



Polaris Industries Inc.
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December 6, 2013

Associate Administrator for Enforcement
 National Highway Traffic Safety Administration
 1200 New Jersey Avenue, SE
 Washington, D.C. 20590

RE: 579.5 Notices, bulletins, customer satisfaction campaigns, consumer advisories, and other communications for the month of November, 2013.

Manufacturer: Polaris Industries Inc. (Victory Motorcycle Division; Indian Motorcycle Company; Global Electric Motorcars (GEM))
 Report Author: Don L. Good
 Telephone Number: 651-408-7579

One communication was sent in the month of November, 2013. A copy is attached to this report:

Date Sent	Number	Product	Sent To	Summary	Previously Sent To NHTSA
11/21/2013	Volume 10: November 21, 2013	GEM	All Dealers	Page 2; generic article about GEM battery life cycles	No

If you have any questions with this report, please contact me at 651-408-7579.

Thank you,

Signed: *Don L. Good*
 Don L. Good
 Product Safety Specialist
 Polaris Industries Inc.

Date: 12-6-2013

Polaris North Star Service Solutions



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VOLUME 10: NOVEMBER 21, 2013

Meet the New Polaris Staff!

Each month the North Star Service Solutions newsletter features a member of the Polaris Dealer Services team. This month's featured team member is **Brandon Knez**.



Brandon joined the service department one month ago as the Technical Training Curriculum Developer. Before coming to Polaris, Brandon taught 3D animation at the college level. He also worked in the Machinery Industry for five years.

Newsletter Delivery

Would you like to have this newsletter emailed to you? If so, please send your request to service.newsletters@polarisind.com and you'll receive the following month's newsletter via email! Enter "North Star Service Solutions Newsletter" as the subject line.

Please note, the newsletter will still be posted under *News, Forms & Links* → *Newsletters*. The Newsletter is no longer being faxed.

Recent Team Tips / Voice of Victory / TSB / SA's

The following list includes the most recent Team Tips, Voice of Victory, Service Bulletins and Service Advisories that have been released. Please take the time to visit the dealer STOP site and familiarize yourself with them.

Service Bulletins:

R-13-05

R-13-05/A RGR XP 900 Service Bulletin

Service Bulletin R-13-05/A has been released to address a select number of MY14 RANGER XP 900 units that were manufactured without an airbox drain plug.

R-13-04

2013-14 RANGER XP 900 / CREW Speed Sensor

Service Bulletin R-13-04 has been released to address any MY13/14 RANGER XP 900 / 900 CREW units experiencing speed sensor related issues. This procedure should **ONLY** be done on those units experiencing issues.

Z-13-01

Z-13-01 RZR XP 1000 Propshaft

Service Bulletin Z-13-01 has been released to address any MY14 RZR XP 1000 units experiencing noise/vibration from the front driveline. This procedure should **ONLY** be done on those units experiencing issues. Check unit inquiry.

L-13-03

L-13-03 GEM Battery Replacement Service Bulletin

Service Bulletin L-13-03/A/B has been published. L-13-03 instructs GEM dealers to replace the 8V gell batteries in some 2012-2013 models, and inspect other models and dealer inventory for affected batteries.

Team Tips:

S-13-11-01

RMK Pre-Season Prep Team Tip

Team Tip S-13-11-01 to address pre-season prep for RMK and PRO-RMK snowmobiles.

S-13-11-02

PRO-RIDE Switchback Accessory Seat Team Tip

Team Tip S-13-11-02 has been published to provide installation notes for the accessory passenger seat kit for PRO-RIDE Switchback snowmobiles.

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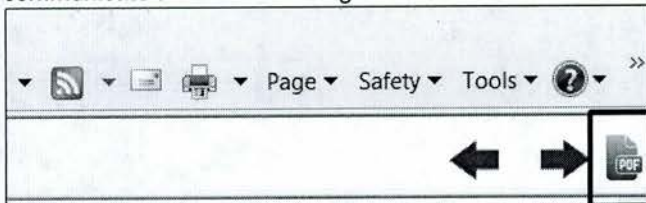
News and Information

A New Option for Viewing Service Manuals

Dealers asked, and Polaris delivered.

