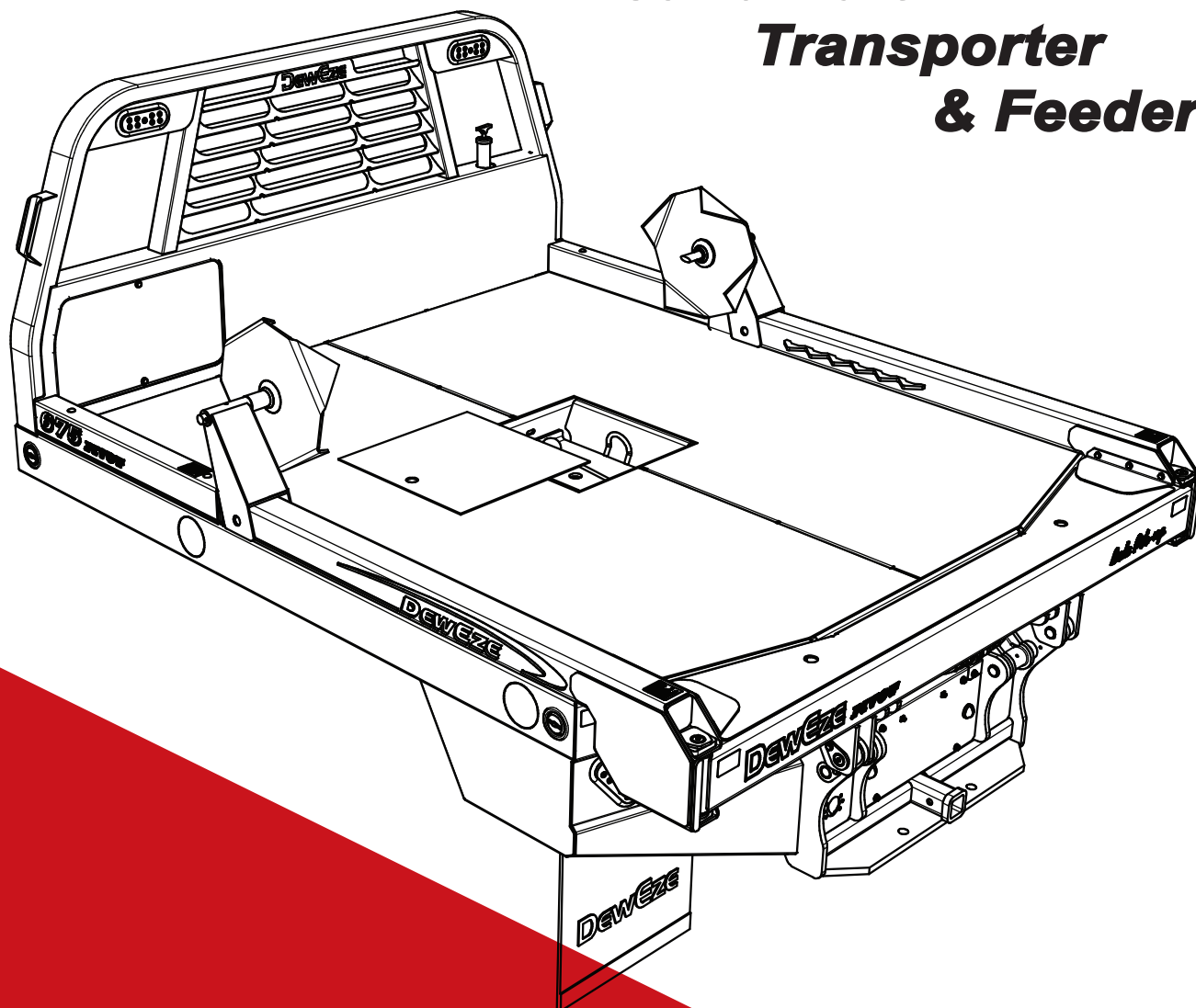




600 & 700
Series Flatbed

**Round Bale
Transporter
& Feeder**



Pivot Squeeze

**Operator's
& Parts
Manual**



Thank you for purchasing a DewEze Flatbed.

TO THE OWNER OR OPERATOR:

As with all Harper products, the 600 and 700 Series Flatbeds have been thoroughly tested and built to provide a sturdy, dependable product. The Flatbed is equipped with live hydraulics, which allows it to be used for a wide range of lifting and hauling tasks. This manual is written as an aid to operating and maintaining the DewEze Flatbed. Read and understand the manual thoroughly before operation to avoid damage to the unit or injury to the operator or bystanders.

A Flatbed can present hazards to an operator who follows unsafe procedures in either the operation or maintenance of the unit. Therefore, **SAFETY WARNINGS** are present at certain locations in the text. Harper Industries is not responsible for accidents or injuries that result from the misuse or lack of maintenance of the Flatbed.

SYMBOL:



SAFETY WARNING!



MEANING: Failure to understand and obey this warning may result in injury to you or others. Whenever this symbol is used, please pay very close attention to the information presented, and make sure you fully understand. If you do not, contact your dealer or Harper Industries for clarification.



151 E. HWY. 160 Harper, KS 67058
(620) 896-7381 • **Fax** (620) 896-7129

Toll Free 800-835-1042

Email info@deweze.com

Website www.deweze.com

© 2013 Harper Industries, Inc.

The Harper and DewEze names and the ATM logo are registered trademarks of Harper Industries, Inc. All other brand and product names are trademarks or registered trademarks of their respective companies.



Statement of Warranty

Harper Industries warrants to each purchaser of a new DewEze Flatbed from an authorized dealer or representative, that such equipment is free of manufacturer's defects which appear while in normal service for a period of TWO YEARS commencing with deliver to the original user. The Flatbed hydraulic and electrical systems are warranted for a period of one year.

The obligation of Harper Industries under this warranty is expressly limited, at our option, to replacement or repair at a service facility designated by Harper Industries or at the manufacturing plant in Harper, Ks. A part will be replaced after inspection discloses it to have been defective. This warranty does not apply to defects caused by damage or unreasonable use (including failure to provide reasonable and necessary maintenance, or by performing functions without genuine DewEze accessories) while in the possession of the consumer.

Harper Industries shall not be liable for the consequential damages of any kind, including but not limited to consequential labor costs or transportation charges in connection with replacement or repair of defective parts.

Harper Industries makes no warranty with respect to trade accessories. They are subject to the warranties of their respective manufacturers.

ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. Harper Industries makes no other express warranty, nor is anyone authorized to make any on behalf of Harper Industries.

For further information please contact your nearest DewEze dealer.

RECORDS

Date of Purchase _____ / _____ / _____

Dealer's Name _____

Dealer's Phone _____

Serial Number Machine _____

Serial Number Engine _____

Table of Contents

OPERATOR SECTION

To the Owner or Operator.....	1
Warranty Statement.....	2
Table of Contents.....	3
Specifications.....	4
Feature Identification.....	5
Safety Guidelines	
General Equipment Safety.....	6
Flatbed Operation Safety.....	6
Hydraulic Safety.....	7
Operating Instructions	
Beginning Operation.....	7
Loading.....	7
Extending (option).....	7
Unloading.....	7
Unrolling.....	7
Storing the arms.....	8
Turning System Off.....	8
Maintenance	
Check Daily or Before Use.....	8
Lubrication.....	8
Hydraulic Oil.....	9
Hydraulic System.....	9
GatorHyde Protective Coating.....	9
Remote Control.....	9
Power Unit.....	9
Troubleshooting.....	10

PARTS SECTION

Standard Parts	
600/700 Common Parts.....	1.1
Dual Lift Standard Parts.....	1.2
Pivot Squeeze Parts	
Crosstube and Arms.....	2.1
Hydraulics	
Pivot Squeeze Hydraulics.....	3.1
Hydraulic Reservoir Assy.....	3.2
Pivot Squeeze Valve and Filter.....	3.3
Gen. 2 Valve Service Parts.....	3.4
Electrical	
RF Control & Manual Switches.....	4.1
Switch, Clutch Control Assy.....	4.2
Lights and Harness.....	4.3
Replacements & Accessories	
Decals, Safety and Operation.....	5.1
600/700 Pivot Squeeze Decals.....	5.2
Swingout Lights.....	5.3
Cargo Lights.....	5.4
30" Toolbox & Fender Skirts.....	5.5
Across the Bed Toolbox.....	5.6
Spinners and Risers.....	5.7
Front Skirt Toolbox Replacement.....	5.8

Appendices

I	GatorHyde Repair.....	6.1
II	Remote Control.....	6.2
	2-Bank Wiring - Kar-Tech Remote.....	6.3
	3rd Bank Wiring - Kar-Tech Remote.....	6.4



Specifications

DewEze flatbeds are specifically designed to transport and feed round hay bales.

Model Specifications

MODEL	675	682	684	782
WIDTH	7' 1"	7' 9"	7' 9"	8'
LENGTH	8' 6"	9' 4"	9' 8"	9' 4"
WEIGHT	2120 lbs.	2320 lbs.	2470 lbs.	2320 lbs.

* Length of all flatbeds includes 6" for crosstube.

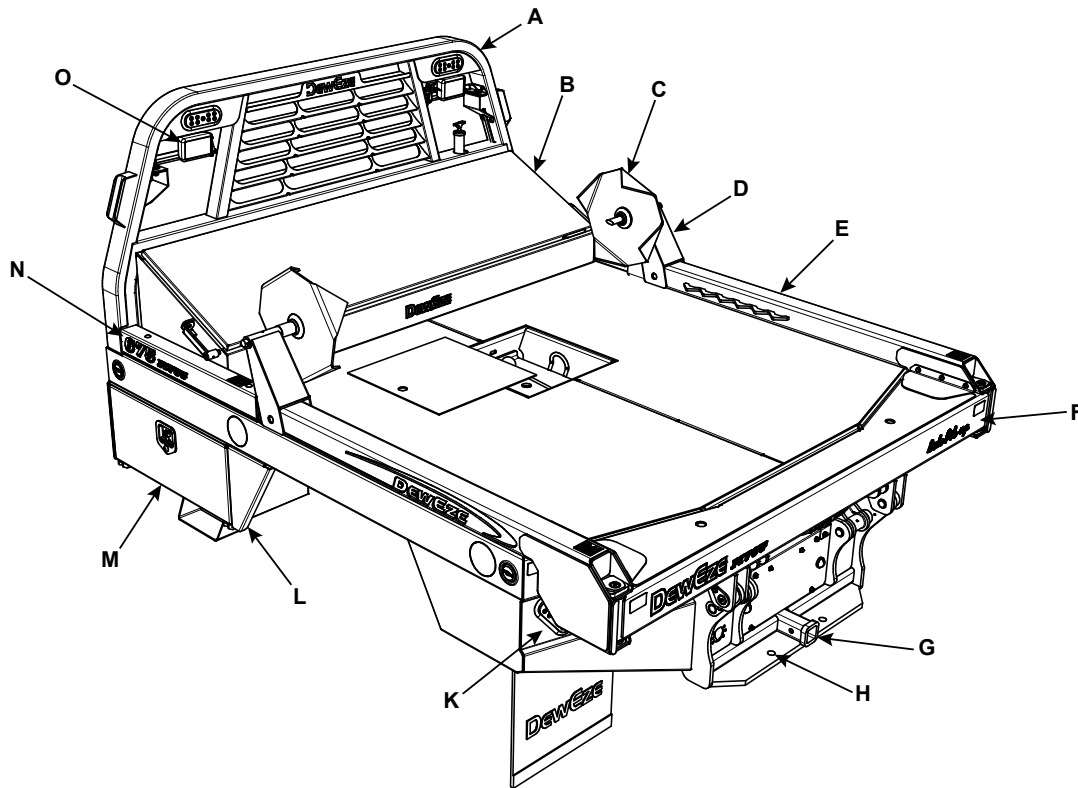
Hydraulic System Specifications

HYDRAULIC SYSTEM	Powered by engine driven pump		
SYSTEM PRESSURE	2450 psi		
OIL RESERVOIR CAPACITY	10 gallons		
OIL FILTER	DewEze 720043, WIX 51551 (10 micron)		
CYLINDER, LIFT (2)	3.50" x 16.62"		
CYLINDER, SQUEEZE	3.00" x 5.00"	Rephasing	
	3.25" x 5.00"		

Protective Coating Specifications

PAINT	Heat-cured, polyurethane based paint
GATORHYDE	Long-lasting, textured polyurea surface

Feature Identification



A. Headache Rack – protects the rear pickup window. The hydraulic oil tank and valve are located in the headache rack.

B. Across-the-bed Toolbox (optional) – measures 78" wide, 15.5" tall and 21.5" deep and has a shelf mounted inside.

C & D. Spinners & Risers (optional) – used to unroll hay. The risers allow the hugger arms to lie flat on the bed with the spinners attached.

E. Hugger Arms – squeeze together to grip the bale and lift it onto the flatbed. When the arms are stored they serve as side rails for the flatbed.

F. Crosstube – houses the squeeze cylinder and guides the hugger arms.

G. Hitch Plate – allows for a 2" square receiver hitch and has holes for hitch pins.

H. Safety Chain Loops – always use safety chains when towing.

I. Gooseneck Hitch – located under a cover plate in the middle of the bed.

J. Safety Chain Loops – always use safety chains when towing.

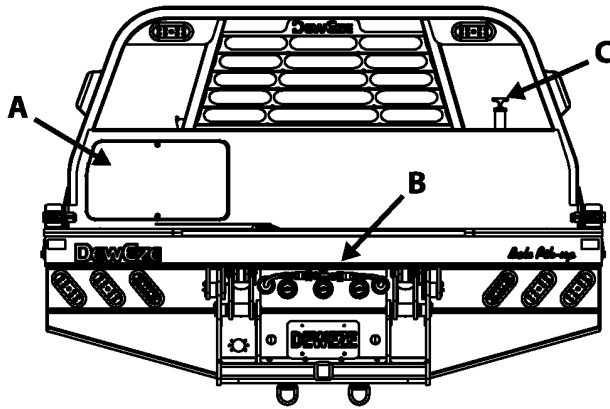
K. Lights – LED lighting for stop-tail-turn has long life and low current draw.

L & M. Skirts & Toolboxes (optional) – mount under front of bed on both sides. The Electric/Hydraulic Power unit mounts inside the left toolbox.

N. Dummy Arms – serve as side rail along with hugger arms.

O. Swing Lights (optional) – lights can be pivoted out wider than the bale when working at night.

Specifications



A. Valve Compartment – houses the hydraulic control valve, hydraulic oil filter and the radio frequency receiver.

B. Pioneer Couplers – connect hydraulic hoses to the squeeze cylinder – may also be used to connect to implements.

C. Hydraulic Oil Fill & Dipstick – check hydraulic oil level with dipstick – fill here when necessary.

Remote Control Transmitter – operates all functions of the flatbed – uses two AA batteries.



SAFETY WARNING!

Do not stand under the hugger arms when operating the bale pickup unit, even when arms are empty.

Operator safety is of utmost concern when designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. Most accidents can be avoided by observing the precautions in this section. To avoid personal injury, study the safety warnings and cautions listed in this manual and follow them.

General Equipment Safety

- This equipment can be dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained for this unit.
- Do not attempt to operate equipment under the influence of drugs or alcohol.
- Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and how the unit works.
- Review the safety warnings and cautions with all users annually.

If you have any questions not answered in this manual or require additional copies, contact your dealer or Harper Industries.

Flatbed Operation Safety

- Replace any CAUTION, WARNING, DANGER or instruction decal that is not readable or is missing.
- Make sure all safety pins are in place and flatbed mounting bolts are secure to the truck frame.
- Make sure hinges, joints, and sliding parts are well greased, especially during off season to prevent rusting and binding.

- Check with truck dealer for any load limits, additional suspension or tire requirements. The flatbed's lifting capability may exceed the truck's load capacity in some instances.

Hydraulic Safety

- Do not operate the hydraulic system with the hood open.
- Do not activate the electric clutch unless the truck engine is at idle. Operating the clutch at road speeds can damage the hydraulic system.



Hydraulic system operates under high pressure and escaping fluid can penetrate the skin.

Operating Instructions

Beginning Operation

- Turn the pump switch on the dash to the "ON" position. (Red light will indicate that pump is on).

CAUTION: In cold weather, let engine idle for 5-10 minutes with pump on before operating arms to warm oil. Neglecting to do so may cause hydraulic pump failure.

- Press and hold the power button on the transmitter until both LEDs turn on, then release.
- The green LED will flash rapidly when the communication has been established. If the receiver is off, the red LED will flash slowly.
- Press the corresponding buttons on the transmitter keypad to turn on and off each of the outputs.

Loading

- Back truck against bale with the arms wide apart and tilted slightly upward.
- Squeeze arms firmly against the bale.

- Lift the bale onto the truck.
- Release the bale and repeat the operation for the second bale.

CAUTION: When hauling one bale, make sure it is held tightly and rests on the bed. When hauling two bales make sure the second bale is as far forward as possible (Fig. 1). Carrying a bale behind the bed, as show in Fig 2, places excessive stress on the cylinder, linkage, and pins.

