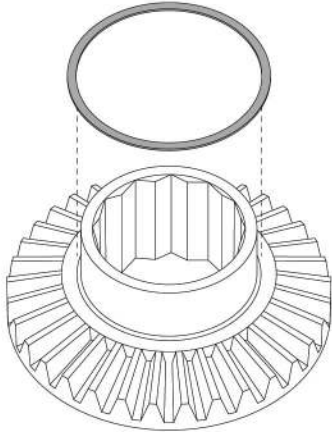
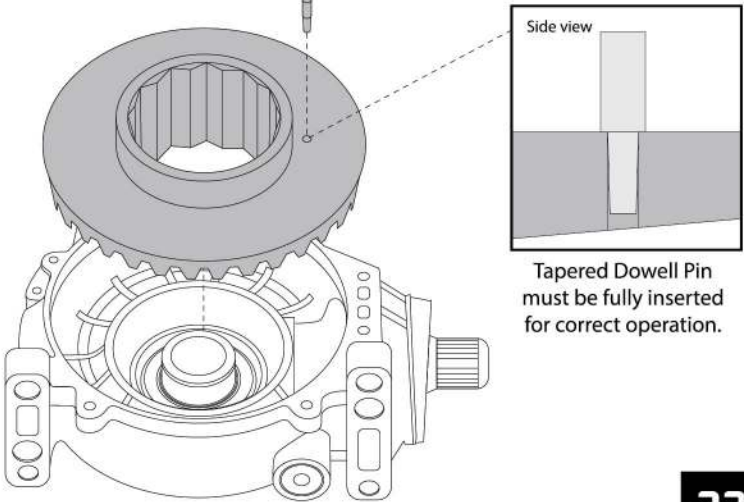


Install the Ring Gear Shim onto the Ring Gear.



21

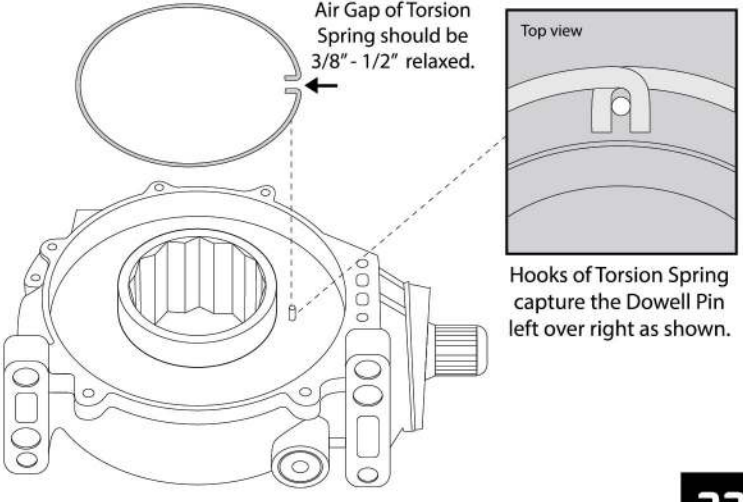
Install the SANDCRAFT™ Solid Tapered Dowell Pin into the Ring Gear.
Install the Ring Gear into the Differential Case.



Side view
Tapered Dowell Pin must be fully inserted for correct operation.

22

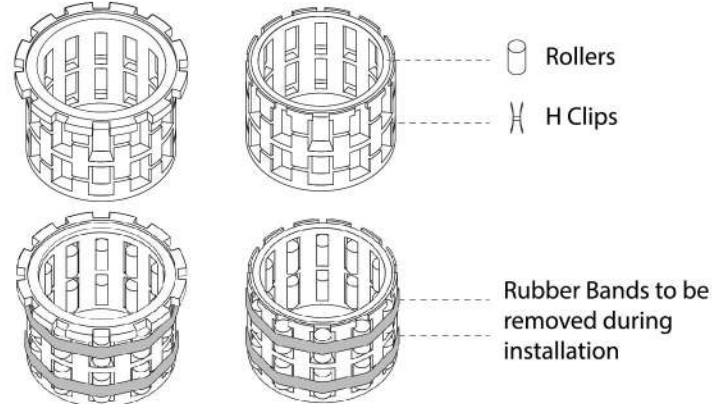
Install the Torsion Spring. Torsion Spring hook ends stack left over right



Air Gap of Torsion Spring should be 3/8" - 1/2" relaxed.
Top view
Hooks of Torsion Spring capture the Dowell Pin left over right as shown.

23

Install H Clips and Rollers into SANDCRAFT™ Sprague Cage. Use Rubber Bands to temporarily hold the Rollers in place until installation.

