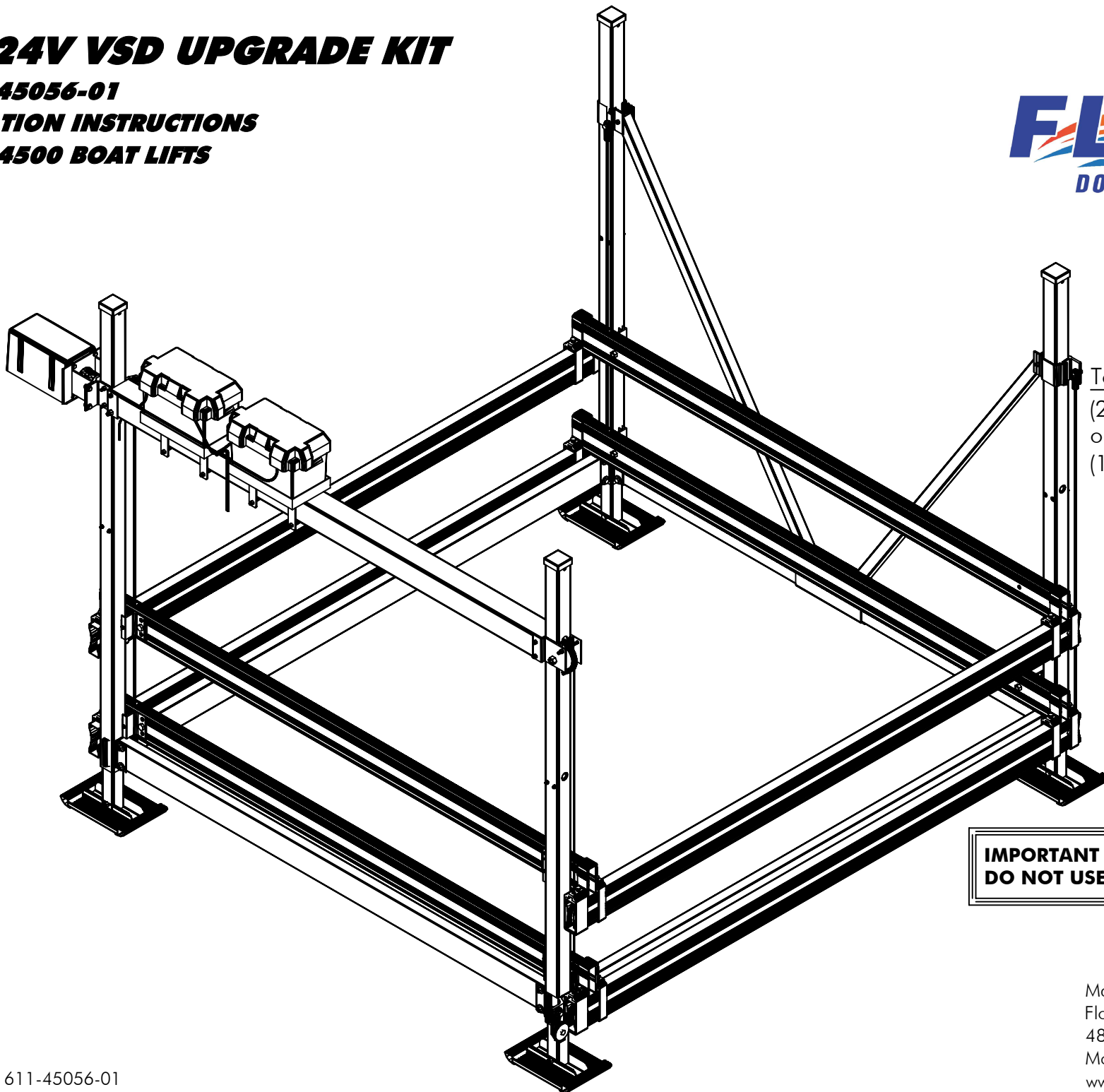


FLOE 24V VSD UPGRADE KIT

P/N 511-45056-01

INSTALLATION INSTRUCTIONS

