Objective:

To ensure Aus Pits Designed & Manufactured Self-Locking Lifting Pins or Aus Pits Designed & Manufactured Manual-Locking Lifting Pins are used correctly and safely where there are lifting hole provisions identified by “LIFT HERE” on pit wall.

Scope:

For pits with lifting provisions that need to be transported, un/loaded, and installed off-site.

Installation:

The following points regarding the installation of lifting pins are valid regardless whether a Self-Locking Lifting Pin or a Manual-Locking Lifting Pin is selected.

1. Aus Pits Designed & Manufactured Lifting Pins [Self-Locking / Manual-Locking] which are rated at 3.08 tonne SWL shall be used. Each lifting pin is stamped with a test number as well as having an individual identity number welded on the backing plate.

2. A ‘spreader bar’ MUST be used to provide a direct vertical lift; reducing force on lifting pin, lifting chain and pit wall.

3. Visually and physically inspect lifting pins to make sure components are intact and functional.

4. All lifting provisions MUST be used, if there are 4 cast in, all 4 MUST be used. If there are 2, both MUST be used.

5. Refer below to *‘Self-Locking Lifting Pin Instructions’* or *‘Manual-Locking Lifting Pin Instructions’* for guidance on how to place these lifting pins safely and correctly.

6. Aus Pits recommends that an exclusion zone between mobile plant and worker(s) be maintained during transport of pit using lifting pins. Distance to be determined by clients own Risk Assessment and/or Job Safety Analysis.

7. Where required, lifting pins may be placed into the lift holes from the inside of the pit in which case all the points mentioned above apply.

Self-Locking Lifting Pin Instructions:

Lifting pin inserted upside down in lifting hole. Lifting pin MUST be inserted all the way in with the metal plate hard up against the external pit wall.

Lifting pin rotated 180◦ so that pin drops down and automatically engages.

The metal plate MUST be hard up against the pit wall prior to lifting to ensure forces during lift are distributed evenly. *Refer to* Figure *5*

Note how metal plate is hard up against the pit wall.

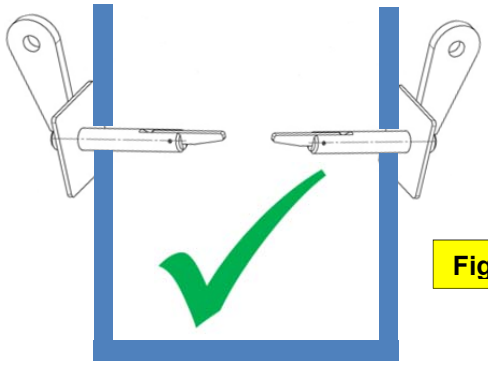

Figure 5

CORRECT PLACEMENT OF SELF-LOCKING LIFTING PINS

The correct method for placing lifting pins involves inserting the lifting pin all the way in the lifting hole until the metal plate is firmly up (hard up) against the external face of the pit wall.

To remove Self-Locking Lifting Pin perform steps in reverse i.e. rotate lifting pin 180◦ to unlock pin mechanism so that lifting pin may be taken out.

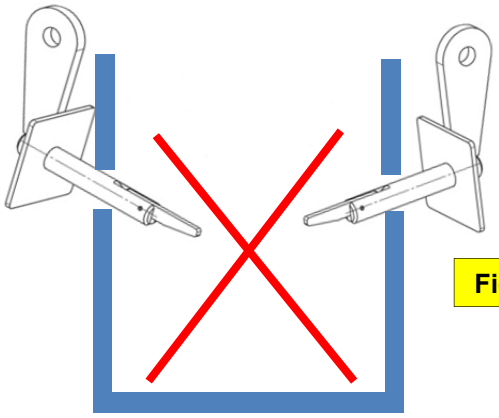

Figure 6

INCORRECT PLACEMENT OF SELF-LOCKING LIFTING PINS

If the metal plate of the lifting pin is **NOT** placed hard up against the pit wall uneven forces will be exerted on the lifting hole which may cause structural damage.

Structural damage may vary from chipping, flaking, to significant damage to pit wall.

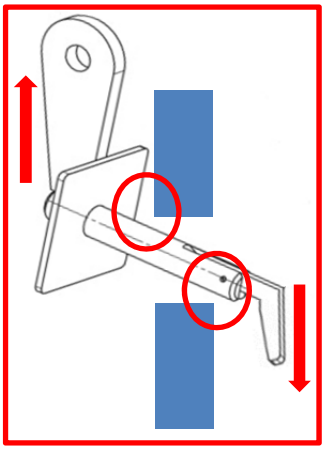

Figure 7

Red arrows indicate forces acting on lifting hole, with red circles indicating areas where damage is most likely to occur.

Manual-Locking Lifting Pins:

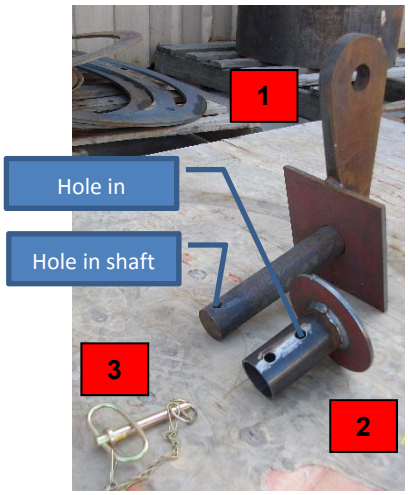

Figure 8

Components which make up a Manual-Locking Lifting Pin are:

1. Manual Locking Lifting Pin
2. Collar
3. Locking Pin

Refer to Figure 8

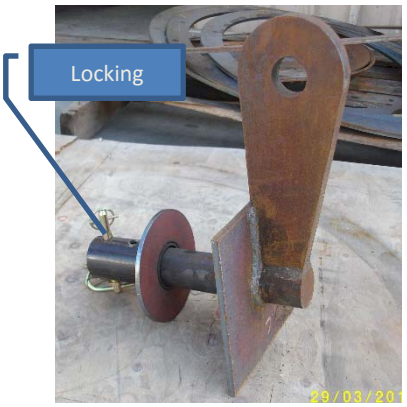

Figure 9

CORRECT PLACEMENT OF MANUAL-LOCKING LIFTING PINS

1. Insert lifting pin in lifting hole with metal plate hard up against external pit wall.
2. Slide collar over lifting pin inside of the pit.
3. Insert locking pin through the hole in the collar and shaft of the lifting pin to secure.

To remove Manual-Locking Lifting Pin perform steps in reverse.

Further Information

If you require more information regarding the above lifting procedure please contact our office on (03) 5222 4526.