

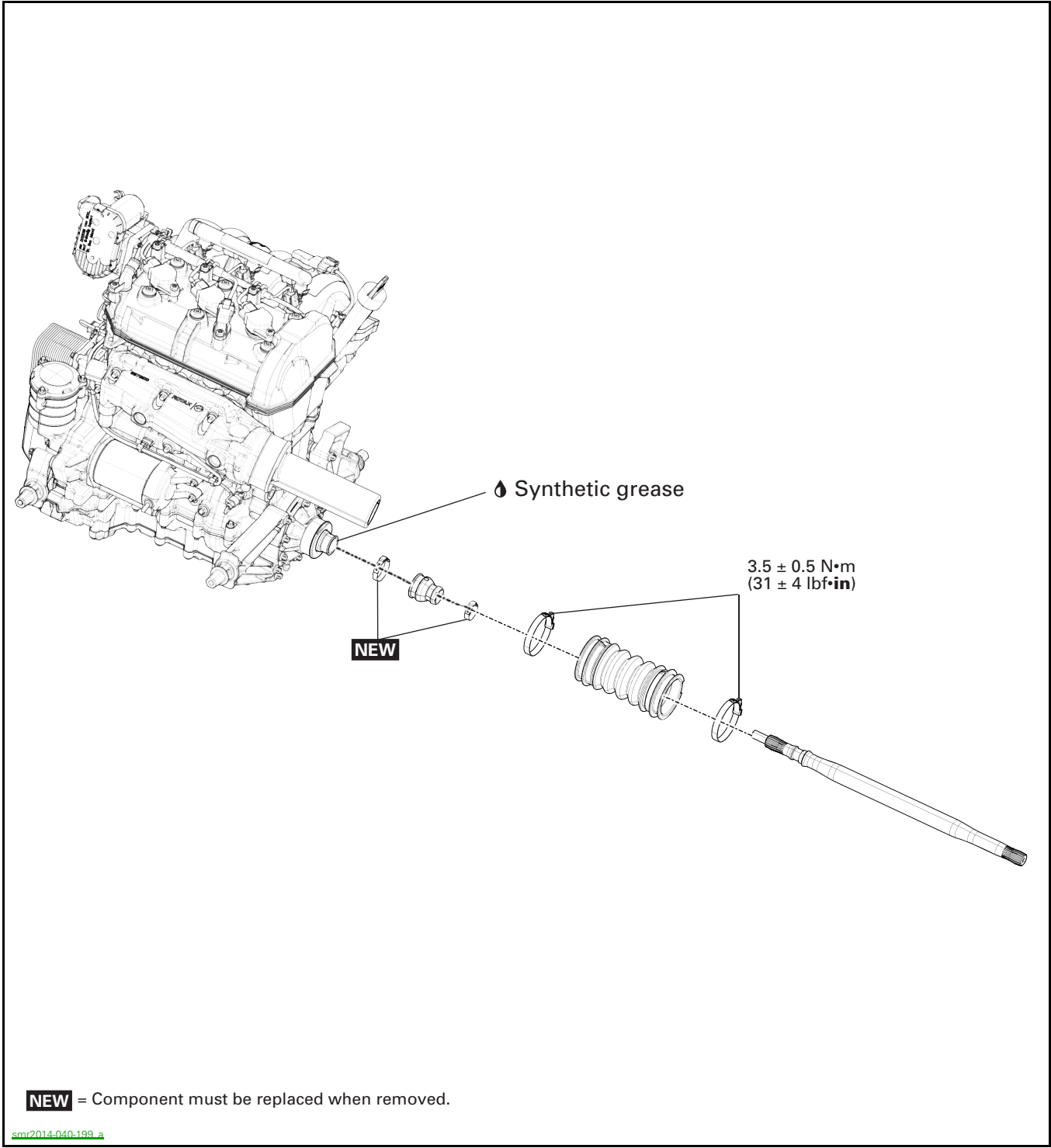
DRIVE SHAFT

SERVICE TOOLS

Description	Part Number	Page
OETIKER PLIER.....	295 000 070	5-6
PTO ADAPTER	529 036 273	4

