

# UTA POWER REVERSIBLE SNOW PLOW PARTS MANUAL

MODEL: UTA

SERIAL #:\_\_\_\_\_

### INSTRUCTIONS FOR ORDERING PARTS

Always give the model & serial number.

To obtain parts promptly, give part number & description.

Please specify whether parts will be picked up or shipped by freight, parcel post, or United Parcel Service. Give complete address for shipping.

Inspect all goods received immediately upon receipt. Shortages or errors need to be reported immediately. Damaged product needs to be documented on delivery freight bill. Damage may be the responsibility of the transportation company. No responsibility is assumed for delay or damage to merchandise while in transit.

Universal Truck Equipment, Inc. Hwy 54/93 - N15921 Schubert Rd Galesville, WI 54630 Phone 608-539-4600

www.universaltruckequipment.com

## UNIVERSAL TRUCK EQUIPMENT Introduction

The process of snow removal may be a hazardous duty. Removing the effects of a winter storm in the midst of traffic & physical hazards is a job that requires highly skilled operators who must be alert to their surroundings and familiar with their equipment. Snow removal equipment, in spite of its heavy-duty construction, is susceptible to damage. This damage may seriously affect the equipment's operating safety and efficiency. Snow removal equipment must be cared for and maintained regularly. Daily maintenance and inspection of equipment is a MUST.

Snow removal equipment shouldn't be subjected to uses for which it was not designed. Physical hazards must be avoided. Obstructions may cause damage to snow plow or snow wing. Tripping devices & shear pins are designed to minimize the damages, not to prevent them.

## **IN SEASON MAINTENANCE**

\*Snow removal equipment must be cared for and maintained regularly. Daily or pre-route inspection and maintenance are necessary. Failure to do so may affect efficiency and safety.

\*A visual inspection must be carried out after every eight hours of operation. Look for damaged components, bends, cracked welds or hydraulic leaks. Repair immediately. It is recommended to re-torque all bolts after the first eight hours of use and to regularly check for loosened or missing fasteners. Replace any damaged fasteners immediately.

\*Because of the environment in which snow equipment is expected to operate, hydraulic lines, fasteners, wearable or replaceable items may become damaged by snow, ice, and road debris. These items must be inspected daily and replaced if necessary to avoid equipment damage or personal injury.

\*Lubrication of moving parts is of the utmost importance. Exposure to snow, ice, salt, and road debris will wash away lubrication quickly and it may be necessary to inspect and reapply lubrication more than once a day.

### **OFF SEASON MAINTENANCE**

\*Thoroughly inspect equipment for any defects or worn parts that can be replaced or fixed during the off-season.

\*Care should be taken not to mix or misplace bolts and hardware when equipment is removed during the off-season. Be sure to replace any fasteners with damaged threads.

\*All hydraulic cylinders should be fully retracted when stored, if possible, during off-season to prevent damage, corrosion, or contamination. Remaining exposed shaft surface is to be coated with a moisture displacement, such as thick grease, which should be removed before returning to regular service.

\*When disconnecting hydraulic lines, valves and so forth to insure that dirt and other forms of contamination do not enter the systems. Use caps for covering hydraulic hose fittings and install in hydraulic ports.

## COMPLETE WARRANTY PROVISIONS PARTS REPLACEMENT AND REPAIR:

Universal Truck Equipment, Inc. warrants its manufactured products to be free from defects in material or workmanship for a period of one-year. This warranty of our products under normal use and service is limited to replacement and repair at our facility, of any parts returned and after our examination were found to be defective. Expendable items are excluded from this warranty.

#### EXCLUSIONS:

\*This warranty is expressly limited to parts replacement and repair, and is not transferable. Any expressed warranty not herein provided, and any remedy for breach of contract is excluded and disclaimed. The implied warranties of parts and repairs for any particular purpose are limited to one year from delivery to original user.

\*Any component or parts manufactured by others will carry that manufacturers warranty, and in no case will Universal Truck Equipment be liable, either expressed or implied, for warranties in excess of those made by the original manufacturer.

\*Under no circumstances will Universal Truck Equipment be liable to purchaser, or any other person, for any incidental or consequential damages. The user assumes liability for all personal injury or property damage resulting from handling, possession, or use of this product.

\*Repairs or modifications done by others, or parts from other sources outside the Universal Truck Equipment are not covered by this warranty.

### WARRANTY PROCEDURE

Prior authorization by Universal Truck Equipment must be obtained for all warranty work.

Contact Universal Truck Equipment giving complete details of your request, the unit involved, including serial number, date purchased and the nature of or reason for the claim. All defective parts that Universal Truck Equipment has requested must be returned within 30 days. If not returned within 30 days any/all warranty will be cancelled and void.

When parts are shipped on a warranty request, you may be required to return the defective parts for inspection by Universal Truck Equipment or the original manufacturer. In this case, you will be issued an RAN (return authorization number) for your return and you will be invoiced for shipment of new components until the old unit is returned and inspected by Universal Truck Equipment or the original manufacturer. Payment on warranty pending invoice will need to be paid on regular 30-day net terms. If parts need to be sent out for inspection this can delay the processing the claim. If any labor is involved it must be approved by Universal Truck Equipment.

\*\*\*Persons who install, mount, operate, or service this equipment must be properly instructed and warned. Do not let anyone operate equipment without instruction.

\*\*\*Unauthorized modifications to the snowplow and related components may impair the function and/or safety.

SAFETY INFORMATION This symbol means ATTENTION! Please read and understand completely before operating!

# Improper use of this equipment can result in serious injury.

#### PREPARATION

Know your controls. Read this instruction manual. Learn how to stop the equipment quickly in an emergency.

Do not allow children to operate machine; nor adults to operate it without proper instructions.

Keep all individuals not involved in use of the equipment a safe distance away.

#### **OPERATION**

Observe and shut off all equipment controls before starting engine so equipment will not unintentionally operate with engine is started.

Always check area around machine before engaging or operating controls.

Always wear relatively tight and belted clothing when operating equipment. Loose jacket, shirts, sleeves or other loose clothing should not be worn because of the danger of catching them in moving parts for controls.

Stop and inspect equipment if unusual movement sounds or noises are observed. Repair damage before restarting and operating the equipment.

Disengage power to all operating equipment: (1) before leaving operator's position, (2) before making any repairs, adjustments, or cleaning, or (3) when not in use.

Take all possible precautions when leaving the equipment unattended; such as disengaging the hydraulic system from the vehicle engine, shifting vehicle out of gear, setting parking brake, shutting off engine and removing key.



#### **NOTICE:**

It is the responsibility of the owner of this equipment to replace any or all safety decals which become unreadable or otherwise defaced, and to apply the new decals to the equipment in a secure manner in the same location as the old decals.

Read and observe all safety decals appearing on equipment.

The following safety decals appear in various locations on your equipment. Refer to this manual for location of safety decals on your equipment.



# **THE SAFETY-ALERT SYMBOL**

This symbol is on safety signs on the equipment and in the manual. This symbol indicates to you the potential for personal injury and/or property damage.



# **HAZARD LEVELS**

The **DANGER** signal word indicates - immediate hazards which WILL result in severe personal injury or death.



The **WARNING** signal word indicates - hazards or unsafe practices which COULD result in severe personal injury or death.



The **CAUTION** signal word indicates - hazards or unsafe practices which COULD result in a minor personal injury or product or property damage



# SAFETY INFORMATION FOR OPERATION OF SNOW PLOWS



Person who install, operate, or service this equipment must be instructed and warned regarding the proper use of this equipment.



Read the operator's manual and safety decals completely before operating the equipment and observe these messages during use or maintenance.



Stop the spreader and turn off the power before leaving the truck.



Check the unit regularly to insure that all covers and shields are in place, and safety decals are in place and readable. Replace any missing or damaged safety shields or decals.



Observe instructions and cautions for dump boy use as indicated in the dump body operator's manual, especially being sure to set the body prop before starting any service or maintenance to hoist or underbody area.



Lower the snow plow when the vehicle is parked. The snow plow could drop unexpectedly, causing bodily harm or injuries.



Clear the area around the snow plow while operating or servicing the snow plow.



A loaded body will descend more rapidly than an empty one. So when lowering the hoist with a loaded body, use care to slowly, and only slightly, open the valve to control the descent.



Use low speed, not exceeding 20-25 mph, during highway spreading, and reduce speed on curves or turns, especially when the hoist is partially raised.



Whenever the hoist is partially raised during highway spreading, reduce speed on curves or turns, especially when the hoist is partially raised.



