



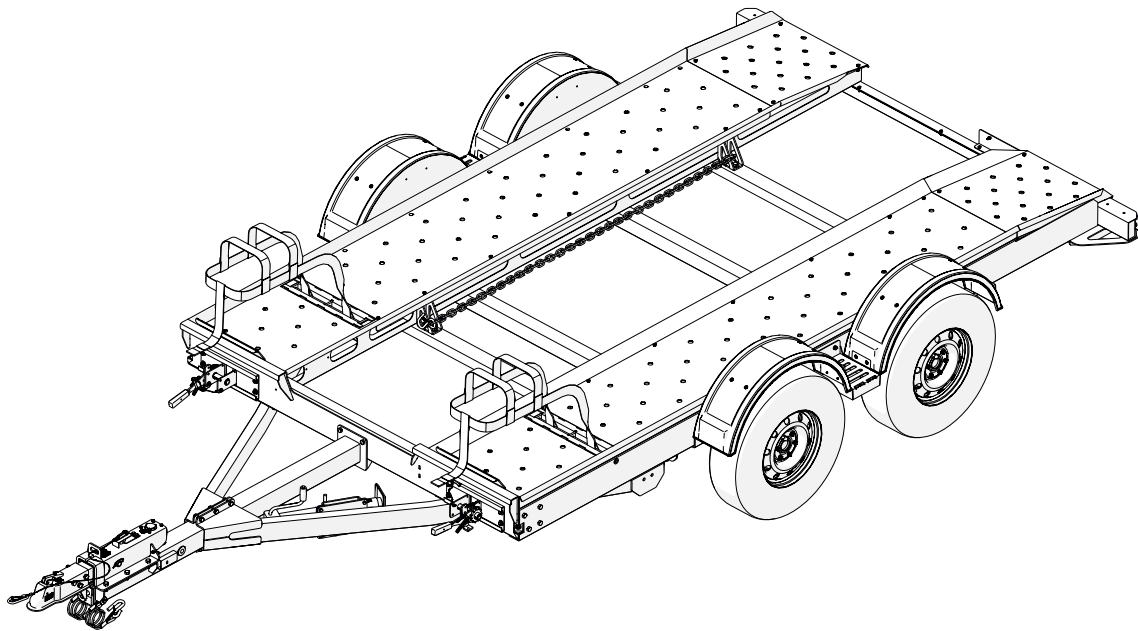
AT7000C

PARTS MANUAL

CAR CARRIER

**READ complete manual CAREFULLY
BEFORE attempting operation.**

**OPERATION
REPLACEMENT PARTS**



CROFT TRAILER SUPPLY, INC.

P.O. Box 300320 • Kansas City, MO 64130

816-861-1001 • 1-800-426-8159 • FAX 816-861-1881 • www.crofttrailer.com

“Reporting Safety Defects”

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying DEMCO.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or DEMCO.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0129 in Washington, D.C. area) or write to:

NHTSA,
U.S. Department of Transportation
Washington, D.C. 20590.

You can also obtain other information about motor vehicle safety from the Hotline.

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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 Croft Car Carrier 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.

If you have questions not answered in this manual, or require additional copies, please contact your dealer or Demco, 4010 320th Street, Boyden, IA 51234
ph: (712) 725-2311 or Toll Free: 1-800-543-3626 Fax: (712) 725-2380
<http://www.demco-products.com>



SAFETY...you can live with it



Equipment safety guidelines

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.

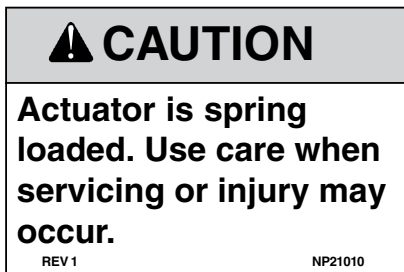
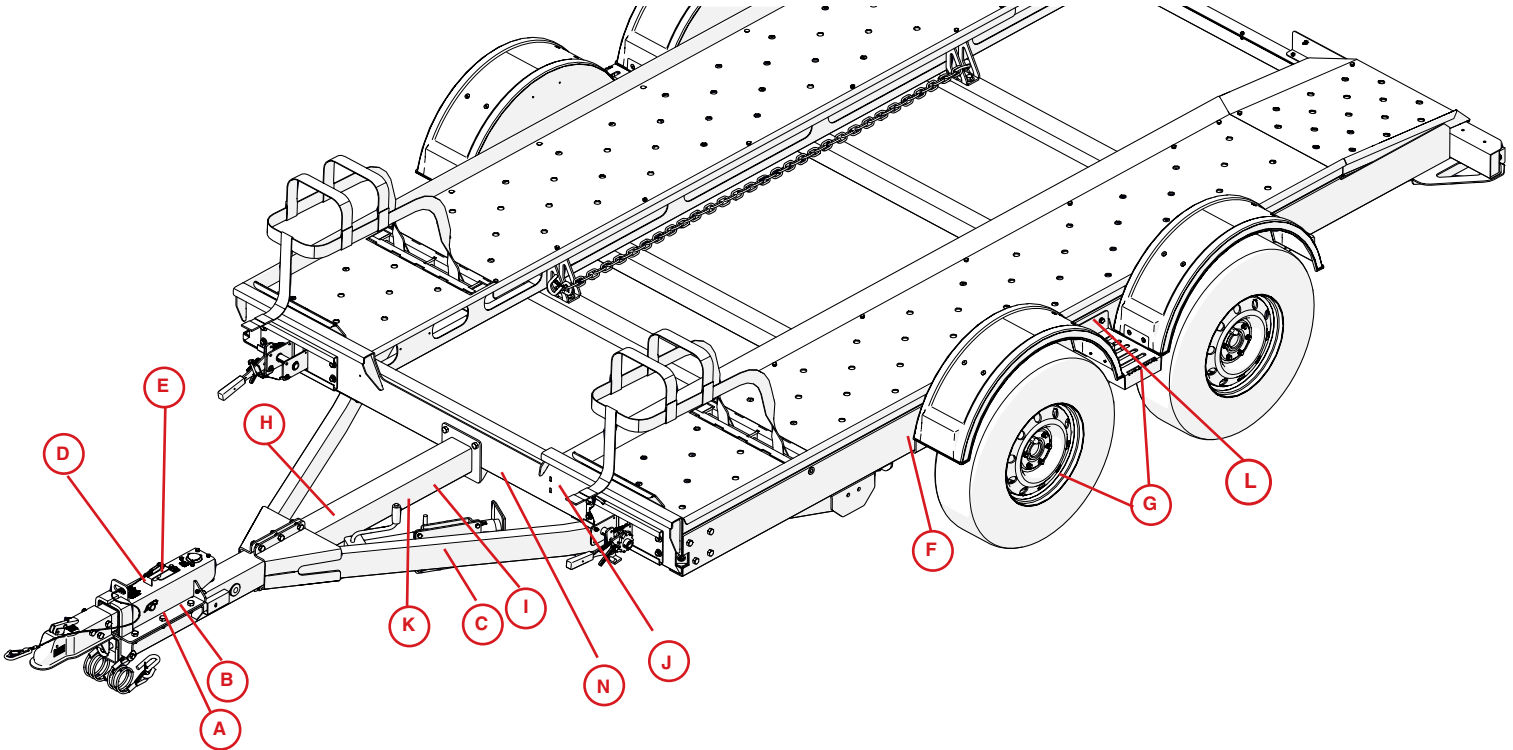
Review the safety instructions with all users.

Do not paint over, remove, or deface any safety signs or warning decals on the Croft Car Carrier. Observe all safety signs and practice the instructions on them.



SAFETY Sign Locations

The types of safety sign and locations on Croft Car Carrier are shown in the illustration below. Good safety requires that you familiarize the customer with the various safety signs, the type of warning, and the area or particular function related to that area, that requires your SAFETY AWARENESS.



A. Side of actuator NP21010 Qty. 1



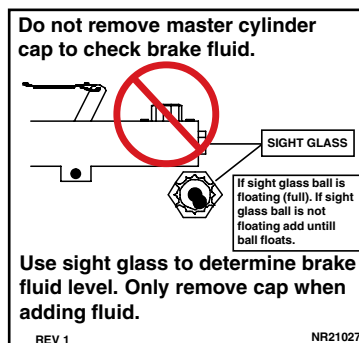
B. Side of actuator BD21001 Qty. 1



C. Tongue by jack mount NR21035 Qty. 1



D. Top of brake lever guide BH21003 Qty. 1



E. Side of actuator NR21027 Qty. 1



F. Car Carrier sides NA21014 Qty. 2

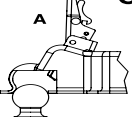
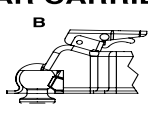


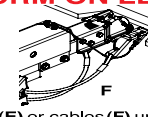
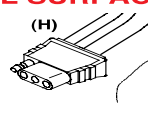
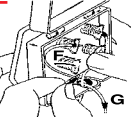
Keep wheel lug nuts or bolts tightened to specified torque.
Maintain tire pressure at 65 P.S.I. cold

REV 0

DA21003

G. Rims and step DA21003 Qty. 6

CAR CARRIER HOOK-UP INSTRUCTIONS - PERFORM ON LEVEL SURFACE

- Place lock lever in unlocked position (A) as shown. Lower car carrier tongue onto ball making sure coupler rests securely on ball. Push lock lever down (B) until trigger latch leg is in locking hole and secured on ball.
- DO NOT operate jack with vehicle loaded on trailer.** After securing trailer to ball on truck, parking jack (D) must be cranked up and rotate to storage position for road travel.
- Criss cross safety chains (E) or cables (F) under coupler as shown. Thread hook and chain (E) through mounting loop on truck hitch and connect hook into link on chain. Attach end of cable (F) to mounting loop on truck. **NOTE:** Leave only enough slack in chains or cable to allow for turning. Secure emergency brake actuator cable to mounting loop on truck.
- Open lid to light hook-up box. Depress spring loaded terminal (F) and insert proper color coded wire (G) into slot. Repeat for all four terminals or plug in flat four connector. (H)

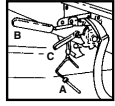
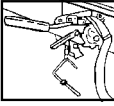
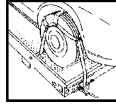
COLOR WIRE BREAKDOWN

YELLOW	Terminal - Left Turn Signal/Brake	GREEN	Terminal - Right Turn Signal/Brake
BROWN	Terminal - Taillight	WHITE	Terminal - Ground

REV 9 NP21009

H. Top of tongue NP21009 Qty. 1

WINCH OPERATING INSTRUCTIONS

IMPORTANT

REFER TO THE
**RENTAL
TOWABILITY GUIDE**
TO DETERMINE TIRE
STRAP SIZE
LIMITATIONS
FOR THIS TRAILER.

Remove winch lock pins (A) from strap winches on front of car carrier.
Release winch: Grasp handle (B) squeeze trigger (C) push down and pull all excess strap from winch. Lay tire strap to outside of car carrier.
Tighten straps: Place tire straps over tires centering straps and winches to tires. While tightening straps, pull cross straps forward to ensure even tightening. Tighten straps until each tire starts to flatten against tire stop. After strap is tight, insert lock pin into winch.

REV 2 NA21003

I. Side of tongue NA21003 Qty. 2


DO NOT EXCEED

**55
MPH**

WHEN TOWING THIS TRAILER

NR21038 Rev 0

J. Front bulkhead NR21038 Qty. 1



IMPORTANT

Hook safety chains to frame of towed vehicle.

Chains must not attach to or go over steering or brake parts.

