

# HYDRAULIC MOTOR DRIVE KIT

FRAME MOUNTED PUMPS / MODEL B-ZR BALL BEARING BRACKETS

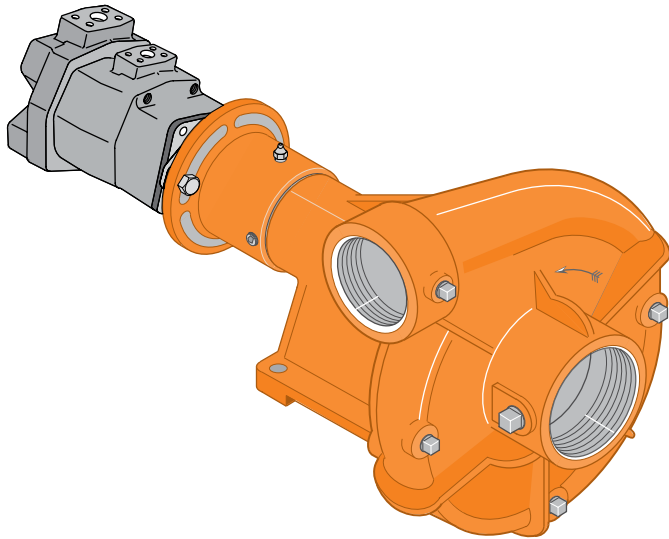


Figure 1 – Hydraulic motor drive kit on Model B3ZRM pump

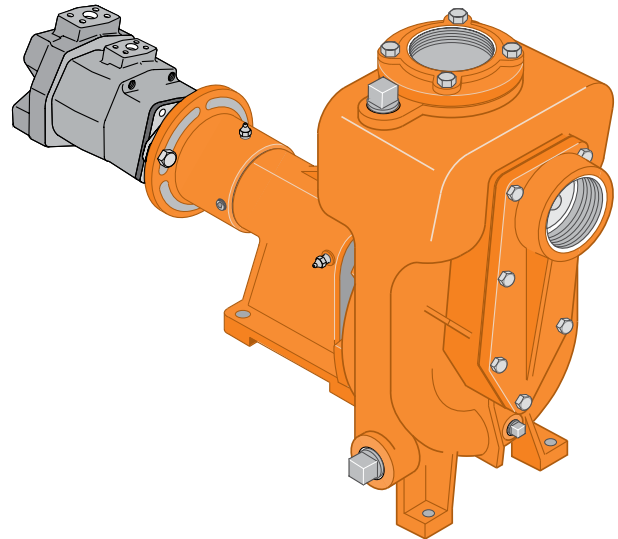


Figure 2 – Hydraulic motor drive kit on Model B4ZRKS self-prime pump

- Ideal for mobile units where truck hydraulic system is adequate to drive pump.
- Pump unit can be installed in any convenient location. Alignment with transmission side power take-off not required.
- Very small hydraulic motor eliminates large mounting space envelope required by engine. Engine fuel system, cooling system, exhaust system, and batteries are not required.
- The hydraulic motor drive kit can be used with the following pump models that use style H04007 or H000553 brackets. Kit can be installed on existing pump or ordered for a new pump.

Pump Model	HP Range	Speed Range
B1-1/2ZRL(S)	20	1000-3600
B2-1/2ZRL(S)	40	1400-3600
B2-1/2ZRM(S)	55	1400-3400
B2ZRL(S)	25	1000-3600
B2ZRM(S)	21	1000-2800
B3ZRM(S)	40	1400-2300
B4ZRKS	23	1000-2200
B6ZRH(S)	45	900-1900
B6ZRL(S)	46	2100-1400
B6ZRM(S)	35	2200

Hydraulic Motor Drive Kit • Catalog Number B07779 • Shipping Weight 15 lbs.

Price includes mounting bracket, splined shaft coupling, shaft key, set screws, grease fitting and tow bolts, nuts and washers to secure hydraulic motor to mounting bracket.

(Price does not include centrifugal pump or hydraulic motor or installation.)