FOR VSD 4500 BOAT LIFTS

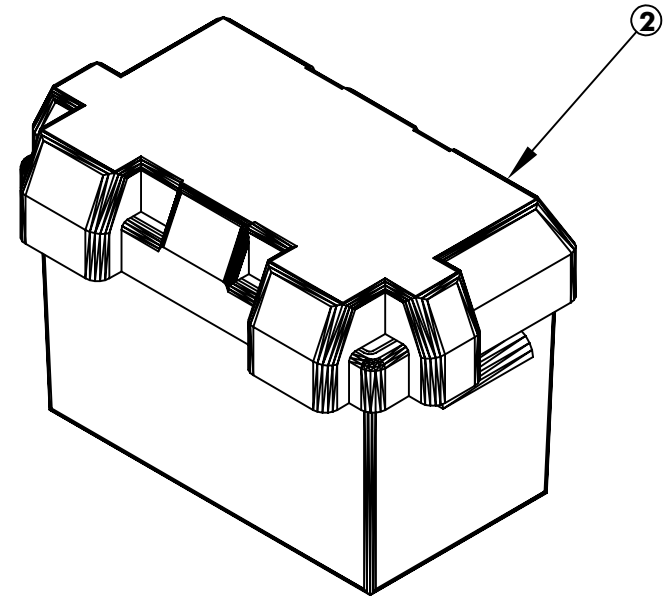
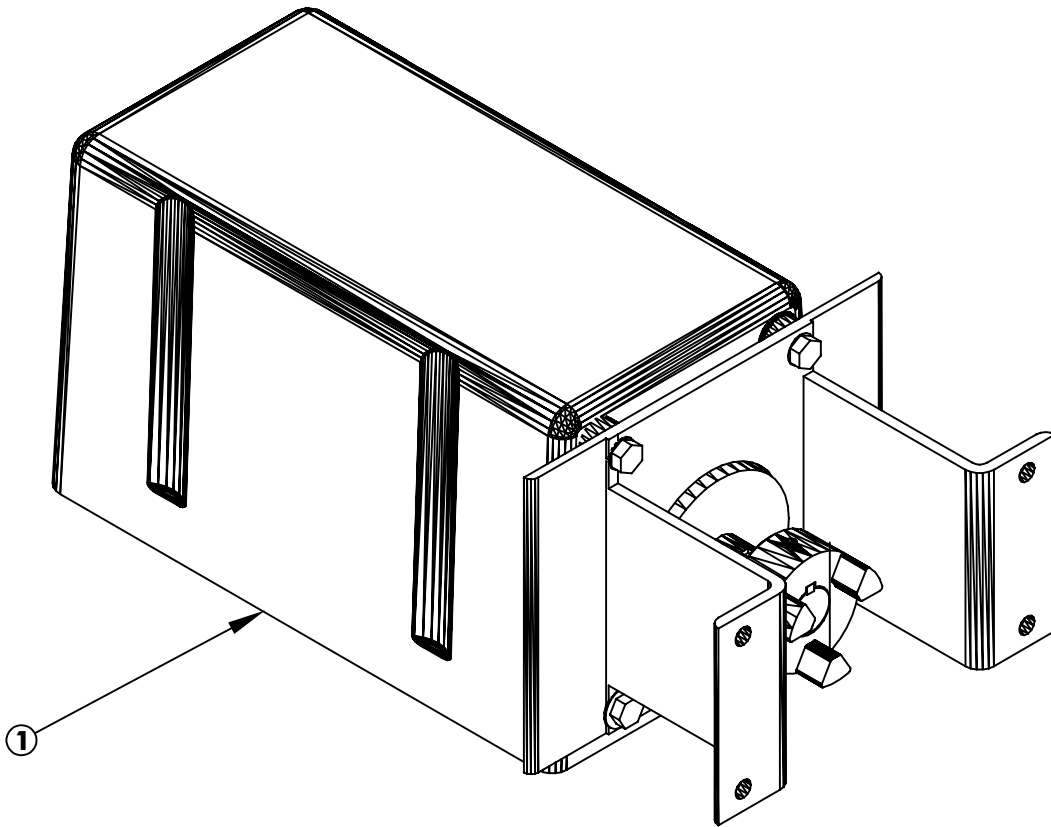


