

# OWNER'S MANUAL

## CANNONBALL BALE BED

CANNONBALL ENGINEERING LLC

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‘Do it all with A Cannonball!’



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## ASSISTANCE

We are more than willing to answer any questions you may have on the functionality of your bed. Usually a quick call to your local dealer or directly to the factory will clear up any uncertainty. We are here to help!

If you have questions not answered in this manual, or require additional copies, or the manual is damaged, please contact us here at the factory.

620-532-3675 office

620-243-4456 emergency

[www.cannonballengineering.com](http://www.cannonballengineering.com)

[info@cannonballengineering.com](mailto:info@cannonballengineering.com)

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## INTRODUCTION

Thank you for purchasing a Cannonball Bale/Dump Bed Combination. We hope you will get many years of productive use from it. The purpose of this Hydraulic bed is to provide a means to load, transport and feed round bales of hay.


## WARRANTY

Cannonball Engineering LLC, has manufactured the Cannonball Bale/Dump Beds for many years, with an excellent reputation for quality and workmanship. If you feel a component has not lasted to your expectation, please contact us. These concerns will be handled on a case-by-case basis. Cannonball Engineering warrants to the original purchaser the Cannonball bed to be free of defects in material and craftsmanship for a period of two years from the date of purchase. Optional items, such as the Motor and Pump are warranted for a period of 1 year. Hydraulic Valve and Hoses are warranted for a period of 1 year. Spinners and Headache rack work lights are warranted for 60 days. The Dew Eze and CW Mills's pumps are as per manufacturer's guidelines. There will be NO warranty if the bed is installed by an unauthorized dealer. Cannonball Engineering also warrants the purchased parts to be free from defects for the period as set by the parts manufacturer. This includes, but is not limited to all small electrical components such as lights, safety switches, trailer plugs etc. If any part, as determined by Cannonball Engineering, is found to be defective, the labor and the part to be replaced or repaired will be borne by Cannonball Engineering. All shipping and handling are the consumer's responsibility. For replacement parts, please contact your dealer or the Cannonball plant in Kingman. Warranty for replacement or repair shall not extend the original warranty period. Cannonball Engineering does not warrant against normal wear or damages caused by abuse, negligence, poor maintenance or operation beyond the rated capacities or intended uses. The warranty card must be completed and returned to Cannonball Engineering within 30 days of purchase.

## SAFETY

Please read and understand this manual and all safety procedures before operating or performing maintenance. Review the safety instructions and precautions periodically.

### TAKE NOTE!

The safety alert symbol  found throughout this manual is used to call your attention to instructions involving your personal safety and the safety of others. Failure to follow these instructions can result in injury or death.



THIS SYMBOL MEANS ATTENTION!

BECOME ALERT!

YOUR SAFETY IS INVOLVED!

### SAFETY SIGNAL WORDS

Note the use of the signal words Danger, Warning and Caution with corresponding safety message.



**DANGER:** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.



**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



**CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



## GENERAL SAFETY GUIDELINES

Safety of the operator is one of the main concerns in 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.

You, the operator, can avoid many accidents by observing the following precautions in this section.

To avoid personal injury please study the following precautions and insist those working with you or for you follow them as well.

Replace any **CAUTION**, **WARNING**, **DANGER** or instructional safety decal that is not readable or is missing. Location of such decals is indicated in this booklet. Do not paint over, remove or deface any safety or warning decals on your equipment. Observe all safety signs and practice the instructions on them. If decals become worn, replacements are available at a nominal charge and in many cases free from the factory.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users periodically.

This equipment could be dangerous to children and persons unfamiliar with its operation.

The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations.

Do not allow persons to operate or perform maintenance on your Cannonball bale bed until they have had thorough training on how the unit works, a complete understanding of the safety precautions, and have read the owners' manual.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - DON'T TRY IT.

Never disable 350amp fuse. (May pose possible fire danger)

Never remove safety decals as they are a visual clue to possible danger.

Never disable safety switches. They are there to prevent arms from opening away from the bed in the upright position. The arms hold the bed in place while in the raised position. (Disabling poses a possible crushing danger)

**⚠ GENERAL SAFETY GUIDELINES - CONTINUED**

Never work under the bed without the safety stand in the upright position, supporting the raised bed. The Arms are responsible for holding the bed up in the raised position. The safety switches inhibit arm function when bed is not in the home (bed down) position. If you disable the safety switch or switches by wiring around or depressing buttons while bed is raised, your bed could drop if at the same time you or someone else operates the hand control to open the arms away from the bed. The safety stand is essential when working under this unit. Please call the factory for further clarification if you do not understand this principle.

You must not operate this device unless:

1. You have been trained in the safe operation of this bale bed.
2. You know and follow the safety and operating recommendations contained in the manufacturer's manual, your employer's work rules and applicable governmental regulations.

An untrained operator subjects himself and others to Death or Serious injury.

If not offered, please request a bed tutorial and safety discussion from your local dealer or call the factory. We are happy to give the tutorial and discuss safety with you over the phone.

Attach the locking bolts (located under the small access door on either side of the hitch ball) to secure the bed to the frame of your truck before trailer towing. It is also advisable to bolt bed to frame when weather conditions are especially messy to avoid debris build up on the sub-frame.

Never dump bed before checking surroundings for safety.

**To avoid personal injury and property damage, please read and understand your operator's manual.**

This manual covers only the basic information for operating the Cannonball Bale Dump bed.

If you have any questions or concerns about the operations, please feel free to contact any member of the Cannonball Team or your local Cannonball dealer.

Contact us here at the factory: 620-532-3675 office  
620-243-4456 emergency  
[www.cannonballengineering.com](http://www.cannonballengineering.com)  
[info@cannonballengineering.com](mailto:info@cannonballengineering.com)



Danger Death or serious injury could result from being crushed by falling bed, decal is located underneath the bed next to the oil reservoir tank.



Danger safety switch do not disable, decal is located next to the safety switch. On some models you may have two safety switches underneath the bed.



Danger pinch point, decal is located on top of the bed at the rear end on either side of the arm hinges.



Caution do not exceed manufacturer vehicle ratings or loading recommendations, decal is located on the spinner mounts on either side of the bed.



Caution bed must be supported with safety stand before working under bed while in the raised position. Bed must be empty. This decal is located on the sub-frame of the bed on the driver's side of the pickup, next to the safety stand.

## SAFETY STAND

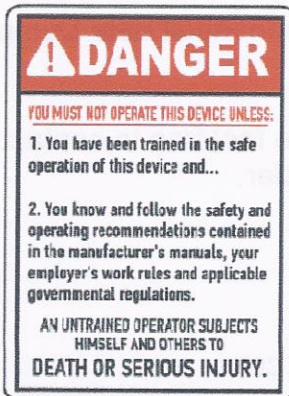
The Safety stand, decal is located underneath the bed on the safety stand mounted on the sub-frame.



The warning do not overload truck. Truck must be level for dumping. Do not stand near or behind truck body while dumping, decal is located on the headache rack upright on the driver's side of the pickup. The GVW for a 1-ton vehicle is 6,000 pounds.

## CAUTION ATTACH LOCKING BOLTS BEFORE TRAILER HOOKUP

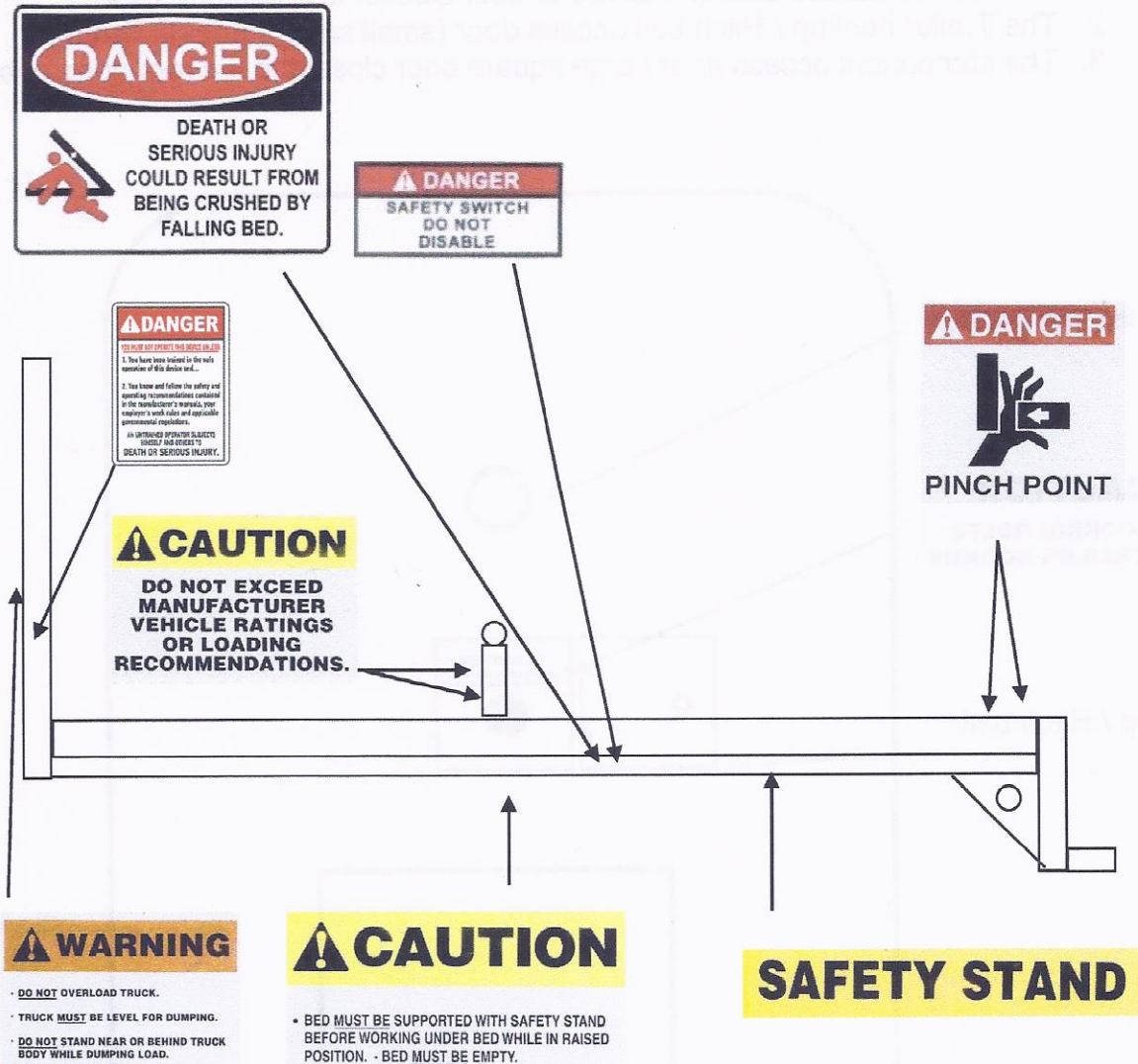
Caution attach locking bolts before trailer hookup, decal is located on the plate underneath the small access door located on top in the middle of the bed next to the hitch ball.



