

Product Manual



Innovating the future of **RV POWER.**

WF-T30 & T57 TRANSFER SWITCHES



T-30



T-57R



Innovating the future of **RV POWER.**

• 2021 Aeroplex Drive, North Elkhart, IN 46514 • (574)-294-8997 • www.wfcotech.com

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 **WARNING**

RISK OF ELECTRICAL SHOCK

Disconnect or isolate all power supplies before making electrical connections. More than one disconnection or isolation may be required to completely de-energize equipment. Contact with components carrying hazardous voltage can cause electric shock and may result in severe personal injury or death.

NOTICE

All wiring must conform to local, national, and regional codes and regulations. Use copper conductors only for all wire connections. Do not exceed the electrical ratings for the Transfer Switch or the equipment connected to it. Failure to follow these precautions may cause equipment failure and/or electrical shock which could result in severe personal injury or death.

 **CAUTION**

INSTALLATION AND SERVICING

This product should be installed and serviced by a certified or licensed electrician familiar with applicable safety codes and installation requirements. Failure to observe this precaution could result in electrical shock or bodily injury. Consult your servicing dealer before attempting any work on this product.

 **WARNING**

SPARK HAZZARD

This unit employs components that can produce arcs or sparks. To prevent fire or explosion, do not install in compartments containing batteries or flammable materials (LP gas). This product is NOT ignition protected.

GENERAL INFORMATION:

The WFCO Transfer Switches are designed to provide trouble-free changeover of power between shore power and generator. The T-30 is used for 30 Amp AC service, T-57R is used for 50 Amp AC service.

The DC coiled relays used in the transfer switches prevent AC “chatter” noise and drop-out in low-voltage conditions. Accidental coupling of power to or from the shore line and generator is prevented by a “break before make” configuration. Both the T-30 and T-57R mount easily onto a flat surface and are engineered for safe, reliable performance. The T-30 can also mount to the back of the WF-8900 power center enclosure, saving wall space.

Transfer Switch Features

Shore Power to Generator Power Transfer Time Delay

Time delay (30 sec. nominal) allows gensets to complete self-diagnostics before power is transferred.

“Break Before Make” Configuration

WFCO’s “break before make” configuration prevents accidental coupling of power between the shore-line and generator.

Shore Power is Always Available

Shore power is always available (Pass-Through) without having to energize the relays.

Easy Ground Lug Accessibility

Easy ground lug accessibility is built-into the T-57R.

Two Mounting Possibilities (T-30 Only)

Can be mounted to the back of a WF-8900 Power Center or wall mounted with the included mounting brackets.

T-30 INSTALLATION INSTRUCTIONS

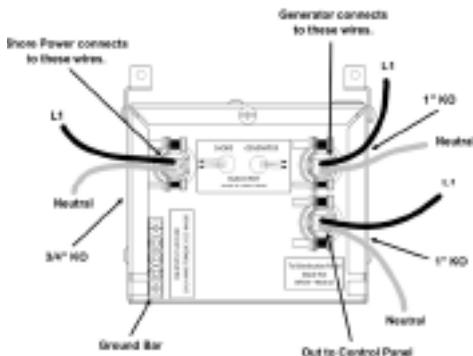
Installing the T-30 Transfer Switch

⚠ WARNING

RISK OF ELECTRICAL SHOCK

Disconnect or isolate all power supplies before making electrical connections. More than one disconnection or isolation may be required to completely de-energize equipment. Contact with components carrying hazardous voltage can cause electric shock and may result in severe personal injury or death.

Ensure no AC power is coming into the RV from either the Shore Power cord or an on-board generator.



The T-30 transfer switch installation is divided into 3 segments:

1. Incoming shore power
2. Incoming generator power
3. Power output to panel (distribution panel or power center)

Remove the top cover with a Phillips screwdriver to expose the wiring box.

Note: All cables from Shore Cord, Generator and Control Panel routed to or from the T-30 Transfer Switch should go through a strain relief (customer supplied) to keep cables from being pulled out of the transfer switch enclosure.

To install the T-30 transfer switch follow the steps below:

Incoming Shore Power:

1. Connect the black wire from the shore cord to the black wire on transfer switch marked Shore.
2. Connect the white wire from the shore cord to the white wire on transfer switch marked Shore.
3. Connect the ground (copper) wire from the shore cord to the ground bar on transfer switch marked equipment ground.

