### Application Chart

<table>
<thead>
<tr>
<th>Lever Position</th>
<th>Gear</th>
<th>B1</th>
<th>K1</th>
<th>B3</th>
<th>F1</th>
<th>K2</th>
<th>B2</th>
<th>BS</th>
<th>KS</th>
<th>F2</th>
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<tbody>
<tr>
<td>D 1st</td>
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**Note:** Transmission starts in first gear at full throttle and kick down.

**Legend:**
- X = Activated or locked.
- K2 - Fourth Clutch
- B1 - Intermediate Brake Band
- B3 - Reverse Brake
- BS - O. D. Brake
- F1 - Low One Way Clutch
- B2 - Forward Brake Band

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Mercedes 722.5

1 - Brand Band B1
2 - Brake Band B2
3 - Sprag Clutch F2
4 - Clutch KS
5 - Brake BS
6 - Clutch K2
7 - Sprag Clutch F1
8 - Multi-Disc Clutch B3
9 - Clutch K1
Refrigeration paragraph...
B3 Clutch Clearance

Measurement "A"
Position Gauge Bar on Case Surface.
Measure Distance to Edge of B3 Plate Spring. (D)

Measurement "B"
Position Gauge Bar on B3 Piston. (E)
Measure Distance to Installed Gasket

"A" - "B" = "C"
"C" = 1.5 - 2.0mm / .059" - .079"

Line Pressure 75-90 PSI in Drive @ Idle
169-199 PSI @ Stall in Drive
Governor Pressure: 18MPH = 13.05PSI, 56MPH = 33.35PSI
Modulator Pressure: Adjusted W/ a gauge no vacuum, in drive
@ 31MPH = 55PSI
Measurement "F" Detail
Position Gauge Bar on B3 Piston.
Measure Distance to Installed Gasket.

Measurement "H" Detail
A. Washer
B. Shim
C. Bearing

K1 to Pump Clearance
Measurement "B" (Previous Page)
Position Gauge Bar on B3 Piston.
Measure Distance to Installed Gasket.
Measurement "F"
Position Gauge Bar on Case Surface.
Measure Distance to K1 Thrust Surface

Measurement "G"
Add K1 Shim, Thrust Bearing & Washer Thickness' Together
"B" - "F" - "G" = "H"
"H" = 0.4 - 0.6mm / .016" - .024"
W/Rear Housing Installed

KS Clutch
Clearance: 1.5-2.1mm/0.059"-0.083"

BS Brake
Clearance: 0.5-1.1mm/0.020"-0.043"
**B1 Brake Band Adjustment**

**B1 Brake Band Piston**
1. Piston Seal, Lip Type
2. Thrust Pin
3. Adjustment Shims
4. O-Ring
5. Piston, B1

**A:** Servo Adjustment Shims Not to Exceed 6.5mm / .256"

**B:** Servo Assembly/Disassembly Tool, Mercedes #125 589 06 21 00 or Equivalent

Tool Has a Bolt Thread Pitch of 1mm / .040"
One Turn = A Distance of 1mm / .040"

**B1 Brake Band Travel**
1.8 - 2.5mm / .071" - .098"
(1.8 - 2.5 Turns of the Bolt to Achieve 1Nm / .225 Ft. Lb)

Delayed Engagement in all Forward Ranges May be Due to the "T" Type B2 Brake Piston Seal
The "T" Type Seal is not as Flexible and May Not Seal Well Against the Servo Bore.

By Grinding a 30 Degree Chamfer Around the Outer Land on the Piston - See Illustration
This Will Allow Additional Oil Pressure to Directly Affect the Piston Seal During the Apply

Mario Aristides Independent Transmission
**B2 Brake Band Adjustment**

Install Servo Cover & Ring

Press band toward band piston - direction of arrow so that piston contacts cover. (Fig. 1)

Measure dimension "A" on brake band

Press band toward thrust element - in direction of arrow until it bottoms (Fig. 2)

Measure dimension "B" on brake band

Measured A - B = C. C = Brake band travel 5.5 - 6.0mm / .217" - .236"

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Note: Thrust pins (A) are available with lengths of 47.2; 48.8 and 49.6 mm for brake band B2 1.858", 1.921" & 1.953"
Drain Valve
Plate Check Valve
Primary Pump Check Valve

B2 Valve Clamped Container

Upper Valve Body

1 - Manual Valve
2 - Piston Control Valve 2-3
3 - Control Valve 2-3
4 - Regulator Valve Torque Conv.
5 - Lock-Out Valve K1
10 - Shift Valve B1
11 - Piston Control Valve 3-4
12 - Control Valve 3-4
16 - Regulation Valve Basic Press
17 - Control Valve 1-2
18 - Sleeve Control Valve 1-2
19 - Piston Control Valve 1-2
26 - Regulator Valve Oper. Press.
27 - Plug, Shift Valve Ku
32 - Regulator Valve, Full TV
33 - Shift Valve B2
35 - Shift Pin Lube Press.
38 - Regulator Valve B1
40 - Shift Valve, Kick Down
41 - Shift Valve Gov. Press.
44 - Amplification Valve Gov.
45 - Regulator Valve, Cont.l Pressure
46 - Piston, Regulator Valve Control Pressure

67 - Check Valve
88 - Sieve Filter
103 - Drain Valve KS
105 - Drain Valve LB2
### Lower Valve Body

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<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>25</td>
<td>Relief Valve</td>
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<tr>
<td>47</td>
<td>Regulator Valve Shift Pattern</td>
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<tr>
<td>48</td>
<td>Damper K1</td>
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<tr>
<td>49</td>
<td>Damper K2</td>
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<td>50</td>
<td>Regulator Valve Damper K1</td>
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<td>Regulator Valve Damper K2</td>
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<td>Damper B1</td>
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<td>Shift Valve Deceleration</td>
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<td>Regulator Valve Damper B1</td>
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<td>Regulator Valve Damper, Switch On</td>
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<td>59</td>
<td>Shift Valve K2</td>
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<td>Release Valve B2</td>
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<td>Lock-Out Valve Deceleration</td>
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<tr>
<td>62</td>
<td>Lock-Out Valve RV1</td>
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<tr>
<td>63</td>
<td>Damper, Kick-Down</td>
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<td>64</td>
<td>Lubrication Pressure Valve</td>
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<td>65</td>
<td>Pressure Limitation Valve</td>
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<td>65</td>
<td>Lock-Out Piston (Rev, Kick-Down)</td>
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<td>Shift Valve Secondary Pump</td>
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<td>Shift Valve Overlap KS/BS</td>
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<td>Return Spring (Large)</td>
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<td>Return Spring (Small)</td>
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<td>Kick-Down Solenoid Valve</td>
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<tr>
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