

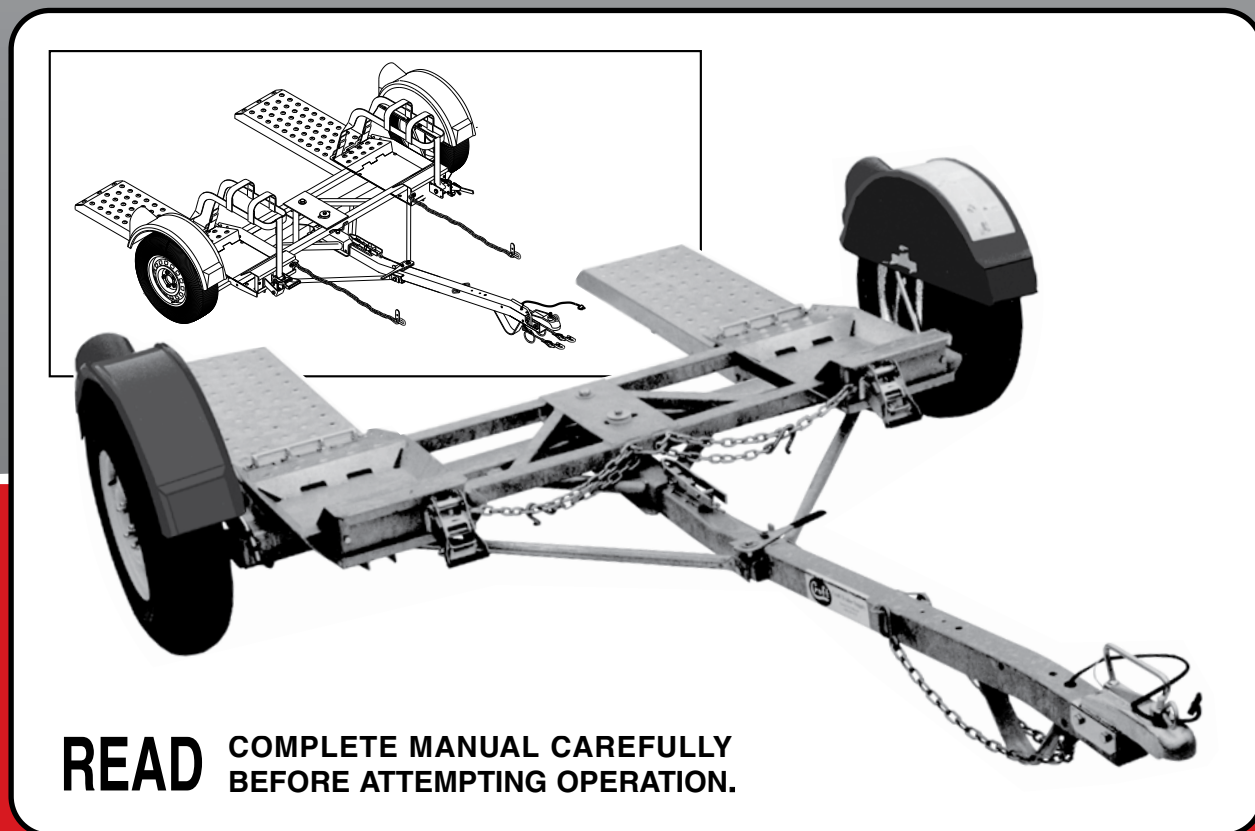
# CROFT TOW DOLLY

*MODELS CG850T76, CG850TDB76 & CP85076*



## OWNERS MANUAL

Towing Instructions, Assembly, Parts Breakdown and Options



**CROFT TRAILER SUPPLY, INC.**

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**! WARNING**

Exceeding weight limitations or not using a towing vehicle larger and at least 1,000 lbs. heavier than the tow dolly and the towed vehicle combined can result in loss of towing vehicle control, separation of the tow dolly from the towing vehicle, or separation of the towed vehicle from the tow dolly, causing severe personal injury, death, or property damage.  
 All vehicles to be towed on tow dollies must be towed with the front axle on the dolly.

**It is recommended that two people set-up and load this piece of equipment**

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**WIRING OF THE TOWING VEHICLE**

Connect the wiring to the towing vehicle keeping in mind the color code indicated below.

1. Make certain the towing vehicle lights are "OFF".
2. Connect YELLOW wire to left turn signal and stop wire in the left rear of towing vehicle with the wire splicer supplied.
3. Connect GREEN wire to the right turn signal and stop wire.
4. Connect BROWN wire to tail light wire.
5. VERY IMPORTANT - connect WHITE wire to frame or body of towing vehicle. This is the common ground and a clean metal-to-metal contact must be made.

**CAUTION:** Many flashers for vehicle turn signals will not carry the additional load of tow dolly turn signals. If normal operation does not occur when connected to the tow dolly, a heavy duty replacement flasher may be obtained through an auto parts outlet store.

**TESTING CIRCUITRY**

1. Check that the WHITE (ground) wire is connected to the frame of the towing vehicle.
2. With headlights in "ON" position, the tail lights should be lighted.
3. Start engine and have someone depress brake pedal. Brake lights of the tow dolly and towing vehicle should come "on" and "off" simultaneously with each application.
4. Put left turn signal on. Left turn light of tow dolly and towing vehicle should flash simultaneously. Should the turn signal light of the tow dolly function opposite to those of the towing vehicle, it is probable that the YELLOW and GREEN wires have been reversed. Check the plug connection under the tongue of the tow dolly to make sure wire colors are not crossed at that point. If this plug connection is correct, correct problem by reversing yellow and green wire connection on the towing vehicle.

# SAFETY

**TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.**



**THIS SYMBOL MEANS**

**ATTENTION**

**BECOME ALERT**

**YOUR SAFETY IS INVOLVED!**

## **SIGNAL WORDS:**

Note the use of the following signal words **DANGER**, **WARNING**, and **CAUTION** with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

### **DANGER:**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for tow unit components which, for functional purposes, cannot be guarded.

### **WARNING:**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

### **CAUTION:**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



## SAFETY...YOU CAN LIVE WITH IT



### EQUIPMENT SAFETY GUIDELINES

Every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or you yourself, follow them.

Replace any caution, warning, danger or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this tow unit under the influence of alcohol or drugs.

Review the safety instructions with all users.

Operator should be a responsible adult. **DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS UNIT UNTIL THEY HAVE DEVELOPED A THOROUGH UNDERSTANDING OF THE SAFETY PRECAUTIONS AND HOW IT WORKS.**

Do not paint over, remove, or deface any safety signs or warning decals on your tow unit . Observe all safety signs and practice the instructions on them.

Never exceed the limits of a tow unit. If its ability to do a job safely is in question **DON'T TRY IT.**



### LIGHTING AND MARKING

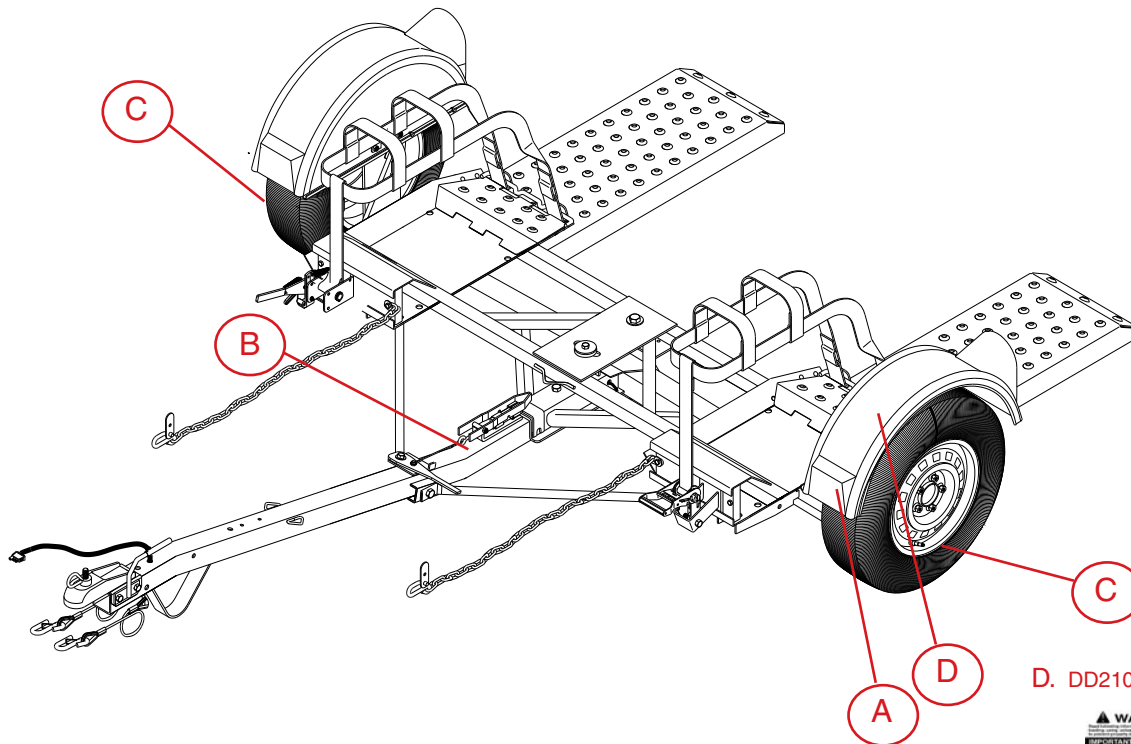
It is the responsibility of the owner to know lighting and marking requirements of local highway authorities and to install and maintain equipment to provide compliance with regulations.

Light bar kits and magentic tow lights are available from Croft Trailer Supply Inc.



# SAFETY SIGN LOCATIONS

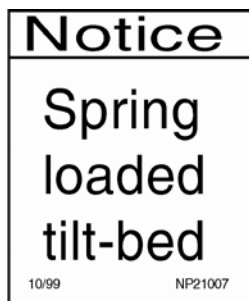
Types of safety signs and locations on a Croft Tow Dolly are shown in the illustration below. Good safety requires that you familiarize yourself with various safety signs, type of warning, and particular functions related to that area, that requires your SAFETY AWARENESS.



A. NA21007 55 MPH Speed Limit



B. NP21007 Tilt Bed



C. DA21001 Tire Pressure/Torque



D. DD21012 Instruction Decal





## **SAFETY SIGN CARE**

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replacement parts that displayed a safety sign should also display current sign.
- Safety signs are available from Croft Trailer Supply.

### **How to install safety signs:**

- Be sure installation surface is clean and dry.
- Decide on exact position before you remove backing paper.
- Remove smallest portion of split backing paper.
- Align decal over specified area and carefully press small portion with exposed sticky backing in place.
- Slowly peel back remaining paper and carefully smooth remaining portion of decal into place.
- Small air pockets can be pierced with a pin and smoothed out using piece of decal backing paper.



## **TIRE SAFETY**

- Failure to follow proper procedures when mounting a tire on a rim can produce an explosion which may result in serious injury or death.
- Do not attempt to mount a tire unless you have proper equipment and experience to do the job.
- Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires.
- Tow unit tires must be inflated to recommended P.S.I. . See decal on tow unit for correct pressure.
- Always order and install tires and wheels with appropriate type and load capacity to meet or exceed gross weight of unit.



## **REMEMBER**

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact Croft Trailer Supply.



## **BEFORE OPERATION:**

- Carefully study and understand this manual.
- Keep wheel and lug nuts tightened to specified torque.
- Assure tires are inflated evenly.
- Give unit a visual inspection for any loose bolts, worn parts, or cracked welds, and make necessary repairs. Follow maintenance safety instructions included in this manual.
- Be sure there are no tools lying on or in tow unit.
- Do not use unit until you are sure that area is clear, especially around children and animals.
- Don't hurry learning process or take unit for granted. Ease into it and become familiar with your new tow unit.
- Practice operation of your tow unit and its attachments. Completely familiarize yourself and other operators with its operation before using.
- Make sure that brakes are evenly adjusted (if equipped with brakes)
- Securely attach to towing vehicle. Use an appropriately sized and rated hitch ball and attach safety chains.
- Do not allow anyone to stand between tongue or hitch and towing vehicle when backing up to unit.
- Make sure tow rating on vehicle is high enough for what it is towing.



## **DURING OPERATION**

- **SAFETY CABLES** - Always follow state and local regulations regarding safety chains and auxiliary lighting when towing. Be sure to check with local law enforcement agencies for your own particular regulations. Only safety chains (not elastic or nylon/plastic tow straps) should be used to retain connection between towing vehicle and towed unit in event of separation.
- Do not load towed vehicle with cargo. Towed vehicles exceeding weight limits will overload tow unit and may cause serious injury and damage.
- Criss cross safety cables under tongue, secure to mounting loops on towing vehicle.
- Secure emergency brake actuator cable to mounting loop on towing vehicle.
- Beware of bystanders, **PARTICULARLY CHILDREN!** Always look around to make sure it is safe to start engine of towing vehicle or move unit. This is particularly important with higher noise levels, as you may not hear people shouting.
- **NO PASSENGERS ALLOWED**- Do not carry passengers anywhere on or in towed unit.
- When halting operation, even periodically, set towing vehicle parking brake, shut off engine, and **remove ignition key**.
- Be extra careful on inclines.



- **MANEUVER TOWING VEHICLE AT SAFE SPEEDS. DO NOT EXCEED 55 M.P.H.**
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- Avoid loose gravel, rocks, and holes; they can be dangerous for unit operation or movement.
- Allow for unit length when making turns.
- Do not work under raised components or attachments unless securely positioned and blocked.
- Keep all bystanders and pets clear of work area.
- Operate towing vehicle from operators seat only.
- As a precaution, recheck hardware on tow unit every 50 miles, and correct all problems. Follow maintenance safety procedures.



### **FOLLOWING OPERATION**

- Following operation, or when unhitching, stop towing vehicle, set parking brake, shut off engine and **remove ignition key**.
- Store tow unit in area away from human activity.
- Do not permit children to play on or around stored tow unit.
- Make sure parked tow unit is on hard, level surface.
- Wheel chocks may be needed to prevent unit from rolling.