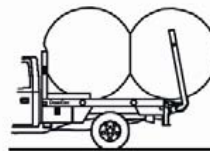


Fig. 1



Fig. 2

CAUTION: Do not exceed GVRW rating of truck when loading. Two bales can easily exceed the GVRW on a $\frac{3}{4}$ ton truck. A typical $\frac{3}{4}$ ton truck can haul 2,300 lbs. of payload in addition to the flatbed.

Extending (option)

- Always squeeze the bale with the arms in the retracted position.
- Extend the arms and release the bale.
- Fully retract the arms before laying them on the bed.

CAUTION: Squeezing the bale when the arms are extended puts excessive force on the arms and cross-tube and may result in bending the unit.

Unloading

- To unload, do the reverse of the loading operation.
- Spinners may sometimes be needed to grip the front bale for unloading.

Unrolling (option)

- Use risers and spinners to unroll a bale.
- Position the arms over the bale so the spinners are at the center of the bale.

- To unroll, lower the bale to the ground.
- Turn the pump off and push the FLOAT switch on the remote control.
- Slowly drive STRAIGHT forward. The bale will gradually unroll.

CAUTION: Turning while unrolling a bale may cause hugger arms to bend.

CAUTION: Failure to use FLOAT while unrolling may damage flatbed frame or lift cylinder. The FLOAT switch on the remote transmitter stays on until it is pressed a second time or another switch is activated. To avoid power loss, always deactivate the FLOAT when not in use.

Storing the Arms

- Close the arms partially and lay them on the flatbed.
- Open the arms until they are flush with the side of the bed. They now function with the dummy arms as side rails.

Turning System Off

- Turn the pump off when it is not in use.
- The remote control turns itself off automatically after 10 minutes.

CAUTION: Operating truck at road speeds or above 2,000 RPM with pump engaged may cause hydraulic pump failure.

Maintenance

Check Daily or Before Use

- Check the hydraulic oil level. Keep the level to "FULL" on the dipstick.
- Check the belt, belt tensioner and idler pulleys on engine clutch pump system.
- Examine the hydraulic hoses for leaks with an object such as cardboard.



SAFETY WARNING!

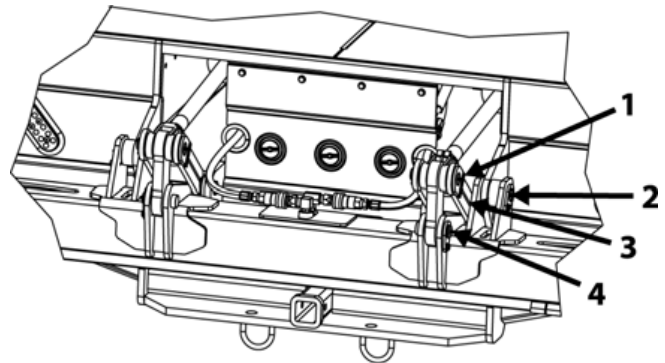


Hydraulic fluid escaping under pressure can penetrate the skin and may cause death if not treated immediately.

Lubrication

Grease the locations indicated in the illustrations below once per week while the unit is in use and at the end of each season (same locations on right and left).

1. Lift cylinder – rod end
2. Cross-tube hinge
3. Idler arm base
4. Idler link pin

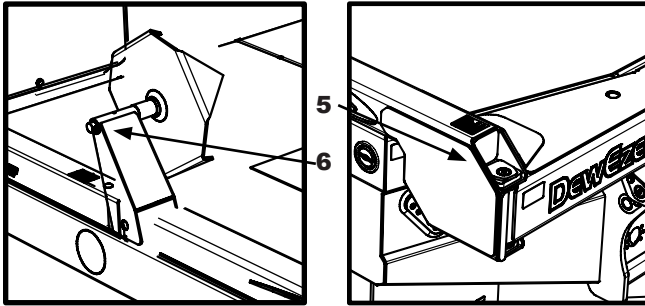


SAFETY WARNING!



Use extreme caution when greasing the flatbed. Completely lower arms to expose rear zerks and turn off ignition.

- 5. Pivot
- 6. Riser (option)



Hydraulic Oil

- Change the hydraulic oil filter after the first 40 hours of use and then every 250 hours, or annually thereafter.
- Change the hydraulic oil if it becomes contaminated or turns milky in appearance.
- In cold weather (below 10°F), use hydraulic oil that is specifically rated for cold weather.
- If other hydraulic equipment is attached to the bed, the oil will intermix and cold weather viscosity may be lost.

Hydraulic System

- If the quick-couplers leak, the o-rings may need to be replaced.
- High heat, 190° or greater, can be damaging to the hydraulic system. Feel various parts of the system to make sure there are no “hot spots” which may indicate a problem.
- In the off season, run the bed at least twice a month to prevent valve condensation.
- For easy hookup of the couplers, turn the pump switch off and activate the control valve switches with the ignition on. This will release pressure in the lines.

GatorHyde Protective Coating

- In the event that damage should occur to the GatorHyde protective coating, repair materials are available from your DewEze dealer to fix small areas. Follow the instructions provided in Appendix I.

Remote Control

- The remote control transmitter has two LED indicators, the green TRANSMIT indicator and the red BATTERY / DIAGNOSTIC indicator.
- The green TRANSMIT indicator flashes rapidly whenever there is communication between the transmitter and the receiver.
- The red BATTERY / DIAGNOSTIC indicator starts blinking once every second when the battery voltage is low and requires replacement. It also blinks when there is a problem with the system in the form of an error code. Refer to the ERROR CODE CHART in Appendix II.
- To synchronize a new transmitter and receiver together, refer to the TEACH ID CODE instructions in Appendix II.

Power Unit

- If the flatbed is powered with a DewEze Under-the-Hood hydraulic system, refer to the following chart when troubleshooting.
- See Appendix III if the flatbed is powered with the Electric/Hydraulic power unit.

Troubleshooting

Problem	Symptom	Possible Solutions
Hydraulic Pump	No Oil Flow	<ul style="list-style-type: none"> CHECK OIL LEVEL IN RESERVOIR. If oil level is low, check for leaks in system then re-fill to FULL. CHECK BELT TENSION. Replace tensioner or tighten idlers if needed. Replace belt if worn. CHECK FOR SHEARED KEY ON PUMP SHAFT. Replace key. CHECK IF SUCTION HOSE COLLAPSES IN SUCTION. Locate and remove obstruction. CLUTCH NOT FUNCTIONING. See possible clutch solutions. INTERNAL PUMP DAMAGE. Seek assistance from dealer.
Hydraulic Pump	No Oil Pressure	<ul style="list-style-type: none"> HYDRAULIC OIL LEAKS IN SYSTEM. <u>Take safety precautions</u> and check for leaks. Tighten fittings and replace damaged hoses. CHECK FOR MALFUNCTIONING SWITCH. Replace switches. BELT OR CLUTCH MAY BE SLIPPING. Replace tensioner or tighten idlers if needed. Replace belt if worn. VALVE NOT FUNCTIONING. Check for disconnected wires at solenoid or rusted ground wires. Seek assistance from dealer if valve continues to be unresponsive. PRESSURE RELIEF MAY BE SET TOO LOW OR BROKEN. Seek assistance from dealer. CAUTION: PRESSURE EXCEEDING 2,600 PSI CAN DAMAGE THE PUMP. PUMP IS WORN OR DAMAGED. Seek assistance from dealer.
Clutch	Does Not Engage	<ul style="list-style-type: none"> CHECK FOR BLOWN FUSE. Replace fuse. CAUTION: FUSE SHOULD NOT EXCEED 30 AMPS CHECK WIRE TO CLUTCH. Insure there are no breaks or shorts. CHECK FOR BAD SWITCHES IN SYSTEM. Replace switches. CLUTCH IS WORN OUT. Seek assistance from dealer.
Belt(s)	Jumps Off Pulley	<ul style="list-style-type: none"> BELT(S) TOO LOOSE. Replace tensioner or tighten idler pulleys. CHECK FOR EXCESSIVE BELT WEAR. Replace worn belt(s). CHECK FOR LOOSE PUMP BRACKET. Tighten loose bolts. Replace broken bolts. CHECK CRANKSHAFT PULLEY FOR LOOSE OR BROKEN BOLTS. Tighten loose bolts. Replace broken bolts. CHECK ALIGNMENT OF IDLER PULLEYS AND CONDITION OF BEARINGS. Re-align idler pulleys or replace worn idler pulleys. CHECK ALIGNMENT OF CLUTCH AND CRANKSHAFT PULLEY. If misalignment is visible, seek assistance from dealer.



SAFETY WARNING!



Use extreme caution when inspecting an engine. Serious injury or death could result from getting too close! Remove key from ignition when servicing.



600 & 700
Series Flatbed

Parts
Section

Table of Contents

PARTS SECTION

Standard Parts

600/700 Common Parts.....	1.1
Dual Lift Standard Parts.....	1.2

Pivot Squeeze Parts

Crosstube and Arms.....	2.1
-------------------------	-----

Hydraulics

Pivot Squeeze Hydraulics.....	3.1
Hydraulic Reservoir Assy.....	3.2
Pivot Squeeze Valve and Filter.....	3.3
Gen. 2 Valve Service Parts.....	3.4

Electrical

RF Control & Manual Switches.....	4.1
Switch, Clutch Control Assy.....	4.2
Lights and Harness.....	4.3

Replacements & Accessories

Decals, Safety and Operation.....	5.1
600/700 Pivot Squeeze Decals.....	5.2
Swingout Lights.....	5.3
Cargo Lights.....	5.4
30" Toolbox & Fender Skirts.....	5.5
Across the Bed Toolbox.....	5.6
Spinners and Risers.....	5.7
Front Skirt Toolbox Replacement.....	5.8

Appendices

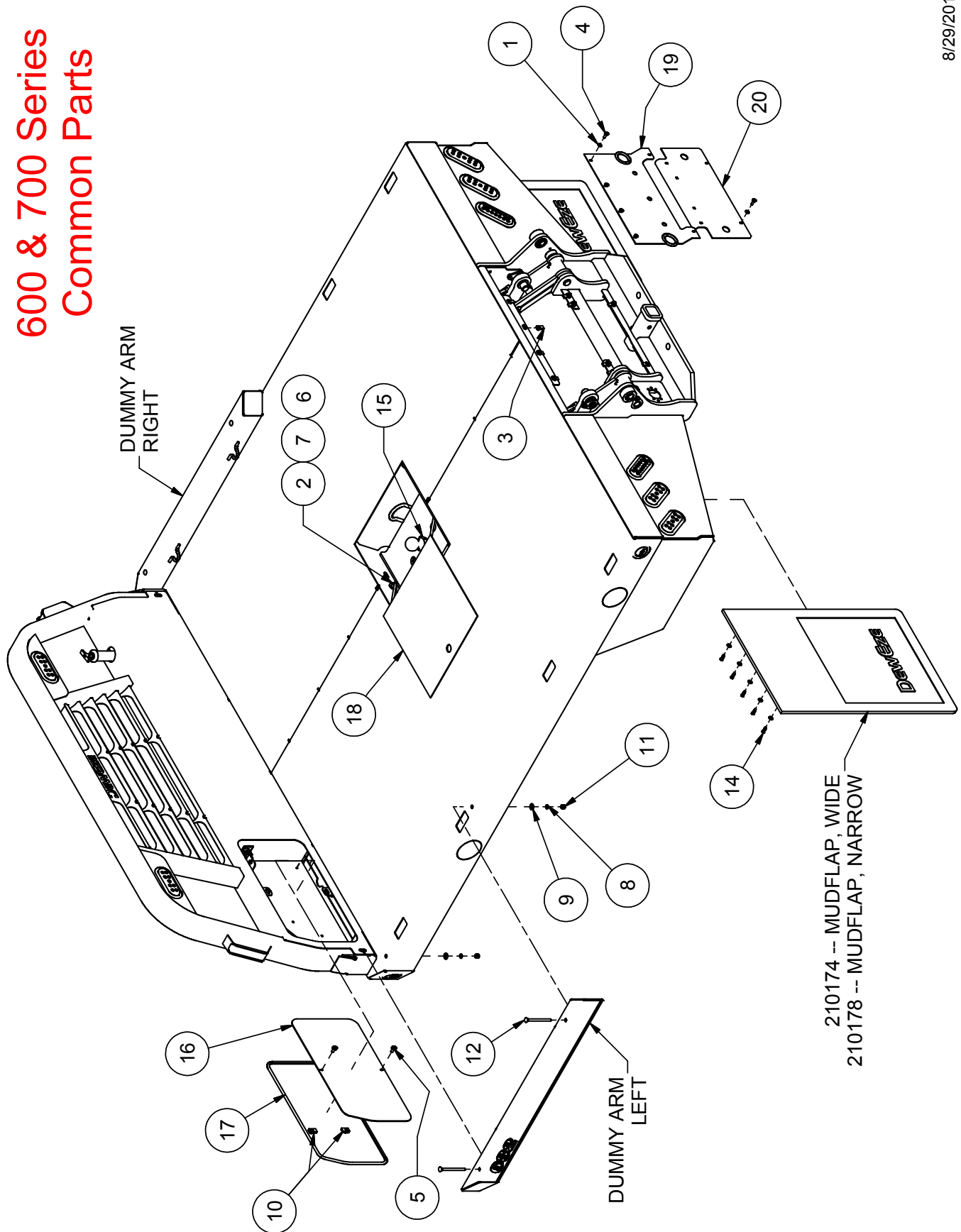
I

GatorHyde Repair.....	6.1
-----------------------	-----

II

Remote Control.....	6.2
2-Bank Wiring - Kar-Tech Remote.....	6.3
3rd Bank Wiring - Kar-Tech Remote.....	6.4

600 & 700 Series Common Parts



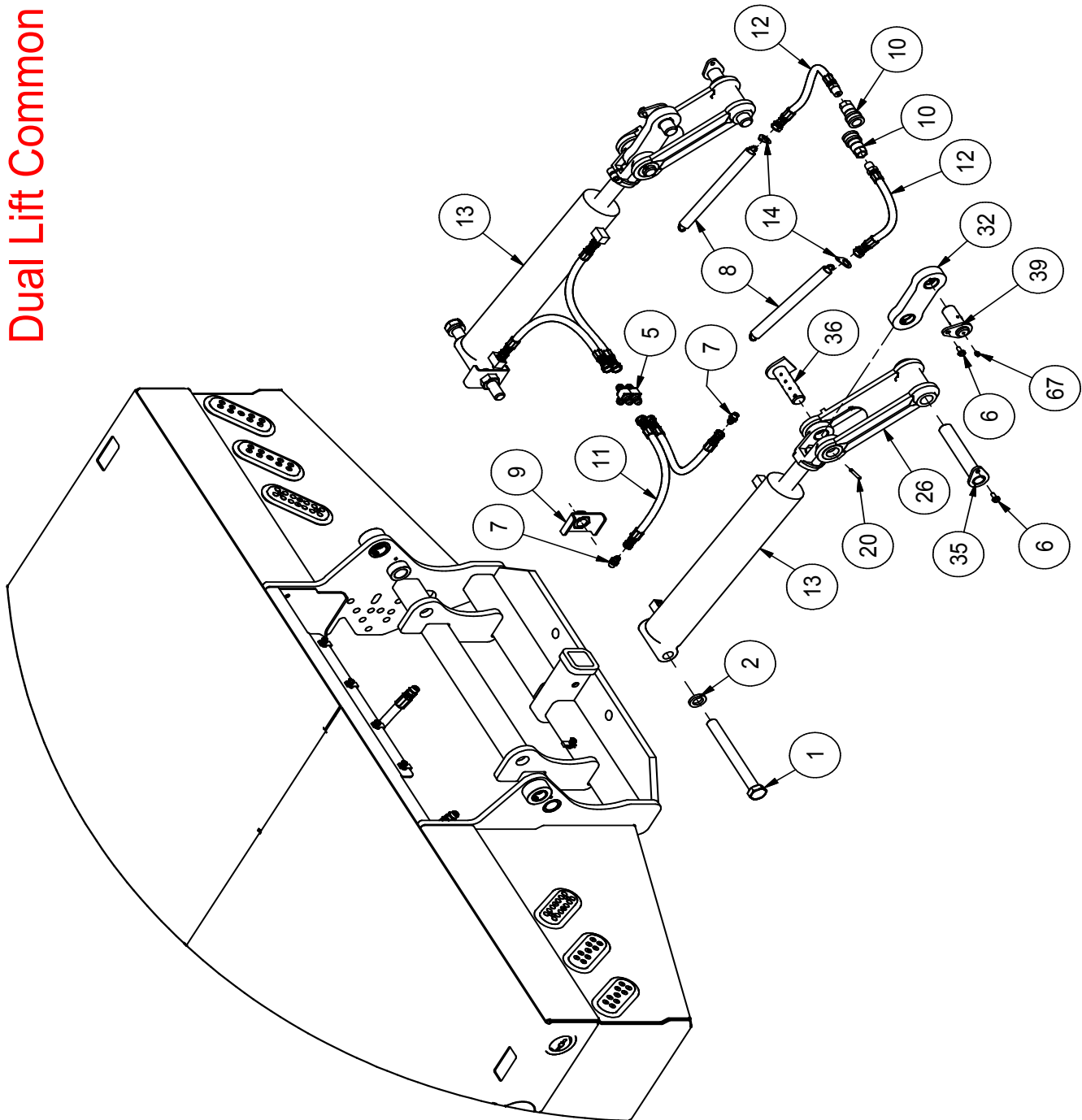
8/29/2013

600 & 700 Series Common Parts

Dummy Arms	
Left & Right	Part #
670	215189
675	215150
677	215191
679	215208
682	215145
684	215193
687	215198
688	215200
770	215210
778	215160
782	215158
784	215202
787	215204
788	215206

