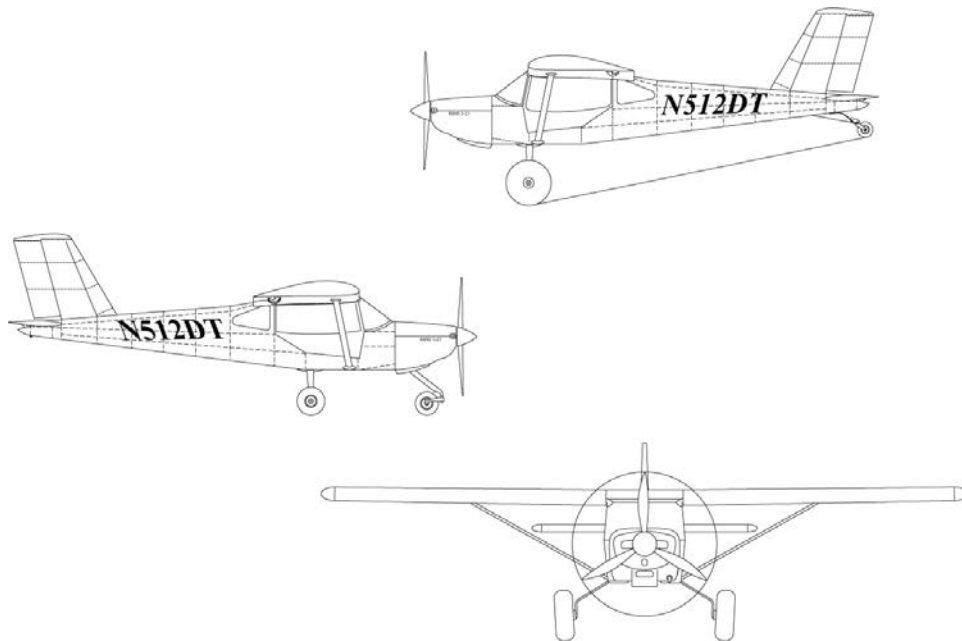


RANS

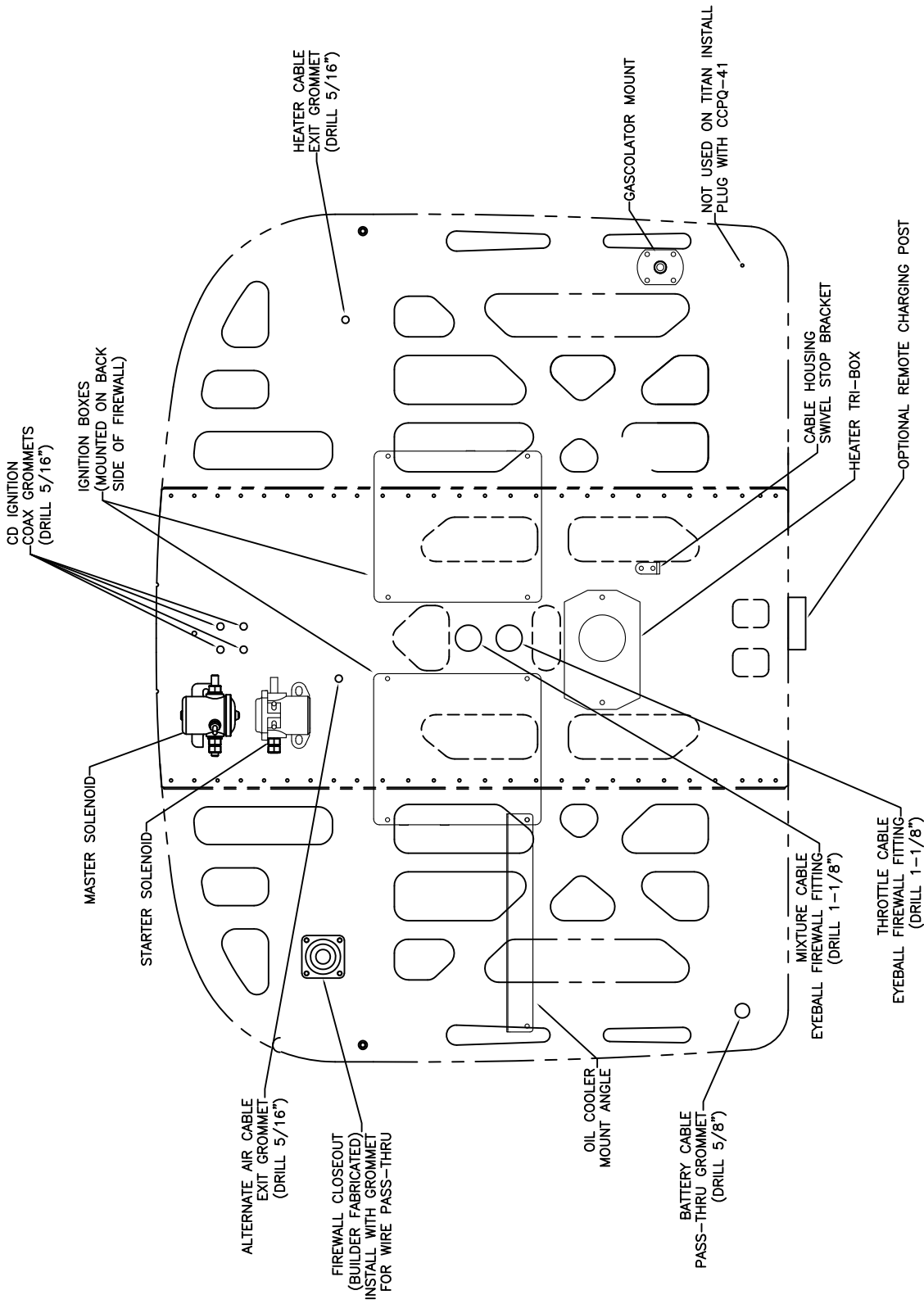
S-21 OUTBOUND **TITAN X-340 INSTALLATION** **FIGURES MANUAL**



Serial Number: _____

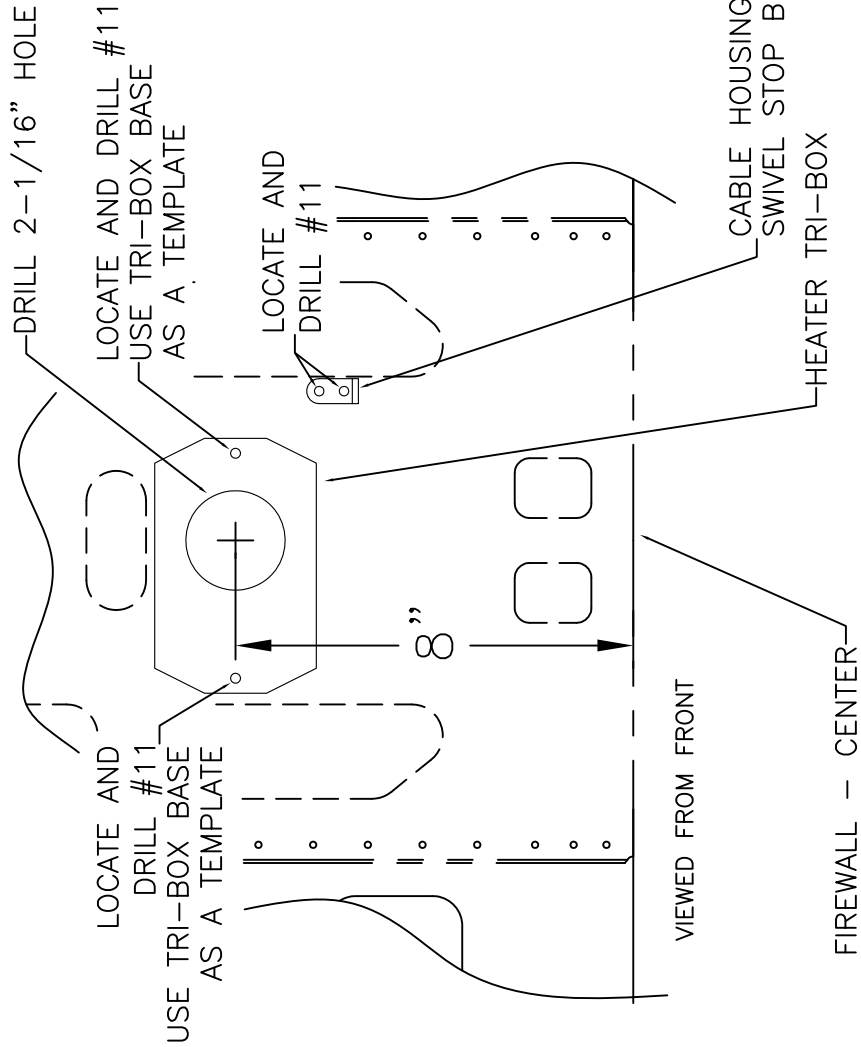
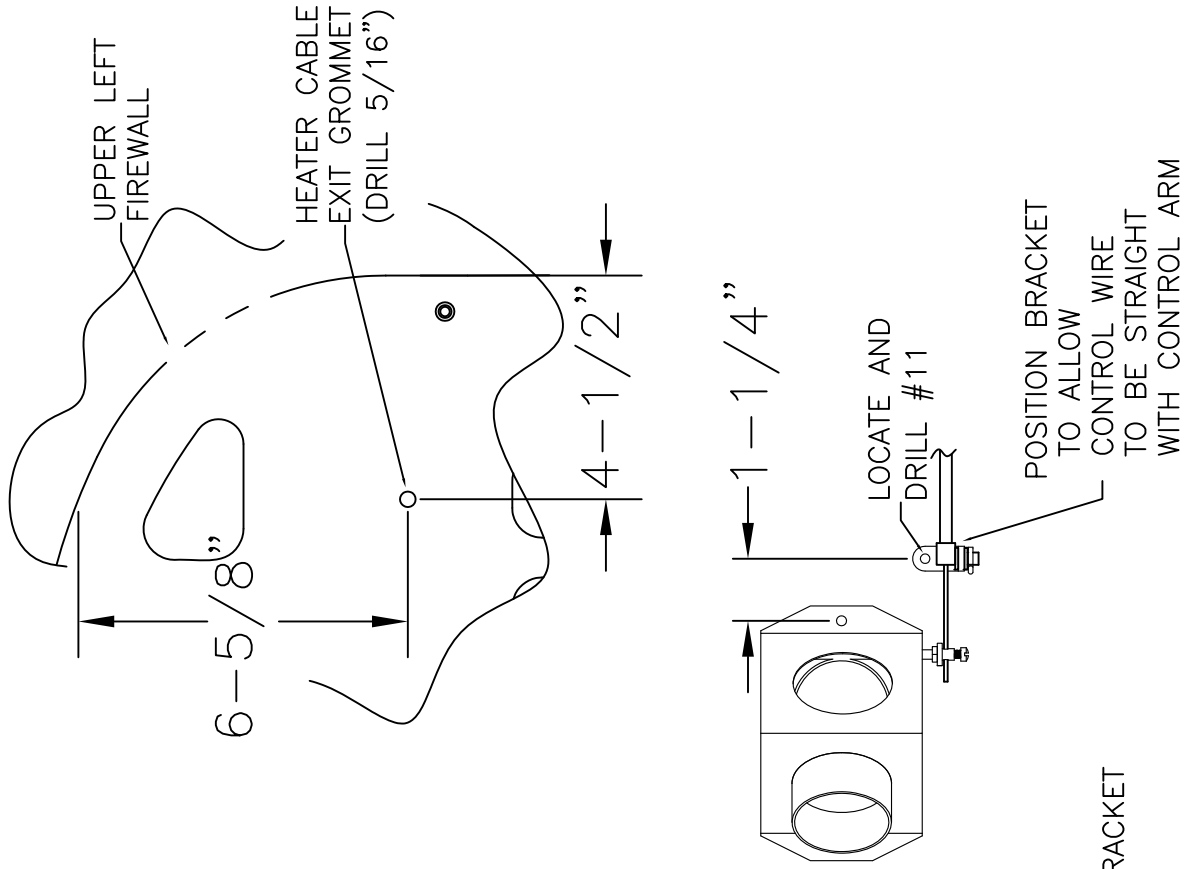
Registration Number: _____

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HAYS, KANSAS, USA 67601
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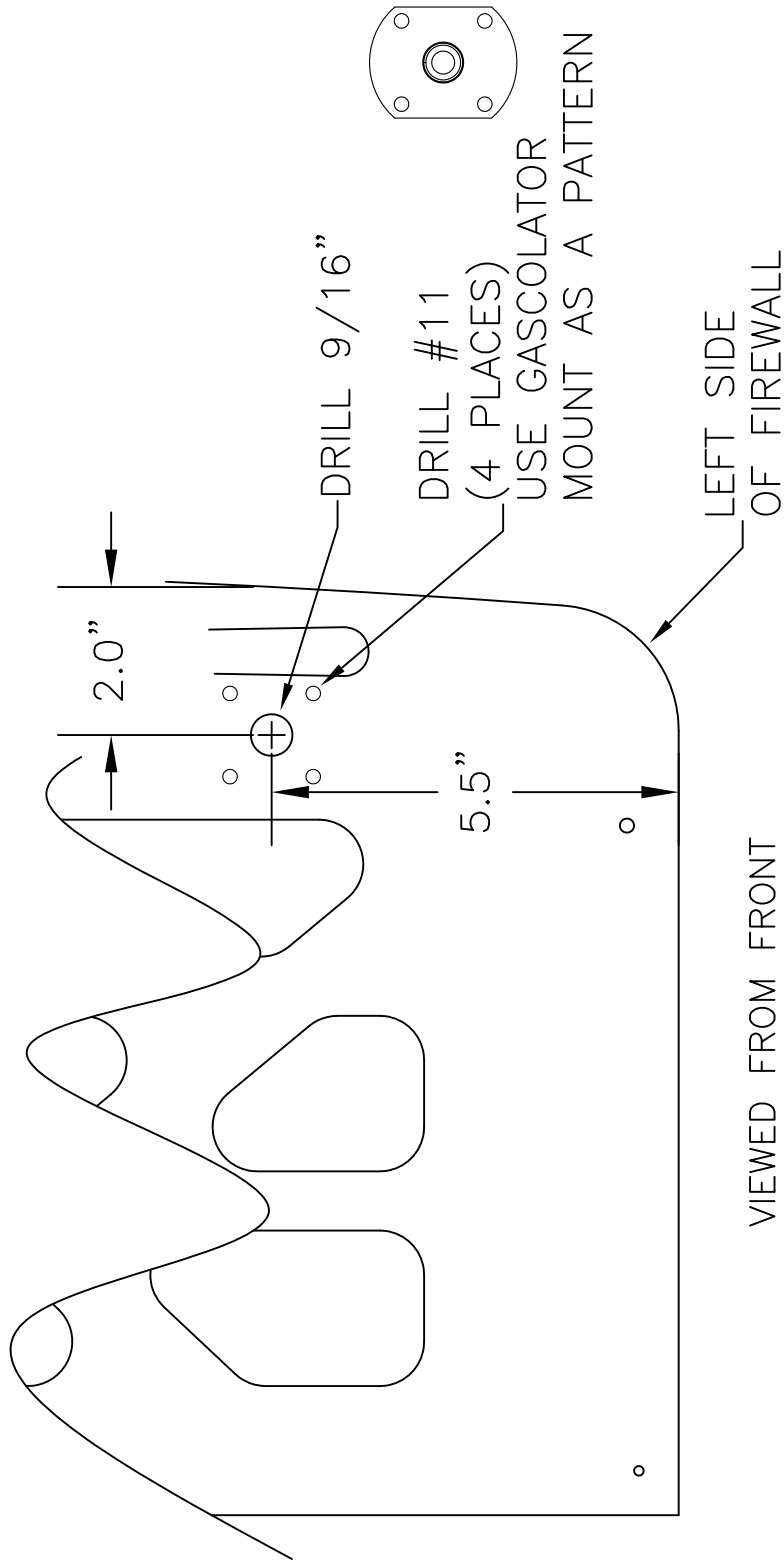
MD5575
REV. A

