



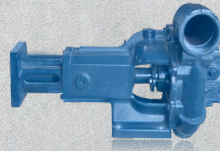
SPECIALTY HAULAGE SOLUTIONS FOR CONSTRUCTION AND MINING

PRODUCT INFORMATION BULLETIN

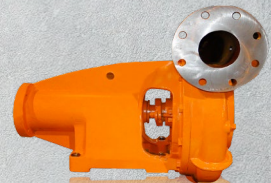
COMPARISON OF MEGA WATER PUMP MODELS

Applicable to:

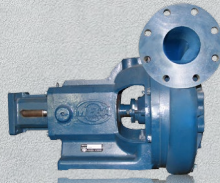
- M-3 (part no. 304954)
- B-4 (part no. 304755)
- M-4 (part no. 304991/304992)
- M-4B (part no. 306200/306201)



M-3 Direct Motor Mount, CW
304954



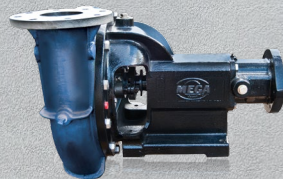
B-4J Splined Shaft, CW
304755



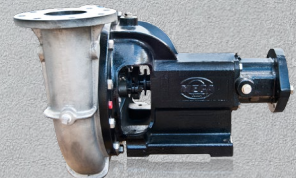
M-4 Standard, CW
304991



M-4 Corrosion Resistant, CW
304992



M-4B Standard, CW
306200



M-4B Corrosion Resistant, CW
306201

PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

Contents

Description	1	B-4 Water Pump Identification	7
Pump Overviews	2	Side-by-side Comparison of M-4 & M-4B...	8
M-3 Water Pump Identification	6	Hydraulic Drive Motor Couplings	13

DESCRIPTION

This bulletin is designed to highlight the differences between the four main models of Mega Water Pumps so that they may be easily distinguished from one another. These Water Pump models are the **M-3 (part no. 304954)**, **B-4 (part no. 304755)**, **M-4 (part no. 304991/304992)**, and **M-4B (part no. 306200/306201)**.

Any questions concerning this bulletin should be directed to the MEGA Corp. Product Support Group at:
US toll free: 1-800-345-8889

Direct: 1-505-345-2661 or visit our website at www.megacorpinc.com for more detailed contact information.

VISUAL IDENTIFICATION REFERENCES

The four main Mega Water Pump models differ notably in structure at certain locations. These visual references may be used to quickly determine which model a specific pump is. The locations are as follows:

- Hydraulic Drive Motor Mount
- Pump Lifting Lugs
- Volute and frame reinforcing ribs
- Grease Fitting Location
- Water Pump ID Plate Hydraulic
- Drive Motor Coupling

This bulletin will discuss the differences between pump models for each of these locations.

INTERCHANGEABILITY

M-4 to M-4B: Physical interchange, direct replacement. All internal components DO NOT interchange. The conversion kit includes: gaskets, hardware, and drive coupling.

B-4 to M-4B: Extensive pipe, flange, inlet, and mounting changes are required. Some internal components interchange. The conversion kit includes: gaskets, hardware, adjustable sump ring, inlet riser, pump frame, inlet and outlet flanges, and drive coupling.

PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

PUMP OVERVIEWS

This section includes the basic specifications for the water pump models, as well as four full side-view images of each. The images are of an *example* pump of that series, and may differ from other pumps of the same model in terms of color and material.

M-3 SERIES (304954)

304954: CW, 4 inch NPT inlet/3 inch NPT outlet, Cast Iron Water Pump



PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

B-4 SERIES (304755)

304755: CW, 5 inch inlet/4 inch outlet, Cast Iron Water Pump

NOTE

Due to the 6 bolt drive motor flange, it may be necessary to reposition the hydraulic manifolds for the flow control to face away from the pump to keep the original orientation of the drive motor.



PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

M-4 SERIES (304991/304992)

304991: CW, 6 inch inlet/4 inch outlet, Rope Packing Seal, Standard Cast Iron Water Pump

304992: CW, 6 inch inlet/4 inch outlet, Rope Packing Seal Corrosion Resistant Water Pump



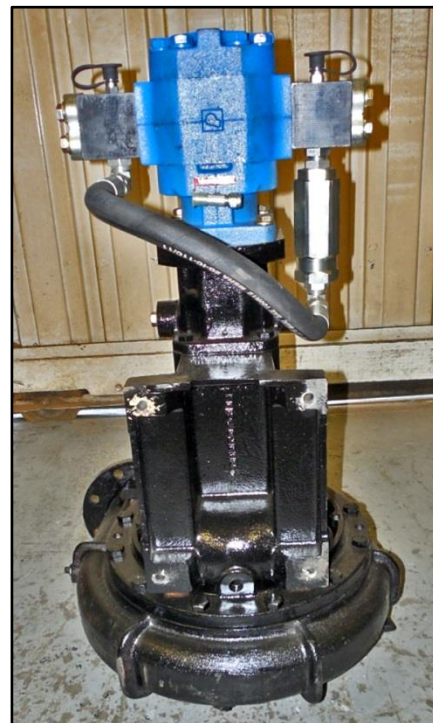
PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

