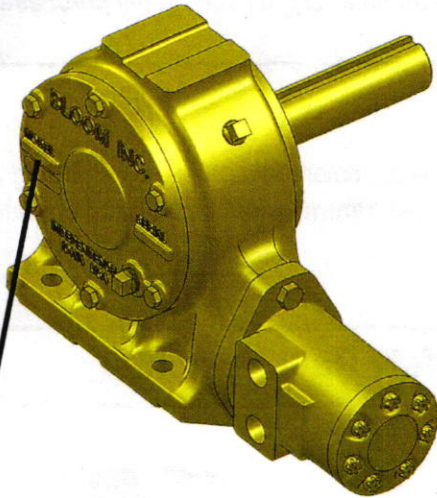


BLOOM MANUFACTURING LLC



Safety, Warranty, Maintenance & Repair, Installation and Operation Manual



Bloom™ Hydraulic Speed Reducers

Series 800
Series 1000
Series 1100
Series 1200
Series 1400

All Bloom Speed Reducers have the model and serial number stamped on the gear case cover. Please take a few minutes to record these numbers for future use. You will need these numbers for ordering parts or gathering service information from the factory:

Model # 10-E-SR-LH-40-5533

Serial # 62942

Thank you for your purchase of a quality Bloom product !

This Manual Must Be Kept With The Speed Reducer At All Times And New Operators Must Read And Understand It.

Bloom Manufacturing LLC

Winch Division
1443 220th Street
Independence, IA 50644

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Please note that not all of the above sections apply to each model purchased

Merchandise may not be returned without approval from factory. The customer will be charged for placing the returned goods in salable condition plus a restocking charge of 25%. **All returns must be shipped prepaid.**

Section 1

General Safety Requirements



THIS SYMBOL MEANS

- Attention!
- Become Alert!
- Your Safety Is Involved



Take Note! This Safety Alert Symbol Found Throughout This Manual Is Used To Call Your Attention To Instructions Involving Your Personal Safety And The Safety Of Others. Failure To Follow These Instructions Can Result In Injury Or Death.

SIGNAL WORDS: Note the use of the signal words DANGER, WARNING AND CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practice.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



WARNING

Failure to Heed The Following Warnings May Result In Serious Injury Or Death

- Bloom Speed Reducers are not to be used to lift, hoist, or move people. If your task involves lifting or moving people, you must use the proper equipment, not this speed Reducer.
- Bloom products are sold on the strict understanding that all products selection is the full responsibility of the purchaser.
- Bloom accepts no liability for the use, misuse or incorrect application of its products.
- Make sure that all equipment is maintained properly.
- Ensure the correct equipment is obtained and installed for the application
- Ratings shown in Bloom literature are applicable only to new products.
- In general, products displayed in Bloom literature are used as parts of a system. As a result, we can only recommend within the working load limits, or other stated limitations, the use of products for this purpose.
- No equipment should be installed, operated, or maintained by any person who has not carefully read all contents of this manual. Serious physical injury or property damage can result from failure to read and apply the instructions contained therein. Therefore, we urge you to read all operating instructions and warnings carefully. If any instruction or warning is not clear, or if you feel you need additional information, please contact Bloom Mfg LLC. This manual should not be understood to prepare you for every possible situation. It is the owner's and user's responsibility to determine the suitability of a product for a particular use. Applicable industry, trade association, federal, state, and local regulations should be reviewed.
- Working load limits or safety factors for each Bloom product may be affected by wear, misuse or environmental conditions. Regular inspection must be conducted to ensure the equipment continues to meet the published standards.

If you have questions not answered in this manual or require additional copies or the manual is damaged, please contact Bloom Mfg. LLC, 1443 220th Street, Independence, Iowa 50644.

This sample manual is based upon general industry considerations and does not take into account product or manufacturer specific exposures or needs. This sample manual may not be adopted by a product manufacturer as its manual, but may be used by the manufacturer in the process of developing its own manual, based upon its specific products and operations, after consulting with its advisor.

Section 2

Warranty



LIMITED NINETY (90) DAY WARRANTY FOR HYDRAULIC SPEED REDUCERS

Effective date January 1, 1999

Bloom Mfg. LLC, Independence, Iowa 50644, provides the following limited ninety (90) day warranty on its product to the purchaser of this product and to any person to whom such product is transferred during the duration of this warranty. The warrantor's obligation shall be limited to repairing or replacing at the factory in Independence, Iowa, USA, any part or parts which shall within the ninety (90) day period hereinafter specified be returned to it with transportation prepaid and which upon examination by Bloom Mfg. LLC shows to have been defective. This warranty shall not apply if:

- (a) the product has been altered, repaired or modified outside the warrantor's factory in any way that would adversely affect its operation.

- (b) the product has been subject to careless or negligent misuse, damage or use of improper oil while in the possession of the purchaser or any person to whom the product was transferred by the purchaser or was installed or operated other than in accordance with the manufacturer's operating instructions.
- (c) the product was used with accessories not recommended by Bloom Mfg. LLC or for loads in excess of those listed as rated for the product.
- (d) in the case of hydraulic motors, Bloom Mfg. LLC will not accept responsibility and warranty will be subject to manufacturer's warranty.

The ninety (90) day limited warranty period shall commence with the date the product is sold to the purchaser by the dealer or if this date cannot be established, the date the product was sold by Bloom Mfg. LLC to the dealer.

The implied warranties of merchantability and fitness for particular purpose are limited to the duration of this warranty - ninety (90) days - after said (90) days, Bloom Mfg. LLC expressly disclaims any warranty or merchantability or fitness for any particular purpose.

Purchase or other acceptance of the product by the claimant shall be on the condition and agreement that Bloom Mfg. LLC shall not be liable for incidental or consequential or contingent damage, secondary charges or loss or expense resulting from any alleged defect, failure of article to operate properly, or for the negligence of others or damages of any kind.

Bloom Mfg. LLC is not responsible for the cost, of removal of product, damages due to removal or any other expenses incurred in shipping the product to or from Bloom Mfg. LLC or the installation of the repaired or replacement product. The consumer must bear these expenses.