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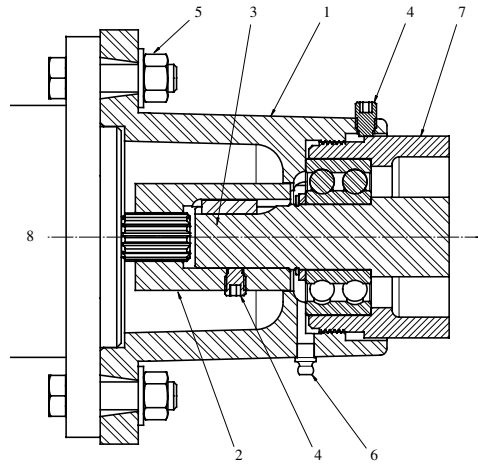


Figure 3

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Mounting Bracket – Cast Iron<br/>Fits on Model B-ZR ball bearing bracket in place of outer bearing cap. Supports hydraulic motor and maintains exact shaft alignment.</li> <li>2. Splined Shaft Coupling – Steel<br/>Precision machined to fit SAE standard hydraulic motor shaft spline (see Figure 4 for size). Coupling is installed on pump shaft and locked in place with drive key and set screw.</li> <li>3. Pump Shaft – Steel<br/>Length of new or existing shaft projection to be shortened by saw cut, as shown in installation instructions (disassembly of pump is not required).</li> </ol> | <ol style="list-style-type: none"> <li>4. Set Screws – Steel</li> <li>5. Bolts, with Nuts and Flat Washers – Steel</li> <li>6. Grease Fitting for outer pump bearing – Steel</li> <li>7. Model B-ZR Ball Bearing Bracket – Cast Iron Component of new or existing pump unit (see Pump Model).</li> <li>8. Hydraulic Motor – See below for detailed requirements.</li> </ol> |
|---|---|

### Hydraulic Motor Requirements

The hydraulic motor must have and SAE Standard (SAE J744C) mounting flange and shaft size [B], with 30° involute spline, 13T, 16/32 pitch, as shown in Figure 4.

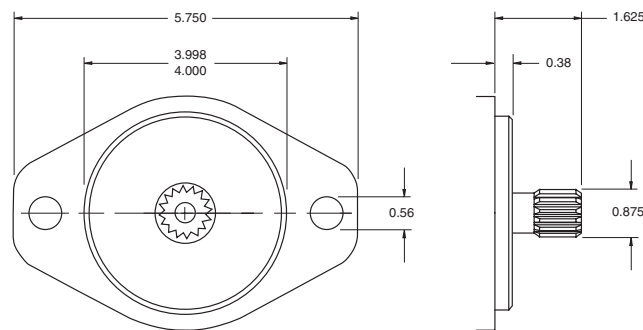


Figure 4

The hydraulic motor must produce the torque required to drive the centrifugal pump at the desired operating speed. For the centrifugal pump GPM and TDH, read the required RPM and BPH from the pump performance curve, and calculate the required torque, in Lbs-Ft, as follows:

$$\text{Torque} = \frac{[5252] \times (\text{BPH})}{(\text{RPM})}$$

The hydraulic motor selected must match with the flow and pressure capability of the hydraulic power source system. The operating speed of the centrifugal pump will be controlled by valves in the hydraulic power source system.

