

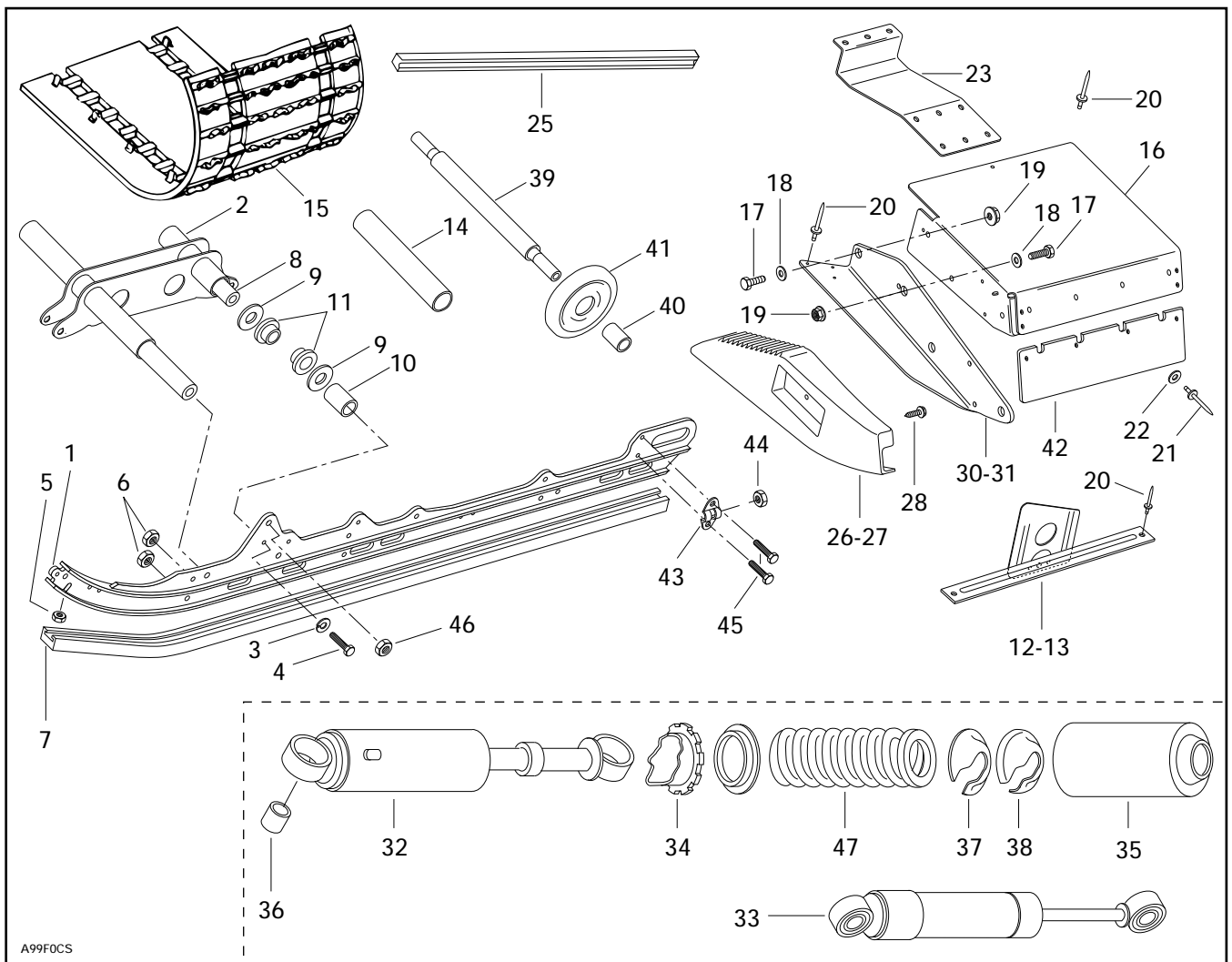


◆ **WARNING :** For safety reasons, this kit must installed by an authorized Bombardier Ski-Doo snowmobile dealer. Should removal of a locking device be required when undergoing disassembly / assembly, always replace with a new one. This instruction sheet should be given to the purchaser after modification. 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



