

# DUO LIFT<sup>TM</sup>

Manufacturing Company, Inc.



**OPERATOR'S MANUAL AND PARTS BOOK**

## **ENGINE TRAILER**

**OFF ROAD MODELS: ET240 - ET440 D.O.T. MODELS: ET240D - ET440D**

*Read and understand the manual. This manual provides information and procedures to safely operate and maintain the Engine Trailer.*







**DUO LIFT MANUFACTURING CO., INC.**  
**ENGINE TRAILER**

**WARRANTY REGISTRATION FORM & INSPECTION REPORT**

**WARRANTY REGISTRATION (please print)**

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery.

Customer's Name _____	Dealer Name _____
Address _____	Address _____
City, State, Zip Code _____	City, State, Zip Code _____
Phone Number ( ____ ) _____	Phone Number ( ____ ) _____
Contact Name _____	Check One:
Serial Number _____	Farm Use <input type="checkbox"/>
Delivery Date _____	Commercial Use <input type="checkbox"/>

**ENGINE TRAILER MODELS - CHECK MODEL BELOW**

ET240	ET240D		ET440	ET440D	

I have thoroughly instructed the buyer on the above-described equipment. This review included the Operator's Manual content, equipment care, adjustments, safe operation, and applicable warranty policy.

Date \_\_\_\_\_ Dealer's Rep. Signature \_\_\_\_\_

The above equipment and Operator's Manual have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation, and applicable warranty policy.

Date \_\_\_\_\_ Owner's Signature \_\_\_\_\_

DUO LIFT MFG.	DEALER	CUSTOMER

(MAKE COPIES AND CHECK APPROPRIATE BOX)

**Send Signed Copy of Warranty Registration to One of the Options Below:**  
Address: Duo Lift Manufacturing Company, Inc. - 2810 38th Street - Columbus, NE 68601  
E-Mail: warranty@duolift.com or FAX: (402) 564-5385



# **DUO LIFT<sup>®</sup>** Manufacturing Company, Inc.

## Warranty

This is to certify that we warrant to the original purchaser equipment manufactured by Duo Lift Manufacturing Company, Inc., identified and recorded by serial number, to be free of defects in material and workmanship under normal use and service to replace, free of cost, to the original purchaser any part or parts of said equipment that in our judgement shows evidence of such defects; and provide further that the said part or parts shall be returned to the factory, freight prepaid, within two years of shipping date. Manufacturer agrees to replace or repair during this period of no charge any defective part or parts returned to the factory, and deemed defective by authorized factory inspection. Should it become impractical to return said parts to the factory, the manufacturer shall not be liable for any labor costs, or any other costs encountered, in repairing or replacing any part or parts involved, but will be obligated to supply only the necessary repair and/or replacement items.

Duo Lift Manufacturing Company, Inc., as the manufacturer shall not be liable for any other damage, whether direct or consequential.

No representative or other person is authorized or permitted to make any other warranty or assume for his company any liability not strictly in accordance with the foregoing. This limited warranty is in lieu of all warranties expressed or implied and of all other obligations on the part of the factory.

This limited warranty shall not apply to any item which shall have been operated in a manner not recommended by the Company nor which shall have been repaired, altered, neglected or used in any way which in the Company's opinion adversely affects its performance and results.

This limited warranty shall not apply to any equipment which has been tampered with in any way or which has been subject to misuse, neglect or accident, or which has the serial number altered, defaced, or removed.

This limited warranty does not apply to exterior finishes, tire, bearings, springs, jacks, couplers or any such items not directly manufactured by Duo Lift Manufacturing Company, Inc., except to the extent of their individual manufacturer's guarantee.





