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SNOWMOBILES

D

PREDELIVERY
Bulletin

No. **96-1**

Date : April 18, 1995

SUBJECT : Predelivery Procedure

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Élan	3053	All

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

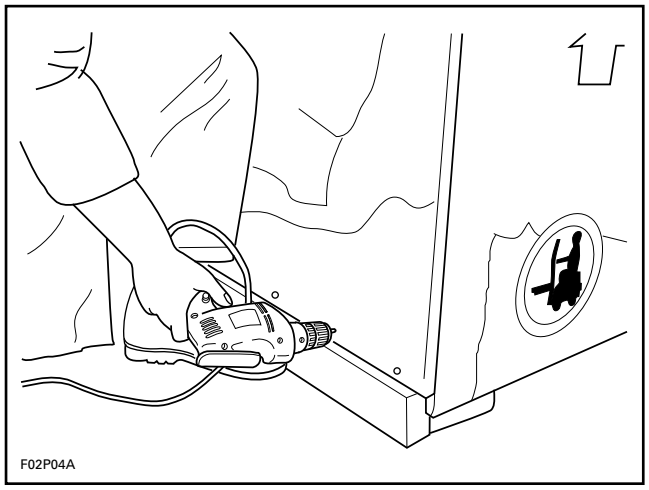
O NOTE : This bulletin must be used in conjunction with the check list enclosed in *Operator's Guide* bag. Make sure that predelivery check list is completed and signed.

CONTENTS

◆ WARNING : Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. locking 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.

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

Using a screwdriver, remove all screws retaining crate cover to base.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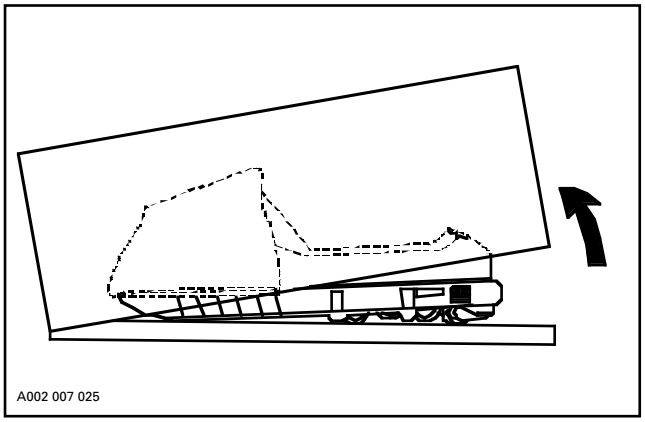
Tip cover towards front of vehicle.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Detach parts to be installed (e.g. skis, windshield) from the vehicle and its base.

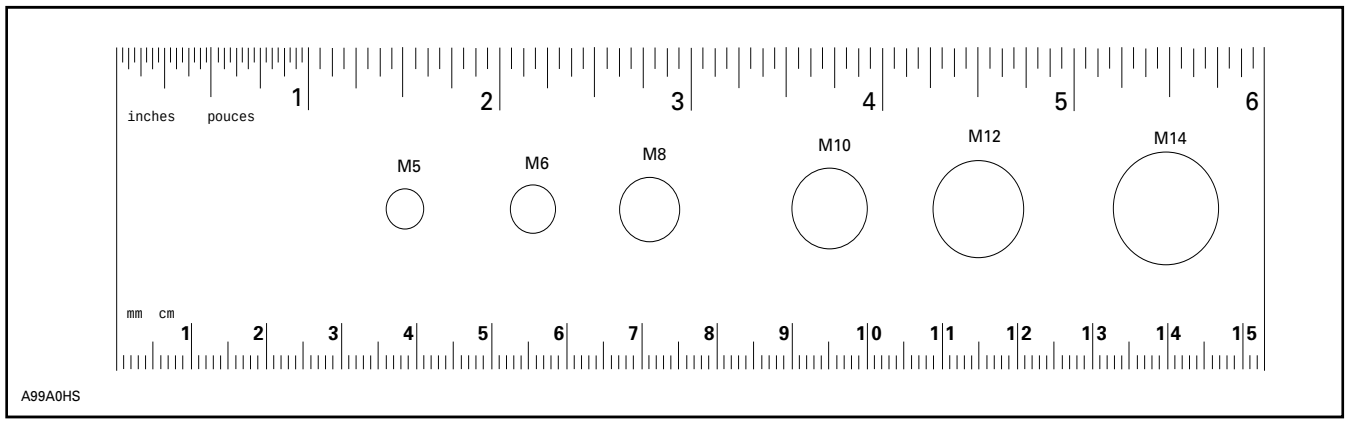
▼ CAUTION : Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts to secure skis to ski legs, later. Discard crating spacers and nuts.

Remove vehicle from base.

Remove predelivery kit from engine compartment.

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



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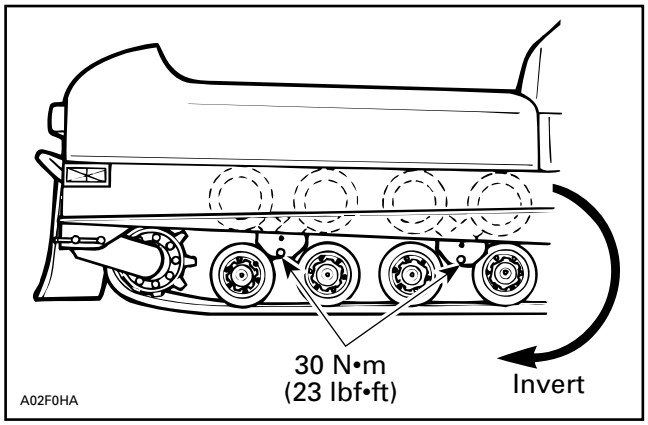
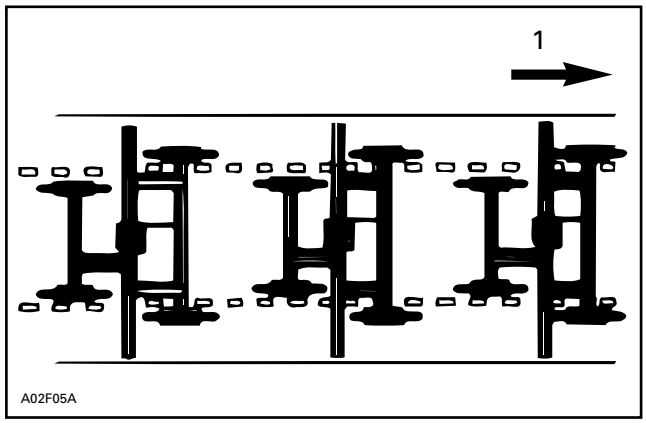
Rear Suspension

Using a pry bar, invert each bogie wheel set (if necessary remove one set to loosen track tension).

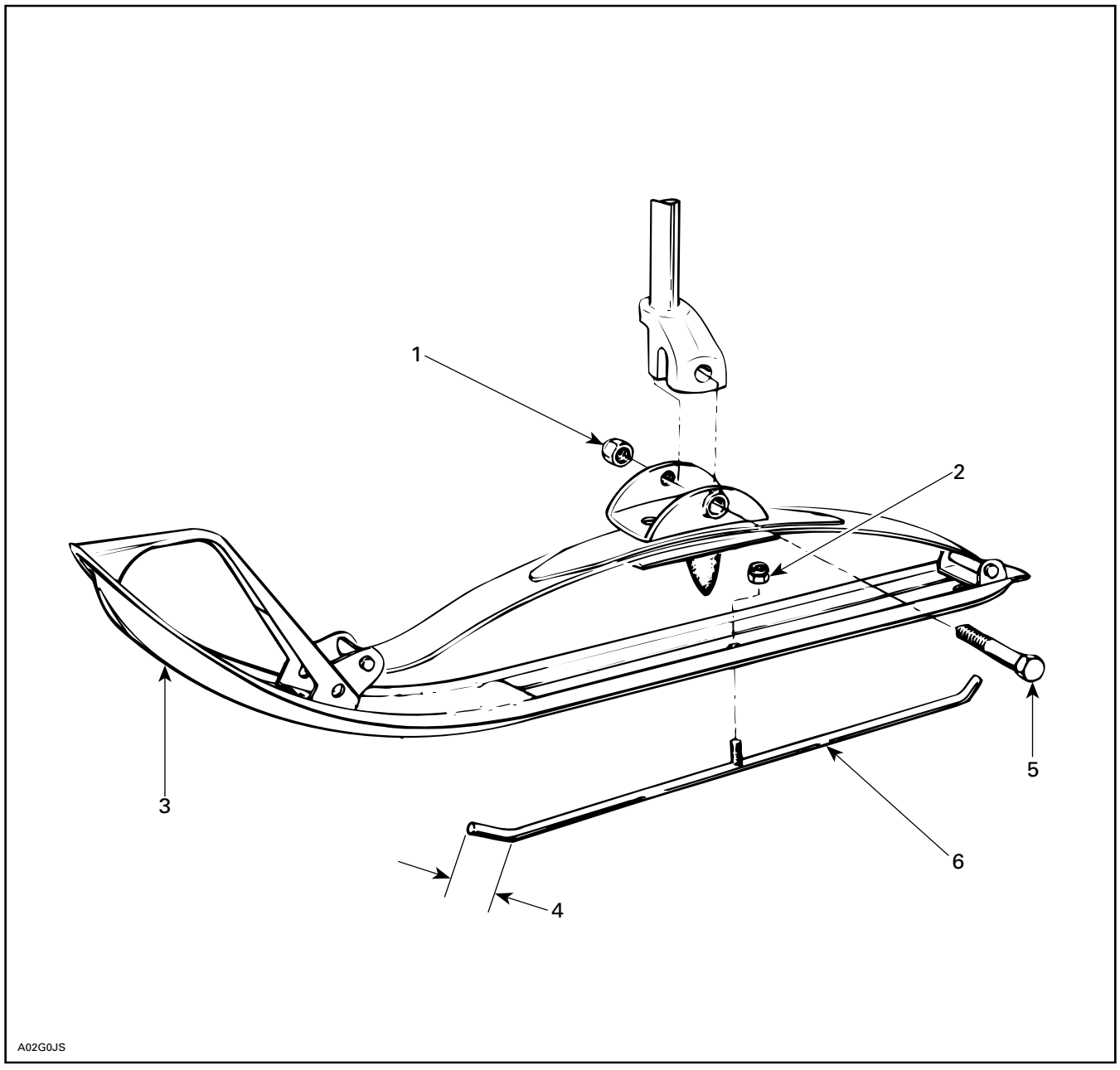


Make sure bogie wheel sets are as shown.



Hook up link plate springs at rear of tunnel.

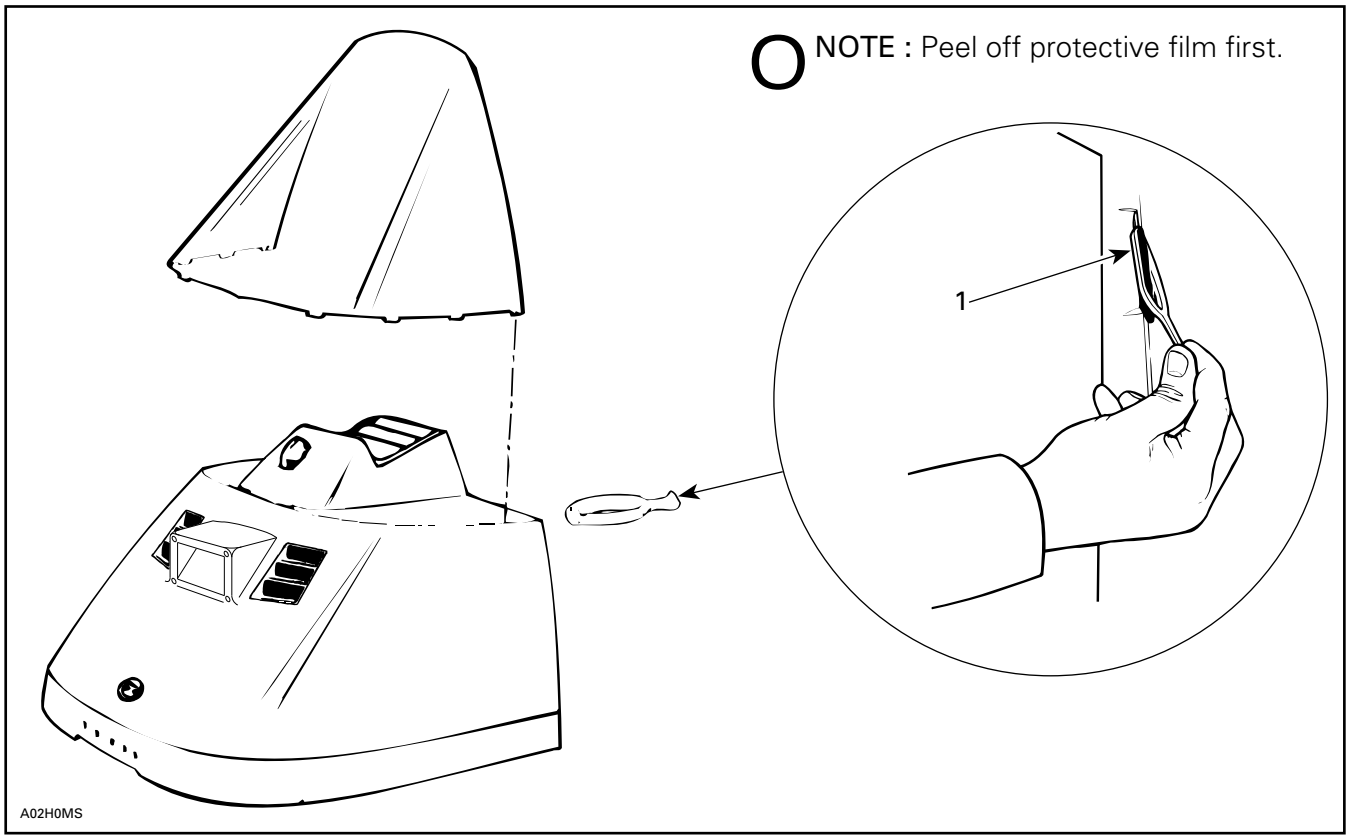
Adjust track tension according to technical data found on last page of this bulletin.



LEFT SIDE SHOWN

1. *Nut 7/16-20 (2) P/N 398 2026 00 (section 1) Tighten until ski moves up and down with a slight resistance*
2. *Nut M10 X 1,5 (2) P/N 228 5010 45 (section 2) 18 N•m (159 lbf•**in**)*
3. *Ski (2) (On crate)*
4. *Longer portion toward front*
5. *Bolt 7/16-20 X 3-1/2 (2) P/N 305 3133 00 (On crate)*
6. *Runner (2) P/N 505 0568 00 (Attached to tie rod) Curve runner by about 10 mm (3/8 in) to ease installation*

PARTS INSTALLATION
WINDSHIELD



1. Latch (9) P/N 570 0238 00 (section 3)

PARTS INSTALLATION
DRIVE BELT

Clean pulleys with a suitable cleaner such as Loctite Cleaning Solvent (P / N 413 7082 00) before installing drive belt.

Fuel : Regular unleaded gasoline or gasohol containing less than 10% of ethanol.

Fuel Octane Number ((R + M) / 2) : 87.

NOTE : In most service station pump octane number corresponds to (R + M) / 2 octane number.

Oil : Blizzard oil P / N 496 0135 00 - 500 mL.

CAUTION : Never use outboard or straight mineral oils.

Ratio : 40:1.

NOTE : Use a 40:1 fuel / oil ratio for the first 10-15 hours of use which corresponds to the break-in period. After that, fuel / oil ratio is 50:1.

				ÉLAN
	Engine Type			247
	Maximum HP ①		RPM	5100-5300
	Carburetor Type			VM 28-470
	Main Jet			160
	Needle Jet			182 O-8
	Pilot Jet			30
	Needle Identification – Clip Position			6DP1-3
	Slide Cut-away			2.0
	Float Adjustment		mm (in)	17.3 (.68)
	Air Screw Adjustment		± 1/8 turn	1-1/2
	Idle Speed		RPM	1100-1300
	Gas Grade / Octane Number		(R + M) / 2	Regular Unleaded / 87
	Gas / Oil Ratio			50:1 (40:1 for break-in)
	Ignition Timing BTDC		mm (in)	3.98 (1.57) ②
	Engagement Speed		RPM	2000-2200
	Pulley Distance	Z	(+ 0, – 1) mm (+0, –1/32 in)	45.8 (1-13/16)
	Offset	X	± 0.4 mm (± 1/64 in)	34.4 (1-23/64)
		Y		③
	Drive Belt Adjustment	Deflection	mm (in)	33 ± 3 (1-19/64 ± 1/8)
		Force ④	kg (lbf)	5 (11)
	Driven Pulley Preload		kg (lbf)	3.6 (7.9)
	Drive Chain Tension			Automatic (Spring Loaded)
	Track Adjustment	Deflection	mm (in)	35 (1-3/8)

① Engine speed at which maximum power is achieved.

② With centrifugal weight in fully advanced position.
Dynamic edge gap : 8.5 mm (.335 in).
Breaker point gap : 0.30 - 0.40 mm (.012 - .016 in).
Condenser capacity : 0.27 µF.

③ Dimension Y may be less than X by 0.75 mm (1/32 in) or exceed X by 0.75 mm (1/32 in).

④ Force applied midway between pulleys to obtain specified deflection.

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PREDELIVERY Bulletin

D

No. **96-2**

Date : April 18, 1995

SUBJECT : Predelivery Procedures

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Tundra II LT (Canada and United States)	3264	All
1996	Tundra II LT (Sweden)	3265	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 Inc. 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, it may have some differences between the manufactured product and the descriptions and / or specifications in this document. Bombardier Inc. reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

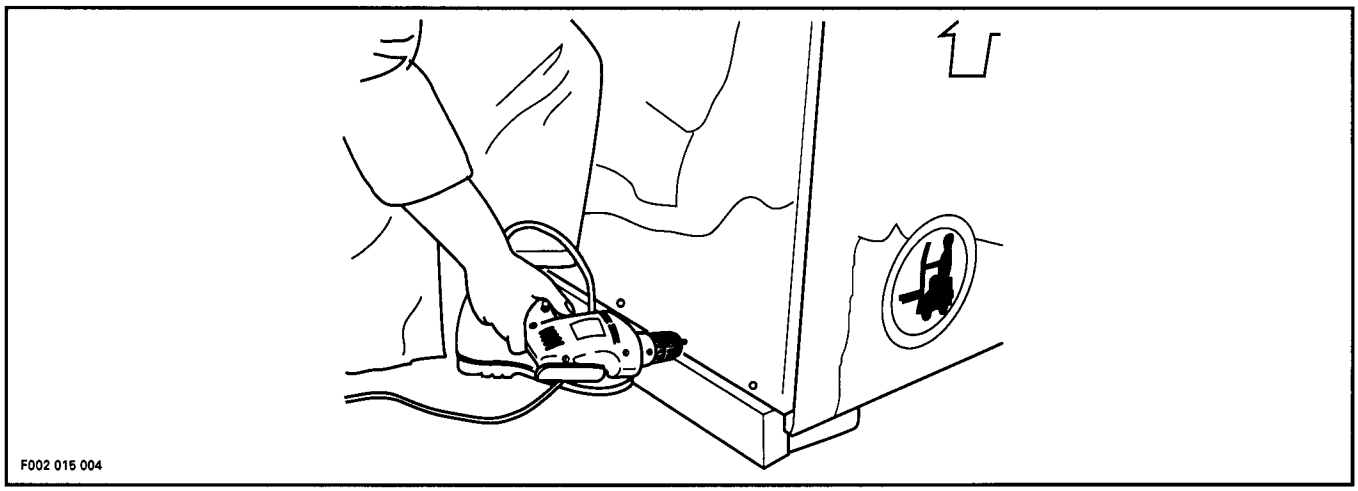
The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

CONTENTS

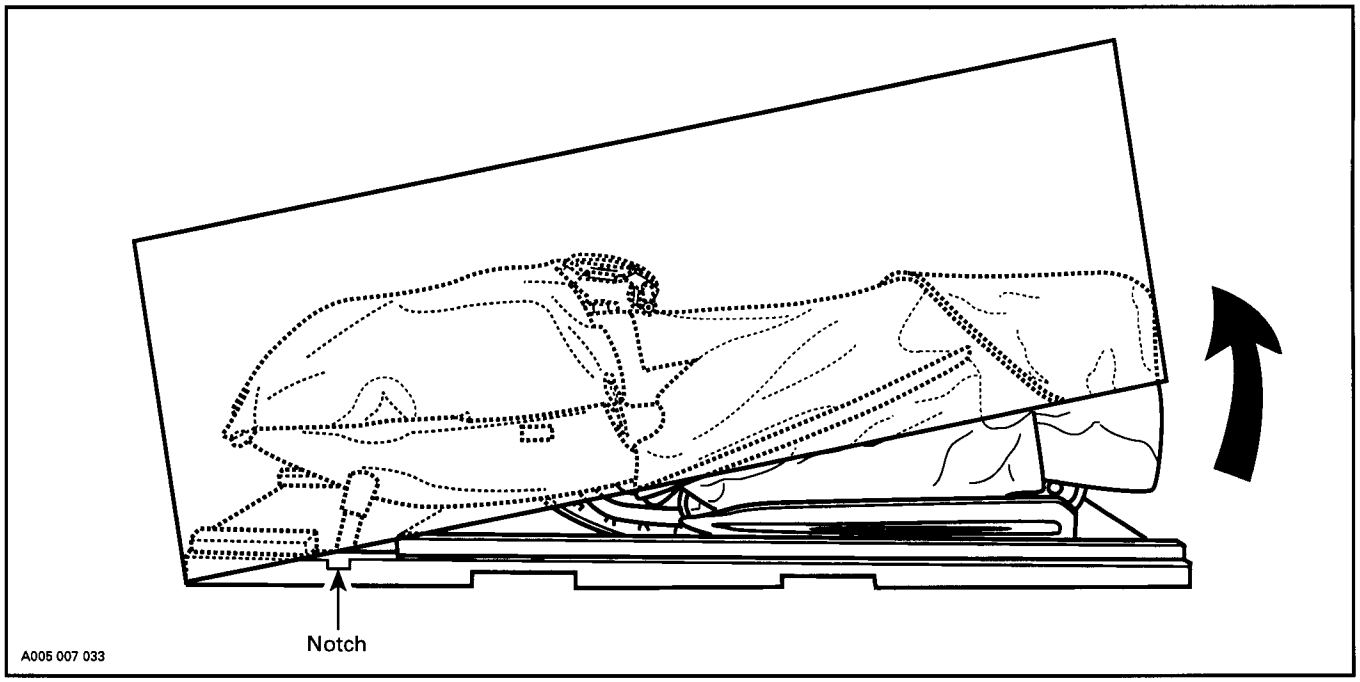
◆ WARNING : Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

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

Using a screwdriver remove all screws retaining crate cover to base.



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



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

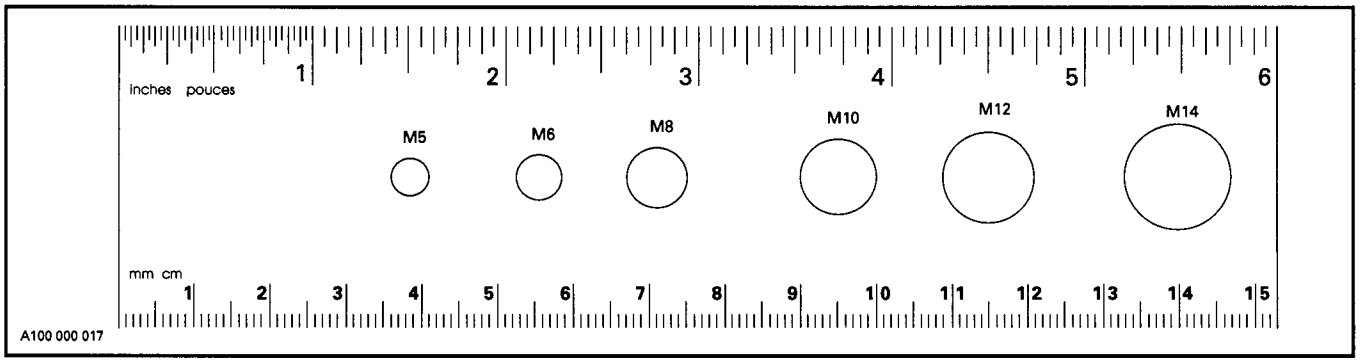
CAUTION : Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

Detach ski legs from crate. Keep ski leg bolts to bolt skis to ski legs. Discard nuts.

Remove vehicle from base.

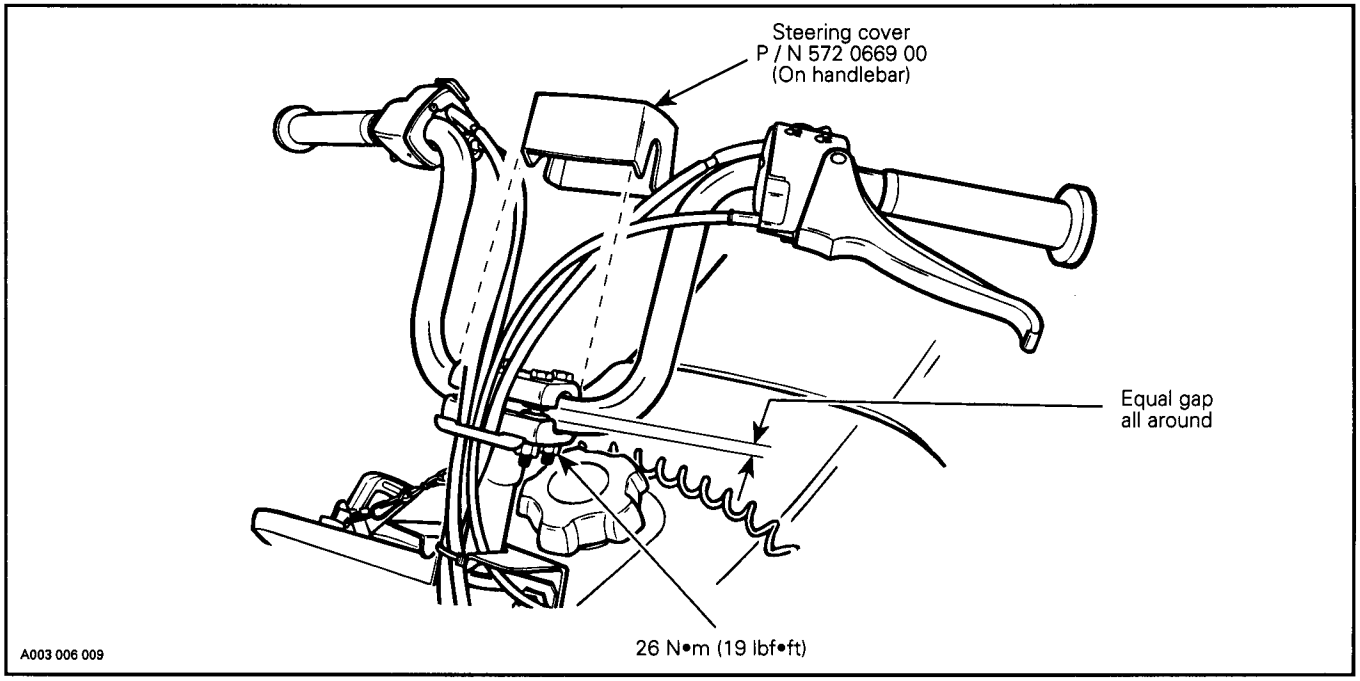
Remove predelivery kit from engine compartment.

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

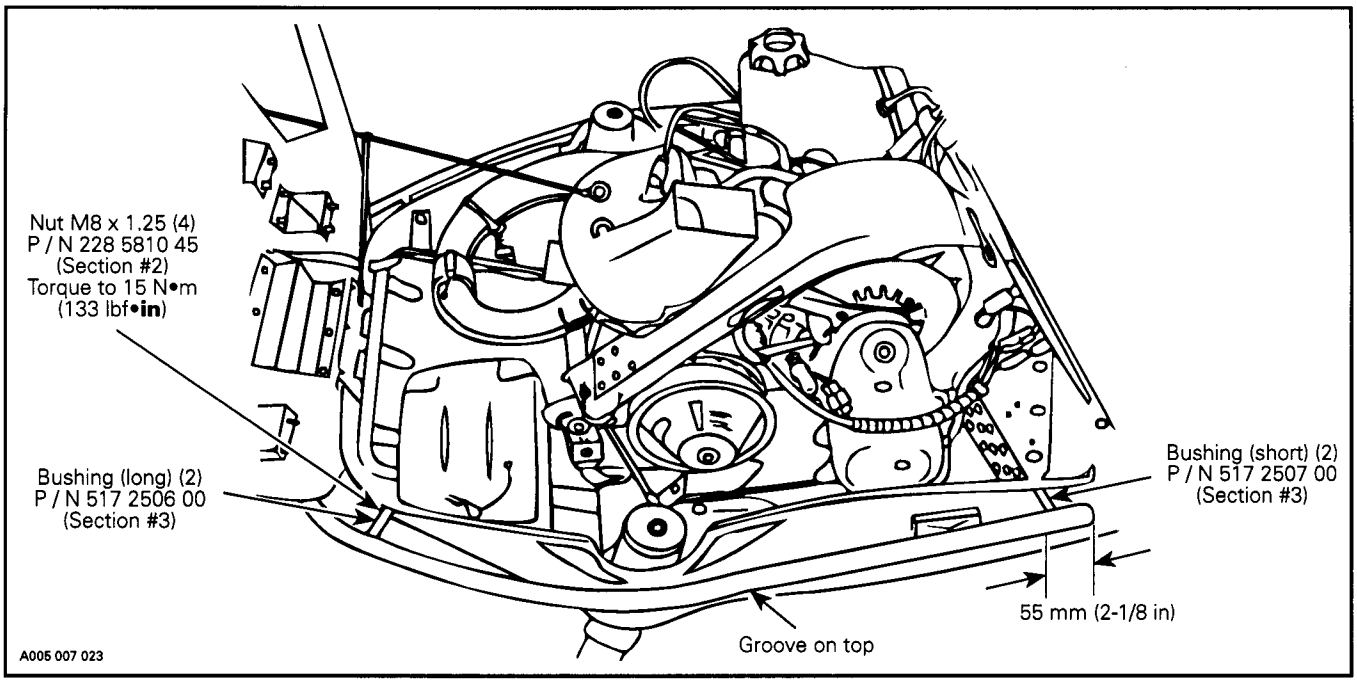


PARTS INSTALLATION

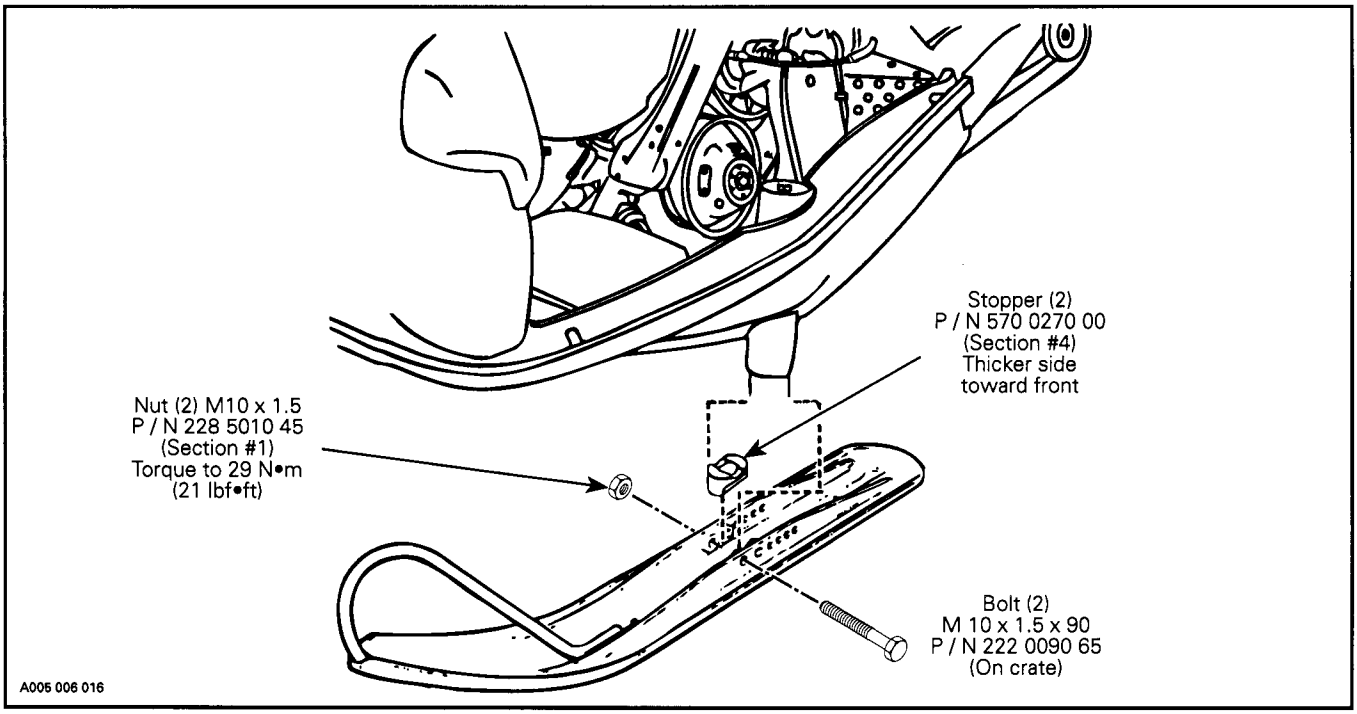
STEERING COVER



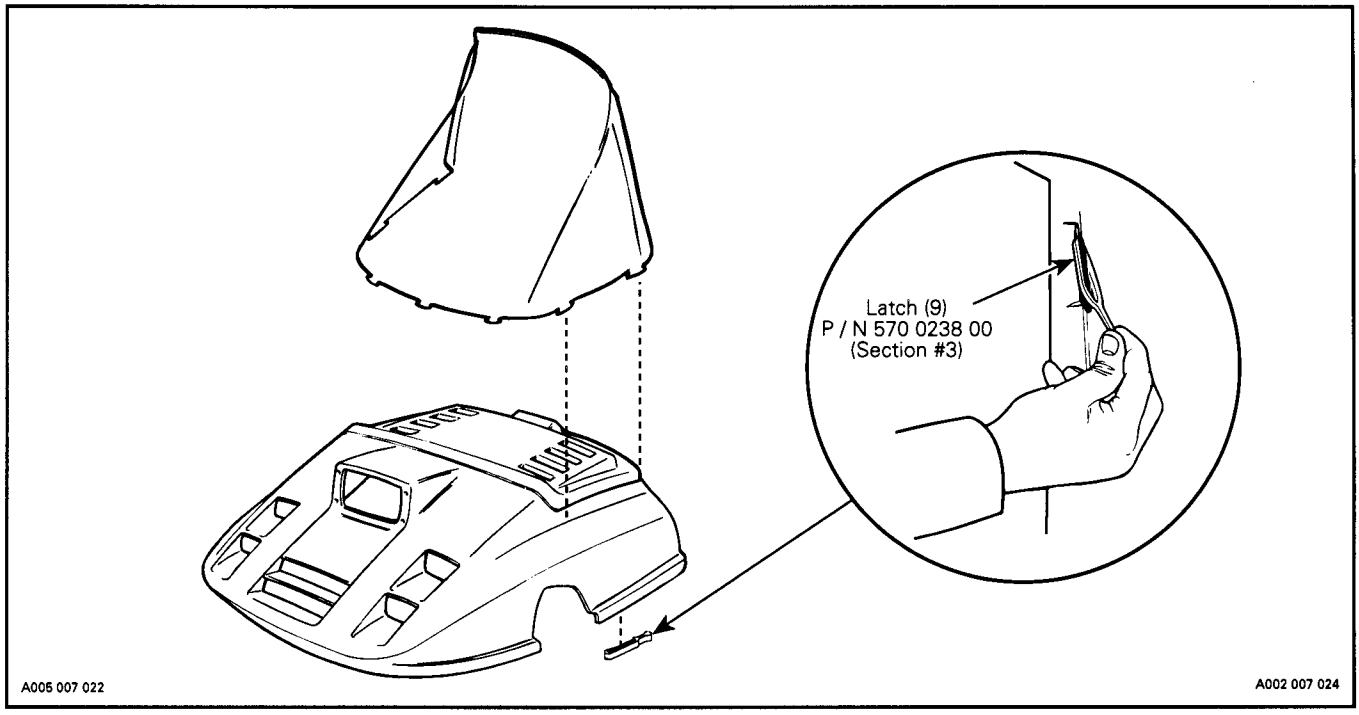
PARTS INSTALLATION
FRONT BUMPER



PARTS INSTALLATION
SKI



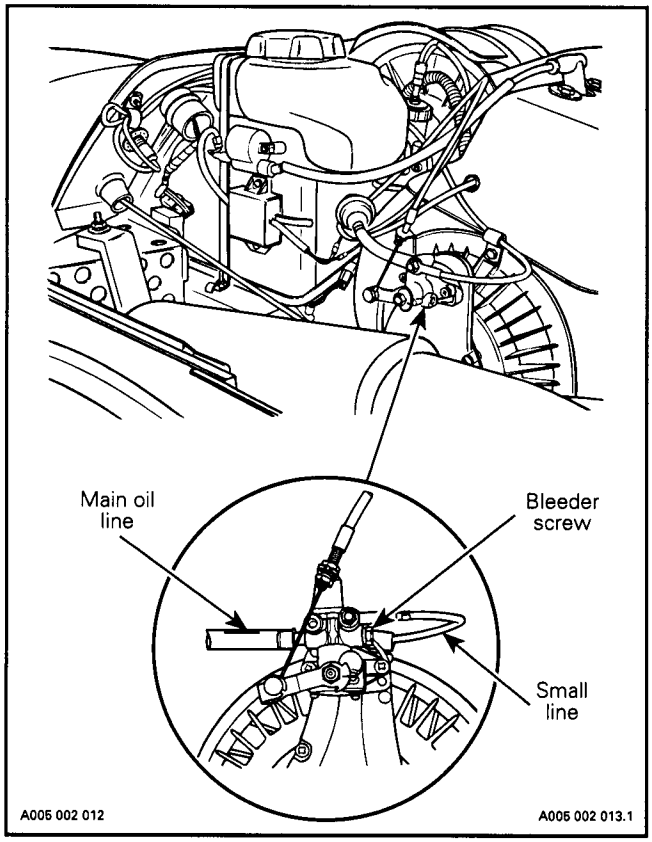
PARTS INSTALLATION
WINDSHIELD



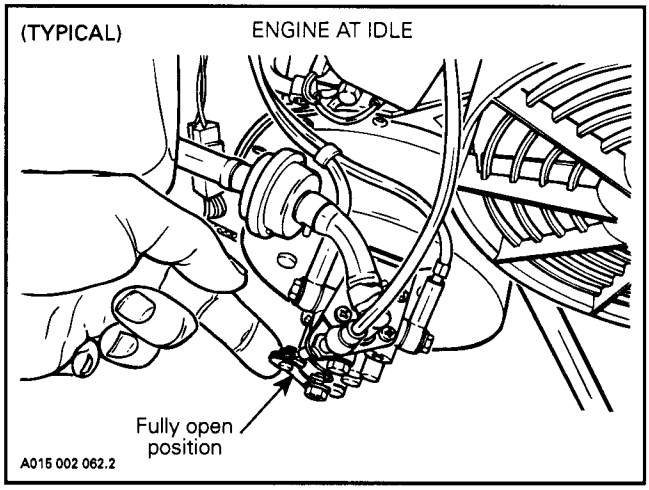
PARTS INSTALLATION
DRIVE BELT

Clean pulleys and brake disc with a suitable cleaner such as Loctite Safety Solvent (P / N 413 7082 00) before installing drive belt.

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



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



				TUNDRA II LT
	Engine Type			277
	Maximum HP RPM ①		RPM	6700-7000
	Carburetor Type			VM 34-425
	Main Jet			190
	Needle Jet			159 O-8
	Pilot Jet			40
	Needle Identification – Clip Position			6DH4-2
	Slide Cut-away			2.5
	Float Adjustment		mm (in)	24 (.94)
	Air Screw Adjustment		± 1/8 turn	1
	Idle Speed		RPM	1100-1300
	Gas Grade / Octane Number ②		(R + M) / 2	Regular Unleaded / 87
	Gas / Oil Ratio			Oil Injection
	Ignition Timing BTDC ③		mm (in)	2.52 (.099)
	Engagement Speed		RPM	3000-3200
	Pulley Distance	Z	(+ 0, – 1) mm (+0, –1/32 in)	36.5 (1-7/16)
	Offset	X	± 0.4 mm (± 1/64 in)	34.5 (1-23/64)
		Y		Dimension Y must exceed X by up to 1.5 mm (1/16 in)
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
		Force ④	kg (lbf)	5 (11)
	Driven Pulley Preload		± 1 kg (± 2 lbf)	3.6 (8)
	Drive Chain Tension			Automatic (Spring Loaded)
	Track Adjustment	Deflection ⑤	mm (in)	35 to 45 (1-3/8 to 1-3/4)

① Engine speed at which maximum power is achieved.

② In most service station pump octane number corresponds to (R + M) / 2 octane number.

③ At 6000 RPM (engine cold) with headlamp turned on.

④ Force applied midway between pulleys to obtain specified deflection.

⑤ Deflection with a 7.3 kg (16 lb) downward pull.

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SNOWMOBILES

D

PREDELIVERY Bulletin

No. **96-3**

Date : June 20, 1995

SUBJECT : Predelivery Procedures

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United states : Touring E / E LT / LE / SLE, skandic 380 / 500 and Formula S / SL.	1530, 1542, 1527, 1528, 1524, 1525, 1534, 1535, 1531, 1532, 1523, 1521, and 1522.	ALL
1996	Sweden : Touring LE /SLE, skandic 380 / 500 and Formula S / SL.	1529, 1526, 1536, 1533, 1541 and 1540.	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 Inc. 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, it may have some differences between the manufactured product and the descriptions and / or specifications in this document. Bombardier Inc. 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.

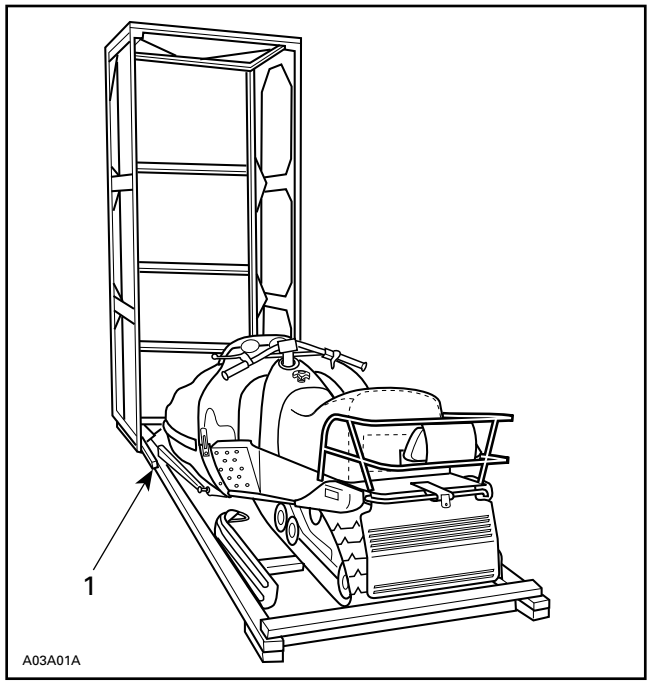
CONTENTS

◆ 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.

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

Unscrew all screws retaining cover to vehicle base. Tip cover over front 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.

Slowly pull out metal strip retaining windshield.

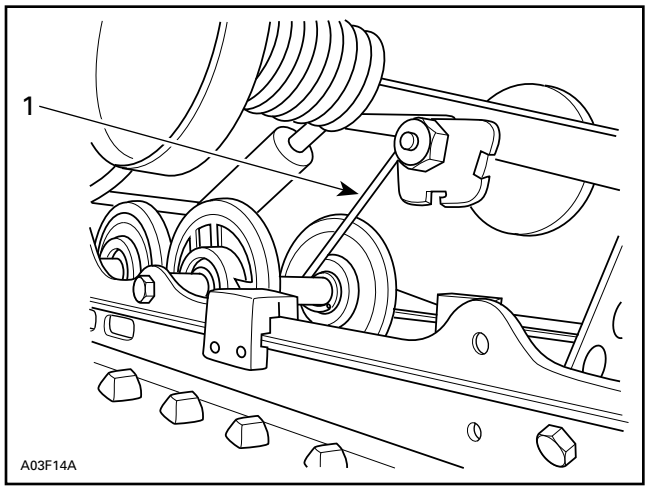
▼ CAUTION : Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

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

Remove vehicle from base.

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

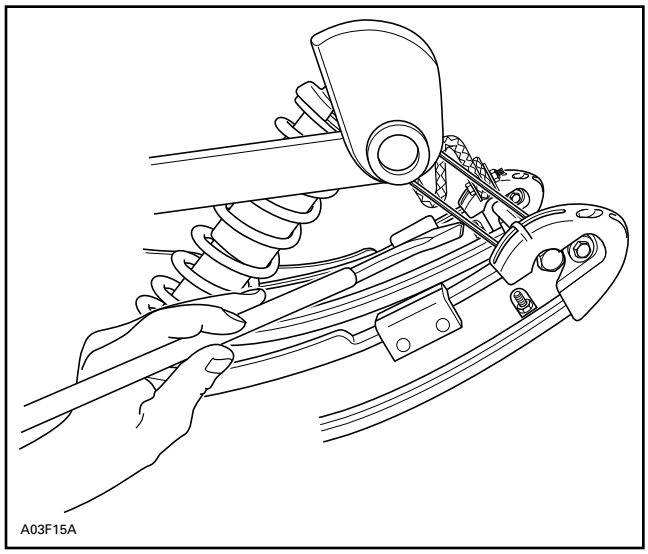
Remove hook from rear portion of rear suspension.



1. Hook

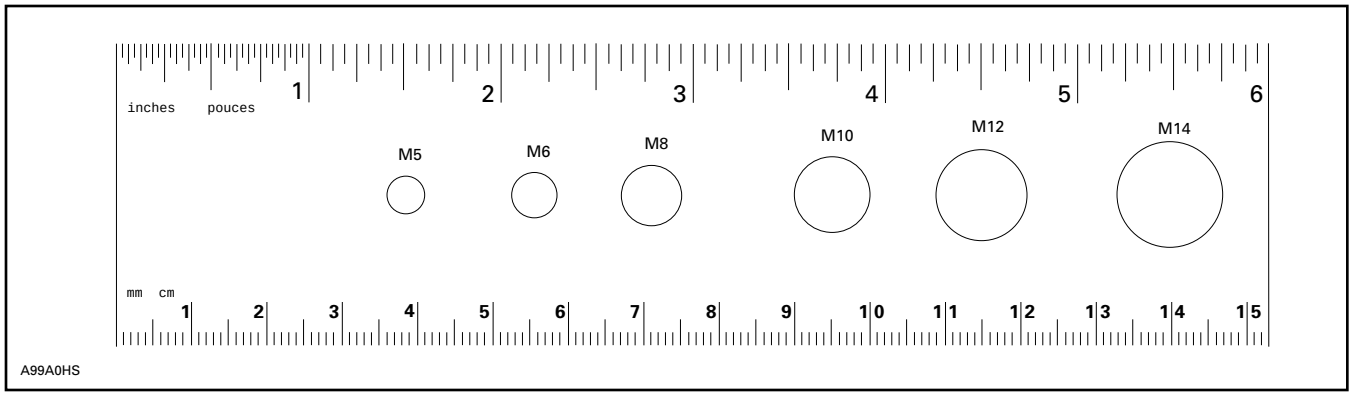
Using a long flat chisel such as Snap-On® PPC820LA cut shipping strap that collapses front portion of rear suspension.

◆ WARNING : Failure to use this method of strap removal could result in personal injury.



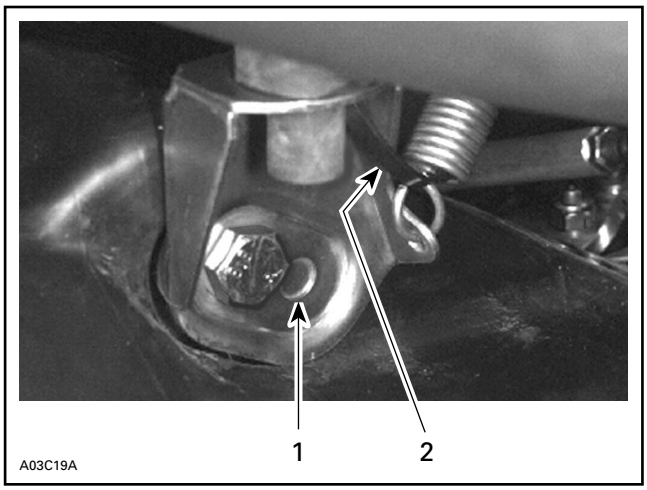
◆ WARNING : Shipping strap must be cut and hook removed to have snowmobile suspension operational.

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



Formula S / SL Only

Cut locking tie retaining exhaust spring to exhaust support.



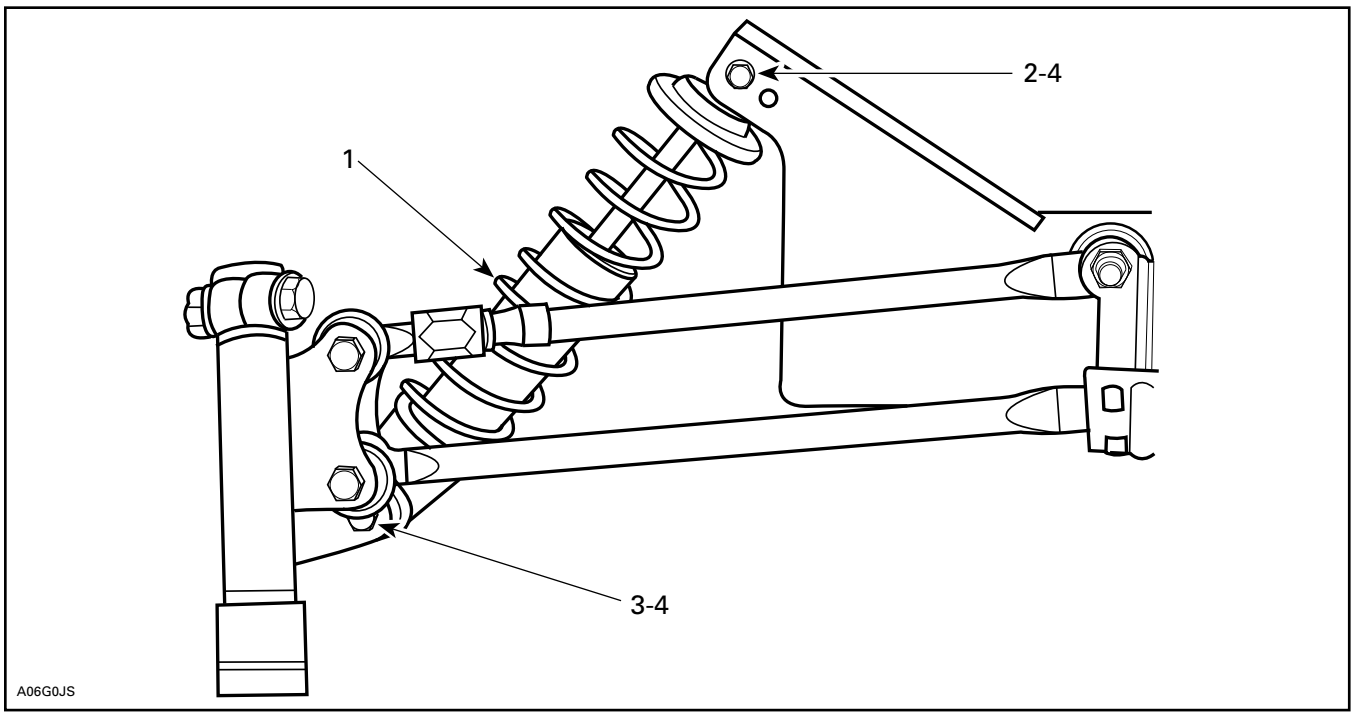
1. Lug in recess
2. Locking tie

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

Lift front of vehicle and block safely. Secure shock absorbers to suspension with their adjusting ring at bottom.

NOTE : Position screw heads toward front.

Properly position exhaust support on chassis making sure that its lug rests in chassis recess. Hook up exhaust spring.



TYPICAL RH SIDE SHOWN

1. Shock absorber (2) (Engine compartment)
2. Screw M10 x 1.5 x 60 (2) P/N 222 0060 65 (On suspension)
3. Screw M10 x 1.5 x 55 (4) P/N 222 0055 65 (On suspension)
Nut M10 x 1.5 (4) P/N 228 5010 45 (Section no. 5)
Torque to 48 N•m (35 lbf•ft)

Touring Models 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.

Battery Removal

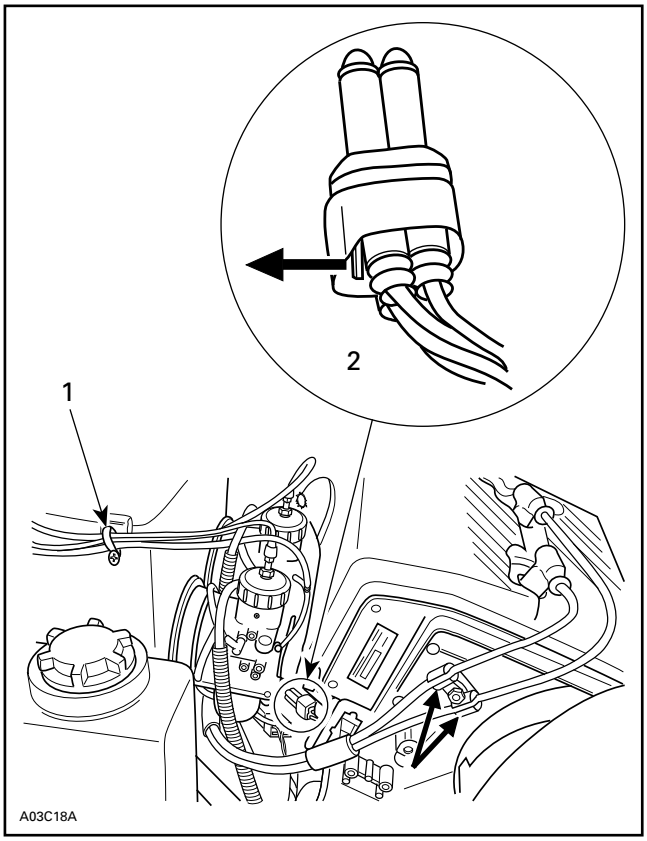
Remove belt guard.

Unfasten spark plug cables from fan housing. Unplug spark plug caps.

Remove throttle cable and primer hose attachment from air silencer.

Unplug CDI box harness connector.

Slacken collar on carburetor adaptors. Remove air silencer. CDI box will come along with.



1. Attachment
2. CDI box harness connector

Remove battery.

Battery Installation

Install vent tube on battery.

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

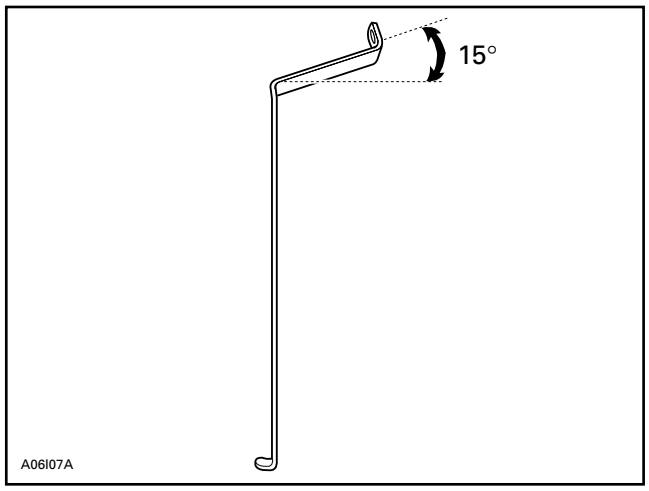
Connect BLACK negative cable LAST.

▼ CAUTION : Negative battery terminal should always be disconnected FIRST and reconnected LAST.

Apply silicone dielectric grease (P / N 413 7017 00) on battery posts and connectors.

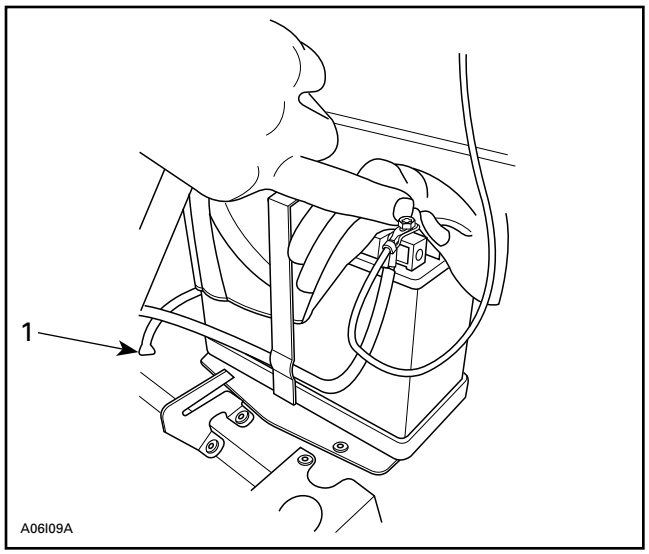
Ensure vent tube is properly installed on battery elbow, then install protective boot over battery.

