

# martec

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## international

### Accessories



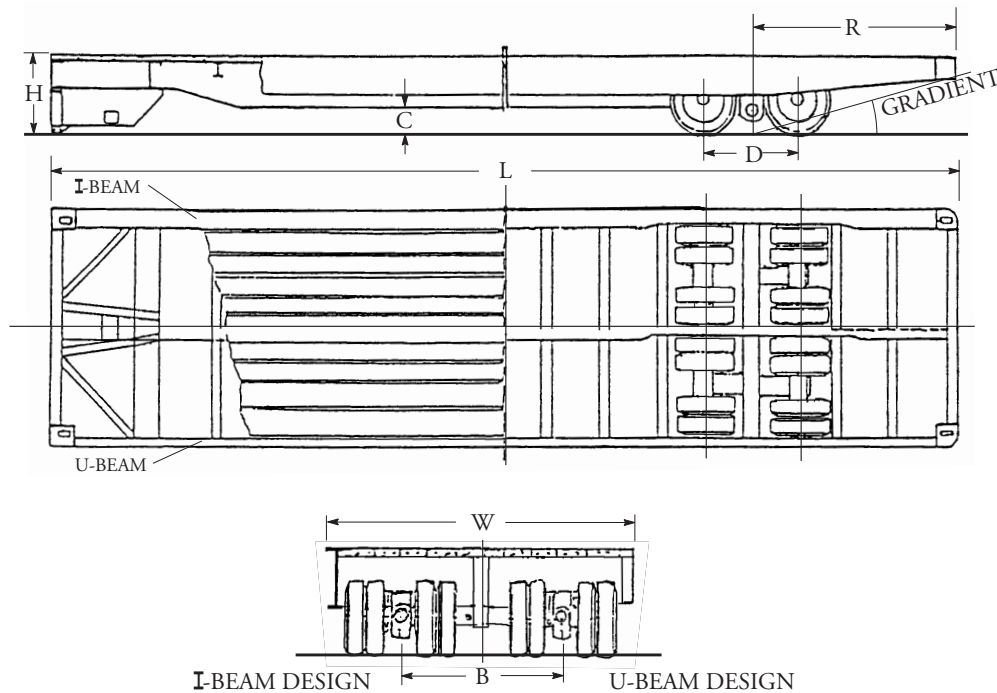
New Jersey • Chicago • Dallas • Houston • Los Angeles • Miami  
Costa Rica • Guatemala • Honduras

|                                                        |    |
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## 18.10 Rolltrailers and Accessories