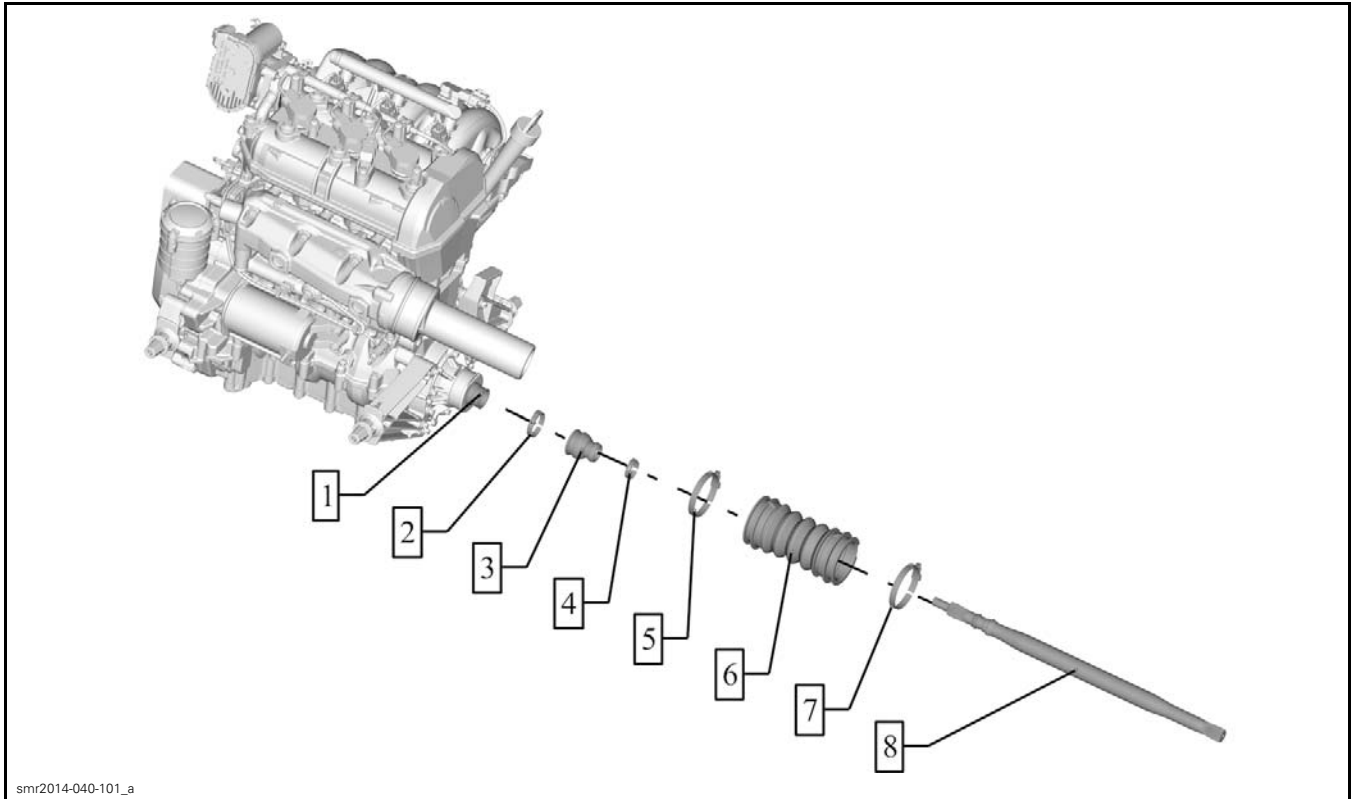
SERVICE PRODUCTS

Description	Part Number	Page
P80 GRIP-IT	296 000 406	5
PULLEY FLANGE CLEANER	413 711 809	4-5
XPS SYNTHETIC GREASE.....	293 550 010	4-5



GENERAL

NOMENCLATURE



- smr2014-040-101_a
1. PTO
 2. Large Oeticker clamp
 3. Inner drive shaft boot
 4. Small Oeticker clamp
 5. Clamp
 6. Outer drive shaft boot
 7. Clamp
 8. Drive shaft

