Slump Master II



Operating and Service Manual
*Includes Parts List



C & W Manufacturing and Sales Co.

© 2005 C & W Manufacturing and Sales Co.





Dear Customer,

C & W Manufacturing and Sales Co. thanks you for your recent purchase of our Slump Master II safety inspection platform. Congratulations on investing into a system that provides superior quality, engineering, and customer support. C & W believes in creating lasting relationships with our customers by meeting their individual needs, and we appreciate the opportunity to serve you.

We know our customers don't want the hassle of dealing with equipment that doesn't perform like it was designed. By following this operations manual, you will enjoy the efficiency and effectiveness of the new Slump Master II system. This operations manual covers everything from principles of operation, initial start-up, additional parts, and troubleshooting to specifications of the equipment. If you need any additional assistance, please feel free to call on our C & W support team at 1-800-880-3878. For specific inquiries, please refer to the contact page for the personnel that you need.

Thank you for selecting C & W Manufacturing and Sales Co. We hope you enjoy your new system, as well as the rewards that come from teaming up with the best in the industry. If you have any other environmental needs, please remember C & W Manufacturing and Sales Co.

Thanks again for allowing us to serve you.

ley Beakly

Sincerely,

Deryl Beakley

President

C & W Manufacturing and Sales Co.



NOTE:

The proper installation of each Slump Master component is extremely important to the successful operation of your Slump Master Inspection



This manual has been developed to answer any question you might have.

If you need further information or assistance, please give us a call.

1-800-880-3878

Index

Safety	
Principles of Operation	II
Foundation	Ш
Installation	IV
Maintenance	V
Spare Parts List	VI
Drawings	VII
Warranty	VIII
Contact Page	



Celebrating 25 Years of Serving the Concrete Industry with the Best Environmental Solutions Available!

ACAUTION



Safety Precautions

Caution:

- •The maximum weight allowance for the Pivot Platform is 500 lbs. gross weight.
- •The maximum weight allowance for the Tower Module is 1,500 lbs. gross weight.
- •The Slump Master II must be anchored to a concrete foundation.
- •Be sure to follow all directions and install all bolts. Failure to do so may result in serious injury.
- •Watch your head when walking around the base of the Slump Master II, especially near the Tower Module. Inattentive personnel risk serious injury.
- •Do NOT stand under the Pivot Platform or the Tower Module.
- •When not in use, always Secure the Slump Master II, using the Latch.
- ·Safety attire such as safety glasses and hard hats should be worn when servicing equipment.
- •Read this manual completely before installation and operation of the Slump Master II.

C & W Mfg and Sales Co, its suppliers, and its dealers, are not liable for any claims, losses, labor expenses or damages, direct or consequential, resulting directly or indirectly from the use of, or inability to use, the Slump Master II or for other consequential loss or damage of any nature arising from any cause.

Principles of Operation

Slump Master II is a modular slump-inspection platform that ready-mix producers can use to provide an OSHA-safe working environment for their personnel. Typical platform uses include checking the mixture's slump, adding water, inserting fiber additives, and washing mixer trucks. Major Modules include Tower, Upper and Lower Stairs, Pivot Platform, optional Washdown Platform, and optional Pallet Shelf. The modules can be combined in a variety of ways to conform to the specific needs of producers. The various configurations allow producers to use the Slump Master II with front- and rear-discharge mixer trucks, tanker trucks, and railroad cars. Other flexibilities allow workers to access stairs on the left, right, or opposite side of the tower.

Foundation

The Slump Master has been designed to sit on a 12" tall concrete foundation. It has been re-designed for left-hand or right-hand stair access. NOTE: All illustrations in this manual show right-hand access. Make appropriate changes for left-hand access. The foundation must be designed by a qualified engineer, including size and depth. C & W is not responsible for the design



Receiving:

1. Although the unit has been thoroughly checked and inspected before leaving our plant, it should be inspected for damage immediately upon receipt from the carrier and any claims should be made to the delivery carrier immediately.

Lifting:

- 1. Proper lifting and/or transporting methods must be used to prevent damage and injury. When moving by forklift, make sure the package is secure and well balanced on the forks before attempting to raise or transport.
- 2. When hoisting from overhead, spacers and spreader bars should be utilized to avoid damaging the unit.
- 3. Make sure entire lifting, rigging and supporting structure is in good condition and has a rating capacity of at least 2350 lbs, the weight of the Slump Master II unit.
- 4. Lift and handle only in accordance with federal, state, and local codes.

