

GENERAL NOTES

- AREAS SUBJECT TO DEVELOPMENT OR AREAS WHERE DEVIATIONS FROM THIS DRAWING ARE PERMITTED ARE INDICATED BY AN ASTERISK (*).
- CLEAT(S) (PC 1 AND PC 6) SHALL BE HEAT TREATED TO OBTAIN A MINIMUM TENSILE STRENGTH OF 90,000 PSI (BRINELL HARDNESS 175-200).
- FABRICATION, WELDING, STRESS RELIEF, AND INSPECTION SHALL BE IN ACCORDANCE WITH NAVSEA S9074-AR-GIB-010/278 AND T9074-AS-GIB-010/271, CLASS M-2, CATEGORY A.

- A. WELD INSPECTION STARTS AT ROOT WELD IN ACCORDANCE WITH TECHNICAL PUBLICATIONS LISTED ABOVE.**
- B. MAGNETIC PARTICLE INSPECTION (MT) SHALL BE PER ASTM E709 PERFORMED BY LONGITUDINAL METHODS. THE WET OR DRY PROCESS WITH EITHER FLUORESCENT OR NON-FLUORESCENT PARTICLES SHALL BE USED. NO CRACKS SHALL BE ALLOWED.**

- CLEATS ARE TO BE EXAMINED AND STATICALLY TESTED IN ACCORDANCE WITH THE LIMITING QUALITY PLAN SHOWN IN TABLE VII-B OF ANSIA/SQ Z1.4, SAMPLING PROCEDURE AND TABLE FOR INSPECTION BY ATTRIBUTES.

A. CLASSIFICATION OF DEFECTS OBSERVED DURING EXAMINATION OF CLEATS.

- CRITICAL: NONE DEFINED.
- MAJOR: MATERIAL AND WELDS SHOW EVIDENCE OF: CRACKS, NONFUSION, DEEP UNDERCUT, SLAG INCLUSIONS, POROSITY, AND INCOMPLETE OR UNDERSIZED WELDS.
- MINOR: LABEL PLATE MISSING.

- B. DEFECT CRITERIA FOR STATIC TESTING OF CLEATS. SAMPLE CLEAT SHALL NOT FAIL, FRACTURE, TAKE PERMANENT SET, OR SHOW EVIDENCE OF INSTABILITY OR DEFORMATION WHEN SUBJECTED TO THE STATIC LOAD TEST OF 12,200 POUNDS FOR THE 12-INCH CLEAT OR 48,000 POUNDS FOR THE 20-INCH CLEAT. TEST LOAD TO BE APPLIED TO EACH HORN AS SHOWN IN VIEW 6-A.**