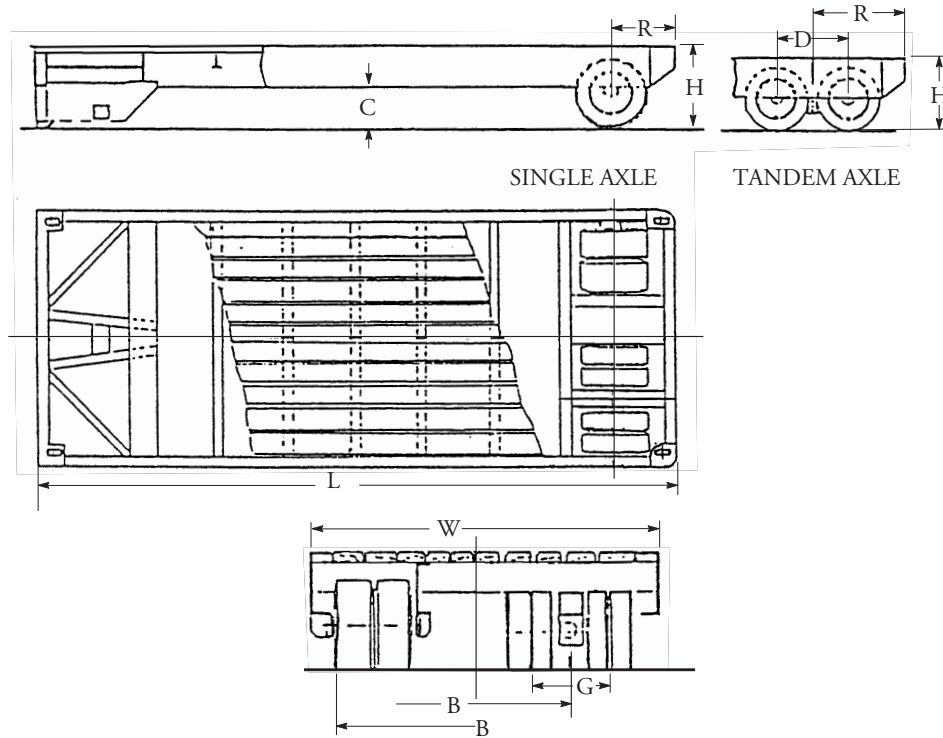
### 18.10.1: ROLLTRAILERS

03.05.002



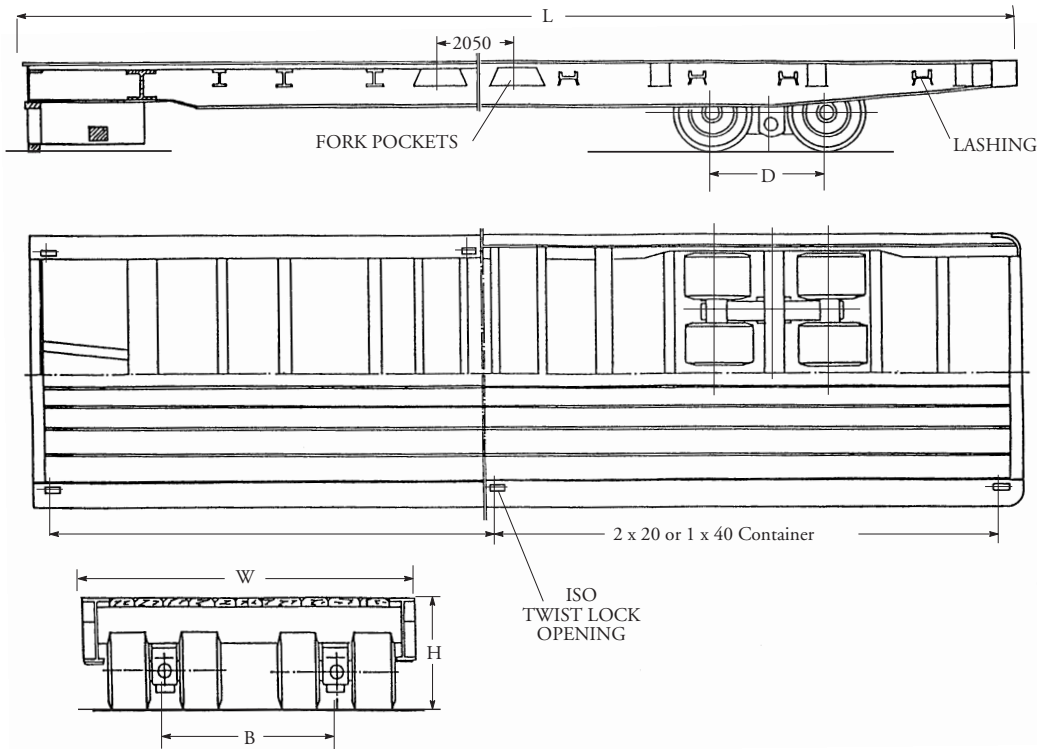
| Technical Data                         | 40'/40 Ton        | 40'/60 Ton           | 40'/80 Ton        |
|----------------------------------------|-------------------|----------------------|-------------------|
| Nominal Capacity (Ton)                 | 40                | 60                   | 30                |
| Container Capacity (Ton)               | 40                | 60                   | 30                |
| Load Configuration                     | 4 x 20' or        | 1 x 40' + 2 x 20' or | 2 x 40            |
| Tare Weight (kg)                       | 5,600             | 6,600                | 7,900             |
| Platform Size - L x W                  | 12,260 x 2,500 mm | 12,260 x 2,500 mm    | 12,260 x 2,500 mm |
| Platform Height (mm)                   | 720               | 720                  | 840               |
| Gradiability (%)                       | 22                | 28                   | 25                |
| Ground Clearance (C)                   | 245 mm            | 320 mm               | 290 mm            |
| Rear Overhang (R)                      | 3,123 mm          | 3,123 mm             | 3,123 mm          |
| Axle Base (B)                          | 1,600 mm          | 1,350 mm             | 1,250 mm          |
| Wheel Base (D)                         | 800 mm            | 1,000 mm             | 1,000 mm          |
| Wheel Diameter/Width                   | 540 x 200         | 550 x 320            | 540 x 400         |
| Axle Load                              | 16,832 kg         | 24,583 kg            | 32,445 kg         |
| Wheel Load                             | 4,208 kg          | 6,146 kg             | 8,111 kg          |
| Fifth Wheel Load (including gooseneck) | 14,437 kg         | 19,914 kg            | 25,510 kg         |

03.05.001



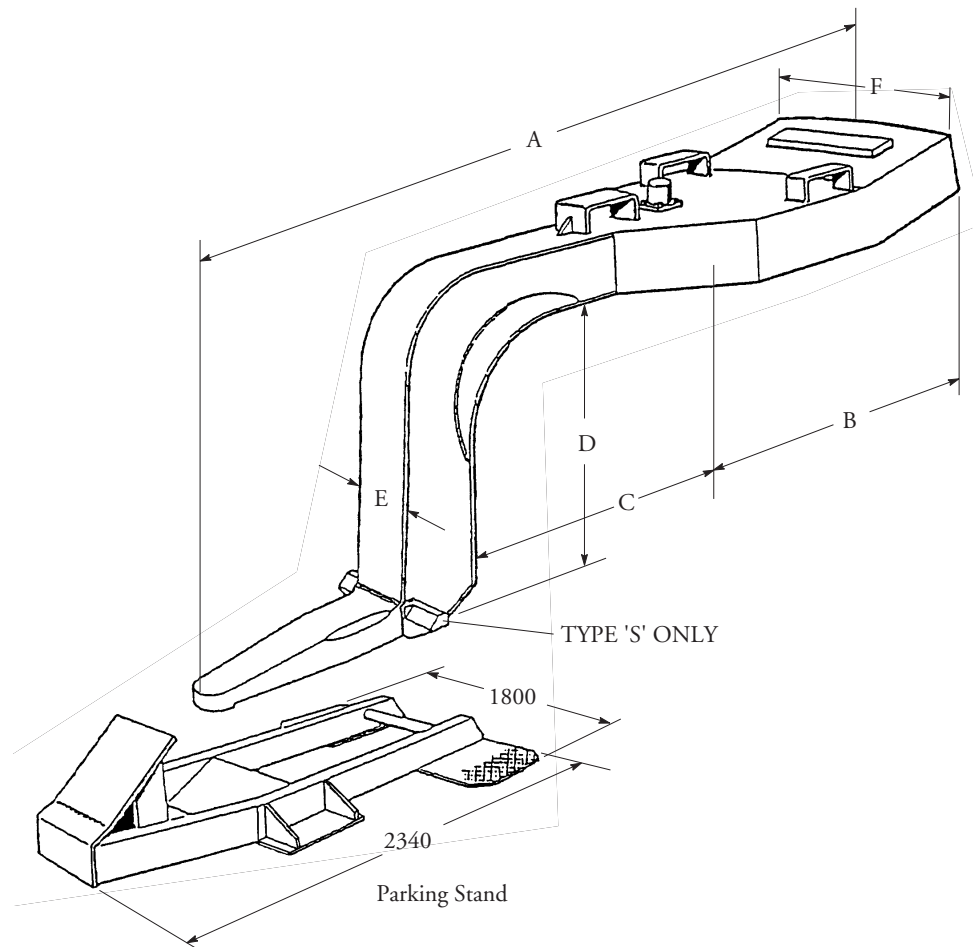
| Technical Data                         | 20'/25 Ton       | 20'/40 Ton       |
|----------------------------------------|------------------|------------------|
| Nominal Capacity (Ton)                 | 25               | 40               |
| Container Capacity (Ton)               | 25               | 40               |
| Load Configuration                     | 1 x 20'          | 2 x 20'          |
| Tare Weight (kg)                       | 2,370            | 3,300            |
| Platform Size - L x W                  | 6,118 x 2,500 mm | 6,118 x 2,500 mm |
| Platform Height (H)                    | 650 mm           | 650 mm           |
| Gradiability (%)                       | 33               | 33               |
| Ground Clearance (C)                   | 250 mm           | 250 mm           |
| Rear Overhang (R)                      | 400 mm           | 400 mm           |
| Axle Base (B)                          | 1,600 mm         | 1,300 mm         |
| Wheel Base (D)                         |                  |                  |
| Wheel Diameter/Width                   | 540 x 200        | 540 x 400        |
| Axle Load                              | 18,350 kg        | 28,828 kg        |
| Wheel Load                             | 4,588 kg         | 7,207 kg         |
| Fifth Wheel Load (including gooseneck) | 11,520 kg        | 16,672 kg        |

