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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.70

NAME: Assembly gages (PRI 779-1)

ACCURACY: +,- .2 degrees(PARA 6).

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS:Transfer standard must have current"in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS:None required

EQUIPMENT REQUIRED:

Optical Comparator

PROCEDURE:

1.Clean with acetone to remove any foreign substances.

2. Visual inspect for nicks, burrs, scratches, rust or corrosion, or any signs of mishandling or wear that may affect the accuracy or functions of the gage.

3. Removal of nicks and burrs on gaging surface should be accomplished only by the use of a hard Arkansas stone.Reclean per 1 above.

4.Set up bottom on comparator. Using the Angle function with the comparator set on reflector 10x. Check the angleof the pin to the centerline of the hole.

5.Set up top on comparator. Assure the centerline of the tits are in line with the centerline of the guide holes.

6.tolerance will be +,- 1 degree.

7.Record actual angle on calibration record card with date with date of calibration, calibration due date and initials of inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.70

PROCEDURE, CONTINUED

8. Label each gage with label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.
9. Apply a light coat of oil and return to using facility.
10. Tests shall be performed at 68-75 deg. F, 50% - 20 R.H.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.71

NAME: Ball Sizer

ACCURACY: +/- .0001

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

P & W Supermicrometer S/N L791 (.000020 accuracy)

PROCEDURE:

1. See procedure 15 of Cal-1 for calibration of plug gages attached to Ball Sizer. Complete this before proceeding.
2. Clean the Ball Sizer with acetone to remove foreign material.
3. Using the calibrated plug gages attached, check the slot at the marked widths. The gages should be tight and not go beyond their minimum.
4. Record the actual measurements of the gages and the width of slot at marks (3 digits) on calibration record card with date of calibration, calibration due date, and initials of the Inspector performing the calibration.

5. Label each gage and the sizer with a label stating the date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 71

PROCEDURE, CONTINUED

6. Tolerance will be +/- .0001. 7. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

8. Upon completion, apply a light coat of oil and return to using facility.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 72

NAME: 1-2-3 Block

ACCURACY: +/- .00005

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Surface plate (Lab Grade) S/N 860843  
Height Gage (Holder Only)  
Indicator (.0001) S/N 1063

PROCEDURE:

1. Clean block with acetone to remove foreign material.

2. Inspect for nicks, burrs, scratches, rust or corrosion which might interfere with the accuracy or function of the block.
3. Removal of positive imperfections shall be accomplished only by the use of a hard Arkansas Stone. Reclean per 1 above.
4. Lay on surface plate and indicate surface for flatness and parallelism to the opposite side. Repeat on all 6 surfaces. Repeat on all 6 surfaces. Indicate sides for perpendicularity to top and bottom surfaces.
5. Tolerance shall be .0002 TIR on all measurements.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.72

PROCEDURE, CONTINUED

6. Record deviation on Calibration Record Card with date calibrated, calibration due date, and initials or stamp of Inspector performing calibration.
7. Label each block with label stating date of calibration, calibration due date and acceptance stamp of the inspector.
8. Upon completion apply a light coat of oil and return to the using facility.
9. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.73

NAME: Bryant Groove Gage

ACCURACY: +/- .00025

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

1-2" Micrometer (.0001) S/N 528

PROCEDURE:

1. Visual check groove segments for nicks, burrs, on gaging surfaces. Remove positive imperfections by use of a hard Arkansas Stone only.
2. Clean segments with acetone to remove any foreign material.
3. Set 1-2" micrometer to read midrange of the indicator. Put groove segments between anvils of micrometer and culminate to produce the lowest reading and zero the indicator.
4. Move the thimble  $-.10$  on the micrometer and observe the indicator movement. This movement should be reflected on the indicator. Return to 0 and repeat thimble movement  $+.010$  and observe the indicator movement. This movement should be reflected on the indicator.
5. Repeat procedure 4 above at  $-.050$  and  $+.050$ .

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.73

PROCEDURE, CONTINUED

6. Record results on Calibration Record Card with date calibrated, calibration due date, and initials of Inspector performing calibration.
7. Label the gage with label stating date of calibration, calibration due date and acceptance stamp of the inspector.
8. Tolerance shall be  $\pm 1/2$  indicator division (.00025).
9. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.74

NAME: Centrifuge Radius Bar (759-10)

ACCURACY: +/- .003

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite Surface Plate  
V-Block

PROCEDURE:

1. Clean with acetone to remove all foreign material.
2. Attach a V Block approximately midway of the bar as shown below. Assure clamp is snug but will allow some movement.
3. Place surface A of the V Block on surface plate. Using program 3 of the Micro-Hite, Measure centerline of pins. Adjust till centerline is parallel. Tighten clamp and recheck centerline.
4. Again using program 3 measure Dim 1. Place surface B of VBlock on surface plate and measure Dim 2.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.74

PROCEDURE, CONTINUED

5. Using program 1 measure Dim 3. Add these together to get the overall dimension.
6. Record the overall dimension on Calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.

7. Label the gage with a label stating the date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

8. Tolerance will be +/- .003 overall.

9. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.75

NAME: Dead Weight Tester

ACCURACY: +/- .00002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

P & W supermicrometer S/N L791 (.00002 accuracy)

PROCEDURE:

1. Wipe clean both the high pressure piston and the low pressure piston.
2. Using the Supermicrometer, Measure the diameter of the high pressure piston. Repeat for the low pressure piston.
3. Remove the plug from the reservoir and check the level and quality of hydraulic fluid for contamination. Refill or replace if necessary.
4. Record actual dimensions of pistons on calibration record with date of calibration, calibration due date, and initials of Inspector performing calibration as well as fluid replacement if applicable.
5. Label with label stating date of calibration, calibration due date, and acceptance stamp of inspector performing calibration.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.75

PROCEDURE, CONTINUED

6. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

7. Tolerance will be +/- .0001 of the initial calibration on both pistons.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.76

NAME: Destructive Tester

ACCURACY: See Tolerance below

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Dead Weight tester S/N 857-2

Calibrated weights (Certified traceable to Nation Bureau of Standards)

3-4" Micrometer S/N 505

PROCEDURE:

1. Use procedure 2. Using a 3-4" O.D. Micrometer measure the diameter of the piston Ram on the tester. The ram will be 3.520.

