

SKI-DOO KIT - Trail Rail Ice Scratchers

Product:	Ski-Doo
Project no:	487803792_rev3
Instruction Sheet P/N:	487803792
Revision no:	3
Revision date:	June, 2025
Item covered:	Trail Rail Ice Scratchers

The following symbols may be used in this document:

 **WARNING**
Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION:** Indicates a hazard situation which, if not avoided, could result in minor or moderate injury.

NOTICE Indicates an instruction which, if not followed, could severely damage vehicle components or other property.

 **WARNING**

- This kit is designed for specific applicable models only (authorized BRP dealers will confirm model(s)). It is not recommended for units other than the one (those) for which it was sold.
- Should removal of a locking device (e.g. lock tabs, self-locking fasteners, etc.) be required when undergoing disassembly/assembly, always replace with a new one.
- Torque wrench tightening specifications must strictly be adhered to.
- Unless otherwise specified, engine must be OFF when performing any operation on the vehicle.
- Always be aware of parts that can move, such as wheels, transmission components, etc.
- Always wear EYE PROTECTION AND APPROPRIATE GLOVES when using power tools.

 **WARNING**
Some important safety information and/or operating instructions dedicated to the end user might be included in this instruction sheet. Make sure to give the kit part number as well as the instruction sheet included with this kit to the customer. Verify that the customer has access to all the information required for proper use of the accessory.

NOTE: USE TIGHTENING TORQUES IN THE FOLLOWING TABLE IF NOT OTHERWISE SPECIFIED.

GRADE				
	5.8	8.8	10.9	12.9
M4	1.8 ± 0.2 N•m (16 ± 2 lbf•in)	2.8 ± 0.2 N•m (25 ± 2 lbf•in)	3.8 ± 0.2 N•m (34 ± 2 lbf•in)	4.5 ± 0.5 N•m (40 ± 4 lbf•in)
M5	3.3 ± 0.2 N•m (29 ± 2 lbf•in)	5 ± 0.5 N•m (44 ± 4 lbf•in)	7.8 ± 0.7 N•m (69 ± 6 lbf•in)	9 ± 1 N•m (80 ± 9 lbf•in)
M6	7.5 ± 1 N•m (66 ± 9 lbf•in)	10 ± 2 N•m (89 ± 18 lbf•in)	12.8 ± 2.2 N•m (113 ± 19 lbf•in)	16 ± 2 N•m (142 ± 18 lbf•in)
M8	15.3 ± 1.7 N•m (135 ± 15 lbf•in)	24.5 ± 3.5 N•m (18 ± 3 lbf•ft)	31.5 ± 3.5 N•m (23 ± 3 lbf•ft)	40 ± 5 N•m (30 ± 4 lbf•ft)
M10	29 ± 3 N•m (21 ± 2 lbf•ft)	48 ± 6 N•m (35 ± 4 lbf•ft)	61 ± 9 N•m (45 ± 7 lbf•ft)	73 ± 7 N•m (54 ± 5 lbf•ft)
M12	52 ± 6 N•m (38 ± 4 lbf•ft)	85 ± 10 N•m (63 ± 7 lbf•ft)	105 ± 15 N•m (77 ± 11 lbf•ft)	128 ± 17 N•m (94 ± 13 lbf•ft)

M14	85 ± 10 N•m (63 ± 7 lbf•ft)	135 ± 15 N•m (100 ± 11 lbf•ft)	170 ± 20 N•m (125 ± 15 lbf•ft)	200 ± 25 N•m (148 ± 18 lbf•ft)
M16	126 ± 14 N•m (93 ± 10 lbf•ft)	205 ± 25 N•m (151 ± 18 lbf•ft)	255 ± 30 N•m (188 ± 22 lbf•ft)	305 ± 35 N•m (225 ± 26 lbf•ft)
M18	170 ± 20 N•m (125 ± 15 lbf•ft)	273 ± 32 N•m (201 ± 24 lbf•ft)	330 ± 25 N•m (243 ± 18 lbf•ft)	413 ± 47 N•m (305 ± 35 lbf•ft)

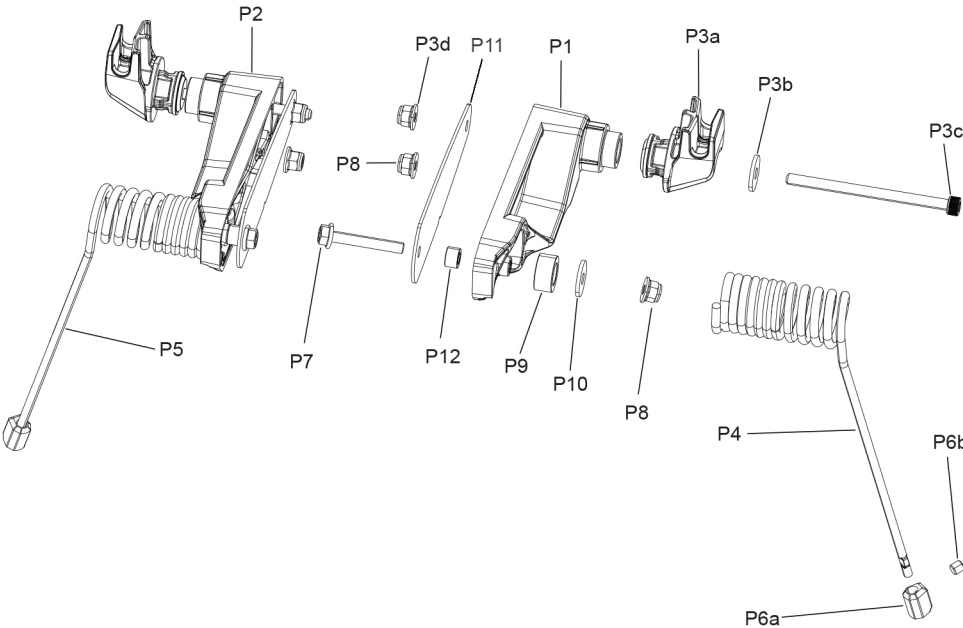
NOTE: The illustrations in this document show typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts; however, they represent parts that have the same or similar function.

Installation time is approximately **0.25** hour.

ICON LEGEND

ICON	INDICATES
	Parts to be discarded
	Parts kept for reinstallation

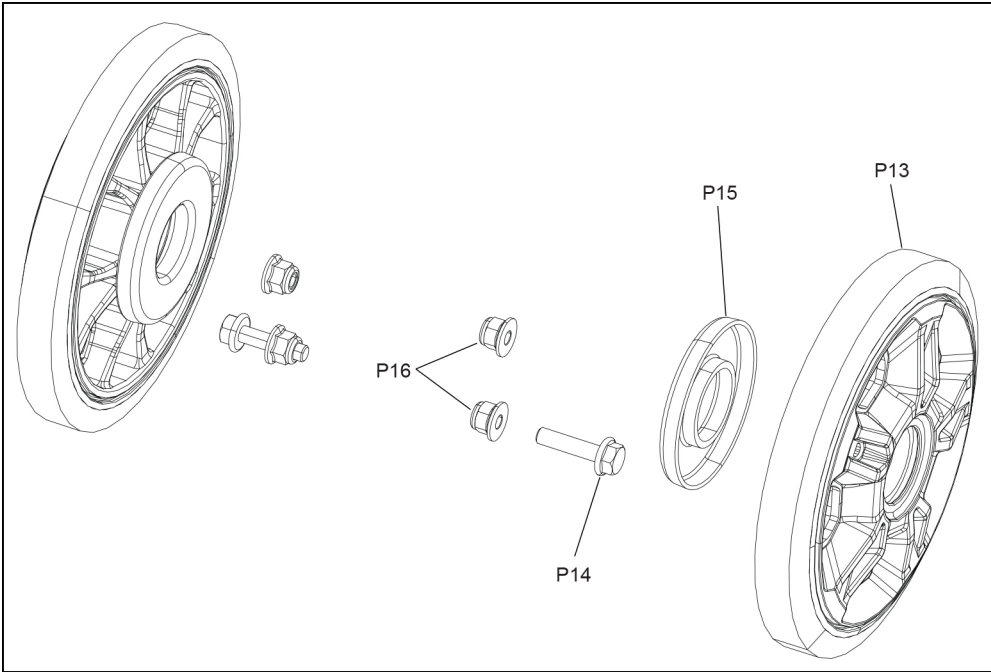
PARTS TO BE INSTALLED



ITEM	DESCRIPTION	PART NUMBER	QTY
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P1	LH Spring Support	503197391	1
P2	RH Spring Support	503197392	1
P3	Hook Retaining Kit (Includes P3a to P3d)	860202574	1
P3a	Retaining Hook Assembly	Not available separately	2
P3b	Flat Washer	Not available separately	2
P3c	M6 X 90 Socket Head Screw	Not available separately	2
P3d	M6 Flanged Elastic Nut	Not available separately	2
P4	LH Torsion Spring	503197410	1
P5	RH Torsion Spring	503197411	1
P6	End Piece Kit (Includes P6a to P6b)	860202860	1
P6a	End Piece	Not available separately	2
P6b	Socket Set Screw	Not available separately	2
P7	M6 X 40 Hex. Flanged Screw	207664044	2
P8	M6 Flanged Elastic Nut	233261466	4
P9	Spacer	503197077	2
P10	Flat Washer	224061201	2
P11	Reinforcement Support	503197386	2
P12	Spacer	503197390	2

Parts to be Installed on Some Vehicles (See MOVING AND ADDING A WHEEL section.)



