BOMBARDIER
RECREATIONAL PRODUCTS

ski-doo Snowmobiles

MODEL NAME	SERIAL NUMBER

PREDELIVERY CHECK LIST

THIS CHECK LIST MUST BE USED IN CONJUNCTION WITH THE PREDELIVERY BULLETIN OF THE APPLICABLE SNOWMOBILE.

WARRANTY VALIDATION ON MX Zx 440 LC ONLY: I, the undersigned owner, declare and agree to have low compression ratio engine cylinder head inserts installed in order to benefit from the limited warranty coverage. Failing such installation I declare that this snowmobile will be used for racing.

NOTE: Some items only apply to certain vehicles. For specific items refer to appropriate *Predelivery Bulletin*.

PARTS TO BE INSTALLED	✓
Battery	
Steering pad/cover	
Skis	
Bumper, front/rear (w/molding)	
Front/rear suspension components	
Backrest	
Drive belt	
Windshield	
Snow guard	
Other	

LIQUIDS	✓
Brake fluid	
Battery electrolyte	
Fuel	
Injection oil (fill and bleed)	
Coolant	
Chaincase/gearbox oil	
Grease/lubricant	

ADJUSTMENTS	✓
Handlebar	
Ski toe-out/camber	
Track tension/alignment	
Chain deflection	
Driven pulley preload	
Carburetor(s)	
Front and rear suspensions	
Other	

OPTIONS/ACCESSORIES	✓
High/low altitude kit	
Other	

GENERAL INSTRUCTIONS

FINAL INSPECTION	✓
Inspect movement and operation of:	
Throttle/brake lever/parking brake	
Ignition/emergency stop/ tether cut-out switches	
Headlamp/taillight/brake light	
Dimmer switch/pilot lamps	
Accessories	
Test run snowmobile.	
Clean and polish snowmobile.	

AT SALE, EXPLAIN TO OWNER	✓
The *Operator's Guide, Video, Safety Handbook* and warranty and give same to customer.	

AT DELIVERY	✓
Complete and return warranty registration signed by owner.	

NOTE: File this document in vehicle file. Give a copy to owner.

PREPARED BY:	DATE: month day year
DEALER NO.:	
INSPECTED BY:	DATE: month day year
DEALER SIGNATURE: ✗	

The dealer named on this document has instructed me on the operation, maintenance, safety features and warranty policy, all of which I understand. I am also satisfied with the predelivery set-up and inspection of my snowmobile.

OWNER SIGNATURE: ✗	DATE: month day year
PRINT:	

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Accessories	
Test run snowmobile.	
Clean and polish snowmobile.	

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The *Operator Guide, Video, Safety Handbook* and warranty and give same to customer.	

AT DELIVERY	✓
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PREPARED BY:	DATE: month / day / year
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INSPECTED BY:	DATE: month / day / year
DEALER SIGNATURE: ✗	

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OWNER SIGNATURE: ✗	DATE: month / day / year
PRINT:	

Litho'd in Canada (mbl2001-001a.fm GM)

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-1**

Date: May 19, 2000

SUBJECT: Predelivery Bulletin

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2001	Canada/United States: MX Z* Fan 380/500 Formula Deluxe Fan 380 Touring Fan 380/500 Touring Cargo 380/500	1719/1720/1721/1722 1784/1785 1804/1805/1807/1808 1852/1853/1854/1855	All
2001	Europe: MX Z Fan 380 Touring Cargo 380/500	1835 1806/1809	All

This bulletin must be used in conjunction with the check list enclosed in the bag with the *Operator's Guide*. Make sure that predelivery check list is completed and signed.

⚠ WARNING

To obtain warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook, Predelivery Check List* signed copy and *Video*.

There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.

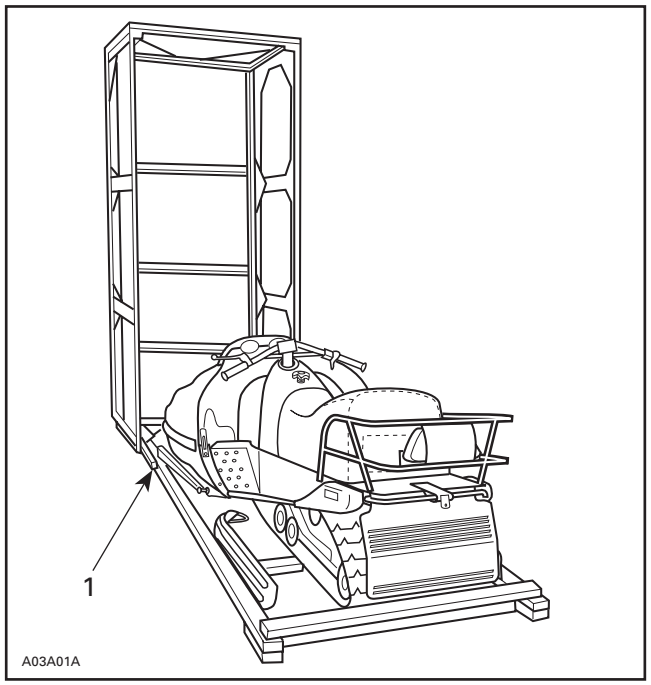
⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

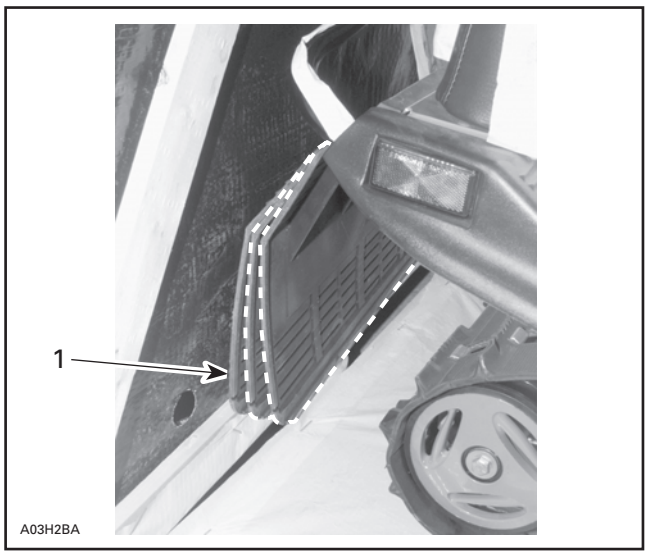
CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

Remove all screws retaining cover to vehicle base. Tip cover toward front of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging the snow guard or taillight.



1. Notch

NOTE: On some models, snow guard may interfere with crate cover, as shown in the following photo. Push on snow guard when lifting cover.

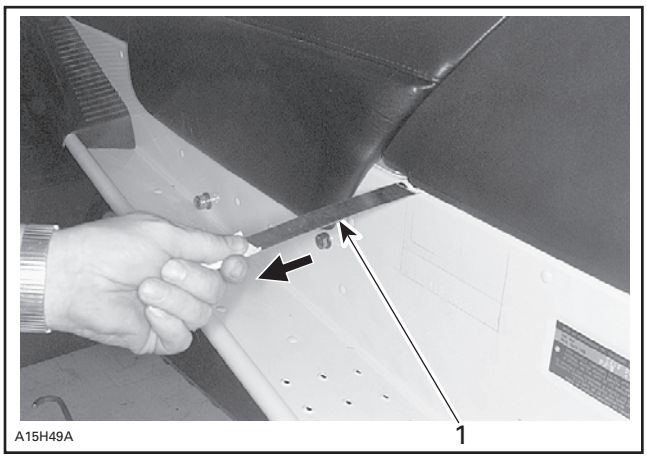


FROM OUTSIDE CRATE PUSH ON SNOW GUARD TO ALLOW COVER TO LIFT WITHOUT DAMAGING SNOW GUARD

1. Snow guard interfering with crate cover

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Cut locking ties retaining windshield. Slowly pull out metal strip and discard.



1. Pull out and discard

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts and slider cushions to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove steering pad, drive belt, predelivery kit and detach shock absorbers from engine compartment.

FRONT HOOK REMOVAL

Procedure

Apply parking brake.

Cut locking tie holding hook.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

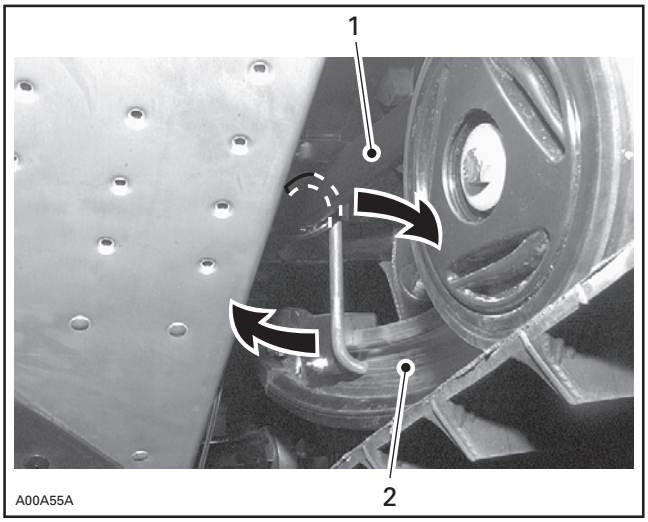
From left side of vehicle, apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

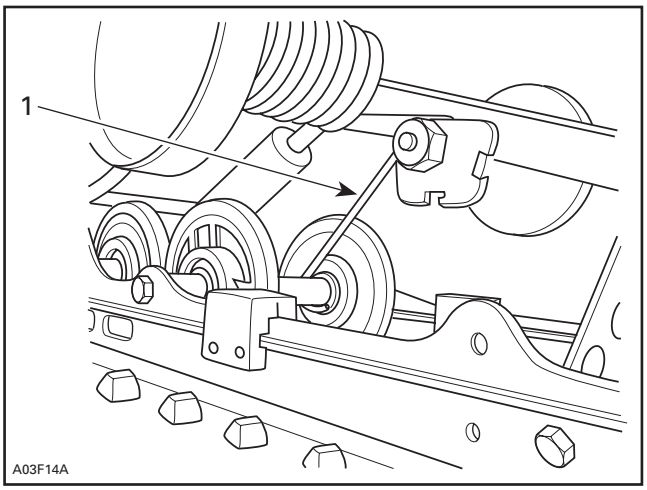
Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



TYPICAL — REMOVE HOOK

1. *Front arm*
2. *Runner*

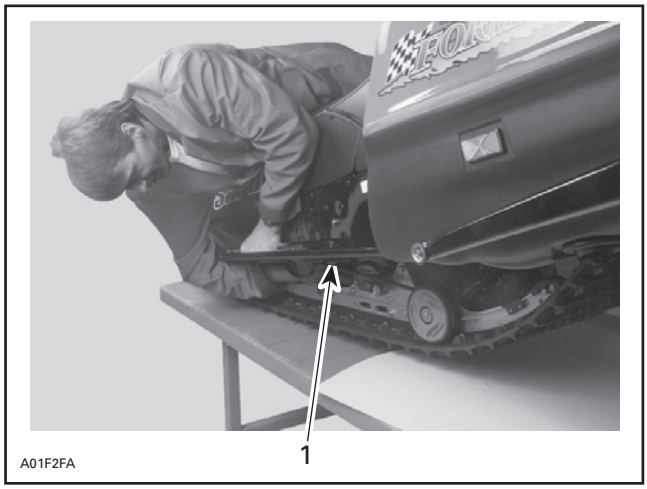
REAR HOOK REMOVAL



1. *Hook to be removed*

Lift front of vehicle to position bumper around 1 m (35 to 40 in) upward.

Lean on vehicle seat to apply pressure on rear suspension and remove hook from rear portion of suspension, as shown on the next photo.



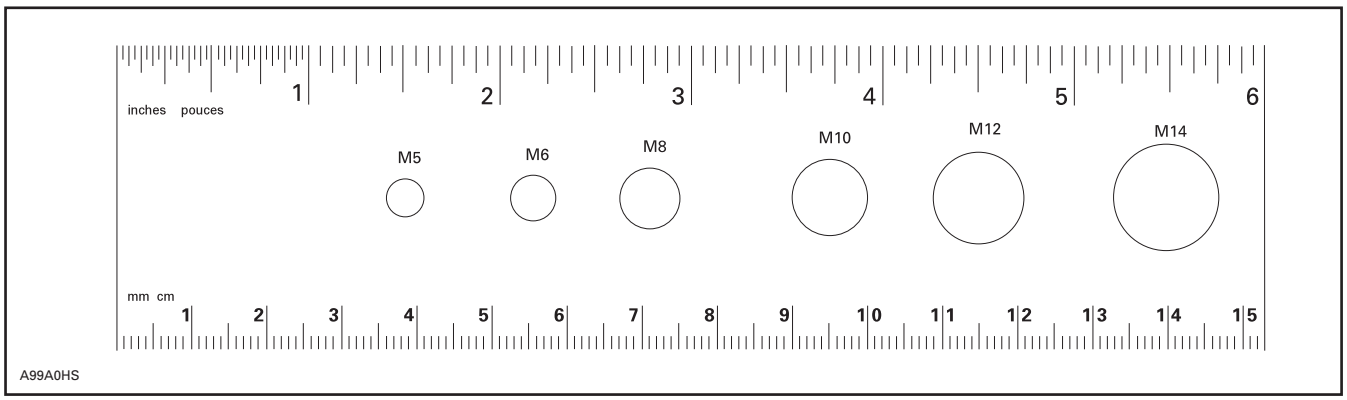
1. Remove hook on the rear portion of the suspension

Remove hook on the rear portion of the suspension.

⚠ WARNING

Both hooks must be removed to have snowmobile suspension operational.

PREDELIVERY KIT P/N	MODEL
549 010 828	MX Z Fan 380/500
549 010 839	Touring Fan/Cargo 380
549 010 844	Touring Fan/Cargo 500
549 010 833	Formula Deluxe Fan 380



NOTE: This ruler can be helpful to identify fastener length or size.

Cut locking tie retaining exhaust spring to exhaust support.

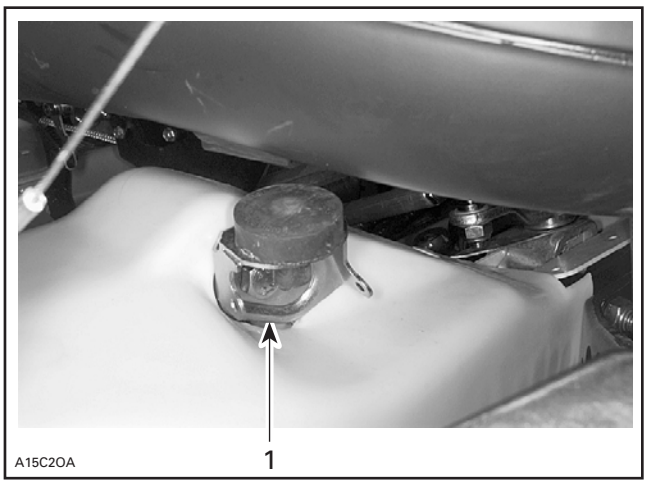
Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Secure shock absorbers to suspension with their shock rod at top.

Position top and bottom screw heads toward front of vehicle.

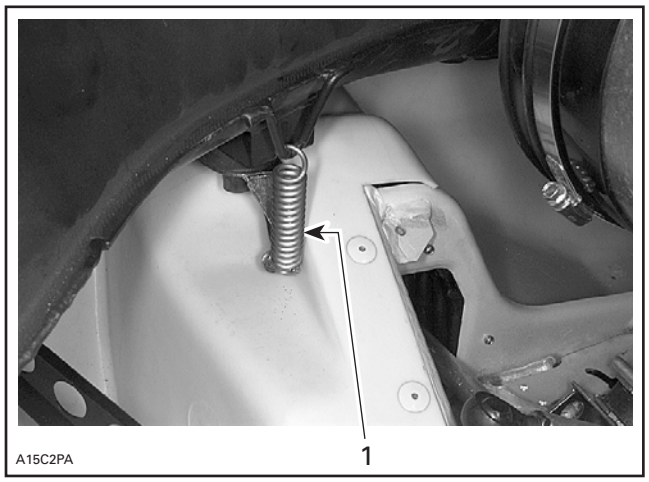
Properly position exhaust support on chassis making sure that its lug rests in chassis recess, as shown in the following photo.



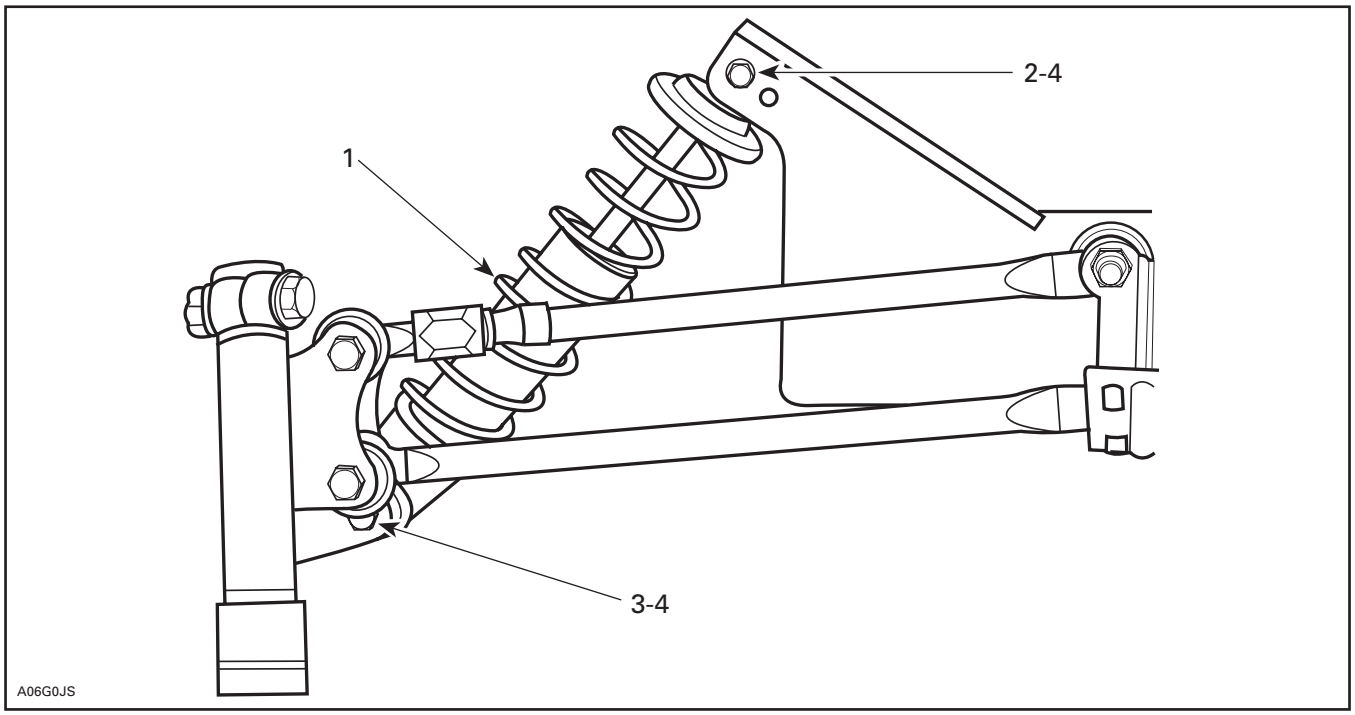
TYPICAL

1. Exhaust support

Hook up exhaust spring.



1. Exhaust spring



TYPICAL — RH SIDE SHOWN

1. *Shock absorber (2) (engine compartment) adjusting ring, if equipped, at bottom*
2. *Screw M10 x 1.5 x 60 (2) (P/N 207 006 044) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Elastic nut M10 x 1.5 (2) (P/N 233 601 416) (section no. 2 or 4). Torque to 48 N•m (35 lbf•ft)*

All Models except MX Z 380 and MX Z 500

During vehicle preparation, the battery can be activated as described in *Shop Manual*.

CAUTION: Prior to charging the battery, always remove it from the vehicle to prevent electrolyte spillage. Do not charge an installed battery.

Battery Removal

Remove belt guard.

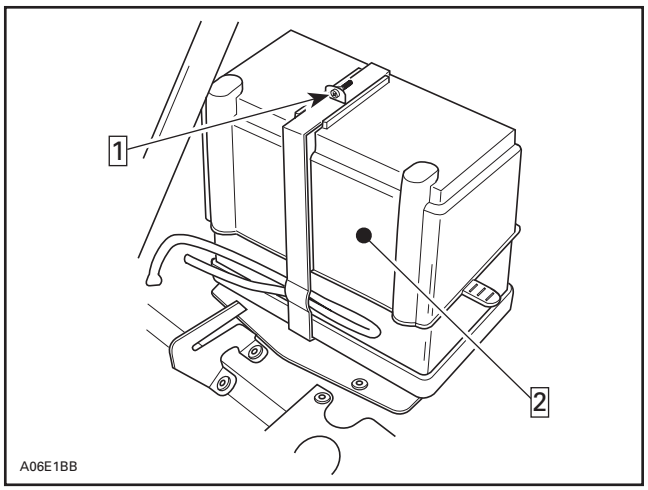
Untie plastic clip retaining throttle cable and choke cable to air silencer.

Loosen collar on carburetor adaptors.

Remove air intake silencer.

Unfasten battery retaining strips.

Open strips and lift battery protective boot.



Step 1: Detach and open
Step 2: Lift battery protective boot

Withdraw battery from vehicle.

Battery Installation

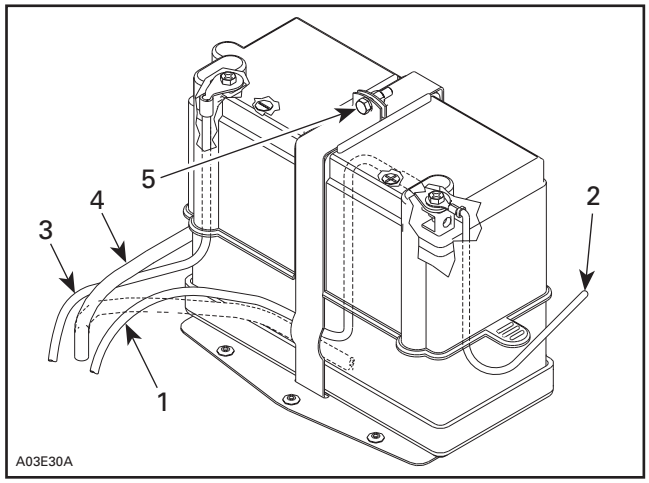
Install vent tube on battery.

Connect RED positive cable and RED wire to positive battery terminal.

Connect BLACK negative cable LAST.

⚠ WARNING

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



BATTERY CONNECTION

1. *RED positive cable*
2. *RED positive wire*
3. *BLACK negative cable*
4. *Ensure that vent tube is properly connected*
5. *Secure retaining strips to 3 N•m (2 lbf•ft)*

Ensure that vent tube is properly connected to vehicle fitting on front frame.

Apply silicone dielectric grease (P/N 293 550 004) on battery posts and connectors.

Ensure vent tube is properly installed on battery elbow, then install protective boot over battery.

Close and fasten retaining strips as shown on previous drawing.

Ensure that vent tube is not kinked or blocked.

Reinstall air silencer.

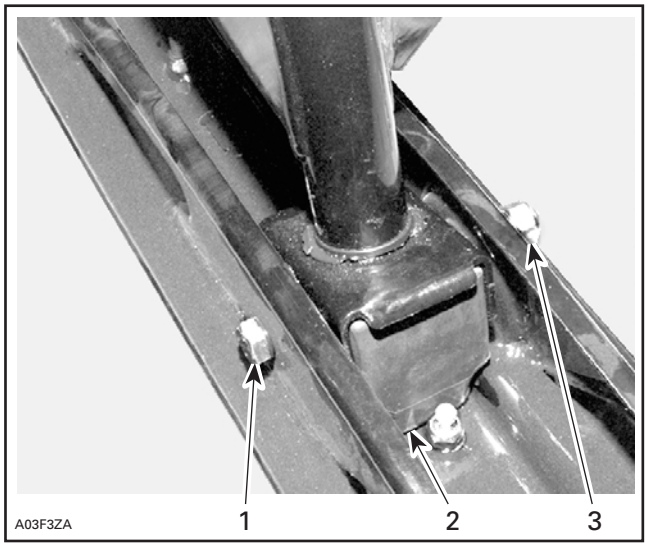
Reinstall throttle cable and choke cable with plastic clip to air silencer.

Reinstall belt guard.

Ensure ski leg slider cushions are still in ski leg.

Install skis on vehicle.

Replace vehicle on ground.

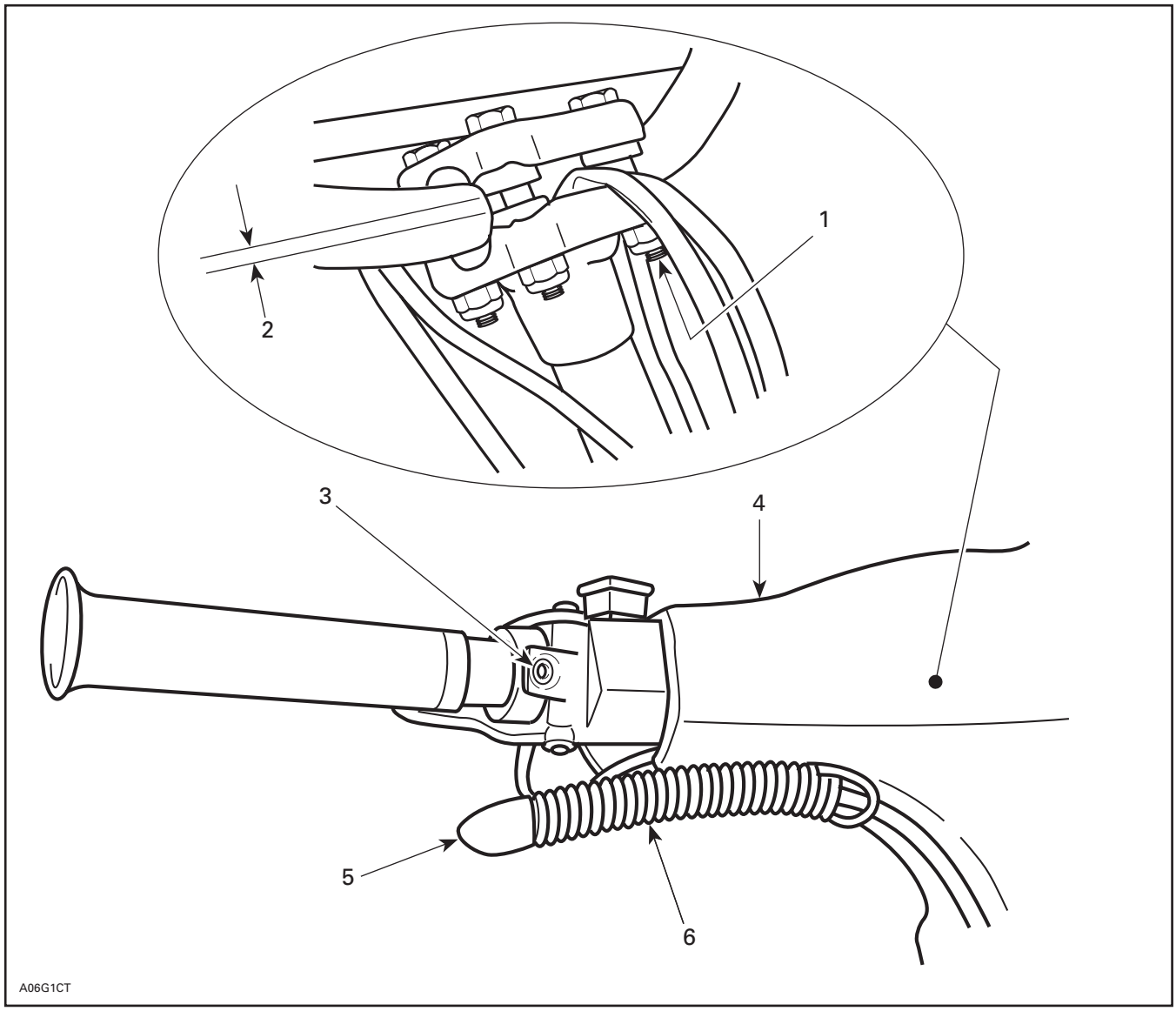


TYPICAL — RIGHT SIDE SHOWN

1. *Bolt M10 (2) (ski leg)*
2. *Ski stopper (2) (P/N 505 070 324) (section 3 or 8). Higher side must be placed toward front*
3. *Nut M10 (2) (section 1 or 8). Torque to 40 N•m (30 lbf•ft)*

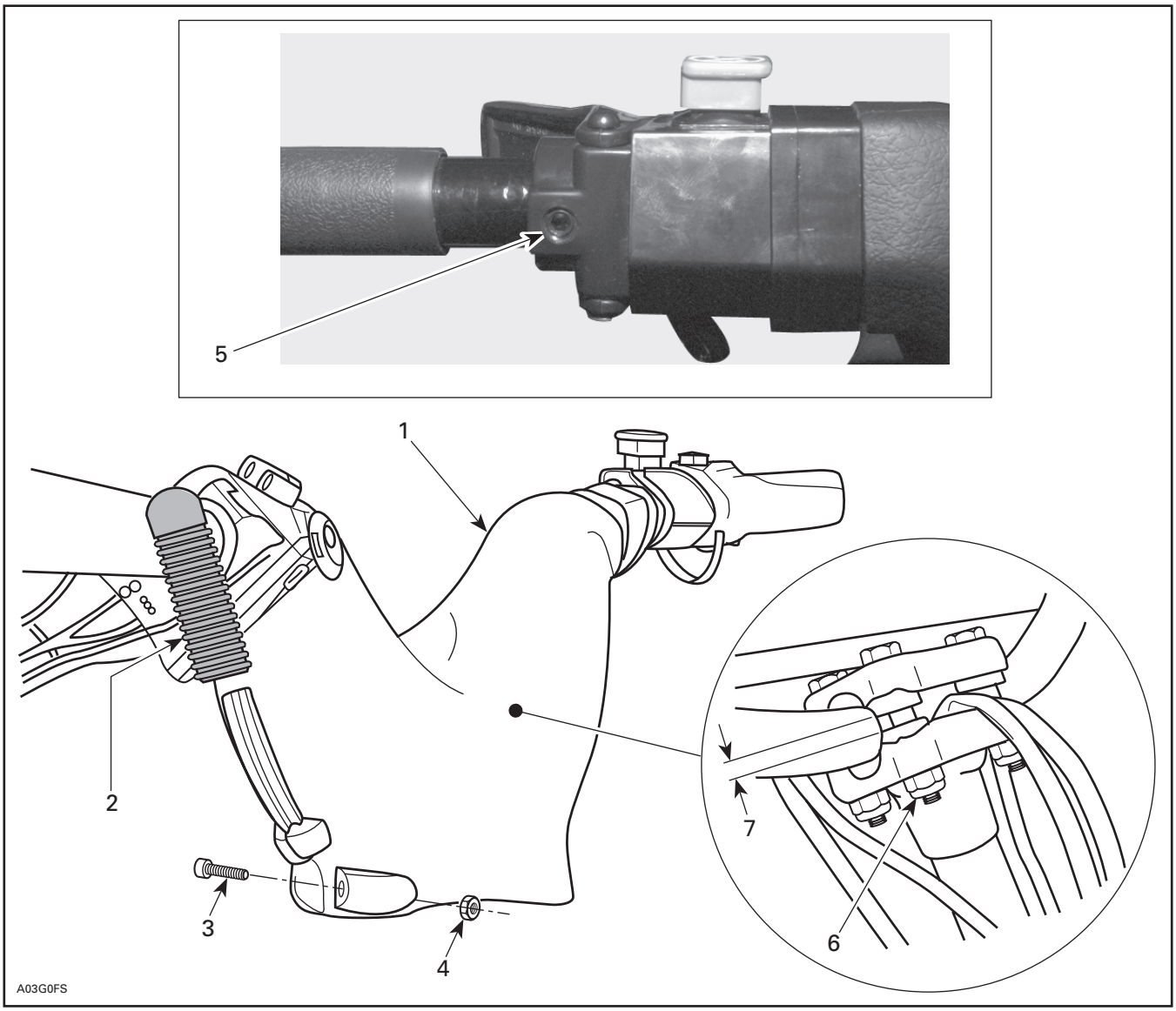
Adjust handlebar temporarily and tighten nuts loosely for now.
Loosen, at least 3 turns, Allen screw of throttle and brake handle housings.
Install steering pad temporarily, and adjust for proper fit with console.
Remove steering pad and torque nuts from 21 to 28 N•m (16 to 20 lbf•ft).
Reinstall steering pad, adjust and tighten throttle and brake handle housings.

All Models except Touring

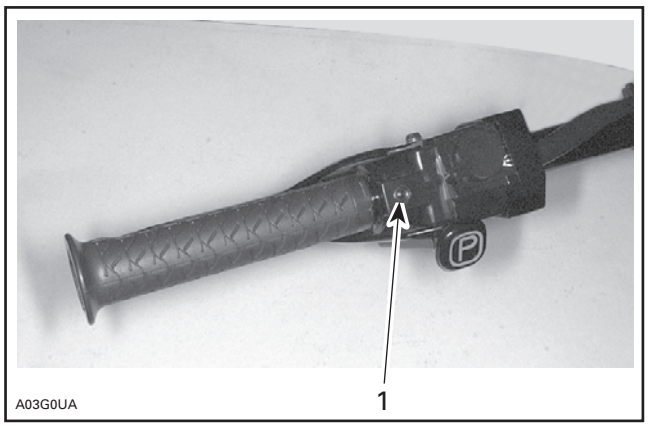


1. Torque from 21 to 28 N•m (16 to 20 lbf•ft)
2. Equal gap each side (both clamps)
3. Loosen Allen screw
4. Steering pad (engine compartment)
5. Use liquid soap to ease installation
6. Keyway (2) (P/N 572 072 400) (section no. 3 or 5)

Touring Models Only

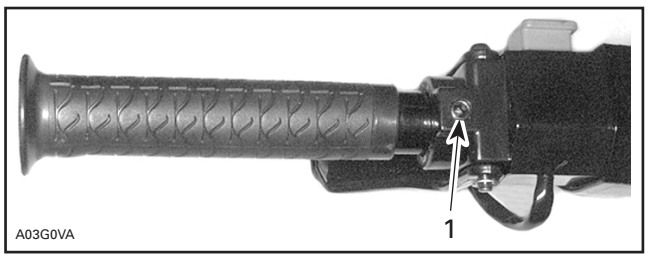


1. *Steering pad (P/N 572 023 800) (engine compartment)*
2. *Keyway (2) (P/N 572 023 900) (section no. 2) use liquid soap to ease installation*
3. *Screw M5 x 20 (2) (P/N 208 652 044) (section no. 3)*
4. *Nut M5 (2) (P/N 233 251 414) (section no. 3) seat tighten only, no deformation of rubber*
5. *Loosen Allen screw*
6. *Torque nuts from 21 to 28 N•m (16 to 20 lbf•ft)*
7. *Equal gap each side*



BRAKE HANDLE HOUSING (MODELS WITH MECHANICAL BRAKE)

*1. Tighten set screw to 2 N•m (18 lbf•**in**)*

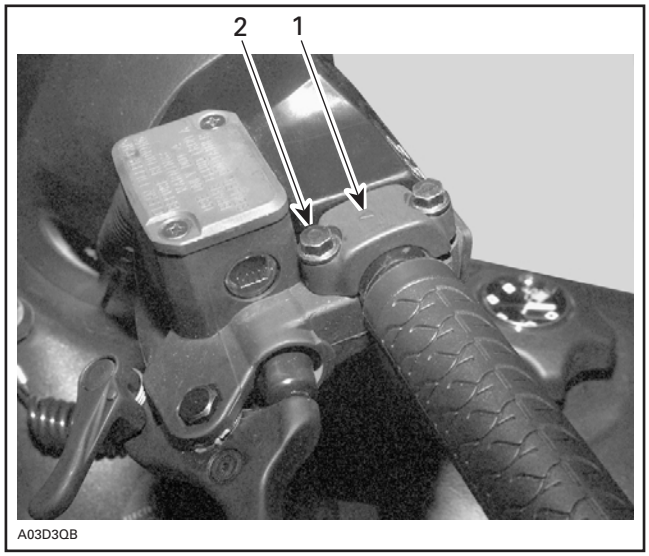


THROTTLE HANDLE HOUSING

*1. Tighten set screw to 2 N•m (18 lbf•**in**)*

Models Equipped with a Hydraulic Brake

Loosen master cylinder may be necessary. When securing it back in place, install upper clamp with its arrow pointing toward front of vehicle. Tighten front bolt before rear one. Secure to 8 N•m (71 lbf•**in**).

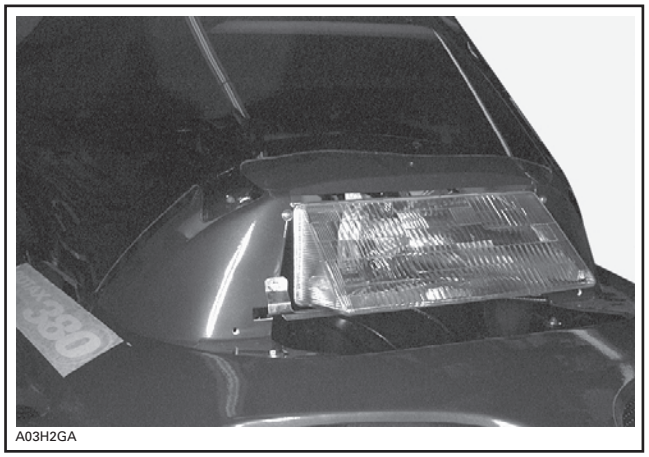


1. Arrow on upper clamp pointing at front of vehicle
2. Tighten front screw first

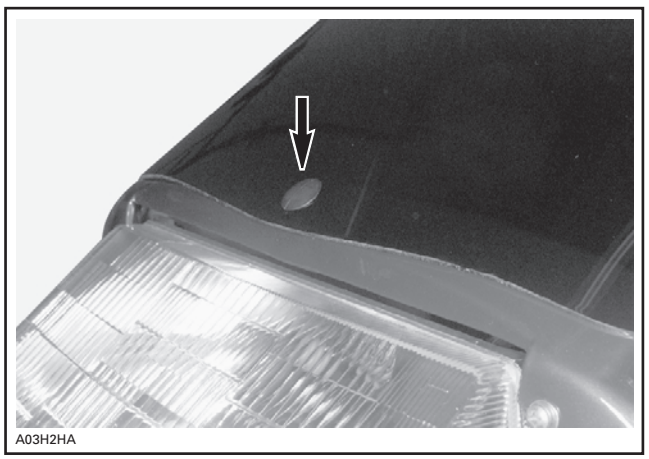
Remove protective films from windshield.

Remove headlamp molding.

Insert windshield tabs into appropriate slots.


A03H2GA

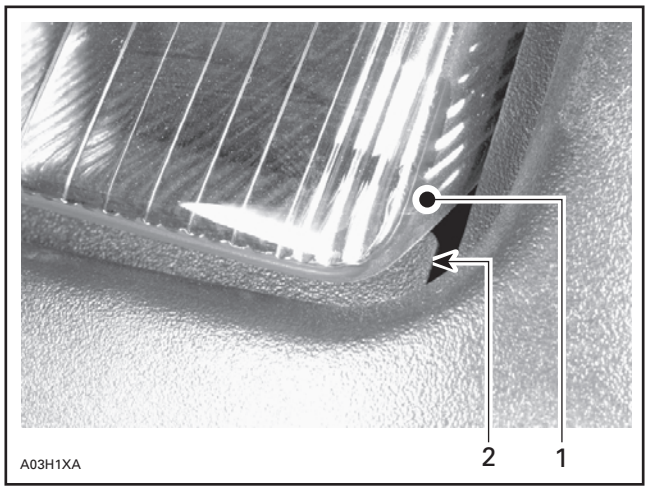
Insert dart (section no. 4 or 6) in hole over headlamp.


A03H2HA

Reinstall headlamp molding.

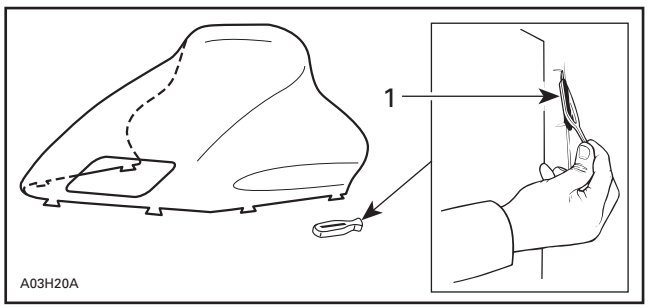
NOTE: Make sure that headlamp is properly positioned on headlamp molding.

Install windshield and secure from underneath.



1. *Headlamp*
2. *Lip of headlamp molding behind headlamp*

Secure windshield using latches.

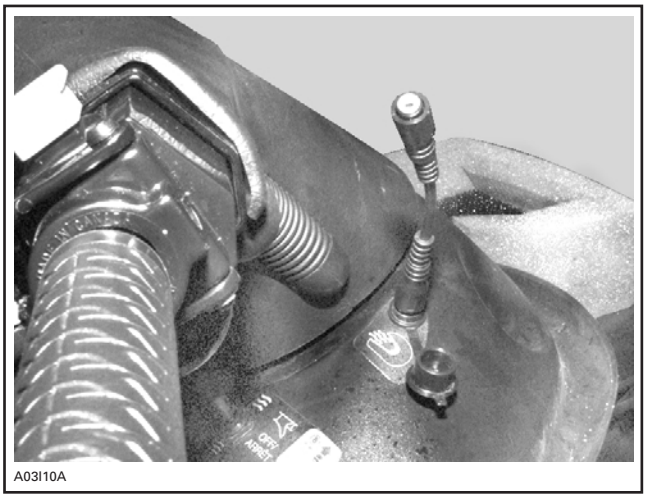


TYPICAL

1. *Latch (6 in kit and 4 on headlamp molding) (P/N 570 023 800) (section no. 4 or 6)*

Formula Deluxe 380 Model Only

Lift cap on right side of handlebar and install heated visor extension cord, supplied in kit, (section no. 8).



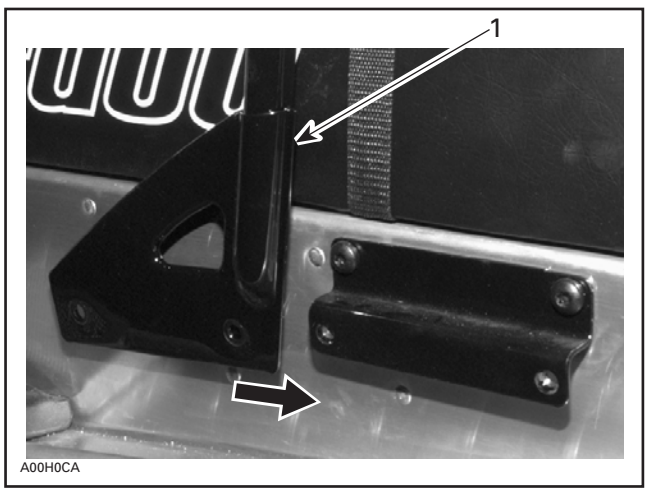
PARTS INSTALLATION
BACKREST

Touring Fan 380 Model Only

Remove backrest from its box and slip off plastic bag.

Place backrest each side of the bench and slide on mounting bracket as shown on next photo.

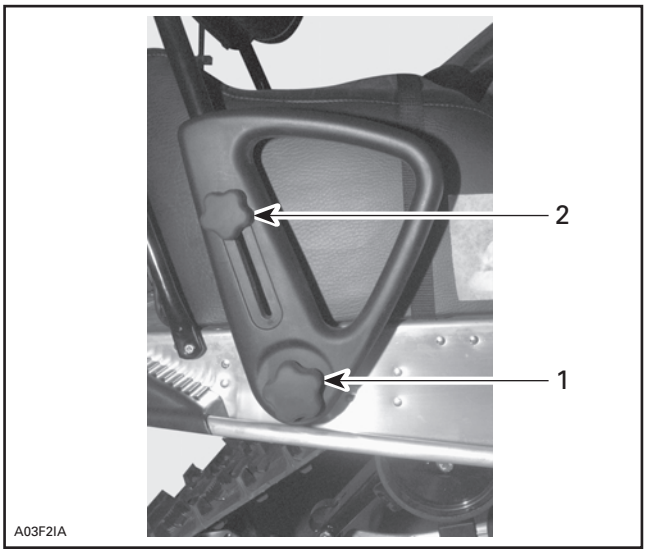
Screw in place using black Torx screws M8 x 20 (P/N 236 282 084) and lock washers M8 (P/N 234 181 601) (section no. 1).



1. Slide backrest on mounting bracket and install with screws. Torque to 15 N•m (11 lbf•ft)

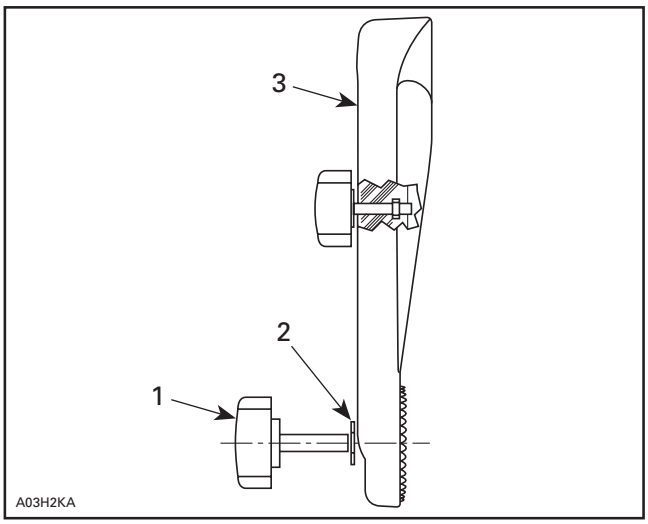
Touring Fan 500 Model Only

Install arms in place and insert backrest in arms. Adjust it to the preferred angle and height using the plastic knobs (see photos) to fix it in place.



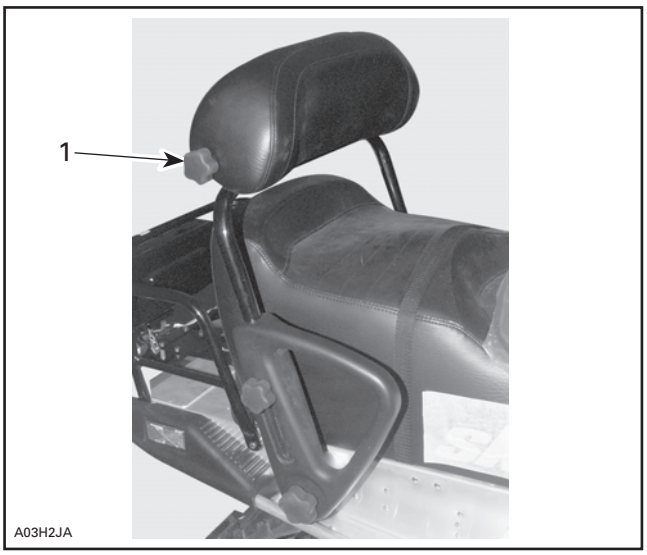
1. Backrest angle knob
2. Backrest height knob

NOTE: Use flat washers (P/N 732 900 050) included in the box to help tighten backrest's lower knob, as shown below.



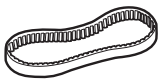
1. *Backrest angle knob*
2. *Flat washer*
3. *Backrest arm*

Adjust the cushion angle using the upper knob.



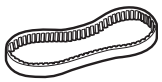
INSTALLED BACKREST

1. *Backrest cushion angle knob*



PARTS INSTALLATION

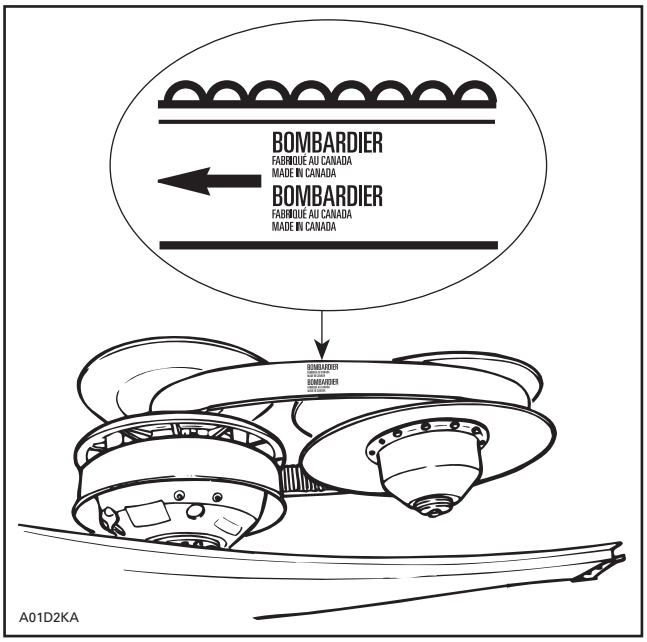
DRIVE BELT



Clean pulleys and disc brake with a suitable cleaner such as Loctite Part Cleaner (P/N 413 711 809) before installing drive belt.

To ensure maximum drive belt life span, the new drive belt must be installed so that the Bombardier name can be read when facing pulleys.

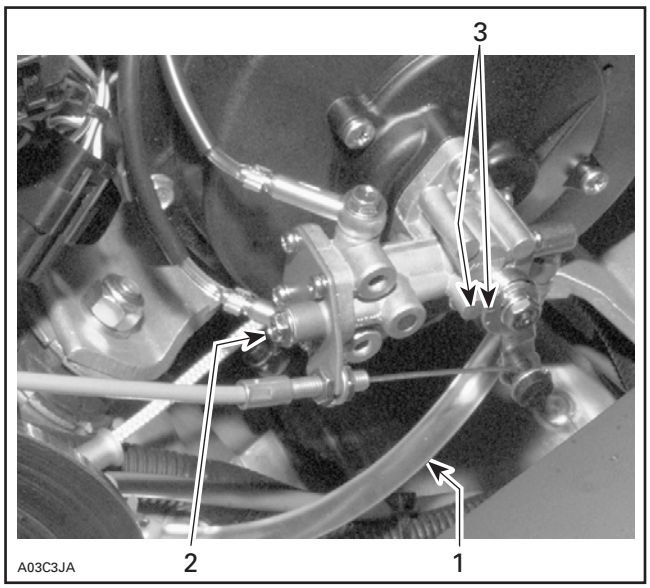
CAUTION: The arrow is indicating the direction of rotation.



TYPICAL — CORRECT INSTALLATION

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER injection oil (P/N 413 802 900 - 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

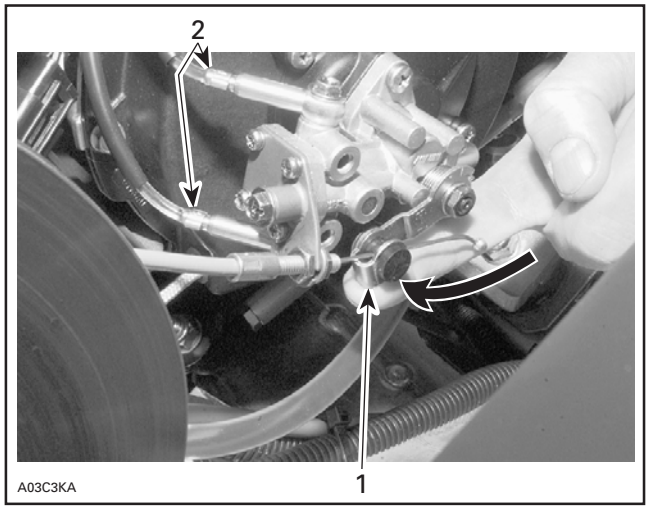
Bleed main oil line (between tank and pump) by loosening the bleeder screw until air has escaped from the line. Add injection oil as required.



TYPICAL

1. *Main oil line*
2. *Bleeder screw*
3. *Alignment marks*

Bleed the small oil line between pump and intake manifold by running engine at idle while holding the pump lever in fully open position.



TYPICAL

1. *Fully open position*
2. *Small lines*

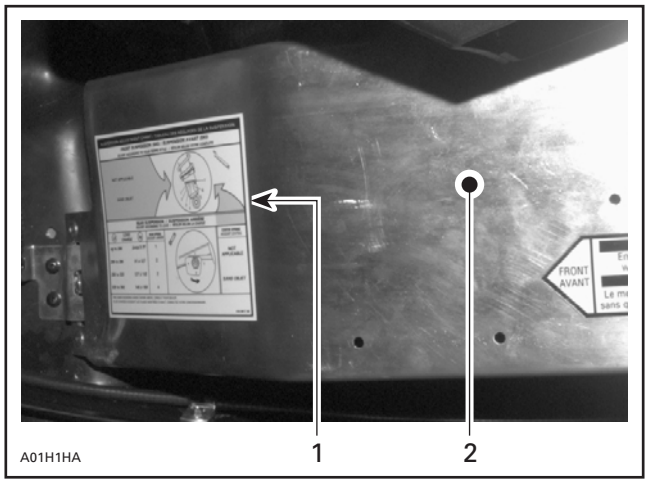
Check also for proper oil lever adjustment. Mark on lever should align with mark on pump body after taking all cable play.

Models with Hydraulic Brake Only

Check brake fluid in reservoir for proper level. Add fluid (DOT) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



1. Adjustment chart
2. Pulley guard

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

Install caps provided in Predelivery Kit (section 3 or 9).

NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap to get out from its location due to soap residual.

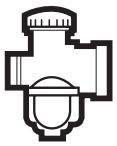
ADJUSTMENTS
DRIVEN PULLEY

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquiries should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODEL			MX Z FAN 500	MX Z FAN 380	FORMULA DELUXE FAN 380	
	Engine Type			503	380	377	
	Maximum HP RPM ①		± 100 RPM	7000	6900	6900	
	Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	N.A.			
	Carburetor Type			PTO VM 34 - 549 MAG VM 34 - 550	PTO/MAG VM 30 - 200	PTO/MAG VM 30 - 200	
	Main Jet			PTO 180 MAG 170	PTO/MAG 140	PTO/MAG 140	
	Needle Jet			P-0 (159)			
	Pilot Jet			40	40	40	
	Needle Identification — Clip Position			6DH2 - 3	6DP9 - 3	6DP9 - 3	
	Slide Cut-Away			2.5			
	Float Adjustment		± 1 mm (in)	23.9 (.94)			
	Air Screw Adjustment		± 1/16 turn	1-7/8	1-1/4	1-1/4	
	Idle Speed RPM		± 200 RPM	1650			
	Gas Grade/Pump Octane Number		(R + M)/2	Regular Unleaded/87			
	Gas/Oil Ratio			Oil Injection			
	Ignition Timing BTDC		mm (in)	2.77 (0.109)	2.79 (0.110) ②	2.79 (0.110) ②	•
	Trigger Coil Air Gap		mm (in)	0.5 - 0.7 (.020 - .028)	0.5 - 0.7 (.020 - .028)	0.5 - 0.7 (.020 - .028)	•
	Gear Ratio		Teeth	21/44	18/44	18/44	
	Engagement Speed		± 100 RPM	4500	3500	3500	
	Drive Pulley Calibration Screw Position			3	N.A.	N.A.	
	Pulley Distance	Z	(± 0.5) mm (± 1/64) in	17.0 (21/32)	26.0 (1-1/64)	26.0 (1-1/64)	•
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-13/32)	33.4 (1-5/16)	33.4 (1-5/16)	•
		Y		Dimension Y must exceed X from 1.0 mm (1/32 in) to 2.0 mm (5/64 in)			•
	Drive Belt Adjustment	Deflection	± .5 mm (in)	32 (1-1/4)			
		Force ③	kg (lbf)	11.34 (25)			
	Driven Pulley Preload		± 0.7 kg (± 1.5 lbf)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	•
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation			
	Track Adjustment	Deflection	mm (in)	35 to 40 (1-3/8 to 1-9/16) with a 7.3 kg (16 lb) downward pull			

① Engine speed at which maximum power is achieved.

② 22° at 3500 RPM (engine cold) with headlamp turned on.

③ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center

ATDC: After Top Dead Center

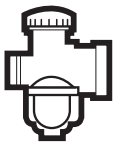
PTO: Power Take OFF side

MAG: Magneto side

CTR: Center

N.A.: Not Applicable

A dot (•) on right indicates changes from 2000 model.

	MODEL			TOURING FAN 380	TOURING FAN 500
	Engine Type			377	503
	Maximum HP RPM ①		± 100 RPM	6900	7000
	Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	N.A.	
	Carburetor Type			PTO VM 30 - 200 / MAG VM 30 - 200	PTO VM 34 - 549 / MAG VM 34 - 550
	Main Jet			PTO 140 / MAG 140	PTO 180 / MAG 170
	Needle Jet			P-0 (159)	
	Pilot Jet			40	
	Needle Identification — Clip Position			6DP9 - 3	6DH2 - 3
	Slide Cut-Away			2.5	
	Float Adjustment		± 1 mm (in)	23.9 (.94)	
	Air Screw Adjustment		± 1/16 turn	1-1/4	1-7/8
	Idle Speed RPM		± 200 RPM	1650	
	Gas Grade/Pump Octane Number		(R + M)/2	Regular Unleaded/87	
	Gas/Oil Ratio			Oil Injection	
	Ignition Timing BTDC ②		mm (in)	2.79 (0.110)	2.77 (0.109)
	Trigger Coil Air Gap		mm (in)	0.5 - 0.7 (0.020 - 0.028)	
	Gear Ratio		Teeth	18/44	21/44
	Engagement Speed		± 100 RPM	2500 •	2900 •
	Drive Pulley Calibration Screw Position			N.A.	3
	Pulley Distance	Z	(± 0.5) mm (± 0.020) in	26.0 (1.024)	17.0 (0.67)
	Offset	X	± 0.5 mm (± 1/64 in)	33.4 (1.315)	35.5 (1.400)
		Y		Dimension Y must exceed X from 1.0 mm (1/32 in) to 2.0 mm (5/64 in) •	Dimension Y must exceed X from 1.0 mm (1/32 in) to 2.0 mm (5/64 in)
	Drive Belt Adjustment	Deflection	± .5 mm (in)	32 (1-1/4)	
		Force ③	kg (lbf)	11.34 (25)	
	Driven Pulley Preload		± 0.7 kg (lbf)	0.0 (0.0)	
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track Adjustment	Deflection	mm (in)	35 to 40 (1-3/8 to 1-3/16) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.

② 15.4° at 3500 RPM (engine cold) with headlamp turned on.

③ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center

ATDC: After Top Dead Center

PTO: Power Take OFF side

MAG: Magneto side

CTR: Center

N.A.: Not Applicable

Please route to :

Init.

- Service
- Sales
- Parts

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-2**

Date: June 16, 2000

SUBJECT: Predelivery Instructions

YEAR	MODEL	PACKAGE	MODEL NUMBER	SERIAL NUMBER
2001	MX Z 600	X	1825/1826/1827/ 1828/1829/1830	All
		Adrenaline	1695/1696/1697/ 1698/1699/1700	
		Standard	1701/1702/1703/ 1704/1705	
		Trail	1691/1692/1693/1694	
2001	MX Z 500	Standard	1710/1711/1712/ 1713/1714	All
		Trail	1706/1707/1708/1709	

This bulletin must be used in conjunction with the check list enclosed in the bag with the *Operator's Guide*. Make sure that predelivery check list is completed and signed.

⚠ WARNING

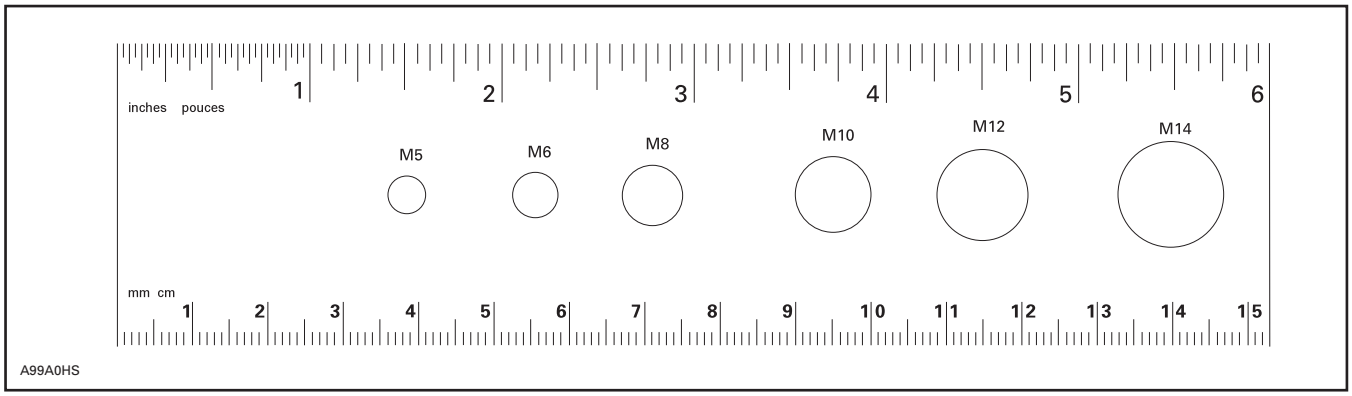
To obtain limited warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook, Predelivery Check List* signed copy and *Video*.

There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.



NOTE: This ruler can be helpful to identify fastener length or size.

PREDELIVERY KIT P/N	MODELS
549 010 880	MX Z 600 MX Z 500

⚠ WARNING

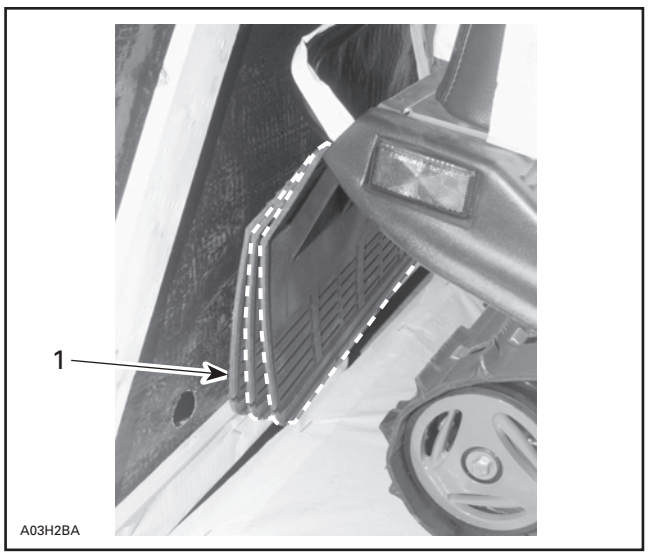
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

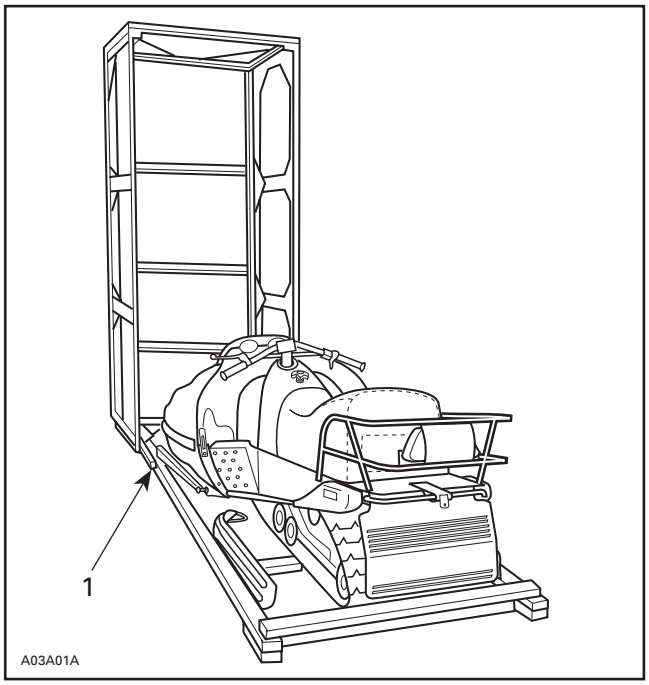
Remove all screws retaining cover to vehicle base. Tip cover toward front or rear of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging any part of the snowmobile.

NOTE: If cover is tilted toward front of vehicle, snow guard may interfere with crate cover, as shown in the following photo. Push on snow guard when lifting cover.



IF CRATE COVER IS TILTED TOWARD FRONT OF VEHICLE, FROM OUTSIDE CRATE PUSH ON SNOW GUARD TO ALLOW COVER TO LIFT WITHOUT DAMAGING SNOW GUARD

1. Snow guard interfering with crate cover



1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Remove ropes and cut locking ties retaining windshield.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts and slider cushions in order to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove steering pad, predelivery kit, shock absorbers and drive belt from engine compartment.

HOOK REMOVAL

Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

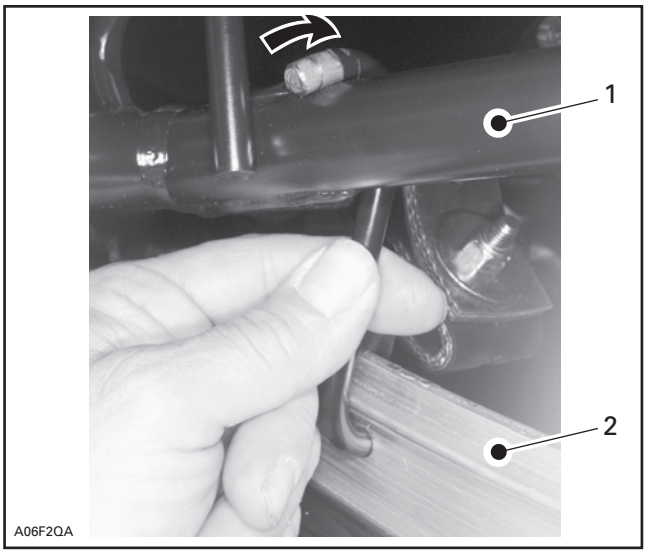
From left side of vehicle, cut locking tie retaining hook, then apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



TYPICAL — REMOVE HOOK

1. *Front arm*
2. *Runner*

⚠ WARNING

Hook must be removed to have snowmobile suspension operational.