Location:

1. The Slump Master II should be installed on a clean, level foundation with ample clearance around the unit for ease of maintenance and service. (minimum of 36" on all sides)

Tools Needed:

Impact wrench or Ratchet and Socket Torque wrench 15/16" box end wrench Drill for anchor bolt holes Line up bar

NOTE:

All nuts, bolts, washers and small parts are shipped in a PARTS Bucket which should be attached to the unit. If this bucket is missing, notify C&W IMMEDIATELY at 800-880-3878

NOTE:

Most nuts provided for this installation are self locking and will require effort for assemble.

However the long term safety consideration is well worth this extra effort. An impact wrench or at least a ratchet and socket are suggested.

Using a torque wrench, tighten all bolts to 80 to 110 ft lbs of torque. Assembly may be aided if bolts are left slightly loose until all bolts are installed.

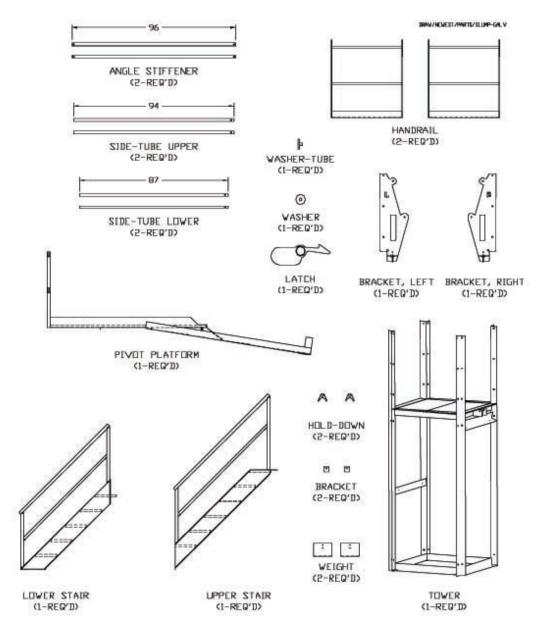


Components for SINGLE Slump Master

NOTE:

Use this page to make sure you have received all parts prior to beginning assembly.

Contact C&W at 800-880-3878 immediately should any parts be missing or erroneous.



QTY.	DESCRIPTION
1	LOWER STAIR ASSY
1	UPPER STAIR ASSY
1	TOWER ASSY
1	PIVOT PLATFORM ASSY
1	LEFT BRACKET ASSY
1	RIGHT BRACKET ASSY
1	LATCH ASSY
1	WASHER-TUBE ASSY
1	WASHER
2	HANDRAIL ASSY
2	SIDE TUBE, LOWER - 87"
2	SIDE TUBE, UPPER - 94"
2	ANGLE STIFFENER - 96"
2	ADJUSTABLE WEIGHT
2	BRACKET
2	HOLD-DOWN

More Parts on Following Page



Below is a detailed listing of the SlumpMaster II Parts, along with quantities and C&W Part #s to refer to should you need replacement pieces or did not receive all of the parts in shipping.

SM88 - Slump Master

SM88 QTY	CW Part #	Description
4	BT022	BOLT 3/8" X 1 1/4" (BUMPRT)
1	BT035	BOLT 1/2" X 3 3/4 " (LATCH STOP)
27	BT043	BOLT 5/8" X 1 1/2"
4	BT055	BOLT 5/8" X 3 1/2" (PIVOT HANDRAILS)
2	BT060	BOLT 3/4" X 4" (LATCH & LATCH CATCH)
1	BT082	BOLT 1/2" X 5 1/2" (SHOCK)
6	BT085	ANCHOR BOLT 5/8" X 5 1/2"
1	BT091	BOLT 5/8" X 6 1/2" (SHOCK)
2	BT093	BOLT 7/16" X 2 (ADJUSTABLE WEIGHTS)
2	MISC48	SHOCK
4	MISC49	BUMPER HD
1	MISC49-1	BUMPER HD, MODIFIED
2	MISC50	BUSHING FOR PIVOT DECK
18	MISC52	PLASTIC END CAP 1 1/2" TUBE
1	NU000	1/2" HEX NUT (LATCH STOP)
2	NU001	1/2" NYLOCK NUT (TWO F/SHOCK, ONE F/LATCH STOP)
2	NU005	3/4" HEX NUT (ONE F/LATCH, ONE F/LATCH CATCH)
4	NU007	3/8" NYLOCK NUT (BUMPER)
4	NU011	5/8" (PIVOT HANDRAILS)
2	NU013	7/16" NYLOCK NUT (ADJUSTABLE WEIGHTS)
35	NU016	5/8" NYLOCK NUT
2	NU021	3/4" NYLOCK NUT (ONE F/LATCH, ONE F/LATCH CATCH)
1	PF125	BRONZE SLEEVE BEARING
2	WA006	7/16" FLAT WAHER (ADJUSTABE WEIGHTS)
4	WA008	3/8" FLAT WASHER (BUMPER)
1	WA012	3/4" FLAT WASHER (LATCH)
2	BT054	Bolt 5/85 " x 2" (Hold-Down)