ITEM	DESCRIPTION	PART NUMBER	QTY
P13	Original Wheel	Depends on the vehicle model	2
P14	M6 X 25 Screw	250000945	2

P15	Back Cap	503190434	2
P16	M6 Nut	233261466	4

NOTE: The wheel part number is located on the back of the wheel.

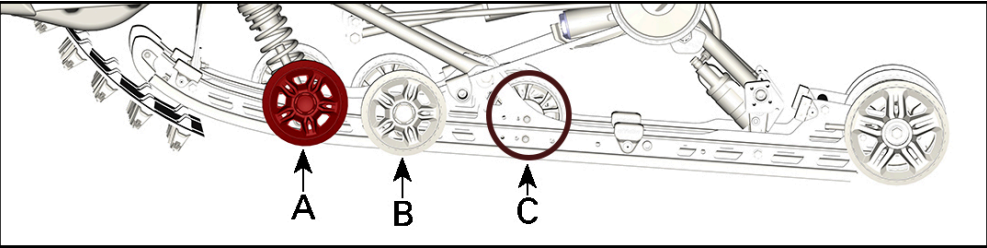
VEHICLE PREPARATION

NOTE: Consult the *OPERATOR'S GUIDE* or the *SPEC BOOK* to identify the vehicle suspension.

Replacement of Casting

If a wheel is present in the position A of the rail (see pictures below), the support of the wheel is replaced with the ice scratcher.

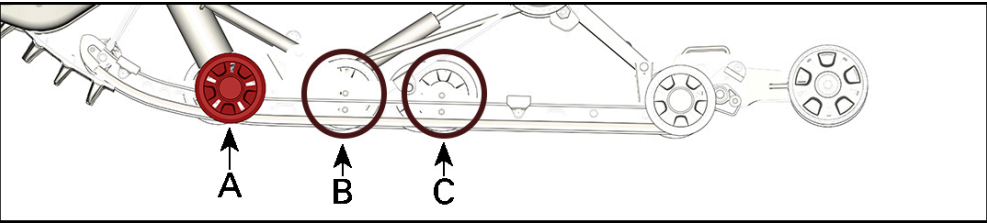
RMX 129" & 137"



TYPICAL - LH SIDE SHOWN

- A. Position A
- B. Position B
- C. Position C

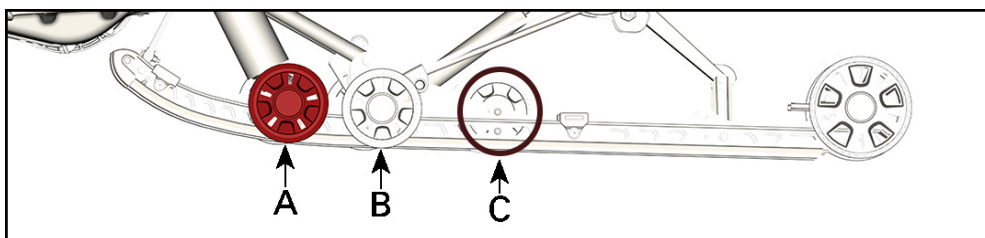
SC5U 20"



TYPICAL - LH SIDE SHOWN

- A. Position A
- B. Position B
- C. Position C

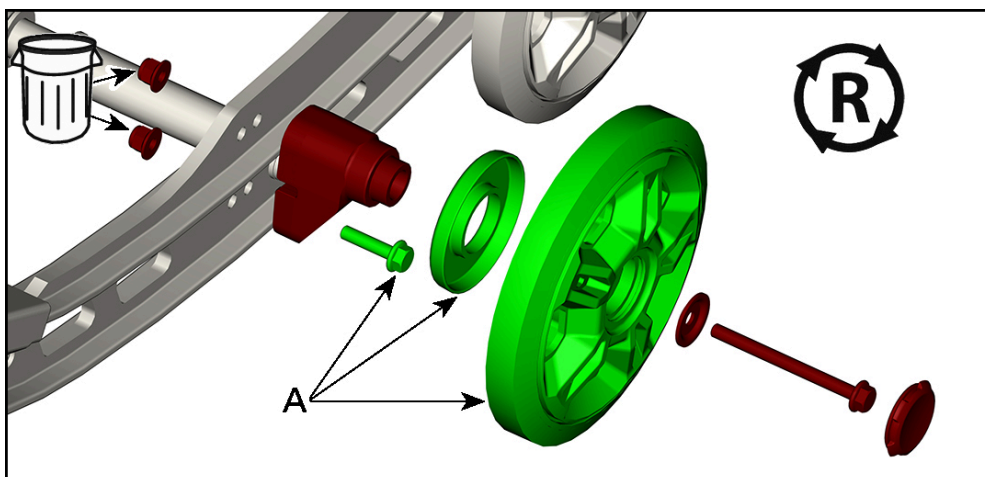
SC5M 137" with a wheel in position A



TYPICAL - LH SIDE SHOWN

A. Position A
B. Position B
C. Position C

Remove the wheel indicated above and its support. Keep the wheel, the inner cap, and the lower screw.



TYPICAL - LH SIDE SHOWN

A. Parts to keep for the ice scratcher

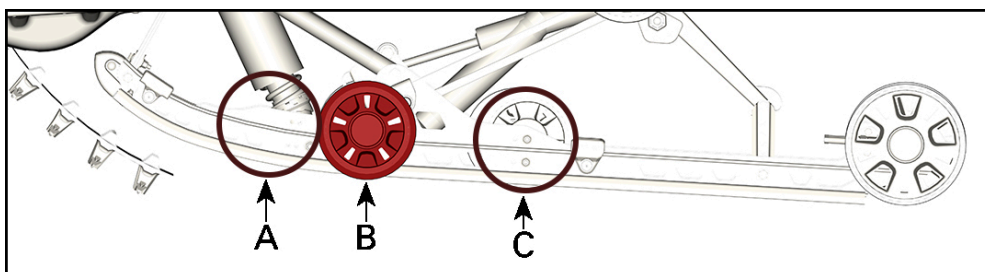
The ice scratcher will be installed at the same position.

Moving and Adding a Wheel

NOTE: BRP strongly suggest ordering and installing the second wheel to avoid premature wear of the slides.

If the wheel is not present in position A of the rail (see pictures below), the wheel position will change to enable the installation of the ice scraper.

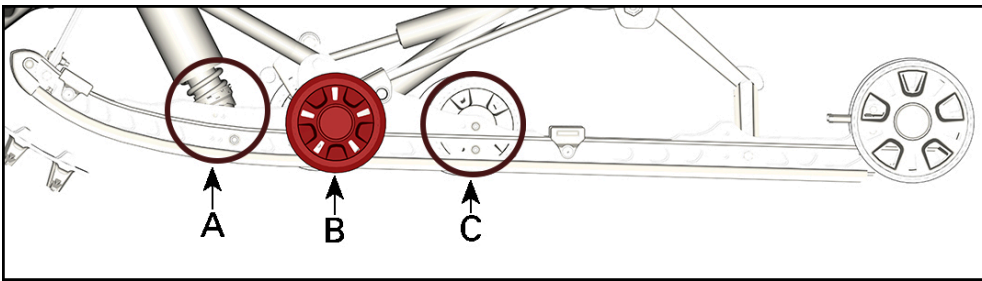
SC5M 129"



TYPICAL - LH SIDE SHOWN

A. Position A
B. Position B
C. Position C

SC5M 137"



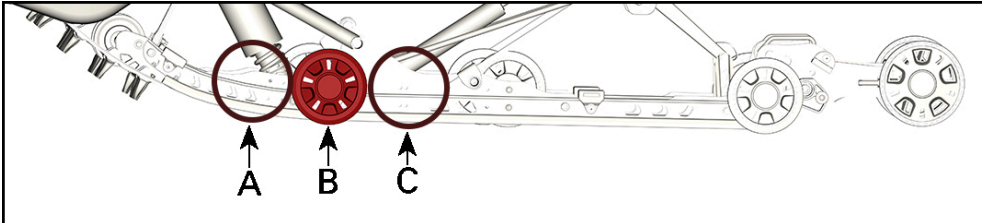
TYPICAL - LH SIDE SHOWN

A. Position A

B. Position B

C. Position C

SC5U 16"



