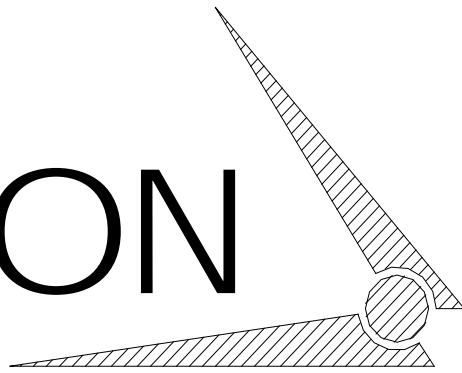


CHAMPION

Hoist and Equipment

Dunn, North Carolina, U.S.A.

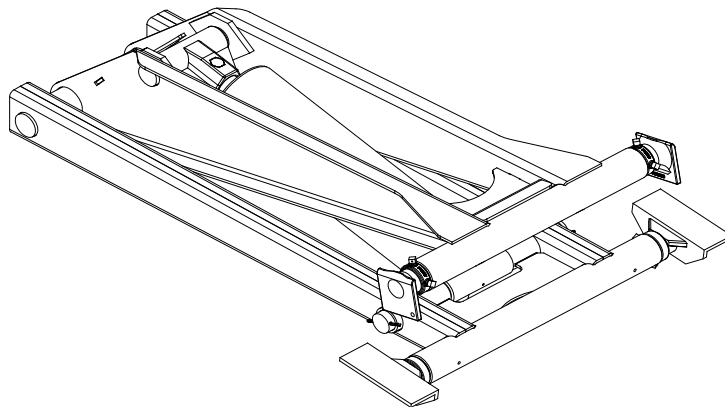


AN AFFILIATE OF

The **Godwin**
 **Group**

200 CHAMPION DRIVE
DUNN, N.C. 28334
(910) 897-4995 FAX: (910) 897-7306

TRAILER CONVERSION HOIST



Operation & Installation Manual



WARRANTY

Champion Hoist and Equipment warrants these products for a period of 36 months from the date of sale to the customer.

This warranty provides that the equipment shall be free of defective materials and workmanship, or we will replace or repair at our factory, any part that our inspection shows to be defective.

The hydraulic valve, pump, motor, hoses, and other purchased products are not manufactured or warranted by Champion Hoist and Equipment and are therefore covered by the warranties of the manufacturer of these products.

Any part shipped to the factory shall be prepaid, and will be returned collect. Champion Hoist and Equipment does not assume responsibility for shipping, labor or travel expenses.

We reserve the right to make improvements to any of our product without notice or obligation regarding model previously sold.

CHAMPION HOIST & EQUIPMENT
200 Champion Drive
Dunn, NC 28334
800-649-4995
7/23/2009

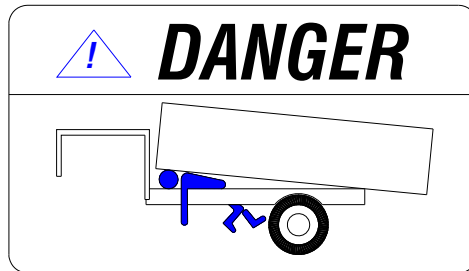
CHAMPION TRAILER SCISSOR HOIST

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Operations and Service

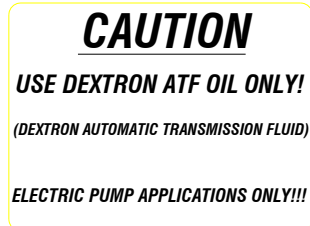
Do not operate this equipment without fully reading and understanding this manual.
Do not allow unauthorized personnel to operate this equipment.
Do not go underneath a loaded raised bed under ANY circumstances.



Be sure to.....

- * Follow all Federal, State, Local regulations pertaining to this equipment.
- * Keep unit properly maintained and serviced.
- * Understand and follow all safety decals and keep them in good condition.
- * Check hydraulic oil level each time equipment is serviced.
- * Add correct hydraulic oil to reservoir as needed.

ELECTRIC PUMP APPLICATIONS



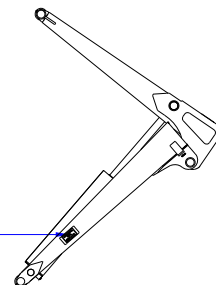
- * Grease hoist and rear hinge assembly as needed.

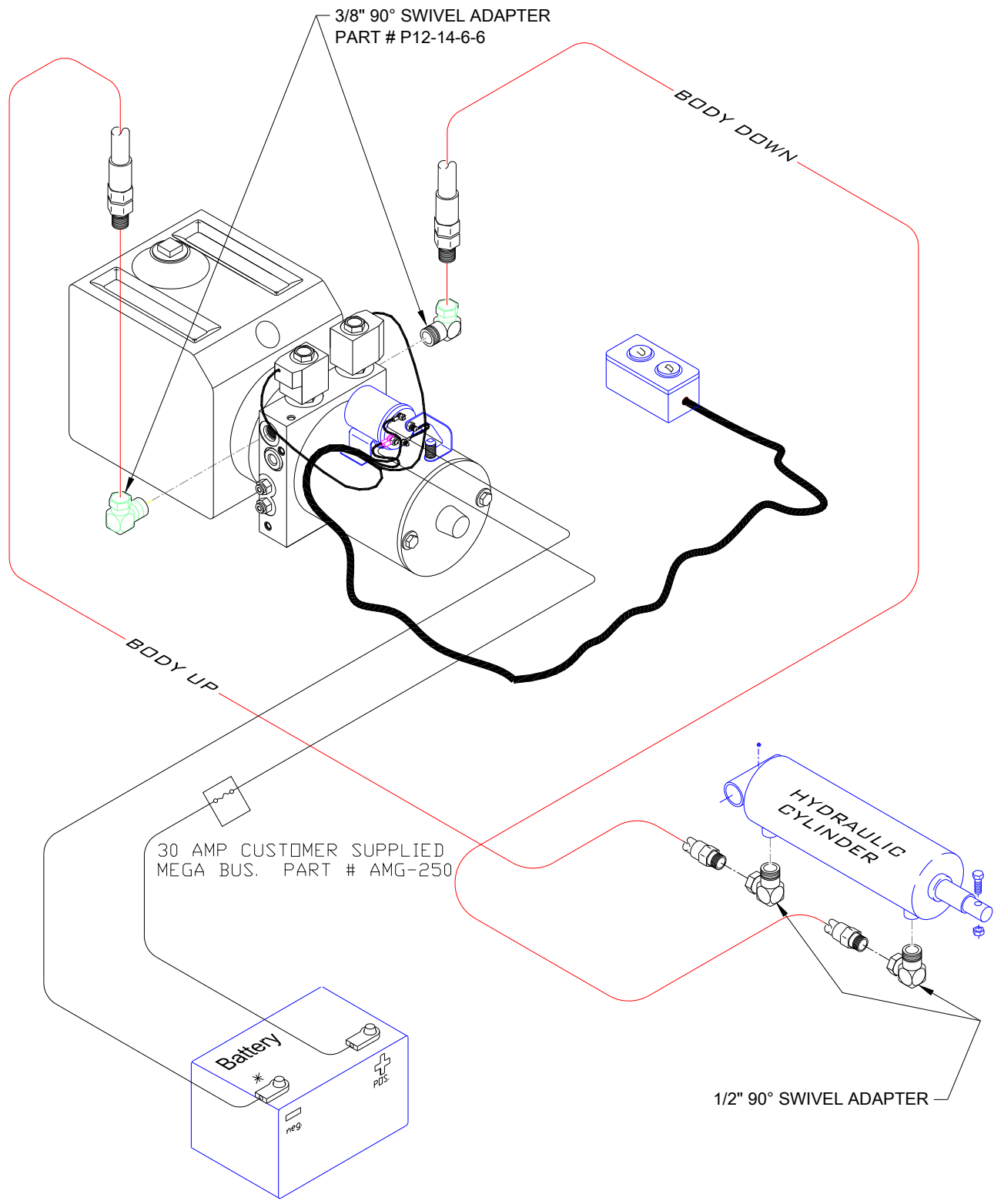
Do not allow controls and area around them to become cluttered with tools, cans, etc.
Do not use hands or other body parts to check for hydraulic leaks.
Do not leave trailer unattended with bed raised.
Do not allow personnel to ride in or on the bed.
Do not load the equipment beyond the hoist rating.
Do not operate the hoist on an unlevel or soft surface.
Do not operate the hoist **UNDER POWER LINES!!**
Do not raise the hoist when trailer is in motion.
Do not move a trailer with a raised hoist.

When calling for Parts/Service Be Sure To Have....

Hoist: model number
serial number

Serial Plate Location



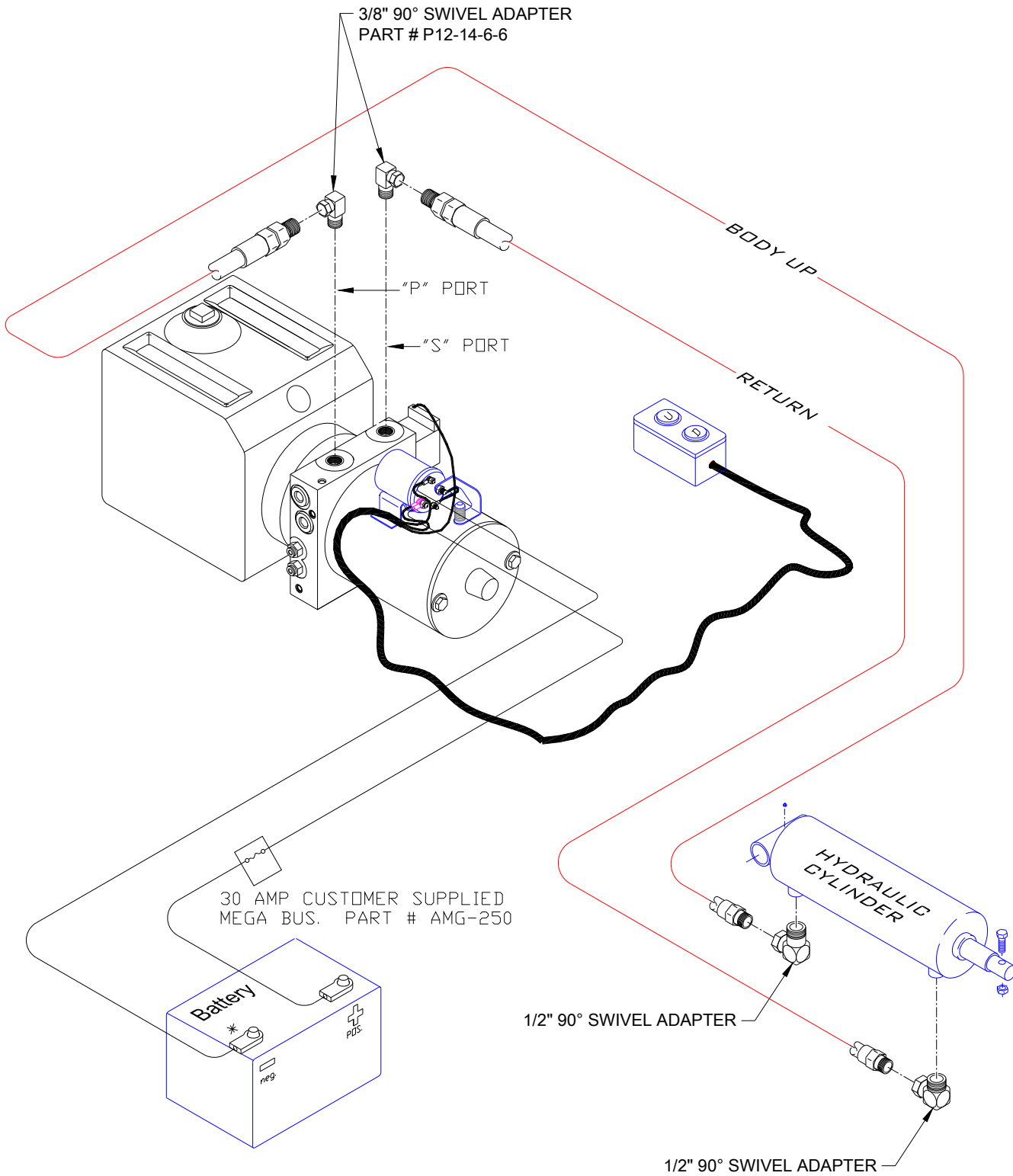


NOTE: Ground Wire is to be ground at SOURCE.
DO NOT GROUND TO CHASSIS!!