PROCEDURES

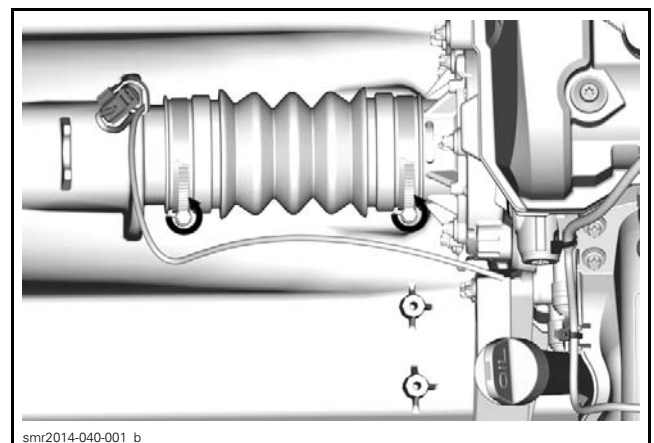
DRIVE SHAFT

Drive Shaft Access

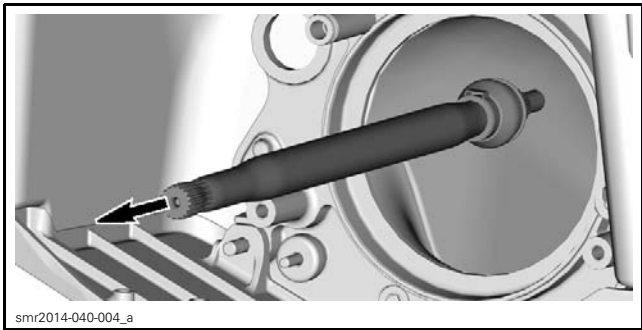
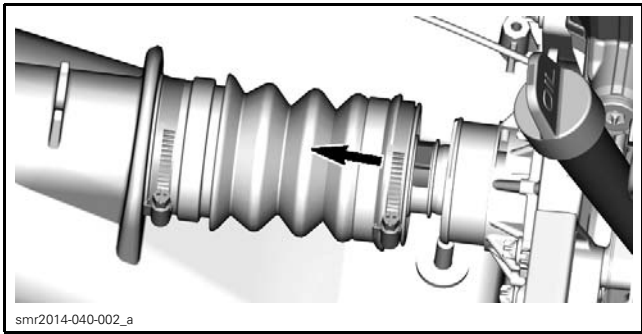
1. Remove central body. Refer to *BODY*.
2. Remove jet pump. Refer to *JET PUMP*.
3. Remove muffler. Refer to *EXHAUST SYSTEM*.

Drive Shaft Removal

Procedures



Subsection XX (DRIVE SHAFT)



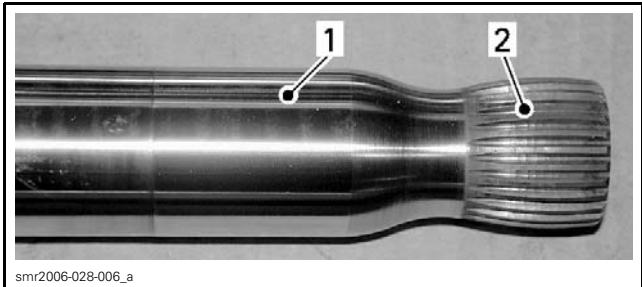
1. Remove drive shaft.

Drive Shaft Inspection

Drive Shaft

Inspect condition of drive shaft splines. If splines are damaged, replace drive shaft.