40' Rolltrailer



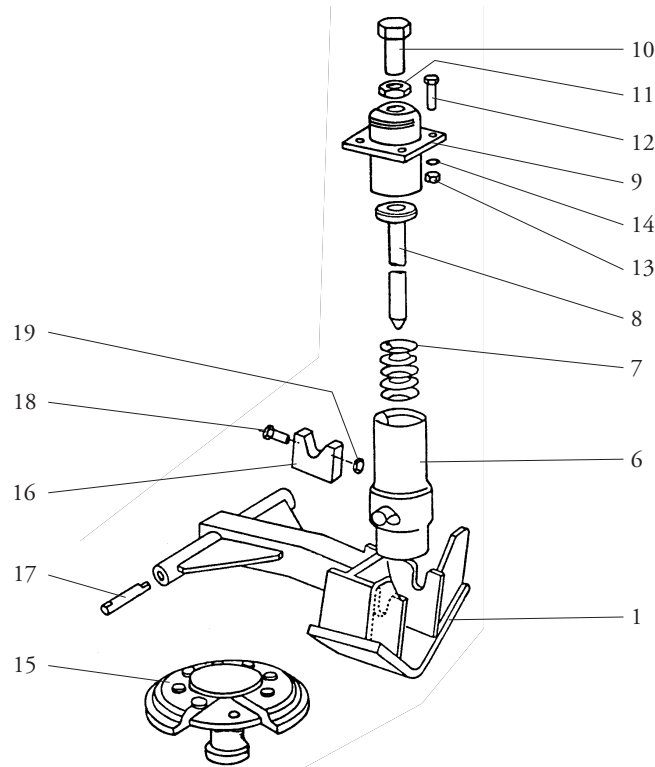
### 18.10.2: GOOSENECKS

#### Gooseneck



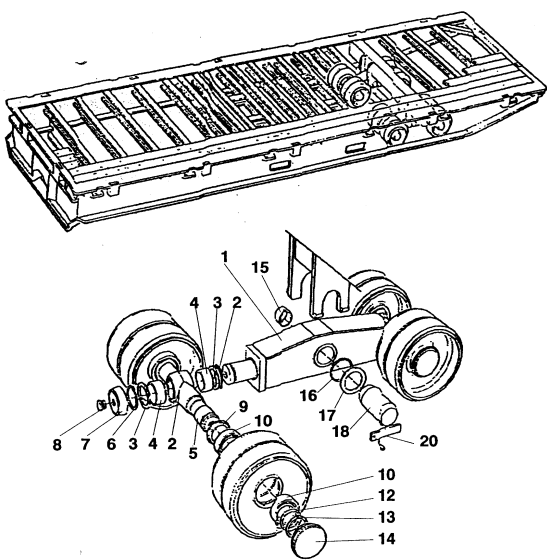
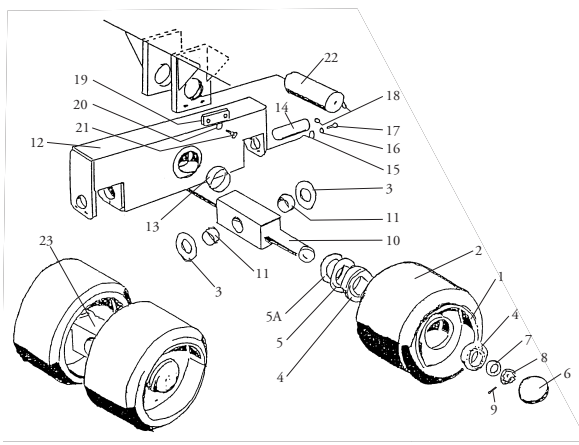
| Type  | Max. Fifth Wheel Load (Tons) | Max. Trailer Weight (Tons) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | Dead Weight Approx. (kg) |
|-------|------------------------------|----------------------------|--------|--------|--------|--------|--------|--------|--------------------------|
| 20 F  | 20                           | 50                         | 4330   | 1280   | 1740   | 1200   | 340    | 900    | 2440                     |
| 20 SF | 20                           | 50                         | 4350   | 1300   | 1740   | 1200   | 340    | 900    | 2516                     |
| 25 F  | 25                           | 80                         | 4430   | 1340   | 1740   | 1235   | 340    | 900    | 2840                     |
| 25 SF | 25                           | 80                         | 4450   | 1360   | 1740   | 1235   | 340    | 900    | 2920                     |
| 30 SF | 32                           | 120                        | 4460   | 1410   | 1740   | 1350   | 340    | 900    | 3170                     |