A99F0CS

1. Runner (2)
2. Welded Shock Support
3. Lock Washer (4)
4. Bolt M10 (4)
5. Elastic Nut M6 (8)
6. Elastic Nut M8 (8)
7. Runner Shoe (2)
8. Lower Axle (2)
9. Washer (8)
10. Spacer (4)
11. Cushion (8)
12. Suspension Mounting Bracket (Left)
13. Suspension Mounting Bracket (Right)
14. Spacer
15. Track (15" x 136" x 1.45")
16. Tunnel Extension
17. Bolt M8 (4)
18. Flat Washer M8 (4)
19. Flanged Elastic Nut M8 (4)
20. Pop Rivet (Gloss Black) (61)
21. Pop Rivet (4)
22. Flat Washer (4)
23. Extension Protector
24. Extension Decal (Not Illustrated)
25. Radiator Protector (2)
26. Moulding (Right)
27. Moulding (Left)
28. Self-Tapping Screw (6)
29. Warning Label (Not Illustrated)
30. Reinforcement Plate (Left)
31. Reinforcement Plate (Right)
32. Shock Absorber (Front)
33. Shock Absorber (Rear)
34. Cam
35. Protector
36. Lower Bushing
37. Cap
38. Spring Stopper
39. Upper Axle
40. Spacer (2)
41. Idler Wheel (2)
42. Snow Guard Reinforcement
43. Tensioner (2)
44. Nut M10 (2)
45. Bolt M6 x 20 (4)
46. Nut M12
47. Spring

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.

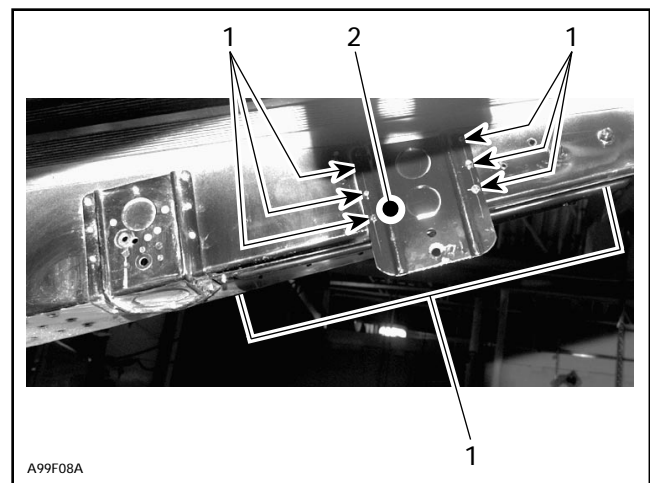
Discard track, rear mouldings and screws.

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

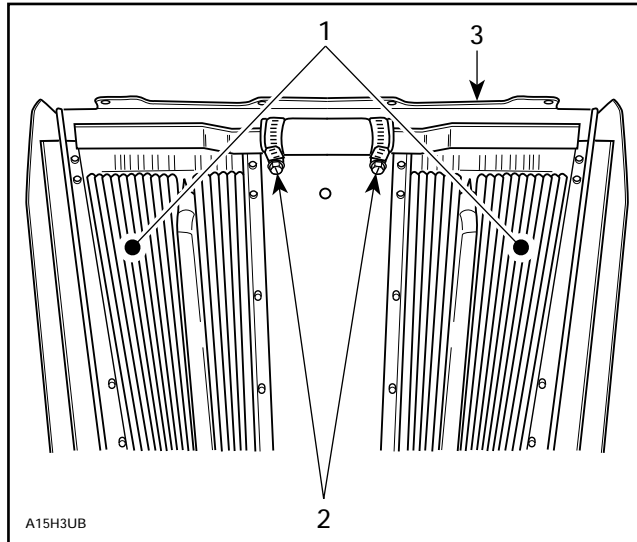
PROCEDURE

◆ **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. 25**.