REV 1 NP21008

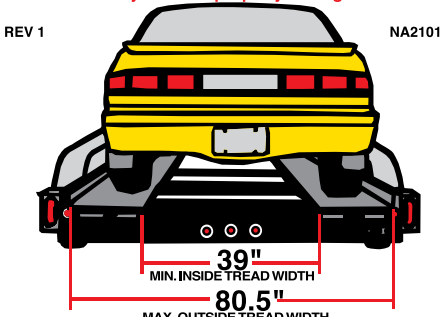


L. Step NA21015 Qty. 2

K. Tongue & inside of car carrier frame NP21008 Qty. 2

IMPORTANT

Loading oversized or undersized vehicles may result in property damage



REV 1 NA21013

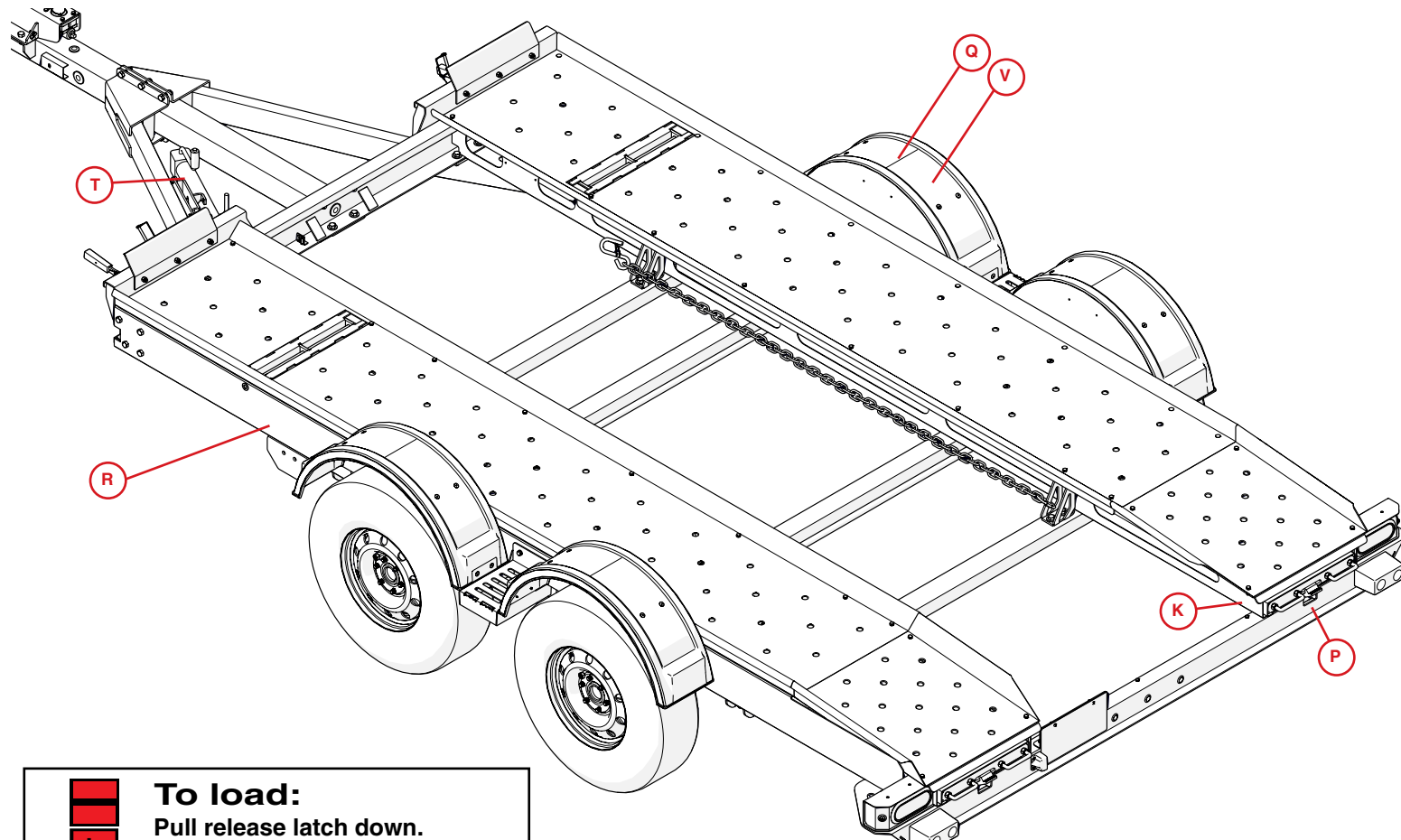
39" MIN. INSIDE TREAD WIDTH

80.5" MAX. OUTSIDE TREAD WIDTH

N. Front bulkhead NA21013 Qty. 1



S. Heat Sensing Label 15116 Qty. 4



To load:
Pull release latch down.
Fully extend and lower ramps.

To store:
Lift and slide ramps into carrier.
Verify that latch is engaged.

REV 1
NA21005

P. Rear of Car Carrier NA21005 Qty. 1

NO STEP

Q. Fenders NA21002 Qty. 4

EMPTY WEIGHT	2000	LBS
MAXIMUM WEIGHT	7000	LBS
CARRYING CAPACITY	5000	LBS

R. Side of Car Carrier NR21036 Qty. 1

WARNING

To prevent serious injury or property damage:

✓ **Unload trailer before using jack.**

T. Jack PTL180R Qty. 1



S. Heat Sensing Label 15116 Qty. 4

OPERATING INSTRUCTIONS
Read all instructions completely before use
Find a level area to perform the following operations

1. Fully engage parking brake on truck. Secure ball coupler to a 2" - 7000 lb. rated ball on truck. Assure hitch and hitch ball are securely attached to truck, in good condition, not rusted, loose or stripped. Criss-cross safety chains under tongue and secure to mounting loop on truck. Secure emergency brake actuator cable to mounting loop on truck. Connect light wires to truck and check for proper operation. Raise tongue jack fully before moving car carrier.
2. Car carrier must be completely and properly attached to truck, setting on level surface, before loading towed vehicle. Vehicle to be loaded must have an outside tire width of not more than 80.5" and an inside width of not less than 39" and must not exceed 5000 lbs.
3. Remove winch lock pins from strap winches on front of car carrier. Release winch (grasp handle, squeeze trigger, then push down) and pull all excess strap from winch. Lay tire strap to outside of car carrier.
4. To extend ramp, pull release latch down, fully extend and lower ramp to ground.
5. With someone safely guiding you, center vehicle to car carrier and slowly drive forward until tires touch front stops. Do not back vehicle onto car carrier. Place towed vehicle in park (automatic) or in gear (manual) and set parking brake.
6. Place tire straps over tires centering straps and winches to tires. While tightening straps, pull cross straps forward to ensure even tightening. Tighten straps until each tire starts to flatten against tire stop. After strap is tight, insert lock pin into winch.
7. Attach front and rear safety chains to towed vehicle axle or frame. Chains must not attach to or go over steering or brake parts of towed vehicle.
8. Grasp ramp handle and slide ramp in until latch locks.
9. Release truck's parking brake and drive forward 100 feet. Stop and perform safety check. Check hitch, hitch ball, ball coupler, safety chains, tire straps, bolts, ramps, and other items to ensure they are tight and in correct position. Check all lights to make sure they are operating properly. Repeat safety check after first 5 miles and every 50 miles thereafter.
10. Unloading - Do not unhook car carrier from truck until towed vehicle is completely unloaded from car carrier. Fully engage parking brake on truck. Reverse procedure in this order: step 4, step 7, step 3, step 5 and step 8. After completing unloading procedures, secure safety chains and tie down straps in their original empty car carrier positions.

SAFETY

Perform safety check. Check hitch, hitch ball, ball coupler, safety chains, tire straps, bolts, ramps and other items to ensure they are tight and in correct position. Check all lights to make sure they are operating properly. Car carrier tires must be inflated to recommended P.S.I. See decal on car carrier for correct pressure. Tire pressure may increase during travel. Do not bleed off this increase in pressure. Repeat safety check after first 5 miles and every 50 miles thereafter.

Do not exceed load capacity of car carrier. Car carriers may only be towed by approved trucks with correct towing capacity. Weight of loaded trailer must not exceed weight of towing vehicle. Do not exceed 55 M.P.H.

IMPORTANT INFORMATION

Weight and size limitations:

Car Carrier	Interior Platform Dimensions:
Empty Weight 2000 lbs.	Bed length 148"
Maximum Weight 7000 lbs.	Maximum Bed Width 80.5"
Carrying Capacity 5000 lbs.	Minimum Bed Width 39"

NR21037, Rev 02

V. Fender NR21037 Qty. 1



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 your distributor, dealer parts department, or factory.

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.
- Croft Car Carrier tires must be inflated to recommended P.S.I. . See decal on Croft Car Carrier for correct pressure.
- Always order and install tires and wheels with appropriate type and load capacity to meet or exceed gross weight of unit.



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 Croft Car Carrier, 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.
- 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 Croft Car Carrier 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 Croft Car Carrier 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 Croft Car Carrier.



BOLT TORQUE

Checking Bolt Torque

Table shown below gives correct torque values for various bolts and capscrews.

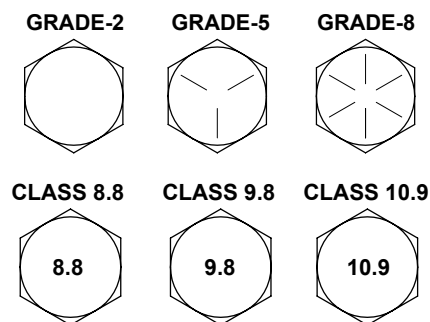
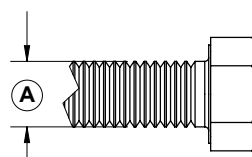
Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt chart as a guide. Replace hardware with same grade bolt.

NOTE: Unless otherwise specified, high-strength Grade 5 hex head bolts are used throughout assembly of this Croft Car Carrier.

Torque Specifications

Bolt Torque *

"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)



NOTE: Torque wheel nuts to 120 ft./lbs.

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

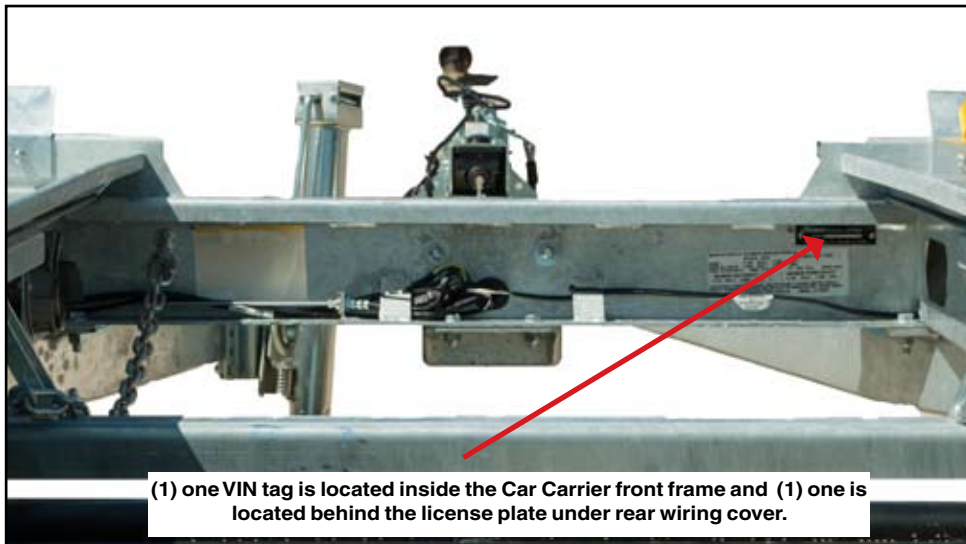
* Torque value for bolts and capscrews are identified by their head markings.

SAFETY & MAINTENANCE

Safety is of utmost importance at all times. The following are several items that should be checked each time before using and while using the Car Carrier. Failure to observe this warning could result in severe injury, death, or property damage.

1. Make sure all bolts are properly tightened.
2. 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 truck. The ball coupler must latch securely around the ball and the safety ball clamp must be in position to lock the hitch on the ball. **RECOMMENDED LOADED BALL HEIGHT: 20 inches to the top of the towing vehicle ball.**
3. Criss-cross the safety chains under the Car Carrier tongue and secure to safety chain mounting loops on truck.
4. The snap hook on the actuator must be hooked to the safety chain mounting loops, by the ball, on the rear bumper of the truck.
5. Check to make sure that all lights are in proper working order.
6. The Car Carrier tires should be inflated to the recommended 65 PSI. Tire pressure may increase during travel - do not bleed off this increase pressure.
7. Check to make sure ramps are stored and secured in the transport position.
8. Periodically check brakes for proper operation.

