

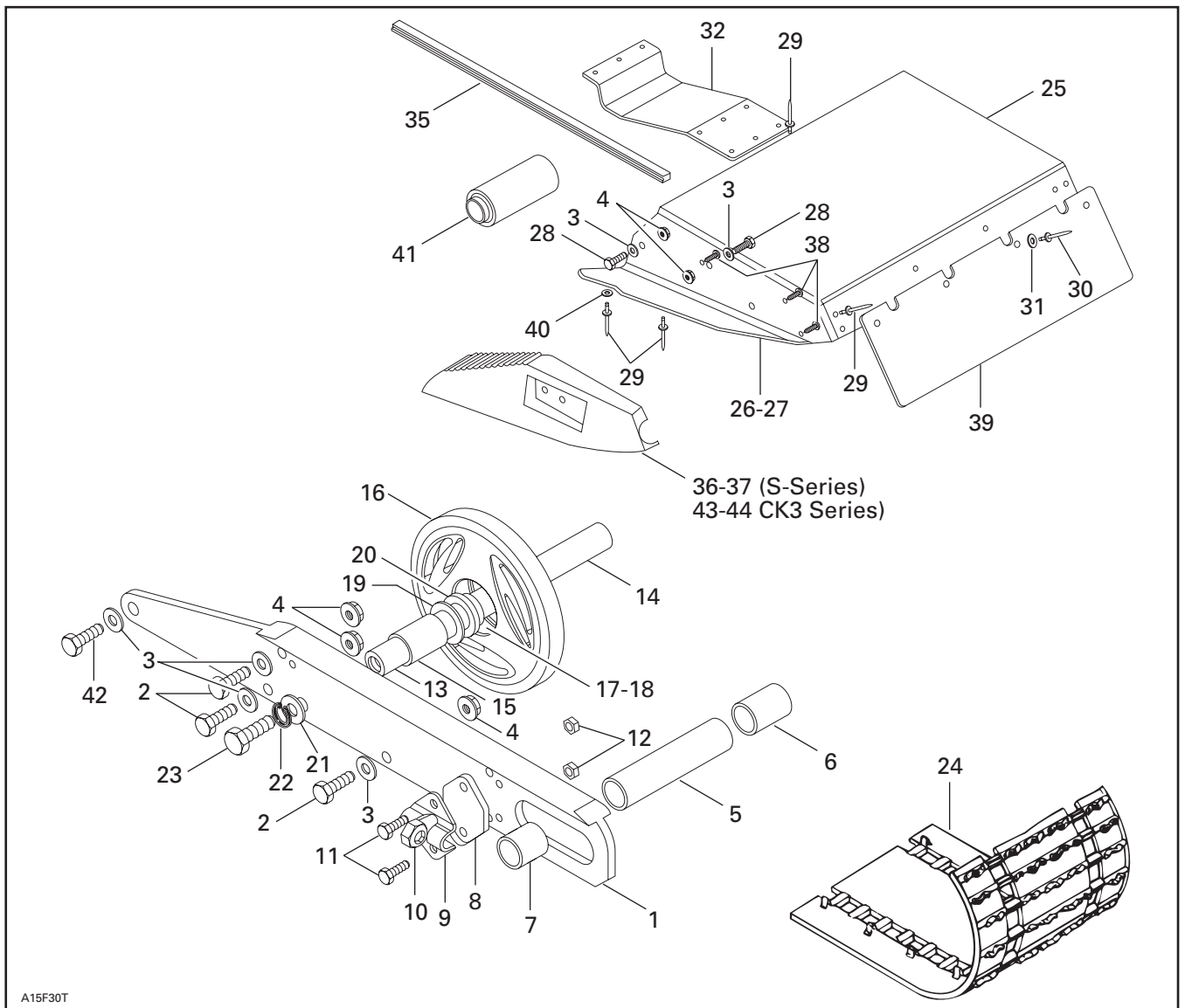


## ◆ WARNING

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 3.0 hours.

