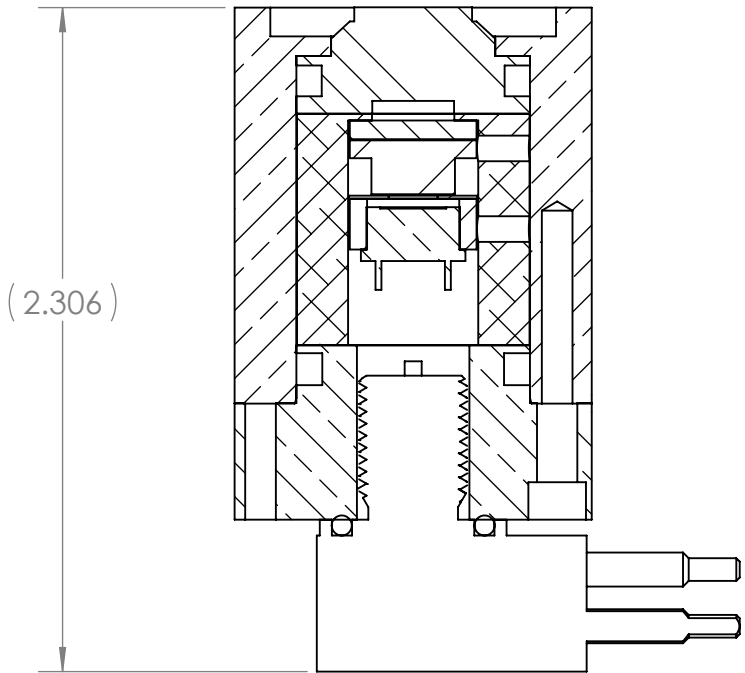
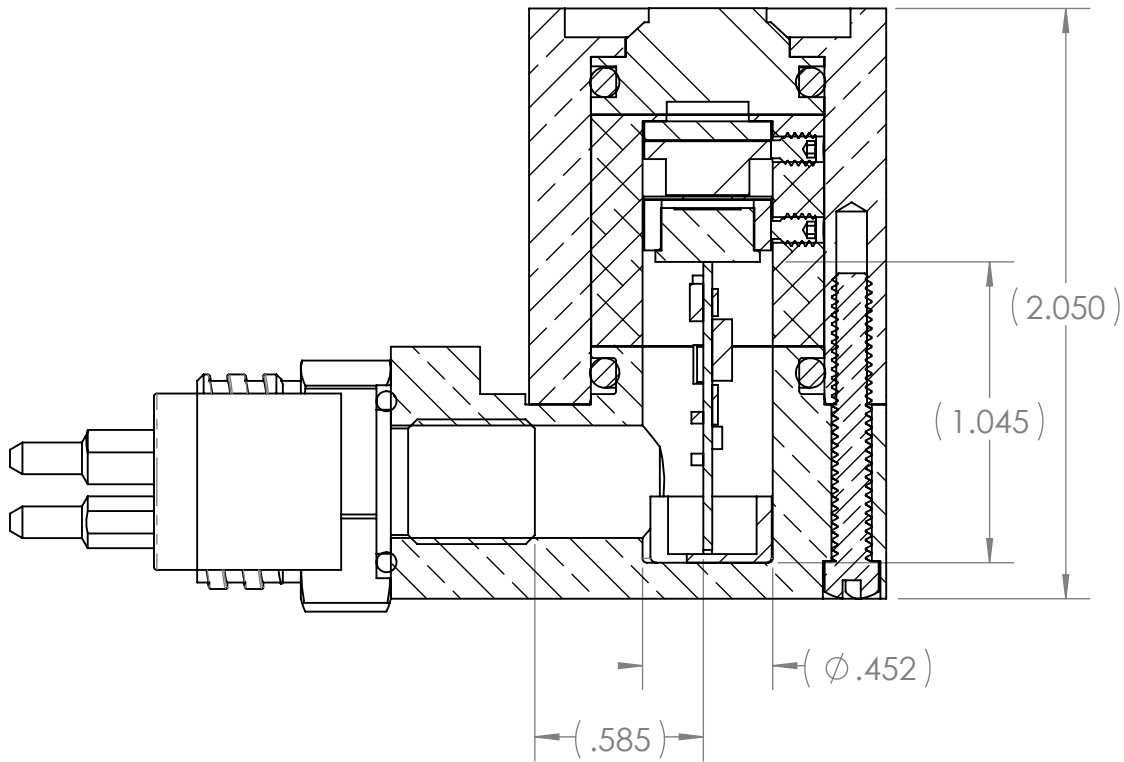
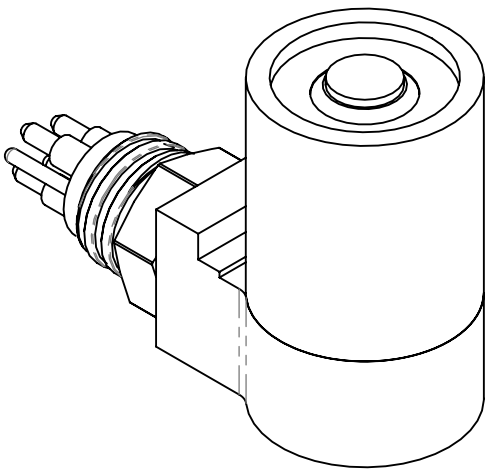