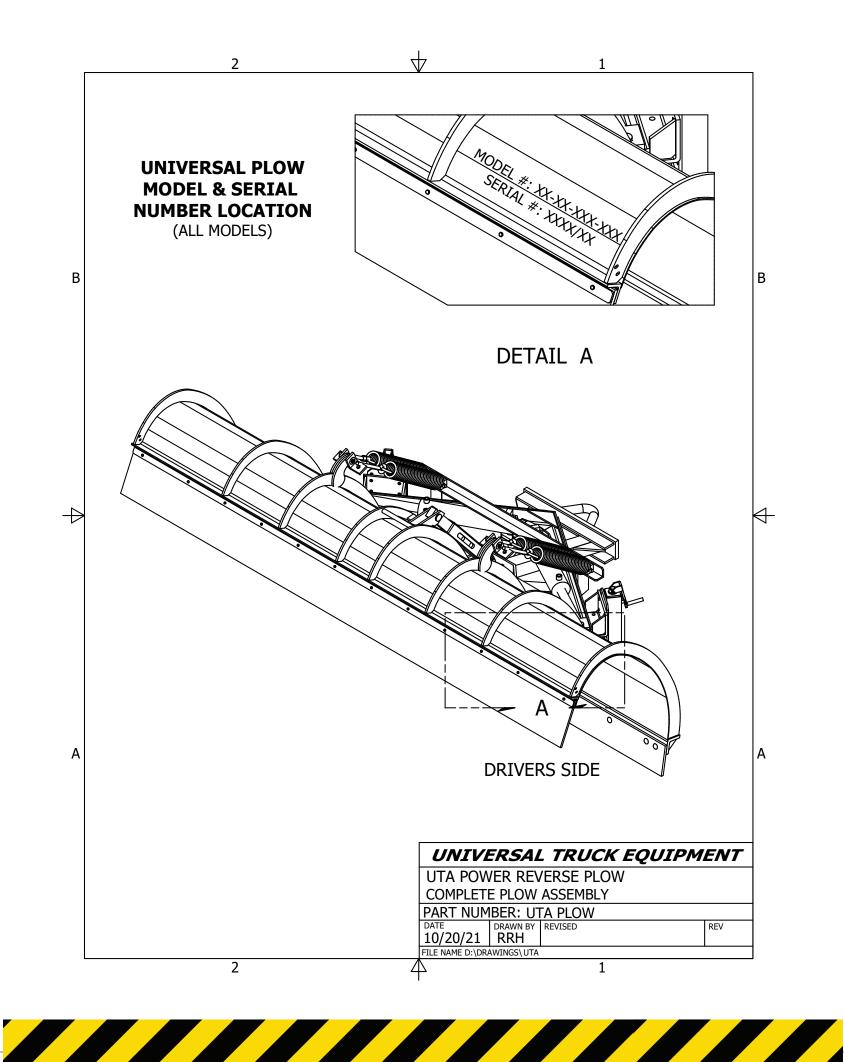
Whenever the hoist is partially raised during highway spreading, use special care to anticipate road conditions, curves, stops, turns, or obstructions such as trees, power lines, overpasses, etc., which could contribute to damaging, or potentially overturning the vehicle.

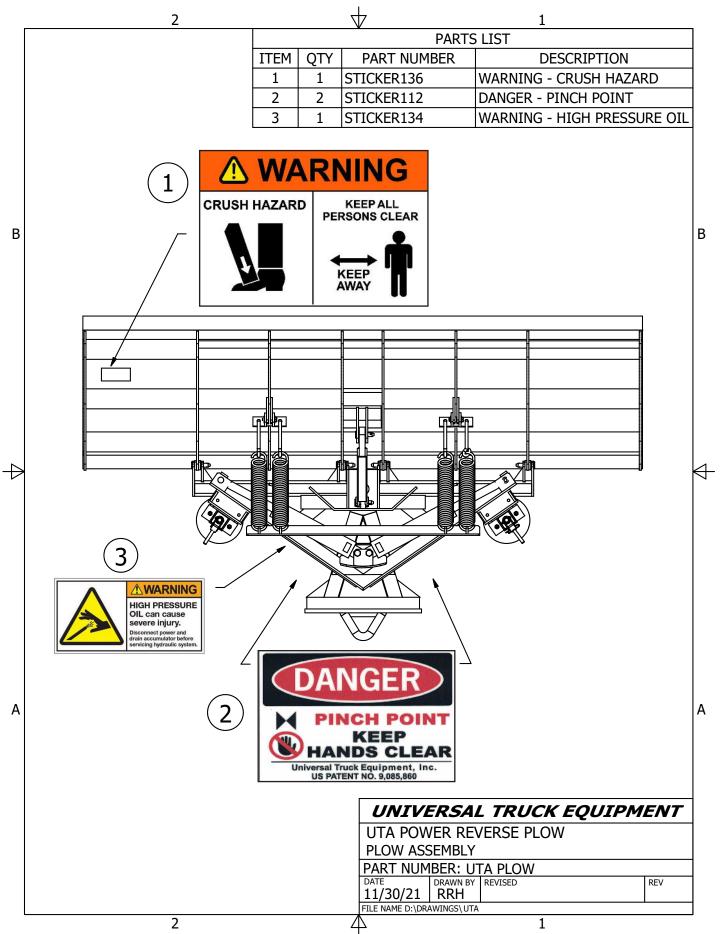


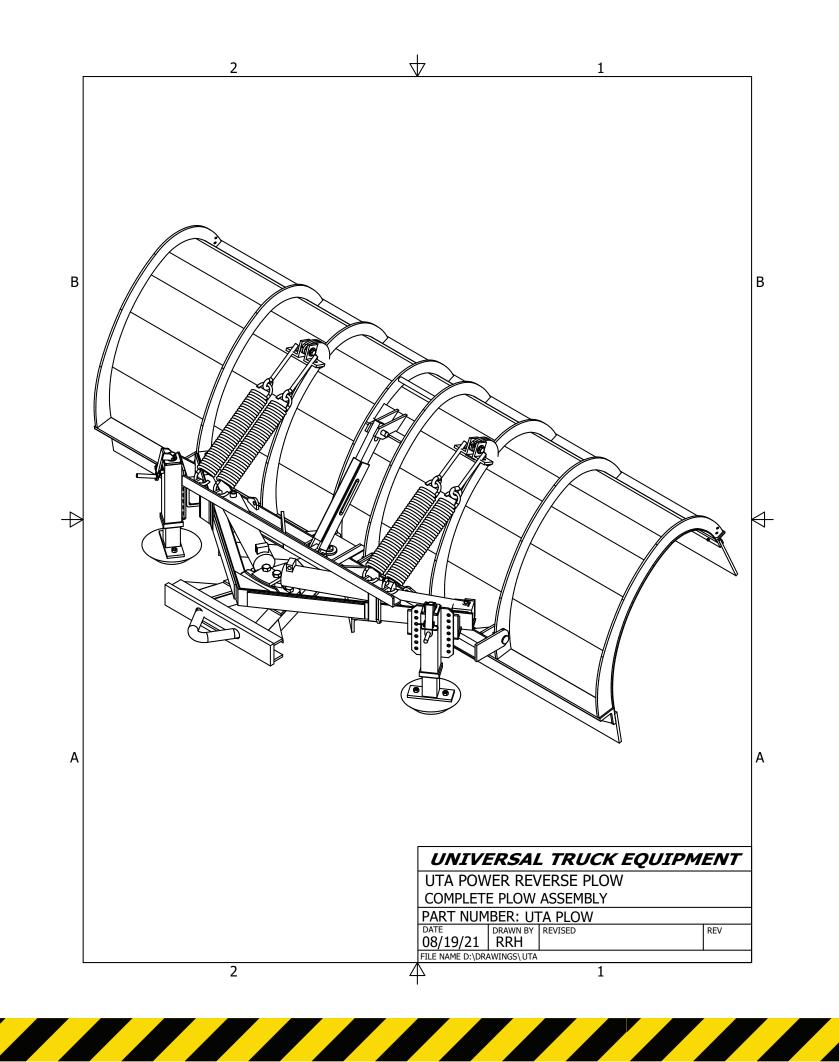
Be sure the body is lowered onto the frame when leaving the road, or when driving off-road.

