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Problem Solving is Our Specialty

Bushings

We are suppliers of bronze bushings, steel backed babbitt bushings and steel sleeves to all the major parts distributors and several overseas companies.



AW55-50/51SN Kit



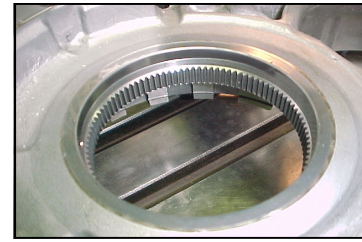
4F27E Kit

Hard Parts

We also rebuild many different transmission hard parts. The 4405 case and the AW55-50SN case at right are just two examples of the many different cases we do.



4405 Rear Case

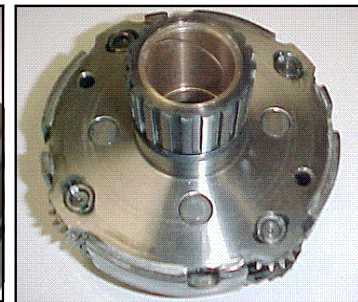


AW55-50/51SN case

Newest Products



4L80E Forward Drum



AW55-50SN Planetary

In addition

We stock many remanufactured hard parts, including but not limited to: A4LD bell housings, A4LD cases, AOD/AODE/4R70W cases, BW4405 transfer case halves, clutch drums, E40D/4R100 pumps updated with 9 lobe high volume gear sets, E40D center supports, (get rid of that bearing), and 700/4L60E pumps remachined to closer tolerances.

If you have a problem, Omega Machine & Tool, Inc. wants to be your problem solver. CALL US!

5L40E Bushing Kit



Bushings Include in Kit

- 1 Reverse Drum
- 1 Clutch Drum
- 2 Planetary bushings
- 1 Output Pilot
- 2 Direct Drum
- 1 Front Clutch Drum

Part # 98500

We also have a special set of drivers that makes installing this kit a snap.
Driver Part # 98325

Omega Machine & Tool, Inc.
“Precision and Innovation for Today
www.omegamachine.com

Chevrolet/GMC



Bushing Kits

	Part Number
450-43LE W4500/W5500 crew cabs 99—Up. Bushing kit	95500
TH400 case bushing kit: "hat style" no-spin design bushing, Output shaft needle bearing, and bonding agent - .	43500
5L40E Bushing kit Cadillac CTS, STS, SRX (3.6L), Pontiac Solstice	98500

Bushings and Sleeves

180

TH180,4L30E (MD3,4 3L30) Case bushing – prevents the bushing from walking forward into the planets, "hat style", no walk design. Widely used in '87-up Post Office vehicles LLV.	46401
TH180 Governor bore chrome-moly sleeve:	46341
GEO Tracker extension housing bushing, 89-98 TH180 3sp transmissions. Contrary to most catalogs this bushing is not the same as the 200/350/700R4	46411
GEO Tracker extension housing bushing, 89-98 5 speed transmission	51411

4L30E

4L30E one piece bronze center support bushing	46410
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400

TH400 rear case bushing - "hat style" no spin design	43401
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700/4L60E

700-4L60E accumulator piston bushings, reclaim those worn-out pistons	15439
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4L80

4L80E (MT1) "hat style" no spin design. We have .001 and .002 Oversize OD bushings available for repairing cases with spun bushings.	33401
4L80E Extension Housing bushing. O4 and up larger bore in housing.	33411B
4L80E Steel-backed babbitt Pump Bushing: '97-Up Second Design (Wider)	33423
4L80E Direct Drum sleeve for repairing ring cut area of drum.	33350
4L80E Stator support sleeve. Repair the ring cut area of the stator.	33348

4T60E

4T60E Forward clutch drum bushing, 2 nd Design.	25438
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Chevrolet/GMC

Bushings and Sleeves (Misc.)

Part Number

JR403E case bushing: GMC Trucks 88 -Up

29401

T-56 Six speed extension housing bushing

41411

5LM60/HM290/NV3500 - GM extension housing bushing. Three shift rail uses 42411A (3 rail has slightly larger O.D. bushing)

42411

NV1500 - Chevy/GMC extension housing bushing S10/15 96-Up

49411

NV4500 - Chevy, Dodge extension housing bushing for NV4500 and NP241DMP.91-UP C,K15/35, 92-UP A,D&W 150/350, RAM Pickup 2500/3500

50411

Services

180

TH180 Case - Sleeved governor bore.

Resurface bell housing for no leaks.

400

Repair damaged thrust area and rebush.

T5

T5 Case - Front counter shaft bearing bore repaired, new bearing installed.

Transaxles

Sleeve the throw-out bearing area on transaxles to restore bearing surface. We can also install a new stub if yours is broken or cracked.

Hard Parts

Part Number

700/4L60E Pumps Everything from the small shaft 700s to the removable bell housing 4L60/65 PWM. All pumps include a new pump kits.

4L60E PWN removable bell housing pump bodies. These are brand new. Install a pump kit and you're on your way.

15021

4L80E

We can resurface your pump and install new bushings.

4L30E Center Support Bushing



The steel-backed bushing for the 4L30 is sloppy and allows line pressure to drop throughout the unit. Our bushing is machined closer (.002) and allows better control of pressure. If your band is cooked, check this bushing first.

The stock bushing requires a lot of pressure to extract it. Make sure your press has good support under this CS or you may crack it.

The bushing must be installed as shown. The chamfer on the lower edge will help start in. Installed inside dimension should be .0015 to .0020 clearance.

Part # 46410

Chevrolet/GMC

Tools

Part Number

700E-Z clutch drum loading tool for forward and 3-4 clutch piston seal installation. Allows installation of pistons without cutting the seals.

15312



N.P.246 Transfer case. The front output hat seal on these cases is very difficult to install without the case leaking. This tool installs the seal correctly.

99321



4L80E Forward Drum



Omega announces the availability of a 4L80E forward drum fixed right. No oversize sealing rings to trip up the next guy. Use the stock ones.

