

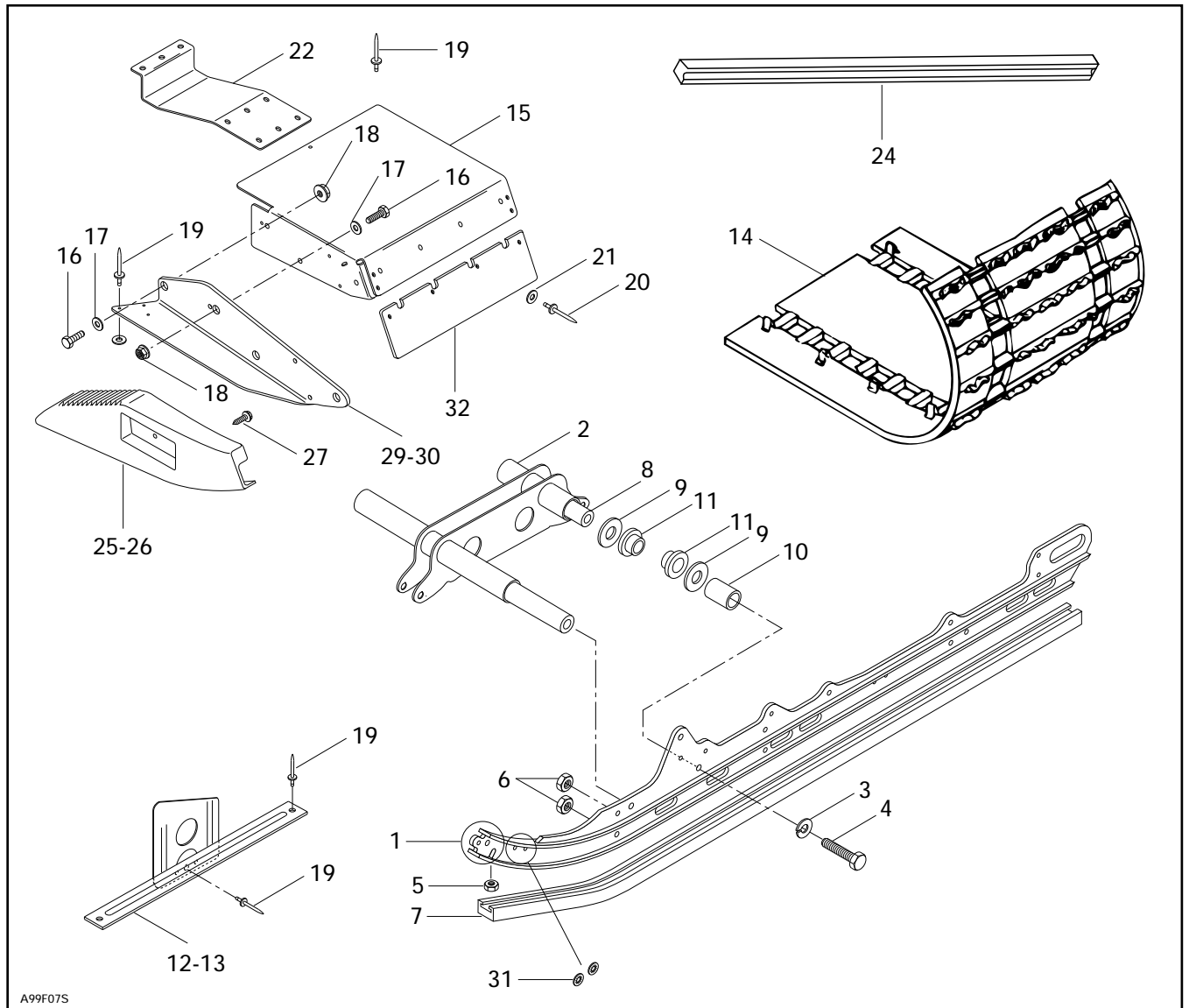


◆ **WARNING :** For safety reasons, this kit must be installed by an authorized Bombardier Ski-Doo snowmobile dealer. Should removal of a locking device be required when undergoing disassembly / assembly, always replace with a new one. This instruction sheet should be given to the purchaser after modification. This kit is designed for specific applicable models only. It is not recommended for snowmobiles other than those for which it was sold.

