HYDRAFLKR

SQUARE BALE FLAKER



OWNERS MANUAL



The Original Flatbed Bale Handler

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As with any device designed to transfer feed, some cautions are in order. Keep this manual available at all times and refer to it regularly.

Keep **ALL** persons, animals, objects, etc. away from the machine **AND** its controls during all bale handling, loading, ramping and flaking operations.

When making adjustments or repairs, truck, tractor or other power source should be turned off.

Install the machine on the **HYDRABED**® using only the factory-supplied or equivalent hardware.

Torque installation clamps to 85 ft/lbs.

DO NOT operate vehicle without safe and adequate rear view. Adjust or replace rear view mirrors as needed to do so, especially when bale(s) are being transported. It is the responsibility of the operator to insure that the vehicle's outside rear view mirrors provide adequate rear view when a bale or bales are loaded on the bale platform of the $HydraFLKR^{TM}$. Due to the variations in bale size and length, this MUST be determined by the operator after the machine is installed on the vehicle.

DO NOT exceed the GVWR or GAWR of the chassis.

Operate the vehicle at or below speeds that are safe for the existing driving surface conditions.

DO NOT allow excess hay, snow, etc. to build up under or around $HYDRAFLKR^{\text{TM}}$ unit.

To avoid possible injury from flakes, do not stand directly in line with the end of the bale when removing bale twines.

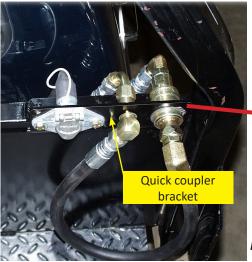
To prevent entanglement hazards as well as possible equipment damage, remove and discard all twine before engaging flaking mechanism.

Unsecured bales have the potential to slide off of the truck on side slopes or when turning, creating a serious hazard to bystanders and vehicles. When moving the vehicle with bales loaded, secure the bales by doing the following:

- When transporting a single bale, keep bale securely engaged between arms until ready to flake.
- When multiple bales are transported, the bale gripped in the arms must securely contact the bale below it to prevent sliding.

ALWAYS use sound judgment and common sense when operating your $HYDRAFLKR^{\text{TM}}$.

INSTALLING POWER BEYOND OPTION ON HYDRABED®



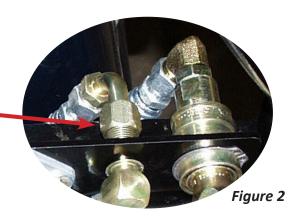


Figure 1

After determining correct valve series, install the proper Power Beyond components on the main control valve. (See specific instructions for each valve model below)

<u>Husco 5000 Series Sectional Valve (Hydra Beds® built August, 2002 and newer)</u>

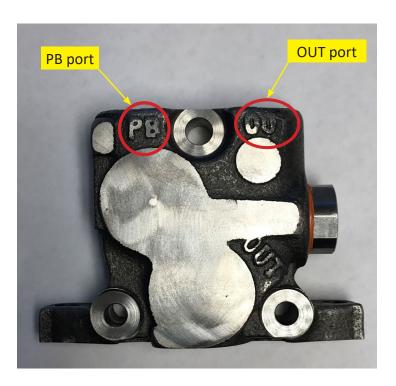
- With truck engine turned off, truck parking brake engaged and truck wheels blocked, relieve any trapped hydraulic pressure by activating all hydraulic controls in both directions several times.
- 2. Thoroughly clean entire hydraulic valve, fittings, hose ends, etc. to prevent contamination during the installation of the Power Beyond Option.
- 3. Label all cables and hoses for ease of re-installation.
- 4. Disconnect control cables from valve.
- 5. Drain system. Disconnect hoses from valve, carefully plugging each to prevent leakage and contamination.
- 6. Cap all exposed hydraulic fittings and remove valve from bed.



- 7. Thoroughly clean external surfaces of valve again.
- 8. Place valve on a clean, flat work surface and remove nuts from Outlet end of studs.
- 9. Carefully remove existing Outlet cover.
- 10. Inspect exposed internal face of valve section and remove any contamination resulting from disassembly. Make certain that the large diameter o-ring is undamaged and properly installed in it's machined groove. Make certain that the small spring is seated properly in it's cavity in the valve.
- 11. Install (2) –10 MORB x –8 MJIC straight fittings in Power Beyond Outlet cover as shown. Figure 3