HYDRAULIC PLUMB DIAGRAM
DOUBLE ACTING ELECTRIC PUMP

GODWIN MFG. CO., INC.
DUNN, NORTH CAROLINA

PD40045



NOTE: Ground Wire is to be ground at SOURCE.
DO NOT GROUND TO CHASSIS!!

ELECTRIC PUMP PRIMING PROCEDURE

(Single or Double acting)

(A) Be sure hoist and electric pump are completely installed and ready to safely operate. Fill electric pump reservoir with Automatic Transmission Fluid to within 1" of top.

(B) Power the hoist "Up" using the "White" button on the push button controller.
NOTE: If hoist does not start to raise within 10 seconds, stop and check that the hydraulic lines are correctly installed. See below:

Monarch 3551 (double acting) "C1" port = hoist raise (white button) = 2800psi
"C2" port = hoist lower (black button) = 800psi

Monarch 3519 (single acting) "P" port = hoist raise (white button) = 2800psi
"S"port = lower/vent to res. (black button) = -0- psi

(C) When powering the hoist "Up" the first time it is imperative that the reservoir NOT run out of fluid. Maintain a half tank of fluid on the first lift by stopping and filling as needed.

(D) As you are fully raising the hoist safely check for leaks, any visual obstructions, etc.

(E) **For Double Acting pump only** - "Lower" the hoist by pressing the "black" button. Once the hoist has fully lowered CONTINUE to hold the "black" button until the oil in the reservoir stops moving. (about 20 seconds) The turbulence you see in the reservoir during this crucial step is in reality filling the top side (down side) of the cylinder. This typically has to be done only upon the initial installation or when the unit has run out of oil and is being refilled.

(F) Once this has been done fill the reservoir as needed to maintain 2/3 to 3/4 full.

HELPFUL HINTS:

(1) Perform the above priming steps no more than twice in 30 minutes due to the oil aerating.

(2) If the reservoir overflows when lowering, the following could cause this.

- (a) Aerated oil
- (b) "Hoist lower" line too small or obstructed
- (c) Wrong ports used on pump
- (d) Extremely cold conditions.

(3) Electric power units are NOT to be used with twin cylinder hoists or any hoist with a volume larger than a 6" bore X 24" stroke cylinder.

(4) Make sure the customer understands that the electric power unit (used when necessary) will have the same capacity but be slower than a PTO driven unit.

(5) If voltage drops below about 10.5vdc the up and down coils may be affected first.

**MONARCH M-3519 (single acting). M-3551 (double acting)
ELECTRIC PUMP TROUBLESHOOTING**

Motor on pump does not operate.

Electric pump Solenoid does not click.

- (A) Bad hot(+) or ground(-) cable(s) from battery to pump. Be sure to use both cables and connect directly to battery. It is advisable to install a 250amp Mega fuse at the positive battery connection. *Note: On newer trucks the ground cable from battery to chassis is too small to carry the load of the electric pump unit. This is why you need (2) individual positive and ground cables from battery to electric pump unit.*
- (B) Check for 12v signal at small post of solenoid when pressing the “up” button of the control. If voltage is below 12 volts it may be a sign of an alternator or battery issue. If no voltage it may be the switch or a broken or corroded wire

Electric pump Solenoid clicks but motor does not operate.

- (A) Check battery connection between solenoid and motor.
- (B) Contacts in solenoid could be burned. (Check this by shorting the two large posts on the solenoid, if motor turns replace solenoid assembly)
- (C) Motor could be bad.
- (D) Pump could be seized.

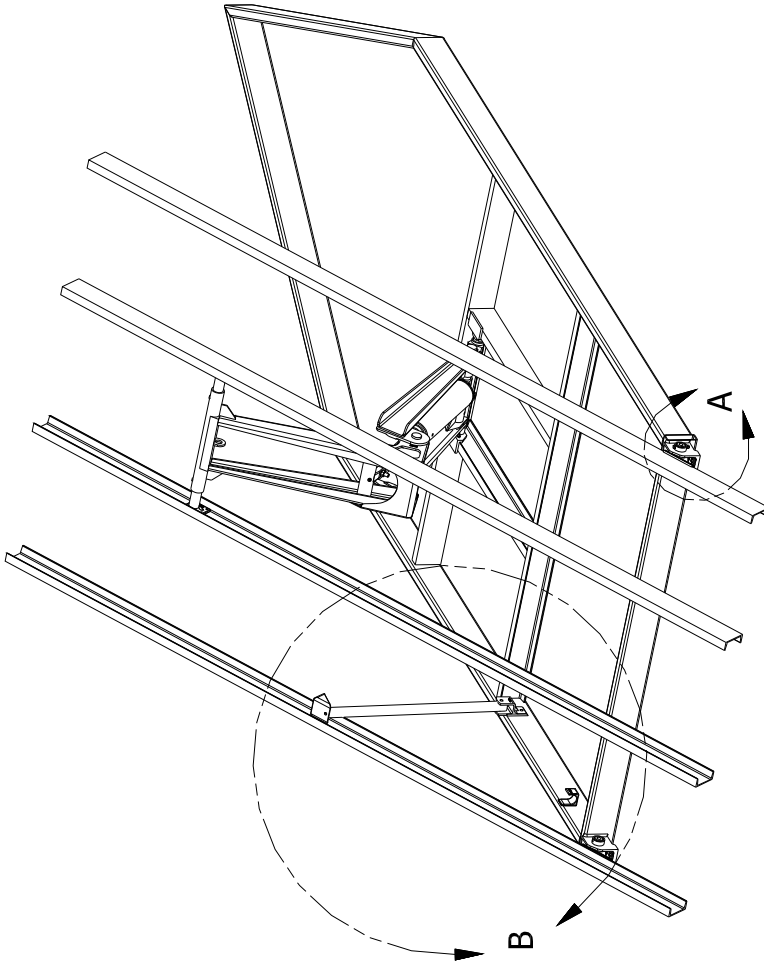
Motor/pump turns but hoist will not work.

- (A) Check for 12 volts at valve coil(s). Could be bad switch or broken wire.
- (B) Is/are coil(s) magnetized when button is pressed? Could be bad coil/ or connector.
- (C) Cartridge stem could be bent. With bed down, remove cartridge and roll on table to check for alignment.
- (D) Check pump unit pressure. Up should be 2800psi and down (on double acting units) should be 800psi.

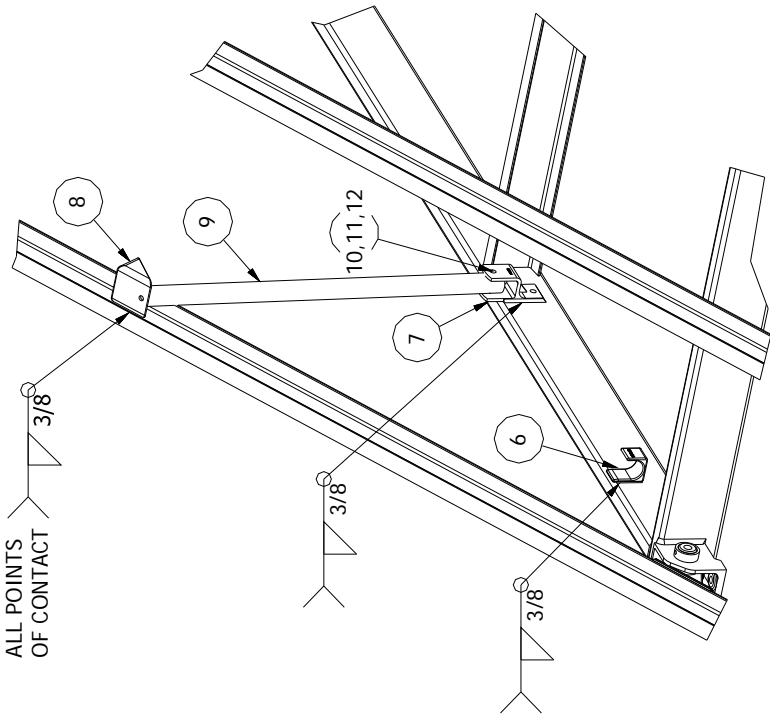
Hoist stuck in up position, will not come down.

