144/146 RAIL UPGRADE KIT

ENGINEERED PARTS ACCESSORIES & APPAREL

P/N 2882916

APPLICATION

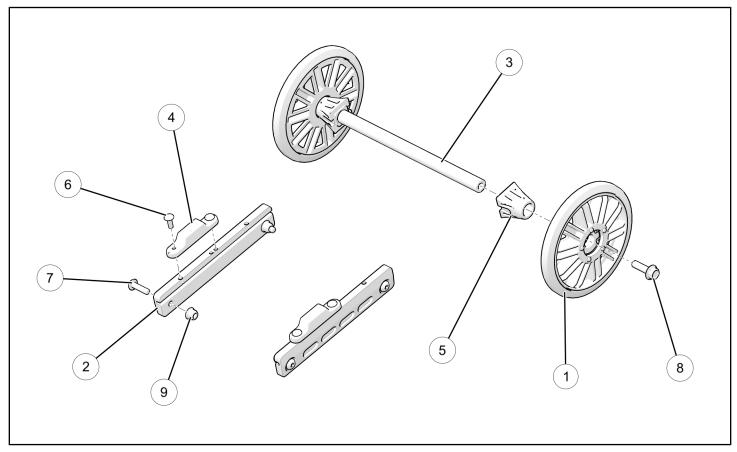
Verify accessory fitment at Polaris.com.

BEFORE YOU BEGIN

Read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

KIT CONTENTS

This Kit includes:



REF	QTY	PART DESCRIPTION	PART NUMBER
1	2	Wheel	1590459
2	2	Rail Reinforcement Plate	5136588
3	1	Idler Shaft	5136745
4	2	Torque Arm Bumper	5432166
5	2	Spacer	5432535
6	4	Screw - 1/4-20 X 3/4	7515199
7	4	Screw - M8 X 1.25 X 30	7518953
8	2	Screw - M10 X 1.5 X 35	7518957

REF	QTY	PART DESCRIPTION	PART NUMBER
9	4	Locking Nut - M8 X 1.25	7547332
	1	Instructions	9928206

TOOLS REQUIRED

- · Safety Glasses
- Socket Set, Torx® Bit
- · Socket Set, Metric
- · Socket Set, Standard

- · Wrench Set, Metric
- · Wrench Set, Standard
- Torque Wrench
- · Owners Manual

IMPORTANT

Your 144/146 Rail Upgrade Kit is exclusively designed for your vehicle. Please read the installation instructions thoroughly before beginning. Installation is easier if the vehicle is clean and free of debris. For your safety, and to ensure a satisfactory installation, perform all installation steps correctly in the sequence shown.

ASSEMBLY TIME

Approximately 48 minutes

NOTE

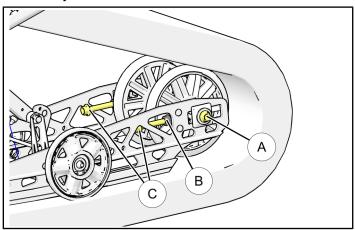
Additional time may be required for optional steps, or to accommodate other installed accessories.

INSTALLATION INSTRUCTIONS

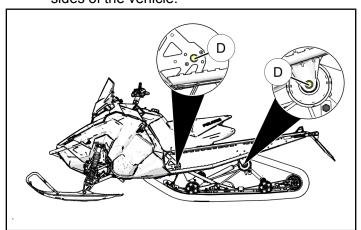
M WARNING

ALL components of kit **MUST** be fully installed or the structural integrity of the rail may be compromised. Failure to comply may result in death or serious personal injury.

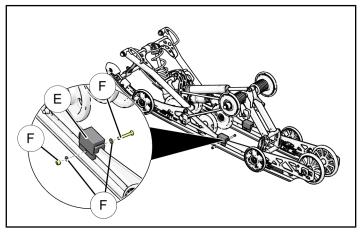
- 1. Turn key to "OFF" position and remove from vehicle.
- 2. Remove rear suspension.
 - a. Support the rear of the machine so that the track is off the floor.
 - b. Loosen the rear idler bolts (A). Loosen the rear idler adjuster jam nuts (B), and then retract the adjuster bolts (C).



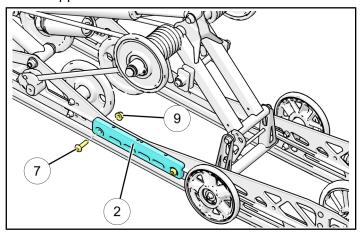
- c. When the adjuster bolts are fully retracted, push the rear idler assembly forward.
- d. Carefully release the torsion springs from the spring blocks.
- e. Remove the support from the tunnel letting the suspension carry the weight of the machine.
- f. Remove the fasteners ① securing the rear suspension assembly to the tunnel from both sides of the vehicle.



- g. Place a protective mat on the floor and tip the unit over on the left side, supporting the sled on the end of the handlebar.
- h. Collapse the torque arms, and remove the suspension from the tunnel.
- 3. After removing the rear suspension you will need to remove the stock rear torque arm bumpers (£) and related hardware (£) from each rail as shown. The removed parts will not be needed while the rail upgrade kit is installed.



