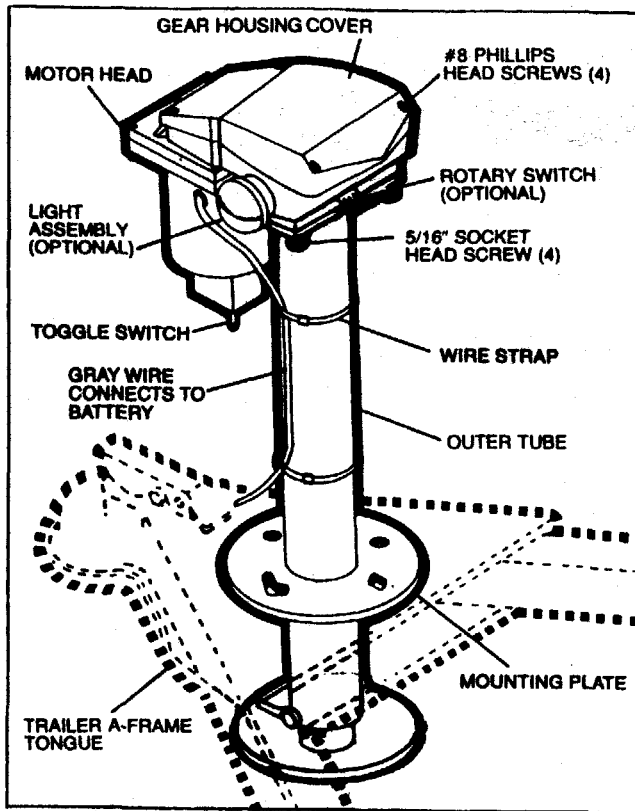




ULTRA 3502 / 3500 ELECTRIC TONGUE JACK

INSTALLATION/OPERATION

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APPLICATION

The Ultra 3500 Electric Tongue Jack is a 12-volt motor-driven screw jack for use on travel trailers and boat trailers.

SPECIFICATIONS

Vertical Load - 3500 lbs. continuous over full stroke with 5000 lbs. instantaneous tongue break-away capacity.

Travel - 18"

Power Requirement - 12 volt D.C.

Model # 3502 = 2" outer tube w/ 1 1/4" inner tube

Model # 3500 = 2 1/4" outer tube w/ 2" inner tube

Retracted Height - 25 1/2"

Removable Foot Pad - 5 1/2" dia.

Approximate Shipping Weight - 22 lbs.

INSTALLATION

1. Block the wheels and support the trailer "A" frame securely.
 2. Remove the existing jack.
- NOTE: Save the original nuts, bolts, and washers for installing the Ultra 3500 Electric Tongue Jack.**
3. The Electric Tongue is internally grounded. Therefore, for good electrical contact, clean well where the "A" frame comes in contact with the Tongue Jack Mounting Plate.
 4. Install the Electric Tongue Jack using original nuts and bolts.
 5. The Electric Tongue Jack was designed to replace an existing crank down jack. The diameter of the outer tube of your chosen jack, will need to match the existing hole size, or you will need to modify the hole diameter to fit.
 6. Align the motor head so that the motor housing is facing the front of the "A" frame.
 7. Install the Fuse Holder. The Fuse Holder can be installed

by means of either crimping or soldering the connections. For convenience the Fuse Holder can be installed close to the Tongue Jack motor head or it can be installed near the power source.

9. Connect the gray positive lead to the positive terminal of the battery. The Ultra 3500 Electric Tongue Jack is internally grounded, and needs no ground wire if "A" frame is cleaned.

WARNING: When using an extension wire, DO NOT use smaller than #10 gauge wire.

OPERATION

1. Block trailer wheels securely.
2. The Ultra 3500 Electric Tongue Jack is operated by means of the Toggle Switch located under the motor housing.
3. Extend the jack by holding the Toggle Switch in the Extend position.

CAUTION: Release the Toggle Switch when the motor switches off to prevent damage to motor. Wait 15 seconds for the motor to reset before operating the jack again.

4. Retract the jack by holding the Toggle Switch in the Retract position. As the jack approaches the fully retracted position it will slow down and then stall. The Toggle Switch should be released at the first indication of slowing down. The jack is now fully retracted.