Parts List		
ITEM	QTY	DESCRIPTION
1	10	WASHER, 5/16" FLAT SAE
2	2	BOLT, 1/2-13 X 1.5 SHCS
3	10	NUT, 5/16-18 U-TYPE .75L
4	10	BOLT, 5/16-18 X .75
5	2	BOLT, 3/8-16 X 0.75, WIZ FLANGE
6	2	NUT, 1/2-13 WIZ FLANGE
7	2	WASHER, 1/2" FLAT STANDARD
8	4	WASHER, 3/8" LOCK
9	4	WASHER, 3/8" FLAT STANDARD
10	2	NUT, 3/8-16 U-TYPE .75L
11	4	NUT, 3/8-16 GR 5
12	4	Bolt, 3/8-16 X 5 in Carriage
14	1	INSTALL HARDWARE
15	1	HITCH BALL AND NUT
16	1	VALVE COVER
17	1	EDGE TRIM, VALVE COVER
18	1	BALL WELL DOOR WELDMENT
19	1	CENTER TAILBOARD DOOR WELDMENT, UPPER
20	1	CENTER TAILBOARD, LOWER, ARM BED

Dual Lift Common Parts



Dual Lift Common Parts

Dual Lift Cylinders
Production Part# 223038
Seal Kit Part# 212012

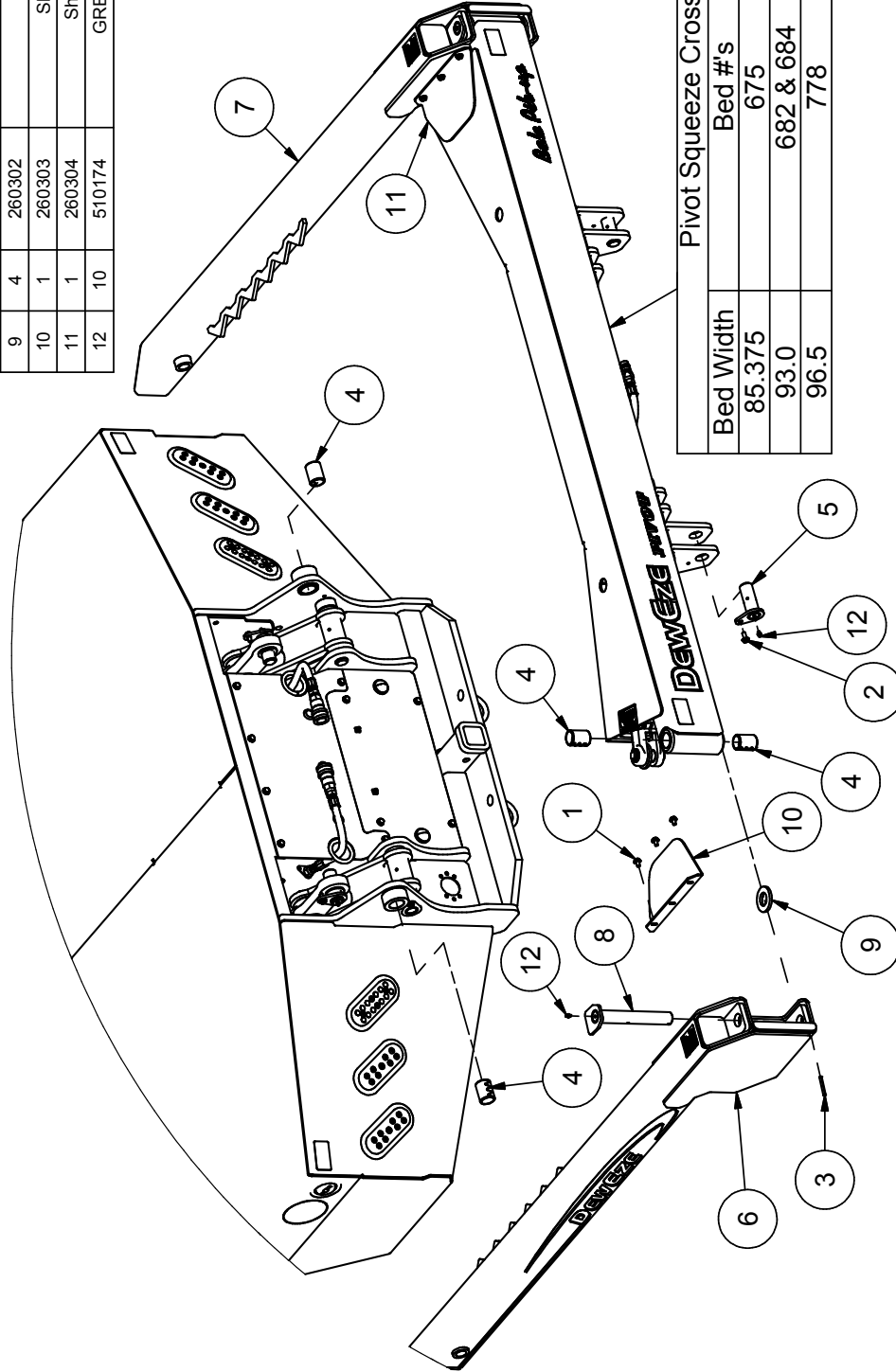
Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	2	110352	BOLT, 1-8 X 10, GR8
6	10	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE
2	2	110649	WASHER, 1" LOCK
5	2	120242	ADAPTER, 8MJ-8MJ-8MJ
7	4	120319	ADAPTER, 6MJ-6MB
20	2	200150	ROLL PIN, 1/4 X 2
8	2	202022	SPRING, 1" O.D. X 12" L X .105 WIRE
26	2	210935	IDLER ARM, MACHINE DWG.
32	2	214002	PUSH ARM ASSY, DUAL LIFT
35	2	215141	PIN WELDMENT, 1-1/4 X 7
36	2	215142	PIN WELDMENT, 1-1/4 X 4
9	2	215144	KEEPER, 1 IN NUT, WELDMENT
39	2	215148	PIN WELDMENT, CROSSTUBE LINK
10	2	220084	COUPLER, PIONEER FEMALE
11	4	220681	HOSE ASSY, FLATBED DUAL LIFT
12	2	220682	HOSE ASSY, FLATBED SQUEEZE SHORT
13	2	223038	LIFT CYLINDER 3.50 X 16.6
14	2	260111	MOUNT, HOSE SPRING
67	8	510174	GREASE ZERK, 1/4-28 ST

600 - 700 WITH GENERATION 2 VALVES

COMMON HOSES	SQUEEZE HOSES SHORT	LIFT HOSES SHORT	RESERVOIR RETURN	HYDRAULIC HOSE KIT #
	6MTF3 - 8FJX / 8MP 2 ea.	8M3K - 6FJX / 8FJX 4 ea.	12-10FJX / 12-12MPX90 1 ea.	
	220682 (17 in.)	220681 (17 in.)	220691 (12.25 in.)	223033
	SQUEEZE HOSES	LIFT HOSES		
	8M3K - 8FJX / 8MJ 2 ea.	8M3K - 6FJX / 8FJX 2 ea.		
	220683 (106 in.)	220687 (76 in.)		223034
80 in. _70				
96 in. _75 & _78	220684 (122 in.)	220688 (99 in.)		223035
106-110 in. _77 & _82, _79 & _84	220685 (132 in.)	220689 (111 in.)		223036
132-136 in. _87 & _88	220686 (158 in.)	220690 (137 in.)		223037

Pivot Squeeze Crosstube & Arms

Parts List			DESCRIPTION
ITEM	QTY	PART #	
1	6	110426	BOLT, 5/16-18 X 0.5, WIZ FLANGE
2	10	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE
3	4	200150	ROLL PIN, 1/4 X 2
4	6	202023	BUSHING, 1.5 X 1.25 X 2.0 SPLIT CG/ID
5	2	215140	PIN WELDMENT, 1-1/4 X 3
6	1	215237	Weldment, Pivot Squeeze Arm Left
7	1	215238	Weldment, Pivot Squeeze Arm Right
8	2	215239	Weldment, Pivot Pin
9	4	260302	Shim Washer
10	1	260303	Shield, Pivot Arm, Left
11	1	260304	Shield, Pivot Arm, Right
12	10	510174	GREASE ZERK, 1/4-28 ST



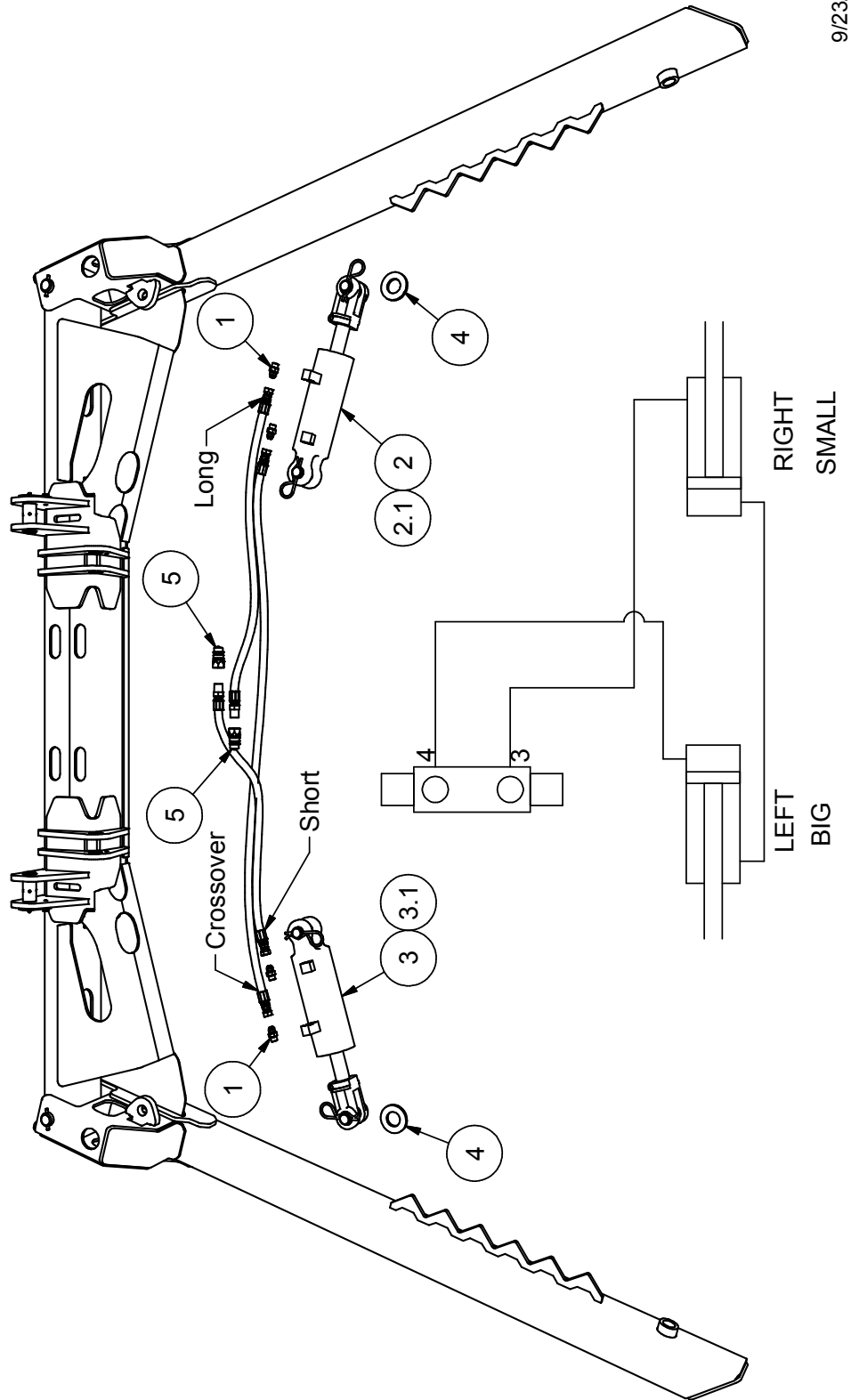
Pivot Squeeze Crosstubes

Bed Width	Bed #'s	Part #
85.375	675	215236
93.0	682 & 684	215240
96.5	778	215241

Pivot Squeeze Hydraulics

Parts List		
ITEM	QTY	PART # DESCRIPTION
1	4	120319 ADAPTER, 6MJ-6MB
2	1	223042 Pivot Cylinder, 3.0 x 5.0
2.1		212021 Seal Kit
3	1	223043 Pivot Cylinder, 3.25 x 5.0
3.1		212025 Seal Kit
4	4	260302 Shim Washer
5	2	420005 COUPLER, PIONEER MALE

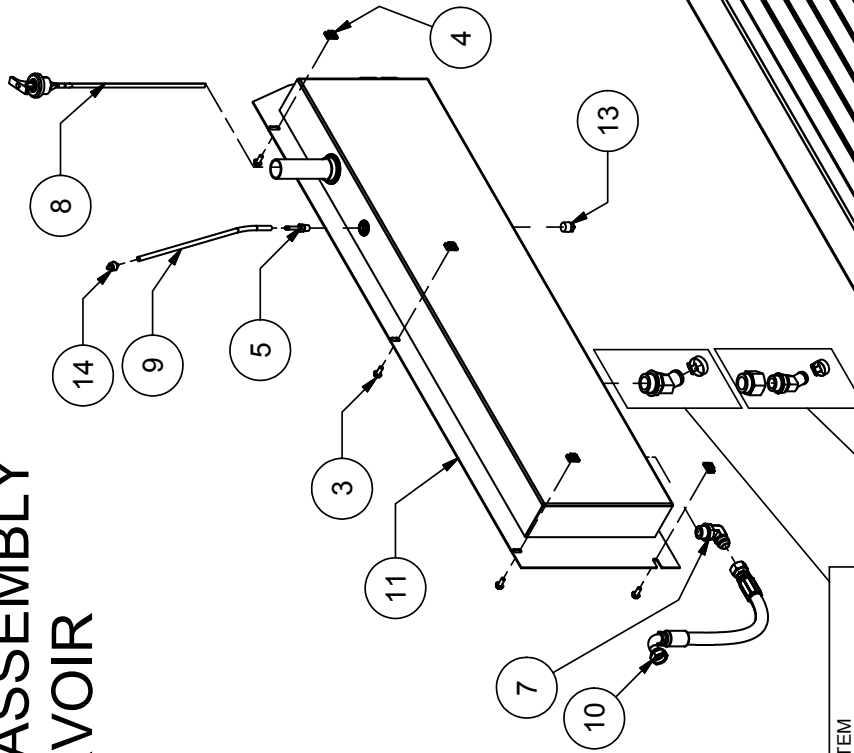
Pivot Squeeze Hoses				
Hoses	67-	68-	7--	
Pivot Squeeze Crossover	220711 (56in)	220716 (62.5in)	220714 (66in)	
Pivot Squeeze Short	220712 (27in)	220717 (30in)	220713 (32in)	
Pivot Squeeze Long	220713 (32in)	220718 (35in)	220715 (37in)	



HYDRAULIC ASSEMBLY RESERVOIR

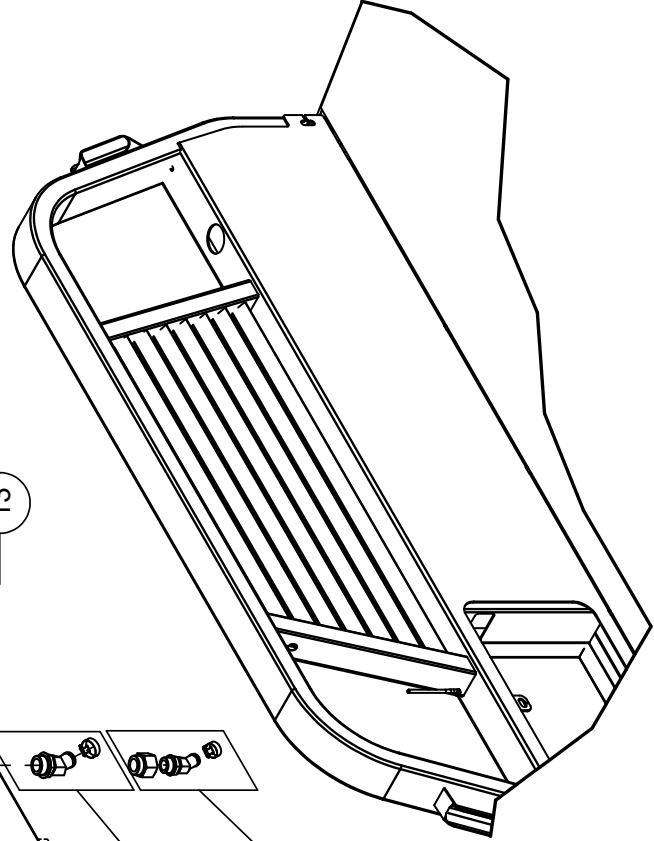
Parts List

ITEM	PART #	QTY	DESCRIPTION
1	110290	2	NUT, 1/4-20 WIZ FLANGE
2	110434	4	BOLT, 1/4-20 X 0.5, WIZ FLANGE
3	110444	4	BOLT, 5/16-18 X 0.75, WIZ FLANGE
4	110616	4	NUT, 5/16", J-TYPE, CAGE, .5C
5	120237	1	ADAPTER, 4BH-4MP
6	120244	1	ADAPTER, 12MJ-12MP
7	120257	1	ADAPTER, 12MJ-12MB90
8	220566	1	DIP STICK
9	220587	1	VENT HOSE
10	220700	1	FILTER TO RESERVOIR HOSE
11	225012	1	Reservoir, Flatbed, Remote Filter
12	260265	1	MOUNTING BRACKET, FILTER
13	500175	1	FITTING, PLUG 1/2" PIPE
14	540031	1	FUEL FILTER