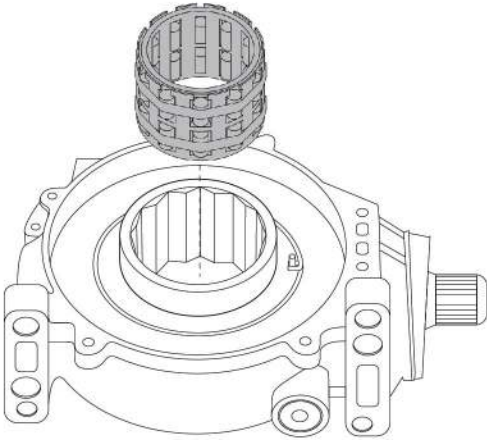


Rollers
H Clips
Rubber Bands to be removed during installation

BOMBPROOF BULLETPROOF

24

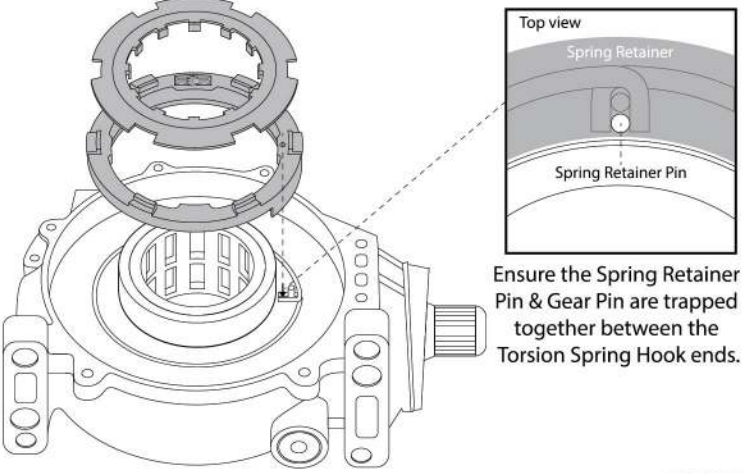
Install the Sprague Cage Assembly into the Differential. Remove the Rubber Bands as the Sprague Cage Assembly is inserted.



***BOMBPROOF KITS FOLLOW ASSEMBLY STEPS 25B-26B BELOW**

25A

Install the SANDCRAFT™ Spring Retainer and Armature Plate (teeth down)

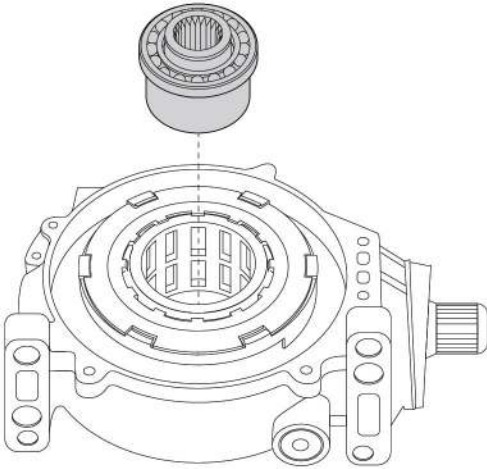


Top view
Spring Retainer
Spring Retainer Pin
Ensure the Spring Retainer Pin & Gear Pin are trapped together between the Torsion Spring Hook ends.

***BOMBPROOF KITS FOLLOW ASSEMBLY STEPS 25B-26B BELOW**

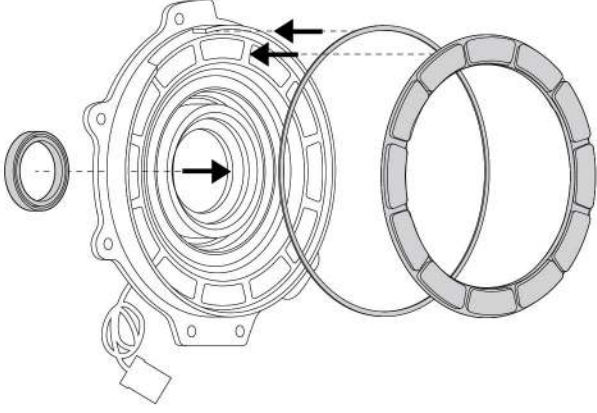
26A

Install the Driver Side Axle Hub and Bearing Into the Differential Case.



