#### CITY OF FLINT

#### **DEPARTMENT OF PURCHASES AND SUPPLIES**

City Hall, 1101 S. Saginaw Street, M203 – Flint, Michigan 48502 (810) 766-7340 www.cityofflint.com



#### **REQUEST FOR PROPOSALS**

#### **OWNER/RETURN TO:**

THE CITY OF FLINT FINANCE DEPARTMENT – DIVISION OF PURCHASES AND SUPPLIES 1101 S. SAGINAW ST., ROOM 203, 2nd FLOOR FLINT, MI 48502

PROPOSAL NO: 20000553 (REBID)

#### **SCOPE OF WORK:**

The City of Flint, Finance Department of Purchases & Supplies, is soliciting sealed bids for providing:

#### McKinley Park and Farnumwood Park Playground Installation Services

Per the attached additional requirements.

If your firm is interested in providing the requested services, please submit one (1) original and two (2) printed copies of your detailed bid to the City of Flint, Finance Department of Purchases and Supplies, 1101 S. Saginaw St., Room 203, Flint, MI, 48502, by February 19, 2020 at 1:00 PM (EST). Please note: all detailed bids received after 1:00 PM (EST) will not be considered. Bids must be in a sealed envelope clearly identifying the proposal and number. Faxed bids are not accepted.

All additional proposal documents, requirements, addendums, specifications, and plans/drawings (if utilized) are available on the Purchasing page of the City of Flint's web site at <a href="https://www.cityofflint.com/finance/purchasing/bids-2/">https://www.cityofflint.com/finance/purchasing/bids-2/</a> under "open bids" and the specific bid or proposal number assigned to this notice.

New vendors should complete and submit a vendor application, IRS W-9 Form, and Vendor ACH Payment Authorization Form with the City of Flint. Links to these forms are available at <a href="https://www.cityofflint.com/finance/accounts-payable-department/">https://www.cityofflint.com/finance/accounts-payable-department/</a>

Results may be viewed next business day online EXCEPT when a bid is under review. The bidders/public will only see the names of the bidders that submitted a bid, not their cost. This will protect the bidders cost in case there is a re-bid. <a href="https://www.cityofflint.com/finance/purchasing/results/">https://www.cityofflint.com/finance/purchasing/results/</a> under "bid results".

Any questions regarding the proposal process may be directed to Joyce McClane in writing by no later than **February 11, 2020** to <a href="mailto:jmcclane@cityofflint.com">jmcclane@cityofflint.com</a>.

Sincerely,

Joyne & McChane

Joyce A. McClane, CPPB Purchasing Manager

The City of Flint may hold proposals for a period of 120 days from opening, for the purpose of reviewing the results and investigating the qualifications of proposal prior to making an award. The City of Flint reserves the right to waive any irregularities and accept or reject any or all bids submitted. Vendors located within the corporate city limits of Flint, Michigan may be given a seven percent (7%) competitive price advantage. Additionally, if the lowest responsible vendor is not located within the limits of the City of Flint, but is located within the county of Genesee and vendor does not exceed the bid of the lowest non-local bidder by more than three and one-half percent (3 ½), the County vendor may have a competitive advantage.

The City reserves the right to waive any irregularities and accept or reject any or all proposals submitted. The City is an equal opportunity employer.

The successful bidder must comply with all requirements and pay prevailing wages and fringe benefits on this project per the City's Resolution R-12 adopted 4/8/91. Pursuant to the requirements of 1976 P.A. 453 (Michigan Civil Rights Act) and 1976 P.A. 220 (Michigan Handicapped Rights Act), the local unit and its agent agree not to discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, marital status or because of a handicap that is unrelated to the person's ability to perform the duties of nondiscrimination provision identical to this provision and binding upon any and all contractors and subcontractors. A breach of this covenant shall be regarded as a material breach of this contract.

The bidder acknowledges that by signing this document that he/she is duly authorized to make said offer on behalf of the company he/she represents and that said bid is genuine and not sham or collusive and not made in the interests or on behalf of any person not therein named, and that he/she and said bidder have not directly induced or solicited any other person(s) or corporation to refrain from responding to this solicitation and that he/she and said bidder have not in any manner sought by collusion to secure to himself/herself and said bidder any advantage over any other bidder.

#### **INSTRUCTIONS TO VENDORS**

- 1) PRE-BID INFORMATION AND QUESTIONS: Each bid that is timely received will be evaluated on its merit and completeness of all requested information. In preparing bids, Bidders are advised to rely only upon the contents of this Request for Proposals (RFP) and accompanying documents and any written clarifications or addenda issued by the City of Flint. If a Bidder finds a discrepancy, error or omission in the RFP package, or requires any written addendum thereto, the Bidder is requested to notify the Purchasing contact noted on the cover of this RFP, so that written clarification may be sent to all prospective Bidders. THE CITY OF FLINT IS NOT RESPONSIBLE FOR ANY ORAL INSTRUCTIONS. All questions must be submitted in writing to the Finance Department of Purchases and Supplies before any pre-bid deadline (if specified) or at least one (1) week prior to the proposal opening date indicated on the front of this document.
- 2) **RFP MODIFICATIONS:** The City of Flint has the right to correct, modify or cancel the RFP, in whole or in part, or to reject any Bid, in whole or in part, within the discretion of the City of Flint, or their designee. If any such changes are made, all known recipients of the RFP will be sent a copy of such changes. If any changes are made to this RFP document by any party other than the City of Flint, the original document in the City of Flint's files takes precedence.

#### 3) **PROPOSAL SUBMISSION:**

- a) The Bidder must include the following items, or the proposal may be deemed non-responsive:
  - i) All forms contained in this RFP, fully completed.
- b) Bids must be submitted to the Finance Department of Purchases and Supplies, City of Flint, 1101 S. Saginaw Street, Room 203, Flint, Michigan 48502 by the date and time indicated as the deadline. The Purchasing Department time stamp will determine the official receipt time. It is each Bidder's responsibility to insure that their proposal is time stamped by the Purchasing Department by the deadline. This responsibility rests entirely with the Bidder, regardless of delays resulting from postal handling or for any other reasons. Proposals will be accepted at any time during the normal course of business only, said hours being 8:00 a.m. to 5:00 p.m. local time, Monday through Friday, legal holidays as exception.
- c) Bids must be enclosed in a sealed, non-transparent envelope, box or package, and clearly marked on the outside with the following: RFP Title, RFP Number, Deadline and Bidder's name.
- d) Submission of a bid establishes a conclusive presumption that the Bidder is thoroughly familiar with the Request for Proposals (RFP), and that the Contractor understands and agrees to abide by each and all of the stipulations and requirements contained therein.
- e) All prices and notations must be typed or printed in ink. No erasures are permitted. Mistakes may be crossed out and corrections must be initialed in ink by the person(s) signing the bid.
- f) Proposals sent by email, facsimile, or other electronic means will not be considered unless specifically authorized in this RFP.
- g) All costs incurred in the preparation and presentation of the bid are the Bidder's sole responsibility; no pre-bid costs will be reimbursed to any Bidder. All documentation submitted with the proposal will become the property of the City of Flint.
- h) Proposals must be held firm for a minimum of 120 days.
- 4) **EXCEPTIONS:** Bidder shall clearly identify any proposed deviations from the Terms or Scope in the Request for Proposals. Each exception must be clearly defined and referenced to the proper paragraph in this RFP.

The exception shall include, at a minimum, the proposed substitute language and opinion as to why the suggested substitution will provide equivalent or better service and performance. If no exceptions are noted in the bid, the City of Flint will assume complete conformance with this specification and the successful Bidder will be required to perform accordingly. Bids not meeting all requirements may be rejected.

- 5) **DUPLICATE BIDS:** No more than one (1) bid from any Bidder including its subsidiaries, affiliated companies and franchises will be considered by the City of Flint. In the event multiple proposals are submitted in violation of this provision, the City will have the right to determine which bid will be considered or, at its sole option, reject all such multiple proposals.
- 6) **WITHDRAWAL:** Bids may only be withdrawn by written notice prior to the date and time set for the opening of bids. No bid may be withdrawn after the deadline for submission.
- 7) **REJECTION/GOOD STANDING:** The City of Flint reserves the right to reject any or all bids, or to accept or reject any bid in part, and to waive any minor informality or irregularity in bids received if it is determined by the City of Flint, or their designee, that the best interest of the City will be served by doing so. No bid will be considered from any person, firm or corporation in arrears or in default to the City on any contract, debt, taxes or other obligation, or if the Bidder is debarred by the City of Flint from consideration for a contract award pursuant to Section 18-21.5 (d) of Article IV of the "Purchasing Ordinance of the City of Flint".
- 8) **PROCUREMENT POLICY:** Procurement for the City of Flint will be handled in a manner providing fair opportunity to all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City. The City of Flint and their officials have the vested authority to execute a contract, subject to City Council and Mayoral approval where required.
- 9) **BID SIGNATURES:** Bids must be signed by an authorized official of the Bidder Each signature represents binding commitment upon the Bidder to provide the goods and/or services offered to the City of Flint if the Bidder is determined to be the lowest Responsive and Responsible Bidder.
- 10) **CONTRACT AWARD/SPLIT AWARDS:** The City of Flint reserves the right to award by item, group of items, or total bid. The Bidder to whom the award is made will be notified at the earliest possible date. Tentative acceptance of the bid, intent to recommend award of a contract and actual award of the contract will be provided by written notice sent to the Bidder at the address designated in the bid if a separate Agreement is required to be executed. After a final award of the Agreement by the City of Flint, the Contractor/Vendor must execute and perform said Agreement. All proposals must be firm for at least 120 days from the due date of the proposal. If, for any reason, a contract is not executed with the selected Bidder within 14 days after notice of recommendation for award, then the City may recommend the next lowest responsive and responsible Bidder.
- 11) **NO RFP RESPONSE:** Bidders who receive this RFP but who do not submit a bid should return this RFP package stating "No Bid" and are encouraged to list the reason(s) for not responding. Failure to return this form may result in removal of the Bidder's name from all future lists.
- 12) **FREEDOM OF INFORMATION ACT (FOIA) REQUIREMENTS:** Bids are subject to public disclosure after the deadline for submission in accordance with state law.

- 13) **ARBITRATION:** Contractor/Vendor agrees to submit to arbitration all claims, counterclaims, disputes and other matters in question arising out of or relating to this agreement or the breach thereof. The Contractor's/Vendor's agreement to arbitrate shall be specifically enforceable under the prevailing law of any court having jurisdiction to hear such matters. Contractor's/Vendor's obligation to submit to arbitration shall be subject to the following provisions:
  - a) Notice of demand for arbitration must be submitted to the City in writing within a reasonable time after the claim, dispute or other matter in question has arisen. A reasonable time is hereby determined to be fourteen (14) days from the date the party demanding the arbitration knows or should have known the facts giving rise to their claim, dispute or question. In no event may the demand for arbitration be made after the time when institution of legal or equitable proceedings based on such claim dispute or other matters in question would be barred by the applicable statute of limitation.
  - b) Within fourteen (14) days from the date that demand for arbitration is received by the City, each party shall submit to the other the name of one person to serve as an arbitrator. The two arbitrators together shall then select a third person, the three together shall then serve as a panel in all proceedings. Any decision concurred in by a majority of the three shall be a final binding decision.
  - c) The final decision rendered by said arbitrators shall be binding and conclusive and shall be subject to specific enforcement by a court of competent jurisdiction.
  - d) The costs of the arbitration shall be split and borne equally between the parties and such costs are not subject to shifting by the arbitrator.
  - e) These provisions shall survive the termination or expiration of any agreement entered into as a result of this request.
- 14) **BID HOLD:** The City of Flint may hold bids for a period of one hundred twenty (120) days from opening, for the purpose of reviewing the results and investigating the qualifications of bidders prior to making an award.
- 15) **NONCOMPLIANCE:** Failure to deliver in accordance with specifications will be cause for the City of Flint and they may cancel the contract or any part thereof and purchase on the open market, charging any additional cost to the Contractor/Vendor.
- 16) **DISCLAIMER OF CONTRACTUAL RELATIONSHIP:** Nothing contained in these documents shall create any contractual relationship between the City and any Subcontractor or Sub-subcontractor.
- 17) **ERRORS AND OMISSIONS:** Bidder is not permitted to take advantage of any obvious errors or omissions in specifications.
- 18) **INTERPRETATION:** In the event that any provision contained herein shall be determined by a court of competent jurisdiction or an appropriate administrative tribunal to be contrary to the provision of law or to be unenforceable for any reason, then, to the extent necessary and possible to render the remainder of this Agreement enforceable, such provision may be modified or severed by such court or administrative tribunal having jurisdiction over this Agreement and the interpretation thereof, or the parties hereto, so as to, as nearly as possible, carry out the intention of the parties hereto, considering the purpose of the entire Agreement in relation to such provision.

- 19) LAWS AND ORDINANCES: The Bidder shall obey and abide by all of the laws, rules and regulations of the Federal Government, State of Michigan, Genesee County and the City of Flint, applicable to the performance of this Agreement, including, but not limited to, labor laws, and laws regulating or applying to public improvement, local government, and its operational requirements.
- 20) **LOCAL PREFERENCE:** Contractors/bidders located within the corporate city limits of Flint, Michigan may be given a seven percent (7%) competitive price advantage. Additionally, if the lowest responsible bidder is not located within the limits of the City of Flint, but is located within the County of Genesee, and said bidder does not exceed the bid of the lowest non-local bidder by more than three and one-half percent (3-1/2%), then said lowest Genesee County bidder may be determined to be the lowest responsible bidder, and make the award to such Genesee County bidder accordingly, subject to the approval of the City Council. If the lowest non-local bidder does not exceed that of any Proposers/bidders by (7%) inside the City of Flint or (3-1/2%) inside the County of Genesee, then the Purchasing Director shall be allowed to request that the lowest local vendor match the price offered by the lowest non-local vendor.
- 21) MATERIAL WORKMANSHIP AND STANDARDS OF PERFORMANCE: The Bidder agrees to exercise independent judgment and to complete performance under this Agreement in accordance with sound professional practices. In entering into this Agreement, the City is relying upon the professional reputation, experience, certification and ability of the Bidder by her/him/themselves or by others employed by her/him/them and working under their direction and control. The continued effectiveness of this Agreement during its term or any renewal term shall be contingent, in part, upon the Bidder maintaining her/his/their operating qualifications in accordance with the requirements of federal, state and local laws. All materials furnished must be new, of latest model and standard first grade quality, or best workmanship and design, unless otherwise expressly specified. Bidder, if required, must furnish satisfactory evidence of quality materials; offers of experimental or unproven equipment may be disregarded.
- 22) **MODIFICATIONS/CHANGES:** Any modification to this agreement must be in writing and signed by the authorized employee, officer, board or council representative authorized to make such modifications pursuant to the State law and local ordinances.
- 23) **NON-COLLUSION:** The Bidder acknowledges that by signing this document that she/he/they is/are duly authorized to make said offer on behalf of the company she/he/they represent(s) and that said bid is genuine and not sham or collusive and not made in the interests or on behalf of any person not therein named, and that she/he/they and said bidder have not directly induced or solicited any other person(s) or corporation to refrain from responding to this solicitation and that she/he/they and said bidder have not in any manner sought by collusion to secure to themselves and said bidder any advantage over any other bidder.
- 24) **NON-DISCRIMINATION:** Pursuant to the requirements of 1976 P.A. 453 (Michigan Civil Rights Act) and 1976 P.A. 220 (Michigan Handicapped Rights Act), the local unit and its agent agree not to discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, marital status or because of a handicap that is unrelated to the person's ability to perform the duties of nondiscrimination provision identical to this provision and binding upon any and all contractors and subcontractors. A breach of this covenant shall be regarded as a material breach of this contract.
- 25) **SUBCONTRACTING:** No subcontract work shall be started prior to the written approval of the subcontractor by the City. The City reserves the right to accept or reject any subcontractor.

- 26) **UNION COMPLIANCE:** Bidder agrees to comply with all regulations and requirements of any national or local union(s) that may have jurisdiction over any of the materials, facilities, services or personnel to be furnished by the City.
- 27) **WAIVER:** Failure of the City to insist upon strict compliance with any of the terms, covenants or conditions of this Agreement shall not be deemed a waiver of that term, covenant or condition or of any other term, covenant or condition. Any waiver or relinquishment of any right or power hereunder at any one or more times shall not be deemed a waiver or relinquishment of that right or power at any other time.
- 28) **CITY INCOME TAX WITHHOLDING:** Contractor and any subcontractor engaged in this contract shall withhold from each payment to his employees the City income tax on all of their compensation subject to tax, after giving effect to exemptions, as follows:
  - a) Residents of the City:At a rate equal to 1% of all compensation paid to the employee who is a resident of the City of Flint.
  - Non-residents:
     At a rate equal to 1/2% of the compensation paid to the employee for work done or services performed in the City of Flint.

These taxes shall be held in trust and paid over to the City of Flint in accordance with City ordinances and State law. Any failure to do so shall constitute a substantial and material breach of this contract.

- 29) **CONTRACT DOCUMENTS:** The invitation for proposal, instructions to proposal, proposal, affidavit, addenda (if any), statement of Bidder's qualifications (when required), general conditions, special conditions, performance bond, labor and material payment bond, insurance certificates, technical specifications, and drawings, together with this agreement, form the contract, and they are as fully a part of the contract as if attached hereto or repeated herein.
- 30) **DISCLAIMER OF CONTRACTUAL RELATIONSHIP WITH SUBCONTRACTORS:** Nothing contained in the Contract Documents shall create any contractual relationship between the City and any Subcontractor or Sub-subcontractor.
- 31) **EFFECTIVE DATE:** Any agreement between the City and the Bidder shall be effective upon the date that it is executed by all parties hereto.
- 32) **FORCE MAJURE:** Neither party shall be responsible for damages or delays caused by Force Majeure nor other events beyond the control of the other party and which could not reasonably have anticipated the control of the other party and which could not reasonably have been anticipated or prevented. For purposes of this Agreement, Force Majeure includes, but is not limited to, adverse weather conditions, floods, epidemics, war, riot, strikes, lockouts, and other industrial disturbances; unknown site conditions, accidents, sabotage, fire, and acts of God. Should Force Majeure occur, the parties shall mutually agree on the terms and conditions upon which the services may continue.

- 33) **INDEMNIFICATION:** To the fullest extent permitted by law, Bidder agrees to defend, pay on behalf of, indemnify, and hold harmless the City of Flint, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Flint, including the Project Manager, against any and all claims, demands, suits, or losses, including all costs connected therewith, and for any damages which may be asserted, claimed, or recovered against or from the City of Flint, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Flint, by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof, which may arise as a result of Bidder's acts, omissions, faults, and negligence or that of any of his employees, agents, and representatives in connection with the performance of this contract. Should the Bidder fail to indemnify the City in the above-mentioned circumstances, the City may exercise its option to deduct the cost that it incurs from the contract price forthwith. *These provisions shall survive the termination or expiration of any agreement entered into as a result of this request*.
- 34) **INDEPENDENT CONTRACTOR:** No provision of this contract shall be construed as creating an employer-employee relationship. It is hereby expressly understood and agreed that Bidder is an "independent contractor" as that phrase has been defined and interpreted by the courts of the State of Michigan and, as such, Bidder is not entitled to any benefits not otherwise specified herein.
- 35) **NO THIRD-PARTY BENEFICIARY:** No contractor, subcontractor, mechanic, material man, laborer, vendor, or other person dealing with the principal Contractor shall be, nor shall any of them be deemed to be, third-party beneficiaries of this contract, but each such person shall be deemed to have agreed (a) that they shall look to the principal Contractor as their sole source of recovery if not paid, and (b) except as otherwise agreed to by the principal Contractor and any such person in writing, they may not enter any claim or bring any such action against the City under any circumstances. Except as provided by law, or as otherwise agreed to in writing between the City and such person, each such person shall be deemed to have waived in writing all rights to seek redress from the City under any circumstances whatsoever.
- 36) **NON-ASSIGNABILITY:** Contractor shall not assign or transfer any interest in this contract without the prior written consent of the City provided, however, that claims for money due or to become due to Contractor from the City under this contract may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the City.
- 37) **NON-DISCLOSURE/CONFIDENTIALITY:** Contractor agrees that the documents identified herein as the contract documents are confidential information intended for the sole use of the City and that Contractor will not disclose any such information, or in any other way make such documents public, without the express written approval of the City or the order of the court of appropriate jurisdiction or as required by the laws of the State of Michigan.
- 38) **RECORDS PROPERTY OF CITY:** All documents, information, reports and the like prepared or generated by Contractor as a result of this contract shall become the sole property of the City of Flint.
- 39) **SEVERABILITY:** In the event that any provision contained herein shall be determined by a court or administrative tribunal to be contrary to a provision of state or federal law or to be unenforceable for any reason, then, to the extent necessary and possible to render the remainder of this Agreement enforceable, such provision may be modified or severed by such court or administrative tribunal so as to, as nearly as possible, carry out the intention of the parties hereto, considering the purpose of the entire Agreement in relation to such provision. The invalidation of one or more terms of this contract shall not affect the validity of the remaining terms.

- 40) **TERMINATION:** This contract may be terminated by either party hereto by submitting a notice of termination to the other party. Such notice shall be in writing and shall be effective 30 days from the date it is submitted unless otherwise agreed to by the parties hereto. Contractor, upon receiving such notice and prorated payment upon termination of this contract shall give to the City all pertinent records, data, and information created up to the date of termination to which the City, under the terms of this contract, is entitled.
- 41) **TIME PERFORMANCE**: Contractor's services shall commence immediately upon receipt of the notice to proceed and shall be carried out forthwith and without reasonable delay.
- 42) **EVALUATION OF PROPOSAL:** In the City's evaluation of proposals, at minimum: cost, serviceability, financial stability, and all requirements set forth in this document shall be considered as selection and award criteria unless otherwise specified.
- 43) **PREVAILING WAGE:** All work for this project must meet Davis-Bacon Act requirements and full prevailing wage. Information on Davis-Bacon reporting and requirements, including payroll reporting, can be found at: <a href="https://www.dol.gov/whd/govcontracts/dbra.htm">https://www.dol.gov/whd/govcontracts/dbra.htm</a>

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## Proposal No. 20000553 – PLAYGROUND INSTALLATION SERVICES <u>SCOPE OF SERVICES</u>

#### **Project Description**

The City of Flint invites sealed proposals from certified playground safety inspectors (CPSI) to install playground equipment in McKinley Park and Farnumwood Park. The playground equipment and installation instructions will be provided by the City to the selected Contractor. The Contractor will retrieve the playground equipment and transport the pieces to the parks. The storage location of the playground equipment is outside at the Flint City Water Plant, located at 4500 N Dort Hwy, Flint, MI 48505.

This project is paid by Community Development Block Grant (CDBG) from U.S. Dept. of Housing and Urban Development subcontracted to the Planning & Zoning Division for Park Facility Improvements. The contract for the grant will expire June 30, 2020.

#### Scope of Work

The successfully awarded Contractor shall perform 1) a preliminary meeting with the City at the sites to finalize the playground locations, 2) retrieval of playground equipment at the storage locations, 3) delivery to the sites, and 4) installation of the respective playground equipment features at McKinley Park and Farnumwood Park.

#### **Project Location**

McKinley Park: 249 Peer Avenue, Flint, MI 48503

Farnumwood Park: 800 McKinley Street, Flint, Michigan 48507

#### Work to be done includes:

#### Preliminary Site Walkthrough

Contractor will meet with the City and/or Genesee County staff representative(s) at the sites to discuss, measure, and select final playground locations.

#### Retrieval

Contractor will be required to retrieve the provided playground equipment from its current storage location at the Flint City Water Plant, 4500 N Dort Hwy, Flint, MI 48505. The Contractor will be expected to collaborate with the City of Flint Planning & Development Staff to arrange for access of the equipment at the storage location.

#### • Transportation

Contractor is responsible for safely and carefully transporting the playground equipment pieces to the parks.

#### Installation

Selected Contractor must provide CPSI certification documentation. Documentation of this certification is required at the time of the proposal submission. The schematics and specifications for the playgrounds are attached as Appendix items. Removal of the playground equipment from its storage location must be complete by Friday, March 6, 2020. Installation of both playgrounds must be complete by the grant deadline of Tuesday, June 30, 2020.

## Proposal No. 20000553 – PLAYGROUND INSTALLATION SERVICES SCOPE OF SERVICES

#### Inspection

The City and/or Genesee County staff will inspect the playground to ensure completeness and safety of project after installation is complete. Contractor will be expected to remedy any deviation from the construction specifications at no additional costs to the City. Upon full inspection, the City will sign off on installation and accept invoices from the Contractor.

#### **Proposal Requirements**

Proposals should include a minimum of the following in their scope:

#### Project Timeline

Proposals shall include a detailed timeline to complete the requested service by Tuesday, June 30, 2020.

#### Experience

A brief history of the firm, including: when organized, size, and experience with similar playground equipment installation projects over the history of the firm. Proposals without documentation of the CPSI certification will be deemed incomplete and not considered.

#### Key Staff

Bidders shall identify their key staff person(s) proposed to perform the scope of services requested. Include as a minimum: A description of education, training, licenses or certifications and relevant experience shall be presented for each team member. If subcontractors or a joint venture agreement are proposed, their respective experiences shall also be included.

#### Budget

A detailed, time-task project budget that includes hourly rates per staff person, estimated time for assembly at the park, and a final, not-to-exceed, total for requested services.

#### **Selection Criteria**

The selection committee shall review and rate all the properly submitted proposals against the set of criteria in Appendix Attachment A. The lowest price of bid that reflects employee compensation at full prevailing wage, Contractor's responsiveness to RFP requirements, and a history of similar project experience will be of importance.

#### Completion

The playground equipment installation shall be satisfactorily completed by Tuesday, June 30, 2020.

#### **Submission Location**

City of Flint
C/O Joyce McClane
Finance Department – Division of Purchases and Supplies
1101 S. Saginaw Street, Room 203
Flint, MI 48502

Phone: (810) 766-7426 ext. 2902

If you have any question regarding this request, please contact: Joyce McClane, Purchasing Manager, email: <a href="mailto:jmcclane@cityofflint.com">jmcclane@cityofflint.com</a>, phone (810) 766-7426 ext. 2902.

## Proposal No. 20000553 – PLAYGROUND INSTALLATION SERVICES <u>SCOPE OF SERVICES</u>

Proposals should be clearly labeled: "McKinley Park and Farnumwood Park Playground Installation Services"

#### **Receipt and Handling of Proposals**

Sealed submissions will be opened at 1:00 PM (EST) on Wednesday, February 19, 2020 in the McKenzie Conference Room, 1101 S. Saginaw St. (2<sup>nd</sup> Floor), Flint, MI, 48502.

#### **Prevailing Wage**

#### All work for this project must meet Davis-Bacon Requirements and full prevailing wage.

Information on Davis-Bacon reporting and requirements, including payroll reporting, can be found at: <a href="mailto:portal.hud.gov/hudportal/documents/huddoc?id=DOC\_12590.pdf">portal.hud.gov/hudportal/documents/huddoc?id=DOC\_12590.pdf</a>. Information on current Davis-Bacon wages can be found here: <a href="http://www.wdol.gov/dba.aspx">http://www.wdol.gov/dba.aspx</a>

The most current prevailing wage and fringe benefit rates apply to the time of the work performed. It is the responsibility of the contractor to identify the prevailing wage and fringe benefits for the applicable job classifications.

#### Subcontracting

No subcontracting shall be started prior to the written approval of the subcontractor by the City. The City reserves the right to accept or reject any subcontractor.

#### Insurance

The contractor shall notify all insurance agents and companies retained by the contractor that these insurance requirements shall be included in any agreement between the contractor and the City of Flint.

#### **Notice to Proceed**

No work on this project shall commence without prior written notice to proceed from the City of Flint.

#### The City of Flint is an Equal Opportunity Employer

#### **Equal Employment Opportunity**

Contractor will be required to comply with all applicable federal and state equal opportunity affirmative action and minority representation laws. Minority and women owned business enterprises are encouraged to apply.

#### **Ineligible Bidders**

All bidders are required to certify that they are a certified playground safety inspector (CPSI) and that they will be present at the installation of the equipment at all times. Failure to provide these requested certifications will result in an incomplete proposal. Proposals deemed to be incomplete will not be considered.

#### **Notice of Incomplete Proposal**

Proposals deemed to be incomplete according to the Proposal Requirements and requested certification will not be considered. The contractor will not be allowed an additional opportunity to supplement its submittal.

#### **COVER SHEET**

#### BIDS DUE: February 19, 2020 at 1:00PM

Contact Information		
Bidder's (Company) Name:		
Address:		
City:	_ State:	
Phone:	Fax:	
Email Address:		
Signature Information:		
Representative:		
Title:		
Signature:		
Date:		

Please ensure that your bid proposal includes a brief history of the company, key staff to be involved in the project, and playground safety inspector certification as described in the proposal requirements section.

#### **Bid Form**

#### **BID SUMMARY**

Description of Services	Total Not-to-Be- Exceeded Price
*Contractor's price should include procuring installation	
machinery, any permits, inspection fees, tools, additional	
materials, and necessary labor to install the provided	
equipment.	

#### THIS PAGE MUST BE COMPLETED AND INCLUDED WITH SUBMITTAL:

The undersigned herby certifies, on behalf of the respondent named in this Certification (the "Respondent"), the information provided in this offer submitted to the City of Flint is accurate and complete, and that I am duly authorized to submit same. I hereby certify that the Respondent has reviewed all documents and requirements included in this offer and accept its terms and conditions.

Prices firm unless state receipt of order).	ed otherwise by bidder. Delive	ery can be made in (	) hours ARO (after
Payment Terms:	Delivery Destination:	Fed. ID#:	
COMPANY NAME (Res (Please Print)	spondent):		
ADDRESS:			
CITY/STATE/ZIP:			
PHONE:		FAX:	
EMAIL:			
PRINT NAME AND TIT	LE:		
(Authorized Represent	tative)		
SIGNED:			
(Authorized Represent	tative)		

Please submit one (1) original and one (1) copy. Please include a copy of your insurance.

New vendors are required to compete and submit an IRS W-9 Form and Vendor ACH Form with the City of Flint. Link is available at <a href="https://www.cityofflint.com/finance/accounts-payable-department/">https://www.cityofflint.com/finance/accounts-payable-department/</a>

#### **NOTICE TO PROCEED:**

No work on this project shall commence without prior written notice to proceed from the project manager.

<sup>\*</sup>Please provide itemized costs for each service/item in a detailed budget with your bid submission.

#### **APPENDIX**

Attachment A: Evaluation Form

Attachment B: McKinley Park Design Visuals
Attachment C: Farnumwood Park Design Visuals
Attachment D: McKinley park Installation Specifications
Attachment E: Farnumwood Park Installation Specifications

#### **Attachment A: Evaluation Form**

#### 1. Pricing proposal

Lowest bid amount	75 pts.
Each additional lowest bid amount will be reduced by 10 pts.	

#### 2. Overall experience in playground equipment installation

Sixteen (16) or more years of experience doing this type of project	
	25 pts.
Eleven (11) to fifteen (15) years of experience doing this type of project	
	15 pts.
Five (5) to ten (10) years of experience doing this type of project	
	10 pts.
One (1) to four (4) years of experience doing this type of project	
	5 pts.

Additional Notes:
 Total Score
Evaluator(s):

## CITY OF FLINT, MICHIGAN AFFIDAVIT AFFIDAVIT FOR INDIVIDUAL

STATE OF		
		S.S.
COUNTY OF		
collusive, and is not made in t directly or indirectly induced of	he interest of or on bor solicited any bidde person or corporation	being duly sworn above bid; and that said bid is genuine and not sham or ehalf of any person not therein named, and that he has not r to put in a sham bid; that he has not directly or indirectly on to refrain from bidding, and that he has not in any manner ge over other bidders.
Subscribed and sworn to befo	re me at	, in said County and State,
this	day of	, A.D. 20,
My Commission expires	,20	*Notary Public,County,

### FOR CORPORATION

STATE OF					
COUNTY OF		S.S	5.		
			being duly sworn,	deposes and says that	t she/he/they
is	of				
	(Official Title)	(N:	ame of Corporation	on)	_
the corporation authority of it interests of or indirectly indu	duly organized and doing but on making the within and for its Board of Directors; that say on behalf of any person not used or solicited any other put in any manner sought by contact.	regoing bid; that hid bid is genuine at herein named, a erson or corporat	he executed said be and not sham or c and that he has no tion to refrain fror	oid in behalf of said corollusive and is not mad t and said bidder has rond bidder has rond bidding; that he has	rporation by de in the not directly or not and said
Subscribed an	d sworn to before me at		, ii	n said County and State	e,
this	day (	of	, A.D. 2	.0,	
My Commission	on expires	*Notary Pu	ublic,	County,	

### FOR PARTNERSHIP

STATE OF		<u></u>	
COUNTY OF		S.S.	
partnership, making the aborthat said bid is genuine and not therein named, and that	ove bid; that he is du not sham of collusiv the has and said bic	m of Ily authorized to make said bid e, and is not made in the inte Ider has not directly or indirec	being duly sworn,, a co- d on behalf of said co-partnership; erest of or on behalf of any person ctly induced or solicited any other idder has not in any manner sought
•		er any advantage over other b	•
Subscribed and sworn to be	fore me at	, ir	said County and State,
this	day of	, A.D. 2	0,
My Commission expires	.20	*Notary Public,	County,

	FOR AGENT
STATE OF	
COUNTY OF	S.S.
	being duly sworn, deposes and says that he
that said bid is genuine and not sham or collusive not therein named, and that he has not and said bidder to put in a sham bid; that he has not and	etofore lawfully authorized, as the agent of said bidder, so to do; we and not made in the interests of or on behalf of any person d bidder has not directly or indirectly induced or solicited any I said bidder has not directly or indirectly induced or solicited any ding, and that he has not and said bidder has not in any manner aid bidder any advantage over other bidders.
Subscribed and sworn to before me at _	, in said County and State,
thisday of	, A.D. 20,
My Commission expires,20_	*Notary Public,County,

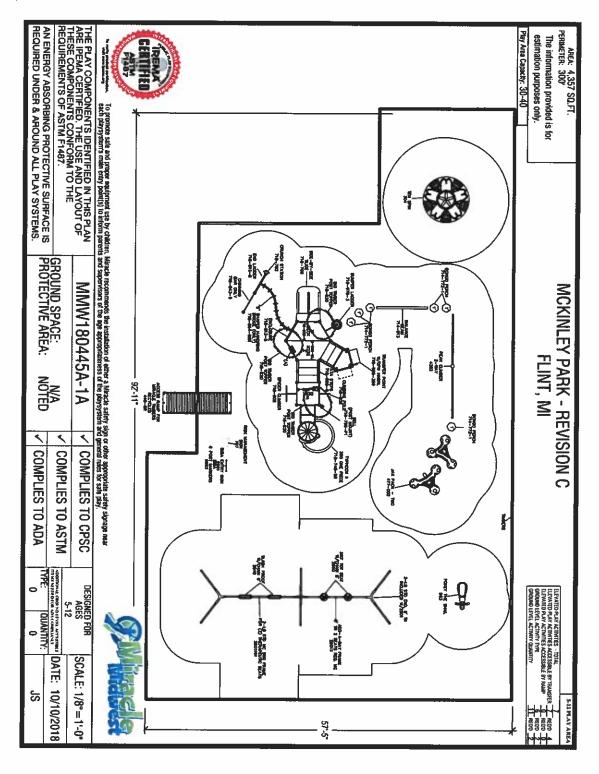
NOTE: If executed outside of the State of Michigan, certificate by the Clerk of the Court of Record, authenticating the Notary's Signature and authority should be attached.

Attachment B: McKinley Park Design Visuals

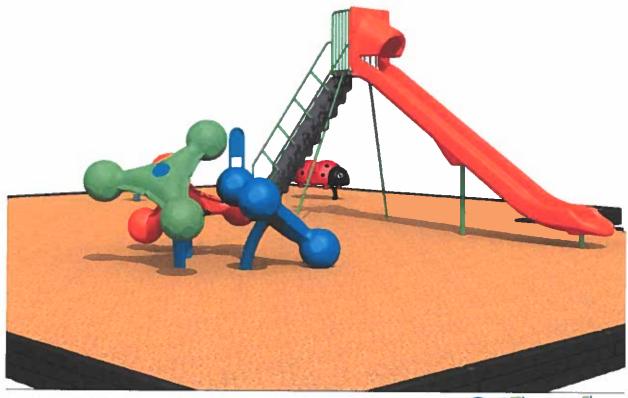


MCKINLEY PARK - REVISION C - View 1 FLINT, MI MMW180445A





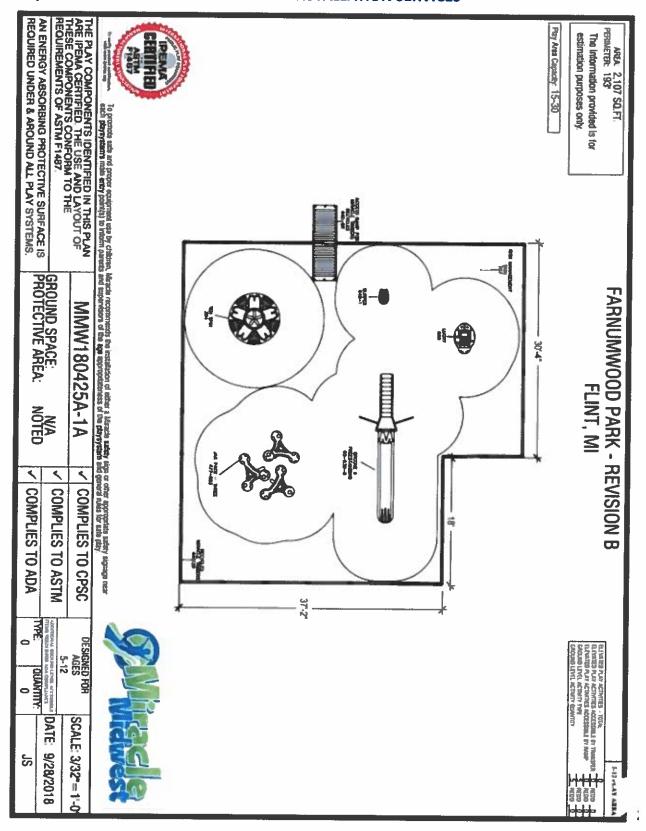
## Proposal No. 20000553 — PLAYGROUND INSTALLATION SERVICES Attachment C: Farnumwood Park Design Visuals



FARNUMWOOD PARK- REVISION B- VIEW 1 FLINT, MI MMW180425A







"General Decision Number: MI20190057 09/20/2019

Superseded General Decision Number: MI20180057

State: Michigan

Construction Type: Heavy

County: Genesee County in Michigan.

Heavy, Includes Water, Sewer Lines and Excavation (Excludes Hazardous Waste Removal; Coal, Oil, Gas, Duct and other similar Pipeline Construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor

requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/04/2019
1	02/08/2019
2	07/05/2019
3	08/09/2019
4	08/30/2019
5	09/20/2019

#### CARP0706-017 06/01/2019

	Rates	Fringes
CARPENTER, Includes Form Work	.\$ 27.21	21.54
ELEC0948-009 05/26/2019		
	Rates	Fringes
ELECTRICIAN	.\$ 38.31	23.06
ENGI0325-019 09/01/2018		

POWER EQUIPMENT OPERATORS: Underground Construction (Including Sewer)

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1	32.53	23.85
GROUP 2	27.80	23.85
GROUP 3	27.07	23.85
GROUP 4	26.50	23.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backhoe/ Excavator, Boring Machine, Bulldozer,

Crane, Grader/ Blade, Loader, Roller, Scraper, Trencher (over 8 ft. digging capacity)

GROUP 2: Trencher (8-ft digging capacity and smaller)

GROUP 3: Boom Truck (non-swinging, non- powered type boom)

GROUP 4: Broom/ Sweeper, Fork Truck, Tractor, Bobcat/ Skid

Steer /Skid Loader

ENGI0326-011 06/01/2018

#### EXCLUDES UNDERGROUND CONSTRUCTION

	1	Rates	Fringes
OPERATOR:	Power Equipment		
Group	1\$	38.68	23.85
Group	2\$	35.38	23.85
Group	3\$	32.73	23.85
Group	4\$	31.02	23.85
Group	5\$	31.02	23.85
Group	6\$	25.16	23.85

#### FOOTNOTES:

Crame operator with main boom and jib 300' or longer: \$1.50 per hour above the group 1 rate.

Crane operator with main boom and jib 400' or longer: \$3.00 per hour above the group 1 rate.

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

#### POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Crane operator with main boom and jib 400', 300', or 220' or longer.

GROUP 2: Crane operator with main boom and jib 140' or

longer, tower crane, gantry crane, whirley derrick

GROUP 3: Backhoe/Excavator; Boring Machine; Bulldozer; Crane;

Grader/Blade; Loader; Roller; Scraper; Tractor; Trencher

GROUP 4: Bobcat/Skid Loader; Broom/Sweeper; Fork Truck (over

20' lift)

GROUP 5: Boom truck (non-swinging)

GROUP 6: Fork Truck (20' lift and under for masonry work)

IRON0025-006 06/17/2018

Rates Fringes

IRONWORKER

 Reinforcing
 \$ 29.48
 27.74

 Structural
 \$ 35.52
 28.65

.

LAB00334-009 06/01/2019

**EXCLUDES OPEN CUT CONSTRUCTION** 

	Rates	Fringes
Landscape Laborer		
GROUP 1		7.10
GROUP 2	18.75	7.10

#### LANDSCAPE LABORER CLASSIFICATIONS

GROUP 1: Landscape specialist, including air, gas and diesel equipment operator, lawn sprinkler installer and skidsteer (or equivalent)

GROUP 2: Landscape laborer: small power tool operator, material mover, truck driver and lawn sprinkler installer tender

#### LAB00334-015 09/01/2018

#### SCOPE OF WORK:

OPEN CUT CONSTRUCTION: Excavation of earth and sewer, utilities, and improvements, including underground piping/conduit (including inspection, cleaning, restoration, and relining)

	Ra	tes	Fringes
LABORER			
(1)	Common or General\$ 2	1.94	12.85
(2)	Mason Tender-		
Cem	ent/Concrete\$ 2	2.08	12.85
(4)	Grade Checker\$ 2	2.25	12.85
(5)	Pipelayer 2	2.39	12.85
(7)	Landscape\$ 1	6.84	12.85

LAB01075-010 06/01/2019

#### **EXCLUDES OPEN CUT CONSTRUCTION**

Rates Fringes

LABORER

Common or General; Grade

Checker; Mason Tender -

Cement/Concrete; Pipelayer..\$ 23.00 13.66

.....

PAIN1052-003 06/01/2018

Rates Fringes

PAINTER

Brush & Roler......\$ 24.40 12.95 Spray......\$ 25.75 12.95

PLAS0016-016 04/01/2014

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
PLUM0370-006 06/01/2018		
	Rates	Fringes
PLUMBER/PIPEFITTER		
* TEAM0007-006 06/01/2019		
	Rates	Fringes
TRUCK DRIVER		
Dump Truck under 8 cu.		
yds.; Tractor Haul Truck	27.15	.50 + a+b
Dump Truck, 8 cu. yds. and		
over	27.25	.50 + a+b
Lowboy/Semi-Trailer Truck;	27.40	.50 + a+b
FOOTNOTE:		
a. \$446.70 per week.		
b. \$67.00 daily.		
SUMI2010-055 11/09/2010		
	Rates	Fringes
TRUCK DRIVER: Off the Road		
Truck\$	20.82	3.69
***************************************		
WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.		
=======================================		=======================================
Note: Executive Order (EO) 13706,	Establishin	g Paid Sick Leave

https://beta.sam.gov/wage-determination/MI20190057/5/document

for Federal Contractors applies to all contracts subject to the

Davis-Bacon Act for which the contract is awarded (and any

solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this

classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage

determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

Load: 18-2021

# Installation Manual

for your Miracle PlaySystem

## Please see (Online):

- READ ME FIRST
- CPSC Handbook
- Install 101 and Hardware Guide

## Inside

- Construction Drawings and Footing Layouts
- Installation Guides
- Parts List of every component in your Playsystem



CITY OF FLINT FLINT, MI Work Order: MR00116997 MCKINLEY PARK

DRAWING NUMBER: 116997

WORK ORDER NUMBER(S): 116997

DATE: 12/4/18 MIRACLE MIDWEST

## IMPORTANT SAFETY NOTE:

IT IS THE RESPONSIBILITY OF THE PLAYGROUND OWNER/
OPERATOR TO ENSURE THAT THE APPROPRIATE TYPE AND DEPTH
OF CUSHIONING MATERIAL (PROTECTIVE SURFACING) IS USED.
THE CUSHIONING MATERIAL MUST BE INSTALLED AND MAINTAINED
IN THE "USE ZONE" AREA UNDER AND ALL AROUND THE
PLAYGROUND EQUIPMENT. FOR COMPLETE SURFACING AND USE
ZONE INFORMATION, PLEASE REFER TO THE U.S. CONSUMER
PRODUCT SAFETY COMMISSION'S (CPSC) "PUBLIC PLAYGROUND
SAFETY HANDBOOK" SECTION 2.4 (SURFACING), SECTION 5.3
(EQUIPMENT) AND SECTION 4.3 (MAINTENANCE).

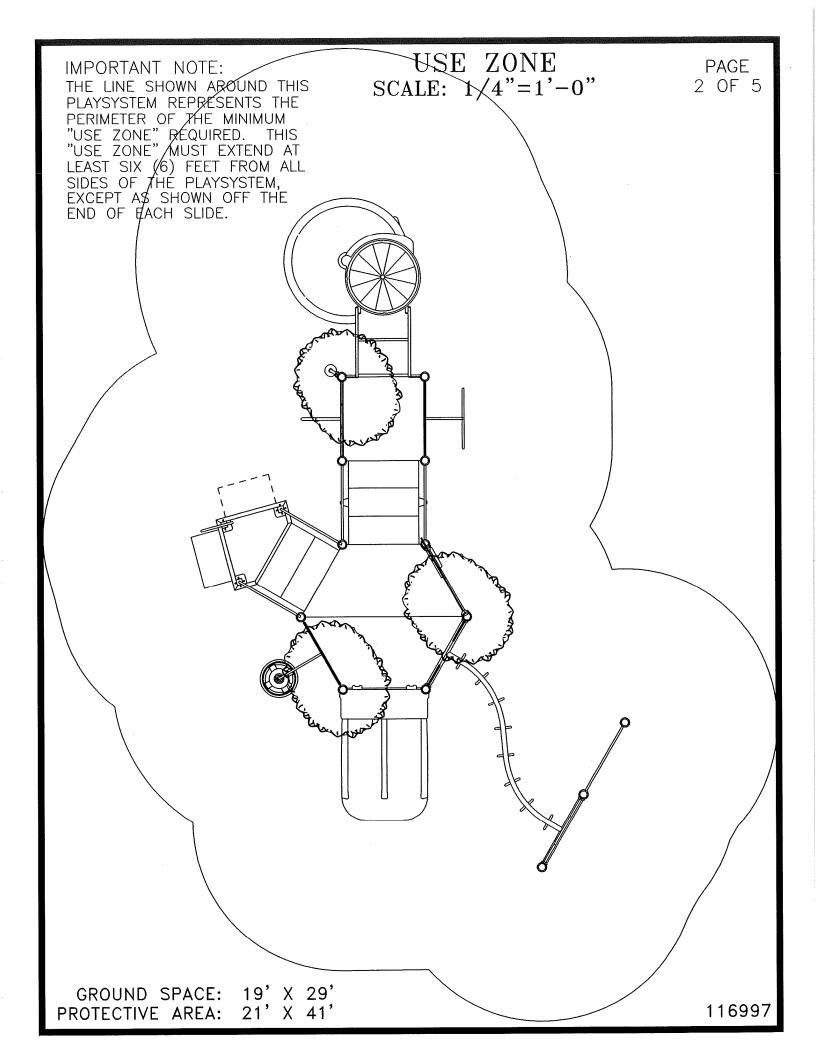
THIS PLAY SYSTEM FOLLOWS THE RECOMMENDATIONS CONTAINED IN THE U.S. CONSUMER PRODUCT SAFETY COMMISSION'S "PUBLIC PLAYGROUND SAFETY HANBOOK" REGARDING PLAYGROUND EQUIPMENT DESIGNED FOR:

## 5 - 12 YEAR OLD CHILDREN

THERE CAN BE LARGE DISPARITIES IN THE ABILITIES OF CHILDREN OF SIMILAR AGES. PARENTS MUST BE RESPONSIBLE FOR LIMITING THEIR CHILDREN TO THOSE ACTIVITIES THAT ARE APPROPRIATE AND SAFE FOR THEIR CHILDREN'S INDIVIDUAL ABILITIES.