3. Record actual results of ram diameter and pressure gage calibration on calibration record date and initials of the Inspector performing calibration.

4. Label both the ram and the pressure gage with a label stating the date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

5. These tests can be done outside of controlled environment without any compensation corrections.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.76

PROCEDURE, CONTINUED

6. Tolerance will be as follows: Pressure gage +/- 1/2 divisions Ram +/- .001

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.77

NAME: Height Reference Gage, Final Assy. 789/642A55650

ACCURACY: +/- .0002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate

PROCEDURE:

1. Clean with acetone to remove any foreign material.
2. Check for nicks, burrs, scratches, rust or corrosion or any signs of mishandling which may affect the function or accuracy of the gage.

3. Positive imperfections can be removed with the use of a hard Arkansas Stone. Reclean per 1 above.

4. Set on surface plate. Using a B & S Micro-Hite program 1 measure from the 4.283 step to the top of the base. Measure from the 4.283 step to the +.035 step. Measure from the 4.283 step to the -.035 step.

5. Tolerance will be as follows: 4.283 step to base is +/- .0005

4.283 step to +.035 step is +.000, -.001

4.283 step to -.035 step is +.001, -.000

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.77

PROCEDURE, CONTINUED

6. Record actual values on calibration record card with date of calibration, calibration due date and initials of Inspector performing calibration.

7. Label the gage with a label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

8. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

9. Upon completion apply a light coat of oil and return to using facility.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.78

NAME: Pin Shear Fixture W.O. 774 P/N 704AS2163

ACCURACY: +/- .0002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate  
V-Block

PROCEDURE:

1. Clean with acetone to remove foreign material
  2. Set up on V-Block on surface plate as shown:
  3. Using a B & S Micro-Hite on program 1, measure .060 Dim. from surface A to shear pin at the bottom of hole indicated
  4. Tolerance will be +/- .030
  5. Record actual dimension on calibration record card with date of calibration, calibration due date and initials of Inspector performing calibration.
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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.78

PROCEDURE, CONTINUED

6. Label fixture with a label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.
7. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.
8. Upon completion apply a light coat of oil and return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.79

NAME: True Position gage, Probe Assy.

ACCURACY: +/- .0002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS:None required

EQUIPMENT REQUIRED:

Optical comparator 10X

PROCEDURE:

1. Clean with acetone to remove any foreign material. 2.Visual check for nicks, burrs, or corrosion which may affect the accuracy or function of the gage.
3. Positive imperfections may be carefully removed with a very fine emery cloth. Reclean per 1 above.
4. Position on optical comparator and check the .320 and .155 dimensions. The actual dimensions must maintain a true position of .030 max. There will be no tolerance over the .030 max.
- 5.Record actual dimensions on calibration record card with calibration date, calibration due date and initials of Inspector performing calibration.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.79

PROCEDURE, CONTINUED

6. Label the gage with label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.
- 7.Tests will be done at 68-75 deg. F, 50% - 20 R.H. 8.Upon completion apply a light coat of oil and return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.80

NAME: Probe for Housing window Projection

ACCURACY: +/- .0002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Optical Comparator

PROCEDURE:

1. Clean with acetone to remove any foreign material. Visually check gaging surfaces for rust or corrosion that may affect the accuracy of the gages. Remove carefully with very fine emery cloth and reclean per 1 above.

2. Remove gage segment from handle and set up on comparator. Using the circle function on 10 X check the radius of the 2 curved gaging surfaces. This radius should be  $.673 +.001/- .0005$ . Center the measuring surface. It should be  $.661 +.002 /-.0005$ . Add these two dimensions together and total should be 1.333 minimum.

3. Record total dimension on calibration record card with date of calibration, calibration due date and initials of Inspector performing calibration.

4. Label gage with date of calibration due date and acceptance stamp of Inspector performing calibration.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.80

PROCEDURE, CONTINUED

5. Test shall be performed at 68-75 deg. F, 50% - 20 R.H. 6. Upon completion. Install handle, apply light coat of oil and return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.81

NAME: Spring Plunger Displacement Gage

ACCURACY: +/- 2%

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Gram Scale (0-1111Gr) S/N PEI-S-6  
Gage Blocks (Grade 3) S/N 69135  
Surface Plate (Lab Grade) S/N 860843  
Height Gage-Holding Device Only

PROCEDURE:

1. Remove indicator and calibrate per Procedure 11 of Cal-1 upon completion reinstall indicator on fixture.
2. Check the 3 weights per Procedure 46 of Cal-1 with the exception of Equipment Required Use PEI-S-6.
3. Upon completion return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.82

NAME: Solenoid Rotation Gage

ACCURACY: See Calibration Record Card

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS:None required

EQUIPMENT REQUIRED:

Optical Comparator  
Calibrated Weights  
1-2" Micrometer S/N 528  
Angle Plate (Holding Device Only)

PROCEDURE:

- 1.Calibrate gram gage to procedure 63 of Cal-1.(Limit to 30 Gr.)
- 2.Set up on the comparator. Using 10X, surface reflection check 45 degree and 90 degree angles marked on the disc.
- 3.Using 1-2" micrometers check the O.D. of the disk from 0 degrees to 180 degrees.
- 4.Record actual values on calibration record card with date of calibration, calibration due date and initials of Inspector performing calibration.
- 5.Label the gage with a label stating the date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.82

PROCEDURE, CONTINUED

- 6.Tolerance will be as follows: O.D. 205 +/- .005 Angles +/- 30 Min.  
Gram gage 30 Gr. Min
7. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.
- 8.Upon completion return to using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 83

NAME: Rotor Assembly Solenoid

ACCURACY: +/- .0002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current  
"in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by  
comparison with higher accuracy  
standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Surface Plate (Inspection Grade) S/N spool  
B & S Micro-Hite (.01%) S/N 1034  
Gage Blocks (Grade 3) S/N 69135  
5" Sine Plate S/N 1

PROCEDURE:

1. Set up on Sine plate and Surface plate. Using Micro-Hite on program 1, level the fixture where the Rotor Assy. Solenoid rests on the flats so when gage blocks are inserted in sine plate the other flat will be level. Shims may be required to level the first flat (Under Edge of fixture).
2. Install gage blocks (per sine bar tables) to achieve the 3 degree 30 min. Using the Micro-Hite on program 1 check the second set of flats. These should be approximately level. Add subtract gage blocks until it is level. Total the gage blocks and convert to degrees.
3. Record actual value on calibration record card with date of calibration, calibration due date and initials of Inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 83

PROCEDURE, CONTINUED

4. Label the fixture with label stating the date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
5. Tests shall be performed at 68-75 deg. F, 50% - 20 R.H.
6. Upon completion apply a light coat of oil and return to the using facility.
7. Tolerance +/- 15 minutes.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 84

NAME: Rotor Retainer Check Fixture

ACCURACY: +/- .0002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 20 uses

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

#### EQUIPMENT REQUIRED:

P & W super Micrometers S/N L791 (.000020 accuracy)

B & S Micro-Hite (.01) S/N 1034

Surface Plate (Inspection Grade) S/N Spool

Optical Comparator

#### PROCEDURE:

- 1.Clean with clean acetone to remove any foreign materials.
- 2.Visually inspect gaging surfaces for rust or corrosion that may affect the accuracy or function of the gages. Remove with very fine emery cloth and reclean per 1 above.
- 3.Set up A & B on comparator and check for a radius on the 1.241 & 1.246 dimensions. No radius allowed.
- 4.Using P & W Supermicrometer check the 1.241 & 1.246 dimensions.
- 5.Set up C on Surface plate. Using Micro-Hite check the 1.250 inside diameter.
- 6.Tolerance will be as follows:  
On A & B all dimensions +/- .0002  
On C +/- .0005

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 84

PROCEDURE, CONTINUED

7. Record actual results on calibration record card with date of calibration, and initials of Inspector performing calibration.
8. Place a label on C with date of calibration, 20 uses and acceptance stamp of Inspector performing calibration.
9. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.
10. Upon completion apply a light coat of oil and return to storage.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 85

NAME: Check Fixture W.O. 789 P/N 642AS5653

ACCURACY: +/- .00002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.  
CALIBRATION INTERVAL: 20 uses

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

P & W Supermicrometer S/N L791 (.00020 Accuracy)  
Optical Comparator

PROCEDURE:

1. Clean with acetone to remove any foreign materials.
2. Visually inspect gaging surfaces for rust or corrosion that may affect the accuracy or function of gages. Remove with very fine emery cloth and reclean per 1 above.

3.Using Supermicrometer check dimensions as set forth below.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 85

PROCEDURE, CONTINUED

4.Record Dimensions on calibration record card with date of calibration, and initials of Inspector performing calibration.

5.Place a label on A with date of calibration, 20 uses and acceptance stamp of Inspector performing calibration.

6.Tolerance will be +/- .0003 on all dimensions.

7.Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

8.Upon completion apply a light coat of oil and return to storage.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 86

NAME: Flush Pin Gage .230 +/- .020

ACCURACY: +/- .0002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Surface Plate

B & S Micro-Hite  
Parallel Bar

PROCEDURE:

- 1.Clean with acetone to remove any foreign material.
- 2.Set up on parallel Bar as follows.
- 3.Using Micro-Hite on program 1 measure the dimensions shown above.
- 4.Record results on calibration record card with date of calibration, calibration due date and initials of inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 86

PROCEDURE, CONTINUED 5.Label gage with a label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.

6.Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

7.Upon completion apply a light coat of oil and return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 87

NAME: Flush Pin Gage .280 +/- .010

ACCURACY: +/- .0002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 20 uses

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate  
V-Blocks  
Parallel Bar

PROCEDURE:

- 1.Clean with acetone to remove any foreign material
- 2.Set up on V-Blocks & Parallel Bar as follows
- 3.Using Micro-Hite on program 1 measure the dimensions shown above.
- 4.Record results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 87

PROCEDURE, CONTINUED

- 6.Label each gage with label stating calibration date, calibration due date, or uses, and acceptance stamp of Inspector performing calibration.
- 7.Test shall be performed at 68-75 deg. F, 50% - 20 R.H.
- 8.Upon completion apply a light coat of oil and return gage to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 88

NAME: Visual Gage

ACCURACY: +/- .0002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current  
"in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by  
comparison with higher accuracy  
standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate  
Parallel Bar

PROCEDURE:

1. Set up on parallel bar as shown below.
  2. Using Micro-Hite on program 1 measure the dimension above  
at 2 places (one on each arm).
  3. Record dimensions on calibration record card with date of  
calibration, calibration due date, and initials of Inspector  
performing calibration.
  4. Place a label on the gage container stating the date of calibration,  
calibration due date, and acceptance stamp performing calibration.
  5. Tolerance will be +/- .0005
  6. Tests will be done at 68-75 deg. F, 50% - 20 R.H.
  7. Upon completion return to using facility
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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 89

NAME: Torque Test Fixture

ACCURACY: 5 minutes

SCOPE: This procedure prescribes the requirements and/or  
methods for periodic calibration of a unit of  
inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current  
"in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by  
comparison with higher accuracy

standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:  
Optical Comparator

PROCEDURE:

- 1.Remove plate from fixture. Clean with acetone to remove any foreign material.
- 2.Set up on comparator, using Reflective lens on 10 X use angle function to measure the angle.
- 3.Record on calibration record card with date of calibration, calibration record card, and initials of Inspector performing calibration.
- 4.Label the fixture with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
- 5.Reinstall plate
- 6.Tolerance will be +/- .2 degrees.
- 7.Test will be done at 68-75 deg. F, 50% - 20 R.H.
- 8.Upon completion apply a light coat of oil and return fixture to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 90

NAME: Vise, Mitutoyo S/N 0581

ACCURACY: .0002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Surface Plate (Lab Grade) S/N 860843  
Height Gage (Holder Only)  
Indicator (.0001) S/N 1063  
B & S Master Square S/N 516

PROCEDURE:

1. Clean with acetone to remove any foreign material.
2. Visual inspect for nicks, burrs, rust or corrosion that may affect the function of the VISE. Removal may be done with very fine emery cloth or hard Arkansas stone. Reclean per 1 above.
3. Using master square check items A - D of the Inspection Table.
- 4 Using .0001 Indicator check item E -F of the Inspection Table. 5. Record results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.
6. Label the vise with label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 90

PROCEDURE, CONTINUED

7. Tests shall be performed at 68-75 deg. F, 50% - 20 R.H
8. Tolerance will be as set forth on the Inspection table attached to calibration record card.
9. Upon completion, apply a light coat of oil and return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 91

NAME: Test Point (ALT for MIL-D-48175B(AR) 4.5.9)

ACCURACY: +/- .0002 R +/- 6' <

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year

PRECALIBRATION REQUIREMENTS: Transfer standard must have current  
"in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by  
comparison with higher accuracy  
standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Optical Comparator

PROCEDURE:

1. Set up Comparator.

2. Using angle function check the angle.

3. Using circle function check the radius of the Tip.

4. Record actual values on calibration record card with date of calibration,  
calibration due date, and initials of Inspector performing calibration and any  
deviation.

