

TORO®

MODEL NO. 44-0400

**INSTALLATION
INSTRUCTIONS****COLD START KIT**

FOR SERIES 6 DIESEL & HTM TRACTORS

Since this instruction sheet covers only a minimal amount of information necessary to install the unit on your machine, we suggest that you keep this material with your Operator's Manual so that both may be referred to for installation or parts replacement procedures.

**DANGER**

Do not smoke when installing Cold Start System. Work in a well ventilated area away from heat, open flames, or sparks. Wear goggles to avoid eye injury. Make sure openings in the valve, tube, or nozzle are pointing away from yourself while testing.

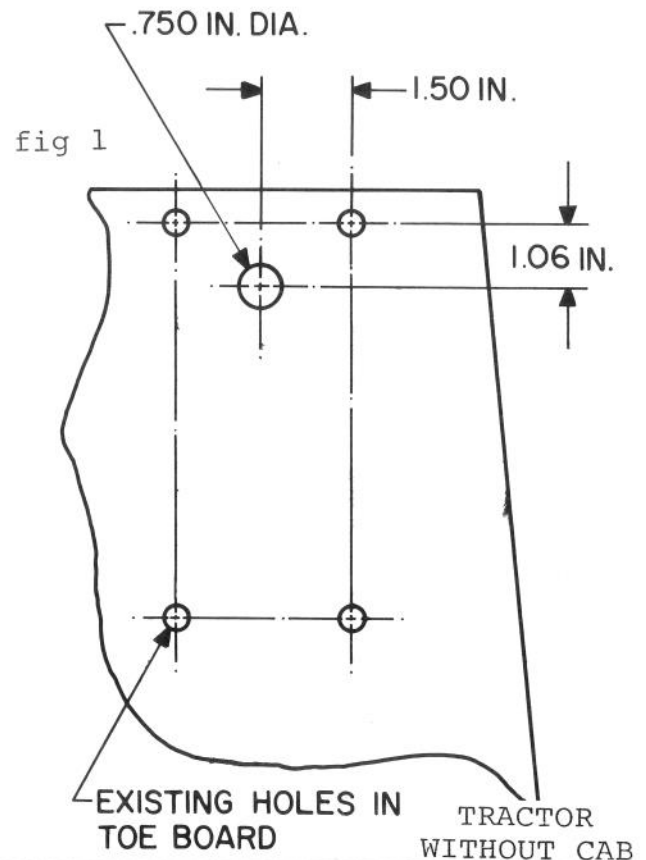
Starting fluid contains ethyl ether and is extremely flammable and toxic. It can be harmful or fatal if swallowed. Avoid contact with eyes or skin. Avoid breathing fumes.

If swallowed, DO NOT INDUCE VOMITING. Call a physician immediately. If fluid or fumes enter the eyes, flush with large quantities of clean water for 15 minutes. Call a physician, preferably an eye specialist, immediately.

Starting fluid Cylinder contents are under pressure. Do not incinerate, puncture, or attempt to remove cores from Cylinder.

INSTALL MOUNTING PLATE - TRACTOR WITHOUT CAB

1. Using dimensions in fig 1, drill a 3/4" hole. NOTE: Mounting Plate may be used as a template.



2. Position Mounting Plate as shown (fig 2) and bolt in place using three Capscrews, Washers, and Locknuts. Insert Grommet into Mounting Plate.
3. Secure Valve Assembly to Mounting Plate with two Capscrews, Spacers, and Locknuts.
4. Connect Valve Ground Wire to Mounting Plate using one Capscrew, Lockwasher, Washer, and Locknut.