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



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

MD5575
 REV. - - ORIG

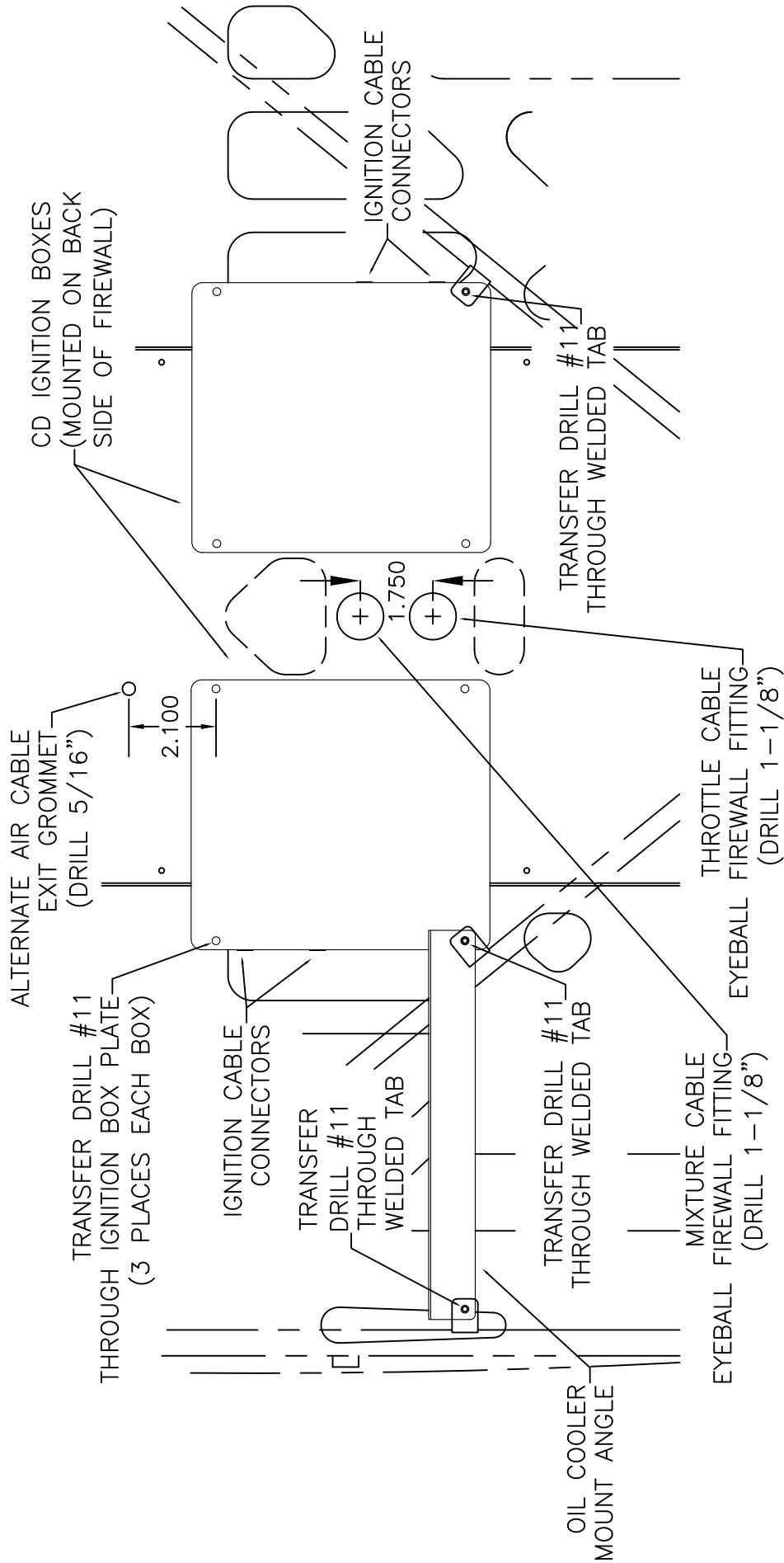


VIEWED FROM FRONT

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

**GASCOLATOR MOUNT INSTALLATION
FIGURE 11-03/ TITAN340**

MD5575
REV. - ORIG



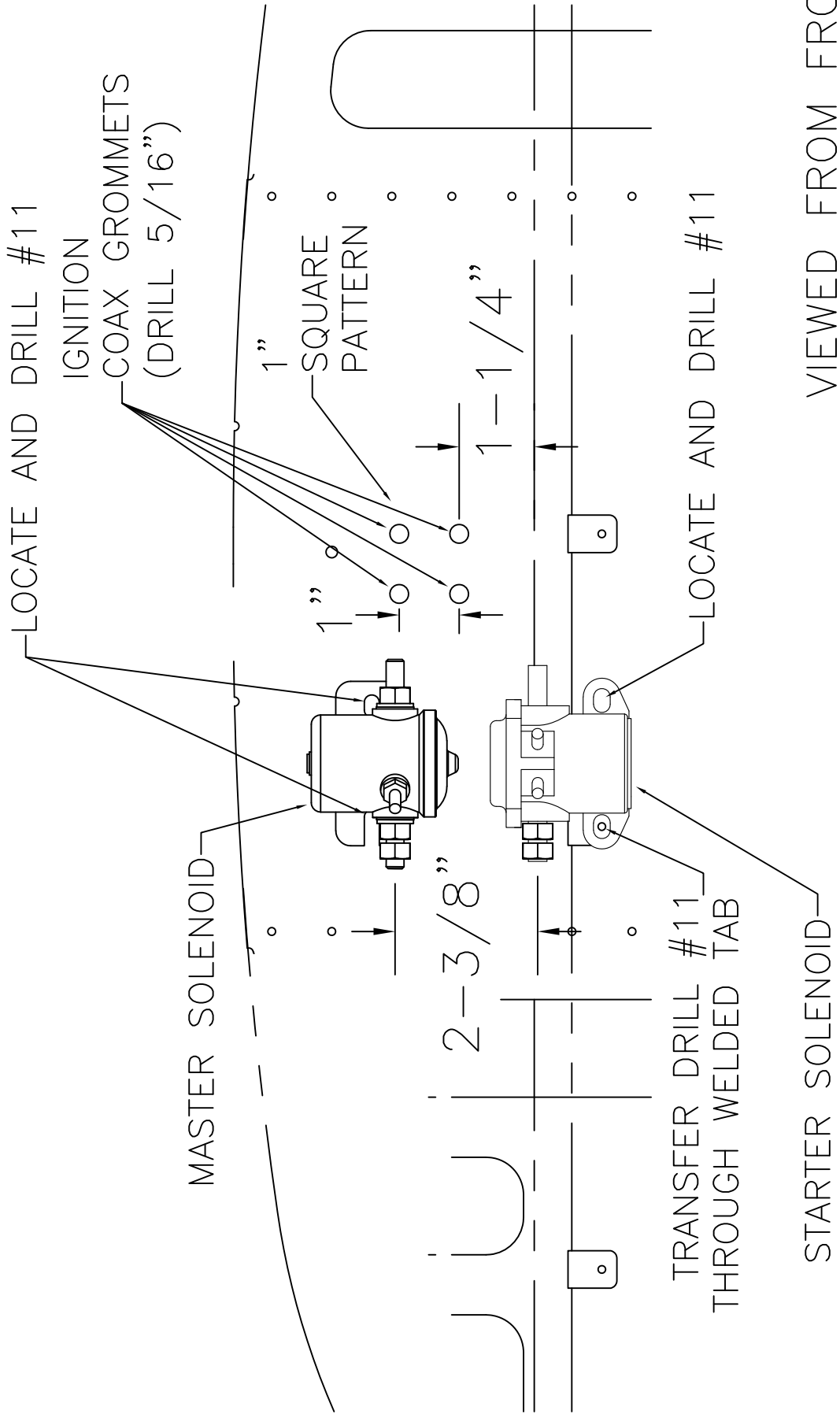
VIEWED FROM FRONT

ITEMS FORWARD OF IGNITION BOXES NOT SHOWN FOR CLARITY

RAMBOS S-21 OUTBOUND
TITAN X-340

MD5575
REV. A

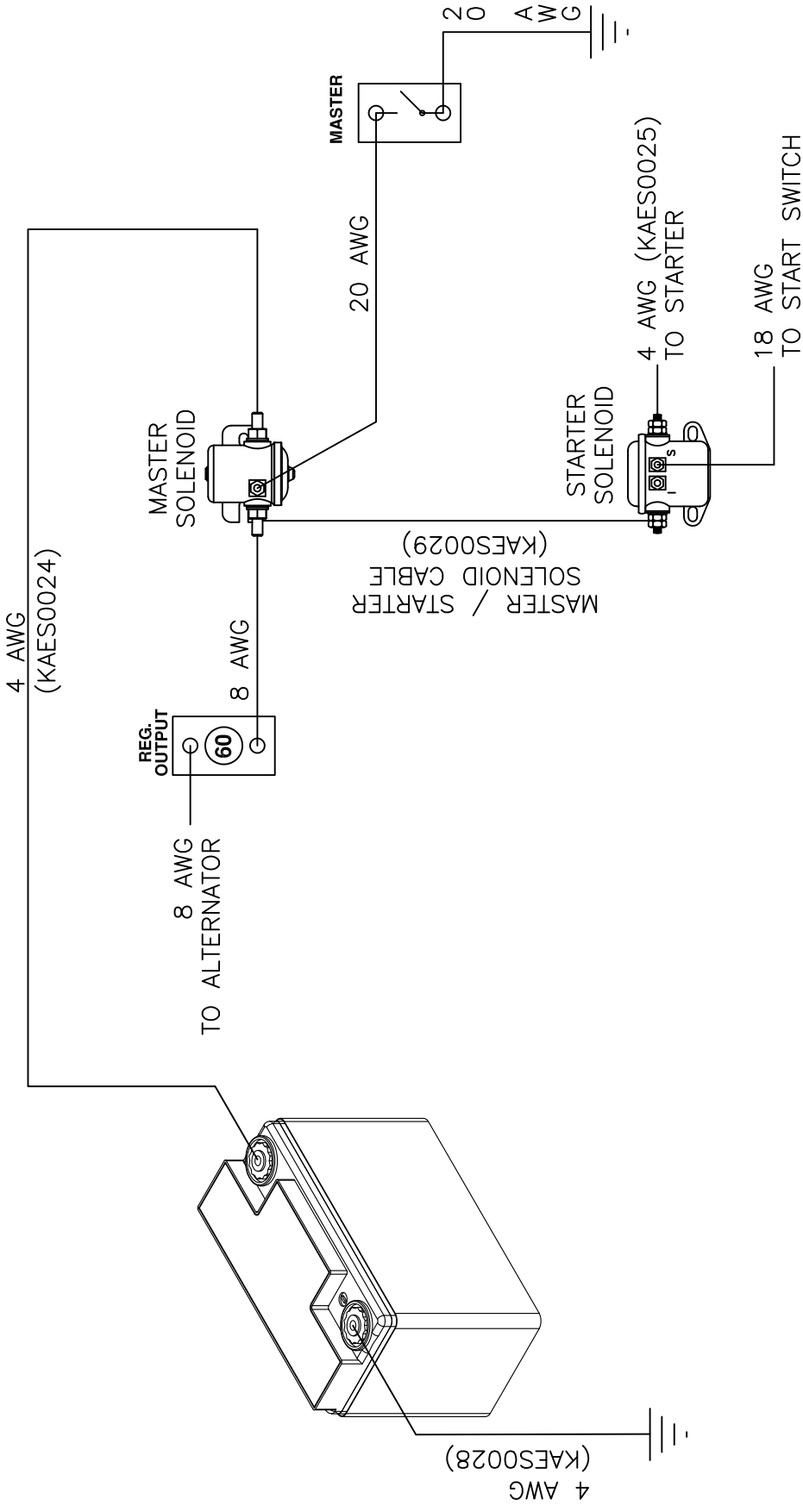
IGNITION MODULE & OIL COOLER MOUNT INSTALLATION
FIGURE 11-04/ TITAN340



MD5575
REV. A

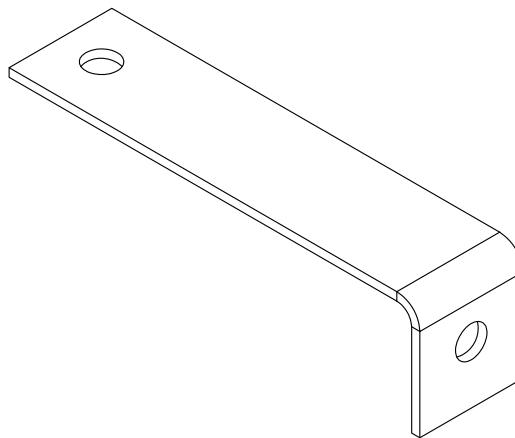
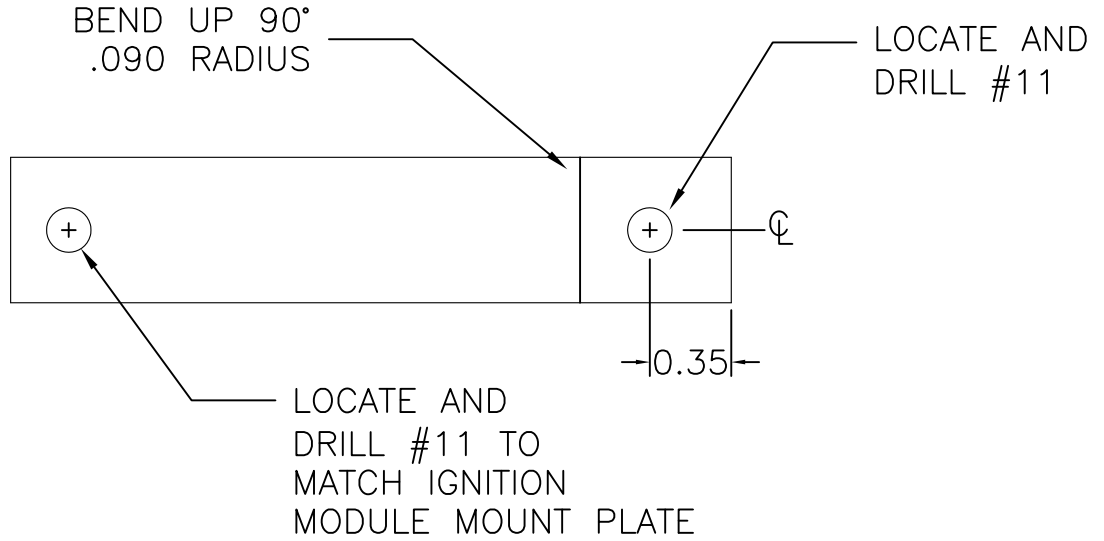
RAMROB S-21 OUTBOUND
TITAN X-340