To make a claim under this warranty, write directly to Bloom Mfg. LLC, Independence, Iowa 50644, identifying the product and giving its location and follow the company's return instructions which will be provided by the company. Bloom Mfg. LLC will make its best efforts to repair or replace the product, if found to be defective within the terms of this warranty, within sixty (60) days after return of the product to the company.

This warranty is exclusive and in lieu of all other warranties whether written, oral or implied (including any warranty of merchantability or fitness for a particular purpose.

Section 3	Maintenance & Repair
------------------	---------------------------------



CAUTION

- **Make sure that the hydraulic hoses have been disconnected before servicing unit**

A Speed Reducer, like other types of machinery, needs to have regular maintenance if it is to perform properly, give lasting value, and provide safe operation.

(a) **Clean and Inspect**

Thoroughly clean all of the parts in a good grade of cleaning solvent; one that is not flammable, not toxic and will not cause skin rashes. If necessary, use rubber gloves. Inspect all parts for wear, nicks, scratches and damage that would render them unusable. If a part is questionable, it is better to replace it rather than take a chance on premature failure when the Speed Reducer is placed back in service. Always replace O-rings and seals, and it is a good idea to use new roll pins as well. Sometimes it is permissible to reuse bearings and bushings...it depends on how much use they have had. The rollers should not exhibit any surface irregularities. If the rollers show any sign of spalling, corrosion, discoloration, material displacement or abnormal wear, the bearings should be replaced. If the Speed Reducer was disassembled only to replace damaged seals after a short period of service, it is not necessary to replace the bearings.

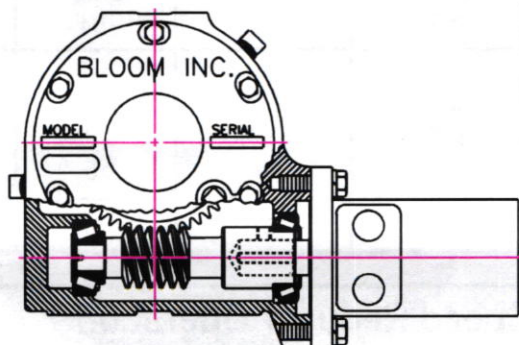
- Experience and common sense, along with a good inspections, will determine if they can be used again. Always coat O-Rings, bearings, bushings and the rubber parts of seals with oil during assembly. Use a light coat of thread sealing compound on pipe fittings and plugs.

(b) Oil Change Information:

The Speed Reducer vent/fill and drain plugs are located at the base of the face plate. Oil should be changed every 100 hours of operating time, or every six months, whichever comes first.

OIL CAPACITY CHART

Speed Reducer Series	Base Mounted Position*	All Other Mounting Positions
800	1 Pint	2 Pints
1000	1 Pint	2 Pints
1100	1 Pint	2 Pints
1200	2 Pints	3 Pints
1400	4 Pints	6 Pints



*Base Mounted Position
is when the worm
shaft is below the bronze gear

(c) Oil Level:

To check the oil level, remove the level plug. The oil should be level with the bottom of this opening. If more oil is needed, use the recommended gear oil listed below.

(d) Recommended Gear Oil:

Use Bloom ULLTRA-LUBE NO. 601 trans-worm gear oil; available from Bloom in pints or quarts. For emergency situations when Bloom ULLTRA-LUBE NO. 601 is not immediately available, use Phillips 66 Company SAE grade 80W90 superior multi-purpose gear oil (Phillips 80W90 SMP) meeting API classification GL-5 or equivalent brand. Continuous use of oil other than Bloom ULLTRA-LUBE NO. 601 or Phillips 80W90 SMP oil may shorten the life of the gears. DO NOT mix Bloom #601 or Phillips 80W90 SMP with more than 50% of any other kind of oil.

Section 4

Speed Reducer Break In



CAUTION

- Speed Reducers, like any other kind of machinery, require a “break in” to perform well and to maximize their life.
- The following guidelines should be used in the break in of Bloom Speed Reducers.
- Do not run the speed Reducer at high speeds when performing this operation.
- Do not exceed one half rated load for the first thirty minutes of operation. This will ensure that the worm and gear have an opportunity to wear in properly.
- Periodically, check the gearbox for temperature rises and allow the Speed Reducer to cool down if necessary.

Section 5

Speed Reducer Installation



CAUTION

- To must make sure that your speed Reducer is securely mounted in order for it to function properly and to ensure safe operation.
- The mount must be flat to ensure proper alignment of the gearbox.
- Speed Reducers must never be fastened directly to the frame of a truck. Mounting brackets should be used.
- With a hydraulically driven Speed Reducer, make sure the hydraulic system is clean and that all components function properly, especially the relief valve.

Hardware Requirements	Speed Reducer Series				
	800	1000	1100	1200	1400
Base Mount (steel) Thickness	1/2"	1/2"	1/2"	1/2"	1"
Angle Mounts (steel) Length	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"
Width	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"
Thickness	1/4"	1/4"	1/4"	1/4"	1/2"
Capscrews (Hexhead) Size	1/2"	1/2"	1/2"	1/2"	5/8"
Thread	13 UNC	13 UNC	13 UNC	13 UNC	11 UNC
Grade (plated)	5	5	5	5	5
Torque / Tightening (foot pounds)	57	57	57	57	112

Section 6

Speed Reducer Operation



- To familiarize yourself with the Speed Reducer, run it for a few minutes to understand the controls and the "feel" of the Speed Reducer. Pay particular attention to the controls and how they operate.
- Make sure you understand which way the Speed Reducer will rotate when the control lever is moved.
- Always make sure that all people are clear of the load before beginning a Speed Reducer operation.
- Do Not attempt to defeat the relief valve.