- 12. Re-Install Power Beyond Outlet cover on **HYDRABED**® control valve.
- 13. Install stud nuts and torque to 14 ft/lbs on 5/16" studs and 33 ft/lbs on 3/8" stud.
- 14. Install the hydraulic couplers, jumper hose assembly and adapters in the quick coupler bracket as shown above. *Figures 1 & 2*
- 15. Install the 106" –8 Power Beyond pressure hose from the Power Beyond "PB" port on HYDRABED® control valve to the SAE –8 Bent Tube 90-degree adapter at the quick coupler bracket. This supplies pressure to the short loop hose at the quick coupler bracket.
- 16. Install the 106" –8 Power Beyond return hose from the –8 JIC Run 90 degree fitting at the quick coupler bracket to the Power Beyond "OUT" port on the HYDRABED® control valve. This returns oil from the female Pioneer quick coupler in the quick coupler bracket to the valve.
- 17. Refill system with recommended hydraulic oil.

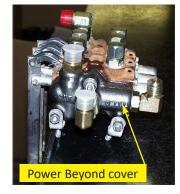


Brand 34 Series Sectional Valve (Hydra Beds® built March, 1992 through July, 2003)

- 1. With truck engine turned off, truck parking brake engaged and truck wheels blocked, relieve any trapped hydraulic pressure by activating all hydraulic controls in both directions several times.
- 2. Thoroughly clean entire hydraulic valve, fittings, hose ends, etc. to prevent contamination during the installation of the Power Beyond Option.
- 3. Label all cables and hoses for ease of re-installation.
- 4. Disconnect control cables from valve.
- 5. Drain system. Disconnect hoses from valve, carefully plugging each to prevent leakage and contamination.
- 6. Cap all exposed hydraulic fittings and remove valve from bed.
- 7. Thoroughly clean external surfaces of valve again.
- 8. Place valve on a clean, flat work surface with studs perpendicular to surface as shown.
- 9. Remove nuts from Outlet end of studs.
- 10. Carefully remove original Outlet cover.



- 11. Inspect exposed internal face of valve section and remove any contamination resulting from disassembly. Make certain that (1) metal spacer shim remains in place on each stud, and that the (4) o-rings are in place in their respective machined recesses. Replace these components as needed.
- 12. Install (2) -10 MORB x -8 MJIC 90 degree fittings in Power Beyond cover ports as shown before proceeding. *Figure 5*
- 13. Re-Install Power Beyond Outlet cover on valve as shown.
- 14. Install stud nuts and torque to 70 in/lbs.
- 15. Install the hydraulic couplers, jumper hose assembly and adapters in the quick coupler bracket as shown above. *Figures 1 & 2*
- 16. Install the 106" –8 Power Beyond pressure hose from the –8 90 degree Power Beyond adapter on **HYDRABED**® control valve to the SAE –8 Bent Tube 90-degree adapter at the quick coupler bracket. This supplies pressure to the short loop hose at the quick coupler bracket.
- 17. Install the 106" –8 Power Beyond return hose from the –8 JIC Run 90 degree fitting at the quick coupler bracket to the –8 JIC 90 degree return adapter at the **HYDRABED**® control valve. This returns oil from the female Pioneer quick coupler in the quick coupler bracket to the valve.
- 18. Refill system with recommended hydraulic oil.







<u>Gresen V15 Monoblock Valve (Hydra Beds® built January, 1986 through February, 1992)</u>

- 1. With truck engine turned off, truck parking brake engaged and truck wheels blocked, relieve any trapped hydraulic pressure by activating all hydraulic controls in both directions several times.
- 2. Drain oil from hydraulic system by removing filter element. Catch and dispose of hydraulic oil.
- 3. Thoroughly clean entire hydraulic valve, fittings, hose end, etc. to prevent contamination during the installation of the Power Beyond Option.
- 4. Cap all exposed hydraulic fittings and remove valve from bed.
- 5. Remove Power Beyond cavity plug from Outlet end of valve.
- 6. Install supplied Power Beyond Sleeve in cavity.
- 7. Install (1) -10 MORB x -8 MJIC 90 degree adapter in Power Beyond Sleeve.
- 8. Remove valve return hose from filter inlet adapter.
- 9. Remove ¾" MPT x (-10 MJIC or ¾" hose barb) adapter from filter inlet port.
- 10. Install male end of -12 (3/4") run pipe "T" in filter inlet opening. Seal threads with Teflon paste (NOT tape).
- 11. Re-Install original $-12 (3/4") \times (-10 \text{ MJIC or } 3/4")$ hose barb) adapter removed earlier from filter inlet into female threads of "T" using Teflon paste.
- 12. Re-Attach original valve return hose to (-10 MJIC or ¾" hose barb) adapter.
- 13. Install supplied -12 (3/4") MPT x -8 MJIC adapter in branch opening of "T" using Teflon paste to seal threads.
- 14. Install the hydraulic couplers, jumper hose assembly and adapters in the quick coupler bracket as shown above. *Figures 1 & 2*
- 15. Install the 106" –8 Power Beyond pressure hose from the Power Beyond port on **HYDRABED**® control valve to the SAE –8 Bent Tube 90-degree adapter at the quick coupler bracket. This supplies pressure to the short loop hose at the quick coupler bracket.
- 16. Install the 106" –8 Power Beyond return hose from the –8 MJIC Run 90 degree fitting at the quick coupler bracket to the return adapter at the **HYDRABED**® filter. This returns oil from the female Pioneer quick coupler in the quick coupler bracket to the filter/reservoir.
- 17. Refill system with recommended hydraulic oil.

