

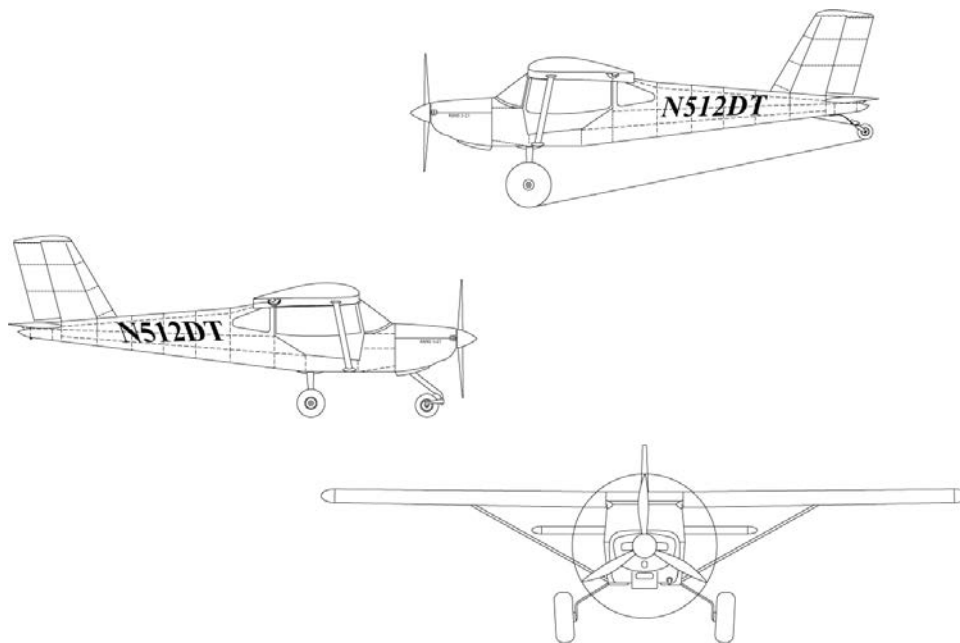
RANS

AIRCRAFT

S-21 OUTBOUND

TITAN X-340 INSTALLATION

FIGURES MANUAL

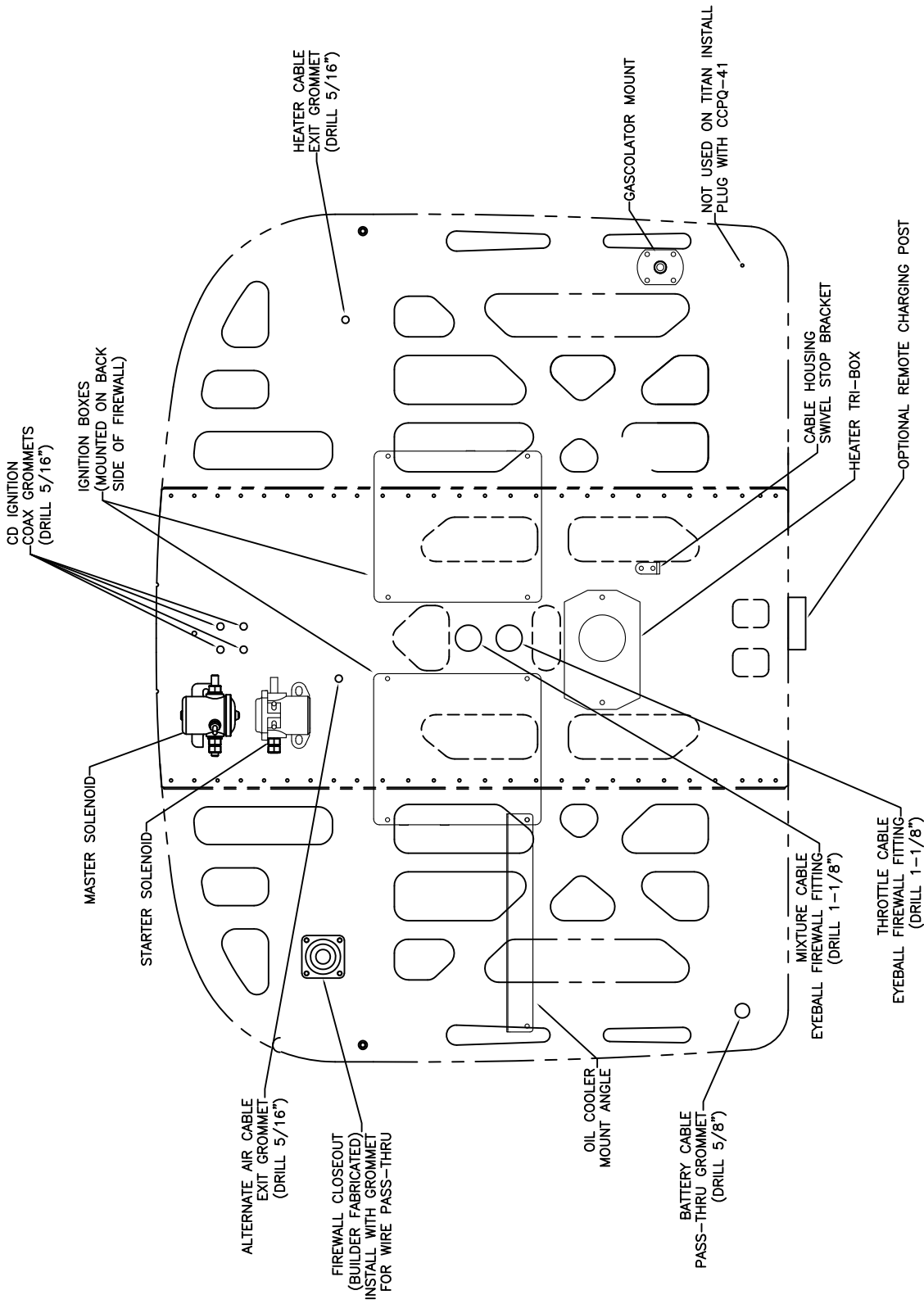


Serial Number: _____

Registration Number: _____

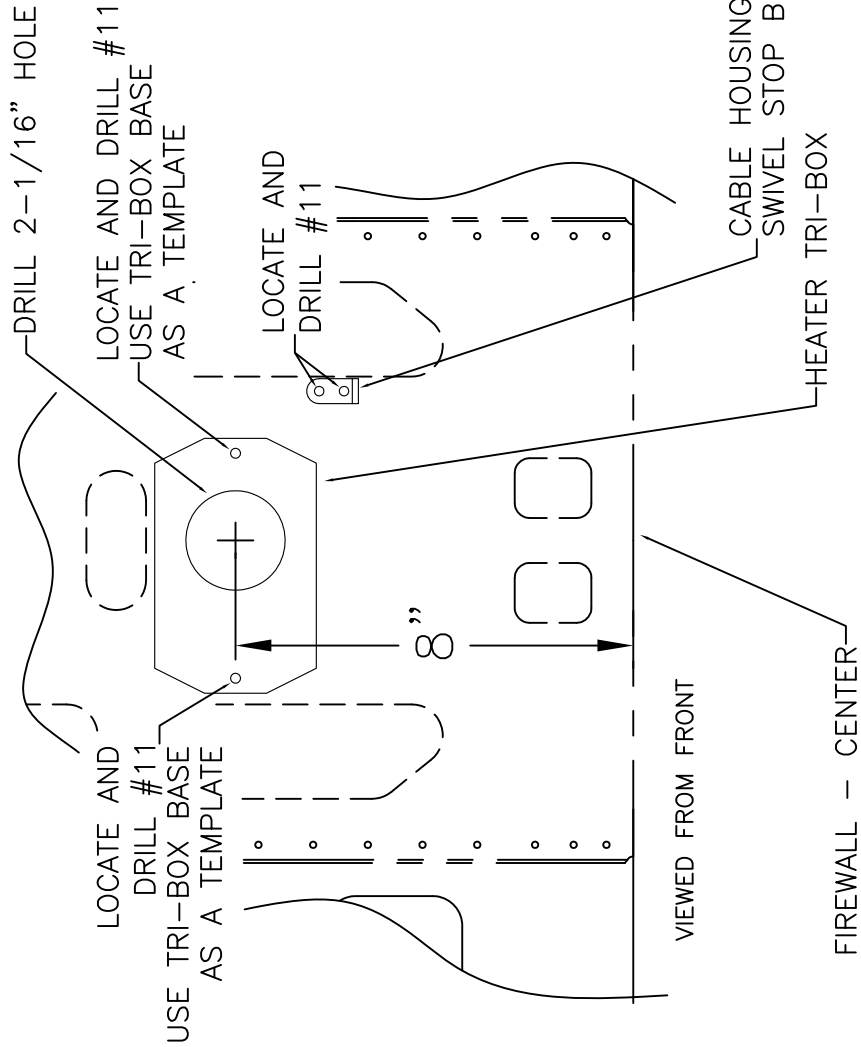
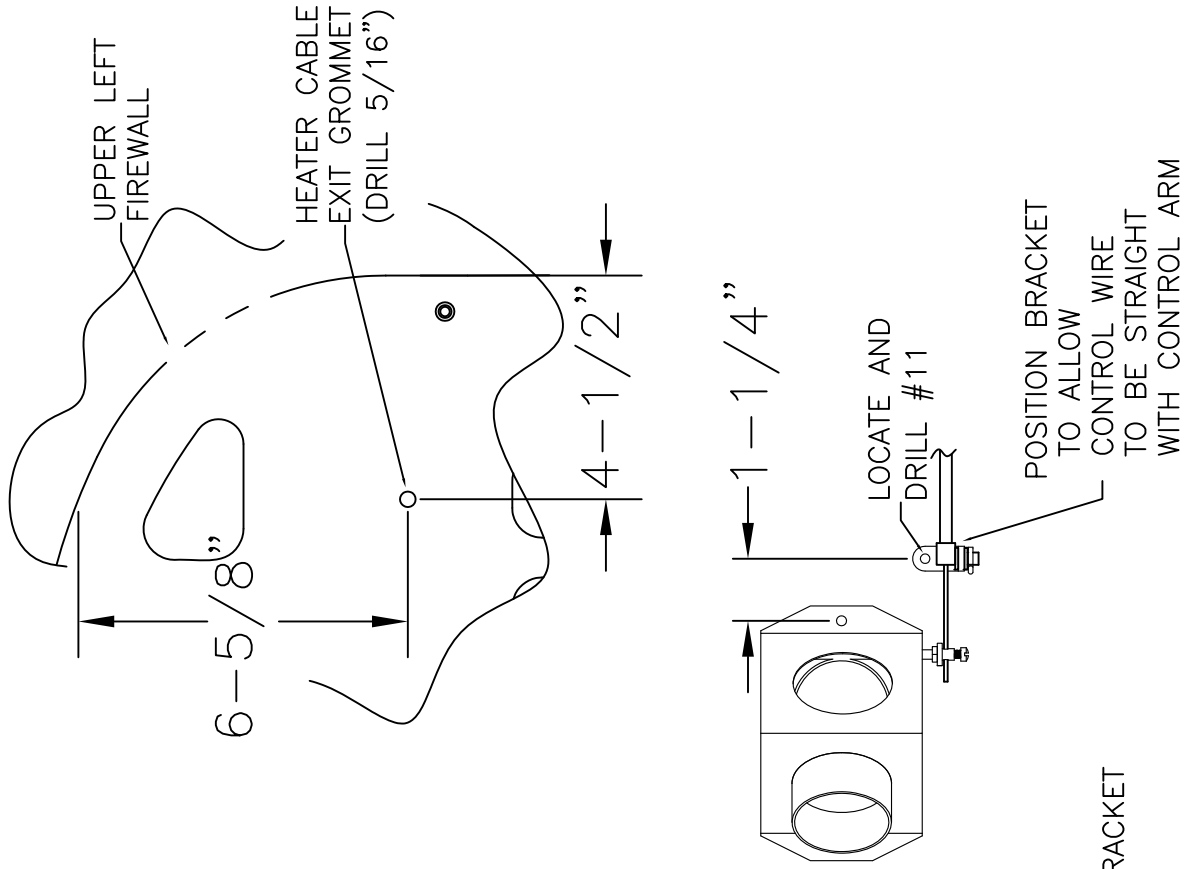
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This manual conforms to FAA Evaluated date 9/11/2018