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



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

MODIFY KPES0036



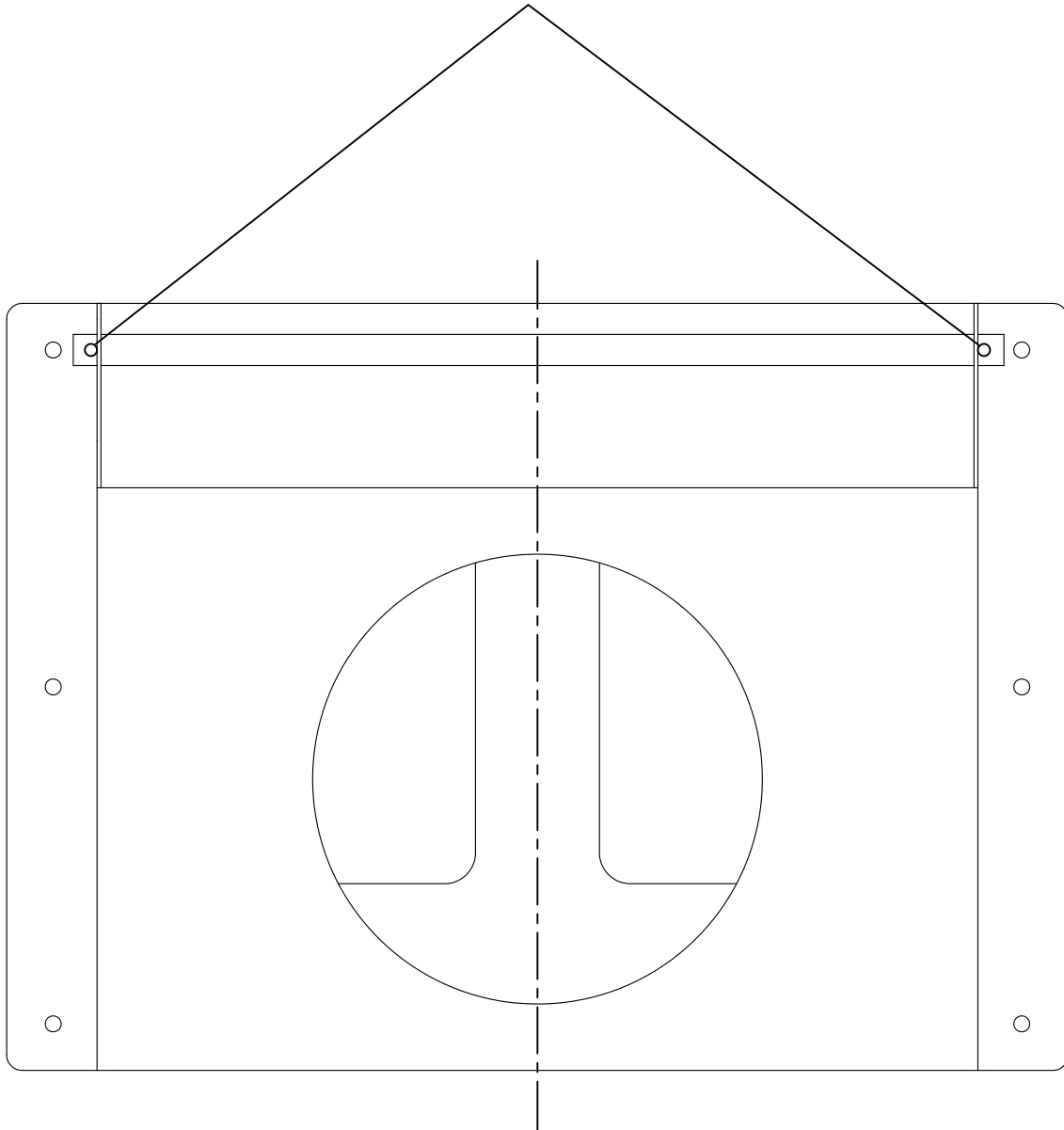
**RANS S-21 OUTBOUND
TITAN X-340**

MD5575
REV. - ORIG

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

09/11/2018

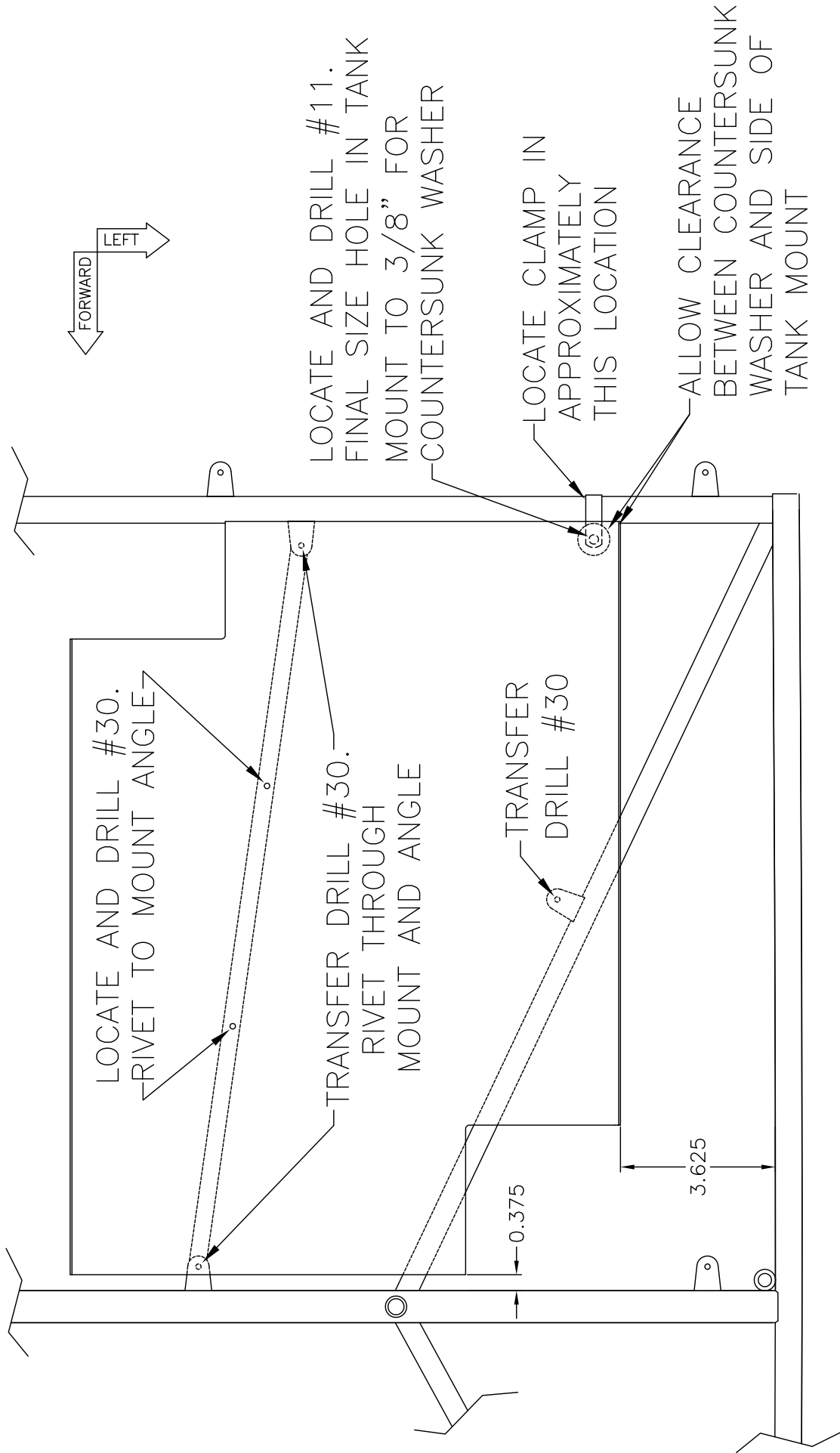
CENTER BATTERY BAR AND DRILL #40
AS NECESSARY



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

MD5468
REV. - ORIG

09/11/2018



FORWARD
LEFT

LOCATE AND DRILL #11.
FINAL SIZE HOLE IN TANK
MOUNT TO 3/8" FOR
COUNTERSUNK WASHER

LOCATE CLAMP IN
APPROXIMATELY
THIS LOCATION

ALLOW CLEARANCE
BETWEEN COUNTERSUNK
WASHER AND SIDE OF
TANK MOUNT

LOCATE AND DRILL #30.
RIVET TO MOUNT ANGLE

TRANSFER DRILL #30.
RIVET THROUGH
MOUNT AND ANGLE

TRANSFER
DRILL #30

0.375

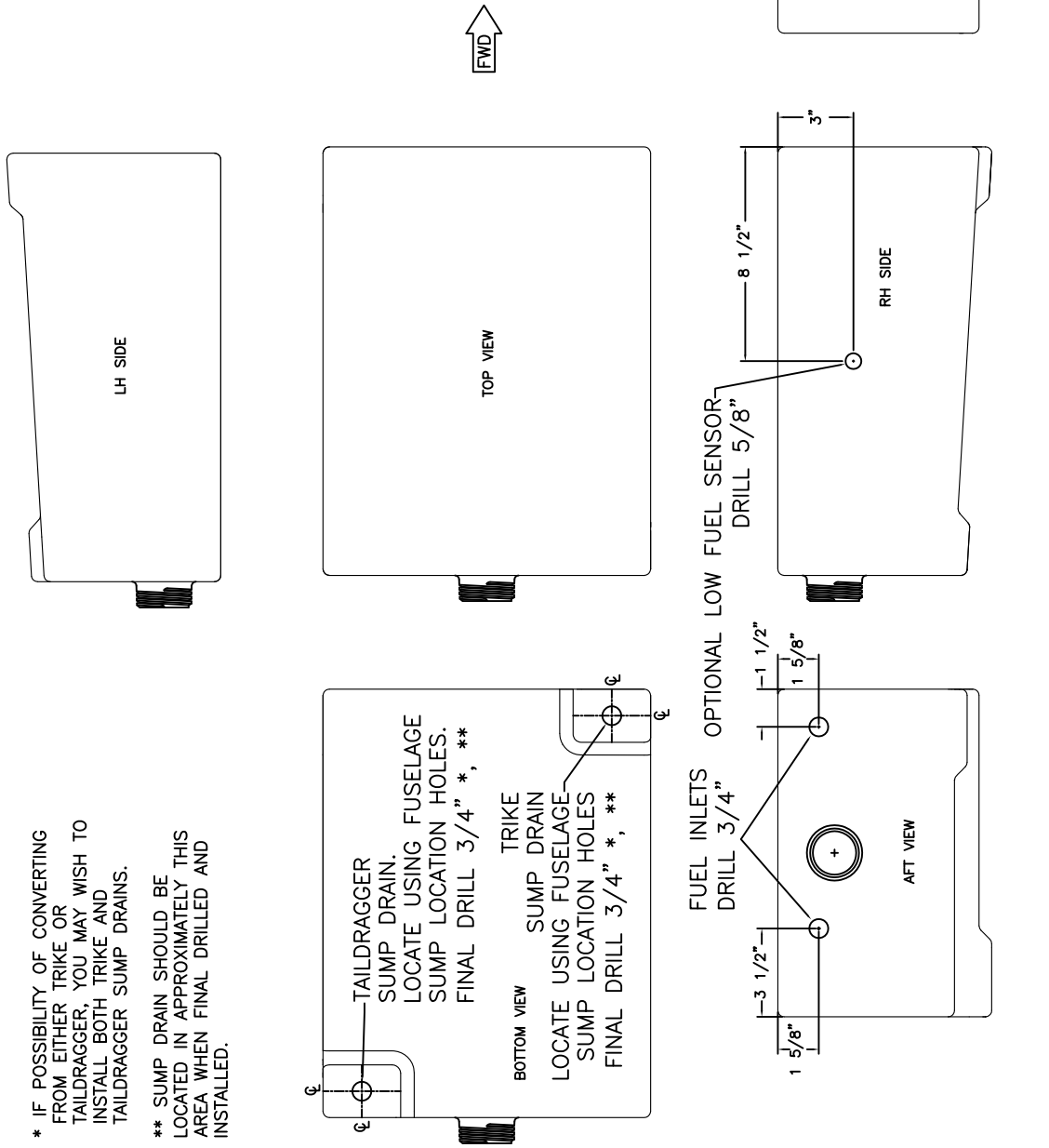
3.625

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

MD5616
REV. - ORIG

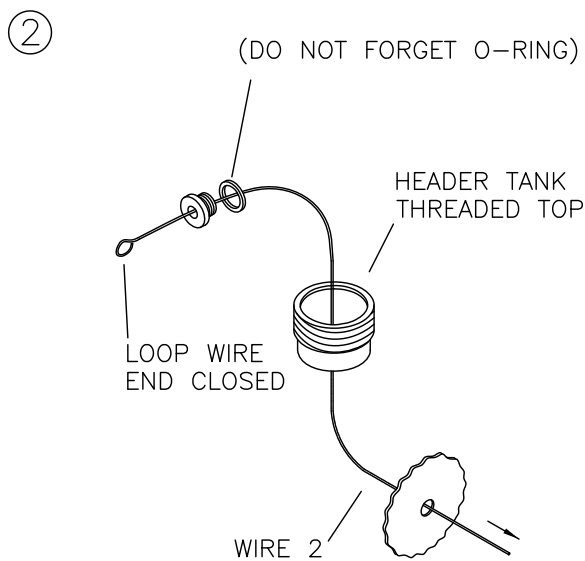
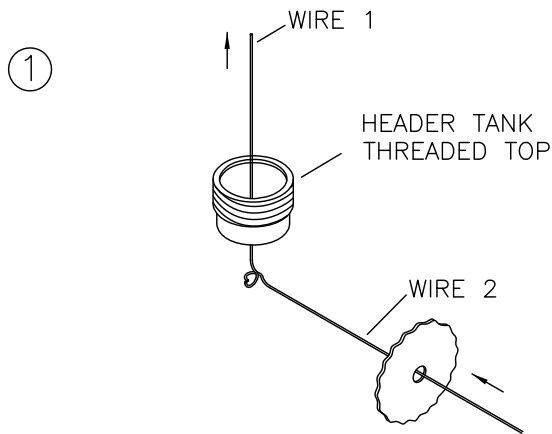
* IF POSSIBILITY OF CONVERTING FROM EITHER TRIKE OR TAILDRAGGER, YOU MAY WISH TO INSTALL BOTH TRIKE AND TAILDRAGGER SUMP DRAINS.