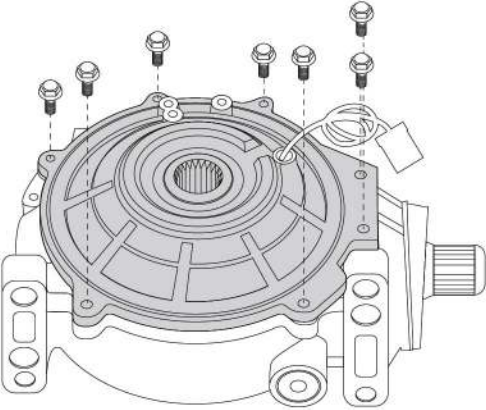
27

Install the SANDCRAFT™ Driver Side Axle Seal into the Differential Cover.
Install the Cover Seal and Cover Cushion into the Differential Cover.



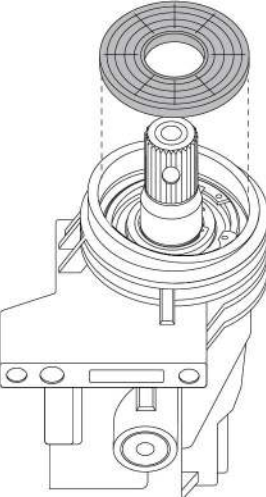
28

Install the differential cover using the stock hardware. Torque to 8 ft-lb.



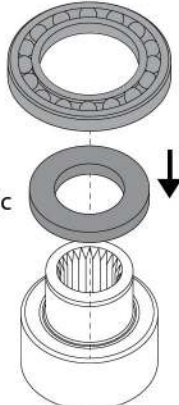
29

Install the Sandcraft RCR Pinion Seal. Remove the Zip Tie from Differential Cover Wire and fill Differential with oil before use.

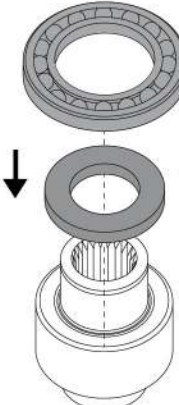


30

BULLETPROOF
2014 POLARIS 1000



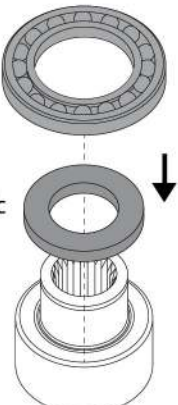
Grey Plastic Ring
Driver Side Hub



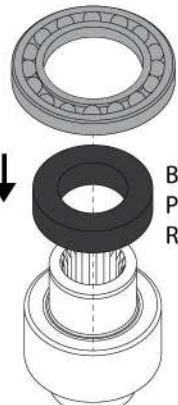
Grey Plastic Ring
Passenger Side Hub

16B

BULLETPROOF
2015 POLARIS 1000



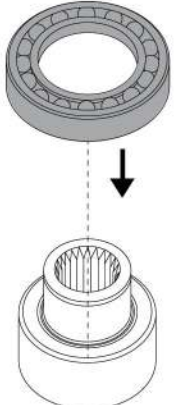
Grey Plastic Ring
Driver Side Hub



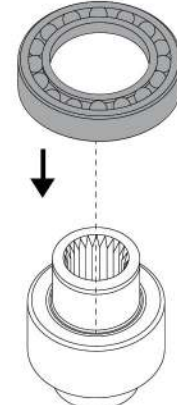
Black Plastic Ring
Passenger Side Hub

16C

BULLETPROOF
2016 POLARIS TURBO & SOME 2016 POLARIS 1000



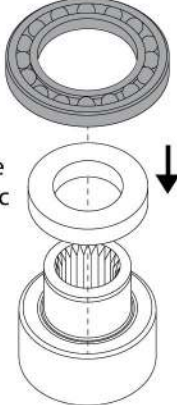
Driver Side Hub



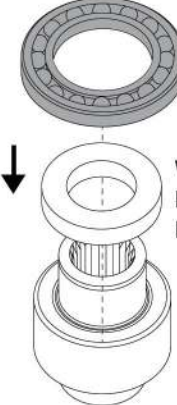
Passenger Side Hub

16D

BULLETPROOF
POLARIS 900 & 800



White Plastic Ring
Driver Side Hub



White Plastic Ring
Passenger Side Hub

16E



BULLETPROOF & BOMBPROOF FRONT DIFFERENTIAL INSTALLATION INSTRUCTIONS

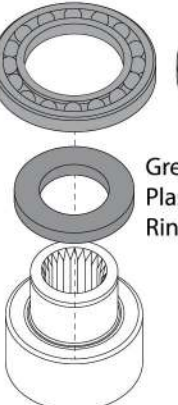
READ THIS ENTIRE INSTRUCTION MANUAL BEFORE STARTING

ATTENTION! TO ENSURE CORRECT OPERATION, USE POLARIS DEMAND DRIVE FLUID.