## TRAILER SAFETY

### CHECK SAFETY CODES FOR FULL COMPLIANCE

- 1 DO NOT LOAD TRAILER OVER RECOMMENDED CAPACITY
- 2 MAKE SURE COUPLER AND HITCH BALL MATCH SIZE
- 3 SECURE HITCH WITH CROSSED SAFETY CHAINS w/HOOKS
- 4 CHECK LIGHTS AND REFLECTORS BEFORE TOWING
- 5 EXAMINE TIRES FOR WEAR AND CORRECT PRESSURE
- 6 CHECK WHEEL LUG BOLTS FOR TORQUE TIGHTNESS
- 7 INSPECT AND CHECK BRAKES FOR CORRECT OPERATION
- 8 RAISE JACK BEFORE MOVING TRAILER
- 9 ALWAYS SECURE LOAD AND CHECK DURING TRIP
- 10 MAINTAIN PROPER DISTANCE FOR STOPPING
- 11 BE CAREFUL WHEN BACKING TRAILER
- 12 WHEN PARKING, BLOCK WHEELS IF ON SLOPE
- 13 USE PRECAUTION WHEN OPERATING ANY EQUIPMENT

DESIGNED AND MANUFACTURED BY			
<b>DUO LIFT<sup>®</sup></b>		Manufacturing Company, Inc.	
2810 38th St - Columbus, NE 68601 * 402-564-8023			
DATE OF MANUFACTURE			
V.I.N.			
MODEL		TYPE	TRAILER
FRAME RATING		IN	FEET
TIRES		PLY	PSI COLD
RIMS			
GROSS VEHICLE WT. RATING		AT	MPH
GROSS AXLE WT. RATING		ALL AXLES	
NUMBER OF AXLES			
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON DATE OF MANUFACTURE SHOWN ABOVE.			





# Trailer and Truck Towing Definitions

## GCVW

Gross Combined Vehicle Weight (GCVW) is the total combined weight of a fully loaded vehicle, including passengers, payload and everything in tow.

## GVW

Gross Vehicle Weight (GVW) is the total weight of a fully loaded vehicle, including passengers and payload but excluding all towing.

## GVWR

Gross Vehicle Weight Rating (GVWR) is the maximum number that the GVW or GTW should never exceed. GVWR is applied to trailers as well as vehicles, but you may see this rating referred to as the **Maximum Loaded Trailer Weight**.

## GTW

Gross Trailer Weight (GTW) is the total weight of the trailer plus all the cargo in it.

## Curb Weight

The weight of a vehicle without any passengers or cargo, but including all necessary fuel, fluids and standard equipment.

## Trailer Tongue Weight

The downward force exerted on the hitch ball by the trailer coupler. In most cases, it should fall between 10 to 25 percent of GTW. *Trailer tongue weight must be accounted for in total payload.*

## Understanding Gross Vehicle Weight Rating

Knowing and understanding GVWR is important to towing because it tells you explicitly the maximum weight of passengers and cargo you can safely carry in your truck or SUV. GVWR is the total combined weight of truck, including all passengers, fuel, fluids and cargo. GVWR is constant and does not change, regardless of what you tow. It's engineered in when the vehicle is manufactured.

Because tongue weight must be included in the GVWR, you will need to know how much weight capacity you need to have "left over" for when you hook up your trailer.

For example, if you have a 5,000-pound truck with a 6,200 pound GVWR, you can safely carry 1,200 pounds in the vehicle. If you are towing a trailer with a 300-pound tongue weight, the amount of passengers and gear you can carry decreases to 900 pounds.

To be sure you choose the right tow vehicle, you must find the vehicle with a tow rating high enough to meet your needs. It's usually a good idea to get a bit more capacity than what your current needs are. But at the very least, be certain the towed load and tongue weight are within your vehicle's capacity.





# ENGINE TRAILER

Manufactured by **DUO LIFT** Mfg. Co., Inc.



