The PDQ Festoon System was designed to run on one of three sizes of I-beams: S3 x 5.7, S4 x 7.7, S6 x 12.5. System trolleys must have been ordered for the size I-beam intended for use or the trolleys will not fit. If your I-beam is not one of those listed above, contact the Gleason Reel factory or your local Gleason representative. Maximum capacity is 300 lbs. per trolley at 400 fpm.

Each installation includes one fixed trolley, one tow trolley, and a number of intermediate trolleys. Refer to Figure 1-Typical Installation and Figure 4-Trolley Components and thoroughly familiarize yourself with this product and the terminology used prior to beginning installation.

NOTICE: Safe and proper operation and long life of the PDQ Festoon system depend on proper installation, maintenance, location and environment. These instructions are intended as a guide but do not cover all possible situations that may arise. Please refer any questions to Gleason Reel or its authorized representative or distributor.

**I–BEAM TRACK INSTALLATION**

1. Mount I-beam track to any suitable framework that is strong enough to support the entire weight of the festoon system (weight of I-beam, hanging hardware, trolleys and cables or hoses which will be carried by the festoon). Make sure hardware used for hanging I-beam will not interfere with free trolley movement. Refer to Figure 2-Trolley Clearance.

NOTE: On previously installed track, check all joints and hangers for clearances shown in Figure 2.

2. Special care should be taken in aligning the I-beam sections to the crane or hoist support rails. I-beams must be parallel with rails.

ACCEPTABLE SYSTEM TOLERANCES:

- **HORIZONTAL PLANE:** 0.02" per 1.0" across the lower flange width.
- **RISE/RUN RATIO:** 1.0" per 10.0' along track length, maximum of 2.0" for entire SYSTEM LENGTH.

3. Join beams by welding, keeping clearances shown in Figures 2 & 3. Use beams having the same lower flange tolerances. Grind welded joints smooth as shown in Figure 3.

**FIXED TROLLEY**

Always include trolley type, capacity, size I-beam, and size saddle when ordering parts or kits.

**NOTE:**
Primary illustration shows bumpers and spacers for 1/2" diameter saddle. Bumpers for 6" and 9" saddles shown in boxes.

**NOTE:**
Always include trolley type, capacity, size I-beam, and size saddle when ordering parts or kits.

**FIG. 1–TYPICAL INSTALLATION**

**FIG. 2–TROLLEY CLEARANCE**

**FIG. 3–WELDED JOINT**

Gleason Reel Corp.
P.O. Box 26, 600 S. Clark St.
Mayville, Wisconsin 53050-0026
Phone 920/387-4120
FAX 920/387-4189

PRINTED IN U.S.A. © COPYRIGHT GLEASON REEL CORP. 1998 BULLETIN 039770.b
TROLLEY INSTALLATION

There are three types of trolleys: Fixed, Intermediate, and Tow. The FIXED trolley is the first trolley on the storage end of the system. It is stationary, bolted to the track, and acts as the “bumper” to stop the trolleys when they are moved into storage. See Figure 1—Typical Installation. INTERMEDIATE trolleys carry the cable or hose. Number and spacing of intermediate trolleys is determined by length of cable/hose and loop depth. The TOW trolley is last in the string and is attached to the machine (crane, machine tool, etc.) serviced by the festoon system.

1. Check to make sure all trolleys are sized for I-beam installed previously. No width adjustment is required or possible. If trolleys do not fit I-beam, consult factory or Gleason representative.

2. Slide all trolleys onto I-beam track in order shown in Figure 1. NOTE: Fixed trolley will rest on cut-outs in carriage plates.

3. Temporarily position trolleys as they will be stored. There should be 1/8” between bumpers. Tow trolley must be at or beyond limits of machine movement.

4. Fasten FIXED TROLLEY to I-beam.
   A. Temporarily slide fixed trolley out of the way.
   B. Mark vertical location of mounting holes on beam web, 1.2” above bottom of I-beam. One method of doing this is by using two squares as shown in Figure 5.

C. Mark horizontal location of holes. Holes must be 5.5” apart and in final location for fixed trolley. Drill two 0.562” dia. holes thru web. See Figure 6.

5. Mark two places 5.5” apart. Square the two marks as shown.

D. Mount fixed trolley to I-beam using hex head bolt, flat washers, spacers and lock nut, supplied. See Figure 7.

6. Remove temporary restraints securing trolleys in storage position (Step 3).

7. Roll all wheeled trolleys along entire length of track. Check for binding or interference from hanging or joining hardware or weld bead. Fix areas of concern.