## PARTS TO BE INSTALLED



1. Rail Extension (2)
2. Bolt M8 X 30 (6)
3. Flat Washer (12)
4. Flanged Elastic Nut M8 (12)
5. Long Spacer
6. Short Spacer
7. Exterior Spacer (2)
8. Spacer Plate (2)
9. Tensioner (2)
10. Elastic Hex. Nut M10 (2)
11. Hex. Bolt M6 X 25 (4)
12. Elastic Hex. Nut M6 (4)
13. Axle
14. Spacer
15. Spacer (2)
16. Bonded Wheel (2)
17. Ball Bearing (2)
18. Circlip (2)
19. Washer (4)
20. Cushion (4)
21. Flat Washer (2)
22. Lock Washer (2)
23. Hex. Bolt M10 X 45 (2)
24. Track
25. Tunnel Extension
26. Reinforcement Plate (Left Side)
27. Reinforcement Plate (Right Side)
28. Hex. Bolt M8 X 20 (4)
29. Pop Rivet Black (27)
30. Pop Rivet Black (4)
31. Flat Washer (4)
32. Protector
33. Decal Extension (Not Illustrated)
34. Label Warning (Not Illustrated)
35. Radiator Protector (2)
36. Moulding (Right Side)
37. Moulding (Left Side)
38. Tapping Screw 12 X 3/4 (6)
39. Reinforcement
40. Flat Washer (6)
41. Bushing (2)
42. Bolt M8 X 35 (2)
43. Moulding (Right Side)
44. Moulding (Left Side)
45. Reflector (Right Side) (Not Illustrated)
46. Reflector (Left Side) (Not Illustrated)

## VEHICLE PREPARATION

### Tunnel and Body

**NOTE:** Refer to your *Ski-Doo Shop Manual* for additional information.

#### ▼ CAUTION

Apply Loctite 271 (P/N 413 7074 00) on fasteners when reassembling and tighten with proper torques.

Raise rear of vehicle and block safely.

Remove spring ends from adjusting cams as follows:

Slightly turn adjusting cam to expose spring end. Use spring installer tool (P/N 529 0050 00), remove spring end from adjusting cam to remove spring tension.

Remove rear suspension and track.

Remove seat and rear mouldings.

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

Discard track, rear mouldings and screws.

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

### **Models with Standard Rivets**

Use a 5 mm (13/64 in) drill bit and drill out rivets retaining rear cap then remove it from tunnel.

### **Models with Self-Piercing Rivets**

Grind the rivet end (side opposite of head) then removed with a punch. For tight areas, drill rivets with a 5 mm (13/64 in) Supertanium™ drill bit (P/N 529 0318 00).

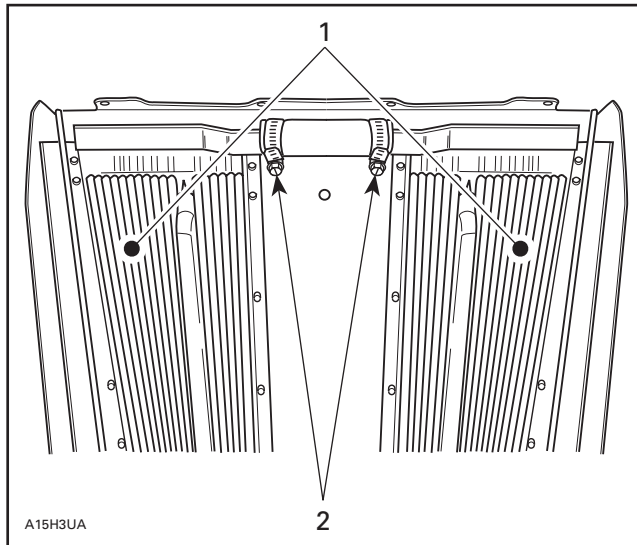
**NOTE:** Always place a backing plate surrounding the rivet head prior to punching out rivet. Omitting to do so may damage the aluminum area surrounding the rivet hole.

Bend the rear edge of the tunnel upward in order to properly install rivets for tunnel extension.

