

# AN ANALYSIS OF FORD AODE, 4R70W, AND 4R75 TRANSMISSION GENERATIONS

Powertrain Control Solutions

Revision 1.5

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8/12/2021

M. Petrie

Transmission	Trans Connector	Range Connector	Out. Pulse	OLD Kit	OLD Kit #	NEW Kit	NEW w/ TPS	NEW w/o TPS
AODE 92-95	10 cavity, 9 wire	8 cavity, 8 wire	6	92-97	TCM-5360	92-97	TCM-5361	TCM-5360
4R70W 93-97	10 cavity, 9 wire	8 cavity, 8 wire	6	92-97	TCM-5360	92-97	TCM-5361	TCM-5360
4R70W 98-03	10 cavity, 7 wire	12 cavity, 10 wire	6	98+	TCM-5350	98-03	TCM-5351	TCM-5350
4R70E 04-09	10 cavity, 7 wire	12 cavity, 10 wire	24	98+	TCM5350	04-09	TCM-5381	TCM-5380
4R75 04-09	10 cavity, 7 wire	12 cavity, 10 wire	24	98+	TCM5350	04-09	TCM-5381	TCM-5380
4R75 10-13	8 cavity, 7 wire	12 cavity, 10 wire	24	2010+	TCM-5375	2010+	TCM-5376	TCM-5375

\*TCM538x kits were created to replace the kits displayed in RED above

Please note the continued connector schemes from 92-97, 98-09, and 2010+ in addition to the 2004 output pulse update. Please be aware, the Range-Connectors are physically interchangeable and need to be compared to the Trans-Connector. The kit numbers above are for PCS Simple-Shift transmission controller kits with controller, harness, and remote TPS. It is the responsibility of the customer to verify these multiple differences of their transmission before purchasing the kit.



## AN ANALYSIS OF FORD 4R100 SERIES TRANSMISSION GENERATIONS

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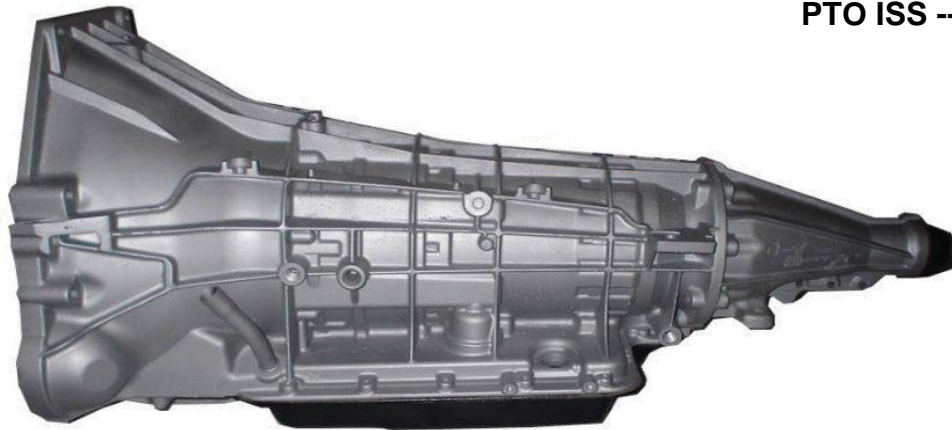


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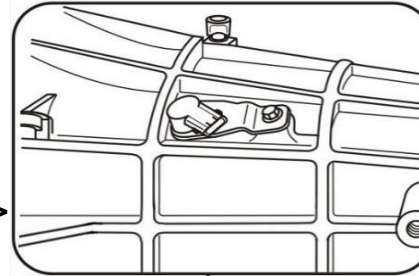
M. Petrie

Transmission	Trans Connector	IN / Out. Pulse	KIT w/ TPS	KIT w/o TPS	NOTES
4R100 non-PTO	12 Cavity / 9 Pin	32 / 18	TCM5371	TCM5370	No PTO cast into the aluminum case
4R100 PTO	12 Cavity / 9 Pin	115 / 18	TCM5391	TCM5390	Has the Power-Take-Off cast into the case