Danger you must not operate this device unless decal is located on the headache rack upright on the driver's side of the bed.

REMEMBER: If Safety decals have been damaged, removed, become illegible or parts replaced without decals, new decals must be applied. New decals are available from your local dealer or factory.

Safety decal locations (page 1) are shown below

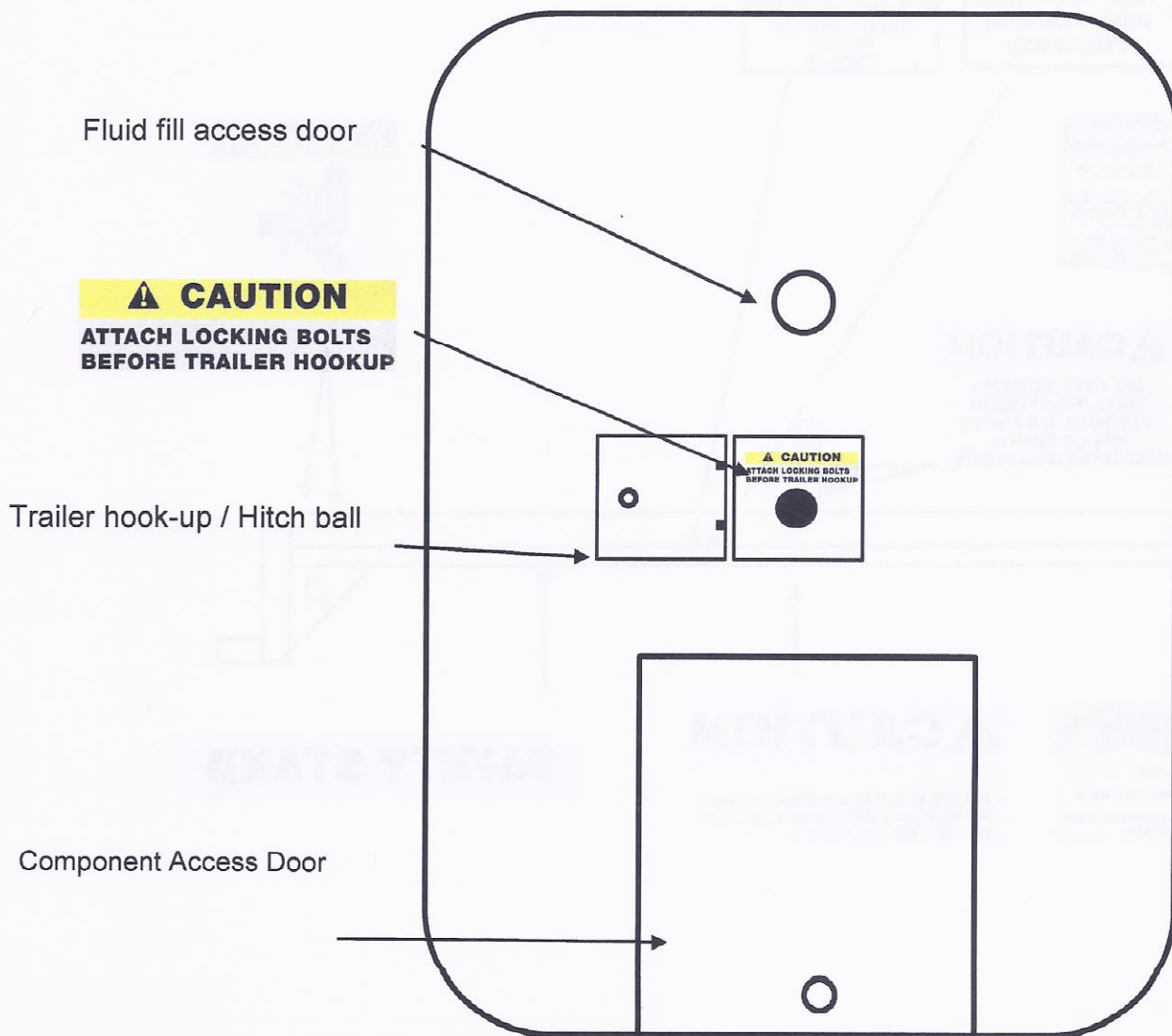


Safety decal locations (page 2) are shown below

## Birdseye view of bed top

There are 3 access doors located on the top of your bale bed.

1. The fluid fill access door (small round door closest to headache rack)
2. The Trailer hookup / Hitch ball access door (small square door in center)
3. The component access door (large square door closest to the rear edge of bed)





## SAFETY DECAL CARE

- Keep safety decals clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replaced parts that display a safety decal should also display the current decal.
- Safety decals are available from your Cannonball Dealer or call the Cannonball factory.

### How to Install Replacement Safety Decals:

- Be sure that the installation area is clean and dry.
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
- Small air pockets can be pierced with a pin and smoothed out by using the piece of decal backing paper.



## BEFORE OPERATION CHECK LIST

- Carefully study and understand this manual.
- Do not wear loose-fitting clothing which may catch in moving parts.
- Always wear protective clothing and substantial shoes.
- Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
- Be sure that there are no tools laying on or in the equipment.
- Do not use the unit until you are sure that the area is clear, especially of children and animals.
- Don't hurry the learning process or take the unit for granted. Ease into it and become familiar with your new bale bed.
- Practice operation of your bale bed and its attachments. Completely familiarize yourself and other users with safe operating procedures.
- Do not allow anyone to stand between the back of the bed, or between the bed and the objects to be lifted.
- Do not allow anyone to stand near the pickup when loading or unloading hay.
- Do not allow anyone to stand behind the pickup when lifting bed for unloading.
- Do not allow anyone to work on your unit while the bed is in the raised position without the safety stand or other substantial blocking device in place to avoid an inadvertent crushing hazard.
- Always use safety stand when bed is in the unload position and performing maintenance.
- Keep body parts away from pinch points.
- Never operate under unsafe conditions.
- Never check for leaking hydraulic fluid with hands.
- Keep equipment in good operating condition and never operate bed beyond capacities.



## DURING OPERATION CHECK LIST

- Children should not be allowed to play on or operate the bale bed, it is a complicated piece of equipment intended for adult operation only.
- Clear the area of small children and bystanders before moving, loading, or unloading this unit.
- Never leave running equipment unattended. Keep hand control in a safe place, inaccessible from children and pets. The Arm / Dump function can be initiated while vehicle is turned off.
- Slow down for corners and rough terrain.
- Make sure you are in compliance with all local and state regulations regarding transporting equipment and hay on public roads and highways. Lights must be clean and visible by overtaking or oncoming traffic when feed or other loads are transported.
- Beware of bystanders, **particularly children!** Always look around to make sure that it is safe to operate your bale bed. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.
- Keep hands and clothing clear of moving parts.
- Do not clean, lubricate or adjust your equipment while in operation. Use access doors whenever possible while performing routine maintenance.
- Be especially observant of the operating area and terrain - watch for holes, rocks or other obstacles. DO NOT operate near the edge of drop-offs or banks.
- DO NOT operate on steep slopes as truck roll over may result.
- Operate up and down (not across) intermediate slopes. Avoid sudden starts and stops.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- Avoid loose fill, rocks, and holes; they can be dangerous for equipment operation or movement.
- Never stand alongside a unit while engaging the arm or dump features.
- As a precaution, always re-check the hardware on equipment following every 100 hours of operation. Correct all problems. Follow the maintenance safety procedures.
- Do not over load your truck. The GVW for a 1-ton vehicle is 6,000 pounds. The Arm lift capacity is 2850 lbs.