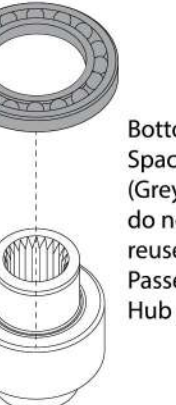
RUN MACHINE WITH FOUR-WHEEL DRIVE ENGAGED FOR 50-100 MILES, THIS WILL ALLOW YOUR DIFFERENTIAL TO PROPERLY MATE WITH THIS PRECISION-MADE ARMATURE PLATE.

SANDCRAFT™ will not be responsible for any damage resulting from mishandling, abuse, misuse, improper storage, improper installation, or improper operation, including use in conjunction with equipment that is mechanically incompatible with, or of inferior quality to, the product, as well as failure to maintain the environmental conditions specified by the manufacturer.

BOMBPROOF
14-15 POLARIS 1000



Grey Plastic Ring
Driver Side Hub

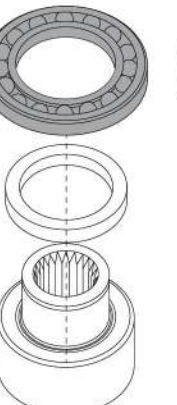


Passenger Side Hub

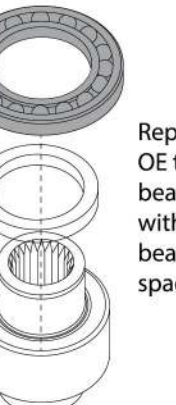
Bottom Spacers (Grey or Black) do not get reused on Passenger Side Hub Assembly

16F

BOMBPROOF
16 POLARIS TURBO



Driver Side Hub

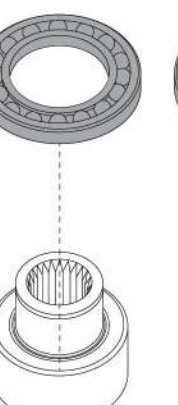


Passenger Side Hub

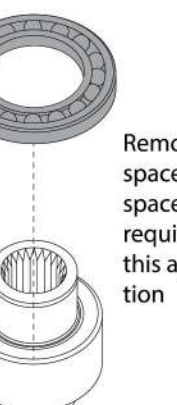
Replace OE thick bearings with thin bearings & spacers

16G

BOMBPROOF
17+ POLARIS TURBO & 1000



Driver Side Hub

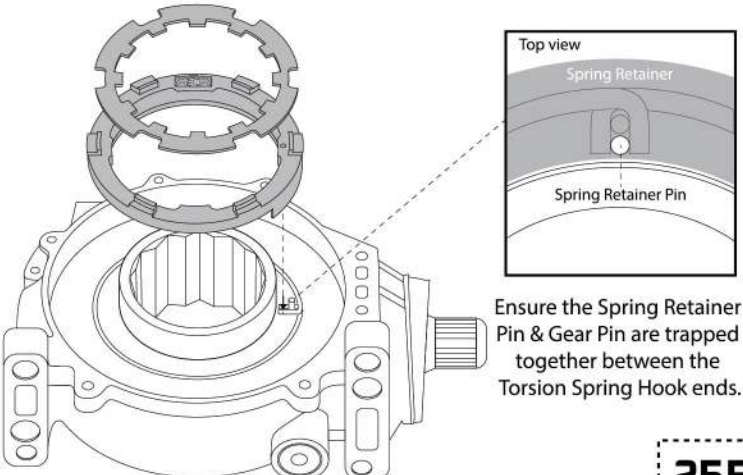


Passenger Side Hub

Remove white spacers - No spacers required for this application

16H

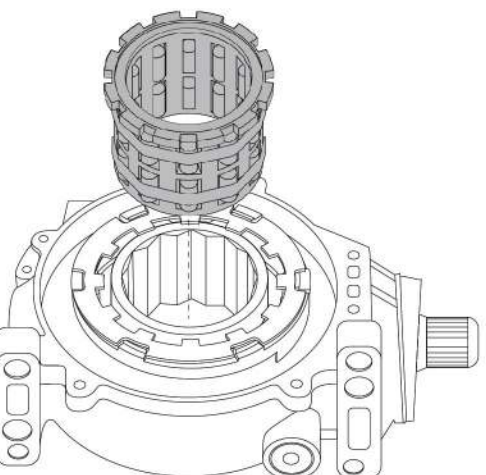
BOMBPROOF
Install the SANDCRAFT™ Spring Retainer and Armature Plate (teeth up, smooth side down). The Armature Plate sets the Steel Sprague position.