○ **NOTE :** Installation time is approximately 4.0 hours.

▼ **CAUTION :** This kit is designed for deep snow application only. It is not recommended for vehicles other than those for which it was sold.

## PARTS TO BE INSTALLED



1. Runner (2)
2. Welded Shock Support
3. Lock Washer (2)
4. Bolt M10 (2)
5. Elastic Nut M6 (8)
6. Elastic Nut M8 (8)
7. Runner Shoe (2)
8. Lower Axle
9. Washer (4)
10. Spacer (2)
11. Cushion (4)
12. Suspension Mounting Bracket (Left)
13. Suspension Mounting Bracket (Right)
14. Track (15" x 136" x 1.45")
15. Tunnel Extension
16. Bolt M8 (4)
17. Flat Washer M8 (4)
18. Flanged Elastic Nut M8 (4)
19. Pop Rivet (Gloss Black) (61)
20. Pop Rivet (4)
21. Flat Washer (4)
22. Extension Protector
23. Extension Decal (Not illustrated)
24. Radiator Protector (2)
25. Moulding (Right)
26. Moulding (Left)
27. Self-Tapping Screw (6)
28. Warning Label (Not illustrated)
29. Reinforcement Plate (Left)
30. Reinforcement Plate (Right)
31. Push Nut (8)
32. Snow Guard Reinforcement

## VEHICLE PREPARATION

### Tunnel and body

**NOTE :** If additional information is required, refer to *Ski-Doo Shop Manual* for proper removal / installation procedures. The following procedure gives instructions for one side of the vehicle. Assure to remove burrs after drilling. Proper torquing specs are given in the *Ski-Doo Shop Manual*.

**CAUTION :** Apply Loctite 242 (P / N 413 7030 00) on fasteners when reassembling and tighten with proper torques.

Raise rear of vehicle and block safely.

Remove rear suspension, track, seat and rear mouldings.

Lower vehicle and support it safely. Remove rear bumper and snow guard.

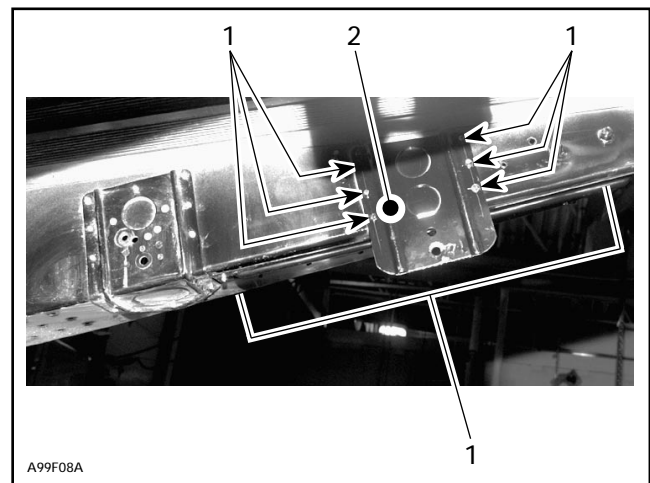
Discard track, rear mouldings and screws.

Remove reflectors and screws, DO NOT DISCARD, they will be reused.

Grind the rivets on the rear cap (side opposite of head). Using an appropriate punch, push out the ground rivets retaining rear cap then remove from tunnel. Use a 5 mm (3/16 in) cobalt drill bit for tight areas (P / N 414 9614 00).

Grind rivets that are retaining the suspension mounting brackets (left and right) then remove brackets from vehicle.

**NOTE :** Always place a backing plate surrounding the rivet head prior to punching out rivet. Omitting to do so may damage the aluminum area surrounding the rivet hole.