5. Label the container with label stating date of calibration, calibration due  
date, and acceptance stamp of Inspector performing calibration.

6. Tolerance will be +/- 30' on < +/- .002 on radius. 7. Calibration will be done  
at 68-75 deg. F, 50% - 20 R.H

8. Upon completion return to storage.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 92

NAME: Template :815 (NOSE)

ACCURACY: MIN/MAX Per Print

SCOPE: This procedure prescribes the requirements and/or  
methods for periodic calibration of a unit of  
inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current  
"in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by  
comparison with higher accuracy  
standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED

Surface Plate  
B & S Micro-Hite  
Vise (Holder only)

PROCEDURE:

- 1.Clean with acetone to remove any foreign material.
- 2.Set up on surface plate in vise. Using Micro-Hite on program 3 check the centerline of hole C to the radius. Repeat a minimum of 3 places on the radius of each gage.
- 3.Record average dimension on the calibration record card with the date of calibration, calibration due date and, initials of Inspector performing calibration.
- 4.Label each gage with a label stating date of calibration, calibration due date, and acceptance stamp of inspector performing calibration.
- 5.Calibration will be done at 68-75 deg. F, 50% - 20 R.H.
- 6.Upon completion return to storage.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 93

NAME: Torque Wrench (Ft. LBS.)

ACCURACY: +/- 1/2 division

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Calibrated Weights +/- 1%  
Weights Holder (S/N 3)  
Large Machinist Vise

PROCEDURE:

1. Remove dirt or other foreign material with acetone. Wipe or blow dry with compressed air.
2. Visual inspect for nicks, rust, or corrosion.
3. Remove nicks, rust or corrosion, if necessary, carefully using crocus cloth or very fine emery cloth. Reclean per 1 above.
4. Clamp the socket drive (Square) in the Vise with the handle near level. Assure vise is tight to avoid slippage

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 93

PROCEDURE, CONTINUED

5. Locate the slot on the handle (12 inches from centerline of socket drive) and hang the weight holder. Set the wrench to the desired torque. Apply the proper weights for the torque being checked. Don't forget to include the weight of the holder. With weight applied the wrench should trip. If not remove the weight and reduce the setting 1 FT. Lb. less. If the wrench trips at the lower setting the wrench will be considered good. If wrench tripped on the original setting, remove the weights and increase the setting 1 Ft. LB. more. If the wrench doesn't trip it will be considered good.
6. Tolerance will be +/- 1 Ft. LB.
7. Record actual values on calibration record card with date of calibration, calibration due date, and initials of inspector performing calibration.
8. Label the wrench with label stating date of calibration, calibration due date, and acceptance stamp of inspector performing calibration. Identify limit if limited calibration is done.
9. Calibration may be done outside of controlled environment. No compensating corrections required.
10. Upon completion apply a light coat of oil and return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 94

NAME: Solenoid Assembly Fixture (S/N 0358)

ACCURACY: Minimum (8 in. oz.) 7).

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Torque Screwdriver w/attachment

PROCEDURE:

- 1.Clean with acetone to remove any foreign material.
- 2.Using an in. oz. Torque screwdriver w/Attachment, check torque required to move arm approximately 1/4 inch. Adjust weight asrequired.
- 3.Record results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.
- 4.Label the fixture with label stating date of calibration,calibration due date, and acceptance stamp of Inspector performing calibration.
- 5.Calibration will be done at 68-75 deg. F, 50% - 20 R.H.
- 6.Upon completion apply a light coat of oil and return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 95

NAME: Scale, A & D 0-40,000 Gr.

ACCURACY: +/- .02%

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Weights (Traceable to NBS)

PROCEDURE:

1. Wipe tray with a clean dry cloth.
2. Using appropriate weights check scale at a minimum of 4 places over range.
3. Record results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration and any deviation.
4. Label the scale with label stating the date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
5. Tolerance will be +/- .02% of weight applied.
6. Calibration will be done outside of controlled environment. No compensating corrections required.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 96

NAME: Scale, Hanson 0-60 LBS.

ACCURACY: +/- 1b..

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Weights (Traceable to NBS)

PROCEDURE:

- 1.Wipe tray with a clean dry cloth
- 2.Using appropriate weights check scale at a minimum of 4 places over range.
- 3.Record results on calibration record card with date of calibration, calibration due date, initials of Inspector performing calibration and any deviation.
- 4.Label the scale with label stating the date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.
- 5.Tolerance will be +/- 1/2 lb. of weight applied.
- 6.Calibration will be done at 68-75 deg. F, 50% - 20 R.H.
- 7.Upon completion return to using facility

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 97

NAME: Length Gage

ACCURACY: +/- .001

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Super Micrometers (.00002)

PROCEDURE:

1. Clean with acetone to remove any foreign material.
2. Due to the length of this gage it must be measured in sections. See diagram below.
3. Remove ceiling tile above surface plate to allow clearance.
4. Measure the height of the VBI.
5. Stand gage in the vertical position. Using the Micro-Hite on Program 1 measure from the top of VB1 to the top of VB2. Move gage over the edge of surface plate and allow VB2 to the top of VB3. Write these measurements down.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 97

PROCEDURE:

6. Rotate the gage end for end and measure from the top of the gaging surface to the top of VB4. Move the gage over the edge of the surface plate once again and measure from the top of VB4 to the bottom of VB3.
7. Total these 5 measurements to obtain the overall length.
8. Record the total length on the calibration record card with date of calibration, calibration due date and initial of the inspector performing calibration.
9. Label the gage with label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.
10. Tolerance will be +/- .001 of length marked on the gage.
11. Calibration will be performed at 68-75 deg. F, 50% - 20 R.H.
12. Upon completion apply a light coat of oil and return to storage.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 98

NAME: Wire length gage (pressure probe) S/N LG1

ACCURACY: +/- 1/64

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: IF THIS UNIT IS USED TO CHECK OXYGEN EQUIPMENT, THE PUMP MUST BE CLEANED AND FILLED WITH A THIN GLYCERINE.