### **HIGHWAY AND TRANSPORT OPERATIONS**

- Adopt safe driving practices:
  - Always drive at safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop. **Do not exceed 55 M.P.H.**
  - Reduce speed prior to turns to avoid risk of overturning.
  - Always keep towing vehicle in gear to provide engine braking when going downhill. **Do not coast.**
  - **Do not drink and drive!**
- Comply with state and local laws governing highway safety.
- Local laws should be checked for all highway lighting and marking requirements.



- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- Watch for obstructions overhead and to both sides while transporting.
- Operate with maximum visibility at all times. Make allowances for increased length and weight of tow unit when making turns and stopping.



## **PERFORMING MAINTENANCE**

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Make sure there is plenty of ventilation. Never operate engine of towing vehicle in a closed building. Exhaust fumes may cause asphyxiation.
- Before working on tow unit, stop towing vehicle, set parking brake, turn off engine and **remove ignition key**.
- Always block wheels and never use a jack as sole support.
- Always use proper tools or equipment for job at hand.
- Use extreme caution when making adjustments.
- Follow torque chart in this manual when tightening bolts and nuts.
- Openings in skin and minor cuts are susceptible to infection from brake fluid.  
**Without immediate medical treatment, serious infection and reactions can occur.**
- After servicing, be sure all tools, parts and service equipment are removed.
- Do not allow grease or oil to build up on any step or platform.
- When replacing bolts, refer to owners manual for proper size and grade.
- Refer to bolt torque chart for head identification marking.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your tow unit to original specifications. Manufacturer will not claim responsibility for use of unapproved parts and/or accessories or other damages as a result of their use.
- If tow unit has been altered in any way from original design, manufacturer does not accept any liability for injury or warranty.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this tow unit.

## BOLT TORQUE

### TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAP SCREWS.

Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt chart as guide. Replace hardware with same grade bolt.

NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.



### Torque Specifications

#### Bolt Torque for Standard Bolts \*

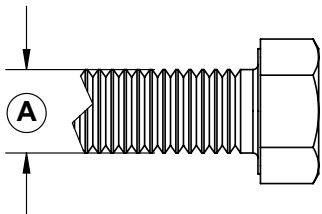
"A"	GRADE 2		GRADE 5		GRADE 8	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
1/4"	6	(8)	9	(12)	12	(16)
5/16"	10	(13)	18	(25)	25	(35)
3/8"	20	(27)	30	(40)	45	(60)
7/16"	30	(40)	50	(70)	80	(110)
1/2"	45	(60)	75	(100)	115	(155)
9/16"	70	(95)	115	(155)	165	(220)
5/8"	95	(130)	150	(200)	225	(300)
3/4"	165	(225)	290	(390)	400	(540)
7/8"	170	(230)	420	(570)	650	(880)
1"	225	(300)	630	(850)	970	(1310)

#### Bolt Torque for Metric Bolts \*

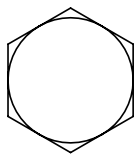
"A"	GRADE 8.8		GRADE 9.8		GRADE 10.9	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
6	9	(13)	10	(14)	13	(17)
7	15	(21)	18	(24)	21	(29)
8	23	(31)	25	(34)	31	(42)
10	45	(61)	50	(68)	61	(83)
12	78	(106)	88	(118)	106	(144)
14	125	(169)	140	(189)	170	(230)
16	194	(263)	216	(293)	263	(357)
18	268	(363)	--	--	364	(493)
20	378	(513)	--	--	515	(689)
22	516	(699)	--	--	702	(952)
24	654	(886)	--	--	890	(1206)

Torque figures indicated are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

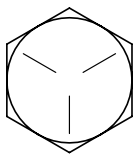
\* GRADE or CLASS value for bolts and capscrews are identified by their head markings.



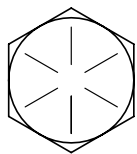
**GRADE-2**



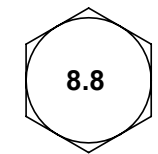
**GRADE-5**



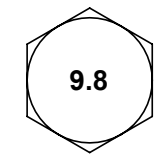
**GRADE-8**



**CLASS 8.8**



**CLASS 9.8**



**CLASS 10.9**



## TOW DOLLY LOAD LIMITATIONS

### READ TOW DOLLY INSTRUCTIONS BEFORE LOADING

**Maximum Tire Tread Width or Outside Body Width:  
42" Min. - 76" Max.**

### Maximum Towed Vehicle Weight

	CP85076 & CG850T76	CG850TDB76
Front Wheel Drive	4,330 lbs	4,550 lbs
Rear Wheel Drive or Four Wheel Drive	4,330 lbs	4,960 lbs

- Vehicle must be centered with front end on tow dolly facing forward.
- Vehicles with low front end or air dams may not have enough ground clearance to drive up on tow dolly platform.
- Vehicle must have lockable steering.
- Rear-wheel or four-wheel drive vehicles must have drive shaft disconnected.
- Do not tow mid or rear engine mounted vehicles
- Towed vehicles must not be loaded with possessions, people, pets, etc.

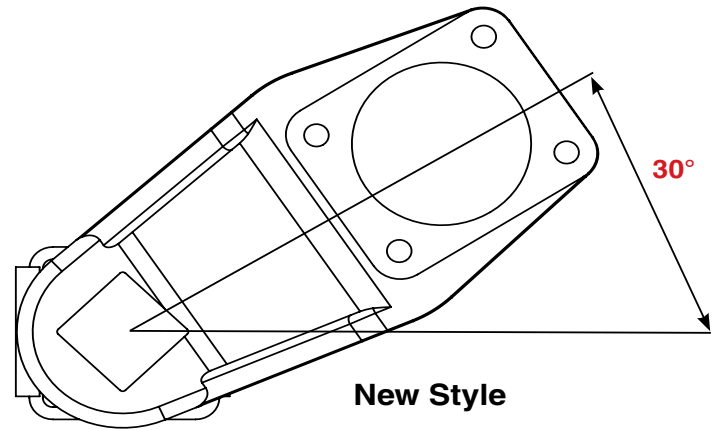
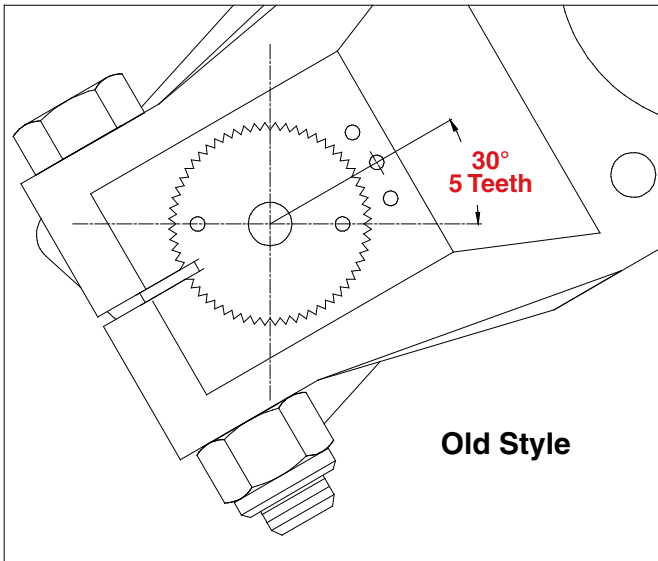
**TOW DOLLIES ARE ILLEGAL ON THE:**  
**NEW JERSEY TURNPIKE**  
**NEW JERSEY GARDEN STATE PARKWAY**

#### BACKING UP

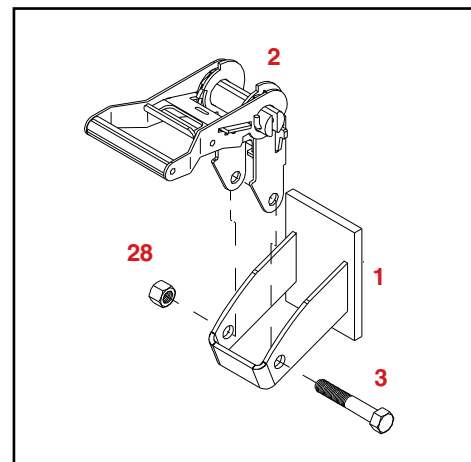
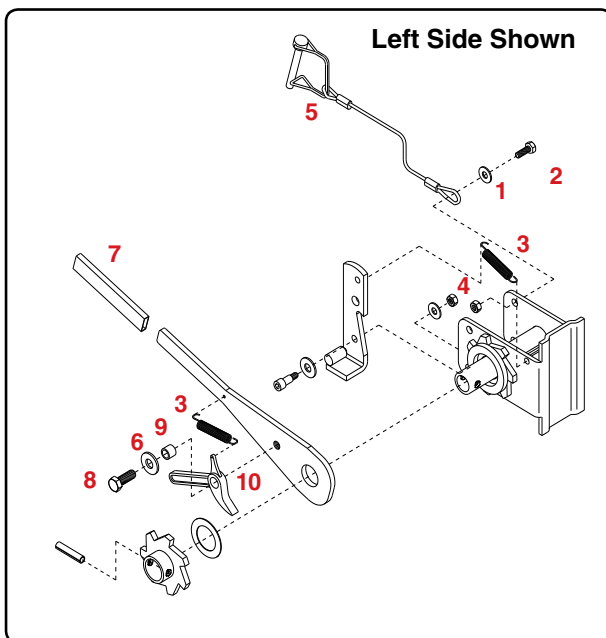
The tow dolly is not a trailer and cannot be backed up because it swivels both at the coupler and car platform. If you must back up, unload car first, disconnect the coupler, and move car and dolly separately.

**PLAY IT SAFE: Park where you can pull out going forward.**

## FORGED SPINDLE ARM ALIGNMENT



The end view drawing of the tow dolly axle and hub mount forging shows the location of the axle spline shaft divot marks and the casting marks. Casting location should be **5 teeth** up from level as shown above. **Approx. 30° upward.**



### LEVER RATCHET ASSEMBLY PARTS LIST

-	<b>5432</b>	-	Left Lever Ratchet
-	<b>5433</b>	-	Right Lever Ratchet
1.	<b>FW14Z</b>	1	1/4" Flat Washer
2.	<b>B14075G5ZC</b>	1	1/4"-20 UNC x 3/4" Hex Head Bolt
3.	<b>01864</b>	2	Spring
4.	<b>02772X</b>	2	1/4"-20 UNC Nylon Insert Locknut
5.	<b>05337X</b>	1	Lock Pin w/ Cable
6.	<b>FW516Z</b>	2	5/16" Flat Washer
7.	<b>02243X</b>	1	Black Vinyl Hand Grip
8.	<b>05444X</b>	1	3/8"-16 UNC x 3/4" Hex Head Bolt w/ Epoxy
9.	<b>05449X</b>	1	Winch Pawl Bushing (Stainless Steel)
10.	<b>05450</b>	1	Winch Pawl

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

REF. NO.	PART NO.	QTY.	DESCRIPTION
-	<b>5422</b>	-	Tie Down Ratchet Kit
1.	<b>03383X</b>	1	Mounting Bracket (plated)
2.	<b>03423X</b>	1	Ratchet
3.	<b>B1235G5ZC</b>	1	1/2"-13UNC x 3-1/2" Hex Head Bolt Gr.5
28.	<b>LN12G5ZC</b>	1	1/2"-13UNC Nylon Insert Locknut

Please order replacement parts by **PART NO.** and **DESCRIPTION.**



## WARNING

Read the following information completely before hooking up, loading, using, unloading or unhooking the tow dolly. Failure to abide by the following can result in damage to property, severe personal injury and/or death.

### IMPORTANT DO'S & DON'TS

- Read the towing instructions in the towed vehicle's owner's manual.
- Use a 2", 5000 lb. (or greater) capacity ball for a Tow Dolly *without* surge brakes and a 2", 6000 lb. (or greater) capacity ball for a Tow Dolly *with* surge brakes.
- Make sure the towing vehicle's parking brake is fully engaged before starting hookup, loading, unloading or unhooking of the Tow Dolly.
- Do not load the towed vehicle onto the Tow Dolly until the Tow Dolly is completely and properly hooked up to the towing vehicle and setting on a level surface.
- Always drive the front wheels of the towed vehicle onto the Tow Dolly. Do not load backwards.
- Tail lights and stop lights must be hooked up and operating properly at all times.
- Do not load a towed vehicle that exceeds the weight or size limits onto the Tow Dolly.
- Always have someone safely guide you when driving the towed vehicle onto the Tow Dolly.
- Be sure the tires of your towed vehicle and the Tow Dolly are in good condition and inflated to the proper pressures. Tire pressure may increase during travel - do *not* bleed off this increase in pressure.
- Do not back up your towing vehicle when the Tow Dolly is attached. The Tow Dolly swivels both at the coupler and at the car platform. If you *must* back up, unload the towed vehicle first, disconnect the Tow Dolly and move the vehicle and tow dolly separately. *Play It Safe... park where you can pull ahead when leaving.*
- Do not exceed 55 miles per hour, or any lower posted speed limit.
- Avoid sharp turns or swerves.
- Braking distance increases when using a Tow Dolly. Use caution and always allow sufficient distance for braking.
- Do not transport passengers or cargo in the vehicle being towed.
- Do not unhook the Tow Dolly from the towing vehicle until the towed vehicle is completely unloaded from the Tow Dolly.

### IMPORTANT INFORMATION

#### CUSTOMER RESPONSIBILITIES

The customer assumes all risks inherent in the operation, use, or possession of the Tow Dolly. Towing a vehicle is the customer's responsibility and it is the customer who must ensure that the weight and size limits of the Tow Dolly rented will not be exceeded by the vehicle being towed. Any injury or damage that results from exceeding weight or size limits is the sole responsibility of the customer.