Trailer Frame



ET440D Engine Trailer (D.O.T. Compliant)



ET240 Engine Trailer

## Standard Features - ET240D and ET440D D.O.T. Models

**Empty Trailer Weight:** ET240D - 3,100 Lbs.  
ET440D - 3,620 Lbs.

**Dimensions:** ET240D - 14'2"L x 7'10"W, 96"L x 67"W Support Bed  
ET440D - 18'2"L x 7'10"W, 144"L x 67"W x Support Bed

**Trailer Frame:** 9" Formed Channel Tank Support Frame  
4" x 3" Tubular Front A-Frame

**Jack Stands:** 8,000 Lb. Side-Wind, Drop Leg, (1) Tongue Jack,  
(2) Rear Frame Jacks

**Diesel Fuel Tank:** 200 Gallon (ET240D) or 400 Gallon (ET440D), Bolt-In, Bottom Mounted Diesel Tank, Dial Type Fuel Gauge, Front 3" Fusible Fill Vent Cap, Rear 3" Fill Cap, 2" Stainless Steel Tank Vent, Diesel Tank Drain Port, (1) 1/2" NPT Diesel Fuel Supply Port with Suction Tube, Capped, and (1) 1/2" NPT Diesel Fuel Return Port, Capped

**Engine & Pump Support System:** (3) Bolt-On Multi-Position Engine Supports and  
(1) Pump Support

**Provision for DEF:** Frame will Accommodate Optional Bolt-In  
40 Gallon Diesel Exhaust Fluid Tank

**Fenders:** Heavy Duty Flat Top Steel Fenders with Anti-Slip  
Surface and Black Splash Guards

**Axles :** (2) 3,500 Lb with 4" Drop (ET240D)  
(2) 7,000 Lb with 4" Drop (ET440D)

**Hitch:** 2-5/16" Adjustable Height Ball Coupler with  
(2) 3/8" Safety Chains and ID Tags

**Suspension:** Under-Slung Slipper Springs

**Color:** Trailer: White Tank: White Axles: Black

**Wheels:** 15" x 6" x 6-5.5" White Spoke Wheels (ET240D)  
16" x 6" x 8-6.5" White Spoke Wheels (ET440D)

**Lights:** D.O.T. LED Lights Conforming to CFR49  
All Wiring Joints Soldered, Shrink-Wrapped  
and Enclosed in Conduit or Loom

**Tires:** 225/75R15D (ET240D), 235/80R16E (ET440D)

**Brakes:** 4-Wheel Electric Brakes with Breakaway Kit

**Other:** (2) Frame Mounted Level Indicators, Tool Box  
Support, Conspicuity Tape, Safety Signs, Duo  
Lift Decals, 17 Digit VIN ID Plate, Statement  
of Origin and Manual Holder.

**Misc.:** 1-Year Component Warranty 2-Year Tank(s)  
and Trailer Frame Warranty, Annual Federal  
Inspection and Certificate

## Standard Features - ET240 and ET440 OFF ROAD Models:

**Empty Trailer Weight:** ET240 - 2,800 Lbs.  
ET440 - 3,320 Lbs.

**Dimensions:** ET240 - 14'2"L x 7'10"W, 96"L x 67"W Support Bed  
ET440 - 18'2"L x 7'10"W, 144"L x 67"W x Support Bed

**Trailer Frame:** 9" Formed Channel Tank Support Frame  
4" x 3" Tubular Front A-Frame

**Jack Stands:** 8,000 Lb. Side-Wind, Drop Leg, (1) Tongue  
Jack and (2) Rear Frame Jacks

**Diesel Fuel Tank:** 200 Ga. (ET240) or 400 Ga. (ET440), Bolt-In,  
Bottom Mounted Diesel Tank, Dial Type Fuel  
Gauge, Front 3" Fusible Fill Vent Cap, Rear 3"  
Fill Cap, 2" Stainless Steel Tank Vent, Diesel  
Tank Drain Port, (1) 1/2" NPT Diesel Fuel  
Supply Port with Suction Tube, Capped,  
(1) 1/2" NPT Diesel Fuel Return Port, Capped