EQUIPMENT REQUIRED:

0-24" Steel Rule 1/64 scale

PROCEDURE:

- 1.Clean with soft dry cloth.
- 2.Using Steel Rule 1/64 scale, measure to the 12" 13",16" & 17" per print.
- 3.Record the results on the calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration and deviation.
- 4.Label the gage with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
- 5.Tolerance will be as follows 12" & 16" +1/32,-0, 13" & 17" +0, -1/32.
- 6.Calibration will be done at 68-75 deg. F, 50% - 20 R.H
- 7.Upon completion return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.99

NAME: Wire length gage (Pressure Probe) S/N SMR1

ACCURACY: +/- 1/64

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

0-24" Steel Rule 1/64 Scale.

PROCEDURE:

1. Clean with soft dry cloth.
2. Using Steel Rule, 1/64 scale, measure the 10 1/4" & 11" dimensions.
3. Record the results on the calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.
4. Label the gage with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
5. Tolerance will be as follows 10" +000, 9 1/4" +1/32, -000.
6. Calibration will be done at 68-75 deg. F, 50% - 20 R.H.
7. Upon completion return to the using facility.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.100

NAME: Pull-off Fixture (TRW 2)

ACCURACY: +/- .0002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Parallel Bar  
2-3" Micrometer  
Surface Plate

PROCEDURE:

1. Clean gaging surfaces with acetone.
2. Set up on surface plate as shown above.
3. Using 2-3 micrometer check the O.D. of the 2.623 and record.
4. Using B & S Micro-Hite on Program 3 parallel the centerline of the 1.515 dimension (2 places). Shine may be required.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.100

PROCEDURE, CONTINUED

5. Measure the diameter of the 1.515 dimension (2 Places).
6. Measure the 2.425 centerline to centerline dimension.
7. Tolerance will be +/- .001 on all dimensions.
8. Record all dimensions on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.
9. Label the fixture with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
10. Calibration will be performed at 68-75 deg. F, 50% - 20 R.H.
11. Upon completion apply a light coat of oil over entire fixture and return to storage.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.101

NAME: Manometer

ACCURACY: +/- 1/64

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Steel Rule 2 Ft. (1/64 Scale)

PROCEDURE:

1. Use steel rule and check against the rule of the manometer. Use conversion chart for P.S.I.
2. Monitor the fluid for contaminants or oxidation.
3. Record results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.
4. Label the manometer with a label stating the date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration
5. Tests may be performed outside of controlled environment. No compensation required.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.102

NAME: Centrifuge Radius Bar (S/N 01)

ACCURACY: +/- .010

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro Hite  
Surface Plate  
V-Block

PROCEDURE:

1. Clean with acetone to remove any foreign substance.
2. Attach V-Block approximately midway of the longer shaft as shown. Clamp tight.
3. Place surface A of the V-Block on surface plate. Using B & S Micro-Hite on program 3 measure Dim. 2.
4. Place surface B of the V-Block on surface plate. Using program 3 measure Dim. 1.
5. Use program 1 to measure Dim 3 (V-Block). Add these 3 dimensions together to get the overall dimension.
6. Record the overall dimension on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.102

PROCEDURE, CONTINUED

7. Label the radius bar with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
8. Tolerance will be +/- .010 overall.
9. Test will be performed at 68-75 deg. F, 50% - 20 R.H.
10. Upon completion return to the using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.103

NAME: Centrifuge Radius Bar

ACCURACY: +/- .003

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite Surface Plate  
Parallel Bars

PROCEDURE:

1. Clean with acetone to remove any foreign substance.
2. Set up on parallel bars as shown diagram.
3. Using B & S Micro-Hite on program 3, measure centerline of pins to top centerline of plate.
4. Remove the parallel bars and using program 3 measure top center line of 1 in. dia. hole.
5. Total dimensions from 3 & 4 above for 20.3816 dim.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.103

PROCEDURE, CONTINUED

6. Tolerance will be +/- .003 overall.
7. Record total dimension with date of calibration, calibration due date, and initials of inspector performing calibration.

8. Label the radius bar with a label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

9. Upon completion return to using facility.

10. Calibration will be done at 68-75 deg. F, 50% - 20 R.H.

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XXXX COMPANY, INC.

#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.104

NAME: Pull test fixture (822-004)

ACCURACY: +/- 1/2 Div.

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Dead Weight Tester S/N 857-2  
Calibrated Weights (Traceable to NBS)

PROCEDURE:

1. Use procedure 29 of Cal-1 for calibration of Pressure Gage.

2. After the pressure gage has been tested and reinstalled remove the bolt holding the cylinder to the fixture. Invert the cylinder and reinstall bolt. Attach weight holder, S/N 3, to the cylinder piston. Using appropriate weights (be sure to include 2 Lbs. for the holder) check the actual piston pull when each valve is activated. The low pressure valve (left) will be 20 Lbs. minimum and the high pressure valve (Right) will be 30 Lbs. maximum. These must correspond to P.S.I. reading on the pressure gage.

3. Remove the cylinder and reinstall it in the original position.

4. Record the results with date of calibration, calibration due date, and initials of Inspector performing calibration.

5.Label the fixture with label stating date of calibration,calibration due date, and acceptance stamp of Inspector.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.104

PROCEDURE, CONT.

6.Calibration may be performed outside of controlled environment. No compensation required.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.105

NAME: Centrifuge

ACCURACY: See Calibration Record Card

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS:Transfer standard must have current"in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS:None required

EQUIPMENT REQUIRED:

Centrifuge Radius Bar (0211)

PROCEDURE:

1.Assure centrifuge radius bar fits between the center post and the fixture.(PEI 0210).