# HYDRAULIC MOTOR DRIVE KIT

## DISCHARGE PRIMING VALVES

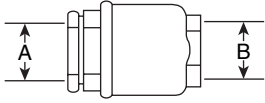


Figure 5 - Standard check valve, female pipe thread both ends

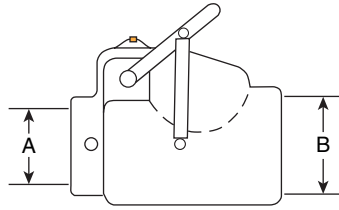


Figure 6 - Priming valve, female pipe thread both ends

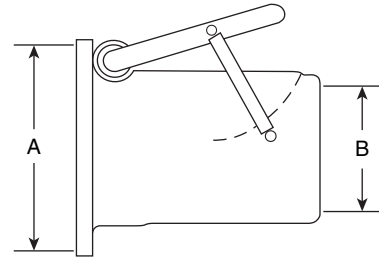


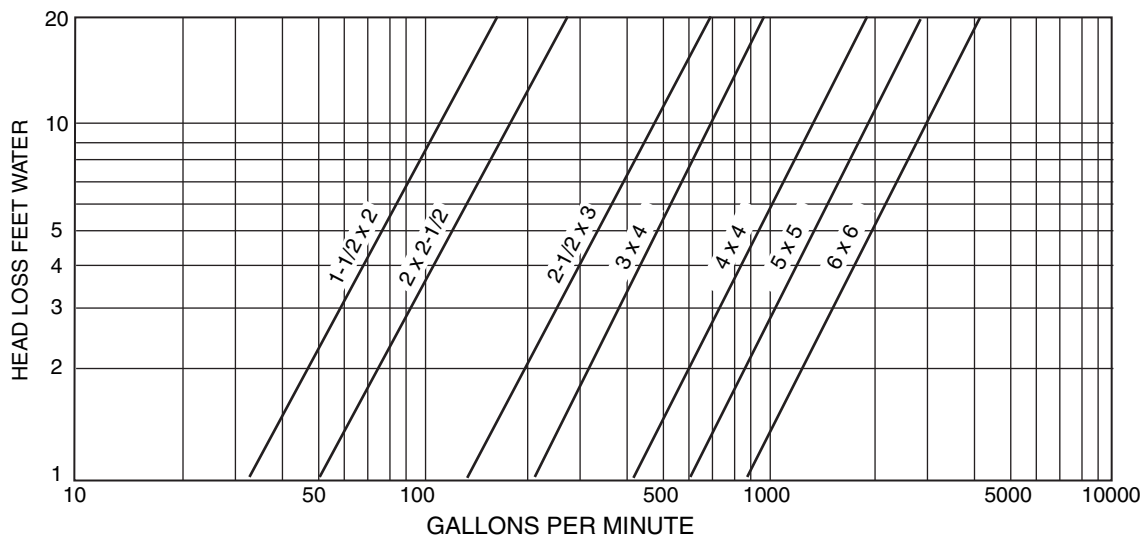
Figure 7 - Priming valve, flanged pump end, female pipe thread discharge end

Size (in)	Drawing	Dimensions (in)		Weight (lb)	Type	Catalog Number
		"A" Pump End	"B" Discharge End			
1-1/2 x 2	Figure 5	1-1/2	2	5	Automatic Set, Automatic Open	B02669
2 x 2-1/2	Figure 5	2	2-1/2	9		B02352
2-1/2 x 3	Figure 6	2-1/2	3	21		B05922
3 x 4	Figure 6	3	4	20		B05923
4 x 4	Figure 7	4 x 9	4	36		B05924
5 x 5	Figure 7	5 x 10	5	55		B05925
6 x 6*	Figure 7	6 x 11	6	70		B05926

\* When this 6 x 6 valve is used on a "B6ZRM(S)" pump end, a catalog number B56341 discharge connection kit is required.

NOTE:  
 1-1/2" x 2" valve is a 2" x 2" check valve bushed to sizes shown.  
 2" x 2-1/2" valve is a 2-1/2" x 2-1/2" check valve bushed to sizes shown.  
 2-1/2" x 3" valve is a Berkeley 3" x 4" valve bushed to sizes shown.

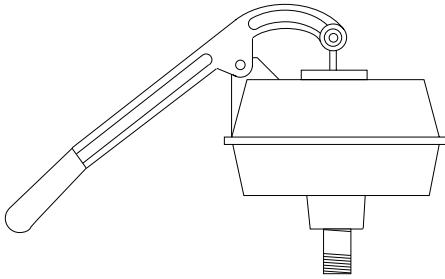
### FLOW CHARACTERISTICS



All prices F.O.B. factory or factory branch. Non-retroactive and subject to change without notice.

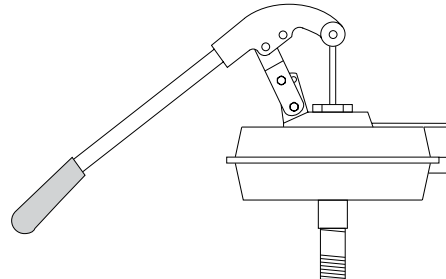
# HYDRAULIC MOTOR DRIVE KIT

## PRIMERS



### 6" Hand Primer

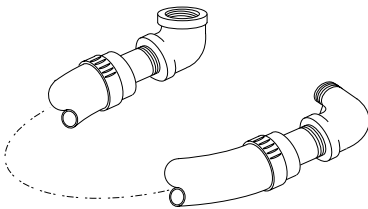
Model TS6 primer with built-in automatic shut-off valve. Mount has 1/2" NPT female thread and 1" NPT male thread.



### 9" Hand Primer

Model TS9 for 6 inch, 8 inch and larger pumps. Heavy duty, high capacity primer with adjustable stroke. Unit has 4-1/2" stroke for maximum capacity and 3-1/2" stroke for maximum lift. Steel mounting bracket is included.

Model	Description	Catalog Number	Apprx. Net Wt (lb)	Max. Suction Lift (ft)
TS6	Han-Dee Primer	M14832	21	15
TS9	Han-Dee Primer	M14833	21	10



### Remote Mounting Kit

Rubber hose and fittings necessary for mounting Han-Dee Primer as much as 24" away from pump. Apprx. Net Wt. 2 lbs., Catalog Number B50001.