8. Set clearances for TOW trolley. NOTE: Tow arm is supplied by customer and must work to minimum clearances of rectangular tube. Check tow arm movement throughout total system travel to insure it does not pull out of rectangular tube in tow trolley and that no upward or downward forces are transmitted to tow trolley. See Fig. 9.

9. Weld or bolt a thrust bar to I-beam directly behind the fixed trolley to absorb impact forces. See Figure 8.

NOTE:
Primary illustration shows bumpers for 9” and 12” diameter saddle. Bumpers for 6” saddles shown in boxes.

NOTE:
Always include trolley type, capacity, size I-beam, and size saddle when ordering parts or kits.
**CABLE INSTALLATION**

Proper cable installation is the key to a successful festoon system. Refer to the guidelines below while following the cable installation procedure.

**CABLE GUIDELINES**

**Bending Cables**
- It is best to follow the rule that "BIG BENDS ARE BEST" for good service and long life. Cable manufacturers vary in specifying a multiplier and we offer the following guide as typical. Dimension uses the chart below.

<table>
<thead>
<tr>
<th>CABLE O.D.</th>
<th>MINIMUM RADIUS</th>
<th>MINIMUM SADDLE DIA.</th>
<th>Cable O.D. Variations should be held to a minimum. Clamping is best accomplished when all cables are same O.D. or close (Figure 10). Wire den. (Figure 11) makes clamping difficult and cable may not remain in saddle.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 0.3 in.</td>
<td>3 x O.D.</td>
<td>6 x O.D.</td>
<td>Cable clamps should be tightened so that the smallest cable cannot be pulled through by hand.</td>
</tr>
<tr>
<td>Under 0.5 in.</td>
<td>4 x O.D.</td>
<td>8 x O.D.</td>
<td>This is important for smooth running, long wheel bearing life and alignment of components.</td>
</tr>
<tr>
<td>Under 0.8 in.</td>
<td>5 x O.D.</td>
<td>10 x O.D.</td>
<td>It is best to distribute the cable evenly, with the heaviest cables near the center.</td>
</tr>
</tbody>
</table>

**Balance in Loading Cable**
- This is important for smooth running, long wheel bearing life and alignment of components. It is best to distribute the cable evenly, with the heaviest cables near the center.

**CABLE INSTALLATION**

1. Remove all twist from round cable.
2. On cable, mark length required between TOW trolley and termination junction.
3. Mark CABLE LENGTH LOOPS per General Arrangement Drawing. Remaining cable is for hookup from FIXED trolley to termination point.
4. Hang cable. All marks on cable must align with tops of saddles. See Figure 19. Arrange multiple cables per General Arrangement Drawing.
5. Complete cable termination connections after loops have been adjusted and loop clamps installed. Avoid connections or splices at any loop between TOW trolley and FIXED trolley.
6. After cable loop(s) is aligned, clamp cables in place using cable clamps on the saddle. Cable clamps should be tightened so that the smallest cable cannot be pulled through by hand.
7. Install CABLE LOOP CLAMPS at bottom of each loop. Tighten. NOTE: Flat cable may be "stacked" (see CABLE GUIDELINES, above). If cable is stacked:
   - A. Secure clamping. EXTREMELY IMPORTANT - At least 50% of cable surface must be under clamp pressure.
   - B. Height consideration
     - Flat cable stacking best when width is 4-6 times height, or in Figure 14 & 15 above. High standing cats as long as gaps in stacks are not between all cables. See Figure 17.
   - C. Configuration
     - BIG CABLE ON TOP provides maximum bending radius, improves heat dissipation and reduces cable movement. See Figures 14 & 15 above.

**CABLE LOOP ADJUSTMENTS**

3. Divide remaining cable into equal lengths per number of CABLE LOOPS and mark each length.

**NUMBER OF CABLE LOOPS = NUMBER OF INTERMEDIATE TROLLEYS + 1**

4. Hang cable. All marks on cable must align with tops of saddles. See Figure 19. Arrange multiple cables using guidelines above.
5. Complete cable termination connections after loops have been adjusted and loop clamps installed. Avoid connections or splices at any loop between TOW trolley and FIXED trolley.
6. After cable loop(s) is aligned, clamp cables in place using cable clamps on the saddle. Cable clamps should be tightened so that the smallest cable cannot be pulled through by hand.
7. Install CABLE LOOP CLAMPS at bottom of each loop. Tighten. NOTE: Flat cable may be "stacked" (see CABLE GUIDELINES, above). If cable is stacked:
   - A. If you received one cable clamp per loop, arrange cables as indicated above.
   - B. If you received two cable clamps per loop, adjust loops as shown in CABLE LOOP ADJUSTMENTS section, below.

