SKILL BUILDER

RECOMMENDED CONVERSION PROCEDURE

WATER FREE HYDRAULIC FLUID TO HFC WATER GLYCOL

- 1. Make sure that all components, seals, paint etc used in the system are compatible with HFC-water glycol
- 2. Drain the current water free hydraulic fluid completely from system. Hydraulic reservoirs should be drained, end plates removed, and residual fluid and debris squeegeed or vacuumed out of the reservoir. All hoses should be disconnected and drained. If possible, solid piping should be blown out with nitrogen. Accumulators should be de-energized and all fluid drained. All other actuators should be drained as completely as possible
- 3. Inlet strainers, if present, should be cleaned and the mesh size checked. If inlet strainers are used with water glycol fluid, they should be no finer than 60 mesh
- 4. All filters should be changed and filter housings drained of fluid. New filter elements should be installed. Filter elements need to be compatible with alkaline water solutions for operation with water glycol fluid
- 5. The hydraulic reservoir should have all end plates put back in position. Hoses and pipes should be reconnected. The system should be charged with a zinc free hydraulic oil for flushing. When re-charging the system with oil, make sure that the pump inlet is always submerged in fluid. Aerated fluid in the system is difficult to remove and will cause spongy response of components

- Operate system at minimal pressure settings. Bring fluid in system to 32°C 38°C (90°F 100°F). Exercise all components and actuators at least 10 times. If possible, remove oil from the surface of the fluid in the reservoir. Let the system circulate for 1 ½ to 2 hours skimming oil from the surface of the fluid in the reservoir
- 7. Repeat steps 1 through 3
- 8. Drain all fluid from the reservoir and refill the reservoir with fresh water glycol hydraulic fluid. Change all filters. Refill the reservoir with fresh water glycol fluid and put system back into operation. Over the next 7-10 days, periodic skimming of oil from the surface of the reservoir will be necessary. Also, visual examinations of the fluid in the system should be done. If the fluid is too hazy, the reservoir should be drained and recharged

