

Replace Dash AC Compressor with a Modern One

Or, how to lose 27 pounds without
dieting.

Ken Henderson

DISCLAIMER

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This presentation is provided for web site posting primarily to offer the various information links. The oral presentation which explained such issues as connections and mounting details was not recorded. Here is a brief synopsis of those remarks:

The mounting of the Sanden-type compressor is very simple – use the front mounting plate for the A-6 to bolt the new compressor through the 3 axial holes behind the pulley. The center hole should align; the other two will require only very slight elongation with a file to admit 5/16” bolts. It is recommended that a small bracket be added to the rear of the compressor to brace it to the double-ended head bolt left un-used by removal of the A-6’s rear mount.

Hose connections can be made by having the compressor-end fittings replaced at an air conditioning shop. The usually-required fittings are readily available, cheaply, on eBay. Or, the rear plate on the compressor can be replaced with one which accepts the GM-style fittings; they cost about \$30. However, the GMC hose length may be too great so that modification is still required.

Why Abandon the A6?

- Weighs too much for old codgers to handle
- Makes right rocker cover removal difficult
- Remanufactured ones unreliable
- New ones expensive
- Smoother , quieter operation
- Less engine load
- NOT for improved cooling
- **MOST IMPORTANTLY:** 'Cause we can.

What's Involved?

- Find a replacement
 - Sanden (Formerly Sankyo)
 - Seltec (Sanden clone)
 - Chinese Sanden Clone

Where to Get It?

- Junk Yard
 - Used on many Japanese, European, & US cars
 - Durable & usually not the reason for junking
 - Cheap (\$24-\$30)
- New
 - eBay lists many (\$75-\$150)
 - Nostalgic Air & Others (\$190-\$300)

What to get

Type	R-134a	R-12
7 Cylinder	SD7B10	SDB-706
	SD7H13	SD-708
	SD7H15/ HD, SHD	SD-709
5 Cylinder	SD7B10 / SD5H09	SD-505
	SD5H11	SD-507
	SD5H14	SD-508
		SD-510

Note: 5 Cylinder compressors have 5 bolts holding rear cap; 7 cylinder units have 6 bolts.

Sanden Identification

R-12


SD-709

SD	7	09
Sanden wobble plate piston type compressor	Number of pistons	Approximate Displacement In Cubic Inches

Sanden Identification

R-134a

SD 7 H 15 HD



SD	7	H	15	HD
Sanden wobble plate piston type compressor	Number of pistons	Port Location B- Body H- Head	Approximate Displacement In CC's divided by 10	HD- Heavy Duty SHD- Sealed HD

$$1 \text{ in}^3 = 16.3870 \text{ cm}^3$$

So, SD7H15HD has 150 cc displacement = $150/16.387 = 9.154 \text{ ci}$
(A6 has 6 cylinders and 12.6 ci)

Identification

- DIFFICULT
- The preceding are Model Numbers. There are similar but less descriptive numbers for Seltec (TM-15, TM-15HD, TM-16, TM-21, etc).
- Part Numbers are entirely different. They represent a specific model equipped with a specific combination of clutch characteristics, plumbing fittings, etc.

This Sanden Should Fit Exactly
(from www.remcoair.com)





Part No. 1401025



CHEVROLET	P20 VAN	(1986 - 1989)
CHEVROLET	P30 VAN	(1986 - 1991)
GMC	P2500 VAN	(1986 - 1989)
GMC	P3500 VAN	(1986 - 1991)

[Related Parts](#)

1987 CHEVROLET P30 VAN 7.4L 454cid V8 Carb (W) OHV : Heat & Air Conditioning : A/C Compressor [Wiki](#)

	Price	Core	Total
FOUR SEASONS Part # 58552 info w/ SD709 Compressor; w/ Clutch; Sanden 7402	\$221.79	\$0.00	\$221.79
Add to Cart			
FOUR SEASONS Part # 57559 info Remanufactured w/ SD510HD Compressor; w/ Clutch; Sanden Model U9125	\$220.79	\$35.00	\$255.79
	Add to Cart		
FOUR SEASONS Part # 57552 info Remanufactured w/ SD709 Compressor; w/ Clutch; Sanden 7402	\$204.79	\$53.33	\$258.12
	Add to Cart		
FOUR SEASONS Part # 58559 info w/ SD510HD Compressor; w/ Clutch; Sanden Model U9125	\$263.79	\$0.00	\$263.79
	Add to Cart		
ACDELCO Part # 1521619 info {#19144901, 19192306} replaces 19144901 COMPRESSOR,A/C(REMAN) SD510HD CMPR, SANDEN MODEL U9125	\$294.79	\$0.00	\$294.79
	Add to Cart		

* [Non-stock](#) item--shipping delayed up to 5 business days

For More Information

Detailed Sanden specs, End cap layouts,
Comparisons with other brands, Photos, etc:

<http://www.heco.net/MainCat/compressors.pdf>

Sanden-style compressors, etc:

<http://www.nostalgicairparts.com/ac/compressors-41.php>

Seltec Compressors, etc:

<http://www.ackits.com/c/seltec/Universal+Compressors+-+Seltec.html>

More Information

- This is the most complete reference I know for descriptions, cross references, and specifications:
- <http://www.remcoair.com/catalogue2008/kysor/compressors.pdf>

Alternatives

- Seltec is a very common replacement for Sanden. Part numbers are entirely different, but dimensions and characteristics and performance are very similar. Some dealers promote them as more smooth and reliable than Sanden (especially those who don't sell Sanden).
- There are other alternatives, but their populations are so small I didn't investigate them. (Tama, Zexel, Diesel Kiki, and Seltec are all Valeo)

Reality

- With all this information, how do you choose a compressor?