## PROCEDURE

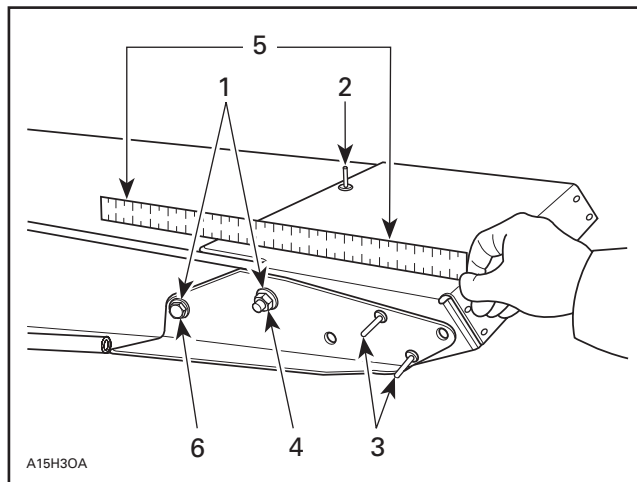
From underneath tunnel, ensure that the gear clamp screw heads securing the hose between the heat exchangers are pointing toward the front of vehicle. Reposition as necessary. To avoid disconnecting hose, unscrew collar completely, remove and rotate. Reinstall and tighten firmly. This is necessary to properly install the heat exchanger protectors.

Install heat exchanger protectors **no. 35**.



1. Heat exchangers
2. Screw heads must be facing this direction

Position top part of tunnel extension **no. 25** over tunnel and side parts inside tunnel. Position reinforcement plates **no. 26** and **no. 27** on outer side of tunnel. Secure with bolts **no. 28**, flat washers **no. 3** and flanged elastic nuts **no. 4**. Pass bolts through extension, tunnel and plates. Ensure to place bolt head and nut as per illustration. Temporarily insert rivets **no. 29** into rear holes for proper alignment. Tighten bolts.



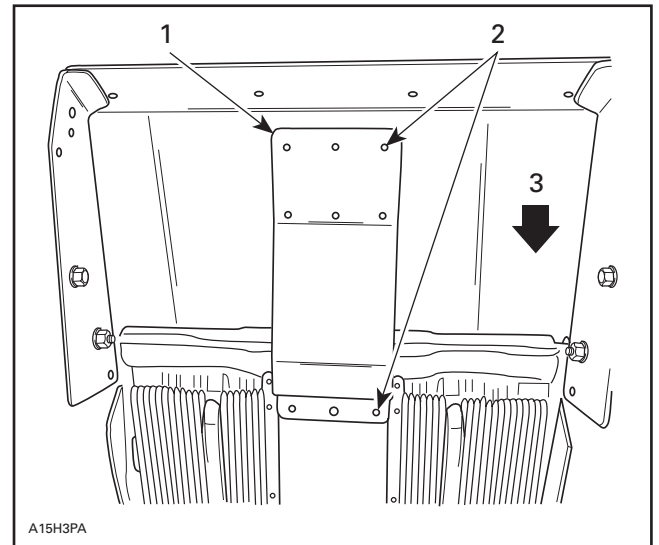
1. M8 bolts, washers and nuts
2. Insert a first rivet here
3. Temporary rivets for alignment purposes only
4. Nut on this side
5. Parallel
6. Bolt head on this side

**NOTE:** Using a 5 mm (13/64 in) drill bit, enlarge the front/center hole on the extension protector **no. 32**.

From underneath tunnel, install extension protector **no. 32**. From top of tunnel, insert a rivet **no. 29** in **front center** hole of tunnel extension previously installed. Center protector from left to right, then retain rear of protector on tunnel extension with a C-clamp. Secure front rivet **no. 29** and drill other holes with a 5 mm (13/64 in) drill bit.

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

Using extension protector holes as a guide, drill rear holes in tunnel. Install rivets **no. 29**.



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

Using tunnel as a guide, drill holes in extension. Do not drill holes in rear corners of extension yet. **DO NOT** drill side rear holes of tunnel.

Remove burrs then rivet rear part of protector and extension using rivets **no. 29** to tunnel in the following sequence:

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

Remove C-clamp.

Using reinforcement plates as a guide, drill holes in footboard. Rivet making sure to use rivets **no. 29** and washers **no. 40**. Position washers beneath footboard.

Drill a 6 mm (15/64 in) hole close to rear bolt of reinforcement plates. This is required for rear moulding attachment.

Reinstall rear bumper using existing fasteners.