NOTE: If the motor should stall with the jack in the fully retracted position, and the Toggle Switch is not released, the motor will automatically switch off.

MANUAL OPERATION

1. Disconnect the 30 amp Slow Blow fuse. (unscrew and pull apart)
2. Remove plug cap in the access hole. (located top center of the housing cover)
3. Insert the crank handle in the access hole, over the drive spindle tang. Rotate the crank handle clockwise to retract and counter clockwise extend.
4. When complete, remove crank handle and replace plug cap, and reassemble the fuse connection.

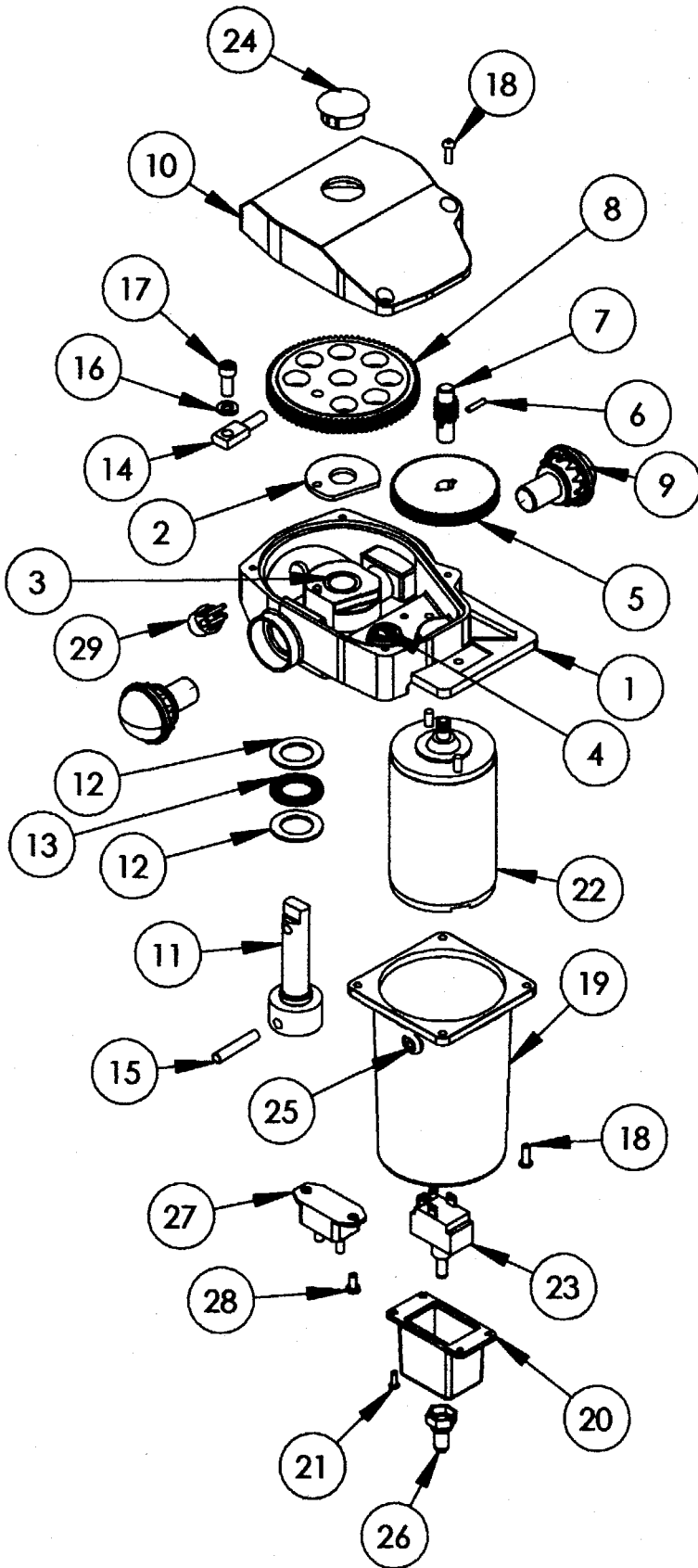
LUBRICATION

The jack is lubricated before leaving the factory. Under normal conditions, lubrication will be needed after one year.