**Engine & Pump Support System:** (3) Bolt-On Multi-Position Engine Supports and  
(1) Pump Support

**Provision for DEF:** Frame will Accommodate Optional Bolt-In  
40 Gallon Diesel Exhaust Fluid Tank

**Fenders:** Heavy Duty Flat Top Steel Fenders

**Axles:** (2) 3,500 Lb with 4" Drop (ET240)  
(2) 7,000 Lb with 4" Drop (ET440)

**Hitch:** Pin-On Adjustable Height Clevis Hitch, Accepts  
1" Hitch Pin (2) 3/8" Safety Chains and ID Tags

**Suspension:** Under-Slung Slipper Springs

**Color:** Trailer: White Tank: White Axles: Black

**Wheels:** 15" x 6" x 6-5.5" White Spoke Wheel (ET240)  
16" x 6" x 8-6.5" White Spoke Wheel (ET440)

**Lights:** AG Transport LED Lights, All Wiring Joints  
Soldered, Shrink-Wrapped and Enclosed in  
Conduit or Loom

**Tires:** 225/75R15D (ET240), 235/80R16E (ET440)

**Brakes:** None

**Other:** (2) Frame Mounted Level Indicators, Tool Box  
Support, SMV Emblem, Safety Signs, Duo Lift  
Decals, Manual Canister, Amber and Red AG  
Reflective Tape and Ag Trailer Serial Number

**Misc.:** 1-Year Component Warranty, 2-Year Tank(s)  
and Trailer Frame Warranty.

**DUO LIFT** Manufacturing  
Company, Inc.

2810 38th Street • Columbus, Nebraska 68601

Phone: 402-564-8023 • FAX: 402-564-5385 • Toll Free: 1-800-243-2583

Email: sales@duolift.com • Website: www.duolift.com

Authorized Dealer:





ET440  
with Storage  
Box Option



ET440D Multi-Position Engine and  
Pump Mounts



ET440D with 400 Gallon Diesel Tank and  
Optional 40 Gallon DEF Tank, Bolt-In



ET440D Diesel Tank Fittings and Optional  
DEF Tank Fittings



ET440D  
Removable  
400 Gallon  
Diesel Tank  
with  
3" Rear  
Fill / Auxiliary  
Port



