EASTERN LABS

Instructions
Model RM-1205
04/25/2007

Operation

Junction Box Assembly

Different Types of Switch Installations

Counter Mounting Suggestions

Operation

Total Counter

Mix Counter

Thru counter
mounting holes X2

Status Display

Input status
LEDs

On/Off & **Sel**ect
button

Eastern Labs
REV - MASTER

TOTAL 148   116 MIX

RPM 17.8

SELECT

Model RM-1205

INPUT 1 2 RESET

SEL PWR

OFF (HOLD)

20 - 120v 60hz

Actual size

Reset Plug

Power LED

**Push PWR/SEL
button to turn on**

**LOCKOUT
RESET**

Normal power up display.
(Plug in reset cord)

**REMOVE
RESET**

Displayed while resetting.
(Unplug reset cord)

Normal Operating Mode

000   000
RPM 0.00

RPM display will momentarily flash
one of the drum status displays.

By pushing the PWR/SEL button the RPM
display cycles thru these displays.

Note: In operating mode Total and Mix counters are
always displayed. Only the lower half changes

**ShutDown
In 3**

PWR/SEL button held more than
1.5s, shut down count will start.
When zero is reached the unit
will power off. If released before
zero, the unit returns to where it
left off in operating mode.

Agitate   Mixing

Charging   Discharg

Display's backlight
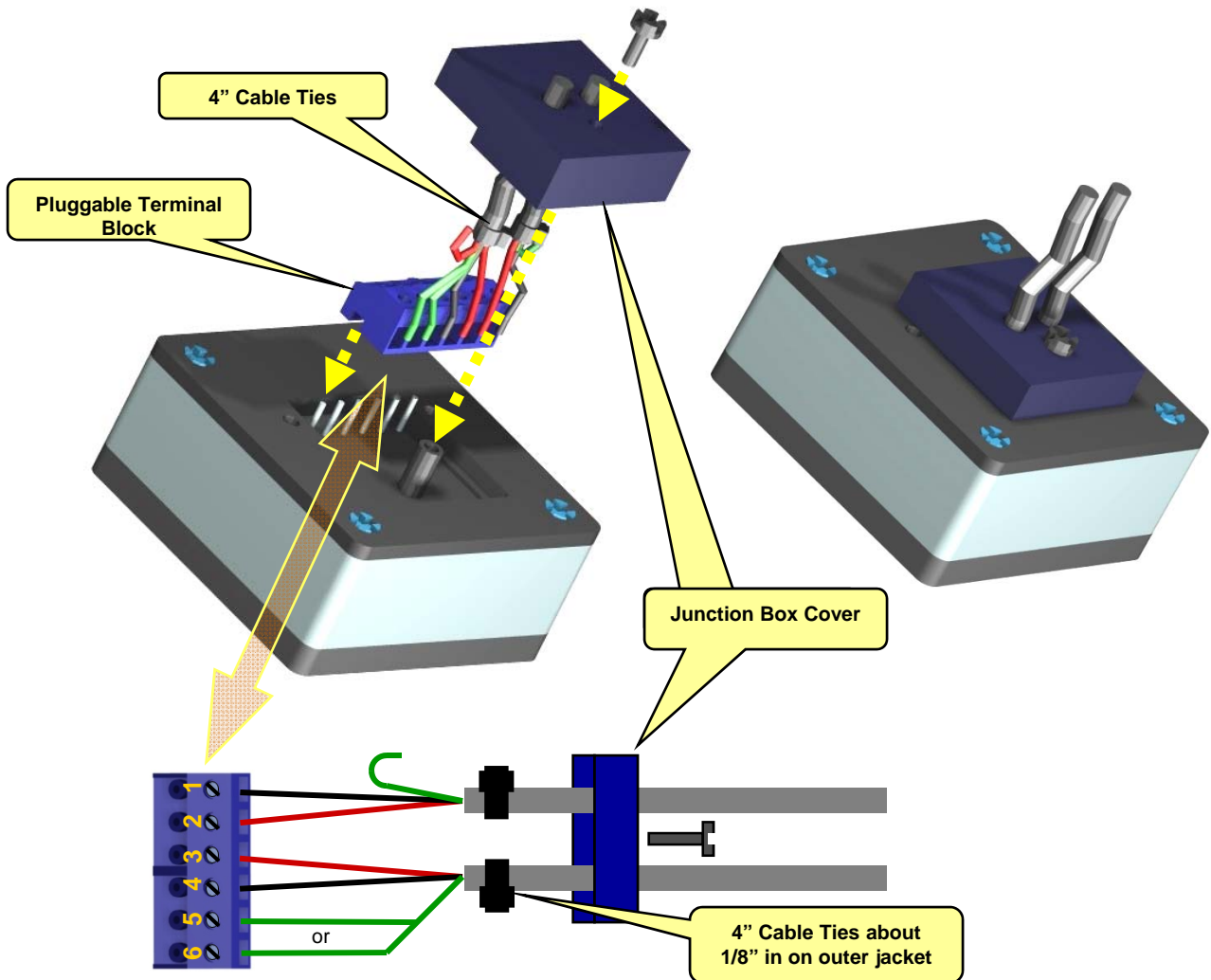flashes on & off

TIM 0:26

Time since reset
H:MM

PS 6-18

