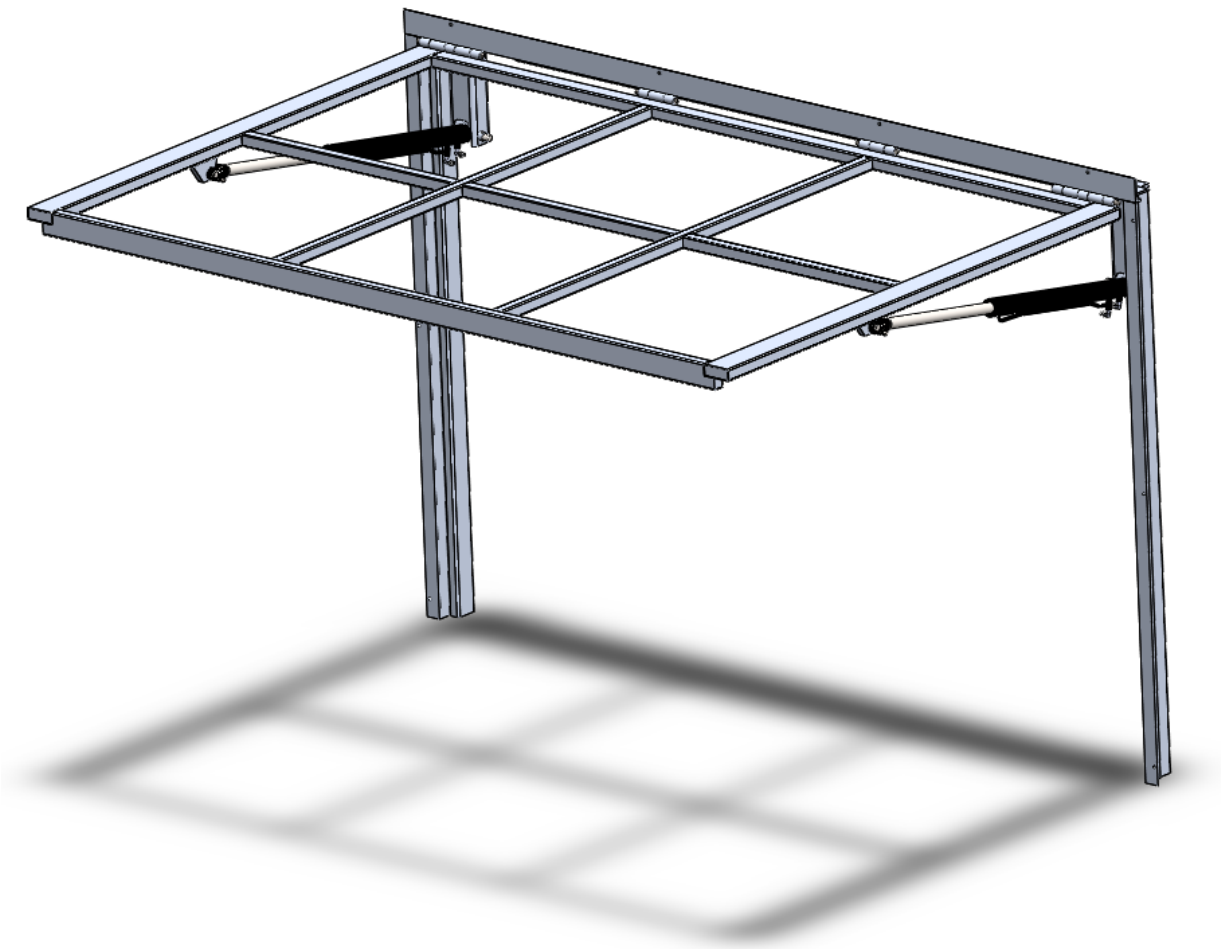


INSTALLATION MANUAL

- SINGLE-SWING HYDRAULIC SYSTEM**
- STANDARD POWER UNIT**



For additional information, please review our installation video:

https://youtu.be/BdnS8M6_oto

Assembly/Alignment Reference Guide (Numbering Placement)

DOOR NUMBERING: 1 2 3 4 5 6 7 8 9



TOP OF LEGS



TOP OF HEADER ANGLE



HOSE TRAY



TOP OF DOOR PANEL

Notes:

- Applies only to projects with multiple door/window systems.

