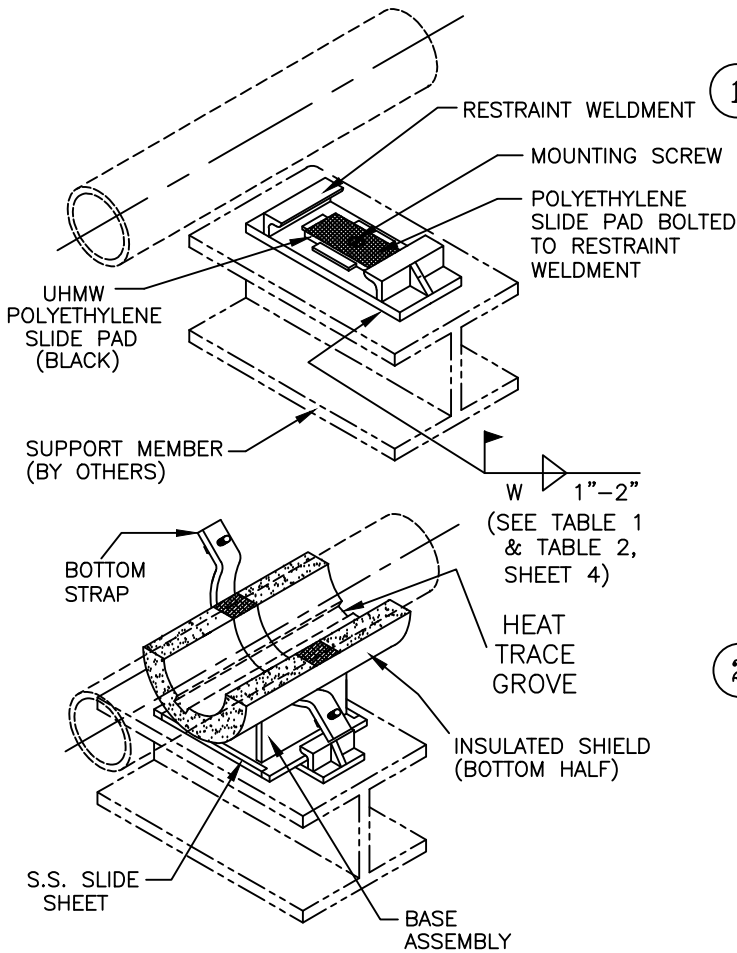
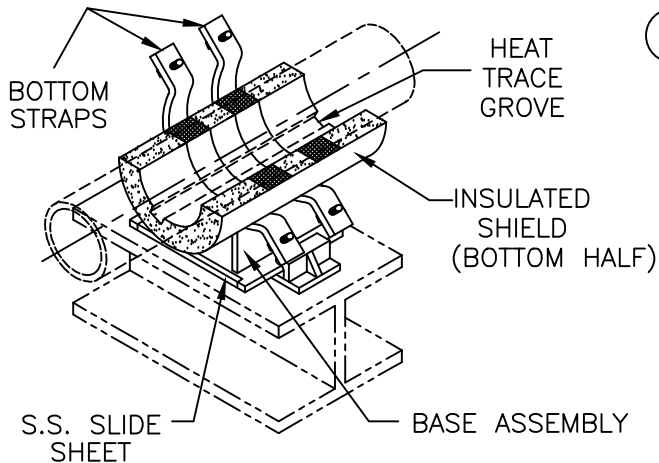




Pipe Shields, Inc.



MODEL B3000–B3300



MODEL B4000–B4300

MODEL: B3000–B4300 SERIES

GUIDED INSULATED PIPE SUPPORT

INSTALLATION INSTRUCTIONS

1) A) REMOVE THE MOUNTING SCREW FROM THE SLIDE PAD AND SLIDE BASE RESTRAINT WELDMENT. B) TEMPORARILY SEPARATE THE SLIDE PAD FROM THE RESTRAINT WELDMENT. C) LOCATE AND POSITION THE RESTRAINT WELDMENT ON THE STEEL SUPPORT TO MEET THE REQUIRED PIPING ANALYSIS COLD SETTINGS (SEE SHEET 3, FOR P.S.I. RECOMMENDED COLD SETTINGS). PLEASE NOTE THAT REQUIRED PIPING ANALYSIS COLD SETTINGS GOVERNS OVER P.S.I. RECOMMENDATIONS). D) WHEN PROPERLY POSITIONED, WELD RESTRAINT WELDMENT TO SUPPORT STEEL AS SHOWN. SELECT "W" (WELD SIZE) THAT CORRESPOND WITH THE PIPE SIZE AND MODEL DESIGNATION OF THE UNIT. E) PLACE SLIDE PAD ON RESTRAINT WELDMENT AND INSTALL WITH THE MOUNTING SCREWS.

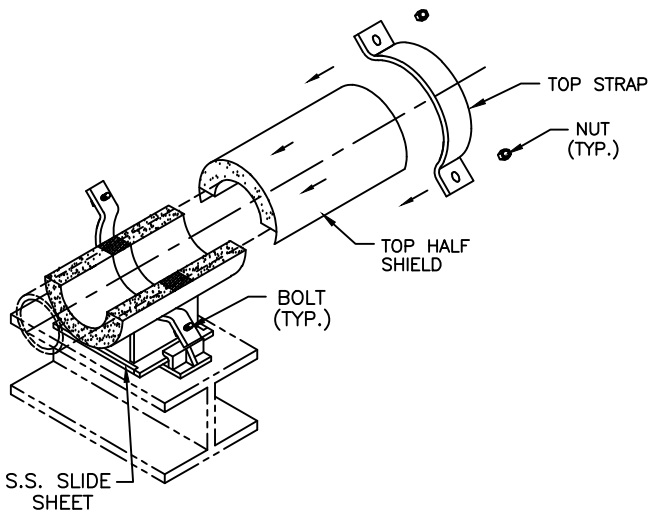
2) POSITION BOTTOM HALF OF THE INSULATED SHIELD INTO THE BASE ASSEMBLY. ENSURE THAT THE INSERTS ARE PROPERLY LOCATED OVER THE STRAP BY CHECKING THAT:

(A) EACH END OF SHIELD SHALL HAVE EQUAL DISTANCE (C) FROM OUTER EDGE OF STRAP(S) (FIG. A OR A1, SHT. 3).

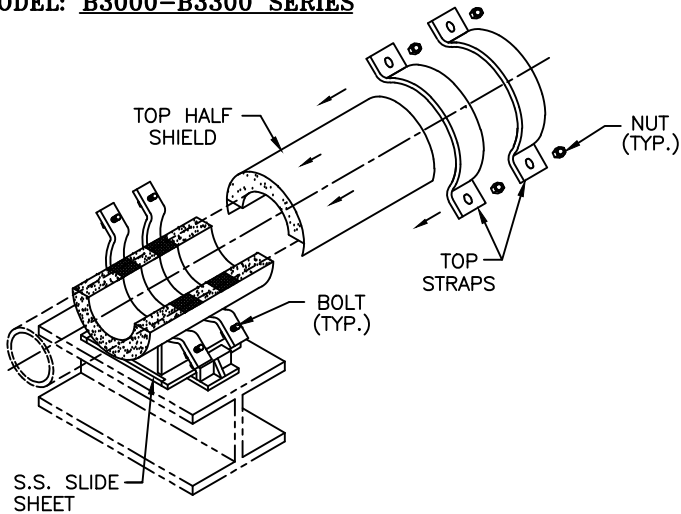
(B) THE 180° SECTION OF THE BOTTOM HALF SHIELD SHALL BE PARALLEL TO THE SUPPORT BASE (FIG. B, SHT. 3).

3) A) SLIDE THE BASE ASSEMBLY AND BOTTOM HALF SHIELD UNDER THE PIPE. B) POSITION THE BASE ASSEMBLY ON THE RESTRAINT WELDMENT TO ALLOW FOR ANTICIPATED AXIAL TRAVEL. (SEE SHEET 3 FOR P.S.I. RECOMMENDED AXIAL COLD SETTINGS)

NOTE: WHEN MODELS INCLUDE HEAT TRACE GROVES, THE NUMBER AND LOCATION MAY VARY. CHECK WITH DESIGN DRAWINGS FOR EXACT NUMBER AND LOCATION. ENSURE THAT THE HEAT TRACING CABLE IS PROPERLY POSITIONED INSIDE THE GROVE OF THE SHEILD.



MODEL: B3000-B3300 SERIES



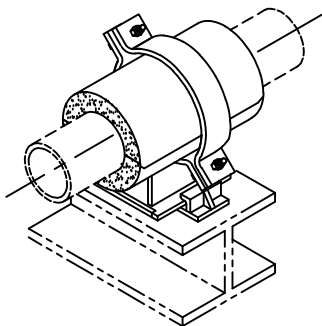
MODEL: B4000-B4300 SERIES

4 **A)** SLIDE THE TOP HALF SHIELD INTO POSITION ABOVE THE BOTTOM-HALF SHIELD. **B)** GENTLY PLACE THE TOP STRAP INTO POSITION ABOVE THE BOTTOM STRAP AND LINE-UP THE BOLT HOLES.

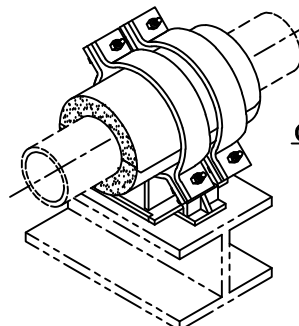
5 **A)** INSTALL THE BOLTS, LOCKWASHERS AND NUTS AND HAND TIGHTEN. FOR EASE OF BOLT TORQUING, INSTALL THE BOLTS WITH THE NUTS ON TOP. **B)** APPLY TORQUE ON THE BOLTS. SELECT TORQUE VALUE THAT CORRESPOND WITH THE PIPE SIZE AND MODEL DESIGNATION OF THE UNIT SHOWN ON TABLE 1 FOR MODEL B3000-B3300 AND TABLE 2 FOR B4000-4300 SHT. 4. WHEN TIGHTENING, IT IS RECOMMENDED THAT THE NUT IS TURNED RATHER THAN THE BOLT HEAD AND THAT THE BOLTS ARE CROSS-TORQUED UNTIL THE REQUIRED TORQUE HAS BEEN ACHIEVED TO OBTAIN AN EVEN PRESSURE ON THE STRUCTURAL INSULATION. **C)** ENSURE THAT THE BOLTS ARE PROPERLY CROSS-TORQUED BY CHECKING THE SPACING "B" BETWEEN THE EARS TO BE APPROXIMATELY THE SAME. (SEE FIG. B, SHT. 3).

NOTE:

THESE UNITS ARE DESIGNED FOR SPECIFIC AXIAL TRAVEL. PRIOR TO TIGHTENING OF THE BOLTS, THE UNIT MAY REQUIRE COLD SETTING. SEE FIG. A & A1 (SHT. 3) FOR RECOMMENDED AXIAL COLD SETTING INSTRUCTION FOR THIS UNIT.



COMPLETED ASSEMBLY

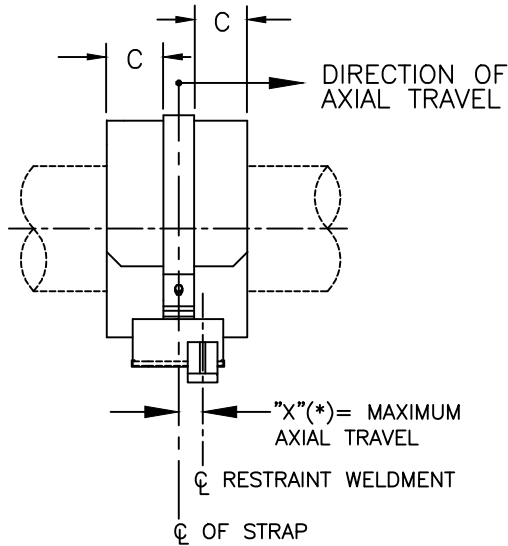


COMPLETED ASSEMBLY

MODEL: B3000-B4300 SERIES
GUIDED INSULATED PIPE SUPPORT
INSTALLATION INSTRUCTIONS

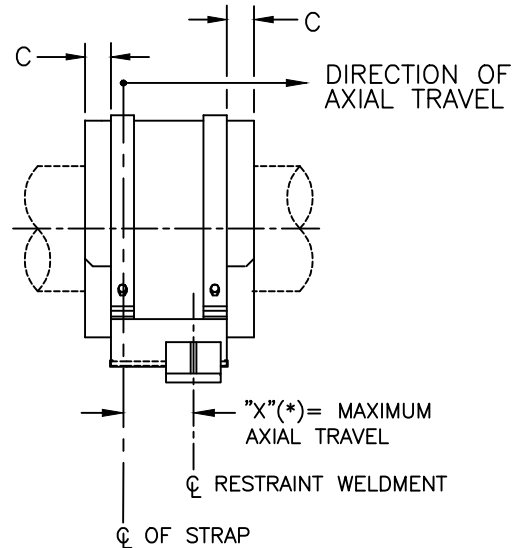
AXIAL COLD SETTINGS

* POSITION BASE ASSEMBLY SUCH THAT AFTER THE SUPPORT HAS MOVED, THE CENTER LINE OF THE STRAP (MARKED BY CENTER LINE) APPROXIMATELY MATCHES THE CENTER LINE OF THE RESTRAINT WELDMENT (FIGURE A & A1).



AXIAL COLD SETTING

FIGURE A



AXIAL COLD SETTING

FIGURE A1

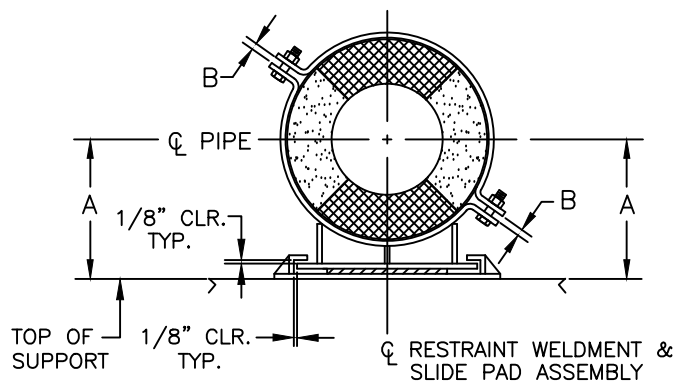


FIGURE B

MODEL: B3000-B4300 SERIES GUIDED INSULATED PIPE SUPPORT INSTALLATION INSTRUCTIONS



Pipe Shields, Inc.

TABLE 1
BOLT TORQUE & WELD SIZE (W)

| PIPE SIZE | B3000 SERIES | | B3100 SERIES | | B3200 SERIES | | B3300 SERIES | | SPECIAL | | SPECIAL | |
|-----------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|
| | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE |
| .5" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 1" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 1.5" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 2" | 3-5 | 3/16" | 3-5 | 3/16" | 5-7 | 3/16" | 3-5 | 3/16" | | | | |
| 2.5" | 3-5 | 3/16" | 3-5 | 3/16" | 6-8 | 3/16" | 3-5 | 3/16" | | | | |
| 3" | 3-5 | 3/16" | 5-7 | 3/16" | 7-9 | 3/16" | 3-5 | 3/16" | | | | |
| 3.5" | 3-5 | 3/16" | 6-8 | 3/16" | 8-10 | 3/16" | 6-8 | 3/16" | | | | |
| 4" | 3-5 | 3/16" | 7-9 | 3/16" | 11-13 | 3/16" | 7-9 | 3/16" | | | | |
| 5" | 3-5 | 3/16" | 9-11 | 3/16" | 13-15 | 3/16" | 9-11 | 3/16" | | | | |
| 6" | 7-9 | 1/4" | 14-16 | 1/4" | 20-22 | 1/4" | 14-16 | 1/4" | | | | |
| 8" | 9-11 | 1/4" | 18-20 | 1/4" | 27-29 | 1/4" | 18-20 | 1/4" | | | | |
| 10" | 11-13 | 1/4" | 21-23 | 1/4" | 32-34 | 1/4" | 21-23 | 1/4" | | | | |
| 12" | 12-14 | 1/4" | 23-25 | 1/4" | 35-37 | 1/4" | 23-25 | 1/4" | | | | |
| 14" | 13-15 | 1/4" | 27-29 | 1/4" | 40-42 | 1/4" | 27-29 | 1/4" | | | | |
| 16" | 18-20 | 1/4" | 37-39 | 1/4" | 55-57 | 1/4" | 37-39 | 1/4" | | | | |
| 18" | 20-22 | 1/4" | 41-43 | 1/4" | 61-63 | 1/4" | 41-43 | 1/4" | | | | |
| 20" | 22-24 | 1/4" | 43-45 | 1/4" | 65-67 | 1/4" | 43-45 | 1/4" | | | | |
| 24" | 23-25 | 1/4" | 46-48 | 1/4" | 69-71 | 1/4" | 46-48 | 1/4" | | | | |
| 26" | 25-27 | 1/4" | 51-53 | 1/4" | 76-78 | 1/4" | 51-53 | 1/4" | | | | |
| 28" | 27-29 | 1/4" | 55-57 | 1/4" | 82-84 | 1/4" | 55-57 | 1/4" | | | | |
| 30" | 40-42 | 1/4" | 80-82 | 1/4" | 120-122 | 1/4" | 80-82 | 1/4" | | | | |
| 32" | 42-44 | 1/4" | 85-87 | 1/4" | *127-129 | 1/4" | 85-87 | 1/4" | | | | |
| 36" | 47-49 | 1/4" | 93-95 | 1/4" | *140-142 | 1/4" | 93-95 | 1/4" | | | | |
| 42" | 53-55 | 1/4" | 105-107 | 1/4" | *158-160 | 1/4" | 105-107 | 1/4" | | | | |
| 48" | 60-62 | 1/4" | 120-122 | 1/4" | *180-185 | 1/4" | 120-122 | 1/4" | | | | |

* = REQUIRES A325 BOLT MATERIAL

TABLE 2
BOLT TORQUE & WELD SIZE (W)

| PIPE SIZE | B4000 SERIES | | B4100 SERIES | | B4200 SERIES | | B4300 SERIES | | SPECIAL | | SPECIAL | |
|-----------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|
| | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE | BOLT TORQUE (FT-LBS) | WELD (W) SIZE |
| 1" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 1.5" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 2" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 2.5" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 3" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 3.5" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | 3-5 | 3/16" | | | | |
| 4" | 3-5 | 3/16" | 3-5 | 3/16" | 5-7 | 3/16" | 3-5 | 3/16" | | | | |
| 5" | 3-5 | 3/16" | 3-5 | 3/16" | 7-9 | 3/16" | 3-5 | 3/16" | | | | |
| 6" | 3-5 | 1/4" | 7-9 | 1/4" | 10-12 | 1/4" | 7-9 | 1/4" | | | | |
| 8" | 5-7 | 1/4" | 9-11 | 1/4" | 14-16 | 1/4" | 9-11 | 1/4" | | | | |
| 10" | 5-7 | 1/4" | 11-13 | 1/4" | 16-18 | 1/4" | 11-13 | 1/4" | | | | |
| 12" | 6-8 | 1/4" | 12-14 | 1/4" | 18-20 | 1/4" | 12-14 | 1/4" | | | | |
| 14" | 7-9 | 1/4" | 13-15 | 1/4" | 20-22 | 1/4" | 13-15 | 1/4" | | | | |
| 16" | 9-11 | 1/4" | 18-20 | 1/4" | 28-30 | 1/4" | 18-20 | 1/4" | | | | |
| 18" | 10-12 | 1/4" | 20-22 | 1/4" | 31-33 | 1/4" | 20-22 | 1/4" | | | | |
| 20" | 11-13 | 1/4" | 22-24 | 1/4" | 33-35 | 1/4" | 22-24 | 1/4" | | | | |
| 24" | 11-13 | 1/4" | 23-25 | 1/4" | 34-36 | 1/4" | 23-25 | 1/4" | | | | |
| 26" | 13-15 | 1/4" | 25-27 | 1/4" | 38-40 | 1/4" | 25-27 | 1/4" | | | | |
| 28" | 14-16 | 1/4" | 27-29 | 1/4" | 41-43 | 1/4" | 27-29 | 1/4" | | | | |
| 30" | 20-22 | 1/4" | 40-42 | 1/4" | 60-62 | 1/4" | 40-42 | 1/4" | | | | |
| 32" | 21-23 | 1/4" | 42-44 | 1/4" | 62-64 | 1/4" | 42-44 | 1/4" | | | | |
| 36" | 23-25 | 1/4" | 47-49 | 1/4" | 70-72 | 1/4" | 47-49 | 1/4" | | | | |
| 42" | 26-28 | 1/4" | 53-55 | 1/4" | 79-81 | 1/4" | 53-55 | 1/4" | | | | |

MODEL: B3000-B4300 SERIES
GUIDED INSULATED PIPE SUPPORT
INSTALLATION INSTRUCTIONS