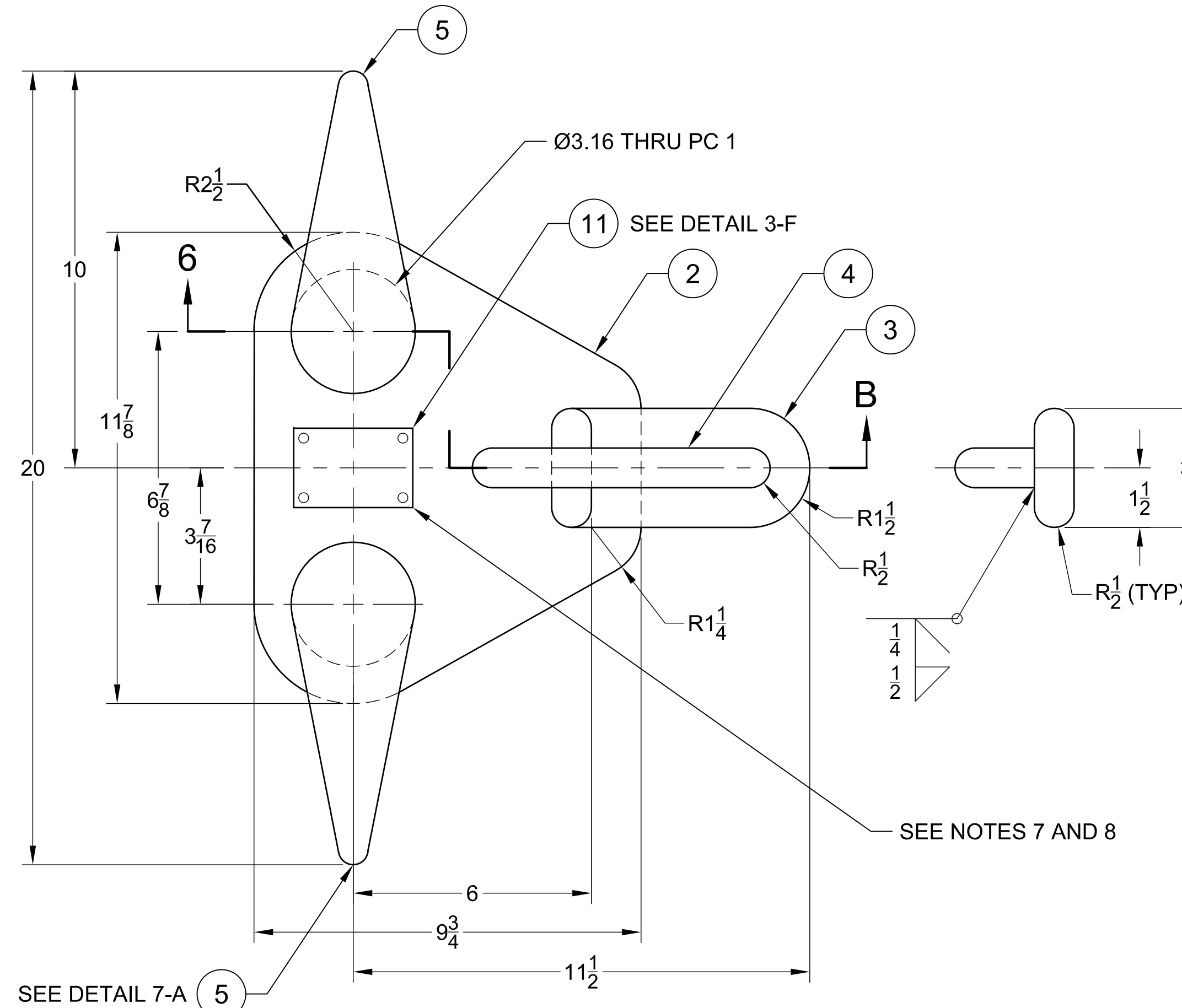
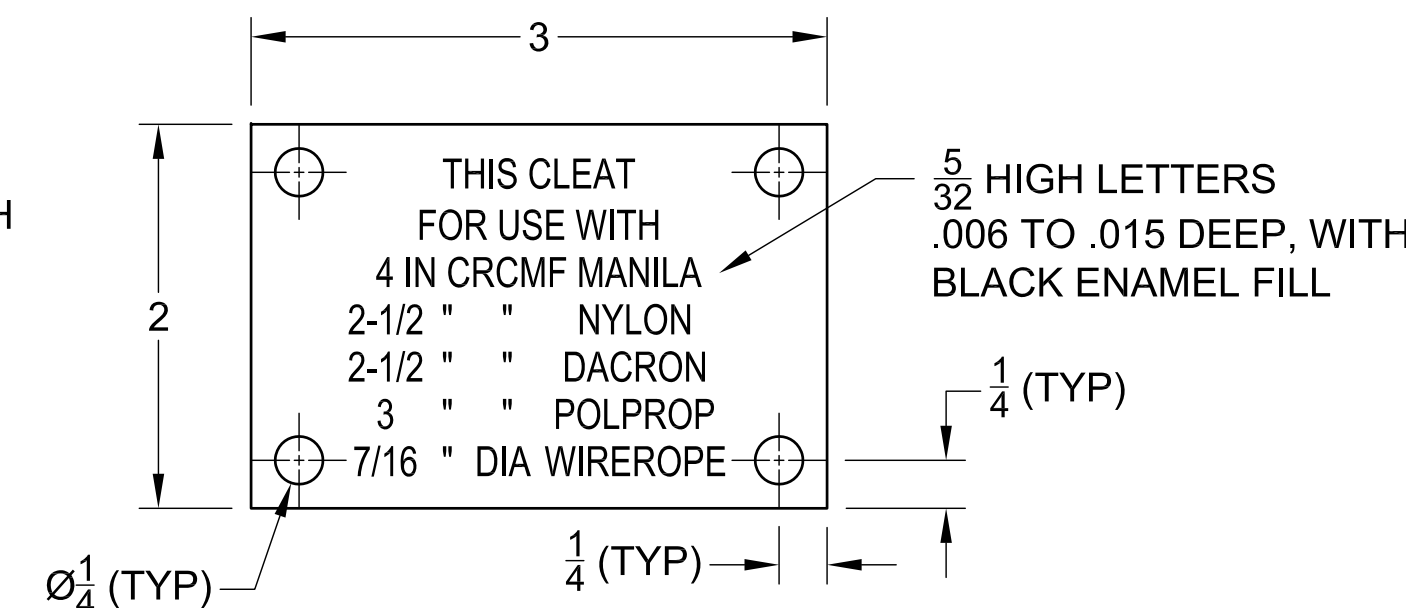
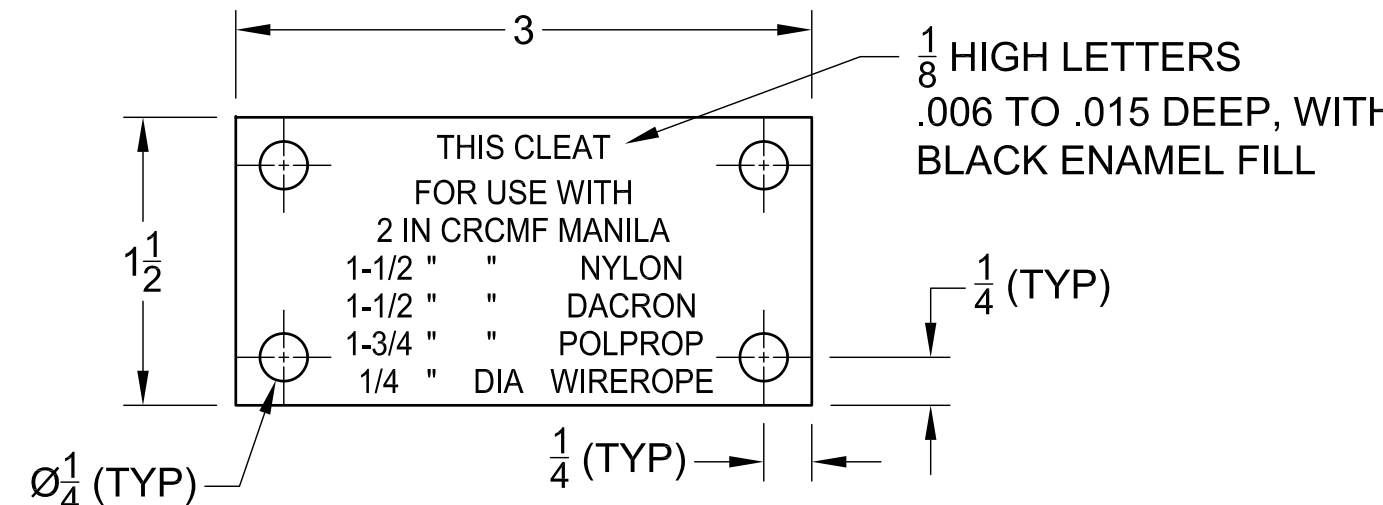
- ROUND OFF ALL SHARP EDGES AND CORNERS LIABLE TO INJURE PERSONNEL OR DAMAGE EQUIPMENT. ALL CHAFING SURFACES AND WELDS IN WAY OF ROPE CONTACT SHALL HAVE A 125 MICRO-INCH FINISH IN ACCORDANCE WITH ANSIB 46.1.