2. Record on calibration record card with date of calibration, calibration due date, and initials of Inspector.

3. Label the centrifuge with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

4. No allowable tolerance.

5.This procedure will be performed in C/R 2, outside of calibration controlled environment requirements. Nocompensation required.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.106

NAME: Twin Test System

ACCURACY: +/- 5%

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS:Transfer standard must have current"in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS:In the Event servicing is required for X-Ray cabinet itself, onlyAuthorized or certified service Personnel can effect repairs to this system.

EQUIPMENT REQUIRED:

Certified Plating Standards.

PROCEDURE:

1. Follow instruction given in section 4 para: 4.4.4 & 4.6 of the operating system.
2. Run the system test in accordance with chapter 10 of the operating manual.
3. Print out results and file.
4. Record data filed on calibration record card with date ofcalibration, calibration due date, and initials of Inspector performing calibration.
- 5.Label the system with label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.

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XXXX COMPANY, INC.

EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.106

PROCEDURE, CONTINUED

6. Tolerance +/- 5%.

7. Calibration will be performed at 68-75 deg. F, 50% - 20 R.H.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.107

NAME: Vacuum Gage

ACCURACY: +/- 1/2 div.

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

#### EQUIPMENT REQUIRED:

Mercury Manometer

Vacuum Source

#### PROCEDURE:

1. Connect gage and manometer to vacuum source.
2. Compare gage reading to the manometer reading at a minimum of 4 places.
3. Record results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.
4. Label the gage with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
5. Tolerance will be +/- 1/2 gage division.
6. Calibration may be performed outside of calibration controlled environment, No compensation required.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.108

NAME: Location Gage (Threaded Hole)

ACCURACY: .0002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Optical Comparator  
Staging Centers (Holding Device Only)  
Threaded Chart (reference ONLY)  
P & W Supermicrometer  
Threaded Wires

PROCEDURE:

1. Check the pitch diameter of gage (see procedure 16 of Cal-1)
2. Set up gage in comparator on staging center.
3. Put chart on screen and align thread with chart. Check Concentricity of thread by rotating on centers.
4. Check concentricity of gaging surface by rotating on centers.
5. Record results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.
6. Label gage container with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.108

PROCEDURE, CONTINUED

7. Calibration will be done at 68-75 deg. F, 50% - 20 R.H.
8. Upon completion apply a light coat of oil and return to storage.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.109

NAME: Inspection Gage (818-01)

ACCURACY: +/- .0002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Gage Blocks  
P & W Supermicrometer  
Optical Comparator  
B & S Micro-Hite  
Print (818-01)

PROCEDURE:

1. Clean with acetone to remove any foreign materials.
2. Set up in comparator on centers, using edge finder check of the 1.056 & .8088 dimensions. Use Angle Function to check the 35 degree Angle. Use the edge finder to check perpendicularity of Datum B to Datum A.
3. Using Micro-Hite check the .5650 dimension parallel to Datum B and the .0060 dimension parallel to Datum B.
4. Set the supermicrometer with Gage Blocks and check the 1.0560, .8088 and .2178 dimension.
5. Record actual dimension on calibration record card with the date of calibration, calibration due date, and initials of Inspector performing calibration.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.109

PROCEDURE, CONTINUED

6. Label the gage with date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
7. Tolerance will be as setforth on print 818-01.
8. Upon completion apply a light coat of oil and return to using facility.
9. Calibration will be performed at 68-75 deg. F, 50% - R.H.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.110

NAME: Inspection Gage (815-065)

ACCURACY: +/- .0002

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Optical Comparator  
Drawing (815-065)

PROCEDURE:

1. Clean with acetone to remove any foreign material.
2. Remove handle and set up in vise on comparator.
3. With comparator on 10X, using direct projection take measurements A thru H.
4. With comparator on 10X, using surface reflection take measurement I thru R.
5. Record actual results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.
6. Label the gage with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

7.Tolerance will be as set forth on Drawing 815-065.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.110

PROCEDURE, CONTINUED

8.Calibration will be done at 68 - 75 deg. F, 60% Maximum R.H.

9.Upon completion, apply a light coat of oil and return to storage.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.111

NAME: Hite-Icator

ACCURACY: +/- .0003

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS:Transfer standard must have current"in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS:None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate

PROCEDURE:

1.Clean gaging surface with acetone to remove shop dirt,fingerprints and any other foreign substance. Apply a light coat of oil.

2.Visually inspect for nicks, burrs, scratches, rust andcorrosion or any signs of mishandling of the gage that may affect the accuracy or function of the gage.

3.Set gage on surface plate. Using a B & S Micro-Hite measure the gaging surface from 1"-12" with the spindle anddigital counter set on 0. Rotate the spindle and

set digital counter on 300, 500 and 612 assuring the spindle is set on corresponding setting.

4. Record results on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.111

PROCEDURE, CONTINUED

5. Label the gage with label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.

6. Upon completion return to the using facility.

7. Calibration will be performed at 67-75 deg. F, 50% - 20 R.H.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO.112

NAME: Switch Set Gage w/Spacer, W.O. 821

ACCURACY: +/- .0002 of print tolerance

SCOPE: This Procedure Prescribes the requirements and/or method for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status.

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:  
Optical Comparator  
0-1 Micrometer

PROCEDURE:

1. Remove dirt or other foreign material with warm soapy water. (Do not use acetone). Wipe or use compressed air to dry.

2. Visual inspect for nicks, scratches, or frosted plexiglass which may interfere with setting operation.

3. Radius will be checked as to confirm with work order, part number or drawing number as applicable. This will be done on the optical comparator on 10 X range.

4. Using 0-1 Micrometer measure the height of the spacer. The height will be .208 +/- .001.

5. Record actual value on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.

6. Label gage with label stating date of calibration, calibration due date, and acceptance stamp of Inspector.

7. Calibration will be performed at 68-75 deg. F, 50% - 20 R.H.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 113

NAME: Connector Position Gage W.O. 779 P/P 3300110

ACCURACY: P/P

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

#### EQUIPMENT REQUIRED:

0-1" Micrometer (.0001)

Optical Comparator

Drawing 779-4 Rev. A

#### PROCEDURE:

1. Clean with acetone to remove shop dirt and any foreign substance.  
2. Visually inspect for nicks, burrs, scratches or any sign of mishandling or wear that may affect the accuracy or function of the gage.