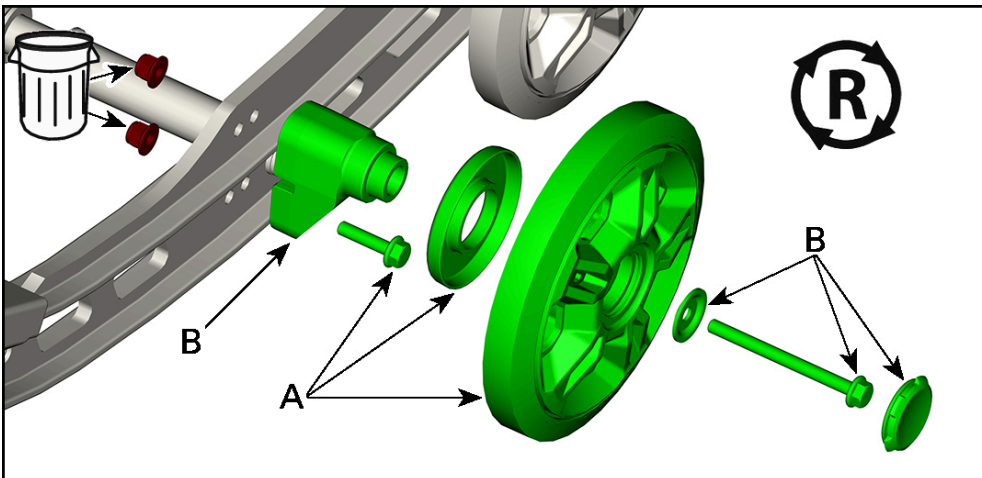
TYPICAL - LH SIDE SHOWN

A. Position A

B. Position B

C. Position C

Remove the wheel indicated above and its support. Keep everything except the two (2) nuts.

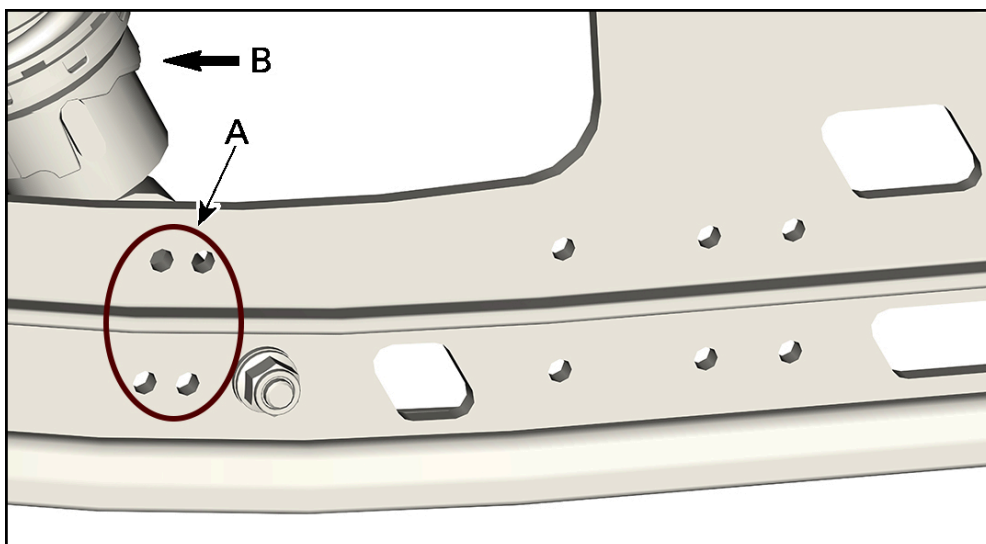


TYPICAL - LH SIDE SHOWN

A. Parts to keep for the ice scratcher

B. Parts to keep for the new wheel

The ice scratcher will be installed at position A instead of its original position.



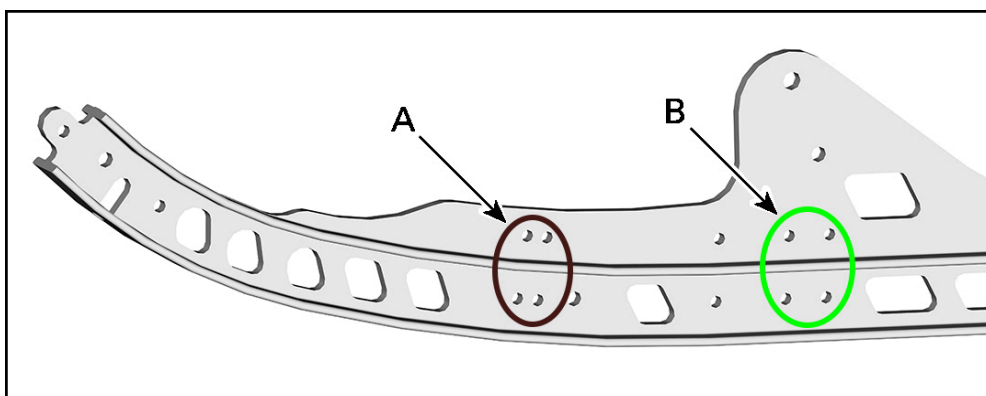
TYPICAL - LH SIDE SHOWN
 A. Position of the ice scratcher
 B. Front of the vehicle

Recommended Installation

NOTE: To install the new wheel, make sure to order all the parts in the recommended parts section and to use the leftover parts of the previously removed wheel.

Position of the new wheel for SC5M

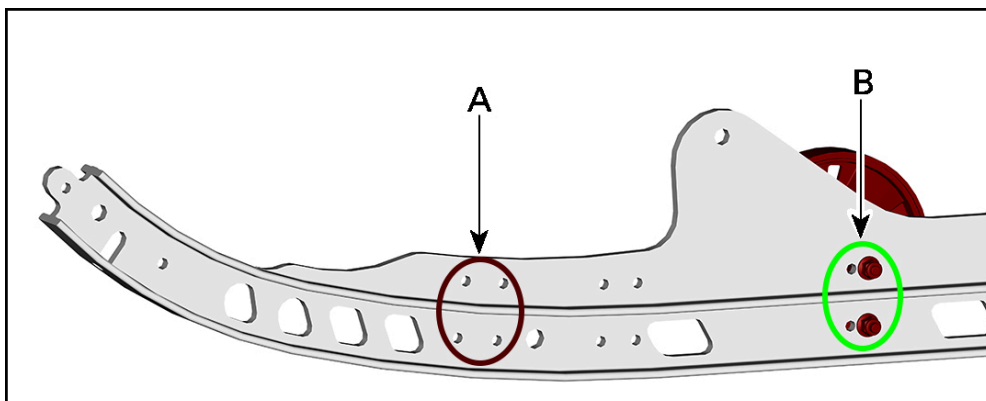
NOTE: Make sure the wheel is installed outside for this suspension type.



TYPICAL - LH SIDE SHOWN
 A. Position of the ice scratcher
 B. Position of the new wheel

Position of the new wheel for SC5U

NOTE: Make sure the wheel is installed inside for this suspension type.