Reuse reflectors and screws. On S-series models, install new rear mouldings **no. 36** and **no. 37** using new self-tapping screws **no. 38**. On CK-3 series models, install new rear mouldings **no. 43** and **no. 44**, sticking in their respective reflector **no. 45** and **no. 46**.

Round exterior front corner of mouldings.

Reinstall seat.

Install new track **no. 24** paying close attention to the direction of rotation.

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

## Rear Suspension

Remove rear axle and components.

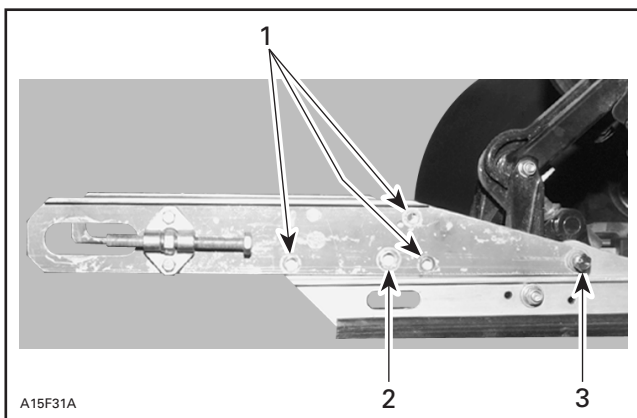
Discard the 4 bushings on rear axle.

Remove track adjuster and adjuster bolt. Bolt will be reinstalled on rail extension with new track adjuster.

Remove the two bolts holding rear arm lower shaft to side rails. Position rail extensions **no. 1** outside of suspension rail, one of each side. Align front hole of rail extension with lower shaft and secure with new bolts **no. 42**, using new washers **no. 3**.

Ensure that both rail extension are touching all along rail.

Using an 8 mm (5/16 in) and 10 mm (13/32 in) drill bits, drill holes in rail using extension rail as a guide. Drill the smallest holes first.



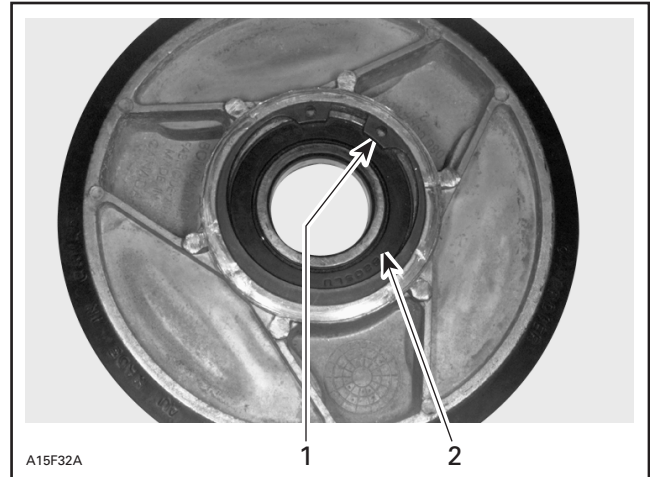
1. Drill 8 mm holes (5/16 in)
2. Drill 10 mm holes (13/32 in)
3. Use new M8 x 35 bolts

Secure extension to rail with bolts **no. 2**, washers **no. 3** and nuts **no. 4**, then tighten.

Install spacer plate **no. 8** and tensioner **no. 9** onto extension rails. Secure with screws **no. 11** and nuts **no. 12**.

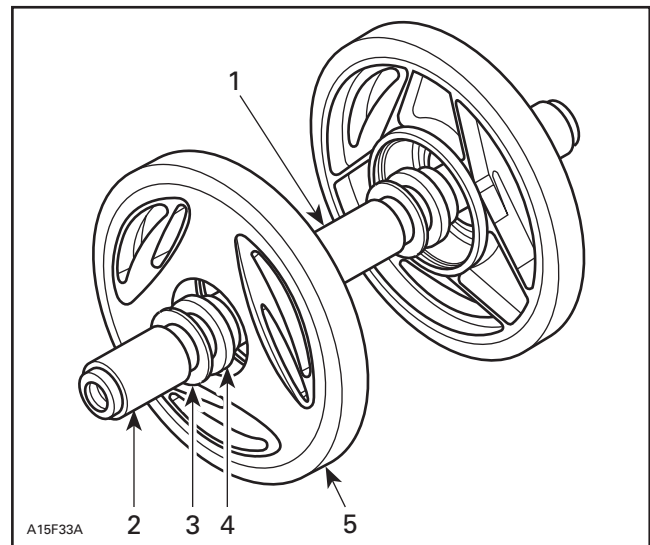
Install tension adjustment bolts and secure with nuts **no. 10**

Install ball bearings **no. 17** into bonded wheels **no. 16**, retain bearings using circlips **no. 18**.



