

Owner's Installation Manual

After-Plane Trim Pump

Part Number: 620-P108

NOTICE TO INSTALLER

After completing installation, these instructions should be placed with the product for future use.

WARNING!

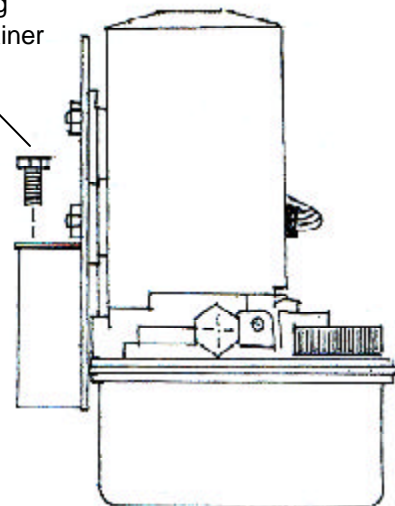
Avoid possible injury during installation. Ventilate the engine compartment. Disconnect battery cables from the battery to avoid sparks or personal injury. Safety glasses should be worn to avoid eye injury.

NOTE: Upper base plate must be installed first before mounting pump(s).

PUMP MOUNTING

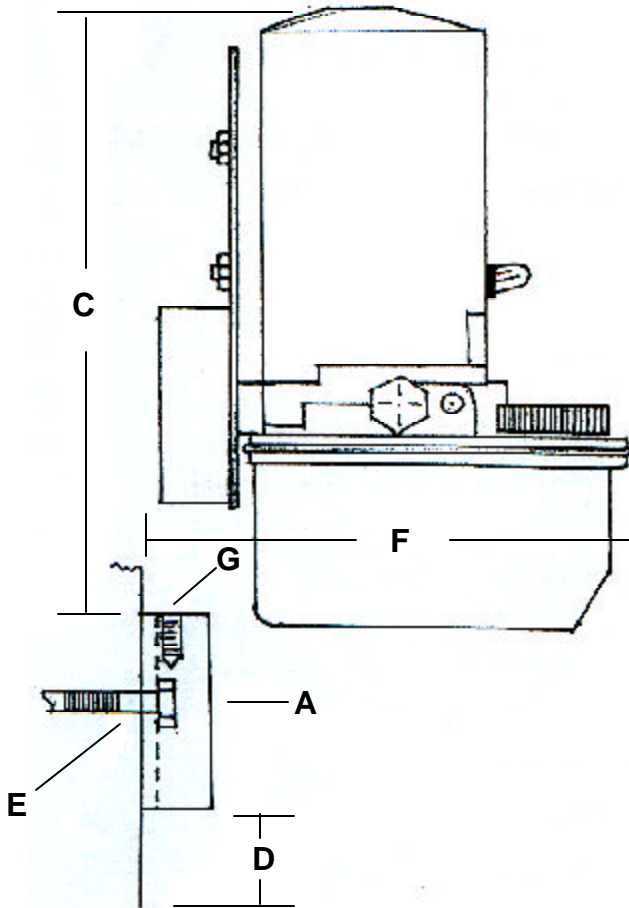
1. Locate a suitable pump mounting position to achieve the following:
 - a. Pump hoses may be routed to the Power-plane trim tab with no sharp bends or contact with sharp or hot objects.
 - b. Allow easy access to pump reservoir filler cap.
 - c. Pump will not be exposed to water.
 - d. Pump battery leads must reach the battery.
 - e. Pump must be mounted vertically and level in all directions.
2. Remove the bolt that secures the mounting bracket halves.

A. Mounting bracket retainer bolt.



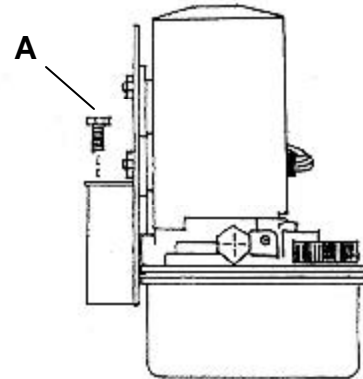
3. Using the bulkhead half of the mounting bracket as a template, mark two mounting holes and secure with appropriate fasteners (not supplied). Allow enough clearance above and below the pump so that the pump may be installed into the mounting bracket.

NOTE: Pump mounting bracket must be installed with the threaded hole on top.