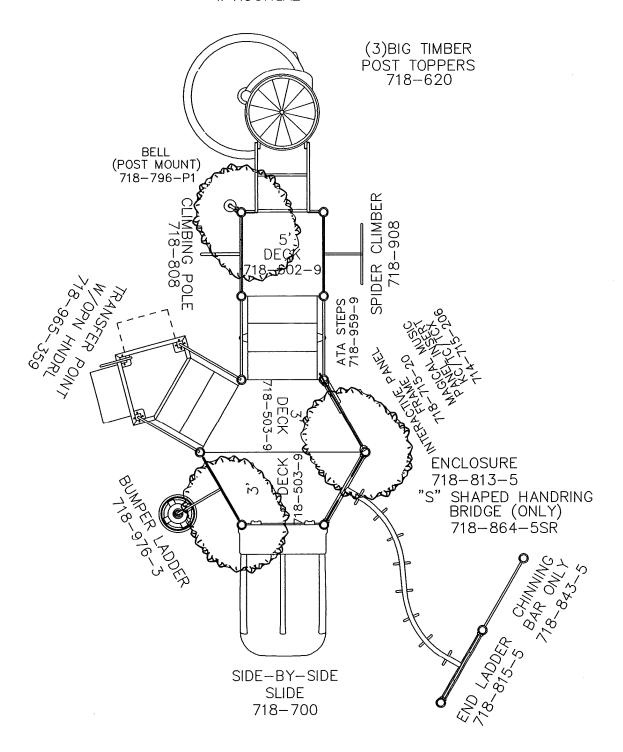
## MIRACLE RECREATION EQUIPMENT COMPANY

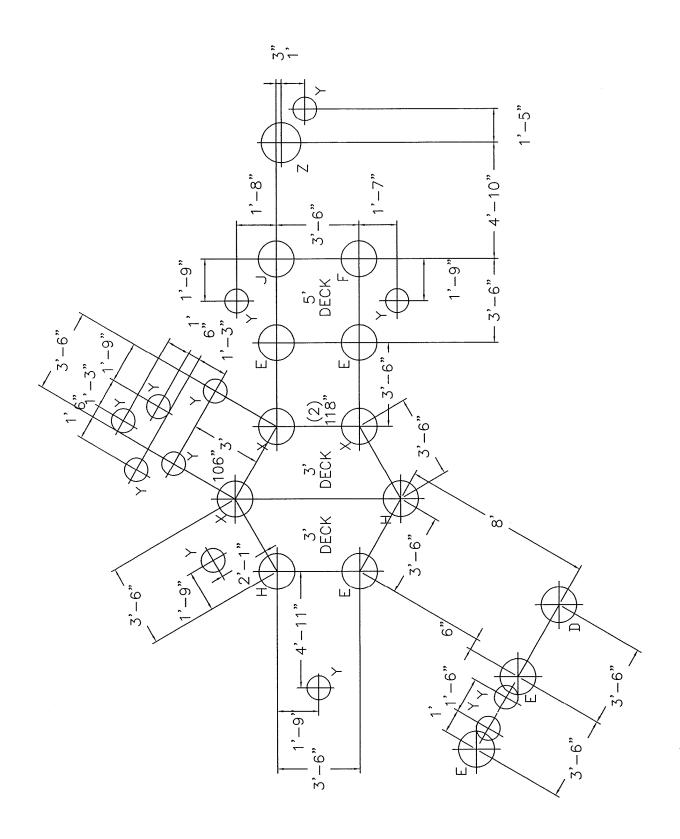
878 E. HWY 60 MONETT, MISSOURI 65708 PHONE: 1-800-523-4202



# TOP VIEW SCALE: 1/4"=1'-0"

218-748-59 360 ONE PIECE TYPHOON II





IMPORTANT NOTE: DO NOT POUR CONCRETE FOR FOOTINGS UNTIL ALL COMPONENTS ARE INSTALLED.

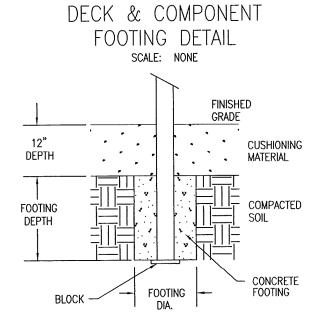
# FOOTING INFORMATION

# POST LOCATION:

FOOTING	MODEL	POST LENGTH	
A. B. C. D. E. F. G. H. J. K. L.	718-575 718-554 718-554 718-551 718-552 718-553 718-572 718-573 718-574 718-583 718-585 718-586	190" POST 166" POST. 198" POST. 100" POST. 130" POST. 148" POST. 138" POST. 162" POST. 180" POST. 151" ARCH. 175" ARCH.	FOOTING SCHEDULE:  A-N. 18" DIA. X 18" DEEP. X. 18" DIA. X 18" DEEP. Y. 12" DIA. X 18" DEEP. Z. 20" DIA. X 42" DEEP.  * LOCATIONS DETERMINED ON SITE.
N.	718-555	70" POST.	

### FOOTING NOTES:

- 1. SOME EQUIPMENT LEGS MAY NOT REACH TO BOTTOM OF FOOTINGS.
- 2. ALLOW FOR BLOCK THICKNESS BY INCREASING FOOTING DEPTH WHEN APPLICABLE.



# Miracle Installation Guide

# **Swing Seats**

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

### Models included in this installation guide:

MODEL 284 2840 2840TT	DESCRIPTION Slashproof Seat (10' max. height) Slashproof Seat w/Chain 8' Slashproof Seat w/Tensile Tough Chain	PAGE 2 2 2
2841 2841TT	Slashproof Seat w/Chain 10' Slashproof Seat w/Tensile Tough Chain	2 2
299 2990 2990TT	360° Tot Seat (8' max. height) 360° Tot Seat w/Chain 8' 360° Tot Seat w/Tensile Tough Chain	2 2 2
2740 2741	Inclusive Swing Seat w/Chain 8' Inclusive Swing Seat w/Chain 10'	2 2
2760	Generation Swing Seat w/Chain 8'	2

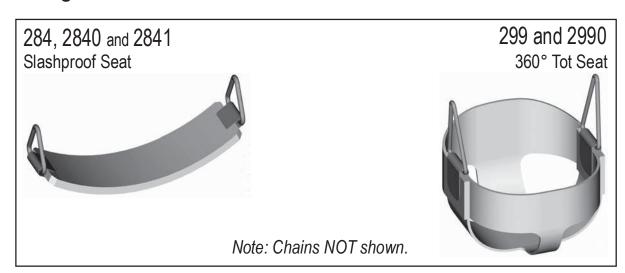
### Note:

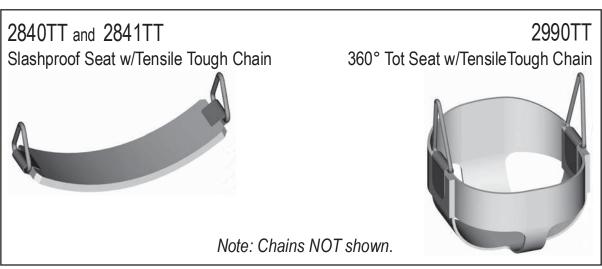
- Deck Systems are NOT included in these assemblies.
- An (\*) by part numbers indicate: Color Code Required.
- Please refer to Construction Drawings for the model particular to your system.

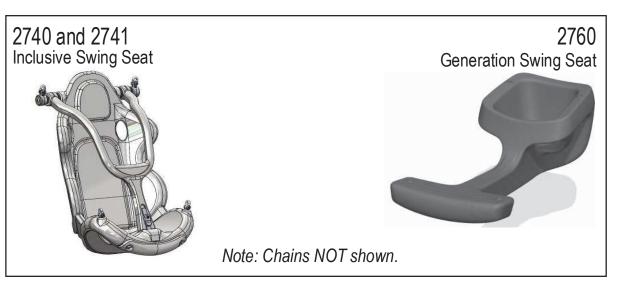
### **TOOLS AND EQUIPMENT REQUIRED**

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, wood pieces, concrete blocks, bricks, sawhorses, jack stands, etc.)
- 4. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 5. Step ladder(s)
- 6. Tape measure and level
- 7. Adult installer







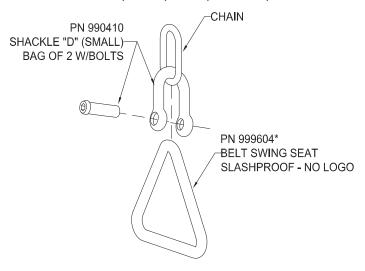


### **STEP 1** INSTALL SWING FRAMES PER SEPARATE INSTRUCTIONS

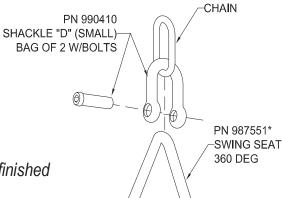
1a. Install swing frame and allow concrete footings to fully cure (usually 72 hours) be fore assembling chains and seats to frame.

### **STEP 2** ATTACH SEAT WITH "D" SHACKLES

- 2a. Attach seat to chains using two (2) "D" shackles with bolts. Depending on your installation, the chains may need to be shortened to ensure the correct seat height.
  - i. For Models 284, 2840, 2841, 2840TT, 2841TT:



ii. For Models 299, 2990, 2990TT:

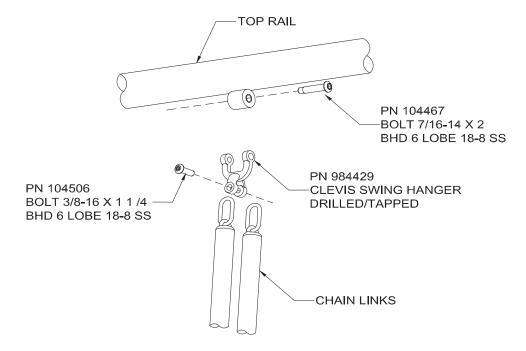


Note: The correct height of the seats above finished grade when a user is sitting in the seat is:

- 12" minimum for pre-school age children
- 12" minimum for school-age children
- 24" minimum for tot swings

### STEP 2 ATTACH SEAT WITH "D" SHACKLES cont.

- 2b. Depending on your installation, the chains may need to be shortened to ensure the correct seat height.
  - iii. For Models 2740 and 2741:



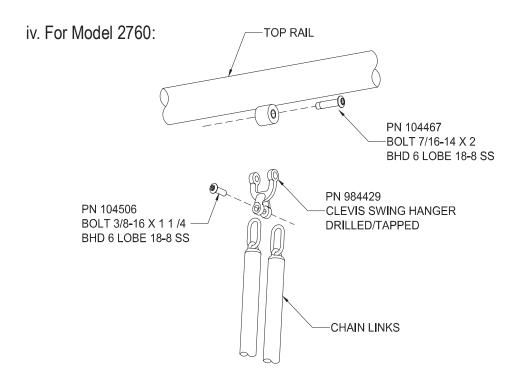
Note: The correct height of the seats above finished grade when a user is sitting in the seat is:

- 12" minimum for pre-school age children
- 12" minimum for school-age children
- 24" minimum for tot swings



### STEP 2 ATTACH SEAT WITH "D" SHACKLES cont.

2c. Attach seat to chains using two (2) "D" shackles and bolts. Depending on your installation, the chains may need to be shortened to ensure the correct seat height.



Note: The correct height of the seats above finished grade when a user is sitting in the seat is:

- 12" minimum for pre-school age children
- 12" minimum for school-age children
- 24" minimum for tot swings

# **FINAL STEP**

Proceed with *Final Assembly* installation located behind *Installations 101* in Installation Manual.

# Swins

# **Swing Seats**

# REPLACEMENT KITS FOR MAINTENANCE

# 2740 and 2741 - Inclusive Swing Seat

<u>ITEM</u> 923422	QUANTITY AS NEEDED	DESCRIPTION INCL SWG SEA	AT RES REPLACEMENT KIT
	<u>COMPONENT</u> 304262 200097726	QUANTITY 4 2	<u>DESCRIPTION</u> YOKE FRICTION SPACER SCREW MACH BUTTONHEAD M10 X 1.5 X 38MM
<u>ITEM</u> 924407	QUANTITY AS NEEDED	DESCRIPTION REPLACEMEN	IT LATCH F/INCL SWG SEAT
	COMPONENT 906478 906491 906498 906499 906500 906501 906488 200002010 200097726	QUANTITY 1 1 1 1 1 1 1 1 1 1	DESCRIPTION LATCH LOCATOR SLEEVE LATCH GRIP LATCH FRONT PLATE LATCH SPRING PLATE LATCH CYLINDER LATCH BACKING PLATE LATCH COMPRESSION SPRING SCREW MACH BUTTON HEAD M10 X 1.5 X 16MM SCREW MACH BUTTONHEAD M10 X 1.5 X 38MM
<u>ITEM</u> 902840	QUANTITY AS NEEDED  COMPONENT 903695 903694 903699 200035993 200035994	DESCRIPTION HDWR BAG F/I QUANTITY 2 2 1 6 6	NCL SWING SEAT 10FT TOP RAIL  DESCRIPTION INCLUSIVE SWING CHAIN 1, 52 LINKS F/10FT INCLUSIVE SWING CHAIN 2, 68 LINKS F/10FT INCLUSIVE SWING CHAIN 3, 13 LINKS SHACKLE "D" STYLE 41MM 300 S.S. (SMALL) BOLT M10 X 1.5 X 27MM 300 SS 6-LOBE(SM)
<u>ITEM</u> 902841	QUANTITY AS NEEDED  COMPONENT 906502 906118 903699 200035993 200035994	DESCRIPTION HDWR BAG F/I QUANTITY 2 2 1 6	, ,



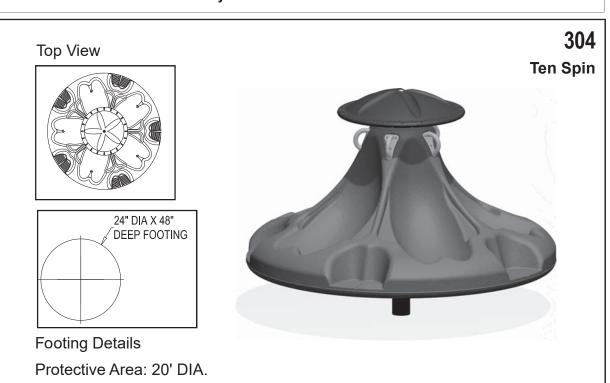
		Bill of Mate	erial
SLASHPROOF SEAT			
<u>Model</u>   284	Component 990931*	<u>Quantity</u> 1	Description PARTS CARTON, S/P SEAT W/SHACKLES
Model 2840 (For 8' Top Rail)	Component 990932 990931*	<u>Quantity</u> 1 1	<u>Description</u> PARTS CARTON - (2) - 71" CHAINS PARTS CARTON, S/P SEAT W/SHACKLES
Model 2840TT (For 8' Top Rail)	<u>Component</u> 990931* 294	<u>Quantity</u> 1 1	Description PARTS CARTON, S/P SEAT W/SHACKLES CHAIN SWING 71" TENSILE TOUGH 8' T/R
Model 2841 (For 10' Top Rail)	Component 990933 990931*	Quantity 1 1	<u>Description</u> PARTS CARTON - (2) - 7'-10" CHAINS PARTS CARTON, S/P SEAT W/SHACKLES
Model 2841TT (For 10' Top Rail)	Component 284 295	<u>Quantity</u> 1 1	<u>Description</u> SLASH PROOF SEAT W/SHACKLES CHAIN SWING 94", TENSILE TOUGH 10' T/R
360 DEGREE TOT SEAT Model 299	Component 990934*	<u>Quantity</u> 1	Description PARTS CARTON, S/P CHAIR W/SHACKLES
Model 2990 (For 8' Top Rail)	Component 990935 990934*	<u>Quantity</u> 1 1	<u>Description</u> PARTS CARTON - (2) - 4'-3" CHAINS PARTS CARTON, S/P CHAIR W/SHACKLES
Model 2990TT (For 8' Top Rail)	<u>Component</u> 990934* 296	<u>Quantity</u> 1 1	<u>Description</u> PARTS CARTON, S/P CHAIR W/SHACKLES CHAIN SWG 51" TENSILE TOUGH F/360 DEG ST
INCLUSIVE SWING SEAT  Model 2740 2741	Component 906486* 903697*	<u>Quantity</u> 1 1	<u>Description</u> INCLUSIVE RACING SEAT - 8' ASSEMBLY - MREC INCLUSIVE RACING SEAT - 10' ASSEMBLY - MREC
GENERATION SWING SEA Model 2760	Component 907604*	<u>Quantity</u> 1	<u>Description</u> GENERATION SWING SEAT ASSEMBLY - MREC

Note: An (\*) by part numbers indicate: Color Code Required

# Miracle Installation Guide

# Ten Spin

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.



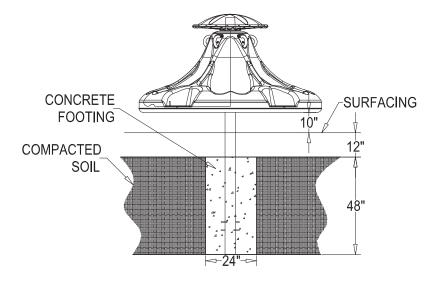
### **TOOLS AND EQUIPMENT REQUIRED**

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4;s, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Drill, bits, extension cords, power supply
- 7. Step ladder
- 8. Adult installers 2 minimum

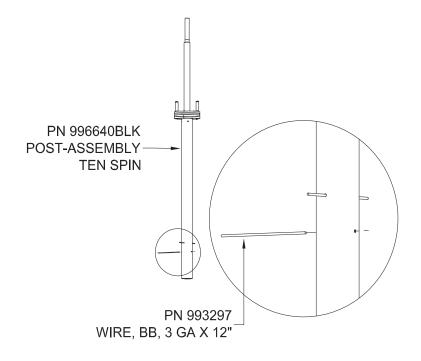
# STEP 1 DIG FOOTING

1a. Refer to Footing Details on page 1 and Footing side view below.



# STEP 2 INSERT BB WIRE INTO HOLES IN POST ASSEMBLY

2a. Tap BB Wire into pre-drilled holes in post assembly bottom as shown. Ensure equal amounts of wire protrude on both sides.



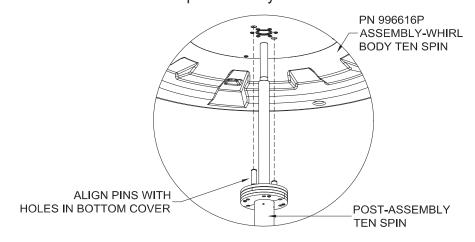


### STEP 3 SET POST INTO FOOTING; BRACE; POUR CONCRETE

3a. Ensure post assembly is braced into footing, level and plumb. Pour concrete and allow to cure for 72 hours prior to completing installation.

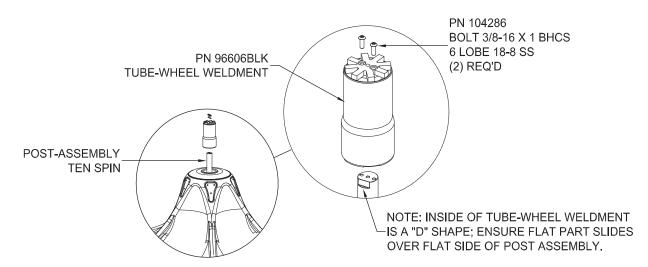
# STEP 4 ATTACH TEN SPIN ASSY TO POST ASSY

4a. Set Ten Spin assembly onto post assembly; ensure pins on post assembly line up with holes in bottom of Ten Spin assembly.



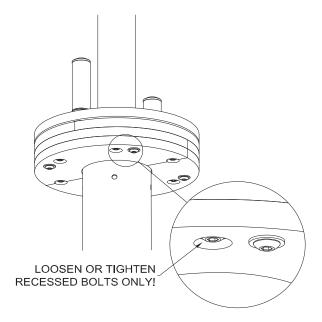
### STEP 5 SECURE TEN SPIN TO POST ASSEMBLY

5a. Locate tube-wheel weldment (PN 996606BLK) and set tube atop the post assembly; line up two (2) outer bolt holes on top of post assembly with the two (2) outer bolt holes on tube's top; securely fasten via hardware as shown.



### **STEP 6** TEST TEN SPIN OPERATION

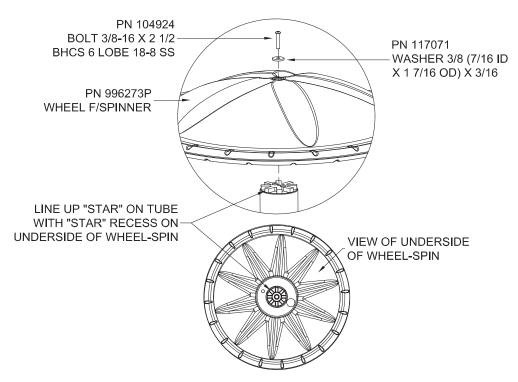
- 6a. Refer to Step 4 graphic on page 3, give Ten Spin a firm push and note number of revolutions; ensure Ten Spin rotates freely, quietly and smoothly.
  - **IF, Ten Spin successfully and smoothly rotates 2-3 times** before coming to a complete stop, move ahead to Step 7 on page 6.
  - IF, Ten Spin rotates *LESS* than two (2) times before coming to a complete stop, locate six (6) recessed bolts on post assembly (shown below in graphic) and *LOOSEN* counter clockwise 1/8th of a turn (45°) in all six (6) recessed bolt locations.
  - IF, Ten Spin rotates *MORE* than three (3) times before coming to a complete stop, locate six (6) recessed bolts on post assembly (shown below in graphic) and *TIGHTEN* all clockwise 1/8th of a turn (45°) in all six (6) recessed bolt locations.
- 6b. Retry spinning and continue to adjust as needed for smooth operation.





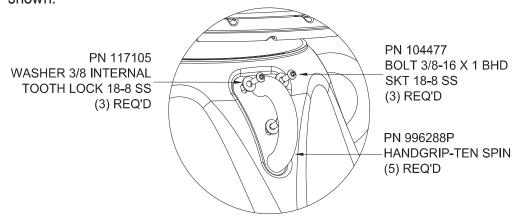
### **STEP 7** ATTACH WHEEL-SPIN

- 7a. Set wheel-spin atop tube, ensuring "star" arms on tube set into recessed "star" indentations on wheel-spin's underneath side. It is IMPORTANT that these line up correctly to create a cog-wheel effect.
- 7b. Fasten via hardware as shown. Bolt will fasten into center bolt hole on tube.



### STEP 8 FASTEN HAND GRIPS

8a. Set hand grips into indentations in Ten Spin and attach in three (3) places each as shown.



# **FINAL STEP**

Proceed with **Final Assembly** installation: Ensure all hardware is tightened; use hand grips to turn Ten Spin, ensuring it turns freely; if not, refer back to step 6; install all protective surfacing; apply Miracle and warning labels onto post assembly where they can be easily seen.

### **Bill of Material**

### **MODEL 304 TEN SPIN**

QTY	<u>PART</u>	DESCRIPTION
1	996616P	ASSEMBLY-WHIRL BODY TEN SPIN
1	996273P	WHEEL F/SPINNER
1	996640BLK	POST-ASSEMBLY TEN SPIN
1	996618BLK	PARTS CARTON WHEEL TEN SPIN
1	996354P	PARTS CARTON GRIPS TEN SPIN
1	986348	PARTS CARTON - GENERIC AND WARNING LABELS
1	994990	PARTS CARTON - 2-12 LABEL

### PARTS CARTON 996618BLK

PART

QTY

1	996606BLK		TUBE-WHEEL WELDMENT
2	993297		WIRE, BB, 3 GA X 12"
1	HW996618-1		HRDW PKG WHL TN SN S1/1
	<u>QTY</u>	<u>PART</u>	<u>DESCRIPTION</u>
	1	104924	BOLT 3/8-16 X 2 1/2 BHCS 6 LOBE 18-8 SS
	2	104930	BOLT 3/8-16 X 1 1/8 BHCS 6 LOBE 18-8 SS
	1	117071	WASHER 3/8 (7/16 ID X 1 7/16 OD) X 3/16

**DESCRIPTION** 

# PARTS CARTON 996354P

<u>QTY</u>	<u>PART</u>		DESCRIPTION
5	996288P		HAND GRIP TEN SPIN
1	HW996354-1		HRDW PKG GRP TN SPN S1/1
	<u>QTY</u>	<u>PART</u>	<u>DESCRIPTION</u>
	15	104477	BOLT 3/8-16 X 1 BHD SKT 18-8 SS
	15	117105	WASHER 3/8 INTERNAL TOOTH LOCK 18-8 SS
	10	117105	WASHER 3/6 INTERNAL TOOTH LOCK 16-6



# Installation Guide

# Peak Climber - 2-Way, 3-Way & 4-Way

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

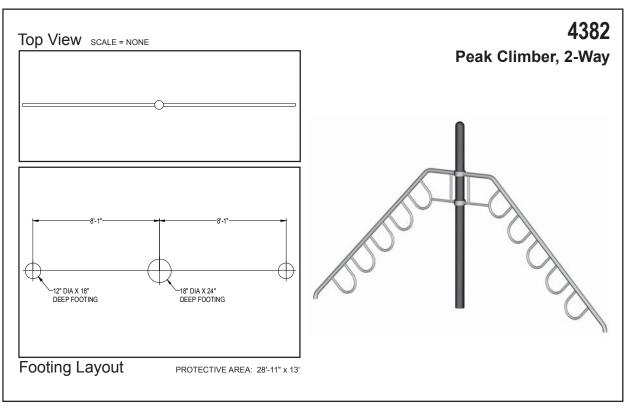
### Models included in this installation guide:

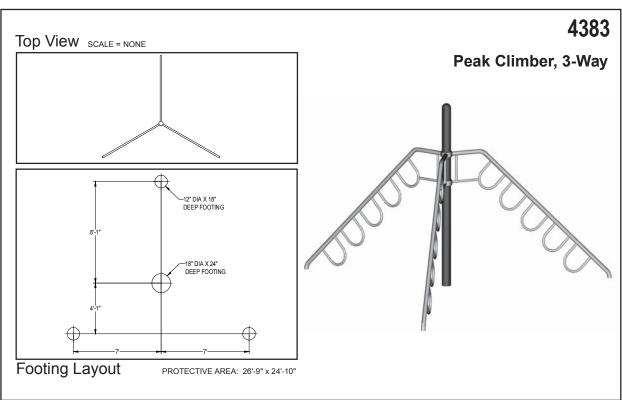
MODEL#	<u>DESCRIPTION</u>	PAGE#
4382	Peak Climber, 2 Way	2
4383	Peak Climber, 3 Way	2
4384	Peak Climber, 4 Way	3

### **TOOLS AND EQUIPMENT REQUIRED**

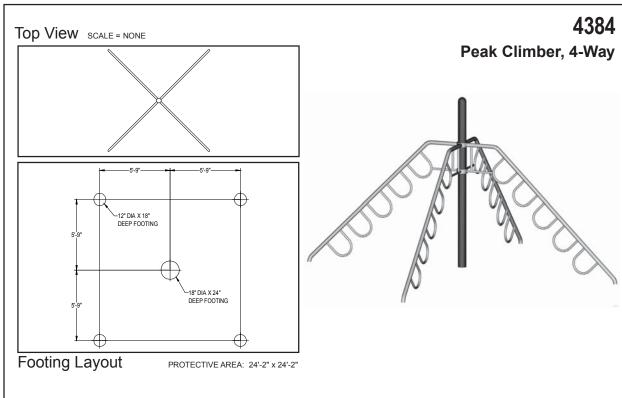
Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, jack stands, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Drill, bits, extension cords, power supply
- 7. Hammer
- 8. Step ladder
- 9. Adult installers 2 minimum









### **STEP 1** DIG FOOTINGS

Dig Footings per *Footing Layout* or Construction Drawings. Refer to *Footing Details* installation.

Note: Do not pour concrete or permanently secure Clamps to Post with self-drilling screws until components illustrated in this installation guide have been installed per instructions and braced in position level and plumb.

### STEP 2 | ASSEMBLE HEADER SUPPORT CASTINGS TO CLAMP RINGS

Refer to *Versalok Fastening System* installation. Slide Header Support Castings (one per P/N 986153 Climber Rail) onto top set of Clamp Ring HEADER SUPPORT P/N 713010 CASTING CLAMP RING halves. Assemble top set of Clamp (4) REQ'D P/N 987705 Ring halves around Post centered 5/16" SET SCREW at 109-13/16" (9' 1-13/16") from bottom end. P/N 104750 Assemble bottom set of Clamp Ring halves around 1/2" X 5/8" BHCS Post centered at **94"** (7' 10") from bottom end. (2) REQ'D Loosely assemble Bar Sockets (one per Climber P/N 986903 BAR SOCKET TOP Rail) onto bottom Clamp Ring. HALF WITH HOLE P/N 714552 136" POST P/N 713003 BAR SOCKET **BOTTOM HALF** 

### STEP 3 | SET POST INTO FOOTING

Set Post into Footing. Ensure that bottom Clamp Ring is centered at **70"** (5' 10") from subgrade (compacted soil level) and **58"** (4' 10") from Finished Grade (protective surfacing level.)



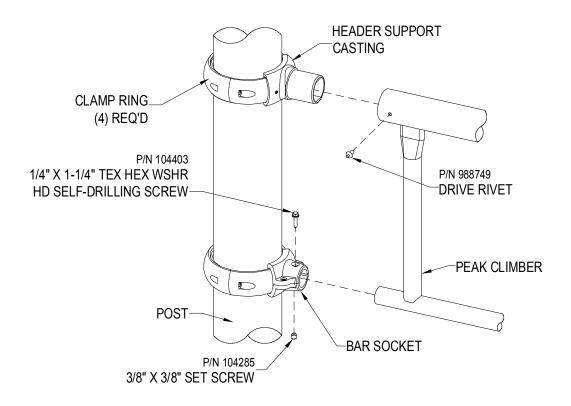
# **STEP 4** ATTACH PEAK CLIMBERS

Refer to Versalok Fastening System installation.

Set Rail into Footing, placing top rail end over Header Support (top Clamp) and bottom rail end into Bar Socket (bottom Clamp.) Plumb Post and firmly seat Rail ends against Post. Ensure that horizontal sections of Rail are level. Brace Post and Rail in position to prevent movement.

Using pre-drilled hole in top rail as a guide, drill **1/4"** hole into Header Support Casting. Fully seat drive rivet and strike pin with hammer to expand. Secure bottom rail in Bar Socket as shown.

Repeat process for remaining Rail(s.) Ensure that Climber Rails are oriented correctly, and tighten Bar Socket and Header Support against Clamp. Brace in position when complete.



### **FINAL STEP**

Proceed with *Final Assembly installation*.

# eak Climber

# Bill of Materials

# Peak Climber - 2-Way, 3-Way & 4-Way

QUANTITY	PART#	DESCRIPTION

# MODEL # 4382 - 2-WAY PEAK CLIMBER

1	714552	POST 5" OD X 136" 3'-5' DECKS
2	987716P	PEAK CLIMBER WELDMENT
1	987806P	PARTS CARTON, MODEL 4382, POLE CLAMPS
2	987807P	PARTS CARTON, MODEL 4382, CLAMP STUBS

### MODEL #4383 - 3-WAY PEAK CLIMBER

1	714552	POST 5" OD X 136" 3'-5' DECKS
3	987716P	PEAK CLIMBER WELDMENT
1	987806P	PARTS CARTON, MODEL 4382, POLE CLAMPS
3	987807P	PARTS CARTON, MODEL 4382, CLAMP STUBS

### MODEL # 4384 - 4-WAY PEAK CLIMBER

1	714552	POST 5" OD X 136" 3'-5' DECKS
4	987716P	PEAK CLIMBER WELDMENT
1	987806P	PARTS CARTON, MODEL 4382, POLE CLAMPS
4	987807P	PARTS CARTON, MODEL 4382, CLAMP STUBS

### PARTS CARTON # 987806P CONTENTS:

4	713010P	CLAMP RING 5" DIA
4	104749	BOLT 1/4-20 X 1 1/4 BHCS 6 LOBE 18-8 SS
4	104403	BOLT 1/4-14 X 1 1/4 TEK HEX WSHR HD SERR
4	104942	INSULATOR, SCREW, 1/4 DIA HOLE X 3/8

### PARTS CARTON # 987807P CONTENTS:

1	986903P	BAR SOCKET 5" OD TOP HALF WITH HOLE
1	986153P	HEADER SUPPORT CASTING
1	713003P	BAR SOCKET 5" OD BOTTOM HALF
2	104750	BOLT 1/4-20 X 5/8 BHCS 6 LOBE 18-8 SS
1	104366	BOLT 1/4 X 1 TEK WSHR HEX HD 18-8 SS
1	104285	BOLT 3/8-16 X 3/8 SKT SET SCREW 18-8 SS
1	987705	SCREW, SET 10-24 X 5/16 18-8 SS
1	988749	DRIVE RIVET, NAIL-IN, 100 PER PKG.

Male & Female Length Adapters, Single & Double Stacked Sections, Timber Opening Kit

<u>IMPORTANT NOTE</u>: Miracle Timbers are not structural components. They are intended only to contain engineered surfacing for fall zones around playground equipment. They are not intended for retention of soil or heavy backfill.

440 & 440R\*

440-1 & 440-1R\*

### **Male Length Adapter**

\* Model # 440R Male Length Adapter (Recycled) differs in material only.

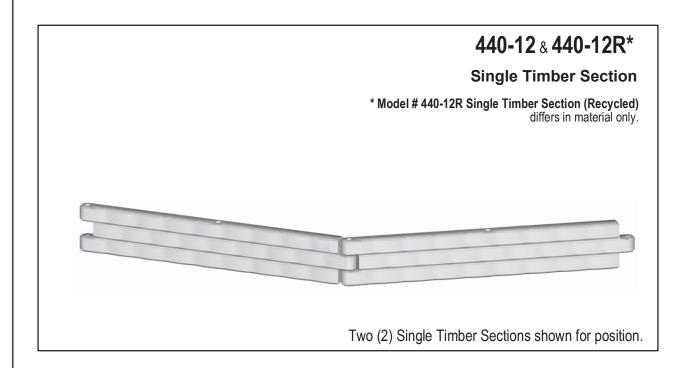
### Female Length Adapter

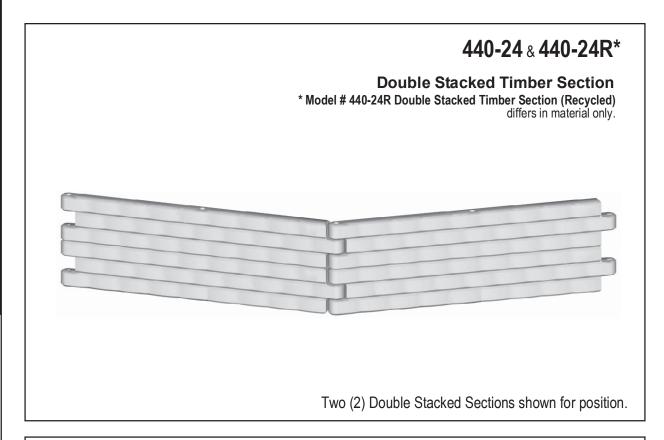
\* Model # 440-1R Female Length Adapter (Recycled) differs in material only.





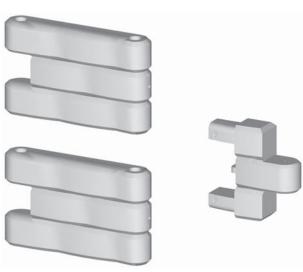
Models used to reduce length of Timber Section(s) when needed to fit closure.





# 440-3 & 440-3R\* Timber Opening Kit

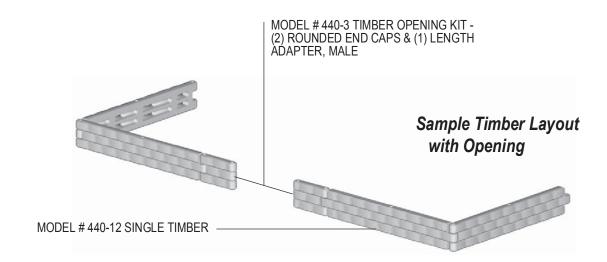
\* Model # 440-3R Timber Opening Kit (Recycled) differs in material only.



Model includes two (2) Rounded End Caps and one (1) Male Length Adapter.



### PARTS IDENTIFICATION



### RECOMMENDED ASSEMBLY SEQUENCE

- 1. Mark playsystem or playground perimeter (surpassing Use Zone)
- 2. Position and stake Timbers
- 3. Length Adapter to close, if required
- 4. Timber Opening Kit, if required
- 5. Access Ramp (Model # 440-6 or # 440-6R), if required per separate instructions
- 6. Final Assembly

### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, if required; wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings, if required (spade shovel, post hole digger, auger)
- 3. Tape measure and level
- 4. If Length Adapter or Timber Opening Kit installed: handsaw or hacksaw, screwdriver (battery-powered screwdriver recommended), Phillips head bit
- 5. Sledge hammer
- 6. Adult installer

Installation instructions for **Model # 440-12 (and -12R)** Single Timber Sections and **Model # 440-24 (and -24R)** Double Stacked Timber Sections begin with **Step 1** below.

Instructions for **Model # 440 (and 440R)** and **Model # 440-1 (and 440-1R)** Length Adapters start on **page 7.** Instructions for **Model # 440-3 (and -3R)** Timber Opening Kit begin on **page 8.** 

### **STEP 1** PREPARE FOR INSTALLATION

Read **Safety Brochure 100, Important Notes,** these instructions, and other enclosed materials. Unpack, count, and become familiar with system components and hardware.

# STEP 2 DETERMINE MINIMUM USE ZONE

Refer to "Use Zone" drawing (elsewhere in this Installation Manual) to determine minimum required Use Zone of playsystem or playground. Timbers must be installed to contain entire Use Zone area without touching or impeding area.

Mark or stake Timber Layout, being careful not to overlap Use Zone at any location. Note that at closure location, Timbers may overlap, requiring installation of a *Length Adapter (Model # 440. # 440-1. or # 440-1R.)* 

Install Tip: Generally, if Timbers are intended to contain Use Zone with aid from another barrier (such as building wall, fence, etc.), begin layout at barrier. If Timbers will contain Use Zone without aid of other barriers, starting/ending point is at installers' discretion. Many installers prefer to start layout with Timber Opening (see Step 8 on page 8) or with Access Ramp (Model # 440-6 or # 440-6R) per separate instructions. Many also prefer to "conceal" connection of Length Adapter and Timber by closing at least conspicuous side of playground.



### STEP 3 POSITION AND STAKE TIMBERS

Set Timbers on ground end-to-end per Layout, with formed "brick" side of Timbers facing outward away from playsystem. See orientation note below.

Stand Timbers on their sides (stacking Timbers if necessary) and interlock as shown, inserting Stakes to hold Timbers together in place, but do not yet drive Stakes into ground.

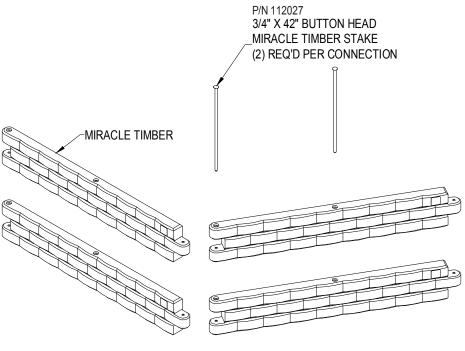
3/4" X 28-1/4" BUTTON HEAD MIRACLE TIMBER STAKE
(2) REQ'D PER CONNECTION

P/N 200001386

By not driving Stakes into ground at this point, connected Timbers may be repositioned easily if necessary.

Note: A molded-in "Miracle logo" on CONNECTION FOR SINGLE STACKED EDGES
the outside should be oriented upright (legible), and recesses at stake locations must be on top side of top Timber Sections, so that stake heads may be driven flush. Therefore, male ends of Timbers will be on right and female ends on left (when viewed from outside closure.)

PIN 112027



CONNECTION FOR DOUBLE STACKED EDGES



### **STEP 4** OPTIONAL FOOTINGS

### OPTIONAL FOOTINGS FOR TIMBERS AT RISK OF BEING STOLEN OR VANDALIZED:

Note: It is generally acceptable to SKIP THIS STEP, unless installation location is characterized by particularly high crime, extreme seclusion, etc.; again, customers' discretion.

With Timbers loosely connected with Stakes, mark locations of Stakes on ground at interlocking connections. Set Timbers aside and dig footings **8" diameter** by **18" deep** from subgrade.

When all footings are dug, replace and re-connect Timbers two-at-a-time, placing Stake through interlocking connections into footing holes and ensuring Stake heads are flush with Timber edge. Pour concrete to subgrade level at each footing, and verify that Timber sections are plumb and level before proceeding to next set.

Note: Allow concrete to cure for 72 hours before loading Use Zone with protective surfacing material.

### **STEP 5** TIMBER CLOSURE, IF POSSIBLE

Verify that Use Zone for playsystem is completely enclosed without intersecting Timber framework at any point, and that Timbers are plumb, level and straight (if desired.)

If Timber framework achieves closure without length adjustment, place remaining Stakes into Timbers and drive so that heads are flush with recessed holes. Proceed to *Final Step.* 

If installation of a *Length Adapter* is required to close Timbers, proceed to **Step 6**. If installing *Timber Opening*, proceed to **Step 8** on **page 8**.



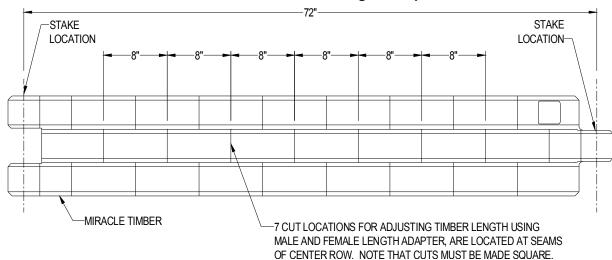
Instructions for **Model # 440 (and 440R)** and **Model # 440-1 (and 440-1R)** Length Adapters start with **Step 6** below.

Installation instructions for Model # 440-3 (and -3R) Timber Opening Kit begin on page 8.

### STEP 6 CUT TIMBERS FOR CLOSURE, IF NECESSARY

If length of final Timber requires adjustment to achieve framework closure, measure overlap between two Timbers, accounting for width of Male or Female Length Adapter to be installed, and use illustration below to determine location of cut. Each Timber contains seven (7) cut locations, based on seams of center row. Cuts must be made square for Length Adapter to fit properly and for good appearance.

### Note: Installers must cut at location shown or Length Adapter will not fit!



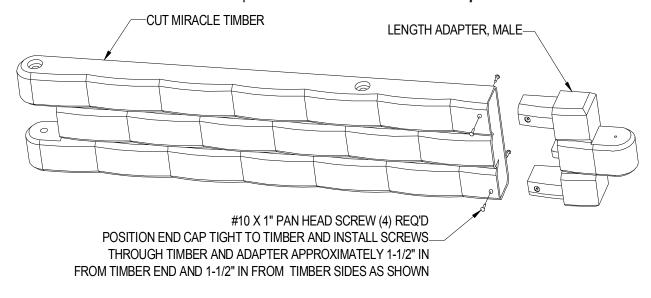
Length between outer Stakes (at interlocking connections) is 72". Timber lengths that can be made using Length Adapters are 64", 56", 48", 40", 32", 24" and 16".



### **STEP 7** INSERT LENGTH ADAPTER, IF NECESSARY

Cut Timber squarely at location determined in **Step 6**. Insert Length Adapter in open end of Timber, and use power screwdriver to secure with pan head screws as shown below.

Insert Timber/Length Adapter assembly into final Timber to close framework. Insert Stake and drive until head is flush with top of Timber. Proceed to *Final Step.* 



Installation instructions for **Model # 440-3 (and -3R)** Timber Opening Kit begin with **Step 8** below.

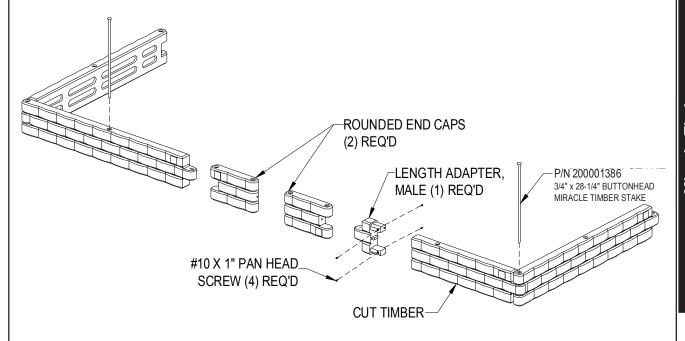
### **STEP 8** TIMBER OPENING KIT, IF REQUIRED

Determine desired location of Timber Opening in framework. Miracle recommends a minimum opening width of **36**".

Refer to illustration on next page. Timber Opening Kit contains three (3) pieces: two (2) Rounded End Caps with one rounded end and one female end, and one (1) Length Adapter - Male, used to give a Single Timber section two male ends rather than one.

Position one End Cap against Timber section and place Stake into interlocking connection (without fully driving into ground.) Measure **36"** or greater from round surface of End Cap to create opening, place round end of second End Cap at mark, and temporarily stake as before.





### STEP 9 CUT TIMBER, IF NECESSARY

Refer to Length Adapter installation instructions in Step 6 and Step 7.

Measure from end of Single Timber, accounting for width of Length Adapter, and determine location to cut. Cut Timber squarely, insert Length Adapter into open end, and secure to Timber with pan head scr1ews as shown in **Step 7**.

# STEP 10 PLUMB AND LEVEL TIMBERS; INSERT STAKES INTO END CAPS

Position second Rounded End Cap onto attached Length Adapter, and verify Timbers and opening pieces are plumb, level and straight (if desired.) Insert and drive Stakes (two each) in both End Caps until heads are flush with top of Timber.

### **FINAL STEP**

Verify that concrete is fully cured (if applicable) and that all Stakes are driven until flush with top of Timbers. Fill enclosure with protective surfacing material. Proceed with *Final Assembly installation*.