M-4B SERIES (306200/306201)

306200: CW, 6 inch inlet/4 inch outlet, Rope Packing Seal, Standard Cast Iron Water Pump

306201: CW, 6 inch inlet/4 inch outlet, Rope Packing Seal, Corrosion Resistant Water Pump



PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

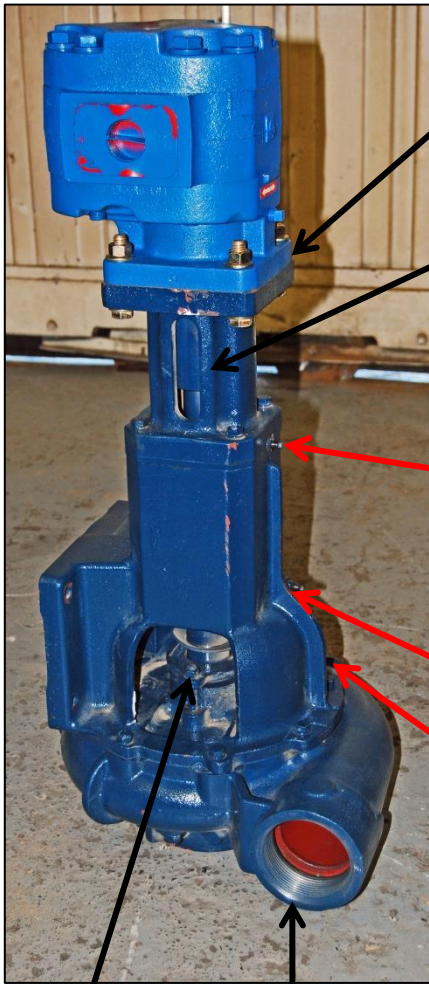
M-3 WATER PUMP IDENTIFICATION

The M-3 pump is the smallest of all four water pumps, and is easy to identify by the following references:



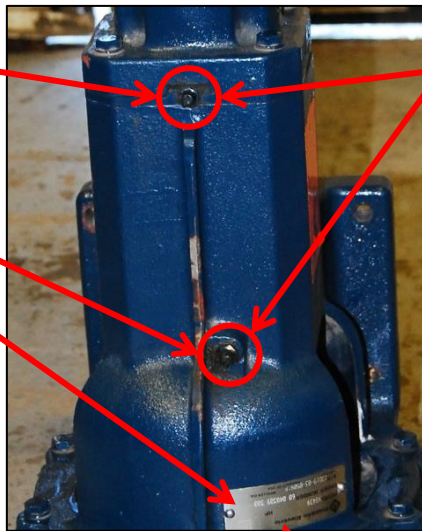
3 Inch NPT Outlet

4 Inch NPT Inlet



Square 4 Bolt Motor Flange

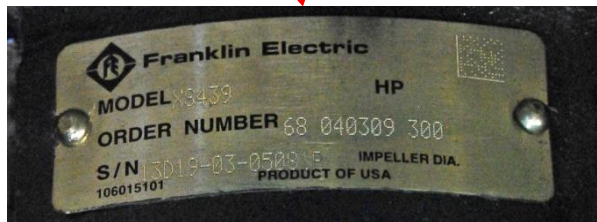
Access Slots on Motor Mount



Grease Fittings, 2 each

Rope Packing Seal

3 Inch NPT Outlet



PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

B-4 WATER PUMP IDENTIFICATION

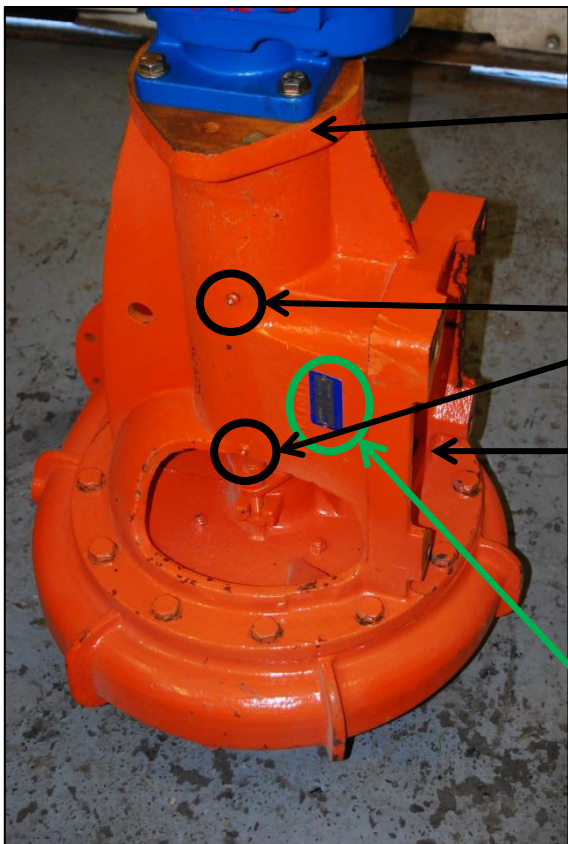
The B-4 pump frame is very distinct from the other three Mega water pump frames, which therefore makes the B-4 relatively easy to identify. Shown below are several references to assist in identification.



4 Inch outlet.
Uses the **same gasket** as M-4 and M-4B Water Pumps. Outlet location is different than M-4 and M-4B pumps.

"BERKELEY" cast into Volute Case

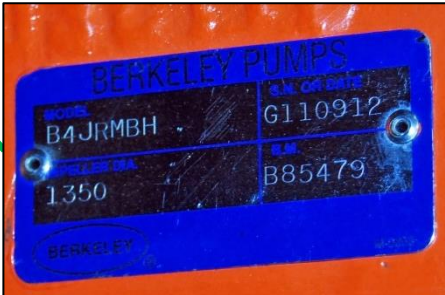
5 Inch Inlet.
NOT the same as M-4 and M-4B Water Pumps



Dual Bolt Pattern Drive Motor Flange (Square 4 Bolt and 2 Bolt Oval)

Grease Fittings (2 each)

Smaller pump frame mount bolt pattern. Will **not** directly replace M-4 or M-4B pumps



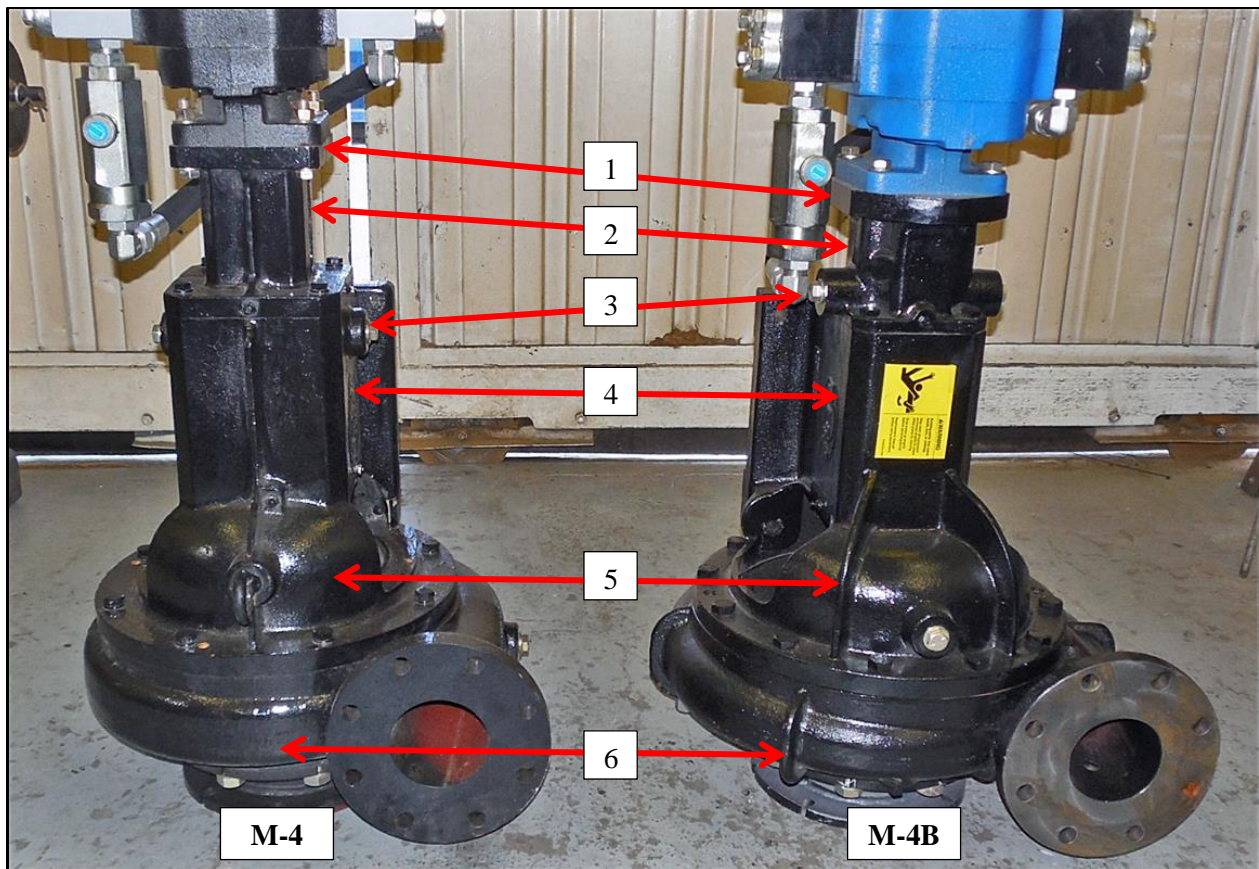
PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