1. Grind these rivets
2. Suspension mounting bracket

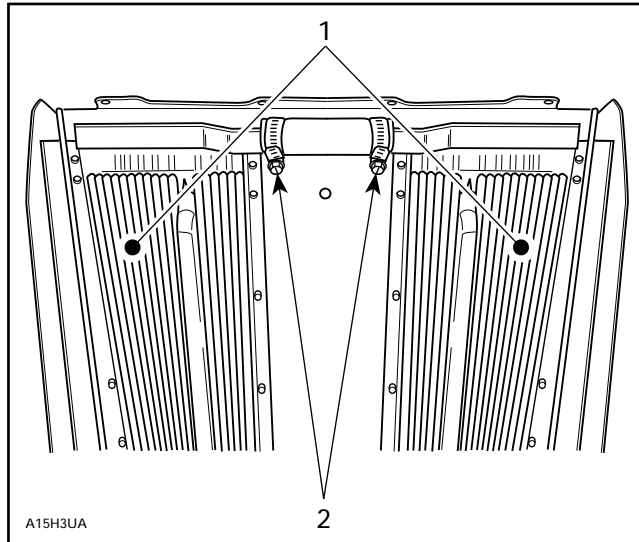
## PROCEDURE

◆ **CAUTION** : Depressurize cooling system before loosening gear clamp screws.

From underneath tunnel, ensure that the gear clamp screw heads securing the hose between the radiators are pointing toward the front of vehicle. Reposition as necessary. To avoid disconnecting hose, unscrew collar completely, remove and rotate. Reinstall and tighten firmly.

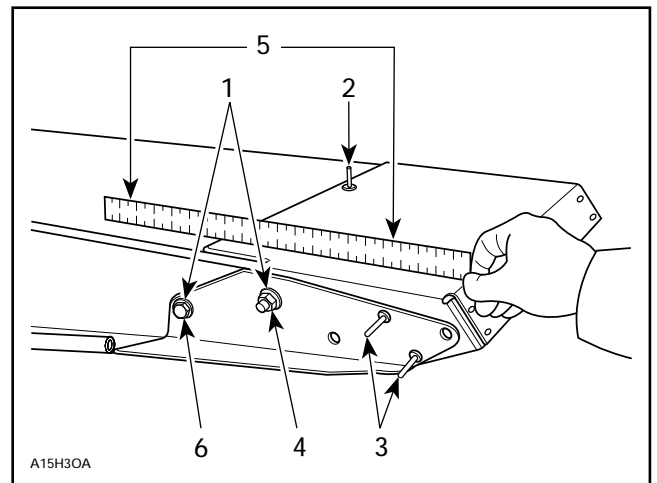
Install radiator protectors **no. 24**.

Close radiator ends using pliers.



1. Radiators
2. Screw heads must be facing toward front
3. Bend flap straight back

Position top part of tunnel extension **no. 15** over tunnel and side parts inside tunnel. Position reinforcement plates **no. 29** and **no. 30** on outer side of tunnel. Secure with bolts **no. 16**, flat washers **no. 17** and flanged elastic nuts **no. 18**. Pass bolts through extension, tunnel and plates. Ensure to place bolt head and nut as per illustration. Temporarily insert rivets **no. 19** into rear holes for proper alignment. Tighten bolts.



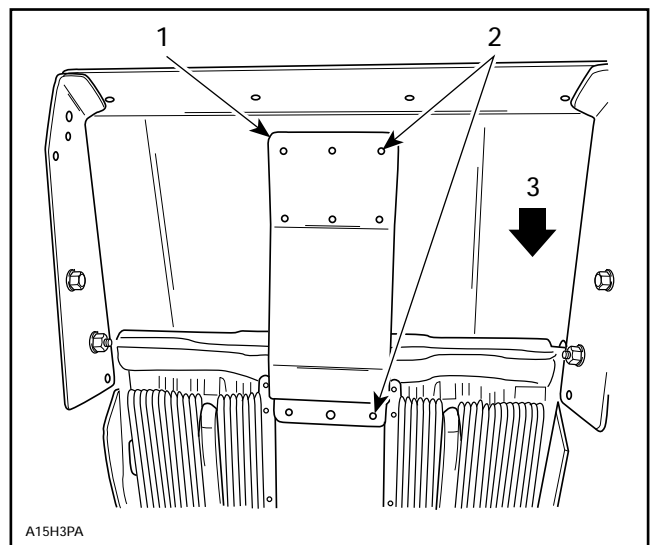
1. M8 bolts, washers and nuts
2. Insert a first rivet here
3. Temporary rivets for alignment purposes only
4. Nut on this side
5. Parallel
6. Bolt head on this side

○ **NOTE** : Using a 5 mm (3/16 in) drill bit, enlarge the front / center hole on the extension protector **no. 22**.