Gooseneck Brake Complete

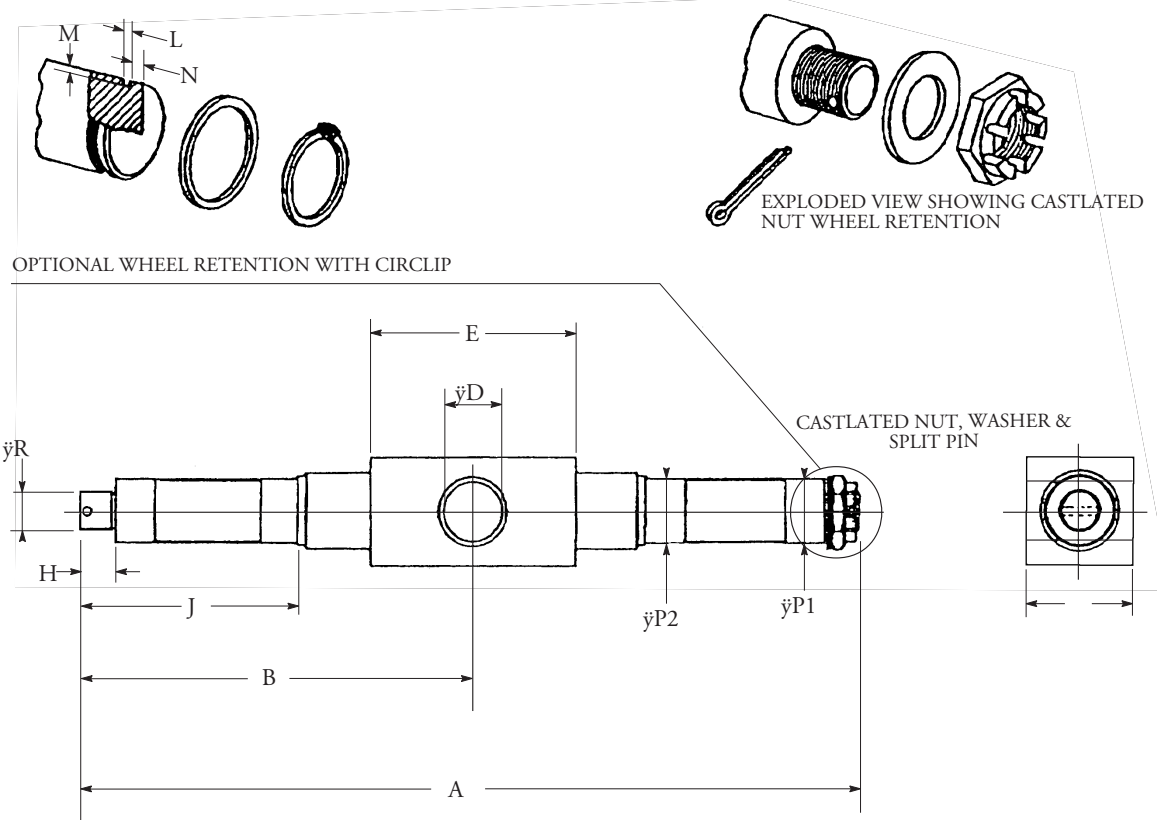


|                                                                   |                                           |
|-------------------------------------------------------------------|-------------------------------------------|
| 1. Swivelling Key                                                 | 12. Spanner Bolt                          |
| 6. Spring Socket                                                  | 13. Hexagon Nut                           |
| 7a. Belleville Spring Washer SH 25<br>Dimensions 60 x 30, 5 x 3.5 | 14. Spring Ring                           |
| 7b. Belleville Spring Washer SH 16<br>Dimensions 60 x 30, 5 x 3.0 | 15. King-Pin Complete with Mounting Plate |
| 8. Bolt Complete                                                  | 16. Bearing                               |
| 9. Covering Cap                                                   | 17. Bolt                                  |
| 10. Spanner Bolt                                                  | 18. Spanner Bolt                          |
| 11. Hexagon Nut                                                   | 19. Hexagon Nut                           |

### 18.10.3: RUNNING GEAR/AXLE ASSEMBLIES

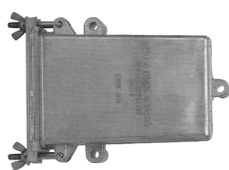
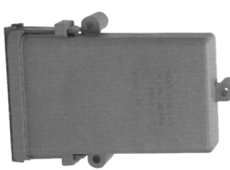
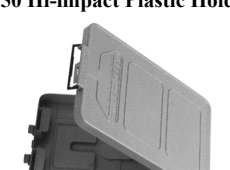
| 40'/40-Ton Rolltrailer Running Gear/Axle Assembly                                 |                     |                      | 40'/60-Ton Rolltrailer Running Gear/Axle Assembly                                  |                         |                     |
|-----------------------------------------------------------------------------------|---------------------|----------------------|------------------------------------------------------------------------------------|-------------------------|---------------------|
|  |                     |                      |  |                         |                     |
| 1. Rocker                                                                         | 8. Plug             | 15. Bushing          | 1. Rim                                                                             | 8. Locking Nut          | 16. Washer          |
| 2. O-ring                                                                         | 9. Sealing Ring     | 16. O-ring           | 2. Rubber Tire                                                                     | 9. Locking Pin          | 17. Screw           |
| 3. Supporting Ring                                                                | 10. Bearings        | 17. Adjusting Washer | 3. Washer                                                                          | 10. Wheel Axle          | 18. Greasing Nipple |
| 4. Bearing Ring                                                                   | 11. Wheel           | 18. Pin              | 4. Ball Bearing (Roller Bearing)                                                   | 11. Axle Bushing        | 19. Locking Plate   |
| 5. Pendular Axle                                                                  | 12. Supporting Ring | 19. Axle Guard       | 5. Sealing Ring                                                                    | 12. Rocker Arm          | 20. Washer          |
| 6. Locking Ring                                                                   | 13. Locking Ring    | 20. Clamping Sleeve  | 5a. Dust Seal                                                                      | 13. Rocker Arm Bushings | 21. Screw           |
| 7. Metal Cap                                                                      | 14. Hub Cap         |                      | 6. Hub Cap                                                                         | 14. Axle Bolt           | 22. Rocker Arm Bolt |

Axle Assembly

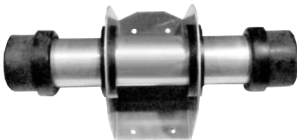
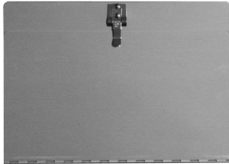


**18.21 Truck & Trailer Record Holders & Log Books**

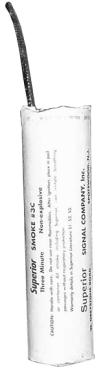
**18.11.1: JAMES KING TRUCK & TRAILER RECORD HOLDERS**


|                                                                                                                                                                                                                                                                                                                    |            |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|---------------|----------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|
| <p><b>#300 Aluminum Holder</b></p>  <p>Outside size: 5.25" x 7" x 2"</p> <table><tr><td>1. JKG300</td><td>Complete</td></tr><tr><td>2. JKG300-LID</td><td>Lid only</td></tr><tr><td>3. JKG300-BOLT-KIT</td><td></td></tr></table> | 1. JKG300  | Complete | 2. JKG300-LID                                                                                                                                                                                                                    | Lid only  | 3. JKG300-BOLT-KIT |  | <p><b>#350 Xenoy Holder</b></p>  <p>Outside size: 5.25" x 7" x 2"</p> <table><tr><td>1. JKG350</td><td>Complete</td></tr><tr><td>2. JKG350-LID</td><td>Lid only</td></tr><tr><td>3. MTR300</td><td>Generic</td></tr></table> | 1. JKG350 | Complete | 2. JKG350-LID | Lid only | 3. MTR300 | Generic | <p><b>#500 Hi-impact Plastic Holder</b></p>  <p>Outside size: 11.5" x 16" x 1.5"</p> <table><tr><td>1. JKG500</td><td>Complete</td></tr></table> | 1. JKG500 | Complete |
| 1. JKG300                                                                                                                                                                                                                                                                                                          | Complete   |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| 2. JKG300-LID                                                                                                                                                                                                                                                                                                      | Lid only   |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| 3. JKG300-BOLT-KIT                                                                                                                                                                                                                                                                                                 |            |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| 1. JKG350                                                                                                                                                                                                                                                                                                          | Complete   |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| 2. JKG350-LID                                                                                                                                                                                                                                                                                                      | Lid only   |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| 3. MTR300                                                                                                                                                                                                                                                                                                          | Generic    |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| 1. JKG500                                                                                                                                                                                                                                                                                                          | Complete   |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| <p><b>#500E Stand Up Envelope</b></p>  <p>Translucent-waterproof<br/>Hardboard stiffener<br/>9.5" x 12.0"</p> <table><tr><td>1. JKG500E</td><td>Complete</td></tr></table>                                                        | 1. JKG500E | Complete | <p><b>#550 Hi-impact Plastic Holder</b></p>  <p>Outside size: 10" x 15" x 1.25"</p> <table><tr><td>1. JKG550</td><td>Complete</td></tr></table> | 1. JKG550 | Complete           |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| 1. JKG500E                                                                                                                                                                                                                                                                                                         | Complete   |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |
| 1. JKG550                                                                                                                                                                                                                                                                                                          | Complete   |          |                                                                                                                                                                                                                                  |           |                    |  |                                                                                                                                                                                                                                                                                                               |           |          |               |          |           |         |                                                                                                                                                                                                                                     |           |          |

