REED

the GUN THAT BUILDS

A SPECIFICATION AND INTERCHANGE GUIDE FOR SERIES 4 LOVA (AIR DRIVEN) AND LOHE (ELECTRIC DRIVEN) REED GUNCRETE MACHINES

PATENT 3,161,442
THE ORIGINATORS AND DEVELOPERS OF
COMPACT AUTOMATIC GUNITE EQUIPMENT

REED - A Member of the Shea Family of Companies
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PERFORMANCE SPECIFICATIONS

Dry process production rates for Reed Guncrete Machines with 100 feet (30.48 meters) of material delivery hose and powered with standard 8AM Air Motor*

Hose Size in. (cm)	Production Rates** Yd^3/hr (m^3/hr)	Clean Dry Air at 100 PSI (7.3 Kg/Cm^2) $ft.^3/min.$ ($m^3/min.$)	Maximum Size of Aggregate in. (mm)	Number of Pockets-Wear Plate and Feed Bowl Combination LOVA
¾ (1.9)	1-2 (.75–1.5)	150 (4.3)	1/8 (3.5)	30
1 (2.5)	2-4 (1.5–3.1)	250 (7.0)	1/4 (7.0)	21 or 30
1¼ (3.2)	4-6 (3.1–4.6)	315 (9.0)	3/8 (10.0)	20 or 21
1½ (3.8)	6-9 (4.6–6.9)	365 (10.5)	3/8 (10.0)	Standard 15 or 20
2 (5.1)	9-12 (6.9–9.2)	600 (17.0)	1/2 (13.0)	Standard 15
2 (5.1)	12-15 (9.2–11.5)	750 (21.0)	3/4 (19.0)	Large Aggregate 12 or 15
2½ (6.4)	12-15 (9.2–11.5)	900 (25.5)	3/4 (19.0)	Large Aggregate 12 or 15

*Add 90 SCFM (2.5 M^3/Min) to Air Requirement if larger more powerful 16AM Air Motor is used.

**Performance specifications are nominal. They are affected by factors such as mix design, type of aggregate, size of placing line, atmospheric conditions, etc. Specifications and design are subject to change without notice.

HOW TO SPECIFY AND EQUIP A SERIES 4 REED GUNCRETE MACHINE

1) Determine a convenient source of clean, dry compressed air.
   ____ SCFM @ 100 PSIG
   ____ (m^3/min. @ 7.3 Kg/Cm^2)

2) Identify the size of the largest aggregate in the gunning material.
   Diameter ____ Inches
   ____ (Cm)

3) Consider a satisfactory hourly production rate in relation to the working conditions.
   ____ Yd^3/hr ____ Lbs/hr
   ____ (m^3/hr) ____ (Kg/hr)

4) Select a material hose, sized to:
   a) accommodate the largest aggregate,
   b) correspond with the available air supply,
   c) meet the hourly production rate.
   Diameter ____ Inches
   ____ (Cm)

5) Consider a convenient method of filling the Machine: Shovel, Chute, Conveyor, Bags, etc.

6) With this information, a Reed Guncrete Machine can be equipped with selected interchangeable parts to meet your working requirements. Refer to options shown below and to the Performance Specifications. Interchangeable parts and other details are shown on supplementary pages.

   A) One of four Hopper types:
   Short Pre-Mix, Tall Pre-Mix,
   Tall Standard Mixing or Flat Refractory

   B) One of seven Wear Plate/Feed Bowl combinations:
   Four large aggregate sizes; two each with 12 pockets and two with 15 pockets. Standard pocket configurations for smaller aggregate sizes (3/8 inch) of 15, 20, and 21 pockets. The 30 pocket Feed Bowl does not use a wear plate. It is used for small volume gunning with small diameter (¾ to 1 inch) material delivery hose.

   C) One of six Gooseneck size options to match material delivery hose size, 2 inch x 2½ inch (with adapter) 2 inch, 1½ inch, 1¼ inch, 1¼ inch x 1 inch and 1¼ inch x ¾ inch (with adapters).

   D) One of three Motor Drive Units:
   LOVA Series: Standard Air Motor 8 AM or Large Air Motor 16 AM or
   LOHE Series: Electric Motor, 3 Phase. (Specify voltage and cycle)
   Choice of 3 hp or 5 hp.