Tools Required

- (2) $\frac{9}{16}$ " Sockets or Wrenches
- (1) Torque Wrench

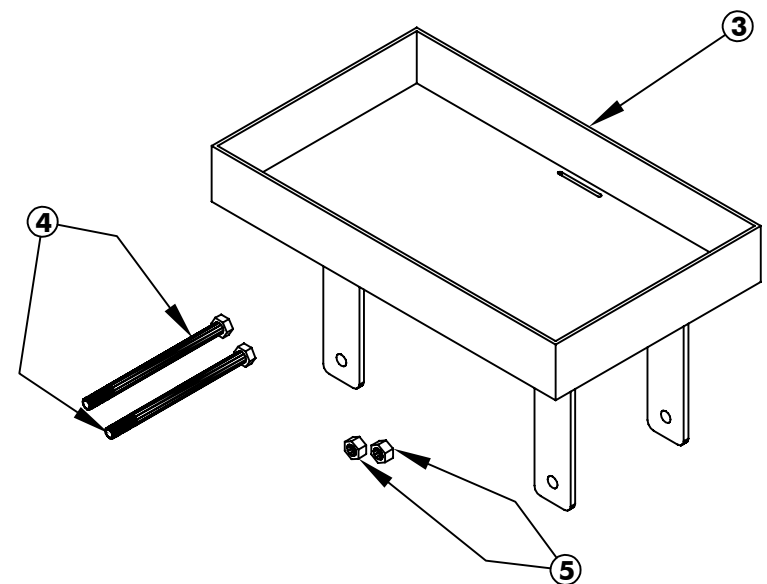
**IMPORTANT NOTE:
DO NOT USE IMPACT WRENCH**

Manufactured by:
Floe International Inc.
48473 State Hwy. 65
McGregor MN. 55760
www.floeintl.com



Parts List:

- 1, P/N 511-45019-01 Qty (1) 24 Volt VSD Drive Unit
- 2, P/N 002-03106-00 Qty (1) Battery Box
- 3, P/N 111-00014-00 Qty (1) Battery Tray
- 4, P/N 001-70124-00 Qty (2) $\frac{3}{8}$ " x $5\frac{1}{2}$ " Bolts
- 5, P/N 001-76071-00 Qty (2) Alum. Nylock Nuts



⚠ DANGER

Before removing the VSD power unit, remove the boat and completely lower the main cradle lift beams until there is slack in the lifting cable. Failure to do so will cause the lift cradle to suddenly fall downward, resulting in potential serious bodily injury or possible death.

Step 1: Remove the boat from the lift, lower the lifting frame until it will not lower further, and the lifting cables become slack. **Warning** failure to follow this step will result in property damage, bodily injury, or possible death.

Step 2: Disconnect power leads from the battery terminals. Unplug the wired remote, limit switch, and the radio remote from the existing drive unit.

Step 3: Support the drive unit while removing the (4) nuts from the bolts as shown in fig 1a. While holding the drive up remove the bolts and separate the unit from the lift frame. Note: Do not discard the bolts, nuts, washers, and Hytrel spider. You will need them to attach the new VSD Drive Train.

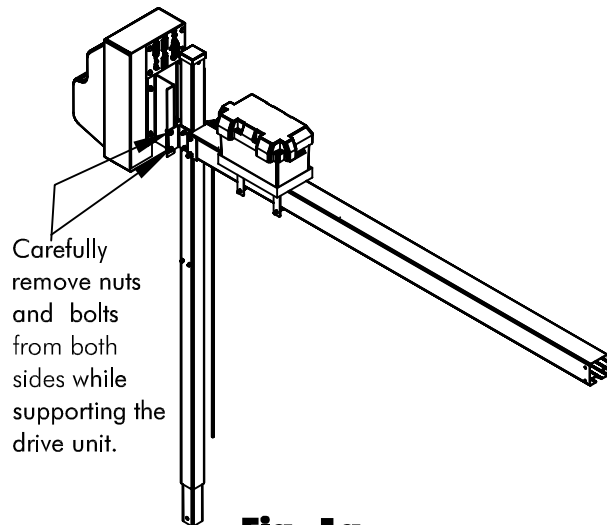


Fig. 1a

Step 4: Align the Love joy of the new drive unit with the Love joy of the ball screw making sure that the saved Hytrel spider is positioned between the two mating couplers. Fasten the drive unit with the saved nuts, bolts, and washers. Torque the bolts to 30 ft lb.. As shown in fig 1b.