No need to buy an expensive replacement new drum. Now you can buy a repaired drum. Drum is bored and a steel sleeve is used in sealing ring area. As an upgrade the drum comes with a new bronze bushing that is substantially wider. Bushing is available separately. Part #33438



Omega Machine & Tool, Inc.
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Chrysler/Jeep

Bushing Kits

Part Number

Toyota A340H (4X4) Transfer case bushing kit: (5-Piece Kit: Front Support, Ring Gear Flange, Center Support, Pilot Direct Clutch Drum.	28500
ZF4HP18 Input & stator shaft bushing kit: <i>Note: for 1986-Up Saab 9000 w/ Transverse, use the direct shaft bushing only. Stator requires a custom bushing.</i>	67500
ZF4HP14 Input & stator shaft bushing kit: (2-piece kit)	68500
KM 175-5, 176-5, 177/177-8, F4A33-1: Sun gear bushing kit	70500

Bushings and Sleeves

B/W 1356 Part-time Transfer Case extension housing bushing	16411
A-500, 518 Output shaft pilot bushing:	21441
A340H Jeep extension housing bushing: 87-Up	27411J
208 Transfer case annulus ring gear bushing	40400
CHEVY, DODGE NV4500 extension housing bushing	50411
Extension housing bushing: '93-Up 5-speed Dodge Dakota Pickup (Not for Jeep)	80411
GM extension housing bushing- '88-Up 5LM60/HM290/NV3500 5-Speed ½ ton Pickups. Three shift rail uses 42411A (3 rail has slightly larger O.D. bushing)	42411
Mitsubishi extension housing bushing. '80-'91 5-Speed KM 2WD, Mitsubishi/Dodge imports.	65411

Hard Parts

A44D forward clutch drum repair ring cut. R&R only , '87-Up A44D, Ram 50 - 4 spd., AW372 (2WD); '87-Up Van - KM148 (4WD); '83-'84 Raider, Montero (4WD)
404-413-470-670 Rear Planetary Gear Repair: Machine washer surface to fit supplied needle bearing.
413-470-670 Differential Carriers, with bearings & races - no spider gears
Repair throw-out bearing stub area on transaxles
ZF18 Case sleeve governor bore
96753 45RFE 99 & Up accumulator cover plate. (see page 8)

Ford

Bushings Kits

Part Number

G4A-EL/G4-EAT 7-piece bushing kit: (2-4 Brake Drum, Stator, Small & Large pump bushings, Rotor, Sun Gear with holes, and Sun Gear without holes). Mazda may take G4PSSB Sun Shell bushing.

37500

F4A-EL/F4-EAT 6-piece bushing kit: (2-4 Brake Drum, Rotor, Stator, Sun Gear with holes, Sun Gear without holes, Pump.)

48500

4F27E Ford Focus 00-Up 8 piece bushing kit, includes one piece rear stator bushing

92500

Bushings and Sleeves

4F27E

4F27E converter bushing

92423

BW1356 Transfer case

B/W 1356 Part-time Transfer Case extension housing bushing

16411

AOD. AODE.4R70W

Ford AOD case, governor bore sleeve: Chrome-moly

73341

Ford AODE/4R70W case governor bore sleeve: Available in various oversizes Chrome-moly:

74341E

Ford stator support sleeve: See "AODE Sleeve" above for application

74348

AXOD, AXODE

AXOD pump shaft bushing. Replaces needle bearing in pump assembly.)

35421

A4LD, 4R44E, 4R55E, 5R55E

A4LD lever bore bushing: Fits Omega Lever Bore Repair Tool. This bushing is used to restore the lever bore hole in the side of the A4LD case to original dimensions, stopping those annoying leaks.

66414

A4LD late front stator bushing

66428

A4LD late front stator bushing: Same as above except 1 inch long

66428A

C4

C4 Reverse and High clutch drum bushing..

62408

DANA 28

Ford Aerostar Dana 28, transfer case extension housing bushing: 1990-Up All Wheel Drive

14411

Ford

Bushings and Sleeves

Part Number

E40D, 4R100, 4 Speed overdrive

E40D one piece case bushing: (Oversize .020 and .050 available for case spin out)

73401

E40D rolled case bushing: This is the same bushing as above except it is a rolled bushing and not a solid bronze bushing See 73401 for application

73401R

E40D pump bushing oversize, bronze.

73423OS

G4

G4 brake drum bushing: - Non-Turbo Ford G4EAT, '89-Up Probe, Probe GT ; '91-Up Capri ; Non-turbo '86-Up Mazda G4A-EL 626; '87-Up MX6, 323.

37407

G4 Posi-Track sun shell turbo brake drum bushing (See 37407 above for applications.)

37407T

M50D, (M5R1), (M5R2)

Ford M50D extension housing bushing: '88-Up M5R1, 5-SPD, 2 WD; M5R2. 2nd exec. Cougar, T-Bird, Ranger, Aerostar, F-Series Trucks

30411

Toyo/Kogyo

TOYO/KOGYO extension housing bushing: '83-86 Bronco II, Ranger 4-SPEED 2WD

32411

TOYO/KOGYO extension housing bushing: '83-Up Ranger 5-SPEED, 2WD (No Aerostar)

36411

C4 Reverse and High clutch drum bushing..

62408

Services

Repair throw-out bearing areas on transaxles

Repair servo bore pin holes in 4R55E/5R55E/5R55S,N,W

91-Up Aerostar transfer case extension housing repair

Borg Warner 1356 shift shaft hole restored

Repair spun rear case bushings

Ford

Hard Parts

Part Number

4405 Transfer cases

Borg Warner 4405 front and rear case halves. The rear mainshaft bearing bore and front and rear shift rail bores wear out and cause the transfer case to jump out of gear. The shift rail bores are bushed and the groove made in the case by the oil pump stabilizer arm is pinned.

55109– 55109A



Borg Warner 4405 Shift fork, modified to correct jumping out of gear problems.

55754



BW1356 Transfer case

Borg Warner 1356 Transfer case input planetary remanufactured. The input gear eats into the thrust surface of the carrier and produces undesirable end-play. We machine the carrier and install thrust washer to bring part back to factory specifications.

16254



Ford

Hard Parts

Part Number

AOD, AODE.4R70W

Ford AOD case

AOD/AODE stator

AXOD, AXODE

Channel Plates

35181-35187

A4LD, 4R44E, 4R55E, 5R55E

Bell Housings. Align bored, surfaced and new bushing and seal installed.

See page 12

Cases, governor bore repaired and if equipped, new thrust washer behind bearing race.

E40D, 4R100

Our support kit includes a line-bored bushing for greater concentricity, and one of our famous one-piece case bushings. The shaft has a bur-nished surface for superior wear resistance. We also make this as a direct replacement for the bearing type support, without the pilot tip on the shaft.

73222 or 73221



E40D-4R100 pumps. We use new 9 lobe high volume gear sets, seals and bushings.

E40D-4R100 center support rings. We cut these down where they wear into the case. Use a snap ring to space back the deck height.

