

TO: All Dealer Principals, Service Managers and Parts Managers

Subject: HXX 12 & 15 Yard Models Hoist Cylinder Safety Recall

Number: SB 0292 **DATE:** 04/27/2018

NOTICE



Follow recommended safety practices while performing all work. Refer to the Vactor/Guzzler Safety Manual for additional information.

This manual is available at: www.vactor.com

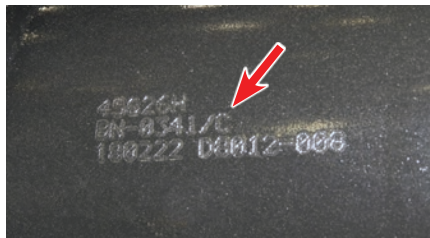
PURPOSE:

Some hoist cylinders used on the HXX series units have been reported to have failed due to corrosion. The corrosion can result in the debris body pulling the hoist cylinder apart, resulting in the debris body locking in place or tipping rearward. This bulletin lists the units using the relevant hoist cylinders and the procedures for inspection, rebuild and replacement if required.

Operational procedures for dumping, cleaning and decanting are included for reference.

UNITS TO SERVICE:

See list. If the cylinder part number ends in a **C** no action is required. The part number is located on the side and near the top of the cylinder.



WARRANTY COVERAGE:

See last page

SPECIAL TOOLS:

An overhead hoist suitable to remove/install the hoist cylinder.

Dual body props - safety wedge locks are available from many truck equipment suppliers.

Spanner wrench to remove gland.

Dead blow hammer to strike the spanner wrench.

Buckets to collect oil, oil absorbing mats, & clean rags.

Optional strap wrench to hold chromed cylinder stage.

Clean hydraulic oil.



PARTS AVAILABILITY: June 25, 2018

Black spray paint.

PARTS REQUIRED:

	HXX Cylinder Part Numbers	
	15 yard	12 yard
Vactor P/N	45826H-30	45826G-30
Prince P/N	BN-0341	BN-0342
	Kit Part Numbers	
Vactor P/N	45826HK-30	45826GK-30
Prince P/N	CD-0100	CD-0101

WARNING

Crushing hazard

NEVER go under a raised loaded debris body. To avoid injury or death:



- Empty debris body before service work.
- Always use the body prop when the debris body is raised for service.
- NEVER disconnect check valve with the debris body in raised position. Debris body will fall.
- NEVER remove the bleeder screw from cylinder with pressure on the cylinder. Debris body will fall. Only loosen bleeder screw to bleed air from cylinder.
- NEVER loosen or disconnect any hydraulic components while the hydraulic pump is running.

Serial Number
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16-04V-16179
16-04V-16183
16-05V-16194

Serial Number
16-05V-16195
16-05V-16196
16-05V-16205
16-05V-16224
16-06V-16230
16-06V-16231
16-06V-16251
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16-09V-16377
16-09V-16401
16-09V-16402
16-09V-16409
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16-09V-16421
16-09V-16423
16-10V-16427
16-10V-16435
16-10V-16437
16-10V-16460
16-11V-16492
16-11V-16506
16-12V-16509
16-12V-16547
17-01V-16564
17-01V-16589
17-02V-16604
17-02V-16617

Operational Safety

All dumping/cleaning/decanting operations require that the unit be positioned with the unit on firm level ground in a clear area away from any other equipment, personnel and overhead wires or obstructions. Bystanders must be kept at safe distance from the work area. Everyone should be clear of the rear area during dumping operations.

DUMPING PROCEDURE:

1. Decant if required.
2. Slowly open the rear door to full open.
3. Slowly raise the debris body as needed.
4. If equipped, use the vibrator as needed.
5. Verify the debris body is clear to lower and fully lower it.
6. Verify the rear door is clear to lower and fully lower it.

CLEANING PROCEDURE:

1. Slowly open the rear door enough to set the rear door safety props in place and slowly lower the door to the prop.
2. Slowly raise the debris body three feet up at the front.
3. Verify everyone is clear of the area before cleaning.
4. If equipped activate the washout system until clean.
5. If equipped, use the onboard handgun to clean up. Special attention should be used on the float balls, rear door seal and sealing surface.
6. This is a good time to perform a walk around inspection for leaks and damage.
7. Lower the debris body after it has fully drained and close the rear door.



Crushing Hazard

NEVER leave body raised or partly raised while vehicle is unattended or while performing maintenance or service under body unless body is propped to prevent accidental lowering. [Always disengage PTO when hoist is not in use or when moving vehicle.] The debris body **MUST BE** empty for service work.


