



Technical Service Information

VOLKSWAGEN 09A/JF506E

NO UP-SHIFT COLD ONLY

COMPLAINT: Before or after an overhaul, a Volkswagen equipped with the JF506E Transmission may exhibit a complaint of no up-shift at all when cold. Vehicle takes off in 1st gear and stays in first gear until vehicle warms up for a little bit.

CAUSE: One cause may be a faulty 2-4 Brake Solenoid N283 or 2-4 Brake Timing Solenoid N282. The solenoid valves have a tendency to stick or hang up when cold. Refer to the diagram in Figure 1 for Solenoid locations for the 2-4 Brake Solenoid N283 and 2-4 Brake Timing Solenoid N282.

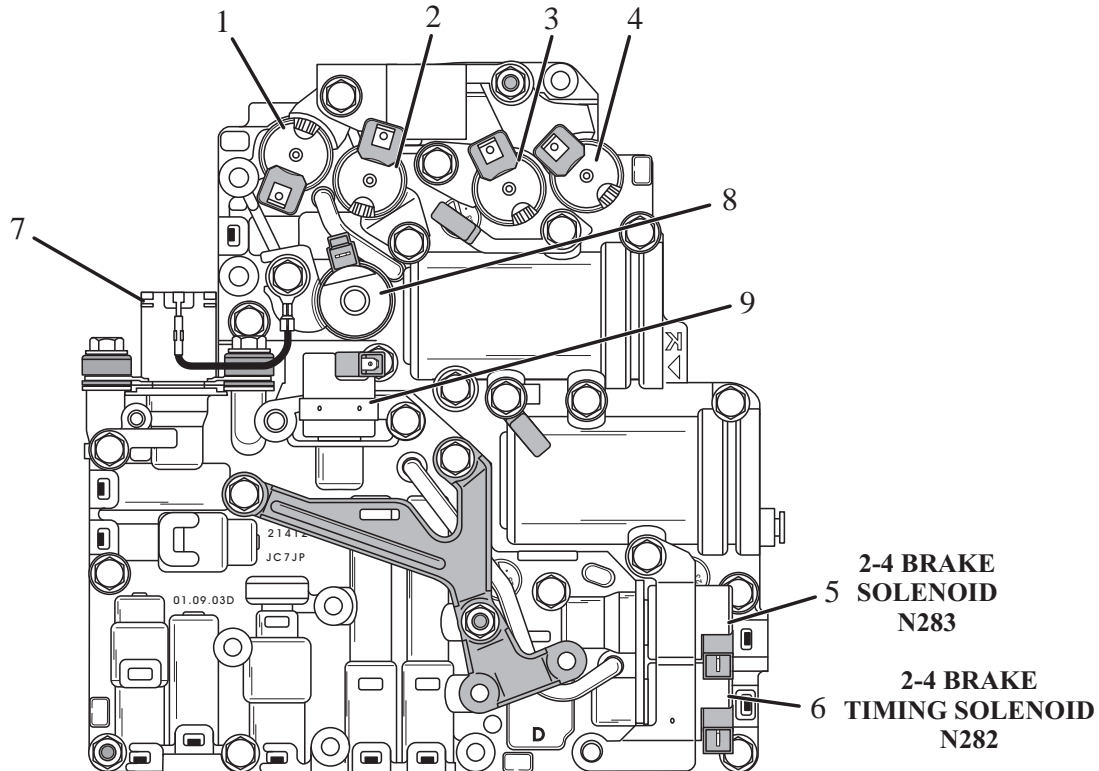
CORRECTION: Replace the 2-4 Brake Solenoid N283 and the 2-4 Brake Timing Solenoid N282.

NOTE: There has been some confusion about the internal wire colors for the Volkswagen version of the JF506E. We have included internal wire colors and their position within the internal harness connector to assist the technician in assembly and reduce the possibility of cross connecting wires. Please refer to the diagram in Figure 2 for the internal harness wire and connector colors.

