Customer Service Bulletin
Commercial Business Group

Greensmaster® Flex 21

Date: July 18, 2002

Model/Serial Range:	Model Number:	Serial Numbers:
	04021	220000001-220009999

Subject: Installation of seals into gear case.

The differential shaft seals located at the rear of the transmission may not have been fully installed into the housing bore during assembly. If a seal is not fully installed, the normal pressure that builds inside the gearbox during operation (4-5 psi) may be sufficient to push the seal out of the bore, resulting in the loss of oil.

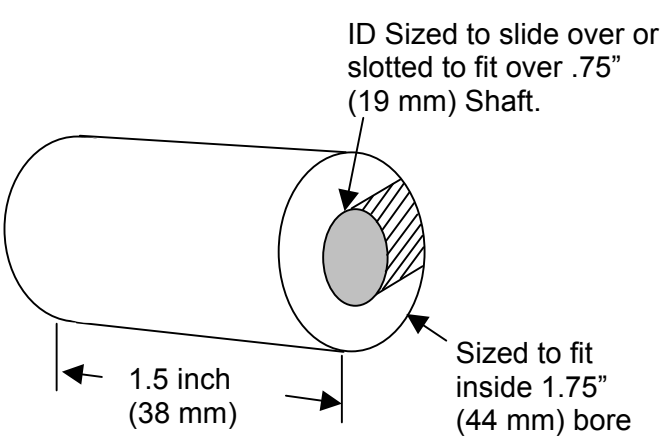
Note: A properly installed seal requires 150 pounds of force to be pushed out of the bore.

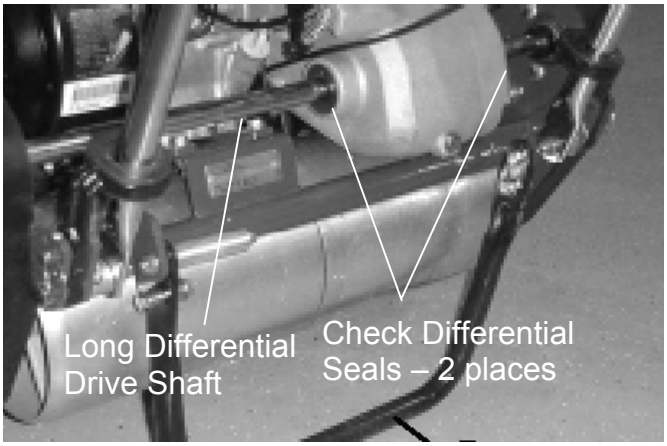
If a seal is protruding from the bore, the seal must be repositioned as described in the instructions below. Assistance in correcting this condition is available through your local Toro distributor at no charge. No action is required if the seals are flush or recessed into the bore.

Instructions (if seal protrudes from bore):

Push the seal inward until it is flush or up to .020" (0.5 mm) recessed. Use a properly sized seal-installing tool to place equal force across the face of the seal to prevent damage. The tool may be made from metal, wood, or plastic and should be sized to slide over a ¾" (19 mm) shaft and fit inside a bore of 1¾" (44 mm). A section may be removed as shown in the drawing below to be able to use the tool without disassembly of the gearbox (see drawing).

Verification that the Differential Shaft alignment is correct is also recommended. With the drive belts removed, turn the Long Differential Drive Shaft (see picture). If it does not turn easily by hand, loosen the bearing collars and align the shafts to provide free movement. Refer to the Service Manual if additional information is needed.





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