

OPERATING & INSTRUCTION MANUAL

**Series JG Gear Drive and
Series JD Direct Drive Clamp Mount Mixer**
PLUS: JGR and JDR Angle Riser Mount
Series JGF and JDF Flange Mount




Neptune
A  COMPANY

204, Dekalb Pike,
Lansdale, PA 19446



Tel.: 215-699-8700 • FAX: 215-699-0370

WARNING

**LOCKOUTS ARE REQUIRED BEFORE
SERVICING THIS EQUIPMENT.**

SAFETY INSTRUCTIONS:

Shut off/Lockout Mixer Power before Servicing.

**DO NOT OPERATE MIXER UNLESS PROPERLY INSTALLED, AVOID
ROTATING SHAFT AND BLADES, TURN OFF POWER AND
LOCKOUT EQUIPMENT BEFORE ADJUSTING OR SERVICING, ETC.**

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LIMITED WARRANTY

All Neptune Mixers are tested at the factory prior to shipment. Each part used in their construction has been carefully checked for workmanship.

If the Mixer is installed properly, Neptune Chemical Pump Company warrants to the purchaser of this product for a period of one year from the date of shipment, whichever occurs first, this product shall be free of defects in material and/or workmanship, as follows:

1. Neptune Chemical Pump Company will replace, at no charge, any part that fails due to a defect in material and/or workmanship during the warranty period, FOB our factory, Lansdale, Pennsylvania. To obtain warranty service, you must get an RMA number to return the defective parts to the factory for examination, freight pre-paid.
2. This warranty period does not cover any product or product part, which has been subject to accident, misuse, abuse or negligence. Neptune Chemical Pump Company shall only be liable under this warranty if the product is used in the manner intended by the manufacturer as specified in the written instructions furnished with this product.

Any express warranty not provided in this warranty document, and any remedy for breach of contract that, but for this provision, might arise by implication or operation of law, is hereby excluded and disclaimed. Under no circumstances shall Neptune Chemical Pump Company be liable to purchaser or any other person for any charge for labor, repairs, or parts, performed or furnished by others, nor for any incidental consequential damages, whether arising out of breach of warranty, express or implied, a breach of contract or otherwise. Except to the extent prohibited by applicable law, any implied warranty of merchantability and fitness for a particular purpose are expressly limited in duration to the duration of this limited warranty.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long any implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights, which may vary from state to state.

IMPORTANT

SHOULD IT BE NECESSARY TO SEND THE PUMP TO THE FACTORY FOR REPAIR OR MAINTENANCE REBUILDING; DRAIN ALL OIL AND CHEMICAL FROM PUMP BEFORE SHIPPING. FAILURE TO DO SO CAN CAUSE EXTENSIVE DAMAGE TO THE MOTOR.

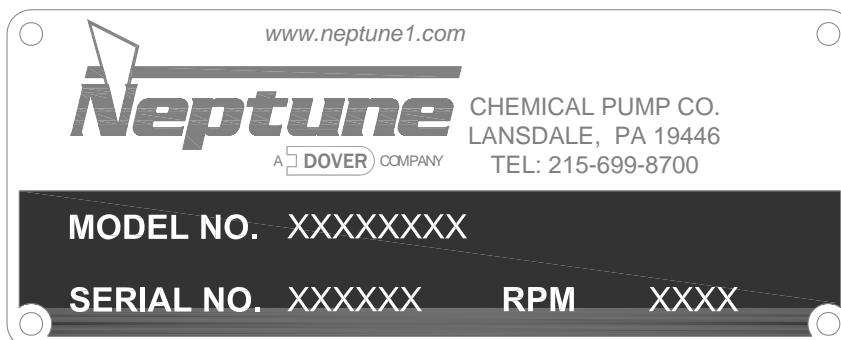
¹SEE IMPORTANT NOTICE - RETURN GOODS AUTHORIZATION

IMPORTANT NOTICE RETURN GOODS AUTHORIZATION

- (1) All equipment returned to Neptune Chemical Pump Company requires proper Returned Goods Authorization Number (RGA) and tags.
- (2) All equipment returned to the factory for repair or service must first be thoroughly flushed and have all chemical contact areas neutralized.
- (3) All equipment which has been in contact with chemicals must be accompanied by a copy of the Chemical Product Material Safety Data Sheet (MSDS).
- (4) Failure to comply with the above instructions will result in equipment being returned to sender, freight collect, without service.

PARTS ORDERING INSTRUCTIONS

The complete model number and serial number of the pump must be furnished to insure prompt and accurate parts service. These numbers are found on the name plate (sample below) located on the side of the mixer. Refer to Pages 6, 7, 9, 11 and 13 for complete parts lists.

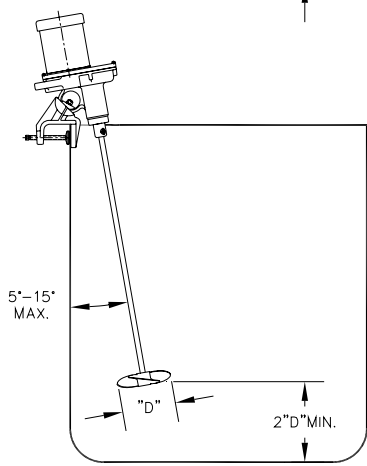
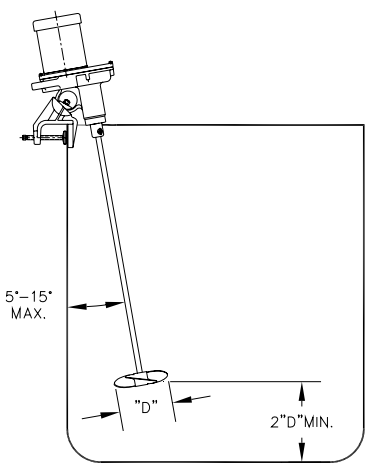
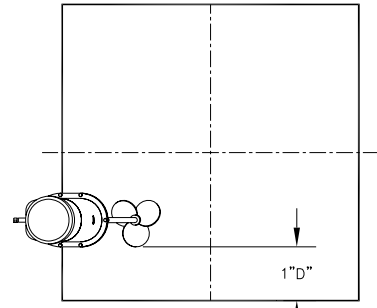
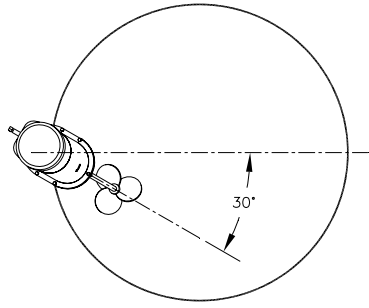


Send all orders or inquiries for parts to:

Parts Department
Neptune Chemical Pump Company
P.O. Box 247
Lansdale, PA 19446
Tel.: 215-699-8700
1 -888-3NEPTUNE (888-363-7886)
FAX: 215-699-0370
Web: www.neptune1.com
Email: pump@neptune1.com