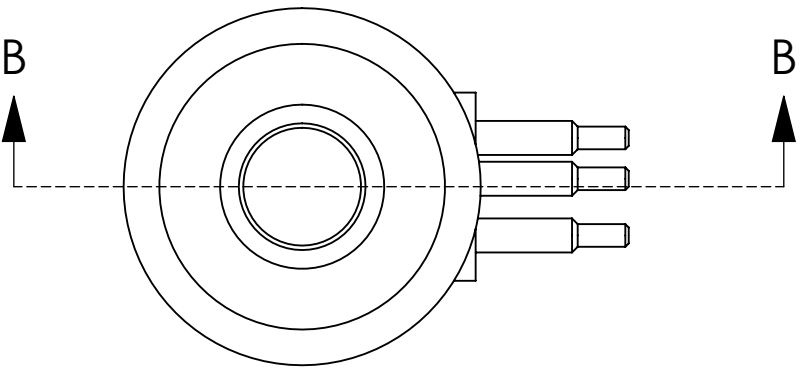
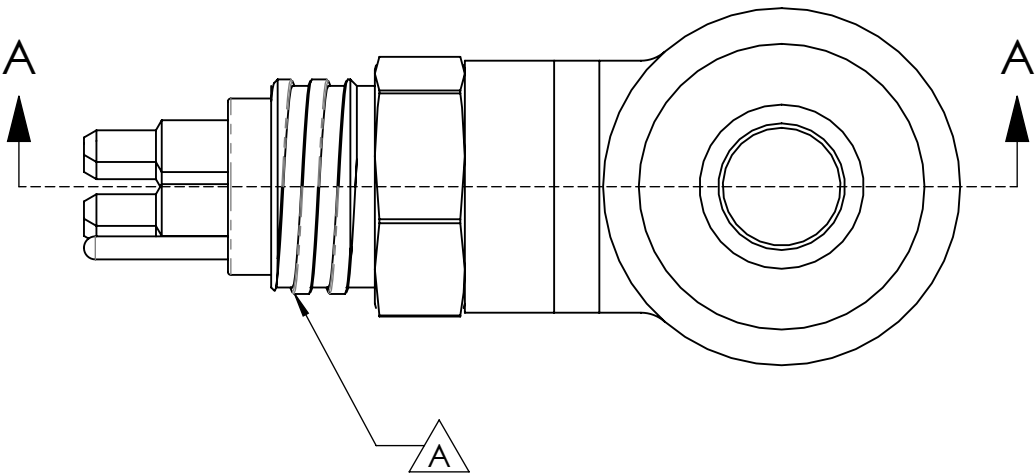