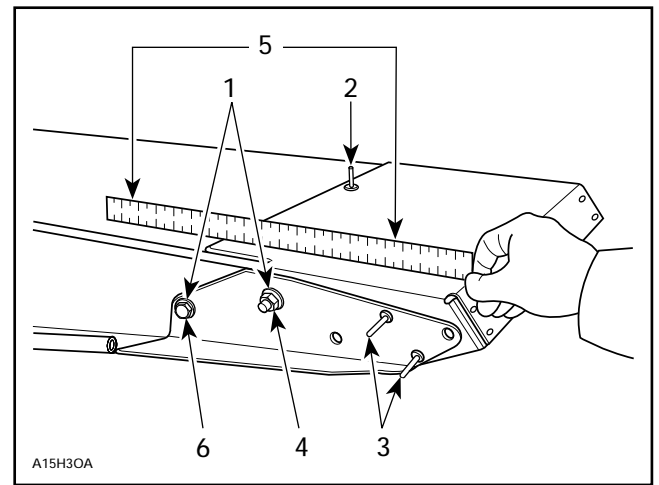
Close radiator ends using pliers.



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

Position top part of tunnel extension **no. 16** over tunnel and side parts inside tunnel. Position reinforcement plates **no. 30** and **no. 31** on outer side of tunnel. Secure with bolts **no. 17**, flat washers **no. 18** and flanged elastic nuts **no. 19**. Pass bolts through extension, tunnel and plates. Ensure to place bolt head and nut as per illustration. Temporarily insert rivets **no. 20** into rear holes for proper alignment. Tighten bolts.

Using the front center hole of the extension as a guide, drill a 5 mm (3/16 in) hole in the tunnel.



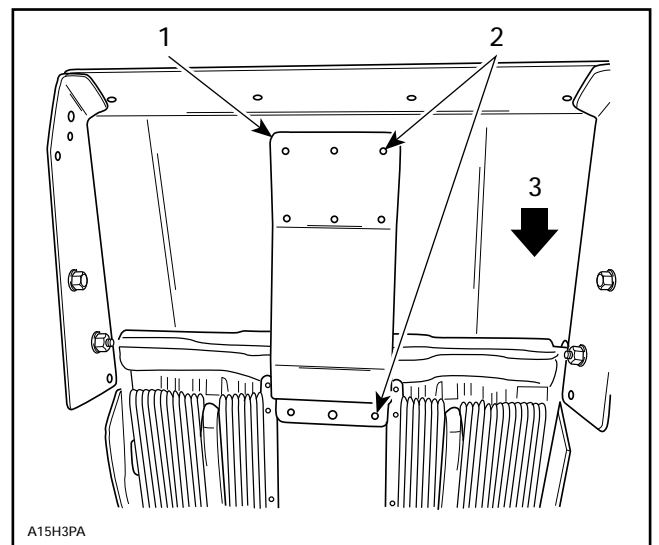
1. M8 bolts, washers and nuts
2. Insert a first rivet here
3. Temporary rivets for alignment purposes only
4. Nut on this side
5. Parallel
6. Bolt head on this side

○ **NOTE** : Using a 5 mm (3/16 in) drill bit, enlarge the front / center hole on the extension protector **no. 23**.

From underneath tunnel, install extension protector **no. 23**. From top of tunnel, insert a rivet **no. 20** 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. 20** 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. 20**.



