

# TITAN **FORCE**™

## RECIPROCATING A/C COMPRESSOR



POE OIL  
CHARGED!

REPLACEMENTS FOR  
BRISTOL COMPRESSORS



**TITAN **FORCE**™**  
RECIPROCATING A/C COMPRESSOR  
Item ID: TFH5524EXN  
Oil Type: POE Oil Charge  
Volts: 208/230 RUN CAP: 35/370  
Hertz: 60 LRA: 60  
Phase: 1  
Country of Origin: U.S.A.  
\*Must be installed by a licensed contractor.

TFH5524EXN  
20899 1 12568  
**Packard**

A solution from

**Packard**

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## Applications

- Air Conditioning
- Heat Pump

## Features

- POE Oil
- For R22 Designed System Replacement
- PSC motors are standard in all single-phase compressor models
- BtuH capacity ratings are based on 45°F evaporating temperature
- Mounting hardware included
- Molded plug included for most models
- Crank case heater included on all compressors except the 5512 and 5515 models
- Showroom style packaging







# RECIPROCATING A/C COMPRESSOR

## Nomenclature

**TFH 5 524 E XN**

Compressor Family (First Two Digits) Evap Temp (The Third Digit)	Application	First Digit is the No. of Digits in Btu/h Capacity Last Two Digits are the First Two Digits in Rated Btu/h Capacity	Refrigerant	Voltage
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**H = 45**  
**M = 20**  
**L = -10**

In this example (5) total digits, with the first two (24), or 24,000 BTU capacity

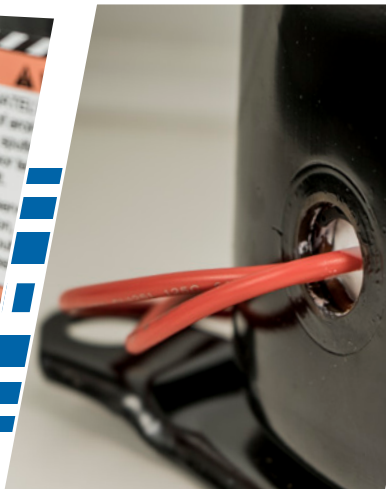
Primary Refrigerants
<b>B</b> = R410A
<b>C</b> = R407C
<b>E</b> = R22
<b>W</b> = R22/R407C
<b>X</b> = (CBP Models Only) R404A/R507, R134a, R22 R407A, R407F
<b>Y</b> = R134a
<b>Z</b> = R404A/R507

Voltage Codes
<b>AA</b> = 115/60/1
<b>AB</b> = 115/60/1; 90/50/1
<b>DS</b> = 115-127/60/1
<b>NA</b> = 208-230/60/1
<b>VA</b> = 265/60/1; 220-240/50/1
<b>XA</b> = 115/60/1; 100/50/1
<b>XB</b> = 230/60/1; 200/50/1
<b>XD</b> = 208-230/60/1; 200/50/1
<b>XF</b> = 208-230/60/3; 200-240/50/3
<b>XG</b> = 460/60/3; 380-420/50/3
<b>XN</b> = 208-230/60/1; 200-220/50/1
<b>XT</b> = 200-230/60/3; 200-220/50/3

Primary Application Parameters		
Evap Temperature	Rating Point	Motor Starting Torque
1. Low	-10°F	Normal
2. Low	-10°F	High
3. High	+45°F	Normal
4. High	+45°F	High
5. A/C & H/P	+45°F	Normal
6. Medium	+20°F	Normal
7. Medium	+20°F	High
8. Air Cond	+49°F	Normal
9. Commercial	+20°F	High
0. Commercial	+20°F	Normal
F. Low – Vapor Inj	-10°F	High
G. Low – Liquid Inj	-10°F	High

### Compressor Replacement Guides and Quick Selects

This document is NOT to be used as a drop-in replacement guide. The cross-reference is offered as a tool to help identify potential replacement options based on performance. Mounting and tubing connections are likely to differ from the original compressor. With use, system performance will most likely have changed from initial specifications. Careful review of current application requirements is essential. **IT IS THE RESPONSIBILITY OF THE SERVICE PERSON TO ASSURE THEY HAVE PURCHASED A REPLACEMENT PRODUCT WHICH MEETS THE NEED OF THE APPLICATION.** Failure to do so may result in misapplication requiring immediate or subsequent additional compressor replacement(s).