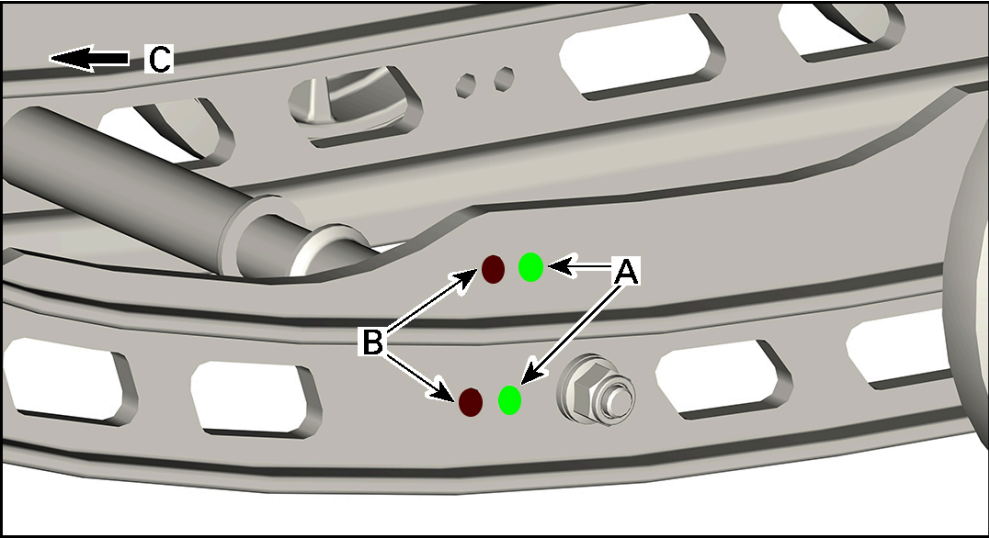


TYPICAL - LH SIDE SHOWN

- A. Position of the ice scratcher
- B. Position of the new wheel

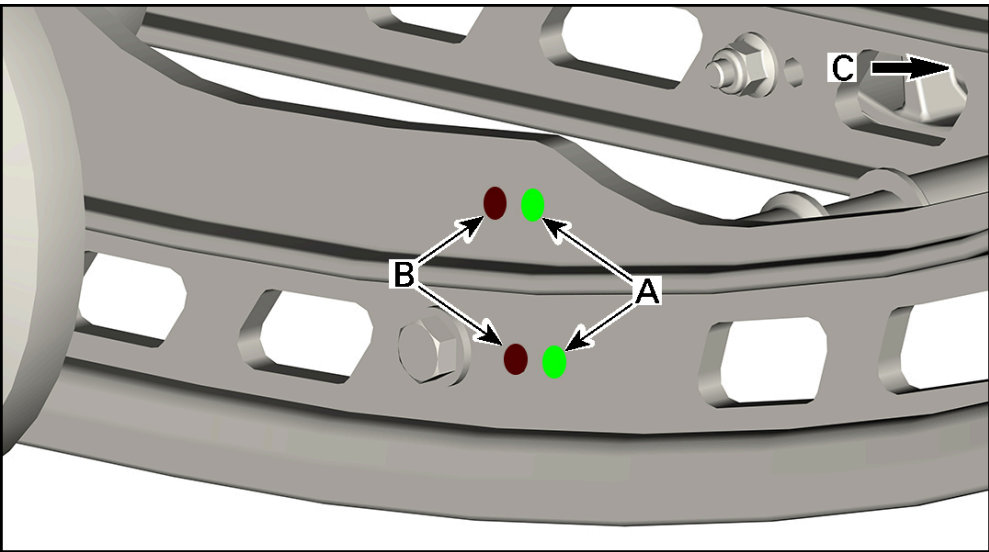
For Both Suspensions

Install the new wheel in the back position on the LH side of the vehicle.



TYPICAL - LH SIDE SHOWN
A. Correct position
B. Incorrect position
C. Front of vehicle

Install the new wheel in the front position on the RH side of the vehicle.



TYPICAL – RH SIDE SHOWN
A. Correct position
B. Incorrect position
C. Front of vehicle

Install the new wheel. Installation is the reverse of the removal procedure.

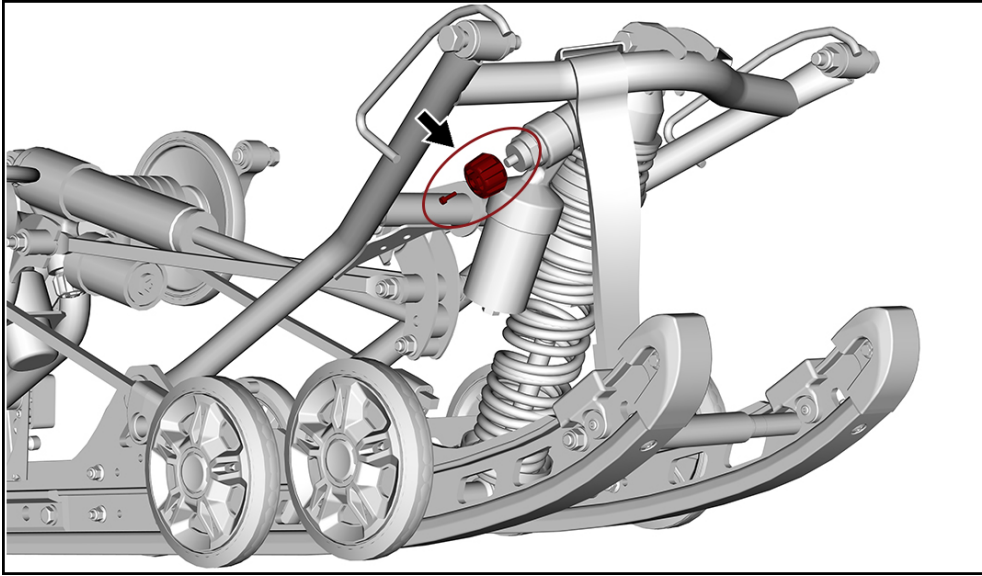
NOTE: Make sure to tighten the M6 X 25 screws [P14] to specification.

TIGHTENING TORQUE	
M6 X 25 Screw [P14]	18 ± 2 N•m (159 ± 18 lbf•in)

X-RS MODELS

You must **permanently remove** the front central shock absorber adjustment knob and its hex. socket screw.

NOTE: If needed, use the BRP clutch adjuster tool (P/N 520001815 (included in vehicle tool kit)) to adjust the shock. Insert the Torx #25 clutch tool end in place of the socket screw. An unthreaded portion with a depth of approximately 4 to 5 mm is machined to use a Torx #25 tool.

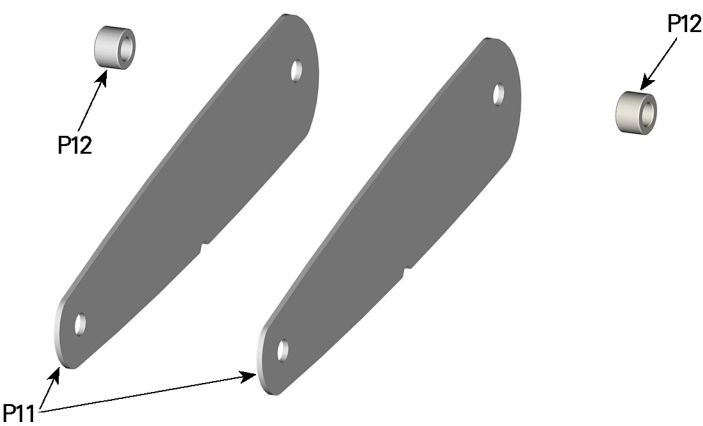


1. Clutch Tool Torx #25 end

PARTS PREPARATION

For X-RS Models Only

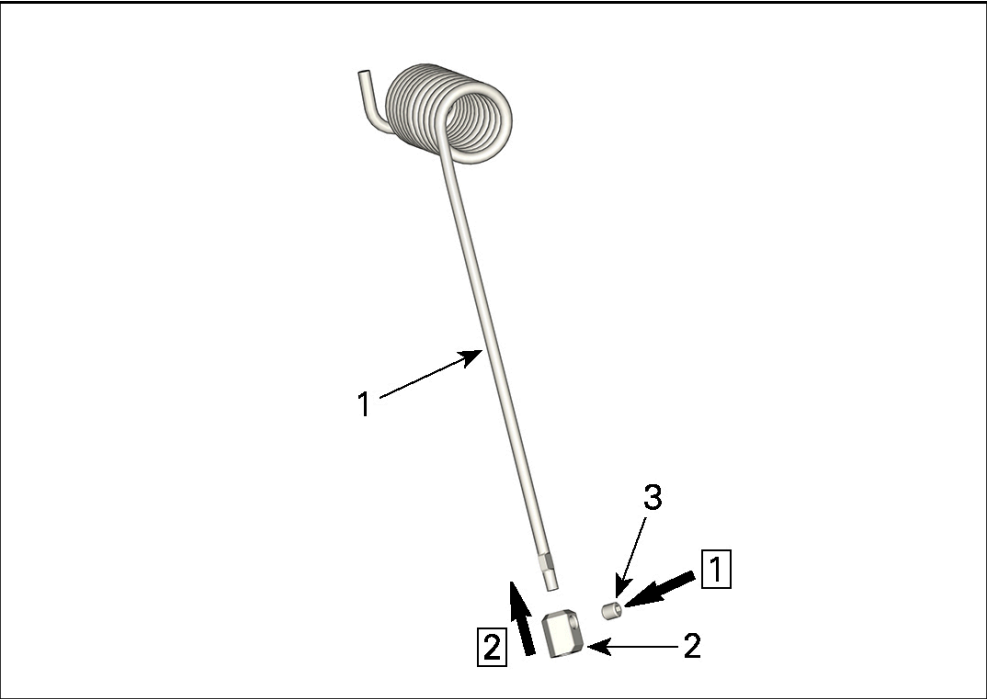
The following parts should not be installed on the X-RS models because they can come in contact with the suspension.



For All Models

Insert the end piece [P6a] at the end of the LH torsion spring [P4] with the screw on the opposite side of the flange. Tighten it in place with the socket set screw [P6b].