NOTE:

Use this page to make sure you have received all parts prior to beginning assembly.

Contact C&W at 800-880-3878 immediately should any parts be missing or erroneous.





Make sure you have all the Modules prior to beginning installation.
Refer to previous Pages for list.

Optional Modules:

- WashDown Module
- Pallet Shelf Module

NOTE: Install the Double Shock Brackets on the Opposite Drive Side

Installation Procedures

Before you begin assembling your Slump Master, Installation Steps: first install the diagonal brackets on the tower.

Position Tower Module on customer provided concrete foundation, square and level.





2 Drill and install four (4) 5/8" concrete anchor bolts using four (4) of the eight (8) provided holes in the base of the tower.

(3) If the optional WashDown Module has been purchased for your Slump Master II, skip to step (6) on next page.

If your Slump Master II is being installed without the WashDown Module, lay out the Upper Stair Module and Lower Stair Module as shown (below left) and join them using four (4) 5/8" bolts.





Using a lift machine, place the stairs against the Tower Module as shown (above right).



(5) Install two (2) 5/8" bolts to secure the Stair Tabs to the tower.

If NOT using WashDown Module, skip to Step 10 (next pg)



Optional Steps (6-9) if using the WashDown Module Only

 a. If the optional WashDown Module is used, position the Upper Stair Module to the WashDown Module as shown (below left).
 b. Install four (4) 5/8" bolts as shown (below right).





7 Move this assembly to the tower, lining up the holes.





8 Install two (2) 5/8" bolts to secure the Stair Tabs to the tower as shown (above right).



Use a line up bar to adjust and line up the hole so you can get the bolts into the hole with less difficulty





Optional Steps (6-9) if using the WashDown Module Only

- a. Move the Lower Stair Module to the WashDown Module and secure with four (4) 5/8" bolts (below left).
 - b. Using a drill and masonry bit, install two (2) 5/8" anchor bolts, one on each side. Use two (2) of the four (4) provided holes for anchors.





- Stair Modules (with or without Washdown Module) should now be completed and attached to Tower Module, as shown (above right)
- If the optional Pallet Shelf Module (below left) has NOT been purchased for your Slump Master II, skip to step 4 on next page. If your unit is equipped with a pallet shelf, continue to step 12



Optional Steps (12-13) if using the Pallet Shelf Module Only

Position the pallet shelf as shown (below left). It may be installed in the front or right side position of the tower.





(3) Use six (6) 5/8" bolts to mount Pallet Shelf Module to Tower Module (above right).



NOTE:

Right position is the one to the right when coming up the stairs and front position is the one one in front of you when coming up the stairs.

Installation Procedures

(14) Handrail module. All units have two (2) Handrail Modules. If you purchased a Pallet Shelf, replace one of the Handrail Modules with the Pallet Shelf module.





- (15) Using six (6) 5/8" bolts, install the handrail module(s), with the Kick Plate on the outside, in the right and front positions of the Tower Module. Also mount the pivot deck to the right-hand side as well.
- (16) Rubber Shock Pads (shown below left) are used to absorb the shock of the weight of the platform.



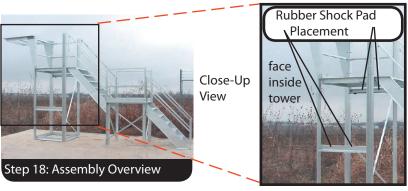


Step 16: Rubber Shock Pad

Step 17: Install Rubber Shock Pads

Install two (2) rubber shock pads (hockey pucks) using 3/8" bolts and flat washer facing inside each on the upper and lower tower crossbars facing INSIDE the tower, as shown.