Item ID	Nominal H.P.	Volts-Phase-HZ	Capacity (BTU)	Foot (In.)	Discharge I.D. (In.)	Suction I.D. (In.)	CCH	Height (In.)
TFH5512EXD	1	208/230-1-60	12000	4.8 x 8	1/4	3/8	No	9.0
TFH5515EXN	1-1/4	208/230-1-60	15200	7.5 x 7.5	3/8	5/8	Yes	13.1
TFH5517EXD	1-1/2	208/230-1-60	16600	4.8 x 8	5/16	1/2	No	11.2
TFH5519EXN	1-1/2	208/230-1-60	18800	7.5 x 7.5	3/8	3/4	Yes	13.1
TFH5520EXN	1-3/4	208/230-1-60	20200	7.5 x 7.5	3/8	3/4	Yes	13.1
TFH5524EXN	2	208/230-1-60	24200	7.5 x 7.5	3/8	3/4	Yes	13.1
TFH5528EXN	2-1/4	208/230-1-60	28000	7.5 x 7.5	3/8	3/4	Yes	13.1
TFH5530EXN	2-1/2	208/230-1-60	30200	7.5 x 7.5	3/8	3/4	Yes	13.1
TFH5532EXN	2-1/2	208/230-1-60	31500	7.5 x 7.5	3/8	3/4	Yes	13.1
TFH5535EXN	2-3/4	208/230-1-60	35200	7.5 x 7.5	1/2	7/8	Yes	14.9
TFH5538EXN	3	208/230-1-60	38400	7.5 x 7.5	1/2	7/8	Yes	15.3
TFH5538EXT	3	208/230-3-60	38400	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5538EXG	3	460-3-60	38400	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5542EXN	3-1/2	208/230-1-60	42500	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5542EXT	3-1/2	208/230-3-60	42500	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5542EXG	3-1/2	460-3-60	42500	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5546EXN	3-3/4	208/230-1-60	46500	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5546EXT	3-3/4	208/230-3-60	46500	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5546EXG	3-3/4	460-3-60	46500	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5549EXN	4	208/230-1-60	49000	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5558EXN	5	208/230-1-60	57500	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5558EXT	5	208/230-3-60	57000	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5558EXG	5	460-3-60	57000	7.5 x 7.5	1/2	7/8	Yes	14.6
TFH5568EXT	5-1/2	208/230-3-60	68000	7.5 x 7.5	1/2	7/8	Yes	16.4
TFH5573EXG	6	460-3-60	72500	7.5 x 7.5	1/2	7/8	Yes	16.4

\*Mounting adapter may be required.

All products supplied by Packard must be installed by a licensed contractor.