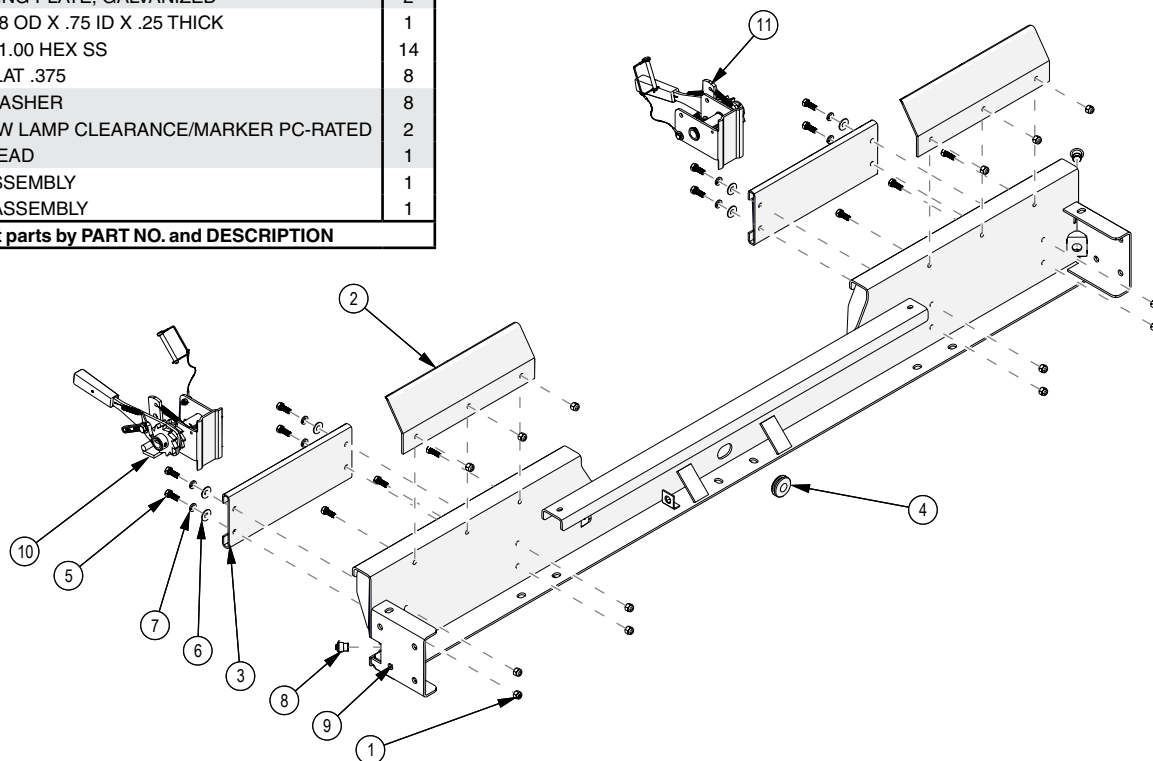
Location of VIN Tag



(1) one VIN tag is located inside the Car Carrier front frame and (1) one is located behind the license plate under rear wiring cover.

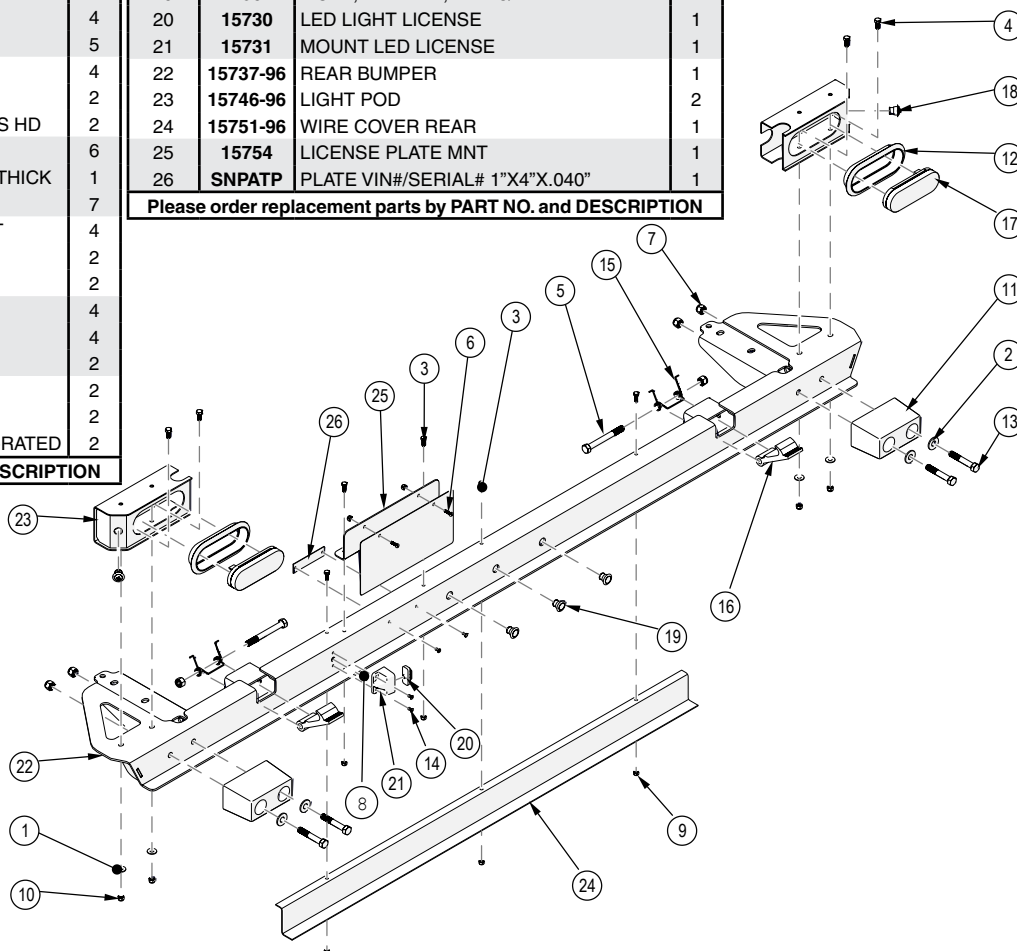
FRONT BULK HEAD BREAKDOWN

ITEM #	PART #	DESCRIPTION	Qty
1	02592	NUT, .375NC NYLON LOCK	14
2	03638-96	FRONT TIRE STOP, GALVANIZED	2
3	03643-96	WINCH MOUNTING PLATE, GALVANIZED	2
4	03826	GROMMET 1.438 OD X .75 ID X .25 THICK	1
5	04630	BOLT .375NC X 1.00 HEX SS	14
6	04633	WASHER, SS FLAT .375	8
7	06328	.375 SS LOCKWASHER	8
8	12963	3/4" LED YELLOW LAMP CLEARANCE/MARKER PC-RATED	2
9	15736-96	FRONT BULK HEAD	1
10	5432	LEFT WINCH ASSEMBLY	1
11	5433	RIGHT WINCH ASSEMBLY	1
Please order replacement parts by PART NO. and DESCRIPTION			

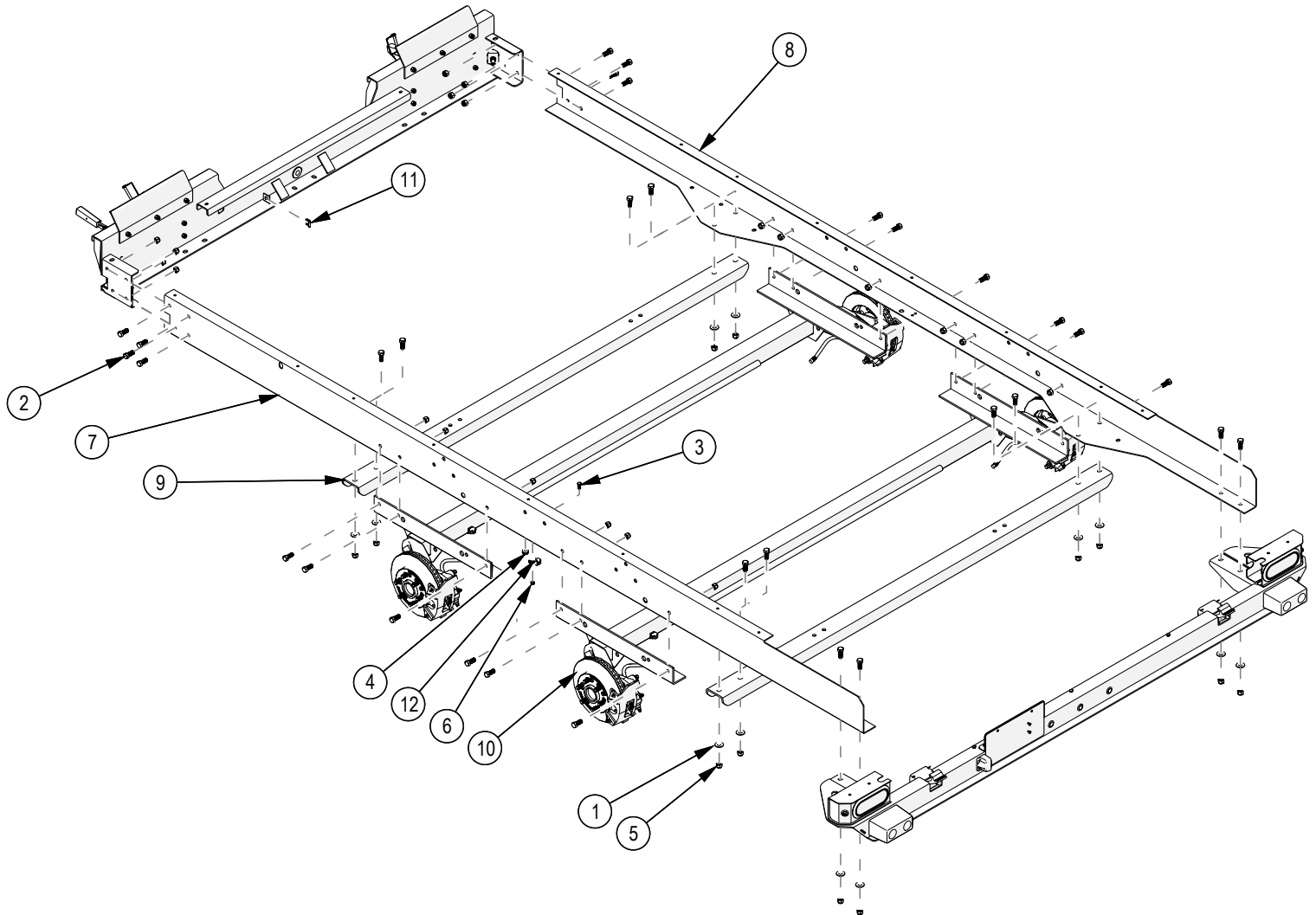


REAR BUMPER BREAKDOWN

ITEM #	PART #	DESCRIPTION	Qty	ITEM #	PART #	DESCRIPTION	Qty
1	00004	"WASHER, FLAT, .313"	4	19	12964	LIGHT, MARKER, RED 3/4 LED	2
2	00085	WASHER FLAT .50	4	20	15730	LED LIGHT LICENSE	1
3	01076	BOLT .25NC X .75 GR5 HEX	5	21	15731	MOUNT LED LICENSE	1
4	01263	BOLT .313NC X .75 GR5 HEX	4	22	15737-96	REAR BUMPER	1
5	01338	BOLT .50NC X 4.50 GR5 HEX	2	23	15746-96	LIGHT POD	2
6	01906	BOLT .25NC X .75 SLOTTED TRUSS HD	2	24	15751-96	WIRE COVER REAR	1
7	02178	NUT .50NC LOCK NYLON INSERT	6	25	15754	LICENSE PLATE MNT	1
8	02590	GROMMET .438 OD X .25 ID X .25 THICK	1	26	SNPATP	PLATE VIN#/SERIAL# 1"X4"X.040"	1
9	02772	NUT .25NC LOCK NYLON INSERT	7	Please order replacement parts by PART NO. and DESCRIPTION			
10	02802	NUT .313NC LOCK NYLON INSERT	4				
11	03647	BUMPER RUBBER	2				
12	03652	GROMMET RUBBER OVAL	2				
13	04073	BOLT .50NC X 3.00 GR5 HEX	4				
14	04467	"RIVET, .188 X .425 ALIM"	4				
15	10109	SPRING DOUBLE TORSION	2				
16	10126	RAMP LATCH	2				
17	12249	LIGHT, SEALED OVAL S/T/T LAMP	2				
18	12962	LIGHT, MARKER, RED 3/4 LED PC-RATED	2				
Please order replacement parts by PART NO. and DESCRIPTION							