## FOLLOWING OPERATION CHECK LIST

- Do not park equipment where it will be exposed to livestock for long periods of time. Damage to the bale bed and livestock injury may result.
- Do not permit children to play on or around the stored unit.



## HIGHWAY AND TRANSPORT OPERATIONS

- Adopt safe driving practices:
  - Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum.
  - Reduce speed prior to turns, avoiding the risk of overturning.
  - Avoid sudden uphill turns on steep slopes.
  - Always keeps the vehicle in gear to provide engine braking when going downhill. Do not coast.
  - Do not drink and drive!
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight at which you are operating your unit.
- Watch for obstructions overhead and to the side while transporting.
- Make sure any hay bales you are carrying do not obstruct the view of the trucks lights.
- Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the equipment when making turns, stopping the unit, etc.
- Pick the most level route possible when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.
- Be extra careful when working on inclines.
- Maneuver the vehicle at safe speeds.

## BED OPERATION (ARM FUNCTION)

**BALE MOVING** (Loading) – Back up to the bale – Stay about two feet from bale. Use a 1-2-3 step method for loading the bale.

**STEP 1** – Depress LEFT Arm out to release LEFT arm from the bed (home position).

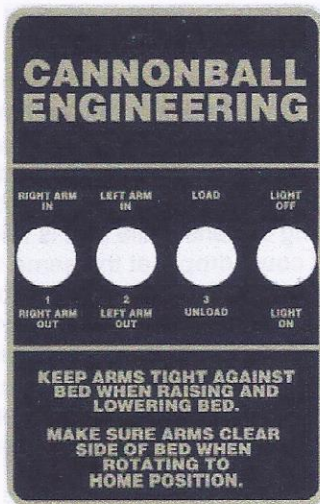
**STEP 2** – Depress RIGHT Arm out switch to release RIGHT arm from the bed (home position)

 **MAKE SURE BOTH ARMS ARE FREE FROM BED**

**STEP 3** – Depress Unload switch until the arms are at the center of the bale. Depress the Right Arm in and the Left Arm in switches to squeeze bale. Once the bale is squeezed, depress the Load switch to load bale on to the truck. Repeat procedure for 2<sup>nd</sup> bale. Keep arms squeezed on the 2<sup>nd</sup> bale to keep bales from rolling off the truck.

**BALE MOVING** (UNLOADING) – Use the reverse procedure from loading.

**BALE MOVING** (UNROLLING) – If bed is equipped with spinners, unload bale onto the ground. Leave bale arms in squeezed (in) position. Cut the strings and drive forward until bales is unrolled.



\*Please note some models have 3 switches.

Newer decals have the Right and Left Arm toggles switched

 **DANGER**

Never work under bed without the safety stand in the upright position, supporting the raised bed. The Arms are responsible for holding the bed up in the raised position.

The safety switches inhibit arm function when bed is not in the home position (bed down arms to the side of the bed). If you disable the safety switch or switches by wiring around or depressing buttons while bed is raised your bed could drop if at the same time you or someone else operates the hand control to open the arms away from the bed. The safety stand is essential when working under this unit.

Please call the factory for further clarification if you do not understand this principle.

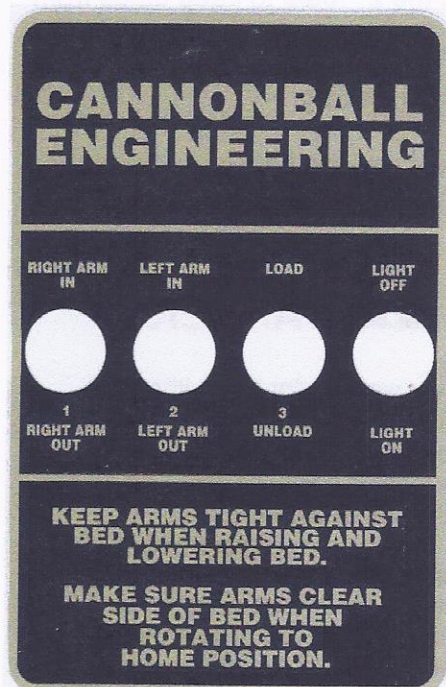
 **WARNING**

**BOTH BALE ARMS MUST BE IN THE OUT POSITION BEFORE BALE MOVING**

## BED OPERATION (DUMPING FUNCTION)

**BED DUMPING** — Make sure bed latch is in unlock position. Both arms must be tight against the side of the bed (home position). Suck them in by depressing the right arm and Left arm switches (in). This will unlock the bed from the sub-frame. Depress the Unload switch to begin dumping, bed will raise. Depress the Load switch to bring the bed back to the home position when dumping, bed will lower.

**⚠ MAKE SURE BOTH ARMS ARE ALWAYS TIGHT AGAINST THE SIDES OF THE BED WHEN USING THE DUMPING FUNCTION.**



\*Please note some models have 3 switches. Newer decals have the Right and Left Arm toggles Switched



**DANGER**

Never work under bed without the safety stand in the upright position, supporting the raised bed. The Arms are responsible for holding the bed up in the raised position.

The safety switches inhibit arm function when bed is not in the home position (bed down arms to the side of the bed). If you disable the safety switch or switches by wiring around or depressing buttons while bed is raised your bed could drop if at the same time you or someone else operates the hand control to open the arms away from the bed. The safety stand is essential when working under this unit.

Please call the factory for further clarification if you do not understand this principle.



**WARNING**

**MAKE SURE ARMS ARE TIGHT AGAINST THE BED BEFORE DUMPING. DO NOT DRIVE WITH THE BED IN THE UP POSITION.**

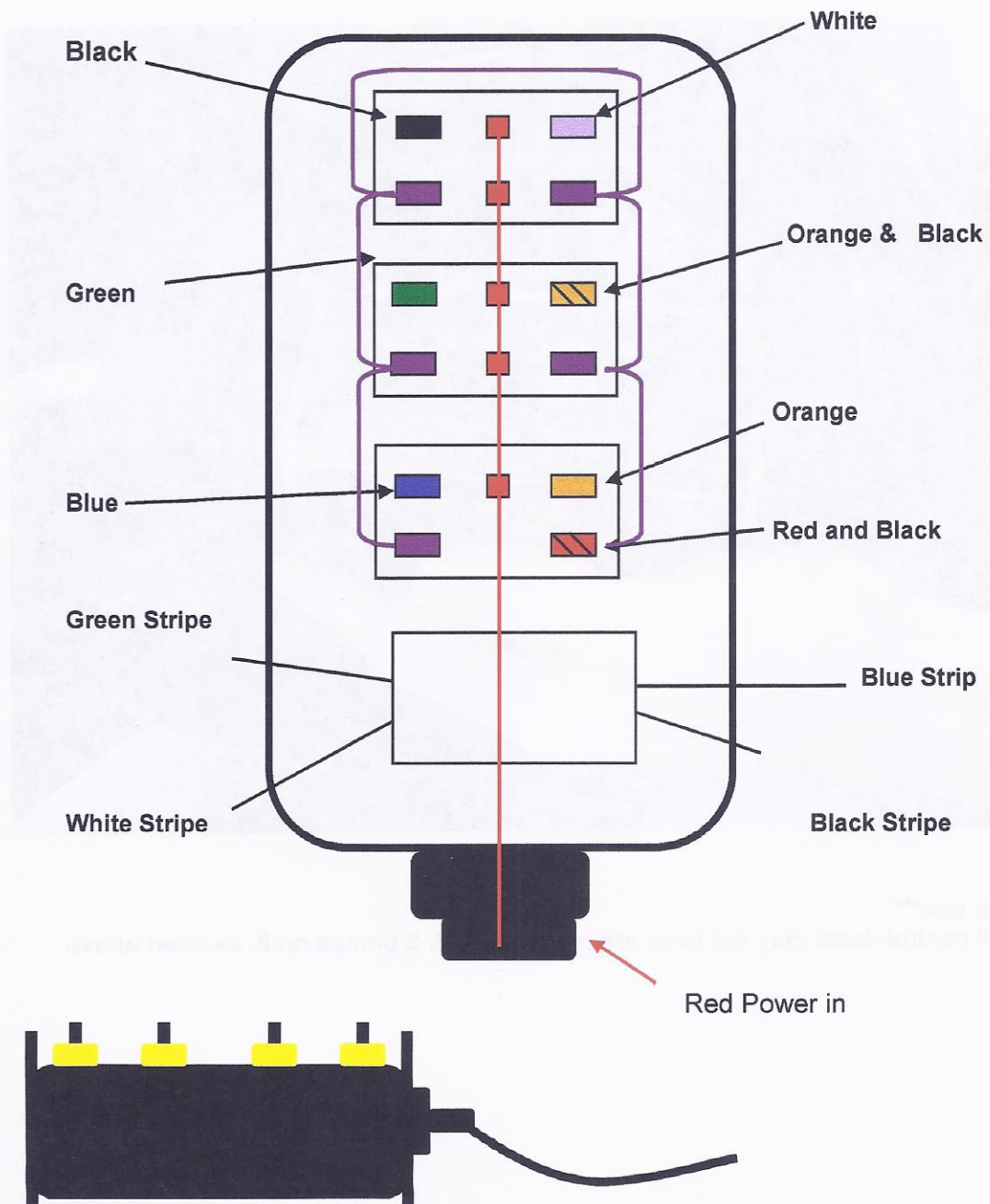
## Tethered Hand Control Pendant photo



\*\*\* Note to user\*\*\*

Your hand control decal may not have the numbers 1, 2, 3 printed on it, as seen above.

