



Edge-of-Dock

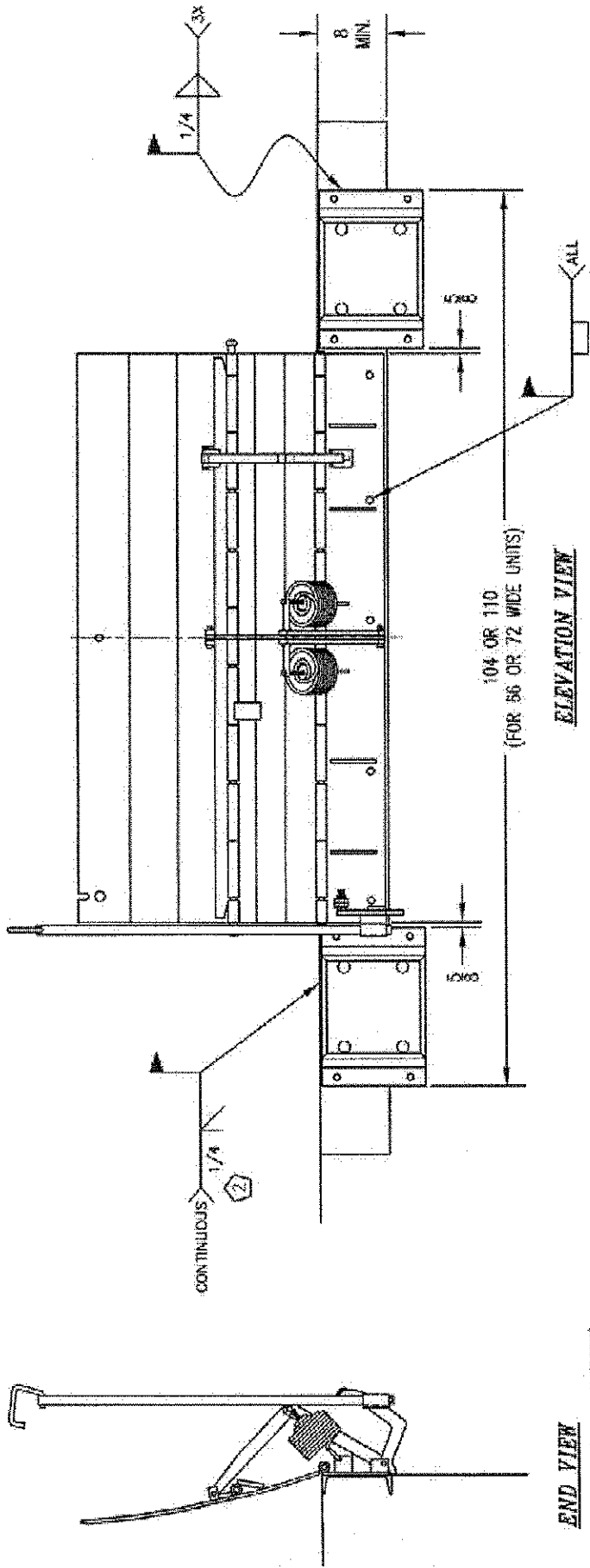
NL • DL • TS

E.O.D. Installation Instructions
Flush Mount – Weld On

A flush mount weld on application is used when an 8" wide (minimum) embed channel is securely anchored into the concrete at the dock edge, and the dock height is adequate.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.
2. At chosen location for Edge of Dock leveler, locate the center of space and mark a point half of the base plate width to the left and right.
3. Using a proper lifting device, raise and position leveler on dock face with the top of the base plate being flush with the top of the embedded channel. Position ends of base plate to match up with marks made previously.
4. Tack weld base plate to dock steel on left hand end of the leveler. Check right hand end of base plate, ensure that end is against dock steel and that the top of the base plate is still flush with the top of the embedded channel. Tack right hand end to dock steel.
5. Position bump blocks out approximately 5/8" from the edge of the inside flange of the bump block to the end of the base plate. This will allow for vertical welding of both the base plate and the bump block flange back to the dock steel. Top of the bump block cover plate should be flush with the top of the embed channel. Tack weld bump blocks to dock steel.
6. Check the positioning of the base plate and the bump blocks.
7. Complete welding of tacked parts as follows:
 - A. Apply a continuous weld across top of each bumper and base plate to dock steel. Skip welding is acceptable to prevent warpage, but complete weld across the top must be completed.
 - B. Weld vertically along each end of base plate and on both inboard and outboard flanges of bump blocks.
 - C. Fully plug weld all holes in base plate.
8. Installer must remove all welding slag, and repaint welded areas.
9. Installer must adjust springs on all mechanical edge of dock levelers to provide desired tension for smooth operation. Stand on ground in front of leveler, with the unit raised and secured in the maintenance position, loosen jam nut on the underside of the linkage pin. To start allow about 3/4" to 1" of threads between top of jam nut and linkage pin. Using an open faced wrench, hold locknut on inside of spring while tightening threaded bolt until washer on top side of spring closes up tight to jam nut. Test operation of unit. Further adjust spring tension if needed by advancing jam nut toward linkage pin and tightening threaded rod. After desired unit operation is achieved, tighten jam nut to outer washer on spring. Springs must be adjusted alternately to have equal spring tension.
10. Before install is complete, installer must make a final operational check of dock leveler to verify all phases of install are correct. Installer must complete, sign and return the Installation Checklist upon completion.



END VIEW
(BUMPER NOT SHOWN FOR CLARITY)

ELEVATION VIEW

DLM
DIVISION OF SYSTEMS INC., HALVERN, AR.