SIDE-BY-SIDE COMPARISON OF M-4 AND M-4B

The M-4 and M-4B pumps are the most difficult to distinguish between as they are very similar in appearance. The following side-by-side comparison will assist in differentiating the M-4 and M-4B pumps by pointing out specific areas in which they differ:

1. **Motor Mount Flange**
 - a. M-4 Motor mount flange is square and is the same size as the motor flange
 - b. M-4B Motor mount flange is oval in shape with 2 parallel flats and is larger than the motor flange
2. **Motor Mount**
 - a. M-4 Motor mount has access openings for tightening the drive coupling set screws
 - b. M-4B Motor mount is enclosed, no opening
3. **Lifting Lugs**
 - a. M-4 Lifting lugs are on the pump frame
 - b. M-4B Lifting lugs are on the motor mount
4. **Pump Frame**
 - a. M-4 pump frame is **larger** than the M-4B frame
5. **Strengthening ribs on pump frame**
 - a. M-4 has **no** ribs on pump frame
 - b. M-4B has ribs on pump frame
6. **Volute Case Ribs**
 - a. M-4 has **no** ribs on volute case
 - b. M-4B has ribs on volute case



(1) Motor Mount Flange
(2) Motor Mount
(3) Lifting Lugs

(4) Pump Frame Size
(5) Presence of Pump Mount Ribs
(6) Presence of Volute Case Ribs

PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

7. Seal Opening Size

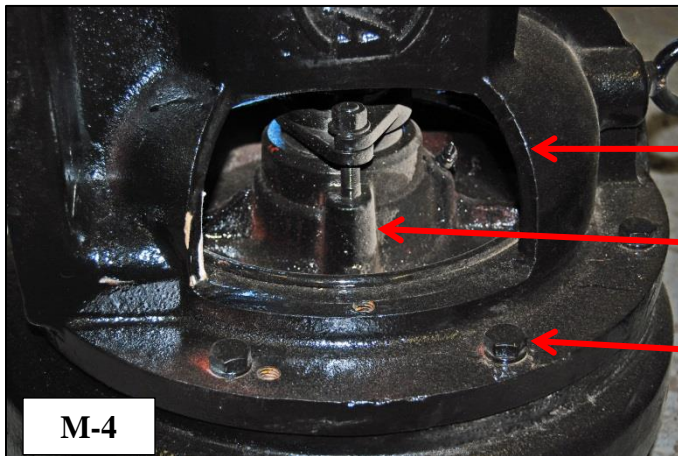
- a. M-4 has a **smaller** seal opening than the M-4B

8. Packing Mount Ribs

- a. M-4 has **no ribs** on packing mount
- b. M-4B **has ribs** on packing mount

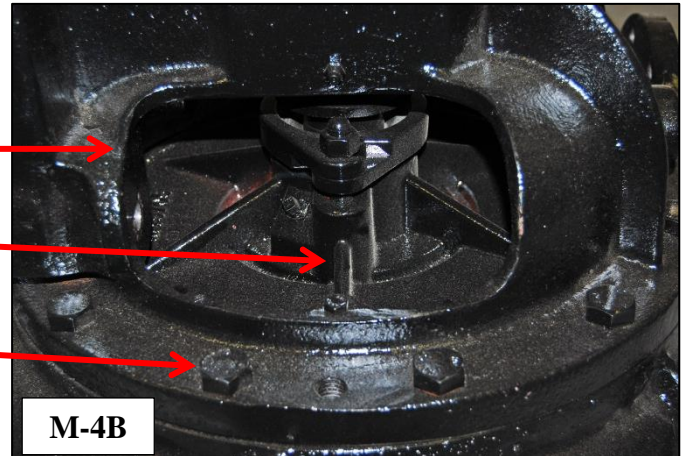
9. Volute Case Bolt Size

- a. M-4 has **smaller** volute case bolts than the M-4B



M-4

- (7) Smaller seal opening
- (8) No ribs on packing mount
- (9) Small volute case bolts