Incoming Generator Power:

4. Connect the black wire from the generator to the black wire on transfer switch marked Generator.
5. Connect the white wire from the generator to the white wire on transfer switch marked Generator.
6. Connect the ground (copper) wire from the shore cord to the ground bar on transfer switch marked equipment ground.

Power Output to Panel:

7. Connect the black wire from the Distribution Panel to the black wire on transfer switch marked Panel.
8. Connect the white wire from the Distribution Panel to the white wire on transfer switch marked Panel.
9. Connect the ground (copper) wire from the Distribution Panel to the ground bar on transfer switch marked equipment ground.

Final Assembly:

10. Slide the wiring box cover over the internal wire connections and tighten with one Phillips screw in the center.
11. Install the two mounting brackets. For power center mounting, position the brackets so the right-angle tabs face away from the enclosure and fasten with 2 screws on each side. Remove the 2 screws from the top rear of the WF-8900 enclosure. Slide the T-30 assembly down over the mounting rails on the WF-8900 enclosure and push down until the right-angle portion of the bracket stops movement. Fasten the T-30 in place with the 2 screws removed earlier.

Wall Mounting (T-30WM Model): Place the brackets so that the small right-angle tabs face inward and attach with 2 Phillips screws on each side. Fasten to the wall with 2 fasteners through each bracket (fasteners not supplied). Note: Fasteners must be able to safely support a 5 lb minimum load.

Note: All field connections should be made using 10 AWG (min.) solid or stranded copper wire rated 75°C (167°F) minimum. Torque Ground bar terminals to 35 in-lb maximum.
Caution: over torquing will cause screw and wire damage.

When removing the T-30 Transfer Switch, reverse the order of steps 1 through 11.

T-57R INSTALLATION INSTRUCTIONS

Installing the T-57R Transfer Switch

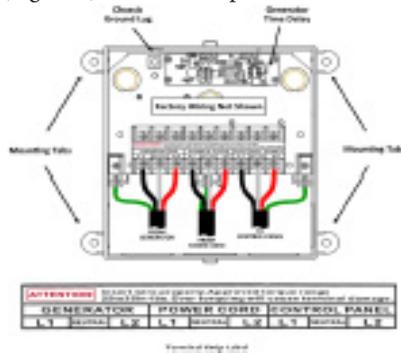
⚠ WARNING

RISK OF ELECTRICAL SHOCK

Disconnect or isolate all power supplies before making electrical connections. More than one disconnection or isolation may be required to completely de-energize equipment. Contact with components carrying hazardous voltage can cause electric shock and may result in severe personal injury or death.

Make sure no AC power is coming into the RV from either the Shore Power cord or an on-board generator.

Refer to the T-57R drawing (Figure 2) below for help.



T-57 Installation:

The T-57 transfer switch is divided into 3 segments:

1. Incoming power cord
2. Incoming generator power
3. Power output to panel (distribution panel or power center)

Remove the top cover to expose the wiring box and terminal strip. Secure the enclosure in a suitable location using a screw at each of the mounting lug locations.

Note: All cables from Shore Cord, Generator and Control Panel routed to or from the T-57R Transfer Switch should go through a strain relief (customer purchased) to keep cables from being pulled out of the transfer switch enclosure.

To install the T-57 transfer switch follow the steps below:

Incoming Shore Power:

1. Connect the black wire from the shore cord to the L1 position on transfer switch marked Power Cord.
2. Connect the white wire from the shore cord to the Neutral position on transfer switch marked Power Cord.
3. Connect the red wire from the shore cord to the L2 position on transfer switch marked Power Cord.
4. Connect the ground (copper) wire from the shore cord to the ground block on transfer switch below that segment.

Incoming Generator Power:

5. Connect the black wire from the generator to the L1 position on transfer switch marked Generator.
6. Connect the white wire from the generator to the Neutral position on transfer switch marked Generator.
7. Connect the red wire from the generator to the L2 position on transfer switch marked Generator.
8. Connect the ground (copper) wire from the generator to the ground block on transfer switch next to that segment.

Power Output to Panel:

9. Connect the black wire from the Distribution Panel to the black wire L1 on transfer switch marked Control Panel.
10. Connect the white wire from the Distribution Panel to the white wire (neutral) on transfer switch marked control Panel.
11. Connect the red wire from the Distribution Panel to the red wire L2 on transfer switch marked control Panel.
12. Connect the ground (copper) wire from the generator to the ground block on transfer switch next to that segment.