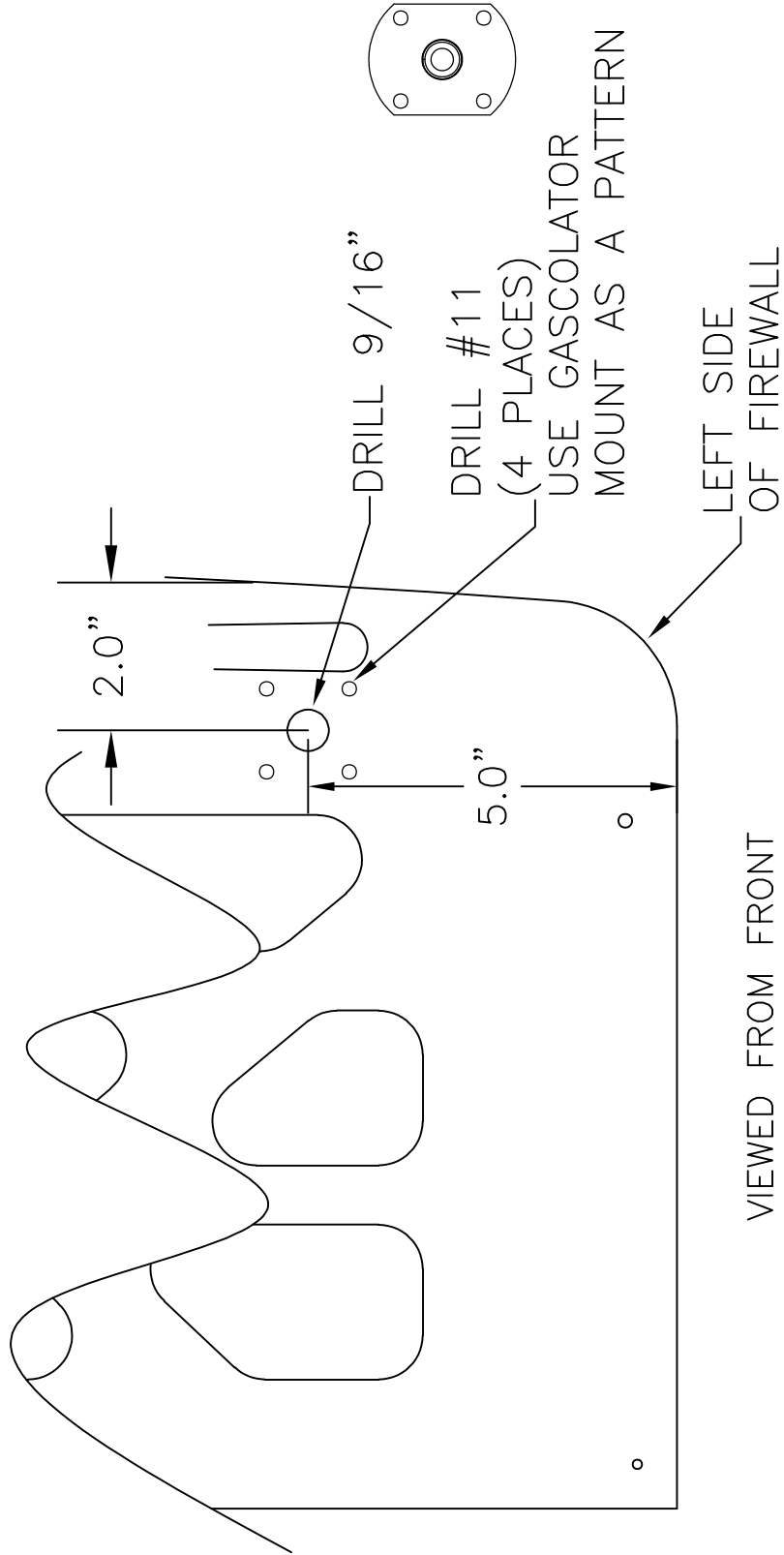
MD5575
REV. A

RAMROD S-21 OUTBOUND
TITAN X-340
FIREWALL INSTALLED ITEMS
FIGURE 11-01/ TITAN340



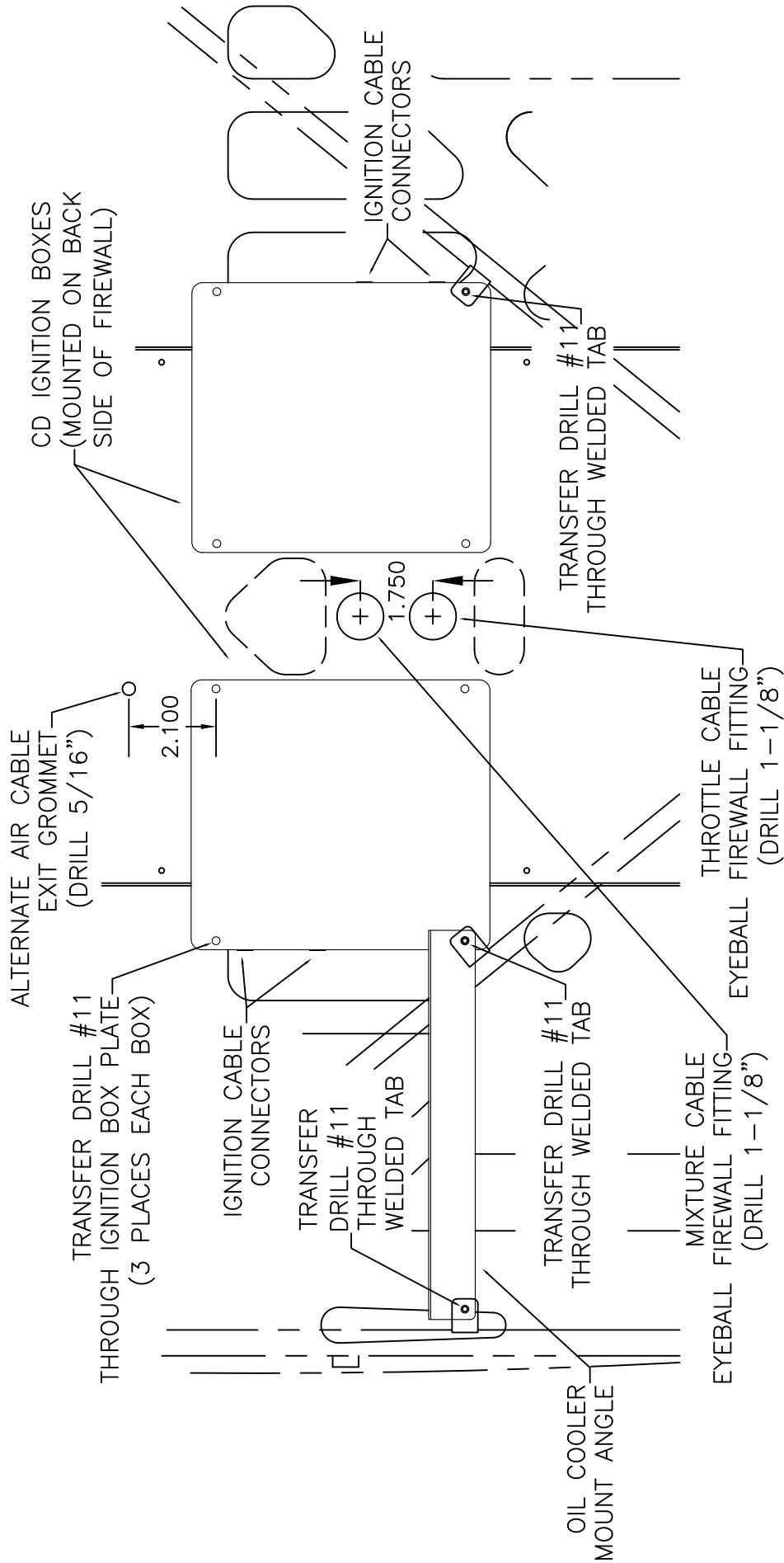
RAMBOLD S-21 OUTBOUND
 TITAN X-340
 CABIN HEATER INSTALLATION
 FIGURE 11-02/ TITAN340

MD5575
 REV. - - ORIG



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REV. - ORIG

**RAMCO S-21 OUTBOUND
TITAN X-340**
GASCOLATOR MOUNT INSTALLATION
FIGURE 11-03/ TITAN340



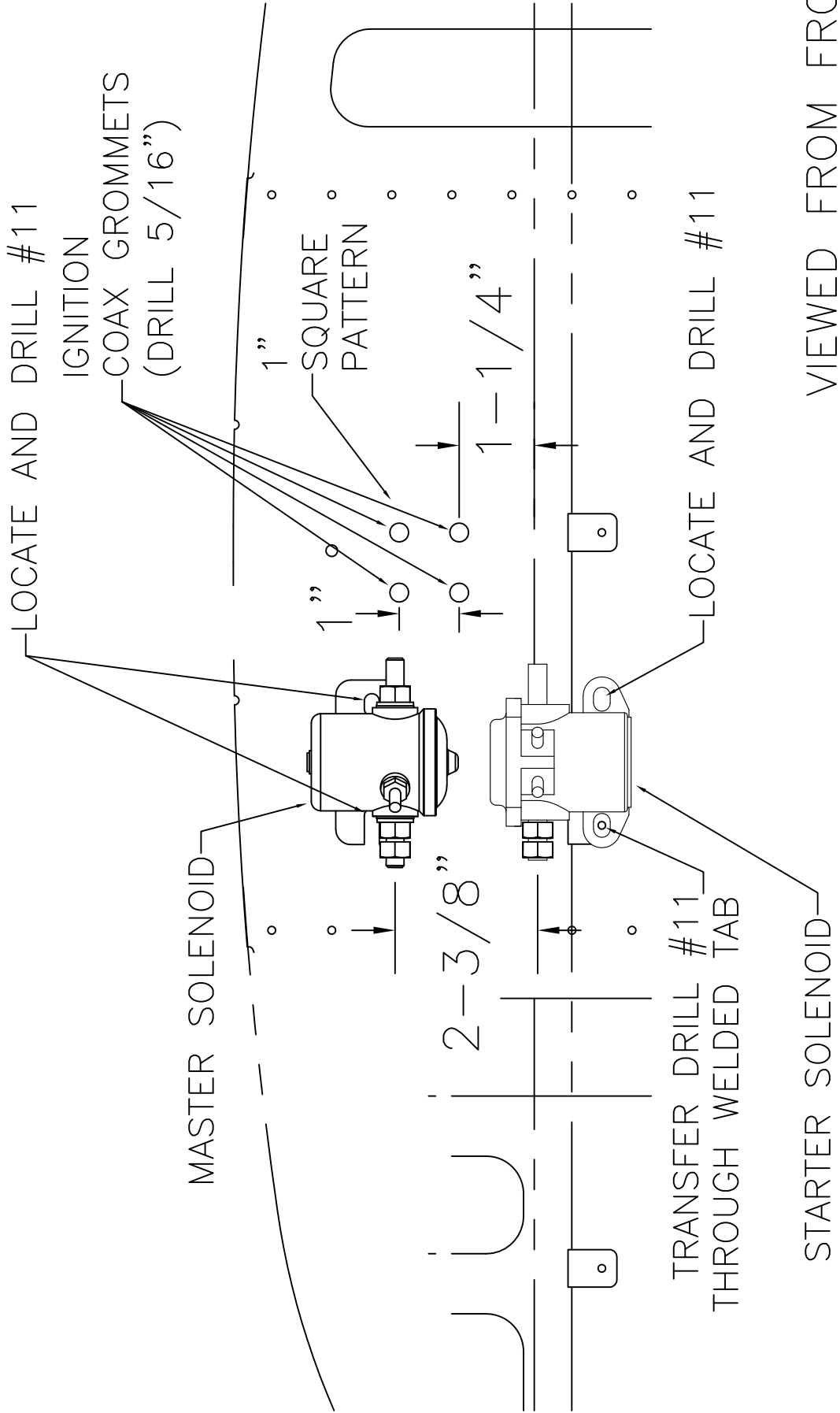
VIEWED FROM FRONT

ITEMS FORWARD OF IGNITION BOXES NOT SHOWN FOR CLARITY

RAM S-21 OUTBOUND
TITAN X-340

MD5575
REV. A

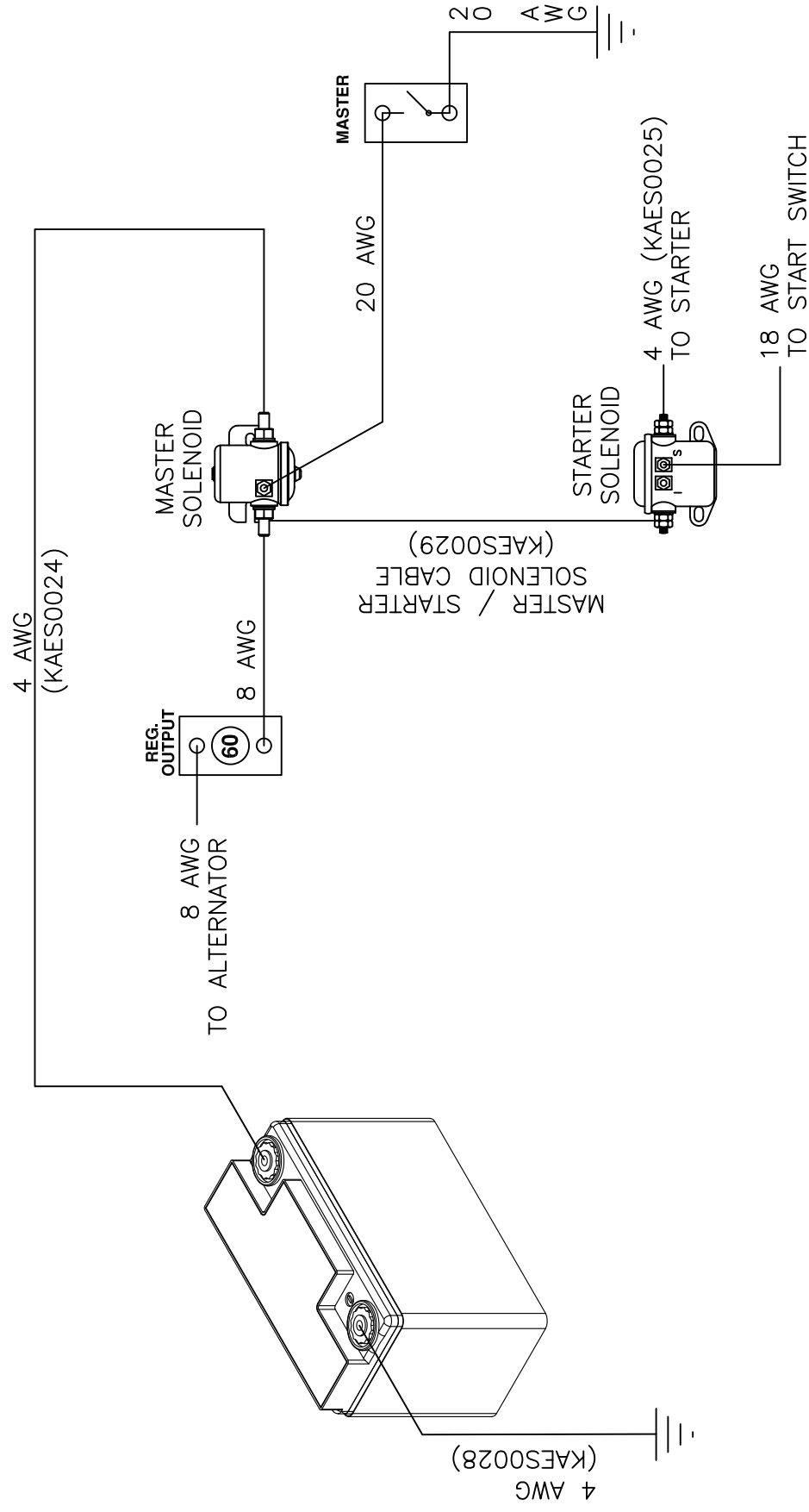
IGNITION MODULE & OIL COOLER MOUNT INSTALLATION
FIGURE 11-04/ TITAN340



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REV. A

RAMROB S-21 OUTBOUND
TITAN X-340

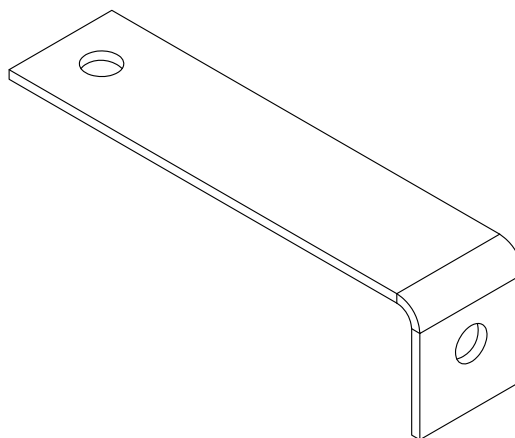
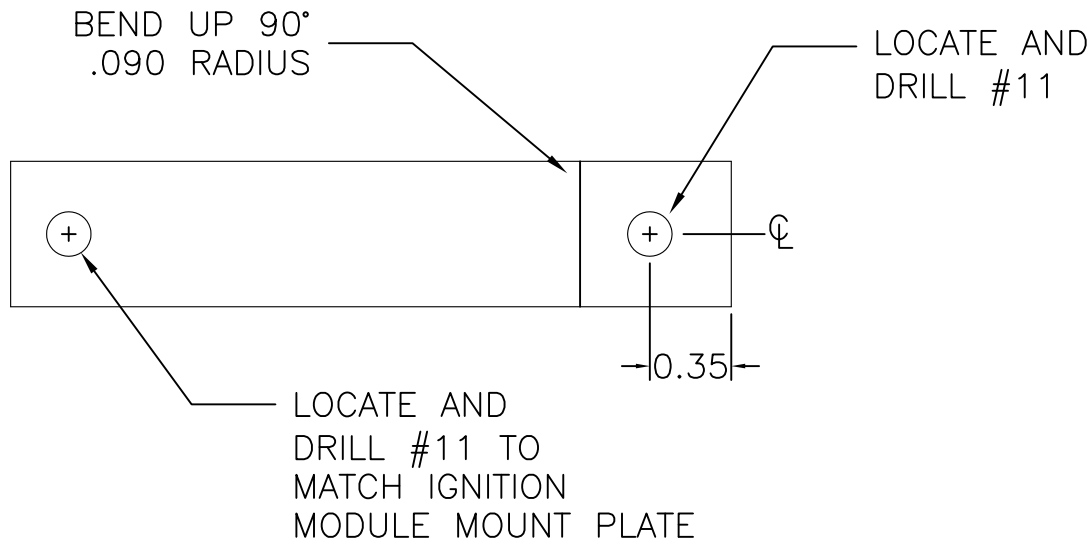
MASTER & STARTER SOLENOID INSTALLATION
FIGURE 11-04A/ TITAN340