Bent rear strip by 15ø to facilitate installation. That strip can also be taped on its hook portion so it stays in place.



Close and fasten retaining strips.

Connect vent tube to vehicle fitting on front frame.



1. Vent tube

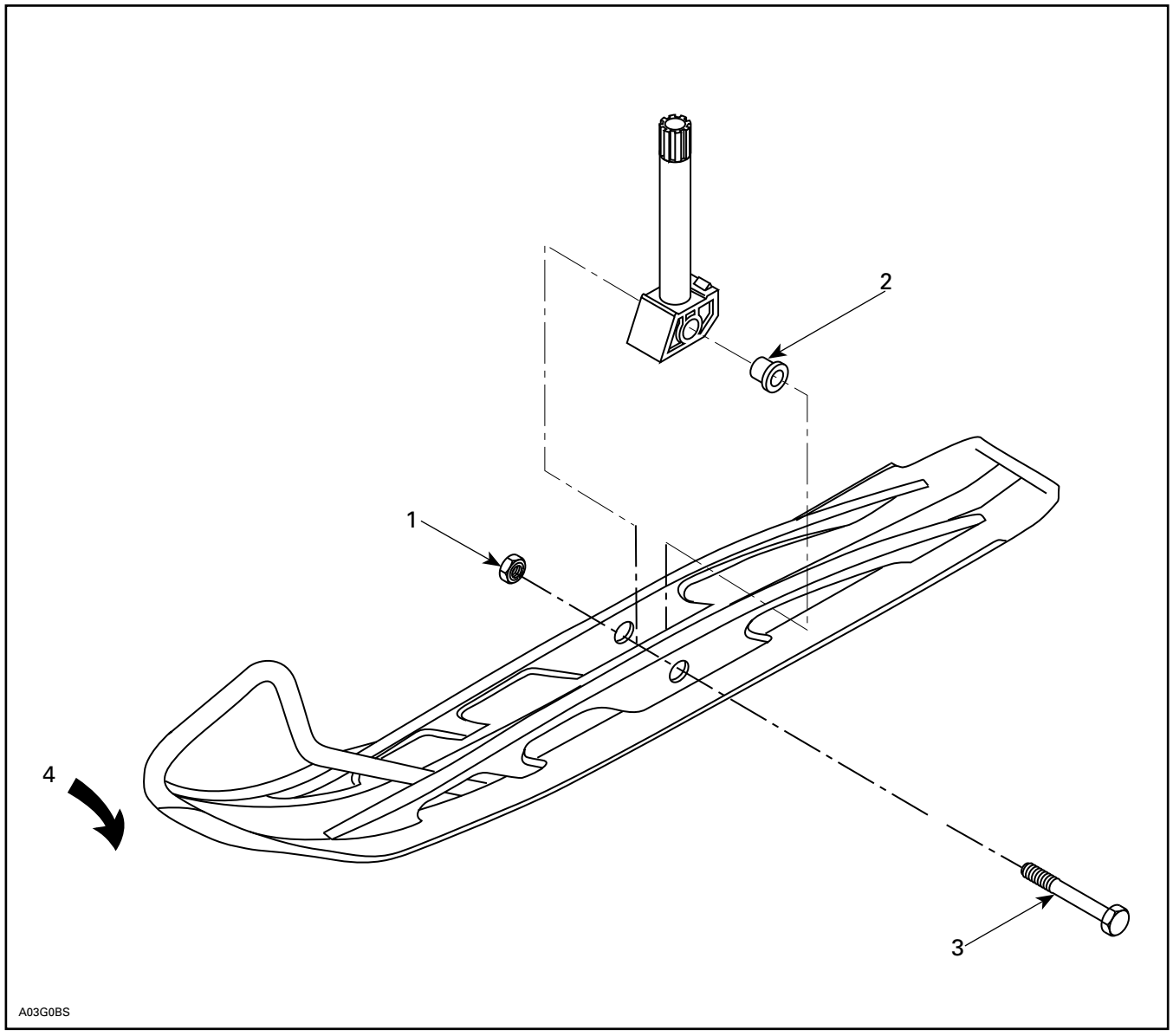
Ensure that vent tube is not kinked or blocked.

Reinstall air silencer and ignition module.

Reinstall throttle cable and primer hose attachment to air silencer. Fasten spark plug cables. See removal illustration.

Install skis on vehicle.

NOTE : Make sure that slider cushions are still in ski leg.
Replace vehicle on ground.



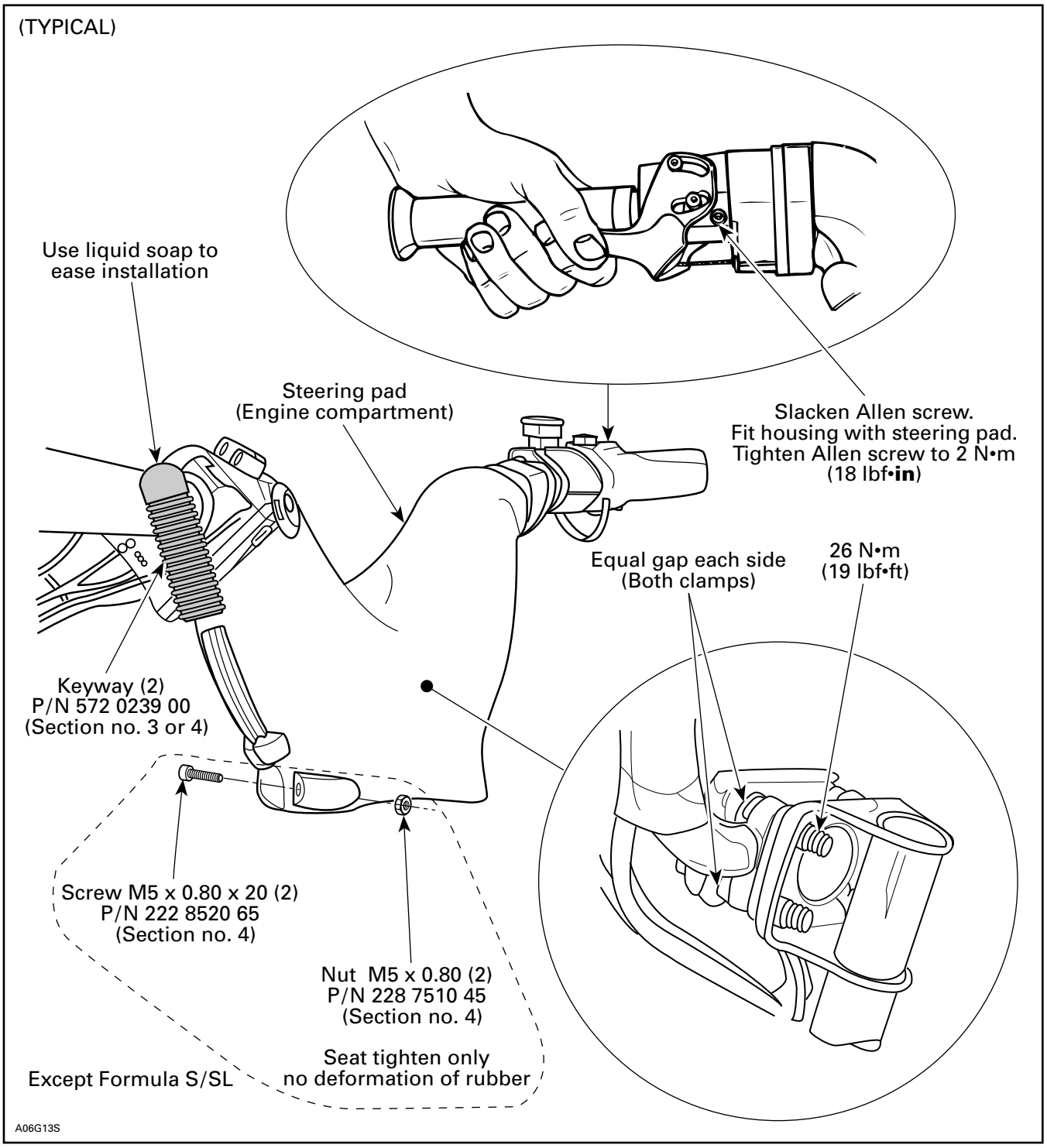
LEFT SIDE SHOWN

1. *Nut M12 X 1.75 (2) P/N 228 5210 45 (Section no. 1 or 3) 40 N•m (30 lbf•ft)*
2. *Slider cushion (4) (Ski leg)*
3. *Bolt M12 (2) (Ski leg)*

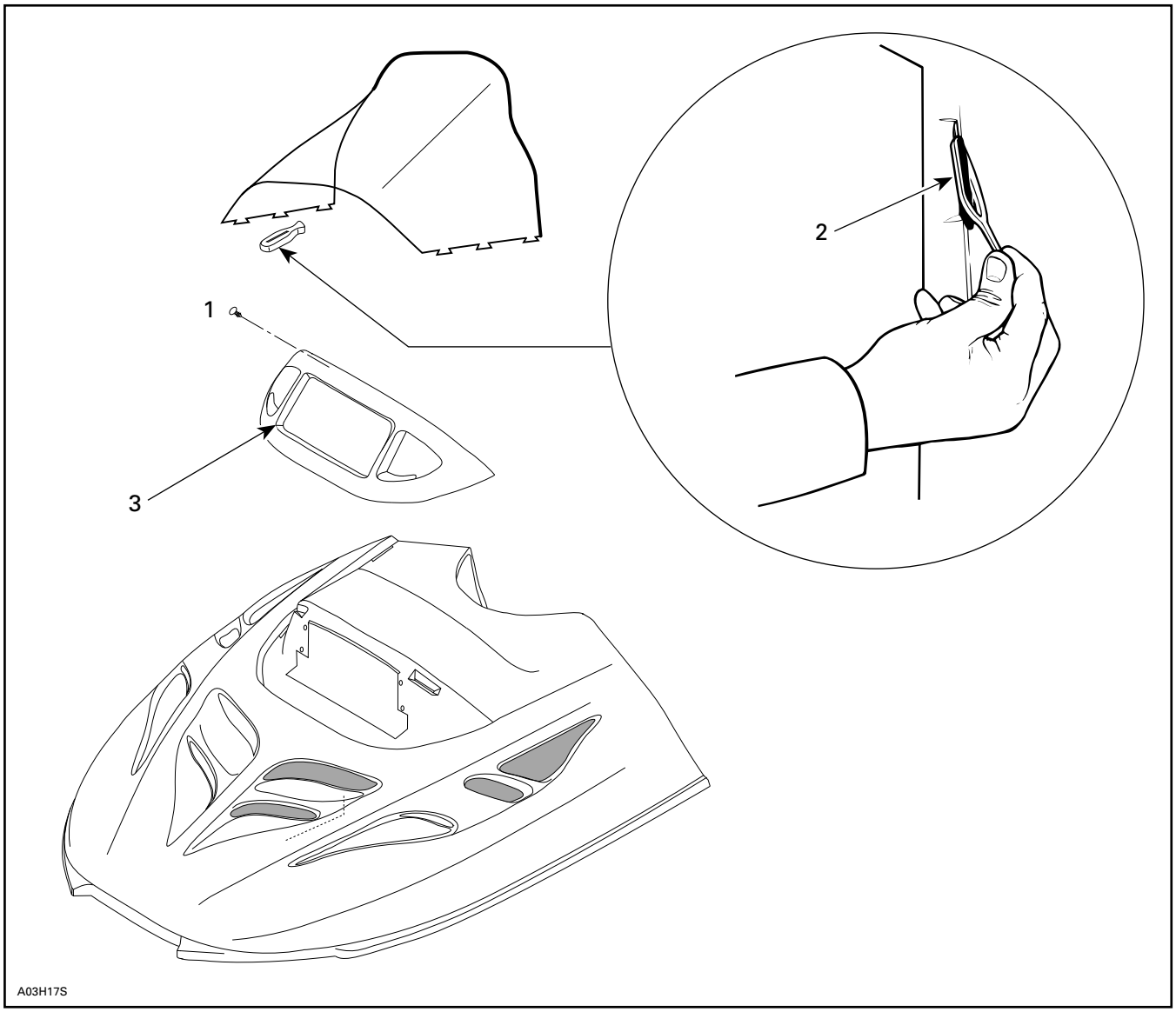
Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).

Slacken throttle and brake handle housings.

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



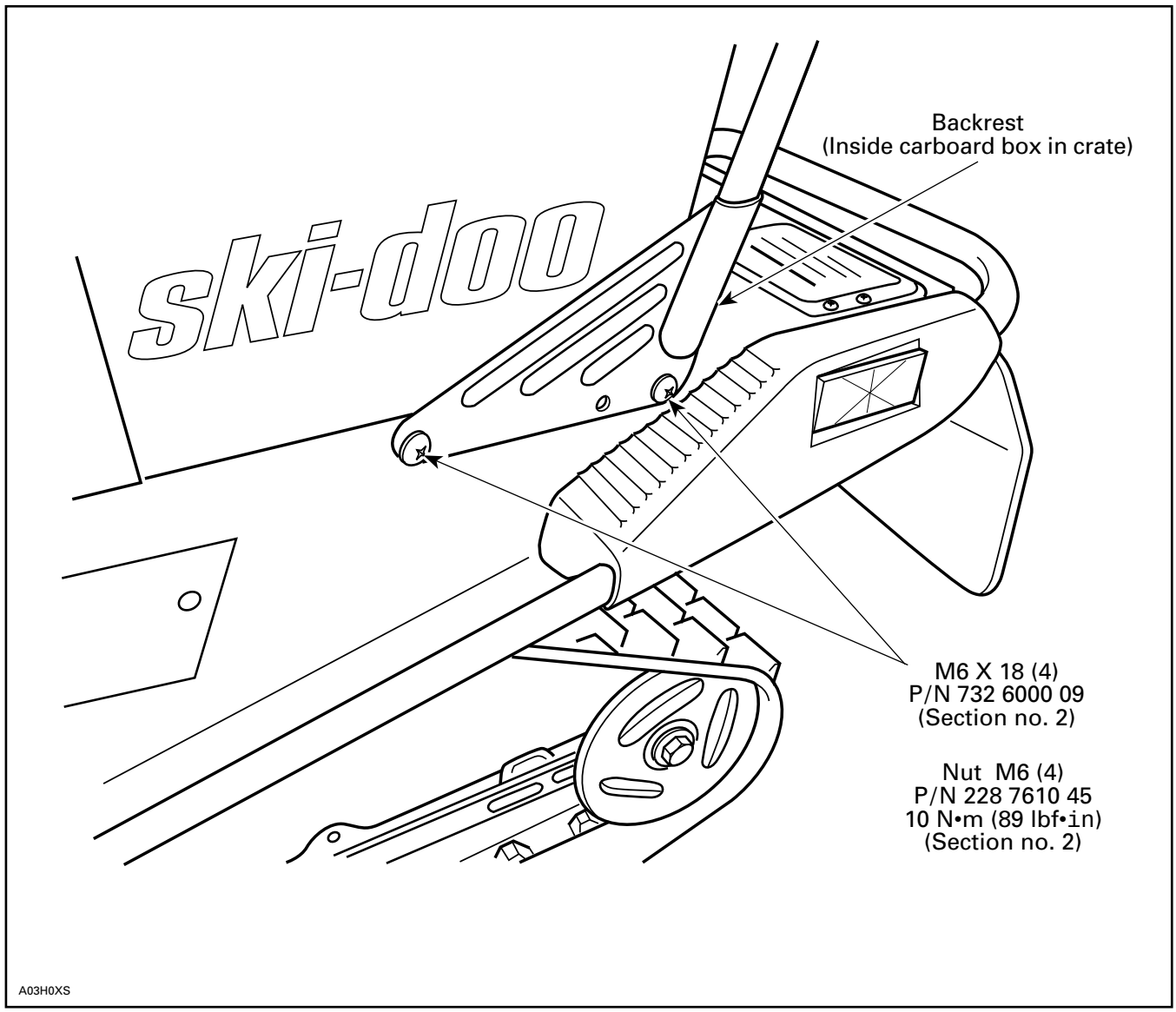
Install windshield on dashboard.



1. *Dart (1) P/N 414 6443 00 (Section no. 2 or 5)*
2. *Latch (6) P/N 570 0238 00 (Section no. 4 or 6)*
3. *Temporary remove headlamp molding for windshield installation*

PARTS INSTALLATION
BACKREST

Touring SLE Only

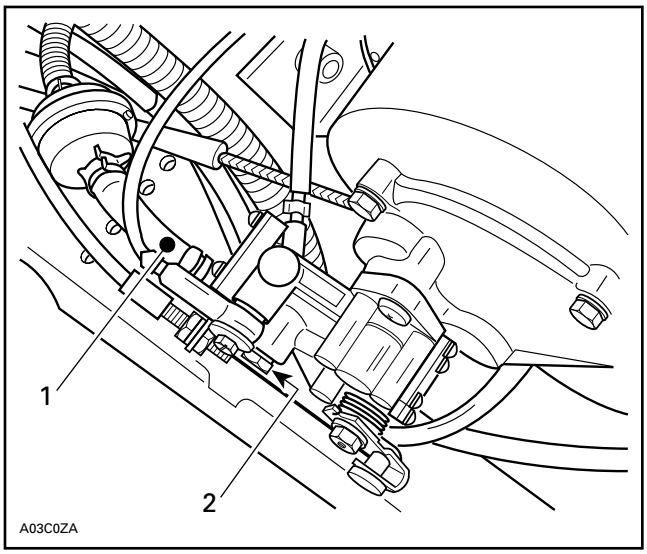


PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P / N 413 7082 00) before installing drive belt.

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER Injection Oil (P / N 496 0133 00) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

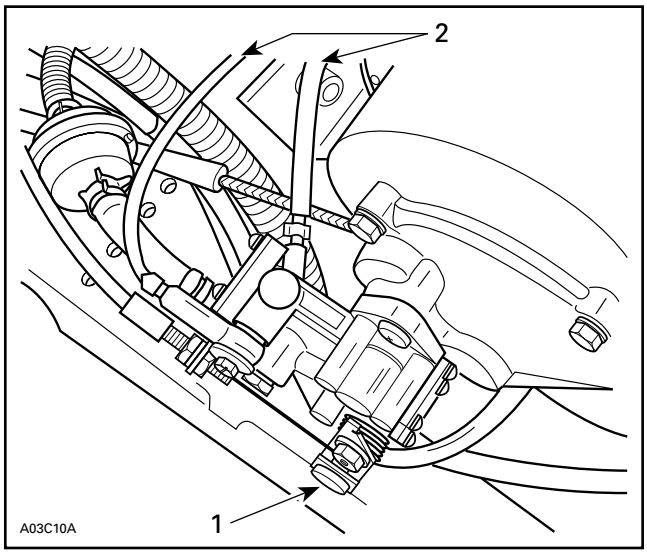
Bleed main oil line (between tank and pump) by loosening the bleeder screw until air has escaped from the line. Add injection oil as required.



TYPICAL

1. *Main oil line*
2. *Bleeder screw*

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 ENGINE AT IDLE

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

ADJUSTMENT
TRACK

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

MODELS			TOURING E / E LT FORMULA S SKANDIC 380	TOURING LE
Engine Type			377	443
Maximum HP RPM ①		RPM	6700-7000	6900-7200
Rotary Valve		P / N Opening(BTDC) / Closing (ATDC)	N.A.	N.A.
Carburetor Type			2 x 30-188	2 x VM 34-67
Main Jet			140	180
Needle Jet			159 P-0	159 P-0
Pilot Jet			40	40
Needle Identification– clip position			6DP9-3	6DH2-3
Slide Cut-away			2.5	2.5
Float Adjustment		± 1 mm (±.040 in)	23.9 (.94)	23.9 (.94)
Air Screw Adjustment		± 1/32 turn	1-1/4	2-1/4
Idle Speed RPM		RPM	1500-1800	1500-1800
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)	1.68 (.066)	1.68 (.066)
Trigger Coil Air-Gap		mm (in)	0.45 - 0.55 (.018 -.022)	0.45 - 0.55 (.018 -.022)
Gear Ratio		teeth	21/44	21/44
Engagement Speed		RPM	Formula S : 3000-3200 Touring E : 3000-3200 Touring E LT : 2800-3000 Skandic 380 : 2800-3000	3000-3200
Drive Pulley Calibration Screw Position			N.A.	4
Pulley Distance	Z	(+ 0, – 1)mm (+ 0, – 1/32 in)	25.5 (1)	16.5 (21/32)
Offset	X	± 0.4 m (± 1/64 in)	33.4 (1-5/16)	35.0 (1-3/8)
	Y		Dimension Y must exceed from 0.5 mm (.020 in) to 1.5 mm (.059 in)	Dimension Y must exceed from 1 mm (.039 in) to 2 mm (.079 in)
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	32 (1-1/4)
	Force	kg (lbf)	6.8 (15)	6.8 (15)
Driven Pulley Preload		kg (lbf)	4.1 to 5.5 (9 to 21.1)	4.1 to 5.5 (9 to 21.1)
Drive Chain Tension			④	④
Track Adjustment	Deflection ⑤	mm (in)	40 to 55 (1-9/16 to 2-5/32)	40 to 55 1-9/16 to 2-5/32)

①Engine speed at which maximum power is achieved.

②At 6000 RPM (engine cold) with headlamp turned on.

③Force applied midway between pulleys to obtain specified deflection.

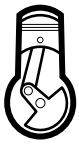
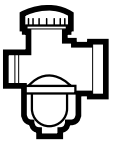
④Fully tighten adjusting screw by hand then back OFF only far enough for hair pin installation.

⑤Deflection with a 7.3 kg (16 lb) downward pull.

BTDC : Before Top Dead Center

ATDC : After Top Dead Center

N.A. : Not applicable

	MODELS			TOURING SLE FORMULA SL SKANDIC 500
	Engine Type			503
	Maximum HP RPM ①		RPM	7000-7200
	Rotary Valve		P / N Opening(BTDC) / Closing (ATDC)	N.A.
	Carburetor Type			PTO VM 34-465 / MAG VM 34-466
	Main Jet			PTO 190 / MAG 180
	Needle Jet			159 P-0
	Pilot Jet			40
	Needle Identification– clip position			6DH2-3
	Slide Cut-away			2.5
	Float Adjustment		± 1 mm (±.040 in)	23.9 (.94)
	Air Screw Adjustment		± 1/32 turn	1-1/4
	Idle Speed RPM		RPM	1500-1800
	Gas Grade / Octane Number		(R + M) / 2	Regular Unleaded / 87
	Gas / Oil Ratio			Oil Injection
	Ignition Timing BTDC ②		mm (in)	1.66 (.065)
	Trigger Coil Air-Gap		mm (in)	0.45 - 0.55(.018 -.022)
	Gear Ratio		teeth	Touring SLE and Skandic 500 : 21/44 Formula SL : 22/44
	Engagement Speed		RPM	Touring SLE and Skandic 500 : 2900-3100 Formula SL : 3500-3700
	Drive Pulley Calibration Screw Position			Formula SL : 3 Touring SLE and Skandic 500 : 4
	Pulley Distance	Z	(+ 0, – 1)mm (+ 0, – 1/32 in)	16.5 (21/32)
	Offset	X	± 0.4 m (± 1/64 in)	35.0 (1-3/8)
		Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
		Force	kg (lbf)	6.8 (15)
	Driven Pulley Preload		kg (lbf)	4.1 to 5.5 (9 to 21.1)
	Drive Chain Tension			④
	Track Adjustment	Deflection ⑤	mm (in)	40 to 55 (1-9/16 to 2-5/32)

①Engine speed at which maximum power is achieved.

②At 6000 RPM (engine cold) with headlamp turned on.

③Force applied midway between pulleys to obtain specified deflection.

④Fully tighten adjusting screw by hand then back OFF only far enough for hair pin installation.

⑤Deflection with a 7.3 kg (16 lb) downward pull.

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. **96-3**

Date : June 20, 1995

SUBJECT : Predelivery Procedures

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United states : Touring E / E LT / LE / SLE, skandic 380 / 500 and Formula S / SL.	1530, 1542, 1527, 1528, 1524, 1525, 1534, 1535, 1531, 1532, 1523, 1521, and 1522.	ALL
1996	Sweden : Touring LE /SLE, skandic 380 / 500 and Formula S / SL.	1529, 1526, 1536, 1533, 1541 and 1540.	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 Inc. 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, it may have some differences between the manufactured product and the descriptions and / or specifications in this document. Bombardier Inc. 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.

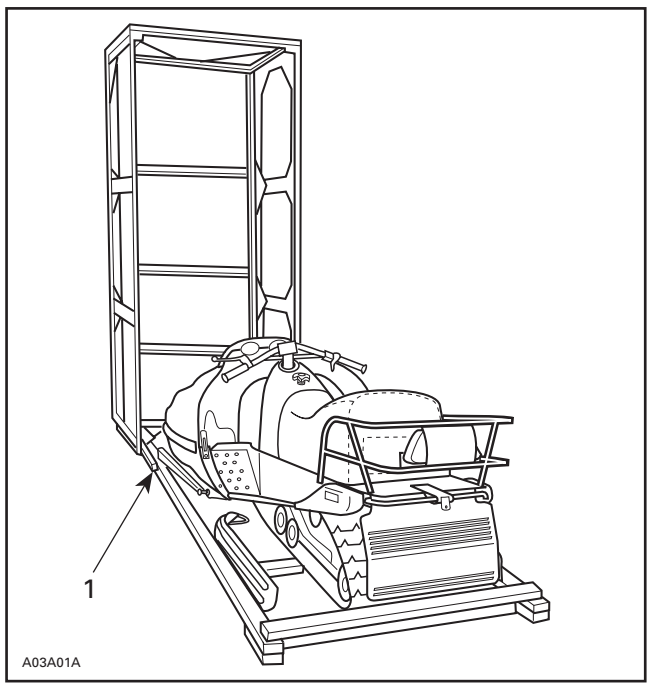
CONTENTS

◆ 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.

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

Unscrew all screws retaining cover to vehicle base. Tip cover over front 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.

Slowly pull out metal strip retaining windshield.

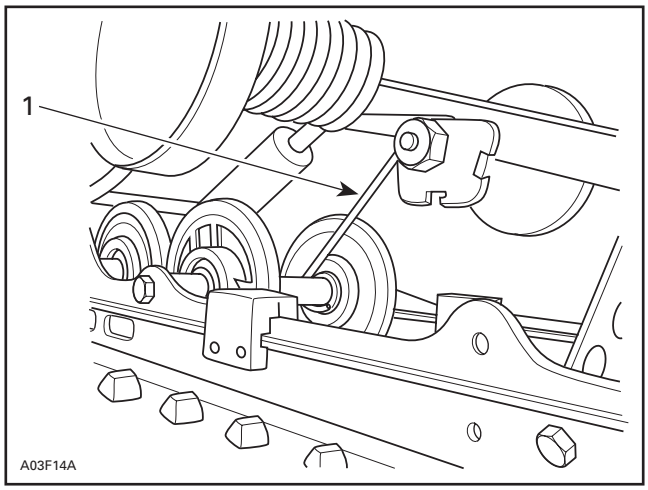
▼ CAUTION : Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

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

Remove vehicle from base.

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

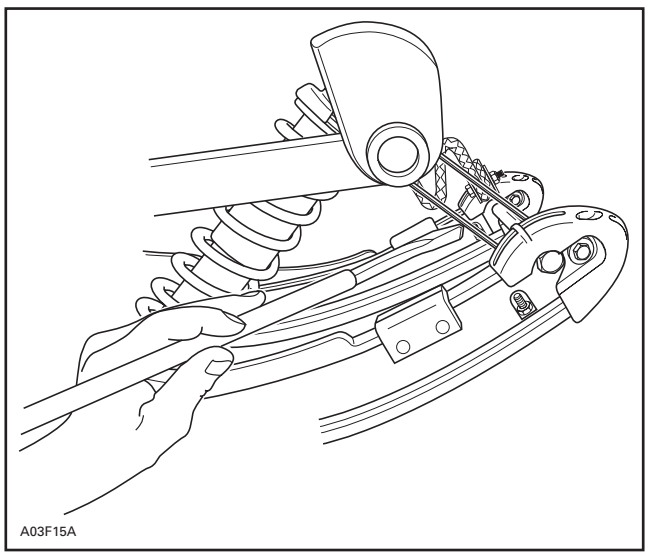
Remove hook from rear portion of rear suspension.



1. Hook

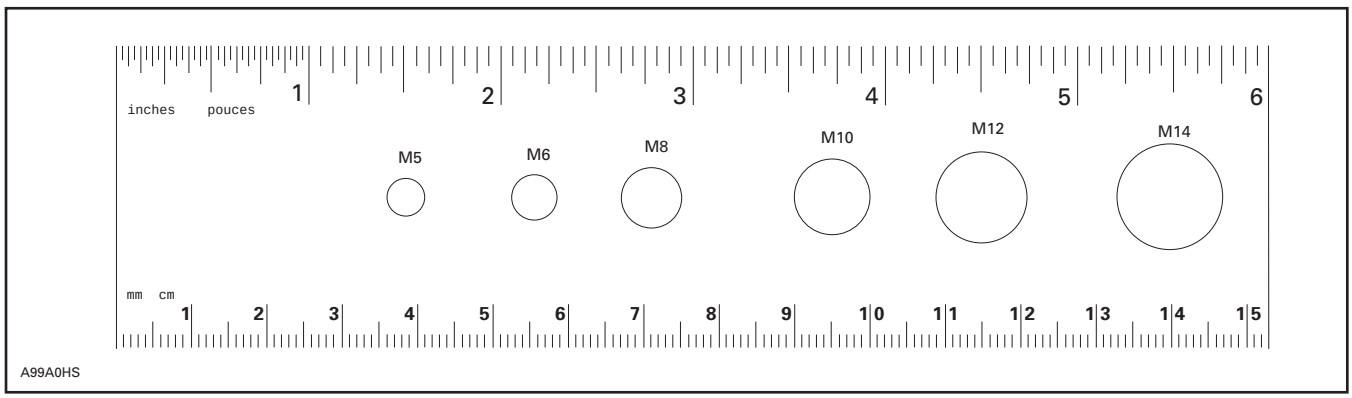
Using a long flat chisel such as Snap-On® PPC820LA cut shipping strap that collapses front portion of rear suspension.

◆ WARNING : Failure to use this method of strap removal could result in personal injury.



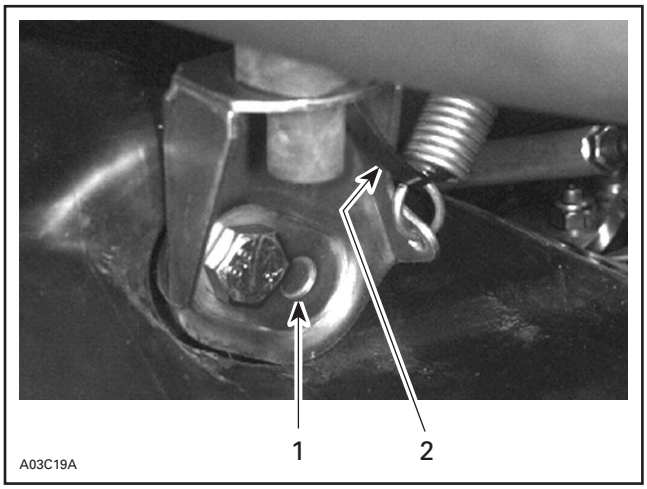
◆ WARNING : Shipping strap must be cut and hook removed to have snowmobile suspension operational.

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



Formula S / SL Only

Cut locking tie retaining exhaust spring to exhaust support.



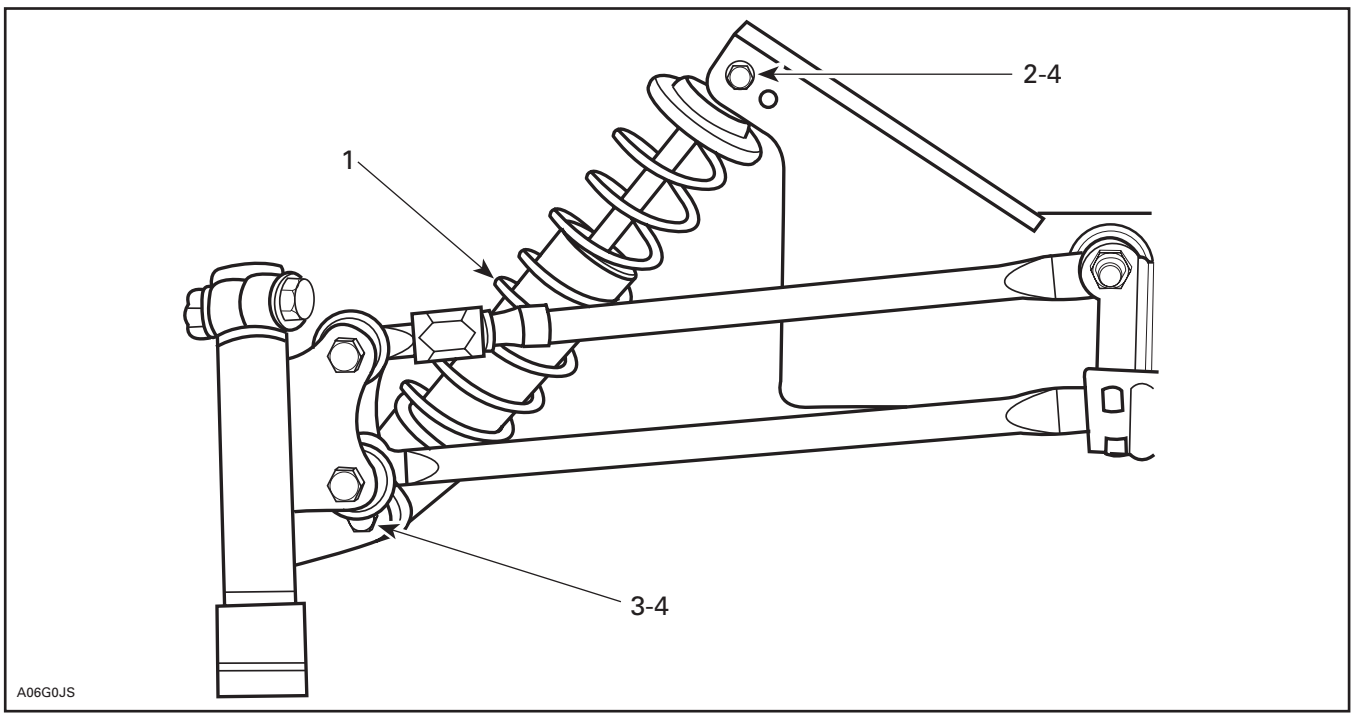
1. Lug in recess
2. Locking tie

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

Lift front of vehicle and block safely. Secure shock absorbers to suspension with their adjusting ring at bottom.

NOTE : Position screw heads toward front.

Properly position exhaust support on chassis making sure that its lug rests in chassis recess. Hook up exhaust spring.



TYPICAL RH SIDE SHOWN

1. Shock absorber (2) (Engine compartment)
2. Screw M10 x 1.5 x 60 (2) P/N 222 0060 65 (On suspension)
3. Screw M10 x 1.5 x 55 (4) P/N 222 0055 65 (On suspension)
Nut M10 x 1.5 (4) P/N 228 5010 45 (Section no. 5)
Torque to 48 N•m (35 lbf•ft)

Touring Models 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.

Battery Removal

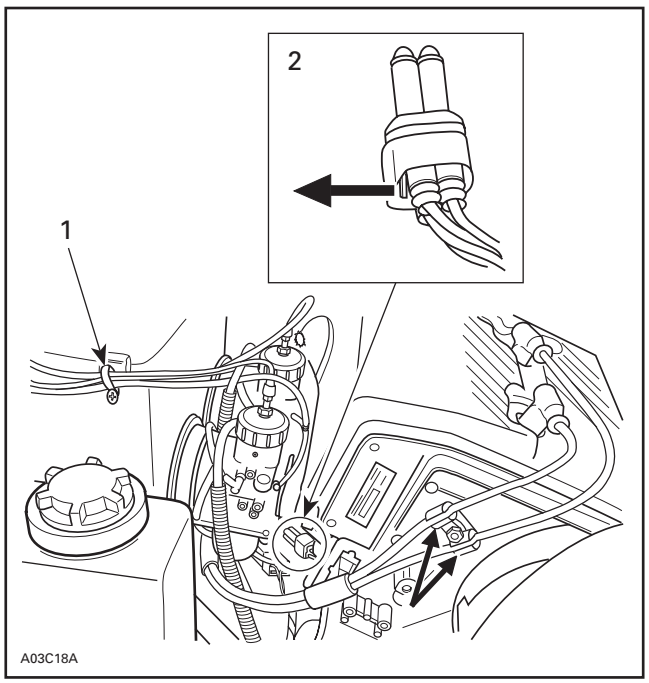
Remove belt guard.

Unfasten spark plug cables from fan housing. Unplug spark plug caps.

Remove throttle cable and primer hose attachment from air silencer.

Unplug CDI box harness connector.

Slacken collar on carburetor adaptors. Remove air silencer. CDI box will come along with.



1. Attachment
2. CDI box harness connector

Remove battery.

Battery Installation

Install vent tube on battery.

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

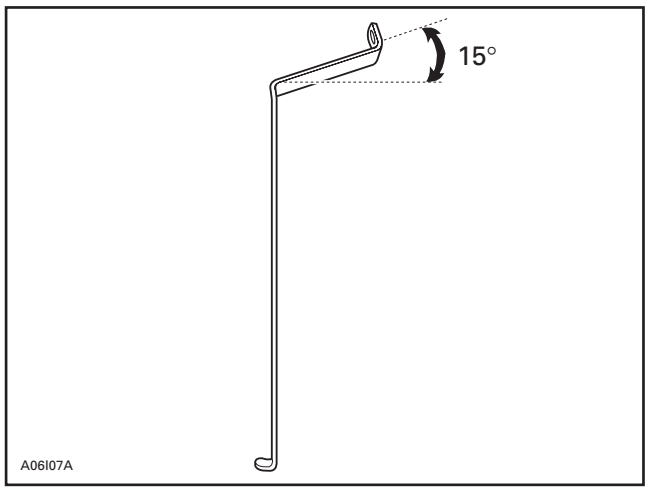
Connect BLACK negative cable LAST.

▼ CAUTION : Negative battery terminal should always be disconnected FIRST and reconnected LAST.

Apply silicone dielectric grease (P / N 413 7017 00) on battery posts and connectors.

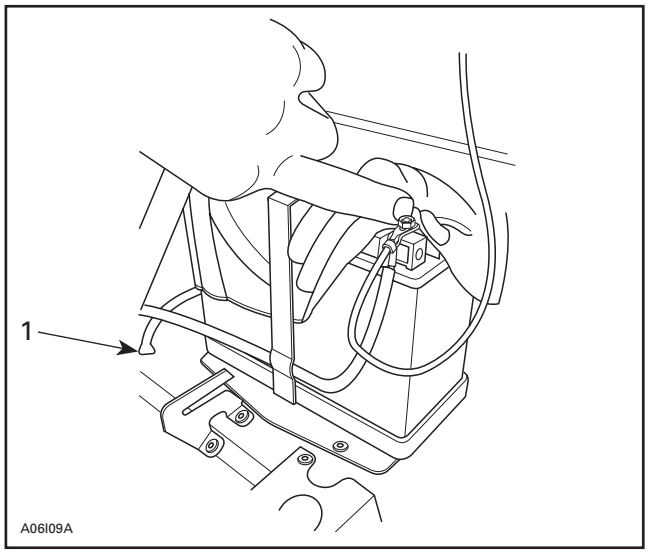
Ensure vent tube is properly installed on battery elbow, then install protective boot over battery.

Bent rear strip by 15ø to facilitate installation. That strip can also be taped on its hook portion so it stays in place.



Close and fasten retaining strips.

Connect vent tube to vehicle fitting on front frame.



1. Vent tube

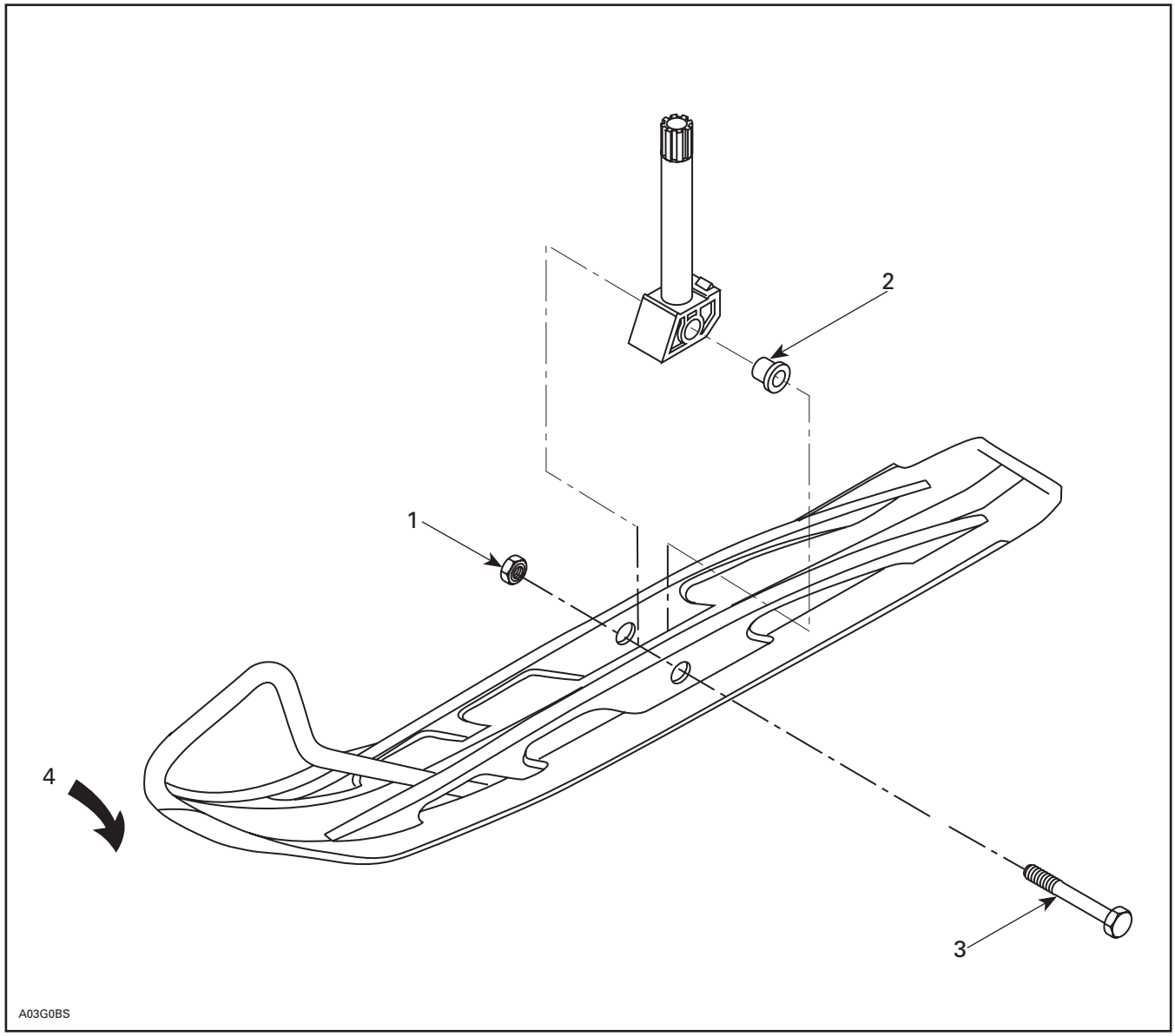
Ensure that vent tube is not kinked or blocked.

Reinstall air silencer and ignition module.

Reinstall throttle cable and primer hose attachment to air silencer. Fasten spark plug cables. See removal illustration.

Install skis on vehicle.

NOTE : Make sure that slider cushions are still in ski leg.
Replace vehicle on ground.



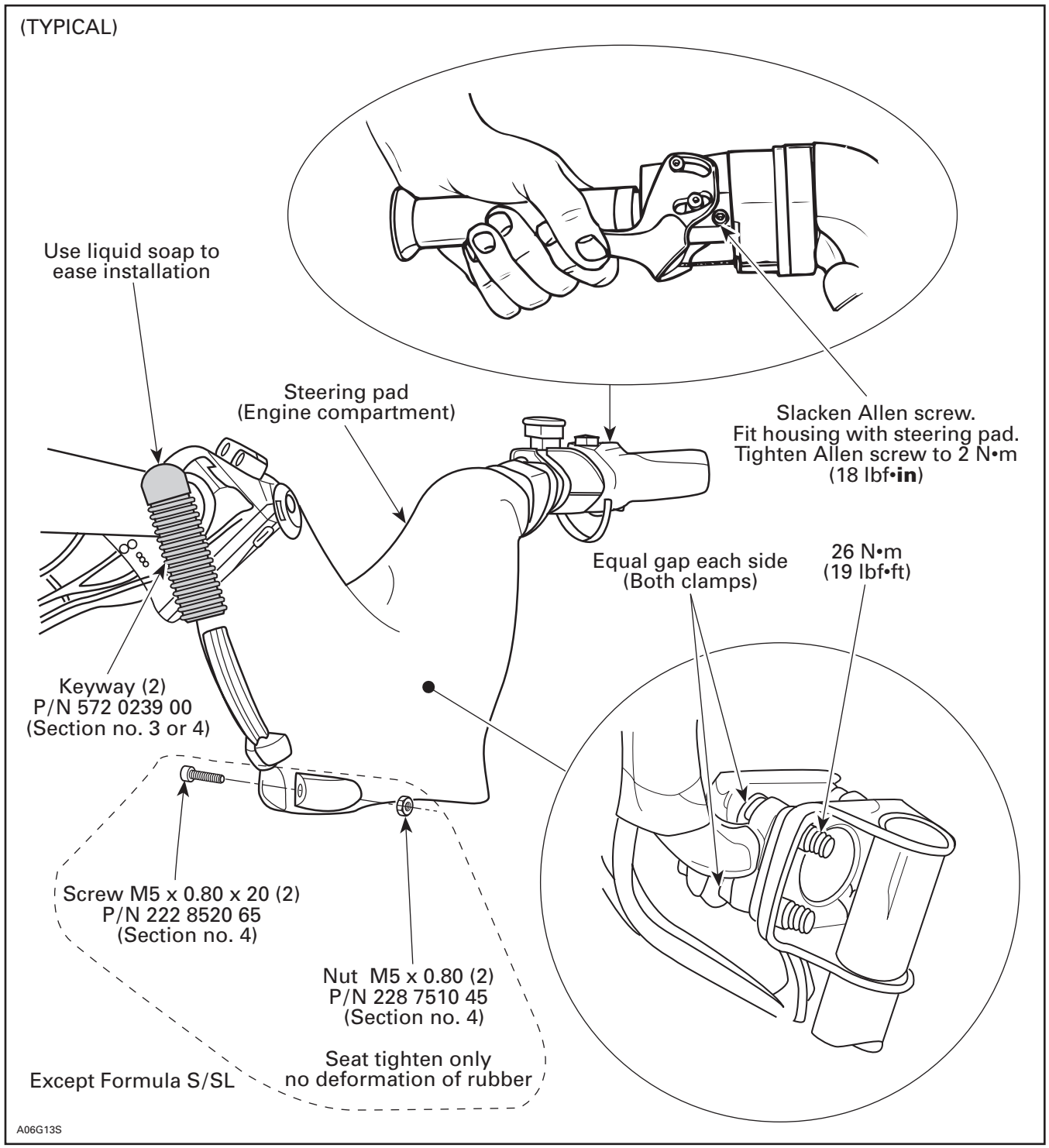
LEFT SIDE SHOWN

1. *Nut M12 X 1.75 (2) P/N 228 5210 45 (Section no. 1 or 3) 40 N•m (30 lbf•ft)*
2. *Slider cushion (4) (Ski leg)*
3. *Bolt M12 (2) (Ski leg)*

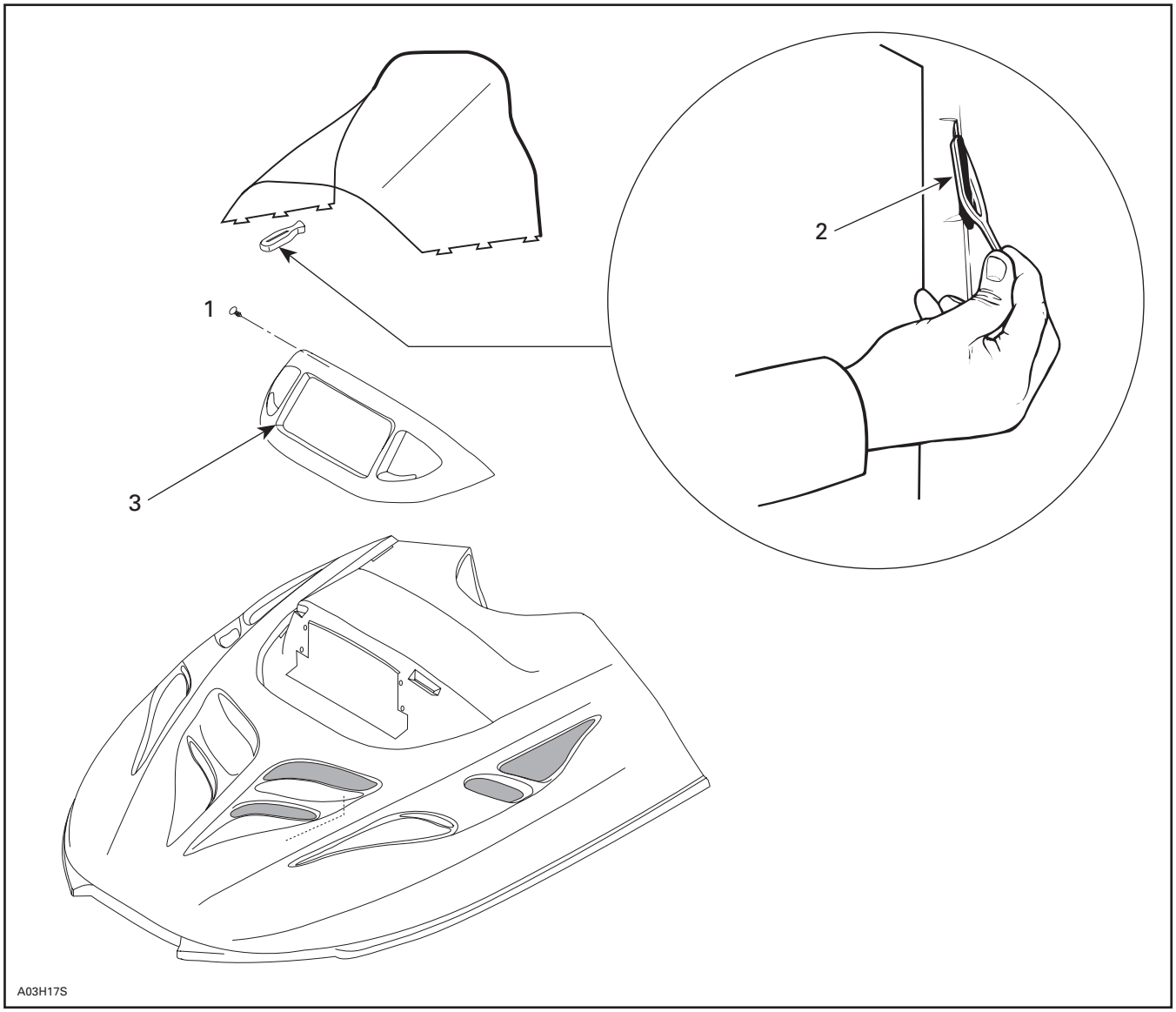
Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).

Slacken throttle and brake handle housings.

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



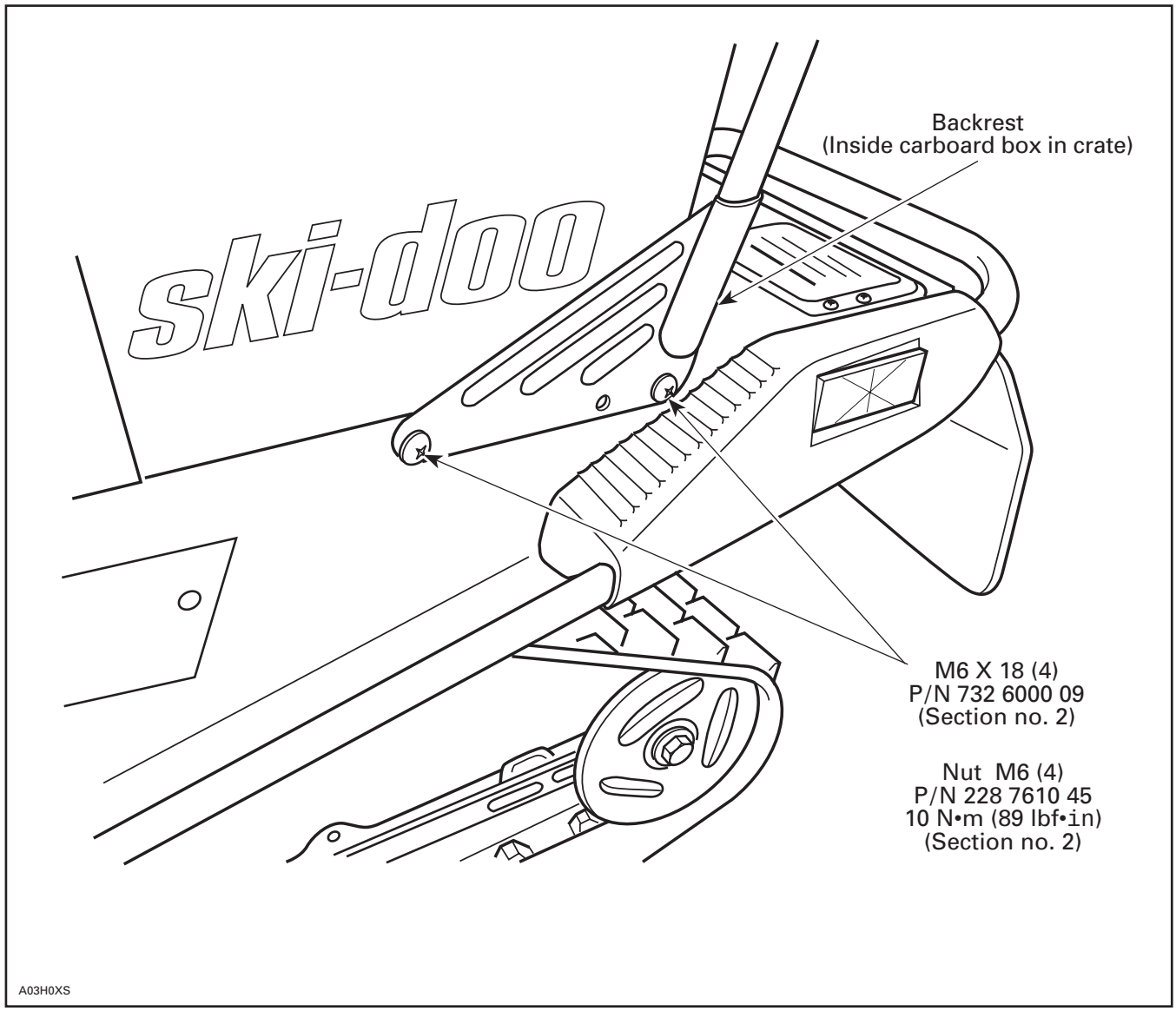
Install windshield on dashboard.



1. *Dart (1) P/N 414 6443 00 (Section no. 2 or 5)*
2. *Latch (6) P/N 570 0238 00 (Section no. 4 or 6)*
3. *Temporary remove headlamp molding for windshield installation*

PARTS INSTALLATION
BACKREST

Touring SLE Only

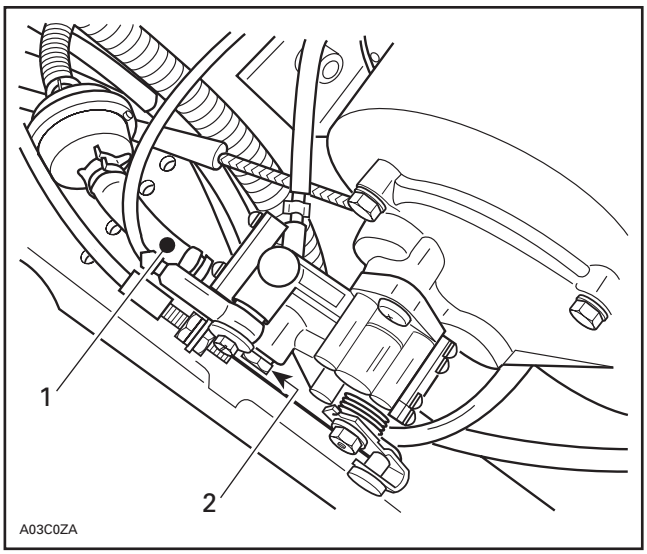


PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P / N 413 7082 00) before installing drive belt.