3. Removal of nicks or burrs should be accomplished by use of a Hard Arkansas Stone. Reclean per 1 above.

4. Use a .032 Go, .038 No Go Plug Gage to check the .035 diameter holes (1) (13 places).

5. Set up on Optical Comparator reflective lens to check items (2) thru (15) and (19).

6. Using the Angle Function check (17) and (18).

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 113

PROCEDURE, CONTINUED

7. Set up on Optical Comparator direct lens to check (22) thru (24).

8. Using the Angle Function check 20 and 21.

9. Using 0-1 Micrometer check the .487 diameter (16).

10. Record results on gage calibration record card with calibration date, calibration due date, and initials of Inspector performing calibration.

11. Label the gage with a label stating calibration date, calibration due date, and acceptance stamp of Inspector performing calibration.

12. Tests shall be done at 68-75 deg. F, 50% - 20 R.H.

13. Tolerance will be +/- .003 decimals, +/- 30 Min. angles.

14. Upon completion return to using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 114

NAME: Angle Disc (821/1)

ACCURACY: +/- .05 DEG. of Print Tolerance.

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 6 Months

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Optical Comparator

PROCEDURE:

- 1.Clean with acetone to remove shop dirt and any foreignsubstances.
- 2.Set up on comparator using 10 X reflective lens, anglefunction to check the 42 deg. and 48 deg. lines form 0.
- 3.Record results on gage calibration record card with date of calibration, calibration due date and initials of Inspector performing calibration.
- 4.Label gage with a label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.
- 5 Test shall be performed at 68-75 deg. F, 50% - 20 R.H.
- 6.Tolerance will be min. for 42 deg. and Max for 48 deg.
- 7.Upon completion return to using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 115

NAME: Centrifuge Radius Bar (30.510)

ACCURACY: +/- .00004

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate  
V-Block

PROCEDURE:

- 1.Clean with acetone to remove any foreign substances.
- 2.Attach V-Block approximately midway of the shaft as shown.  
Clamp Tight
- 3.Place surface A of the V-Block on surface plate. Using B & S Micro-Hite on program 1 measure Dim. 2.
- 4.Place surface B of the V-Block on surface plate. Using program 1 measure Dim. 1.
- 5.Use program 1 to measure Dim 3 (V-Block). Add these 3 dimensions together to get the overall dimension.
- 6.Record the overall dimension on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 115

PROCEDURE, CONTINUED

- 7.Label the radius bar with label stating date of calibration,calibration due date, and acceptance stamp of Inspector performing calibration.
- 8.Tolerance will be +/- .002 overall.
- 9.Test shall be performed at 68-75 deg. F, 50% - 20 R.H.
10. Upon completion return to using facility.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 116

NAME: Centrifuge Radius Bar (24.400)

ACCURACY: +/- .0004

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate  
V-Block

PROCEDURE:

- 1.Clean with acetone to remove any foreign substances.
- 2.Attach V-Block approximately midway of the shaft as shown.  
Clamp Tight
- 3.Place surface A of the V-Block on surface plate. Using B & S Micro-Hite on program 1 measure Dim. 2.
- 4.Place surface B of the V-Block on surface plate. Using program 1 measure Dim. 1.
- 5.Use program 1 to measure Dim 3 (V-Block). Add these 3 dimensions together to get the overall dimension.
- 6.Record the overall dimension on calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 116

PROCEDURE, CONTINUED

7.Label the radius bar with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

8.Tolerance will be +/- .002 overall.

9.Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

10. Upon completion return to using facility.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 117

NAME: Micrometer, Digimatic

ACCURACY: See Calibration Record

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

#### EQUIPMENT REQUIRED:

Gage Blocks (Grade 3) S/N 69135

Supermicrometer (.00002) S/N L791

#### PROCEDURE:

1. Do Not remove spindle. Clean the micrometer with a cloth slightly dampened with a light oil.
2. Visual check for nicks and burrs on gaging surfaces or any sign of mishandling or wear that may affect the accuracy of functions of the micrometer.
3. Removal of nicks and burrs on gaging surfaces should be accomplished only by the use of a hard Arkansas Stone. Reclean Per 1 above.
4. Anvil and spindle faces shall be checked for flatness and parallelism by closing the spindle on a gage block. Maintaining the position of the gage block in the micrometer, carefully inspect for any gap at the contact areas that would be evident by light. Any evidence of light shall be considered cause for rejection.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 117

PROCEDURE, CONTINUED

5. Wipe clean the faces of the anvil and spindle by drawing a clean sheet of paper between them. Close the anvil and spindle and preset the mics to 0.00000. On larger mics use gage blocks for example 1-2 mic 1"; 2-3 mic 2"; preset according to manufacturers instructions found in Manual No. 1026 page 11. Rotate the ratchet stop 1.5 to 2 turns on all measurements.

6. Check for any difference between the sleeve reference line and the zero line of the thimble. Zero point error must be adjusted in the same manner as conventional mics using a spanner wrench. 7. Using gage blocks check measurements at .300, .500, .612 and 1.000. Make comparable readings for micrometers larger than 1 inch.

8. Using gage blocks set up the supermicrometer to correspond with the length of the setting gage. Measure the length of the setting gage (1-2" and larger).

9. Tolerance on micrometers having 5 decimal places will be +/- .0001. Tolerance on micrometers having 4 decimal places will be +/- .001.

10. Record actual values and corresponding digital readings on calibration record card along with date of calibration, calibration due date, initials of Inspector performing calibration and any deviation.

11. Label the micrometer with a label stating date of calibration, calibration due date and acceptance stamp of Inspector performing calibration.

12. Upon completion of inspection apply a light coat of oil to gaging surfaces.

13. Calibration will be performed at 68-75 deg. F, 50% - 20 R.H

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 118

NAME: Borematic Bore Gage

ACCURACY: +/- .00025 over .800"

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Ring gage (compatible size for head)  
Manual 1034

PROCEDURE:

1. Use only a lint-free soft cloth for cleaning. If it is very dirty use a mild detergent on a slightly dampened cloth. Do Not use acetone or other chemicals.