73225

Ford

Tools

Part Number



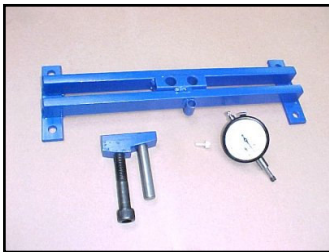
66311

A4LD lever bore repair tool kit - Fixture Plate, 7/8" Reamer, Bushing driver, 5 Solid Bronze Bushings, Cutting Solution Concentrate, application bottle.



85320

4R55E/5R55E
 Front stator Teflon ring resizer



73320

E40D / 4R100 Case Repair Tool
 The valve body area of the cases can become distorted from over tightening the center support bolts. Our tool pulls up on the inside of the case. A conveniently mounted dial indicator tells you when things are back on the level.

Ford

Tools

Part Number

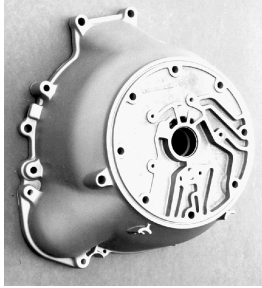


18322

5R55N,S,W Converter alignment tool. The adapter plate on these transmissions must be properly centered on the converter to eliminate noises and vibrations.

Ford

Ford Bell housing identification guide



Omega part

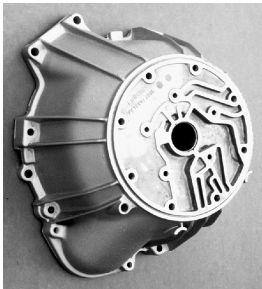
(dependant on pump bolt size)

66138 - 6 mm bolts

66140 - 8 mm bolts

2-bolt starter on driver's side.

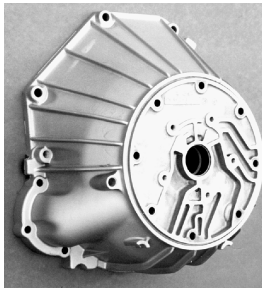
Smooth exterior on bell housing



Omega part # 66142

2-bolt starter on driver's side in vehicle
with 4-liter engine.

Notice ribs on exterior of bell housing.



Omega part

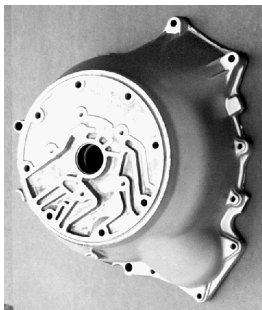
(dependant on pump bolt size)

66144 - 6 mm bolts

66145 - 8 mm bolts

3 bolt starter on driver's side.

Found in Aerostars



Omega part

(dependant on pump bolt size)

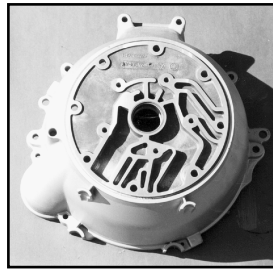
66147 - 6 mm bolts

66148 - 8 mm bolts

3 bolt starter on passenger's side.
Commonly found in 4 cylinder Mus-
tangs. Height approx. 6.9"

Ford

Ford Bell housing identification guide



Omega part # 66150 or 66151

(dependant on pump bolt size)

Merkur

66150 - 6 mm bolts

66151 - 8 mm bolts

2-bolt starter on driver's side.

Smooth exterior on bell housing.

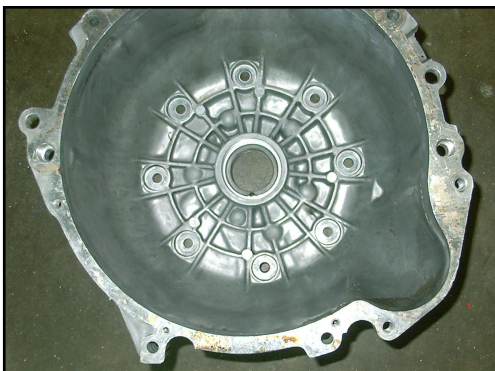
Note bell housing height of 6.4"

A4LD-4R55E Bell Housing and case differences



Notice there are six pump bolt holes instead of five in this bell housing. If your bell housing has six it is an electronic version. It could still be an A4LD or 4R55E

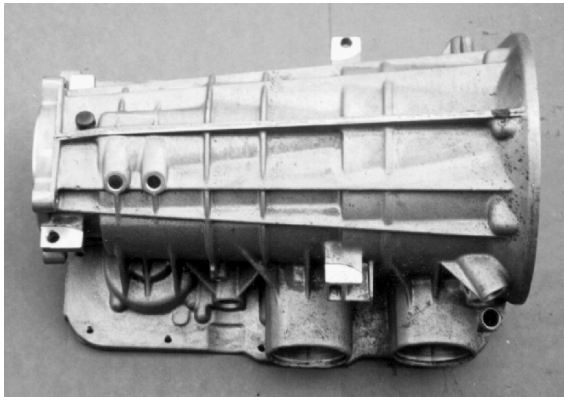
There is also a difference in the starter pocket. The housing on the left is the newer 4R55E. The housing on the right is our number 66142, the A4LD electronic version. Notice that the starter pocket on the bell housing on the left is smaller and not centered between the mounting holes as is the pocket on the right



Ford

A4LD—M5R1

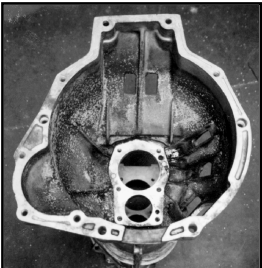
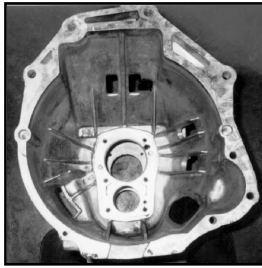
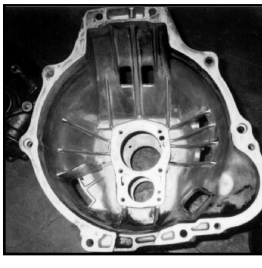
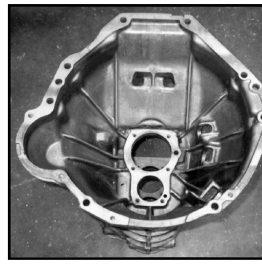
A4LD Case



The cooler line fitting orifices on the passenger's side of the case are two different sizes. The large is .585 and the small is .448. The 4 liter case has the large size fittings and a thrust washer behind the sprag race at the rear of the case.

