



**CEMENT SILO #4  
Operator's & Parts  
Manual**



Ideal Manufacturing, Inc. • 2011 Harnish Blvd. • Billings, MT 59101  
P (406) 656-4360 / 800-523-3888 • F (406) 656-4363

**Note: When ordering parts please have your serial# to insure the correct parts are sent to you.**

**USD Funds \$15.00**



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Billings, MT 59101

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## **FAST-WAY LIMITED WARRANTY POLICY**

**Ideal Manufacturing, Inc., hereinafter referred to as "Manufacturer" warrants FAST-WAY equipment to be free from defect in material and workmanship, under normal use and service, for a period of one (1) year from the date of original purchase. Manufacturer will, at its option, replace or repair at factory in Billings, MT, any part or parts which shall appear, to the satisfaction of the Manufacturer, upon inspection at its factory, to have been defective in material or workmanship. This warranty does not obligate the Manufacturer to bear any transportation charges in connection with replacement or repair of defective parts. This warranty excludes electrical components and damage due to Acts of God, unauthorized modifications, misuse, abuse or negligence to this product.**

**In order to proceed with a warranty claim, Ideal Manufacturing must be notified of the problem. A new part will be shipped out prepaid (Ground UPS). If the customer requests that the part be expedited that shipping charge will be charged to the owner.**

**The part that is being warranted must be returned to Ideal Manufacturing postage prepaid. When the new part is shipped out, it will go out with an invoice and a warranty part return number. The defective part must be returned to Ideal Manufacturing, Inc freight prepaid, with the warranty part return number. At that time the invoice will be considered paid in full.**

**This warranty is exclusive and in lieu of all other obligation, liabilities or warranties. In no event shall Ideal Manufacturing be liable or responsible for incidental or consequential damage or for any other direct or indirect damage loss, cost, expense or fee.**

**This warranty shall not apply to any products or parts that have been altered or repaired without written consent of Ideal Manufacturing.**

**Labor to remove and reinstall defective product or parts will be paid from a labor rate and schedule only. Consult Ideal Manufacturing for that rate and schedule.**

**For further information on returning your product or questions concerning Ideal Manufacturing warranty, please contact Ideal Manufacturing.**

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# **SAFETY RULES**

1. Follow instructions, don't take chances. If you don't know, ask. When setting up, lowering or putting equipment into traveling position, follow all instructions in operator's manual.
2. Correct or report unsafe conditions. If not sure of how to correct a hazard, report it and get help.
3. Keep everything clean and orderly. Trips or falls can cause serious injuries.
4. Use the right tools and equipment for the job. Use them safely. Replace all machine guards after repair.
5. Report all injuries and get first aid or medical treatment promptly.
6. Use prescribed protective equipment. Keep it in good condition. Wear your hardhat, safety climbing devices or belt. Wear safe clothing to protect you from material being handled cold or hot. Wear a dust mask when conditions require them. When conditions require them, use gloves, eye protection/safety glasses, and earplugs for noise.
7. Use, adjust, and repair equipment only when authorized.
8. Remember, all petroleum fumes, gasoline, L.P. gasses are highly explosive.
9. Don't horseplay: avoid distracting others.
10. When lifting, bend your knees and get help for heavy loads.
11. Don't repair or adjust equipment while in motion. Shut off power source, gasoline engines or electric motors.
12. Comply with safety rules and signs.

# OPERATING PROCEDURE

## 1. CHARGING SILO

- a. Close silo discharge valve, (REF# 31).
- b. Air pump cement thru filler pipe, (REF# 7).
- c. You must shake upper section of bag-house to clean filter bags each time after filling silo.

## 2. CHARGING WEIGH HOPPER

- a. Close weigh hopper cement discharge line valve, (REF# 32).
- b. Open weigh hopper air displacement valve, (REF# 27).
- c. Open weigh hopper cement inlet valve, (REF# 30).
- d. Open silo discharge valve, (REF# 31), in a gradual fashion while observing weigh scale read-out dial. Close valve when desired weight has been reached.