Mixing range Preset
Lo cutoff – Hi cutoff

TPR 3.41

Time per Revolution
Seconds

LSA 0.13

Limit Switch actuation time
Seconds

Back to RPM

Junction Box Assembly

4" Cable Ties

Pluggable Terminal Block

Junction Box Cover

4" Cable Ties about 1/8" in on outer jacket

or

Terminal Block Pin Assignments

Power In

1.....-12v power in (ground)

2….+12v power in (hot after ignition sw.)

To Sensor Switch

3…..+12v power out to switch (fused)

4…..-12v power out to switch (ground)

5……Input 2   for double pulse inputs (Eastern's Prox. or Standard Prox. with fork arm)

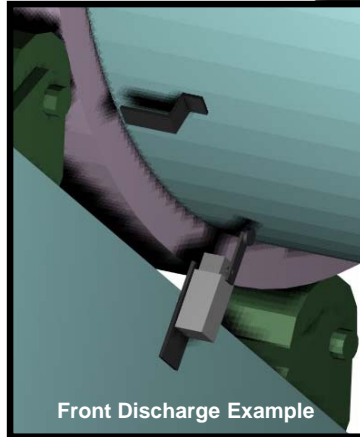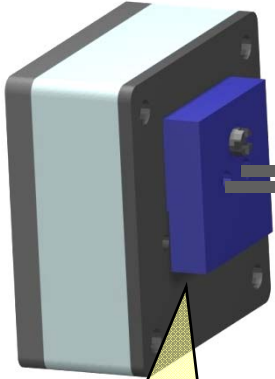6……Input 1   for single pulse inputs (Limit Switch   or   Standard Prox. with bar arm)

Prewired for Limit Switch from factory

Note: For those with dual sensors
    Use input 1 & 2 where 1 is on
    before 2 in mixing direction

10ft Power Cable

+

−

12 to 24v connected after ignition switch

GRN no connection (NC)

Front Discharge Example

Use strain-relief connector

MIX

Set head for correct rotation (CCW shown)

20ft Cable to switch

Prewired for Limit Switch from factory

Limit Switch

NC

10ft Power Cable

BLK

GRN
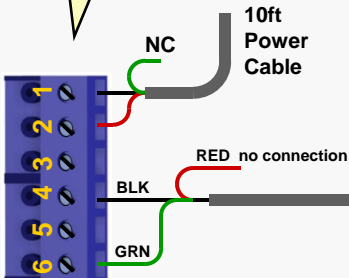
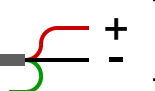RED no connection