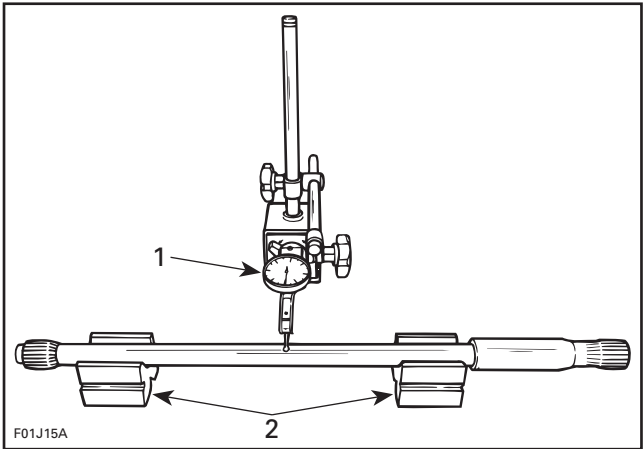
With your finger nail, feel machined surface of drive shaft. If any irregular surface is found, re-new drive shaft.



TYPICAL
1. Surface condition
2. Splines condition

Excessive deflection could cause vibration and damage to drive shaft splines, impeller or floating ring.

Place drive shaft on V-blocks and set-up a dial gauge in center of shaft. Slowly rotate shaft; difference between highest and lowest dial gauge reading is deflection. Refer to the following illustration.



MEASURING DRIVE SHAFT DEFLECTION
1. Dial gauge
2. V-blocks

Maximum permissible deflection is 0.5 mm (.020 in).

Drive Shaft Installation

NOTICE The:

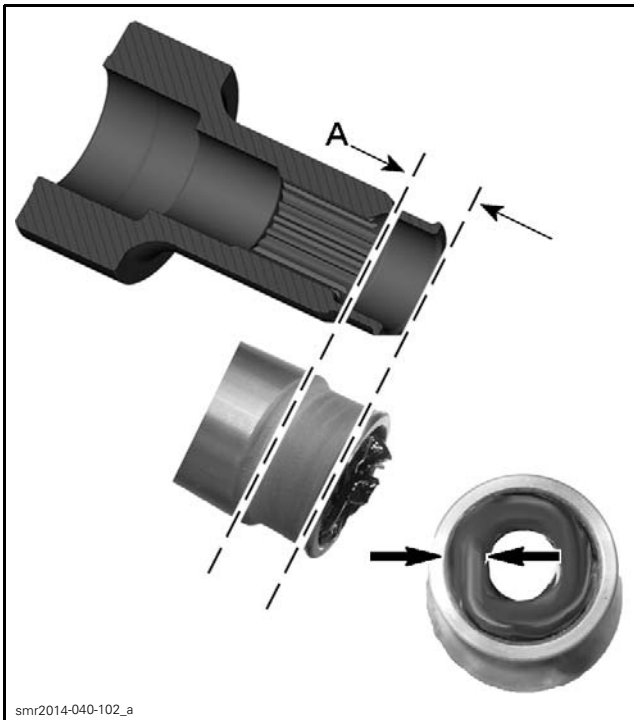
- PTO
 - Inner drive shaft boot
 - drive shaft
- must be free of grease and/or contaminants for the procedure to be a success. Thoroughly clean all surfaces with PULLEY FLANGE CLEANER (P/N 413 711 809) and dry with compressed air.

1. Apply XPS SYNTHETIC GREASE (P/N 293 550 010) to the splines of the PTO ADAPTER (P/N 529 036 273).



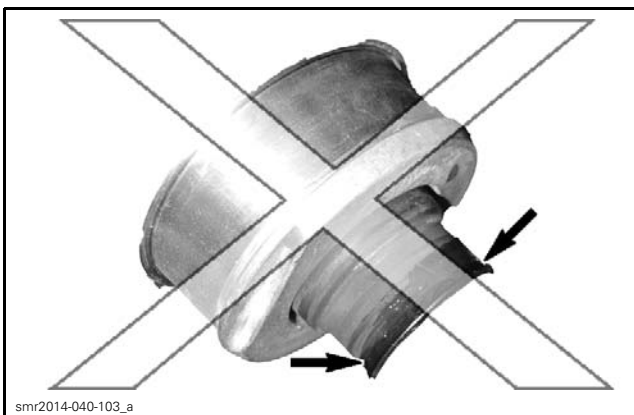
2. Insert the greased PTO adaptor into the PTO splines and remove it.

