



TECHNICAL SERVICE BULLETIN

Bulletin Number: DC-2257

Date: 7/7/2009

Affected Model(s): PMV Grease Pumps

Bare Pumps-85791, 85792, V350120000/V350400000

V450120000, V450400000

See (Attachment 1) for Listing of Affected Models

Subject: Separation Issues between Tube and Outlet Body

Lincoln's PMV pump represents a new and successful pump design in an industry that has settled for the old designs. Our confidence in the design of this pump family has been rewarded with hundreds of successful installations. With this assembly issue we want to work together to correct the problem before it occurs in use. In Bulletin DC-2236 (copy attached) of 9/18/2008, we notified you of the separation of our pump tube from the air motor with certain models of our PMV grease pumps. During our manufacturing process, the outlet body and pump tube were not being tightened to the specified torque settings in all cases. We later determined that the issue affected not only our 3 inch pumps as reported, but also our 4.25 inch pumps. We learned the issue was a direct result of equipment malfunctions that lead to false torque settings.

The original bulletin, DC-2236 reported the issue was isolated to pumps produced prior to November, 2007, date code MM/XT (11/07) or earlier. Please refer to the attached for details on our date code system. All Lincoln inventory was, in fact, pulled and reworked to the required torque setting of 160 ft. lbs. During ongoing review we learned that Loctite 242 Blue was required along with the proper torque setting to secure the proper 160 ft. lb. setting. This Loctite procedure has been part of our Series 20/25/40 assembly standard for many years-it will now become part of our PMV procedure.

As of Monday, June 29th, additional rework was undertaken on all stock at Lincoln. All PMV grease pumps will have 2-3 drops of Loctite 242 Blue added between the pumps tube and outlet casting to make sure that the 160 ft. lb. torque setting is maintained.

The date codes on the pump will stay the same as the original manufacture date. We will be adding a "Z" below the date code on the carton and on the pump right next to the date code as identified in the original Bulletin DC-2236. Instead of a date code such as "MM/XT", you will see "MM/XT Z". This will mean that the pump torque has been set to 160 ft. lbs. and includes 2-3 drops of Loctite 242 Blue.

Originally, in Bulletin DC-2236 we asked that you tighten torque settings on all pumps to 160ft. lb. Subsequently, we must ask that you secure the torque setting with Loctite 242 Blue. **Please use only Loctite 242 Blue so future serviceability will not be affected.** There is no possibility of the separation causing damage or personal injury, but the issues need to be immediately addressed and brought under control to prevent future failures.

To rework pumps currently in your inventory, you will loosen the pump tube from the outlet body, add Loctite 242 Blue, and tighten to the required 160 ft. lbs. Close review of an installed pump is required to determine what action to take. If in service for a short period of time, rework can be accomplished rather easily (**directions included below**). **If a pump has been in service for a long period of time and has been allowed to run in that condition, the bare pump should be replaced completely.** The pump tube threads are most likely in good shape, but the outlet casting threads are most likely damaged beyond repair. In this case we will allow total replacement of the bare pump on a warranty exchange basis. Warranty claims for your efforts to rework your stock, or locate pumps already in service will be paid accordingly for pumps manufactured prior the 11/07. Failure to address this situation can affect overall warranty consideration. The issues above are currently causing much customer concern on this new product line and we are very anxious to address and correct immediately.

Instructions for checking torque and adding Loctite 242-

--Check date code (prior to MM/XN-11/07)

A. On cartons for stock on hand pumps:

- place in vise and remove the four hex head bolts on top that hold the cylinder head in place
- remove the cylinder head and set aside-you should be able to see the top of the air piston at this time
- the air piston is attached to the plunger rod
- push the air piston and plunger down until it bottoms out
- this will move the internal parts down and allow you to loosen the pump tube from the outlet casting
- loosen the pump tube until you see the o-ring then continue 4-5 turns
- clean the threads thoroughly
- add 2-3 drops of Loctite 242 and let it cure a couple minutes
- re-tighten the tube into the outlet casting 160 ft. lbs.
- re-assemble the cylinder head and replace the 4 hex head screws securely
- test pump for obvious air leaks

B. On installed pumps, evidence of leaking or seeping grease, or not, disconnect the air, relieve system pressure and follow the same instructions listed above. The main difference here is you must thoroughly clean any exposed threads good enough for the Loctite to adhere. If not, the Loctite most likely will not work as expected.

