



Technical Bulletin #1636

Transmission: *Torqshift 6/6R140*

Subject: *Clutch Apply Chart, Solenoid Firing Order, Solenoid ID*

Application: *Ford*

Issue Date: *August, 2014*

Torqshift 6/6R140

Clutch Apply Chart, Solenoid Firing Order, Solenoid ID

This transmission uses 2 types of solenoids, normally low and normally high. Normally low solenoids provide hydraulic pressure proportional to supplied current. A normally low solenoid will output very low pressure with low (50 mA) or no current, while it will supply high pressure with high current (850 mA). Normally high solenoids provide pressure inversely-proportional to supplied current. Normally high solenoids provide full output of pressure with low or no current (50 mA) and very low pressure with high current (850 mA).

Refer to the illustration below for solenoid identification.

Clutch Apply Chart							
	1-2-3-4 FD	3-5-R Dir	2-6 Int	1-R L/R	4-5-6 OD	Low OWC	Ratio
Park				On			
Reverse		On		On			3.128
Neutral				On			
D 6th Gear			On		On		0.674
D 5th Gear		On			On		0.858
D 4th Gear	On				On		1.149
D 3rd Gear	On	On					1.516
D 2nd Gear	On		On				2.318
D 1st Gear	On			On*		Holding	3.974

* Holding until 5MPH

The 1-2-3-4, 3-5-Rev and 4-5-6 are driving clutches

The 2-6 and 1-R clutches are holding clutches

Solenoid Firing Chart Torqshift 6/6R140						
	SSA (NL)	SSB (NH)	SSC (NL)	SSD (NL)	SSE (NH)	TCC (NL)
Park	Off	On	Off	On	On	Off
Reverse	Off	Off	Off	On	On	Off
Neutral	Off	On	Off	On	On	Off
D 6th Gear	Off	On	On	Off	Off	***
D 5th Gear	Off	Off	Off	Off	Off	***
D 4th Gear	On	On	Off	Off	Off	***
D 3rd Gear	On	Off	Off	Off	On	***
D 2nd Gear	On	On	On	Off	On	***
D 1st Gear	On	On	Off	On*	On	***