Notes:

- *There are multiple ways in which to install the operable system and frame into your R.O. This manual will demonstrate "typical" steps.*
- *All lifting and rigging equipment should be protected with foam or other material to prevent scratching of powder-coat finish.*

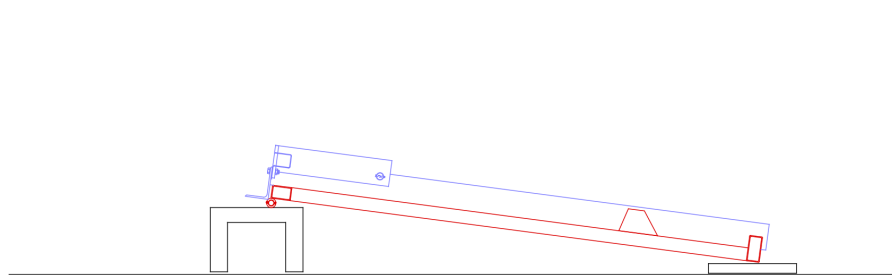


FIG. 1

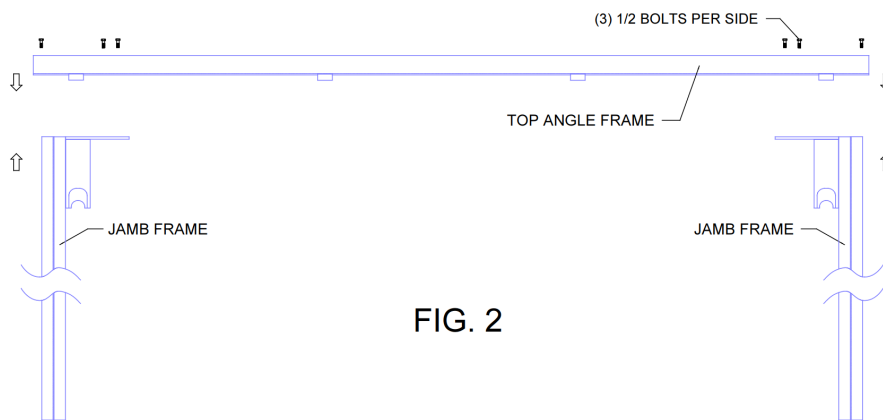


FIG. 2

Step 1:

Lay out the door panel—"interior" or cylinder bracket side, face up—with bottom of door system toward the rough opening (see fig. 1); This is most easily accomplished on stands or blocks. Attach the top mounting angle frame to the door panel using the supplied hinge pins. Line up each side/jamb frame with the top angle frame and bolt together using the (3) supplied bolts, per side (see fig. 2).

Notes:

- *See assembly/alignment reference guide prior to proceeding to step 1.*
- *Depending on R.O. dimensions, door may arrive fully assembled.*
- *!! Grease (or anti-seize) all hinge pins not previously installed at factory !!*

Notes:

- *All lifting and rigging equipment should be protected with foam or other material to prevent scratching of powder-coat finish.*
- *Do not yet install hydraulic cylinders.*

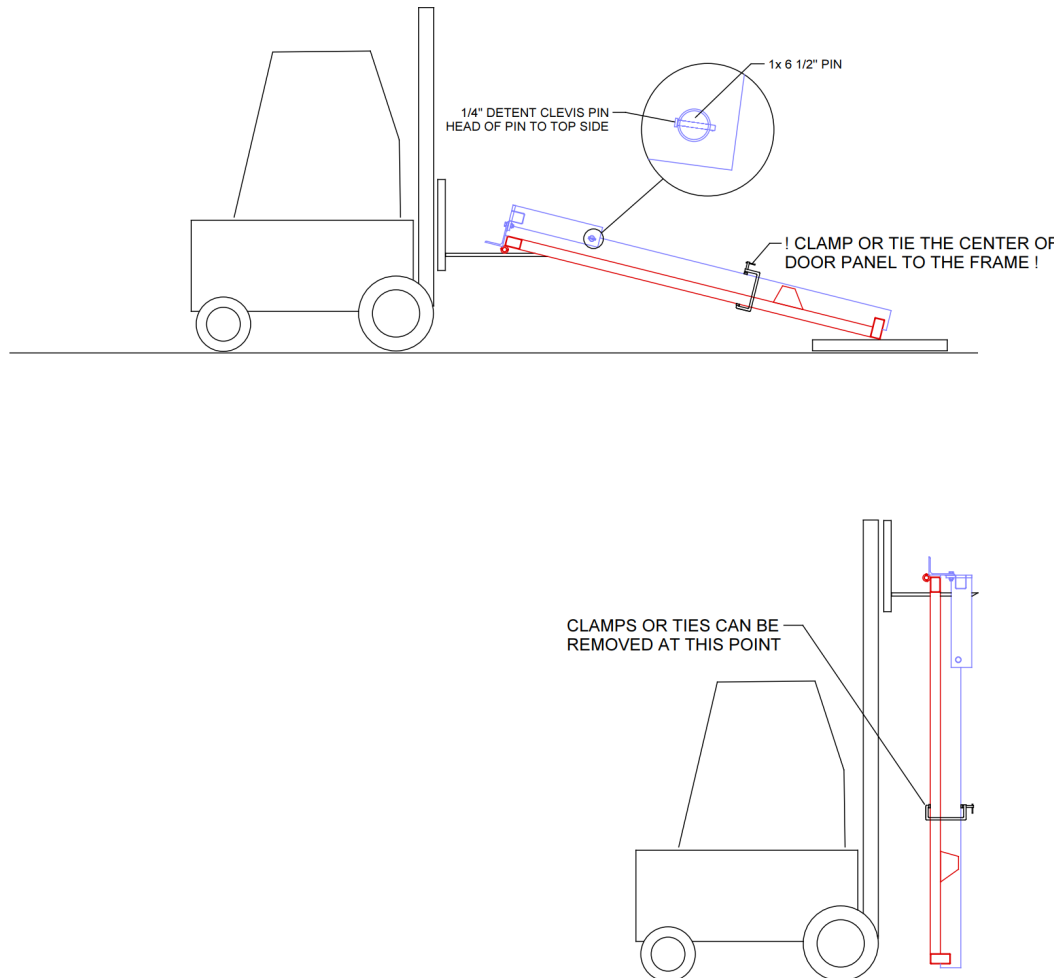


Fig. 3

Step 2:

The door panel must be clamped or tied to the side/jamb frames when lifting, as shown above (see fig. 3). Carefully lift the door up and into the rough opening. Clamps or ties may be removed once the door system is hanging vertically, and is close to the opening. Side/Jamb frames should rest on the finished floor/slab.

Step 3:

Center the top frame angle in the opening. The side frames will now be ready to “plumb,” and the entire frame is now ready to be attached to the building structural surround.

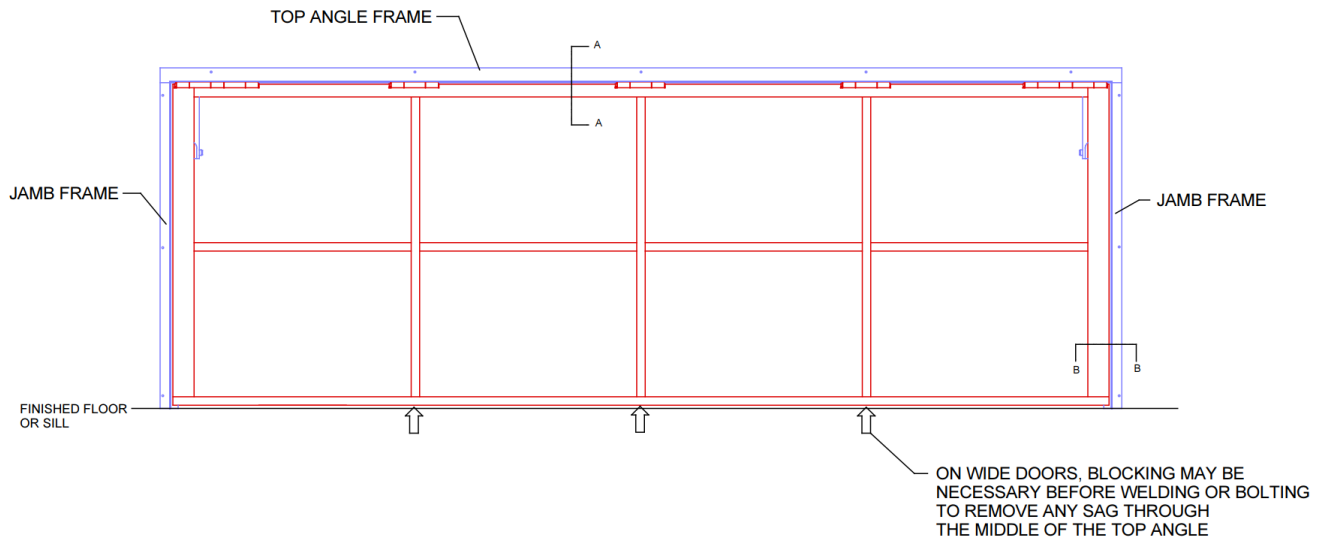


Fig. 4

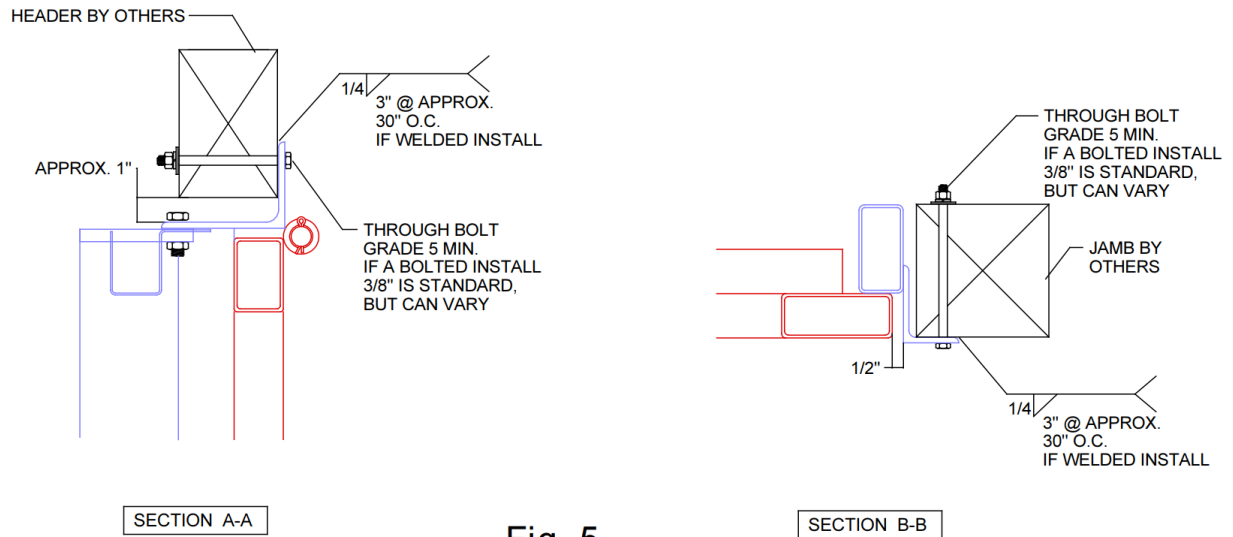


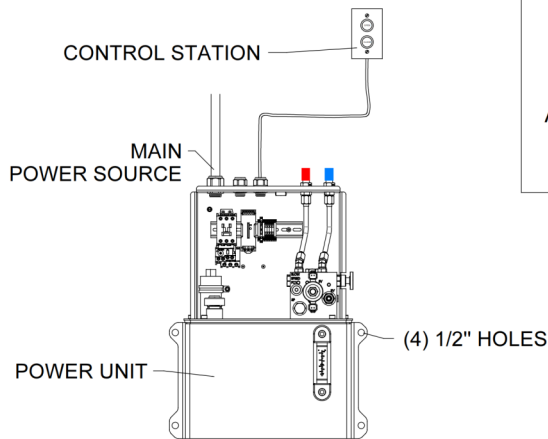
Fig. 5

Step 4:

Before permanently attaching to structure, sight down the top of the top mounting angle and block up the center of the door if any sag is present (see fig. 4).

Step 5:

Attach the system frame to surrounding structure (see fig. 5).



