IIHS LATCH Measurement Tool
Set Drawings – REV1
LATCH FORCE TOOL WITH DEPTH SHIELD
SHEET 3-4, 9

LATCH CLEARANCE ANGLE GAUGE
SHEET 5-9

TETHER ROUTING TOOL
SHEET 10

CASE SUCH AS PLANO 108361
36" GUN CASE

PROBE THERMOMETER

WAGNER INSTRUMENTS FDX100
WWW.WAGNERINSTRUMENTS.COM
WITH CONNECTOR, SHEET 9

MEASURING TAPE

WIXEY WR365 ANGLE GAUGE
WWW.WIXEY.COM

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MM
TOLERANCE:

MATERIAL
VARIED

FINISH:

DO NOT SCALE DRAWING

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LATCH TOOL KIT

SCALE: NONE
WEIGHT: VARIABLE
SHEET 2 OF 10
IIHS ATTACHMENT FORCE TOOL

DO NOT GLUE PLATES TIGHT, LEAVE CLEARANCE TO SLIDE ON GUIDE ROD

INCLINOMETER STAGE
18ga POWDERCOATED STEEL GLUED TO 1/4"x1/2" ALUMINUM

RE: DEPTH SCALE MARKINGS
AS BUILT DRAWN, DESIGN INTENT DIMENSIONED

GUIDE ROD 4140 ALLOY

GUIDE ROD & INCLINOMETER STAGE

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM
TOLERANCE: ±0.1

MATERIAL
VARIOUS

FINISH
AS MILLED

DO NOT SCALE DRAWING

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GUIDE ROD & INCLINOMETER STAGE
SCALE: 2:3 WEIGHT: VARIED SHEET 3 OF 10

REVISIONS

<table>
<thead>
<tr>
<th>REV</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>CORRECT DATUM FOR DEPTH DIMENSION TO MATCH SLIDER DIMENSION, ADD FITS FOR ROD SIZE, ADD DEPTH SHIELD ACTUAL THICKNESS, ADD MARKINGS NOTE, CHANGE IIHS LOGO, CHANGE ROD DATUM TO EDGE OF ARC, ADD INCLINOMETER STAGE, REMOVE DEPTH SHIELD.</td>
<td>2/1/2017</td>
<td>RGJ</td>
</tr>
</tbody>
</table>

DO NOT GLUE PLATES TIGHT, LEAVE CLEARANCE TO SLIDE ON GUIDE ROD

#8-32x.75 PHMS

WELD 2" RING ON AS HANDLE

DATUM FOR DEPTH

DATUM FOR FORCE

WHITE

RED

BLUE

ORANGE

GREEN

BLACK

R3.18

6.35

H9
d8

64.36

82.68

102.68

122.68

142.68

162.68

182.68

202.17

600
FORCE GAUGE ADAPTER
MACHINED FROM POWER DRIVER ADAPTER SUCH AS DEWALT DWA2509-6IR
SEE SHEET 9 OF 10

MACHINE SPOTFACE AND/OR CHEMICAL THREADLOCKER TO ALIGN CONNECTOR SUCH THAT, WHEN ATTACHED, FORCE GAUGE READS FROM TOP.

SPOTFACE AS NEEDED FOR ADAPTER

DO NOT SCALE DRAWING
<table>
<thead>
<tr>
<th>#</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>SHT # (of 10)</th>
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<tbody>
<tr>
<td>1</td>
<td>Clr Ga Left Side</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Catch Lever</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Clr Ga Right Side</td>
<td>1</td>
<td>6</td>
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<tr>
<td>4</td>
<td>Scale</td>
<td>2</td>
<td>7</td>
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<tr>
<td>5</td>
<td>Insert</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>FHCS 6-32x3/8&quot; (90585A212)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>FHCS 8-32x1/2&quot; (90585A228)</td>
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<tr>
<td>8</td>
<td>3/16&quot;x1&quot; Dowel Pin (97395A473)</td>
<td>1</td>
<td></td>
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<tr>
<td>9</td>
<td>3/16&quot;x1/2&quot; Dowel Pin (97395A461)</td>
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<tr>
<td>10</td>
<td>Flanged Poly Bearing 3/16&quot;x1/4&quot; (6627K11)</td>
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<tr>
<td>11</td>
<td>FHCS 1/4-20x1&quot; (90585A542)</td>
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<tr>
<td>12</td>
<td>5/8&quot;L Conical Spring (1692K22)</td>
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<td>13</td>
<td>Conn Plug Clr Gge, Female</td>
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<tr>
<td>14</td>
<td>Conn Plug Clr Gge, Male</td>
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<td>9</td>
</tr>
<tr>
<td>15</td>
<td>Arm Assembly</td>
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<td>8</td>
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**REVISIONS**

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<tbody>
<tr>
<td>A</td>
<td>CHANGE TO ARM ASM W/ 1/4-20 HOLE AND INCLINOMETER BASE, ADD WT TOLERANCE, ADD GAUGE ADPTRS, REMOVE U BOLT, CHANGE IIHS LOGO.</td>
<td>2/1/2017</td>
<td>RGJ</td>
</tr>
</tbody>
</table>

**Material**: VARIED

**Finish**: AS MACHINED

**Comments**: Align adapters such that force gauge, when attached, reads from side of clearance gauge.

**Scale**: 1:2

**Weight**: 432g ±5%

**Sheet**: 5 of 10

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**CLEARANCE GAUGE ASSEMBLY**

DIMENSIONS ARE IN MM TOLERANCE: ±0.1

**Drawn**: R Jones

**Checked**: 6/12/2015

**Comments**:
LEFT SIDE DRAWN, RIGHT SIDE OPP HAND EXCEPT:

Dowel Note: Left: Ø 4.75 Ø 9.65  Right: Ø 4.79 Ø 9.65

Body Screw: Left: Ø 6.76 Thru All  √ Ø 13.49 X 82°
Right: 1/4-20 UNc Thru All

SECTION A-A

Dimensions are in mm
Tolerance: ±0.1

Material: 6061-T6 Alloy
Finish: AS MACHINED

Do not scale drawing

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CLEARANCE GAUGE
BODY, L & R SIDES

Scale: 1:1  Weight: 84g  Sheet 6 of 10
UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MM
TOLERANCE: ±0.1
MATERIAL: 6061-T6 ALLOY
FINISH: AS MACHINED
DO NOT SCALE DRAWING

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SCALE AND INSERT
SCALE: 1:1 | WEIGHT: VARIED | SHEET 7 OF 10
ATTACHED WITH LOCTITE 324. CENTER LATERALLY.

171.45 X 22.2 X 0.64 (24 ga) POWDERCOATED STEEL PLATE INCLINOMETER ATTACH PLATE, BOTH SIDES.

INCLINOMETER ATTACH PLATE, BOTH SIDES. I7145 X 22.2 X 0.64 (24 gal) POWDERCOATED STEEL PLATE ATTACHED WITH LOCTITE 324. CENTER LATERALLY.

CATCH LEVER
SCALE 1:1

ARM
SCALE 1:2

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM
TOLERANCE: ±0.1

MATERIAL
6061-T6 ALLOY
FINISH
AS MACHINED

DO NOT SCALE DRAWING

LEVER AND ARM

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SCALE: VARIED | WEIGHT: VARIED | SHEET 8 OF 10
CONNECTOR PLUG, CLEARANCE GAUGE, FEMALE THREAD
FAB FROM DRIVER BIT SHANK AND COUPLING NUT

CONNECTOR PLUG, CLEARANCE GAUGE, MALE THREAD
FAB FROM DRIVER BIT SHANK

CONNECTOR SOCKET, FORCE GAUGE
FAB FROM DRIVER BIT EXTENSION

CONNECTOR PLUG, FORCE TOOL
FAB FROM HEX SHANK DEVICE WITH INCREASED DIAMETER SHANK

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MM[IN]
TOLERANCE: ±[.25]

MATERIAL
VARIED STEEL

FINISH
COLD BLACKENING

DO NOT SCALE DRAWING

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Gauge Adapters

SCALE: 2:1 WEIGHT: VARIES | SHEET 9 OF 10
ALL FILLET RADII 3mm

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TETHER ROUTING TOOL

SCALE: 1:1  WEIGHT: 195 g  SHEET 10 of 10

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MM
TOLERANCE: ±0.1

MATERIAL:
6061-T6 ALUMINUM ALLOY

FINISH:
AS MILLED

DO NOT SCALE DRAWING

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TETHER ROUTING TOOL

SCALE: 1:1  WEIGHT: 195 g  SHEET 10 of 10

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MM
TOLERANCE: ±0.1

MATERIAL:
6061-T6 ALUMINUM ALLOY

FINISH:
AS MILLED

DO NOT SCALE DRAWING

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TETHER ROUTING TOOL

SCALE: 1:1  WEIGHT: 195 g  SHEET 10 of 10

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MM
TOLERANCE: ±0.1

MATERIAL:
6061-T6 ALUMINUM ALLOY

FINISH:
AS MILLED

DO NOT SCALE DRAWING