NEVER attempt to raise body when vehicle is on unlevel ground.


Rear door **MUST BE** opened before the front of the body is 3 feet above the chassis frame. Operator must remain at controls during all operations.



<p>⚠ WARNING</p>  <p>Crushing hazard. Serious injury or death can result from falling debris body. Never go under a raised debris body without the safety prop(s) in place. Debris body must be clean and empty for service work. On firm level ground raise the body above the height of the props. Tilt the prop(s) in place. Lower debris body until it just rests on the prop(s). Use all props. Shut down and lock out the entire system and chassis before servicing. Unload any items stored in debris body before using machine. Refer to manual for details. </p>	<p>⚠ WARNING</p>  <p>Crushing hazard. Serious injury or death can result from falling rear door. Never go under the rear door when open. Use door prop(s) or safety pin(s) to secure door before entering body, working under or around the door. Open the rear door to just clear the prop(s) and lower door until it just rests on the prop(s). On units that use a safety pin(s) open the door until the pin holes are aligned and insert pin. Use all props or pins. Shut down and lock out the entire system and chassis before servicing. Unload any items stored in debris body before using machine.</p>	<p>⚠ WARNING</p>  <p>Electrocution hazard. Serious injury or death can result from electrocution. Check for overhead wires and obstructions before raising debris body, opening rear door or raising optional equipment. Never leave debris body, rear door or optional equipment raised or partly raised while vehicle is unattended. Never move vehicle with debris body, rear door or optional equipment raised. Be aware of the vehicle's surroundings before operating any of the hydraulic functions to prevent death, injury or equipment damage.</p> <p style="text-align: right;"><small>1800128 rE</small></p>
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⚠ WARNING



Electrocution hazard
Serious injury or death can result from electrocution.
 Check for overhead wires and obstructions before raising or moving boom. Do not leave boom raised while vehicle is unattended. Do not move vehicle unless boom is in travel mode. Do not allow boom to contact the vehicle or any obstruction.
 Be aware of the vehicle's surroundings before operating any of the boom functions to prevent death, injury or equipment damage.
 Refer to SAFETY section in manual. 

1800149 rev A

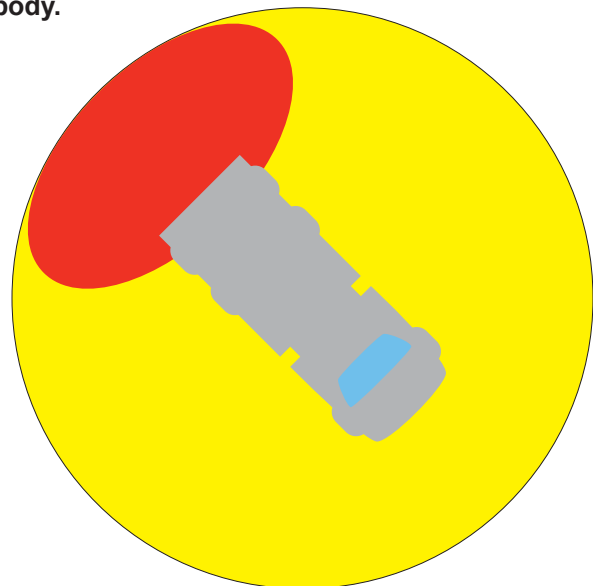
DECANTING PROCEDURE:

1. If not equipped with an optional valve turn on the vacuum system and operate in mid-range. Unfold the nylon flat-hose and let it hang down into the manhole opening. Turn off the vacuum to allow the liquids to flow out.
2. If equipped with an optional valve open the valve and drain until complete and close the valve. If the drain port plugs with debris the vacuum system can be used to pull the debris clear of the port.
3. To get the remaining liquid slowly raise the debris body three feet up at the front.
4. When done close the valve if equipped or lower the debris body.
5. Refold the hose and place it back into its bracket.

NOTICE

Safe Work Zone


Bystanders must be kept a minimum of 15 feet from the work area. NEVER stand directly behind the truck when raising or lowering the body.



Preparation

Empty and clean out the debris body.

Shut down the unit on level ground, set the brake, and follow lockout/tagout procedures.

 **WARNING** **SAFETY WARNING for cylinder disassembly, inspection, and repair: Please read and understand all instructions before proceeding. Any person attempting to repair the cylinder must take reasonable safety precautions to prevent serious personal injury. If they feel they cannot safely follow the instructions or make the repairs they should not proceed.**

NOTE: The procedure outlined below will normally take more than one person to safely complete. Also be prepared for the possibility of several quarts of oil spilling from the cylinder as it is removed from the truck and rebuilt.