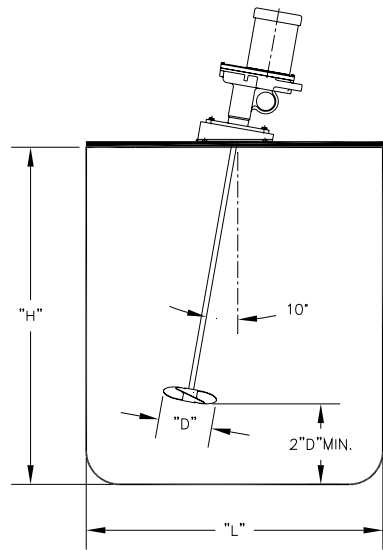
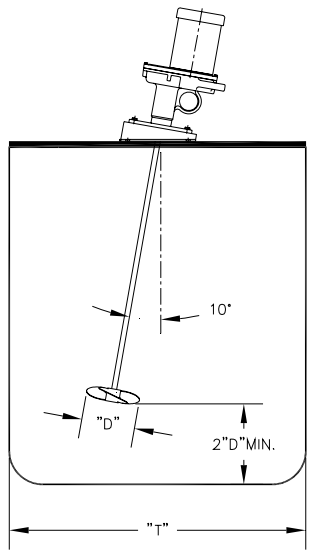
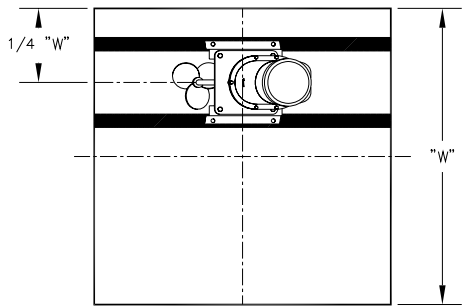
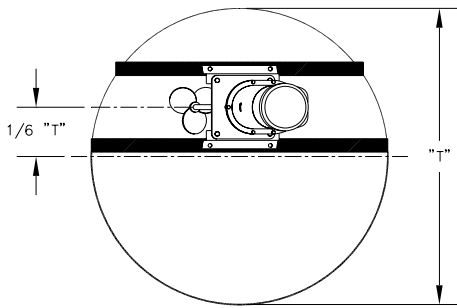
NOTE: PLEASE SUPPLY BOTH MODEL AND SERIAL NUMBERS.

MIXER POSITIONING



VERTICAL
CYLINDRICAL

CUBICAL
(L=W)



"T" = TANK DIAMETER
"D" = IMPELLER DIAMETER

INTRODUCTION

The Neptune Mixer is a carefully designed piece of precision equipment which will give you years of satisfactory service under normal operating conditions.

A. INSPECTION

All Neptune Mixers are shipped in a specially designed carton to insure against damage in shipment. Each shaft is shipped in an individual box. Upon receipt, examine the mixer for damage; report any damage to Neptune and the delivering carrier at once.

B. LUBRICATION/MAINTENANCE

The outboard ball bearing [30] and upper ball bearing [27] are sealed and pre-greased for bearing life. The gear box is lubricated at the factory. Neptune recommends changing grease annually. To change grease or to change the motor: Remove motor midplate (fig. 21) by taking out the six bolts & washers (fig. 14/15). Remove motor and midplate (they will be attached) from gearbox. Remove four motor bolts (fig. 12/13) underneath midplate. Clean gear box and gears with solvent. Repack with the following grease.

Mixers use LUBRIPLATE® 1200-2 Grease. Order P/N 114444

C. MOUNTING THE MIXER

Remove the mixer from the carton and attach clamp. Rotate the clamp to an initial position such that the motor will be upright when the unit is clamped to the tank.

Place the clamp on the desired location on the tank, being certain that both the horizontal and vertical surfaces of the clamp are in contact with the top and side of the tank. Rotate the nut clockwise to tighten; counter clockwise to loosen.

D. MOUNTING MIXER SHAFT

Neptune supplies standard square pitch propellers which may be put on the mixer shaft either face up or face down. Place the propellers on the end of the shaft WITHOUT THE NOTCH. If two propellers are used, they should be spaced at least two propeller diameters apart. Be certain to securely tighten the propeller set screws. Place the end of shaft with the notch into the shaft collar until it bottoms. Insert the retaining pin-bolt [32] with the tapered flat facing the shaft into the collar (half way). Rotate the shaft to line up the shaft notch with the bolt flat and push the pin-bolt [32] into the collar complete. Place the lock washer [33] on the pin-bolt and tighten with a hex nut [34]. (See Shaft Installation Diagram on pg. 5.)

E. ELECTRICAL CONNECTIONS

Your Neptune mixer is designed to rotate clockwise when looking down on the end of the motor. This is so indicated by arrows cast on the motor midplate.

Follow the wiring directions as indicated on the motor to obtain proper rotation.

F. MIXER POSITIONING

To utilize energy supplied by the mixer, atop to bottom turnover of the liquid should be created. The mixer shaft should be angled 5° to 15° off vertical wall of tank pointed 20° to 30° right of the center line.

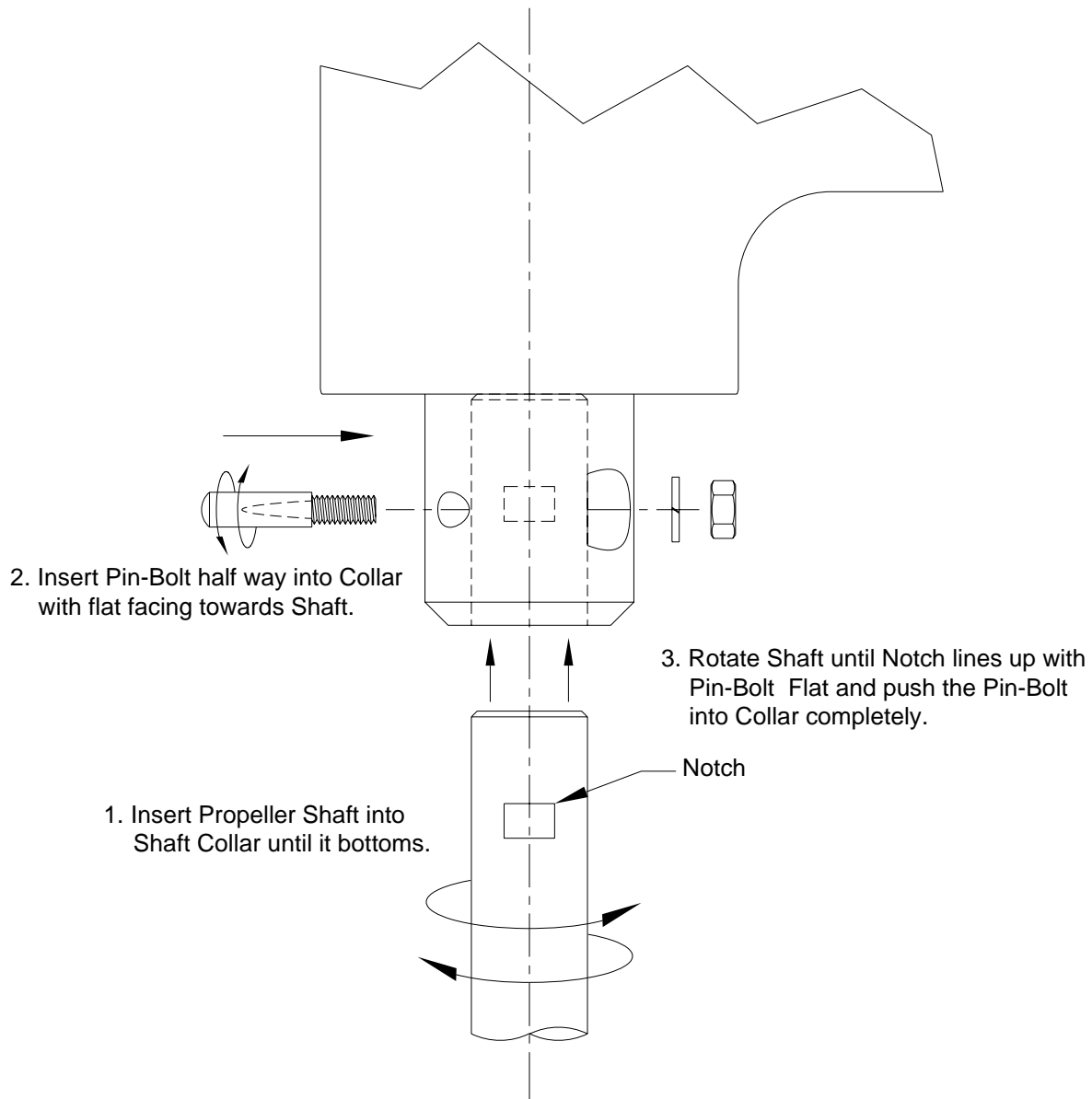
Moving the shaft to the left of the position described will increase swirl of vortex. This helps to submerge light powders or to aerate the mix but decreases mixing efficiency.

