IMPORTANT SAFETY RECALL – 15V-163

This notice applies to your vehicle [redacted]

March 27, 2015

[redacted]

Dear Hi Ranger Owner,

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

REASON FOR RECALL

Terex Utilities has decided that a defect which relates to motor vehicle safety exists in certain vehicles built with General digger derricks and TM series Aerial devices which were manufactured from March 28, 2014 to March 1, 2013. The affected units contain Turntable bearing bolts, 404083, which may experience head separation. If the bolts fail there is risk of injury due to the boom falling.

WHAT TEREX UTILITIES WILL DO

Terex Utilities will provide replacement bolts, 404083, for units in the affected date range, which fail the torque inspection requirements. The repair will take about 1.5 hours at no cost to the owner if failed bolts are detected.

WHAT YOU SHOULD DO

1. Immediately remove machine from service and perform a bolt torque test. The procedure is shown in the Maintenance manual and PA1016 is attached which describes the same information as in the manual. The torque for each unit is in the maintenance manual and shown below:
   - General DD - 550 ft lbs
   - TM Aerials 500 ft-lbs
2. If any bolts are broken, or break as a result of the torque test, do not use the machine. All broken bearing bolts must be replaced prior to use. Call your local Terex Utilities dealer or contact the Terex Service Department by calling 1-800-982-8975, or email your information to utilities.warranty@terex.com, or fax to 1-605-882-5572, provide your contact information and serial number to arrange repairs.

CONTINUED USE:

After the bolt torque inspection, Owners may continue to use the aerial or digger derrick provided that all bolts are able to hold the torque. Performance of this inspection will satisfy the required 6 month bolt torque inspection until the next required inspection date.

If you have any questions you can contact your nearest dealer at this web site; http://www.terex.com/utilities/en/products/dealer-locator/index.htm.

If you take your unit to your dealer on the agreed service date and they do not remedy this condition on that date or within three (3) working days, we recommend you contact Terex Utilities Warranty department by calling 1-605-882-4000.

After contacting your dealer and Terex Utilities Warranty department, if you are still not able to have the safety defect remedied within a reasonable time, you may wish to write the: Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington DC 20590 or call 1-888-327-4236 (TTY: 1-800-424-9153): or go to http://www.safercar.gov.

Terex South Dakota, Inc.
500 Oakwood Road
Watertown, SD 57201 USA
(605) 882-4000 • Fax (605) 882-1842

If you have sold or retired the unit please let us know by contacting the Terex Utilities Warranty department at 1-605-882-4000 or send the serial number and new owner contact information to utilities.warranty@terex.com. You are required to forward this bulletin to the new owner within 10 days of receipt of this letter.

If you have leased this vehicle to another person, you are required by Federal Law to forward a copy of this notice to the lessee by first class mail within ten days of your receipt of this notice.

Thank you for your immediate attention on this important matter,

Jeff Hegstrom
Product Support Manager

Our records indicate the following machines registered to you are involved in SN616.

Model	Aerial Serial Number	Inspected by	Date
TM	[redacted]		

Terex Utilities	
SAFETY NOTICE	**SN-616**

DATE: ***3/20/15*** **REVISED:**

TO: Owners, Users, Dealers, and Installers

Models Affected: TM Aerials and General Digger Derricks

SUBJECT: ***Rotation Bearing Bolts 404083***

Issue:

Terex has become aware that specific lots of rotation bearing bolts 404083, 7/8-9NC x 5.5", have experienced head separation. The failures are isolated to two lot numbers used on machines listed above, built from March 28, 2014 to March 1, 2015. **If the bolts fail there is risk of injury due to the boom falling.**

Action:

What the Owner must do:

1. Immediately remove machine from service and perform a bolt torque test. The procedure is shown in the Maintenance manual and PA1016 is attached which describes the same information as in the manual. The torque for each unit is in the maintenance manual and shown below:

   General DD - 550 ft lbs

   TM Aerials - 500 ft-lbs
2. If any bolts are broken, or break as a result of the torque test, do not use the machine. Replace only broken bearing bolts prior to use.
3. Contact your local Terex dealer, TEREX Utilities at 1-800-982-8975 and ask for the Service Department, or email machine information to utilities.warranty@terex.com, to schedule an appointment for repairs or to receive replacement bolts.

Continued Use: After the bolt torque inspection, Owners may continue to use the aerial or digger derrick provided that all bolts are able to hold the torque. Performance of this inspection will satisfy the required 6 month bolt torque inspection until the next required inspection date.

If you have any questions you can contact your nearest dealer at this web site; http://www.terex.com/utilities/en/products/dealer-locator/index.htm.

What Terex will do:

Terex is working with the supplier to determine the root cause. Terex will provide bolts for units which are broken. For further assistance call TEREX Utilities at 1-800-982-8975 and ask for the Service Department.

Dealers and Installers: A letter is being sent to owners of affected units. If an owner contacts you about this bulletin; contact TEREX Utilities at 1-800-982-8975 and ask for the Service Department for further instructions.

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Important: Some of the involved units may be in rental fleets. You are required to complete the recall service on these units before renting, and to inform the renters of affected units within 10 days of receipt of this bulletin.

