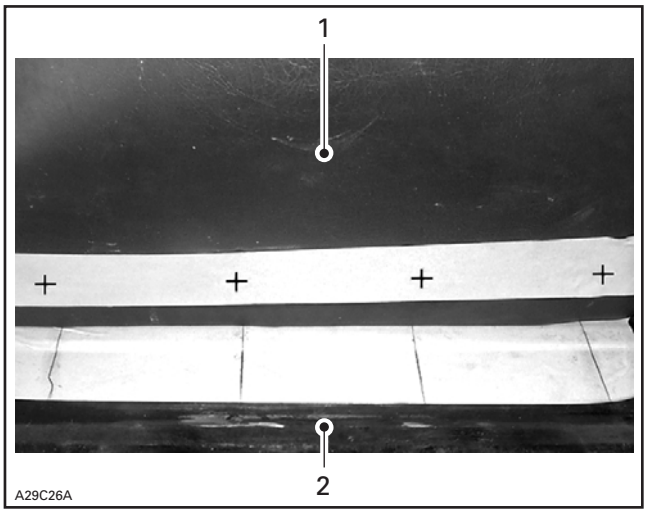
Repeat measuring and drilling procedure for seat.



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HOLE POSITIONS ON SEAT

Masking tape can be used to help marking
1. Seat
2. Tunnel

Drill four 57 mm (2-1/4 in) holes in seat box and then, four same size holes in seat, in line with seat box holes, taking care not to damage seat cover **which requires four holes of 30 mm (1-3/16 in) only**.


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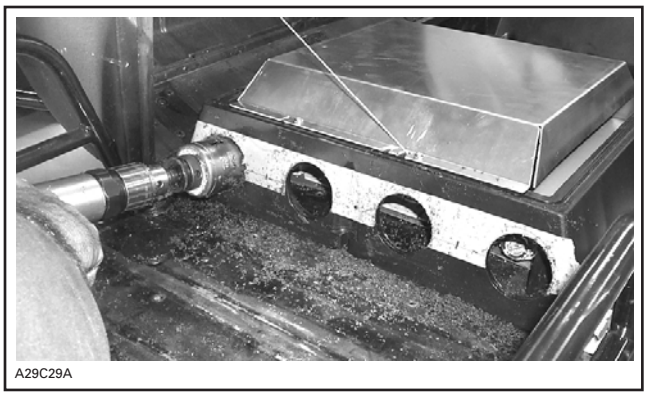
SEAT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SEAT BOX

Insert grills **no. 9** into tubes **no. 8** and push tubes in seat holes starting from the outside and snap tubes in place. A little flat screwdriver may be very useful to complete this step.


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TUBE IN PLACE — SEEN FROM INSIDE SEAT

Refill system with coolant, and bleed air.

Check Super Cooler operation.

Installation is now complete.

The following table is to be consulted if and when a tightening torque is required but not specified.

Bold face size indicates nominal value (mean value).

N•m	FASTENER SIZE (8.8 GRADE)	Lbf•**in**
2	**M4**	18
3	M4	27
4	**M5**	35
8	M6	71
9	M6	80
10	**M6**	89
11	M6	97
12	M6	106

N•m	FASTENER SIZE (8.8 GRADE)	Lbf•ft
21	M8	15
22	M8	16
23	**M8**	17
24	M8	18
25	M8	18
43	M10	32
44	M10	32
45	M10	33
46	M10	34
47	M10	35
48	**M10**	35
49	M10	36
50	M10	37
51	M10	38
52	M10	38
53	M10	39
76	M12	56
77	M12	57
78	M12	58
79	M12	58
80	**M12**	59

N•m	FASTENER SIZE (8.8 GRADE)	Lbf•ft
81	M12	60
82	M12	60
83	M12	61
84	M12	62
121	M14	89
122	M14	90
123	M14	91
124	M14	91
125	M14	92
126	M14	93
127	M14	94
128	M14	94
129	M14	95
130	M14	96
131	M14	97
132	M14	97
133	M14	98
134	M14	99
135	**M14**	100
136	M14	100
137	M14	101
138	M14	102
139	M14	103
140	M14	103
141	M14	104
142	M14	105
143	M14	105
144	M14	106
145	M14	107
146	M14	108
147	M14	108
148	M14	109
149	M14	110
150	M14	111

M5146062

1.	M5346063	Hose Joint (2)	Raccord de boyau (2)
2.	M48229	Radiator	Radiateur
3.	M42091	Axial Fan	Ventilateur axial
4.	M5346065	Wiring Harness	Faisceau de fils
5.	M42219	Sensor	Sonde
6.	M5346067	Hose (2)	Boyau (2)
7.	M48230	Aluminum Plug with Gasket	Bouchon en aluminium avec joint d'étanchéité
8.	M5346226	Tube (4)	Tube (4)
9.	M5346235	Grill (4)	Grille (4)
10.	408 800 400	Gear Clamp (2)	Collier de serrage (2)
11.	M42089	Relay	Relais
12.	M36083	Rivet (8)	Rivet (8)
13.	M5246250	Cover Plate	Plaque-couvercle
14.	M5246236	Protective Plate	Plaque de protection
15.	M28012	Protector Tubing (0.5 m (20 in))	Tube protecteur (0.5 m (20 po))
16.	M33035	M4 Flanged Elastic Nut (4)	Écrou élastique à épaulement M4 (4)
17.	M20001	M4 Flat Washer (4)	Rondelle plate M4 (4)
18.	M40182	Self-Tapping Screw (4)	Vis autotaraudeuse (4)
19.	207 162 044	M6 x 20 Hexagonal Screw (4)	Vis hexagonale M6 x 20 (4)
20.	M33200	M6 Flanged Elastic Nut (4)	Écrou élastique à épaulement M6 (4)
21.	M40203	M4 x 50 Hexagonal Screw (4)	Vis hexagonale M4 x 50 (4)
22.	M39013	Gasket (0.5 m (20 in))	Joint d'étanchéité (0.5 m (20 po))
23.	M40156	M5 x 20 Hexagonal Screw	Vis hexagonale M5 x 20
24.	M20008	M5 Flat Washer	Rondelle plate M5
25.	M33009	M5 Flanged Elastic Nut	Écrou élastique à épaulement M5