** 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.

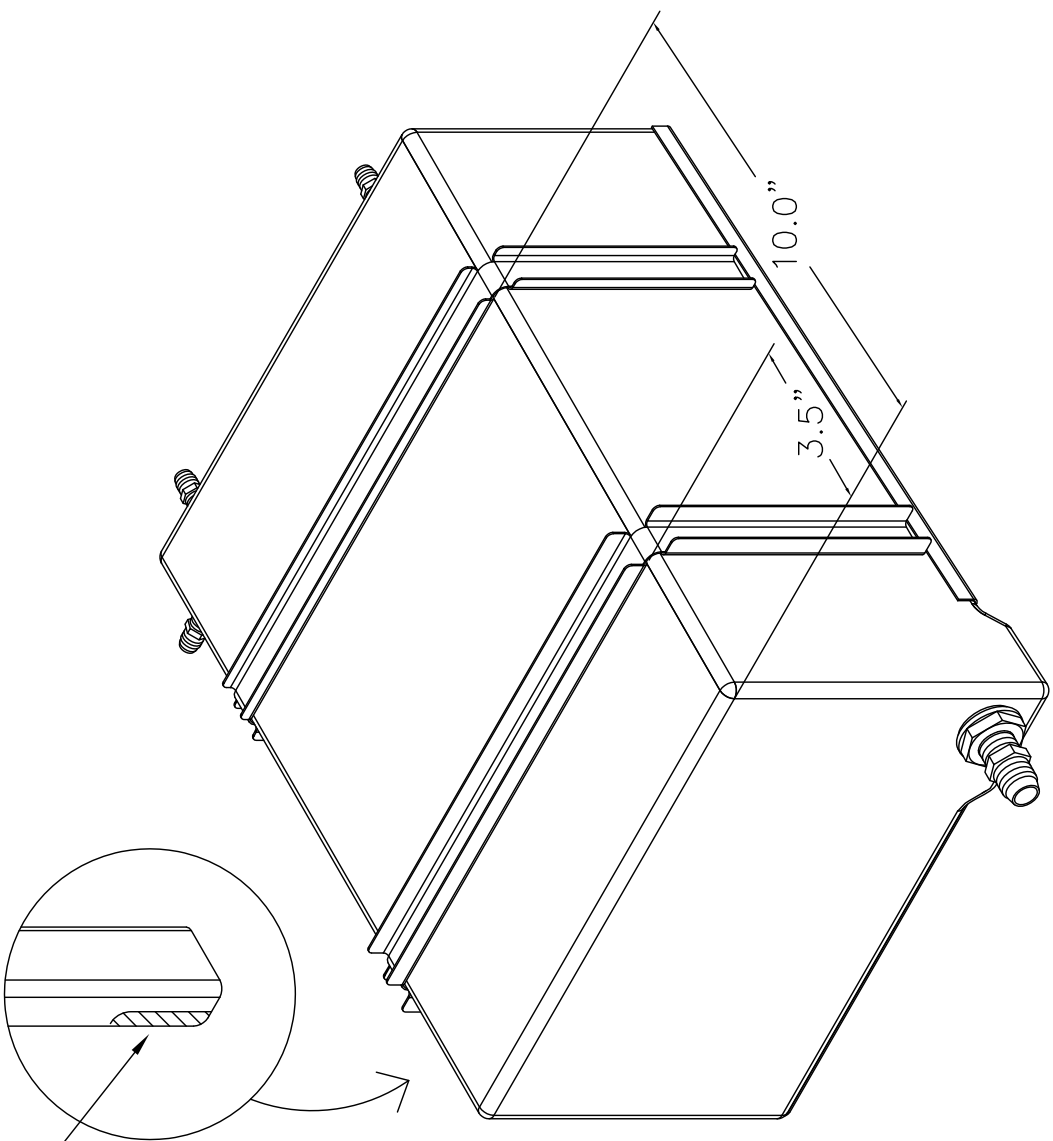
④ REMOVE WIRE.

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

MD4832
REV. - ORIG

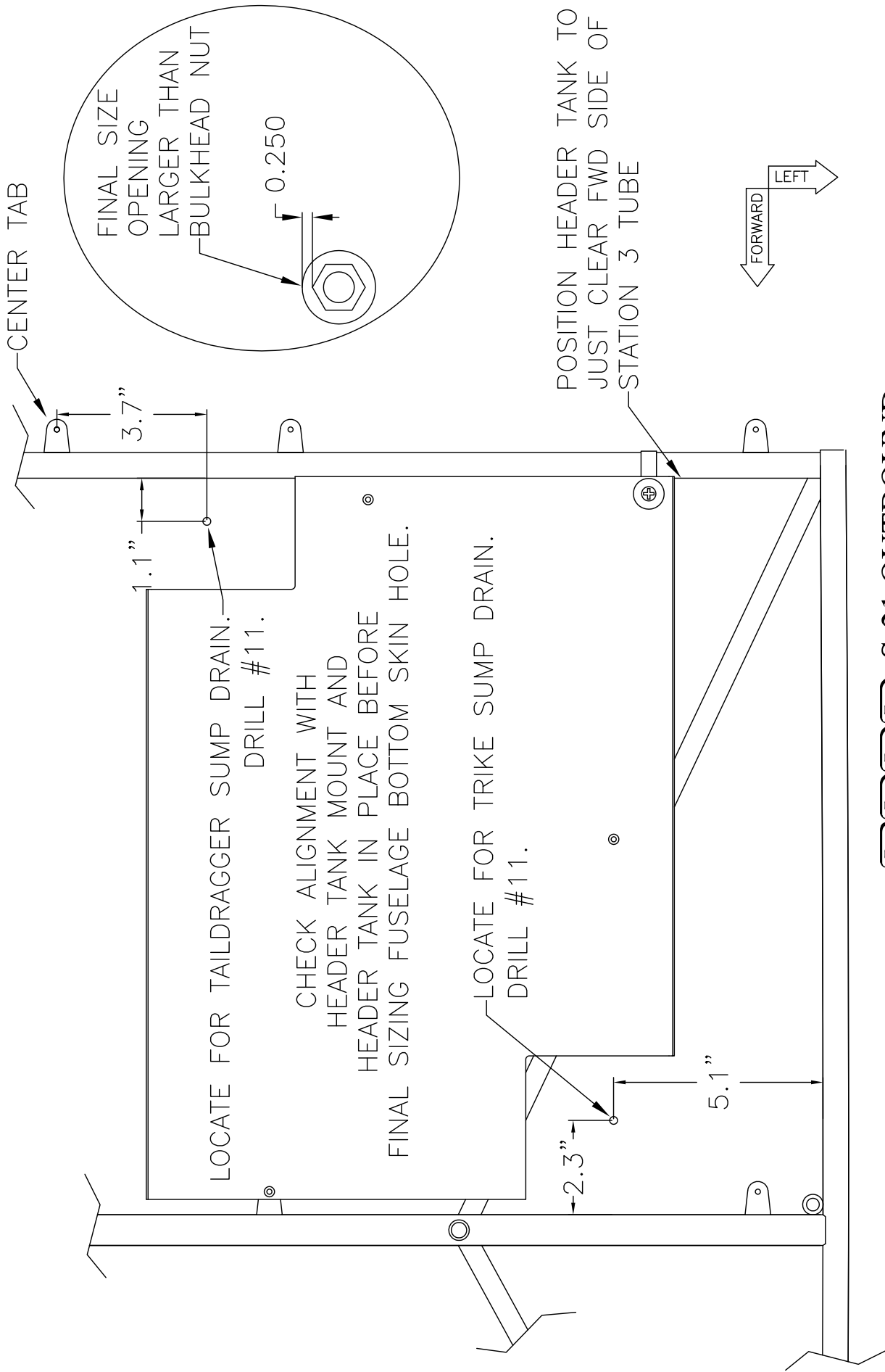
09/11/2018

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

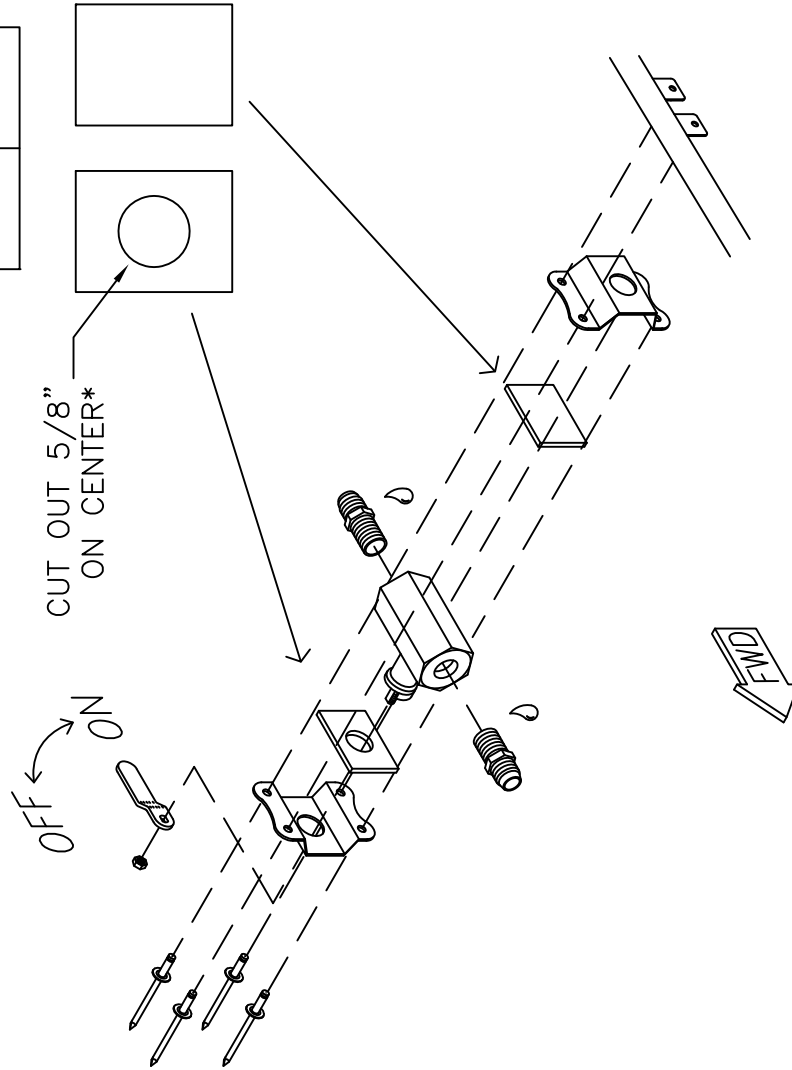
FUEL VALVE
SILICONE PAD
(KPFS0106)