Now available on all HTML service manuals is the option to view the service manual in PDF format and save it to the computer. This option will allow dealers to work in areas with limited or no internet connection and still access the manuals electronically, anytime, anywhere as long as it is saved to the hard drive.

The PDF can be launched into a new window by clicking the PDF icon located in the upper right corner of all service manuals. Use your PDF reader's functionality to save the PDF to your system. The PDF versions of the manuals have been compressed to allow a fast download speed, which results in lower resolution of some images. The images are still readable and communicate the same message.



NOTE: Although this new format is easy to share, the PDF is to be used internally and is not suitable for translation.

Polaris/GEM Electric Vehicles: Battery Life Cycles

When deciding to replace a single battery or an entire battery pack in Polaris and GEM electric vehicles, consider the life span and the number of life cycles the battery pack has been through.

One "life cycle" is defined as: a discharge of 80% (20% charge level remaining according to the vehicle gauge) and then recharged to 100%. If a vehicle is discharged to a 20% level daily, the battery pack will last approximately 600 days, or 20 months (1.75 yrs). Polaris

and GEM batteries are typically rated to have approximately 550-650 life cycles.

Batteries have a basic shelf life, but the life span of a battery is better determined by the number of cycles it has been through. For example: a technician is working on a vehicle and finds that one battery in the pack is failing; its voltage is considerably lower compared to the rest of the batteries. The technician must decide to replace the whole battery pack or just the one that is failing. It is recommended to replace only the failing battery if the batteries are less than 1 year old. An exception to this recommendation is excessive life cycles. If the batteries are less than a year old, but are used excessively to the point where they may have used up most of their life cycles, the better option may be to replace the whole battery pack. Older, cycled-out batteries can influence the new batteries when mixed together, basically rendering the new batteries the same age as the rest of the pack.

For tips on troubleshooting batteries, and worksheets for filling out your test results, access Team Tip L-12-03-1, or R-12-03-01. Also, when replacing flooded lead-acid batteries, always remember to check the fluid level in each cell.

MDW Frequently Asked Questions

With the recent release of Mobile Digital Wrench (MDW) and the Wireless Vehicle Link, Polaris Technical Service has had several calls and "Ask Polaris" cases with questions. While many of the answers can be found in the MDW User's Guide, some cannot. Polaris Technical Service has put together a list of FAQs to save time and reduce the need to call or submit an "Ask Polaris" case:

Q: Will this application work on Apple or Windows products?

A: No, MDW has only been designed to work with Android-based systems

Q: Why will this application not work with Apple or Windows-based systems?

A: Android is the most widely used platform for smart phones and tablets and is also more cost effective to develop programs on, and for dealers to purchase.

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Q: Are there plans to have this application on Apple or Windows based systems in the future?

A: No, currently there are no plans for this to happen.

Q: Where can I find the User Guide for MDW?

A: The User Guide can be found in two locations:

- Open the application and click on the "More Info" button, then click on the "Settings/Preferences" button and select "Help".
- On your dealer site, from the home page under News, Forms & Links, click on Service & Warranty>>>Polaris Mobile Digital Wrench User's Guide V2.0.

Q: Where is the download for the application located?

A: It is located on your dealer site in the Service & Warranty Drop-down menu and is titled "Mobile Digital Wrench App Download". If you do not see it there you will have to have your site administrator login and give you permission to view this when you sign into your dealer site.

Q: What tablet do you recommend for use with MDW?

A: Polaris does not recommend a specific tablet, as long as it meets the minimum requirements called out in the User Guide it should work.

Q: What makes this tool more useful/better than the PC-based Digital Wrench?