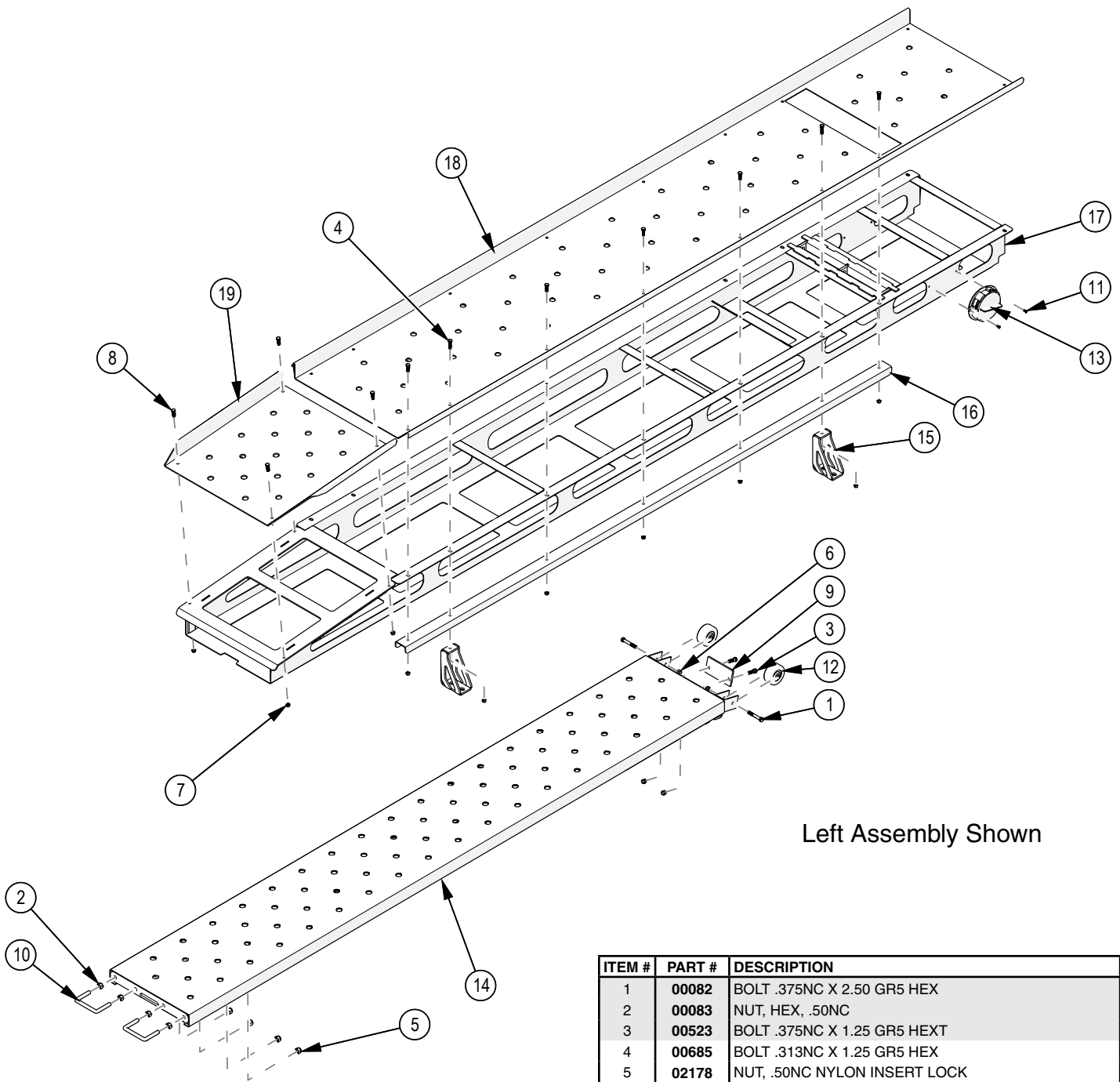
MAIN FRAME BREAKDOWN



ITEM #	PART #	DESCRIPTION	Qty
1	00085	.50 FLAT WASHER	12
2	00967	BOLT .50NC X 1.25 GR5 HEX	32
3	01263	BOLT .313NC X .75 GR5 HEX	1
4	01863	GROMMET .625 OD X .375 ID X .25 THK	1
5	02178	NUT, .50NC LOCK, NY. INSERT	32
6	02802	NUT .313NC NYLON INSERT	1
7	16274-96	SIDE FRAME, LEFT	1
8	16275-96	SIDE FRAME, RIGHT	1
9	15738-96	CROSSMEMBER	2
10	6164	AT7000 AXLE COMPLETE	2
11	SB7764	CLIP, BRAKE HOSE	1
12	SB7785	FTG, TEE, .188" UNION, W/ MTG BRACKET	1

Please order replacement parts by PART NO. and DESCRIPTION

RAMP PLATFORM BREAKDOWN

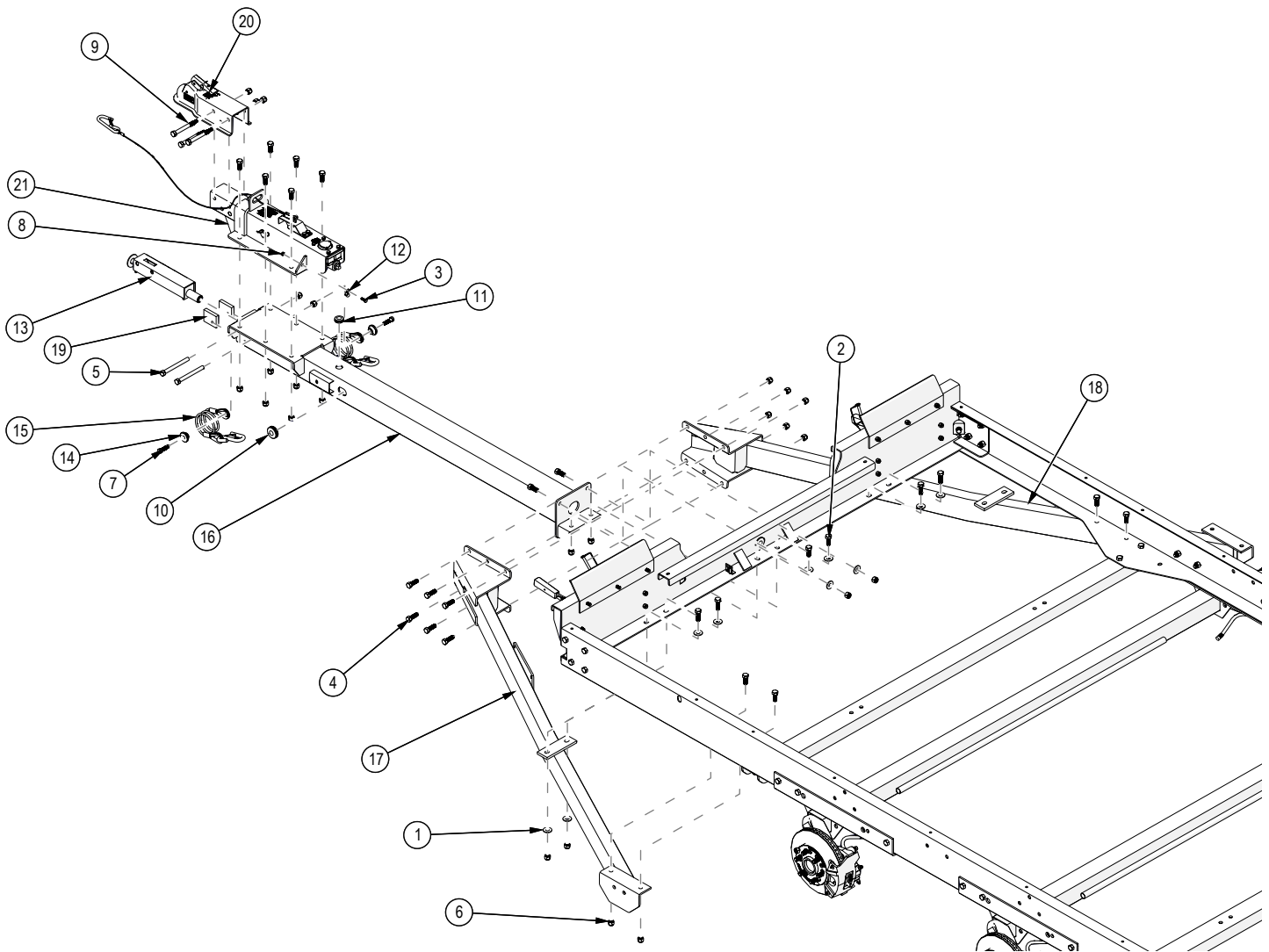


Left Assembly Shown

ITEM #	PART #	DESCRIPTION	Qty
1	00082	BOLT .375NC X 2.50 GR5 HEX	4
2	00083	NUT, HEX, .50NC	8
3	00523	BOLT .375NC X 1.25 GR5 HEX	4
4	00685	BOLT .313NC X 1.25 GR5 HEX	4
5	02178	NUT, .50NC NYLON INSERT LOCK	8
6	02592	3/8" -NC NYLON INSERT LOCK NUT	8
7	02802	5/16" NYLON LOCK NUT	22
8	02990	5/16" NC X 1" HEX HD BOLT	18
9	03649-95	RAMP STOP PLATE	2
10	03885	RAMP PULL-OUT HANDLE	4
11	04467	RIVET, .188 X .425 ALUM	2
12	04725	RAMP ROLLER WHEEL	4
13	07254	REGISTRATION HOLDER (INCLUDES PLASTIC COVER)	1
14	16276-96	RAMP - GALVANIZED	2
15	15739-96	SIDE SUPPORT	2
16	15740-96	SIDE SUPPORT CHANNEL	2
17	15741-96	RAMP POCKET	2
18	15742-96	TOP PLATFORM, LEFT	1
-	15743-96	TOP PLATFORM, RIGHT	1
19	15744-96	PLATFORM APPROACH, LEFT	1
-	15745-96	PLATFORM APPROACH, RIGHT	1