RAMBO S-21 OUTBOUND
TITAN X-340
MASTER SOLENOID WIRING
FIGURE 11-05/TITAN340

MD5231
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MODIFY KPES0036



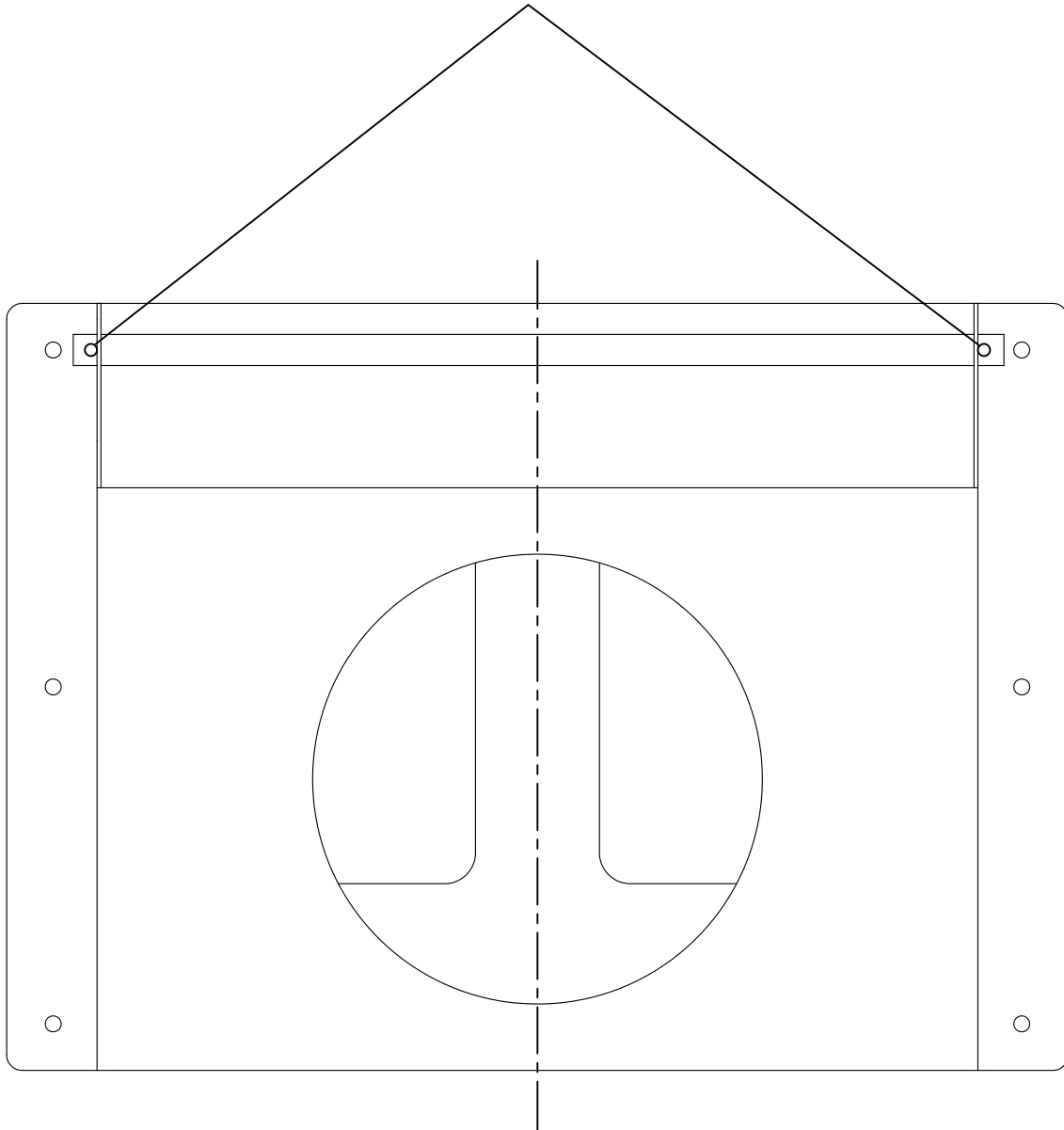
**RANS S-21 OUTBOUND
TITAN X-340**

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REV. - ORIG

**AFT IGNITION BRACKET BRACE FABRICATION
FIGURE 11-06/TITAN340**

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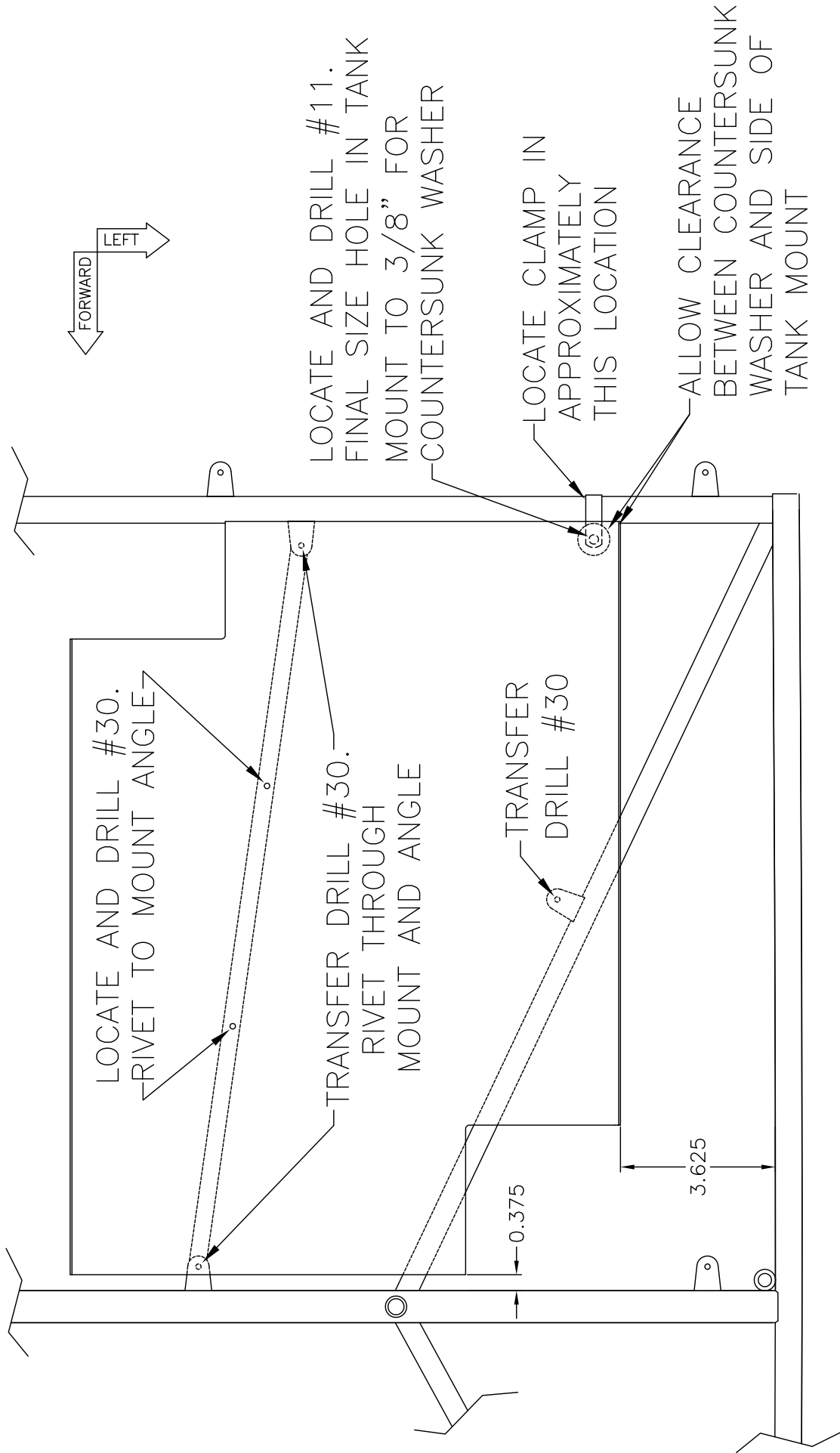
CENTER BATTERY BAR AND DRILL #40
AS NECESSARY



**RANS S-21 OUTBOUND
TITAN X-340
BATTERY BAR MODIFICATION
FIGURE 11-07/TITAN340**

MD5468
REV. - ORIG

09/11/2018

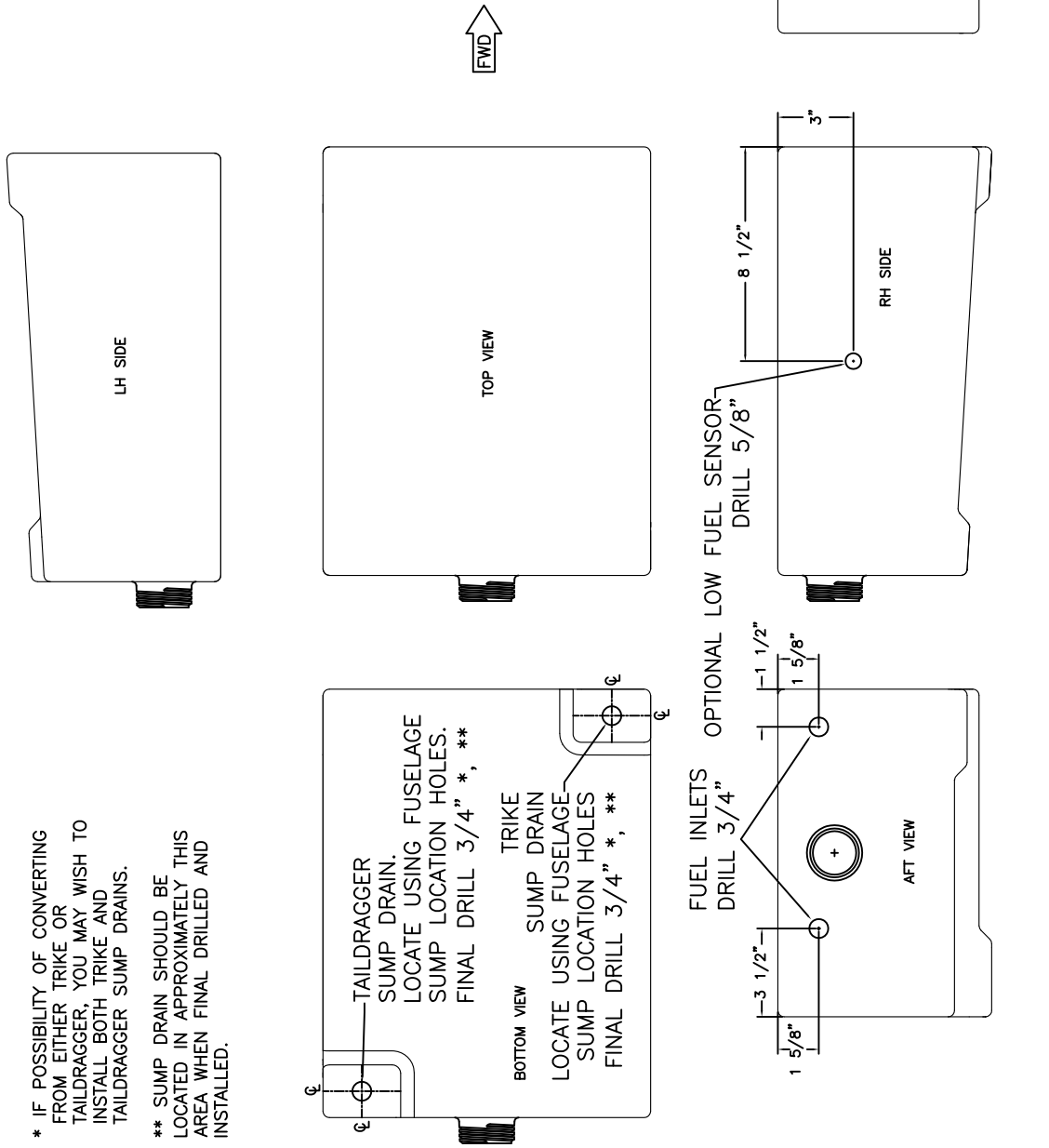


RRR S-21 OUTBOUND
TITAN X-340
6.9 GALLON HEADER TANK MOUNT
FIGURE 11-08/TITAN340

MD5616
 REV. - ORIG

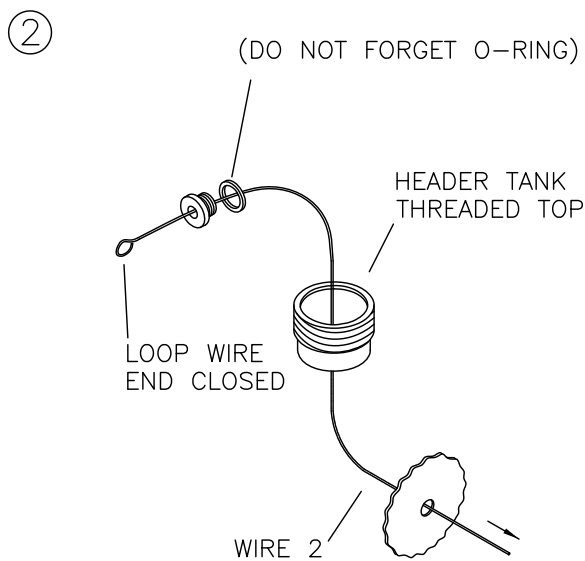
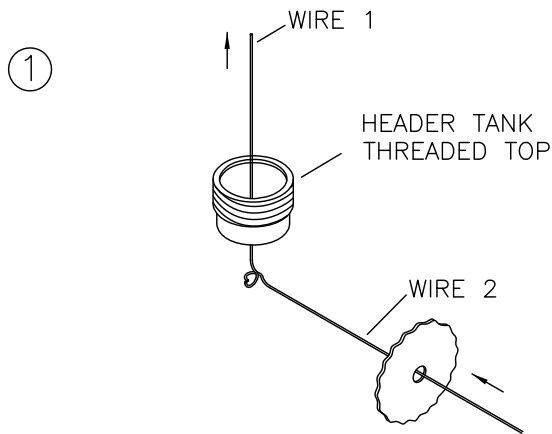
* IF POSSIBILITY OF CONVERTING FROM EITHER TRIKE OR TAILDRAGGER, YOU MAY WISH TO INSTALL BOTH TRIKE AND TAILDRAGGER SUMP DRAINS.

** SUMP DRAIN SHOULD BE LOCATED IN APPROXIMATELY THIS AREA WHEN FINAL DRILLED AND INSTALLED.



MD2861
REV. A

RRR S-21 OUTBOUND
TITAN X-340
6.9 GALLON HEADER TANK MODIFICATION
FIGURE 11-09/TITAN340



③ INSTALL RUBBER WASHER, STEEL WASHER, LOCTITE, AND NUT.

