

Wire Connector Quantity Wire Size and Type								
Connector Type	18 AWG	14 AWG	10 AWG	8 AWG	6 AWG	4 AWG	1 AWG	TOTAL
PIN	1							1
RJ6	3							3
terminal block		3						
butt		5	6					11
step down butt			2	3				5
1/4" push on		8	1					9
#8 Ring	1	6	5					12
#10 Ring		3		5		1		9
1/4" Ring		2		5	3	2	5	17
5/16" Ring	1	3	2	2	1	3	15	27
3/8" Ring				1		2	6	9

Wire Resistance		
Gauge	Ohms / 1000 feet	Ohms / foot
0	0.0779	0.0000779
0	0.0983	0.0000983
1	0.1239	0.0001239
4	0.2485	0.0002485
6	0.3951	0.0003951
8	0.6282	0.0006282
10	0.9989	0.0009989
12	1.588	0.001588
14	2.525	0.002525
16	4.016	0.004016

AMPS TABLE	
MAX	TYP
1	1
2	2
3	3
10	4.8
20	15
25	15.5
50	30
50	40
105	75

Total Circuit (positive plus negative conductors plus connections)	TOTAL Voltage Drop (Volts) Wire and Connections	Voltage Drop (%) Wire and Connections
Voltage Drop, alternator to house battery bank, round trip - 1 AWG	0.563	4.69%
Voltage Drop, reserve battery to starter, round trip - 1 AWG	0.510	4.25%
Voltage Drop, house battery bank to starter, round trip - 1 AWG	0.600	5.00%
Voltage Drop, house battery bank to reserve battery via Echo Charge - 10 AWG	0.255	2.12%