Part #

- 66098 -- .448
- 66099 -- .585
- 66100 -- 4.0L

			
M5R1	M5R1	M5R1 V-6	M5R2
Aerostar and occasionally in Ranger 3.0, 3 bolt starter on passenger's side	Ranger & Aero-star 3.0 liter, 3 bolt starter on drivers side	2.9 & 4.0, 2 bolt starter on drivers side	T-Bird, Cougar or Full size truck 6 cylinder or small V-8 4.9, 5.0, 5.8 liter

Honda

Bushing Kits

Part Number

Fits A4RA, MP7A, S4XA, SP7A, MPRA, MY8A, PY8A, R0	19500A
Fits A24A, M24A, M4TA, P24, S24A, CRV (SDMA)	19500B
Fits A6VA, AOYA, APX4, APXA, BOYA, MP1A, MPXA, MPOA, PX4B	19500C
Fits MPYA	19500D
Fits MPWA (VIGOR), MPZA, B6VA, BAXA, M6HA, M7ZA, B7XA, MAXA	19500E

Bushings and Sleeves

3-4 clutch feed pipe bushing. Fits 98-2002 Accord 4cyl & V6; 99-2002 Odyssey	19405
Main shaft bushings 83-85 Accord; 83-87 Prelude (AS,F4, AK, K4, AS) 86-89 Accord; 85-87 Prelude SI with fuel injection (F4)	20415
Main shaft bushings 86-87 Legend (G4) 88-90 Legend (L5)	24415
Acura output shaft bushing, fits M7WA, B7WA, BDGA, MGFA, BGFA, MGHA, BGHA, BAYA, MAYA, BVGA, BYBA	24503
Main shaft bushings 88-91 Civic (L4, P1, CQ)	26415

Hard Part

Repair throw-out bearing area on transaxles.

Tools

Bushing extraction and installation tool.	24313
Output shaft bushing installation tool for M7WA, B7WA, BDGA, MGFA, BGFA, MGHA, BGHA, BAYA, MAYA, BVGA, BYBA	24326

Isuzu

Bushing Kits

Part Number

450-43LE transmission bushing kit: Isuzu NPR, NQR 99-Up

95500

Bushings and Sleeves

JR403E trans one piece case bushing: 88-Up Isuzu trucks.

29401

Isuzu extension housing bushing: '81 UP. RWD - 4Cyl., 5-Speed, No turbo.

64411

'85-'91 Isuzu Impulse extension housing bushing: A44DL Impulse and Pick-ups; '83-Up Toyota 4Spd, OD with L/U

75411

Isuzu AW-372 extension housing bushing: '88-Up Pickups and Sports Utility Vehicles. Yoke 1.50"

89411

450-43LE transmission pump/converter bushing: Isuzu NPR, NQR 99-Up

95423

Hard Part

A40/A42D/A43D/A44DL forward clutch drum repair ring cut. R&R only

Mazda

Bushing Kits

Part Number

G4A-EL/G4-EAT 7-piece bushing kit: '86-Up Mazda 626, '87-Up MX6, 323, '90-Up Protégé 4WD; '88-Up Probe, Probe GT; '91-Up Capri. (2-4 Brake Drum, Stator, Small & Large pump bushings, Rotor, Sun Gear with holes, and Sun Gear without holes). Mazda may take G4PSSB Sun Shell bushing

37500

F4A-EL/F4-EAT 6-piece bushing kit: '91-Up Ford Escort, Mercury Tracer; '90-Up Mazda 323 & Protégé. (2-4 Brake Drum, Rotor, Stator, Sun Gear with holes, Sun Gear without holes, Pump.)

48500

J39A Mazda Protégé 00-Up 8 piece bushing kit, includes one piece rear stator bushing

92500

Mazda

Bushings and Sleeves

Part Number

A4LD late front stator bushing: '91-Up Aerostar Van 2/4WD, Wagon 2/4WD, Bronco 2/4WD, Ranger, Ranger II 4WD, Starlight van, European Granada & Sierra, Mustang & T-Bird, Explorer 2/4WD, Mazda Navajo 4WD w/4.0L.	66428
G4 brake drum bushing: Non-Turbo Ford G4EAT, '89-Up Probe, Probe GT ; '91-Up Capri ; Non-turbo '86-Up Mazda G4A-EL 626; '87-Up MX6, 323.	37407
G4 posi-track sun shell turbo brake drum bushing: (See G4BD above for applications.)	37407T
Mazda extension housing bushing: 85-90 B2200, 85-90 RX7	69411
Ford M50D extension housing bushing: '88-Up M5R1, 5-SPD, 2 WD; M5R2. 2nd exec. Cougar, T-Bird, Ranger, Aerostar, F-Series Trucks	30411
A4LD lever bore bushing: Fits Omega Lever Bore Repair Tool. This bushing is used to restore the lever bore hole in the side of the A4LD case to original dimensions, stopping those annoying leaks.	66414
A4LD governor bore sleeve– CHROME-MOLY - Fits American Eagle/Southeast Tool	66341
4F27E Ford Focus, Mazda Protégé converter-pump bushing	92423
4F27E Ford Focus, Mazda Protégé one piece rear stator bushing. Available only in 92500 bushing kit.	92429

Services

A44DE forward clutch drum repair ring cut. R&R only Miata 98-99

R4A-EL governor bore repair.

Mercedes

Bushings and Sleeves

Part Number

Mercedes 722.3, 5, & 6 front pump body bushing (HUB OF 1.692) 1981-Up. Steel-backed Babbitt (6-bolt pan, 4-speed)	77423
722.6 transmission sun gear bushing	77440
722.6 input drum bushing 96-99 Mercedes	77413
722.6 input drum bushing 96-99 Mercedes converts bearing style to bushing	77413A

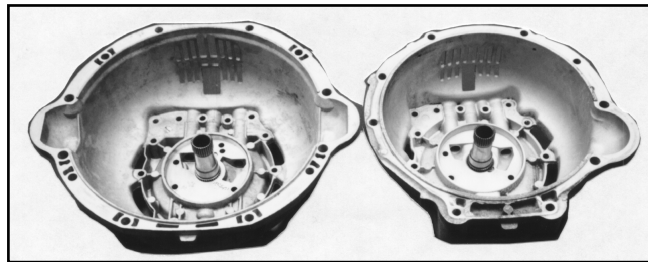
Mercedes

Hard Parts

Mercedes Bell Housing - Replaced stator

RE-bush and seal ZF pump body

Repair Mercedes case governor bore



Mercedes Bell Housings fitted with new hardened stator shafts.