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| REVISIONS       |      |                                    |           |          |
|-----------------|------|------------------------------------|-----------|----------|
| INITIAL RELEASE |      |                                    | X/XX/01   | J.E.     |
| REVISIONS       |      |                                    |           |          |
| ZONE            | REV. | DESCRIPTION                        | DATE      | APPROVED |
| B3              | A    | CHG CONN. to Impulse_MCBH(WB)-4-MP | 8/10/2018 | J.E.     |



SECTION B-B  
SCALE 1.5 : 1

SECTION A-A  
SCALE 1.5 : 1

7. PROJECT LIBRARY:\900739.LRAUV\Project.Drawings\Project.ME.Dwgs\  
LRAUV\Sensors\PAR\PAR-MOD\_V3

NOTES: (CONT. FROM TITLE BLOCK)

| ITEM NO.              | QTY.             | PART NO.                                                                                                  | DESCRIPTION         | VENDOR               | MATERIAL SPECIFICATION                               |
|-----------------------|------------------|-----------------------------------------------------------------------------------------------------------|---------------------|----------------------|------------------------------------------------------|
| BILL OF MATERIALS     |                  |                                                                                                           |                     |                      |                                                      |
| Shop / Q.C.           |                  | UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:                                                                |                     |                      | APPROVALS DATE                                       |
| Inspector             |                  | 1 PLACE DIM<br>±1/16                                                                                      | 2 PLACE DIM<br>±.02 | 3 PLACE DIM<br>±.005 | ANGLES<br>±1°                                        |
| Shop Foreman          |                  | 1. DIMENSIONS ARE IN INCHES                                                                               |                     |                      | DRAWN J. ERICKSON                                    |
| Engineer              |                  | 2. DIMENSION LIMITS HELD AFTER PLATING.                                                                   |                     |                      | ENGINEER J. ERICKSON                                 |
|                       |                  | 3. REMOVE BURRS AND SHARP EDGES .015 MAX.                                                                 |                     |                      | CHECKED                                              |
|                       |                  | 4. MACHINED FILLET RADII .0150-.030.                                                                      |                     |                      | PROJECT NO. 900739                                   |
| NEXT ASSY Description | NEXT ASSY Number | 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005                                       |                     |                      | PROJECT ZZZZZZZZ                                     |
|                       |                  | 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE. |                     |                      |                                                      |
| Application           |                  | DO NOT SCALE DRAWING                                                                                      |                     |                      | WEIGHT 0.694                                         |
|                       |                  |                                                                                                           |                     |                      | SIZE B DWG. NO. A-201xxx-16.DWG                      |
|                       |                  |                                                                                                           |                     |                      | SCALE 1:1 CAD FILE: MECH ENG ON TORNADO SHEET 1 OF 2 |