The Reed Guncrete Machine will then be identified as: (Ref. 6A thru 6D above)

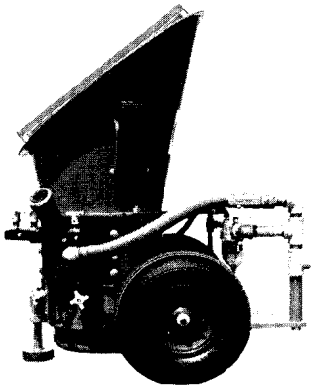
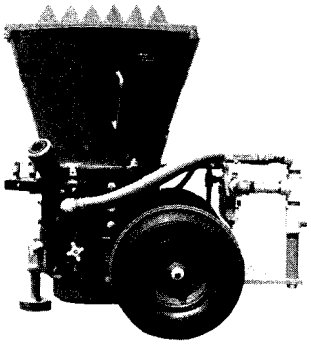
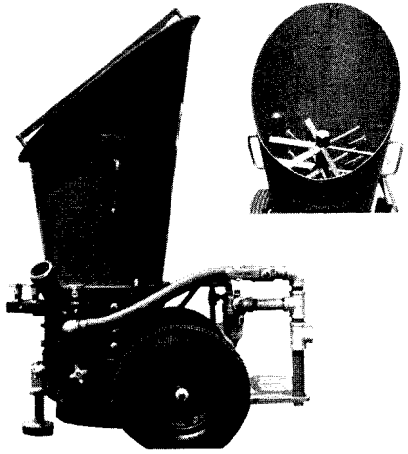
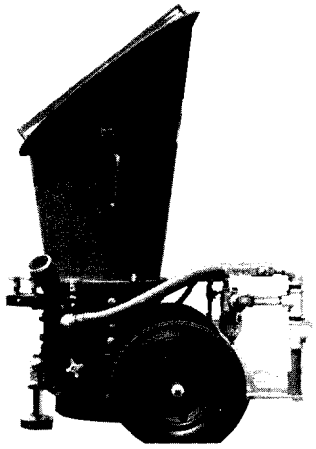
Series 4 LO__Reed Guncrete Machine with
A__ __ __ __ Hopper, Screen and Agitator;
B__ __ __ __ Pocket, Wear Plate and Feed Bowl, C__Gooseneck
D__ __ __ __ Motor Drive; on wheels.
S/N __ __ __ __ __ __ __ __ __ __ __ __ __ __

Related Spare Parts, Coupled Material Hose and Nozzle Assemblies are not included in the price of the Machine identified.
These items should be stated individually, as accessories to the Reed Guncrete Machine.

GENERAL INFORMATION – MEASUREMENTS* FOR SERIES 4 REED GUNCRETE MACHINES

Calculated for a Series 4 LOVA Reed Guncrete Machine equipped with hopper configurations as shown below, and with standard 8 AM Air Motor.

* Weights are subject to change slightly with installation of other interchangeable parts.

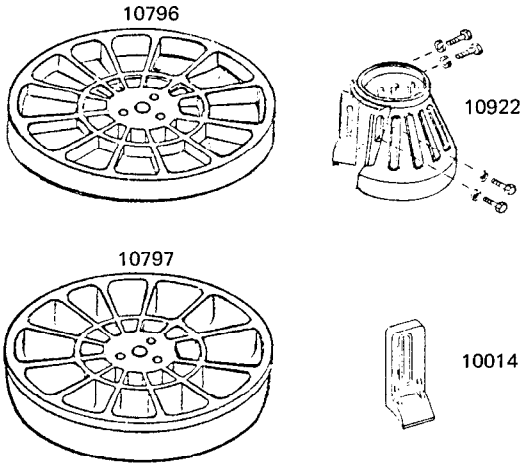
SHORT PRE-MIX HOPPER WITH SCREEN	FLAT REFRACTORY HOPPER WITH SCREEN	TALL STANDARD MIXING HOPPER WITH SCREEN (NO LONGER AVAILABLE)	TALL PRE-MIX HOPPER WITH SCREEN
			
Net Weight, Lbs. (kg) and Cube Dimensions, ft^3 (m^3)			
582 lbs. 32.21 ft^3 264.5 kgs. .912 m^3	585 lbs. 25.9 ft^3 265.9 kg. .733 m^3	624 lbs. 38.52 ft^3 283.6 kg. 1.091 m^3	600 lbs. 38.52 ft^3 272.7 kg. 1.091 m^3
Hopper Holding Capacity in ft^3 (m^3)			
1.26 ft^3 0.036 m^3	4.27 ft^3 0.121 m^3	2.82 ft^3 0.080 m^3	2.82 ft^3 0.080 m^3
Maximum Dimensions – Length" (CM), Width" (CM), Height" (CM)			
L 38 in. 96.52 cm W 31 in. 78.74 cm H 47 in. 119.38 cm	L 38 in. 96.52 cm W 31 in. 78.74 cm H 38 in. 96.52 cm	L 38 in. 96.52 cm W 31 in. 78.74 cm H 56.5 in 143.51 cm	L 38 in. 96.52 cm W 31 in. 78.74 cm H 56.5 in. 143.51 cm

Add 64 Lbs. (29 kg) for Series 4 LOVA Reed Guncrete Machine equipped with Large Air Motor.
Add 192 Lbs. (87.07 kg) for Series 4 LOHE Reed Guncrete Machine equipped with Electric Motor.