Mitsubishi

Bushing Kits

Part Number

KM 175-5, 176-5, 177/177-8, FA33-1: Sun gear bushing kit: 5-piece kit: (2ea.)
 Large & Small Sun Gear, (1 ea.) Ring Gear

70500

450-43LE transmission bushing kit: Fuso 99 and Up

95500

Mitsubishi

Bushings and Sleeves

Part Numbers

A-500, 518 Output shaft pilot bushing	21441
Mitsubishi extension housing bushing: '80-'91 5-Speed KM 2WD, Mitsubishi/Dodge imports.	65411
4L80E steel-backed babbitt Pump Bushing: '97-Up Second Design (Wider)	33423
Mitsubishi 03-71 series (D50; 03-72) extension housing bushing: '87-Up A44D, Ram 50 - 4 sp., AW372 (2WD); '87-Up Van - KM148 (4WD); '83-'84 Raider, Montero (4WD)	86411
JR403E trans one piece case bushing: 88-Up Mitsubishi trucks with	29401
450-43LE transmission pump/converter bushing: Fuso trucks 99-Up	95423
450-43LE transmission pump/converter bushing oversize: Fuso trucks 99-Up	95423A

Hard Part

Cases: A44D, Ram 50, AW372, AW3072L, A44DL 2WD 87-Up; A44D – Raider, Montero – 4WD 83-84. Governor bore repair.	76105
Forward clutch drum: A44D/AW372/A44DL forward clutch drum repair ring cut. R&R only , '87-Up A44D, Ram 50 - 4 sp., AW372 (2WD); '87-Up Van - KM148 (4WD); '83-'84 Raider, Montero (4WD)	86069
Repair throw-out bearing stub area on transaxles	R&R only

Nissan

Bushing Kits

Part Number

450-43LE transmission bushing kit: Nissan UD truck 99 and Up	95500
AW 55-50/51SN Aisin Warner bushing pack for large input shaft	31500
AW 55-50/51SN Aisin Warner 4-5 clutch drum sleeve and bushing	31502
AW 55-50/51SN Aisin Warner bushing pack for small input shaft	44500

Bushings and Sleeves

RE4R03A /JR403E One-Piece case bushing: '90-Up 300ZX - V6 Turbo; '90-Up Infinity Q45, V8. Nissan Diesel truck 88-Up	29401
4L80E steel-backed babbitt Pump Bushing: '97-Up Second Design (Wider)	33423
R4AX-EL Subaru Legacy Converter/Pump Bushing.	47423

Nissan

Bushings and Sleeves, cont.

Part Numbers

Nissan RE/RL4F02A converter/pump steel-backed babbit bushing: '89-Up Axxess 2/4WD; 7/84-Up Maxima; 3/84-Up Stanza, 2/4WD Stanza Station Wagon.	57423
RE4R01A, R4A-EL, RE4R03A One-Piece case bushing	58401
RE4R01A Output shaft pilot bushing: 1987 AND UP	58441
Nissan extension housing bushing: 4-5 Speed FS4W71. FS5W71 A, B & C	71411
Nissan converter/pump bronze bushing: 7/91-Up Maxima; '92-Up Altima; '93-Up Villager/Quest Hub: 1.73"	78423
Nissan striker shaft bushing: '81-'86 Stanza 2.0L; '81-'94 Sentra 1.6L; '83-'90 Pulsar 1.6L	81442
Nissan T-5 extension housing bushing	82411
RE4R03A Nissan extension housing bushing: '90-Up QX45 V-8 INFINITY.	91411
450-43LE transmission pump/converter bushing: Nissan UD truck 99 and Up	95423
450-43LE transmission pump/converter bushing oversize: Nissan UD truck 99 and Up	95423A

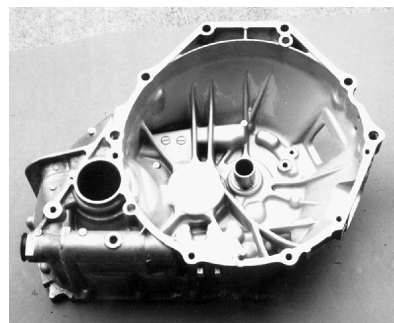
Hard Part

RL-4/RE-4FO2A - Nissan, Maxima, Stanza, Pulsar, Posi-Track. Re-machine pump surface. See picture below.	R&R Only
RL4FO4A (Nissan) FO4A (Mercury) Pump. Reface stator support.	R&R Only
RL-3 Direct clutch drum with chrome-moly sleeve (Nissan RL4F01A Trans. with Lockup)	55061
RN-3 Direct (High and Reverse) clutch drum with chrome-moly sleeve (Nissan RN3F01A Trans., w/o lockup)	55071
RL-4 Direct (High) clutch drum with chrome-moly sleeve (Nissan RL4F02A Trans.)	57061

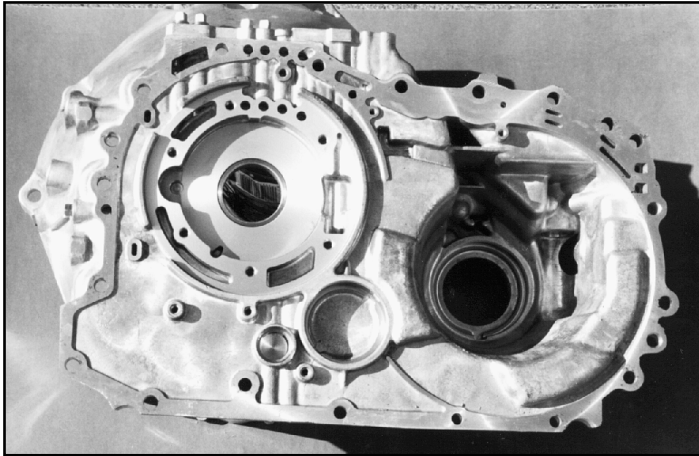
RL4/RE4FO2A restore pump area. This is just an example of our machining capabilities.