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

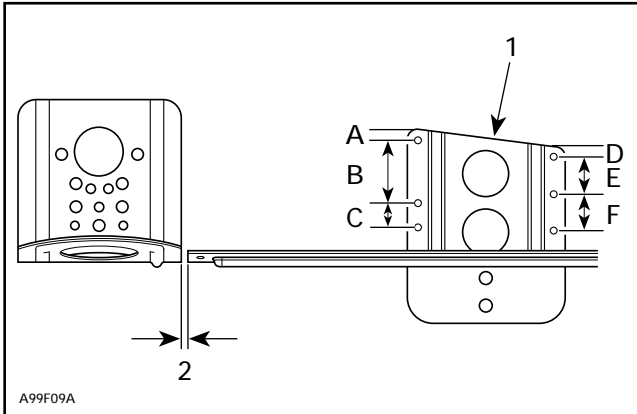
Do not drill holes in rear corners of extension yet.
DO NOT drill side rear holes of tunnel.

Rivet rear part of protector and extension using rivets **no. 20** to tunnel in the following sequence :

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

Remove C-clamp.

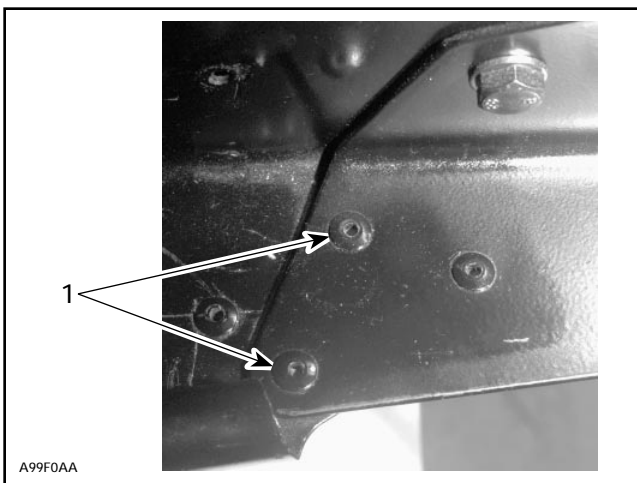
Install new suspension mounting brackets **no. 12** and **no. 13**. Drill holes using a 5 mm (3/16 in) bit. Secure with rivets **no. 20**. Refer to following illustration for proper drilling and positioning.



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)

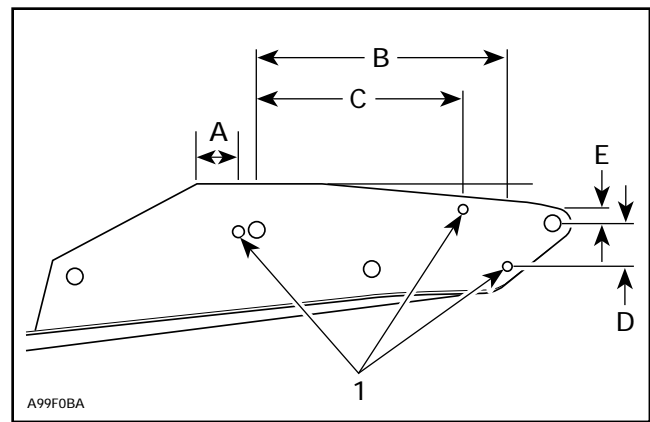
Using reinforcement plates as a guide, drill 2 holes in footboard. Secure using rivets **no. 20**.



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. 26** and **no. 27** using new self-tapping screws **no. 28**.

Round front exterior corner of mouldings.

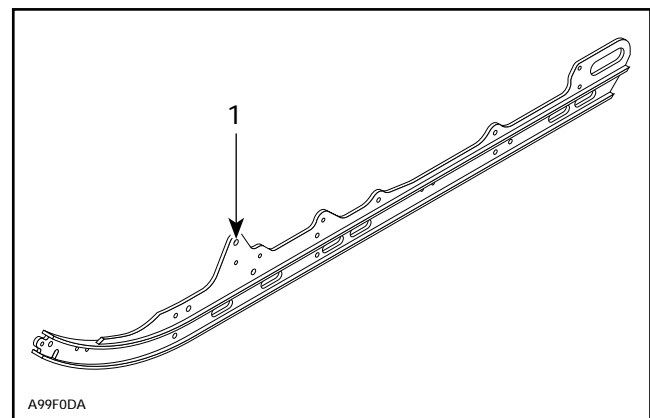
Install new track **no. 15** paying close attention to the direction of rotation.