NOTE: Install the end piece [P6a] with the good orientation by aligning the socket set screw [P6b] on the flat section at the end of the torsion spring [P4].

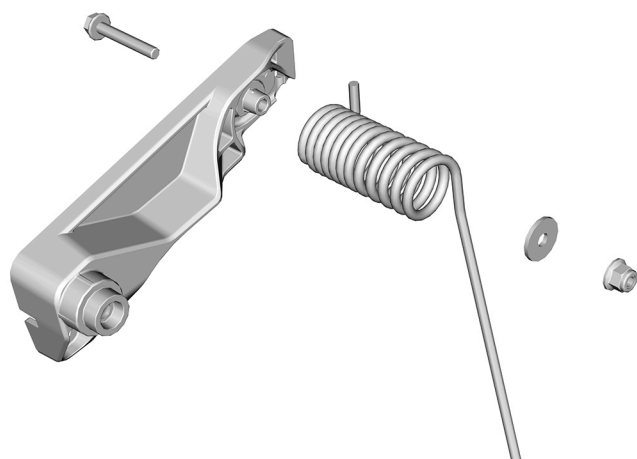


TYPICAL - LH SIDE SHOWN
1. LH Torsion Spring [P4]
2. End Piece [P6a]
3. Socket Set Screw [P6b]

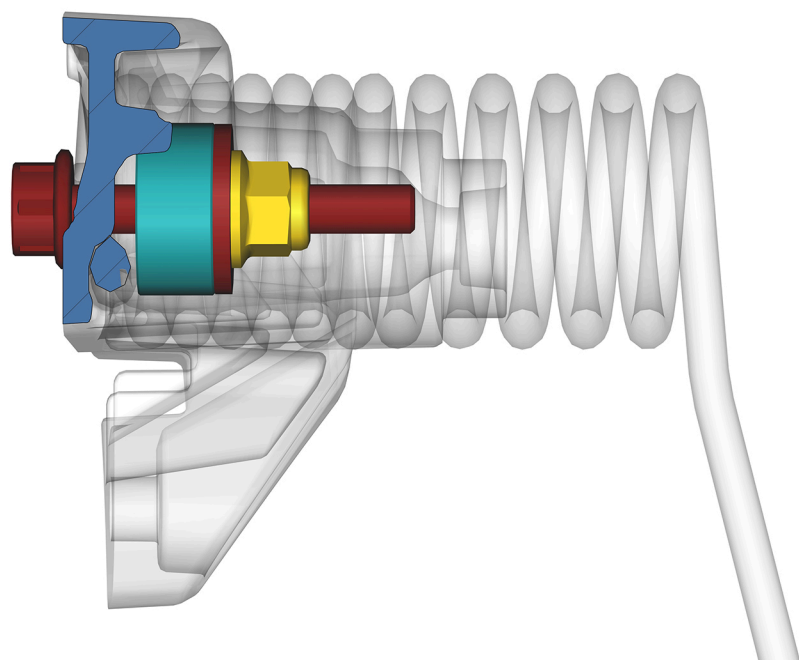
TIGHTENING TORQUE	
Socket Set Screw [P6b]	7 ± 1 N•m (62 ± 9 lbf•in)

For X-RS Models Only

Assemble the ice scratcher like indicated. Tighten the M6 elastic flange nut [P8].



LH SIDE SHOWN



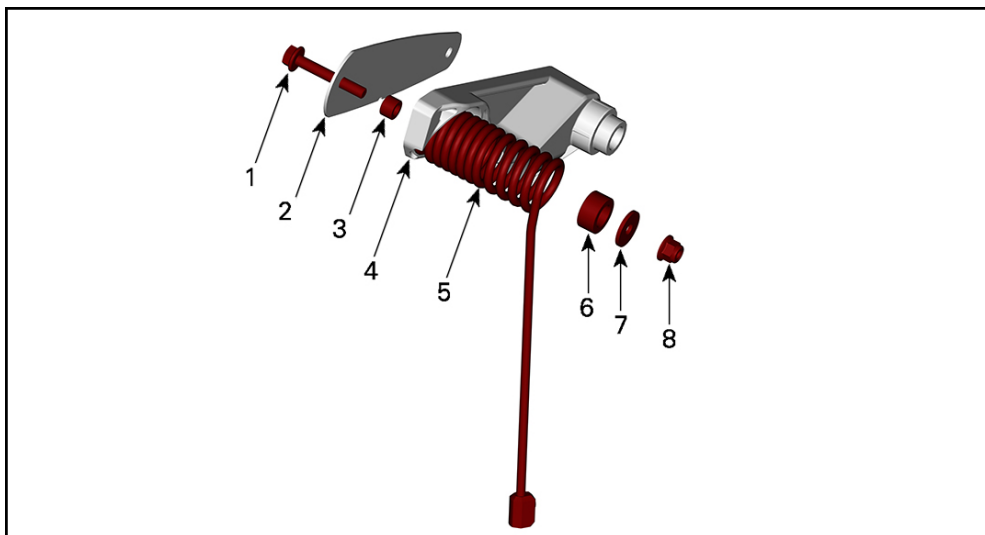
LH SIDE SHOWN

Apply the following torque.

TIGHTENING TORQUE	
M6 Elastic Flange Nut [P8]	10 ± 2 N•m (89 ± 18 lbf•in)

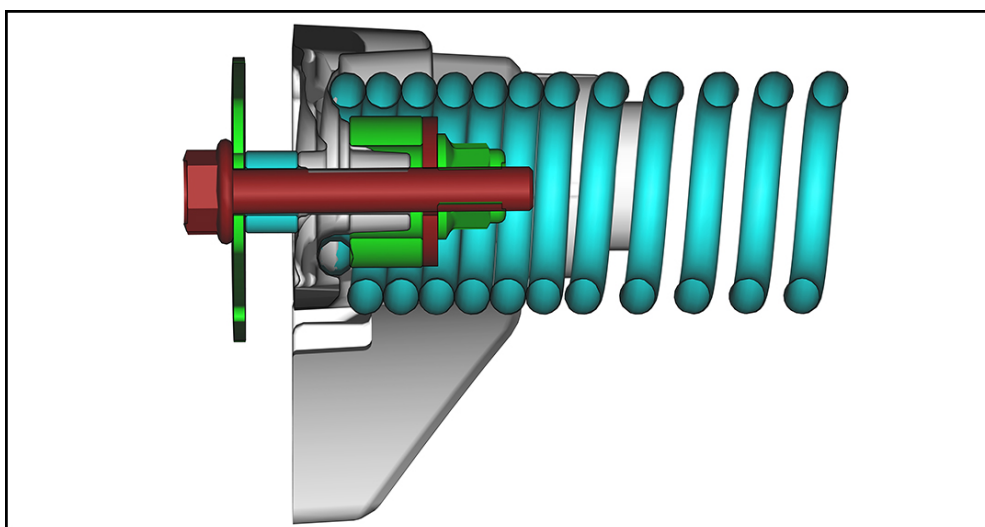
For All Models Except X-RS

Assemble the ice scratcher as indicated. Do not tighten the M6 elastic flange nut [P8] yet.



LH SIDE SHOWN

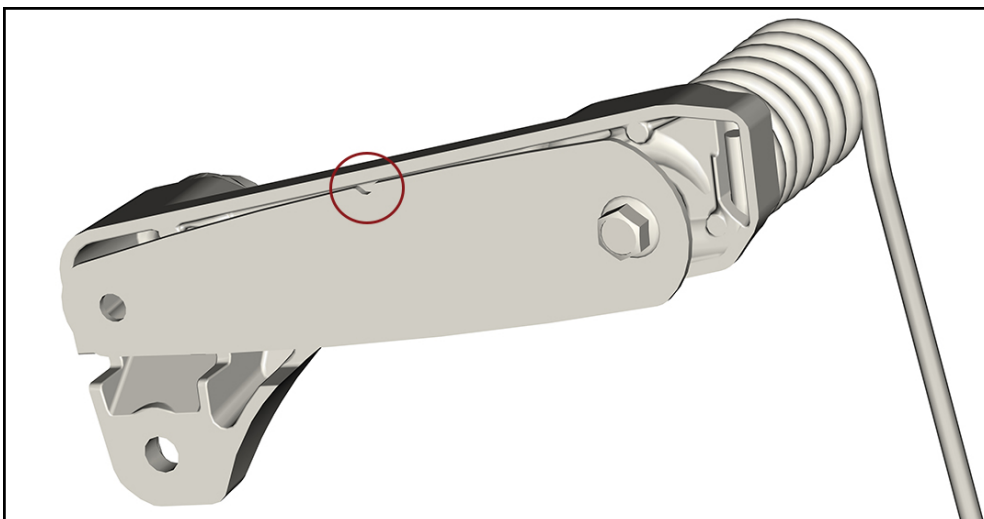
1. M6 X 40 Hex. Flanged Screw [P7]
2. Reinforcement Support [P11]
3. Spacer [P12]
4. LH Spring Support [P1]
5. LH Torsion Spring [P4]
6. Spacer [P9]
7. Flat Washer [P10]
8. M6 Flanged Elastic Nut [P8]