20ft Cable
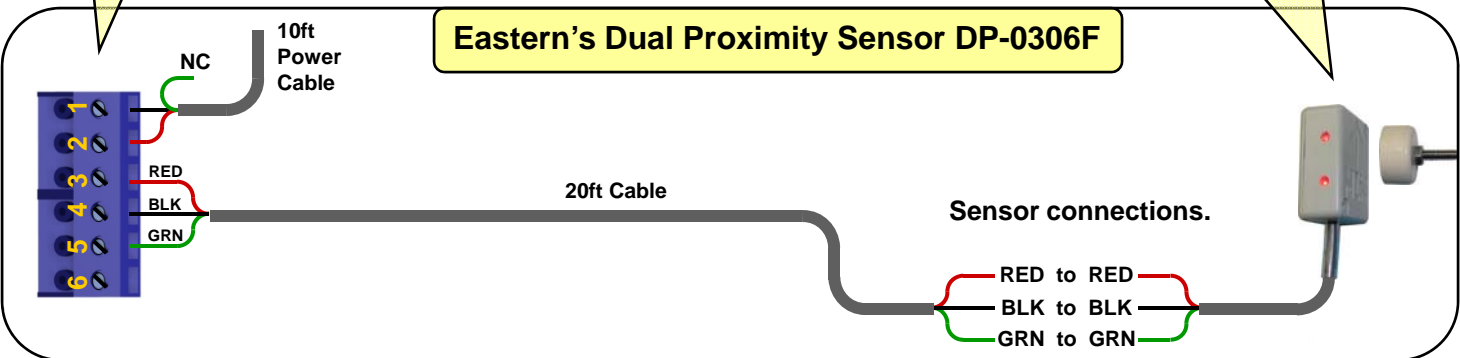
RED no connection

BLK & GRN to

Normally open contacts
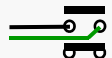
Pluggable terminal block (inside junction box)

10ft Power Cable

+
−

} 12 to 24v connected after ignition switch

GRN no connection (NC)

Front Discharge Example

¾" Gap

MIX

**20ft Cable
to Sensor**

Eastern's Dual Proximity Sensor DP-0306F

NC

**10ft
Power
Cable**

1
2
3
4
5
6

RED
BLK
GRN

20ft Cable

Sensor connections.

RED to RED
BLK to BLK
GRN to GRN

**Pluggable terminal block (inside
junction box)**

10ft Power Cable $+$ $-$ } **12 to 24v connected after ignition switch**

GRN no connection (NC)

Front Discharge Example

* 3/8" Gap

MIX
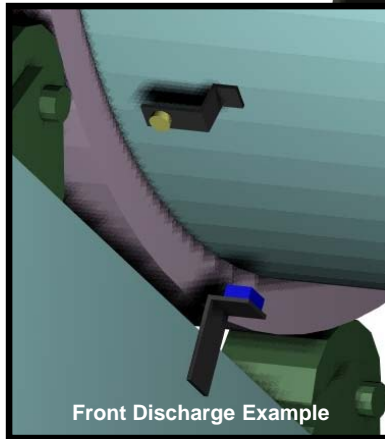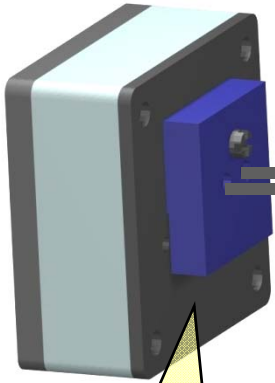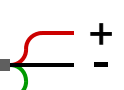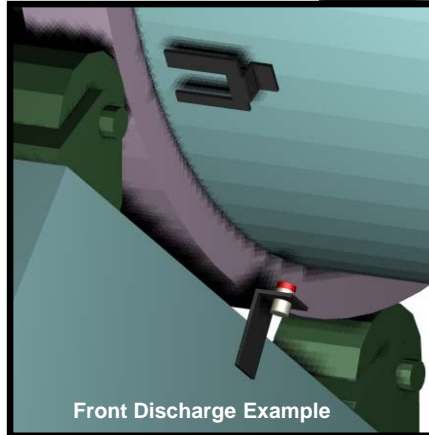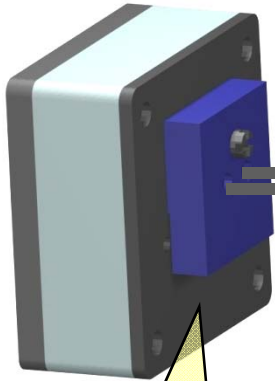
Fork Arm

**20ft Cable
to Sensor**

* Gap distance is dependant on Prox's rated sensing distance. For practical purposes use 50-75% of that

NC

**10ft
Power
Cable**

RED
BLK
GRN

Standard Proximity Sensor with Fork Arm

20ft Cable

RED to BRN
BLK to BLU
GRN to BLK

With Fork Arm

Sensor connections.