ET440D With 6 Cylinder Diesel Engine and  
Water Pump



ET240



ET440D with 6 Cylinder Diesel Engine





## ET440D ENGINE TRAILER PARTS LIST

PART NUMBER	QTY	DESCRIPTION
78000254	1	TRAILER WIRING HARNESS ASSEMBLY
LT000284	1	LIGHT, LED - 3-PIECE IDENTIFICATION LIGHT BAR
LT000275	2	LIGHT, LED - AMBER 2-1/2" ROUND WITH GROMMET
LT000276	2	LIGHT, LED - RED 2-1/2" WITH GROMMET
LT000277	2	LIGHT, LED - RED 4" ROUND WITH GROMMET
LT000283	1	LIGHT, LED - LICENSE PLATE LIGHT
LT000380	2	LIGHT, LED, AMBER 3/4" CLEARANCE AND SIDE MARKER LIGHT
LT000229	1	WIRING CONNECTOR, TRAILER END, 7 POLE RV STYLE
BR000345	1	BATTERY BOX, BRAKE-BREAKAWAY
BR000416	1	BATTERY, 12V, BRAKE-BREAKAWAY
BR0004290	1	BREAKAWAY SWITCH ASSEMBLY, INCLUDING CABLE AND KEY
BT000199	6	SCREW, SELF TAPPING, 1/4"
78000435	4	DIESEL TANK HANGER BRACE
70002344	2	L-BRACKET
70002345	1	DIESEL TANK SUPPORT TUBE
78000436	1	D.E.F. TANK HANGER BRACE
70002344	4	BRACKET, TANK SUPPORT, L-SHAPED
70002345	1	D.E.F. TANK SUPPORT TUBE
70002346	2	DEF TANK SUPPORT
BT000005	18	BOLT, 1/2-13 X 2 GR 5 ZP
WA000003	42	WASHER, FLAT 1/2 ZP
NT000003	18	NUT, HEX 1/2-13 ZP
78000417	1	DIESEL TANK, 400 GALLON
FH000088	1	CAP, DIESEL TANK, FILL AND VENT, 3" NPT WITH LOCKING ASSEMBLY
PURCHASE LOCALLY	1	HEXAGON SOCKET SET SCREW - CUP POINT, 1/4-20 UNC X 0.51"
FH000036	1	CAP, DIESEL TANK, FILL, NON-VENTED, LOCATED AT REAR TOP OF DIESEL TANK
FH000037	2	VENT, 2" LOW PROFILE PRESSURE/VACUUM RELIEF, FOR DIESEL TANK AND D.E.F. TANK
FG000009	2	GAUGE AND FLOAT ASSEMBLY, THERMA GAUGE TYPE H, TOP MOUNTED LIQUID LEVEL GAUGE, 2" NPT X 36" FOR DIESEL TANK AND D.E.F. TANK
801125	1	D.E.F. TANK, 40 GALLONS, OPTIONAL EQUIPMENT
801108	1	ET440D DOT FRAME WITH FENDERS
AX000046	2	AXLE, 7,000 LB. CAPACITY, 4" DROP WITH 12" X 2" ELECTRIC BRAKES
HB000967	4	HUB, BRAKED WITH (8) 9/16" WHEEL STUDS
NT000027	16	NUT, WHEEL, 9/16"-18
HB000968	16	STUD, WHEEL, 9/16"-18 X 2-3/4"
SG000003	4	SLIPPER SPRING, 4000 LBS., 6 LEAF WITH NYLON BUSHING
AP000031	4	U-BOLT KIT, 3" AXLE DIAMETER, 1/2" X 7" LONG U-BOLT
WT000102	4	235/80R16 LRE RADIAL TIRE ON 16 X 6 - 8 BOLT ON 6.5" WHITE SPOKE WHEEL
JK000044	1	JACK, DROP LEG, SIDE WIND
70002450	1	JACK MOUNT PLATE
MI000262	2	LEVEL, BULLSEYE
DE000057	3	DECAL, DUO LIFT MFG. DECAL, 4" X 18"
DE000025	1	DECAL, SMALL FEMA STICKER
DE000018	1	DECAL, MADE BY DUO LIFT 3.25"x 4.75"
DE000011	1	V.I.N. PLATE
DE000017	1	CERTIFICATE HOLDER AND POUCH
DE0000015	12	CONSPICUITY TAPE, RED AND WHITE
DE0000030	2	NON-SKID SAFETY TREAD, BLACK, 4" X 64"
TB000021		STORAGE BOX, ALUMINUM, 20" F X 34" R X 14" D X 15" H, OPTIONAL EQUIPMENT
70002473	1	TOOLBOX RUBBER LINER
70002474	2	TANK MOUNT PAD
78000438	2	MUD FLAP WITH HARDWARE, BLACK UHMW 1/8" X 12" X 17-3/16"
DE000010	1	DECAL DANGER/WARNING/CAUTION SS-104
DE000077	2	DECAL, MODEL ET440D
DE000053	1	CANISTER, MANUAL, 2" WITH THREADED CAP, BLACK
70002906	3	SUPPORT CHANNEL, ENGINE
70005460	1	SUPPORT CHANNEL, PUMP
CP000178	1	BALL COUPLER, EZ-LATCH, BOLT ON, 2-5/16", G.V.W.R. 21,000 LBS, BLACK
CP000179	1	PIN, BALL COUPLER SAFETY PIN, 1/4" SQUARE SHAPE WIRE SNAP RETAINER
BT000224	4	BOLT, 5/8-11 x 2" Hex, GRD, 8 ZP
NT000022	4	LOCK NUT, 5/8"-11 ZINC FINISH GRADE G REVERSE
78000254	1	TRAILER WIRING HARNESS ASSEMBLY
LT000229	1	WIRING CONNECTOR, TRAILER END, 7 POLE RV STYLE
800242	2	CHAIN, SAFETY, ASSEMBLY, 3/8" X 40", GRADE 70, INCLUDES ITEMS BELOW
CH000031	2	CHAIN, SAFETY, 3/8" X 40"
CH000043	2	CHAIN HOOK, 3/8" WITH LATCH
CH000060	2	DOUBLE CLEVIS, 3/8", WITH PINS
CH000032	2	SAFETY CHAIN ID TAGS