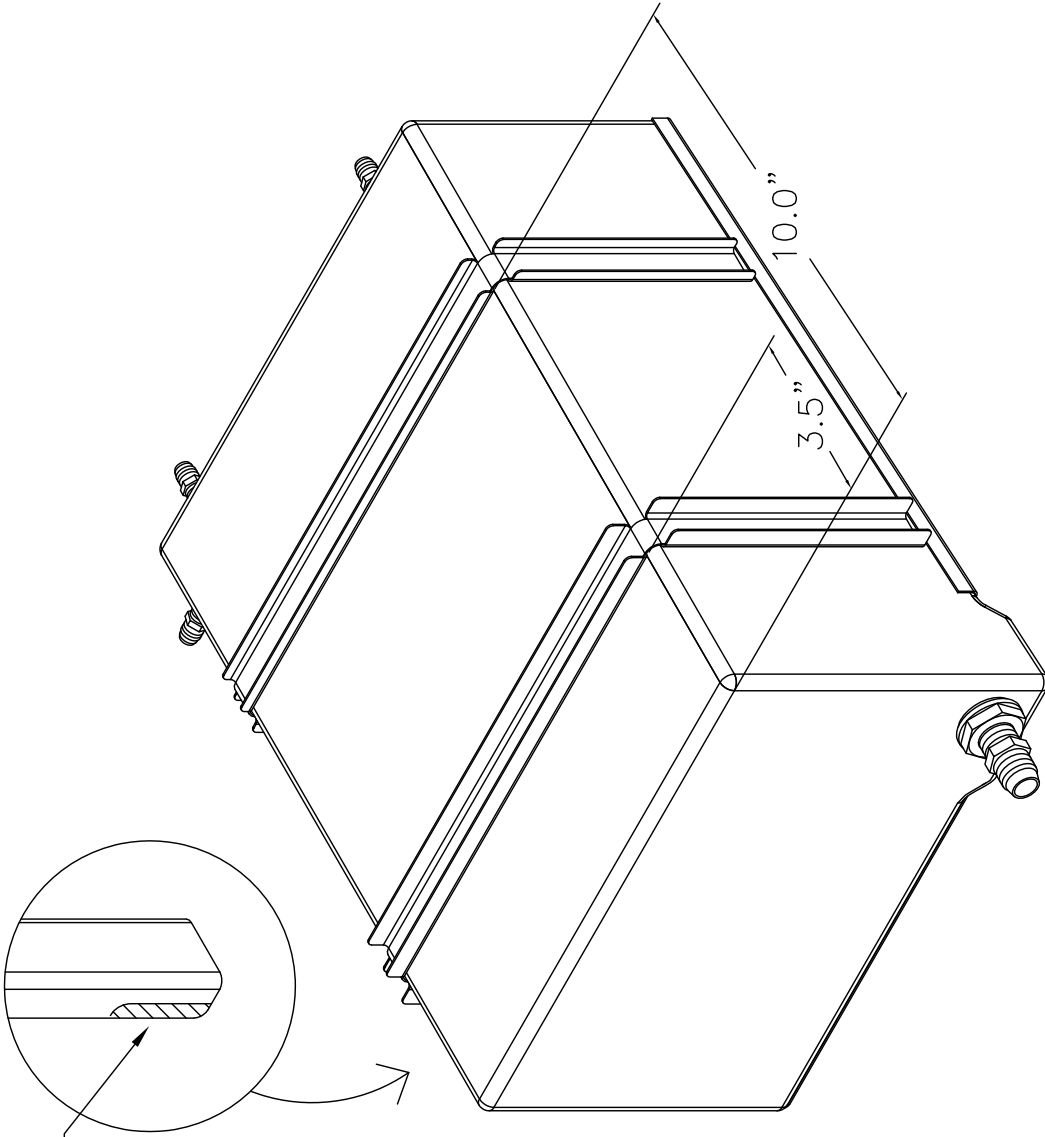
④ REMOVE WIRE.

**RANS S-21 OUTBOUND
TITAN X-340
HEADER TANK FITTING INSTALLATION
FIGURE 11-10/TITAN340**

MD4832
REV. - ORIG

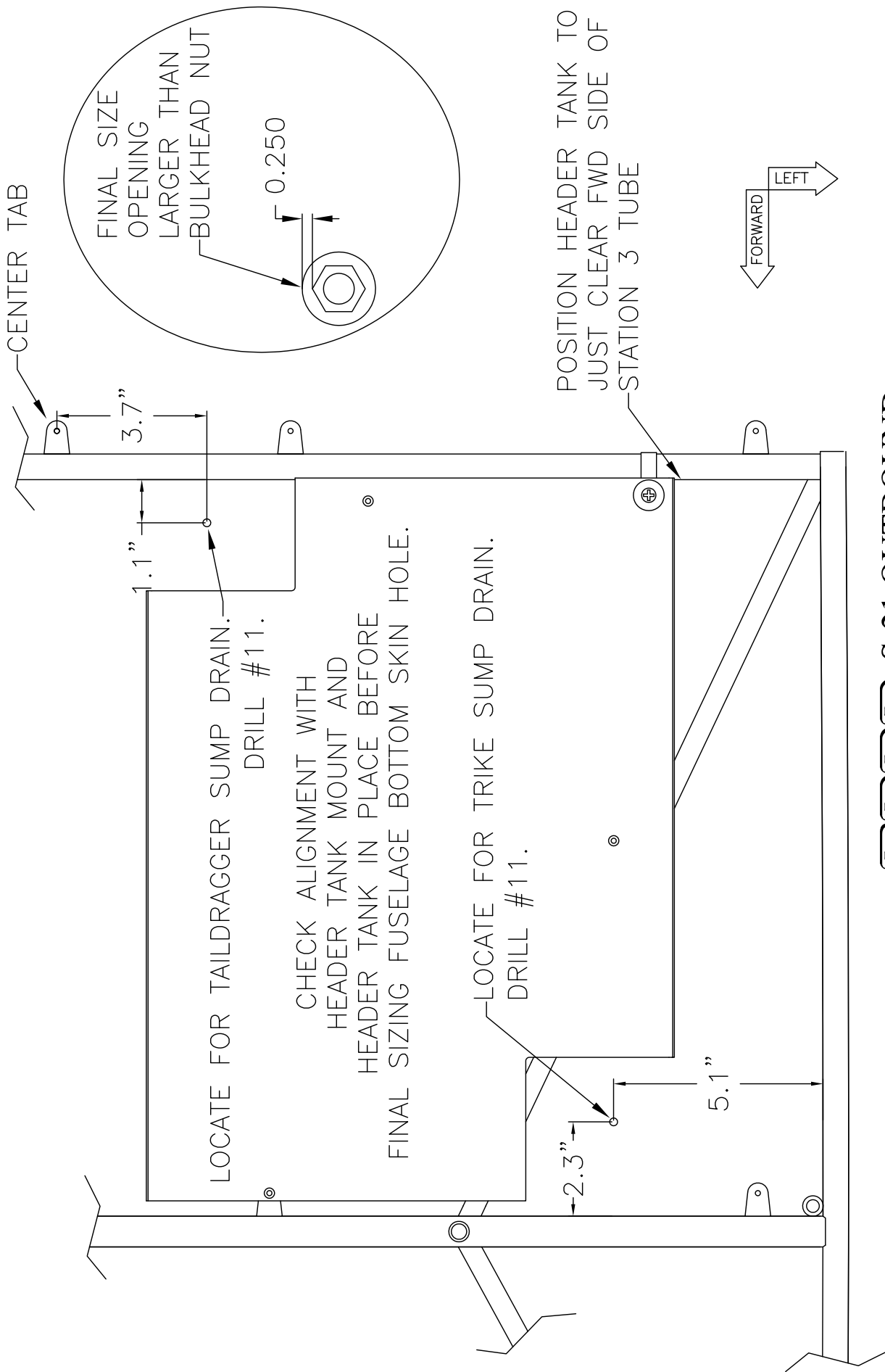
09/11/2018

TRIM INBOARD SECTION
OF MOUNT CHANNEL
AS REQUIRED TO
CLEAR RUDDER CABLE



RAMS S-21 OUTBOUND
TITAN X-340
6.9 GALLON HEADER TANK
MOUNT CHANNEL LOCATION
FIGURE 11-11/TITAN340

MD5616
REV. - ORIG



RRR S-21 OUTBOUND
TITAN X-340
6.9 GALLON HEADER TANK
SUMP HOLE LOCATIONS
FIGURE 11-12/TITAN340

MD5616
 REV. ORIG

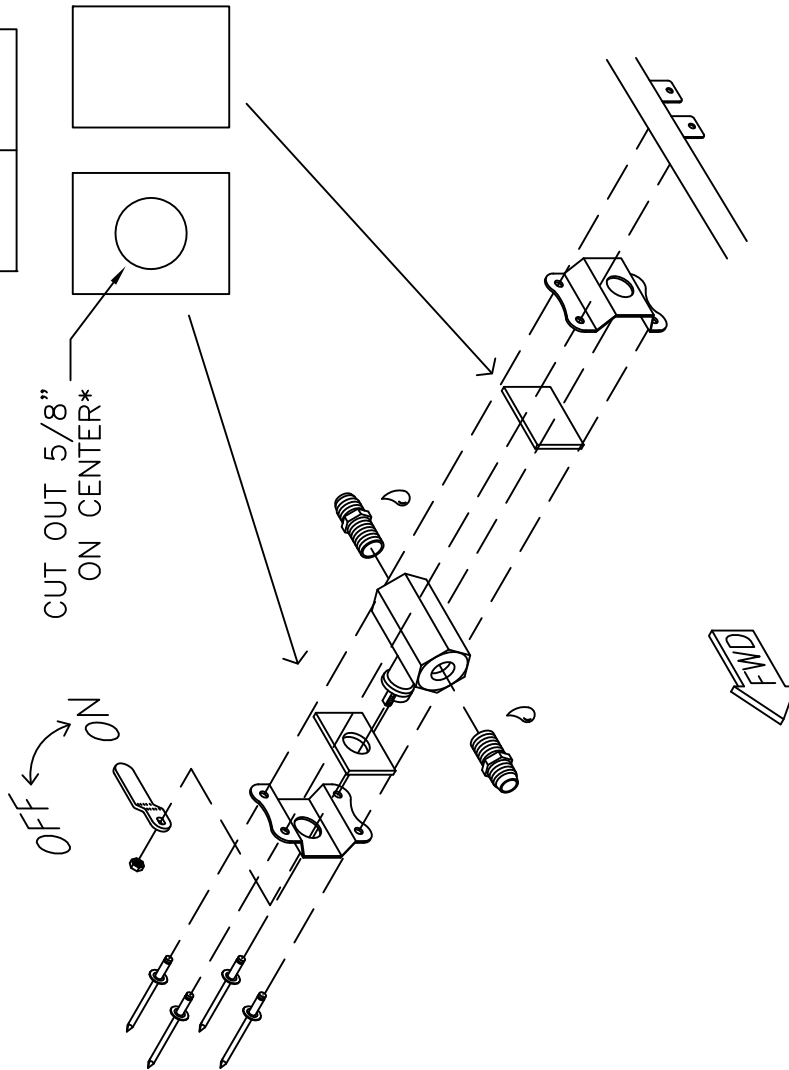
FUEL VALVE
SILICONE PAD
(KPF50106)

CUT INTO 2 PIECES
ON CENTERLINE

OFF ←
ON →

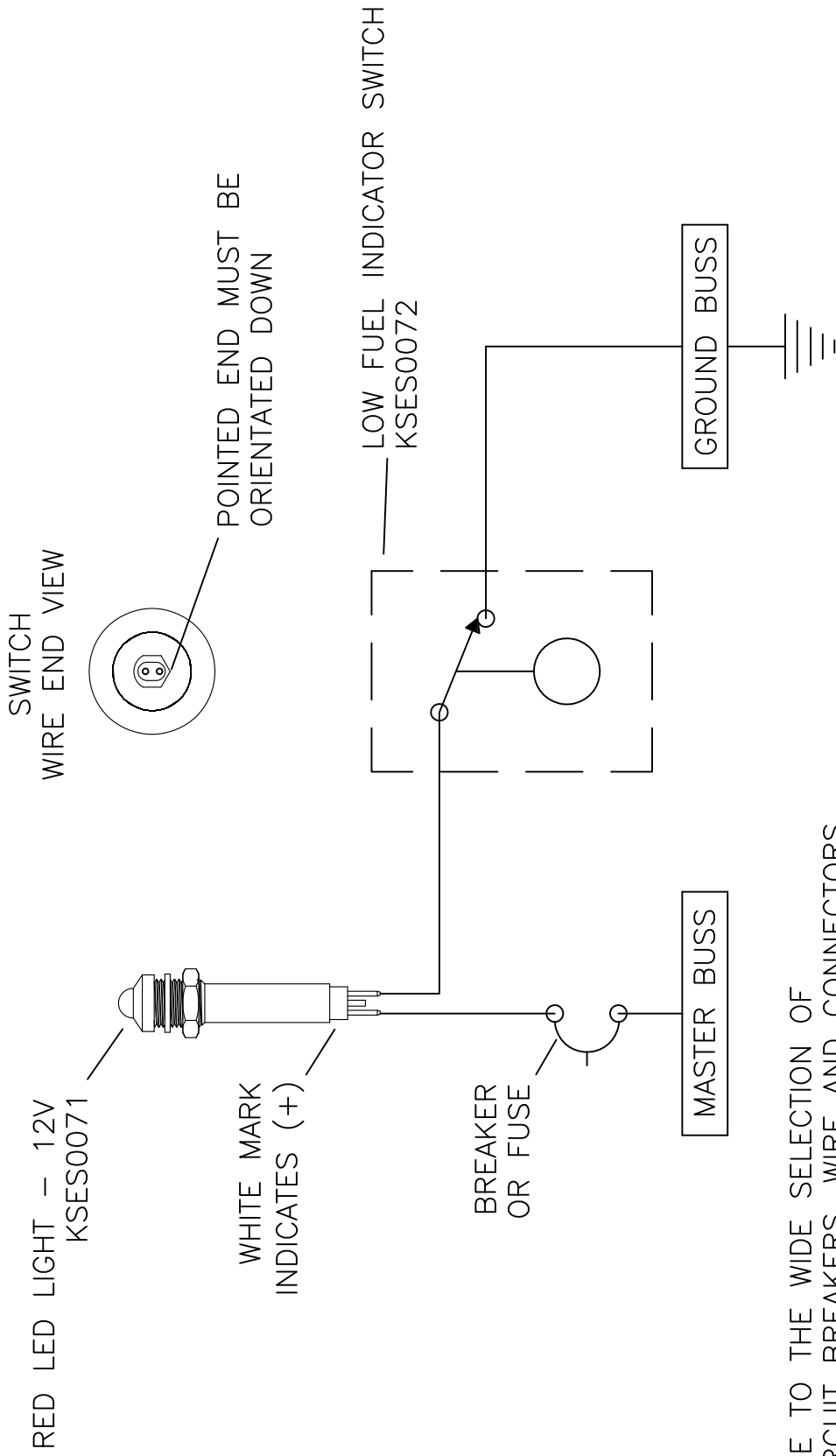
CUT OUT 5/8"
ON CENTER*

* HINT: USE A 5/8" TUBE
SHARPENED ON INSIDE AS
A PUNCH TO CUT HOLE.