CUT INTO 2 PIECES
ON CENTERLINE

OFF ←
ON →

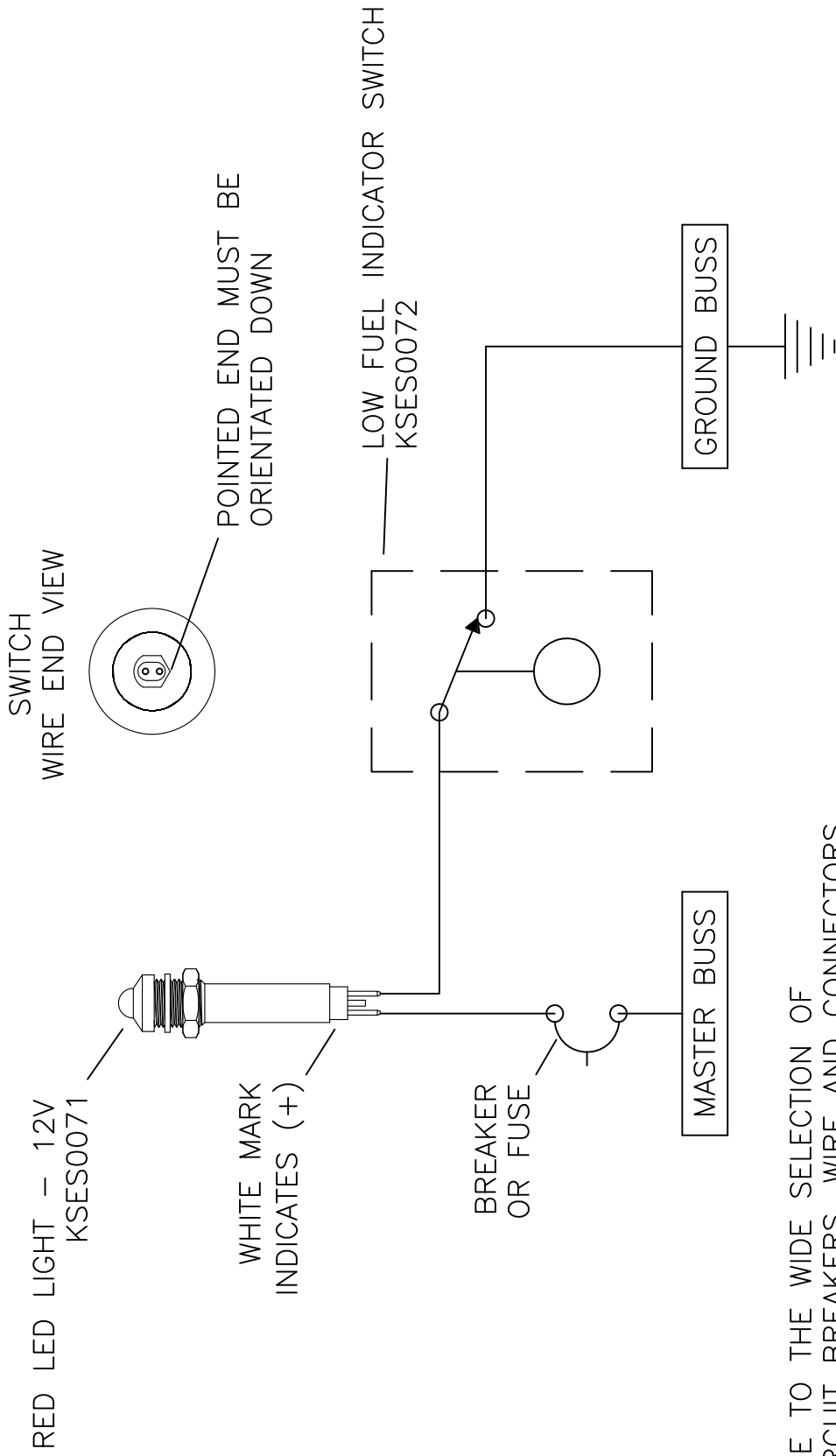
CUT OUT 5/8"
ON CENTER*

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



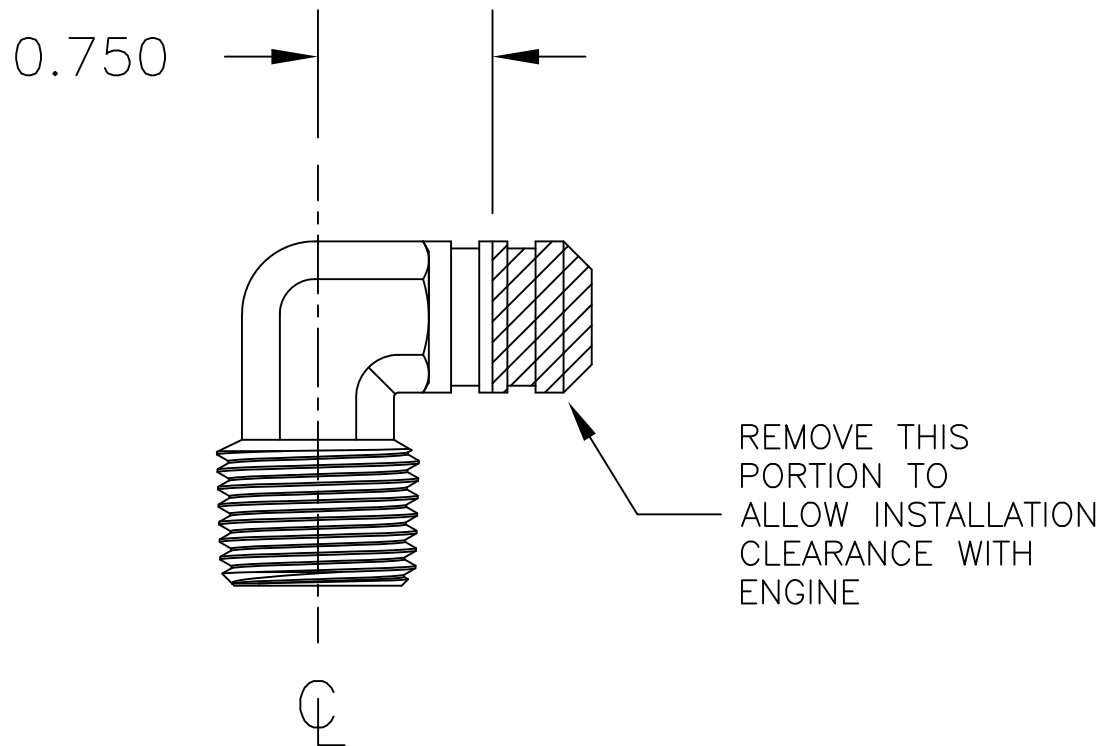
MD4388
REV. - ORIG

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



MD2861
REV. - ORIG

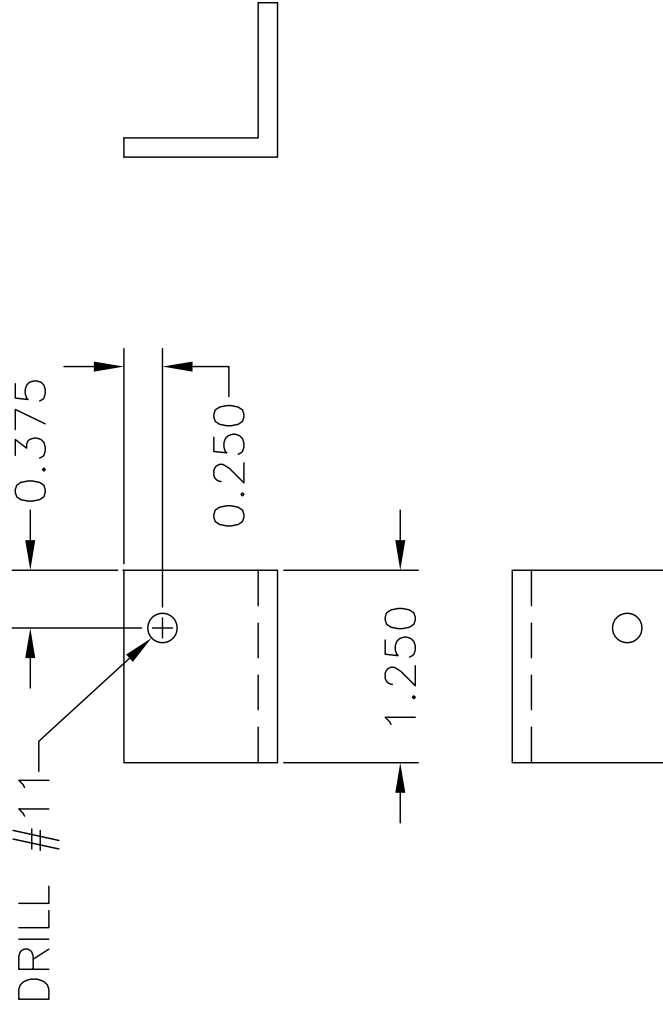
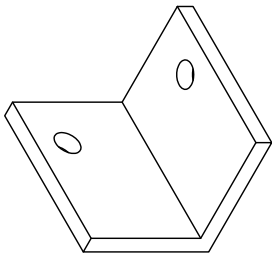
RAMMS S-21 OUTBOUND
TITAN X-340
LOW FUEL WARNING SYSTEM WIRING
FIGURE 11-15/TITAN340



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

MD5575
REV. - ORIG

09/11/2018



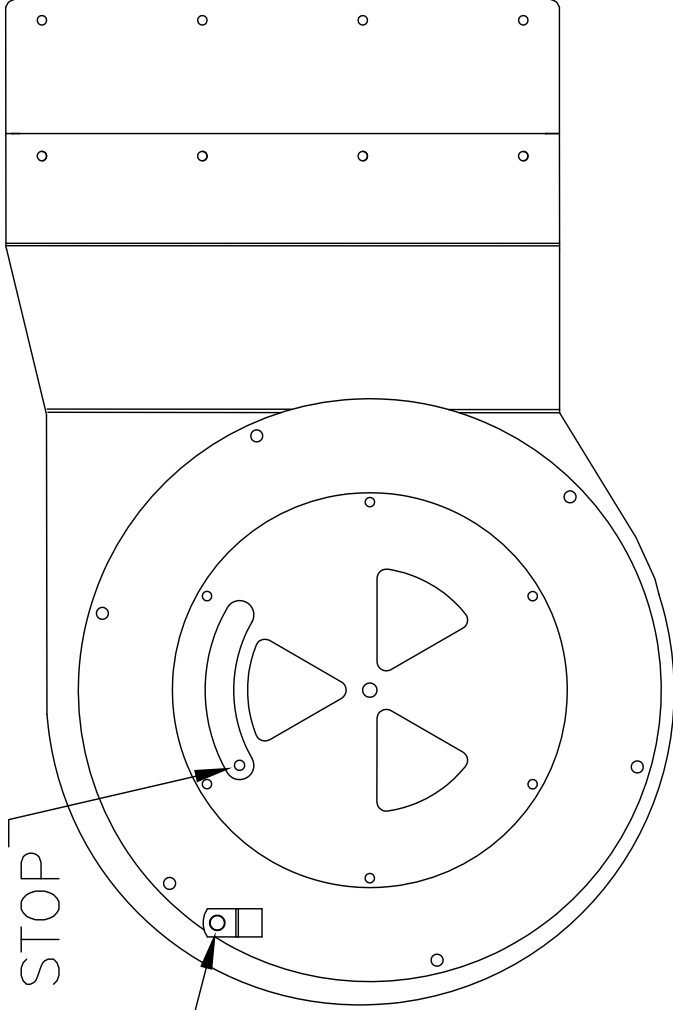
DRILL BOTH FLANGES OF ANGLE
FABRICATE QUANTITY 2