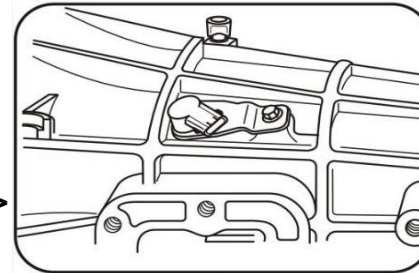
The Ford 4R100 Transmission has two different electronic configurations, simply separated by units grabbing Turbine-Speed from either the normal tone wheel on the Coast Clutch drum, or from the 115 Tooth PTO Ring Gear. If there is no Output Shaft Speed Sensor on the extension-housing, the unit may be an E4OD which is not supported by the PCS Simple Shift. It is the responsibility of the customer to remove the ISS and verify the correct number of ridges or teeth (32 vs 115) before purchasing the kit.



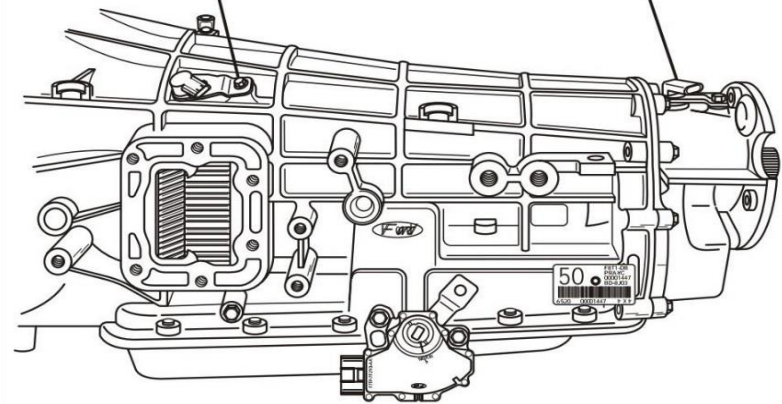
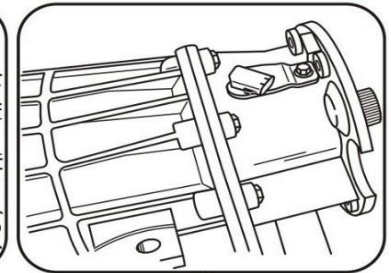
NON-PTO ISS -->