E.O.D. INSTALLATION DETAILS
FLUSH MOUNT - WELD ON

MATERIAL DRAWN BY SR

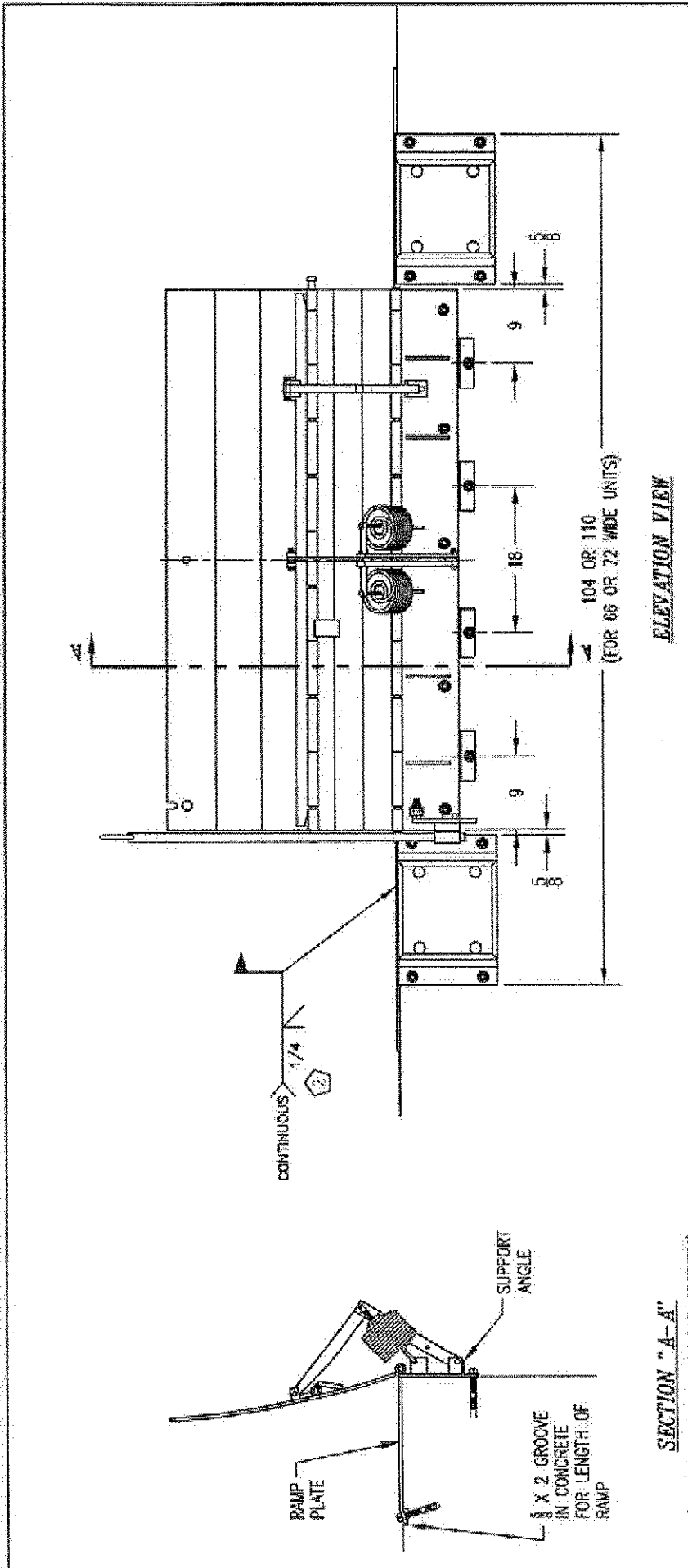
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES - DECIMAL ±1/32 FRACTIONAL ±1/32 DECIMAL ±.015" ANGULAR ±1°

DATE 01/05/04 CHK'D

DRAWING NO. **EODI-1000**

| NOTE | DESCRIPTION |
|------|--|
| 1 | TOP OF BASE PLATE BUMPER COVER PLATE TO BE FLUSH WITH TOP OF DOCK FLOOR AND EMBEDDED CHANNEL |
| 2 | APPLY CONTINUOUS BEVEL WELD ACROSS BOTH BUMPER AND LENGTH OF BASE PLATE |

WARNING!
SECURELY BLOCK OR SUPPORT RAMP AND LIP WHEN IN VERTICAL POSITION. LACK OF PROPER BRACING CAN RESULT IN RAMP DROPPING DURING ADJUSTMENT OR INSTALLATION CAUSING PERSONAL INJURY OR DAMAGE TO UNIT.



SECTION "A-A"
(BUMPERS NOT SHOWN FOR CLARITY)

DLM
DIVISION OF SYSTEMS INC., MALVERN, AR.

E.O.D. INSTALLATION DETAILS
FLUSH MOUNT - BOLT ON

MATERIAL DRAWN BY SR

DATE 03/24/04 CHK'D

DRAWING NO. **EODI-1001**

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. TOLERANCES FOR FINISH DIMENSIONS: FINISHING ±1/32 (OD ONLY) ±.01" (200 ±.0005" ANGULAR) ±1'

| NOTE | DESCRIPTION |
|------|---|
| 1 | TOP OF BASE PLATE & BUMPER COVER PLATE TO BE FLUSH WITH TOP OF RAMP PLATE |
| 2 | APPLY CONTINUOUS BEVEL WELD ACROSS BOTH BUMPERS AND LENGTH OF BASE PLATE |

WARNING!
SECURELY BLOCK OR SUPPORT RAMP AND LIP WHEN IN VERTICAL POSITION. LACK OF PROPER BRACING CAN RESULT IN RAMP DROPPING DURING ADJUSTMENT OR INSTALLATION CAUSING PERSONAL INJURY OR DAMAGE TO UNIT.