Make sure parking brake is applied.

Lift front of vehicle and block safely.

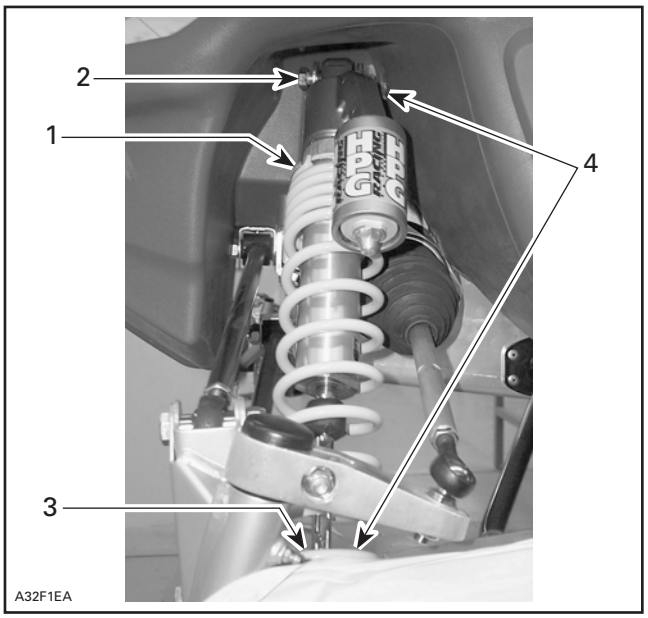
Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

MX Z 500 Model, Trail Package

Secure shock absorbers to suspension with their adjusting ring at bottom.

MX Z 600 Model, X Package

Secure shock absorbers to suspension with their adjusting ring at top. There is a left and a right shock. Do not mix them. Reservoir must stand toward back of vehicle as shown on next photo.



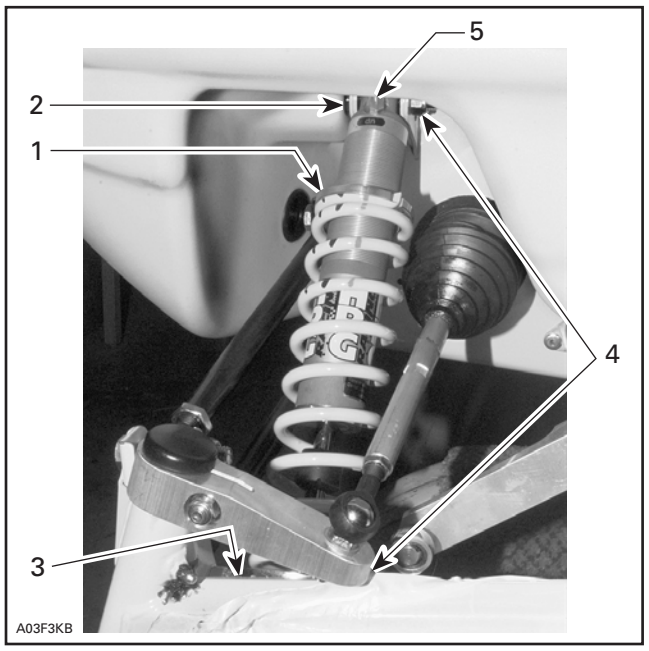
LH SIDE SHOWN

1. *Shock absorber (2) (predelivery box) adjusting ring at top*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Elastic nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*

All Models Except MX Z 600, X Package and MX Z 500, Trail Package

Secure shock absorbers to suspension with their adjusting ring at top. Valve must be toward outside of vehicle.

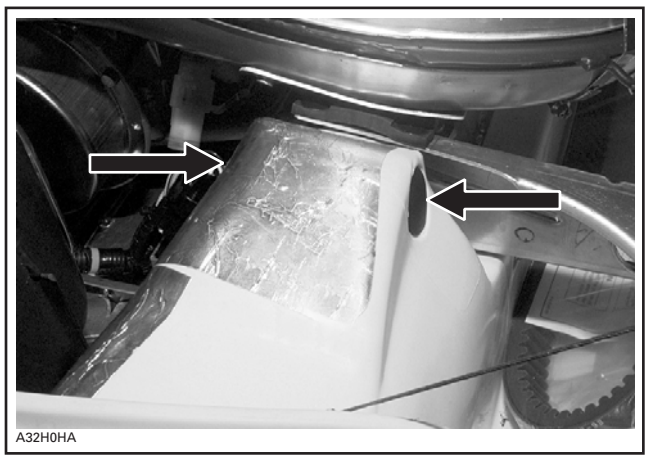
NOTE: Position screw heads toward front of vehicle and secure with nuts provided in Predelivery Kit (section no. 3). Make sure decal edges are toward inside vehicle.



TYPICAL — LH SIDE SHOWN

1. *Shock absorber (2) (predelivery box) adjusting ring at top*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Elastic nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*
5. *Valve*

Install caps provided in predelivery kit on bottom pan, each side of upper bolt.

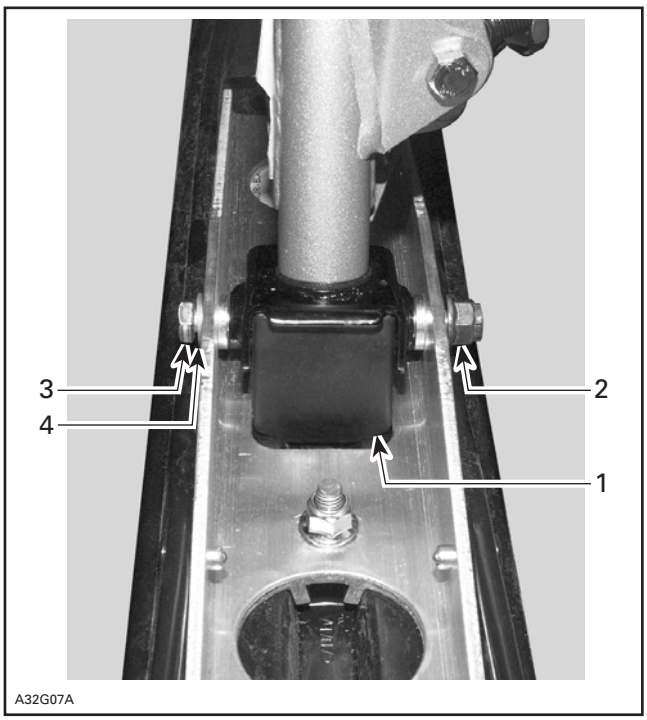


SNAP PROVIDED CAP (SECTION NO. 5) (P/N 414 916 600) EACH SIDE OF MOLDING

Ensure ski leg bushings are still on ski legs.

Install skis on vehicle. Make sure bolt head is toward outside.

Put back vehicle on ground.

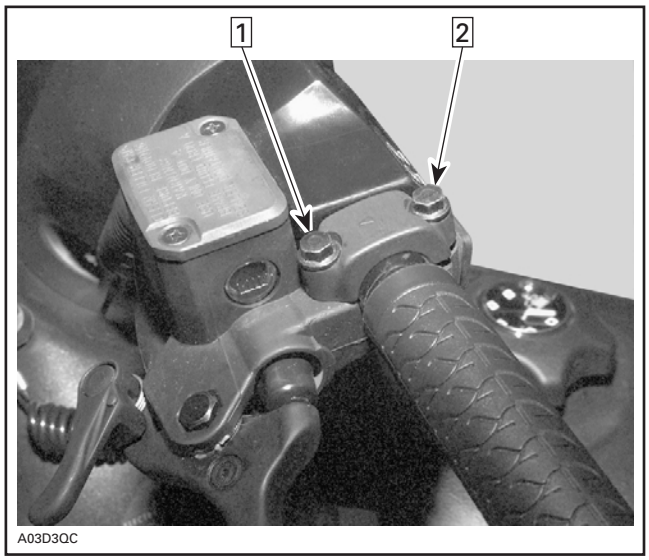


RIGHT SIDE SHOWN

1. *Ski stopper (2) (section no. 3) (P/N 506 151 233) with higher side toward front*
2. *Flanged Nut M10 (2) (section no. 3) (P/N 732 610 084). Torque to 32 N•m (27 lbf•ft)*
3. *Bolt M10 (2) (ski leg)*
4. *Washer (2) (section no. 3) (P/N 732 900 049) installed on bolt head side*

Adjust handlebar and tighten nuts between 21 and 28 N•m (16 and 20 lbf•ft).

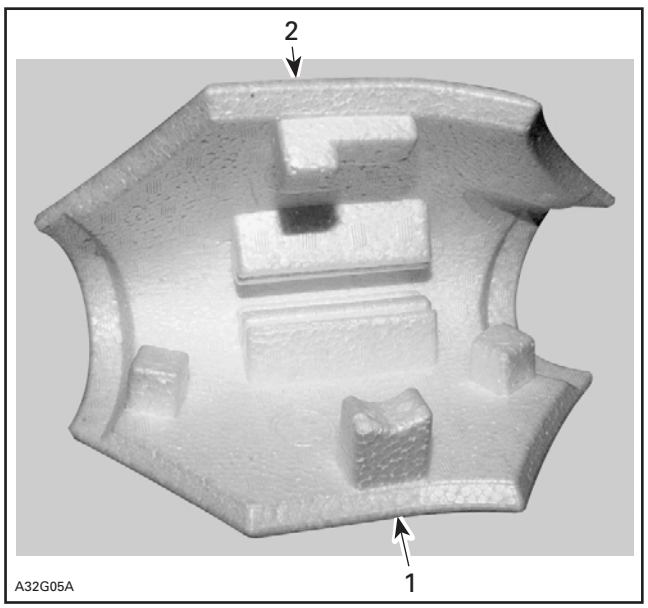
Turn brake housing to level brake oil reservoir. Secure front screw first, then rear screw. See photo.



Step 1: Screw this bolt first to a torque between 7 and 10 N•m (5.25 and 7.5 lbf•ft)
Step 2: Secure housing with this bolt (same torque)

Install steering foam and adjust for proper fit with console. Fit steering padding and set in place with velcros.

NOTE: Take care to install foam in the proper side.



1. *Driver's side*
2. *Engine side*

PARTS INSTALLATION
WINDSHIELD

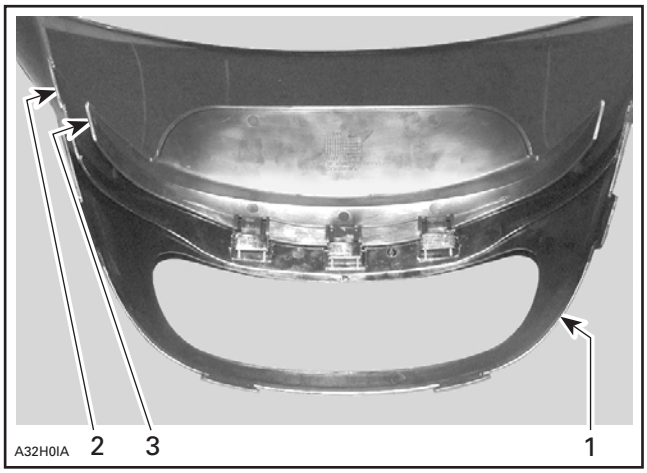
Remove headlamp protector from hood.

Unclip inner protector from headlamp protector.

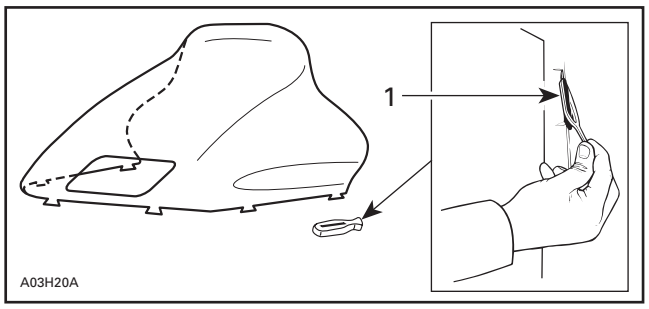
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp Protector*
2. *Windshield*
3. *Inner Protector*



TYPICAL

1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 on section no. 2)*

WINDSHIELD INSTALLED

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

LIQUIDS
OIL INJECTION PUMP BLEEDING

BREAK-IN PERIOD SUPPLEMENTAL OIL

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER injection oil (P/N 413 802 900 - 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

PUMP ADJUSTMENT

Oil injection pump is factory set. However, if adjustment needs to be checked or modified, refer to *2001 Ski-Doo Shop Manual, Volume 3* (P/N 484 200 026) or special *Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

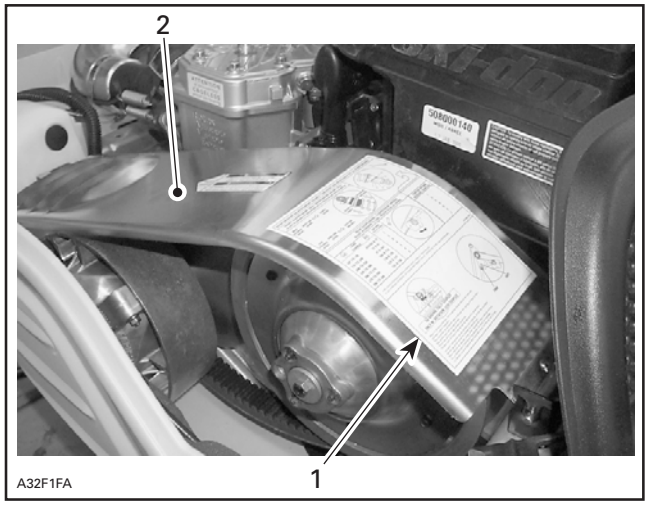
LIQUIDS
BRAKE FLUID LEVEL

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT 4) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



1. *Adjustment chart*
2. *Pulley guard*

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

When completed, install wheel caps (P/N 570 063 600) provided in predelivery kit (section no. 4).

NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap to get out from its location due to soap residual.

ADJUSTMENTS
DRIVEN PULLEY

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquiries should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODELS			MX Z 500 PACKAGES: STANDARD TRAIL	MX Z 600 PACKAGES: X ADRENALINE STANDARD TRAIL
	Engine Type			493	593
	Maximum HP RPM ①		± 100 RPM	8000	8000
	Reed Valve		P/N	420 924 519 •	420 924 519 •
	Carburetor Type			PTO VM 38 - 429 MAG VM 38 - 429	PTO/MAG TM 40-B91 ② •
	Main Jet			PTO 280 MAG 280	PTO/MAG 500 •
	Needle Jet			P-8 (480)	P(0) •
	Pilot Jet			40	20 •
	Needle Identification — Clip Position			6DEY10 - 4 •	9HFY2-53 ⑥ •
	Slide Cut-Away			2.5	2.0 •
	Float Adjustment		± 1 mm (in)	22.9 (.902)	N.A. •
	Air Screw Adjustment		± 1/16 turn	1.25 •	N.A. •
	Idle Speed RPM		± 200 RPM	1700	1600
	Gas Grade/ Octane Number		(R + M)/2	Regular unleaded/87	Regular unleaded/87
	Gas/Oil Ratio			Oil injection	Oil injection
	Ignition Timing BTDC ③ ④		mm (in)	3.0 (0.118)	3.0 (0.118)
	Trigger Coil Air Gap		mm (in)	0.55 - 1.45 (.022 - .057)	0.55 - 1.45 (.022 - .057)
	Gear Ratio		Teeth	22/43	24/43
	Engagement Speed		± 100 RPM	4100	4100 •
	Drive Pulley Calibration Screw Position			3	4 •
	Pulley Distance	Z	± 0.5 mm (± 0.020) in	16.5 (21/32)	16.5 (21/32)
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-13/32)	35.5 (1-13/32)
		Y	± 0.5 mm (± 1/64 in)	Dimension Y must exceed X of 1 mm (1/32 in)	
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	32 (1-1/4)
		Force ⑤	kg (lbf)	11.34 (25)	11.34 (25)
	Driven Pulley Preload		± 0.7 kg (± 1.5 lbf)	7.0 (15.43)	7.0 (15.43)
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track Adjustment	Deflection	mm (in)	30 to 35 (1-3/16 to 1-3/8) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.

② Adrenaline and X packages also have a DPM.

③ At 3500 RPM (engine cold) with headlamp turned on.

④ During the first 8 hours, the timing curve is retarded between 4500 RPM and maximum RPM. Because checking ignition timing is done at lower RPM, this will not affect the 3500 RPM timing specification.

⑤ Force applied midway between pulleys to obtain specified deflection.

⑥ Needle with one groove only (no adjustment).

BTDC: Before Top Dead Center
ATDC: After Top Dead Center
PTO: Power Take OFF side
MAG: Magneto side
N.A.: Not Applicable

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-3**

Date: June 23, 2000

SUBJECT: Predelivery Instructions

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2001	Canada and United States: Summit* 600	1758/1759/1760/1761	All

This bulletin must be used in conjunction with the predelivery check list enclosed in the bag with the *Operator's Guide*. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

To obtain limited warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook, Predelivery Check List* signed copy and video.

There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.

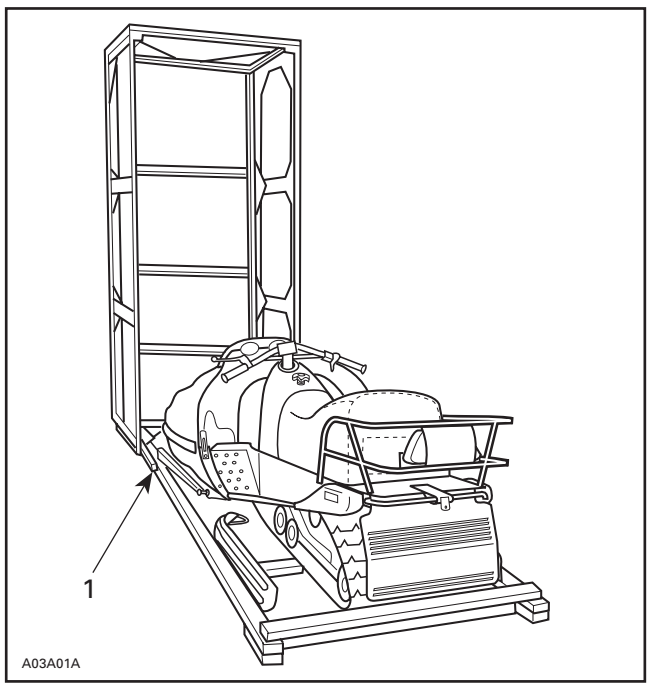
⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

Remove all screws retaining cover to crate base. Tip cover toward front or rear of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging any part of the snowmobile.



TYPICAL
1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Remove ropes and cut locking ties retaining windshield.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Keep ski leg bolts and bushings to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove steering pad, drive belt, predelivery kit and shock absorbers from engine compartment.

FRONT HOOK REMOVAL

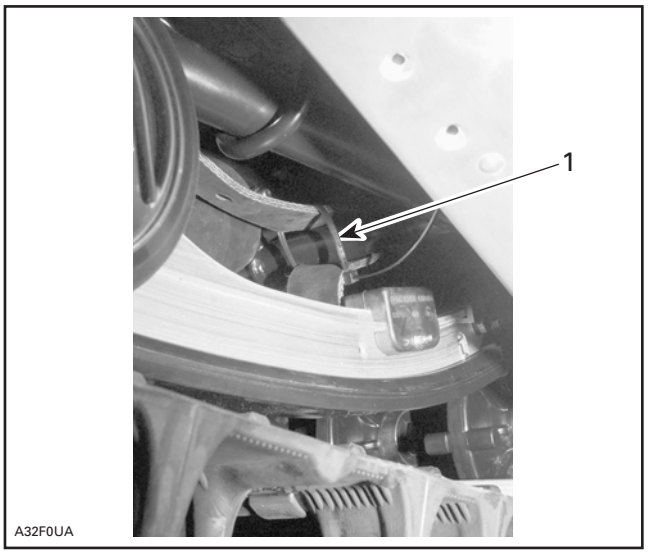
Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

On both sides, cut locking ties holding stopper straps.



1. Cut locking ties on both sides

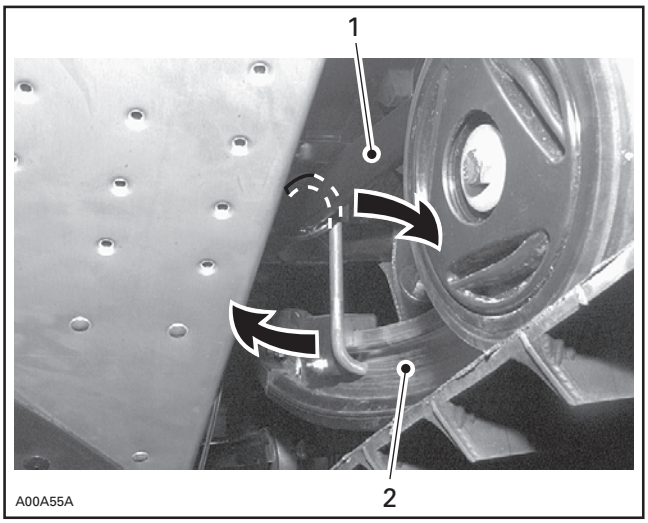
From left side of vehicle, cut locking tie, then apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



TYPICAL — REMOVE HOOK

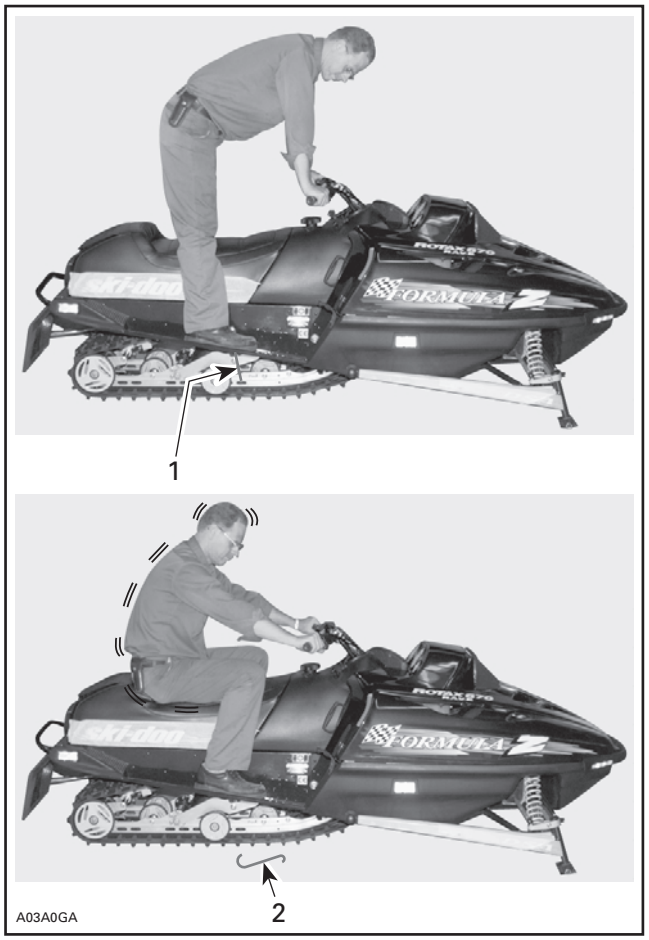
1. Front arm
2. Runner

REAR HOOK REMOVAL

To remove hooks, stand on running boards.

Using a fast and strong movement, sit down on snowmobile seat. This will allow suspension to compress and hooks to detach. See the next photo.

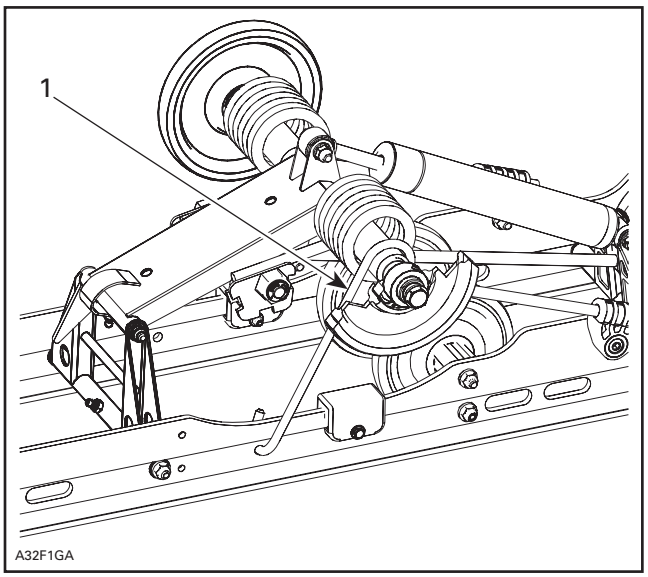
CAUTION: To avoid damaging seat storage compartment and cover, always sit on seating surface.



TYPICAL — STAND ON RUNNING BOARDS THEN SIT DOWN ON SEAT

1. *Hook to be removed (both sides)*
2. *Hook removed*

NOTE: Hook may detach from top only. In that case remove hook from runner by hand or with tongs.



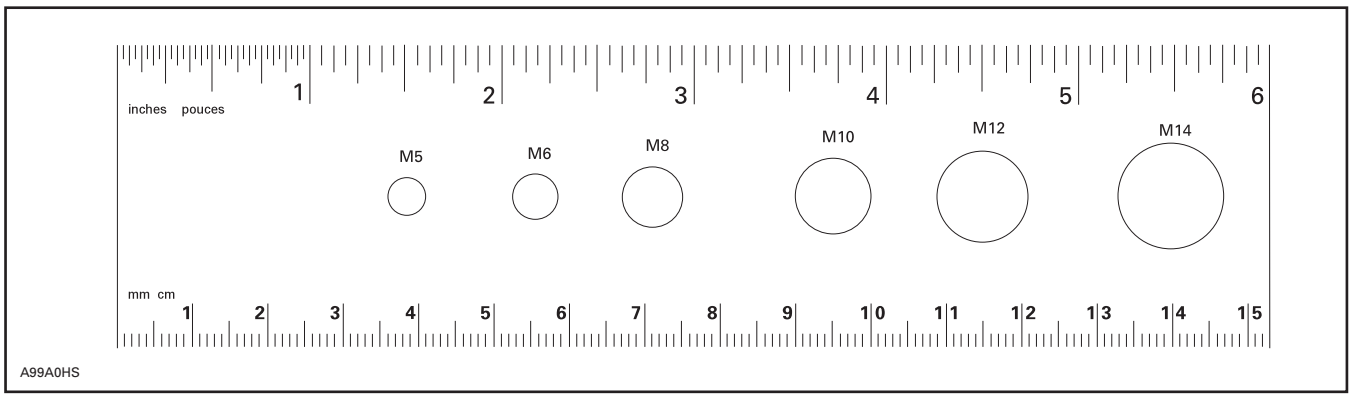
TYPICAL

1. *Remove hook*

⚠ WARNING

Shipping hooks must be removed to have snowmobile suspension operational.

PREDELIVERY KIT P/N	MODELS
549 010 883	Summit 600



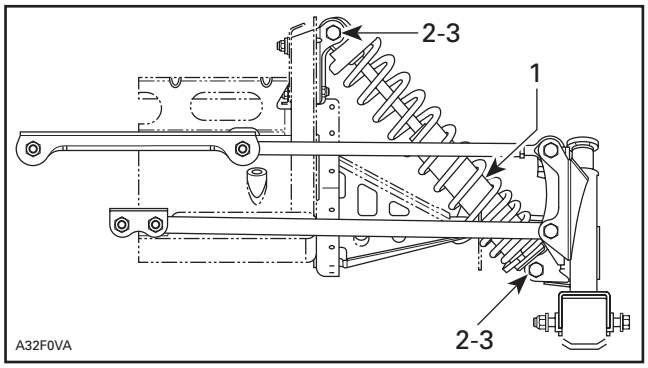
NOTE: This ruler can be helpful to identify fastener length or size.

Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Secure shock absorbers to suspension with their adjusting ring at bottom.

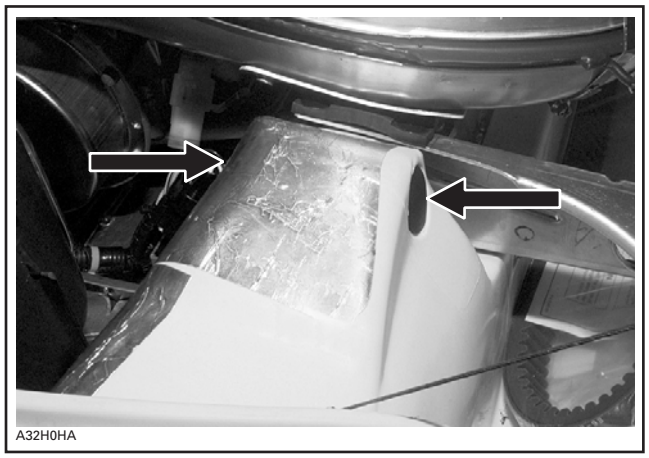
NOTE: Position top and bottom screw heads toward front of vehicle and secure with nuts provided in predelivery kit (section no. 3).



TYPICAL — RH SIDE SHOWN

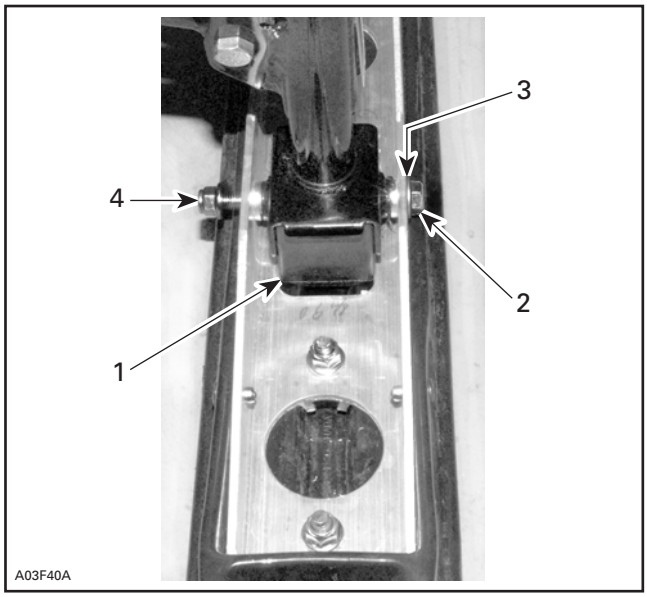
1. *Shock absorber (2) (engine compartment) adjusting ring at bottom*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Elastic flanged nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*

Install caps provided in predelivery kit on bottom pan, each side of upper bolts.



SNAP PROVIDED CAPS (SECTION NO. 3) EACH SIDE OF MOLDING

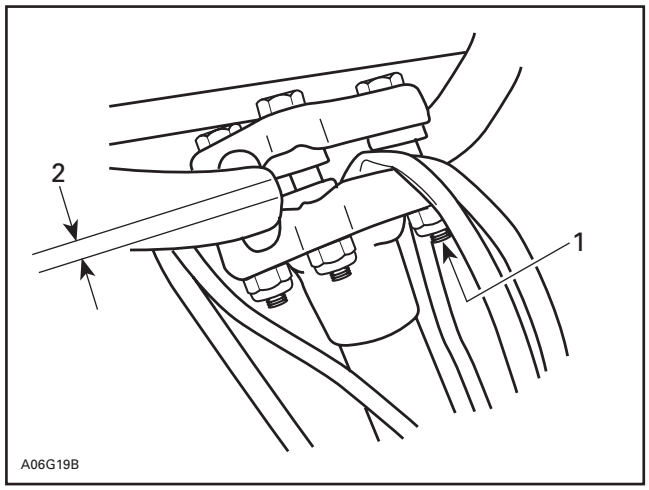
Install skis on vehicle.



LEFT SIDE SHOWN

1. *Ski stopper (2) (P/N 506 151 233) (section no. 3) with higher side toward front*
2. *Flanged nut M10 (2) (section no. 2). Torque to 32 N•m (24 lbf•ft)*
3. *Bolt M10 (2) (ski leg)*
4. *Washer (2) (section no. 1). Installed on bolt head side*

Adjust handlebar and torque nuts between 21 and 28 N•m (16 and 20 lbf•ft).



TYPICAL

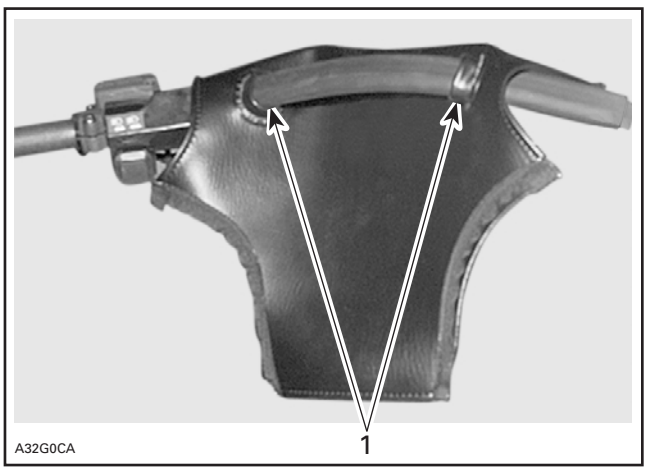
1. *Torque between 21 and 28 N•m (16 and 20 lbf•ft)*
2. *Equal gap each side (both clamps)*

Loosen, at least 3 turns, Allen screw of throttle and brake handle housings.

STEERING HOLDING STRAP

Cut locking tie retaining right side strap end.

Insert strap through holes provided in steering padding, as shown in the next photo.

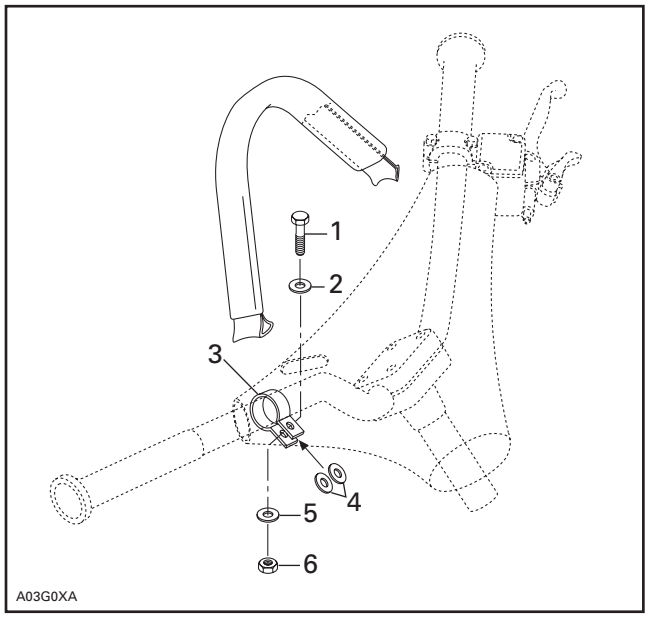


TYPICAL

1. *Strap inserted through both steering pad cover holes*

Secure right side strap end with retaining clip and tighten firmly using bolt, nut and washers (section no. 3) in the sequence shown on drawing below. Torque to 10 - 12 N•m (89 - 106 lbf•**in**).

NOTE: A wire route along handlebar. To avoid pinching it, take care to keep wire out of retaining clip.



1. *Bolt*
2. *Washer*
3. *Retaining clip*
4. *Washers*
5. *Washer*
6. *Nut*

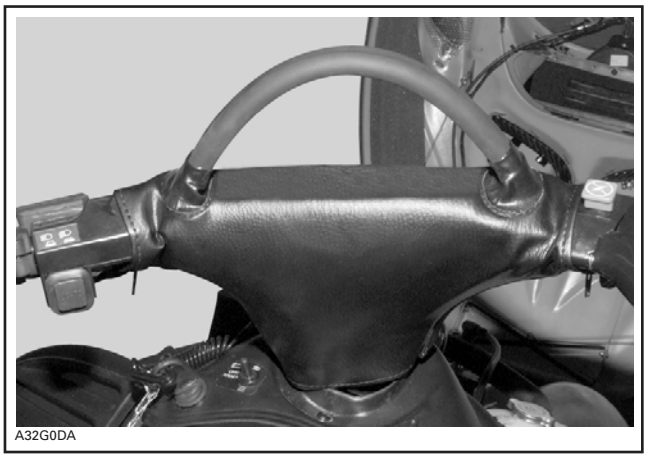
Properly position foam and padding in place, as shown in the next photo.

NOTE: As a tip, place narrow side of padding on rear side.


A32G06A

MAKE SURE FOAM AND PADDING WRAP STEERING PROPERLY

Fasten padding with velcro strips to complete installation.


A32G0DA

TYPICAL — FINAL INSTALLATION

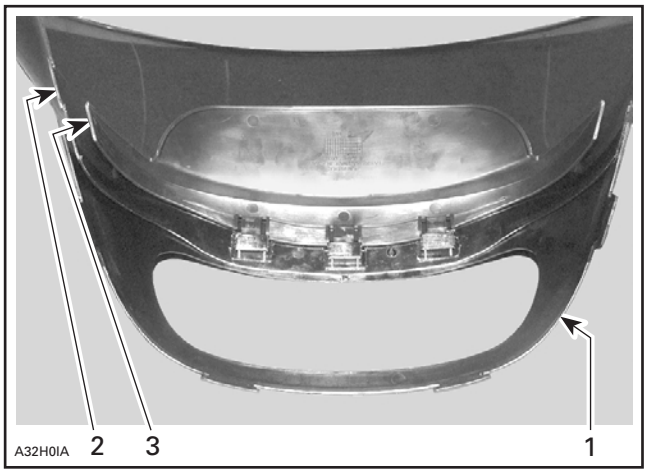
Remove headlamp protector from hood.

Unclip inner protector from headlamp protector.

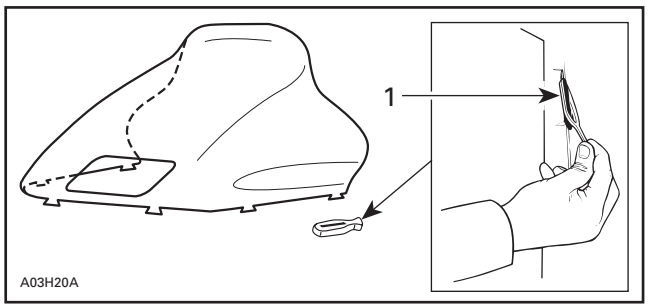
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp protector*
2. *Windshield*
3. *Inner protector*



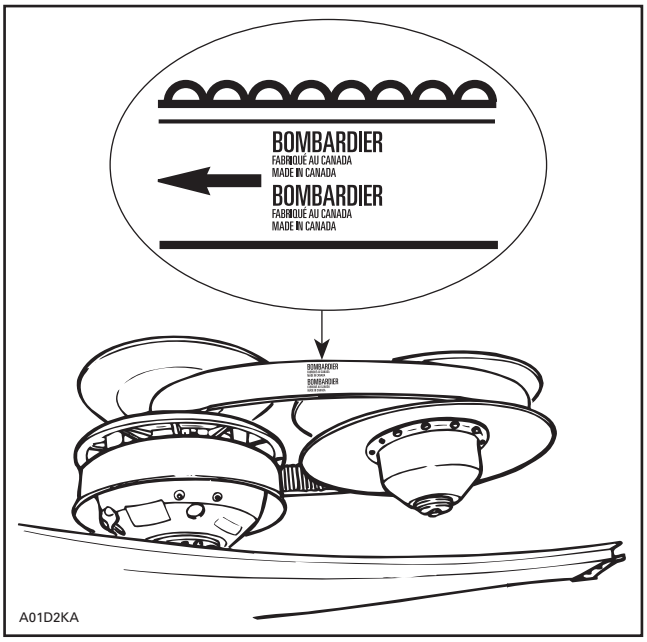
1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 on section no. 5)*

TYPICAL — WINDSHIELD INSTALLED

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

To ensure maximum drive belt life span, the new drive belt must be installed so that the Bombardier name can be read when facing pulleys.

CAUTION: The arrow indicates the direction of rotation.



CORRECT INSTALLATION

LIQUIDS
OIL INJECTION PUMP BLEEDING

SUPPLEMENTAL OIL

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz.) of BOMBARDIER-ROTAX injection oil (P/N 413 803 000) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

PUMP ADJUSTMENT

Oil injection pump is factory set. However, if adjustment needs to be checked or modified, refer to *2001 Ski-Doo Shop Manual, Volume 3* (P/N 484 200 026) or special *Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

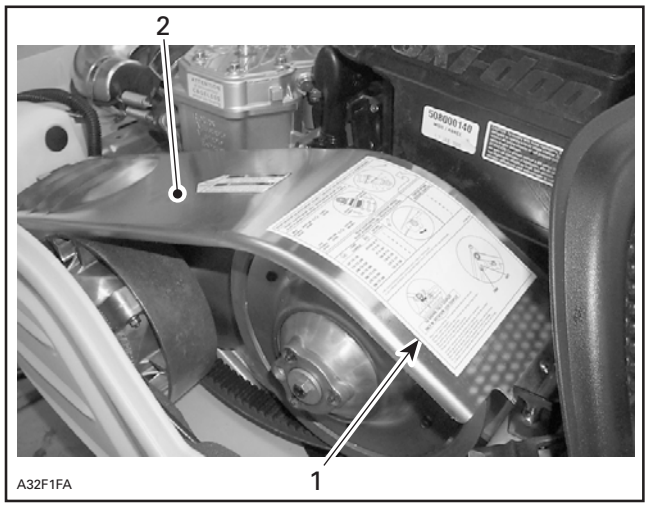
LIQUIDS
BRAKE FLUID LEVEL

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partially filled bottle of brake fluid.

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



TYPICAL

1. *Adjustment chart*
2. *Pulley guard*

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

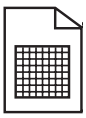
When operation is done, install wheel caps provided with the predelivery kit (section no. 4) on rearmost wheels.

NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap to get out from its location due to soap residual.

ADJUSTMENTS
DRIVEN PULLEY

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA



The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Further inquiries should be directed to your distributor service representative.

When Summit 600 snowmobiles are to be used at sea level, at an altitude of 600 m (2000 ft) or less, it is of the utmost importance to install the appropriate sea level kit.

CAUTION: To avoid severe engine damage, the sea level kit must be installed when the vehicle is used at sea level, at an altitude of 600 m (2000 ft) or less.

DRIVE PULLEY

Altitude / Clutching	Sea Level	2400 m 8000 ft
Spring	Green/White 415 019 400	Pink/White 415 019 300
Ramp	417 222 048	417 005 287
Calibration screw position	4	3
Pin	Qty 3 x 1 504 259 600	Qty 3 x 1 417 004 309
Engagement RPM ± 100	4100	4500
Maximum RPM ± 100	8000	8000

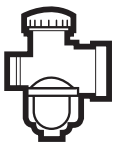
MAIN JET CHART

Altitude / Temperature	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
- 40°C - 40°F	←	←	←	←	540	←	PTO MAG
- 30°C - 20°F	←	←	←	←	520	←	PTO MAG
- 20°C - 4°F	←	←	←	←	**500**	←	PTO MAG
- 10°C 14°F	←	←	←	←	500	←	PTO MAG
0°C 32°F	←	←	←	←	500	←	PTO MAG
10°C 50°F	←	←	←	←	500	←	PTO MAG
20°C 70°F	←	←	←	←	500	←	PTO MAG

NOTE: Arrows in the chart indicate that the preceding information is repeated.

NOTE: Shaded columns give factory settings.

A dot (•) on right indicates changes from 2000 model.

	MODEL			SUMMIT 600	
	Engine Type			593	
	Maximum HP RPM ①		± 100 RPM	8000	
	Reed Valve		P/N	420 924 519	
	Carburetor Type			PTO - MAG TM 40 - B94 with DPM	•
	Main Jet			500	•
	Needle Jet			P-0	•
	Pilot Jet			20	•
	Needle Identification			9HFY2-53 ②	•
	Slide Cut-Away			2.0	•
	Float Adjustment		± 1 mm (± 0.04 in)	N.A.	•
	Air Screw Adjustment		± 1/16 turn	N.A.	•
	Idle Speed RPM		± 200 RPM	1500	•
	Gas Grade/Pump Octane Number		(R + M)/2	Regular unleaded/87	
	Gas/Oil Ratio			Oil injection	
	Ignition Timing BTDC ③		mm (in)	3.0 (0.118)	
	Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 - .057)	
	Gear Ratio		Teeth	19/43	•
	Engagement Speed		± 100 RPM	4500	•
	Drive Pulley Calibration Screw Position			3	•
	Pulley Distance	Z	(± 0.5) mm (± 1/64) in	16.5 (21/32)	
	Offset	X	± 0.5 mm (± 0.02 in)	35.5 (1.398)	
		Y		Dimension Y must exceed X by 1 mm (1/32 in) ± 0.5 mm (1/64 in)	
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
		Force ④	kg (lbf)	11.34 (25)	
	Driven Pulley Preload		± 0.7 kg (± 1.5 lbf)	7.0 (15.43)	
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track Adjustment	Deflection	mm (in)	30 to 35 (1-3/16 to 1-3/8) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.
② Needle with one groove only (no adjustment).
③ At 3500 RPM (engine cold) with headlamp turned on.
④ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center
ATDC: After Top Dead Center
PTO: Power Take OFF side
MAG: Magneto side
N.A.: Not applicable

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-4**

Date: July 7, 2000

SUBJECT: Predelivery Instructions

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2001	Canada and United States: Grand Touring 700 GS Grand Touring 600 Grand Touring 500	1789/1790/1792/1793 1794/1795/1797/1798 1799/1800/1802/1803	All
2001	Europe: Grand Touring 700 GS Grand Touring 600 Grand Touring 500	1791 1796 1801	All

This bulletin must be used in conjunction with the check list enclosed in *Operator's Guide* bag. Make sure that predelivery check list is completed and signed.

⚠ WARNING

To obtain warranty coverage, predelivery procedures must be performed by an authorized Bombardier snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

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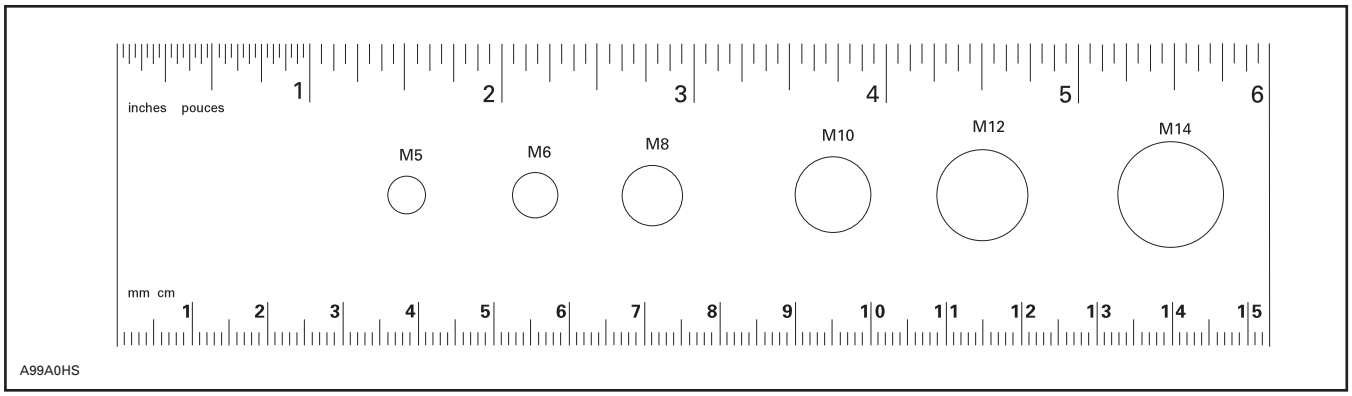
There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.



NOTE: This ruler can be helpful to identify fastener length or size.

UNCRATING

PREDELIVERY KIT P/N	MODELS
549 010 964	Grand Touring 700 GS Grand Touring 600 Grand Touring 500

⚠ WARNING

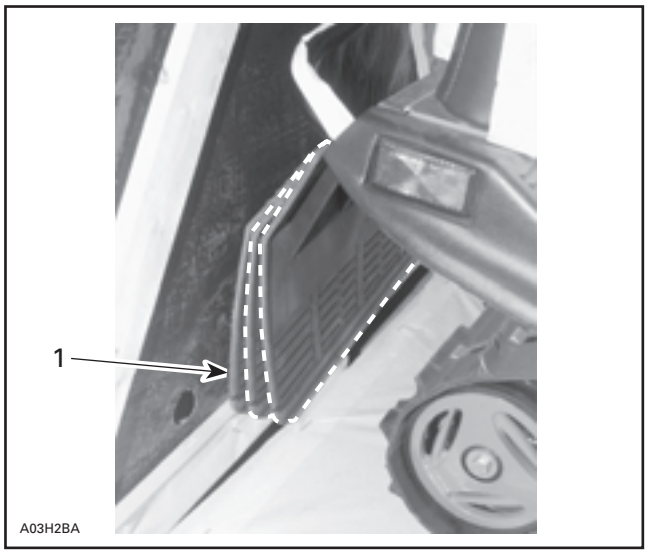
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

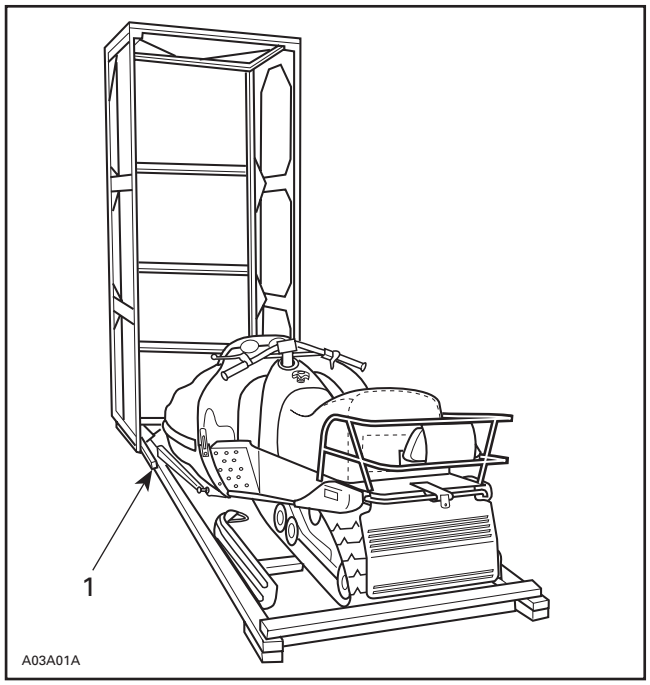
Remove all screws retaining cover to vehicle base. Tip cover toward front of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging the snow guard or taillight.

NOTE: On some models, snow guard may interfere with crate cover, as shown in the following photo. Push on snow guard when lifting cover.



FROM OUTSIDE CRATE PUSH ON SNOW GUARD TO ALLOW COVER TO LIFT WITHOUT DAMAGING SNOW GUARD

1. Snow guard interfering with crate cover



1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Remove ropes and cut locking ties retaining windshield.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts and bushings to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove parts to be installed and predelivery kit from engine compartment. Remove shock absorbers from engine compartment.

FRONT HOOK REMOVAL

Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

Cut locking tie retaining front hook.

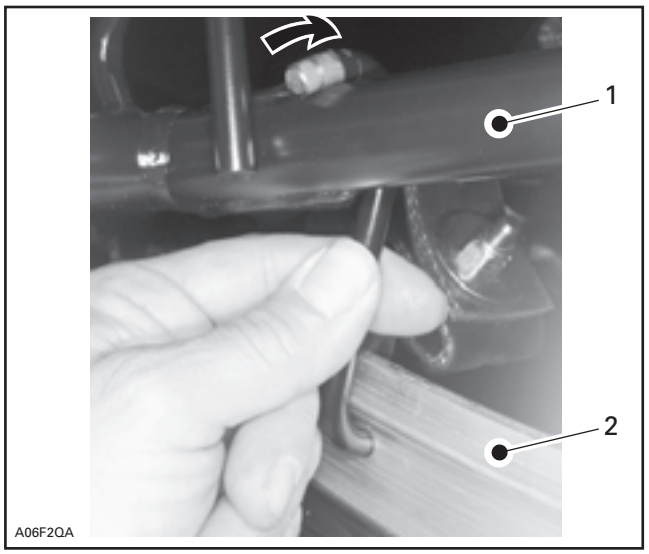
From left side of vehicle, apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



TYPICAL

1. *Front arm*
2. *Runner*

⚠ WARNING

Shipping hook must be removed to have snowmobile suspension operational.

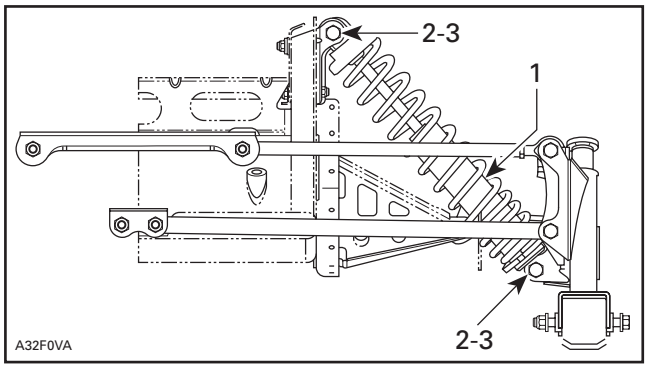
PARTS INSTALLATION
FRONT SUSPENSION

Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Secure shock absorbers to suspension with their adjusting ring at bottom.

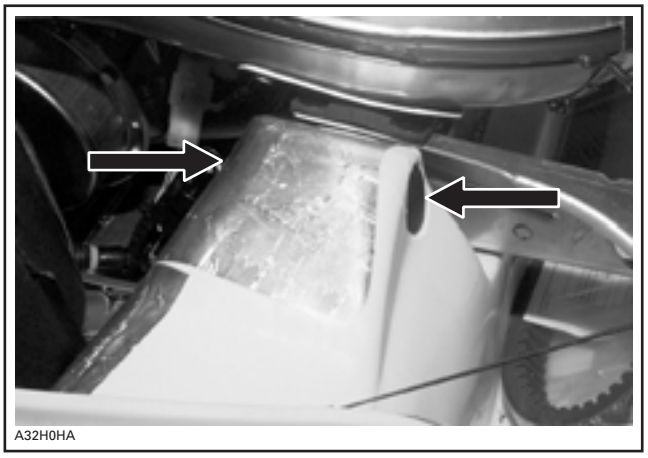
NOTE: Position screw heads toward front and secure with nuts provided in predelivery kit (section no. 1). A long socket may be needed to torque screws.



TYPICAL — RH SIDE SHOWN

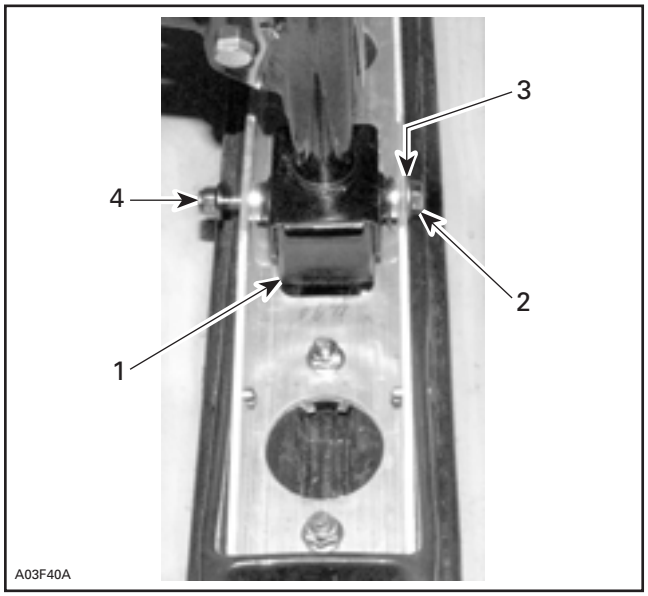
1. *Shock absorber (2) (engine compartment) adjusting ring at bottom*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Elastic flanged nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 1). Torque to 48 N•m (35 lbf•ft)*

Install caps provided in predelivery kit on bottom pan, each side of upper bolts.



SNAP PROVIDED CAPS (SECTION NO. 6) EACH SIDE OF MOLDING

Ensure ski leg slider cushions are still in ski leg.
Install skis on vehicle.
Replace vehicle on ground.



LEFT SIDE SHOWN

1. *Ski stopper (2) (P/N 506 151 233) (section no. 8) higher side toward front*
2. *Bolt M10 x 110 (2) (ski leg)*
3. *Washer (2) (P/N 732 900 049) (section no. 6)*
4. *Elastic flanged nut M10 (2) (P/N 732 610 084) (section no. 9). Torque to 32 N•m (24 lbf•ft)*

Well located on its rack, in front of chaincase cover, battery is a gel type that could be charged, during vehicle preparation, as described in the *Shop Manual*.

CAUTION: Prior to charging the battery, always remove it from the vehicle. Do not charge an installed battery.

Battery Removal

Unhook retaining strap and then remove battery.

Battery Installation

Properly position battery on its rack.

Insert red wire into rubber protection cap, below red cable.

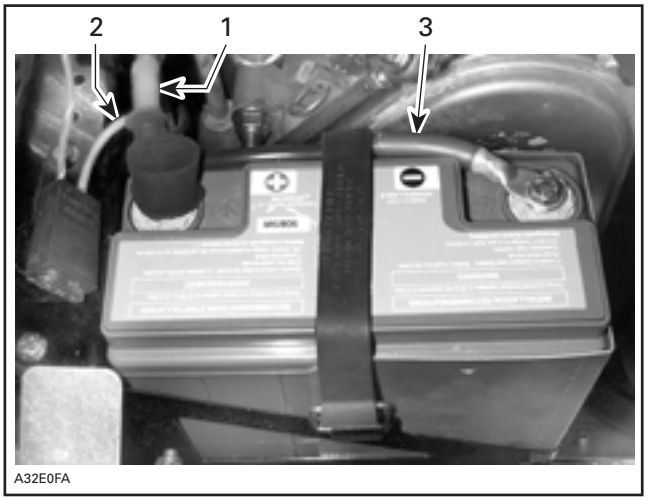
Connect RED positive cable and RED wire to positive battery terminal.

Connect BLACK negative cable LAST.

⚠ WARNING

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

Secure battery with retaining strap.



BATTERY CONNECTION

1. *RED positive cable*
2. *RED positive wire*
3. *BLACK negative cable under battery strap*

Apply silicone dielectric grease (P/N 293 550 004) on battery posts and connectors.

Cover positive post with rubber protection cap.

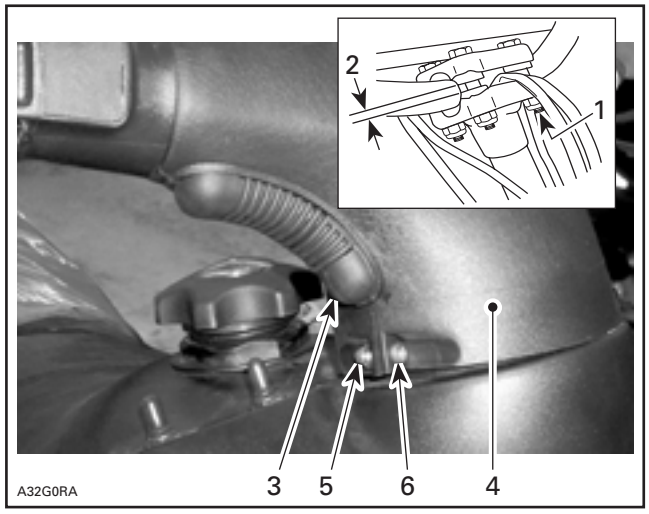
Adjust handlebar temporarily and tighten nuts loosely for now.

Loosen, at least 3 turns, Allen screw of throttle and brake handle housings.

Install steering pad temporarily, and adjust for proper fit with console.

Remove steering pad and torque nuts from 21 to 28 N•m (16 to 20 lbf•ft). Take care to make gap equal between each corners of clamps.

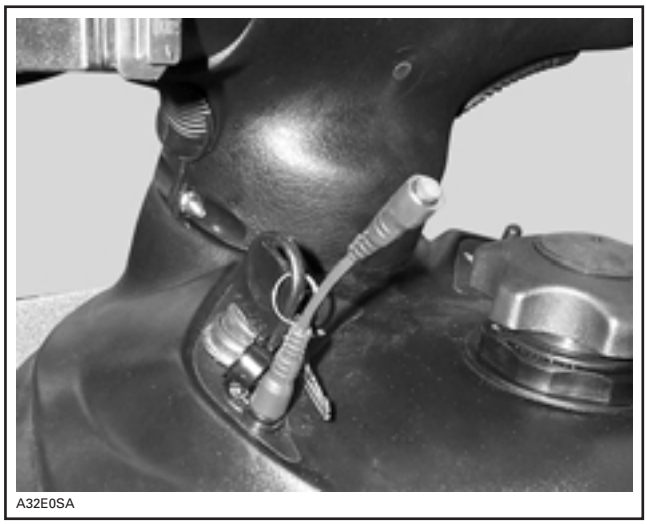
Reinstall steering pad, adjust and tighten throttle and brake handle housings.



1. *Torque from 21 to 28 N•m (16 to 20 lbf•ft)*
2. *Equal gap each side (both clamps)*
3. *Keyway (2) (section no. 6)*
4. *Steering pad (engine compartment)*
5. *Screw M5 x 20 (2) (section no. 6)*
6. *Nut M5 (2) (section no. 6). Seat tighten only, no deformation of rubber*

Heated Visor Connector Extension

Section no. 8 of predelivery kit provides a connector extension for the heated visor.



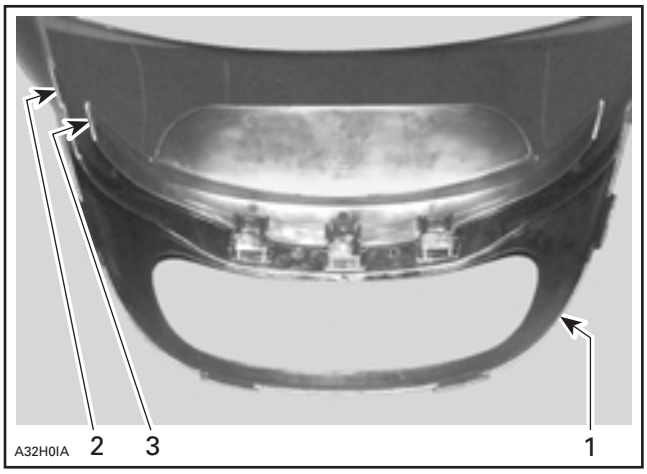
Take off plastic films from windshield.

Unclip inner protector from headlamp protector.

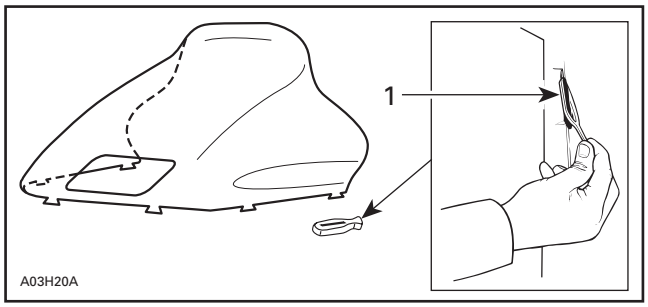
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp protector*
2. *Windshield*
3. *Inner protector*

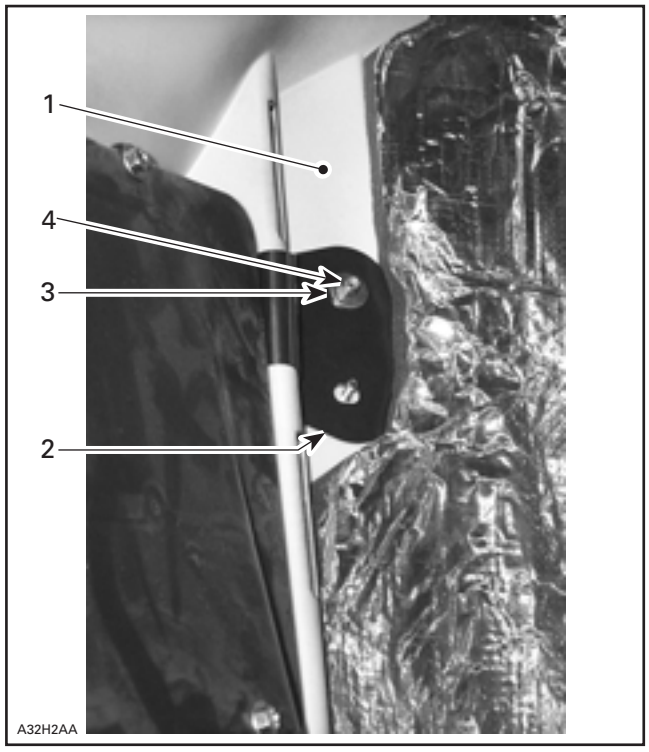


1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 on section no. 1)*

TYPICAL — WINDSHIELD INSTALLED

Place retaining plate underneath hood facing rear view mirror holes.

Install mirrors in place. Secure with washers and nuts (section no. 1 in predelivery kit). Torque to 2 N•m (18 lbf•**in**).