- (A) Check for 12 volts at “down” coil.
- (B) Bent stem on “down” cartridge. Call for service technician. **DO NOT ATTEMPT TO REPAIR!**

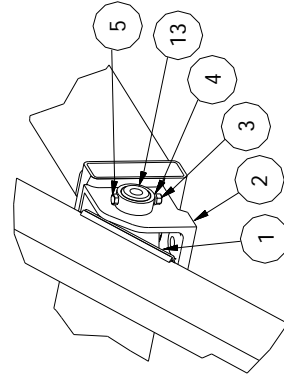
SAFETY PROP AND HINGE HARDWARE



ALL POINTS
OF CONTACT
3/8"



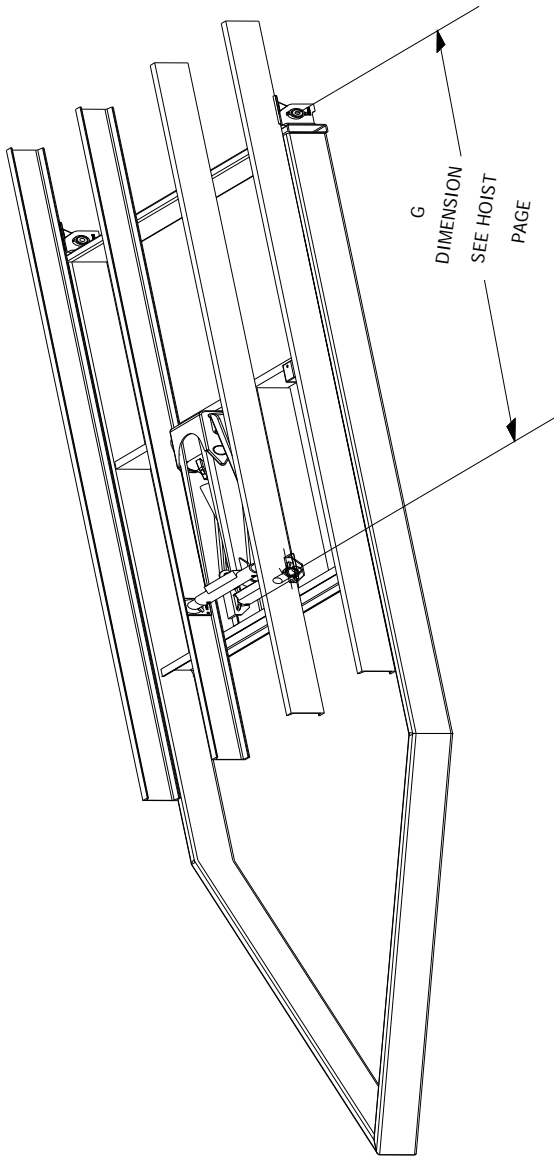
DETAIL B
SAFETY PROP KIT
K101020



DETAIL A
HINGE KIT
K101019

HINGE KIT PARTS LIST	
ITEM	QTY PART NUMBER DESCRIPTION
1	2 PC10636 HINGE FLIPPER
2	2 PC10583 HINGE BLOCK
3	2 116-3-A1 3/8" HEX NUT
4	2 118-3-A1 3/8" LOCK WASHER
5	2 102-213-A1 3/8" x 3" GRADE 8 HEX BOLT
SAFETY PROP KIT PARTS LIST	
ITEM	QTY PART NUMBER DESCRIPTION
6	1 PC10468 SAFETY PROP HOOK
7	1 PC21006 SAFETY PROP BRACKET
8	1 PC10415 SAFETY PROP CUP
9	1 PC13033 SAFETY PROP
10	1 102-417-A1 1/2" GRADE 8 HEX BOLT
11	1 118-5-A1 1/2" LOCK WASHER
12	1 116-5-A1 1/2" HEX NUT
13	2 PC10816 HINGE PIN

PROCEDURE I - HOIST LOCATION ON TRAILER & REAR HINGE INSTALLATION



PROCEDURE STEPS:

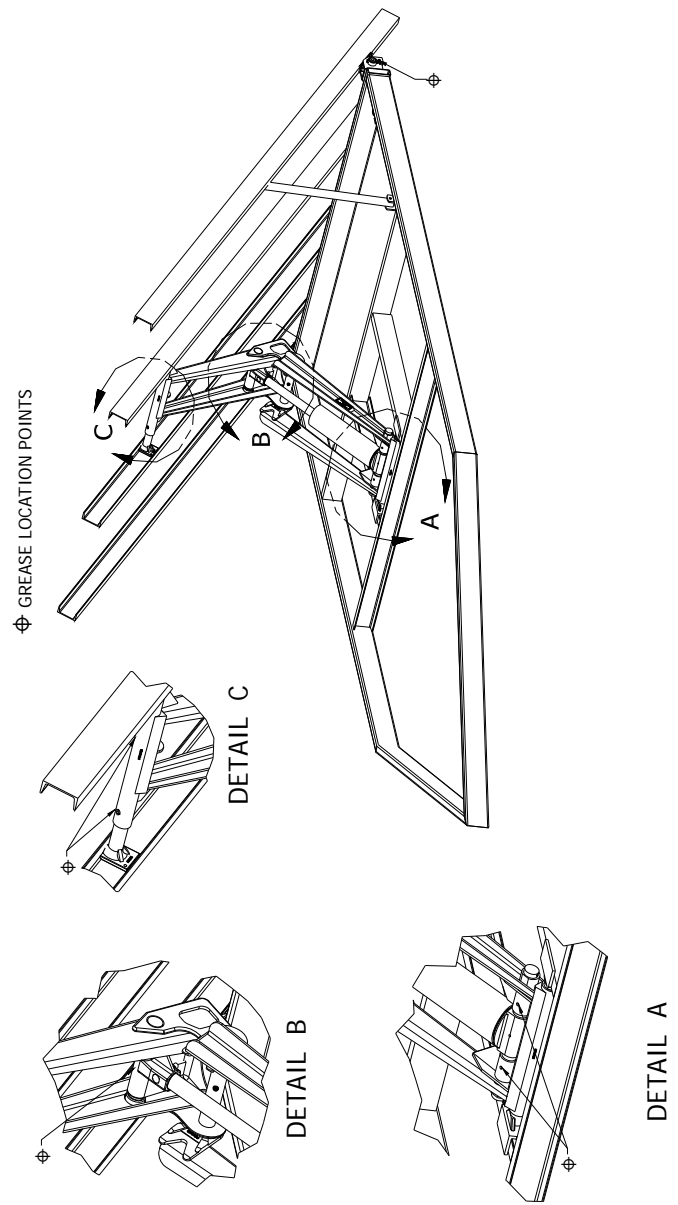
LOCATE AND WELD REAR HINGE BRACKET TO FRAME.

LOCATE HOIST ON FRAME SO THAT THE CENTERLINE OF THE LOWER LIFT ARM IS AT THE DESIRED LOCATION FROM THE REAR HINGE FOR THE DUMP ANGLE REQUIRED.

WELD LOWER LIFT ARM TO FRAME .

PLACE BODY ON FRAME TO THE DESIRED LOCATION. THE BODY MUST BE PARELLEL WITH THE FRAME.

WELD REAR HINGE FLIPPERS TO FRAME. USING 1/2" CONTINUOUS FILLET WELDS AROUND ALL CONTACT AREAS.

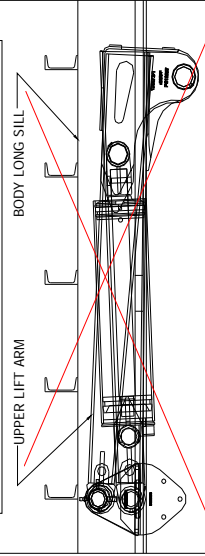


PROCEDURE III - REMOVING SLACK FROM HOIST AND REAR HINGE

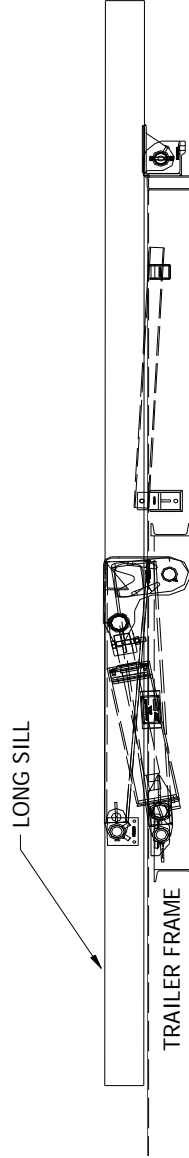
IMPORTANT!

SLACK MUST BE REMOVED FROM HOIST AND REAR HINGE DURING INSTALLATION.

INCORRECT INSTALLATION



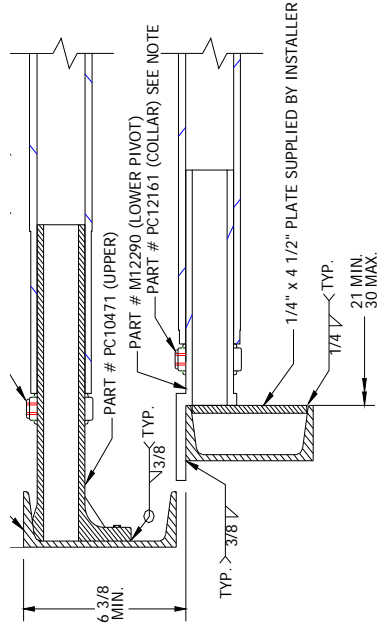
UPPER LIFT ARMS AND TOP OF LONG SILLS MUST BE PARALLEL.



NOTE: MAKE SURE TO GREASE ALL LUBRICATION FITTINGS BEFORE OPERATING. REFER TO PAGE (10) FOR FITTING LOCATIONS.

PROCEDURE STEPS:
(SEE ILLUSTRATION LEFT)

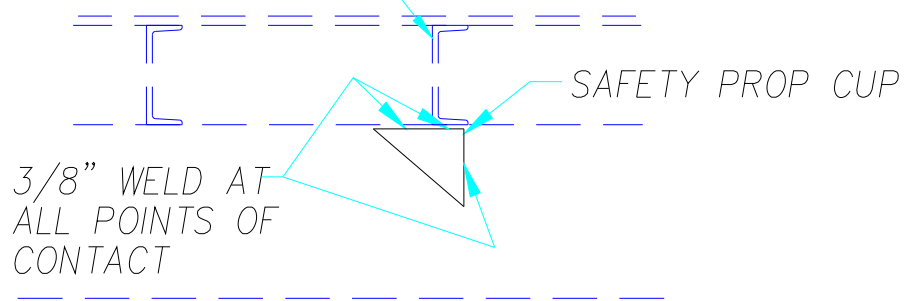
USING THE HOIST POWER, RAISE THE BODY APPROXIMATELY 1-1/2" AS MEASURED FROM THE END OF BED. WELD LIFT ARMS TO LONG SILLS USING 3/8" CONTINUOUS FILLET WELD. (SEE BELOW)
MAKE SURE HOIST IS CENTERED WITHIN THE RAILS AND SECURE IN PLACE WITH COLLARS.
CAUTION: FAILURE TO PERFORM THIS PROCEDURE AS SPECIFIED COULD CAUSE HOIST FAILURE AND THEREFORE VOIDS ASSOCIATED WARRANTY.



NOTE: IF LOWER LIFT ARM IS EXTENDED OUT FURTHER THAN 2" THEN COLLAR MUST BE USED.