Brand Monoblock Valve (Hydra Beds® built January, 1983 through December, 1985)

- 1. With truck engine turned off, truck parking brake engaged and truck wheels blocked, relieve any trapped hydraulic pressure by activating all hydraulic controls in both directions several times.
- 2. Thoroughly clean entire hydraulic valve, fittings, hose end, etc. to prevent contamination during the installation of the Power Beyond Option.
- 3. Cap all exposed hydraulic fittings and remove valve from bed.
- 4. Remove Outlet adapter from Outlet end of valve.
- 5. Remove Power Beyond cavity female hex plug from valve top.
- 6. Thoroughly clean Power Beyond cavity female hex plug & o-ring & re-install in second set of threads accessible through Outlet port.
- 7. Re-install Outlet adapter.
- 8. Install –8 MORB x –8 MJIC adapter in Power Beyond port on valve top.
- 9. Remove valve return hose from filter inlet adapter.
- 10. Remove ¾" MPT x (-10 MJIC or ¾" hose barb) adapter from filter inlet port.
- 11. Install male end of -12 (3/4") run pipe "T" in filter inlet opening. Seal threads with Teflon paste (NOT tape).
- 12. Re-Install original $-12 (3/4") \times (-10 \text{ MJIC or } 3/4")$ hose barb) adapter removed earlier from filter inlet into female threads of "T" using Teflon paste.
- 13. Re-Attach original valve return hose to (-10 MJIC or ¾" hose barb) adapter.
- 14. Install supplied –12 (3/4") MPT x –8 MJIC adapter in branch opening of "T" using Teflon paste to seal 14.
- 15. Install the hydraulic couplers, jumper hose assembly and adapters in the Power Beyond connection bracket as shown above. *Figures 1 & 2*
- 16. Install the 106" –8 Power Beyond pressure hose from the Power Beyond port on **HYDRABED**® control valve to the SAE –8 Bent Tube 90-degree adapter at the quick coupler bracket. This supplies pressure to the short loop hose at the quick coupler bracket.
- 17. Install the 106" –8 Power Beyond return hose from the –8 JIC Run 90 degree fitting at the quick coupler bracket to the return adapter at the **HydraBed**® filter. This returns oil from the female Pioneer quick coupler in the quick coupler bracket to the filter/reservoir.
- 18. Refill system with recommended hydraulic oil.

INSTALLING HYDRAFLKR™ ON VEHICLE EQUIPPED WITH HYDRABED SYSTEM

- 1. Remove all interfering toolboxes, feeders, etc.
- Install the quick coupler bracket to the headache rack as shown using sheet metal screws or by welding. *Figure 7*

Note: Disconnect vehicle battery prior to welding.

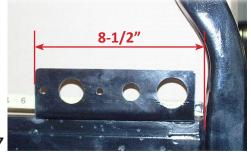


Figure 7

 Route the hydraulic hoses from the power beyond ports on the HYDRABED® valve to the quick coupler bracket. Figure 8

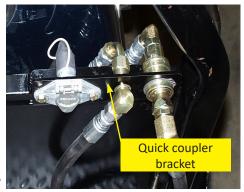
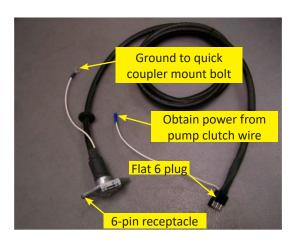


Figure 8

- 4. Install the electrical control wiring harness/switch pendant.
 - a. Route Connector portion of control harness into truck cab by first threading flat 6 plug through hole in quick coupler connection bracket (on headache rack of *HydraBed®*), then through rear of truck cab utilizing rubber grommet to prevent abrasion or electrical shorting.
 - b. Route Switch Pendant portion of control harness from driver's seat to rear of cab.
 - c. Connect mating portions of flat 6 plug assembly.
 - d. Route and connect a jumper wire from the *HydraBed*® pump clutch switch to the jumper wire (blue butt connector) on the flat 6 plug end of the *HydraFLKR*™ control harness. Secure and protect this wire as needed along its entire path.
 - e. Install 6-pin female receptacle in headache rack quick coupler bracket, grounding white ground jumper (ring terminal) to (1) mount bolt.
 - f. Secure all harness cables & wires as needed to prevent damage.