1. Circlips
2. Ball Bearing

Install axle **no. 13**, spacer **no. 14**, washers **no. 19**, one cushion **no. 20** on both sides of each bonded wheel **no. 16** and spacers **no. 15** as per the following illustration.



1. Center Spacer **no. 14**
2. Short Spacers **no. 15**
3. Washers **no. 19**
4. Cushions **no. 20**
5. Bonded Wheel, Bearing and Circlip

Install center axle assy. in front of rear axle location. Secure with M10 bolts **no. 23**, lock washers **no. 22** and flat washers **no. 21**.

Reinstall rear axle with new spacers. Long spacer **no. 5**, short spacer **no. 6** and exterior spacer **no. 7**. Reuse other components. Apply Loctite 271 (red) to bolt threads).

Ensure to reinstall thin shims to each side of rails.

Remove locking rings and top idler wheels.

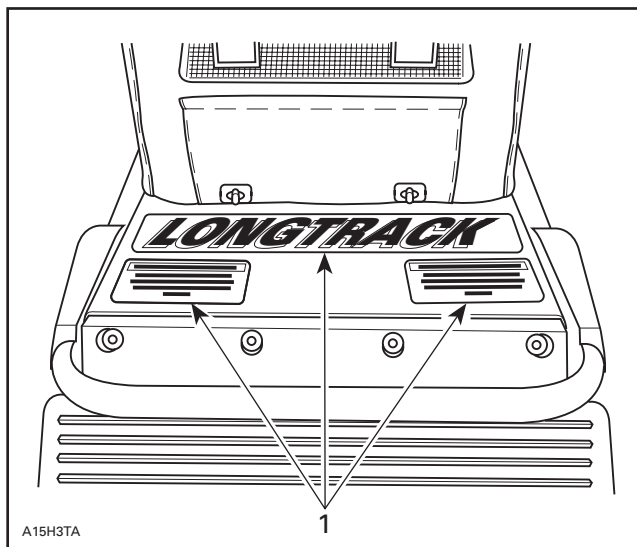
Remove existing plastic spring bushings (one on each side), and replace with new bushings **no. 41**.

Reinstall spring end in cam using tool and adjust cam.

Reinstall idler wheels and locking rings. Tighten set screws.

Reinstall rear suspension in tunnel. Pay attention to secure suspension attachments in same holes.

Apply (LONGTRACK) extension decal **no. 33** and warning label **no. 34** on top of tunnel extension.



1. Decals

Install snow guard reinforcement **no. 39** and secure with new rivets **no. 30** and flat washers **no. 31**.

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

Test snowmobile.