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER Injection Oil (P / N 496 0133 00) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

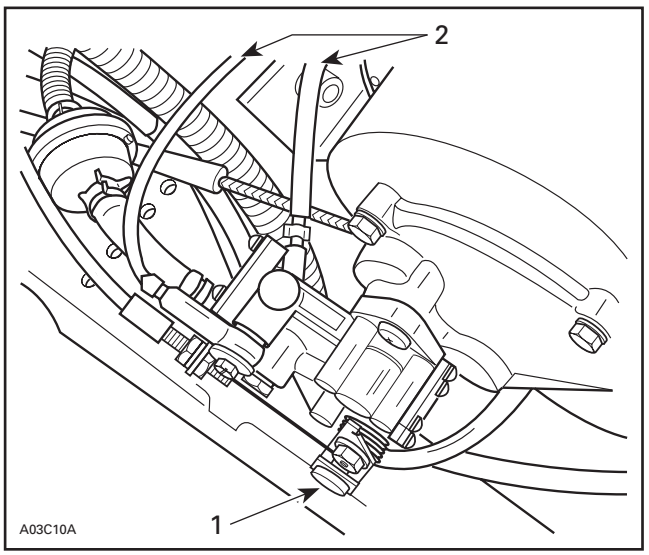
Bleed main oil line (between tank and pump) by loosening the bleeder screw until air has escaped from the line. Add injection oil as required.



TYPICAL

1. *Main oil line*
2. *Bleeder screw*

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 ENGINE AT IDLE

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

ADJUSTMENT
TRACK

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

MODELS			TOURING E / E LT FORMULA S SKANDIC 380	TOURING LE
Engine Type			377	443
Maximum HP RPM ①		RPM	6700-7000	6900-7200
Rotary Valve		P / N Opening(BTDC) / Closing (ATDC)	N.A.	N.A.
Carburetor Type			2 x 30-188	2 x VM 34-67
Main Jet			140	180
Needle Jet			159 P-0	159 P-0
Pilot Jet			40	40
Needle Identification– clip position			6DP9-3	6DH2-3
Slide Cut-away			2.5	2.5
Float Adjustment		± 1 mm (±.040 in)	23.9 (.94)	23.9 (.94)
Air Screw Adjustment		± 1/32 turn	1-1/4	2-1/4
Idle Speed RPM		RPM	1500-1800	1500-1800
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)	1.68 (.066)	1.68 (.066)
Trigger Coil Air-Gap		mm (in)	0.45 - 0.55 (.018 -.022)	0.45 - 0.55 (.018 -.022)
Gear Ratio		teeth	21/44	21/44
Engagement Speed		RPM	Formula S : 3000-3200 Touring E : 3000-3200 Touring E LT : 2800-3000 Skandic 380 : 2800-3000	3000-3200
Drive Pulley Calibration Screw Position			N.A.	4
Pulley Distance	Z	(+ 0, – 1)mm (+ 0, – 1/32 in)	25.5 (1)	16.5 (21/32)
Offset	X	± 0.4 m (± 1/64 in)	33.4 (1-5/16)	35.0 (1-3/8)
	Y		Dimension Y must exceed from 0.5 mm (.020 in) to 1.5 mm (.059 in)	Dimension Y must exceed from 1 mm (.039 in) to 2 mm (.079 in)
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	32 (1-1/4)
	Force	kg (lbf)	6.8 (15)	6.8 (15)
Driven Pulley Preload		kg (lbf)	4.1 to 5.5 (9 to 21.1)	4.1 to 5.5 (9 to 21.1)
Drive Chain Tension			④	④
Track Adjustment	Deflection ⑤	mm (in)	40 to 55 (1-9/16 to 2-5/32)	40 to 55 1-9/16 to 2-5/32)

①Engine speed at which maximum power is achieved.

②At 6000 RPM (engine cold) with headlamp turned on.

③Force applied midway between pulleys to obtain specified deflection.

④Fully tighten adjusting screw by hand then back OFF only far enough for hair pin installation.

⑤Deflection with a 7.3 kg (16 lb) downward pull.

BTDC : Before Top Dead Center

ATDC : After Top Dead Center

N.A. : Not applicable

MODELS			TOURING SLE FORMULA SL SKANDIC 500
Engine Type			503
Maximum HP RPM ①		RPM	7000-7200
Rotary Valve		P / N Opening(BTDC) / Closing (ATDC)	N.A.
Carburetor Type			PTO VM 34-465 / MAG VM 34-466
Main Jet			PTO 190 / MAG 180
Needle Jet			159 P-0
Pilot Jet			40
Needle Identification– clip position			6DH2-3
Slide Cut-away			2.5
Float Adjustment		± 1 mm (±.040 in)	23.9 (.94)
Air Screw Adjustment		± 1/32 turn	1-1/4
Idle Speed RPM		RPM	1500-1800
Gas Grade / Octane Number		(R + M) / 2	Regular Unleaded / 87
Gas / Oil Ratio			Oil Injection
Ignition Timing BTDC ②		mm (in)	1.66 (.065)
Trigger Coil Air-Gap		mm (in)	0.45 - 0.55(.018 -.022)
Gear Ratio		teeth	Touring SLE and Skandic 500 : 21/44 Formula SL : 22/44
Engagement Speed		RPM	Touring SLE and Skandic 500 : 2900-3100 Formula SL : 3500-3700
Drive Pulley Calibration Screw Position			Formula SL : 3 Touring SLE and Skandic 500 : 4
Pulley Distance	Z	(+ 0, – 1)mm (+ 0, – 1/32 in)	16.5 (21/32)
Offset	X	± 0.4 m (± 1/64 in)	35.0 (1-3/8)
	Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
	Force	kg (lbf)	6.8 (15)
Driven Pulley Preload		kg (lbf)	4.1 to 5.5 (9 to 21.1)
Drive Chain Tension			④
Track Adjustment	Deflection ⑤	mm (in)	40 to 55 (1-9/16 to 2-5/32)

①Engine speed at which maximum power is achieved.

②At 6000 RPM (engine cold) with headlamp turned on.

③Force applied midway between pulleys to obtain specified deflection.

④Fully tighten adjusting screw by hand then back OFF only far enough for hair pin installation.

⑤Deflection with a 7.3 kg (16 lb) downward pull.

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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PREDELIVERY Bulletin

No. **96-4**

Date : June 30, 1995

SUBJECT : Belt Guard Label

YEAR	MODEL NAME	MODEL NUMBERS	SERIAL NUMBERS
1996	FORMULA STX	1054, 1055, 1098	ALL
1996	FORMULA STX LT	1056, 1057, 1099	ALL
1996	MACH 1	1081, 1082, 1083	ALL
1996	GRAND TOURING SE	1073, 1074, 1075	ALL

PARTS

New belt guard decals are being sent automatically to your dealership according to the number of vehicles being delivered to you. Refer to the above chart.

If you need additional decals order the following part number.

DESCRIPTION	P / N
Decal	415 0289 00

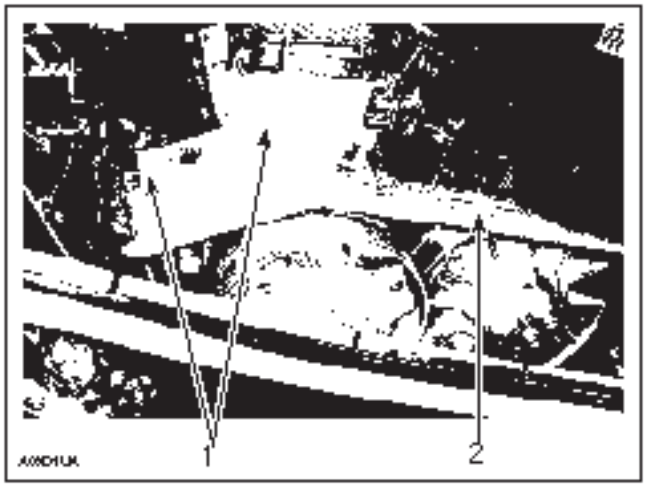
PROCEDURE

When PDI is complete ensure that the belt guard is installed correctly.

If it is installed **incorrectly** only 1/2 of the drive belt will be covered by the guard.

Refer to the following illustration for the **correct** installation of the guard and the new decal.

After verifying belt guard installation remove the old decal and replace with a new one (P / N 415 0289 00). Use the following illustration to properly locate the decal.



1. Note coverage in these areas
2. New decal properly installed with the arrow

ONOTE : A letter is being sent to owners of models listed on the following chart. Included with the letter is a new decal for the belt guard for their machine. A copy of this letter is included for your reference.

When any of these vehicles are at your dealership for service ensure that the belt guard is installed correctly and that the new decal has been installed in the proper location. If not order and install a new belt guard decal for the vehicle.

Litho'd in Canada (MBL-9606 RH)

ALL “F” SERIES CHASSIS

YEAR	MODEL NAME	MODEL NUMBERS	SERIAL NUMBERS
1995	MX	1000,1001	ALL
1995	FORMULA STX	1003,1004	ALL
1995	FORMULA STX LT (2)	1007,1008	ALL
1995	SUMMIT 583	1013,1014,1015	ALL
1995	SUMMIT 670 1ST SERIES	3838,3839	ALL
1995	SUMMIT 670	1016,1017,1018	ALL
1995	GRAND TOURING 470	1022,1023,1046	ALL
1995	GRAND TOURING 580	1024,1025,1026	ALL
1995	GRAND TOURING SE	1027,1028,1029	ALL
1995	FORMULA Z	1030,1031,1032	ALL
1995	FORMULA SS	1033,1034,1047	ALL
1995	MX Z	1035,1036,1037	ALL
1995	FORMULA III	1038,1039	ALL
1995	MACH 1	1043,1044,1045	ALL
1995	MACH Z	1040,1041,1042	ALL
1994	SUMMIT 470 (2)	3865,3887	ALL
1994	MX	3868, 3885,3883	ALL
1994	MX Z	3870,3886	ALL
1994	SUMMIT 470	3871,3888	ALL
1994	FORMULA ST	3872,3889	ALL
1994	FORMULA STX	3873,3892,3893	ALL
1994	FORMULA STX (2)	3874,3894	ALL
1994	FORMULA Z	3875,3896,3897	ALL
1994	SUMMIT 583	3876,3890,3891	ALL
1994	SUMMIT 583 (2)	3881,3882	ALL
1994	MACH Z	3877,3898,3899	ALL
1993	MX Z	3844,3861,3847	ALL
1993	MACH Z	3845,3862,3848	ALL

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **96-05**

Date : July 7, 1995

SUBJECT : Predelivery Procedures

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United States :Grand Touring 500/580/SESummit 500, Mach 1 andFormula SLS/STX/STX LT	1067, 1068, 1070, 1071, 1073, 1074, 1058, 1059, 1081, 1082, 1049, 1050, 1054, 1055, 1056 and 1057	ALL
1996	Sweden :Grand Touring 500/580/SEM-ach 1 and Formula SLS	1069, 1072, 1075, 1083 and 1097	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.

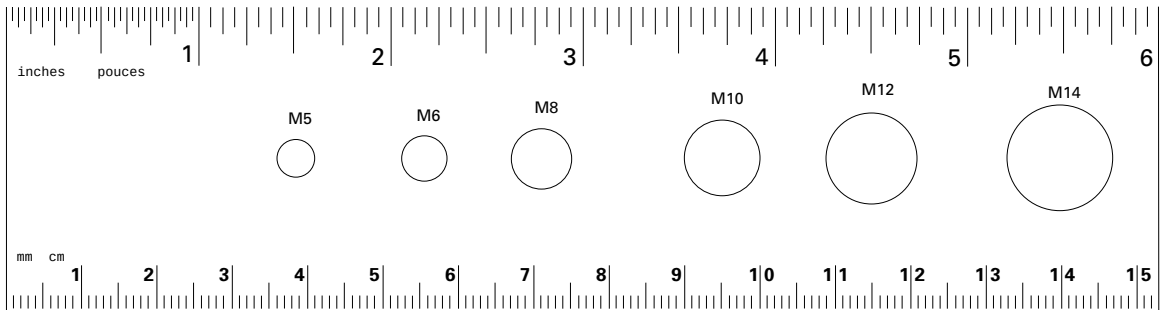
○ NOTE : The information and components/system descriptions contained in this document are correct at the time of publication. Bombardier Inc. however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, it may have some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier Inc. 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 inquires 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.

TABLE OF CONTENTS

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

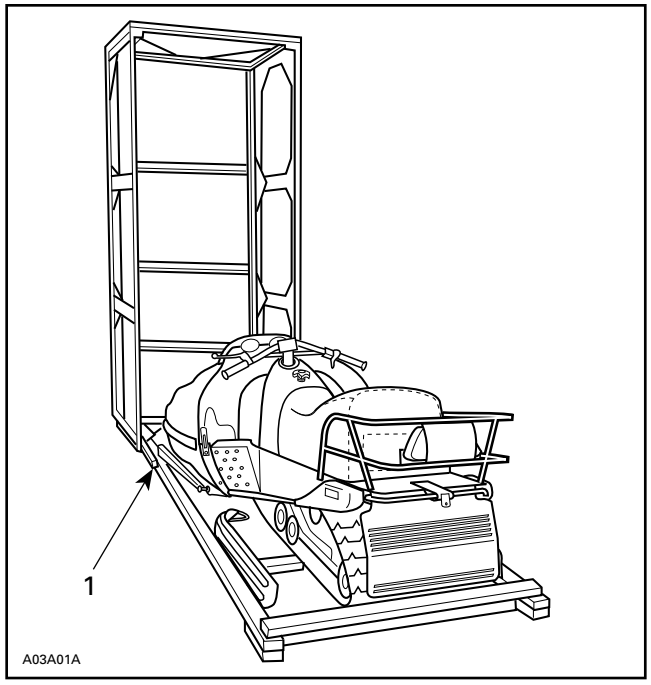


◆ WARNING : Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

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

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

Slowly pull out metal strip retaining windshield.

When this metal strip is under the seat (F-series models) loosen 2 or 4 nuts retaining the seat before pulling out the metal strip.

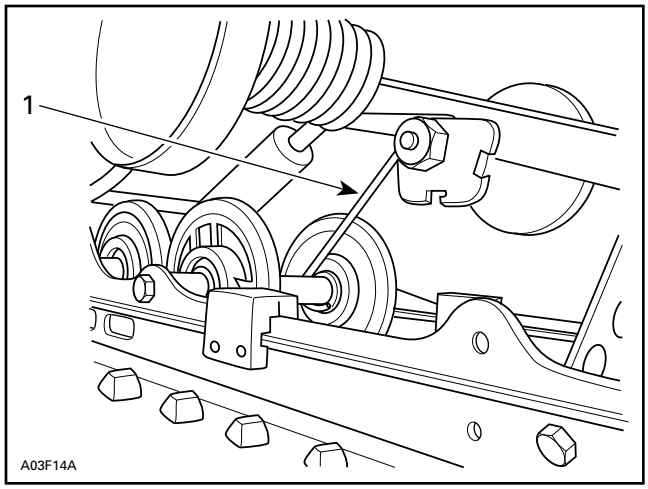
▼ CAUTION : Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

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.

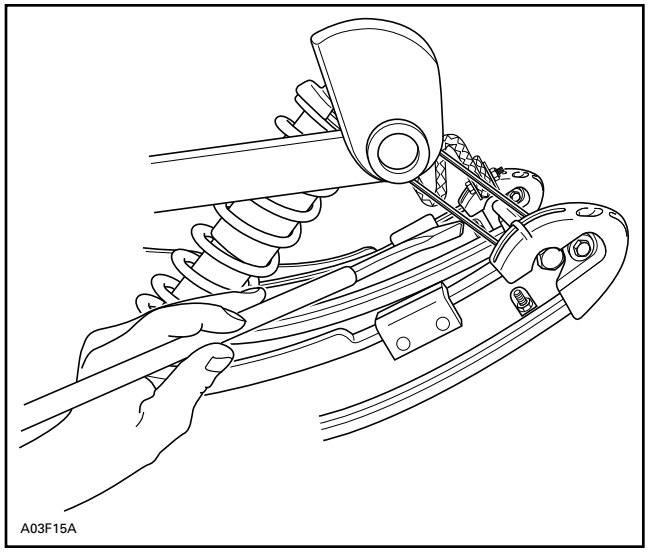
Remove hook from rear portion of rear suspension.



1. Hook

Using a long flat chisel such as Snap-On® PPC820LA cut shipping strap that collapses front portion of rear suspension.

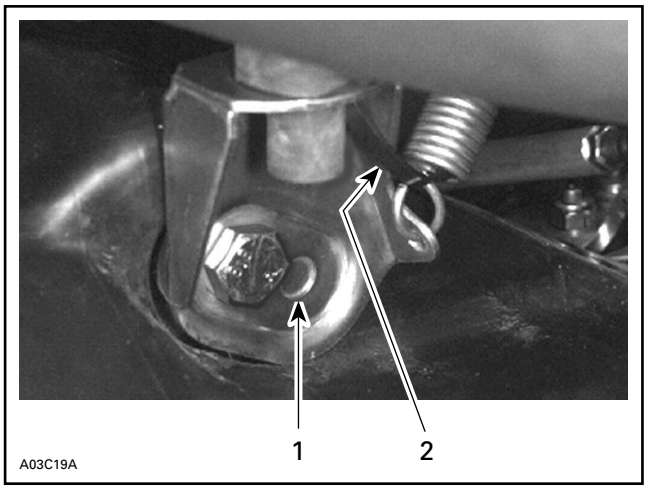
◆ WARNING : Failure to use this method of strap removal could result in personal injury.



◆ WARNING : Shipping strap must be cut and hook removed to have snowmobile suspension operational.

Formula SLS, Summit 500

Cut locking tie retaining exhaust spring to exhaust support.



1. Lug in recess
2. Locking tie

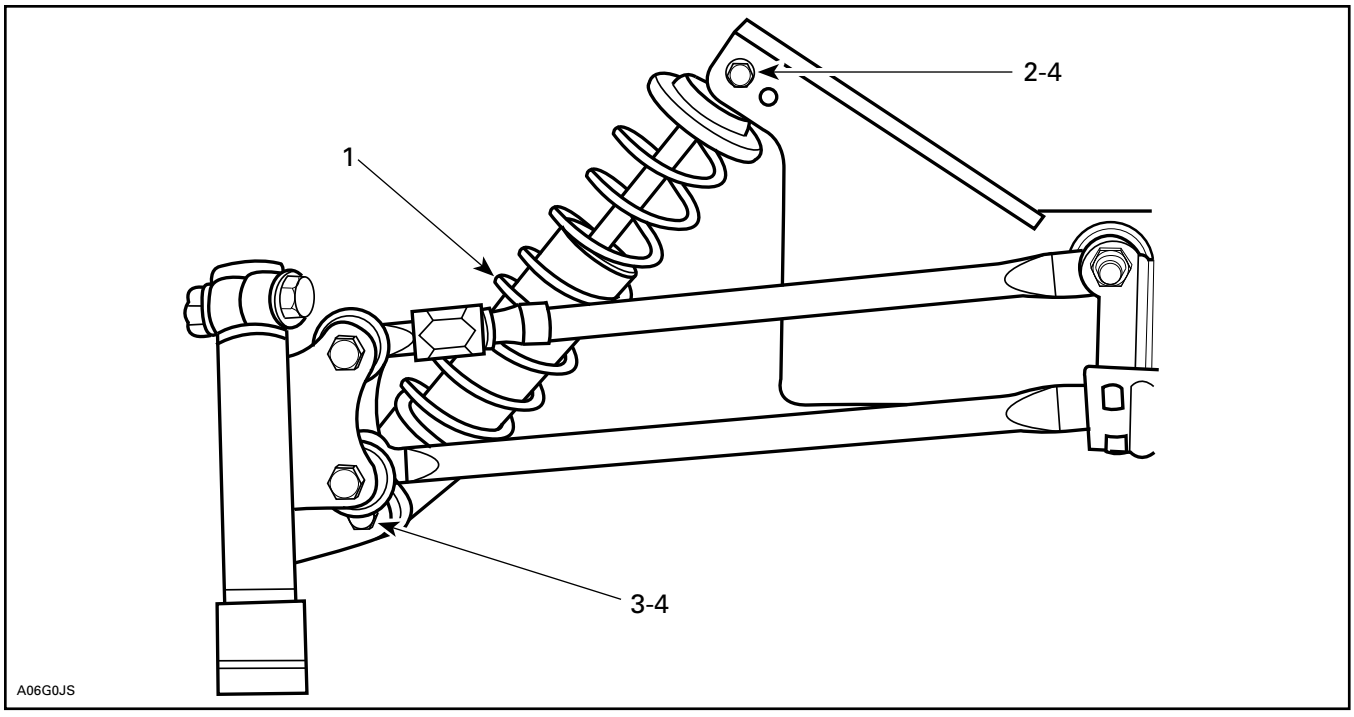
All Models

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

Lift front of vehicle and block safely. Secure shock absorbers to suspension with their adjusting ring at bottom.

NOTE : Position screw heads toward front.

Properly position exhaust suppport on chassis making sure that its lug rests in chassis recess. Hook up exhaust spring.



TYPICAL - RH SIDE SHOWN

1. Shock absorber (2) (Engine compartment)
2. Screw M10 x 1.5 x 60 (2) (P/N 222 0060 65) (On suspension)
3. Screw M10 x 1.5 x 55 (2) (P/N 222 0055 65) (On suspension)
4. Nut M10 x 1.5 (2) (P/N 228 5010 45) (Section no. 3, 4 or 5). Torque to 48 N•m (35 lbf•ft)

Grand Touring Models 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.

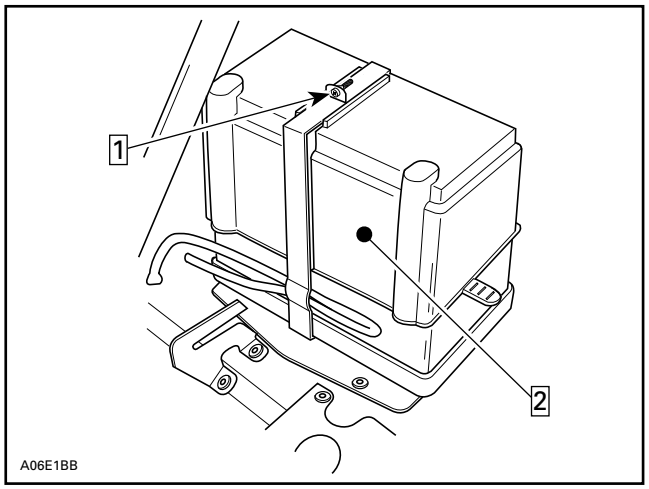
Battery Removal

Remove belt guard.

Remove air intake silencer.

Unfasten retaining strips.

Open strips and lift battery protective boot.



Step 1 Unfasten and open
Step 2 Lift protective boot

Withdraw battery from vehicle.

Battery Installation

○NOTE : Before reinstalling battery and air silencer check oil pump lever adjustment. On GT 580/SE, harnesses of heating element switches can be easily connected before installation of air silencer.

Install vent tube on battery.

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

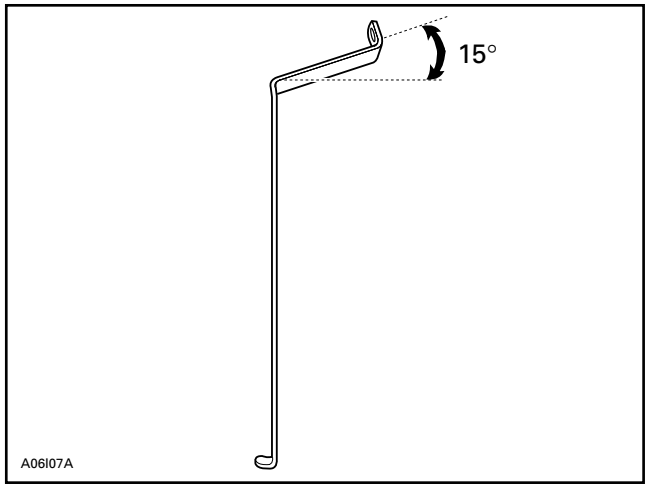
Connect BLACK negative cable LAST.

▼CAUTION : Negative battery terminal should always be disconnected FIRST and reconnected LAST.

Apply silicone dielectric grease (P/N 413 7017 00) on battery posts and connectors.

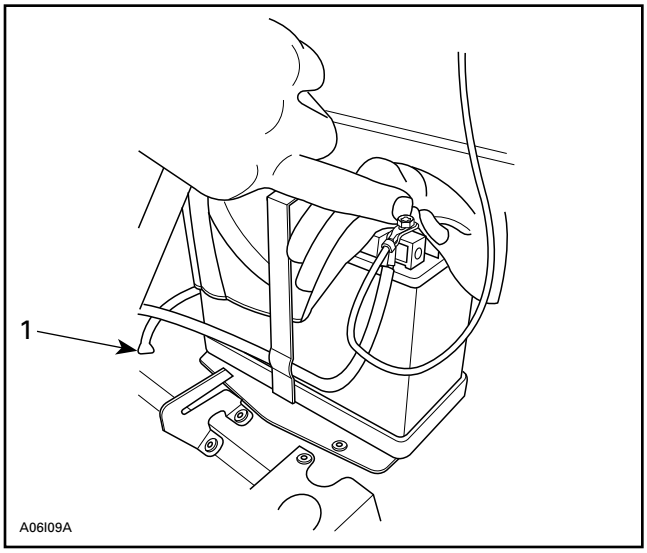
Ensure vent tube is properly installed on battery elbow, then install protective boot over battery.

Bent rear strip by 15° to facilitate installation. That strip can also be taped on its hook portion so it stays in place.



Close and fasten retaining strips.

Connect vent tube to vehicle fitting on front frame.



1. Vent tube on fitting

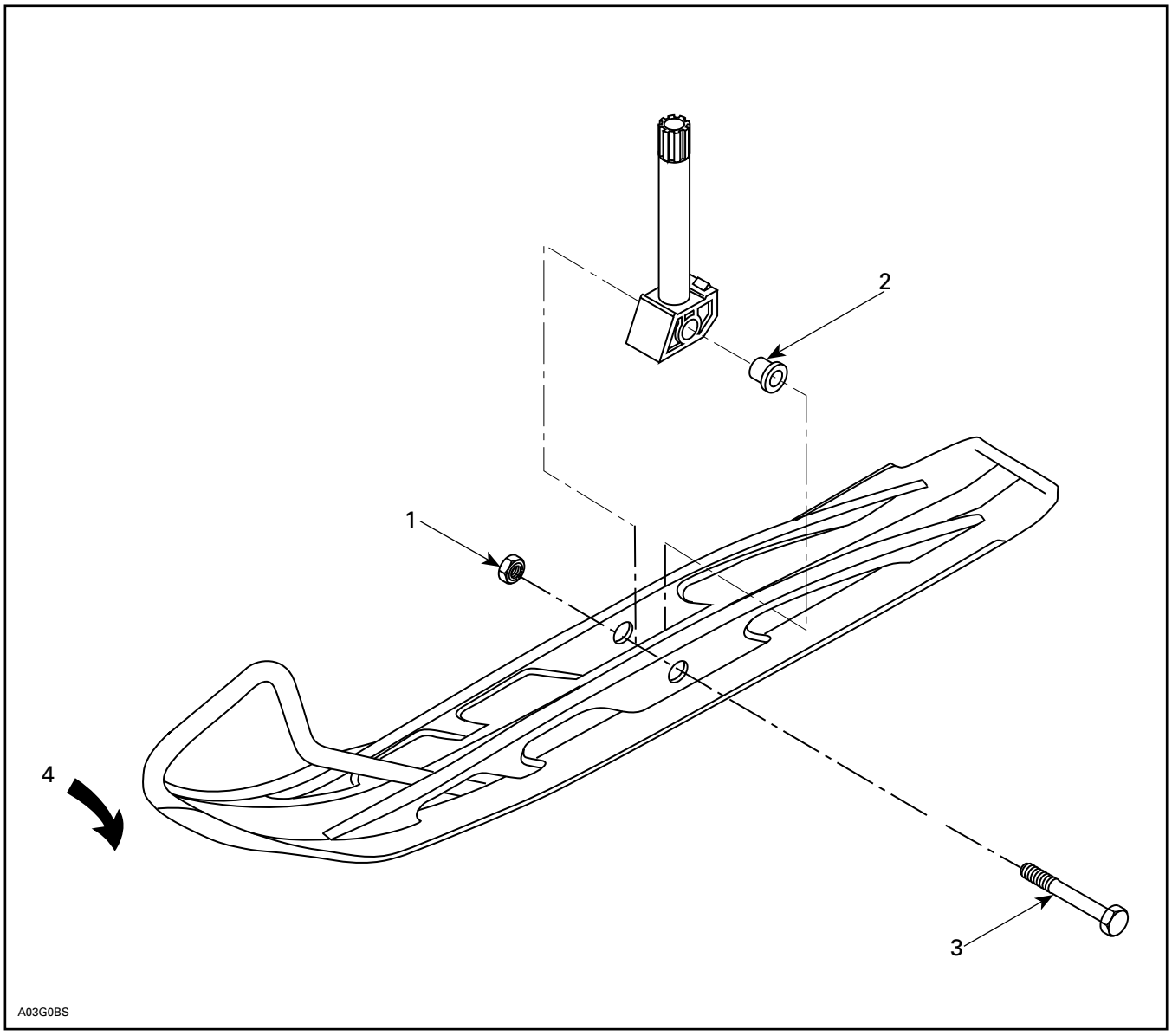
Ensure that vent tube is not kinked or blocked.

GT 500 and Formula SLS

Install skis on vehicle.

NOTE : Make sure that slider cushions are still in ski leg.

Replace vehicle on ground.



LEFT SIDE SHOWN

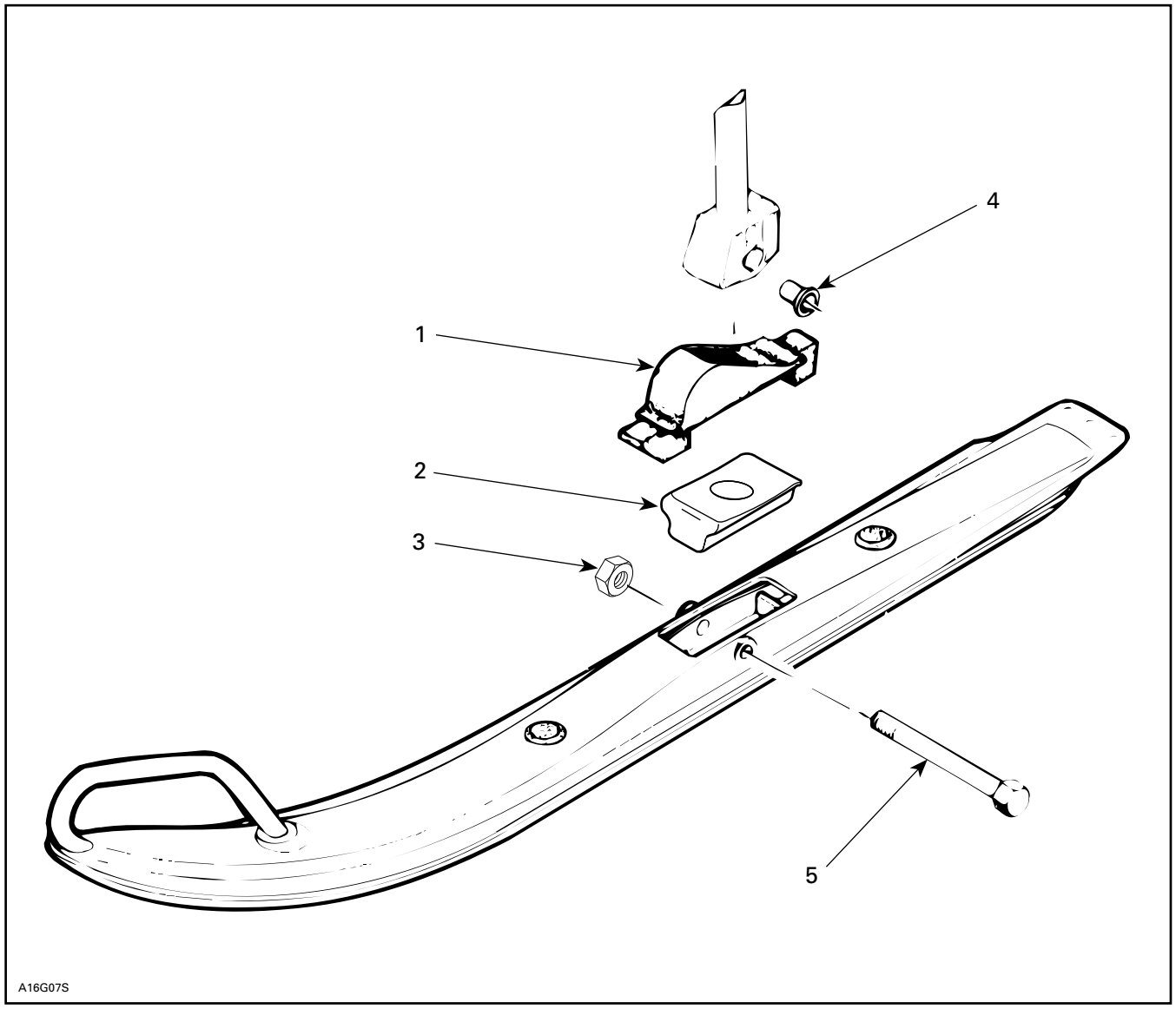
1. *Nut M12 x 1.75 (2) (P/N 228 5210 45) (Section no. 3 or 5). Torque to 40 N•m (30 lbf•ft)*
2. *Slider cushion (4) (Ski leg)*
3. *Bolt M12 (2) (Ski leg)*
4. *Twist ski to ease bolt installation*

Formula STX

Install skis on vehicle.

NOTE : Make sure that slider cushions are still in ski leg.

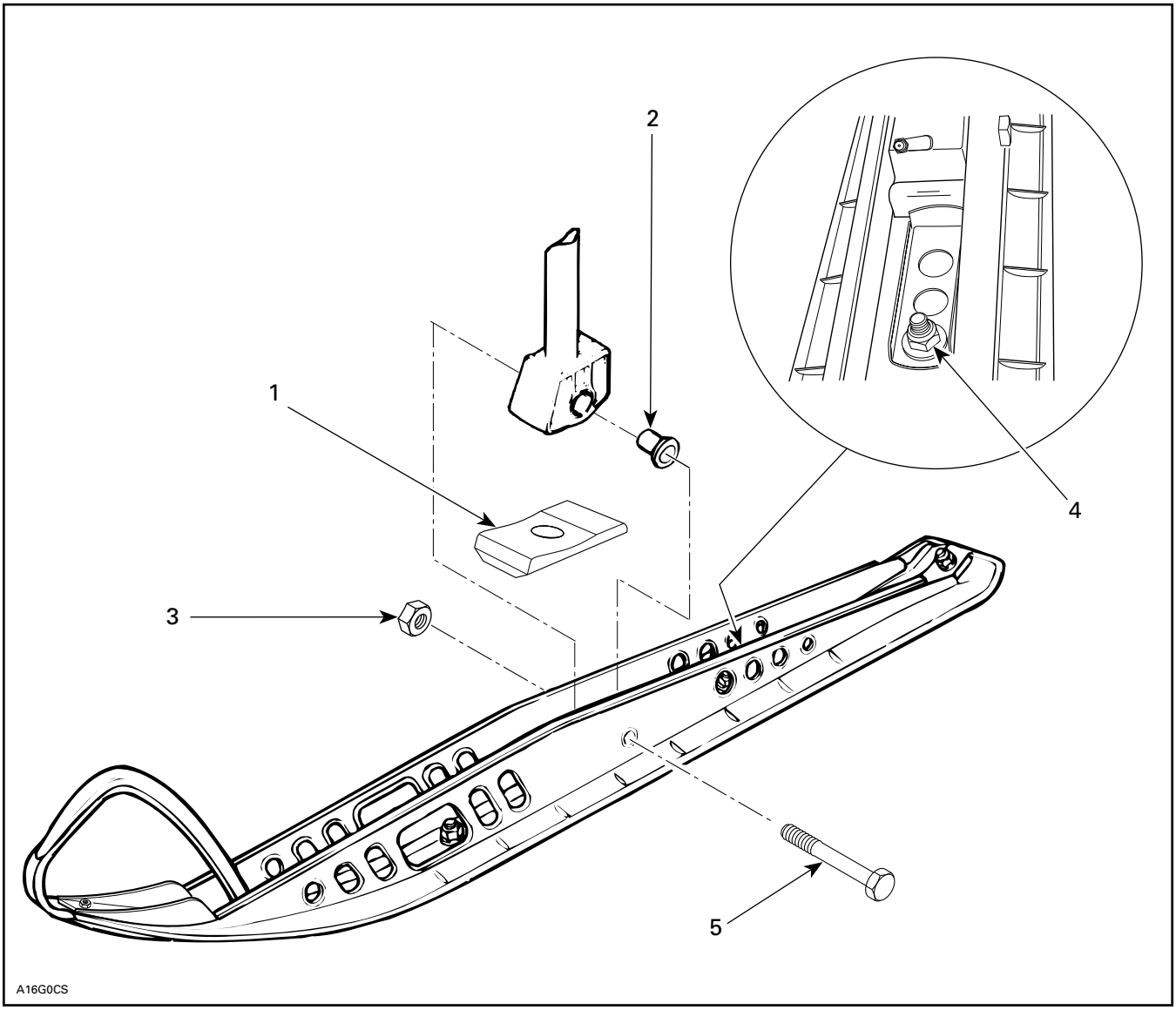
Replace vehicle on ground.



LEFT SIDE SHOWN

1. *Ski boot (2) (P/N 570 0222 00) (Section no. 7)*
2. *Stop bounding (2) (P/N 570 0531 00) (Section no. 7). Marked "Front"*
3. *Nut M12 x 1.75 (2) (P/N 228 5210 45) (Section no. 7). Torque to 40 N•m (30 lbf•ft)*
4. *Slider cushion (4) (Ski leg)*
5. *Bolt M12 (2) (Ski leg)*

Summit 500, GT 580/SE and Mach 1



LEFT SIDE SHOWN

1. *Stop bounding (2) (P/N 570 0468 00) (Section no. 8)*
2. *Slider cushion (4) (Ski leg)*
3. *Nut M12 (2) (Ski leg). Torque to 40 N•m (30 lbf•ft)*
4. *Slacken then adjust against stop bounding. Torque to 14 N•m (124 lbf•**in**)*
5. *Bolt M12 (2) (Ski leg)*

After ski installation, adjust stopper against stop bounding then tighten nut to 14 N•m (124 lbf•**in**). More preload on stop bounding will result in a more aggressive steering. Adjust according to driver preferences.

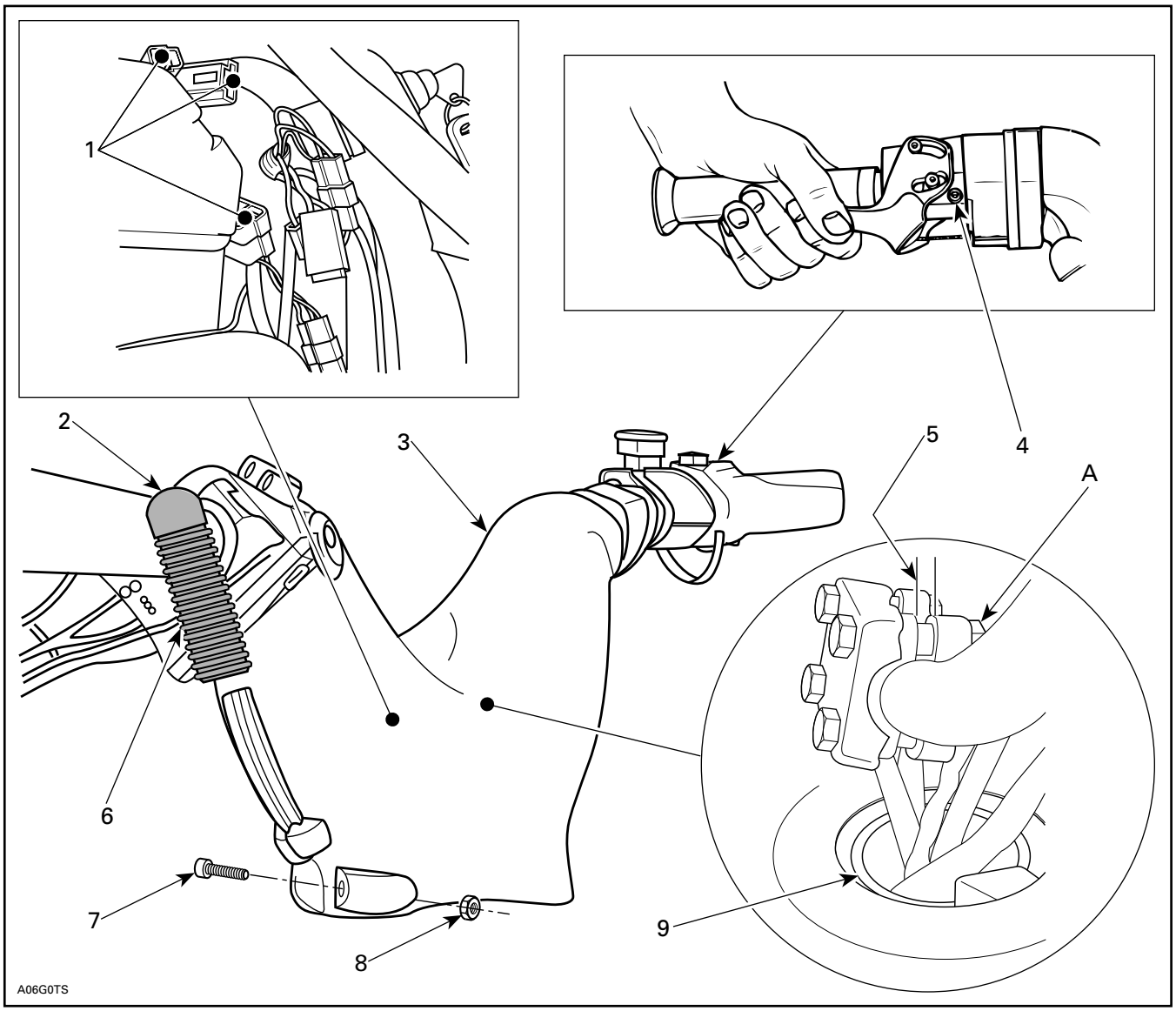
GT 500/580/SE

Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).

Loosen throttle and brake handle housings.

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

On 580/670 only, route wiring harnesses through steering column ring.

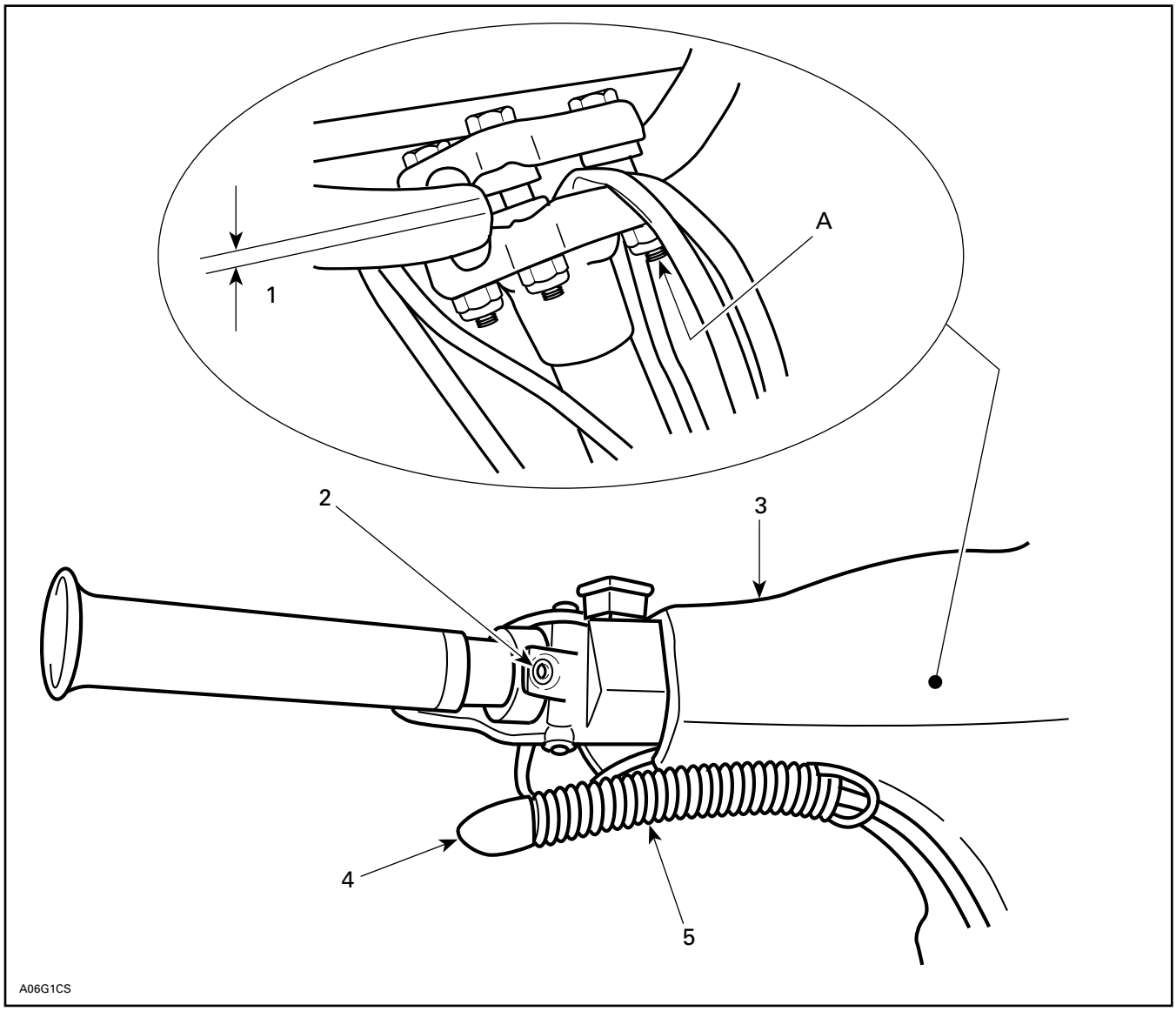


GT 580/670 ONLY

1. *Connect to steering padding wiring harnesses*
2. *Use liquid soap to ease installation*
3. *Steering pad (Engine compartment)*
4. *Loosen Allen screw. Fit housing with steering pad. Tighten Allen screw to 2 N•m (18 lbf•**in**)*
5. *Equal gap each side (Both clamps)*
6. *Keyway (2) (P/N 572 0239 00) (Section no. 1 or 4)*
7. *Nut M5 x 0.80 x 20 (2) (P/N 222 8520 65) (Section no. 1 or 4)*
8. *Nut M5 x 0.80 (2) (P/N 228 7510 45) (Section no. 1 or 4) Seat tighten only no deformation of rubber*
9. *9.Wiring harnesses through ring*

A. 26 N•m (19 lbf•ft)

Formula SLS / STX, Summit 500 and Mach 1



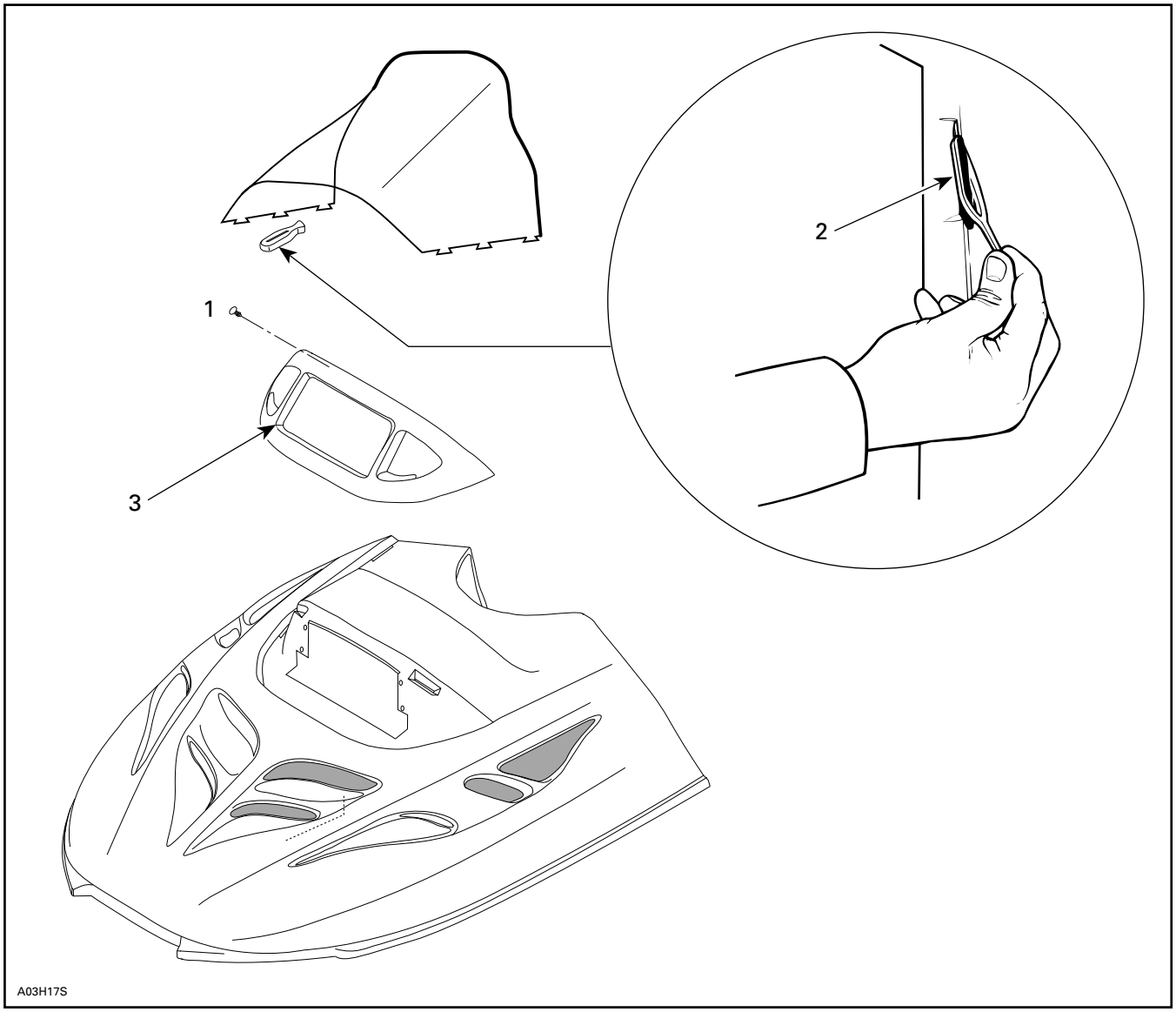
1. *Equal gap each side (Both clamps)*
2. *Loosen Allen screw, fit housing with steering pad then slightly tighten Allen screw*
3. *Steering pad (Engine compartment)*
4. *Use liquid soap to ease installation*
5. *Keyway (2) (P/N 572 0724 00) (Section no. 3 or 5)*

A. 26 N•m (19 lbf•ft)

Formula SLS, GT 500 and Summit 500

Install windshield on dashboard.

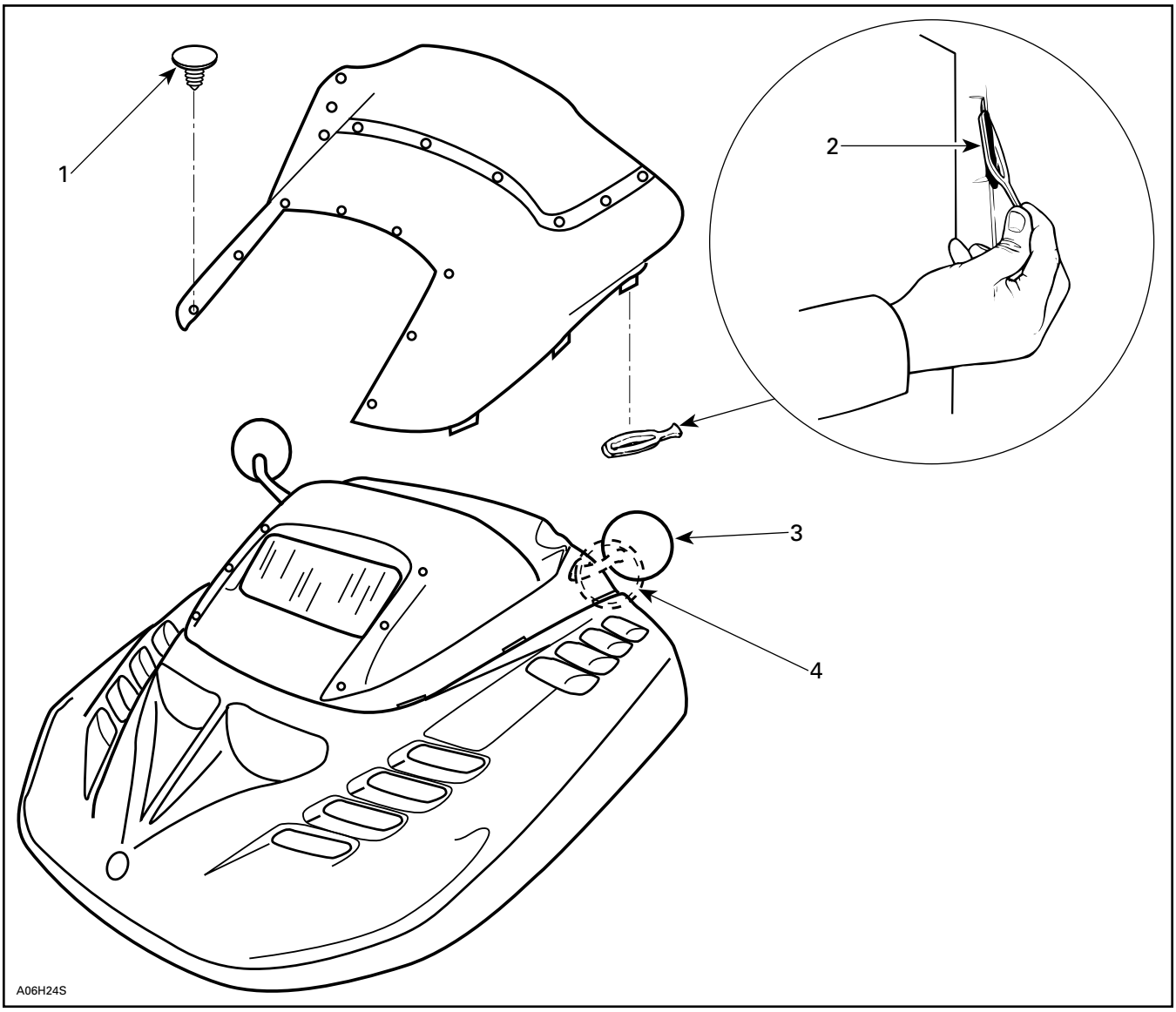
Install windshield on dashboard.



1. *Dart (1) (P/N 414 6443 00)*
2. *Latch (6) (P/N 570 0238 00)*
3. *Temporary remove headlamp molding for windshield installation*

Formula STX, GT 580/SE and Mach 1

Install windshield on dashboard.

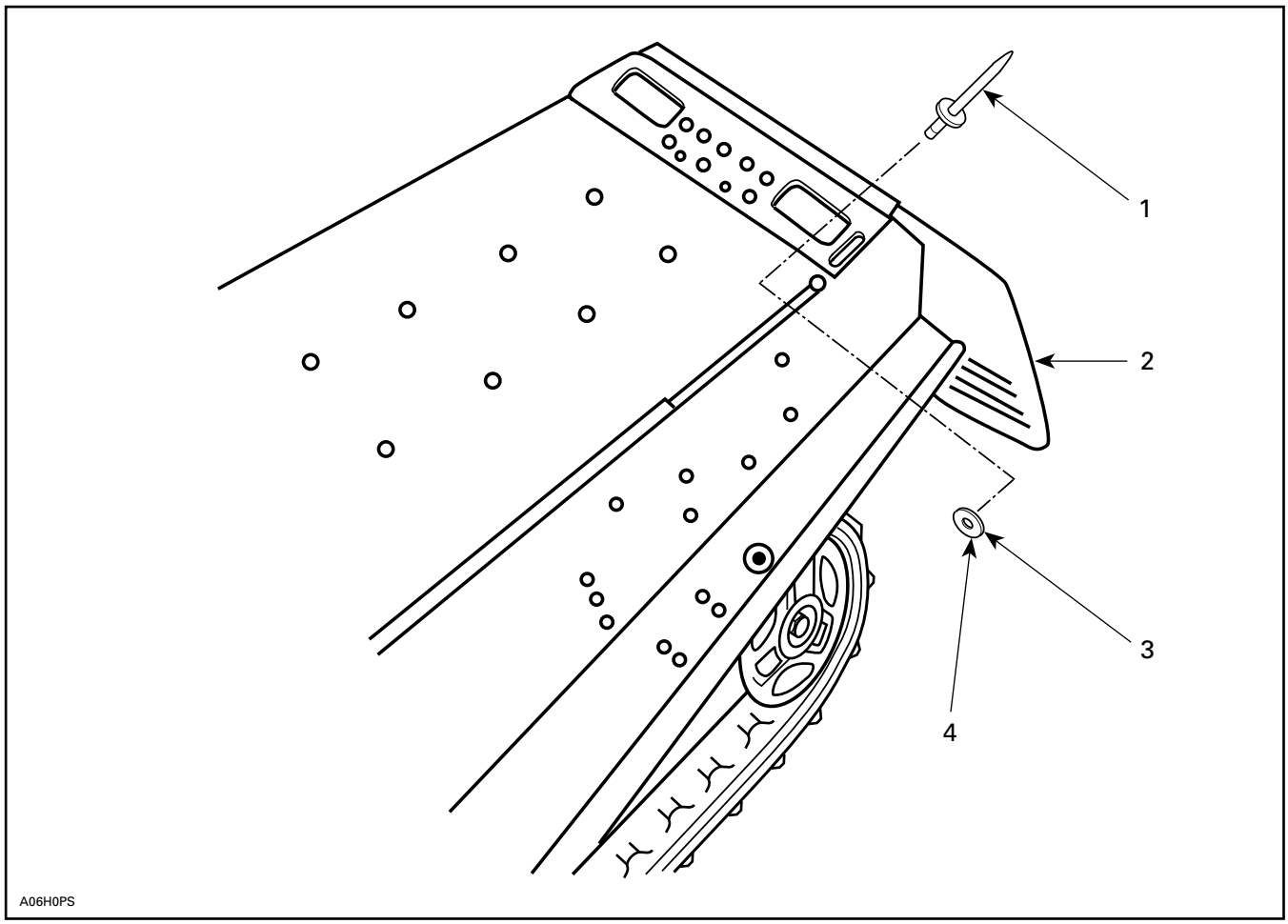


1. *Dart (8) (P/N 414 9395 00) (Section no. 5 or 6)*
2. *Latch (6) (P/N 570 0238 00) (Section no. 5 or 6)*
3. *Normal use position GT 580/SE only : Rotate mirror ass'ys half turn by hand*
4. *PDI position*

Formula STX and Mach 1

Install snow guard to chassis.