LH SIDE SHOWN

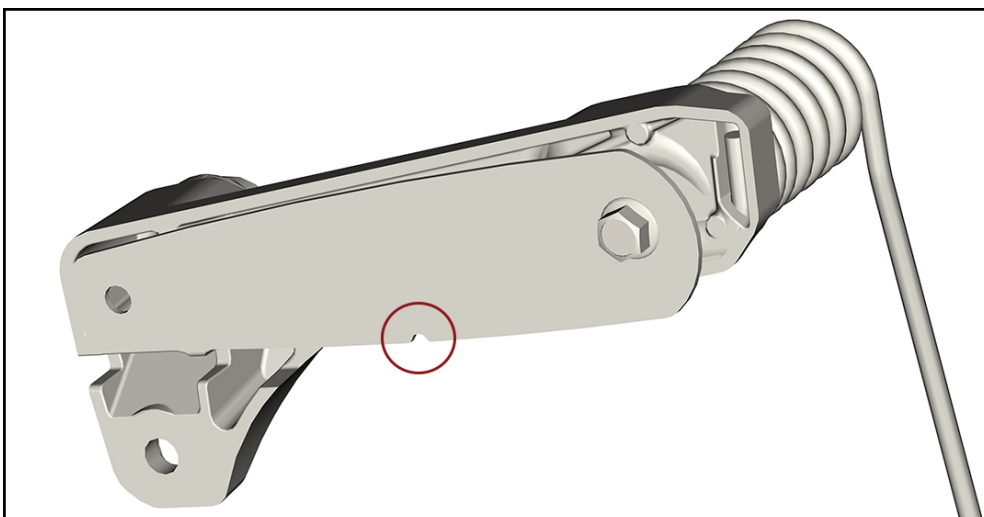
NOTE: The reinforcement support [P11] needs to be oriented in a specific way depending on the suspension type on which it is installed.

Notch Up with SC5, SC5M and SC5U



LH SIDE SHOWN

Notch Down with RM and RMX

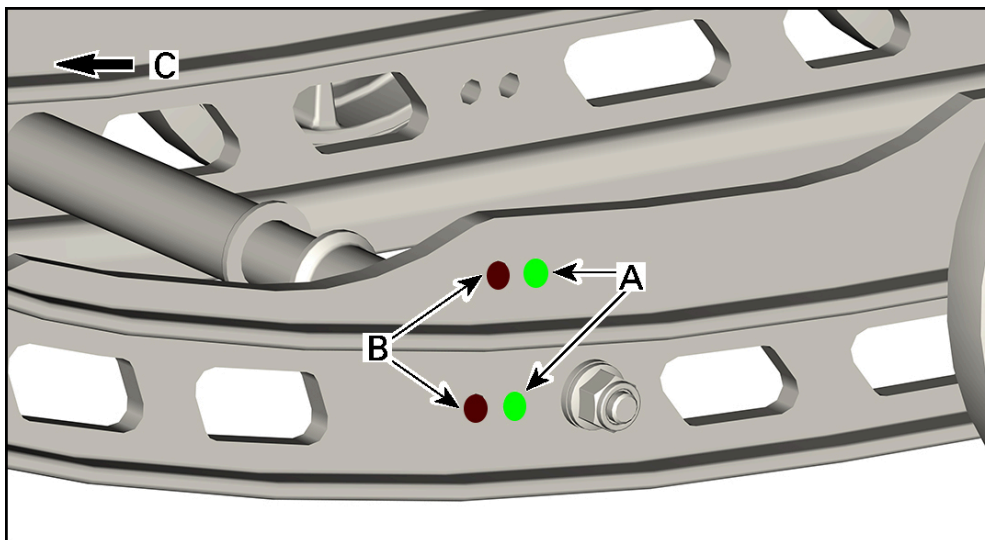


LH SIDE SHOWN

INSTALLATION INSTRUCTIONS

For All Models

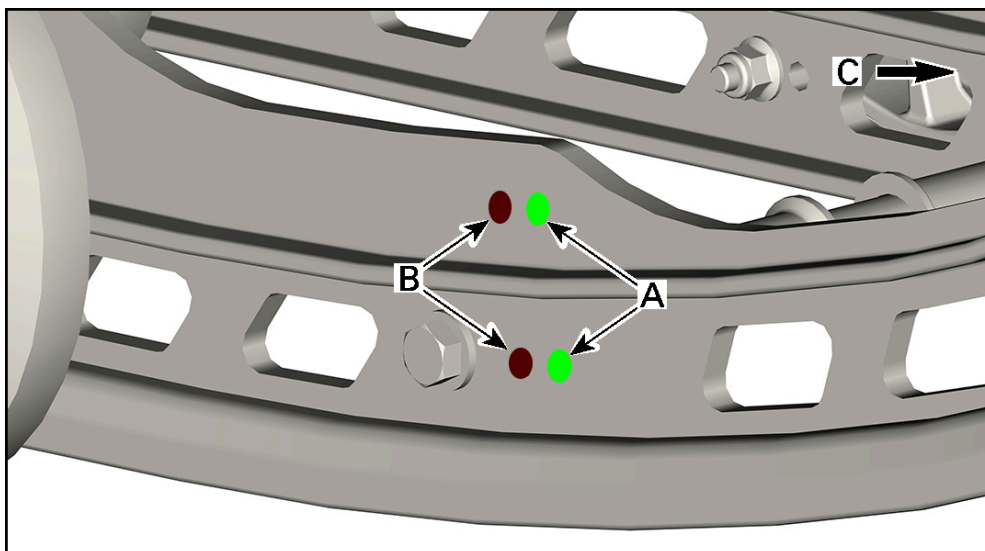
Install in the back position on the LH side of the vehicle.



TYPICAL - LH SIDE SHOWN

- A. Correct position
- B. Incorrect position
- C. Front of vehicle

Install in the front position on the RH side of the vehicle.



