

RAYCO®

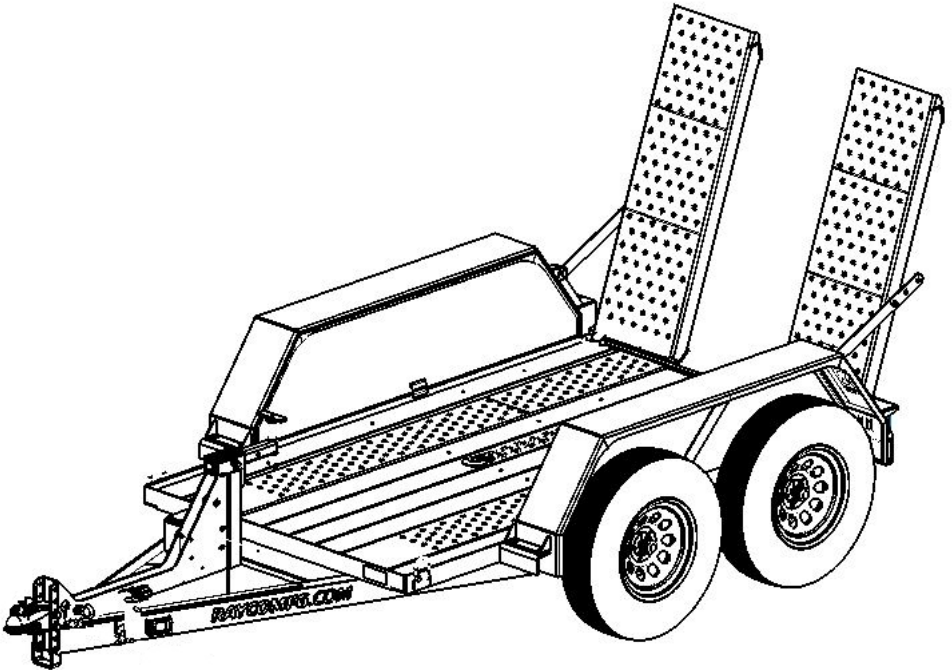
RAYCOMFG.COM

WORK INSTRUCTIONS

MODEL: TR100L

TR100L AXLE RETROFIT

TSB #23-001



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4255 E LINCOLN WAY
WOOSTER, OHIO 44606 U.S.A.
800-392-2686
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PRINTED IN USA
PART NUMBER: 45562-INSTRY

Overview

Rayco Manufacturing has determined that certain TR100L trailers may require an axle retrofit, dependent on the year and model of machine issued to the trailer. The trailer's as built are capable of the rated capacity, however the machines listed below may exceed the trailer capacity. A serial number picture of the trailer and machine being transported with it will be required as part of the warranty claim process. Email the pictures to techservice@raycomfg.com. If it has been determined that due to the machine being transported the trailer requires the retrofit, the following instructions will show you what is necessary to properly complete this job. Customers will be compensated 8 hours to complete this job. If you have any questions contact Rayco Manufacturing or your local dealer.

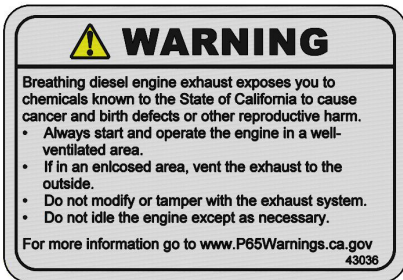
Machines Effected:

RG74T-R

RG165T-R

Phone Number: 800-392-2686

Email: techservice@raycomfg.com



45562RY TR100L Axle Retrofit Kit

- (1) Serial Tag
Part #: 37398RY
- (4) 3/8" x 1.5" Bolts
Part #: 722605RY
- (4) 3/8" Nuts
Part #:724300RY
- (4) 3/8" Lock Washers
Part #: 726302RY
- (8) 3/8" SAE Flat Washers
Part #: 726300RY
- (14) 5/8" x 1.75" Bolts
Part #: 763669RY
- (14) 5/8" Nuts
Part #: 724702RY
- (14) 5/8" Lock Washers
Part #: 726702RY
- (28) 5/8" SAE Flat Washers
Part #: 763436RY
- (2) Formed Spacer Anlge
Part #: 45556RY
- (2) 4000 lb Axles Rework
Part #: 45630RY
- (1) Retrofit Subframe
Part #: 45560RY
- (1) Adjustable 2" Coupler
Part #: 808676RY
- (10) Body Clips
Part #: 730018RY
- (8") Heat Shrink Tubing
Part #: 750777RY
- (1) Yellow Spray Paint
Part #: 734020RY
- (8) Torx Screws
Part #: 807502RY

Hinge Installation

The trailer will need to be on jackstands or other appropriately rated support device to perform this job.

Step #1:

Disconnect the trailer from any vehicle that it may be attached to and lower the jackstand on the front.

Step #2:

Jack up the trailer in the rear and place jackstands on the frame. Do not place them on the axles because the axles will be removed. Remove the wheels when the trailer is in the air.

 WARNING
Failure to use proper support devices and/or supporting the trailer in incorrect locations could lead to serious injury or death.



Figure 1
Support Points

Axle Removal

Step #3:

Remove the outside boards from the top of the trailer (Items 1, [Figure 2](#)).



Figure 2
Outside Boards Removed

Step #4:

Remove the axles from the frame. They are held on by six bolts, three on each side, see [Figure 3](#).

- After the axles are dropped, cut the white wires coming out of the right drums, see [Figure 4](#).
- The axles can be slid out from under the trailer now.



Figure 3
Axle Mounting Bolts



Figure 4
Cut White Wires

Cutting the Frame

Step #5:

The frame will need to be cut to accommodate the new subframe.

- The middle hangers (Items 1 and 2, [Figure 5](#)) need cut off.

- [Figure 6](#) shows the hangers cut off.



Figure 5
Hangers to Cut



Figure 6
Hangers Cut Off

Cutting the Frame

Step #6:

After the hangers have been cut off the frame needs notched in six places.

- Measure 2-1/2" in from the outside as shown in [Figure 7](#).
 - The frame should look like [Figure 8](#) when all cuts have been made.
- Test fit the subframe to make sure that enough material has been cut before moving forward.
 - Paint any bare metal with the spray paint provided.



Figure 7
Crossmembers to Cut



Figure 8
Crossmembers Notched

Drilling the Mounting Holes

Step #7:

Holes will need to be drilled into the frame so that the new subframe can be attached to the trailer.

- Use the 45560RY subframe as a stencil to mark the holes.
- Be sure to have the subframe oriented in the correct direction with the front spacers installed as shown in **Figure 9**. Lift the subframe using a floor jack as shown in **Figure 10**.



Figure 9
Subframe Orientation



Figure 10
Subframe Lifted into Place

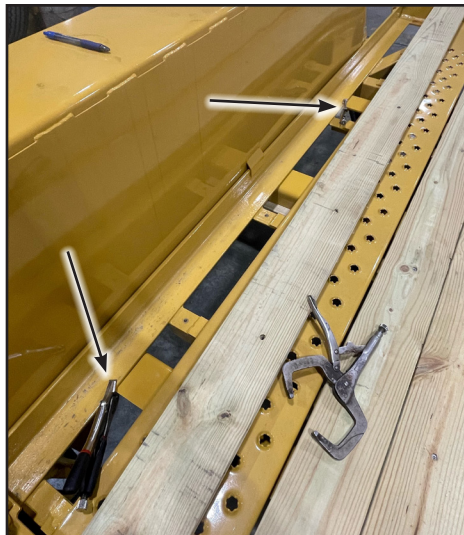


Figure 11
Subframe Clamped into Place

Drilling the Mounting Holes

Step #8:

Use a center punch to determine where the frame needs to be drilled. Drill a small pilot hole from underneath the trailer and then the remaining step up in drill sizes can be done from the top of the trailer.

Step #9:

Mount the subframe using the 5/8" x 1-3/4" bolts provided using flat washers and lock washers. A full print showing hardware is given at the end of these instructions.