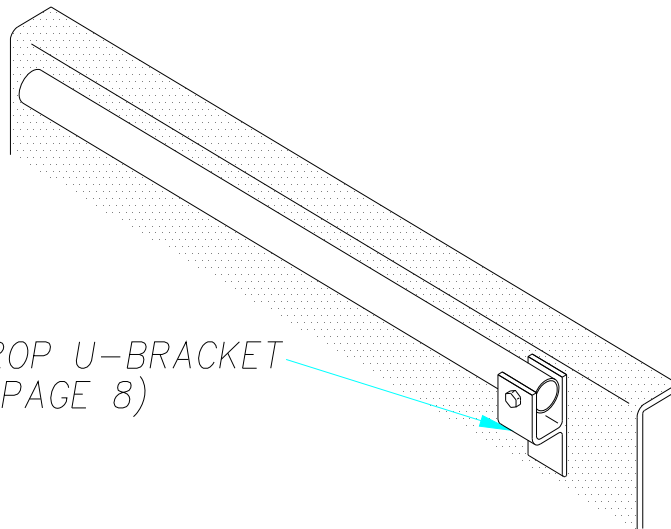
DETAIL "A"

BODY CROSS MEMBER



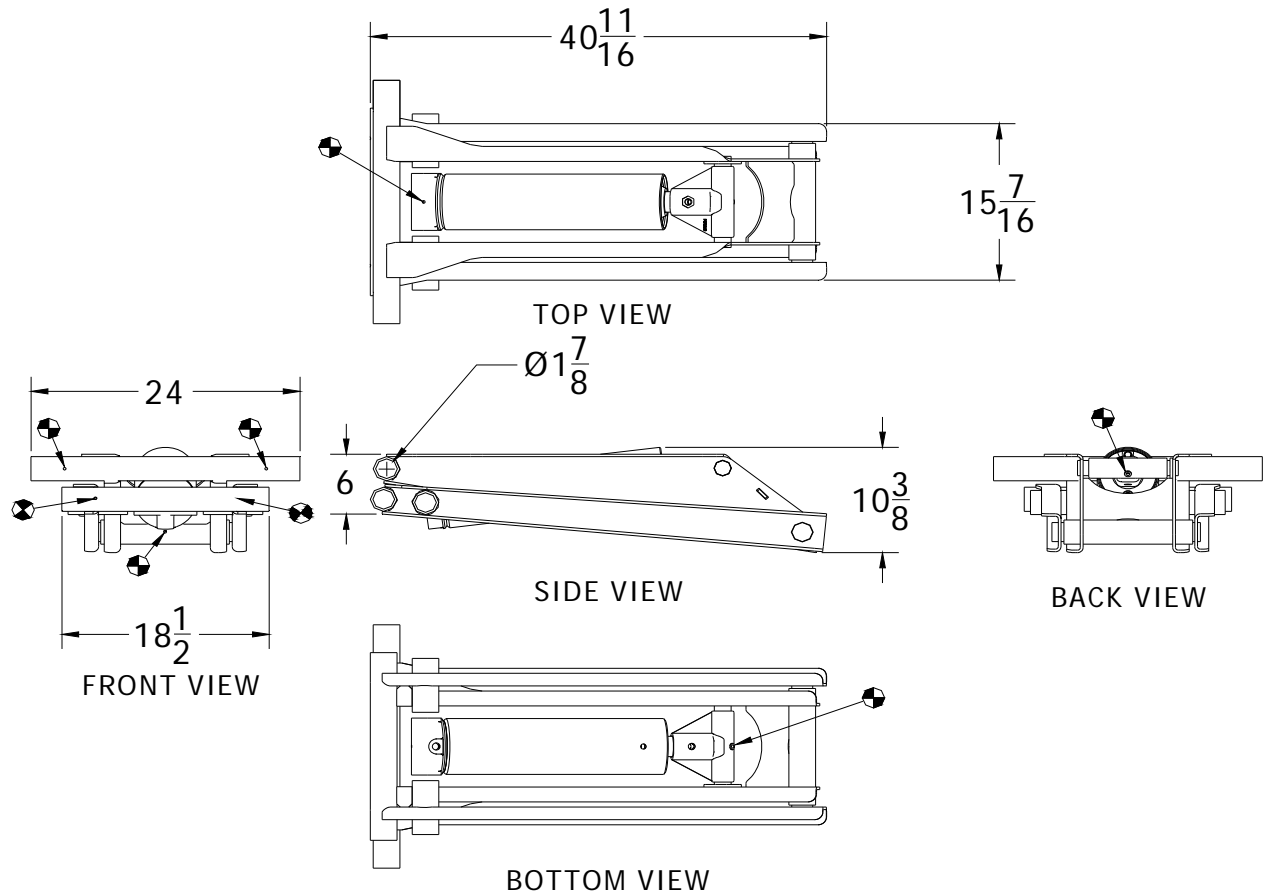
LOCATE SAFETY PROP CUPS ON BODY MAIN RUNNER SO THAT THE SAFETY PROP IS ANGLED SLIGHTLY TO THE REAR. ALSO, BE SURE CUPS ARE SUPPORTED BY A BODY CROSS CHANNEL. (SEE PAGE 8)

DETAIL "B"



NOTE:
SOME STATES MAY REQUIRE
ADDITIONAL SAFETY PROP
(KIT NUMBER K101020)

CS415T



☉ - GREASE FITTING LOCATIONS

"G" DIMENSION	
40° TILT	84 inches
45° TILT	74 inches

Trailer bed lengths -10 - 12 feet

Hoist	System Pressure PSI	Capacity (TONS) - Trailer Length (FT) - 18 inches Overhang	
		10	12
CS 415T	3,200	6.0	4.7

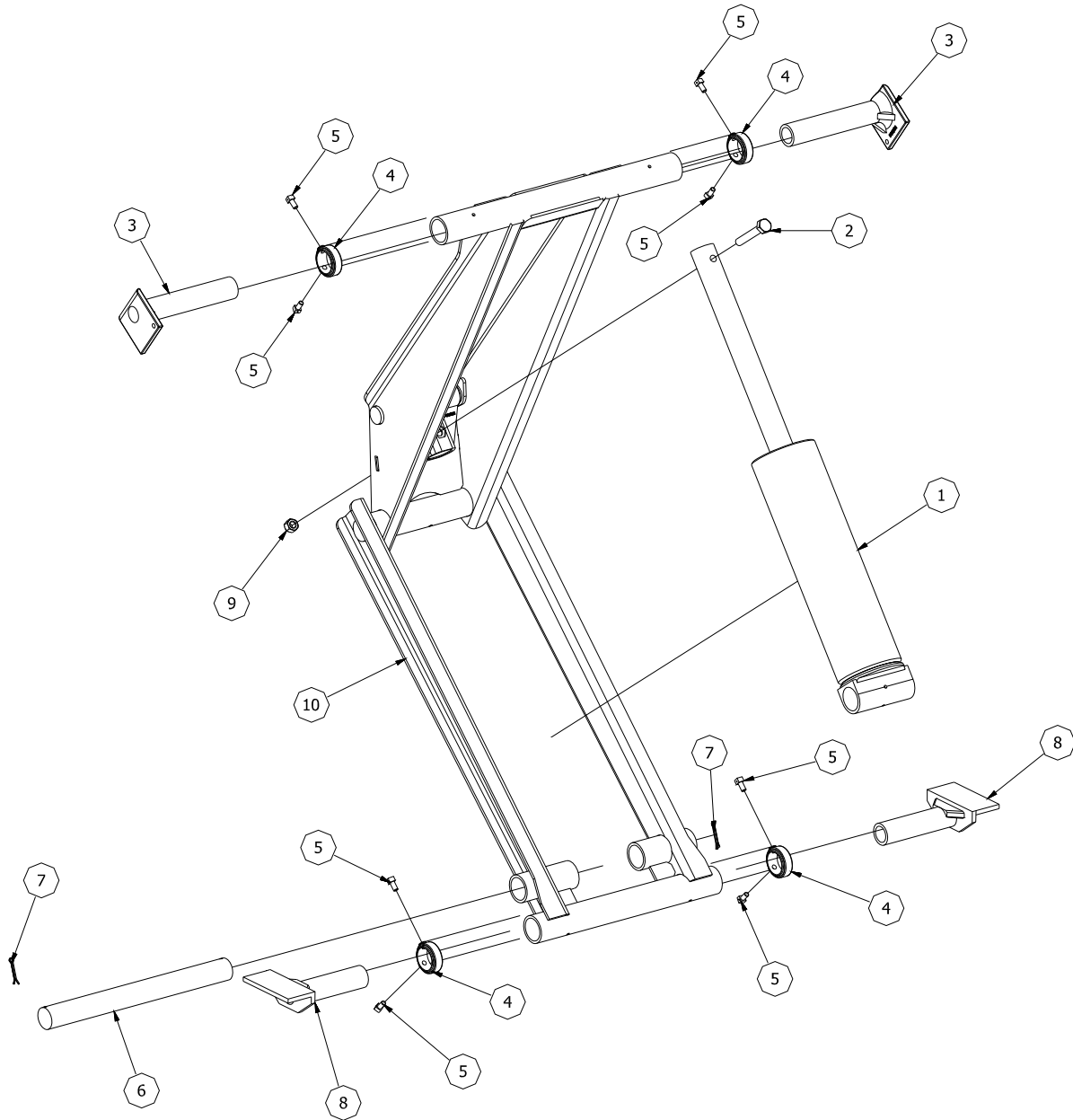
CHAMPION

Hoist and Equipment

Dunn, North Carolina, U.S.A.

910 - 897 - 4995

Fax 910 - 897 - 6822



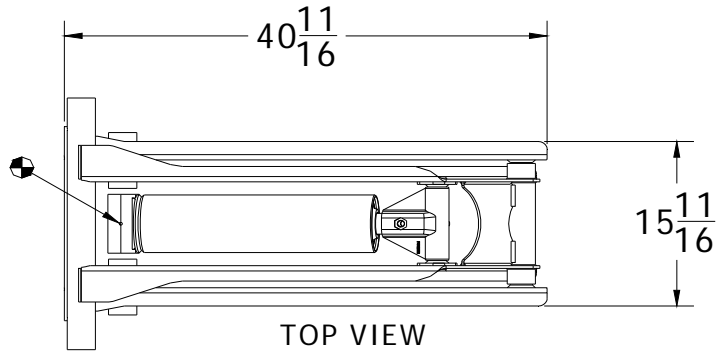
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	415CYLINDER	415 CYLINDER
2	1	102-617-L	HEX BOLT, 5/8-11 UNC X 4, GR L9
3	2	PC10471	UPPER MOUNTING BRACKET
4	4	PC12161	COLLAR, LIFT ARM 1-7/8"
5	8	P34	SET SCREW 3/8"-16 x 3/4" SQHD
6	1	SM12016	SHAFT, BTM CYLINDER MT. - AGS515
7	2	125-257	Pin - Cotter
8	2	M12290	LOWER MOUNTING BRACKET
9	1	162-10-S	5/8" LOCK NUT
10	1	W12334	CS 415T,515T, & 615T WELDMENT