E.O.D. Installation Instructions
Flush Mount – Bolt On

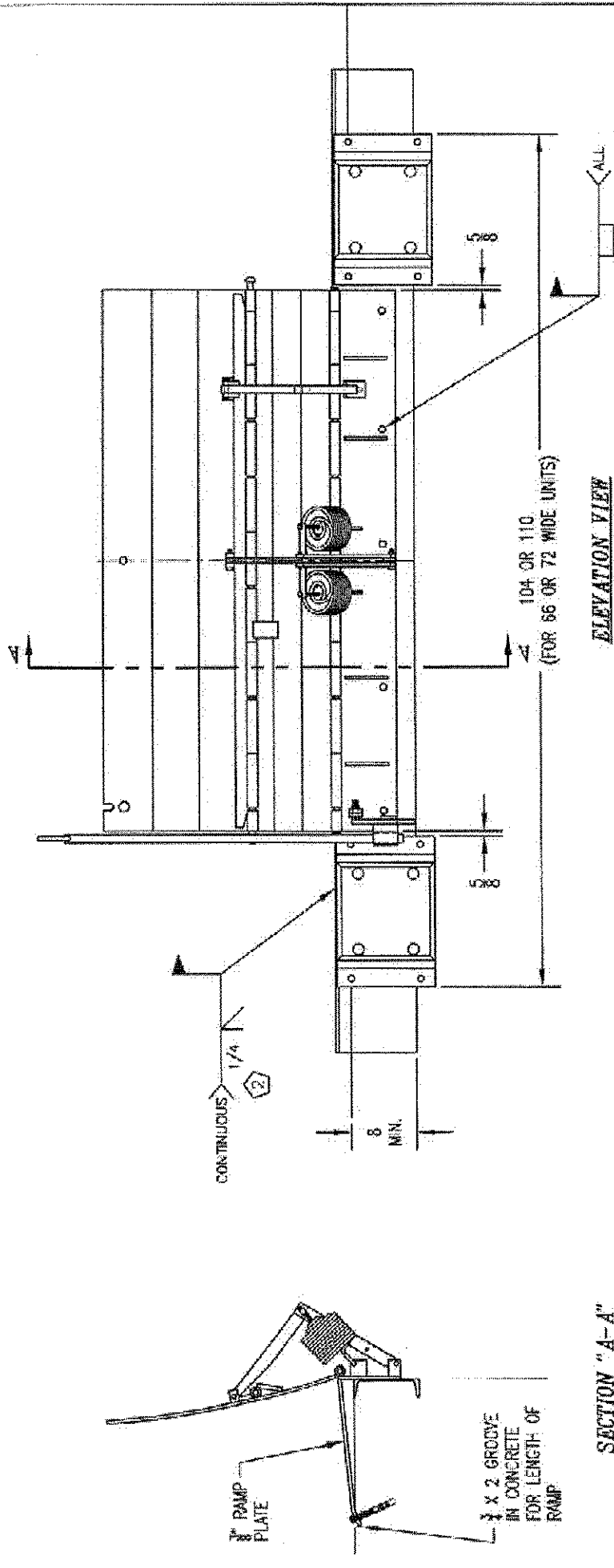
A flush mount bolt on application is used when there is no steel on dock edge, and the dock height is adequate. Additional steel ramp plate and bolting is required with this type of installation.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.
2. At chosen location for Edge of Dock leveler, locate the center of space and mark a point half of the base plate width to the left and right.
3. At the points marked to each side of center, measure and mark points 7-1/2" below dock level (for 1/4" ramp plate) to locate position for bottom of base plate. This position will place the top of the base plate 1/4" above the dock floor. This position will vary with ramp plate thickness.
4. Mark line connecting these points and position support angles. Position angles as shown in installation drawing provided. Mark center of holes in each of the support angles.
5. At center marks, drill holes 5/8" dia. by 5" deep in concrete. Install anchor bolts with washers through support angles into holes in concrete. Tighten bolts until support angles are secure. Follow anchor manufacturers installation instructions for proper installation.
6. Using a proper lifting device, raise and position the leveler base plate to marked position, while resting on the support angles. While holding base plate tight against dock face, tack weld securely to support angles.
7. Drill 5/8" dia. by 5" deep holes in concrete through holes in base plate, and install anchor bolts with washers and tighten securely.
8. Position bump blocks out approximately 5/8" out from the edge of the inside flange of the bump block to the end of the base plate. Position the top of the tread cover plate on the bump blocks to be 1/4" above dock level. Note that this placement will vary with ramp plate thickness. Mark centers of holes in bump block flanges.
9. Drill 5/8" dia. by 5" deep holes at center marks. Reposition bump blocks, insert anchor bolts with washers and tighten securely to dock face.
10. Place steel ramp plate in position, flush with top backside of base plate. Mark along full length of back edge of ramp plate. Slide ramp plate forward over dock leveler the width of bushing tool, approximately 2".
11. Place bushing tool on marked line at each end of ramp to ensure proper alignment at both ends, and tack weld ramp plate to dock leveler to hold ramp plate in place while bushing. A Skil Roto Hammer #736 or similar tool is recommended.
12. Using the back edge of the ramp plate as a guide, groove concrete approximately 5/8" deep by 2" wide, and should be the entire length of ramp plate.

(Flush mount – bolt on continued)

13. Break tack welds holding ramp in place, slide ramp plate back into position with the top of the ramp plate flush with the top of the base plate. Tack weld each end and center of ramp plate to base plate.
14. Drill 5/8" dia. by 5" deep holes through ramp plate at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to ramp plate using a 1/4" fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.
15. Complete welding of tacked parts as follows:
 - A. Apply continuous weld across top of each bumper and base plate to ramp plate. Skip welding is acceptable to prevent warpage, but complete weld must be completed.
 - B. Weld bottom of base plate to support angles using a 1/4" fillet weld.
16. Installer must remove all welding slag, and repaint welded areas.
17. Installer must adjust main springs on all mechanical edge of dock levelers to provide desired tension for smooth operation. Stand on ground in front of leveler, with the unit raised and secured in the maintenance position, loosen jam nut on the underside of the linkage pin. To start allow about 3/4" to 1" of threads between top of jam nut and linkage pin. Using an open faced wrench, hold locknut on inside of spring while tightening threaded bolt until washer on top side of spring closes up tight to jam nut. Test operation of unit. Further adjust spring tension if needed by advancing jam nut toward linkage pin and tightening threaded rod. After desired unit operation is achieved, tighten jam nut to outer washer on spring. Springs must be adjusted alternately to have equal spring tension.
18. Before install is complete, installer must make a final operational check of dock leveler to verify all phases of install are correct. Installer must complete, sign, and return the Installation Checklist upon completion.