- THE BACKING STRUCTURE FOR CLEATS FITTED TO DECKS AND STRUCTURE SHALL PROVIDE SUFFICIENT STIFFNESS IN ORDER TO ALLOW THE FULL STRENGTH OF THE CLEAT TO BE MET WITHOUT BUCKLING. WHERE STIFFNESS IS NOT SUITABLE THEN INSERT PLATES OR DOUBLERS SHALL BE PROVIDED TO SUFFICIENTLY STIFFEN THE STRUCTURE.

- TEMPLATE MOUNTING HOLES FROM LABEL PLATES AND DRILL FOUR 0.191 INCH (#11 DRILL) DIAMETER HOLES, 1/2 INCH DEEP.

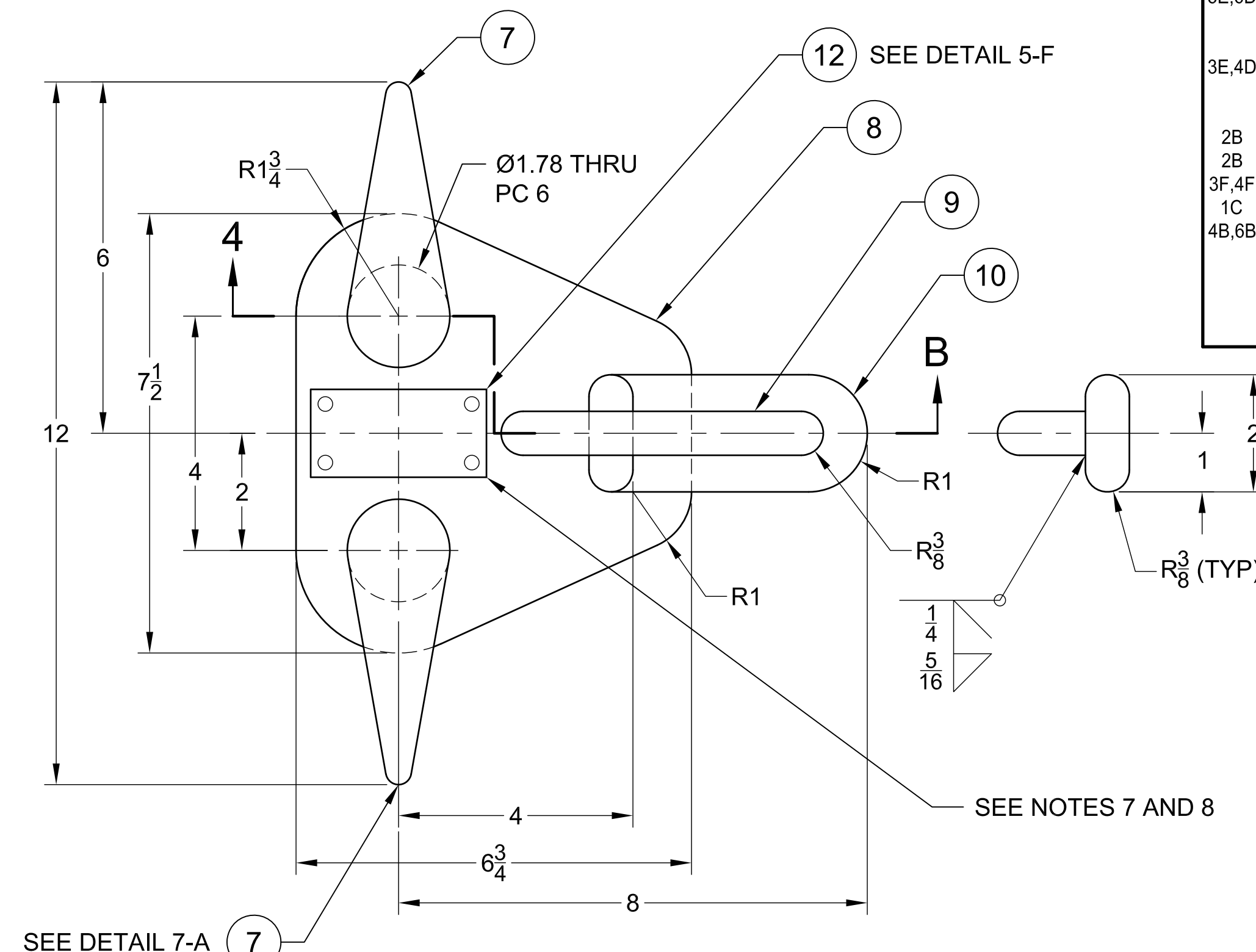
- INSTALL LABEL PLATES WITH 1/2 INCH LONG, 0.212 INCH (#12) CRES, DRIVE SCREWS (PC 13). PRIOR TO INSTALLATION OF DRIVE SCREWS, APPLY RTV SILICONE ADHESIVE/SEALANT (PC 14) INTO THE DRIVE SCREW HOLES AND TO THE BACK SIDE OF LABEL PLATE.

- A. PC 14, RTV ADHESIVE/SEALANT, SILICONE RUBBER FOLLOW MANUFACTURER'S INSTRUCTIONS FOR APPLICATION APPROVED SOURCE OF SUPPLY:**
 MOMENTIVE PERFORMANCE MATERIALS (OR EQUAL)
 260 HUDSON RIVER RD
 WATERFORD, NY 12188
 CAGE CODE: 01139
 PART NUMBER: RTV162