We repair the throw-out bearing area with a chrome moly sleeve



Nissan bell housing identification guide



**Early Maxima
Non-electronic**

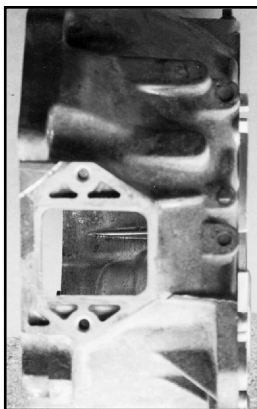
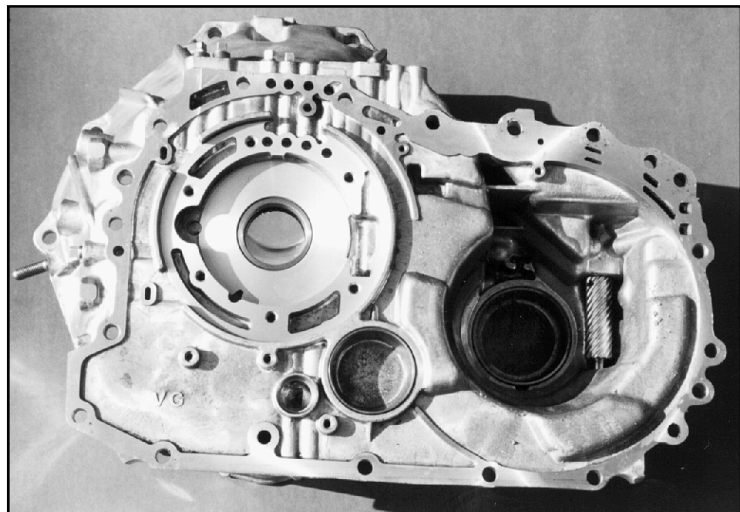
Part # 57132

Non electronic (early) Maxima's have two different size bolt holes along the bottom edge of the case. The two holes on the right side, under the differential area are approximately .350" in diameter. The two holes to their left, in line, are .425" in diameter. On the late, Maxima all four holes are the same size.

**Late Maxima
Electronic**

Part # 57133

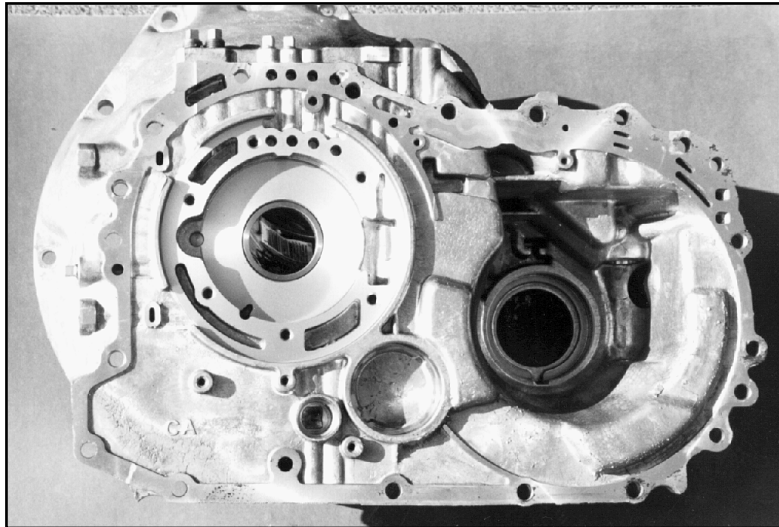
**These bell housings are
also found in Sentras**



The starter mount shown at left for the early and Late Maxima is on the driver's side at eight o'clock.

Nissan bell housing identification guide cont.

Stanza— Early or Late?



As with the Maxima, early models have two different size bolt holes along the straight edge of the bottom of the bell housing. Late models have only one size.

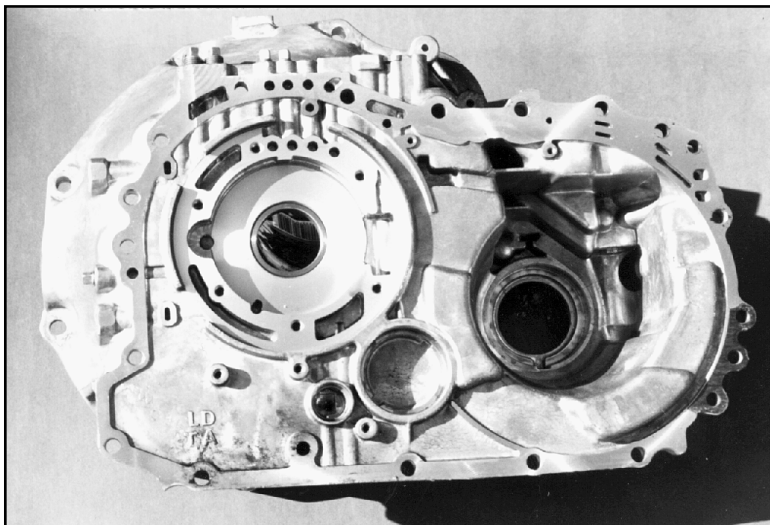


Starter mounting position

Part #
Early 57136
Late 57137

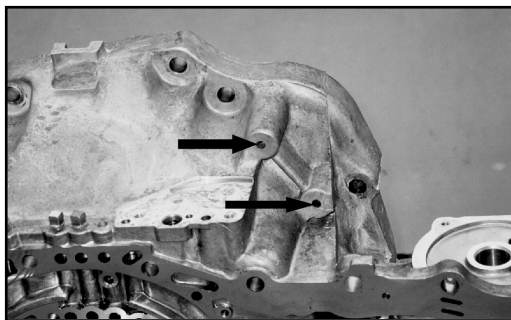
Nissan bell housing identification guide cont.

2.4L Stanza, Pulsar & Posi-Track

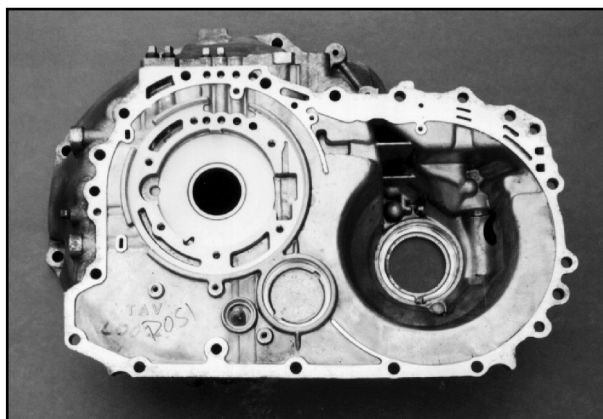


Part #
57134

Note raised areas on final drive surface. The 57135 posi-track bell housing is smooth in these areas. (See below)