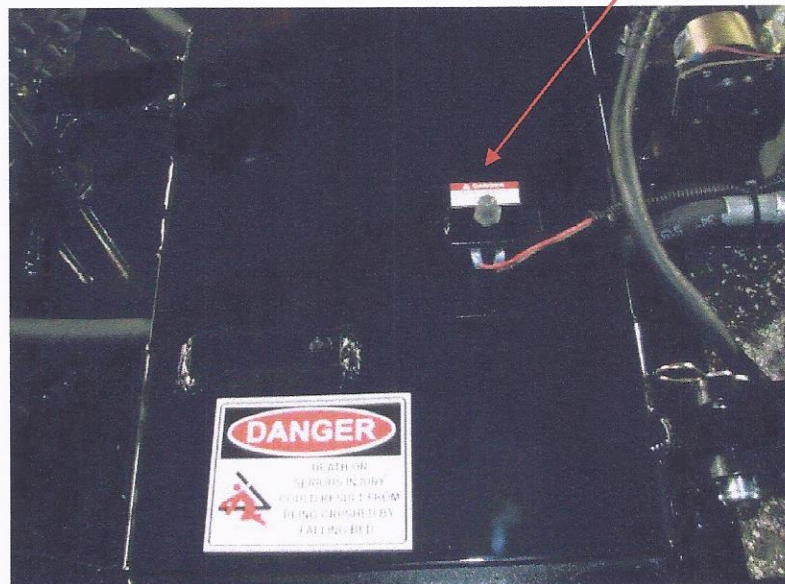
# Tethered Handheld Control Pendant diagram



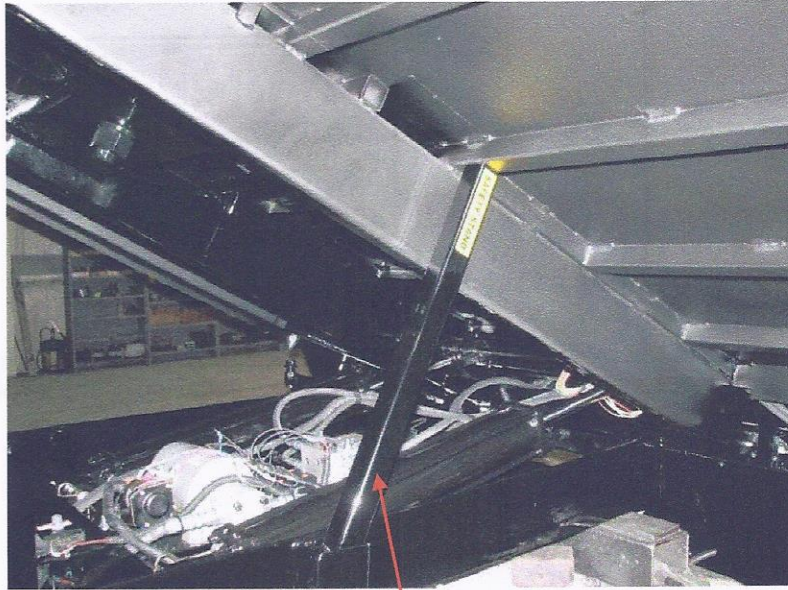


\*\*\*Please note some older units have two safety switches, one for each arm\*\*\*

### Snap Action Safety Switch



This is a photo of the Safety Stand in upright position. Note the stand is allowing the bed to rest in the up position on a cross member.



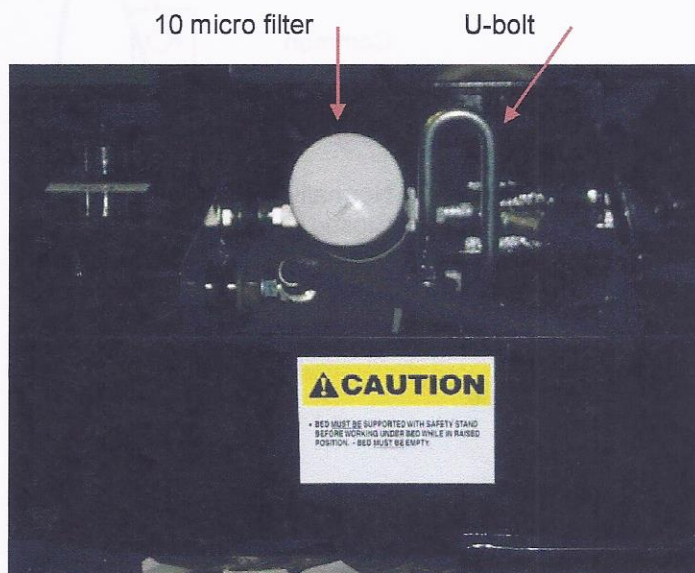
## SAFETY STAND

## ⚠ CAUTION

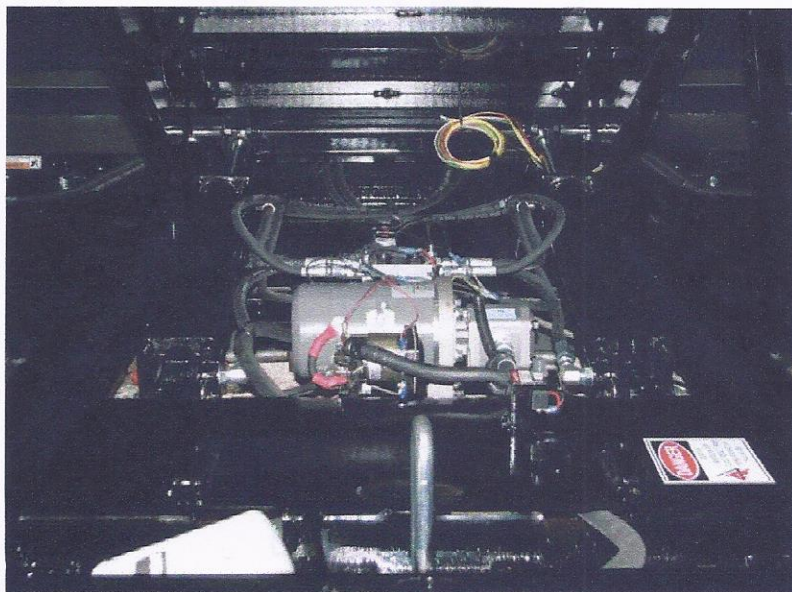
- BED MUST BE SUPPORTED WITH SAFETY STAND BEFORE WORKING UNDER BED WHILE IN RAISED POSITION. • BED MUST BE EMPTY.



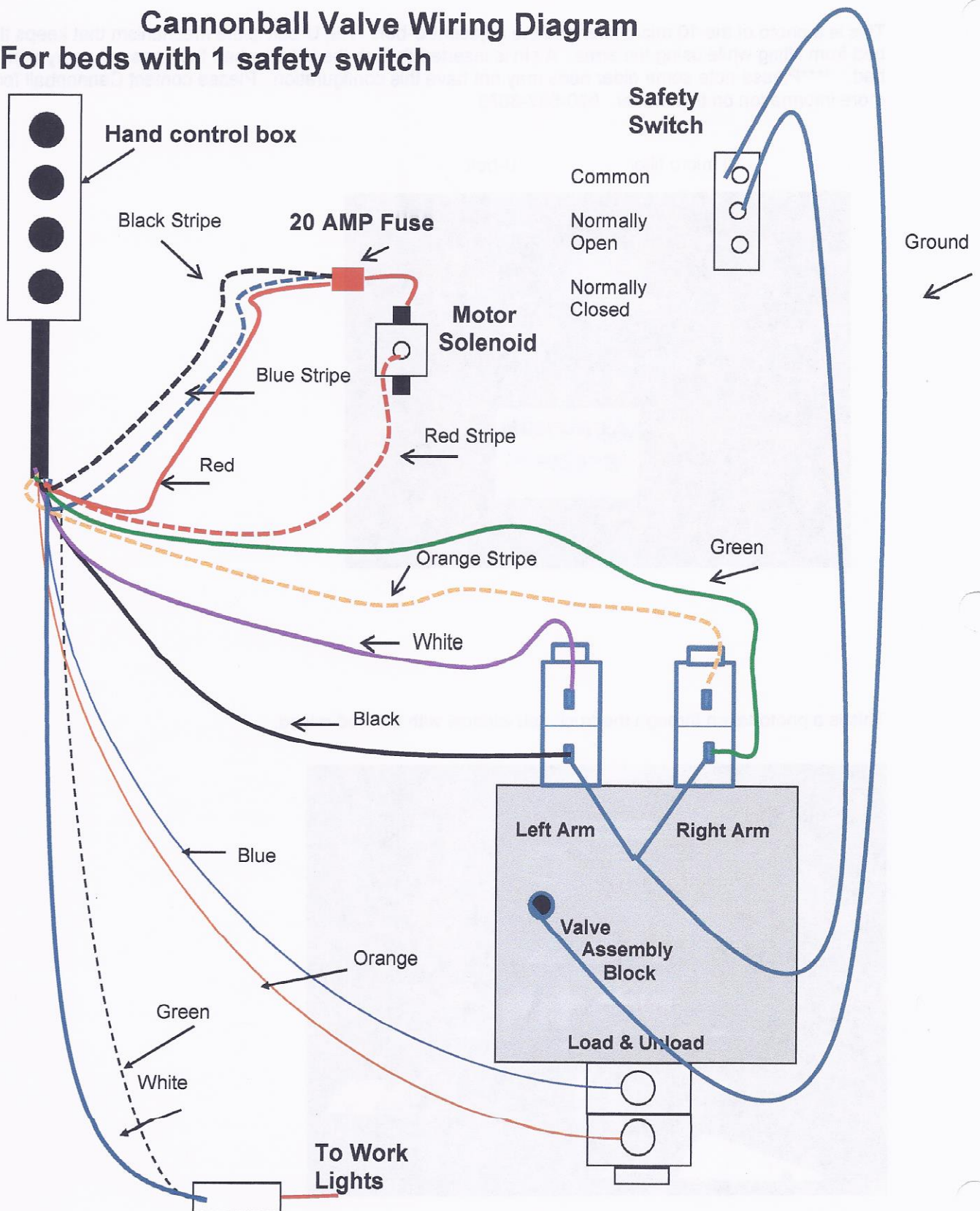
This is a photo of the 10 micro filter and the adjacent U-bolt. The U-bolt is the mechanism that keeps the bed from lifting while using the arms. A pin is inserted through the U-bolt when the arms are away from the bed. \*\*\*\*Please note some older beds may not have this configuration. Please contact Cannonball for more information on this matter. 620-532-3675