CS415T TRAILER HOIST ASSEMBLY

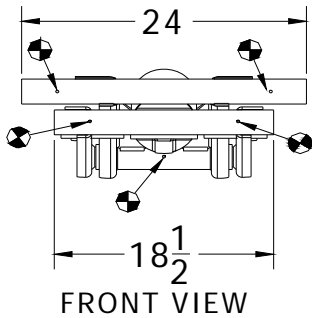


MP50335

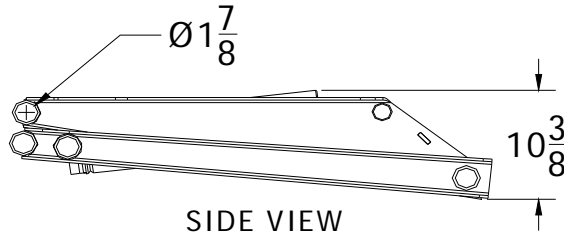
CS515T



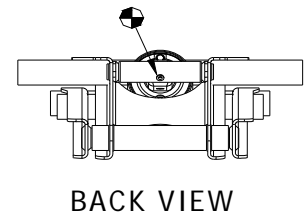
TOP VIEW



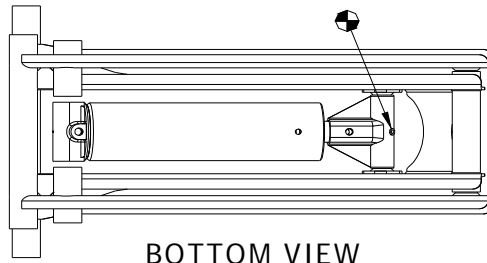
FRONT VIEW



SIDE VIEW



BACK VIEW



BOTTOM VIEW

☛ - GREASE FITTING LOCATIONS

"G" DIMENSION	
40° TILT	84 inches
45° TILT	74 inches

Trailer bed lengths -10 - 12 feet

Hoist	System Pressure PSI	Capacity (TONS) - Trailer Length (FT) - 18 inches Overhang	
		10	12
CS 515T	3,200	9.5	7.3

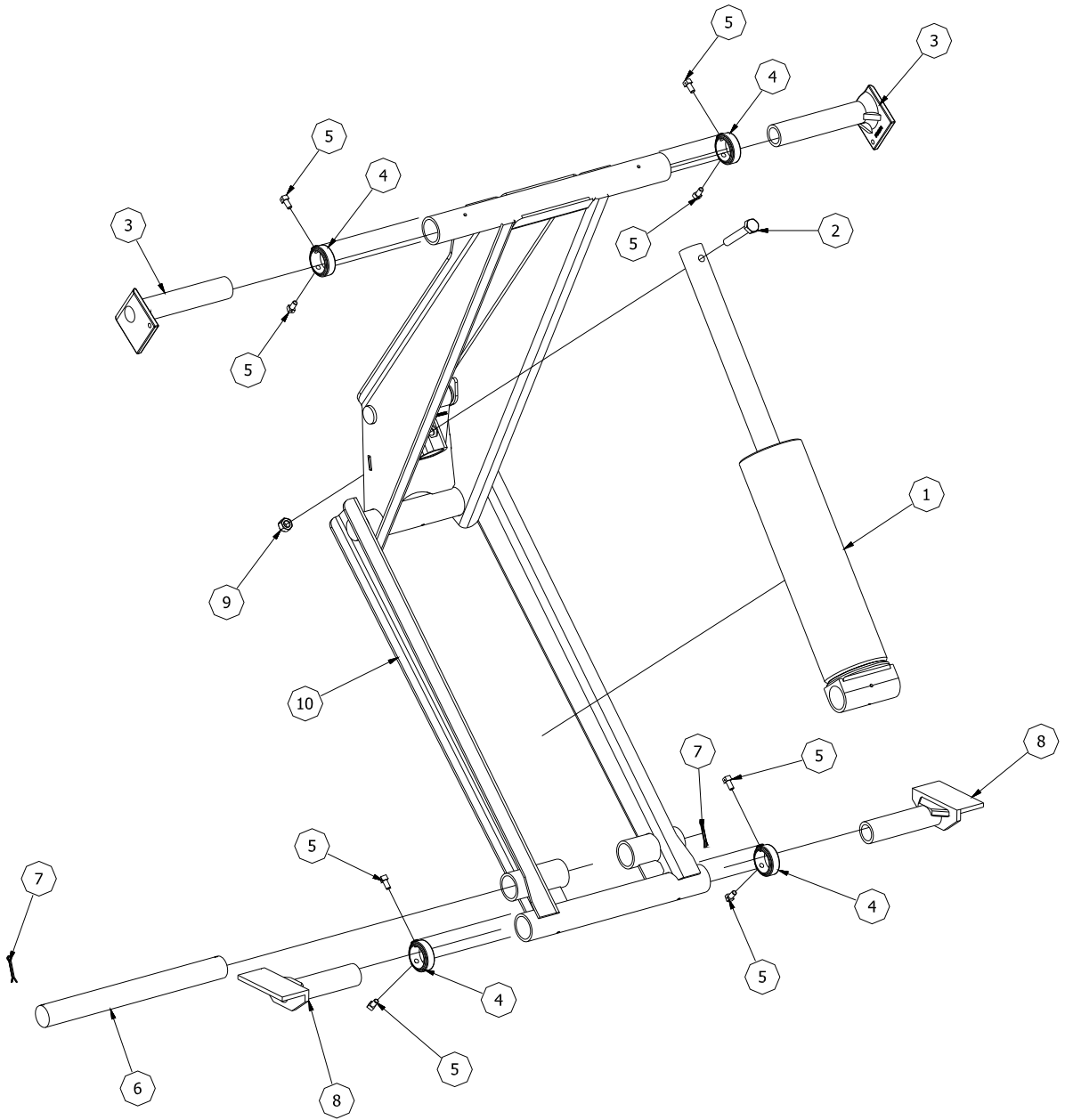
CHAMPION

Hoist and Equipment

Dunn, North Carolina, U.S.A.

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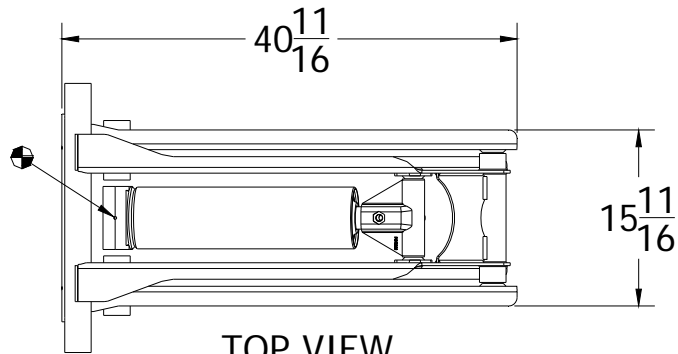
Fax 910 - 897 - 6822



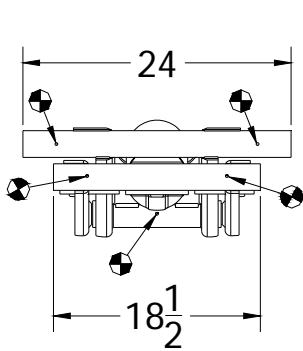
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	515CYLINDER	515 CYLINDER
2	1	102-617-L	HEX BOLT, 5/8-11 UNC X 4, GR L9
3	2	PC10471	UPPER MOUNTING BRACKET
4	4	PC12161	COLLAR, LIFT ARM 1-7/8"
5	8	P34	SET SCREW 3/8"-16 x 3/4" SQHD
6	1	SM12016	SHAFT, BTM CYLINDER MT. - AGS515
7	2	125-257	Pin - Cotter
8	2	M12290	LOWER MOUNTING BRACKET
9	1	162-10-S	5/8" LOCK NUT
10	1	W12334	CS 415T,515T, & 615T WELDMENT

CS515T TRAILER HOIST ASSEMBLY

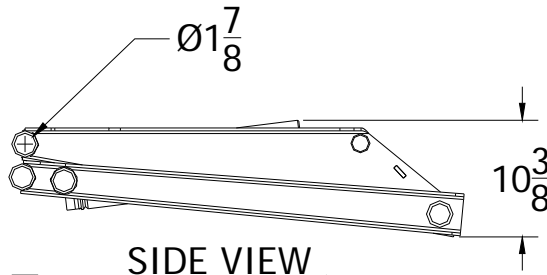
CS615T



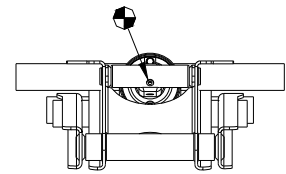
TOP VIEW



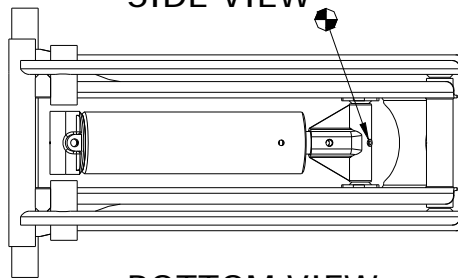
FRONT VIEW



SIDE VIEW



BACK VIEW



BOTTOM VIEW

⊕ - GREASE FITTING LOCATIONS

"G" DIMENSION	
40° TILT	84 inches
45° TILT	74 inches

Trailer bed lengths -10 - 12 feet

Hoist	System Pressure PSI	Capacity (TONS) - Trailer Length (FT) - 18 inches Overhang	
		10	12
CS 615T	3,200	13.6	10.6

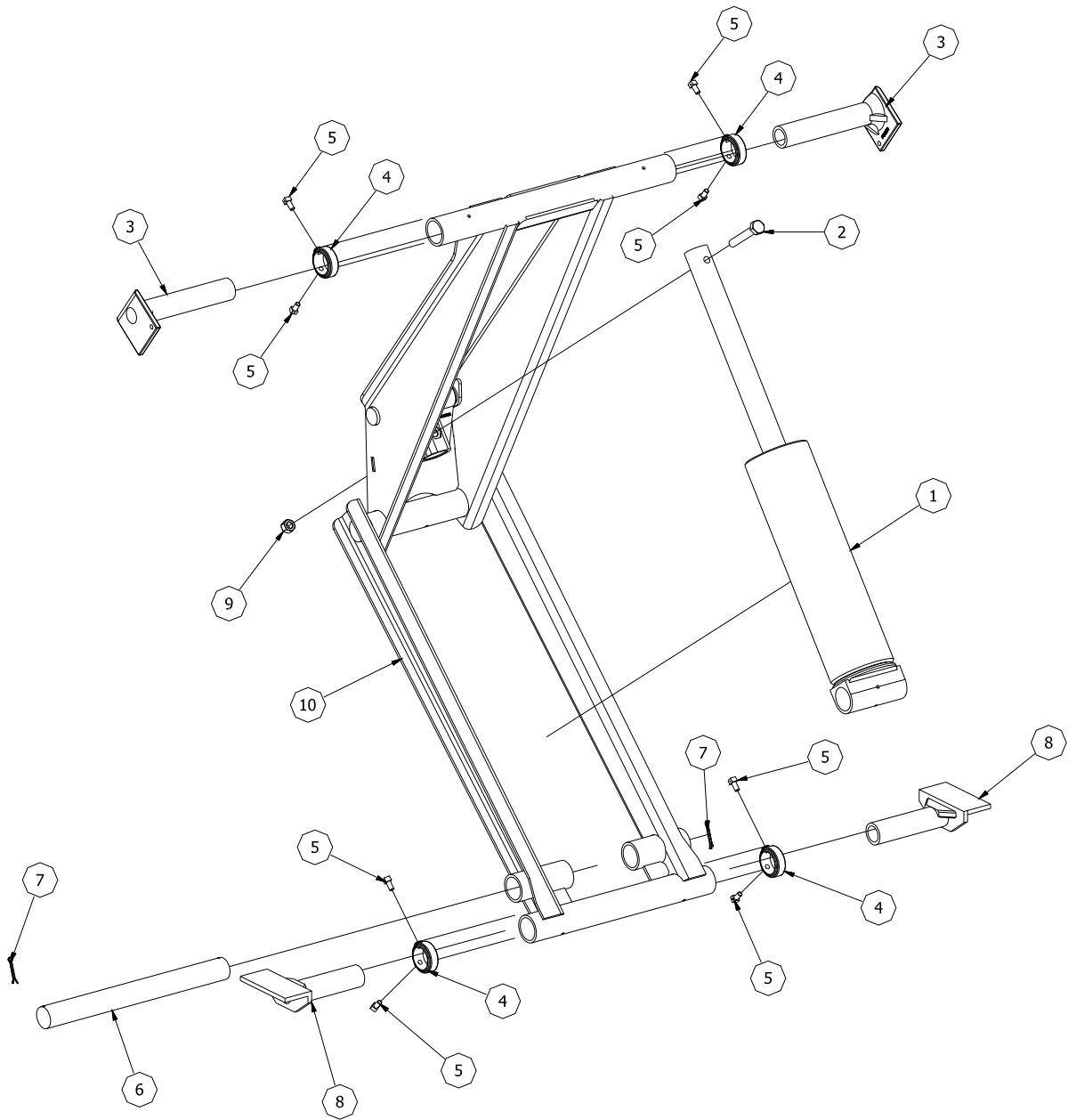
CHAMPION

Hoist and Equipment

Dunn, North Carolina, U.S.A.