M-4B

- (7) Large seal opening
- (8) Ribs on packing mount
- (9) Large volute case bolts

10. Motor Mount Bolts

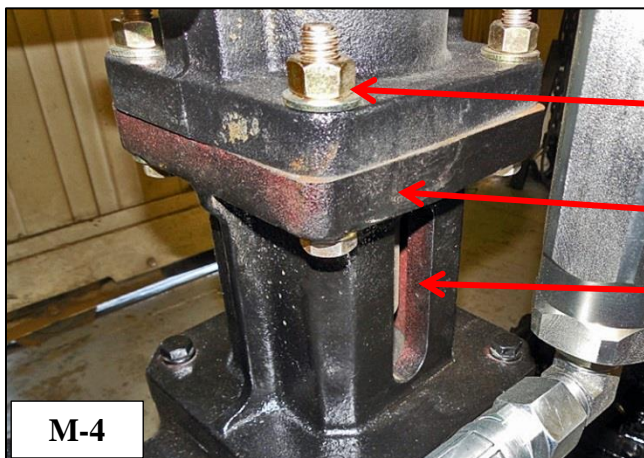
- a. M-4 motor mount bolts **require** nuts
- b. M-4B has a threaded motor mount; bolts do **not require** nuts

11. Motor Mount Flange Shape

- a. M-4 motor mount flange is **square-shaped**
- b. M-4B motor mount flange is **oval-shaped**

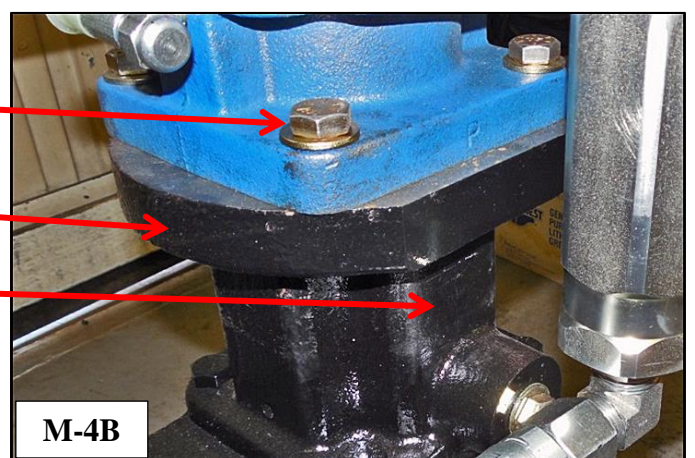
12. Open/Closed Motor Mount

- a. M-4 has an **open** motor mount for coupler set screw access
- b. M-4B has a **closed** motor mount (no opening)



M-4

- (10) Motor through bolts with nuts
- (11) Square motor mounting flange
- (12) Open motor mount for coupler set screw access



M-4B

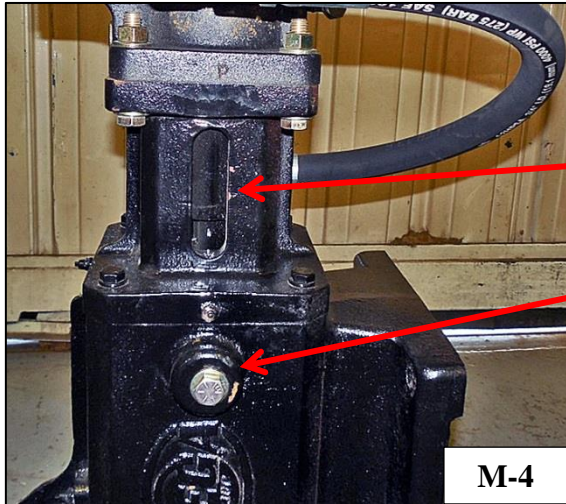
- (1) Threaded motor mount, no nuts
- (2) Oval shaped motor mount flange
- (3) No opening in motor mount

PRODUCT INFORMATION BULLETIN

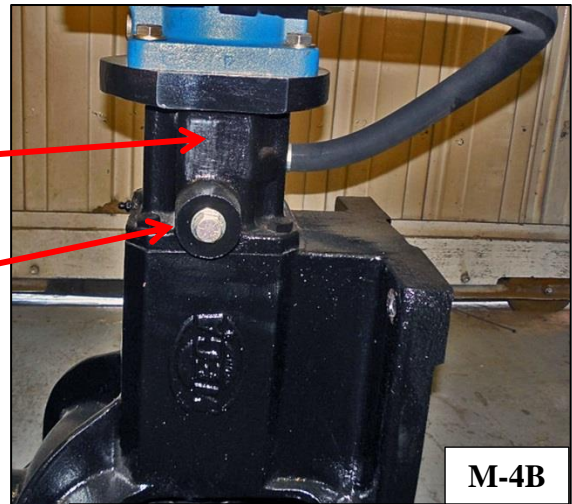
Comparison Of Mega Water Pump Models

13. Lifting Lug Location

- a. M-4 lifting lug is located on the **pump frame**.
- b. M-4B lifting lug is located on the **motor mount**.