5. Using the (3) self-storing square lifting brackets, carefully lift the *HYDRAFLKR*™ to a position above the bed. With the flake separator mechanism to the left (driver's side), carefully lower the *HYDRAFLKR*™ to the surface of the bed leaving approximately one foot of bed floor exposed between the headache rack and the front edge of the *HYDRAFLKR*™. *Figure 11*



Figure 11

6. Connect the hydraulic quick couplers and the electrical control circuit plug. *Figure 12*



Figure 12

NOTE: If feeding bales will be larger than 36" wide or high, Step 9 will need to be performed before Step 7.

7. Carefully slide the entire *HYDRAFLKR*™ forward until the upper edge of the front bale guide is approximately 3/4" from the headache rack. *Figure 13*



Figure 13

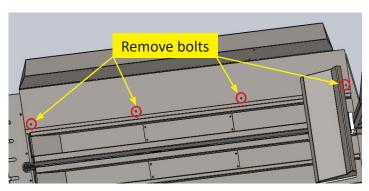
8. Shift the *HydraFLKR*™ left or right as needed to center the base angles. Install the clamp hooks under the appropriate bed side bar for your bed model. *HydraBed*® models ending in "00" - install clamping bolts on **outer** rubrail. *HydraBed*® models ending in "50" - install clamping bolts on **inner** 3/8 rubrail ("00" model shown). Torque the clamp bolts to 85 ft/lbs. *Figure 14*



Figure 14

- 9. If you will be feeding bales that are more than 36" wide or high:
 - a. Install the FLKR-EXT bale support rail as shown using (2) 1/2 x 3 Grade 5 cap screws and nylock nuts.
 - b. Adjust the front fence by removing the (4) socket head cap screws and loosening the (6) fence bracket bolts that are at the front underside of the flaker.
 - c. Slide the fence outward to the next set of bolt holes and reinstall the (4) socket head cap screws into those bolt holes and tighten the (6) fence bracket bolts loosened in step b. *Figures 15 & 16*





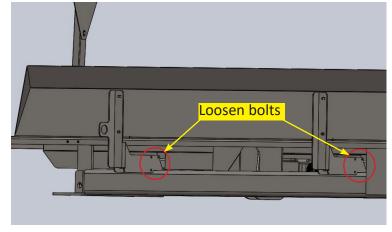


Figure 15

Figure 16



During steps 11-16 and at all other times the unit is in use, make certain that no persons, tools, etc. are near the travel path of the $HydraBed^{\otimes}$ arms or any portion of the $HydraFLKR^{\text{TM}}$.

- 10. Carefully cycle the HydraBed arms through their full range of motion to insure there are no points of interference with any part of the $HydraFLKR^{TM}$.
- 11. Activate the *HydraFLKR*™ Ramp control to the "Up" direction until the bale platform reaches its highest point.
- 12. Reverse the "Ramp" control until the bale platform is again at its lowest position.
- 13. Activate the "Flake" control. The flake separating fingers should cycle in an outward motion when viewed from bale platform.
- 14. Activate the "Push" control until the bale wedge/bale support assembly reaches its travel limit nearest the flake separator.
- 15. Reverse the "Push" control until the bale wedge/bale support assembly reaches its travel limit farthest from the flake separator. The bale support should tip out beyond perpendicular at this position.

16. Install the appropriate bale engaging attachments for your combination of $HYDRABED^{\circledast}$ model and bale dimensions. Adjust back stops so bale just clears front fence on $HYDRAFLKR^{\intercal}$ when placed on platform. *Figure 16*



Figure 16

NOTE: The location of the backstops will determine where the bale rests on the HydraFLKR when it is loaded onto the HydraFLKR.

