

# Fuel Oil and Propane Tank Anchor Kits

Areas near the coast line or low lying river basins are areas that can be prone to a tidal surge or rising water levels. Unanchored tanks can easily be moved by flood waters and high winds and present serious problems for possible contamination or explosion when ruptured.

Local codes in some areas now state that it is unlawful to fill or refill any tank that is not anchored or elevated above base flood elevation.

Anchoring equipment for heating oil and propane gas tanks are the same as those used to anchor manufactured homes. Listed below are the anchoring kits and instructions for application.

## 59603 Tank Anchoring Kit Contains:

- Four Steel double headed ground anchors, 48" x 3/4" shaft with a 6" helix with galvanized finish.

## 59626 Concrete Anchoring Kit Contains:

- Four Steel double headed concrete anchors, 3" x 5/8" concrete wedge anchors with galvanized finish.

## Both Kits also contain:

- 4 – Slotted strapping bolts w/nut
- 15 ft. – 1-1/2" vinyl sheathing to prevent damage from contact between tank and strap
- 37ft. – 1-1/4" x .035 G-120 Galvanized strap, grade 1, class B, Minimum breaking strength of 4,725 lbs. ANSI A225.1 ASTM 3593-97

## Anchoring Installations:

**Ground** – Anchors can be installed using an Electric Drive Machine or by manually using a bar or length of pipe.

**Caution:** Call your local "Call before you dig" number and have the area marked before you start. Anchors can be installed with a slight back angle depending on the positioning of the tank and strap angles.

**For Manual installation,** dig holes to half length of the anchor then manually twist in with bar. When anchor is installed to full depth flush with ground, replace the soil and pack dirt every 6" till full. For Drive Machine installation, place anchor head into drive adapter and line up the anchor shaft with the anchor tip in the location where anchor is to be buried. Drive anchor to the full depth so head is flush with the ground. Now repeat for each anchor. Care should be taken when using drive machines, it is recommended that they are operated by 2 people.

**Concrete** – Before starting with a concrete anchor installation, first check to see that there is enough of a concrete slab to allow for the specified tension per anchor without lifting. Concrete must be 2500 PSI minimum with a 4" minimum thickness. To achieve 4725 lbs. of holding power per anchor, use the assumption that concrete weighs 150 lbs. per cu. Ft. the minimum slab area for a 4" slab would be 95 SQ' per anchor, 6" slab - 65 SQ', 8" slab - 48 SQ'.

This anchor is designed to be bolted to and expansion sleeve in an existing concrete slab,( if pouring new concrete a J anchor could be used.) Once you are sure of your concrete size, drill a 5/8" x 3" hole in the concrete where the anchor head is to be located. Place expansion sleeve over the bolt and place into the drilled hole and place washer and nut on top of bolt. The bolt should only have about 1" of thread showing above the surface. If the bolt did not go down into the hole far enough you can tap the top of the bolt lightly to finish going in. Tighten the nut onto the bolt until maximum expansion of sleeve has been achieved. Remove nut and washer and place anchor head over bolt and replace washer and nut and tighten on bolt. Now repeat for each anchor.

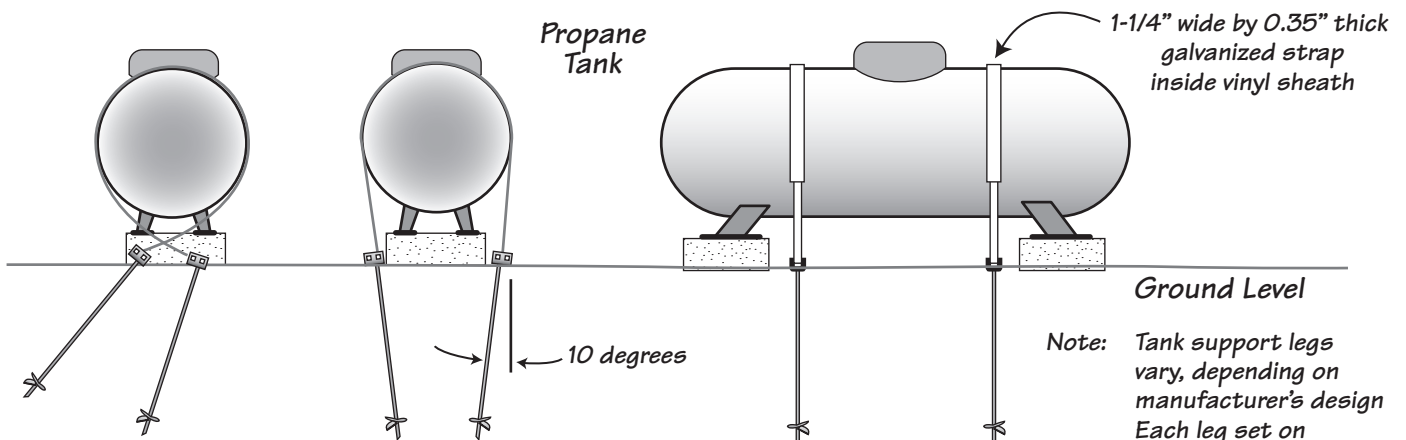
## Attaching Straps to Anchors:

Attach strap to anchor by sliding into the slotted bolt in anchor and tightening 4 to 5 turns with a socket wrench, then use the nut to tighten and pull the square shoulder of the bolt into the anchor head. Now insert strap into the vinyl sheath and lay sheath over the top of the tank and pull remaining strap down to the anchor head on the opposite side. Cut the strap approximately 12" past the head of the anchor, this will leave enough strap to wrap 4 to 5 turns onto the bolt. Tighten strap and lock bolt into shoulder of the anchor. Now repeat for the next anchor.