Pluggable terminal block (inside junction box)

10ft Power Cable

+

–

12 to 24v connected after ignition switch

GRN no connection (NC)
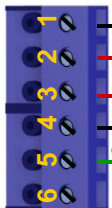
Front Discharge Example

* 3/8" Gap

MIX

Bar Arm

**20ft Cable
to Sensor**

* Gap distance is dependant on Prox's rated sensing distance. For practical purposes use 50-75% of that

NC

**10ft
Power
Cable**

1
2
3
4
5
6

RED

BLK

GRN

With Bar Arm

**Standard Proximity Sensor
with Bar Arm**

20ft Cable

RED to BRN
BLK to BLU
GRN to BLK

Sensor connections.
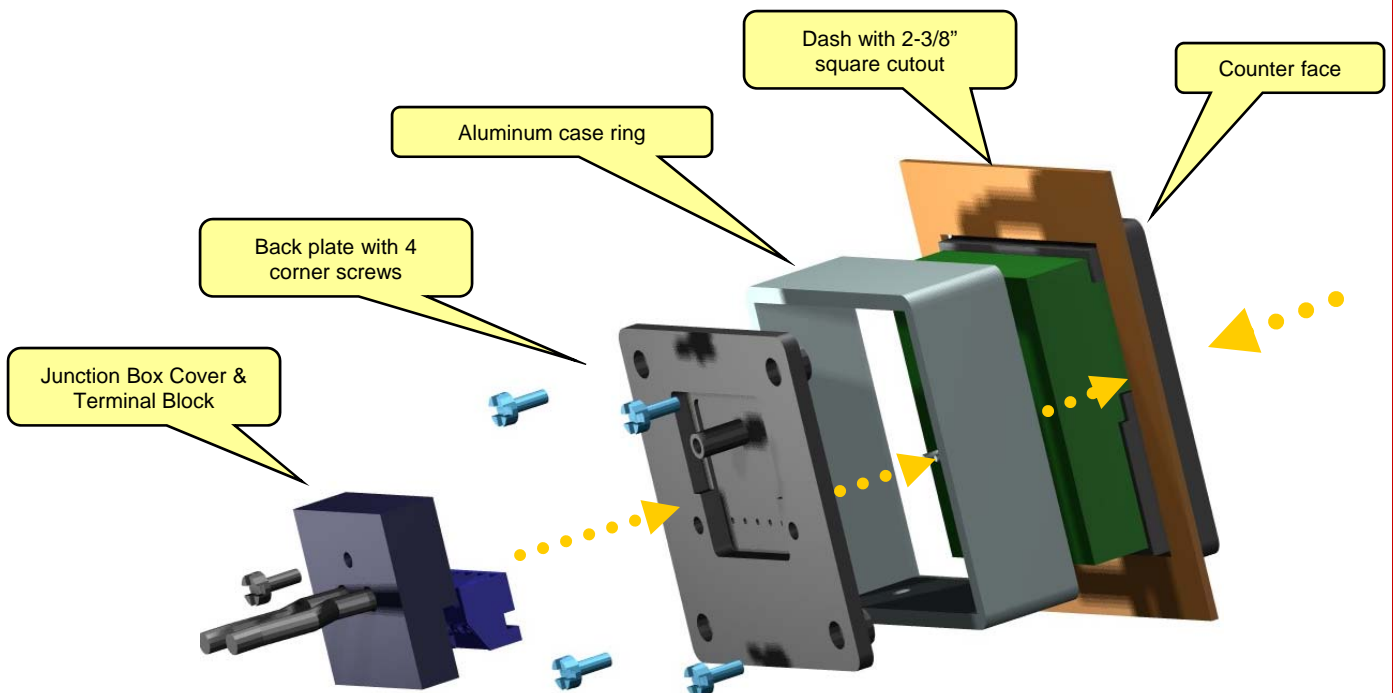