WARNING

Crushing hazard

NEVER go under a raised loaded debris body. To avoid injury or death:

- Empty debris body before service work.
- Always use the body prop when the debris body is raised for service.
- **NEVER** disconnect check valve with the debris body in raised position. Debris body will fall.
- **NEVER** remove the bleeder screw from cylinder with pressure on the cylinder. Debris body will fall. Only loosen bleeder screw to bleed air from cylinder.
- **NEVER** loosen or disconnect any hydraulic components while the hydraulic pump is running.



PROCEDURE CONTINUED:

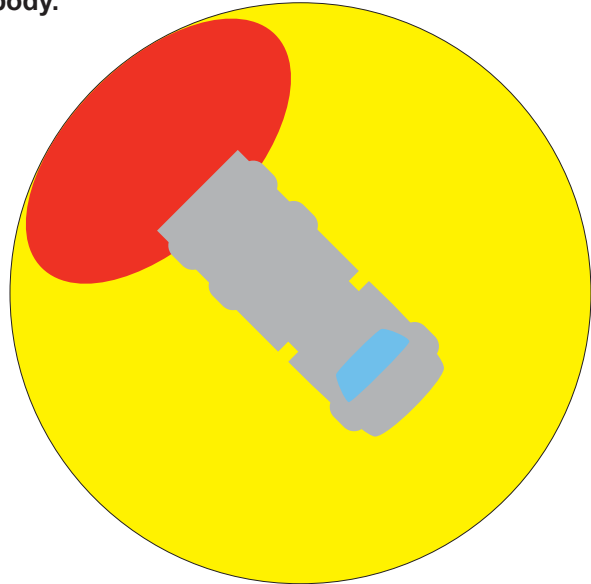
Testing and Inspection of the body lift telescopic cylinder before removal from truck:

1. The first step is to determine if the cylinder is in good enough condition to be rebuilt.
2. Follow all safety instructions and warnings detailed in the operator manual or outlined on warning labels.
3. Confirm that the oil level in the hydraulic reservoir is within safe operating range.
4. With the body empty completely raise and lower the empty body two or three times. While doing this observe from a safe location on the ground the operation of the telescopic cylinder that lifts the body.
5. The telescopic cylinder should smoothly raise the body without unusual hesitation or binding. As the cylinder extends to raise the body the largest chromed stage of the telescopic cylinder should extend fully before the next smaller chromed stage begins to move. Two or more stages should not be moving at the same time when the cylinder is extending. This rebuild will replace the smallest chromed stage. If there is an issue when the larger chromed stages are moving then there could be damage to the cylinder and additional inspection and repair not covered in these rebuild instructions may be necessary. Consult with a Vactor factory service representative on how best to proceed.
6. The telescopic cylinder should smoothly lower the body without sudden movement or binding. As the cylinder retracts to lower the body the smallest chromed stage of the telescopic cylinder should retract fully before the next larger chromed stage begins to move. Two or more stages should not be moving at the same time when the cylinder is retracting. If there is an issue when the larger chromed stages are moving then there could be damage to the cylinder and additional inspection and repair not covered in these rebuild instructions may be necessary. Consult with a Vactor factory service representative on how best to proceed.
7. Follow all safety instructions outlined in the operator manual to support body on the safety stand for preliminary inspection of the cylinder.
8. Using a ladder and any necessary safety equipment visually inspect the outside of the telescopic cylinder where it is attached to the frame rails of the truck. Note if there is damage to the cross frame, the mounting tangs where the bottom of the telescopic cylinder is attached, or the cylinder attachment pin. If any of these have been damaged additional inspection and repair not covered in these rebuild instructions may be necessary. Consult with a Vactor factory service representative on how best to proceed.

NOTICE

Safe Work Zone

Bystanders must be kept a minimum of 15 feet from the work area. NEVER stand directly behind the truck when raising or lowering the body.



PROCEDURE CONTINUED:

Note: Check if there is significant fresh oil leakage from around the chromed stages caused by the raising and lowering of the body. This rebuild will address the leakage from around the smallest chromed stage. However, if there is leakage from around the other stages, a complete cylinder rebuild or a new cylinder is needed. Consult with a Vactor factory service representative on how best to proceed.

Note: Check if there is damage to or leakage from the hydraulic lines attached to the cylinder. If these are damaged, they will need to be replaced.