1. Hood
2. Retaining plate
3. Washer
4. Nut

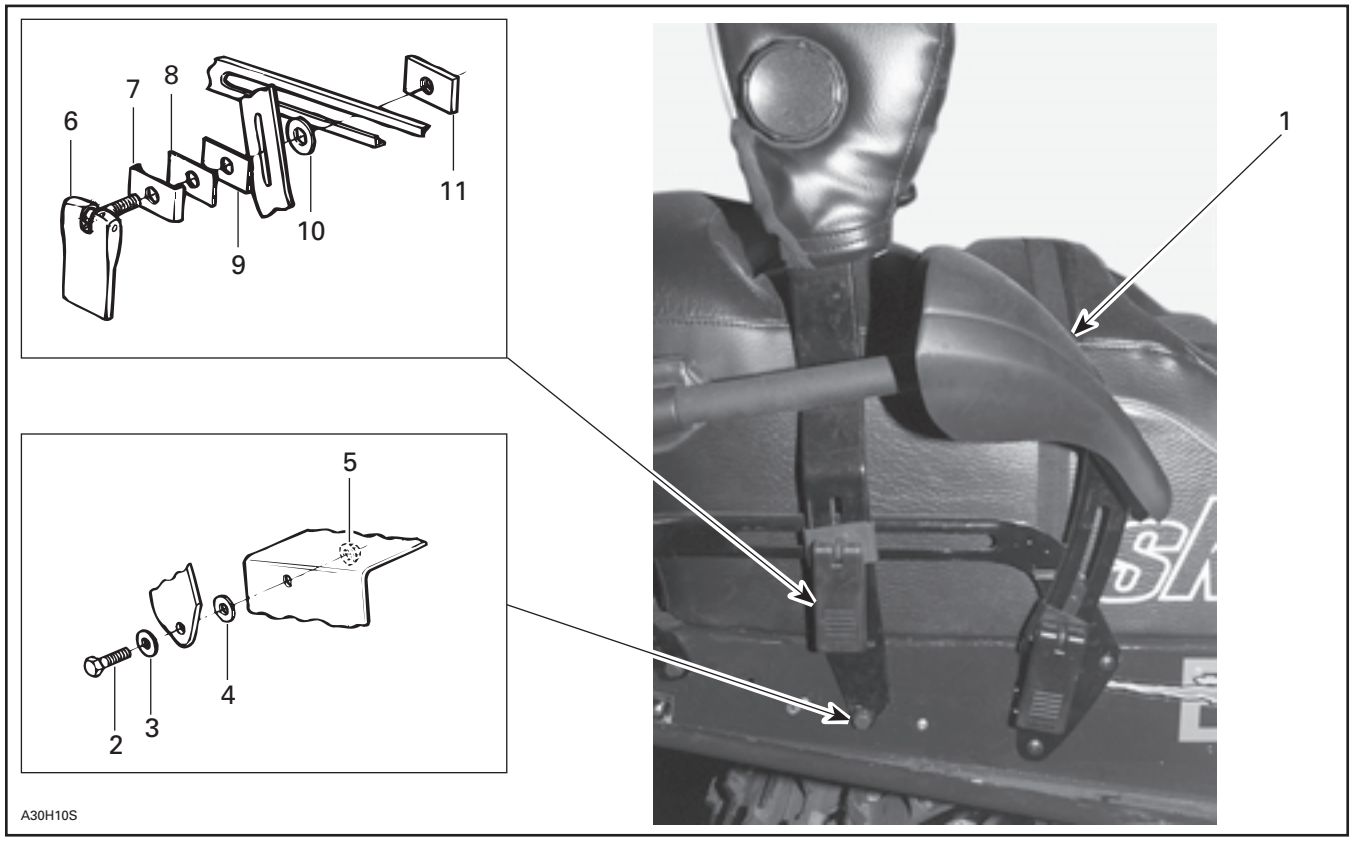
NOTE: Do not mix right and left mirrors (P/N 517 302 471 for right mirror and P/N 517 302 472 for left mirror).

INSTALLATION COMPLETED

Remove mouldings and secure backrest frame on tunnel then install lever assembly onto luggage rack rail as explained on following drawing.

Install hand protectors with rivets (P/N 390 907 700) (section no. 9) onto luggage rack handle.

Reinstall mouldings.



1. Handle protector (2). Secure with rivets (section no. 9)
2. Screw (2) (P/N 207 182 584) (section no. 4)
3. Washer (2) (P/N 234 081 670) (section no. 5)
4. Plastic washer (2) (P/N 414 819 600) (section no. 3)
*5. Elastic nut (2) (P/N 232 581 414) (section no. 4). Torque to 8 N•m (73 lbf•**in**)*
6. Lever assembly (2) (section no. 5)
7. Guide (2) (P/N 517 257 300) (section no. 3)
8. Rubber shim (2) (P/N 570 027 400) (section no. 4)
9. Spacer (2) (P/N 517 251 300) (section no. 5)
10. Flanged washer (2) (P/N 414 819 500) (section no. 2)
11. Threaded plate (2) (P/N 517 250 000) (section no. 2)

Turn adjustment knob left or right to adjust backrest cushion position.

A03H25A

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

LIQUIDS
OIL INJECTION PUMP BLEEDING

SUPPLEMENTAL OIL

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER Injection Oil (P/N 413 802 900 — 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

PUMP ADJUSTMENT

Oil injection pump is factory set. However, if adjustment needs to be checked or modified, refer to *2001 Ski-Doo Shop Manual, Volume 3* (P/N 484 200 026) (N/P 484 200 025 en français) or *Special Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

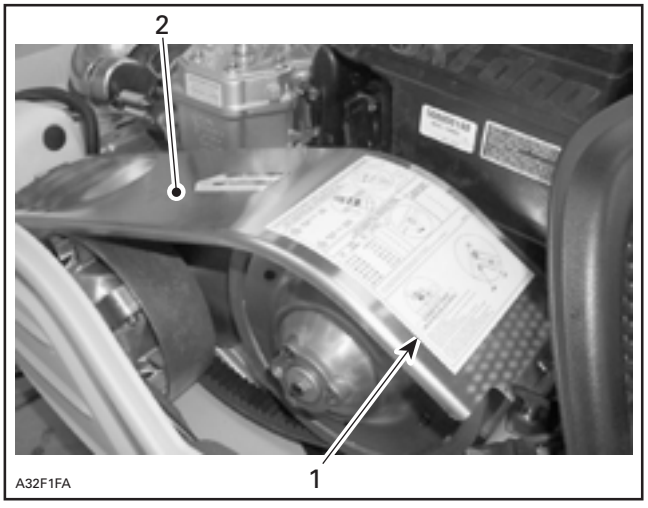
LIQUIDS
BRAKE FLUID LEVEL

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



1. *Adjustment chart*
2. *Pulley guard*

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See *Technical Data* section at the end of this bulletin.

When track adjustment is completed, place wheel caps provided in predelivery kit (section 4) on rear wheels.

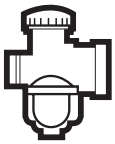
ADJUSTMENTS
DRIVEN PULLEY

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquires should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODELS			GRAND TOURING 700 GS	GRAND TOURING 600	GRAND TOURING 500
	Engine Type			693 •	593	493 •
	Maximum HP RPM ①		± 100 RPM	8000 •		
	Reed valve		P/N	420 867 870	420 924 519	
	Carburetor Type			TM40-B115 •	TM40-B112 •	VM 38 - 429
	Main Jet			520 •	500 •	280 •
	Needle Jet			P-0 •		P-8 (480) •
	Pilot Jet			17.5 •	20 •	40 •
	Needle Identification — Clip Position			9ZLY3-58 ② •	9HFY2-53 ② •	6DEY10 - 4 •
	Slide Cut-Away			2.0 •		2.5
	Float Adjustment		± 1 mm (in)	N/A •		22.9 (0.90) •
	Air Screw Adjustment		± 1/16 Turn	N/A •		1.25 •
	Idle Speed RPM		± 200 RPM	1500	1600	1700 •
	Gas Grade/Octane Number		(R + M)/2	Regular Unleaded/87		
	Gas/Oil Ratio			Oil Injection		
	Ignition Timing BTDC ③		mm (in)	3.36 (.132) •	3.00 (.118)	•
	Trigger Coil Air Gap		mm (in)	0.55 - 1.45 (.022 - .057)		
	Gear Ratio		Teeth	23/44		22/44 •
	Engagement Speed		± 100 RPM	3600 •		3500 •
	Drive Pulley Calibration Screw Position			3		
	Pulley Distance	Z	(+ 0, - 1) mm (+ 0, - 1/32) in	16.5 (21/32)		
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-25/64)		
		Y	± 0.5 mm (± 1/64 in)	Dimension Y must exceed X of 1 mm (1/32 in)		
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)		
		Force ④	kg (lbf)	11.34 (25)		
	Driven Pulley Preload		± 0.7 kg (lbf)	8.0 (17.64)	7.0 (15.43)	
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation		
	Track Adjustment	Deflection	mm (in)	30 to 35 (1.181 to 1.378) with a 7.3 kg (16 lb) downward pull		

① Engine speed at which maximum power is achieved.

② Only one groove on needle — no adjustment.

③ 22° at 3500 RPM (engine cold) with headlamp turned on.

④ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center

ATDC: After Top Dead Center

PTO: Power Take OFF side

MAG: Magneto side

N.A.: Not applicable

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-5**

Date: August 11, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2000	Grand Touring 800 SE	1786/1787/1788	All
2001	Mach Z Tech Plus Mach Z Standard	1661/1662/1819/1820 1656/1657/1658/1659/1660	All

This bulletin must be used in conjunction with the *Predelivery Check List* enclosed in *Operator's Guide* bag. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

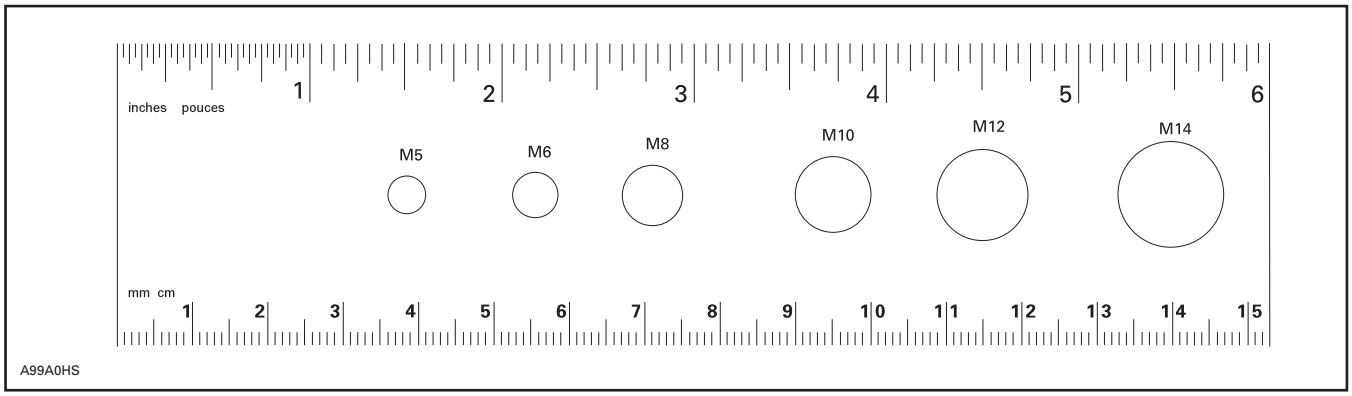
To obtain limited warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and return a customer signed copy. Make sure the customer receives the *Operator's Guide*, *Safety Handbook* and *Video*.

There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.

NOTE: This ruler can be helpful to identify fastener length or size.



UNCRATING

PREDELIVERY KIT P/N	MODEL
549 010 873	GRAND TOURING 800 SE
549 010 962	Mach Z Tech Plus
549 010 966	Mach Z Standard

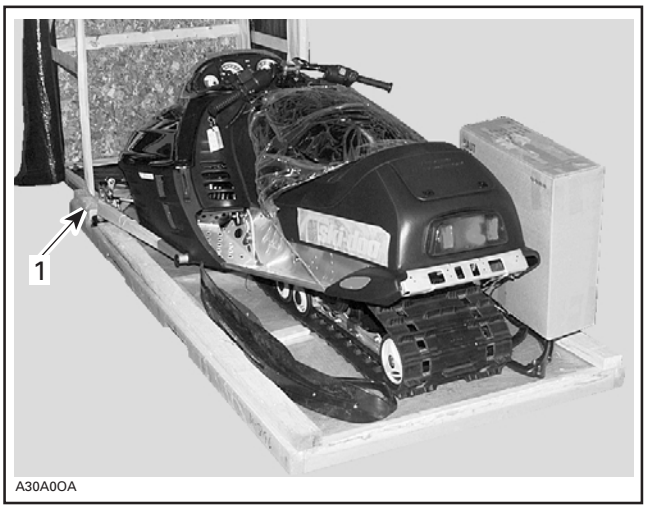
⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

Remove all screws retaining cover to vehicle base. Tip cover toward front of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging the snow guard or taillight.



TYPICAL

1. Notch

Detach parts to be installed (e.g. skis, windshield, boxes) from the vehicle and its base.

Cut locking ties and ropes retaining windshield. Keep windshield latches for further installation.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts and bushings to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove parts to be installed and predelivery kit from parts box. Note that shocks are behind a double bottom.

FRONT HOOK REMOVAL

Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

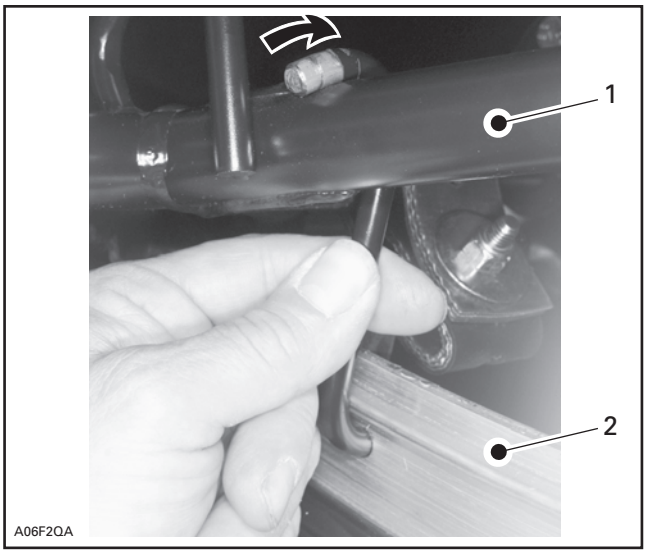
From left side of vehicle, cut locking tie retaining front hook, then apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, cut tie wrap and remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.

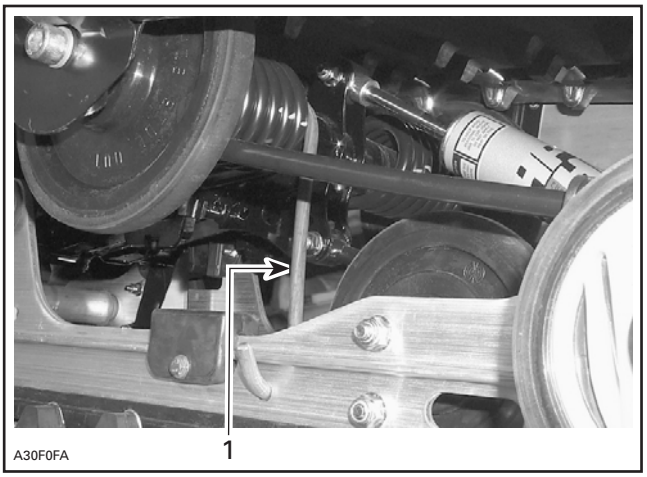


TYPICAL — REMOVE HOOK

1. *Front arm*
2. *Runner*

REAR HOOK REMOVAL

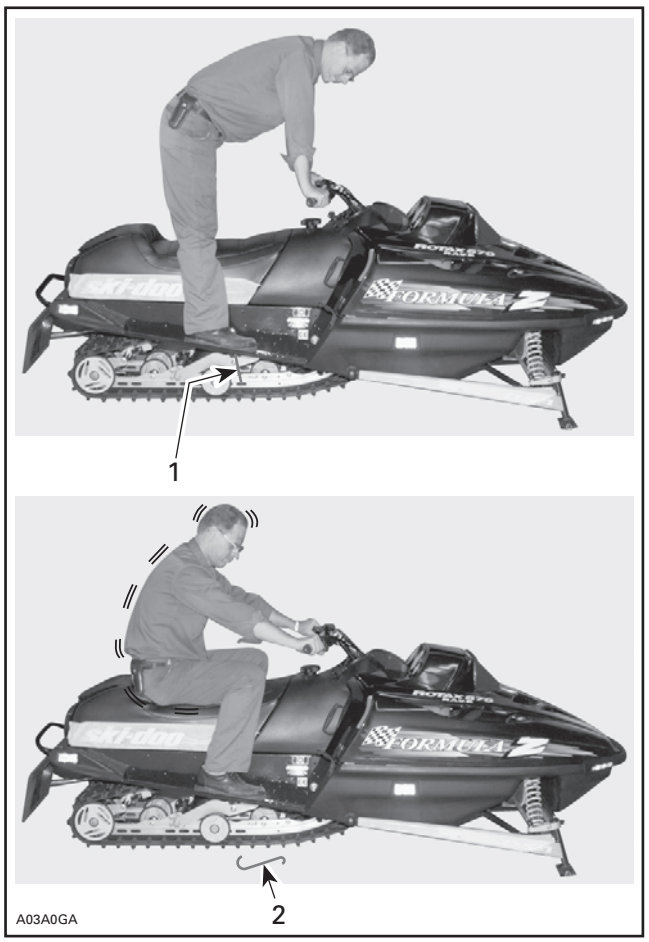
Mach Z and Mach Z Tech Plus Only



1. *Hook to be removed*

Lift front of vehicle to position bumper approximately 1 meter upward (35 to 40 inches).

Standing on footwells, sit roughly to free hook and make it fall as shown on next photo.



TYPICAL

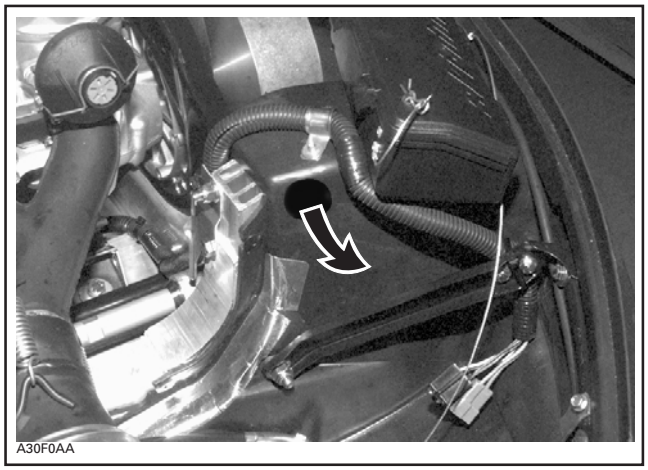
1. *Remove hook on the rear portion of the suspension*
2. *Hook removed*

CAUTION: Both hooks must be removed to have snowmobile suspension operational.

All Models

Lift front of vehicle and block safely.

From inside engine compartment, remove caps as shown in the next photo.



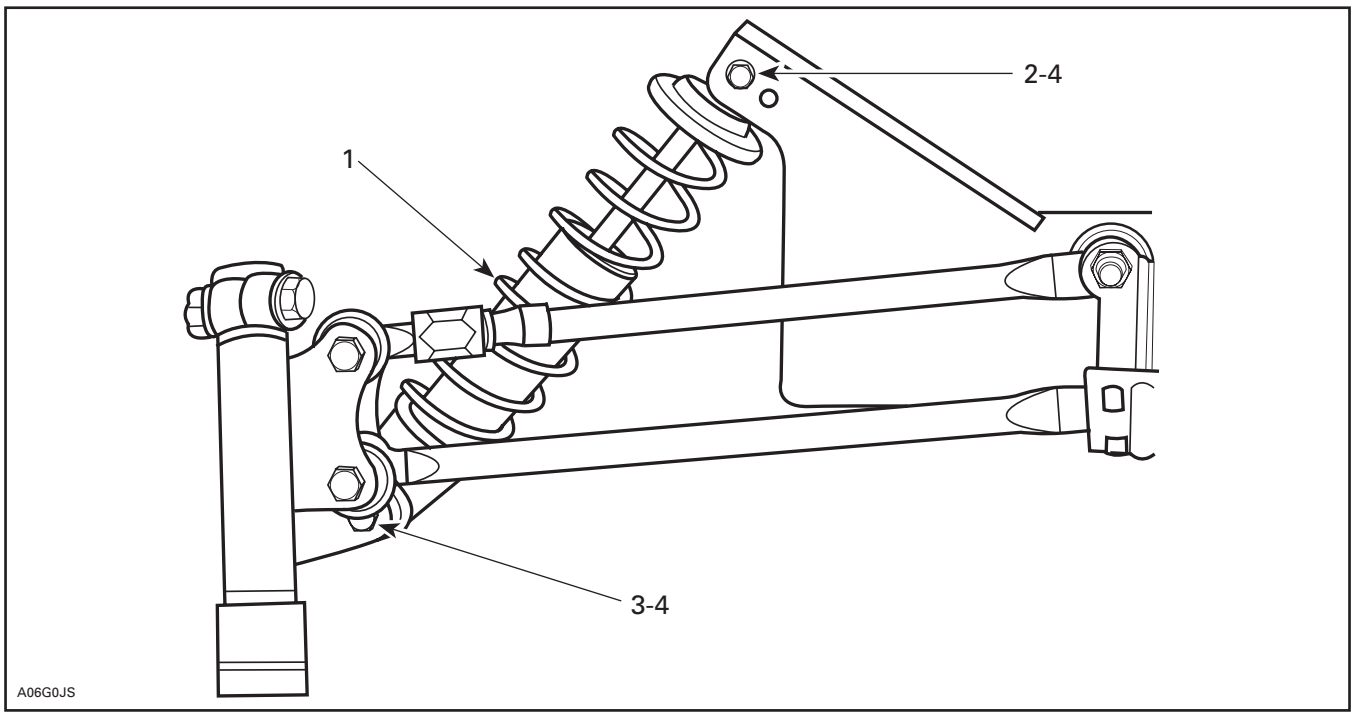
INSIDE ENGINE COMPARTMENT — PUSH AND REMOVE CAP

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Secure shock absorbers to suspension with their adjusting ring at bottom. Adjust them as per suspension adjustment chart on belt guard.

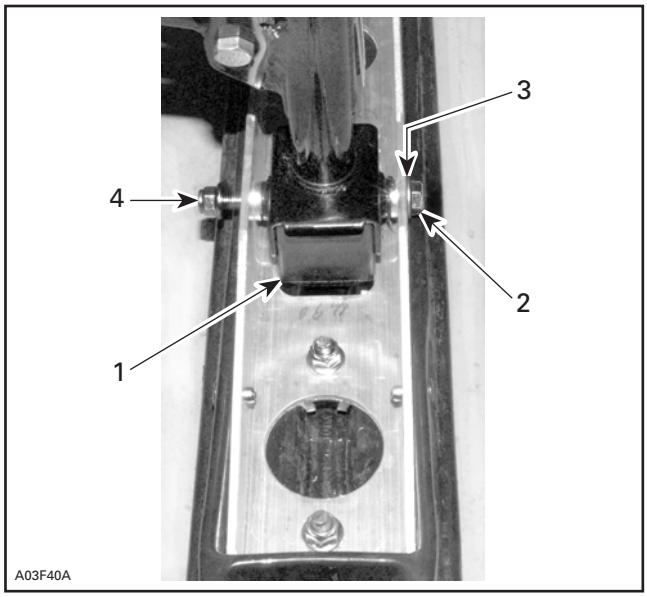
NOTE: Position bolt heads toward front.

Reinstall caps.



TYPICAL — RH SIDE SHOWN

1. *Shock absorber (2) (box)*
2. *Screw M10 x 1.5 x 55 (2) (P/N 222 005 565) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 222 005 565) (on suspension)*
4. *Nut M10 x 1.5 (4) (P/N 228 501 045) (section no. 1). Torque to 48 N•m (35 lbf•ft)*



LEFT SIDE SHOWN

1. *Ski stopper (2) (P/N 506 151 233) (section no. 3 or 8) higher side toward front*
2. *Bolt M12 (2) (ski leg)*
3. *Washer (4) (P/N 732 900 049) (section no. 2 or 8)*
4. *Elastic flanged nut M12 x 1.75 (2) (P/N 233 201 414) (section no. 2 or 8). Torque between 28 and 35 N•m (21 and 26 lbf•ft)*

Ensure ski leg bushings are still in ski legs.

Install skis on vehicle.

Replace vehicle on ground.

Grand Touring 800 SE Model Only

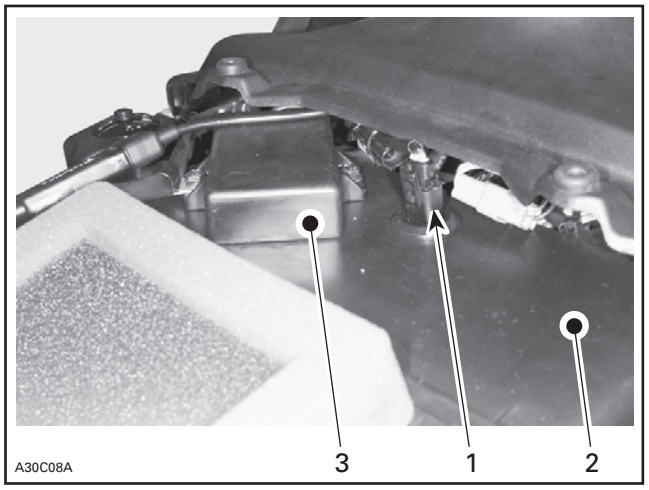
During vehicle preparation, the battery can be activated as described in *Shop Manual*.

CAUTION: Prior to charging the battery, always remove it from the vehicle to prevent electrolyte spillage. Do not charge an installed battery.

BATTERY REMOVAL

Air Intake Silencer Removal

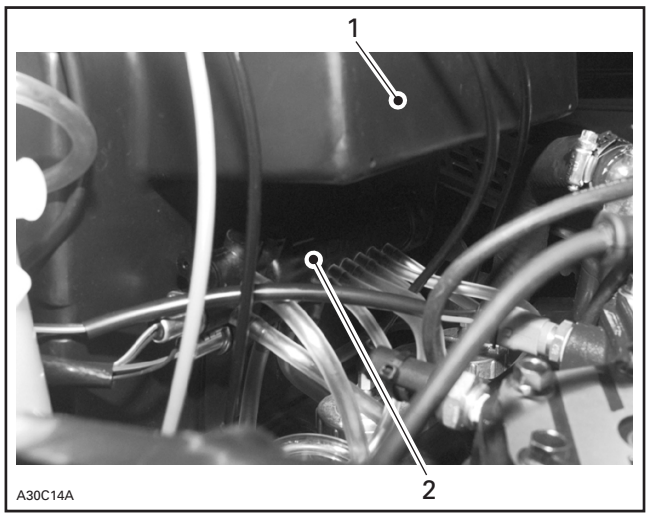
Unplug air temperature sensor connector from air intake silencer, remove MPEM module and DPM manifold, as shown in the next photos.



TYPICAL

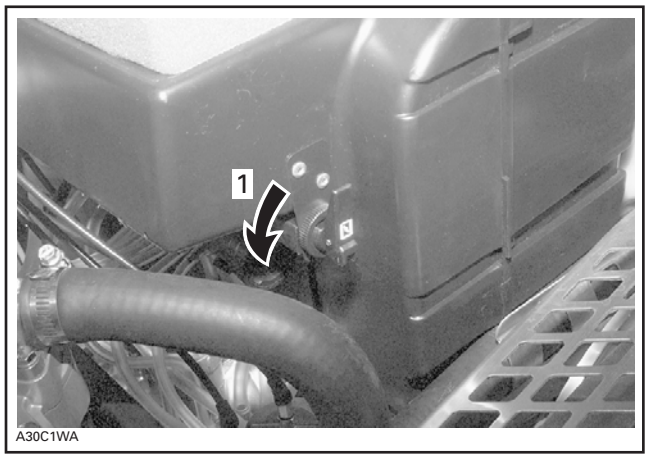
1. *Air temperature sensor*
2. *Air intake silencer*
3. *MPEM module*

Twist DPM manifold and detach from air intake silencer.



1. *Air intake silencer*
2. *Detach DPM manifold*

Unscrew choke from air intake silencer.



1. *Unscrew and remove choke*

Remove air intake silencer.

Unfasten battery retaining strips.

Open strips and withdraw battery from vehicle.

BATTERY INSTALLATION

Position battery onto battery support on vehicle.

NOTE: To ease battery insertion, use soap with water.

Ensure that vent tube is properly connected to vehicle fitting on front frame.

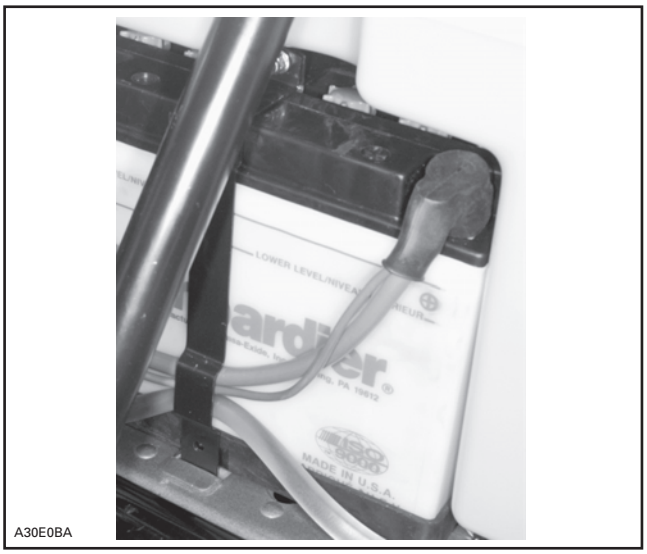
VENT TUBE PROPERLY CONNECTED

Install vent tube on battery.

NOTE: Ensure that vent tube is not kinked or blocked. To ensure a good routing, cut vent tube if necessary.

Red Positive Cable and Wire

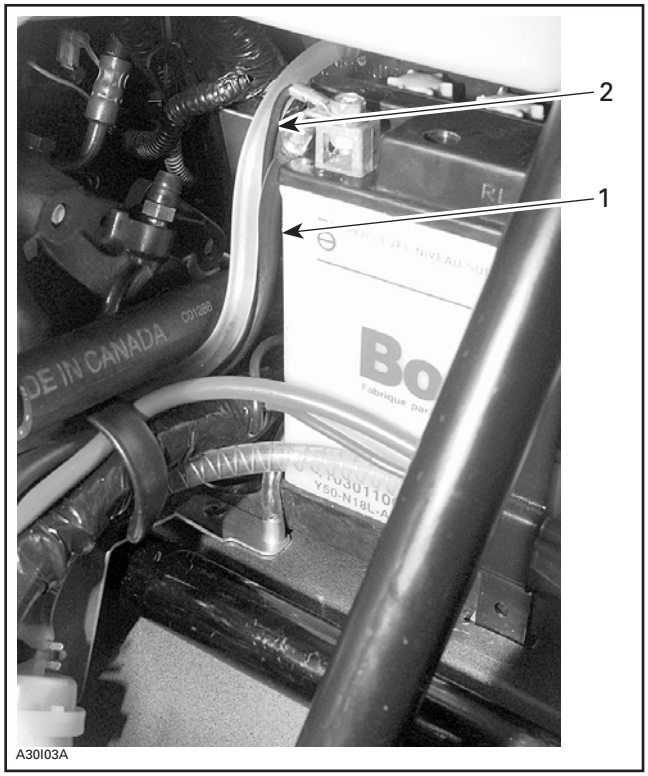
Connect RED positive cable and RED wire to positive battery terminal. Refer to the following photo for proper cable positioning.



RED POSITIVE (+) BATTERY CABLE AND WIRE POSITIONING

Black Negative Cable and Wire

Connect BLACK negative cable and BLACK wire LAST. Refer to the following photo for proper cable positioning.



1. *Black negative (-) battery cable*
2. *Black negative (-) battery wire*

⚠ WARNING

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

Apply silicone dielectric grease (P/N 293 550 004) on battery posts and connectors.

Ensure vent tube is properly installed on battery elbow.

Close and fasten retaining strips and ensure that RED positive battery cable is routed into front retaining strip recess.

Reinstall air intake silencer, choke, DPM manifold, DPM module and air temperature sensor.

NOTE: It can be useful to coat carburetors intakes with oil to facilitate air silencer installation.

Mach Z Standard Model Only

Adjust handlebar temporarily and tighten nuts loosely for now.

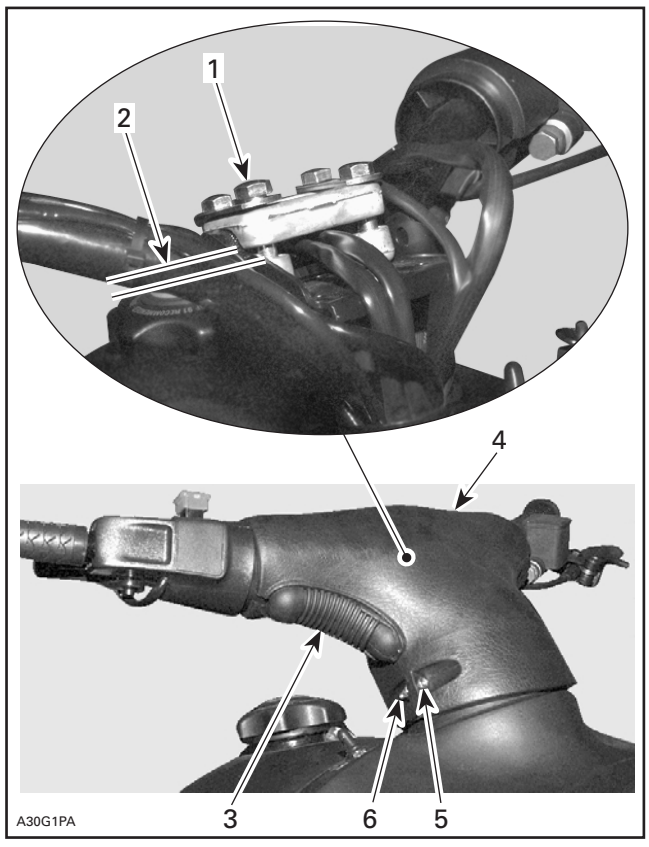
Loosen Allen screw of throttle and brake handle housings, at least 3 turns.

Install steering pad temporarily, and adjust for proper fit with console.

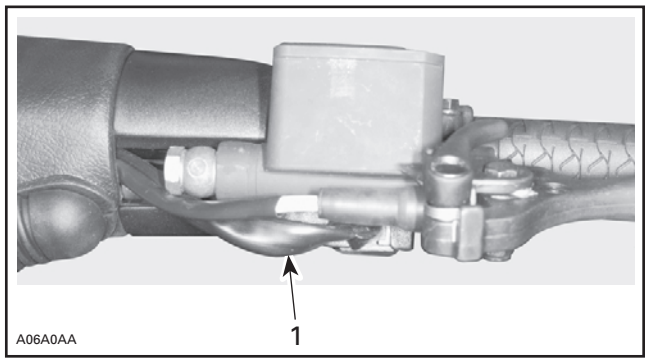
Remove steering pad and torque nuts between 21 and 28 N•m (16 and 20 lbf•ft) in a criss-cross sequence. Make sure gap is equal each side of clamps.

Reinstall steering pad, adjust and tighten throttle and brake handle housings.

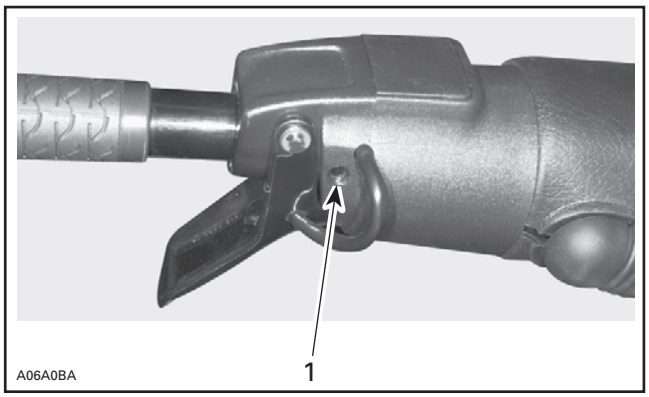
NOTE: While reinstalling handlebar and pad, make sure brake oil reservoir cover is level.



1. Torque nuts between 21 and 28 N•m (16 and 20 lbf•ft)
2. Equal gap each side (both clamps)
3. Keyway (2) (P/N 572 106 200) (section no. 3)
4. Steering pad (box)
5. Bolt (2) (P/N 208 652 044) (section no. 4)
6. Nut (2) (P/N 233 251 414) (section no. 4)



BRAKE HANDLE HOUSING
*1. Torque Allen screw to 2 N•m (18 lbf•**in**)*



THROTTLE HANDLE HOUSING
*1. Torque Allen screw to 2 N•m (18 lbf•**in**)*

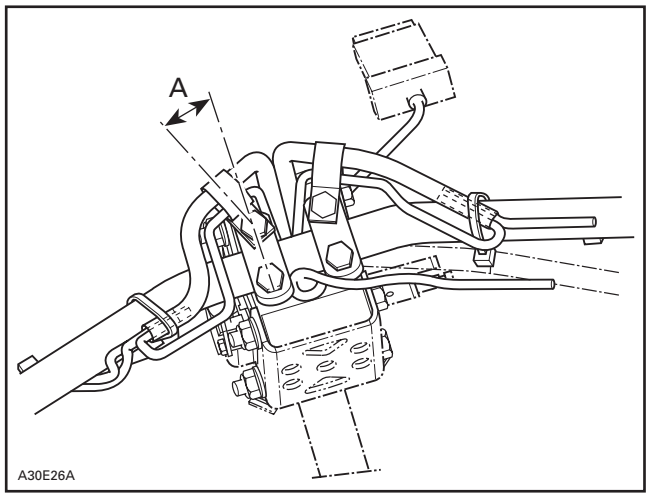
ADJUSTABLE STEERING

Grand Touring 800 SE and Mach Z Tech Plus Models

CAUTION: Never hang snowmobile by handlebar. This can impair adjustable steering mechanism.

Adjust handlebar when the mechanism is in the middle position.

Adjust retaining tabs to 25° ± 10° and tighten nuts between 21 and 28 N•m (16 and 20 lbf•ft).

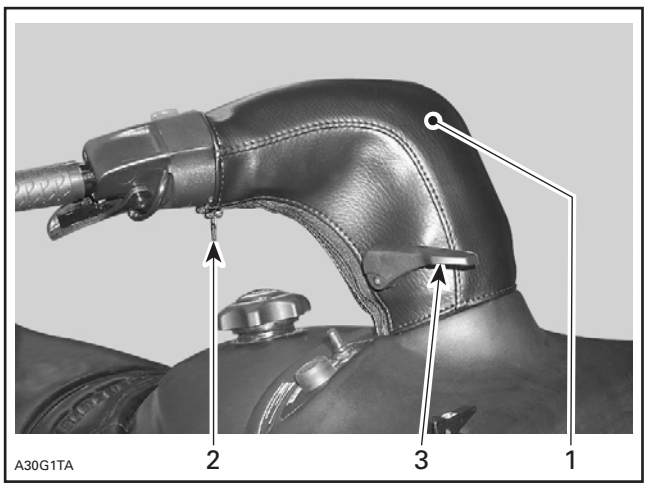


A. 25° ± 10°

Install steering foam properly to make it fit with console.

Cover steering foam with steering pad and zip it both sides.

Install lever with screw (section no. 3 or 6) using an Allen key. Torque from 2.5 to 3.0 N•m (23 to 27 lbf•**in**).



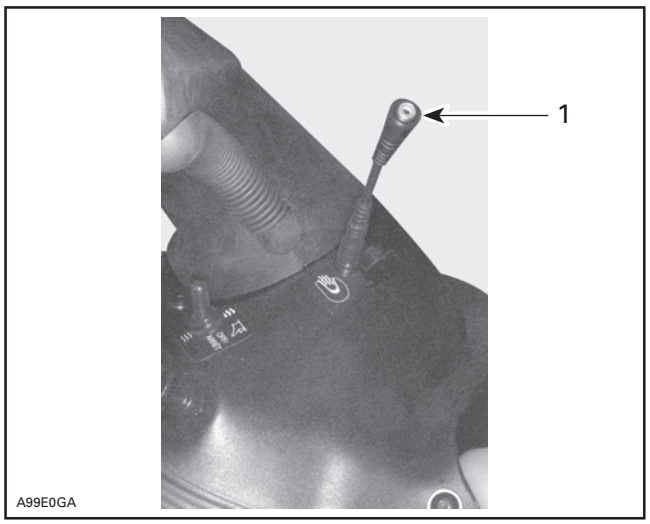
1. Steering Pad
2. Zipper
3. Steering Adjustment Lever

Adjust and tighten throttle and brake handle housings (if needed).

Heating Visor Extension

Grand Touring 800 SE Only

Meanwhile installing steering pad, open heating visor plug and install extension provided in predelivery kit.



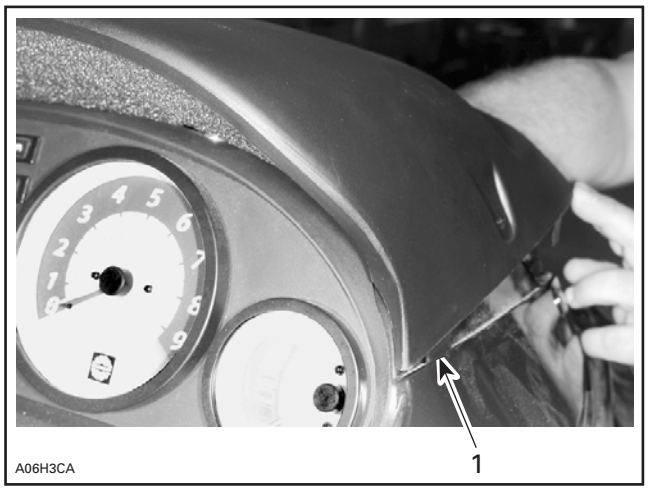
TYPICAL — INSTALLED, THE CUSTOMER ISN'T LIKELY TO LOOSE THAT PART

1. Heating visor extension (P/N 515 175 161) (section no. 9)

NOTE: Air deflector with foam must be installed before windshield.

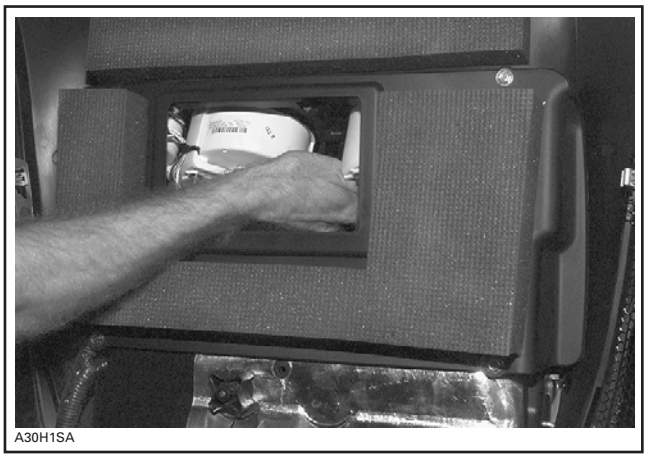
AIR DEFLECTOR

Position air intake deflector tabs (left and right side) into hood slots, as shown in the next photo.



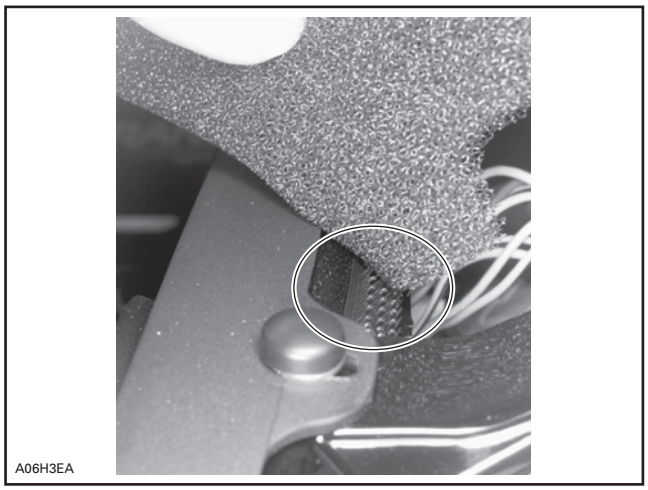
1. Air intake deflector tabs (right side)

Holding air intake deflector, insert one hand underneath hood, in gauges housing and attach air intake foam to hood Velcro.



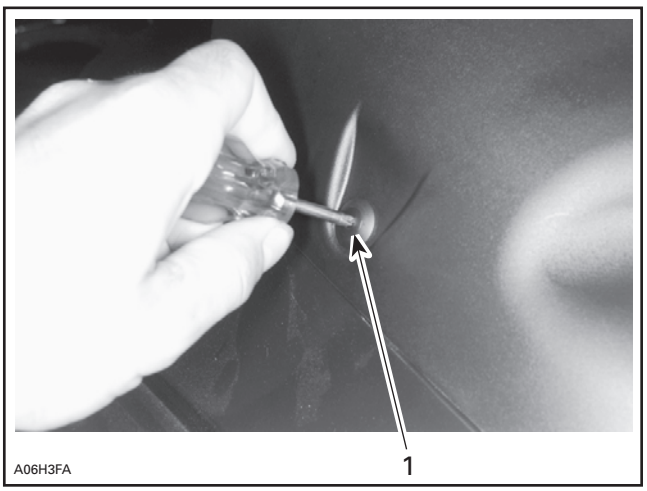
FROM UNDERNEATH HOOD, GOING THROUGH GAUGES HOUSING, ATTACH FOAM TO VELCRO

NOTE: Ensure that air intake foam is properly attached to Velcro. See next photo.



AIR INTAKE DEFLECTOR HAS BEEN REMOVED TO SHOW WHERE AND HOW TO ATTACH AIR INTAKE FOAM TO HOOD

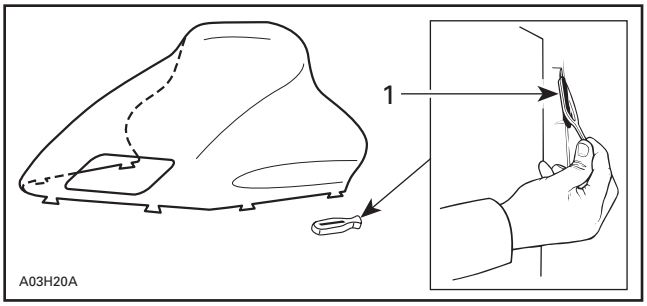
Secure air intake deflector using darts (one on each side), as shown in the next photo.



1. Dart (P/N 414 745 900) (section no. 2 or 3). Push to set in place

Remove protective films and install windshield on dashboard. Secure with windshield latches.

TYPICAL — WINDSHIELD INSTALLED ON DASHBOARD

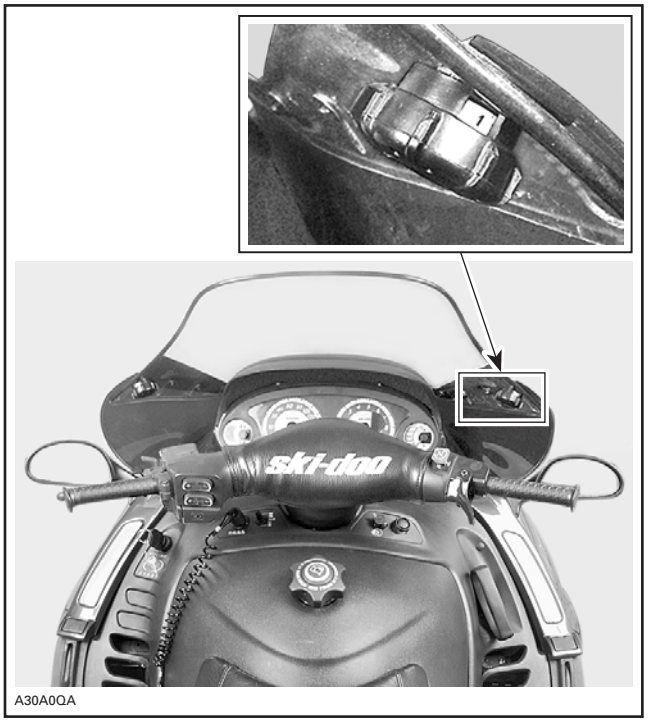


1. Latch (6) (P/N 570 023 800) (4 in section no. 1 or 5)

WINDSHIELD ADJUSTMENT

Grand Touring 800 SE and Mach Z Tech Plus Models Only

To adjust new windshield on Grand Touring SE, always sit on snowmobile and turn both adjustment buttons at the same time. Failure to do so may jam the mechanism.



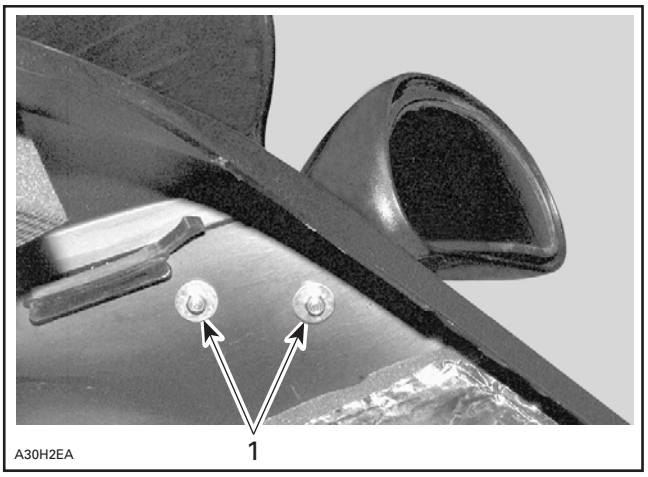
BOTH LEFT AND RIGHT BUTTON MUST BE TURNED AT THE SAME TIME

NOTE: Customers must be advised of this item prior to snowmobile delivery.

MIRRORS

Grand Touring 800 SE Models Only

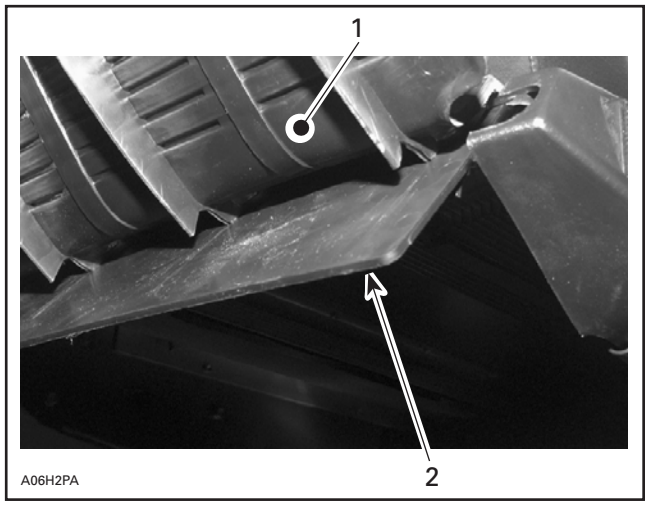
Install right and left mirrors using washers and nuts provided in bag.



*1. Washers and nuts. Torque to 2.0 N•m (18 lbf•**in**)*

Insert and position snow guard onto chassis, between rear moldings.

Slide and position snow guard protector pad between snow guard and chassis.

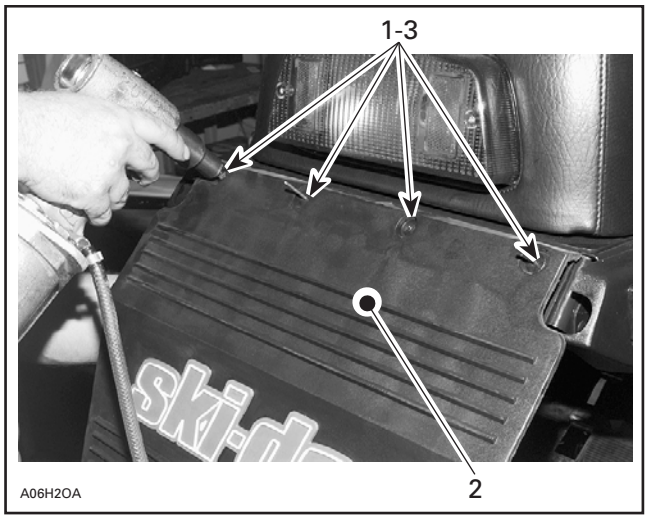


TYPICAL — VIEW FROM UNDER SNOW GUARD

1. *Snow guard (box)*
2. *Snow guard protector pad (box)*

Secure the two parts with rivets.

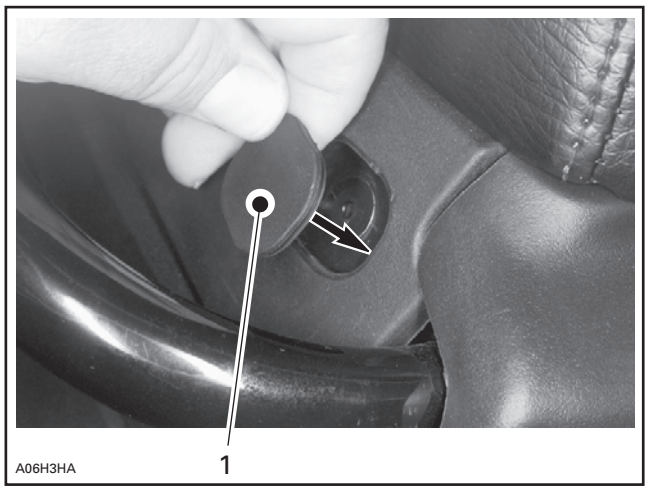
NOTE: Place washers inside tunnel.



TYPICAL

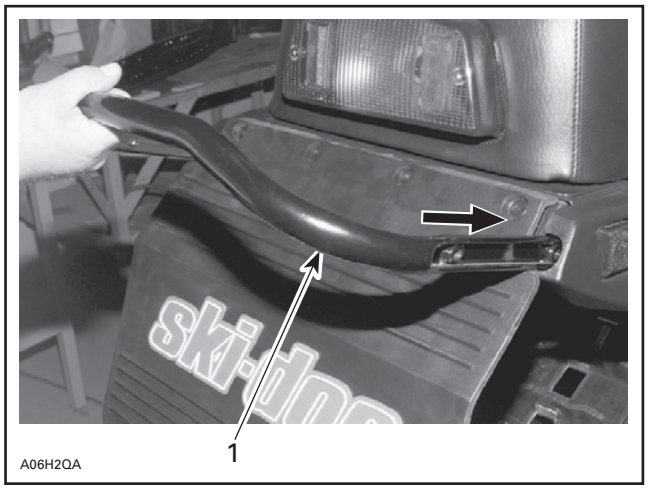
1. *Rivet (4) (P/N 390 908 000) (section no. 3)*
2. *Snow guard (box)*
3. *Washer (4) (P/N 517 225 900) (section no. 3). Position washer inside tunnel*

Finalize snow guard installation with caps, as shown in the next photo.



1. *Cap (4) (P/N 415 073 300) (section no. 3)*

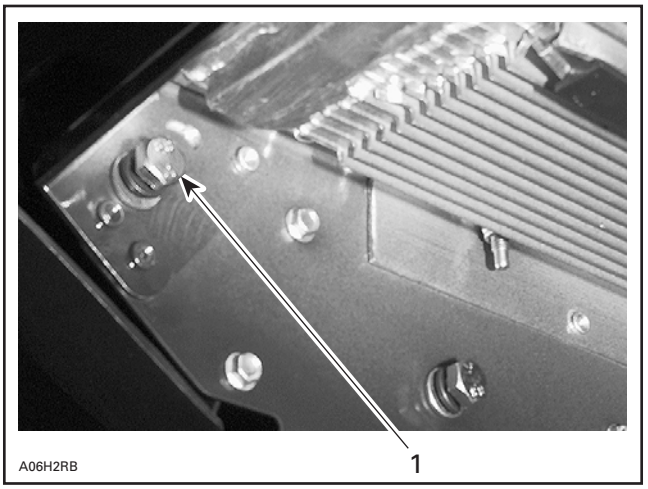
Install rear bumper to chassis.



SLIDE BUMPER INSIDE REAR MOLDINGS

1. Rear bumper (box)

Secure bumper from inside of tunnel.



TYPICAL — VIEW FROM INSIDE OF TUNNEL

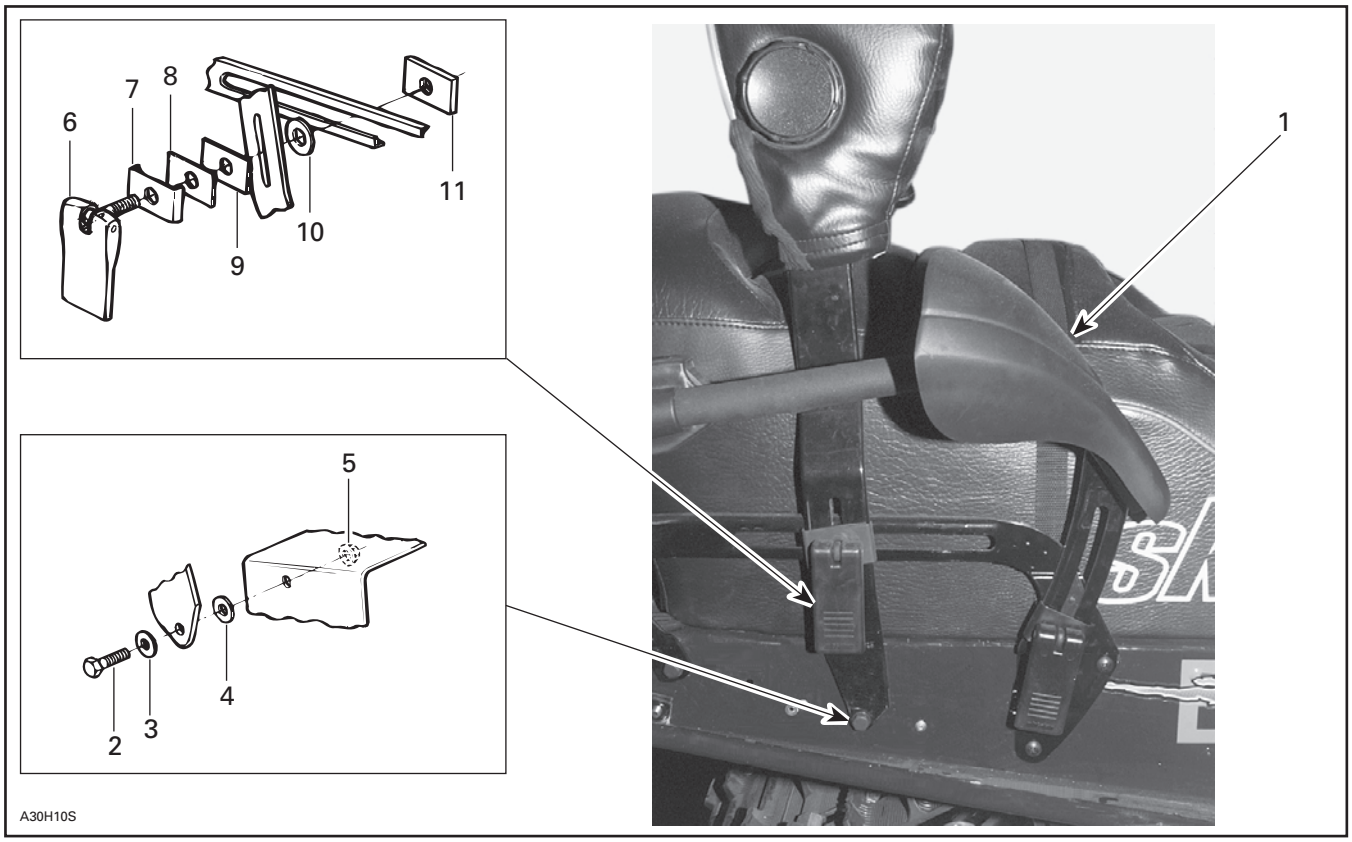
1. Bolt M8 (4) (P/N 207 182 044) (section no. 1). Torque to 15 N•m (11 lbf•ft)

Grand Touring 800 SE Model Only

Remove mouldings and secure backrest frame on tunnel then install lever assembly onto luggage rack rail as explained on following drawing.

Install hand protectors with rivets (P/N 390 907 700) onto luggage rack handle.

Reinstall mouldings.



1. Handle protector (2). Secure with rivets (section no. 6)
2. Screw (2) (P/N 207 182 584) (section no. 4)
3. Washer (2) (P/N 234 081 670) (section no. 5)
4. Plastic washer (2) (P/N 414 819 600) (section no. 3)
*5. Elastic nut (2) (P/N 232 581 414) (section no. 4). Torque to 8 N•m (73 lbf•**in**)*
6. Lever assembly (2) (P/N 580 611 000) (section no. 5)
7. Guide (2) (P/N 517 257 300) (section no. 3)
8. Rubber shim (2) (P/N 570 027 400) (section no. 4)
9. Spacer (2) (P/N 517 251 300) (section no. 5)
10. Flanged washer (2) (P/N 414 819 500) (section no. 2)
11. Threaded plate (2) (P/N 517 250 000) (section no. 2)

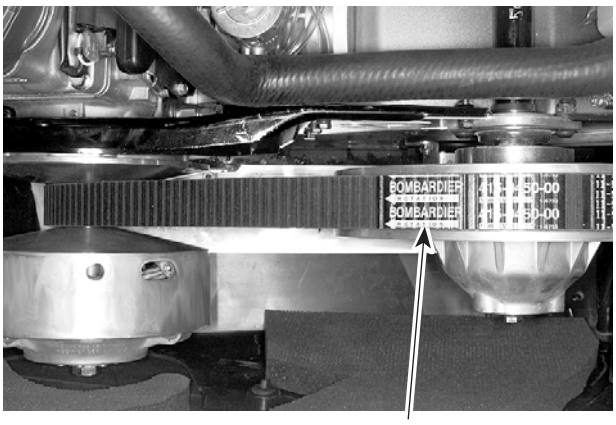
Turn adjustment knob left or right to adjust backrest cushion position.


A03H25A

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

NOTE: Take care to install belt so that arrows point toward front of snowmobile.



A30D0DA

1. Arrows pointing toward front

BREAK-IN PERIOD

Supplemental Oil

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER injection oil (P/N 413 802 900 — 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

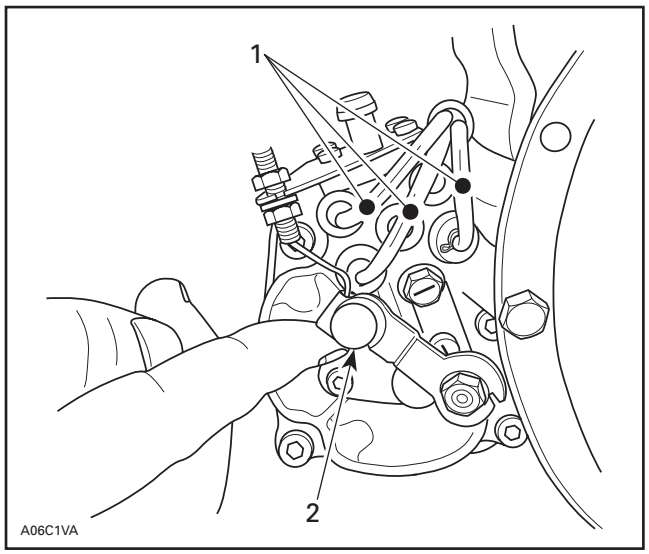
Bleeding Procedure

Check for air bubbles in main line. If huge bubbles or if no oil is found, bleed main line as described in *Shop Manual*. Add injection oil in oil tank as required.

Although set in factory, check also for proper oil lever adjustment. Mark on pump body must align with mark on lever when throttle lever is activated just enough to take all cable play.

Bleed the small oil lines between pump and engine crankcase by running engine at idle while holding the pump lever in fully open position.

NOTE: To ease pump lever holding, make a J hook out of mechanical wire to lift the lever.

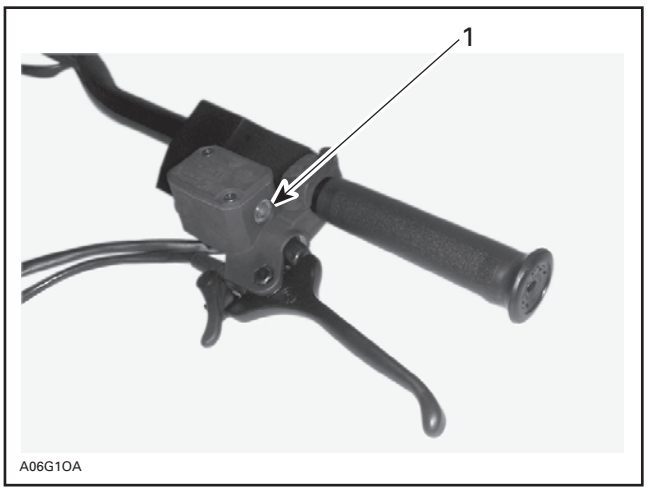


TYPICAL

1. *Small oil line*
2. *Engine at idle (fully open position)*

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT 4) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.



1. *Minimum level window*

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on belt guard.

1. Adjustment chart
2. Belt guard

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

When track adjustment is completed, install wheel caps provided in predelivery kit (section no. 4 or 9).

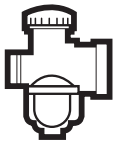
NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap to get out from its location due to soap residual.