G. MIXER OPERATION

Neptune mixers are designed for continuous operation under normal conditions. It is not good practice to operate continuously when extreme vortexing occurs. Mixer Propellers must be submerged in the Liquid during mixing operation, damage could occur.

After mixer has been turned on and the mixing pattern developed, adjust mixer position if necessary.

After ten days of operation, check the Motor Midplate screws, and shaft collar Hex Nut for tightness. At the end of a mixing period, it is a good practice to turn off the mixer before the tank is drained. Turn mixer off when liquid level is one propeller diameter above lower propeller.



SHAFT INSTALLATION DIAGRAM
 (Refer to Section D.)

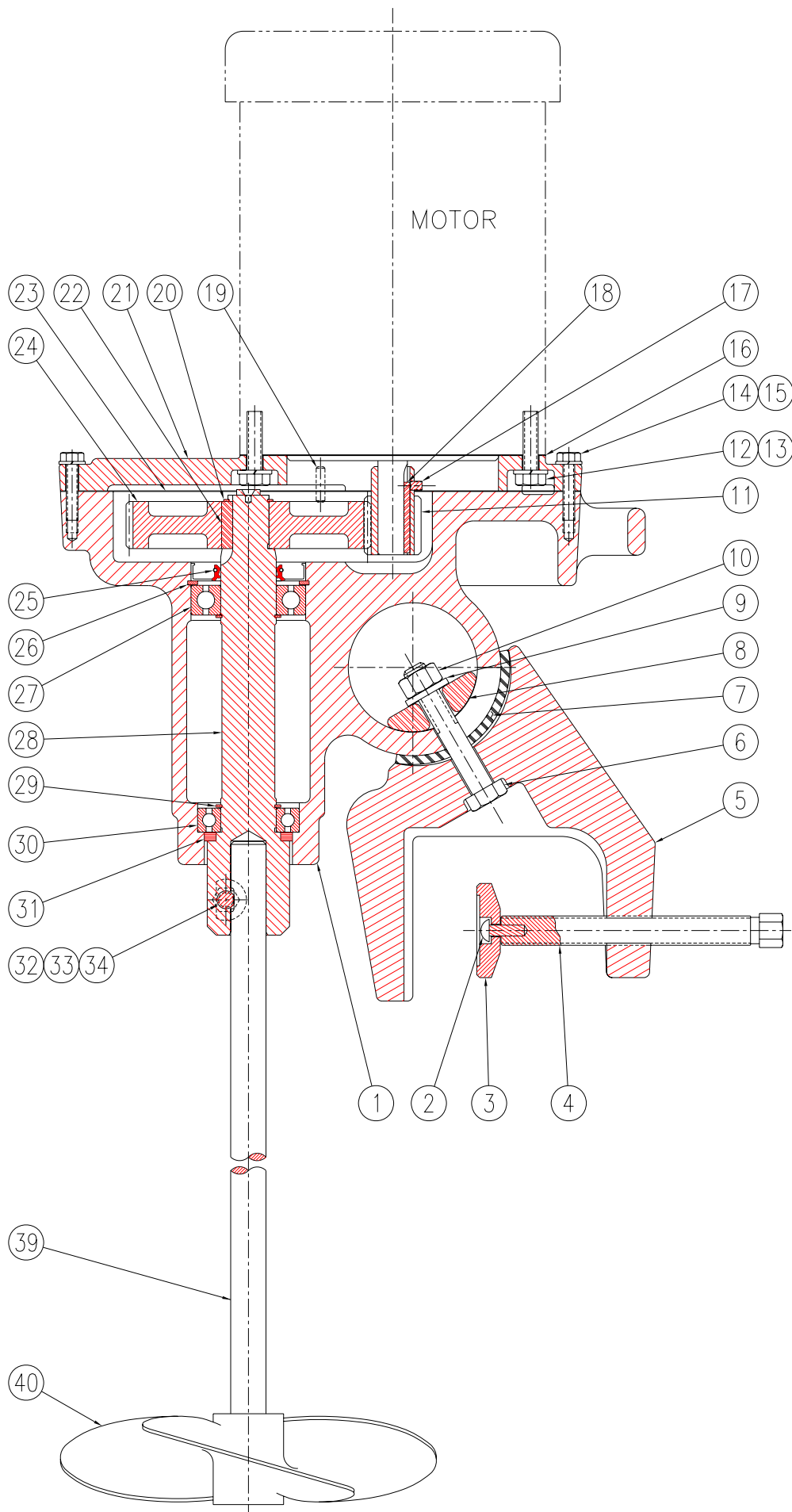
SHAFT AND PROPELLER PARTS LIST
For Series JG, JD Clamp Mount Model Mixers
And Series JGR and JDR Angle Riser Mount Model Mixers
(Refer to Drawing on Page 8)

