

ZF 4HP18											
Wire Colors		Software		Orion Input / Outputs				Software		Wire Colors	
		Priority2	Priority1					Priority1	Priority2		
OT02-P1	OT01-P1			P1-12 Way Input						OT01-P1	OT02-P1
Green	Green		Oil 1k	Water Temp	7	1	Air Temp	Low Range Input		Yellow	Yellow
Blue	Blue		Shifter In	Lambda	8	2	TPS	TPS		Yellow	Blue
Red	N/C			+.5 Volt Out	9	3	MAP	4 Map Select		Red	Red
Orange	Orange			+.12 Volt Ign	10	4	GND			White	White
Blue	Blue		Speed	TDC Sensor	11	5	TDC Power			Red	Red
Blue	Green		RPM	Crank Sensor	12	6	Crank Power			N/C	Red
E31	OT03 - P2			P2-10 Way Output						OT03 - P2	E31
Black/Red	Black/Red		N/C	Coil1	6	1	Coil2	N/C		Black/Purple	Black/Purple
Black/Brown	Black/Brown		N/C	Coil3	7	2	Coil4	N/C		Black/Orange	Black/Orange
Black/Yellow	Black/Yellow		Retard	N2	8	3	N1	Starter Lockout		Black/White	Black/White
Green	Green		Speed Out	N4	9	4	N3	Relay Out		Blue	Blue/Black
Blue/White	Blue/White	Lockup Led	GP2	N6	10	5	N5	GP1	Reverse Light	Blue/Orange	Blue/Orange
	E36			P3-8 Way Output						E36	
	Red/White		MV1 Shift 1	P1	5	1	P2	MV2 Shift2		Red/Yellow	
	Red/Orange		MV3 Shift3	P3	6	2	P4	EDS1 Line Pres		Red/Green	
	Red			+.12 Volt In	7	3	+.12 Volt In			Red	
	White		N/C	Coil5	8	4	Coil6	N/C		Blue	
				P4-4 Way Serial							
			N/C	SDA	3	1	SCL	N/C			
			N/C	+.5 Volt Out	4	2	GND	N/C			
OT20	USB			6 Way USB						USB	OT20
Green	N/C	Up Switch	Overdrive	Tuning Pot	4	1	Dual Map Sw	Second Start	Down Switch	N/C	Yellow
Yellow	Yellow			Receive	5	2	Transmit			Green	Green
Red	Red			+.5 Volt Out	6	3	GND			Blue	Blue

### Orion TCU Combo 25 ZF4HP18 Ver 3.3C

Firmware Class - Advance Intermediate Standard

Polarity in Transmission is Common Negative

2 GP outputs available. Depending on features used.

When overdrive or second start is selected then the tiptronic buttons will be disabled and there functions changed to these functions.

Low range, Overdrive and Second Start could be used with different map selections without connections to the tranny or buttons.

Shifter	Gears Allowed	Engine Break
P	1	
R	1	
N	1	
D	1,2,3,4	
3	1,2,3	
2	1,2	
1	1	