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

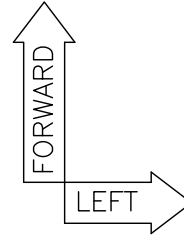
MD5616
REV. ORIG

LOCATION OF CABLE
SWIVEL STOP

LOCATION OF
1/4" CLAMP



AIRBOX WITH ALTERNATE AIR
VALVE "OPEN"
SHOWN FROM BELOW

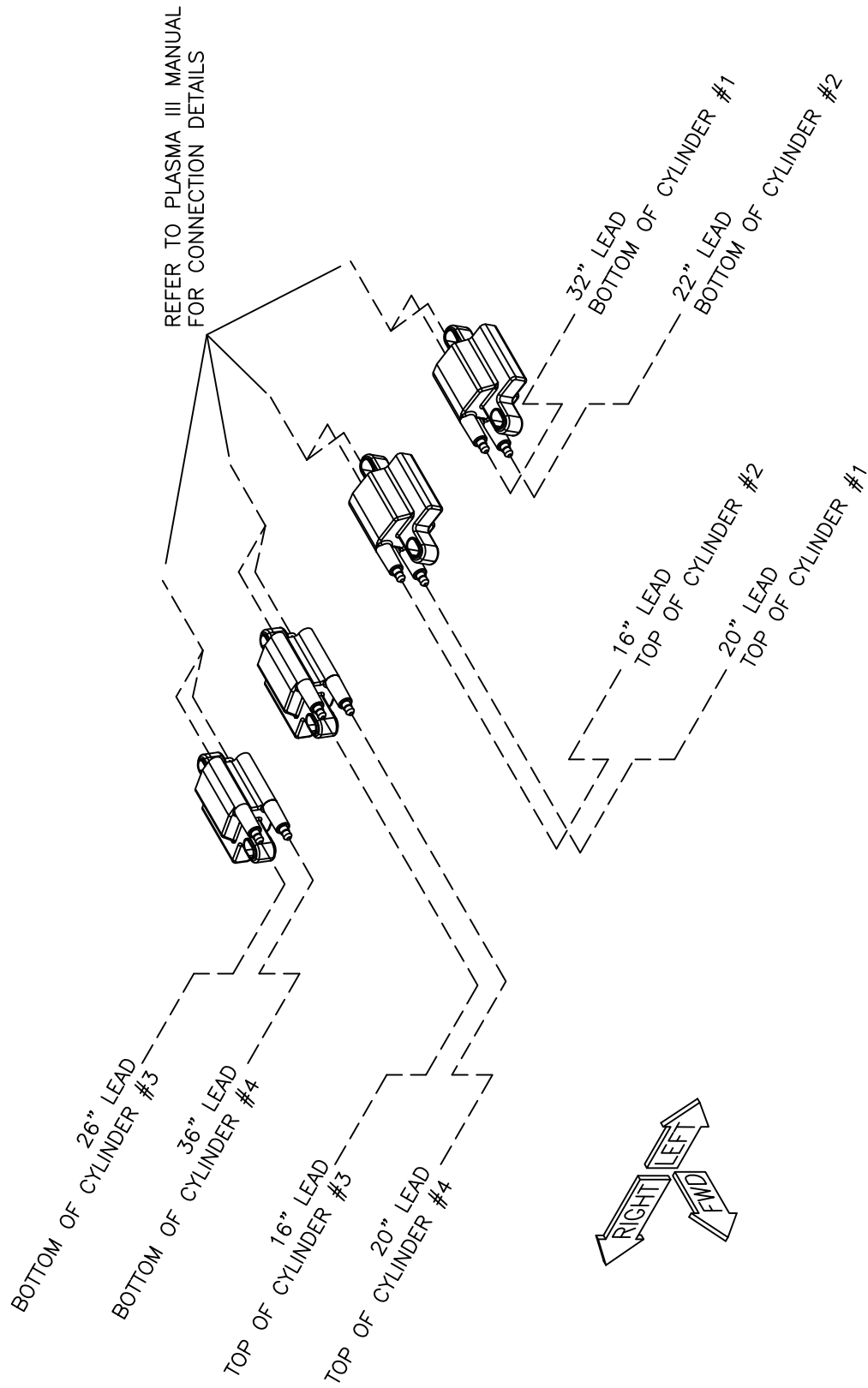


RRR S-21 OUTBOUND

TITAN X-340

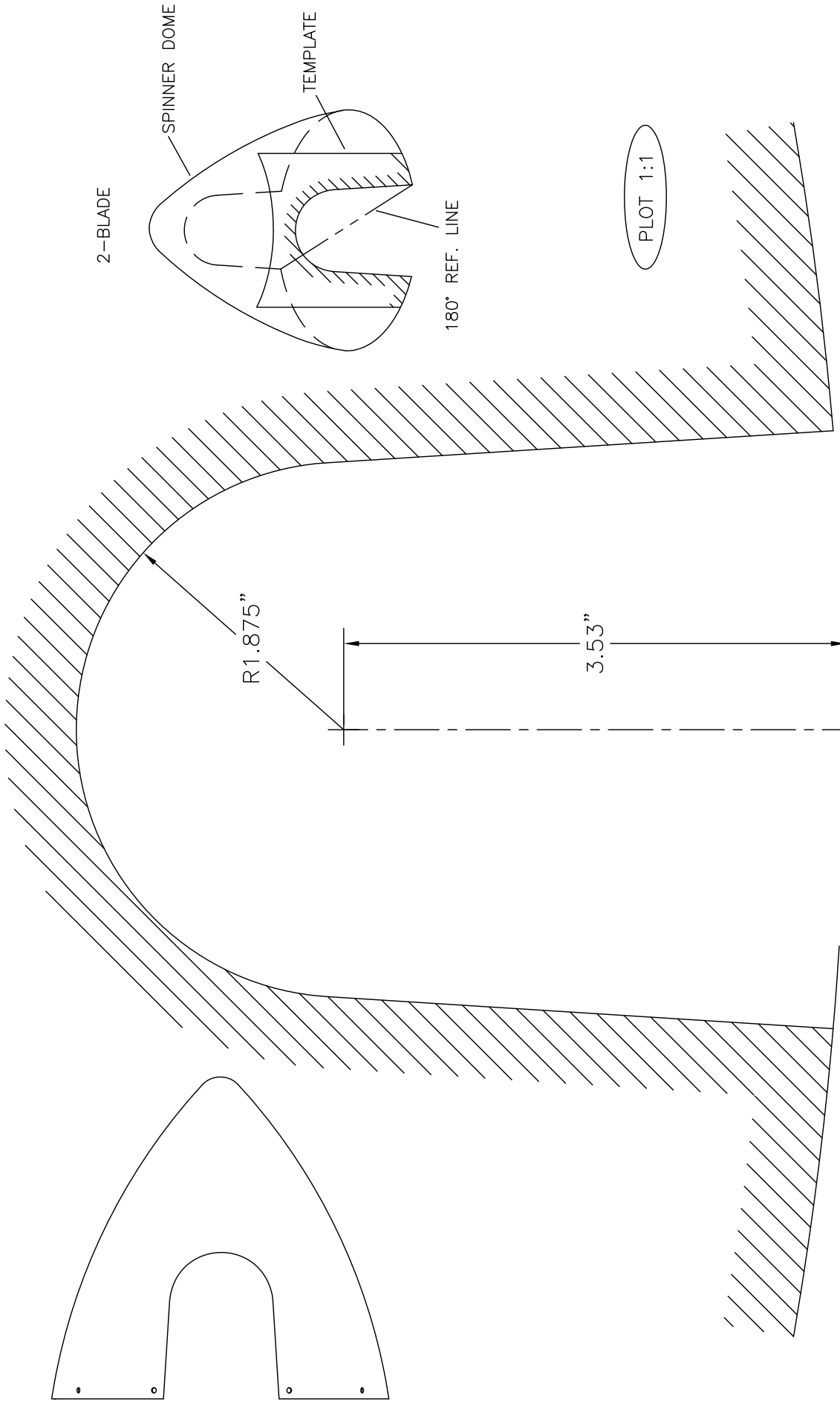
AIRBOX FILTER COVER AND
ALTERNATE AIR VALVE ORIENTATION
FIGURE 11-17/TITAN340

MD5616
REV. ORIG



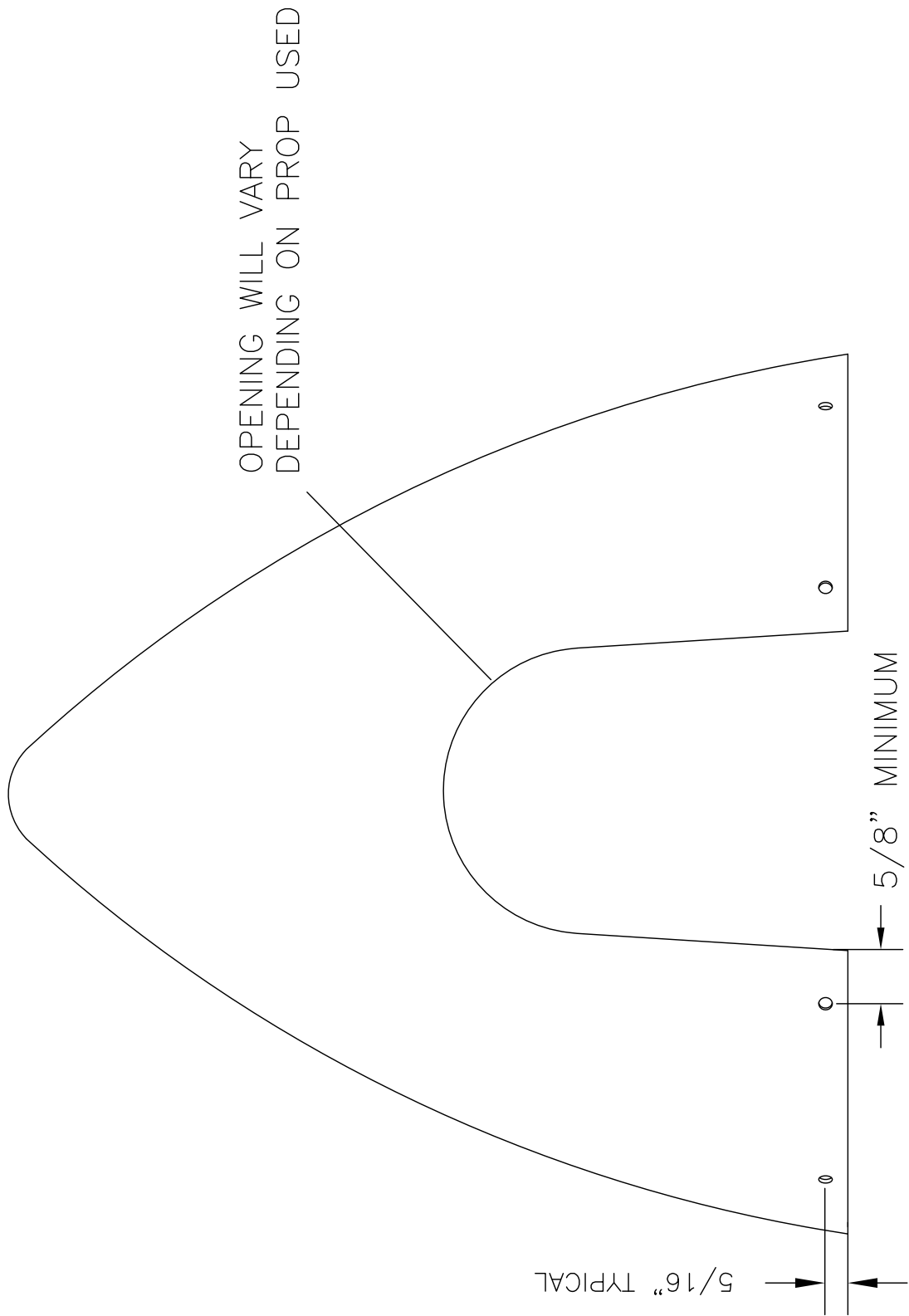
RAMCO S-21 OUTBOUND
 TITAN X-340
 HIGH TENSION IGNITION LEAD ROUTING
 FIGURE 11-17A/ TITAN340

MD55575
 REV. A



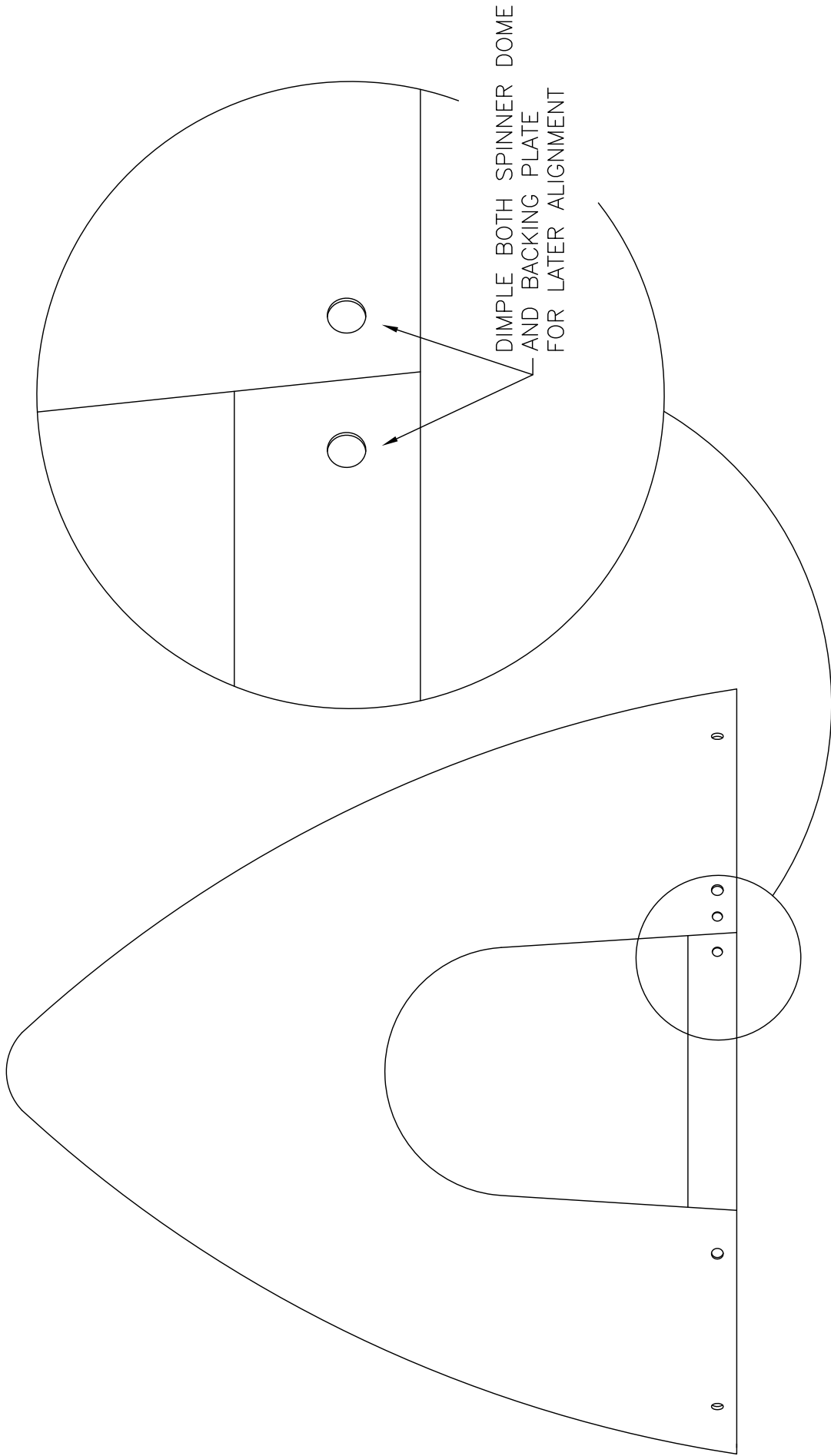
RAMS S-21 OUTBOUND
TITAN X-340
WHIRL WIND PROP - 13" SPINNER TEMPLATE
FIGURE 11-18/TITAN340