| ITEM NUMBER | ITEM DESCRIPTION | QTY. | MODEL JG2.0- JG6.1 | MODEL JG7.1 - JG8.1 | MODEL JG9.1 |
|---------------------------------------|---------------------------------------|------|--------------------------------------|--------------------------------------|--------------------------------------|
| 39 | Shaft 3/4" dia. x 30" lg. | 1 | 004396 | | |
| | Shaft 3/4" dia. x 40" lg. | 1 | 004397 | | |
| | Shaft 3/4" dia. x 48" lg. | 1 | 003075 | | |
| | Shaft 3/4" dia. x 60" lg. | 1 | 003076 | | |
| | Shaft 1" dia. x 48" lg. | 1 | 004398 | | |
| | Shaft 1" dia. x 60" lg. | 1 | 003071 | | |
| | Shaft 1" dia. x 72" lg. | 1 | 003072 | | |
| | Shaft 1-1/4" dia. x 60" lg. | 1 | | 003073 | 003073 |
| | Shaft 1-1/4" dia. x 72" lg. | 1 | | 003074 | 003074 |
| 40 | Prop 5 x 5, 3/4" Bore, P/N 100383 | A/R | As Required Per Application | As Required Per Application | As Required Per Application |
| | Prop 4 x 4, 3/4" Bore, P/N 100384 | | | | |
| | Prop 14 x 14, 1-1/4" Bore, P/N 100385 | | | | |
| | Prop 12 x 12, 1" Bore, P/N 100389 | | | | |
| | Prop 11 x 11, 1" Bore, P/N 100390 | | | | |
| | Prop 6 x 6, 1" Bore, P/N 100392 | | | | |
| | Prop 5 x 5, 1" Bore, P/N 100393 | | | | |
| | Prop 7 x 7, 3/4" Bore, P/N 100394 | | | | |
| | Prop 6 x 6, 3/4" Bore, P/N 100395 | | | | |
| | Prop 5 x 5, 3/4" Bore, P/N 106046 | | | | |
| | Prop 6 x 6, 3/4" Bore, P/N 106043 | | | | |
| | Prop 8 x 8, 3/4" Bore, P/N 106218 | | | | |
| | Prop 10 x 10, 3/4" Bore, P/N 106219 | | | | |
| | Prop 12 x 12, 3/4" Bore, P/N 106220 | | | | |
| | Prop 13 x 13, 3/4" Bore, P/N 106221 | | | | |
| | Prop 13 x 13, 1" Bore, P/N 1 06222 | | | | |
| | Prop 16 x 16, 1-1/4" Bore, P/N 106225 | | | | |
| Prop 11 x 11, 3/4" Bore, P/N 106229 | | | | | |
| Prop 7 x 7, 1" Bore, P/N 106232 | | | | | |
| Prop 15 x 15, 1-1/4" Bore, P/N 106344 | | | | | |

PARTS LIST
For Series JG Clamp Mount Model Mixers
(Refer to Drawing on Page 8)

| ITEM NUMBER | ITEM DESCRIPTION | QTY. | MODEL JG2.0 - JG6.1 | MODEL JG7.1 - JG8.4 | MODEL JG9.1 |
|-------------|----------------------------|------|---------------------|---------------------|-------------|
| 1 | Mixer Gearbox - Body | 1 | 003161 | 003053 | 003053 |
| 2 | Drive Screw | 1 | 100370 | N/A | N/A |
| 3 | Clamp Button | 1 | 000476 | N/A | N/A |
| 4 | Stud | 1 | 002683 | N/A | N/A |
| 5 | Mounting Clamp | 1 | 003146 | N/A | N/A |
| 6 | Hex Head Cap Screw or Stud | 1 | 100397 | N/A | N/A |
| 7* | Flat Washer | 1 | 100369 | N/A | N/A |
| 8 | Pivot Washer | 1 | 100509 | N/A | N/A |
| 9 | Flat Washer | 1 | 106833 | N/A | N/A |
| 10 | Hex Nut | 1 | WA170583 | N/A | N/A |
| 11 | Helical Pinion | 1 | 003143 | 003141 | 003054 |
| 12 | Hex Head Cap Screw | 4 | 100216 | 100216 | 100216 |
| 13 | Lock Washer | 4 | 100217 | 100217 | 100217 |
| 14 | Hex Head Cap Screw | 6 | 106748 | 106748 | 106748 |
| 15 | Lock Washer | 6 | 100075 | 100075 | 100075 |
| 16 | Motor Gasket | 1 | 106097 | 106097 | 106097 |
| 17 | Set Screw | 1 | 105159 | 105159 | 105159 |
| 18 | Key | 1 | 003060 | 106589 | 003060 |
| 19 | Dowel Pin | 2 | 100351 | 100579 | 100579 |
| 20 | Retaining Ring | 1 | 106594 | 106496 | 106496 |
| 21 | Motor Midplate | 1 | 003148 | 003147 | 003057 |
| 22 | Key | 1 | 100110 | 100110 | 100110 |
| 23 | Midplate Gasket | 1 | 106507 | 106494 | 106494 |
| 24 | Helical Gear | 1 | 003144 | 003142 | 003055 |
| 25 | Seal | 1 | 106586 | 106542 | 106542 |
| 26 | Retaining Ring | 1 | 106592 | 106562 | 106562 |
| 27* | Ball Bearing | 1 | 106180 | 106495 | 106495 |
| 28 | Shaft Adapter, 3/4" dia. | 1 | 003406 | N/A | N/A |
| | Shaft Adapter, 1" dia. | 1 | 003407 | N/A | N/A |
| | Shaft Adapter, 1-1/4" dia. | 1 | N/A | 003058 | 003058 |
| 29 | Retaining Ring | 2 | 106593 | 106497 | 106497 |
| 30* | Ball Bearing | 1 | 106588 | 106564 | 106564 |
| 31 | Felt Wiper Seal | 1 | 106502 | 106488 | 106488 |
| 32* | Retaining Pin-Bolt | 1 | 003154 | 003070 | 003070 |
| 33 | Lock Washer | 1 | 106832 | 106832 | 106832 |
| 34 | Hex Nut | 1 | 106831 | 106831 | 106831 |