NOTE : Place washers inside tunnel.



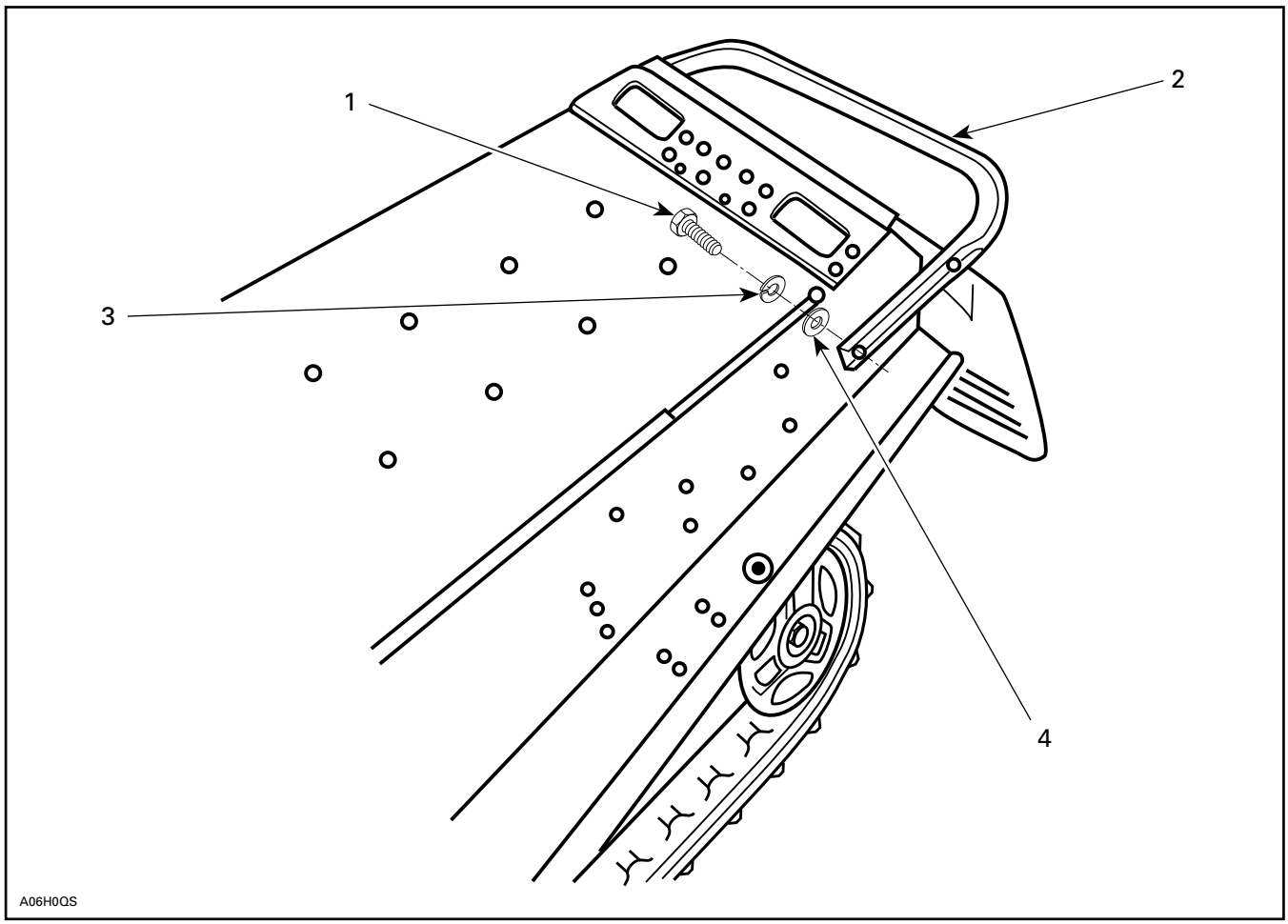
TYPICAL

1. *Rivet (4) (P/N 390 9080 00) (Section no. 2)*
2. *Snow guard (In engine compartment)*
3. *Washer (4) (P/N 517 2259 00) (Section no. 2)*
4. *Inside tunnel*

Formula STX and Mach 1

Install rear bumper to chassis as necessary.

NOTE : On some models, rear moldings are installed at factory. It is not necessary to remove them to install bumper. Slide bumper inside rear moldings and secure from inside of tunnel.

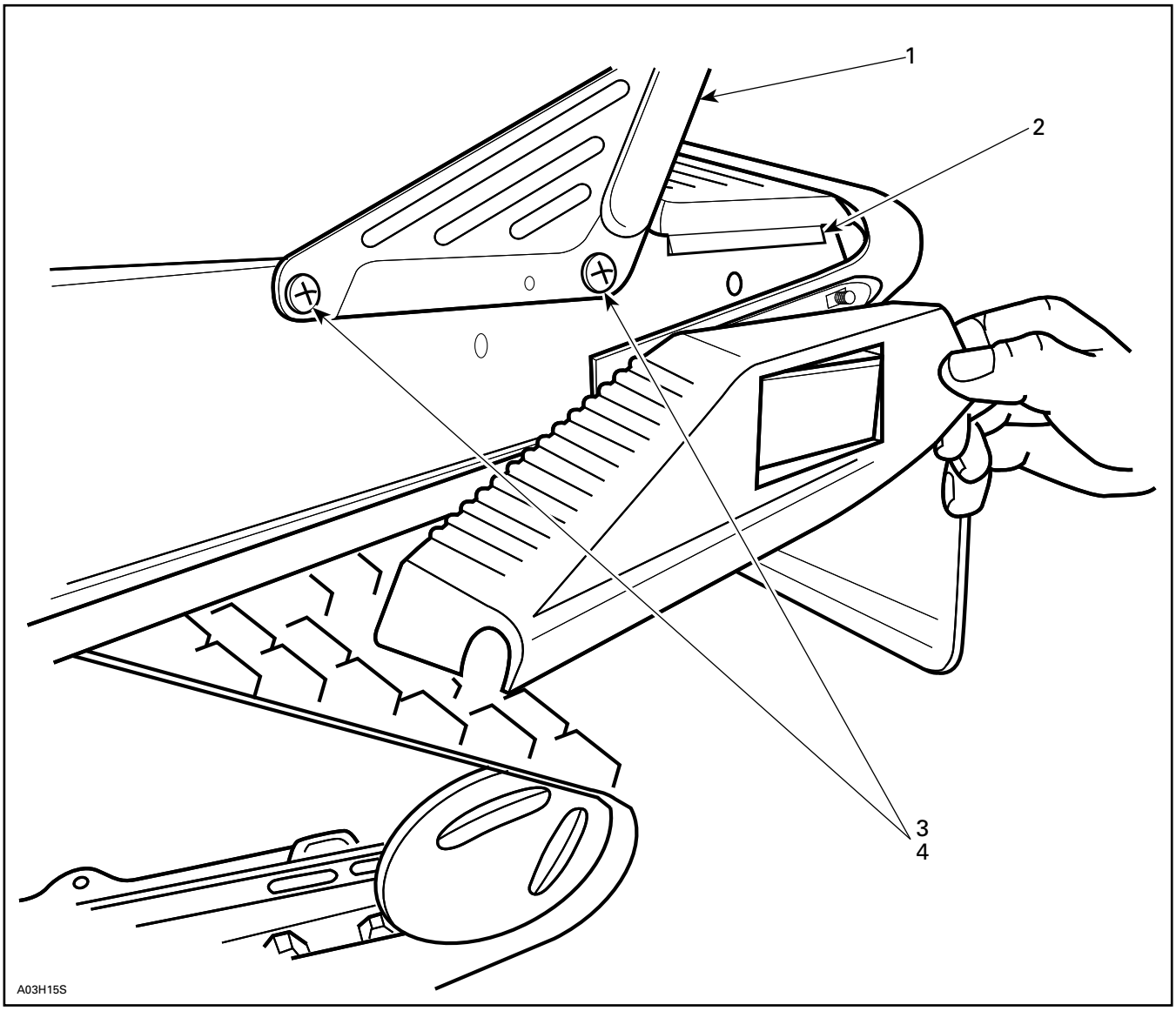


TYPICAL

1. *Screw M8 x 1.25 x 20 mm (4) (P/N 222 0820 65) (Section no. 1). Torque to 24 N•m (18 lbf•ft)*
2. *Rear bumper (In engine compartment)*
3. *Lock washer (4) (P/N 224 7811 40) (Section no. 1)*
4. *Washer (4) (P/N 224 0811 71) (Section no. 1)*

GT 500

Using a 10 mm socket, remove 3 screws retaining side moldings. At installation insert tab underneath side molding.



1. Backrest (Inside carboard box in crate)
2. Tab
3. M6 x 18 (4) (P/N 732 6000 09) (Section no. 2)
*4. Nut M6 (4) (P/N 228 7610 45) (Section no. 2). Torque to 10 N•m (89 lbf•**in**)*

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P/N 413 7082 00) before installing drive belt.

LIQUIDS
OIL INJECTION PUMP BLEEDING

SUPPLEMENTAL OIL

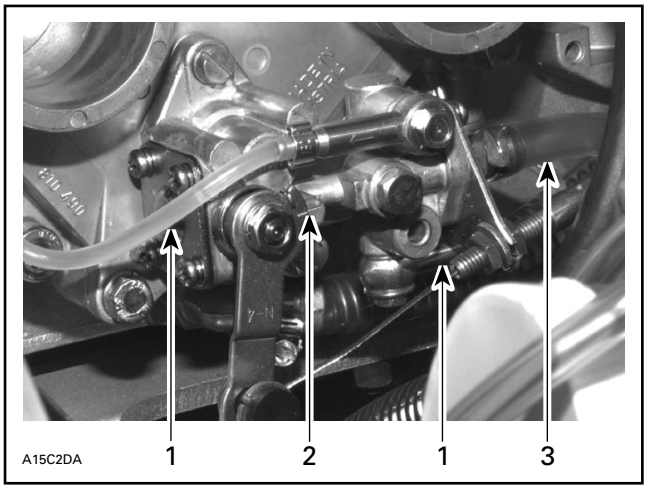
To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER ROTAX Injection Oil (P/N 413 8030 00) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

BLEEDING PROCEDURE

Remove air silencer and move carburetors aside.

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.

Check also for proper oil lever adjustment. Marks must aligned when throttle lever is activated just enough to take all cable play.

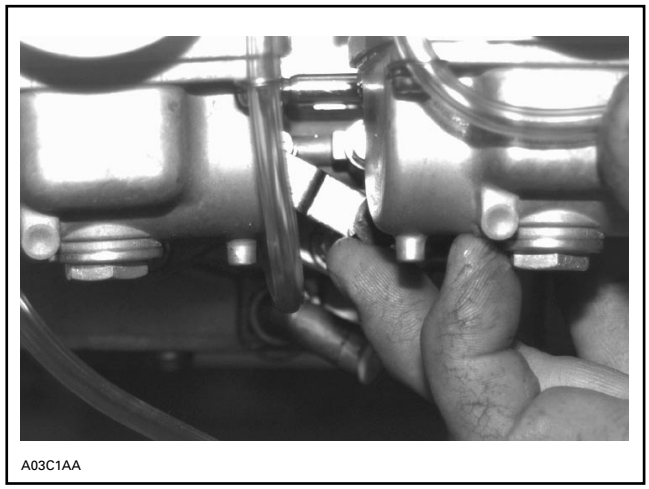


1. Small oil line
2. Marks aligned
3. Main oil line

Reinstall all parts except air silencer.

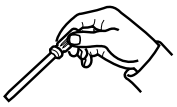
Bleed the small oil line between pump and intake manifold by running engine at ildle while holding the pump lever in fully open position.

NOTE : If the air silencer has been reinstalled, make a J hook out of mechanical wire to lift the lever.

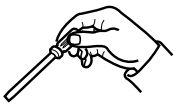


TYPICAL - ENGINE AT IDLE

Reinstall air silencer.



ADJUSTMENT
DRIVE PULLEY

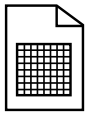


Summit 500

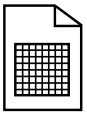
Adjust TRA drive pulley screw according to decal on belt guard.

ADJUSTMENT
TRACK

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

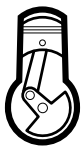
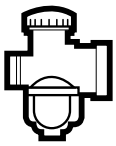


TECHNICAL DATA



The content of the TECHNICAL DATA pages should be used as necessary to fine-tune and perform additional adjustments required on the snowmobile. 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 1995 model.

	MODELS		GRAND TOURING 500 FORMULA SLS	FORMULA STX- FORMULA STX LT
	Engine Type		494 •	583
	Maximum HP RPM ①	RPM	7400 - 7600 •	7800 - 8000
	Rotary Valve	P/N Opening (BTDC) / Closing (ATDC)	420 9245 09 • 135°/64° •	420 9245 02 • 140/71 •
	Carburetor Type		2 x VM 38 - 311 •	PTO VM 38 - 325MAG VM 38 - 326 • •
	Main Jet		320 •	PTO 320 MAG 330
	Needle Jet		480 P - 7 •	480 P - 0
	Pilot Jet		45 •	40
	Needle Identification– clip Position		6FEY1 - 3 •	6DHN44 - 3
	Slide Cut-away		2.5	2.5
	Float Adjustment	mm (in)	18.1 (.71) •	18.1 (.71)
	Air Screw Adjustment	± 1/16 turn	1-3/4 •	1-1/2
	Idle Speed RPM	RPM	1700 - 1900 •	1800 - 2000
	Gas Grade/Octane Number	(R + M)/2	Regular Unleaded/87	Regular Unleaded/87
	Gas/Oil Ratio		Oil Injection	Oil Injection
	Ignition Timing BTDC②	mm (in)	1.81 (.071) •	1.75 (.069)
	Trigger Coil Air-Gap	mm (in)	0.55 - 1.45(.022 - .057)	0.55 - 1.45(.022 - .057)
	Gear Ratio	teeth	GT : 23/44 SLS : 5/44	STX : 25/44 STX LT : 23/44
	Engagement Speed	± 100 RPM	GT : 4100 SLS : 4500 •	STX : 3500 STX LT : 3200
	Drive Pulley Calibration Screw Position		GT : 3 SLS : 4	STX : 4 STX LT : 3
	Pulley Distance	Z (+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)	
	Offset	X ± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
		Y	Dimension Y must exceed X from 1mm (1/32in) to 2 mm (5/64 in)	
	Drive Belt Adjustment	Deflection mm (in)	32 (1-1/4)	
		Force ③ kg (lbf)	6.8 (15)	
	Driven Pulley Preload	kg (lbf)	5.4 to 6.8 (12 to 15)	
	Drive Chain Tension		Fully tighten adjusting screw by hand then back OFF only far enough for hair pin installation	
	Track Adjustment	Deflection mm (in)	40 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull	

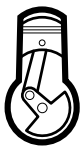
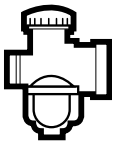
NOTE : See end of specifications for foot notes.

A dot (•) on right indicates changes from 1995 model.

MODEL			GRAND TOURING 580	
Engine Type			582	
Maximum HP RPM ①		RPM	7200-7400	
Rotary Valve		P/N	420 9245 09	•
		Opening (BTDC) / Closing (ATDC)	129.5/69.5	•
Carburetor Type			PTO VM 38 - 317 MAG VM 38 - 318	•
Main Jet			PTO 360 MAG 370	
Needle Jet			480 O - 4	
Pilot Jet			40	
Needle Identification– clip Position			6DH44 - 4	
Slide Cut-away			2.5	
Float Adjustment		mm (in)	18.1 (.71)	
Air Screw Adjustment		± 1/16 turn	1 - 1/4	
Idle Speed RPM		RPM	1800-2000	
Gas Grade/Pump Octane Number		(R + M)/2	Regular Unleaded/87	
Gas/Oil Ratio			Oil Injection	
Ignition Timing BTDC ②		mm (in)	2.18 (.086)	
Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 - .057)	
Gear Ratio		teeth	Touring SLE and Skandic 500 : 21/44 Formula SL : 22/44	
Engagement Speed		RPM	Touring SLE and Skandic 500 : 2900-3100 Formula SL : 3500-3700	
Drive Pulley Calibration Screw Position			Formula SL : 3 Touring SLE and Skandic 500 : 4	
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)	
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
	Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)	
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
	Force	kg (lbf)	6.8 (15)	
Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (12 to 15)	•
Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
Track Adjustment	Deflection	mm (in)	40 to 50 (1-3/4 - 2) with a 7.3 kg (16 lb) downward pull	

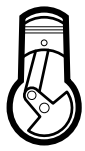
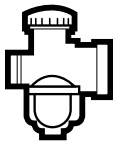
NOTE : See end of specifications for foot notes.

A dot (•) on right indicates changes from 1995 model.

	MODEL		GRAND TOURING SE 670	
	Engine Type		670	
	Maximum HP RPM ①	RPM	7600-7800	•
	Rotary Valve	P/N Opening (BTDC) / Closing (ATDC)	420 9245 09 144°/72°	
	Carburetor Type		2 VM 40 - 79	•
	Main Jet		360	•
	Needle Jet		224 AA - 3	
	Pilot Jet		50	•
	Needle Identification– clip Position		7EDY1 - 3	•
	Slide Cut-away		2.5	
	Float Adjustment	mm (in)	18.1 (.71)	
	Air Screw Adjustment	± 1/16 turn	2 - 1/4	•
	Idle Speed RPM	RPM	1800 - 2000	
	Gas Grade/Pump Octane Number	(R + M)/2	Regular Unleaded/87	
	Gas/Oil Ratio		Oil Injection	
	Ignition Timing BTDC ②	mm (in)	1.93 (.076)	
	Trigger Coil Air-Gap	mm (in)	0.55 - 1.45 .022 - .057)	
	Gear Ratio	teeth	25/44	
	Engagement Speed	±100 RPM	3400-3600	
	Drive Pulley Calibration Screw Position		3	
	Pulley Distance	Z (+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)	
	Offset	X ± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
		Y	Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)	
	Drive Belt Adjustment	Deflection mm (in)	32 (1-3/8)	
		Force ③ kg (lbf)	6.8 (15)	
	Driven Pulley Preload	kg (lbf)	5.4 to 6.8 (12 to 15)	•
	Drive Chain Tension		Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track Adjustment	Deflection mm (in)	45 to 50 (1-3/4 - 2) with a 7.3 kg (16 lb) downward pull	

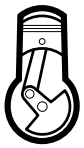
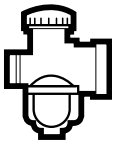
NOTE : See end of specifications for foot notes.

A dot (•) on right indicates changes from 1995 model.

	MODEL			SUMMIT 500
	Engine Type			494
	Maximum HP RPM ①		RPM	7400-7600
	Rotary Valve		P/N Opening (BTDC) / Closing (ATDC)	420 9245 09 135°/64°
	Carburetor Type			PTO VM 38 - 313 MAG VM 38 - 314
	Main Jet			400
	Needle Jet			480 Q - 0
	Pilot Jet			75
	Needle Identification– clip Position			6FEY1 - 3
	Slide Cut-away			2.5
	Float Adjustment		mm (in)	19.6 (.77)
	Air Screw Adjustment		± 1/16 turn	2
	Idle Speed RPM		RPM	1700 - 1900
	Gas Grade/Pump Octane Number		(R + M)/2	Regular Unleaded/87
	Gas/Oil Ratio			Oil Injection
	Ignition Timing BTDC ②		mm (in)	1.81 (.071)
	Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 .022 - .057)
	Gear Ratio		teeth	22/44
	Engagement Speed		±100 RPM	4800
	Drive Pulley Calibration Screw Position			See label on belt guard
	Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)
	Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)
		Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
		Force ③	kg (lbf)	6.8 (15)
	Driven Pulley Preload		kg (lbf)	6.1 to 7.5 (13.4 to 16.5)
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation
	Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 - 2) with a 7.3 kg (16 lb) downward pull

NOTE : See end of specifications for foot notes.

A dot (•) on right indicates changes from 1995 model.

	MODEL			MACH 1	
	Engine Type			670	
	Maximum HP RPM ①		RPM	8100-8300	
	Rotary Valve		P/N Opening (BTDC) / Closing (ATDC)	420 9245 09 145°/76°	•
	Carburetor Type			PTO VM 44 - 32 MAG VM 44 - 33	•
	Main Jet			PTO 420 MAG 400	
	Needle Jet			224 AA - 7	
	Pilot Jet			35	
	Needle Identification– clip Position			7EG06 - 3	
	Slide Cut-away			2.5	
	Float Adjustment		mm (in)	18.1 (.71)	
	Air Screw Adjustment		± 1/16 turn	1.5	
	Idle Speed RPM		RPM	1800 - 2000	
	Gas Grade/Pump Octane Number		(R + M)/2	Super Unleaded/91	•
	Gas/Oil Ratio			Oil Injection	
	Ignition Timing BTDC ②		mm (in)	1.93 (.076)	
	Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 .022 - .057)	
	Gear Ratio		teeth	26/44	
	Engagement Speed		RPM	4400-4600	
	Drive Pulley Calibration Screw Position			4	
	Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)	
	Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
		Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)	
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-3/8)	
		Force ③	kg (lbf)	6.8 (15)	
	Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (12 to 15)	•
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
	Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 - 2) with a 7.3 kg (16 lb) downward pull	

NOTE : See end of specifications for foot notes.

①Engine speed at which maximum power is achieved.
②At 6000 RPM (engine cold) with headlamp turned on.
③Force applied midway between pulleys to obtain specified deflection.
④High Altitude Compensator.
BTDC : Before Top Dead Center
ATDC : After Top Dead Center
PTO : Power Take OFF side
MAG : Magneto side
CRT : Center
N.A. : Not applicable

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

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PREDELIVERY Bulletin

No. **96-6**

REVISION 1

Date: September 21, 1995

SUBJECT: Predelivery Procedures

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Skandik WT (Canada)	1537	ALL
1996	Skandik WT (United States))	1539	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 Inc. 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, it may have some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier Inc. 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 return a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook* and video.

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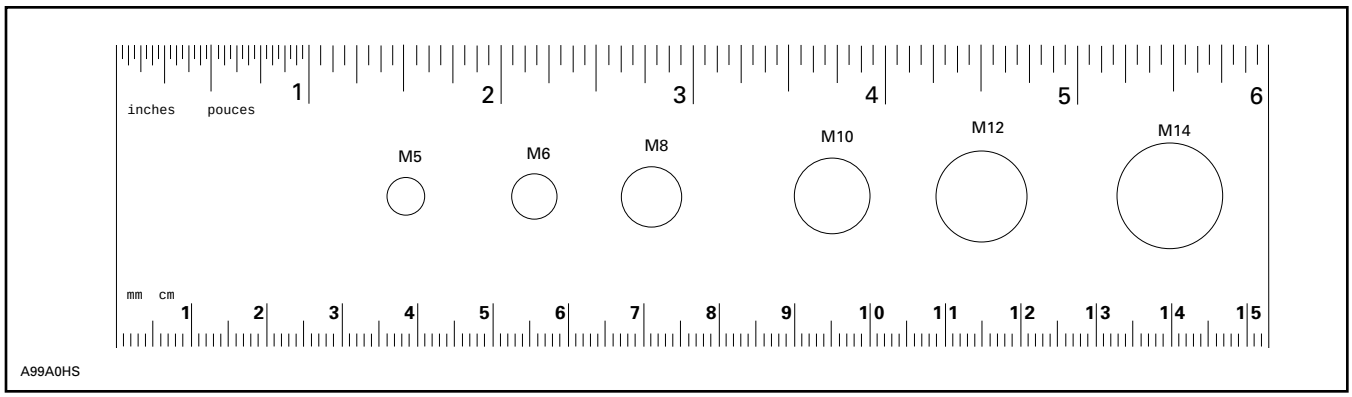
NOTE: This ruler can be helpful to identify fastener length or size.



◆ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, lock 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.

Unscrew all screws retaining cover to vehicle base. Tip cover over rear of vehicle. There is a notch in crate base at front.

Remove protective covering from snowmobile.

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

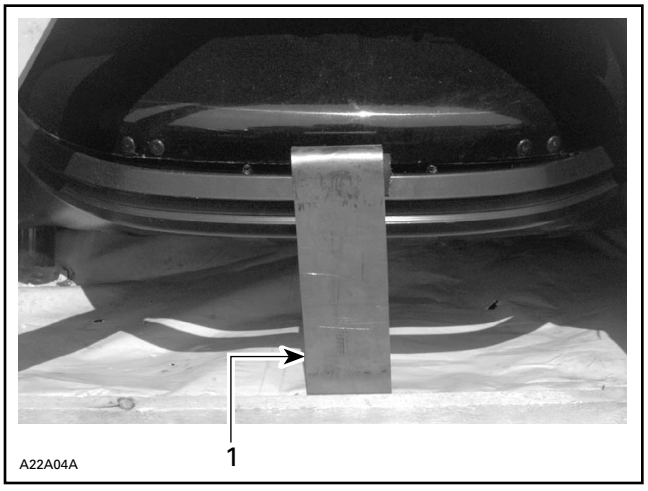
▼ CAUTION

Make sure vehicle is properly supported.

Remove the rear retaining brackets from vehicle.

Keep screws for further installation.

Using a hoist or other suitable equipment, slightly lift the rear end of the vehicle; then, remove the front retaining bracket.



1. Front retaining bracket

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

Remove vehicle from base.

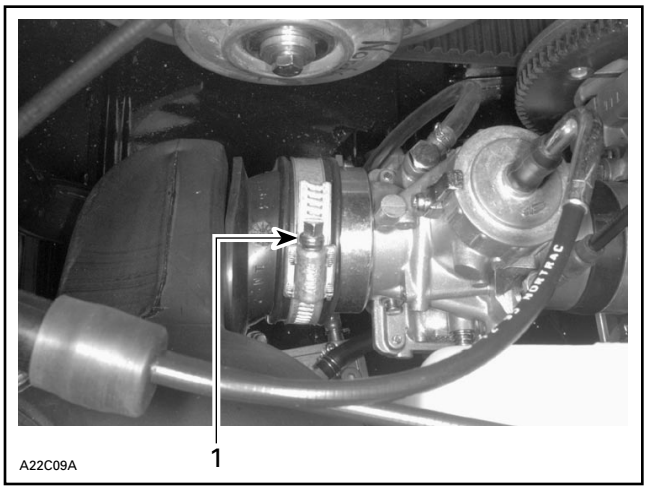
During vehicle preparation, the battery can be activated as described in *Shop Manual*.

CAUTION

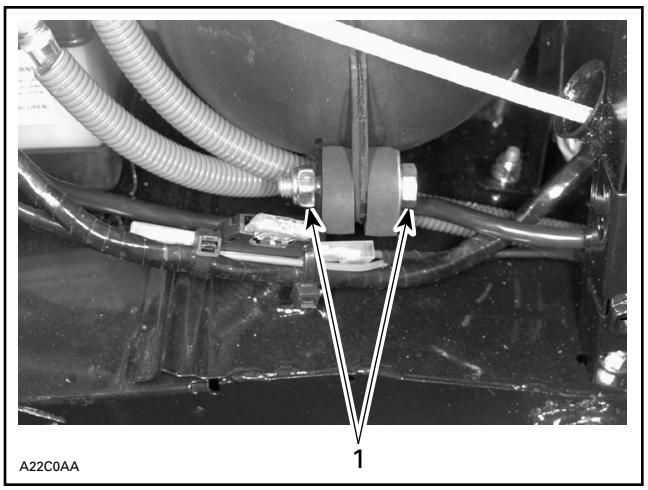
Prior to charging the battery, always remove it from the vehicle to prevent electrolyte spillage.

Battery Removal

Remove air intake silencer.

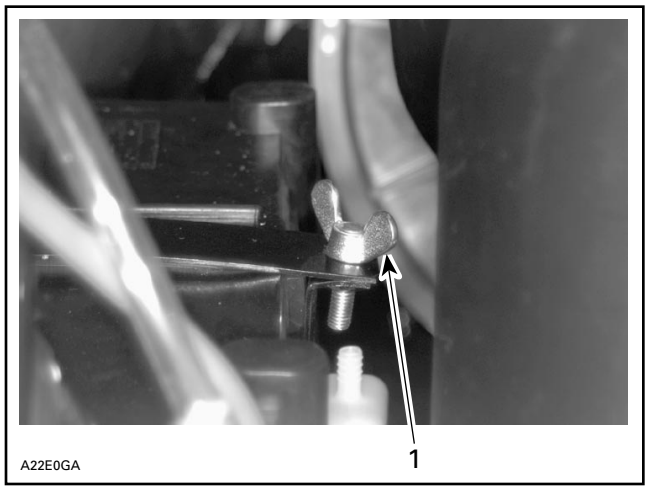


1. Loosen clamp



1. Remove bolt and lock nut

Unfasten battery brackets and remove battery.



1. Wing screw

Battery Installation

Secure battery brackets.

Connect battery cables.

CAUTION

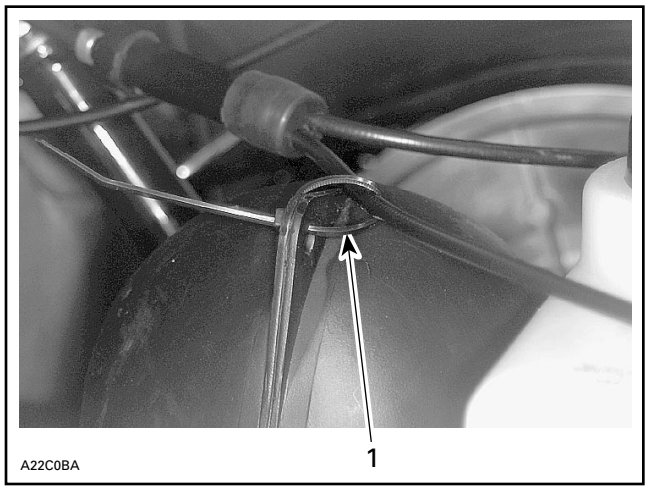
Negative BLACK battery terminal should always be disconnected FIRST and reconnected LAST.

Apply silicone dielectric grease (P/N 413 7017 00) on battery posts and connectors.

Ensure vent tube is properly installed on battery elbow and that is not kinked or blocked.

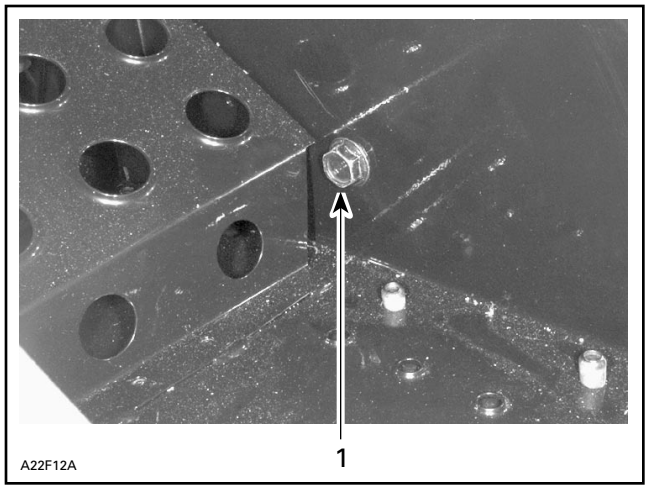
Reinstall air intake silencer.

Secure oil injection pump cable to air intake silencer using a tie rap (shrink pack). Install tie rap loosely as per following illustration.



1. Tie rap

Secure front arm of rear suspension using 2 M10 x 30 screws in plastic bag under the seat. Torque screws to 48 N•m (35 lbf•ft).



1. Torque screw on each side to 48 N•m (35 lbf•ft)

Secure rear arm using previously removed screws. Torque screws to 48 N•m (35 lbf•ft).

The front suspension was partially assembled in 2 different ways at the factory. Follow appropriate procedure to complete PDI.

Procedure for model 1537 serial numbers : 00001 to 00169.

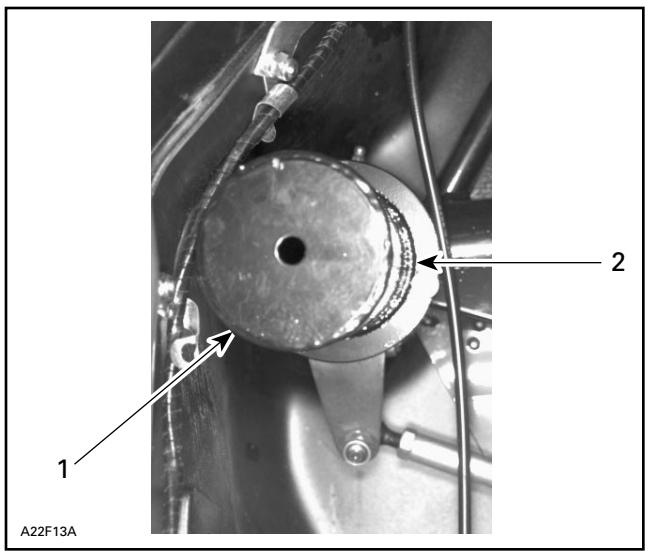
Lift front of vehicle and block safely.

Open hood.

Remove O-ring from ski leg covers.

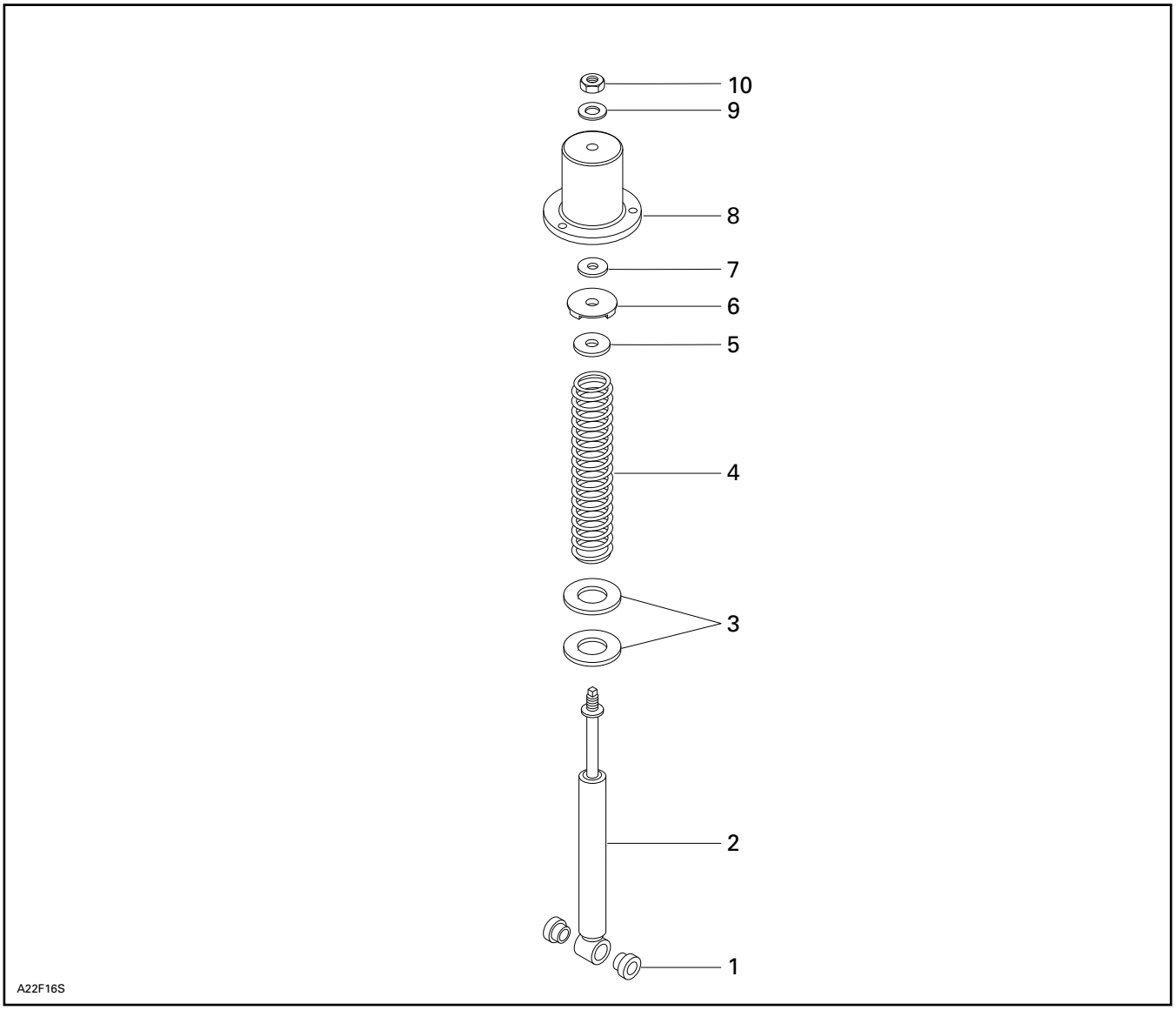
Remove screws from R.H. Ski leg cover then remove exhaust pipe.

Remove front suspension covers.



1. Cover
2. O-ring

Assemble both shock absorbers, springs and covers with parts included in the shrink pack and plastic bag under the seat as per following illustration. Do not tighten shock top nut yet.



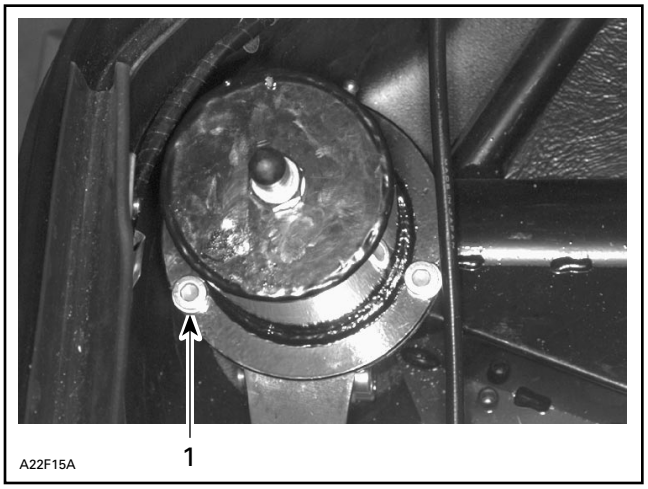
1. *Shock absorber bushing (2)*
2. *Shock absorber*
3. *Bearing plate (2)*
4. *Spring*
5. *Plate*
6. *Stopper*
7. *Washer*
8. *Cover assembly*
9. *Flat washer*
10. *M10 lock nut. Torque to 30 N•m (22 lbf•ft)*

Install both shock absorbers assemblies springs into ski leg. Do not tighten screws on R.H. cap.

NOTE: Make sure O-rings are well positioned. Apply grease to keep them in place.

Reinstall muffler. Apply sealant 736 (P/N 413 7092 00) as required.

Tighten suspension cap screws to 13 N•m (115 lbf•**in**).

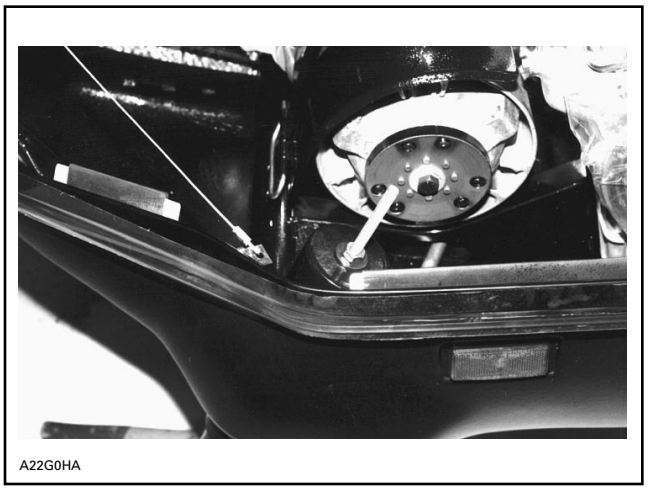


*1. Screw and flat washer. Torque to 13 N•m (115 lbf•**in**)*

Install muffler springs and force flow pipe.

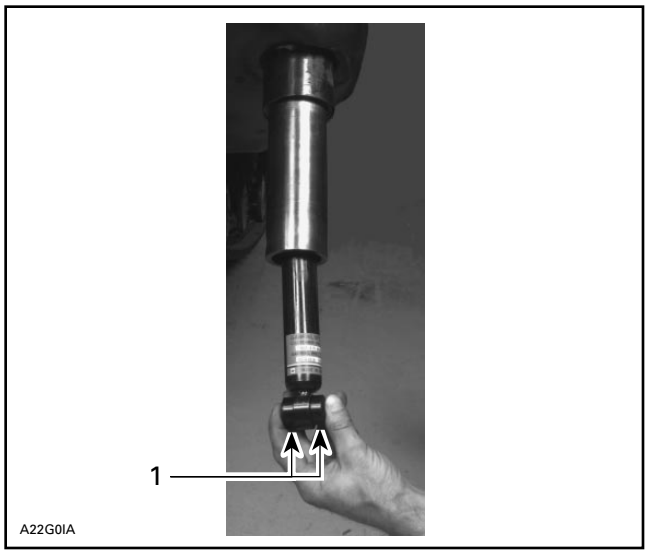
Procedure for model 1537 serial numbers : 00170 and up and all serial numbers of model 1539.

Remove long bolt that compresses front suspension.



Install 2 bushings into shock absorber eyelet.

Slide shock absorber into bottom of ski leg. Shock rod must be through cap hole.

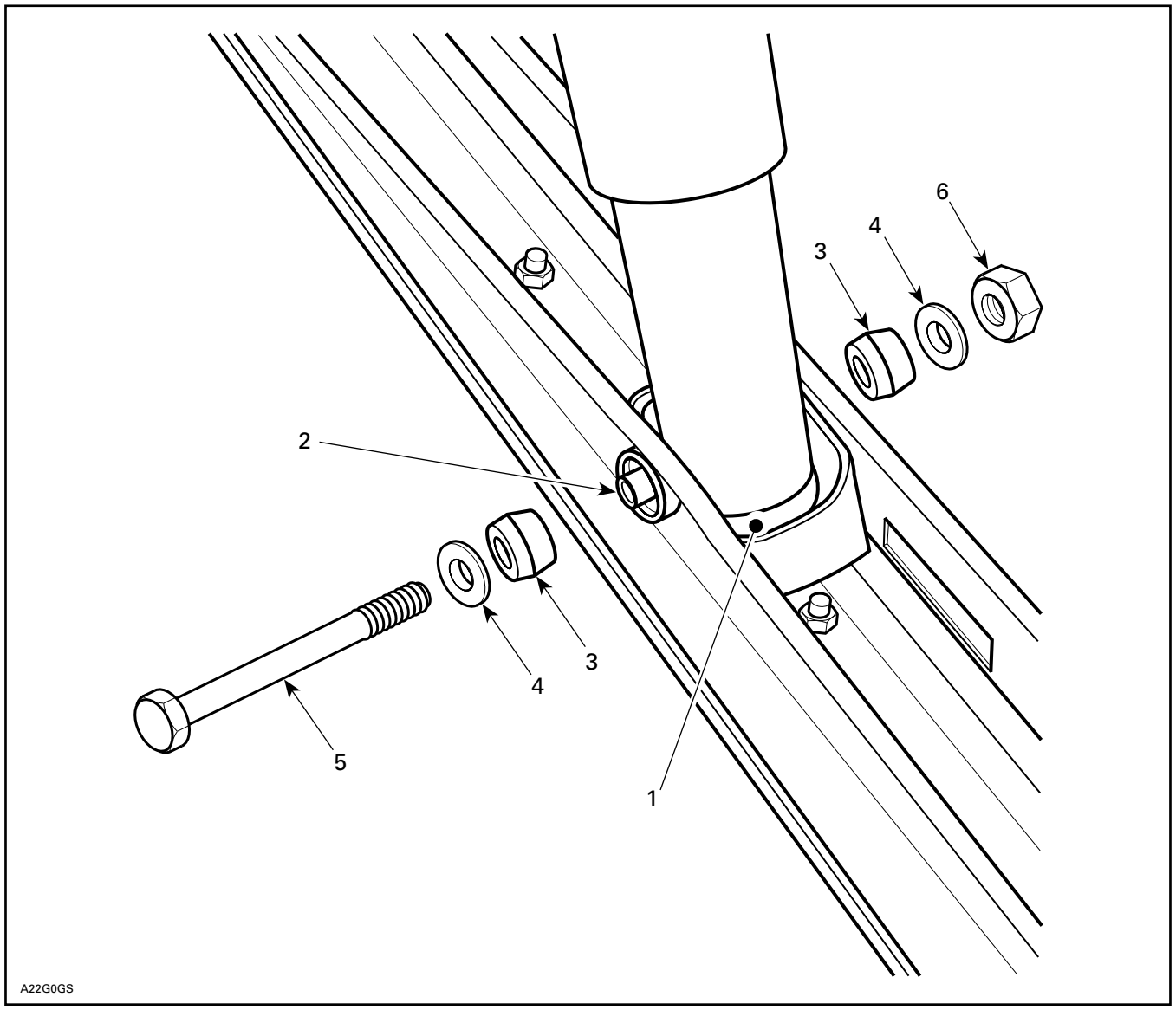


1. Bushings

Install ski.

Install washer and shock top nut.

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



RIGHT SIDE SHOWN

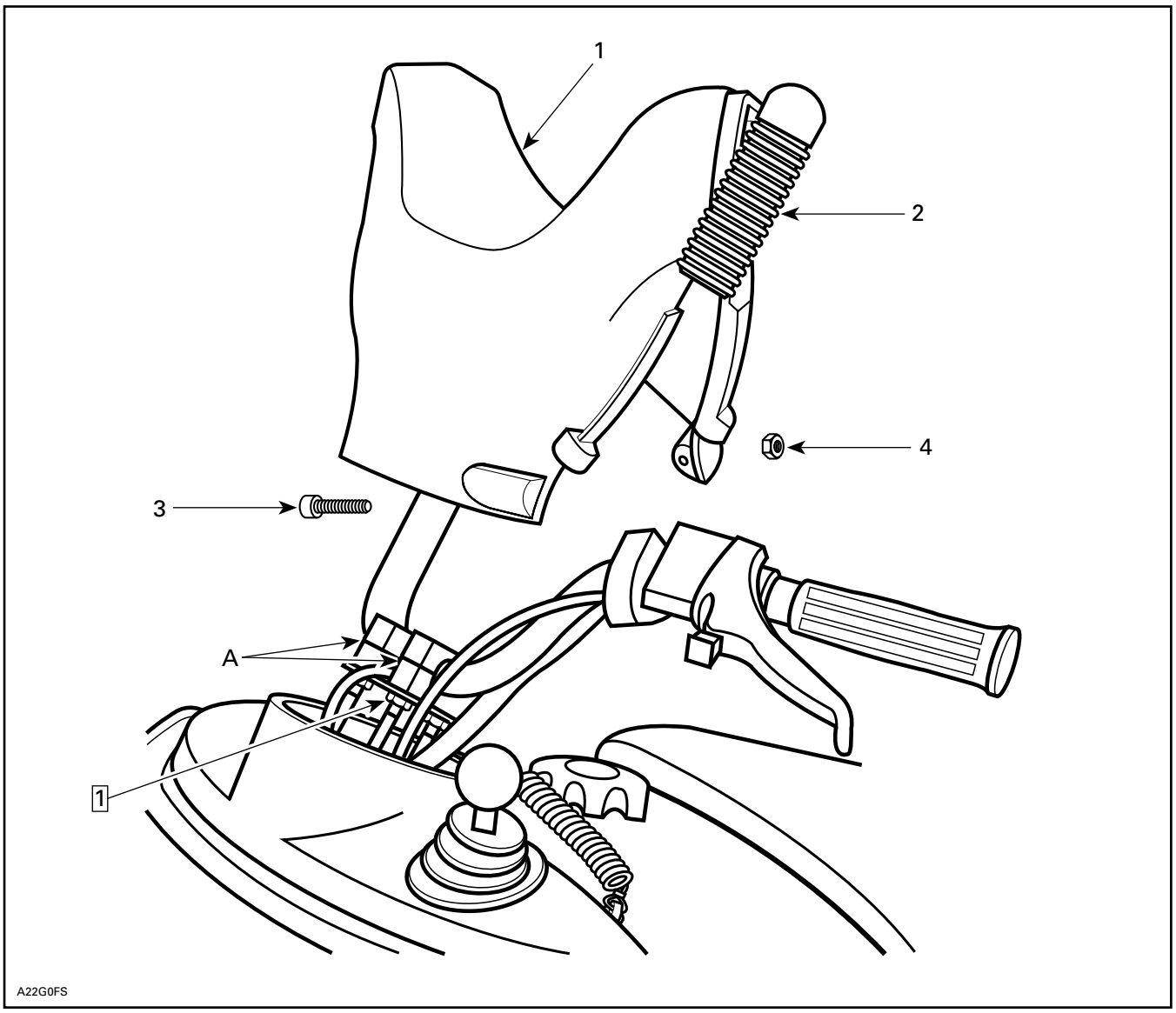
1. *Stop bounding*
2. *Sleeve*
3. *Rubber bushing (2)*
4. *Flat washer (2)*
5. *Bolt M10 x 120*
6. *M10 lock nut, tighten until ski moves up and down with a slight resistance*

Tighten shock rod top nuts.

Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).

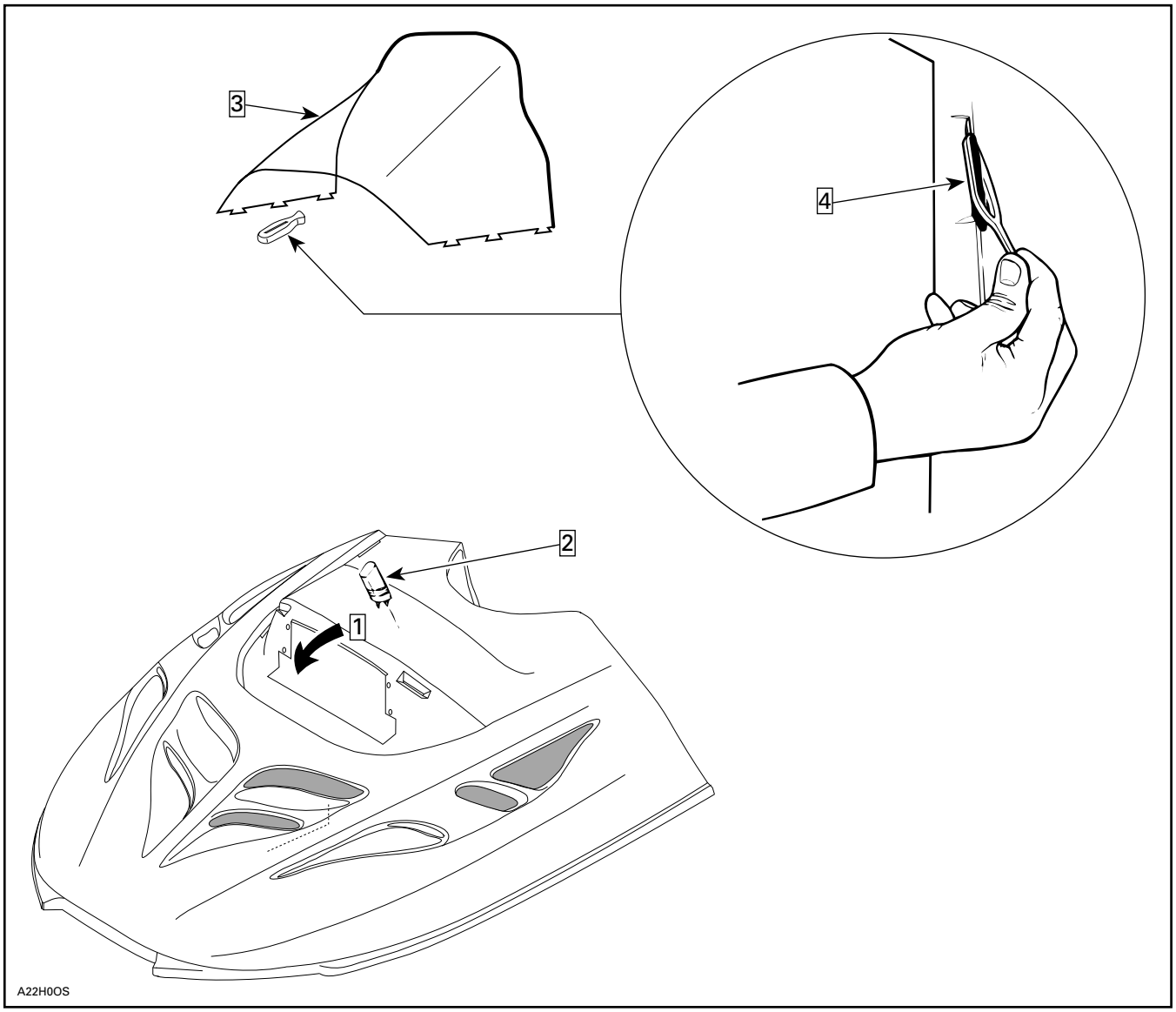
Slacken throttle and brake handle housings.

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



Step 1 Torque to 26 N•m (19 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 (2). Seat tighten only, no deformation of rubber
A. Equal gap on each side (Both clamps)

Slightly pry out headlamp molding to insert windshield.



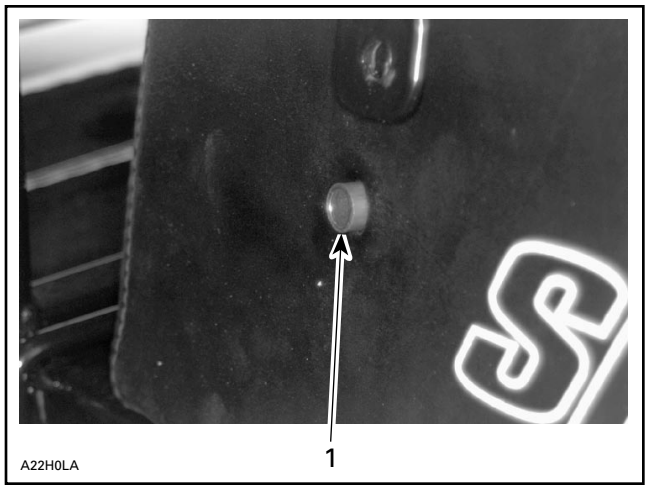
Step 1 Pry out headlamp molding
Step 2 Install support. Apply soap on tips to ease installation
Step 3 Install windshield
Step 4 Install latches (10)

PARTS INSTALLATION
BACKREST AND SEAT STRAP

Remove and discard screws retaining backrest to seat.

Remove backrest.

Install spacers (shrink pack) in rear seat holes of backrest.

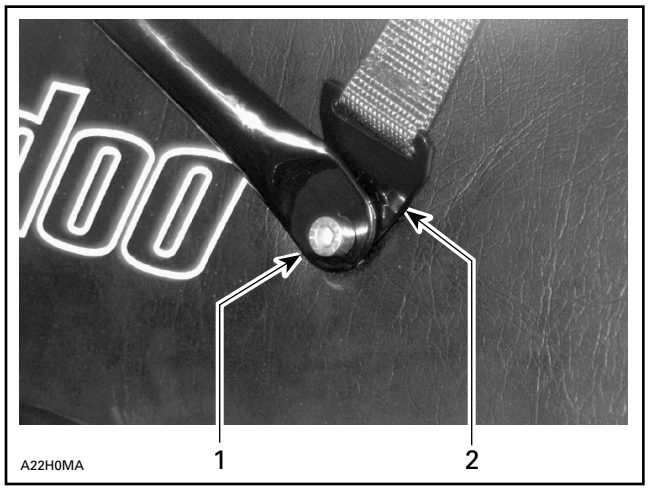


1. Spacer

Reinstall backrest in its proper position.