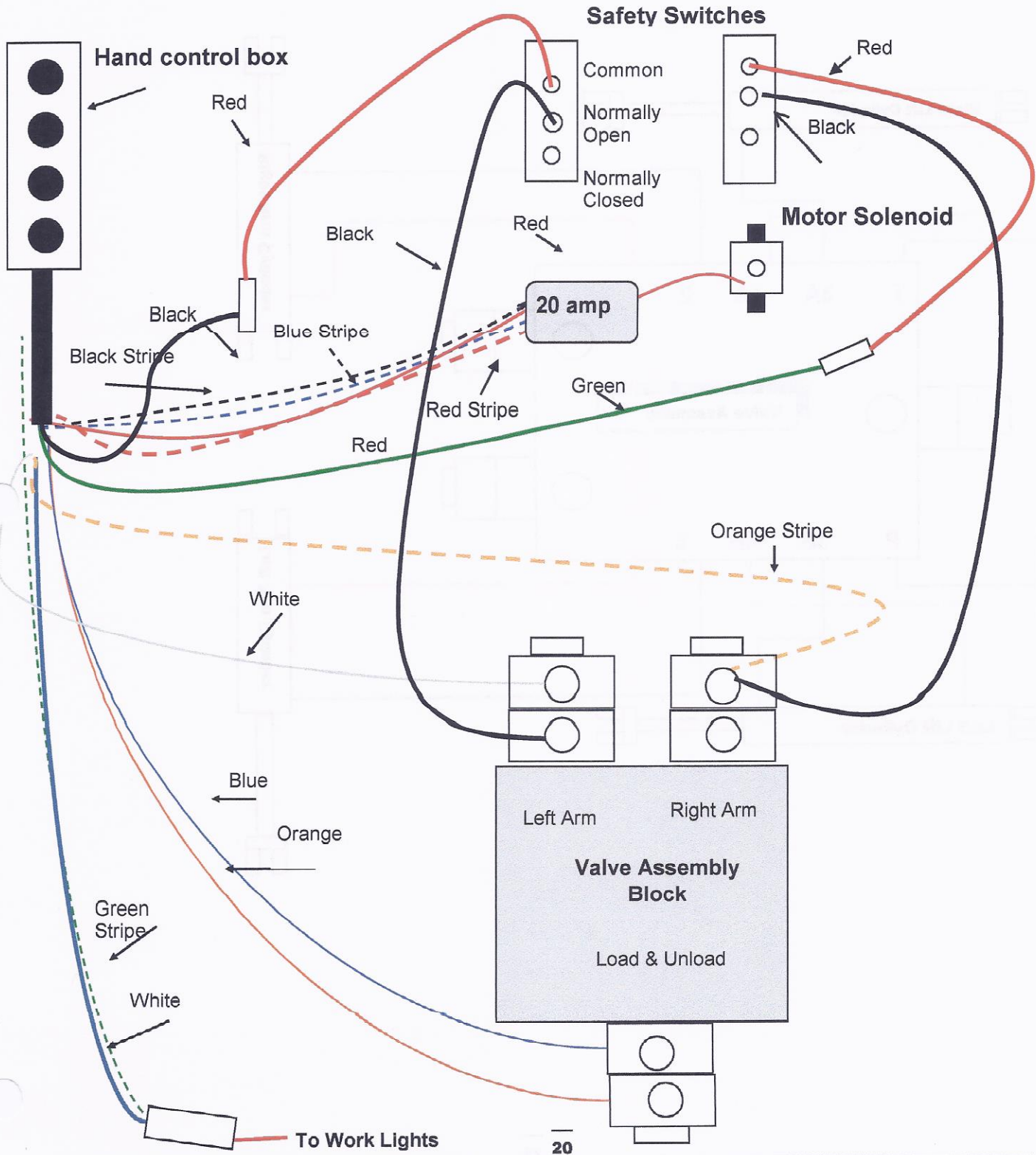
This is a photo taken through the truck cab window with the bed raised.



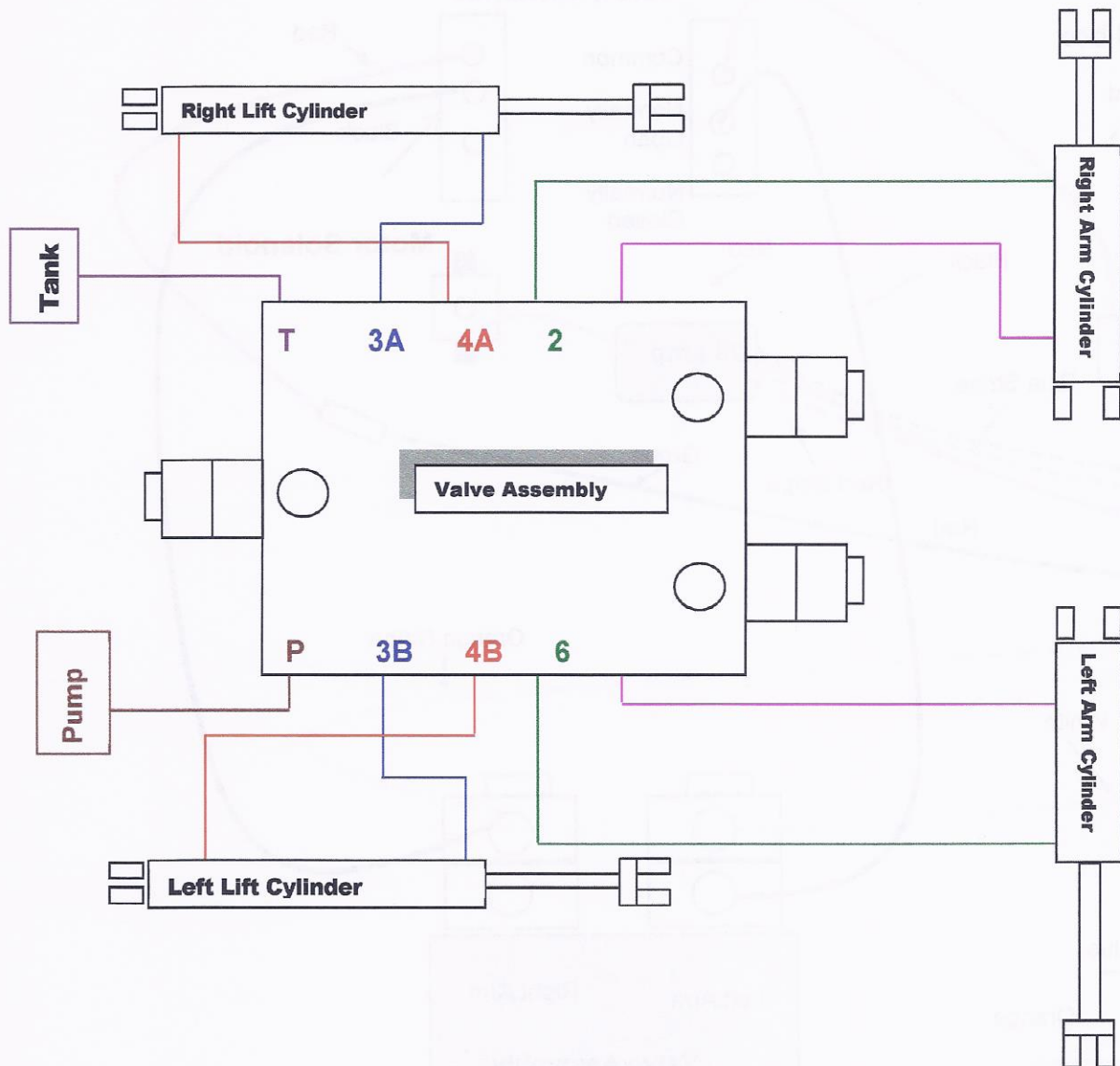
## Cannonball Valve Wiring Diagram For beds with 1 safety switch



