

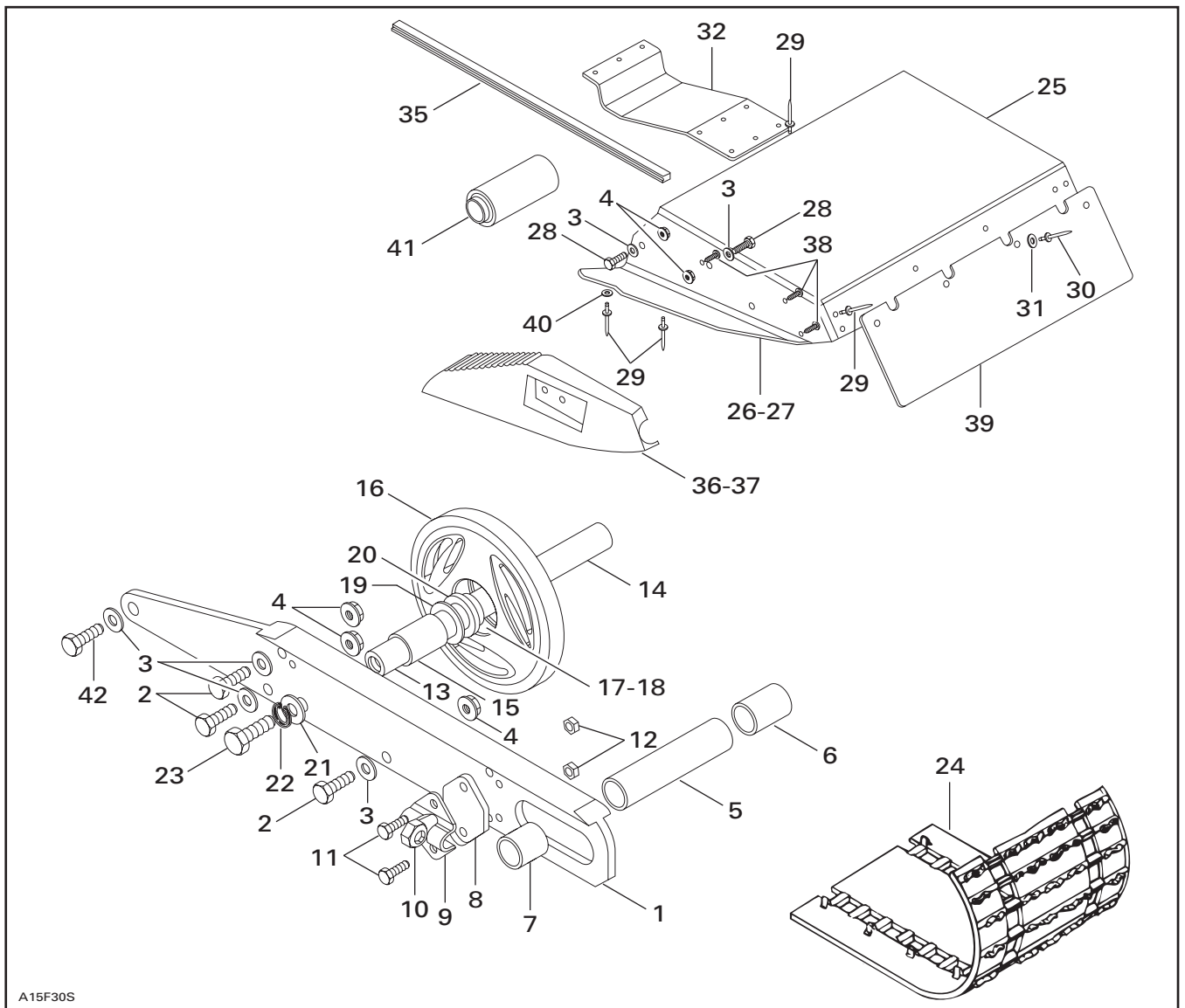


## ◆ WARNING

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 (10)
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)