#### TOWING VEHICLE REQUIREMENTS

The customer assumes all responsibility for the towing vehicle's fitness and suitability to perform the towing task in a safe, legal, and reliable manner. These responsibilities may include, but are not limited to:

- The towing vehicle's weight being at least 1000 lbs. greater than the weight of the tow dolly and the towed vehicle.
- Compliance with towing restrictions as stated by the towing vehicle's owner's manual and/or manufacturer.
- The towing vehicle having, as a minimum, a 5000 lb., Class 3 hitch and hitch ball for a Tow Dolly *without* surge brakes. Or a 6000 lb. hitch, class 3 and hitch ball for a Tow Dolly *with* surge brakes. (Hitch ball must be 2". Do not use any other size hitch ball.)
- The towing vehicle being in good condition.
- The towing vehicle having a current federal and/or state inspection where applicable, and complying with any applicable laws.
- Making sure all lights are properly hooked up and operating at all times.
- The towing vehicle's hitch being approximately 20 inches to the top of the ball. Make sure that the hitch and the hitch ball are in good condition and not rusted, loose or stripped. Both the hitch and the hitch ball must be securely attached to the towing vehicle.

#### LOAD WEIGHT AND SIZE LIMITS

Load Limits (total weight of towed vehicle). A towed vehicle exceeding the weight limit will overload the tow dolly and may cause serious injury and damage to both the towed vehicle and the Tow Dolly.

For Tow Dolly *without* surge brakes:

- Front-Wheel-Drive Vehicles: 4330 lbs. max.
- Rear-Wheel-Drive Vehicles: 4330 lbs. max.

For Tow Dolly *with* surge brakes:

- Front-Wheel-Drive Vehicles: 4550 lbs. max.
- Rear-Wheel-Drive Vehicles: 4960 lbs. max.

Size Limits. A towed vehicle exceeding the width limit will obstruct the platforms swivel action when towing and could damage the towed vehicle's tires and the fenders.

- Maximum Vehicle Tread & Body Width: 76" from outside of left tire to outside of right tire on the front axle.

## TOW DOLLY INSTRUCTIONS

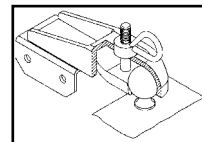
The tow dolly may only be used with a vehicle that is equipped with a 2", 5,000 lb. capacity ball. When used properly, the tow dolly can provide a safe and effective means to transport a vehicle within the following limitations. **WARNING:** Read all Tow Dolly instructions and load limitations before using Tow Dolly.

### IMPORTANT

Tow dolly must be attached to the towing vehicle before loading the towed vehicle onto the tow dolly. Do not back the vehicle with the tow dolly attached, as this will damage the towed vehicle and tow dolly. If in a situation where backing is necessary, disconnect the towed vehicle from the tow dolly, and the tow dolly from the towing vehicle and move separately.

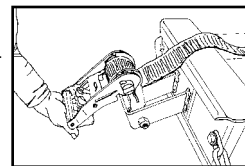
#### HOOK-UP OF THE TOW DOLLY

1. Loosen coupler loop nut. Place the coupler of the tow dolly over the 2" hitch ball on the truck. Be sure the coupler is fully seated down over the ball. Make sure that the hitch and hitch ball are in good condition and not rusted, loose or stripped. Both the hitch and hitch ball must be securely attached to the towing vehicle.
2. Completely tighten the coupler loop nut. Pull up on the tow dolly tongue to be sure it is properly secured.
3. Connect the color coded wires from the tow dolly to the corresponding color coded posts on the towing vehicle's electrical box.
4. Crisscross the safety chains under tongue and secure to towing vehicle frame. Allow some slack in the chains for movement during turns made by the towing vehicle and tow dolly.



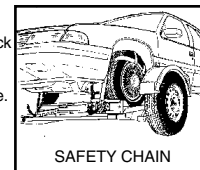
#### HOOK-UP OF THE TOWED VEHICLE TO TOW DOLLY

1. Be sure that the towing vehicle and tow dolly are straight and on level ground.
  2. Make sure that the tow dolly platform is straight.
  3. Lift ratchet handle to full extended position and unroll straps from ratchet. Return ratchet handle to the down position.
  4. Lay straps along fender side of tow dolly, off of tow dolly platform.
  5. Allow tow dolly platform to tilt back by releasing the locking pin.
  6. Slowly drive the front end of the towed vehicle onto the tow dolly until tires on the towed vehicle are resting against the tow dolly wheel stops. The platform will go into upright position.
- Make certain that the towed vehicle is centered on tow dolly platform since the platform swivels during turns. Adequate space is required between the tow dolly fenders and towed vehicle.



**CAUTION: NEVER BACK A TOWED VEHICLE ONTO A TOW DOLLY.**

7. Locking pin on platform must go into the locked position.
8. For safety reasons, engage the parking brake of the towed vehicle (see item #13) and place transmission in low gear (standard) or park (automatic).
9. Center the tie down ratchets in front of the towed vehicle tires and pull the tow dolly tire straps forward over the tires.
10. Tighten each strap securely by pulling up and down as many times as necessary on the tie down ratchet assembly handle until the tire flattens slightly against the tire stop. Place handle in down position.
11. Hook up safety chains from tow dolly platform to the frame of towed vehicle directly above the area where chains are mounted on tow dolly. Allow slight slack in the chains to provide for suspension movement on the towed vehicle.
12. Disconnect the drive shaft on the towed vehicle if rear-wheel or four-wheel drive. Consult your dealer if you are uncertain of above. **TOWING ABOVE VEHICLE WITHOUT DISCONNECTING DRIVE SHAFT WILL DAMAGE TOWED VEHICLE'S TRANSMISSION EVEN IF TRANSMISSION IS PLACED IN NEUTRAL.**
13. Release parking brake on towed vehicle and be sure the steering is **LOCKED** in the straight position. The towed vehicle must have lockable steering. Remove keys from ignition and lock vehicle.
14. Check the towing system after hook-up, tow about 100 feet, then stop and perform a safety check. Check the bolts, chains, coupler, ramps, tire straps, and other items to make sure they are in the right position and secure. Repeat the safety check after the first 5 miles and then every 50 miles thereafter.
15. Towed vehicle is now safely connected and ready to be towed.

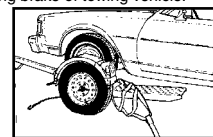


CHECK THE TOW DOLLY BOLTS, COUPLER, SAFETY CHAINS, ELECTRICAL HOOK-UP, AND TIRE STRAPS AFTER 100 FEET, AFTER THE FIRST 5 MILES OF TRAVEL, AND THEN EVERY 50 MILES THEREAFTER.

**DO NOT EXCEED 55 MILES PER HOUR OR ANY LOWER POSTED SPEED LIMIT.**

#### UNLOAD TOWED VEHICLE FROM TOW DOLLY

1. Park towing vehicle and tow dolly straight and on level ground. Apply parking brake of towing vehicle.
2. Fully apply towed vehicle parking brake.
3. Install drive shaft on rear-wheel or four-wheel drive towed vehicle.
4. Remove wheel straps and safety chains from towed vehicle.
5. Release tow dolly platform locking pin.
6. Release parking brake on towed vehicle.
7. SLOWLY back towed vehicle off of tow dolly to prevent bottom of vehicle from contacting ramps.



CHECK TRANSMISSION FLUID LEVEL ON TOWED VEHICLE IF DRIVE SHAFT WAS REMOVED AS FLUID MAY HAVE LEAKED OUT DURING TOWING.

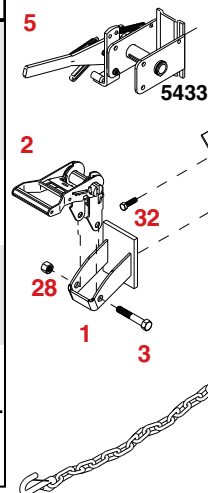
8. Return tow dolly platform to the up position and engage locking pin.
9. Take up excess slack on tow dolly straps in ratchet assembly.
10. Store all safety chains in storage position.
11. Wrap tow dolly electrical wires around tow dolly tongue handle.

## CG850T76 & CG850TDB76 PARTS BREAKDOWN

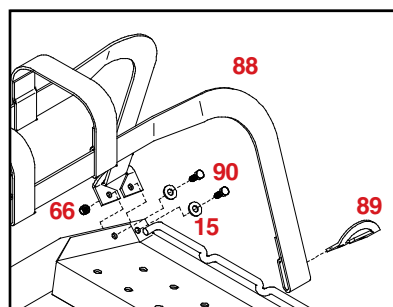
REF. NO.	PART NO.	QTY.	DESCRIPTION
-	<b>5422</b>	2	Tie Down Ratchet Kit
1.	<b>03383X</b>	1	Mounting Bracket (plated)
2.	<b>03423X</b>	1	Ratchet
3.	<b>B1235G5ZC</b>	1	1/2"-13UNC x 3-1/2" Hex Head Bolt (Gr.5)
28.	<b>LN12G5ZC</b>	1	1/2"-13UNC Nylon Insert Locknut

4.	<b>5432</b>	1	Left Lever Ratchet
5.	<b>5433</b>	1	Right Lever Ratchet
6.	<b>NLN716G2ZC</b>	6	7/16"-14 UNC Nylon Insert Locknut
-	<b>NLN716G2ZC</b>	4	Brake Units
7.	<b>03574X</b>	1	Latch Handle (plated)
8.	<b>02243X</b>	1	Black Vinyl Hand Grip
9.	<b>03381X</b>	1	Latch Catch (plated)
10.	<b>03382X</b>	1	Handle Bushing (plated)
11.	<b>FW12Z</b>	4	1/2" Flatwasher
12.	<b>B12125G5ZC</b>	1	1/2"-13UNC x 1-1/4" Hex Head Bolt (Gr.5)
13.	<b>02189X</b>	1	Hand Grip
14.	<b>05444X</b>	1	3/8"-16 UNC x 3/4" Epoxied Hex Bolt (Gr. 5)
15.	<b>FW38Z</b>	5	3/8" Flatwasher
16.	<b>05449X</b>	1	Spacer Bushing - Stainless Steel
17.	<b>03434X</b>	1	5/16"-18 UNC x 5-1/4" Eye Bolt
18.	<b>03433X</b>	1	Latch Cable
19.	<b>03435X</b>	1	Roll Pin (5/16" x 2-1/4")
20.	<b>03499X</b>	1	Latch Spring - Stainless Steel
21.	<b>HN516G2ZC</b>	1	5/16"-18 UNC Hex Nut
22.	<b>B51625G5ZC</b>	1	5/16"-18 UNC x 2-1/2 Hex Head Bolt (Gr. 5)
23.	<b>NLN516G2ZC</b>	1	5/16"-18 UNC Nylon Insert Locknut
24.	<b>FW516Z</b>	1	5/16" Flatwasher
25.	<b>03769X</b>	1	Tongue (galvanized)
26.	<b>H3BOS</b>	1	Coupler (Cast)
27.	<b>B1245G5ZC</b>	4	1/2"-13UNC x 4-1/2" Hex Head Bolt (Gr.5)
28.	<b>NLN12G2ZC</b>	10	1/2"-13UNC Nylon Insert Locknut
29.	<b>02288-95</b>	1	Lift Handle (units without brakes) (plated)
-	<b>04017X</b>	1	Lift Handle (units with brakes) (plated)
30.	<b>03503X</b>	2	5/8" -11UNC x 1-1/4" Hex Epoxied Bolt(Gr.5)
31.	<b>5841</b>	2	24" Safety Cable with Hardware
-	<b>5842</b>	2	36" Safety Cable with Hardware (Brake Unit)
32.	<b>B716125G5ZC</b>	4	7/16"-14UNC x 1-1/4" Hex Head Bolt (Gr.5)
33.	<b>11590X</b>	1	Wiring Harness (Front Half)
34.	<b>11591X</b>	1	Wiring Harness (Rear Half)
35.	<b>03394X</b>	2	Bracing Strut (8'-6" wide unit) (galvanized)
36.	<b>B1215G5ZC</b>	2	1/2"-13UNC x 1-1/2" Hex Head Bolt (Gr.5)
37.	<b>02579X</b>	2	Pivot Bushing (plated)
38.	<b>07166X</b>	1	Tilt Bed Spring
39.	<b>B5845G5ZC</b>	1	5/8"-11UNC x 4-1/2" Hex Head Bolt (Gr.5)
40.	<b>NLN58G2ZC</b>	1	5/8"-11UNC Nylon Insert Locknut
42.	<b>01863X</b>	3	5/8" Grommet
43.	<b>B71615G5ZC</b>	2	7/16" -14UNC x 1.5" Hex Head Bolt (Gr. 5)
44.	<b>12068X</b>	1	Undercarriage (galvanized)
45.	<b>12986-30</b>	1	Cartridge Insert Left
46.	<b>12987-30</b>	1	Cartridge Insert Right
47.	<b>03500X</b>	4	1/2"-13UNC x 1" Socket Hd. Set Screw
51.	<b>04369X</b>	2	Hub (5 on 115mm Bolt Circle)
52.	<b>02377X</b>	8	7/16"-20UNF x 1-1/2" Epoxied Hex Bolt (Gr.8)
-	<b>02377X</b>	10	Brake Units
53.	<b>04366X</b>	2	14" x 5.5" Rim (5 on 115mm Bolt Circle)
54.	<b>04826X</b>	2	ST205/75R 14" x "C" Radial Tire
-	<b>CTD4ST</b>	-	Replacement Wheel/Tire
55.	<b>02213X</b>	10	12mm zinc Lug Nut
56.	<b>11971</b>	2	Nut Plate
57.	<b>07092X</b>	2	48" Ramp (galvanized)
58.	<b>B716075G8ZF</b>	20	7/16"-20UNF x 3/4" Hex Head Bolt (Gr.8)
59.	<b>LN716G5ZF</b>	20	7/16"-20UNF Hex Punch Locknut
60.	<b>03377X</b>	2	Wear plate (four hole)
61.	<b>07082X</b>	8	1/4"-20 UNC x 1" Flat Hd Torx Cap Screw
63.	<b>04424X</b>	2	Back-Up Plate for Fender (plated)
64.	<b>B3815G5ZC</b>	4	3/8"-16UNC x 1" Hex Head Bolt (Gr.5)
65.	<b>03526X</b>	2	3/8"-16UNC x 1-1/2" Flat Hex Hd Socket Bolt
66.	<b>NLN38G8ZC</b>	6	3/8"-16UNC Nylon Insert Locknut
67.	<b>14124</b>	1	Right Poly Fender Grey
68.	<b>14123</b>	1	Left Poly Fender Grey
70.	<b>04425X</b>	6	Wire Retaining Clip
71.	<b>426-18</b>	2	Rubber Mounting Grommet for light
72.	<b>11209</b>	2	Sealed "LED" Round Tail Light
73.	<b>11206</b>	2	Wire Harness for LED light
74.	<b>12049X</b>	1	Top Platform (galvanized)
75.	<b>B12225G5ZC</b>	1	1/2"-13UNC x 2-1/4" Hex Hd. Bolt (Gr.5)
76.	<b>02578X</b>	1	Metal Pivot Washer (plated)
77.	<b>00698X</b>	1	Top Pivot Bushing (plated)
78.	<b>03370X</b>	1	UHMW Pivot Washer