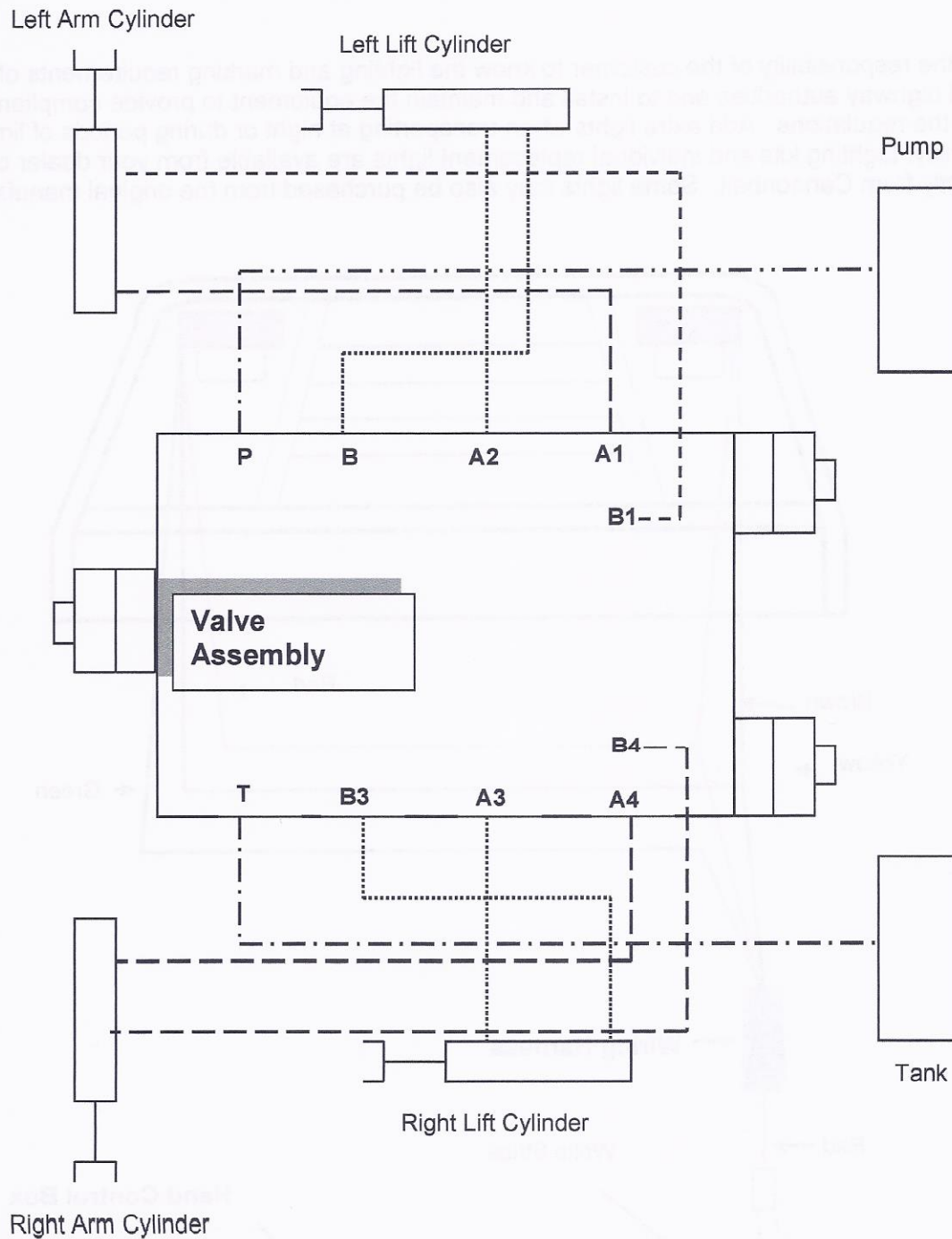
## Cannonball Valve Wiring Diagram For beds with 2 safety switches



## Cannonball (**P**ace) Valve Hose Diagram



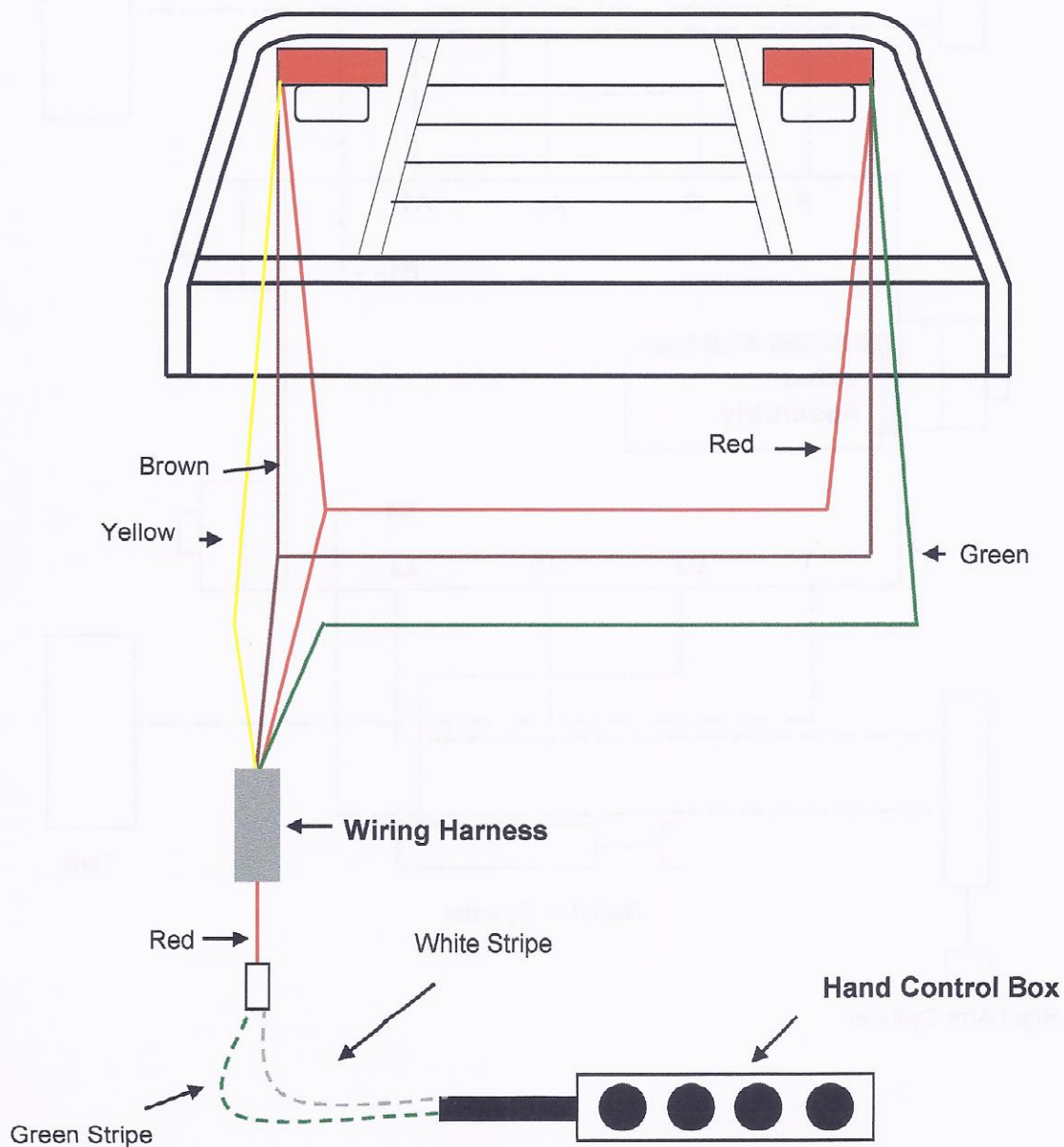
## Cannonball (**Applied**) Valve Hose Diagram