WARNING: The weight of the Trailer tongue should be supported by blocks or the Ball Hitch of the tow vehicle before proceeding.

1. The Foot should be fully extended.
2. Using the Toggle Switch, extend the jack until the Foot Pad is 2" from the ground.
3. Disconnect the 30 Amp Slow Blow Fuse.
4. Loosen the four #8 Phillips Head Screws and remove the Gear Housing Cover.
5. If required, repack the exposed gears with a common Lithium Base Machine Grease.
6. Reassemble Gear Housing Cover.
7. Using a 1/4" Allen Wrench, remove the four 5/16" Socket Head Screws holding the Motor Head to the Outer Tube.
8. Lift the Motor Head and Screw Assembly away from the Outer Tube.
9. Clean and regrease the Jack Screw and Nut with a common Lithium Base Machine Grease.
10. Reassemble Motor Head and Screw Assembly to Outer Tube. Replace 30 Amp Slow Blow Fuse.

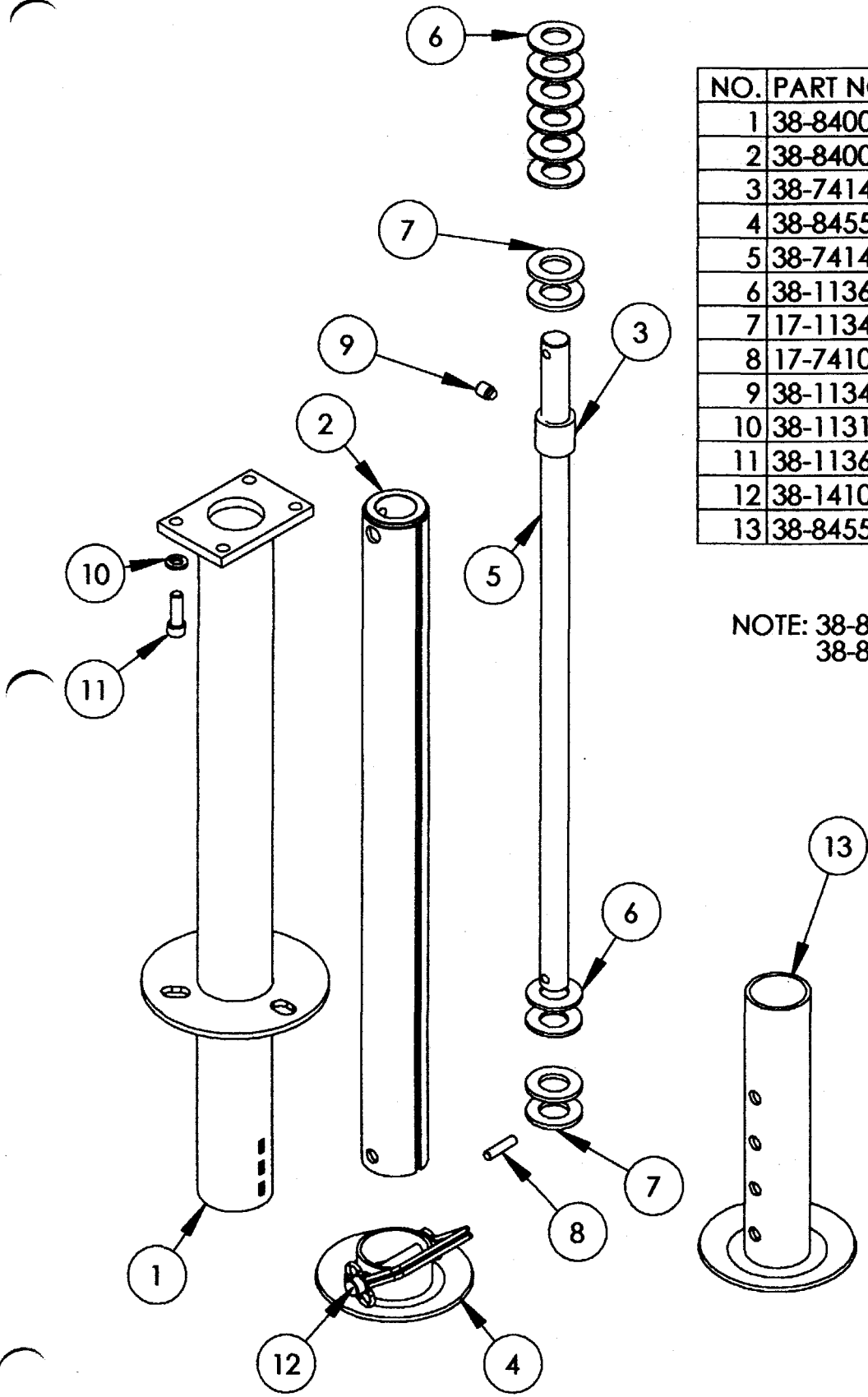
MOTOR EXPLODED VIEW 3500/3502



NO.	PART NO.	DESCRIPTION
1	38-741531	MAIN HOUSING
2	38-743081	THRUST WASHER
3	38-113622	BUSHING
4	38-143336	BUSHING
5	38-743124	SPUR GEAR
6	17-741004	PIN
7	38-743080	PINION GEAR
8	38-741465	MAIN GEAR
9	38-101102	LIGHT
10	38-741532	HOUSING COVER
11	38-741471	COLLAR
12	17-141006	HARD. WASHER
13	17-141004	THRUST BEARING
14	38-741458	HEADED PIN
15	17-741064	PIN
16	38-113550	1/4 LOCK WASHER
17	38-113632	1/4 CAP BOLT
18	38-113348	#8-32 SCREW
19	38-741530	MOTOR HOUSING
20	38-741529	SWITCH HOUSING
21	38-114449	#5-40 SCREW
22	17-840016.001	MOTOR
23	17-101011	MOTOR SWITCH
24	38-001017	CAP PLUG
25	38-143332	GROMMET
26	17-143097	BOOT SNAP SEAL
27	38-101283	CIRCUIT BREAKER
28	38-113349	#8 SCREW
29	38-100011.001	LIGHT SWITCH