Secure rear arms of backrest using 2 M8 x 20 screws (shrink pack).

Install seat strap; it is retained by the front arms of the backrest. Secure with M8 x 20 screws included in the shrink pack.



1. Front arm of backrest
2. Seat strap

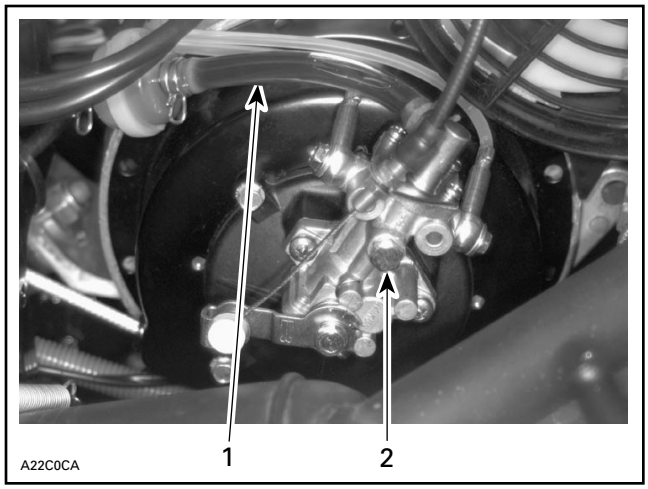
PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P/N 413 7082 00) before installing drive belt.

LIQUIDS
OIL INJECTION PUMP BLEEDING

To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER ROTAX Injection Oil (P/N 413 8029 00) should be added to fuel for the first full filling of fuel tank.

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.



1. No air in main line
2. Bleeder screw

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

ADJUSTMENT
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. 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.

The dot (•) on right indicates changes from 1995 model.

MODEL			SKANDIK WT	
Engine Type			ROTAX 503	
Maximum HP RPM ①		± 100 RPM	6500	•
Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	Not applicable	
Carburetor Type			VM 32	
Main Jet			220	•
Needle Jet			159 O-0	
Pilot Jet			25	
Needle Identification– clip Position			6DH8-4	
Slide Cut-away			3.0	
Float Adjustment		mm (in)	23.9 (0.94)	
Air Screw Adjustment		± 1/32 turn	1.5	•
Idle Speed RPM		RPM	1500-1800	
Gas Grade/Octane Number		(R + M)/2	Regular Unleaded/87	
Gas/Oil Ratio			Oil Injection	
Ignition Timing BTDC ②		mm (in)	1.66 (.065)	•
Trigger Coil Air-Gap		mm (in)	0.45 - 0.55 (.018 -.022)	
Gear Ratio			1st gear: 1:3.27 2nd gear: 1:2.07	•
Engagement Speed		± 100 RPM	2900	•
Drive Pulley Calibration Screw Position			3	•
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	32.75 (1-9/32)	
Offset	X	± 0.4 mm (± 1/64 in)	36.25 (1-27/64)	
	Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)	
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
	Force ⑤	kg (lbf)	6.8 (15)	
Driven Pulley Preload			5.7 to 7.1 (12.5 to 15.6)	•
Drive Chain Tension			Not applicable	
Track Adjustment	Deflection	mm (in)	40 to 45 (1.5 to 1.7)	•
	Force	kg (lbf)	7.3 (16.1)	

①Engine speed at which maximum power is achieved.

②At 6000 RPM (engine cold) with headlamp turned on.

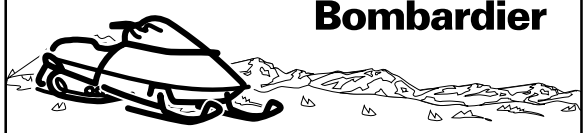
③Force applied midway between pulleys to obtain specified deflection.

Please route to:

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier



SNOWMOBILES

D

PREDELIVERY Bulletin

No. **96-7**

Date: September 5, 1995

SUBJECT: Predelivery Procedure

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United States: Formula Z	1090/1091	ALL
1996	Sweden: Formula Z	1092	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 Inc. 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, it may have some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier Inc. 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 return a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook* and video.

TABLE OF CONTENTS

◆ WARNING

Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, lock 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.

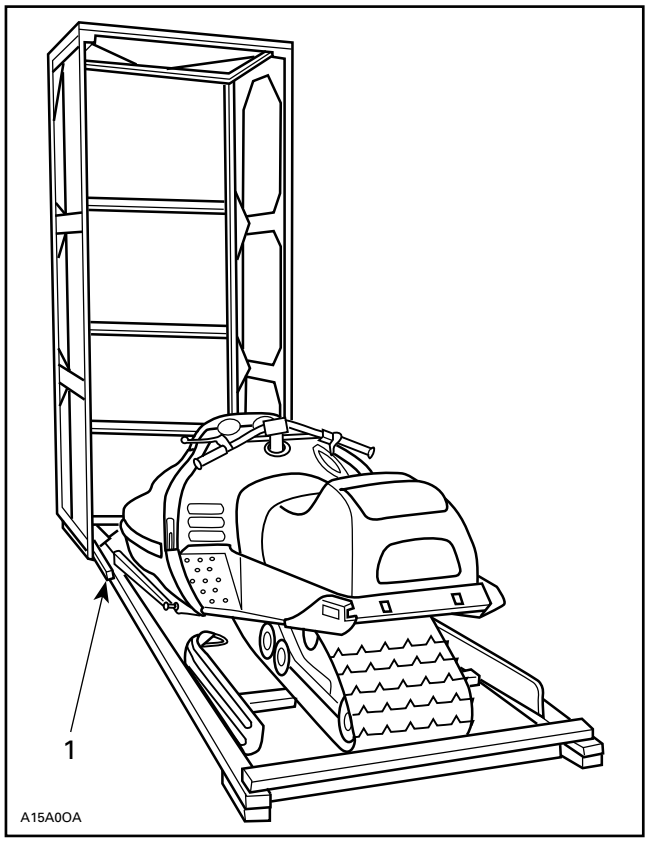
▼ CAUTION

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

Unscrew all screws retaining cover to crate base.

Notch in crate base is at front.

Tip cover over front of vehicle.



1. Notch

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

From underneath tunnel, loosen 4 nuts retaining seat then slowly pull out metal strip retaining windshield.

▼ CAUTION

Failure to lift seat might result in leatherette damage.

Retighten nuts of seat.

▼ CAUTION

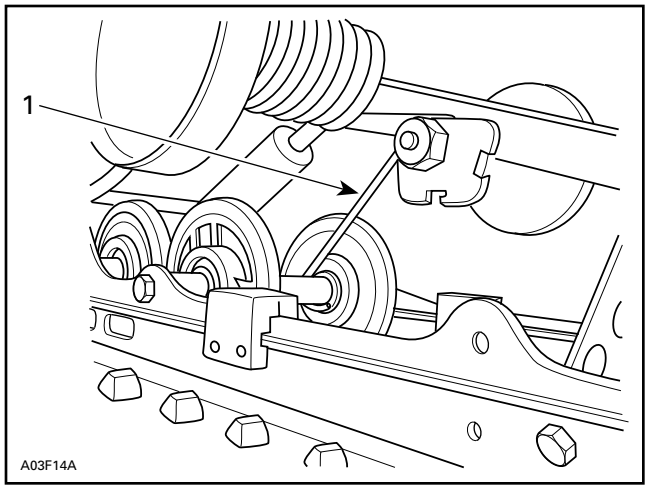
Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

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

Remove vehicle from base.

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

Remove hook from rear portion of rear suspension.

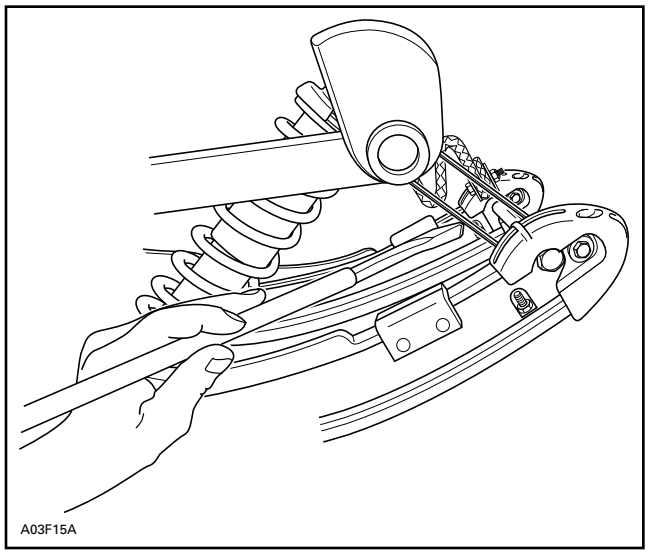


1. Hook

Using a long flat chisel such as Snap-On® PPC820LA cut shipping strap that collapses front portion of rear suspension.

◆ WARNING

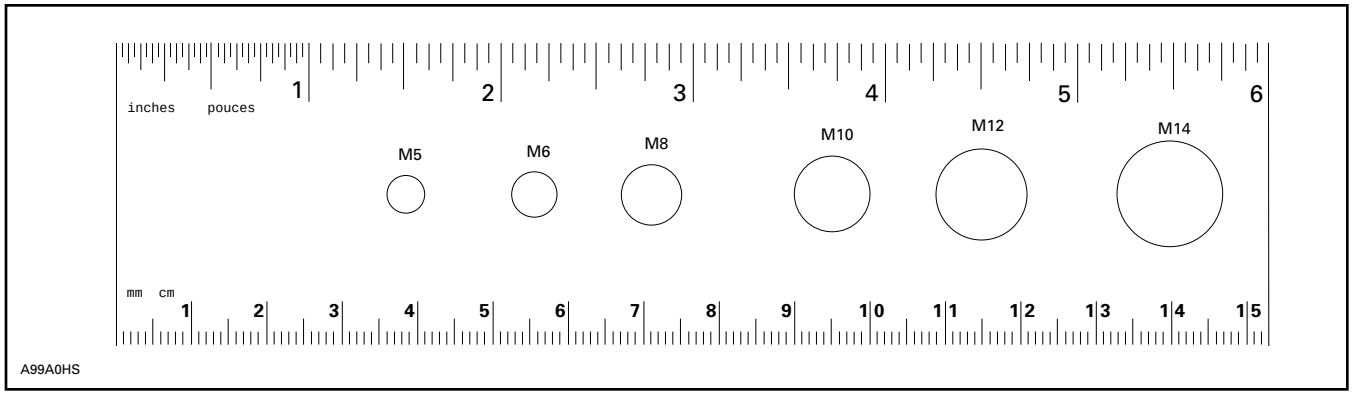
Failure to use this method ofstrap removal could result in personal injury.



◆ WARNING

Shipping strap must be cut andhook removed to have snowmobile suspension operational.

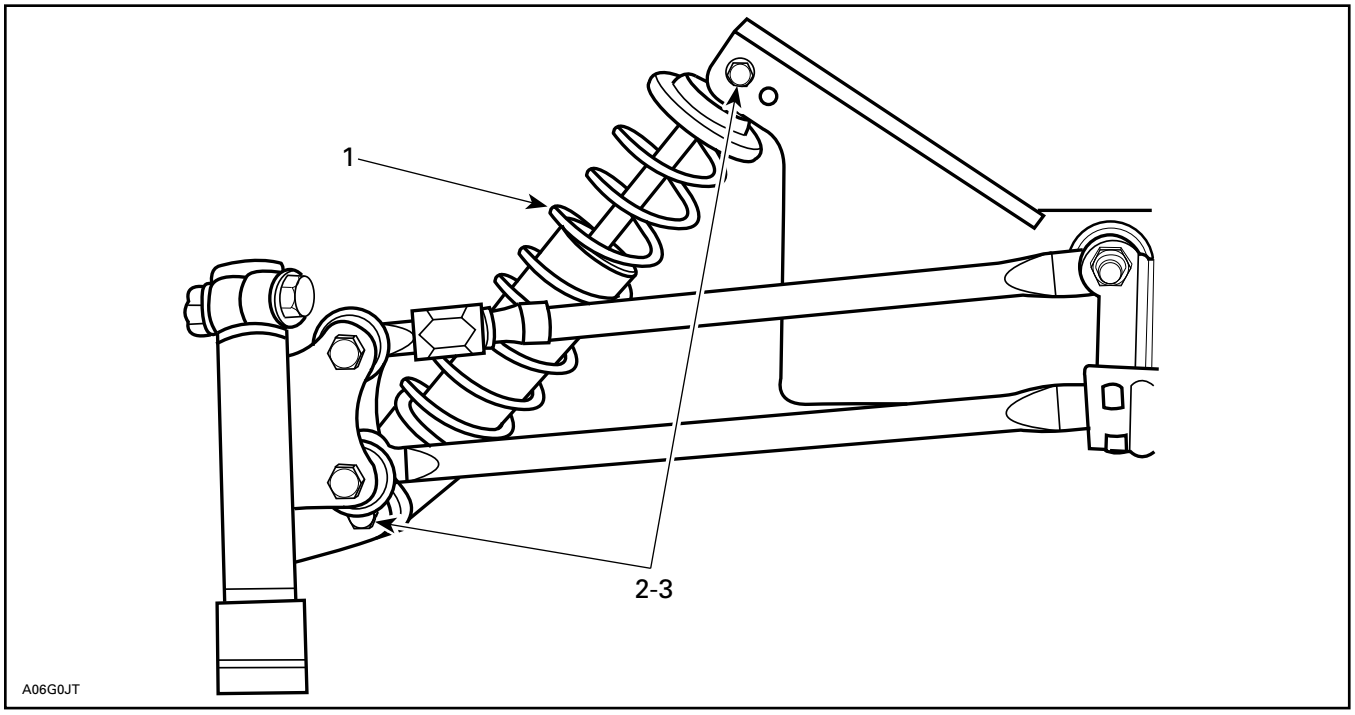
NOTE: This rule can be helpful to identify fastener length or size.



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

Lift front of vehicle and block safely. Secure shock absorber to suspension with its adjuster ring at the bottom.

NOTE: Position bolt heads toward front.



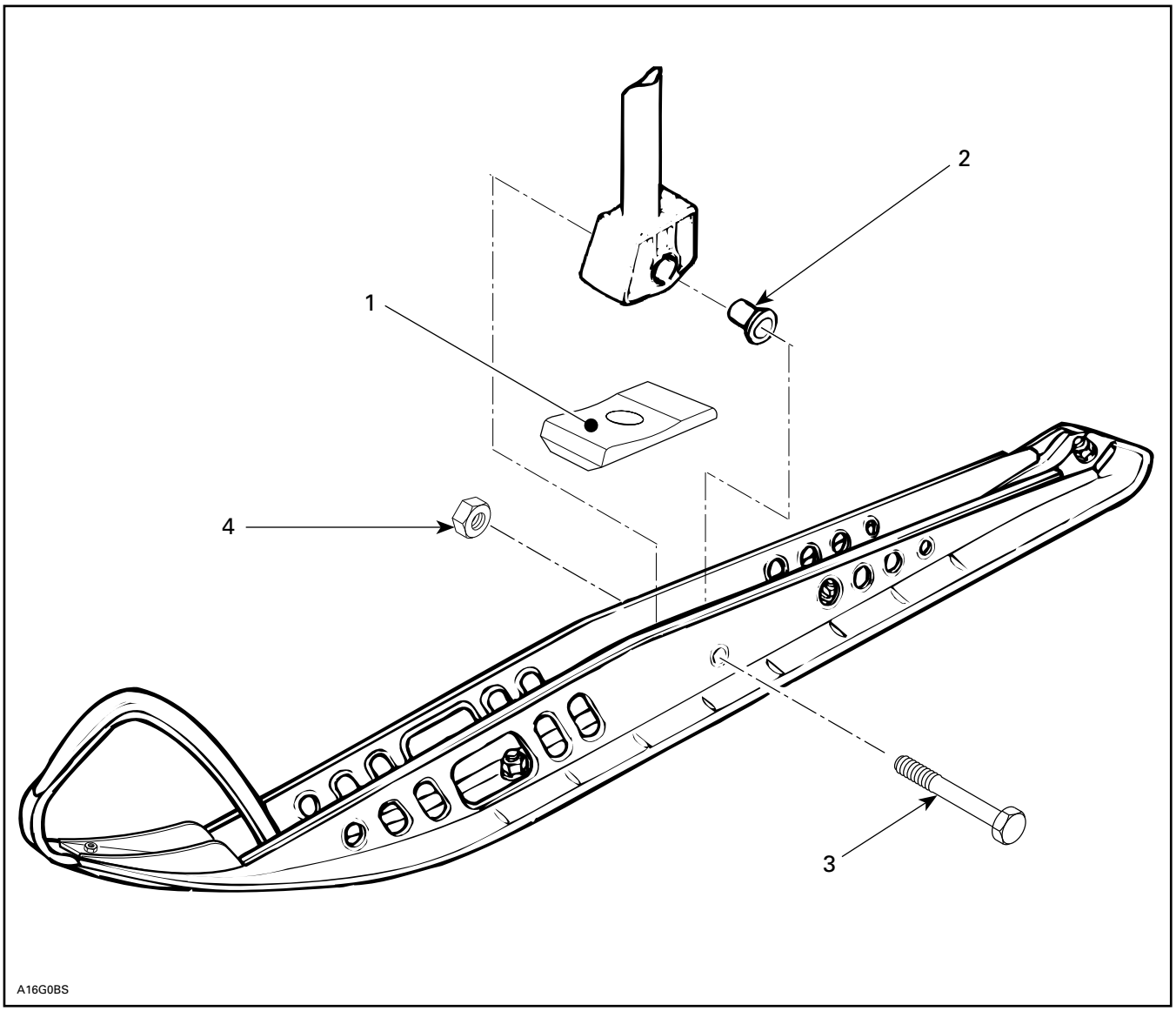
TYPICAL - RIGHT SIDE SHOWN

1. *Shock absorber (engine compartment)*
2. *M10 x 1.5 x 55 bolt (on suspension)*
3. *M10 x 1.5 nut (section 4). Torque to 48 N•m (35 lbf•ft)*

Install skis on vehicle.

NOTE: Make sure that slider cushions are still in ski leg.

Replace vehicle on ground.



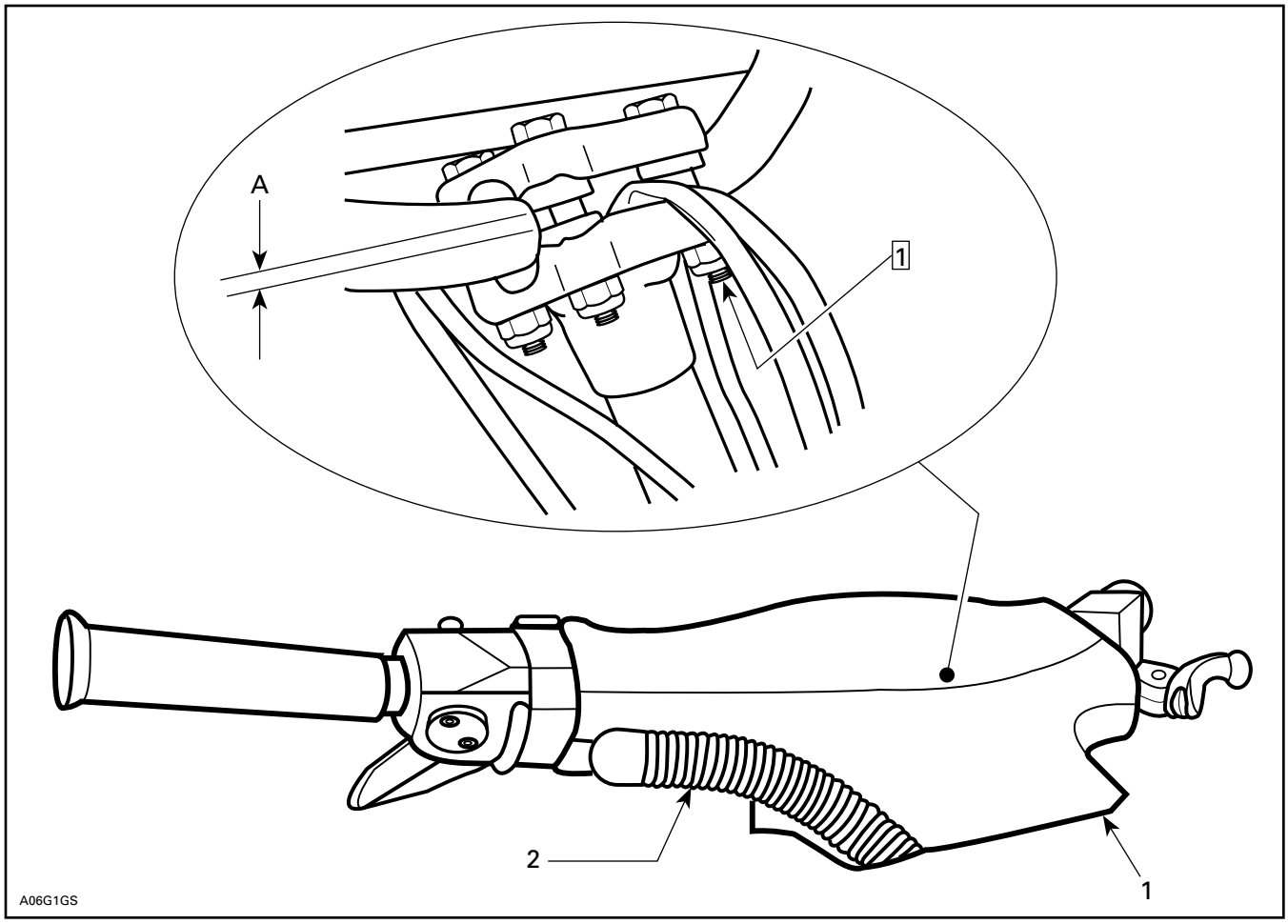
LEFT SIDE SHOWN

1. *Stop bounding (section 8). "AVANT" mention towards front*
2. *Slider cushion (ski leg)*
3. *M12 bolt (ski leg)*
4. *M12 nut (section 8). Tighten until ski moves up and down with a slight resistance*

Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).

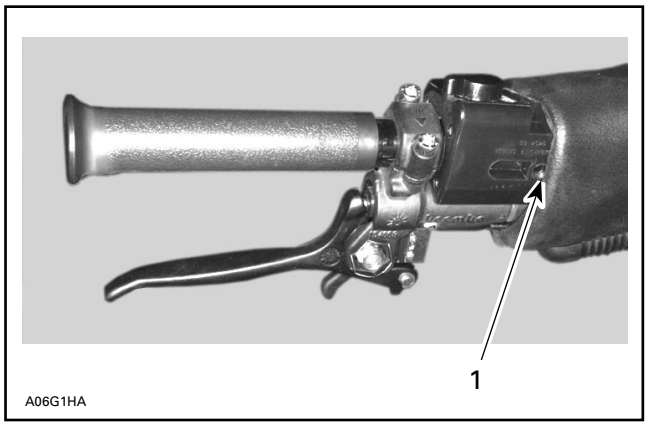
Slacken throttle and brake handle housings.

Install steering pad.

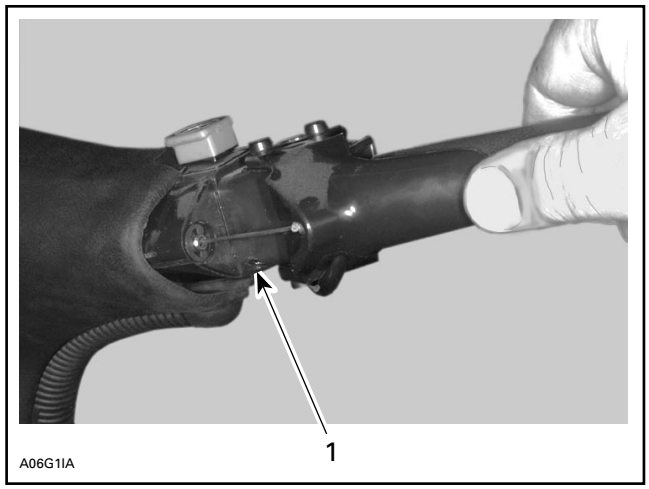


Step 1 Torque nuts to 26 N•m (19 lbf•ft)
1. Steering pad (engine compartment)
2. Keyway (section 5). Use liquid soap to ease installation
A. Equal gap each side (both clamps)

Adjust then tighten throttle and brake handle housings.

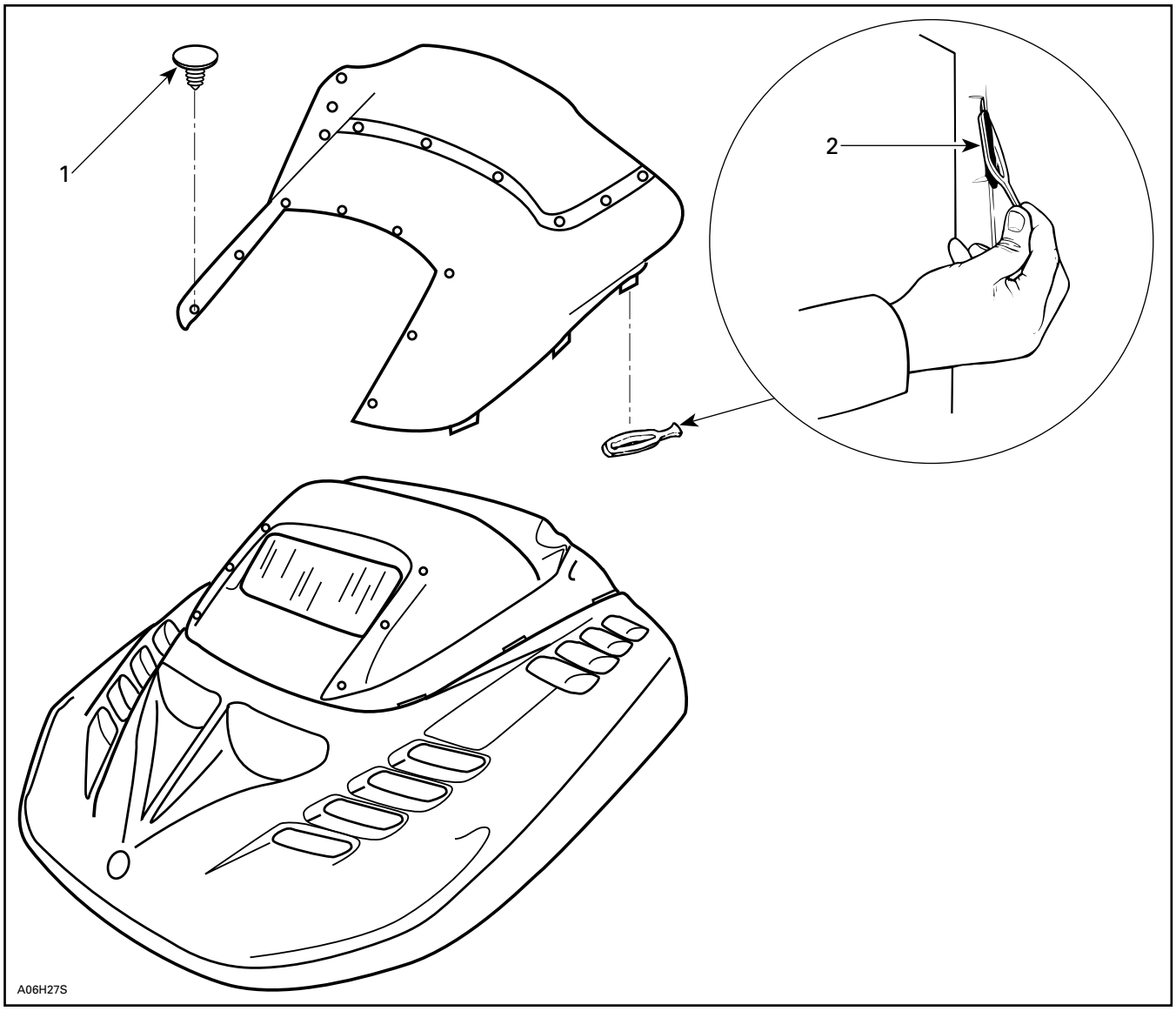


BRAKE HANDLE HOUSING
1. Tighten set screw to 2 N•m (18 lbf•in)



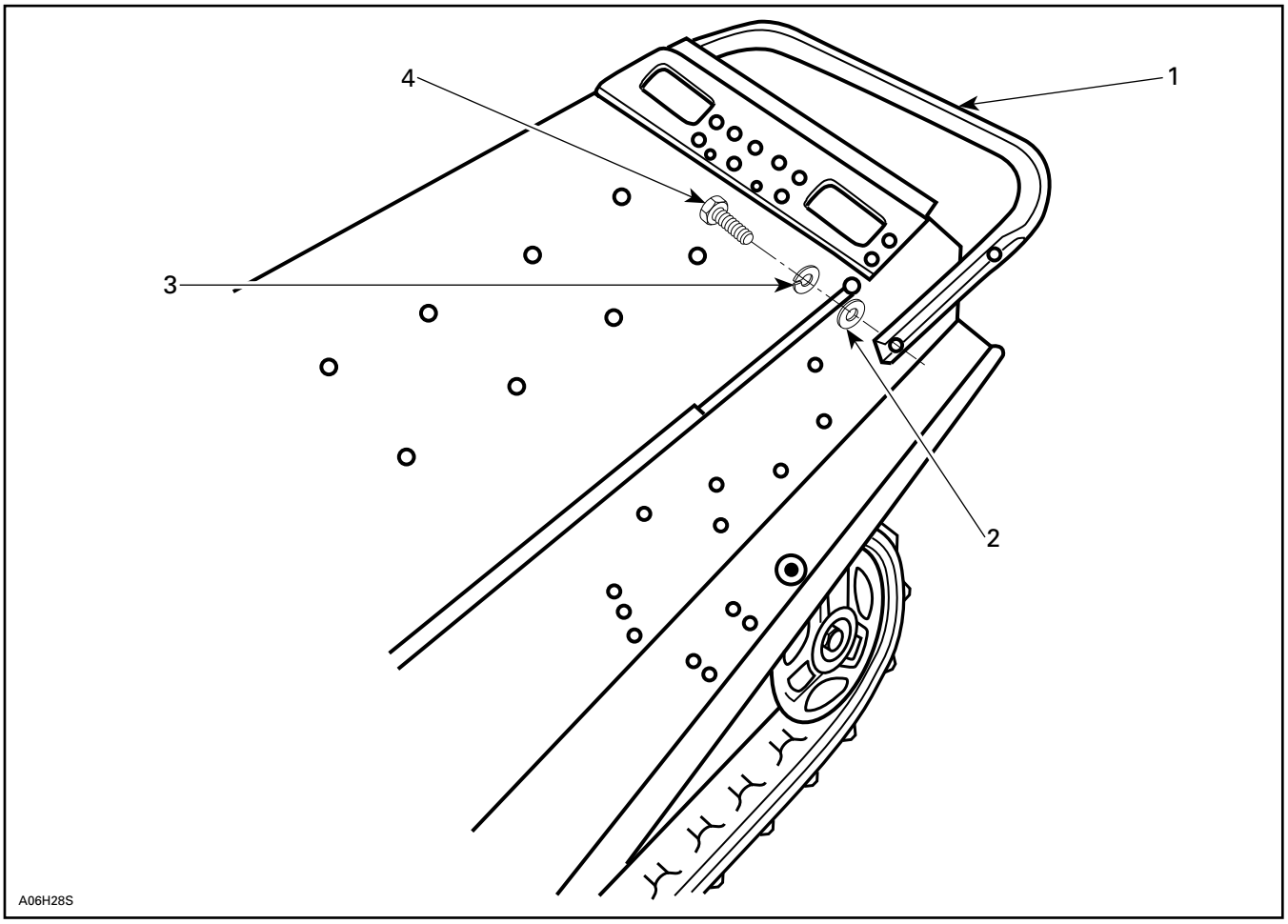
THROTTLE HANDLE HOUSING
1. Tighten set screw to 2 N•m (18 lbf•in)

Install windshield on hood.



1. Dart (section 6)
2. Latch (section 6)

Install rear bumper to chassis.

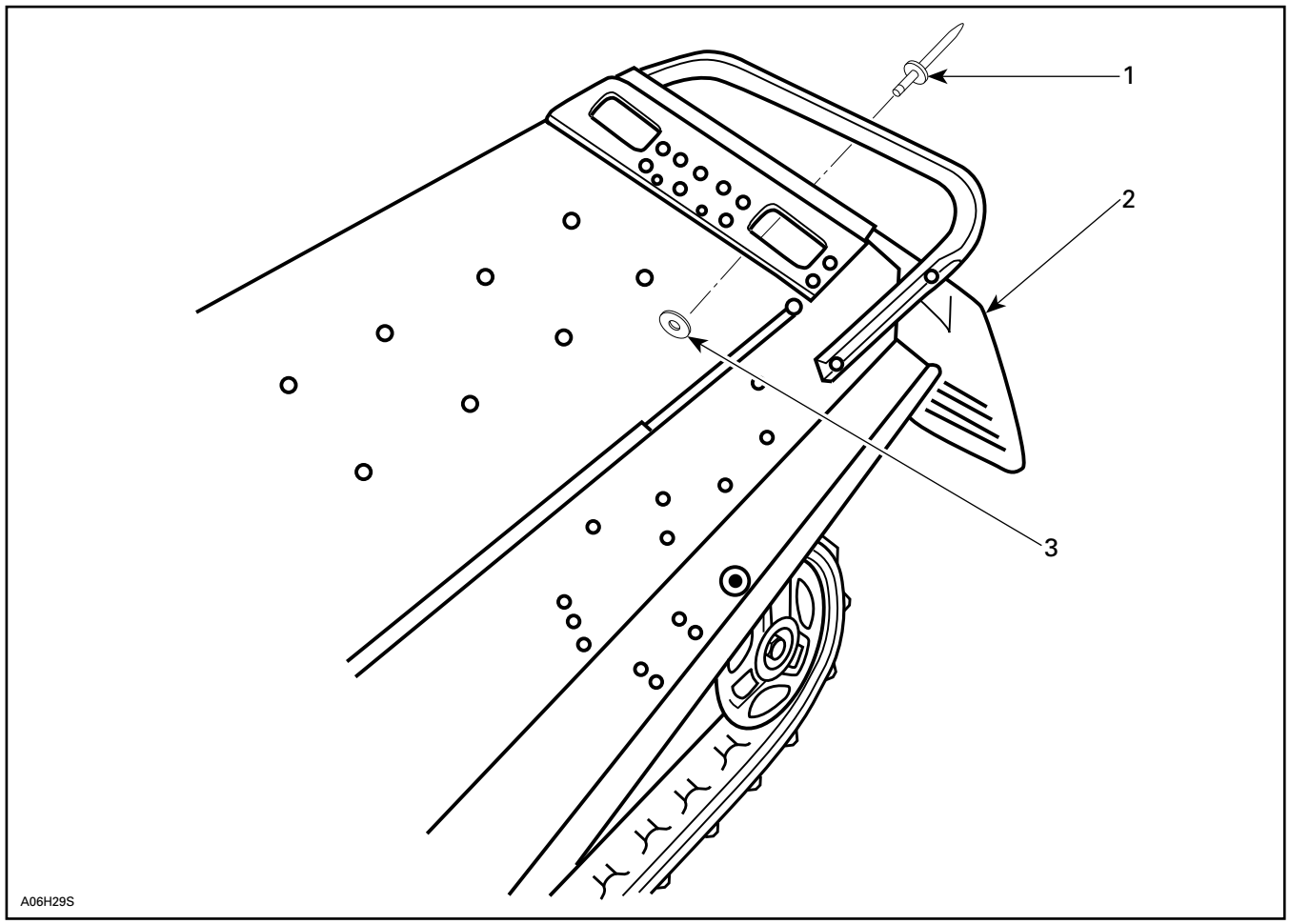


TYPICAL

1. *Rear bumper (in engine compartment)*
2. *Washer (section 1)*
3. *Lock washer (section 1)*
4. *Screw M8 x 1.25 x 20 mm (section 1). Torque to 24 N•m (18 lbf•ft)*

Install snow guard to chassis.

NOTE: Place washers inside tunnel.

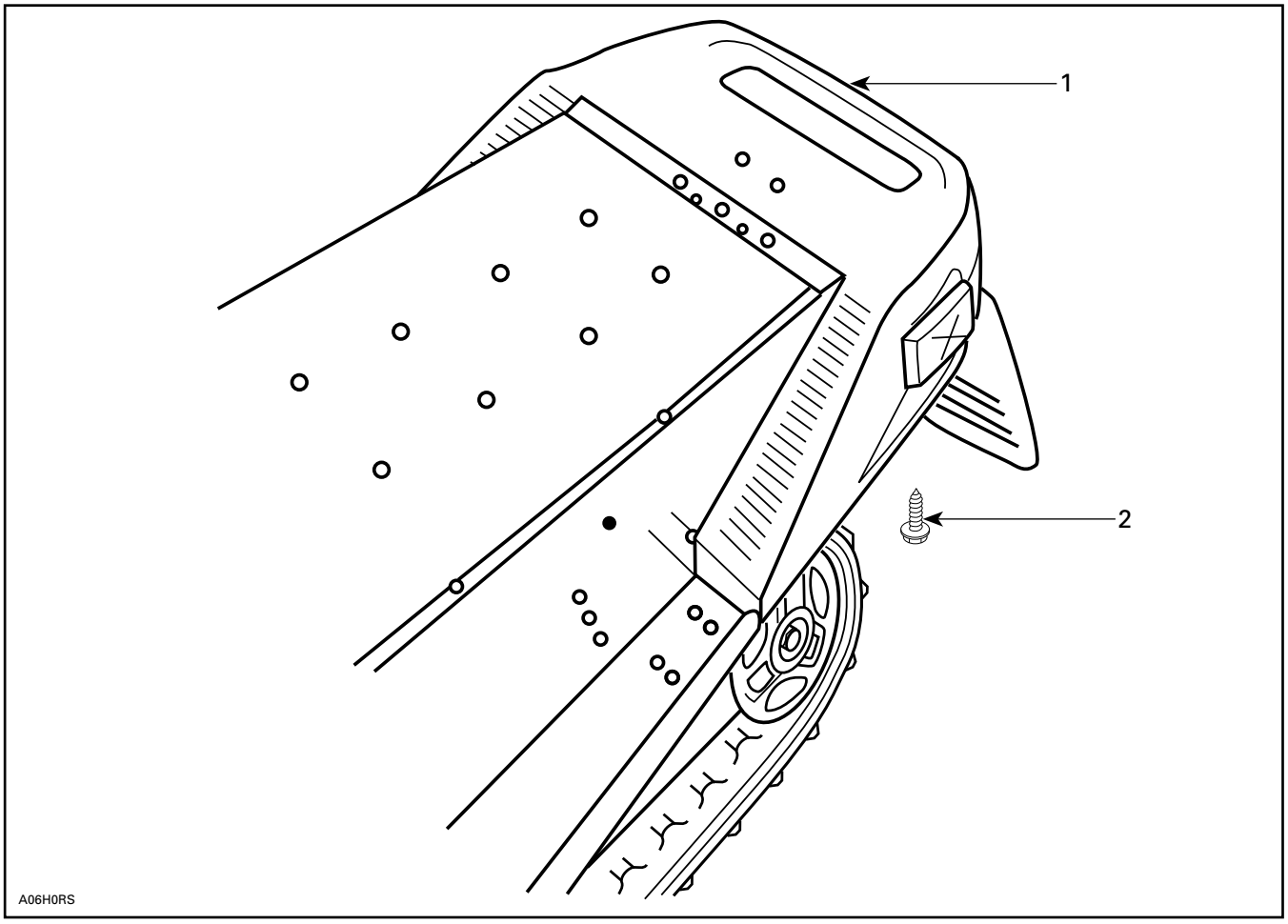


TYPICAL

1. *Rivet (section 2)*
2. *Snow guard (in engine compartment)*
3. *Washer (section 2)*

PARTS INSTALLATION
REAR MOLDING

Install rear molding to chassis.



TYPICAL

1. *Rear molding (on track)*
2. *Screw no. 12 x 3/4 in (section 3)*

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P/N 413 7082 00) before installing drive belt.

SUPPLEMENTAL OIL

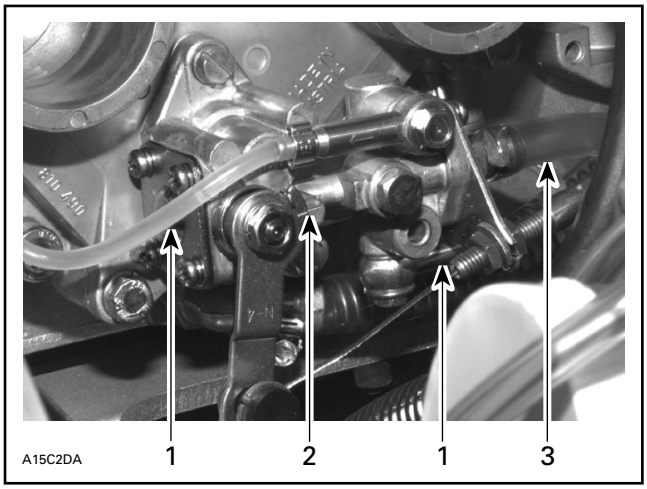
To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER ROTAX Injection Oil (P/N 413 8030 00) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

BLEEDING PROCEDURE

Remove air silencer and move carburetors aside.

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.

Check also for proper oil lever adjustment. Marks must aligned when throttle lever is activated just enough to take all cable play.

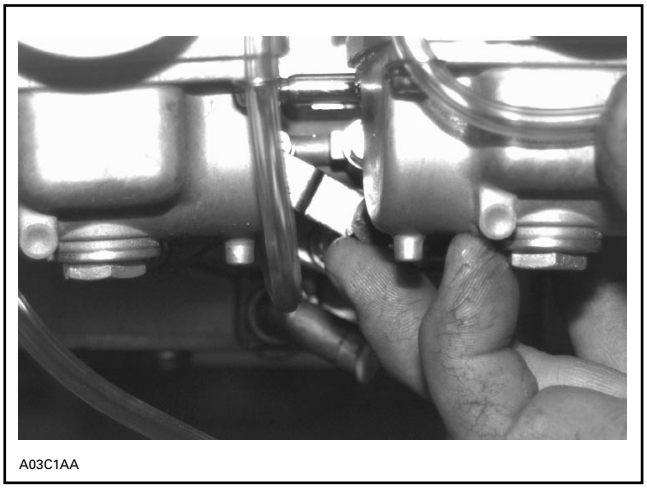


1. *Small oil line*
2. *Marks aligned*
3. *Main oil line*

Reinstall all parts except air silencer.

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

NOTE: If the air silencer has been reinstalled, make a J hook out of mechanical wire to lift the lever.



TYPICAL - ENGINE AT IDLE

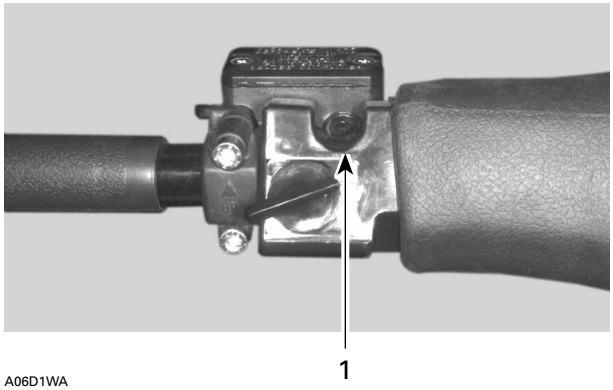
Reinstall air silencer.

LIQUIDS
BRAKE FLUID LEVEL

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

▼ CAUTION

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

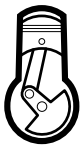
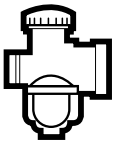


1. Fluid level window

ADJUSTMENT
TRACK

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

A dot (•) on right indicates changes from 1995 model.l

	MODEL			FORMULA Z
	Engine Type			583
	Maximum HP RPM ①		RPM	7800-8000
	Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	420 9245 02 140°/71°
	Carburetor Type			2 VM 40-83 •
	Main Jet			340
	Needle Jet			224 AA-2
	Pilot Jet			45
	Needle Identification– clip Position			7DL7-3
	Slide Cut-away			2.5
	Float Adjustment		± 1 mm (± .040 in)	18.1 (.71)
	Air Screw Adjustment		± 1/32 turn	1.5 •
	Idle Speed RPM		RPM	1800-2000
	Gas Grade/Octane Number		(R + M)/2	Regular Unleaded/87
	Gas/Oil Ratio			Oil Injection
	Ignition Timing BTDC ②		mm (in)	1.75 (.069)
	Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 -.057)
	Gear Ratio		teeth	25/44
	Engagement Speed		RPM	3700-3900
	Drive Pulley Calibration Screw Position			4
	Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)
	Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)
		Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
		Force ③	kg (lbf)	6.8 (15)
	Driven Pulley Preload		kg (lbf)	5.5 to 7.0 (12.1 to 15.4)
	Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation
	Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull

①Engine speed at which maximum power is achieved.
②At 6000 RPM (engine cold) with headlamp turned on.
③Force 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
CRT: Center
N.A.: Not applicable

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

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SNOWMOBILES

D

PREDELIVERY Bulletin

No. **96-8**

Date: September 15, 1995

SUBJECT:Predelivery Procedures

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United States: Summit 583/670 Formula SS	1064, 1065, 1061, 1062, 1078 and 1079	ALL
1996	Sweden: Summit 583/670	1066 and 1063	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 Inc. 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, it may have some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier Inc. 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 inquires 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.

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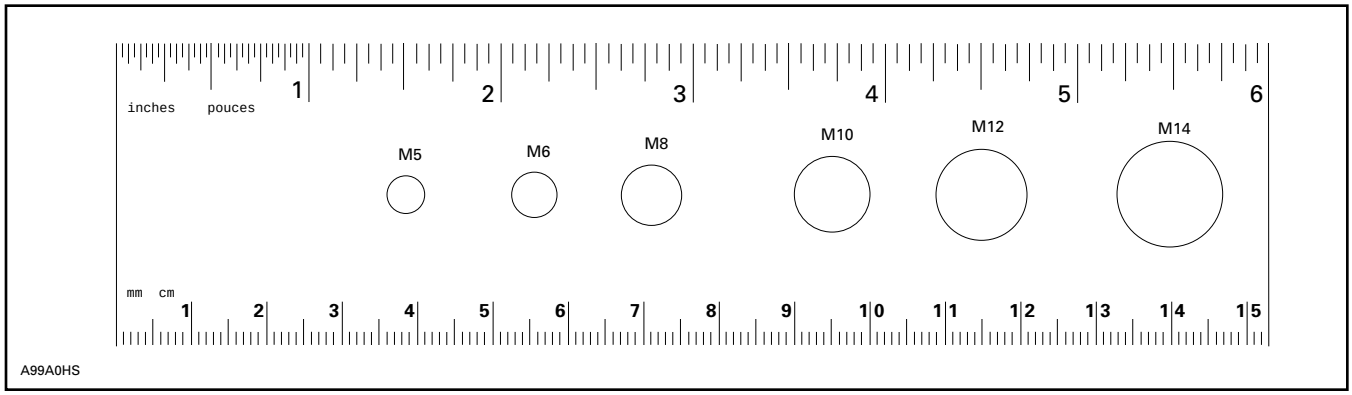
NOTE: This ruler can be helpful to identify fastener length or size.



◆ WARNING

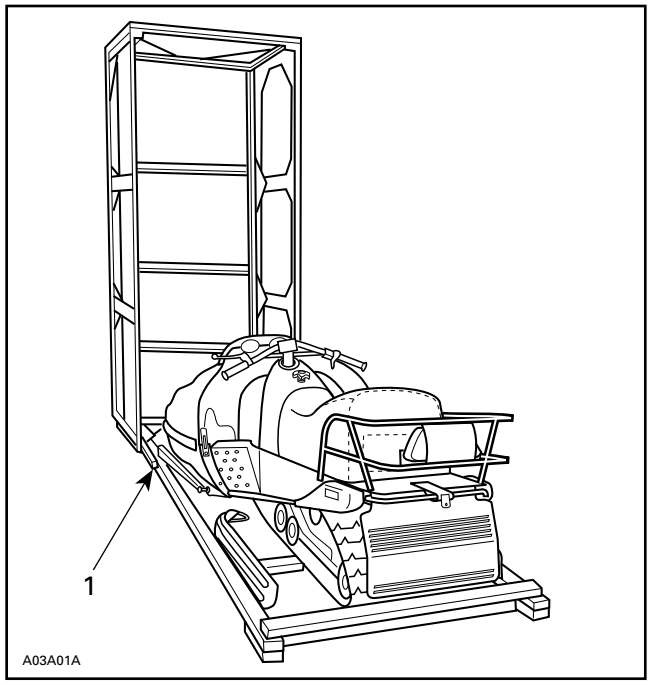
Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

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

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

Slowly pull out metal strip retaining windshield.

When this metal strip is under the seat (F-series models) loosen 2 or 4 nuts retaining the seat before pulling out the metal strip.

▼ CAUTION

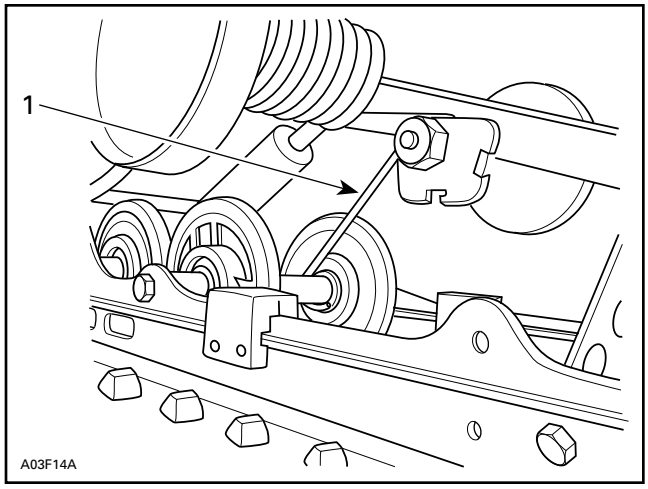
Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

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.

Remove hook from rear portion of rear suspension.

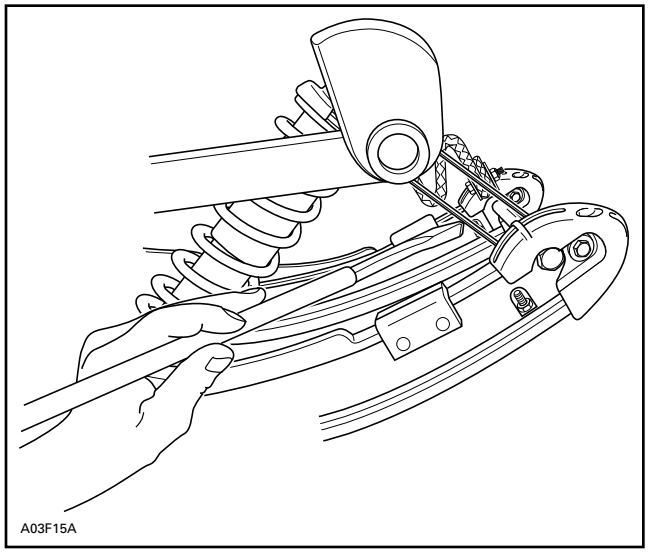


1. Hook

Using a long flat chisel such as Snap-On® PPC820LA cut shipping strap that collapses front portion of rear suspension.

◆ WARNING

Failure to use this method of strap removal could result in personal injury.

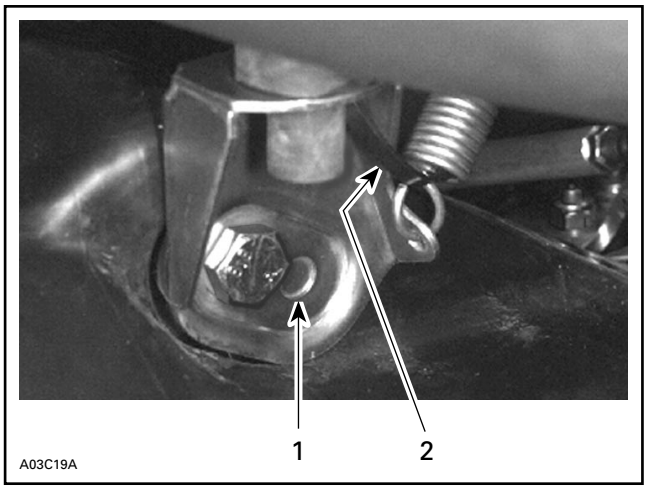


◆ WARNING

Shipping strap must be cut and hook removed to have snowmobile suspension operational.

Summit 583 and 670

Cut locking tie retaining exhaust spring to exhaust support.



1. Lug in recess
2. Locking tie

All Models

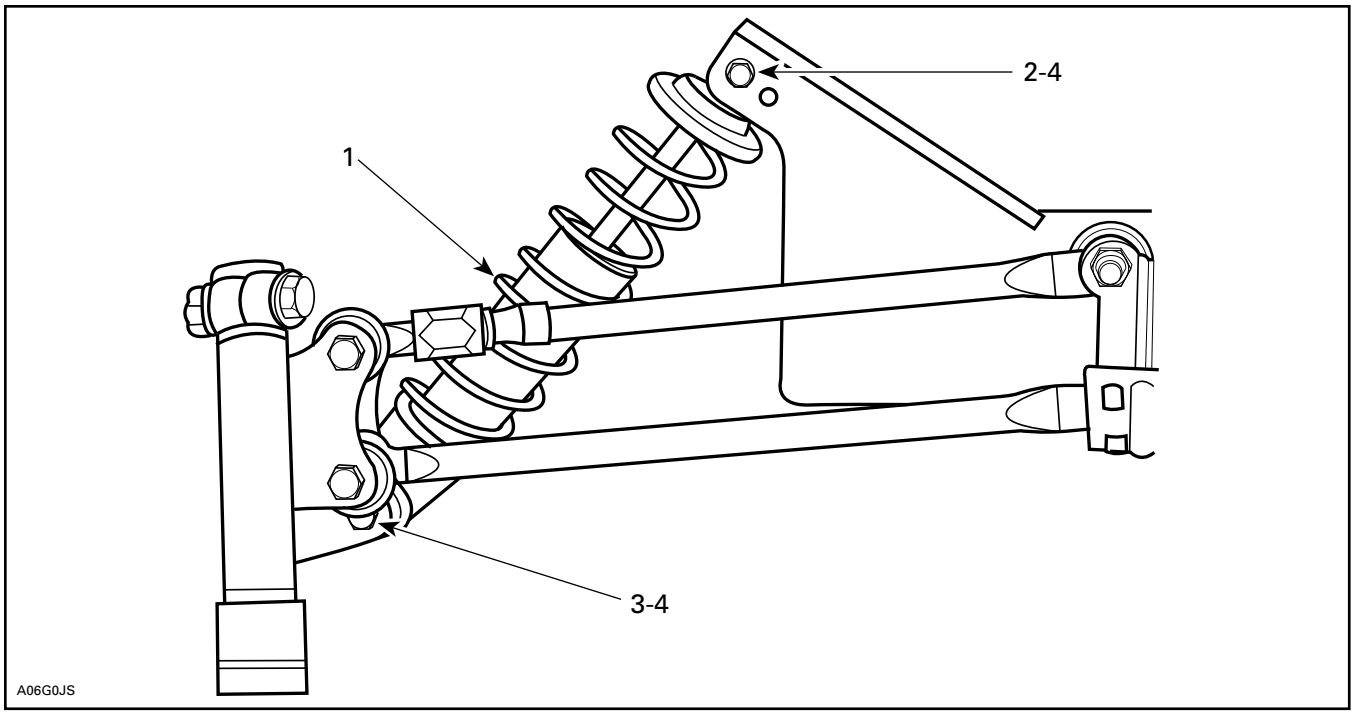
Remove and discard shipping brackets from suspension. Discard spring clips, keep screws.

Lift front of vehicle and block safely. Secure shock absorbers to suspension with their adjusting ring at bottom.

NOTE: Position screw heads toward front.

Summit 583 and 670

Properly position exhaust suppport on chassis making sure that its lug rests in chassis recess. Hook up exhaust spring.