HYDRAULIC FLUID : If door is to be used rarely in temps below 30 deg. F.
ISO 32 or 10W

ATF MERCON/ DEXRON III : If door is to be used regularly in temps below 30 deg. F.

Fig. 6

Step 6:

Mount power unit and control switch at their pre-determined locations. Using a qualified electrician, connect the main incoming power source to the power unit (see proper electrical schematic at end of installation manual). Fill reservoir with suggested fluid (see relevant notes, above).

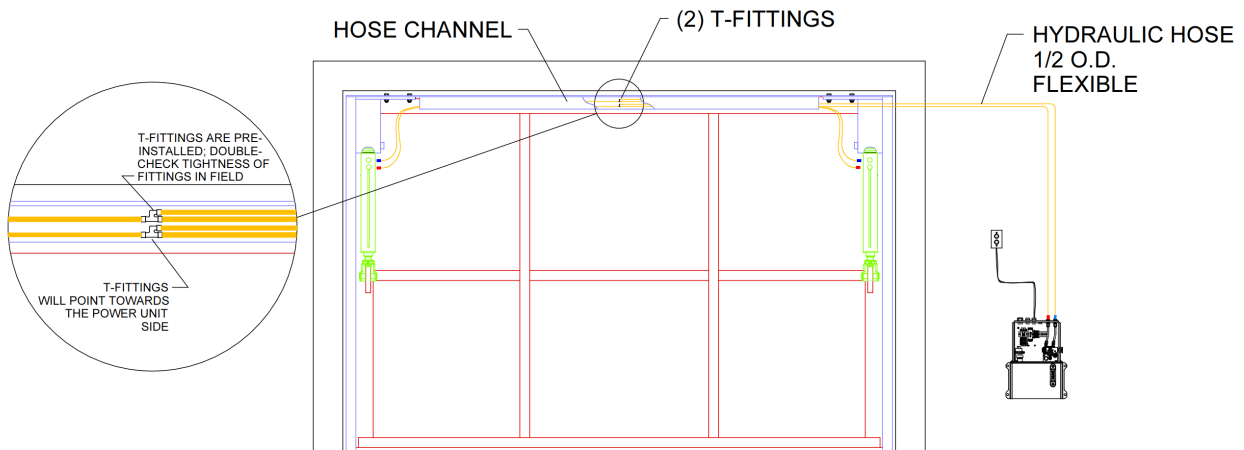


Fig. 7

Step 7:

Run the hydraulic hoses, as per fig. 7. Lay the hoses in the hose channel with the T-fittings pointed in the appropriate direction. **Do not, yet, hook up hoses to cylinders; See pg. 7 for purging/hook-up instructions.**

Step 8:

Install the hydraulic cylinders, attaching only the top ends to the upper brackets at this time; Leave the lower ends hanging loose, temporarily. The upper cylinder pins will already be in place.