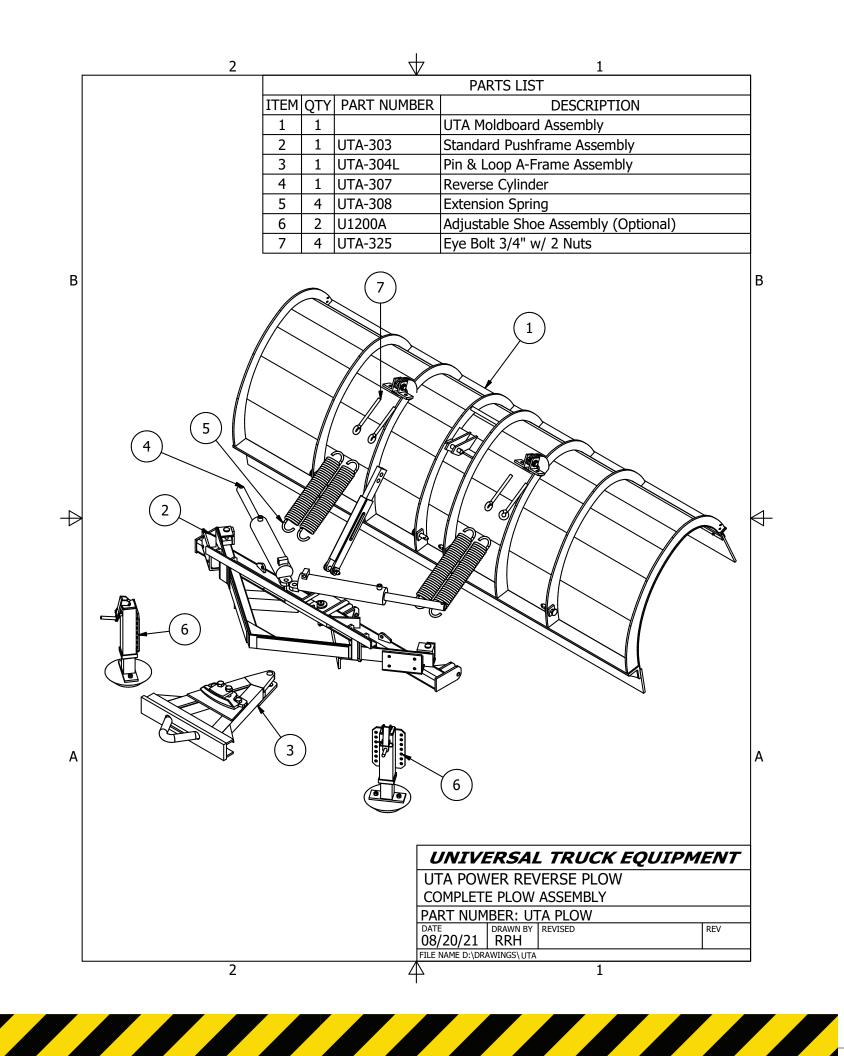


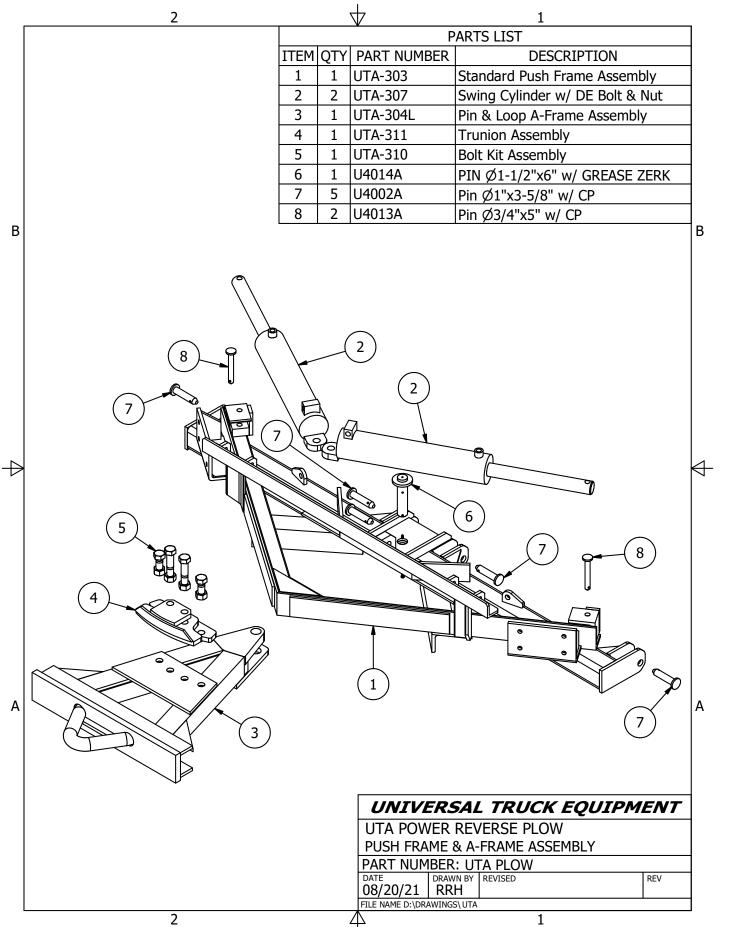
Always wear your seatbelt when operating a truck.