From underneath tunnel, install extension protector **no. 22**. From top of tunnel, insert a rivet **no. 19** in FRONT CENTER hole of extension. Center protector from left to right, then retain rear of protector on tunnel extension with a C-clamp. Secure front rivet **no. 19** and drill other holes with a 5 mm (3/16 in) drill bit.

Using a straight edge, ensure that extension is parallel with tunnel on each side. Reposition parts as necessary.

Using protector holes as a guide, drill rear holes in tunnel. Install rivets **no. 19**.



1. Extension protector
2. Use these holes as a drilling guide
3. FRONT

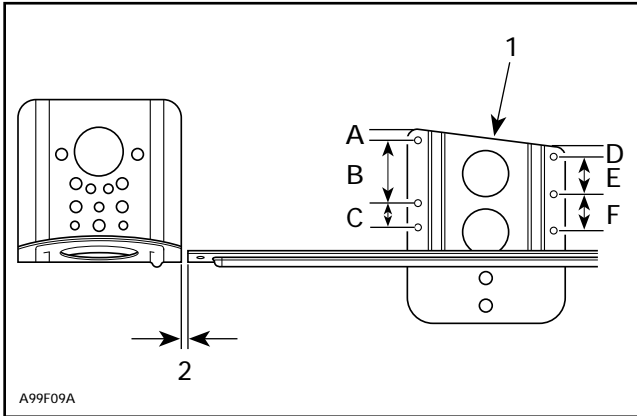
Do not drill holes in rear corners of extension yet.  
DO NOT drill side rear holes of tunnel.

Rivet rear part of protector and extension using rivets **no. 19** to tunnel in the following sequence :

- Top front of extension.
- Drill rear corners of extension and rivet.

Remove C-clamp

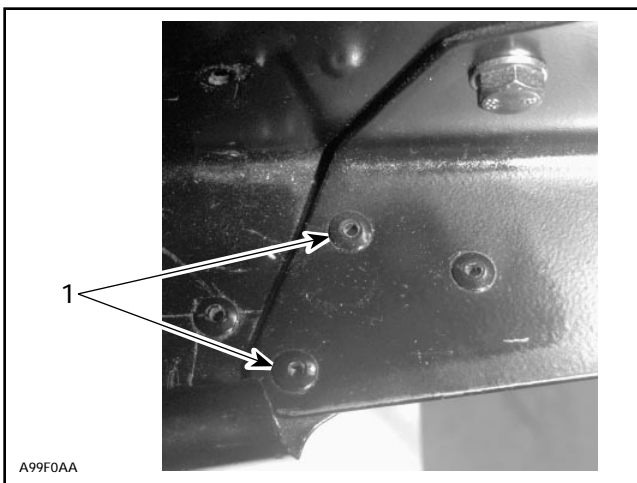
Install new suspension mounting brackets **no. 12** and **no. 13**. Drill holes using a 5 mm (3/16 in) bit. Secure with rivets **no. 19**. Refer to following illustration for proper drilling and positioning.



**RIGHT SIDE VIEW (INSIDE TUNNEL)**

1. Suspension bracket
2. Measure this distance 6 mm (1/4 in)
- A. 10 mm (25/64 in)
- B. 50 mm (2 in)
- C. 30 mm (1-3/16 in)
- D. 10 mm (25/64 in)
- E. 30 mm (1-3/16 in)
- F. 30 mm (1-3/16 in)

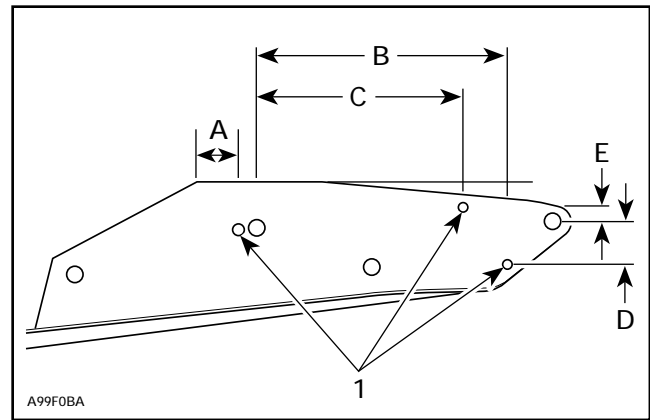
Using reinforcement plates as a guide, drill two holes in footboard. Secure using rivets **no. 19**.