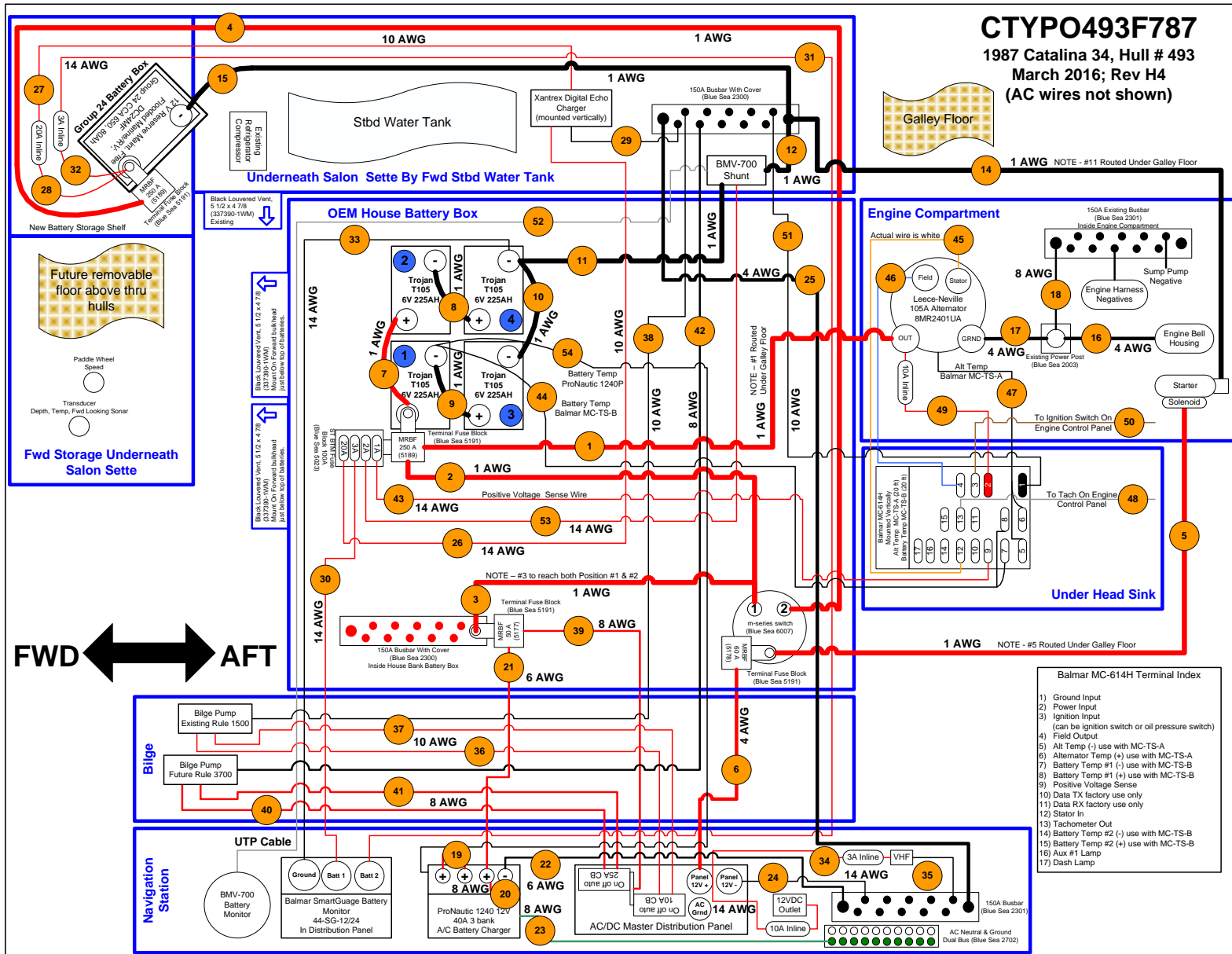
Total Circuit (positive plus negative conductors)	Resistance Per Connection	TYP Amperage	Total Circuit Connections	Voltage Drop (Connections Only)	Voltage Drop (%) (Connections Only)	Wire Resistance per foot	TYP Amperage	Total Circuit Length In Feet	Voltage Drop (Wire Only)	Voltage Drop (%) (Wire Only)
Alternator to house battery bank, round trip - 1 AWG	0.00025	75	16	0.300	2.50%	0.0001239	75	28.34	0.263	2.19%
Reserve battery to starter, round trip - 1 AWG	0.00025	75	8	0.150	1.25%	0.0001239	75	38.75	0.360	3.00%
House battery bank to starter, round trip - 1 AWG	0.00025	75	18	0.338	2.81%	0.0001239	75	28.25	0.263	2.19%
House battery bank to reserve battery via Echo Charge - 10 AWG	0.00025	15	8	0.030	0.25%	0.0009989	15	15.00	0.225	1.87%

Wire Resistance		
Gauge	Ohms / 1000 feet	Ohms / foot
00	0.0779	0.000779
0	0.0983	0.000983
1	0.1239	0.001239
4	0.2485	0.002485
6	0.3951	0.003951
8	0.6282	0.006282
10	0.9989	0.009989
12	1.588	0.01588
14	2.525	0.02525
16	4.016	0.04016

Connection Point Resistance
Ohms / Connection
0.00025

CTYPO493F787

1987 Catalina 34, Hull # 493
 March 2016; Rev H4
 (AC wires not shown)



- Balmar MC-614H Terminal Index**
- 1) Ground Input
 - 2) Power Input
 - 3) Ignition Input (can be ignition switch or oil pressure switch)
 - 4) Field Output
 - 5) Alt Temp (-) use with MC-TS-A
 - 6) Alternator Temp (+) use with MC-TS-A
 - 7) Battery Temp #1 (-) use with MC-TS-B
 - 8) Battery Temp #1 (+) use with MC-TS-B
 - 9) Positive Voltage Sense
 - 10) Data TX factory use only
 - 11) Data RX factory use only
 - 12) Tachometer In
 - 13) Tachometer Out
 - 14) Battery Temp #2 (-) use with MC-TS-B
 - 15) Battery Temp #2 (+) use with MC-TS-B
 - 16) Aux #1 Lamp
 - 17) Dash Lamp