

Ariens Service Letter

COMPANY

Ariens Company
655 W. Ryan St.
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Product Family: Gravely Pro-Stance, Ariens Pro-Zoom, Great Dane Surfer and Super Surfer, and EverRide Scorpion Stand-on Riders with Pump and Wheel Motor Transmissions

Subject: Servicing Hydro-Gear® 12P wheel motors

Dealer Action: Understand Proper Service Techniques

Model	Description	Serial Range	Model	Description	Serial Range
994100	Pro-Stance 1948FL	102 – 524	994402	EFXKA1948S	101 – 109
994101	Pro-Stance 1952FX	102 – 533	994403	EFXKW2352S	1 – 42
994102	Pro-Stance 2352FX	102 – 206	994404	ESKH2352S	1 – 18
994103	Pro-Stance 2352FX	101 – 543	994405	ESKW2352S	664810
994104	Pro-Stance 1934FX	101 – 539	994406	EFXKA1952S	1 – 125
994105	Pro-Stance 1948FX	101 – 518	994409	ESKH1848S	101
994107	Pro-Stance 2048FX	101 – 115	994600	GSRKW2352S	101 – 10095
994108	Pro-Stance 2052FX	101 – 134	994601	GSRKA1948S	101 – 160
994109	Pro-Stance 2048FX	101 – 125	994602	GSRKA1952S	101 – 193
994110	Pro-Stance 2452FX	101 – 145	994603	GSKW2352S	1 – 192
994300	Pro-Stance 1948FL	101 – 108	994604	GSRKA1934S	101 – 637110
994301	Pro-Stance 1934FX	101 – 120	994605	GSKA1948S	101 – 132
994401	EFXKA1934S	101 – 141	994806	Pro-Zoom 2052	101 – 2515

Beginning with the 2012 model year, Gravely Pro-Stance commercial stand-on riders began incorporating larger capacity Hydro-Gear® 15P wheel motors (p/n 09115400) on models with pump and wheel motor transmissions. Previously, Gravely, Ariens, EverRide, and Great Dane stand-on riders had used Hydro-Gear 12P wheel motors under part numbers 04915500, 00882300, and TCA15078.

The 15P wheel motors have proven to be more durable and run cooler than the 12P wheel motors in this application. Previous model stand-on riders listed above that are being used in severe commercial applications and experience chronic overheating with wheel motor failure may benefit from converting the 12P wheel motors to 15P wheel motors.

Ariens Company has made available a service kit p/n 59400600 which consists of two 15P wheel motors for converting these models.

Troubleshooting and Failure Analysis

When deciding if a conversion to 15P Wheel motors would be beneficial for a stand-on rider, dealer should do this three-step failure analysis:

1. Confirm low power.

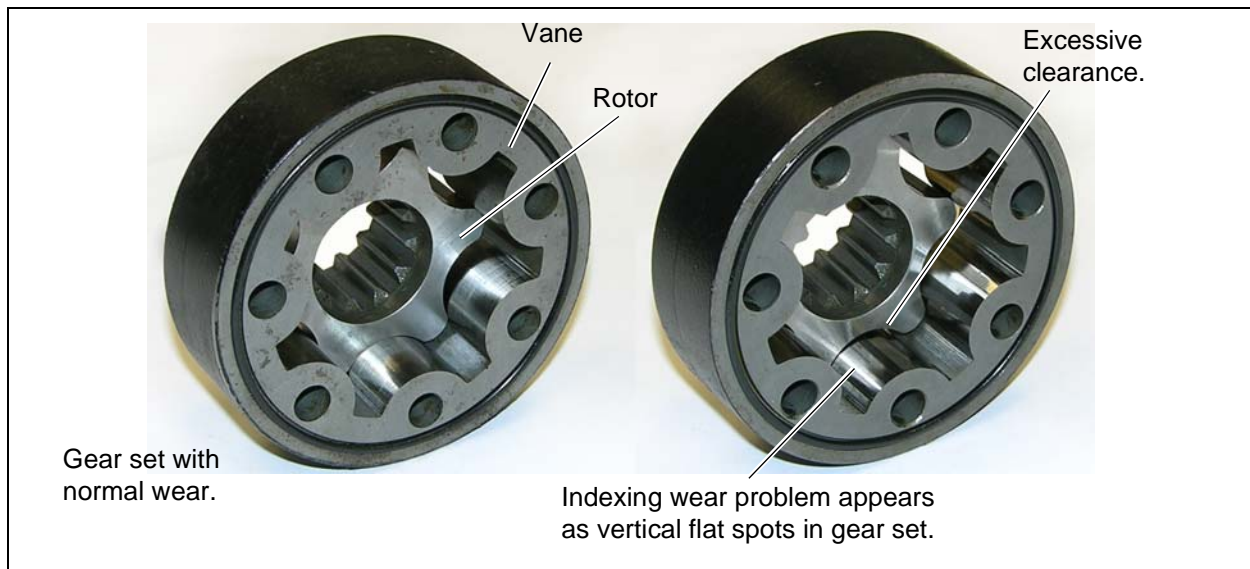
A stand-on unit with worn 12P motors will usually operate normally on flat surfaces but will have low power when going up ramps, over curbs, or on steep hills.

2. Perform a flow meter test.

Low power can be caused either by poor performance at the pump or by a worn wheel motor. By performing a flow test, the pump can be eliminated as the source of the problem.

3. Inspect the wheel motor gear set.

A wheel motor gear set that is worn due to extended high temperature operation will display an "indexing" wear pattern of vertical flat spots on both parts of the gear set. See the photos below. The vertical flat spots can be seen on the outer vane of the gear set. Similar wear will also be observed on the rotor. Excessive clearance between the rotor and outer vane set can also be seen. The gear set on the left shows normal wear.



If the gear set is worn as shown in the photograph, it is recommended that service kit p/n 59400600 be installed to prevent future failures.

Important notes:

- After service kit 59400600 is installed, the transport speed of a stand-on unit is reduced by 20%.
- In some applications, it may be necessary to grind a small amount of excess metal from the frame so the 15P motor can be mounted in place of the 12P motors.
- To order 59400600 Service Kits, dealers must contact Ariens/Gravely Technical Service directly at 920-756-4688.

Normal warranty applies for machines that fail within the warranty period. Dealer will be reimbursed 1.5 hours labor for each service kit installed under warranty.

For more information, contact Ariens/Gravely Technical Service at 920-756-4688.