**Cable Layout when General Arrangement Drawing is provided.**

1. On cable, mark length required between TOW trolley and termination junction.
2. Mark length required from FIXED trolley to termination point.
3. Divide remaining cable into equal lengths per number of CABLE LOOPS and mark each length.

**Cable Layout when no General Arrangement Drawing is provided.**

1. On cable, mark length required between TOW trolley and termination junction.
2. Mark length required from FIXED trolley to termination point.

**Flat Cable Stacking**

A. Secure clamping. EXTREMELY IMPORTANT - At least 50% of cable surface must be under clamp pressure.

**Balance in Loading Cable**
- This is important for smooth running, long wheel bearing life and alignment of components. It is best to distribute the cable evenly, with the heaviest cables near the center.

**Flat Cable Stacking**
- A. Secure clamping. EXTREMELY IMPORTANT - At least 50% of cable surface must be under clamp pressure.
- B. Height consideration
  - Flat cable stacking best when width is 4-6 times height, or in Figure 14 & 15 above. High standing cats as long as gaps in stacks are not between all cables. See Figure 17.
- C. Configuration
  - BIG CABLE ON TOP provides maximum bending radius, improves heat dissipation and reduces cable movement. See Figures 14 & 15 above.
1. Mount tow ropes with fasteners supplied. See Figure 22.

**INSTALLING SHOCK CORDS** (when required)

Shock Cords are slightly shorter than tow cables and are used in pairs, two between each trolley. Spring loaded, their function is just as their name implies; they act as shock absorbers when the festoon trolleys are beginning to move, limiting undue stress on the tow ropes.

1. Mount two shock cords between each pair of trolleys as shown in Figure 22.

**TESTING**

1. With tow arm not attached to tow trolley, spread each set of trolleys and check to make sure tow rope gets tight before electrical cables or hoses. Adjust length of cable or hose loop, as required.
2. Spread each set of trolleys and check to make sure shock cords are stretched before tow rope gets tight.
3. Connect tow arm to tow trolley and slowly operate festoon system throughout the total travel. Check for “smooth rolling wheels,” misaligned joints, hanging or joining hardware interference, and interference of cable loops with operating area.
4. With festoon trolleys in STORAGE POSITION, check to see that cables are suspended uniformly between trolleys and that cable load is balanced in saddle.
5. With festoon system FULL Y EXTENDED, check each loop to see that cables are suspended uniformly between trolleys and that their name implies; they act as shock absorbers when the festoon trolleys are beginning to move, limiting undue stress on the tow ropes.

**MAINTENANCE**

1. During normal equipment inspection, perform the following checks and maintenance:

A. Check for wear on trolley wheels and anti-lift rollers. Wheel and anti-lift roller bearings are sealed and do not require routine maintenance.
B. Check for loose fasteners and nuts, especially the bolts affixing the fixed trolley to the I-beam. Tighten if required.
C. Check for wear or fractured walls on the rectangular tube on the tow trolley. Repair or replace as necessary. If undue wear persists, check alignment of tow arm throughout entire travel. Refer to **TROLLEY INSTALLATION**, Step 8.
D. Check condition of bumpers, tow ropes and shock cords. Replace as required.
E. Check for damaged cable and the tightness of cable and loop clamps.

**INSTALLING TOW ROPES**

Tow ropes “pull” the festoon system along the track, minimizing wear to and prolonging the life of electrical cables or hoses being carried.

Without tow ropes, the electrical cables are required to act as tension members which can lead to separated conductors. On multiple cable applications it is virtually impossible to adjust a festoon system so that all cables are exactly the same length. Thus all force is directed to the cables or hoses themselves. See Figure 1–Typical Installation.