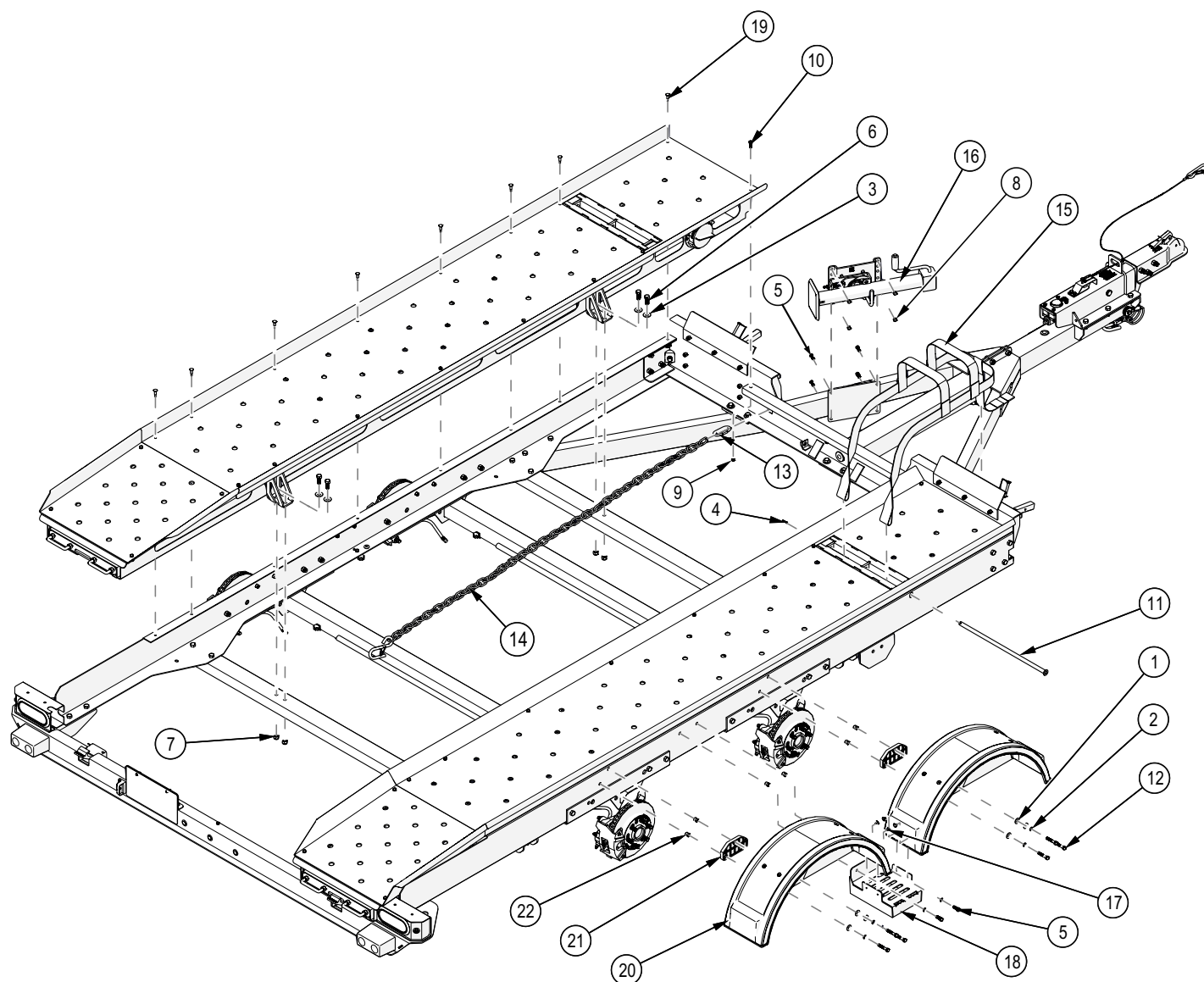
Please order replacement parts by PART NO. and DESCRIPTION

TONGUE BREAKDOWN



ITEM #	PART #	DESCRIPTION	Qty	ITEM #	PART #	DESCRIPTION	Qty
1	00085	.50 FLAT WASHER	12	12	07221	WIRE CLAMP	1
2	00967	BOLT .50NC X 1.25 GR5 HEX	14	13	07623-30	SPRING RETURN SYSTEM	1
3	01076	BOLT .25NC X .75 GR5 HEX	1	14	12229-95	WASHER	2
4	01254	BOLT .50NC X 1.50 GR5 HEX	10	15	12238	SAFETY CABLE 36" w/ S-HOOK	2
5	01975	BOLT .50NC X 5.00 GR5 HEX	2	16	15748-96	TONGUE CENTER	1
6	02178	NUT .50NC NYLON INSERT	29	17	15749-96	TONGUE WISHBONE, LEFT	1
7	02377	BOLT .438NF X 1.50 GR8 EPOXY	2	18	15750-96	TONGUE WISHBONE, RIGHT	1
8	02772	NUT .25NC NYLON INSERT	1	19	15770-95	THREADED SPACER PLATE	2
9	02918	BOLT .50NC X 4.50 GR8 HEX	3	20	15781	2" BALL COUPLER	1
10	03826	GROMMET 1.438 OD X .75 ID	1	21	6177	DA91 ACTUATOR F/AT Car Carrier (KIT INCLUDES * ITEMS)	1
11	04396	GROMMET 1.00 OD X .688 ID	1	22	6188	SAFETY CABLE KIT	
Please order replacement parts by PART NO. and DESCRIPTION				Please order replacement parts by PART NO. and DESCRIPTION			

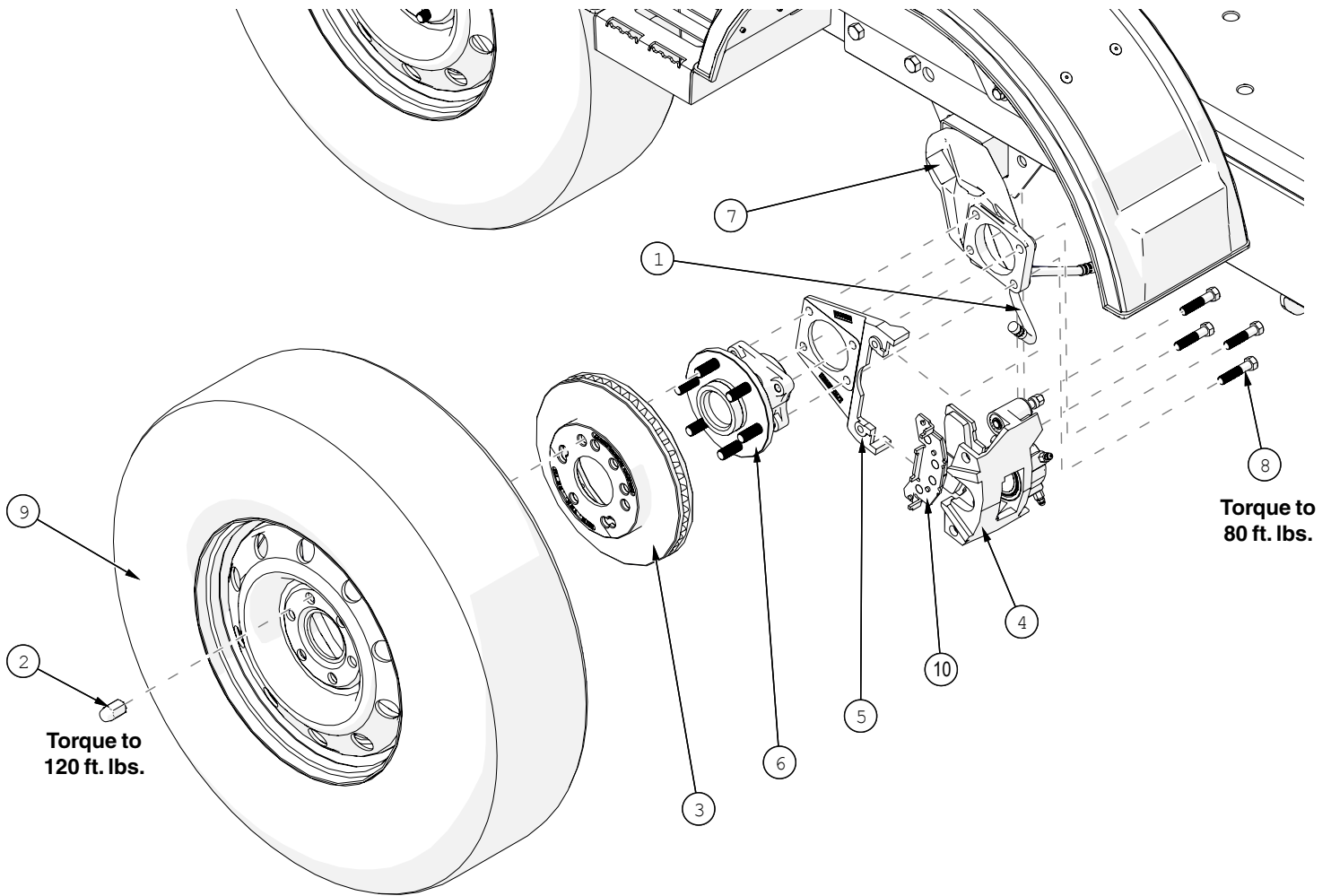
FENDER, STEP & JACK BREAKDOWN



ITEM #	PART #	DESCRIPTION	Qty
1	00059	FLAT WASHER .375	12
2	00060	.375 LOCK WASHER	16
3	00085	FLAT WASHER .50	8
4	00185	COTTER PIN	2
5	00907	BOLT .375NC X 1.00 GR5 HEX	8
6	00967	BOLT .50NC X 1.25 GR5 HEX	8
7	02178	NUT .50NC NYLON LOCK	8
8	02592	NUT .375NC NYLON LOCK	4
9	02802	NUT .313NC NYLON LOCK	2
10	02990	BOLT .313NC X 1.00 GR5 HEX	2
11	03639-95	AUTO TIE DOWN STRAP ROD	2
Please order replacement parts by PART NO. and DESCRIPTION			

ITEM #	PART #	DESCRIPTION	Qty
12	04226	BOLT .375NC X 2.00 GR5 HEX	12
13	04819	.313 RAPID LINK (use Locktite)	2
14	05926	60" AUTO TIE DOWN CHAIN w/ HOOK	2
15	12977	3 POINT TIE DOWN STRAP (YELLOW)	2
16	13691	eZ FOLD JACK ASSEMBLY	1
17	14876	RIVET, .187D .25- .50 GR	4
18	15753-96	STEP	2
19	15764	.313 HUCK RIVET	16
20	16287	FENDER w/ DECALS GRAY	4
21	15777	FENDER SPACER	4
22	15794	NUTSERT .375NC	16
Please order replacement parts by PART NO. and DESCRIPTION			