NOTE: If at any time during the weigh hopper charging operation, cement fails to flow freely as indicated by the scale read-out dial, silo cone aeration must be induced.

- e. Close weigh hopper discharge air supply line valve, (REF# 28).
- f. Open aerator supply line valve, (REF# 29).
- g. Start air pump unit, (REF# 33).
- h. When charging operation is complete, stop air pump unit.

## 3. DISCHARGE WEIGH HOPPER

- a. Close weigh hopper inlet valve, (REF# 30).
- b. Close weigh hopper air displacement valve, (REF# 27).
- c. Close aerator supply line valve, (REF# 29).
- d. Open weigh hopper discharge air supply valve, (REF# 28).
- e. Start air pump unit, (REF# 33).
- f. Observe air pressure gauge located at top of weigh hopper until a reading of approximately 8 p.s.i. is indicated.
- g. Open weigh hopper cement discharge valve, (REF# 32), in a gradual fashion to control the desired discharge rate.
- h. Observe the weigh scale read-out dial to determine when weigh hopper has fully discharged. If hopper fails to discharge completely, close discharge valve and allow pressure to increase, then open valve again.
- i. Stop air pump unit, (REF# 33).

## PREPARING SILO FOR TRANSPORT

1. Most important is to be positive that all cement has been removed from systems before lowering silo.
2. Weigh scale read-out will indicate an empty hopper.
3. Remove inspection cover at top of silo and observe interior.
4. At weigh hopper bottom, connect two (2) red color, vertical, hold down, pull type turnbuckles, (REF# 19). Tighten in an equal, uniform fashion to point where a reading of 500 pounds is indicated on scale.
5. At weigh hopper mid-section, connect four (4) red color, hold-up, push type turnbuckles, (REF# 18). Tighten in an equal, uniform fashion to an indicated reading of zero (0) pounds on scale.
6. At weigh hopper bottom, connect four (4) red color, pull type turnbuckles with chains, (REF# 19). Tighten to a point of snugness only.
7. Connect tow vehicle to trailer in a straight line and retract from support screw jack, (REF# 2). Insure that hitch pintle hook is closed and locked.
8. Be positive that tow vehicle brakes are released and that transmission is in neutral position.

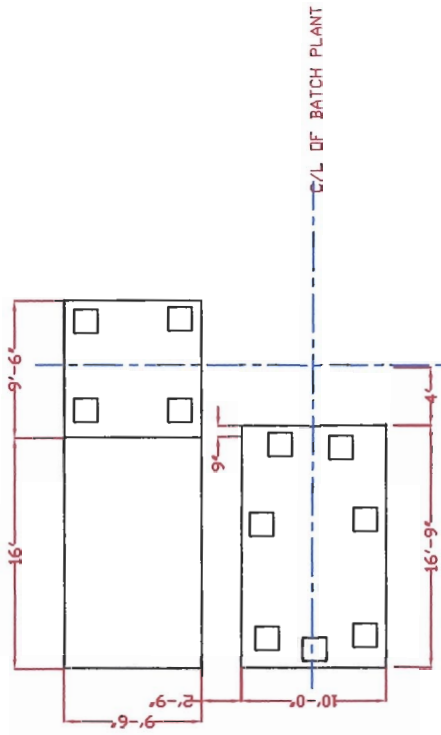
**CAUTION:** If on an incline, guard against coasting.

9. At front of trailer, start hydraulic power unit, (REF# 22) proceed to lower silo with the control manual operating lever, (REF# 22). Feather operating lever as required for smooth, gentle movement
10. At front of trailer on each side, connect red color turnbuckles and tighten.
11. At rear of trailer on each side, remove retaining pin and raise folding support base. Replace pin to secure base, (REF# 3).
12. At top of silo, unscrew and remove cement discharge line overhead extension and tighten upper clamp bolts.
13. Connect and check stop, signal and clearance electrical running lights.