Top view
Spring Retainer
Spring Retainer Pin
Ensure the Spring Retainer Pin & Gear Pin are trapped together between the Torsion Spring Hook ends.

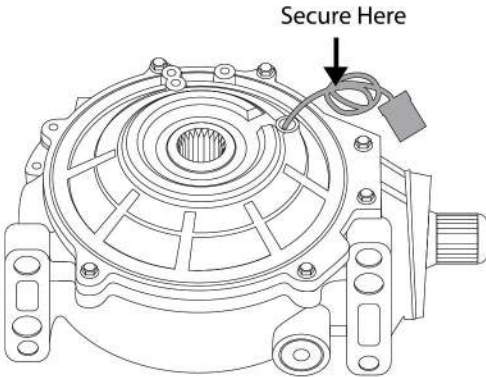
25B

BOMBPROOF
Install the SANDCRAFT™ Sprague Cage Assembly into the Differential. Remove the Rubber Bands as the Sprague Cage Assembly is inserted.



26B

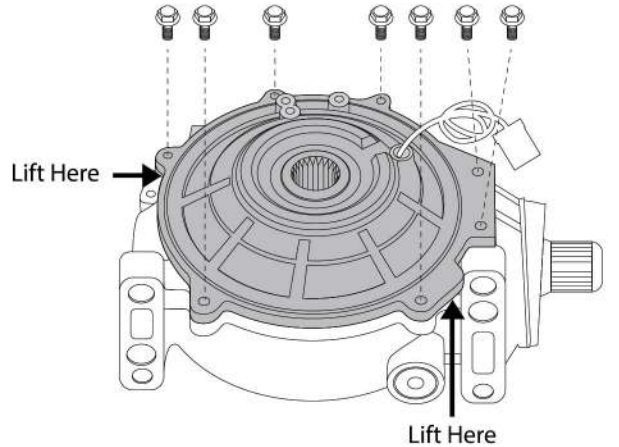
Secure the Differential Cover cable with a Zip Tie.



Secure Here

1

Remove the Bolts holding the Differential Cover in place and remove the Differential Cover. Retain hardware.

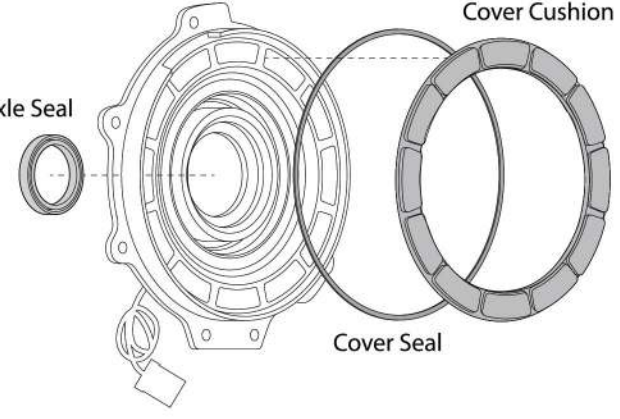


Lift Here

Lift Here

2

Remove the Cover Seal, Cover Cushion and Driver Side Axle Seal from the Differential Cover. Retain Cover Seal & Cover Cushion. Inspect and clean all surfaces.



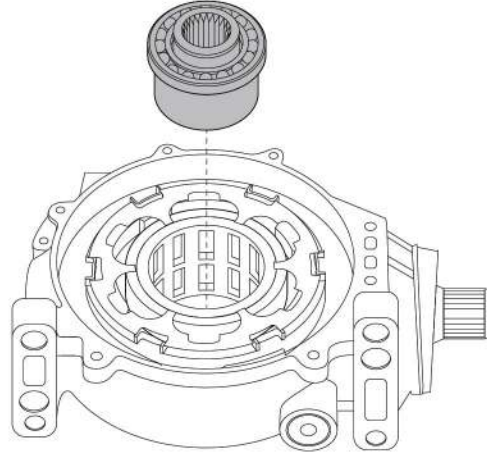
Axle Seal

Cover Cushion

Cover Seal

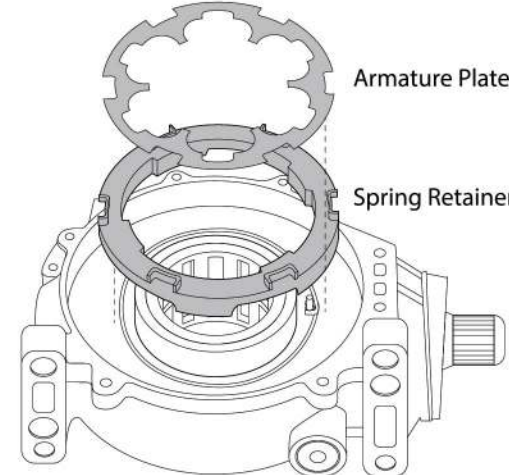
3

Remove the Driver Side Axle Hub and Bearing Assembly from the Differential Case.