(a) Automatic Safety Brake

Some Bloom Speed Reducers are equipped with an automatic hydraulic brakes to hold suspended loads. If your Speed Reducer is not equipped with one, it is intended for pulling loads only. If you wish to lift and suspend loads with your Speed Reducer, it can be retrofitted with a brake. Please consult the factory for details. The safety brake is an important feature of your Speed Reducer and must be maintained properly. There are two types of brakes used on Bloom Speed Reducers:

Adjustable Automatic Safety Brake (Drag)

An oil cooled automatic safety brake disengages when a load is lifted or moved forward and automatically engages when power is removed or the load is lowered or if the load tries to roll backward. IT IS EFFECTIVE IN ONLY ONE DIRECTION. Make sure the braking action is taking place in the correct rotation. See instruction for; "Assembly Instructions, Oil Cooled Adjustable Automatic Safety Brake".

Automatic Hydraulic Fail-Safe Brake (Spring applied hydraulic release)

Spring applied hydraulic release brake automatically holds load when hydraulic pressure is released. Double counter balance valve adds additional load holding capability by locking hydraulic oil in motor.

BLOOM™ WINCH

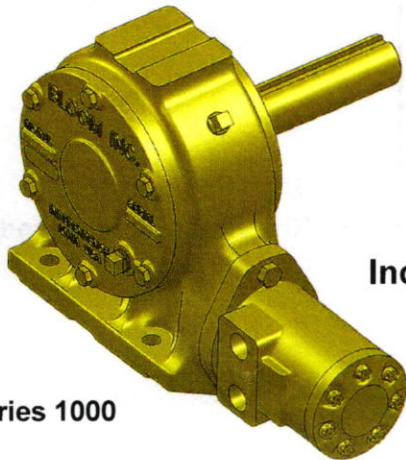


Series 1000 & Series 1100

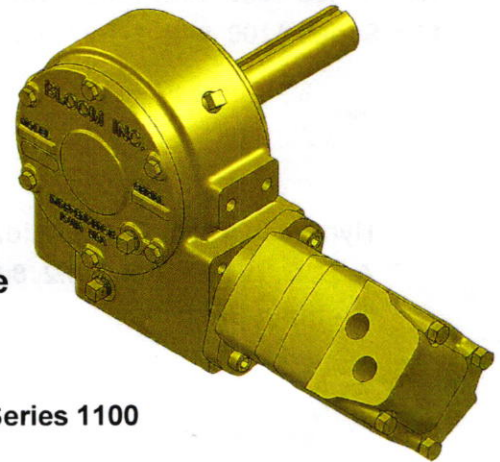
*"Quality Since
1910"*

Hydraulic Speed Reducer

The rugged construction and versatility of the **Series 1000** and **Series 1100** Speed Reducer is ideal for stationary and mobile applications where slow speed, high torque, or variable speed and reversing are needed. Applications include paving and curb forming, ditching, irrigation, and plastic and extruding equipment.



Series 1000



Series 1100

**Up To 24,000
Inch Pounds of Output Torque**

Bloom™ Hydraulic Speed Reducers – Standard Features

- | | |
|---------------------|---|
| GEAR CASE | - Made of high strength cast iron. Completely sealed for oil enclosed operation and to keep dirt out. |
| WORM SHAFT | - One piece alloy steel hardened and ground to insure long service. The hydraulic motor couples direct to the shaft. |
| WORM GEAR | - High tensile aluminum-nickel alloy bronze . Optimum lead and pressure angles transmit maximum power to the drum. |
| GEAR RATIO | - 20:1 standard, optional 10:1, 27:1 and 40:1 ratios provide optimum efficiency in power and speed. |
| BEARINGS | - Worm gear and worm shaft run on tapered roller bearings in an oil enclosed gear case. |
| OUTPUT SHAFT | - 1-1/2" diameter heat -treated alloy steel minimum tensile strength 150,000 psi. |
| MOTOR MOUNT | - SAE (A) 2 bolt flange. 1" woodruff keyed motor shaft. Motor is directly coupled into worm shaft. No separate coupling required. |



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Manufacturing LLC
Winch Division

"Custom Engineered Solutions"

*Lifting
Pulling
Hoisting*

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RV7/2020

BLOOM™ WINCH



Series 1000 and Series 1100 Model Selection from Performance Data

"Quality Since
1910"

MODEL EXAMPLE: 10-E-SR-RH-20

Gear Case and
Shaft Designation

10 = Series 1000 with 1-1/2" Output Shaft
11 = Series 1100 with 1-1/2" Output Shaft