*Recommended Spare Parts

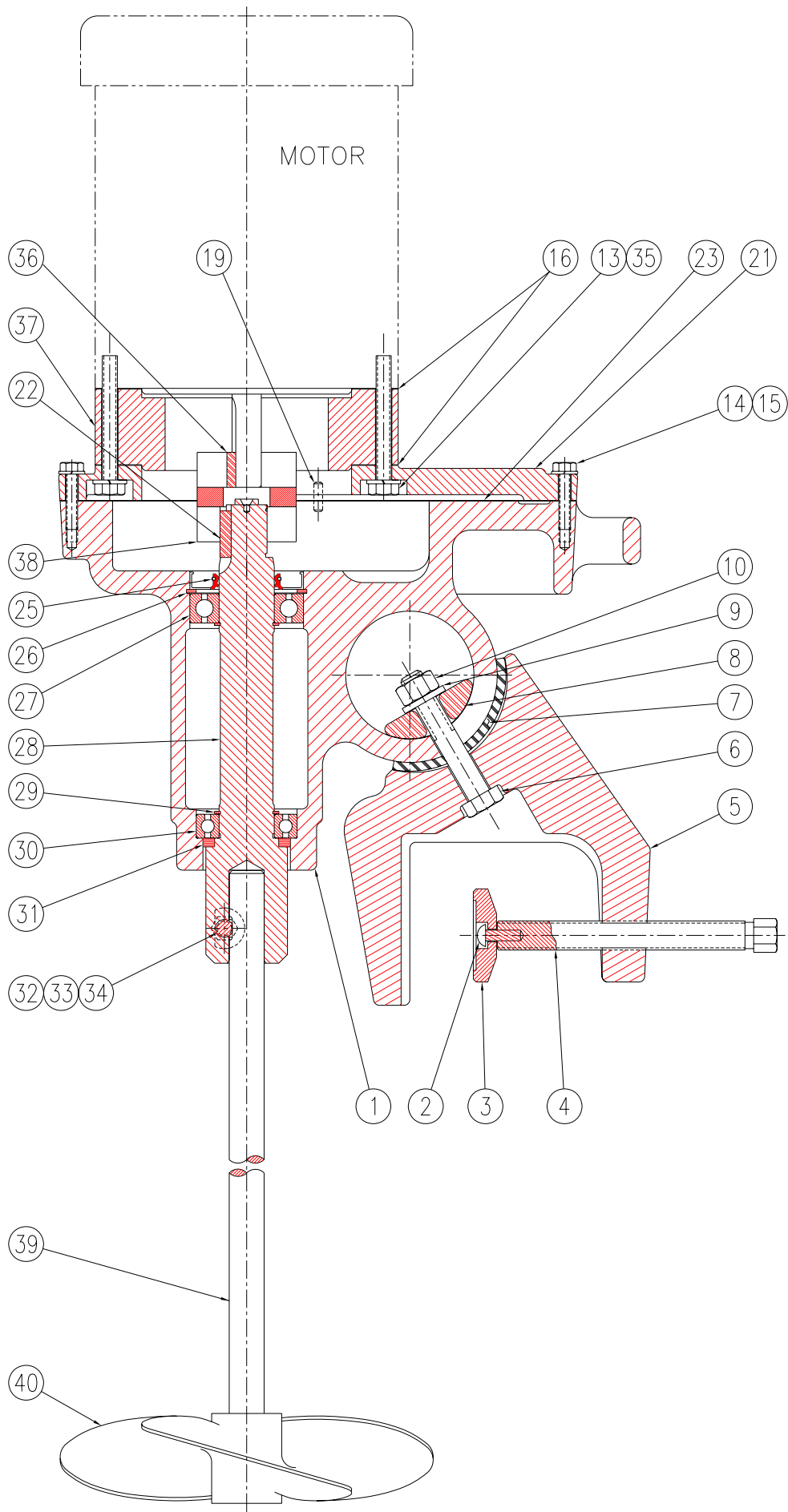


Mixer Model JG
Drawing No. S00070

PARTS LIST
For Series JD Clamp Mount Model Mixers
(Refer to Drawing on Page 10)

| ITEM NUMBER | ITEM DESCRIPTION | QTY. | MODEL JD2.0 - JG6.1 | MODEL JD7.1 – JD7.4 |
|-------------|----------------------------|------|---------------------|---------------------|
| 1 | Mixer Gearbox - Body | 1 | 003161 | 003053 |
| 2 | Drive Screw | 1 | 100370 | 100370 |
| 3 | Clamp Button | 1 | 000476 | 000476 |
| 4 | Stud | 1 | 002683 | 002683 |
| 5 | Mounting Clamp | 1 | 003146 | 002682 |
| 6 | Hex Head Cap Screw or Stud | 1 | 100397 | 106387 |
| 7* | Flat Washer | 1 | 100369 | 100369 |
| 8 | Pivot Washer | 1 | 100509 | 106074 |
| 9 | Flat Washer | 1 | 106833 | 100051 |
| 10 | Hex Nut | 1 | WA170583 | 108518 |
| 13 | Lock Washer | 4 | 100217 | 100217 |
| 14 | Hex Head Cap Screw | 6 | 106748 | 106748 |
| 15 | Lock Washer | 6 | 100075 | 100075 |
| 16 | Motor Gasket | 1 | 106097 | 106097 |
| 19 | Dowel Pin | 2 | 100351 | 100579 |
| 21 | Motor Midplate | 1 | 003148 | 003057 |
| 22 | Key | 1 | 100110 | 100110 |
| 23 | Midplate Gasket | 1 | 106507 | 106494 |
| 25 | Seal | 1 | 106586 | 106542 |
| 26 | Retaining Ring | 1 | 106592 | 106562 |
| 27* | Ball Bearing | 1 | 106180 | 106495 |
| 28 | Shaft Adapter, 3/4" dia. | 1 | 003406 | N/A |
| | Shaft Adapter, 1" dia. | 1 | 003407 | 003059 |
| | Shaft Adapter, 1-1/4" dia. | 1 | N/A | N/A |
| 29 | Retaining Ring | 2 | 106593 | 106497 |
| 30* | Ball Bearing | 1 | 106588 | 106564 |
| 31 | Felt Wiper Seal | 1 | 106502 | 106488 |
| 32* | Retaining Pin-Bolt | 1 | 003154 | 003070 |
| 33 | Lock Washer | 1 | 106832 | 106832 |
| 34 | Hex Nut | 1 | 106831 | 106831 |
| 35 | Hex Head Cap Screw | 4 | 108338 | 108338 |
| 36 | Key | 1 | 100218 | 100218 |
| 37 | Motor Extension | 1 | 003197 | 003197 |
| 38 | Coupling | 1 | 106664 | 106640 |