Figure 12
Holes Drilled in Frame

Mounting the Subframe

Step #10:

The outside boards that were removed will need to be either countersunk or drilled through so that the bolt heads do not interfere with the fitment of the boards. See [Figure 13](#).

Step #11:

The boards can be reinstalled using the new screws provided (PN: 800980RY).



Figure 13
Board Countersunk

Axle Installation

Step #12:

The new axles can now be installed.

- The new axles will have wiring installed on them. The wired side should be installed on the left side of the trailer as shown in **Figure 14**.
- Refer to the print at the end of these instructions for the proper mounting hardware.

Step #13:

After both axles have been mounted, run the wires across the bottom of the frame to the other side.

- Clip the harness across using the clips provided in the kit. See **Figure 15**.



Figure 14
New Axle Mounted



Figure 15
Axle Wires Ran

Axle Wiring

Step #14:

After the wires have been ran across the bottom of the trailer, the drums will need to be wired into the main trailer harness.

- Pull the frame and axle harness through the cutout in the subframe, **Figure 16**.
- Connect the wires as shown in **Figure 17**.
- Connect one wire from each harness into one wire from the drum. It does not matter which wire in the harness is connected to which wire on the drum.
- After the wires are connected, heat shrink the wires so that the connection does not short out.
- Be sure to leave enough slack in the wires for axle travel.



Figure 21
Harness Through Frame

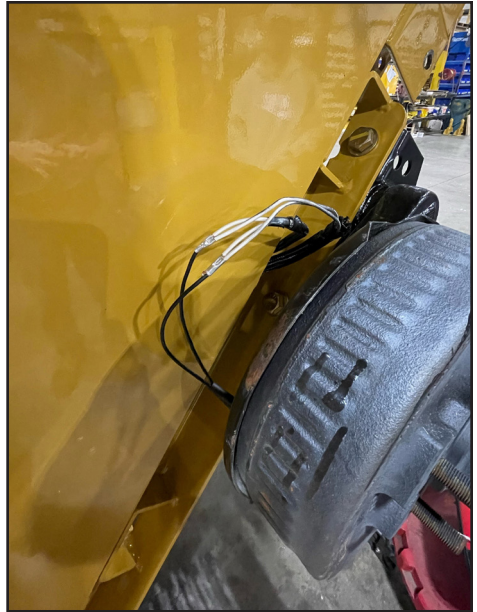


Figure 22
Harness Connected to Drum

Mounting Wheels and Testing

Step #15:

After the harness has been installed, reinstall the wheels and torque them to 100 ft-lbs.

Step #16:

Hook up the trailer and verify that all functions work. Lights, blinkers, brakes etc.

Your trailer is now ready for normal use.

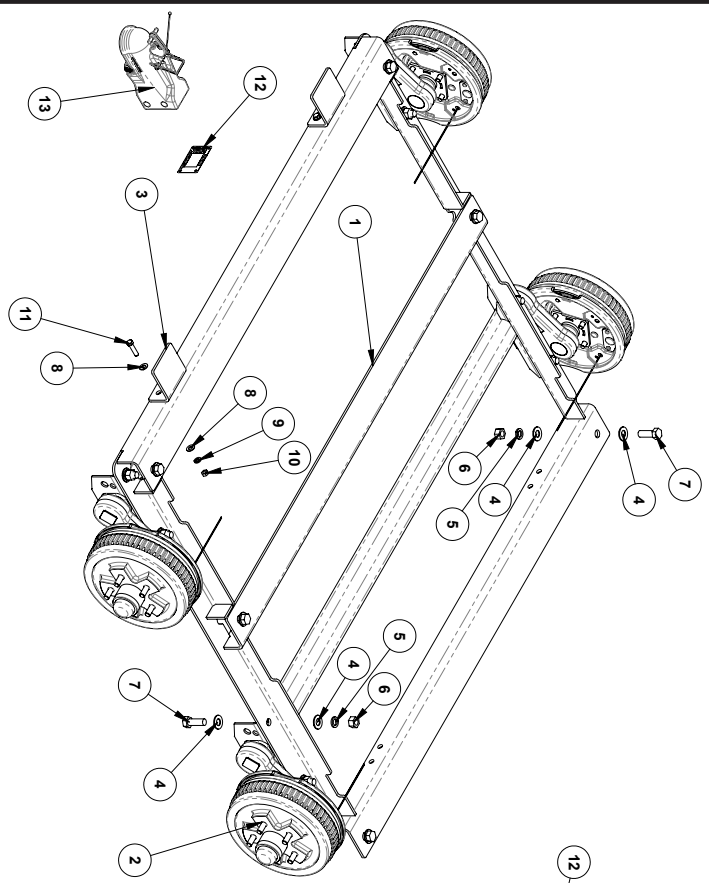
If you have any questions contact Rayco Manufacturing or your local dealer.