REF. NO.	PART NO.	QTY.	DESCRIPTION
79.	<b>B347G5ZC</b>	1	3/4"-10UNC x 7" Hex Hd. Bolt (Gr.5)
80.	<b>FW34Z</b>	1	3/4" Flatwasher
81.	<b>NLN34G2ZC</b>	1	3/4"-10UNC Nylon Insert Locknut
82.	<b>02383X</b>	2	36" Safety Chain with hook
-	<b>04194X</b>	-	7/16" "S" Hook for safety chains
83.	<b>03528X</b>	2	Removable 3-point Strap w/Buckle
-	<b>02729X</b>	2	Buckle only (plated)
84.	<b>FW716Z</b>	12	7/16" Flatwasher
85.	<b>07167X</b>	1	Spring Sleeve (plated)
86.	<b>HN716G8ZF</b>	2	7/16"-20UNF Hex Nut (Gr.8) (Brake Unit)
87.	<b>12229-95</b>	2	Safety Cable Mounting Washer
91.	<b>03379X</b>	1	Latch Block
92.	<b>12925</b>	1	Coupler (eZ-Latch)
93.	<b>02917X</b>	10	Replacement 12mm x 1.5" Stud Bolt
-	<b>04508X</b>	2	Amber Fender Reflector (not shown)
-	<b>04804X</b>	2	Red Fender Reflector (not shown)
-	<b>04944</b>	2	Strain Relief (not shown)
-	<b>5452</b>	1	Tilt Bed Spring and Sleeve Assembly
38.	<b>07166X</b>	1	Tilt Bed Spring
85.	<b>07167X</b>	1	Spring Sleeve (plated)



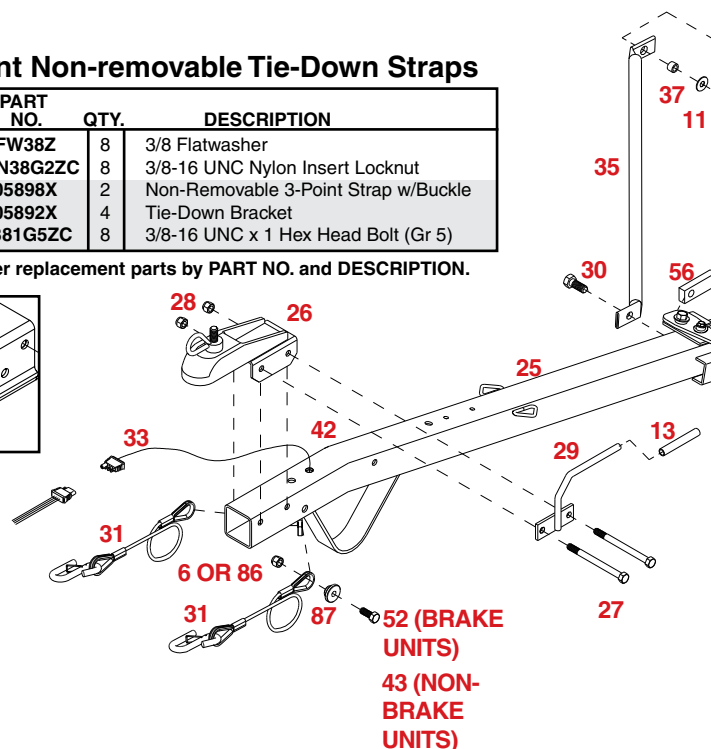
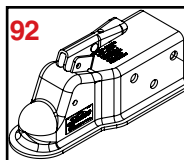
Please order replacement parts by PART NO. and DESCRIPTION.



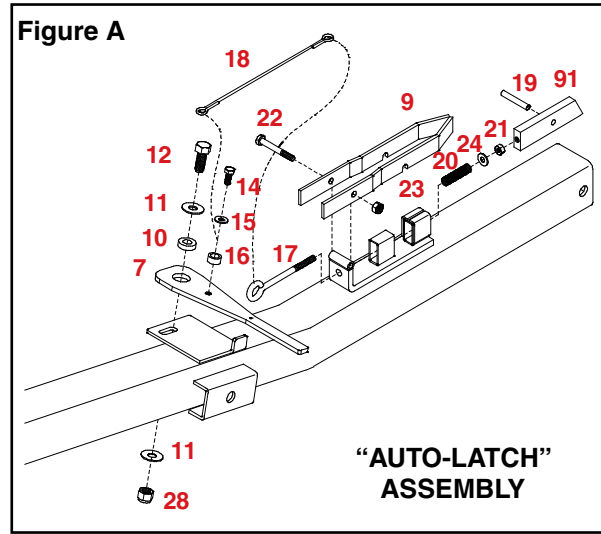
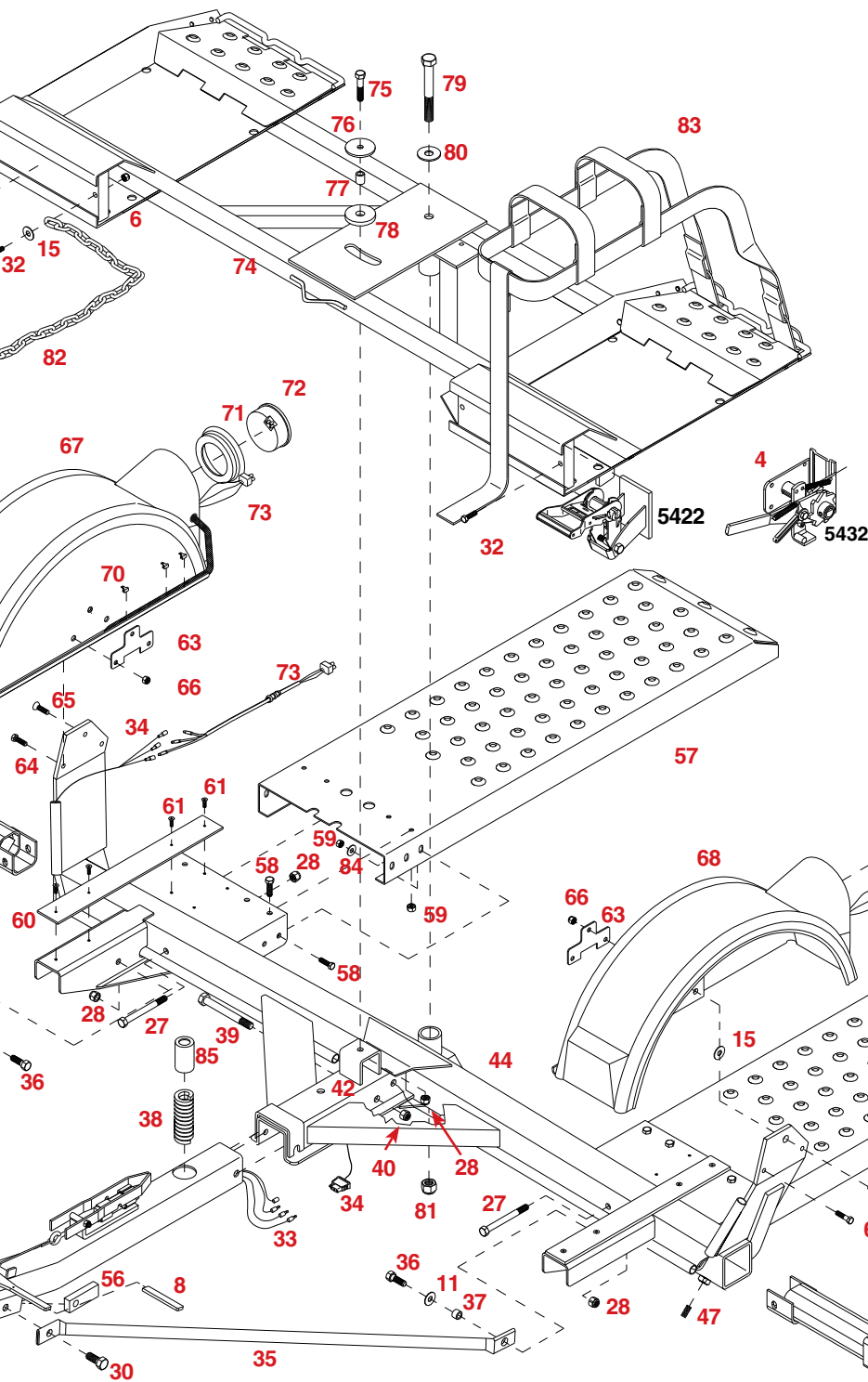
### 3-Point Non-removable Tie-Down Straps

REF. NO.	PART NO.	QTY.	DESCRIPTION
15.	<b>FW38Z</b>	8	3/8 Flatwasher
66.	<b>NLN38G2ZC</b>	8	3/8-16 UNC Nylon Insert Locknut
88.	<b>05898X</b>	2	Non-Removable 3-Point Strap w/Buckle
89.	<b>05892X</b>	4	Tie-Down Bracket
90.	<b>B381G5ZC</b>	8	3/8-16 UNC x 1 Hex Head Bolt (Gr 5)

Please order replacement parts by PART NO. and DESCRIPTION.







REF. NO.	PART NO.	QTY.	DESCRIPTION
-	5511	-	Auto Latch Rebuilt Kit
91.	03379X	1	Latch Block (plated)
17.	03434X	1	5/16"-18 UNC x 5-1/4" Eye Bolt
18.	03433X	1	Latch Cable
19.	03435X	1	Roll Pin (5/16" x 2-1/4")
20.	03499X	1	Latch Spring -Stainless Steel
21.	HN516G2ZC	1	5/16"-18 UNC Hex Nut
24.	FW516Z	1	5/16" Flatwasher

Please order replacement parts by PART NO. and DESCRIPTION.

<b>WHITE</b>	Ground	
<b>BROWN</b>	Tail lights	
<b>YELLOW</b>	Left Turn and Stop	Red on Fender
<b>GREEN</b>	Right Turn and Stop	Red on Fender