TYPICAL - RH SIDE SHOWN

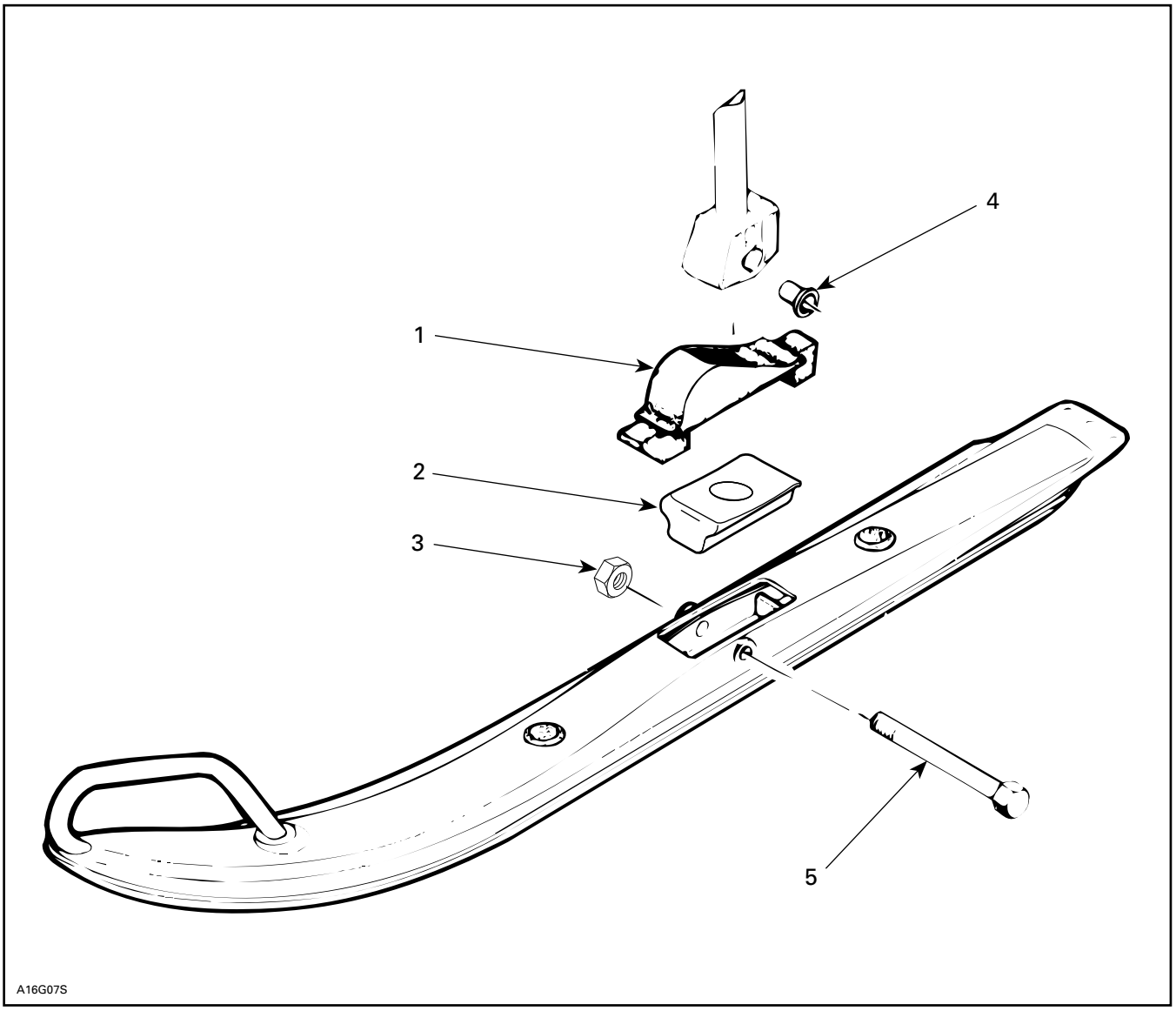
1. Shock absorber (2) (Engine compartment)
2. Screw M10 x 1.5 x 60 (2) (P/N 222 0060 65) (On suspension)
3. Screw M10 x 1.5 x 55 (2) (P/N 222 0055 65) (On suspension)
4. Nut M10 x 1.5 (2) (P/N 228 5010 45) (Section no 4). Torque to 48 N•m (35 lbf•ft)

Formula SS

Install skis on vehicle.

NOTE: Make sure that slider cushions are still in ski leg.

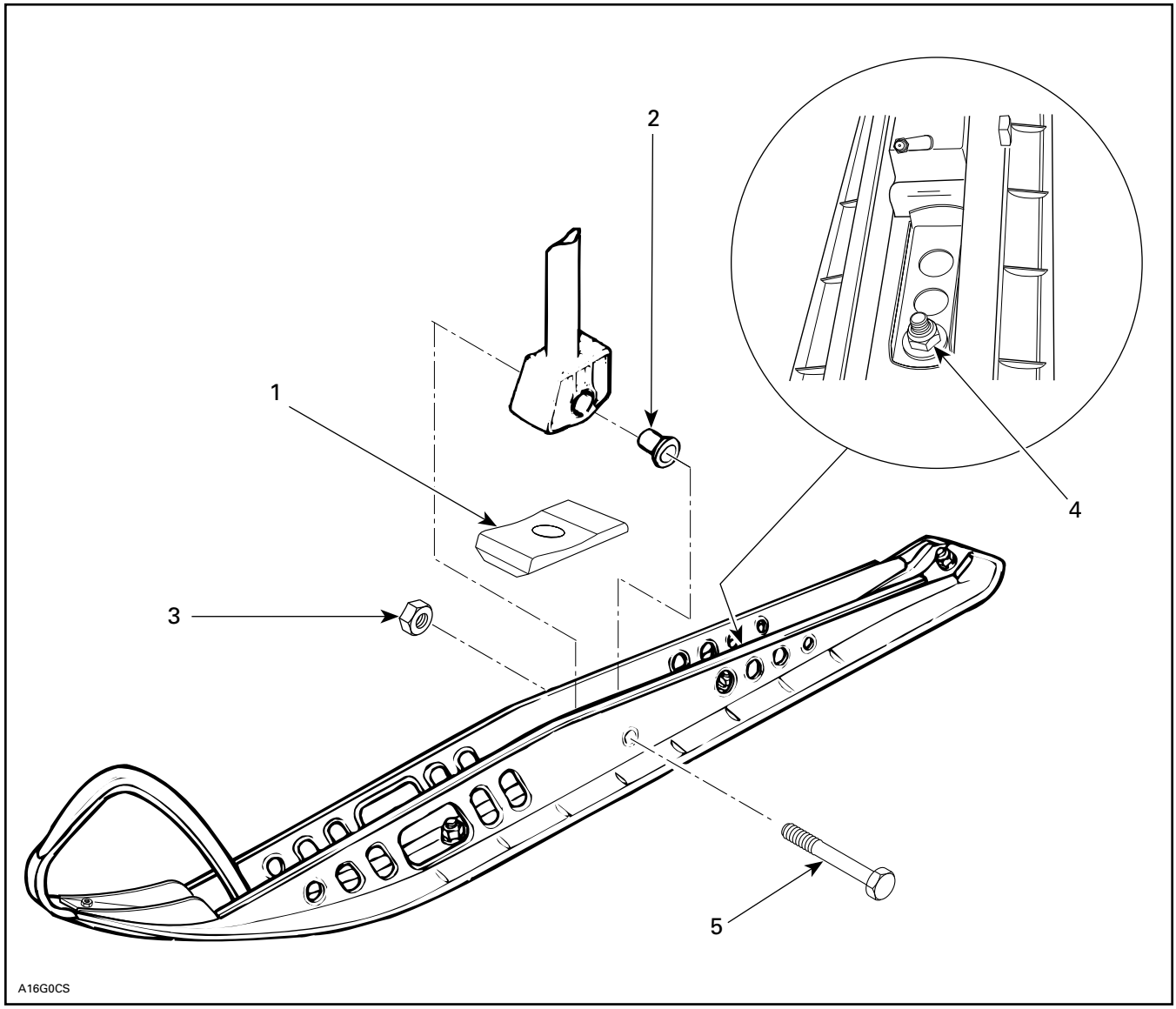
Replace vehicle on ground.



LEFT SIDE SHOWN

1. *Ski boot (2) (P/N 570 0222 00) (Section no. 7)*
2. *Stop bounding (2) (P/N 570 0531 00) (Section no. 7). Marked "Front"*
3. *Nut M12 x 1.75 (2) (P/N 228 5210 45) (Section no. 7). Torque to 40 N•m (30 lbf•ft)*
4. *Slider cushion (4) (Ski leg)*
5. *Bolt M12 (2) (Ski leg)*

Summit 583 and 670

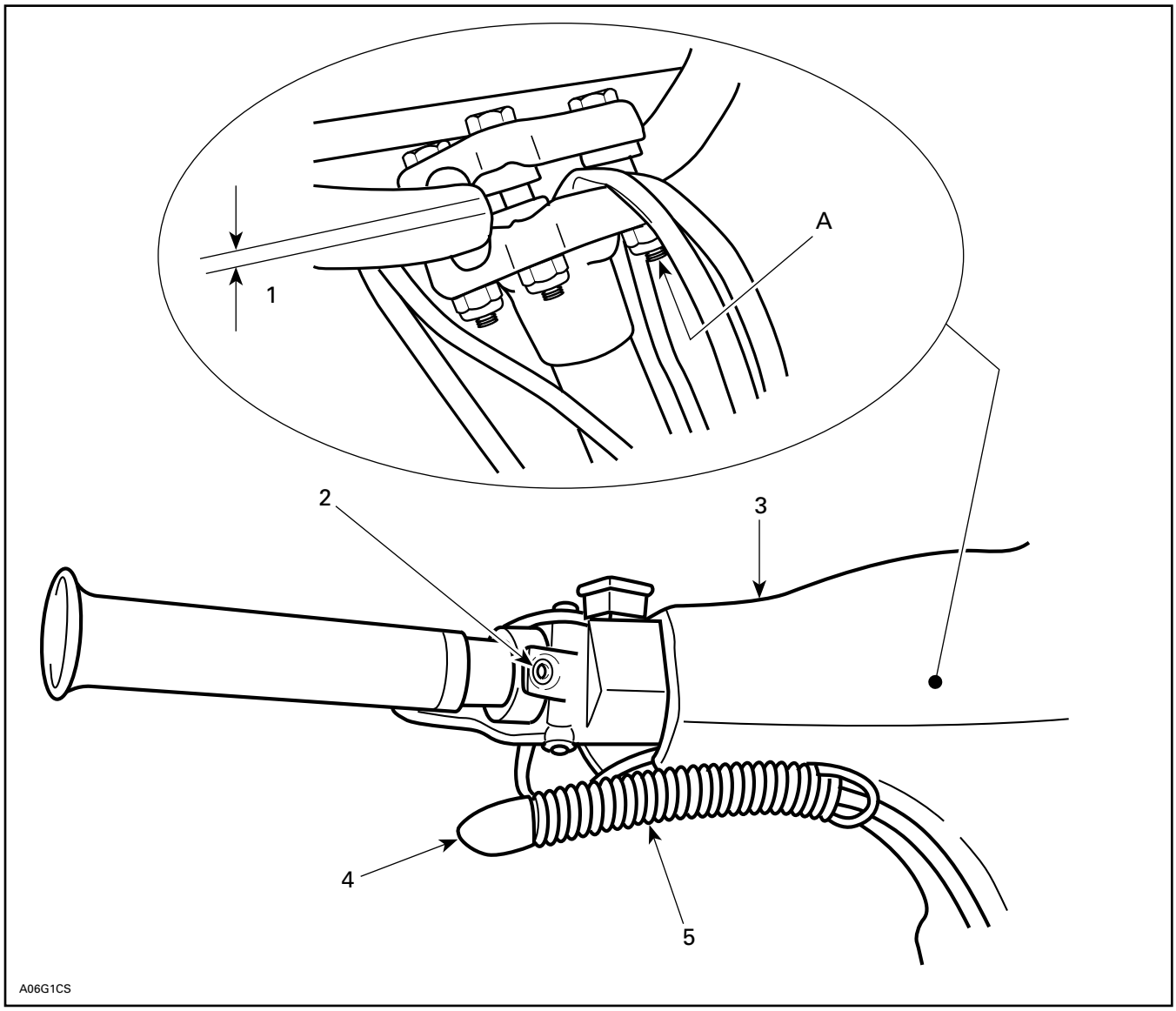


LEFT SIDE SHOWN

1. *Stop bounding (2) (P/N 570 0468 00) (Section no. 8)*
2. *Slider cushion (4) (Ski leg)*
3. *Nut M12 (2) (Section no. 8). Torque to 40 N•m (30 lbf•ft)*
4. *Slacken then adjust against stop bounding. Torque to 14 N•m (124 lbf•in)*
5. *Bolt M12 (2) (Ski leg)*

After ski installation, adjust stopper against stop bounding then tighten nut to 14 N•m (124 lbf•in). More preload on stop bounding will result in a more aggressive steering. Adjust according to driver's preferences.

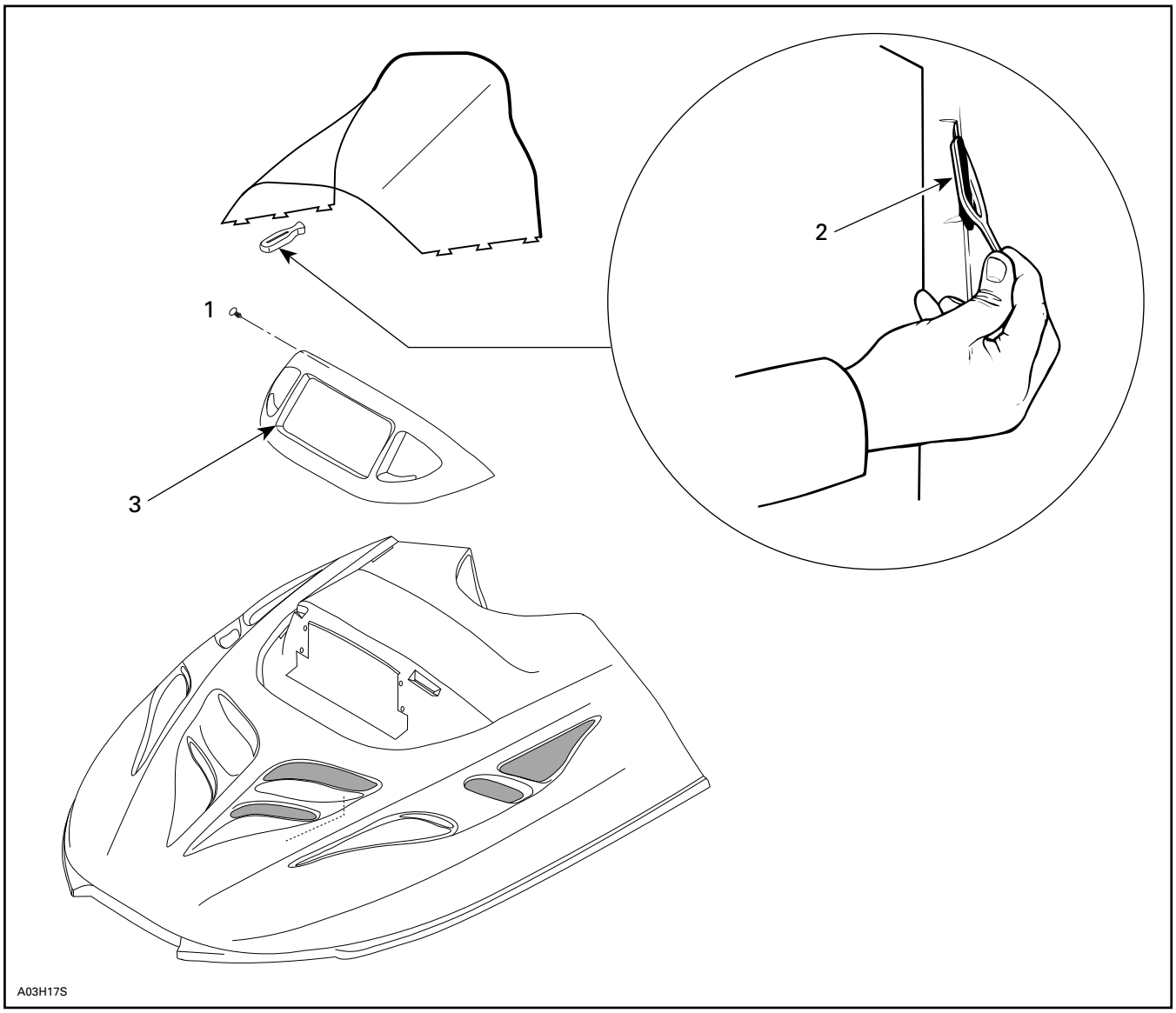
Formula SS, Summit 583 and 670



1. Equal gap each side (Both clamps)
2. Loosen Allen screw, fit housing with steering pad then slightly tighten Allen screw
3. Steering pad (Engine compartment)
4. Use liquid soap to ease installation
5. Keyway (2) (P/N 572 0724 00) (Section no. 5)
A. 26 N•m (19 lbf•ft)

Summit 583 and 670

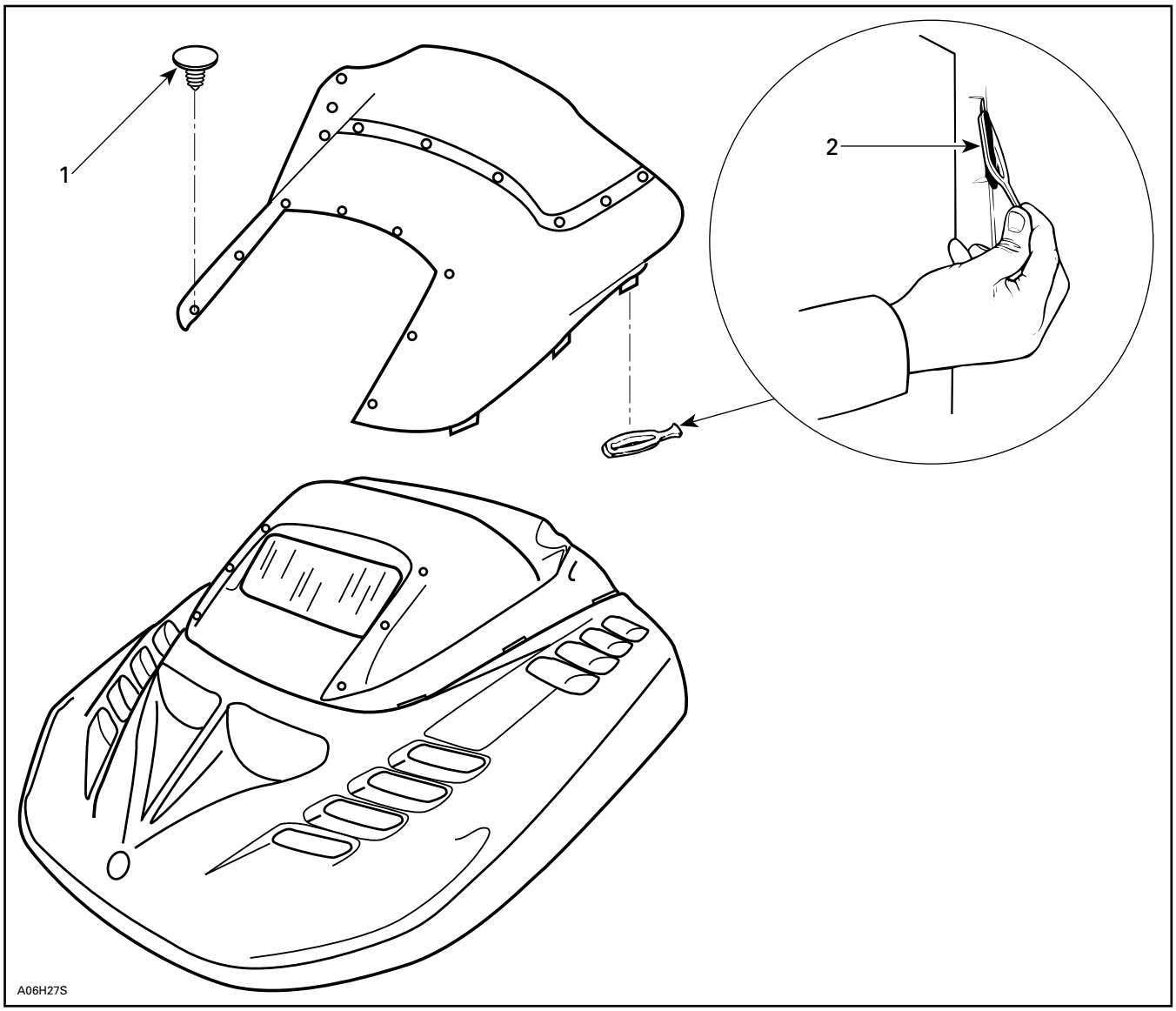
Install windshield on dashboard.



1. *Dart (1) (P/N 414 6443 00) (Section no. 6)*
2. *Latch (6) (P/N 570 0238 00) (Section no. 6)*
3. *Temporary remove headlamp molding for windshield installation*

Formula SS

Install windshield on dashboard.

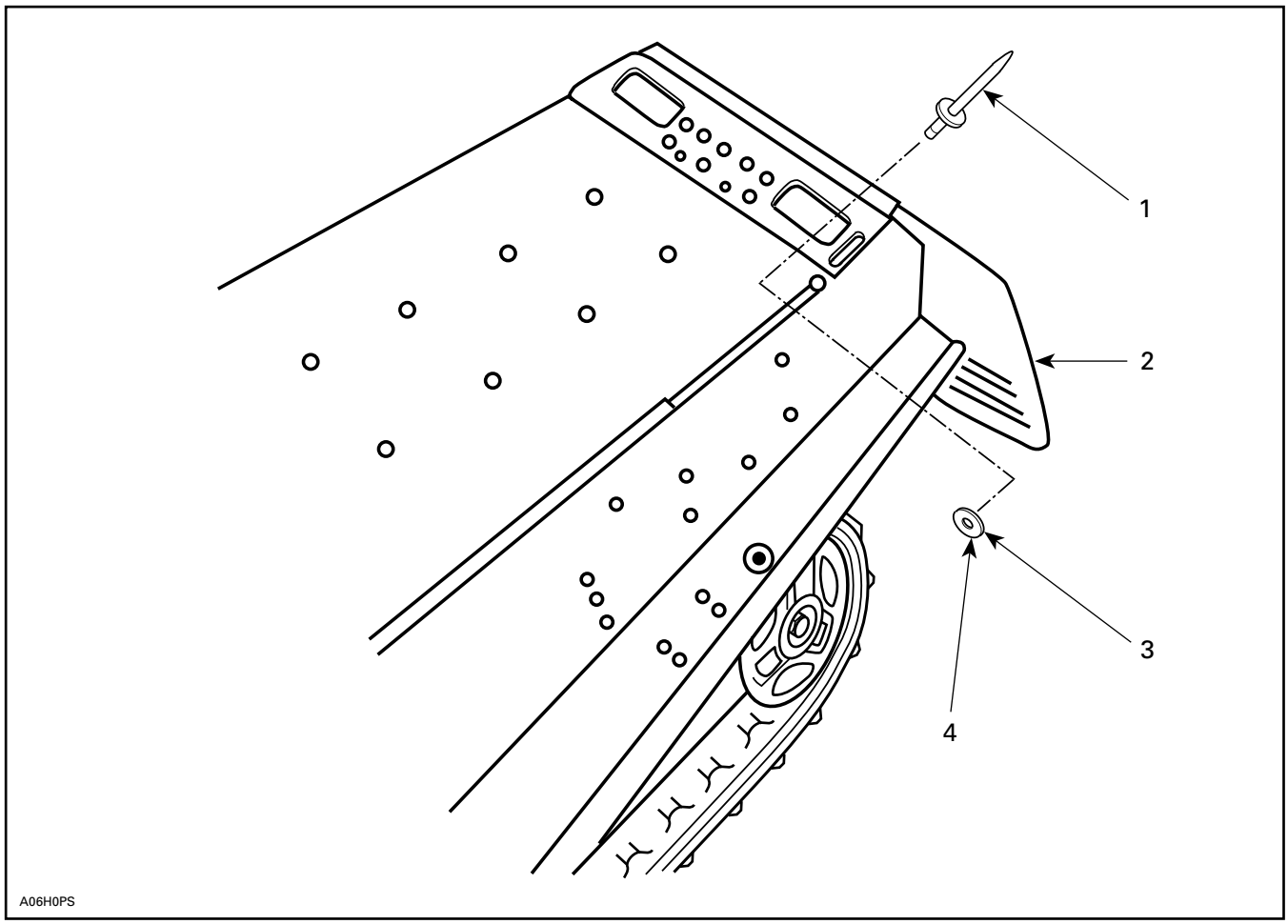


1. Dart (8) (P/N 414 9395 00) (Section no. 6)
2. Latch (6) (P/N 570 0238 00) (Section no. 6)

Formula SS

Install snow guard to chassis.

NOTE: Place washers inside tunnel.



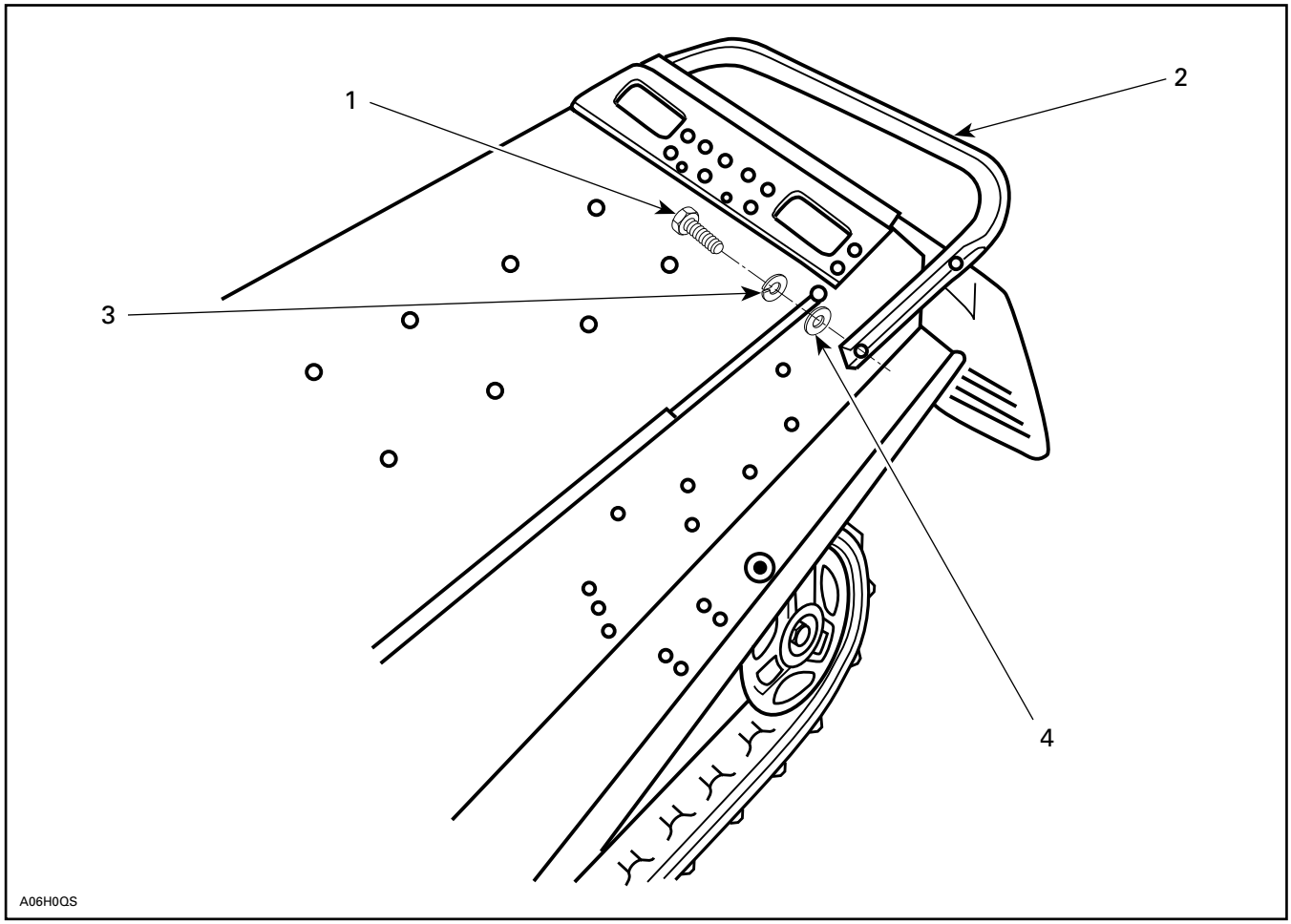
TYPICAL

1. *Rivet (4) (P/N 390 9080 00) (Section no. 2)*
2. *Snow guard (In engine compartment)*
3. *Washer (4) (P/N 517 2259 00) (Section no. 2)*
4. *Inside tunnel*

Formula SS

Install rear bumper to chassis as necessary.

NOTE: On some models, rear moldings are installed at factory. It is not necessary to remove them to install bumper. Slide bumper inside rear moldings and secure from inside of tunnel.



TYPICAL

1. *Screw M8 x 1.25 x 20 mm (4) (P?/?N 222 0820 65) (Section no. 1). Torque to 24 N•m (18 lbf•ft)*
2. *Rear bumper (In engine compartment)*
3. *Lock washer (4) (P?/?N 224 7811 40) (Section no. 1)*
4. *Washer (4) (P?/?N 224 0811 71) (Section no. 1)*

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P/N 413 7082 00) before installing drive belt.

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 8030 00) 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

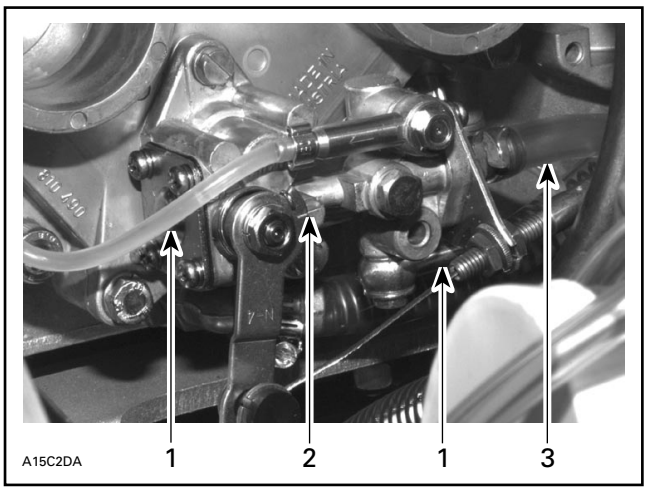
Summit 583 and 670

Remove air silencer and move carburetors aside.

All Models

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.

Check also for proper oil lever adjustment. Marks must aligned when throttle lever is activated just enough to take all cable play.



TYPICAL

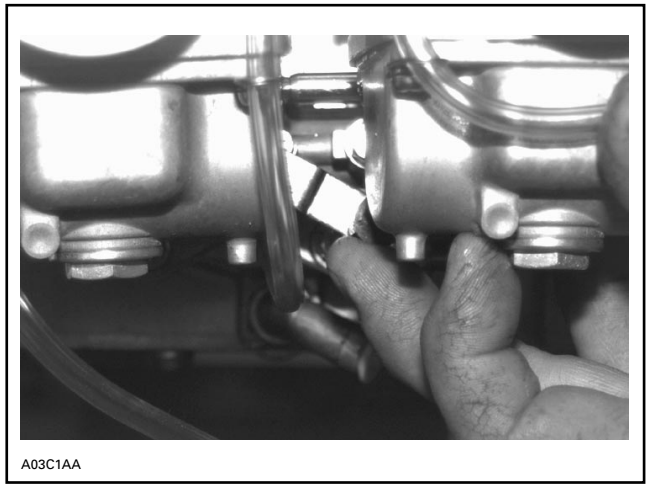
1. *Small oil line*
2. *Marks aligned*
3. *Main oil line*

Summit 583 and 670

Reinstall all parts except air silencer.

All Models

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

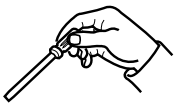


TYPICAL - ENGINE AT IDLE

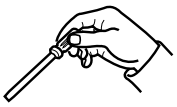
Summit 583 and 670

NOTE: If the air silencer has been reinstalled, make a J hook out of mechanical wire to lift the lever.

Reinstall air silencer.

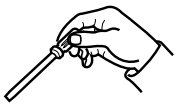


ADJUSTMENTS
DRIVE PULLEY

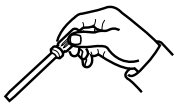


Summit 583 and 670

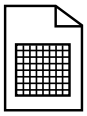
Adjust TRA drive pulley screw according to decal on belt guard.



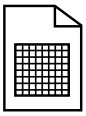
ADJUSTMENTS
TRACK



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. 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 1995 model.

MODELS			FORMULA SS	
Engine Type			670	
Maximum HP RPM ①		RPM	7600-7800	
Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	420 9245 00 144°/72°	
Carburetor Type		PDM/MAG	VM 40-79	•
Main Jet			360	
Needle Jet			224 AA-3	
Pilot Jet			50	•
Needle Identification– clip Position			7EDY1-3	
Slide Cut-away			2.5	
Float Adjustment		mm (in)	18.1 (.71)	
Air Screw Adjustment		± 1/32 turn	2-1/4	
Idle Speed		RPM	1800-2000	
Gas Grade/Octane Number		(R + M)/2	Regular Unleaded/87	
Gas/Oil Ratio			Oil Injection	
Ignition Timing BTDC ②		mm (in)	1.93 (.076)	
Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 -.057)	
Gear Ratio		teeth	26/44	
Engagement Speed		RPM	3800	•
Drive Pulley Calibration Screw Position			3	
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)	
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
	Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)	
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
	Force ③	kg (lbf)	6.8 (15)	
Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (12 to 15)	
Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull	

NOTE: See end of specifications for foot notes.

A dot (•) on right indicates changes from 1995 model.

MODELS			SUMMIT 583	
Engine Type			583	
Maximum HP RPM ①		RPM	7700-7900	•
Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	420 9245 09 135°/64°	
Carburetor Type			PTO VM 38-319 MAG VM 38-320	•
Main Jet			340	•
Needle Jet			480 Q-S	•
Pilot Jet			75	
Needle Identification– clip Position			6BGY15-2	•
Slide Cut-away			2.5	
Float Adjustment		mm (in)	19.6 (.77)	•
Air Screw Adjustment		± 1/16 turn	1.5	•
Idle Speed		RPM	1800-2000	
Gas Grade/Octane Number		(R + M)/2	Regular Unleaded/87	
Gas/Oil Ratio			Oil Injection	
Ignition Timing BTDC ②		mm (in)	1.75 (.069)	
Trigger Coil Air-Gap		mm (in)	.55-1.45 (.022-.057)	
Gear Ratio		teeth	22/44	•
Engagement Speed		RPM	4500	•
Drive Pulley Calibration Screw Position			See label on belt guard	
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)	
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
	Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)	
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
	Force ③	kg (lbf)	6.8 (15)	
Driven Pulley Preload		kg (lbf)	6.1 to 7.5 (13.4 to 16.5)	•
Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull	

NOTE: See end of specifications for foot notes.

A dot (•) on right indicates changes from 1995 model.

MODELS			SUMMIT 670	
Engine Type			670	
Maximum HP RPM ①		RPM	7600-7800	
Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	420 9245 00 144°/72°	
Carburetor Type			PTO VM 40-81 MAG VM 40-82	•
Main Jet			PTO 380 MAG 370	•
Needle Jet			224 AA-2	•
Pilot Jet			75	
Needle Identification– clip Position			7PDI1-3	•
Slide Cut-away			2.5	
Float Adjustment		mm (in)	19.6 (.77)	
Air Screw Adjustment		± 1/16 turn	1.5	•
Idle Speed		RPM	1800-2000	
Gas Grade/Octane Number		(R + M)/2	Regular Unleaded/87	
Gas/Oil Ratio			Oil Injection	
Ignition Timing BTDC ②		mm (in)	1.93 (.076)	
Trigger Coil Air-Gap		mm (in)	.55-1.45 (.022-.057)	
Gear Ratio		teeth	22/44	
Engagement Speed		RPM	3800-4000	
Drive Pulley Calibration Screw Position			See label on belt guard	
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)	
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
	Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)	
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
	Force ③	kg (lbf)	6.8 (15)	
Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (12 to 15)	
Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull	

NOTE: See end of specifications for foot notes.

①Engine speed pat which maximum power is achieved.
②At 6000 RPM (engine cold) with headlamp turned on.
③Force applied midway between pulleys to obtain specified deflection.
④H.A.C.: High Altitude Compensator.

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

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **96-9**

Date : October 3, 1995

SUBJECT : Predelivery Procedure

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United States : MX Z 440 / 583	1051 / 1052 1094 / 1095	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.

O NOTE : The information and components / system descriptions contained in this document are correct at the time of publication. Bombardier Inc. 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, it may have some differences between the manufactured product and the descriptions and / or specifications in this document. Bombardier Inc. reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

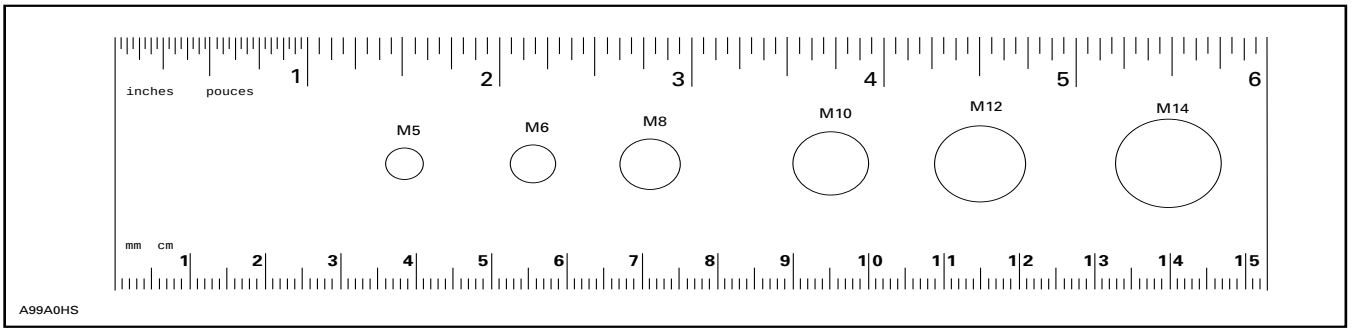
The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

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 return a customer signed copy. Make sure the customer receives the *Operator's Guide, Safety Handbook* and video.

CONTENTS

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

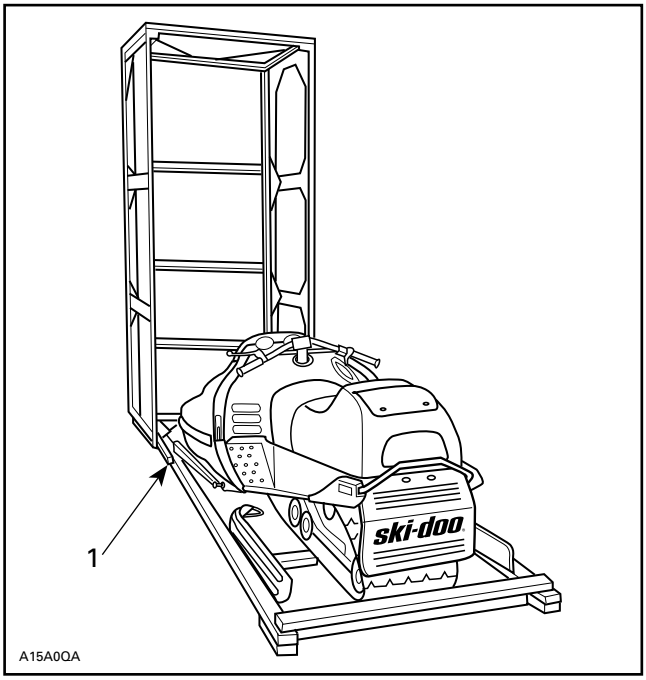


◆ WARNING : Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

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

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

Slowly pull out metal strip retaining windshield.

When this metal strip is under the seat loosen 2 or 4 nuts retaining the seat before pulling out the metal strip.

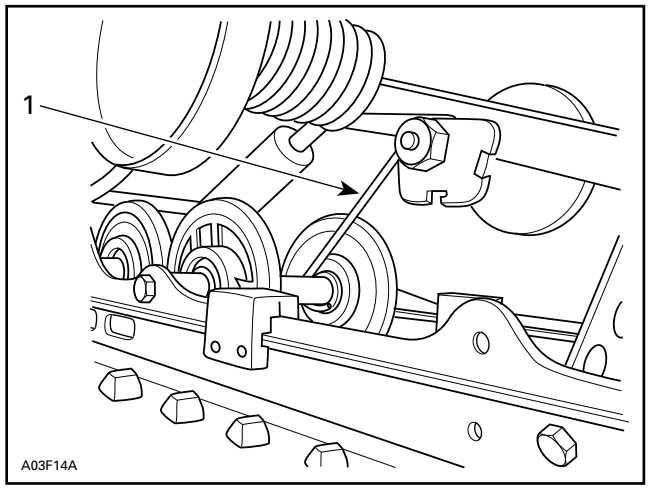
▼ CAUTION : Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

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.

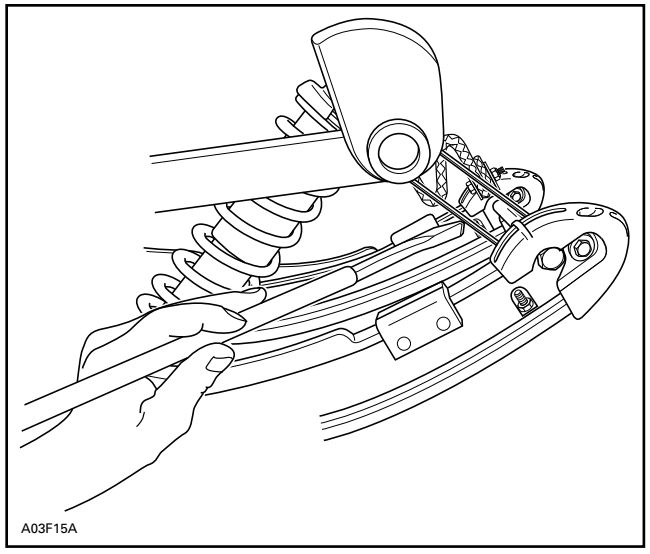
Remove hook from rear portion of rear suspension.



1. Hook

Using a long flat chisel such as Snap-On® PPC820LA cut shipping strap that collapses front portion of rear suspension.

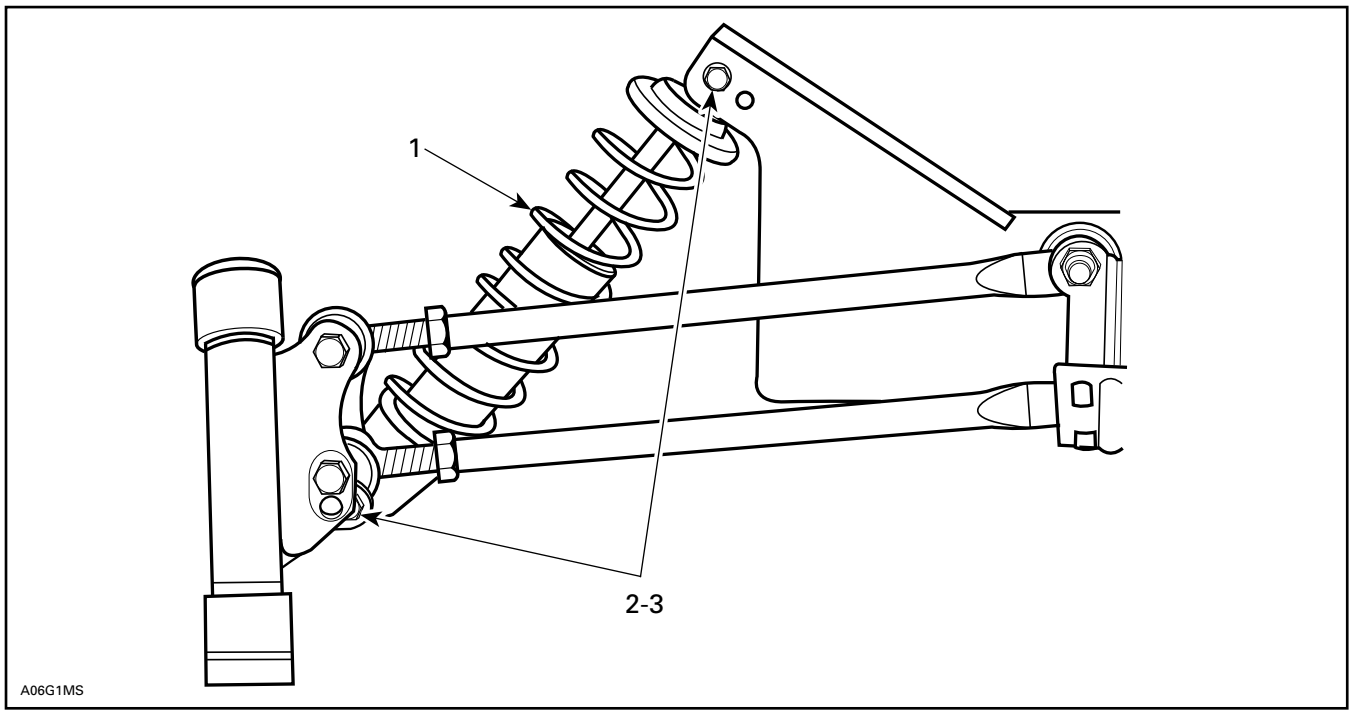
◆ WARNING : Failure to use this method of strap removal could result in personal injury. Shipping strap must be cut and hook removed to have snowmobile suspension operational.



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

Lift front of vehicle and block safely. Secure shock absorber to suspension with its adjuster ring at the bottom.

O NOTE : Position bolt heads toward front.

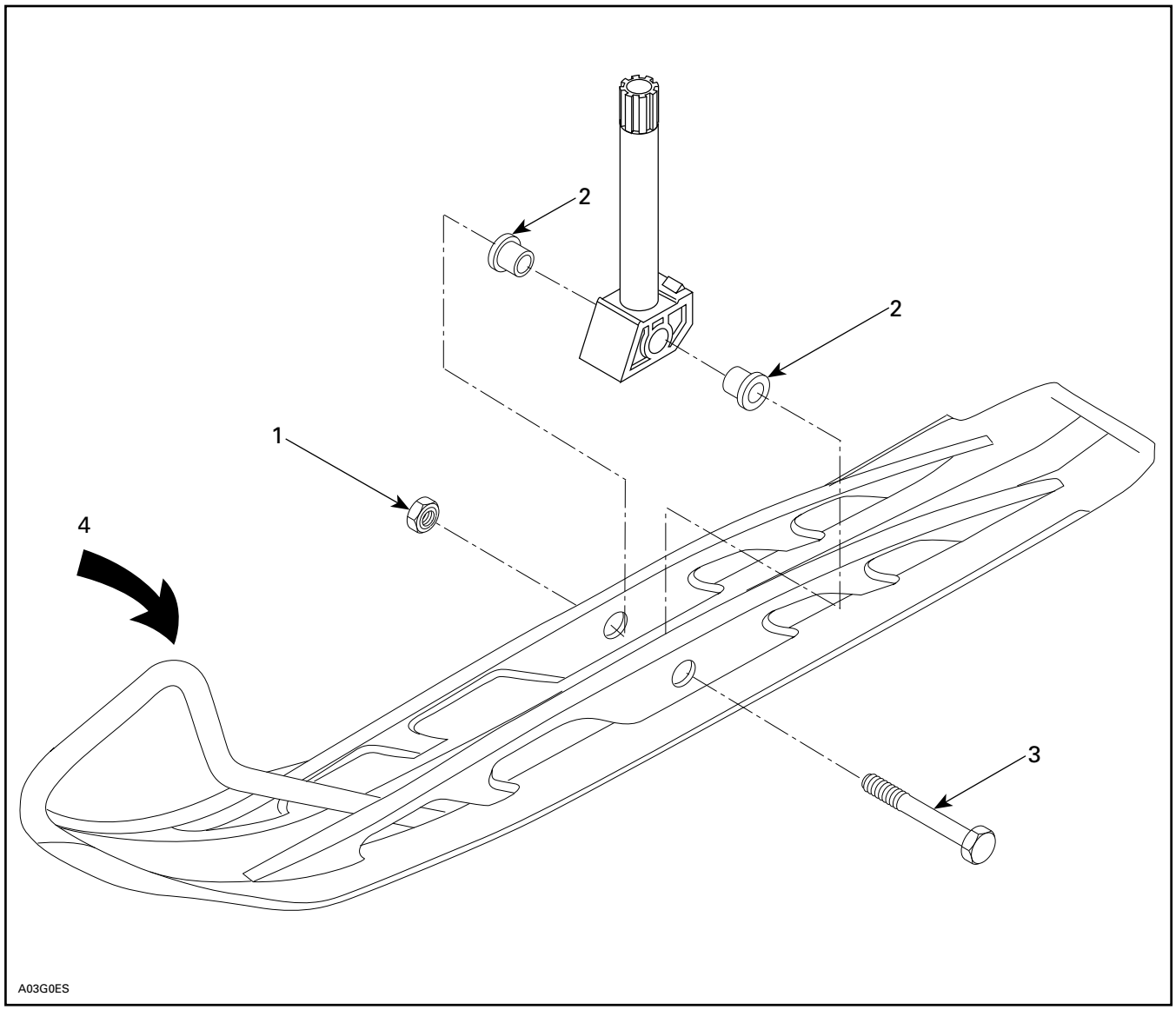


TYPICAL - RIGHT SIDE SHOWN
1. *Shock absorber (engine compartment)*
2. *M10 x 1.5 x 55 bolt (on suspension)*
3. *M10 x 1.5 nut (section 4). Torque to 48 N•m (35 lbf•ft)*

Install skis on vehicle.

NOTE : Make sure that slider cushions are still in ski leg.

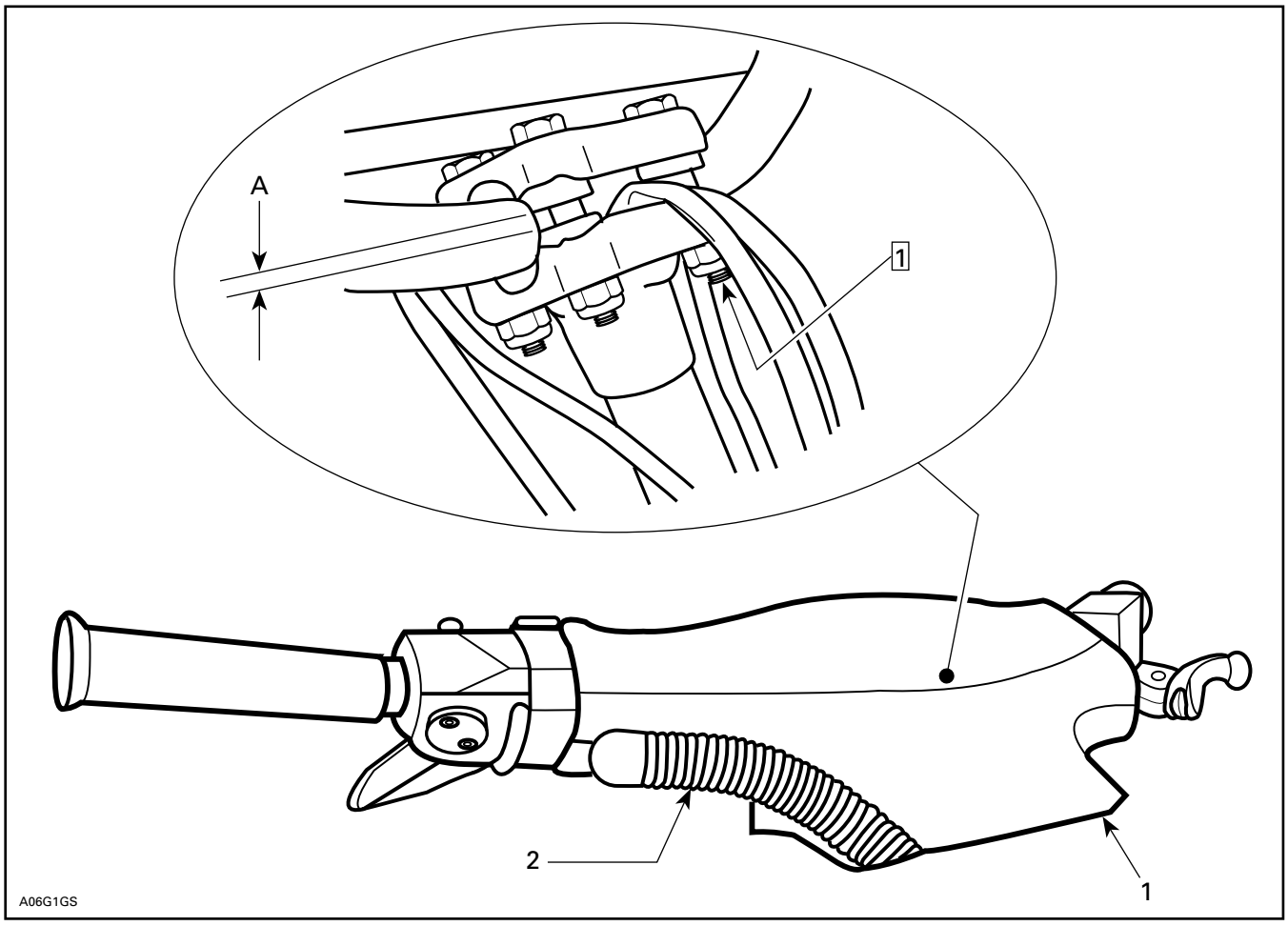
Place vehicle on ground.



TYPICAL - RIGHT SIDE SHOWN

1. *Nut M12 x 1.75 (2) (Section no. 3 or 5). Torque to 40 N•m (30 lbf•ft)*
2. *Slider cushion (4) (Ski leg)*
3. *Bolt M12 (2) (Ski leg)*
4. *Twist ski to ease bolt installation*

Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).
Slacken throttle and brake handle housings.
Install steering pad.

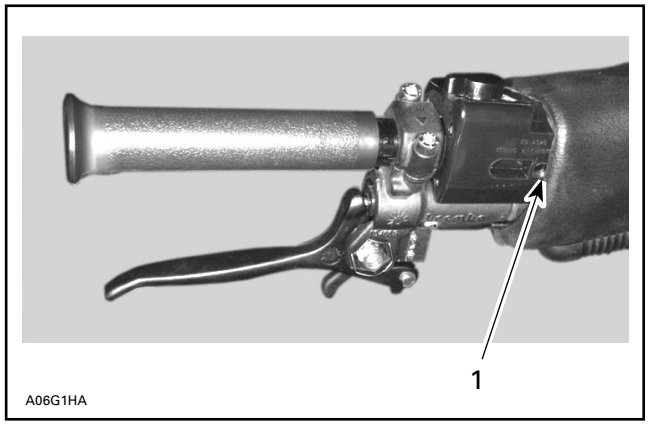


Step 1 : Torque nuts to 26 N•m (19 lbf•ft)

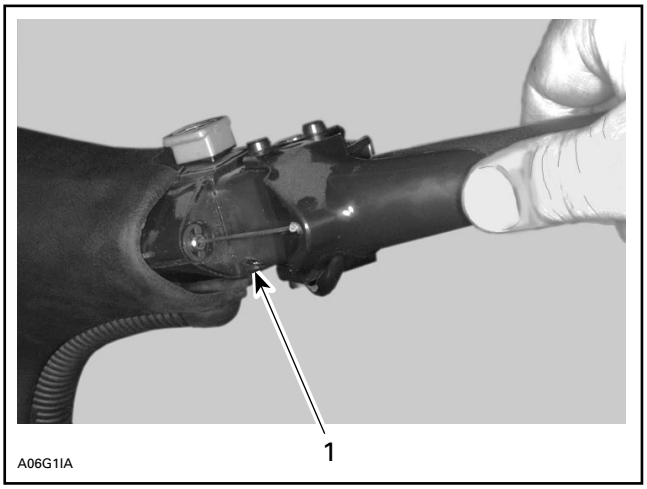
1. *Steering pad (engine compartment)*
2. *Keyway (section 5). Use liquid soap to ease installation*

A. Equal gap each side (both clamps)

Adjust then tighten throttle and brake handle housings.