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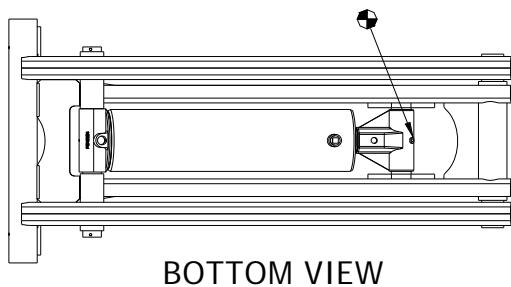
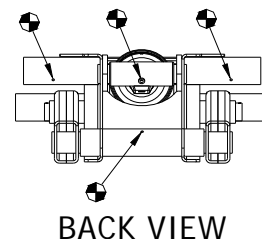
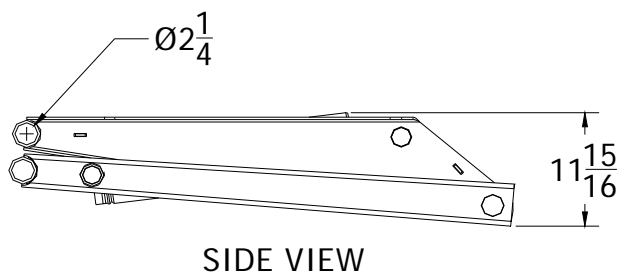
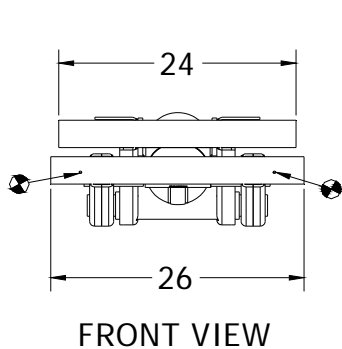
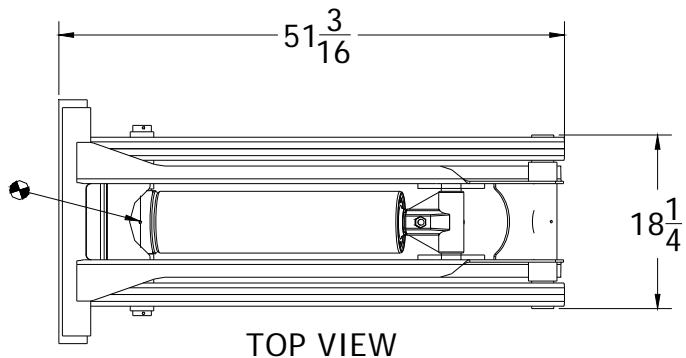
Fax 910 - 897 - 6822



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	615CYLINDER	615 CYLINDER
2	1	102-617-L	HEX BOLT, 5/8-11 UNC X 4, GR L9
3	2	PC10471	UPPER MOUNTING BRACKET
4	4	PC12161	COLLAR, LIFT ARM 1-7/8"
5	8	P34	SET SCREW 3/8"-16 x 3/4" SQHD
6	1	SM12016	SHAFT, BTM CYLINDER MT. - AGS515
7	2	125-257	Pin - Cotter
8	2	M12290	LOWER MOUNTING BRACKET
9	1	162-10-S	5/8" LOCK NUT
10	1	W12334	CS 415T,515T, & 615T WELDMENT

CS615T TRAILER HOIST ASSEMBLY

CS520T



● - GREASE FITTING LOCATIONS

"G" DIMENSION	
40° TILT	119 inches
45° TILT	104 inches

Trailer bed lengths -12 - 14 feet

Hoist	System Pressure PSI	Capacity (TONS) - Trailer Length (FT) - 18 inches Overhang	
		12	14
CS 520T	3,200	9.5	7.7

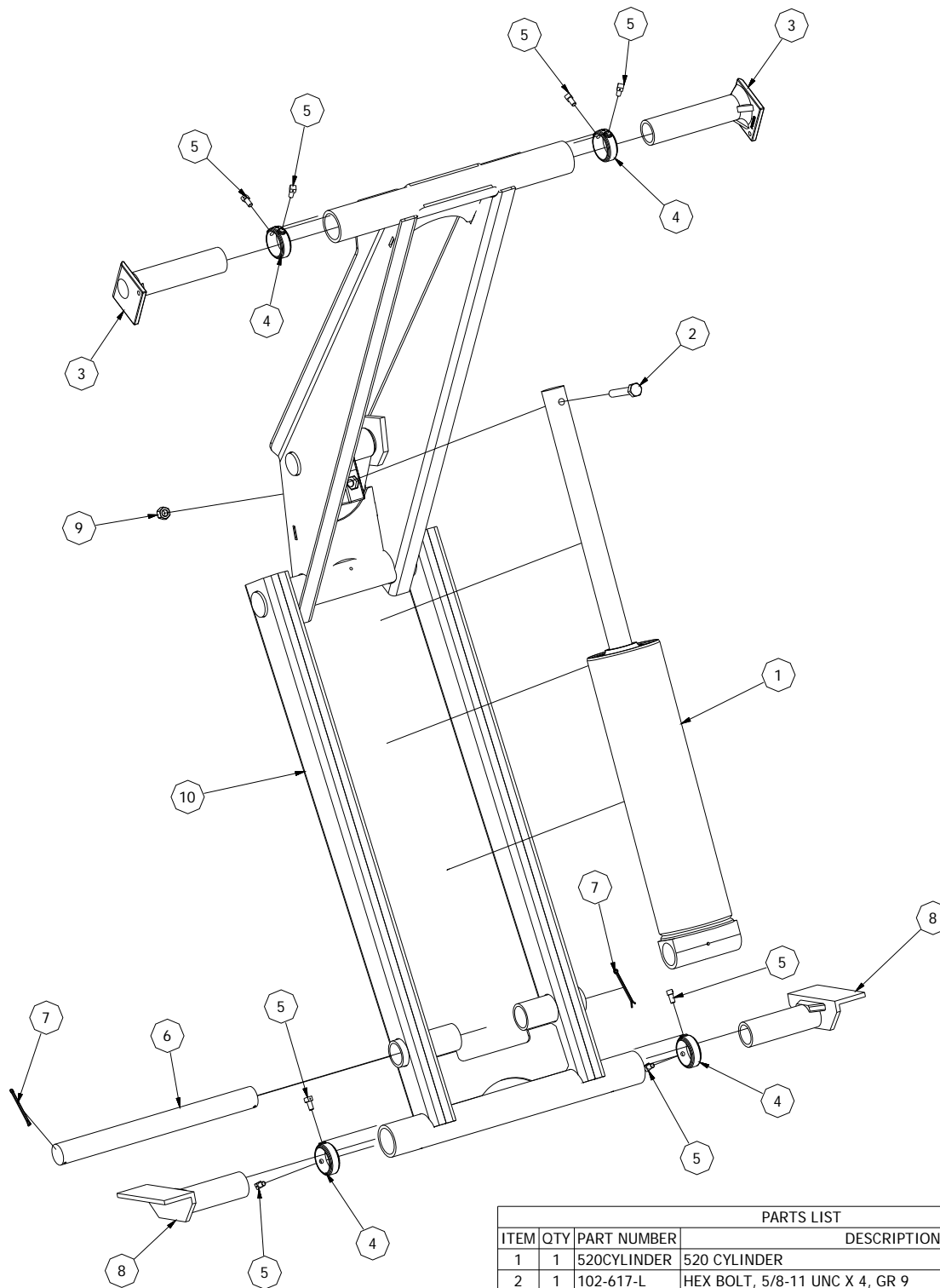
CHAMPION

Hoist and Equipment

Dunn, North Carolina, U.S.A.

910 - 897 - 4995

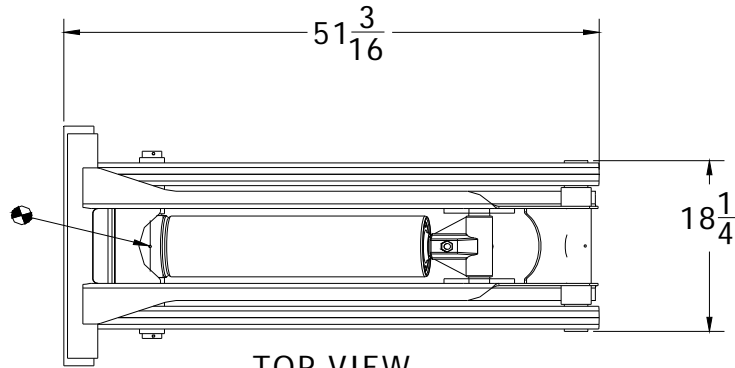
Fax 910 - 897 - 6822



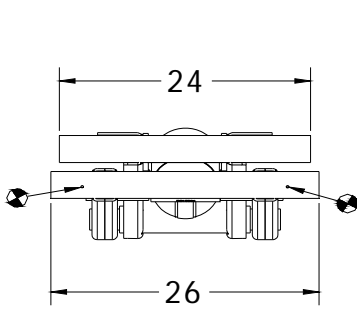
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	520CYLINDER	520 CYLINDER
2	1	102-617-L	HEX BOLT, 5/8-11 UNC X 4, GR 9
3	2	PC10470	LIFT ARM 2-1/4"
4	4	PC12157	SET COLLOR FOR UPPER LIFT ARM 2-1/4"
5	8	P34	SET SCREW 3/8"-16 x 3/4" SQHD
6	1	SM12304	SHAFT, CYLINDER ENDCAP, CS 520T
7	2	125-257	PIN- COTTER
8	2	M12345	LOWER LIFT ARM MODIFICATION, TRAILER HOIST, 2 1/4"
9	1	162-10-S	5/8" LOCK NUT
10	1	W12335	CS 520T, & 620T WELDMENT

