

HAPPIJAC

CAMPER JACK

OWNERS MANUAL

OPERATING INSTRUCTIONS

CAREFULLY READ THESE INSTRUCTIONS BEFORE USING THE HAPPIJAC CAMPER JACKS. **CAUTION:** NEVER RAISE JACKS ABOVE RED SAFETY LINE MARKED ON INNER JACK LEG.

Release Locking Lever (*Down Position*) at top of jack when cranking. Be sure to reset Locking Lever (*Up Position*) when jacks are not being cranked to avoid accidental jack extension.



General Instructions

1. Load & unload camper on basically level ground, never on an obvious grade.
2. Use 12" sq. 3/4" plywood support pads under each jack to prevent sinking into the ground or asphalt
3. Use extreme caution when the wind is blowing. Avoid storing camper in windy, unsheltered areas and prevent snow accumulation on camper roof. Secure camper with tie downs when stored outdoors.
4. Camper should be supported on a sturdy base during storage to prevent damage to camper floor and the wing walls. When living in camper, the floor should be firmly supported.
5. When leveling with the camper on the truck – **ALWAYS disconnect the camper tiedowns before leveling.** Jacks are not designed to lift both camper & truck! Damage can occur to jacks, tiedowns and truck! **Overloading jacks can result in jack failures.**

Unloading Your Camper

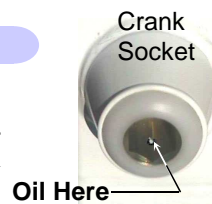
1. Make sure electrical connections and all tie downs are disconnected between camper and truck body.
2. Insert crank handle (if using manual jacks) firmly into the crank socket of one of the front jacks and begin cranking counter-clockwise to extend. Raise the front of the camper 3" to 4" working side to side (if alone) or together if 2 people are unloading.
3. Repeat step 2 for the rear corners, then go back to the front and repeat step 2. **Caution: Never raise the back of the camper higher than the front.**
4. When the camper floor is clear of the truck bed (3" to 6") slowly drive the truck forward, being very careful not to hit the jacks or the camper. **Caution: Fill holes or move rocks that could cause the truck to pitch into the jacks or the camper.**
5. **LOWER CAMPER:** Insert crank handle into crank socket of either rear jack and begin cranking clockwise (if using manual jacks). Lower the rear 3" to 4" working side to side or together if more than one is cranking. Move to the front and do the same. Work back and forth in 3" to 4" increments until desired height is reached.
6. For added safety and stability, support the camper floor with blocks and use camper jacks to stabilize.

Loading Your Camper

1. Raise camper, (see steps 2& 3 of the UNLOADING YOUR CAMPER section) until the bottom of the camper is higher than truck bed by 3" to 6".
2. Slowly back the truck under the camper. Make sure truck and camper are aligned so as not to hit the jacks or the camper with truck fenders or wheel wells. See also the **Caution** in step 4 above. Connect electrical cables while accessible.
3. Lower camper onto truck bed. Crank clockwise on rear jacks first lowering 3" to 4" then move to the front and do the same. Repeat until the truck takes the full weight of the camper, then secure camper to truck.
4. Completely retract all 4 jacks and stow crank handle.

Maintenance

1. After periods of non-use, or anytime jack seems to labor more than usual, place a few drops of light oil, ie: **3 in 1®** into the oil hole in the crank socket then run the jack to distribute the oil.
2. Frequently - check all mounting screws and other hardware for tightness & proper jack alignment.
3. Every 6 months - wax mounting brackets and both inner and outer tubes of jack with automotive wax.
4. Once each year - fully extend jacks to red safety line. This redistributes lubrication evenly on the screw shaft. Remove top cap and regrease gears (if needed) with white lithium grease. Lightly oil bearings.



Support Services

For information regarding upgrading these jacks to remote controlled electric powered units, or for parts, technical support, or information regarding our other fine products, please contact us via one of the following:

INSTALLATION INSTRUCTIONS

READ CAREFULLY BEFORE STARTING

Tools and Materials Required

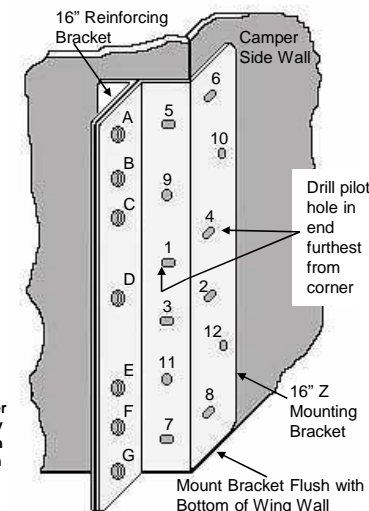
- Electric drill & 5/32" drill bit
- 1/4" nut driver or socket
- 3/8" wrench or socket wrench
- Weather proof putty tape (available at RV stores)
- Extra hardware as required (See section 5)
- Clear Silicone Sealant
- Hacksaw
- Wrench
- Mallet

The Front Jacks

Mount to either a "Z" or "T" bracket configuration. The Z + (L) bracket is the most common and is shown in the following illustrations.