Gear Ratios

10:1, 20:1, 27:1, 40:1

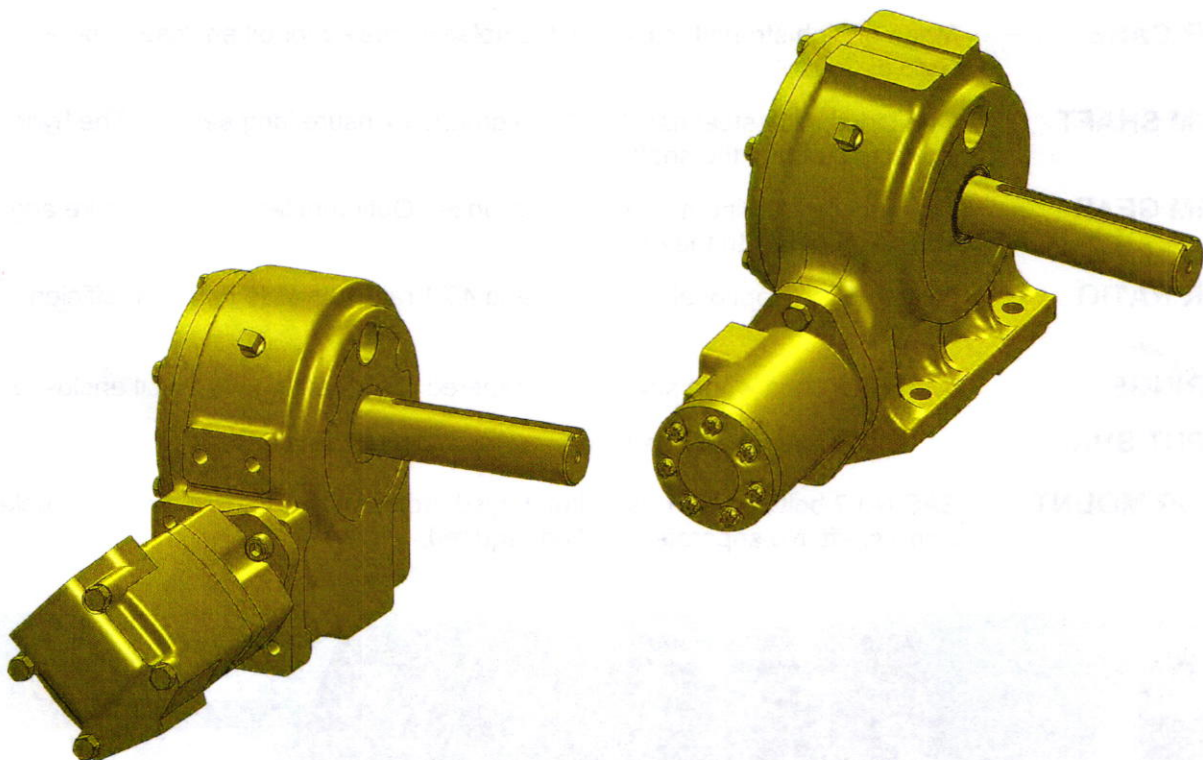
Hydraulic Motor Designation

A, B, C, DD, E, G, 4.9, 6.2, 8.0, 9.6, 11.9
IS - Input Shaft

Shaft Position

RH - Right Hand (Standard)
LH - Left Hand

Speed Reducer



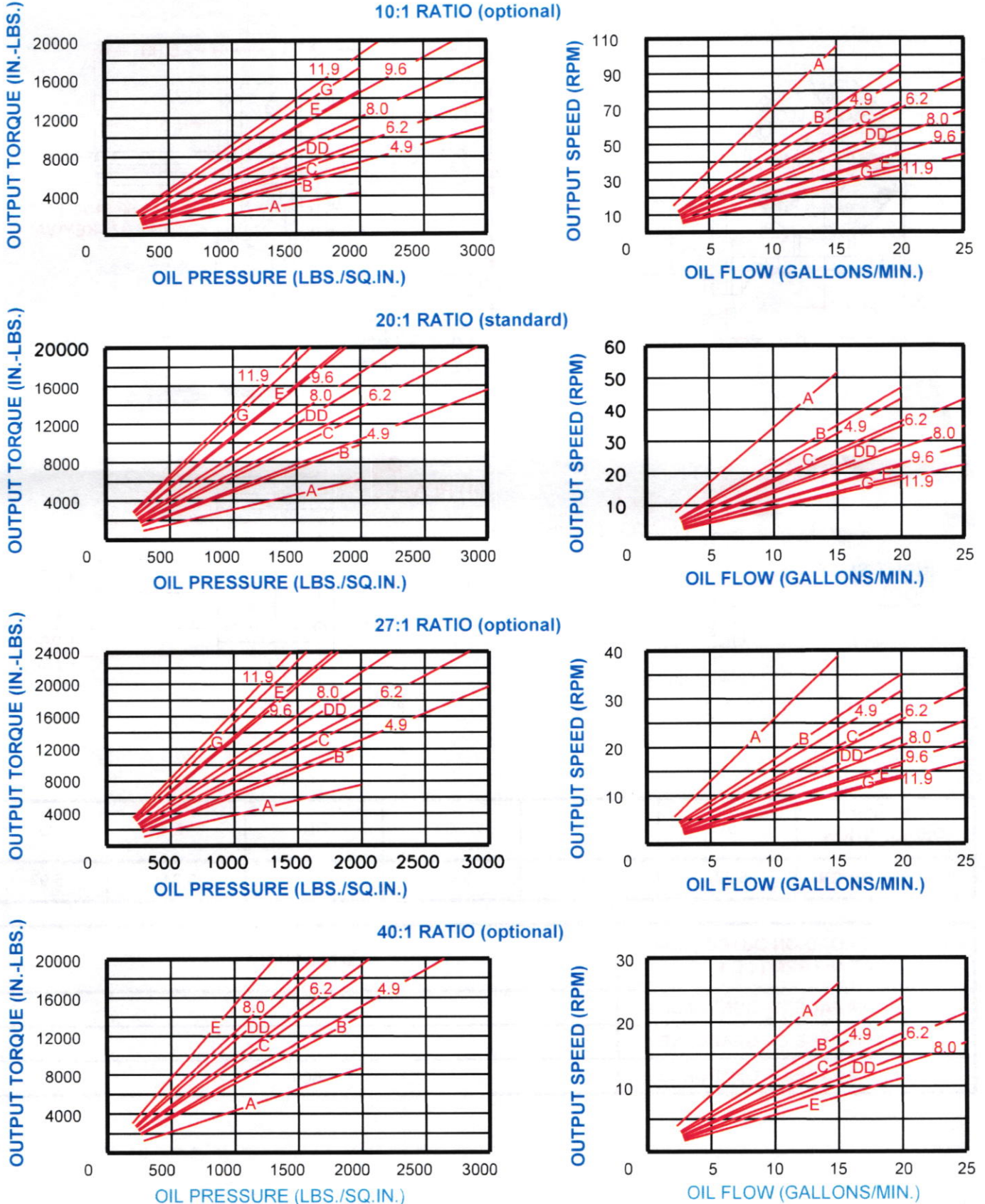
BLOOM™ WINCH



Series 1000 & Series 1100

"Quality Since 1910"