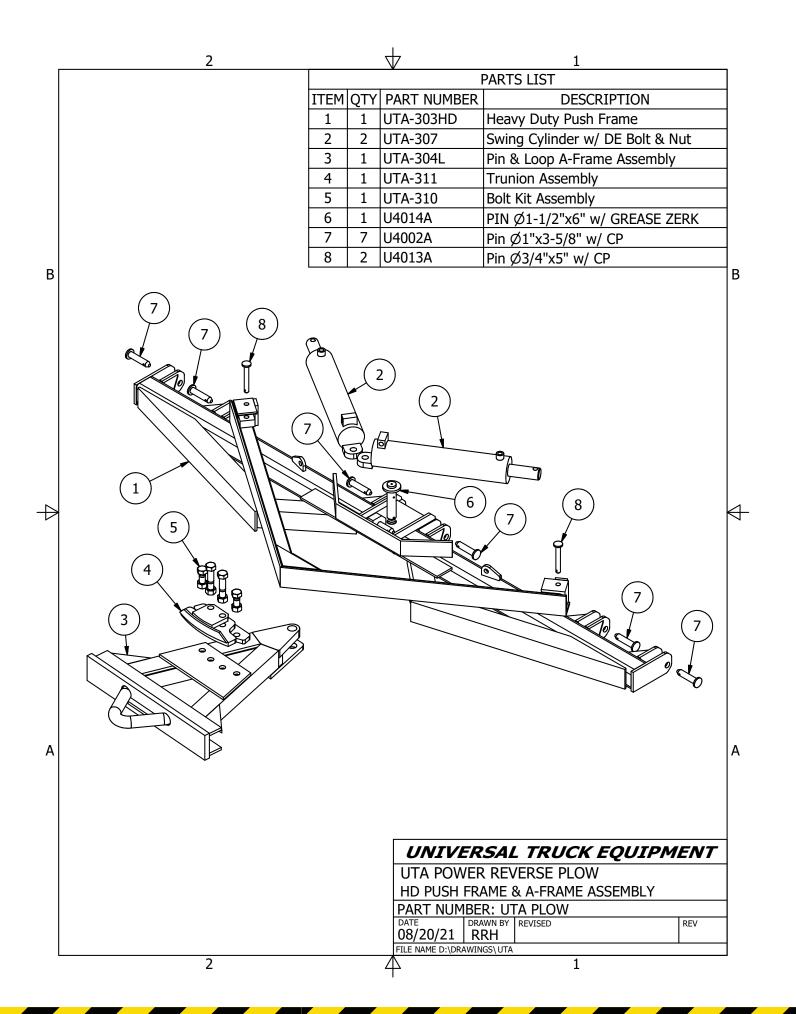




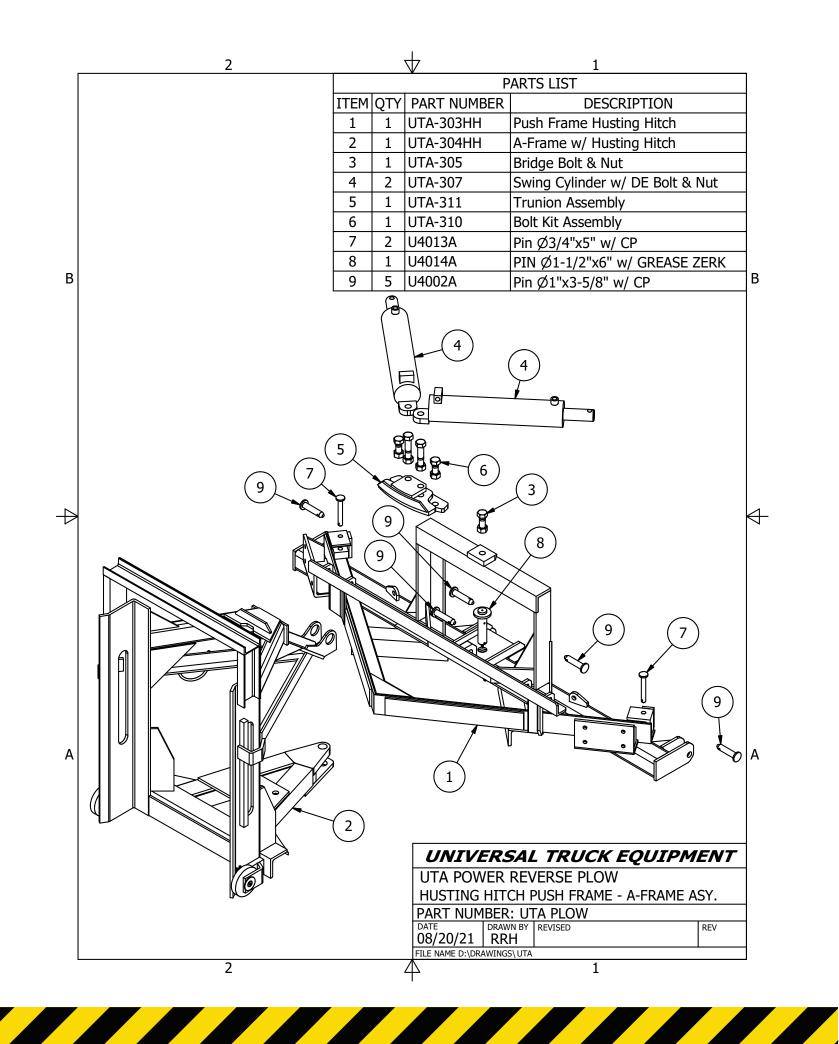


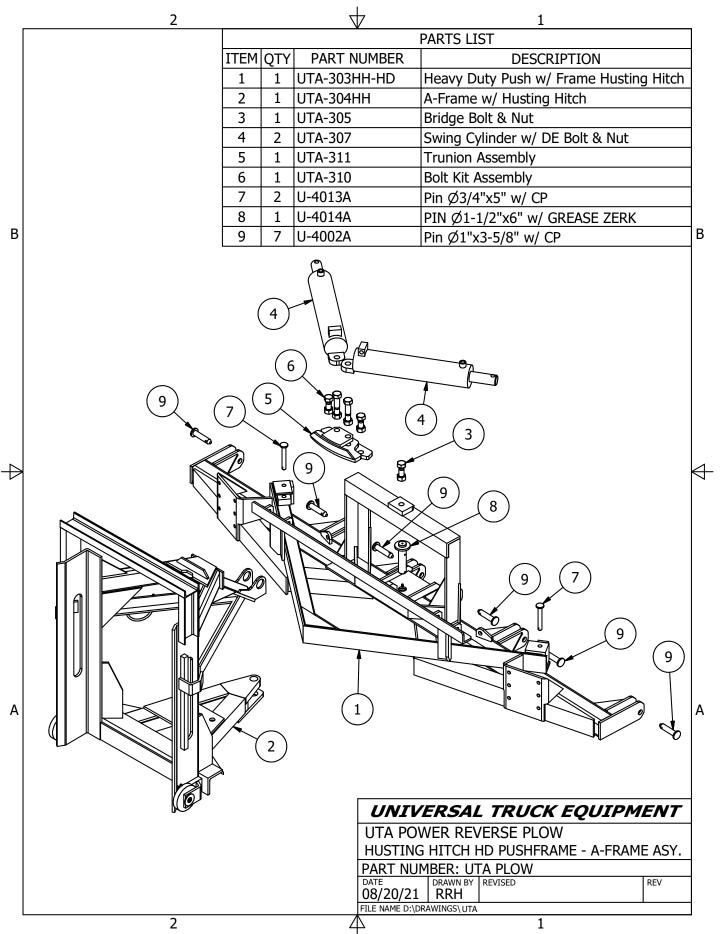






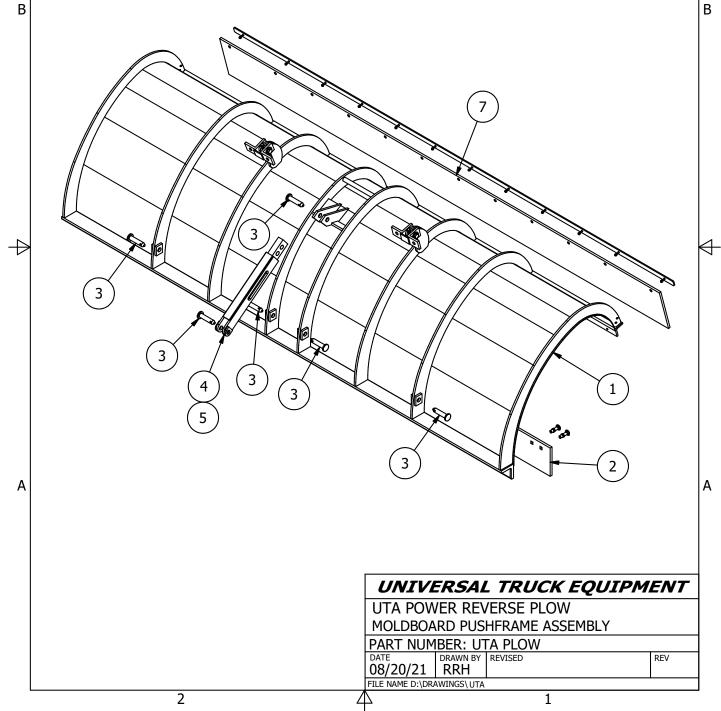
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					ARTS LIST
		ITEM	-		DESCRIPTION
		1	1	UTA-303HD	Heavy Duty Push Frame
		2	2	UTA-307	Swing Cylinder w/ DE Bolt & Nut
		3	1	UTA-304-SL	Snap-Link A-Frame Assembly
		4	1	UTA-311	Trunion Assembly
		5	1	UTA-310	Bolt Kit Assembly
		6	1	U4014A	PIN Ø1-1/2"x6" w/ GREASE ZERK
		7	7	U4002A	Pin Ø1"x3-5/8" w/ CP
В		8	2	U4013A	Pin Ø3/4"x5" w/ CP B
A			1		
				UTA POWER HD PUSH FRA PART NUMBER DATE 08/20/21 RF	WN BY REVISED REV
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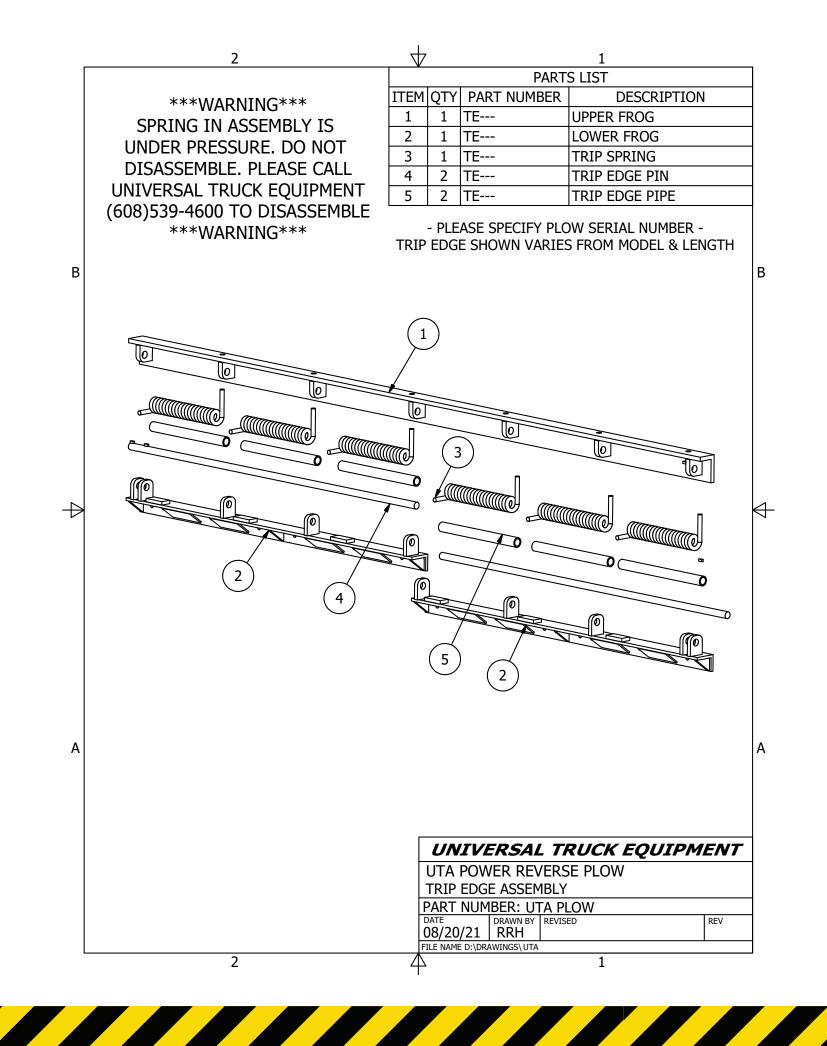


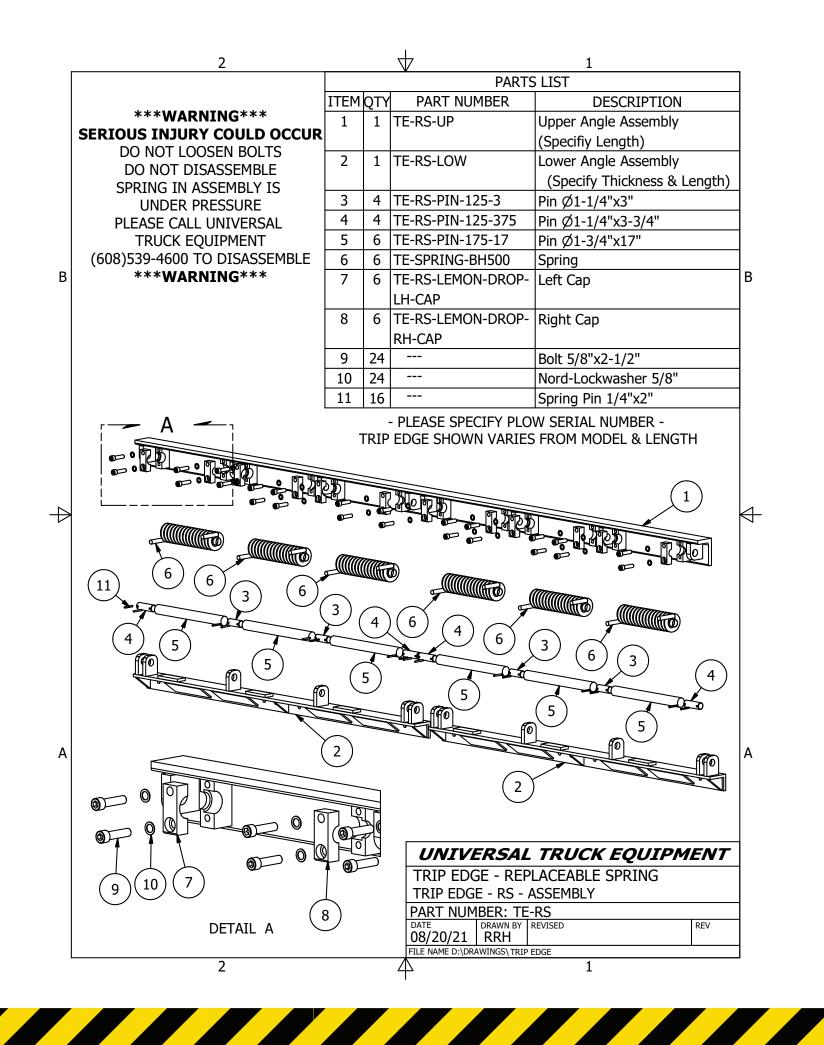


	2		$\checkmark$ 1
			PARTS LIST
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1		Moldboard Assembly (Specify model & Length)
2	1		Cutting Edge & Bolt Kit (Call for Options)
3	6	U4002A	Pin Ø1"x3-5/8" w/ CP
4	1	UTA-301	Cannon Assembly
5	1	UTA-286	Solid Cannon Assembly (Available - Not Shown)
6	2	UTA-319	Pork Chop Assembly
7	1		Plow Flap w/ Steel Strip & Bolt Assembly (Specify Length)