## LIGHTING AND MARKING

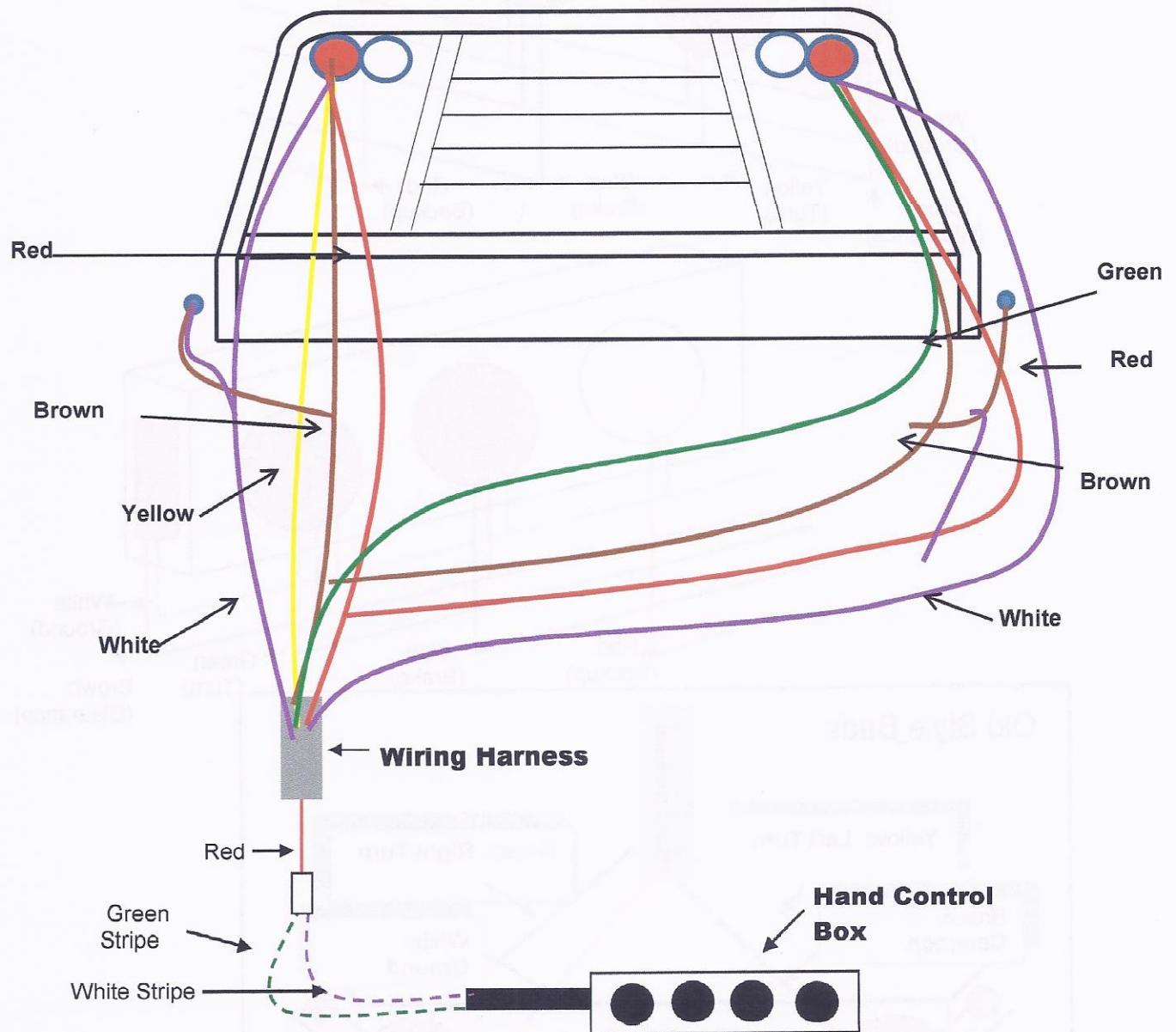
### Cannonball Light Wiring Diagram #1 (Headache Rack Lights)

It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities and to install and maintain the equipment to provide compliance with the regulations. Add extra lights when transporting at night or during periods of limited visibility. Lighting kits and individual replacement lights are available from your dealer or directly from Cannonball. Some lights may also be purchased from the original manufacturer.

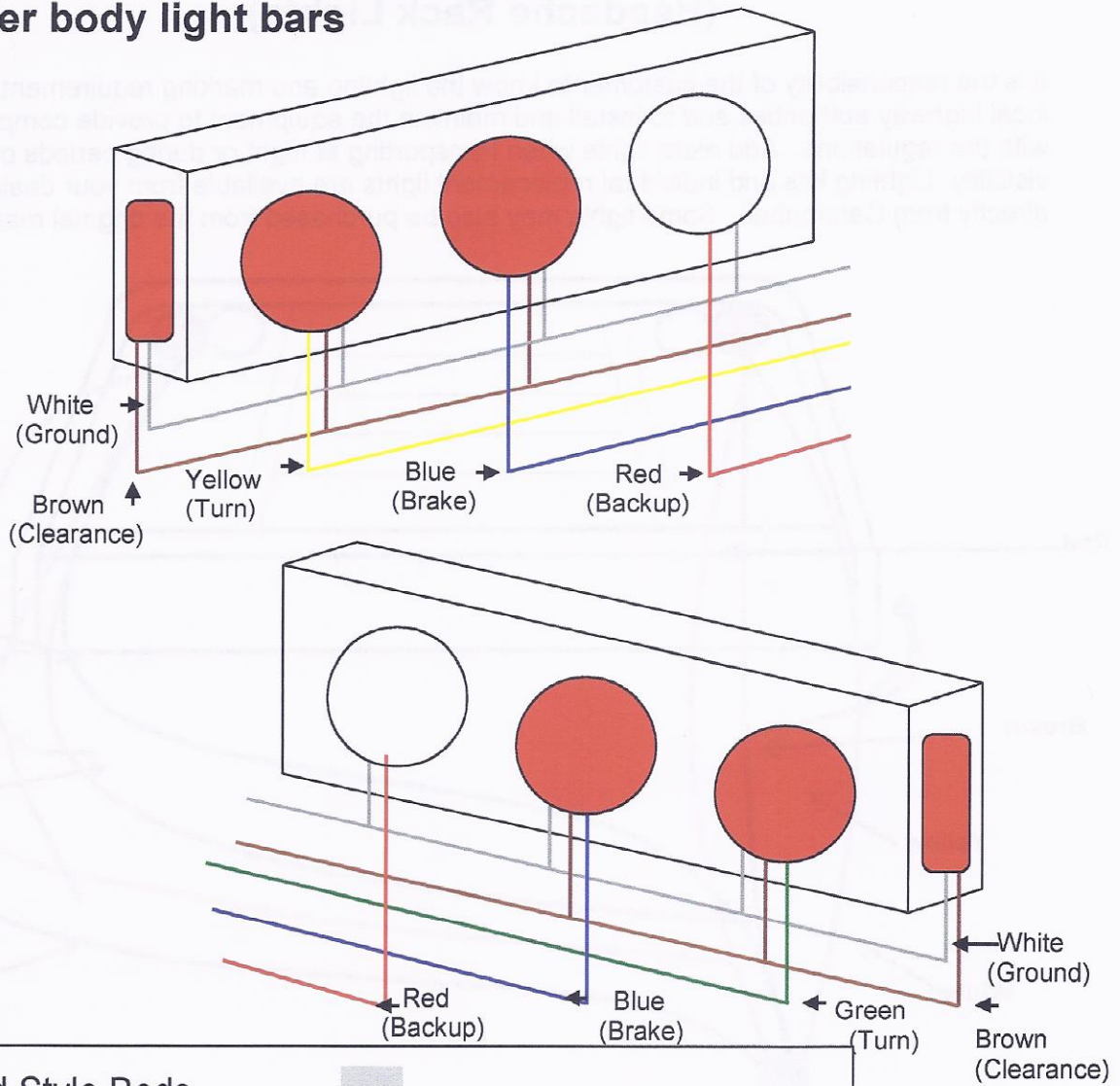


## Cannonball Light Wiring Diagram #2 (Headache Rack Lights)

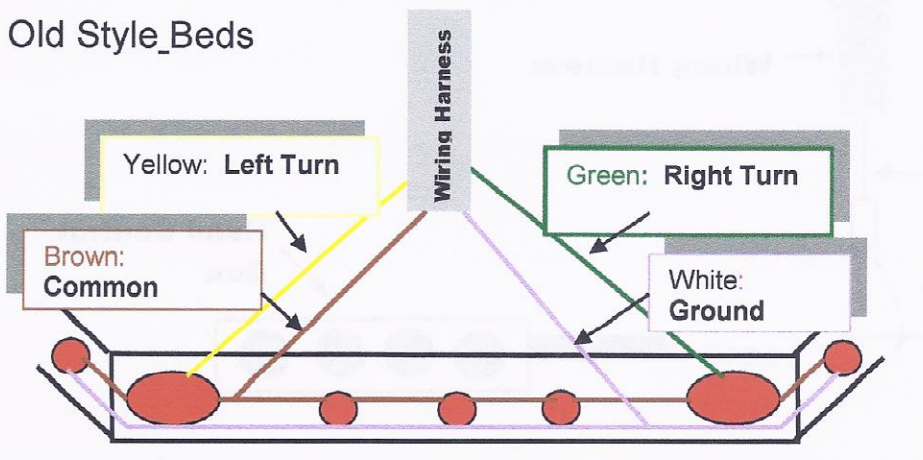
It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities and to install and maintain the equipment to provide compliance with the regulations. Add extra lights when transporting at night or during periods of limited visibility. Lighting kits and individual replacement lights are available from your dealer or directly from Cannonball. Some lights may also be purchased from the original manufacturer.