CAUTION
28

506491-1261
285



COMP. TYPE
PART NO.
SER. NO.
OIL
LUB. &
REF. SER.

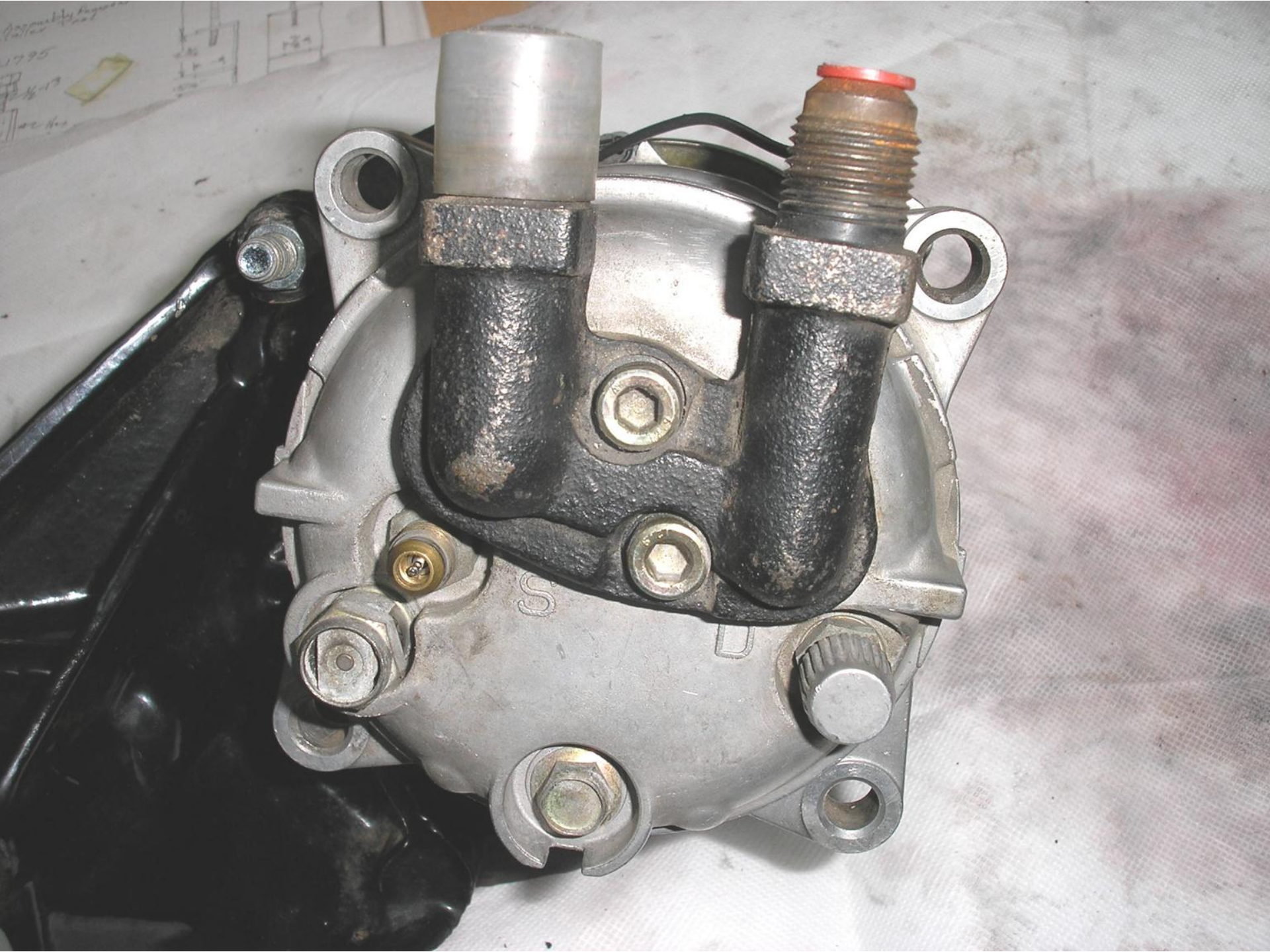
CAUTION
DO NOT OIL
THIS UNIT
BEFORE
REASSEMBLY
PRE-SERVE
SYSTEMS
BE SERVICED BY
QUALIFIED
PERSONNEL ONLY.
IMPROPER
REPAIR METHODS
MAY CAUSE
SYSTEM FAILURE
OR ALLIANCE
CONSULT SERVICE
SAE-J639