NH = Normal High

NL = Normally Low

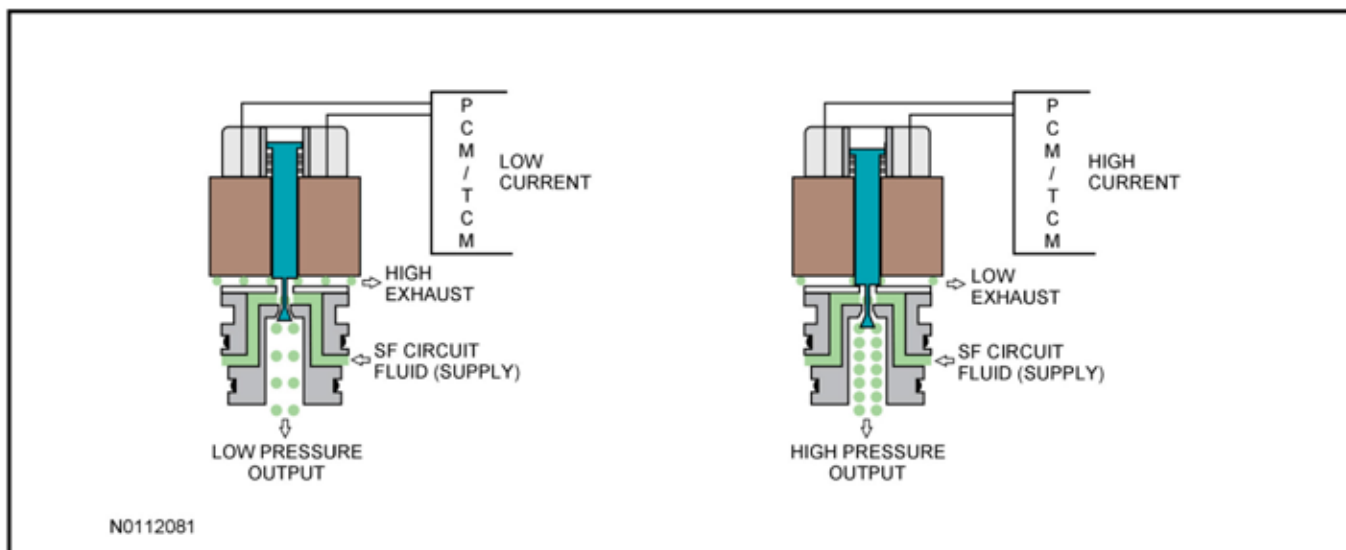
* Will turn off after 5 MPH

*** TCC may be commanded on depending on fluid temperature

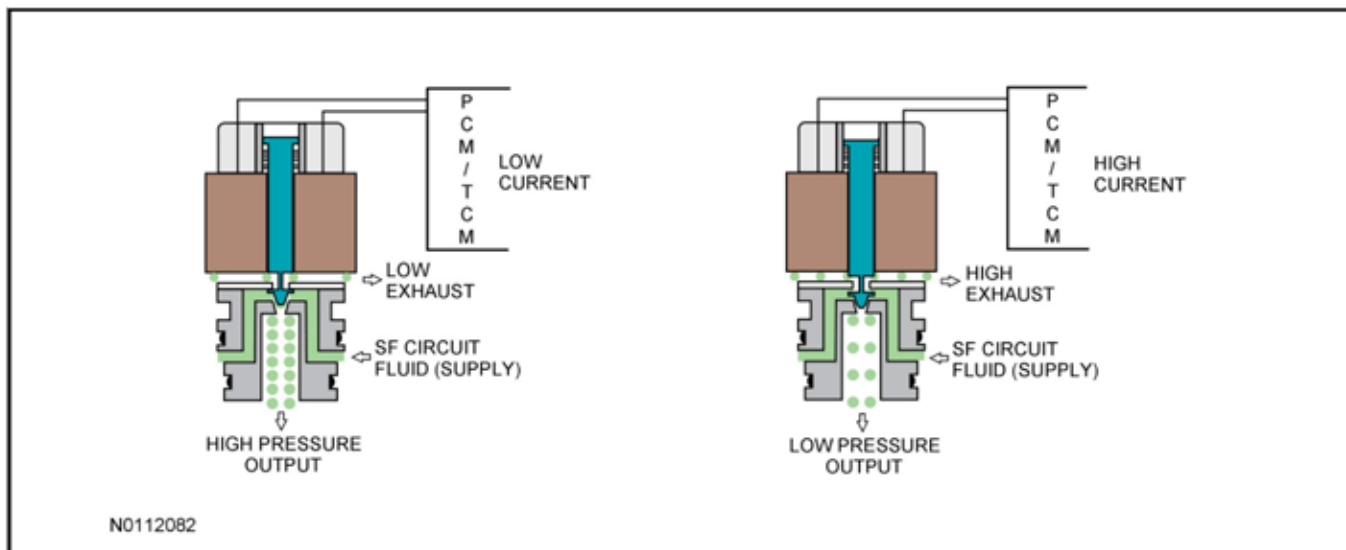
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Normally Low Solenoids

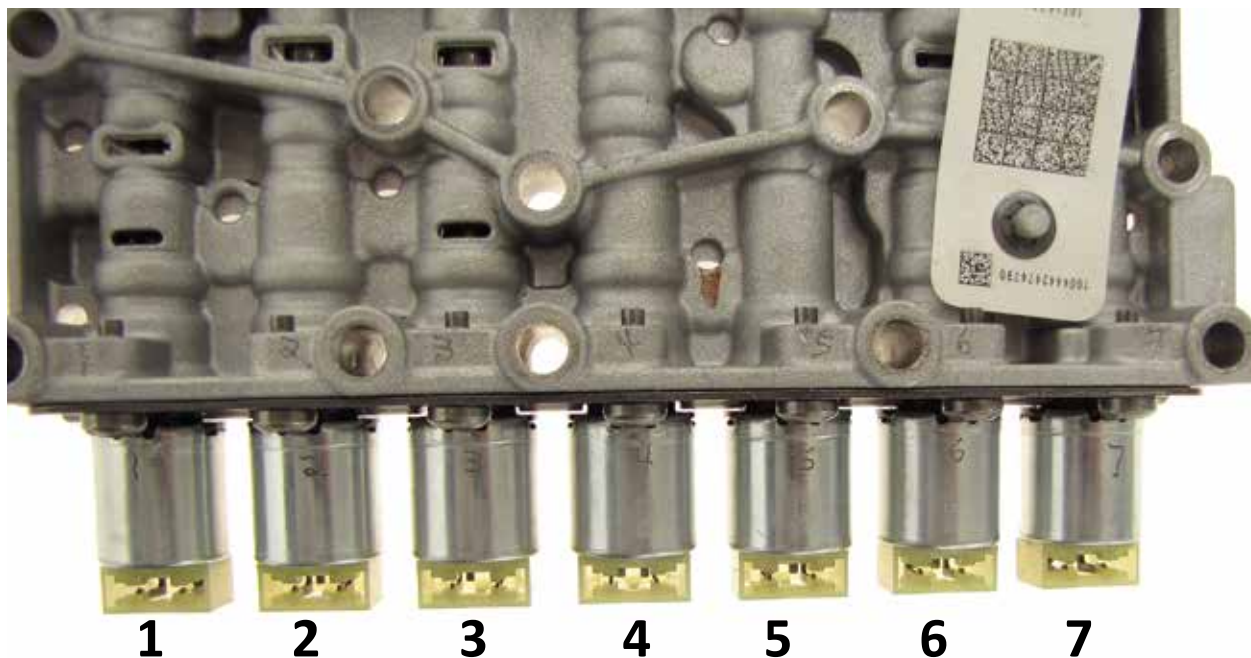


Normally High Solenoids



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Torqshift 6/6R140 Clutch Apply Chart, Solenoid Firing Chart, ID



Torqshift 6/6R140 Solenoid Identification (Function)	
1	Shift Solenoid E (SSE) Overdrive (4,5,6) Clutch, Normally High
2	Shift Solenoid C (SSC) Intermediate (2,6) Clutch, Normally Low
3	Shift Solenoid A (SSA) Forward (1,2,3,4) Clutch, Normally Low
4	Shift Solenoid B (SSB) Direct (3,5,R) Clutch, Normally High
5	Torque Converter Clutch (TCC) Solenoid, Normally Low
6	Line Pressure Control (LPC) Solenoid, Normally Open
7	Shift Solenoid D (SSD) Low/Reverse (1,R) Clutch, Normal Low

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The solenoids are calibrated from the factory and are not all the same. There are (2) types of solenoids, normally high and normally low solenoids. The solenoids can be replaced separately, but only with the same type of solenoid. The replacement solenoid band number must match the band number of the solenoid being replaced. The band number is printed on the side of the solenoid and will be a 2, 3, 4 or 5.