3. Apply a bead, 3 ml (.1 U.S. oz), of XPS SYNTHETIC GREASE (P/N 293 550 010) to the PTO between the splines and the extremity **no. A**.

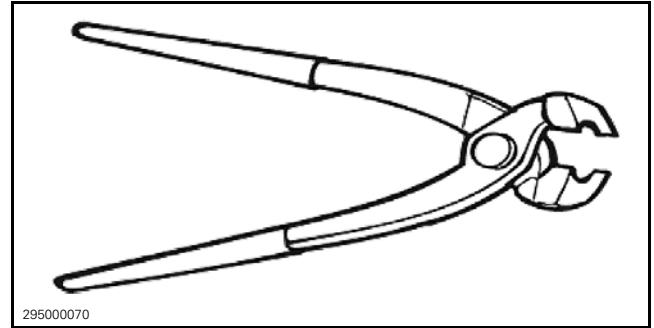


IMPORTANT

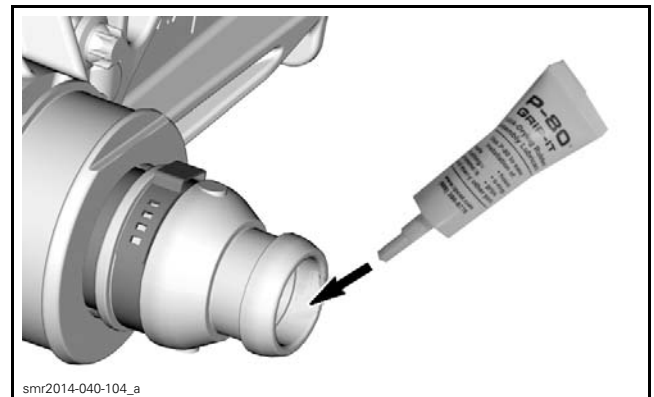
No grease on the outer flange of the PTO



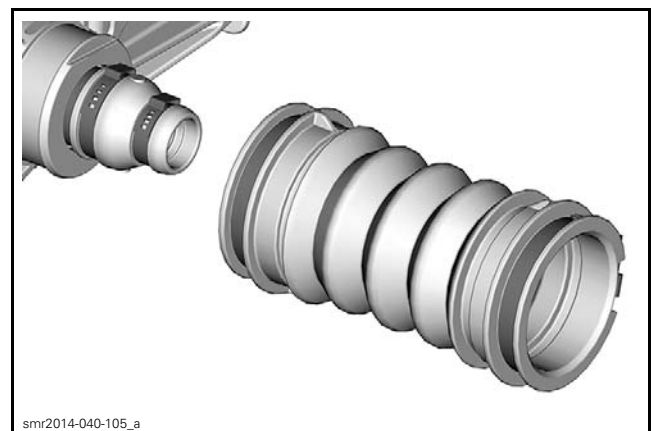
4. Clean the outer PTO flange and the new inner drive shaft boot with PULLEY FLANGE CLEANER (P/N 413 711 809).
5. Install and crimp the new inner drive shaft boot to the PTO using OETIKER PLIER (P/N 295 000 070).



6. Apply a small amount of P80 GRIP-IT (P/N 296 000 406) to inner drive shaft boot to help with assembly.

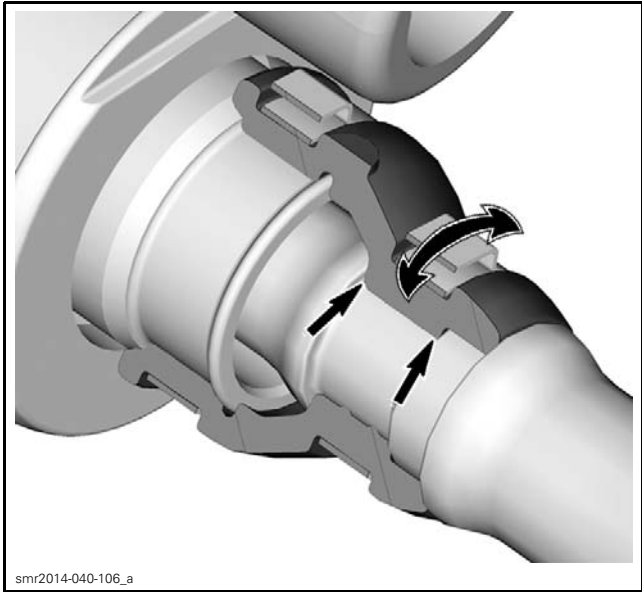


7. Position the small Oetiker clamp on the inner drive shaft boot and position the outer drive shaft boot (with clamps) over hull and PTO.



