

RESOLVING THE STICKING TXV



Popular
Manufacturer
recommendation
regarding how to
address sticking
TXVs

THE ISSUE

- A small percentage of recently manufactured HVAC equipment of multiple brands sharing a common brand compressor/oil experienced differing degrees of TXV performance degradation
- Accelerated diagnostics by the industry were performed to determine the root cause of the TXV performance degradation
- The issue is a third-party supplier of a rust inhibitor oil additive
- Manufacturers have responded by various means
- A popular remedy has been the addition of Nu-Calgon's A/C Re-New oil additive

NU-CALGON ANNOUNCEMENT



2008 Atton Court, St. Louis, Missouri 63146-4131
Phone 314-469-7000 or 1-800-954-2499
www.nucalgon.com

September 8, 2014

MEMORANDUM TO: Our Valued Air Conditioning, Refrigeration Wholesalers

SUBJECT: A/C Re-New*

In the last 14 days, we have experienced a very fluid situation involving our product A/C Re-New. Within the sticking TXV situation that has plagued our industry, A/C Re-New has been found by many contractors, wholesalers, and even several OEMs, to play a helpful role in fixing this problem. **In fact, the degree of its success in eliminating or reducing the severity of sticking TXVs has been remarkable.**

As a result, this has led to an unprecedented demand on our product, both for the pressurized version (4037-30) and the unpressurized version (4037-35). In fact, as many of you already know, the demand has left many wholesalers with no product on the shelf, and has depleted our existing inventory resulting in many unfilled orders.

The good news is that we have already ramped-up our manufacturing resources to meet elevated demand levels for A/C Re-New, and we will shortly be in a position to resume filling orders.

That said, we must also share two consequences coming as a result of the accelerated demand for the product and the realignment of the manufacturing process:

1. Going forward, the unpressurized A/C Re-New (4037-35) will be the only version available, along with the quart package (4037-54). The older pressurized versions, 4037-30 and 4037-51, will no longer be available. It is a difficult decision, but it is technically driven and very sound. With the increased use of the product in R-410A systems where a pump down is required, we are finding an increased number of instances where the associated pressures prevent adequate injection of the pressurized product. The unpressurized product and the way it is injected solves this problem.
 2. Obviously, this will require us to contact those wholesalers with backorders for the pressurized product. With approval from the customer, we will switch these orders to the unpressurized 4037-35 package. The application tonnage for each version is the same, up to 3 tons, and both come in a 6 x 1 case. And again, it provides a technically improved installation.
- The second consequence comes from the manufacturing side. Because of the enhanced processes needed to meet the incredible demand, we have encountered significant increases in costs. As a result, it is necessary for us to increase the price of 4037-35 to cover these new costs. The new pricing will be effective immediately on all unfilled and new orders, including those backorders for pressurized product that are switched to the unpressurized version, 4037-35. We find this regrettable, but unavoidable. The cost impact we received in matching the new demand was significant and we could not absorb it. A supplemental price sheet is attached.

We greatly appreciate your understanding and patience as we work through this availability issue. We do anticipate having product to ship shortly, and your Nu-Calgon account manager will be in touch with you if we have unfilled orders of the pressurized version. We will need to obtain your approval, or re-submission of the order, to switch it to the unpressurized A/C Re-New.

If you have any questions whatsoever, please feel free to contact our St. Louis office or your Account Manager. And again, thank you.

Sincerely,

John Lawler
Vice President - Marketing

“In fact, the degree of success in eliminating or reducing the severity of sticking TXVs has been remarkable.”

4057-55 NON-PRESSURIZED SOLUTION



2008 Alton Court, St. Louis, Missouri 63146-4151
Phone 314-489-7000 or 1-800-554-5499
www.nucalgon.com

September 8, 2014

MEMORANDUM TO: Our Valued Air Conditioning, Refrigeration Wholesalers
SUBJECT: A/C Re-New*

In the last 14 days, we have experienced a very fluid situation involving our product A/C Re-New. Within the sticking TEV situation that has plagued our industry, A/C Re-New has been found by many contractors, wholesalers, and even several OEMs, to play a helpful role in fixing this problem. In fact, the degree of its success in eliminating or reducing the severity of sticking TEV's has been remarkable.