Note to Owners: If the manufacturer or their dealer has failed or is unable to remedy the defect/noncompliance condition without charge or within a reasonable amount of time you can notify:

Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE, West Building,
Washington, DC 20590

Or call the toll-free DOT auto Safety Hotline at 1-888-327-4236

Terex Utilities	
Product Advisory	**PA 1016-08**

DATE: ***1/04/08*** **REVISED:** ***2/26/13***

TO: ***ALL DISTRIBUTORS, OWNERS AND USERS***

SUBJECT: ***TURNTABLE BEARING BOLT INSPECTION (ALL UNITS)***

Issue:

Inspection of turntable to bearing and pedestal to turntable bearing bolt torque.
The fasteners connecting the upper rotating structure to the turntable bearing and the turntable bearing to the pedestal are very important fasteners that must be inspected and maintained periodically as specified in the Operators and Maintenance Manuals. If one or more bolts loosen or stretch, the loading is transferred to the adjacent bolts making them support more than their share of the load. Should the unit be allowed to operate in this manner the fasteners will eventually fatigue and failure occur.

Failure to properly inspect and maintain fasteners can result in failure of the fasteners and the booms falling.

Action:

To prevent failure of the turntable bearing fasteners they must be inspected at intervals specified in the Operator's and Maintenance Manuals for the unit. This requires:

- Daily visual inspection for loose or missing fasteners.
- Periodically verify the torque of all turntable bearing bolts.

Daily visual inspection is looking for:

- Missing or broken fasteners.
- Loose washers or gaps under fastener heads.
- Indications of looseness such as shiny areas on washer or mounting surfaces.

If any of the above are observed do not continue operation. Notify the appropriate people in your company and have the machine repaired, it is not safe to use. Check the torque on all bearing fasteners and correct as required.

The daily and periodic inspection also must include a visual inspection of all pins, retainers and other fasteners in addition to the turntable bearing fasteners.

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Verify the torque of the turntable bearing fasteners at 180 day intervals, (or by hour of operation for your specific unit), to the torque shown in the Maintenance Manual for the specific unit.

- Use a calibrated torque wrench. It can be a clicker or dial type.
- Use extensions, socket, or crowfoot wrenches as required.
- Determine the proper torque from the Maintenance Manual.
- Check ALL bearing fasteners, turntable to bearing and bearing to pedestal. The number of fasteners will vary by model. If items prevent access to the bolt head with a socket it will require using a crow foot wrench or removing the item that interferes. When a crow foot wrench is used the torque setting of the torque wrench must be adjusted to account for the variation in leverage. See the information supplied with your torque wrench to determine adjustment.
- Mark a corner of the fastener to determine movement. Apply the torque to the head of the fastener, slowly increase the torque on the fastener until the torque wrench clicks or shows you have reached the required torque. Do not exceed the torque value in the Maintenance Manual. Do not jerk the wrench. If the fastener does not move continue to next fastener.
    - First torque check at 180 days: Due to variations in torque wrench calibrations at the first 180 day torque interval if the fastener moves less than 1/8" measured at a point of the hex and holds torque mark this fastener and continue to the next fastener.
    - Torque checks after first check: Any torque checks after the first 180 day interval if the movement at a point is less than 1/16" and it holds torque mark the fastener and continue to the next. If the fastener moves at the next torque interval it must be replaced.
- If the fastener does not hold torque or moves more than allowed it must be removed and replaced. Also the fastener on each side of this fastener must be replaced. If the fastener is a bolt using a nut, both bolt and nut must be replaced. We recommend using only Terex Utilities supplied fasteners to ensure the proper grade and reduce the chance of counterfeit fasteners. There are several finishes used on fasteners that cause the tension to vary. Replace fasteners only with the same grade and finish. All fasteners, washers, and nuts on a bolt circle must be the same finish.
- The bolting surfaces, holes and threads must be cleaned thoroughly before installing a new fastener.
- Lubricate fastener with appropriate lube shown in the Maintenance Manual when replacing all fasteners. Use the same lubricant as on the bolt being replaced, if only replacing a single fastener, to ensure applying the same preload as the other bolts in that bolt circle.
- Washers, if used with bearing fasteners, are only hardened flat washers. Do not use lock washers. Replace the washer if damaged.

- Replace all covers and items moved or removed and verify operation before returning to service.
- Document the service performed as required by ANSI A92.2 and A10.31.

Torque intervals:

- The Frequent and Periodic inspection intervals for turntable bearing fasteners is to check the torque at the 180 day intervals.
- This 180 day interval can be increased to annually only if all fasteners do not move on two successive 180 day torque inspections
- If at subsequent annual inspections any fasteners move the interval must be reduced and performed at the 180 day interval until the fasteners do not have movement during two sucessive torque inspections. Then the interval can be increased to annually.
- When the turntable bearing, weldments, or fasteners are replaced the same criteria would apply as for new machines. The torque must be checked at 180 day intervals. If two successive torque checks at 180 day intervals do not have any fastener movement the interval can be increased to annually.

The information above is related to the turntable bearing fasteners. The daily visual inspections, continuous observation for unusual noise or operation, and following the maintenance Frequent and Periodic Inspection Intervals apply to all fasteners, pins and pin retainers of all units.

It is the position of Terex South Dakota that all Critical fasteners should have the torque checked to 100% of their installation torque during the periodic inspections (typically 6 months). We are aware that some owners have policies of checking torque of critical fasteners to a value less than the recommended installation torque. Equipment owners who have documentation of torque testing at 90% of the installation torque for each individual piece of equipment will be accepted as meeting the current Periodic requirement. Future Periodic testing should be done at 100% of the installation torque.