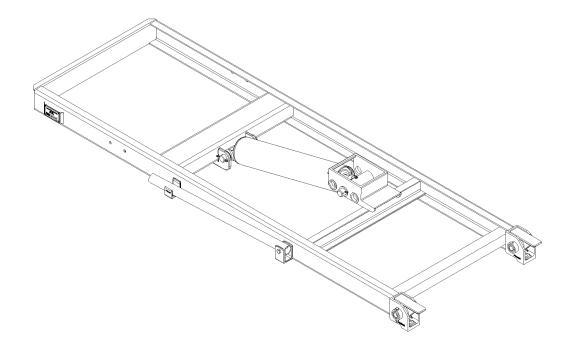


AN AFFILIATE OF



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

# 524DM, 624DM UNDERBODY HOIST



**Operation & Installation Manual** 



# 524DM, 624DM UNDERBODY HOIST <u>Table of Contents</u>

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# CHAMPION HOIST AND EQUIPMENT

200 CHAMPION DRIVE DUNN, N.C. 28334

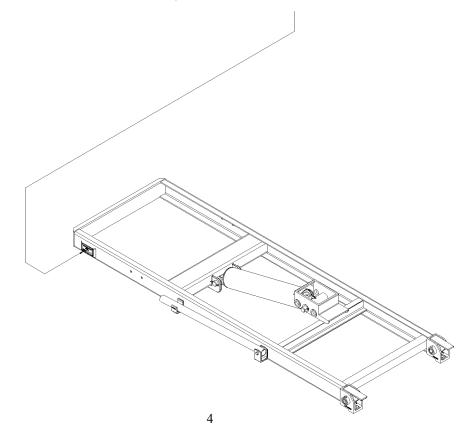
Phone# (800) -649-4995

Phone# (910) -897-4995

fax# (910) -897-7306

when calling, specify (parts) - (service) - (sales) have the following information on hand for faster service, body model # & Serial # hoist model # & serial # year, make, type of truck.

this information is provided as indicated



#### Operations and Service Manual

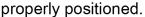
Do not operate this equipment without fully reading and understanding this manual.

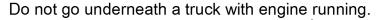
Do not allow unauthorized personnel to operate this equipment.

Do not go underneath a loaded raised bed under ANY circumstances.



Do not go underneath an unloaded raised bed unless the safety props are







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 truck unattended with bed raised.

Do not allow personnel to ride in or on the bed.

Do not load the equipment beyond the GVW rating of the vehicle or 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 vehicle is in motion.

Do not move a vehicle with a raised hoist.



#### 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 weekly.
  - \* For PTO driven pumps use HD 32 hydraulic oil.
  - \* For electric driven pumps use ATF, automatic transmission fluid.
- \* Add correct hydraulic oil to reservoir as needed.
- \* Use EP-3 grease for all grease fittings.
- \* Lubricate hoist and rear hinge assembly every 90 to 180 days depending on useage. (See MP50077)
- \* Check all bolts, welds, electrical connections frequently.

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

Hoist: model number serial number

Serial Plate Location



#### **HOIST OPERATION**

#### To Operate Hoist:

- (1) Engage PTO per PTO operation instructions.
- (2) The pump/hoist control should be in the neutral or "hold" position.
- (3) For a manual control pull to raise, push to lower. NOTE: Manual push/pull controls require a 1/2 inch mounting hole.
- (4) When bed raises to desired height, push the pump/hoist controls to the center neutral or "hold" position. This will stop bed movement up or down.
- (5) To lower bed push pump/hoist control.
- (6) Disengage PTO.



# INSTALLATION INSTRUCTIONS REFER TO MP50074

STEP #1	SET SUB FRAME ON CHASSIS 4" FROM CAB. (NOTE: MAKE SURE THERE ARE NO OBSTRUCTIONS (MUFFLER ETC.)
STEP #2	DRILL (8) 1/2" HOLES THRU CHASSIS AND INSTALL HARDWARE. (EACH SIDE)
STEP #3	DRILL (2) 5/8" HOLES THRU CHASSIS AND INSTALL 5/8" x 2-1/2" BOLT. (EACH SIDE)
STEP #4	REMOVE EXCESS CHASSIS.
STEP #5	INSTALL PUMP CABLE ASSEMBLY IN CAB OF TRUCK. THIS REQUIRES A 1/2" HOLE DRILLED THRU CAB FLOOR. (NOTE: CONTROL MUST MOUNTED IN FLOOR DUE TO CABLE LENGTH)
STEP #6	MOUNT HYDRAULIC PUMP TO PTO. <u>BEFORE MOUNTING, CHECK ROTATION OF PUMP.</u> IF PUMP HAS A ROTATION THAT NEEDS TO BE REVERSED SEE MP50078 - PROCEDURES TO REVERSE C102 PUMPS ROTATION. IF APPLICATION CALLS FOR A P22 PUMP SEE NOTE ON PD40030 FOR FURTHER INSTRUCTIONS.
STEP #7	INSTALL RESERVOIR TANK IN FRONT OF LOWER BUNK FOR A C102 PUMP APPLICATION AS INDICATED ON MP50077.  FOR A P22 PUMP APPLICATION, TWO THINGS NEED TO BE CONSIDERED:  #1 - REQUIRES A SP4 VALVE & VALVE MOUNTING BRACKET & A CABLE SUPPORT BRACKET. (SEE MP50079)  #2 - RESERVOIR MOUNTING. SP4 BRACKET IS TO BE MOUNTED IN SUCH A WAY THAT THE PORTS ARE ACCESSIBLE AND THE CABLE CONTROLS OPERATE FREELY. AFTER DETERMINING WHERE THE SP4 VALVE MOUNTING BRACKET WILL BE MOUNTED, INSTALL RESERVOIR. (SEE MP50077)
STEP #8	PLUMB HYDRAULICS PER PLUMBING DIAGRAM: PD40029 - SINGLE ACTING CYLINDERS W/ C102 PUMP PD40030 - DOUBLE ACTING CYCILNDERS W/ P22 PUMP
STEP #9	AFTER HYDRAULIC CONNECTIONS ARE COMPLETED AND CABLE ASSEMBLY INSTALLED, FILL RESERVOIR WITH OIL.



#### INSTALLATION INSTRUCTIONS CONTINUED

STEP #10 SET BODY. THERE ARE 2 METHODS.

- #1 FOR A <u>SINGLE ACTING ASSEMBLY</u> WITH HOIST RAISED SUSPEND BODY OVER SUBFRAME A MINIMUM OF 4" AWAY FROM CAB, AND LOWER BODY DOWN LOW ENOUGH TO INSTALL UPPER LIFT ARM PINS TO BODYS UPPER BUNK. (SEE MP50077 ITEM 1) AFTER INSTALLATION OF LIFT ARM PINS AND COTTER PINS, LOWER HOIST AND BODY ONTO CHASSIS MAKING SURE CYLINDER IS FULLY RE TRACTED. BODY SHOULD BE EVEN WITH FRONT SUBFRAME RAILS. WELD REAR HINGE FLIPPERS SECURELY TO BODY.
- #2 FOR A <u>DOUBLE ACTING ASSEMBLY</u> RAISE HOIST AND SUSPEND BODY OVER SUBFRAME A MINIMUM OF 4" AWAY FROM CAB, AND LOWER BODY DOWN LOW ENOUGH TO INSTALL UPPER LIFT ARM PINS TO BODYS UPPER BUNK. (SEE MP50077 ITEM 1) AFTER INSTALLATION OF LIFT ARM PINS AND COTTER PINS, WHILE LOWERING BODY ONTO CHASSIS AND AT THE SAME TIME USING HYDRAULIC POWER, BOTTOM OUT CYLINDER TO PULL SLACK OUT OF HOIST. SECURELY WELD REAR HINGE FLIPPERS TO BODY.

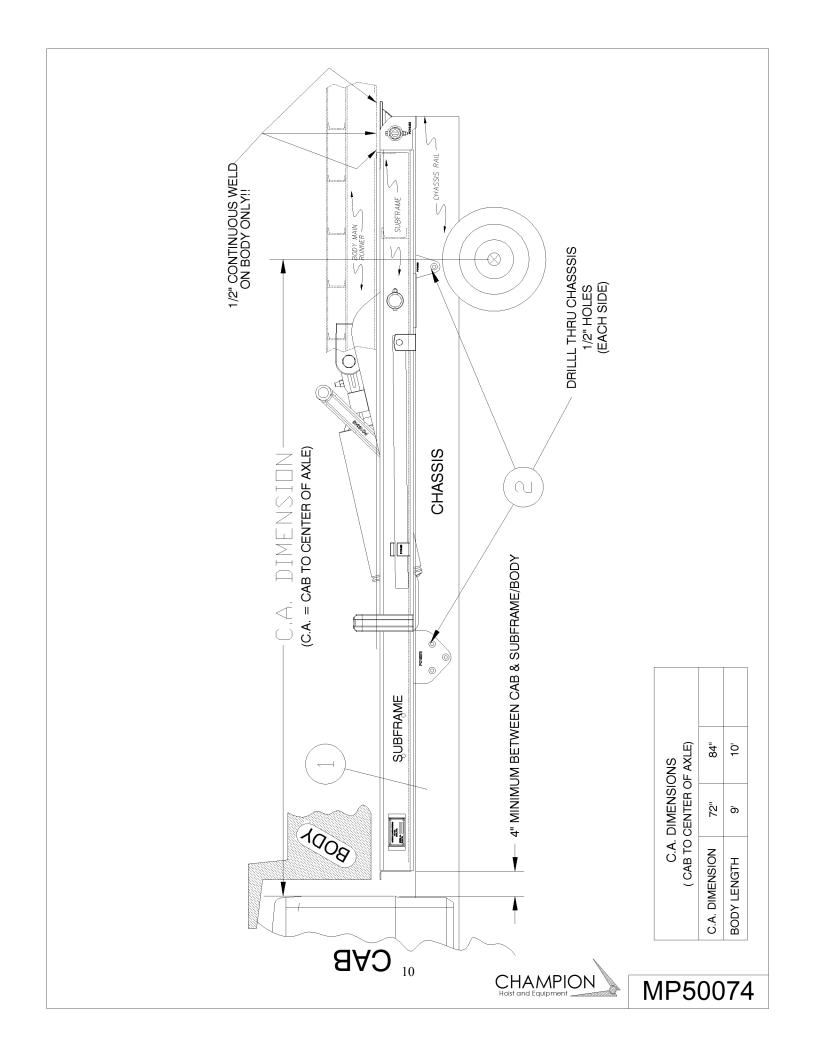
CAUTION - IF SLACK IS NOT REMOVED DAMAGE TO HOIST/BODY COULD OCCUR!!!

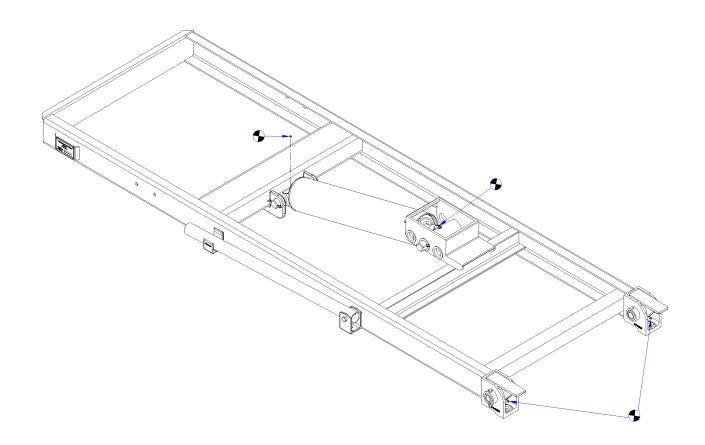
- STEP #11 INSTALL SAFETY PROP CUPS ON BODY IN SUCH A MANNER THAT THE PROP IS ANGLED SLIGHTLY TO THE REAR. (SEE MP50080)
- STEP #12 REINSPECT ALL WELDS, CHECK THAT ALL HARDWARE IS SECURE, AND PLUMBING CONNECTION FOR LEAKS. (REPAIR AS NECESSARY)
- STEP #13 GREASE ALL PIVOT POINTS AND GREASE FITTINGS. (SEE MP50077)

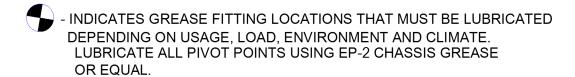
NOTE: NEVER WORK ON A RAISED EMPTY BODY WITHOUT SAFETY PROPS IN PLACE!!!





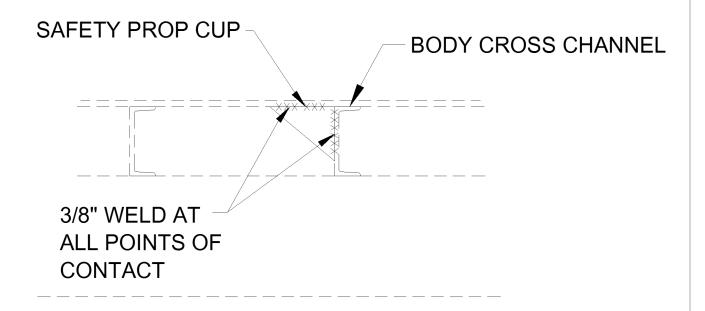






\* Grease hoist and rear hinge assembly each time truck is serviced.

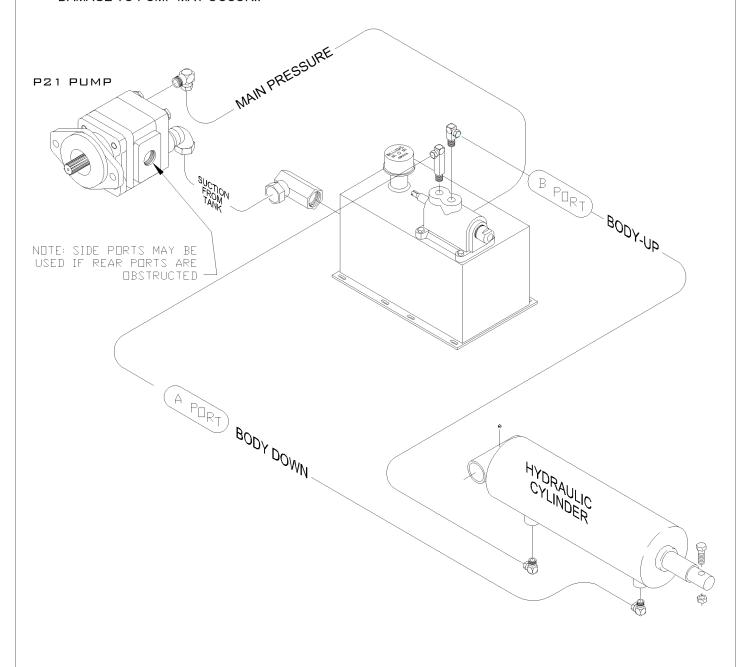
### SAFETY PROP CUP INSTALLATION



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.

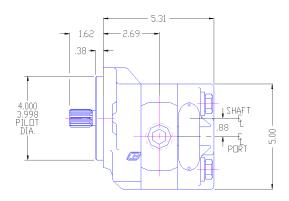
#### NOTE:

WHEN PLUMBING PUMP BE SURE TO USE THE PROPER PORT. IF YOU ARE NOT SURE WHICH PORT IS SUCTION, & WHICH IS MAIN PRESSURE, LEAVE SHIPPING PLUGS IN PORTS, AND OPERATE PUMP NO LONGER THAN 3 SECONDS. THIS WILL POP OUT THE MAIN PRESSURE SHIPPING PLUG. BE SURE IT RUNS NO LONGER THAN 3 SECONDS, OR PERMANENT DAMAGE TO PUMP MAY OCCUR!!

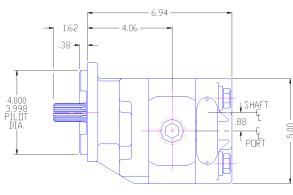


HYDRAULIC PLUMB DIAGRAM

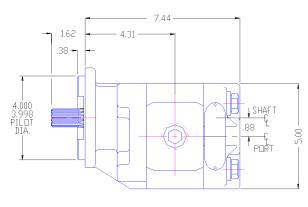




P21 PUMP



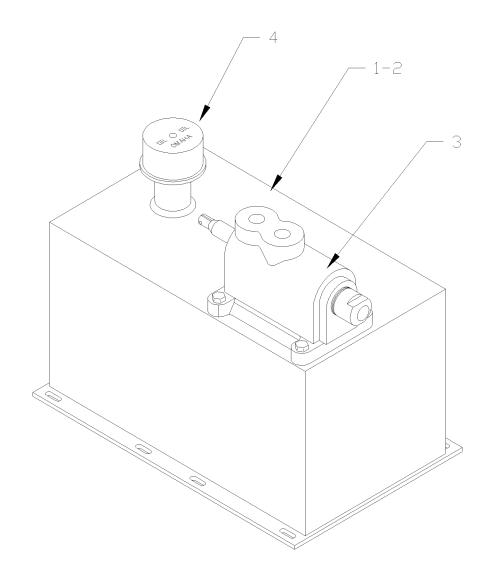
P22 PUMP



P23 PUMP

P20 SERIES PUMPS

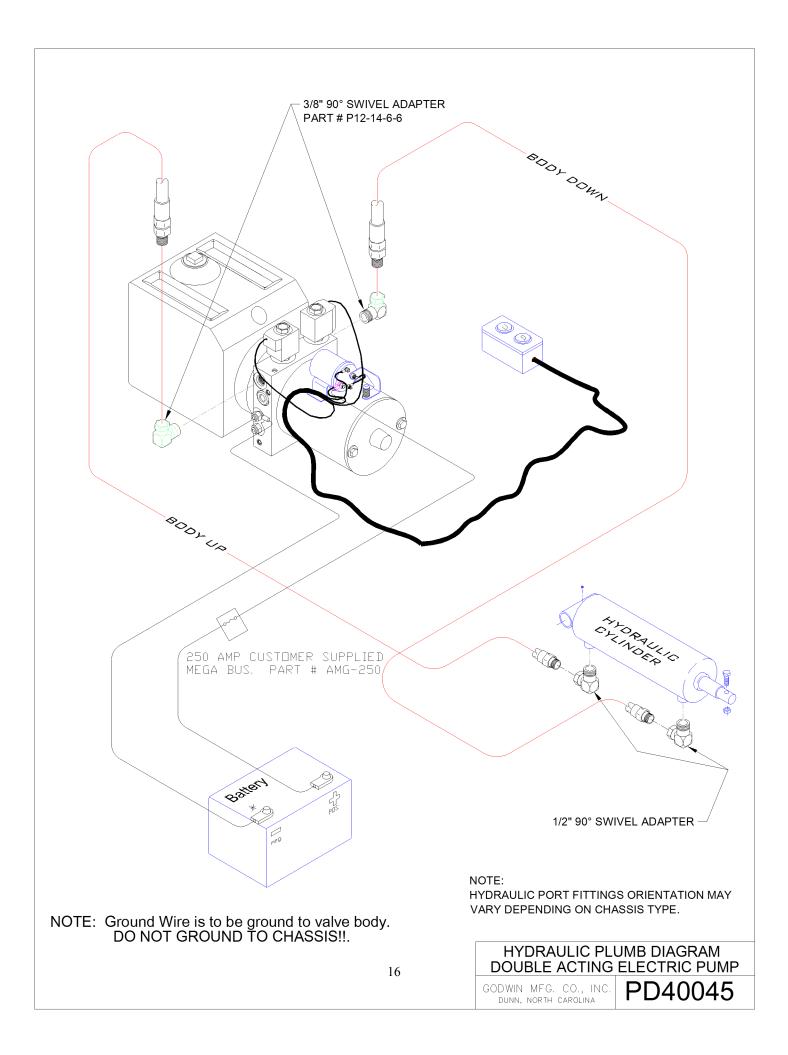


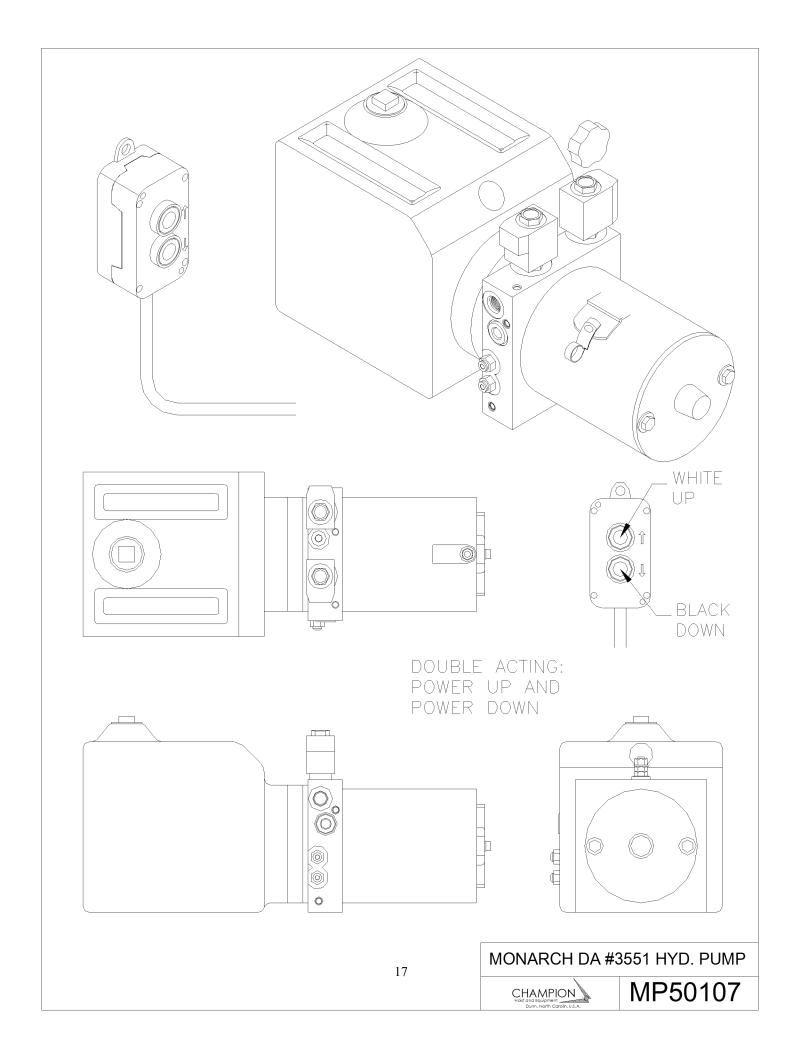


NO.	PART NUMBER	QTY.	DESCRIPTION
1	PW16-8CR-15QT	1	15 QUART RESERVOIR
2	PW16-8CR-21QT	1	21 QUART RESERVOIR
3	P8WCR	1	HYDRAULIC VALVE
4	P10241	1	CAP

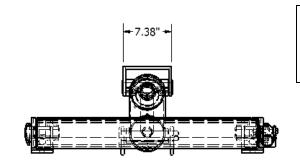
15/21 QUART RESERVOIR





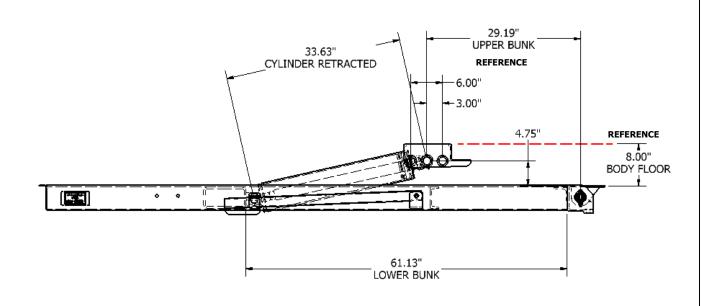


## CHAMPION HOIST MODEL: 524DM, 624DM



STANDARD SUBFRAME LENGTHS (FT):