# Bill of Materials

### **Miracle Timbers**

QUANTITY PART NO. DESCRIPTION

MODEL # 440 MALE LENGTH ADAPTER

1 985385P MALE LENGTH ADAPTER - MIRACLE TIMBER

1 985429 PARTS CARTON 440 & 440R (SEE BELOW FOR CONTENTS)

PARTS CARTON # 985429 CONTENTS:

4 104426 SCREW #10 X 1 TYPE A TAPPING PH PAN HD

MODEL # 440R MALE LENGTH ADAPTER (RECYCLED)

985385RE END CAP-MIRACLE TIMBER (RECYCLED BLACK)

1 985429 PARTS CARTON 440 & 440R (SEE BELOW FOR CONTENTS)

PARTS CARTON # 985429 CONTENTS:

4 104426 SCREW #10 X 1 TYPE A TAPPING PH PAN HD

MODEL # 440-1 FEMALE LENGTH ADAPTER

I 988778P FEMALE LENGTH ADAPTER - MIRACLE TIMBER

1 985429 PARTS CARTON 440 & 440R (SEE BELOW FOR CONTENTS)

PARTS CARTON # 985429 CONTENTS:

4 104426 SCREW #10 X 1 TYPE A TAPPING PH PAN HD

MODEL # 440-1R FEMALE LENGTH ADAPTER (RECYCLED)

1 988778RE FEMALE LENGTH ADAPTER-MIRACLE TIMBER RE

985429 PARTS CARTON 440 & 440R (SEE BELOW FOR CONTENTS)

PARTS CARTON # 985429 CONTENTS:

4 104426 SCREW #10 X 1 TYPE A TAPPING PH PAN HD

MODEL # 440-12 SINGLE TIMBER SECTION

1 112602P MIRACLE TIMBER

MODEL # 440-12R SINGLE TIMBER SECTION (RECYCLED)

1 112602RE TIMBER REGRIND

MODEL # 440-24 DOUBLE-STACKED TIMBER SECTION

2 112602P MIRACLE TIMBER

2 112027 STAKE 42" GALV FOR 24" HIGH KID TIMBER

MODEL # 440-24R DOUBLE-STACKED TIMBER SECTION (RECYCLED)

2 112602RE TIMBER REGRIND

2 112027 STAKE 42" GALV FOR 24" HIGH KID TIMBER

440R,



QUANTITY	PART NO.	DESCRIPTION
MODEL # 440-3 T	MBER OPENING KIT	
1	985385P	MALE LENGTH ADAPTER - MIRACLE TIMBER
1	985429	PARTS CARTON (SEE BELOW FOR CONTENTS)
2	986101P	ROUNDED END CAP - MIRACLE TIMBER
3	200001386	STAKE 28-1/4" GALV. FOR 12" HIGH KID TIMBER
PARTS CARTON # 985429 CONTENTS:		
4	104426	SCREW #10 X 1 TYPE A TAPPING PH PAN HD
MODEL # 440 3P	TIMBER OPENING KIT (REC	VCI ED/

1	985385RE	END CAP-MIRACLE TIMBER (RECYCLED BLACK)
1	985429	PARTS CARTON (SEE BELOW FOR CONTENTS)
2	986101RE	ROUNDED END CAP - MIRACLE TIMBER RECYCLE
3	200001386	STAKE 28-1/4" GALV. FOR 12" HIGH KID TIMBER

### PARTS CARTON # 985429 CONTENTS:

SCREW #10 X 1 TYPE A TAPPING PH PAN HD 104426

# **Access Ramp for Miracle Timbers**

Access Ramp for Miracle Timbers including (2) Ramp Sections,

(1) Single Timber (regular), (1) Single Timber With Two Male Ends, and (13) Stakes

**IMPORTANT NOTE:** Miracle Timbers are not structural components. They are intended only to contain engineered surfacing for fall zones around playground equipment. They are not intended for retention of soil or heavy backfill.

440-6 and 440-6R\*

### **Access Ramp for Miracle Timbers**

\* Model # 440-6R Access Ramp (Recycled) for Miracle Timbers differs in material only. Installation is identical.



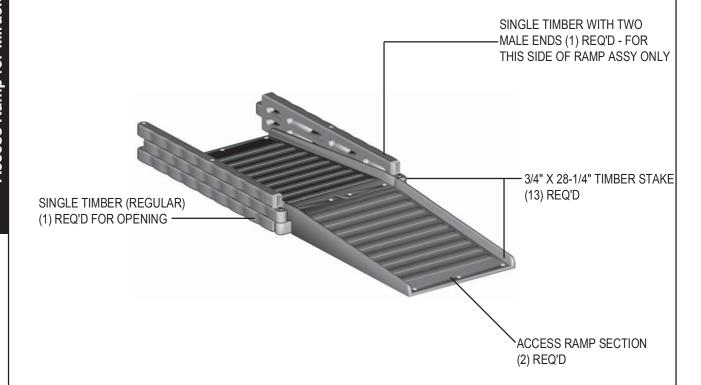
### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Tape measure and level
- 2. Sledge hammer
- 3. Adult installer

# **Access Ramp for Miracle Timbers**

### PARTS IDENTIFICATION



### **STEP 1** LAYOUT & STAKE TIMBER CLOSURE

NOTE: Ramp may be installed as a 6' ramp extension or a 12' ramp extension. For instructions on installing a 6' Ramp, see Step 2. For instructions on installing a 12' Ramp, see Step 3.

Install playsystem and pour concrete for footings. Layout and stake Timber closure per separate instructions. Refer to *Miracle Timbers* installation (# 440 et. al.) Ramp width requires 40" opening in Timber closure.



#### **Access Ramp for Miracle Timbers**

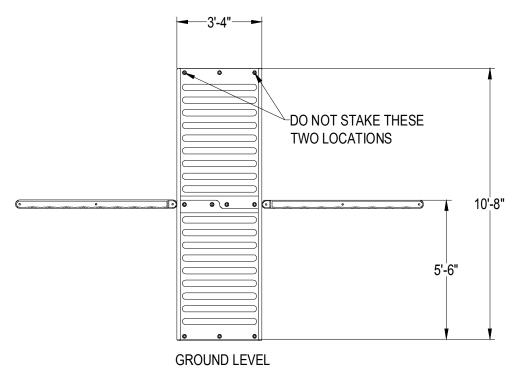
#### STEP 2 | CREATE 6' RAMP EXTENSION

See Parts ID on page 2. Position interlocking Ramp Sections together between Single Timbers. Align mounting stubs on Ramp sides with holes in male ends of Single Timbers.

Attach Single Timber (regular) and Single Timber With Two Male Ends at midpoint of Ramp Sections. *Ensure Ramp does not intersect with equipment safety zones.* 

Drive stakes through mating holes in Ramp Sections, through holes at ends of Ramp Sections, and through male ends of Timbers and mounting stubs of Ramp Assembly.

#### PROTECTIVE SURFACING



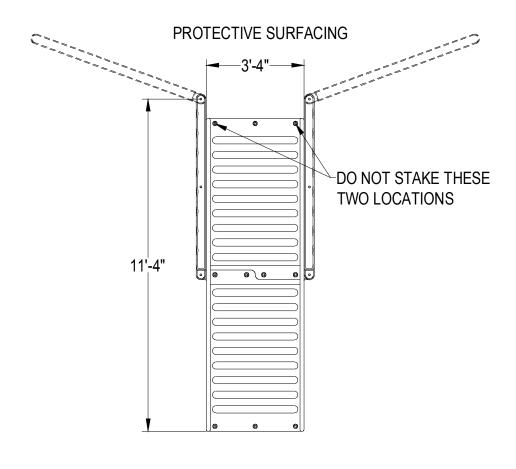
#### **Access Ramp for Miracle Timbers**

#### STEP 3 | CREATE 12' RAMP EXTENSION

Attach Single Timber (regular) and Single Timber With Two Male Ends to closure at opening, parallel with each other, with 40" span between inner surfaces for Ramp Sections.

See Parts ID on page 2. Position interlocking Ramp Sections together between Single Timbers. Align mounting stubs on Ramp sides with holes in male ends of Single Timbers. *Ensure Ramp does not intersect with equipment safety zones.* 

Drive stakes through mating holes in Ramp Sections, through holes at ends of Ramp Sections, and through male ends of Timbers and mounting stubs of Ramp Assembly.



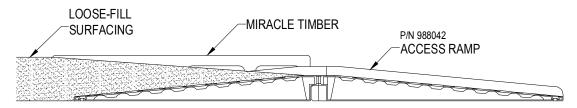
440-6, 440-6R



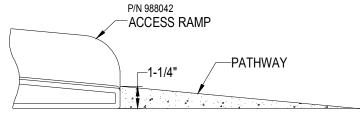
#### **Access Ramp for Miracle Timbers**

#### **FINAL STEP**

Proceed with *Final Assembly installation*. Fill Timber closure with loose-fill surfacing. Allow protective surfacing materials to gradually slope downward until they meet Access Ramp's apex as shown in "cut-away" side view.



Note: Leading edge of Ramp is 1-1/4" high. Pathway must be constructed to meet this edge at same height. Pathway and loose-fill surfacing must meet ADA standards for wheelchair access.



### Bill of Materials

QTY PART# DESCRIPTION

#### MODEL # 440-6 ACCESS RAMP FOR MIRACLE TIMBERS

2	988042P	ACCESS RAMP-MIRACLE TIMBERS
11	200001386	STAKE 28-1/4" GALV FOR 12" HIGH TIM

1 112602P MIRACLE TIMBER

1 988103P MIRACLE TIMBER WITH TWO MALE ENDS

#### MODEL # 440-6R ACCESS RAMP FOR MIRACLE TIMBERS (RECYCLED)

2	988042BK	ACCESS RAMP-MIRACLE TIMBERS (RECYCLED BK)
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11 200001386 STAKE 28-1/4" GALV. FOR 12" HIGH TIMBER

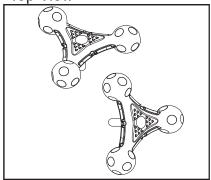
1 112602RE TIMBER REGRIND

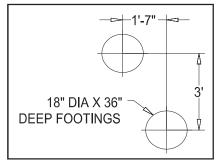
1 988103RE MIRACLE TIMBER WITH TWO MALE ENDS

Phyzics<sup>™</sup>
JAX<sup>®</sup> Pack - Two

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.







**Footing Layout** 

477-002

JAX Pack - Two



Protective Area: 20' x 22'

#### TOOLS AND EQUIPMENT REQUIRED

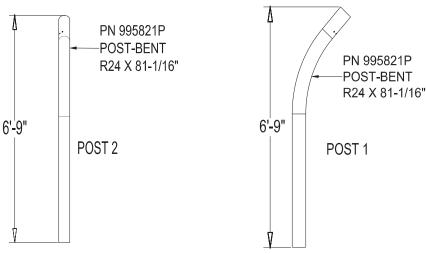
Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, jack stands, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Adult installers 2 minimum

# Phyzics<sup>™</sup> JAX<sup>®</sup> Pack - Two

#### STEP 1 IDENTIFY POST AND BASE SUPPORT CLOCKING

- 1a. The success of the JAX Pack-Two installation is based on proper post identification and base support clocking.
- 1b. It is important to note that Post 1 and Post 2 are *THE SAME POST*, however, they have two (2) sets of holes drilled in them for base support installation and are placed in footings at different angles.



#### STEP 2 DIG FOOTINGS; AFFIX SURFACING LABEL

- 2a. Dig Footings per *Footing Layout* or Construction Drawings. Refer to *Footing Details installation* located behind *Installations 101* in Installation Manual.
- 2b. Measure up **48"** from bottom of one post and place "Top of Surfacing" label at this location.

Note: Do not pour concrete until components illustrated in this installation guide have been installed per instructions and braced in position, leveled and plumbed.

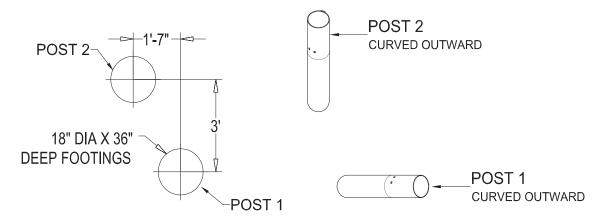


Phyzics™

#### JAX® Pack - Two

#### STEP 3 DETERMINE CORRECT POST PLACEMENT

3a. Jax posts **MUST** be placed into footings as shown below. Loosely set posts into footings in approximate positions, reference step 1 on page 2.

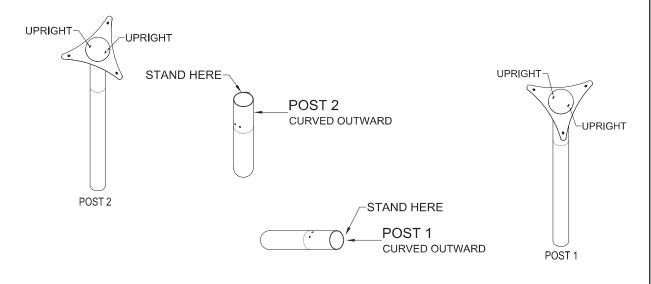


#### STEP 4 DETERMINE CORRECT BASE SUPPORT CLOCKING

4a. The following graphics show correct base support clocking. Graphics show clocking as if you were standing with each post's curve *FACING* you.

Note: Proper clocking is based on base support uprights, which will DIRECTLY correspond with notches in each Jax.

Important Note: DO NOT attach base support to post until clocking is correct!



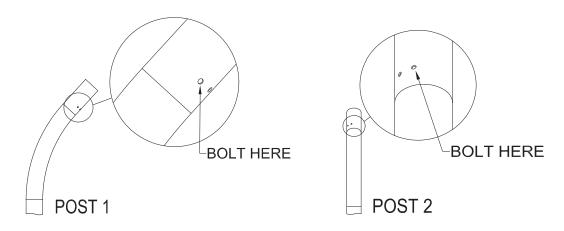
#### $Phyzics^{^{\intercal}}$

#### JÁX® Pack - Two

#### **STEP 5** BOLT BASE SUPPORT TO POSTS

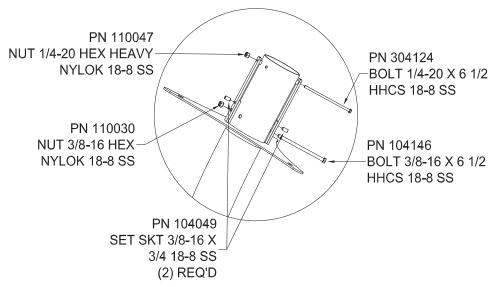
5a. Once proper clocking is determined, slide base support over post and line up bottom bolt hole in base support uprights with hole in post.

Important Note: Post 1 and 2 have different bolting locations. See illustrations below prior to installing hardware!



- 5b. Secure base support to post, with bolts, in both posts as shown above. Verify correct bolt is used for each hole, as shown below.
- 5c. Insert set screws in holes above bottom bolt and secure uprights to post.

Note: Do not overtighten!

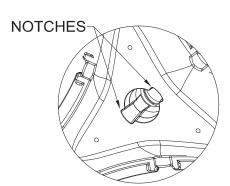




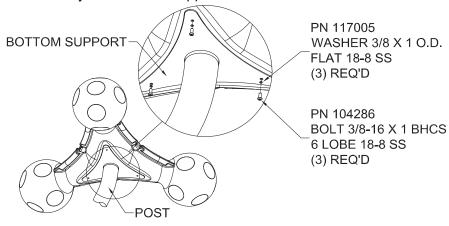
# Phyzics<sup>™</sup> JAX<sup>®</sup> Pack - Two

#### STEP 6 INSTALL JAX ON BASE SUPPORT

6a. Set Jax on bottom support, with uprights aligned with notches, in Jax body and the support plate aligned with recess on bottom of Jax body.



6b. Fasten Jax body and bottom support as shown below.



**BOTTOM VIEW** 

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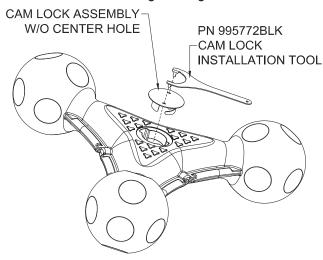
#### Phyzics™

#### JÁX® Pack - Two

#### STEP 7 INSERT AND TIGHTEN CAM LOCK ASSEMBLY

- 7a. Set cam lock assembly into recess in top of Jax; align slots in cam lock assembly with spacers on base support uprights (attached in step 5).
- 7b. Turn cam lock assembly clockwise until firmly secure. Do not overtighten.

Note: Keep lock installation tool for future tightening.



#### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

Important Note: Prior to pouring concrete ensure there is a minimum of 10" between all Jax surfaces! Pour concrete and allow to cure for 72 hours prior to allowing play.



Phyzics<sup>™</sup>
JAX<sup>®</sup> Pack - Two

#### **Bill of Materials**

MODEL 477-002 QUANTITY 2 1 1 2 1 1 2 1 1 1	COMPONENT 995821P 995543P 995543P 995640P 116048 116049 999033P 912289P 996031		DESCRIPTION POST-BENT R24 X 81-1/16" JAX 1 HOLE JAX 1 HOLE SUPPORT ASSEMBLY - CENTER HOLE LABEL, 2"X2" WHIT POLYESTER THERMAL LAMINATE, CLEAR, 2"X2" W/PERMANENT PARTS CARTON - TOUCH-UP PAINT-POST PARTS CARTON FOR 995543 TOP OF POST PARTS CARTON - JAX INSTALLATION TOOLS		
PARTS CARTON 912289P QUANTITY 1	COMPONENT 995645P HW912289-1  QUANTITY 3 3 1 1 2	COMPC 104286 117005 104146 110030 104049	HRDW PKG F	DESCRIPTION BOLT 3/8 -16 X 1 BHCS 6 LOBE 18-8 SS WASHER 3/8 X 1 O.D. FLAT 18-8 SS BOLT 3/8 -16 X 6 1/2 HHCS 18-8 SS NUT 3/8 -16 HEX NYLOK 18-8 SS SET SKT 3/8-16 X 3/4 18-8 SS	
PARTS CARTON 996031 QUANTITY 1	1 1 1 1 <u>COMPONENT</u> 995772BLK	304124 110047 104480	DESCRIPTION CAM LOCK IN	BOLT 1/4-20 X 6-1/2 HHCS 18-8 SS NUT 1/4-20 HEX HEAVY NYLOK 18-8 SS BIT 6 LOBE T-45 FOR 3/8 BOLTS	

# Miracle Installation Guide

#### **Activity Panel Inserts**

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

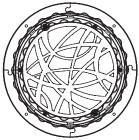
#### **ACTIVITY PANEL INSERTS**

714-715-202

714-715-201 Hypnotize Insert



Funhouse Insert



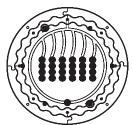
714-715-203 Very Buried Insert



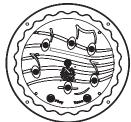
714-715-204 A-maze-ing Insert



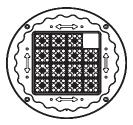
714-715-205 Four-the-Win Insert



714-715-206 Magical Music Insert



714-715-207 Slide & Solve Insert



#### **TOOLS AND EQUIPMENT REQUIRED**

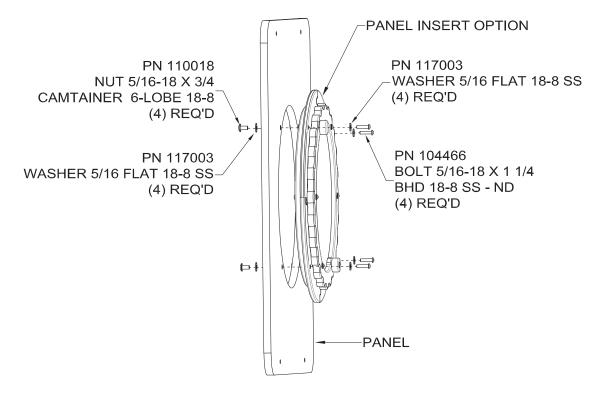
Also see "Suggested Tools & Equipment" (Doc. # D75002) in "Installations 101"

- 1. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 1. Drill, drill bits, extension cords, power supply
- 3. One adult installer

#### **Activity Panel Inserts**

#### STEP 1 ATTACH PANEL INSERT

- 1a. Above Deck: Attach panel insert, always facing inside the deck, to the activity panel frame.
- 1b. Below Deck: Attach panel insert, always facing away from the deck, to activity panel frame.



Note: Activity panel attachment *below deck* is shown.

#### **FINAL STEP**

Refer to *Final Assembly installation* located behind *Installations 101* in Installation Manual.

MIRACLE B

## Installation Guide

Kids' Choice®

Deck-mount models for 2'-0" Decks or lower, not included.

# Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges

Ground-to-Deck, Between Decks or Freestanding; spans of 8', 10' & 12'

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

#### Models included in this installation guide:

DESCRIPTION	PAGE#
Big Timber Bongo Stump Perch	2
Big Timber Bongo Stump Bridge, (4) Perches; 8' Span	2
Big Timber Bongo Stump Bridge, (5) Perches; 10' Span	3
Big Timber Bongo Stump Bridge, (6) Perches; 12' Span	3
Bongo Perch	4
Bongo Bridge, (4) Perches; 8' Span	4
Bongo Bridge, (5) Perches; 10' Span	5
Bongo Bridge, (6) Perches; 12' Span	5
	Big Timber Bongo Stump Perch Big Timber Bongo Stump Bridge, (4) Perches; 8' Span Big Timber Bongo Stump Bridge, (5) Perches; 10' Span Big Timber Bongo Stump Bridge, (6) Perches; 12' Span Bongo Perch Bongo Bridge, (4) Perches; 8' Span Bongo Bridge, (5) Perches; 10' Span

NOTE: Deck Systems are NOT included in these Assemblies.

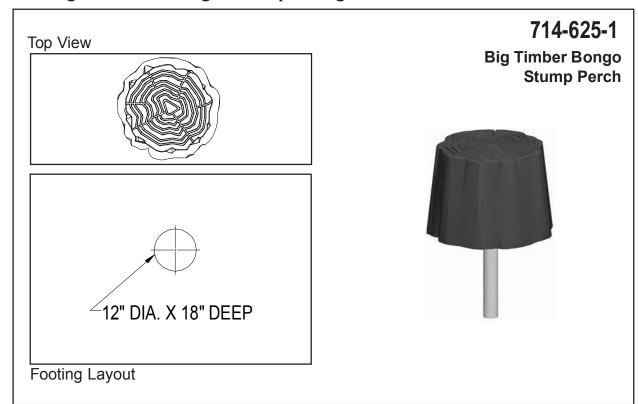
Please refer to Construction Drawings for the model particular to your system.

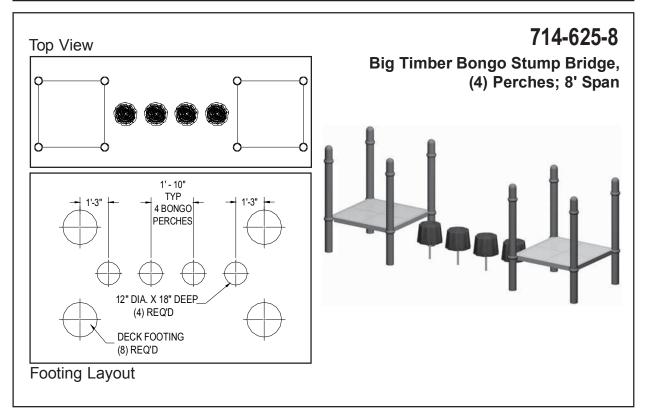
#### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Tape measure and level
- 4. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 5. Bracing materials (2x4's, wood pieces, sawhorses, jack stands, concrete blocks, bricks, etc.)
- 6. Hacksaw or electric handsaw
- 7. Adult installers 2 minimum

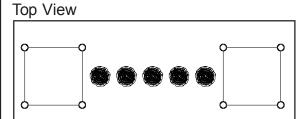
# Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges







#### Bongo Perch, Big Timber<sup>®</sup> Bongo Stump Perch, Bongo Bridges and Big Timber<sup>®</sup> Bongo Stump Bridges



1 - 10" TYP 5 BONGO PERCHES

12" DIA. X 18" DEEP (5) REQ'D

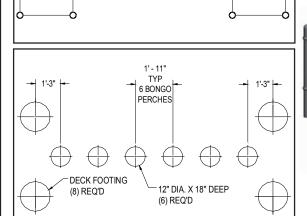


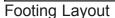
Big Timber Bongo Stump Bridge,

Footing Layout

DECK FOOTING (8) REQ'D 12"

#### Top View



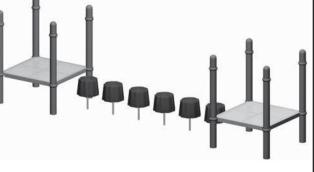


#### 714-625-12

714-625-10

(5) Perches; 10' Span

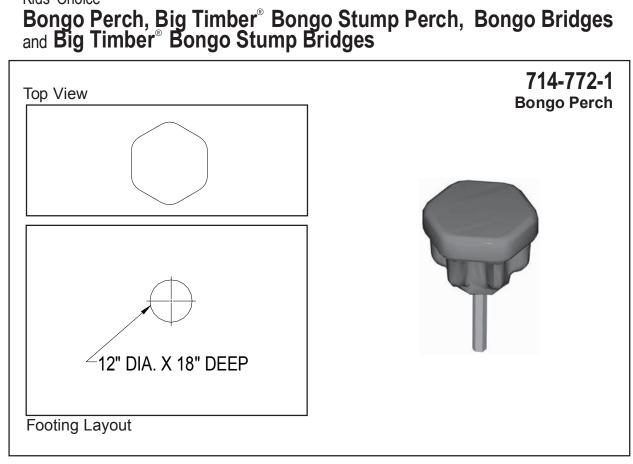
Big Timber Bongo Stump Bridge, (6) Perches; 12' Span

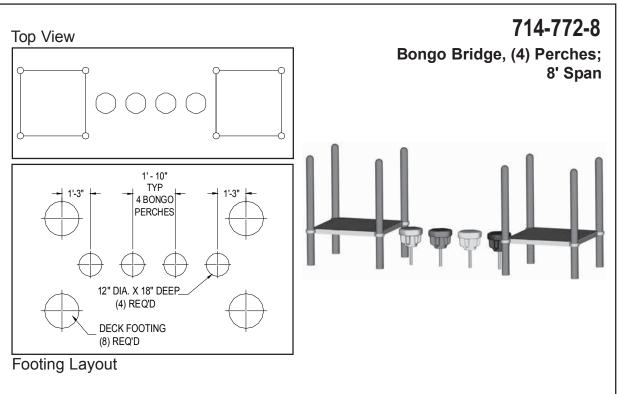


# Bongo Perch & Bongo Bridges

Kids' Choice®

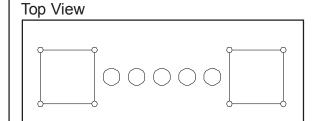






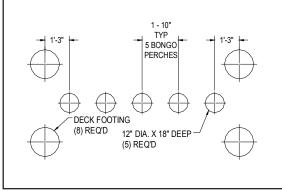


# Bongo Perch, Big Timber<sup>®</sup> Bongo Stump Perch, Bongo Bridges and Big Timber<sup>®</sup> Bongo Stump Bridges



714-772-10

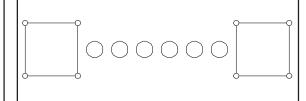
Bongo Bridge, (5) Perches; 10' Span

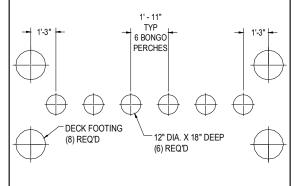




**Footing Layout** 

#### Top View





**Footing Layout** 

#### 714-772-12

Bongo Bridge, (6) Perches; 12' Span



# Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges

#### **INSTALLATION NOTES**

- 1. Bongo Perches may enter/exit Decks 2'-0" or lower only.
- 2. Bongo Perch's top surface may be set no greater than 24" from finished grade.
- 3. If installing as Bridge between Decks, Bongo Perches should be installed in straight line with flat side facing flat side, as shown in *Top Views* and *Footing Layouts,* though Bongo Perches may still vary. Freestanding configurations may zig-zag, circle, diverge, etc.
- 4. If installing as Stair or Bridge between Decks, Bongo Perches adjacent to Deck(s) must be installed so that top surface is level with or maximum **6"** below Deck height.
- 5. Footings might require additional excavation or Bongo Perch Posts might require cutting.
- 6. Do not allow more than 6" vertical difference in adjacent Bongo Perch heights.
- 7. For configurations not in a straight line, distance between Bongo Perches must be **7" to 9"** edge-to-edge (or **22" to 24"** center-to-center.)
- 8. If installing as Bridge between 2'-0" Decks intended for 2 to 5 year olds, Deck Enclosures Model # 714-813-5 must be installed on each Deck. See separate *Installation Guide*.

IMPORTANT NOTE: Big Timber Stump installation is <u>identical</u> to Bongo Pod. If you have a Stump component, follow these instructions substituting ONLY the Stump for the Pod.

INSTALL DECK(S) AND ENCLOSURE(S), IF APPLICABLE If applicable, install Deck system(s) and Enclosure(s) per separate instructions.

#### STEP 2 DIG FOOTINGS

Dig footings per *Footing Layouts* or other configuration. Refer to *Footing Details* installation located behind *Installations 101* in Installation Manual.

Note: Do not pour concrete for footings until <u>all</u> components in system have been installed per instructions and are braced in position level and plumb.



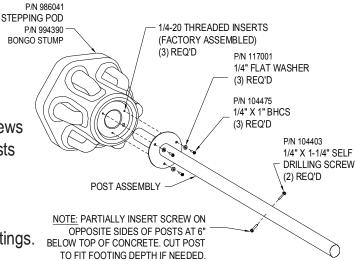
#### Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges

#### STEP 3 BOLT PODS TO POSTS & LOCATE

Assemble Bongo Perches by bolting Posts to Pods or Stumps as shown.

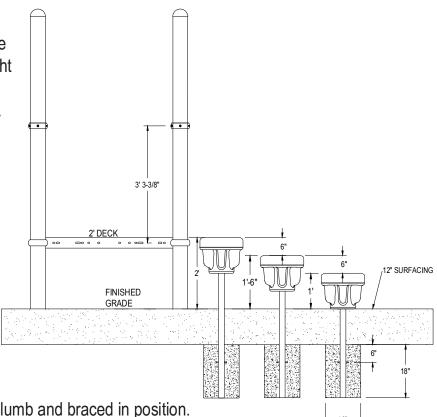
Determine proposed height of each Assembly and find finished grade and subgrade on each. Install self-drilling screws as noted in illustration to help anchor Posts in footings.

If necessary, cut Posts to fit in footings.
Alternately, installers may dig deeper footings.



#### **STEP 4** BRACE PERCHES IN FOOTINGS

Set Bongo Perch Assemblies into footings and center. Brace each in footing at desired height and orientation. Refer to *Installation Notes* on *Page 6*.



#### FINAL STEP

Verify components are level, plumb and braced in position.

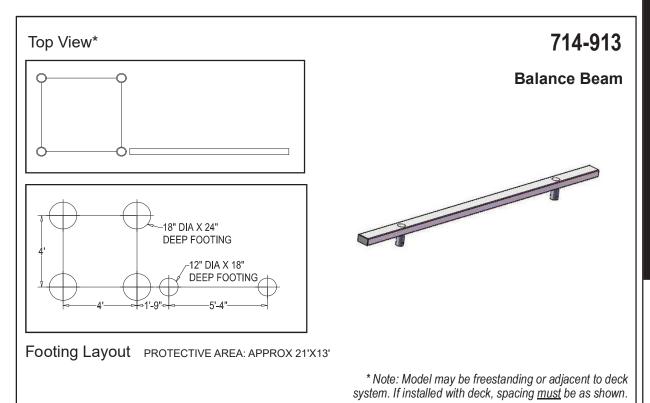
Prepare to pour concrete. Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

Rev. F

Kids' Choice®

#### Balance Beam - 8', Straight

Optional deck system not included in this assembly



#### **TOOLS AND EQUIPMENT REQUIRED**

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, wood pieces, concrete blocks, bricks, jack stands, sawhorses, etc.)
- 4. Tape measure and level
- 5. Adult installer

Note: Do not pour concrete for footings, or permanently secure clamps to posts with self-drilling screws, until <u>all</u> components in system have been installed per instructions, braced into position, leveled and plumbed.

Rev. F

**Balance Beam** 

Kids' Choice®

#### Balance Beam - 8', Straight

Optional deck system not included in this assembly

#### STEP 1 INSTALL DECK SYSTEM

1a. IF applicable, first install the deck system per deck instructions.

#### STEP 2 DIG FOOTINGS

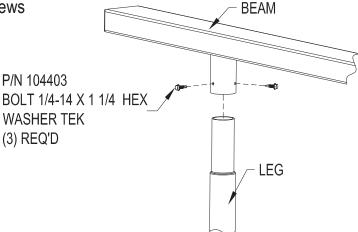
- 2a. Dig footings per Footing Layout on page 1. Refer to Footing Details installation.
- 2b. Model is designed to be installed with 12" of protective surfacing. Legs may require cutting to ensure proper fit in footings; alternately, installers may dig deeper footings, if applicable.

#### STEP 3 | SET LEGS INTO FOOTINGS

3a. Plumb, level and block assembly up so that top surface of beam is **12" maximum** from top of surfacing.

#### **STEP 4** ATTACH BEAM TO LEGS

4a. Set beam onto legs and attach with tek screws in three places.



#### **FINAL STEP**

Proceed with *Final Assembly installation*.



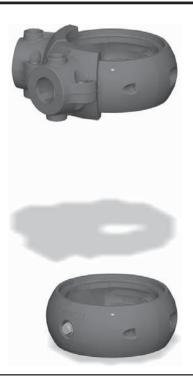
#### **Versalok® Fastening System**

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

Models included in this installation guide:

MODELDESCRIPTIONPAGE718-500Versalok® Fastening System1

Posts and additional components not included in this assembly.



718-500

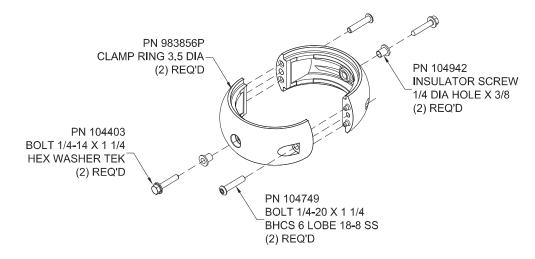
Versalok® Fastening System

#### Note:

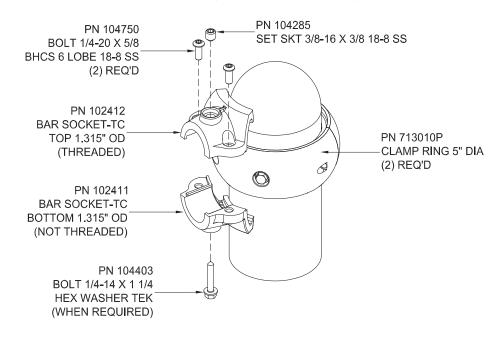
- Deck, deck post, handrails and panel are not included.
- Illustration demonstrates completed assembly with common components.
- Versalok clamps mount to posts allowing connection of decks, enclosures and other components.
- Support casting designs and hardware vary by component.

#### **Versalok® Fastening System**

#### A. 3.5" dia Clamp Ring Assembly



#### B. 2-PC Bar Socket w/1-5/16" dia Hole (for climber rails, etc.)



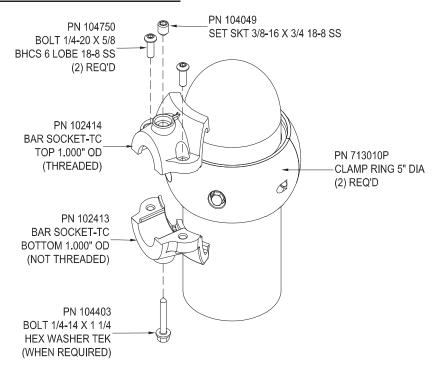
#### Note:

- Top and bottom halves of 2-pc. bar sockets can be reversed to ease installation.
- For bar socket only: Use self-drilling screw (PN 104403) only as required on models specified in installation instructions. This should not be used on any other model.



#### **Versalok® Fastening System**

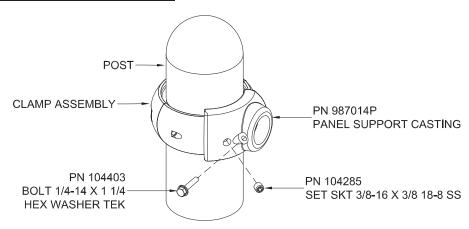
#### C. 2-PC Bar Socket w/1" dia Hole



#### Note:

- Top and bottom halves of 2-pc. bar sockets can be reversed to ease installation.
- For bar socket only: Use self-drilling screw (PN 104403) only as required on models specified in installation instructions. This should not be used on any other model.

#### D. PANEL SUPPORT CASTING



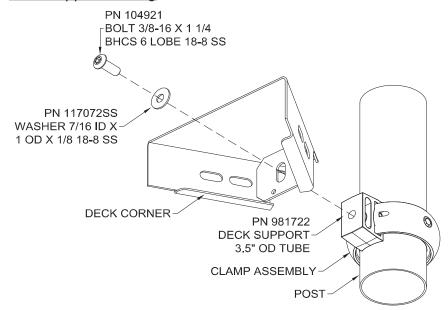
Rev. P

Versalok Fastening System

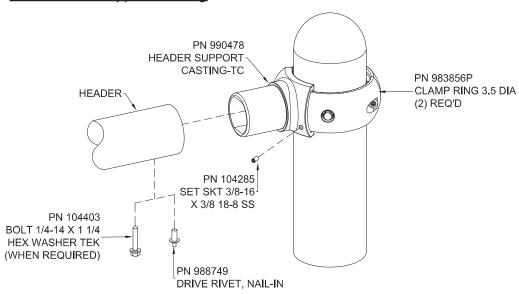
#### Tots' Choice®

#### **Versalok® Fastening System**

#### E. Deck Support Casting



#### F. TCX Header Support Casting



#### Note:

• Refer to specific component installation instruction.



#### **Versalok® Fastening System**

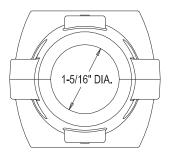
#### STEP 1 MATCH CLAMPS WITH POSTS & COMPONENTS

1a. Determine use(s) and location of each clamp ring based on Construction Drawings and/ or installation instructions of playsystem's components. It is the installer's choice whether to assemble clamps to posts before or after setting posts into footings.

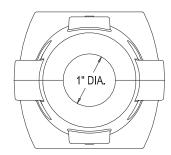
#### Note:

- Most measurements are made from finished grade, which accounts for post length below subgrade (in concrete, beneath compacted soil level) and 12" of loose-fill surfacing.
- Do not permanently affix clamps to posts with self-drilling screws, or pour concrete for footings, until <u>all</u> components in playsystem are installed per instructions and braced in position level and plumb.
- The Versalok Fastening System contains two sizes of bar sockets to accommodate components of two sizes: 1-5/16" O.D. tube and 1" O.D. tube. Take care to match correct size of bar socket with intended connecting component before affixing clamp rings to posts.

PN 102411, PN 102412: 2-PC. BAR SOCKET FOR 1.315" TUBE



PN 102413, PN 102414: 2-PC. BAR SOCKET FOR 1" TUBE



#### STEP 2 MARK CLAMP POSITIONS ON POSTS

- 2a. Determine clamp heights on posts per component instructions. Mark positions on posts with pencil or washable pen or marker.
- 2b. If assembly contains deck support castings, panel support castings or TCX header supports, slide each onto a clamp ring half before mating with opposite half around post. Otherwise, clamp ring will require disassembly during installation to add support castings.

#### **Versalok® Fastening System**

#### **STEP 3** FASTEN CLAMP RING HALVES AROUND POSTS

3a. Refer to first illustration on *page 2*. Connect clamp ring halves to each other around posts at marked heights with **1/4" x 1-1/4" BHCS bolts** (PN 104749) at each end. Orient clamp ring assembly so that recessed center holes (for securing clamp ring halves to post) will not be blocked when components are attached to support castings.

#### Note:

• For aesthetic purpose, it is advisable to assemble clamps around posts with text on surface oriented upright and legible, though clamp will function properly regardless.

#### **STEP 4** COMPONENTS TO OR IN SUPPORT CASTINGS

- 4a. Seat component rail, rungs, edges, etc. in bar sockets or panel supports or against deck supports. Adjust clamp rings on posts as needed (maintaining heights specified in component instructions) to achieve plumb and level posts and components.
- 4b. Refer to illustrations on pages 3 and 4 for support casting hardware requirements.
- 4c. Tighten hardware affixing components to support castings, castings to clamps and clamp rings around posts.

#### FINAL STEP | SECURE CLAMPS TO POSTS

Permanently affix clamp rings to deck posts using self-drilling screws and screw insulators when all components in system have been installed, plumbed, leveled and braced in position for pouring of concrete. Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

# Installation Guide

**FOOTING** 

18"

Footing Details - Deck Posts & Components, Chain/Rope & Tire, Cargo

#### Chain / Rope & Tire **Deck Posts and Components** Cargo **Tots' Choice Deck Post Component Footing Detail Footing Detail FINISHED FINISHED** GRADE GRADE CUSHIONING CUSHIONING · · · MATERIAL MATERIAL COMPACTED COMPACTED SOIL SOIL FOOTING 18" **DEPTH** . 4 CONCRETE CONCRETE FOOTING FOOTING **FOOTING**

Note: Block at bottom of Footing hole is optional, and recommended for installation of deck posts. If used, compensate by digging deeper Footing(s).

DIA

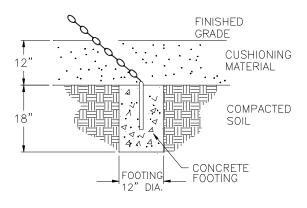
#### Chain / Rope and Tire **Deck Posts & Components** Cargo **Tire Climber Footing Detail Chain Ladder & Climbing Rope Footing Detail FINISHED** FINISHED GRADE GRADE CUSHIONING CUSHIONING 12 12" MATERIAL MATERIAL COMPACTED COMPACTED 18" SOIL 18 CONCRETE FOOTING CONCRETE FOOTING FOOTING 12" DIA FOOTING 12" DIA

## MIRACLE Footing Details - Deck Posts & Components, Chain/Rope & Tire, Cargo

**Deck Posts & Components** 

Chain / Rope & Tire | Cargo Net / Climber

Cargo Net & Cargo Climber **Footing Detail** 





**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

#### Models included in this installation guide:

MODEL#	<u>DESCRIPTION</u>	PAGE#
718-501-9	Triangle Deck	2
718-502-9	Square Deck	2
718-503-9	Half Hexagon Deck	3
718-504-9	Half Hexagon Deck - Open	3

Deck Posts NOT included in these assemblies

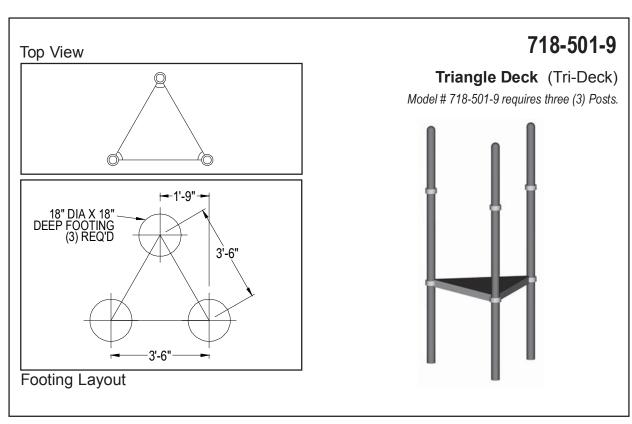
Please refer to Construction Drawings for the model particular to your system.

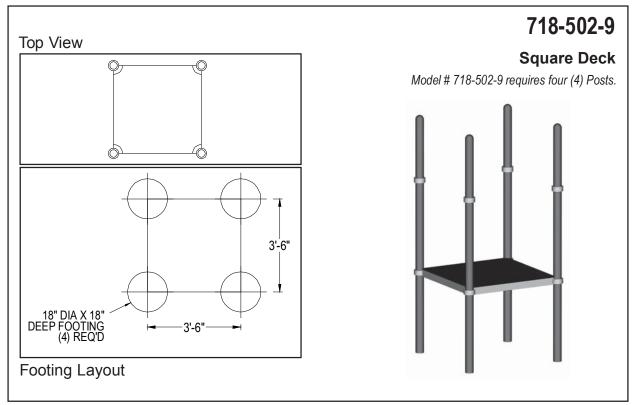
#### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

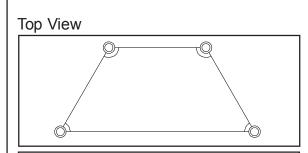
- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, wood pieces, sawhorses, etc.)
- 4. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 5. Drill, bits, extension cords, power supply
- 6. Tape measure and level
- 7. Step ladder
- 8. Adult installers 2 minimum

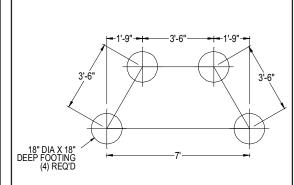












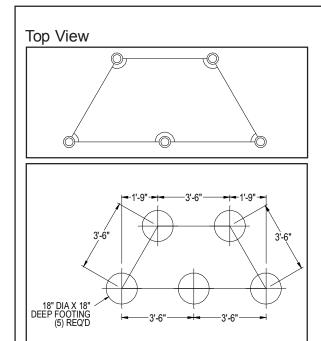
Footing Layout

#### 718-503-9

#### Half Hexagon Deck (1/2 Hex)

Model # 718-503-9 requires four (4) Posts if used with Flippo components, or six (6) Posts and two (2) Decks to form a complete Hex Deck.







#### 718-504-9

Half Hexagon Deck - Open (1/2 Hex Open)

Model # 718-504-9 requires five (5) Posts.



Tots' Choice® - Mira-Therm II

#### **Decks**

Each Deck system requires a number of Posts or Arches, available in various heights and configurations, to facilitate different Deck and component heights. Refer to *Top Views, Footing Layouts,* and *Construction Drawings* specifically for this installation to determine type and location of each Deck Post or Arch.

	STEEL OR ALUMINUM DECK POSTS				
Steel	Aluminum				
Model #	Model #	<b>Description</b>	For use with		
718-551	718-551-2	100" Deck Post	Decks - 2'-6" or lower		
718-552	718-552-2	130" Deck Post	Decks - 3' to 5'		
718-553	718-553-2	148" Deck Post	Decks - 5'-6" to 6'		
718-555	718-555-2	70" Deck Post	Freestanding Panels		
718-572	718-572-2	138" Deck Post	Decks - 3' or lower (with Roof		
718-573	718-573-2	162" Deck Post	Decks - 3'-6" to 5' (with Roof)		
718-574	718-574-2	180" Deck Post	Decks - 5'-6" to 6' (with Roof)		
718-583	718-583-2	151" Arch	Decks - 3' or lower		
718-585	718-585-2	175" Arch	Decks - 3'-6" to 5'		
718-586	718-586-2	193" Arch	Decks - 5'-6" to 6'		

#### STEP 1 DIG FOOTINGS

Dig Footings per *Top Views* and *Footing Layouts* or Construction Drawings. Refer to *Footing Details installation* located behind *Installations 101* in Installation Manual.

Install Tip: Determine thickness of blocking material (such as patio blocks.) Dig Footings that amount deeper and place blocks beneath Deck Posts in Footings. This gives playsystem additional stability and helps ensure it remains level and plumb until concrete is fully cured.

Note: Do not pour concrete for footings until components illustrated in this installation guide have been installed per instructions and braced in position level and plumb.



#### STEP 2 SET POSTS INTO FOOTINGS

Set Posts into Footings and verify that tops of plumb Posts are level on same (or correct) plane.

Note: One Arch functions as two Deck Posts. Legs of Arch may vary slightly in length. Plumb each Arch leg so that Arch Assembly stands plumb at desired height, and adjust Footing depth or block up short leg as needed.

# STEP 3 ASSEMBLE DECK SUPPORTS AND BAR SOCKETS (IF APPLICABLE) TO CLAMP RINGS

Refer to *Versalok Fastening System installation* located behind *Installations 101* in Installation Manual.

Place Deck Supports (and Bar Sockets, if applicable) on each Clamp Ring and loosely assemble Clamp Ring halves around Posts so that tops of Clamps are **approximately 3/4" below** intended Deck height. Orient Deck Supports toward center of Deck.

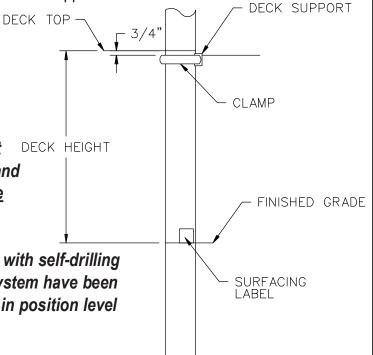
Apply a "Top of Surfacing" label to each Deck Post 12" above compacted soil.