A: Polaris does not say this tool is more useful or better than the PC version, however, there are things that you can do with it that you cannot do with the PC version. A couple examples are:

- It is more portable for test rides
- It is wireless (no cable connections)
- It has a data recording feature

Q: We do not have Android-based tablets or phones here in the shop so we cannot use this tool, how do we return the Wireless Vehicle Link (WVL) and not be charged for it or the application?

A: MDW is an essential tool, therefore even if the WVL is returned to Bosch you will still be charged for it. This essential tool will be billed at the same time as the annual Digital Wrench Technology subscription.

Q: Can I sell the Wireless Vehicle Link (WVL) to my customer with Android based devices?

A: No, the customer has no way to access the application and download it. It's only available through your dealer website.

Q: How many mobile downloads of MDW are allowed?

A: Unlike the PC version of Digital Wrench, we have not limited the number of downloads for MDW.

Q: Is the User Guide available in French?

A: Currently, no French version of the User's Guide is planned.

Q: Will the WVL work with the PC-based version of Digital Wrench?

A: No, WVL is not compatible with the PC version of Digital Wrench; it is only designed to work with the mobile version.

Q: How much will additional Wireless Vehicle Links (WVL) cost?

A: The cost of the WVL has not yet been determined.

ORV Lube Specification Chart – 2014

The 2014 ORV Lube Specification Chart has been posted and is available to dealers. To access the new chart from the dealer website, select the "Service and Warranty" drop down then select: **News, Forms, and Links – Service & Warranty**. The 2014 ORV Lube Specification Chart can be found in the "Service and Warranty Files" section of the page.

King's Corner

– By: Bob Von Vett



All service writers and service managers wish to please customers by explaining service requirements and maintaining shop productivity. Productivity and customer happiness are the primary focus of a service writer or manager's daily duty. That being said, what service manager has not walked into

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a technician's service bay to find a customer asking the technician questions about a repair or even participating in the repair of the vehicle? When this happens without approval it hinders productivity and is a liability to the shop.

Service managers must somehow remove the customer from the technician's work bay and focus the technician on the job at hand without alienating the customer. Breaking up the session between the customer and technician by separating the customer from the work area may make the customer feel uncomfortable or unhappy, but it is preferred by technicians and managers. The customer may become unreceptive to the services suggested thereafter.

So how does one handle situations like this without alienating customers? Many years ago I found a way to reduce the number of customers walking into my shop's service bays without saying a word to anyone eliminating the risk of making anyone feel uncomfortable. I scrubbed the concrete floor around the service write-up area and then I put down safety-stripe tape just like you see in most manufacturing facilities.



I taped off areas of the shop to guide customers to areas where they were allowed. I added verbiage to the service menu requesting customers to please stay within the tape boundaries for their own safety. I was amazed at how many customers respected the boundaries without anyone saying a word. The tape also gave our service department a very professional look at very little cost.

Safety tape can be purchased at most home improvement centers for \$5 to \$20 per roll. This is a very cost effective way to keep everyone safe, improve productivity, and make your shop look great.

New! Polaris Trivia

For a chance to win, correctly respond via email to the trivia below with the answers to the question by November 28th, 2013 and you will automatically be signed up for the monthly newsletter via email and also be entered into this month's prize drawing.

November Trivia: What is the name of the snowmobile racer who set a world record jump on a Polaris snowmobile? How many feet is the record jump?



Submit trivia responses to:

service.newsletters@polarisind.com

October Trivia

October Question:

Polaris Crossword Puzzle Answers:

- | Across: | Down: |
|-------------|---------------|
| 2. Growing | 1. Snowmobile |
| 3. Snow | 7. Asphalt |
| 4. Razor | 8. Dirt |
| 5. Indian | 9. Victory |
| 6. Race | 11. Sportsman |
| 10. Polaris | 13. Trail |
| 12. Utility | |
| 14. Ranger | |
| 15. Mud | |

Congratulations to John Morin @ Polaris of Timmins, Canada for answering the October trivia question correctly! Look for your prize in the coming weeks!