

From: Tecumseh Application Engineering Team

To: North America OEM and Distribution Customers

Date: May 2026

Subject: Rotary compressor refrigerant code update for R-410A and R-454B refrigerants

PRODUCT BULLETIN

Dear Valued Customer,

To adapt to the ongoing changes in the commercial and HVAC refrigeration industry, Tecumseh Compressors Company has approved the existing Air Conditioning / Heat Pump (AC/HP), rotary R-410A rotary model compressors for use with R-454B and R-410A. These compressors will now be identified with the **"F"** refrigerant code in the compressor model nomenclature where previously, this code was exclusive to R-410A approved rotary compressors and were identified with **"B"** refrigerant code.

HG	5	479	F	XV	3A
HGA	5	479	F	XV	
COMPRESSOR FAMILY (FIRST TWO DIGITS)	APPLICATION	FIRST DIGIT IS THE NUMBER OF DIGITS IN BTU/H CAPACITY	REFRIGERANT CODE	VOLTAGE	RELEASE VARIANT
RELEASE VARIANT (THE THIRD DIGIT)		LAST TWO DIGITS ARE THE FIRST TWO DIGITS IN RATED BTU/H CAPACITY			

Fig.1

This updated labeling is designed to support next-generation, lower-GWP refrigerants and support compliance with evolving environmental regulations and standards while maintaining full performance and reliability across both refrigerants.



Fig. 2

Please bear in mind that a few R-454B BOMs may have slight changes to the housing dimensions while the mechanical kit and motor remain the same as the legacy R-410A BOMs. This change is reflected with the compressor's discharge port inside diameter from .314"-.322" (mating

Ø5/16" tube) to the new, updated inside diameter of .377"-.381" (mating Ø3/8" tube). Please see table below (Fig.3) and contact your Tecumseh Sales Representative or the Tecumseh Technical Service team for further details or with any questions.

From BOM	MODEL	To (new) BOM	(new) MODEL	Same Housing
HG073ER-500-A4JI	HGA5453BXD	HG077ER-500-A4JI	HGA5453FXD	Yes
HG073ER-510-A4JI	HGA5453BXD	HG077ER-510-A4JI	HGA5453FXD	Yes
HG073JB-500-A4JI	HGA5453BXV	HG077JB-500-A4JI	HGA5453FXV	Yes
HG073JB-510-A4JI	HGA5453BXV	HG077JB-510-A4JI	HGA5453FXV	Yes
HG075JB-500-A4JI	HG5453B-XV3A	HG078JB-500-A4JI	HG5453F-XV3A	Yes
HG103ER-501-A4JI	HGA5471BXD	HG107ER-511-A4JI	HGA5471FXD	No
HG103ER-511-A4JI	HGA5471BXD	HG107ER-511-A4JI	HGA5471FXD	Yes
HG103JB-501-A4JI	HGA5471BXV	HG107JB-501-A4JI	HGA5471FXV	Yes
HG103JB-511-A4JI	HGA5471BXV	HG107JB-511-A4JI	HGA5471FXV	Yes
HG113AR-501-A4JI	HGA5479BAA	HG117AR-501-A4JI	HGA5479FAA	Yes
HG113ER-501-A4JI	HGA5479BXD	HG117ER-501-A4JI	HGA5479FXD	Yes
HG113JB-501-A4JI	HGA5479BXV	HG117JB-501-A4JI	HGA5479FXV	Yes
HG115JB-501-A4JI	HG5479B-XV3A	HG118JB-501-A4JI	HG5479F-XV3A	Yes
HG133ER-502-A4JI	HGA5494BXD	HG137ER-512-A4JI	HGA5494FXD	No
HG133ER-512-A4JI	HGA5494BXD	HG137ER-512-A4JI	HGA5494FXD	Yes
HG133JB-502-A4JI	HGA5494BXV	HG137JB-512-A4JI	HGA5494FXV	No
HG133JB-512-A4JI	HGA5494BXV	HG137JB-512-A4JI	HGA5494FXV	Yes
HG143ER-502-A4JI	HGA5510BXD	HG147ER-502-A4JI	HGA5510FXD	Yes
HG143ER-562-A4JI	HGA5510BXD	HG147ER-562-A4JI	HGA5510FXD	Yes
HG143JB-502-A4JI	HGA5510BXV	HG147JB-502-A4JI	HGA5510FXV	Yes
HG143JB-562-A4JI	HGA5510BXV	HG147JB-562-A4JI	HGA5510FXV	Yes
HG146JB-572-A4JI	HG5510B-XV3A	HG148JB-572-A4JI	HG5510F-XV3A	Yes
HG163ER-503-A4JI	HGA5512BXD	HG167ER-503-A4JI	HGA5512FXD	Yes
HG163JB-503-A4JI	HGA5512BXV	HG167JB-503-A4JI	HGA5512FXV	Yes
RG073AR-500-A4IV	RGA5453BAA	RG077AR-500-A4IV	RGA5453FAA	Yes
RG073ER-500-A4IV	RGA5453BXD	RG077ER-500-A4IV	RGA5453FXD	Yes
RG073ER-510-A4IV	RGA5453BXD	RG077ER-510-A4IV	RGA5453FXD	Yes
RG073JB-510-A4IV	RGA5453BXV	RG077JB-510-A4IV	RGA5453FXV	Yes
RG103AR-501-A4IV	RGA5471BAA	RG107AR-501-A4IV	RGA5471FAA	Yes
RG103ER-501-A4IV	RGA5471BXD	RG107ER-511-A4IV	RGA5471FXD	No
RG103ER-511-A4IV	RGA5471BXD	RG107ER-511-A4IV	RGA5471FXD	Yes
RG103JB-511-A4IV	RGA5471BXV	RG107JB-511-A4IV	RGA5471FXV	Yes
RG133ER-502-A4IV	RGA5494BXD	RG137ER-522-A4IV	RGA5494FXD	No
RG133ER-522-A4IV	RGA5494BXD	RG137ER-522-A4IV	RGA5494FXD	Yes
RG133JB-522-A4IV	RGA5494BXV	RG137JB-522-A4IV	RGA5494FXV	Yes
RG163ER-503-A4IV	RGA5512BXD	RG167ER-513-A4IV	RGA5512FXD	No
RG163ER-503-A4NB	RGA5512BXD	RG167ER-513-A4IV	RGA5512FXD	No
RG163ER-513-A4IV	RGA5512BXD	RG167ER-513-A4IV	RGA5512FXD	Yes
RG163ER-533-A4JG	RGA5512BXD	RG167ER-513-A4JG	RGA5512FXD	No
RG163JB-513-A4IV	RGA5512BXV	RG167JB-513-A4IV	RGA5512FXV	Yes

Fig.3



Understand, that care should always be taken to avoid mixing or cross-contamination with R-454B and R-410A refrigerants. These refrigerants should never be mixed with each other as this can cause safety issues within the system's operation and could invalidate the compressor warranty. R-454B is A2L refrigerant and is classified as mildly flammable by ASHRAE Standard 34. The proper precautions should always be taken when servicing A2L (R-454B) systems and this work should only be serviced by qualified refrigeration technicians to ensure safe handling practices.

If you have any questions that are not addressed in this bulletin, please contact your local Tecumseh's Sales Representative, Application Engineer or Tecumseh's Technical Service Team. Thank you.

Contact Resource link: www.tecumseh.com/contact