12 & 17 GALLON SYSTEM		
PART #	QTY	DESCRIPTION
120189	1	ADAPTER, 20MB-20BH 45°
511002	1	HOSE CLAMP, #24

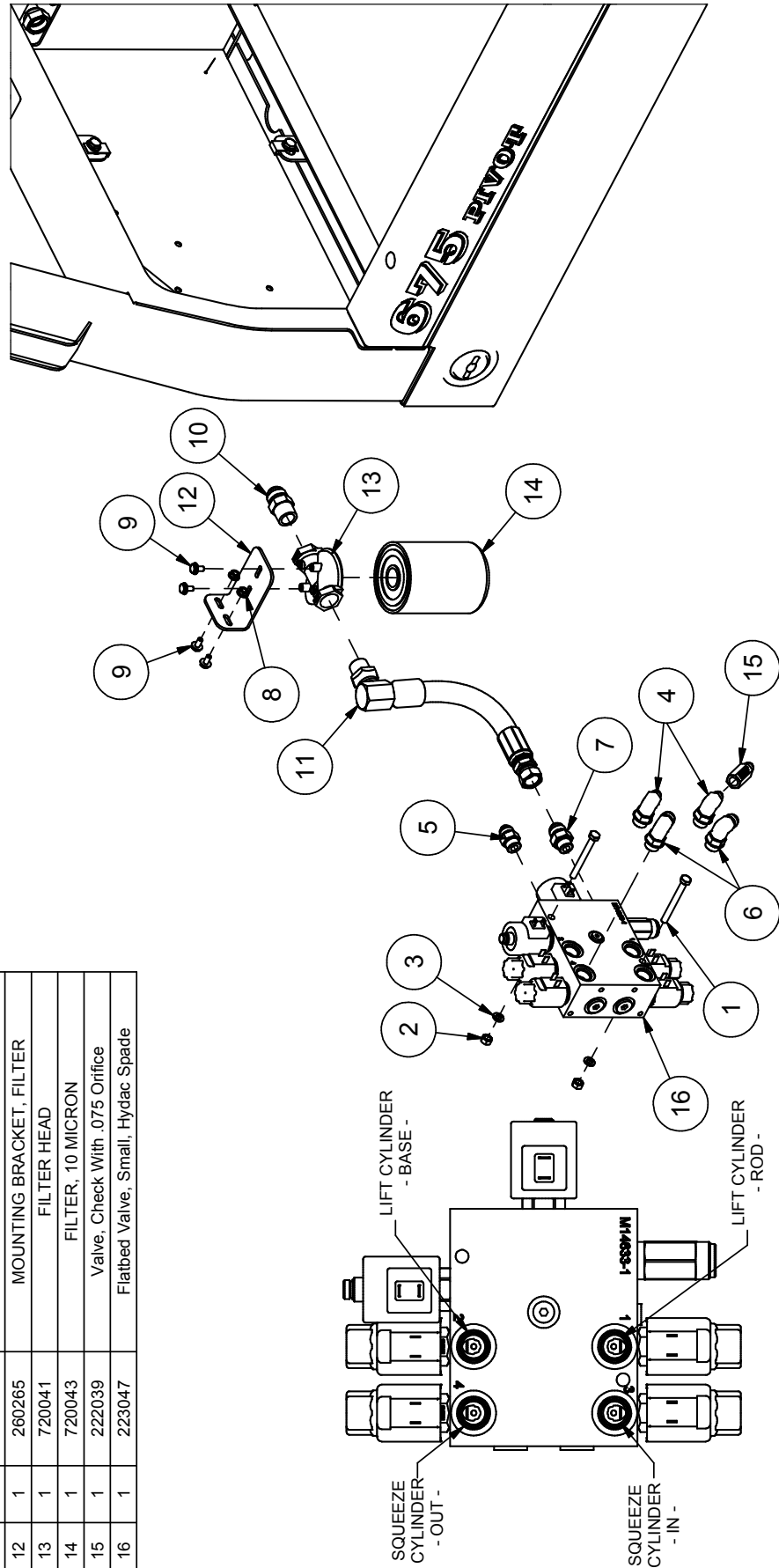
5, 7 & 9 GALLON SYSTEM		
PART #	QTY	DESCRIPTION
120188	1	ADAPTER, 16MB-16BH 45°
120511	1	ADAPTER, 20MB-16FOR
720107	1	HOSE CLAMP, #20



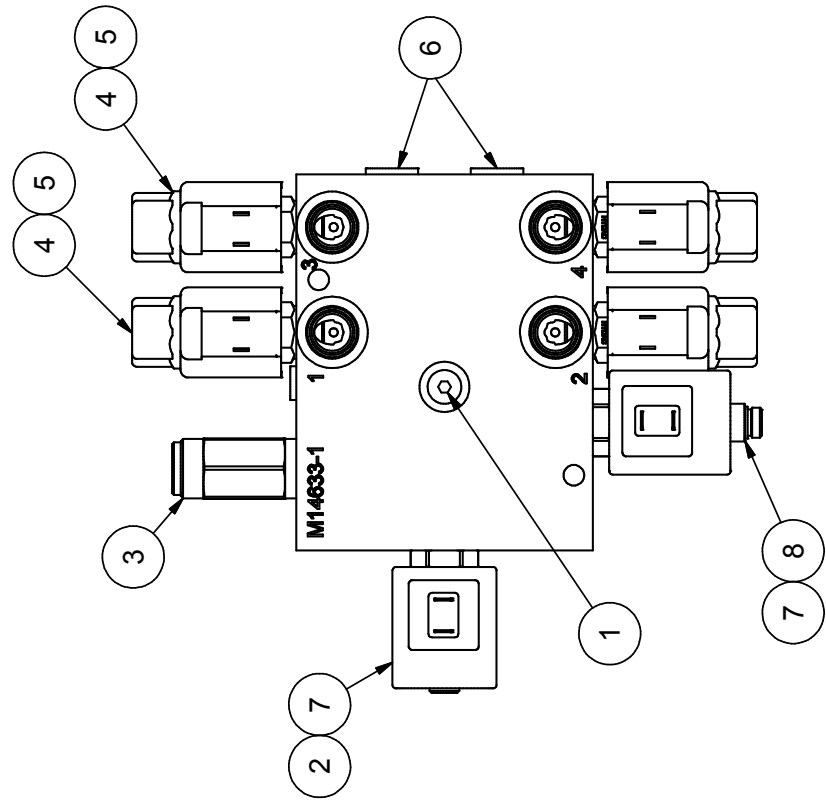
6/15/2012

Parts List		
ITEM	QTY	PART # DESCRIPTION
1	2	110538 BOLT, 5/16-18 X 3.0
2	2	110608 NUT, 5/16-18
3	2	110674 WASHER, 5/16" LOCK
4	2	120134 ADAPTER, 6MJ-8MB90
5	1	120277 ADAPTER, 8MJ-8MB
6	2	120288 ADAPTER, 8MJ-8MB90
7	1	120493 ADAPTER, 10MJ-8MB
8	2	110290 NUT, 1/4-20 WIZ FLANGE
9	4	110434 BOLT, 1/4-20 X 0.5, WIZ FLANGE
10	1	120244 ADAPTER, 12MJ-12MP
11	1	220691 RESERVOIR RETURN
12	1	260265 MOUNTING BRACKET, FILTER
13	1	720041 FILTER HEAD
14	1	720043 FILTER, 10 MICRON
15	1	222039 Valve, Check With .075 Orifice
16	1	223047 Flatbed Valve, Small, Hydac Spade

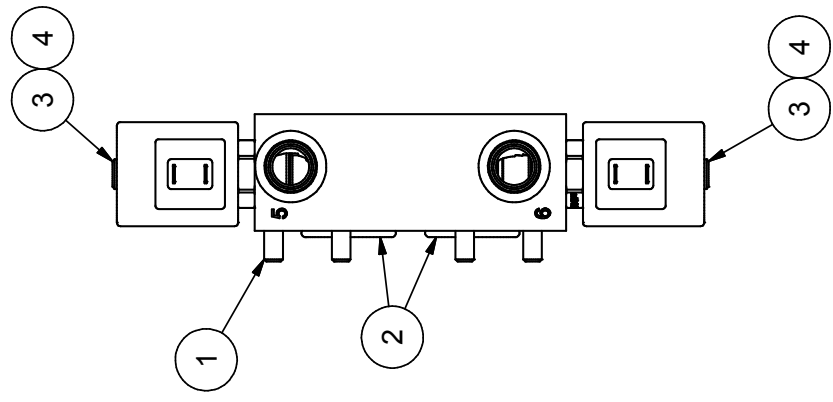
Pivot Squeeze Valve & Filter



**GEN 2 VALVE
-08 HYDAC DUAL SPADE
SERVICE PARTS**

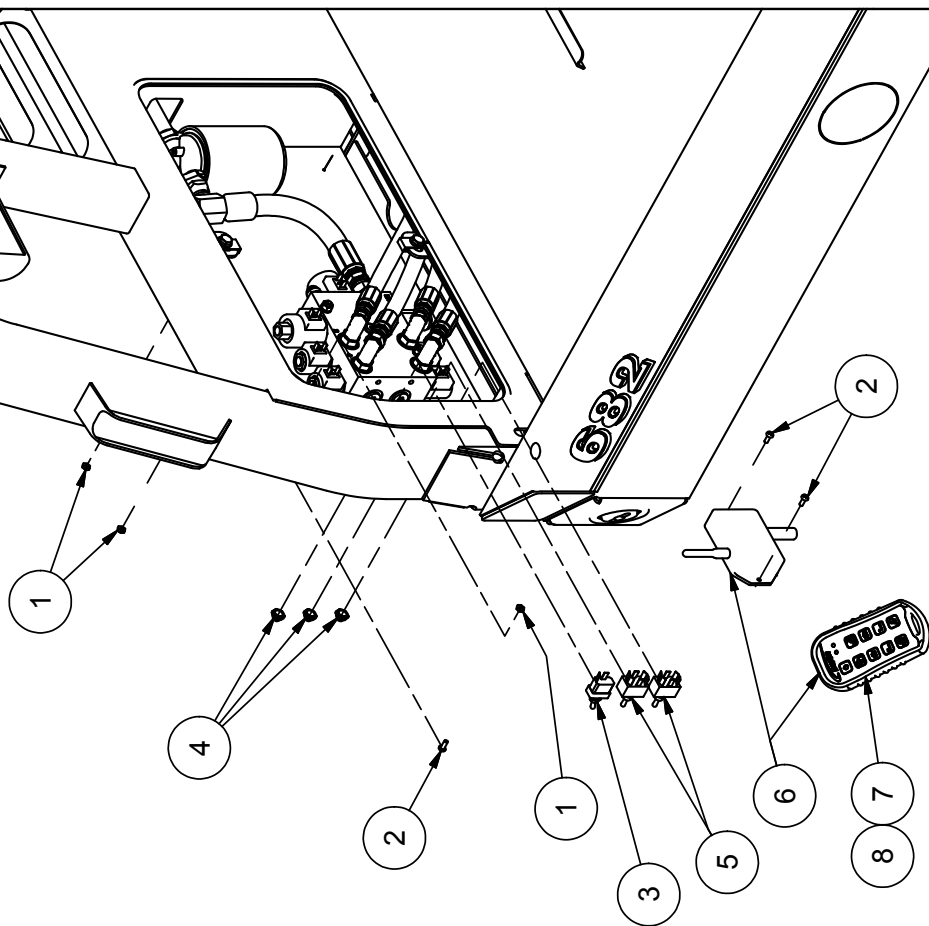


Flatbed Valve, Small, Hydac Spade P/N 223047		DESCRIPTION	
ITEM	QTY	PART #	
1	1	120062	O-Ring Plug, #4 7/16-20
2	1	222002	Valve, Directional, 4-Way
3	1	222004	Valve, Pressure Relief
4	4	222010	Cartridge, #8 HYDAC Double Poppet
5	4	222011	Coil, #8 Hydac, Dual Spade
6	2	720164	O-Ring Plug, #8 3/4-16
7	2	820229	COIL, #10 DUAL SPADE
8	1	820232	Spool, #10 Valve



VALVE, 3rd BANK ADD ON P/N 223017		DESCRIPTION	
ITEM	QTY	PART #	
1	4	110168	BOLT, 5/16-18 X 2.0 SHCS
2	2	120376	O-RING, -219, 90 DURO
3	2	222003	Valve, Poppet N.C. SOL VALVE
4	2	820229	COIL, #10 DUAL SPADE

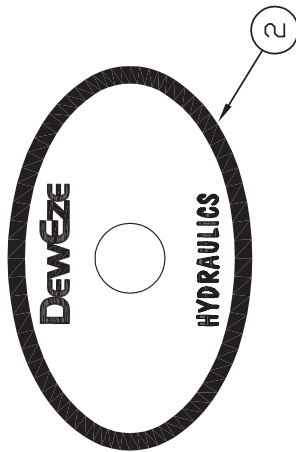
RF Control & Manual Switches



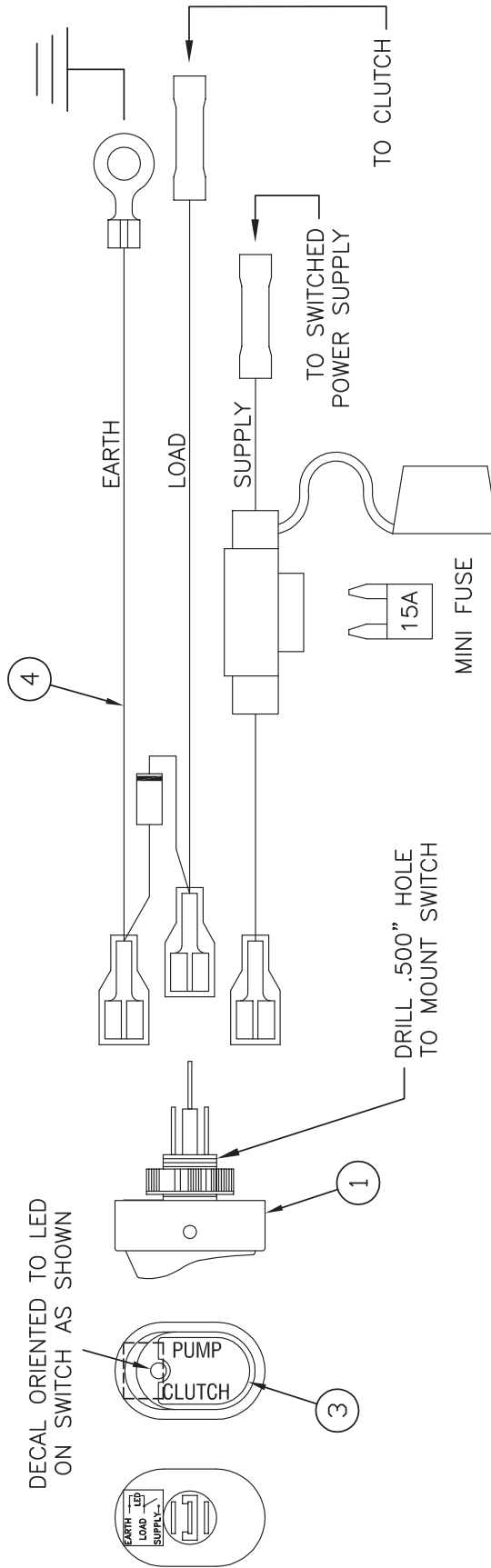
Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	3	110119	NUT, 10-24 LOCK
2	3	110264	BOLT, 10-24 X .5 STAINLESS, PHILLIPS
3	1	132027	Switch, Spst, Toggle .250 Tab
4	3	132035	SWITCH BOOT
5	2	232086	SWITCH, DPDT, M, 6 PIN, PUSH ON
6	1	233003	Transmitter & Receiver, Kar-Tech
7		233004	Transmitter, Kar-Tech
8			Two AA Batteries