MD4388
REV. - ORIG

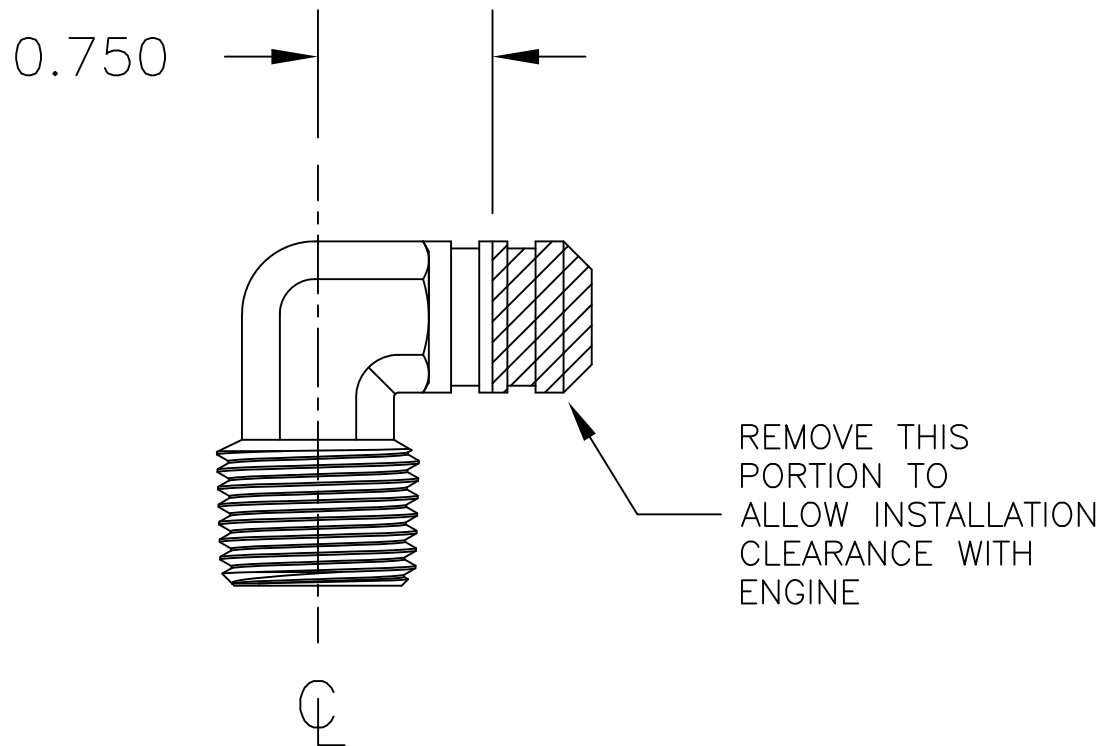
RAMS S-21 OUTBOUND
TITAN X-340
FUEL VALVE MOUNTING
FIGURE 11-13/TITAN340



DUE TO THE WIDE SELECTION OF
CIRCUIT BREAKERS, WIRE AND CONNECTORS
WHICH MAY BE USED TO CUSTOMIZE YOUR
AIRCRAFT. THESE ITEMS ARE "BUILDER SUPPLIED"

RAMMS S-21 OUTBOUND
TITAN X-340
LOW FUEL WARNING SYSTEM WIRING
FIGURE 11-15/TITAN340

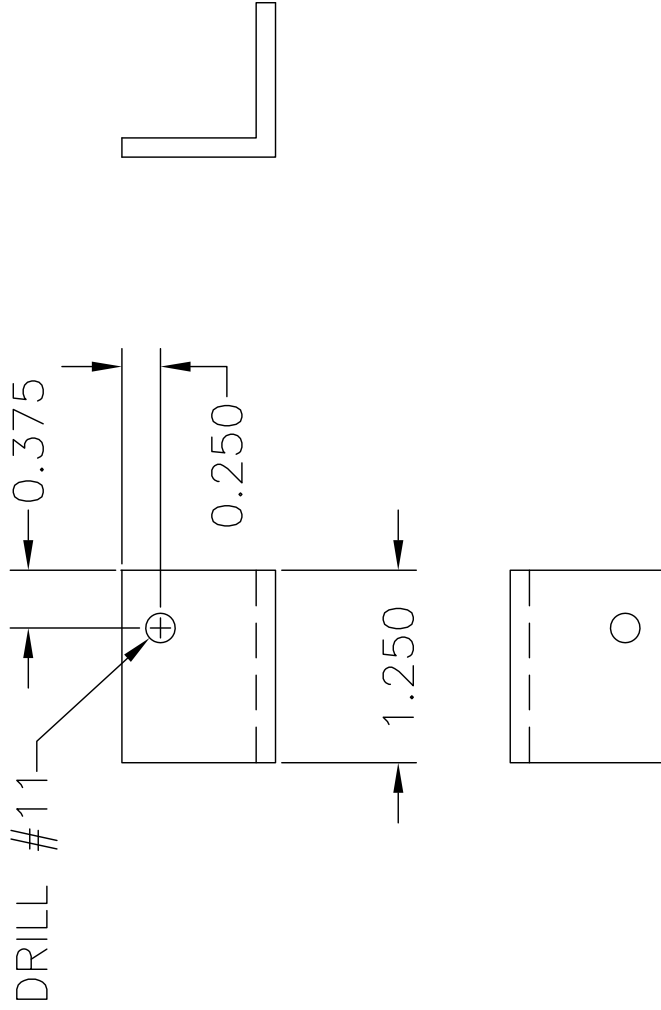
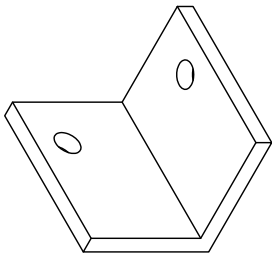
MD2861
REV. - ORIG



RANS S-21 OUTBOUND
TITAN X-340
MODIFICATION OF KSPW0098
FIGURE 11-15A/TITAN340

MD5575
REV. - ORIG

09/11/2018



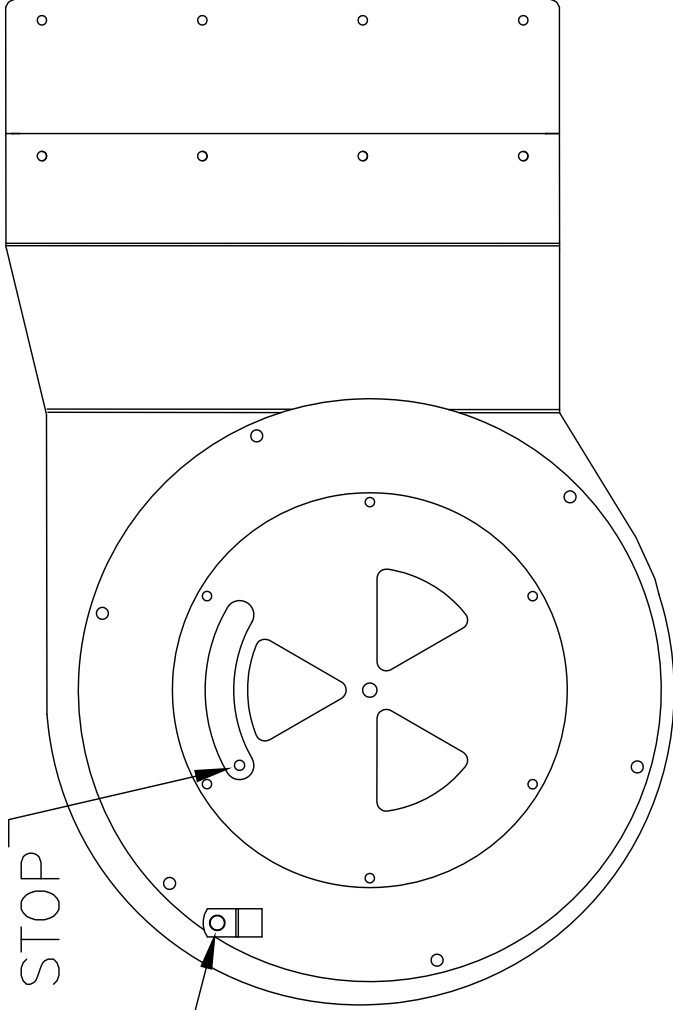
DRILL BOTH FLANGES OF ANGLE
FABRICATE QUANTITY 2