Instructions #08198 (D1321 - Rev. 8/15/19)

# Anchoring Propane Tanks

Flood Level



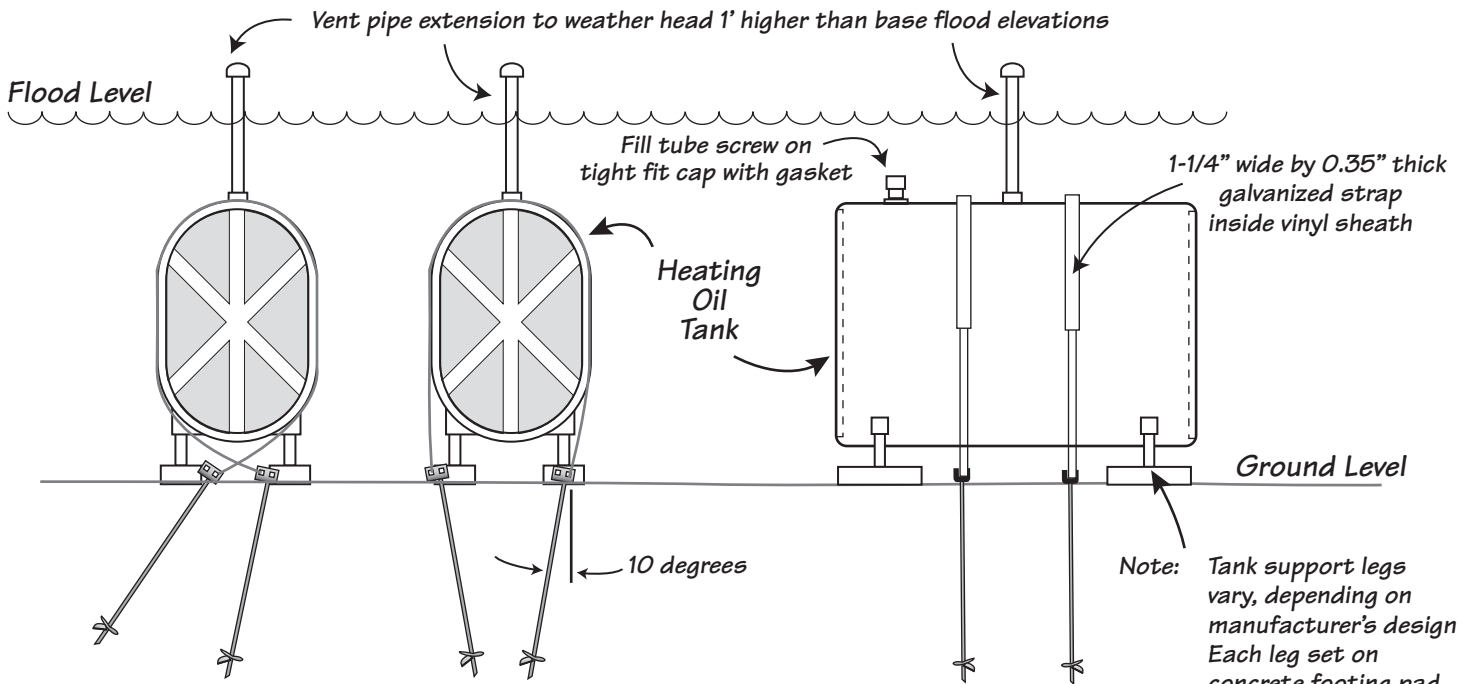
Ground Level

Note: Tank support legs vary, depending on manufacturer's design  
Each leg set on concrete footing pad

Galvanized 48" long by 3/4" dia. double head ground anchor with 6" single helix  
Concrete anchors would go into the tank leg footing or slab

Note: Check with utility companies for locations of underground lines. Verify locations of underground lawn sprinkler lines, septic tanks, and drain lines before augering in ground anchors.

# Anchoring Fuel Oil Tanks



Ground Level

Note: Tank support legs vary, depending on manufacturer's design  
Each leg set on concrete footing pad

Galvanized 48" long by 3/4" dia. double head ground anchor with 6" single helix  
Concrete anchors would go into the tank leg footing or slab

Note: Check with utility companies for locations of underground lines. Verify locations of underground lawn sprinkler lines, septic tanks, and drain lines before augering in ground anchors.