



GB-0124-1.1 Rev. 2

QUANTUM PM PRESS MOUNT - INSTALLATION INSTRUCTIONS



Proper installation is vital if your press is to perform to its fullest capability. Following are several important considerations to insure an optimum installation:

- The press frame must be precisely aligned and parallel.
- The press must be supported properly.
- The press bed must be level.
- The best, fine tuned, control of shock and vibration must be achieved.
- The elimination of press "walking" during operation must be achieved.

Unisorb Quantum PM Press Mounts allow all of the above considerations to be accomplished with ease of installation that is unparalleled in the press industry. When installed per these instructions you will significantly reduce shock and vibration, and avoid internal press misalignment, premature die wear, etc. Expensive down time will be averted, and improved efficiency will translate into increased profitability.

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Site Planning/Preparation

1. The foundation should be of sufficient size and weight to properly support the press, and should be a monolithic slab, with no expansion joints. The press should not span any expansion joints or cracks. The concrete must be clean, free from all lubricants and other foreign material in areas under press mounts.
2. The surface of the concrete should be free of irregularities and all damaged areas should be repaired with Unisorb Concrete Repair Compound (UCRC).
3. Inspect and clean all surfaces of the press feet, removing any debris, including inside of the mounting holes.
4. Locations with significant surface deviations should be evaluated using Unisorb Technical Bulletin GB-0143-2 – Quantum PM Site Preparation.

Mount Placement

1. Precisely place each mount in its proper location beneath the press feet, assuring that the press mount adjusting bolt holes are concentric with the mounting holes in the press feet. Reposition mounts if required, for alignment with holes in press feet.
2. Make sure that the retaining pins on the sides of the press mounts are centered laterally within the holes – Adjust as necessary. – **See Figure A.**
3. Be sure there is appropriate clearance around all of the press mounts and the press frame.
4. Slowly lower the press into position until it rests uniformly on all of the press mounts.
Should conditions dictate that the adjusting bolt must be installed prior to lowering the press, take special care not to damage the threads on the bolts during the lowering process. The protective mesh supplied with the bolts may be helpful for this purpose.
5. After removing the protective mesh, carefully insert the adjusting bolts through the press feet, again taking care not to damage the threads. Thread the bolts into the mount housings until the spherical nose of each bolt seats into the matching dimple on the impact plate. – **See Figure B.**
6. Turn each adjusting bolt two full turns clockwise, lifting the housing off the impact plate. On large presses it will be necessary to lift the press slightly by external means to relieve the load on the mounts while turning the bolts.

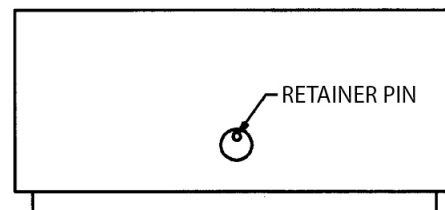


Figure A

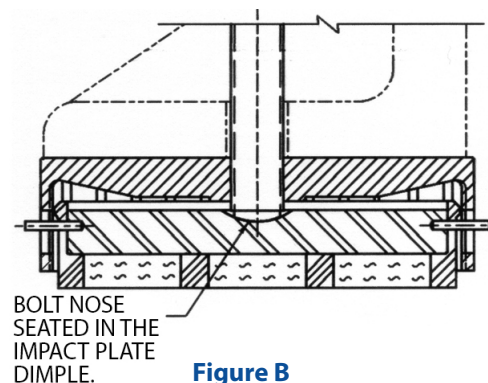


Figure B

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Level & Aligning Procedure

1. Position the precision leveling devices at the locations specified by the press manufacturer. Using the leveling bolts, level the press to within the press manufacturer's installation specification criteria.
2. Using a torque wrench, verify the torque on each bolt. On a press with an even distribution of weight, the torque should be approximately equal on each bolt. Variations in the torque between each of the bolts should fall within approximately 5% of the average torque values measured.
3. Because of the variations in press design, most presses will exhibit some variation in weight distribution – **See Figure C**. In the event that there is some variation in press weight, the condition $A+D=B+C$ should be satisfied.
4. In the event that the press design has resulted in a press with a significant amount of mass over one corner, the torque on the bolts cannot be used as a reliable indicator of mount loading. If such a condition should exist, the following will assure that each mount is properly supporting the press.
 - a) Level the press as described above.
 - b) Turn each level-adjusting bolt until the level of the press is affected.

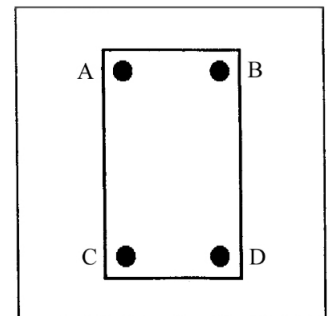


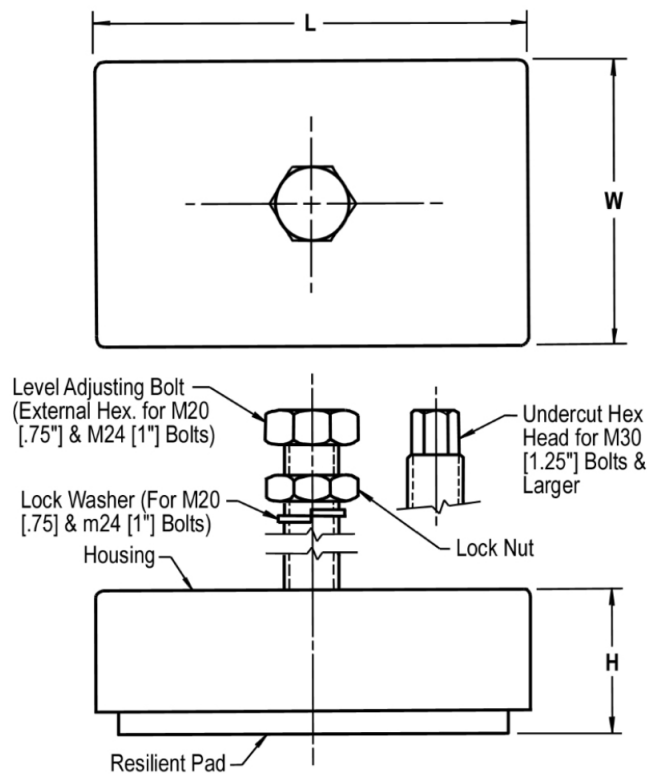
Figure C

Note: These steps will assure that each press mount is carrying its share of the press weight and eliminate press rocking caused by unequal mount loading. Any residual rocking of the press may be caused by unbalanced components within the press, or by using an isolation pad that is too soft. The corrective action for rocking caused by using too soft a pad can be remedied by using a stiffer isolation pad. The stiffer pad will help reduce the rocking at the expense of isolation performance.

5. Repeat steps 2 thru 4 until compliance with manufacturer's specifications is achieved.
6. Adjust the lock nut and tighten securely.

Note: Be certain that all electrical and plumbing connections use flexible fittings.

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SPECIFICATIONS

Mount Series	L	W	H	Standard Bolt Sizes (in/mm)
PM-61	7.00 in (178 mm)	4.50 in (114 mm)	2.50 in (64 mm)	.075 - 1.00 M20 - M24
PM-81	8.00 in (203 mm)	5.88 in (149 mm)	2.50 in (64 mm)	.075 - 1.25 M20 - M30
PM-101	10.00 in (254 mm)	7.88 in (200 mm)	3.25 in (83 mm)	.075 - 1.50 M20 - M36
PM-121	12.50 in (318 mm)	9.00 in (229 mm)	3.50 in (89 mm)	1.00 - 1.75 M24 - M42
PM-161	16.00 in (406 mm)	12.50 in (318 mm)	4.50 in (114 mm)	1.25 - 2.25 M30 - M56
PM-201	20.00 in (508 mm)	16.00 in (406 mm)	6.00 in (152 mm)	1.75 - 3.00 M42 - M80
PM-261	26.00 in (660 mm)	22.00 in (559 mm)	6.00 in (152 mm)	2.50 - 4.00 M64 - M100
PM-301	30.00 in (762 mm)	24.00 in (610 mm)	9.50 in (241 mm)	3.00 - 4.50 M80 - M110
PM-321	32.00 in (813 mm)	24.00 in (610 mm)	10.50 in (267 mm)	3.00 - 5.00 M80 - M130
PM-351	35.00 in (889 mm)	20.00 in (508 mm)	11.00 in (279 mm)	3.00 - 5.00 M80 - M130
PM-381	38.00 in (965 mm)	25.50 in (648 mm)	13.00 in (330 mm)	4.00 - 6.00 M100 - M150
PM-421	42.00 in (1067 mm)	24.00 in (610 mm)	14.75 in (375 mm)	4.00 - 6.00 M100 - M150
PM-481	48.00 in (1219 mm)	36.00 in (914 mm)	15.50 in (394 mm)	5.00 - 7.00 M130 - M180

[Quantum Press Mounts on the Unisorb website](#)

[Quantum Press Mount Calculation Criteria Sheet](#)

Technical Bulletin GB-0143-2 – Quantum PM Press Mount Site Preparation (Contact Unisorb's engineering staff for this document)