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquiries should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODELS			GRAND TOURING SE	MACH Z TECH PLUS	MACH Z STANDARD
	Engine Type			809		
	Maximum HP RPM ①		± 100 RPM	8000	8300	
	Reed valve		P/N	420 924 519		
	Carburetor Type			PTO TM 38 - C321 CTR TM 38 - C321 MAG TM 38 - C321	PTO TM 38 - C317 CTR TM 38 - C317 MAG TM 38 - C317	
	Main Jet			PTO 450 • CTR 470 • MAG 470 •	PTO 290 • CTR 290 • MAG 290 •	
	Needle Jet			O-2 (876)	O-2 (327)	
	Pilot Jet			15	50	
	Needle Identification — Clip Position			8BCY01/42-4	8ADY1/41-3	
	Slide Cut-Away			2.0		
	Float Adjustment		± 1 mm (± 0.04 in)	21.0 (0.83)		
	Air Screw Adjustment		± 1/16 turn	—	4.5	
	Idle Speed RPM		± 200 RPM	2000 •		
	Gas Grade Octane Number		(R + M)/2	Super unleaded 91		
	Gas/Oil Ratio			Injection		
	Ignition Timing BTDC ② ③		mm (in)	2.59 (.102)		1.94 (0.076)
	Trigger Coil Air Gap		mm (in)	0.55 - 1.45 (.022 - .057)		
	Gear Ratio		Teeth	24/43	26/43	
	Engagement Speed		± 100 RPM	3300	4200	
	Drive Pulley Calibration Screw Position			3		
	Pulley Distance	Z ④	(+ 0, - 0.5) mm ((+ 0, - 1/64) in)	121.0 (4-3/4)		
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-13/32)		
		Y	± 0.5 mm (± 1/64 in)	Dimension Y must exceed X of 1 mm (1/32 in)		
	Drive Belt Adjustment	Deflection	mm (in)	38 (1-1/2)		
		Force ⑤	kg (lbf)	11.50 (25.4)		
	Driven Pulley Preload		± 0.7 kg (± 1.5 lbf)	0.0		7.0 (15.4)
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation		
	Track Adjustment	Deflection		30 to 35 mm (1-3/16 to 1-3/8 in) with a 7.3 kg (16 lb) downward pull		

① Engine speed at which maximum power is achieved.
② At 3500 RPM (engine cold) with headlamp turned on.
③ During the first 8 hours, the timing curve is retarded by 2° between 4500 RPM and maximum RPM. Because checking ignition timing is done at lower RPM, this will not affect the 3500 RPM timing specification.
④ Distance to be adjusted after a 10-hours break-in period.
⑤ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center
ATDC: After Top Dead Center
PTO: Power Take OFF side
CTR: Center
MAG: Magneto side

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-7**

Date: August 25, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	PACKAGE	MODEL NUMBER	SERIAL NUMBER
2001	MX Z 700	X	1670/1671/1672/ 1673/1674/1675	All
		Adrenaline	1680/1681/1682/ 1683/1684/1685	
		Standard	1686/1687/1688/1689/1690	
		Trail	1676/1677/1678/1679	

This bulletin must be used in conjunction with the *Check List* enclosed in the bag with the *Operator's Guide*. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

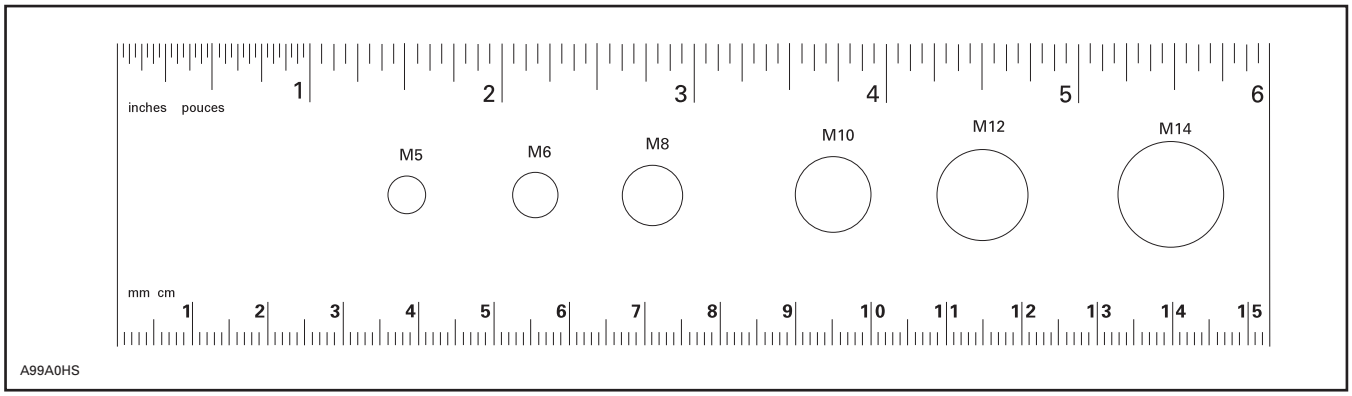
To obtain limited warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

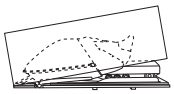
The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook, Predelivery Check List* signed copy and *Video*.

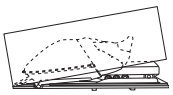
There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.



NOTE: This ruler can be helpful to identify fastener length or size.



UNCRATING



PREDELIVERY KIT P/N	MODELS
549 010 880	All Models

⚠ WARNING

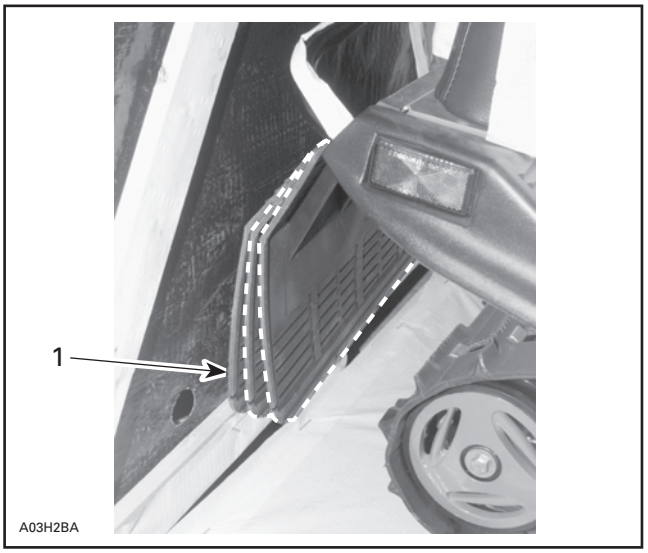
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

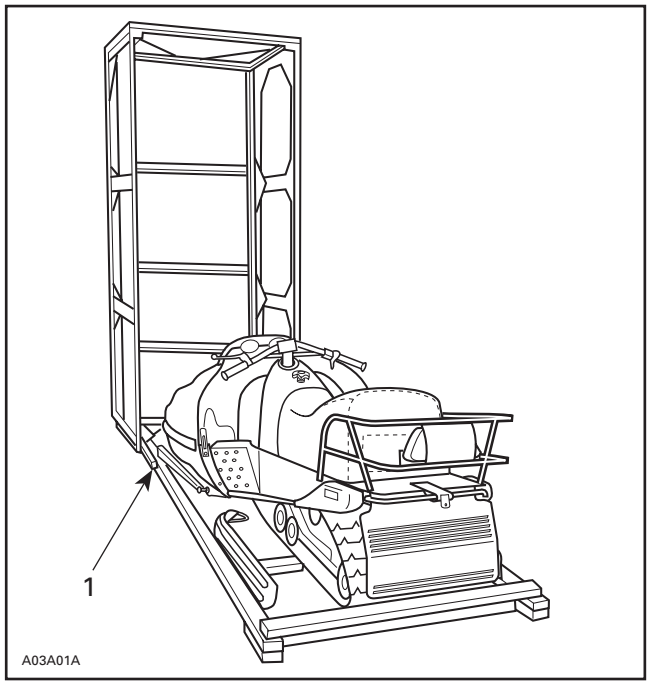
Remove all screws retaining cover to vehicle base. Tip cover toward front or rear of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging any part of the snowmobile.

NOTE: If cover is tilted toward front of vehicle, snow guard may interfere with crate cover, as shown in the following photo. Push on snow guard when lifting cover.



IF CRATE COVER IS TILTED TOWARD FRONT OF VEHICLE, FROM OUTSIDE CRATE PUSH ON SNOW GUARD TO ALLOW COVER TO LIFT WITHOUT DAMAGING SNOW GUARD

1. Snow guard interfering with crate cover



1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Remove ropes and cut locking ties retaining windshield.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts and slider cushions in order to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove steering pad, predelivery kit, shock absorbers and drive belt from engine compartment.

HOOK REMOVAL

Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

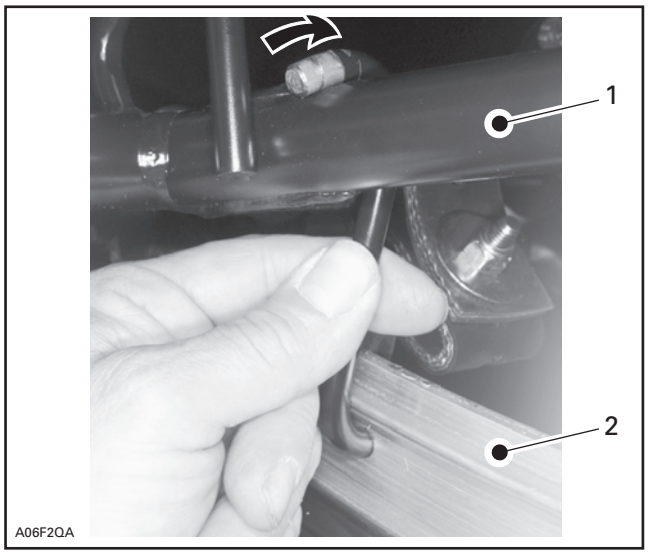
From left side of vehicle, cut locking tie retaining hook, then apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



TYPICAL — REMOVE HOOK

1. *Front arm*
2. *Runner*

⚠ WARNING

Hook must be removed to have snowmobile suspension operational.

PARTS INSTALLATION
FRONT SUSPENSION

Make sure park brake is applied.

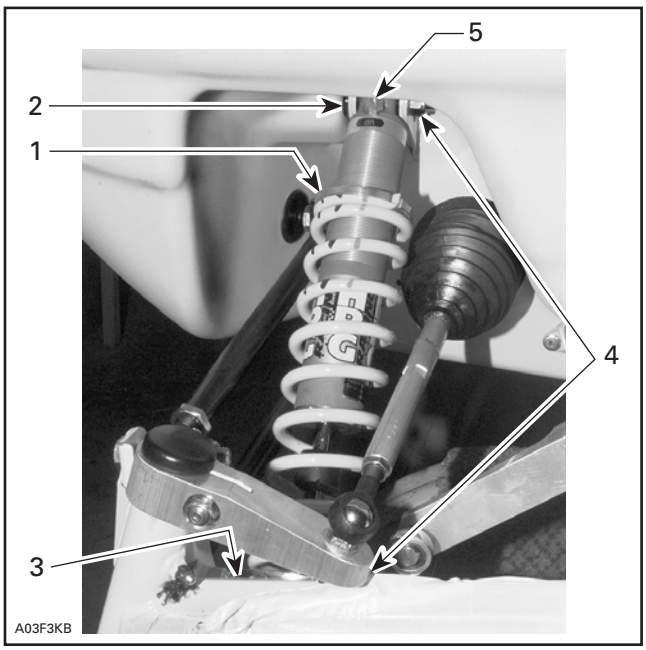
Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

All Models Except MX Z 600, X Package

Secure shock absorbers to suspension with their adjusting ring at top.

NOTE: Position screw heads toward front of vehicle and secure with nuts provided in predelivery kit (section no. 3). Make sure decal edges are toward inside vehicle.

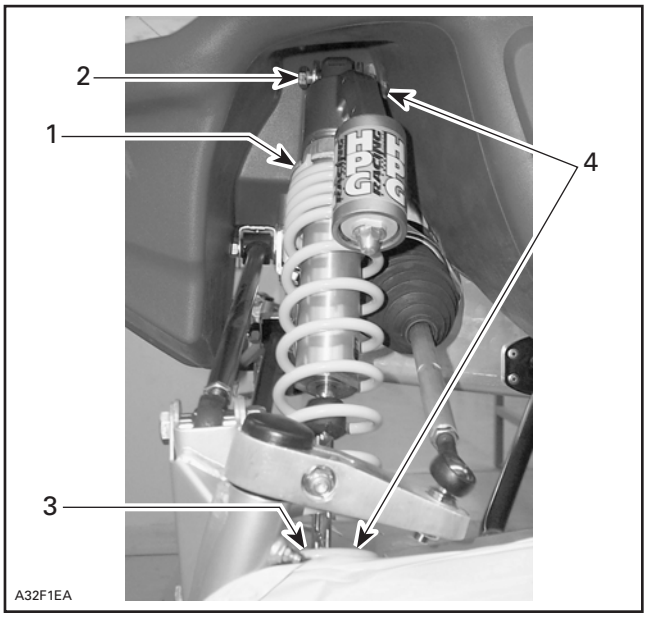


TYPICAL — LH SIDE SHOWN

1. *Shock absorber (2) adjusting ring at top*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Elastic nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*
5. *Valve*

MX Z 600, X Package

Secure shock absorbers to suspension with their adjusting ring at top. There is a left and a right shock. Do not mix them. Reservoir must stand toward back of vehicle as shown on next photo.

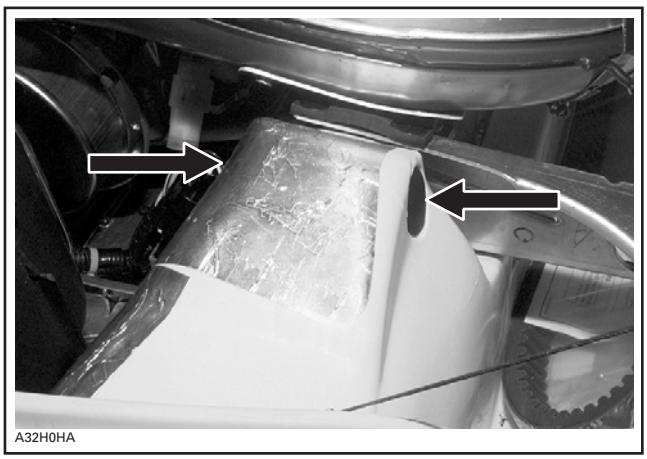


LH SIDE SHOWN

1. *Shock absorber (2) (predelivery box) adjusting ring at top*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Elastic nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*

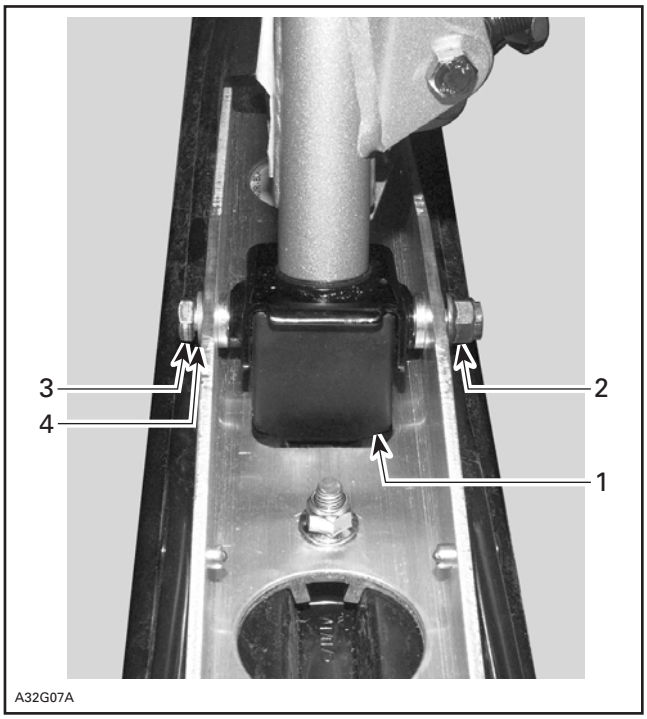
All Models

Install caps provided in predelivery kit on bottom pan, each side of upper bolt.



SNAP PROVIDED CAP (SECTION NO. 5) (P/N 414 916 600) EACH SIDE OF MOLDING

Install skis on vehicle.



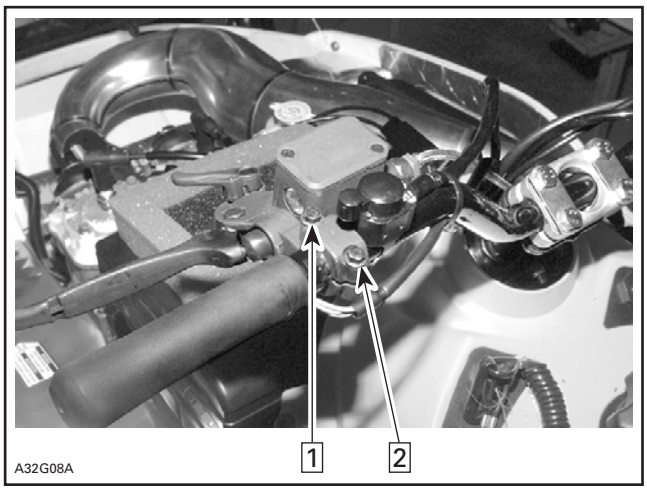
RIGHT SIDE SHOWN

1. *Ski stopper (2) (section no. 3) (P/N 506 151 233) with higher side toward front*
2. *Flanged Nut M10 (2) (P/N 732 610 084). Torque to 32 N•m (27 lbf•ft)*
3. *Bolt M10 (2) (ski leg)*
4. *Washer (2) (P/N 732 900 049) installed on bolt head side*

PARTS INSTALLATION
STEERING PAD

Adjust handlebar and tighten nuts between 21 and 28 N•m (16 and 20 lbf•ft).

Turn brake housing to level brake oil reservoir. Secure front screw first, then rear screw. See photo.



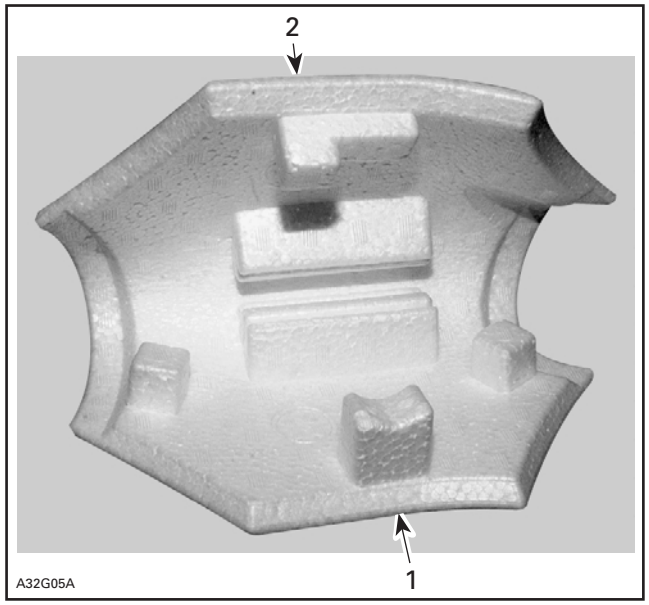
TYPICAL

Step 1: Screw this bolt first to a torque between 7 and 10 N•m (5.25 and 7.5 lbf•ft)

Step 2: Secure housing with this bolt (same torque)

Install steering foam and adjust for proper fit with console. Fit steering padding and set in place with velcros.

NOTE: Take care to install foam in the proper side.



1. *Driver's side*
2. *Engine side*

PARTS INSTALLATION
WINDSHIELD

Slip off the plastic bag from windshield and peel off protective films.

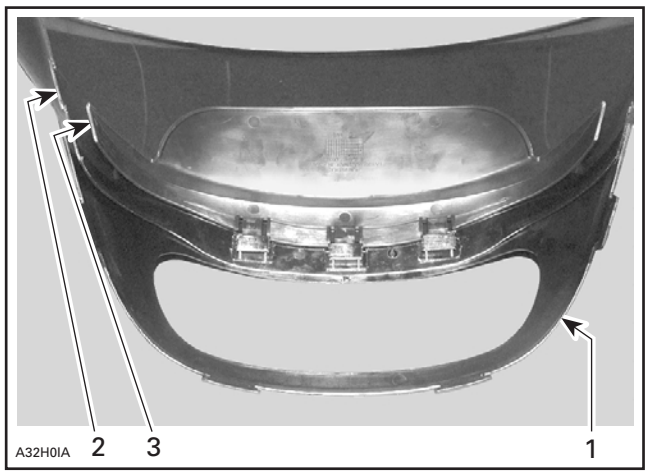
Remove headlamp protector from hood.

Unclip inner protector from headlamp protector.

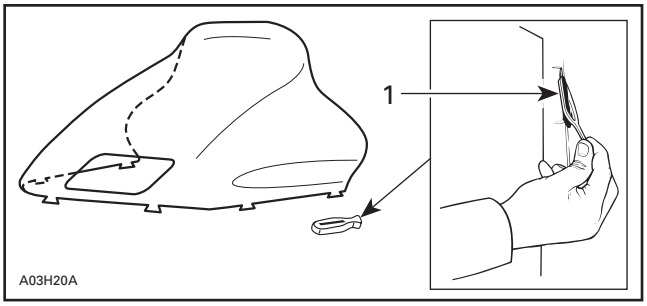
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp protector*
2. *Windshield*
3. *Inner protector*



1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 on section no. 2)*

WINDSHIELD INSTALLED

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

LIQUIDS
OIL INJECTION PUMP BLEEDING

BREAK-IN PERIOD SUPPLEMENTAL OIL

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER injection oil (P/N 413 802 900 — 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

PUMP ADJUSTMENT

Oil injection pump is factory set. However, if adjustment needs to be checked or modified, refer to special *Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (ex.: locking tab, elastic stop nut, self-locking fasteners, etc.) must be installed or replaced with new ones where specified. If the efficiency of a locking device is impaired, it must be renewed.

⚠ WARNING

Make sure cable is free to swivel in lever end.

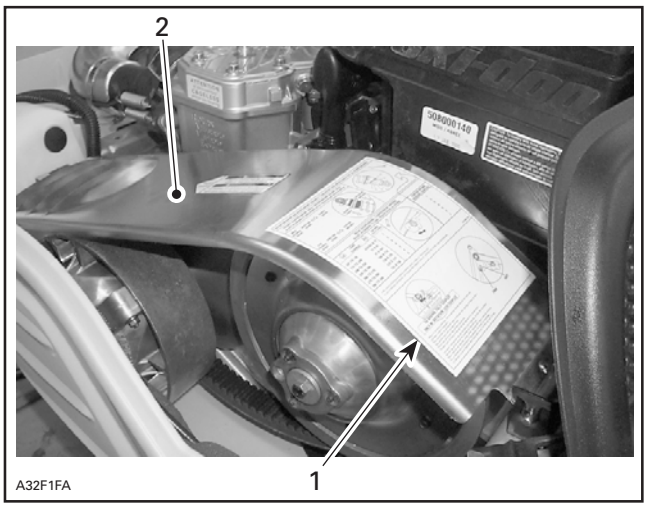
LIQUIDS
BRAKE FLUID LEVEL

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT 4) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



TYPICAL

1. *Adjustment chart*
2. *Pulley guard*

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

When completed, install wheel caps (P/N 570 063 600) provided in predelivery kit (section no. 4).

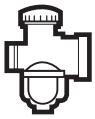
NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap to get out from its location due to soap residual.

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquiries should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODELS			MX Z 700 PACKAGES: X ADRENALINE	MX Z 700 PACKAGES: STANDARD TRAIL
	Engine type			693	
	Maximum HP RPM ①		± 100 RPM	8000	
	Reed valve		P/N	420 867 870	
	Carburetor type			PTO TM 40 - B-97, MAG TM 40 - B-97 ②	•
	Main jet			PTO 520, MAG 520	•
	Needle jet			P-0	•
	Pilot jet			17.5	•
	Needle identification — clip position			9ZLY3-58	•
	Slide cut-away			2.0	•
	Float adjustment		± 1 mm (in)	—	•
	Air screw adjustment		± 1/16 turn	—	•
	Idle speed RPM		± 200 RPM	1500	•
	Gas grade/ Octane number		(R + M)/2	Regular unleaded/87	
	Gas/oil ratio			Oil injection	
	Ignition timing BTDC ③ ④		mm (in)	3.36 (0.132)	
	Trigger coil air gap		mm (in)	0.55 - 1.45 (.022 - .057)	
	Gear ratio		Teeth	25/43	
	Engagement speed		± 100 RPM	3800	
	Drive pulley calibration screw position			3	
	Pulley distance	Z	± 0.5 mm (± 0.020) in	16.5 (21/32)	
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-13/32)	
		Y	± 0.5 mm (± 1/64 in)	Dimension Y must exceed X of 1 mm	
	Drive belt adjustment	Deflection	mm (in)	32 (1-1/4)	
		Force ⑤	kg (lbf)	11.34 (25)	
	Driven pulley preload		± 0.7 kg (± 1.5 lbf)	8.0 (17.643)	•
	Drive chain tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track adjustment	Deflection	mm (in)	30 to 35 (1-3/16 to 1-3/8) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.
② With a DPM.
③ At 3500 RPM (engine cold) with headlamp turned on.
④ During the first 8 hours, the timing curve is retarded by 3° between 4500 RPM and maximum RPM. Because checking ignition timing is done at lower RPM, this will not affect the 3500 RPM timing specification.
⑤ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center

PTO: Power Take OFF side

MAG: Magneto side

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SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-6**

Date: August 25, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2001	Mini Z*	1818	All

This bulletin must be used in conjunction with the check list enclosed in the bag with the *Operator's Guide*. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

To obtain limited warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Predelivery Check List* signed copy and *video*.

Printed in Canada (Mbl-2001-008a.fm SG)

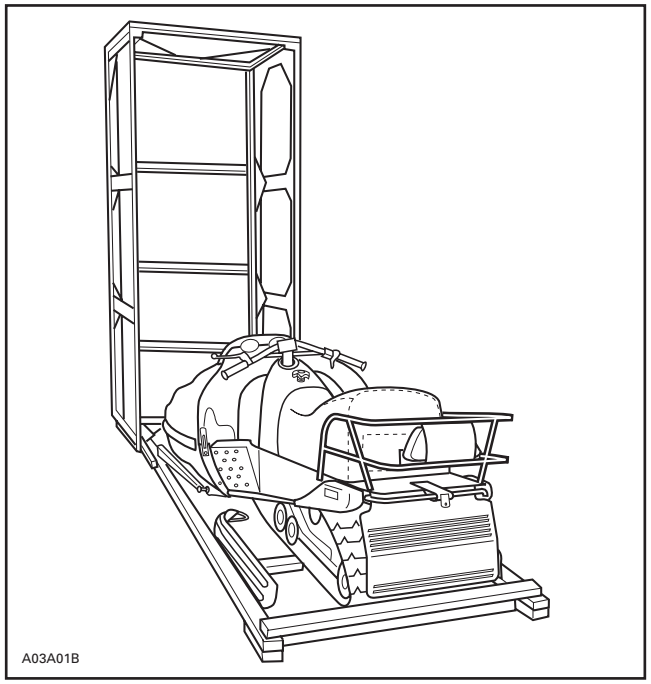
⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

Remove all screws retaining cover to crate base. Tip cover toward front of vehicle. Lift cover slowly to avoid damaging the snow guard or taillight.

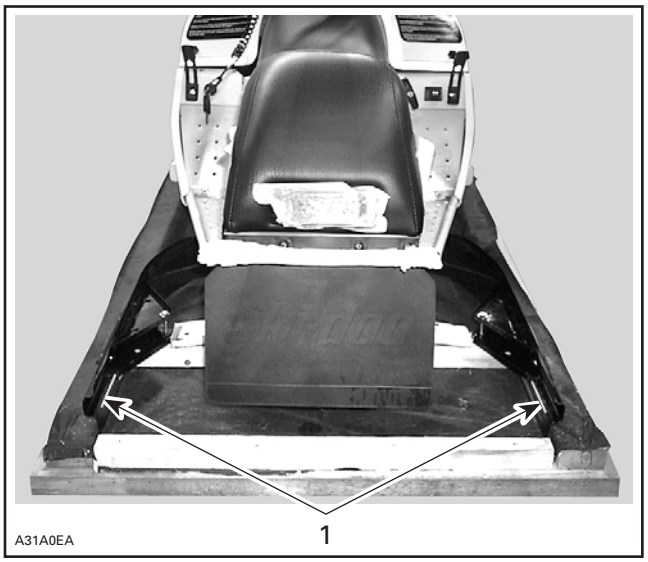


TYPICAL

Remove predelivery bag from engine compartment.

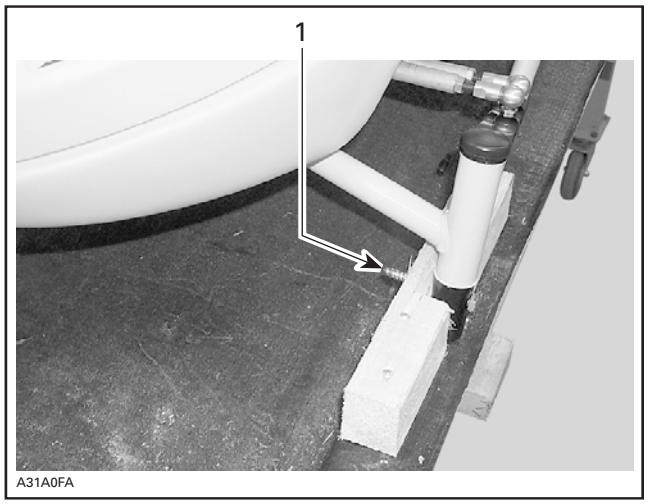
CAUTION: Make sure vehicle is properly supported before removing ski legs from crate brackets.

Detach skis from the crate base.



1. Detach skis from crate

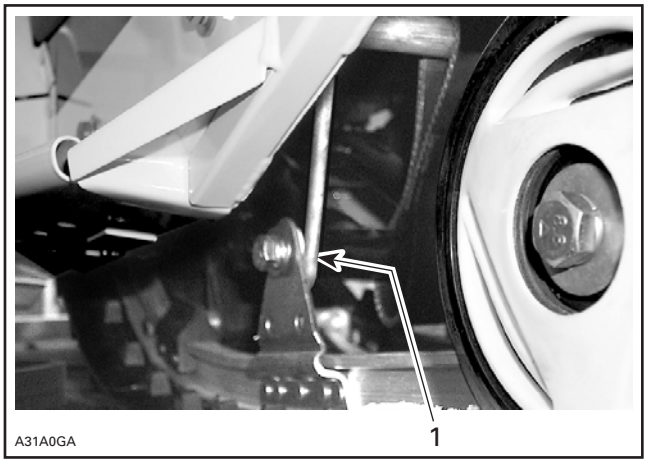
Detach ski legs from crate. Discard screws.



1. Remove screws

Remove vehicle from base.

Lean on vehicle seat to apply pressure on rear suspension and remove hook from rear portion of suspension.



1. Hook to be removed

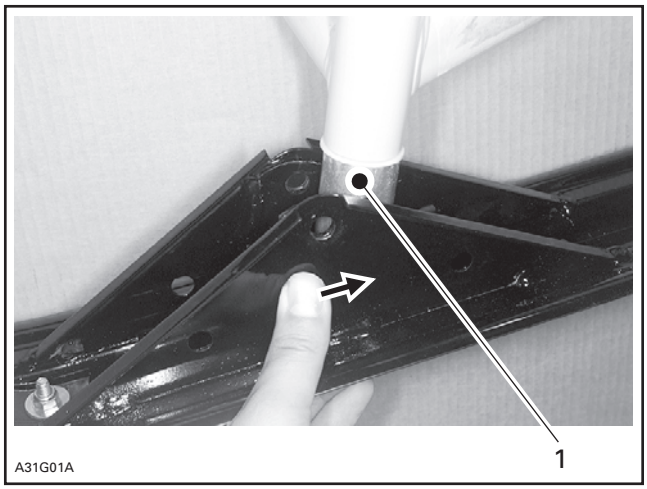
⚠ WARNING

Hook must be removed to have snowmobile suspension operational.

Lift front of vehicle to install skis.

Make sure that ski leg spacers are still on ski legs.

Slide ski on ski leg as shown in the next photo.

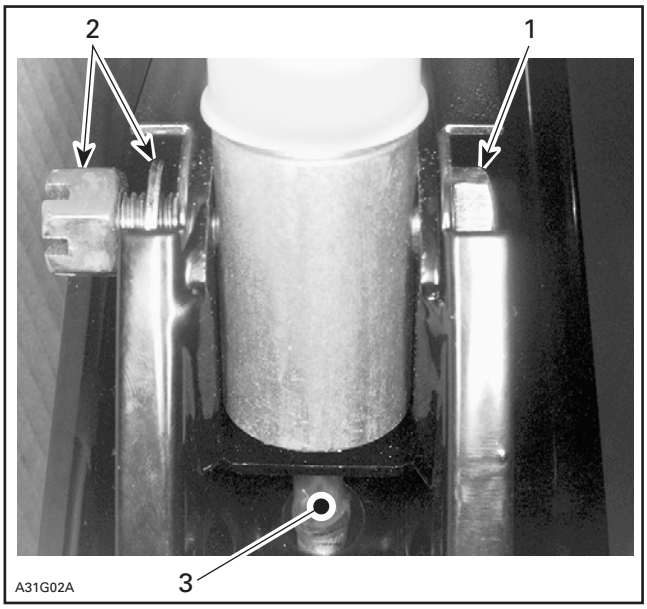


SLIDE SKI

1. Ski leg spacer

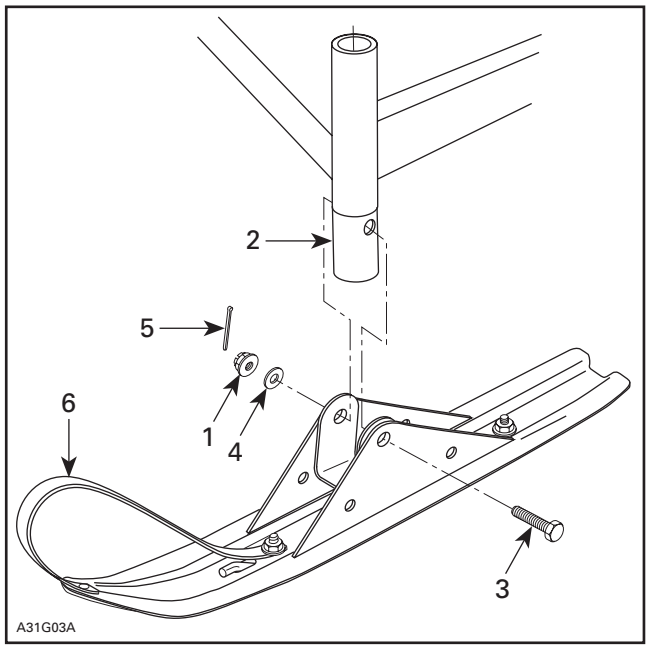
Ensure that ski pin is properly centered into ski leg, as shown in the following photo.

Install ski bolt, washer, nut and cotter pin.



1. Bolt head toward OUTSIDE of vehicle
2. Washer, nut and cotter pin (not shown) toward inside of vehicle
3. Ski pin centered into ski leg

Replace vehicle on ground.



LEFT SIDE SHOWN

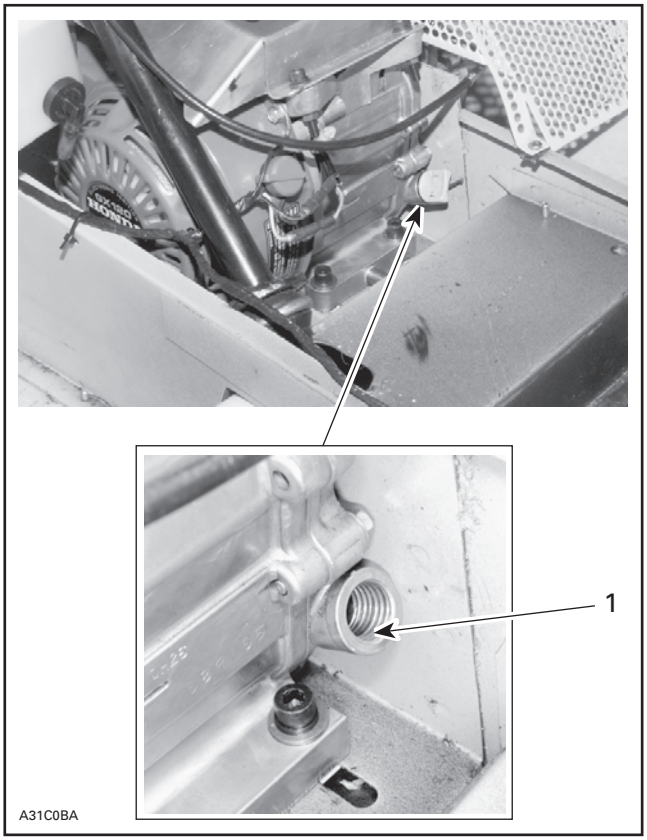
*1. Nut M10 (2) (P/N 232 201 414 in predelivery bag). Torque to 3 N•m (27 lbf•**in**)*
2. Spacer (2) (ski leg)
3. Bolt M10 (2). Bolt head from outside vehicle
4. Washer (4) (ski leg)
5. Cotter pin (2) (P/N 371 800 200 in predelivery bag)
6. Twist ski to ease bolt installation

PARTS INSTALLATION
WINDSHIELD

Peel off protective film from windshield.

LIQUIDS
ENGINE OIL LEVEL

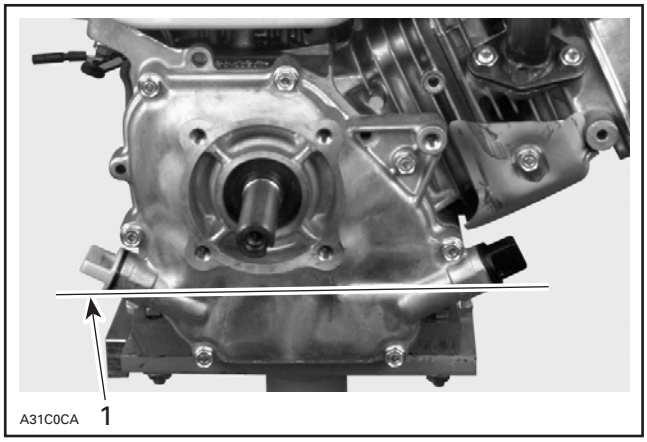
Check engine oil level. Add SAE 5W/30 recommended oil as required. Refer to the following photos.



ADD OIL UNTIL IT REACHES THE TOP OF THE OIL FILLER NECK

1. Top of the oil filler neck

CAUTION: When checking engine oil level in crankcase, ensure vehicle is on level ground.



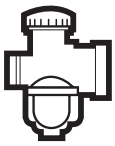
1. Proper oil level

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. Also, see TECHNICAL DATA section at the end of this bulletin.

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Further inquires should be directed to your dealer distributor service representative.

	MODEL	MINI Z
	Engine Type	4-stroke, overhead valves single cylinder, inclined at 25°, QB26, Model GX120K1 by Honda
	Maximum HP/RPM (Engine speed at which maximum power is achieved)	4.0 HP at 4000 RPM
	Lubricating System/Oil Capacity	Splash Type (Oil Bath)/0.6 L
	Carburetor Type	Horizontal Type, Butterfly Valve
	Main Jet	# 68 (Externally vented carb. bowl)
	Float Height	13.7 mm (.539 in)
	Pilot Screw Opening	2 turns out (Externally vented carb. bowl)
	Idle Speed RPM ± 150 RPM	1400 (RPM)
	Gas Grade/Pump Octane Number (R + M)/2	Regular Unleaded/87
	Ignition Timing	25° (Fixed)
	Spark Plug Type/Gap	NGK BPR6 ES/ 0.7 - 0.8 mm .028 - .031 (in)
	Drive Sprocket/Driven Sprocket teeth	10/48
	Drive Sprocket Diameter mm (in)	101.6 (4.0)
	Clutch Type	Automatic Centrifugal
	Chain Type	Standard Rollers Type 40/78
	Chain Pitch mm (in)	12.7 (0.5)
	Track Alignment	Equal distance between edges of track guides and slider shoes
	Track Deflection	35 mm (1-3/8 in) Measure gap between slider shoe and bottom inside of track when exerting a downward pull of 7.3 kg (16 lb) to the track

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SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-9**

Date: September 22, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	PACKAGE	MODEL NUMBER	SERIAL NUMBER
2001	Formula Deluxe 700	GSE	1764/1765/1766/1767	All
		GS	1768/1769/1770/1771/1772	
	Formula Deluxe 600	GSE	1831/1832/1833/1834	
		Standard	1773/1774/1775/1776/1777	
	Formula Deluxe 500	Standard	1778/1779/1780/1781	

This bulletin must be used in conjunction with the check list enclosed in *Operator's Guide* bag. Make sure that predelivery check list is completed and signed.

⚠ WARNING

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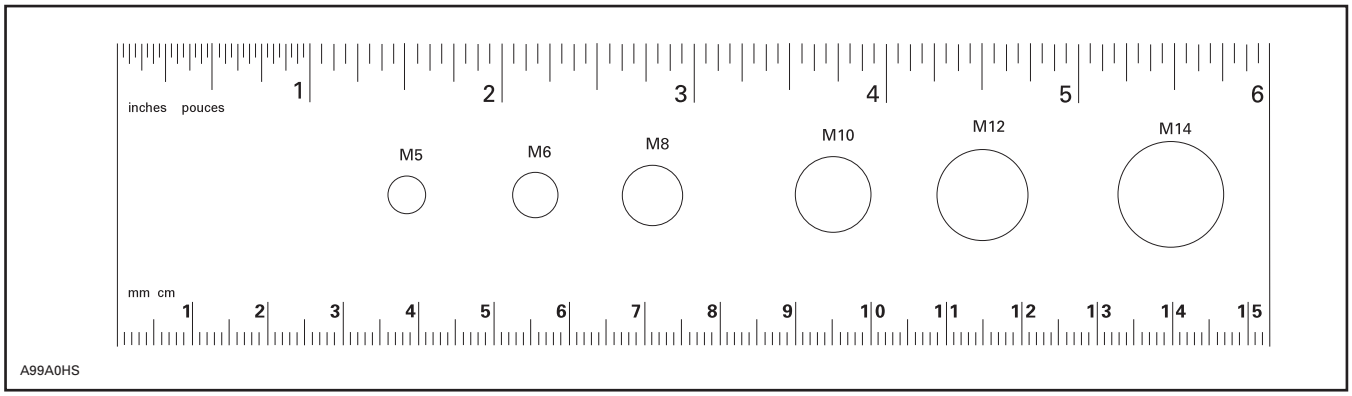
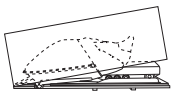
The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and return a customer signed copy. Make sure the customer receives the *Operator's Guide*, *Safety Handbook* and video.

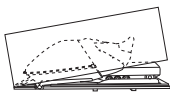
There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.



NOTE: This ruler can be helpful to identify fastener length or size.



UNCRATING



PREDELIVERY KIT P/N	MODELS
549 010 973	All models

⚠ WARNING

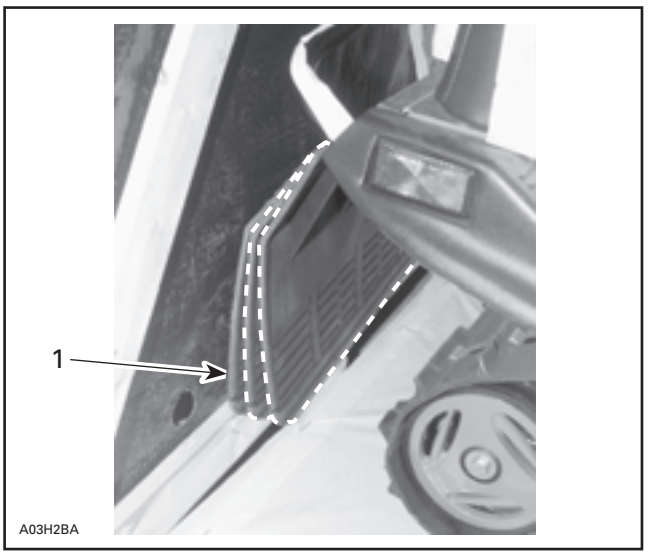
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

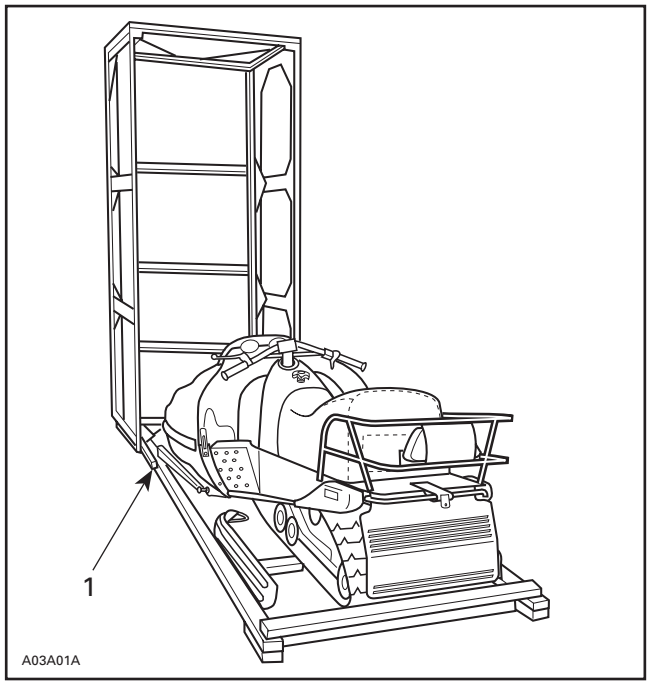
Remove all screws retaining cover to vehicle base. Tip cover toward front of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging the snow guard or taillight.

NOTE: On some models, snow guard may interfere with crate cover, as shown in the following photo. Push on snow guard when lifting cover.



FROM OUTSIDE CRATE PUSH ON SNOW GUARD TO ALLOW COVER TO LIFT WITHOUT DAMAGING SNOW GUARD

1. Snow guard interfering with crate cover



1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts and slider cushions to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove parts to be installed and predelivery kit from engine compartment. Detach shock absorbers from engine compartment.

FRONT HOOK REMOVAL

Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

Cut locking tie retaining front hook.

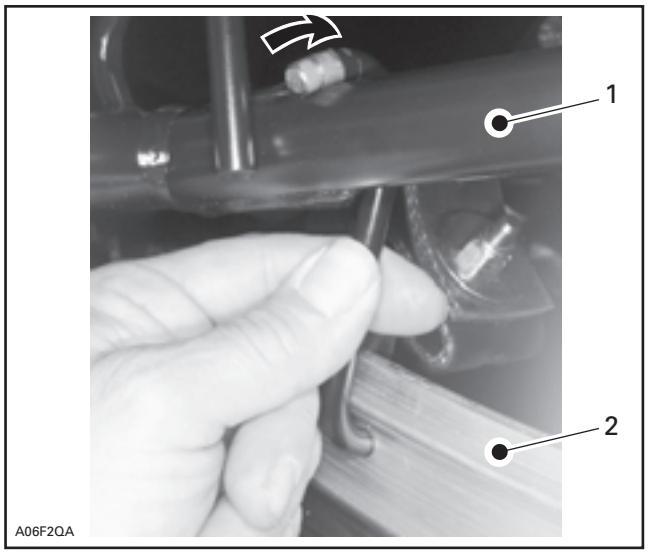
From left side of vehicle, apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



TYPICAL

1. *Front arm*
2. *Runner*

⚠ WARNING

Hook must be removed to have snowmobile suspension operational.

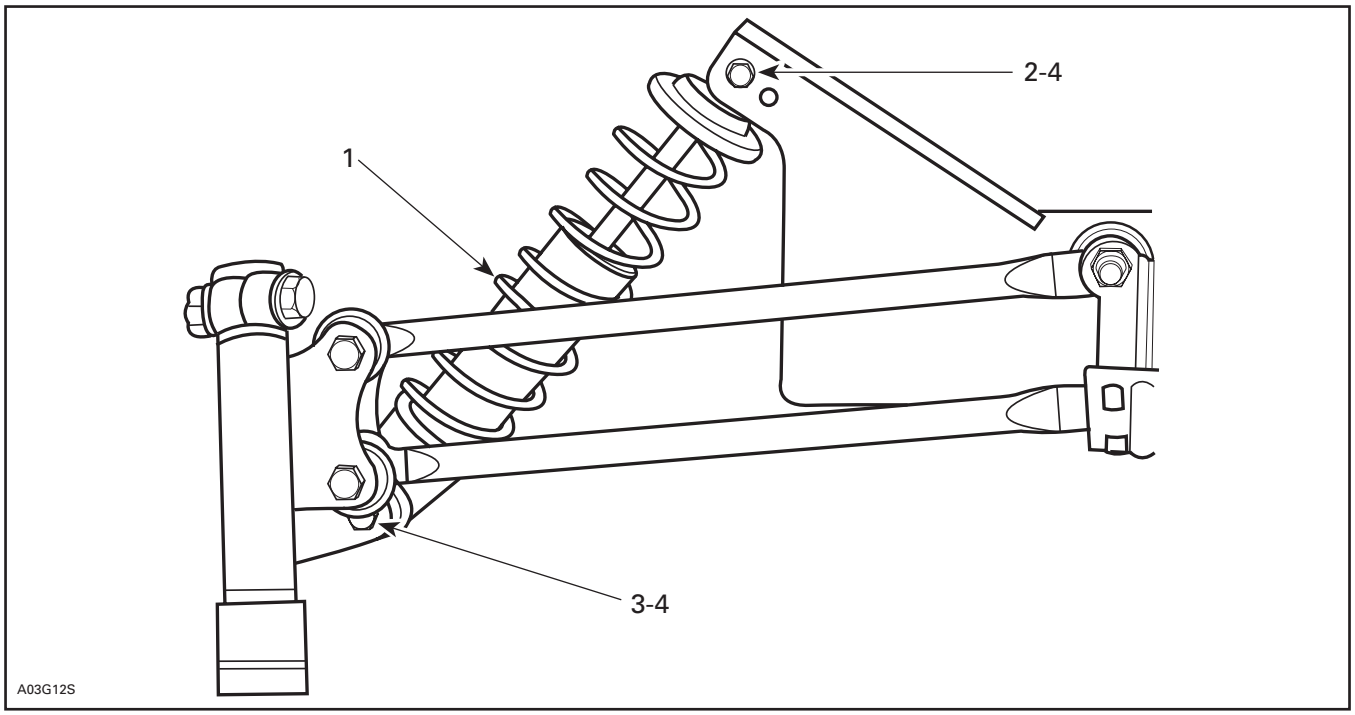
Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Secure shock absorbers to suspension with their adjusting ring at bottom.

NOTE: Position screw heads toward front. A long socket may be needed to torque screws.

Install caps provided in section 5 of predelivery kit.



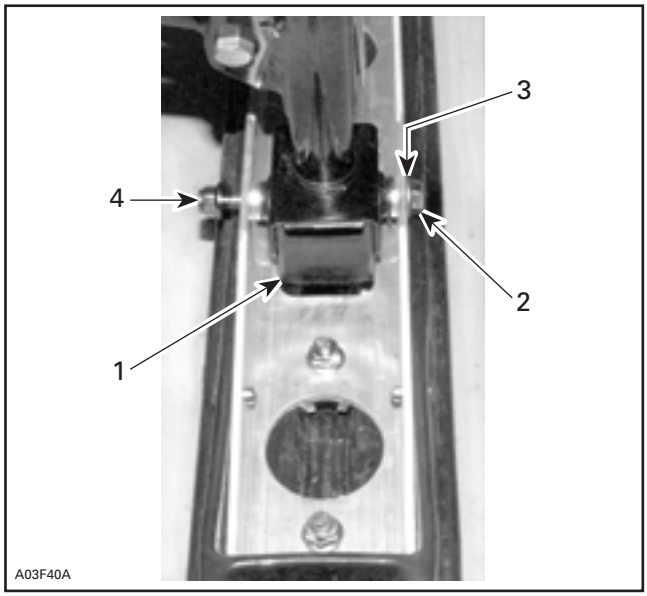
TYPICAL — RH SIDE SHOWN

1. *Shock absorber (2) (engine compartment)*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 4). Torque to 48 N•m (35 lbf•ft)*

Ensure ski leg slider cushions are still in ski leg.

Install skis on vehicle.

Replace vehicle on ground.



LEFT SIDE SHOWN

1. *Ski stopper (2) (P/N 506 151 233) (section no. 3) with higher side toward front*
2. *Bolt M10 x 110 (2) (ski leg)*
3. *Washer (2) (P/N 732 900 049) (section no. 1)*
4. *Elastic flanged nut M10 x 1.75 (2) (P/N 233 201 414) (section no. 2). Torque to 32 N•m (24 lbf•ft)*

Well located on its rack, in front of chaincase cover, battery is a gel type that could be charged, during vehicle preparation, as described in the *Shop Manual*.

CAUTION: Prior to charging the battery, always remove it from the vehicle. Do not charge an installed battery.

Battery Removal

Unhook retaining strap and then remove battery.

Battery Installation

Properly position battery on its rack.

Apply silicone dielectric grease (P/N 293 550 004) on battery posts and connectors.

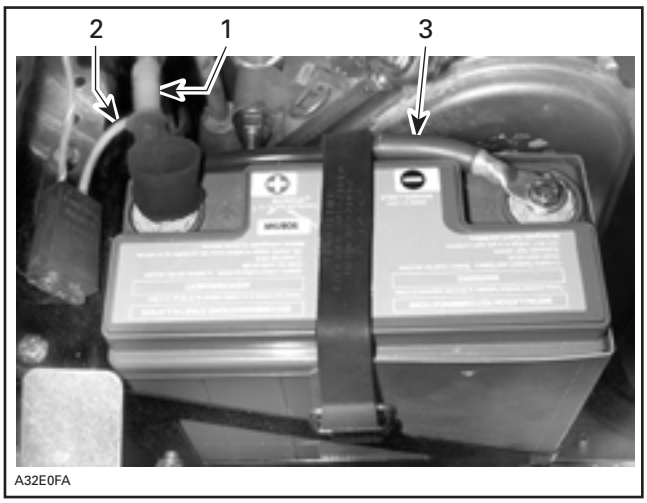
Connect RED positive cable and RED wire to positive battery terminal.

Connect BLACK negative cable LAST.

⚠ WARNING

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

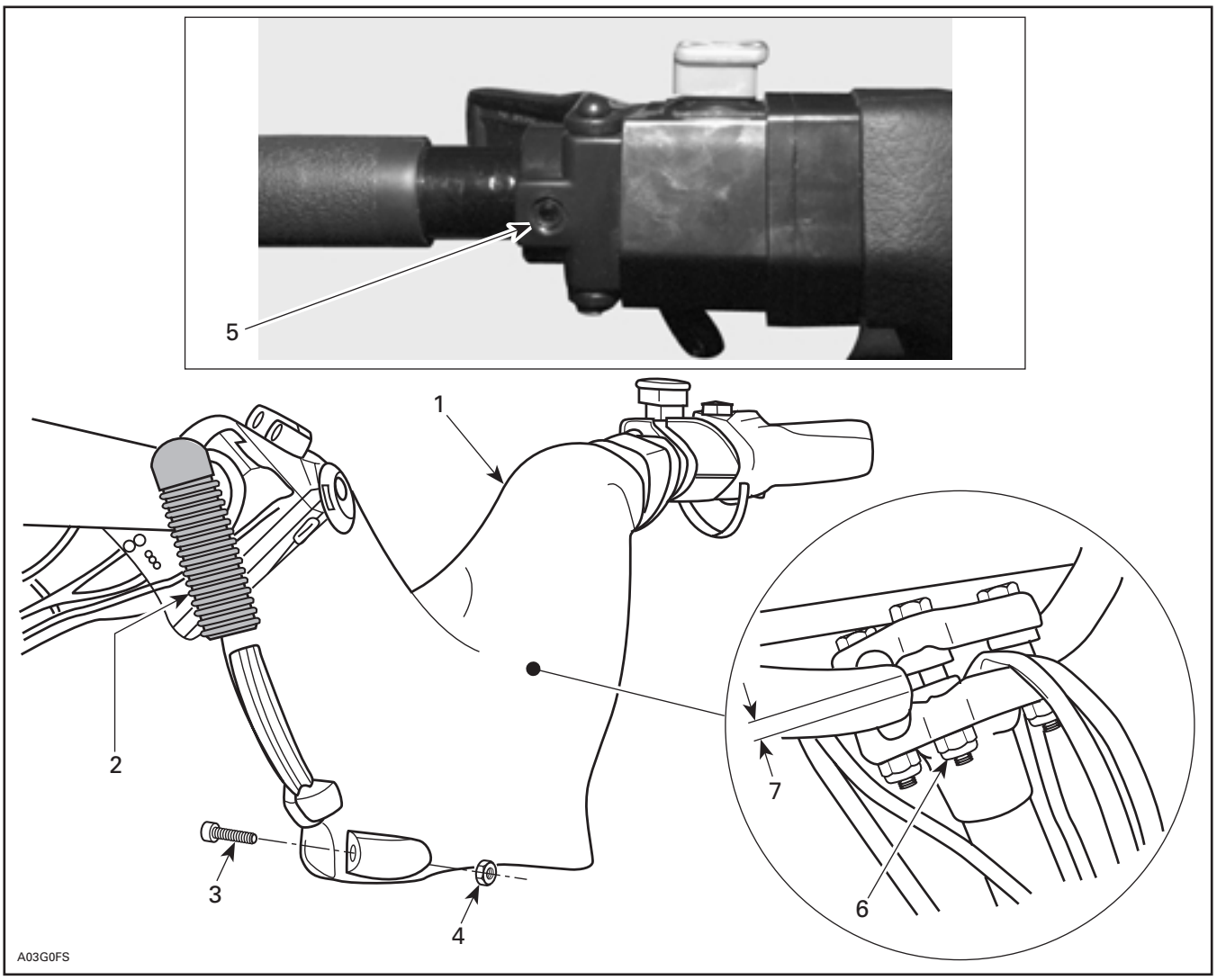
Secure battery with retaining strap.



BATTERY CONNECTION

1. *RED positive cable*
2. *RED positive wire*
3. *BLACK negative cable under battery strap*

Adjust handlebar temporarily and tighten nuts loosely for now.
Install steering pad temporarily, and adjust for proper fit with console.
Remove steering pad and torque nuts from 21 to 28 N•m (16 to 20 lbf•ft).
Reinstall steering pad, adjust and tighten throttle and brake handle housings.



TYPICAL

1. *Steering pad (engine compartment)*
2. *Keyway (2) (section no. 3). Use liquid soap to ease installation*
3. *Screw M5 x 20 (2) (section no. 1)*
4. *Nut M5 (2) (section no. 1). Seat tighten only, no deformation of rubber*
5. *Loosen Allen screw*
6. *Torque nuts from 21 to 28 N•m (16 to 20 lbf•ft)*
7. *Equal gap each side*

Formula Deluxe 500 Model

Heated Visor Connector Extension

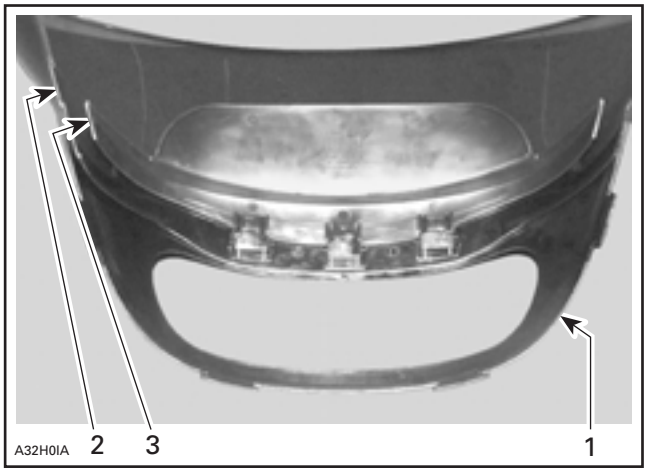
Section no. 3 of predelivery kit provides a connector extension for the heated visor.

Unclip inner protector from headlamp protector.

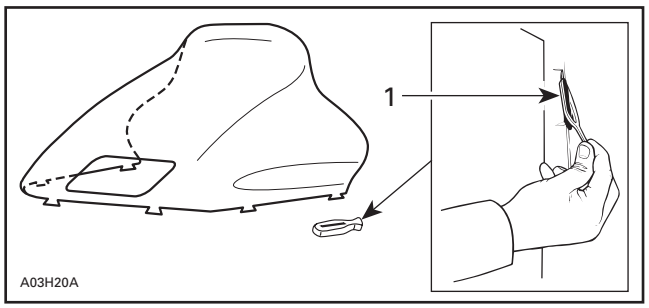
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp protector*
2. *Windshield*
3. *Inner protector*

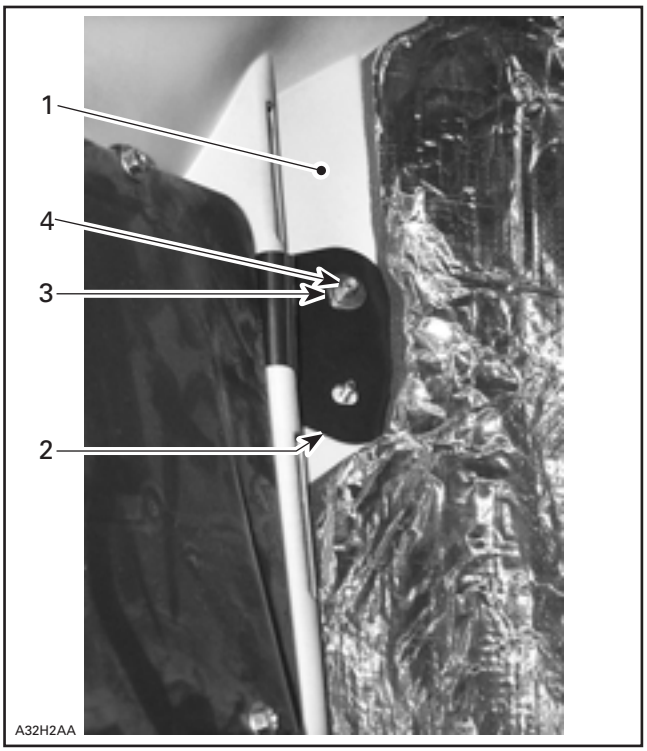


1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 on section no. 2)*

TYPICAL — WINDSHIELD INSTALLED

Place retaining plate underneath hood facing rear view mirror holes.

Install mirrors in place. Secure with washers and nuts (section no. 3 in predelivery kit). Torque to 2 N•m (18 lbf•**in**).



1. Hood
2. Retaining plate
3. Washer
4. Nut

NOTE: Do not mix right and left mirrors (P/N 517 302 471 for right mirror and P/N 517 302 472 for left mirror).

INSTALLATION COMPLETED

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

BREAK-IN PERIOD SUPPLEMENTAL OIL

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER Injection Oil (P/N 413 802 900 — 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

PUMP ADJUSTMENT

Oil injection pump is factory set. However, if adjustment needs to be checked or modified, refer to special *Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (ex.: locking tab, elastic stop nut, self-locking fasteners, etc.) must be installed or replaced with new ones where specified. If the efficiency of a locking device is impaired, it must be renewed.

⚠ WARNING

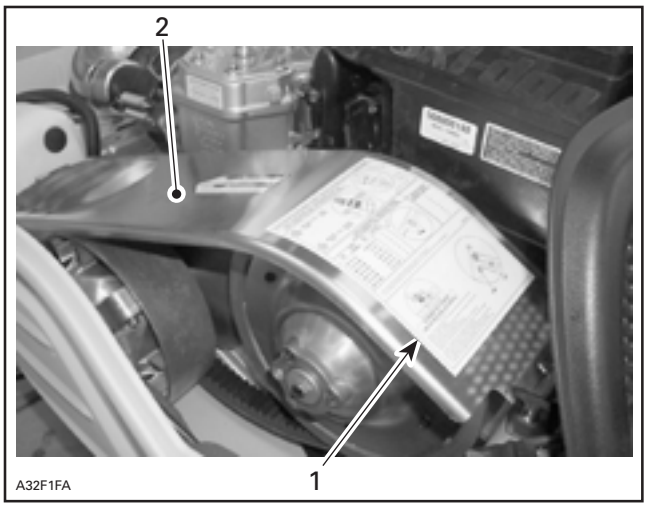
Make sure cable is free to swivel in lever end.

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



1. Adjustment chart
2. Pulley guard

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See *Technical Data* section at the end of this bulletin.

When track adjustment is completed, place wheel caps provided in predelivery kit (section no. 4) on rear wheels.

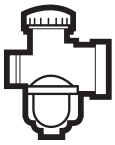
ADJUSTMENTS
DRIVEN PULLEY

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquires should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODELS			FORMULA DELUXE 700	FORMULA DELUXE 600	FORMULA DELUXE 500
	Engine type			693	593	493
	Maximum HP RPM ①		± 100 RPM	8000	8000	8000
	Rotary valve		P/N	420 867 870	420 924 519	420 924 509
	Carburetor type			Heated • TM 40 - B115 with DPM	Heated • TM 40 - B112 with DPM	VM 38 - 42 9 •
	Main jet			520 •	500 •	280 •
	Needle jet			P-0 •	P-0 •	P-8 (480) •
	Pilot jet			17.5 •	20 •	40 •
	Needle identification — clip position			9ZLY3 - 58 •	9HFY2 - 53 •	6DEY10 - 4 •
	Slide cut-away			2.0 •	2.0 •	2.5
	Float adjustment		± 1 mm (in)	—	—	22.9 (0.902) •
	Air screw adjustment		± 1/16 turn	—	—	1.25 •
	Idle speed RPM		± 200 RPM	1500 •	1600	1700 •
	Gas grade/octane number		(R + M)/2	Regular unleaded/87		
	Gas/oil ratio			Oil injection		
	Ignition timing BTDC ②		mm (in)	3.36 (0.132)	3.00 (0.118)	3.00 • (.118)
	Trigger coil air gap		mm (in)	0.55 - 1.45 (.022 - .057)		
	Gear ratio		Teeth	25/43 •	24/44	22/44 •
	Engagement speed		± 100 RPM	3600 •	3800	4100
	Drive pulley calibration screw position			3		
	Pulley distance	Z	± 0.5 mm (± 1/64 in)	16.5 (21/32)		
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-25/64)		
		Y	± 0.5 mm (± 1/64 in)	Dimension Y must exceed X of 1 mm (1/32 in)		
	Drive belt adjustment	Deflection	mm (in)	32 (1-1/4)		
		Force ③	kg (lbf)	11.34 (25)		
	Driven pulley preload		± 0.7 kg (lbf)	8.0 • (17.6)	7.0 (15.43)	7.0 (15.43)
	Drive chain tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation		
	Track adjustment	Deflection	mm (in)	30 to 35 (1.181 to 1.378) with a 7.3 kg (16 lb) downward pull		

① Engine speed at which maximum power is achieved.