Refer also to Picture 18 (below) for additional indications. (17) Install two (2) rubber shock pads (hockey pucks) using 3/8" bolts and flat



(18) Assembly should appear as shown above.

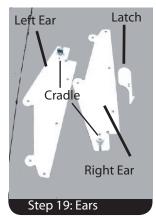
Slump Master

NOTE:

When Ears are in place, the cradles should both be facing inward. These cradles will hold the Pivot Platform.

Installation Procedures

19 Installing the Pivot Platform "Ears".





- 20 Left Ear- Use three (3) 5/8" bolts and install the Left Ear to the left corner (immediate left at top of stairs) of the Tower Modules, as shown (above right).
- 21) Right Ear
 - a. Use the 3/4" x 5" bolt at the bottom to install the Right Ear to the Tower as shown (below left). This bolt should be extended out and will act as the latch pin for the Platform Latch once completed.
 - b. Use two (2) 5/8" bolts to finish the installation. The 3/4" bolt will be a tight fit and will use one standard nut inside and one locking nut outside.



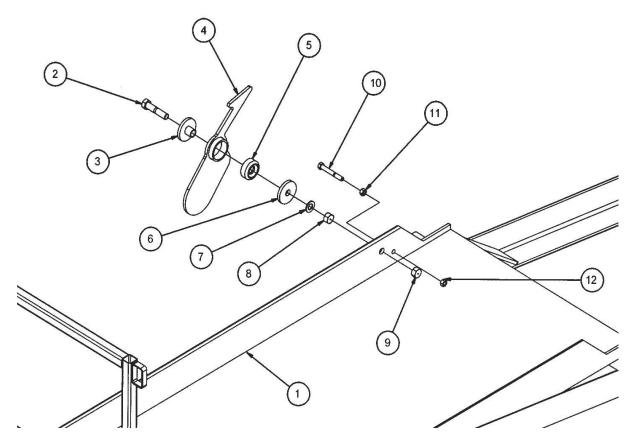


- 22) Assembly with ears installed.
- Assemble the Pivot Platform Latch
 Assemble the Latch as shown on the following page. Make sure you tighten the standard nut to allow latch to rotate without binding.





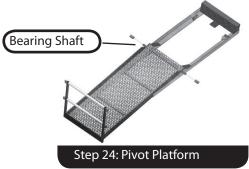
Pivot Platform Latch Assembly



ITEM	QTY	DESCRIPTION
1	1	Pivoting Walk Deck Assembly
2	1	3/4" Dia.X4" Long Bolt
3	1	Washer-Tube Assembly
4	1	Latch Assembly
5		Modified BumberAssembly
6	1	Washer
7	- 1	3/4" FlatWasher
8	1	3/4" HexNut
9	1	3/4" Nylock Nut
10	1	1/2" Dia.X33/4" Long Bolt
11	1	1/2" Nylock Nut
12	1	1/2" HexNut



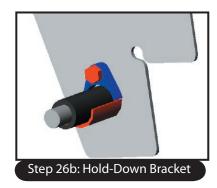
24 Installing the pivot platform. Slide the composite bushings on the ends of the Pivot Platform bearing shaft.





- 25 Using a lift machine, position the platform to the tower (above right).
- a. Set the Pivot Platform bearing shaft ends (with bushings installed) into the cradles (below left) on the Ears.





- b. Install a 5/8" x 1 1/2" Locking Bolt in the hole just above the cradle. This will lock the shaft, bushing, and platform in place. Remove the lifting machine and allow the platform to come to a stable position.
- 27 Install the Latch assembly (descibed in Step 23) in the 3/4" hole provided on the Pivot Platform. (below left)







28 Install the 1/2" x 3 1/2" Stop Bolt. If necessary, bend the stop bolt such that the latch will stop and hook on the 3/4" bolt on the tower as shown.



29 Installing Handrails onto Pivot Platform



NOTE:

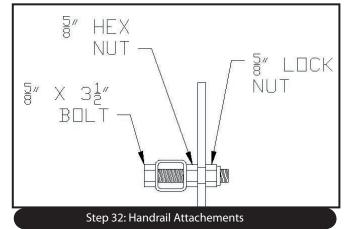
The far ends of the Handrails are not attached. They merely are slid through the braces allowing them to move freely as the Pivot Platform is lowered and raised.

30 Install the two longest Handrails (94") in the top positions through the handrail braces of the platform (below left).





- 31 Using 5/8" x 3 1/2" bolts provided, secure handrail to the Ear (above right).
- 32 Use the nuts (one lock, one stanard), to lock the 5/8" x 3 1/2" bolt to the Ear and allow the Handrail to rotate freely (below left).



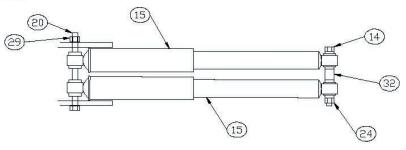


(33) Install the lower Handrails in a similar way to the upper handrails.

Slump Master

Installation Procedures

34) Install the Dampening Shocks on side of Tower Deck.



Item Number	Description
14	1/2" x 5 1/2" Bolt
15	Shock/Dampener
20	5/8" x 6 1/2" Bolt
24	1/2" Self-Locking Nut
32	Bushing, Bronze
29	5/8" Locking Nut

- 35) Install the 5/8" x 6 1/2" bolt (#20 above) through the anchor plate then through the large ends of the dampeners. Tighten nut (#29). Insert 1/2" x 5 1/2" bolt (#14) through the small end of the dampers and then through bushing (#32). Tighten nut (#24) just enough so it can be rotated by hand. Do NOT overtighten. Dampeners should be free to move and rotate. Allow dampeners to hang down.
- 36) The unit should now be assembled. Check to see that all bolts are tightened.



37) Place plastic endcaps on ends of handrails along the stairs, as well as on the ends of the Pivot Platform Handrails. There are 18 total.

NOTE:

On new units it may take several adjustments of moving the weight before the Latch will catch on its own.

38) Test Assembly and Make Adjustments

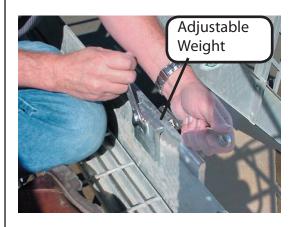
- a. Release Pivot Platform Latch by press down on it with your foot. This should begin the Platform's decent.
- b. Quickly walk out onto the Platform while it is lowering, causing it to lower into a level position.
- c. Walk back off of the Platform, allowing it to rise and latch into position.
- d. Adjust unit as descibed on the following page.



d. Adjusting the Pivot Platform: Adjustable Weights Ideally, when you step off the platform, it should rise just far enough to cause the latch to catch the ¾" bolt on the tower leg and without a significant impact. When the latch is released, the platform should start to lower. However, metal thickness and galvanizing can vary the weighting unit to unit.

Therfore, if the unit does not work as descibed above, there are two adjustable 40 lb. weights (provided) that can be installed on one or both of the following:

a. the 4x6 angle frame of the pivot platform (see pictures below)





b. the 4x4 angle of the counterweight support (see picture below). [Note the placement of the bolt holes for the different size angles].



These weights can be used in any combination and can slide up and down the angles to adjust the counterbalance of the pivot platform.



The weights are particularly helpful if a water connection or hose is added at the end of the platform.



NOTE:

Application of Safety Decals is REQUIRED by OSHA!

Installation Procedures

Safety Decal Instructions:

C & W has included safety decals for the Slump Master II in a Safety Decal Pack. It is necessary to place these decals in the areas shown in the following diagram. Failure to properly place safety decals on the Slump Master II will void the product warranty.

Please protect your personnel by properly placing all safety decals on the Slump Master II. Should you have any difficulty placing the safety decals, please call us immediately at 1-800-880-3878.

		Slumph	laster II Safety Decal Pack
	Quantity	Item	Pla cement
1	4	Keep Out	2 on either side of the weight arm (4)
3	2	Watch Your Head	1 on either side of weight (2)
2	31	Keep Hands Clear	under platform, where weight arm rests against tower(1)
	2	4x8 C&W Oval	one on both ears (2)
	2	Made in USA	one below C&W oval on ears (2)
	options:		
	1	No Step	pallet shelf (1)
)	2	4x8 C&W Oval	was hdown platform, one on either side (2)







Detailed Safety Decal Placement Steps:

1. Place Two (2) "Caution: Keep Out" Safety Decals on the arms of the Pivot Platform, as shown below. To properly apply the "Keep Out" Decals, you will need to apply two (2) of them while the Pivot Platform is up (one of each arm). After those are applied, you must then lower the Pivot Platform to get the correct placement for the remaining two (2) "Keep Out" decals. In essence, you should be able to read one of the "Keep Out" decals on the outside of both weight arms when the Platform is either up or down.