RRR S-21 OUTBOUND
TITAN X-340
THROTTLE & MIXTURE RETAINER ANGLE MODIFICATION
FIGURE 11-16/TITAN340

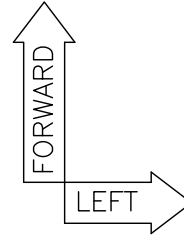
MD5616
REV. ORIG

LOCATION OF CABLE
SWIVEL STOP

LOCATION OF
1/4" CLAMP



AIRBOX WITH ALTERNATE AIR
VALVE "OPEN"
SHOWN FROM BELOW



RRR S-21 OUTBOUND

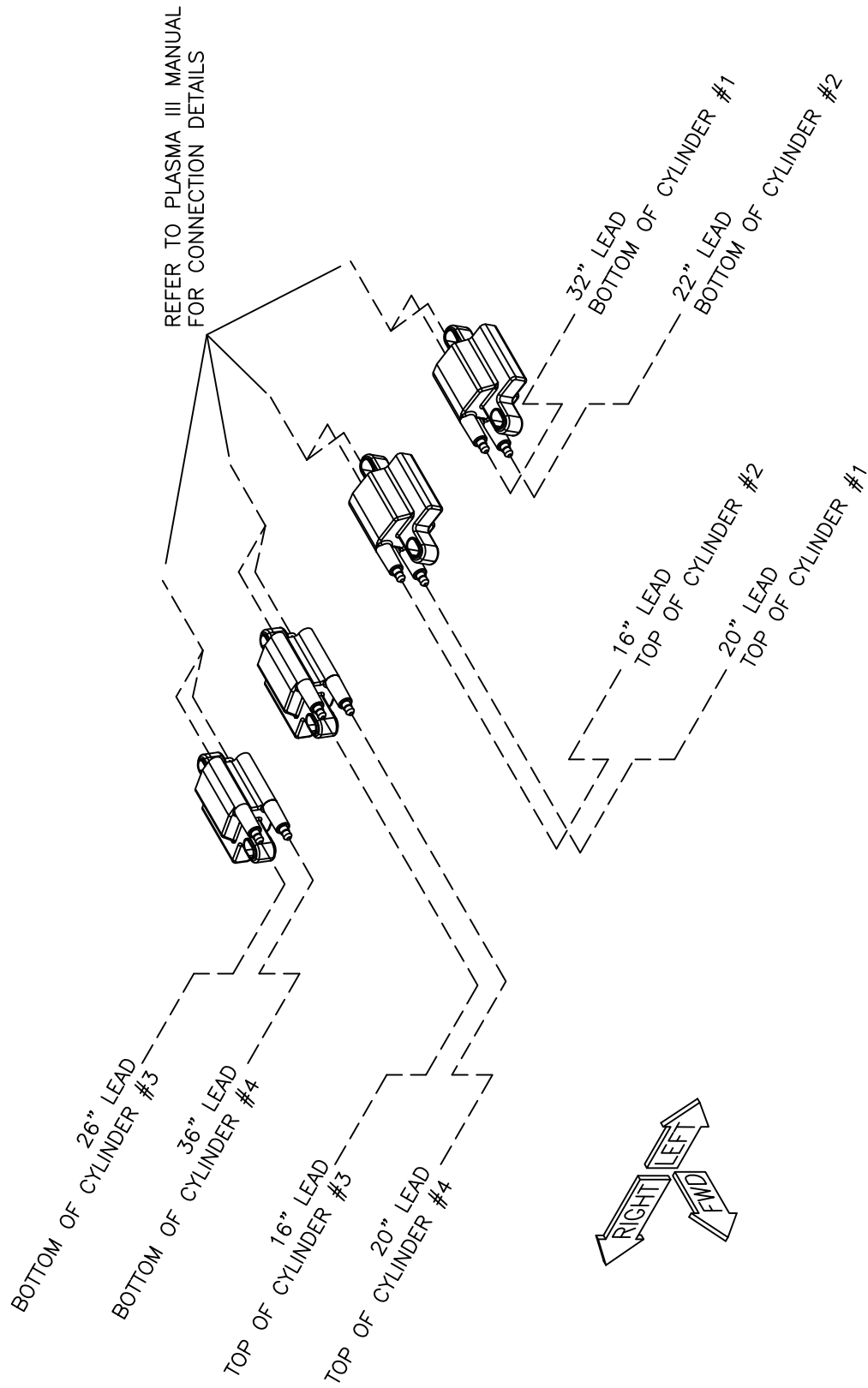
TITAN X-340

AIRBOX FILTER COVER AND

ALTERNATE AIR VALVE ORIENTATION

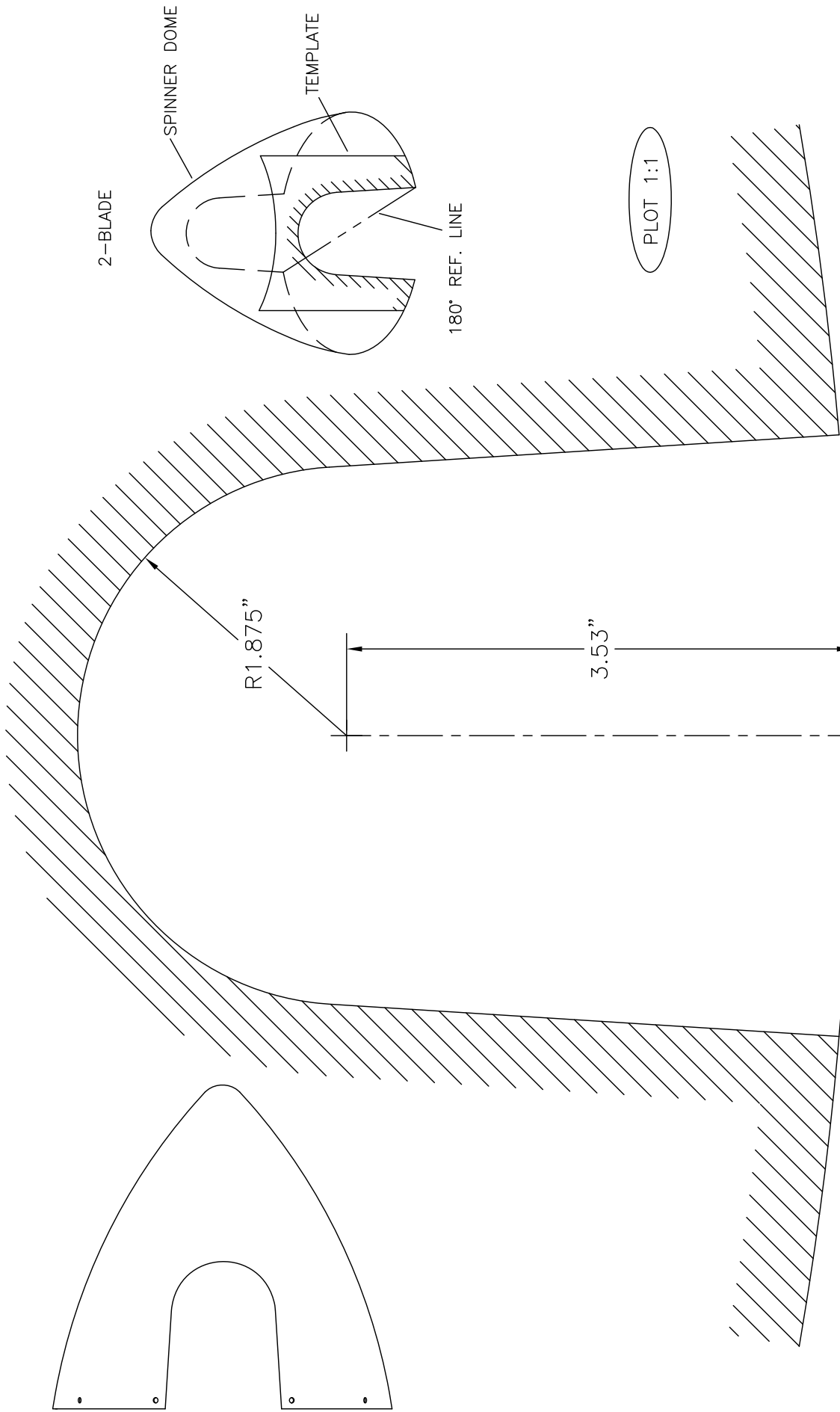
FIGURE 11-17/TITAN340

MD5616
REV. ORIG



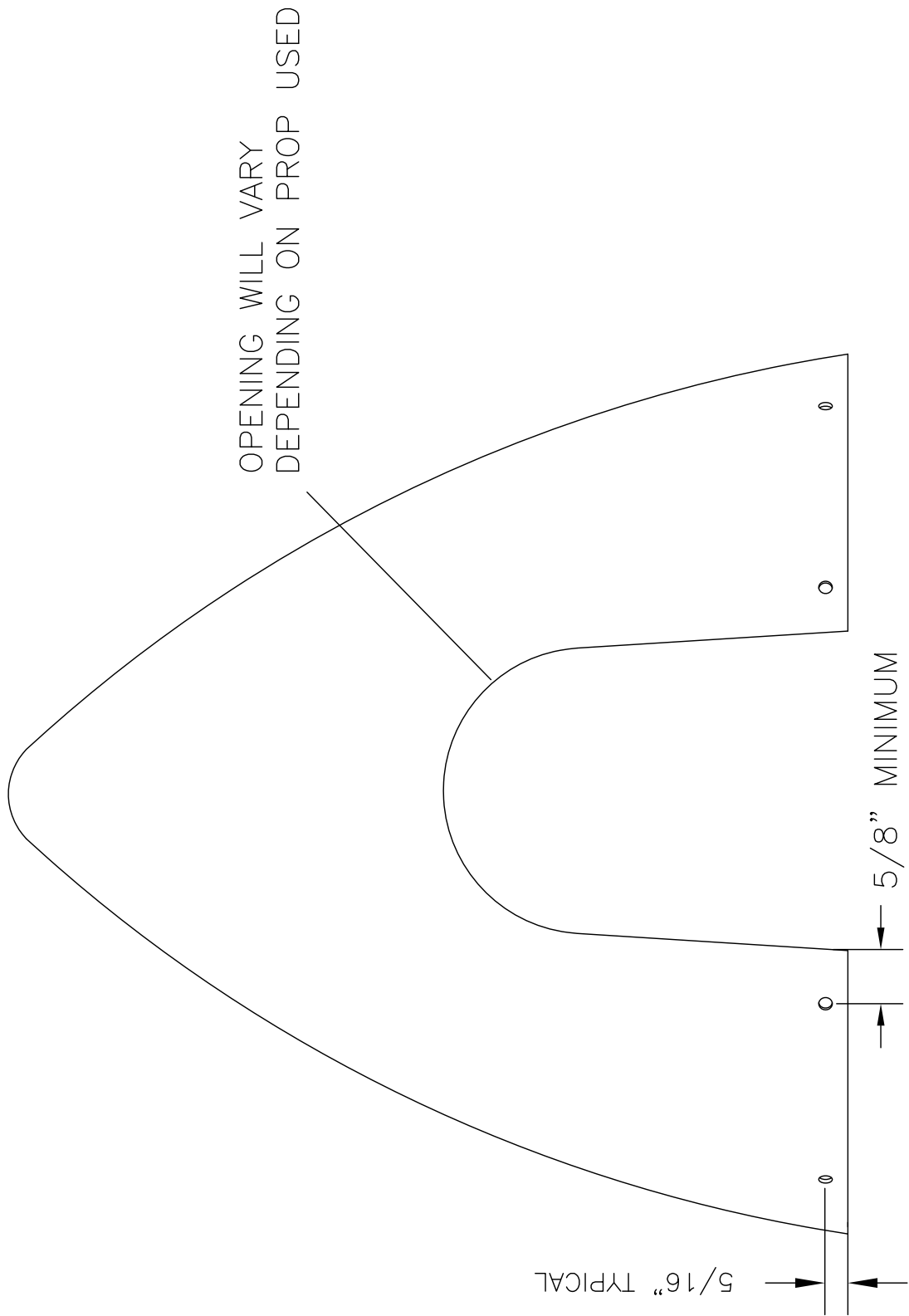
RAMOS S-21 OUTBOUND
 TITAN X-340
 HIGH TENSION IGNITION LEAD ROUTING
 FIGURE 11-17A/ TITAN340

MD55575
 REV. A



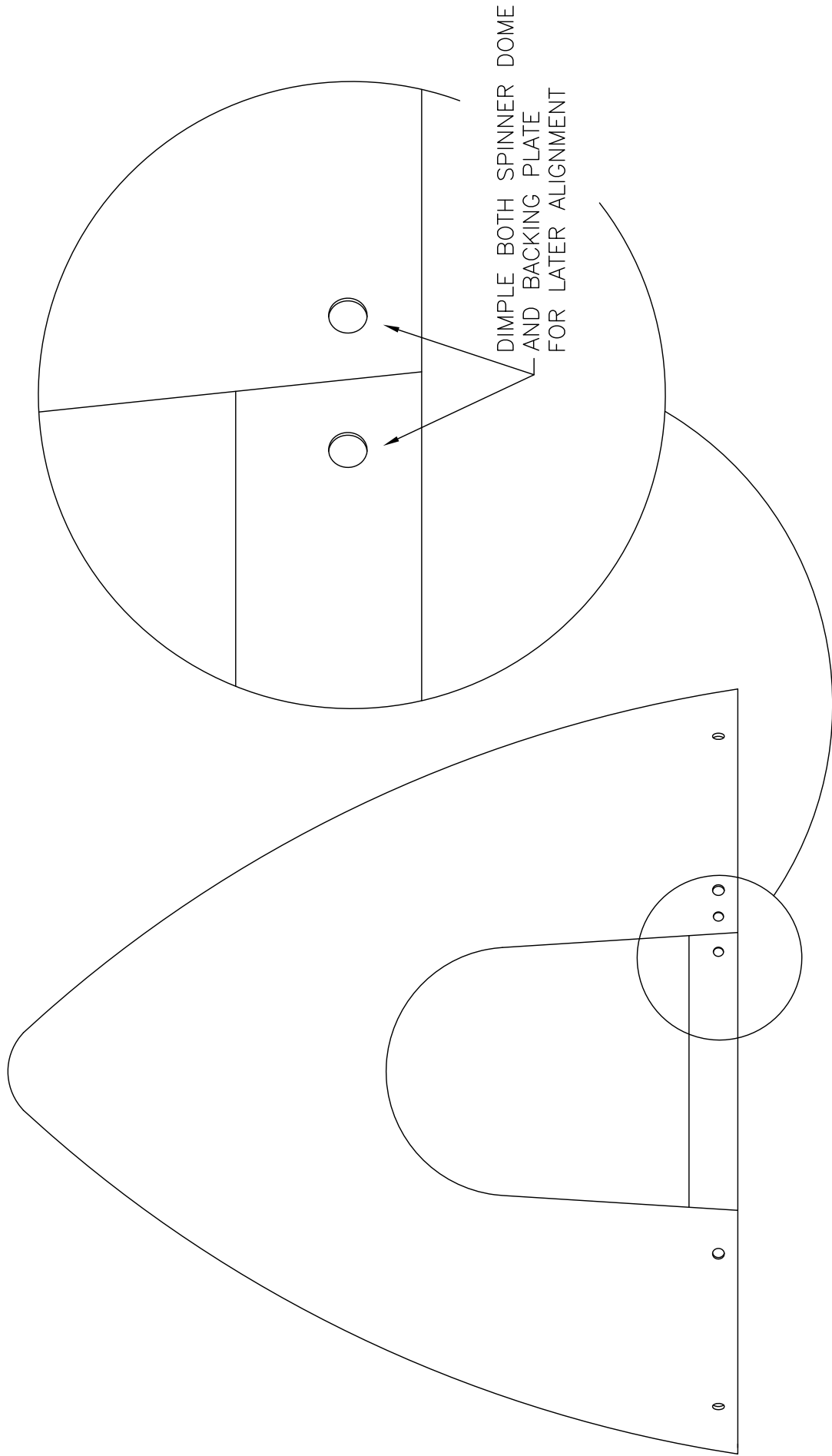
RRANOS S-21 OUTBOUND
TITAN X-340
WHIRL WIND PROP - 13" SPINNER TEMPLATE
FIGURE 11-18/TITAN340