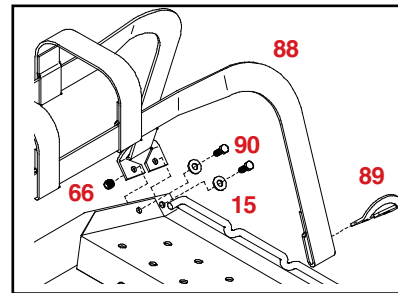


## CP85076 PARTS BREAKDOWN

REF. NO.	PART NO.	QTY.	DESCRIPTION
-	5422	2	Tie Down Ratchet Kit
1.	03383X	1	Mounting Bracket (plated)
2.	03423X	1	Ratchet
3.	B1235G5ZC	1	1/2" - 13UNC x 3-1/2" Hex Head Bolt (Gr.5)
28.	LN12G5ZC	1	1/2" - 13UNC Nylon Insert Locknut
4.	5432	1	Left Lever Ratchet
5.	5433	1	Right Lever Ratchet
6.	NLN716G2ZC	6	7/16" - 14UNC Nylon Insert Locknut
7.	03574X	1	Latch Handle (plated)
8.	02243X	1	Black Vinyl Hand Grip
9.	03381X	1	Latch Catch (plated)
10.	03382X	1	Handle Bushing (plated)
11.	FW12Z	4	1/2" Flatwasher
12.	B12125G5ZC	1	1/2"-13UNC x 1-1/4" Hex Head Bolt (Gr.5)
13.	02189X	1	Hand Grip
14.	05444X	1	3/8"-16 UNC x 3/4" Epoxyed Hex Bolt (Gr. 5)
15.	FW38Z	21	3/8" Flatwasher
16.	05449X	1	Spacer Bushing - Stainless Steel
17.	03434X	1	5/16" - 18UNC x 5-1/4" Eye Bolt
18.	03433X	1	Latch Cable
19.	03435X	1	Roll Pin (5/16" x 2-1/4")
20.	03499X	1	Latch Spring - Stainless Steel
21.	HN516G2ZC	1	5/16" - 18UNC Hex Nut
22.	B51625G2ZC	1	5/16" - 18UNC x 2-1/2" Hex Head Bolt (Gr.5)
23.	NLN516G2ZC	1	5/16" - 18UNC Nylon Insert Locknut
24.	FW516Z	1	5/16" Flatwasher
25.	12696-80	1	Tongue (painted)
26.	H3BOS	1	Coupler (Cast)
27.	B1245G5ZC	4	1/2"-13UNC x 4-1/2" Hex Head Bolt (Gr.5)
28.	NLN12G2ZC	10	1/2"-13UNC Nylon Insert Locknut
29.	02288-95	1	Lift Handle (plated)
30.	03503X	2	5/8"-11UNC x 1-1/4" Hex Hd. Epoxyed Bolt(Gr.5)
31.	5841	2	24" Safety Cable with Hardware
32.	B716125G5ZC	4	7/16"-14UNC x 1-1/4" Hex Head Bolt (Gr.5)
33.	11590X	1	Wiring Harness (Front Half)
34.	11591X	1	Wiring Harness (Rear Half)
35.	03394X	2	Bracing Strut (8'-3" wide unit) (galvanized)
36.	B1215G5ZC	2	1/2"-13UNC x 1-1/2" Hex Head Bolt (Gr.5)
37.	02579X	2	Pivot Bushing (plated)
38.	07166X	1	Tilt Bed Spring
39.	B5845G5ZC	1	5/8"-11UNC x 4-1/2" Hex Head Bolt (Gr.5)
40.	NLN58G2ZC	1	5/8"-11UNC Nylon Insert Locknut
42.	01863X	3	5/8" Grommet
43.	B71615G5ZC	2	7/16" x 14UNC x 1.5" Hex Head Bolt
44.	12068-80	1	Undercarriage
45.	11204-30	1	Right Axle
46.	11203-30	1	Left Axle
47.	03500X	4	1/2"-13UNC x 1" Socket Hd. Set Screw
49.	03388-80	2	Rear Tire Stop
51.	04369X	2	Hub (5 on 115mm Bolt Circle)
52.	02210X	8	7/16"-20UNF x 1-1/4" Epoxyed Hex Bolt (Gr.8)
53.	04366X	2	14" x 5.5" Rim (5 on 115mm Bolt Circle)
54.	04826X	2	ST205/75R 14" x "C" Radial Tire
-	CTD4ST	-	14" Replacement Wheel/Tire
55.	02213X	10	12mm zinc Lug Nut
56.	11971	2	Nut Plate
57.	07092X	2	48" Ramp (galvanized)
58.	B716075G8ZF	20	7/16"-20UNF x 3/4" Hex Head Bolt (Gr.8)
59.	LN716G5ZF	28	7/16"-20UNF Hex Punch Locknut
60.	03377X	2	Wear plate (four hole)
61.	07082X	8	1/4"-20 UNC x 1" Flat Hd Torx Cap Screw
63.	04424X	2	Back-Up Plate for Fender (plated)
64.	B3815G5ZC	4	3/8"-16UNC x 1-1/2" Hex Head Bolt (Gr.5)
65.	03526X	2	3/8"-16UNC x 1-1/2" Flat Hex Head Socket Bolt
66.	NLN38G8ZC	14	3/8"-16UNC Nylon Insert Locknut
67.	03771X	1	Right Poly Fender Black
68.	03372X	1	Left Poly Fender Black
70.	04425X	6	Wire Retaining Clip
71.	426-18	2	Rubber Mounting Grommet for Light
72.	11209	2	Sealed "LED" Round Tail Light
73.	11206	2	Harness Wire Fender
74.	12085-80	1	Top Platform (painted)
75.	B12225G5ZC	1	1/2" - 13UNC x 2-1/4" Hex Hd. Bolt (Gr.5)
76.	02578X	1	Metal Pivot Washer (plated)
77.	00698X	1	Top Pivot Bushing (plated)
78.	03370X	1	UHMW Pivot Washer
79.	B347G5ZC	1	3/4" - 10UNC x 7" Hex Hd. Bolt (Gr.5)
80.	FW34Z	1	3/4" Flatwasher
81.	NLN34G2ZC	1	3/4" - 10NC Nylon Insert Locknut
82.	02383X	2	36" Safety Chain with Hook
-	04194X	2	7/16" "S" Hook for Safety Chains
83.	03528X	2	Removable 3-Point Strap w/Buckle

REF. NO.	PART NO.	QTY.	DESCRIPTION
48.	02729X	2	Buckle Only (plated)
84.	FW716Z	12	7/16" Flatwasher
85.	07167X	1	Spring Sleeve (plated)
87.	12229-95	2	Cable Mounting Washer
90.	B381G5ZC	8	3/8" - 16UNC x 1" Hex Bolt (Gr.5)
91.	B381G5ZC	1	Latch Block
92.	12925	1	Coupler (eZ-Latch)
93.	02917X	10	Replacement 12mm x 1.5 Stud Bolt
-	04508X	2	Amber Fender Reflector (not shown)
-	04804X	2	Red Fender Reflector (not shown)
-	04944	2	Strain Relief (not shown)
-	5452	1	Tilt Bed Spring & Sleeve Assembly
38.	07166X	1	Tilt Bed Spring
85.	07167X	1	Spring Sleeve (plated)

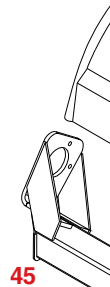
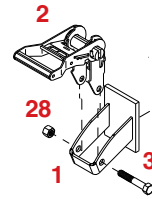
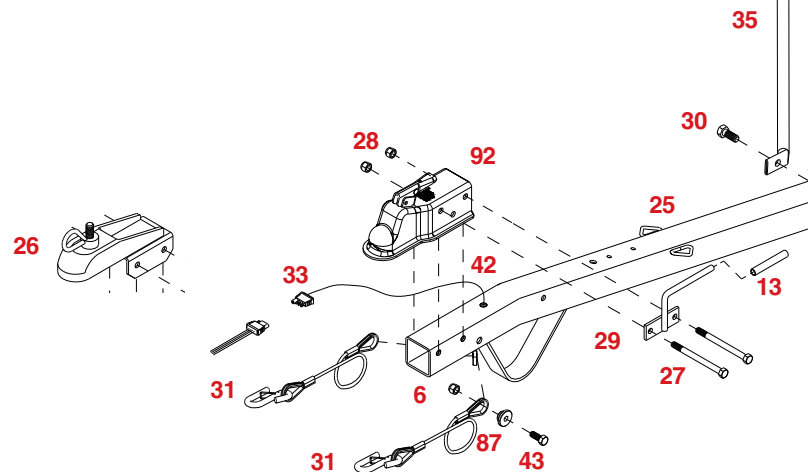
Please order replacement parts by PART NO. and DESCRIPTION.



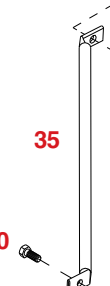
### 3-Point Non-removable Tie-Down Straps

REF. NO.	PART NO.	QTY.	DESCRIPTION
15.	FW38Z	8	3/8 Flatwasher
66.	NLN38G2ZC	8	3/8-16 UNC Nylon Insert Locknut
88.	05898X	2	Non-Removable 3-Point Strap w/Buckle
89.	05892X	4	Tie-Down Bracket
90.	B381G5ZC	8	3/8-16 UNC x 1 Hex Head Bolt (Gr 5)

Please order replacement parts by PART NO. and DESCRIPTION.

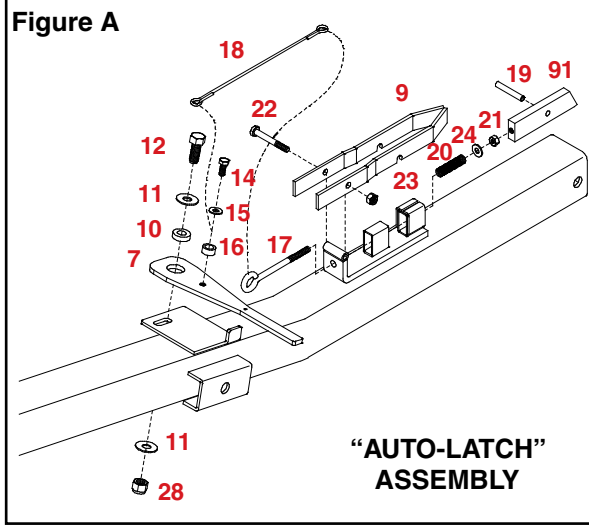
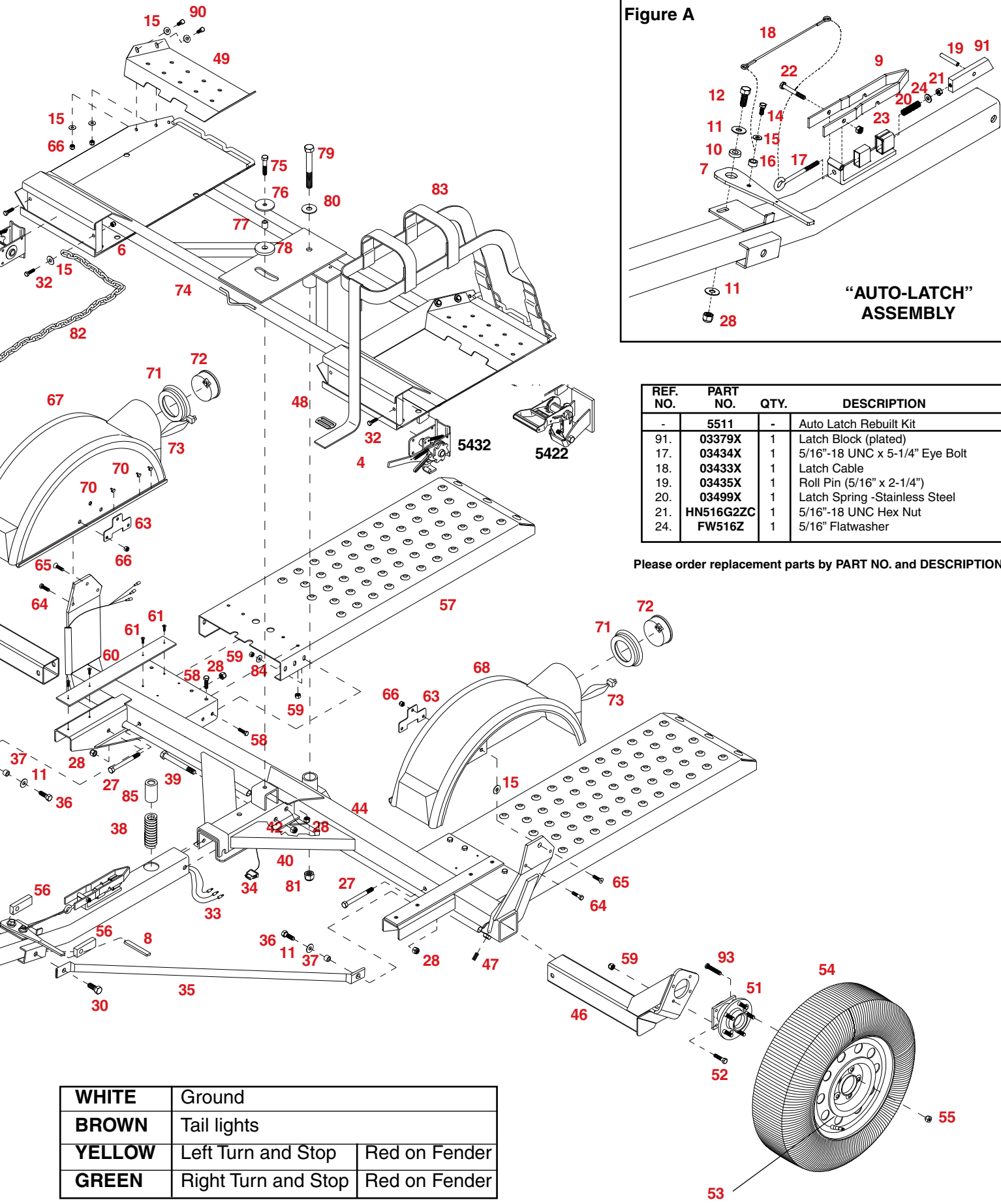


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# MODEL CP85076

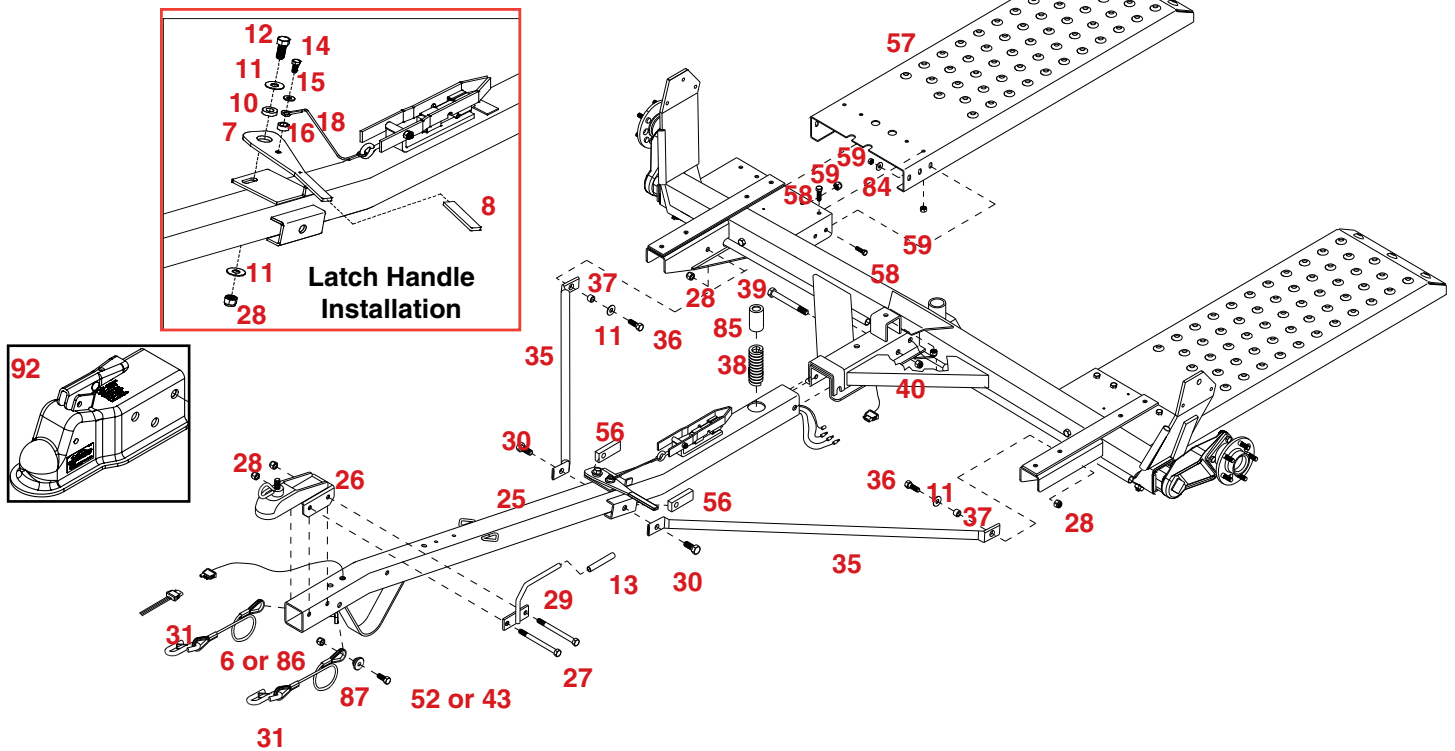


REF. NO.	PART NO.	QTY.	DESCRIPTION
-	5511	-	Auto Latch Rebuilt Kit
91.	03379X	1	Latch Block (plated)
17.	03434X	1	5/16"-18 UNC x 5-1/4" Eye Bolt
18.	03433X	1	Latch Cable
19.	03435X	1	Roll Pin (5/16" x 2-1/4")
20.	03499X	1	Latch Spring -Stainless Steel
21.	HN516G2ZC	1	5/16"-18 UNC Hex Nut
24.	FW516Z	1	5/16" Flatwasher

Please order replacement parts by PART NO. and DESCRIPTION.

<b>WHITE</b>	Ground	
<b>BROWN</b>	Tail lights	
<b>YELLOW</b>	Left Turn and Stop	Red on Fender
<b>GREEN</b>	Right Turn and Stop	Red on Fender

## ASSEMBLY INSTRUCTIONS

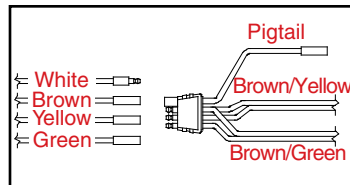


### Tools Needed

- End Wrenches - 9/16", 5/8", 11/16", 3/4", 15/16" & 1-1/8".
- Sockets - 7/16", 9/16", 5/8", 11/16", 3/4", 15/16" & 1-1/8"
- Ratchet
- Torque Wrench
- 12" Adjustable Wrench
- 7/32" Allen Wrench
- #25 Torx Bit
- Small Hammer
- Pliers

1. Remove top platform to expose mainframe by removing bolts (#75) and (#79). Place the mainframe on blocks or some other sturdy support so that the frame rest approximately 8" – 10" off the ground. **Note: Save the fasteners for later use.**

2. Hold the tongue (#25) up to the front of the tow dolly and plug the four bullet connectors extending out of the back of the tongue into the connector protruding from under the mainframe channel.

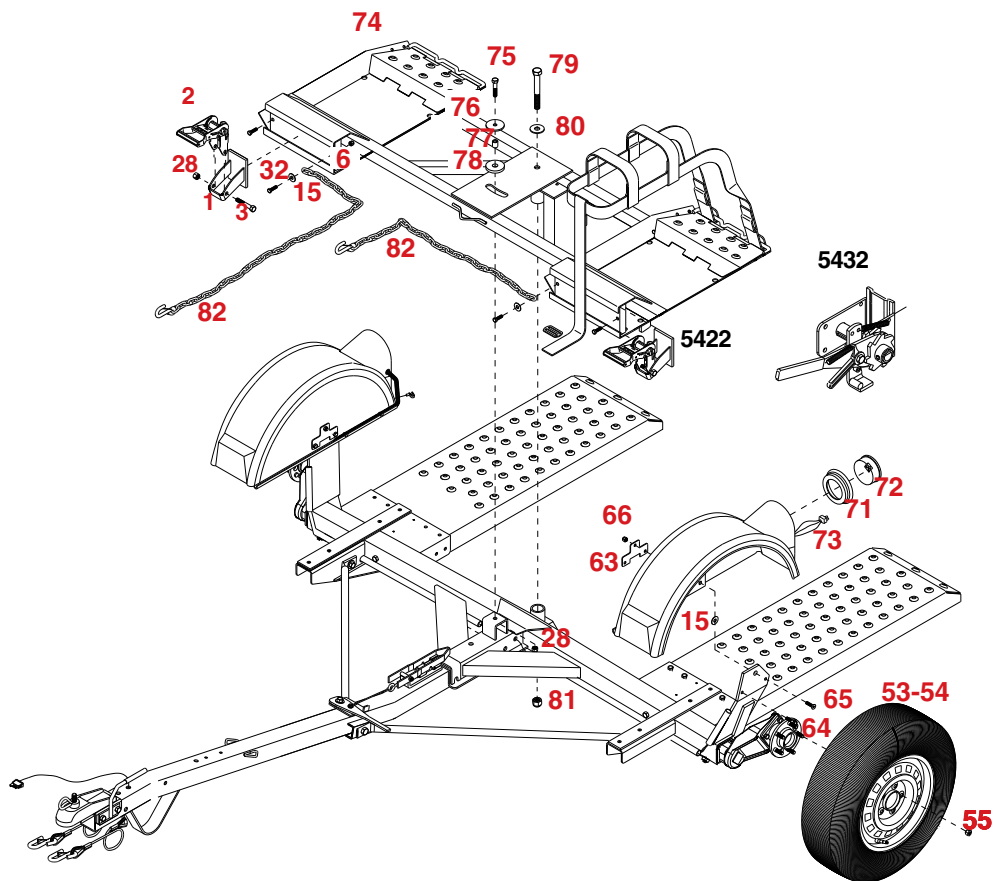


3. Insert the tilt bed spring (#38) and spring sleeve (#85) into the hole provided at the top rear of the tongue. Mount the tongue to the front of the tow dolly using one 5/8"-11UNC x 4-1/2" grade 5 bolt (#39) and one 5/8"-11UNC nylon lock nut (#40) and torque to 50 ft. lbs. **Do not torque over 50 ft. lbs. or the bed will not tilt.** Make sure that the spring and spring sleeve remain aligned with the hole in the tongue and the latch catch (#9, Figure A, Page 15) is in the up position during the latching process. You may now latch the tilt bed to the tongue. The tilt bed should remain latched through the balance of the assembly process. **Note: If assembling a unit with surge brakes, attach the rubber brake hose to the brake tee at this time and tighten. See page 21.**

4. Mount the latch handle (#7) to the mounting plate using 1/2"-13UNC x 1-1/4" grade 5 bolt (#12), two 1/2" flat washers (#11), bushing (#10), and 1/2"-13UNC nylon lock nut (#28). Put stainless steel bushing (#16) into latch cable (#18) and secure handle using 3/8"-16UNC x 3/4" epoxied grade 5 bolt (#14) and 3/8" flat washer (#15). Adjust latch so cable is snug by loosening bolt and nut and sliding handle

forward or back in the slot in the mounting plate. Slide black vinyl hand grip (#8) onto the latch handle (#7).

5. Bolt the coupler (#26 or #92) and lift handle (#29) to the front of the tongue with two 1/2"-13UNC x 4-1/2" grade 5 bolts (#27) and two 1/2"-13UNC nylon lock nuts (#28). Torque to 75-80 ft. lbs. Slide vinyl grip (#13) onto the lift handle. **Note: If assembling a unit with surge brakes, see page 21 for actuator mounting instructions.**
6. Attach the two 24" transport safety cables (#31) (cables are 36" if assembling a surge brake unit) to the two holes in the safety chain mounting bracket located under the tongue using two 7/16"-20UNC x 1-1/2" grade 5 bolts (#43 for Non-Braking Units) or two 7/16"-20UNC x 1-1/2" grade 8 bolts (#52 for Braking Units), two cable mounting washers (#87) and two 7/16"-UNC nylon lock nuts (#6 for Non-Braking Units) or two 7/16" -UNF lock nuts grade 8 (#86 for Braking Units). Torque bolts to 50 ft. lbs.
7. Remove two 1/4"-20UNC x 1" flat head Torx cap screws (#61) from the rear most hole in each wear plate (#60). (These Torx screws will be re-installed after the ramps are secure). Attach the ramps (#57) as shown using twenty 7/16"-20UNF x 3/4" grade 8 bolts (#58) and twenty 7/16"-20UNF hex punch lock nuts (#59). **Bolts on the side of ramps use 7/16" flat washers (#84).** Bolts on top of ramps must be inserted from the top side for clearance. **Tighten top bolts before tightening side bolts.** Torque the 7/16" bolts to 80 ft. lbs. Re-install flat head Torx screw in wear plate at this time.
8. Lay the bracing struts (#35) out along the tow dolly tongue with the back end (the end with the larger hole) toward the mainframe. Loosely bolt the back end of each bracing strut to the dolly frame as shown using 1/2"-13UNC x 1-1/2" grade 5 bolt (#36), 1/2" flat washer (#11), pivot bushing (#37) and 1/2"-13UNC nylon lock nut (#28). Slide the two threaded nut plates (#56) into mounting bracket located on each side of the tongue below the latch handle. Hold up the front end (the end with the smaller hole) of each bracing strut and secure in the threaded hole of the nut plates (#56) with two 5/8"-11UNC x 1-1/2" grade 5 epoxied bolts (#30). Torque the rear bolts (the ones with pivot bushing) to 75 ft. lbs. and the front bolts to 100 ft. lbs.



9. Replace the top platform (#74) and attach using one  $\frac{3}{4}$ "-10UNC x 6" grade 5 bolt (#79),  $\frac{3}{4}$ " flat washer (#80) and  $\frac{3}{4}$ "-10UNC nylon lock nut (#81). Install top pivot bushing (#77) in hole in the UHMW pivot washer (#78) and attach using one  $\frac{1}{2}$ "-13UNC x 2-1/4" grade 5 bolt (#75), special washer (#76) and  $\frac{1}{2}$ "-13UNC nylon lock nut (#28). **Note: New  $\frac{1}{2}$ " lock nut (#28) and  $\frac{3}{4}$ " lock nut (#81) are provided in hardware package to replace the ones removed in Step 1. Torque the  $\frac{1}{2}$ " lock nut to 75 ft. lbs. Caution: Do not torque the  $\frac{3}{4}$ " nut. Tighten until snug and then back off one full turn. If over tightened, the platform will not pivot.**
10. Remove the two  $\frac{7}{16}$ "-14UNC x 1-1/4 bolts (#32),  $\frac{3}{8}$ " flat washers (#15) and  $\frac{7}{16}$ "-14UNC nylon lock nuts (#6) located on the front of each wheel platform tire stop. Slide the tie down ratchets 5432, 5433 or 5422 into the channel at the front of the wheel platforms as shown. Attach the 36" long towed vehicle safety chains (#82). Secure one chain to each wheel platform stop with the  $\frac{7}{16}$ " bolt, flat washer and lock nut that was previously removed. Torque the bolts to 50 ft. lbs. **Note: If assembling a surge brake unit, bleed the brakes now before installing the fenders. See page 22 for instructions on bleeding the system**
11. Bolt each fender on using two  $\frac{3}{8}$ "-16UNC x 1-1/2" bolts (#64), one  $\frac{3}{8}$ "-16 x 1-1/2" flat head hex socket drive bolt (#65), one back-up plate (#63), one  $\frac{3}{8}$ " flat washer (#15) and three  $\frac{3}{8}$ "-16UNC nylon lock nuts (#66). Flat washer is to be placed between the fender mounting bracket and the fender on the  $\frac{3}{8}$ "-16UNC x 1-1/2 flat head hex socket drive bolt. Mount the fenders with the light pocket toward the rear of the dolly. When tightening the fender bolts, tip fenders forward as far as possible. Torque fender bolts to 30 ft. lbs.
12. Fish the three wires from the main unit through the hole in the fender lip. Fish the plug pigtail (#73) through the light housing on the black fenders and out the wire hole. On grey fenders, fish the wire between the light housing and the body of the fender. Insert the grommet (#71) into the light housing on the fender. Plug the pigtail into the back of the light (#72) and snap light into the grommet. On the left side, plug in the bullet plugs with white to white, black to brown, and yellow to red. On the right side, plug in bullet plugs with white to white, black to brown and green to red. Route the wires down the lip of fender. Secure wire in the lip by using pliers and wire clamps (not shown). From the rear of the fender lip, install one clamp at 5-1/2" and one at 8".
13. Attach the wheel and tire assemblies (#53-54) to the hub using the 12 mm lug nuts (#55) and torque to 75-80 ft. lbs.
14. Attach right side rear tire stop (#49) using four  $\frac{3}{8}$ " - 16UNC x 1" Hex Head Bolt Grade 5 (#90), eight  $\frac{3}{8}$ " flat washers (#15) and four  $\frac{3}{8}$ " - 16UNC Nylon Insert Locknut (#66). Repeat for left side rear tire stop.



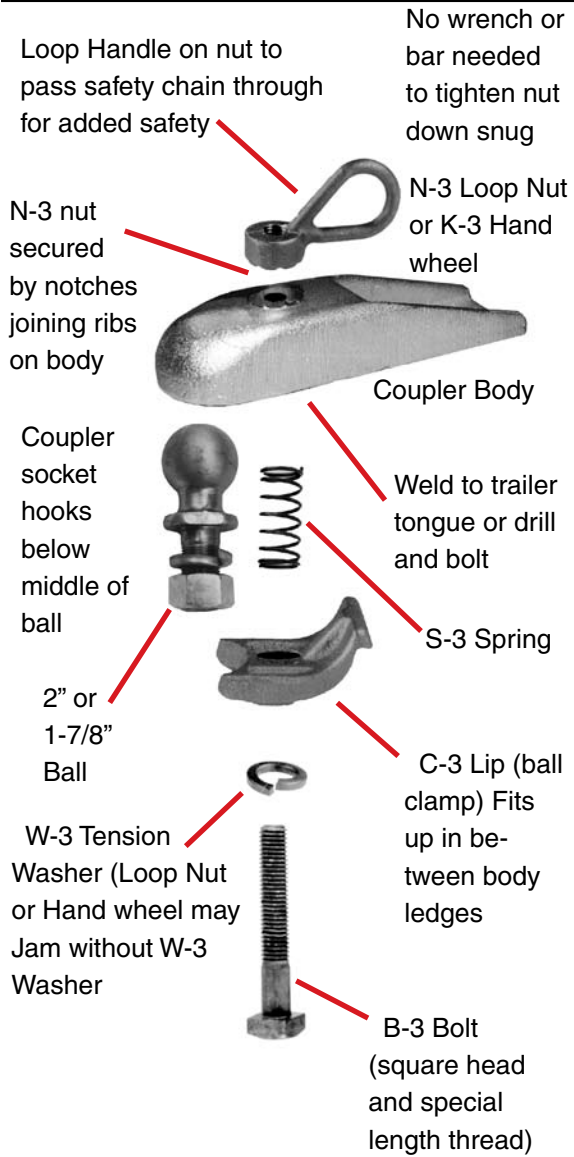
## CROFT COUPLER ASSEMBLY INSTRUCTIONS

**Note: Applies to the following couplers, H-3, H3BOS Series, AH3, AH4 & H3LA Series**

**PARTS FUNCTION:** There is a definite purpose for each part. Use ALL the parts for safest use and to prolong useful life. Install parts as shown. The body and parts shown comprise a positive locking device in Croft, K.C., MO couplers. The square bolt head cannot turn in the C-3 Lip (ball clamp), thus the N-3 Loop Nut (or K-3 Hand wheel Knob) must turn uphill against gravity and ratchet up and down over the ribs around the bolt hole in order to loosen. Both the W-3 Washer and the S-3 Spring exert pressure down, joining the ribs and notches securely. A safety chain may be passed through the N-3 Loop Nut handle for added safety and to keep the chain from dragging. All these features prevent loosening. Do not ignore them.

**INSTALLATION:** Coupler steel is ASTM A 27-80, Class 65-35. Weld at least entire bottom edge of both sides with good penetration using mild steel electrode or wire welder. If bolted, use 1/2" grade 5 bolts with H3BOS series couplers. Use 5/8" bolts with AH3/AH4 series adjustable couplers.

**MAINTENANCE:** Oil threads of bolt and loop nut or hand wheel periodically. Check ribs around bolt hole for wear. Replace any missing, broken, damaged or worn parts. **DO NOT SUBSTITUTE** regular nuts or other loop nuts or hand wheels for Croft, K.C. MO. N-3 Loop Nuts or K-3 Hand wheel Knob. **DO NOT** use Hex head bolts in place of square head B-3 Bolt. **DO NOT** leave out W-3 Washer or S-3 Spring. Check coupler to make sure the C-3 Lip and all parts are in place correctly before using or renting. **DO NOT** use a wrench or bar to tighten couplers. Over-tightening strains and wears bolt and nut threads, and may cause the coupler to seize on the ball and turn it's own nut, thus loosening the ball on right hand turns. **HAND TIGHTEN** couplers snug on ball.



**ILLUSTRATED PARTS ASSEMBLY** (Shown on H-3 coupler. Also applies to AH3/AH4 couplers, H3LA series ring-to-coupler adapters, and H3BOS series bolt on couplers)

Cutaway photo of coupler with parts installed. Top photo at right showing ball in coupler socket and installed parts. Photos below at right show the sequence and position of parts.

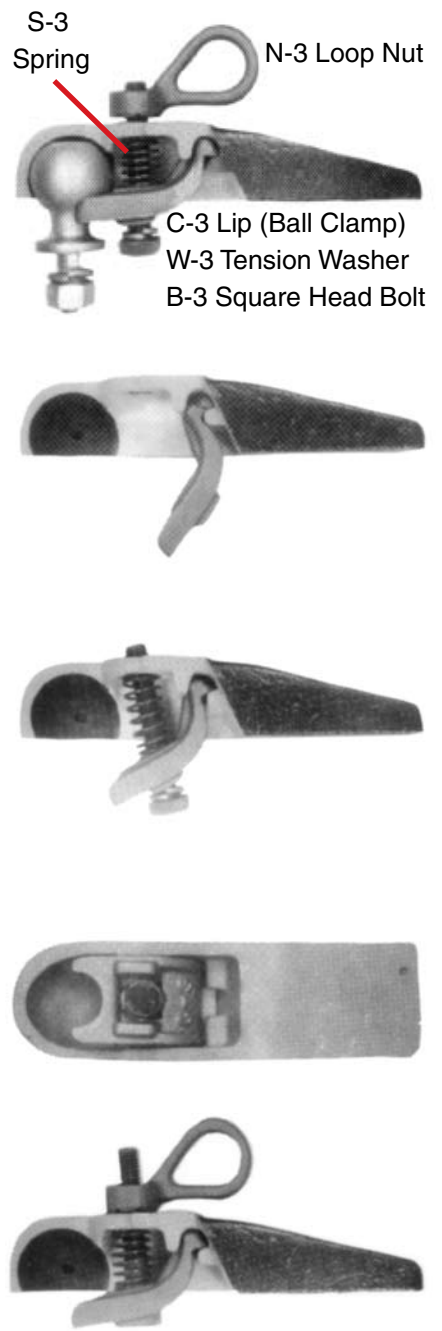
Install C-3 Lip up in between the ledges inside the coupler body by hooking the rear flat surface over the horizontal ledge, then swing the lip forward. The lip hinges on top of horizontal ledge and is held by both ledges when swung forward.

Put the S-3 Spring between the lip and inside of coupler under the bolt hole. Put the W-3 Washer on the bolt, then push the bolt up through the lip, spring and body bolt hole. The W-3 Washer provides extra spring tension to allow the notches in either the N-3 Loop Nut or K-3 Hand wheel Knob to join and ratchet up and down over the ribs around the body bolt hole.

Underneath view of coupler showing lip, (spring), washer & bolt in place. Note that the square head of the bolt fits into the square cavity of the lip.

Screw either the N-3 Loop Nut or K-3 Hand wheel Knob on the bolt. Note how notches in them join the ribs around the body hole as lip is drawn up.

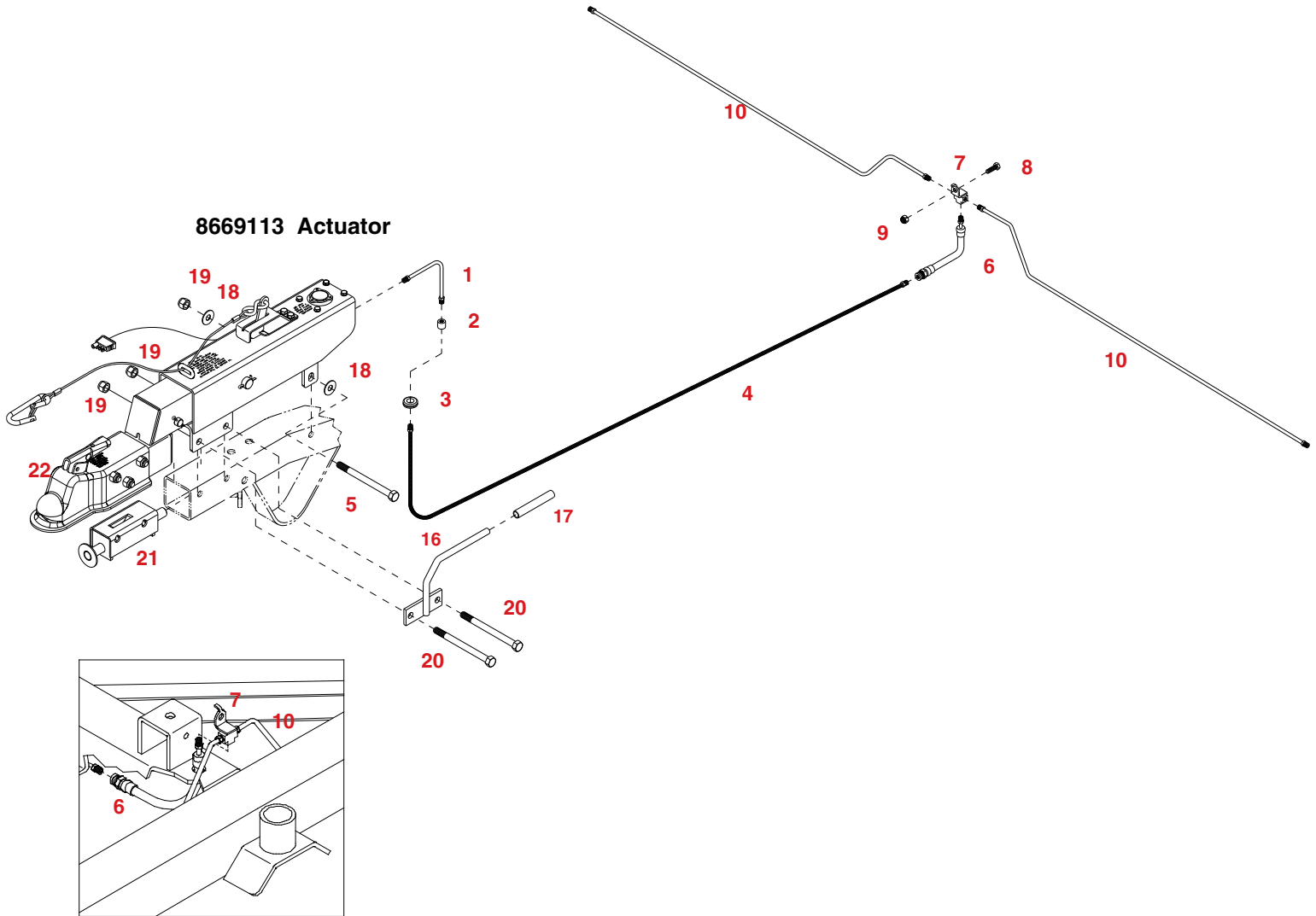
H-3 Cutaway Photos Showing Parts Installed



**TO INSTALL ON BALL:**

Loosen loop nut or hand wheel. The spring will push the lip down. Put coupler socket down over ball. While tightening, feel under coupler to make sure the square bolt head is up in the square lip cavity and the lip is under the ball head. Jiggle the coupler up and down on the ball to make sure it is snug while tightening.

## SURGE BRAKE SYSTEM PARTS BREAKDOWN



**Brake Tee/Hose Assembly**

### BRAKE LINES PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	SB5045	1	4" Brake Line
2.	SBD10	1	Brake Line Union
3.	01863X	1	Rubber Grommet
4.	SB563	1	63" Brake Line (metal w/ stone guard)
5.	B1245G5ZC	1	1/2"-13 UNC x 4-1/2" Hex Head Bolt
6.	SB7H67	1	7" Rubber Brake Hose
7.	SB7785	1	3/16" Brake Tee
8.	B516075G5ZC	1	5/16-18 UNC x 3/4" Hex Head Bolt (Gr 5)
9.	NLN516G2ZC	1	5/16-18 UNC Nylon Insert Locknut
10.	SB540	2	40" Brake Line (metal)
11.	03384X	2	Brake Line/Hose Protector Plate
12.	SB7764	4	Retainer Clip
13.	SB7H66	2	7" Rubber Brake Hose
14.	00496X	2	5/8" x 14 Gauge NR Machine Washer
15.	SB508	2	8" Brake Line (metal)
16.	04017X	1	Lift Handle (plated)
17.	02189X	1	Hand Grip
18.	FW12Z	2	1/2" Flat Washer
19.	LN12G5ZC	3	1/2"-13 UNC Nylon Insert Locknut
20.	B125G5ZC	2	1/2"-13 UNC x 5" Hex Head Bolt
21.	12445-30	1	Spring Return System
22.	12925	1	Coupler (eZ-Latch)

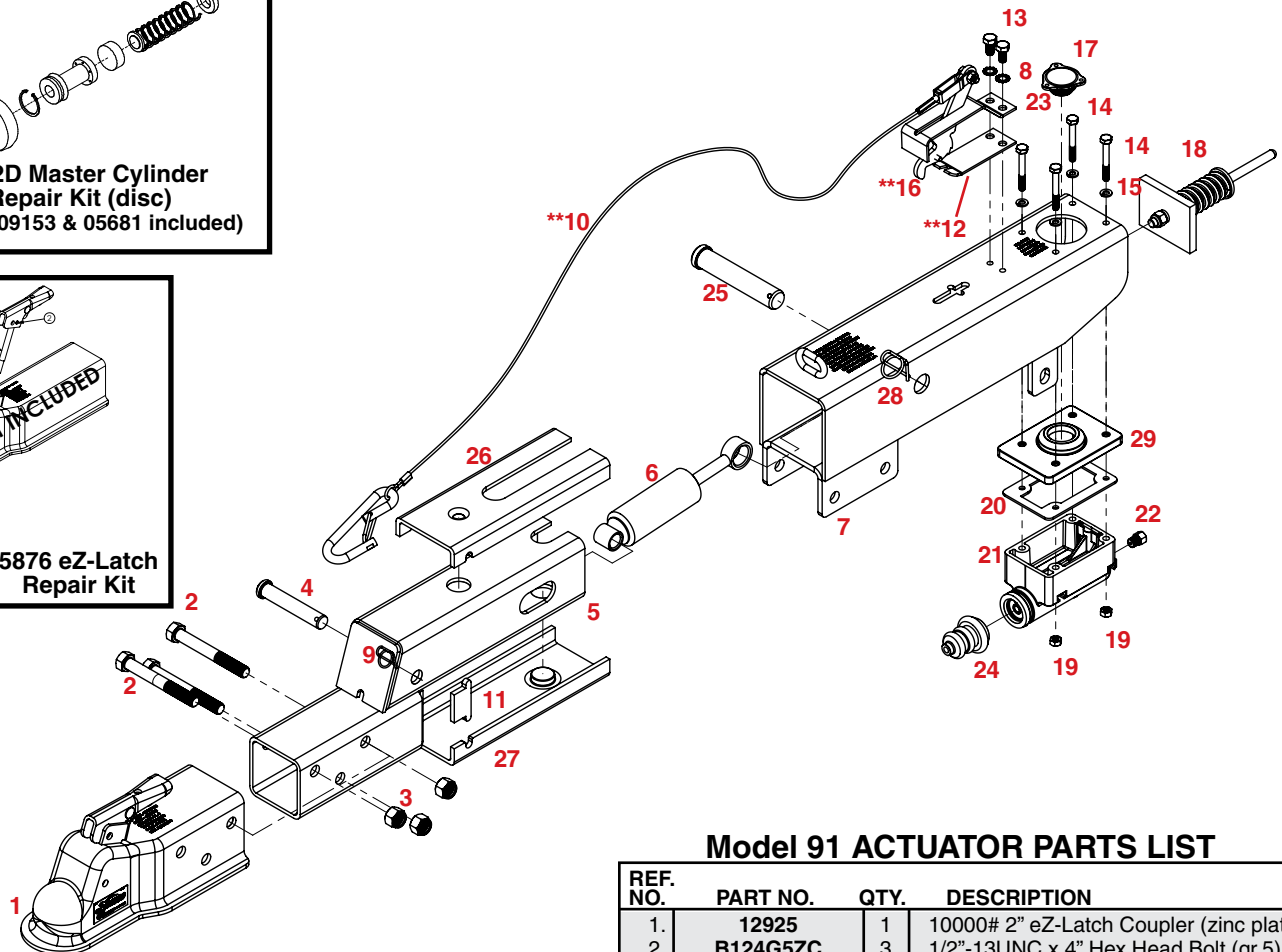
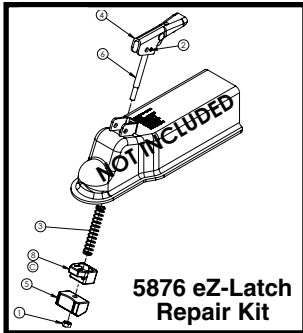
### ASSEMBLY INSTRUCTIONS

Push the rubber brake line (#6) through the hole in the top of the tongue channel and attach the brake hose to the bottom of the brake tee (#7). Install the 5/16"x3/4" grade 5 bolt (#8) and 5/16-18 UNC nylon insert locknut (#9) to secure brake tee and tighten. Make sure all connections are tight on the tee. Secure the brake actuator, lift handle (#16) and brake return spring system (#21) to the front end of the tongue with two 1/2"x5" gr. 5 bolts (#20) and 1/2"-13 UNC nylon insert locknuts (#19). Secure rear of actuator using one 1/2"x4-1/2" gr. 5 bolt (#5), two 1/2" flat washers (#18) and one 1/2"-13 UNC nylon insert locknut (#19). **Note: The spring return system has a small nut wedged in the spring area for pre-load installation. Do Not remove nut. Nut will automatically drop out during the first braking period.**

Use the 4" metal brake line (#1) and the brake line union (#2) to make the connection between the brake actuator and the brake line (#4) coming out the top front of the tongue. Make sure all brake line connections are tight. Follow the bleeding procedure as outlined on the following page.

Please order replacement parts by PART NO. and DESCRIPTION.

## MODEL 8669113 ACTUATOR PARTS BREAKDOWN



**2" eZ-Latch Coupler  
RATED AT 10000#**

### BLEEDING THE SYSTEM

The first requirement for safe, sure hydraulic braking is the use of quality brake fluid. Use only DOT-3 or DOT-4 brake fluid from a sealed container.

If pressure bleeding equipment is available, follow the manufacturer's instruction in bleeding the system.

**If system must be bled manually, proceed as follows:** Fill master cylinder with fluid. Install bleeder hose on first wheel cylinder to be bled. **Raise tongue of dolly before bleeding.**

Have loose end of hose submerged in brake fluid in glass container to observe bubbling.

By loosening the bleeder screw located in the wheel cylinder one turn, the system is open to the atmosphere through the passage drilled in the screw. Pump actuator with long steady strokes. The bleeding operation is completed when bubbles no longer rise to the surface of the fluid. **Be sure to close bleeder screw securely.**

Repeat bleeding operation at each wheel cylinder. During the bleeding process, replenish the brake fluid, so the level does not fall below the 1/2 full level in the master cylinder reservoir. After bleeding is complete, make sure master cylinder reservoir is filled and filler cap is securely in place.

After the bleeding operation has been completed, apply pressure to the system and check the whole brake system for leaks.

### Model 91 ACTUATOR PARTS LIST

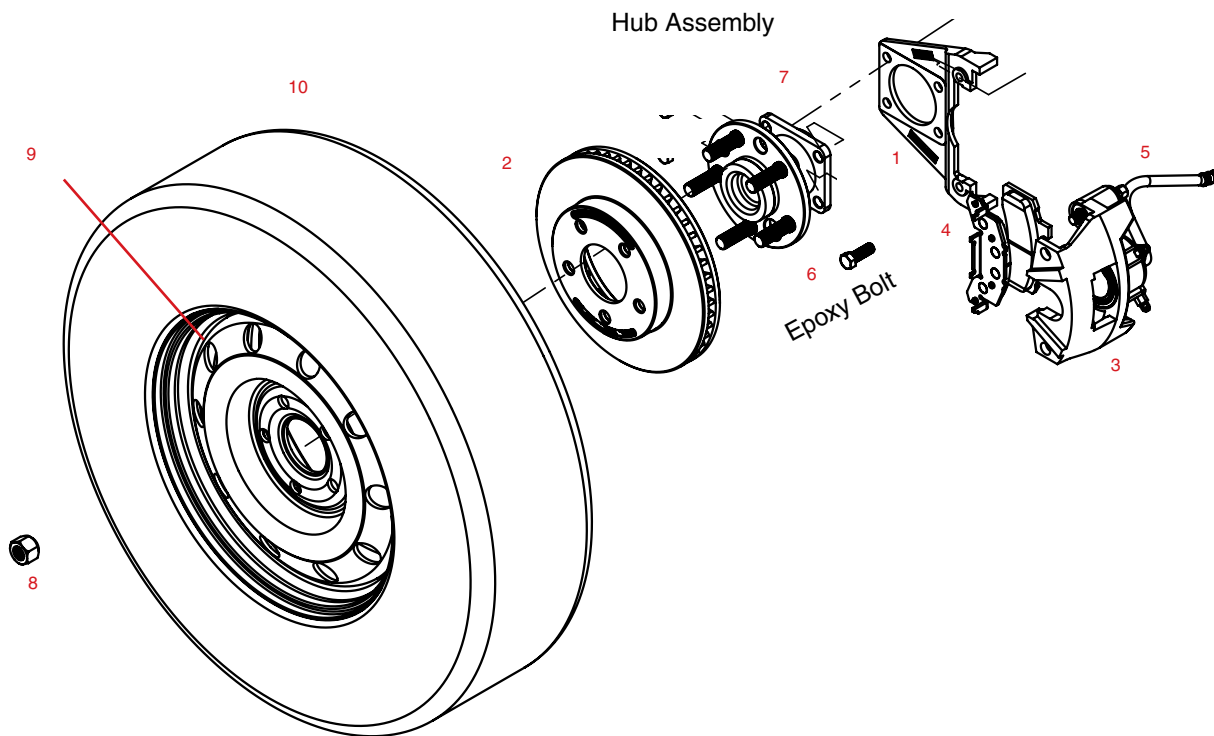
REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	12925	1	10000# 2" eZ-Latch Coupler (zinc plated)
2.	B124G5ZC	3	1/2"-13UNC x 4" Hex Head Bolt (gr.5)
3.	NLN12G2ZC	3	1/2"-13UNC Nylon Insert Lock Nut
4.	05426X	1	Front Shock Pin (drop tube actuators)
5.	11079	1	Drop Tube Actuator Slider (plated)
6.	12426	1	Damper/ Shock
7.	11164-95	1	3 Bolt Mount Outer Case (plated)
8.	05424X	2	5/16" External Tooth Lock Washer
9.	12396	1	Rue Ring Lock Collar, 5/8" Shaft
**10.	05408X	1	3/32" Cable with hooks
11.	10967X	2	Side Spacers
**12.	05693-95	1	Emergency Lever Spring (plated)
13.	B5160625G5ZC	2	5/16"-18UNC x 5/8" Hex Head Bolt (gr.5)
14.	B142G5ZC	4	1/4"-20UNC x 2" Hex Head Bolt (gr.5)
15.	LW14Z	4	1/4" Lock Washer
**16.	05951X	1	Emergency Lever Assembly
17.	03876X	1	Master Cylinder Cap w/ Diaphragm & O-ring
-	05849X	1	O-Ring Only (not shown)
18.	07132X	1	Push Rod Assembly
19.	HN14G2ZC	4	1/4"-20 UNC Hex Nut
**20.	09153X	-	Plastic Master Cyl. Gasket ONLY
21.	5672	1	Master Cylinder Kit
22.	05679X	1	Inverted Flare Adapter (Disc Brakes)
**23.	03866-95	1	Lever Guide (plated)
24.	05687X	1	Master Cylinder Protective Boot
25.	05986X	1	Connecting Pin (plated)
26.	10965X	1	Upper Slider
27.	10966X	1	Lower Slider
28.	12397	1	Rue Ring Lock Collar, 7/8" Shaft
29.	12557	1	Master Cylinder Cover Plate

-	5401	-	Lever Replacement Kit (incl. items w/**)
-	5482D	-	Master Cyl. Replacement Kit (disc)
-	5876	-	Coupler Repair Kit

Please order replacement parts by **PART NO.** and **DESCRIPTION**



## DISC BRAKE PARTS BREAKDOWN AND PARTS LIST



### PARTS LIST

- ASSEMBLY**
1. Begin by mounting the Hub Assembly and the Caliper Mounting Bracket (#1) to the Forged Arm using the (#6) 7/16" Epoxyed Bolts (as shown).
  2. Now place the Rotor (#2) onto the Hub Assembly as shown in the diagram.
  3. Make sure the Brake Pads (#4) are correctly placed in the Caliper (#3).
  4. Place Caliper (#3) over the Rotor (#2), and secure it to the Mounting Bracket (#1) using the Caliper Mounting Bolts (not shown).
  5. When mounting left caliper only, rotate elbow fitting 1/4 turn tighter (clockwise) to position elbow fitting correctly. Hook up Brake Hoses (#5) and replace the Rim and Tire.

REF. NO.	PART NO.	REQD QTY.	DESCRIPTION
1.	<b>13920-92</b>	2	Caliper Mounting Plate
2.	<b>03927-92</b>	2	Rotor
3.	<b>13825-92</b>	2	Disc Brake Caliper Complete
4.	<b>13824</b>	1	Brake Pads (for one complete axle)
5.	<b>05982X</b>	2	19" Brake Hose
6.	<b>02377X</b>	8	7/16"-20UNF Gr8 x 1-1/2" Epoxy Hex Hd Bolt
7.	<b>04369X</b>	2	Hub (5 on 115mm Bolt Circle)
-	<b>02917X</b>	-	12mm x 1-1/2" Replacement Stud Bolt
8.	<b>02933X</b>	10	12mm Lug Nut Chrome
9.	<b>04366X</b>	2	14x5.5" White Rim (115mm Bolt Circle)
10	<b>CTD4ST</b>	2	Rim and Tire Assembly
-	<b>14179</b>	-	Kit Disc Brake Fitting (includes items listed below)
-	-	1	90 Degree Fitting
-	-	2	Bleeder Valve
-	-	2	Rubber Bushing
-	<b>14487</b>	2	Stainless Steel Bushing
-	<b>14486</b>	2	Stainless Steel Bolt

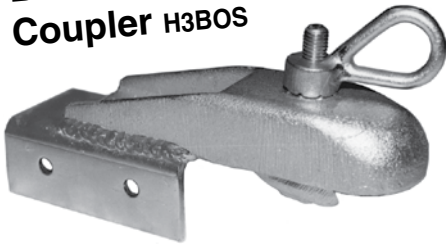
Please order replacement parts by **PART NO.** and **DESCRIPTION.**

# CROFT TOW DOLLY

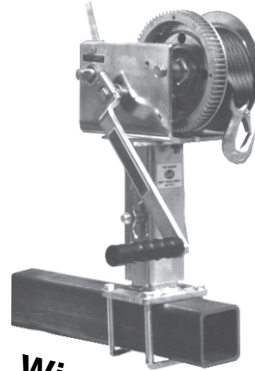


## PARTS & ACCESSORIES

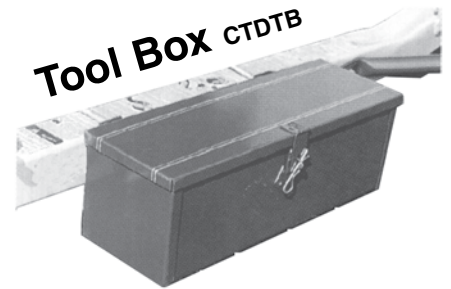
**Bolt On Croft Coupler H3BOS**



**Magnetic Tow Lights 1481B**



**Winch T2005  
Strap WS202HD  
Removable Bracket WB96**



**Tool Box CTDTB**



**Tire Carrier CTDSTM**



**Spare Tire & Wheel CTD4ST**



**Ratchet 5422**

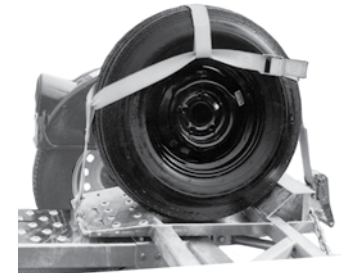
**Light & Grommet 11209 & 426-18**



**poly Fenders**



**Tie-Down Straps ATS1315**



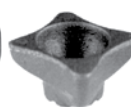
**Swing-Away Jack TJ1500**



**Repair Kits HV3 & KHV-3**



**N-3**



**K-3**



**S-3**



**C-3**



**W-3**



**B-3**

11/08-F-TDM

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