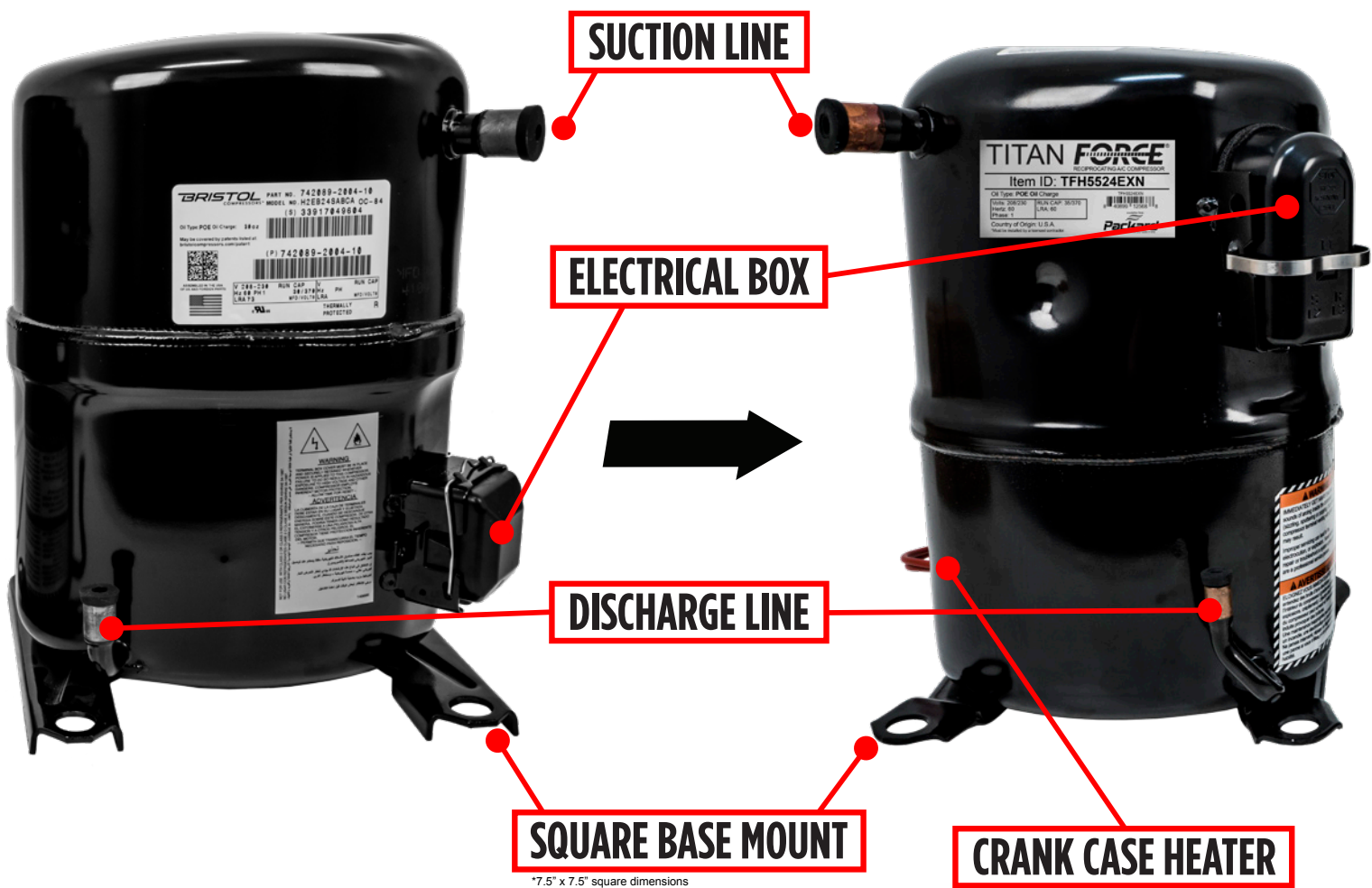


# RECIPROCATING A/C COMPRESSOR

## Cross References for Bristol Compressors

Item ID	Functional Replacement for Bristol	Copeland CR
TFH5512EXD	H22J133ABCAP	N/A
TFH5515EXN	H22J153ABCAP	CR16K6-PFV
TFH5517EXD	H2EB18SABCBP	CR16K6-PFV
TFH5519EXN	H22J183ABCAP, H2EB18SABCAP, HCRB183ABCA, HTRB183ABCS	CR20K6-PFV
TFH5520EXN	H2EB223ABCAP	CR20K6-PFV
TFH5524EXN	H2EB24SABCAP, H22J223ABCAP, H2EB24SABCBP*, HCRB223ABCA, HCRB243ABCA, HTRB253ABCS, HTRJ243ABCT, H22J253ABCAP	CR24K6-PFV
TFH5528EXN	H2EB28SABCAP, H2EB283ABCBP*	CR28K6-PFV
TFH5530EXN	H22J293ABCAP, HCRB283ABCA, HCRB303ABCA, HTRJ303ABCT	CR30K6-PFV
TFH5532EXN	H2EB32SABCAP, H22J333ABCAP, HCRB323ABCA	CR32K6-PFV
TFH5535EXN	H22J363ABCAP, HCRB353ABCA, HTRJ363ABCT	CR35K6-PFV
TFH5538EXN	H22J383ABCAP	CR38K6-PFV
TFH5538EXT	H22J383DBLAP	CR38K6-TF5
TFH5538EXG	H22J383DBVAP	CR38K6-TFD
TFH5542EXN	H22J413ABCAP	CR42K6-PFV
TFH5542EXT	H22J413DBLAP	CR42K6-TF5
TFH5542EXG	H22J413DBEAP	CR42K6-TFD
TFH5546EXN	H22J443ABCAP	CR47KQ-PFV
TFH5546EXT	H22J443DBDAP	CR47KQ-TF5
TFH5546EXG	H22J443DBEAP	CR47KQ-TFD
TFH5549EXN	H22A503ABCAP	CR47KQ-PFV
TFH5558EXN	H22A543ABCAP, H22A583ABCAP, H22A623ABCAP	CRP5-0450-PFV
TFH5558EXT	H22A543DBLAP, H22A563DBLAP, H22A623DBLAP	CRP5-0450-TF5
TFH5558EXG	H22A543DBEAP, H22A583DBEAP, H22A623DBEAP	CRP5-0450-TFD
TFH5568EXT	H29A723DBLAP	N/A
TFH5573EXG	H29A723DBEAP	N/A

