## Basic Municipal Specifications for Trailer Equipped with KEITH® V-FLOOR® and KEITH® V-Sweep Assembly

## Floor Specifications

- A. Hydraulic System: (6) cylinders with 3" diameter bore, 1.772: ODx1.125" ID 1045 induction hardened (50 Rc minimum and 10 RMS finis) piston rods with 6" stroke. Each unit of (2) cylinders is connected at the base of each cylinder. All hydraulic lines on the drive unit must be steel hydraulic tubing (no hoses). Each piston shall have (2) piston seals with heavy duty back up rings and a high strength wear ring. Each cylinder head shall have (1) rod wiper, (2) high strength wear rings, (1) energized rod seal with heavy-duty backup ring, and (1) buffer seal with backup ring.
- **B. KRFII DX Drive Mechanism:** The hydraulic cylinder shafts must be attached to the frame with (4) 5/8" [16mm] bolts and will remain stationary. The 2"x 6" cross drives are clamped directly to the hydraulic cylinder barrels. The cylinders on each cross drive must be independently removable and interchangeable.
- **C. Cross Drives:** Are supported by UHMW strips on a support rail attached directly to the frame.
- **D.** Flooring: Steel V-Slats on 10" or 10-1/2" centers supported by #2837 sub-deck and #2446 J-bearing.
- **E. V-Sweep Assembly:** As supplied by KEITH Mfg. Co., Madras, Oregon
- **F. Wet Kit:** A hydraulic pump, driven off a PTO mounted on the truck tractor transmission, shall power the hydraulic system. Minimum pump rating to be 30 GPM @ 3000 PSI. (Can be up to 60 GPM @ 3000 PSI depending on unloading speed desired.) Truck mounted hydraulic unit shall be provided and installed by hauling contractor.
- **G. Warranty:** All KRFII DX hydraulic drive units come with a 2 year warranty on hydraulic components.

Note: TRI-AXLE TRAILERS SHOULD SPECIFY 2"X 8" CROSS DRIVES IN ITEM "C" AND 3.5" DIAMETER BORE CYLINDERS IN ITEM "A".

## **Trailer Design Requirements**

- **H. Side Walls:** Side walls must be flat from top rail to floor side seal front to rear. No protrusions (welds, bolts, etc) on walls. Door post must be flush with wall at real door opening NO EXCEPTIONS. Walls need to be parallel front to rear. Walls can be steel, aluminum, or lined.
- I. Front Wall: The V-Sweep winch must be mounted on the center line of the trailer to align with the strap attachment on the V-Sweep Headboard. If a strap roller is used it must be mounted on a reinforced area on the center line of the trailer and be perpendicular to the floor. The front wall needs to be reinforced where the winch mounting bracket is attached and where the V-Sweep headboard bump stops make contact with the front wall. Check for clearance if front corners of trailer are rounded. Must have top front shield above V-Sweep Assembly.
- **J. Rear Threshold:** Rear threshold must be at a 45 degree angle (not flat) starting at 9" minimum from inside door. This will require door to be 9" longer.
- **K.** Floor Section: All floor components must be steel from wall to wall (side seal, flooring & subdeck).
- **L. Side Seal:** Side seal must include a 20 degree angle from subdeck to wall. The corner between side seal and side wall needs to be free of protrusions (welds).