Bloom Hydraulic Speed Reducers Model Selection from Performance Data



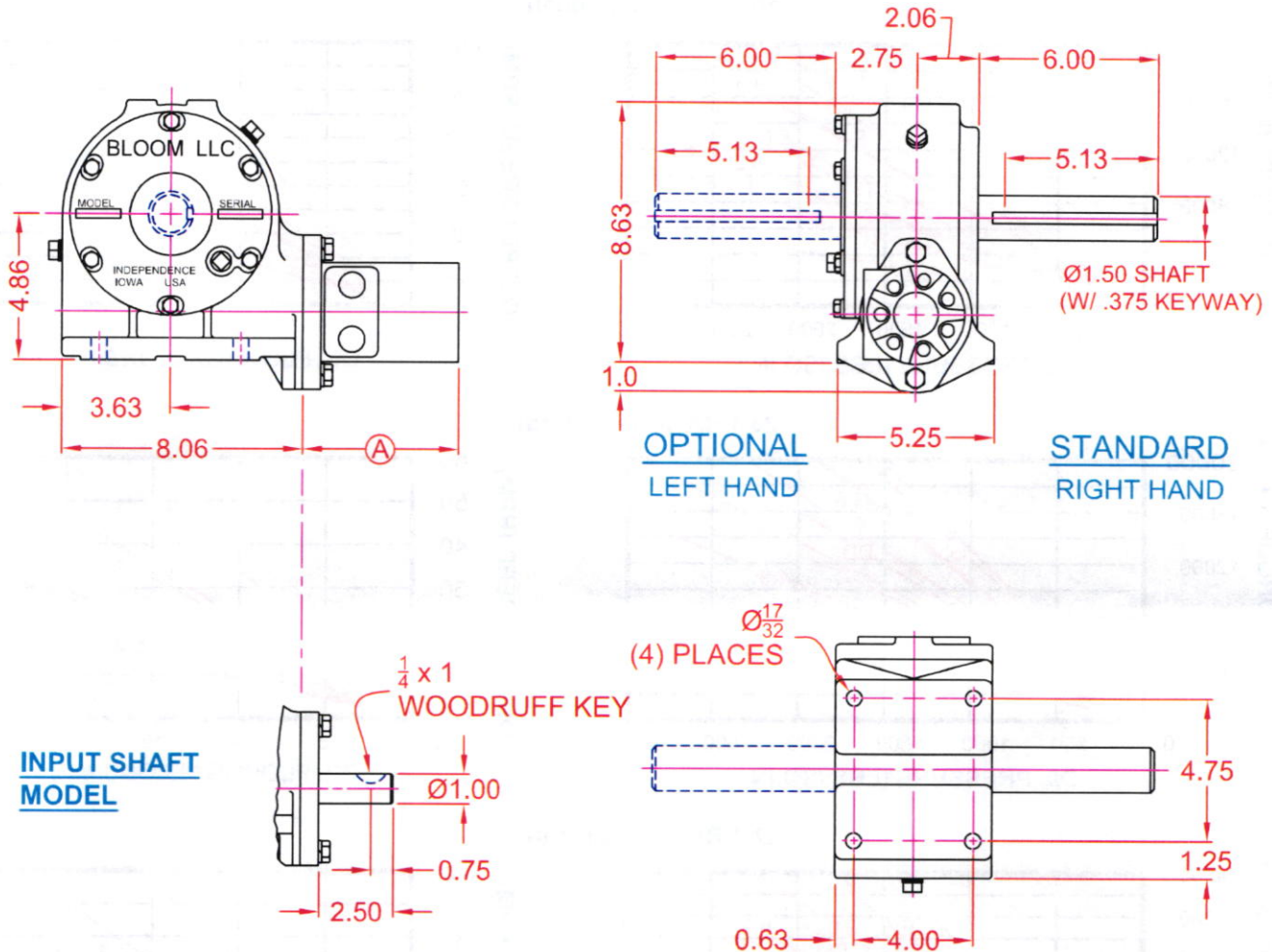
BLOOM™ WINCH

Dimensional Drawings



Series 1000 Speed Reducer

"Quality Since 1910"



INPUT SHAFT MODEL

MOTOR DESIGNATION	A	B	C	DD	E	G
(A) DIMENSION	5.22	5.37	5.49	5.62	5.84	5.97

OVERHUNG LOAD ON OUTPUT SHAFT AT 100 RPM (LB.)	Ø1.50 SHAFT
1" FROM FACE OF GEARCASE	750
2" FROM FACE OF GEARCASE	600
3" FROM FACE OF GEARCASE	500

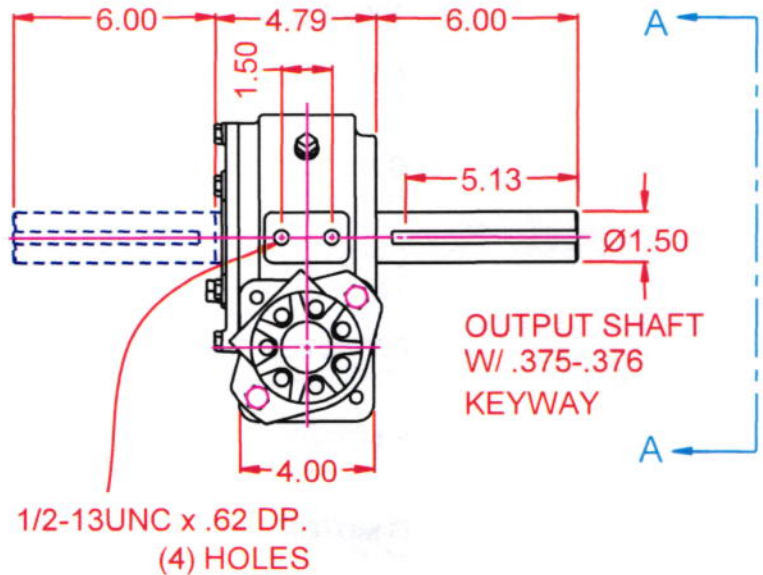
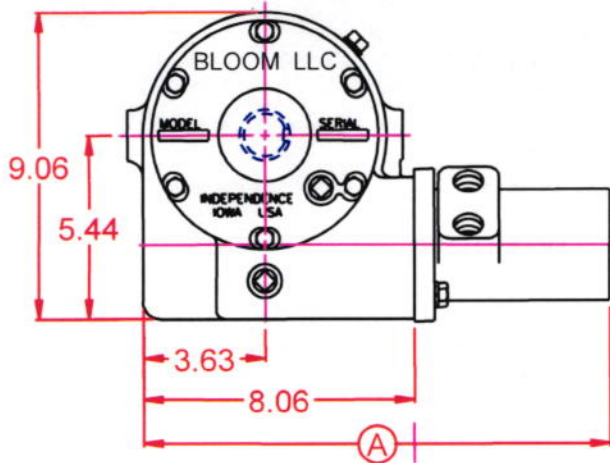
BLOOM™ WINCH