2. Visual inspect for nicks and burrs or any sign of mishandling or wear that may affect the accuracy or functions of the boremetrics. Worn or damaged surfaces should be replaced. Positive imperfections can be removed only by the use of a hard Arkansas Stone. Reclean per 1 above.

3. Select ring gage of proper diameter for boremetric head to be calibrated. Wipe clean the measuring surfaces of the ring gage being used to calibrate.

4. Install Boremetric head per instruction in manual # 1023 page 7. Preset the origin point per instruction on page 13. Repeat Procedures 3 and 4 for all heads to be calibrated.

5 Tolerance will be +/- .0002.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 118

PROCEDURE, CONTINUED

6. Record actual size being checked and corresponding digital readout being displayed along with the date of calibration, calibration due date, initials of Inspector performing calibration and any deviation.

7. Label the gage with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

8. Upon completion apply a coat of light oil on the gaging surfaces and return to the using facility.

9. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 119

NAME: Height Gage, Digimatic

ACCURACY: +/- .0015

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Surface Plate (Lab Grade) S/N 860843  
Gage Blocks (Grade 3) S/N 69135  
.0001 Indicator S/N 1063  
10" Gage Block (Grade 3) S/N GB 10

PROCEDURE:

1. Digimatic height Gage shall be cleaned with a damp (Not wet) soft cloth on all plastic parts. The columns can be cleaned with a clean dry toothbrush type brush. Clean the base and the scriber holding face with Acetone. Wipe or use compressed air to dry.

2. Visual inspect for nicks, burrs scratches, rust or corrosion, or any signs of mishandling or wear that may affect the accuracy or functions of the Height Gage. If necessary remove with crocus cloth, hard Arkansas stone or very fine emery cloth. Reclean per 1 use.

3. Attach .0001' indicator. Set the indicator to 0 setting on a 2.000" gage block. Using light finger pressure, press all around the edge of the base while on the surface plate and observe indicator variation. Maximum permissible variation shall be .0002"

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 119

PROCEDURE, CONTINUED

4. While on surface plate place a 2.000" Gage block under the scriber holding face. Turn the digital display on. This establishes a zero starting point. Add

gage blocks in 2 inch increments over the entire range. The digital display should reflect each step.

5. After taking the last reading in the ABS mode press the zero control key. Remove top gage block lower to the top of remaining build up. The digital display should reflect the value of the removed gage block. Repeat till your back to the original 2" gage block remembering to push the zero control key between each measurement.

6. Record actual values and indicated values along with any deviation on the calibration record card with date of calibration, calibration due date, and initials of Inspector performing calibration.

7. Label the Height Gage with label stating date of calibration, calibration due date, and acceptance stamp of Inspector performing calibration.

8. Test shall be performed at 68-75 deg. F, 50% - 20 R.H.

9. Tolerance Base flatness .0002, Display .0015 on all measurements.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 120

NAME: Torque Test Fixture

ACCURACY: +/- .05 Deg.

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

Optical Comparator

PROCEDURE:

1. Clean with acetone to remove shop dirt and other foreign material.

2. Inspect fixture for any nicks, burrs, scratches, rust and corrosion or any other signs of mishandling which might interfere with the accuracy or function of the fixture.

3. Set up base on comparator. Using the angle function, 10X reflection lens. Check the scribed line of the 105 degree dimension.

4. Place the rotating sleeve on the shaft and assure it rotates freely. Apply a light coat of oil and return fixture to the using facility.

5. Tolerance of the scribed angle will be 105 deg. +/- 30 MIN.

6. Record results on the calibration record card with the date calibrated, calibration due date and initials of Inspector performing calibration.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 120

PROCEDURE, CONTINUED

7. Label the fixture with label stating date of calibration, calibration due date and acceptance stamp of Inspector.

8. Calibration shall be performed at 68-75 deg. F, 50% - 20 R.H.

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#### EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 121

NAME: Alignment Gage 801-001

ACCURACY: +/- .0002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current "in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by comparison with higher accuracy standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate  
Vise

PROCEDURE:

- 1.Clean with acetone to remove shop dirt and other foreignmaterial.
  - 2.Inspect Gage for any nicks, burrs, scratches, rust and corrosion or any other signs of mishandling which might interfere with the accuracy or function of the alignmentgage.
  - 3.Set in vise on surface plate. Using program 1 of micro-heightcheck the diameter of the 1.040" dimensions.
  - 4.Using program 3 of micro-height check the 9.000 centerline dimension.
  - 5.Tolerance will be per print PEI 801-001.
  - 6.Record results on the calibration record card with the datecalibrated, calibration due date and initials of Inspector performing calibration.
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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 121

PROCEDURE, CONTINUED

- 7.Label the gage with label stating date of calibration, calibration due date and acceptance stamp of Inspector.  
performing calibration.
- 8.Calibration shall be performed at 68-75 deg. F, 50% - 20 R.H.

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EQUIPMENT CALIBRATION PROCEDURE

PROCEDURE NO. 122

NAME: Assembly Gage B 822030 (2 Pieces)

ACCURACY: +/- .0002

SCOPE: This procedure prescribes the requirements and/or methods for periodic calibration of a unit of inspection or test equipment.

CALIBRATION INTERVAL: 1 Year Maximum

PRECALIBRATION REQUIREMENTS: Transfer standard must have current  
"in calibration" status

CALIBRATION REQUIREMENT: Calibration must be performed by  
comparison with higher accuracy  
standards.

SAFETY PRECAUTIONS: None required

EQUIPMENT REQUIRED:

B & S Micro-Hite  
Surface Plate  
Vise

PROCEDURE:

- 1.Clean with acetone to remove shop dirt and other foreignmaterial.
- 2.Inspect Gage for any nicks, burrs, scratches, rust and corrosion or any other signs of mishandling which might interfere with the accuracy or function of the alignmentgage.
- 3.Set in vise on surface plate. Using program 3 of micro-heightmeasure the centerline dimension #1,2,4,& 6.
- 4.Using program 1 of micro-height measure the diameterdimension 3 & 5.
- 5.Tolerance will be per print B 822030
- 6.Record results on the calibration record card with the datecalibrated, calibration due date and initials of Inspector performing calibration.

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