CS520T TRAILER HOIST ASSEMBLY

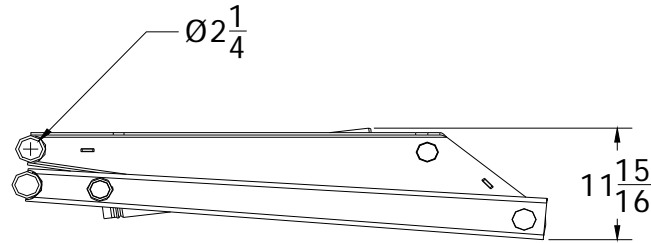
CS620T



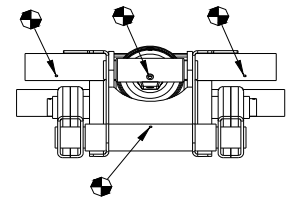
TOP VIEW



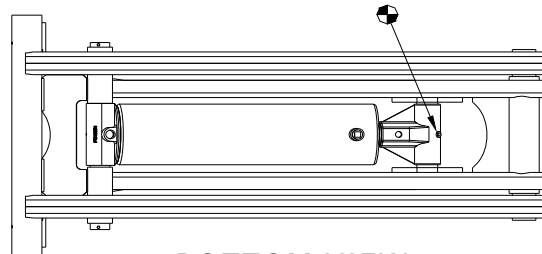
FRONT VIEW



SIDE VIEW



BACK VIEW



BOTTOM VIEW

⊕ - GREASE FITTING LOCATIONS

"G" DIMENSION	
40° TILT	119 inches
45° TILT	104 inches

Trailer bed lengths -12 - 14 feet

Hoist	System Pressure PSI	Capacity (TONS) - Trailer Length (FT) - 18 inches Overhang	
		12	14
CS 620T	3,200	13.7	11.2

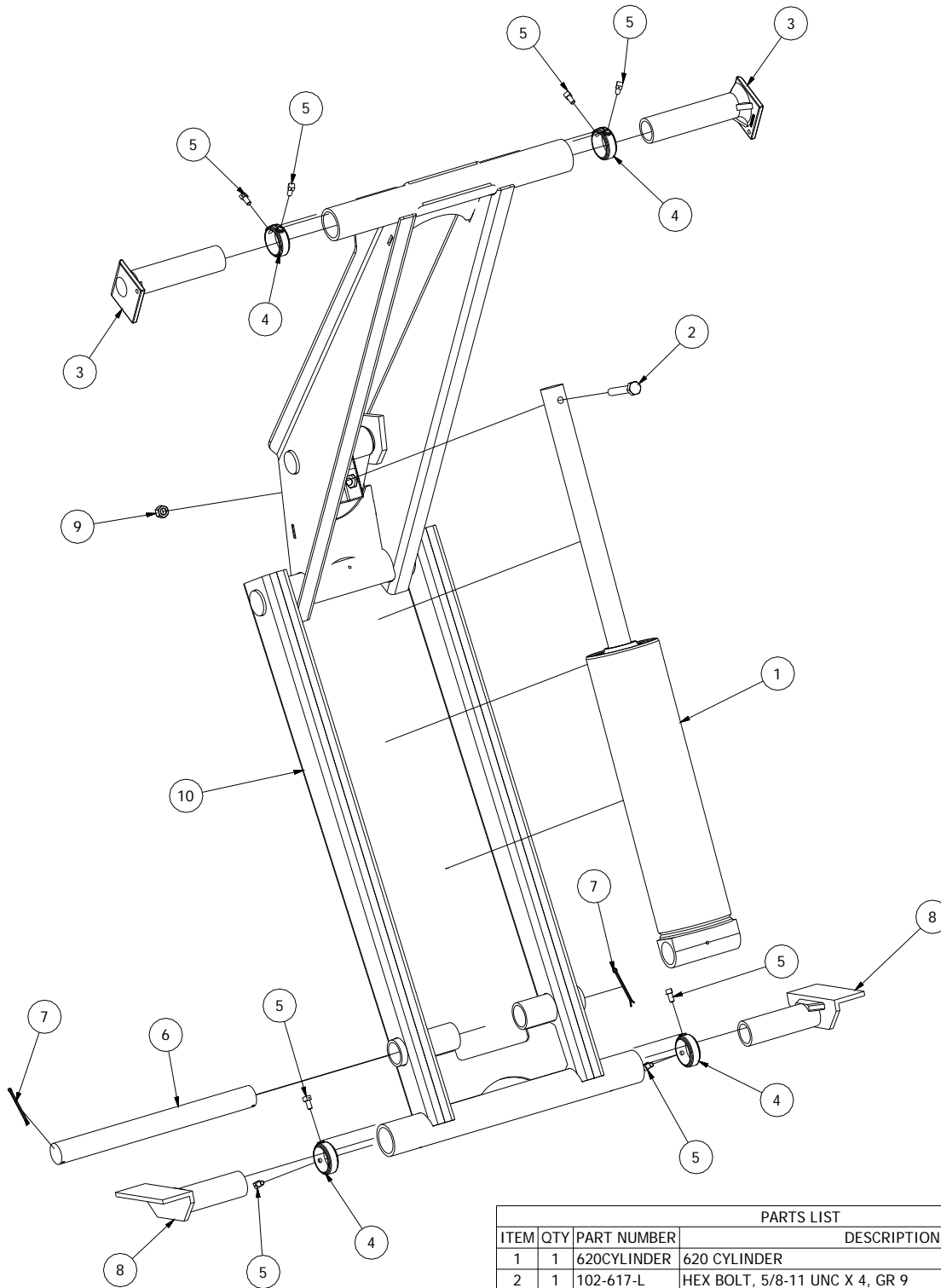
CHAMPION

Hoist and Equipment

Dunn, North Carolina, U.S.A.

910 - 897 - 4995

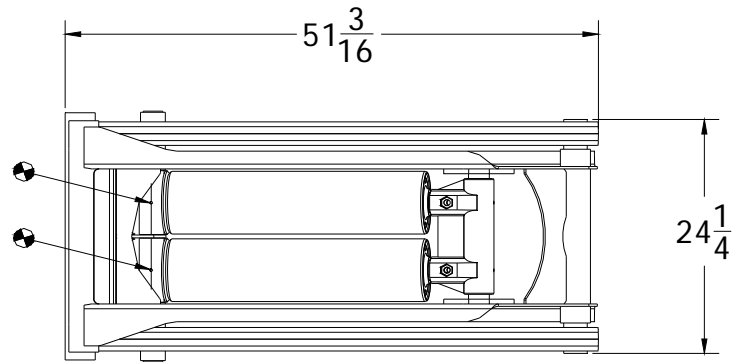
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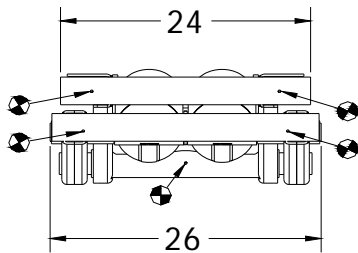
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	620CYLINDER	620 CYLINDER
2	1	102-617-L	HEX BOLT, 5/8-11 UNC X 4, GR 9
3	2	PC10470	LIFT ARM 2-1/4"
4	4	PC12157	SET COLLOR FOR UPPER LIFT ARM 2-1/4"
5	8	P34	SET SCREW 3/8"-16 x 3/4" SQHD
6	1	SM12304	SHAFT, CYLINDER ENDCAP, CS 520T
7	2	125-257	PIN- COTTER
8	2	M12345	LOWER LIFT ARM MODIFICATION, TRAILER HOIST, 2 1/4"
9	1	162-10-S	5/8" LOCK NUT
10	1	W12335	CS 520T, & 620T WELDMENT

CS620T TRAILER HOIST ASSEMBLY

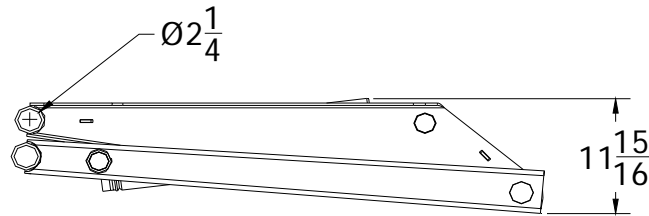
CS5520T



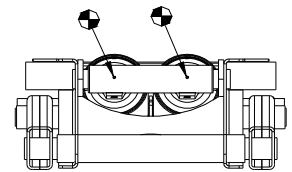
TOP VIEW



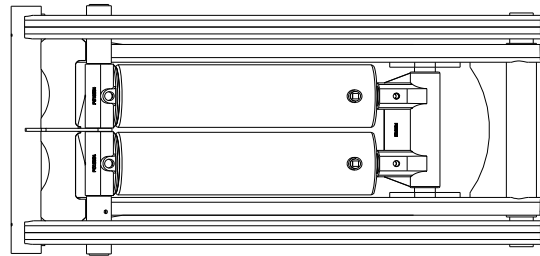
FRONT VIEW



SIDE VIEW



BACK VIEW



BOTTOM VIEW

● - GREASE FITTING LOCATIONS

"G" DIMENSION

40° TILT	119 inches
45° TILT	104 inches

Trailer bed lengths -14 - 16 feet

Hoist	System Pressure PSI	Capacity (TONS) - Trailer Length (FT) - 18 inches Overhang	
		14	16
CS 5520T	3,200	15.5	13.1

