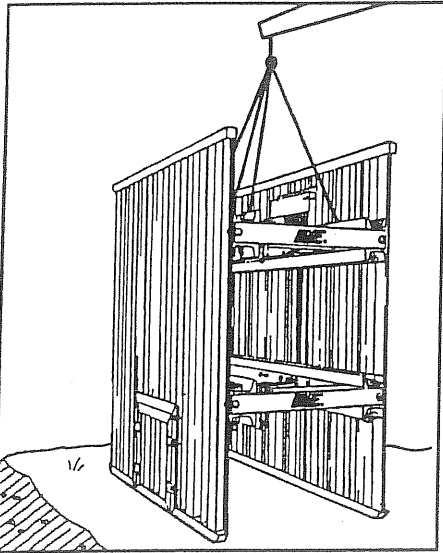




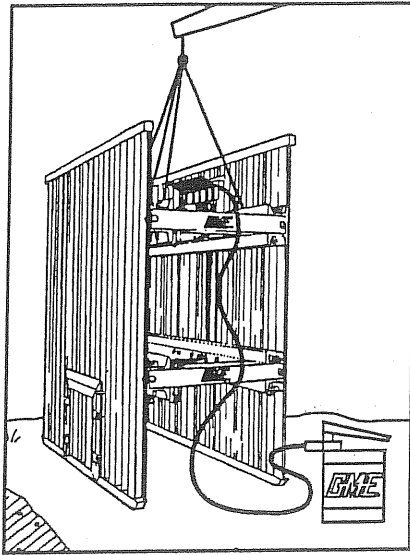
HYDRAULIC SHIELD INSTALLATION AND REMOVAL INSTRUCTIONS (To be used with Manufacturer's Tabulated Data)

Attach the appropriate sling to the four lifting eyes on the hydraulic shield.



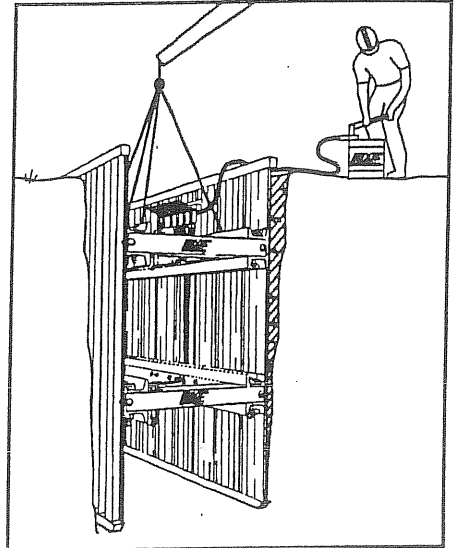
2. Position shield in area next to the excavation and inspect shield for any damage that may hinder its operation. A visual inspection would include the following items:
- Check valves to make sure they are intact.
 - Manifold cover assembly is in good repair.
 - All sheeting is attached and in good repair.
 - All hoses are in good shape and are attached to their correct hydraulic strut.

3. Attach pump bucket to the inlet valve on the hydraulic shield.



Now is the time to do an operational check of the hydraulic system. With the locking pins in their correct holes in the strut, apply pressure to the system (approximately 1000 psi). If pressure holds, the system is fine. If the system will not hold pressure, the unit cannot be used in the hydraulic mode and must be serviced. The shield may still be used in the static mode. If pressure holds, release the pressure and remove the locking pins. The shield is now ready for use in the trench.

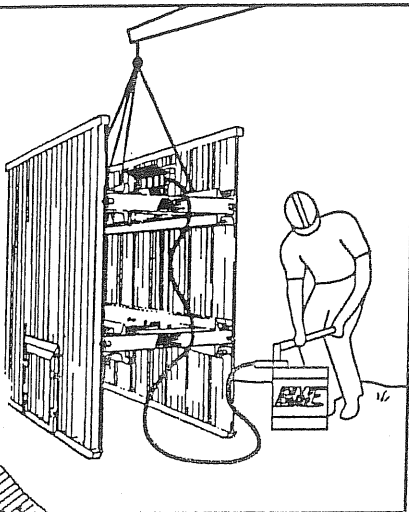
4. Position the shield in the trench where it is to be used and apply pressure to approximately



750 psi. Make sure that the needle on the gauge stays in the green zone on the gauge face. If there is no pressure loss, close inlet valve on the manifold and disconnect the pump bucket hose from the shield. (Note: It may be necessary to open the valve on the pump bucket after closing the inlet valve to disconnect the hose.)

5. Remove lifting sling from the shield.

STATIC SHIELD INSTALLATION



- Complete steps 1-3 of hydraulic shield installation procedure.
- With shield on top of excavation, use pump bucket to open shield to a width that will allow it to be placed in the trench, so that you have no more than a 6-inch gap between the sidewall of the shield and the dirt wall of the trench. Place locking pins in their proper holes.
- Place the shield into the trench.
- Remove the lifting sling.

REMOVAL

- Attach sling to lifting eyes.
- Open center bleed valve on manifold to allow pressure to bleed off. Care should be taken so that the ground does not start to move and collapse around shield.
- Remove shield and store until next time it is needed.