**18.2.2: MISCELLANEOUS TRUCK & TRAILER RECORD HOLDERS**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Round ID Card Holder</div> <div></div> <div><div><div><div>1. BETPS1</div><div>2. BETPS71</div><div>3. MTR1001</div><div>4. MTR1007P</div><div>5. 20TL97962</div><div>6. 20TL97960</div></div><div><div>Complete</div><div>Cover only</div><div>Complete</div><div>Complete w/Pro-Par logo</div><div>Cover only</div><div>Complete</div></div></div></div> | <div>Aluminum Manifest Box</div> <div></div> <div><div>8" x 13" x 1.5"</div><div><div><div><div>1. MTR1002W</div><div>2. PEN10-01W</div><div>3. MTR1002P</div><div>4. MTR1002</div><div>5. PEN10-01</div></div><div><div>Wabash</div><div>Wabash</div><div>Pro-Par</div><div>No logo</div><div>No logo</div></div></div></div></div> | <div>Aluminum Tube Registration Holder</div> <div></div> <div><div><div><div>1. TIS158-CK</div><div>2. MTR1003</div><div>3. TIS158-E</div></div><div><div>Complete</div><div>Complete</div><div>Rubber end only</div></div></div></div> |
| <div>Registration Holder</div> <div></div> <div><div>12-1/2" x 8-3/4"</div><div><div><div>1. JJK1RSP-DD</div></div></div></div>                                                                                                                                                                                                                                 | <div>Certificate Holder</div> <div></div> <div><div><div>1. 20PMB45</div></div></div>                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                              |

18.3 Smoke Bombs

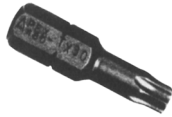
| Part Number | Time     | Figure                                                                              |
|-------------|----------|-------------------------------------------------------------------------------------|
| SSC3-C      | 3 minute |  |

18: Rolltrailers, Specialty Products & Misc.

## 18.4 Tools & Shop Items

### 18.13.1: BITS & HOLDERS

#### 18.13.1.1: TX STYLE BITS

| Part Number  | Hex Size | Figure                                                                              |
|--------------|----------|-------------------------------------------------------------------------------------|
| TOL440-TX-20 | 1/4"     |  |
| TOL440-TX-25 | 1/4"     |                                                                                     |
| TOL440-TX-27 | 1/4"     |                                                                                     |
| TOL440-TX-30 | 1/4"     |                                                                                     |
| TOL440-TX-40 | 1/4"     |                                                                                     |
| TOL440-TX-45 | 1/4"     |                                                                                     |
| TOL480-TX-30 | 5/16"    |                                                                                     |
| TOL480-TX-40 | 5/16"    |                                                                                     |
| TOL480-TX-45 | 5/16"    |                                                                                     |
| TOL480-TX-50 | 5/16"    |                                                                                     |

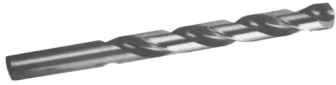
#### 18.13.1.2: PHILLIPS BITS

| Part Number | Hex Size | Point Size | Figure                                                                               |
|-------------|----------|------------|--------------------------------------------------------------------------------------|
| TOL440-P2   | 1/4"     | No. 2      |  |
| TOL480-P2   | 5/16"    | No. 2      |                                                                                      |
| TOL480-P3   | 5/16"    | No. 3      |                                                                                      |

#### 18.13.1.3: BIT HOLDERS

| Part Number | Hex Size | Drive | Figure                                                                                |
|-------------|----------|-------|---------------------------------------------------------------------------------------|
| TOL855      | 1/2"     | 5/16" |  |
| TOL858      | 1/4"     | 1/4"  |                                                                                       |
|             |          |       |                                                                                       |

### 18.13.2: DRILL BITS

| Part Number | Hex Size | Type       | Figure                                                                               |
|-------------|----------|------------|--------------------------------------------------------------------------------------|
| TOL41-11763 | 7/32"    | Heavy duty |  |
| TOL41-11765 | 1/4"     | Heavy duty |                                                                                      |
| TOL41-11766 | 17/64"   | Heavy duty |                                                                                      |

### 18.13.3: GLOVES

### 18.13.4: NYLON CABLE TIES

### 18.13.5: SAFETY GLASSES

## 18.51 RF Identification Devices

### 18.14.1: AMTECH TAGS

|                                                                                              |                                                                                              |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| AT5100 TollTag - 915 MHz Tag, Full Frame                                                     | AT5102 Access Control Tag 915 MHz, Half Frame                                                |
| AT5105 Access Control Tag - Multifrequency (915 MHz/2450 MHz), Half Frame                    | AT5106 Access Control Tag, Half Frame                                                        |
| AT5107 Access Control Tag - Multifrequency (915 MHz/2450 MHz), Half Frame                    | AT5110 Transportation Tag - 915 MHz, beam, Full Frame                                        |
| AT5112 Access Control Transportation Tag - 915 MHz, Half Frame                               | AT5113 Transportation Tag - 915 MHz, beam, Full Frame                                        |
| AT5114 Transportation Tag - 64 bits, 915 MHz 10 year battery, Half Frame                     | AT5125 Transportation Tag - 915 MHz, high temperature case beam                              |
| AT5140 License Plate Mount TollTag - 915 MHz, Full Frame                                     | AT5145 License Plate Mount TollTag - 915 MHz, Full Frame                                     |
| AT5146 License Plate Tag - 64 bits, 915 MHz, Half Frame                                      | AT5147 License Plate Tag - 64 bits, 915 MHz, Half Frame                                      |
| AT5510 Transportation Tag - multifrequency (915 MHz/2450 MHz), Full Frame                    | AT5544 TollTag - Multifrequency (915 MHz/2450 MHz) 10 year battery, Full Frame, window mount |
| AT5545 TollTag - Multifrequency (915 MHz/2450 MHz) 10 year battery, Full Frame, window mount | AT5547 TollTag - Multifrequency (915 MHz/2450 MHz) Full Frame                                |
| AT5704 Dynamic Tag - up to 256 frames - multifrequency (915 MHz/2450 MHz)                    | AT5720 Dynamic Check Tag                                                                     |
| IT2221 Interior Type II Tag w/ Buzzer, LED and Battery options, 915 MHz                      | IT2235 Interior Type III Tag w/ LCD, 3 LEDs, button and buzzer, 915 MHz                      |
| AT5801 Tag: 5.8 GHz CEN, GSS, A1 Compliant                                                   |                                                                                              |