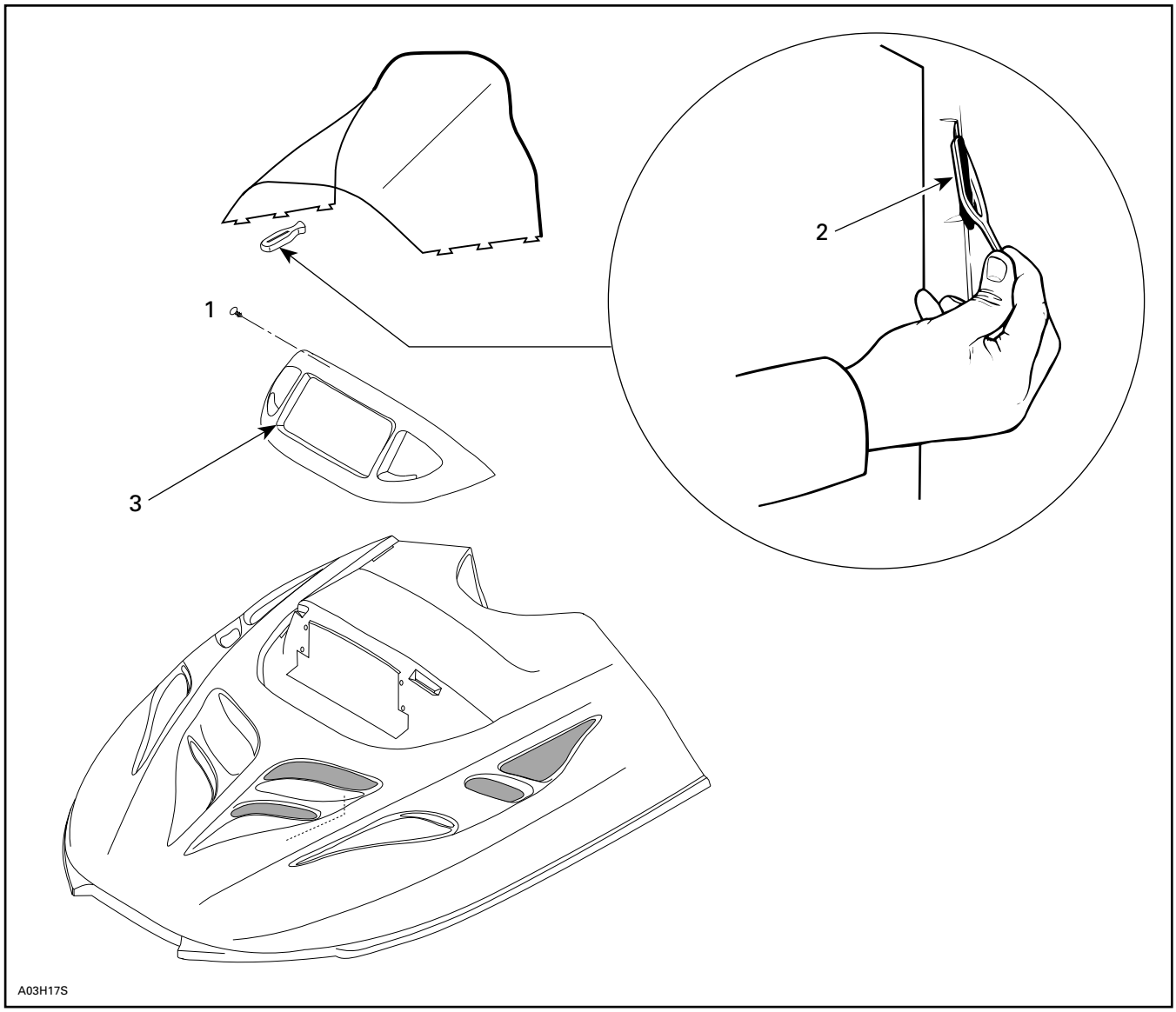


BRAKE HANDLE HOUSING
*1. Tighten set screw to 2 N•m (18 lbf•**in**)*



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

Install windshield on dashboard.



1. *Dart (1) (P / N 414 6443 00)*
2. *Latch (6) (P / N 570 0238 00)*
3. *Temporarily remove headlamp molding for windshield installation*

SUPPLEMENTAL OIL

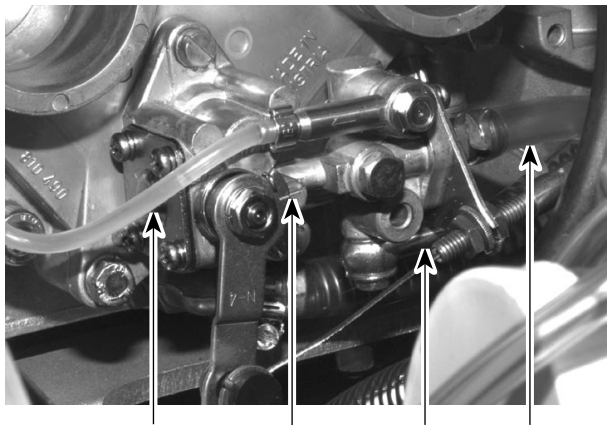
To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER ROTAX Injection Oil (P / N 413 8030 00) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

BLEEDING PROCEDURE

Remove air silencer and move carburetors aside.

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.

Check also for proper oil lever adjustment. Marks must aligned when throttle lever is activated just enough to take all cable play.

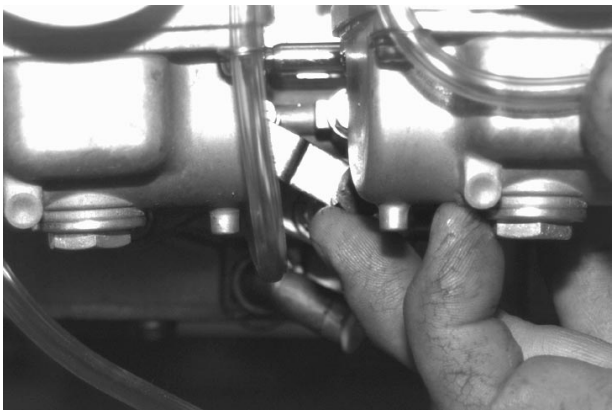


1. Small oil line
2. Marks aligned
3. Main oil line

Reinstall all parts except air silencer.

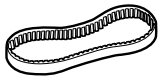
Bleed the small oil line between pump and intake manifold by running engine at idle while holding the pump lever in fully open position.

NOTE : If the air silencer has been reinstalled, make a J hook out of mechanical wire to lift the lever.



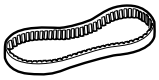
TYPICAL - ENGINE AT IDLE

Reinstall air silencer.



PARTS INSTALLATION

DRIVE BELT

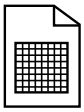


Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P / N 413 7082 00) before installing drive belt.

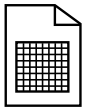
ADJUSTMENTS

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. 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.

MODELS			MX Z 440	MX Z 583
Engine Type			454	583
Maximum HP RPM ①		RPM	7900 - 8100	7800 - 8000
Rotary Valve		P / N Opening (BTDC) Closing (ATDC)	420 9245 02 146 / 65	420 9245 02 140/71
Carburetor Type			2 x VM 34	2 x VM 40
Main Jet			PTO 230 MAG 210	PTO 270 MAG 260
Needle Jet			159 P-8	224 AA-2
Pilot Jet			40	45
Needle Identification – clip position			6FJ43-2	7ECY1-3
Slide Cut-away			2.5	2.5
Float Adjustment		mm (in)	23.9 (.94)	18.1 (.71)
Air Screw Adjustment		± 1/16 turn	1/2	1-3/4
Idle Speed		RPM	1600 - 1800	1800 - 2000
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)	1.48 (.058)	1.75 (.069)
Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 - .057)	0.55 - 1.45 (.022 - .057)
Gear Ratio		teeth	23 / 44	25 / 44
Engagement Speed		±100 RPM	4400	3800
Drive Pulley Calibration Screw Position			3	2
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32 in)	16.5 (21/32)	
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
	Y		Dimension Y must exceed X from 1mm (1/32in) to 2 mm (5/64 in)	
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
	Force ③	kg (lbf)	6.8 (15)	
Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (12 to 15)	
Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation	
Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.
② At 6000 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

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **96-10**

Date: October 12, 1995

SUBJECT: Predelivery Procedure

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United States: Formula III	1076 and 1077	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 Inc. 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, it may have some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier Inc. reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

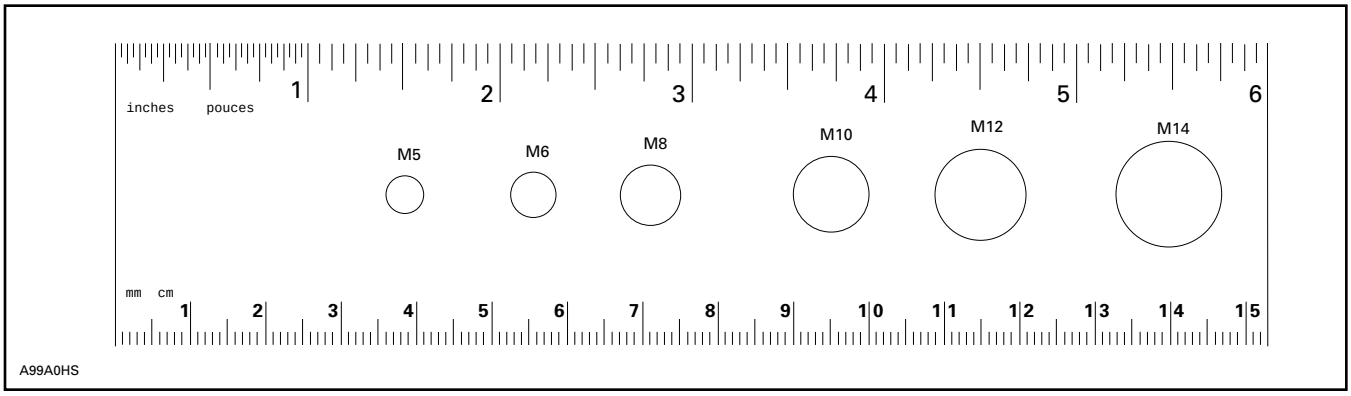
The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

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 inquires 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.

TABLE OF CONTENTS

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



◆ 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.

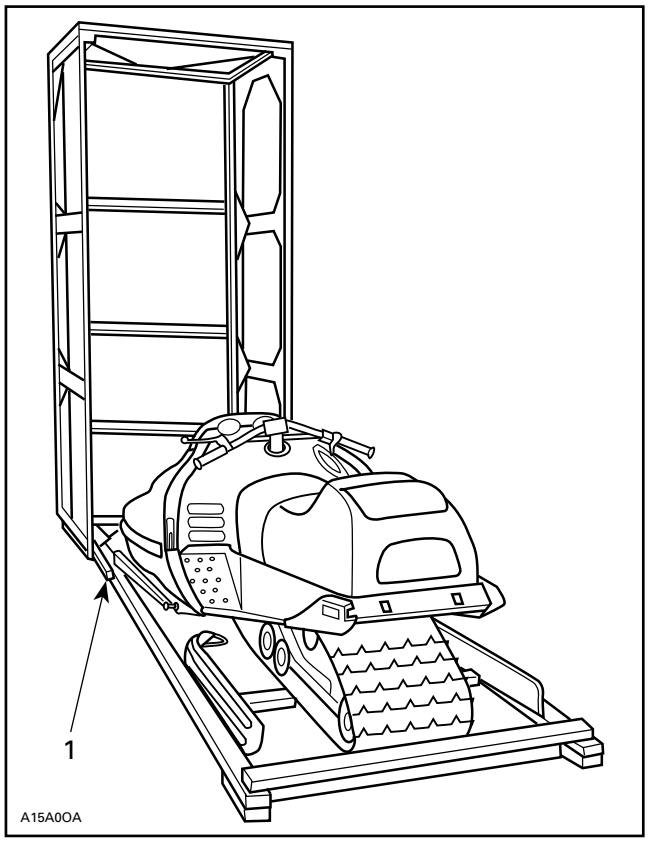
▼ CAUTION

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

Unscrew all screws retaining cover to crate base.

Notch in crate base is at front.

Tip cover over front of vehicle.



1. Notch

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

From underneath tunnel, slacken 4 nuts retaining seat then slowly pull out metal strip retaining windshield. Wait after rear molding installation for seat nuts retightening.

▼ CAUTION

Failure to lift seat might result in leatherette damage.

▼ 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, slider cushions and castellated nuts (some models only) to bolt skis to ski legs. Discard crating spacers and elastic stop nuts.

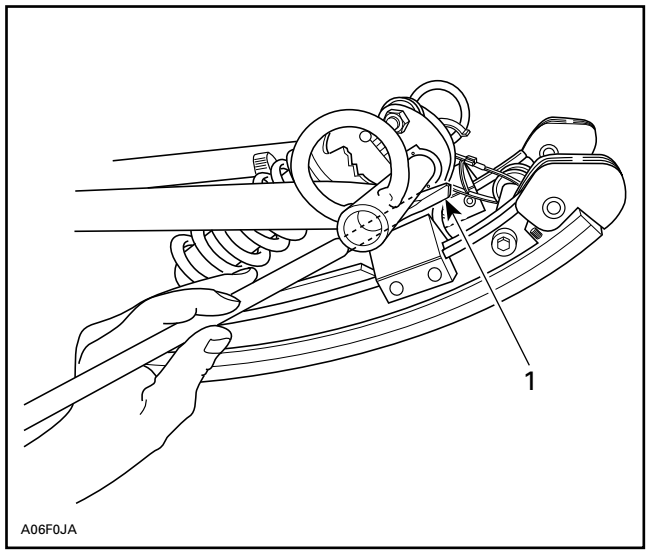
Remove vehicle from base.

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

Using a long flat chisel such as Snap-On® PPC820LA cut and remove shipping strap that collapses front portion of rear suspension.

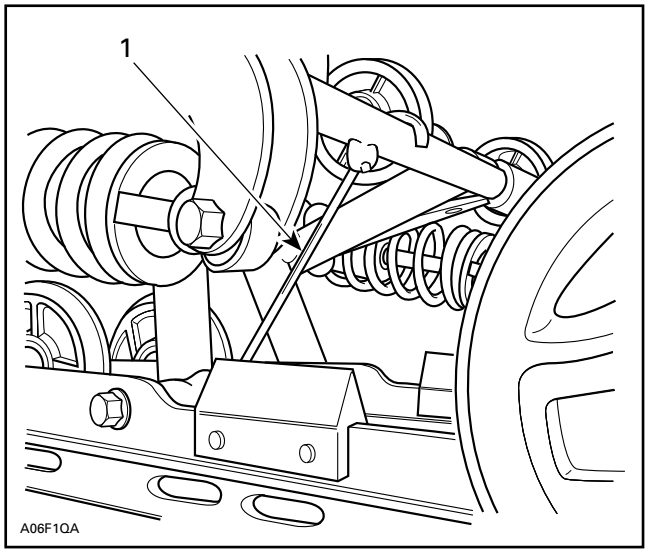
◆ WARNING

Failure to use this method of strap removal could result in personal injury.



1. Cut shipping strap

Remove hook from rear portion of rear suspension.



1. Hook

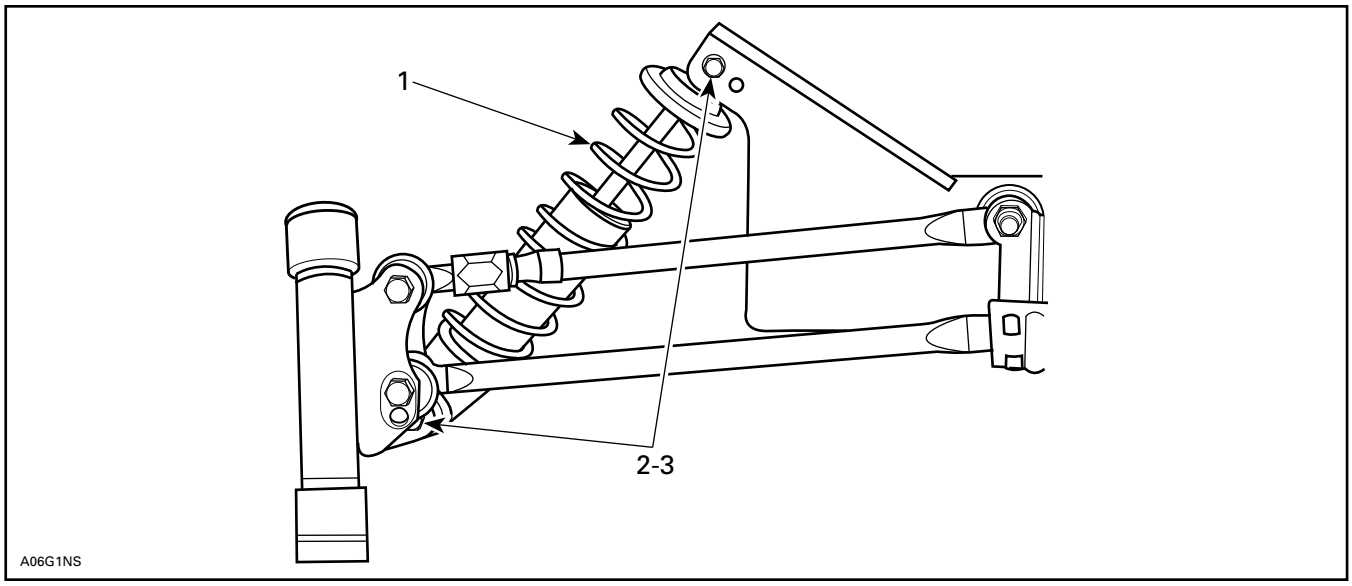
◆ WARNING

Shipping strap must be cut and hook removed to have snowmobile suspension operational.

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

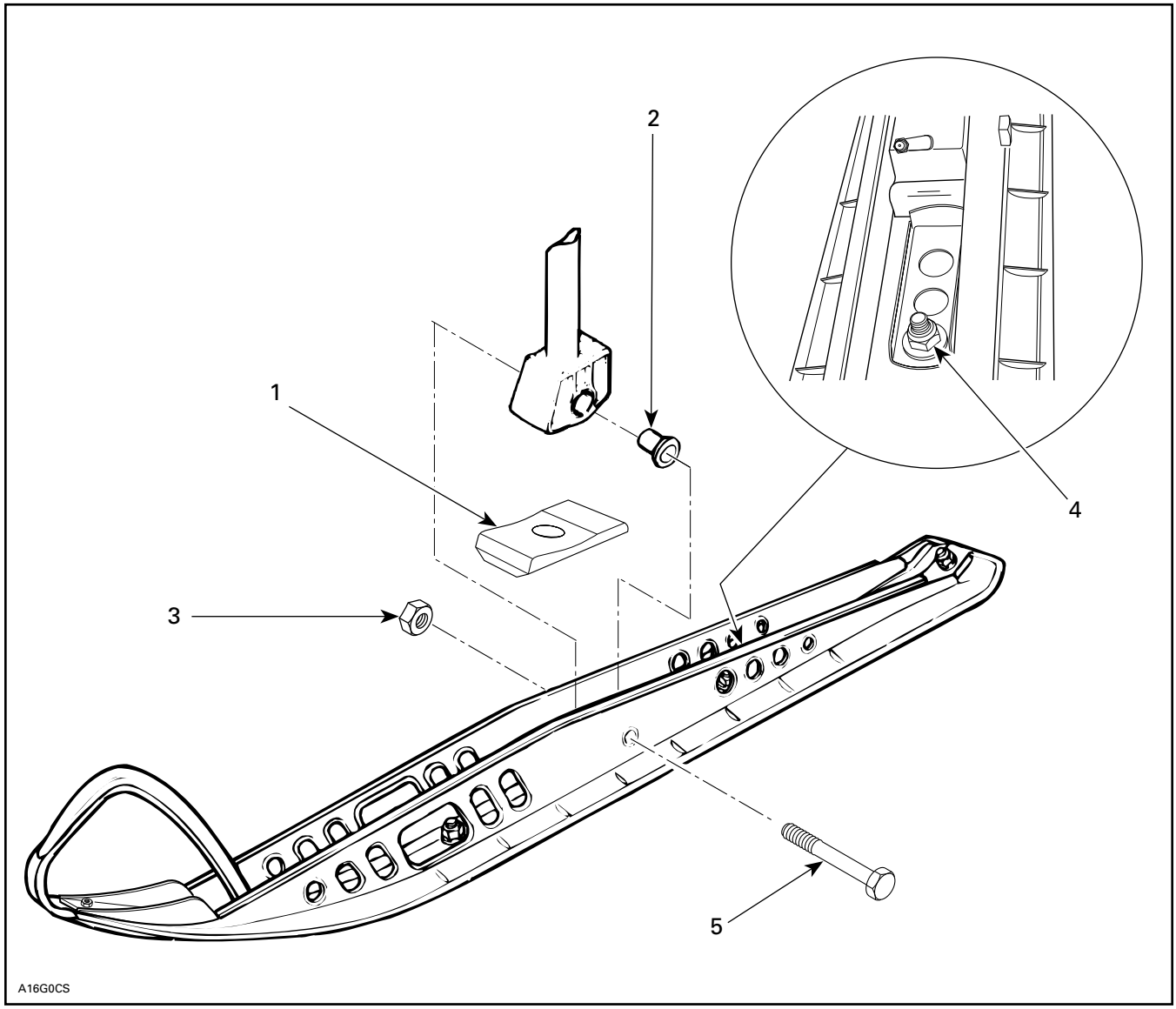
Lift front of vehicle and block safely. Secure shock absorbers to suspension with their adjusting ring at bottom.

NOTE: Position bolt heads toward front.



TYPICAL - RIGHT SIDE SHOWN

1. *Shock absorber (2) (engine compartment)*
2. *M10 x 1.5 x 55 bolt (on suspension)*
3. *M10 x 1.5 nut (section 4). Torque to 48 N•m (35 lbf•ft)*

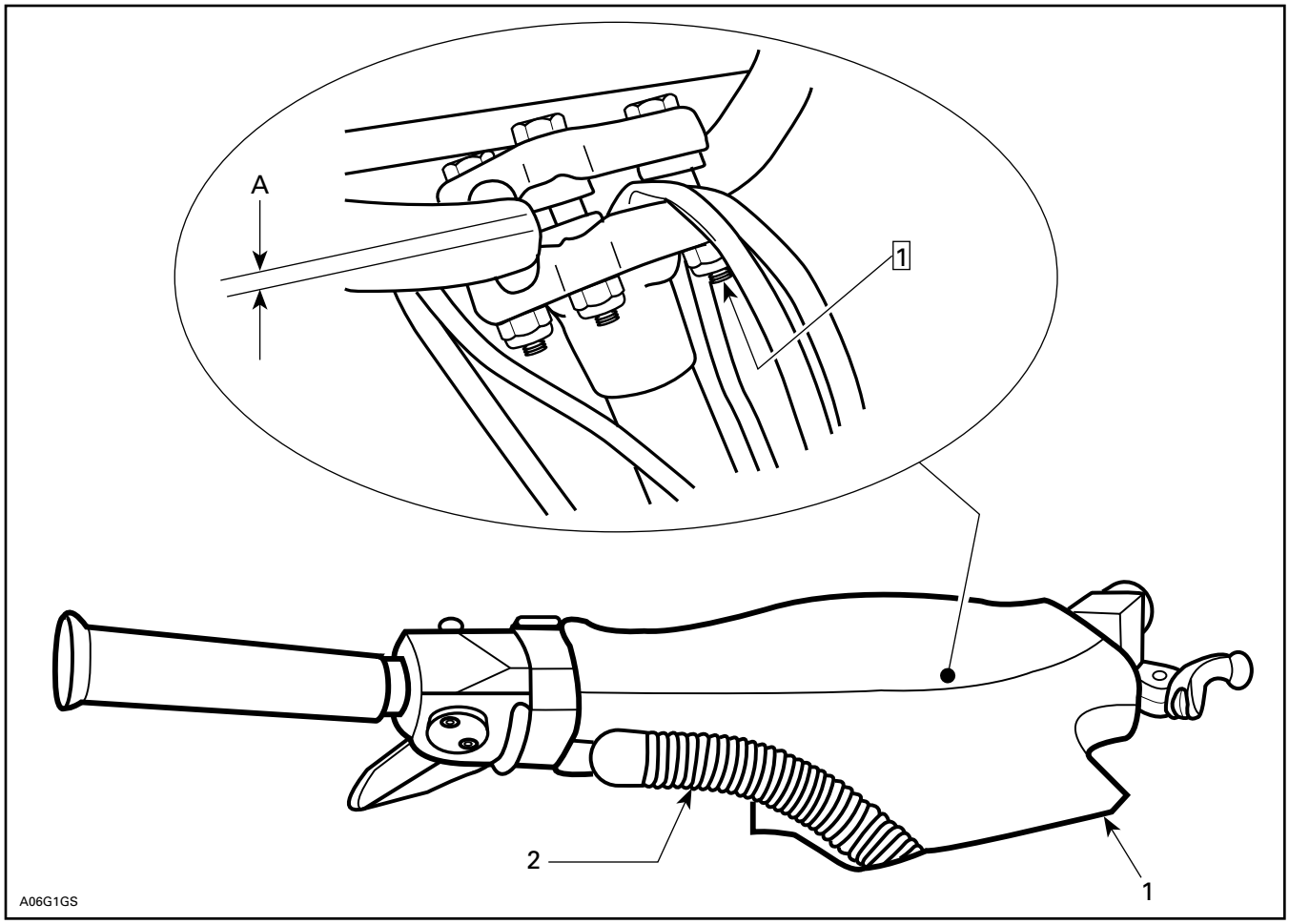


LEFT SIDE SHOWN

1. *Ski stopper (2), "AVANT" toward front*
2. *Slider cushion (4)*
3. *Nut M12 (2) (tighten until ski moves up and down with a slight resistance)*
4. *Slacken then adjust against ski stopper 14 N•m (124 lbf•**in**)*
5. *Bolt M12 (2) (torque to 40 N•m (30 lbf•ft))*

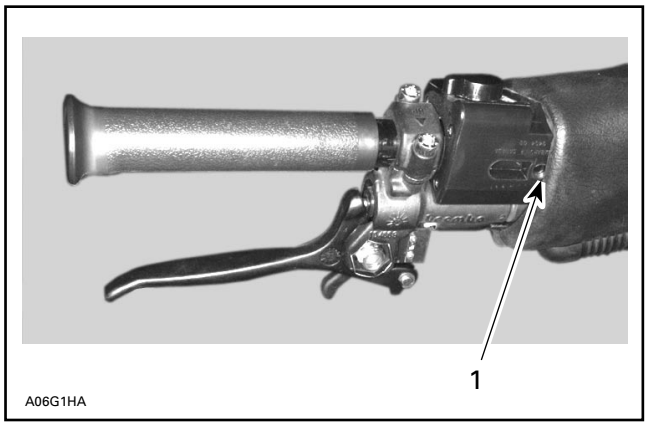
After ski installation, adjust stopper against stop bounding then tighten nut to 14 N•m (124 lbf•**in**). More preload on stop bounding will result in a more aggressive steering. Adjust according to driver preferences.

Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).
Slacken throttle and brake handle housings.
Install steering pad.

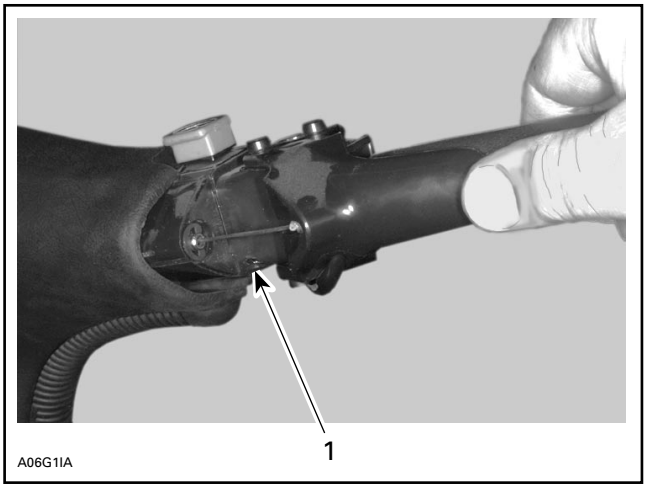


Step 1 Torque nuts to 26 N•m (19 lbf•ft)
1. Steering pad (engine compartment)
2. Keyway (section 5). Use liquid soap to ease installation
A. Equal gap each side (both clamps)

Adjust then tighten throttle and brake handle housings.

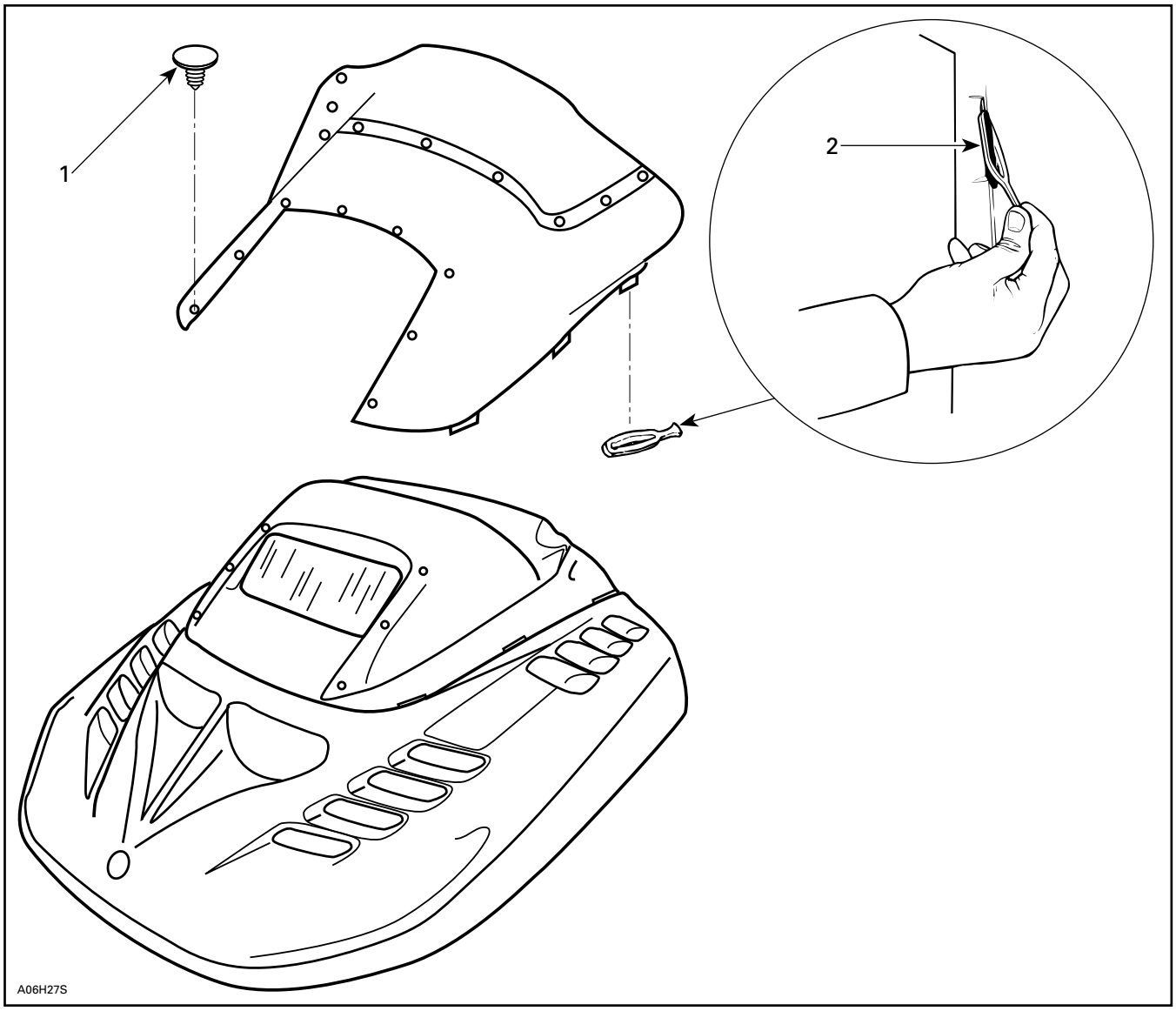


BRAKE HANDLE HOUSING
*1. Tighten set screw to 2 N•m (18 lbf•**in**)*



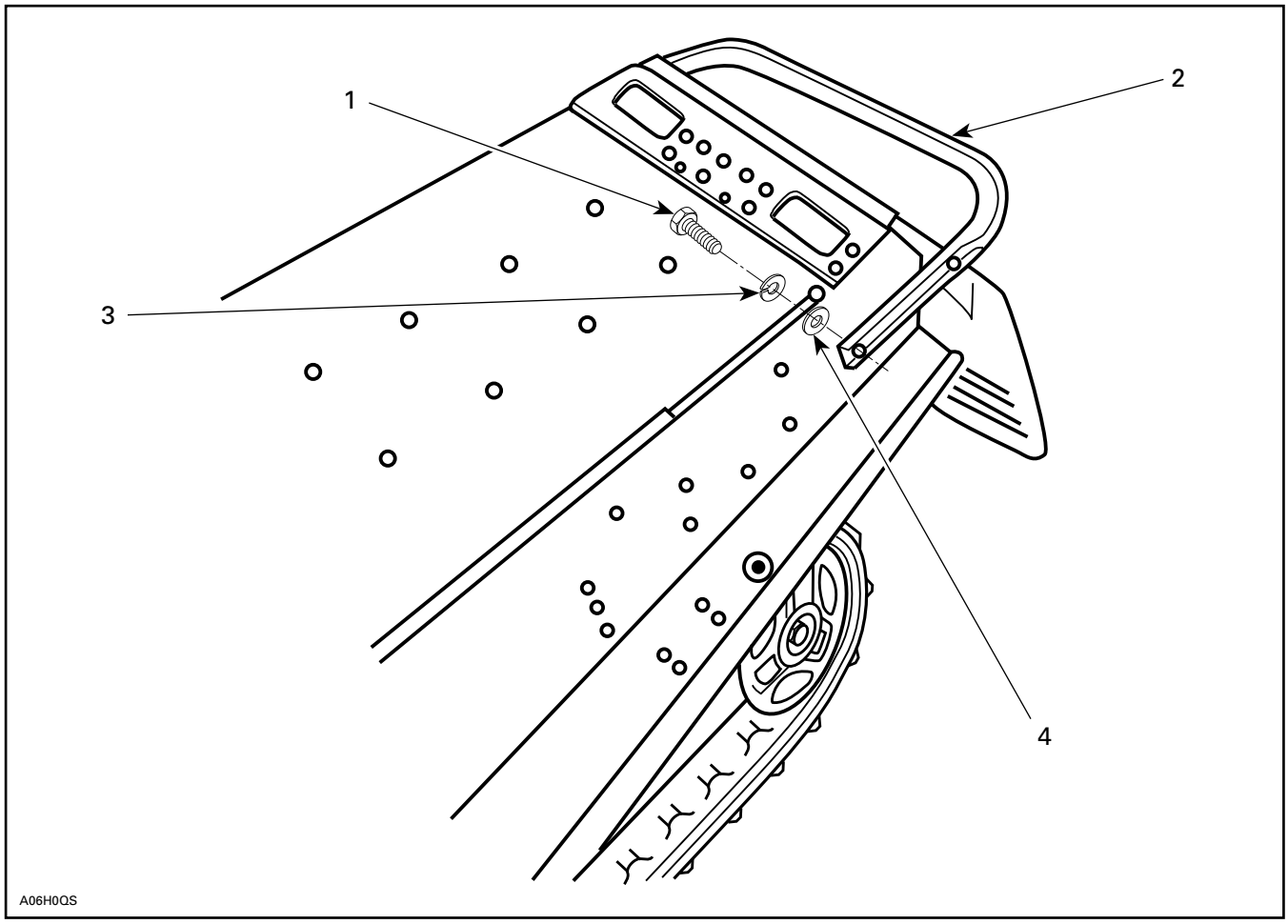
THROTTLE HANDLE HOUSING
*1. Tighten set screw to 2 N•m (18 lbf•**in**)*

Install windshield on hood.



1. *Dart (section 6)*
2. *Latch (section 6)*

Install rear bumper to chassis. Slide bumper inside rear moldings and secure from inside of tunnel.

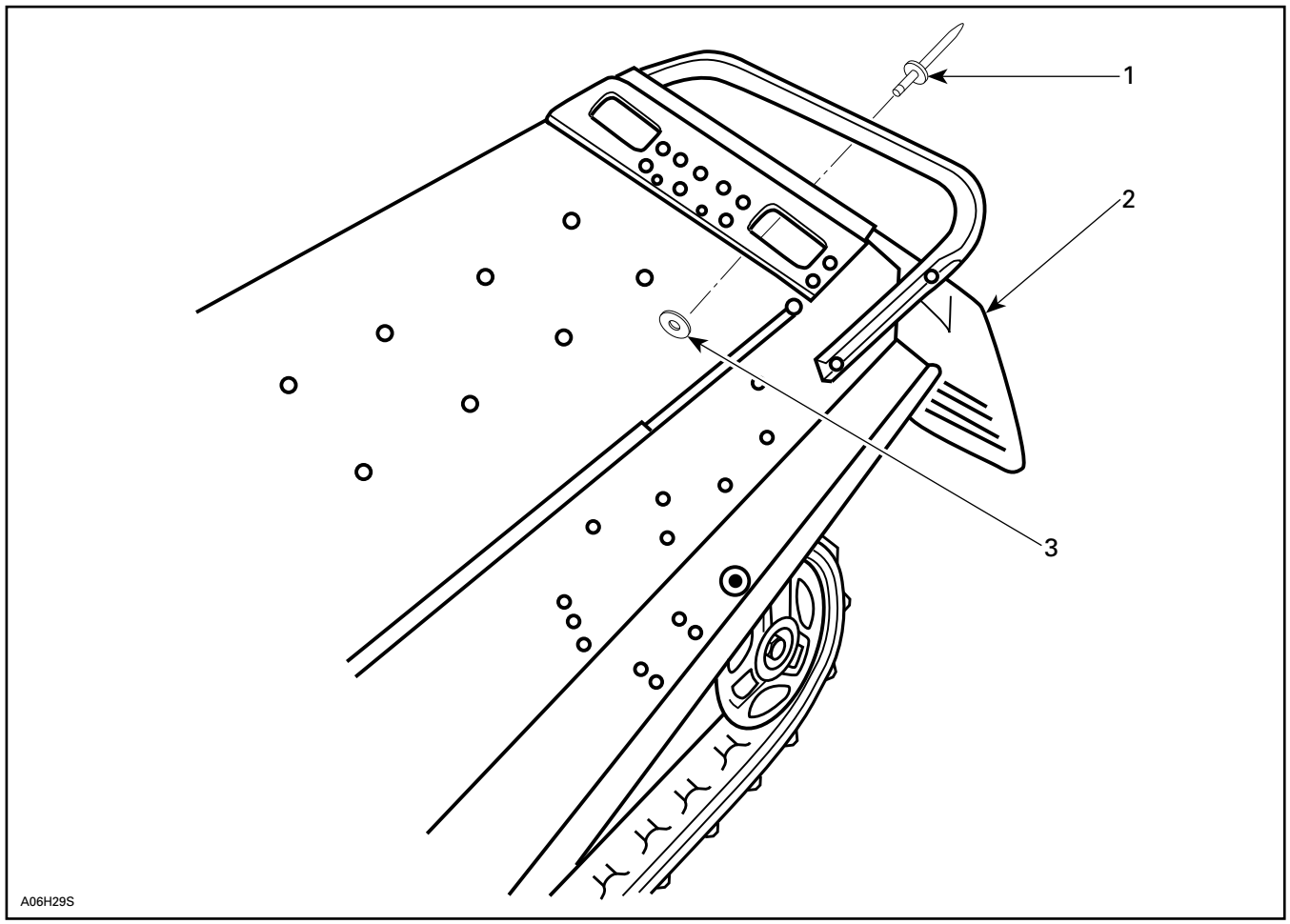


TYPICAL

1. *Bolt M8 (4) (section 1) (torque to 24 N•m (18 lbf•ft))*
2. *Rear bumper*
3. *Lock washer (4) (section 1)*
4. *Washer (4) (section 1)*

Install snow guard to chassis.

NOTE: Place washers inside tunnel.



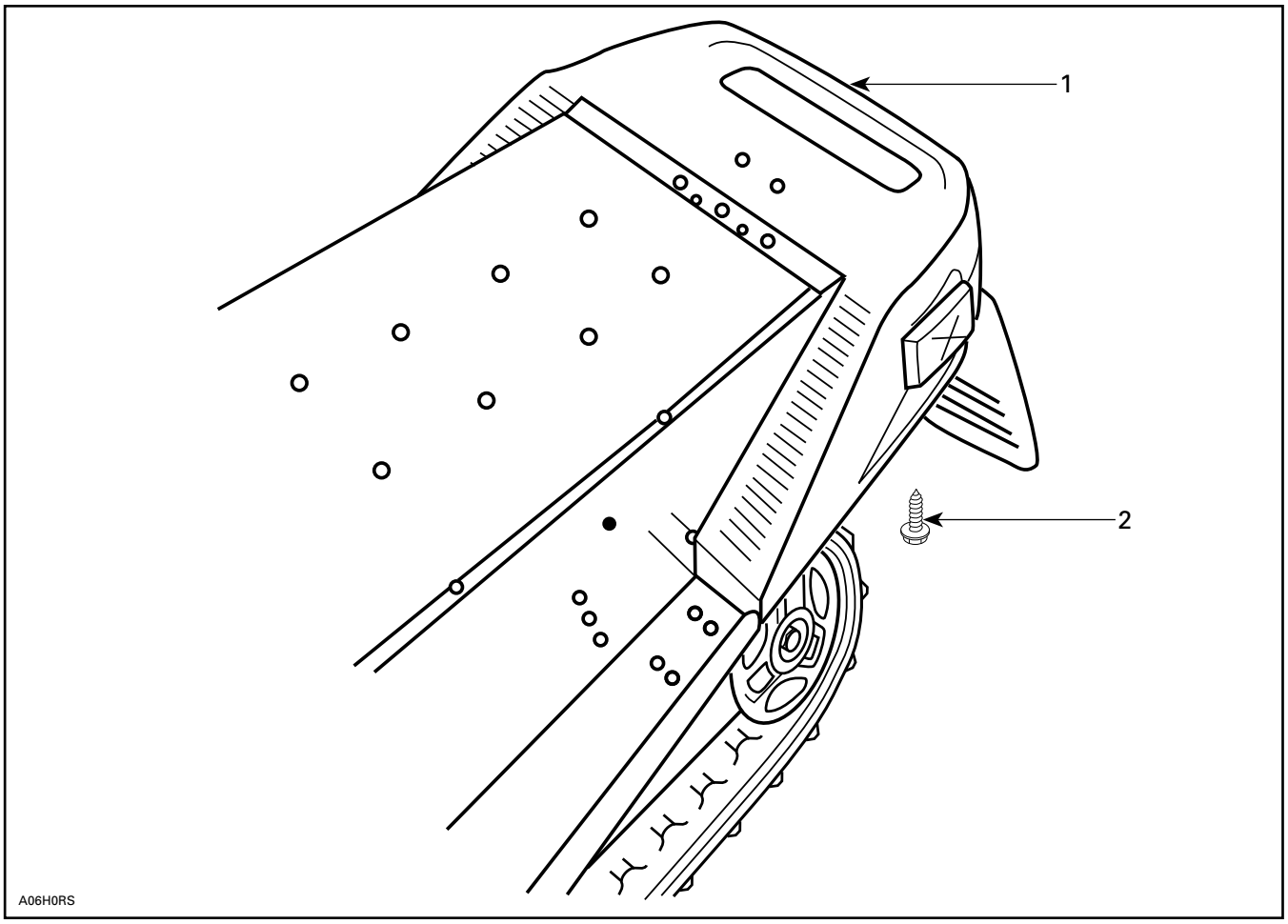
TYPICAL

1. *Rivet (4) (section 2)*
2. *Snow guard (in engine compartment)*
3. *Washer (4) (section 2)*

PARTS INSTALLATION
REAR MOLDING

Install rear molding to chassis.

Tighten seat nuts and make sure that rear light harness is properly connected.



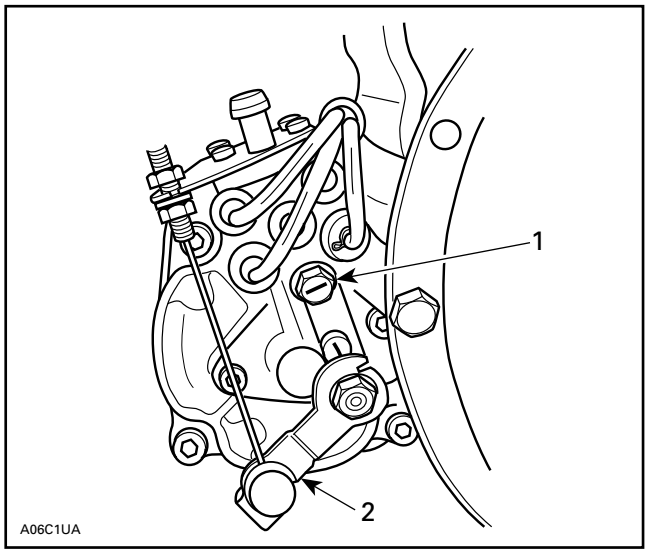
1. Rear molding
2. Screw (2) (section 3)

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P/N 413 7082 00) before installing drive belt.

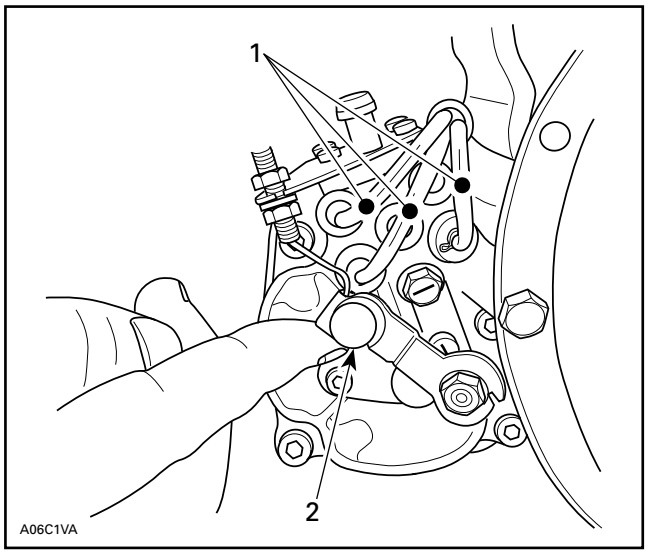
To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER Injection Oil (P/N 496 0133 00) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

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



1. Bleeder screw
2. Oil pump lever

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



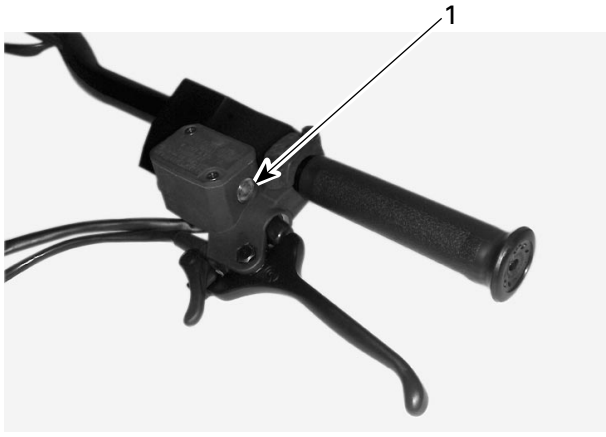
1. Small oil lines
2. Engine at idle (fully open position)

LIQUIDS
BRAKE FLUID LEVEL

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

▼ CAUTION

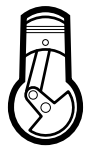
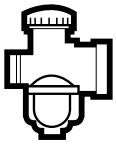
Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.



1. Minimum

ADJUSTMENTS
TRACK

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

	MODELS			FORMULA III		
	Engine Type			599		
	Maximum HP RPM ①		RPM	7000-7200		
	Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	N.A.		
	Carburetor Type			PTO VM 36-172	CRT VM 36-173	MAG VM 36-174
	Main Jet			PTO 320	CRT VM 320	MAG 320
	Needle Jet			480 P-3		
	Pilot Jet			PTO 40	CRT 40	MAG 40
	Needle Identification– clip Position			6DH2-3		
	Slide Cut-away			2.5		
	Float Adjustment		mm (in)	18.1 (.71)		
	Air Screw Adjustment		± 1/32 turn	PTO 1.5	CRT 1.0	MAG 1.0
	Idle Speed RPM		RPM	1800-2000		
	Gas Grade/Octane Number		(R + M)/2	Regular Unleaded/87		
	Gas/Oil Ratio			Oil Injection		
	Ignition Timing BTDC ②		mm (in)	2.18 (.086)		
	Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 -.057)		
	Gear Ratio		teeth	25/44		
	Engagement Speed		RPM	4400-4600		
	Drive Pulley Calibration Screw Position			4		
	Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)		
	Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)		
		Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)		
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)		
		Force ③	kg (lbf)	6.8 (15)		
	Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (11.9 to 15.0)		
	Drive Chain Tension			Fully tighten adjusting screw by hand then back OFF only far enough for hair pin installation		
	Track Adjustment	Deflection	mm (in)	40 to 50(1-3/4 to 2) with a 7.3 kg (16 lb) downward pull		

①Engine speed at which maximum power is achieved.

②At 6000 RPM (engine cold) with headlamp turned on.

③Force 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 :

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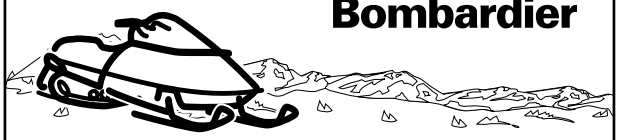

SNOWMOBILES

D

PREDELIVERY
Bulletin

No. **96-11**
Revision 1

Date : November 17, 1995

SUBJECT : Technical Data

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United States : Formula III	1076 and 1077	ALL

The technical data sheet for the above mentioned models has been updated.

Refer to Ski-Doo *Predelivery Bulletin No. 96-10*.

Remove Page 15 and replace with the attached.

MODEL			FORMULA III		
Engine Type			599		
Maximum HP RPM ①		RPM	8100 - 8300		
Rotary Valve		P / N Opening (BTDC) / Closing (ATDC)	Not applicable		
Carburetor Type			PTO VM 36-172	CTR VM 36-173	MAG VM 36-174
Main Jet			PTO 330	CTR 320	MAG 330
Needle Jet			286 P-0		
Pilot Jet			PTO 50	CTR 55	MAG 50
Needle Identification – clip position			6DEY2-3		
Slide Cut-away			2.5		
Float Adjustment		mm (in)	18.1 (.71)		
Air Screw Adjustment		± 1/32 turn	PTO 1.5	CTR 1.5	MAG 1.5
Idle Speed		RPM	1800 - 2000		
Gas Grade / Pump Octane Number		(R + M) / 2	Regular Unleaded / 87		
Gas / Oil Ratio			Oil Injection		
Ignition Timing BTDC ②		mm (in)	2.18 (.086)		
Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 - .057)		
Gear Ratio		Teeth	25/44		
Engagement Speed		RPM	4400 - 4600		
Drive Pulley Calibration Screw Position			4		
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32 in)	16.5 (21/32)		
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)		
	Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)		
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)		
	Force ③	kg (lbf)	6.8 (15)		
Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (11.9 to 15.0)		
Drive Chain Tension			Fully tighten adjusing screw by hand then back OFF only far enough for hair pin installation		
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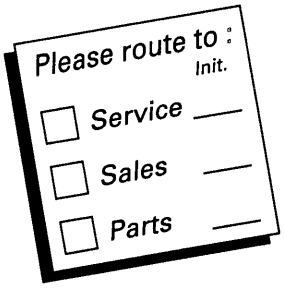

ski-doo.

BOMBARDIER

PREDELIVERY
Bulletin

D

No. **96-12**

Date : November 24, 1995

SUBJECT : Predelivery Procedure

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United States : MX Z 670	1187 / 1188	ALL

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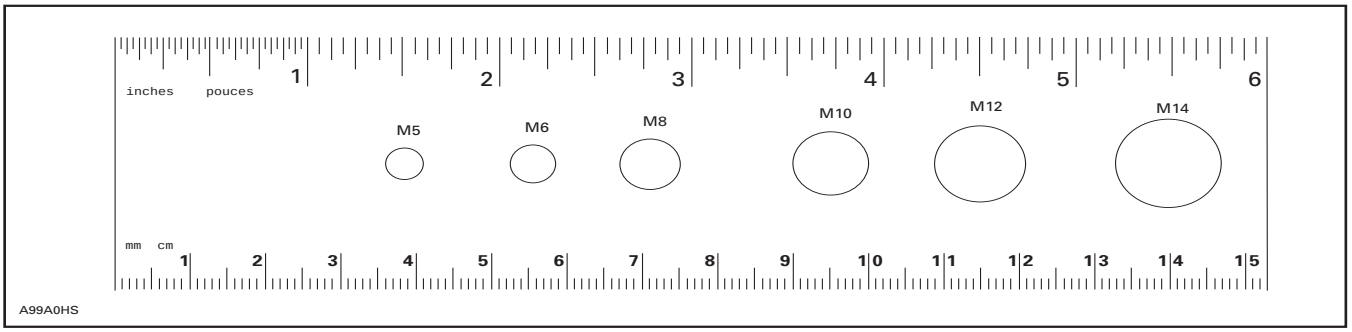
CONTENTS

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

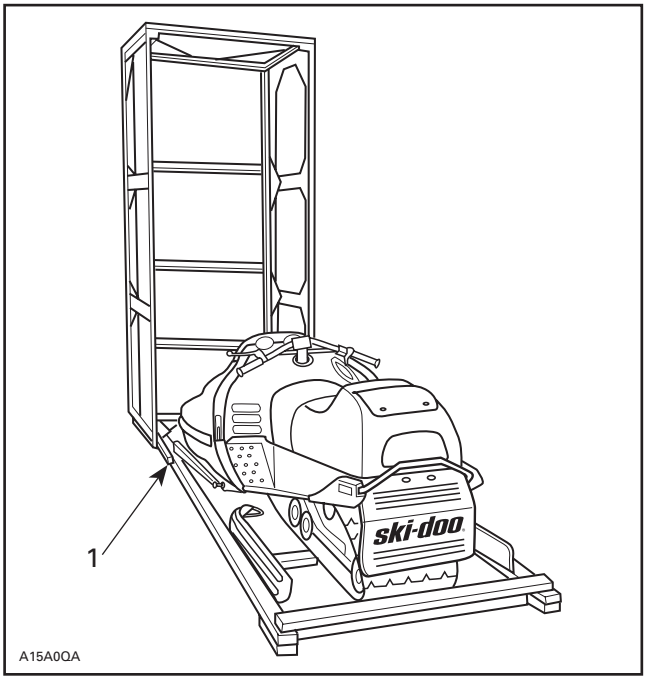


◆ WARNING : Torque wrench tightening specifications must be strictly adhered to. Locking devices (e.g. lock tabs, elastic stop nuts) must be installed or replaced by new ones, where specified. If the efficiency of a locking device is impaired, it must be renewed.

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

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

Slowly pull out metal strip retaining windshield.

When this metal strip is under the seat loosen 2 or 4 nuts retaining the seat before pulling out the metal strip.

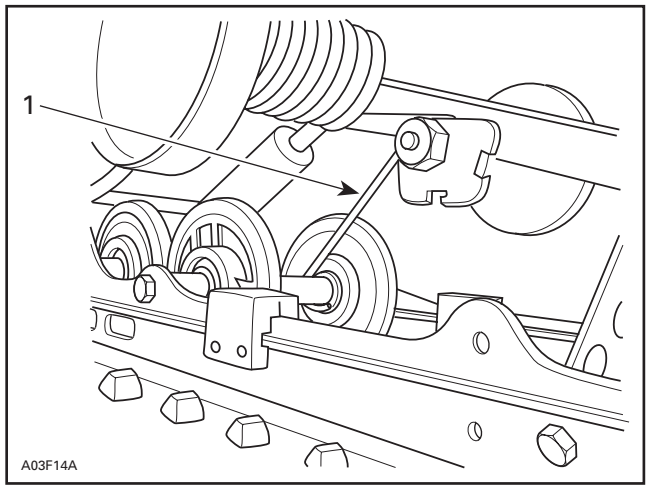
▼ CAUTION : Make sure vehicle is properly supported before removing ski legs and rear suspension from crate brackets.

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.

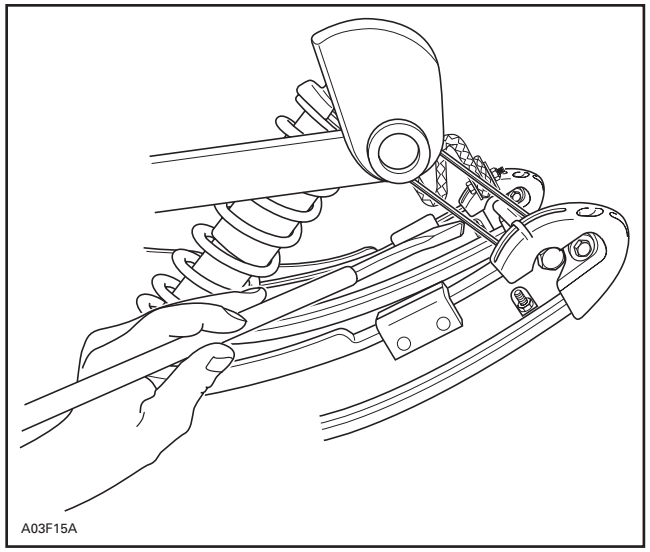
Remove hook from rear portion of rear suspension.



1. Hook

Using a long flat chisel such as Snap-On® PPC820LA cut shipping strap that collapses front portion of rear suspension.