M-4

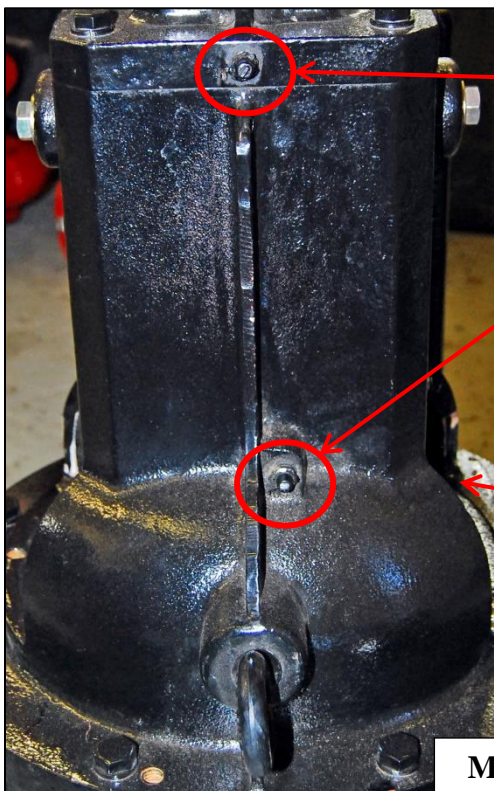


M-4B

(12) Open motor mount for coupler set screw access
(13) Lifting lug located on pump frame

(12) No opening in motor mount
(13) Lifting lug on motor mount

14. Grease Fitting Locations: Grease fittings are located in different places on the M-4 and M-4B. Note that in the images below, the M-4 and M-4B pumps are at different angles. Additionally, the M-4 has a lantern ring grease fitting, whereas the M-4B does **not** have a lantern ring and therefore has no grease fitting for one.