### 18.52: AMTECH READERS

|                                                               |                                                    |
|---------------------------------------------------------------|----------------------------------------------------|
| AI1200 Reader, industrial environment, 915 MHz                | AI1202 Reader, 12VDC, harsh environment, 915 MHz   |
| AI1301 Reader on a card                                       | AI1611 SmartPass Reader - 2450 MHz                 |
| AI1620 SmartPass Reader - 915 MHz                             | AH1101 Handheld Reader, 915 MHz                    |
| IT2020 ISA Read/Write Reader Card - Multimode Option, 915 MHz | AI5810 Reader Card: 5.8 GHz CEN, GSS, A1 Compliant |

### 18.53: AMTECH RF MODULES

|                                                          |                                                                                  |
|----------------------------------------------------------|----------------------------------------------------------------------------------|
| AR2200 RF Module, 915 MHz                                | AR2602 RF Module, 2450 MHz, 1 ch., 300 MW                                        |
| AR2603 RF Module, 2450 MHz, 1 ch., 50 MW                 | IT2611 - RF Read/Write Module - Multimode/Monostatic & Bistatic Options, 915 MHz |
| AR5800 Antenna/RF Module: 5.8 GHz CEN, GSS, A1 Compliant |                                                                                  |

### 18.54: AMTECH ANTENNAS

|                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| AA3100 Yagi Antenna - 915 MHz             | AA3110 Parapanel Antenna (SCALA) - 915 MHz |
| AA3140 PCB Log Periodic Antenna - 915 MHz | AA3152 Universal Toll Antenna - 915 MHz    |

### 18.55: AMTECH PROGRAMMER MODULES

AP4110 Programmer Module

### 18.14.1: AMTECH TOOLS

|                          |                            |
|--------------------------|----------------------------|
| AS8003 Plug Removal Tool | AS8010 Plug Insertion Tool |
|--------------------------|----------------------------|

**18.56: EGO**

|                            |                 |
|----------------------------|-----------------|
| eGo Windshield Sticker Tag | eGo 2110 Reader |
| eGo 2101 Reader            | eGo 2210 Reader |
| eGo 2201 Reader            |                 |

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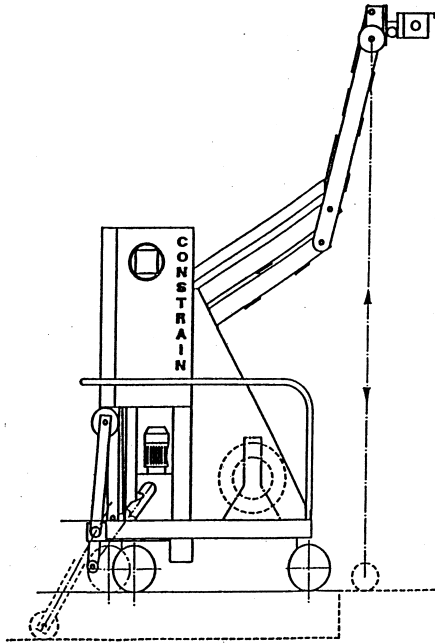
**18.14.1: FLEET SOFTWARE**

SmartWatch Access

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## 18.6 Drehtainer/Container Straightening Machine

### Constrain Machine



Container straightening made efficient, economical and simple. The Constrain Machine reduces labor costs by reducing the amount of labor required to fix a container.

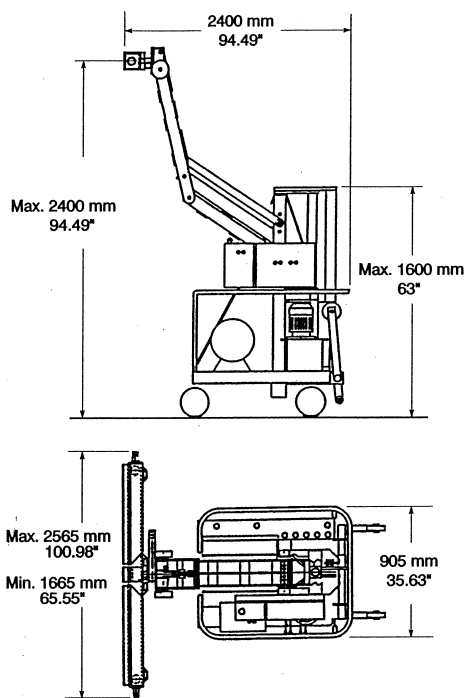
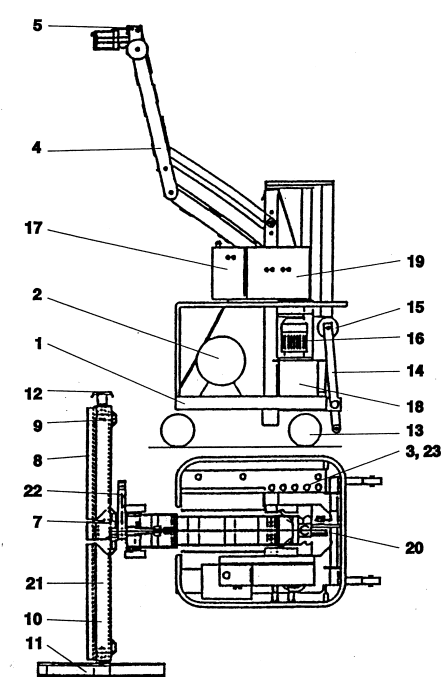
**Components that can be straightened:**

- All roof, side, front and door panels
- All top, bottom side, front end and rear end rails
- Corner posts
- J-bars
- Crossmembers

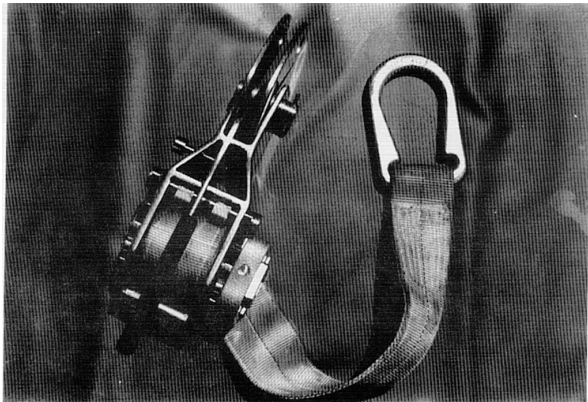
The Constrain Machine can push horizontally, perpendicularly, vertically, and diagonally.