PTO ISS -->



**ALL UNITS W/ OSS  
SHOWN BELOW**



# AN ANALYSIS OF GENERAL MOTORS 4L60E SERIES TRANSMISSION GENERATIONS

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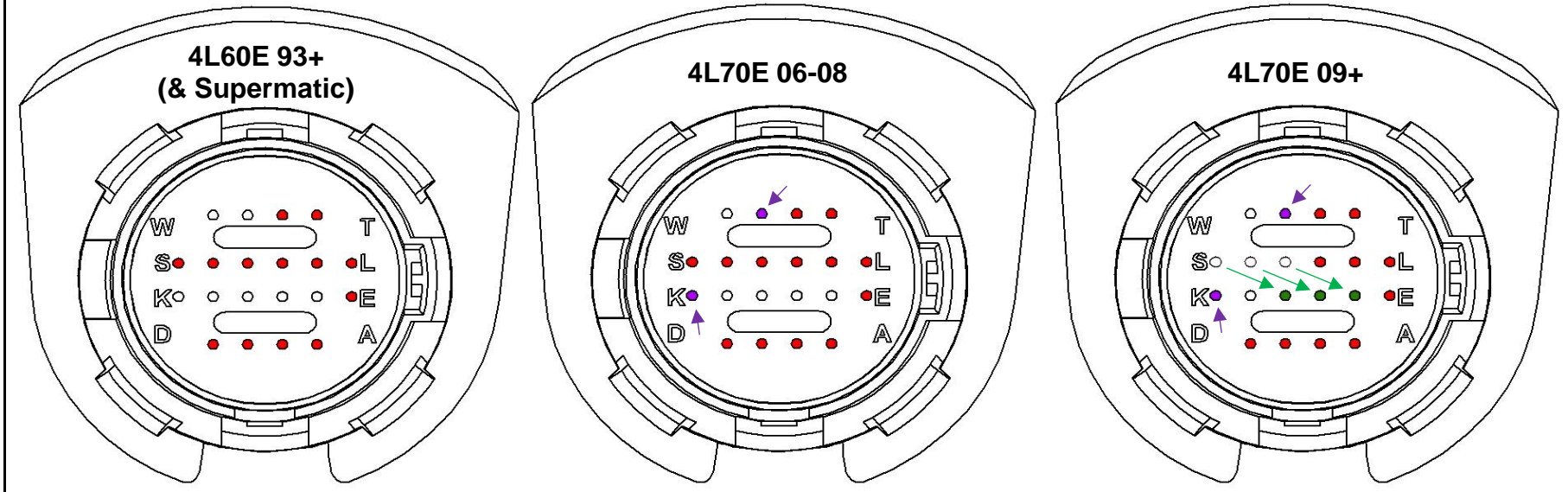
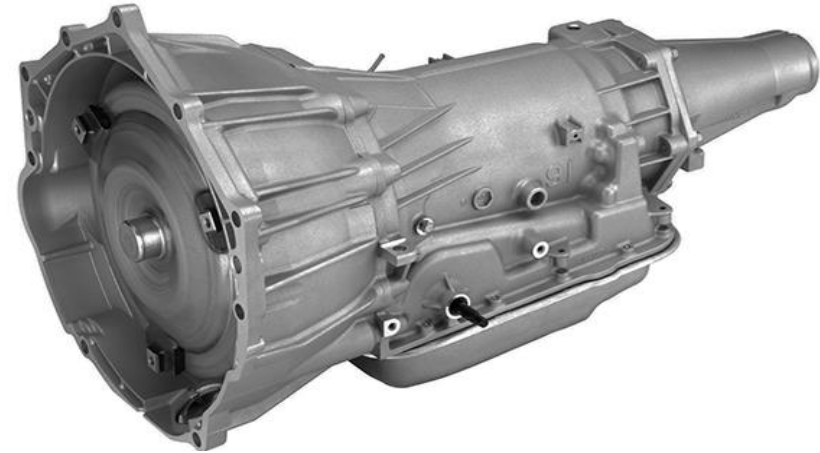


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Transmission	Trans Connector	In / Out. Pulse	KIT w/ TPS	KIT w/o TPS	NOTES
4L60E 93+	20 Cavity, 13 Pins	40	TCM5311	TCM5310	TFP only (Transmission-Fluid-Pressure internal range switch)
4L70E 06-08	20 Cavity, 15 Pins	15 / 40	TCM5321	TCM5320	TFP & ISS (Input-Shaft-Speed sensor)
4L70E 09+	20 Cavity, 15 Pins	15 / 40	TCM5326	TCM5325	IMS & ISS (Internal-Mode-Switch internal range switch)

The proper Simple Shift controller for 4L60E series (60/65/70/75) can be identified by choosing the matching pin layout shown below. These are the pins sticking out from the transmission casing, not coming from the old transmission harness. An out of warranty or rebuilt Supermatic 4L60E can also be controlled using the 13 Pin TCM5311/5310 kits. It is the responsibility of the customer to verify the pinout of the transmission (below) before purchasing the kit.