1087
306011 33



ZEXEL
CAUTION
High Voltage
Pressure
SAFETY
DO NOT TOUCH
OR REMOVE
COVER
OR WIRE
DURING
OPERATION
OR
REPAIR

ZEXEL
COMP. TYPE: 100% R134A
RIP. NO. 3002-71
OIL: ZEXEL DS-83P
LEAK TEST: 1.5MPa
REF. R12





72092489
THREADED SCREW
MOTOR
1980

76GMC MH A/C







76GMC MH A/C







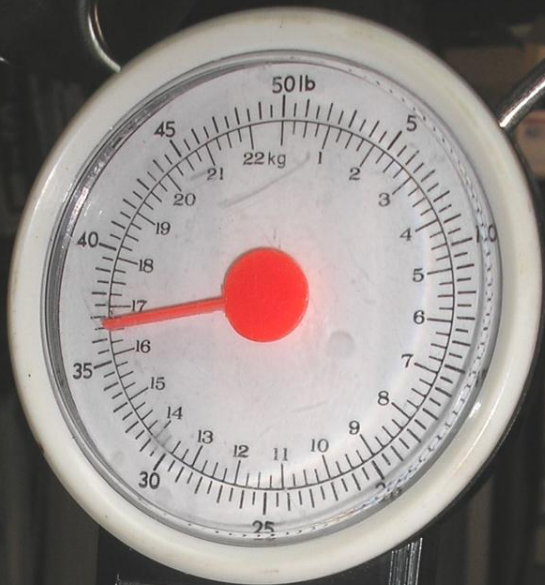


COMPRESSOR
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OIL: 1000
PART NO: 1000
DATE: 1000

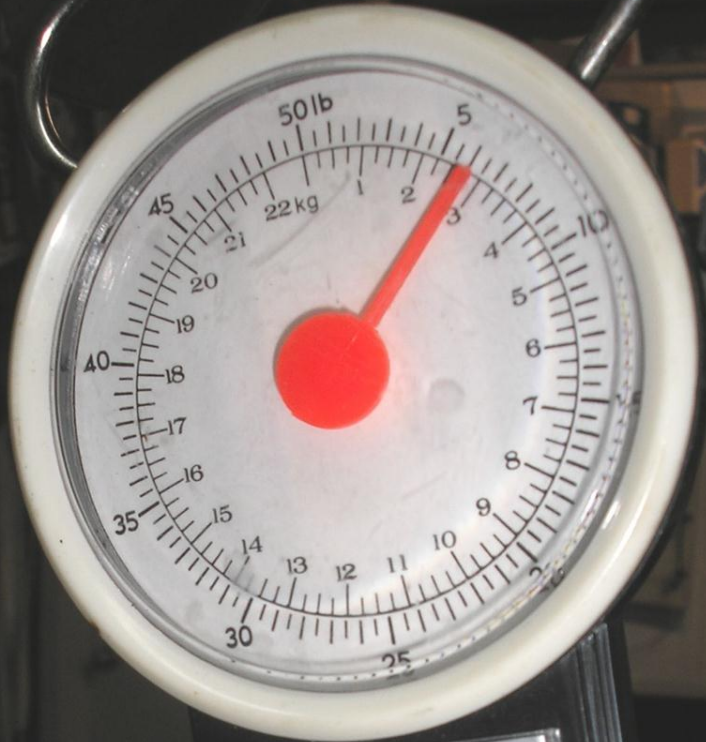
SAE-J639
CAUTION
DO NOT OIL
SYSTEM TO BE SERVICED AT
THIS POINT. SEE SERVICE MANUAL.
FOR OILING INSTRUCTIONS.





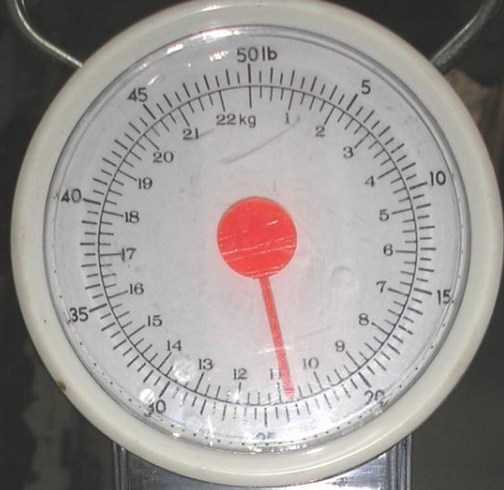


SOUTH BEND
SCALE
AND
TAPE MEASURE
DL-5
50 LB/22 KG
39 IN/1 M
NOT LEGAL FOR TRADE



SOUTH BEND
SCALE
AND
TAPE MEASURE
DL-5
50 LB/22 KG
39 IN/1 M
NOT LEGAL FOR TRADE





TAP