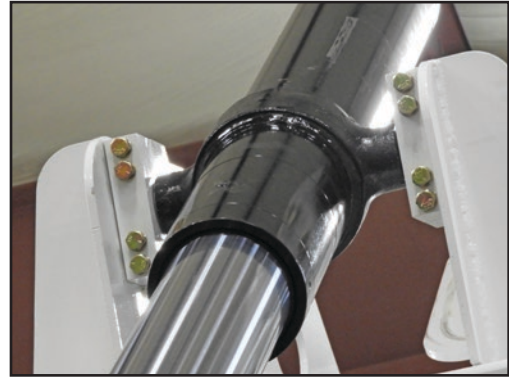
Instructions for removing the telescopic cylinder from the truck

The following is the general procedure, but will vary with some options and models.

Empty and clean out the debris body.

Shut down the unit on level ground, set the brake, and follow lockout/tagout procedures.

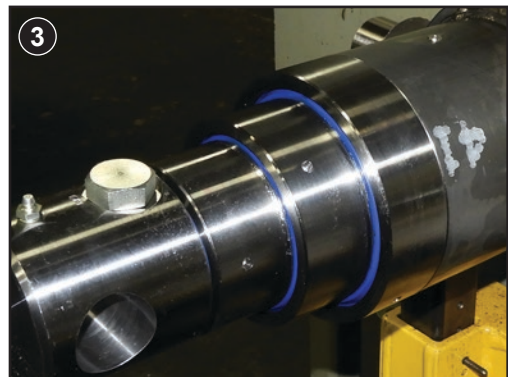
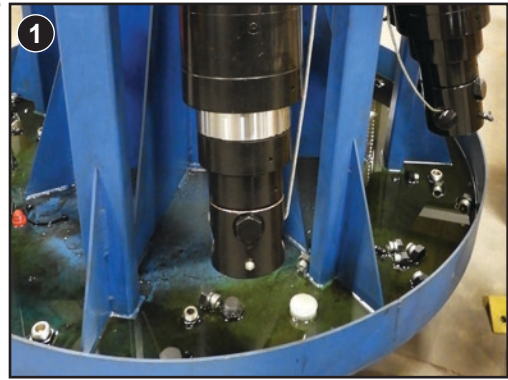
9. Raise the debris body and secure with the safety props
10. Shut down the system
11. Secure the hoist cylinder with suitable straps
12. Disconnect the hoist cylinder from the debris body by removing the caps and bolts
13. Power up the unit and hydraulic system and power the hoist cylinder enough to clear the caps
14. Shut down the system
15. Disconnect and cap the hydraulic hoses and hoist cylinder ports. Be prepared for some oil spillage and clean up.
16. Attach the hoist to the straps on the cylinder and position to remove the lower pin
17. Remove the lower pin
18. Use the crane to remove the hoist cylinder from the unit.



PROCEDURE CONTINUED:

Instructions For Inspection and Rebuilding of the Small Stage of Telescopic Cylinder:

1. After removing the cylinder from the truck, allow oil to drain from the extend and retract ports. Please note that because of the internal construction, not all the oil can be drained from the cylinder. Be prepared for the possibility of several quarts of oil spilling from the cylinder as it is taken apart.
2. Secure the cylinder horizontally on a suitably sturdy work bench.
3. Inspect the packing glands on the chromed stages of the telescopic cylinder. This rebuild will only replace the smallest packing gland. If there is damage or significant corrosion to the larger packing glands, then additional inspection and repair not covered in these rebuild instructions may be necessary. If oil is leaking from around the larger packing glands additional inspection and repair not covered in these rebuild instructions may be necessary. Consult with a Vactor factory service representative on how best to proceed.
4. Remove any debris from the exterior of the cylinder glands and clean thoroughly to prevent contamination from entering cylinder during rebuild.



PROCEDURE CONTINUED:

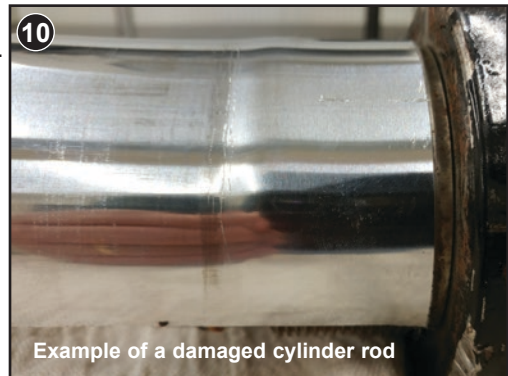
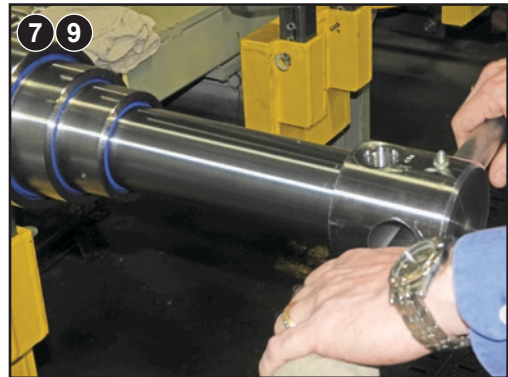
5. Install the spanner wrench onto the smallest gland.
6. Strike spanner wrench sharply with a dead blow hammer to loosen the gland from the mating chromed tube stage (counter clockwise). This may take several attempts.
7. If the gland will not loosen, pull the chromed tube stage out a few inches. Place strap wrench on the chromed tube stage and again strike spanner wrench sharply to loosen the gland.
8. To prevent damage to the chrome tube stage DO NOT use a chain wrench or similar tool.



Note: Use just enough force on the spanner wrench to unthread the gland. If any galling resistance is felt, stop all movement and reverse slightly. It may be possible to continue by gently rotating and working the gland while lightly tapping on the second stage tube. After removal, carefully inspect the threads for damage. It may be necessary to clean up any minor damage. A 3M Scotch-Brite™ EXL Unitized wheel (3" diameter x 1/4") works well. Care must be used to contain the debris by stuffing some rags into the tube and by carefully cleaning the tube's inner area and threads of all debris.

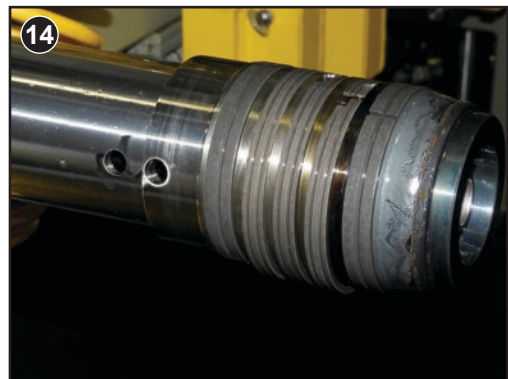


9. Place buckets to collect oil and unthread the gland fully. Then carefully begin to pull out the small cylinder stage. It may be necessary to hold the larger stages in place while pulling out the small stage. At this point, only pull the small stage out about 10 inches and push the packing gland back toward the chrome stage it was removed from so the chromed tube of the small stage can be inspected.
10. Visually inspect the first 10 inches of small stage where it attaches to the rod end. Look for any signs of stretching, cracking of the chrome surface, or necking down of the tube. If this type of damage is clearly present on the cylinder, do not proceed with the rebuild as defined here. Additional inspection and repair not covered in these rebuild instructions may be necessary or it may need to be replaced. Consult with a Vactor factory service representative on how best to proceed.



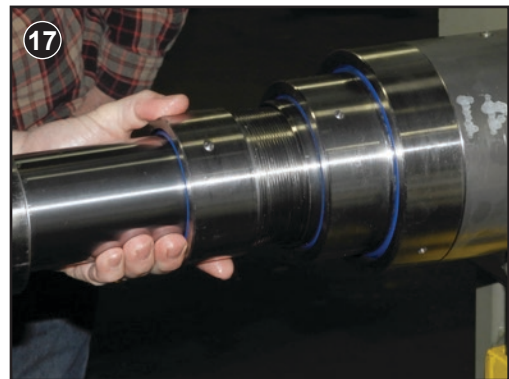
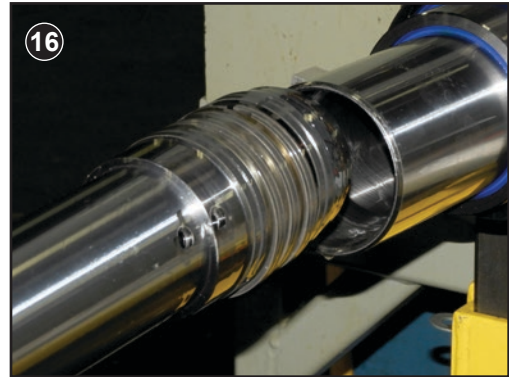
PROCEDURE CONTINUED:

11. If possible, support the small stage using a strap attached to an overhead jib; otherwise a second person should assist in supporting the small stage as it is removed. Carefully remove the small stage assembly and set aside.
12. Using a flashlight visually inspect the honed inside diameter surface of the mating chromed tube stage that the small stage was removed from. There will be spiral honing marks and mostly likely some longitudinal scratches. However, there should not be any galling or significant surface damage.
13. Clean the threads and tube end with a lint free rag.
14. Remove port plugs from new small stage assembly. Remove any protective covering and port plugs from the piston end.