**Pluggable terminal block (inside
junction box)**
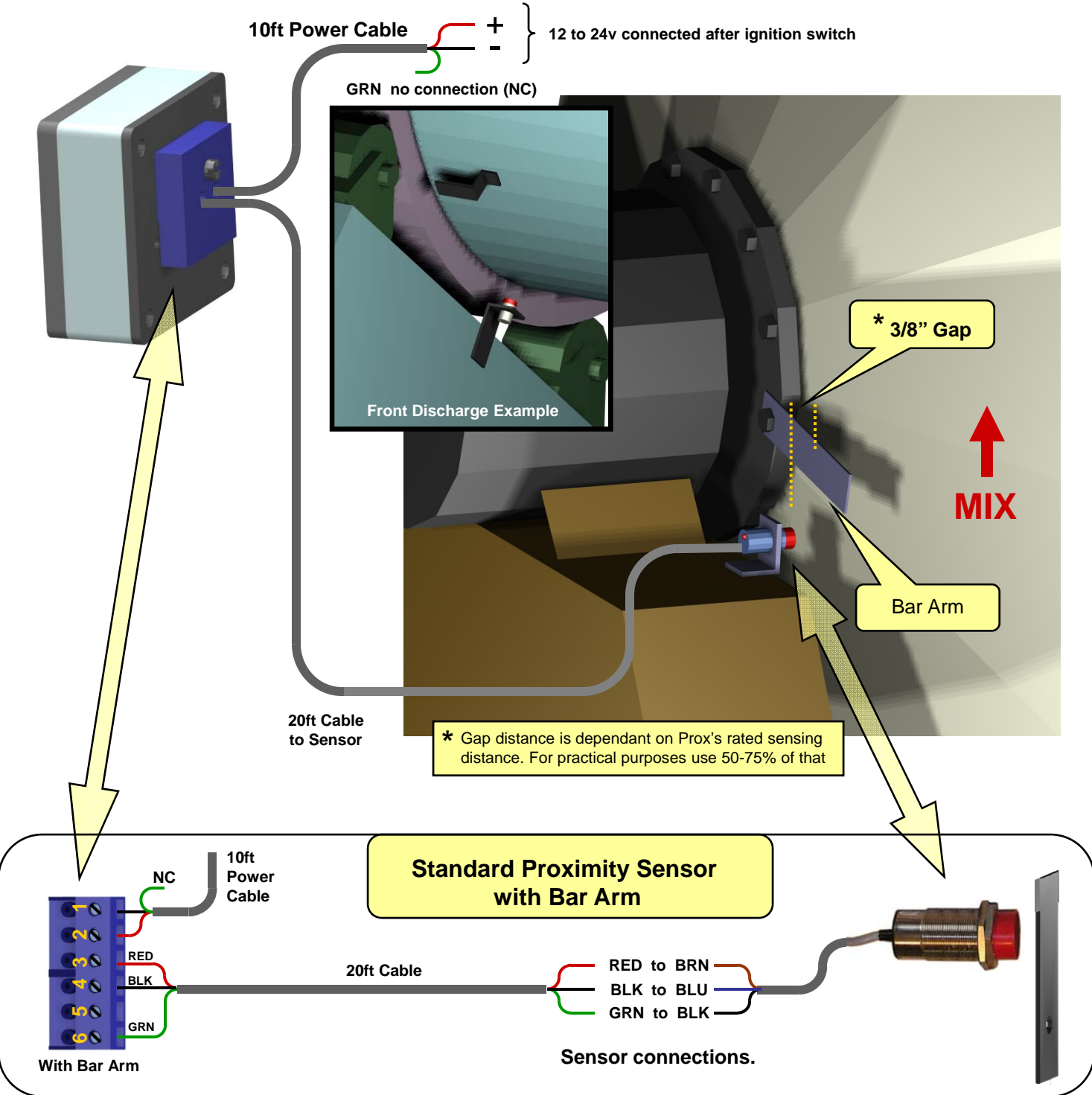
**Note: This is the only setup that is *not* NYSDOT accepted.
This is for use in areas where counting in both directions is allowed.**

Instrument Panel Mounting
Flush Mount

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TOTAL 148 116 MIX
RPM 17.8
SELECT

Model RM-1205

INPUT 1 2
RESET
SEL PWR
OFF (HOLD)
20 - 120v 60hz

Cut a 2-3/8" square hole in dash. Take counter apart
and reassemble with the face in front of the dash and
the rest (aluminum ring, back plate, terminal block, &
junction box cover) from behind the dash.