## 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).

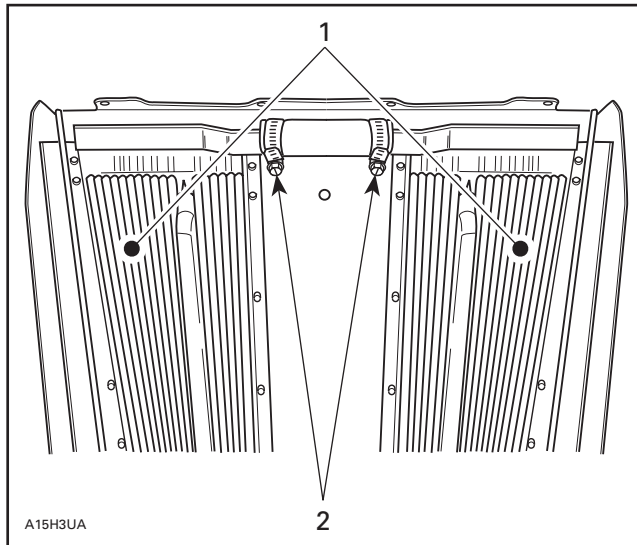
**NOTE:** Always place a backing plate surrounding the rivet head prior to punching out rivet. Omitting to do so may damage the aluminum area surrounding the rivet hole.

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

## PROCEDURE

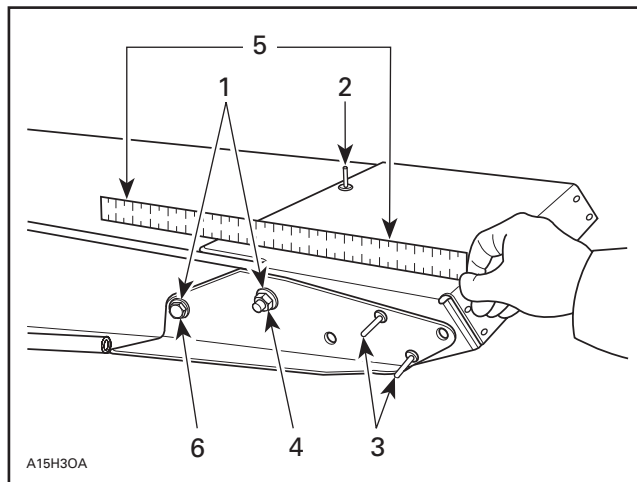
From underneath tunnel, ensure that the gear clamp screw heads securing the hose between the heat exchangers are pointing toward the front of vehicle. Reposition as necessary. To avoid disconnecting hose, unscrew collar completely, remove and rotate. Reinstall and tighten firmly. This is necessary to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



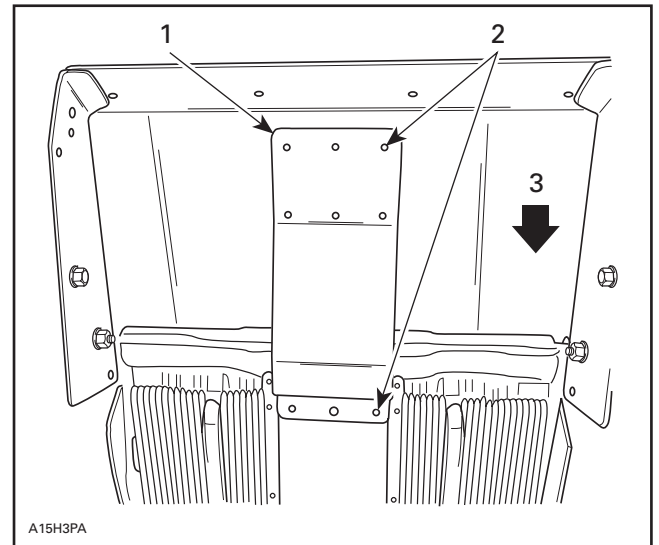
1. M8 bolts, washers and nuts
2. Insert a first rivet here
3. Temporary rivets for alignment purposes only
4. Nut on this side
5. Parallel
6. Bolt head on this side

**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. Install new rear mouldings **no. 36** and **no. 37** using new self-tapping screws **no. 38**.

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.

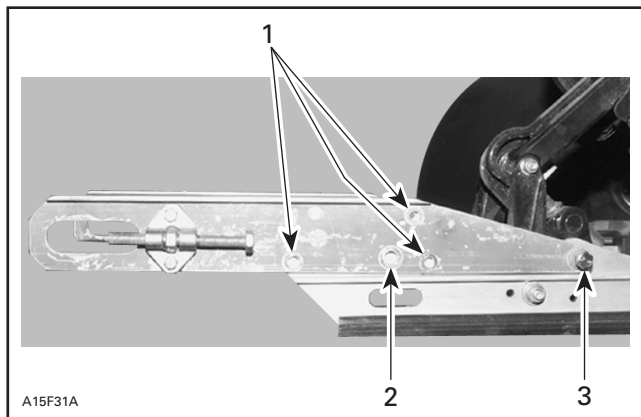
Discard the 4 bushings on rear axle.