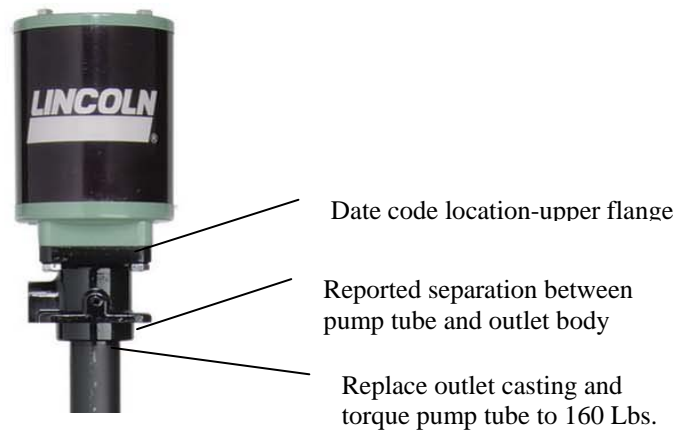


Fig. 2

PLEASE NOTE: As mentioned earlier in the bulletin, if a pump has been allowed to run for an extended period of time in the loose condition, we will authorize total replacement of the bare pump.

As always, if you have questions or concerns, please do not hesitate to call Lincoln Technical Services at 314/679-4200, Ext. 4782 or fax us at 314/679-HELP (4357).

Regards,

Barry Frankum

(Attachment-Original Bulletin DC-2236 dated 9/18/2008)
Listing of all affected model numbers

(Attachment 1)

Affected Grease PMV Pumps-

3 inch 50:1

V350120000
V350400000
V350120DC
V350400DC
V350120HF
V350400HF
V350120LT
V350400LT85791
85792
9989
9917
9917-57

4.25 inch 50:1

V4501200000
V450400000
V450120DC
V450400DC
V450400HF
V450400HR
V450120LT
V450400LT



TECHNICAL SERVICE BULLETIN

Bulletin Number: DC-2236

Date: 9/18/2008

**Affected Model(s): 3" PMV Grease Pumps
Bare Pumps-85792/V350120000/V350400000
Associated Configured Models**

Subject: Outlet Body/Pump Tube Torque Settings

Isolated incidents have been reported regarding Lincoln's 3" PMV grease pumps. Reports indicate that the outlet body and pump tubes are "pulling apart", or "separating" from each other. These reports prompted a quick review of returned samples and all on hand inventory. It was confirmed by Quality Assurance and Engineering that we had variations in torque settings. All on hand inventory has been pulled and reworked accordingly to the specified torque settings. Remember to reinforce the fact that hundreds of these 50:1 PMV grease pumps have been sold without problems at all. This issue is limited to a single manufacturing run where we had an electronic torque meter malfunction. Due to this issue we have now added a second torque validation by a mechanical torque meter to make sure that the appropriate torque setting is achieved. Based on our testing, confidence in this pump line remains high and we see no evidence of any design issues contributing to the reported issues.

The reported issues were found to be limited to units that were produced prior to November, 2007. They are identified with our date codes prior to MM/XN (11/07). Please see [Fig. 1](#) for details of our date coding system. It is commonly referred to as the "MERCHANTSX" date code system. If you have any trouble identifying the date code on your pumps, please feel free to contact us. The date code is located on the upper flange of the outlet casting ([see Fig. 2](#)).

We suggest that you review your on hand inventory and discuss the issues with your users. The proper torque setting on these pumps is 160 ft. lbs. Our testing identified the fact that torque values were all across the spectrum. Anything tested that was tightened to under 80 ft. lbs. would seem to separate, or pull apart as the pump operated normally-pumping, stopping and stalling. Threads on the outlet body became distorted and in most cases could not be retightened to the proper torque value. The outlet body is part number 275065 and they are currently available from stock. Warranty will be paid for your efforts to review and repair all pumps in the field with the date code parameters listed above (basically 1/07-10/07). Please use your best judgment in determining the course of action to take with your individual customers.

If you have questions or concerns, please do not hesitate to call Lincoln Technical Services at 314/679-4200, ext. 4782, or fax us at 314/679-HELP (4357).

Regards,

Barry Frankum

MERCHANTSX Date Code System

Alpha	M	E	R	C	H	A	N	T	S	X
Numeric	1	2	3	4	5	6	7	8	9	0

Example: MM/XN =November, 2007 or 11/07

1=M 1=M / 0=X 7=N

Fig. 1

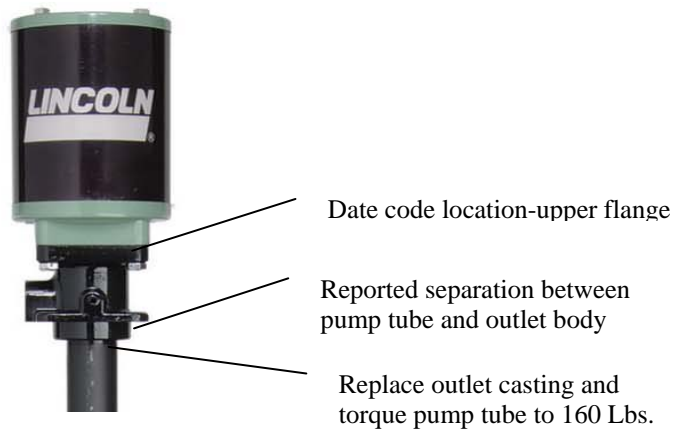


Fig. 2