**TOP VIEW (LEFT SIDE)**

1. Install rivets here (2 on each side)

Drill three 6 mm (15/64 in) holes close to the rear plate on the reinforcement plates. This is required for rear moulding attachment.



1. Drill here
- A. 12 mm (31/64 in)
- B. 160 mm (6-1/4 in)
- C. 132 mm (5-3/16 in)
- D. 27 mm (1-5/64 in)
- E. 9 mm (23/64 in)

Reinstall rear bumper using existing fasteners.

Reuse reflectors and screws. Install new rear mouldings **no. 25** and **no. 26** using new self-tapping screws **no. 27**.

Round front exterior corner of mouldings.

Install new track **no. 14** paying close attention to the direction of rotation.

Refill chaincase with Bombardier synthetic chaincase oil (P / N 413 8028 00).

## Rear Suspension

**NOTE :** For easier installation, the following procedure is basically a parts swap from the old rear suspension to the new.

Install runner shoes **no. 7** on runners **no. 1**.

Remove bolts and nuts that are retaining the old runner shoes from front of old runners.

Secure new runner shoes onto new runners using existing bolts and new M6 nuts **no. 5**.

Remove rubber stoppers and push nuts (remove bolts and nuts if equipped) from old runners (front and rear).

Install rubber stoppers onto new runners. Reuse pins with new push nuts **no. 31**, (reuse bolts and nuts if equipped).

Remove bolts from front axle.

Remove runner protectors from front of old runners.

Install runner protectors onto new runners using same hardware.

Remove bolts from rear axle of old runners.

Remove wheels, spacers and washers.

Remove adjusters from old runners and install onto new runners using new M6 nuts **no. 5**.

Install wheels, spacers and washers onto new runners. Apply Loctite 271 (red) on bolt threads.

Remove interior axle assembly and install onto new runners. Use Loctite 271 (red) on bolt threads.

Remove front wheels and wheel supports from old runners and install wheel supports on new runners using new M8 nuts **no. 6**. Do not install wheels yet.

Remove bolts that are retaining the spring support.

Remove lower bolt from rear shock.

Remove rear welded pivot arm assembly and install on new runner using a new M8 nut **no. 6** then tighten.

Install lower axle **no. 8** into shock support **no. 2**.

Install washers **no. 9**, one on each side.

Install cushions **no. 11** into idler wheels, washers **no. 9** then spacers **no. 10**, one on each side.

Install welded shock support assembly **no. 2** using existing hardware on front then secure with new M10 bolts **no. 4** and lock washers **no. 3** on rear. Do NOT tighten yet.

**NOTE** : Apply Loctite 271 (red) on bolt threads when instructed to tighten bolts at end of instruction sheet.

Install rear shock using existing spacer, bolt and new M8 elastic nut **no. 6** onto shock support.

Install springs into spring supports then lift spring supports and secure with existing bolts and new M6 elastic nuts **no. 5**.

Remove lower bolt from front shock on old runners.

Remove and discard old shock support.

Transfer welded front arm assembly with shock onto new runners using existing hardware. Apply Loctite 271 (red) to bolt threads.

Install front shock, lower part, using new M8 nut **no. 6**.