MD5228
 REV. - ORIG



RAMCO S-21 OUTBOUND
TITAN X-340
SPINNER DRILLING
FIGURE 11-19/TITAN340

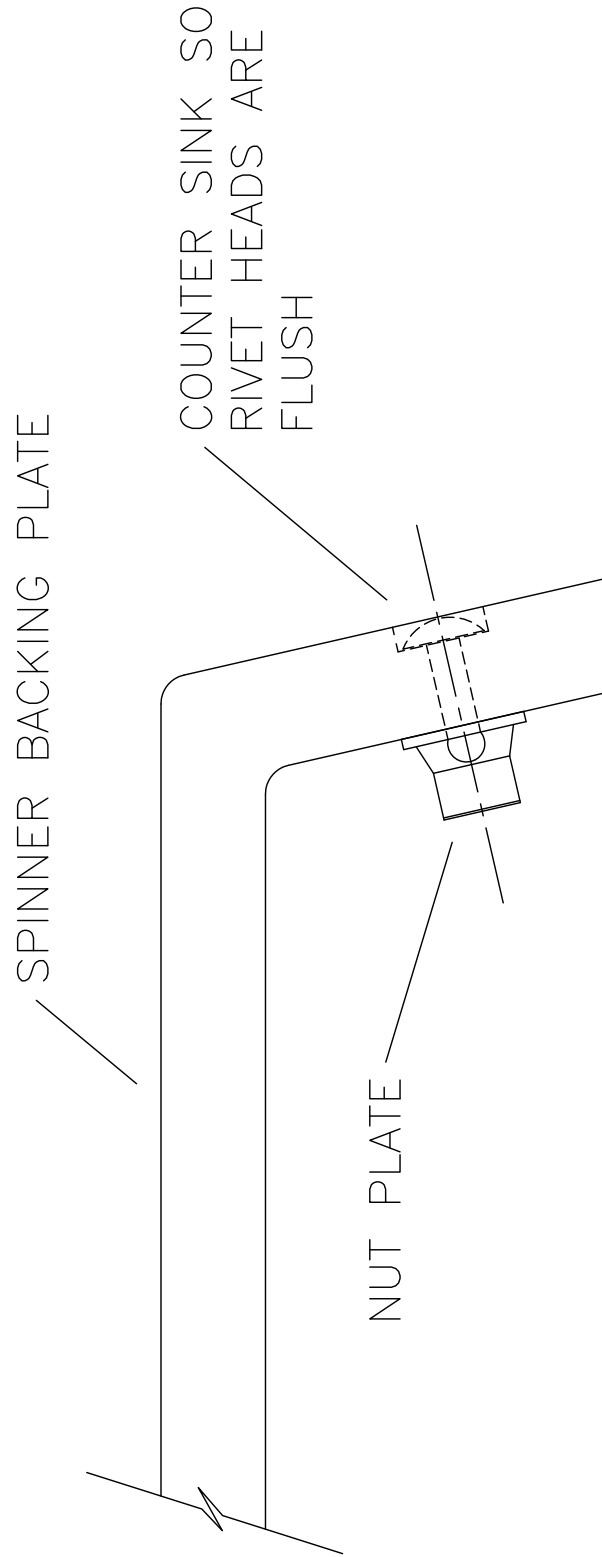
MD5228
 REV. - ORIG



DIMPLE BOTH SPINNER DOME
AND BACKING PLATE
FOR LATER ALIGNMENT

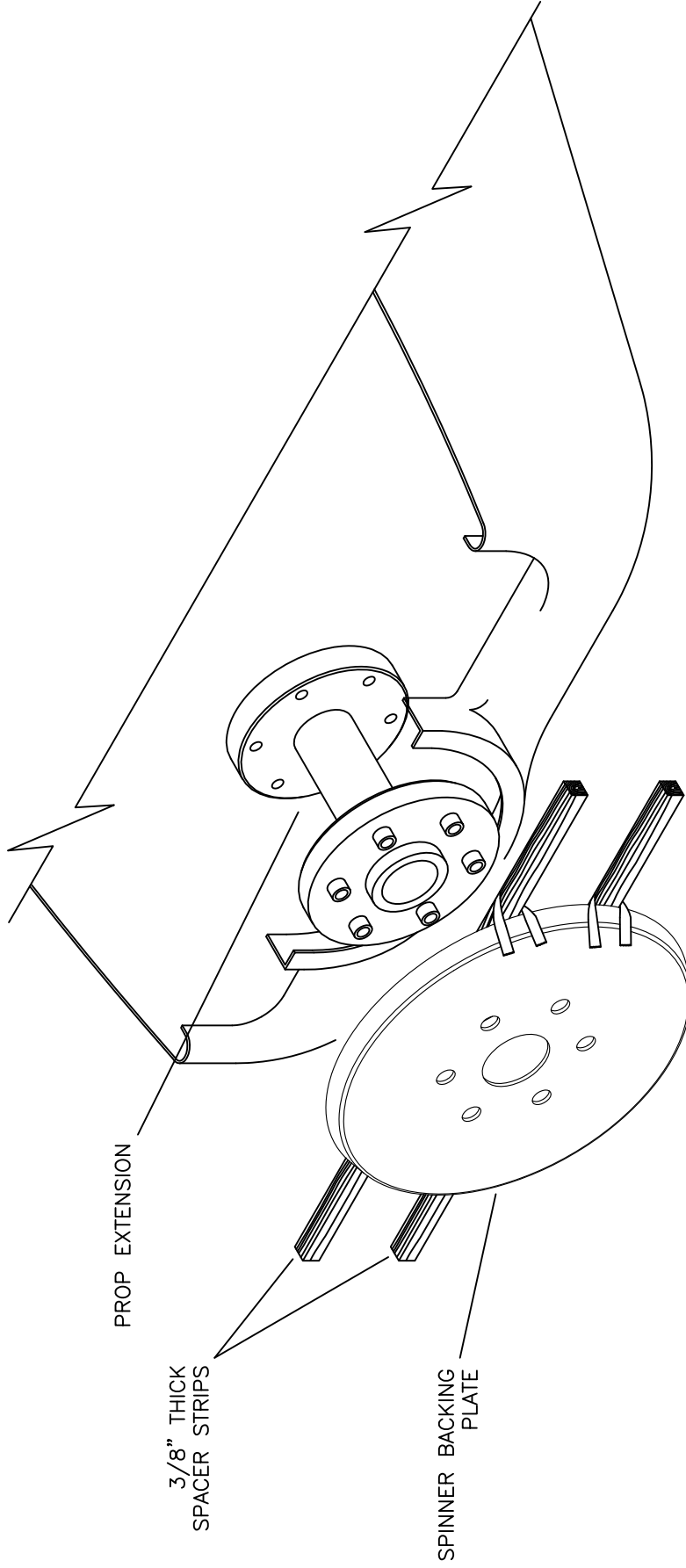
RAMS S-21 OUTBOUND
TITAN X-340
SPINNER ALIGNMENT MARKS
FIGURE 11-20/TITAN340

MD5228
REV. - ORIG



RAVEN S-20 RAVEN
TITAN X-340
SPINNER NUT PLATE INSTALLATION
FIGURE 11-21/TITAN340

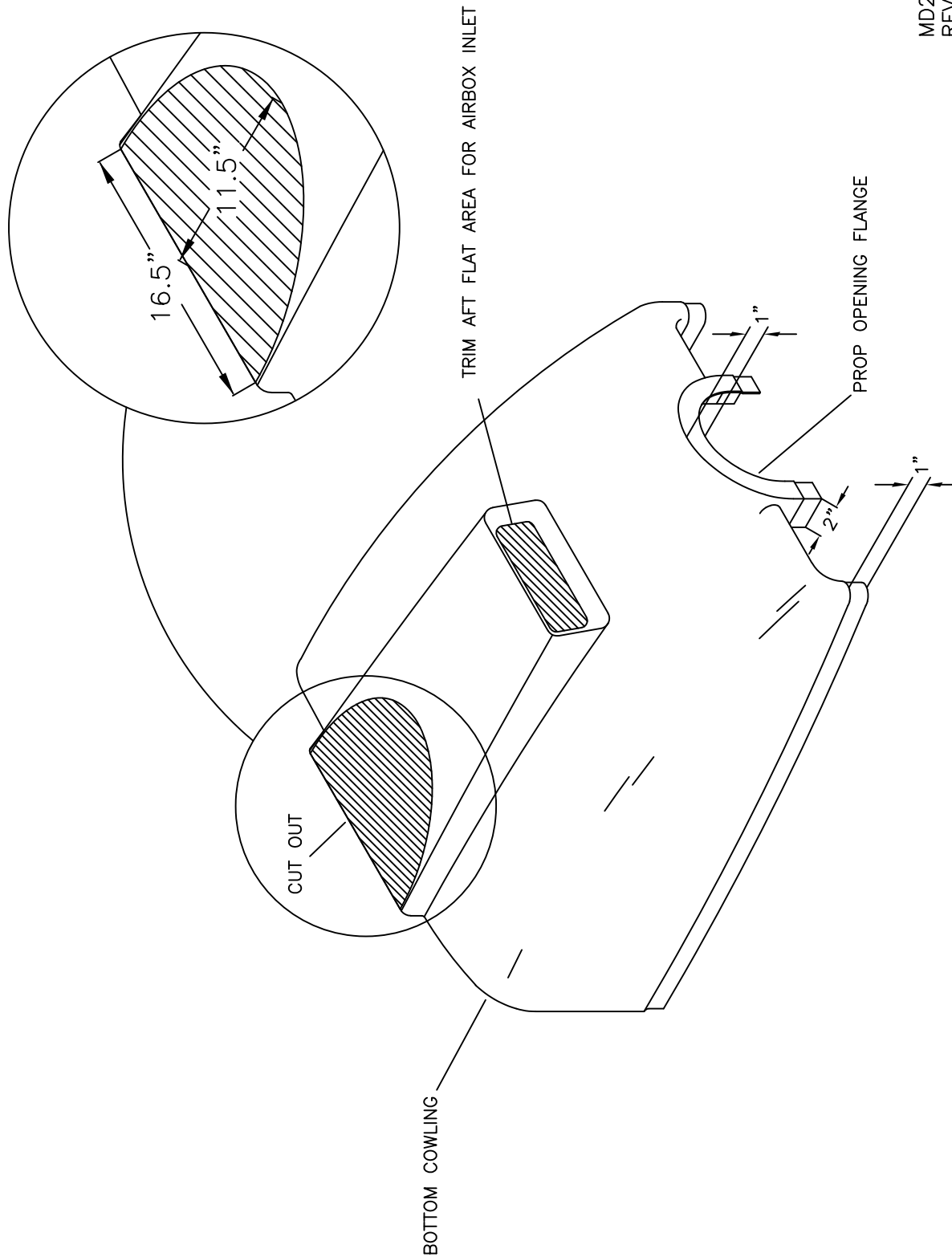
MD5228
 REV. - ORIG



IMPORTANT: INSTALLATION OF COWLING REQUIRES ENGINE, STARTER RING, PROP EXTENSION AND SPINNER BACKING PLATE TO BE INSTALLED.

MD4402
REV. - ORIG

RRR S-21 OUTBOUND
TITAN X-340
COWLING TO SPINNER SPACING
FIGURE 11-22/TITAN340

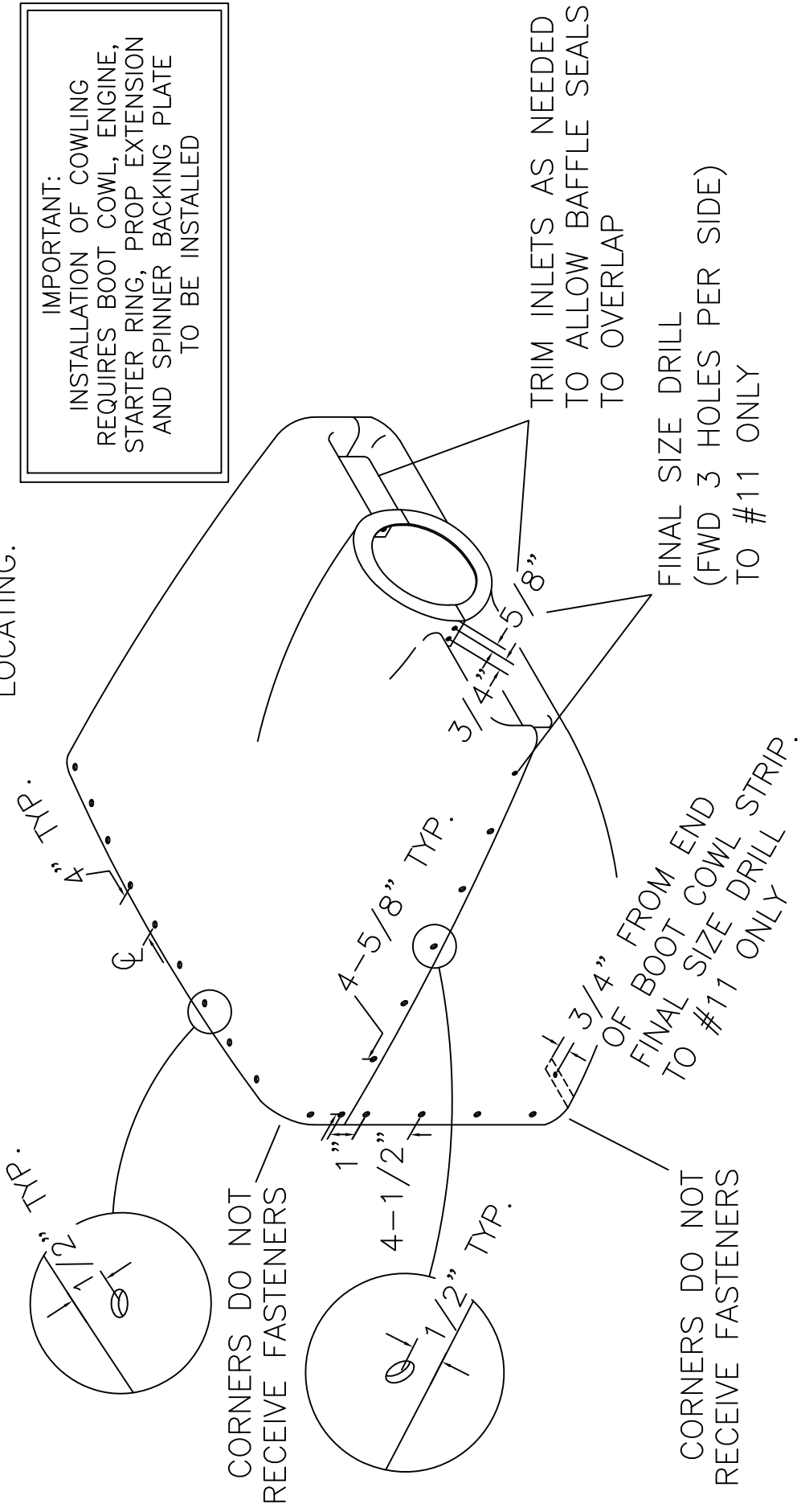


MD2833
REV. A

RRANOS S-21 OUTBOUND
TITAN X-340
BOTTOM COWLING MODIFICATION
FIGURE 11-23/TITAN340

DRILL ALL LOCATIONS #40 FOR FIT-UP.
 THEN, TRANSFER DRILL #11 FOR
 RECEPTACLE & NUT PLATE RIVET
 LOCATING.

IMPORTANT:
 INSTALLATION OF COWLING
 REQUIRES BOOT COWL, ENGINE,
 STARTER RING, PROP EXTENSION
 AND SPINNER BACKING PLATE
 TO BE INSTALLED