NOTE: NOT SHOWN
 38-001016 MANUAL CRANK
 17-101265 FUSE HOLDER
 17-101066 FUSE 30 AMP SLOW BLOW

**LOWER STEM ASSEMBLY
3500/3502
EXPLODED VIEW**

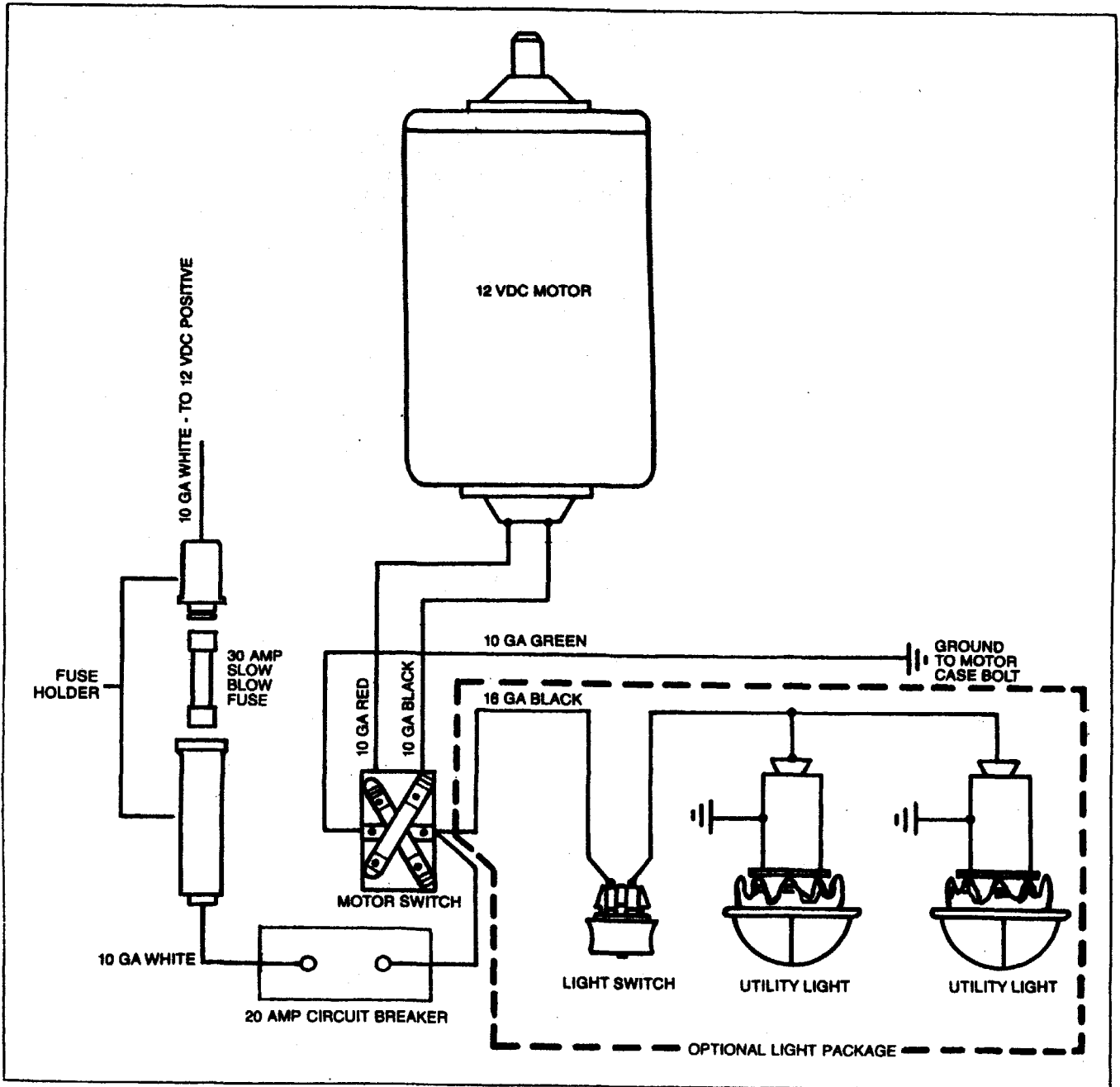


NO.	PART NO.	DESCRIPTION
1	38-840075	2" OUTER TUBE (3502)
2	38-840074	1.75" INNER TUBE (3502)
3	38-741476	BRONZE NUT
4	38-845508	FOOTPAD (3502)
5	38-741470	JACKSCREW
6	38-113619	BELLVILLE WASHER
7	17-113402	FLAT WASHER
8	17-741007	PIN
9	38-113415	3/8 SET SCREW
10	38-113136	5/16 LOCK WASHER
11	38-113631	5/16 CAP SCREW
12	38-141023	3/8 PIN
13	38-845507	FOOTPAD (3500)

NOTE: 38-840068 2.25" OUTER TUBE (3500)
38-840059 2" INNER TUBE (3500)



ULTRA 3500 ELECTRIC TONGUE JACK WIRING DIAGRAM



ONE-YEAR LIMITED WARRANTY

This Ultra 3500 Tongue Jack is warranted to the original owner for a period of one (1) year from the date of purchase against defective workmanship and parts, provided:

1. It was installed according to instructions.
2. A proof of purchase is presented.
3. The damaged unit is returned to Ultra-Fab Products transportation prepaid.

Unit **MUST** have a return authorization number before factory will accept it. Please write or call Ultra-Fab Products for a return authorization number. When return authorization is given, send the defective unit to factory prepaid, along with proof of purchase date. Your unit will be repaired or replaced at Ultra-Fab's option.

Your electric tongue jack is not warranted against abuse or misuse such as:

1. Immersion of working parts in water.
2. Moving the vehicle without retracting the jack.
3. Improper installation, operation or service as per Ultra-Fab's instructions.

NOTE: Ultra-Fab Products will pay reasonable labor and freight charges on authorized parts replacement provided notice of the defect is received within 12 months (for labor) or 90 days (for freight) from date of purchase. This is a Limited Warranty as defined by federal law. Liability for indirect or consequential damages for any incidental expenses is excluded. Ultra-Fab Product shall be liable only to the extent and for the time expressed in this warranty and no further. This warranty is non-transferable.