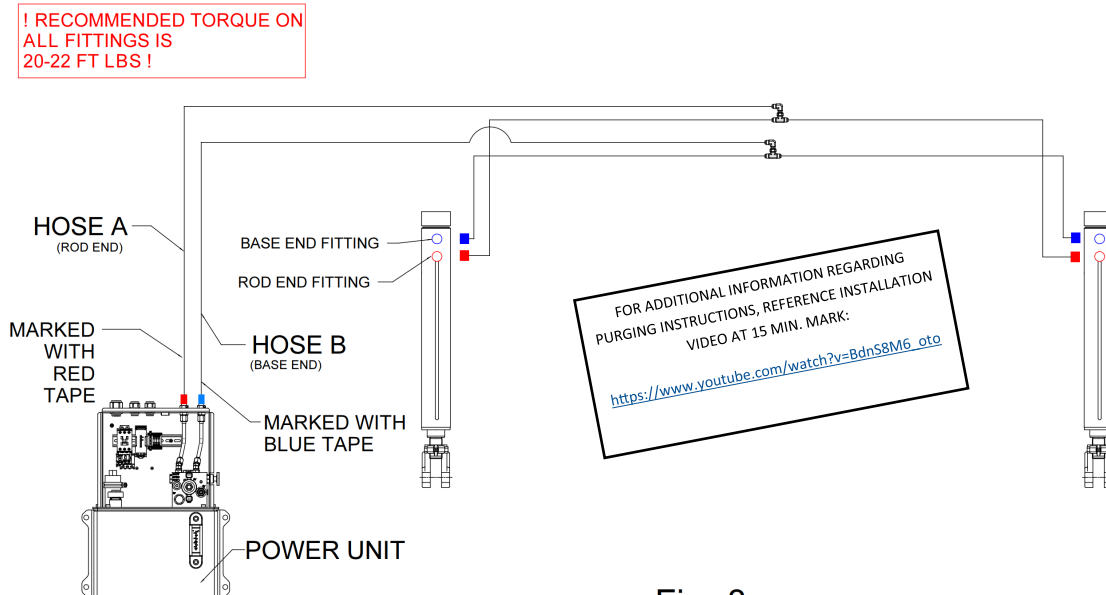


Fig. 8

Step 9:

All connections are fitted; There is no need for Teflon tape or other sealants. Secure hoses to power unit, as per fig. 8. Secure the opposite (or cylinder) end “blue” hoses in a clean container to capture overflow during the purge process. Run the power unit in the open mode until the air is out of the “blue” hoses. Attach the “blue” hoses to the “blue” base end fittings. Attach the “red” hoses to the “red” end fittings (“red” hoses will be purged later). Refill the reservoir.

Step 10:

Using the open mode, fully extend the cylinders, making certain to hold outward the loose end, to ensure they do not hit the door panel while extending.

Note:

- It may be necessary to add fluid in small increments to achieve full extended cylinder position.

Remove the “red” hoses from the cylinders and secure them in a clean container to capture overflow. Using the close mode, run until air is out of the hoses, then reattach to the “red” cylinder fittings. Retract the cylinders and attach the bottom ends to the door panel bracketry, using the lower cylinder pins.

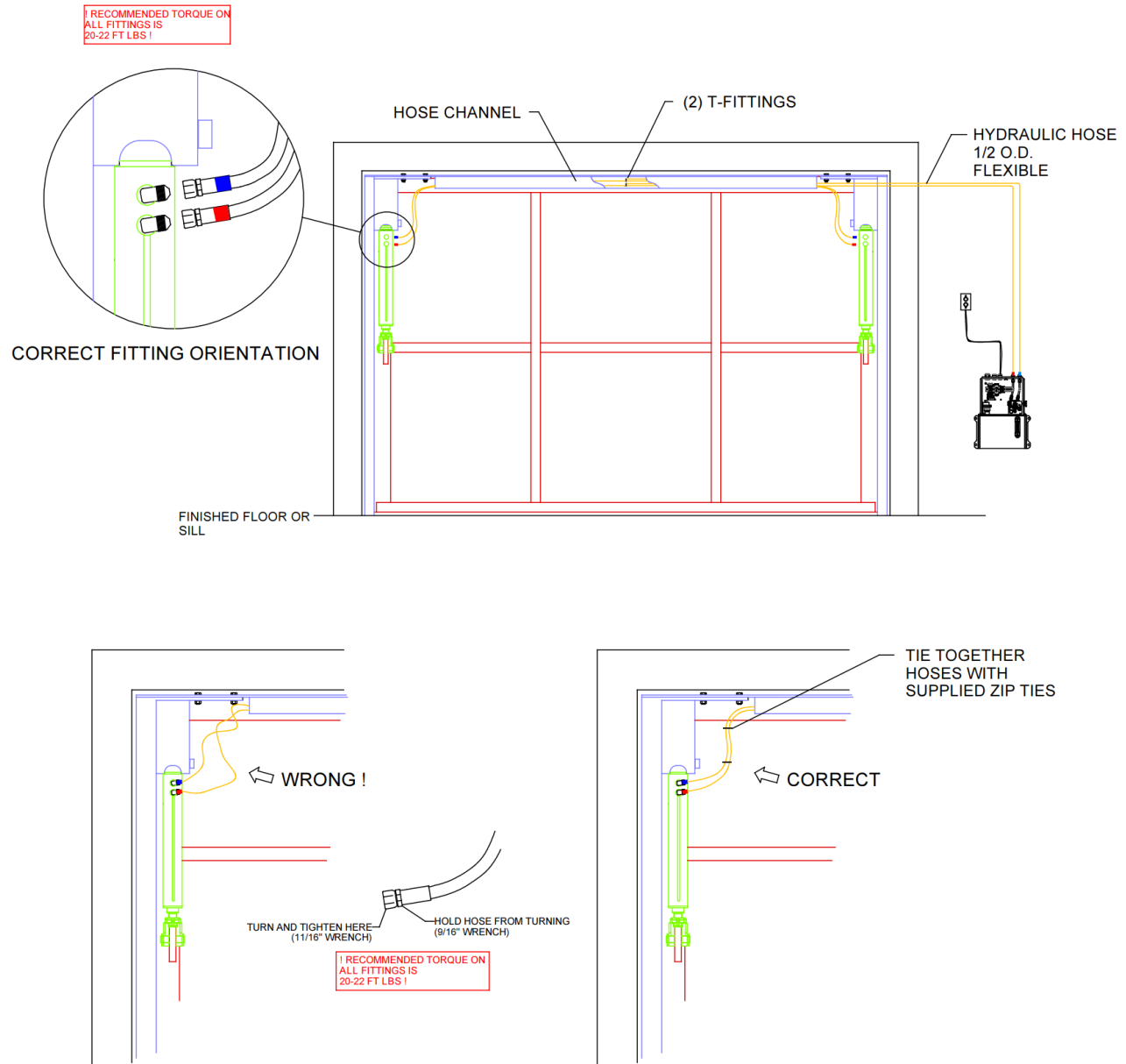
Note:

- There will be a small amount of fluid immediately at the cylinder end of the “red” hoses after extending the cylinders; Make sure to run in the close mode long enough to ensure fluid from the reservoir has filled the hoses.
- When all hoses are attached, and the door is in the full-open position, the reservoir should be no more than 1/3 full.

Step 11:

To purge any remaining air out of the system, run the door for several full cycles. Check fittings for leaks, and tighten as needed.

Proper Hose Connection Instructions:



Note:

- If the hoses look like this (see, above), after tightening, you have twisted the hose. Not only will this look bad, it will cause the hoses to unwind over time and loosen the fitting, causing a leak. Tightening the hoses correctly requires two wrenches: One (11/16") to tighten the fitting and one (9/16") to hold the hose from rotating.

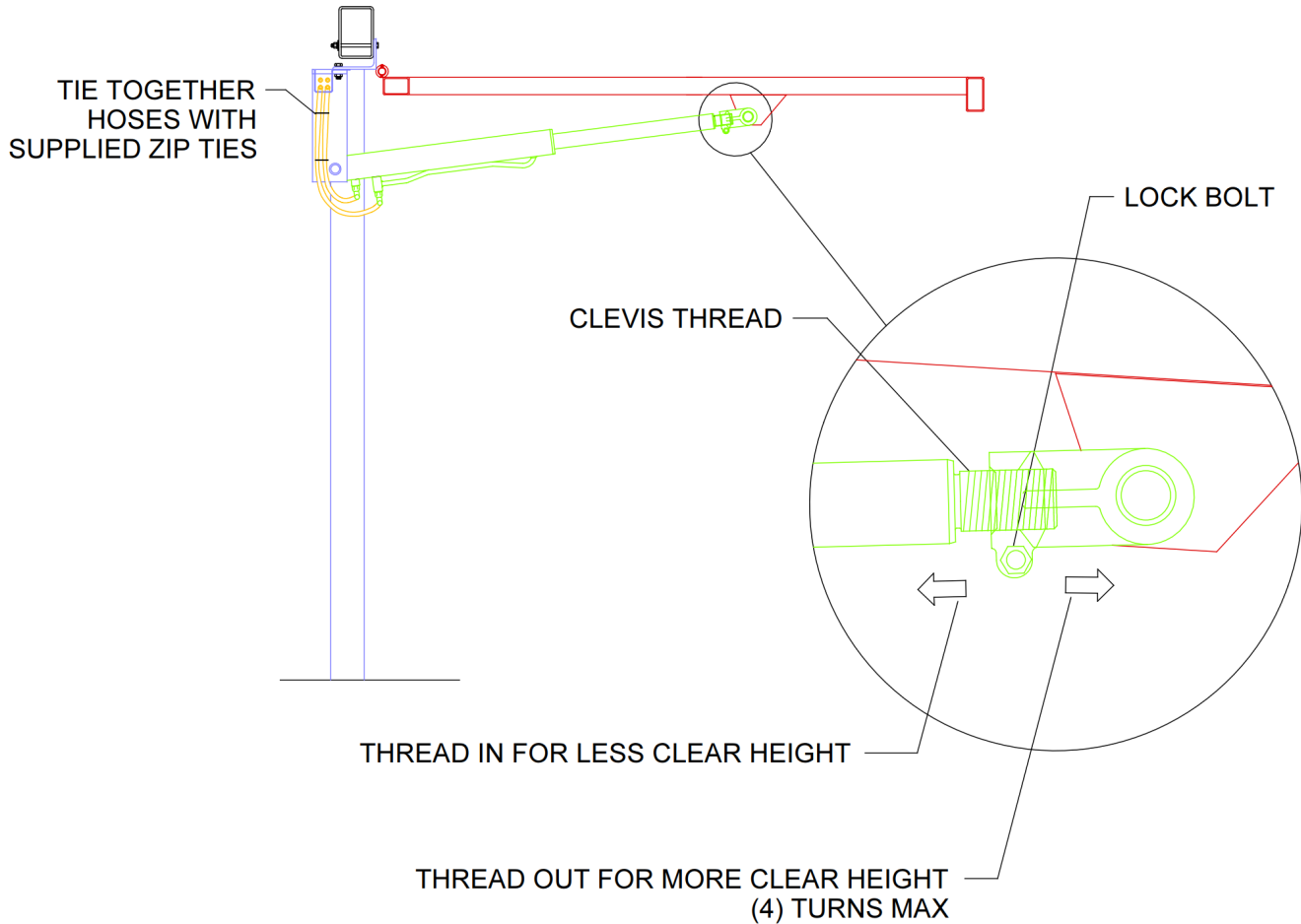


Fig. 9

Step 12:

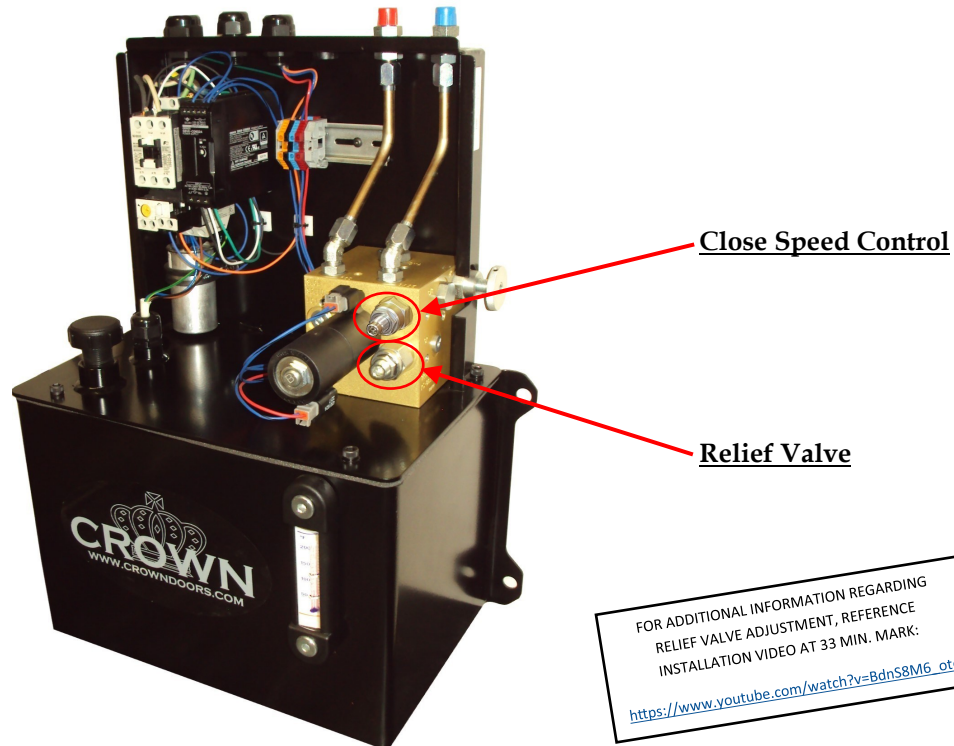
Clear height may be adjusted at the rod connection clevis if needed (see fig. 9). There is approx. 3-4" of clear opening adjustment available. This is to be done with the door in the closed position. Be sure to tighten the lock bolt when finished.

Step 13:

Neatly tie up hoses and wires.

Note:

- ***!! Make sure the hoses are moving freely at the base of the cylinders when the door is fully opened or closed !!***



Step 14:

There are two adjustments which need to be addressed after the door is completely finished and all claddings/coverings have been installed/attached:

Close Speed Control

This adjustment controls the speed at which the door closes/lowers, and is critical on large doors. Rotating the control clockwise will slow the door and eventually bring it to a stop if turned too far. Rotating the control counter-clockwise will increase the close speed.

This adjustment must be made with the door in the full open position. To adjust safely, rotate the control in (clockwise) all the way. Then, push the close button—The door should not move. Then, slowly turn the control out (counter-clockwise) until the door starts to come down. The goal is to get the door lowered in 75% to 100% of the open speed. Use 3/4" wrench; 1/4" Allen wrench.