4/12/2011

ITEM	QUAN	PART #	NAME
1	1	132044	SWITCH, SPST ROCKER LED
2	1	702002	DECAL, DEWEZE HYDRAULICS
3	1	702061	DECAL, PUMP CLUTCH
4	1	732002	HARNESS, CLUTCH CONTROL



DECAL ORIENTED TO LED
ON SWITCH AS SHOWN

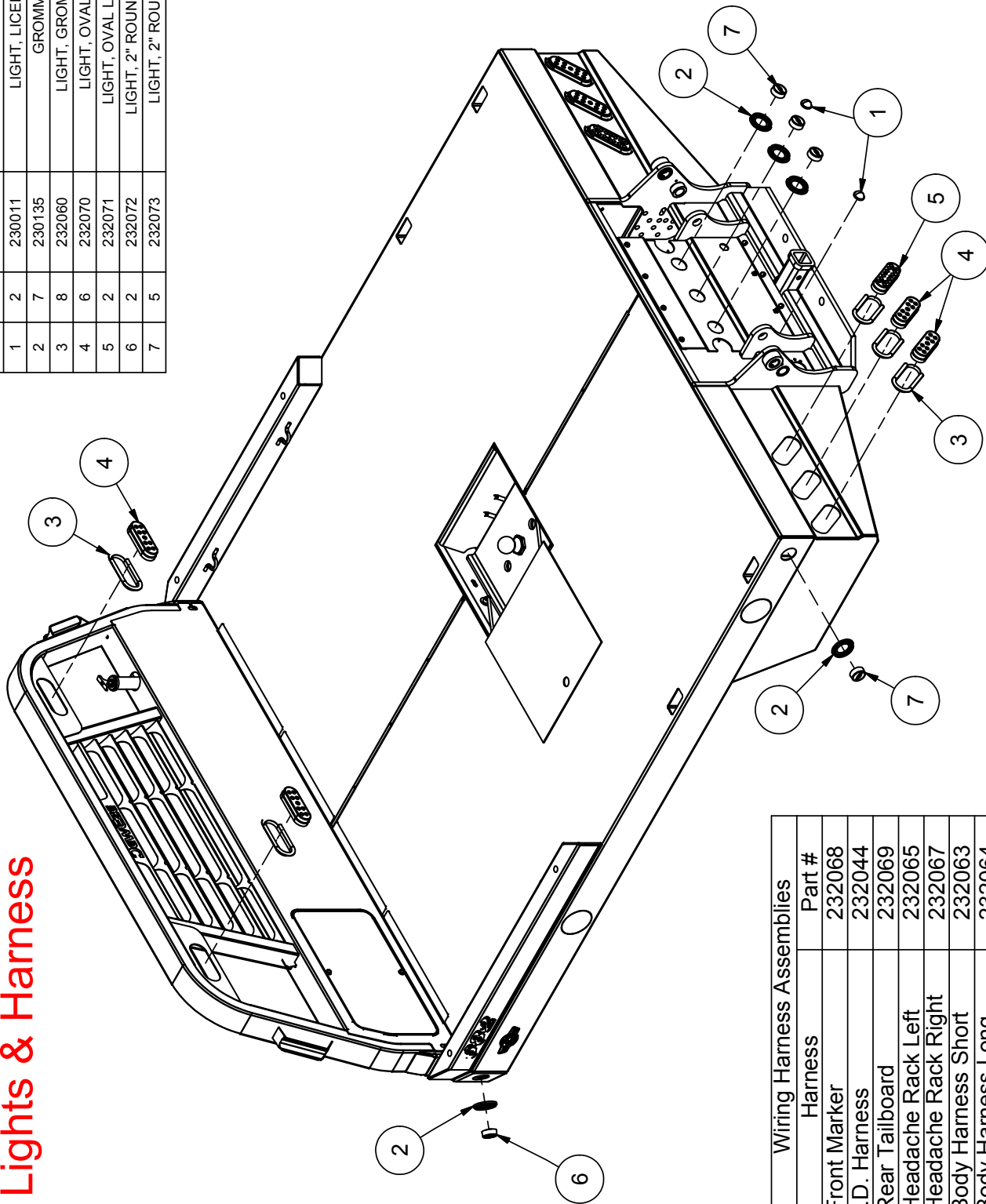


DRILL .500" HOLE
TO MOUNT SWITCH

15A
MINI FUSE

Lights & Harness

Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	2	230011	LIGHT, LICENSE PLATE
2	7	230135	GROMMET, 2"
3	8	232060	LIGHT, GROMMET OVAL
4	6	232070	LIGHT, OVAL LED, S/T/T
5	2	232071	LIGHT, OVAL LED, BACK-UP
6	2	232072	LIGHT, 2" ROUND LED, AMBER
7	5	232073	LIGHT, 2" ROUND LED, RED

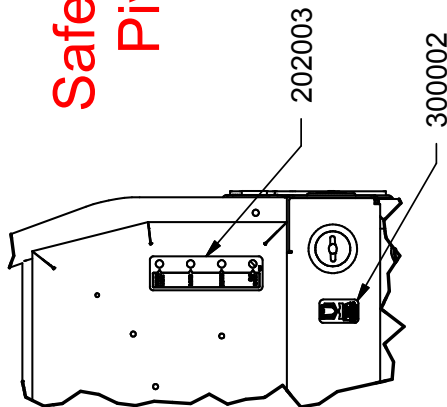


Wiring Harness Assemblies	
Harness	Part #
Front Marker	232068
I.D. Harness	232044
Rear Tailboard	232069
Headache Rack Left	232065
Headache Rack Right	232067
Body Harness Short	232063
Body Harness Long	232064

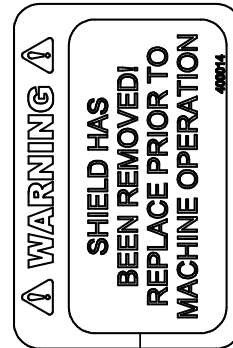
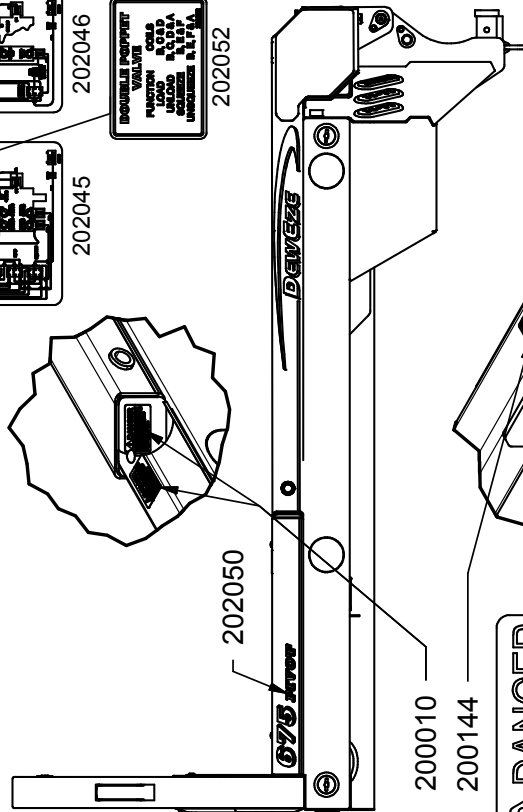
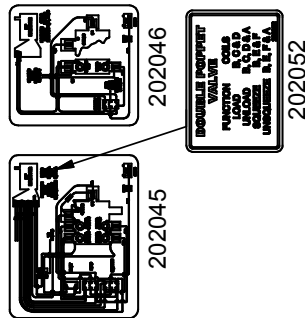
6/16/2009

Decals Safety & Operation Pivot Squeeze

PART #	QTY	DESCRIPTION
200010	4	DANGER DECAL, HORIZONTAL
200137	1	BALE PIK-UP, SILVER SCRIPT
200144	2	DANGER DECAL, VERTICAL
200181	1	DEWEZE, SILVER OUTLINE
200190	4	REFLECTIVE DECAL
202003	1	DECAL, SWITCH IDENTIFICATION
202045	1	DECAL, WIRING DIAGRAM, KAR-TECH REMOTE
202046	1	DECAL, 3rd BANK OPTION, KAR-TECH REMOTE
202050	3	DECAL, PIVOT
202052	1	DECAL, DOUBLE POPPET VALVE
300002	1	FEMA DECAL



INSIDE OF VALVE COVER
2 BANK 3rd BANK



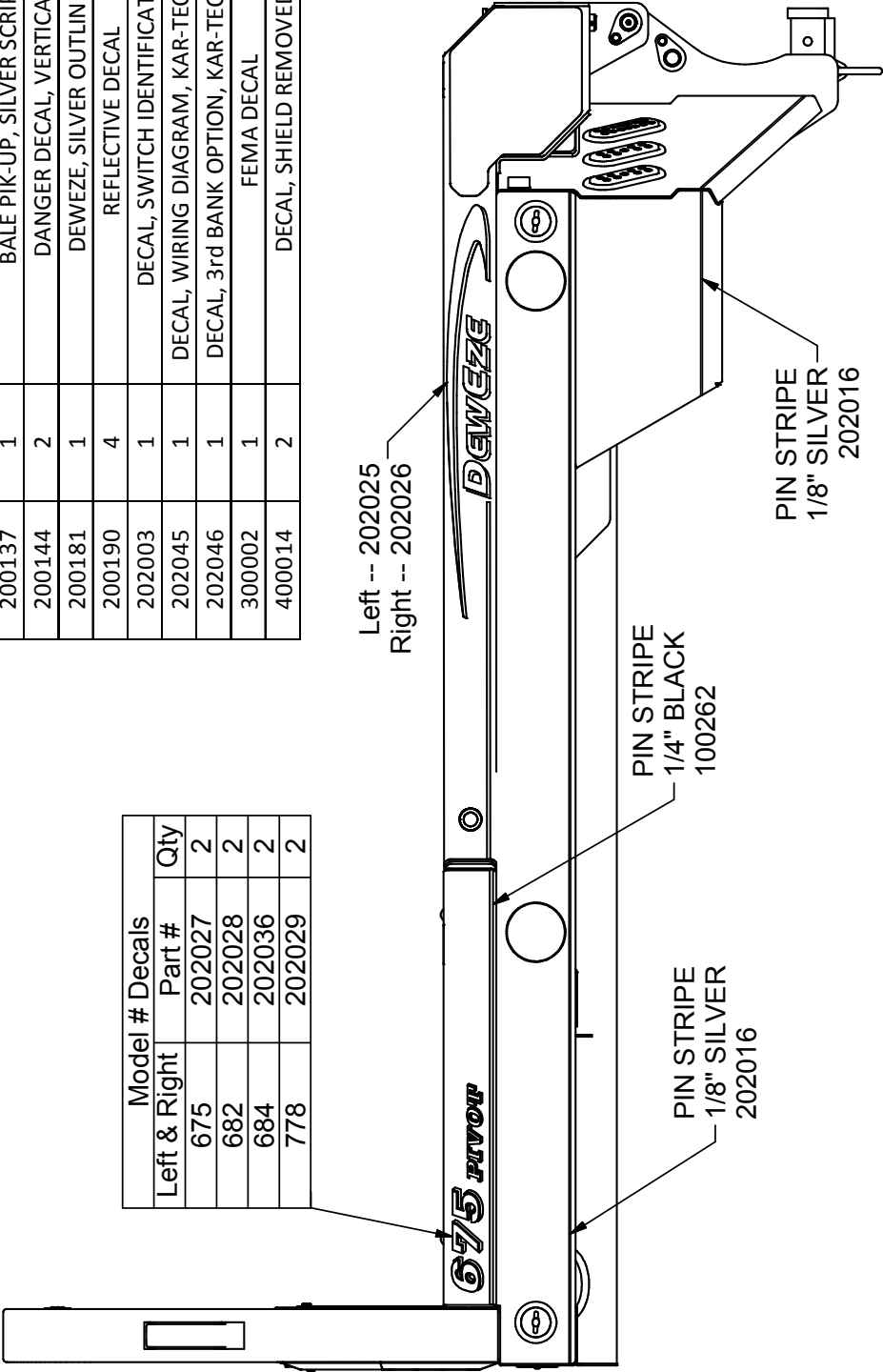
IT IS THE OWNER'S RESPONSIBILITY TO REPLACE MISSING OR DAMAGED WARNING DECALS. DECALS ARE AVAILABLE FROM YOUR DEALER OR FROM THE DEWEZE FACTORY.

10/25/2013

600 & 700 Series Pivot Squeeze Decals

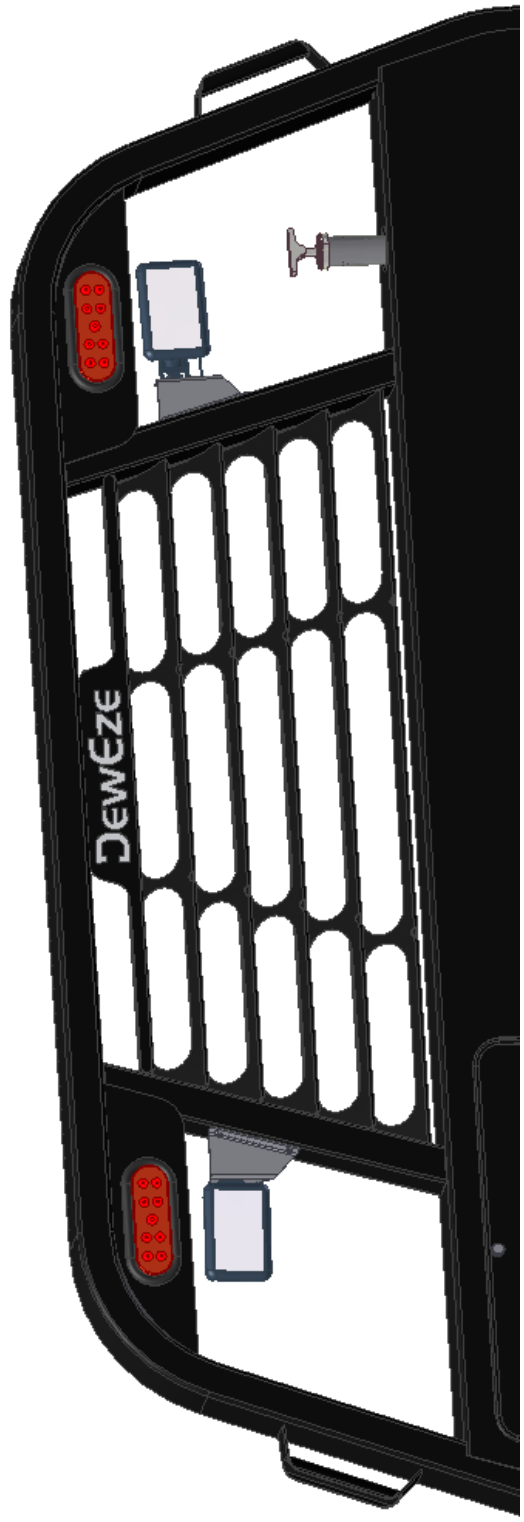
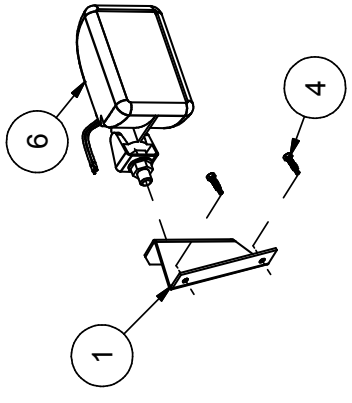
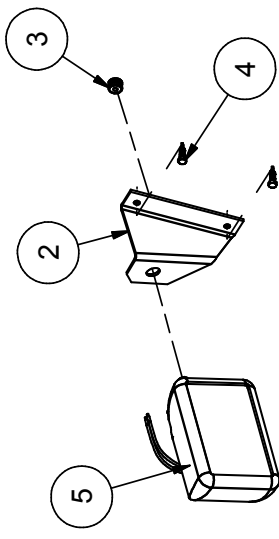
Model # Decals		
Left & Right	Part #	Qty
675	202027	2
682	202028	2
684	202036	2
778	202029	2

Decal Kit, 6-700 Series Part # 205058		
PART #	QTY	DESCRIPTION
200010	4	DANGER DECAL, HORIZONTAL
200137	1	BALE PIK-UP, SILVER SCRIPT
200144	2	DANGER DECAL, VERTICAL
200181	1	DEWEZE, SILVER OUTLINE
200190	4	REFLECTIVE DECAL
202003	1	DECAL, SWITCH IDENTIFICATION
202045	1	DECAL, WIRING DIAGRAM, KAR-TECH REMOTE
202046	1	DECAL, 3rd BANK OPTION, KAR-TECH REMOTE
300002	1	FEMA DECAL
400014	2	DECAL, SHIELD REMOVED