Dimensional Drawings

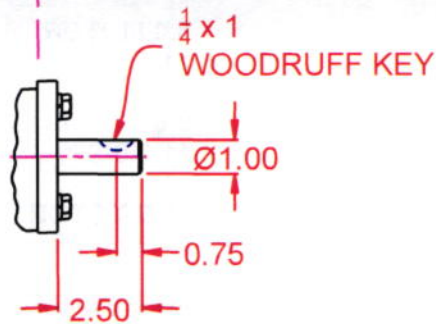
Series 1100 Speed Reducer

"Quality Since 1910"



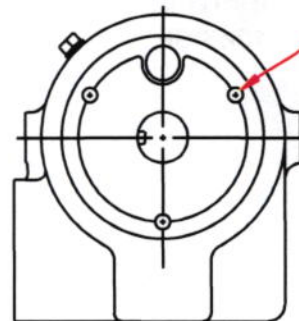
OPTIONAL
LEFT HAND

STANDARD
RIGHT HAND



INPUT SHAFT MODEL

OPTIONAL
Ø1/2-13 UNC x .75 DEEP
3 HOLES ON Ø5.00 B.C.
EQUALLY SPACED APART
MOUNTING HOLES AND FACED



VIEW 'A-A'

MOTOR DESIGNATION	A	B	C	DD	E	G	4.9	6.2	8.0	9.6	11.9
Ⓐ DIMENSION	13.28	13.43	13.55	13.68	13.90	14.03	15.32	15.50	15.75	15.75	16.02

BLOOM™ WINCH

1000 and 1100 SERIES MODEL SELECTION

1000 SERIES

A MOTOR
10-A-SR

B MOTOR
10-B-SR

C MOTOR
10-C-SR

DD MOTOR
10-DD-SR

E MOTOR
10-E-SR

G MOTOR
10-G-SR

4.9 MOTOR
10-4.9-SR

6.2 MOTOR
10-6.2-SR

8.0 MOTOR
10-8.0-SR

9.6 MOTOR
10-9.6-SR

11.9 MOTOR
10-11.9-SR

INPUT SHAFT MODEL
10-IS-SR

1100 SERIES

A MOTOR
11-A-SR

B MOTOR
11-B-SR

C MOTOR
11-C-SR

DD MOTOR
11-DD-SR

E MOTOR
11-E-SR

G MOTOR
11-G-SR

4.9 MOTOR
11-4.9-SR

6.2 MOTOR
11-6.2-SR

8.0 MOTOR
11-8.0-SR

9.6 MOTOR
11-9.6-SR

11.9 MOTOR
11-11.9-SR

INPUT SHAFT MODEL
11-IS-SR

BLOOM™ WINCH

Correct choice of Directional Control Valves for Bloom Winches

Tandem Center Spool Valve – Work Ports are **blocked** in neutral position

Use on all winches that use motor only to hold load.

*Winches require ridged mounting plate.
See owner's manual for information about proper mounting plate thickness or call Bloom Sales Engineer at factory.

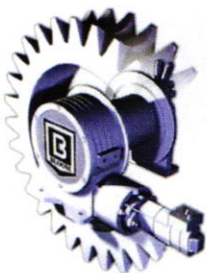
WARNING!

Goods are not intended for use in the moving or lifting of persons!

The winches described herein are neither designed nor intended for use or application to equipment used in the lifting or moving of persons and it is understood that all such use shall be at the sole risk of the user.

The cable clamps on winches are not designed to hold rated loads. A minimum of 5 wraps of cable must be left on drum barrel to guarantee holding of rated load.

Applications of winch where life would be endangered by any event are not recommended.



BLOOM Manufacturing LLC

Winch Division

1443 220th Street,, Independence, Iowa 50644

FAX 319-827-1140 PHONE 319-827-1139

www.bloommfg.com

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- 1) Drain oil from gear case.
- 2) **Without Brake:**
 - a) Loosen and remove (2) 7/16" X 1-1/2" (2000 series motor) or (2) 7/16" X 1-1/4" ("H" series motor) hex head cap screws. Remove motor from gear case.
- With Brake:**
 - a) Loosen jam nuts and locking nuts to remove brake line.
 - b) Remove (3) 3/8" X 2-1/2" (2000 motor) socket head cap screws or (4) 5/16" X 3" (AM motor) hex head cap screws. Remove counterbalance valve.
 - c) Loosen and remove (2) 1/2" X 1-1/2" (2000 motor) or (2) 1/2" X 1-1/4" ("AM motor) socket head cap screws. Remove motor from back of brake unit.
 - d) Loosen and remove (2) 1/2" X 3" socket head cap screws from back of brake housing. Split brake unit into 2 parts.
 - e) Loosen and remove (2) 7/16" X 1" socket head cap screws and remove brake housing from gear case.
- 3) Remove worm shaft and bearings from gear case.
- 4) Remove gear case cover.
- 5) Remove bronze gear and shaft as a unit being careful not to damage shaft seal.

Note: Bronze gear is press fit on shaft. **DO NOT** remove unless absolutely necessary.

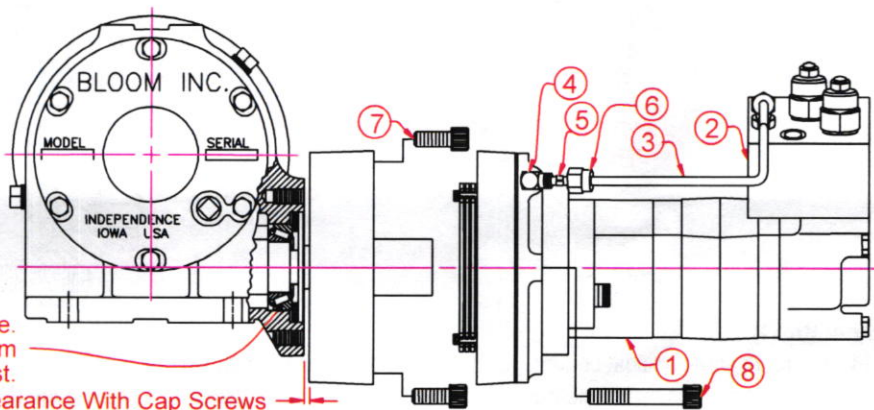
Model number prefix (stamped in gear case cover) indicates model series and shaft size:

- No prefix designates 1000 series speed reducer with 1-1/4" shaft
- Prefix "10" designates 1000 series speed reducer with 1-1/2" shaft
- Prefix "27" designates 1000 series speed reducer with 1-1/2" shaft and old style 27:1 ratio gears
- Prefix "11" designates 1100 series speed reducer with 1-1/2" shaft

- ① Motor
- ② Counterbalance Valve
- ③ Hydraulic Tube
- ④ Elbow
- ⑤ Tapered Split Ring
- ⑥ Nut
- ⑦ Socket Head Cap Screw
- ⑧ Socket Head Cap Screw

Note The Location of The Cup & Cone.
The Cone Is Installed Onto The Worm
Shaft First.

Measure Clearance With Cap Screws
Tightened Lightly

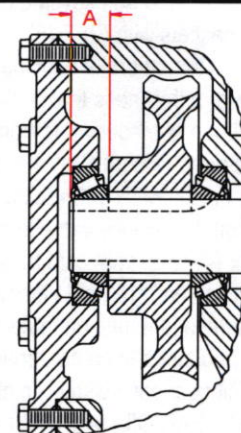


Assembly Instructions

1000, 1000K & 1100 Series Speed Reducers

- 1) Clean gear case and all parts thoroughly, inspect oil seal and replace if worn or scored.
- 2) If bronze gear has been removed from shaft, care should be used to press the gear onto the shaft squarely. Press gear and keys onto shaft simultaneously. Locate end of gear hub (the set screw side) 21/32" from the shaft end on 1-1/4" shaft models and 3/4" on 1-1/2" shaft models.
- 3) Install gear and shaft assembly (with bearings) into gear case carefully to prevent damage to the shaft seal.

A DIM.	SHAFT DIA.
21/32	1-1/4
3/4	1-1/2



**Do Not
Use Hammer
To Install
Bronze Gear
Onto Shaft**

Measure Clearance
With Cap Screws
Tightened Lightly

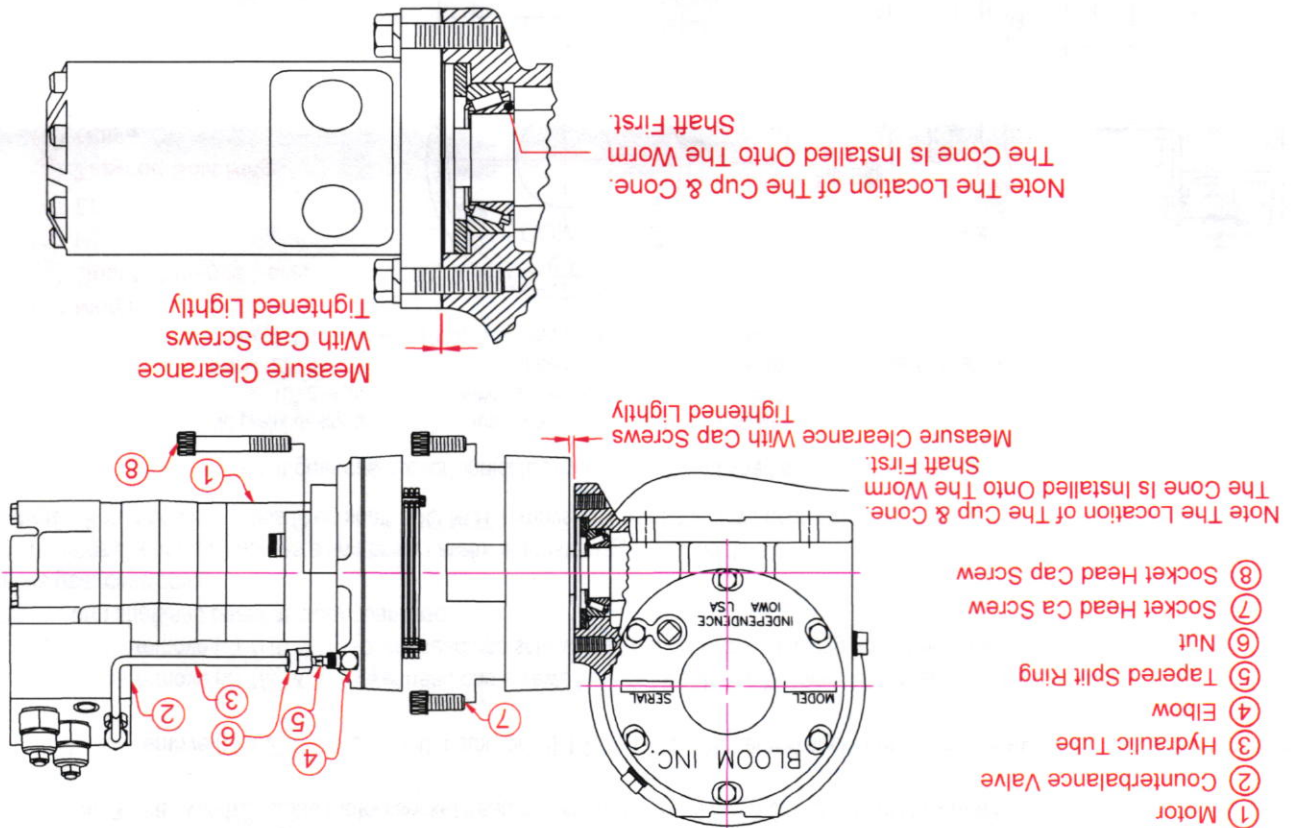
Phillips 80W90 SMP with more than 50% of any other kind of oil.
 ULLTRA-LUBE NO. 601 or Phillips 80W90 SMP may shorten the life of the gears. DO NOT mix Bloom ULLTRA-LUBE NO. 601 or gear oil (Phillips 80W90 SMP) meeting API classification GL-5 or equivalent competing brand. Continuous use of oil other than Bloom ULLTRA-LUBE NO. 601 is not immediately available, use Phillips 66 Company SAE grade 80W90 superior multi-purpose TRANS-WORM GEAR OIL; available from Bloom in pints or quarts. The hardened steel worm shaft must run in oil. For emergency situations when Bloom ULLTRA-LUBE NO. 601 is not immediately available, use Phillips 66 Company SAE grade 80W90 superior multi-purpose