4

Remove the Armature Plate and plastic Spring Retainer.

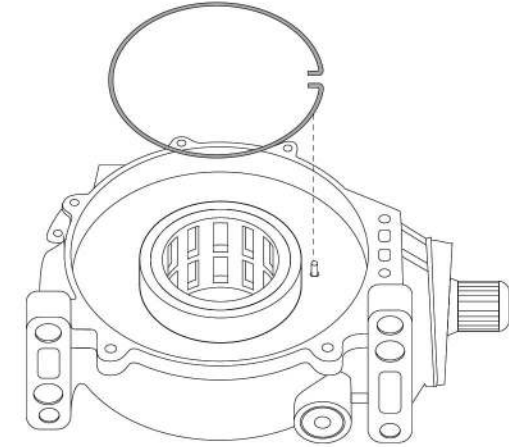


Armature Plate

Spring Retainer

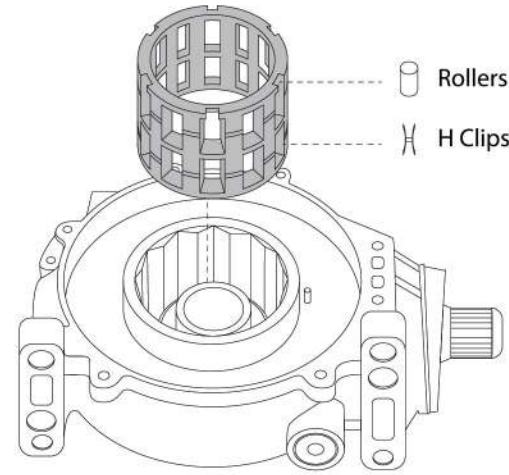
5

Remove the Torsion Spring.



6

Remove the Sprague Cage. Be careful, the Rollers are under tension. Using rubber bands helps to retain the Rollers and H Clips.

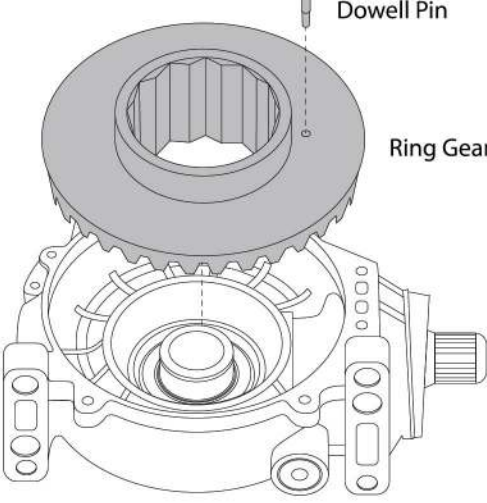


Rollers (reuse)

H Clips (reuse)

7

Remove Ring Gear from the Differential. Remove the Dowell Pin from the Ring Gear.

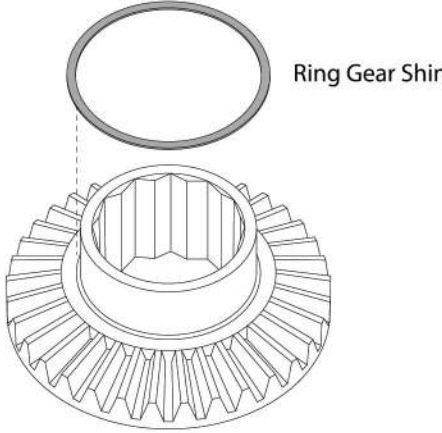


Dowell Pin

Ring Gear

8

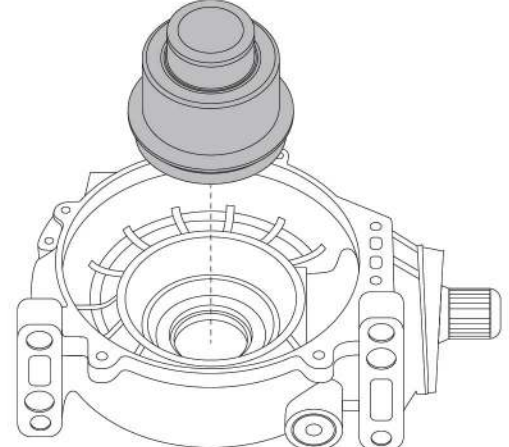
Remove the Ring Gear Shim from the Ring Gear. Retain Shim.