*Recommended Spare Parts



Mixer Model JD
Drawing No. S0072

PARTS LIST

For Series JGR and JDR Angle Riser Mount Model Mixers

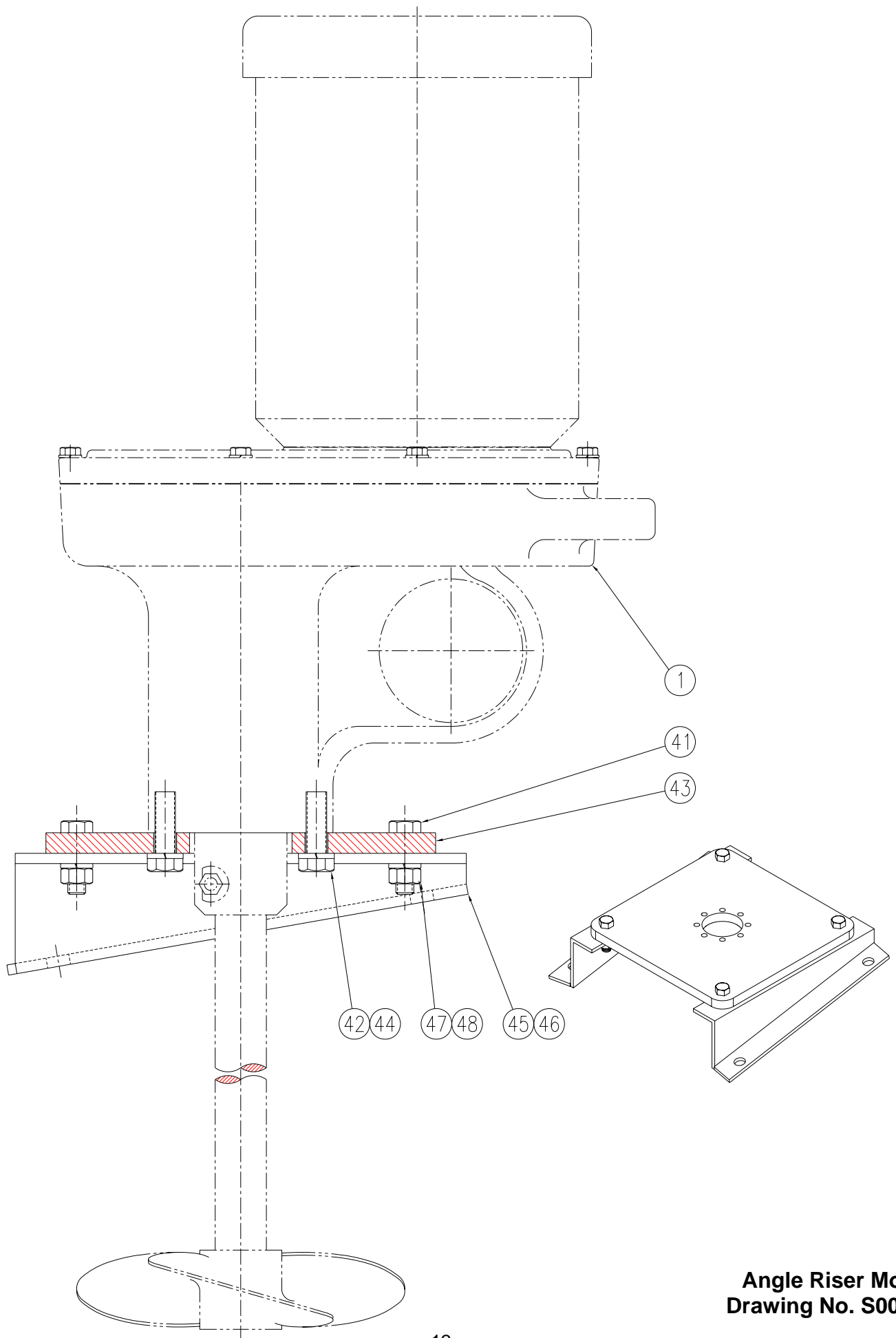
NOTE: All parts in JGR and JDR Mixers are the same as JG or JD Mixers except mounting clamps. JGR and JDR Mixers do not use items 2 to 10 including items on parts list (Refer to pages 7 and 9). JGR and JDR do use parts listed below for Angle Riser Mount.

| ITEM NUMBER | PART NUMBER | ITEM DESCRIPTION | QTY. PER ASSEMBLY | |
|-------------|-------------|----------------------------|-------------------|----------|
| | | | JGR QTY. | JDR QTY. |
| 1 ** | 003161 | Mixer Gearbox - Body | 1 | 1 |
| 41 | 106268 | Hex Head Cap Screw | 4 | 4 |
| 42 ** | 106704 | Hex Head Cap Screw | 4 | 4 |
| | 106996 | Socket Head Cap Screw | 8 | 8 |
| 43 ** | 106281 | Angle Riser Midplate | 1 | 1 |
| | 106809 | Angle Riser Midplate | 1 | 1 |
| 44 ** | 100457 | Lock Washer | 4 | 4 |
| | 108592 | Internal Tooth Lock Washer | 8 | 8 |
| 45 | 002794 | Angle Riser (Right Side) | 1 | 1 |
| 46 | 002795 | Angle Riser (Left Side) | 1 | 1 |
| 47 | 100105 | Lock Washer | 4 | 4 |
| 48 | 106267 | Hex Nut | 4 | 4 |

**These Parts are for JGR/JDR-2.0-JGR/JDR 6.1 Only.

INSTALLATION:

1. Remove the Mixer and Angle Riser Unit (A.R.U.) from their shipping cartons.
2. Install assembled A.R.U. onto tank, see page 3, for mounting instruction, and secure in place.
3. Place Mixer onto A.R.U. and secure with hardware provided (42, 44).
4. Insert Shaft into Mixer Shaft Collar and secure as described on page 5 in Section "0" of the Operating and Instruction Manual of Series JG and JD Mixers.



**Angle Riser Mount
Drawing No. S0051**

FLANGE MOUNTING MIXER ADDENDUM TO OPERATING AND INSTRUCTION MANUAL FOR SERIES JG AND JD MIXERS

PARTS LIST For Series JGF and JDF Stuffing-Box Model Mixers

NOTE: All parts in JGF and JDF Mixers are the same as JG or JD Mixers except mounting clamps. JGF and JDF Mixers do not use items 2 to 10 including items on parts list (Refer to pages 7 and 9). JGF and JDF do use Parts listed below for Flange Mount.

| ITEM NO. | PART NO. | ITEM DESCRIPTION | QTY. |
|----------|----------|-----------------------------------------|------|
| 1 ** | 003161 | Mixer Gearbox - Body | 1 |
| 42 | 106704 | Hex Head Cap Screw 1/2-20 x 1-1/2" lg. | 4 |
| ** | 106996 | Socket Head Cap Screw 1/4-20 x 3/4" lg. | 8 |
| 44 | 100457 | 1/2" Lock Washer | 4 |
| ** | 108592 | 1/4" Internal Tooth Lock Washer | 8 |
| 47 | 100105 | 7/16" Lock Washer | 16 |
| 48 | 106267 | 7/16-14 Hex Nut | 8 |
| 49 | 106619 | Hex Head Cap Screw 7/16-14 x 1-3/4" lg. | 8 |
| 50 ** | 003270 | Mixer Spacer Adapter | 1 |
| | 003271 | Mixer Spacer Adapter | 1 |
| 51 | 003260 | Stuffing-Box Spacer | 1 |
| 52 | 108180 | 3/8-16 Hex Nut with Nylock | 4 |
| 53 ** | 003265 | 1" dia. Shaft, Sealing Bushing | 1 |
| | 003266 | 1-1/4" dia. Shaft, Sealing Bushing | 1 |
| ** | 003274 | 3/4" dia. Shaft, Sealing Bushing | 1 |
| 54 | 106620 | 3/8-16 x 3-1/2" lg. Stud | 4 |
| 55 | 100036 | Grease Filling | 1 |
| 56 | 100104 | Hex Head Cap Screw 7/16-14 x 1-1/4" lg. | 8 |
| *57 ** | 003261 | 1" dia. Shaft, Lantern Ring | 1 |
| | 003262 | 1-1/4" dia. Shaft, Lantern Ring | 1 |
| ** | 003273 | 3/4" dia. Shaft, Lantern Ring | 1 |