DISC BRAKE BREAKDOWN AND PARTS LIST



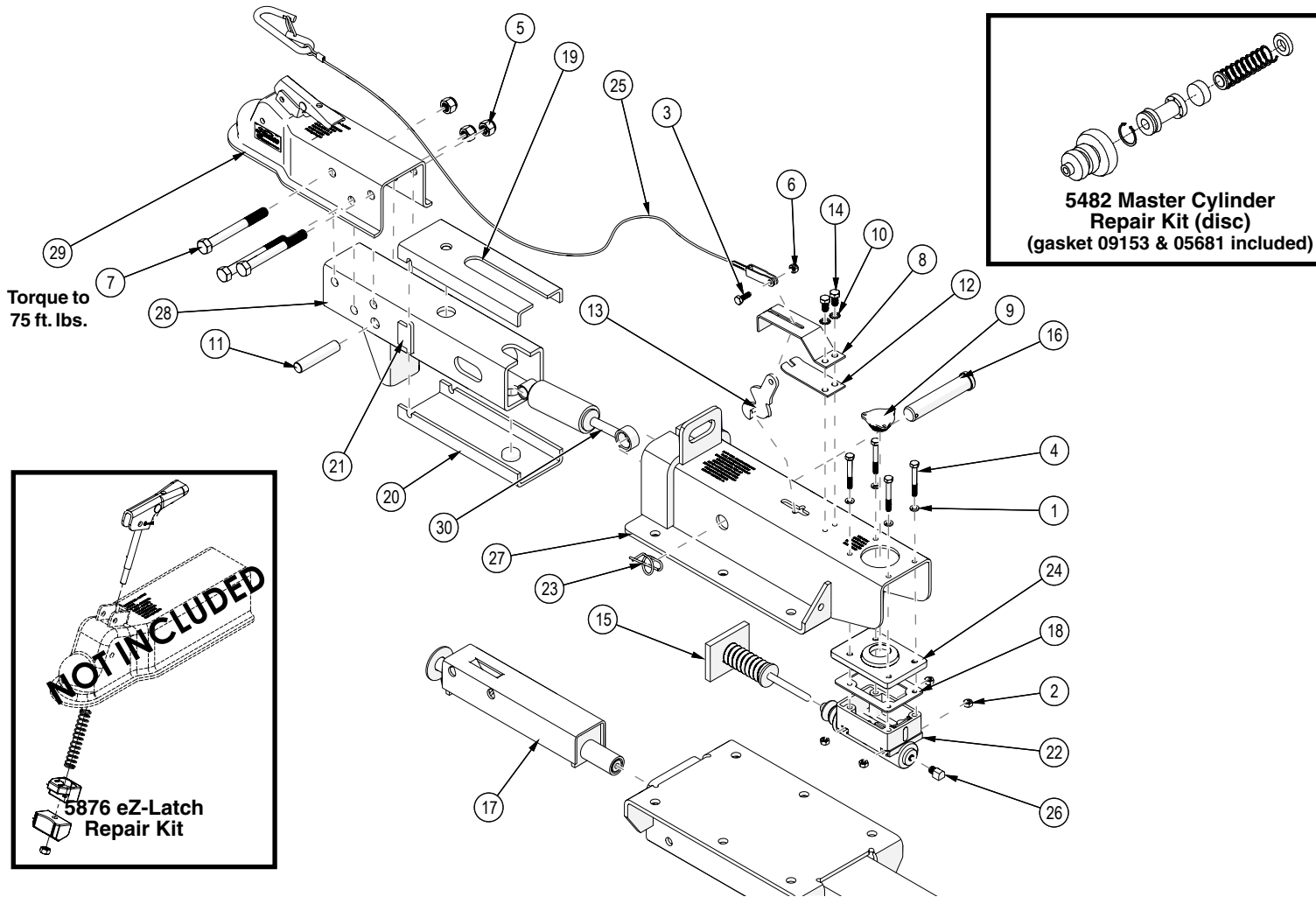
ASSEMBLY

1. Begin by mounting the Hub Assembly and the Caliper Mounting Bracket (#5) to the Forged Arm using the (#8) 7/16" Epoxied Bolts (as shown).
2. Now place the Rotor (#3) onto the Hub Assembly as shown in the diagram.
3. Make sure the Brake Pads (#10) are correctly placed in the Caliper (#4).
4. Place Caliper (#4) over the Rotor (#3), and secure it to the Mounting Bracket (#5) using the Caliper Mounting Bolts (not shown).
5. When mounting right caliper only, rotate elbow fitting 1/4 turn tighter (clockwise) to position elbow fitting correctly. Hook up Brake Hoses (#1) and replace the Rim and Tire.

PARTS LIST

ITEM #	PART #	DESCRIPTION	Qty
-	6164	AXLE w/DISC BRAKES, HUBS AND BRAKE LINES	-
1	02032	12" BRAKE HOSE	4
2	02933	12MM LUG NUT CHROME	24
3	03927	ROTOR	4
4	13825-92	DISC BRAKE CALIPER, COMPLETE	4
5	13920-92	CALIPER MOUNTING PLATE	4
6	15555	HD SEALED HUB 6/115MM	4
7	15718	CAR CARRIER AXLE 3700#	2
8	15721	BOLT .438NF X 2.00 GR8 EPOXY	16
9	6176	RIM TIRE ASSEMBLY	4
-	15556	15 X 6" WHITE RIM (6 ON 115mm BOLT CIRCLE)	4
10	13824	BRAKE PADS (for one complete axle)	2
-	14179	KIT DISC BRAKE FITTING (includes items listed below)	-
-	-	90 DEGREE FITTING	1
-	-	BLEEDER VALVE	2
-	-	RUBBER BUSHING	2
-	14486	STAINLESS STEEL CALIPER BOLT (not shown)	2
-	14487	STAINLESS STEEL CALIPER BUSHING (not shown)	2
Please order replacement parts by PART NO. and DESCRIPTION			

BRAKE ACTUATOR BREAKDOWN



PARTS LIST

ITEM #	PART #	DESCRIPTION	Qty
-	6177	Croft DISC BRAKE ACTUATOR COMPLETE	1
1	00057	WASHER, .25 SPRING LOCK	4
2	00062	NUT .25NC HEX	4
3	00068	BOLT .25NC X .75 GR2 HEX	1
4	00618	BOLT .25NC X 2.00 GR5 HEX	4
5	02178	NUT, .50NC LOCK, NY. INSERT	3
6	02772	NUT, .25NC LOCK NYLON INSERT	1
7	02918	BOLT, .50 NC X 4.50 HEX HEAD GR.8	3
8	03866-95	LEVER GUIDE	1
9	03876	MASTER CYL. CAP w/ DIAPHRAM & O-RING	1
10	05424	WASHER, .313 EXTERNAL TOOTH LOCK	2
11	05441-95	PIN, FRONT SHOCK	1
12	05693-95	EMERGENCY LEVER SPRING	1
13	05951-95	EMERGENCY LEVER	1
14	05961	BOLT .313NC X .625 GR5 HEX	2
15	05977	PUSH ROD ASSEMBLY	1
16	05986-95	CONNECTING PIN	1
17	07623-30	SPRING RETURN SYSTEM	1
18	09153	COMPOSITE MASTER CYL. GASKET ONLY	1
19	10965	UPPER SLIDER	1
20	10966	LOWER SLIDER	1
21	10967	SIDE SPACERS	2
22	11793	COMPOSITE MASTER CYLINDER DISC	1
23	12397	RUE RING LOCK COTTER PIN f/ 7/8 SHAFT	1

Please order replacement parts by PART NO. and DESCRIPTION

ITEM #	PART #	DESCRIPTION	Qty
24	12557	CAP FOR MASTER CYLINDER	1
25	05408	BREAK-AWAY CABLE KIT (includes #3 & #6)	1
26	14798	90° FITTING	1
27	15747-95	DA91 OUTER CASE for AT7000	1
28	15752-95	ACTUATOR SLIDER TUBE	1
29	15781	2" BALL COUPLER	1
30	SB12426	SHOCK, DAMPER	1
**	5401	Emergency Lever Kit f/DA91/10/20	-
-	5482	Master Cylinder Repair Kit (Disc Brakes)	-
-	5876	eZ-Latch Repair Kit	-

Please order replacement parts by PART NO. and DESCRIPTION



When servicing actuator and installing Rue Pins, make sure to manual lock the Rue Pin as shown above.

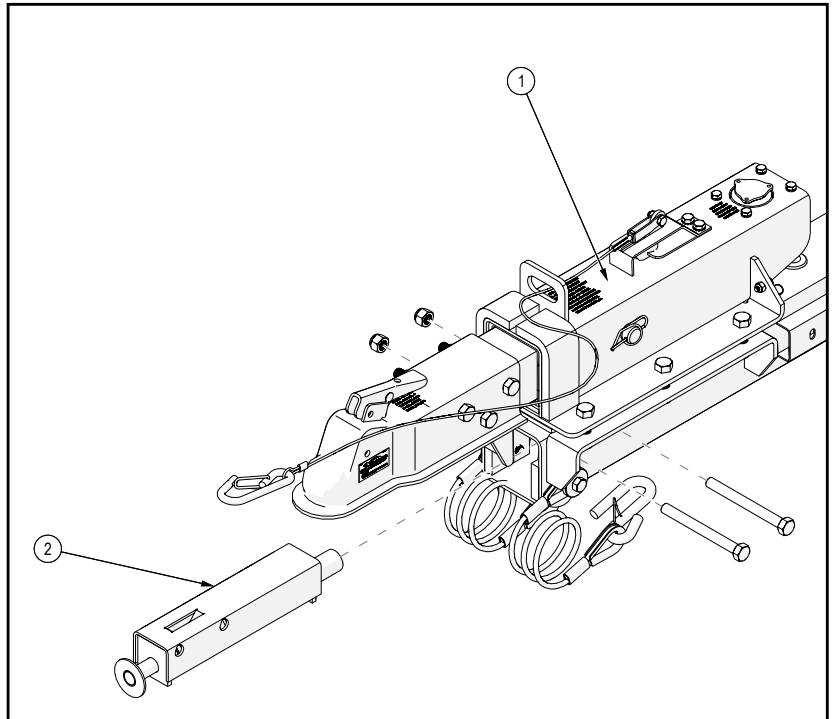
BRAKE RETARDER SPRING ASSEMBLY INSTRUCTION

ASSEMBLY INSTRUCTIONS

1. Loosen or remove the six bolts that mount the brake actuator (#1) to the tongue. Do not remove the brake line, as actuator will not be removed.
2. Lift the front of actuator high enough to slide Retarder Spring Assembly (#2) up into the tongue tube. Line up the front mounting holes for the retarder spring (#1) and the retarder spring assembly (#2), and reinstall the bolts.
3. Retarder Spring Assembly (#2) is shipped out preloaded with a 1/4" disposable hex nut (not shown). Retarder Spring Assembly (#2) will activate itself when Car Carrier is loaded with a vehicle on it.

TOOLS REQUIRED

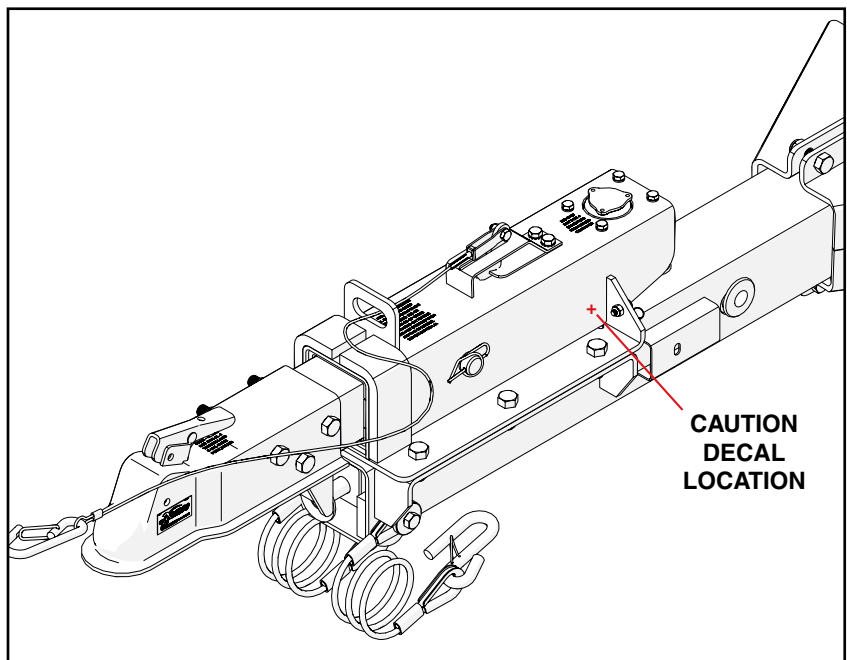
- 2 - 3/4" WRENCHES
- 1 - LINE UP PUNCH



CAUTION

This actuator is spring loaded. Use care when servicing or injury may occur.

NP21010



Brake System Repair & Maintenance

(INSTRUCTIONS FOR UNITS WITH DISC BRAKES)

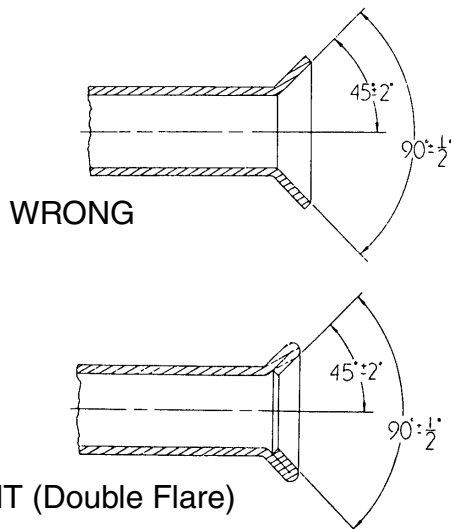


Warning

Failure to follow these instructions, or failure to properly maintain brakes after installation, can result in loss of braking action. This can cause personal injury, death or property damage. Only professional mechanics should install brake components. Have your brakes inspected by a professional mechanic a minimum of once a year after installation.