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VOLKSWAGEN SOLENOID IDENTIFICATION AND LOCATIONS



Shift Solenoid Application Chart

<i>Solenoid</i>	<i>1st</i>	<i>2nd</i>	<i>3rd</i>	<i>4th</i>	<i>5th</i>
<i>N88 = SSA</i>		<i>ON</i>			<i>ON</i>
<i>N89 = SSB</i>	<i>ON</i>	<i>ON</i>	<i>ON</i>		
<i>N92 = SSC</i>	<i>ON</i>			<i>ON</i>	<i>ON</i>

Manufacturer	Volkswagen Solenoid Identification And Location								
	1	2	3	4	5	6	7	8	9
VW Golf, GTI and Jetta	N88 - SV1	N281-SV8	N89-SV2	N92-SV5	N283-SV10	N282-SV9	N93-SV6	N91-SV4	N90-SV3
Description	Shift Solenoid "A"	Reduction Timing Solenoid	Shift Solenoid "B"	Shift Solenoid "C"	2-4 Brake Solenoid	2-4 Brake Timing Solenoid	Line Pressure Solenoid	TCC Solenoid	Low Clutch Timing Solenoid

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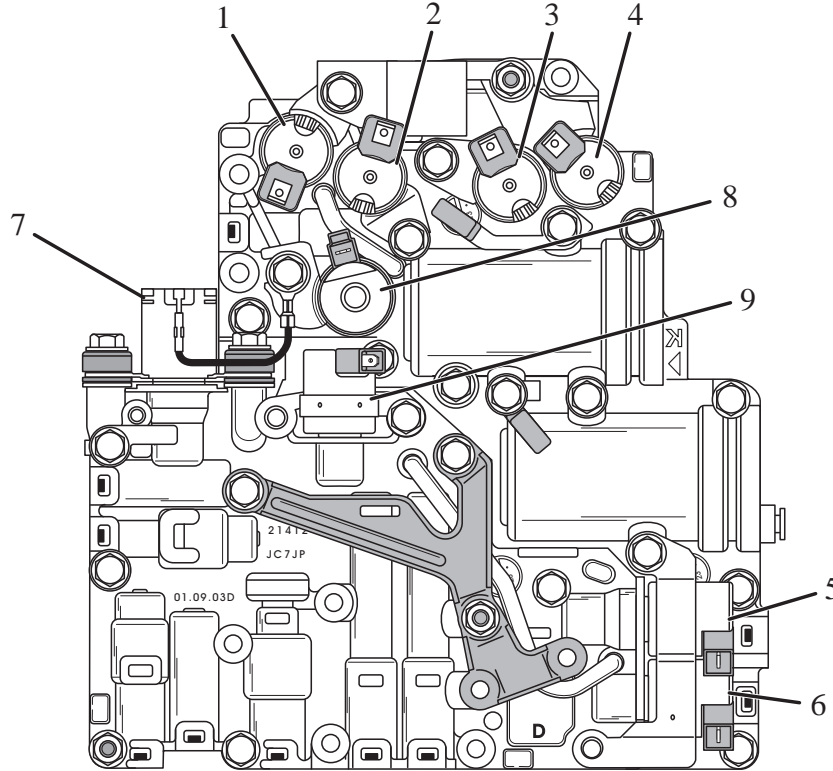
Figure 1

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VOLKSWAGEN INTERNAL WIRE HARNESS SOLENOID WIRE AND CONNECTOR COLORS



*View Looking Into The
Internal Transaxle
Harness From The Wire Side
Connector Number "T10"*

Blue 17	18	Brown
Green 15	16	Black
	14	Black
	13	White
Yellow 11	12	White
Green 9	10	Red

ITEM NUMBER	SOLENOID ID	WIRE COLOR	CONNECTOR COLOR
1	Solenoid A N88	Blue	Brown
2	Reduction Timing Sol N281	White	Brown
3	Solenoid B N89	Brown	Brown
4	Solenoid C N92	Green	Green
5	2-4 Brake Solenoid N283	White	Brown
6	2-4 Brake Timing Sol N282	Black	Black
7	Line Pressure Sol N93	Yellow	Green
8	TCC Solenoid N91	Green	Black
9	Low Clutch Timing Sol N90	Black	Black

Manufacturer	Volkswagen Solenoid Identification And Location								
	1	2	3	4	5	6	7	8	9
VW Golf, GTI and Jetta	N88 - SV1	N281-SV8	N89-SV2	N92-SV5	N283-SV10	N282-SV9	N93-SV6	N91-SV4	N90-SV3
Description	Shift Solenoid "A"	Reduction Timing Solenoid	Shift Solenoid "B"	Shift Solenoid "C"	2-4 Brake Solenoid	2-4 Brake Timing Solenoid	Line Pressure Solenoid	TCC Solenoid	Low Clutch Timing Solenoid

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Figure 2