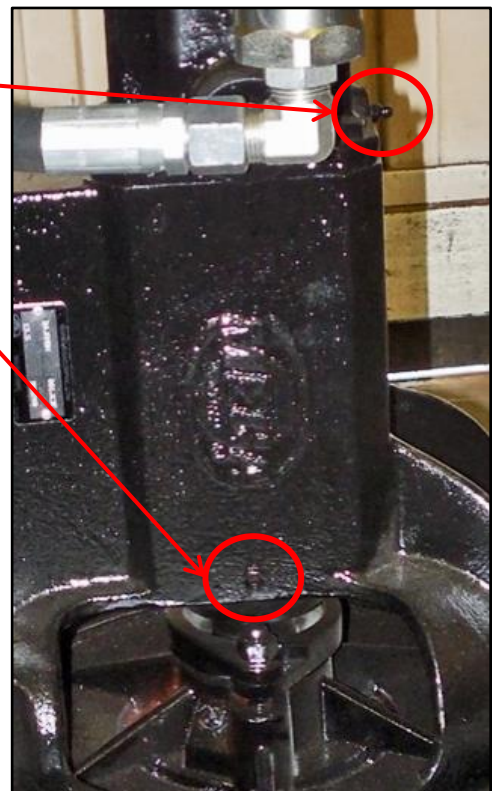


M-4

Drive End Bearing
grease fitting

Impeller End Bearing
grease fitting

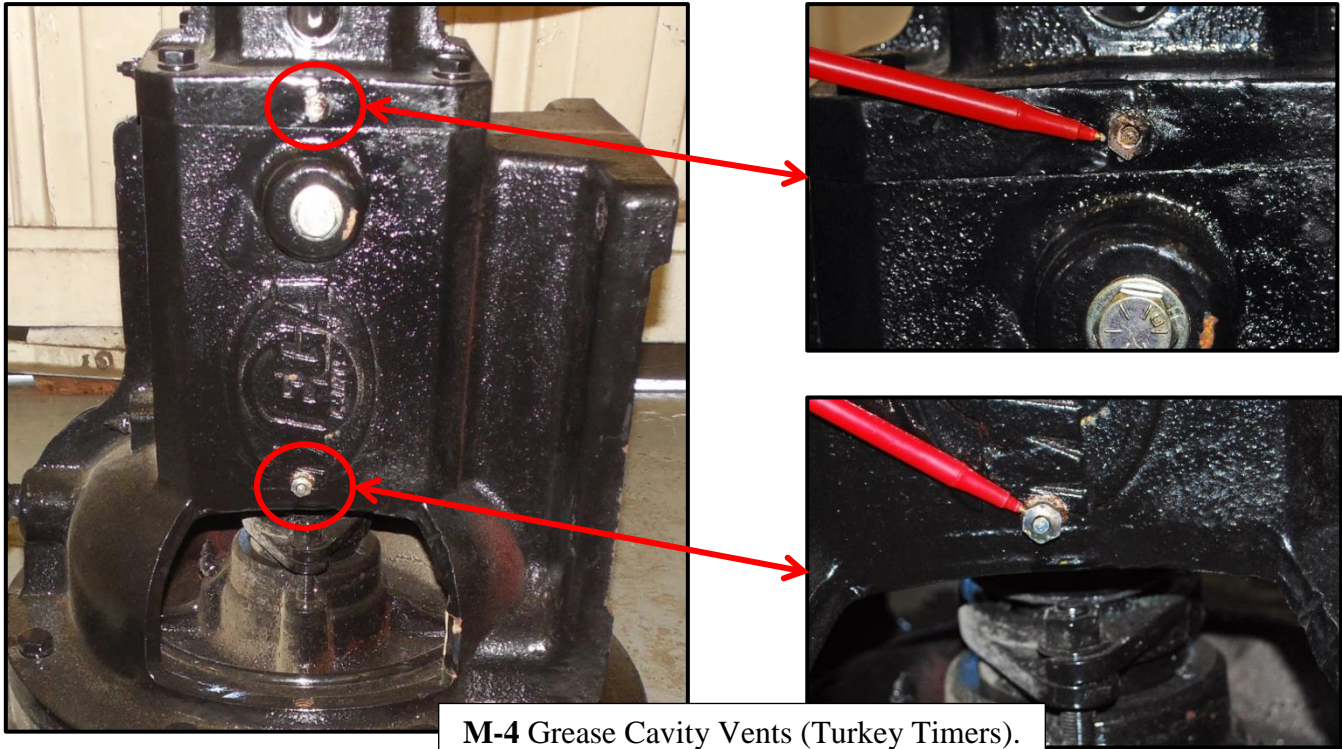
Lantern Ring grease
fitting (M-4 only)



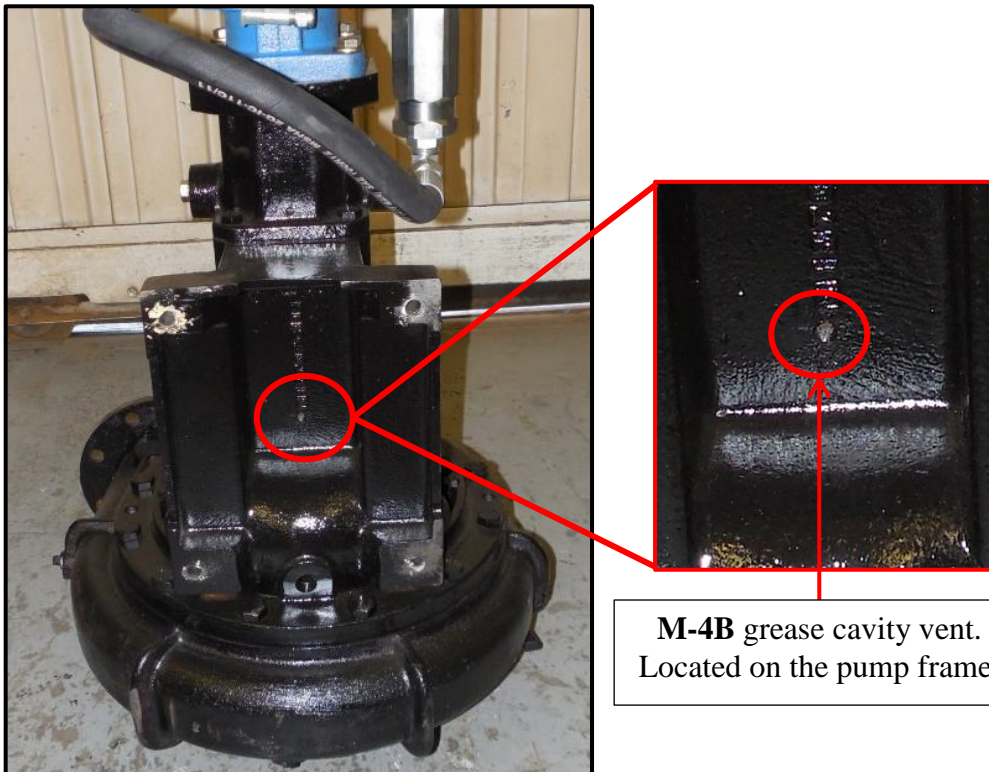
PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

15. Grease Cavity Vent Locations: Grease cavity vents (also known as ‘Turkey Timers’) are located in different places on the M-4 and M-4B. Additionally, the M-4 has **two** grease cavity vents, whereas the M-4B has only **one**. Note that in the images below, the M-4 and M-4B pumps are at different angles.