INTERCHANGEABLE FEED OPTIONS FOR LOVA AND LOHE REED GUNCRETE MACHINES

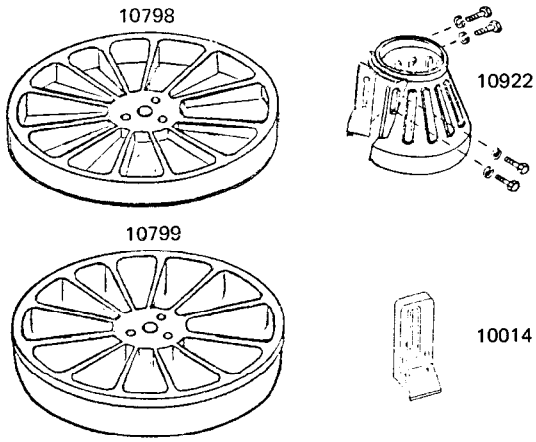
Large Aggregate 12 Pocket Feed System with 10336 or 10337 Rubber Wear Pad; wire fiber mixes, up to ¾ inch aggregates, 2 inch and 2½ inch material hoses.

10796 Wear Plate – 10797 Feed Bowl
10922 Rock Cone – 10014 Rock Shear



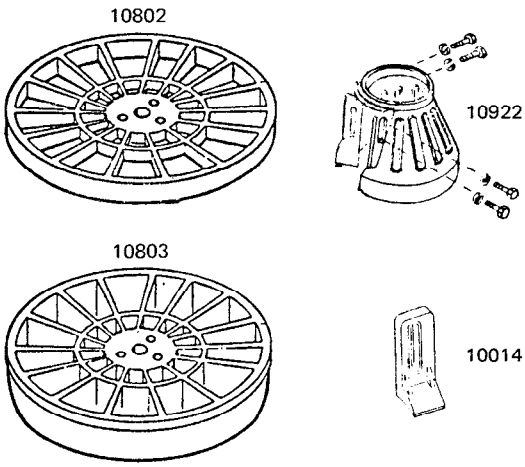
Large Aggregate 12 Pocket Feed System with 10336 or 10337 Rubber Wear Pad; Wear Plate and Feed Bowl are "dividerless" for gunning wire fiber mixes, up to ¾ inch aggregates, 2 inch and 2½ inch material hoses.

10798 Wear Plate – 10799 Feed Bowl
10922 Rock Cone – 10014 Rock Shear



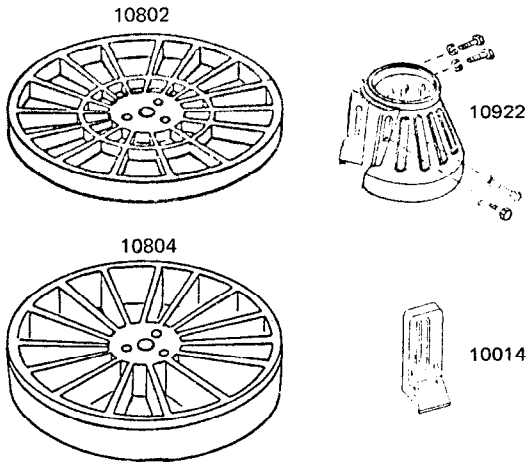
Large Aggregate 15 Pocket Feed System with 10336 or 10337 Rubber Wear Pad; 1¼ inch wire fiber mixes, up to ¾ inch aggregates, 2 inch and 2½ inch material hoses; smooth high volume, extreme applications.

10802 Wear Plate – 10803 Feed Bowl
10922 Rock Cone – 10014 Rock Shear



Large Aggregate 15 Pocket Feed System with 10337 Rubber Wear Pad; Feed Bowl is "dividerless", for gunning high proportions of large aggregate; 2 inch and 2½ inch material hoses.