2. Place Two (2) "Caution: Watch Your Head" Safety Decals on the weight, one on level to the ground when the Platform is up and one level to the ground when the Platform is down (below left).

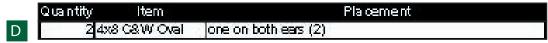


3. Place "Caution: Keep Hands Clear" decal on the level side of the crossbar, underneath the Platform side (above right). This is to avoid injury when the Platform is raised and the weight arm comes to rest against the Tower.





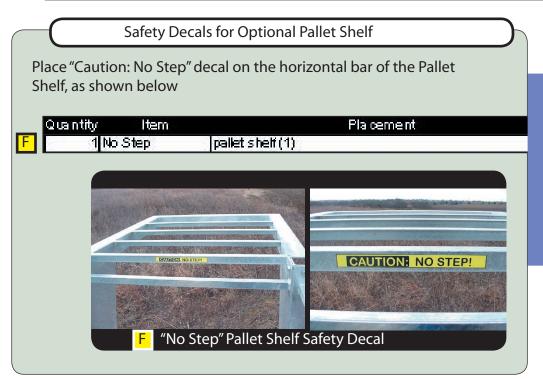
4. Place Two (2) "C&W" logo decals on the Ears, one on the Left Ear and one on the Right Ear (below).





5. Place "Made in the USA" decal on Left Ear, facing stairs (above).







Safety Decals for Optional WashDown Platform

Place two (2) "C&W" logo decals on the WashDwon Platform, on on either side, as shown below





Maintenance Procedures

There is no regular maintenance that should be performed on the unit except for occasionally checking and tightening any loose bolts.

Shipping

Below is a picture of how the Slump Master II is shipped in an efficient and compact way, reducing costs.





Below is a detailed listing of the SlumpMaster II Parts, along with quantities and C&W Part #s to refer to should you need replacement pieces or did not receive all of the parts in shipping.

SM88 - Slump Master

SM88 QTY	CW Part #	Description
4	BT022	BOLT 3/8" X 1 1/4" (BUMPER)
1	BT035	BOLT 1/2" X 3 3/4 " (LATCH STOP)
4	BT055	BOLT 5/8" X 3 1/2" (PIVOT HANDRAILS)
2	BT060	BOLT 3/4" X 4" (LATCH & LATCH CATCH)
1	BT082	BOLT 1/2" X 5 1/2" (SHOCK)
6	BT085	ANCHOR BOLT 5/8" X 5 1/2"
1	BT091	BOLT 5/8" X 6 1/2" (SHOCK)
2	BT093	BOLT 7/16" X 2 (ADJUSTABLE WEIGHTS)
2	MISC48	SHOCK
4	MISC49	BUMPER HD
1	MISC49-1	BUMPER HD, MODIFIED
2	MISC50	BUSHING FOR PIVOT DECK
18	MISC52	PLASTIC END CAP 1 1/2" TUBE
1	NU000	1/2" HEX NUT (LATCH STOP)
2	NU001	1/2" NYLOCK NUT (TWO F/SHOCK, ONE F/LATCH STOP)
2	NU005	3/4" HEX NUT (ONE F/LATCH, ONE F/LATCH CATCH)
4	NU007	3/8" NYLOCK NUT (BUMPER)
4	NU011	5/8" (PIVOT HANDRAILS)
2	NU013	7/16" NYLOCK NUT (ADJUSTABLE WEIGHTS)
35	NU016	5/8" NYLOCK NUT
2	NU021	3/4" NYLOCK NUT (ONE F/LATCH, ONE F/LATCH CATCH)
1	PF125	BRONZE SLEEVE BEARING
2	WA006	7/16" FLAT WAHER (ADJUSTABE WEIGHTS)
4	WA008	3/8" FLAT WASHER (BUMPER)
1	WA012	3/4" FLAT WASHER (LATCH)
2	BT054	Bolt 5/5 " x 2" (Hold-Down)
23	BT072	Bolt 5/8" x 1 3/4"
23	WA010	5/8" Flat Washer





Single Slump Master II