Monterey Bay Aquarium Research Institute

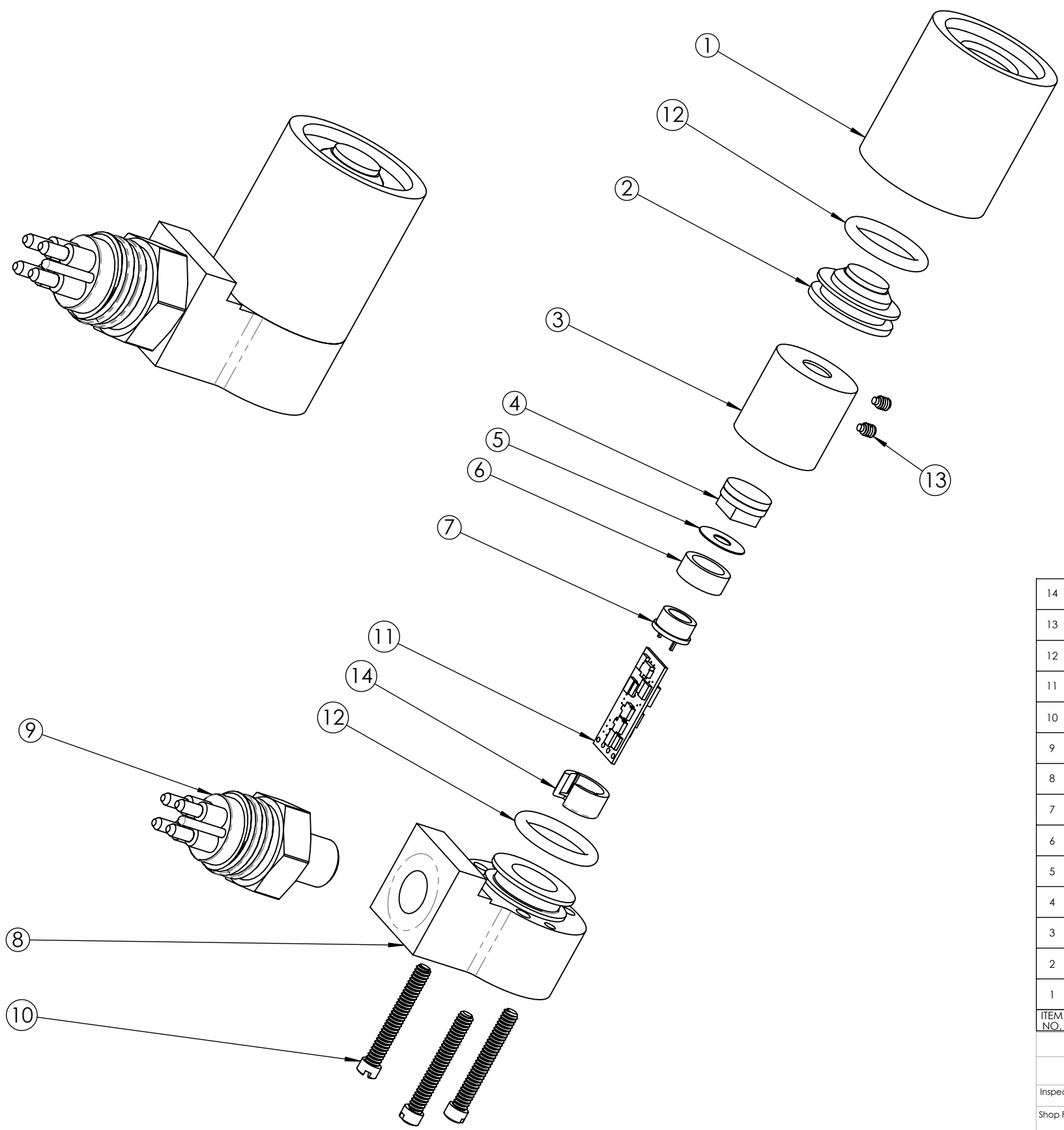
MBARI  
7700 Sandholdt RD.  
Moss Landing, CA 95039  
PH: (831) 775-1700



PROJECT NAME  
LICOR PAR - MOD3

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| REVISIONS |                 |         |          |
|-----------|-----------------|---------|----------|
| REV.      | DESCRIPTION     | DATE    | APPROVED |
|           | INITIAL RELEASE | X/XX/00 | J.E.     |



7. PROJECT LIBRARY:\900739.LRAUV\Project.Drawings\Project.ME.Dwgs\  
LRAUV\Sensors\PAR\PAR-MOD\_V3

NOTES: (CONT. FROM TITLE BLOCK)

