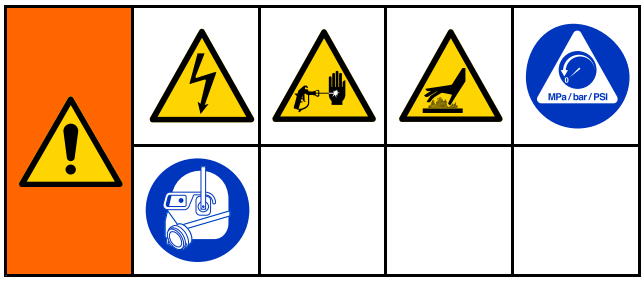
## Hydraulic Drive System




Before performing any troubleshooting procedures:

1. Follow Pressure Relief Procedure, page 48.
2. Turn main power OFF.
3. Allow equipment to cool.

Try the recommended solutions in the order given for each problem, to avoid unnecessary repairs. Also, determine that all circuit breakers, switches, and controls are properly set and wiring is correct before assuming there is a problem.

**Note**

Motor startup is delayed a maximum of 5 seconds from the last time the motor was turned off to reduce the chance of the motor overheating.

| PROBLEM | CAUSE | SOLUTION |
|---|---|---|
| Electric motor will not start or stops during operation. | Loose connections and/or contactor (CT01) is not closing. | Check wiring between the following components:<br>• HCM and contactor CT01<br>• HCM and fuses F11/F12 |
| | Damaged HCM. | Replace HCM. |
| | Loose connections and/or contactor (CT01) is closing. | Check wiring between the following components:<br>• motor junction box and CB12<br>• CB12<br>• contact CT01 and main disconnect switch (or terminal blocks TB06 and TB09) |
| | Circuit breaker tripped. | Reset CB12 within the electrical enclosure after confirming wiring is correct and its insulation is intact. |

| PROBLEM | CAUSE | SOLUTION |
|---|---|---|
| Hydraulic pump does not develop pressure. Low or zero pressure with screeching noise. | Pump is not primed or lost its prime. | Check electric motor rotation. Both motor and hydraulic pump must rotate counterclockwise when viewed from shaft end. If rotation is incorrect, reverse leads L1 and L2. See **Connect Electrical Cord** in Operation manual. |
| | | Check dipstick to ensure that hydraulic reservoir is properly filled (see Operation manual). |
| | | Check that inlet fitting is fully tight, to ensure no air is leaking into the pump inlet. |
| | | To prime pump, run unit at lowest pressure setting and slowly increase pressure. In some cases it may be necessary to remove motor cover and drive belt to allow for manual (counterclockwise) rotation of hydraulic pump. Turn fan pulley by hand. Verify oil flow by removing oil filter to see flow into filter manifold. Reinstall oil filter. Do NOT operate unit without a properly installed oil filter. |
| | Screeching noise is characteristic of cavitation and is normal at initial startup for a maximum of 30 seconds. | If noise continues longer than 30 seconds, press  to shut off the motor. Check that the inlet fittings are tight and that the pump has not lost its prime. |
| | Hydraulic fluid is too hot. | Ensure that the reservoir is properly serviced. Improve ventilation to allow more efficient heat dissipation. |
| | Electric motor operating in wrong direction for 3 Phase system. | Motor must operate counter-clockwise from pully end. |
| | Drive belt loose or broken. | Check drive belt condition. Replace if broken. |