There is minimal hammering necessary, improving the quality of repair. Damaged areas can now be easily made square and true. No additional damage to the container coating should occur. The noise level involved in repair is greatly reduced, and worker safety is greatly increased. The whole operation can be simplified to one man.

Electro hydraulic machine  
Voltage: 220V/AC, 50 cycles (other voltages on request)  
Motor: 1.1 kW  
Hydraulic pressures: 320/115 bar  
Maximum push force on hydraulic cylinders: 4 metric tons

| Constrain Machine                                                                                      |  |                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions and Weights                                                                                 |  | Parts                                                                                                                                             |                                                                                                                                                                                                                                                                                                                      |
|                      |  |                                                                |                                                                                                                                                                                                                                                                                                                      |
| <b>Weight</b><br>Machine without accessories: 480 kg<br>Machine with accessories and packaging: 665 kg |  | 1. Chassis<br>2. Cable Drum<br>3. Extension Rods<br>4. Beam Supports<br>5. Beam Support, "Head"<br>6. (Lamp)<br>7. Pressure Beam<br>8. Guide Rail | 9. Hook<br>10. Pressure Arms<br>11. Support Profile<br>12. Straight Profile<br>13. Wheels<br>14. Swivel Arms<br>15. Casters<br>16. Electric Motor<br>17. Electric Control<br>18. Pump Unit<br>19. Hydraulic Control<br>20. Free-life Cylinder<br>21. Beam Cylinder<br>22. Turning Cylinder<br>23. Hand-held Cylinder |

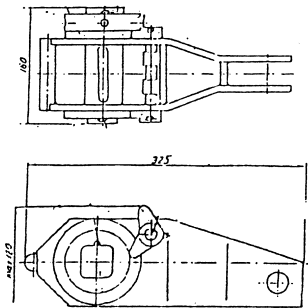
18.7 20-Ton Tie Down Assembly



Ratchet

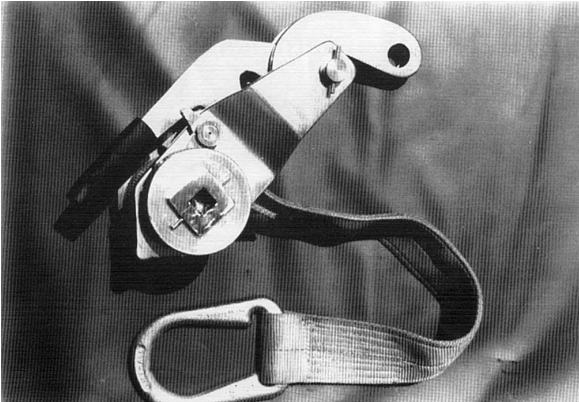
Standard ratchet consists of:

1. Yoke-type body
2. 1 7/8" diameter slotted tensioning spindle with a 1 7/8" square on one end and a 1 1/2" square on the opposite end. (Option: A 3/4" square hole cut into the 1 7/8" square end for use with a ratchet or impact tool.)
3. Two symmetrical locking gears and spring-loaded cogs
4. Deck-fitting attachment, fitted into a one-inch shaft at small end of yoke
5. Handwheel is knurled alloy steel construction with four 1/2" mandral holes. (Optional 72S Aluminum or special wrench for 1 7/8" square end)
6. Alloy steel construction, with a 20-ton certified breaking strength.



Optional stainless steel construction.

Deck fittings can be specified by the individual end user.



Webbing Assembly

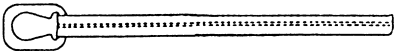
**Sling Webbing:**

- 3" wide 100% nylon, two-ply weave with stuffer construction
- 9800 lb/inch of width breaking strength
- Red core yarn warning system
- Elasticity - the stretch characteristics depend upon the type yarn and the web finish
- Date stamped for service life

Approximate stretch at rated sling capacity is:

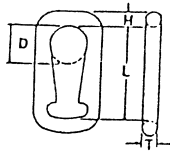
- Nylon - Treated - 10%
- Nylon - Untreated - 6%
- Polyester - Treated - 7%
- Polyester - Untreated - 3%

\*Option: Tuff-Edge webbing - polymer coated yarns are woven into the edges of the Tuff-Edge. Independent lab tests prove it to be 67% more resistant to edge abrasion and 30% more resistant to edge cutting than standard sling webbing. Laboratory results may differ from individual application circumstances.



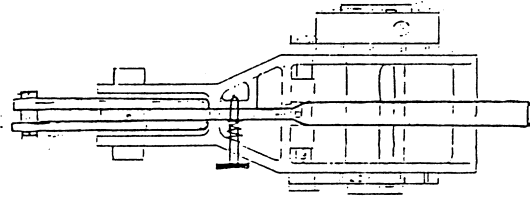
**Unilink:**

- Forged, high carbon steel with zinc dichromate plated finish to resist corrosion
- May be rewetbed with recertification to reduce replacement costs
- Larger hook opening than triangle or choker fittings
- Smooth rounded profile



| Web Width | Code | Dimension in Inches |   |   |       | Weight in lbs. | Capacity Rating (lbs.) |
|-----------|------|---------------------|---|---|-------|----------------|------------------------|
|           |      | L                   | D | H | Thick |                |                        |
| 3"        | SU3  | 5 1/4               | 3 | 1 | 5/8   | 3.2            | 10,800                 |

Ratchet can also be supplied with a quick-release handle, consisting of an over-center lock in conjunction with an "L" type connecting link and a spring-loaded 3/8" locking pin to hold the center lock in the loaded position.


**Unilink Attachments:**

Pear Link:

- Chain Diameter (inches): 1/2
- Working Load Limit (lbs.): 12,000
- Weight/Pieces (7.5)



Short Link Chain: 1/2" grade 80 alloy steel chain, cut at 3 ft. lengths; attached to pear link



Note: Unilink can be custom outfitted to meet individual customer requirements (i.e., chain, chain fittings, hooks, shackles, etc.)