Note: If a Post must "share duty" by supporting an adjacent Deck system at equal height or an adjacent component, slide all Deck Supports and Bar Sockets onto Clamp Rings before assembling to Posts.

Note: Do not secure Clamps to Posts with self-drilling screws until all components in playsystem have been installed per instructions and braced in position level and plumb.

#### STEP 4 DRILL EXCESS PVC

Use drill to ream excess PVC from Deck Support mounting holes in Deck corners.



Tots' Choice® - Mira-Therm II

#### **Decks**

#### STEP 5 ATTACH DECK TO POSTS

Rest Deck on Clamps, and plumb and brace Deck Posts in position. Readjust position of Clamps on Posts as needed to ensure that Deck is level at desired height.

Align Deck corner mounting holes with Deck Supports and attach each with 3/8" x 1-1/4" button head bolt (P/N 104921) and 7/16" I.D. x 1" O.D. flat washer (P/N 117072SS). Do not embed washer in deck coating by overtightening bolt.

Install Tip: Employ a jack stand or other blocking material to support Deck system at proper height until other components are attached, to prevent leaning or twisting of Deck assemblies and to temporarily lend stability.

#### **STEP 6** AFFIX DECK SECTIONS TOGETHER; IF APPLICABLE

If installing Deck systems with sections sharing a long side at same height (without a middle Post,) use drill to ream excess deck coating from four (4) mating holes in long side edge angle on both Deck sections. Secure Deck sections together with 3/8" x 1-1/8" button head bolts (P/N 104930), 3/8" flat washers (P/N 117005) on each side, and 3/8" Nylok nut (P/N 110030).

Deck sections which share a 3'-6" side at same or varying heights attach to common Posts per previous instructions. Deck-to-Deck fastening on a common 3'-6" side is not necessary.

#### **FINAL STEP**

Square, plumb and level Deck Assembly. Tighten Clamps on Posts, and assemble remaining components to Deck system. When complete, proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.



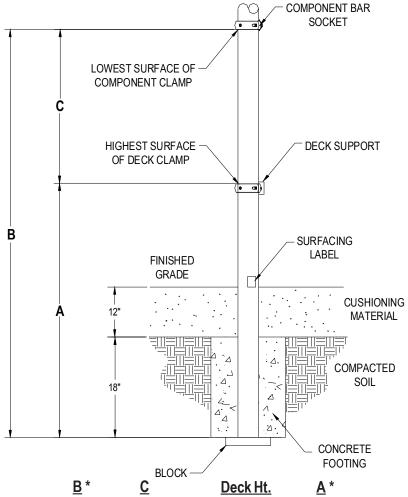
## Installation Guide

Rev. B

E Tots' Choice®

## Pre-Installation Preparation of Clamps to Deck Posts This procedure is an optional step for playsystem installations.

#### **Clamp Locations on Posts by Deck Height**



Deck Ht.	<u>A</u> *	<u>B</u> *	DECON	Deck Ht.	<u>A</u> *	<u>B</u> *	<u>C</u>
1'-0" 1'-6" 2'-0" 2'-6"	35-1/4" 41-1/4" 47-1/4" 53-1/4" 59-1/4"	78-3/4" 84-3/4" 90-3/4" 96-3/4"	37-1/2" 37-1/2" 37-1/2" 37-1/2" 37-1/2"	5'-0"	83-1/4" 89-1/4" 95-1/4" 101-1/4" 107-1/4"	126-3/4" 132-3/4" 138-3/4" 144-3/4"	37-1/2" 37-1/2" 37-1/2" 37-1/2"
3'-6"	71-1/4" 77-1/4"	108-3/4"	37-1/2"	7'-6"	119-1/4" 125-1/4"	156-3/4"	37-1/2"

\* Dimensions measured from bottom end of Deck Post

Note: The values in this chart assume 18" deep footing plus 12" protective surfacing. If planned drainage system or other factors affect height of finished grade, adjust chart values accordingly.

Special thanks to the crew of Ozark Mountain Installations, Inc. in Monett, Missouri, for recommending this procedure.

#### **Pre-Installation Preparation of Clamps to Deck Posts**

Many installers prefer to assemble Deck-supporting Clamps and corresponding Component-supporting Clamps around Deck Posts at correct heights all at once as part of their "prep work," in order to save time and effort during installation of other playsystem components.

Miracle's *Installation Guides* provide dimensions and instructions for mounting each model and its parts individually and consecutively, regardless of whether this prep work is completed. It is at the installers' discretion whether to reference this procedure.

The instructions, diagram and chart herein refer to locations for marking and connecting Clamps around Deck Posts only (i.e. Posts without Decks do not apply.) Refer to **Versalok Fastening System** installation instructions in this **Manual** for assembly details.

Note: Do not use self-drilling screws to secure Clamps to Posts until all components in system have been installed per instructions, and are plumb, level and braced in position. This will allow Clamps to be shifted as needed during installation of remaining components.

It is important to note that until Clamps are permanently secured, Deck systems and other components are UNSAFE TO STAND ON!

Note: This procedure is valid only if footing depths are precise and consistent. Continue only if a transit or other device will be used to verify accuracy.

If Blocks will be placed beneath Deck Posts at bottom of footing holes as recommended, compensate for extra height by digging holes deeper. Refer to *Footing Details*.

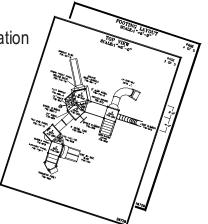
#### STEP 1

Remove wrapping from Deck Posts, verifying that Part Identification Labels match Parts Lists in this *Installation Manual*.

#### STEP 2

Study enclosed *Top View* and *Footing Layout*, located behind "Construction Drawings" tab.

Locate all Deck Posts in playsystem, and determine which size Bar Socket(s) should be attached to each Deck Post.

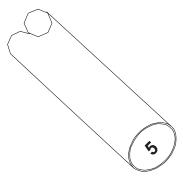




#### **Pre-Installation Preparation of Clamps to Deck Posts**

#### STEP 3

Plan installation sequence of Decks and other system components. Assign each Deck Post a number. Write numbers by Posts on *Footing Layout* or *Top View* for later reference, then use a permanent marker to write identical numbers inside bottom of corresponding Deck Posts.



#### STEP 4

Place Deck Posts on sawhorses or other sturdy, non-abrasive surface.

Note intended usage and location of each Deck Post (for which Deck heights), and refer to chart on *Page 1*. Measure from bottom of each Deck Post and mark location of **highest surface of Deck-supporting Clamp (A)**, *not Deck Support*.

#### STEP 5

Refer to **Versalok Fastening System** Installation Guide. Slide Deck Support(s) onto Deck-supporting Clamp halves, and assemble both halves of Clamp Rings around Deck Posts tightly, aligning top surface of Clamp Ring (not Deck Support) with mark.

#### STEP 6

Measure and mark Deck Post at lowest surface of Component-supporting Clamp (B).

#### STEP 7

Slide correct size(s) of Bar Socket(s) onto Component-supporting Clamp Ring halves, and assemble Rings around Deck Posts at marks. Verify that distance between **A** and **B** is **(C)** value in third column of chart.

#### **FINAL STEP**

Repeat procedure starting at **Step 4** until all Deck Posts are position-planned, numbered, and assembled with Clamp Rings and Deck Supports, when applicable.



# Miracle Installation Guide

Rev. N

Tots' Choice®

#### Steel Posts & Aluminum Posts - 3-1/2" O.D.

These components may be used in Deck systems as well as freestanding and other assemblies.

#### Steel Posts - 3-1/2" O.D.

	MODEL	DESCRIPTION	USES	PART#
	718-549-3	106" Deck Post	3' Decks	995232P
	718-549-4	118" Deck Post	4' Decks	995233P
	718-550-3	200" Deck Post (PlayCover)	3' Deck & Less	997245P
	718-550-5	216" Deck Post (PlayCover)	3'-6" to 5' Decks	997251P
	718-550-6	232" Deck Post (PlayCover)	5'-6" to 6'-6" Decks	997257P
	718-550-8	248" Deck Post (PlayCover)	7' to 8' Decks	997227P
	718-551	100" Deck Post	2'-6" Decks & less	981925P
	718-552	130" Deck Post	3' to 5' Decks	981926P
	718-552L	130" Deck Post w/CPSIA Label	3' to 5' Decks	996062P
	718-553	148" Deck Post	5'-6" to 6'-6" Decks	981927P
	718-554	166" Deck Post	7'-0" to 8'-0" Decks	990656P
	718-555	70" Post for Play Panels	Play Panels	982294P
	718-571	100" Deck Post (for Roof)	Ground Level	114145P
igwdow	718-572	138" Deck Post (for Roof)	3' Decks & less	981928P
	718-573	162" Deck Post (for Roof)	3'-6" to 5' Decks	981930P
	718-574	180" Deck Post (for Roof)	5'-6" to 6'-6" Decks	981929P
	718-575	190" Deck Post (for Roof)	6'6" Deck	114965P
	718-576	198" Deck Post (for Roof)	7'-0" to 8'-0" Decks	114957P

Top Views not shown. Refer to playsystem's Installation Guide and/or Construction Drawing for Footing Layouts.

# Steel Posts & Aluminum Posts - 3-1/2" O.D.

Tots' Choice®

#### Steel Posts & Aluminum Posts-3-1/2" O.D.

	Aluminum Posts - 3-1/2" C		
MODEL	DESCRIPTION	USES	PART#
718-549-32	106" Deck Post	3' Decks	995234P
71-549-42	118" Deck Post	4' Decks	995235P
718-551-2	100" Deck Post	2'-6" Decks & less	989070P
718-552-2	130" Deck Post	3' to 5' Decks	989071P
718-552-2L	130" Deck Post w/CPSIA Label	3' to 5' Decks	996066P
718-553-2	148" Deck Post	5'-6" to 6'-6" Decks	989073P
718-555-2	70" Post for Play Panels	Play Panels	989069P
718-572-2	138" Deck Post (for Roof)	3' Decks & less	989072P
718-573-2	162" Deck Post (for Roof)	3'-6" to 5' Decks	989074P
718-574-2	180" Deck Post (for Roof)	5'-6" to 6'-6" Decks	989075P
	718-549-32 71-549-42 718-551-2 718-552-2 718-552-2L 718-553-2 718-555-2 718-573-2	MODEL         DESCRIPTION           718-549-32         106" Deck Post	MODEL         DESCRIPTION         USES           718-549-32         106" Deck Post

Note: Miracle Recreation attaches a CPSIA label to transfer points and 2' stairs. If your composite structure does not have one of these components, there will be ONE post with the label attached. This label will be attached so that when installed it will be approximately 6" above finished grade. Ensure this label is readable and not covered by clamps, hardware or other equipment. If you do NOT have a component with label, contact your Miracle sales representative.



#### Steel Posts & Aluminum Posts-3-1/2" O.D.

#### **STEP 1** DIG FOOTINGS

Use playsystem's *Installation Guide* and/or *Construction Drawing* to determine footing locations, and use shovel, posthole digger, auger, etc. to dig footings.

Refer to Footing Details installation.

#### **STEP 2** PLACE POSTS INTO FOOTINGS

Place Posts into footings. Plumb and brace in position.

Note: Do not pour concrete for footings, or permanently secure Clamps to Posts with self-drilling screws, until <u>all</u> components in system or freestanding assembly have been installed per instructions and braced in position level and plumb.

#### **FINAL STEP**

Install remaining Playsystem components per instructions. Verify that components are at correct heights, angles, etc., and are plumb and level.

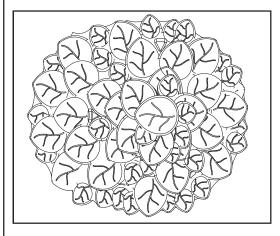
Secure Posts in footings with concrete. Allow 72 hours to cure before removing braces. Refer to *Final Assembly installation*.



#### **Big Timber® Post Topper**

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

Top View Big Timber Post Topper





NOTE: Post NOT included in these assemblies.

#### **TOOLS AND EQUIPMENT REQUIRED**

Also see "Suggested Tools & Equipment" (Doc # D70052) in "Installations 101"

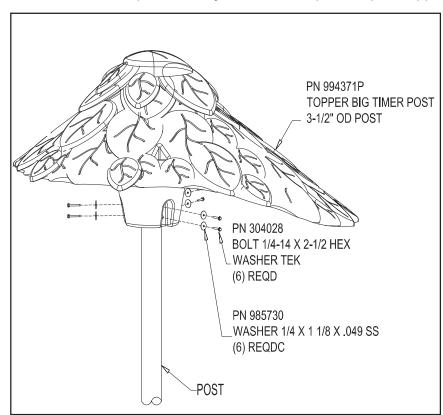
- 1. Tape measure and level
- 2. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 3. Step ladder
- 4. Adult installer

#### Big Timber® Post Topper

#### STEP 1 INSTALL POST TOPPER

- 1a. Set post cap into top end of post.
- 1b. Firmly and completely seat big timber post topper onto top of post cap. The inside of the wall at topper's crown *must* come in contact with the post cap.
- 1c. Level and plumb post topper.
- 1d. Secure to post in six (6) places as shown below.

NOTE: To minimize damage to the cap, use a rubber mallet to *GENTLY* drive cap into fully seated position; to ensure complete contact with the top of the post topper, use a rubber mallet to *GENTLY* tap all the way around the top of the post topper.



#### **FINAL STEP**

Refer to *Final Assembly installation* located behind *Installations 101* in Installation Manual.



#### Side-by-Side Slide, Bump & Glide Slides & Ski Slide

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

#### Models included in this installation guide:

MODEL	DESCRIPTION	<u>PAGE</u>
718-700	Side-by-Side Slide from 3' Deck	2
718-728-4	Bump & Glide Slide from 4' Deck	2
718-728-5	Bump & Glide Slide from 4'-6" to 5'-6" Deck	3
718-874	Skil Slide from 3' Deck	3

Note: Deck Systems are NOT included in these assemblies. Please refer to Construction Drawings for the model particular to your system.

#### TOOLS AND EQUIPMENT (REQUIRED)

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

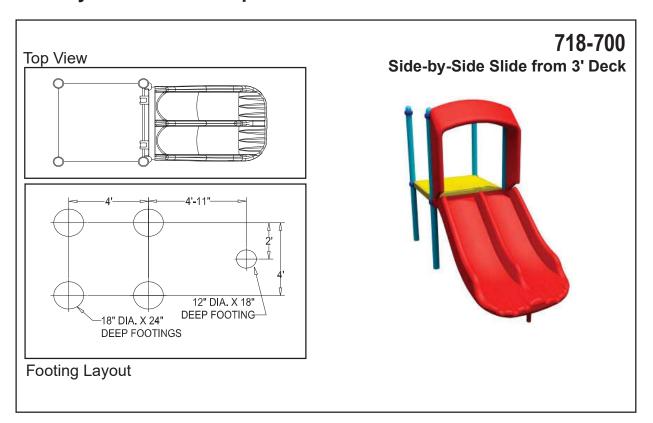
- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4's, wood pieces, concrete blocks, bricks, jack stands, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Rubber mallet
- 7. Step ladder
- 8. Drill, drill bits, extension cords, power supply
- 9. Adult installers 2 minimum

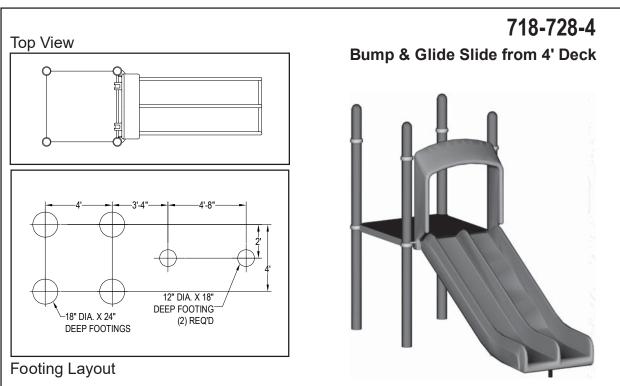
Rev. S

# Side-by-Side, Bump & Glide & Ski Slide

#### Tots' Choice®

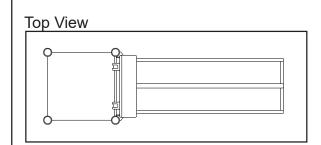
#### Side-by-Side Slide, Bump & Glide Slides & Ski Slide

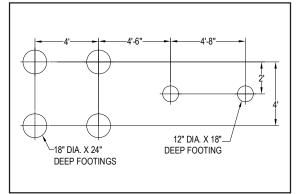






#### Side-by-Side Slide, Bump & Glide Slides & Ski Slide



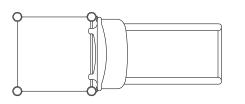


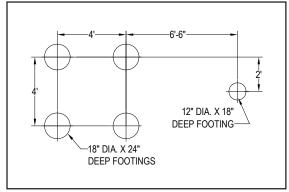
**Footing Layout** 











**Footing Layout** 

### 718-874

Ski Slide from 3' Deck



#### Side-by-Side Slide, Bump & Glide Slides & Ski Slide

#### STEP 1 INSTALL DECK SYSTEM

1a. Install deck system per separate instructions. Plumb, level and brace in position.

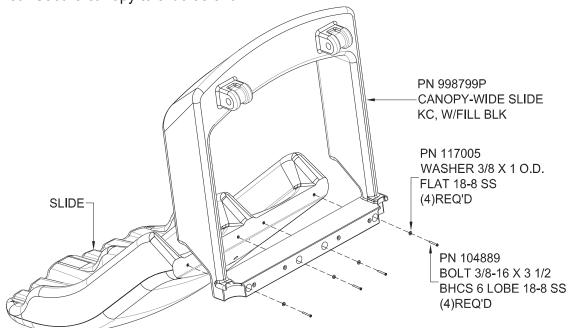
#### STEP 2 DIG FOOTINGS

2a. Dig footings per *Footing Layout*, Construction Drawings and *Footing Details* installation.

Note: Do not pour concrete for footings, or permanently secure clamps to posts with self-drilling screws, until components illustrated in this installation guide have been installed per instructions and braced in position, leveled and plumbed.

#### STEP 3 SECURE CANOPY TO SLIDE

3a. Secure canopy to slide as shown.



#### STEP 4 TAP RUNG INTO CANOPY TOP

4a. Use rubber mallet to gently tap 41-½" rung (PN 713110P) through canopy top until equal lengths are exposed on each end.

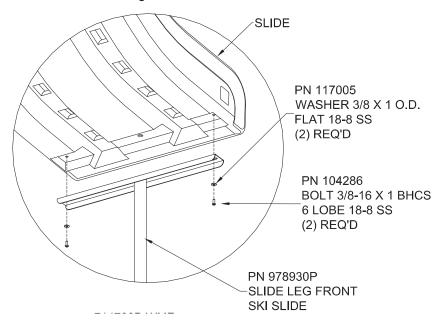


#### Side-by-Side Slide, Bump & Glide Slides & Ski Slide

#### STEP 5 ATTACH FRONT LEG

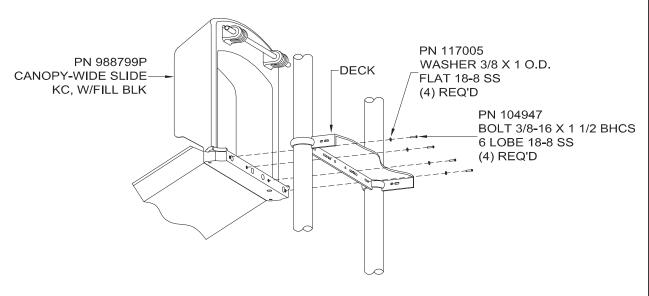
5a. Attach front leg to slide as shown.

Note: If applicable, attach middle leg to slide.



#### STEP 6 AFFIX CANOPY TO DECK

6a. Set slide leg(s) into footing(s) and position canopy against deck. Use drill to remove excess material from mating bolt holes in deck edge. Fasten canopy to deck as shown.



#### Side-by-Side Slide, Bump & Glide Slides & Ski Slide

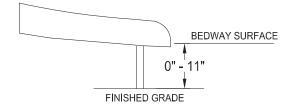
#### **STEP 7** AFFIX CLAMP RINGS TO POSTS; BAR SOCKETS TO CLAMPS

- 7a. Refer to **Versalok Fastening System** installation located behind *Installations 101* in Installation Manual.
- 7b. Loosely assemble clamp ring halves around each post so that bottom edge of each clamp is **37-3/8**" from top edge of deck-supporting clamps. Loosely assemble a bar socket on each clamp ring.
- 7c. Seat rung ends in bar sockets; plumb and level canopy; tighten rung in bar sockets; bar sockets on clamps; clamp rings on posts.

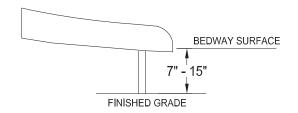
#### **STEP 8** SET BEDWAY HEIGHT

- 8a. Set height of slide bedway exit's top surface from finished grade as shown.
- 8b. Plumb leg(s) and block in position ensuring the bedway will drain water.

DECKS LESS THAN 4'



DECKS GREATER THAN OR EQUAL TO 4'



#### **FINAL STEP**

Proceed with Final Assembly installation.

Rev. Y

Tots' Choice®

#### **Imagination Panels & Activity Panels**

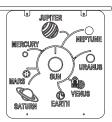
**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

Models included in this installation guide:		
MODEL_	<u>DESCRIPTION</u>	<u>PAGE</u>
718-617	Space Ship Panel	2
740 744 4	Dark Dan van Daniel	0
718-714-1	Park Ranger Panel	2
718-714-2	Fire Truck Panel	2
718-714-3	Police Panel	2
718-714-4	Train Panel	2
718-714-5	Taxi Panel	2
718-714-6	Pilot Panel with Window	2
718-714-7	Pilot Panel	2
718-714-8	Race Car Panel	2
718-715-1	Alphabet Panel	2
718-715-2	Finger Maze Panel	2
718-715-3	Jump Panel (3' Deck)	2
718-715-4	Calculator Panel	2
718-715-5	Jump Panel (5' Deck)	2
1	camp rane (or 2001)	_
718-715-10	Sign Language Panel	2
718-715-11	Spanish Panel	2
718-715-12	Braille Panel	3
718-715-13	Calypso 3-Drum Panel	3
718-715-15	Chinese Panel	3
718-715-20	Activity Panel Frame	3
718-732	Wolcomo Panal (5.12)	3
718-732-1	Welcome Panel (5-12) Welcome Panel (2-5)	3
718-732-2	,	3
110-132-2	Welcome Panel (2-12)	J
718-761-2	Piston Panel	3
718-761-3	Gear Panel	3
718-761-4	Sliding Tile Panel	3
1		

Note: Deck systems are NOT included in these assemblies. Please refer to Construction Drawings for the model particular to your system.

#### **Imagination Panels & Activity Panels**





718-714-1: Park Ranger Panel



718-714-2: Fire Truck Panel



718-714-3: Police Panel



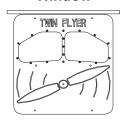
718-714-4: Train Panel



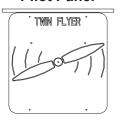
718-714-5: Taxi Panel



718-714-6: Pilot Panel w/ Window



718-714-7: Pilot Panel



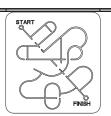
718-714-8: Race Car Panel



718-715-1: Alphabet Panel



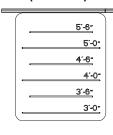
718-715-2: Finger Maze Panel



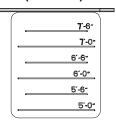
718-715-4: Calculator Panel



718-715-3: Jump Panel (3' Deck)



718-715-5: Jump Panel (5' Deck)



718-715-10: Sign Language Panel



718-715-11: Spanish Panel

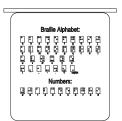


Top Views and Footing Layouts not shown. These models mount vertically on deck systems.



#### **Imagination Panels & Activity Panels**

### 718-715-12: Braille Panel



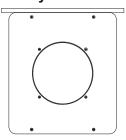
#### 718-715-13: Calypso 3-Drum Panel



718-715-15: Chinese Panel



718-715-20: Activity Panel Frame



718-732-1: Welcome Panel (2-5)



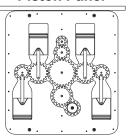
718-732-2: Welcome Panel (2-12)



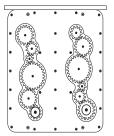
718-732: Welcome Panel (5-12)



718-761-2: Piston Panel



718-761-3: Gear Panel



718-761-4: Sliding Tile Panel



Top Views and Footing Layouts not shown. These models mount vertically on Deck systems.

#### **Imagination Panels & Activity Panels**

#### TOOLS AND EQUIPMENT REQUIRED

Also see "Suggested Tools & Equipment" (Doc. # D75002) in "Installations 101"

- 1. Tape measure and level
- 2. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 3. Step ladder
- 4. Drill, drill bits, extension cords, power supply
- 5. Adult installers 2 minimum

#### STEP 1 INSTALL DECK SYSTEM

1a. Install deck system per separate instructions. Plumb, level and brace in position.

Note: Do not pour concrete for footings or permanently affix clamps to posts with self-drilling screws until components illustrated in this installation guide have been installed per instructions and braced in position, leveled and plumbed.

#### STEP 2 DRILL EXCESS PVC FROM DECK MATING BOLT HOLES

2a. Center panel between posts against deck face to locate and mark mating bolt holes. Use drill to remove excess PVC from only those holes in the deck.

#### **STEP 3** LOOSELY ATTACH CLAMP RINGS TO POSTS

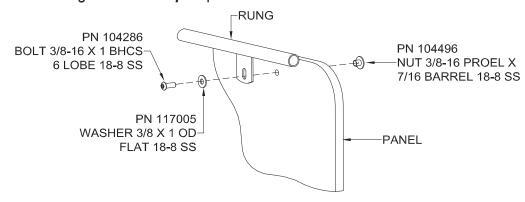
- 3a. Refer to **Versalok Fastening System** installation located behind *Installations 101* in Installation Manual.
- 3b. Loosely assemble clamp rings around deck posts so that bottom edge of each is **37-3/8"** from top edge of deck-supporting clamp. It is acceptable to approximate position of clamps until panel is completely installed. Loosely affix bar sockets to clamps.



#### **Imagination Panels & Activity Panels**

#### **STEP 4** ATTACH RUNG BRACKET TO PANEL

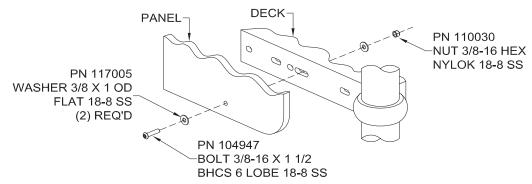
4a. Attach rung bracket to *top* of panel as shown.



- 4b. Model 718-761-2 Piston Panel and Model 718-761-3 Gear Panel:
- Determine panel assembly's "top" for rung bracket attachment. Knobs should be located to ensure comfortable operation by users either on or off deck. In general, knobs should be at panel top if gear mechanism faces inward (for users standing on deck), or at bottom if gear mechanism faces outward (for users standing on ground or lower deck).
- 4c. Model 718-715-13 Calypso 3-Drum Panel:
- Determine panel assembly's "top" for rung bracket attachment. Calypso 3-drum panel must be attached so drums are angled *UPWARD*.

#### STEP 5 AFFIX PANEL TO DECK

5a. Replace panel against deck. Attach bottom of panel to deck face with bolts through outermost holes.



Note: Model's 718-761-2 and 718-761-3 will use PN 304007 (3/8" X 1-5/8" BHCS).

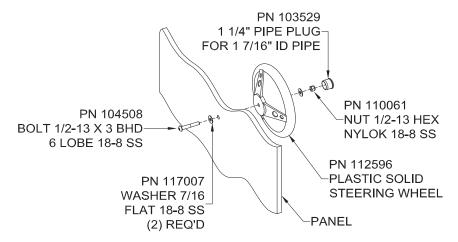
#### **Imagination Panels & Activity Panels**

#### **STEP 6** INSERT RUNG BRACKETS IN BAR SOCKETS

- 6a. Refer to *Versalok Fastening System installation* located behind *Installations 101* in Installation Manual.
- 6b. Insert rung bracket ends in bar sockets and tighten in place. Plumb and level panel assembly. Tighten bar sockets on clamps and clamp rings around posts.

#### STEP 7 SECURE STEERING WHEEL(S), IF APPLICABLE

7a. If applicable, secure steering wheel(s) to panel assembly as shown.



#### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.



## Installation Guide

Tots' Choice®

**Vertical Climbers** 

Cliff Climber, Canyon Climber, Trap Door Climber, Climbing Pole & Spider Climber

718-719\* & 718-719-6

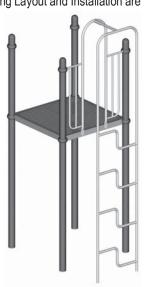
718-721 & 718-721-6

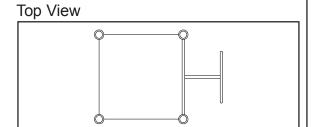
**5 Additional Models** 

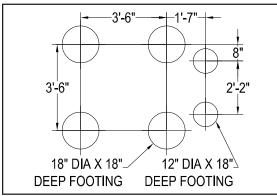
Deck system not included in these assemblies.

#### Cliff Climber for 6' or 6'-6" Deck

\* Model # 718-719 Cliff Climber for 3' or 5' Deck not shown. Top View, Footing Layout and Installation are identical.







**Footing Layout** 

718-719 & 718-719-6

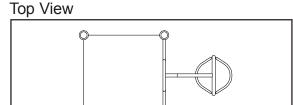
718-721\* & 718-721-6

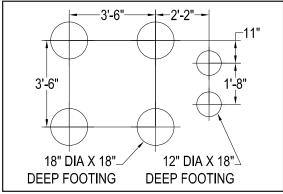
**5 Additional Models** 

#### Canyon Climber for 6' or 6'-6" Deck

\* Model # 718-721 Canyon Climber for 3' or 5' Deck not shown. Top View, Footing Layout and Installation are identical.







**Footing Layout** 

#### **Vertical Climbers**

718-731\* & 718-731-6

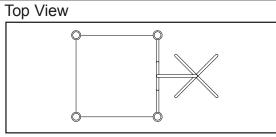
718-808 & 718-808-8

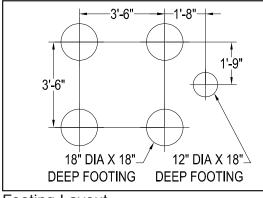
1 Additional Model

#### Trap Door Climber for 6' or 6'-6" Deck

\* Model # 718-731 Trap Door Climber for 3' or 5' Deck not shown. Top View, Footing Layout and Installation are identical.







Footing Layout

718-731 & 718-731-6

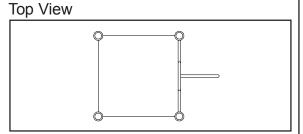
718-808\* & 718-808-8

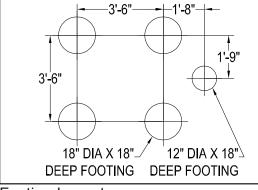
1 Additional Model

#### **Climbing Pole for 8' Deck**

\* Model # 718-808 Climbing Pole for 3', 5', 6' or 6'-6" Deck not shown. Top View, Footing Layout and Installation are identical.







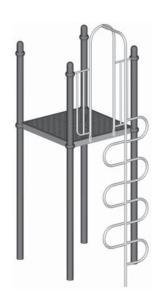
**Footing Layout** 



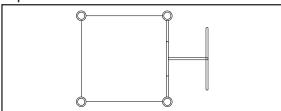
#### **Vertical Climbers**

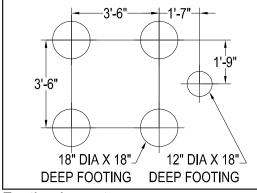
718-908

Spider Climber for 3', 5', 6' or 6'-6" Deck



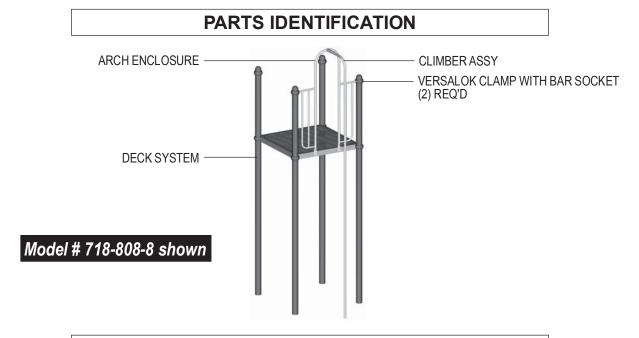






Footing Layout

#### **Vertical Climbers**



#### RECOMMENDED ASSEMBLY SEQUENCE

- 1. Deck system (per separate instructions)
- 2. Footing(s)
- 3. Clamps with Bar Sockets loosely to Deck Posts
- 4. Arch Enclosure to Deck and to Posts (via Clamps)
- 5. Climber Assembly into footing(s), to Arch Enclosure
- 6. Final Assembly

#### **TOOLS AND EQUIPMENT REQUIRED**

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, wood pieces, jack stands, sawhorses, concrete blocks, bricks, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Drill, bits, extension cords, power supply
- 7. Step ladder
- 8. Adult installers 2 minimum



#### STEP 1

Read **Safety Brochure 100, Important Notes**, these instructions, and other enclosed materials. Unpack, count, and become familiar with system components and hardware.

#### STEP 2

Install Deck system per separate instructions. Plumb, level and brace in position.

Note: Do not pour concrete for footings, or permanently secure Clamps to Posts with self-drilling screws, until <u>all</u> components in system have been installed per instructions and braced in position level and plumb.

#### STEP 3

Dig footings per Footing Layouts, Construction Drawings, and to Footing Details installation.

#### STEP 4

Refer to Versalok Fastening System installation.

Loosely affix a Bar Socket (with 1-1/16" diameter hole) to each set of Clamp Ring halves. Loosely assemble Clamps on Posts so that bottom edge of each is **37-1/2**" from top edge of Deck-supporting Clamp.

#### STEP 5

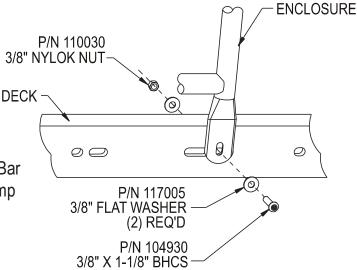
Position Arch Enclosure against Deck, aligning holes in mashed ends of plumb Enclosure uprights with bolt holes in Deck face. Use drill to ream excess PVC from only those holes in Deck.



#### **Vertical Climbers**

#### STEP 6

Refer to *Versalok Fastening System installation.* Place Enclosure's top rails
into Bar Sockets, aligning bottom holes
in Enclosure uprights with holes in Deck.
Plumb and level Arch Enclosure and
secure to Deck as shown. Tighten rails in Bar
Sockets, Bar Sockets to Clamps, and Clamp
Rings around Posts.



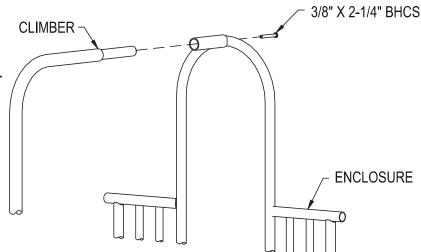
#### STEP 7

Set Climber into footing(s).

Note: Some Climber Assemblies require cutting at bottom end to properly fit certain Deck heights. If necessary, measure 90" from top surface of Climber and add distance of Deck height from finished grade to locate cut mark. (This formula allows for 12" of protective surfacing and allows adjusted Climber to reach bottom of footing hole). Cut Climber at mark.

#### STEP 8

Firmly seat stub at top of Climber Assembly in Arch Enclosure's sleeve. Attach Climber to Arch Enclosure as shown.



P/N 104262

#### FINAL STEP

Proceed with *Final Assembly installation*.

Tots' Choice® - Mira-Therm II

360° Typhoon II Slides from 4', 5' and 6' Decks

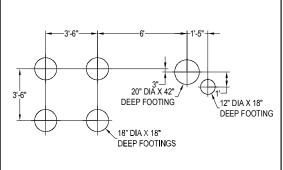
**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

#### Models included in this installation guide:

MODEL#	DESCRIPTION	PAGE#
718-748-49	360° Typhoon II Slide from 4' Deck (6'-2" Platform)	1
718-748-59	360° Typhoon II Slide from 5' Deck (6'-2" Platform)	2
718-748-69	360° Typhoon II Slide from 6' Deck (6'-0" Platform)	2

Deck system not included in these assemblies.

# Top View



**Footing Layout** 

#### 718-748-49

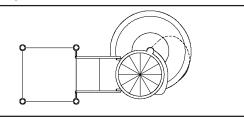
360° Typhoon II Slide from 4' Deck (6'-2" Platform)

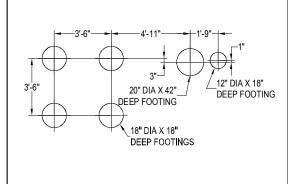


#### Tots' Choice® - Mira-Therm II

#### 360° Typhoon II Slides

Top View





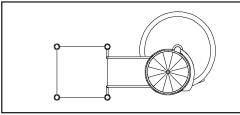
Footing Layout

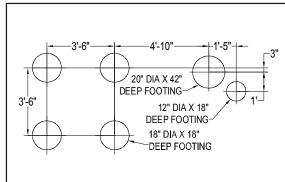
#### 718-748-59

360° Typhoon II Slide from 5' Deck (6'-2" Platform)



#### Top View





Footing Layout

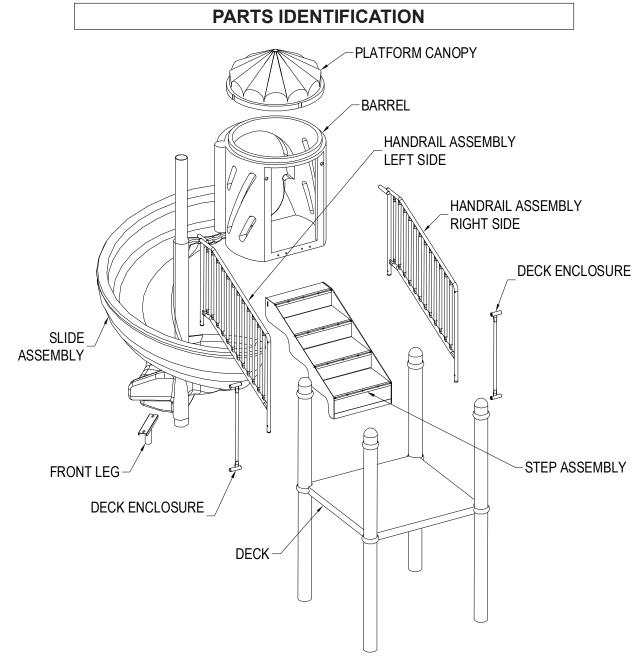
#### 718-748-69

360° Typhoon II Slide from 6' Deck (6'-0" Platform)





# Tots' Choice® - Mira-Therm II 360° **Typhoon II Slides**



Tots' Choice® - Mira-Therm II

#### 360° Typhoon II Slides

#### RECOMMENDED ASSEMBLY SEQUENCE

- 1. Deck system (per separate instructions)
- 2. Footings
- 3. Clamps with Bar Sockets loosely to Posts
- 4. Deck Enclosures to Posts (via Clamps)
- 5. Ramp/Stair Enclosures to Deck Enclosures
- 6. Ramp/Stair to Deck
- 7. Ramp/Stair Enclosures to Ramp or Stair
- 8. Front Leg to Slide
- 9. Center Pole and Front Leg into footings; Ramp/Stair Enclosure stubs into Barrel
- 10. Ramp/Stair to Barrel
- 11. Platform Canopy to Barrel
- 12. Final Assembly

#### **TOOLS AND EQUIPMENT REQUIRED**

Also see "Suggested Tools & Equipment" (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footing holes (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, wood pieces, concrete blocks, bricks, jack stands, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Drill, bits, extension cords, power supply
- 7. Step ladder
- 8. Adult installers 3 minimum



Tots' Choice® - Mira-Therm II 360° **Typhoon II Slides** 

#### **STEP 1** PREPARE FOR INSTALLATION

Read **Safety Brochure 100, Important Notes,** these instructions, and other enclosed materials. Unpack, count, and become familiar with system components and hardware.

#### STEP 2 INSTALL DECK SYSTEM

Install Deck system per separate instructions. Plumb, level, and brace in position.

Note: Do not pour concrete for footings, or permanently secure Clamps to Posts with self-drilling screws, until <u>all</u> components in system have been installed per instructions and braced in position level and plumb.

#### STEP 3 DIG FOOTINGS

Dig footings per Footing Layout, Construction Drawings, and Footing Details installation.

#### STEP 4 AFFIX CLAMPS (WITH BAR SOCKETS) LOOSELY TO POSTS

Refer to **Versalok Fastening System** installation.

Loosely affix a Bar Socket (with 1-3/8" diameter hole) to each set of Clamp Ring halves. Loosely assemble *upper* set of Clamp Rings around Posts so that bottom edge of each Clamp is **37-1/2**" from top edge of Deck-supporting Clamps. *Lower* Clamp Rings will be located by Deck Enclosure bottom stubs.

Tots' Choice® - Mira-Therm II

#### 360° Typhoon II Slides

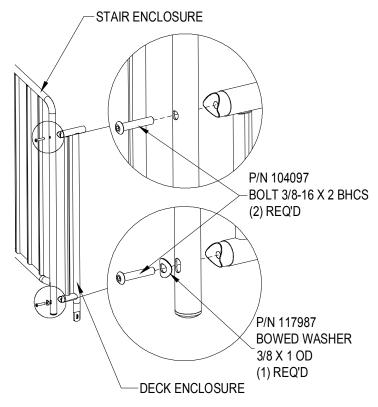
#### STEP 5 ATTACH DECK ENCLOSURES TO POSTS (VIA CLAMPS)

Refer to *Versalok Fastening System installation*. Insert non-threaded ends of Deck Enclosures into Bar Sockets on Clamps.

Repositioning Clamps as needed, plumb and level Enclosures. Tighten Enclosure stubs in Bar Sockets, Bar Sockets on Clamps, and Clamp Rings around Posts.

#### STEP 6 ATTACH STAIR ENCLOSURE TO DECK ENCLOSURE

Affix Stair Enclosure to Deck Enclosures on each side of stair. Each Stair Enclosure attaches to each Deck Enclosure at two (2) locations.

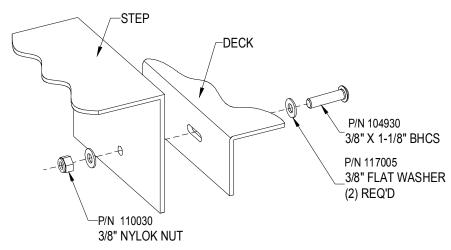




Tots' Choice® - Mira-Therm II 360° **Typhoon II Slides** 

#### STEP 7 SECURE RAMP/STAIR TO DECK

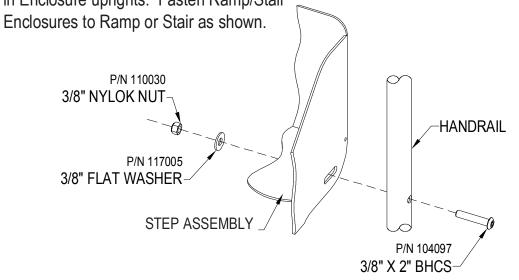
Position Ramp or Stair against Deck face to determine four mating bolt holes. Use drill to ream excess PVC from only those holes in Deck and Ramp/Stair. Replace Ramp or Stair and secure to Deck as shown. Ensure surfaces are flush before tightening hardware.



Refer to *Step 11 illustration* on *Page 9*. Ream excess PVC from four bolt holes in Ramp or Stair designated for attachment of Barrel.

#### **STEP 8** FASTEN RAMP/STAIR ENCLOSURES TO RAMP OR STAIR

Use drill to ream excess PVC from bolt hole in each side of Ramp/Stair aligned with bolt hole in Enclosure uprights. Fasten Ramp/Stair

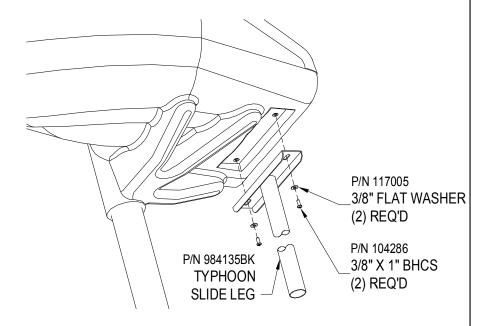




# Tots' Choice® - Mira-Therm II 360° **Typhoon II Slides**

#### STEP 9 ATTACH FRONT LEG TO SLIDE

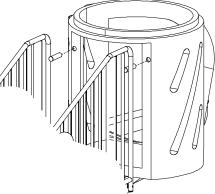
Attach Front Leg to exit of Slide Assembly as shown.



# STEP 10 SET CENTER POLE & FRONT LEG INTO FOOTINGS

Lift Slide Assembly into position, setting Center Pole and Front Leg into footings. Place Barrel against top of Ramp/Stair and insert Ramp/Stair Enclosure ends into Barrel.

Important: Position Barrel and Handrail so that upright nearest Barrel is parallel to side of Barrel. Even if Slide or Handrail must be tilted slightly off plumb, priority must be given to Barrel/Handrail spacing.





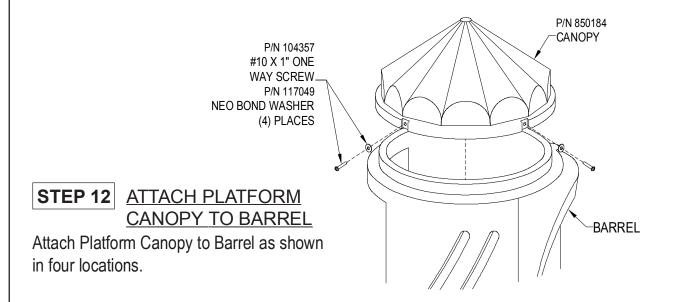


#### STEP 11 SECURE RAMP OR STAIR TO BARREL

Secure Ramp or Stair to Barrel using Back-Up Plates within access holes. Cap holes with Plugs when hardware is fully tightened. (2) PLACES. CAP WITH P/N 103543

ACCESS HOLE 4" CYCLONE PLUG

STEP ASSEMBLY **BARREL** P/N 104947 3/8" X 1-1/2" BHCS (4) REQ'D P/N 976468ZP **BACK UP FLANGE** (2) REQ'D P/N 117005 3/8" FLAT WASHER (8) REQ'D P/N 110030 3/8" NYLOK NUT (4) REQ'D



#### **STEP 13** SET SLIDE EXIT HEIGHT

Set height of Slide bedway exit at least 7" but not more than 15" from finished grade. Verify that Slide will drain water.

#### **FINAL STEP**

Plumb and level entire assembly. Proceed with *Final Assembly installation*.

**NOTE:** When pouring concrete for the center pole footing, do <u>NOT</u> cover the joint in the center pole with concrete.

Rev. B

## Installation Guide

Tots' Choice

# Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges

Ground-to-Deck, Between Decks or Freestanding; spans of 8', 10' & 12'

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

#### Models included in this installation guide:

MODEL#	DESCRIPTION	PAGE#
718-625-1	Big Timber Bongo Stump Perch	2
718-625-8	Big Timber Bongo Stump Bridge, (4) Perches; 8' Span	2
718-625-10	Big Timber Bongo Stump Bridge, (5) Perches; 10' Span	3
718-625-12	Big Timber Bongo Stump Bridge, (6) Perches; 12' Span	3
718-772-1	Bongo Perch	4
718-772-8	Bongo Bridge, (4) Perches; 8' Span	4
718-772-10	Bongo Bridge, (5) Perches; 10' Span	5
718-772-12	Bongo Bridge, (6) Perches; 12' Span	5

NOTE: Deck Systems are NOT included in these Assemblies.

Please refer to Construction Drawings for the model particular to your system.