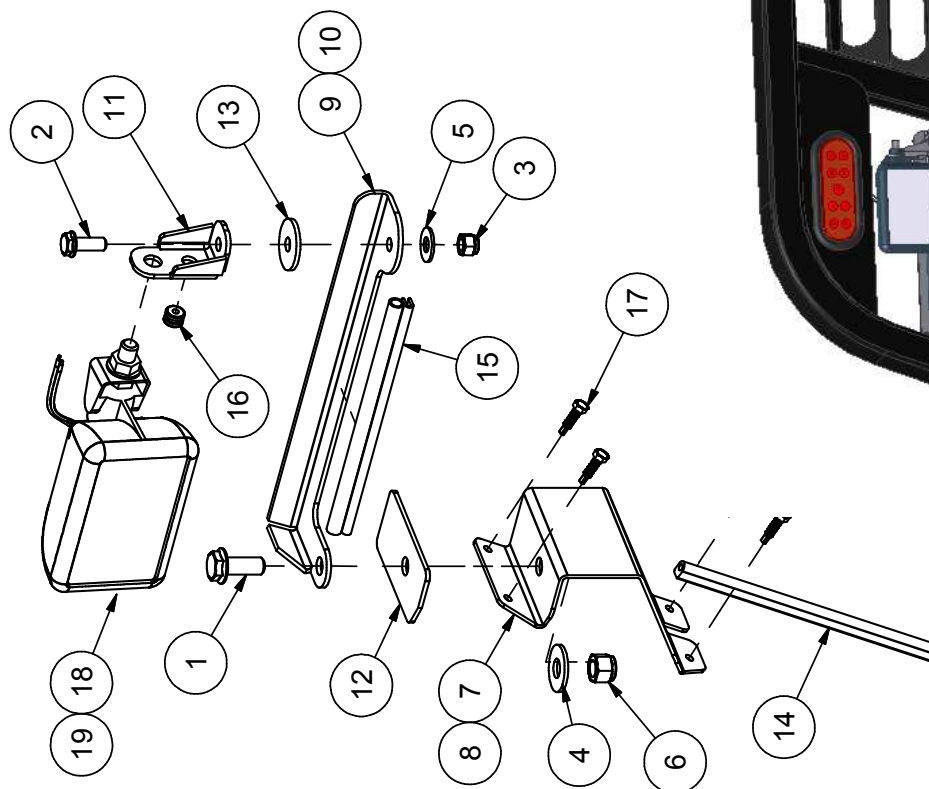
Flatbed Accessories Cargo Lights

Cargo Light Assy, Part# 211391		
ITEM	QTY	DESCRIPTION
1	1	LIGHT BRACKET, RIGHT
2	1	LIGHT BRACKET, LEFT
3	1	GROMMET, 3/16 ID X 9/16 OD
4	4	SCREW, 3/16 X .75 TEK SELF-TAP
5	1	WORK LIGHT, LEFT
6	1	WORK LIGHT, RIGHT
NOT SHOWN		
20	130004	Wire, 14ga, Black
1	130010	Terminal, Scotch Lock
1	132027	Switch, Spst, Toggle .250 Tab
1	132035	Boot, 1/2 Toggle Switch Seal
3	530071	Terminal, Ring, 10-12 Ga, 5/16
3	730008	Terminal, Butt Connector, 14-16
2	730010	Terminal, Ring, 14-16ga, 10-32



8/29/2013

Flatbed Accessories Swingout Lights



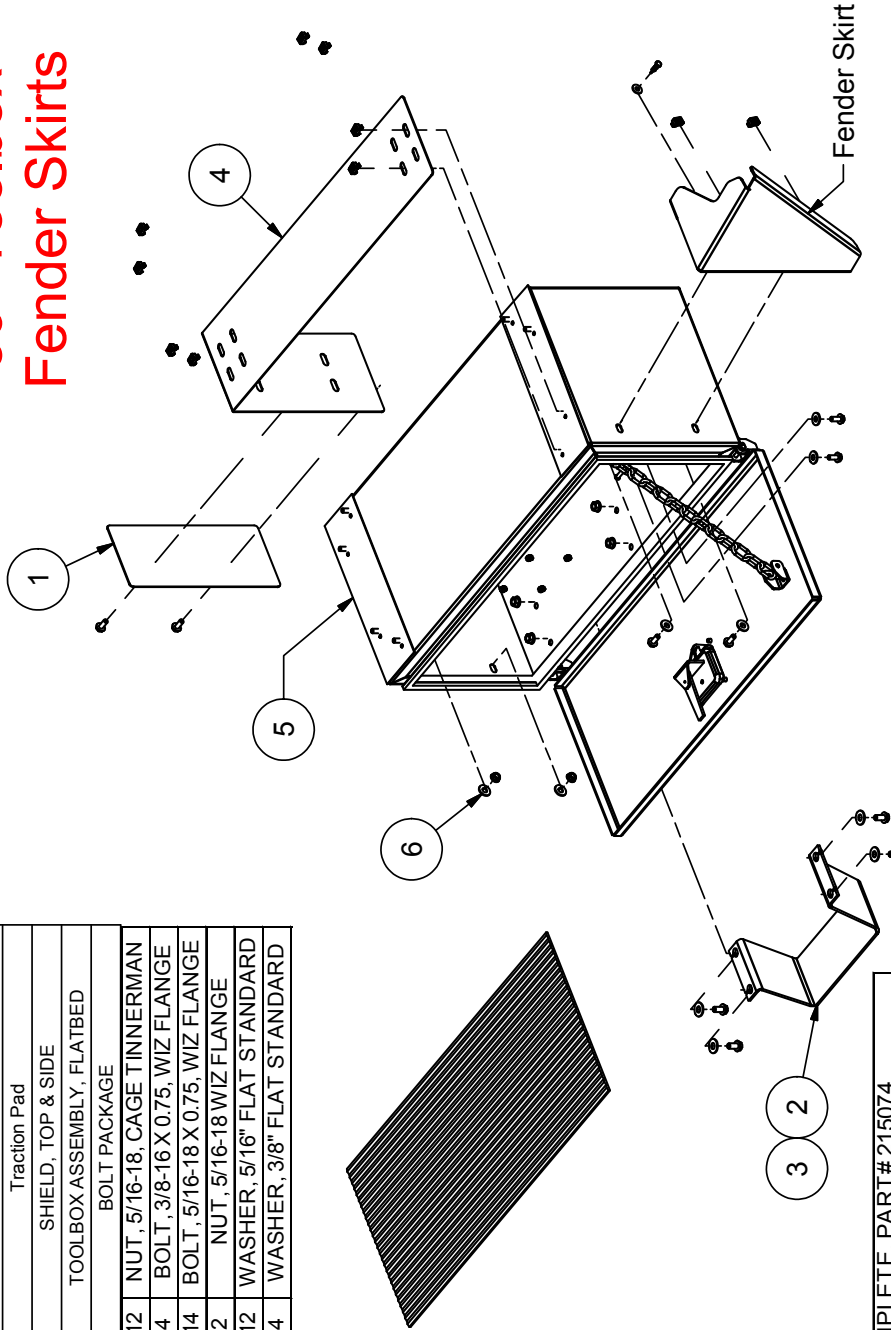
Swing Light Kit, Part# 205013			
ITEM	QTY	PART #	DESCRIPTION
1	2	110001	BOLT, 1/2-13 X 1.25, WIZ FLANGE
2	2	110440	BOLT, 3/8-16 X 1, WIZ FLANGE
3	2	110618	NUT, 3/8-16 LOCK NYLON INSERT
4	2	110658	WASHER, 1/2" FLAT STANDARD
5	2	110676	WASHER, 3/8" FLAT STANDARD
6	2	111034	NUT, 1/2-13 LOCK NYLON
7	1	211741	SWING LIGHT MOUNT, LEFT
8	1	211742	SWING LIGHT MOUNT, RIGHT
9	1	211743	SWING LIGHT ARM, LEFT
10	1	211744	SWING LIGHT ARM, RIGHT
11	2	211745	LIGHT MOUNT
12	2	211746	FRICTION MOUNTING PLATE
13	2	211747	FRICTION WASHER 1.5"
14	2	211748	SWING LIGHT, RUBBER SEAL
15	2	211749	SWINGLIGHT EDGE TRIM
16	2	230146	GROMMET, 3/16 ID X 9/16 OD
17	8	710586	SCREW, 1/4 X 1 TEK SELF-TAP
18	1	830031	WORK LIGHT, LEFT
19	1	830035	WORK LIGHT, RIGHT
			NOT SHOWN
	20'	130004	WIRE, 14GA BLACK
	2	130023	TERMINAL, RING, 14-16GA 3/8"
	1	132027	Switch, Spst, Toggle .250 Tab
	1	132035	Boot, 1/2 Toogle Switch Seal
	2	730008	TERMINAL, BUTT CONNECTOR, 14-16
	2	730010	TERMINAL, RING, 14-16GA, 10-32



Toolbox Complete W/Step, Part# 205011

ITEM	QTY	PART #	DESCRIPTION
1	1	202001	DECAL, CHIP GUARD
2	1	211109	STEP, TOOLBOX
3	1	540082	Traction Pad
4	1	211684	SHIELD, TOP & SIDE
5	1	215074	TOOLBOX ASSEMBLY, FLATBED
6	1	205012	BOLT PACKAGE
		110258	12 NUT, 5/16-18, CAGE TINNERMAN
		110437	4 BOLT, 3/8-16 X 0.75, WIZ FLANGE
		110444	14 BOLT, 5/16-18 X 0.75, WIZ FLANGE
		110606	2 NUT, 5/16-18 WIZ FLANGE
		110665	12 WASHER, 5/16" FLAT STANDARD
		110676	4 WASHER, 3/8" FLAT STANDARD

Flatbed Accessories 30" Toolbox Fender Skirts



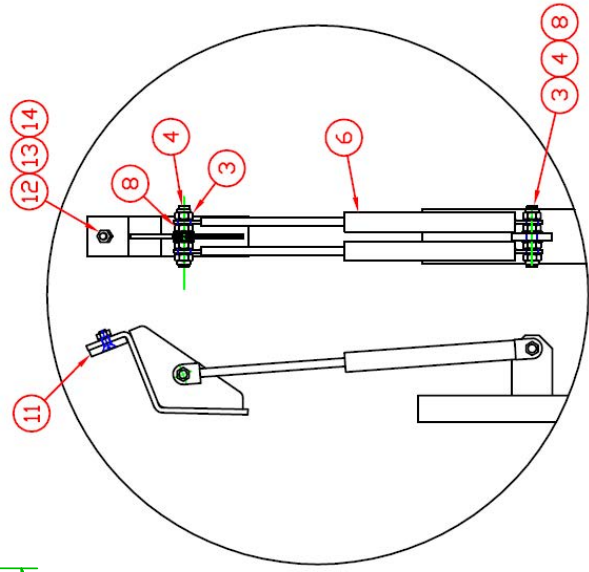
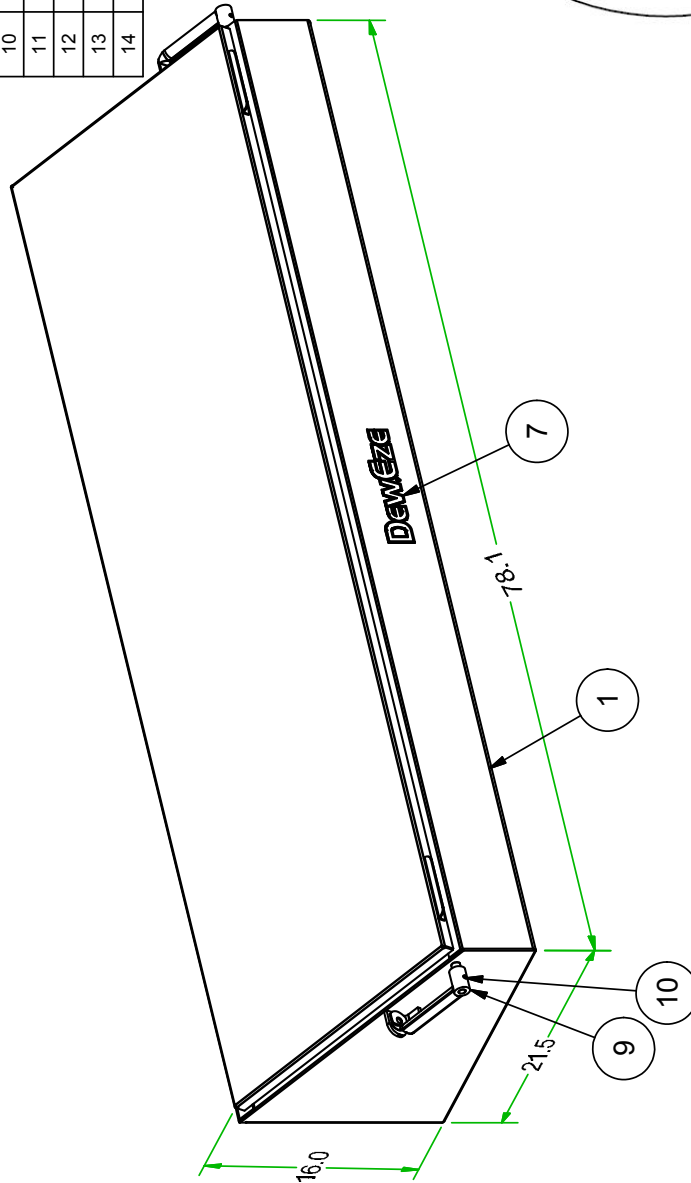
TOOLBOX COMPLETE, PART# 215074		DESCRIPTION
PART #	QTY	
110174	4	NUT, 1/4-20 LOCK 2-WAY
110300	3	COTTER PIN, 3/32 X 0.75
112011	3	PUSH NUT, WASHER CAP STYLE
200184	1	SEAL, LATCH
202010	1	SEAL, TOOLBOX LID (TRIM-LOK X-2897)
211119	1	TOOL BOX MAT
212003	2	GASKET, TOOLBOX MOUNT
212007	1	LATCH W/STUDS
215072	1	TOOL BOX DOOR AND HINGE W/DMT
215073	1	TOOL BOX AND HINGE W/DMT

Fender Skirts	Kits	Left	Right
400 Series	Short	205070	260269
	Long	N/A	211293
500 Series	Short	205071	260271
	Long	N/A	211587
600 Series	Short	205070	260269
	Long	205072	260273
700 Series	Short	205071	260271
	Long	205073	260275
			260276

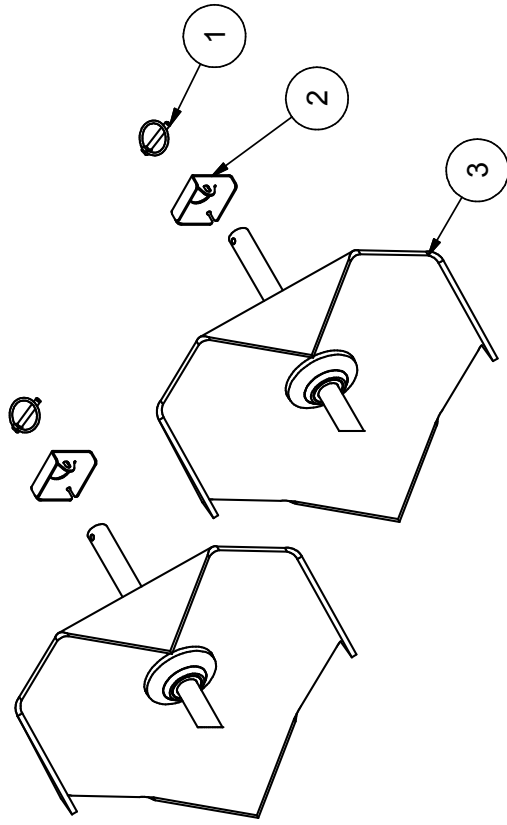
7/24/2012

Flatbed Accessories Across the Bed Toolbox

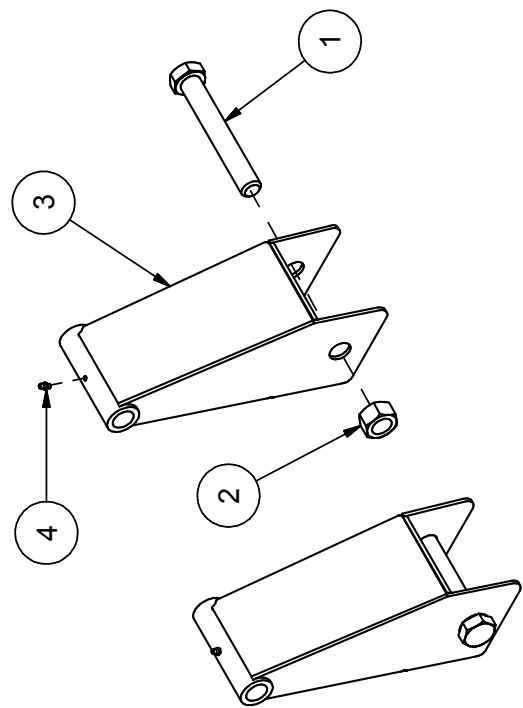
Across the Bed Toolbox, Part# 2109125			
ITEM	QTY	PART #	DESCRIPTION
1	1	210914	TOOLBOX WELD ASSEMBLY
2	2	211132	BUSHING, .625 X .5 X .062 FNG
3	4	110618	NUT, 3/8-16 LOCK NYLON INSERT
4	1	210908	ALL THREAD
5	2	211134	SPRING/LATCH
6	2	500078	Shock, Gas Filled
7	1	400010	DECAL, DEWEZE BLACK OUTLINE
8	4	110645	NUT, 3/8-16 WIZ FLANGE
9	1	211143	HANDLE WELD ASSY
10	2	110239	SetScrew, 5/16-18 X 0.3125
11	1	211138	WEAR PAD, PLASTIC TOOLBOX
12	1	110238	1/4-20 X .75 FLAT C'SUNK SCREW
13	1	110667	WASHER, 1/4" LOCK
14	1	110609	NUT, 1/4-20