Brake Line Installation

Use care in forming tubing to avoid sharp bends or kinks. Use double flare steel tubing to assure tight leakproof connections. This must be done by a certified brake shop. Anchor all hydraulic lines at two foot intervals to prevent chafing and vibration. Use hydraulic rubber hose at points of flexing. Anchor hose ends to avoid stress on tubing.



Brake Rotor Maintenance

Brake rotors, if worn, may be reground to minimum thickness of .995 before needing to be replaced.

Actuator Installation

The Model 91 is completely assembled and ready to bolt into place.

1. Bolt the actuator to a 3" square tongue with three 1/2" x 4-1/2" bolts (gr.8) and nylon insert lock nuts. Tighten bolts to 75 ft. lbs. torque.
2. Attach brake line to master cylinder outlet. Make sure all connections are tight. Support master cylinder outlet fitting

with wrench when tightening brakeline to master cylinder.

3. Fill the master cylinder from a sealed container of DOT 3 or 4 brake fluid. Raise tongue of Car Carrier a few inches higher than level to improve brake bleeding.
4. After the master cylinder has been filled, remove the flat spring behind the emergency lever. Pull forward on the lever to pump the master cylinder. Use short strokes until bubbling stops in the master cylinder. A pressure type brake bleeder may be used. If one is not available, you can bleed the system manually as follows.
5. Bleed the rear axle first. Install bleeder hose on the bleeder valve on the first wheel with other end of the hose in a clear container partially filled with brake fluid. Loosen the top bleeder valve one turn and pump the master cylinder until the air bubbles stop coming out of the hose in the glass container, then close the bleeder valve and repeat the process on the other wheels. (Watch the fluid level in the master cylinder and refill so level does not fall below 1/2 full.) Refill master cylinder every 4 or 5 strokes.
6. After bleeding is completed, refill the master cylinder and put the filler cap on securely. Replace the flat spring behind the emergency lever.
7. To test the brakes use a wrench or vise grip and clamp onto the top of the emergency lever to lengthen it. Pull lever forward until lever locks. The lever should be approximately straight up and down. Now try to rotate each of the four wheels in a forward rotation. You should not be able to rotate the wheels forward. If you can, then release the emergency lever by wedging a screwdriver under the flat spring behind the lever and rebleed brakes. Then repeat the test procedure.

Replacing The Emergency Lever

Step one: Remove the lever guide and flat spring. Remove the cable from the lever, take the lever out from by tilting lever to the side and moving lever back until cross pin aligns with cross slot remove lever.

Step two: Install the new lever from the top and through the slot. Replace the new flat spring and the lever guide. Note correct direction of lever. Tilt lever to side while inserting lever through slot, slide forward, make sure lower hook on lever is contacting frontside of push plate. Replace the new flat spring and lever guide.

Step three: Take the new cable, route it through the chain link fasten to the lever leave nut and bolt slightly loose to allow rotation. Check the master cylinder and fill with DOT 3 or 4 brake fluid.

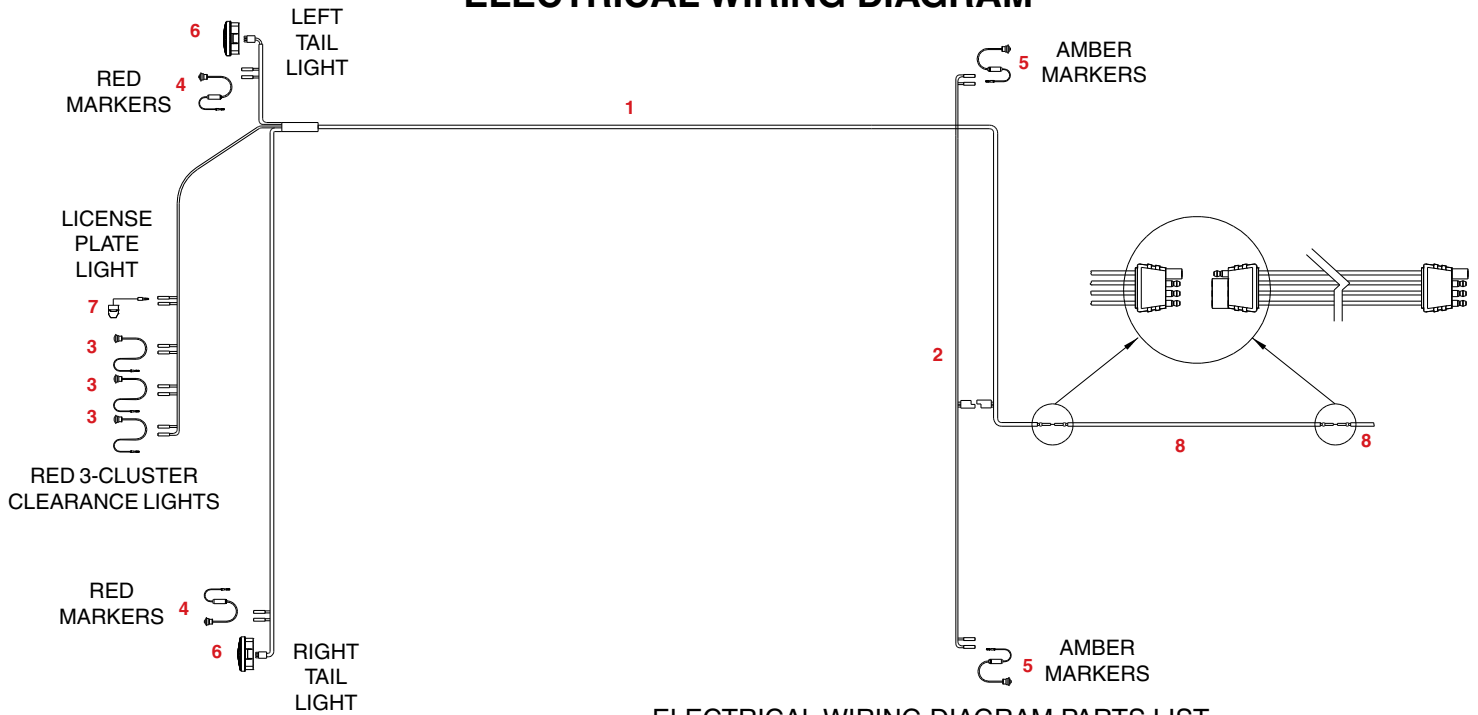
Step four: Rebleed brake system.

10. Sway controls that restrict actuator movement cannot be used.

MAINTENANCE

1. Before towing check sight gauge to be sure master cylinder is full of brake fluid and check lines for leaks. Inspect the actuator for bent or worn parts. Replace parts if necessary. Make sure the actuator mounting bolts are tight.
2. Check brake pad lining. Replace brake pads if necessary. (If lining is an 1/8" or less)
3. Inspect the tamper evidence cable on actuator. If cut or removed, the cap has been removed, and the system should be inspected for contamination.
4. A film of clean grease on the ball will extend ball and coupler life.
5. Periodically check braking quality, as described above. Failure to do so will result in loss of braking.
6. If units are used in corrosive conditions the actuator and wheels should be washed out with high pressure water. When actuator parts are dry, oil all moving parts.

ELECTRICAL WIRING DIAGRAM

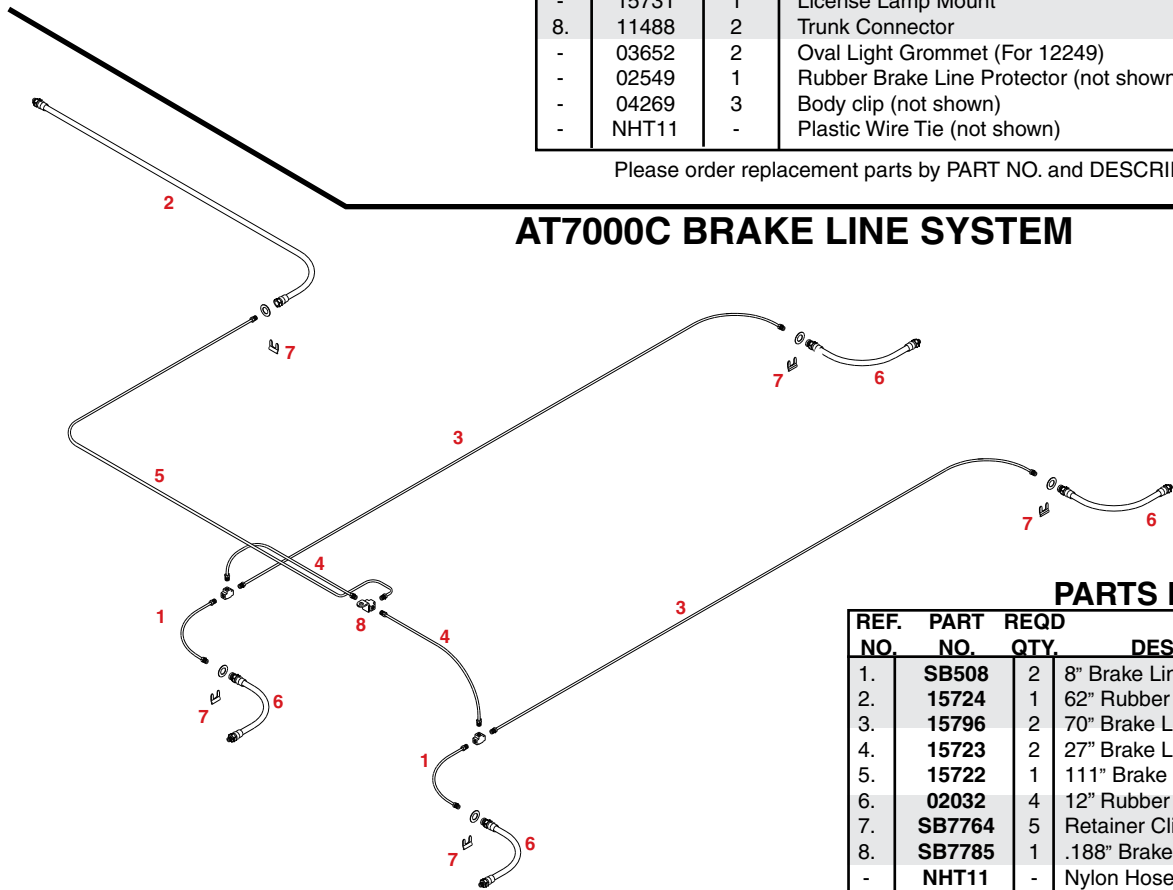


ELECTRICAL WIRING DIAGRAM PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	15720	1	Main Wiring Harness
2.	15719	1	Front Marker Wire Harness
3.	12964	3	3/4" LED Red Lamp Clearance/Marker
4.	12962	2	3/4" LED Red Lamp Clearance/Marker PC-Rated
5.	12963	2	3/4" LED Yellow Lamp Clearance/Marker PC-Rated
6.	12249	2	Sealed Oval Tail Light - Stop, Tail, Turn
7.	15730	1	License Lamp
-	15731	1	License Lamp Mount
8.	11488	2	Trunk Connector
-	03652	2	Oval Light Grommet (For 12249)
-	02549	1	Rubber Brake Line Protector (not shown)
-	04269	3	Body clip (not shown)
-	NHT11	-	Plastic Wire Tie (not shown)

Please order replacement parts by PART NO. and DESCRIPTION.