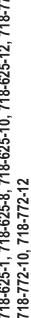
#### TOOLS AND EQUIPMENT REQUIRED

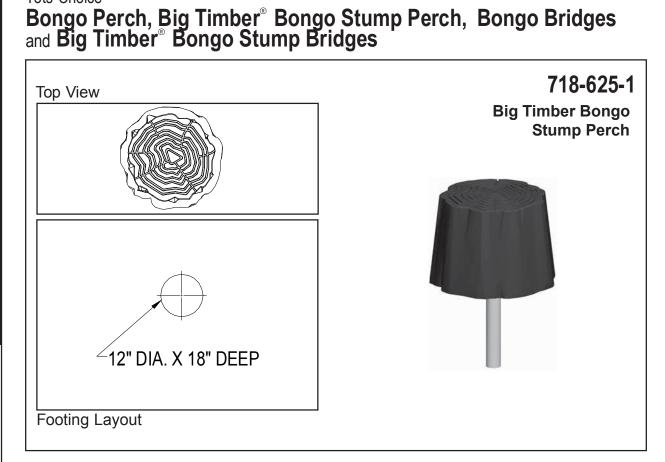
Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

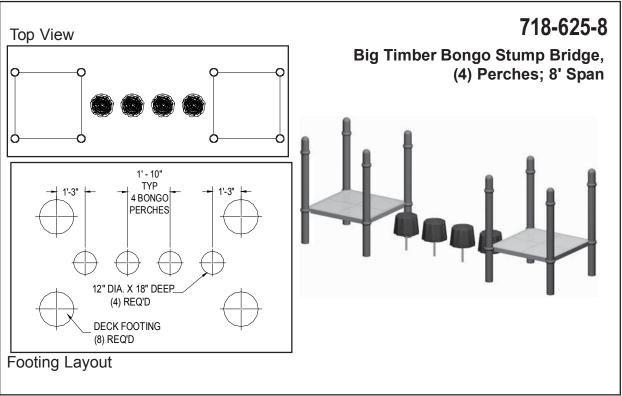
- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Tape measure and level
- 4. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 5. Bracing materials (2x4's, wood pieces, sawhorses, etc.)
- 6. Hacksaw or electric handsaw
- 7. Adult installers 2 minimum

# Bongo Perch & Bongo Bridges

Tots' Choice®





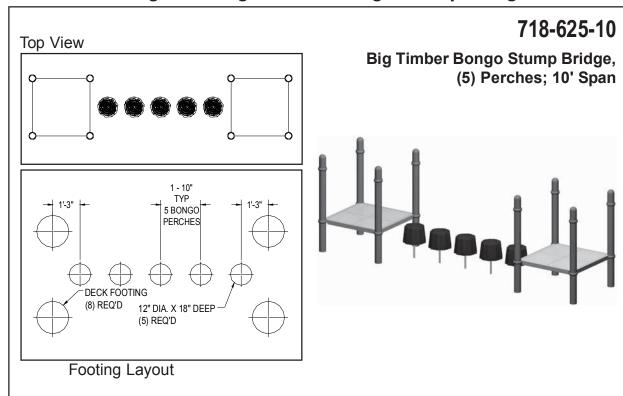


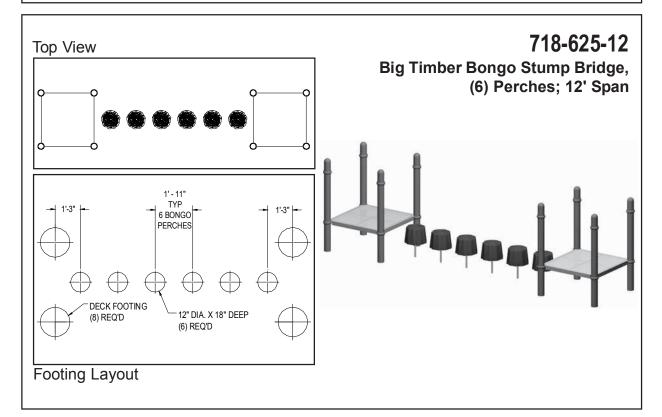
718-772-10, 718-772-12



Tots' Choice®

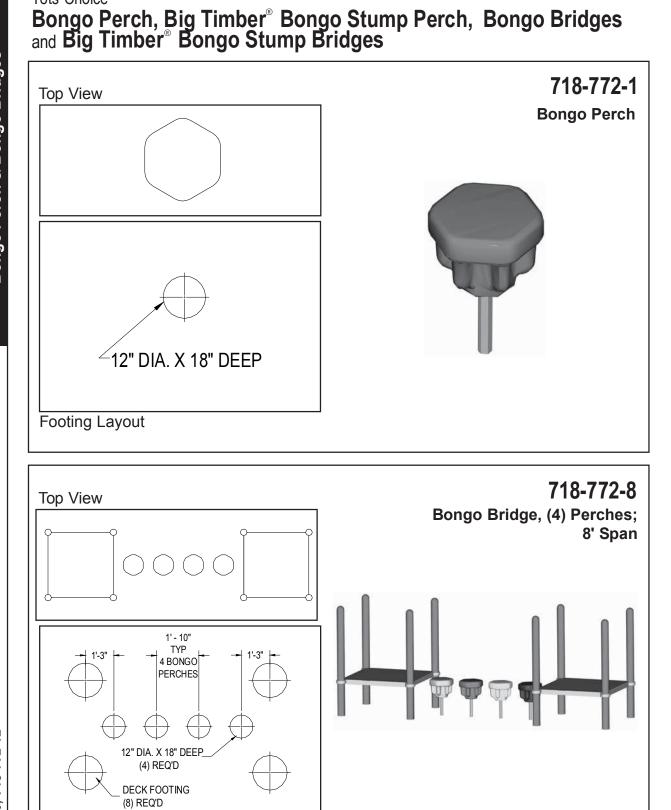
# Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges





# Bongo Perch & Bongo Bridges

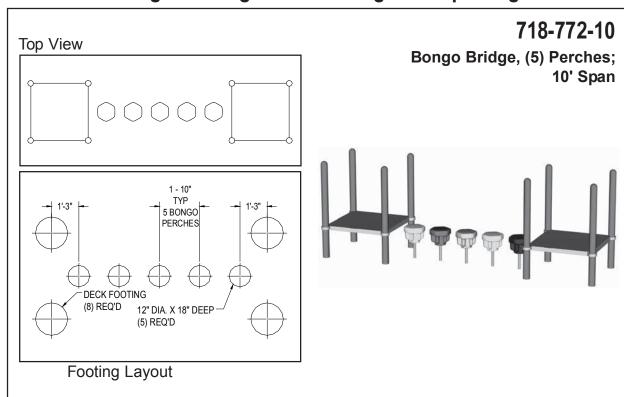
Tots' Choice®

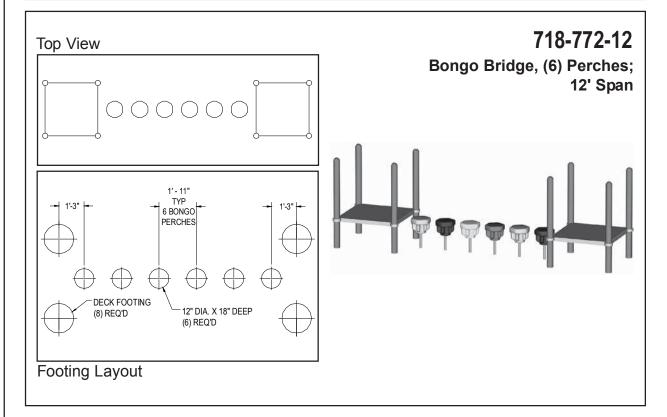


Footing Layout



# Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges





# Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges

### **INSTALLATION NOTES**

- 1. Bongo Perches may enter/exit Decks 2'-0" or lower only.
- 2. Bongo Perch's top surface may be set no greater than **24"** from finished grade.
- 3. If installing as Bridge between Decks, Bongo Perches should be installed in straight line with flat side facing flat side, as shown in *Top Views* and *Footing Layouts*, though Bongo Perches may still vary. Freestanding configurations may zig-zag, circle, diverge, etc.
- 4. If installing as Stair or Bridge between Decks, Bongo Perches adjacent to Deck(s) must be installed so that top surface is level with or maximum **6"** below Deck height.
- 5. Footings might require additional excavation or Bongo Perch Posts might require cutting.
- 6. Do not allow more than 6" vertical difference in adjacent Bongo Perch heights.
- 7. For configurations not in a straight line, distance between Bongo Perches must be **7" to 9"** edge-to-edge (or **22" to 24"** center-to-center.)
- 8. If installing as Bridge between 2'-0" Decks intended for 2 to 5 year olds, Deck Enclosures Model # 718-813-5 must be installed on each Deck. See separate *Installation Guide*.

IMPORTANT NOTE: Big Timber Stump installation is <u>identical</u> to Bongo Pod. If you have a Stump component, follow these instructions substituting ONLY the Stump for the Pod.

**STEP 1** INSTALL DECK(S) AND ENCLOSURE(S), IF APPLICABLE If applicable, install Deck system(s) and Enclosure(s) per separate instructions.

### STEP 2 DIG FOOTINGS

Dig footings per *Footing Layouts* or other configuration. Refer to *Footing Details* installation located behind *Installations 101* in Installation Manual.

Note: Do not pour concrete for footings until components illustrated in this installation guide have been installed per instructions and are braced in position level and plumb.



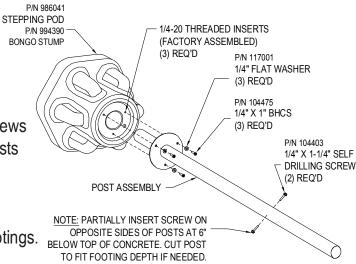
# Bongo Perch, Big Timber® Bongo Stump Perch, Bongo Bridges and Big Timber® Bongo Stump Bridges

### STEP 3 BOLT PODS TO POSTS & LOCATE

Assemble Bongo Perches by bolting Posts to Pods or Stumps as shown.

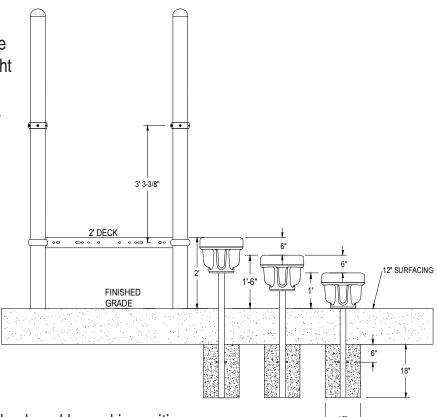
Determine proposed height of each Assembly and find finished grade and subgrade on each. Install self-drilling screws as noted in illustration to help anchor Posts in footings.

If necessary, cut Posts to fit in footings.
Alternately, installers may dig deeper footings.



### **STEP 4** BRACE PERCHES IN FOOTINGS

Set Bongo Perch Assemblies into footings and center. Brace each in footing at desired height and orientation. Refer to *Installation Notes* on *Page 6*.



### **FINAL STEP**

Verify components are level, plumb and braced in position.

Prepare to pour concrete. Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

# Installation Guide

Tots' Choice®

Crunch Station

Deck system or Post not included in this assembly.

718-782

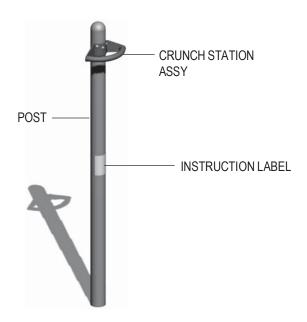
**Crunch Station** 



Note: Top View and Footing Layout not shown. Model mounts vertically to installed Deck Post.

### **Crunch Station**

### PARTS IDENTIFICATION



### ORDER OF ASSEMBLY (RECOMMENDED)

- 1. Deck system or Post (separate assemblies)
- 2. Crunch Station to Post
- 3. Instruction Label to Post
- 4. Final Assembly

### TOOLS AND EQUIPMENT (REQUIRED)

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Tape measure and level
- 2. Open end wrench set; allen & 6 lobe wrenches; socket set; screwdrivers
- 3. Drill motor; bits; taps; extension cords; power supply
- 4. Adult installer



### STEP 1

Read **Safety Brochure 100, Important Notes** and other supplementary materials. Unpack, count and become familiar with system components and hardware.

### STEP 2

Install Deck system or Post in Footings per separate instructions. Level, plumb and brace in position.

Note: Do not pour concrete for Footings until all components in system have been installed per instructions, leveled, plumbed and braced in position.

### STEP 3

Place Crunch Station assembly against Post as shown in illustration on Page 1. Orientate assembly in desired direction. Measure and hold Crunch Station against Post so that rung is set **50" to 80"** from Finished Grade.

### STEP 4

Attach Crunch Station assembly to Post and secure using three (3) 1/4" x 1-1/4" Tek screws.

### STEP 5

Remove dust, oil or grime from Post surface and verify that it is dry. Apply Instruction Label to Post plumb and level (below Crunch Station), using firm pressure over entire label to ensure proper adhesion with no wrinkles, bubbles or tears.

### FINAL STEP

Proceed with Final Assembly.

# Installation Guide

Tots' Choice® **Bell, Post Mount** 

MRACLE RECREATION EQUIPMENT COMPANY

718-796-P1

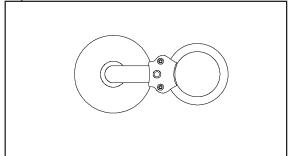
Post not included in assembly

**Bell, Post Mount** 

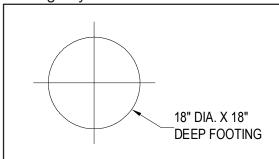


Post not included in this assembly

Top View



**Footing Layout** 



# Installation Guide

Tots' Choice®

Bell, Post Mount

### STEP 1 PREPARE FOR INSTALLATION

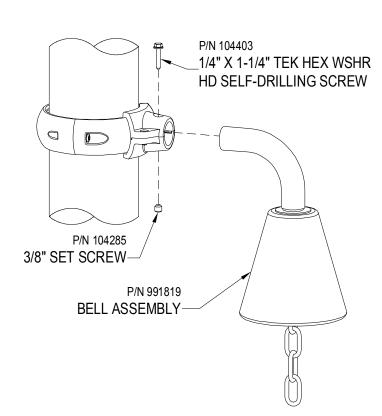
Read **Safety Brochure 100, Important Notes,** these instructions, and other materials. Unpack, count and become familiar with system components and hardware.

### STEP 2 ATTACH CLAMP RING AND BAR SOCKET TO POST

Refer to *Versalok Fastening System* installation guide located behind *Installations 101* in your Installation Manual.

### STEP 3 AFFIX BELL TO BAR SOCKET

Attach Bell Assembly to Bar Socket as shown.



### **FINAL STEP**

Proceed with Final Assembly instructions.



EQUIPMENT COMPANY Standard Steps and ADA Stairs Between Decks - 1', 1'-6" & 2' Rise

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

### Models included in this installation guide:

MODEL#	<u>DESCRIPTION</u>	PAGE#
718-810-9	ADA Stair Between Decks, 1' Rise	2
718-959-9	ADA Stair Between Decks, 2' Rise	2
718-990-9	Steps Between Decks, 2' Rise (Standard)	3
718-993-9	ADA Stair Between Decks, 1'-6" Rise	3

NOTE: Deck systems are NOT included in these assemblies.

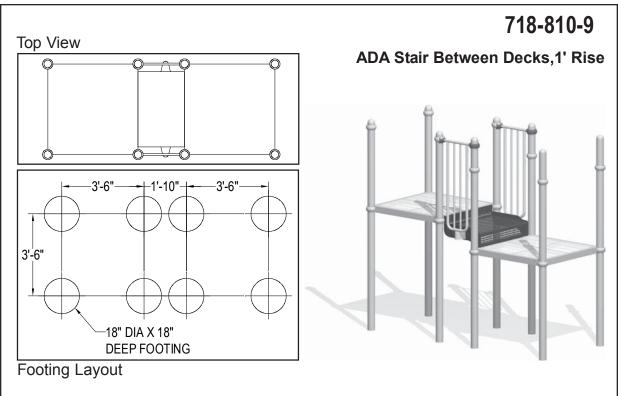
Please refer to Construction Drawings for the model particular to your system.

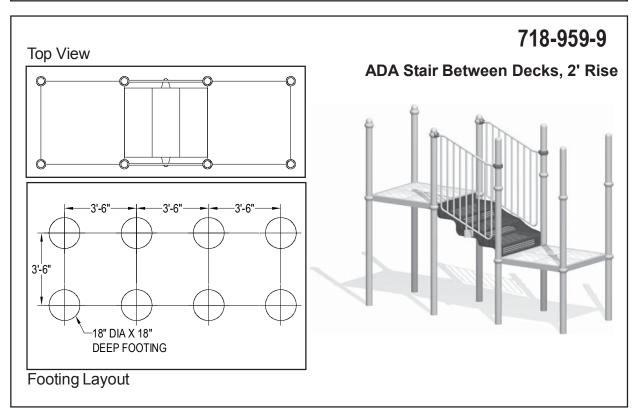
### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Tape measure and level
- 2. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 3. Drill, bits, extension cords, power supply
- 4. Step ladder
- 5. Adult installers 2 minimum

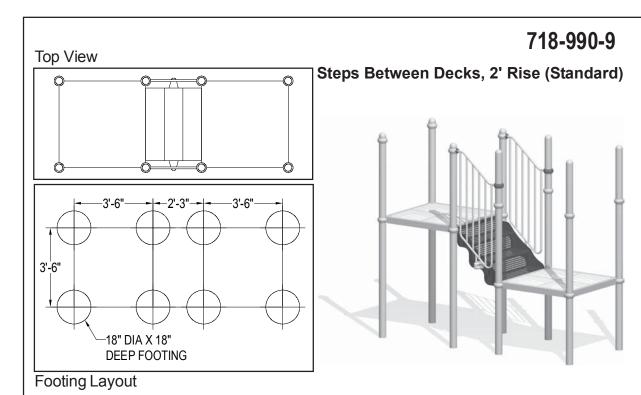
# Tots' Choice® - Mira-Therm II Standard **Steps** and ADA **Stairs Between Decks**

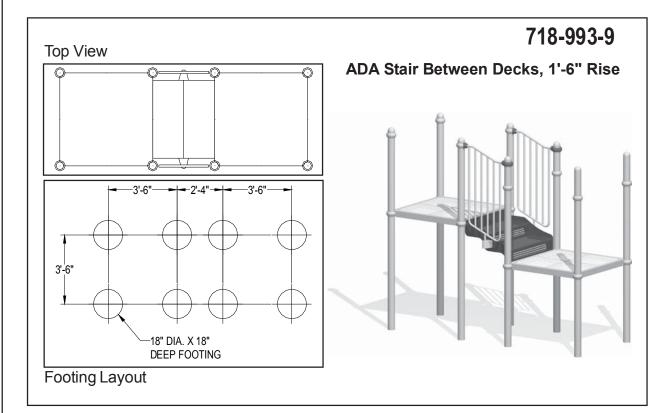






# Tots' Choice® - Mira-Therm II Standard Steps and ADA Stairs Between Decks





Tots' Choice® - Mira-Therm II

### Standard Steps and ADA Stairs Between Decks

### **STEP 1** PREPARE FOR INSTALLATION

Read *Safety Brochure 100, Important Notes,* these instructions, and other enclosed materials. Unpack, count, and become familiar with system components and hardware.

### **STEP 2** INSTALL DECK PER SEPARATE INSTRUCTIONS

Install Deck systems per separate instructions. Plumb, level and brace in position.

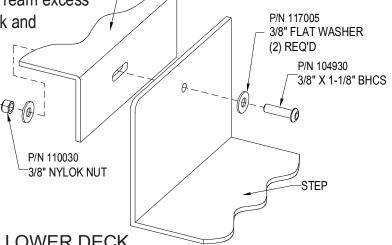
Note: Do not pour concrete for footings, or permanently secure Clamps to Posts with self-drilling screws, until <u>all</u> components in system have been installed per instructions and braced in position level and plumb.

### STEP 3 SECURE STAIR TO UPPER DECK

Position Stair against upper Deck, or measure, to locate mating bolt holes. Use drill to ream excess coating from only those holes in Deck and Stair. Repeat process for lower

end of Stair and lower Deck.

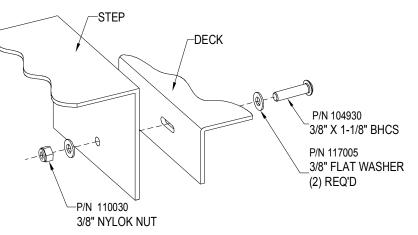
Replace Stair against upper Deck and secure as shown.



-DECK

### **STEP 4** SECURE STAIR TO LOWER DECK

Secure Stair Assembly to lower Deck.





Tots' Choice® - Mira-Therm II

Standard Steps and ADA Stairs Between Decks

# STEP 5 ASSEMBLE CLAMPS RINGS TO POSTS AND BAR SOCKETS TO CLAMPS

Refer to *Versalok Fastening System installation*. Loosely affix a Bar Socket (with 1-1/16" diameter hole) to each set of Clamp Ring halves.

ON UPPER DECK POSTS: Loosely assemble Clamp Ring halves around Posts so that bottom edge of each Clamp is **37-1/2**" from top edge of Deck-supporting Clamp. **-AND-**

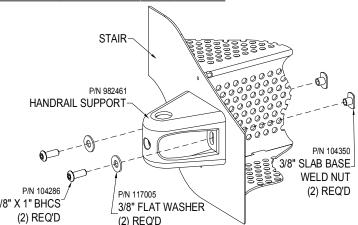
ON LOWER DECK POSTS, STAIR SIDE: Loosely assemble Clamp Ring halves around Posts so that bottom edge of each Clamp is **49-1/2"** from top edge of Deck-supporting Clamp.

Tighten Ring but do not permanently secure to Posts with self-drilling screws. Orient Bar Sockets toward center of Deck face.

### STEP 6 BOLT HANDRAILS SUPPORTS TO STAIR ASSY

Use drill to ream excess coating from bolting slots in sides of Stair Assembly.

Place Handrail ends in Bar Sockets on Clamps, but do not yet secure. Seat handrail uprights in Handrail Supports to locate and mark final position of Handrail Supports against Stair.



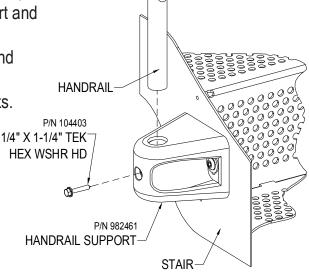
Remove Handrails from Supports and bolt Handrail Supports to Stair Assembly as shown.

# Tots' Choice® - Mira-Therm II Standard **Steps** and ADA **Stairs Between Decks**

### **STEP 7** SECURE HANDRAILS IN HANDRAIL SUPPORTS

Replace Handrail in Bar Sockets on Clamps. Firmly seat Handrail in Handrail Support and secure as shown. Repeat for second Handrail. Plumb and level Handrails and secure in Bar Sockets, Bar Sockets on Clamps, and Clamp Rings around Posts. Refer to *Versalok Fastening System*installation.

1/4" X 1



### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

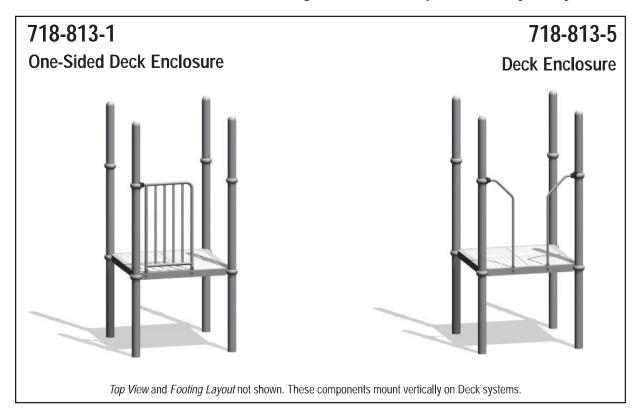


**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

### Models included in this installation guide:

MODEL #	<u>DESCRIPTION</u>	PAGE #
718-813-1	One-Sided Deck Enclosure	2
718-813-5	Deck Enclosure	2

NOTE: Deck Systems, Posts and Overhead Climber are NOT included in these assemblies. Please refer to Construction Drawings for the model particular to your system.



### **TOOLS AND EQUIPMENT REQUIRED**

- 1. Tape measure and level
- 2. Open end wrench set, Allen and 6-lobe wrenches, socket set, screwdrivers
- 3. Step ladder
- 4. Drill, bits, extension cord(s), power supply
- 5. Adult installers 2 minimum

### **Deck Enclosures**

### STEP 1 INSTALL DECK PER SEPARATE INSTRUCTIONS

Install Deck system per separate instructions. Plumb, level, and brace in position.

### STEP 2 ATTACH CLAMP RINGS TO POSTS

Refer to *Versalok Fastening System installation* located behind *Installations 101* in Installation Manual.

Loosely affix a Bar Socket with 1-1/16" diameter hole (1-5/16" diameter hole for One-Sided Enclosure) to each set of Clamp Ring halves. Loosely attach Clamp Rings around Posts so that bottom edge of each is **37-1/2**" from top edge of Deck-supporting Clamp. It is acceptable to approximate position of Clamps until Deck Enclosure is completely installed.

### STEP 3 DRILL EXCESS COATING FROM DECK BOLT HOLES

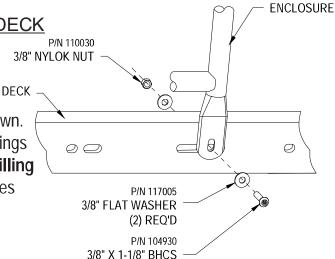
Refer to *Versalok Fastening System installation*.

Lift Deck Enclosures and tighten top rail ends in Bar Sockets, aligning holes in mashed ends of plumb uprights with bolting holes in Deck face. Use drill to ream excess coating from only those holes in Deck.

### STEP 4 AFFIX ENCLOSURE TO DECK

Refer to *Versalok Fastening System installation.* 

Attach Deck Enclosures to Deck face as shown. Tighten Bar Socket on Clamps and Clamp Rings around Posts. Install a 1/4" x 1-1/4" self-drilling screw (P/N 104403), into the Deck Enclosures through non-threaded hole in Bar Sockets.



FINAL STEP

Proceed with *Final Assembly installation* located behind *Installations* 101 in Installation Manual.

718-813-1, 718-813-5



**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to <u>site preparation</u>, <u>footings</u>, <u>system stabilization</u>, and other necessary information <u>vital</u> to the <u>success</u> of your installation.

### Models included in this installation guide:

MODEL #	<u>DESCRIPTION</u>	PAGE #
718-815-5	End Ladder for Overhead Climber Systems	2
718-815-51	End Ladder, 1' Top Rung, for Overhead Climber Systems	2
718-815-52	End Ladder, 2' Top Rung, for Overhead Climber Systems	2
718-815-53	End Ladder, 3' Top Rung, for Overhead Climber Systems	3

NOTE: Deck Systems, Posts and Overhead Climber are NOT included in these assemblies.

Please refer to Construction Drawings for the model particular to your system.

### **TOOLS AND EQUIPMENT REQUIRED**

- 1. Tape measure and level
- 2. Open end wrench set, Allen and 6-lobe wrenches, socket set, screwdrivers
- 3. Step ladder
- 4. Drill, bits, extension cord(s), power supply
- 5. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 6. Digging equipment for footings (spade shovel, post hole digger, auger)
- 7. Adult installer

Rev. A

nd Ladders

718-815-5, 718-815-51, 718-815-52, 718-815-53

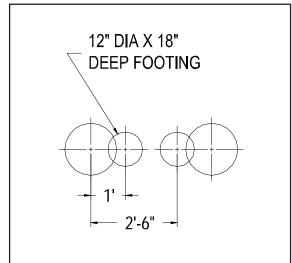
Tots' Choice®

### **End Ladders**

### Top View

718-815-5

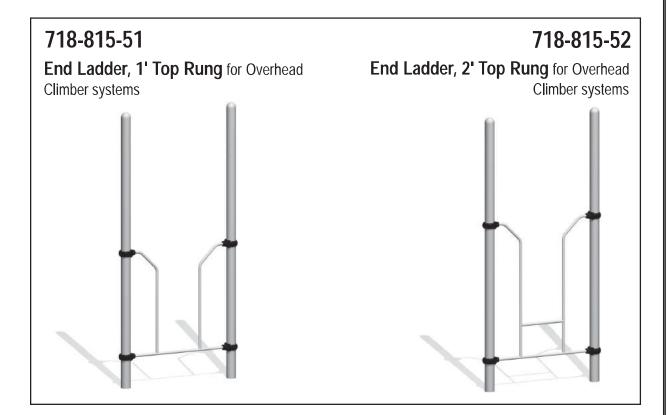
Top View not shown. Refer to Overhead Climber model's **Installation Guide** or **Construction Drawings** if needed.



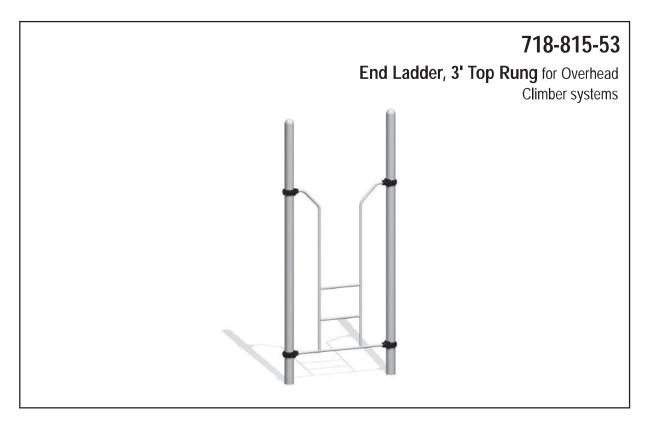
End Ladder for Overhead Climber systems



Footing Layout







Rev. A

**End Ladders** 

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### **End Ladders**

NOTE: USE FOLLOWING INSTRUCTIONS FOR MODEL #S 718-815-51, 718-815-52 AND 718-815-53 ONLY. MODEL # 718-815-5 INSTRUCTIONS SHOWN ON NEXT PAGE.

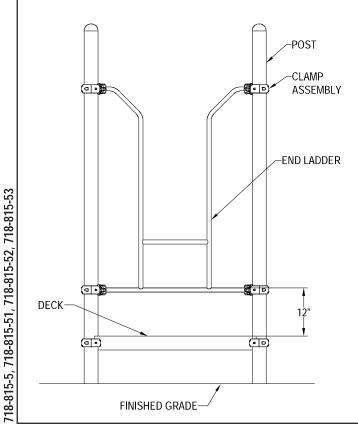
### STEP 1 ATTACH CLAMP RINGS TO POSTS; ATTACH LADDER

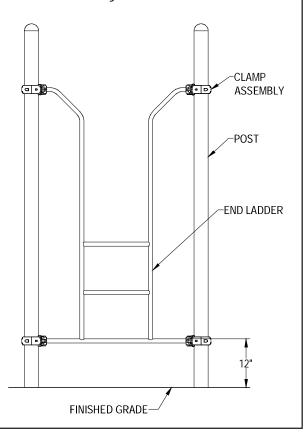
Refer to *Versalok Fastening System installation*. Loosely affix a Bar Socket (with 1-1/16" diameter hole) to each Clamp, and attach Clamps loosely to Deck Posts. It is acceptable to approximate position of Clamps until End Ladder is completely installed.

Insert ends of End Ladder's top rail into Bar Sockets. Plumb and level Posts and End Ladder assembly. Tighten top rail ends in Bar Sockets, Bar Sockets on Clamps, and Clamp Rings around Posts.

Note: When using End Ladder on a Deck, the top of the bottom rung must always be set at 12" above Deck surface.

Note: Miracle recommends that height of top rung on End Ladder be equal to height of Deck or End Ladder on opposite end of Overhead Climber assembly.





Page 4 of 5



### STEP 1 MODEL # 718-815-5 ONLY: DIG FOOTINGS

Dig footings per *Footing Layout*, Construction Drawings, and *Footing Details installation* located behind *Installations 101* in Installation Manual.

Note: Do not pour concrete for footings or permanently secure Clamps to Posts with self-drilling screws until components illustrated in this installation guide have been installed per instructions and braced in position level and plumb.

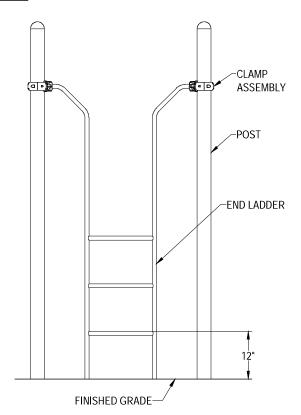
# STEP 2 MODEL # 718-815-5 ONLY: SET CLIMBER INTO FOOTINGS; ATTACH LADDER TO POSTS

Place Legs of End Ladder into footings.

Verify correct height from finished grade to top of lowest exposed rung (12" maximum).

Note: It is acceptable and sometimes necessary to bury one or more rungs on bottom of End Ladder to achieve desired height of top rung.

Note: Miracle recommends that height of top rung on End Ladder be equal to height of Deck or End Ladder on opposite end of Overhead Climber assembly.



Refer to *Versalok Fastening System installation*. Loosely affix a Bar Socket (with 1-1/16" diameter hole) to each Clamp, and attach Clamps loosely to Deck Posts.

Insert ends of End Ladder's top rail into Bar Sockets. Plumb and level Posts and End Ladder assembly. Tighten top rail ends in Bar Sockets, Bar Sockets on Clamps, and Clamp Rings around Posts.

# Installation Guide Tots' Choice®

Chinning Bar with Steel Post, Aluminum Post or Bar Only

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

### Models included in this installation guide:

MODEL#	<u>DESCRIPTION</u>	<u> PAGE #</u>
718-843	Chinning Bar w/Steel Post	2
718-843-2	Chinning Bar w/Aluminum Post	2
718-843-5	Chinning Bar, Bar Only	2
718-843-560	Chinning Bar, Bar Only - 60"	2

NOTE: Deck Systems NOT included in these assemblies.

### **TOOLS AND EQUIPMENT REQUIRED**

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

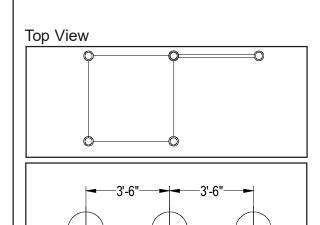
- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, wood pieces, concrete blocks, bricks, jack stands, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Step ladder
- 7. Drill, bits, extension cords, power supply
- 8. Adult installer

Rev. F

nning Bar

Tots' Choice®

### **Chinning Bar**



.18" DIA X 18" DEEP FOOTINGS

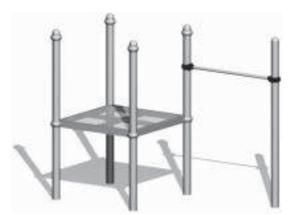
Footing Layout

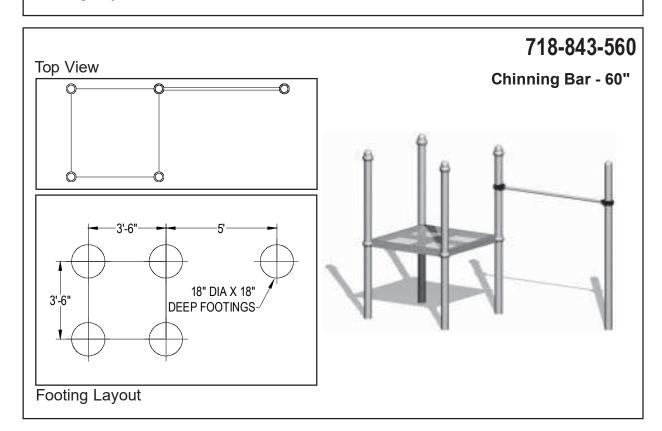
3'-6"

### 718-843, 718-843-2\* & 718-843-5\*

### **Chinning Bar with Steel Post**

\* Model # 718-843-2 Chinning Bar with Aluminum Post and Model # 718-843-5 Chinning Bar not shown. Appearances and installations are identical.







### STEP 1 INSTALL DECK OR POSTS PER SEPARATE INSTRUCTIONS

Install Deck system(s) or Posts per separate instructions. Plumb, level and brace in position.

Note: Do not pour concrete for footings or permanently secure Clamps to Posts with self-drilling screws until components illustrated in this installation guide have been installed and braced in position level and plumb.

### STEP 2 PLACE POSTS INTO FOOTINGS, IF APPLICABLE

Place Posts into footings. Ensure plumb Posts are level at **5'-10"** from finished grade to Post pipe end (before rounded end cap), assuming 12" of protective surfacing will be installed.

### **STEP 3** ATTACH CHINNING BAR TO POSTS

Refer to *Versalok Fastening System installation* located behind *Installations 101* in Installation Manual.

Assemble Chinning Bar ends in Bar Sockets, setting Chinning Bar at desired height -- **5'-0"** from finished grade recommended. Fasten Bar Sockets to Clamps and Clamp Rings around Posts. Level Chinning Bar, plumb Posts and brace in position.

Secure Chinning Bar to Bar Sockets with one (1) set screw and one (1) tek screw on each end.

### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

### Models included in this installation guide:

MODEL #	<u>DESCRIPTION</u>	PAGE #
718-864-5SL	"S" Shaped Handring Bridge, Left	2
718-864-5SR	"S" Shaped Handring Bridge, Right	2

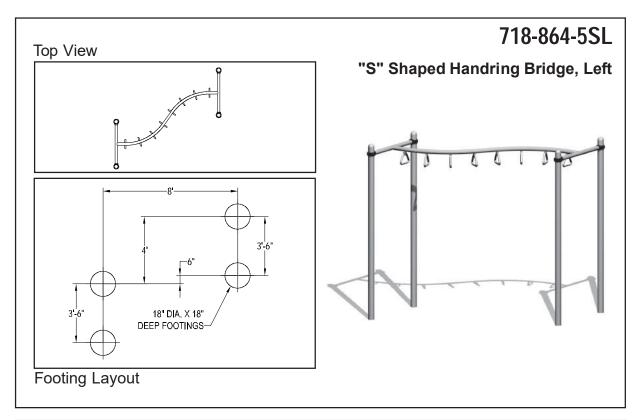
NOTE: Deck Systems and/or Posts are NOT included in these assemblies.

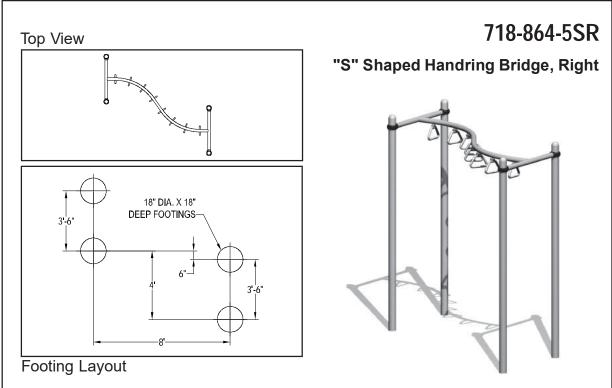
### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Tape measure and level
- 2. Open end wrench set, socket set, Allen and 6-lobe wrenches or bits, screwdrivers
- 3. Step ladder
- 4. Hammer
- 5. Drill, bits, extension cords, power supply
- 6. Adult installers 2 minimum

### Kids' Choice® KIGS Choice Handring Bridges







### **STEP 1** INSTALL DECK PER SEPARATE INSTRUCTIONS

Install Deck system and/or Posts per separate instructions. Plumb, level and brace in position.

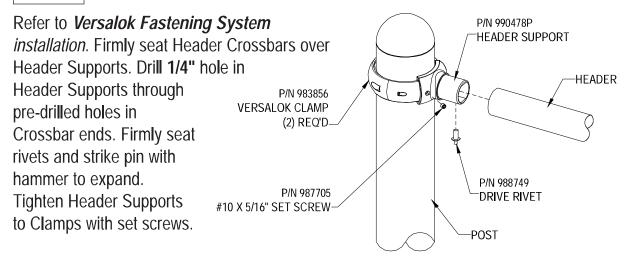
Note: Do not pour concrete for footings or permanently secure Clamps to Posts with self-drilling screws until components illustrated in this installation guide have been installed per instructions and braced in position level and plumb.

### STEP 2 ASSEMBLE CLAMPS TO POSTS

Refer to *Versalok Fastening System installation* located behind *Installations 101* in Installation Manual.

Slide Header Supports onto Clamp Rings. Loosely assemble Clamps to Posts so that bottom edge of each Clamp is **95**" above finished grade. It is acceptable to approximate final position of Clamps until Header Assembly is installed and leveled.

### **STEP 3** ATTACH HEADERS TO HEADER SUPPORTS



Safety Note: Allow concrete footings to set for 72 hours or until fully cured before mounting Handrings to Header (per next step.)

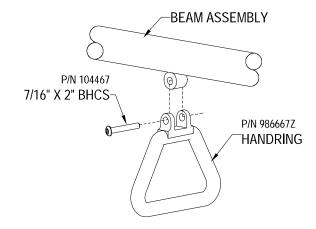
### **Handring Bridges**

### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

Note: Make certain that concrete is fully cured before proceeding.

Assemble each Handring to bushing sleeves on Header as shown.





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Transfer Points for 3', 4' and 5' Decks, with Open Handrails

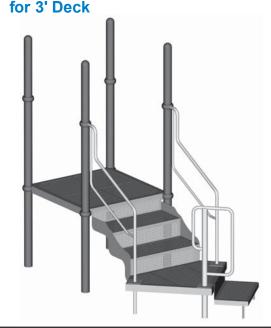
Deck system not included in these assemblies.

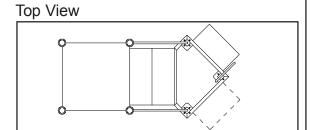
718-965-359 installed LEFT

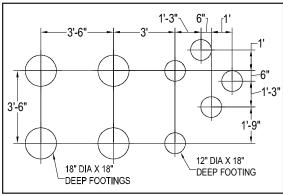
718-965-459

718-965-559

# **Transfer Point with Open Handrails** for 3' Deck







**Footing Layout** 

### 718-965-359 installed RIGHT

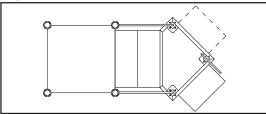
718-965-459

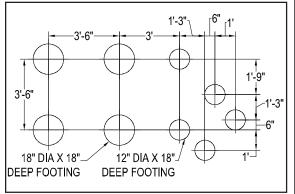
718-965-559

# **Transfer Point with Open Handrails** for 3' Deck



### Top View





Footing Layout

Tots' Choice® - Mira-Therm II

### Transfer Points for 3', 4' and 5' Decks, with Open Handrails

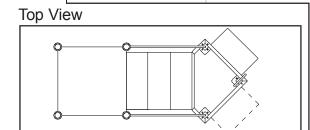
718-965-359

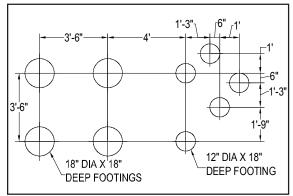
**718-965-459** installed **LEFT** 

718-965-559

Transfer Point with Open Handrails for 4' Deck







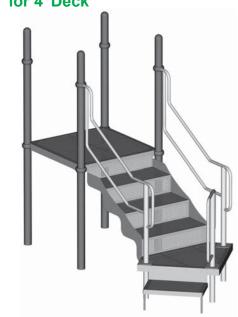
Footing Layout

718-965-359

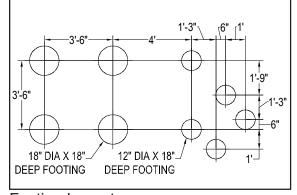
**718-965-459** installed **RIGHT** 

718-965-559

**Transfer Point with Open Handrails** for 4' Deck



Top View



Footing Layout

Page 2 of 8



Tots' Choice® - Mira-Therm II

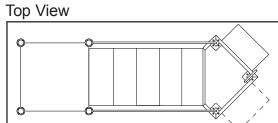
### Transfer Points for 3', 4' and 5' Decks, with Open Handrails

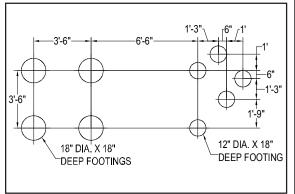
718-965-359

718-965-459

718-965-559 installed LEFT







Footing Layout

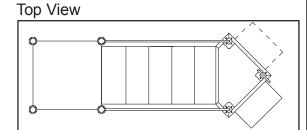
718-965-359

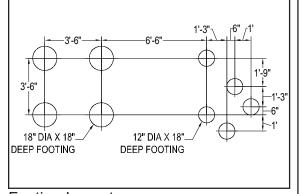
718-965-459

718-965-559 installed RIGHT

# for 5' Deck

**Transfer Point with Open Handrails** 



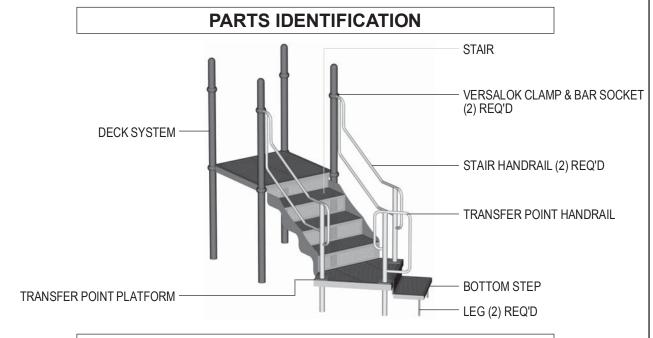


Footing Layout

718-965-559

Tots' Choice® - Mira-Therm II

### Transfer Points for 3', 4' and 5' Decks, with Open Handrails



### RECOMMENDED ASSEMBLY SEQUENCE

- 1. Deck system (per separate instructions)
- 2. Footings
- 3. Clamps with Bar Sockets loosely to Posts
- 4. Transfer Point Handrail and Stair Handrails to Platform (and into footings)
- 5. Stair Handrails to Deck Posts (via Clamps)
- 6. Stair to Deck and to Platform
- 7. Legs to Bottom Step
- 8. Bottom Step to Platform (Legs into footings)
- 9. Final Assembly

### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, wood pieces, jack stands, sawhorses, concrete blocks, bricks, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Drill, bits, extension cords, power supply
- 7. Step ladder
- 8. Adult installers 2 minimum



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Transfer Points for 3', 4' and 5' Decks, with Open Handrails

### STEP 1

Read **Safety Brochure 100, Important Notes**, these instructions, and other enclosed materials. Unpack, count, and become familiar with system components and hardware.

### STEP 2

Install Deck system per separate instructions. Plumb, level, and brace in position.

### STEP 3

Dig footings per Footing Layout, Construction Drawings and Footing Details installation.

Note: Do not pour concrete for footings or permanently secure Clamps to Posts with self-drilling screws until <u>all</u> components in playsystem have been installed per instructions and braced in position plumb and level.

### STEP 4

Refer to Versalok Fastening System installation.

Loosely affix a Bar Socket (with 1-3/8" diameter hole) to each set of Clamp Ring halves. Loosely assemble Clamp Rings around Deck Posts so that bottom edge of each Clamp is **37-1/2"** from top edge of Deck-supporting Clamp.

### STEP 5

Refer to illustrations in Step 8, Step 9, and Step 11.

Position Stair Assembly against Deck face and Bottom Step against Transfer Point Platform (on appropriate side) to determine mating bolt holes. Use drill to ream excess PVC from only those holes in Deck, Stair, Step, and Platform.



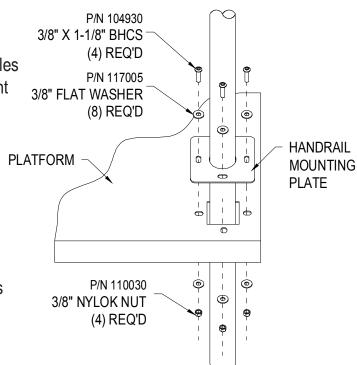
Tots' Choice® - Mira-Therm II

### Transfer Points for 3', 4' and 5' Decks, with Open Handrails

### STEP 6

Use drill to ream excess PVC from bolt holes atop Platform corners. Insert Transfer Point Handrail through Platform until mounting plate is flush with Platform surface. Large loop of Transfer Point Handrail must be oriented with Bottom Step (refer to cover or *Top View* illustrations.) Secure Handrail to Platform as shown.