**Flatbed Accessories
Spinners & Risers
Pivot Squeeze**



Spinner Assy, Wobble Pair Part# 205077			
ITEM	QTY	PART #	DESCRIPTION
1	2	210006	Pin, Lynch 1/4 x 1 1/2
2	2	211513	LYNCH PIN GUARD
3	2	215247	Weldment, Spinner, Wobble



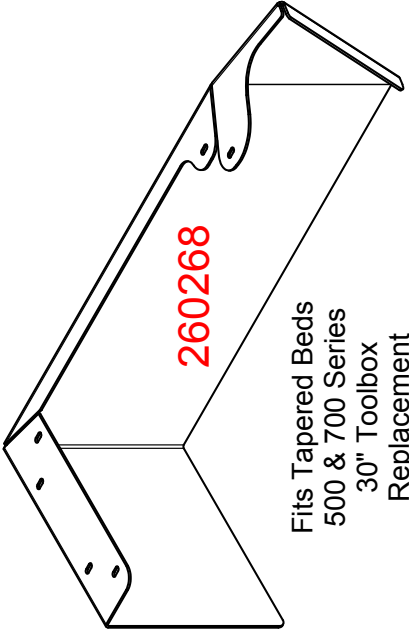
Riser, Offset Pair, Part# 211145			
ITEM	QTY	PART #	DESCRIPTION
1	2	110364	BOLT, 1-8 X 7.0
2	2	110601	NUT, 1-8
3	2	211125	RISER WELD ASSY
4	2	510174	GREASE ZERK, 1/4-28 ST

Front Skirt Toolbox Replacement



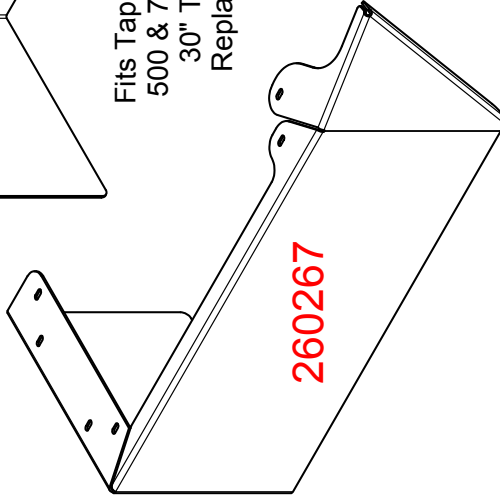
215116

Bolt Kit
1ea Required
Per Fenderskirt

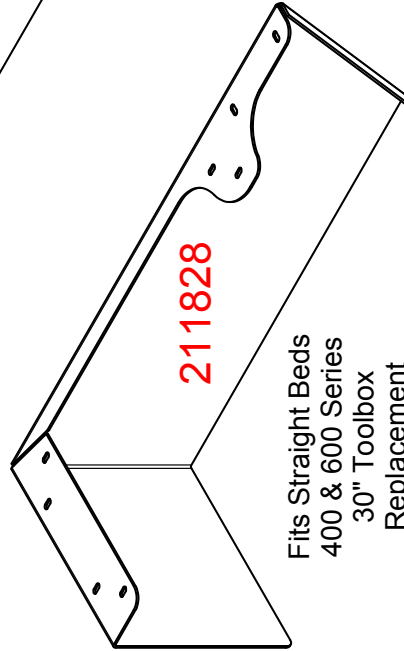


260268

Fits Tapered Beds
500 & 700 Series
30" Toolbox
Replacement

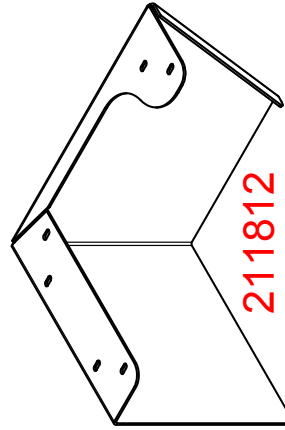


260267



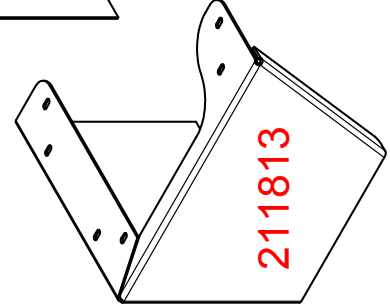
211828

Fits Straight Beds
400 & 600 Series
30" Toolbox
Replacement

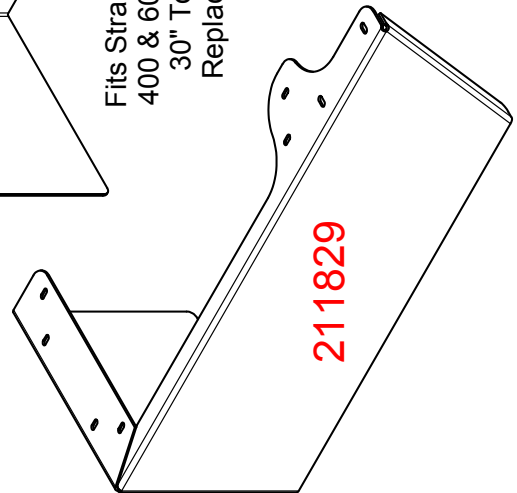


211812

Fits Short Beds
20" Toolbox
Replacement



211813



211829

Appendix I

GatorHyde Repair Instructions

Required items:

- 1 – 25 x 25 ml caulking gun (202030)
- 1 – 25 x 25 ml cartridge set of GatorHyde Repair Material (202031)
- 1 – ¼" x 6" mixing wand (202032)
- 1 – pair of rubber gloves
- 1 – wooden stick
- 1 – Instruction sheet and MSDS sheet
- 1 – MEK – methyl ethyl ketone solvent (available at most hardware stores)
- 1 – small paint brush
- 2 – plastic cups



SAFETY WARNING!

Read the Master Safety Data Sheets (MSDS) on all chemicals before handling any chemical.

See: <http://www.msds.com>

Note:

This repair is designed to easily fix small, damaged areas fast and with limited amount of effort. However this product is fast reacting so make sure to thoroughly read this instruction sheet before proceeding with repairs.

Application Instruction:

- Step 1.** Before you start, put on rubber gloves and safety glasses.
 - Step 2.** Place a piece of cardboard or newspaper next to the repair area prior to opening and mixing the material.
 - Step 3.** Cut back damaged area with a razor knife to make a square.
 - Step 4.** Sand area and feather edges with 40 grit sandpaper. Blow out sanded area to get rid of dust.
 - Step 5.** Clean area well with MEK solvent and allow to dry for 30 minutes.
 - Step 6.** Attach static mixing wand to 25 x 25 ml cartridge set, twist and lock in place. Insert cartridge into caulking gun.
 - Step 7.** Hold the caulking gun in an upright position in one hand, then set the two plastic cups on a flat surface side by side. Next point the static mixing wand into a cup and squeeze the trigger of the gun two times so a small amount of material is discharged into the cup. (Note! This material is to be discarded.) Immediately move the static mixing wand over and point it into the next cup and continue to discharge the remaining amount of material into this cup.
 - Step 8.** Allow the material to set in cup and gently stir with wooden stick for a period of 1 to 1 ½ minutes or until the GatorHyde becomes thicker and will stick to either a finger or wooden stick.
 - Step 9.** Once material has begun to gel, apply enough product to finger or a stick and immediately dab onto damaged area. Use the paint brush to dab the area in a vertical manner to make a textured surface.
- Cure time.** Allow repaired area to cure for a period of 1 hour prior to heavy impact loading.
- Clean-up.** In order to clean up the area take a paper sack or plastic trash bag and place all the empty jars and remaining contents of the repair kit and dispose into a standard trash can or simply put everything back in the box and throw away.

GatorHyde Protective Coatings, Inc., 2210 South Highway 69, Wagoner, OK 74467 * (918) 485-2835 *
www.gatorhyde.com

Appendix II

Remote Control

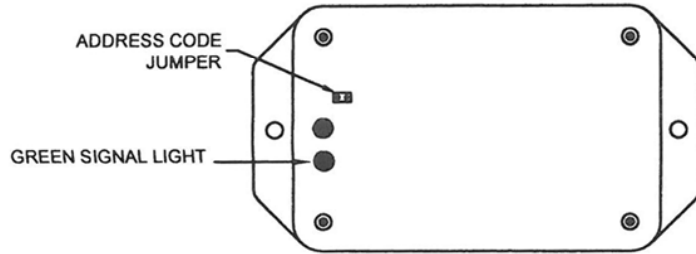
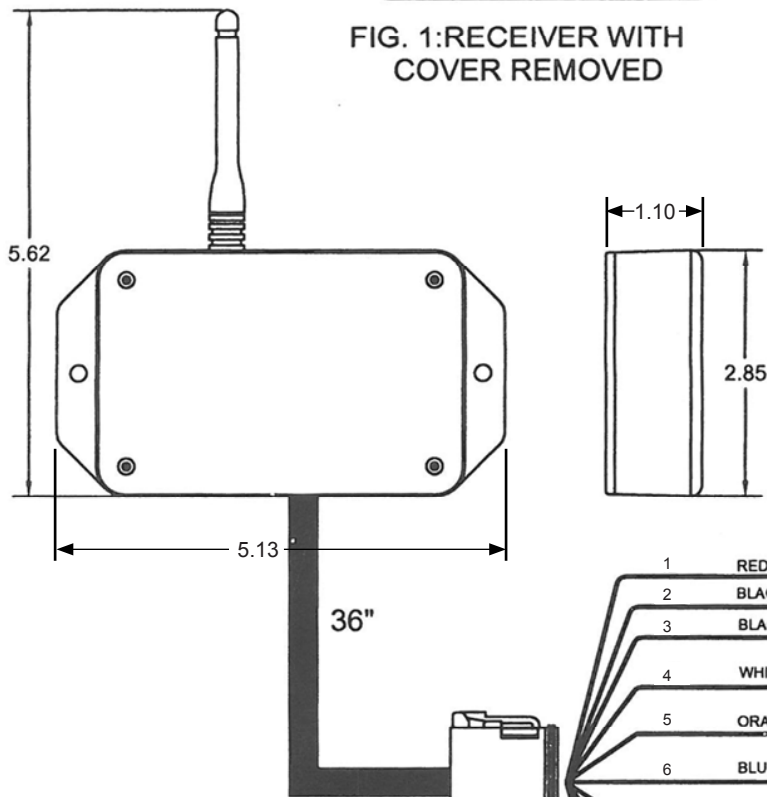


FIG. 1: RECEIVER WITH COVER REMOVED

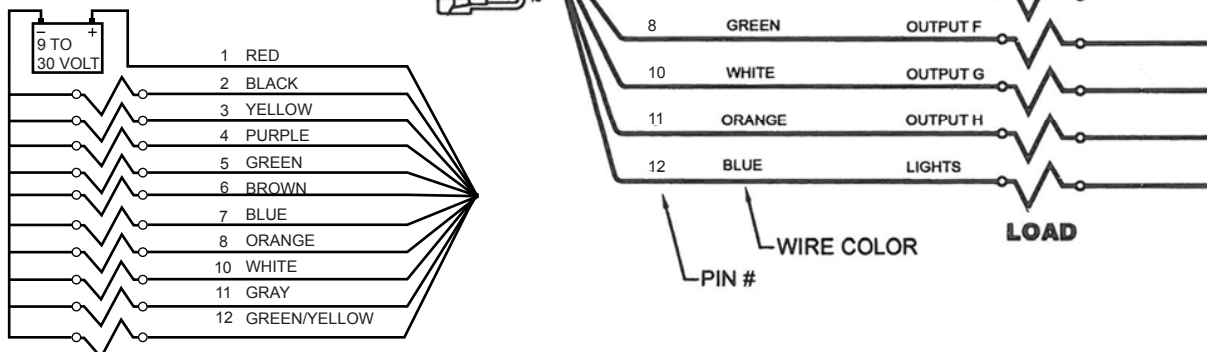


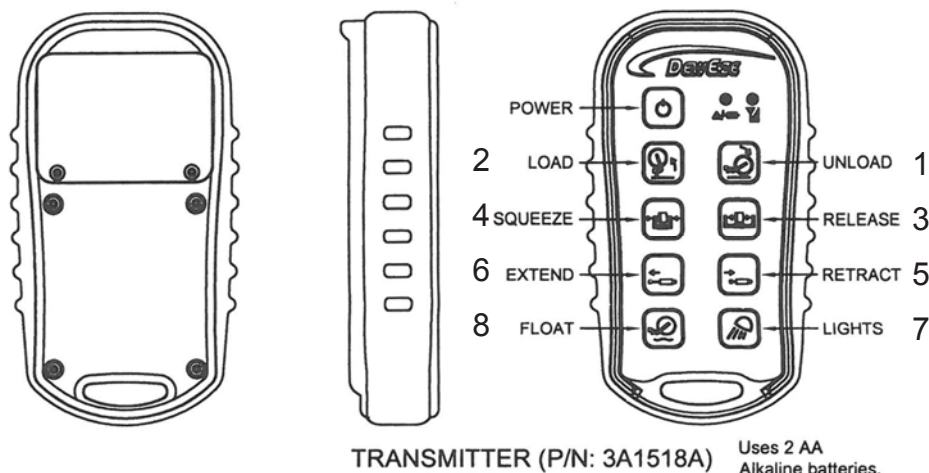
TRANSMITTER ERROR CODE CHART

ERROR CODE	PROBABLE CAUSE
1	LOW BATTERY
2	FAULTY CIRCUIT TO OUTPUT A
3	FAULTY CIRCUIT TO OUTPUT B
4	FAULTY CIRCUIT TO OUTPUT C
5	FAULTY CIRCUIT TO OUTPUT D
6	FAULTY CIRCUIT TO OUTPUT E
7	FAULTY CIRCUIT TO OUTPUT F
8	FAULTY CIRCUIT TO OUTPUT G
9	FAULTY CIRCUIT TO OUTPUT H
10	FAULTY CIRCUIT TO LIGHT OUTPUT

ERROR CODE NUMBER IS THE NUMBER OF RED LIGHT BLINKS BETWEEN EVERY PAUSE.

DEWEZE HARNESS





SYSTEM OPERATION:

Press and hold the power button on the transmitter until both LEDs turn on, then release. The green LED will flash rapidly when communication has been established. When the receiver is off, the red LED will flash slowly indicating this. With the receiver on, press the corresponding buttons on the transmitter keypad to turn on and off each of the outputs.

INDICATOR LIGHTS:

The transmitter has two LED indicators, the red **BATTERY/DIAGNOSTIC** indicator and the green **TRANSMIT** indicator.

The green **TRANSMIT** indicator flashes rapidly whenever there is communication between the transmitter and the receiver.

The red **BATTERY/DIAGNOSTIC** indicator starts blinking once every second when the battery voltage is low and requires replacement. It also blinks when there is a problem with the system in the form of an error code. Refer to the **ERROR CODE CHART** tables for more information.

Note: To check for low battery, turn the receiver off and leave the transmitter on. If the transmitter red LED continues to blink, the battery is low and requires replacement. If the red LED blinks only when the receiver is on, count the number of blinks and refer to ERROR CODE CHART tables for additional information.