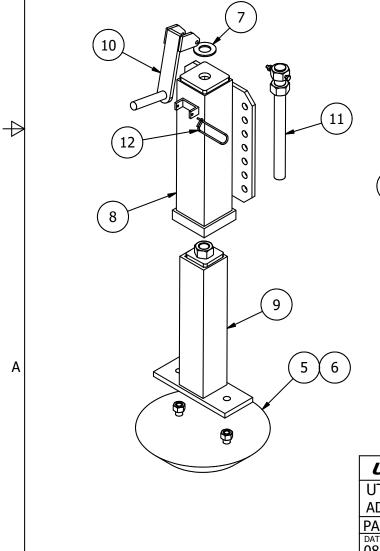
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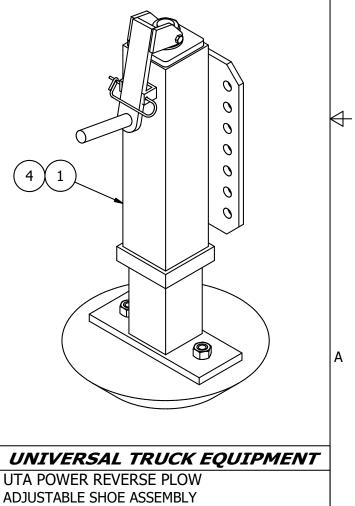






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			PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION			
1	1	U1200A	Complete STD. ADJ. Shoe Assembly (Includes #5,7-12)			
2	1	U1200B	Complete Set of 2 Adj. Shoe Assemblies (STANDARD)			
3 1 U1200C Complete Set of 2 Adj. Shoe Assemblies (NI-HARD)						
4	1	U1200E Complete Ni-Hard Adj. Shoe Assemblies (Includes #6-12)				
5	1	U1201A	Standard Shoe Pad w/ Bolts & Nuts			
6	1	U1201B	Ni-Hard Shoe Pad w/ Bolts & Nuts			
7	1	U1202	Ø1" Washer			
8	1	U1203	Outer Slide Assembly	В		
9	1 U1204 Inner Tube & Plate Assembly					
10	1	U1205	Shoe Handle Assembly			
11	1	U1206	Rebuild Kit (Includes $\emptyset$ 1" Rod w/ 2 Plain Nuts, Top Bolt & Nut)			
12	1	U1207	Close Pin			





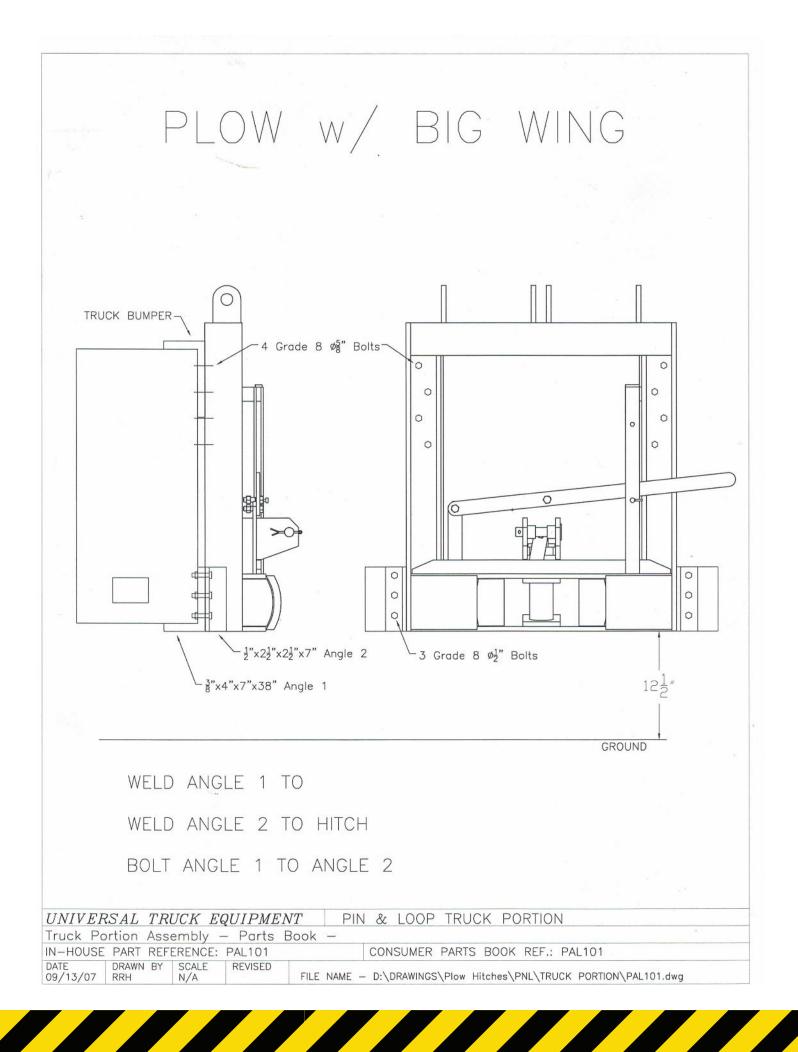
PART NUMBER: UTA PLOW DATE DRAWN BY REVISED REV FILE NAME D:\DRAWINGS\ UTA

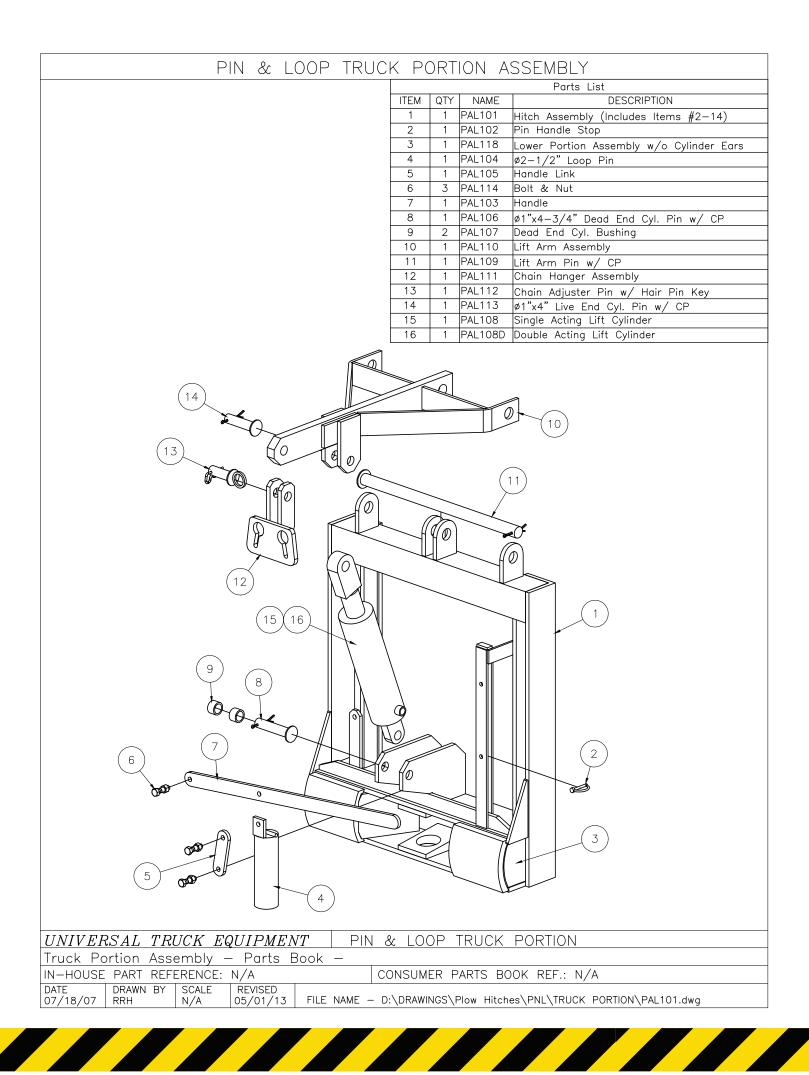
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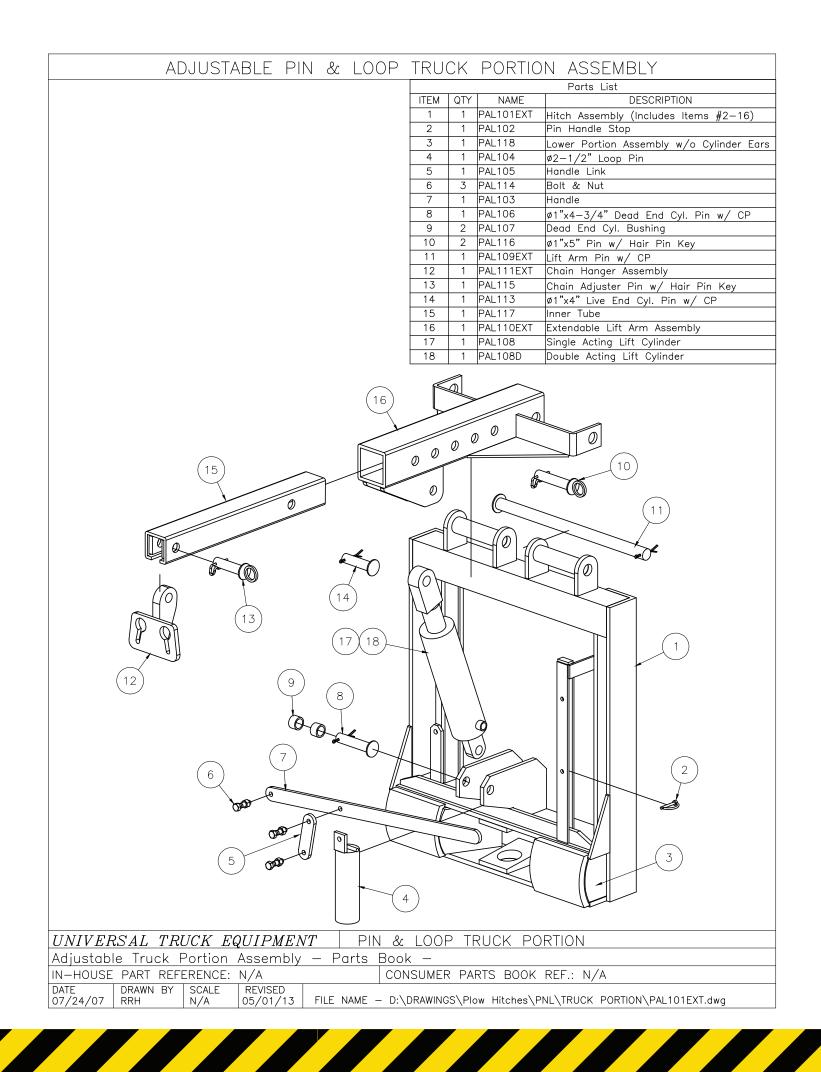
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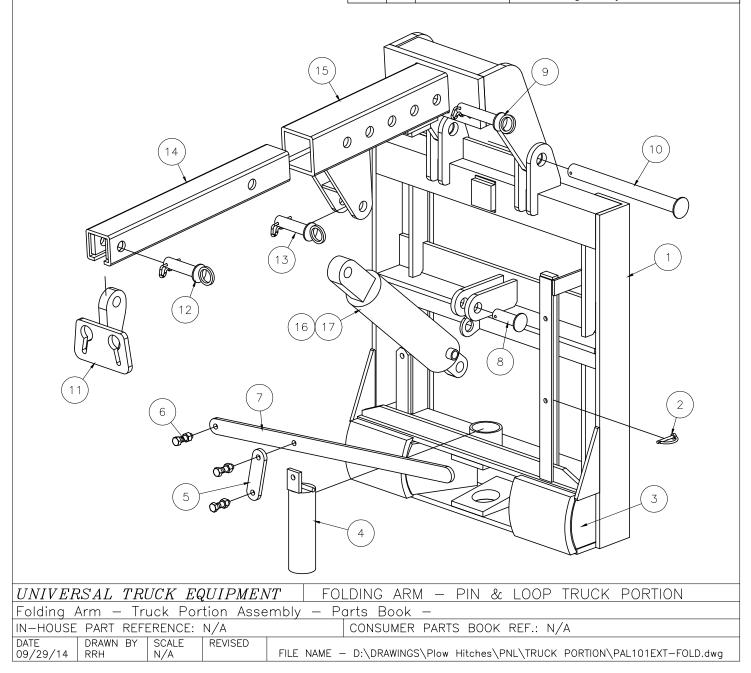






#### FOLDING ARM PIN & LOOP TRUCK PORTION ASSEMBLY

				Parts List		
	ITEM	QTY	NAME	DESCRIPTION		
	1	1	PAL101EXT-FOLD	Hitch Assembly (Includes Items #2-15)		
	2	1	PAL102	Pin Handle Stop		
	3	1	PAL118	Lower Portion Assembly w/o Cylinder E Ø2-1/2" Loop Pin Handle Link Bolt & Nut Handle Ø1"x4-3/4" Dead End Cyl. Pin w/ CP Ø1"x5" Pin w/ Hair Pin Key Lift Arm Pin w/ CP Chain Hanger Assembly		
	4	1	PAL104	ø2-1/2" Loop Pin		
ſ	5	1	PAL105	Handle Link		
	6	3	PAL114	Bolt & Nut		
ſ	7	1	PAL103	Handle		
	8	1	PAL106	ø1"x4-3/4" Dead End Cyl. Pin w/ CP		
ſ	9	2	PAL116	ø1"x5" Pin w/ Hair Pin Key		
ſ	10	1	PAL109EXT	Lift Arm Pin w/ CP		
	11	1	PAL111EXT	Chain Hanger Assembly		
ſ	12	1	PAL115	Chain Adjuster Pin w/ Hair Pin Key		
	13	1	PAL113	ø1"x4" Live End Cyl. Pin w/ CP		
ſ	14	1	PAL117-FOLD	Inner Tube - FOLD		
	15	1	PAL180B	Top Arm Assembly		
ſ	16	1	PAL108	Single Acting Lift Cylinder		
Ī	17	1	PAL108D	Double Acting Lift Cylinder		



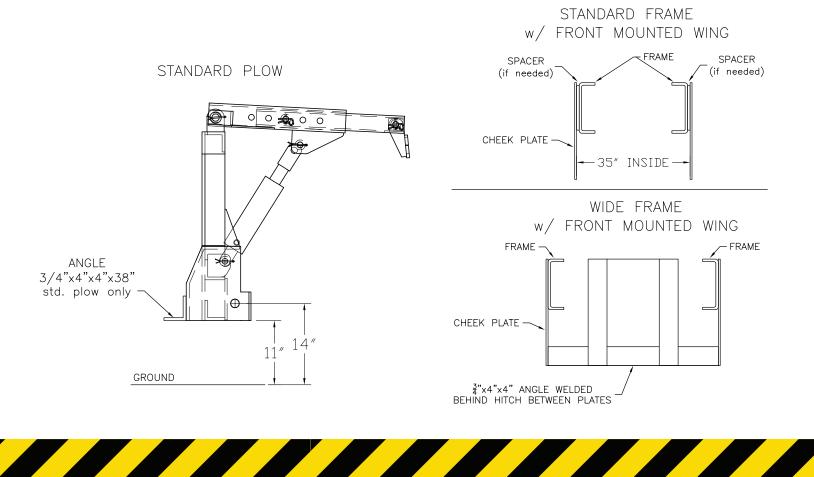
#### SNAP LINK MOUNTING INSTRUCTIONS

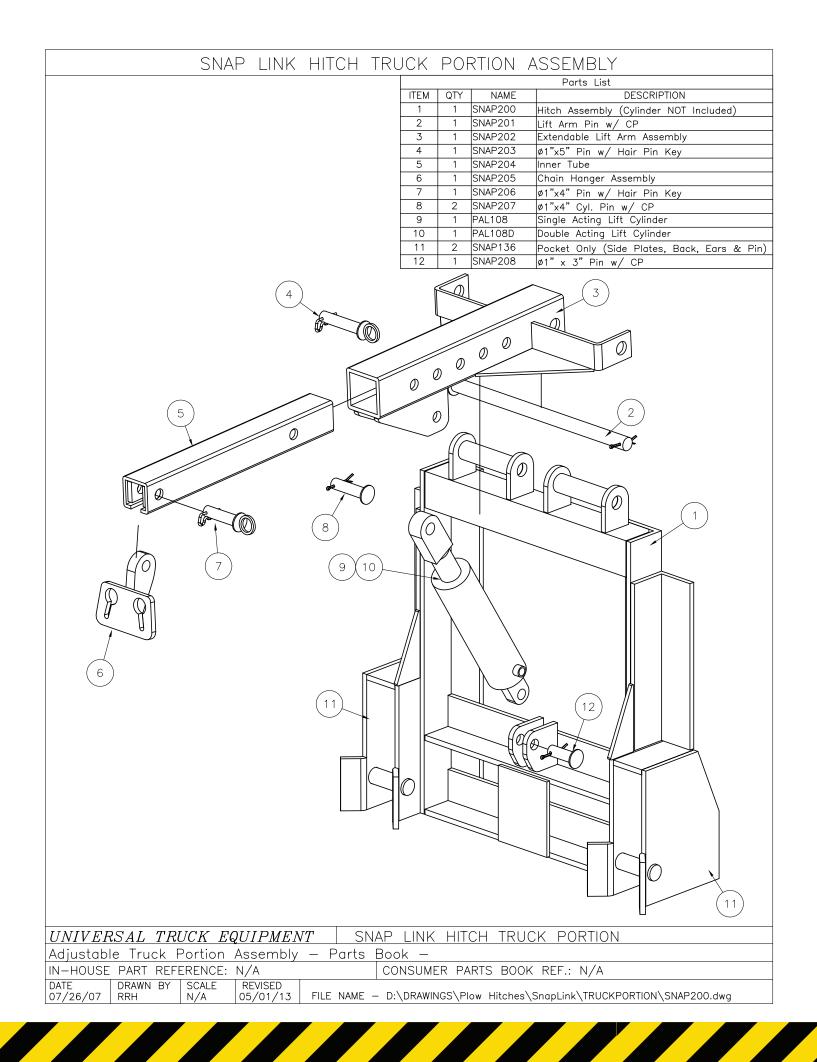
14" from ground to center of pin. Set jack stand at 11" and set outside of hitch pockets on stands to give you the 14" to center of pin. On a standard set up plow only bolt hitch to bumper with 4 or  $5\frac{5}{8}$ " grade 8 bolts and weld a  $\frac{3}{4}$ "x4"x38" angle iron to backside of hitch flush with bottom for a place to put S-Irons.