Insert Stair Handrails though Platform and secure in same manner. Set Handrail legs (with Platform attached) into footings.



### STEP 7

Refer to Versalok Fastening System installation.

Insert Stair Handrail ends into Bar Sockets. Block up Platform as needed. Ensure rails and rungs are plumb and level and tighten in Bar Sockets, Bar Sockets on Clamps, and Clamp Rings around Posts.

# DECK ASSEMBLY P/N 110030 3/8" NYLOK NUT (4) REQ'D P/N 117005 3/8" FLAT WASHER (8) REQ'D P/N 104930 3/8" X 1-1/8" BHCS (4) REQ'D STAIR ASSEMBLY

### STEP 8

Position Stair against Deck face. Plumb and level assembly. Attach Stair to Deck as shown. Ensure that bolt heads are on outside (Stair) side, with nut-to-bolt connections made beneath Deck.

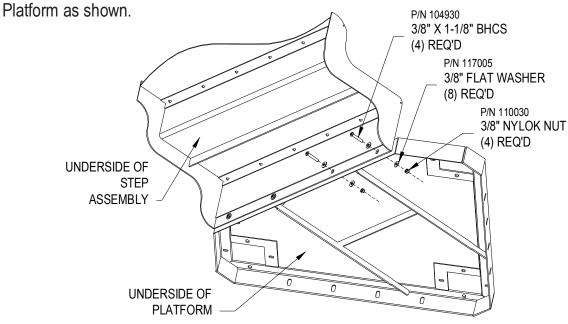


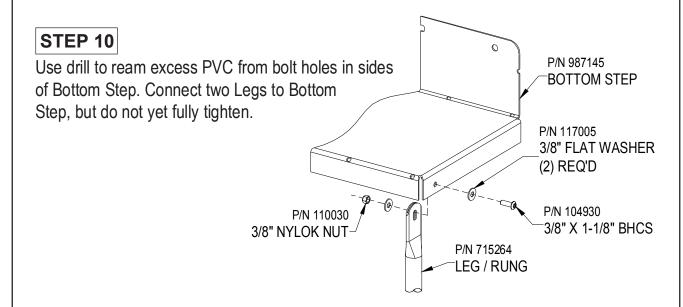
Tots' Choice® - Mira-Therm II

Transfer Points for 3', 4' and 5' Decks, with Open Handrails

#### STEP 9

Brace Stair Assembly in position so Steps are level. Fasten Stair bottom to Transfer Point





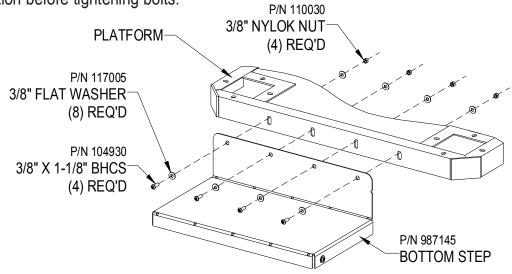


Tots' Choice® - Mira-Therm II

## Transfer Points for 3', 4' and 5' Decks, with Open Handrails

#### STEP 11

Position Bottom Step against Platform edge, setting Legs into footings. Secure Bottom Step to Platform as shown, making certain Platform, Step and Legs are level, plumb and braced in position before tightening bolts.



#### **FINAL STEP**

Proceed with Final Assembly installation.



## Installation Guide

Tots' Choice®

## Bumper Ladders from 3' Deck, 5' Deck, and 6'-6" Deck

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

#### Models included in this installation guide:

MODEL#	<u>DESCRIPTION</u>	PAGE#
718-976-3	Bumper Ladder from 3' Deck	2
718-976-5	Bumper Ladder from 5' Deck	2
718-976-6	Bumper Ladder from 6'-6" Deck	3

Note: Deck systems are NOT included in these assemblies.

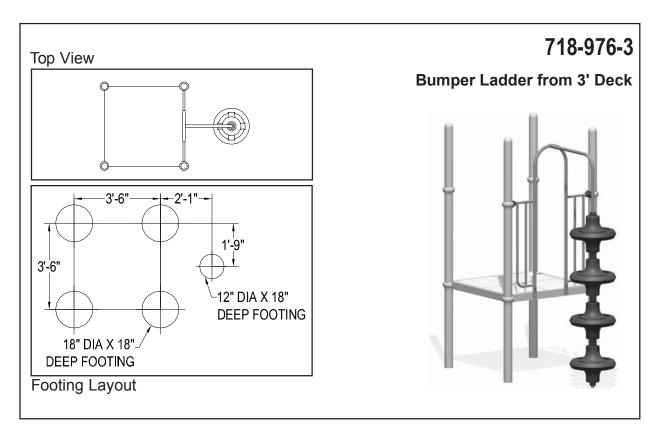
#### TOOLS AND EQUIPMENT REQUIRED

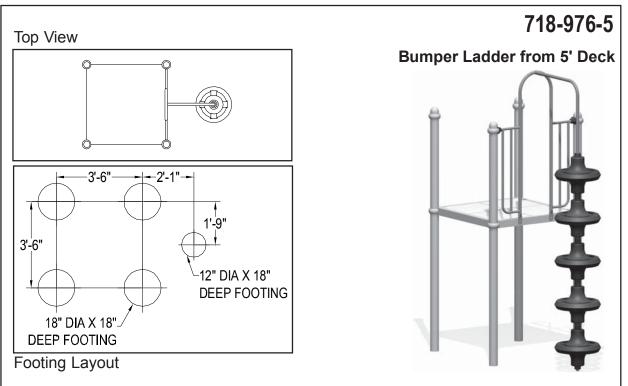
Also see 'Suggested Tools & Equipment' (#D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Hand saw (for assemblies mounting on Deck heights not shown)
- 7. Drill, extension cords, power supply, 1/2" drill bit
- 8. Step ladder
- 9. Adult installers 2 minimum

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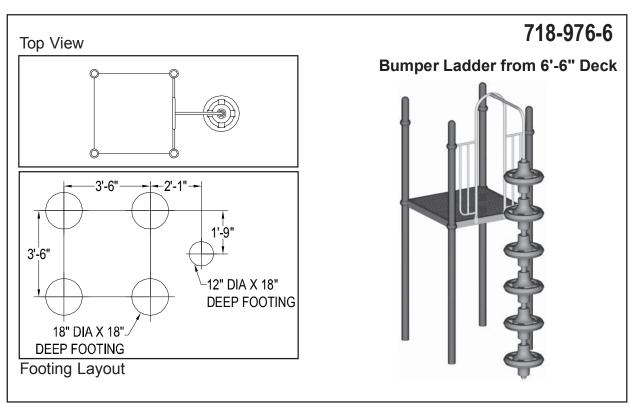
## **Bumper Ladders**







# Tots' Choice® **Bumper Ladders**



## STEP 1 INSTALL DECK SYSTEM PER SEPARATE INSTRUCTIONS

Install Deck system per separate instructions. Plumb, level, and brace in position.

Note: Do not pour concrete for footings, or permanently affix Clamps to Posts with self-drilling screws, until <u>all</u> components in system have been assembled per instructions and braced in position level and plumb.

## STEP 2 DIG FOOTINGS

Dig footings per Footing Layout, Construction Drawings, and Footing Details installation.

Tots' Choice®

## **Bumper Ladders**

## STEP 3 DRILL EXCESS DECK COATING FROM BOLT HOLES

Position Arch Enclosure against Deck face to determine mating bolt holes. Use drill to ream excess Deck coating from only those holes in Deck.

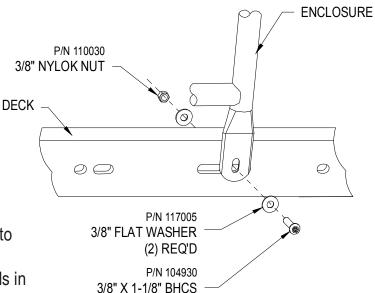
## **STEP 4** AFFIX BAR SOCKET TO CLAMPS; SECURE CLAMPS TO POSTS

Refer to Versalok Fastening System installation.

Loosely affix a Bar Socket (with 1-1/16" diameter hole) to each set of Clamp Ring halves. Loosely assemble Clamps around Posts so that bottom edge of each is **37-1/2**" from top edge of Deck-supporting Clamp. It is acceptable to approximate final position of Clamps until Arch Enclosure is completely installed.

## **STEP 5** INSTALL ENCLOSURE

Refer to *Versalok Fastening System installation*. Lift Arch Enclosure and place top rail ends into Bar Sockets.



Secure bottom of Arch Enclosure to Deck as shown. Plumb and level Enclosure, and tighten top rail ends in Bar Sockets, Bar Sockets on Clamps, and Clamp Rings around Posts.

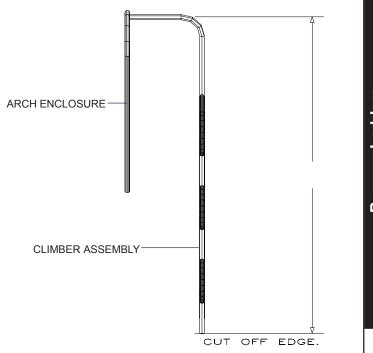


## Tots' Choice® **Bumper Ladders**

## STEP 6 INSTALL CLIMBER

Set Climber Assembly into footing so that Stub at top of Climber will fit into sleeve on Arch Enclosure.

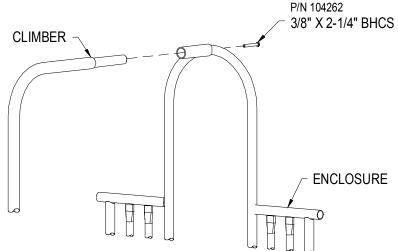
Note: Climber Assemblies being mounted to **Deck heights other than shown** must first have lengths cut from bottom ends. Measure **90"** from uppermost surface of climber, and add Deck height from finished grade. Use hand saw to cut Climber Assembly at that point.



90" + DECK HEIGHT FROM FINISH GRADE, i.e. FOR A CLIMBER FROM A 5' DECK, 90" + 60" = 150" FROM TOP OF CLIMBER TO CUT OFF EDGE.

## STEP 7 SECURE CLIMBER INTO ENCLOSURE SLEEVE

Secure swaged end of Climber Assembly in sleeve on Arch Enclosure as shown.



## **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

NOTE: WHEN POURING THE CONCRETE FOOTING FOR THE BUMPER LADDER, <u>DO NOT COVER THE SWAGED CONNECTION WITH CONCRETE!</u>

Rev. B



## **Risk Management Sign**

**IMPORTANT!** The Risk Management Sign is to be installed outside the defined play area and play equipment use zones. It needs to be oriented so that the **front side faces the main entrance to the playground** and next to but not interfering with the accessible route that leads to the play space.

#### Models included in this installation guide:

MODEL DESCRIPTION

787 Risk Management Sign - English 787FR Risk Management Sign - French 787SP Risk Management Sign - Spanish



Note: English version shown.

# 787, 787FR, 787SP

## **Risk Management Sign**

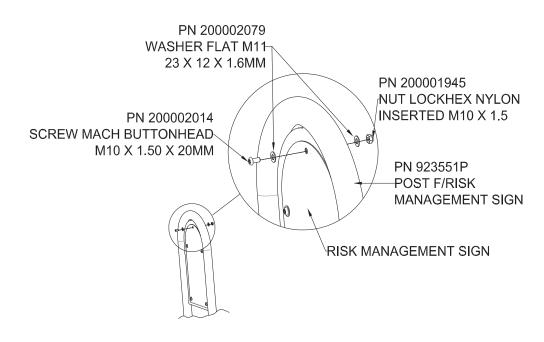
## STEP 1 ATTACH AGE-APPROPRIATE STICKER

1a. Attach age-appropriate sticker to sign, in location, as shown below.



## STEP 2 ATTACH SIGN TO POST FRAME

2a. Attach sign as shown below, in five (5) locations.



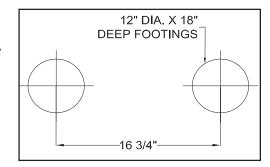


## **Risk Management Sign**

## STEP 3 DIG FOOTINGS

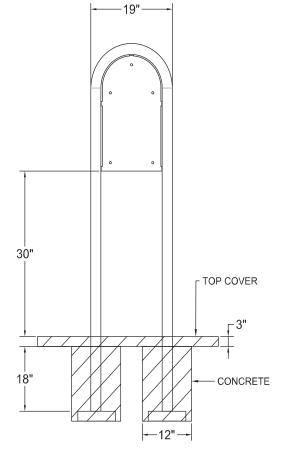
3a. Dig footings per *Footing Layouts*, Construction Drawings, and *Footing Details* installation.

Note: Do not pour concrete for footings until components illustrated in this installation guide have been installed per instructions and braced in position, leveled and plumbed.



## **STEP 4** SET SIGN IN FOOTINGS

- 4a. Place a brick in the bottom of each hole so the sign will rest on the brick when inserted.
- 4b. Set risk management sign in footings per Construction Drawings pour concrete; plumb sign in footings and brace in position until concrete is cured.



#### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

## **Risk Management Sign**

			Dili di Material
	Model 787 QTY 1	<u>PART</u> 923551P 923560	DESCRIPTION POST F/RISK MANAGEMENT SIGN PC F/787 RISK MNGMT ENGLISH
	Parts Carton 9	<b>23560</b> 923287	RISK MNGT SIGN PRINTED ENGLISH
	1 HW923551-1	HW923551-1	HRDW PKG RISK MANAGEMENT SIGN S1/1
	<u>QTY</u>	<u>PART</u>	DESCRIPTION
	5	200002014	SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM
	10 5	200002079 200001945	WASHER FLAT M11 23 X 12 X 1.6MM NUT LOCK HEX NYLON INSERTED M10 X 1.5
	Model 787FR		
	<u>QTY</u>	<u>PART</u>	DESCRIPTION
	1	923551P	POST F/RISK MANAGEMENT SIGN
	1	923558	PC F/787FR RISK MNGMT FRENCH
	Parts Carton 9		
	1	923288	RISK MNGT SIGN PRINTED ENGLISH
	1	HW923551-1	HRDW PKG RISK MANAGEMENT SIGN S1/1
	HW923551-1		
	QTY	PART_	DESCRIPTION  ODESCRIPTION  ODE
	5 10	200002014 200002079	SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM WASHER FLAT M11 23 X 12 X 1.6MM
١	10	Z0000Z013	WASHER FLAT WITH 23 A 12 A 1.0WIW

NUT LOCK HEX NYLON INSERTED M10 X 1.5

Bill of Material

#### Model 787SP

5

<u>QTY</u>	<u>PART                                    </u>	<u>DESCRIPTION</u>	
1	023551D	DOCT E/DICK MA	

200001945

1 923551P POST F/RISK MANAGEMENT SIGN 1 923559 PC F/787SP RISK MNGMT SPANISH

#### Parts Carton 923559

1 923289 RISK MNGT SIGN PRINTED SPANISH 1 HW923551-1 HRDW PKG RISK MANAGEMENT SIGN S1/1

#### HW923551-1

QTY PART DESCRIPTION

5 200002014 SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM

10 200002079 WASHER FLAT M11 23 X 12 X 1.6MM

5 200001945 NUT LOCK HEX NYLON INSERTED M10 X 1.5



**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.



963
Pokey "C" Spring Rider

PROTECTIVE AREA: APPROX 17' X 15'

#### TOOLS AND EQUIPMENT REQUIRED

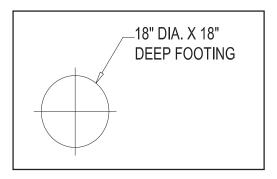
Also see 'Suggested Tools & Equipment' (Doc. # D70052) in 'Installations 101'

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. 2 x 8's or other wood, nails, hammer to construct frame for concrete footing assembly
- 4. Tape measure and level
- 5. Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. For installation in concrete slabs: concrete saw
- 7. Adult installers 2 minimum

## **STEP 1** FOOTING LAYOUT

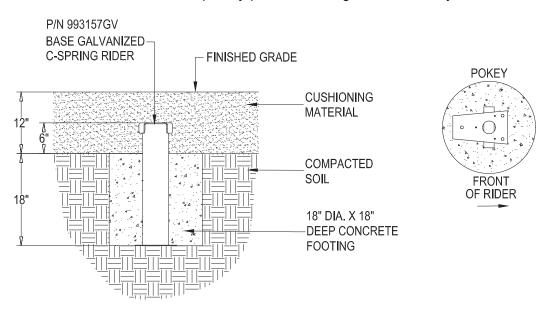
1a. Locate and dig one 18" diameter footing by 18" deep.

NOTE: Footing assembly instructions for <u>natural surfacing</u>, <u>in-ground ONLY</u>. Consult the *CPSC Handbook* for guidelines for placement of Spring Riders, Bouncers, etc.



## STEP 2 BASE WELDMENT AND CONCRETE

- 2a. Set base weldment into footing; ensure it is completely plumb and level.
- 2b. Pour concrete to required distance from base weldment top.
- 2c. Allow concrete to cure completely prior to affixing rider assembly.



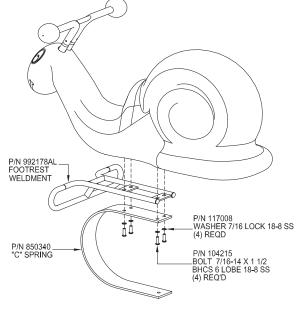
NOTE: Orientation of base weldment will affect direction of rider. See illustration above.



## STEP 3 ATTACH FOOTREST

3a. Install bolts upward through "C" Spring; attach footrest and rider body as shown



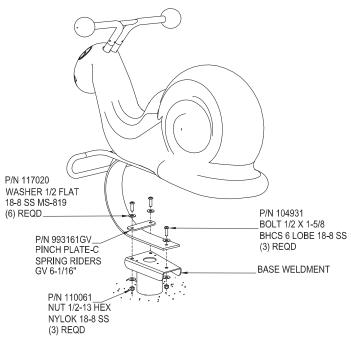


## **STEP 4** ATTACH RIDER TO BASE WELDMENT

4a. Bolt pinch plate over "C" spring and base as shown below.

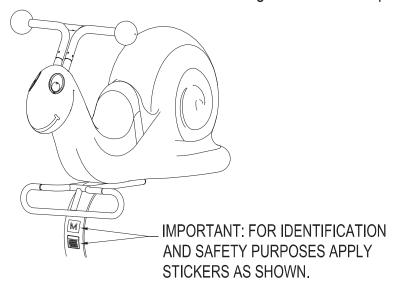
4b. Bolt spring to front of base. Ensure "C" spring and rider are level and plumb on

base.



## STEP 5 AFFIX IDENTIFICATION/WARNING STICKERS

5a. Apply provided Miracle Identification and Warning Stickers to "C" spring as shown.



NOTE: It is imperative that these stickers are CLEARLY visible.

#### **FINAL STEP**

Refer to *Final Assembly installation* located behind *Installations 101* in Installation Manual.

## Bill of Materials

	Biii Gi i	Matorialo
POKEY "C" SPRIN	IG RIDER - MODEL # 963	
QUANTITY	MODEL/COMPONENT	<u>DESCRIPTION</u>
1	850340	"C" SPRING PAINTED BLACK
1	992175BOX	SNAIL BODY ASSEMBLY
1	992178AL	FOOTREST WELDMENT
1	993176	PARTS CARTON (SEE BELOW FOR CONTENTS)
1	993157GV	BASE GALVANIZED C-SPRING RIDER
PARTS CARTON #	‡993176	
QUANTITY	MODEL/COMPONENT	<u>DESCRIPTION</u>
4	104215	BOLT 7/16-14 X 1-1/2 BHCS 6 LOBE 18-8 SS
3	104931	BOLT 1/2-13 X 1-5/8 BHCS 6 LOBE 18-8 SS
3	110061	NUT 1/2-13 HEX NYLOK 18-8 SS
4	117008	WASHER 7/16 LOCK 18-8 SS
6	117020	WASHER 1/2 FLAT 18-8 SS MS-819
1	993161GV	PINCH PLATE-C SPRING RIDERS GALVANIZED
1	116021	LABEL MIRACLE ID - GENERIC
1	116022	LABEL WARNING - PLAYGROUND
1	104478	BIT T-50 FOR 7/16" BOLT
1	104481	BIT T-55 FOR 1/2" BOLT



**Final Assembly** 

Kids' Choice, Tots' Choice, Center Stage, and City Parks Series Deck Systems & Misc.

#### STEP 1

Plumb and level assemblies.



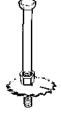
#### STEP 2

Secure Clamps to Posts with self-drilling screws and tighten all fasteners.



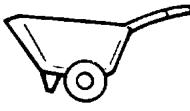
#### STEP 3

Trim all bolts. No more than two (2) threads may protrude after trimming by installer. Peen ends smooth to touch.



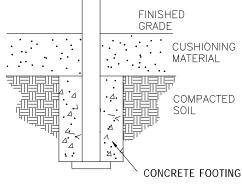
#### STEP 4

Pour concrete in remaining Footings, and allow 72 hours to cure.



#### STEP 5

Install cushioning material (protective surfacing) in, around and beneath areas required for unit.



## STEP 6

Apply *Warning* and *Manufacturer's I.D.* labels, and *Age Appropriate* labels if included. Refer to *Installations 101*.

#### **FINAL STEP**

Establish and adhere to a regular maintenance schedule, checking for loose or missing bolts, worn parts, etc.



## PlayPower Installation Guide

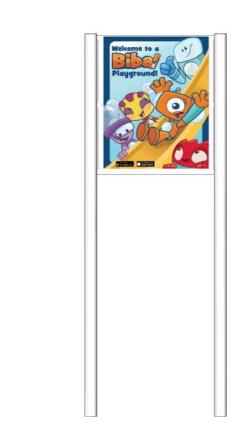


## **Biba Playground Entry Sign**

**IMPORTANT!** The Biba Playground Entry Sign is to be installed outside the defined play area and play equipment use zones. It needs to be oriented so that the front side faces the main entrance to the playground and next to but not interfering with the accessible route that leads to the play space.

#### Models included in this installation guide:

MODEL	DESCRIPTION
9991	Biba Playground Entry Sign - English
9993	Biba Playground Entry Sign - French/English
9994	Biba Playground Entry Sign - Spanish/English
9995	Biba Playground Entry Sign - French





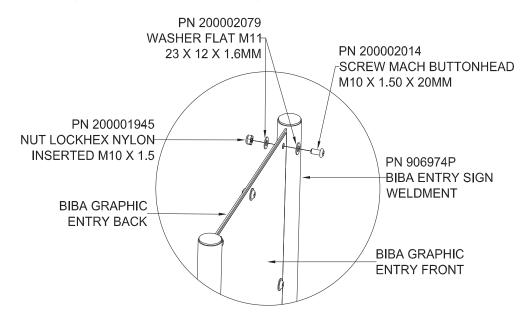
**FRONT** 

**BACK** 

## **Biba Playground Entry Sign**

## STEP 1 ATTACH SIGN TO POST FRAME

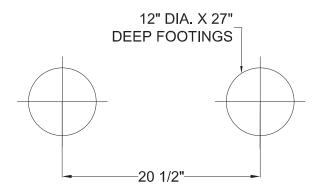
1a. Attach sign as shown below, in five (5) locations.



## STEP 2 DIG FOOTINGS

2a. Dig footings per *Footing Layouts*, Construction Drawings, and *Footing Details* installation.

Note: Do not pour concrete for footings until components illustrated in this installation guide have been installed per instructions and braced in position, leveled and plumbed.



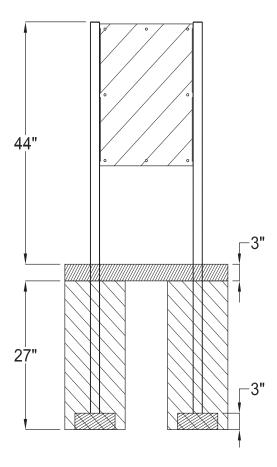




## **Biba Playground Entry Sign**

## STEP 3 SET SIGN IN FOOTINGS

- 3a. Place a brick in the bottom of each hole so the sign will rest on the brick when inserted.
- 3b. Set sign in footings per Construction Drawings pour concrete; plumb sign in footings and brace in position until concrete is cured.



## **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

# 9991, 9993, 9994, 9995

## **Biba Playground Entry Sign**

#### Bill of Material

M	lo	de	اد	9	9	q	1

906974P **BIBA ENTRY SIGN WELDMENT** 

903979 BIBA GRAPHIC ENTRY FRONT FULL ENGLISH 1 903980 BIBA GRAPHIC ENTRY BACK FULL ENGLISH

912637 PARTS CARTON 9991 BIBA

Parts Carton 912637

HW9991-1 HRDW PKG F/BIBA ENTRY S1/1

HW9991-1

**QTY** PART **DESCRIPTION** 

8 200002014 SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM

16 200002079 WASHER FLAT M11 23 X 12 X 1.6MM

200001945 NUT LOCK HEX NYLON INSERTED M10 X 1.5

#### **Model 9993**

QTY	PART	DESCRIPTION

906974P **BIBA ENTRY SIGN WELDMENT** 

906215 BIBA GRAPHIC ENTRY FRONT FRENCH/ENGLISH 906214 BIBA GRAPHIC ENTRY BACK FRENCH/ENGLISH

912637 PARTS CARTON 9991 BIBA

Parts Carton 912637

HRDW PKG F/BIBA ENTRY S1/1 HW9991-1

HW9991-1

QTY **DESCRIPTION** PART

200002014 SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM

16 200002079 WASHER FLAT M11 23 X 12 X 1.6MM

200001945 NUT LOCK HEX NYLON INSERTED M10 X 1.5





## **Biba Playground Entry Sign**

#### Bill of Material cont.

#### Model 9994

<u>QTY</u> <u>PART</u> <u>DESCRIPTION</u>

1 906974P BIBA ENTRY SIGN WELDMENT

1 906217 BIBA GRAPHIC ENTRY FRONT SPANISH/ENGLISH 1 906216 BIBA GRAPHIC ENTRY BACK SPANISH/ENGLISH

1 912637 PARTS CARTON 9991 BIBA

#### Parts Carton 912637

1 HW9991-1 HRDW PKG F/BIBA ENTRY S1/1

#### HW9991-1

QTY PART DESCRIPTION

8 200002014 SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM

16 200002079 WASHER FLAT M11 23 X 12 X 1.6MM

8 200001945 NUT LOCK HEX NYLON INSERTED M10 X 1.5

#### **Model 9995**

QTY PART DESCRIPTION

1 906974P BIBA ENTRY SIGN WELDMENT

1 903988 BIBA GRAPHIC ENTRY FRONT FULL FRENCH 1 903989 BIBA GRAPHIC ENTRY BACK FULL FRENCH

1 912637 PARTS CARTON 9991 BIBA

#### Parts Carton 912637

1 HW9991-1 HRDW PKG F/BIBA ENTRY S1/1

#### HW9991-1

QTY PART DESCRIPTION

8 200002014 SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM

16 200002079 WASHER FLAT M11 23 X 12 X 1.6MM

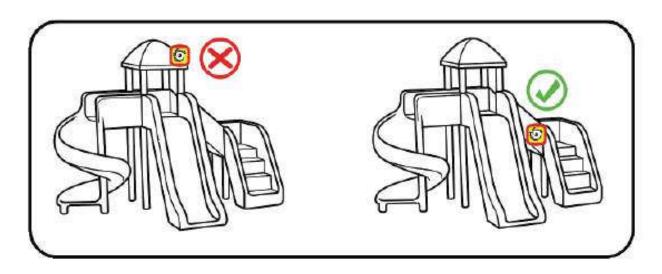
8 200001945 NUT LOCK HEX NYLON INSERTED M10 X 1.5



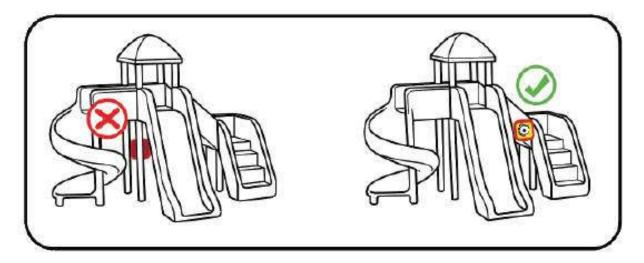


## **Installation of Biba Play Event Markers**

Locate post markers next to the specific events as indicated below.



Markers should be installed no higher than 5ft above surfacing



Markers should always be installed facing outwards from structure

**Step 1**: The markers should be placed at approximately 48" (1220 mm) above surfacing. Actual height may need to be adjusted to not conflict with structure clamps (default to lower rather than higher in this case, **no higher than 5', no lower than 2' above surfacing**). During play, markers will be scanned by caregivers at ground level. Place markers along accessible surfacing routes within the play space to facilitate wheelchair use. Markers need to be oriented so that they relate to the play activity but do not interfere with the play patterns of the users.

Attach the Biba play event markers as shown below.



**Step 2**: Stack up graphic backer (item 4) to Biba graphic (item 3) and nest them into the back of graphic frame (item 2). Position the assembly to the post next to the play event and attach using two (2) self-drilling TEK screws (item 1).

#### Parts List:

#	9992	Post Markers	Qty
1	104404	1 Bolt ¼ - 14 X 2 Hex Washer TEK	12
2	906977	Alum Frame For Biba Post Sign	6
3	906984	Biba Graphic Post Orange	1
3	906983	Biba Graphic Post Purple	1
3	906982	Biba Graphic Post Yellow	1
3	906981	Biba Graphic Post Blue	1
3	906980	Biba Graphic Post Red	1
3	906979	Biba Graphic Post Green	1
4	906978	Rubber Biba post sign backer	6

## **Equipment Categories**

#### Marker colors are tied directly to each category and must be installed in the orientation shown

#### **Climbers** Red Marker



This group contains all climbers and free standing climbers such as stepping pod climbers, rung climbers, net climbers, climbing walls, etc.

**Slides** Yellow Marker



This group contains all types of slides such as spiral, curved, roller, tube, multi bed-way, etc.

#### **Overheads** Purple Marker



.This group contains all overheads event such as overhead rotating wheels, ring treks, overhead ladders, chinning bars, etc.

#### Tubes Blue Marker



This group contains crawl tubes that are structure mounted or those at ground level. In the case that the play equipment contains both a standard slide and a tube slide, then the tube slide can be placed in this category.

#### **Bridge/Deck to Deck link** Orange Marker



This group contains linking events such as suspension bridges, arch bridges, rope bridges, themed deck links, side step climbers, etc.

#### **Swings** Green Marker



.This category covers all types of swinging activities, such as multiuser dish swings, tire swings, generation swings, and tot or belt swings.

If your playground does not contain play equipment from each category, don't worry, the games can function with fewer than six markers/activities. Install markers next to each piece of equipment that is present. Markers for equipment not present should not be installed.



Final Assembly

Miscellaneous Freestanding Play Equipment and Non-Play Equipment

#### STEP 1

Plumb and level assemblies.



#### STEP 2

Tighten all fasteners.



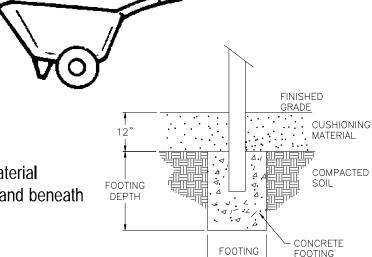
#### STEP 3

Trim all bolts. No more than two (2) threads may protrude after trimming by installer. Peen ends smooth to touch.



#### STEP 4

Pour concrete in remaining Footings, and allow 72 hours to cure.



## STEP 5

If applicable, install cushioning material (protective surfacing) in, around, and beneath areas required for unit.

## STEP 6

If applicable, apply *Age Appropriate, Warning*, and *Manufacturer's I.D.* labels. Refer to *Installations 101.* 

## **FINAL STEP**

Establish and adhere to a regular maintenance schedule, checking for loose or missing bolts, worn parts, etc.



## Bill of Materials (Parts List)

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

Qty		Model/Component	Description
2	*	2840	SLASHPROOF SEAT W/CHAIN (8' T/R)
2	**	990931BK	PARTS CARTON - S/P SEAT W/SHACKLES BLA
2		990410	SHACKLE "D", (SMALL), BAG OF 2 W/BOLTS
2		999604BK	BELT SWING SEAT, SLASHPROOF - NO LOGO
2	**	990932	PARTS CARTON-(2)-71" CHAINS
2		200187286	CHAIN F/8' TOP RAIL BELT/DURAGLIDE (71")
1	*	2901HH	SWING 2-LEG STD 8' T/R MCTE FOR (2) THER
1	**	116048	LABEL, 2" X 2" WHITE POLYESTER THERMAL
1	**	116049	LAMINATE, CLEAR, 2" X 2" W/PERMANENT
4	**	851101AZR	LEG 10'-6" X 2 3/8" PAINT
2	**	983880GRN	YOKE ASSEMBLY PAINTED
1	**	985979	PARTS CARTON 2901
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		HW985979-1	HRDW PKG 2901 S1/1
2		988719	PIN, THREADED, 5/8" OD X 2-13/16" Zinc
4		984429ZP	CLEVIS SWING HANGER ZINC PLATED (DIRECT)
1	**	986348	PARTS CARTON-GENERIC AND WARNING LABELS
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		713550	STICKER TOP OF SURFACING
1	**	991787LIM	THERAPEUTIC TOP RAIL WELDMENT
1	**	995610	PARTS CARTON - LABELS F/THERAPEUTIC SEAT
1		116082	LABEL,SWING,INCLUSIVE,AGE 5-12 YRS, MREC
1		116091	LABEL,SWING,INCLUSIVE,AGE 2-12 YRS, MREC
1	*	2901X	8' STD ADD-A-BAY FRAME MCOTE
2	**	851101AZR	LEG 10'-6" X 2 3/8" PAINT
1	**	983882GRN	CENTER YOKE,SGL TOPRL PAINT
1	**	985903LIM	TOP RAIL ASSY 2 3/8 OD
1	**	991482	PARTS CARTON 2901X
1		HW991482-1	HRDW PKG 2901HHX S1/1

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

•		000740	DIN TUDE AREA SIGN OR VIOLANTE
2		988719	PIN, THREADED, 5/8" OD X 2-13/16" Zinc
4		984429ZP	CLEVIS SWING HANGER ZINC PLATED (DIRECT)
1	**	995603	PARTS CARTON - LABELS F/8' HIGH T/R
1		116083	LABEL,SWING,BUCKET,AGE 24-47 MNTHS, MREC
1		116087	LABEL,SWING, BELT, AGE 2 TO 12 YRS, MREC
1		116088	LABEL, SWING, BELT, AGE 5-12 YRS, MREC
2	*	2990	TOT SEAT 360 DEG W/CHAIN (8' T/R)
2	**	990934BK	PARTS CARTON - S/P CHAIR W/SHACKLES
2		990410	SHACKLE "D", (SMALL), BAG OF 2 W/BOLTS
2		999605BK	TOT SWING SEAT 360 DEG - No logo
2	**	990935	PARTS CARTON-(2)-4'3" CHAINS
2		200187283	CHAIN F/8' TOP RAIL BUCKET SEAT BG (52")
1	*	304W	TEN SPIN
1	**	986348	PARTS CARTON-GENERIC AND WARNING LABELS
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		713550	STICKER TOP OF SURFACING
1	**	994990	PARTS CARTON - 2-12 LABEL
1		116036	LABEL - AGES 2-12 YEARS MREC
1	**	996273LIM	WHEEL F/SPINNER
1	**	996354ORN	PARTS CARTON GRIPS TEN SPIN
1		HW996354-1	HRDW PKG GRP TN SPN S1/1
5		996288ORN	HANDGRIP-TEN SPIN
1	**	996616CYN	ASSEMBLY-WHIRL BODY TEN SPIN
1	**	996618BLK	PARTS CARTON WHEEL TEN SPIN
1		996606BLK	TUBE-WHEEL WELDMENT
1		HW996618-1	HRDW PKG WHL TN SN S1/1
2		993297	WIRE, BB, 3 GA X 12"
1	**	996640BLK	POST-ASSEMBLY TEN SPIN
1	*	4382	CLIMBER PEAK 2-WAY
1	**	116048	LABEL, 2" X 2" WHITE POLYESTER THERMAL
1	**	116049	LAMINATE, CLEAR, 2" X 2" W/PERMANENT
1	**	713552AZR	POST (W/ CAP) ASSY 5" O.D.X 136"
1	**	912375GRN	PC BAR SOCKET W/HDW (4 SETS)

CITY OF FLINT 1101 S. SAGINAW ST.

FLINT, MI 48502

\* Model

\*\* Component

1		HW912375-1	HRDW PKG BAR SKT (4) S1/1
4		102411GRN	BAR SOCKET-BOTTOM 1.315" O.D.
4		102412GRN	BAR SOCKET-TOP 1.315" O.D.
1	**	912380GRN	5" KC (2) CLAMP W/HDW
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		HW912380-1	HRDW PKG CLMP/BIT (2) S1/1
4		713010GRN	CLAMP RING 5" DIA
1	**	986348	PARTS CARTON-GENERIC AND WARNING LABELS
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		713550	STICKER TOP OF SURFACING
2	**	987716LIM	PEAK CLIMBER WELDMENT
2	**	990968GRN	5" OD KC HEADER SUPPORT COMPLETE
2		104285	SET SKT 3/8-16 X 3/8 18-8 SS
2		986153GRN	HEADER SUPPORT CASTING
2		988749	DRIVE RIVET, NAIL-IN
1	**	994991	PARTS CARTON - 5-12 LABEL
1		116037	LABEL - AGES 5-12 YEARS MREC
51	*	44012R	MIRACLE TIMBER 6' L X 12" H RECYCLED
51	**	112602RE	MIRACLE TIMBER REGRIND
1	*	4406R	ACCESS RAMP WITH 2 MIRACLE TIMBERS RECYC
1	**	988844RE	ACCESS RAMP WITH 2 MIRACLE TIMBERS
1	*	477002	JAX PACK-TWO
1	**	116048	LABEL, 2" X 2" WHITE POLYESTER THERMAL
1	**	116049	LAMINATE, CLEAR, 2" X 2" W/PERMANENT
2	**	912289AZR	PARTS CARTON FOR 995543 TOP OF POST
2		995645AZR	CAM LOCK ASSEMBLY W/O CENTER HOLE
2		HW912289-1	HRDW PKG F/JAX PSTTP S1/1
1	**	986348	PARTS CARTON-GENERIC AND WARNING LABELS
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES

CITY OF FLINT 1101 S. SAGINAW ST.

FLINT, MI 48502

1		713550	STICKER TOP OF SURFACING
1	**	995543LIM	JAX 1 HOLE LIM
1	**	995543ORN	JAX 1 HOLE
2	**	995640AZR	SUPPORT ASSEMBLY - CENTER HOLE
2	**	995821AZR	POST-BENT R24 X 81-1/16"
1	**	996031	PARTS CARTON - JAX INSTALLATION TOOLS
1		995772BLK	CAM LOCK INSTALLATION TOOL
1	*	714715206	MAGICAL MUSIC PANEL INSERT FOR KC/TC/TCX
1	**	923418	PC F/ACTIVITY PANEL INSERT
1		HW923418-1	HRDW PKG F/PLAY PANEL S1/1
1	**	ASY0448	ASSY - MUSIC INSERT
2	*	7147721	BONGO PERCH
2	**	986041CYN	STEPPING POD
2	**	986117LIM	POST ASSY, 50" - BONGO POD
2	**	986498	PARTS CARTON-HONEYCOMB POD
2		HW986498-1	HRDW PKG 7147923R13 S1/1
3	*	7147721	BONGO PERCH
3	**	986041ORN	STEPPING POD
3	**	986117LIM	POST ASSY, 50" - BONGO POD
3	**	986498	PARTS CARTON-HONEYCOMB POD
3		HW986498-1	HRDW PKG 7147923R13 S1/1
1	*	714913	BALANCE BEAM
1	**	908145LIM	BALANCE BEAM 162-913 PAINTED
2	**	908164LIM	LEG RND. F/BALANCE BEAM
1	**	HW907317-1	HRDW PKG BALANCE BEAM S1/1
1		HWS47433	HARDWARE STICKER MP FLTNG BALANCE BEAM
9		104403	BOLT 1/4-14 X 1 1/4 HEX WASHER TEK
1	*	7185029	DECK SQUARE ATTACHES TO 4 POSTS MT II
2	**	912253LIM	3.5" TC (8) 1/2 CLAMPS 1/1
2		HW912253-1	HRDW PKG 3.5 4CLMP S1/1
16		983856LIM	CLAMP RING 3.5 DIA
1	**	982073	PARTS CARTON 718502
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116039	LABEL MIRACLE ID - TOTS' CHOICE

Work Order: MR00116997 Cust #: 4850E01 W. O. Page 5 of 13

CITY OF FLINT 1101 S. SAGINAW ST.

\* Model

\*\* Component

FLINT, MI 48502

1		116099	LABEL, PLAY SMART RULES
1		HW982073-1	HRDW PKG DK SPT S1/1
4		713550	STICKER TOP OF SURFACING
4		981722	DECK SUPPORT 3.5" OD TUBE
1	**	988130GY	TC- SQUARE DECK
2	*	7185039	DECK 1/2 HEX FULL ATTA TO 4 POSTS MTII
6	**	912255LIM	3.5" TC (4) 1/2 CLAMPS 1/1
6		HW912255-1	HRDW PKG 3.5 TC 2CLP S1/1
24		983856LIM	CLAMP RING 3.5 DIA
2	**	982074	PARTS CARTON 718503
2		116021	LABEL MIRACLE ID - GENERIC
2		116022	LABEL WARNING - PLAYGROUND - ENGLISH
2		116039	LABEL MIRACLE ID - TOTS' CHOICE
2		116099	LABEL, PLAY SMART RULES
2		HW982074-1	HRDW PKG 718503 S1/1
8		713550	STICKER TOP OF SURFACING
8		981722	DECK SUPPORT 3.5" OD TUBE
2	**	988146GY	TC - 1/2 HEX DECK FPS
1	*	7185493	POST 3-1/2"OD X 106" 3' DECKS
1	**	995232AZR	POST 3.5" OD(W/CAP)X13GAX106"
2	*	7185494	POST 3-1/2"OD X 118" 4' DECKS
2	**	995233AZR	POST 3.5" OD(W/CAP)X13GAX118"
1	*	718551	POST 3-1/2"OD X 100" 2'6" DECKS OR LESS
1	**	981925AZR	POST (W/CAP) ASSY-3 1/2 OD X 100"TC
5	*	718552	POST 3-1/2"OD X 130" 3'-5' DECKS
5	**	981926AZR	POST (W/CAP) ASSY-3 1/2 OD X 130"TC
1	*	718553	POST 3-1/2"OD X 148" 5'6"-6'6" DECKS
1	**	981927AZR	POST (W/CAP) ASSY-3 1/2 OD X 148"TC
2	*	718573	POST 3-1/2" OD X 162" FOR ROOF(3'6-5'DK)
2	**	981930AZR	POST-3 1/2 OD X 162"
1	*	718574	POST 3-1/2"OD X 180" FOR ROOF 5'6"-6'6"
1	**	981929AZR	POST-3 1/2 OD X 180"
3	*	718620	TOPPER, BIG TIMBER POST, TC
3	**	994370	PARTS CARTON 704620, 718620
3		981787	3 1/2" POST CAP CAST ALUMINUM

CITY OF FLINT 1101 S. SAGINAW ST.