As a result, this has led to an unprecedented demand on our product, both for the pressurized version (4037-50) and the unpressurized version (4057-55). In fact, as many of you already know, the demand has left many wholesalers with no product on the shelf, and has depleted our existing inventory resulting in many unfilled orders.

The good news is that we have already ramped-up our manufacturing resources to meet elevated demand levels for A/C Re-New, and we will shortly be in a position to resume filling orders.

That said, we must also share two consequences coming as a result of the accelerated demand for the product and the realignment of the manufacturing process:

1. **Going forward, the unpressurized A/C Re-New (4057-55) will be the only version available, along with the quick package (4057-54). The older pressurized versions, 4037-50 and 4037-51, will no longer be available.** It is a difficult decision, but it is technically driven and very sound. With the increased use of the product in R-410A systems where a pump down is required, we are finding an increased number of instances where the associated pressures prevent adequate injection of the pressurized product. The unpressurized product and the way it is injected solves this problem.

2. Obviously, this will require us to contact those wholesalers with backorders for the pressurized product. With approval from the customer, we will switch these orders to the unpressurized 4057-55 package. The application tonnage for each version is the same, up to 3 tons, and both come in a 6 x 1 case. And again, it provides a technically improved installation.
2. The second consequence comes from the manufacturing side. Because of the enhanced processes needed to meet the incredible demand, we have encountered significant increases in costs. As a result, it is necessary for us to increase the price of 4057-55 to cover these new costs. The new pricing will be effective immediately on all unfilled and new orders, including those backorders for pressurized product that are switched to the unpressurized version, 4057-55. We find this regrettable, but unavoidable. The cost impact we received in matching the unpressurized demand was significant and we could not absorb it. A supplemental price sheet is attached.

We greatly appreciate your understanding and patience as we work through this availability issue. We do anticipate having product to ship shortly, and your Nu-Calgon account manager will be in touch with you if we have unfilled orders of the pressurized version. We will need to obtain your approval, or re-submission of the order, to switch it to the unpressurized A/C Re-New.

If you have any questions whatsoever, please feel free to contact our St. Louis office or your Account Manager. And again, thank you.

Sincerely,

John Lawler

“Going forward, the unpressurized A/C Re-New will be the only version available...”

The pressurized versions were labeled for R-22 systems.

Challenges in getting the entire product from the pressurized containers into the high-pressure R-410A systems is the reason for discontinuing the pressurized product.

JOHNSTONE SUPPLY ASSESSMENT

Since this is a relatively new situation within the HVAC industry, solutions and remedies have been evolving almost daily to address the situation. Here is what we do know...

- *No verifiable examples of sticking TXVs have been brought to the Technical Specialists attention, We are aware of the situation and we will address it within each manufacturer's guidelines, i.e., approved warranty path,etc. and proposed solution*
- *We are currently examining the most logical path thus far, and proposing the addition of the Nu-Calgon A/C Re-New non-pressurized product into systems that have exhibited symptoms, i.e. high sub-cooling and high superheat*



GETTING “KITTED UP” FOR TREATING STICKING SYSTEMS



B17-828 Ritchey 4-ounce Injector tool
+ **B85-533 Nu-Calgon Re-New Treatment**
= Best path to restore system performance

THREE EASY STEPS

- 1. Identify the sticking Thermal Expansion Valve (TXV/TEV)
- 2. Prepare kit for Nu-Calgon AC Re-New®
- 3. Using refrigerant of same type as the system you are working on, pressurize kit to apply Nu-Calgon AC Re-New®