20-INCH - 3-HORN CLEAT ASSY, PC 1

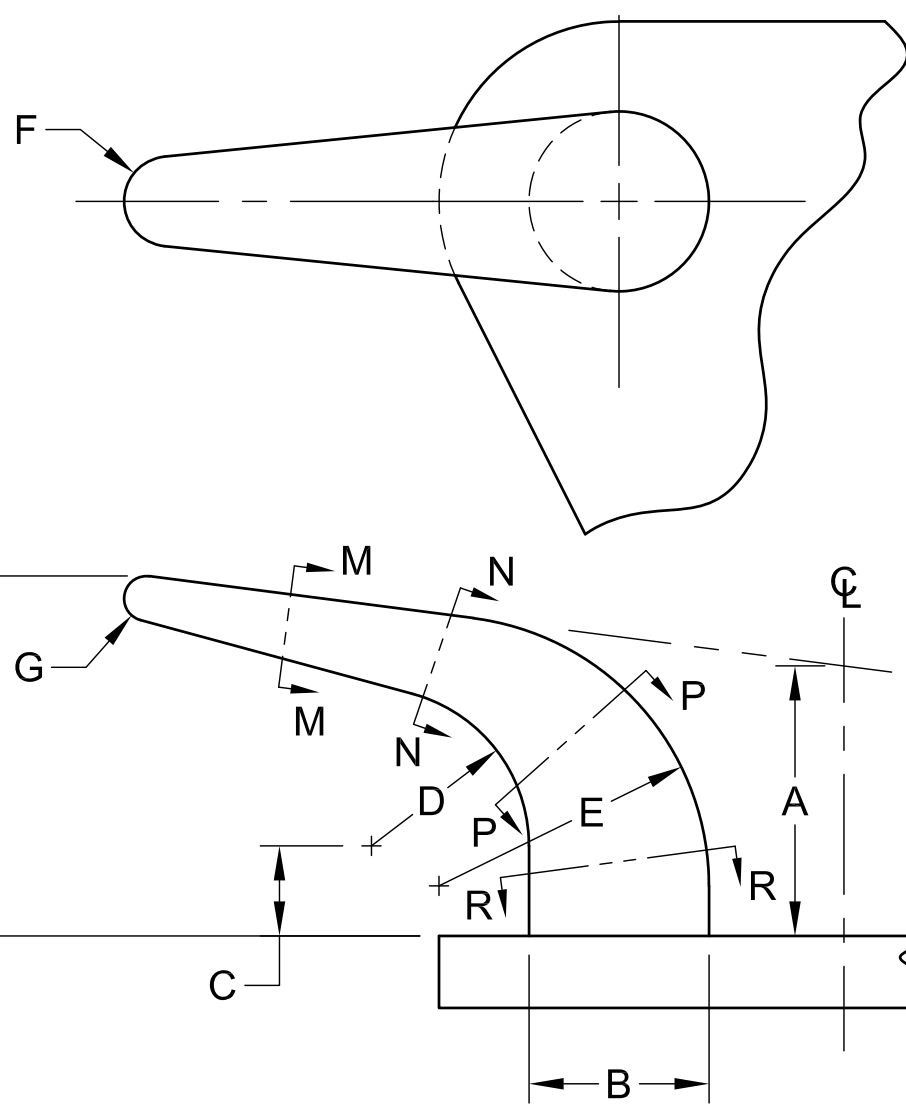
SEE NOTE 2
 SCALE: 3/8" = 1"