## 861 7604 00

|     |             |                                   |   |
|-----|-------------|-----------------------------------|---|
| 1.  | 503 1720 00 | Rail Extension (2)                | Rallonge de porte-glissière (2)                 |
| 2.  | 222 0830 65 | Bolt M8 X 30 (6)                  | Boulon M8 X 30 (6)                              |
| 3.  | 224 0811 71 | Flat Washer (12)                  | Rondelle plate (12)                             |
| 4.  | 228 7810 45 | Flanged Elastic Nut M8 (12)       | Écrou à épaulement élastique M8 (12)            |
| 5.  | 503 1567 00 | Long Spacer                       | Entretoise (longue)                             |
| 6.  | 503 1568 00 | Short Spacer                      | Entretoise (courte)                             |
| 7.  | 503 1721 00 | Exterior Spacer (2)               | Entretoise (extérieure) (2)                     |
| 8.  | 503 1565 00 | Spacer Plate (2)                  | Plaque d'écartement (2)                         |
| 9.  | 503 1553 00 | Tensioner (2)                     | Tendeur (2)                                     |
| 10. | 228 5010 45 | Elastic Hex. Nut M10 (2)          | Écrou hexagonal élastique M10 (2)               |
| 11. | 222 0625 65 | Hex. Bolt M6 X 25 (4)             | Boulon hexagonal M6 X 25 (4)                    |
| 12. | 228 5610 45 | Elastic Hex. Nut M6 (4)           | Écrou hexagonal élastique M6 (4)                |
| 13. | 503 1528 00 | Axle                              | Essieu  |
| 14. | 503 1531 00 | Spacer                            | Entretoise                                      |
| 15. | 503 1510 00 | Spacer (2)                        | Entretoise (2)                                  |
| 16. | 570 0452 02 | Bonded Wheel (2)                  | Roue (2)  |
| 17. | 405 4045 00 | Ball Bearing (2)                  | Roulement à billes (2)                          |
| 18. | 371 9017 00 | Circlip (2)                       | Circlip (2)                                     |
| 19. | 503 1540 00 | Washer (4)                        | Rondelle (4)                                    |
| 20. | 414 8884 00 | Cushion (4)                       | Coussinet (4)                                   |
| 21. | 224 0012 11 | Flat Washer (2)                   | Rondelle plate (2)                              |
| 22. | 224 7011 88 | Lock Washer (2)                   | Rondelle-frein (2)                              |
| 23. | 222 0045 65 | Hex. Bolt M10 X 45 (2)            | Boulon hexagonal M10 X 45 (2)                   |
| 24. | 570 2086 00 | Track                             | Chenille  |
| 25. | 503 1571 00 | Tunnel Extension                  | Rallonge de tunnel                              |
| 26. | 518 3119 00 | Reinforcement Plate (Left Side)   | Plaque de renfort (gauche)                      |
| 27. | 518 3120 00 | Reinforcement Plate (Right Side)  | Plaque de renfort (droite)                      |
| 28. | 222 0820 65 | Hex. Bolt M8 X 20 (4)             | Boulon hexagonal M8 X 20 (4)                    |
| 29. | 390 4036 00 | Pop Rivet Black (27)              | Rivet noir (27)                                 |
| 30. | 390 9096 00 | Pop Rivet Black (4)               | Rivet noir (4)                                  |
| 31. | 517 2259 00 | Flat Washer (4)                   | Rondelle plate (4)                              |
| 32. | 503 1570 00 | Protector                         | Protecteur                                      |
| 33. | 414 9365 00 | Decal Extension (Not Illustrated) | Autocollant de chenille allongée (non illustré) |
| 34. | 414 9366 00 | Label Warning (Not Illustrated)   | Étiquette d'avertissement (non illustré)        |
| 35. | 415 0123 00 | Radiator Protector (2)            | Protecteur de radiateur (2)                     |

861 7604 00

|     |             |  |                                       |
|-----|-------------|--|---------------------------------------|
| 36. | 572 0495 00 | Moulding (Right Side)                  | Enjoliveur (droit)                    |
| 37. | 572 0494 00 | Moulding (Left Side)                   | Enjoliveur (gauche)                   |
| 38. | 365 9011 00 | Tapping Screw 12 X 3/4 (6)             | Vis autotaraudeuse 12 X 3/4 (6)       |
| 39. | 572 0970 00 | Reinforcement                          | Renfort                               |
| 40. | 517 2259 00 | Flat Washer (6)                        | Rondelle plate (6)                    |
| 41. | 572 0861 00 | Bushing (2)                            | Douille (2)                           |
| 42. | 732 6012 56 | Bolt M8 X 35 (2)                       | Boulon M8 X 35 (2)                    |
| 43. | 572 0973 00 | Moulding (Right Side)                  | Enjoliveur (côté droit)               |
| 44. | 572 0974 00 | Moulding (Left Side)                   | Enjoliveur (côté gauche)              |
| 45. | 415 0560 00 | Reflector (Right Side) Not Illustrated | Réflecteur (côté droit) non illustré  |
| 46. | 415 0560 01 | Reflector (Left Side) Not Illustrated  | Réflecteur (côté gauche) non illustré |