PROCEDURE CONTINUED:

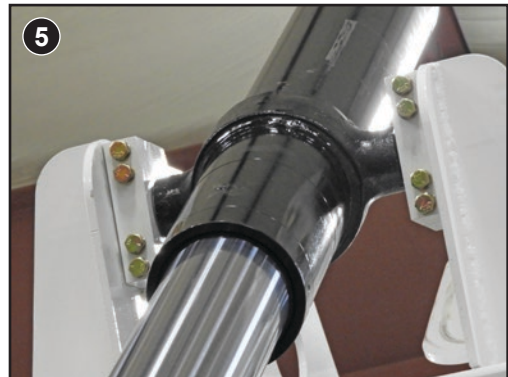
15. Apply oil to the piston and bearing rings of the new small stage. Align the piston of the new small stage with the open end of the mating chromed tube stage of the telescopic cylinder. If possible, support the small stage using a strap attached to an overhead jib; otherwise a second person should assist in supporting the small stage as it is installed.
16. Carefully begin to install the small stage assembly into the mating chromed tube stage of the telescopic cylinder while centering and compressing the cast iron piston rings. It may be necessary to rock the small stage assembly back and forth to get the piston rings to slide into the tube. It may be necessary to compress the piston rings. Finger pressure should only be needed.
17. Push the small stage in fully and apply oil to the seals on the gland. Thread the gland in fully by hand being careful not to cross thread the parts. Using the spanner wrench, by hand, seat the gland against the end of the mating chromed tube stage (see photo). Once seated, strike spanner wrench sharply with dead blow hammer twice.
18. Fully collapse the cylinder, reinstall port plugs, and paint exposed rod end and gland.



PROCEDURE CONTINUED:

Instructions for reinstalling the telescopic cylinder on the truck and then the purging of air from the cylinder Reinstalling the Cylinder

1. Using the crane, raise the hydraulic hoist cylinder in place over the lower cylinder blocks.
2. Reinstall the lower rod pin, fasteners and hoses.
3. Power up the unit and hydraulic system. Top off the hydraulic oil tank.
4. Use the crane to guide it up to the extended position and into the trunnion blocks on debris body. Monitor the hydraulic oil and add oil as required.
5. Reinstall the trunnion blocks and fasteners. At this point the hoist cylinder will not be fully filled with oil and will not function properly.
6. Raise the debris body with the crane enough to remove the safety props and lower the safety prop to its stored position.
7. Slowly lower the debris body using the crane and retracting the hoist cylinder as needed until the debris body has been fully lowered.
8. Remove the crane and any rigging



Air purging

9. Raise the debris body and cylinder to full extension and leave extended for several minutes to allow air to rise to the top of the cylinder.
10. Lower the debris body until the front of the debris body is approximately four inches off of the subframe.
11. Crack the bleeder valve open at this time. DO NOT remove the bleeder.

Note: Bleeding air from the lift cylinder can result in a discharge of hydraulic oil from the cylinder. Make sure the vehicle is in an appropriate area for cleanup. Make sure surrounding personnel are aware of the procedure.

12. Wait until all trapped air has escaped from the valve and a full stream of hydraulic oil is escaping from the valve.
13. At this point the cylinder is bled, and the bleeder valve can be closed.



Poor hoist performance.

Air in the lift cylinder can cause many problems including:

- Failure to lift
- Jerky hoist operation
- Lift cylinder won't raise to full extension
- Lift cylinder drops several inches when lowered

PROCEDURE CONTINUED:

Testing of cylinder after it is reinstalled.

This final step is to determine if the cylinder is operating properly after it has been purged of air.

Follow all safety instructions and warnings detailed in the operator manual or outlined on warning labels.