Dash with 2-3/8"
square cutout

Counter face

Aluminum case ring

Back plate with 4
corner screws

Junction Box Cover &
Terminal Block

Instrument Panel Mounting
2" Gauge Hole

Make the connections and run the cables thru desired 2" gauge hole

2 #6-32 x 2-1/2" mounting screws
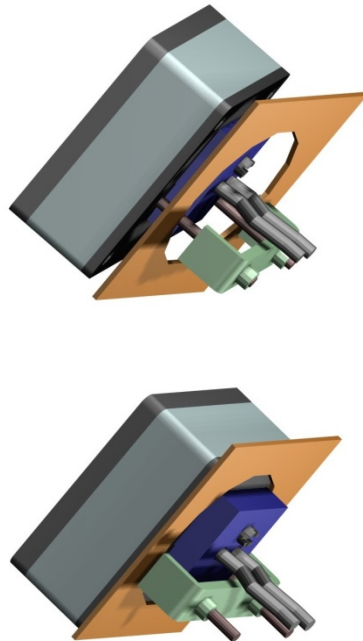
Dash board with 2" gauge hole
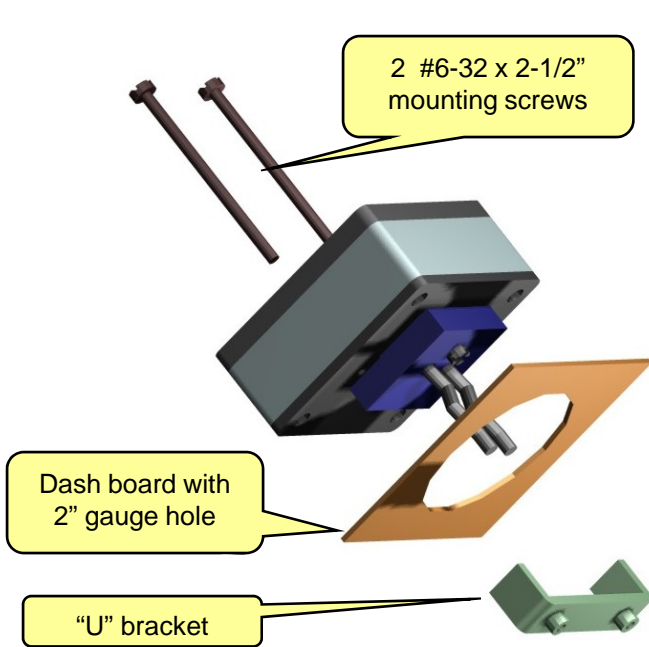
"U" bracket

NEXT

Put counter head in dash and screw the 2 #6 screws into "U" bracket

OR

Put the 2 #6 screws thru counter head and just start them into "U" bracket. Tilt and shift the head & "U" bracket into the gauge hole.
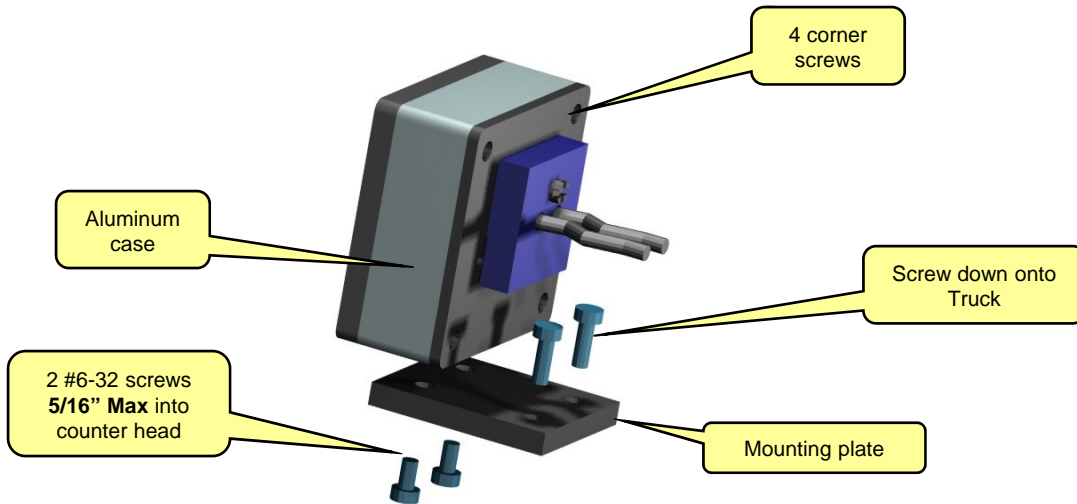
NEXT