12-INCH - 3-HORN CLEAT ASSY, PC 6

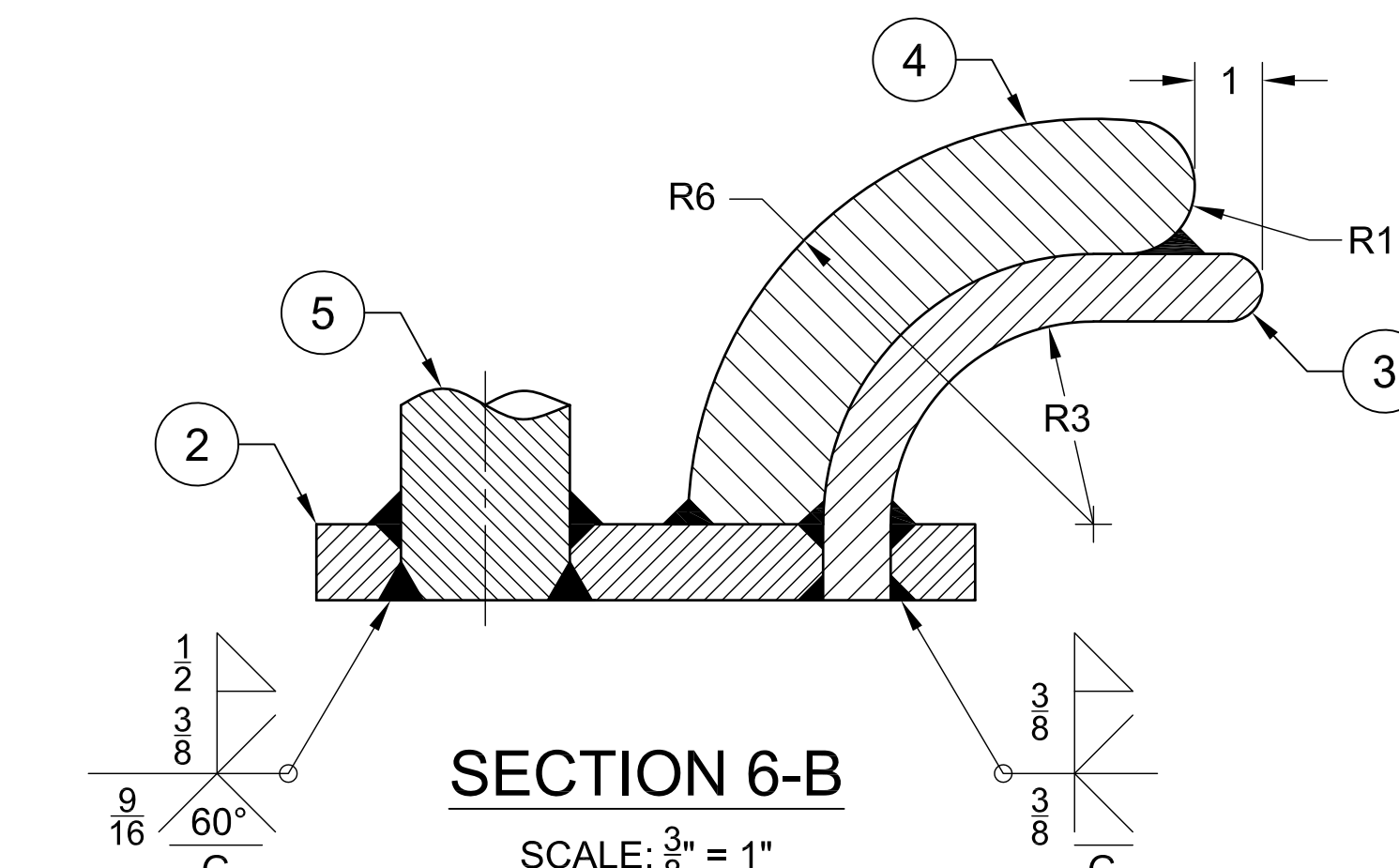
SEE NOTE 2
 SCALE: 1/2" = 1"

| 3-HORN CLEAT WEIGHT TABLE | |
|---------------------------|------------------|
| TYPE | WEIGHT (APPROX.) |
| 12 INCH | 16.5 LBS |
| 20 INCH | 62 LBS |