1. Mount tow ropes with fasteners supplied. See Figure 21.

**FIGURE 20–CABLE LOOP ADJUSTMENT**

1/4" SPACE BETWEEN CABLES

**FIGURE 22–SHOCK CORD INSTALLATION**

**FIGURE 21–TOW ROPE INSTALLATION**

**TABLE OF PART/KIT NO. DESCRIPTION QTY. EA. PER TROLLEY QTY. EA. PER TROLLEY QTY. EA. PER TROLLEY**

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART/KIT NO.</th>
<th>DESCRIPTION</th>
<th>QTY. EA. PER TROLLEY</th>
<th>QTY. EA. PER TROLLEY</th>
<th>QTY. EA. PER TROLLEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>039750</td>
<td>Carriage Plate (6&quot; dia. saddle)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039760</td>
<td>Carriage Plate (9&quot; dia. saddle)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039761</td>
<td>Anti-lift Wheel Kit (3&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039762</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039763</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039764</td>
<td>Bumper Kit (6&quot; dia. saddle)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039765</td>
<td>Bumper Kit (12&quot; dia. saddle)</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>039767</td>
<td>Bumper Extension Kit (12&quot; saddle)</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>039768</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039769</td>
<td>Anti-lift Wheel Kit (3&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039770</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039771</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039772</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039773</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039774</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039775</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039776</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039777</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039778</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039779</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039780</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039781</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039782</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039783</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039784</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039785</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039786</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039787</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039788</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039789</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039790</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039791</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039792</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039793</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039794</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039795</td>
<td>Anti-lift Wheel Kit (6&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>039796</td>
<td>Anti-lift Wheel Kit (1&quot; I-beam)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*Be sure to state capacity, I-beam and saddle size on order.*
1. Mount two shock cords between each pair of trolleys as shown in Figure 22.

TESTING

1. With tow arm not attached to tow trolley, spread each set of trolleys and check to see if they are stretched to the point where all force is directed to the trolley and the cables or hoses themselves. See Figure 1–Typical Installation.

MAINTENANCE

1. During normal equipment inspection, perform the following checks and maintenance:
   A. Check for wear on trolley wheels and anti-lift rollers. Wheels and anti-lift roller bearings are sealed and do not require lubrication. They must be packed “tight” when tow arm is at end of travel.
   B. Check for loose fasteners and nuts, especially the bolts affixing the fixed trolley to the I-beam. Tighten if required.
   C. Check for wear or fractured walls on the rectangular tube on the trolley. Repair or replace as necessary. If undue wear persists, check alignment of the arm throughout entire travel. Refer to TROLLEY INSTALLATION, Step 8.
   D. Check condition of bumpers, tow ropes and shock cords. Replace as required.
   E. Check for damaged cable and the tightness of cable and loop clamps.

INSTALLING SHOCK CORDS

Shock Cords are slightly shorter than tow cables and are used in pairs, two between each trolley. Spring loaded, their function is just as their name implies; they act as shock absorbers when the festoon trolleys are beginning to move, limiting undue stress on the tow ropes.

1. Mount tow ropes with fasteners supplied. See Figure 21.

2. Spread each set of trolleys and check to make sure shock cords are stretched before tow arm gets tight.

3. Connect tow arm to tow trolley and slowly operate festoon system throughout the total travel. Check for “smooth rolling wheels”, misaligned joints, hanging or joining hardware interference, and interference of cable loops with operating area.

4. With festoon trolleys in STORAGE POSITION, check to see if intermediate trolleys can move back and forth slightly. They must not be packed “tight” when tow arm is at end of travel.

5. With festoon system FULLY EXTENDED, check each loop to see if cables are suspended uniformly between trolleys and that cable load is balanced in saddle.

6. Correct all problems before routine operation of crane or hoist.
Always include trolley type, capacity, size I-beam, and size saddle when ordering parts or kits.

Primary illustration shows bumpers and spacers for 12" diameter saddle. Bumpers for 6" and 9" saddles shown in boxes.

NOTE: Flat cable stacking best when width is 5-8 times height, as in Figures 14 & 15 above. High standing over 6-8 times on cables. See Figure 17.

Configuration: BIG CABLE ON TOP provides maximum bending radius, improves heat dissipation and extends cable life. Shortest cables are on top. See Figure 18.
TROLLEY INSTALLATION

There are three types of trolleys: Fixed, Intermediate, and Tow. The FIXED trolley is the first trolley on the storage end of the system. It is stationary, bolted to the track, and acts as the “bumper” to stop the trolleys when they are moved into storage. See Figure 1–Typical Installation. INTERMEDIATE trolleys carry the cable or hose. Number and spacing of intermediate trolleys is determined by length of cable/hose and loop depth. The TOW trolley is last in the string and is attached to the machine (crane, machine tool, etc.) serviced by the festoon system.

1. Check to make sure all trolleys are sized for I-beam installed previously. No width adjustment is required or possible. If trolleys do not fit I-beam, consult factory or Gleason representative.

