

# Replace Dash AC Compressor with a Modern One

Or, how to lose 27 pounds without  
dieting.

Ken Henderson

DISCLAIMER

Accuracy is not guaranteed. Independent verification is urged.

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 Sankyō)
  - 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](http://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 # <a href="#">58552</a> <a href="#">info</a> w/ SD709 Compressor; w/ Clutch; Sanden 7402	\$221.79	\$0.00	<b>\$221.79</b>
<a href="#">Add to Cart</a>			
FOUR SEASONS Part # <a href="#">57559</a> <a href="#">info</a> Remanufactured w/ SD510HD Compressor; w/ Clutch; Sanden Model U9125	\$220.79	\$35.00	<b>\$255.79</b>
<a href="#">Add to Cart</a>			
FOUR SEASONS Part # <a href="#">57552</a> <a href="#">info</a> Remanufactured w/ SD709 Compressor; w/ Clutch; Sanden 7402	\$204.79	\$53.33	<b>\$258.12</b>
<a href="#">Add to Cart</a>			
FOUR SEASONS Part # <a href="#">58559</a> <a href="#">info</a> w/ SD510HD Compressor; w/ Clutch; Sanden Model U9125	\$263.79	\$0.00	<b>\$263.79</b>
<a href="#">Add to Cart</a>			
ACDELCO Part # <a href="#">1521619</a> <a href="#">info</a> {#19144901, 19192306} replaces 19144901 COMPRESSOR,A/C(REMAN) SD510HD CMPR, SANDEN MODEL U9125	\$294.79	\$0.00	<b>\$294.79</b>
<a href="#">Add to Cart</a>			

\* [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 SERVICING  
PRE-CHARGE  
SYSTEMS  
BE SERVICED BY  
QUALIFIED PERSONNEL ONLY.  
IMPROPER REPAIR METHODS  
MAY CAUSE SYSTEM FAILURE  
OR PERSONAL INJURY.  
CONSULT SERVICE MANUAL.