- A. Pump bracket (bulkhead)
- B. Threaded hole
- C. 9" minimum clearance
- D. 3" minimum clearance
- E. Fastener (not supplied)
- F. 8" minimum clearance

4. Slide the pump into the bulkhead bracket and fasten securely with the stainless steel bolt supplied. Tighten to a torque of 8-10 ft. lbs.



A. Stainless bolt (torque 8-10 ft lbs.)

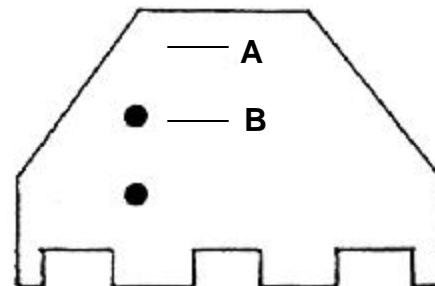
HOSE CONNECTION

CAUTION!

Do not cross-thread or overtighten the hose fittings.

NOTE: Hydraulic hose fittings must be free from dirt and lint to avoid contamination of the hydraulic system.

1. From inside the boat, connect the low pressure hydraulic hoses to the upper After-Plane fittings and the high pressure hydraulic hoses to the lower After-Plane fittings which extend through the transom.



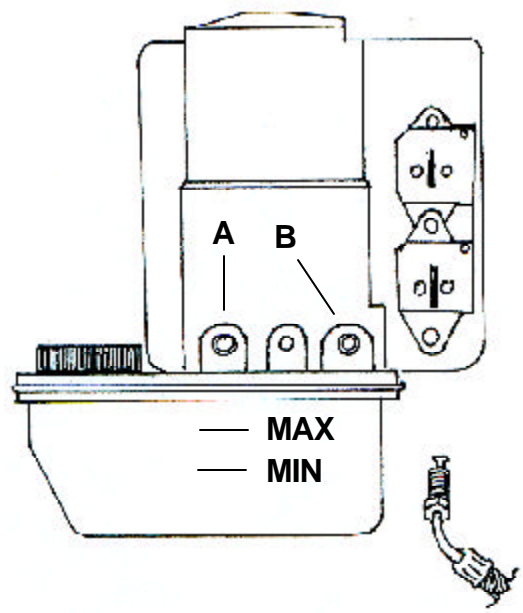
UPPER AFTER-PLANE BASE

- a. Low pressure fitting (upper)
- b. High pressure fitting (lower)

IMPORTANT: Tighten all hose fittings securely.

2. Connect hoses to pump. When facing pump the high pressure port is on the left side marked "DN" for down, the low pressure port is on the right marked "UP" for up.

CAUTION!
DO NOT cross-thread or overtighten hose fittings.

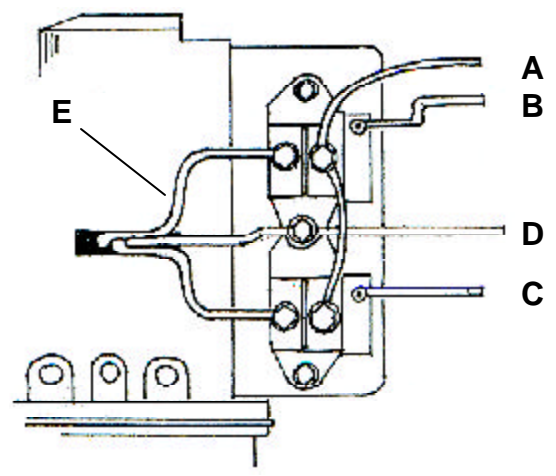


A. High pressure port
B. Low pressure port

ELECTRICAL WIRING

1. Attach optional wiring harness (not supplied) to the After-Plane switches (not supplied). Label harnesses as to port or starboard After-Plane and route to the pump.
2. Attach the harness to the pump following the wiring diagram.

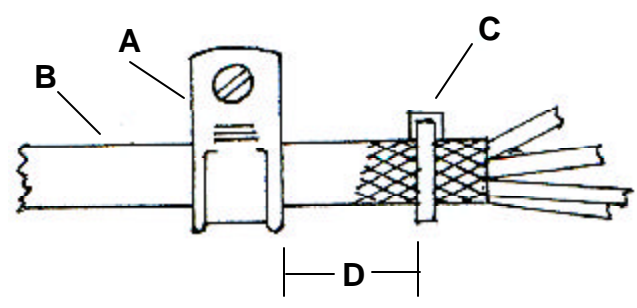
CAUTION!
All wiring must meet U.S. Coast Guard Standards.