Ring Gear Shim

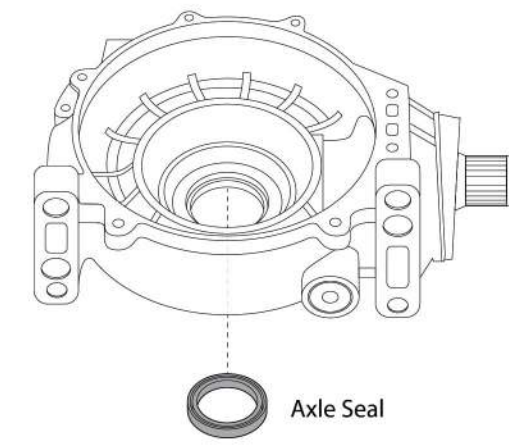
9

Remove the Passenger Side Axle Hub and Bearing from the Differential Case.



10

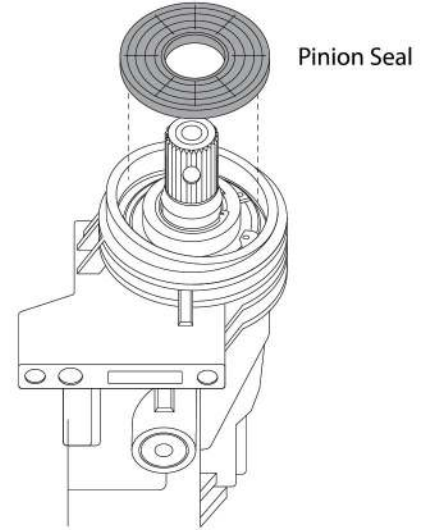
Remove the Axle Seal from the passenger side of the Differential Case.



Axle Seal

11

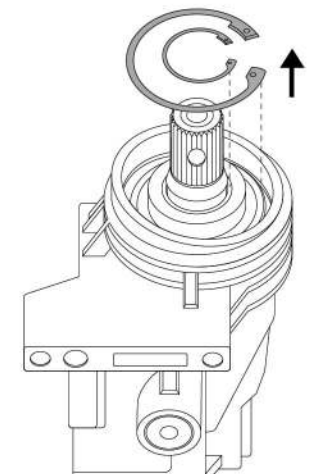
Remove the Pinion Seal.



Pinion Seal

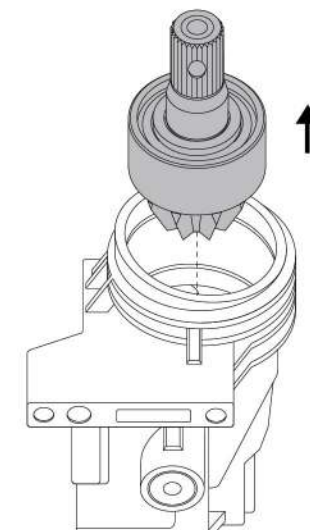
12

Remove the Large Tapered Snap Ring from the Bearing/Case. Remove the Small Snap Ring from the Pinion Gear/Bearing. Note the orientation of each Tapered Snap Ring. Retain hardware.



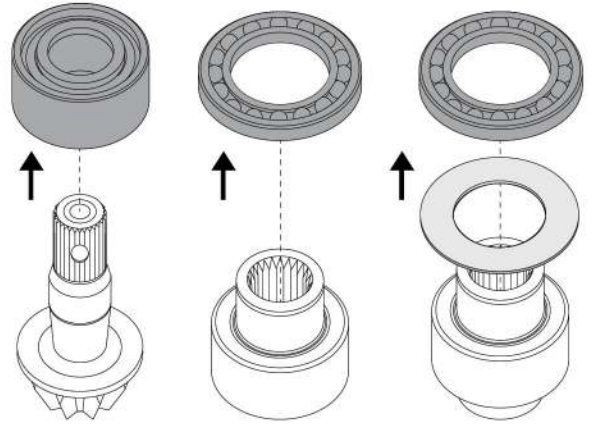
13

Remove the Pinion Gear/Bearing Assembly from the Differential Case.