1. Confirm that the oil level in the hydraulic reservoir is within safe operating range.
2. Completely raise and lower the empty body two or three times. While doing this observe from a safe location on the ground the operation of the telescopic cylinder that lifts the body.
3. The telescopic cylinder should smoothly raise the body without unusual hesitation or binding. As the cylinder extends to raise the body the largest chromed stage of the telescopic cylinder should extend fully before the next smaller chromed stage begins to move. Two or more stages should not be moving at the same time when the cylinder is extending. If unusual movement of the stages is noted, repeat the air purge procedure and again completely raise and lower the empty body two or three times. Repeat a third time if necessary. If the issue persists, there could be damage to the cylinder and additional inspection and repair not covered in these rebuild instructions may be necessary. Consult with a Vactor factory service representative on how best to proceed.
4. The telescopic cylinder should smoothly lower the body without sudden movement or binding. As the cylinder retracts to lower the body, the smallest chromed stage of the telescopic cylinder should retract fully before the next larger chromed stage begins to move. Two or more stages should not be moving at the same time when the cylinder is retracting. If unusual movement of the stages is noted, repeat the air purge procedure and again completely raise and lower the empty body two or three times. Repeat a third time if necessary. If the issue persists, there could be damage to the cylinder and additional inspection and repair not covered in these rebuild instructions may be necessary. Consult with a Vactor factory service representative on how best to proceed.
5. Follow all safety instructions outlined in the operator manual to support body on the safety stand for final inspection of the cylinder.
6. Using a ladder and any necessary safety equipment, visually inspect the outside of the telescopic cylinder. Note if there is significant fresh oil leakage from around the chromed stages or the hoses caused by the raising and lowering of the body. If there is leakage from around the stages, a complete cylinder rebuild or a new cylinder is needed. Consult with a Vactor factory service representative on how best to proceed.



Crushing hazard

NEVER go under a raised loaded debris body. To avoid injury or death:

- Empty debris body before service work.
- Always use the body prop when the debris body is raised for service.
- NEVER disconnect check valve with the debris body in raised position. Debris body will fall.
- NEVER remove the bleeder screw from cylinder with pressure on the cylinder. Debris body will fall. Only loosen bleeder screw to bleed air from cylinder.
- NEVER loosen or disconnect any hydraulic components while the hydraulic pump is running.



REFERENCE - BOLT TORQUE

PURPOSE: THE PURPOSE OF THIS STANDARD IS TO PROVIDE A RECOMMENDED TORQUE FOR THREADED FASTENERS SUCH AS BOLTS, NUTS, CAP SCREWS, USED IN STEEL AND CAST IRON PARTS.

APPLICATION: THIS STANDARD IS INTENDED FOR FASTENERS OF GASKETED OR NON-GASKETED JOINTS, WITH OR WITHOUT STEEL WASHERS, AND WITH COARSE OR FINE THREADS. ALL SPECIAL CONDITIONS WHICH WILL SERIOUSLY AFFECT THE RELATIONSHIP BETWEEN TORQUE AND TENSION OF THE FASTENER, SUCH AS SPECIAL SURFACE FINISHES, LEAD WASHERS, AND FASTENERS SCREWED INTO MATERIAL OTHER THAN STEEL OR CAST IRON, WILL REQUIRE SEPARATE TORQUE VALUES TO BE INCLUDED IN THE APPLICABLE SPECIFICATION. THIS SPECIFICATION DOES NOT APPLY TO TORQUING OF HYDRAULIC CONNECTIONS.

MEAN OR BASIC RECOMMENDED TIGHTENING TORQUE FOR INCH FASTENER REQUIRING ±20% ACCURACY*. TORQUE VALUES ARE BASED ON NON-LUBRICATED THREADS.

NOM. DIA. INCH	TORQUE IN POUND FOOT (LB-FT)	
	GRADE 5	GRADE 8
1/4 - .250	9	12
5/16 - .312	18	25
3/8 - .375	30	45
7/16 - .438	50	70
1/2 - .500	75	110
9/16 - .562	110	155
5/8 - .625	155	215
3/4 - .750	270	385
7/8 - .875	435	620
1 - 1.000	660	930

NOM. DIA. INCH	TORQUE IN NEWTON METER (Nm)	
	GRADE 5	GRADE 8
1/4 - .250	12.2	16.3
5/16 - .312	24.4	33.9
3/8 - .375	40.7	61.0
7/16 - .438	68	95
1/2 - .500	101	149
9/16 - .562	150	210
5/8 - .625	210	290
3/4 - .750	365	520
7/8 - .875	590	840
1 - 1.000	895	1260

BOLT HEAD MARKING



GRADE 5



GRADE 8

*WRENCH TYPES WITH ±20% ACCURACY:

TORQUE CONTROLLED IMPACTS WITH TORSION BARS
 HAND TORQUE WRENCHES
 NUTRUNNERS - STALL AND SHUTOFF
 NUTRUNNERS - ELECTRONIC SHUTOFF
 AIR CYLINDER - STALL TYPE

NOTE: THIS DOES NOT INCLUDE AIR AND ELECTRIC IMPACT WRENCHES WHICH TYPICALLY ARE ±50% ACCURATE.