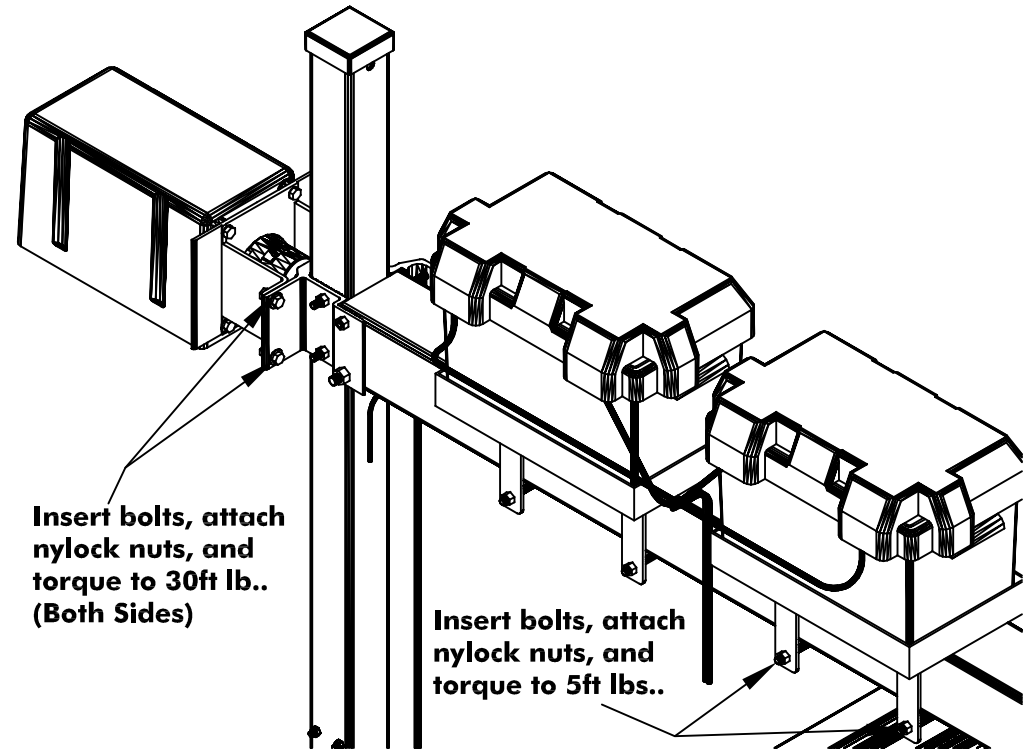


Fig. 1b

Step 5: Position the additional battery tray on the ball screw tube as shown in fig 1b. and insert the two $\frac{3}{8}$ " X $5\frac{1}{2}$ " bolts and torque to 5 ft lb..

Step 6: Set the battery box bottom into the battery tray, insert a battery and hook up the power wires as shown on the diagram on sheet 4. Place the cover on the box and fasten down with the included strap. Plug in the wired remote and limit switch in the provided sockets on the under side of the unit. If you have the wireless remote from the Grey Box style drive unit P/N (511-45002-00), don't plug it into the socket. This remote will not work with any other Floe Product.

VSD Drive Train Upgrade Kit

24 Volt Battery Connection Diagram

1. Connect the red wire from the drive train to the positive post of one battery. Connect the black wire from the drive train to the negative post of the other battery.
2. Connect the 36" white battery interconnect wire to the negative post of the first battery and the positive post of the other battery. See diagram below. Place the covers on the battery boxes and strap it through the slots on the battery tray.