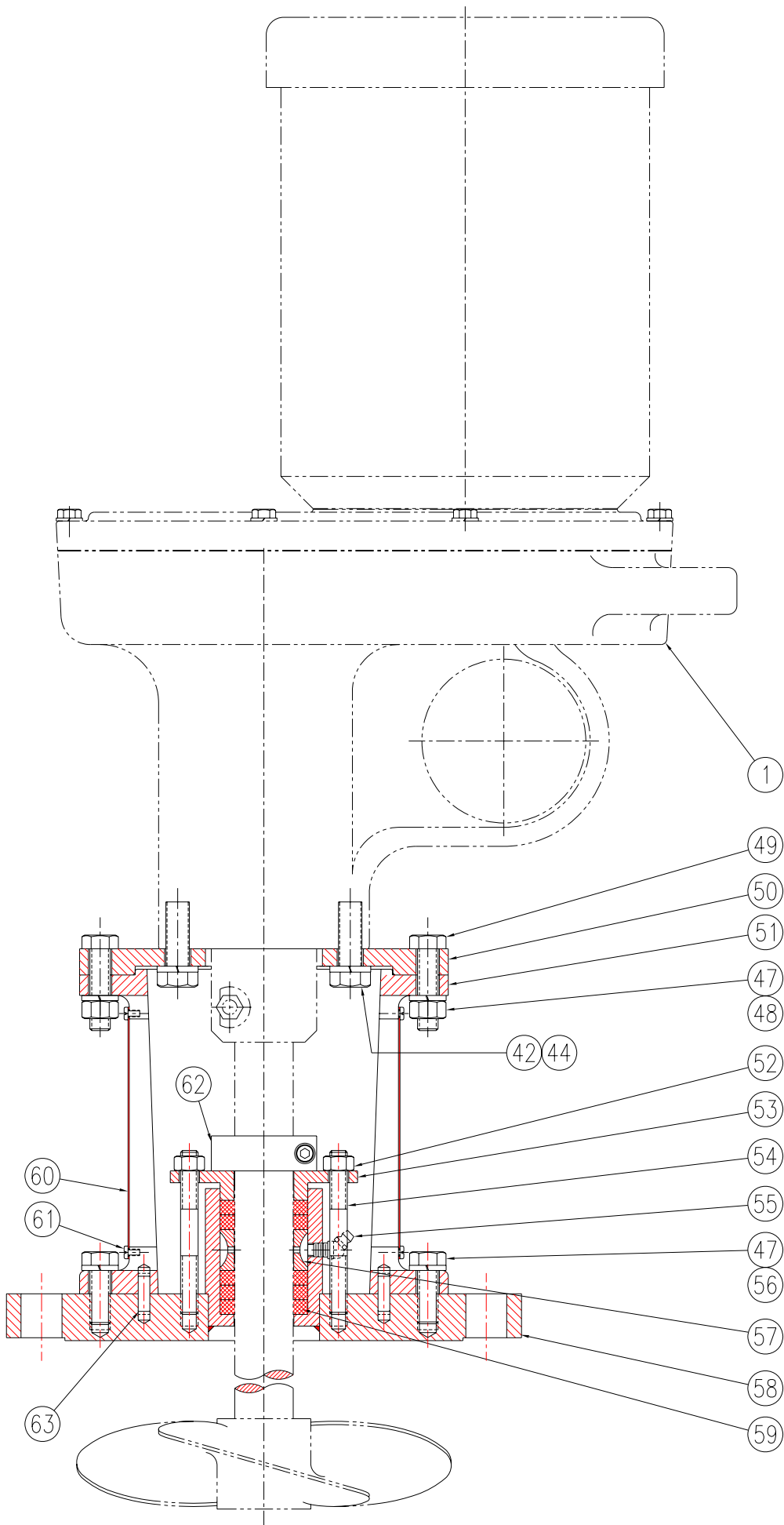
*Recommended Spare Parts.

**These Parts are for Models JGF JDF-2.0 through JGF/JDF-6.1 Only.
Item 58 available in 316SS & Carbon Steel.

| ITEM NO. | PART NO. | ITEM DESCRIPTION | QTY. |
|----------|----------|----------------------------------------|------|
| 58 ** | | 1" dia. Shaft, 6" Flange Assembly | 1 |
| ** | | 1" dia. Shaft, 8" Flange Assembly | 1 |
| ** | | 1" dia. Shaft, 10" Flange Assembly | 1 |
| ** | | 1" dia. Shaft, 12" Flange Assembly | 1 |
| ** | | 1" dia. Shaft, 14" Flange Assembly | 1 |
| | | 1-1/4" dia. Shaft, 6" Flange Assembly | 1 |
| | | 1-1/4" dia. Shaft, 8" Flange Assembly | 1 |
| | | 1-1/4" dia. Shaft, 10" Flange Assembly | 1 |
| | | 1-1/4" dia. Shaft, 12" Flange Assembly | 1 |
| | | 1-1/4" dia. Shaft, 14" Flange Assembly | 1 |
| ** | | 3/4" dia. Shaft, 6" Flange Assembly | 1 |
| ** | | 3/4" dia. Shaft, 8" Flange Assembly | 1 |
| ** | | 3/4" dia. Shaft, 10" Flange Assembly | 1 |
| ** | | 3/4" dia. Shaft, 12" Flange Assembly | 1 |
| ** | | 3/4" dia. Shaft, 14" Flange Assembly | 1 |
| 59 ** | 003267 | 1" dia. Shaft, Packing | 5 |
| | 003268 | 1-1/4" dia. Shaft, Packing | 5 |
| ** | 003269 | 3/4" dia. Shaft, Packing | 5 |
| 60 | 003272 | Mixer Window Screen | 2 |
| 61 | 106621 | #8-32 x 3/8 lg. Pan Head Screw | 8 |
| 62 ** | 106614 | 1" dia. Shaft Collar | 1 |
| | 106615 | 1-1/4" dia. Shaft Collar | 1 |
| ** | 106811 | 3/4" dia. Shaft Collar | 1 |
| 63 | 101208 | 1/4" x 3/4" lg. Dowel Pin | 2 |

INSTALLATION:

1. Remove the Mixer and Flange Mounting Unit (F.M.U.) from their shipping cartons.
2. Remove the (2) Window Screens [60] by unscrewing (8) Screws [61].
3. Remove Mixer Spacer Adapter [50] from the F.M.U.
4. Place the Propellers on the end of the shaft WITHOUT THE NOTCH and then insert into the empty tank.
5. Lubricate the end of the Shaft WITH THE NOTCH and insert through the Orifice of the F.M.U. to protrude approximately 2-1/2", taking care as not to mar the surface of the propeller shaft.
6. To prevent the Shaft from falling into the tank, place the Shaft Collar [62] on the Shaft and secure with a Socket Head Screw and Hex Wrench provided.
7. Install assembled F.M.U. onto Tank and secure in place, make sure that there is free access to the Stuffing Chamber through the windows.
8. Fasten Mixer Spacer [50] with Screws [42] and Lock Washers [44] onto Mixer.
9. Place Mixer assembled with Mixer Spacer Adapter [50] onto F.M.U. and secure with Hardware provided [47, 48, 49].
10. Insert Shaft into Mixer Shaft Collar and secure as described on pg. 5 in Section D, of the Operating and Instruction Manual of Series JG & JD Mixers.
11. Pack Stuffing Chamber with Grease through Grease Fitting [55].
12. Adjust the Packing Pressure with Sealing Bushing [53] by applying approximately 10 in. lbs. to the (4) 3/8-16 Hex Nuts (tightened uniformly).
13. Replace Window Screens [60] before operating Mixer.