Note:

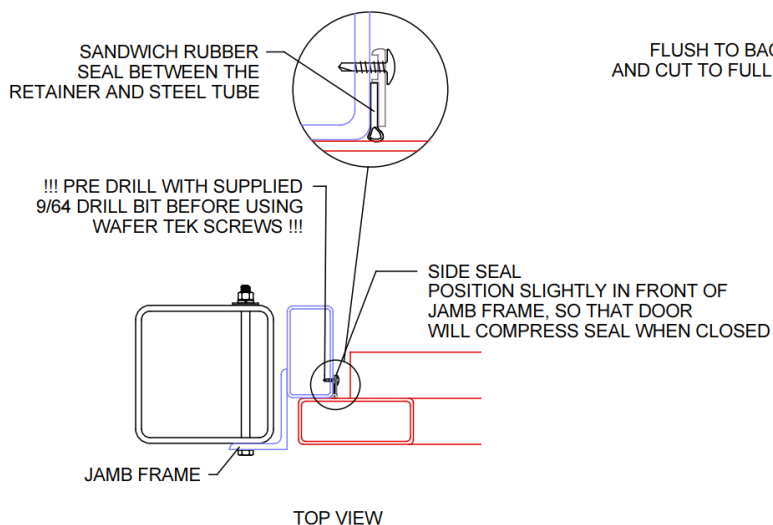
- *Caution—Closing speeds which are too fast can cause the door to bounce and cause damage to both the building and door system.*

Relief Valve

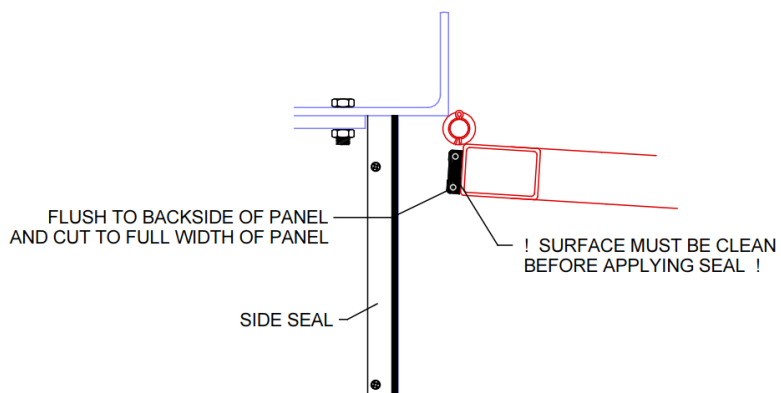
The relief valve adjustment controls the power of the pump, acting like a "clutch," of sorts.

For example, if the relief valve is set too low, the door will not reach full open position; If it is set too high, there will be too much power pushing the door open. At too high a setting, the effects will not be noticeable unless the door becomes obstructed, thereby causing possible damage to either the door or the obstruction.

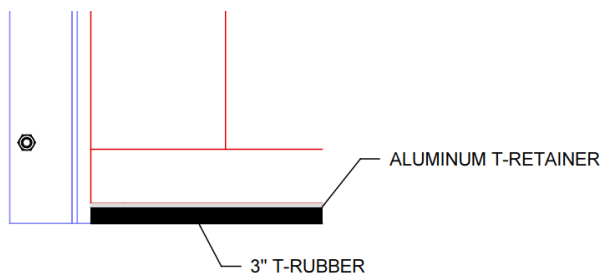
The relief valve is set at the factory to a certain P.S.I., typically with more pressure than is required to open the door, fully. Proper adjustment may be made after the door and cladding/covering installation is complete. Start with the door in the closed position, then adjust the valve out (counter-clockwise) until the door will not open fully. Then, turn the valve back in (clockwise) until the door is able to reach the full-open position. Finally, turn the valve another 1/2 rotation clockwise and tighten the locknut. Use 11/16" wrench; 5/16" Allen wrench.



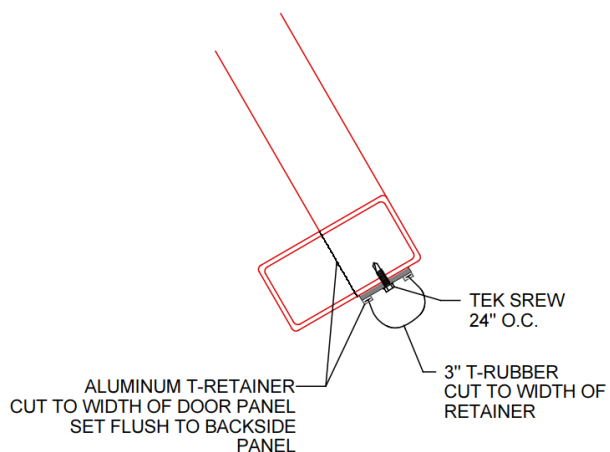
SIDE SEAL



TOP SEAL



BOTTOM SEAL



BOTTOM SEAL

Note:

- Attach seals as per diagrams, above. When installing the 3" T-rubber retainer, raise the door for easier access to bottom.