# AN ANALYSIS OF GENERAL MOTORS 4L80E SERIES TRANSMISSION GENERATIONS

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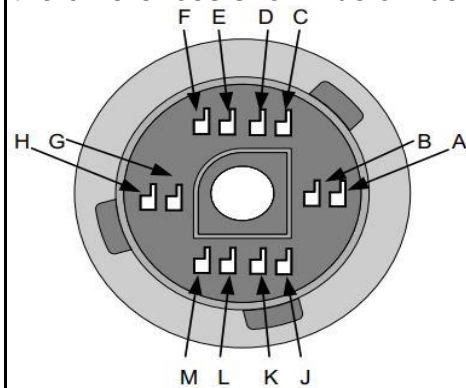


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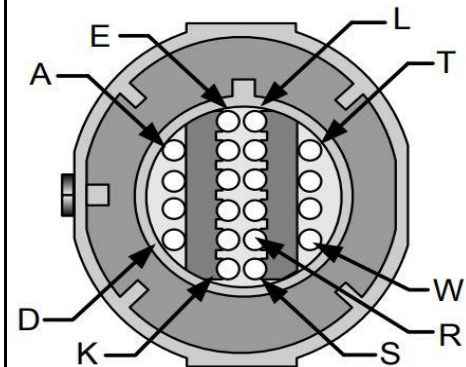
M. Petrie

Transmission	Trans Connector	IN / Out. Pulse	KIT w/ TPS	KIT w/o TPS	NOTES
4L80E 91-92	12 Cavity, 12 Pins	30 / 40	TCM5336	TCM5335	Original Military Style Connector
4L80E 93+	20 Cavity, 11 Pins	30 / 40	TCM5331	TCM5330	Common 20 Cavity GM 4L Connector

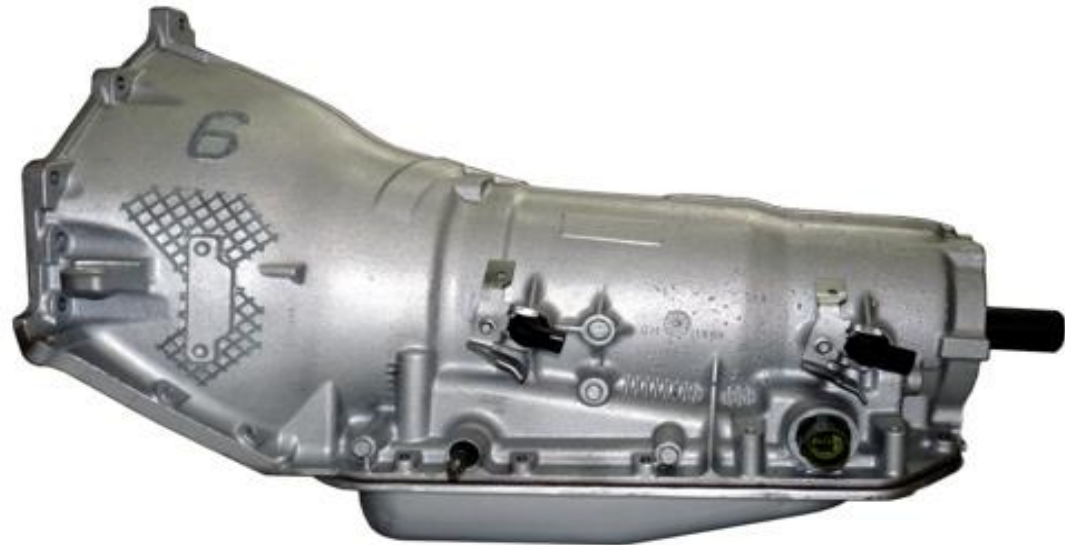
While the 4L80E had multiple component changes over the years, only the main connector type (images shown below) is relevant to choose the proper Simple Shift kit. Our kit utilizes both the ISS (Input Shaft Speed) and OSS (Output Shaft Speed) sensors, units that were originally or rebuilt as 4WD models must have their OSS plugs replaced with the typical 2WD sensor and the tone wheel on the output carrier assembly installed. Please note that unfortunately the global stock and supply of factory-new 91-92 year range connectors has been exhausted, customers must now source their own donor connector and splice it to our provided TCM4118 adapter harness provided in the 91-92 kits. It is the responsibility of the customer to verify the differences shown below before purchasing their kit.



4L80E 91-92 connector shown to the left.



4L80E 93+ connector shown to the left.



4L80E with it's 4WD configuration shown above with the ISS, OSS, and main connector seen on the drivers side.