# Mounting a SNAP Link on a truck with a big wing and std. frame 34" wide.

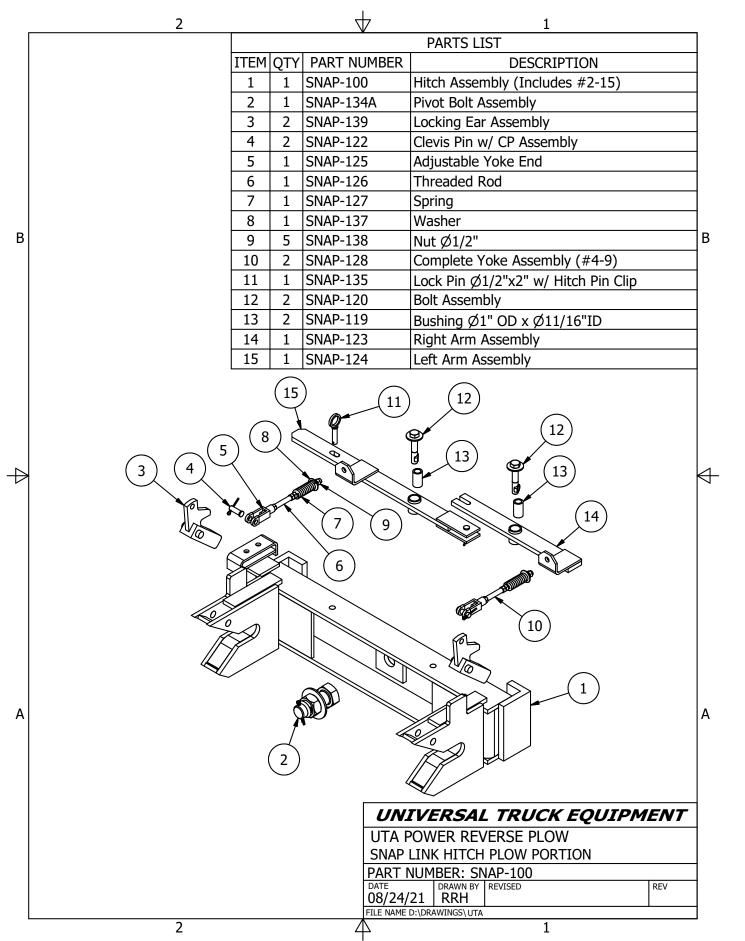
Spacers must be added between frame and cheek plate to reach 35" from inside of cheek plate to inside of cheek plate. Use 4 or  $5\frac{5}{8}$ " grade 8 bolts to bolt to bumper and completely weld hitch pockets to cheek plates where the hitch slips inside of cheek plates.

On a wide frame truck no spacer between cheek plate and frame are needed the only thing different is a piece of  $\frac{3}{4}$ "x4" x4" angle welded between cheek plates tight to back of hitch. Welded on all 4 sides and then a gusset is added between cheek plate and outside pocket gusset is made out of  $\frac{1}{2}$ " cut to fit. Weld all sides.



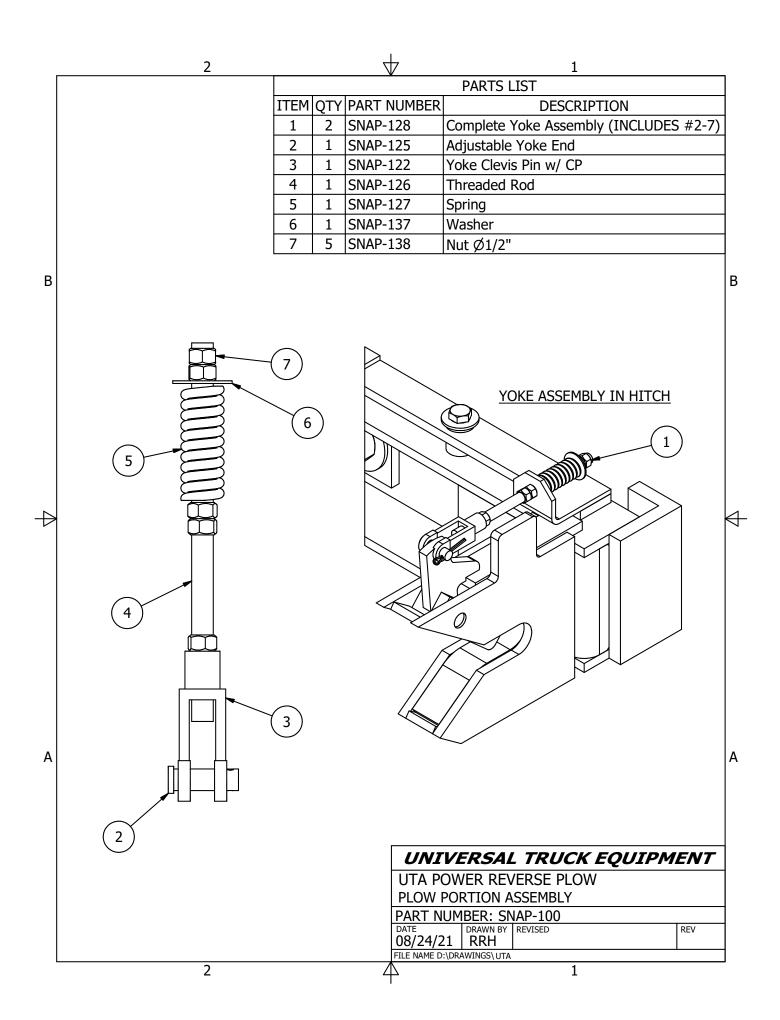


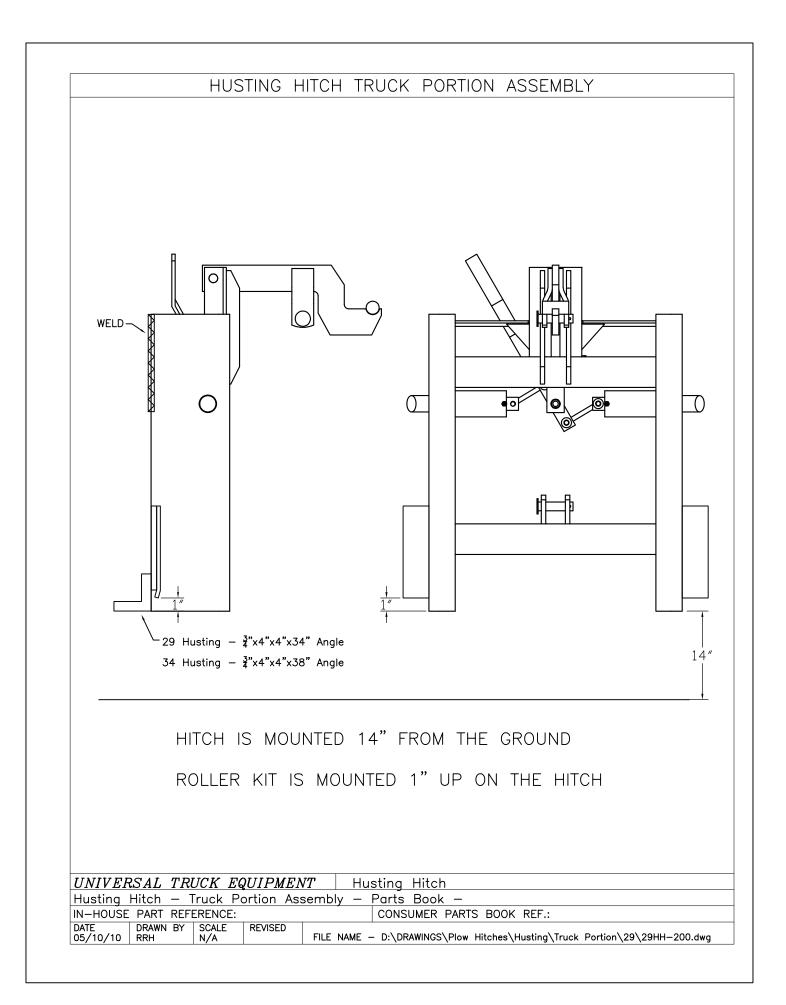
FOLDING ARM SNAP LINI	K HITCH TRUCK PORTION ASSEMBLY
	Parts List ITEM QTY NAME DESCRIPTION
	Item     QTF     NAME     DESCRIPTION       1     1     SNAP200-FOLD     Hitch Assembly (Includes Items #2-10)
	2 1 SNAP201 Lift Arm Pin w/ CP
	3 1 PAL180B Top Arm Assembly
	4 1 SNAP203 Ø1"x5" Pin w/ Hair Pin Key
	5 1 SNAP204 Inner Tube
	61SNAP205Chain Hanger Assembly71SNAP206Ø1"x4" Pin w/ Hair Pin Key
	7         1         SNAP206         Ø1"x4" Pin w/ Hair Pin Key           8         2         SNAP207         Ø1"x4" Cyl. Pin w/ CP
	9 2 SNAP136 Pocket Only (Side Plates, Back, Ears & Pir
	10 1 SNAP208 Ø1" x 3" Pin w/ CP
	11 1 PAL108 Single Acting Lift Cylinder
	12 1 PAL108D Double Acting Lift Cylinder
	FOLDNG ARM – SNAP LINK HITCH TRUCK PORTION
Iding Arm – Truck Portion Assembly –	Parts Book –