Snap the cover in place on the enclosure to complete the wiring procedure.

Note: All field connections should be made using 8 AWG (min.) solid or stranded copper wire rated 75°C (167°F) minimum. Torque terminal strip lugs and Ground block terminals to 35 in-lb maximum. Caution: over torquing will cause wire and screw damage.

When removing the T-57R Transfer Switch, reverse the order of steps 1 through 12.

TROUBLESHOOTING INSTRUCTIONS:

Troubleshooting the T-30 & T-57 Transfer Switches

Refer troubleshooting to a qualified service technician. Contact teh WFCO Power Pro's at: 574-294-8997 for assistance.

GENERAL COMPLIANCE INFORMATION:

Agency Listings

UL (ETL)

The T-30 & T-57R Transfer Switches are ETL Certified to UL 1008 and CSA 22.2.

TRANSFER SWITCH SPECIFICATIONS:

Model #	T-30	T-57R
Input Voltage	120 V ac / 60 Hz	120/240 V ac / 60 Hz
Current Capacity	30 amps	50 amps
Time Delay	30 Sec. (Nominal)	
Knockout Holes	3	10
Knockout Sizes	1 x 1/2" 2 x 3/4"	4 x 1/2" 4 x 3/4" 1 x 3/4" & 1-1/4" Concentric
Outer Dimensions	5 1/8"W x 6 1/4"H x 4 5/16"D	8 1/4"W x 9 1/4"H x 5"D
Weight	4.24 lb	5 lb
Environmental	20 ~ 90% Non-condensing	
Certifications	ETL listed to UL 1008 and CSA 22.2	

CONSUMER LIMITED WARRANTY

For WFCO Technologies Products

WFCO extends, to the original owner, a Two Year Limited Product Warranty. This warranty is in effect from the date of original purchase for a period of two (2) years. This limited warranty is extended specifically for and is limited to Recreational Vehicle application and is only valid within the continental United States, Alaska, Hawaii and the Provinces of Canada. WFCO warrants, to the owner, that its products are free from defects in material and workmanship under normal use and service based on its intended use and function. This warranty is limited to the repair or replacement, at WFCO's discretion, of any defective parts or defective assembly. Any implied warranties of merchantability or fitness for intended use are limited in duration unless applicable State Law provides otherwise. You may have other rights as specified by each individual state.

EXCLUSIONS AND LIMITATIONS

The OEM Warranty specifically DOES NOT APPLY to the following:

- Any WFCO product that has been repaired or altered by an unauthorized person;
- Any damage caused by misuse, faulty installation, testing, negligence, accident or any WFCO product installed in a commercial vehicle;
- Any WFCO product, whose serial number has been defaced, altered or removed;
- Any WFCO product, whose installation has not been in accordance to the WFCO written instructions;
- Any consequential damages arising from the loss of use of the product including but not limited to: inconvenience, loss of service, loss of revenue, loss or damage to personal property, cost of all services performed in removing or replacing the WFCO product. Specifications are subject to change without notice or obligation.
- Any WFCO Electronics products sold through unauthorized Internet sources (Example: eBay) will be excluded from all warranty coverage offered by Arterra Distribution / WFCO.

CONSUMER WARRANTY CLAIM PROCEDURE:

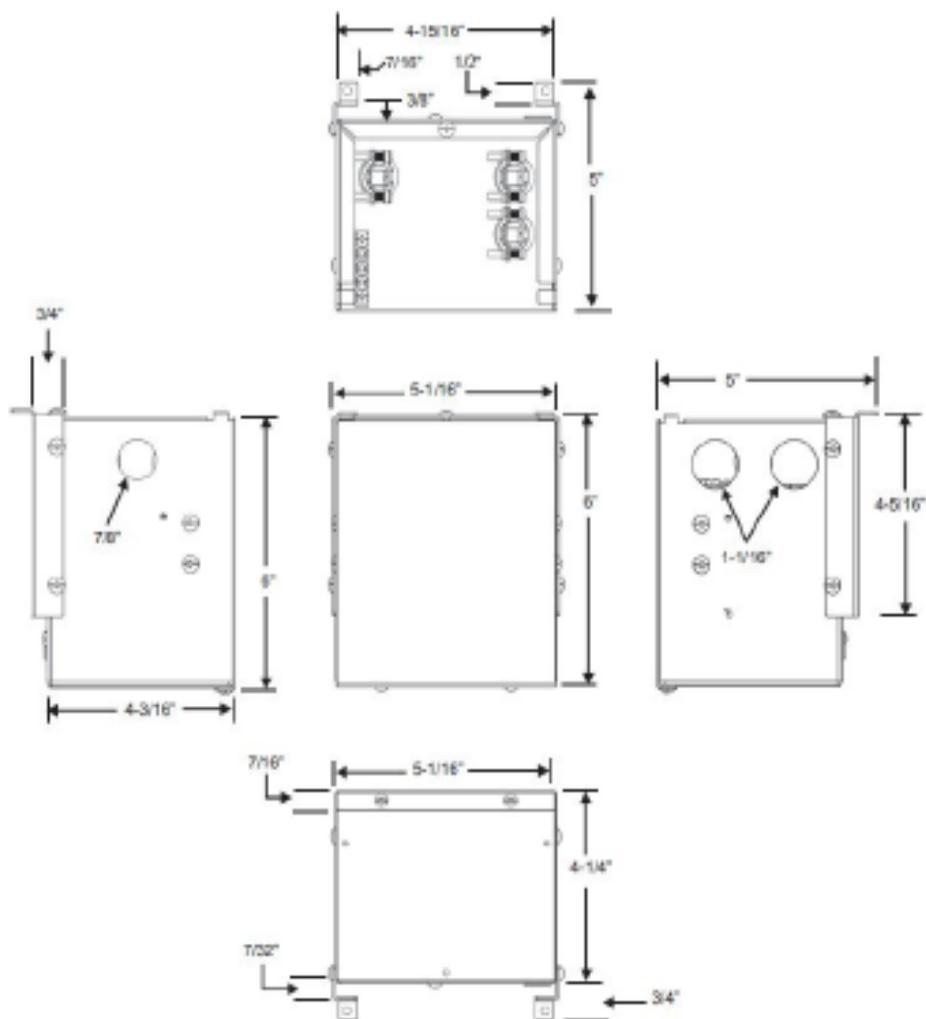
Upon determination and validation by an authorized OEM dealer that a WFCO product has a defect, visit www.wfcotech.com to obtain the warranty request forms. Completed forms may be sent to warranty@wfcoelectronics.com. You may also contact the WFCO Warranty Service Number at (574) 294-8997 and obtain a return goods authorization (RGA) number. This number shall appear on all correspondence with warranty service. Upon validation of the warranty, WFCO shall replace or repair the product with a like product. The RGA number shall be placed on the outside of the carton used to return the product for ease of identification. Do not mark directly on the product. The product must be packaged properly to avoid further product damage which could cause a non-warrantable condition.

WARRANTY ASSISTANCE:

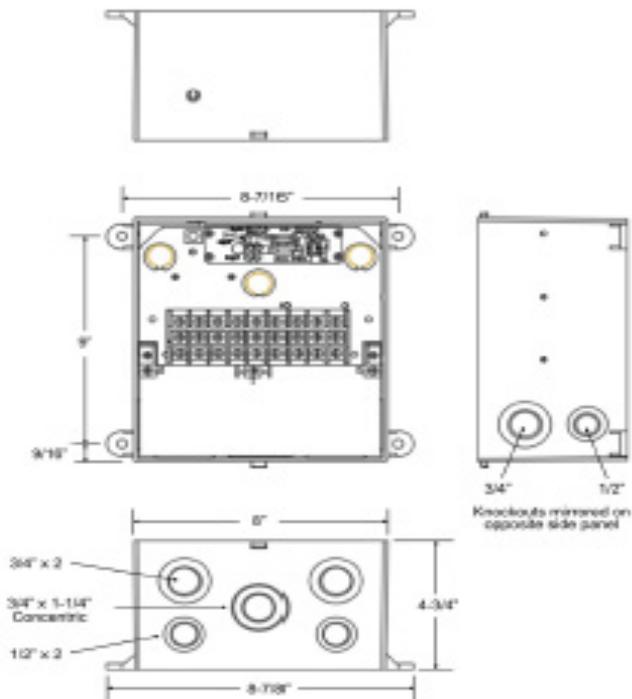
The consumer may contact the selling Dealer or OEM for warranty assistance.

The consumer may also contact WFCO Technologies at: (574) 294-8997 or Fax (574) 294-8698.

T-30 Transfer Switch Dimensional Drawing



T-57R Transfer Switch Dimensional Drawing





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EXPERT PRODUCT SUPPORT

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