TEACH ID CODE:

To synchronize a new transmitter and receiver together, refer to Fig. 1 and use the following procedure:

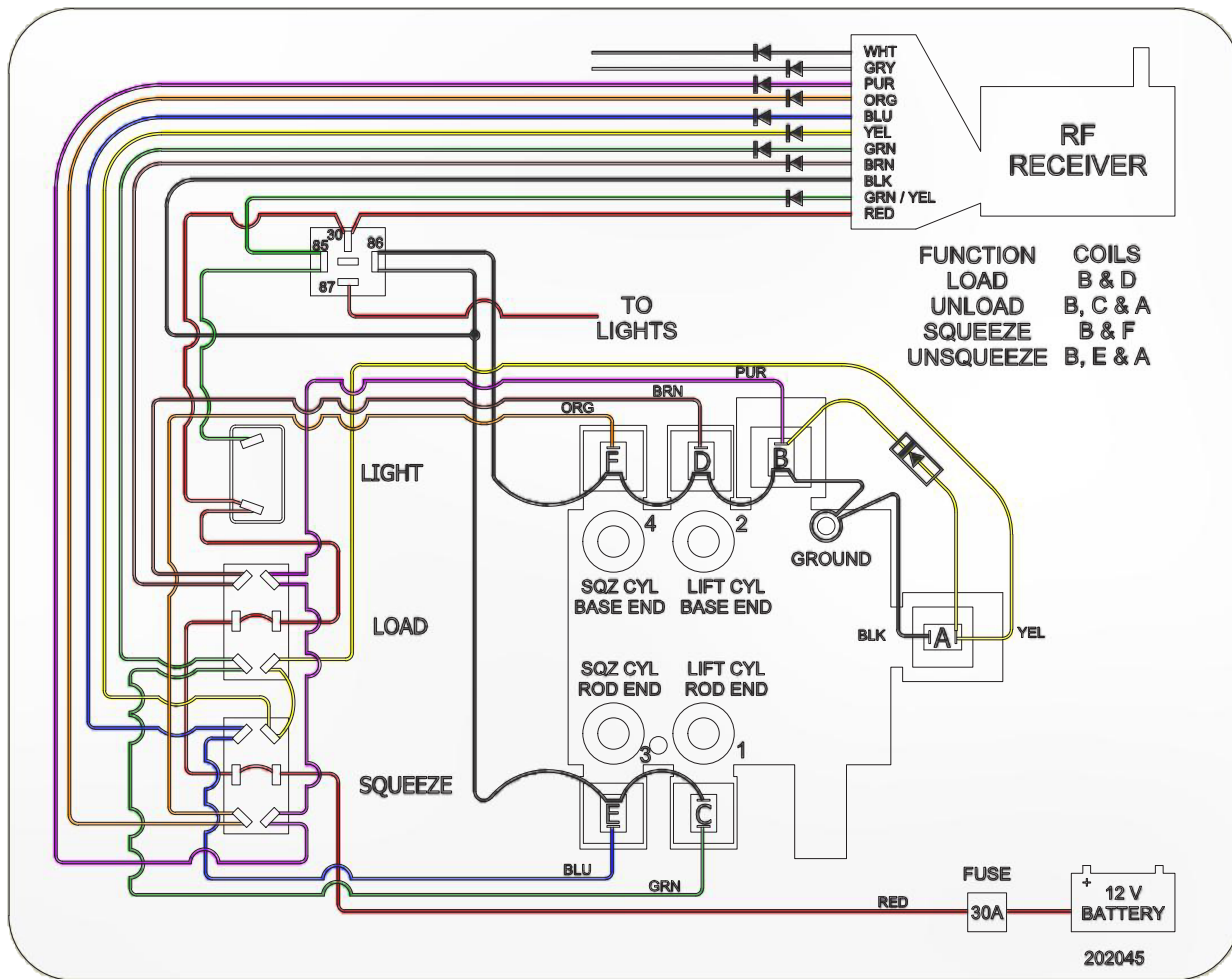
1. Remove receiver cover
2. Apply power to the receiver
3. Place a jumper across the TEACH ID jumper inside the receiver. green LED will go steady inside the receiver. Remove the jumper and store it on one pin
4. To get the transmitter into TEACH ID mode, press and hold the POWER button, UNLOAD and FLOAT
5. Release the POWER button and wait for 1 second or until the green LED goes from steady to blinking in the receiver. Release the other buttons
6. Teach complete
7. Replace the cover on the receiver

SPECIFICATIONS:

RF Transmit power (EIRP): 10 mW
 RF Frequency: 902-928 MHz
 Operating temperature - Radio: -40C to +85C
 Battery life (min): 30 hours continuous.
 Vibration: 3G to 200Hz
 Outputs: 5A max each (20A system max)

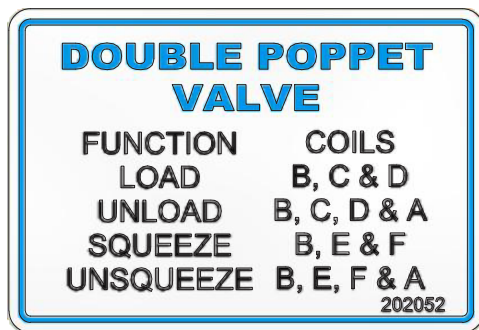
Courtesy of KAR-TECH Delafield, WI

2 Bank Wiring, Kar-Tech Remote

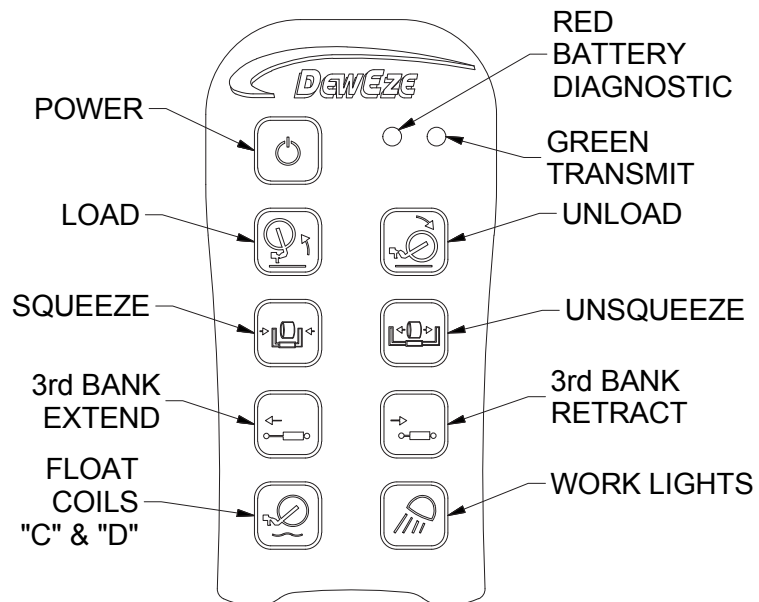


Decal Part# 202045

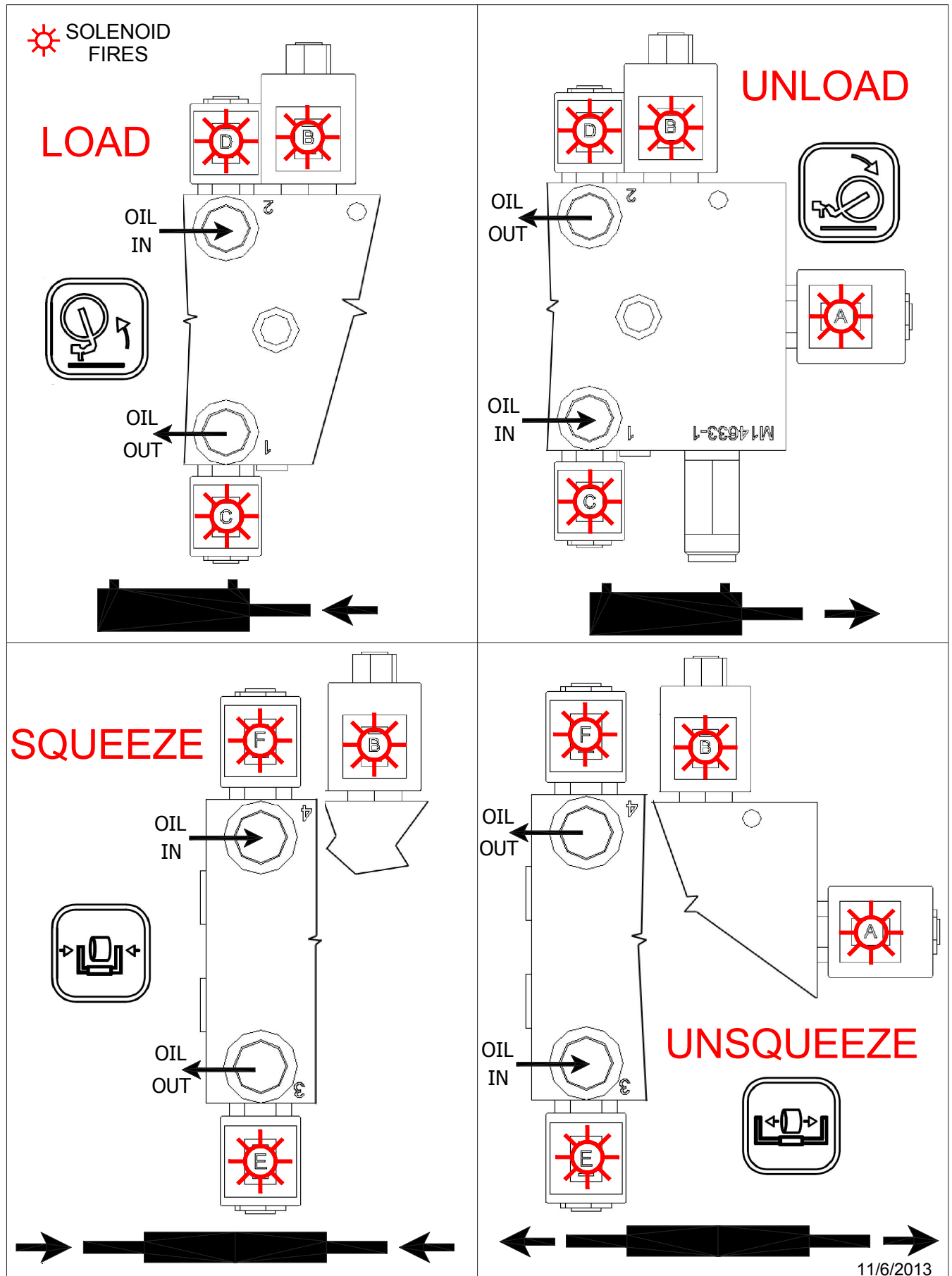
Harness Part# 232087



The Pivot Squeeze Bed
Has a Double Poppet Valve
With Jumper Wires Between
C & D (Green)
E & F (Blue)

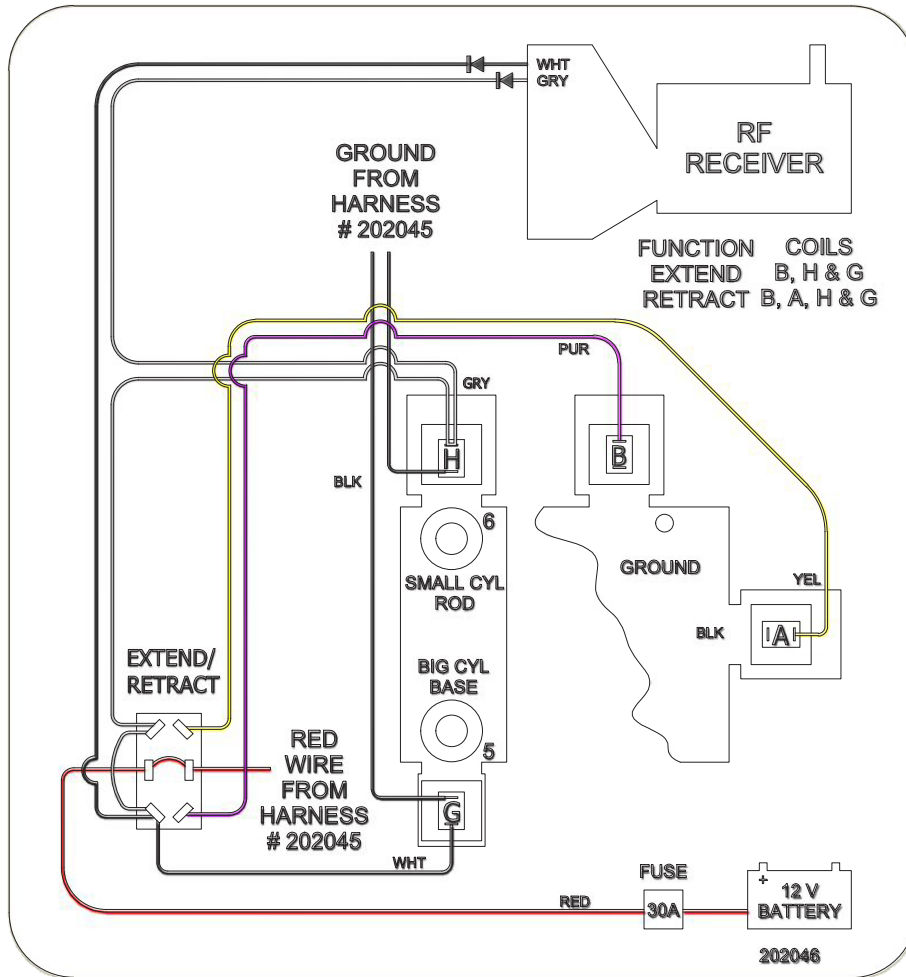


11/6/2013



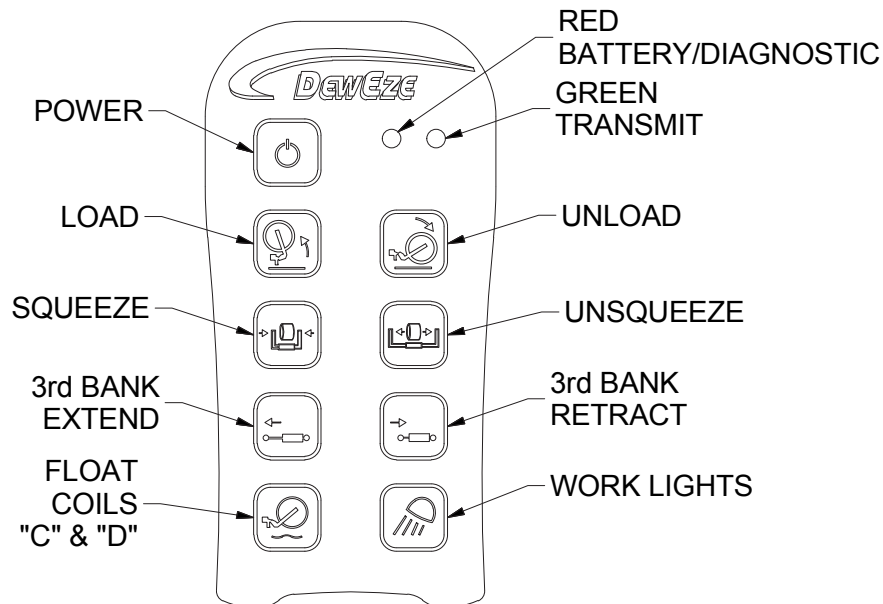
11/6/2013

3rd Bank Wiring, Kar-Tech Remote



Decal Part# 202046

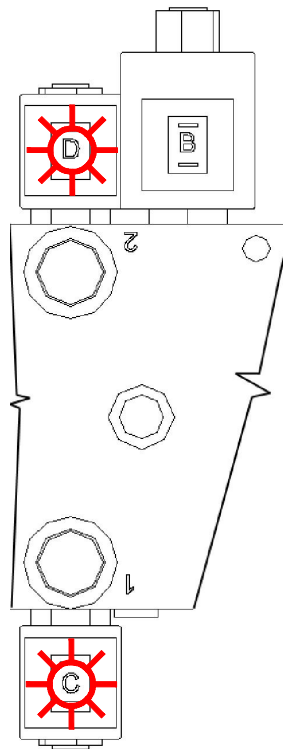
Harness Part# 232088



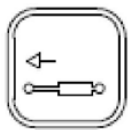
3/11/2011

 SOLENOID FIRES

FLOAT

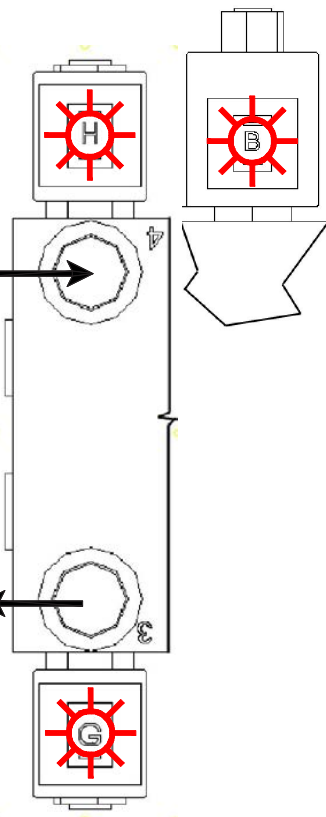


EXTEND

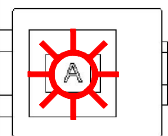


OIL IN

OIL OUT

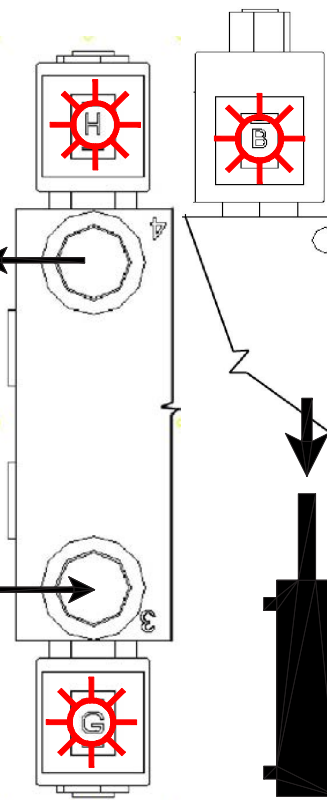


RETRACT



OIL OUT

OIL IN



3/11/2011



Harper Industries, Inc.
151 E. Highway 160
Harper, KS 67058

Telephone: 620-896-7381
Toll-Free: 800-835-1042
Fax: 620-896-7129

Website: www.harperindustries.com

E-mail: info@harperindustries.com

600/700