## FROM BRISTOL TO TITAN FORCE







# RECIPROCATING A/C COMPRESSOR

## Add-on Items

Packard Item ID	Start Cap Rating	Packard Start Cap Item ID	Run Cap Rating	Packard Run Capacitor Item ID	Relay Pick Up / Drop Out	Packard Relay Item ID	Overload
TFH5512EXD	72-88/330	PRMJ72	15/370	PRC15A	PU 203-231 / DO 40-90	PR9066	Included
TFH5515EXN	145-175/330	PRMJ145	20/370	PRC20A	PU 260-289 / DO 50-110	TR64	Internal
TFH5517EXD	21-25/330	PRMJ21	20/370	PRC20A	PU 162-175 / DO 70-100	TR65	Included
TFH5519EXN	145-175/330	PRMJ145	25/370	PRC25A	PU 203-231 / DO 40-90	PR9066	Internal
TFH5520EXN	145-175/330	PRMJ145	25/370	PRC25A	PU 203-231 / DO 40-90	PR9066	Internal
TFH5524EXN	88-108/330	PRMJ88	35/370	PRC35A	PU 162-175 / DO 70-100	TR65	Internal
TFH5528EXN	88-108/330	PRMJ88	35/370	PRC35A	PU 162-175 / DO 70-100	TR65	Internal
TFH5530EXN	145-175/330	PRMJ145	45/370	PRC45A	PU 162-175 / DO 70-100	TR65	Internal
TFH5532EXN	145-175/330	PRMJ145	45/370	PRC45A	PU 162-175 / DO 70-100	TR65	Internal
TFH5535EXN	130-156/330	PRMJ130	40/370	PRC40A	PU 223-259 / DO 60-121	PR9071	Internal
TFH5538EXN	72-88/330	PRMJ72	35/440	PRCF35A	PU 223-259 / DO 60-121	PR9071	Internal
TFH5538EXT	-	N/A	-	N/A	-	N/A	Internal
TFH5538EXG	-	N/A	-	N/A	-	N/A	Internal
TFH5542EXN	130-156/330	PRMJ130	40/370	PRCF40A	PU 223-259 / DO 60-121	PR9071	Internal
TFH5542EXT	-	N/A	-	N/A	-	N/A	Internal
TFH5542EXG	-	N/A	-	N/A	-	N/A	Internal
TFH5546EXN	130-156/330	PRMJ130	40/440	PRCF40A	PU 223-259 / DO 60-121	PR9071	Internal
TFH5546EXT	-	N/A	-	N/A	-	N/A	Internal
TFH5546EXG	-	N/A	-	N/A	-	N/A	Internal
TFH5549EXN	130-156/330	PRMJ130	45/440	PRCF45A	PU 223-259 / DO 60-121	PR9071	Internal
TFH5558EXN	130-156/330	PRMJ130	45/440	PRCF45A	PU 223-259 / DO 60-121	PR9071	Internal
TFH5558EXT	-	N/A	-	N/A	-	N/A	Internal
TFH5558EXG	-	N/A	-	N/A	-	N/A	Internal
TFH5568EXT	-	N/A	-	N/A	-	N/A	Internal
TFH5573EXG	-	N/A	-	N/A	-	N/A	Internal



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