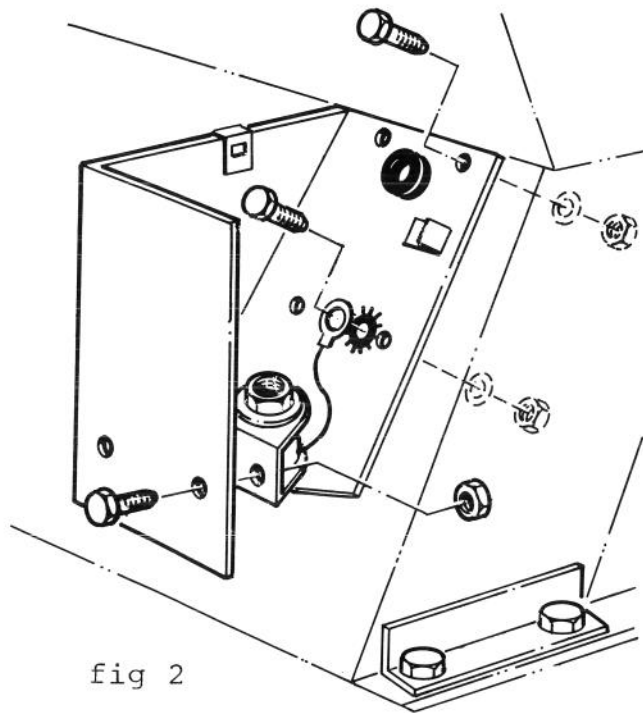


fig 2

TRACTOR WITHOUT CAB

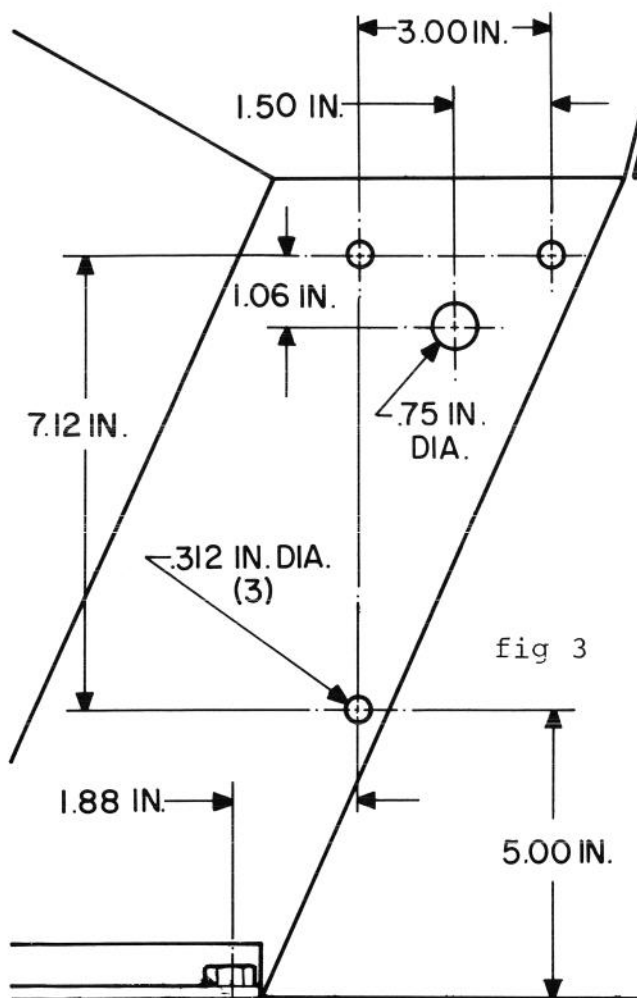


fig 3

TRACTOR WITH CAB

INSTALL MOUNTING PLATE -TRACTOR WITH CAB



DANGER

DO NOT MOUNT INSIDE CAB

1. Using dimensions in fig 3, drill a 3/4" hole and three 5/16" holes in Right Side Plate.
NOTE: Mounting Plate may be used as template.

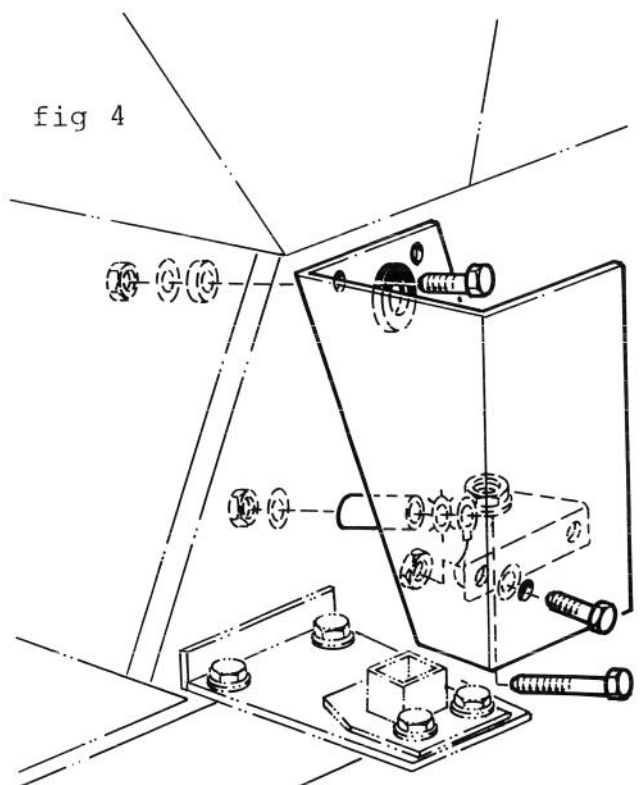
2. Install Grommets in Side Plate and Mounting Plate.

3. Open Hood and position Mounting Plate as shown (fig 4). Secure in place with two Capscrews, Top Spacers, Plain Washers, and Locknuts.

4. Fasten Valve Assembly to Mounting Plate with two Capscrews, Spacers, and Locknuts.

5. Connect Valve Ground Wire to Mounting Plate (fig 4) with one Capscrew, Lockwasher, Bottom Spacer, Plain Washer, and Locknut.

fig 4



TRACTOR WITH CAB

INSTALL CANISTER

1. Push Band thru slots in Mounting Plate.
2. Screw Canister into Valve Assembly finger tight.
3. Screw Fitting Assembly into bottom of Valve Assembly (NOTE: left hand threads) until finger tight. Tighten approximately 2-to-3 turns past finger tight to desired orientation.
4. Connect the Tubing to the Fitting Assembly. Keep the Tubing fully seated while tightening the nut approximately 1-1/2 turns past finger tight.