SAE-J639

10/27/93  
306011-03

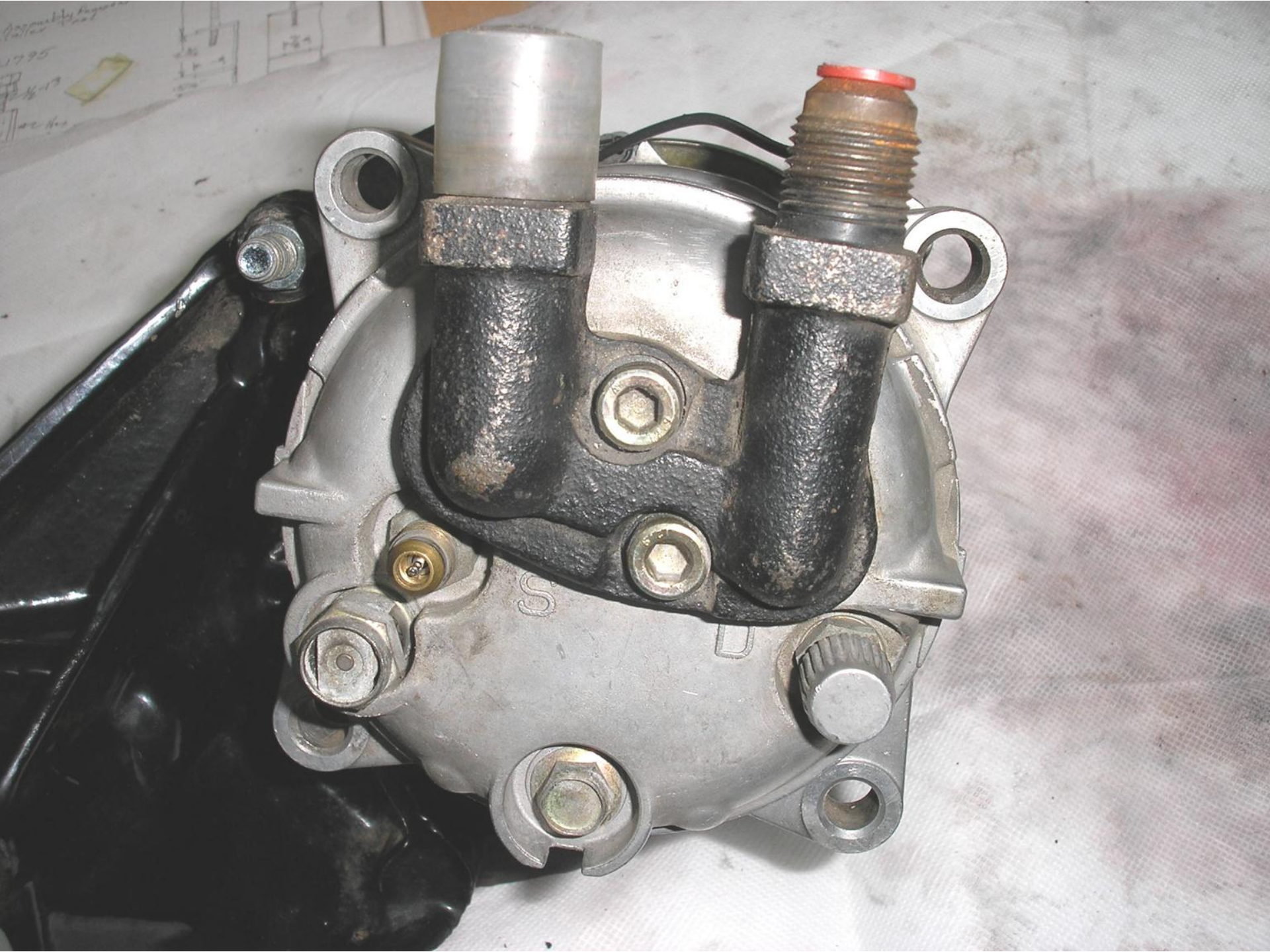


**ZEXEL**  
CAUTION  
High Pressure  
Do Not Touch  
When Running  
SAFETY

**SAFETY**  
DO NOT TOUCH  
WHEN RUNNING  
DO NOT OPEN  
COVER & REFRIGERANT  
LEAKS

COMP. TYPE	
REF. NO.	
SN#	
OIL	FRON DS-83F
LEAK	TEST
REF.	K12

ZEXEL





76202489  
THREADED SCREW  
MOTOR

76GMC MH A/C







76GMC MH A/C





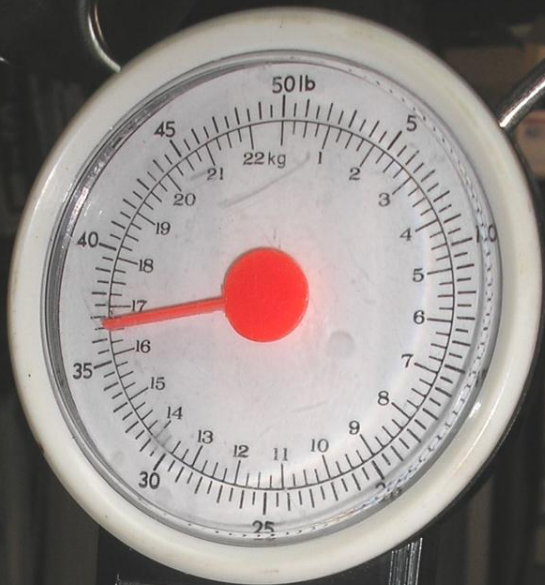




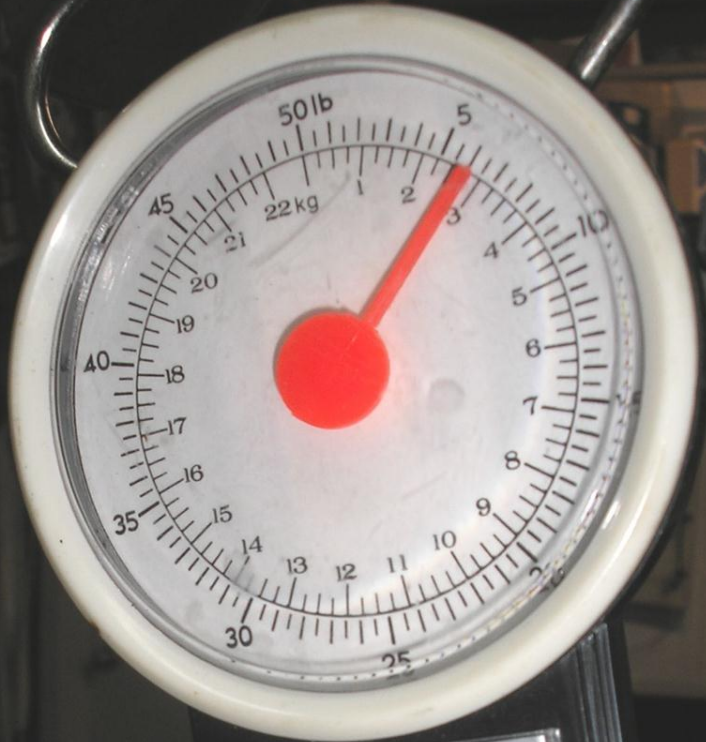






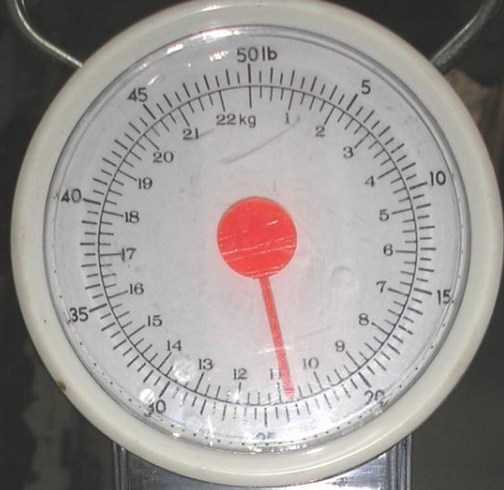


SOUTH BEND  
**SCALE**  
AND  
**TAPE MEASURE**  
DL-5  
50 LB/22 KG  
39 IN/1 M  
NOT LEGAL FOR TRADE



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**SCALE**  
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Model No. 1  
TAP  
S. S. S. S.