8. Clean the drive shaft and splines with PULLEY FLANGE CLEANER (P/N 413 711 809).
9. Install the drive shaft into the PTO.

NOTE: If not using P-80 Grip it, the inner boot will grip on the drive shaft, but **will** slip into position.
Do not use any other type of lubricant.



10. Pull back the outer drive shaft boot and make sure the small Oetiker clamp can be turned by hand.

NOTE: The small Oetiker clamp will only turn if the inner boot is correctly positioned in the groove on the drive shaft.

11. Pull back the outer drive shaft boot and crimp the small Oetiker clamp using OETIKER PLIER (P/N 295 000 070).

12. Position the outer drive shaft boot and tighten the clamps.

TIGHTENING TORQUE	
Outer drive shaft boot clamps	3.5 N•m ± 0.5 N•m (31 lbf•in ± 4 lbf•in)

Test watercraft then ensure there is:

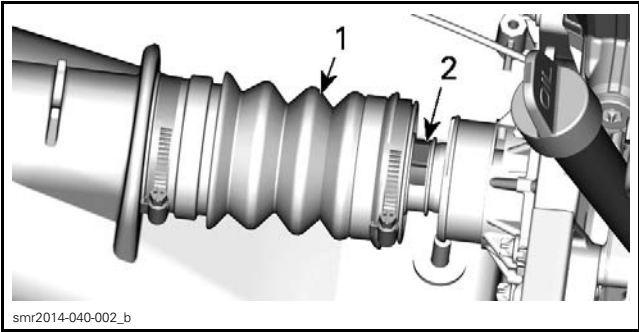
- No water intrusion by the thru-hull fitting area (outer drive shaft boot).

DRIVE SHAFT BOOTS

Drive Shaft Boot Inspection

Remove central body. Refer to *BODY*.

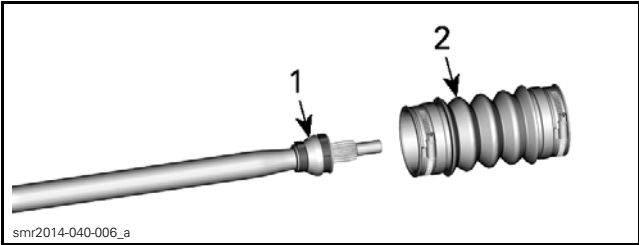
Inspect the condition of outer drive shaft boot. If there is any damage or evidence of wear, replace it.



DRIVE SHAFT BOOTS
1. Outer drive shaft boot
2. Inner drive shaft boot

Drive Shaft Boot Removal

Remove drive shaft. Refer to *DRIVE SHAFT*.



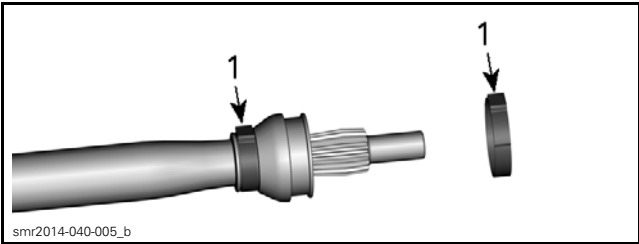
DRIVE SHAFT BOOTS - DISASSEMBLED
1. Inner drive shaft boot
2. Outer drive shaft boot

Inspect the condition of inner boot. If there is any damage or evidence of wear, replace it.

Drive Shaft Boot Installation

The installation is the reverse of the removal procedure.

Install **NEW** Oetiker clamps on drive shaft inner boot.



DRIVE SHAFT - PTO SIDE
1. Oetiker clamps