NOTE: NYLON LOCKING NUTS WILL BE TORQUED TO GRADE 5 STANDARDS

PURPOSE: THE PURPOSE OF THIS STANDARD IS TO PROVIDE A RECOMMENDED TORQUE FOR THREADED FASTENERS SUCH AS BOLTS, NUTS, CAP SCREWS, USED IN STEEL AND CAST IRON PARTS.

APPLICATION: THIS STANDARD IS INTENDED FOR FASTENERS OF GASKETED OR NON-GASKETED JOINTS, WITH OR WITHOUT STEEL WASHERS, AND WITH COARSE OR FINE THREADS. ALL SPECIAL CONDITIONS WHICH WILL SERIOUSLY AFFECT THE RELATIONSHIP BETWEEN TORQUE AND TENSION OF THE FASTENER, SUCH AS SPECIAL SURFACE FINISHES, LEAD WASHERS, AND FASTENERS SCREWED INTO MATERIAL OTHER THAN STEEL OR CAST IRON, WILL REQUIRE SEPARATE TORQUE VALUES TO BE INCLUDED IN THE APPLICABLE SPECIFICATION. THIS SPECIFICATION DOES NOT APPLY TO TORQUING OF HYDRAULIC CONNECTIONS.

MEAN OR BASIC RECOMMENDED TIGHTENING TORQUE FOR METRIC FASTENER REQUIRING ±20% ACCURACY*. TORQUE VALUES ARE BASED ON NON-LUBRICATED THREADS.

SIZE	TORQUE IN POUND FOOT (LB-FT)		
	GRADE 8.8	GRADE 10.9	GRADE 12.9
M3	0.4	1.3	1.5
M4	2.2	3.3	3.7
M5	4.5	6.5	7.5
M6	7.5	11.0	13.0
M8	18	30	33
M10	35	50	63
M12	65	95	110
M14	105	150	177
M16	160	235	277
M20	320	460	542
M24	550	790	937

SIZE	TORQUE IN NEWTON METER (Nm)		
	GRADE 8.8	GRADE 10.9	GRADE 12.9
M3	0.5	1.8	2.0
M4	3.0	4.5	5.0
M5	6	9	10
M6	10	15	18
M8	25	35	45
M10	50	70	85
M12	90	125	150
M14	140	200	240
M16	225	310	375
M20	435	610	735
M24	750	1050	1270

BOLT HEAD MARKING



8.8



10.9



12.9

*WRENCH TYPES WITH ±20% ACCURACY:

TORQUE CONTROLLED IMPACTS WITH TORSION BARS
 HAND TORQUE WRENCHES
 NUTRUNNERS - STALL AND SHUTOFF
 NUTRUNNERS - ELECTRONIC SHUTOFF
 AIR CYLINDER - STALL TYPE

NOTE: THIS DOES NOT INCLUDE AIR AND ELECTRIC IMPACT WRENCHES WHICH TYPICALLY ARE ±50% ACCURATE.

NOTE: NYLON LOCKING NUTS WILL BE TORQUED TO GRADE 8.8 STANDARDS

PROCEDURE CONTINUED:

Warranty claim must include:

- Cylinder serial number
- Truck VIN
- Truck hours (standard practice).
- Please also denote if these removed parts are from the OE installed cylinder. Must include photos of the cylinder serial number, the fitting/rod end before the cylinder is disassembled, and the removed stage/kit.
- Place the removed parts in the plastic bag that was included in the replacement kit to preserve them and to contain residual oil for shipping.
- Contact a Vactor Service Representative for instructions on where to return the parts.

Warranty Coverage and Claim Submittal

The ESG dealer should submit a claim for warranty.

Only claims that meet the failure mode of this bulletin will be covered, all others should contact Vactor service department for assistance.

Use the following information when submitting a warranty claim:

CAUSAL PART: **45826H-30 OR 45826G-30**

To create the FAULT CODE, click **HYDRAULICS (08)** click **DEBRIS BODY LIFT CYLINDER (0644)**, and then click **REBUILD (03)**.

In the FAULT FOUND drop down list, select **DESIGN UPGRADE**.

In the CAUSED BY drop down list, select **Factory Upgrade**.

To enter the Service procedures, perform the following:

For INSTALLED PART # **45826HK-30 OR 45826GK-30**, select **HYDRAULICS (08)**, select **DEBRIS BODY LIFT CYLINDER (0644)**, and then select **REBUILD (03)**.

Standard Repair Time (SRT) of **5** hrs and **0** min is allowed.