PRETEST UNIT

1. Hang Tubing over side of Tractor into an appropriate container on the floor.
2. Disconnect the positive Battery Cable. Using a jumper wire, connect the lead from the Valve Assembly to the Solenoid terminal "S". Be sure of good connections without possibility of spark.
3. Reconnect Battery and activate starter for a brief time. Starting fluid should spray from Valve only while the starter turns. If the Unit is not working, check the KBI manual included with the kit for further instructions.

ELECTRICAL WIRING

1. Disconnect Battery and remove test jumper wire. Bolt Engine Temperature Switch to engine block under the Battery Ground Strap connection.
2. Connect Valve Assembly electrical wire to Engine Temperature Switch using the two Butt Connectors and Jumper Wire.
3. Connect remaining electrical wire on Engine Temperature Switch to Solenoid Terminal "S" (fig 6).

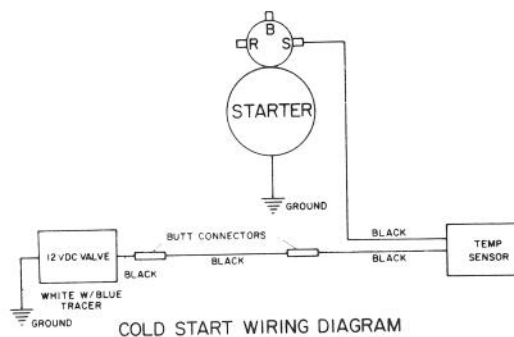
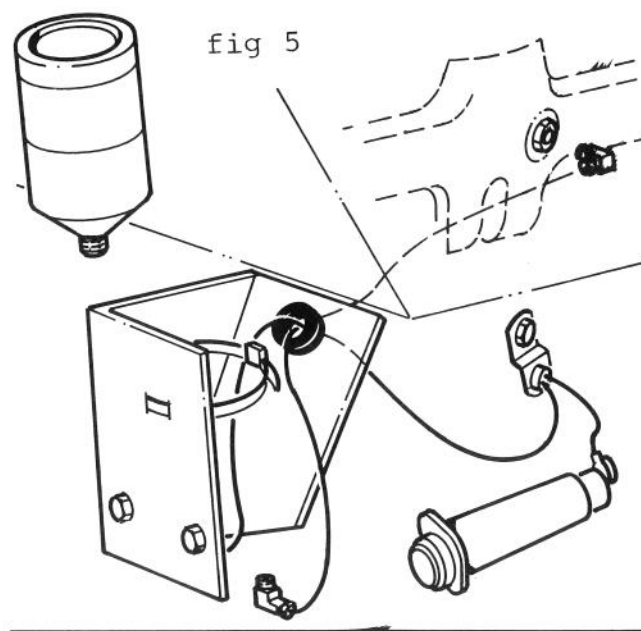
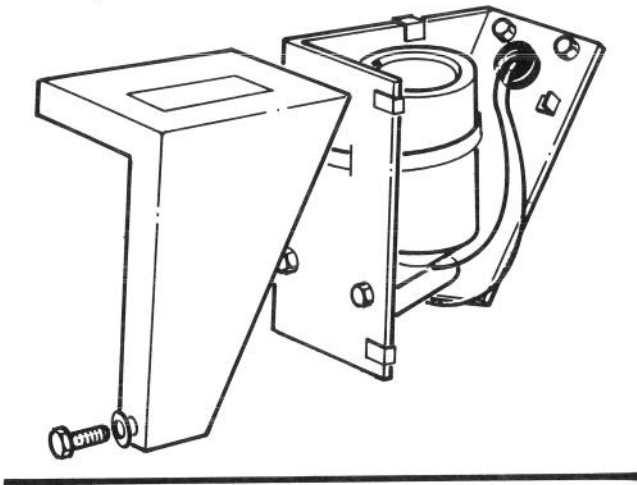


fig 6

INSTALL ATOMIZER NOZZLE

1. Remove Solid Plug from Intake Manifold and install Plug supplied with kit (fig. 5).
2. Screw Atomizer Nozzle into Plug 2 to 3 turns past finger tight. Orient fitting upward to provide clearance between Engine Manifold and tubing.
3. Connect Tubing to Nozzle keeping Tubing fully seated while turning nut approximately 1½ turns past finger tight.
4. Inspect Unit for leaks visually.

fig 7



INSTALL COVER

1. Inspect Assembly to ensure wires and Tubing are well away from Exhaust Manifold or any sharp edges, and that all fasteners are tight.
2. Place Decal on Cover as shown (fig 7).
3. Position Tinnerman Nuts on Mounting Plate (fig 7).
4. Fasten Cover in place using four Capscrews and Washers (fig 7).

NOTE: This system will operate only when ambient and engine temperatures are below 40 F. Precautions must be taken to keep components clean during installation.

Refer to KBI form (130 533 10/80) included with kit for operation and servicing instructions.