|          |      |             |                                   |          |               |                          |
|----------|------|-------------|-----------------------------------|----------|---------------|--------------------------|
| 14       | 1    | P-202056-18 | PAR Sensor-Board-Centroid         |          | MBARI         | FormLabs - "Tough" Mat'l |
| 13       | 2    | 90291A103   | #4-40 x 1/8 Soft Tip Set Screw    |          | McMaster-Carr | AlSi 304                 |
| 12       | 2    | #2-114-70-N | O-RING                            |          |               | BUNA - N                 |
| 11       | 1    | ??????      | parsense_placement_rA             |          | MBARI         |                          |
| 10       | 3    | 90114A537   | Modified #6-32x1 Flister Hd Screw |          | McMaster-Carr | Brass                    |
| 9        | 1    |             | MALE 4 PIN 316 20KFSW W-BLOCK     |          |               |                          |
| 8        | 1    | P-201849-16 | LI-COR_ConnFlange_MOD3            | A        | MBARI         | SiI Al Bronze CDA642     |
| 7        | 1    |             |                                   |          |               |                          |
| 6        | 1    |             |                                   |          |               |                          |
| 5        | 1    |             |                                   |          |               |                          |
| 4        | 1    |             |                                   |          |               |                          |
| 3        | 1    |             |                                   |          |               |                          |
| 2        | 1    |             |                                   |          |               |                          |
| 1        | 1    |             |                                   |          |               |                          |
| ITEM NO. | QTY. | Part_Number | DESCRIPTION                       | Revision | Vendor        | MATERIAL                 |

## BILL OF MATERIALS

|                       |  |                                                                                                                                                                                                                                                                                                                                                 |                     |                               |                                    |                  |             |        |                                                                                                                                                                                                                                                                     |           |  |
|-----------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------|------------------------------------|------------------|-------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--|
| Shop / Q.C.           |  | UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:                                                                                                                                                                                                                                                                                                      |                     |                               |                                    | APPROVALS        |             | DATE   | <div>Monterey Bay Aquarium Research Institute</div> <div>MBARI</div> <div>7700 Sandholdt RD.</div> <div>Moss Landing, CA 95039</div> <div>PH: (831) 775-1700</div> <div></div> |           |  |
| Inspector             |  | 1 PLACE DIM<br>±1/16                                                                                                                                                                                                                                                                                                                            | 2 PLACE DIM<br>±.02 | 3 PLACE DIM<br>±.005          | ANGLES<br>±1°                      | DRAWN            | J. ERICKSON |        |                                                                                                                                                                                                                                                                     |           |  |
| Shop Foreman          |  | 1. DIMENSIONS ARE IN INCHES<br>2. DIMENSION LIMITS HELD AFTER PLATING.<br>3. REMOVE BURRS AND SHARP EDGES .015 MAX.<br>4. MACHINED FILLET RADII .0150-.030.<br>5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005<br>6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE. |                     |                               |                                    | ENGINEER         | J. ERICKSON |        |                                                                                                                                                                                                                                                                     |           |  |
| Engineer              |  |                                                                                                                                                                                                                                                                                                                                                 |                     |                               |                                    | CHECKED          |             |        |                                                                                                                                                                                                                                                                     |           |  |
| NEXT ASSY Description |  |                                                                                                                                                                                                                                                                                                                                                 |                     |                               |                                    | NEXT ASSY Number | PROJECT NO. | 900739 |                                                                                                                                                                                                                                                                     |           |  |
|                       |  | A-201816-16                                                                                                                                                                                                                                                                                                                                     | PROJECT             | LRAUV                         | TETHYS - LRAUV<br>LICOR PAR - MOD3 |                  |             |        |                                                                                                                                                                                                                                                                     |           |  |
| Application           |  | DO NOT SCALE DRAWING                                                                                                                                                                                                                                                                                                                            |                     | WEIGHT                        |                                    |                  |             |        |                                                                                                                                                                                                                                                                     | 0.694 lb. |  |
|                       |  |                                                                                                                                                                                                                                                                                                                                                 | SIZE B              | DWG. NO.                      | A-201xxx-16.DWG                    |                  |             | REV.   | A                                                                                                                                                                                                                                                                   |           |  |
|                       |  |                                                                                                                                                                                                                                                                                                                                                 | SCALE 1:4           | CAD FILE: MECH ENG ON TORNADO | SHEET 2 OF 2                       |                  |             |        |                                                                                                                                                                                                                                                                     |           |  |