2. Slide all trolleys onto I-beam track in order shown in Figure 1. NOTE: Fixed trolley will rest on cut-outs in carriage plates.

3. Temporarily position trolleys as they will be stored. There should be 1/8" between bumpers. Tow trolley must be at or beyond limits of machine movement.

4. Fasten FIXED TROLLEY to I-beam.
   A. Temporarily slide fixed trolley out of the way.
   B. Mark vertical location of mounting holes on beam web, 1.2" above bottom of I-beam. One method of doing this is by using two squares as shown in Figure 5.

   FIGURE 5–LOCATING FIXED TROLLEY HOLES

   C. Mark horizontal location of holes. Holes must be 5.5" apart and in final location for fixed trolley. Drill two 0.562" dia. holes thru web. See Figure 6.

   FIGURE 6–BEAM DRILLING

D. Mount fixed trolley to I-beam using hex head bolt, flat washers, spacers and lock nut, supplied. See Figure 7.

E. Weld or bolt a thrust bar to I-beam directly behind the fixed trolley to absorb impact forces. See Figure 8.

6. Remove temporary restraints securing trolleys in storage position (Step 3).

7. Roll all wheeled trolleys along entire length of track. Check for binding or interference from hanging or joining hardware or weld bead. Fix areas of concern.

8. Set clearances for TOW trolley. NOTE: Tow arm is supplied by customer and must work to minimum clearances of rectangular tube. Check tow arm movement throughout total system travel to insure it does not pull out of rectangular tube in tow trolley and that no upward or downward forces are transmitted to tow trolley. See Fig. 9.

9. Always include trolley type, capacity, size I-beam, and size saddle when ordering parts or kits.

NOTE: Primary illustration shows bumpers for 9" and 12" diameter saddle. Bumpers for 6" saddles shown in boxes.
The PDQ Festoon System was designed to run on one of three sizes of I-beams: S3 x 5.7, S4 x 7.7, S6 x 12.5. System trolleys must have been ordered for the size I-beam intended for use or the trolleys will not fit. If your I-beam is not one of those listed above, contact the Gleason Reel factory or your local Gleason representative. Maximum capacity is 300 lbs. per trolley at 400 fpm.

Each installation includes one fixed trolley, one tow trolley, and a number of intermediate trolleys. Refer to Figure 1-Typical Installation and Figure 4-Trolley Components and thoroughly familiarize yourself with this product and the terminology used prior to beginning installation.

NOTICE: Safe and proper operation and long life of the PDQ Festoon system depend on proper installation, maintenance, location and environment. These instructions are intended as a guide but do not cover all possible situations that may arise. Please refer any questions to Gleason Reel or its authorized representative or distributor.

I–BEAM TRACK INSTALLATION

1. Mount I-beam track to any suitable framework that is strong enough to support the entire weight of the festoon system (weight of I-beam, hanging hardware, trolleys and cables or hoses which will be carried by the festoons). Make sure hardware used for hanging I-beam will not interfere with free trolley movement. Refer to Figure 2-Trolley Clearance.

NOTE: On previously installed track, check all joints and hangers for clearances shown in Figure 2.

2. Special care should be taken in aligning the I-beam sections to the crane or hoist support rails. I-beams must be parallel with rails.

ACCEPTABLE SYSTEM TOLERANCES:

- HORIZONTAL PLANE: 0.02” per 1.0” across the lower flange width.
- RISE/RUN RATIO: 1.0” per 10.0’ along track length, maximum of 2.0” for entire SYSTEM LENGTH.

3. Join beams by welding, keeping clearances shown in Figures 2 & 3. Use beams having the same lower flange tolerances. Grind welded joints smooth as shown in Figure 3.

I–BEAM TRACK

Sizes S3 x 5.7, S4 x 7.7, S6 x 12.5. I–Beam furnished by customer.

STORAGE DISTANCE

ACTIVE TRAVEL

LOOP DEPTH

5” MINIMUM CLEARANCE

*TRAVEL DISTANCE (ACTIVE TRAVEL) AND LOOP DEPTH DETERMINE NUMBER OF INTERMEDIATE TROLLEYS REQUIRED

NOTE: Always include trolley type, capacity, size I-beam, and size saddle when ordering parts or kits.

Gleason Reel Corp.
600 S. Clark St.
Mayville, Wisconsin 53050-0026
Phone 920/387-4120
FAX 920/387-4189

PRINTED IN U.S.A. © COPYRIGHT GLEASON REEL CORP. 1998 BULLETIN 039770.b