Center the head in the hole and tighten down the screws

To remove the head in the future just remove 1 #6 screw completely and loosen the other. This will allow you room to tilt and shift the head & "U" bracket out.
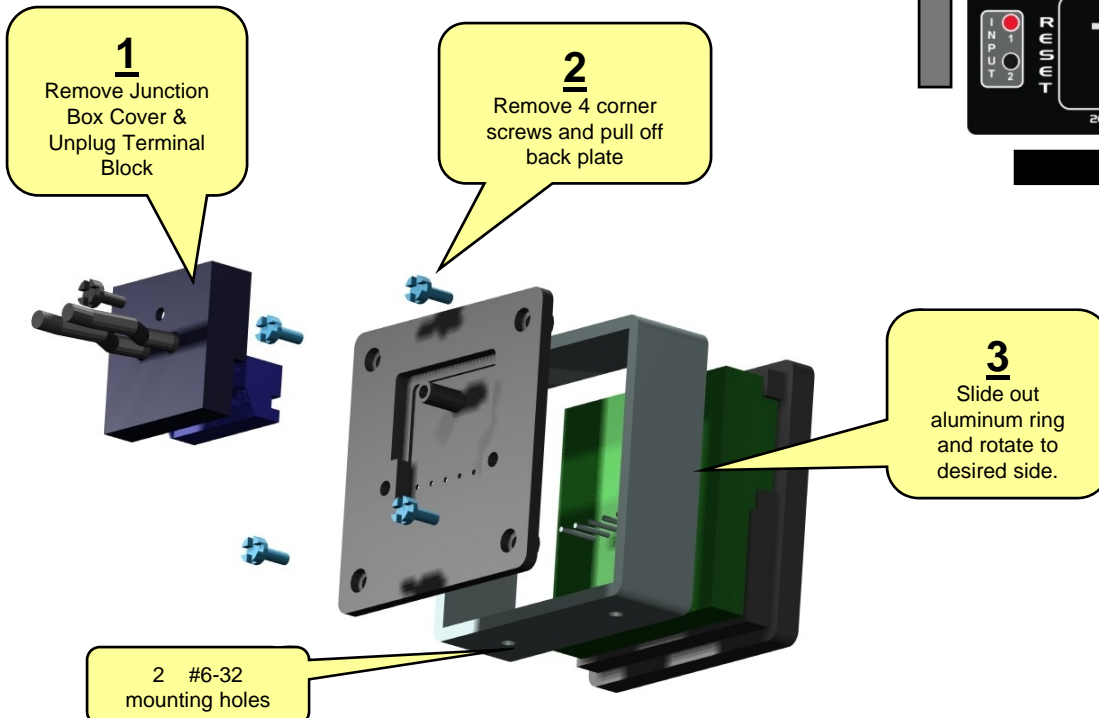
Side Mounting