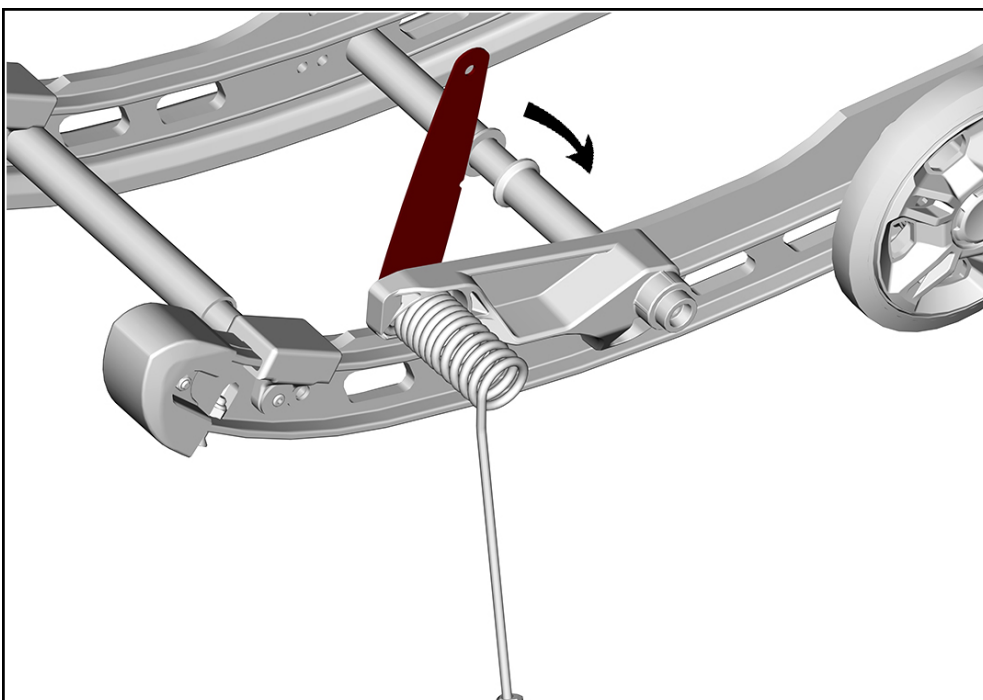
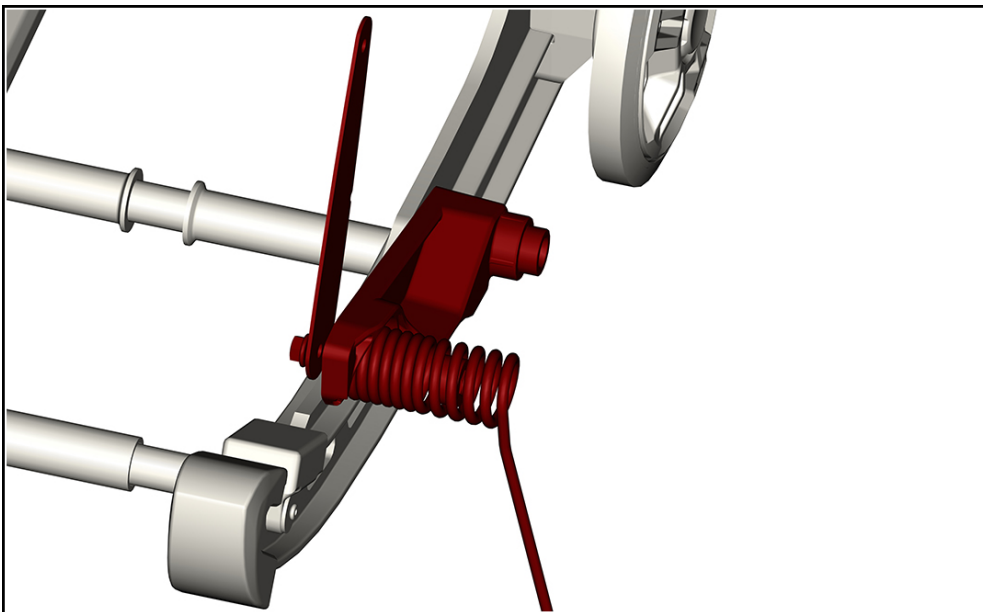
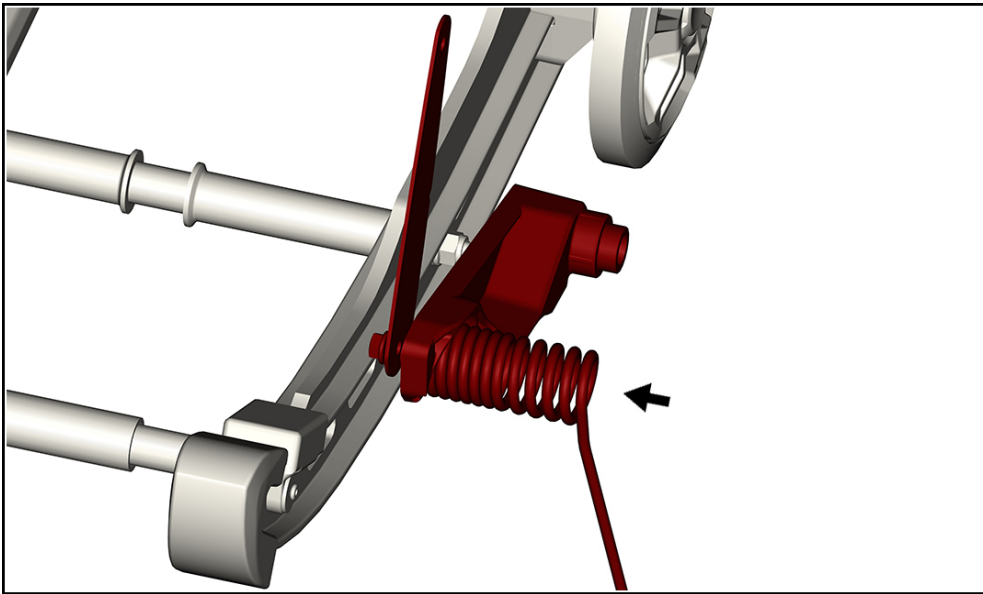
TYPICAL - RH SIDE SHOWN

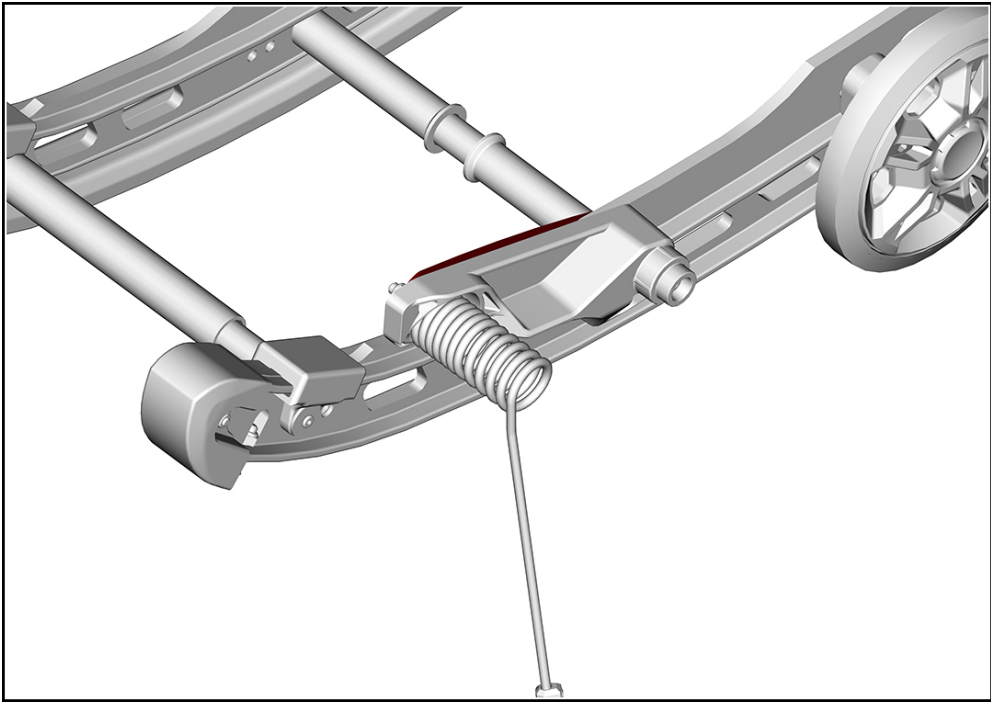
- A. Correct position
- B. Incorrect position
- C. Front of vehicle

For X-RS Models Only

Install the preassembled ice scraper in place and tilt the reinforcement. Follow the instructions shown below.

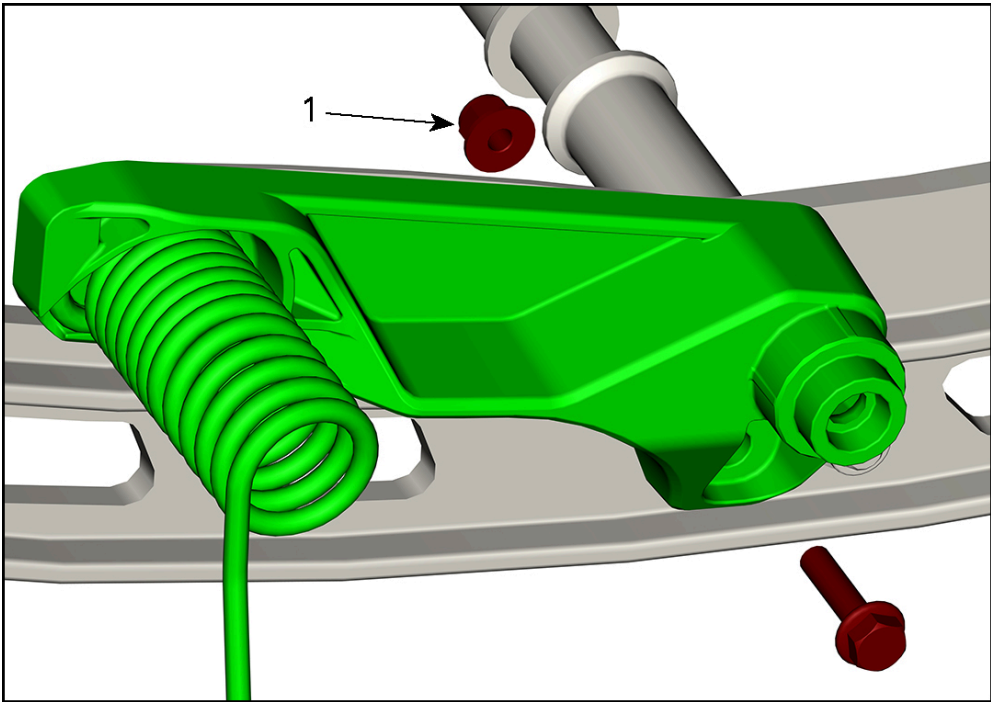
NOTE: Make sure that the spring is towards the front of the vehicle and the wheel is towards the back.