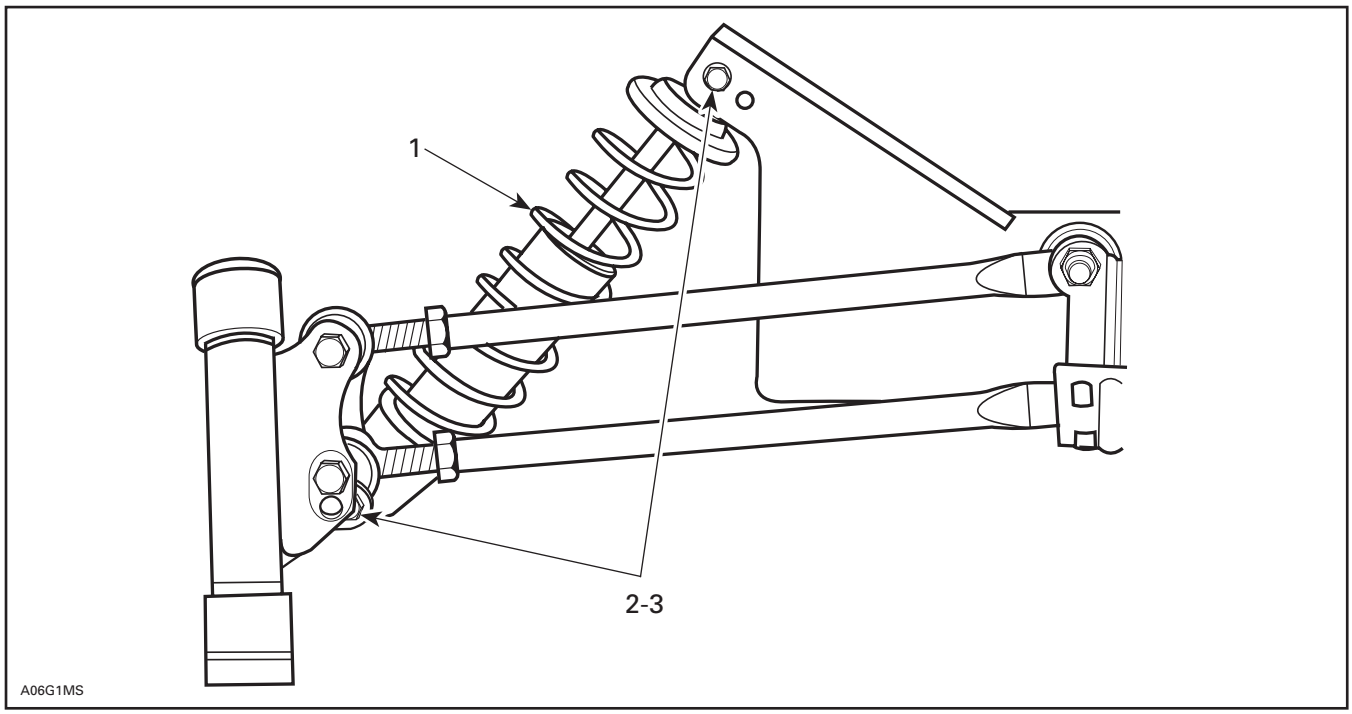
◆ WARNING : Failure to use this method of strap removal could result in personal injury. Shipping strap must be cut and hook removed to have snowmobile suspension operational.



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

Lift front of vehicle and block safely. Secure shock absorber to suspension with its adjuster ring at the bottom.

O NOTE : Position bolt heads toward front.

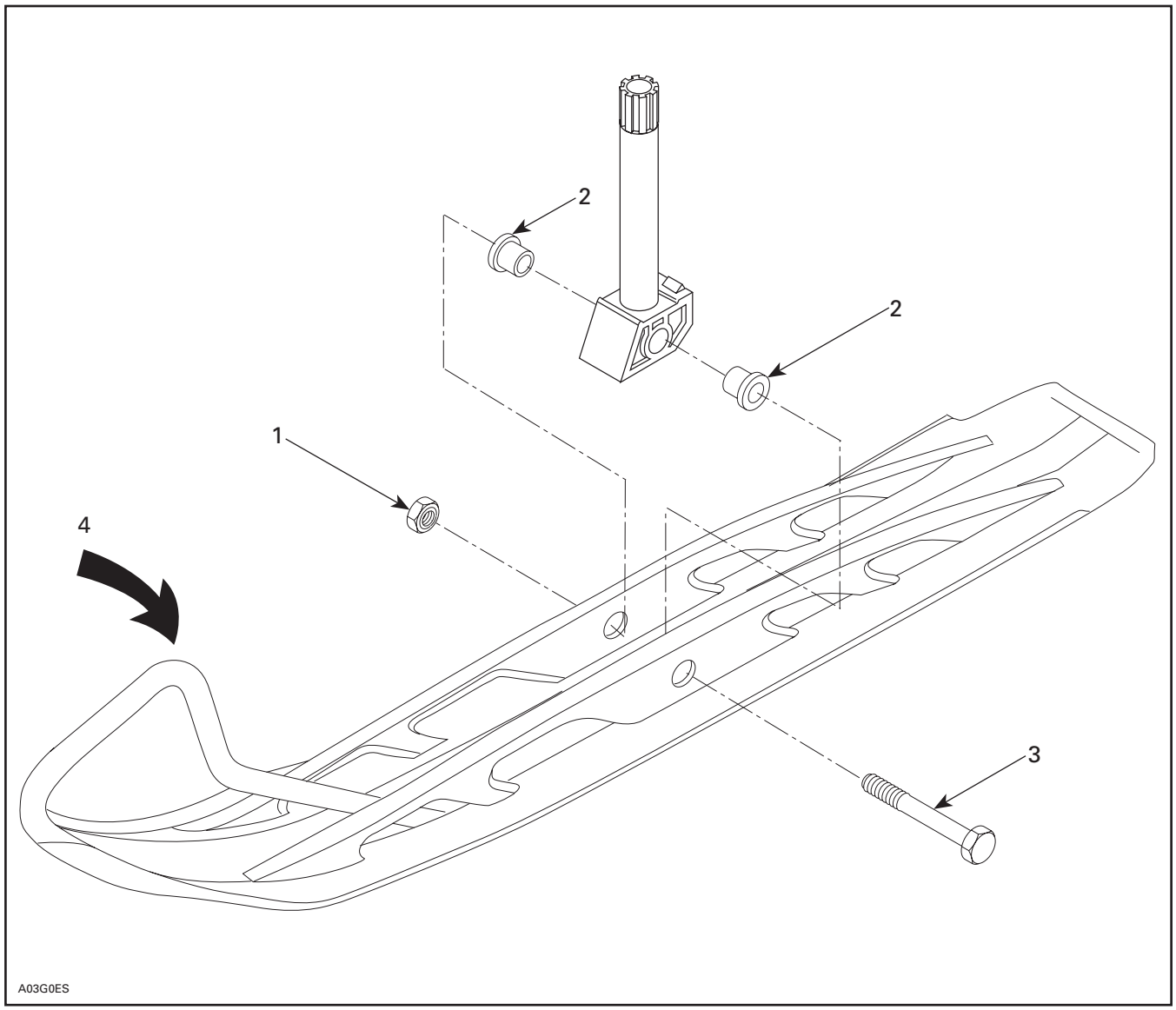


TYPICAL - RIGHT SIDE SHOWN
1. *Shock absorber (engine compartment)*
2. *M10 x 1.5 x 55 bolt (on suspension)*
3. *M10 x 1.5 nut (section 5). Torque to 48 N•m (35 lbf•ft)*

Install skis on vehicle.

NOTE : Make sure that slider cushions are still in ski leg.

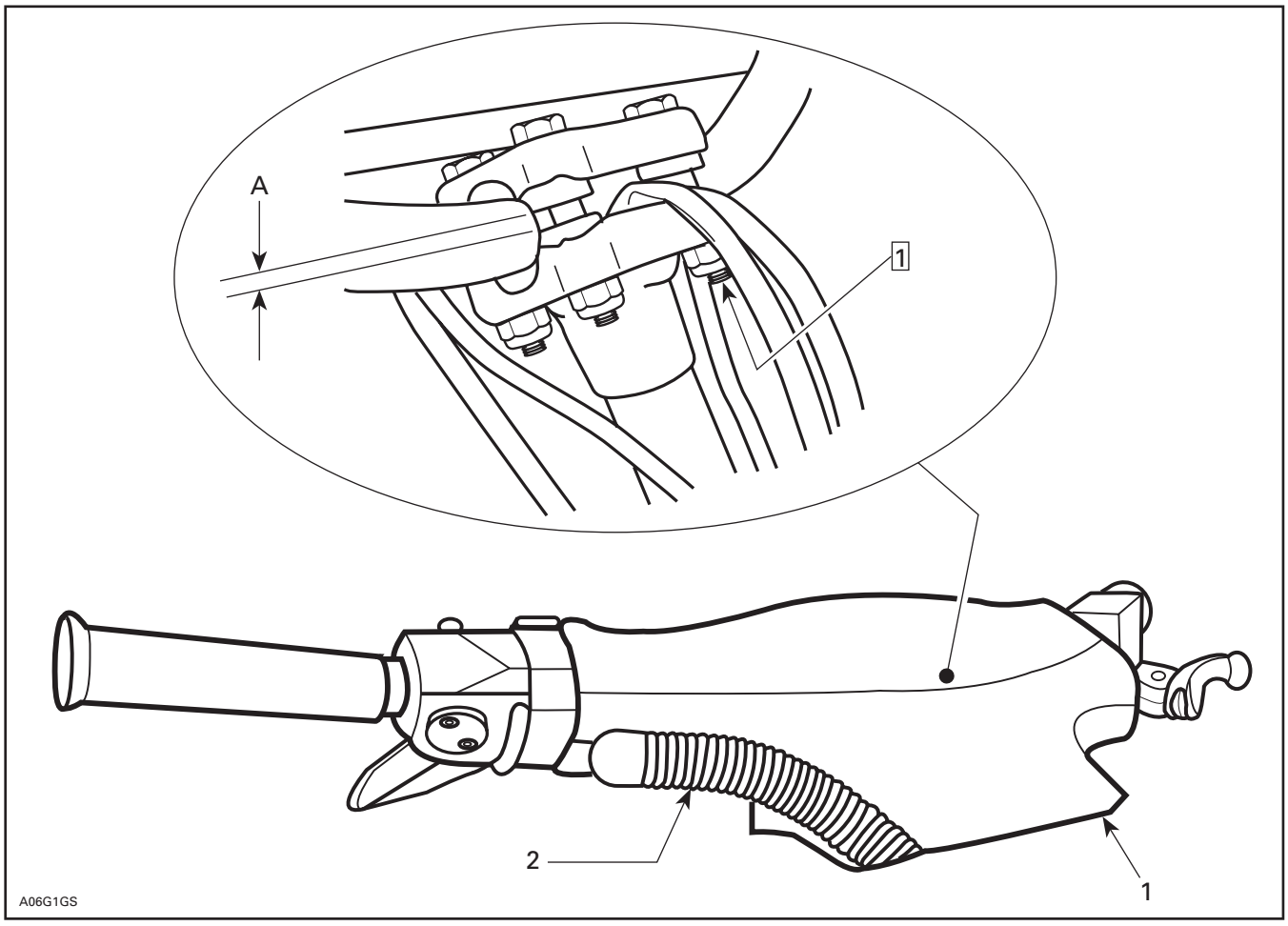
Place vehicle on ground.



TYPICAL - RIGHT SIDE SHOWN

1. *Nut M12 x 1.75 (2) (Section no. 1). Torque to 40 N•m (30 lbf•ft)*
2. *Slider cushion (4) (Ski leg)*
3. *Bolt M12 (2) (Ski leg)*
4. *Twist ski to ease bolt installation*

Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).
Loosen throttle and brake handle housings.
Install steering pad.

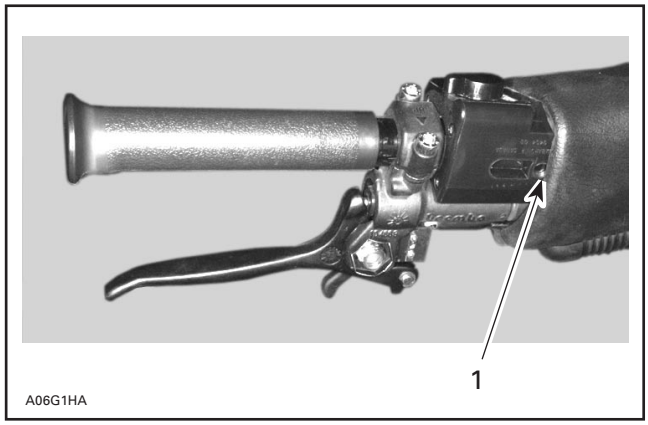


Step 1 : Torque nuts to 26 N•m (19 lbf•ft)

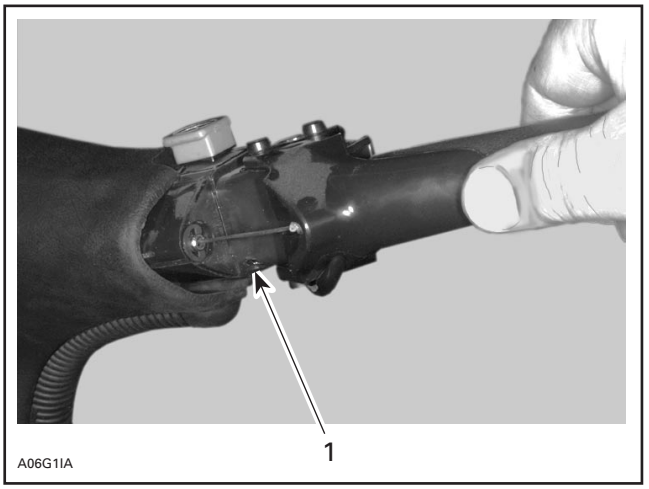
1. *Steering pad (engine compartment)*
2. *Keyway (section 3). Use liquid soap to ease installation*

A. Equal gap each side (both clamps)

Adjust then tighten throttle and brake handle housings.

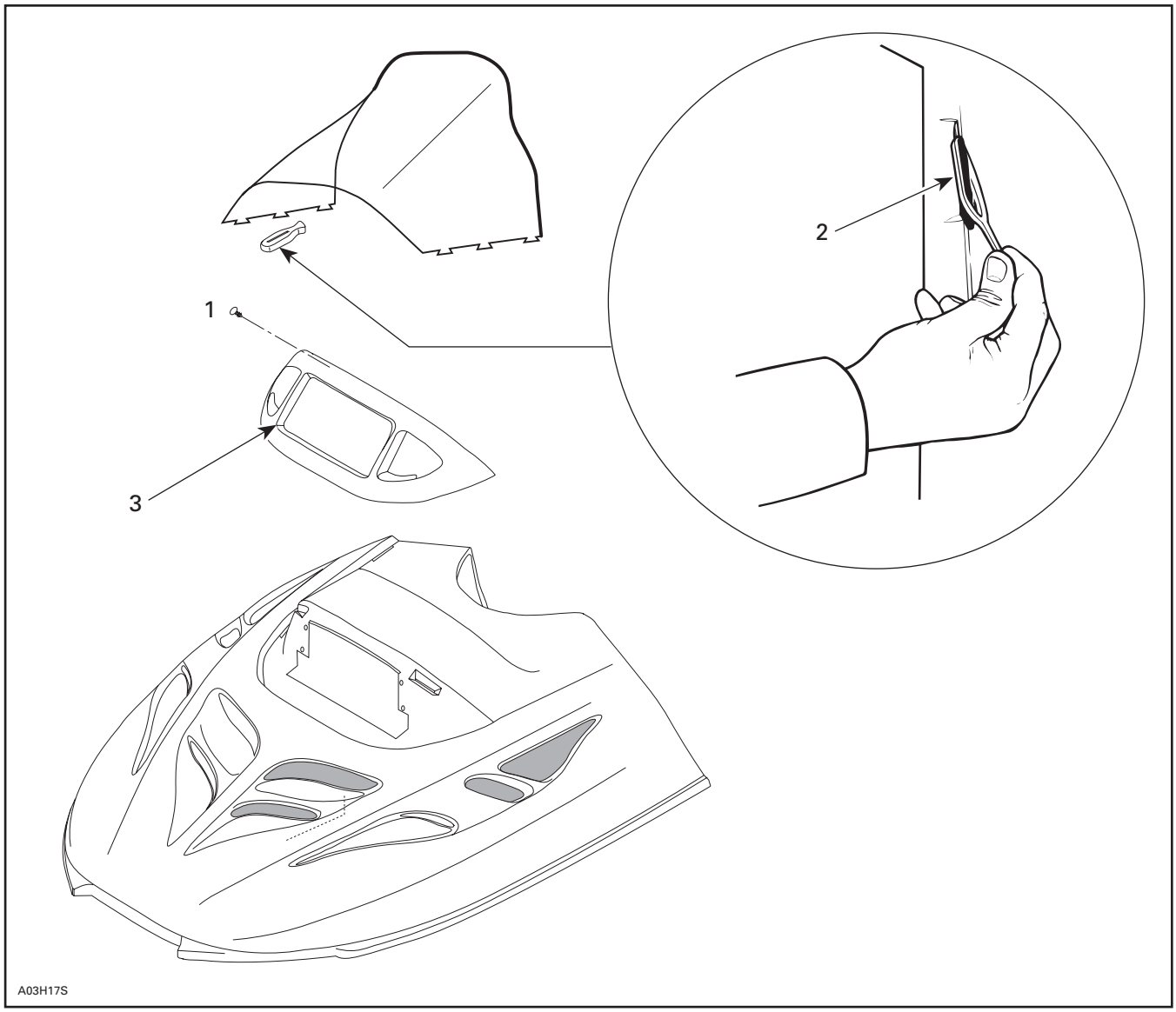


BRAKE HANDLE HOUSING
*1. Tighten set screw to 2 N•m (18 lbf•**in**)*



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

Install windshield on dashboard.



1. *Dart (section 2) (P / N 414 6443 00)*
2. *Latch (section 4) (P / N 570 0238 00)*
3. *Temporarily remove headlamp molding for windshield installation*

SUPPLEMENTAL OIL

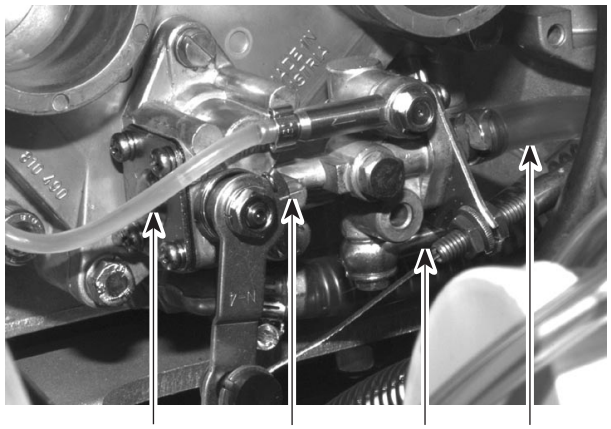
To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER ROTAX Injection Oil (P / N 413 8030 00) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

BLEEDING PROCEDURE

Remove air silencer and move carburetors aside.

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.

Check also for proper oil lever adjustment. Marks must aligned when throttle lever is activated just enough to take all cable play.

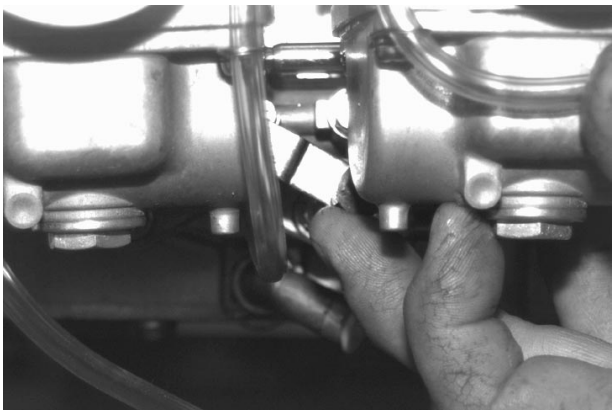


1. Small oil line
2. Marks aligned
3. Main oil line

Reinstall all parts except air silencer.

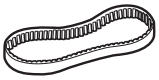
Bleed the small oil line between pump and intake manifold by running engine at idle while holding the pump lever in fully open position.

NOTE : If the air silencer has been reinstalled, make a J hook out of mechanical wire to lift the lever.



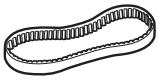
TYPICAL - ENGINE AT IDLE

Reinstall air silencer.



PARTS INSTALLATION

DRIVE BELT



Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P / N 413 7082 00) before installing drive belt.

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. 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.

MODELS			MX Z 670
Engine Type			670
Maximum HP RPM ①		RPM	7600 - 7800
Rotary Valve		P / N Opening (BTDC) Closing (ATDC)	420 9245 02 145 / 76
Carburetor Type			2 x VM 40
Main Jet			PTO 300 MAG 270
Needle Jet			224 AA-2
Pilot Jet			60
Needle Identification – clip position			7EDY1-3
Slide Cut-away			2.5
Float Adjustment		mm (in)	18.1 (.71)
Air Screw Adjustment		± 1/16 turn	2.25
Idle Speed		RPM	1800 - 2000
Gas Grade / Pump Octane Number		(R + M) / 2	Regular Unleaded / 87
Gas / Oil Ratio			Oil Injection
Ignition Timing BTDC ②		mm (in)	1.93 (.076)
Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 - .057)
Gear Ratio		teeth	26 / 44
Engagement Speed		±100 RPM	3800
Drive Pulley Calibration Screw Position			3
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32 in)	16.5 (21/32)
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)
	Y		Dimension Y must exceed X from 1mm (1/32in) to 2 mm (5/64 in)
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
	Force ③	kg (lbf)	6.8 (15)
Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (12 to 15)
Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation
Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull

① Engine speed at which maximum power is achieved.
② At 6000 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

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **96-12**

Revision 1

Date : January 17, 1996

SUBJECT : Technical Data

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada and United States : MX Z 670	1187, 1188	ALL

The technical data sheet for the above mentioned models has been updated.

Refer to Ski-Doo *Predelivery Bulletin* no. 96-12.

Replace with the attached.

MODELS			MX Z 670
Engine Type			670
Maximum HP RPM ①		RPM	7600 - 7800
Rotary Valve		P / N Opening (BTDC) Closing (ATDC)	420 9245 00 145 / 71
Carburetor Type			2 x VM 40
Main Jet			PTO 300 MAG 270
Needle Jet			224 AA-2
Pilot Jet			60
Needle Identification – clip position			7EDY1-3
Slide Cut-away			2.5
Float Adjustment		mm (in)	18.1 (.71)
Air Screw Adjustment		± 1/16 turn	2.25
Idle Speed		RPM	1800 - 2000
Gas Grade / Pump Octane Number		(R + M) / 2	Regular Unleaded / 87
Gas / Oil Ratio			Oil Injection
Ignition Timing BTDC ②		mm (in)	1.93 (.076)
Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 - .057)
Gear Ratio		teeth	26 / 44
Engagement Speed		±100 RPM	3800
Drive Pulley Calibration Screw Position			3
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32 in)	16.5 (21/32)
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)
	Y		Dimension Y must exceed X from 1mm (1/32in) to 2 mm (5/64 in)
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)
	Force ③	kg (lbf)	6.8 (15)
Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (12 to 15)
Drive Chain Tension			Fully tighten adjusting screw **by hand** then back OFF only far enough for hair pin installation
Track Adjustment	Deflection	mm (in)	45 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull

① Engine speed at which maximum power is achieved.
② At 6000 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
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MAG : Magneto side

Please route to :

Init.

- ☐ Service ☐
- ☐ Sales ☐
- ☐ Parts ☐

ski-doo® Bombardier

SNOWMOBILES

D

PREDELIVERY Bulletin

No. **96-13**

Date: November 27, 1995

SUBJECT: Predelivery Procedure

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada, United States and Sweden: Formula III LT/Mach Z LT	1087, 1088, 1089, 1100, 1101, 1102	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 Inc. 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, it may have some differences between the manufactured product and the descriptions and/or specifications in this document. Bombardier Inc. 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 inquires 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.

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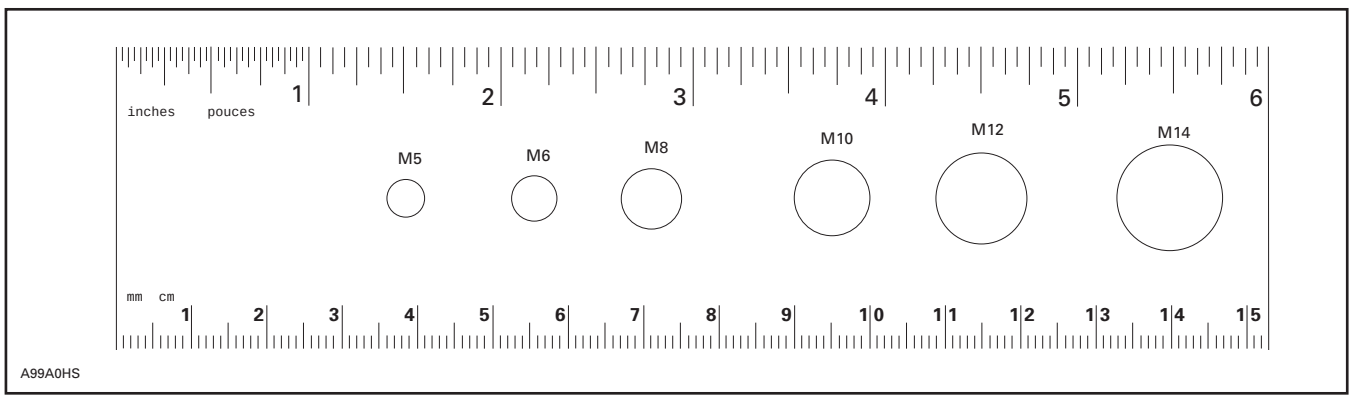
NOTE: This ruler can be helpful to identify fastener length or size.



◆ 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.

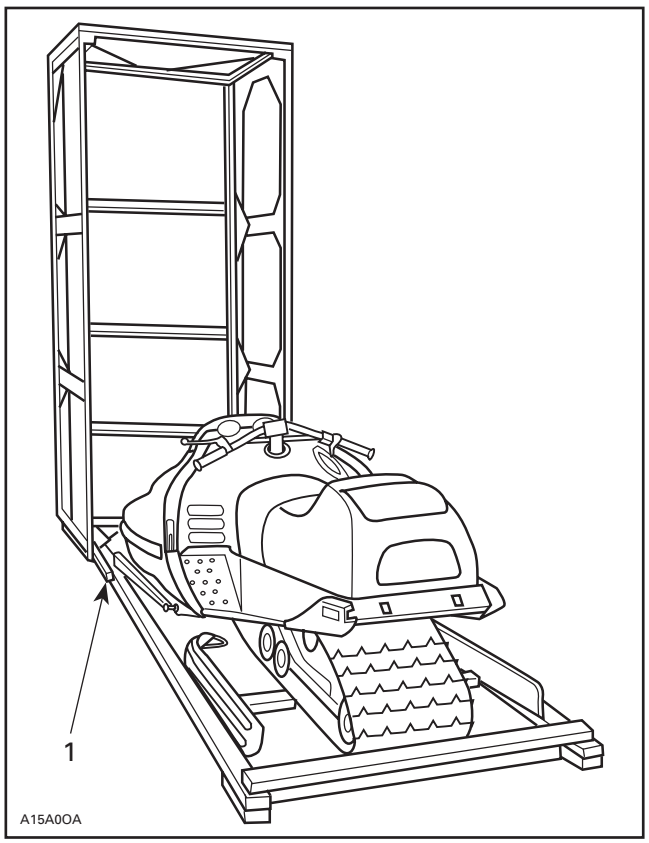
▼ CAUTION

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

Unscrew all screws retaining cover to crate base.

Notch in crate base is at front.

Tip cover over front of vehicle.



TYPIQUE

1. Notch

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

From underneath tunnel, slacken 4 nuts retaining seat then slowly pull out metal strip retaining windshield. Wait after rear molding installation for seat nuts retightening.

▼ CAUTION

Failure to lift seat might result in leatherette damage.

▼ 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, slider cushions and castellated nuts (some models only) to bolt skis to ski legs. Discard crating spacers and elastic stop nuts.

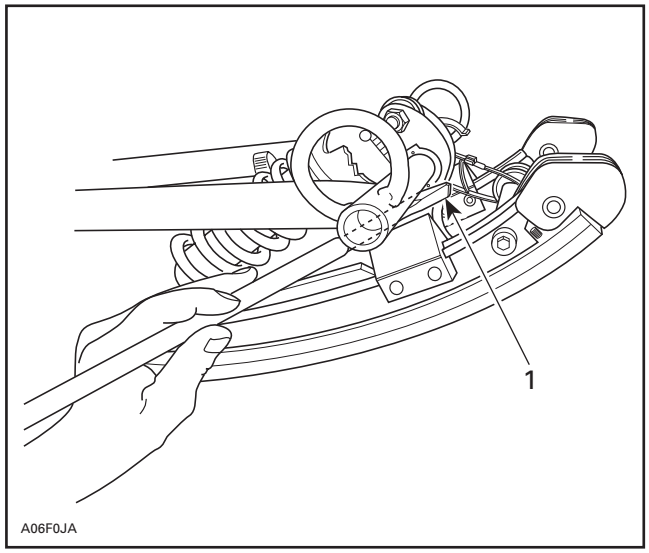
Remove vehicle from base.

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

Using a long flat chisel such as Snap-On® PPC820LA cut and remove shipping strap that collapses front portion of rear suspension.

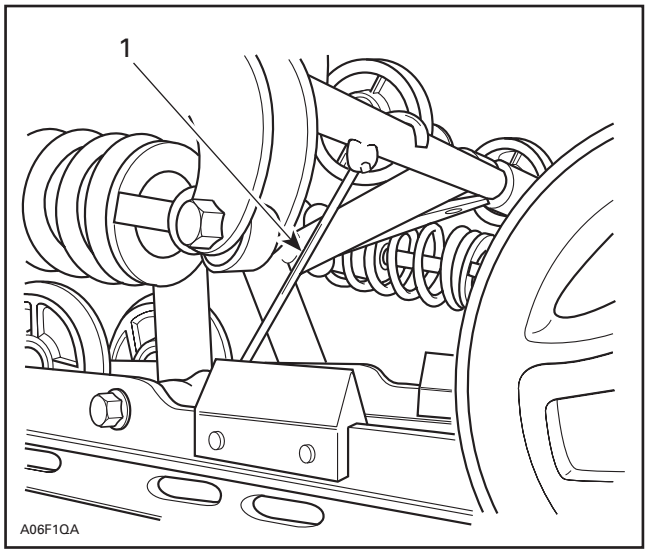
◆ WARNING

Failure to use this method of strap removal could result in personal injury.



1. Cut shipping strap

Remove hook from rear portion of rear suspension.



1. Hook

◆ WARNING

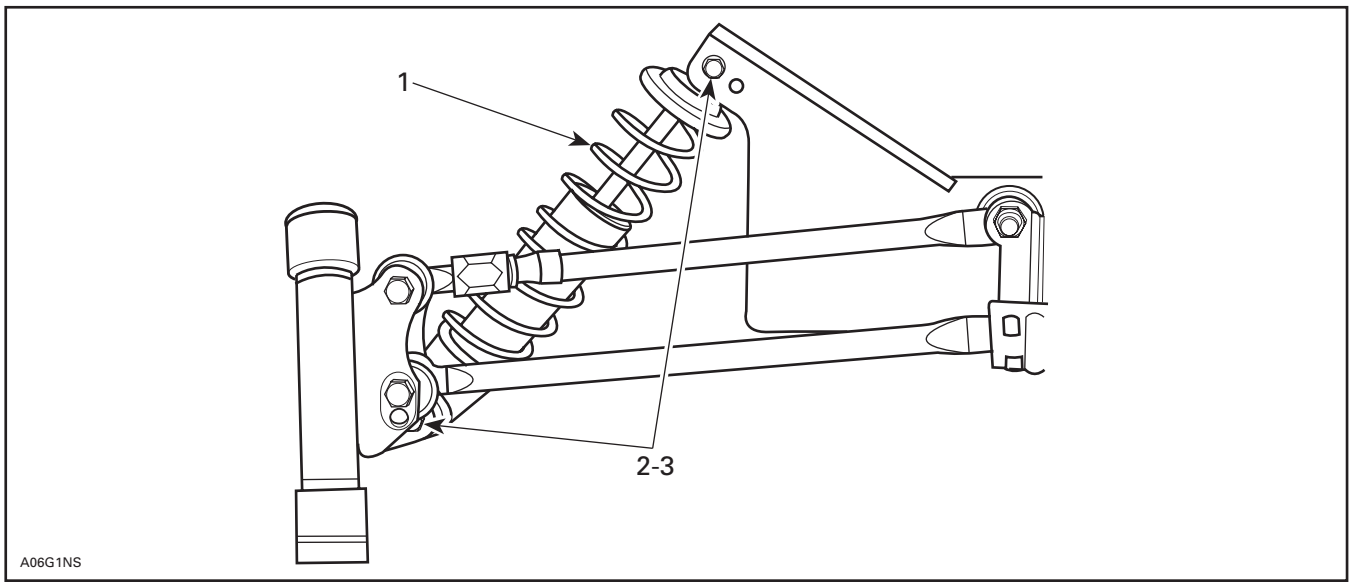
Shipping strap must be cut and hook removed to have snowmobile suspension operational.

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

Lift front of vehicle and block safely. Secure shock absorbers to suspension with their adjusting ring at bottom.

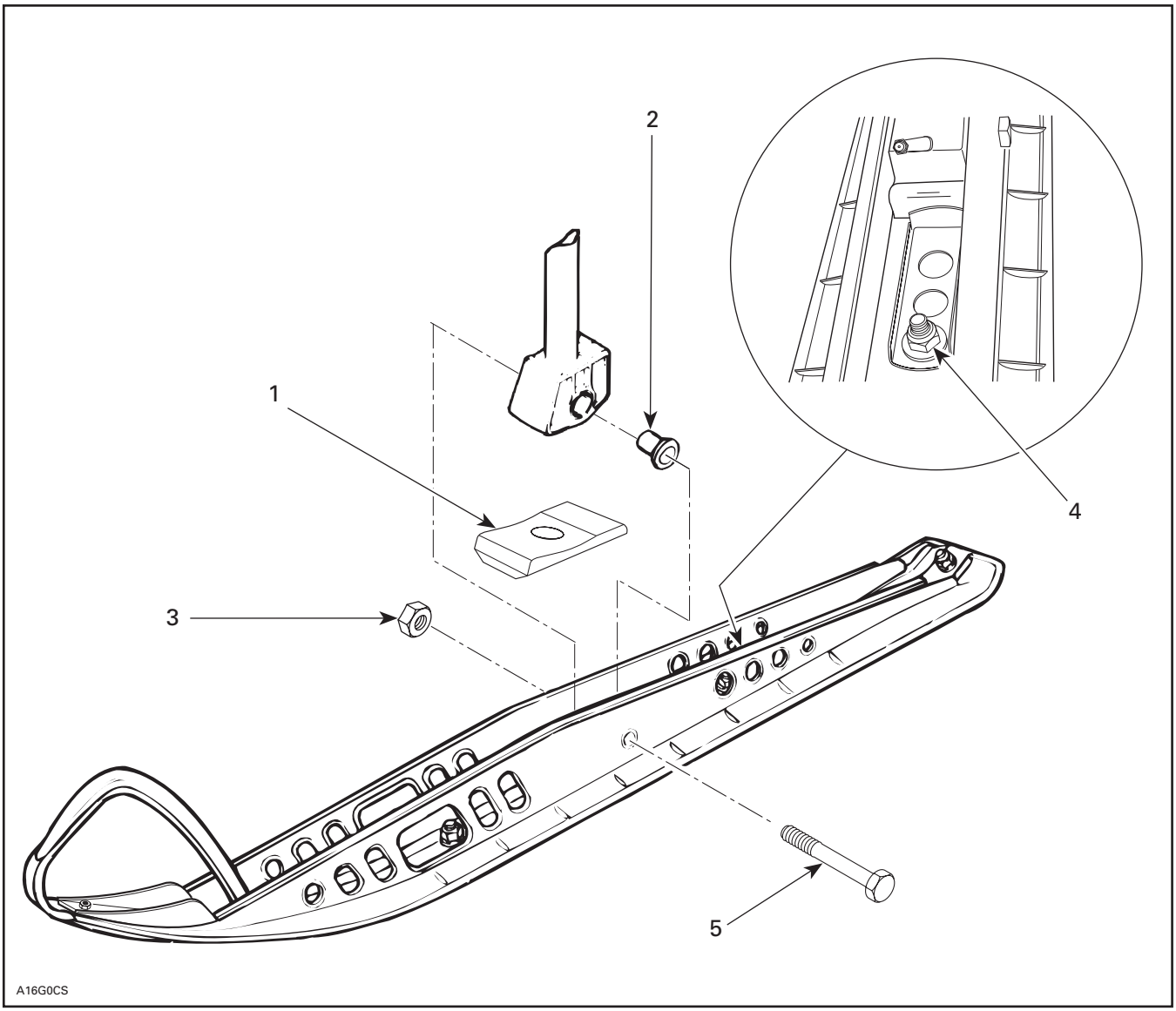
NOTE: Position bolt heads toward front.

Properly position exhaust support on chassis making sure that its lug rests on chassis recess. Hook up exhaust springs.



TYPICAL - RIGHT SIDE SHOWN

1. *Shock absorber (2) (engine compartment)*
2. *M10 x 1.5 x 55 bolt (on suspension)*
3. *M10 x 1.5 nut (section 4). Torque to 48 N•m (35 lbf•ft)*



LEFT SIDE SHOWN

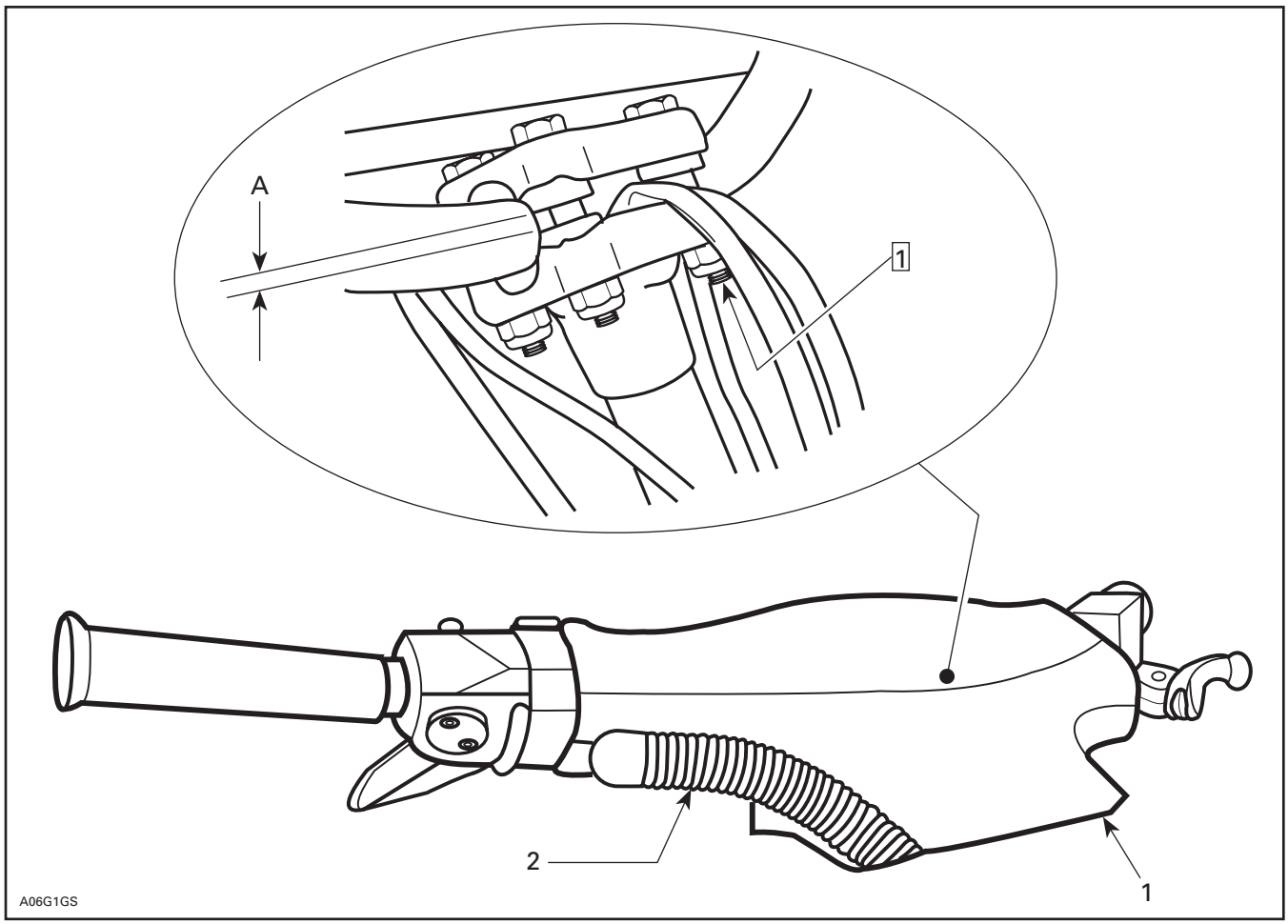
1. *Ski stopper (2), "AVANT" toward front*
2. *Slider cushion (4)*
3. *Nut M12 (2) (section 8) (tighten until ski moves up and down with a slight resistance)*
4. *Slacken then adjust against ski stopper 14 N•m (124 lbf•**in**)*
5. *Bolt M12 (2) (torque to 40 N•m (30 lbf•ft))*

After ski installation, adjust stopper against stop bounding then tighten nut to 14 N•m (124 lbf•**in**). More preload on stop bounding will result in a more aggressive steering. Adjust according to driver preferences.

Adjust handlebar and torque nuts to 26 N•m (19 lbf•ft).

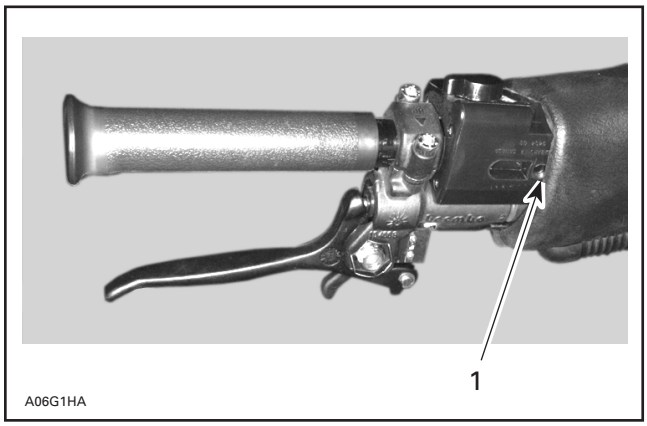
Slacken throttle and brake handle housings.

Install steering pad.



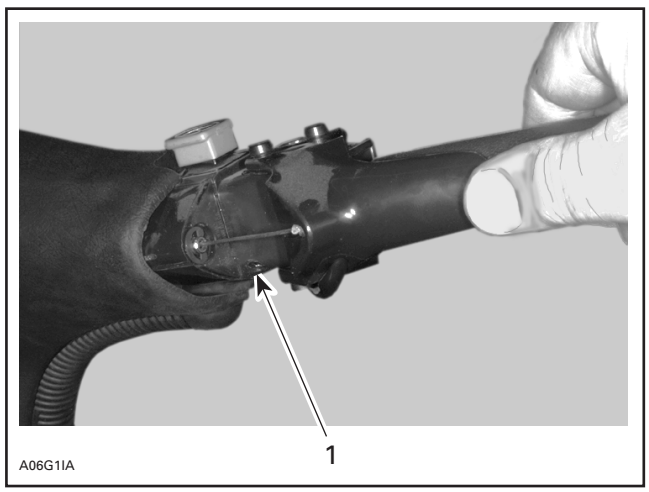
Step 1 Torque nuts to 26 N•m (19 lbf•ft)
1. Steering pad (engine compartment)
2. Keyway (section 5). Use liquid soap to ease installation
A. Equal gap each side (both clamps)

Adjust then tighten throttle and brake handle housings.



BRAKE HANDLE HOUSING

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

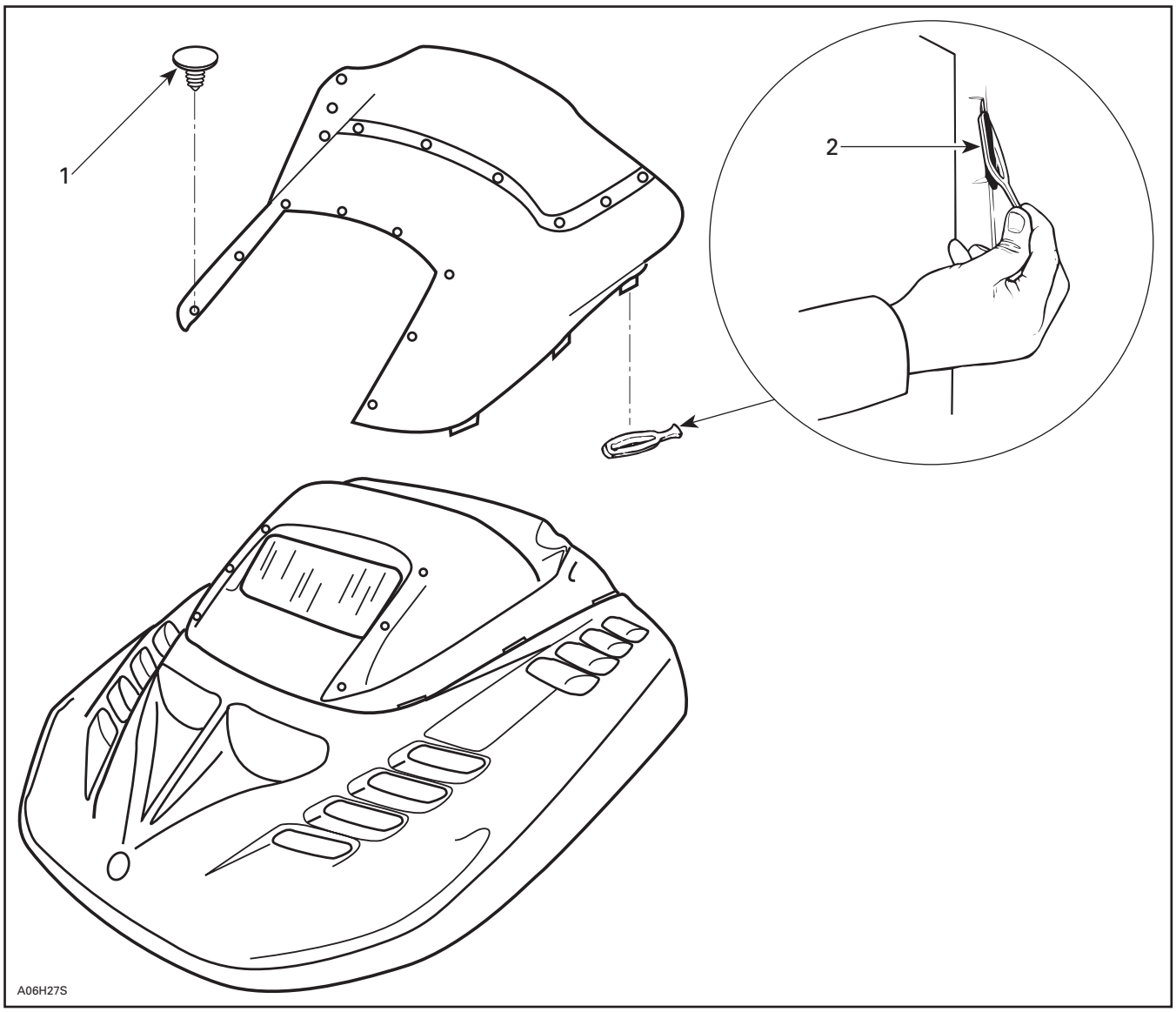


THROTTLE HANDLE HOUSING

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

PARTS INSTALLATION
WINDSHIELD

Install windshield on hood.



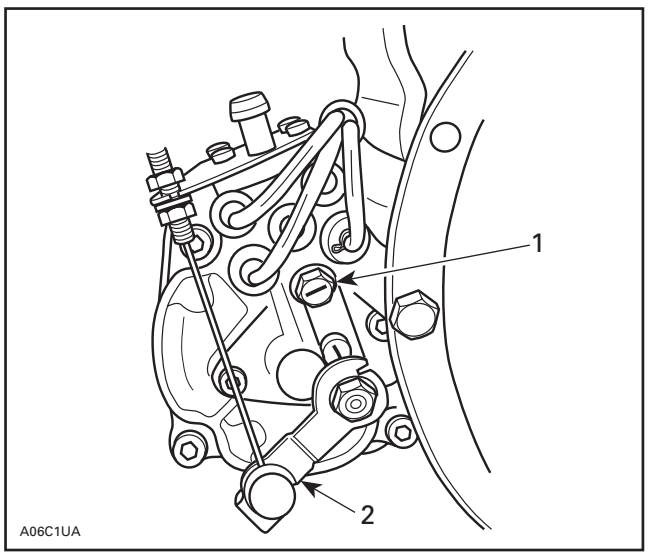
1. *Dart (section 6)*
2. *Latch (section 6)*

PARTS INSTALLATION
DRIVE BELT

Clean pulleys and disc brake with a suitable cleaner such as Loctite Cleaning Solvent (P/N 413 7082 00) before installing drive belt.

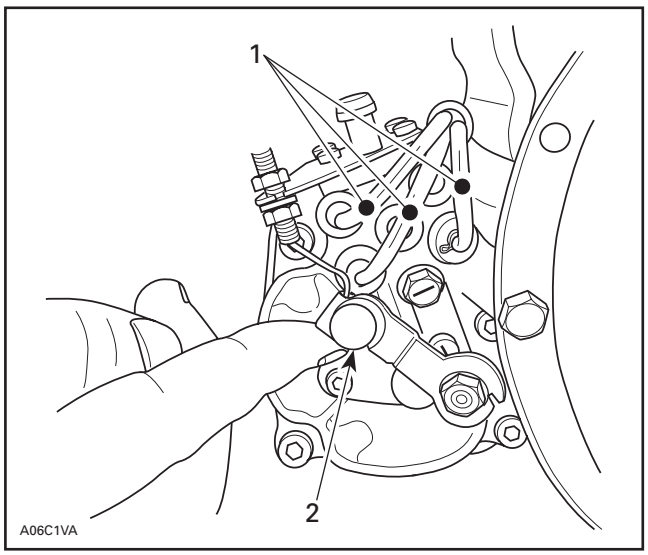
To assure additional protection during the initial engine break-in, 500 mL (18 imp. oz) of BOMBARDIER Injection Oil (P/N 496 0133 00) should be added to fuel for the first full filling of fuel tank. Always remove and clean spark plugs after engine break-in.

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



1. Bleeder screw
2. Oil pump lever

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



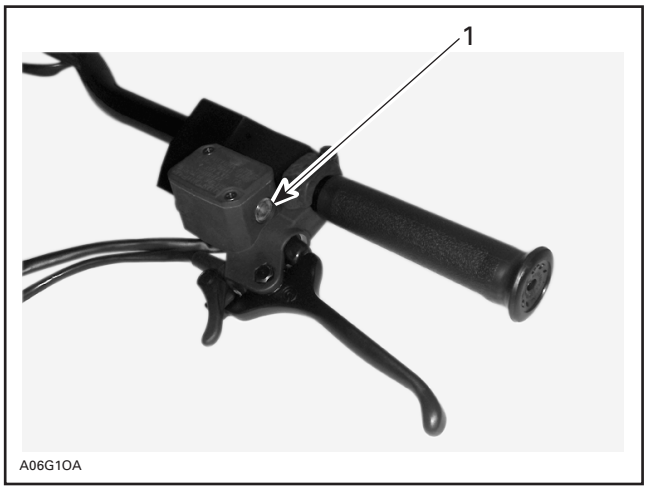
1. Small oil lines
2. Engine at idle (fully open position)

LIQUIDS
BRAKE FLUID LEVEL

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

▼ CAUTION

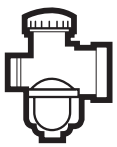
Use only (DOT 4) brake fluid from a sealed container. Do not store or use a partial bottle of brake fluid.



1. Minimum

ADJUSTMENTS
TRACK

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

	MODELS			FORMULA III LT	MACH Z LT
	Engine Type			599	779
	Maximum HP RPM ①		RPM	8100-8300	8100-8300
	Rotary Valve		P/N Opening (BTDC)/ Closing (ATDC)	N.A.	N.A.
	Carburetor Type			PTO VM 36-172 CRT VM 36-173 MAG VM 36-174	PTO VM 38-C152 CRT VM 38-C152 MAG VM 38-C152
	Main Jet			PTO 330 / CRT 320 / MAG 330	PTO 380 / CRT 370 / MAG 380
	Needle Jet			286 P-0	327 O-4
	Pilot Jet			PTO 50 / CRT 55 / MAG 50	PTO 40 / CRT 45 / MAG 45
	Needle Identification– clip Position			6DEY2-3	8AGY1-3
	Slide Cut-away			2.5	2.0
	Float Adjustment		mm (in)	18.1 (.71)	20 (.787)
	Air Screw Adjustment		± 1/16 turn	PTO 1.5 / CRT 1.5 / MAG 1.5	PTO 4.5 / CRT 4.0 / MAG 3.5
	Idle Speed RPM		RPM	1800-2000	1700-1800
	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)	1.75 (.069)	2.11 (.083)
	Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 -.057)	0.55 - 1.45 (.022 -.057)
	Gear Ratio		teeth	23/44	25/44
	Engagement Speed		RPM	4400-4600	4000-4200
	Drive Pulley Calibration Screw Position			4	4
	Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32) in	16.5 (21/32)	
	Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
		Y		Dimension Y must exceed from 1 mm (1/32 in) to 2 mm (5/64 in)	
	Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
		Force ③	kg (lbf)	6.8 (15)	
	Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (11.9 to 15.0)	
	Drive Chain Tension			Fully tighten adjusting screw by hand then back OFF only far enough for hair pin installation	
	Track Adjustment	Deflection	mm (in)	40 to 55 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull	

①Engine speed at which maximum power is achieved.

②At 6000 RPM (engine cold) with headlamp turned on.

③Force 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.

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ski-doo® Bombardier

SNOWMOBILES

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PREDELIVERY Bulletin

No. **96-13**

Revision 1

Date : January 17, 1996

SUBJECT : Technical Data

YEAR	MODEL NAME	MODEL NUMBER	SERIAL NUMBER
1996	Canada, United States and Sweden : Formula III LT / Mach Z LT	1087, 1088, 1089 1100, 1101, 1102	ALL

The technical data sheet for the Formula III LT has been updated (see ignition timing BTDC).

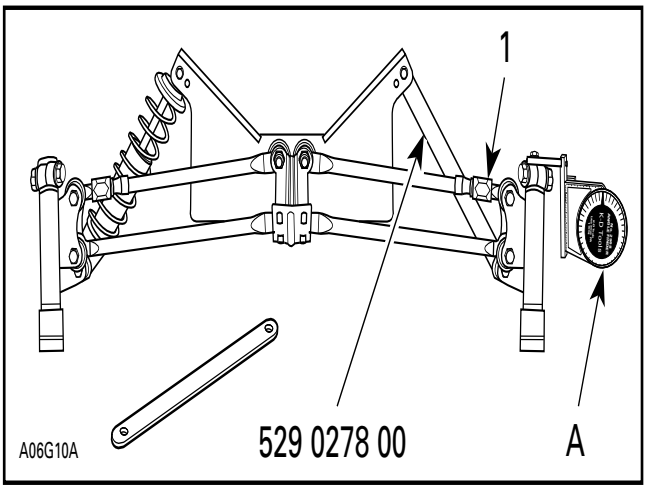
Refer to Ski-Doo *Predelivery Bulletin* no. 96-13.

Replace with the attached.

LIQUIDS
BRAKE FLUID LEVEL

Check brake fluid (DOT 4) in reservoir 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

ADJUSTMENTS
TRACK

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

MODEL			FORMULA III LT	MACH Z LT
Engine Type			599	779
Maximum HP RPM ①		RPM	8100 - 8300	8100 - 8300
Rotary Valve		P / N Opening (BTDC) / Closing (ATDC)	Not applicable	Not applicable
Carburetor Type			PTO VM 36-172 CTR VM 36 -173 MAG VM 36 -174	PTO TM 38 - C152 CTR TM 38 - C152 MAG TM 38 - C152
Main Jet			PTO 330 / CTR 320 / MAG 330	PTO 380 / CTR 370 / MAG 380
Needle Jet			286 P - 0	327 O - 4
Pilot Jet			PTO 50 / CTR 55 / MAG 50	PTO 40 / CTR 45 / MAG 45
Needle Identification – clip position			6DEY2 - 3	8AGY1 - 3
Slide Cut-away			2.5	2.0
Float Adjustment		mm (in)	18.1 (.71)	20 (.787)
Air Screw Adjustment		± 1/16 turn	PTO 1.5 / CTR 1.5 / MAG 1.5	PTO 4.5 / CTR 4.0 / MAG 3.5
Idle Speed		RPM	1800 - 2000	1700 - 1800
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)	2.18 (.086)	2.11 (.083)
Trigger Coil Air-Gap		mm (in)	0.55 - 1.45 (.022 - .057)	0.55 - 1.45 (.022 - .057)
Gear Ratio		Teeth	23/44	25/44
Engagement Speed		RPM	4400 - 4600	4000 - 4200
Drive Pulley Calibration Screw Position			4	4
Pulley Distance	Z	(+ 0, – 1) mm (+ 0, – 1/32 in)	16.5 (21/32)	
Offset	X	± 0.4 mm (± 1/64 in)	35.0 (1-3/8)	
	Y		Dimension Y must exceed X from 1 mm (1/32 in) to 2 mm (5/64 in)	
Drive Belt Adjustment	Deflection	mm (in)	32 (1-1/4)	
	Force ③	kg (lbf)	6.8 (15)	
Driven Pulley Preload		kg (lbf)	5.4 to 6.8 (11.9 to 15.0)	
Drive Chain Tension			Fully tighten adjusing screw by hand then back OFF only far enough for hair pin installation	
Track Adjustment	Deflection	mm (in)	40 to 50 (1-3/4 to 2) with a 7.3 kg (16 lb) downward pull	

① Engine speed at which maximum power is achieved.
② At 6000 RPM (engine cold) with headlamp turned on.
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