4 corner screws

Aluminum case

Screw down onto Truck

2 #6-32 screws **5/16" Max** into counter head

Mounting plate

Caution: Only use #6-32 x **5/16**" screws that go into counter head. Using longer screws can cause damage internally.
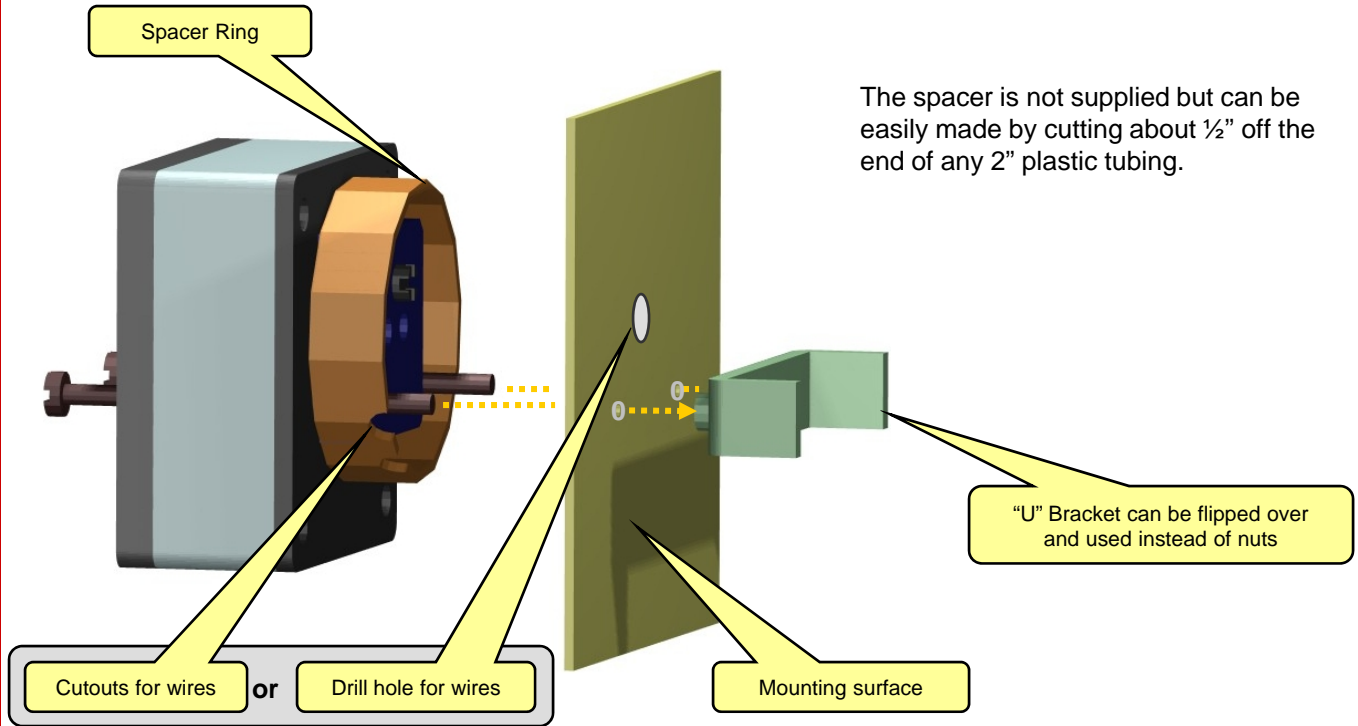
Changing the mounting side

Mounting plate can be put on any of the 4 sides. To change this remove jack box and unplug terminal block (refer to: Junction Box Assembly page). Remove 4 corner screws and pull off back plate. Slide out aluminum ring and rotate so that the mounting holes are on the desired side. Reverse to reassemble.

Eastern Labs
REV - MASTER

TOTAL 148   116 MIX
RPM 17.8

SELECT

Model RM-1205

INPUT 1 2   R E S E T   SEL PWR   OFF (HOLD)

20 - 120v 60hz

1 Remove Junction Box Cover & Unplug Terminal Block

2 Remove 4 corner screws and pull off back plate

3 Slide out aluminum ring and rotate to desired side.

2 #6-32 mounting holes

Additional Mounting Ideas

Surface Mounting

Spacer Ring

The spacer is not supplied but can be easily made by cutting about ½" off the end of any 2" plastic tubing.

"U" Bracket can be flipped over and used instead of nuts

Cutouts for wires **or** Drill hole for wires

Mounting surface

Gauge Bracket Mounting

Head can rotate to any angle on bracket

This bracket is not supplied but can be found at most automotive stores

Standard 2" Gauge mounting bracket