\* Model

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FLINT, MI 48502

3		HW994370-1	HRDW PKG 704620 S1/1
3	**	994371LIM	TOPPER, BIG TIMBER POST, 3-1/2" OD POST
1	*	718700	SLIDE SIDE-BY-SIDE W/CANOPY 3' DECK
1	**	112590ORN	SLIDE DOUBLE WIDE 3' DECK
1	**	978930LIM	SLIDE LEG FRONT SKI SLIDE
1	**	988358LIM	TOP RAIL-TC CANOPY
1	**	989723ORN	CANOPY-WIDE SLIDE TC, W/FILL BLOCK
1	**	989873LIM	PARTS CARTON 718-700 AND 718-874
1		HW989873-1	HRDW PKG 718874 M1/1
2		102411LIM	BAR SOCKET-BOTTOM 1.315" O.D.
2		102412LIM	BAR SOCKET-TOP 1.315" O.D.
1	*	71871520	ACTIVITY PANEL FRAME ABOVE DECK
1	**	923416WHT	ACTIVITY PANEL FRAME
1	**	982631	PARTS CARTON PANELS
1		HW982631-1	HRDW PKG PANELS S1/1
1	**	982664LIM	RUNG BRACKET ASSY PANEL
2	**	990950LIM	PRT CRTN-TC BAR SOCKET 1.000" OD TUBE
2		102413LIM	BAR SOCKET-TC BOTTOM 1.000" O.D.
2		102414LIM	BAR SOCKET-TC TOP 1.000" O.D.
2		HW990950-1	HRDW PKG TC BAR SCKT 1 ST S1/1
1	*	71874859	SLIDE TYPHOON II 6'2" 360 DEG 5' DK MTII
1	**	850184ORN	MUST ORDER WITH CORRECT COLOR CANOPY
1	**	912255LIM	3.5" TC (4) 1/2 CLAMPS 1/1
1		HW912255-1	HRDW PKG 3.5 TC 2CLP S1/1
4		983856LIM	CLAMP RING 3.5 DIA
1	**	980892ORN	PARTS CARTON (2) 4" PLUGS
2		103543ORN	PLUG ROCKITE 4" ORANGE
1	**	984135LIM	TYPHOON SLIDE LEG
1	**	985505AZR	PARTS CARTON 718-749-5
1		HW985505-1	HRDW PKG 7187495 L1/2
1		HW985505-2	HRDW PKG 7187495 L2/2
2		976468ZP	BACK-UP FLANGE - ZINC PLATED
4		102411AZR	BAR SOCKET-BOTTOM 1.315" O.D.
4		102412AZR	BAR SOCKET-TOP 1.315" O.D.
1	**	986555S	TYPHOON II SLIDE ASSY (360 DEGREE)

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

FLINI, MI	48302		
0		995685	SEALANT, 3M 730 HYBRID CLEAR
1		112593ORN	CYCLONE PLATFORM ROCKITE
1		986052ORN	TYPHOON II SLIDE W/120-1/2" POLE
1		987270	BOX, TYPHOON/CYCLONE SHIPPING
2		104180	BOLT 1/2-13 X 1 BHCS 6 LOBE 18-8 SS
2		104977	BOLT 3/8-16 X 2 1/2 HHCS 18-8 SS
3		104057	BOLT 3/8-16 X 2 HHCS 18-8 SS
3		104488	BOLT 1/2 X 1 1/4 BHCS 18-8 SS
3		117020	WASHER 1/2 FLAT 18-8 SS MS-819
5		103538ORN	PLUG ROCKITE 2 1/2" ORANGE
5		103543ORN	PLUG ROCKITE 4" ORANGE
5		110066	NUT 3/8-16 HEX 18-8 SS CADMIUM PLATED
11		117005	WASHER 3/8 X 1 O.D. FLAT 18-8 SS
16		985954	BACK-UP FLANGE CYCLONE SLIDE ZINC PLTD
1	**	987195GY	STAIR, 5' DK TYPHOON ADA
1	**	989361LIM	STEP ENCLOSURE RH 714-748-59
1	**	989362LIM	STEP ENCLOSURE LH 714-748-59
2	**	991963LIM	DECK ENCLOSURE 718-748-49C
1	*	7187721	BONGO PERCH
1	**	986041ORN	STEPPING POD
1	**	986117LIM	POST ASSY, 50" - BONGO POD
1	**	986498	PARTS CARTON-HONEYCOMB POD
1		HW986498-1	HRDW PKG 7147923R13 S1/1
1	*	718782	CRUNCH STATION
1	**	993067LIM	PARTS CARTON CRUNCH STATION
1		116045	LABEL-CRUNCH BAR MREC
1		993066LIM	CRUNCH STATION ASSY
3		104403	BOLT 1/4-14 X 1 1/4 HEX WASHER TEK
1	*	718796P1	BELL (POST MOUNT)
1	**	990951LIM	3.5" OD TC BAR SOCKET 1.315"OD PIPE
1		102411LIM	BAR SOCKET-BOTTOM 1.315" O.D.
1		102412LIM	BAR SOCKET-TOP 1.315" O.D.
1		104285	SET SKT 3/8-16 X 3/8 18-8 SS
1		104403	BOLT 1/4-14 X 1 1/4 HEX WASHER TEK
2		104750	BOLT 1/4-20 X 5/8 BHCS 6 LOBE 18-8 SS

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

1	**	990964LIM	3.5" OD TC VERSALOK CLAMP COMPLETE
2		104403	BOLT 1/4-14 X 1 1/4 HEX WASHER TEK
2		104749	BOLT 1/4-20 X 1 1/4 BHCS 6 LOBE 18-8 SS
2		104942	INSULATOR, SCREW, 1/4 DIA HOLE X 3/8
2		983856LIM	CLAMP RING 3.5 DIA
1	**	991824LIM	PARTS CARTON 714 & 718-796-P1
1		104403	BOLT 1/4-14 X 1 1/4 HEX WASHER TEK
1		991819LIM	BELL ASSEMBLY
1	*	718808	CLIMBING POLE 3', 5' OR 6' DECK
1	**	713166LIM	POLE W/INSERT CLIMBING
1	**	982498LIM	PARTS CARTON 718-908
1		HW982498-1	HRDW PKG 718908 S1/1
2		102413LIM	BAR SOCKET-TC BOTTOM 1.000" O.D.
2		102414LIM	BAR SOCKET-TC TOP 1.000" O.D.
1	**	990660LIM	ARCH ENCLOSURE ASSY, CLIMBER
1	*	7188135	DECK ENCLOSURE F/OH CLIMBRS
2	**	982602LIM	DECK ENCLOSURE-OH CLIMBERS
1	**	990930LIM	PARTS CARTON 7188135
1		HW990930-1	HRDW PKG 7188135 M1/1
2		102413LIM	BAR SOCKET-TC BOTTOM 1.000" O.D.
2		102414LIM	BAR SOCKET-TC TOP 1.000" O.D.
1	*	7188155	END LADDER FOR OH CLIMBERS
1	**	912255LIM	3.5" TC (4) 1/2 CLAMPS 1/1
1		HW912255-1	HRDW PKG 3.5 TC 2CLP S1/1
4		983856LIM	CLAMP RING 3.5 DIA
1	**	982350LIM	PARTS CARTON 718-843
2		102413LIM	BAR SOCKET-TC BOTTOM 1.000" O.D.
2		102414LIM	BAR SOCKET-TC TOP 1.000" O.D.
2		104049	SET SKT 3/8-16 X 3/4 18-8 SS
4		104750	BOLT 1/4-20 X 5/8 BHCS 6 LOBE 18-8 SS
1	**	982383LIM	END CLIMBER-OH CLIMBERS
1	*	7188435	CHINNING BAR ONLY
1	**	912255LIM	3.5" TC (4) 1/2 CLAMPS 1/1
1		HW912255-1	HRDW PKG 3.5 TC 2CLP S1/1
4		983856LIM	CLAMP RING 3.5 DIA

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

1	**	981765LIM	CHINNING BAR-37" TC
2	**	990950LIM	PRT CRTN-TC BAR SOCKET 1.000" OD TUBE
2		102413LIM	BAR SOCKET-TC BOTTOM 1.000" O.D.
2		102414LIM	BAR SOCKET-TC TOP 1.000" O.D.
2		HW990950-1	HRDW PKG TC BAR SCKT 1 ST S1/1
1	*	7188645SR	BRIDGE, HANDRING, "S", RH, TC
1	**	912253LIM	3.5" TC (8) 1/2 CLAMPS 1/1
1		HW912253-1	HRDW PKG 3.5 4CLMP S1/1
8		983856LIM	CLAMP RING 3.5 DIA
1	**	986677	PARTS CARTON 714864105
1		HW986677-1	HRDW PKG 714864105 S1/1
8		986667ZP	HANDRING CAST, ZINC PIATED (DIRECT)
4	**	990965LIM	3.5" OD TC HEADER SUPPORT COMPLETE
4		104285	SET SKT 3/8-16 X 3/8 18-8 SS
4		988749	DRIVE RIVET, NAIL-IN
4		990478LIM	HEADER SUPPORT 3.5" OD-TC
1	**	994065LIM	BEAM ASSY, "S", RH, HANDRING BRIDGE
1	*	718908	CLIMBER SPIDER 3, 5' OR 6' DECK
1	**	713150LIM	CLIMBER ASSY, SPIDER
1	**	982498LIM	PARTS CARTON 718-908
1		HW982498-1	HRDW PKG 718908 S1/1
2		102413LIM	BAR SOCKET-TC BOTTOM 1.000" O.D.
2		102414LIM	BAR SOCKET-TC TOP 1.000" O.D.
1	**	990660LIM	ARCH ENCLOSURE ASSY, CLIMBER
1	*	7189599	STAIR ADA 3' TO 5' DECK CLOSED HNDRL
1	**	912255LIM	3.5" TC (4) 1/2 CLAMPS 1/1
1		HW912255-1	HRDW PKG 3.5 TC 2CLP S1/1
4		983856LIM	CLAMP RING 3.5 DIA
1	**	982279LIM	PARTS CARTON 718-810
1		HW982279-1	HRDW PKG 718810 M1/1
4		102413LIM	BAR SOCKET-TC BOTTOM 1.000" O.D.
4		102414LIM	BAR SOCKET-TC TOP 1.000" O.D.
1	**	982546LIM	PARTS CARTON STAIR CASTINGS
2		982461LIM	STEP CASTING 1" HOLE BLIND
1	**	988162GY	TC - 3 STEP ATA FPS

CITY OF FLINT

1101 S. SAGINAW ST.

FLINT, MI 48502

2	**	996799LIM	STAIR ENCLOSURE 718-959-9
1	*	718965359	TRANSFER PT W/OPEN HNDRL 3' DECK MT II
2	**	715264LIM	RUNG LEG
2	**	982677LIM	HANDRAIL-TOP TRANSFER POINT
1	**	982678LIM	HANDRAIL-BTM TRANSFER POINT
1	**	982682LIM	PARTS CARTON 718-965
1		HW982682-1	HRDW PKG 718965 L1/1
2		102411LIM	BAR SOCKET-BOTTOM 1.315" O.D.
2		102417EIM	BAR SOCKET-TOP 1.315" O.D.
1	**	987145GY	
1	**	988139GY	STEP, KC TP BTM FPS TC - TRANS PT DECK FPS
1	**	988142GY	TC - TRANS PT TOP STEP FPS (22-7/8" RISE
	*	7189763	LADDER BUMPER 3' DECK
1	**		PARTS CARTON 718-908
1 1		982498LIM HW982498-1	HRDW PKG 718908 S1/1
		102413LIM	BAR SOCKET-TC BOTTOM 1.000" O.D.
2			BAR SOCKET-TC BOTTOM 1.000 O.D.  BAR SOCKET-TC TOP 1.000" O.D.
2	**	102414LIM	
1 1	**	990660LIM 996310S	ARCH ENCLOSURE ASSY, CLIMBER
		711103CYN	LADDER ASSY, BUMPER - 3' DECK
1		711103CTN 711103LIM	BUMPER, ROCKITE
1 1			BUMPER, ROCKITE
1		711103ORN	BUMPER, ROCKITE
1		996307 996309LIM	POLE EXTENSION, BUMPER LADDERS POLE BUMPER LADDER 3'DK
2		103012	COLLAR ALUMINUM SHOULDER
_			SET SKT 3/8-16 X 1/2 BOLT 18-8 SS
2 2		104073	BOLT 1/4 X 1 HEX WASHER TEK SS
8		104366 104904	BOLT 5/16-18 X 2 1/4 BHCS 6 LOBE 18-8 SS
8		110018	NUT 5/16-18 X 3/4 CAMTAINER 6-LOBE 18-8 WASHER 1/4 FLAT 18-8 SS MS15795-811
8	*	117001	INSTALLATION KIT TO NO COST
1	**	718999Z	
2		990950LIM	PRT CRTN-TC BAR SOCKET 1.000" OD TUBE
2		102413LIM	BAR SOCKET TO TOP 1 000" O.D.
2		102414LIM	BAR SOCKET-TC TOP 1.000" O.D.
2		HW990950-1	HRDW PKG TC BAR SCKT 1 ST S1/1

# Bill of Materials (Parts List)

12/7/2018 2:50:28 PM

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

\* Model
\*\* Component

	4.4		
1	**	990964LIM	3.5" OD TC VERSALOK CLAMP COMPLETE
2		104403	BOLT 1/4-14 X 1 1/4 HEX WASHER TEK
2		104749	BOLT 1/4-20 X 1 1/4 BHCS 6 LOBE 18-8 SS
2		104942	INSULATOR, SCREW, 1/4 DIA HOLE X 3/8
2		983856LIM	CLAMP RING 3.5 DIA
2	**	990967LIM	PC BAR SOCKET W/HDW (1 SET)
2		102411LIM	BAR SOCKET-BOTTOM 1.315" O.D.
2		102412LIM	BAR SOCKET-TOP 1.315" O.D.
2		104285	SET SKT 3/8-16 X 3/8 18-8 SS
2		104403	BOLT 1/4-14 X 1 1/4 HEX WASHER TEK
4		104750	BOLT 1/4-20 X 5/8 BHCS 6 LOBE 18-8 SS
1	**	999001	CUSTOMER ENVELOPE (BLUE) (MAILED)
1	**	999002	DNO INSTALLER ENVELOPE (RED)
1	**	999005ORN	PART BAG-I.D.LABELS & PLUGS
1		103543ORN	PLUG ROCKITE 4" ORANGE
2		116021	LABEL MIRACLE ID - GENERIC
2		116022	LABEL WARNING - PLAYGROUND - ENGLISH
2		116099	LABEL, PLAY SMART RULES
1	**	999006AZR	TOUCH UP PAINT-POST
1		115208AZR	PAINT AZURE GLOSS 4.5 OZ AEROSOL CAN
1		115209AZR	PAINT 0.6 OZ.TOUCHUP BOTTLE
1	**	999007LIM	TOUCH UP PAINT-ACCENT
1		115208LIM	PAINT LIME GLOSS 4.5 OZ AEROSOL CAN
1		115209LIM	PAINT 0.6 OZ.TOUCHUP BOTTLE
1		995685	SEALANT, 3M 730 HYBRID CLEAR
1	**	999015	WHITE BOX-INSTALLATION KIT
1	**	999019	PART BAG-CUSTOMER SERVICE KIT TC
1		103529	1 1/4" PIPE PLUG FOR 1 7/16"ID PIPE
1		104049	SET SKT 3/8-16 X 3/4 18-8 SS
1		981722	DECK SUPPORT 3.5" OD TUBE
2		103545	1" TUBE PLUG-PLASTIC F/14 GA
2		104481	BIT 6 LOBE T-55 FOR 1/2 BOLTS
2		104750	BOLT 1/4-20 X 5/8 BHCS 6 LOBE 18-8 SS
4		103528	PIPE PLUG 1" FOR 1 1/8" ID PIPE (DIAMOND
4		104472	BIT 6 LOBE T-27 FOR 1/4" BOLTS

Work Order: MR00116997 Cust #: 4850E01 W. O. Page 12 of 13

CITY OF FLINT ST.

\* Model \*\* Component

1101 S. SAGINAW	S
FLINT, MI 48502	

4		104480	BIT 6 LOBE T-45 FOR 3/8 BOLTS
4		304024	BIT 6 LOBE T-45 TAMPER RESISTANT FOR M10
6		104964	RIVET, RATCHET, WHITE PLASTIC
25		104403	BOLT 1/4-14 X 1 1/4 HEX WASHER TEK
25		104942	INSULATOR, SCREW, 1/4 DIA HOLE X 3/8
4	**	999133	PARTS CARTON - 5-12 LABEL - WHITE BOX
4		116037	LABEL - AGES 5-12 YEARS MREC
1	*	787Z	RISK MANAGEMENT SIGN - ENGLISH
1	**	923551AZR	POST F/RISK MANAGEMENT SIGN
1	**	923560	PC F/787 RISK MNGMT ENGLISH
1		923287	RISK MNGT SIGN PRINTED ENGLISH (DNO)
1	**	HW923551-1	HRDW PKG RISK MANAGEMENT SIGN S1/1
1		HWS923551	HARDWARE STICKER 923551
5		200001945	NUT LOCK HEX NYLON INSERTED M10 X 1.5
5		200002014	SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM
10		200002079	WASHER FLAT M11 23 X 12 X 1.6MM
1	*	963	RIDER ROCKITE SNAIL W/C-SPRING, POKEY
1	**	992175BOX	SNAIL BODY ASSEMBLY
1	*	9991Z	BIBA ENTRY SIGN
1	**	903979	BIBA GRAPHIC ENTRY FRONT FULL ENGLISH
1	**	903980	BIBA GRAPHIC ENTRY BACK FULL ENGLISH
1	**	906974AZR	BIBA ENTRY SIGN WELDMENT
1	**	912637	PARTS CARTON 9991 BIBA
1		HW9991-1	HRDW PKG F/BIBA ENTRY SIGN S1/1
1	*	9992Z	BIBA POST MARKERS
6	**	906977	ALUM FRAME FOR BIBA POST SIGN
6	**	906978	RUBBER BIBA POST SIGN BACKER
1	**	906979	BIBA GRAPHIC POST GREEN
1	**	906980	BIBA GRAPHIC POST RED
1	**	906981	BIBA GRAPHIC POST BLUE
1	**	906982	BIBA GRAPHIC POST YELLOW
1	**	906983	BIBA GRAPHIC POST PURPLE
1	**	906984	BIBA GRAPHIC POST ORANGE
1	**	HW9992-1	HRDW PKG BIBA POST MARKER S1/1
1		HWS9992	HARDWARE STICKER BIBA POST MARKERS

# Bill of Materials (Parts List)

12/7/2018 2:50:28 PM

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

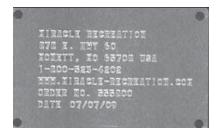
\* Model \*\* Component

12 104404

BOLT 1/4-14 X 2 HEX WASHER TEK

Total Weight: 8327.00





MIR RECREATION E	ACLE.
Order#	
Date:	
	878 E. Hwy 60
	Monett, Missouri
	USA 65708 1-800-523-4202
www.mir	acle-recreation.com

NOTE: It is Miracle Recreation's practice to attach CPSIA labels to the equipment at the factory. For composite equipment, these labels will be attached to a transfer point, 2' stairs or a deck post. If there is not a label attached to your equipment, contact Miracle's Customer Service Department at the number provided below. Upon receipt of the label, use this installation guide to attach it correctly.

#### APPLICATION OF CPSIA LABELS - METAL TAG

Using the tag as a template, mark and drill four (4) 5/32" diameter holes from label location. Prepare surface; remove any dust, oil or grime from the label location area. Ensure the area is dry. Using hardware provided with tag, attach in four places via either pop rivets or screws. Seal exposed steel edges with touch-up paint or silicone caulk.

#### APPLICATION OF CPSIA LABELS - STICKER WITH LAMINATE OVERLAY

Prepare surface; remove any dust, oil or grime from the label location area on the post. Ensure the area is dry. When area is both clean and dry, carefully peel off label from paper backing and place on flat metal surface so that it is flush and flat with no wrinkles or tears. Apply clear laminate on top of CPSIA label so that ALL portions of the CPSIA label are laminate-protected.

#### REPLACEMENT OF CPSIA APPROPRIATE LABELS

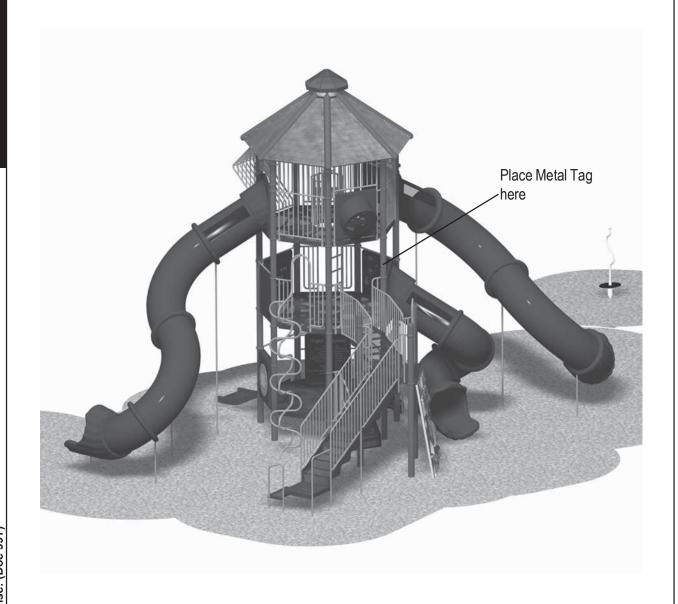
If label should become illegible, torn or is removed it is necessary for the owner to replace the label. Replacement labels may be obtained by calling our Customer Service Department at **1-800-523-4202**, or by writing to:

Miracle Recreation Equipment Company 878 E. Hwy. 60 Monett, MO 65708-0420

# **CPSIA Labels**

# **COMPOSITE STRUCTURES:**

Any playstem where all components are either structurally or functionally linked requires ONE metal CPSIA tag. The CPSIA tag should be placed on a deck post at or near the deck access points (stairs, ramps, transfer points, ladders, etc.). Each tag should be positioned so it is readable by a person entering onto the deck.



714, 718, 704, Misc. (Doc 997)

# E CPSIA Labels

### **INDEPENDENT EVENTS:**

Any component that is NOT structurally or functionally linked to a playsystem is considered an independent event and will require its own label. The categories for independent events are as follow:

### POST - Use sticker with laminate overlay

The definition of "post" in regard to labelling is ANY smooth painted metal surface (e.g. Deck posts, Swing Legs, etc) that is at LEAST 1-7/8" in diameter. Components considered in the Post category include:

Swings - Place on swing leg.

Whirl - Place on center post.

Saddle Seat (post mounted) - Place on post.

Jet-Ski Freeride - Place on middle post.

Freestanding Panels - Place on frame or post.

Bongo-Boingo - Place on post.

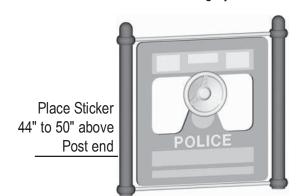
Accessories (e.g. signs, Whirl) - Place on post.

Pool Slides - Place on post.

Spray Stations - Place on straight part of post.

Webscape Climbers - Place on center post.

Fitness Clusters - Place on post. Each individual fitness component requires a label.



# C-SPRING RIDERS - Use sticker with laminate overlay

For all components with a C-Spring, place the CPSIA sticker on the inside turn of one spring.



### **CPSIA Labels**

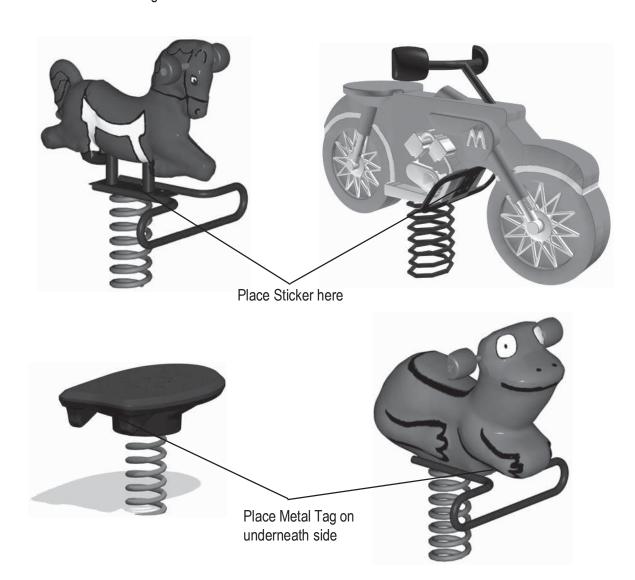
# COIL SPRING RIDERS - Use metal tag or sticker with laminate overlay

For all components with a Coil Spring rider with a BOLTING PLATE, place the CPSIA sticker with laminate overlay on the bolting plate between the bolts. If Coil Spring rider has no bolting plate, attach a metal tag directly to Rockite on underside area of rider. Coil Spring Rider category includes:

All Coil Spring Riders - Attach sticker with laminate overlay to Bolting plate OR metal tag to Rockite on underneath side.

Saddle Seat (Coil Spring) - Attach metal tag to Rockite on underneath side.

Surfer - Attach metal tag to Rockite on underneath side.



714, 718, 704, Misc. (Doc 997)



# FREESTANDING SLIDES - Use metal tag or sticker with laminate overlay

Freestanding Slides fall under 3 categories:

Slides with exposed post - attach sticker with laminate overlay to post. Slides with unexposed post - attach sticker with laminate overlay to brace or leg. Slides with NO post, leg or brace - attach metal tag to stair side or on Rockite slide.



Exposed post -Place Sticker here



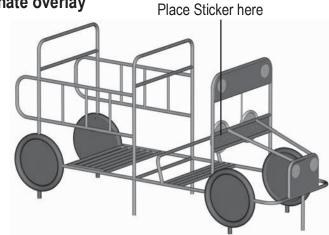


No Exposed Post/Brace/Leg - Place Metal Tag on Stairs or Rockite Slide

# **CPSIA Labels**

# **VEHICLE CLIMBER - Use sticker with laminate overlay**

For all Vehicle Climbers place sticker with laminate overlay on outside of dash board.



# 100% ROCKITE COMPONENTS - Use metal tag

Some Miracle components are constructed completely of Rockite including:

Boulder Ridge Rock Walls - Attach to one corner 4" above finished grade Ground mounted Crawl Tube - Attach to entry panel Freestanding Bongo at ground level - Attach to underside "skirt"



Place Metal Tag in one corner, 4" above finished of grade

# SANDBOXES - Use metal tag or sticker with laminate overlay

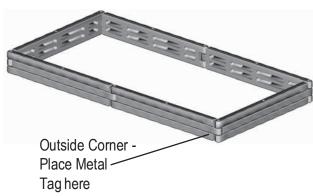
Sandboxes include:

Mira-Therm2 Sandbox - Attach sticker with laminate overlay to painted metal wall side. Cloverleaf Sandbox - Attach sticker with laminate overlay to leg.

Timber Sandbox - Attach metal tag directly to Rockite at outside corner.

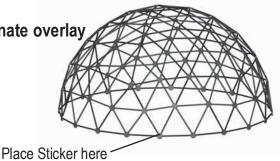


Metal wall side -Place Sticker here



**GEODESIC CLIMBER - Use sticker with laminate overlay** 

Place sticker on underside plate, near ground level.



# AFTER MARKET SERVICE PARTS - Use metal tag or sticker with laminate

All after market service parts will come with a separate installation guide that instructs installers to refer to this CPSIA document for correct placement, dependent upon order. This secondary installation guide is located on the internal and installer websites.



# MIRACLE Post-Installation Check List D70165 Rev. B

Date of Completed Install:	Work Orde	Work Order #:			
Customer:					
Project:	City/State:				
All labels properly affixed (0	CPSIA, age appropriate, top of surfacing and w	varning).			
ALL CPSIA embossed labe equipment*.	ls for composite structures photographed for e	evidence of proper installation on			
All bolts, nuts, and set scre no more than two threads.	All bolts, nuts, and set screws checked for tightness. All excess bolt threads cut and peened smooth to one more than two threads.				
Unit has been wiped down	to eliminate dust/dirt (soap and water may be	necessary).			
Equipment checked for inst	allation guideline compliance.				
Site cleaned with all constru	Site cleaned with all construction trash removed.				
I	Owner notified that installation was done according to manufacturer's specifications. Note any exceptions, e.g. that the owner must still provide safety surface, etc.				
Touch-up paint, torque driv	e bits and spare parts left with the owner.				
	ment should not be used for 72 hours after ins e surfacing must be installed.	stallation to allow concrete to cure (if			
I	according to specifications, please indicate ch for the person(s) who authorized the change.	· ·			
Authorized by:	Phone:	Date:			
Installer Signature		Data:			
Signed by owner or authorized cu	stomer	Date:			

\*RETURN COMPLETED CHECKLIST AND PHOTOGRAPHS to MIRACLE CUSTOMER SERVICE by mail at 878 E. Hwy 60, Monett, MO 65708 or electronically to customer.service@miraclerec.com.

For questions contact Customer Service call 1-800-523-4202.



1-800-523-4202

www.miracle-recreation.com

Load: 18-2021

# Installation Manual

for your Miracle PlaySystem

# Please see (Online):

- READ ME FIRST
- CPSC Handbook
- Install 101 and Hardware Guide

# Inside

- Installation Guides
- Parts List of every component in your Playsystem



CITY OF FLINT FLINT, MI Work Order: MR00116996



**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.



#### **TOOLS AND EQUIPMENT REQUIRED**

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4;s, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Drill, bits, extension cords, power supply
- 7. Step ladder
- 8. Adult installers 2 minimum

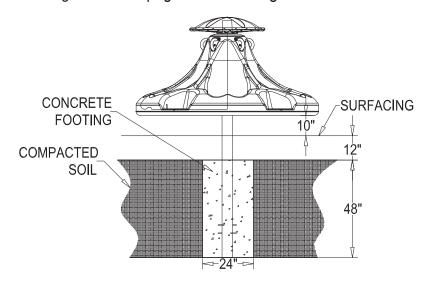
Rev. G

Spin Spin

# Ten Spin

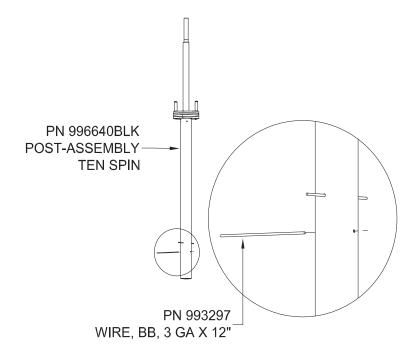
# STEP 1 DIG FOOTING

1a. Refer to Footing Details on page 1 and Footing side view below.



# STEP 2 INSERT BB WIRE INTO HOLES IN POST ASSEMBLY

2a. Tap BB Wire into pre-drilled holes in post assembly bottom as shown. Ensure equal amounts of wire protrude on both sides.



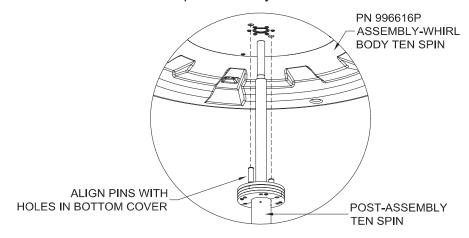


# STEP 3 SET POST INTO FOOTING; BRACE; POUR CONCRETE

3a. Ensure post assembly is braced into footing, level and plumb. Pour concrete and allow to cure for 72 hours prior to completing installation.

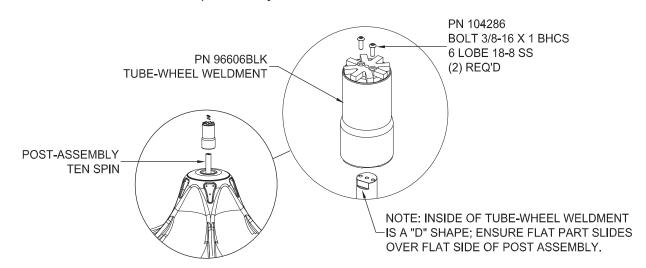
# STEP 4 ATTACH TEN SPIN ASSY TO POST ASSY

4a. Set Ten Spin assembly onto post assembly; ensure pins on post assembly line up with holes in bottom of Ten Spin assembly.



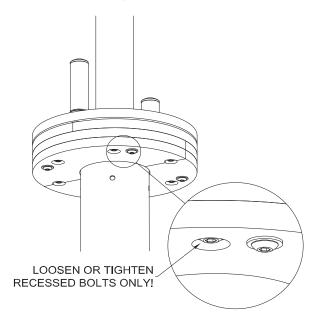
# STEP 5 SECURE TEN SPIN TO POST ASSEMBLY

5a. Locate tube-wheel weldment (PN 996606BLK) and set tube atop the post assembly; line up two (2) outer bolt holes on top of post assembly with the two (2) outer bolt holes on tube's top; securely fasten via hardware as shown.



# **STEP 6** TEST TEN SPIN OPERATION

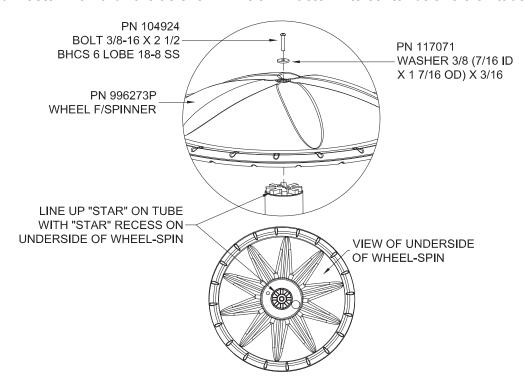
- 6a. Refer to Step 4 graphic on page 3, give Ten Spin a firm push and note number of revolutions; ensure Ten Spin rotates freely, quietly and smoothly.
  - **IF, Ten Spin successfully and smoothly rotates 2-3 times** before coming to a complete stop, move ahead to Step 7 on page 6.
  - IF, Ten Spin rotates *LESS* than two (2) times before coming to a complete stop, locate six (6) recessed bolts on post assembly (shown below in graphic) and *LOOSEN* counter clockwise 1/8th of a turn (45°) in all six (6) recessed bolt locations.
  - IF, Ten Spin rotates *MORE* than three (3) times before coming to a complete stop, locate six (6) recessed bolts on post assembly (shown below in graphic) and *TIGHTEN* all clockwise 1/8th of a turn (45°) in all six (6) recessed bolt locations.
- 6b. Retry spinning and continue to adjust as needed for smooth operation.





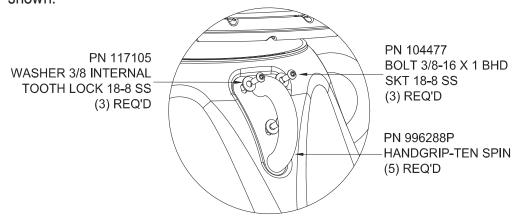
# STEP 7 ATTACH WHEEL-SPIN

- 7a. Set wheel-spin atop tube, ensuring "star" arms on tube set into recessed "star" indentations on wheel-spin's underneath side. It is IMPORTANT that these line up correctly to create a cog-wheel effect.
- 7b. Fasten via hardware as shown. Bolt will fasten into center bolt hole on tube.



# STEP 8 FASTEN HAND GRIPS

8a. Set hand grips into indentations in Ten Spin and attach in three (3) places each as shown.



# **FINAL STEP**

Proceed with **Final Assembly** installation: Ensure all hardware is tightened; use hand grips to turn Ten Spin, ensuring it turns freely; if not, refer back to step 6; install all protective surfacing; apply Miracle and warning labels onto post assembly where they can be easily seen.

# **Bill of Material**

#### **MODEL 304 TEN SPIN**

QTY	<u>PART</u>	DESCRIPTION
1	996616P	ASSEMBLY-WHIRL BODY TEN SPIN
1	996273P	WHEEL F/SPINNER
1	996640BLK	POST-ASSEMBLY TEN SPIN
1	996618BLK	PARTS CARTON WHEEL TEN SPIN
1	996354P	PARTS CARTON GRIPS TEN SPIN
1	986348	PARTS CARTON - GENERIC AND WARNING LABELS
1	994990	PARTS CARTON - 2-12 LABEL

#### PARTS CARTON 996618BLK

PART

QTY

1	996606BLK		TUBE-WHEEL WELDMENT
2	993297		WIRE, BB, 3 GA X 12"
1	HW996618-1		HRDW PKG WHL TN SN S1/1
	<u>QTY</u>	<u>PART</u>	<u>DESCRIPTION</u>
	1	104924	BOLT 3/8-16 X 2 1/2 BHCS 6 LOBE 18-8 SS
	2	104930	BOLT 3/8-16 X 1 1/8 BHCS 6 LOBE 18-8 SS
	1	117071	WASHER 3/8 (7/16 ID X 1 7/16 OD) X 3/16

**DESCRIPTION** 

# PARTS CARTON 996354P

<u>QTY</u>	<u>PART</u>		DESCRIPTION
5	996288P		HAND GRIP TEN SPIN
1	HW996354-1		HRDW PKG GRP TN SPN S1/1
	<u>QTY</u>	<u>PART</u>	<u>DESCRIPTION</u>
	15	104477	BOLT 3/8-16 X 1 BHD SKT 18-8 SS
	15	117105	WASHER 3/8 INTERNAL TOOTH LOCK 18-8 SS
	10	117105	WASHER 3/6 INTERNAL TOOTH LOCK 16-6

Male & Female Length Adapters, Single & Double Stacked Sections, Timber Opening Kit

<u>IMPORTANT NOTE</u>: Miracle Timbers are not structural components. They are intended only to contain engineered surfacing for fall zones around playground equipment. They are not intended for retention of soil or heavy backfill.

440 & 440R\*

440-1 & 440-1R\*

#### **Male Length Adapter**

\* Model # 440R Male Length Adapter (Recycled) differs in material only.

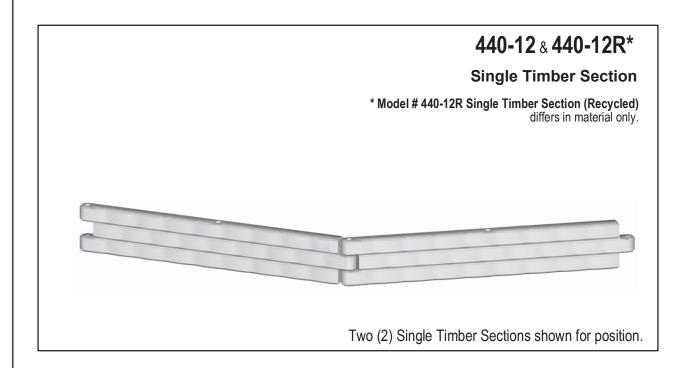
#### Female Length Adapter

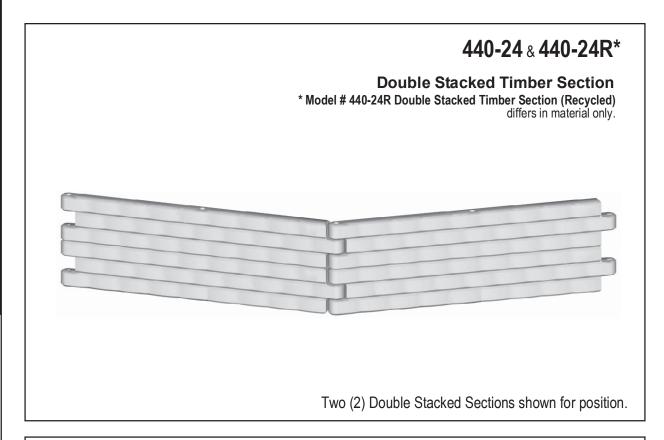
\* Model # 440-1R Female Length Adapter (Recycled) differs in material only.





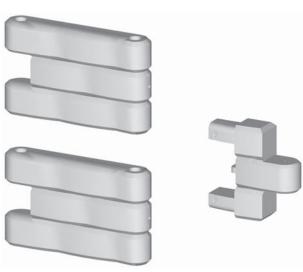
Models used to reduce length of Timber Section(s) when needed to fit closure.





# 440-3 & 440-3R\* Timber Opening Kit

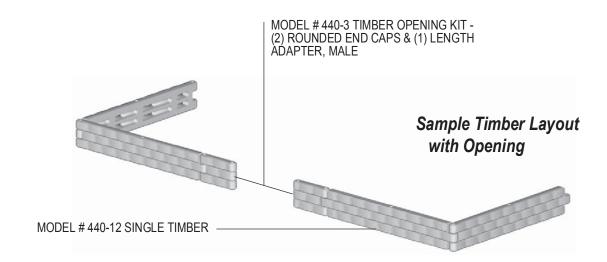
\* Model # 440-3R Timber Opening Kit (Recycled) differs in material only.



Model includes two (2) Rounded End Caps and one (1) Male Length Adapter.



#### PARTS IDENTIFICATION



### RECOMMENDED ASSEMBLY SEQUENCE

- 1. Mark playsystem or playground perimeter (surpassing Use Zone)
- 2. Position and stake Timbers
- 3. Length Adapter to close, if required
- 4. Timber Opening Kit, if required
- 5. Access Ramp (Model # 440-6 or # 440-6R), if required per separate instructions
- 6. Final Assembly

#### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, if required; wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings, if required (spade shovel, post hole digger, auger)
- 3. Tape measure and level
- 4. If Length Adapter or Timber Opening Kit installed: handsaw or hacksaw, screwdriver (battery-powered screwdriver recommended), Phillips head bit
- 5. Sledge hammer
- 6. Adult installer

Installation instructions for **Model # 440-12 (and -12R)** Single Timber Sections and **Model # 440-24 (and -24R)** Double Stacked Timber Sections begin with **Step 1** below.

Instructions for **Model # 440 (and 440R)** and **Model # 440-1 (and 440-1R)** Length Adapters start on **page 7.** Instructions for **Model # 440-3 (and -3R)** Timber Opening Kit begin on **page 8.** 

# **STEP 1** PREPARE FOR INSTALLATION

Read **Safety Brochure 100, Important Notes,** these instructions, and other enclosed materials. Unpack, count, and become familiar with system components and hardware.

# STEP 2 DETERMINE MINIMUM USE ZONE

Refer to "Use Zone" drawing (elsewhere in this Installation Manual) to determine minimum required Use Zone of playsystem or playground. Timbers must be installed to contain entire Use Zone area without touching or impeding area.

Mark or stake Timber Layout, being careful not to overlap Use Zone at any location. Note that at closure location, Timbers may overlap, requiring installation of a *Length Adapter (Model # 440. # 440-1. or # 440-1R.)* 

Install Tip: Generally, if Timbers are intended to contain Use Zone with aid from another barrier (such as building wall, fence, etc.), begin layout at barrier. If Timbers will contain Use Zone without aid of other barriers, starting/ending point is at installers' discretion. Many installers prefer to start layout with Timber Opening (see Step 8 on page 8) or with Access Ramp (Model # 440-6 or # 440-6R) per separate instructions. Many also prefer to "conceal" connection of Length Adapter and Timber by closing at least conspicuous side of playground.



# STEP 3 POSITION AND STAKE TIMBERS

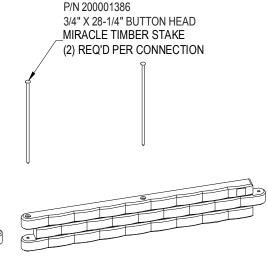
Set Timbers on ground end-to-end per Layout, with formed "brick" side of Timbers facing outward away from playsystem. See orientation note below.

Stand Timbers on their sides (stacking Timbers if necessary) and interlock as shown, inserting Stakes to hold Timbers together in place, but do not yet drive Stakes into ground.

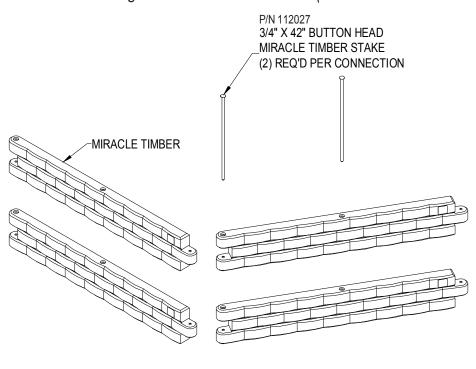
MIRACLE TIMBER

By not driving Stakes into ground at this point, connected Timbers may be repositioned easily if necessary.

closure.)



Note: A molded-in "Miracle logo" on CONNECTION FOR SINGLE STACKED EDGES
the outside should be oriented upright (legible), and recesses at stake locations must be on top side of top Timber Sections, so that stake heads may be driven flush. Therefore, male ends of Timbers will be on right and female ends on left (when viewed from outside



CONNECTION FOR DOUBLE STACKED EDGES

# **STEP 4** OPTIONAL FOOTINGS

#### OPTIONAL FOOTINGS FOR TIMBERS AT RISK OF BEING STOLEN OR VANDALIZED:

Note: It is generally acceptable to SKIP THIS STEP, unless installation location is characterized by particularly high crime, extreme seclusion, etc.; again, customers' discretion.

With Timbers loosely connected with Stakes, mark locations of Stakes on ground at interlocking connections. Set Timbers aside and dig footings **8" diameter** by **18" deep** from subgrade.

When all footings are dug, replace and re-connect Timbers two-at-a-time, placing Stake through interlocking connections into footing holes and ensuring Stake heads are flush with Timber edge. Pour concrete to subgrade level at each footing, and verify that Timber sections are plumb and level before proceeding to next set.

Note: Allow concrete to cure for 72 hours before loading Use Zone with protective surfacing material.

# **STEP 5** TIMBER CLOSURE, IF POSSIBLE

Verify that Use Zone for playsystem is completely enclosed without intersecting Timber framework at any point, and that Timbers are plumb, level and straight (if desired.)

If Timber framework achieves closure without length adjustment, place remaining Stakes into Timbers and drive so that heads are flush with recessed holes. Proceed to *Final Step.* 

If installation of a *Length Adapter* is required to close Timbers, proceed to **Step 6**. If installing *Timber Opening*, proceed to **Step 8** on **page 8**.



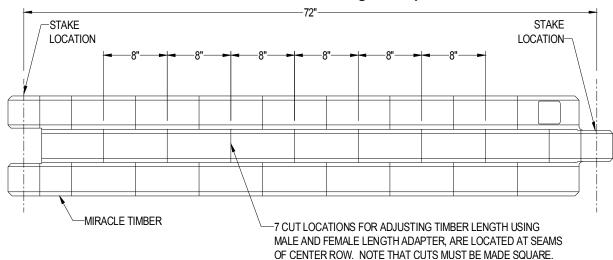
Instructions for **Model # 440 (and 440R)** and **Model # 440-1 (and 440-1R)** Length Adapters start with **Step 6** below.

Installation instructions for Model # 440-3 (and -3R) Timber Opening Kit begin on page 8.

# STEP 6 CUT TIMBERS FOR CLOSURE, IF NECESSARY

If length of final Timber requires adjustment to achieve framework closure, measure overlap between two Timbers, accounting for width of Male or Female Length Adapter to be installed, and use illustration below to determine location of cut. Each Timber contains seven (7) cut locations, based on seams of center row. Cuts must be made square for Length Adapter to fit properly and for good appearance.

### Note: Installers must cut at location shown or Length Adapter will not fit!



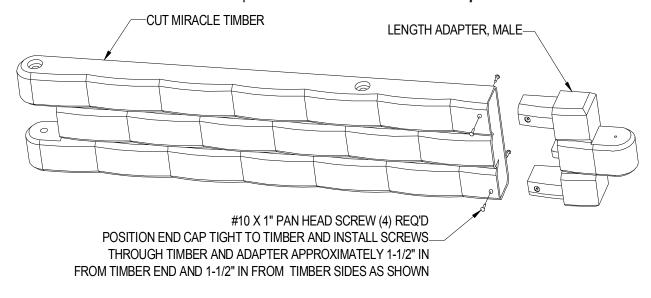
Length between outer Stakes (at interlocking connections) is 72". Timber lengths that can be made using Length Adapters are 64", 56", 48", 40", 32", 24" and 16".



# **STEP 7** INSERT LENGTH ADAPTER, IF NECESSARY

Cut Timber squarely at location determined in **Step 6**. Insert Length Adapter in open end of Timber, and use power screwdriver to secure with pan head screws as shown below.

Insert Timber/Length Adapter assembly into final Timber to close framework. Insert Stake and drive until head is flush with top of Timber. Proceed to *Final Step.* 



Installation instructions for **Model # 440-3 (and -3R)** Timber Opening Kit begin with **Step 8** below.

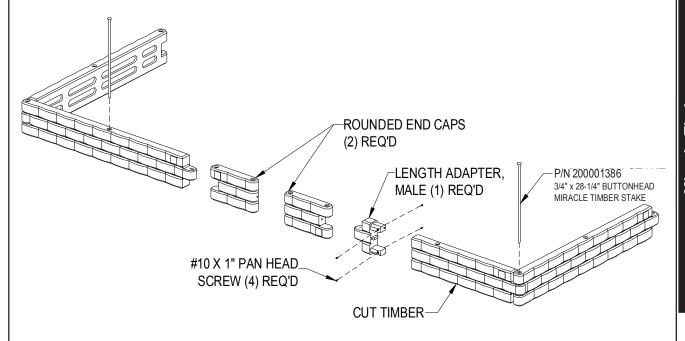
# **STEP 8** TIMBER OPENING KIT, IF REQUIRED

Determine desired location of Timber Opening in framework. Miracle recommends a minimum opening width of **36**".

Refer to illustration on next page. Timber Opening Kit contains three (3) pieces: two (2) Rounded End Caps with one rounded end and one female end, and one (1) Length Adapter - Male, used to give a Single Timber section two male ends rather than one.

Position one End Cap against Timber section and place Stake into interlocking connection (without fully driving into ground.) Measure **36"** or greater from round surface of End Cap to create opening, place round end of second End Cap at mark, and temporarily stake as before.





# STEP 9 CUT TIMBER, IF NECESSARY

Refer to Length Adapter installation instructions in Step 6 and Step 7.

Measure from end of Single Timber, accounting for width of Length Adapter, and determine location to cut. Cut Timber squarely, insert Length Adapter into open end, and secure to Timber with pan head scr1ews as shown in **Step 7**.

# STEP 10 PLUMB AND LEVEL TIMBERS; INSERT STAKES INTO END CAPS

Position second Rounded End Cap onto attached Length Adapter, and verify Timbers and opening pieces are plumb, level and straight (if desired.) Insert and drive Stakes (two each) in both End Caps until heads are flush with top of Timber.

# **FINAL STEP**

Verify that concrete is fully cured (if applicable) and that all Stakes are driven until flush with top of Timbers. Fill enclosure with protective surfacing material. Proceed with *Final Assembly installation*.