**Flange Mounting Unit
Drawing No. S0073**

MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

LUBRIPLATE® Lubricants Co.
129 Lockwood St.
Newark, NJ 07105

Emergency Telephone Number:
1-800-255-3924-CHEM-TEL (24 hour)
Telephone Number for information:
1-973-589-9150

SUBSTANCE: LUBRIPLATE 1200-2

MSDS No. 0892150102001

TRADE NAMES/SYNONYMS:

PRODUCT USE: Petroleum lubricating grease

CREATION DATE: 06/14/2007

REVISION DATE: 01/21/2010

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT: Residual oils (petroleum), solvent dewaxed

CAS NUMBER: 64742-62-7

EC NUMBER (EINECS): 265-166-0

PERCENTAGE: 40-45

COMPONENT: Heavy hydrotreated naphthenic distillates (petroleum)

CAS NUMBER: 64742-52-5

EC NUMBER (EINECS): 265-155-0

PERCENTAGE: 35-40

COMPONENT: Zinc oxide

CAS NUMBER: 1314-13-2

EC NUMBER (EINECS): 215-222-5

PERCENTAGE: 5-10

COMPONENT: 12 hydroxy stearic acid

CAS NUMBER: 106-14-9

EC NUMBER (EINECS): 203-366-1

PERCENTAGE: 5-10

COMPONENT: Antimony 0,0-dipropylphosphorodithionate

CAS NUMBER: 15874-48-3

EC NUMBER (EINECS): 240-001-5

PERCENTAGE: 0-2

COMPONENT: Inedible animal grease

CAS NUMBER: 68153-81-1

EC NUMBER (EINECS): 268-896-8

PERCENTAGE: 0-2

COMPONENT: Lithium hydroxide monohydrate

CAS NUMBER: 1310-66-3

EC NUMBER (EINECS): Not assigned

PERCENTAGE: 0-2

COMPONENT: Butyl zimate

CAS NUMBER: 136-23-2

EC NUMBER (EINECS): 205-232-8

PERCENTAGE: 0-1

COMPONENT: Hydroxyalkyl carboxylic acid

CAS NUMBER: NA

EC NUMBER (EINECS): NA

PERCENTAGE: 0-1

COMPONENT: Methacrylate copolymer

CAS NUMBER: NA

EC NUMBER (EINECS): NA

PERCENTAGE: 0-1

NOTE: The IP 346 value of the mineral oil is less than 3%

SECTION 3 HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

INHALATION: SHORT TERM EXPOSURE: Irritation

LONG TERM EXPOSURE: Lung damage

SKIN CONTACT:

SHORT TERM EXPOSURE: Irritation

LONG TERM EXPOSURE: Irritation, skin disorders

EYE CONTACT:

SHORT TERM EXPOSURE: Irritation

LONG TERM EXPOSURE: No information available

INGESTION:

SHORT TERM EXPOSURE: Diarrhea, difficulty breathing

LONG TERM EXPOSURE: no information on significant adverse effects

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS):

Health – 1

Flammability – 1

Reactivity – 0

Not a Controlled Product under (WHMIS) – Canada

Special Protection: See Section 8

SECTION 4 FIRST AID MEASURES

INHALATION: Vapor pressure is very low and inhalation at room temperature is not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician.

SKIN CONTACT: Remove any contaminated clothing and wash with soap and warm water. If injected by high pressure under skin, regardless of the appearance or its size, contact a physician IMMEDIATELY. Delay may cause loss of affected part of the body.

EYE CONTACT: Flush with clear water for 15 minutes or until irritation subsides. If irritation persists, consult a physician.

INGESTION: If ingested, call a physician immediately. Do not induce vomiting.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Slight fire hazard

EXTINGUISHING MEDIA: Foam, Dry Chemical, Carbon Dioxide or Water Spray (Fog)

SPECIAL FIRE FIGHTING PROCEDURES: Cool exposed containers with water. Use air-supplied breathing equipment for enclosed or confined spaces.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not store or mix with strong oxidants. Empty containers retain residue. Do not cut, drill, grind, or weld, as they may explode.

SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE: Scrape up grease, wash remainder with suitable petroleum solvent or add absorbent. Keep petroleum products out of sewers and water courses. Advise authorities if product has entered or may enter sewers and water courses.

SECTION 7 HANDLING AND STORAGE

STORAGE: Keep containers closed when not in use. Do not handle or store near heat, sparks, flame, or strong oxidants.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

OIL MIST IN AIR (Not Encountered in Normal Usage):

5 mg/m³ UK OES TWA

10mg/m³ UK OES STEL

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant (nitrile) gloves.

RESPIRATOR: Consider the need for appropriate protective equipment, such as self-contained breathing apparatus, adequate masks and filters.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: semi-solid

APPEARANCE: smooth

COLOUR: beige

PHYSICAL FORM: grease

ODOR: mineral oil odor

BOILING POINT: >288°C

FREEZING POINT: Not available

FLASH POINT: 218°C (COC)

LOWER FLAMMABLE LIMIT: 0.9% by volume

UPPER FLAMMABLE LIMIT: 7.0% by volume

AUTO IGNITION: not available

VAPOUR PRESSURE: not available

VAPOR DENSITY (air=1): not available

SPECIFIC GRAVITY (water=1): 0.941

DENSITY: not available

WATER SOLUBILITY: negligible

pH: not available

VOLATILITY: not available

ODOR THRESHOLD: not available

EVAPORATION RATE (Butyl acetate = 1): <0.01

VISCOSITY: not available

COEFFICIENT OF WATER/OIL DISTRIBUTION: not available

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressures

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

INCOMPATIBLES: Oxidising materials, chlorine

HAZARDOUS DECOMPOSITION:

Thermal decomposition products or combustion: oxides of carbon, oxides of sulphur

POLYMERISATION: Will not polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

Residual oils (petroleum), solvent dewaxed:

TOXICITY DATA:

No data available

Heavy hydrotreated naphthenic distillates (petroleum):

TOXICITY DATA:

No data available

Zinc oxide:

TOXICITY DATA:

No data available

12 hydroxy stearic acid:

TOXICITY DATA:

Greater than 5 g/kg oral-rat LD50

Antimony 0,0-dipropylphosphorodithionate

TOXICITY DATA:

4,695 mg/kg oral-rat LD50

Inedible animal grease:

TOXICITY DATA:

No data available

Lithium hydroxide monohydrate:

TOXICITY DATA:

210 g/kg oral-rat LD50

Butyl zimate:

TOXICITY DATA:

Greater than 16,000 g/kg oral-rat LD50

Hydroxyalkyl carboxylic ester:

TOXICITY DATA:

Between 2,000 and 5,000 g/kg oral-rat LD50

Alkyl thiadiazole mixture:

TOXICITY DATA:

Greater than 10,000 g/kg oral-rat LD50

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations

SECTION 14 TRANSPORT INFORMATION

LAND TRANSPORT ADR: No classification assigned.

LAND TRANSPORT RID: No classification assigned.

AIR TRANSPORT IATA: No classification assigned.

AIR TRANSPORT ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

SECTION 15 REGULATORY INFORMATION

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED): N

Risk Phrases: R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SARA/TITLE III, Section 313 Status – Zinc Compounds <6%, Antimony Compounds <3%

SECTION 16 OTHER INFORMATION

The above information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of LUBRIPLATE Lubricants Company. The data on these sheets relates only to the specific material designated herein. LUBRIPLATE Lubricants Company assumes no legal responsibility for use or reliance upon this data.