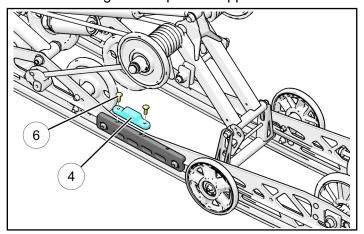
- 4. Install the rail reinforcement plate assemblies onto the rail.
 - a. Install rail reinforcement plate ② onto the rail as shown by lining up the plate mounting holes with the pre-drilled mounting holes on the rail and inserting the provided screws ⑦. Secure into position with provided locking nuts ⑨. Torque to specification provided. Repeat for opposite side.



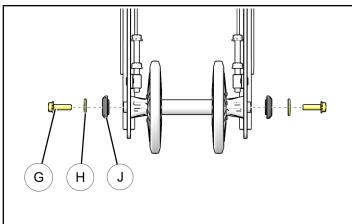
TORQUE

17 Ft. Lbs. (23 Nm)

b. Install torque arm bumper 4 onto rail reinforcement plate using provided screws 6 as shown. Tighten until snug being careful not to overtighten. Repeat for opposite side.



- 5. Remove rear idler shaft assembly.
 - a. Remove idler shaft bolts ⑤, washers ⑪ and outer spacer ① from both sides of the idler shaft.

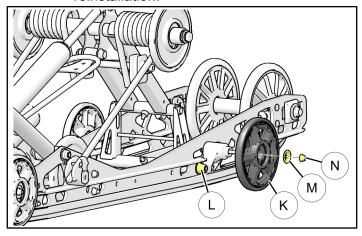


b. Remove the remaining idler shaft components.

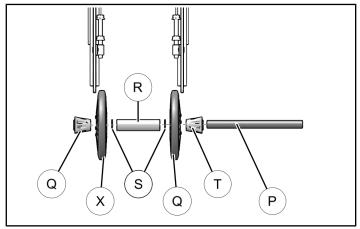
TIP

It may be helpful to remove one of the outside wheels (c) and loosen the lower rear torque arm cross shaft nut (1) to allow the rails to be slightly spread apart for easier removal and installation of the rear idler shaft assembly. See following steps 5bi-iii for procedure.

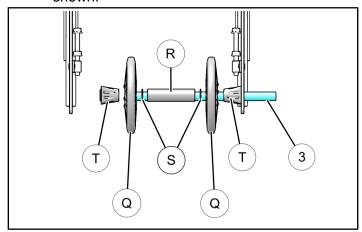
i. Remove outside wheel (to gain access to the lower rear torque arm cross shaft nut (as shown. Retain all related hardware for reinstallation.



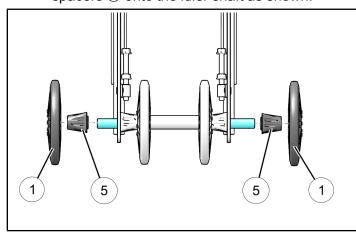
- ii. Once the outer wheel is removed, loosen the cross shaft nut ① to allow the rails to be slightly spread apart enough to remove the existing idler shaft components.
- iii. Remove idler shaft (P), inner wheels (0), center idler spacer (R), inner bushings (S) and inner idler spacers (T). Discard idler shaft. Retain all other components.



- 6. Install rear idler shaft and components.
 - a. Reinstall center idler shaft components previously removed by inserting the new idler shaft ③ through one side of the rail beam and placing the components onto the shaft as shown.

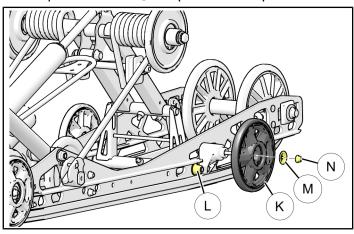


b. Once center components are installed, place the new outer wheels ① and outer idler spacers ⑤ onto the idler shaft as shown.



c. Secure shaft and components in place by placing the outer washers (H) onto the supplied idler shaft bolts (§) and installing bolts into shaft. Tighten just enough so rear idler shaft assembly has minimal free play between the components but is still able to be moved forward and back in the rail slots by hand.

7. Tighten rear torque arm lower cross shaft bolt ① and torque to specifications provided. Replace the outer wheel assembly ⑥ previously removed and torque wheel nut ⑩ to specifications provided.



TORQUE

Cross Shaft: 33 Ft. Lbs. (45 Nm)

TORQUE

Wheel: 10 Ft. Lbs. (13.6 Nm)

8. Reinstall the rear suspension.

IMPORTANT

Always use new fasteners when securing the torque arms to the tunnel.

- a. With the unit on its left side, place the suspension in the tunnel.
- b. Align the front and rear torque arms with the tunnel mounting holes. Loosely install two new fasteners.
- c. Set the snowmobile with the skis and track on the ground.
- d. Install the remaining two new torque arm mounting fasteners and related hardware.
- e. Torque the front and rear suspension mounting bolts to specification.

TORQUE

60 Ft. Lbs. (81 Nm)

- f. Carefully replace the torsion springs onto the spring blocks.
- g. Align the track guides/clips with the suspension rails.
- Adjust the rear idler to achieve the correct amount of track sag. Refer to your owners manual for proper track adjustment specifications.

FEEDBACK FORM

A feedback form has been created for the installer to provide any comments, questions or concerns about the installation instructions. The form is viewable on mobile devices by scanning the QR code or by clicking **HERE** if viewing on a PC.