01/10/23



ET240D D.O.T. Compliant Engine Trailer, VIN: 1EP 3M1624M1004464 – Product Pictures











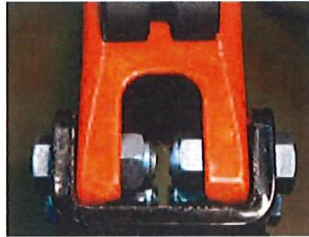




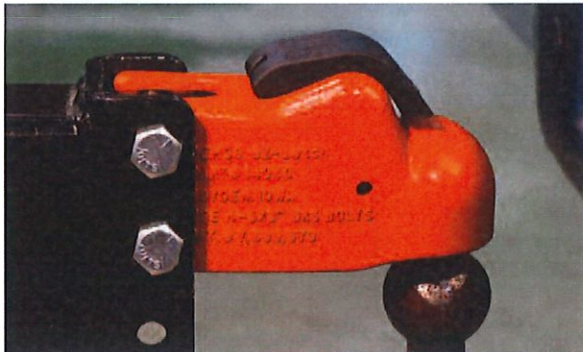


# Demco eZ-Latch Coupler Operation

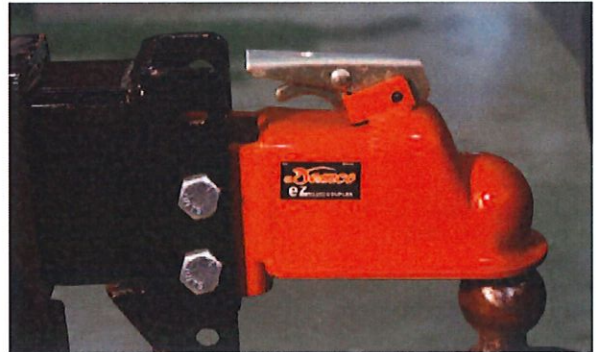
## 2" & 2 5/16" Couplers



(4) 5/8" Grade 5 Bolts are required with channel mounted 2" & 2 5/16" couplers



1



(1) eZ-Latch couplers do not require users to lift the handle for the coupler to engage the ball. Position the ball in the center of the ball socket or slightly forward, then begin to lower the coupler with the jack on the trailer.



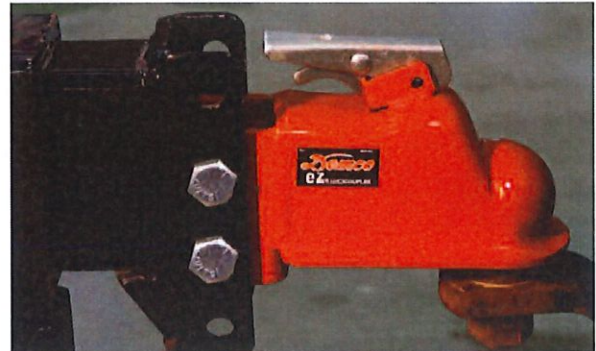
2



(2) At the mid-way point when lowering the trailer, the stem on the handle will begin to rise up allowing the ball to enter the ball socket.



3



(3) Once the ball has fully engaged the socket the ball keeper will snap back into place securing the coupler to the ball.

All Demco eZ-Latch couplers are tested and rated without the use of a safety pin and are not required for the couplers to be used in safe operation. A security hole is available on all the eZ-Latch couplers to be used in correlation with a lock for theft deterrence.

For more information visit [www.demco-products.com](http://www.demco-products.com)