For All Models

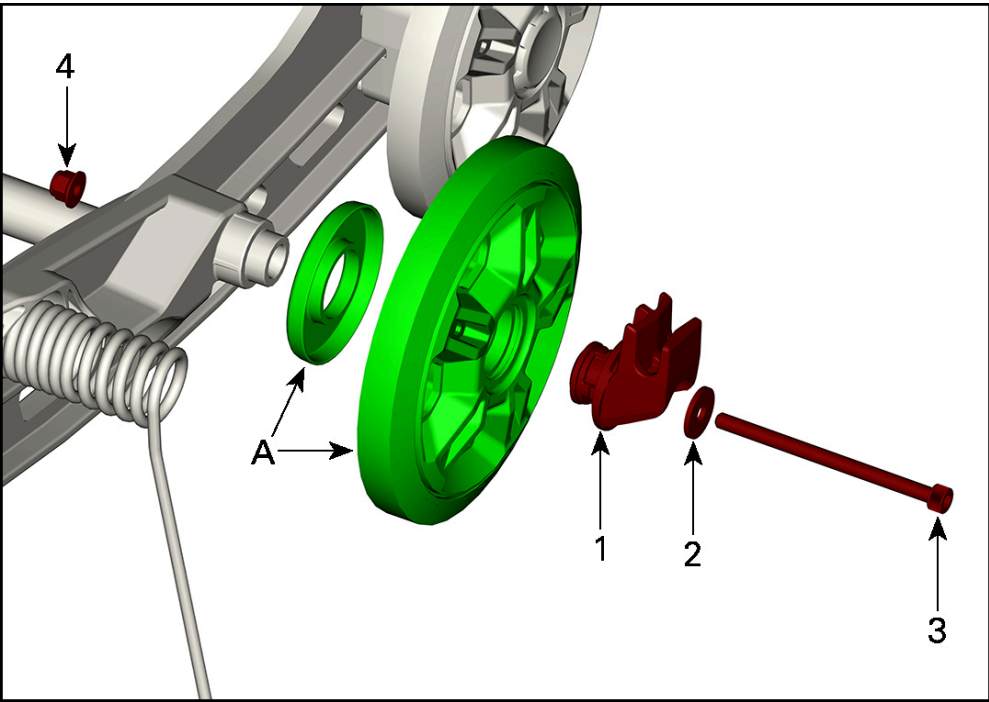
Screw the original screw of the vehicle with the M6 flanged elastic nut [P8].



TYPICAL - LH SIDE SHOWN
1. M6 Flanged Elastic Nut [P8]

TIGHTENING TORQUE	
Original wheel screw	16 ± 2 N•m (142 ± 18 lbf•in)

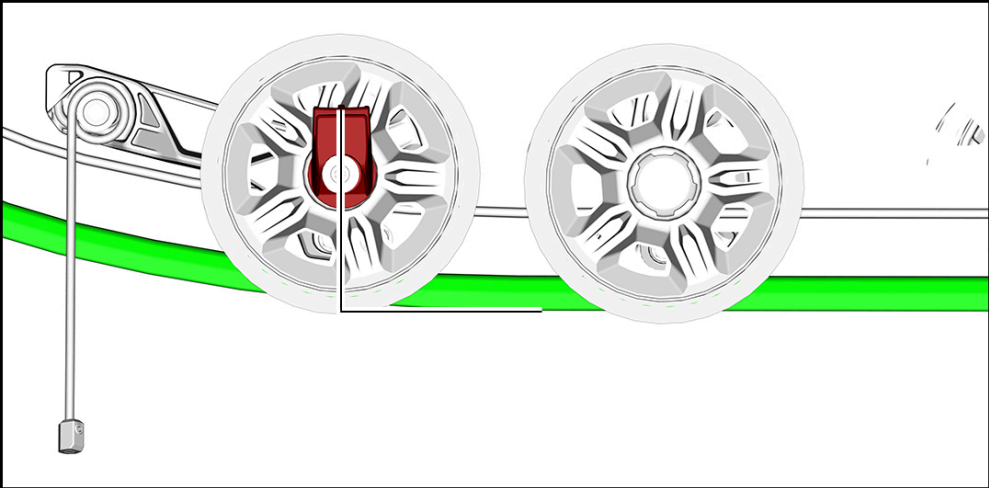
Assemble the retaining hook assembly [P3a], the wheel and the inner cap from the original wheel, the flat washer [P3b], the M6 X 90 socket head screw [P3c], and the M6 flanged elastic nut [P3d].



TYPICAL - LH SIDE SHOWN
A. Parts coming from the original wheel.
1. Retaining Hook Assembly [P3a]
2. Flat Washer [P3b]
3. M6 X 90 Socket Head Screw [P3c]
4. M6 Flanged Elastic Nut [P3d]

TIGHTENING TORQUE	
M6 X 90 Socket Head Screw [P3c]	18 ± 2 N•m (159 ± 18 lbf•in)

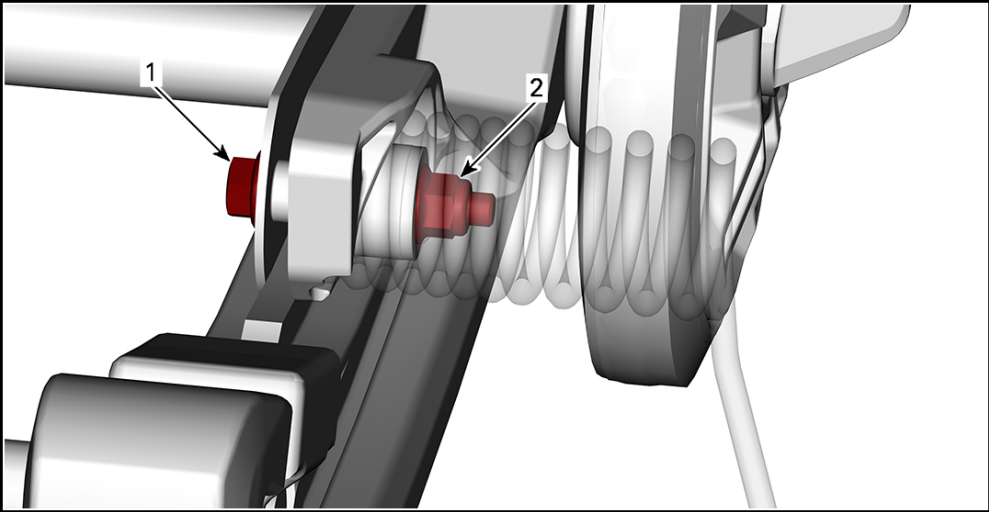
NOTE: Make sure that the retaining hook assembly [P3a] is perpendicular to the rail and open upwards.



TYPICAL - LH SIDE SHOWN

For All Models Except X-RS

Tighten the M6 flanged elastic nut [P8] to specification.

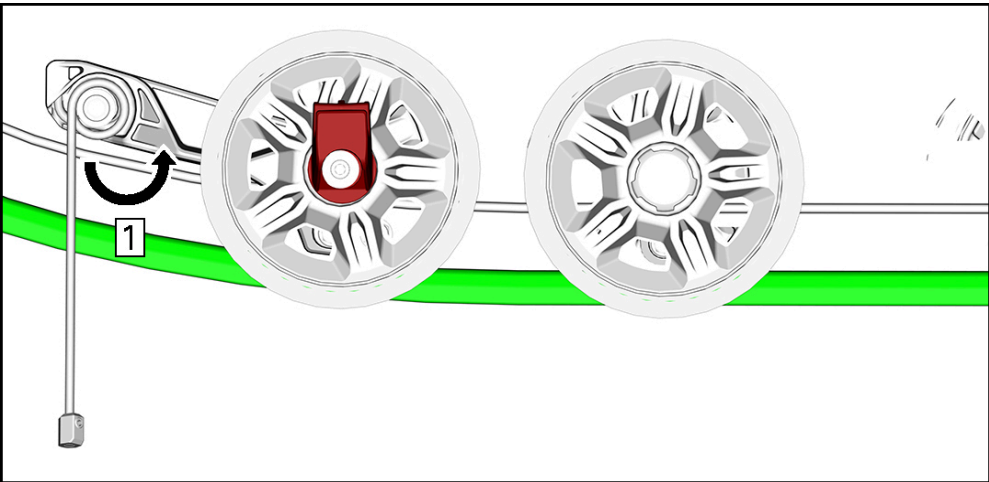


TYPICAL - LH SIDE SHOWN
1. M6 X 40 Hex. Flanged Screw [P7]
2. M6 Flanged Elastic Nut [P8]

TIGHTENING TORQUE	
M6 Flanged Elastic Nut [P8]	10 ± 2 N•m (89 ± 18 lbf•in)

For All Models Except X-RS

Rotate the LH torsion spring [P4] clockwise to place the metal rode on the retaining hook assembly [P3a].



TYPICAL - LH SIDE SHOWN