## Cannonball Light Wiring Diagram Under body light bars



### Old Style\_Beds



## PERFORMING MAINTENANCE

- Good Maintenance is your responsibility. Poor Maintenance is an invitation to trouble.
- Do not allow anyone to operate or perform maintenance on your Cannonball Bale Bed until they have had thorough training on how the unit works, a complete understanding of the safety precautions, and have read the owner's manual.
- Never work under a bed without the safety stand in the upright position, supporting the raised bed. The arms are Responsible for holding the bed up in the raised position. The safety switches inhibit arm function when bed is not in the home position (bed down arms to the side of the bed). If you disable the safety switch or switches by wiring around or depressing button(s) while bed is raised your bed could drop, if at the same time you or someone else operates the hand control to open the arms away from the bed. The safety stand is essential when working under this unit. Please call the factory for further clarification if you do not understand this principle.
- Use access doors whenever possible while performing routine maintenance. If you find it necessary to raise the bed, do not allow anyone to work on your unit while the bed is in the raised position without the safety stand or other substantial blocking device in place to avoid an inadvertent crushing hazard.
- Make sure children and pets do not have access to the hand-held tethered control box or a cord free remote as working parts of your bale bed may be engaged without the trucks motor running. Always support bed in the raised position when servicing or working on the underside of your bale bed.
- Keep safety switch or switches and rubber boot covering in good working condition and clean and clear of debris. Disabling safety switch or switches may cause a crushing hazard if the arm or arms are opened up in the raised position while operating the hand control or a remote device.
- Use extreme caution when making adjustments. (Call the factory if you have questions or are unsure of possible outcomes)
- Make sure there is plenty of ventilation. Exhaust fumes from your truck may cause asphyxiation.
- Never replace hex bolts with less than grade five bolts unless otherwise specified.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.

## PERFORMING MAINTENANCE continued

- If equipment has been altered in any way from original design, the manufacturer does not accept any liability for injury or warranty.
- Safety devices, decals, and fuses are installed for your personal protection; please do not operate your Cannonball bale bed if safety devices appear altered or defective. If you are unsure call the factory, we will assist you.

## MAINTENANCE CHART

ITEM	INTERVAL
Visual inspection, walk around truck look for damage, leaks, accumulated debris, anything that looks unusual.	Daily
Check tire pressure.	Before transporting
Check for stress cracks or broken welds.	Daily
Clean dirt and debris from hinge and squeeze points.	Daily
Keep sub-frame track free of dirt and debris.	Daily
Check for loose electrical connections (keeping them dry and tight).	Daily
Check all hydraulic components for damage or leaking fluids.	Daily
Check hydraulic hoses for proper clearance and movement when raising and lowering bed and arms. Replace broken zip ties and rubber straps.	Daily
Keep batteries in top working condition. Check ground wires for corrosion and poor contact with truck frame. Two batteries are required on all electric over hydraulic systems.	Weekly
Grease all 12 zerks	Weekly
Change oil filter (10 Micron)	Bi-yearly, more often in dirty conditions
Change Hydraulic fluid, using Mercon/Dextron III ATF or Shell Tellus Artic grade hydraulic oil	When changing filter, more often in dirty conditions. Call factory with questions.
Clean and paint	As needed
Keep all safety decals in good visible condition. Replacements are available for a nominal fee.	Periodically as needed
Review safety instructions	Periodically

**BED SPECIFICATIONS**

**PLEASE NOTE THE MANUFACTURER RESERVES THE RIGHT TO SUBSTITUTE PARTS AND VENDORS AT THEIR DISCRETION.**

Power unit 12v dc 1 hp motor/pump/Solenoid	Cannonball	call
Pump (only)	Cannonball	call
Motor (only)	Cannonball	call
Solenoid 3post	Napa	ST80
Solenoid 4 post	Napa	ST51
Solenoid heavy duty	Cole Hersey	call
Valve Manifold (Cannonball 3 cartridge valve)	Cannonball	call
Cylinder (squeeze) 2"x6" tie bolt with clevis ends	varied	2x6
Cylinder (lift) 3"x20" tie bolt with clevis ends	varied	3x20
Halogen Work light (headache rack)	Peterson	M525
Rectangular stop tail (headache rack)	Peterson	M305R
LED Resistor harness	Peterson	421-491RS
LED 4" White Round Back-up	Peterson	M815C-3
LED 4" Red Stop/tail with 7 diodes	Peterson	M826R-3
LED 4" Red Stop/tail with 8 diodes	Peterson	M417R-5P
LED x Lumen	Peterson	22423R-4
LED Small Amber Clearance	Peterson	M177A
LED 2 x 6 Red Oval Stop/turn	Peterson	call
Incandescent 2 x 6 Red Oval Stop/turn	Peterson	call
Incandescent 2 x 6 White Oval Back-up	Peterson	MZ421RX
Incandescent 4" White Round Back-up	Peterson	M415
Incandescent 4" Red Round Stop/tail	Peterson	M42R
Incandescent 2" Red Round	Peterson	146R
Grommets for all the above	Peterson	Call
Pigtails for all the above	Peterson	Call
Tag Lights	Peterson	MZ435N-X
ID Bar	Peterson	M15-3R
Reflectors (Red/Amber)	Peterson	call
Mercon / Dextron III ATF un-dye	Ramsey Oil	DEX/MER
Shell- Tellus Artic Grade Hydraulic oil	Shell	call
Replacement 10 micron Oil Filter		Napa-1551 Wix-51551
<b>Small Electrical Parts</b>		
Fuse (350 amp fuse)	Vortex	ANE-350A
Fuse Block for 350 amp fuse)	Vortex	BLC-209
Fuse (20 amp with holder)	Mize	ACT20
Safety Switches (snap action)	Grangers	6X286
10" Black ground cable	Mize	SS410
Grey rubber boots for safety switch	Remote	NC3030
Tethered Hand control Pendant	Remote	B-2194-23
Replacement Pendant switches	Remote	dpdt
Power cable (double 00) welding cable		00
<b>Other</b>		
2 5/16" 30# 1" riser hitch ball	Buyers	1802050
Dump bed rating	Cannonball	6000#
Arm lift capacity	Cannonball	2850#

Cannonball reserves the right to substitute and or change purchased parts at their convenience.

## USE AND CARE TIPS FROM THE FACTORY

1. Keeping the BED clean and painted will help to prolong the usefulness of this product.
2. Failure to clean Bed routinely may cause a buildup of spoiled feed, mud and other debris, which may become compacted or frozen. The resulting buildup may cause the bed to sit in a slightly unlevelled position while resting on the sub-frame. At this point the safety switch will over-ride the arm out function. Always keep sub-frame free of debris.
3. Two batteries in Top working condition are necessary for all Electric-over-hydraulic Cannonball Bale beds.
4. Maintain good working grounds, free of corrosion and poor connections.
5. Grease the 12 zerk fittings. Keep bed in good lubrication to maintain function and longevity.
6. Keep all safety decals and devices in good visible condition
7. When in doubt, don't hesitate to call. 620-532-3675

## ASSISTANCE

We are more than willing to answer any questions you may have on the functionality of your bed. Usually a quick call to your local dealer or directly to the factory will clear up any uncertainty. We are here to help.

If you have any questions not answered in this manual, or require additional copies, or the manual is damaged, please contact your dealer or:

**Contact us here at the factory: 620-532-3675**

620-243-4456 emergency

"DO IT ALL WITH A CANNONBALL"

## Cannonball Engineering

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## Dealer Tutorial Checklist for Cannonball Bale Bed Purchases

\_\_\_ Bed Provided by \_\_\_\_\_, an authorized Cannonball Dealer.

\_\_\_ Installation Performed by \_\_\_\_\_, an authorized Cannonball Installation facility.

### Proper use and function of the Bed and its component parts

Don't Hurry the learning process or take the unit for granted. Ease into it and become familiar with your new equipment. Practice operation of your equipment.

#### Hand control

\_\_\_ How the controls work, physical location and safety tips

#### Bale arm function

\_\_\_ Arm Clearance requirements

\_\_\_ Arm Pinch Points

\_\_\_ Arms are responsible for raising the bed

\_\_\_ Spinner usage for unrolling hay and free float feature

\_\_\_ Side shift arm function capabilities

#### Bed Lift Operation (Dump function)

\_\_\_ Dump Capacity rating

\_\_\_ Safety Stand location and importance

\_\_\_ Safety Switch or Switches importance and location

\_\_\_ Lock down U-bolt or mechanism, location and function

\_\_\_ Trailer tow bolt down instructions

#### Safety decals

\_\_\_ Location and meaning

#### Lighting

\_\_\_ Locations

#### Maintenance

\_\_\_ Importance of cleaning frame rails

\_\_\_ Periodic wiring inspection

\_\_\_ Periodic inspection of hose placement and condition

\_\_\_ Greasing procedures and frequency

\_\_\_ Location of the 350amp fuse and its function

Warranty

\_\_\_ Explained to purchaser

Cannonball Owner's Manual

\_\_\_ Each page presented and reviewed

\_\_\_ Safety procedures specifically reviewed

\_\_\_ I understand that all operators of this bed must be familiar with the operation and safety of this unit. They have read and understand the Owner's Manual safety guidelines and all operation procedures.

Contact information:

Dealer: \_\_\_\_\_

Dealer contact number \_\_\_\_\_

Cannonball OFFICE #620-532-3675

Cannonball EMERGENCY #620-243-4456

\_\_\_ I have reviewed this checklist. Proper bed operation has been demonstrated. Maintenance procedures have been explained. Warranty information has been explained. I have reviewed the entire Cannonball Owner's Manual. I have the contact information for my dealer and or install facility and Cannonball Engineering. The safety guidelines and operation procedures have been specifically reviewed and thoroughly explained. I understand that operation the bed outside of these guidelines/procedures could result in bed damage and or/or personal injury.

\_\_\_\_\_

\_\_\_\_\_

Owner Signature/date (sign and print)

Seller Signature/date (sign and print)