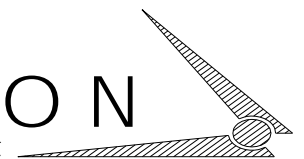
CHAMPION

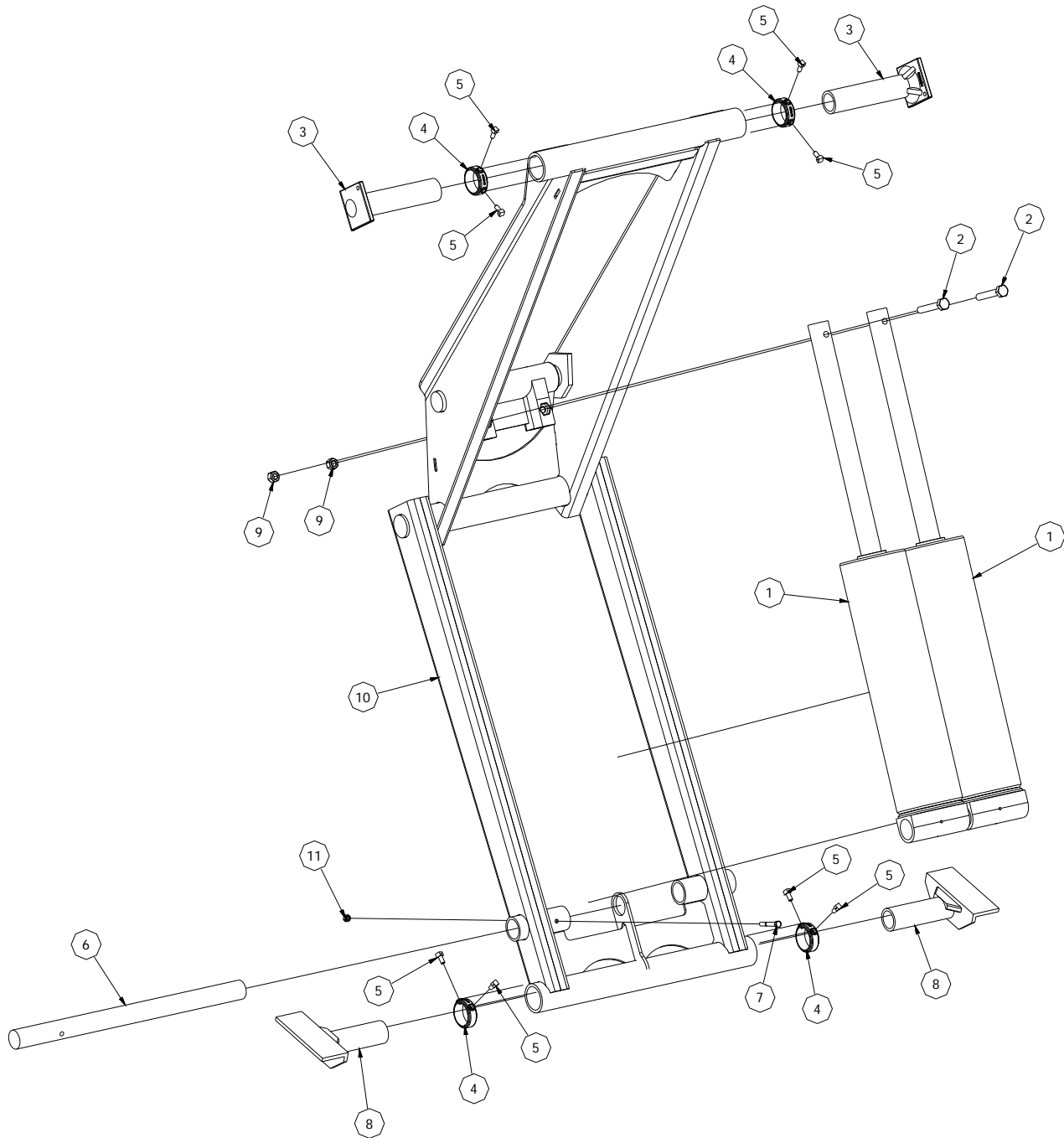
Hoist and Equipment

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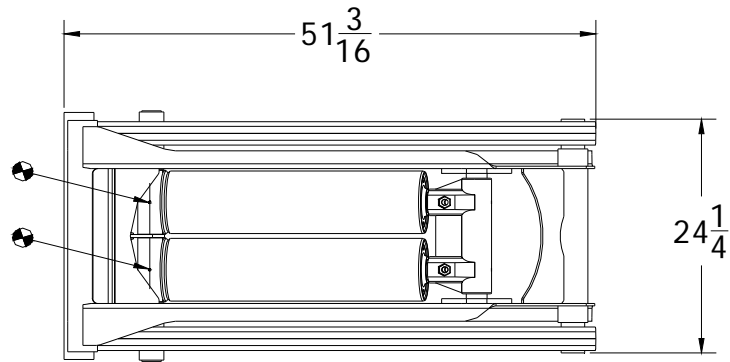
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	520CYLINDER	520 CYLINDER
2	2	102-617-L	HEX BOLT, 5/8-11 UNC X 4, GR 9
3	2	PC10470	LIFT ARM 2-1/4"
4	4	PC12157	SET COLLOR FOR UPPER LIFT ARM 2-1/4"
5	8	P34	SET SCREW 3/8"-16 x 3/4" SQHD
6	1	SM12058	SHAFT, OUTER CYL. MT.
7	1	102-213-A1	Hex Bolt, 3/8" x 3"
8	2	M12345	LOWER LIFT ARM MODIFICATION, TRAILER HOIST, 2 1/4"
9	2	162-10-S	5/8" LOCK NUT
10	1	W12336	CS 5520T, & 6620T WELDMENT
11	1	162-7-S	LOCK NUT, 3/8"

CS5520T TRAILER HOIST ASSEMBLY

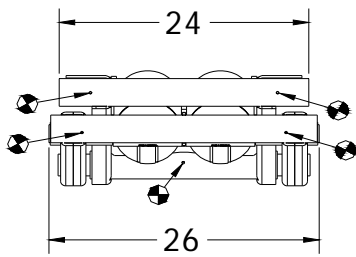


MP50356

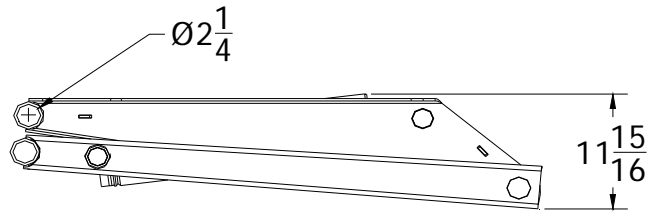
CS6620T



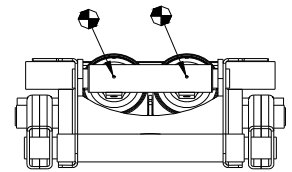
TOP VIEW



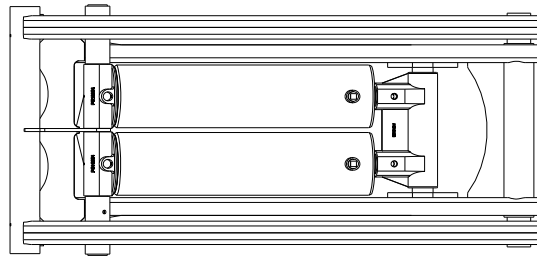
FRONT VIEW



SIDE VIEW



BACK VIEW



BOTTOM VIEW

● - GREASE FITTING LOCATIONS

"G" DIMENSION	
40° TILT	119 inches
45° TILT	104 inches

Trailer bed lengths -14 - 16 feet

Hoist	System Pressure PSI	Capacity (TONS) - Trailer Length (FT) - 18 inches Overhang	
		14	16
CS 6620T	3,200	22.4	18.9

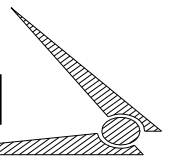
CHAMPION

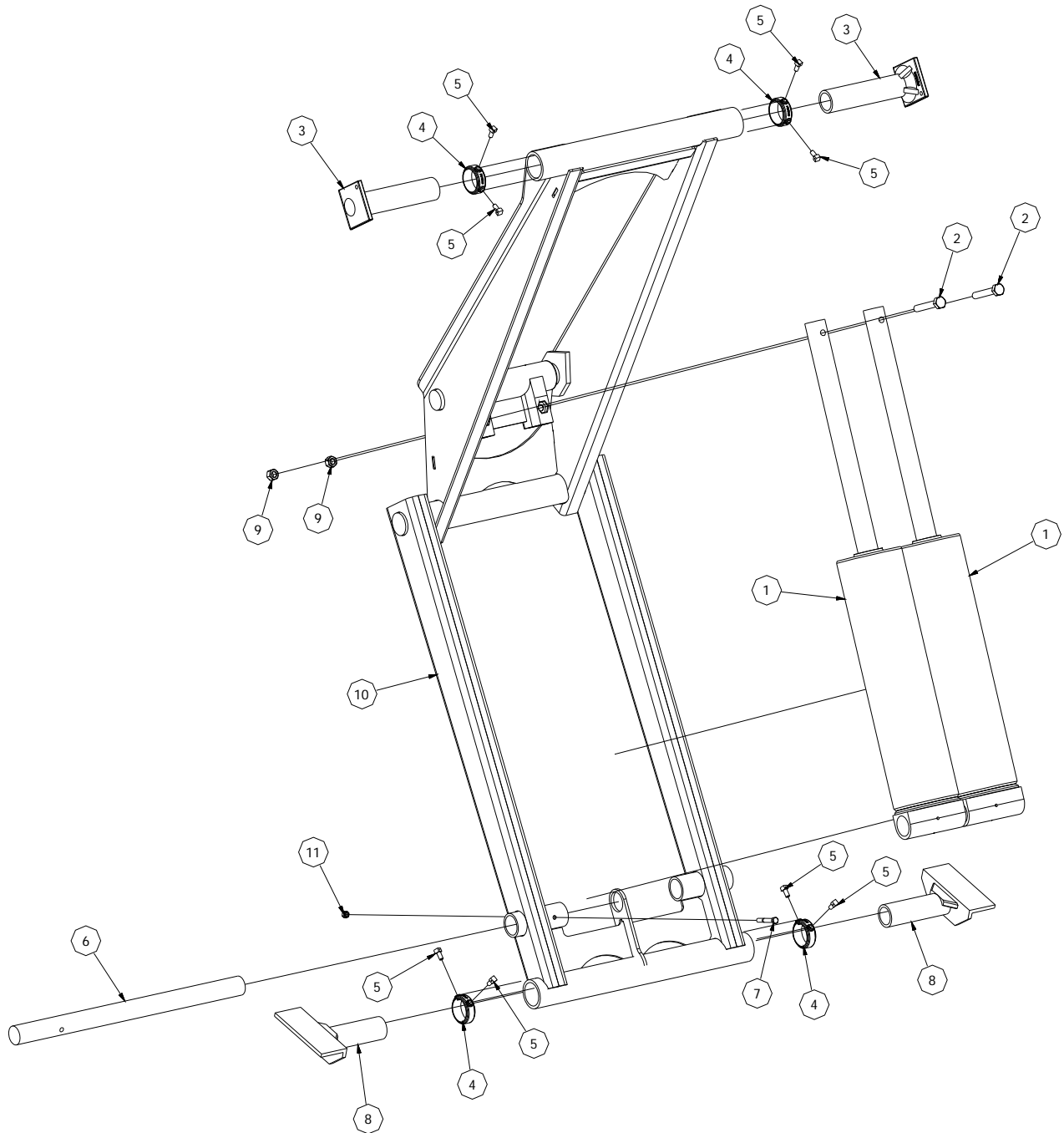
Hoist and Equipment

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PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	620CYLINDER	620 CYLINDER
2	2	102-617-L	HEX BOLT, 5/8-11 UNC X 4, GR 9
3	2	PC10470	LIFT ARM 2-1/4"
4	4	PC12157	SET COLLOR FOR UPPER LIFT ARM 2-1/4"
5	8	P34	SET SCREW 3/8"-16 x 3/4" SQHD
6	1	SM12058	SHAFT, OUTER CYL. MT.
7	1	102-213-A1	Hex Bolt, 3/8" x 3"
8	2	M12345	LOWER LIFT ARM MODIFICATION, TRAILER HOIST, 2 1/4"
9	2	162-10-S	5/8" LOCK NUT
10	1	W12336	CS 5520T, & 6620T WELDMENT
11	1	162-7-S	LOCK NUT, 3/8"

CS6620T TRAILER HOIST ASSEMBLY



MP50357

Notes: