OIL COOLED MOTOR OIL PLUMBING PATH

MARINE CONVERSION FOR OIL COOLED MOTOR APPLICATIONS

Date 4/1/15
DO NOT RUN MOTOR WITHOUT CORRECT OIL LEVEL PRESENT IN THE SYSTEM

Plumb hoses so the oil pumps into the motor at the highest point (threaded access port drive side end bell), and pumps out of the motor at the lowest point (threaded access port non drive side end bell).

Motor Heat Exchanger

Controller Heat Exchanger

Coolant Pump

Coolant Reservoir

OIL FILTER

Oil Cooled Motor

Oil level to dissect rotor shaft

Oil Flow

Water Flow

Coolant Flow

Controller Cooling Plate

Oil Filter

Oil Pump

Motor Heat Exchanger

Oil Flow

Temple Flow

Coolant Flow

Oil type to use with motor:

Full synthetic automatic transmission fluid (ATF); recommendation for DEX/MERC, Mercon LV
NOTE: MOUNT THE OIL PUMP SO THAT IT IS LOCATED BELOW THE OIL LEVEL WITHIN THE MOTOR

FILL MOTOR WITH ATF OIL TO APPROXIMATELY DISSECT ROTOR SHAFT

To Start:
AC-34/35: ¾ gallon of ATF oil.
AC-50/51: 1 gallon of ATF oil.
AC-35X2 Dual: 1 ½ gallon of ATF oil.

Procedure:
1. Disconnect motor leads in junction box ON THE MOTOR from terminal block and carefully bend the three wire leads back.
2. Start adding fluid amount as suggested above to motor through the opening where leads exit motor.
3. Circulate ATF through motor with oil pump so that the oil cooling plumbing is full.
4. With the oil pump running, look into motor through opening and observe oil level. Fill as needed to attain the desired level within the motor (ATF FLUID HALFWAY UP ON THE ROTOR SHAFT).
5. Carefully bend the three leads back down and attach to the terminal block within the junction block. Torque the three fastening nuts to 225 inch pounds.