



Technical Service Information

AUDI/VOLKSWAGEN 01M/01N

B2 & K1 CLUTCH ASSEMBLY

COMPLAINT: **K1 CLUTCH**

After overhaul the transmission experiences a bind-up on the 3-4 shift and a bind-up in reverse.

B2 CLUTCH

After overhaul the transmission experiences one or more of the following malfunctions, a harsh 1-2 shift, a harsh 3-4 shift, a 3-4 flared shift or a bang on a 3-2 coast down shift.

CAUSE: **K1 CLUTCH**

Mis-assembly of the K1 clutch is responsible for the above complaints.

B2 CLUTCH

Mis-assembly of the B2 Clutch assembly is responsible for the above complaints.

CORRECTION: **K1 CLUTCH**

During the 1995 model year the Phase 2 redesign of the K1 clutch took place. The obvious difference was the K1 drum now did not have a shaft. With the new design, the K1 and the K3 drums had to be pressed apart. Other differences are mainly dimensional. The K1 clutch pack is assembled as follows:

1. After the bottom piston, coil spring assembly, top spring assembly and snap ring have been installed into the drum, install the waved plate.
2. Install the .079" steel plate.
3. Install 1 friction plate and 1 .057" steel plate.
4. Place the K1 clutch hub, large diameter end, down on the bench, See Figure 1.
5. Install the top pressure plate onto the clutch hub.
6. Stack the remaining friction and steel plates onto the clutch hub, ending with a friction plate.
7. Install the 4 plastic clutch retainers, making certain that they snap into their respective holes in the clutch hub. Make certain the top friction plate on the clutch hub is below the tab of the plastic retainers as seen in Figure 1. The retainers for the Phase 2 K1 clutch are .640" tall.

NOTE: Always replace these plastic retainers with new ones as they will most likely be broken because they are support bushings for the K3 drum.

8. Invert the clutch hub assembly and install it into the K1 drum as seen in Figure 2.
9. Install the snap ring into the groove of the K1 clutch drum working in between the clutch hub and the drum as also shown in Figure 2.



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CORRECTION B2 CLUTCH

continued:

The B2 clutch assembly was changed in 1998, making assembly of this clutch different than previous Phase 2 models. Referring to Figure 3, assemble the B2 clutch as follows:

1. Begin by placing the B2 clutch support into the case. This support is selective, and will determine how many clutch plates the pack will have. See the chart in Figure 4.
2. Place a .118" thick steel plate, (marked with a #3 on the wide lug), against the B2 clutch support.
3. Install the 3 spring caps into the holes in the steel plate.
4. Stack the clutch pack by beginning with a friction plate and then alternating steel plates and friction plates. The standard thickness of these steel plates is .079" (marked with a #2 on the wide lug), however these steel plates are selective in order to attain proper clutch clearances, see the chart in Figure 5 which is .050" to .060". When the last friction plate is installed, **STOP!**
5. Install the 3 springs into the spring caps.
6. Install the remaining 3 spring caps onto the springs.
7. Install a .118" thick steel plate down against the spring caps.
8. Install the 2 shims on top of the previously installed .118" steel plate.
9. Install the 2 dished plates into the retainer with the first plate "dish up" and the second plate "dish down", (like a clam shell). Crimp the retainer edge slightly, to keep the dished plates in place.
10. Install the dished plate retainer assembly against the shims, with the open end facing up.