MD5228
 REV. - ORIG



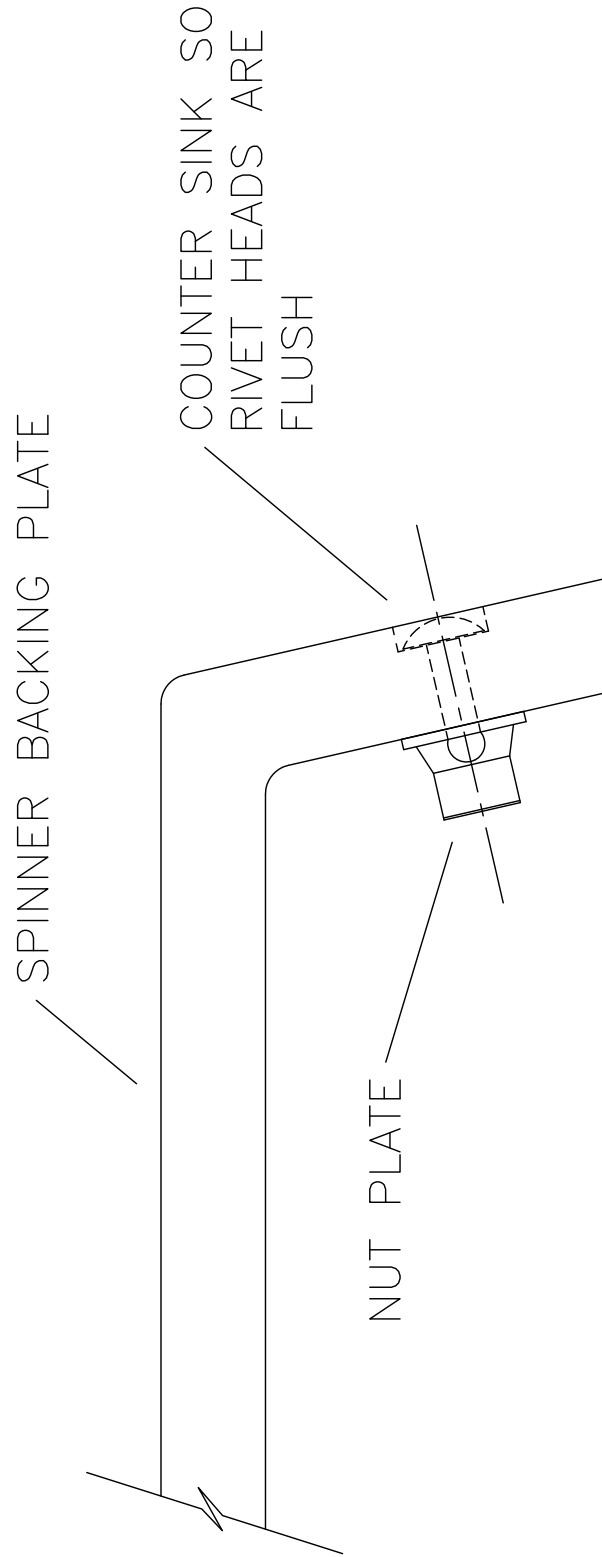
RAMS S-21 OUTBOUND
TITAN X-340
SPINNER DRILLING
FIGURE 11-19/TITAN340

MD5228
 REV. - ORIG



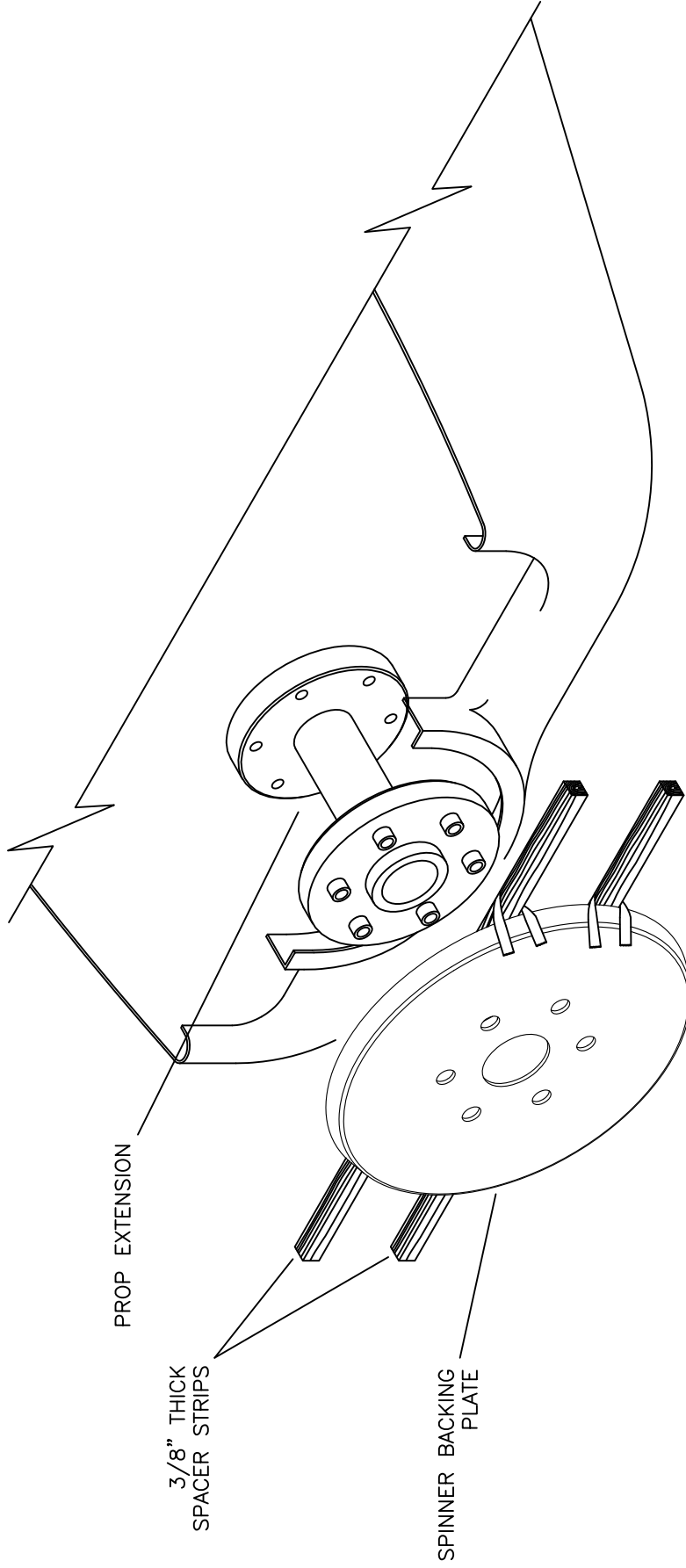
RAMS S-21 OUTBOUND
TITAN X-340
SPINNER ALIGNMENT MARKS
FIGURE 11-20/TITAN340

MD5228
 REV. - ORIG



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

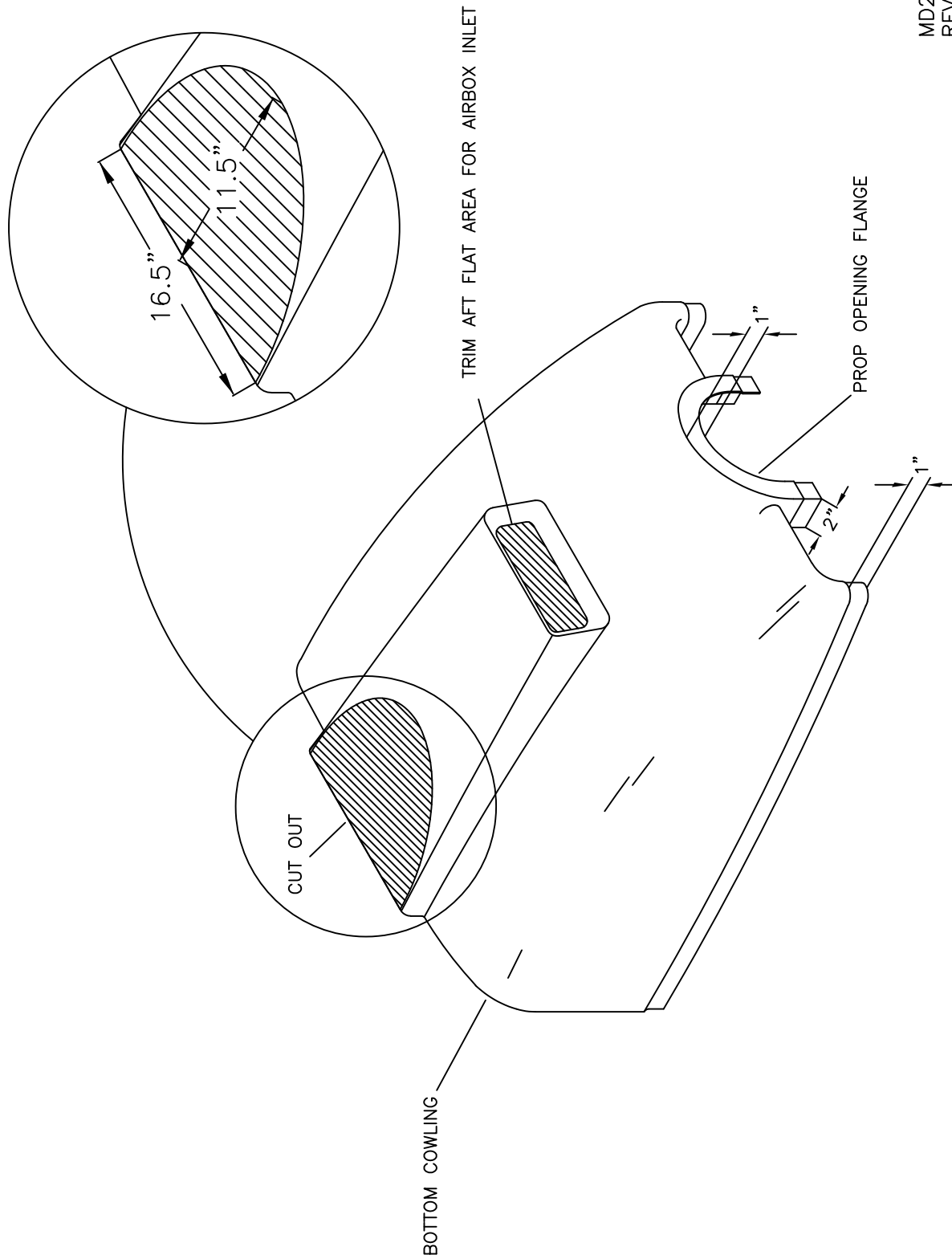
MD5228
 REV. - ORIG



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

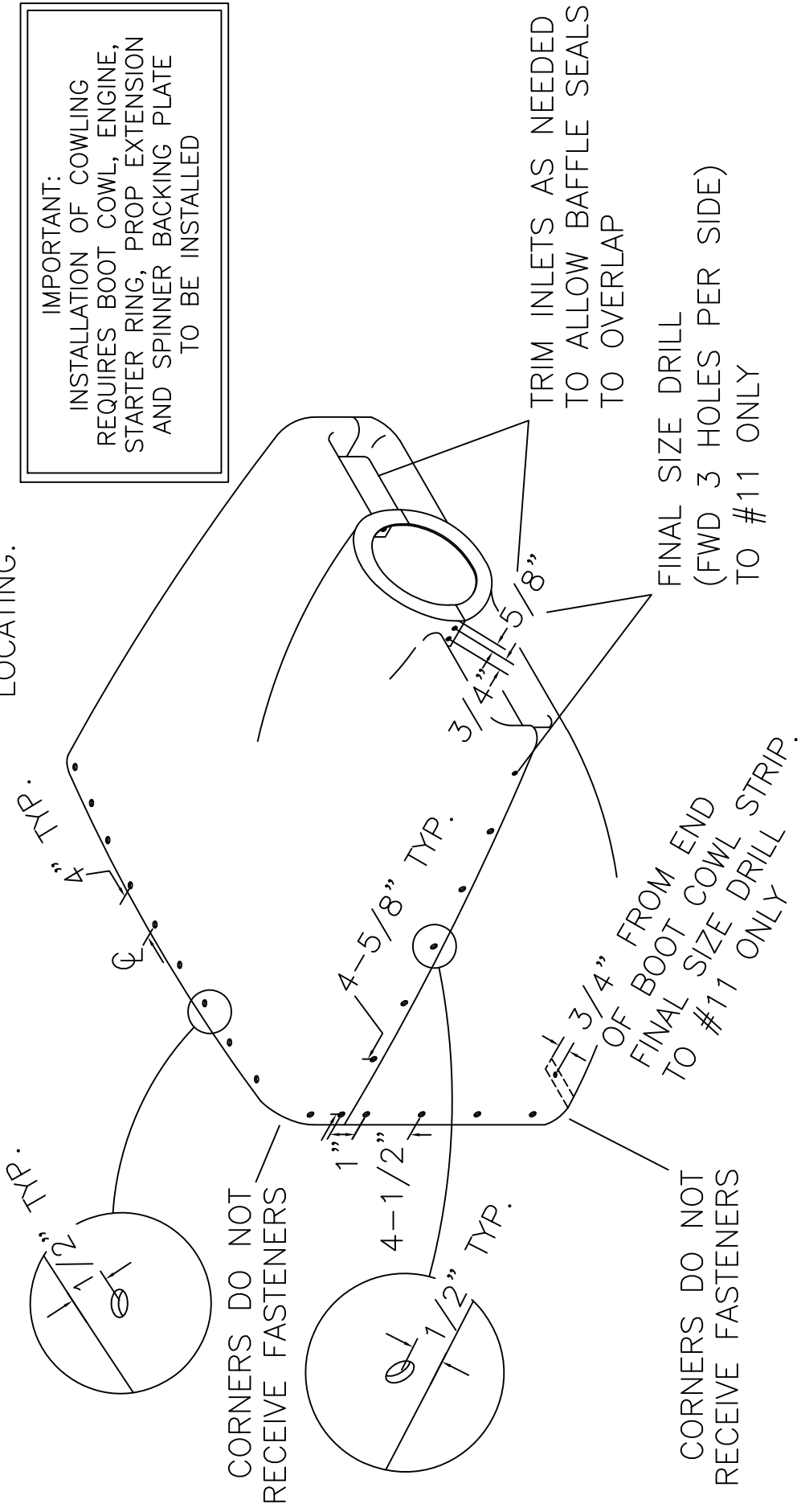


MD2833
REV. A

RAMRO 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

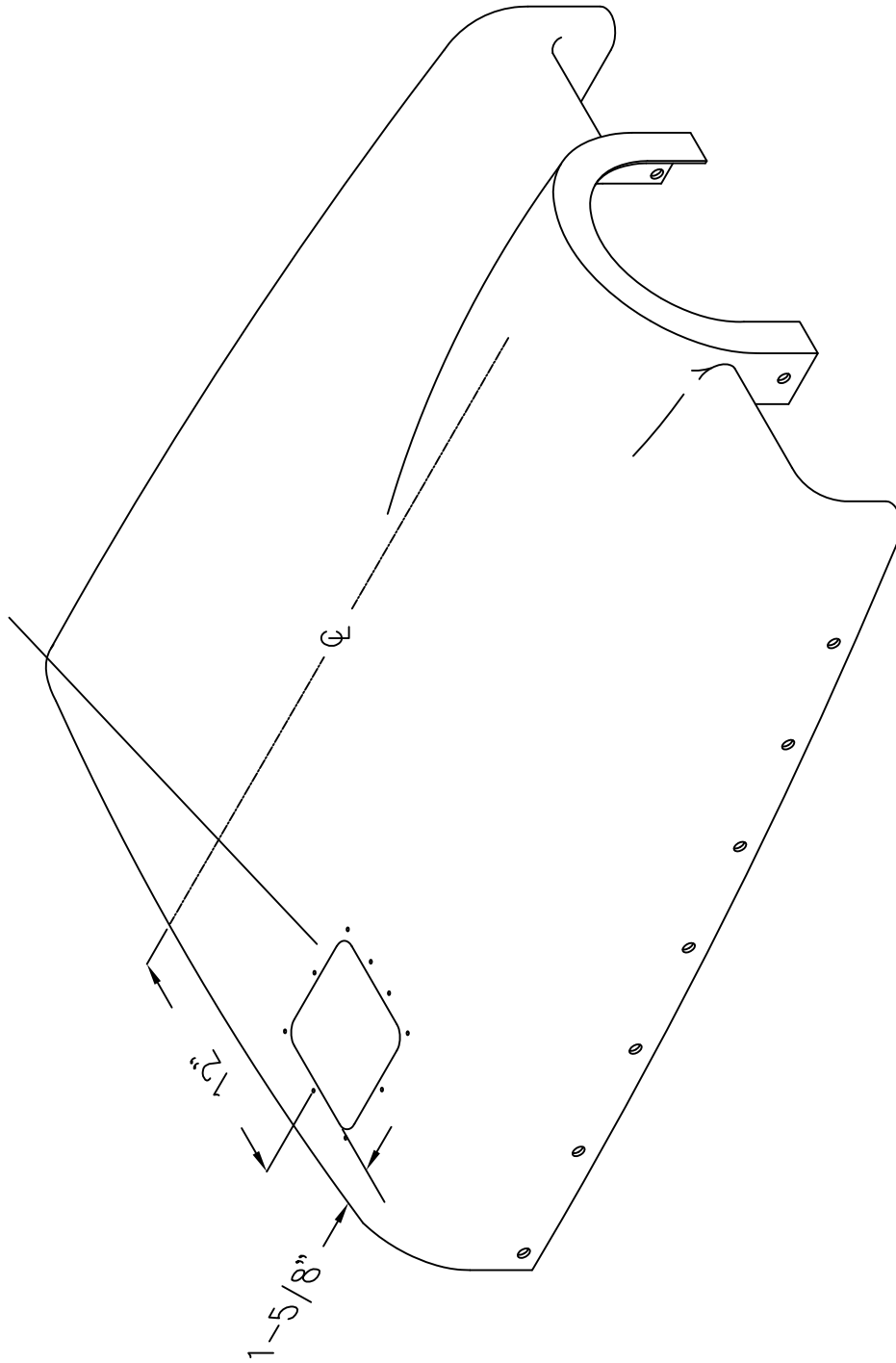
FINAL SIZE DRILL
 (FWD 3 HOLES PER SIDE)
 TO #11 ONLY