DLM
DIVISION OF SYSTEMS INC., MALVERN, AR.
E.O.D. INSTALLATION DETAILS
FLUSH MOUNT - WELD/BOLT ON
DRAWN BY SR

DATE 04/26/04 CHK'D
DRAWING NO. **EODI-1002**

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES WITH THE FOLLOWING TOLERANCES:
FRACTIONS: 1/32
DECIMALS: .005
ANGLES: 1°

| NOTE | DESCRIPTION |
|------|---|
| 1 | TOP OF BASE PLATE & BUMPER COVER PLATE TO BE FLUSH WITH TOP OF RAMP PLATE |
| 2 | APPLY CONTINUOUS BEVEL WELD ACROSS BOTH BUMPERS AND LENGTH OF BASE PLATE |
| 3 | TO FIGURE RAMP PLATE LENGTH, NEED 12" RAMP FOR EVERY 1-1/2" OF RISE TO RAMP |

WARNING!
SECURELY BLOCK OR SUPPORT RAMP AND LIP WHEN IN VERTICAL POSITION. LACK OF PROPER BRACING CAN RESULT IN RAMP DROPPING DURING ADJUSTMENT OR INSTALLATION CAUSING PERSONAL INJURY OR DAMAGE TO UNIT.

E.O.D. Installation Instructions
Ramp Mount – Weld/Bolt On

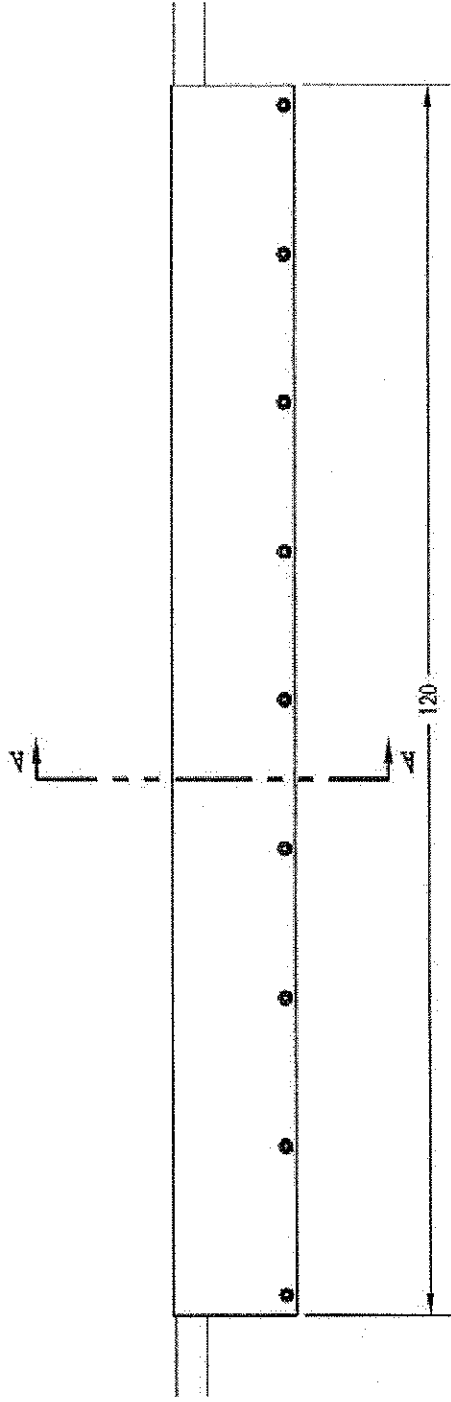
A ramp mount-weld on application is used when adequate dock steel is securely anchored in the concrete at the dock edge, but the existing dock height is too low and the dock leveler must be installed above this height to correct this situation.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.
2. At chosen location for Edge of Dock leveler, locate the center of space and mark a point half of the base plate width to the left and right.
3. At the points marked to each side of center, measure and mark points 7-3/4" below dock level less height the unit is to be raised to locate bottom of base plate. This will locate the top of the base plate X" above dock level.
4. Using a proper lifting device, raise and position the leveler base plate to marked position. While holding base plate tight against dock face, tack weld securely to dock steel on left hand end of leveler. Check right hand end of base plate, ensure that end is against dock steel and that the bottom of the base plate is even with the marks made previously. Tack right hand end to dock steel. Support unit until final welding is ready to complete.
5. Position bump blocks out approximately 5/8" out from the edge of the inside flange of the bump block to the end of the base plate. Position the top of the tread cover plate on the bump blocks to be flush with the top of the base plate. Tack weld bump blocks to dock steel.
6. Place steel ramp plate in position, flush with top backside of base plate. Mark along full length of back edge of ramp plate. Slide ramp plate forward over dock leveler the width of bushing tool, approximately 2".
7. Place bushing tool on marked line at each end of ramp to ensure proper alignment at both ends, and tack weld ramp plate to dock leveler to hold ramp plate in place while bushing. A Skil Roto Hammer #736 or similar tool is recommended.
8. Using the back edge of the ramp plate as a guide, groove concrete approximately 3/4" deep by 2" wide, and should be the entire length of ramp plate.
9. Break tack welds holding ramp in place, slide ramp plate back into position with the top of the ramp plate flush with the top of the base plate. Tack weld each end and center of ramp plate to base plate.
10. Drill 5/8" dia. by 5" deep holes through ramp plate at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to ramp plate using a 1/4" fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.