② 22° at 3500 RPM (engine cold) with headlamp turned on.

③ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

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PREDELIVERY Bulletin

No. **2001-8**

Date: September 15, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2001	Canada Skandic* LT Skandic WT Skandic WT LC Skandic SWT	1598 1596 1600	All
2001	United States Skandic LT Skandic WT Skandic WT LC Skandic SWT	1599 1597 1601	All

This bulletin must be used in conjunction with the *Predelivery Check List* enclosed in the *Operator's Guide* bag. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

To obtain warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The contents of this bulletin is designed as a guideline only. All mechanics performing procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative or specific *Shop Manual* sections.

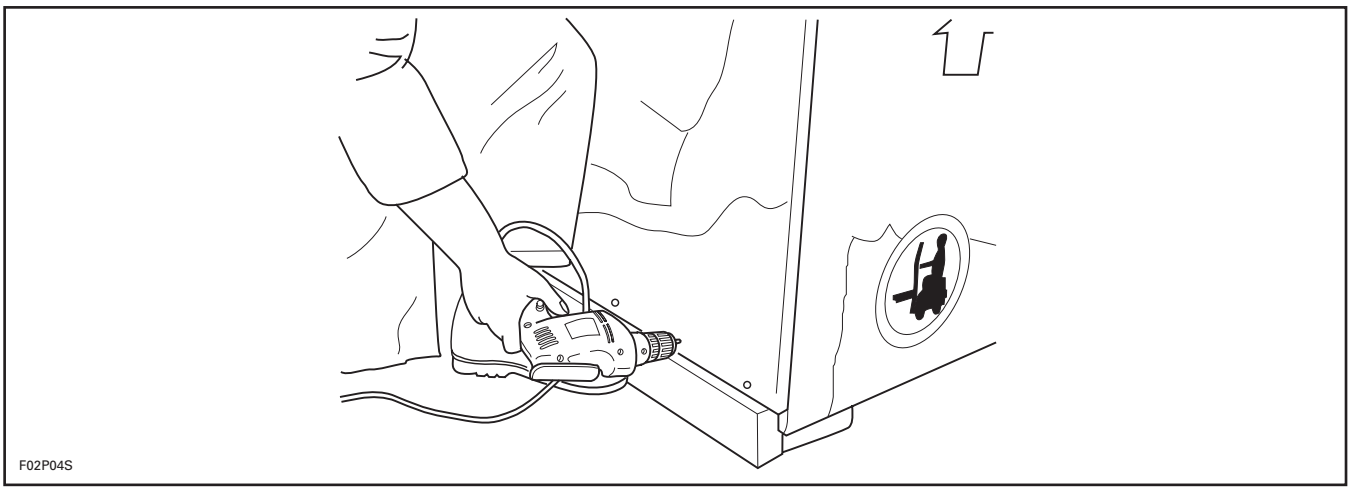
Please complete the *Predelivery Check List* for each snowmobile and return a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook* and *video*.

⚠ WARNING

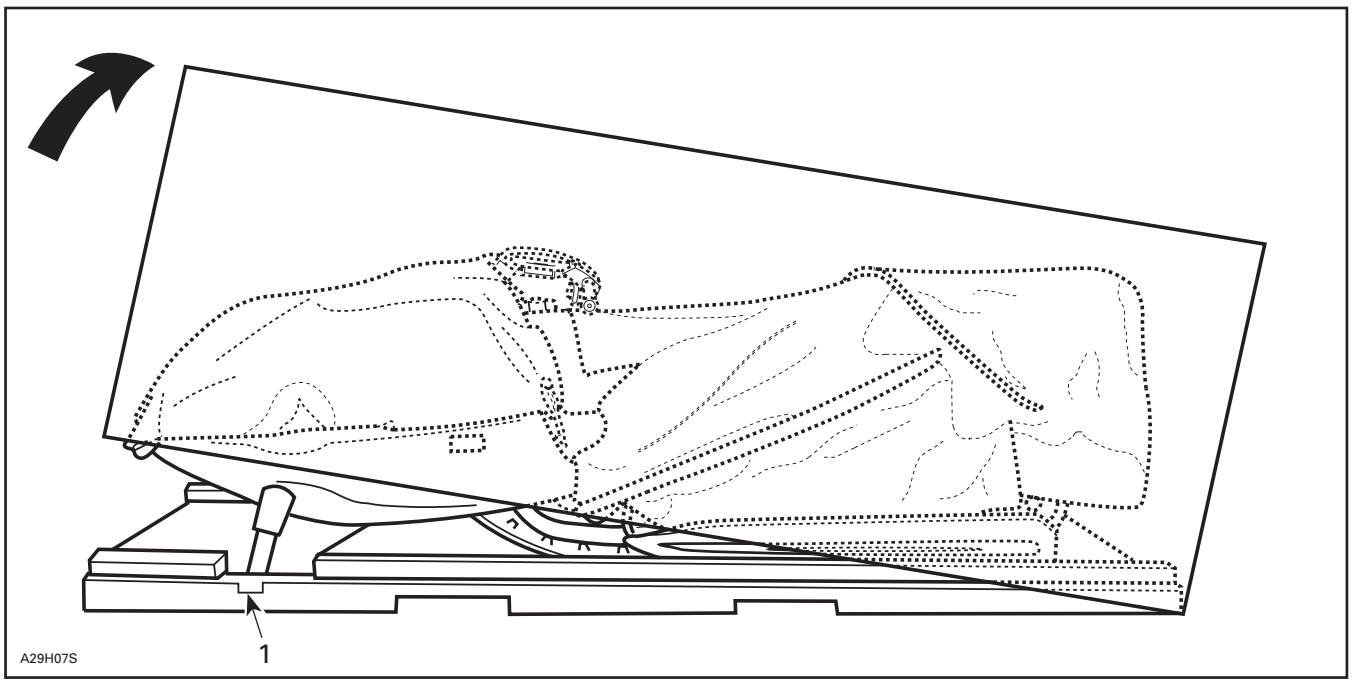
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, nylon stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

CAUTION: Allowing the crate to drop may cause serious damages to the vehicle.

Using a screwdriver or a drill, remove all screws retaining crate to base.



Tip cover towards rear of vehicle. There is a notch in crate base at front.

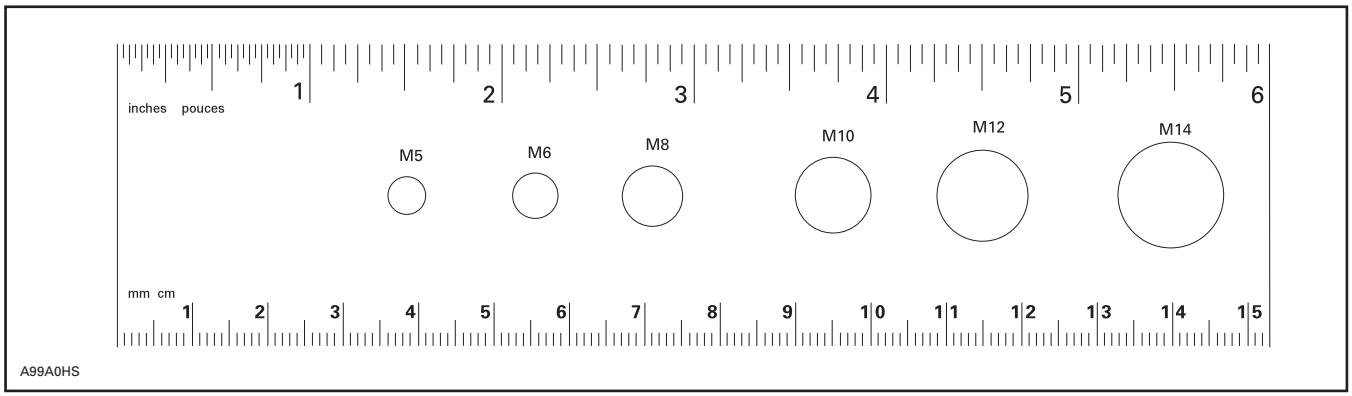


1. Notch

Detach parts to be installed (e.g. skis, windshield), from the vehicle and its base.

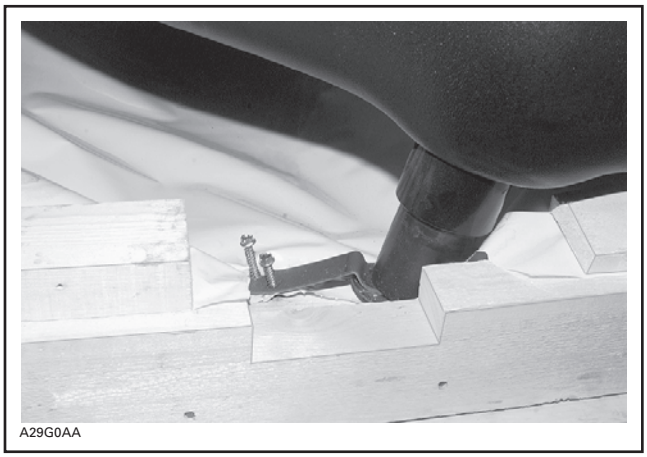
Remove predelivery kit and parts to be installed from under seat compartment.

NOTE: This rule can be helpful to identify fastener length/size.

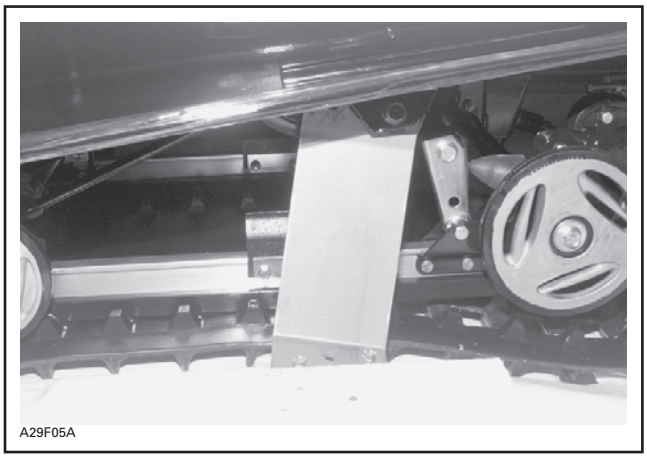


CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Discard screws.



Remove the rear retaining brackets from both sides of vehicle and retain bolts holding brackets to body, discard screws.



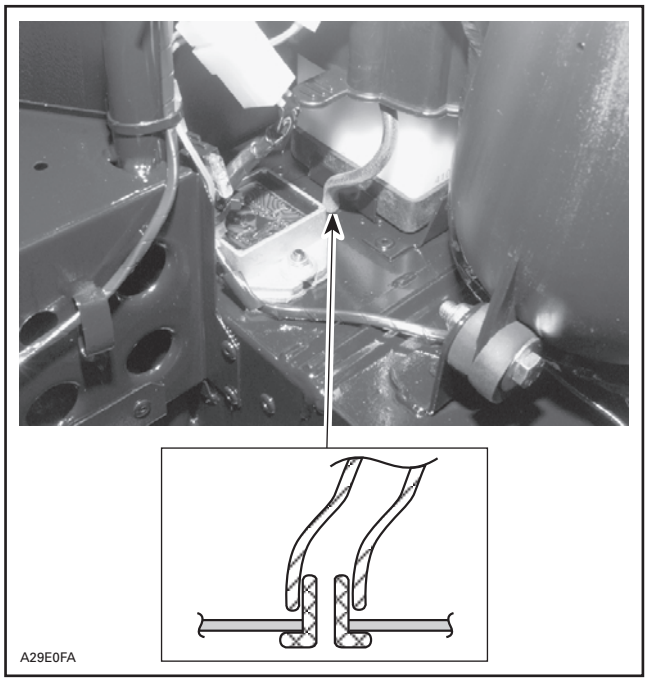
Remove vehicle from base.

Skandic WT/SWT/WT LC Models Only

During preparation, the battery can be activated as described in *2001 Ski-Doo Shop Manual.*

CAUTION: Prior to charging the battery, always remove it from the vehicle to prevent electrolyte spillage.

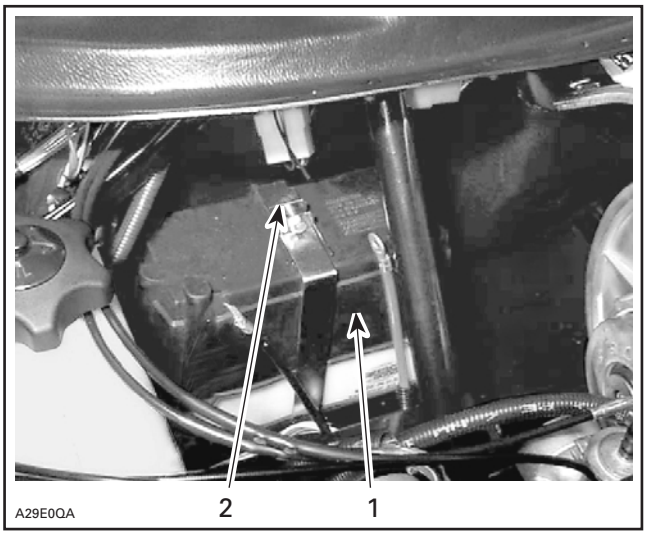
A special vented rivet is fixed to the chassis in order to plug the vent tube from the battery.



Battery Removal

Remove air silencer.

Undo steel strips nut and screw holding battery and remove battery.



1. Battery
2. Wing screw

Battery Installation

Deposit battery on its rack.

Connect battery cables.

⚠ WARNING

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

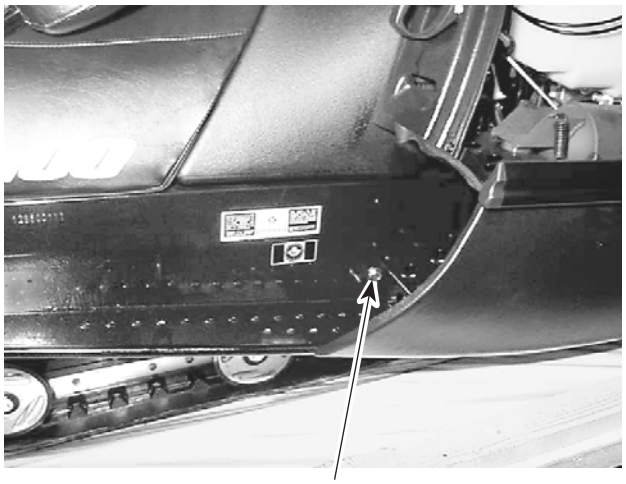
Reinstall battery cover and secure battery with steel strips. Apply silicone dielectric grease (P/N 293 550 004) on battery posts and connectors.

Ensure that battery vent tube is properly installed from battery to the plug provided on the frame and that it is not kinked.

Reinstall air silencer on it's place and tighten gear clamps, if applicable, around carburetor's air intake adapter.

Secure front arm upper axle of rear suspension using 2 M10 x 30 screws in plastic bag under the seat.

Apply Loctite 243 on threads and torque screws to 58 N•m (43 lbf•ft).

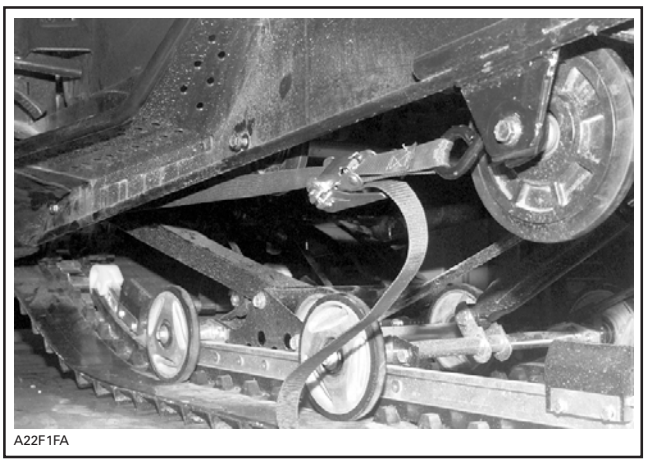


1. Torque screw on each side to 58 N•m (43 lbf•ft)

Secure rear arm using previously removed screws.

Apply Loctite 243 on threads and torque screws to 58 N•m (43 lbf•ft).

Use a tie-down between front arm and spring axle to ease installation of front arm screws.



Skandic WT/WT LC Models Only

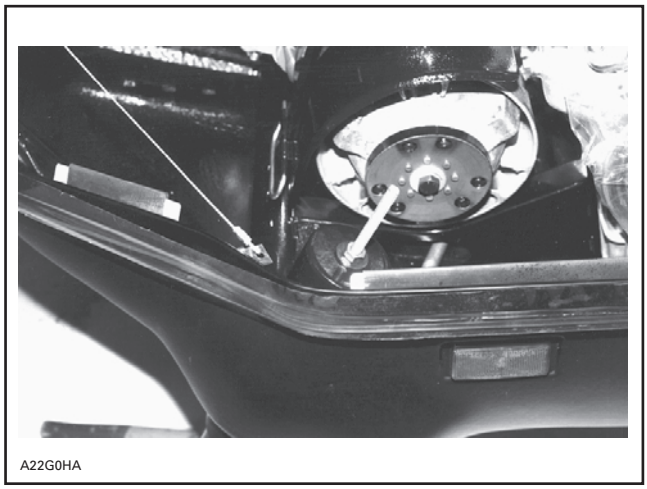
NOTE: For single driving condition use upper hole and for two person driving condition or load in rack, use lower hole.

Apply Loctite 243 on threads and torque screws to 58 N•m (43 lbf•ft).

All Models

NOTE: Also in shrink pack are 4 horse shoe type washers that are used to adjust rear suspension for trail riding according to load (refer to the *2001 Shop Manual* for proper procedure); they are to be put in the tool box for further use.

Remove long bolts that compress front suspension on both sides.

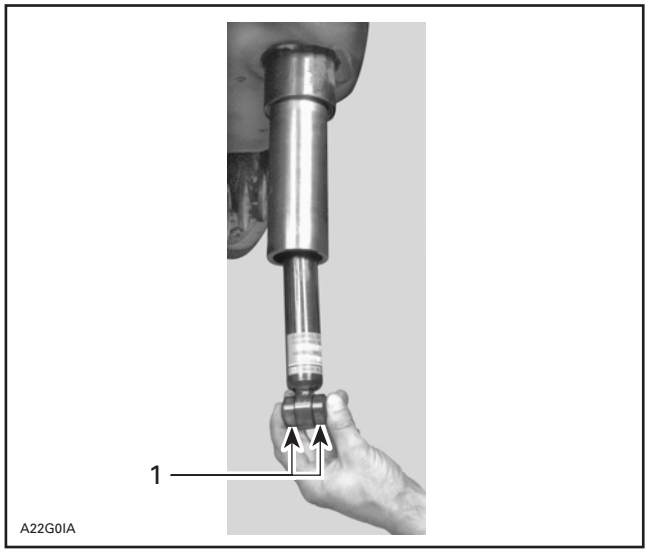

A22G0HA

Install 2 plastic bushings into shock absorber eyelets.

Stretch shock to its maximum.

Slide shock absorber into bottom of ski leg until shock rod goes through cap hole.

Loosely install conical spring washer, concave surface inside, and M10 nut on shock rods, keeping at least 1/4 in (5 mm) of free play.

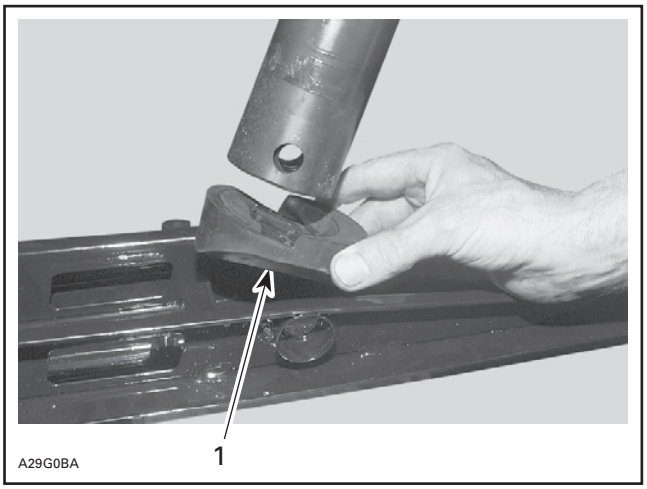


1. Plastic bushings

Install stop bounding on ski with its highest portion toward front.

Install skis on snowmobile using bolts, nuts, washers and rubber bushings supplied in the Predelivery kit. Torque to 13 N•m (9.5 lbf•ft).

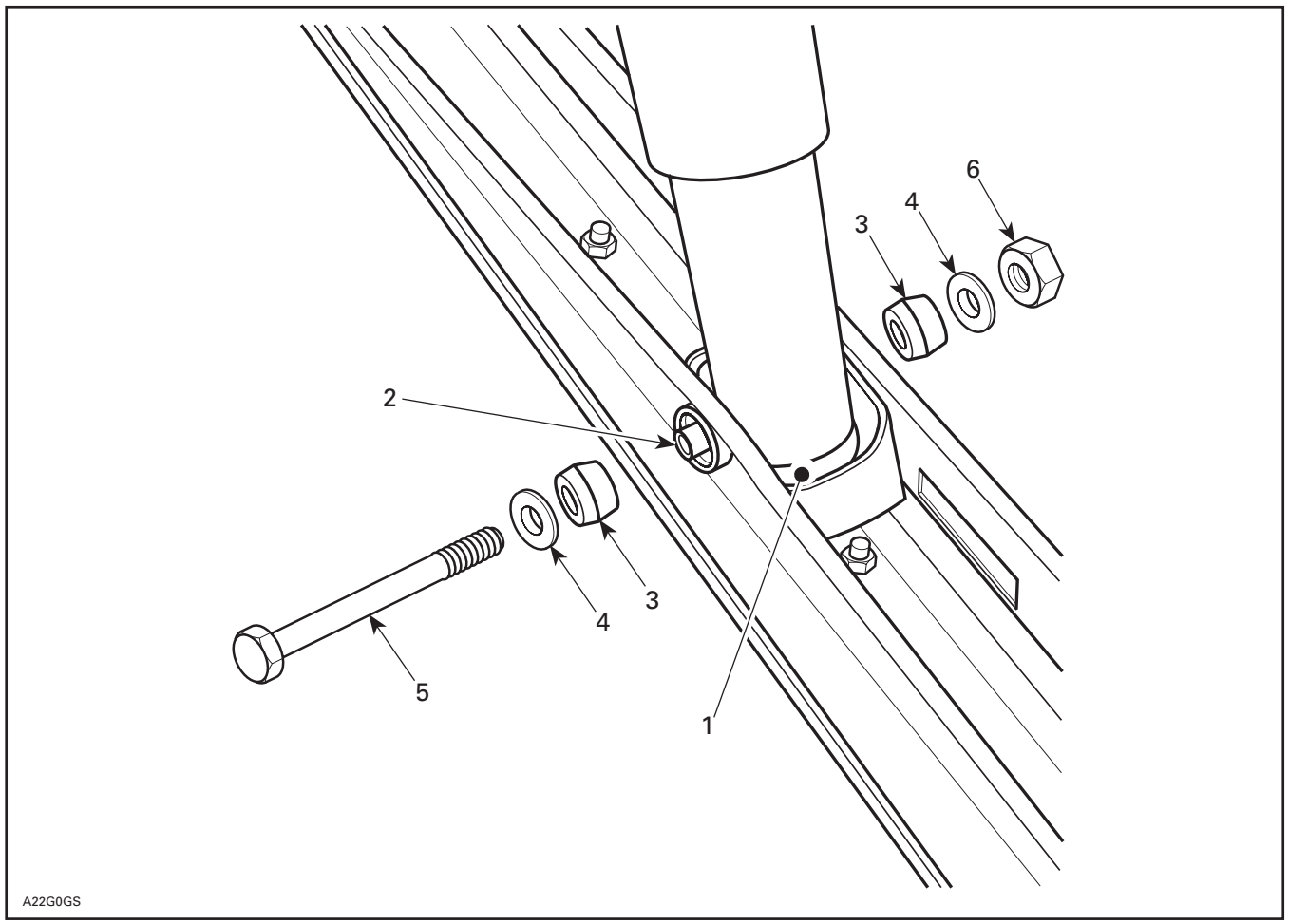
Install stop bounding on skis with its highest portion toward front.



LEFT SIDE SHOWN

1. *Stop bounding*

Install skis on vehicle using bolts, nuts, conical spring washers (concave surface inside) and rubber bushings supplied in the predelivery kit.



1. *Stop bounding*
2. *Sleeve*
3. *Rubber bushing (2)*
4. *Conical spring washer (2)*
5. *Bolt M10 x 125*
6. *M10 lock nut, tighten to 48 N•m (35 lbf•ft)*

Tighten shock rod top nuts to 30 N•m (22 lbf•ft).

Adjust handle bar and set both clamps to have equal gap on each side. Torque nuts from 21 to 28 N•m (16 to 21 lbf•ft).

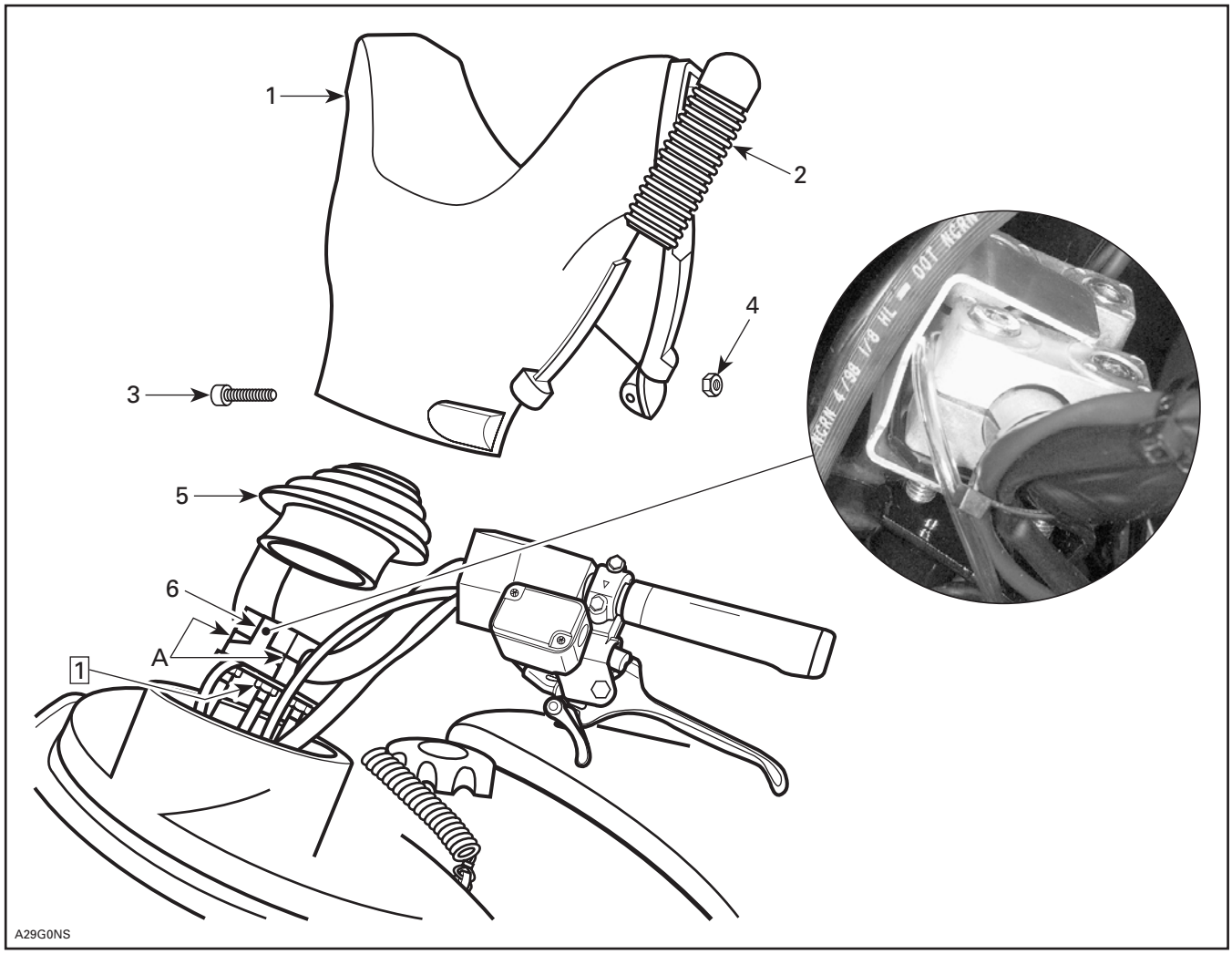
NOTE: On Skandic WT/WT LC/SWT, move handle bar to left of driving shaft to center it. From right edge of driving shaft to right edge of right clamp, a distance of 30 to 35 mm (1-3/16 to 1-3/8 in) must be measured.


A29G0QA

Loosen throttle and brake handle housings.

Install steering pad.

Adjust both throttle and brake handle housings to match steering pad.



TYPICAL

Step 1: Torque from 21 to 28 N•m (16 to 21 lbf•ft)

1. *Steering pad*
2. *Keyway. Use liquid soap to ease installation*
3. *Screw M5 x 0.80 x 20 (2)*
4. *Nut M5 x 0.80 x 20 (2). Seat tighten only, no deformation of rubber*
5. *Steering column cover (Skandic SWT only)*
6. *Clamp bracket*

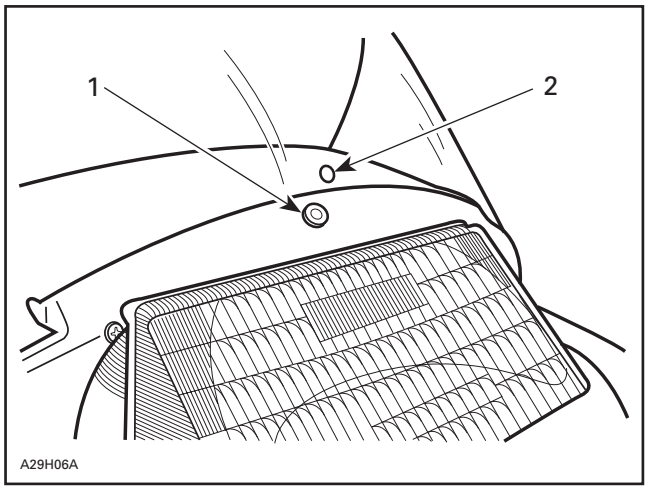
A. *Equal gap on each side (both clamps)*

Remove headlamp molding.

Install rubber expansion nut in hole above head light.

Line up hole in windshield with rubber expansion nut and install screw with cup.

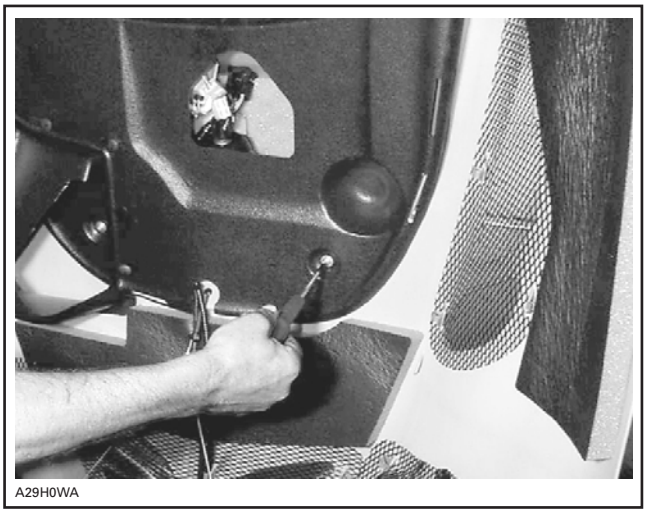
Tighten slightly so that rubber expands inside hood.



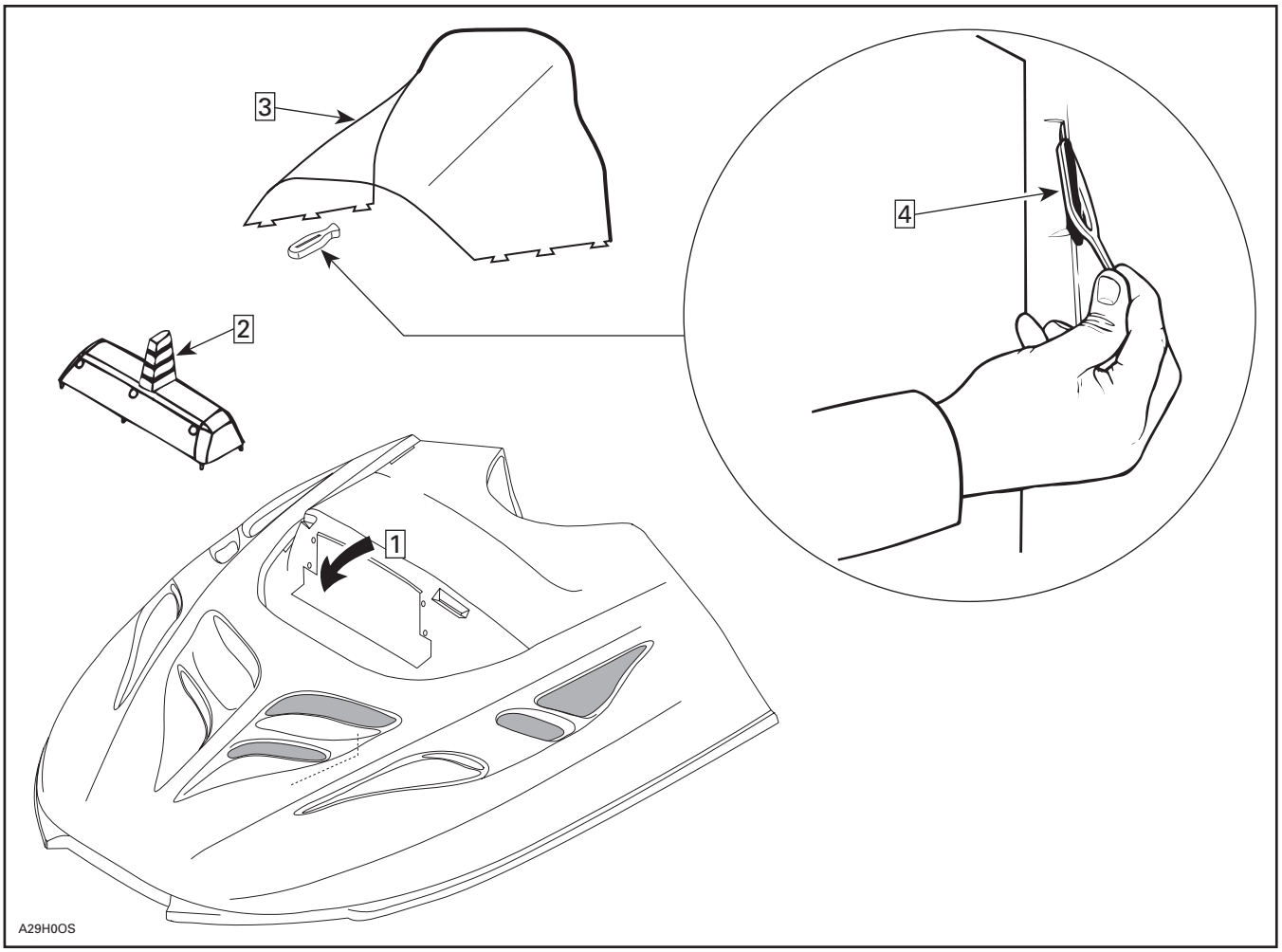
1. Rubber expansion nut
2. Hole in windshield

Skandic WT/SWT/WT LT Models Only

Remove plastic plate from hood.



Install air intake cover with filter and rubber support assembly in predrilled holes on the hood. Retain with 4 supplied push nuts, using 2 end pins on each side.



Step 1: Pry out headlamp molding
Step 2: Install air intake cover with filter, rubber support and push nuts
Step 3: Install windshield
Step 4: Install latches (10)

All Models

Install windshield and secure with latches inside hood.

Reinstall plastic plate. Secure with latches, clips and nuts (for rubber expansion nuts).

Reinstall headlamp molding.

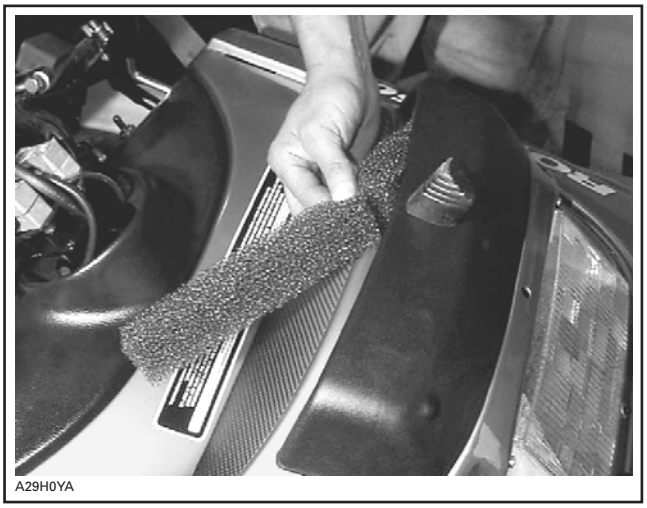
Make sure to properly position lower edge of plastic molding under head lamp.

Skandic WT/SWT/WT LT Models Only

Secure inside hood plastic with supplied green clips (if not already secured).

All Models

Add foam inside cover. Take care to position foam correctly.



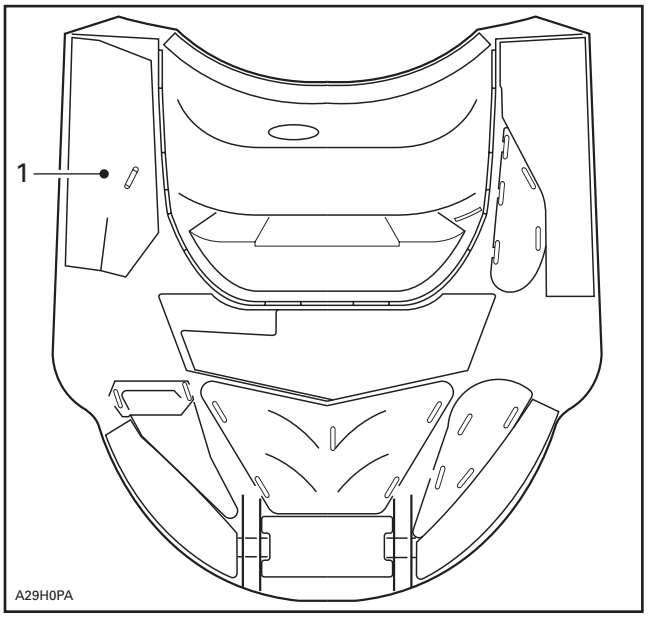
ALUMINUM FOIL HEATSHIELD

Skandic SWT Model Only

Found in seat compartment, an aluminum foil heatshield has to be installed on hood inner surface.

Remove backing from heatshield, align inside hood above braking mechanism (disc), and stick in place, as per following illustration.

NOTE: This heatshield has to be installed over the duct in order to protect both the duct and the hood from heat. Do not remove duct since this heatshield goes over it.



TYPICAL

1. Heatshield

PARTS INSTALLATION
BACKREST

SEAT BELT

Skandic SWT and Skandic LT Only

A seat belt can be found in luggage compartment. Install it on seat using belt lugs each side of seat base.

BACKREST

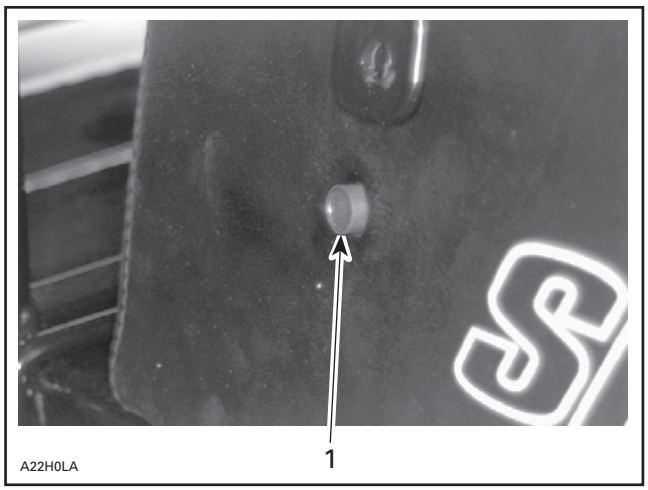
Skandic WT and Skandic WT LC Only

Install spacers (included in shrink kit) in rear seat holes for backrest.

Install backrest in its proper position.

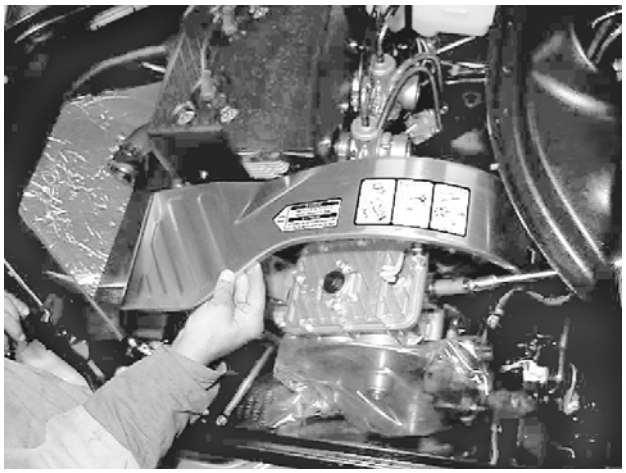
Secure rear arm of backrest using 2 M8 x 30 screws found in shrink pack.

Align front arm of backrest and secure with M8 x 20 screws included in the shrink pack.



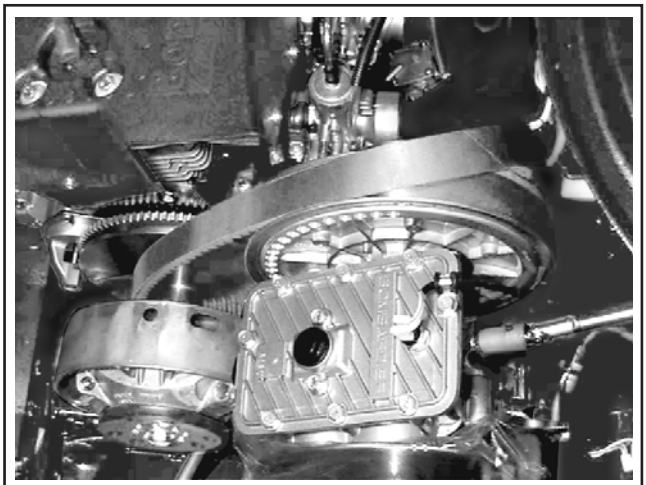
1. Spacer

Remove belt guard.


A29D1YA

Clean pulleys and disk brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809).

Install drive belt in its proper rotation direction, arrow pointing at front.


A29D1ZA

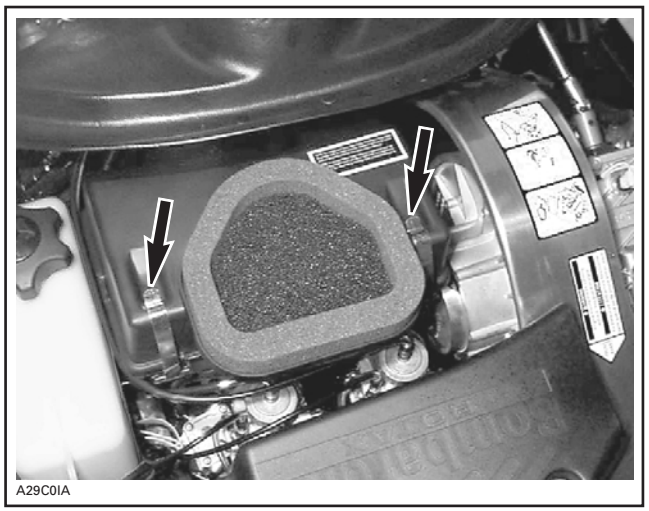
TYPICAL

Air Intake Silencer Installation

This part consist of three separate pieces. First fasten the bottom of air silencer. Check that guide pins are in the provided holes.

Install the middle part.

Mount the upper part of the air silencer. Install the back side first and check that brackets are on right position. Fasten air silencer pieces together with provided clamps.


A29C0IA

Make sure air box rubber extension and carburetors fit well.

NOTE: While installing air silencer, take care to route throttle cable the right way.

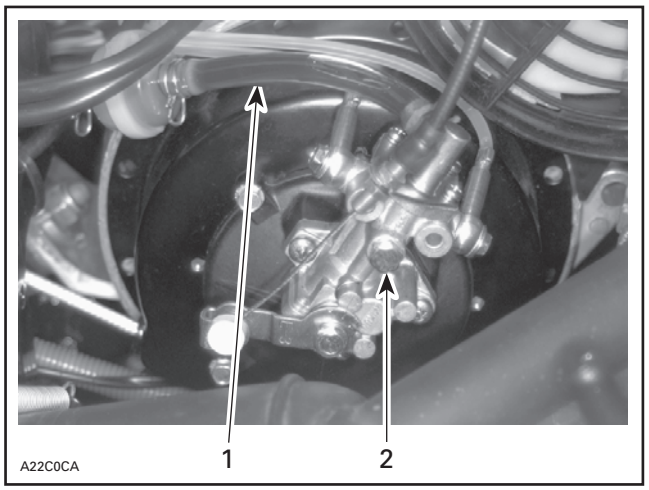
All Models

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz.) of BOMBARDIER injection oil (P/N 413 802 900) should be added to fuel for the first full filling of fuel tank.

Remove muffler if needed.

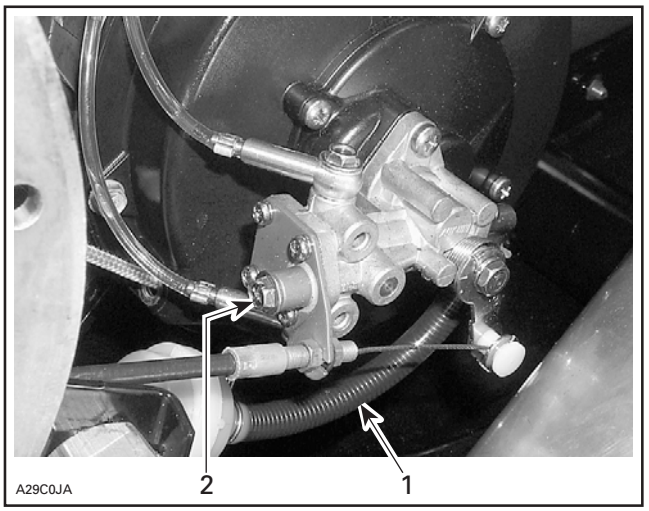
Skandic WT/SWT/LT

Bleed main oil line (between tank and pump) by loosening the bleeder screw until all air has escaped from the line. Add injection oil as required.



TYPICAL — SKANDIC WT/SWT MODELS

1. *No air in main line*
2. *Bleeder screw*



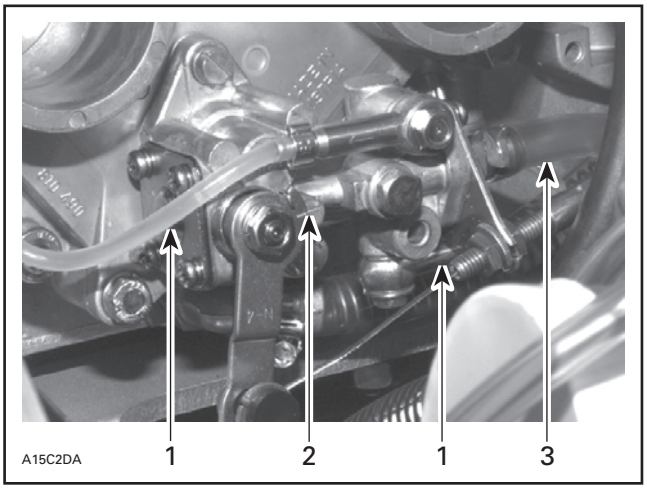
SKANDIC LT MODEL

1. *No air in main line*
2. *Bleeder screw*

Check also for proper oil lever adjustment; mark on lever must align with mark on pump body when throttle lever is activated just enough to take all cable free-play.

Bleed the small oil lines between pump and intake manifold by running engine at idle while holding the pump lever in fully open position.

Skandic WT LC



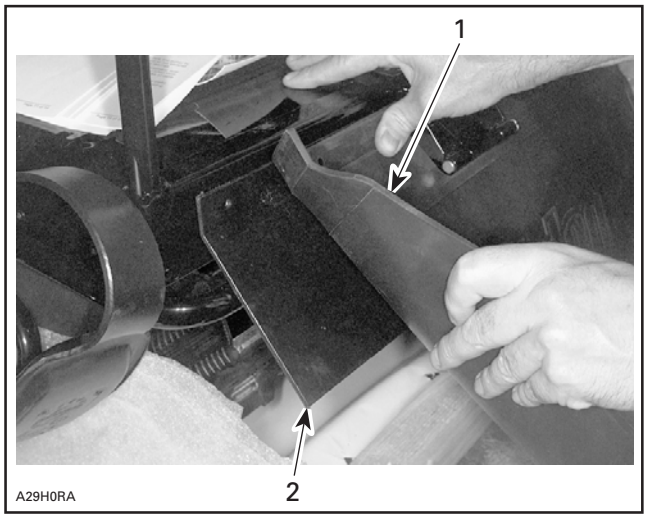
1. *Small oil line*
2. *Mark on lever must be from 1 to 2 mm (0.040 to 0.080 in)*
3. *Main oil line*

IMPORTANT NOTE: Oil pump is set at factory. However adjustment can be done according to *Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

SNOW GUARD

Install snow guard with extra plastic support (in luggage compartment) using rivets supplied in its packaging.



1. *Snow Guard*
2. *Protector Pad*

LIQUIDS

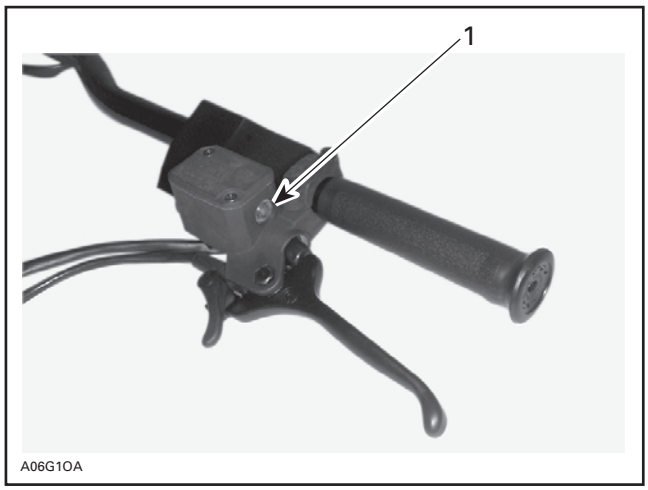
BRAKE FLUID LEVEL

All Models except Skandic LT

Check brake fluid in reservoir for proper level.

Add recommended brake fluid as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partially filled bottle of brake fluid.



1. *Fluid level window*

LIQUIDS
COOLANT LEVEL

Skandic WT LC Only

With vehicle on a flat surface and engine cold, remove pressure cap and check coolant level. Add coolant as needed.

CAUTION: To prevent rust formation or freezing conditions, always use ethylene glycol antifreeze containing corrosion inhibitors specially recommended for aluminum engines. Always use 50% antifreeze and 50% water for this particular type of snowmobile.

Reinstall pressure cap.

Run engine until thermostat opens then stop engine.

Check hoses for leaks.

When engine has completely cooled down, recheck coolant level and top up if necessary.

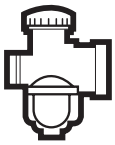
ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

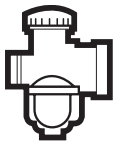
TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicle used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquiries should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODEL		SKANDIC SWT	SKANDIC WT
	Engine Type		ROTAX 503	ROTAX 503
	Maximum HP RPM ①	± 100 RPM	6800	6800
	Reed Valve	P/N	Not Applicable	Not Applicable
	Carburetor Type		2 x VM 34-19084	2 x VM 34-19084
	Main Jet		185	185
	Needle Jet		P-1 (159)	P-1 (159)
	Pilot Jet		40	40
	Needle Identification — Clip Position		6DH2-3	6DH2-3
	Slide Cut-Away		2.5	2.5
	Float Adjustment	mm (in)	23.9 (0.937)	23.9 (0.937)
	Air Screw Adjustment	± 1/16 turn	1.25	1.25
	Idle Speed	± 200 RPM	1650	1650
	Gas Grade/Pump Octane Number	(R + M)/2	Regular Unleaded 87	Regular Unleaded/87
	Gas/Oil Ratio		Oil Injection	Oil Injection
	Ignition Timing BTDC ②	mm (in)	1.66 (.065)	1.66 (.065)
	Trigger Coil Air Gap	mm (in)	0.45 - 0.55 (.018 - .022)	0.45 - 0.55 (.018 - .022)
	Gear Ratio		1st gear 1:3.80 2nd gear 1:2.29 R gear 1:4.63	1st gear 1:3.38 2nd gear 1:2.04 R gear 1:3.88
	Engagement Speed	± 100 RPM	3000	3000
	Drive Pulley Calibration Screw Position		2	4
	Pulley Distance	Z (+ 0, - 1) mm (+ 0, - 1/32) in	32.3 (1-17/64)	32.3 (1-17/64)
	Offset	X ± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	35.0 (1-3/8)
		Y	Dimension Y must exceed X from .75 mm (.03 in) to 2.25 mm (.09 in)	Dimension Y must exceed X from 0.75 mm (.03 in) to 2.25 mm (.09 in)
	Drive Belt Adjustment	Deflection mm (in)	32 (1-1/4)	32 (1-1/4)
		Force ③ kg (lbf)	11.3 (25)	11.3 (25)
	Driven Pulley Preload	kg (lbf)	7.0 + 1/- 0 (15.4 ± 1.5)	7.0 + 1/- 0 (15.4 ± 1.5)
	Drive Chain Tension		Not Applicable	Not Applicable
	Track Adjustment	Deflection mm (in)	40 to 50 (1.6 to 2.0)	40 to 50 (1.6 to 2.0)
		Force kg (lbf)	7.3 (16.1)	7.3 (16.1)

NOTE: See end of specifications for footnotes.

	MODEL			SKANDIC WT LC		SKANDIC LT
	Engine Type			593	•	443
	Maximum HP RPM ①		RPM ± 100	7200	•	6750
	Reed Valve		P/N	420 924 519		Not Applicable
	Carburetor Type			PTO VM 38 - 19111 MAG VM 38 - 19112	•	VM 32 - 19110
	Main Jet			PTO 330 MAG 310	•	195
	Needle Jet			Q4 (480)	•	O6 (159)
	Pilot Jet			40		45
	Needle Identification — Clip Position			6FL14 - 4	•	6DGH10 - 4
	Slide Cut-Away			2.5		2.5
	Float Adjustment		± 1 mm (± .040 in)	18.1 (0.710)	•	23.9 (0.94)
	Air Screw Adjustment		± 1/16 turn	15	•	1.5
	Idle Speed RPM		± 200 RPM	1900		1650
	Gas Grade/Octane Number		(R + M)/2	Regular Unleaded/87		Regular Unleaded/87
	Gas/Oil Ratio			Oil Injection		Oil Injection
	Ignition Timing BTDC ②		mm (in)	3.0 (.118)	•	1.38 (.054)
	Trigger Coil Air Gap		mm (in)	0.55 - 1.45 (.022 - .057)		0.55 - 1.45 (.022 - .057)
	Gear Ratio			1st gear 1:3.38 2nd gear 1:1.7 R gear 1:3.88	•	1 : 2.59
	Engagement Speed		± 100 RPM	2900	•	3000
	Drive Pulley Calibration Screw Position			4		—
	Pulley Distance	Z	(+ 0, - 1) mm (+ 0, - 1/32) in	32.3 (1-17/64)		34.2 (1.35)
	Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)		37.0 (1.46)
		Y		Dimension Y must exceed X from .75 mm (.03 in) to 2.25 mm (.09 in)		Dimension Y must exceed X from .75 mm (.03 in) to 2.25 mm (.09 in)
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)		32 (1-1/4)
		Force ③	kg (lbf)	11.3 (25)		11.3 (25)
	Driven Pulley Preload		kg (lbf)	7.0 + 1/- 0 (15.4 ± 1.5)		0.00 (0.0)
	Drive Chain Tension			Not Applicable		Not Applicable
	Track Adjustment	Deflection	mm (in)	40 to 50 (1.6 to 2.0) with a 7.3 kg (16 lb) downward pull		40 to 50 (1.6 to 2.0) with a 7.3 kg (16 lb) downward pull

① Engine speed at which maximum power is achieved.

② At 3500 RPM (engine cold) with headlamp turned on.

③ Force applied midway between pulleys to obtain specified deflection.

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-14**

Date: January 12, 2001

SUBJECT: Predelivery Procedures

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2001	Summit* 800 Renegade	1874/1875	All

This bulletin must be used in conjunction with the *Predelivery Check List* enclosed in the bag with the *Operator's Guide*. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

To obtain limited warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections.

Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook, Predelivery Check List* signed copy and video.

There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.

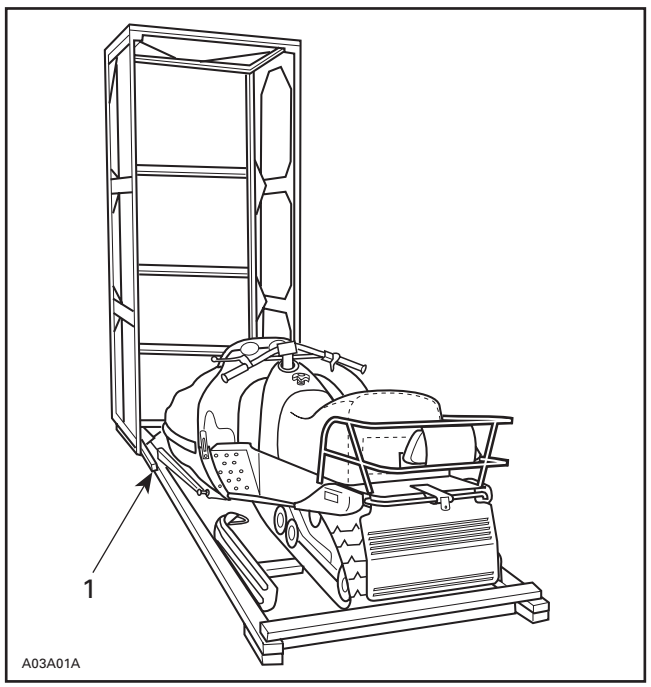
⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

Remove all screws retaining cover to crate base. Tip cover toward front or rear of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging any part of the snowmobile.



TYPICAL
1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Remove ropes and cut locking ties retaining windshield.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Keep ski leg bolts and spacers to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove steering pad, drive belt, predelivery kit and shock absorbers from parts box.

FRONT HOOK REMOVAL

Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

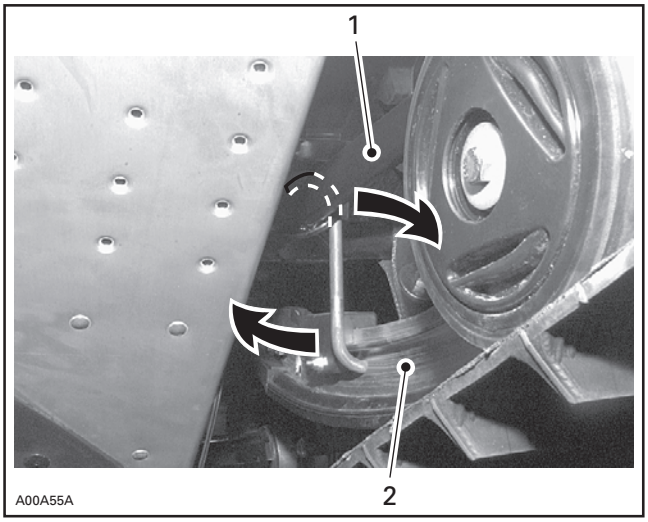
From left side of vehicle, cut locking tie, then apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



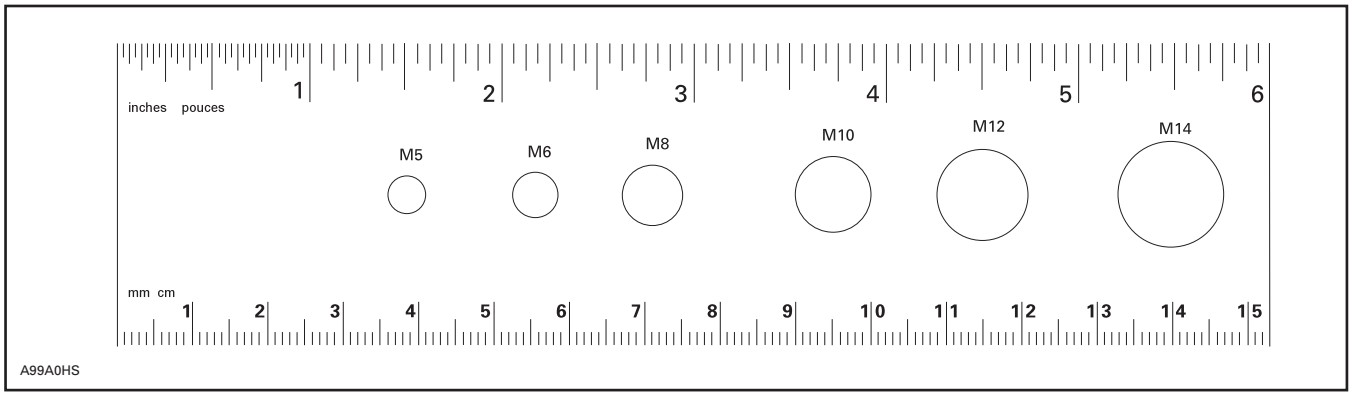
TYPICAL — REMOVAL HOOK

1. *Front arm*
2. *Runner*

⚠ WARNING

Shipping hook must be removed to have snowmobile suspension operational.

PREDELIVERY KIT P/N	MODEL
549 010 977	Summit 800



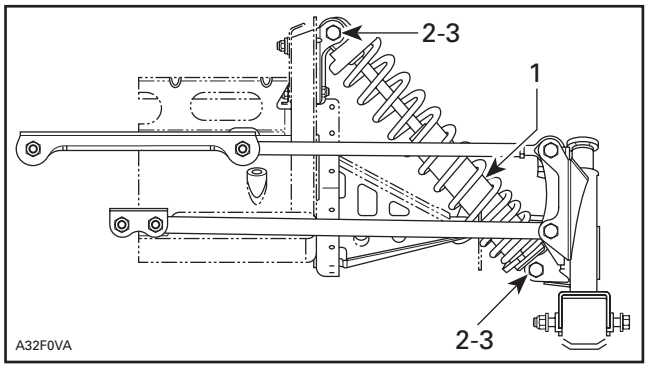
NOTE: This ruler can be helpful to identify fastener length or size.

Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Secure shock absorbers to suspension with their adjusting ring at bottom.

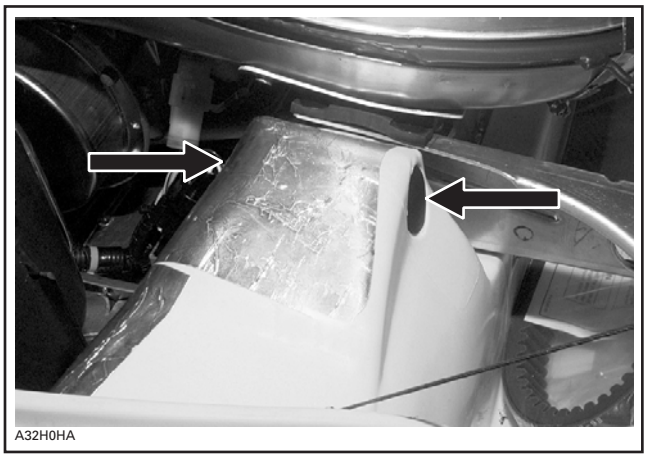
NOTE: Position top and bottom screw heads toward front of vehicle and secure with nuts provided in predelivery kit (section no. 3).