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

MD5567
 REV. A

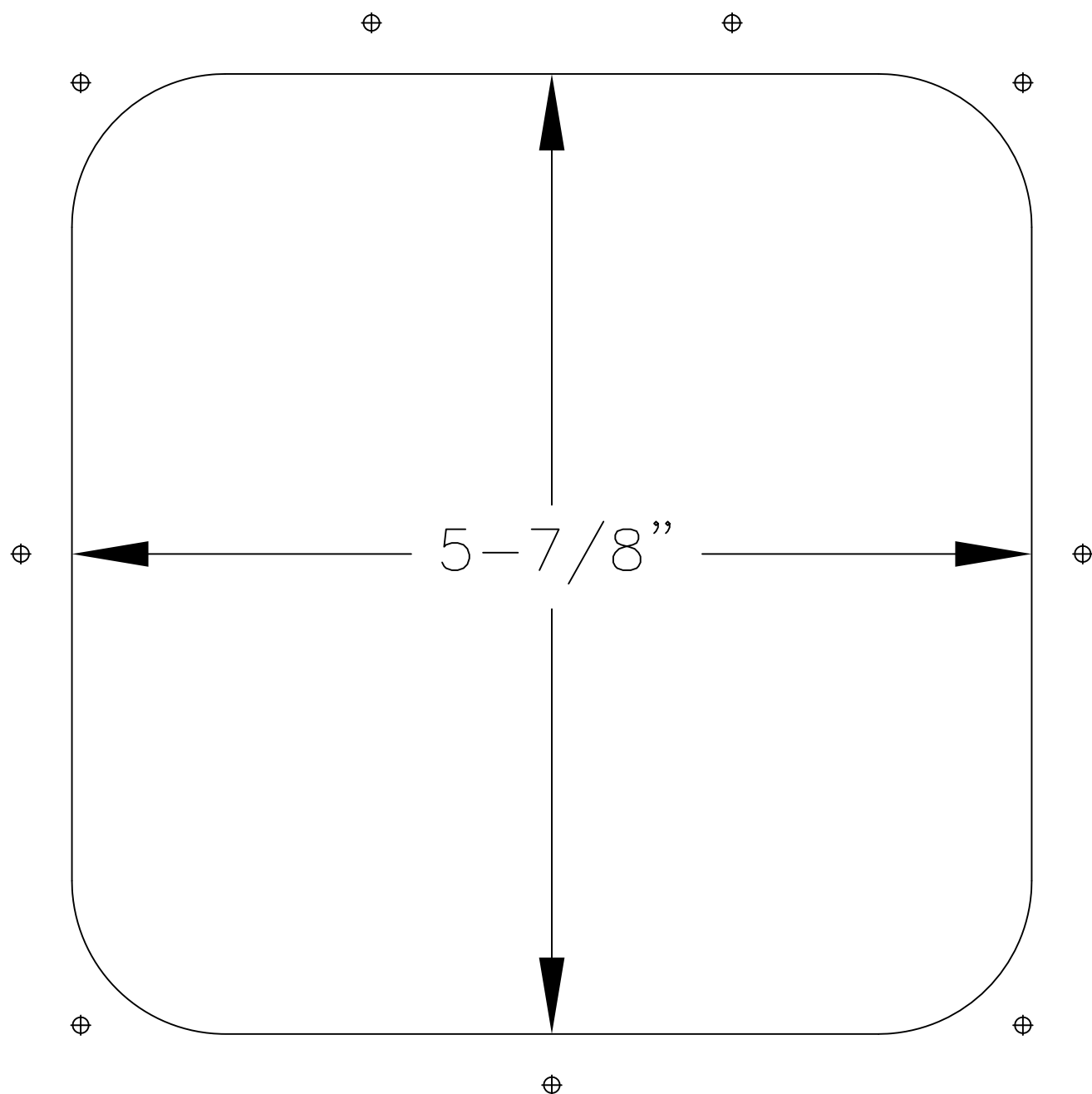
CUT AND DRILL USING 1:1 TEMPLATE.
TEST FIT WITH OIL DOOR AND OIL DOOR FRAME.
MAINTAIN SUFFICIENT CLEARANCE FOR PROPER
OPERATION ONCE PAINTED.



MD4392
REV. - ORIG

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

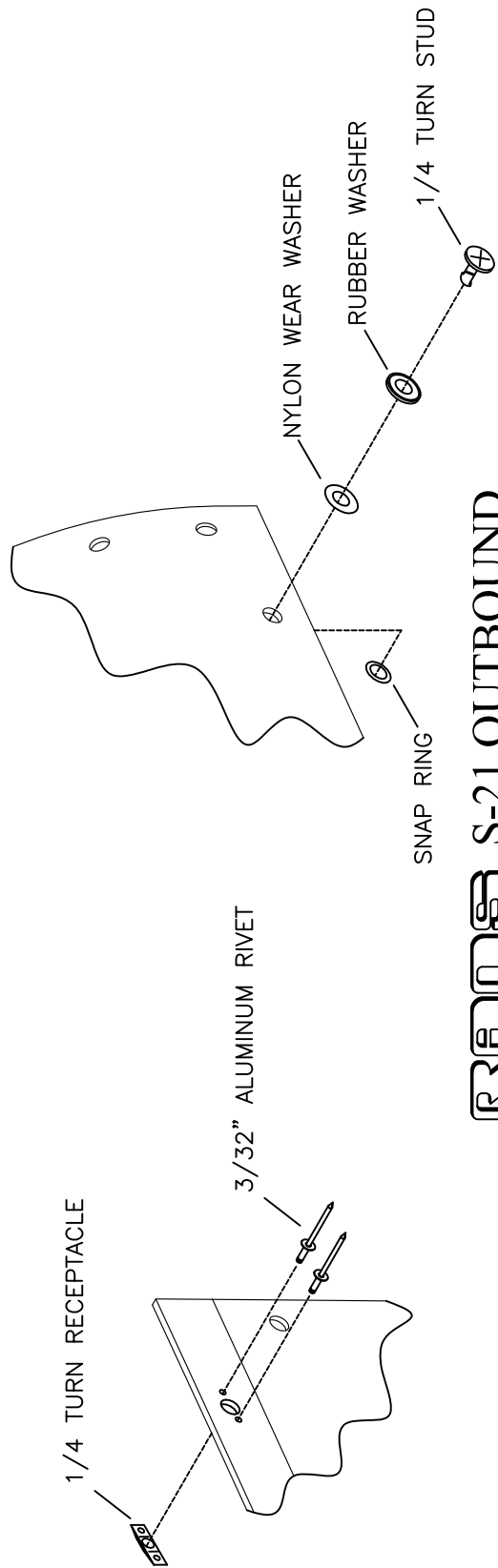
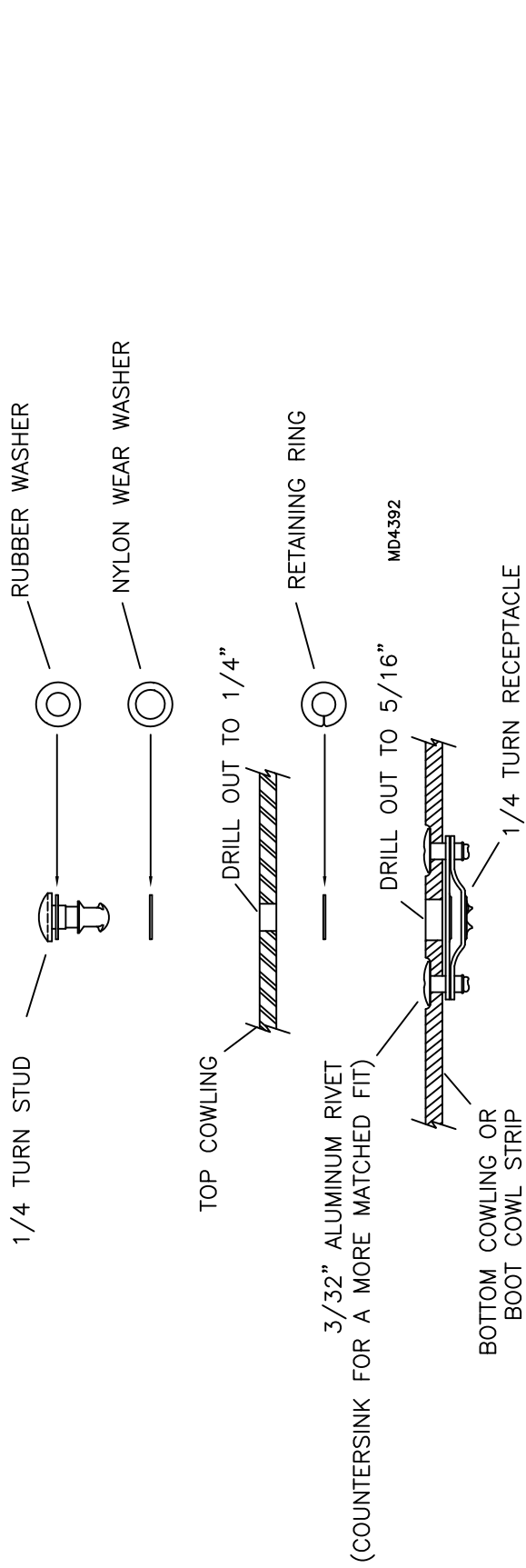
1 TO 1 TEMPLATE



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

MD4392
REV. - ORIG

09/11/2018

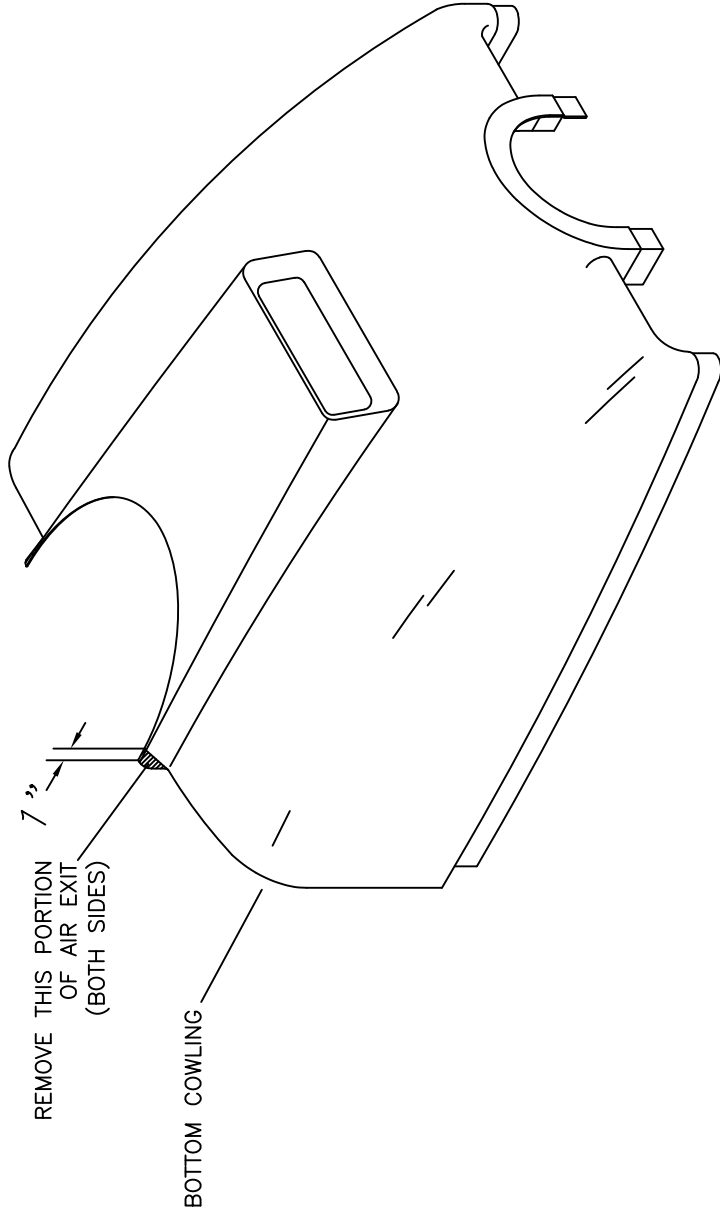


RAMS S-21 OUTBOUND

TITAN X-340

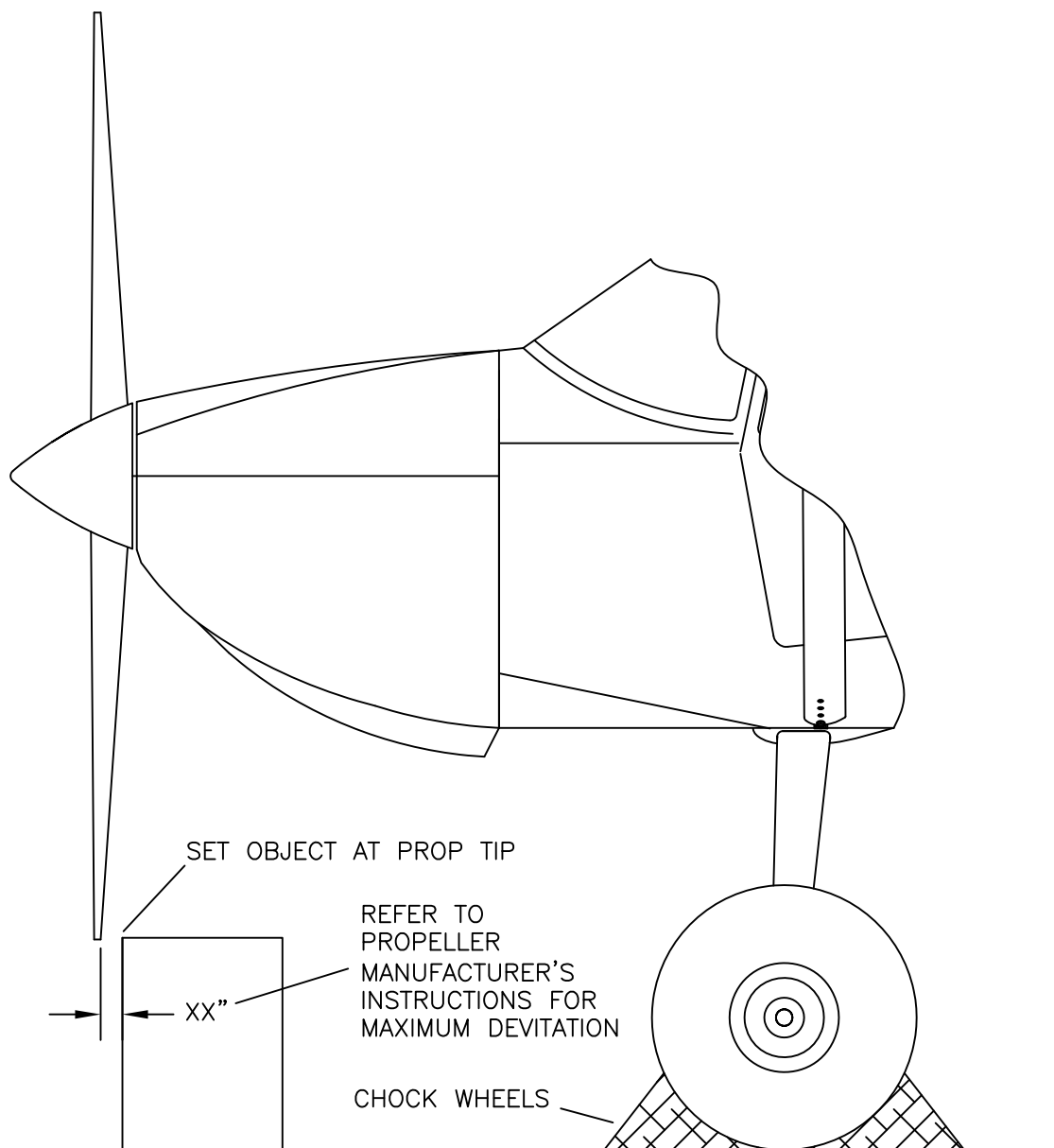
FIGURE 11-27/TITAN340

MD5143
REV. - ORIG



MD2833
REV. A

RRANOS 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