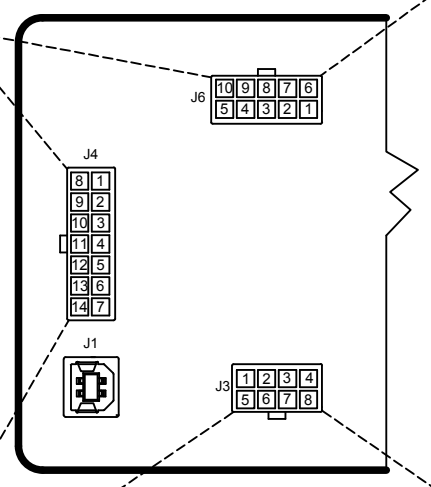
DWG1478 - TG350 Mag Pickup and J1939 Harness			
Terminal	Color	Wire Text	Description
J6-1	Not Populated		
J6-2	Not Populated		
J6-3	Not Populated		
J6-4	White	CAN HIGH	CAN/J1939 High
J6-5	White	CAN LOW	CAN/J1939 Low
J6-6	White	CAN GND	CAN/J1939 Shield
J6-7	Green	SPEED INPUT	Speed Input
J6-8	Green	SPEED REF	Speed Reference
J6-9	Not Populated		
J6-10	Not Populated		

DWG1522 - TG410 Mag Pickup and Comm. Harness			
Terminal	Color	Wire Text	Description
J6-1	Blue	RS485 A	Modbus A (+)
J6-2	Blue	RS485 B	Modbus B (-)
J6-3	Not Populated		
J6-4	Black	CAN HIGH	CAN/J1939 High
J6-5	Black	CAN LOW	CAN/J1939 Low
J6-6	Black	CAN GND	CAN/J1939 Shield
J6-7	Green	SPEED INPUT	Speed Input
J6-8	Green	SPEED REF	Speed Reference
J6-9	Not Populated		
J6-10	Blue	RS485 GND	RS485 Common

DWG1475 / DWG1476 - Main IO Starter Harness

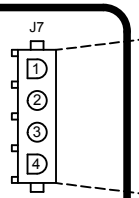
DWG1475 - With RelayPak			
Terminal	Color	Wire Text	Description
J4-1	Red	BATT POS	Battery Positive
J4-2	Not Populated		
J4-3	Black	BATT NEG	Battery Negative
J4-4	Black	BATT NEG	RelayPak Coil -
J4-5	Tan	SW IN A	Switched Input A
J4-6	Tan	SW IN B	Switched Input B
J4-7	Tan	SW IN C	Switched Input C
J4-8	Purple	SW OUT A Fuel	RelayPak relay A
J4-9	Purple	SW OUT C Crank	RelayPak relay C
J4-10	Purple	SW OUT B	RelayPak relay B
J4-11	Brown	SEN GND	Sensor Ground
J4-12	Brown	SEN IN A	Sensor Input A
J4-13	Brown	SEN IN B	Sensor Input B
J4-14	Brown	SEN IN C	Sensor Input C

DWG1476 - Without RelayPak			
Terminal	Color	Wire Text	Description
J4-1	Red	BATT POS	Battery Positive
J4-2	Not Populated		
J4-3	Black	BATT NEG	Battery Negative
J4-4	Not Populated		
J4-5	Tan	SW IN A	Switched Input A
J4-6	Tan	SW IN B	Switched Input B
J4-7	Tan	SW IN C	Switched Input C
J4-8	Purple	SW OUT A	Switched Output A
J4-9	Purple	SW OUT C	Switched Output C
J4-10	Purple	SW OUT B	Switched Output B
J4-11	Brown	SEN GND	Sensor Ground
J4-12	Brown	SEN IN A	Sensor Input A
J4-13	Brown	SEN IN B	Sensor Input B
J4-14	Brown	SEN IN C	Sensor Input C

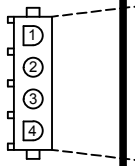


DWG1477 - Advanced IO Harness			
Terminal	Color	Wire Text	Description
J3-1	Tan	SW IN D	Switched Input D
J3-2	Tan	SW IN E	Switched Input E
J3-3	Purple	SW OUT D	Switched Output D
J3-4	Purple	SW OUT E	Switched Output E
J3-5	Purple	SW OUT F	Switched Output F
J3-6	Not Populated		
J3-7	Brown	SEN GND	Sensor Ground
J3-8	Brown	SEN IN D	Sensor Input D

TG410

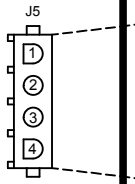


DWG1479 - AC Voltage Sensing Harness			
Terminal	Color	Wire Text	Description
J7-1	Orange	PHASE A	Generator Voltage
J7-2	Orange	PHASE B	
J7-3	Orange	PHASE C	
J7-4	Orange	NEUTRAL	



DWG1518 - AC Current Sensing Harness			
Terminal	Color	Wire Text	Description
J5-1	Red	PHASE A	Gen. Current (A)
J5-2	Red	PHASE B	Gen. Current (B)
J5-3	Red	PHASE C	Gen. Current (C)
J5-4	Red	CT COMMON	CT Common

TG350



DWG1479 - AC Voltage Sensing Harness			
Terminal	Color	Wire Text	Description
J5-1	Orange	PHASE A	Generator Voltage
J5-2	Orange	PHASE B	
J5-3	Orange	PHASE C	
J5-4	Orange	NEUTRAL	

Mating Plugs

Terminal	Manufacturer	Housing P/N	Crimps P/N
J3	Molex	39-01-2080	39-00-0039
J4	Molex	39-01-2140	39-00-0039
J5/J7 - AC Voltage	Tyco	1-480702-0	350536-1
J5 - AC Current	Tyco	1-480702-0	350218-1
J6	Molex	39-01-2100	39-00-0039
RelayPak J1	Molex	39-01-2060	39-00-0039

Notes:
(1) Harnesses are 5 feet in length except for the three DWG1522 RS485 wires which are 6 inches in length.

Terminal J3-3 is left unpopulated from the factory and can be populated using one of the two indivividual wires that came with the harness (a short one with two crimps on both sides and a long one with a crimp on one side and a pigtail on the other). If using relay D on the RelayPak insert one end of the short wire into J3-3 and the other end into RelayPak J1-1. If you are not using the relay pack insert the longer wire into J3-3.

Tough Series Harness Guide
DWG-1547R2.0