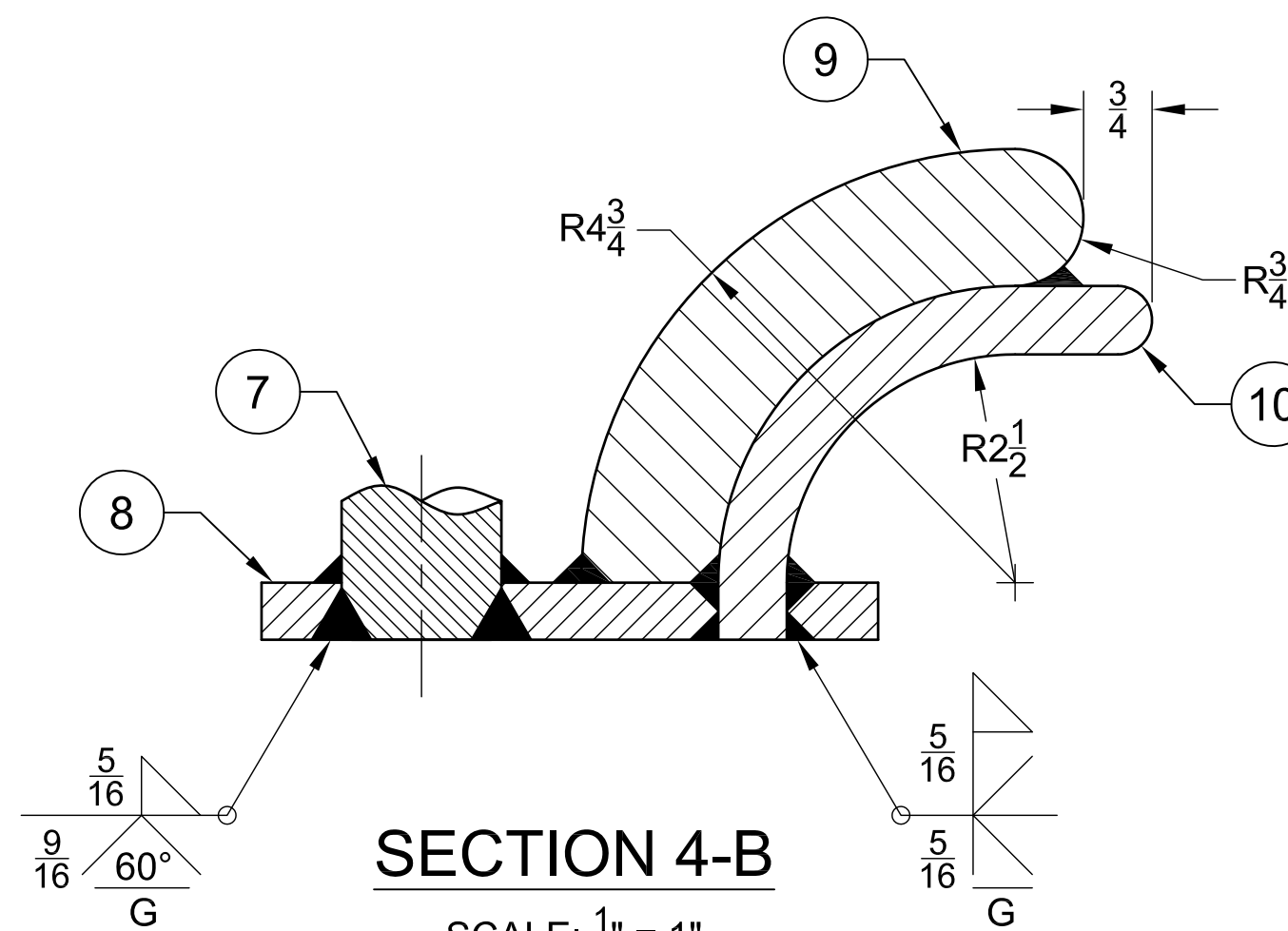


DETAIL 7-A
 SCALE: NONE

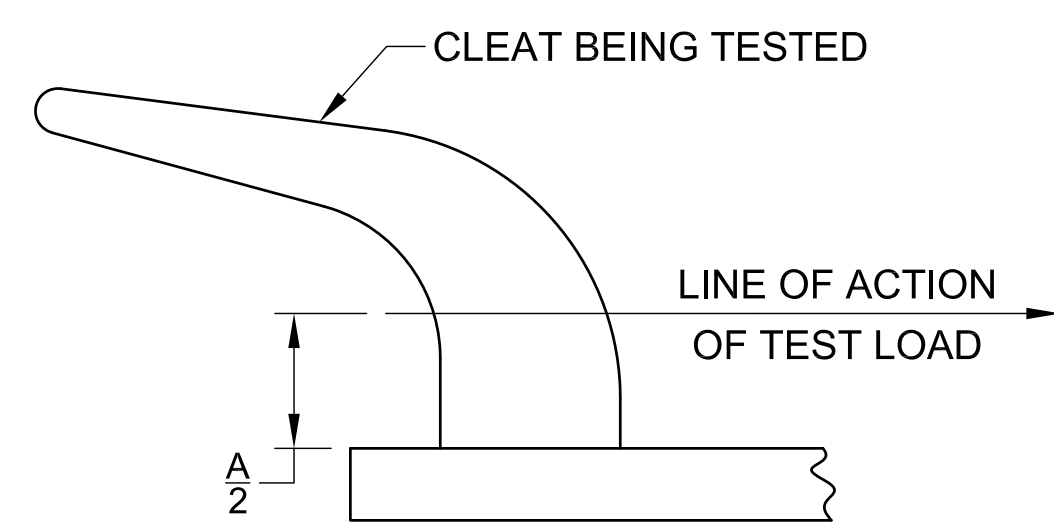
- SECTION M-M
- SECTION N-N
- SECTION P-P
- SECTION R-R



SECTION 6-B
 SCALE: 3/8" = 1"



SECTION 4-B
 SCALE: 1/2" = 1"