## SET UP PROCEDURE

1. Select a level site with solid footing for setting up and operating cement silo.
2. Align silo trailer and tow vehicle in a straight line. Leave tow vehicle hooked to trailer with brakes released and transmission in neutral position.
3. At front of trailer on each side, release red color turnbuckle, (REF# 4).
4. At rear of trailer on each side, remove retaining pin and lower folding support base. Replace pin to secure base, (REF# 3).
5. Before elevating silo, screw in cement discharge line overhead extension at elbow and loosen upper clamp bolts.
6. At front of trailer, start hydraulic power unit, (REF# 20). Proceed to elevate silo with the control valve manual operating lever, (REF# 22).  
CAUTION: Observe pressure indicator gauges and do not exceed 2,000 p.s.i. up pressure. Feather operating lever as required for smooth movement.
7. Level silo with hydraulic system and shim under support as required.
8. Disconnect tow vehicle.
9. At weigh hopper, release six (6) red color, holddown, pull type turnbuckle, (REF# 19).
10. At weigh hopper, release four (4) red color, holdup, push type turnbuckles, (REF# 18). Replace hopper end bolt in turnbuckle to prevent loss.

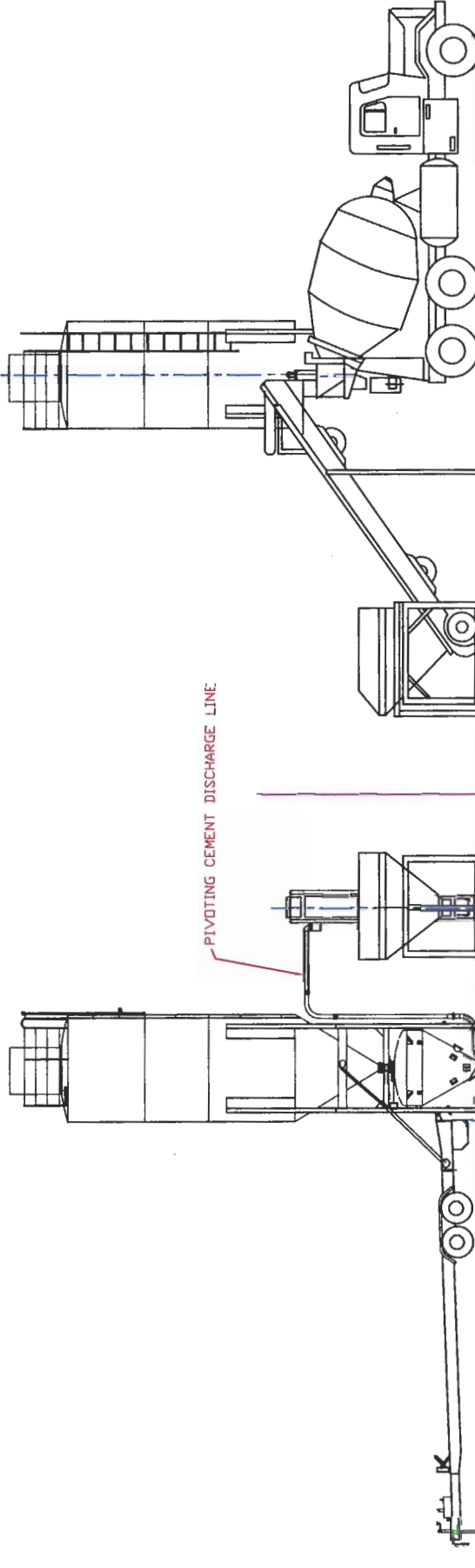




SUPPORT SLABS

C/L OF BATCH PLANT

C/L CEMENT SILO



PIVOTING CEMENT DISCHARGE LINE

BATCH PLANT POSITION FIRST

17' SILO UP POSITION

19' SILO DOWN POSITION

TRAILER MOVES WHEN SILO IS LIFTED

C/L BATCH PLANT

IDEAL MANUFACTURING INC.  
 PHONE (406)-656-4360 FAX (406)-656-4363  
 CEMENT SILO #4 & BATCH PLANT  
 GENERAL ARRANGEMENT  
 SILO #4 DWG # NU-101

DATE: 09-28-2002 ACAD-PAC