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.

Enlarge existing front suspension arm hole on new runners to 12 mm (31/64 in). Refer to illustration.



1. Enlarge hole to 12 mm (31/64 in)

Install new runner shoes **no. 7** onto new runners **no. 1** 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 bolts and nuts.

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 M10 adjustment bolts from tensioners on old runners.

Install new M10 elastic nut **no. 44** onto bolt (1 on each side)

Install M10 bolt into new tensioners **no. 43**.

Install tensioners onto runners using new elastic nuts **no. 5** and new M6 x 20 bolts **no. 45**.

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

Remove 2 coloured wheels from front.

Complete the following assembly :

Install spacer **no. 14** on axle **no. 8**. Install washers **no. 9** (1 on each side of spacer).

Install cushions **no. 11** into coloured wheels (2 for each wheel).

Install wheels onto axle, install washers **no. 9** then spacers **no. 10** (1 on each side).

Install wheel assembly on new runners.

Locate hole in front of rear stoppers. Align wheel assembly with hole (1 on each side).

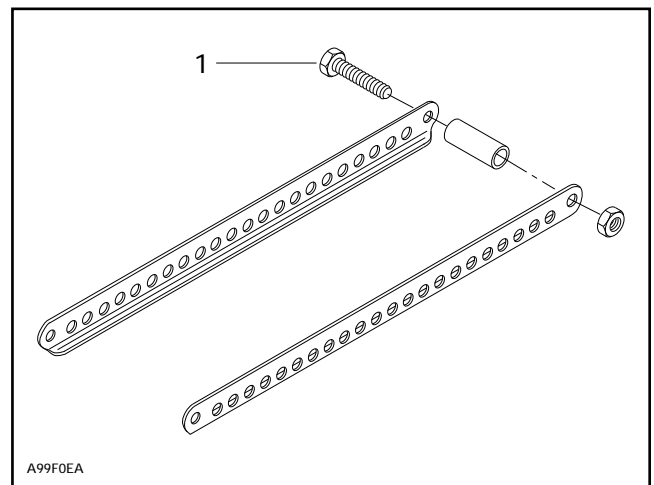
Secure using new bolts **no. 4** and lock washers **no. 3**. Apply Loctite 271 (red).

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

Remove bolts that are retaining the spring supports. Install on new runners temporarily.

Remove M10 nut from threaded shaft on pivot block (lower part).

Remove bolt from retaining bars. Refer to illustration.



1. Remove bolt

Remove rear shock absorber. KEEP upper bushing.

Remove pivot block (2 Allen bolts).

▼ **CAUTION : Do not install Acceleration Control Module onto long track suspension.**

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

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

Install washers **no. 9** (1 on each side).

Remove interior uncoloured idler wheels.

Install cushions **no. 11** into uncoloured idler wheels, washers **no. 9** then spacers **no. 10** (1 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.

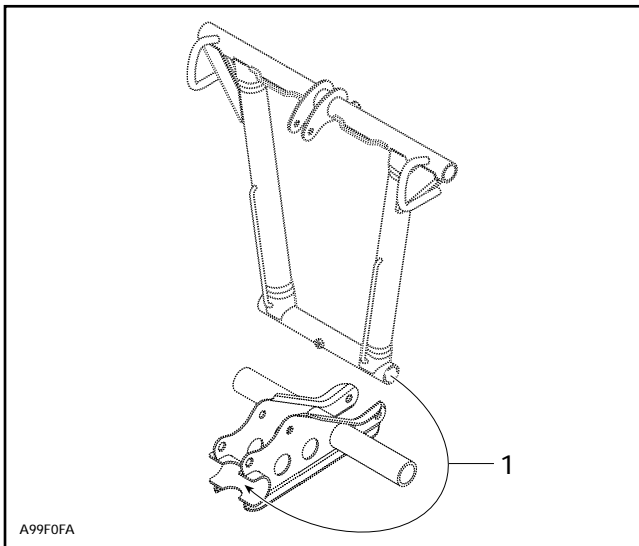
Install new rear shock **no. 33** using existing bushing, bolt and new M8 elastic nut **no. 6** onto shock support (assure shock body is at bottom).