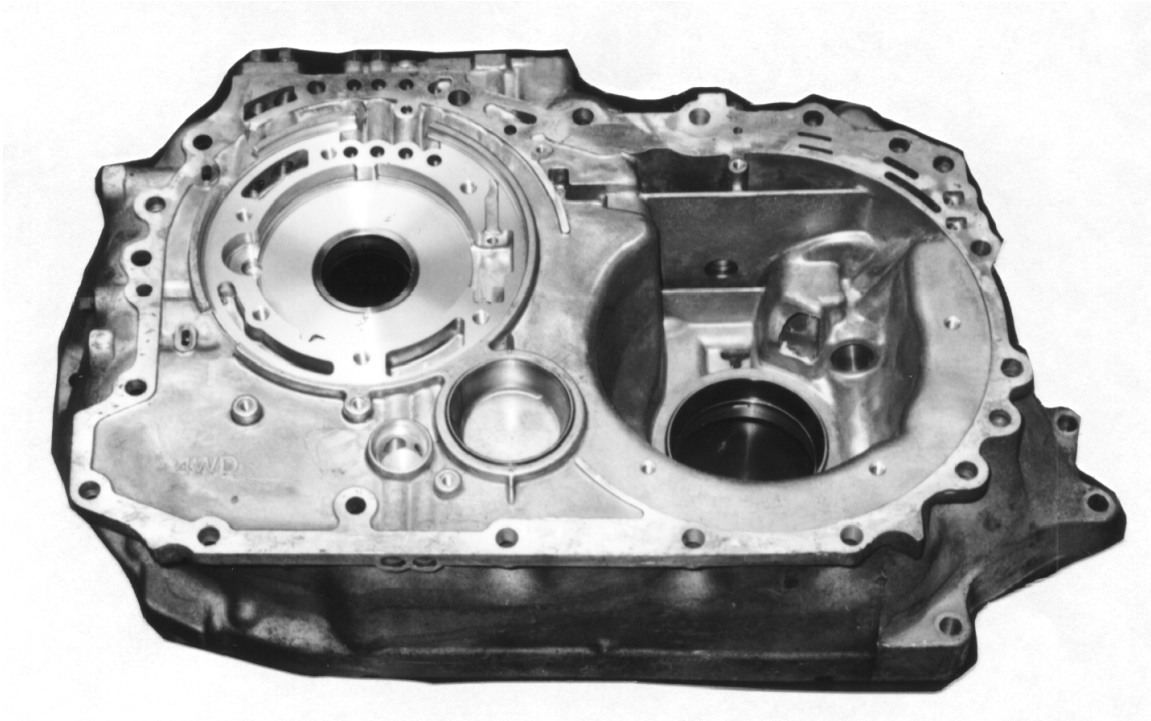
Notice the two drilled bosses behind starter mounting area



Part #
57135
posi-track
Note smooth area around differential area

Nissan bell housing identification guide cont.

3/85—7/89 Stanza Station Wagon 4WD



Omega Part # 57136A

Renault - Peugeot - Citroen

Bushing Kit

Part Numbers

98 – 2009 Renault DPO, Peugeot, Citroen AL4

23500

Saab

Bushings and Sleeves

Part Numbers

ZF18 Saab 9000 Converter/pump bushing: Hub: 1.77"	13423
AW 55-50/51SN Aisin Warner bushing pack for large input shaft	31500
AW 55-50/51SN Aisin Warner 4-5 clutch drum sleeve and bushing	31502
AW 55-50/51SN Aisin Warner bushing pack for small input shaft	44500

Hard Parts

AW55-50SN planetary updated with one piece bushing. Saab 9.3, 9.5	31255
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Saturn

Bushings and Sleeves

Part Numbers

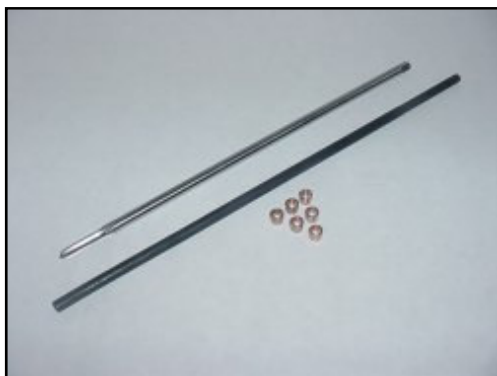
MP6, MP7, TAAT Saturn clutch feed pipe bushings (See ATRA Tech bulletin #733)	93405
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Hard Parts

AW55-50SN planetary updated with one piece bushing. Saturn Ion, Vue 02-03	31255
Valve Body, Saturn TAAT type 2, 92-UP	93851

Tools

93314



This simple tool makes removing and installing the clutch feed pipe bushings a snap in the MP6, MP7, and TAAT Saturn transmissions.

Suzuki

Bushings and Sleeves

Part Numbers

A440F/A442F 1985-Up Toyota Landcruiser and Suzuki Samurai pump bushing For a wider pump bushing see our new 95423	12423
TH180,4L30E (MD3,4 3L30) Case bushing – prevents the bushing from walking forward into the planets, “hat style”, no walk design. Suzuki Sidekick.	46401
Suzuki Samurai (USA) extension housing bushing: '85-1995 Samurai 5-Speeds.	53411
Suzuki Samurai (Hawaiian) extension housing bushing: 1985 5-Speed	79411

Toyota

Bushing Kits

Part Numbers

Toyota 340 transfer case direct clutch drum bushing kit: 1984-Up 4 Runner (Pickup). 1986-Up Jeep. (5-Piece Kit: Front Support, Ring Gear Flange, Center Support, Pilot, Direct Clutch Drum.	28500
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Bushings and Sleeves

A440F/A442F 1985-Up Toyota Landcruiser and Suzuki Samurai pump bushing For a wider pump bushing see our new 95423	12423
340 transfer case direct clutch drum bushing: 1985 -Up 4-Runner, 4WD, Pickup, 4WD,	28409
Toyota extension housing bushing: '86 R150 5-Speed V6; '87-'91 Supra Turbo.	61411
SR5SXB Toyota Corolla SR5 extension housing bushing: 1970-87 T50 5-Speed	72411
Isuzu Impulse extension housing bushing: '85-'91 A44DL Impulse and Pick-ups; '83-Up Toyota 4Spd, OD with L/U.	75411
Toyota A40 series governor bore sleeve: Chrome-moly - Fits American Eagle/Southeast Tool	76341
W56 5 speed shift shaft bushing. Center support and front housing.	97442

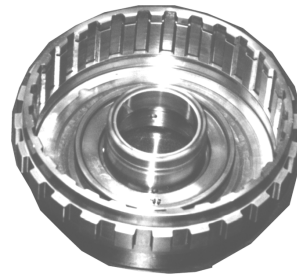
Toyota

Hard Parts

Part Numbers

130/140 Direct clutch drum with chrome-moly sleeve & new bushing (Toyota)	18063
340 Direct clutch drum, reman or new	28063
A40 series forward clutch drum repair ring cut. R&R only	76069

If you have a ring cut drum or the bushing is not serviceable, we can repair your drum or sell you one of our new or rebuilt drums.