Phone Number: 800-392-2686

Email: techservice@raycomfg.com

45562RY Drawing

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Model Type	Rayco
Model	TR100L
Serial Number	
Power Rating	
GVW/GVM	
Bedload Dwg	
Year of Mfg.	
Rayco Manufacturing LLC 455 East Lincoln Way, Worcester, OH 44491 USA	

REVISIONS				
REV	DATE	DESCRIPTION	BY	ECBY
A	05-14-2023	ADDED INCLUDES INFO & SHOW NOTE (REV. 1) (REV. 2) (REV. 3) (REV. 4)	WMD	

NOTE: ASSEMBLY ALSO INCLUDES BUT NOT SHOWN
 (8) N1 250/27 SHRIK TUBING 1/4 3/16 BK
 (1) 79402RY PAINT-SPRAY YELLOW 12OZ
 (8) 807502 SCREW-TORX FLOOR & WALL LINER

ITEM	QTY	PART #	DESCRIPTION
13	1	808676	COUPLER-ADJ LISTABLE 2"
12	1	32798	TAG- SU/VIN CE BA
11	4	722305	BOLT-HEXCS 3/8-16X1.5 GR8 ZP
10	4	724300	NUT-HEXML 3/8-16 GR8 ZP
9	4	724302	WASHER-LOCK 3/8
8	8	724300	WASHER FLAT 3/8 SAE
7	14	724369	BOLT HEX 5/8-18X1-3/4 GR8
6	14	724702	NUT HEX 5/8-18 GR8
5	14	724702	WASHER LOCK 5/8 GR8
4	28	724346	WASHER FLAT 5/8 SAE
3	2	45554	ANGLE-FORMED SPACER
2	2	45530	AXLE REWORK
1	1	45560	WELDED SUBFRAME

RAYCO MFG. INC.
 WOODBURN, OHIO

UNLESS OTHERWISE SPECIFIED: CONFORM TO DIMENSIONS. DIMENSIONS ARE IN INCHES. DO NOT SCALE DRAWINGS.

REVISIONS: 1:10 PERM MFD 12/19/2022
 2:00 PERM MFD 05/14/2023
 ANGLE PLATE 12/19/2022

DATE: 12/19/2022

SCALE: 1/8" = 1"

TR100L RETROFIT KIT
 ASSEMBLY

45562

Read and understand all instructions before attempting to operate this machine. This manual should be readily available for reference at all times.

Additional copies of this manual may be purchased. Contact your Authorized Rayco Dealer or Rayco Manufacturing LLC

RAYCO Manufacturing, LLC
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Wooster, OHIO 44691 U.S.A.
800.392.2686
raycomfg.com

Think Smart, Think Safe.....

We care about your safety. When operating your RAYCO® machinery always wear an approved helmet complete with ear muffs, face shield and the proper eye wear. Never operate under the influence of alcohol or drugs. Know your RAYCO, read and understand your owner's manual cover to cover.

RAYCO Manufacturing LLC retains the right to make changes in design and specifications; engineering; add or remove features; add improvements; or discontinue manufacturing at any time without notice or obligation.

Thank you for buying and using RAYCO Equipment.



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