Remove spring supports (from new runners) that were installed temporarily. Install spring into spring support then lift spring support and secure with existing bolts and new M6 elastic nuts **no. 5**.

Secure top part of shock using existing bushing, bolt and new M8 elastic nut **no. 6**.

Remove front shock. Keep upper bushing.

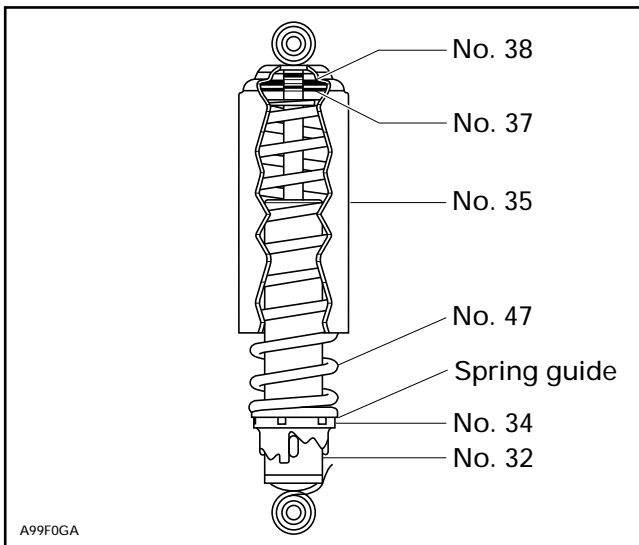
Remove front axle and welded front arm assembly. Separate lower support from welded front arm assembly. Refer to following illustration.



1. Separate here

Transfer welded front arm onto new runners using existing bolt, washers and new M12 elastic nut **no. 46**. Apply Loctite 271 (red) to bolt threads.

Assemble front shock absorber assembly as follows, refer to illustration :



Step **1** : Install cam **no. 34** onto shock absorber **no. 32**, then existing spring guide.

Step **2** : Install spring **no. 47** (refer to Ski-Doo Shop Manual for proper procedure for spring compression).

Step **3** : Using spring compressor, install cap **no. 37** then spring stopper **no. 38**.

Step **4** : Install protector **no. 35**.

Install front shock assembly using same bolts, top bushing, new lower bushing **no. 36** and new elastic nuts **no. 6**.

Tighten complete suspension system.

Install coloured front wheels that were previously removed.

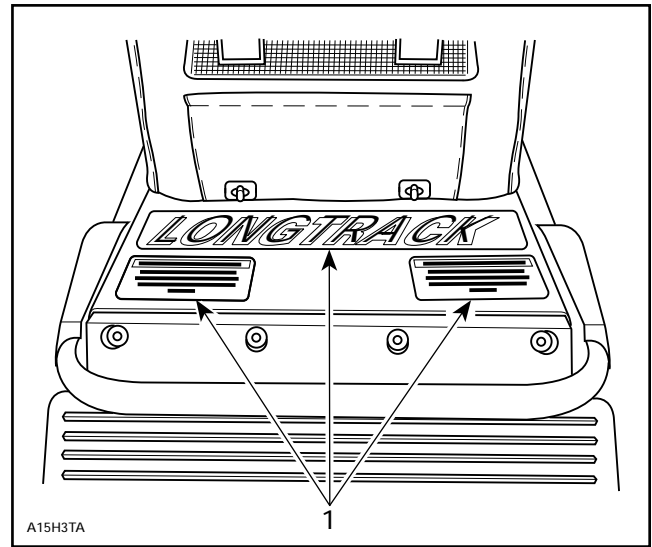
REMINDER : Apply Loctite 271 (red) on lower front shock support bolts.

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

Install wheels **no. 41** and spacers **no. 40** onto axle **no. 39**.

Install into tunnel using existing hardware. Apply Loctite 271 (red) to bolt threads.

Apply (LONGTRACK) extension decal **no. 24** and warning label **no. 29** on top of tunnel extension.



1. Decals

Install snow guard reinforcement **no. 42** and snow guard with new rivets **no. 21** and flat washers **no. 22**.

Reinstall seat.

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

Test snowmobile.

861 7545 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 (4)	Rondelle-frein (4)
4.	222 0035 65	Bolt M10 (4)	Boulon M10 (4)
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 (2)	Essieu inférieur (2)
9.	503 1540 00	Washer (8)	Rondelle (8)
10.	503 1510 00	Spacer (4)	Entretoise (4)
11.	414 8884 00	Cushion (8)	Coussin (8)
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.	503 1531 00	Spacer	Entretoise
15.	570 2086 00	Track (15'' X 136'' X 1.45'')	Chenille (15'' x 136'' x 1.45'')
16.	503 1571 00	Tunnel Extension	Rallonge de tunnel
17.	222 0820 65	Bolt M8 (4)	Boulon M8 (4)
18.	224 0811 71	Flat Washer M8 (4)	Rondelle plate M8 (4)
19.	228 7810 45	Flanged Elastic Nut M8 (4)	Écrou d'arrêt élastique à épaulement M8 (4)
20.	390 4036 00	Pop Rivet (Gloss Black) (61)	Rivet (noir lustré) (61)
21.	390 9096 00	Pop Rivet (4)	Rivet (4)
22.	517 2259 00	Flat Washer (4)	Rondelle plate (4)
23.	503 1570 00	Extension Protector	Protecteur de rallonge
24.	414 9365 00	Extension Decal (Not Illustrated)	Autocollant de rallonge (non illustré)
25.	415 0123 00	Radiator Protector (2)	Protecteur de radiateur (2)
26.	572 0495 00	Moulding (Right)	Enjoliveur droit
27.	572 0494 00	Moulding (Left)	Enjoliveur gauche
28.	365 0110 00	Self-Tapping Screw (6)	Vis à tôle autotaraudeuse (6)
29.	414 9366 00	Warning Label (Not Illustrated)	Étiquette d'avertissement (non illustrée)
30.	518 3119 00	Reinforcement Plate (Left)	Plaque de renfort gauche
31.	518 3120 00	Reinforcement Plate (Right)	Plaque de renfort droite
32.	414 9757 00	Shock Absorber (Front)	Amortisseur avant
33.	414 9759 00	Shock Absorber (Rear)	Amortisseur arrière
34.	503 1690 00	Cam	Came
35.	517 2809 00	Protector	Protecteur
36.	414 8026 00	Lower Bushing	Coussinet inférieur
37.	503 1416 00	Cap	Capuchon
38.	503 1406 00	Spring Stopper	Butée de ressort
39.	503 1536 00	Upper Axle	Essieu supérieur
40.	572 0483 00	Spacer (2)	Entretoise (2)
41.	572 0435 00	Idler Wheel (2)	Roue de support (2)
42.	517 2852 00	Snow Guard Reinforcement	Renfort de garde-neige
43.	503 1553 00	Tensioner (2)	Tendeur (2)
44.	228 5010 45	Nut M10 (2)	Écrou M10 (2)

861 7545 00

45.	222 0620 65	Bolt M6 X 20 (4)	Boulon M6 x 20 (4)
46.	228 5210 45	Nut M12	Écrou M12
47.	414 9760 00	Spring	Ressort