1. Secure the L brackets to the Z brackets using # 8 sheet metal screw at small hole marked X in figure 1 (Start from L side).
2. Determine the proper location for each bracket (see fig. 1) and ensure that there is a strong solid load bearing corner in the camper.
3. Mark, and remove any corner molding that will interfere with flush fit of bracket against camper.
4. Cover inside surface of Z & L bracket (side against camper) with the weatherproof putty tape and seat in place against camper corner by tapping with mallet.
5. Drill 5/32" pilot hole at location 1, (fig. 1) and secure bracket with a #14 hex head sheet metal screw. With all slotted holes, place screw at end of slot furthest from corner of camper, to allow bracket to draw down tight.

Note: These screws are not provided because of the varying wall thickness from camper to camper. **CAUTION:** Be very careful to select a screw which will give maximum penetration without piercing inner wall of camper (normally 1-1/2").



- Install screws at locations 2 thru 8 and tighten in that order. Re-tighten in the same order. (Careful, don't over tighten and strip wood or twist off screw head.)

- Install screws 9 & 11 and tighten.

- Holes 10 & 12 may be secured with a bolt as shown in fig. 2 (best when possible). If not, Sheet metal screws can be used if material exists in camper to hold screw securely.

- Secure the L bracket to camper with #14 sheet metal screws described in step 5. Start at center and work out to ends. As with the Z bracket, bolts can be used, if possible, in the 2 larger holes (see fig. 2).

- Trim away excess putty tape and seal around edge of brackets with clear silicone sealant.

- Mount the jack to the bracket by placing the 3/8" stud bolts on jack through holes A, D & G (fig. 1). Secure with 3/8" flat washer and self-locking nut (fig. 2). **Torque = 25 Ft. Lbs. (Do Not Exceed)** Note: Alternate installation scheme may require a bolt rather than a stud and nut at hole G.

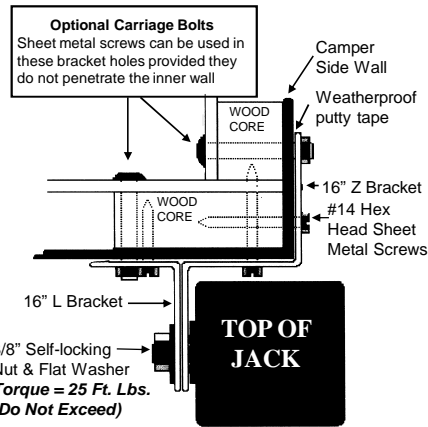


Fig. 2 - Drivers Side Front Corner (looking downward)

- Mount 16" Z bracket in same manner as front installation. If using the 16" L reinforcement bracket, screw it to the Z bracket before installing on camper.

- 16" Z bracket in same manner as front installation. If using the 16" L reinforcement bracket, screw it to the Z bracket before installing on camper.

- Check bracket alignment by installing jack.

- If alignment is good and jack installs properly, clean away all excess putty tape and seal around edges of brackets with clear silicone.

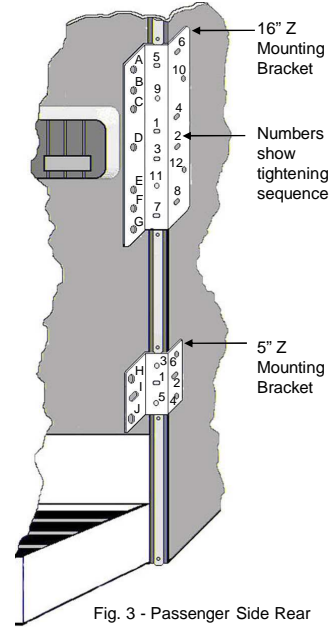


Fig. 3 - Passenger Side Rear

NOTE: If jack will not align with brackets, loosen bracket screws and draw brackets into alignment, then with jack in place, tighten accessible bracket screws. Remove jack and tighten remainder of screws.

The Rear Jacks

The Rear Jacks mount to "Z" bracket in combination with either a 5" lower Z bracket or the 16" L reinforcing bracket. The 5" Z bracket configuration is most common and is shown in the following illustration.

- Determine the proper location for each bracket (see fig. 3). Brackets must be placed vertically at a point where the foot of the jack just extends below the bottom of the camper when fully retracted. NOTE: Alignment of the 16" & 5" brackets is critical. A good way to ensure proper alignment is to bolt both to the jack and then set in place and mark location.
- Mark, and remove any corner molding that will interfere with flush fit of bracket against camper.
- Cover inside surface of brackets (side against camper) with the weatherproof putty tape and seat in place against camper corner by tapping with mallet.

Electric Jack Option

All mechanical Happijac camper jacks (Acme Screw, Ball-Screw, and Ball-Screw with Quick-release Leg) **are fully upgradeable to electric jacks.** There is no need to buy new jacks, all you need to do is buy the Motor Drive Assembly Kit (and the Wiring Kit if your camper did not come prewired for Happijac electric jacks), which you can install yourself, and you are ready to enjoy the ease and comfort of remote controlled electric jacks.