VIEW 6-A
 TEST DIAGRAM; SEE NOTE 4B
 SCALE: NONE

| DIMENSIONAL TOLERANCES (UNLESS OTHERWISE SPECIFIED) | |
|---|--------------|
| FRACTIONS | DECIMALS |
| ± 1/16 | .X : ±.030 |
| | .XX : ±.015 |
| | .XXX : ±.005 |

| ROPE CIRCUMFERENCE, IN | | ROPE DIA, IN | | CLEAT | | | | | | | | | |
|------------------------|-------|--------------|---------|-----------|------|---------------|-------|-------|--------|-------|-------|------|---|
| MANILA | NYLON | DACRON | POLPROP | 6X37 IWRC | TYPE | DIMENSION, IN | | | | | | | |
| A | B | C | D | E | F | G | H | | | | | | |
| 2 | 1 1/2 | 1 1/2 | 1 3/4 | 1/4 | 12 | 2 1/4 | 1 3/4 | 3/4 | 1 5/16 | 2 1/4 | 7/16 | 7/32 | 3 |
| 4 | 2 1/2 | 2 1/2 | 3 | 7/16 | 20 | 3 3/4 | 1 3/8 | 1 1/4 | 1 1/8 | 3 3/4 | 13/16 | 3/8 | 5 |

| AR | NO | DESCRIPTION | MATERIAL | MATL SPEC | REMARKS | REF DWG |
|----|----|-------------------------------|--------------------|-----------------------------|-----------------------------|---------|
| AR | 14 | RTV ADHESIVE SEALANT | COMMERCIAL | | SEE NOTE 8 | |
| 4 | 13 | DRIVE SCREW | CRES | ASME B18.6.3 | TYPE U, #12 (Ø.212), 1/2 LG | |
| 1 | 12 | LABEL PLATE, 1-1/2 X 3 X .037 | CRES 316 | AMS5902 | | |
| 1 | 11 | LABEL PLATE, 2 X 3 X .037 | CRES 316 | AMS5902 | | |
| 1 | 10 | 30.6# PL., 2 X 10 | ALLOY STEEL | ASTM A829 GR4130 COND TN AR | | |
| 1 | 9 | 30.6# PL., 1-1/2 X 10 | ALLOY STEEL | ASTM A829 GR4130 COND TN AR | | |
| 1 | 8 | 25.5# PL., 7 X 7-1/2 | ALLOY STEEL | ASTM A829 GR4130 COND TN AR | | |
| 2 | 7 | CLEATHORN, 12L | FORGED ALLOY STEEL | ASTM A322 GR4130 | Ø1-3/4 STOCK | |
| 1 | 6 | 3-HORN CLEAT, 12-INCH ASSY | ALLOY STEEL | | | |
| 2 | 5 | CLEATHORN, 15L | FORGED ALLOY STEEL | ASTM A322 GR4130 | Ø3-1/8 STOCK | |
| 1 | 4 | 40.8# PL., 2 X 12 | ALLOY STEEL | ASTM A829 GR4130 COND TN AR | | |
| 1 | 3 | 40.8# PL., 3 X 11 | ALLOY STEEL | ASTM A829 GR4130 COND TN AR | | |
| 1 | 2 | 45.9# PL., 10 X 12 | ALLOY STEEL | ASTM A829 GR4130 COND TN AR | | |
| 1 | 1 | 3-HORN CLEAT, 20-INCH ASSY | ALLOY STEEL | | | |

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY: NAVSEA, CODE 05243.
 STANDARD DRAWING

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| | PREPARED BY PERATON | | DEPARTMENT OF THE NAVY WASHINGTON NAVY YARD DC 20376-5160 | |
| | PREPARED BY: M. PRITZLAFF DATE: 5/31/19 HD ENGR: M. PRITZLAFF DATE: 5/31/19 | | NAVAL SEA SYSTEMS COMMAND FUELING AT SEA 3-HORN CLEAT 12 & 20 INCH TYPE | |
| | NAVY REVIEW LEAD ENGR: J. WEGNER DATE: 5/31/19 ENGR MANGR: J. WEGNER DATE: 5/31/19 APPROVED FOR COMNAVSEA | | CONTRACT NO. N00178-04-D-4030 PREP ACTIVITY PERATON CAGE CODE 9M715 | |
| DRAWING TITLE: FAS TEST ARR RIDING LINE FITTINGS DWG NO: 805-2556869 | | REFERENCE DRAWING(S) | | |
| SCALE: AS NOTED WEIGHT: SEE TABLE | | SHEET 1 OF 1 | | |