Volvo

Bushing Kit

Part Numbers

AW55-50SN bushing pack includes one front stator, one rear stator, two front sun gear, one, one piece rear sun gear and one converter bushing. Bushing for planetary is sold separately.	31500
AW 55-50/51SN Aisin Warner bushing pack for large input shaft	31500
AW 55-50/51SN Aisin Warner 4-5 clutch drum sleeve and bushing	31502
AW 55-50/51SN Aisin Warner bushing pack for small input shaft	44500

Bushings and Sleeves

Part Numbers

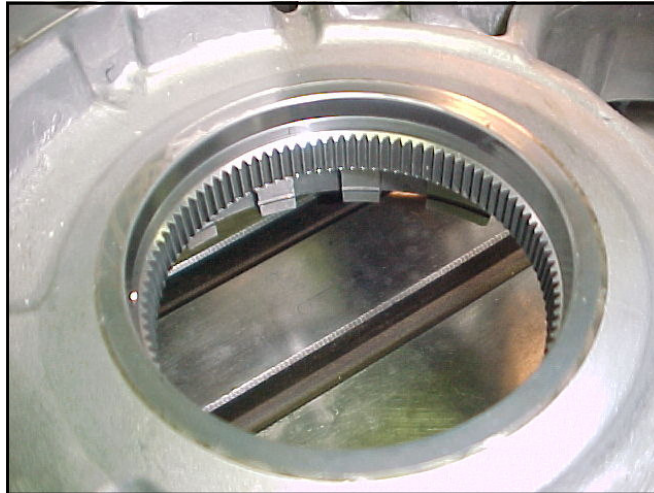
AW55-50SN pump bushing	31423
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Hard Parts

Part Numbers

AW55-50SN planetary updated with new one piece bushing. (See following page)	31255
Cases – AW55 (Japan built), BW55 (England built), 3 Spd; AW70, AW71 4Spd Overdrive; AW70L, AW72L Overdrive W/Lock Up Governor bore repair.	
AW55-50/51SN Case repair. Transfer gear wears bore out of round.	See next page

AW55-50/51SN Case Repair

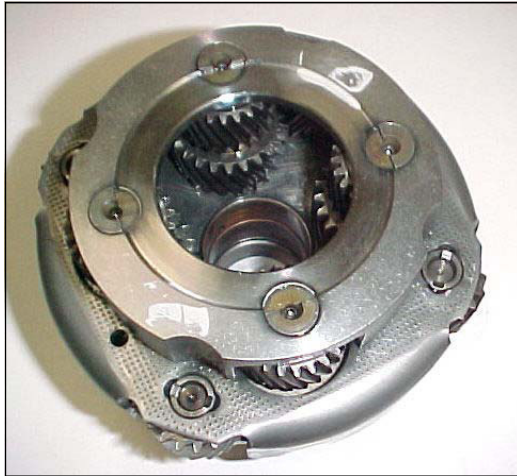


Case Wear and Bushing Failure

The AW 55-50SN family of transmissions comes in Maximas, Saturn Vue, Volvos, and Saabs. Transmission failure is a result of spun and worn bushings. The case wears and the transmission loses its centerline, causing bushings to fail. The picture shows the case wear, where the transfer gear sits in the case.

Note the shiny wear mark in the bore. We bore the case and install a steel sleeve to reestablish center.

AW55-50SN Planetary



This AW55-50SN planetary unit has a common flaw. The bushing closest to the sun gear is poorly supported and likes to spin in the cage.

It ruins the cage, destroying the bushing fit.

All is not lost. We bore out the cage to clean up the wear and also remove an unmachined shoulder between the bushings.

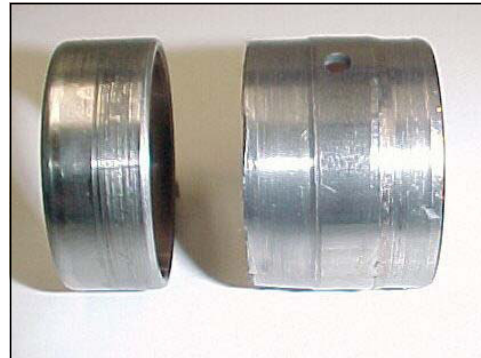
We install a single piece bushing to replace the two bushings and it becomes a better-than-stock repair.

This is a job for a machinist as the boring needs to be precise. Send us your planetary unit and the sun shell, we have same day service on these units!

We carry the bushings in stock for fast service. Everyone working on the AW55-50SN unit needs to know about this repair.

Applications:

01-Up Volvo, Nissan Maxima, Saturn Ion, Vue, Saab 9.3, 9.5



VW

Bushings and Sleeves

Part Numbers

ZF5HP19 Converter/pump bushing: 98- Audi A4, A6, A8; VW Passat; Porsche Boxster	83423
VW 096 K2 reverse clutch drum bushing: '90-Up Corrado; '95-'96 Cabrio; '93-'94 Golf; '93-'94 Jetta/GLX, 2.8; '90-'94 Passat	90408
Pump bushing, same applications as above.	90423

ZF

Bushing Kits

Part Numbers

ZF4HP18 input and stator shaft bushing kit: (2-pc. Kit) <i>Note: for 1986-Up Saab 9000 w/Transverse, use the direct shaft bushing only. Stator requires a custom bushing.</i>	67500
ZF4HP14 input and stator shaft bushing kit: '89-'91 Rover 214, Peugeot 405; '86-Up Citroen BX. (2-piece kit)	68500

Bushings and Sleeves

Part Numbers

ZF18 Saab 9000 Converter/pump bushing: Hub: 1.77"	13423
ZF5HP19 Converter/pump bushing: 98- Audi A4, A6, A8; VW Passat; Porsche Boxster	83423

Hard Parts



ZFHP22 Stator machined and new hardened stator shaft installed to prevent converter failure. With or without check valve.