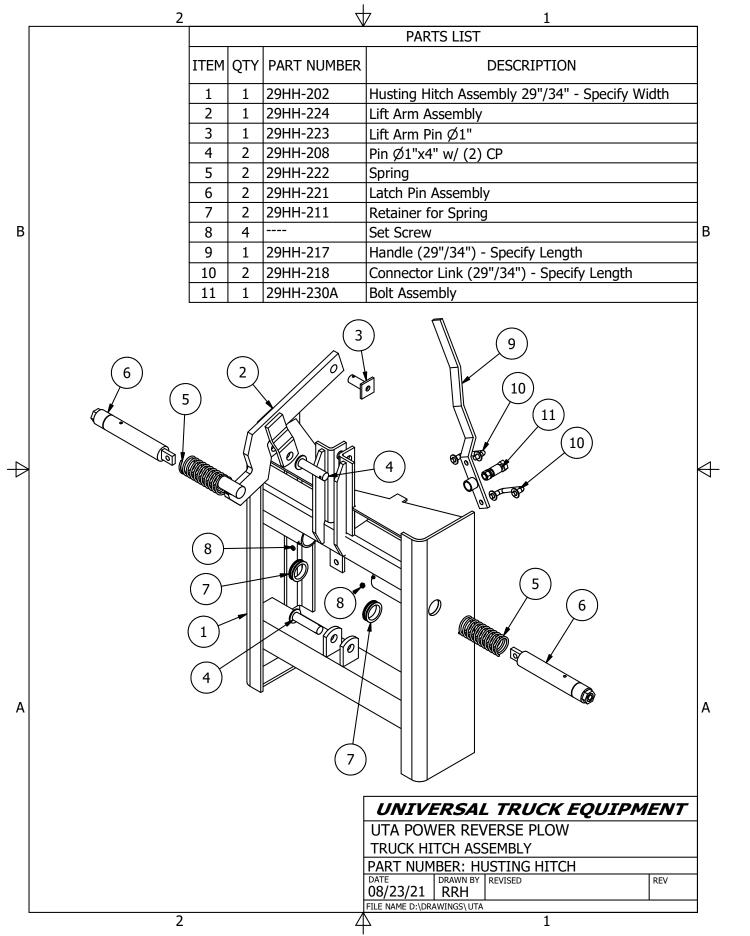


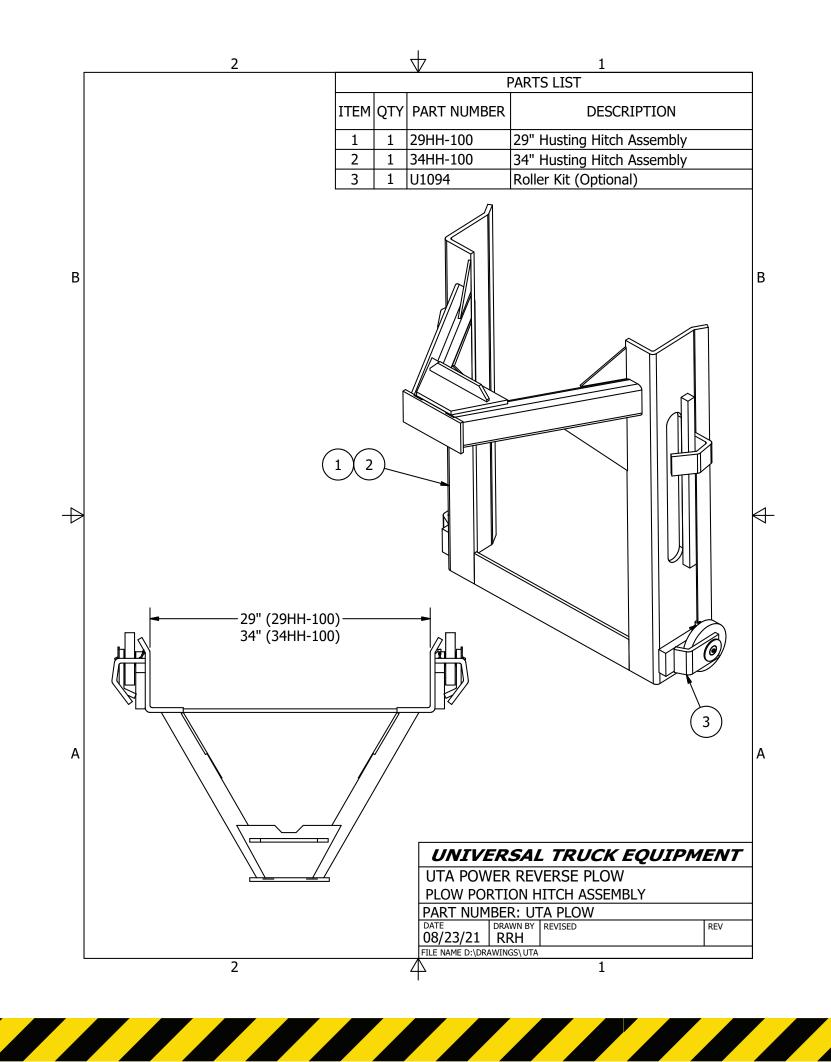
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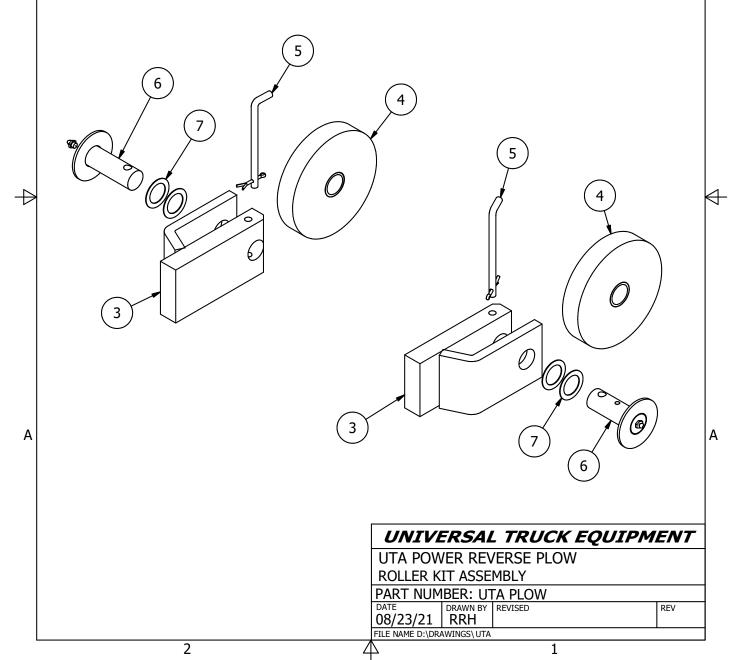






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			PARTS LIST	
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	1	KAM9593	Roller Assembly RH (Items 3-7)	
2	1	KAM9594	Roller Assembly LH (Items 3-7)	
3	1	KAM9588	Roller Wheel Retainer Assembly	
4	1	KAM9592	Roller Wheel w/ Bushing (U3009)	
5	1	KAM2084	Pin for Axle	
6	1	KAM9587	Axle Assembly w/ Grease Zerk	
7	2	KAM2536	Bushing/Spacer	
8	1	KAM9595	Roller Pad LH (Not Shown)	]
9	1	KAM9596	Roller Pad RH (Not Shown)	В



	LIFT CYLINDER           Parts List           ITEM         QTY         NAME         DESCRIPTION           1         1         PAL108         Single Acting Lift Cyl.
	2 1 PAL108SK Seal Kit (Not Shown) NOTE: CUSTOMER REPLACING CYLINDER PARTS VOIDS CYLINDER WARRANTY.
UNIVERSAL TRUCK EQUIPMENT PIN & SINGLE ACTING LIFT CYLINDER	LOOP TRUCK PORTION
	ISUMER PARTS BOOK REF.: PAL108
DATE DRAWN BY SCALE REVISED	

		JBLE AC	LING LI	I U	I LIIN		rts List	
			F	ITEM	QTY	NAME	DESCRIF	PTION
			F	1	1	PAL108D	Double Acting Li	ift Cyl.
				2	1	PAL108DSK	Seal Kit (Not Sl	hown)
						STOMER REP DS CYLINDEF	LACING CYLINDER	PARTS
NIVERSAL TRU	ICK EQUIPME	V <i>T</i> Pin	1 & LOC	P TR	UCK	PORTION		
UBLE ACTING LI	<u>- I CYLINDER</u>							
HOUSE PART REFE			CONSUME	R PAR	TS BO	OK REF.: PA	AL108D	



Universal Truck Equipment, Inc. Hwy 54/93 - N15921 Schubert Rd Galesville, WI 54630 Phone 608-539-4600 / Fax 608-539-4800

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