TYPICAL — RH SIDE SHOWN

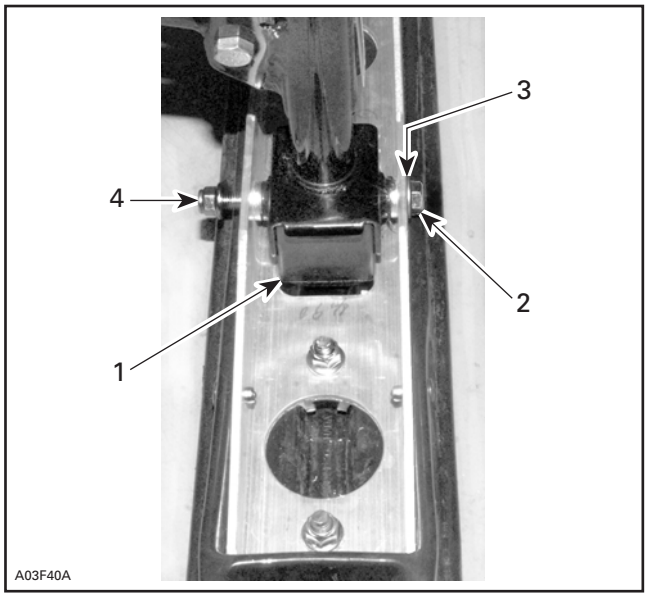
1. *Shock absorber (2) (engine compartment) adjusting ring at bottom*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Elastic flanged nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*

Install caps provided in predelivery kit on bottom pan, each side of molding.



SNAP PROVIDED CAPS (SECTION NO. 3) EACH SIDE OF MOLDING

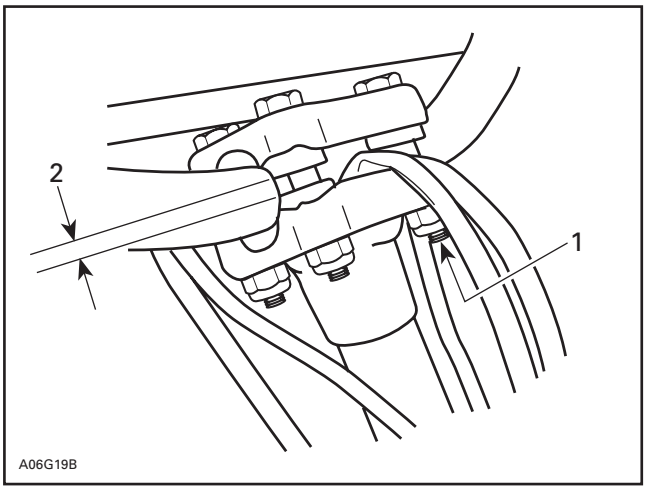
Install skis on vehicle.



LEFT SIDE SHOWN

1. *Ski stopper (2) (P/N 506 151 233) (section no. 3) with higher side toward front*
2. *Bolt M10 (2) (ski leg)*
3. *Washer (2) (section no. 1). Installed on bolt head side*
4. *Flanged nut M10 (2) (section no. 2). Torque to 32 N•m (24 lbf•ft)*

Adjust handlebar and torque nuts between 21 and 28 N•m (16 and 20 lbf•ft).



TYPICAL

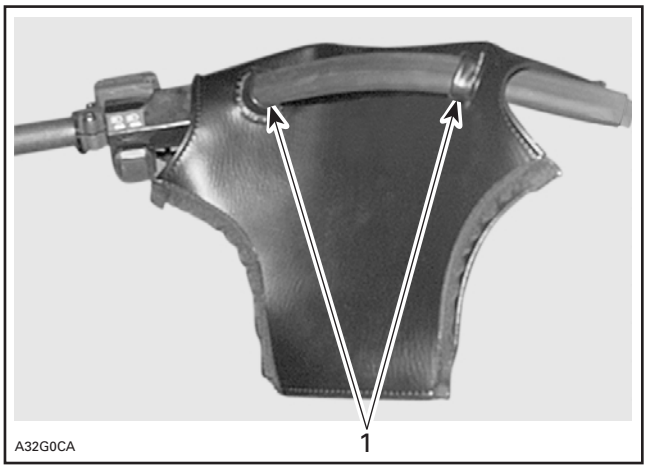
1. *Torque between 21 and 28 N•m (16 and 20 lbf•ft)*
2. *Equal gap each side (both clamps)*

Loosen, at least 3 turns, Allen screw of throttle and brake handle housings.

STEERING HOLDING STRAP

Cut locking tie retaining right side strap end.

Insert strap through holes provided in steering padding, as shown in the next photo.

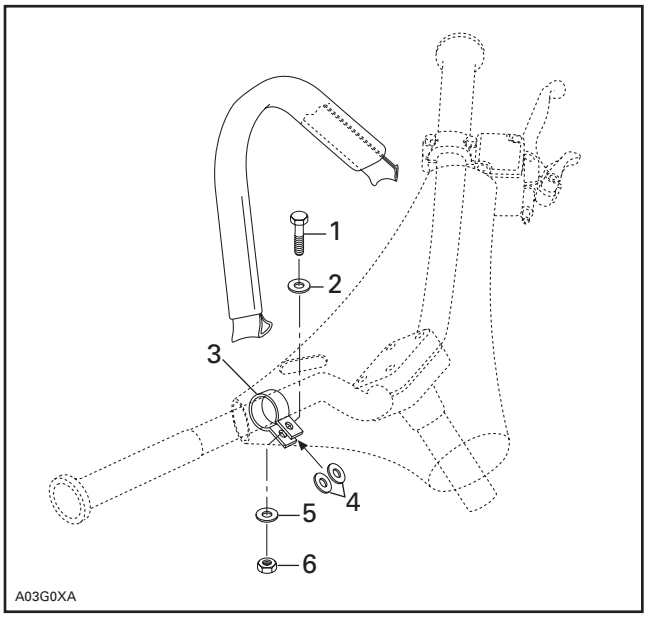


TYPICAL

1. *Strap inserted through both steering pad cover holes*

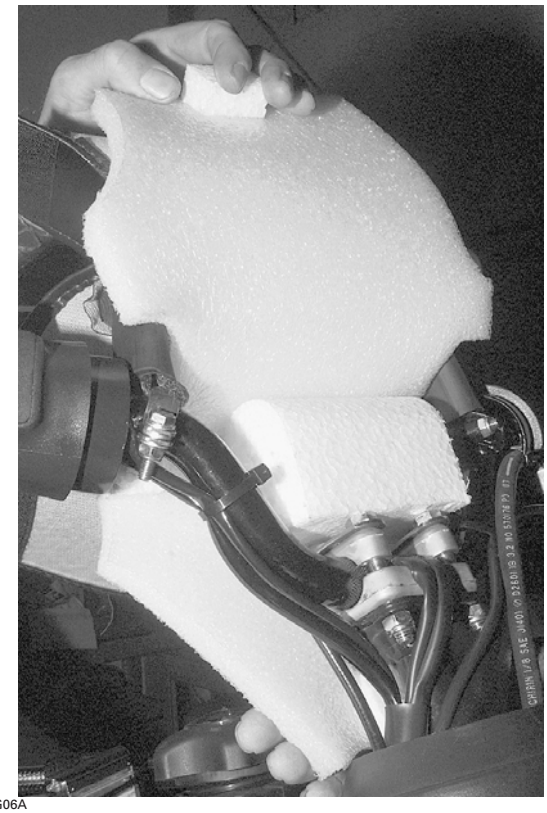
Secure right side strap end with retaining clip and tighten firmly using bolt, nut and washers (section no. 3) in the sequence shown on drawing below. Torque to 10 - 12 N•m (89 - 106 lbf•**in**).

NOTE: A wire routes along handlebar. To avoid pinching it, take care to keep wire out of retaining clip.



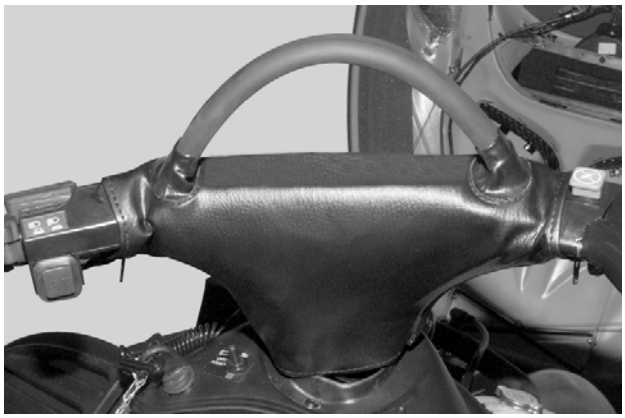
1. *Bolt*
2. *Washer*
3. *Retaining clip*
4. *Washers*
5. *Washer*
6. *Nut*

Properly position foam and padding in place, as shown in the next photo.


A32G06A

MAKE SURE FOAM AND PADDING WRAP STEERING PROPERLY

Fasten padding with velcro strips to complete installation.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TYPICAL — FINAL INSTALLATION

Remove headlamp protector from hood.

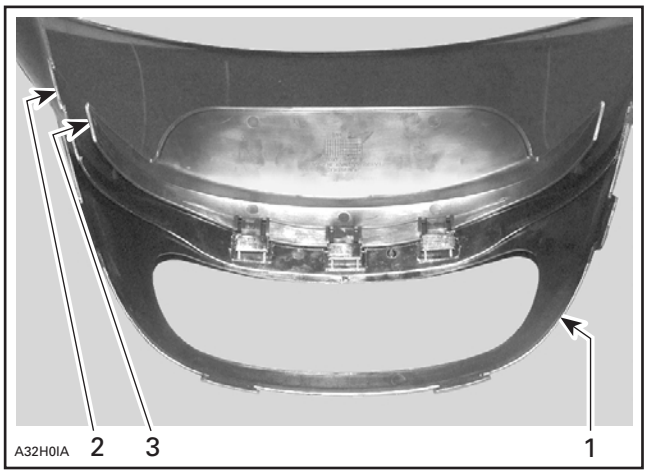
Unclip inner protector from headlamp protector.

Remove blue protector films from windshield.

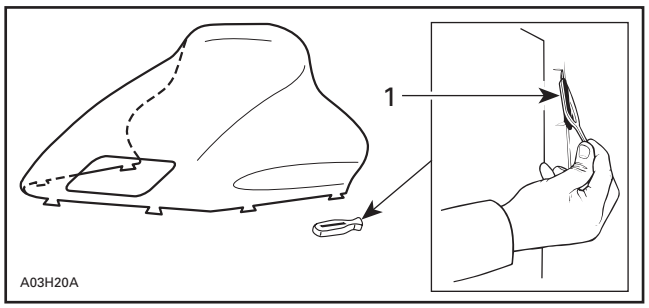
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp protector*
2. *Windshield*
3. *Inner protector*

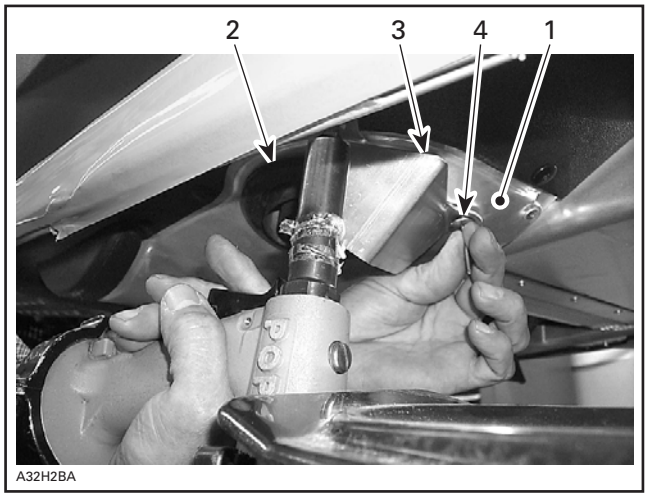


1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 in section no. 5)*

TYPICAL — WINDSHIELD INSTALLED

PARTS INSTALLATION
EXHAUST DEFLECTOR

While front of vehicle is lifted attach exhaust deflector (section no. 3 or 8) to bottom pan using rivets found in section no. 3 or 5. See photo.



1. Bottom pan
2. Exhaust hole
3. Deflector
4. Rivets

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

LIQUIDS
OIL INJECTION PUMP BLEEDING

SUPPLEMENTAL OIL

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz.) of BOMBARDIER injection oil (P/N 413 803 000) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

PUMP ADJUSTMENT

Oil injection pump is factory set. However, if adjustment needs to be checked or modified, refer to special *Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (ex.: locking tab, elastic stop nut, self-locking fasteners, etc.) must be installed or replaced with new ones where specified. If the efficiency of a locking device is impaired, it must be renewed.

⚠ WARNING

Make sure cable is free to swivel in lever end.

LIQUIDS
BRAKE FLUID LEVEL

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT 4) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partially filled bottle of brake fluid.

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

When operation is done, install wheel caps provided with the predelivery kit (section no. 4) on rearmost wheels.

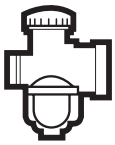
NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap from getting out its location due to soap residual.

ADJUSTMENTS
DRIVEN PULLEY

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Further inquiries should be directed to your distributor service representative.

	MODEL			SUMMIT 800
	Engine Type			793
	Maximum HP RPM ①		± 100 RPM	7850
	Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	420 867 870
	Carburetor Type			TM 40 - B-106 with DPM
	Main Jet			500
	Needle Jet			P0
	Pilot Jet			17.5
	Needle Identification — Clip Position			9ZLY2 — single position
	Slide Cut-Away			2.0
	Float Adjustment		± 1 mm (± 0.04 in)	—
	Air Screw Adjustment		± 1/16 turn	—
	Idle Speed RPM		± 200 RPM	1500
	Gas Grade/Pump Octane Number		(R + M)/2	Regular unleaded/87
	Gas/Oil Ratio			Oil injection
	Ignition Timing BTDC ②		mm (in)	3.51 (0.138)
	Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 - .057)
	Gear Ratio		Teeth	21/43
	Engagement Speed		± 100 RPM	3800
	Drive Pulley Calibration Screw Position			3
	Pulley Distance	Z	± 0.5 mm (± 1/64 in)	16.5 (21/32)
	Offset	X	± 0.5 mm (± 0.02 in)	35.5 (1.398)
		Y	± 0.5 mm (± 1/64 in)	Dimension Y must exceed X from 1 mm (1/32 in)
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
		Force ③	kg (lbf)	11.34 (25)
	Driven Pulley Preload		± 0.7 kg (± 1.5 lbf)	8.0 (17.6)
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation
	Track Adjustment	Deflection	mm (in)	30 to 35 (1-3/16 to 1-3/8) with a 7.3 kg (16 lb) downward pull

① Engine speed at which maximum power is achieved.

② At 3500 RPM (engine cold) with headlamp turned on.

③ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center
ATDC: After Top Dead Center
PTO: Power Take OFF side
MAG: Magneto side
N.A.: Not applicable

Please route to :

Init.

- Service
- Sales
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ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-11**

Date: October 27, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2001	MX* Zx 440 Racing	1715/1716	All

This bulletin must be used in conjunction with the check list enclosed in the bag with the *Operator's Guide*. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

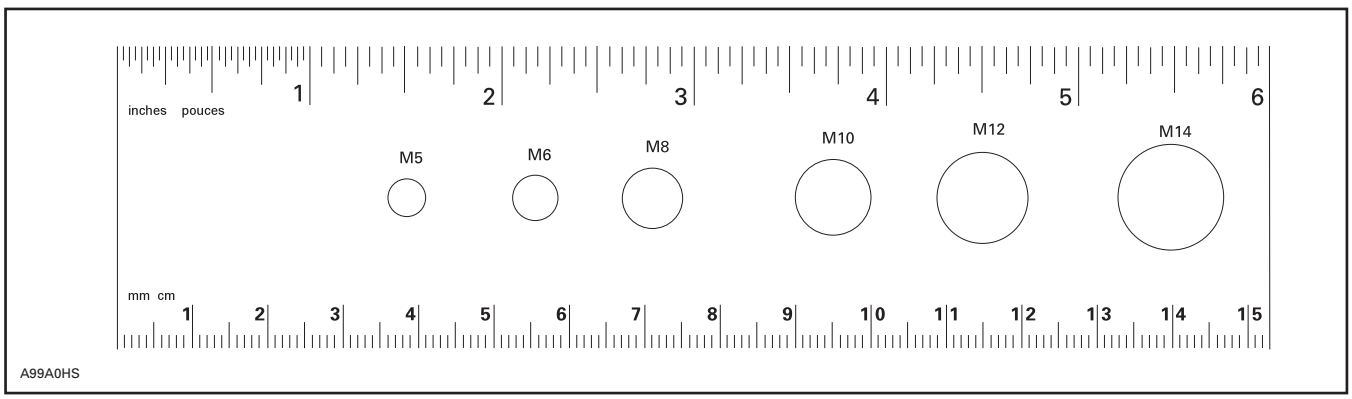
To obtain warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

CAUTION: When fuelling snowmobile, always premix fuel with BOMBARDIER synthetic injection oil using a ratio of 33:1.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook, Predelivery Check List* signed copy and video.



NOTE: This ruler can be helpful to identify fastener length or size.

PREDELIVERY KIT P/N	MODELS
549 010 939	MX Zx 440 Racing

⚠ WARNING

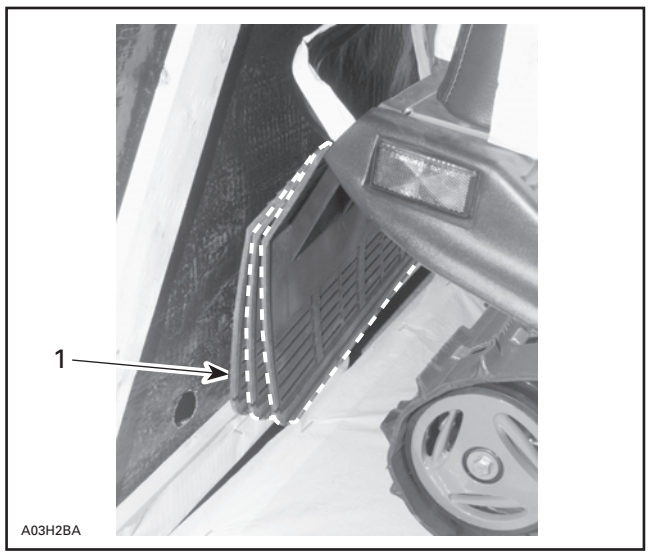
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

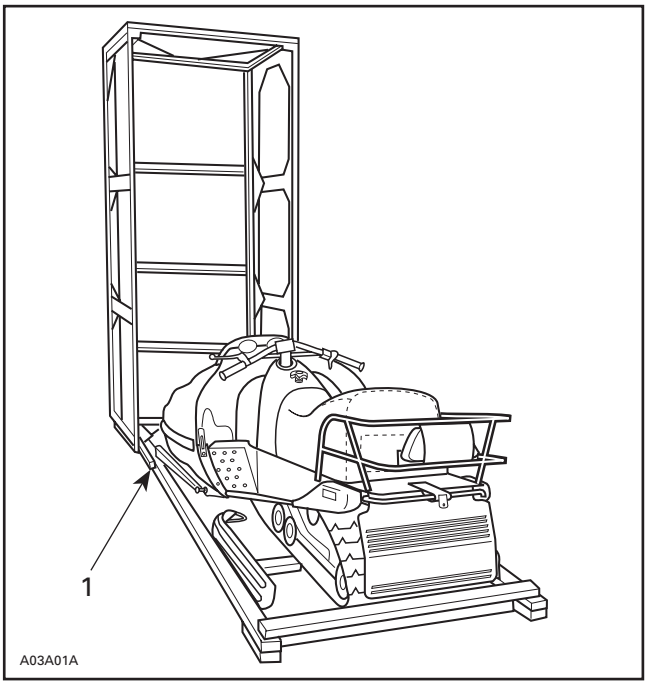
Remove all screws retaining cover to vehicle base. Tip cover toward front or rear of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging any part of the snowmobile.

NOTE: If cover is tilted toward front of vehicle, snow guard may interfere with crate cover, as shown in the following photo. Push on snow guard when lifting cover.



IF CRATE COVER IS TILTED TOWARD FRONT OF VEHICLE, FROM OUTSIDE CRATE PUSH ON SNOW GUARD TO ALLOW COVER TO LIFT WITHOUT DAMAGING SNOW GUARD

1. Snow guard interfering with crate cover



1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts for reinstallation. Discard crating spacers and nuts.

Remove vehicle from base.

Remove drive belt from engine compartment and accessories, such as predelivery kit, steering pad and shocks from the box.

FRONT HOOKS REMOVAL

NOTE: This model is equipped with two front hooks and not at rear.

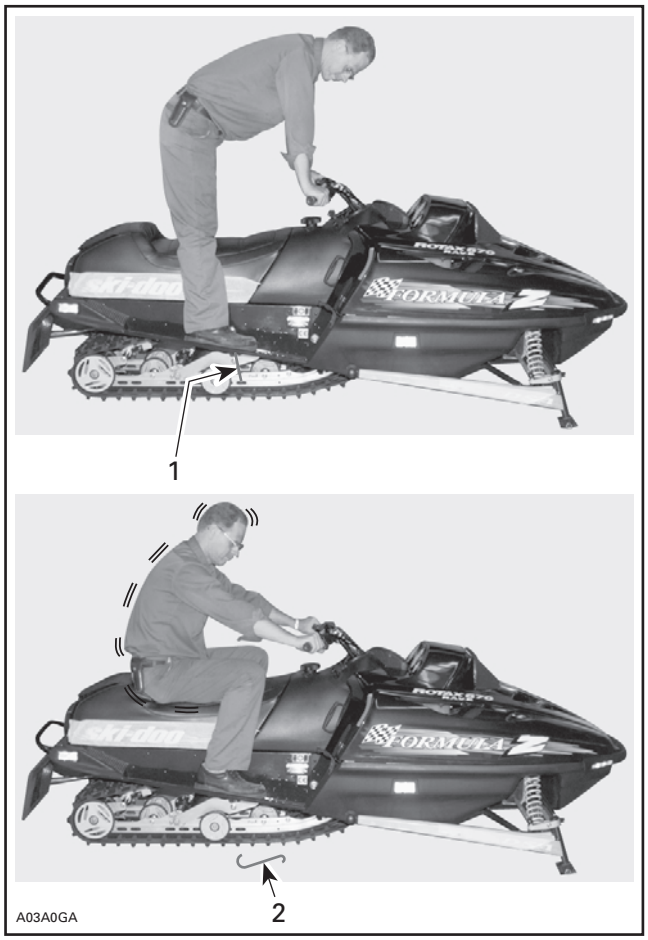
Procedure

Apply parking brake.

To remove hooks, stand on running boards.

Using a fast and strong movement, sit down on snowmobile seat. This will allow suspension to compress and hooks to detach. See the next photo.

CAUTION: To avoid damaging seat storage compartment and cover, always sit on seating surface.



TYPICAL — STAND ON RUNNING BOARDS THEN SIT DOWN ON SEAT

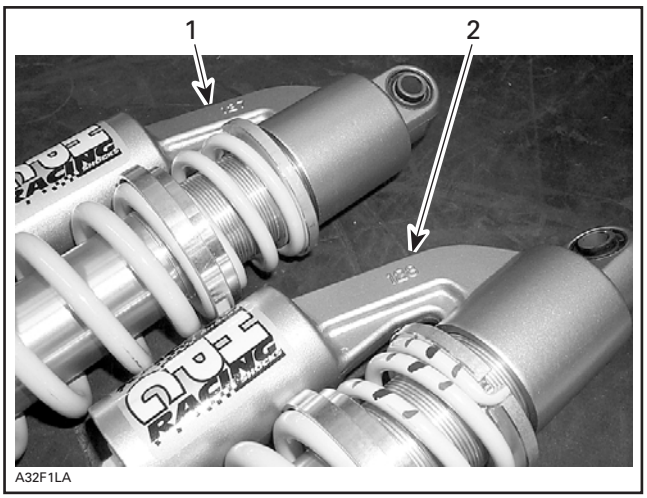
1. *Hook to be removed (both sides)*
2. *Hook removed*

Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Cut locking tie retaining bushing on lower end of shock.

Secure shock absorbers to suspension with their adjusting rings at top. Take care not to mix left and right shocks. A number is embossed on reservoir shoulder (127 for right shock and 128 for left one).



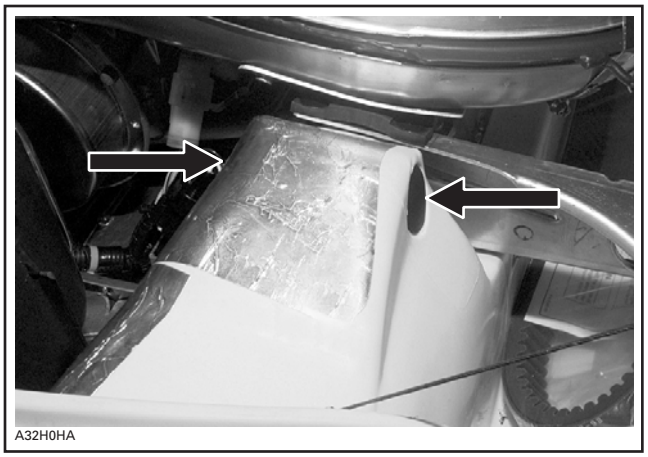
1. Right shock with the inscription 127 embossed
2. Left shock with the inscription 128 embossed

Position screw heads toward front of vehicle and secure with nuts provided in predelivery kit (section no. 3). Torque to 48 N•m (35 lbf•ft).

⚠ WARNING

Always turn the adjusting rings of both shocks the same number of turns. Otherwise, the behavior of front suspension will be impaired.

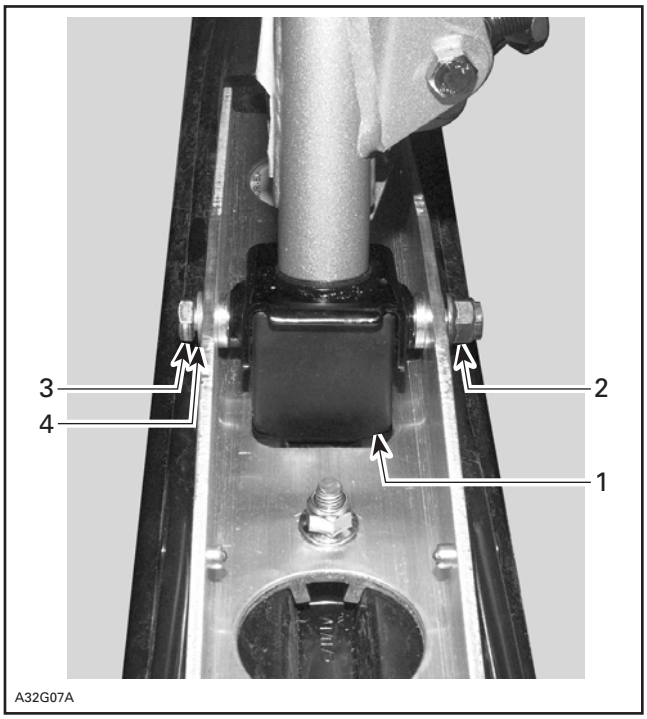
Install caps provided in predelivery kit on bottom pan, each side of upper bolt.



SNAP PROVIDED CAP (SECTION NO. 5) EACH SIDE OF MOLDING

If maintenance has to be done on shock absorbers, refer to *Service Bulletin 2001-7* for adjustment and calibration.

Install skis on vehicle.



TYPICAL — RIGHT SIDE SHOWN

1. *Ski stopper (2) (section no. 3) with higher side toward front*
2. *Flanged nut M12 x 1.75 (2) (section no. 3). Torque to 32 N•m (24 lbf•ft)*
3. *Bolt M12 (2)*
4. *Washer (2) (section no. 3) installed on bolt head side*

CAUTION: Installation of the standard inserts validates the limited warranty coverage.

IMPORTANT NOTICE

The 2001 MX Zx 440 Racing snowmobile is shipped with a set of high CR combustion chamber inserts.

CAUTION: These high compression inserts are installed in the vehicle and require fuel with a minimum octane rating of 91.

To validate warranty, order (no charge) and install standard combustion chambers (P/N 420 923 870).

NOTE: Order preceeding parts through normal channel.

It is also of the utmost importance to proceed with the following setting and/or replacement if standard inserts are installed.

– Main jets have to be changed from 350 PTO side and 340 MAG side to 320 on both sides.
– Calibration screws on TRA pulley must be set to position no. 5 (instead of position 4).

PARTS SUPPLIED (upon your ordering them) (no charge)

DESCRIPTION	PART NUMBER	QTY
Standard Combustion Chamber Insert	420 923 870	2
Main Jet 320	404 101 300	2

PROCEDURE

NOTE: Installation of these inserts validates the limited warranty coverage.

Disassembly

Cylinder

Remove spark plugs and, coolant outlet. Unscrew cylinder head cover then cylinder head.

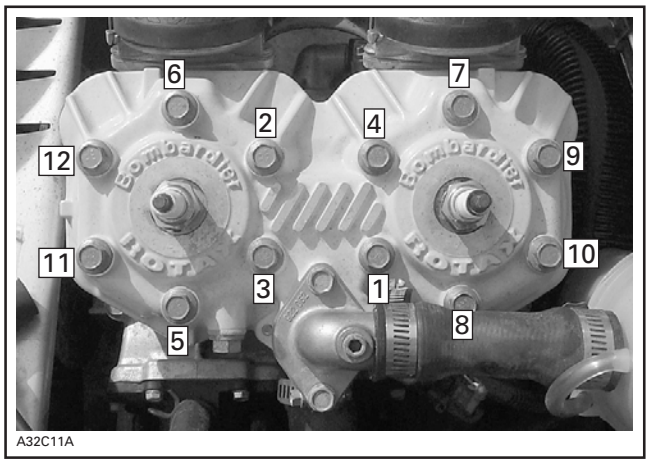
Assembly

Cylinder Head Cover, Cylinder Head and Cylinder

Check flatness of parts sealing surfaces.

Refer to LEAK TEST AND ENGINE DIMENSION MEASUREMENT of *Ski-Doo Shop Manual* and look for **Checking Surface Flatness**.

At assembly, torque cylinder head screws to 29 N•m (21 lbf•ft) in the following illustrated sequence.



Install socket outlet and tighten screws to 12 N•m (106 lbf•**in**). Note position of longer screw.

Adjust handlebar and tighten nuts between 21 and 28 N•m (16 and 20 lbf•ft). Place throttle and brake cable in front of steering extension. With pliers, bend each locking tab below handlebar extension on a flat side of bolt.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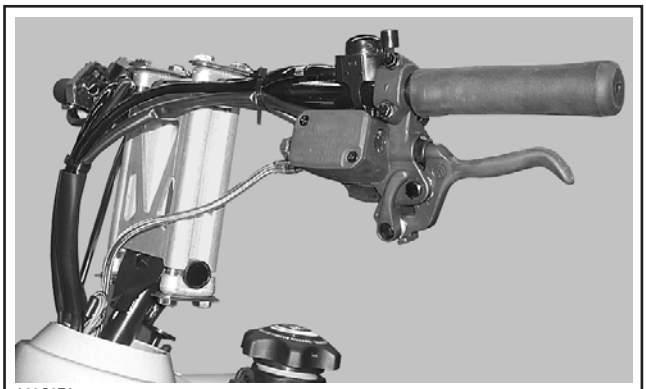
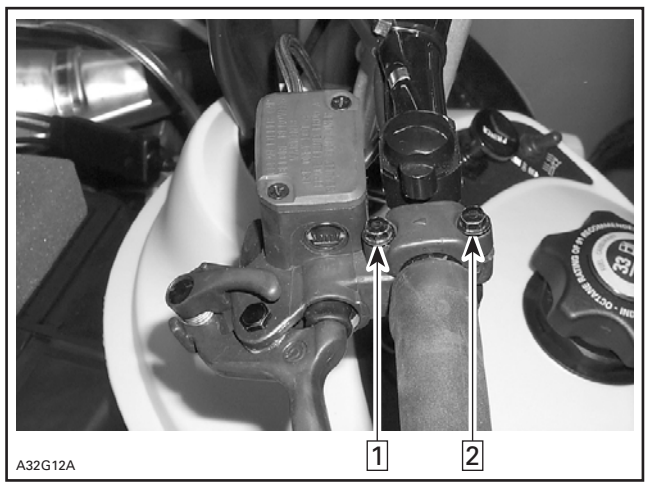
Turn brake housing to level brake oil reservoir.


A32G0ZA

RESERVOIR WALL MUST BE PARALLEL WITH DIMMER HOUSING

Secure front screw first, then rear screw. See photo.

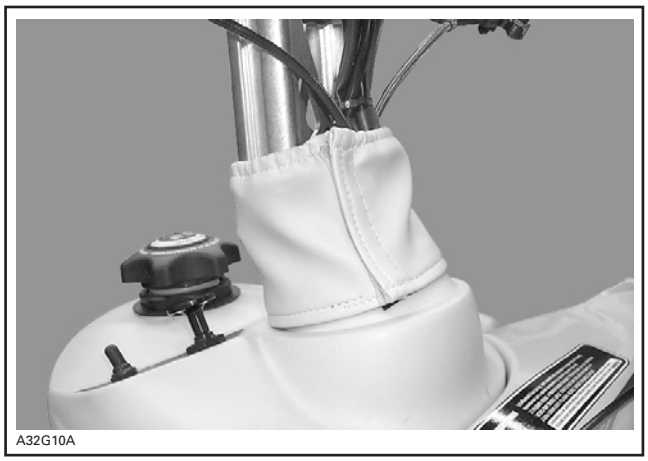


A32G12A

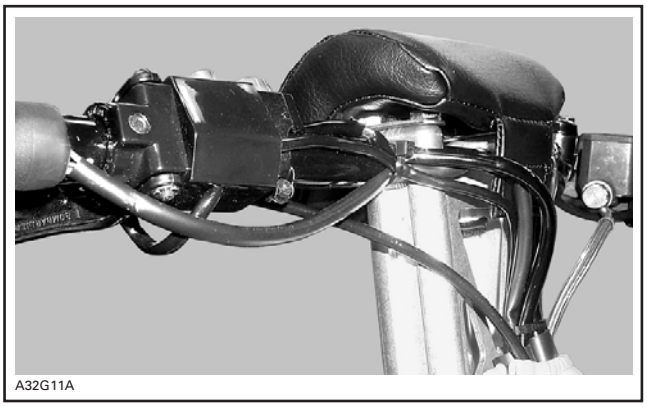
Step 1: Screw this bolt first to a torque between 7 and 10 N•m (5.25 and 7.5 lbf•ft)

Step 2: Secure housing with this bolt (same torque)

Install steering column boot around handlebar extension.


A32G10A

Wrap center of handlebar with protector pad. Secure it with velcro flaps.


A32G11A

A32G13A

SPEEDOMETER INSTALLATION

NOTE: The speedometer may be installed or not at the convenience of the driver.

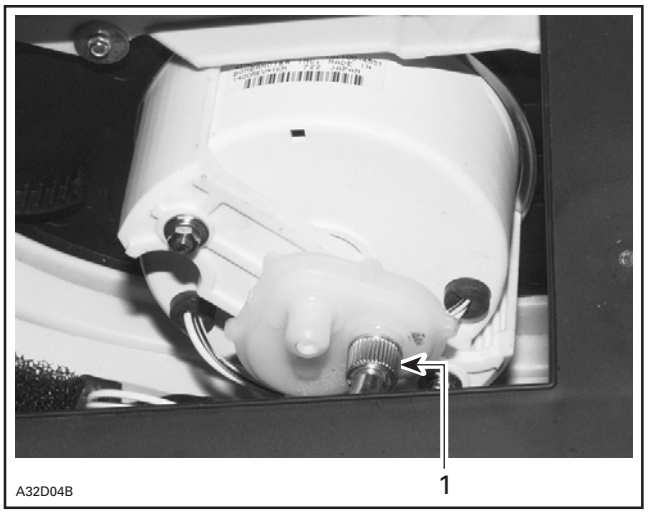
Using the template provided on last page, punch the center point of the speedometer location on gauge support.

Drill speedometer location with a 111 mm (4-3/8 in) hole saw.

Insert speedometer gauge in place on dashboard with gauge packing in place around speedometer gauge.

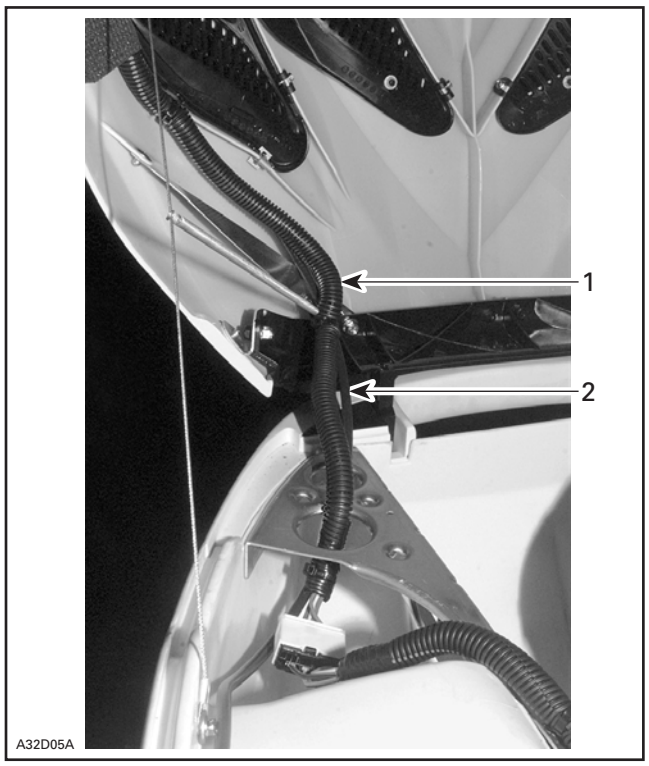
Underneath dash, install ring and gauge holder. Secure with provided fastening devices.

Screw speedometer cable on drive angle.



1. Screw cable here

Route the speedometer cable under electrical wire, through frame support (see photo) and alongside bottom pan.

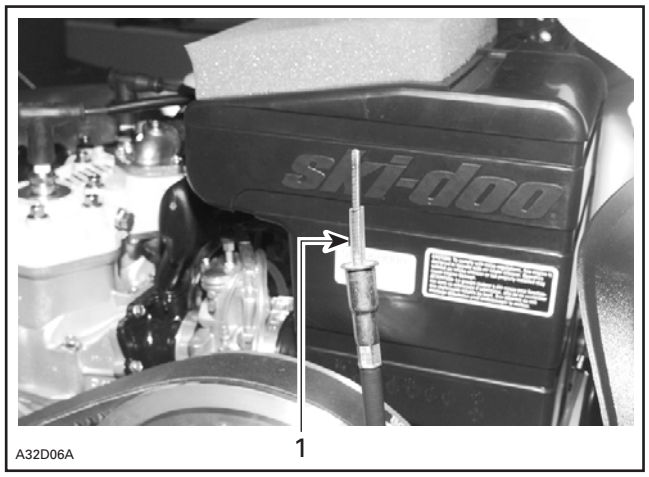


SPEEDOMETER WIRE ROUTING

1. Electrical strand
2. Speedometer wire under electrical strand

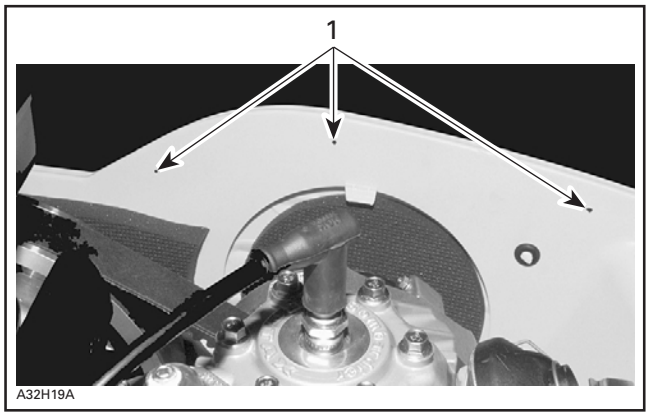
Remove pulley guard.

Insert clear plastic bushing onto wire and insert wire in place on drive axle (under driven pulley).



1. Plastic bushing around speedometer wire

Ensure wire will not touch transmission pulleys securing it with clips screwed on black marks as per illustration below.



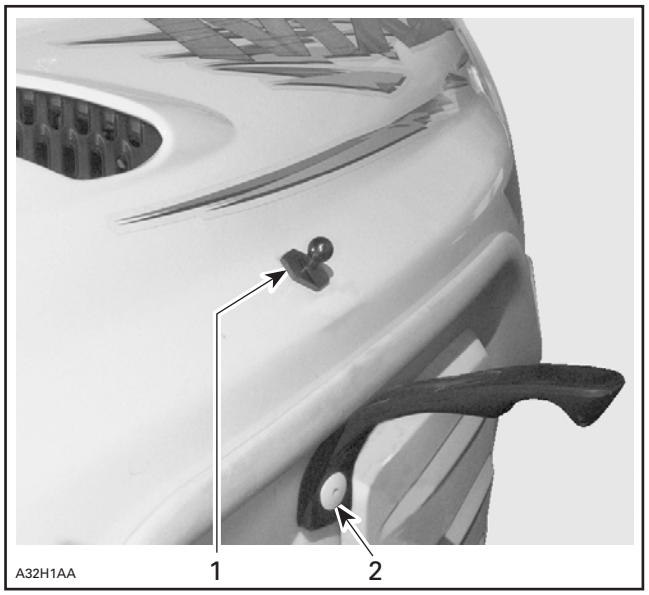
1. Install clips on these points

With locking ties (not included), attach speedometer cable to electrical strand.

Reinstall pulley guard.

HOOD LATCHES

Hood latches are provided for owner who whishes to have a supplemental hood fixture. Install rubber latch on bottom pan near front shocks and studs on hood as per following photos.



1. Drill and rivet stud
2. Drill and rivet latch

SECURE HOOD WITH LATCH

Make sure to install both latches symmetrically.

PARTS INSTALLATION
WINDSHIELD

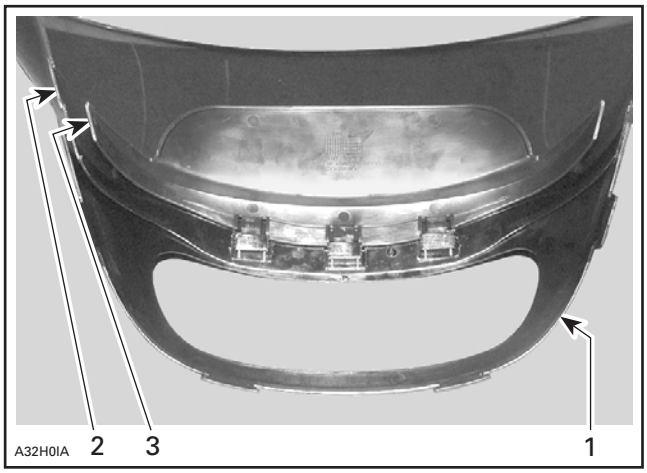
Remove headlamp protector from hood.

Unclip inner protector from headlamp protector.

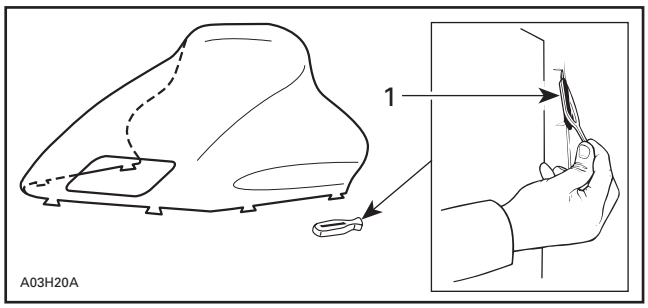
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp protector*
2. *Windshield*
3. *Inner protector*



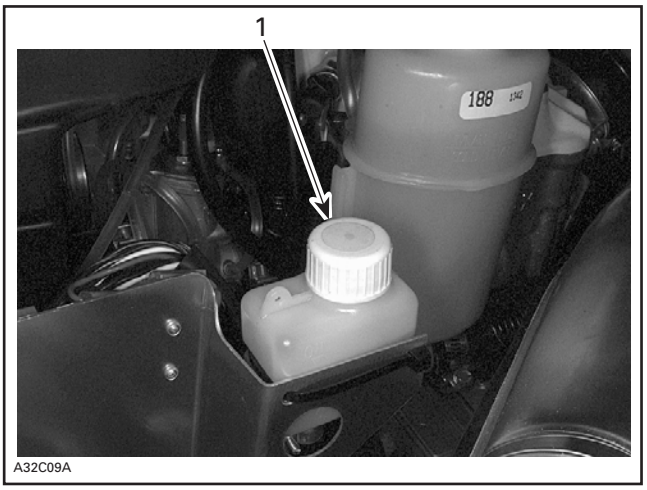
1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 in section no. 2)*

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P/N 413 711 809) before installing drive belt.

LIQUIDS
OIL RESERVOIR LEVEL

Remove sticker on oil reservoir cap to free vent hole. This sticker was installed to avoid oil spilling during transportation. Check also oil level in the reservoir. Add oil as required. Refer to the following photo.



TYPICAL — OIL RESERVOIR
1. Sticker installed for transportation

CAUTION: Use only BOMBARDIER synthetic injection oil (P/N 413 710 500) (12 x 1 L).

LIQUIDS
BRAKE FLUID LEVEL

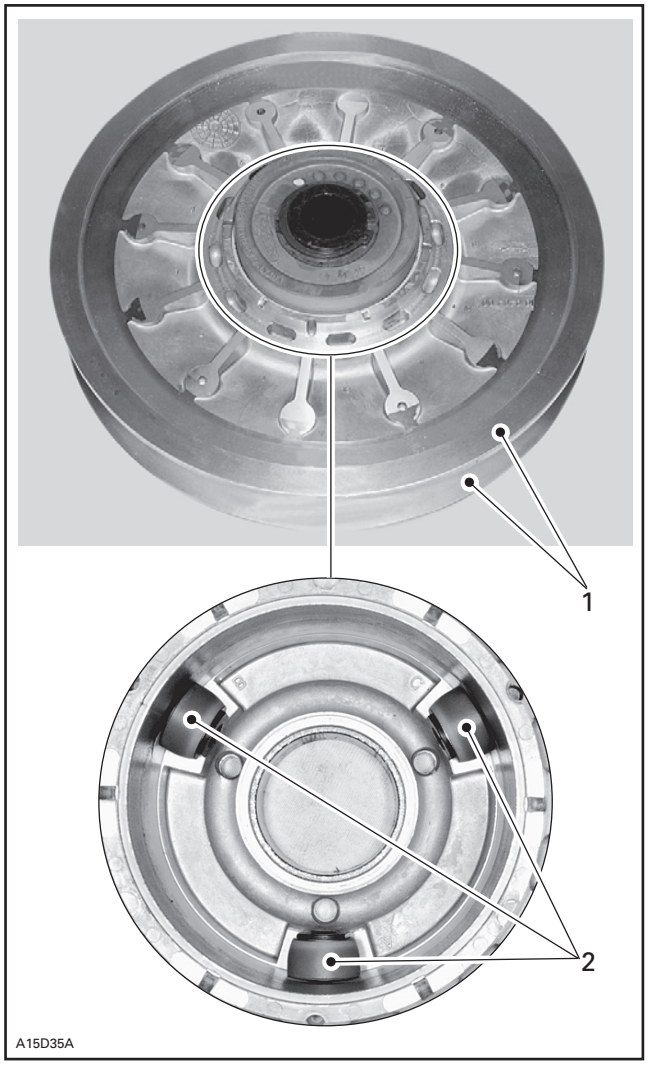
Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT 4) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partly filled bottle of brake fluid.

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section, pages 15 and 16 of this bulletin.

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

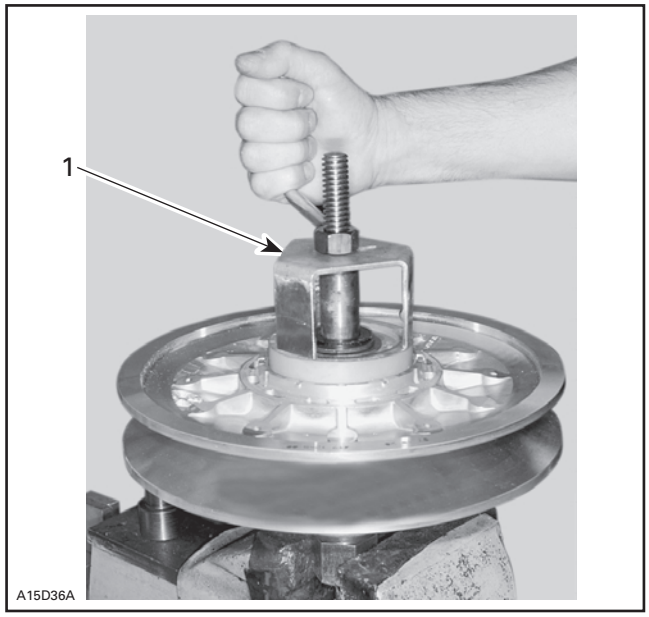


DRIVEN PULLEY

1. *Machined surface*
2. *Cam bearing*

Disassembly

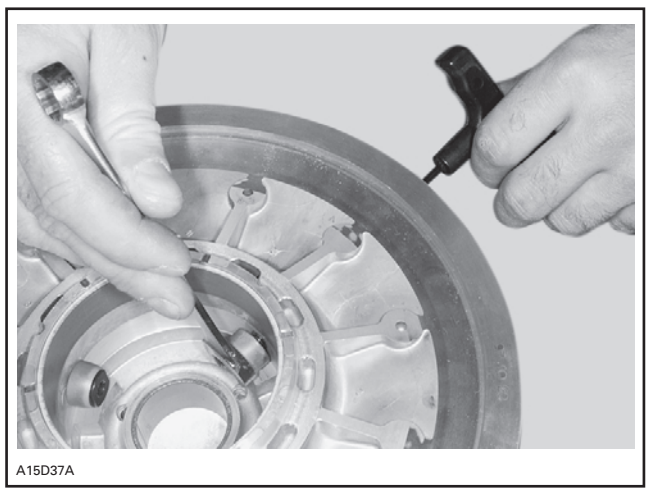
Use spring compressor/TRA clutch flare tool (P/N 529 035 524).



1. Spring compressor/TRA clutch flare tool (P/N 529 035 524)

Remove snap ring and washer to disassemble the outer cam and both pulley halves.

Hold bearing sleeve from inside then remove Allen screw from outside, see next photo.



TO REMOVE BEARING

Cleaning

During break-in period (about 10 hours of use), teflon from bushing moves to cam or shaft surface.

A teflon over teflon running condition occurs, leading to low friction. So it is normal to see gray teflon deposit on cam shaft. Do not remove that deposit, it is not dust.

When a dust deposit has to be removed from the cam or the shaft, use dry cloth to avoid removing transferred teflon.

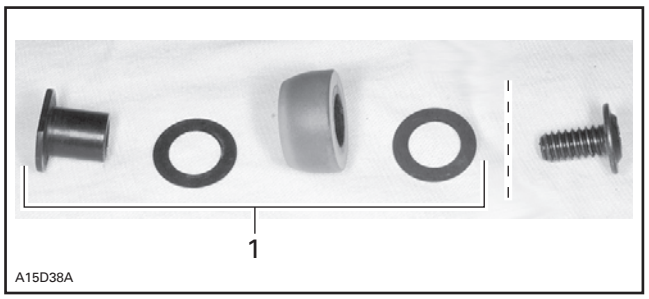
Inspection

Inspect bearings every 75 hours.

Check for cracks, scratch and for free movement when assembled to fixed half.

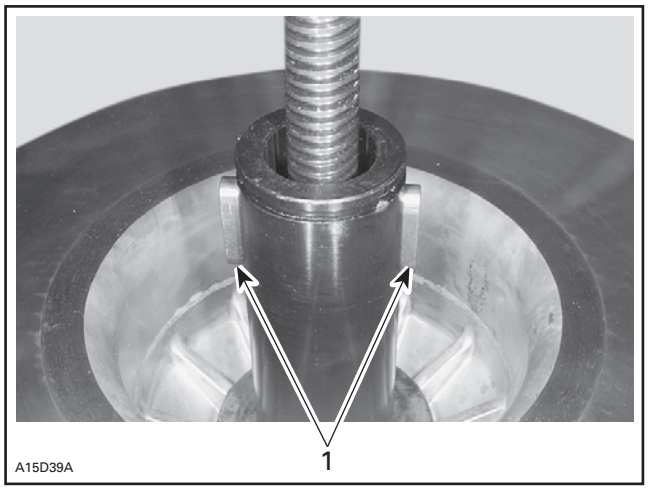
Assembly

When replacing bearings, always install a new set of 3 bearings to maintain equal pressure on the cam.



1. Inside driven pulley

Assemble driven pulley components by reversing the disassembly procedure. Pay special attention to the following:



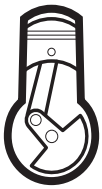
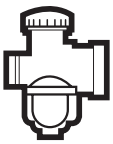
1. Ensure that both keys are in place

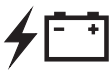
BRAKE

Fixed brake disc with racing type brake pads. Brake hoses are reinforced.

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquiries should be directed to your distributor service representative.

	VEHICLE MODEL			MX ZX 440 RACING
	ENGINE TYPE			**453**
	Number of Cylinders			2
	Bore		mm (in)	65.0 (2.56)
	Stroke		mm (in)	65.8 (2.59)
	Displacement		cm^3 (in^3)	436.6 (26.6)
	Compression Ratio (corrected)			7.7
	Maximum Power Engine Speed ①		± 100 RPM	8400
	Piston Ring Type		1st/2nd	ST/—
	Ring End Gap	New Wear Limit	mm (in) mm (in)	0.2 (.008) 1.0 (.040)
	Ring/Piston Groove Clearance	New Wear Limit	mm (in) mm (in)	0.04 (.0016) 0.2 (.0079)
	Piston/Cylinder Wall Clearance	New Wear Limit	mm (in) mm (in)	0.11 (.0031) 0.18 (.0071)
	Connecting Rod Big End Axial Play	New Wear Limit	mm (in) mm (in)	0.39 (.0154) 1.2 (.0472)
	Maximum Crankshaft End-play ②		mm (in)	0.3 (.0118)
	Maximum Crankshaft Deflection		mm (in)	0.08 (.0031)
	Rotary Valve Timing and P/N		Opening – Closing P/N	N.A.
	Magneto Generator Output		W	290
	Ignition Type			CDI
	Spark Plug Make and Type			NGK BR9ES
	Spark Plug Gap		mm (in)	0.45 (.018)
	Ignition Timing BTDC ③		mm (in)	3.14 (.124)
	Trigger Coil ④		Ω	190 – 300
	Generating Coil ④		Ω	12 – 22
	Lighting Coil ④		Ω	0.1 – 0.4
	High Tension Coil ④	Primary	Ω	—
		Secondary	kΩ	—
	Carburetor Type		PTO/MAG	TMX 34-7
	Main Jet		PTO/MAG	350
	Needle Jet			Q-6
	Pilot Jet			25
	Needle Identification — Clip Position			6F1Y4-59 — 4
	Slide Cut-Away			4.0
	Float Adjustment		± 1 mm (± .040 in)	—
	Air Screw Adjustment		± 1/16 Turn	1
	Idle Speed RPM		± 200 RPM	1600
	Gas Type/Pump Octane Number			Unleaded/87
	Gas/Oil Ratio Mixing Oil			Premix 33: 1 BOMBARDIER Synthetic
	Type			Liquid
	Axial Fan Belt Adjustment	Deflection ⑤	mm (in)	N.A.
		Force	kg (lbf)	N.A.
	Thermostat Opening Temperature		°C (°F)	—
	Radiator Cap Opening Pressure		kPa (PSI)	—
	**ENGINE COLD N·m (lb·ft)**	Drive Pulley Retaining Screw		⑥
		Exhaust Manifold Nuts or Bolts		21.5 (16)
		Magneto Ring Nut		125 (92)
		Crankcase Nuts or Screws	M6 M8	9 (6.5) 29 (21)
		Crankcase/Engine Support Nuts or Screws		40 (30)
		Cylinder Head Nuts		29 (21)
		Axial Fan Shaft Nut		N.A.

	VEHICLE MODEL			MX ZX 440 RACING
	ENGINE TYPE			**453**
	Chain Drive Ratio			21/43
	Chain	Pitch	mm (in)	9.525 (.375)
		Type/Links Qty/Plates Qty		Silent 74 - 15
	Drive Pulley	Type of Drive Pulley		TRAC
		Ramp Identification		296 ⑤
		Calibration Screw Position or Calibration Disc Quantity ⑤		4
		Spring Color		Pink/White
		Spring Length	± 1.5 mm (± 0.060 in)	124.5 (4.90)
		Clutch Engagement	± 200 RPM	5000
	Driven Pulley Spring Preload Cam Angle		± 0.7 kg (± 1.5 lb) degree	7.0 (154) 44°
	Pulley Distance Z		(± 0.5) mm (± 1/32 in)	16.5 (21/32)
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-25/64)
		Y – X	MIN. – MAX. mm (in)	1.0 (0.039)
	Drive Belt Part Number (P/N)			414 860 700
	Drive Belt Width (new) ①		mm (in)	35.3 (1-25/64)
	Drive Belt Adjustment	Deflection	± 5 mm (± 13/64 in)	32 (1-1/4)
		Force ②	kg (lbf)	11.3 (25)
	Track	Width	cm (in)	38.1 (15.0)
		Length	cm (in)	307 (121)
		Adjustment – Deflection	mm (in)	30 – 35 (1-11/64 – 1-3/8)
		Adjustment – Force ③	kg (lbf)	7.3 (16)
	Suspension Type	Track		SC10 II
		Ski		Advanced DSA
	Length		cm (in)	275.0 (108.3)
	Width		cm (in)	121.2 (47.7)
	Height		cm (in)	100 (39.4)
	Ski Stance		cm (in)	108.0 (42.5)
	Mass (dry)		kg (lb)	210 (462)
	Ground Contact Area		cm^2 (in^2)	6670 (1034)
	Ground Contact Pressure		kPa (PSI)	3.09 (0.448)
	Frame Material			Aluminum
	Bottom Pan Material			Impact Copolymer
	Cab Material			RRIM Polyurethane
	Battery		V (A•h)	N.A.
	Headlight		W	H4 60/55
	Taillight and Stoplight		W	8/27
	Tachometer and Speedometer Bulb		W	2 x 3
	Fuel and Temperature Gauge Bulb		W	N.A.
	Fuse	Starter Solenoid	A	N.A.
		Tachometer	A	N.A.
	Fuel Tank		L (U.S. gal)	37.3 (9.9)
	Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)
	Cooling System		L (U.S. oz)	3.8 (128.5)
	Rotary Valve Reservoir		mL (U.S. oz)	N.A.

ENGINE LEGEND

BTDC: Before Top Dead Center
CDI: Capacitor Discharge Ignition
CTR: Center
K: Kilo (× 1000)
MAG: Magneto Side
N.A.: Not Applicable
PTO: Power Take Off Side
ST: Semi-trapez

① The maximum horsepower RPM applicable on the vehicle. It may be different under certain circumstances and BOMBARDIER INC. reserves the right to modify it without obligation.

② Crankshaft end-play is not adjustable on these models. Specification is given for verification purposes only.

③ At 3500 RPM (engine cold) with headlamp turned on.

④ All resistance measurements must be performed with parts at room temperature (approx. 20°C (68°F)). Temperature greatly affects resistance measurements.

⑤ Force applied midway between pulleys to obtain specified tension deflection.

⑥ Drive pulley retaining screw: torque to 90 to 100 N•m (66 to 74 lbf•ft), install drive belt, accelerate the vehicle at low speed (maximum 30 km/h (20 MPH)) and apply the brake; repeat 5 times. Recheck the torque of 90 to 100 N•m (66 to 74 lbf•ft).

VEHICLE LEGEND

DSA: Direct Shock Action
RRIM: Reinforced Reaction Injection Molding
TRA: Total Range Adjustable
N.A.: Not Applicable

① Minimum allowable width may not be less than 3.0 mm (1/8 in) of new drive belt.

② Force applied midway between pulleys to obtain specified tension deflection.

③ Force or downward pull applied to track to obtain specified tension deflection.

④ Coolant mixture: 60% antifreeze/40% water.

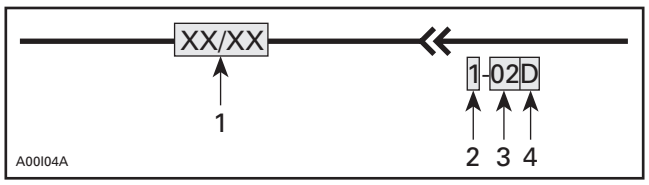
⑤ Lever with roller pin (P/N 417 003 900).

WIRING DIAGRAM

Wiring Diagram Legend

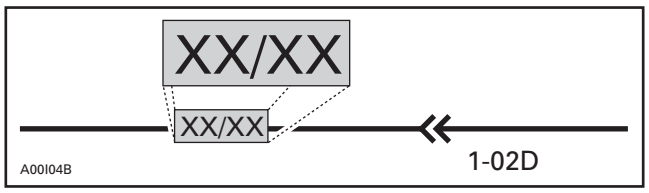
⚠ WARNING

Ensure all terminals are properly crimped on the wires and all connector housings are properly fastened.



1. *Wire colors*
2. *Housing area*
3. *Housing number per area*
4. *Wire connector location in housing*

Wire Colors and Circuit

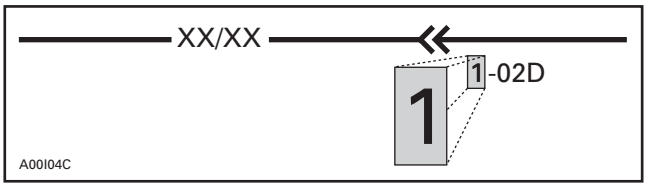


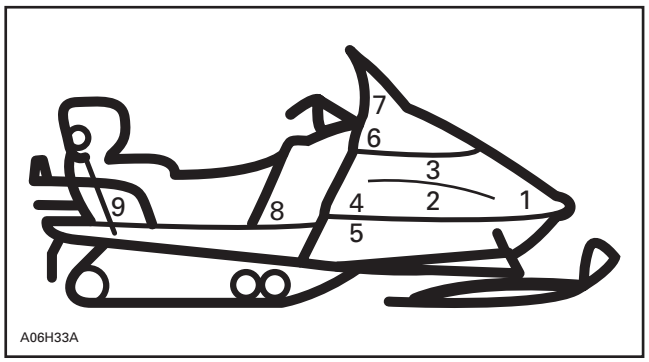
COLOR CODE					
BK	–	BLACK	GN	–	GREEN
WH	–	WHITE	GY	–	GREY
RD	–	RED	VI	–	VIOLET
BL	–	BLUE	OR	–	ORANGE
YL	–	YELLOW	BR	–	BROWN

Following table shows wire colors related to electrical circuits.

WIRE COLOR	ELECTRICAL CIRCUIT	ADDITIONAL INFORMATION
BLACK/YELLOW	ENGINE SHUT OFF – Tether cord switch – Emergency switch	Must be grounded to stop engine.
BLACK (small)	Ground for shut off	
YELLOW YELLOW/BLACK	12 volts (AC)	If shorted, magneto stops producing electricity.
RED/BLUE	12 volts (DC) (+) Rectifier output	
GREY	12 volts (AC) High beam	Current returns by YELLOW/BLACK wire connected to headlamp.
VIOLET/GREY	12 volts (AC) Low beam	
WHITE	12 volts (AC) Brake light	Current returns by YELLOW/BLACK wire connected to taillight.
WHITE/RED	12 volts (AC) Low oil level	Current returns by YELLOW/BLACK wire connected to oil level sensor.
ORANGE	12 volts (AC) Heated grips (max.)	Current returns by YELLOW/BLACK wire connected to heating elements.
ORANGE/VIOLET	12 volts (AC) Heated grips (min.)	
BROWN	12 volts (AC) Heated throttle lever (max.)	
BROWN/YELLOW	12 volts (AC) Heated throttle lever (min.)	
VIOLET	12 volts (AC) Engine overheating light	

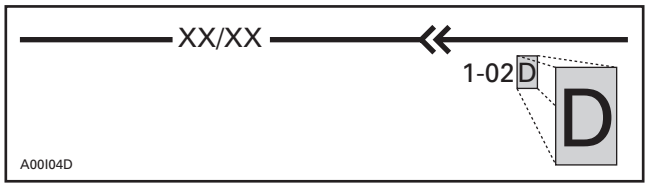
Connector Housing Area

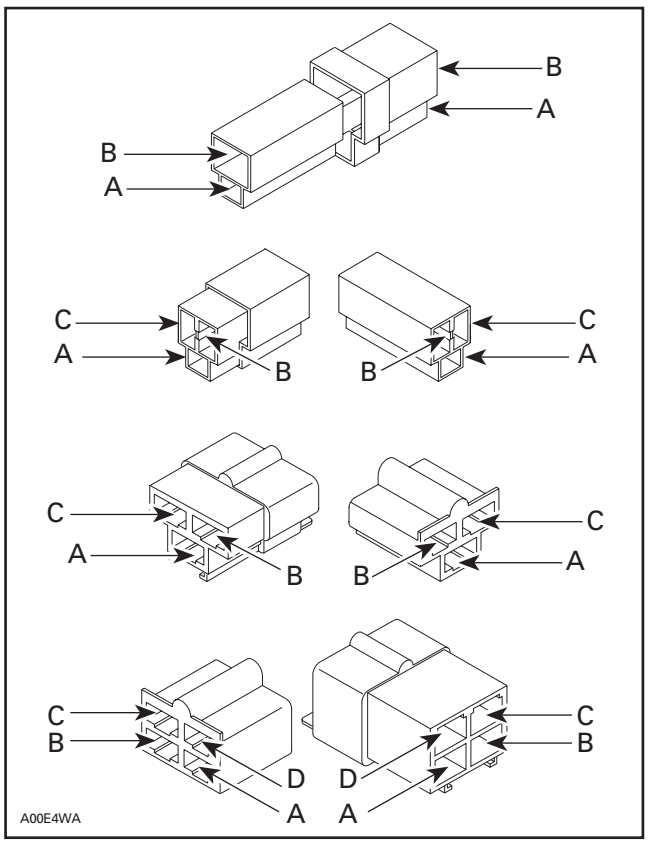




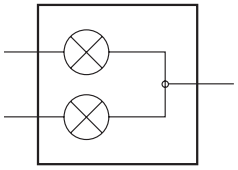
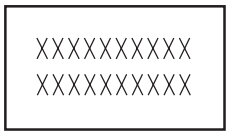
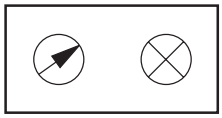
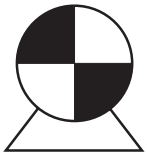
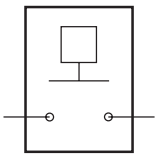
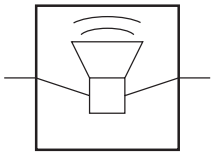
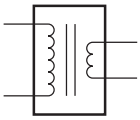
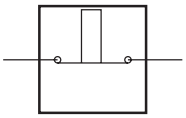
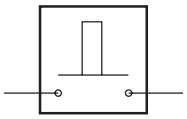
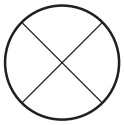
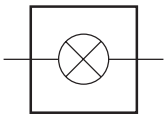
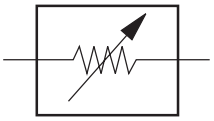
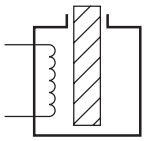
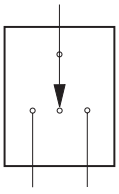
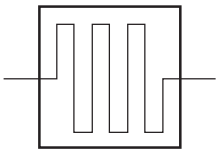
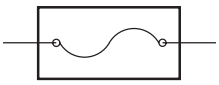
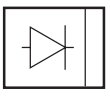
AREA	LOCATION
1	Frame and hood junction
2	Magneto
3	Carburetors
4	Rear of intake silencer
5	Near driven pulley
6	Under handlebar
7	Under hood
8	Near fuel tank
9	Rear of seat

Connector Location in Housing





Symbols Description

Beam and tail light 	Female terminal 	Male terminal 	Electronic module 
Meter 	Electric motor 	Low level sensor 	Buzzer 
Ignition coil 	Normally close switch 	Normally open switch 	Male terminal on instrument 
Engine ground 	Frame ground  Frame	Spark plug 	Meter movement 
Bulb 	Pilot lamp 	Analog sensor 	Solenoid valve 
Magneto (Delta) 	3 position switch 	Heating element 	Fuse 
Trigger coil 	Battery 	Diode 	

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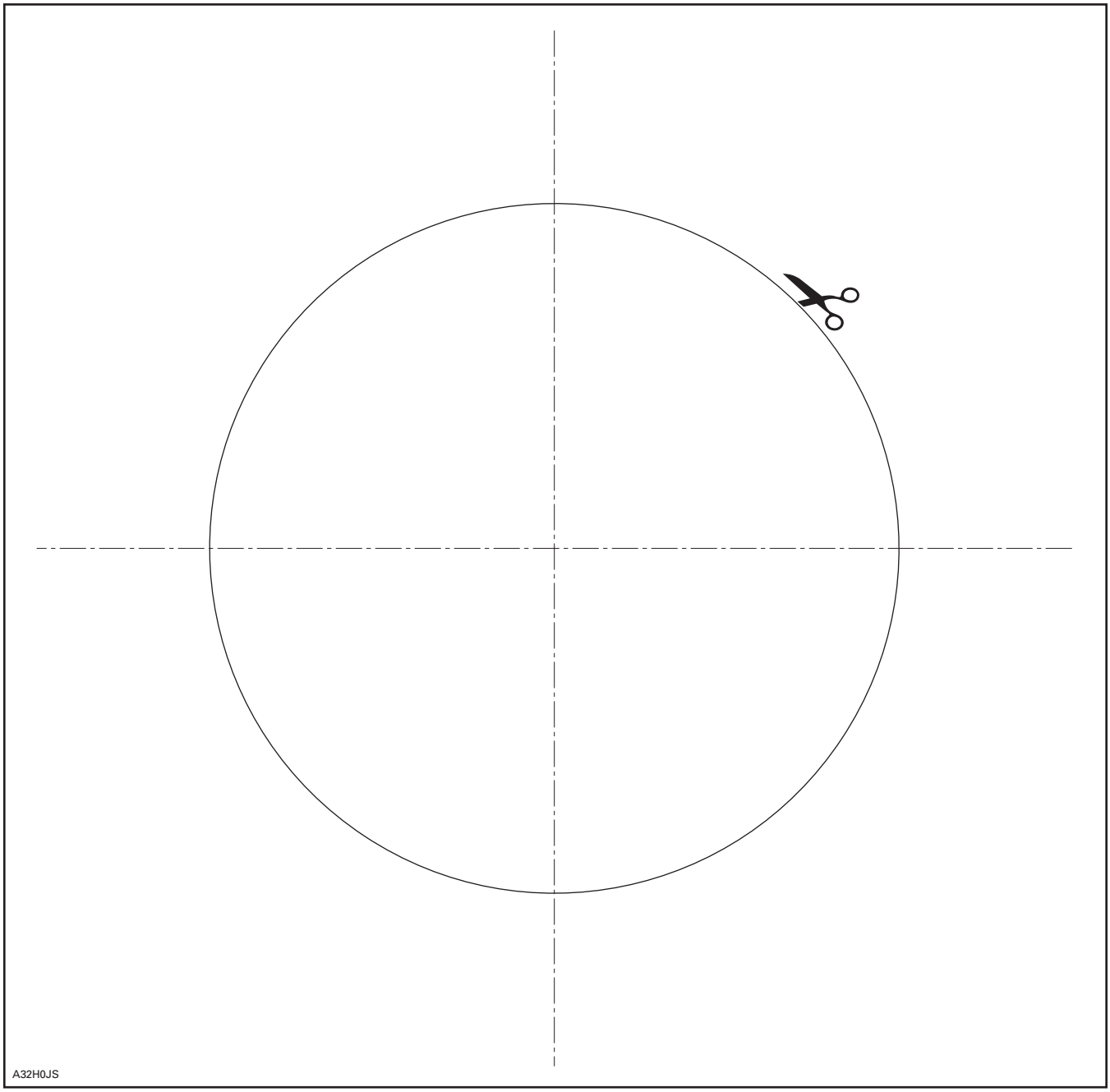
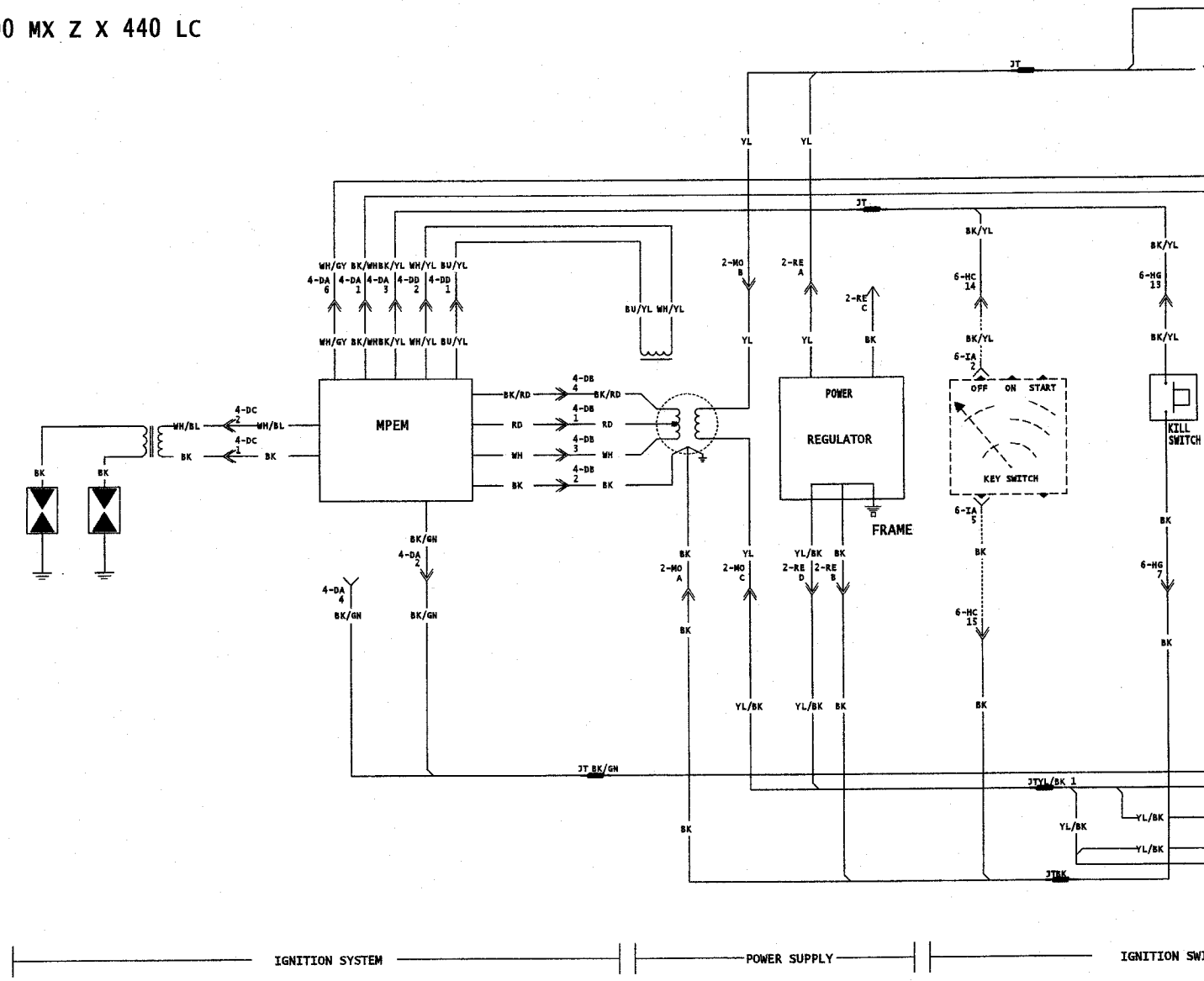
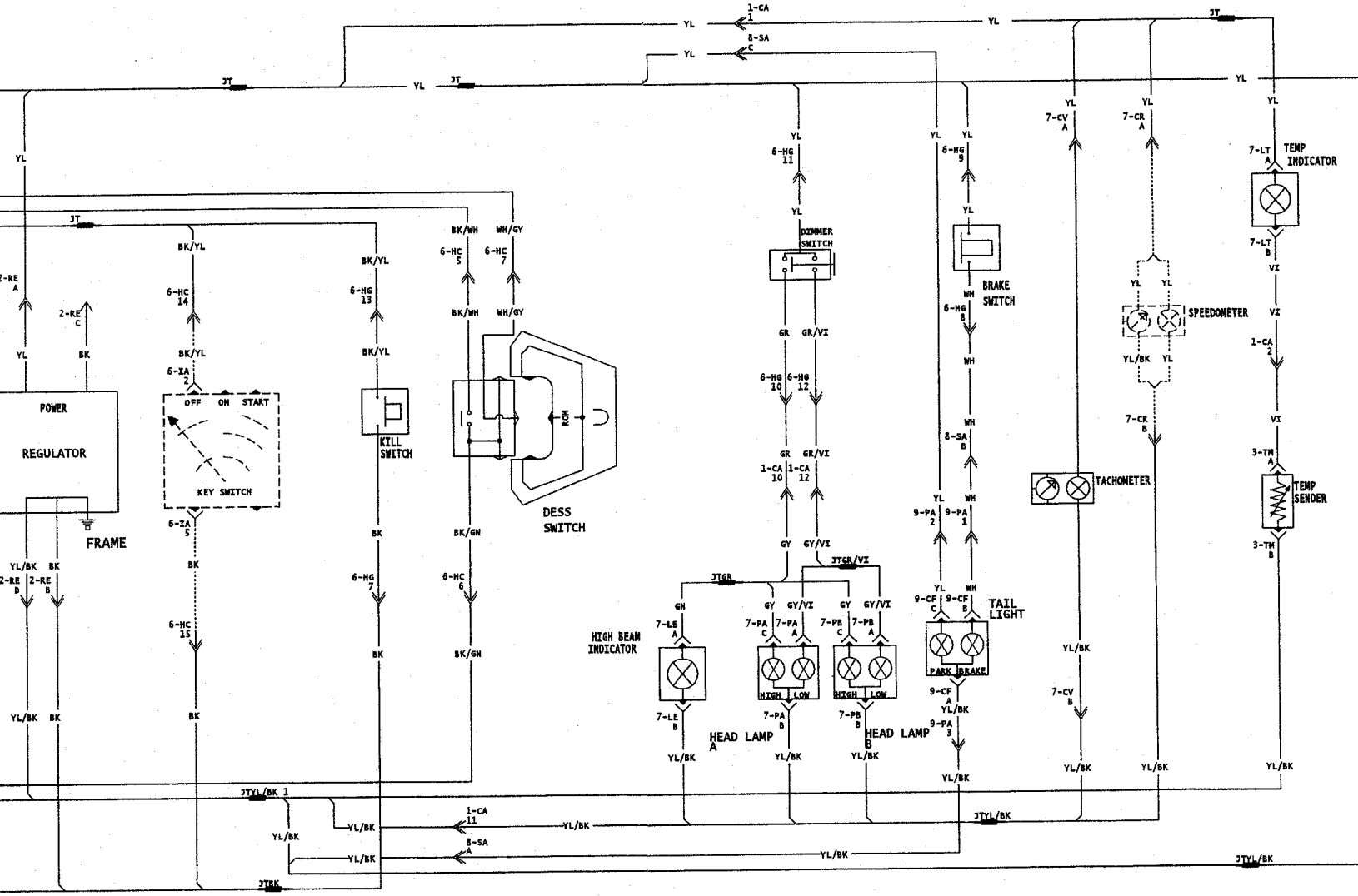
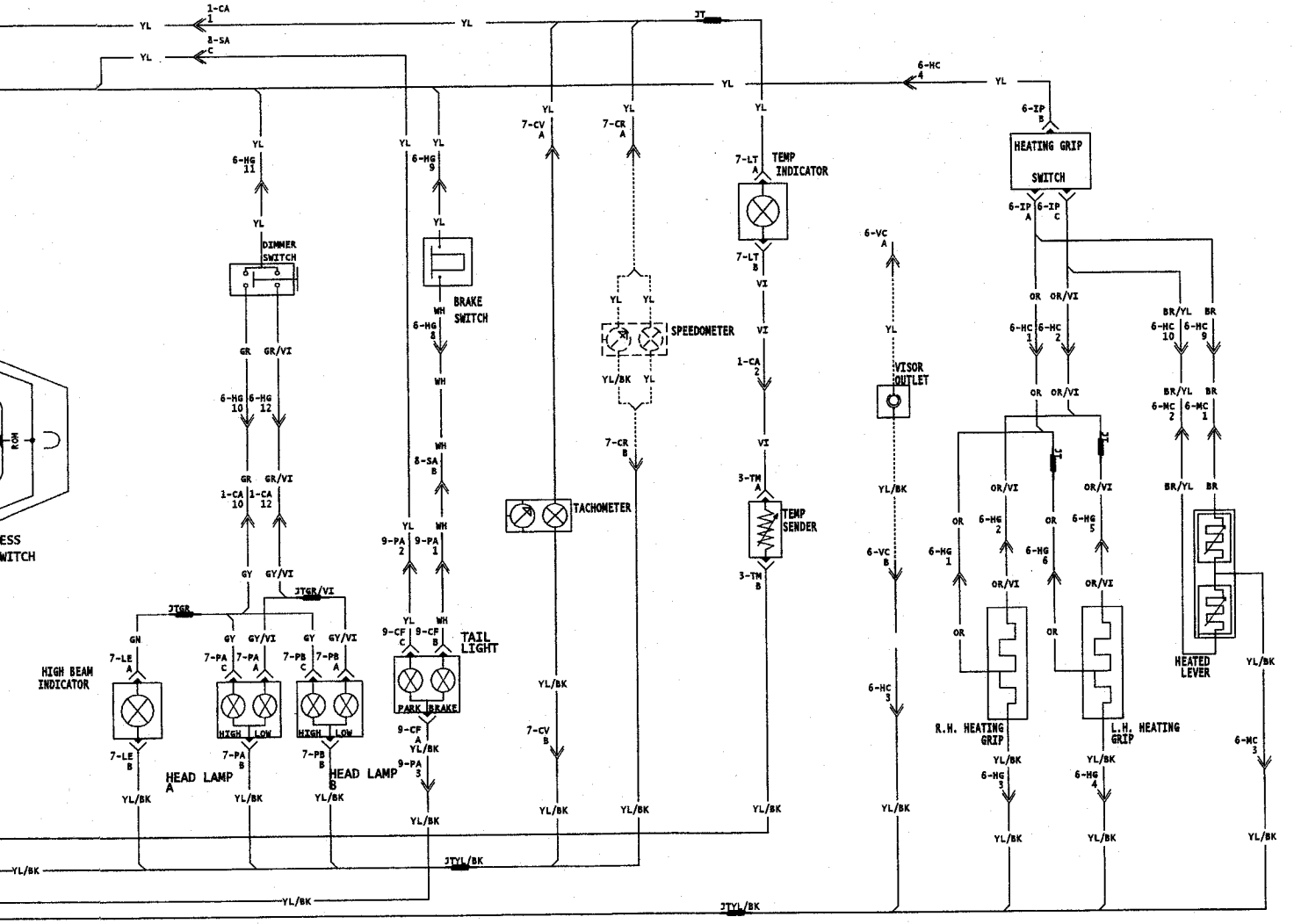

A32H0JS

2000 MX Z X 440 LC





SUPPLY | IGNITION SWITCHES | LIGHTING | INSTRUMENTS


1-CA 1
8-SA C
6-HC 4
6-IP B
HEATING GRIP SWITCH
6-IP A
6-IP C
DIMMER SWITCH
BRAKE SWITCH
TEMP INDICATOR
SPEEDOMETER
TACHOMETER
TEMP SENDER
VISOR OUTLET
HEATED LEVER
R.H. HEATING GRIP
L.H. HEATING GRIP
HIGH BEAM INDICATOR
HEAD LAMP A
HEAD LAMP B
TAIL LIGHT
PARK BRAKE
HIGH
LOW
LIGHTING
INSTRUMENTS
HEATING ELEMENTS

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Init.

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- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-12**

Date: November 3, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	PACKAGE	MODEL NUMBER	SERIAL NUMBER
2001	MX Z 800	X	1663/1664/ 1665/1666/1667/ 1668/1669	All
		Adrenaline	1856/1857/ 1858/1859/ 1860/1861	
		Standard	1870/1871 1872/1873	

This bulletin must be used in conjunction with the check list enclosed in the bag with the *Operator's Guide*. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

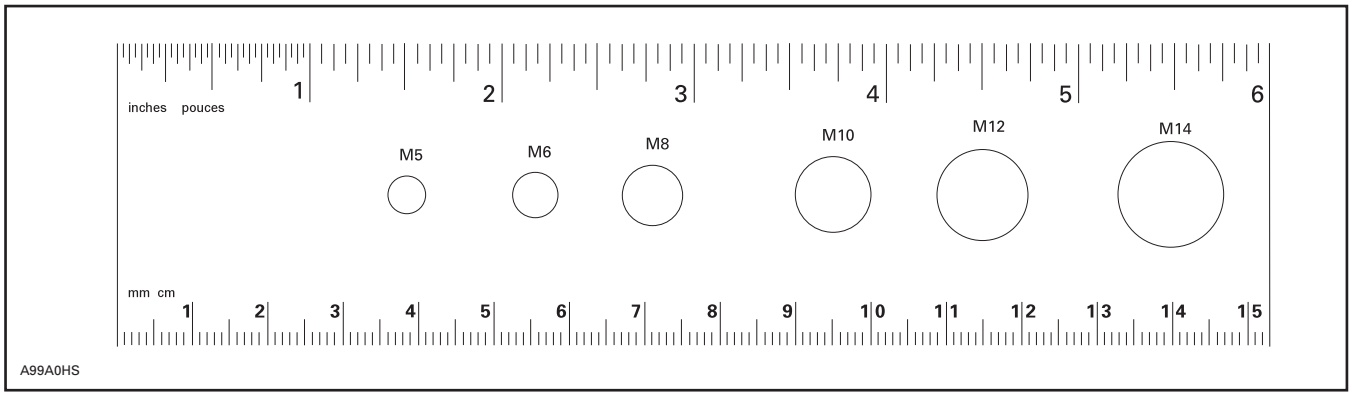
To obtain limited warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook, Predelivery Check List* signed copy and video.

There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.



NOTE: This ruler can be helpful to identify fastener length or size.

PREDELIVERY KIT P/N	MODEL
549 010 880	MX Z 800

⚠ WARNING

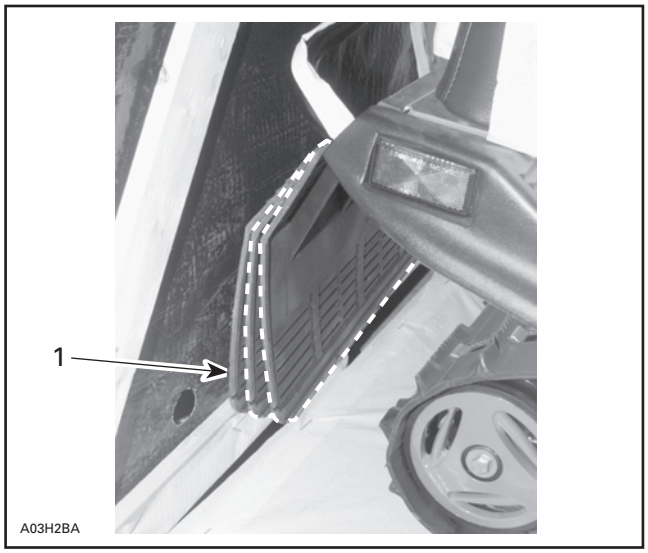
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

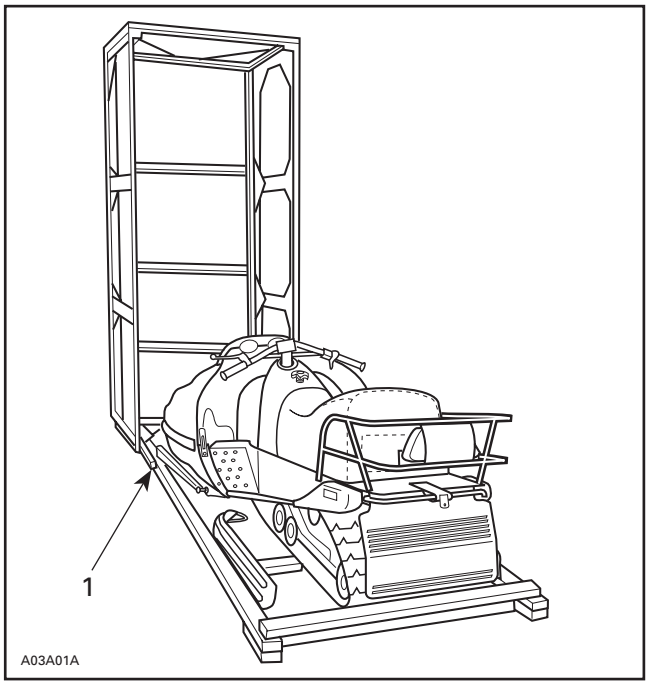
Remove all screws retaining cover to vehicle base. Tip cover toward front or rear of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging any part of the snowmobile.

NOTE: If cover is tilted toward front of vehicle, snow guard may interfere with crate cover, as shown in the following photo. Push on snow guard when lifting cover.



IF CRATE COVER IS TILTED TOWARD FRONT OF VEHICLE, FROM OUTSIDE CRATE PUSH ON SNOW GUARD TO ALLOW COVER TO LIFT WITHOUT DAMAGING SNOW GUARD

1. Snow guard interfering with crate cover



1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Remove ropes and cut locking ties retaining windshield.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts and slider cushions in order to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove steering pad, predelivery kit, shock absorbers and drive belt from engine compartment.

HOOK REMOVAL

Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

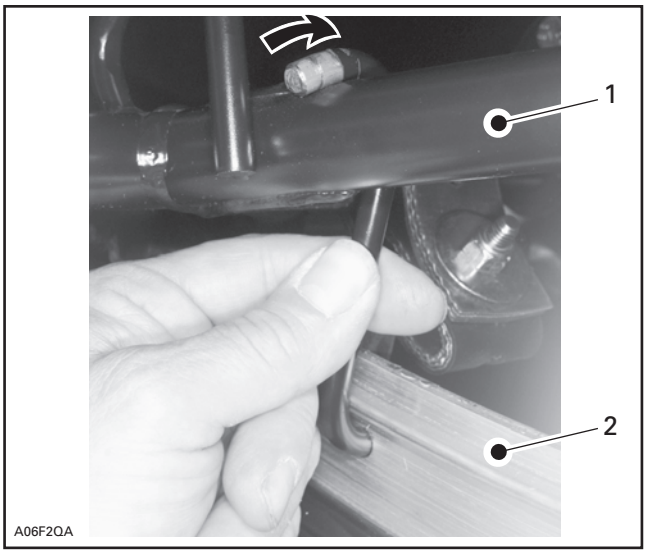
From left side of vehicle, cut locking tie retaining hook, then apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



TYPICAL — REMOVE HOOK

1. *Front arm*
2. *Runner*

⚠ WARNING

Hook must be removed to have snowmobile suspension operational.

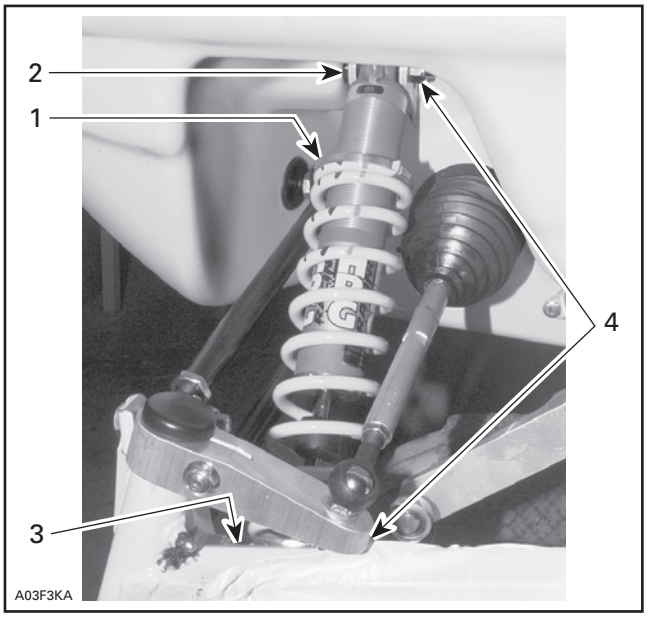
Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

All Models except MX Z 800, X Package

Secure shock absorbers to suspension with their adjusting ring at top.

NOTE: Position screw heads toward front of vehicle and secure with nuts provided in predelivery kit (section no. 3). Make sure decal edges are toward inside vehicle.



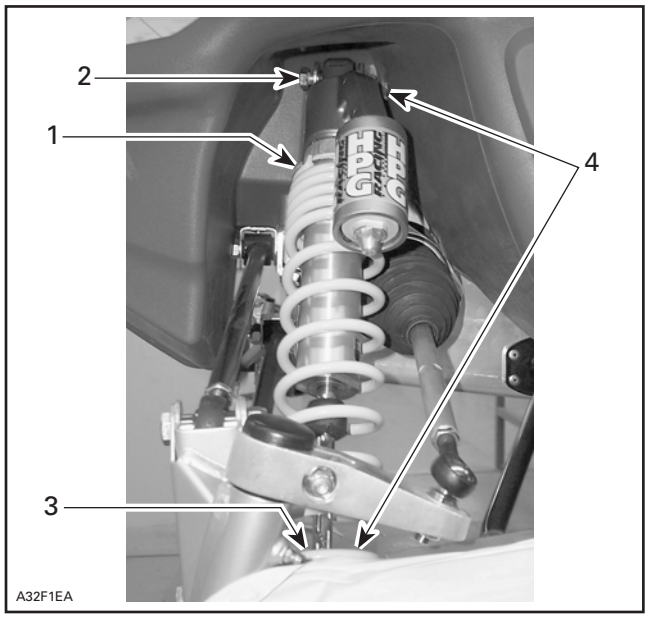
TYPICAL — LH SIDE SHOWN

1. *Shock absorber (2) (predelivery box) adjusting ring at top*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Elastic nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*

MX Z 800, X Package only

Secure shock absorbers to suspension with their adjusting ring at top. There is a left and a right shock. Do not mix them. Reservoir must stand toward back of vehicle as shown on next photo.

NOTE: Position screw heads toward front of vehicle and secure with nuts provided in predelivery kit (section no. 3).

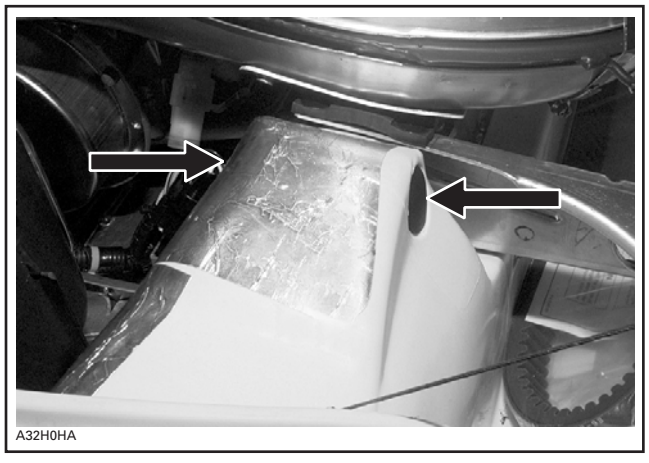


LH SIDE SHOWN

1. *Shock absorber (2) (predelivery box) adjusting ring at top*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Elastic nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*

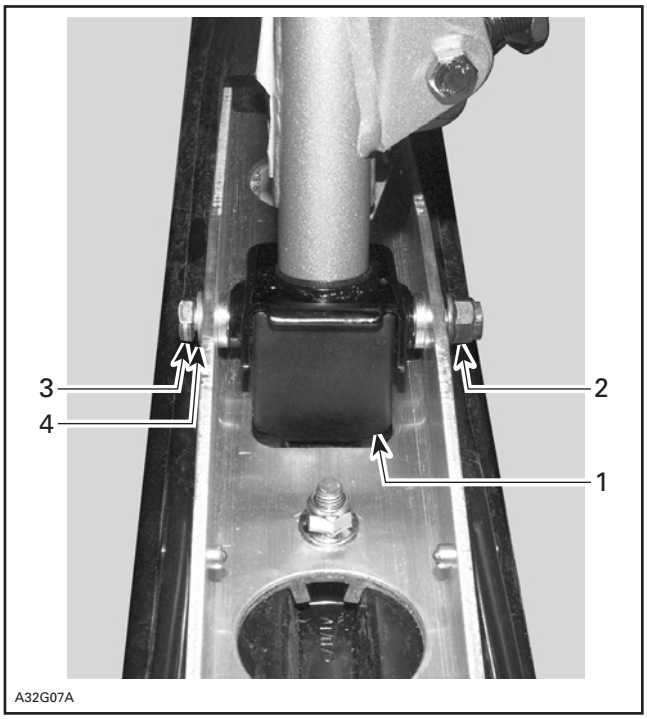
All Models

Install caps provided in predelivery kit on bottom pan, each side of upper bolt.



SNAP PROVIDED CAP (SECTION NO. 5) (P/N 414 916 600) EACH SIDE OF MOLDING

Install skis on vehicle.

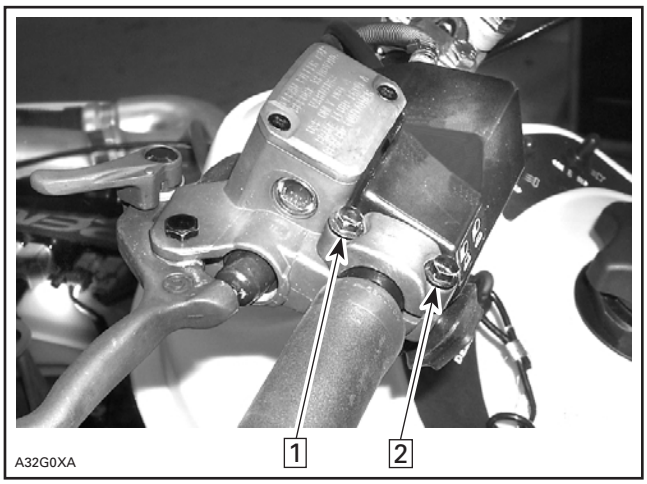


RIGHT SIDE SHOWN

1. *Ski stopper (2) (section no. 3) (P/N 506 151 233) with higher side toward front*
2. *Flanged Nut M10 (2) (P/N 732 610 084). Torque to 32 N•m (27 lbf•ft)*
3. *Bolt M10 (2) (section no. 3) (ski leg)*
4. *Washer (2) (section no. 3) (P/N 732 900 049) installed on bolt head side*

Adjust handlebar and tighten nuts between 21 and 28 N•m (16 and 20 lbf•ft).

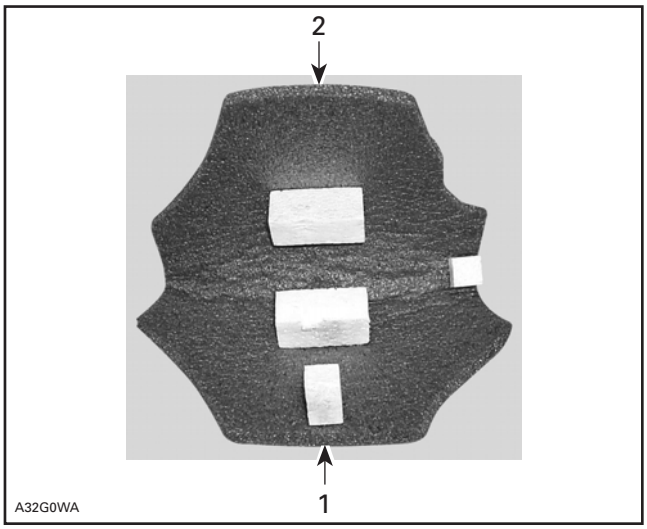
Turn brake housing to level brake oil reservoir. Secure front screw first, then rear screw. See photo.



Step 1: Screw this bolt first to a torque between 7 and 10 N•m (5.25 and 7.5 lbf•ft)
Step 2: Secure housing with this bolt (same torque)

Install steering foam and adjust for proper fit with console. Fit steering padding and set in place with velcros.

NOTE: Take care to install foam in the proper side.



1. *Driver's side*
2. *Engine side*

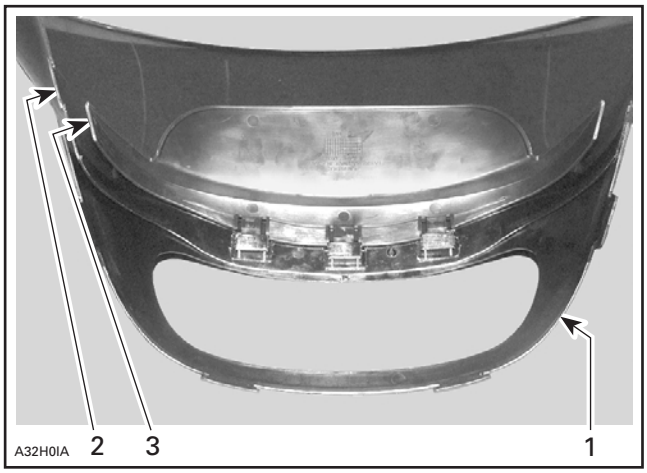
Remove headlamp protector from hood.

Unclip inner protector from headlamp protector.

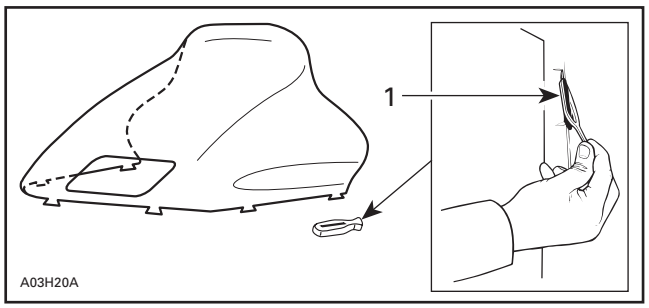
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp protector*
2. *Windshield*
3. *Inner protector*



1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 on section no. 2)*

WINDSHIELD INSTALLED

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

BREAK-IN PERIOD SUPPLEMENTAL OIL

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER injection oil (P/N 413 802 900 - 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

PUMP ADJUSTMENT

Oil injection pump is factory set. However, if adjustment needs to be checked or modified, refer to special *Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (ex.: locking tab, elastic stop nut, self-locking fasteners, etc.) must be installed or replaced with new ones where specified. If the efficiency of a locking device is impaired, it must be renewed.

⚠ WARNING

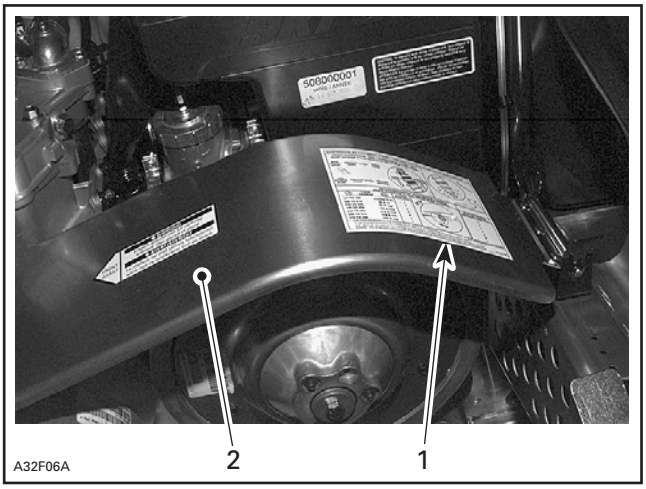
Make sure cable is free to swivel in lever end.

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT 4) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



TYPICAL

1. *Adjustment chart*
2. *Pulley guard*

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

When completed, install wheel caps (P/N 570 063 600) provided in predelivery kit (section no. 4).

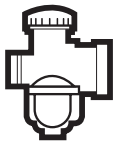
NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap to get out from its location due to soap residual.

ADJUSTMENTS
DRIVEN PULLEY

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquiries should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODEL			MX Z 800 (ALL PACKAGES)
	Engine Type			793
	Maximum HP RPM ①		± 100 RPM	7850 •
	Reed Valve		P/N	420 867 870
	Carburetor Type			TM-40 — B103 with DPM
	Main Jet			500 •
	Needle Jet			P0
	Pilot Jet			17.5
	Needle Identification — Clip Position			9ZLY2 - 58 •
	Slide Cut-Away			2.0
	Float Adjustment		± 1 mm (in)	—
	Air Screw Adjustment		± 1/16 turn	— •
	Idle Speed RPM		± 200 RPM	1500
	Gas Grade/Octane Number		(R + M)/2	Regular unleaded/87
	Gas/Oil Ratio			Oil injection
	Ignition Timing BTDC ② ③		mm (in)	3.51 (0.138)
	Trigger Coil Air Gap		mm (in)	0.55 - 1.45 (.022 - .057)
	Gear Ratio		Teeth	26/43 •
	Engagement Speed		± 100 RPM	3800
	Drive Pulley Calibration Screw Position			3
	Pulley Distance	Z	± 0.5 mm (± 0.020) in	16.5 (21/32)
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-13/32)
		Y		Dimension Y must exceed X from 1 mm (1/32 in) •
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
		Force ④	kg (lbf)	11.34 (25)
	Driven Pulley Preload		± 0.7 kg (± 1.5 lbf)	8.0 (17.6) •
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation
	Track Adjustment	Deflection	mm (in)	30 to 35 (1-3/16 to 1-3/8) with a 7.3 kg (16 lb) downward pull

① Engine speed at which maximum power is achieved.

② At 3500 RPM (engine cold) with headlamp turned on.

③ During the first 8 hours, the timing curve is retarded by 3° between 4500 RPM and maximum RPM. Because checking ignition timing is done at lower RPM, this will not affect the 3500 RPM timing specification.

④ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center
ATDC: After Top Dead Center
PTO: Power Take OFF side
MAG: Magneto side
N.A.: Not Applicable

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SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-13**

Date: November 24, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2001	Canada/United States: MX Z* 440 F Summit* 500 F Formula* Deluxe 500 F	1821/1822 1762/1763 1782/1783	All

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There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.

⚠ WARNING

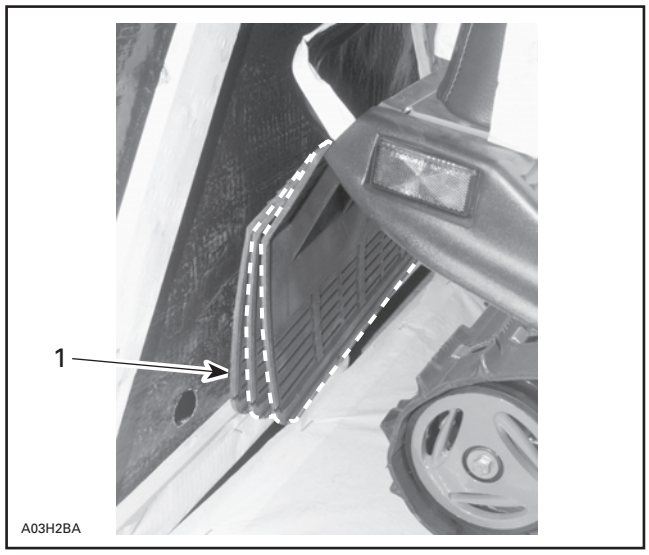
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

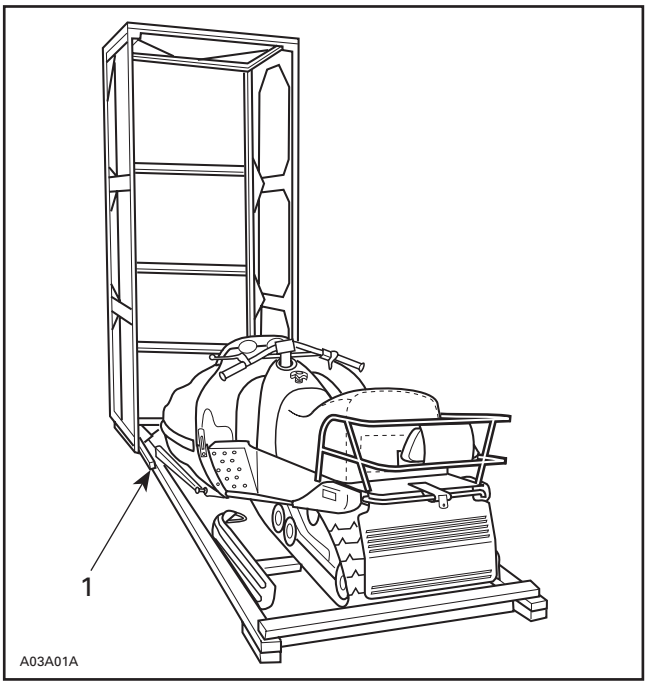
Remove all screws retaining cover to vehicle base. Tip cover toward front of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging the snow guard or taillight.

NOTE: On some models, snow guard may interfere with crate cover, as shown in the following photo. Push on snow guard when lifting cover.



FROM OUTSIDE CRATE PUSH ON SNOW GUARD TO ALLOW COVER TO LIFT WITHOUT DAMAGING SNOW GUARD

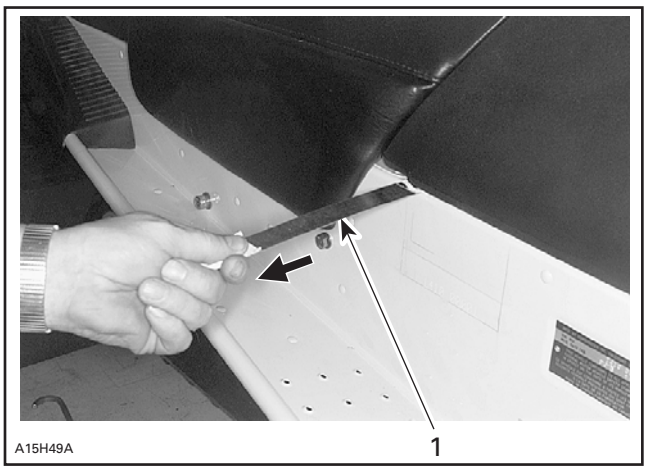
1. Snow guard interfering with crate cover



1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Cut locking ties retaining windshield. Slowly pull out metal strip and discard.



1. Pull out and discard

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts and slider cushions to install skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove steering pad, drive belt, predelivery kit and detach shock absorbers from engine compartment.

FRONT HOOK REMOVAL

Procedure

Apply parking brake.

Cut locking tie holding hook.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown in the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

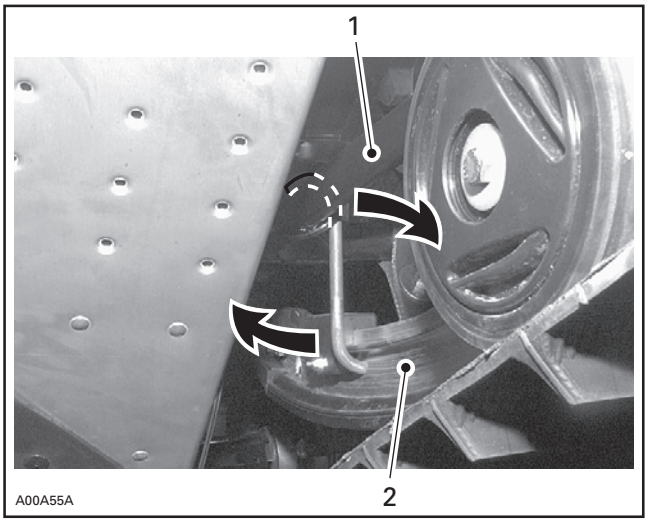
From left side of vehicle, apply pressure onto rear bumper with right hand, as shown in the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown in the following photo.

⚠ WARNING

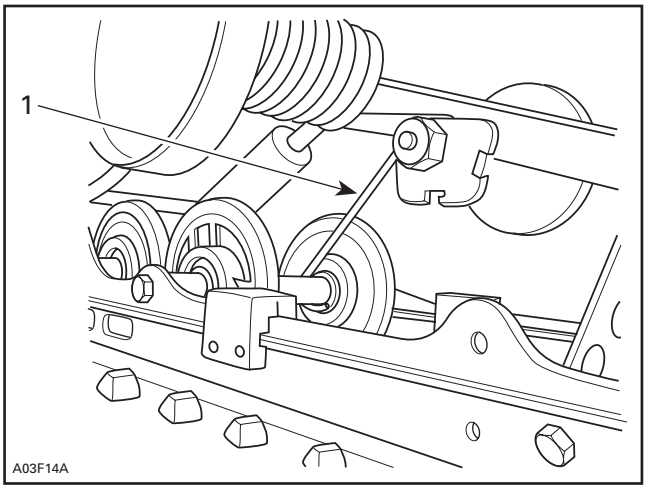
Before removing hook always verify that vehicle is properly supported and that parking brake is applied.



TYPICAL — REMOVE HOOK

1. *Front arm*
2. *Runner*

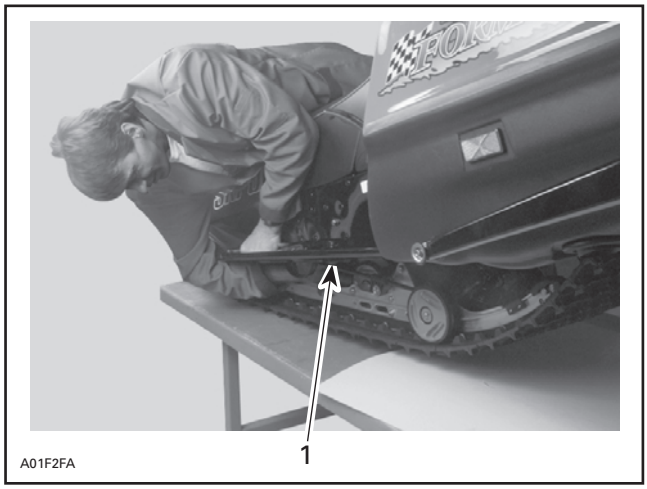
REAR HOOK REMOVAL



1. *Hook to be removed*

Lift front of vehicle to position bumper around 1 m (35 to 40 in) upward.

Lean on vehicle seat to apply pressure on rear suspension and remove hook from rear portion of suspension, as shown in the next photo.



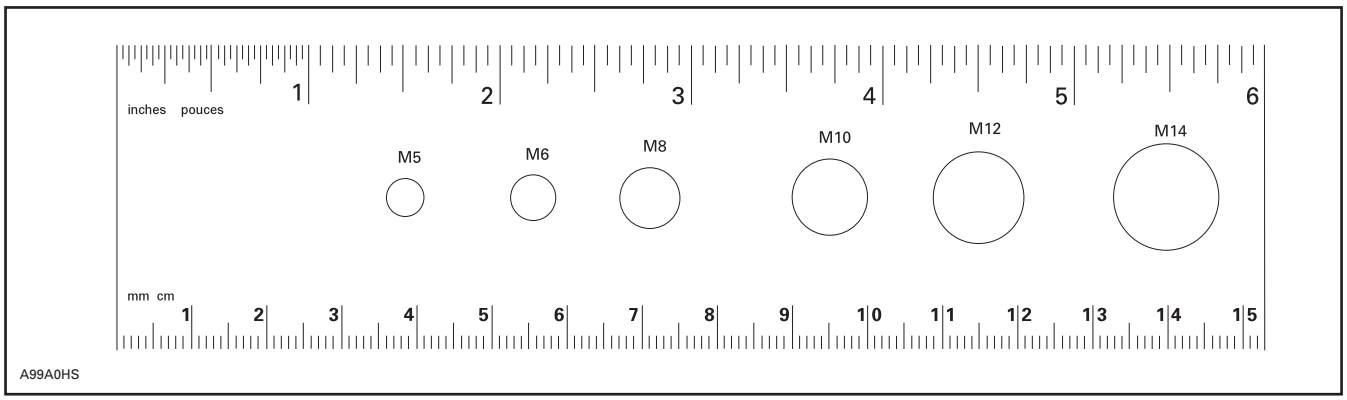
1. Remove hook on the rear portion of the suspension

Remove hook on the rear portion of the suspension.

⚠ WARNING

Both hooks must be removed to have snowmobile suspension operational.

PREDELIVERY KIT P/N	MODEL
549 010 828	MX Z 440 F
549 010 969	Summit 500 F
549 010 833	Formula Deluxe 500 F



NOTE: This ruler can be helpful to identify fastener length or size.

Cut locking tie retaining exhaust spring to exhaust support.

Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Secure shock absorbers to suspension with their shock rod at top.

All Models except Summit 500 Fan

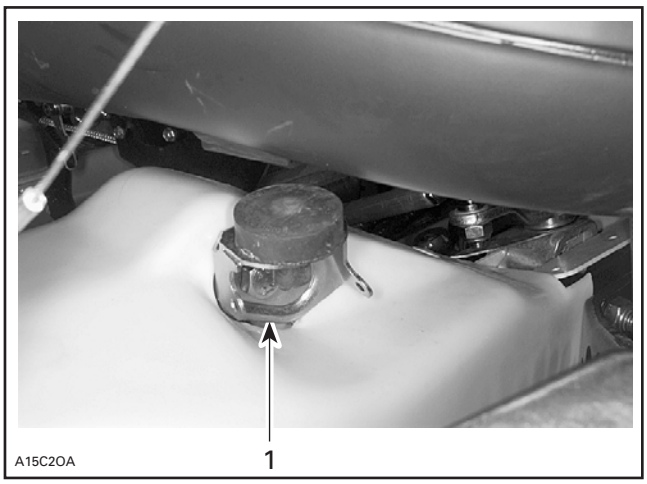
Position top and bottom screw heads toward front of vehicle.

Summit 500 Fan Model

Position top screw head toward front and bottom screw head toward rear of vehicle.

All Models

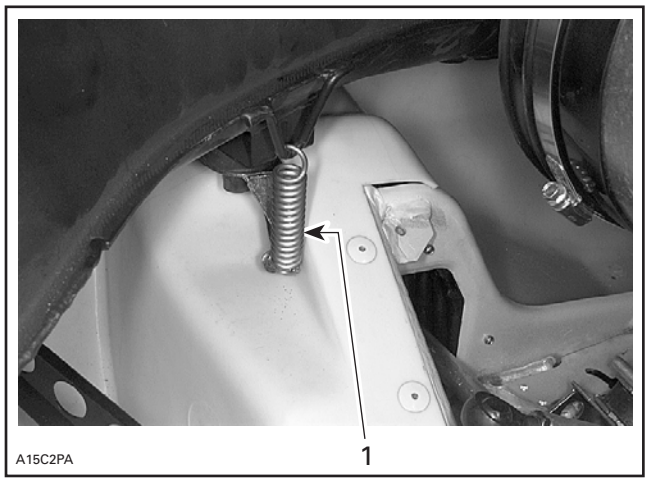
Properly position exhaust support on chassis making sure that its lug rests in chassis recess, as shown in the following photo.



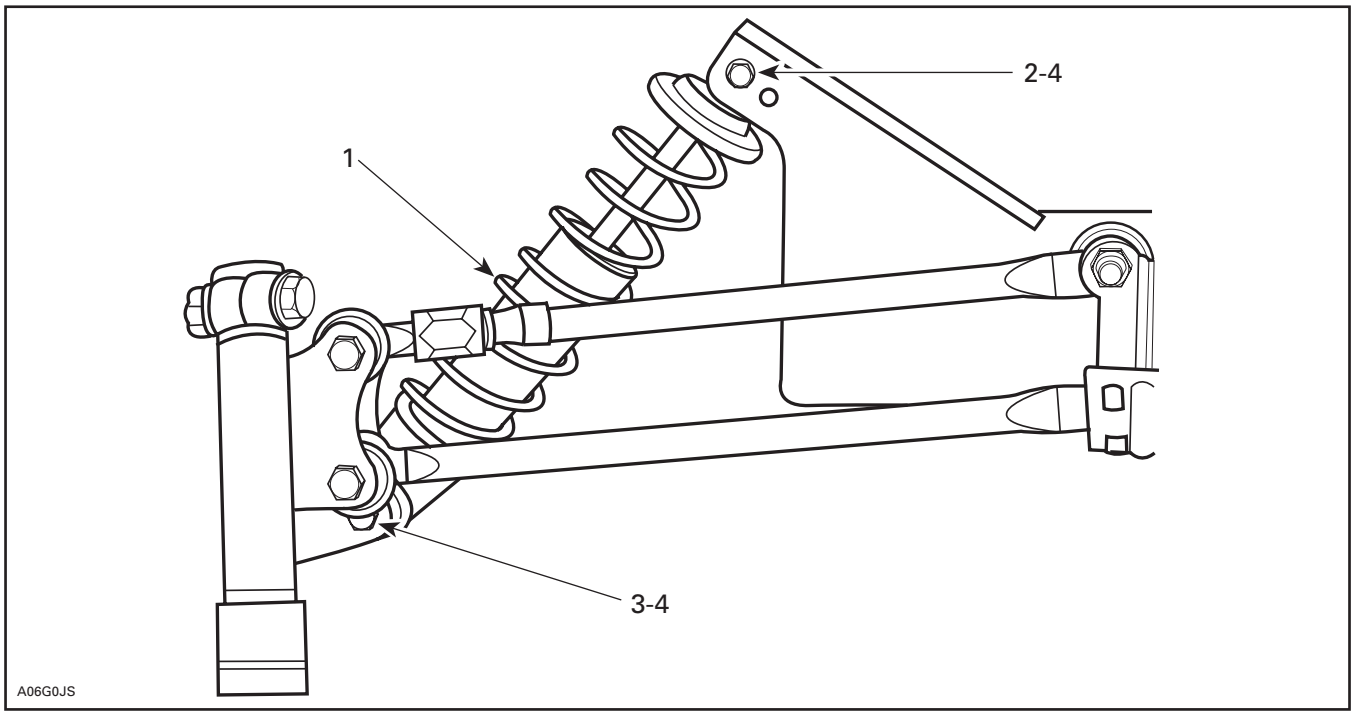
TYPICAL

1. Exhaust support

Hook up exhaust spring.



1. Exhaust spring



TYPICAL — RH SIDE SHOWN

1. *Shock absorber (2) (engine compartment) adjusting ring, if equipped, at bottom*
2. *Screw M10 x 1.5 x 60 (2) (P/N 207 006 044) (on suspension)*
3. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
4. *Elastic nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 2 for MX Z 440 F, section no. 4 for Formula Deluxe 500 F and section no. 3 for Summit 500 F). Torque to 48 N•m (35 lbf•ft)*

If so Equipped

During vehicle preparation, the battery can be activated as described in *Shop Manual*.

CAUTION: Prior to charging the battery, always remove it from the vehicle to prevent electrolyte spillage. Do not charge an installed battery.

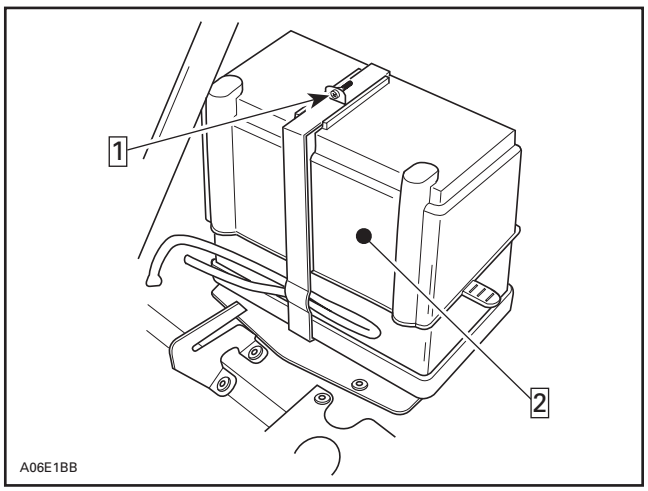
Battery Removal

Remove belt guard.

Remove air intake silencer.

Unfasten battery retaining strips.

Open strips and lift battery protective boot.



Step 1: Detach and open
Step 2: Lift battery protective boot

Withdraw battery from vehicle.

Battery Installation

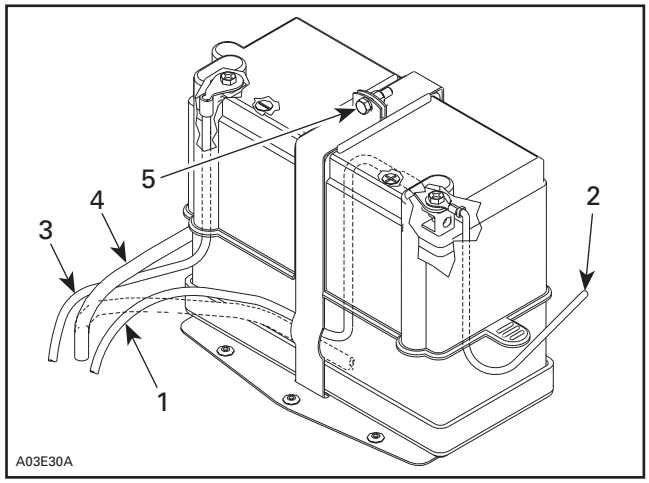
Install vent tube on battery.

Connect RED positive cable and RED wire to positive battery terminal.

Connect BLACK negative cable LAST.

⚠ WARNING

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



BATTERY CONNECTION

1. *RED positive cable*
2. *RED positive wire*
3. *BLACK negative cable*
4. *Ensure that vent tube is properly connected*
5. *Secure to 3 N•m (2 lbf•ft)*

Ensure that vent tube is properly connected to vehicle fitting on front frame.

Apply silicone dielectric grease (P/N 293 500 004) on battery posts and connectors.

Ensure vent tube is properly installed on battery elbow, then install protective boot over battery.

Close and fasten retaining strips as shown on previous drawing.

Ensure that vent tube is not kinked or blocked.

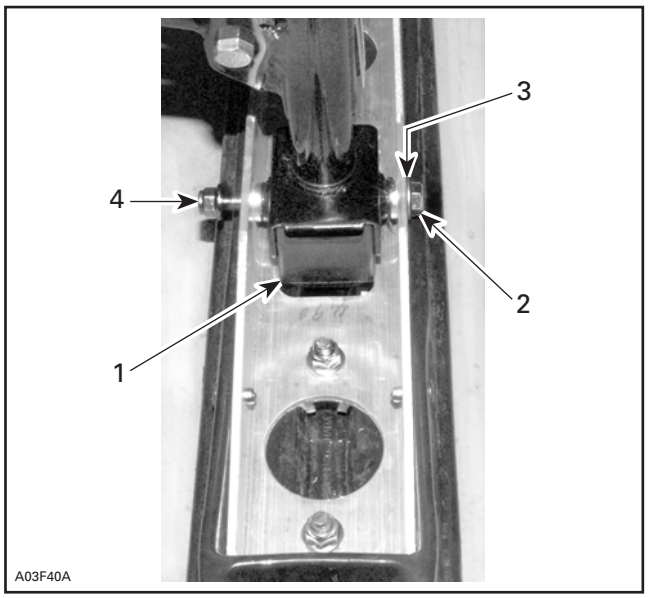
Reinstall air silencer.

Ensure ski leg slider cushions are still in ski leg.

Install skis on vehicle.

Replace vehicle on ground.

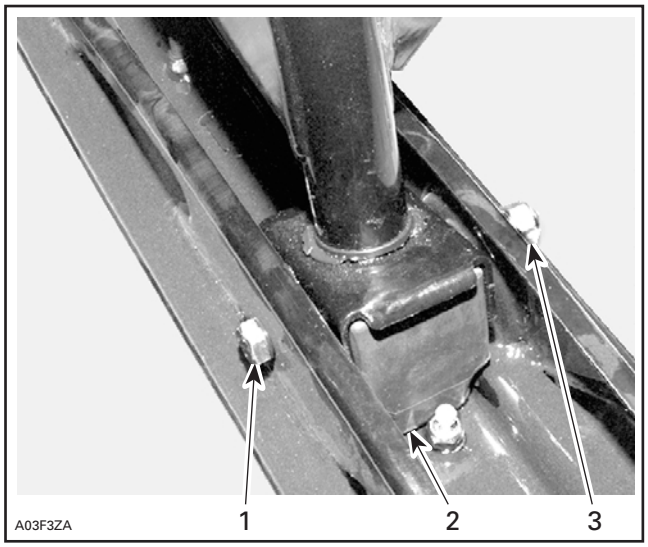
Summit 500 Fan Model



LEFT SIDE SHOWN

1. *Ski stopper (2) (P/N 506 151 233) (section no. 3) higher side toward front*
2. *Bolt M10 (2) (ski leg)*
3. *Washer (2) (P/N 732 900 049) (section no. 1)*
4. *Elastic flanged nut M10 x 1.75 (2) (P/N 732 610 084) (section no. 2). Torque to 32 N•m (24 lbf•ft)*

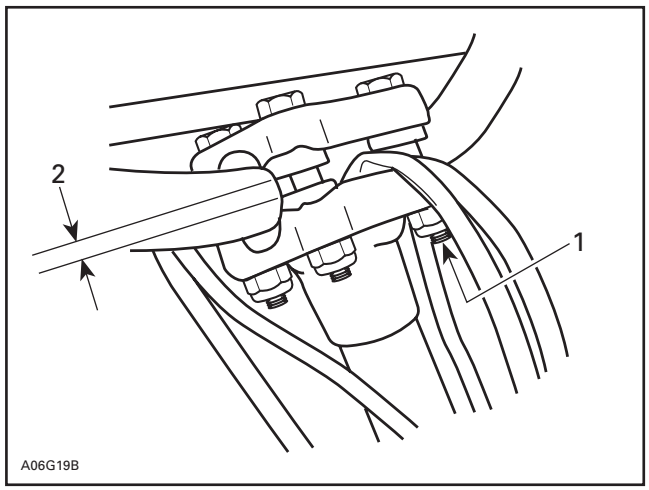
Formula Deluxe 500 Fan and MX Z 440 Fan Models



1. *Bolt M10 (2) (ski leg)*
2. *Ski Stopper (2) (P/N 505 070 324) (section 3 or 8)*
3. *Elastic flanged nut M10 (2) (section 1 or 8). Torque to 40 N•m (30 lbf•ft)*

Summit 500 Fan Model

Adjust handlebar and torque nuts between 21 and 28 N•m (16 and 20 lbf•ft).



TYPICAL

1. *Torque between 21 and 28 N•m (16 and 20 lbf•ft)*
2. *Equal gap each side (both clamps)*

Loosen, at least 3 turns, Allen screw of throttle and brake handle housings.

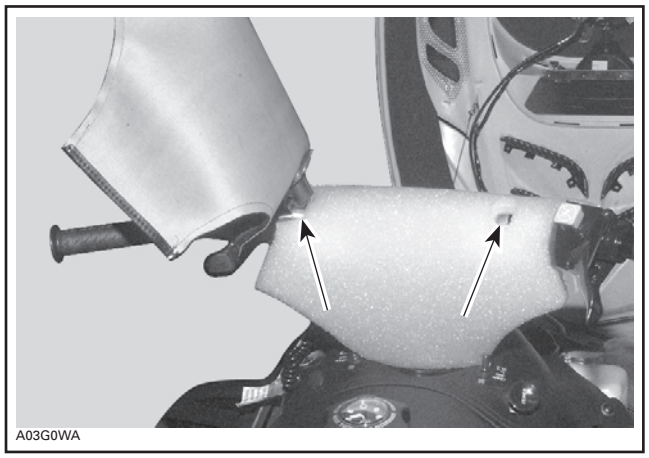
STEERING HOLDING STRAP

Start by cutting locking tie retaining right side strap end.

Insert strap through holes provided in steering padding, as shown in the next photo.

1. *Strap inserted through both steering pad cover holes*

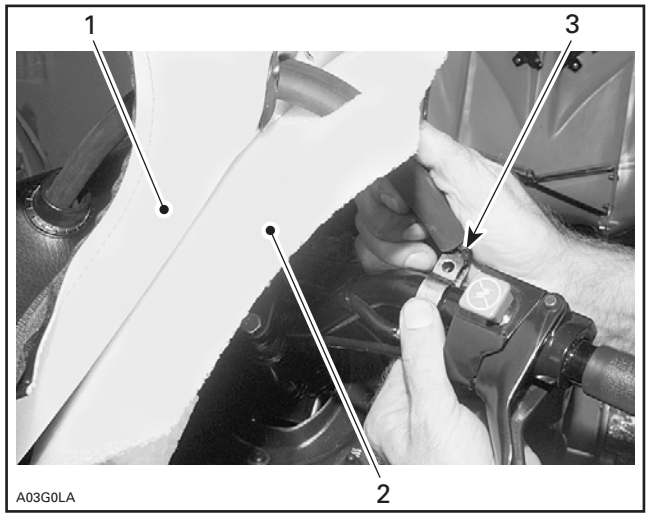
Properly position steering foam in place, as shown in the next photo.



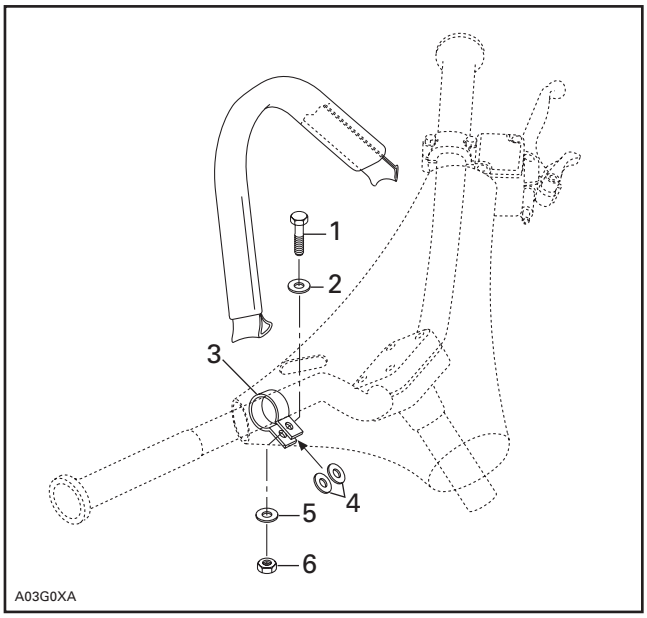
ON STEERING FOAM, NOTE THAT NOTCH IS AT LEFT AND HOLE IS AT RIGHT

Once steering foam is positioned under steering padding, insert right side strap end through padding hole.

Secure right side strap end with retaining clip and tighten firmly using the bolt, nut and washers (section 3) in the sequence shown on drawing below.

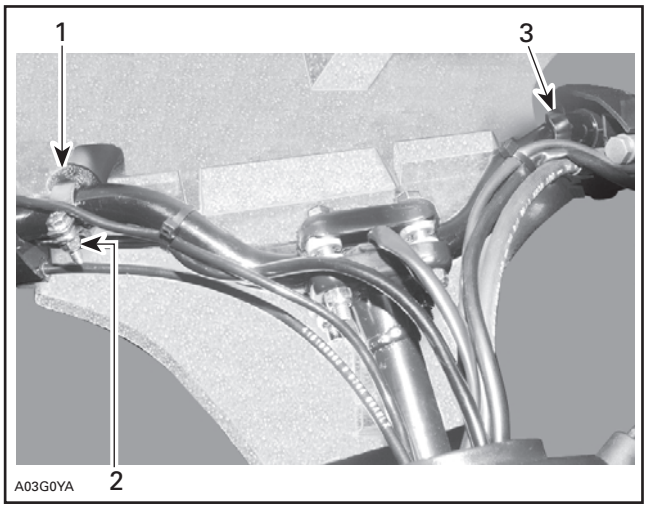


1. *Steering padding*
2. *Steering foam*
3. *Secure right side strap end using clip, washers, screw and nut, (section no. 3)*



1. *Bolt*
2. *Washer*
3. *Retaining clip*
4. *Washers*
5. *Washer*
6. *Nut*

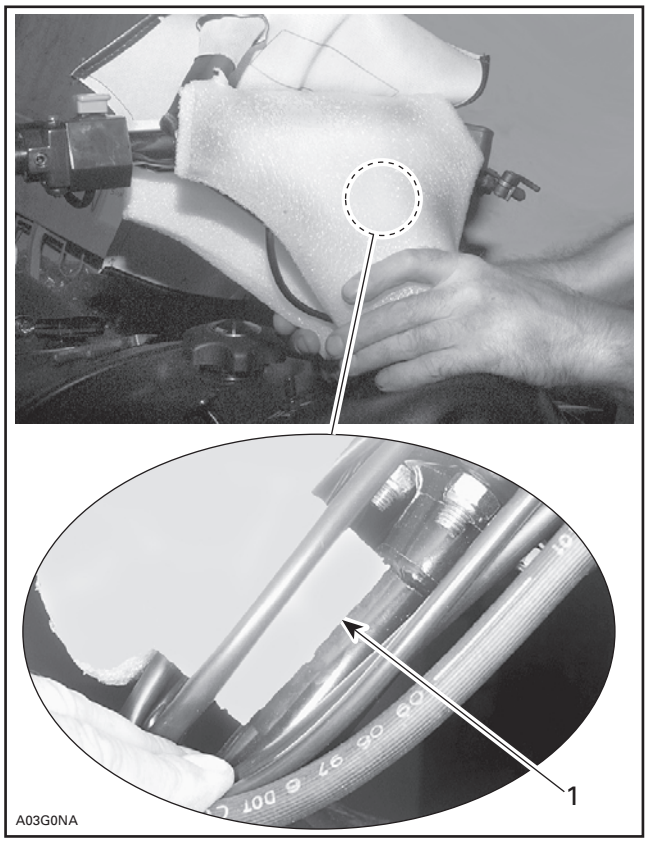
NOTE: Left side clip tightening bolt and nut should be toward rear and right side toward front, as shown in the next photo.



POSITION STYROFOAM BLOCKS PROPERLY ON HANDLEBAR AND MAIN TUBE

1. *Strap inserted in clip*
2. *Right side clip toward front*
3. *Left side clip toward rear*

Install steering foam taking care in positioning foam properly, leaning against steering column, as shown in the next photo.



PROPERLY POSITION PADDING

1. *Foam properly leaning on steering column*

Pull down steering padding onto foam and complete installation by zipping both sides.

Align steering pad with handle housings on both side and screw housings in place.

FINAL INSTALLATION

MX Z 440 Fan and Formula Deluxe 500 Fan Models

Adjust handlebar temporarily and tighten nuts loosely for now.

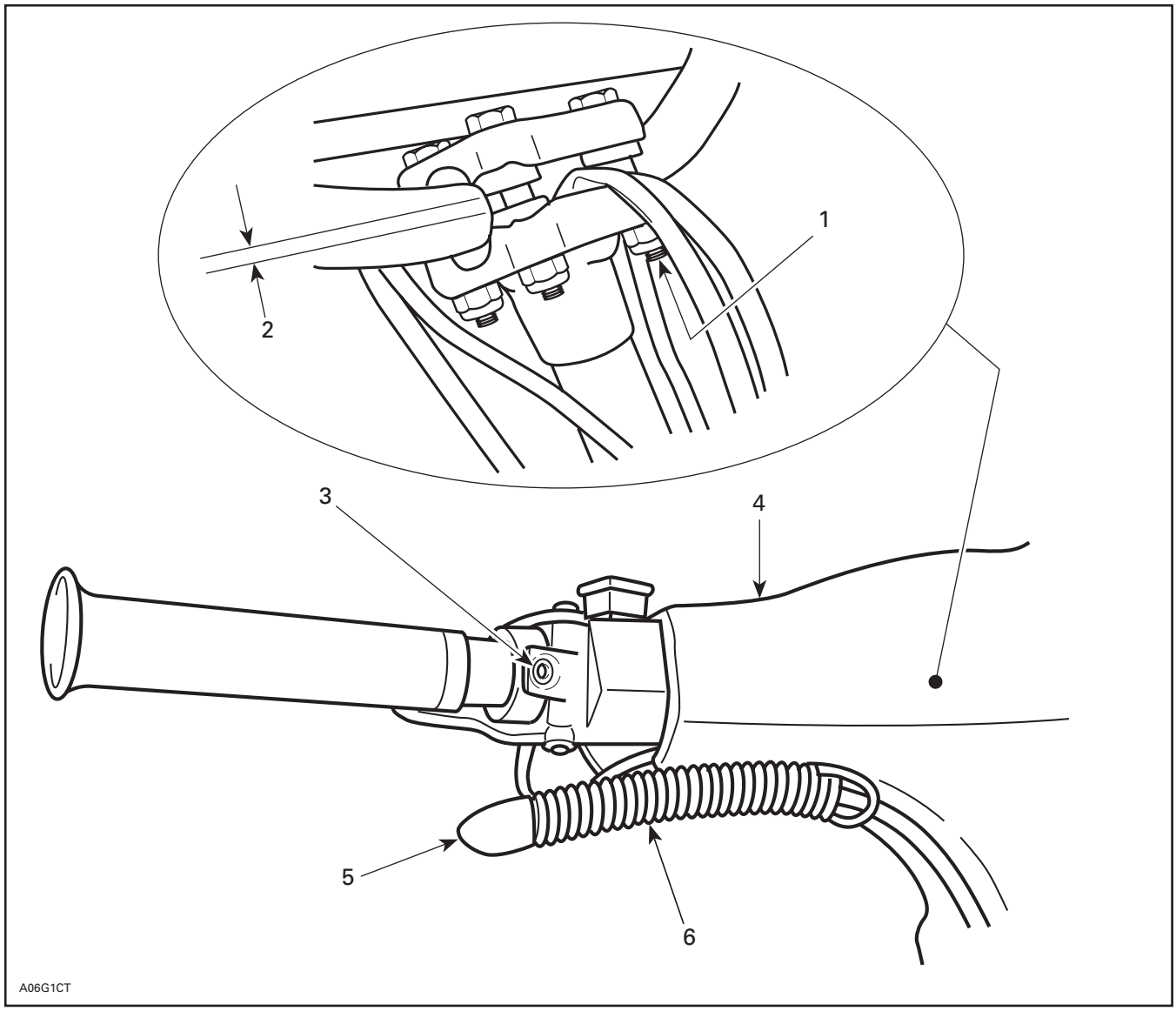
Loosen, at least 3 turns, Allen screw of throttle and brake handle housings.

Right side plastic spacer must be installed.

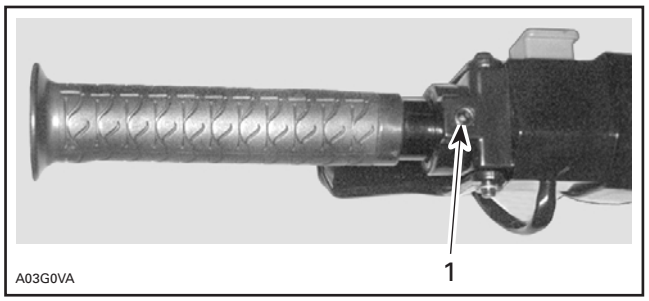
Install steering pad temporarily, and adjust for proper fit with console.

Remove steering pad and torque nuts from 21 to 28 N•m (16 to 20 lbf•ft).

Reinstall steering pad, adjust and tighten throttle and brake handle housings.



1. *Torque from 21 to 28 N•m (16 to 20 lbf•ft)*
2. *Equal gap each side (both clamps)*
3. *Loosen Allen screw*
4. *Steering pad (engine compartment)*
5. *Use liquid soap to ease installation*
6. *Keyway (2) (P/N 572 072 400) (section no. 3 or 5)*

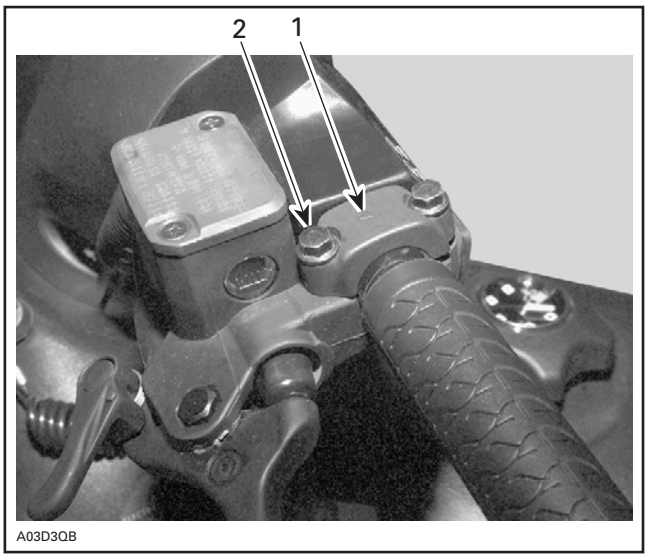


THROTTLE HANDLE HOUSING

*1. Tighten set screw to 2 N•m (18 lbf•**in**)*

Models Equipped with Hydraulic Brake

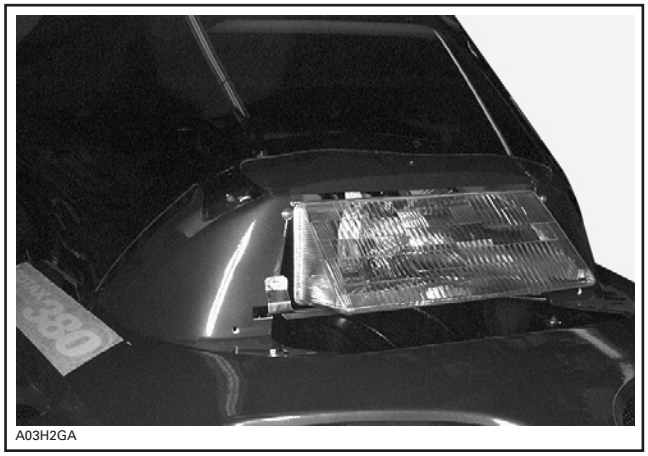
Loosening master cylinder may be necessary. When securing it back in place, install upper clamp with its arrow pointing toward front of vehicle. Tighten front bolt before rear one. Secure to 8 N•m (71 lbf•**in**).



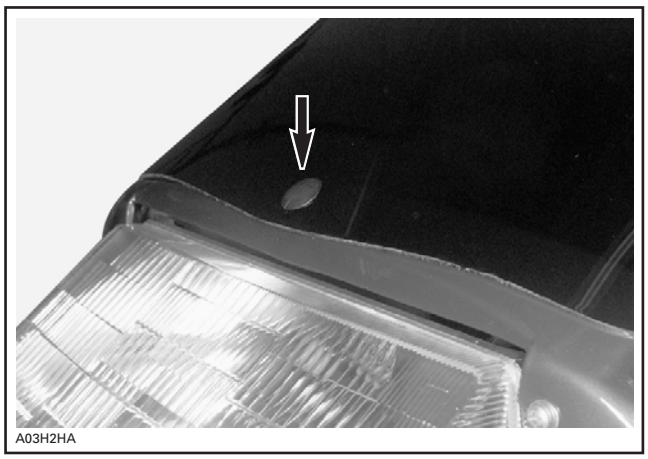
1. Arrow on upper clamp pointing at front of vehicle
2. Tighten front screw first

Remove headlamp molding.

Insert windshield tabs into appropriate slots.


A03H2GA

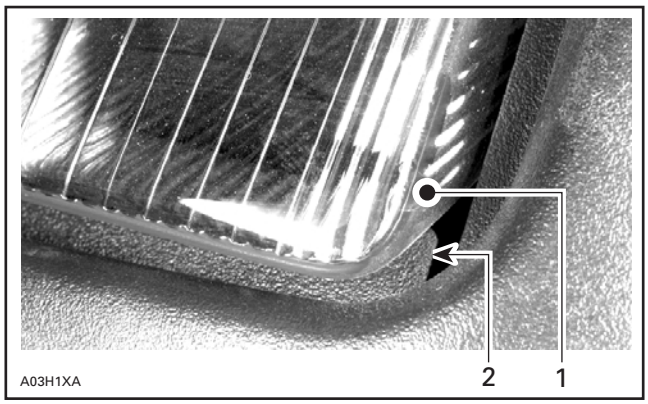
Insert dart in hole over headlamp.


A03H2HA

Reinstall headlamp molding.

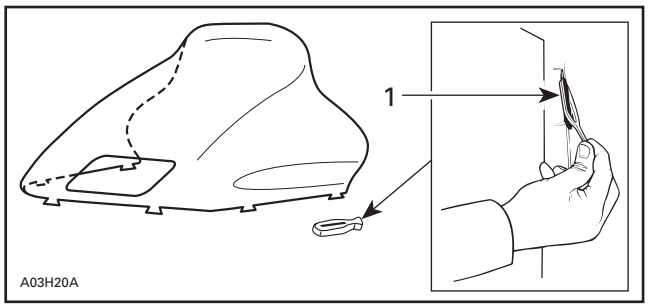
NOTE: Make sure that headlamp is properly positioned on headlamp molding.

Install windshield and secure from underneath.



A03H1XA

1. Headlamp
2. Lip of headlamp molding behind headlamp

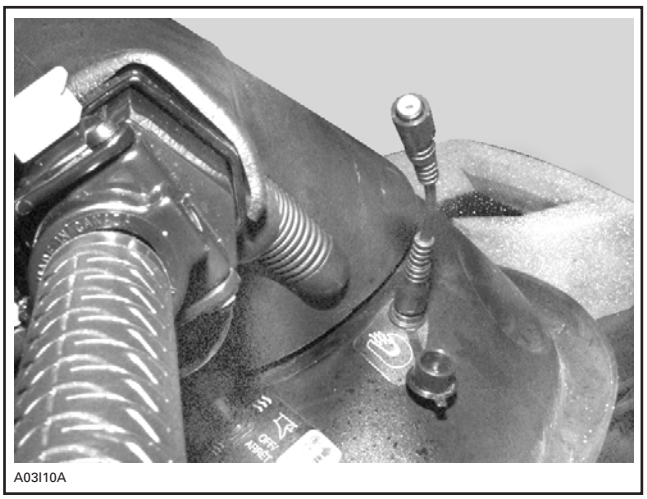


A03H20A

1. Latch (6 in kit and 4 on headlamp molding) (P/N 570 023 800) (section no. 4 for MX Z 440 F, section no. 6 for Formula Deluxe 500 F, section no. 3 and for Summit 500 F)

Formula Deluxe 500 Model Only

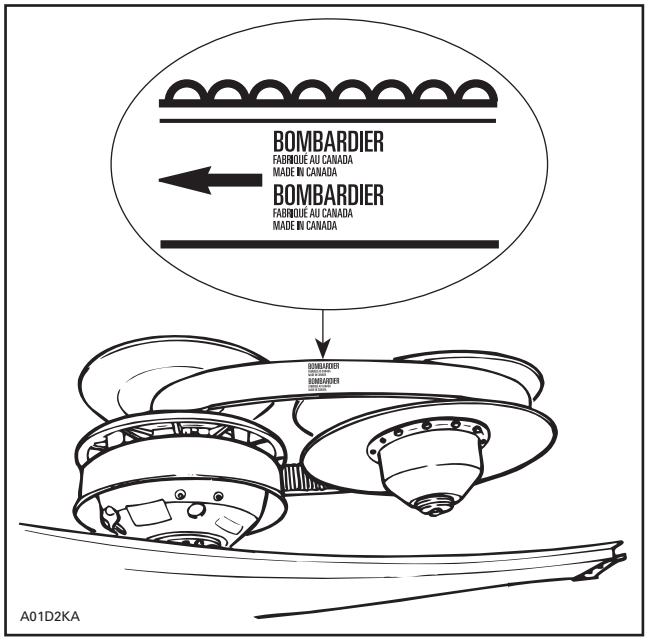
Lift cap on right side of handlebar and install heated visor extension cord, supplied in kit, (section no. 8).


A03I10A

Clean pulleys and disc brake with a suitable cleaner such as Loctite Part Cleaner (P/N 413 708 400) before installing drive belt.

To ensure maximum drive belt life span, the new drive belt must be installed so that the Bombardier name can be read when facing pulleys.

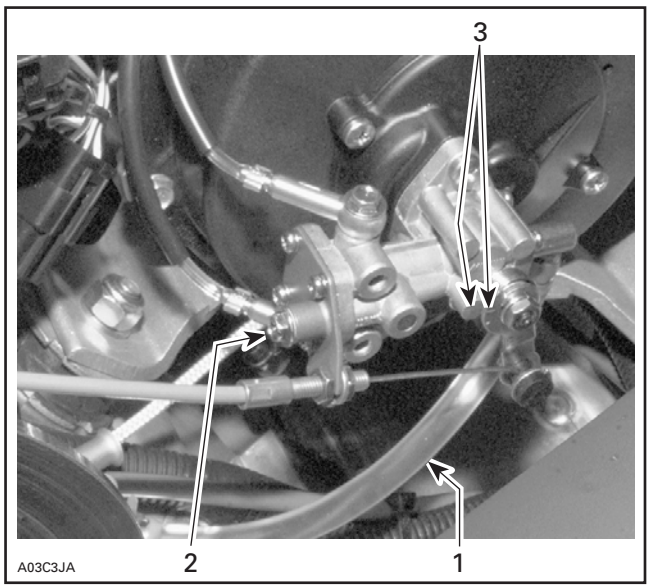
The arrow is indicating the direction of rotation.



CORRECT INSTALLATION

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER injection oil (P/N 413 802 900 — 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

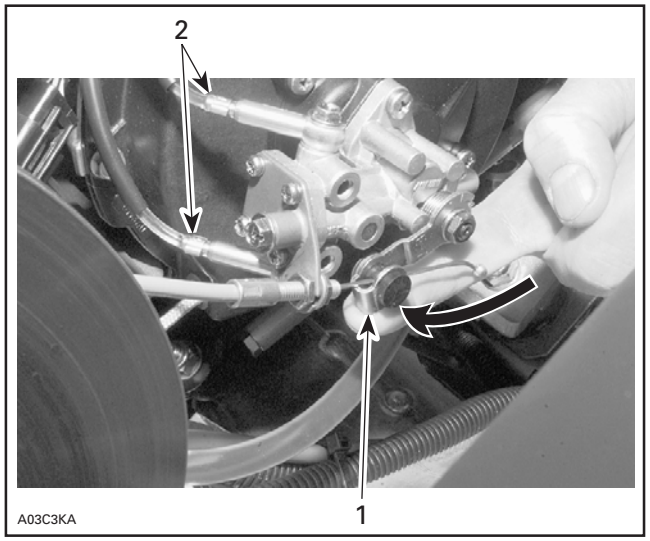
Bleed main oil line (between tank and pump) by loosening the bleeder screw until air has escaped from the line. Add injection oil as required.



TYPICAL

1. *Main oil line*
2. *Bleeder screw*
3. *Alignment marks*

Bleed the small oil line between pump and intake manifold by running engine at idle while holding the pump lever in fully open position.



TYPICAL

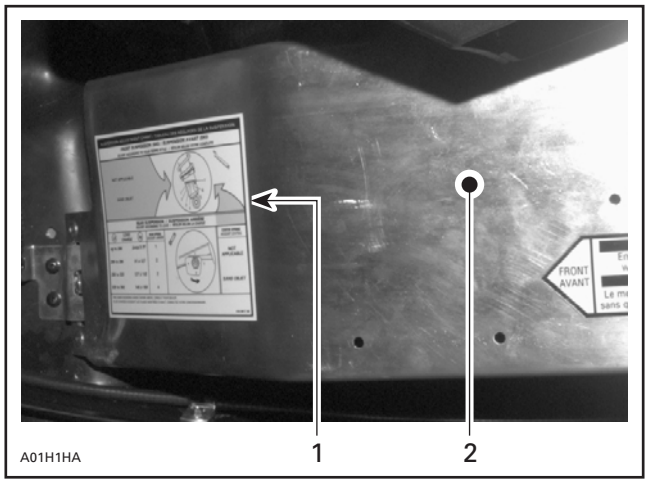
1. *Fully open position*
2. *Small lines*

Check also for proper oil lever adjustment. Mark on lever should align with mark on pump body after taking all cable play.

Check brake fluid in reservoir for proper level. Add fluid (DOT) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



1. Adjustment chart
2. Pulley guard

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

On models equipped with idler wheel cap, install caps provided in predelivery kit (section 3 for MX Z 440 F, section 9 for Formula Deluxe 500 F and section 4 for Summit 500 F).

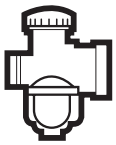
NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap from getting out of its location due to soap residual.

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for spring setting. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Vehicles used at high altitudes, above 600 m (2000 ft) should be fitted with a high altitude kit. Further inquiries should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model. (N.A. for Summit 500 Fan/2001 new model).

	MODEL			MX Z 440 F	SUMMIT 500 F
	Engine type			443	503
	Maximum HP RPM ①		± 100 RPM	7000	
	Rotary valve		P/N Opening (BTDC)/ Closing (ATDC)	N.A.	
	Carburetor type			PTO VM 34 - 547 MAG VM 34 - 548	PTO VM 34 - 565 MAG VM 34 - 566
	Main jet			PTO 205 MAG 195	PTO 200 MAG 190
	Needle jet			P-0 (159)	P-2 (159)
	Pilot jet			35	70
	Needle identification — Clip position			6DH2 - 3	6DH2 - 4
	Slide cut-away			2.5	
	Float adjustment		± 1 mm (± 0.039 in)	23.9 (.94)	
	Air screw adjustment		± 1/16 turn	1-1/2	2-1/4
	Idle speed RPM		± 200 RPM	1650	
	Gas grade/pump octane number		(R + M)/2	Regular unleaded/87	
	Gas/oil ratio Injection oil type			Oil Injection. BOMBARDIER FORMULA XP-S synthetic injection oil (or equivalent) OR BOMBARDIER injection oil (or equivalent) •	
	Ignition timing BTDC ②		mm (in)	2.79 (0.110)	2.77 (0.109)
	Trigger coil air gap		mm (in)	0.5 - 0.7 (.020 - .028) •	0.5 - 0.7 (.020 - .028)
	Gear ratio		Teeth	21/44	17/44
	Engagement speed		± 100 RPM	4500 •	4500
	Drive pulley calibration screw position			3	
	Pulley distance	Z	± 0.5 mm (± 1/64 in)	17.0 (43/64) •	
	Offset	X	± 0.5 mm (± 1/64 in)	35.50 (1-25/64) •	
		Y		Dimension Y must exceed X from 1.0 mm (1/32 in) to 2.0 mm (5/64 in) •	
	Drive belt adjustment	Deflection	± 0.5 mm (± 1/64 in)	32 (1-1/4)	38 (1-1/2)
		Force ③	kg (lbf)	11.34 (25)	11.50 (25.35)
	Driven pulley preload		± 0.7 kg (± 1.5 lbf)	0.0 (0.0) •	
	Drive chain tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track adjustment	Deflection	mm (in)	35 to 40 (1-3/8 to 1-9/16) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.

② 22° at 3500 RPM (engine cold) with headlamp turned on.

③ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center

ATDC: After Top Dead Center

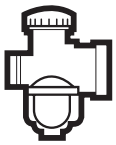
PTO: Power Take OFF side

MAG: Magneto side

CTR: Center

N.A.: Not Applicable

A dot (•) on right indicates changes from 2000 model.

	MODEL			FORMULA DELUXE 500 F	
	Engine type			503	
	Maximum HP RPM ①		± 100 RPM	7000	
	Rotary valve		P/N Opening (BTDC)/ Closing (ATDC)	N.A.	
	Carburetor type			PTO VM 34 - 549 MAG VM 34 - 550	
	Main jet			PTO 180 MAG 170	
	Needle jet			P-0 (159)	
	Pilot jet			40	
	Needle identification — Clip position			6DH2 - 3	
	Slide cut-away			2.5	
	Float adjustment		± 1 mm (± 0.039 in)	23.9 (.94)	
	Air screw adjustment		± 1/16 turn	1-7/8	
	Idle speed RPM		± 200 RPM	1650	
	Gas grade/pump octane number		(R + M)/2	Regular unleaded/87	
	Gas/oil ratio Injection oil type			Oil injection. BOMBARDIER FORMULA XP-S synthetic injection oil (or equivalent) OR BOMBARDIER injection oil (or equivalent)	
	Ignition timing BTDC ②		mm (in)	2.77 (0.109)	•
	Trigger coil air gap		mm (in)	0.5 - 0.7 (0.020 - 0.028)	
	Gear ratio		Teeth	21/44	
	Engagement speed		± 100 RPM	3300	
	Drive pulley calibration screw position			3	
	Pulley distance	Z	± 0.5 mm (± 1/64 in)	17.0 (43/64)	•
	Offset	X	± 0.5 mm (± 1/64 in)	35.5 (1-25/64)	
		Y		Dimension Y must exceed X from 1.0 mm (1/32 in) to 2.0 mm (5/64 in)	
	Drive belt adjustment	Deflection	± 0.5 mm (± 1/64 in)	32 (1-1/4)	
		Force ③	kg (lbf)	11.34 (25)	
	Driven pulley preload		± 0.7 kg (± 1.5 lbf)	0.0 (0.0)	
	Drive chain tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track adjustment	Deflection	mm (in)	35 to 40 (1-3/8 to 1-9/16) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.

② 22° at 3500 RPM (engine cold) with headlamp turned on.

③ Force applied midway between pulleys to obtain specified deflection.

BTDC: Before Top Dead Center

ATDC: After Top Dead Center

PTO: Power Take OFF side

MAG: Magneto side

CTR: Center

N.A.: Not Applicable

Please route to:

Init.

- Service
- Sales
- Parts

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **2001-10**

REVISION 1

Date: October 27, 2000

SUBJECT: Predelivery Procedures

YEAR	MODEL	PACKAGE	MODEL NUMBER	SERIAL NUMBER
2001	Summit 800	HM X	1723/1724/1725/1726/1727/1728/1824	All
		Highmark	1862/1863/1864/1865	
		X	1740/1741/1742/1743/1744/1745/1746	
		Standard	1866/1867/1868/1869	
	Summit 700	Highmark	1735/1736/1737/1738	
		X	1747/1748/1749/1750/1751/1752	
		Standard	1753/1754/1755/1756/1757	

This bulletin must be used in conjunction with the *Predelivery Check List* enclosed in the bag with the *Operator's Guide*. Make sure that *Predelivery Check List* is completed and signed.

⚠ WARNING

To obtain limited warranty coverage, predelivery procedures must be performed by an authorized Ski-Doo® snowmobile dealer. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model year service training. Further information or inquiries should be directed to your distributor service representative and/or specific *Shop Manual* sections. Please complete the *Predelivery Check List* for each snowmobile and retain a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook, Predelivery Check List* signed copy and video.

There is a tag attached to the ignition key, only the customer must remove it. This label will remind the customer to ask dealer to perform suspension adjustments according to riding style and vehicle load.

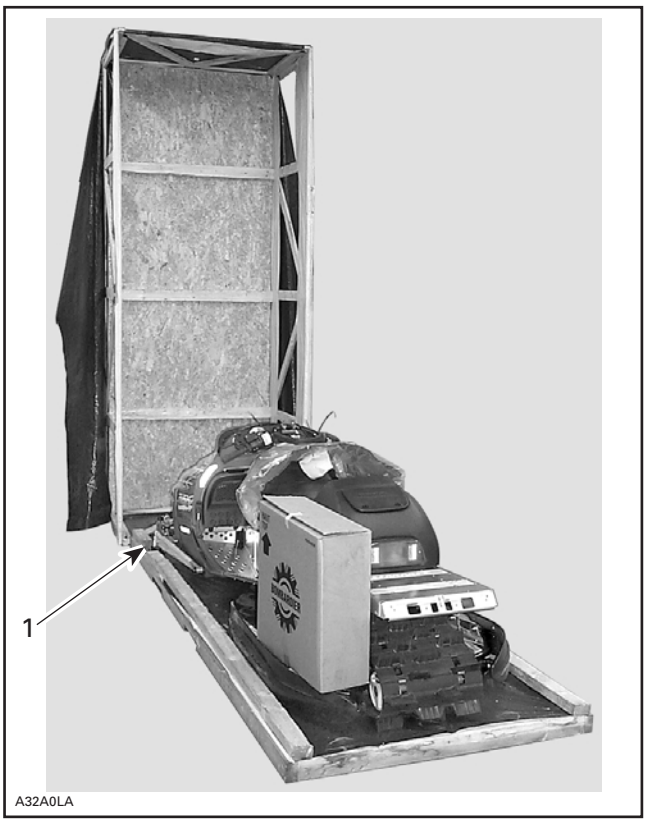
⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

Carefully lay the crate on its bottom.

CAUTION: Allowing the crate to drop may cause serious damage to the vehicle.

Remove all screws retaining cover to crate base. Tip cover toward front or rear of vehicle. There is a notch at the front of crate. Lift cover slowly to avoid damaging any part of the snowmobile.



TYPICAL
1. Notch

Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

Remove ropes and cut locking ties retaining windshield.

CAUTION: Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Keep ski leg bolts and spacers to bolt skis to ski legs. Discard crating spacers and nuts.

Remove vehicle from base.

Remove steering pad, drive belt, predelivery kit, snow guard, bumper and shock absorbers from box.

FRONT HOOK REMOVAL

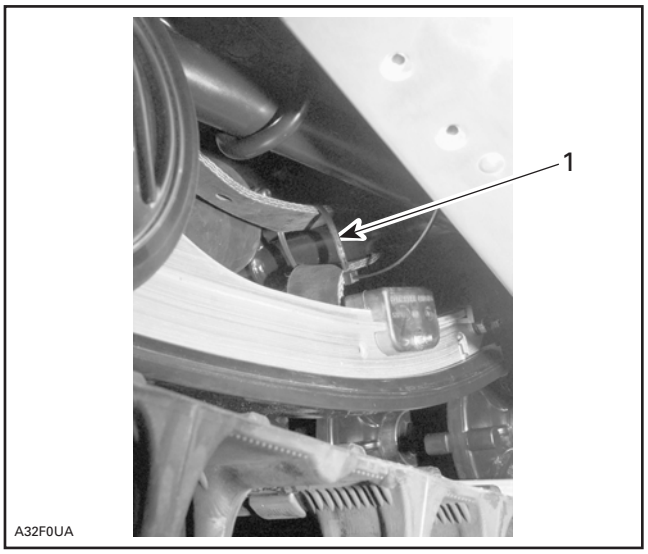
Procedure

Apply parking brake.

Lift rear of vehicle so that a block or a box can be positioned under front wheel, as shown on the next photo.

EDGE OF BOX ALIGNED WITH WHEEL AXIS

On both sides, cut locking ties holding stopper straps.



1. Cut locking ties on both sides

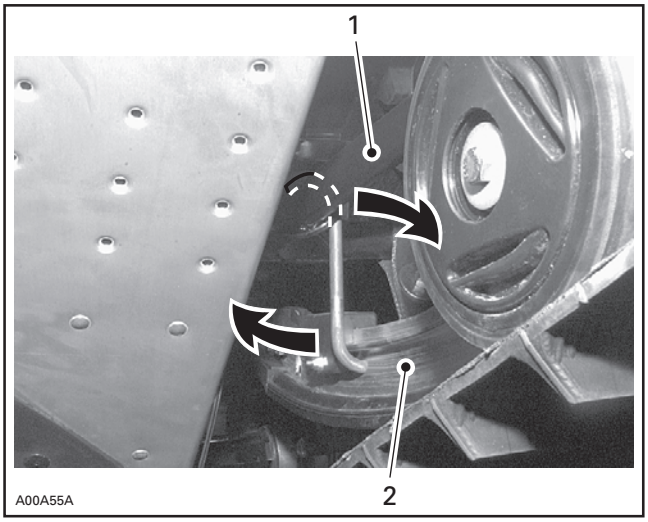
From left side of vehicle, cut locking tie, then apply pressure onto rear bumper with right hand, as shown on the following photo.

TYPICAL

Using left hand, remove hook from suspension, as shown on the following photo.

⚠ WARNING

Before removing hook always verify that vehicle is properly supported and that parking brake is applied.

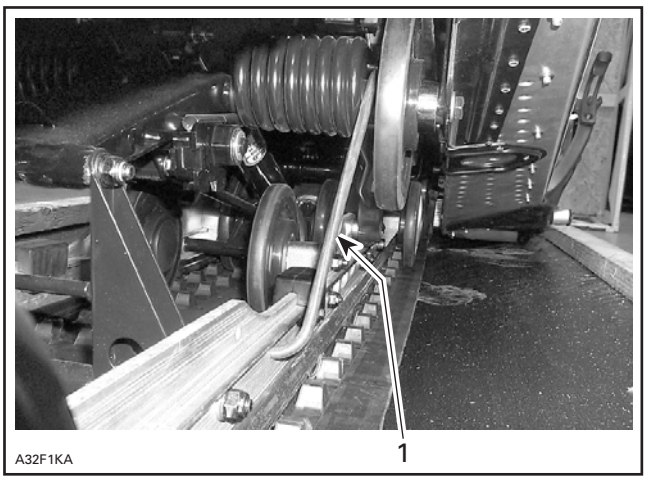


TYPICAL — REMOVE HOOK

1. Front arm
2. Runner

REAR HOOK REMOVAL

Apply pressure on rear suspension and remove hook from rear portion of suspension, as illustrated.



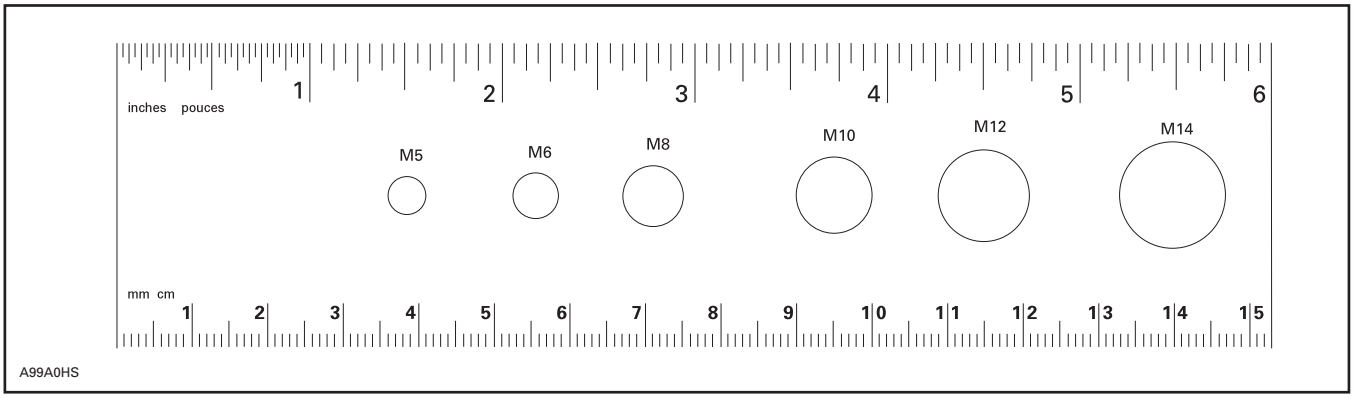
TYPICAL

1. Remove hook

⚠ WARNING

Shipping hooks must be removed to have snowmobile suspension operational.

PREDELIVERY KIT P/N	MODELS
549 010 977	Summit 800 X Summit 700 X Summit 800 Standard Summit 700 Standard
549 010 979	Summit 800 HM X Summit 800 Highmark Summit 700 Highmark



NOTE: This ruler can be helpful to identify fastener length or size.

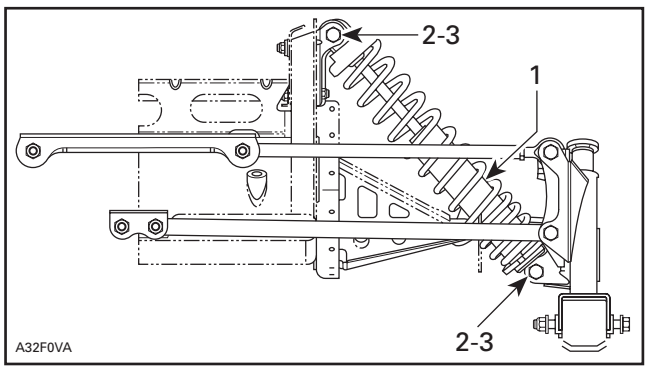
PARTS INSTALLATION
FRONT SUSPENSION

Lift front of vehicle and block safely.

Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Secure shock absorbers to suspension with their adjusting ring at bottom.

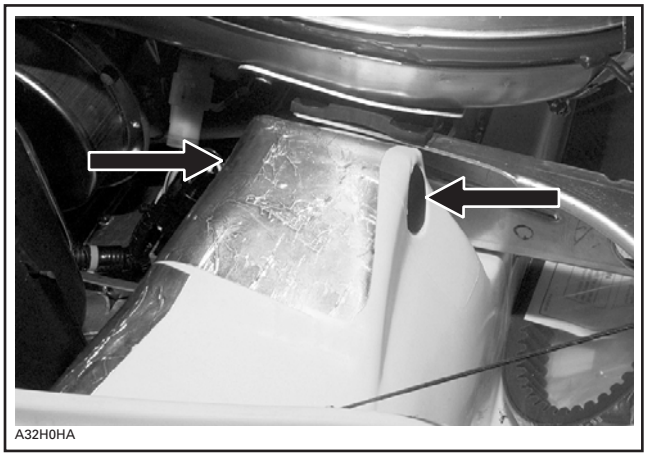
NOTE: Position top and bottom screw heads toward front of vehicle and secure with nuts provided in predelivery kit (section no. 2 or 3).



TYPICAL — RH SIDE SHOWN

1. *Shock absorber (2) (engine compartment) adjusting ring at bottom*
2. *Screw M10 x 1.5 x 55 (2) (P/N 207 005 544) (on suspension)*
3. *Elastic flanged nut M10 x 1.5 (4) (P/N 233 601 416) (section no. 3). Torque to 48 N•m (35 lbf•ft)*

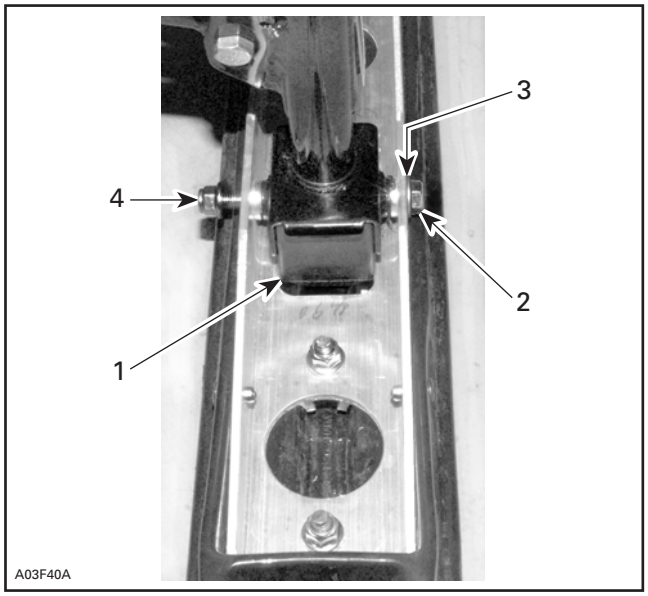
Install caps provided in predelivery kit on bottom pan, each side of upper bolts.



SNAP PROVIDED CAPS (SECTION NO. 3 OR 5) EACH SIDE OF MOLDING

PARTS INSTALLATION
SKIS

Install skis on vehicle.

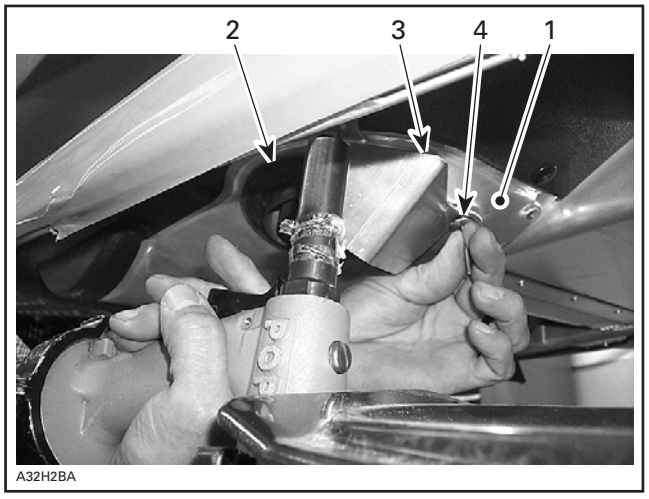


LEFT SIDE SHOWN

1. *Ski stopper (2) (P/N 506 151 233) (section no. 3 or 8) with higher side toward front*
2. *Flanged nut M10 (2) (section no. 1 or 2). Torque to 32 N•m (24 lbf•ft)*
3. *Bolt M10 (2) (ski leg)*
4. *Washer (2) (section no. 1). Installed on bolt head side*

PARTS INSTALLATION
EXHAUST DEFLECTOR

While front of vehicle is lifted attach exhaust deflector (section no. 3 or 8) to bottom pan using rivets found in section no. 3 or 5. See photo.

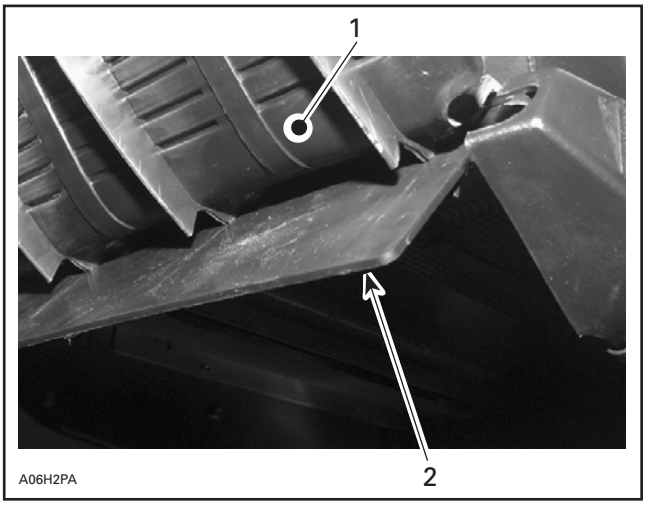


1. *Bottom pan*
2. *Exhaust hole*
3. *Deflector*
4. *Rivets*

Summit 800 HM X, Summit 800 HM and Summit 700 HM Models Only

Insert and position snow guard onto chassis, between rear moldings.

Slide and position snow guard protector pad between snow guard and chassis.

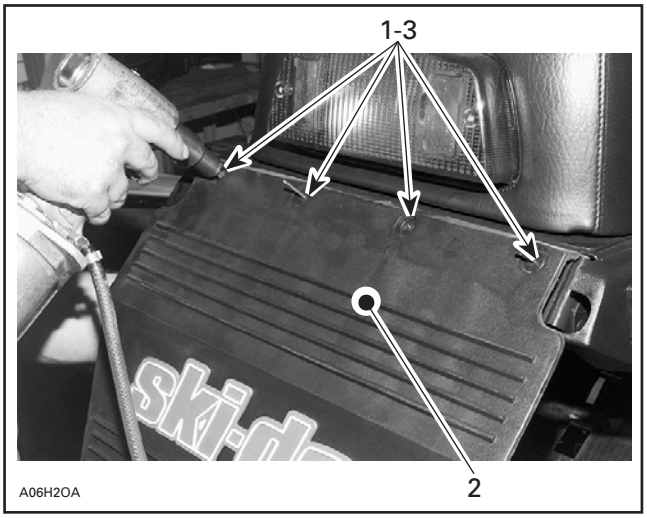


TYPICAL — VIEW FROM UNDER SNOW GUARD

1. *Snow guard (box)*
2. *Snow guard protector pad (box)*

Secure the two parts with rivets.

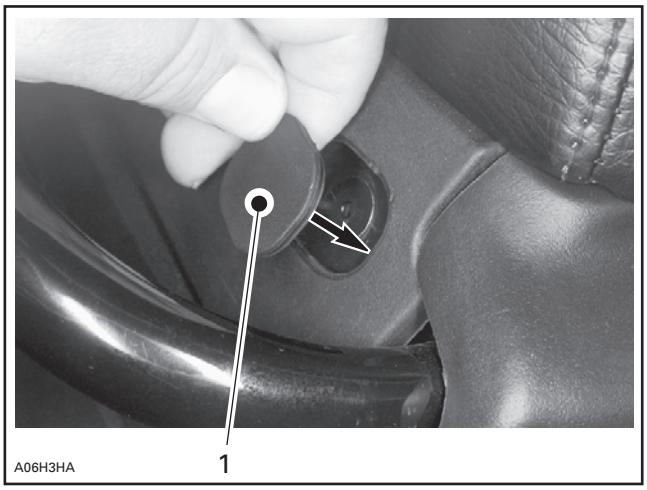
NOTE: Place washers inside tunnel.



TYPICAL

1. *Rivet (4) (P/N 390 908 000) (section no. 4)*
2. *Snow guard (box)*
3. *Washer (4) (P/N 517 225 900) (section no. 2). Position washer inside tunnel*

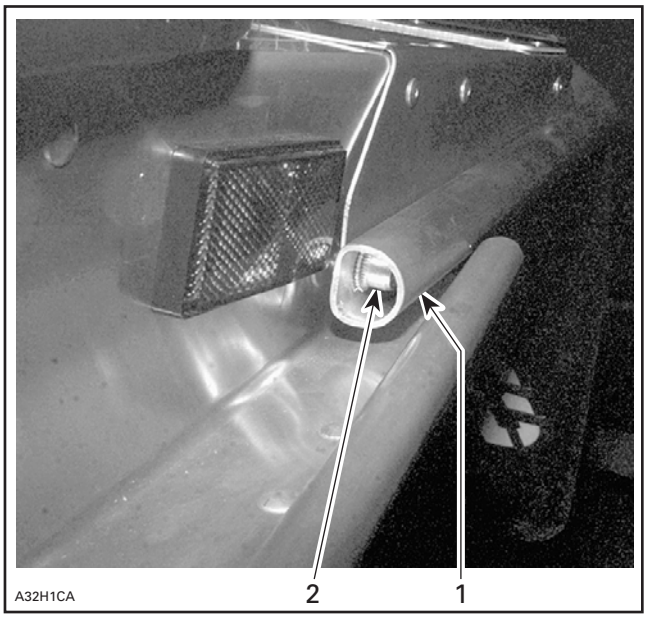
Finalize snow guard installation with caps, as shown in the next photo.



1. *Cap (4) (P/N 415 073 300) (section no. 3)*

Summit 800 HM X, Summit 800 HM and Summit 700 HM Models Only

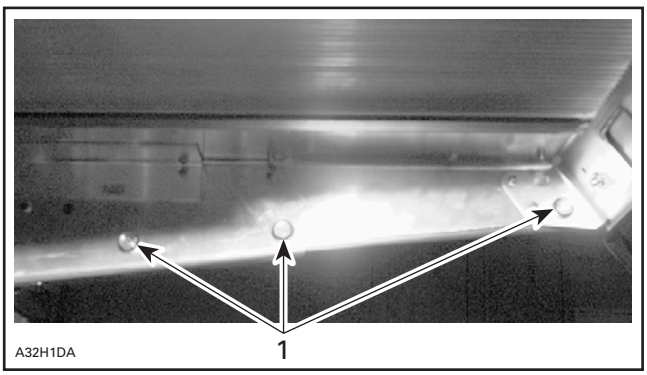
Slide rear bumper on tunnel.



SLIDE BUMPER ON TUNNEL

1. *Rear bumper (box)*
2. *Studs*

Secure bumper from inside of tunnel.

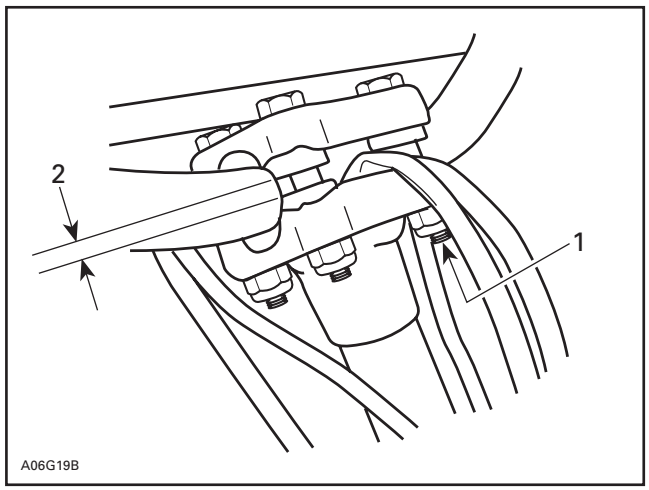


VIEW FROM INSIDE TUNNEL

1. *Bolt M8 x 20 (6) (P/N 207 682 044) (section no. 9)*

If needed, loosen, at least 3 turns, Allen screw of throttle and brake handle housings.

Adjust handlebar and torque nuts between 21 and 28 N•m (16 and 20 lbf•ft).



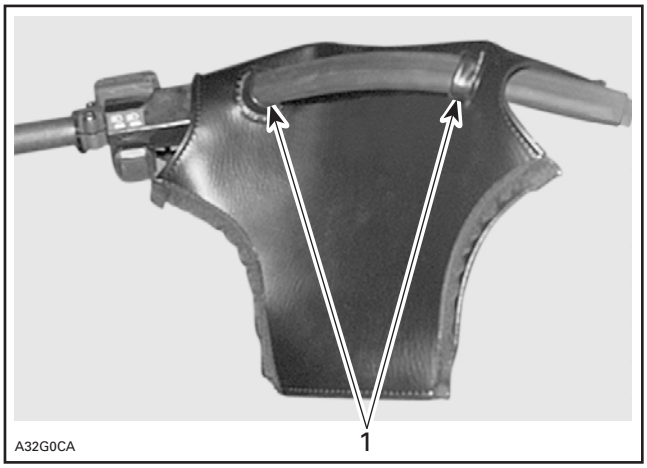
TYPICAL

1. *Torque between 21 and 28 N•m (16 and 20 lbf•ft)*
2. *Equal gap each side (both clamps)*

STEERING HOLDING STRAP

Cut locking tie retaining right side strap end.

Insert strap through holes provided in steering padding, as shown in the next photo.

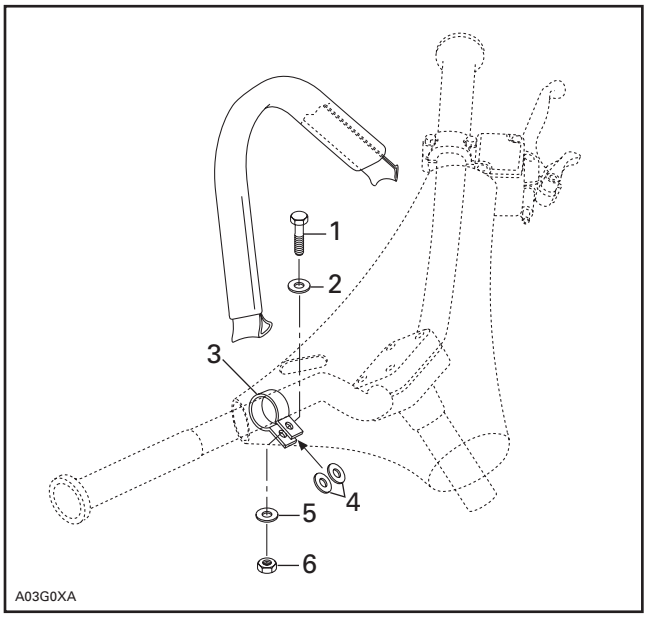


TYPICAL

1. *Strap inserted through both steering pad cover holes*

Secure right side strap end with retaining clip and tighten firmly using bolt, nut and washers in the sequence shown on drawing below. Use long nose pliers to pull clip and help installation. Torque to 10 - 12 N•m (89 - 106 lbf•**in**).

NOTE: A wire route along handlebar. To avoid pinching it, take care to keep wire out of retaining clip.



1. *Bolt (section no. 4 or 6)*
2. *Washer (section no. 2)*
3. *Retaining clip*
4. *Washers (section no. 2)*
5. *Washer (section no. 2)*
6. *Nut (section no. 4 or 6)*

Properly position foam and padding in place, as shown in the next photo.

MAKE SURE FOAM AND PADDING WRAP STEERING PROPERLY

Fasten padding with velcro strips to complete installation.

TYPICAL — FINAL INSTALLATION

PARTS INSTALLATION
WINDSHIELD

Remove protective films from windshield.

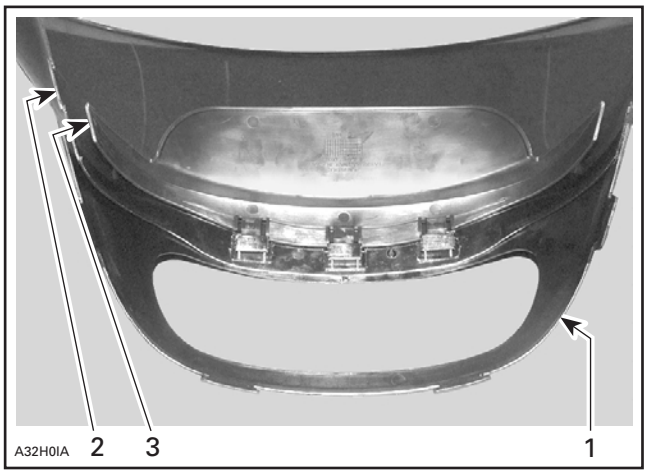
Remove headlamp protector from hood.

Unclip inner protector from headlamp protector.

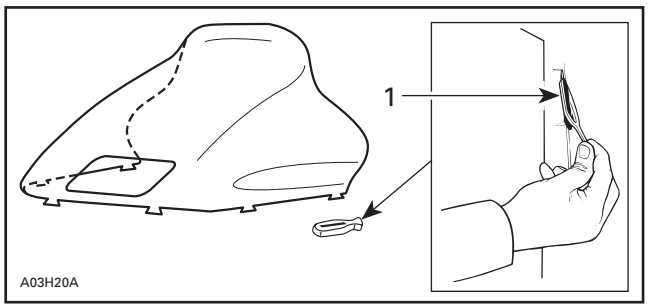
Insert tabs of headlamp protector in windshield square holes.

Clip inner protector in place.

Secure windshield assembly on hood using latches.



1. *Headlamp protector*
2. *Windshield*
3. *Inner protector*



1. *Latch (8) (P/N 570 023 800) (4 already on headlamp protector, 2 on windshield and 2 on section no. 5 or 6)*

TYPICAL — WINDSHIELD INSTALLED

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Parts Cleaner (P/N 413 711 809) before installing drive belt.

BREAK-IN PERIOD SUPPLEMENTAL OIL

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz.) of BOMBARDIER injection oil (P/N 413 802 900 — 12 x 1 L) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

PUMP ADJUSTMENT

Oil injection pump is factory set. However, if adjustment needs to be checked or modified, refer to special *Predelivery Bulletin 2000-14*.

CAUTION: When adjusting oil injection pump lever, be sure to place mirror so that there is no parallax error. Such an error may lead to serious engine damages.

⚠ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (ex.: locking tab, elastic stop nut, self-locking fasteners, etc.) must be installed or replaced with new ones where specified. If the efficiency of a locking device is impaired, it must be renewed.

⚠ WARNING

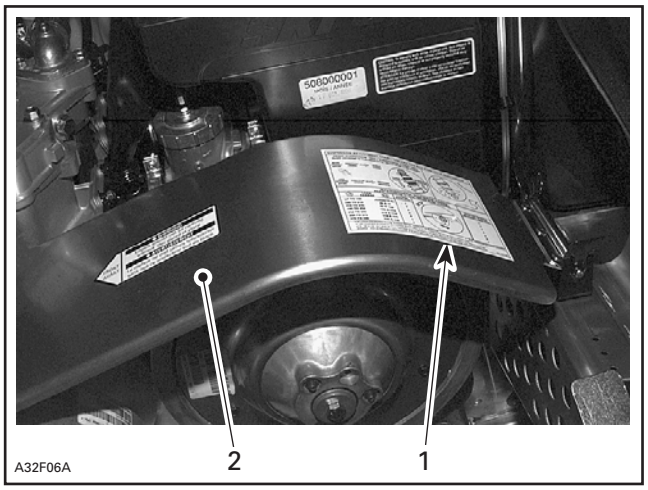
Make sure cable is free to swivel in lever end.

Check brake fluid in reservoir on handlebar for proper level. Add fluid (DOT) as required.

CAUTION: Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partially filled bottle of brake fluid.

ADJUSTMENTS
SUSPENSION

Rear suspension is calibrated at factory. At predelivery, mechanics should perform suspension adjustments according to customer riding style and vehicle load as described on suspension adjustment chart which is located on pulley guard.



1. *Adjustment chart*
2. *Pulley guard*

ADJUSTMENTS
TRACK

Refer to *Shop Manual* to adjust track tension and alignment. See TECHNICAL DATA section at the end of this bulletin.

When operation is done, install wheel caps provided with the predelivery kit (section no. 4 or 6) on rearmost wheels.

NOTE: If lubricant is needed to help cap installation, use lens cleaner instead of soapy water to avoid cap to get out from its location due to soap residual.

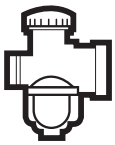
ADJUSTMENTS
DRIVEN PULLEY

It is usual to experience spring settings during break-in period of a new spring. The factory spring preload is slightly higher to compensate for springs settings. Specifications in TECHNICAL DATA are applicable after break-in period (about 10 hours of use).

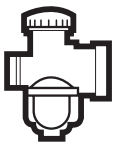
TECHNICAL DATA

The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. Further inquiries should be directed to your distributor service representative.

A dot (•) on right indicates changes from 2000 model.

	MODEL			SUMMIT 800 HM X/ SUMMIT 800 HIGHMARK	SUMMIT 800 X/ SUMMIT 800 STANDARD
	Engine type			793	
	Maximum HP RPM ①		± 100 RPM	7850	•
	Rotary valve		P/N	420 867 870	
	Carburetor type			TM 40 - B106 ② with DPM	
	Main jet			500	•
	Needle jet			P0	
	Pilot jet			17.5	
	Needle identification — Clip position			9ZLY2 - 58	•
	Slide cut-away			2.0	
	Float adjustment		± 1 mm (± 0.04 in)	—	
	Air screw adjustment		± 1/16 turn	—	
	Idle speed RPM		± 200 RPM	1500	
	Gas grade/pump octane number		(R + M)/2	Regular unleaded/87	
	Gas/oil ratio			Oil injection	
	Ignition timing BTDC ③		mm (in)	3.51 (0.138)	
	Trigger coil air-gap		mm (in)	0.55 - 1.45 (.022 - .057)	
	Gear ratio		Teeth	19/43 •	21/43
	Engagement speed		± 100 RPM	4100 (3800 for 800 X Europe and 800 HM X Europe) •	
	Drive pulley calibration screw position			3	
	Pulley distance	Z	(± 0.5) mm (± 1/64) in	16.5 (21/32)	
	Offset	X	± 0.5 mm (± 0.02 in)	35.5 (1.398)	
		Y	± 0.5 mm (± 0.02 in)	Dimension Y must exceed X of 1 mm (1/32 in)	
	Drive belt adjustment	Deflection	mm (in)	32 (1-1/4)	
		Force ④	kg (lbf)	11.34 (25)	
	Driven pulley preload		± 0.7 kg (± 1.5 lbf)	8.0 (17.6)	
	Drive chain tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track adjustment	Deflection	mm (in)	30 to 35 (1-3/16 to 1-3/8) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.
② At 3500 RPM (engine cold) with headlamp turned on.
③ Force applied midway between pulleys to obtain specified deflection.
BTDC: Before Top Dead Center

	MODEL			SUMMIT 700 HIGHMARK	SUMMIT 700 X/ SUMMIT 700 STANDARD
	Engine type			693	
	Maximum HP RPM ①		± 100 RPM	8000	
	Rotary valve		P/N	420 867 870	
	Carburetor type			TM 40 - B100 ② with DPM •	
	Main jet			520 •	
	Needle jet			P0 •	
	Pilot jet			17.5 •	
	Needle identification — Clip position			9ZLY3 - 58 •	
	Slide cut-away			2.0 •	
	Float adjustment		± 1 mm (± 0.04 in)	— •	
	Air screw adjustment		± 1/16 turn	— •	
	Idle speed RPM		± 200 RPM	1500 •	
	Gas grade/pump octane number		(R + M)/2	Regular unleaded/87	
	Gas/oil ratio			Oil injection	
	Ignition timing BTDC ③		mm (in)	3.36 (0.132)	
	Trigger coil air-gap		mm (in)	0.55 - 1.45 (.022 - .057)	
	Gear ratio		Teeth	19/43 •	21/43 •
	Engagement speed		± 100 RPM	4100 (3800 for 700 STD Europe, model 1757)	
	Drive pulley calibration screw position			3 •	4 (3 for 700 STD Europe)
	Pulley distance	Z	(± 0.5) mm (± 1/64) in	16.5 (21/32)	
	Offset	X	± 0.5 mm (± 0.02 in)	35.5 (1.398)	
		Y	± 0.5 mm (± 0.02 in)	Dimension Y must exceed X of 1 mm (1/32 in)	
	Drive belt adjustment	Deflection	mm (in)	32 (1-1/4)	
		Force ④	kg (lbf)	11.34 (25)	
	Driven pulley preload		± 0.7 kg (± 1.5 lbf)	7.0 (15.43) •	
	Drive chain tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track adjustment	Deflection	mm (in)	30 to 35 (1-3/16 to 1-3/8) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.
② At 3500 RPM (engine cold) with headlamp turned on.
③ Force applied midway between pulleys to obtain specified deflection.
BTDC: Before Top Dead Center