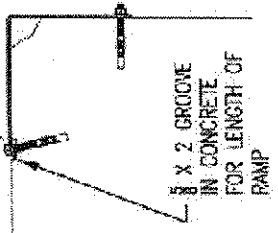
(Ramp mount – weld/bolt on continued)

11. Complete welding of tacked parts as follows:
 - A. Apply continuous weld across top of each bumper and base plate to ramp plate. Skip welding is acceptable to prevent warpage, but complete weld must be completed.
 - B. Weld vertically along each end of base plate and on both inboard and outboard flanges of bump blocks.
 - C. Fully plug weld all holes in base plate.
12. Installer must remove all welding slag, and repaint welded areas.
13. Installer must adjust main springs on all mechanical edge of dock levelers to provide desired tension for smooth operation. Stand on ground in front of leveler, with the unit raised and secured in the maintenance position, loosen jam nut on the underside of the linkage pin. To start allow about $\frac{3}{4}$ " to 1" of threads between top of jam nut and linkage pin. Using an open faced wrench, hold locknut on inside of spring while tightening threaded bolt until washer on top side of spring closes up tight to jam nut. Test operation of unit. Further adjust spring tension if needed by advancing jam nut toward linkage pin and tightening threaded rod. After desired unit operation is achieved, tighten jam nut to outer washer on spring. Springs must be adjusted alternately to have equal spring tension.
14. Before install is complete, installer must make a final operational check of dock leveler to verify all phases of install are correct. Installer must complete, sign, and return the Installation Checklist upon completion.



ELEVATION VIEW

BREAK IN
FORMED ANGLE



2 X 2 GROOVE
IN CONCRETE
FOR LENGTH OF
RAMP

SECTION "A-A"

DLM

DIVISION OF SYSTEMS INC., MALVERN, AR.

E.O.D. INSTALLATION DETAILS
FORMED ANGLE

| | | |
|--|---------------|------------------|
| MATERIAL | DRAWN BY SR | |
| UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES WITH THE FOLLOWING TOLERANCES: FRACTIONAL: ±1/32" DECIMAL: .00 = ±.01" .000 = ±.005" ANGLES: ±1° | DATE 04/26/04 | CHK'D |
| DRAWING NO. | | <i>EODI-1003</i> |

| NOTE | DESCRIPTION |
|------|---|
| 1 | SECURE FORMED ANGLE WITH (18) ANCHOR BOLTS, (9) EACH SIDE |

E.O.D. Installation Instructions

Formed angle

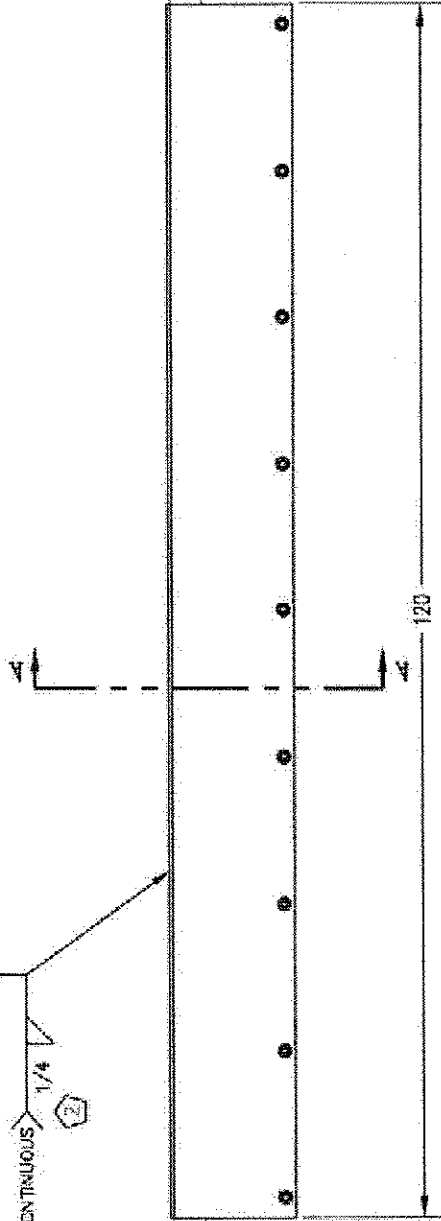
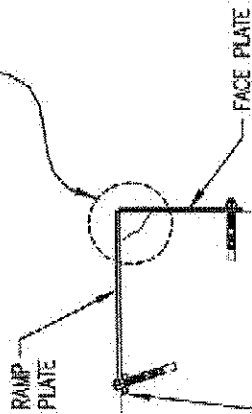
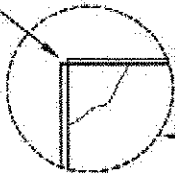
A formed angle is used when there is no existing dock steel and the concrete at the dock edge has been damaged. The formed angle is required to rebuild the damaged concrete edge for a proper installation if the dock height is adequate.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.
2. At chosen location for the formed angle, locate the center of space and mark a point half of the angle width to the left and right.
3. Using a proper lifting device, raise and position the formed angle to marked position, slide formed angle against dock face.
4. Mark along full length of back edge of formed angle. Slide angle forward the width of bushing tool, approximately 2".
5. Place bushing tool on marked line at each end of formed angle to ensure proper alignment at both ends. A Skil Roto Hammer #736 or similar tool is recommended.
6. Using the back edge of the formed angle as a guide, groove concrete approximately 5/8" deep by 2" wide, and should be the entire length of the formed angle.
7. Slide formed angle back until tight against dock face. Drill 5/8" dia. by 5" deep holes through formed angle at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to formed angle using a 1/4" fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.
8. Drill 5/8" dia. by 5" deep holes in dock face through holes in formed angle. Install anchor bolts with washers and tighten securely per manufacturers specifications.

TOP OF FACE PLATE FLUSH WITH TOP OF DOCK FLOOR. LEADING EDGE OF RAMP PLATE FLUSH WITH DOCK FACE.

CONTINUOUS 1/4" (2)



ELEVATION VIEW

SECTION "A-A"

DLM

DIVISION OF SYSTEMS INC., MALVERN, AR.

E.O.D. INSTALLATION DETAILS
FACE PLATE & RAMP

MATERIAL DRAWN BY SR

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES WITH THE FOLLOWING TOLERANCES:
DECIMAL .00 = ±.01"
.000 = ±.005"
ANGULAR ±1°

DATE 04/26/04 CHK'D

DRAWING NO.