M-4 Grease Cavity Vents (Turkey Timers).
Located on motor mount and pump frame.

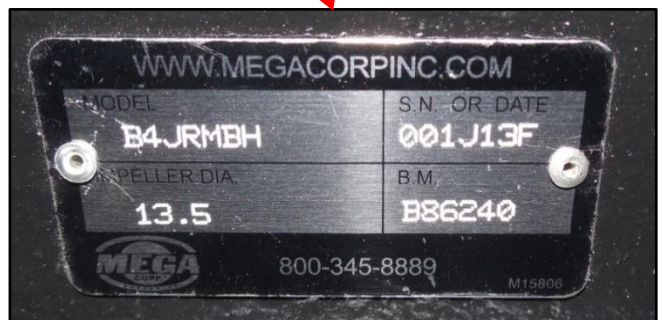
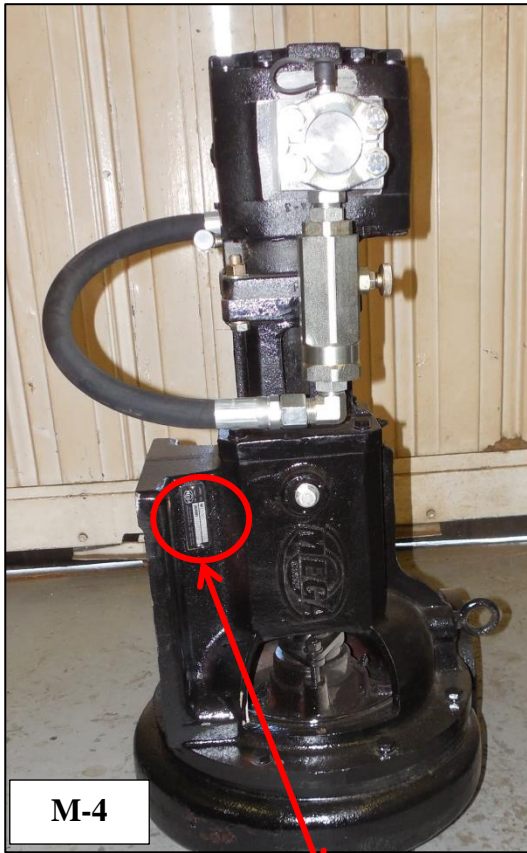


M-4B grease cavity vent.
Located on the pump frame.

PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

16. Water Pump Data Tag Location: The water pump data tags are located in the same place on both pumps, but contain different information. The M-4 data tag has the serial number and Mega part number only. The M-4B data tag has the pump model, serial number, impeller diameter (in inches), and Berkeley model number.



PRODUCT INFORMATION BULLETIN

Comparison Of Mega Water Pump Models

HYDRAULIC DRIVE MOTOR COUPLINGS

The Franklin-made pumps (M-3 and M-4) have different input shafts than the Berkeley-made pumps (B-4, M-4B). M-3 and M-4 water pumps have a keyed input shaft, whereas B-4 and M-4B water pumps have a spline input shaft. The following information is provided to help differentiate between the drive motor couplings for the M-3/M-4 and the M-4/M-4B.

M-4 and M-3 drive Coupling:

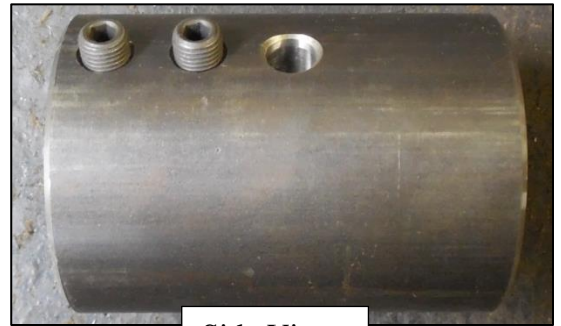
The M-4 and M-3 drive coupling is keyed at the water pump shaft, secured by set screws, and is splined at the drive motor end.



Pump End



Motor End



Side View

M-4B and B-4 Drive Coupling

M-4B and B-4 drive coupling is the same at both ends and is allowed to float on the shafts.



Pump End



Motor End



Side View

PIB-1 WP
22 Oct 2013

PRODUCT INFORMATION BULLETIN
Comparison Of Mega Water Pump Models