AT7000C BRAKE LINE SYSTEM



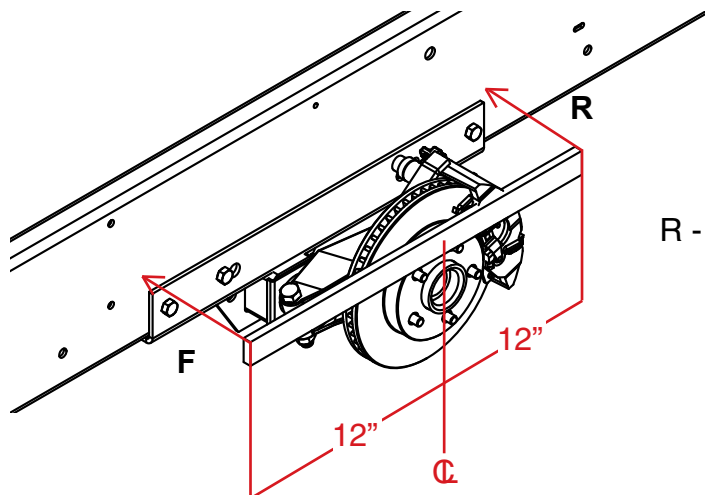
PARTS LIST

REF. NO.	PART NO.	REQD QTY.	DESCRIPTION
1.	SB508	2	8" Brake Line
2.	15724	1	62" Rubber Brake Hose
3.	15796	2	70" Brake Line
4.	15723	2	27" Brake Line
5.	15722	1	111" Brake Line
6.	02032	4	12" Rubber Brake Hose
7.	SB7764	5	Retainer Clip
8.	SB7785	1	.188" Brake Tee
-	NHT11	-	Nylon Hose Tie (Brake Lines & Wiring)

Please order replacement parts by PART NO. and DESCRIPTION.

Car Carrier Axle Alignment Shim Placement

Car Carrier TOE-IN MEASUREMENT



R - F = Positive Number - Toe In
= Negative Number - Toe Out

MEASURING THE TOE-IN AND SHIM INSTALLATION INSTRUCTIONS

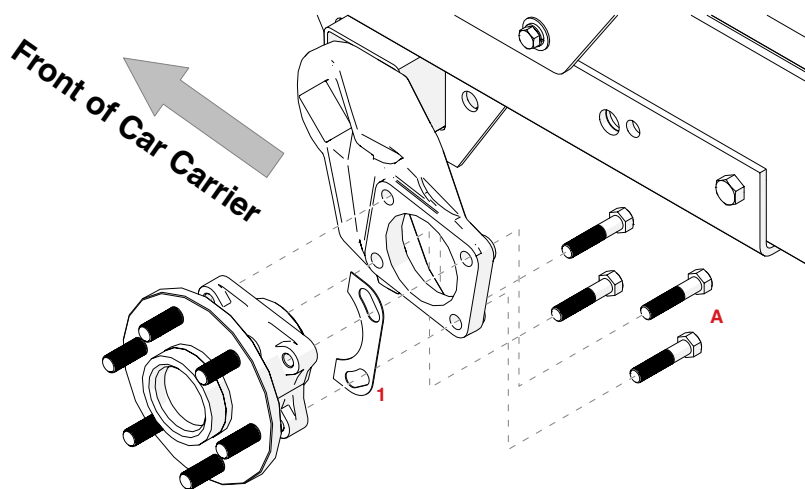
1. Raise and level Car Carrier to a height that the wheels can be removed. Support the Car Carrier safety with the proper capacity jack stands under each corner of Car Carrier frame.
2. Remove tire and wheel assembly.
3. Use 24-inch long straight edge such as a carpenter square or level, clamp to the face of each hub with 12-inches extending forward and backward of the center of the bearing hub.
4. Measure the distance between the rear of the straight edge to the Car Carrier frame and the front of the straight edges to the Car Carrier frame. The front dimension must be between 1/64" to 1/16" less than the rear dimension. See chart below for required shims.
5. If a shim is required loosen all four hub mounting bolts. Remove two of the bolts where the shim is required to be installed. Tapping on the hub may be required to loosen the hub from the swing arm.
6. Install required shim/shims from the chart below and reinstall bolts. Shims go between the swing arm and caliper mount plate.
7. Tighten all four bolts (A) and **torque** these bolts to **80 ft/lbs.**
8. After installing shims repeat step 4 until no shims are required.
9. Re-install tire and wheel assembly and nuts. **Torque** wheel nuts to **120 ft/lbs.**

Tools Required

1/2" Drive Impact Wrench
3/4" x 1/2" Drive Impact Socket
5/8" x 1/2" Drive Impact Socket
6" x 1/2" Drive Impact Extension
1/2" Drive Torque Wrench

REF. NO.	PART NO.	DESCRIPTION
1.	07509	.010 Thick Shim
-	07510	.015 Thick Shim
-	07511	.020 Thick Shim
-	07512	.030 Thick Shim

Toe In (Shim in front)	Shim Size	Shim Kit Part Number
1/64" – 1/16"	None	----
1/16" – 7/64"	0.010"	07509
7/64" – 9/64"	0.015"	07510
9/64" – 3/16"	0.020"	07511
3/16" – 7/32"	0.025"	07509 and 07510
7/32" – 17/64"	0.030"	07512
17/64" – 5/16"	0.035"	07510 and 07511
5/16" – 11/32"	0.040"	07511 (2 ea.)

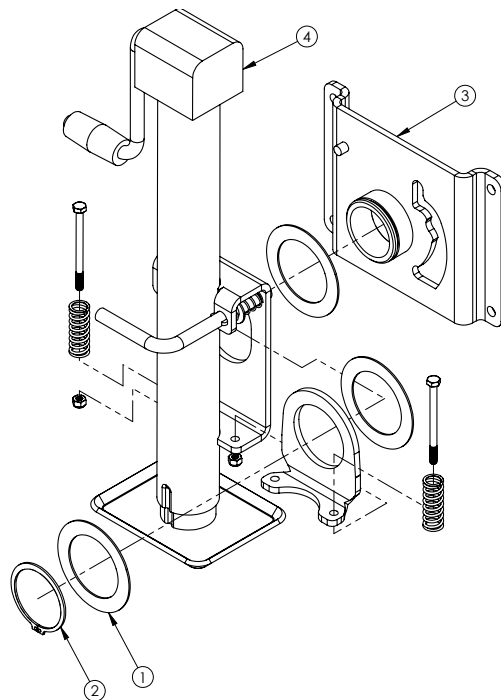
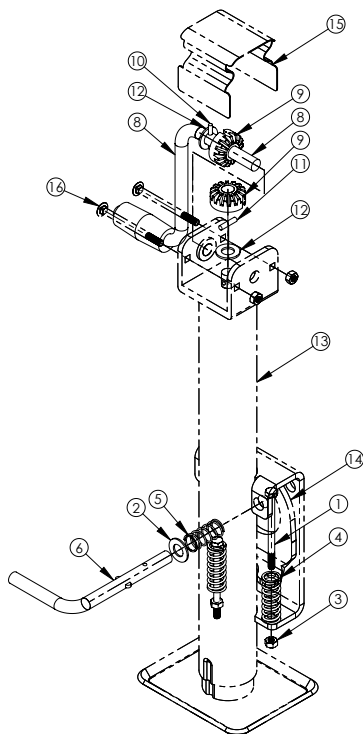


Toe Out (Shim in rear)	Shim Size	Shim Kit Part Number
1/64" – 5/64"	0.010"	07509
5/64" – 7/64"	0.015"	07510
7/64" – 5/32"	0.020"	07511
5/32" – 3/16"	0.025"	07509 and 07510
3/16" – 7/32"	0.030"	07512
7/32" – 17/64"	0.035"	07510 and 07511
17/64" – 5/16"	0.040"	07511 (2 ea.)
5/16" – 11/32"	0.045"	07510 and 07512

Please order replacement parts by PART NO. and DESCRIPTION.

JACK ASSEMBLY PARTS LIST

REF. NO.	PART NO.	REQD QTY.	DESCRIPTION
-	13691	1	EZ FOLD JACK
1.	13001	3	Spacer Washer
2.	13002	1	External Snap Ring 2.375ID
3.	13004-95	1	Mount
4.	13433	1	Jack Assembly



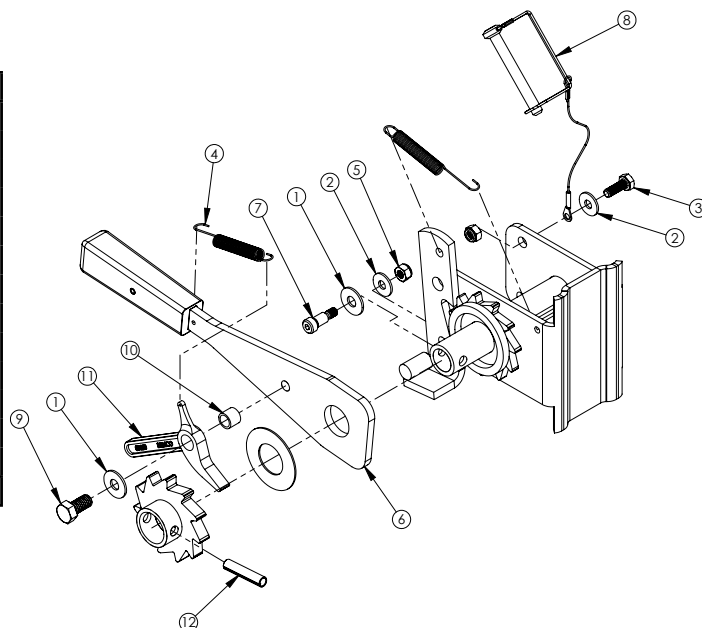
JACK ONLY PARTS LIST

REF. NO.	PART NO.	REQD QTY.	DESCRIPTION
-	5952	1	Jack Assembly Repair Kit
1.	01089	2	Bolt .25NC X 3.50 GR5 HEX
2.	02384	1	.50 X 14GA Machine Washer
3.	02772	2	Nut, .25NC Lock Nylon Insert
4.	12998	2	Upper Spring
5.	12999	1	Handle Spring
6.	-	1	1/2" O.D. Lock Pin
7.	-	1	Double Loop Bridge Pin (not shown)
8.	-	1	Sidewind Jack Handle
9.	-	2	Upper Gear for Sidewind Jack
10.	-	1	.156 Pin for Sidewind Jack
11.	-	1	.188 Pin for Sidewind Jack
12.	-	2	Washer for Sidewind Jack
13.	-	1	Sidewind Jack w/Foot (not included)
14.	-	1	Nylon Washer for Sidewind Jack
15.	-	1	Metal Jack Cap (not included)
16.	-	2	Round Head .25-20UNC X 3.25 Bolt (not included)
17.	-	1	Spring Bracket (not shown and not included)

Note: Parts 14, 15, 16 and 17 are not included in Repair Kit

ITEM	PART #	DESCRIPTION	QTY.
*1.	00004	5/16" Flat Washer	2
2.	00214	1/4" Flat Washer	2
3.	01076	Bolt 1/4" - 20UNC x 3/4" Hex Head	1
*4.	01864	Spring	2
5.	02772	1/4" - 20UNC Nylon Insert Locknut	2
6.	03574-95	Ratchet Handle Plated w/ Hand Grip	1
7.	03578	5/16" - 18UNC x 1/2" Socket Head Shoulder Bolt	1
8.	05337	Safety Pin w/Cable	1
*9.	05444	3/8" - 16UNC x 3/4" Hex Head Bolt w/ Epoxy	1
*10.	05449	Winch Pawl Bushing (Stainless Steel)	1
*11.	05450	Winch Pawl	1
12.	11750	Roll Pin 5/16" x 1-1/2"	1
-	5227	Replacement Winch Pawl Kit (includes 1 of * items)	-

Please order replacement parts by PART NO. and DESCRIPTION.



IMPORTANT INFORMATION

This document is intended as a parts manual for use by the rental agency only. The rental customer, any rental agency using the AT7000C and any person assisting with hooking or loading the AT7000C, should refer to the rental agency's current Car Carrier systems guide, the instructions, and the instruction decals for instruction on proper use. The rental agency is responsible for furnishing appropriate written instructions to the customer and checking that all decals are present and legible at the time of rental. Demco will be happy to assist with the composing of appropriate instructions.

EXCLUSION OF WARRANTIES

This product is warranted as provided by written agreement between Croft and the manufacturer. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE DISCLAIMED.

Important Information

Weight and size limitations:

Car Carrier

Empty weight.....2000 lbs.
Maximum weight of load.....5000 lbs.
Maximum total weight.....7000 lbs.

Interior platform dimensions

Bed Length: 12 feet 4 inches
Maximum Bed Width: 80.5 inches
Minimum Bed Width: 39 inches