A. 10 ga. red wire to positive battery terminal. Fuse required in this line per USCG standard.
B. Low pressure (blue wire) UP.
C. High pressure (green wire) DOWN.
D. 10 ga. black wire to negative battery terminal.
E. Pump

CAUTION!
Avoid damage to the trim pump. DO NOT electrically operate the pump without having the hoses connected and fluid in the reservoir!

4. Securely fasten the wiring harness to boat structure as close to the pump as possible. Clip should be located within 1" of the strap at the pump end of the harness.



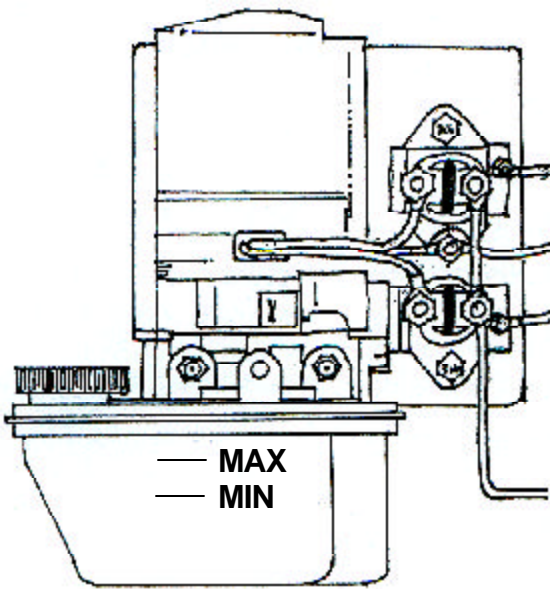
A. Clip
B. Wiring Harness
C. Tie Strap
D. 1" approximate

FILLING THE HYDRAULIC SYSTEM

NOTE: Pumps, hoses and After-Plane cylinders are shipped from the factory with no oil in them. Do Not Run the system until oil is added to the reservoir.

IMPORTANT: Red shipping caps must be removed and discarded. Operating pump with shipping caps

1. With After-Plane cylinder fully retracted (Plates Up), remove the yellow filler cap from the pump. Discard the red shipping cap.
2. Fill the reservoir to the "MAX" mark on the side of the reservoir with power steering fluid or SAE 10W30 motor oil.

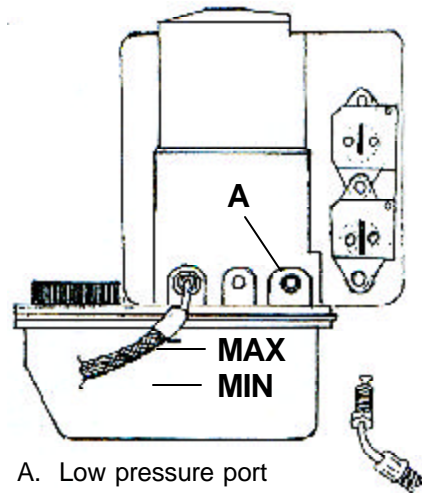


3. Cycle unit several times to purge air from system.
4. With cylinders fully retracted (plates up) recheck the fluid level and refill as required. DO NOT overfill. Repeat steps 1 and 2 as necessary.

AIR BLEEDING THE AFTER-PLANE SYSTEM

NOTE: If the After-Plane System fails to purge itself of air by lowering and raising the After-Plane several times, the following procedure may be used.

1. With the After-Plane in the max up position, remove the filler cap and fill the reservoir with power steering fluid or SAE 10W30 motor oil.
2. Disconnect the hose from the low pressure port of the trim pump and plug the port using a fitting (PE 9099).



A. Low pressure port

3. Direct open end of hose to a suitable container to catch any excess fluid.
4. Run pump to lower After-Plane halfway down.
5. Refill reservoir and continue to run pump to lower After-Plane to the max down position.
6. Remove plug from low pressure port of pump and reconnect the hose. Tighten securely.
7. Run pump to fully raise Power Plane, check oil level in pump reservoir and fill as needed.
8. Cycle Power Plane 4 or 5 times more and recheck the oil level. Fill as needed.