CORNERS DO NOT
 RECEIVE FASTENERS

CORNERS DO NOT
 RECEIVE FASTENERS

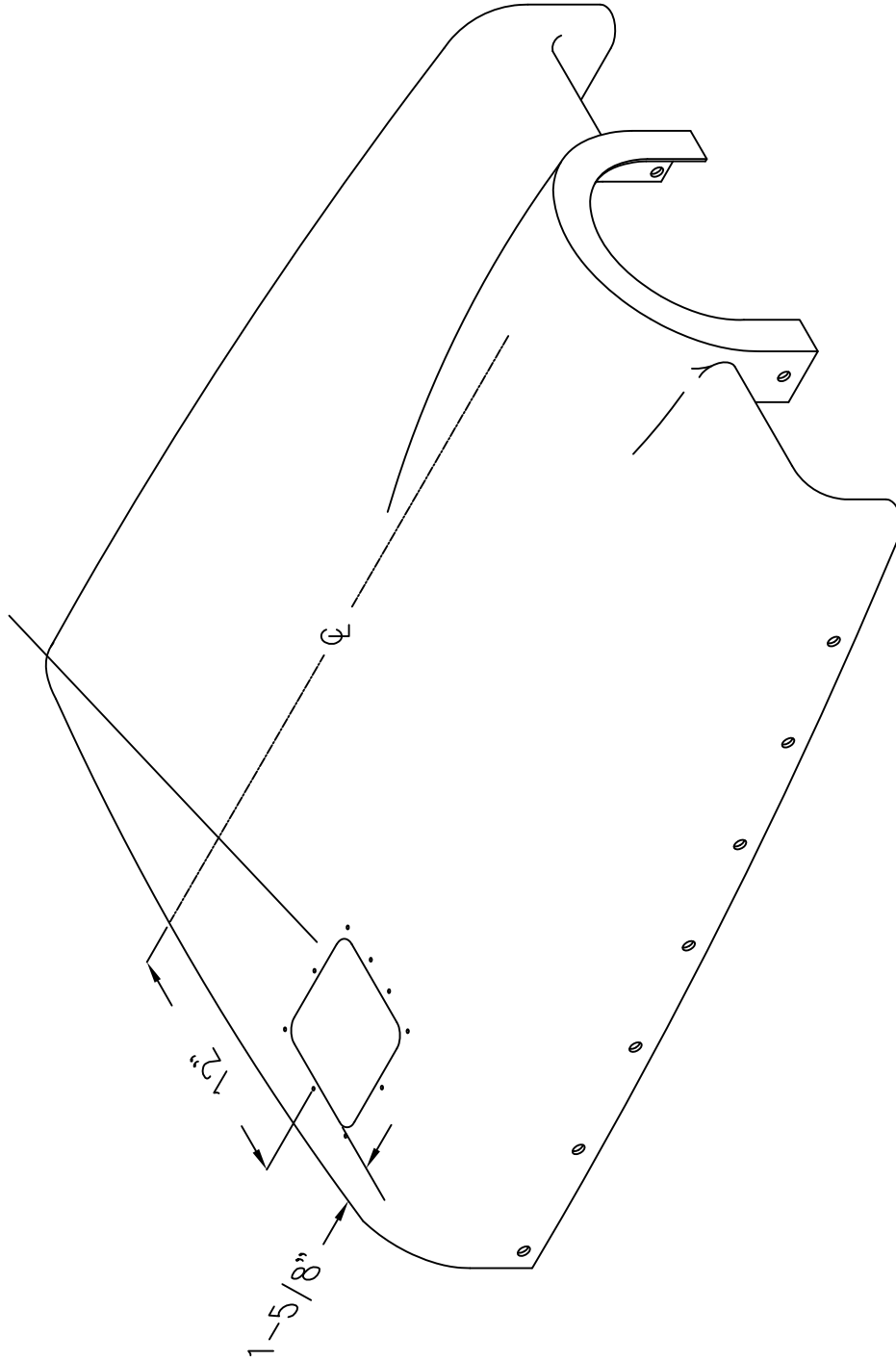
TRIM INLETS AS NEEDED
 TO ALLOW BAFFLE SEALS
 TO OVERLAP

FINAL SIZE DRILL
 (FWD 3 HOLES PER SIDE)
 TO #11 ONLY

3/4" FROM END
 FINAL SIZE COWL DRILL STRIP.
 TO #11 ONLY

RRP S-21 OUTBOUND
 TITAN X-340
 COWLING FASTENER LOCATION
 FIGURE 11-24/TITAN340

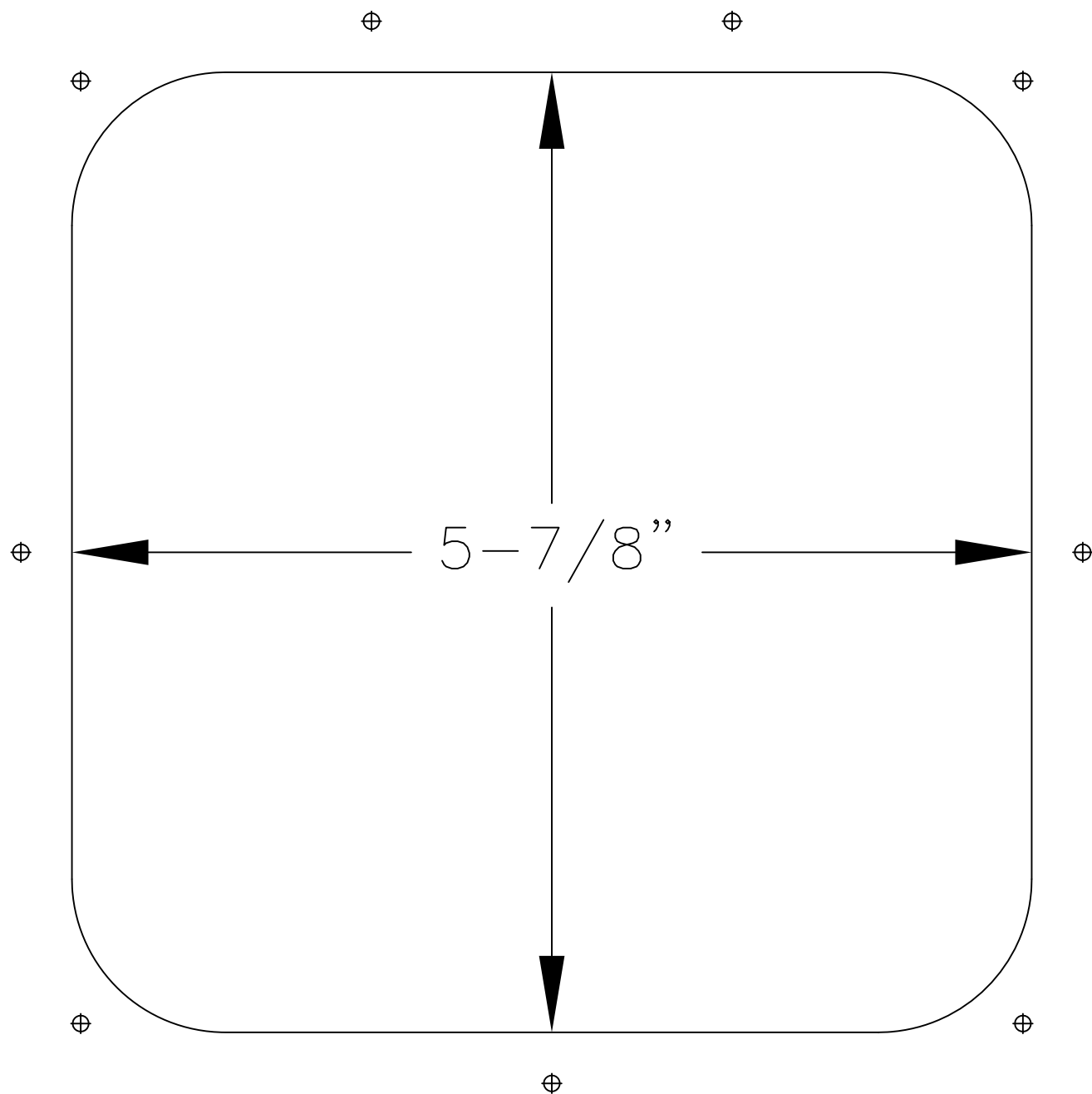
CUT AND DRILL USING 1:1 TEMPLATE.
TEST FIT WITH OIL DOOR AND OIL DOOR FRAME.
MAINTAIN SUFFICIENT CLEARANCE FOR PROPER
OPERATION ONCE PAINTED.



MD4392
REV. - ORIG

RRR S-21 OUTBOUND
TITAN X-340
OIL DOOR LOCATION
FIGURE 11-25/TITAN340

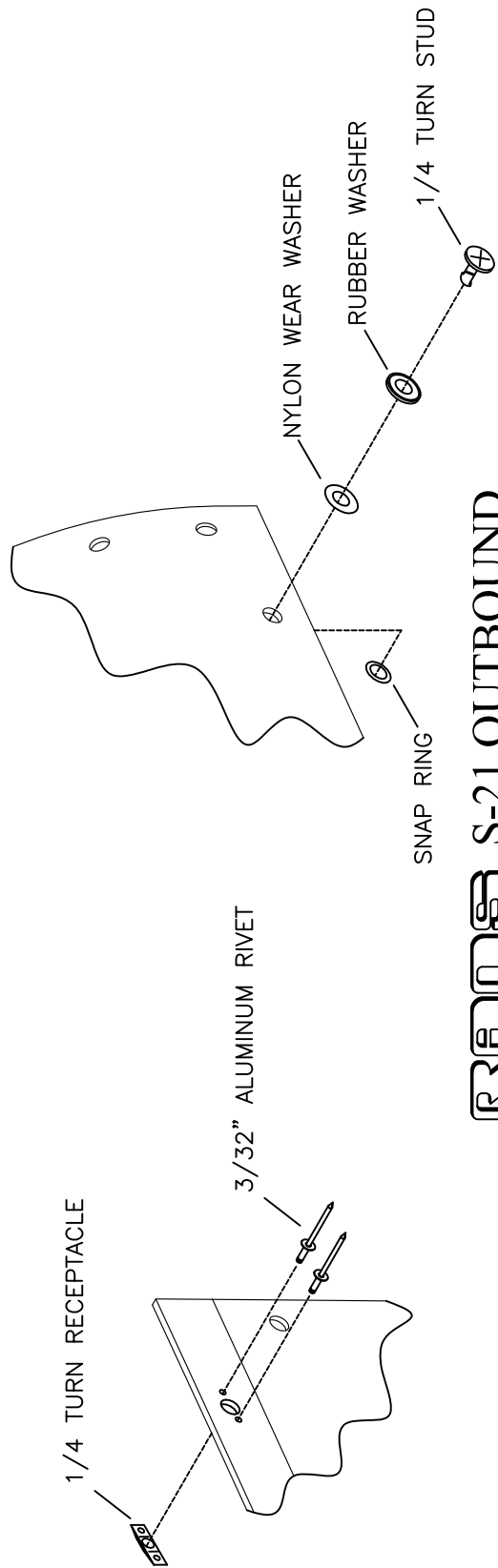
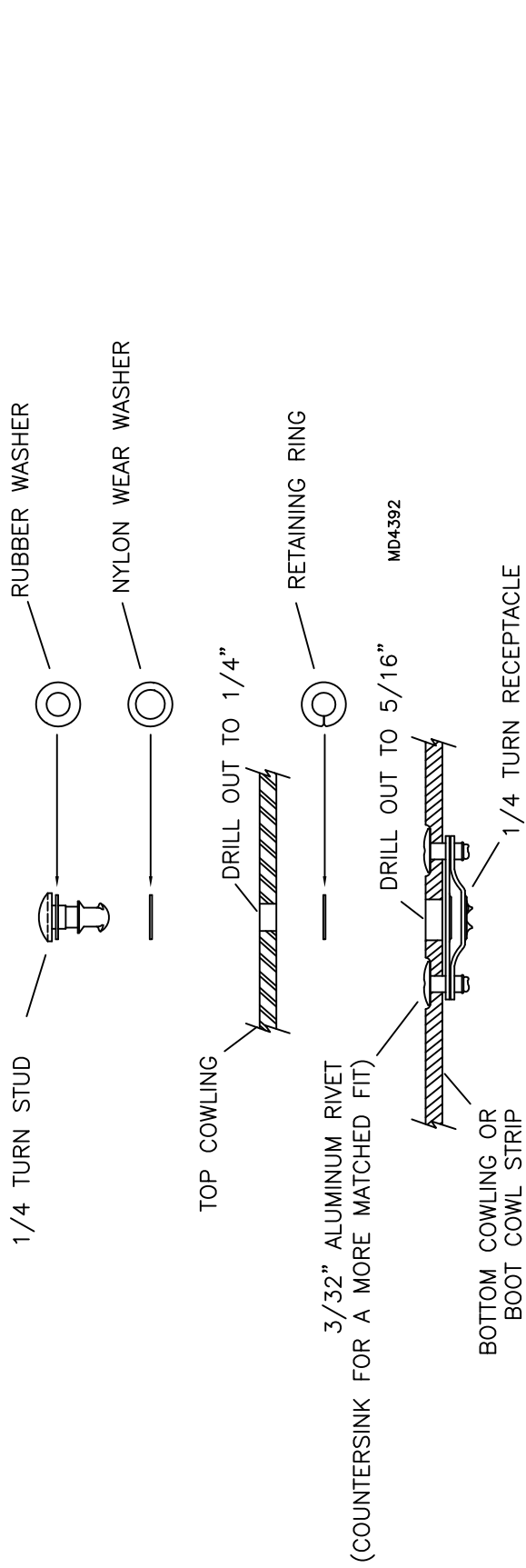
1 TO 1 TEMPLATE



RANS S-21 OUTBOUND
TITAN X-340
OIL CHECK DOOR TEMPLATE
FIGURE 11-26/TITAN340

MD4392
REV. - ORIG

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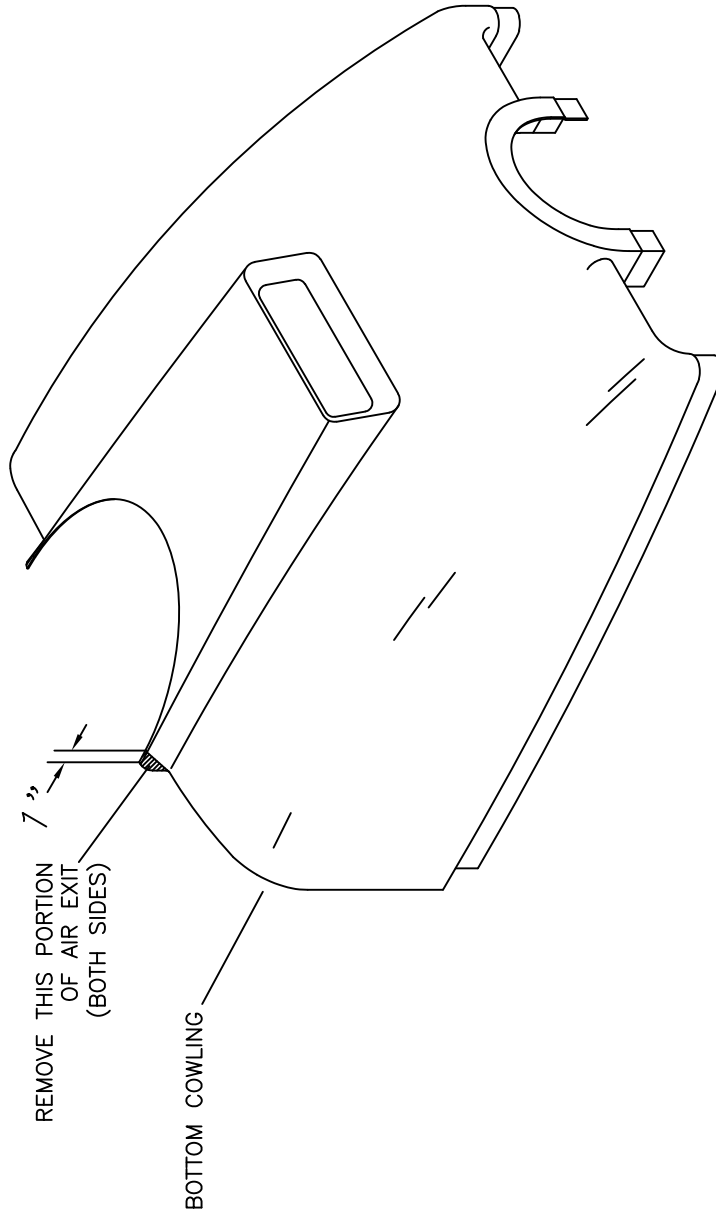


RAMS S-21 OUTBOUND

TITAN X-340

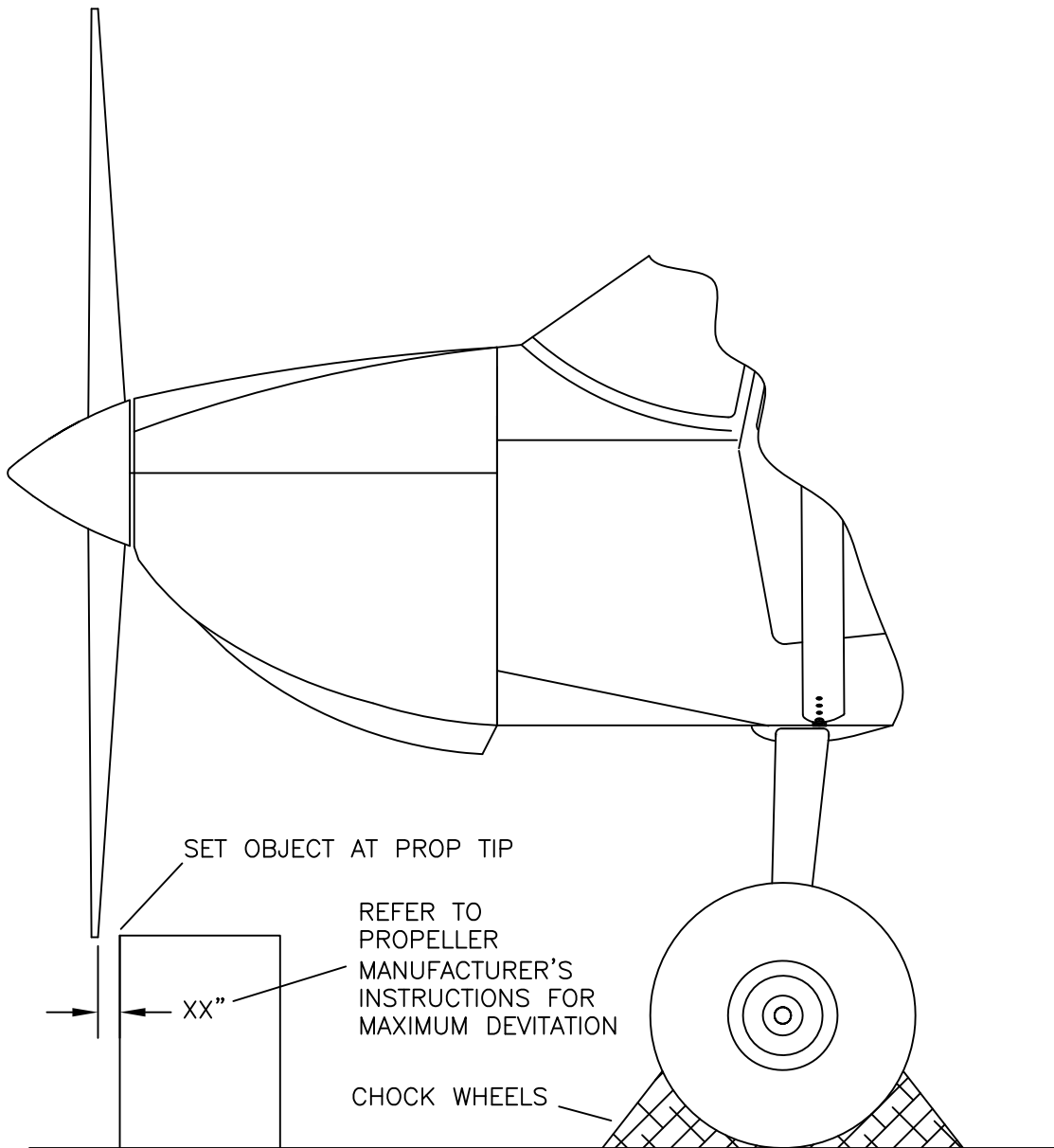
FIGURE 11-27/TITAN340

MD5143
REV. - ORIG



MD2833
REV. A

RAMRO S-21 OUTBOUND
TITAN X-340
BOTTOM COWLING MODIFICATION
FIGURE 11-28/TITAN340



IMPORTANT!

RE-CHECK PROPELLER TORQUE PER MANUFACTURE'S
 RECOMMENDED INSPECTION INTERVAL. FAILURE TO MAINTAIN
 PROP TORQUE MAY RESULT IN SEPARATION OF THE PROPELLER
 FROM THE AIRCRAFT AND MAY CAUSE INJURY OR DEATH. REFER
 TO PROPELLER MANUFACTURER'S INSTRUCTIONS FOR ANY
 SPECIAL MAINTENANCE REQUIREMENTS.

**RANS S-21 OUTBOUND
 TITAN X-340
 PROPELLER TRACKING
 FIGURE 11-29/TITAN340**

MD4380
 REV. - ORIG

09/11/2018