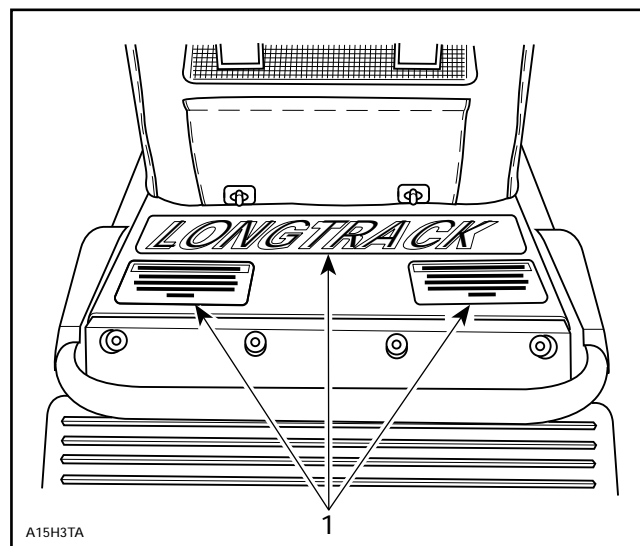
Install front wheels that were previously removed.

Tighten complete suspension system.

**REMINDER** : Apply Loctite 271 (red) on lower front shock support bolts.

Install rear suspension in tunnel. Pay attention to secure rear suspension attachment in **LOWEST** hole.

Apply (LONGTRACK) extension decal **no. 23** and warning label **no. 28** on top of tunnel extension.



#### 1. Decals

Install snow guard reinforcement **no. 32** and snow guard with new rivets **no. 20** and flat washers **no. 21**.

Reinstall seat.

Perform chain tension adjustment as well as track tension and alignment.

Test snowmobile.

## 861 7544 00

1.	503 1667 00	Runner (2)	Porte-glissière (2)
2.	503 1521 00	Welded Shock Support	Support d'amortisseur soudé
3.	224 7011 88	Lock Washer (2)	Rondelle-frein (2)
4.	222 0035 65	Bolt M10 (2)	Boulon M10 (2)
5.	228 5610 45	Elastic Nut M6 (8)	Écrou d'arrêt élastique M6 (8)
6.	228 5810 45	Elastic Nut M8 (8)	Écrou d'arrêt élastique M8 (8)
7.	560 1023 00	Runner Shoe (2)	Glissière (2)
8.	503 1528 00	Lower Axle	Essieu inférieur
9.	503 1540 00	Washer (4)	Rondelle (4)
10.	503 1510 00	Spacer (2)	Entretoise (2)
11.	414 8884 00	Cushion (4)	Coussin (4)
12.	518 3152 05	Suspension Mounting Bracket (Left)	Support de fixation de la suspension (gauche)
13.	518 3152 06	Suspension Mounting Bracket (Right)	Support de fixation de la suspension (droit)
14.	570 2086 00	Track (15'' x 136'' x 1.45'')	Chenille (15'' x 136'' x 1.45'')
15.	503 1571 00	Tunnel Extension	Rallonge de tunnel
16.	222 0820 65	Bolt M8 (4)	Boulon M8 (4)
17.	224 0811 71	Flat Washer M8 (4)	Rondelle plate M8 (4)
18.	228 7810 45	Flanged Elastic Nut M8 (4)	Écrou d'arrêt élastique à épaulement M8 (4)
19.	390 4036 00	Pop Rivet (Gloss Black) (61)	Rivet aveugle (noir lustré) (61)
20.	390 9096 00	Pop Rivet (4)	Rivet aveugle (4)
21.	517 2259 00	Flat Washer (4)	Rondelle plate (4)
22.	503 1570 00	Extension Protector	Protecteur de rallonge
23.	414 9365 00	Extension Decal (not illustrated)	Autocollant de rallonge (non illustré)
24.	415 0123 00	Radiator Protector (2)	Protecteur de radiateur (2)
25.	572 0495 00	Moulding (Right)	Enjoliveur droit
26.	572 0494 00	Moulding (Left)	Enjoliveur gauche
27.	365 0110 00	Self-Tapping Screw (6)	Vis à tôle autotaraudeuse (6)
28.	414 9366 00	Warning Label (not illustrated)	Étiquette d'avertissement (non illustrée)
29.	518 3119 00	Reinforcement Plate (Left)	Plaque de renfort gauche
30.	518 3120 00	Reinforcement Plate (Right)	Plaque de renfort droite
31.	389 8043 00	Push Nut (8)	Écrou à pression (8)
32.	517 2852 00	Snow Guard Reinforcement	Renfort de garde-neige