K1 CLUTCH ASSEMBLY

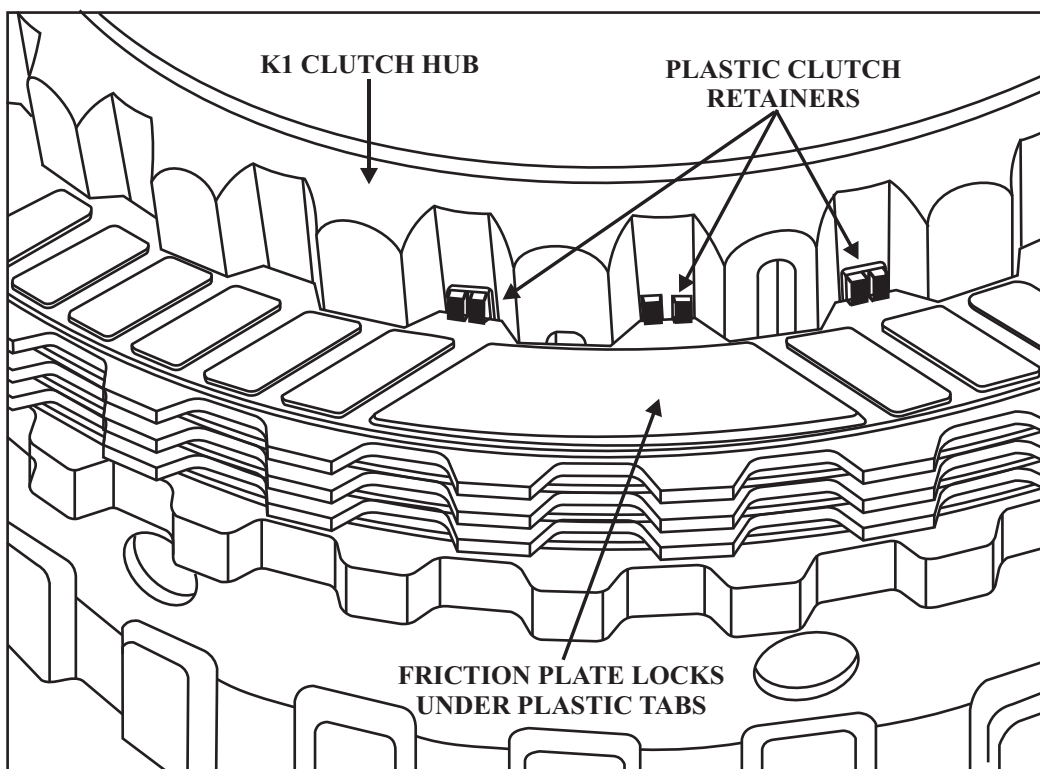


Figure 1

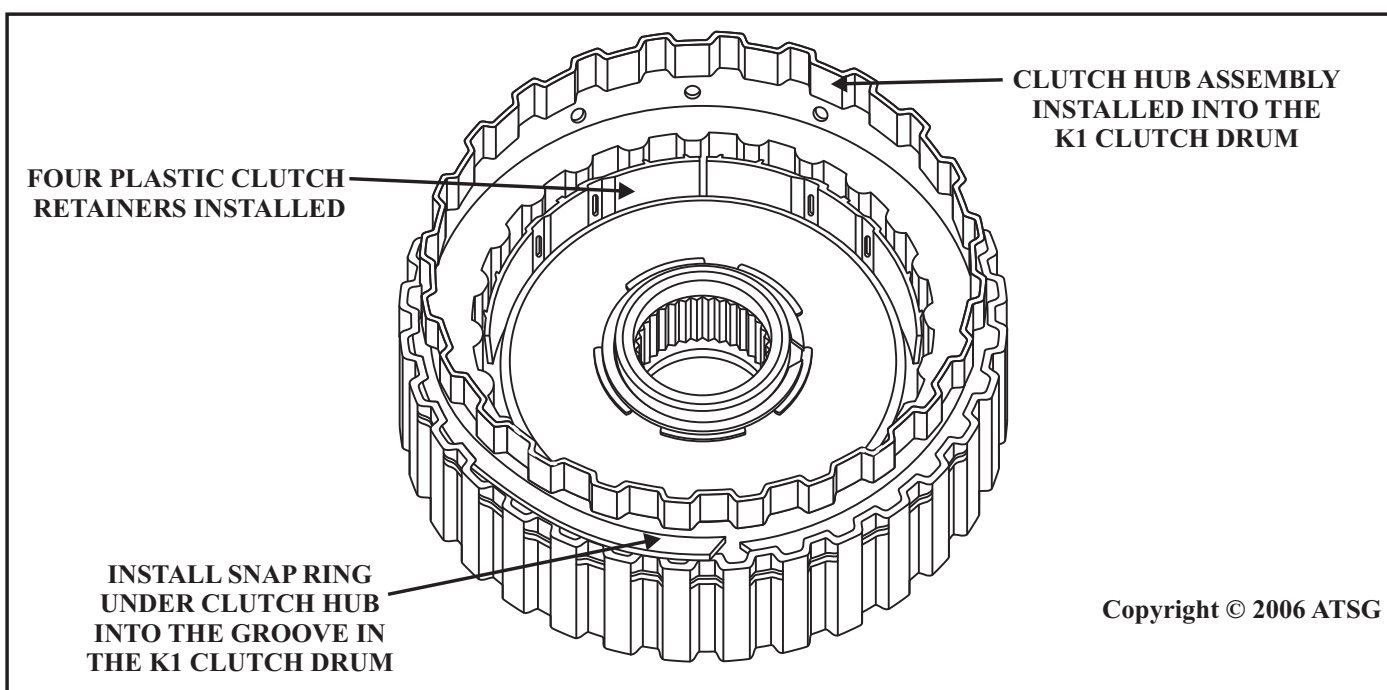
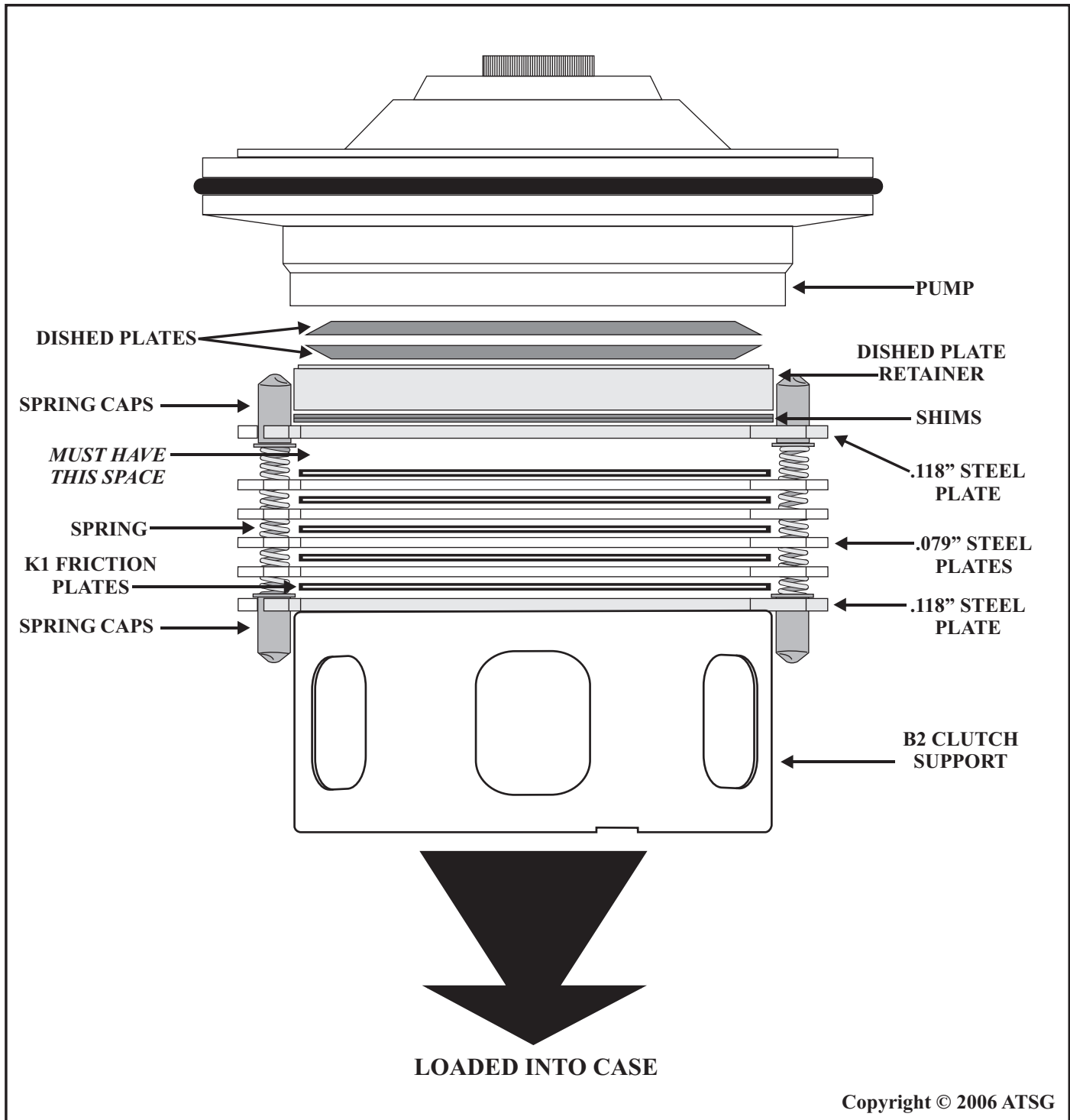


Figure 2

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B2 CLUTCH ASSEMBLY



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Figure 3



Technical Service Information

B2 CLUTCH ASSEMBLY

B2 CLUTCH SUPPORT HEIGHT CHART	
2-4 CLUTCH SUPPORT HEIGHT	CLUTCH QUANTITY
2.846" (72.29mm)	4
2.701" (68.60mm)	5
2.555" (64.90mm)	6

Figure 4

B2 SELECTIVE STEEL PLATE USAGE CHART	
THICKNESS	VW PART NUMBER
.079" (2mm)	097-323-463
.088" (2.25mm)	097-323-463-A
.098" (2.5mm)	097-323-463-B
.108" (2.75mm)	097-323-463-G
.118" (3mm)	097-323-463-C
.128" (3.25mm)	097-323-463-D
.138" (3.5mm)	097-323-463-E
.146" (3.75mm)	097-323-463-F

Figure 5