- 7) Base Mounted: Fill gear case with (1) pint, All Other Mounting Positions: Fill gear case with (2) pints Bloom ULLTRA-LUBE NO. 601 tapered split ring starts to come through the back side or the brake line side of the nut.
 e) Install brake line into 7/16" male elbows on counterbalance valve and brake (if installing a new brake line it may be necessary to cut brake line to fit). Tighten jam nuts on male elbows to hold in place. Tighten locking nuts on elbows to hold brake line in place. Turn nut only until cap screws or (4) 5/16" X 3" (AM motor) hex head cap screws.
 d) Bolt double counterbalance valve to motor manifold bearing end cap using O'Rings provided and (3) 3/8" X 2-1/2" (2000 motor) socket head (2000 motor) or (2) 1/2" X 1-1/4" (AM motor) socket head cap screws.
 c) Install square head woodruff key into motor shaft and bolt motor to back of brake using (1) (W-239) brown motor gasket and (2) 1/2" X 1-1/2" (2000 motor) or (2) 1/2" X 3" socket head cap screws.
 b) Bolt back half of brake housing to front half with the (2) 1/2" X 3" socket head cap screws.
 a) Install round head woodruff key into brake output shaft. Make sure thrust spacer is against bearing. Bolt front brake housing to gear case without shim gaskets with (2) 7/16" X 1" socket head cap screws. Tighten the screws lightly and evenly. Measure clearance with a feeler gage and remove front brake housing (Section B). For proper bearing pre-load, install shim gaskets (red - .002", blue - .005", brown .010") as required with a thickness that is .003" - .005" less than the measurement. Re-bolt front brake housing securely.

With Brake:

- a) Place thrust spacer against bearing. Bolt motor to gear case without shim gaskets with cap screws and lock washers. Tighten the screws lightly and evenly. Measure clearance between motor and gear case with a feeler gage (Section B) and remove motor. For proper bearing pre-load, install shim gaskets (red - .002", blue - .005", brown - .010") as required with a thickness that is .003" to .005" less than the measurement. Re-bolt motor securely.

Without Brake:



worm gear shoulder.

- 4) Bolt cover to gear case without shim gaskets. Tighten the screws lightly and evenly. Measure clearance between cover and gear case with feeler gage and remove cover. For proper bearing pre-load, install shim gaskets (red - .002", blue - .005", brown - .010") onto cover as required with a thickness that is .003" to .005" less than the measurement. Re-bolt cover securely. Check bearing thrust by turning drum shaft. Shaft must turn freely but with just a slight amount of resistance.
 5) Install bearing cone (.75" diameter inside dimension) into bearing pocket. Install worm shaft. Be sure that the shaft end opposite the motor is seated properly in the bearing cone. Install bearing cone and cup on motor end **being sure large end of bearing cone is seated against**

TITAN TRAILERS INC.
Spec. Speed Reducer Part List
Model 10-E-SR-40-LH-5533

REF. NO.	PART NO.	REQ.	DESCRIPTION
2	W-202-1-25	1	Worm Shaft 40:1 Ratio
3	10-203-1-25-A	1	Bronze Gear 40:1 Ratio
10	W-210K	1	Gear Case Cover Gasket Kit
16	10-216	1	Oil Seal
17	10-217	2	3/8" x 3/8" x 1-7/16" Key
26	W-3096	3	3/8" Socket Pipe Plug
27	W-227	6	5/16" - 18NC x 1" HT Cap Screw
32	W-232	1	3/4" Bearing Cup 21212
33	W-233	1	3/4" Bearing Cone 21075
34	W-234	3	1-1/2" Bearing Cup LM29710
35	W-235	3	1-1/2" Bearing Cone LM29749
36	W-236	1	.250 - .255 Spacer
37	W-237K	1	Motor Gasket Kit
49	W-249	2	7/16" - 14NC x 1-1/2" HT Cap Screw & Lock Washer
50	W-250	1	1/4" x 1" Woodruff Key (rounded top)
58	W-258	2	3/8" x 1/2" Socket Set Screw
60	10-260	1	1-1/2" Output Shaft
65	5597	1	Gear Case - L. H.
75	10-206	1	Gear Case Cover
85	W-3226K	1	Ductile Motor Flange Kit (not shown)
86	10-215D	1	E Motor Char-Lynn 101-1036 (P/N 10-215) With Ductile Motor Flange (P/N W-3226K)
87	W-3231	1	Char-Lynn H-Series 101-XXXX-009 (60540) Seal Kit

WHEN ORDERING PARTS, SPECIFY SERIAL NUMBER AND MODEL STAMPED ON COVER

BLOOM MANUFACTURING INC.
WINCH DIVISION
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MODEL 10-E-SR-40-LH-5533