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.



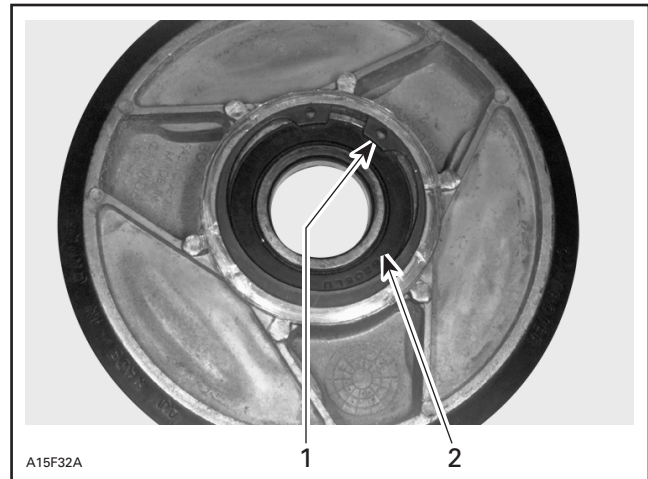
1. Drill 8 mm holes (5/16 in)
2. Drill 10 mm holes (13/32 in)
3. Use new M8 x 35 bolts

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**.

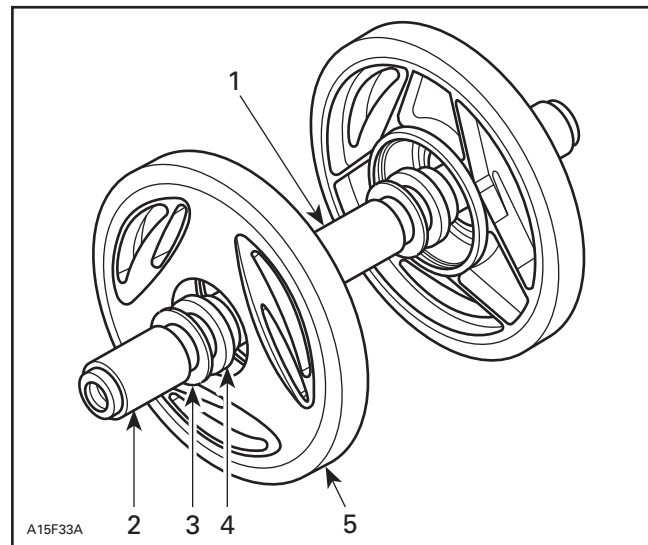
Install tension adjustment bolts and secure with nuts **no. 10**

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.

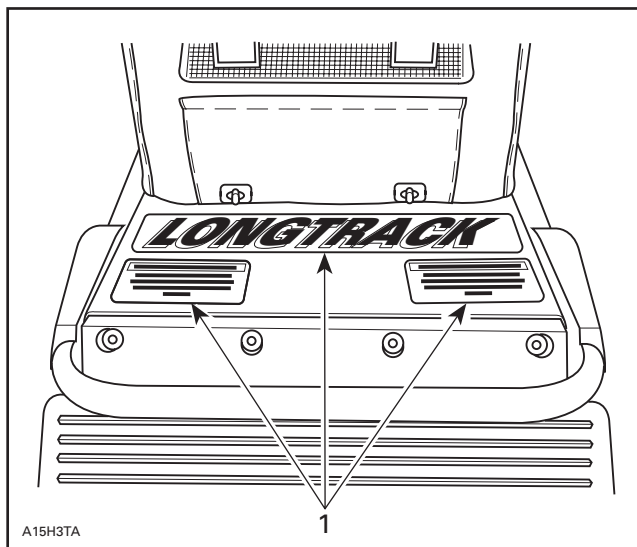
Remove existing plastic spring bushings (one on each side), and replace with new bushings **no. 41**.

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.

 <b>WARNING</b>
Do not carry passengers or cargo in this area.

## 861 7594 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 (10)	Écrou à épaulement élastique M8 (10)
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 7594 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)