STEP 1: IDENTIFY STICKING TXV

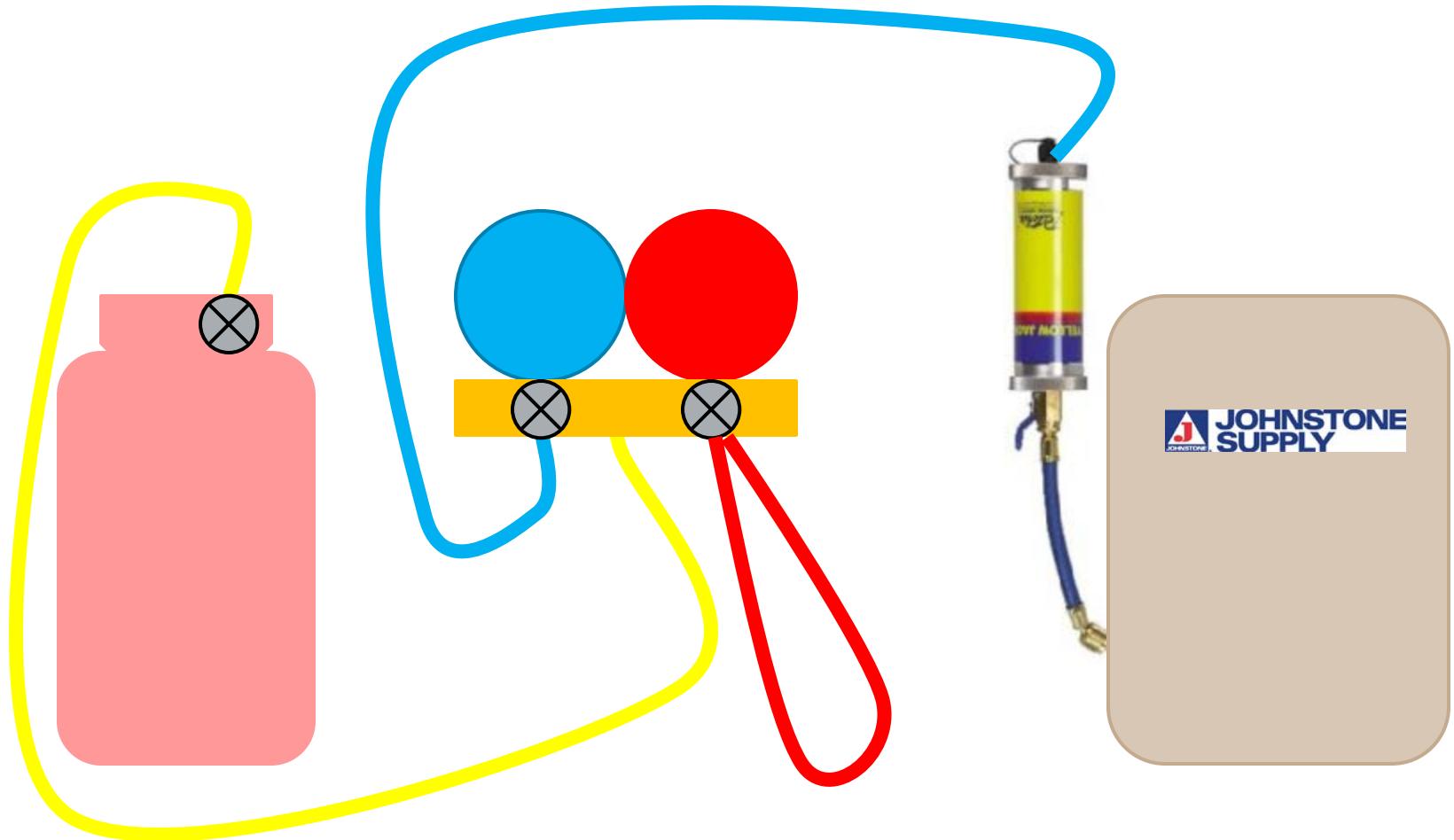


STEP 2: PREPARE FOR NU-CALGON AC RE-NEW®



Step 3: Using Refrigerant of same type as the system, pressurize to apply AC Re-New®

Introduce to AC/HP slowly, using refrigerant to “push” into system low port, while running. Stop when AC Re-New® has been completely installed but **do not** add extra refrigerant!



**YOU ARE FINISHED!
LET THE NU-CALGON
AC RE-NEW®
DO ITS JOB!**

The End