EODI-1004

NOTE DESCRIPTION

1 SECURE FACE PLATE & RAMP WITH (18) ANCHOR BOLTS, (9) EACH SIDE.

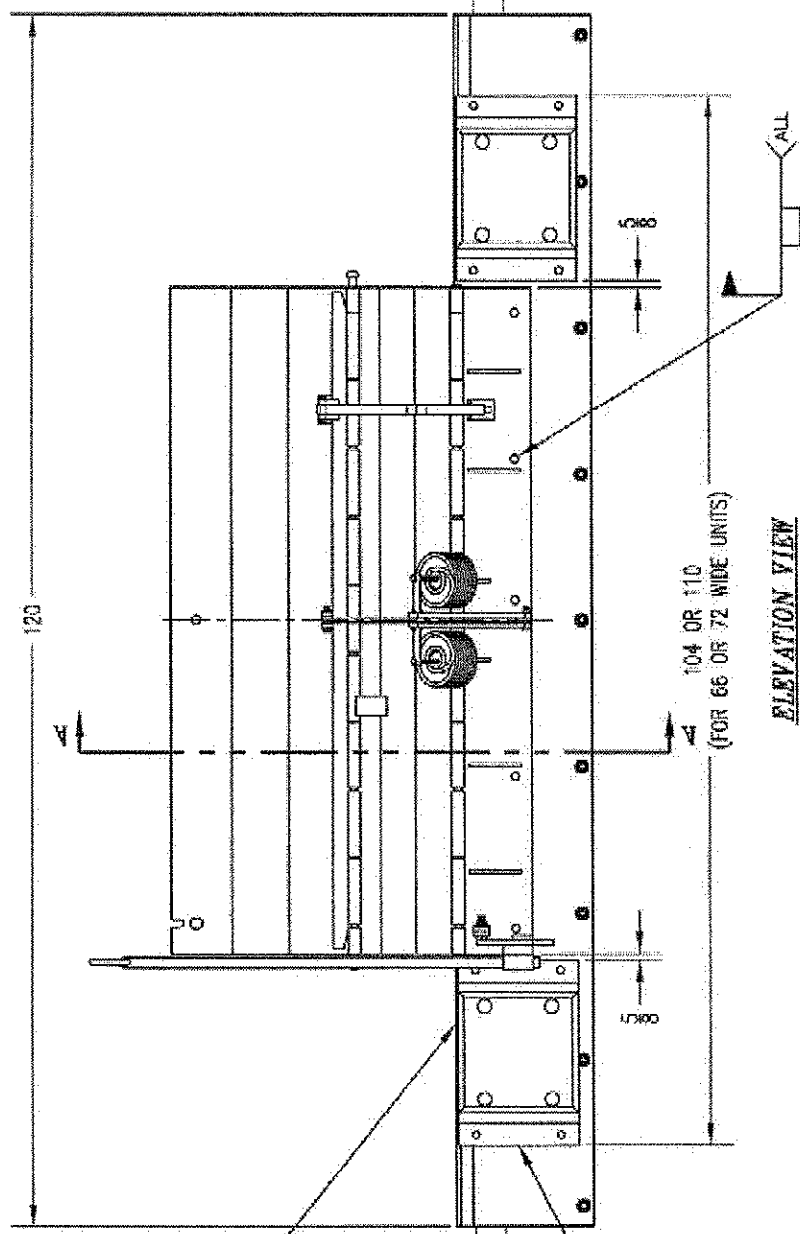
2 APPLY CONTINUOUS FILET WELD ACROSS ENTIRE LENGTH OF FACE PLATE AND RAMP.

E.O.D. Installation Instructions
Ramp and Face Plate

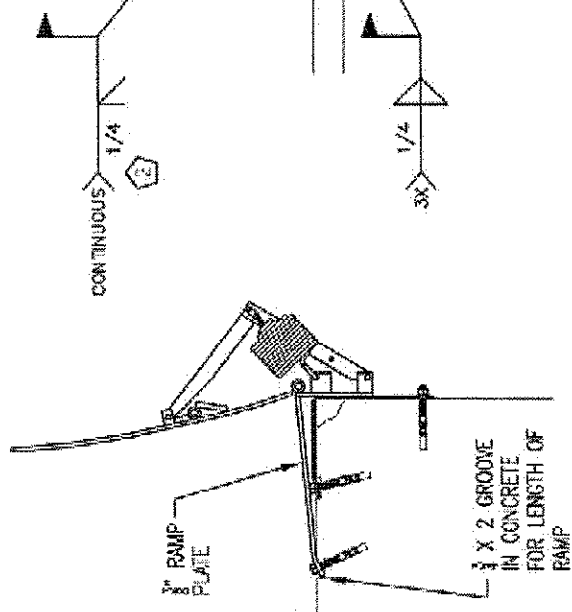
A ramp mount requiring a face plate application is used when there is no existing dock steel and the concrete at the dock edge has been damaged. The dock height can be low, high, or adequate for this application, however, the face plate and ramp plate are required to rebuild the damaged concrete edge.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.
2. At chosen location for the face plate, locate the center of space and mark a point half of the face plate width to the left and right.
3. Using a proper lifting device, raise and position the face plate to marked position, and push face plate against dock face.
4. Top of face plate should be flush with the top of dock floor. Mark center of holes in face plate into dock face. Drill 5/8" dia. by 5" holes into dock face. Install anchor bolts with washers per manufacturers specifications and tighten securely.
5. Place ramp plate to match each end of the face plate. Leading (forward) edge of ramp plate should be flush with dock face.
6. Mark along full length of back edge of ramp plate. Slide ramp forward the width of bushing tool, approximately 2".
7. Place bushing tool on marked line at each end of ramp to ensure proper alignment at both ends. A Skil Roto Hammer #736 or similar tool is recommended.
8. Tack weld ramp to face plate on each end to secure in place.
9. Using the back edge of the ramp plate as a guide, groove concrete approximately 5/8" deep by 2" wide, and should be the entire length of the ramp plate.
10. Break tack welds and slide ramp back until forward edge is flush with dock face. Tack weld ramp on each end and center to face plate. Drill 5/8" dia. by 5" deep holes through ramp plate at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to ramp plate using a 1/4" fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.
11. Apply a continuous fillet weld at the created joint between the face plate and ramp. Skip welding should be the proper method used to avoid warpage, and a complete weld must be achieved.