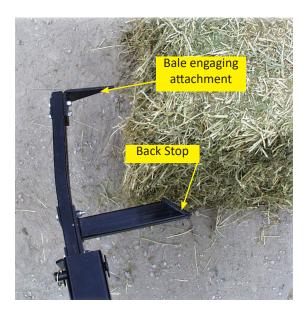


IMPORTANT SAFETY REQUIREMENT: It is the responsibility of the operator to insure that the vehicle's outside rear view mirrors provide adequate rear view when a bale or bales are loaded on the bale platform of the *HydraFLKR*™. Due to the variations in bale size and length, this **MUST** be determined by the operator after the machine is installed on the vehicle.

Operation when installed on Hydra Bed®-equipped vehicle

- Verify that all persons, tools, etc. are away from the truck/bed combination and that the paths behind & in front of the truck are clear of obstacles, vehicles, people, animals, etc.
- Prepare the HYDRAFLKR™ for bale loading by fully lowering the HYDRAFLKR™ bale platform and moving the "Pusher" bale wedge/bale support to its travel limit at the end opposite the flake separator.
- Lower the HYDRABED® bale arms to a point near the centerline of the vertical height of your target bale.
- 4. Grip the arms together until the tips of the bale engaging attachments are approximately 5' apart.
- 5. With the centerline of the truck aligned with the centerline of the long side of the target bale, back up until the attachment tips contact the bale. (*Note 1:* if the bale is free to move on the ground, the attachment tips will square it with the truck) (*Note 2:* If the bale is NOT free to move on the ground, such as in a multi-tiered stack, you must back up to it squarely to ensure that when gripped & loaded, it will be parallel with the *HydraFLKR*™).
- 6. Spread the arms enough to allow the bale engaging attachment tips clear the ends of the bale.
- 7. Back up until the back stops make contact with the face of the bale closest to the truck. Grip the bale securely.
- 8. Carefully load the bale onto the *HYDRAFLKR*™ bale platform, making certain that it is parallel with the front bale guide.





9. Travel to the bale feeding site with the bale resting on the $HYDRAFLKR^{TM}$ bale platform and the $HYDRABED^{@}$ bale arms continuing to grip the bale or in contact with bale.



10. When transporting (2) bale load, the first bale will be resting on the $HYDRAFLKR^{TM}$ platform, and the second bale will be resting on the first bale while also remaining in the secure grip of the $HYDRABED^{\otimes}$ arms. *Figure 21*



Figure 21



IMPORTANT SAFETY NOTICE: FAILURE TO MAINTAIN SECURE CONTACT WITH THE BALE ARMS ON THE BALE RESTING ON THE Hydra FLKR™ MAY ALLOW BALE TO BLOW OR SLIDE OFF PLATFORM, CREATING SERIOUS HAZARD TO BYSTANDERS, OTHER TRAFFIC, ETC. TO REDUCE THIS RISK, NEVER TRANSPORT BALES WITHOUT MAINTAINING A SECURE GRIP ON THEM WITH THE Hydra Bed® ARMS!

11. Release the bale and move the bale arms to a position that will not interfere with bale ramping. Activate the "Ramp" control to raise the bale platform to it's highest position. *Figure 22*



Figure 22

12. Carefully activate the "Push" control until the bale support reaches a position perpendicular to the bale platform. *Figure 23*



Figure 23

- 13. Standing to the side to prevent injury from falling hay, cut the bale twines at the flake separator end (driver's side).
- 14. From opposite end, remove the twines.
- 15. After making certain that your chosen path is clear of obstacles, persons, animals, etc. begin truck forward motion at the desired rate of travel. Activate the "Flake" control to discharge the first flake.
- 16. Activate the "Push" control to advance the bale the necessary distance to provide the desired drop quantity (usually 1 or 2 individual flakes). Activate the "Flake" control to discharge the next flake. *Figures 24 & 25*



Figures 24

Figures 25

- 17. Repeat steps 15 and 16 until all flakes are distributed.
- 18. Fully lower the bale platform.



WARRANTY

No warranty claims will be processed without the return of properly completed warranty card found at the front of this manual.

Triple C, Inc. warrants for a period of two years from date of shipment, the goods manufactured by it to be free from defects in material and workmanship when properly installed, carefully operated and carefully maintained. If within two years from shipment any of the goods fail to so conform, or is found to have been defective in material or workmanship when shipped as determined by Triple C, Inc., such defective goods shall, at Triple C, Inc.'s option, either be repaired or replaced by Triple C, Inc., F.O.B. Sabetha, Kansas. Merchandise not of Triple C, Inc. will give the purchaser the benefit of such adjustment as it can make with the manufacturer.

Warranty is not extended to cover breakage of wear parts, nor does it include any breakage or wear due to the fault of the operator or failure to lubricate and properly care for the equipment.

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