14

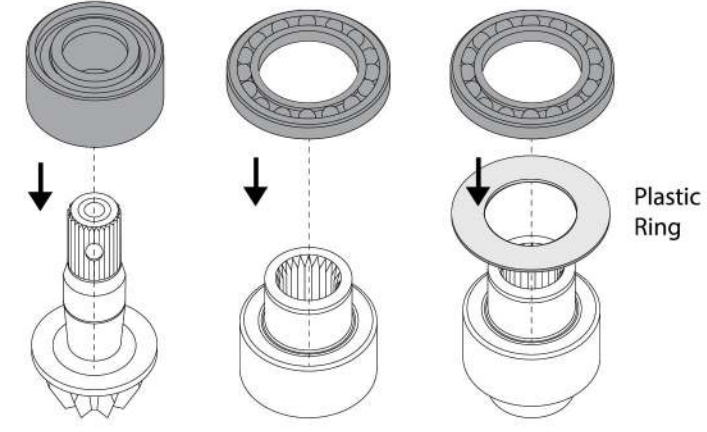
Remove the Pinion Gear Bearing. Remove the Axle Bearings. We recommend using a bearing press. Retain Plastic Ring from Male Axle Hub.



Plastic Ring

15

Re-install Plastic Ring on Male Hub. Install SANDCRAFT™ upgraded Pinion and Axle Bearings. We recommend using a bearing press.

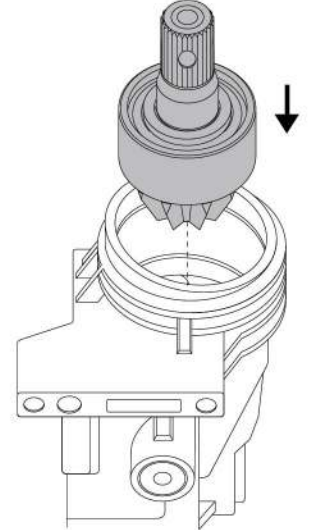


Plastic Ring

17+ XP1000 & TURBO. SEE ADDITIONAL MODEL CONFIGURATIONS ON REVERSE SIDE

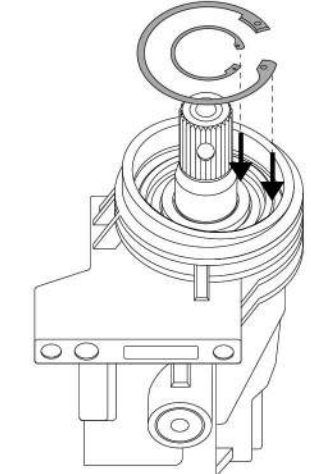
16A

Install the Pinion Gear/Bearing Assembly into the Differential Case.



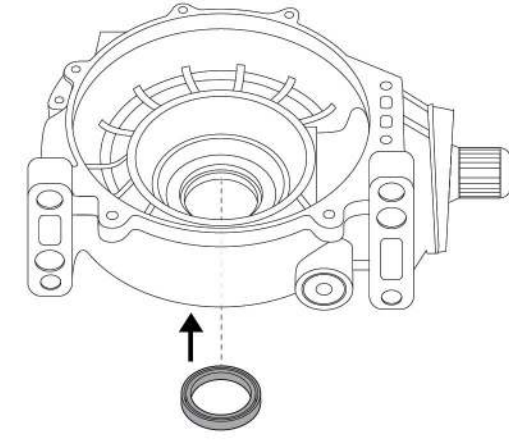
17

Install the large tapered snap ring into the bearing/case. Install the small snap ring into the pinion gear/bearing. Note the orientation, the tapered snap rings install with the flat side down.



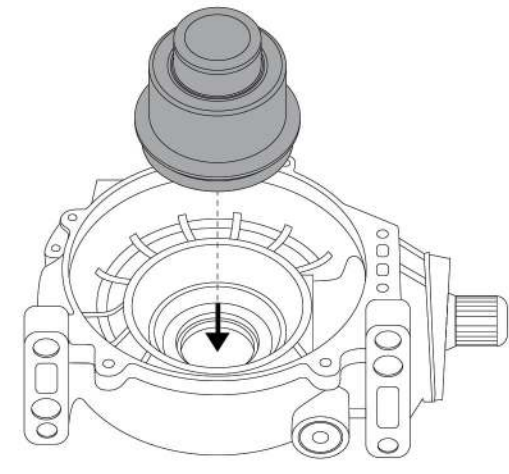
18

Install the SANDCRAFT™ Passenger Side Axle Seal into the Differential Case.



19

Install the Passenger Side Axle Hub and Bearing Assembly into the Differential Case.



20