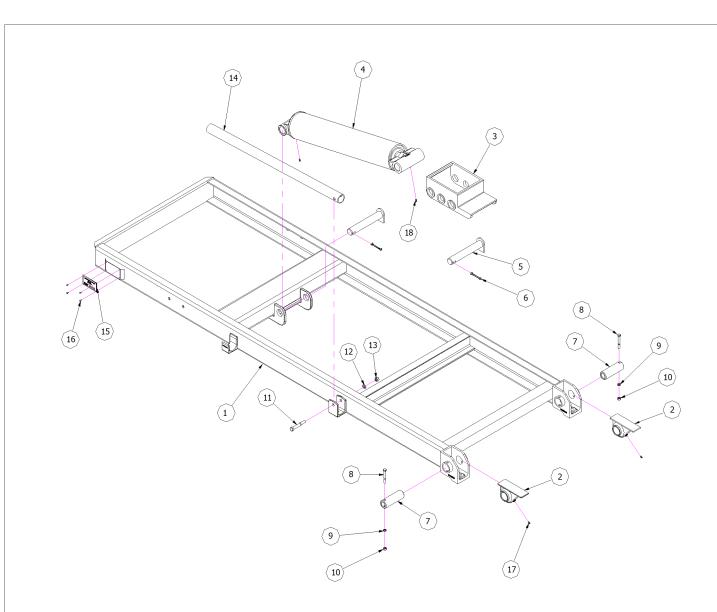
8, 9



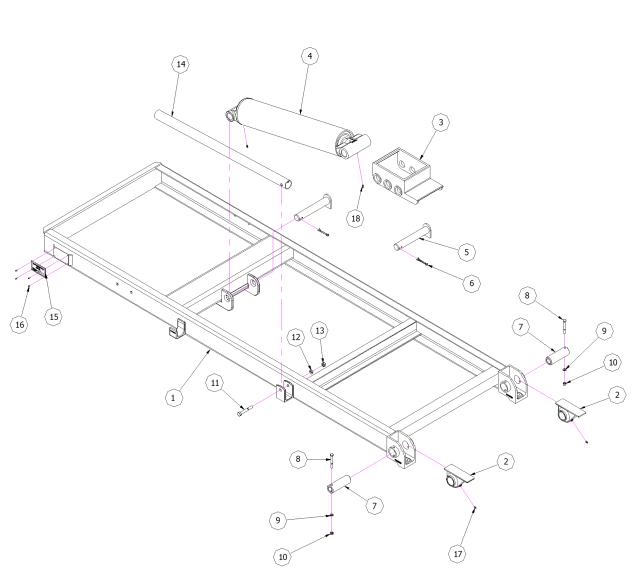
DESIGNED FOR TRUCKS WITH 10,000 TO 14,500 GVW



Dunn, North Carolin, U.S.A. 910 - 897 - 4995 Fax 910 - 897 - 6822



		Parts List	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	W13436	WELDMENT SUBFRAME
2	2	PC10636	REAR HINGE BLOCK
3	1	PC10749	UPPER LIFT POINT
4	1	524CYLINDER	CYLINDER, UNDERBODY
5	2	PC10560	PIN, LOWER AND UPPER BUNK
6	2	125-260	COTTER PIN, 1/4 X 3
7	2	PC10816	PIN, REAR HINGE
8	2	102-213-A1	HEX BOLT, 3/8-16 UNC X 3
9	2	118-3-A1	LOCK WASHER, 3/8
10	1	116-3-A1	HEX HUT, 3/8
11	1	102-415-A1	HEX BOLT, 1/2-13 UNC X 3 1/2 GR8
12	1	118-5-A1	LOCK WASHER, 1/2
13	1	116-5-A1	HEX NUT, 1/2-13 UNC
14	1	SM13033	SAFETY STAND
15	1	P10100	SERIAL PLATE
16	1	PAAP43	RIVET
17	2	PT7608	GREASE FITTING
18	2	P853	GREASE FITTING



		Parts List	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	W13436	WELDMENT SUBFRAME
2	2	PC10636	REAR HINGE BLOCK
3	1	PC10749	UPPER LIFT POINT
4	1	624CYLINDER	CYLINDER, UNDERBODY
5	2	PC10560	PIN, LOWER AND UPPER BUNK
6	2	125-260	COTTER PIN, 1/4 X 3
7	2	PC10816	PIN, REAR HINGE
8	2	102-213-A1	HEX BOLT, 3/8-16 UNC X 3
9	2	118-3-A1	LOCK WASHER, 3/8
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