ELEVATION VIEW



SECTION "A-A"
(BUMPERS NOT SHOWN FOR CLARITY)

DLM
DIVISION OF SYSTEMS INC., MALVERN, AR.

E.O.D. INSTALLATION DETAILS
RAMP MNT. - WELD ON W/FORMED ANGLE

MATERIAL DRAWN BY SR

DATE 04/26/04 CHK'D

DRAWING NO. **EODI-1005**

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES WITH THE FOLLOWING TOLERANCES: FRACTIONAL: ±1/32" DECIMAL: .00 = ±.01" .005 = ±.005" ANGLES: ±1°

| NOTE | DESCRIPTION |
|------|---|
| 1 | TOP OF BASE PLATE & BUMPER COVER PLATE TO BE FLUSH WITH TOP OF RAMP PLATE |
| 2 | APPLY CONTINUOUS BEVEL WELD ACROSS BOTH BUMPERS AND LENGTH OF BASE PLATE |
| 3 | TO FIGURE RAMP PLATE LENGTH, NEED 12" RAMP FOR EVERY 1-1/2" OF RISE TO RAMP |
| 4 | TO INSTALL FORMED ANGLE, SEE FORMED ANGLE INSTALLATION INSTRUCTIONS |

WARNING!
SECURELY BLOCK OR SUPPORT RAMP AND LIP WHEN IN VERTICAL POSITION. LACK OF PROPER BRACING CAN RESULT IN RAMP DROPPING DURING ADJUSTMENT OR INSTALLATION CAUSING PERSONAL INJURY OR DAMAGE TO UNIT.

E.O.D. Installation Instructions
Ramp Mount – Weld On w/Formed Angle

A ramp mount-weld on used with a formed angle application is used when dock edge is damaged, there is no dock steel securely anchored into the concrete, and the dock height is too low and the leveler must be installed above this height to correct this situation.

Installation Steps:

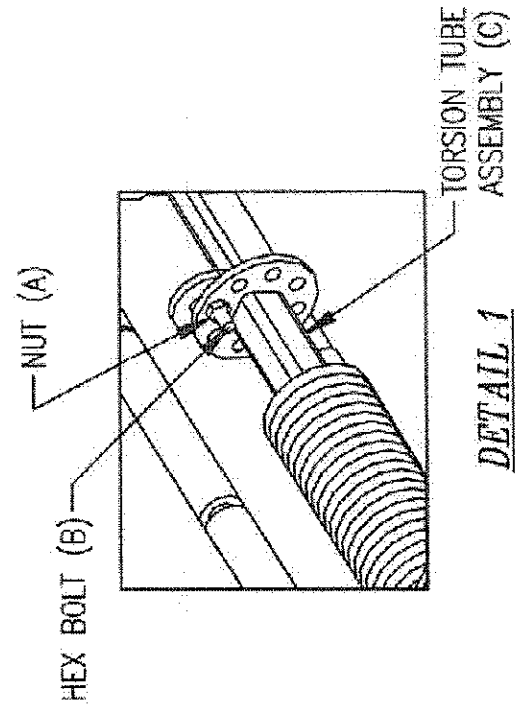
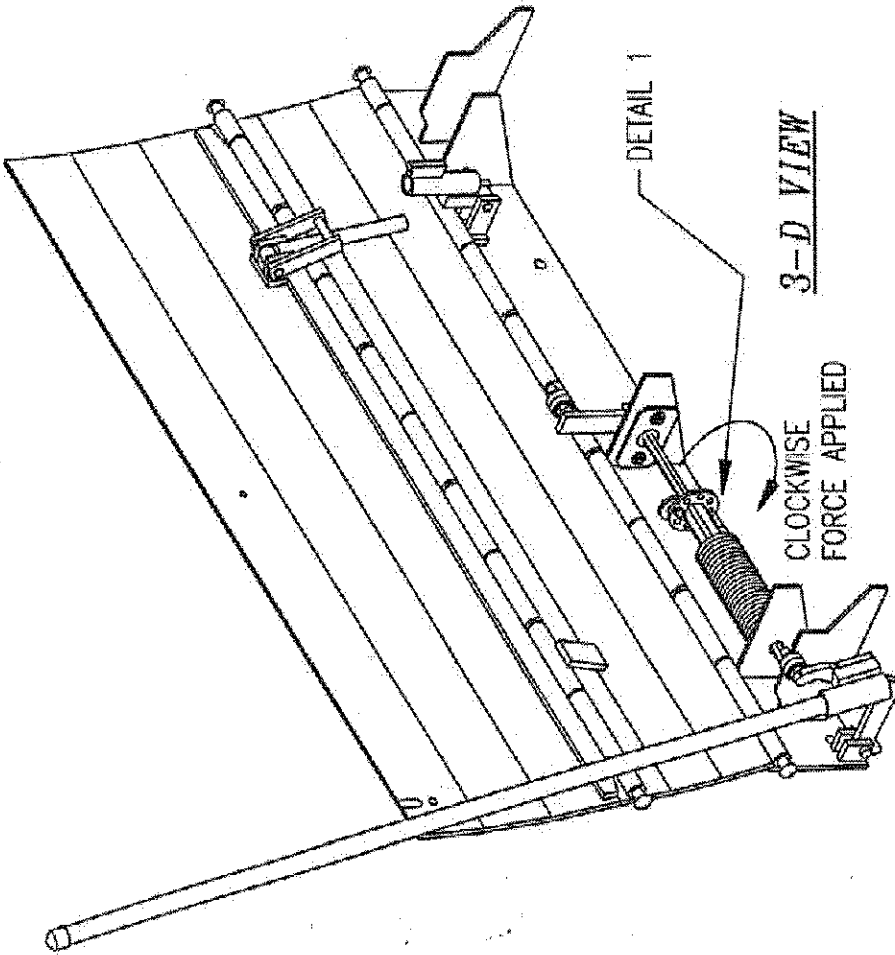
1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.
2. Review and follow formed angle installation instructions prior to leveler installation.
3. At chosen location for Edge of Dock leveler, locate the center of space and mark a point half of the base plate width to the left and right.
4. At the points marked to each side of center, measure and mark points 7-3/4" below dock level less height the unit is to be raised to locate bottom of base plate. This will locate the top of the base plate X" above dock level.
5. Using a proper lifting device, raise and position the leveler base plate to marked position. While holding base plate tight against dock face, tack weld securely to dock steel on left hand end of leveler. Check right hand end of base plate, ensure that end is against dock steel and that the bottom of the base plate is even with the marks made previously. Tack right hand end to dock steel. Support unit until final welding is ready to complete.
6. Position bump blocks out approximately 5/8" out from the edge of the inside flange of the bump block to the end of the base plate. Position the top of the tread cover plate on the bump blocks to be flush with the top of the base plate. Tack weld bump blocks to dock steel.
7. Place steel ramp plate in position, flush with top backside of base plate. Mark along full length of back edge of ramp plate. Slide ramp plate forward over dock leveler the width of bushing tool, approximately 2".
8. Place bushing tool on marked line at each end of ramp to ensure proper alignment at both ends, and tack weld ramp plate to dock leveler to hold ramp plate in place while bushing. A Skil Roto Hammer #736 or similar tool is recommended.
9. Using the back edge of the ramp plate as a guide, groove concrete approximately 3/4" deep by 2" wide, and should be the entire length of ramp plate.
10. Break tack welds holding ramp in place, slide ramp plate back into position with the top of the ramp plate flush with the top of the base plate. Tack weld each end and center of ramp plate to base plate.
11. Drill 5/8" dia. by 5" deep holes through ramp plate at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to ramp plate using a 1/4" fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.

(Ramp mount-formed angle continued)

12. Complete welding of tacked parts as follows:
 - A. Apply continuous weld across top of each bumper and base plate to ramp plate. Skip welding is acceptable to prevent warpage, but complete weld must be completed.
 - B. Weld vertically along each end of base plate and on both inboard and outboard flanges of bump blocks.
 - C. Fully plug weld all holes in base plate.
13. Installer must remove all welding slag, and repaint welded areas.
14. Installer must adjust main springs on all mechanical edge of dock levelers to provide desired tension for smooth operation. Stand on ground in front of leveler, with the unit raised and secured in the maintenance position, loosen jam nut on the underside of the linkage pin. To start allow about $\frac{3}{4}$ " to 1" of threads between top of jam nut and linkage pin. Using an open faced wrench, hold locknut on inside of spring while tightening threaded bolt until washer on top side of spring closes up tight to jam nut. Test operation of unit. Further adjust spring tension if needed by advancing jam nut toward linkage pin and tightening threaded rod. After desired unit operation is achieved, tighten jam nut to outer washer on spring. Springs must be adjusted alternately to have equal spring tension.
15. Before install is complete, installer must make a final operational check of dock leveler to verify all phases of install are correct. Installer must complete, sign, and return the Installation Checklist upon completion.

SPRING TIGHTENING INSTRUCTIONS

1. LIFT AND SECURE LEVELER IN FULL UPRIGHT MAINTENANCE POSITION.
2. REMOVE NUT (A) FROM HEX BOLT (B).
3. PLACE CRESCENT WRENCH ON TORSION TUBE ASSEMBLY (C), APPLY ENOUGH DOWNWARD FORCE TO TUBE ASSEMBLY (C) UNTIL HEX BOLT CAN BE REMOVED.
4. CONTINUE TO APPLY DOWNWARD FORCE UNTIL FLANGE ON TUBE ASSEMBLY (C) HAS THE NEXT HOLE IN SERIES COME INTO ALIGNMENT WITH HEX BOLT HOLE.
5. INSERT THE HEX BOLT (B) THROUGH THE FLANGE ON THE TUBE ASSEMBLY (C), AND TIGHTEN NUT UNTIL SECURE.
6. TEST LEVELER OPERATION. IF SPRING TENSION IS NOT SUFFICIENT, REPEAT THE PREVIOUS STEPS UNTIL DESIRED SPRING TENSION IS ACHIEVED.
7. IF SPRING TENSION IS SATISFACTORY, RETURN TO STORED POSITION.



DLM

DIVISION OF SYSTEMS INC., MALVERN, AR.

TORSION SPRING MODEL

SPRING ADJUSTMENT INSTRUCTIONS

MATERIAL _____ DRAWN BY SR

DATE 02/11/04 CHK'D

DRAWING NO.

DGED-1011

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES WITH THE FOLLOWING TOLERANCES:
 FRACTIONAL: ±1/32"
 DECIMAL: .01" = ±.01"
 .000" = ±.005"
 ANGULAR: ±1°

E.O.D. Installation Checklist

Date: _____ Order No.: _____ Installer: _____

Customer Name: _____

Address: _____

City/State: _____ Zip: _____

Phone: _____

1. Unit is properly aligned and installed properly.
2. All welding has been fully completed.
3. Welding slag has been removed.
4. Welds and other affected areas have been painted.
5. Springs have been properly adjusted.
6. Unit is functioning properly without fault.

I hereby certify that all installation and/or repair
work has been inspected and approved by:

Company: _____ Date Completed: _____

Name: _____ Signature: _____

A copy of this document must be signed and faxed to Poweramp/DLM
at (501)337-7750 to the attention of Steve Robbins.