TACHOMETER TEMINATION BOARD

INSTALL 6 #10X0.250 BRASS MACHINE SCREWS, THREADS UP
  SOLDER HEADS TO BOTTOM SIDE OF CIRCUIT BOARD
  McMASTER SCREW: 92446A825 NUT: 92092A025

INSTALL SURFACE MOUNT COMPONENTS

INSTALL THRU-HOLE COMPONENTS (CONNECTORS)

DETERMINE JP1 SETTING AND INSTALL JUMPER WIRE
  TACH COMES DIRECT OR THROUGH LIMITER

SELECT DESIRED ANALOG CHANNEL
  NO ACTION REQUIRED FOR WATER TEMP
  OTHER CHANNELS, CUT JPH2O TRACE
  AND INSTALL JPOIL OR JPTRIM

INSTALL JPCAL IS BENCH CALIBRATION IS
  TO BE PERFORMED USING THIS BOARD

INSTALL 6 WIRES FROM MOTOR HARNESS USING #10 BRASS NYLOCK NUTS

ASSEMBLE TACHOMETER HARNESS FROM ETHERENT PATCH CORD (STRANDED WIRE)

MISC PARTS

MCMASTER 10-32 BRASS SPACER 0.250 OD

92474A112	3/16"
92474A113	1/4"
92474A114	5/16"
92474A115	3/8"

-62 REVISION

J2 TO 6-PIN RJ11
REDUCED HEIGHT CONNECTOR (FITS IN BOX)

Drawn	W. ROBISON	Date	8/2019
Designed	W. ROBISON	Date	8/2019

The University of Iowa
Department of Physics & Astronomy
Iowa City, IA, USA

TITLE: TACH TERMINATION

A102_73189_62

CAGE	Series		Number	Rev
2D354	102 iCARC FOX HUNT	B	73189	62

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JH20
0009503061

JC21
0008580110

FROM
CONTROL BOX
MOLEX HSG

J1
0026615060

1 +12V
2 BR/WH
3 BLU
4 GRY
5 TAN
6 BLK

V12.0

TACH

TRIM_GAUGE

OIL_PRES

WATER_TEMP

LIMITER TO DRIVE DVM/COUNTER

R1
1.24K

7V DROP
124.
1.24K

1V DROP
20.0
200.

B_TACH

C1
1000PF
RF FILTER

DZ1
N/A SMBJ5338B
5.1V
DO214AA

50mA
(124.)

DZ2
BZT52HC5V1WF-7
5.1V
SOD123FL

5mA
(1.24K)

PIN JACKS TO
DVM/COUNTER

R2
1K

L_TACH

TP1
6055

TP2
6056

TO
TACHOMETER
1734723

J2

JC2A
AT-S-26-6/6
CABLE

1 V12.0
2
3 C_ANALOG
4 C_TACH
5
6
P1
P2

PBC03DACN

1 TRIM_GAUGE
3 OIL_PRES
5 WATER_TEMP

J5

VIO PAD
BR/WH PAD
BLU PAD
GRY PAD
TAN PAD
BLK PAD

FROM CONTROL BOX
HARNESS RING TERMINALS

JP1
N/A

3 RAW
2
1 LIM

JPCAL
N/A

J3
RASM722PX
(2.0x5.5) PJ-036AH-SMT

AC_IN

D1
N/A U2D-E3/52T

CALIBRATION INPUT
12V AC 500mA
2.1 X 5.5

CALIBRATION POWER FILTER

C2
.1UF

C4
.1UF

C3
470UF/25V

C5
10UF/25V

PAD TP3
PAD TP4

1000UF/25V
NEH1000M25EE
2368-NEH1000M25EE-ND
0.152" Dia x 0.866" L (13.00mm x 22.00mm)

J4
WAU12-500
CONNECTOR
REQUIRED
FOR THIS
ASSEMBLY

CALIBRATION
AC WALL WART
12V/500mA

PCB1
102-73189-51

ENCLOSURE
ENCL1
1599BBAT

TOP_FULL		
DRAWING FRAME SHOWN ON CIRCUIT BOARD		
BOARD ASSY		
DRAWING FRAME SHOWN ON CIRCUIT BOARD		
BOT_COMPACT		
DRAWING FRAME SHOWN ON CIRCUIT BOARD		
BOARD-ID		
DRAWING FRAME SHOWN ON CIRCUIT BOARD		
Drawn	W. ROBISON	Date 8/2019
Designed	W. ROBISON	Date 8/2019

MARK ZERO POINT FOR
PICK & PLACE FILE ON
PRINTED CIRCUIT BOARD

PWA RELEASED AS 2D354 102-73189-62

PWB RELEASED AS 2D354 102-73189-62

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