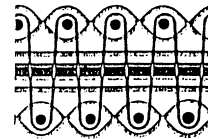
Alterations, adjustments and changes that can be made to meet individual customer needs without compromising the integrity of the design are as follows.

1. Choice of spring device:
  - Coil spring size, number of winds and materials
  - Plunger spring - stainless nose or Delrin
2. Handwheel can be made of 72S aluminum or stainless with knurled shape
3. Deck fitting - fitted into 1" shaft bolt - can be exchanged to suit deck requirements
4. 1" hole can accommodate shaft or bolt with 20-ton shear or better
5. Tiedown assembly can be assembled for left or right tightening
6. Tiedown assembly is field repairable
7. All 3/16" roll pins can be stainless steel, carbon steel or cadmium plated
8. Holes in handwheel can be made to fit any mandril and can be made with 4 or 6 positions.
9. Webbing:
  - Webbing types are interchangeable
  - Webbing end fittings can be made to customer needs and specifications

**Sling Webbing**

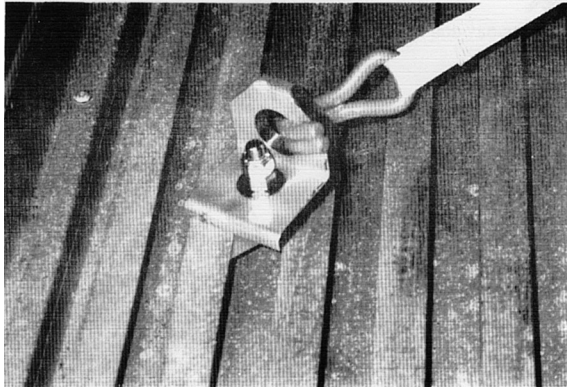
- Transverse pick yarns inter-relate with binder yarns
- Woven surface yarns cover each side and carry a portion of the load
- Strip of longitudinal core yarns bears majority of load
- Binder yarns secure the surface yarns to web core yarns
- Red core warning yarns

Sling webbing, as graphically demonstrated, has its surface yarns connected from side to side to not only protect the core yarns but to position all surface and tensile yarns to work together to support the load. Wear or damage to face yarns does have an immediate strength loss effect on the sling webbing. This is why sling webbing has red core yarns to visually reveal damage and act as a basis for sling rejection.

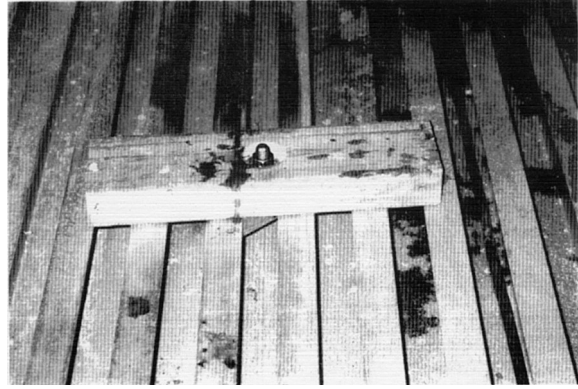


## 18.8 Reefer Lashing Points

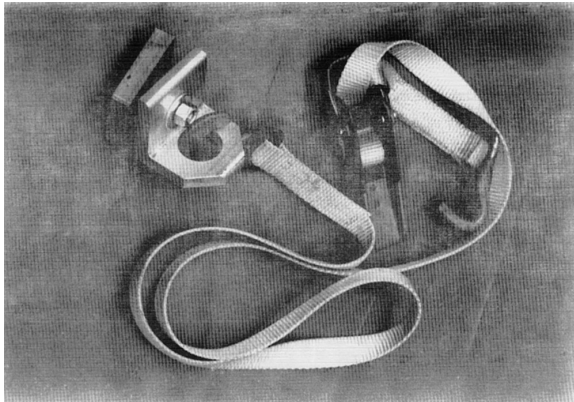
### Reefer Lashing Point Application



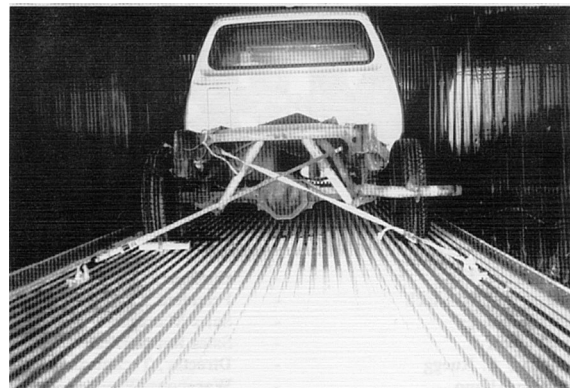
Lashing Point

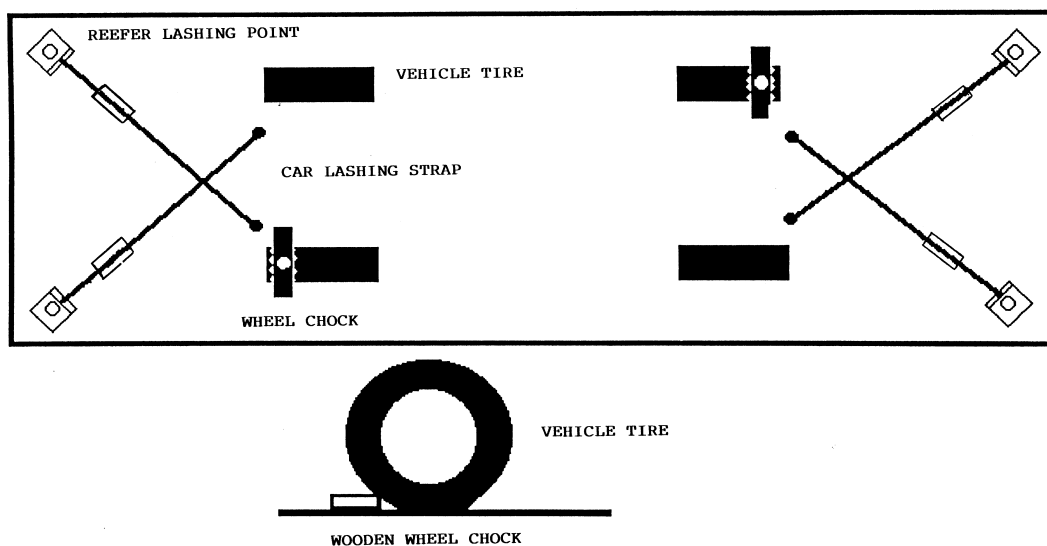


Wheel Chock



Car Lashing Straps





40-45 Foot Reefer