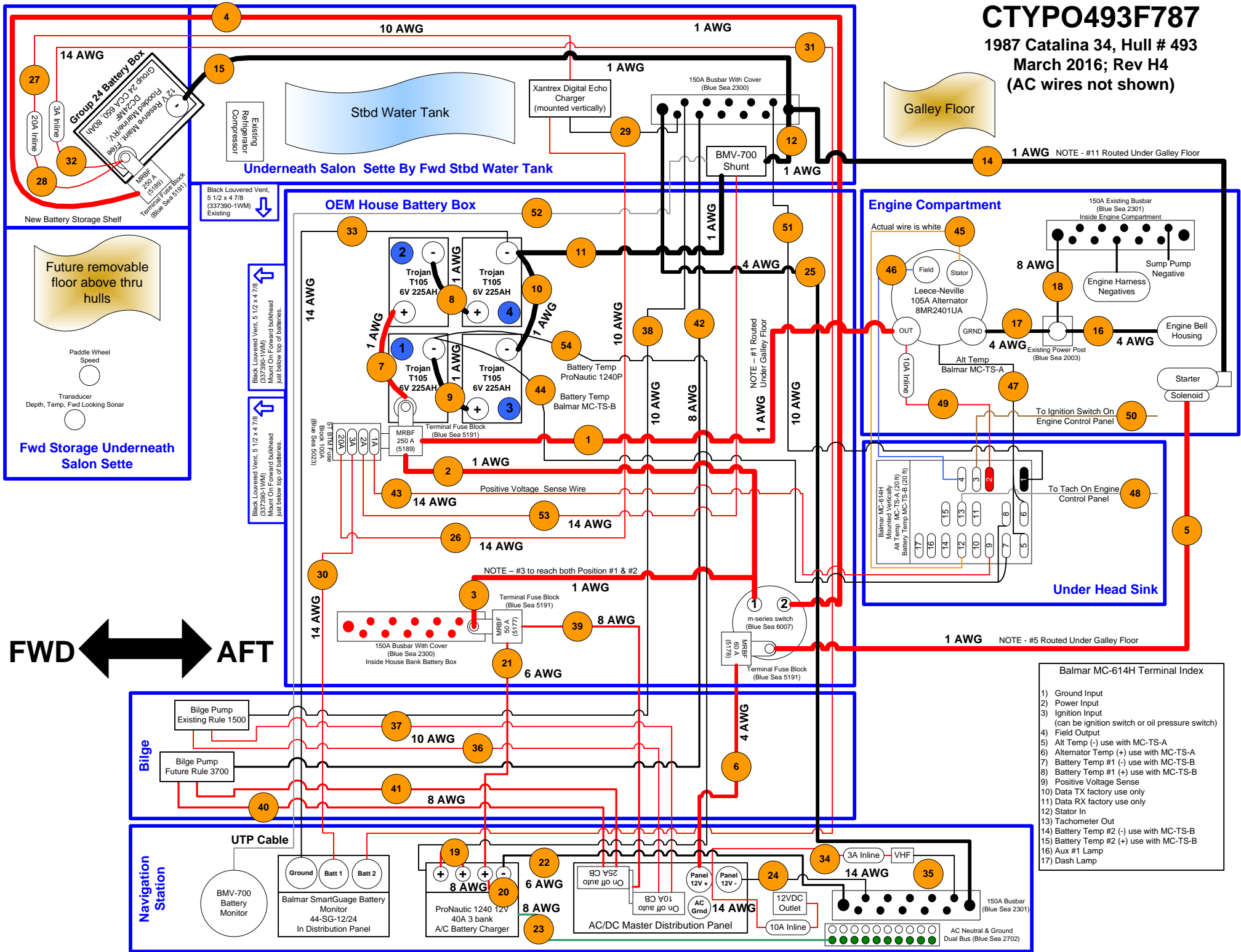


CTYPO493F787

1987 Catalina 34, Hull # 493

March 2016; Rev H4

(AC wires not shown)



Galley Floor

Stbd Water Tank

OEM House Battery Box

Engine Compartment

Fwd Storage Underneath Salon Sette

Under Head Sink

FWD ← → AFT

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) Stator 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

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	0.642	5.35%
Voltage Drop, reserve battery to starter, round trip - 1 AWG	0.582	4.85%
Voltage Drop, house battery bank to starter, round trip - 1 AWG	0.672	5.60%
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	36.84	0.342	2.85%
Reserve battery to starter, round trip - 1 AWG	0.00025	75	8	0.150	1.25%	0.0001239	75	46.50	0.432	3.60%
House battery bank to starter, round trip - 1 AWG	0.00025	75	18	0.338	2.81%	0.0001239	75	36.00	0.335	2.79%
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	0.0000779
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

Connection Point Resistance
Ohms / Connection
0.00025