# Bill of Materials

# **Miracle Timbers**

QUANTITY PART NO. DESCRIPTION

MODEL # 440 MALE LENGTH ADAPTER

1 985385P MALE LENGTH ADAPTER - MIRACLE TIMBER

1 985429 PARTS CARTON 440 & 440R (SEE BELOW FOR CONTENTS)

PARTS CARTON # 985429 CONTENTS:

4 104426 SCREW #10 X 1 TYPE A TAPPING PH PAN HD

MODEL # 440R MALE LENGTH ADAPTER (RECYCLED)

985385RE END CAP-MIRACLE TIMBER (RECYCLED BLACK)

1 985429 PARTS CARTON 440 & 440R (SEE BELOW FOR CONTENTS)

PARTS CARTON # 985429 CONTENTS:

4 104426 SCREW #10 X 1 TYPE A TAPPING PH PAN HD

MODEL # 440-1 FEMALE LENGTH ADAPTER

I 988778P FEMALE LENGTH ADAPTER - MIRACLE TIMBER

1 985429 PARTS CARTON 440 & 440R (SEE BELOW FOR CONTENTS)

PARTS CARTON # 985429 CONTENTS:

4 104426 SCREW #10 X 1 TYPE A TAPPING PH PAN HD

MODEL # 440-1R FEMALE LENGTH ADAPTER (RECYCLED)

1 988778RE FEMALE LENGTH ADAPTER-MIRACLE TIMBER RE

985429 PARTS CARTON 440 & 440R (SEE BELOW FOR CONTENTS)

PARTS CARTON # 985429 CONTENTS:

4 104426 SCREW #10 X 1 TYPE A TAPPING PH PAN HD

MODEL # 440-12 SINGLE TIMBER SECTION

1 112602P MIRACLE TIMBER

MODEL # 440-12R SINGLE TIMBER SECTION (RECYCLED)

1 112602RE TIMBER REGRIND

MODEL # 440-24 DOUBLE-STACKED TIMBER SECTION

2 112602P MIRACLE TIMBER

2 112027 STAKE 42" GALV FOR 24" HIGH KID TIMBER

MODEL # 440-24R DOUBLE-STACKED TIMBER SECTION (RECYCLED)

2 112602RE TIMBER REGRIND

2 112027 STAKE 42" GALV FOR 24" HIGH KID TIMBER

440R,



QUANTITY	PART NO.	DESCRIPTION
MODEL # 440-3 T	MBER OPENING KIT	
1	985385P	MALE LENGTH ADAPTER - MIRACLE TIMBER
1	985429	PARTS CARTON (SEE BELOW FOR CONTENTS)
2	986101P	ROUNDED END CAP - MIRACLE TIMBER
3	200001386	STAKE 28-1/4" GALV. FOR 12" HIGH KID TIMBER
PARTS CARTON #	985429 CONTENTS:	
4	104426	SCREW #10 X 1 TYPE A TAPPING PH PAN HD
MODEL # 440 3P	TIMBER OPENING KIT (REC	VCI ED/

	·····2=·· 0· =····· (··=0·0==2)	
1	985385RE	END CAP-MIRACLE TIMBER (RECYCLED BLACK)
1	985429	PARTS CARTON (SEE BELOW FOR CONTENTS)
2	986101RE	ROUNDED END CAP - MIRACLE TIMBER RECYCLE
3	200001386	STAKE 28-1/4" GALV. FOR 12" HIGH KID TIMBER

#### PARTS CARTON # 985429 CONTENTS:

SCREW #10 X 1 TYPE A TAPPING PH PAN HD 104426

Access Ramp for Miracle Timbers including (2) Ramp Sections,

(1) Single Timber (regular), (1) Single Timber With Two Male Ends, and (13) Stakes

**IMPORTANT NOTE:** Miracle Timbers are not structural components. They are intended only to contain engineered surfacing for fall zones around playground equipment. They are not intended for retention of soil or heavy backfill.

440-6 and 440-6R\*

#### **Access Ramp for Miracle Timbers**

\* Model # 440-6R Access Ramp (Recycled) for Miracle Timbers differs in material only. Installation is identical.

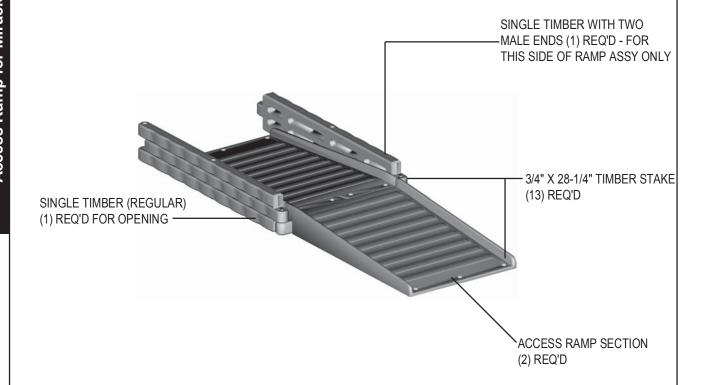


#### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Tape measure and level
- 2. Sledge hammer
- 3. Adult installer

#### PARTS IDENTIFICATION



# **STEP 1** LAYOUT & STAKE TIMBER CLOSURE

NOTE: Ramp may be installed as a 6' ramp extension or a 12' ramp extension. For instructions on installing a 6' Ramp, see Step 2. For instructions on installing a 12' Ramp, see Step 3.

Install playsystem and pour concrete for footings. Layout and stake Timber closure per separate instructions. Refer to *Miracle Timbers* installation (# 440 et. al.) Ramp width requires 40" opening in Timber closure.



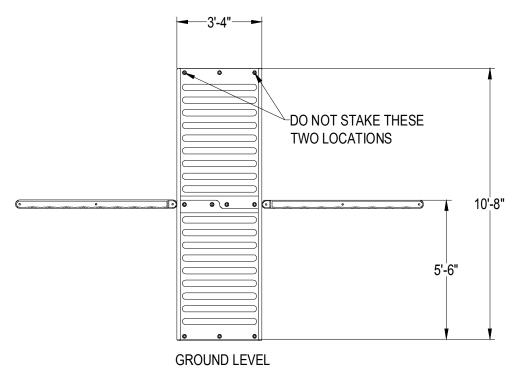
# STEP 2 | CREATE 6' RAMP EXTENSION

See Parts ID on page 2. Position interlocking Ramp Sections together between Single Timbers. Align mounting stubs on Ramp sides with holes in male ends of Single Timbers.

Attach Single Timber (regular) and Single Timber With Two Male Ends at midpoint of Ramp Sections. *Ensure Ramp does not intersect with equipment safety zones.* 

Drive stakes through mating holes in Ramp Sections, through holes at ends of Ramp Sections, and through male ends of Timbers and mounting stubs of Ramp Assembly.

#### PROTECTIVE SURFACING

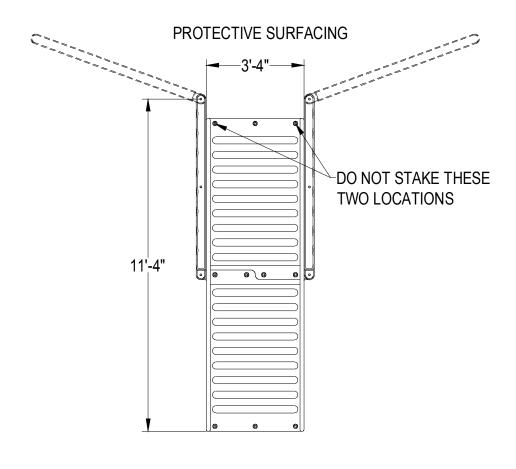


# STEP 3 | CREATE 12' RAMP EXTENSION

Attach Single Timber (regular) and Single Timber With Two Male Ends to closure at opening, parallel with each other, with 40" span between inner surfaces for Ramp Sections.

See Parts ID on page 2. Position interlocking Ramp Sections together between Single Timbers. Align mounting stubs on Ramp sides with holes in male ends of Single Timbers. *Ensure Ramp does not intersect with equipment safety zones.* 

Drive stakes through mating holes in Ramp Sections, through holes at ends of Ramp Sections, and through male ends of Timbers and mounting stubs of Ramp Assembly.

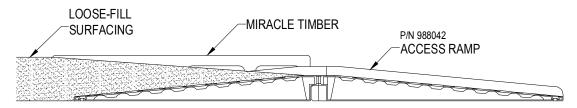


440-6, 440-6R

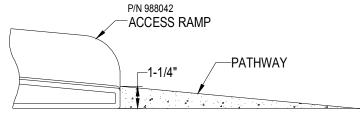


### **FINAL STEP**

Proceed with *Final Assembly installation*. Fill Timber closure with loose-fill surfacing. Allow protective surfacing materials to gradually slope downward until they meet Access Ramp's apex as shown in "cut-away" side view.



Note: Leading edge of Ramp is 1-1/4" high. Pathway must be constructed to meet this edge at same height. Pathway and loose-fill surfacing must meet ADA standards for wheelchair access.



# Bill of Materials

QIY PARI#	DESCRIPTION
-----------	-------------

#### MODEL # 440-6 ACCESS RAMP FOR MIRACLE TIMBERS

2	988042P	ACCESS RAMP-MIRACLE TIMBERS
11	200001386	STAKE 28-1/4" GALV FOR 12" HIGH TIMB

1 112602P MIRACLE TIMBER

1 988103P MIRACLE TIMBER WITH TWO MALE ENDS

#### MODEL # 440-6R ACCESS RAMP FOR MIRACLE TIMBERS (RECYCLED)

2	988042BK	ACCESS RAMP-MIRACLE TIMBERS (RECYCLED BK)
11	200001386	STAKE 28-1/4" GALV. FOR 12" HIGH TIMBER

1 112602RE TIMBER REGRIND

1 988103RE MIRACLE TIMBER WITH TWO MALE ENDS



Phyzics<sup>™</sup> JAX<sup>®</sup> Pack - Three

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.



477-003 JAX Pack - Three

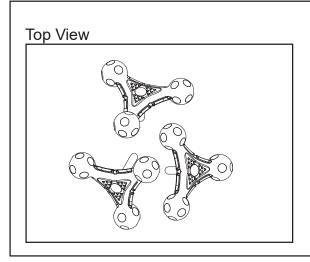
Protective Area: 22' x 23'

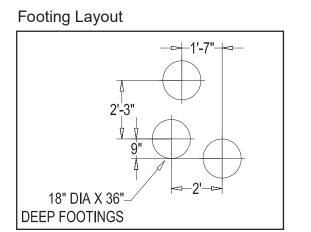
#### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in "Installations 101"

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. Bracing materials (2x4s, jack stands, sawhorses, etc.)
- 4. Tape measure and level
- 5. Open end wrench set, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. Adult installers 2 minimum

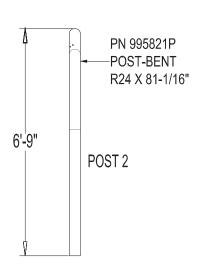
# Phyzics<sup>™</sup> JAX<sup>®</sup> Pack - Three

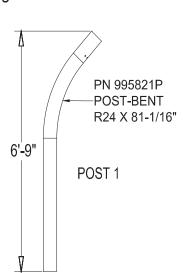


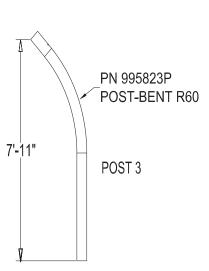


### STEP 1 | IDENTIFY POST AND BASE SUPPORT CLOCKING

- 1a. The success of the JAX Pack-Two installation is based on proper post identification and base support clocking.
- 1b. It is important to note that Post 1 and Post 2 are *THE SAME POST*, however, they have two (2) sets of holes drilled in them for base support installation and are placed in footings at different angles.









### JAX® Pack - Three

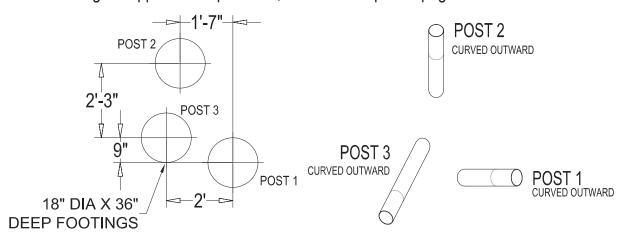
### STEP 2 DIG FOOTINGS; AFFIX SURFACING LABEL

- 2a. Dig Footings per *Footing Layout* or Construction Drawings. Refer to *Footing Details* installation located behind *Installations 101* in Installation Manual.
- 2b. Measure up **48"** from bottom of Post 3 and place "Top of Surfacing" label at this location.

Note: Do not pour concrete until components illustrated in this installation guide have been installed per instructions and braced in position, leveled and plumbed.

### **STEP 3** DETERMINE CORRECT POST PLACEMENT

3a. Jax posts **MUST** be placed into footings as shown below. Loosely set posts into footings in approximate positions, reference step 1 on page 2.



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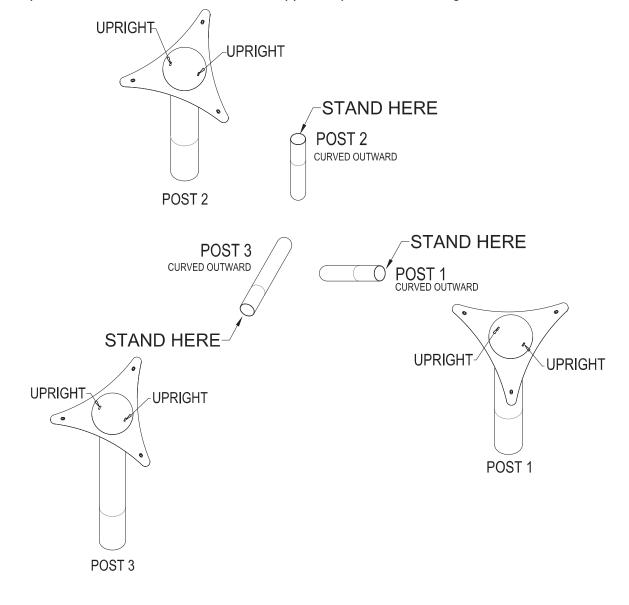
### JAX® Pack - Three

### STEP 4 DETERMINE CORRECT BASE SUPPORT CLOCKING

4a. The following graphics show correct base support clocking. Graphics show clocking as if you were standing with each post's curve *FACING* you.

Note: Proper clocking is based on base support uprights, which will DIRECTLY correspond with notches in each Jax.

Important Note: DO NOT attach base support to post until clocking is correct!



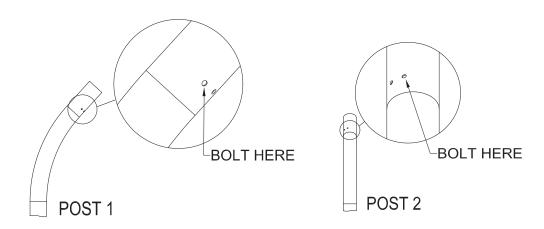


### JÁX® Pack - Three

# **STEP 5** BOLT BASE SUPPORT TO POSTS

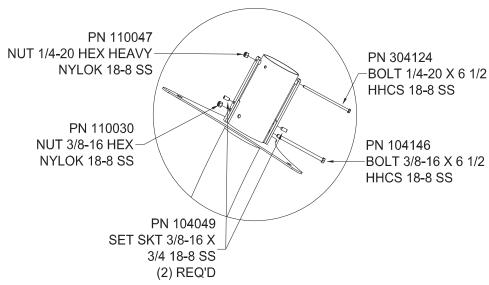
5a. Once proper clocking is determined, slide base support over post and line up bottom bolt hole in base support uprights with hole in post.

Important Note: Post 1 and 2 have different bolting locations. See illustrations below prior to installing hardware!



- 5b. Secure base support to post, with bolts, in both posts as shown above. Verify correct bolt is used for each hole, as shown below.
- 5c. Insert set screws in holes above bottom bolt and secure uprights to post.

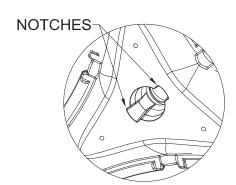
Note: Do not overtighten!



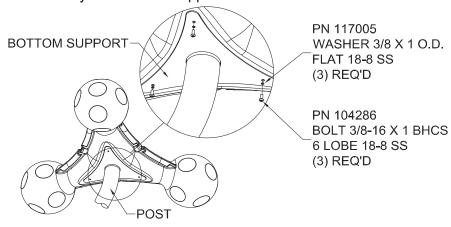
# Phyzics<sup>™</sup> JAX<sup>®</sup> Pack - Three

### **STEP 6** INSTALL JAX ON BASE SUPPORT

6a. Set Jax on bottom support, with uprights aligned with notches, in Jax body and the support plate aligned with recess on bottom of Jax body.



6b. Fasten Jax body and bottom support as shown below.



**BOTTOM VIEW** 

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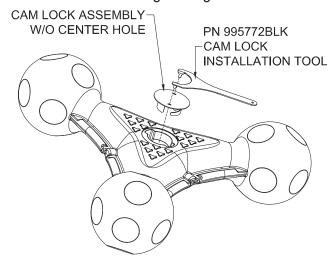


### JAX® Pack - Three

### STEP 7 INSERT AND TIGHTEN CAM LOCK ASSEMBLY

- 7a. Set cam lock assembly into recess in top of Jax; align slots in cam lock assembly with spacers on base support uprights (attached in step 5).
- 7b. Turn cam lock assembly clockwise until firmly secure. Do not overtighten.

Note: Keep lock installation tool for future tightening.



### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

Important Note: Prior to pouring concrete ensure there is a minimum of 10" between all Jax surfaces! Pour concrete and allow to cure for 72 hours prior to allowing play.

# Phyzics<sup>™</sup> JAX<sup>®</sup> Pack - Three

# **Bill of Materials**

MODEL 477-003				
QUANTITY	COMPONENT		DESCRIPTION	l .
2	995821P		POST-BENT R	- 24 X 81-1/16"
1	995823P		POST-BENT R	60
1	995543P		JAX 1 HOLE	
1	995543P		JAX 1 HOLE	
1	995543P		JAX 1 HOLE	
3	995640P		SUPPORT ASS	SEMBLY - CENTER HOLE
1	116048		LABEL. 2"X2" \	WHIT POLYESTER THERMAL
1	116049			.EAR, 2"X2" W/PERMANENT
1	999033P		PARTS CARTO	ON - TOUCH-UP PAINT-POST
3	912289P		PARTS CARTO	ON FOR 995543 TOP OF POST
1	996031		PARTS CARTO	ON - JAX INSTALLATION TOOLS
PARTS CARTON 912289P				
<u>QUANTITY</u>	<b>COMPONENT</b>		DESCRIPTION	<u>l</u>
1	995645P		CAM LOCK AS	SSEMBLY W/O CENTER HOLE
1	HW912289-1		HRDW PKG F/	JAX PSTTP S1/1
	QUANTITY	COMPO	NENT	DESCRIPTION
	3	104286		BOLT 3/8 -16 X 1 BHCS 6 LOBE 18-8 SS
	3	117005		WASHER 3/8 X 1 O.D. FLAT 18-8 SS
	1	104146		BOLT 3/8 -16 X 6 1/2 HHCS 18-8 SS
	1	110030		NUT 3/8 -16 HEX NYLOK 18-8 SS
	2	104049		SET SKT 3/8-16 X 3/4 18-8 SS
	1	304124		BOLT 1/4-20 X 6-1/2 HHCS 18-8 SS
	1	110047		NUT 1/4-20 HEX HEAVY NYLOK 18-8 SS
	1	104480		BIT 6 LOBE T-45 FOR 3/8 BOLTS
PARTS CARTON 996031				
QUANTITY	COMPONENT		DESCRIPTION	<u>l</u>
1	995772BLK			- STALLATION TOOL

477-003

Rev. B



# **Risk Management Sign**

**IMPORTANT!** The Risk Management Sign is to be installed outside the defined play area and play equipment use zones. It needs to be oriented so that the **front side faces the main entrance to the playground** and next to but not interfering with the accessible route that leads to the play space.

### Models included in this installation guide:

MODEL DESCRIPTION

787 Risk Management Sign - English 787FR Risk Management Sign - French 787SP Risk Management Sign - Spanish



Note: English version shown.

# 787, 787FR, 787SP

### **Risk Management Sign**

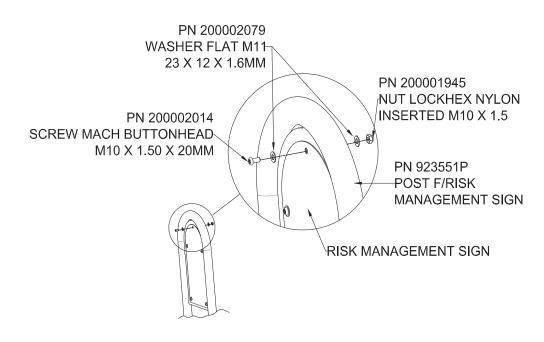
### STEP 1 ATTACH AGE-APPROPRIATE STICKER

1a. Attach age-appropriate sticker to sign, in location, as shown below.



### STEP 2 ATTACH SIGN TO POST FRAME

2a. Attach sign as shown below, in five (5) locations.



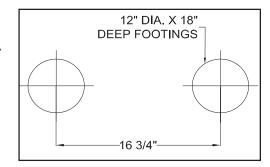


# **Risk Management Sign**

### **STEP 3** DIG FOOTINGS

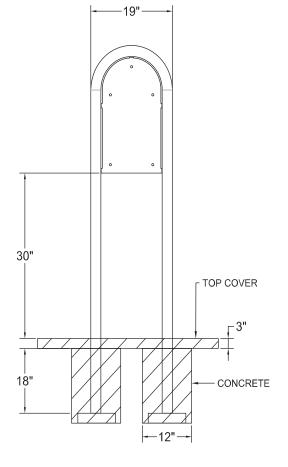
3a. Dig footings per *Footing Layouts*, Construction Drawings, and *Footing Details* installation.

Note: Do not pour concrete for footings until components illustrated in this installation guide have been installed per instructions and braced in position, leveled and plumbed.



### **STEP 4** SET SIGN IN FOOTINGS

- 4a. Place a brick in the bottom of each hole so the sign will rest on the brick when inserted.
- 4b. Set risk management sign in footings per Construction Drawings pour concrete; plumb sign in footings and brace in position until concrete is cured.



### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

# **Risk Management Sign**

			Dili di Material		
	Model 787 QTY 1	<u>PART</u> 923551P 923560	DESCRIPTION POST F/RISK MANAGEMENT SIGN PC F/787 RISK MNGMT ENGLISH		
	Parts Carton 9	<b>23560</b> 923287	RISK MNGT SIGN PRINTED ENGLISH		
	1 HW923551-1	HW923551-1	HRDW PKG RISK MANAGEMENT SIGN S1/1		
	<u>QTY</u>	<u>PART</u>	DESCRIPTION		
	5	200002014	SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM		
	10 5	200002079 200001945	WASHER FLAT M11 23 X 12 X 1.6MM NUT LOCK HEX NYLON INSERTED M10 X 1.5		
	Model 787FR				
	<u>QTY</u>	<u>PART</u>	DESCRIPTION		
	1	923551P	POST F/RISK MANAGEMENT SIGN		
	1	923558	PC F/787FR RISK MNGMT FRENCH		
	Parts Carton 9	23558			
	1	923288	RISK MNGT SIGN PRINTED ENGLISH		
	1	HW923551-1	HRDW PKG RISK MANAGEMENT SIGN S1/1		
	HW923551-1				
	QTY	PART_	DESCRIPTION  ODESCRIPTION  ODE		
	5 10	200002014 200002079	SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM WASHER FLAT M11 23 X 12 X 1.6MM		
١	10	Z0000Z013	WASHER FLAT WITH 23 A 12 A 1.0WIW		

NUT LOCK HEX NYLON INSERTED M10 X 1.5

Bill of Material

#### Model 787SP

5

<u>QTY</u>	<u>PART                                    </u>	<u>DESCRIPTION</u>
1	023551D	DOCT E/DICK MA

200001945

1 923551P POST F/RISK MANAGEMENT SIGN 1 923559 PC F/787SP RISK MNGMT SPANISH

#### Parts Carton 923559

1 923289 RISK MNGT SIGN PRINTED SPANISH 1 HW923551-1 HRDW PKG RISK MANAGEMENT SIGN S1/1

#### HW923551-1

QTY PART DESCRIPTION

5 200002014 SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM

10 200002079 WASHER FLAT M11 23 X 12 X 1.6MM

5 200001945 NUT LOCK HEX NYLON INSERTED M10 X 1.5

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

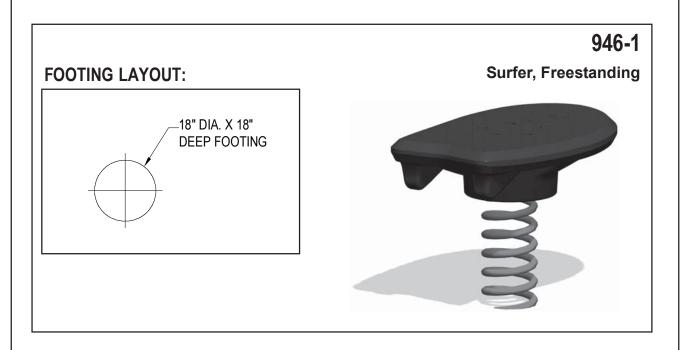
### Models included in this installation guide:

MODEL#	<u>DESCRIPTION</u>	PAGE#
946-1	Surfer, Freestanding	1

### TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in 'Installations 101'

- 1. Digging equipment for footing hole (spade shovel, post hole digger, auger)
- 2. Concrete for footing, wheelbarrow or mixer, 5 gallon bucket, water supply
- 3. Drill, 3/8" masonry drill bit, extension cords, power supply
- 4. Rubber mallet
- 5. Tape measure and level
- 6. Open end wrenches, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 7. Pen, pencil or marker
- 8. Adult installers 2 minimum

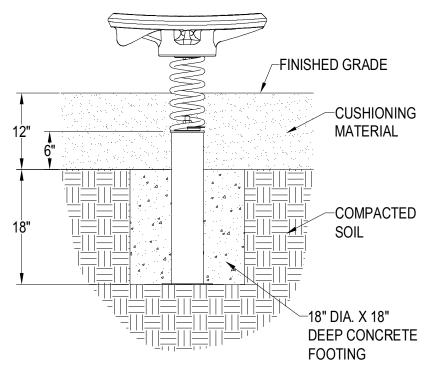


### **STEP 1** DIG FOOTINGS

Footing assembly instructions for <u>natural surfacing</u> in ground ONLY:

Locate and dig one 18" diameter footing, 18" deep.

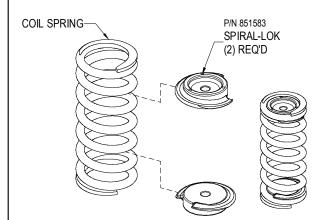
NOTE: Surfer shown below for correct footing dimensions only. Do not yet pour concrete!



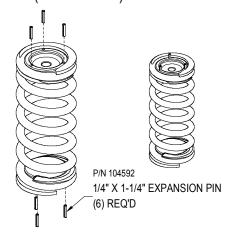


# STEP 2 INSERT SPIRAL-LOKS IN SPRING; INSERT EXPANSION PINS IN SPIRAL-LOKS

Place Spiral-Loks through Coils in each end of Coil Spring, with flat sides facing each other inside Spring, and pin holes facing outward. **Gently thread Spira-Loks into Spring by hand, ensuring Spira-Lok remains fairly horizontal.** Thread Spiral-Loks as far as they will go by hand into respective ends of Spring. **DO NOT USE EXCESSIVE FORCE.** 



Firmly insert expansion pins into Spiral-loks (P/N 851583) as shown.



### **STEP 3** CREATE SPRING ASSEMBLY

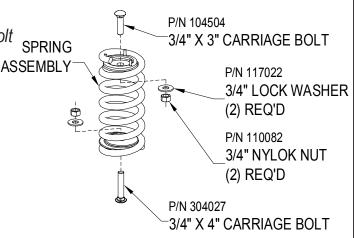
LOOSELY assemble hardware to Spring as shown. Set Spring Assembly aside.

Installation note: It is important to note that one carriage bolt is 3" and one is 4" in length. The longer bolt will be attached to Surfer body while the shorter bolt will be attached to Base Weldment.

To ease confusion, mark 4" bolt with china marker to ensure

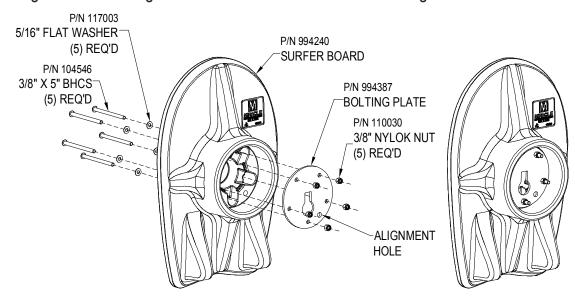
correct installation in Step 7.

ASSEMBLE CARRIAGE BOLTS TO SPRING ASSEMBLY LOOSELY!! THESE WILL BE TIGHTENED DURING ASSEMBLY TO BASE WELDMENT AND SURFER.



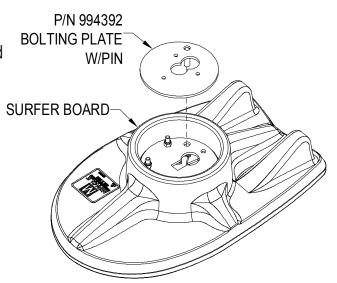
# STEP 4 ATTACH BOLTING PLATE TO SURFER BOARD

Note orientation of Bolting Plate without Pin (P/N 994387) to Surfer Board. Alignment hole in Bolting Plate MUST align with vent hole in Surfer. Attach Bolting Plate as shown.



### **STEP 5** FIT BOLTING PLATE'S PIN INTO VENT HOLE

Turn Surfer Assembly upside down on a flat, smooth surface. Slide Bolting Plate's (P/N 994392) pin through alignment hole and vent hole in Surfer Board. This second Bolting Plate will sit on top of the hardware used to affix Bolting Plate without pin onto Surfer in previous Step.



P/N 993158 BASE WELDMENT



### **Surfer®**

### **STEP 6** <u>SECURE SPRING ASSEMBLY TO SURFER ASSEMBLY</u>

Orient Spring Assembly so that 3" Carriage Bolt (P/N 104504) is on Base Weldment Side and 4" Carriage Bolt (P/N 304027) is on Surfer Assembly Side.

#### TO ATTACH BASE WELDMENT

Place 3" carriage bolt in round end of keyhole in Base Weldment. Slide into square end and lock in place.

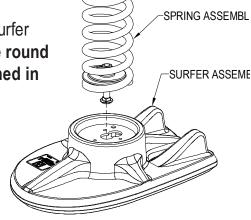
Align Expansion Pins in Spira-lok with holes in Base Weldment and tighten 3" carriage bolt into place in square end of keyhole.

#### TO ATTACH SURFER ASSEMBLY

Place 4" carriage bolt in bottom (larger) keyhole in top Surfer Bolting Plate. Ensure carriage bolt also goes into the round end of keyhole in bottom Surfer Bolting Plate (attached in Step 5.) Slide carriage bolt into square end of keyhole in bottom Bolting Plate and lock in place.

NOTE: The 4" carriage bolt must go through BOTH Bolting Plates.

Align Expansion Pins in Spira-lok with holes in Surfer Assembly Bolting Plate and tighten 4" carriage bolt into place in square end of keyhole in bottom Bolting Plate.



### **STEP 7** LEVEL BASE WELDMENT IN FOOTING; POUR CONCRETE

Ensure Base Weldment is completely plumb and level prior to pouring concrete. Pour concrete to required distance from Base Weldment top (see Step 1 illustration) and allow to cure completely (minimum 72 hours) prior to allowing play.

### **FINAL STEP**

Proceed with *Final Assembly installation* located behind *Installations 101* in Installation Manual.

# Bill of Materials

# Surfer®

QUANTITY	MODEL/COMPONENT	DESCRIPTION
1	993158GV	BASE - COIL SPRING RIDER GALVANIZED
1	994240P	SURFER BOARD - ROTOMOLDED
1	994394	PARTS CARTON 9461
PARTS CARTO	ON # 994394 CONTENTS:	
1	994387ZP	PLATE-BOLTING SPRING, ZINC PLATE
1	994392ZP	PLATE ASSY-BOLTING SPRING, ZINC PLATE
5	104546	BOLT 3/8-16 X 5 BHCS 6 LOBE 18-8 SS
5	117003	WASHER 5/16 FLAT 18-8 SS
5	110030	NUT 3/8-16 HEX NYLOK 18-8 SS
1	304027	BOLT 3/4-10 X 4 CARR CHEMSEAL
2	851583RD	SPIRALOK-RED
1	851582RD	COIL SPRING-RED
1	104504	BOLT 3/4-10 X 3 CARR CHEMSEAL
2	117022	WASHER 3/4 LOCK MG
2	110082	NUT 3/4-10 NYLOK CHEMSEAL
6	104592	PIN EXPANSION 1/4 X 1-1/4
1	116021	LABEL MIRACLE ID - GENERIC
1	116022	LABEL WARNING - PLAYGROUND
1	104480	BIT 6 LOBE T-45 FOR 3/8 BOLTS

Rev. C

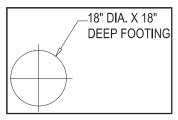
# Bug Bites® "C" Spring Rider - Lucky

**IMPORTANT!** Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to **site preparation**, **footings**, **system stabilization**, and other necessary information **vital to the success of your installation**.

960

"C" Spring Rider - Lucky





**Footing Layout** 

Protective Area: 17' x 16'

### **TOOLS AND EQUIPMENT REQUIRED**

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in 'Installations 101'

- 1. Concrete for footings, wheelbarrow or mixer, 5 gallon bucket, water supply
- 2. Digging equipment for footings (spade shovel, post hole digger, auger)
- 3. 2 x 8's or other wood, nails, hammer to construct frame for concrete footing assembly
- 4. Tape measure and level
- 5. Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 6. For installation in concrete slabs: concrete saw
- 7. Adult installers 2 minimum

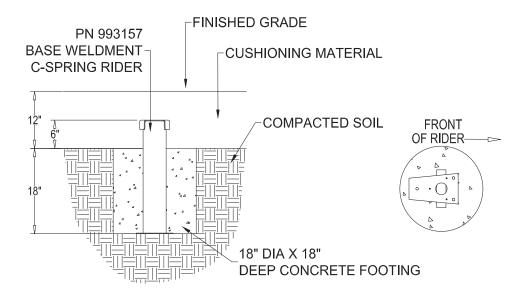
# Bug Bites® "C" Spring Rider - Lucky

### **STEP 1** DIG FOOTINGS

1a. Consult the *CPSC Handbook* for guidelines for placement of Spring Riders, Bouncers, etc. Locate and dig one (1) 18" diameter footing by 18" deep.

### STEP 2 LEVEL BASE WELDMENT IN FOOTING

- 2a. Level and plumb weldment within the footing.
- 2b. Pour concrete within 6" of base top and allow concrete to cure completely prior to affixing rider assembly.



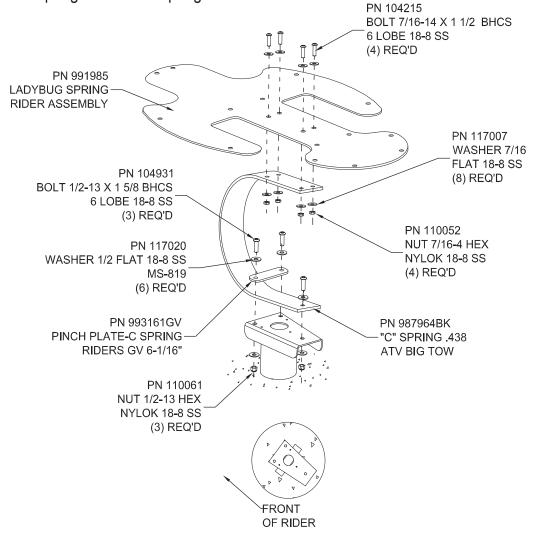
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# Bug Bites® "C" Spring Rider - Lucky

# STEP 3 ATTACH "C" SPRING TO RIDER BODY

- 3a. Bolt pinch plate over "C" spring and base as shown. Bolt spring to front of base. Ensure spring is level and plumb on base.
- 3b. Bolting downward through spring rider base (which is attached to spring rider body), affix spring rider to "C" spring.



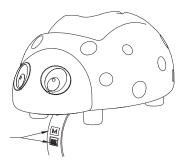
NOTE: Spring Rider is attached to base. Do NOT detach to assemble "C" Spring.

# Bug Bites® "C" Spring Rider - Lucky

# STEP 4 AFFIX IDENTIFICATION/WARNING STICKERS TO "C" SPRING

4a. Apply provided Miracle identification and warning stickers to "C" Spring as shown.

IMPORTANT NOTE: It is imperative that these stickers are CLEARLY visible!!



IMPORTANT: FOR IDENTIFICATION AND SAFETY PURPOSES APPLY STICKERS AS SHOWN.

#### **FINAL STEP**

Refer to Final Assembly installation located behind Installations 101 in Installation Manual.

### Bill of Materials

MODEL: "C" SPRING RIDER, LUCKY -	MODEL # 960	
QUANTITY	PART NO.	DESCRIPTION
1	987964BK	"C" SPRING .438 ATV BIG TOW
1	991985	LADYBUG SPRING RIDER ASSEMBLY
1	993157GV	BASE GALVANIZED-C SPRING RIDER
1	993491	PARTS CARTON 960
PARTS CARTON # 993491		
<u>QUANTITY</u>	PART NO.	<u>DESCRIPTION</u>
1	993161GV	PINCH PLATE-C SPRING RIDERS GV 6-1/16"
2	116021	LABEL MIRACLE ID - GENERIC
2	116022	LABEL WARNING - PLAYGROUND
1	HW993491	HRDW PKG 960 S1/1
HRDW PKG 960 S1/1 - HW993491		
<u>QUANTITY</u>	<u>PART NO</u> .	<u>DESCRIPTION</u>
4	104215	BOLT 7/16-14 X 1-1/2 BHCS 6 LOBE 18-8 SS
3	104931	BOLT 1/2-13 X 1 5/8 BHCS 6 LOBE 18-8 SS
3	110061	NUT 1/2-13 HEX NYLOK 18-8 SS
8	117007	WASHER 7/16 FLAT 18-8 SS
6	117020	WASHER 1/2 FLAT 18-8 SS MS-819
4	110052	NUT 7/16-14 HEX NYLOK 18-8 SS
1	104478	BIT T-50 TORX FOR 7/16 6-LOBE BHD BOLT
1	104481	BIT 6 LOBE T-55 FOR 1/2 BOLTS



Final Assembly

Miscellaneous Freestanding Play Equipment and Non-Play Equipment

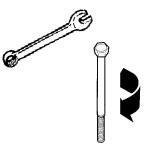
### STEP 1

Plumb and level assemblies.



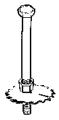
### STEP 2

Tighten all fasteners.



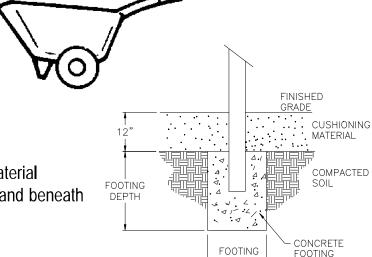
### STEP 3

Trim all bolts. No more than two (2) threads may protrude after trimming by installer. Peen ends smooth to touch.



### STEP 4

Pour concrete in remaining Footings, and allow 72 hours to cure.



### STEP 5

If applicable, install cushioning material (protective surfacing) in, around, and beneath areas required for unit.

### STEP 6

If applicable, apply *Age Appropriate, Warning*, and *Manufacturer's I.D.* labels. Refer to *Installations 101*.

### **FINAL STEP**

Establish and adhere to a regular maintenance schedule, checking for loose or missing bolts, worn parts, etc.



# Bill of Materials (Parts List)

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

\* Model \*\* Component

Qty		Model/Component	Description
1	*	304W	TEN SPIN
1	**	986348	PARTS CARTON-GENERIC AND WARNING LABELS
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		713550	STICKER TOP OF SURFACING
1	**	994990	PARTS CARTON - 2-12 LABEL
1		116036	LABEL - AGES 2-12 YEARS MREC
1	**	996273ORN	WHEEL F/SPINNER
1	**	996354LIM	PARTS CARTON GRIPS TEN SPIN
1		HW996354-1	HRDW PKG GRP TN SPN S1/1
5		996288LIM	HANDGRIP-TEN SPIN
1	**	996616CYN	ASSEMBLY-WHIRL BODY TEN SPIN
1	**	996618BLK	PARTS CARTON WHEEL TEN SPIN
1		996606BLK	TUBE-WHEEL WELDMENT
1		HW996618-1	HRDW PKG WHL TN SN S1/1
2		993297	WIRE, BB, 3 GA X 12"
1	**	996640BLK	POST-ASSEMBLY TEN SPIN
31	*	44012R	MIRACLE TIMBER 6' L X 12" H RECYCLED
31	**	112602RE	MIRACLE TIMBER REGRIND
1	*	4406R	ACCESS RAMP WITH 2 MIRACLE TIMBERS RECYC
1	**	988844RE	ACCESS RAMP WITH 2 MIRACLE TIMBERS
1	*	477003W	JAX PACK-THREE
1	**	116048	LABEL, 2" X 2" WHITE POLYESTER THERMAL
1	**	116049	LAMINATE, CLEAR, 2" X 2" W/PERMANENT
1	**	986348	PARTS CARTON-GENERIC AND WARNING LABELS
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		713550	STICKER TOP OF SURFACING
1	**	995543CYN	JAX 1 HOLE
1	**	995543LIM	JAX 1 HOLE LIM
1	**	995543ORN	JAX 1 HOLE

CITY OF FLINT 1101 S. SAGINAW ST.

\* Model\*\* Component

FLINT, MI 48502

2 221 (1) 1(11	.0002		
3	**	995640AZR	SUPPORT ASSEMBLY - CENTER HOLE
3	**	995820AZR	PARTS CARTON FOR 995543 TOP OF POST
3		104146	BOLT 3/8-16 X 6 1/2 HHCS 18-8 SS
3		110030	NUT 3/8-16 HEX NYLOK 18-8 SS
3		110047	NUT 1/4-20 HEX HEAVY NYLOK 18-8 SS
3		304124	BOLT 1/4-20 X 6-1/2 HHCS 18-8 SS
3		995645AZR	CAM LOCK ASSEMBLY W/O CENTER HOLE
6		104049	SET SKT 3/8-16 X 3/4 18-8 SS
9		104286	BOLT 3/8-16 X 1 BHCS 6 LOBE 18-8 SS
9		117005	WASHER 3/8 X 1 O.D. FLAT 18-8 SS
2	**	995821AZR	POST-BENT R24 X 81-1/16"
1	**	995823AZR	POST-BENT R60
1	**	996031	PARTS CARTON - JAX INSTALLATION TOOLS
1		995772BLK	CAM LOCK INSTALLATION TOOL
1	**	999033AZR	PARTS CARTON - TOUCH-UP PAINT-POST
1		115208AZR	PAINT AZURE GLOSS 4.5 OZ AEROSOL CAN
1	*	656388W	SLIDE GROOVE II W/PVC STEPS 8'PLTFRM
1	**	116048	LABEL, 2" X 2" WHITE POLYESTER THERMAL
1	**	116049	LAMINATE, CLEAR, 2" X 2" W/PERMANENT
2	**	715264	RUNG
1	**	978942LIM	FRONT LEG-TUBE SLIDES
2	**	980431LIM	DIAGONAL BRACE - 126"
1	**	986348	PARTS CARTON-GENERIC AND WARNING LABELS
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		713550	STICKER TOP OF SURFACING
1	**	987062LIM	LH ENCLOSURE-SLIDE PLATFORM
1	**	987063LIM	RH ENCLOSURE-SLIDE PLATFORM
1	**	987079ORN	CANOPY-FREE STANDING SLIDES
2	**	987245LIM	HANDRAIL-8' STEP
1	**	987413	PARTS CARTON GROOVE SLIDE
1		HW987413-1	HRDW PKG 657268 L1/1
1	**	989819GY	PVC PLATFORM-FREESTANDING SLIDES
1	**	989827GY	PVC TOP STEP-8' PLATFORM-FS SLIDES

CITY OF FLINT 1101 S. SAGINAW ST. FLINT, MI 48502

\* Model

\*\* Component

1	**	989829GY	PVC BOTTOM STEPFS SLIDES
1	**	994991	PARTS CARTON - 5-12 LABEL
1		116037	LABEL - AGES 5-12 YEARS MREC
1	**	996408ORN	SLIDE GROOVE II 8' DECK
1	**	996409LIM	MIDDLE LEG, GROOVE II SLIDES
1	**	999034LIM	PARTS CARTON - TOUCH-UP PAINT-ACCENT
1		115208LIM	PAINT LIME GLOSS 4.5 OZ AEROSOL CAN
1	*	787Z	RISK MANAGEMENT SIGN - ENGLISH
1	**	923551AZR	POST F/RISK MANAGEMENT SIGN
1	**	923560	PC F/787 RISK MNGMT ENGLISH
1		923287	RISK MNGT SIGN PRINTED ENGLISH (DNO)
1	**	HW923551-1	HRDW PKG RISK MANAGEMENT SIGN S1/1
1		HWS923551	HARDWARE STICKER 923551
5		200001945	NUT LOCK HEX NYLON INSERTED M10 X 1.5
5		200002014	SCREW MACH BUTTONHEAD M10 X 1.50 X 20MM
10		200002079	WASHER FLAT M11 23 X 12 X 1.6MM
1	*	9461	SURFER WITH SPRING ACTION
4	**	200126822	RIVET POP ALUM. 1/8 X 1/4 PRADA44D
1	**	200126872	PLATE ALUM. CR80 X .032 (I.D. LABEL)
1	**	986348	PARTS CARTON-GENERIC AND WARNING LABELS
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		713550	STICKER TOP OF SURFACING
1	**	993158GV	BASE-COIL SPRING RIDER GALVANIZED
1	**	994240ORN	SURFER BOARD, ROTOMOLDED
1	**	994394AZR	PARTS CARTON 9461
1		104504	BOLT 3/4-10 X 3 CARR CHEMSEAL
1		116021	LABEL MIRACLE ID - GENERIC
1		116022	LABEL WARNING - PLAYGROUND - ENGLISH
1		116099	LABEL, PLAY SMART RULES
1		304027	BOLT 3/4-10 X 4 CARR ZINC PLATE
1		851582AZR	COIL SPRING
1		994387ZP	PLATE-BOLTING SPRING, ZINC PLATE
1		994392ZP	PLATE ASSY-BOLTING SPRING, ZINC PLATE

# Bill of Materials (Parts List)

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CITY OF FLINT

1101 S. SAGINAW ST.

FLINT, MI 48502

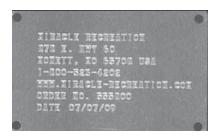
\* Model
\*\* Component

1		HW994394-1	HRDW PKG 9461 M1/1
2		110082	NUT 3/4-10 NYLOK CHEMSEAL
2		117022	WASHER 3/4 LOCK MG
2		851583LGY	SPIRALOK
1	**	994991	PARTS CARTON - 5-12 LABEL
1		116037	LABEL - AGES 5-12 YEARS MREC
1	*	960W	RIDER ROCKITE LADYBUG W/C-SPRING, LUCKY
1	**	991985BOX	LADYBUG SPRING RIDER BOXED

Total Weight: 4395.00

# Installation Guide

### **\_E**CPSIA Labels for After Market Service Parts





Your Miracle Recreation order includes a CPSIA tracking label. This label is either a metal tag or a sticker with laminate overlay. Federal Law dictates that this label MUST be placed in a prominent position on either your existing play system or independent event, dependent upon your order.

Please refer to Miracle document "CPSIA Labels" in our Installation Manual (if manufactured after 8/14/09) to ascertain correct label placement for your particular order. For example, if ordering a replacement part for a Coil Spring rider, see "Coil Spring" section on CPSIA document.

This document may also be found electronically:

Installers: Please see Miracle Installer website

Sales Representatives: Please see Miracle intranet website

Customers: Please see Miracle's website at www.Miracle-Recreation.com

If you have questions regarding CPSIA label placement, please call Miracle Customer Service at 1-800-523-4202 for more information.



# MIRACLE Post-Installation Check List D70165 Rev. B

Date of Completed Install:	Work Ord	ork Order #:		
Customer:				
Project:	City/State:			
All labels properly affixed	CPSIA, age appropriate, top of surfacing and v	warning).		
ALL CPSIA embossed lab equipment*.	els for composite structures photographed for e	evidence of proper installation on		
All bolts, nuts, and set scr no more than two threads	ews checked for tightness. All excess bolt threa	ads cut and peened smooth to expos		
Unit has been wiped dowr	to eliminate dust/dirt (soap and water may be	necessary).		
Equipment checked for ins	stallation guideline compliance.			
Site cleaned with all const	ruction trash removed.			
I	tion was done according to manufacturer's spewner must still provide safety surface, etc.	ecifications. Note any		
Touch-up paint, torque dri	ve bits and spare parts left with the owner.			
•	oment should not be used for 72 hours after insive surfacing must be installed.	stallation to allow concrete to cure (if		
I	e according to specifications, please indicate change for the person(s) who authorized the change.	· ·		
Authorized by:	Phone:	Date:		
Installer Signature		Dato		
Signed by owner or authorized customer		Date:		

\*RETURN COMPLETED CHECKLIST AND PHOTOGRAPHS to MIRACLE CUSTOMER SERVICE by mail at 878 E. Hwy 60, Monett, MO 65708 or electronically to customer.service@miraclerec.com.

For questions contact Customer Service call 1-800-523-4202.



1-800-523-4202

www.miracle-recreation.com