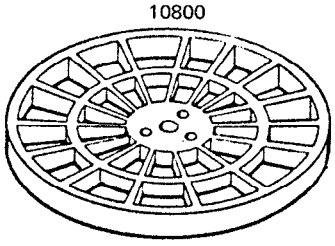
10802 Wear Plate – 10804 Feed Bowl
10922 Rock Cone – 10014 Rock Shear

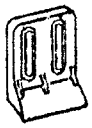


Standard 15 Pocket Feed System with 10338 Rubber Wear Pad; 1 inch wire fiber mixes, up to ½ inch aggregates, 1½ inch and 2 inch material hoses; smooth high volume, general gunning.

10800 Wear Plate — 10801 Feed Bowl
10013 Rock Shear

10800





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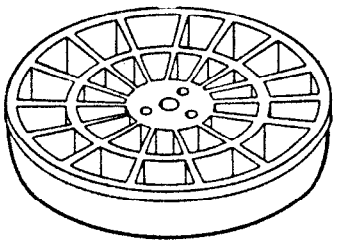
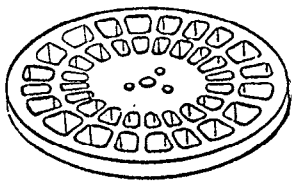
10801

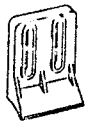


Standard 20 Pocket Feed System with 10338 Rubber Wear Pad; ¾ inch wire fiber mixes, aggregates up to ½ inch, 1½ inch material hose; smooth flow at high or low volume; general gunning.

10805 Wear Plate — 10806 Feed Bowl
10013 Rock Shear

10805





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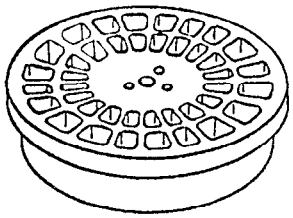
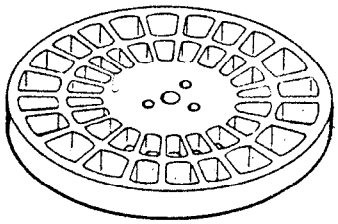
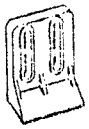


Shallow 21 Pocket Feed System with 10339 Rubber Wear Pad; ½ inch wire fiber mixes, up to ¼ inch aggregates, 1 inch and 1¼ inch material hoses; smooth low volume gunning.

10807 Wear Plate — 10808 Feed Bowl
10013 Rock Shear

10807





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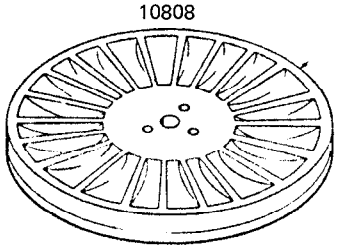
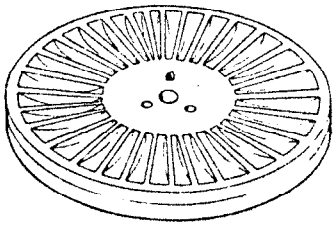


Shallow 30 Pocket Feed System with 10339 Rubber Wear Pad; fine grained materials, ¾ inch and 1 inch material hoses; very low output, for patching or filling small areas. No Wear Plate used.

10809 Feed Bowl only
10013 Rock Shear

10809



10013

NOTE: WHEN 30 POCKET FEED BOWL IS USED NO WEAR PLATE IS REQUIRED. THIS FEED BOWL IS MOUNTED DIRECTLY ON TOP OF ANY OTHER FEED BOWL.

HOPPER, SCREEN AND AGITATOR OPTIONS FOR SERIES 4 LOVA AND LOHE REED GUNCRETE MACHINES

The choice of these parts is determined by the type of gunning material used and by the method of placing material into the Reed Guncrete Machine.

All Hoppers are suitable for shovel or "chute" filling. The Sloping Hoppers are preferred because oversize material and debris will roll or slide off the screens.

The Flat Hopper is used when breaking bags of pre-mixed materials directly into the Hopper. Sloping Hoppers are not recommended for this application.

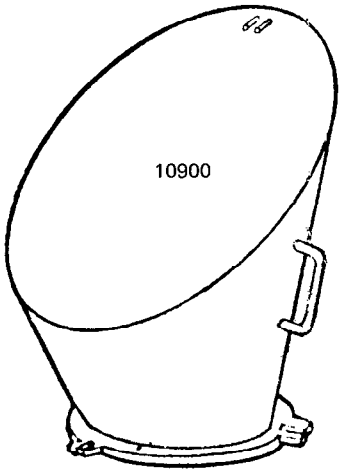
Screens are furnished for two important reasons:
1. to reject oversize materials and debris;
2. to keep tools and hands out of the equipment during operation.

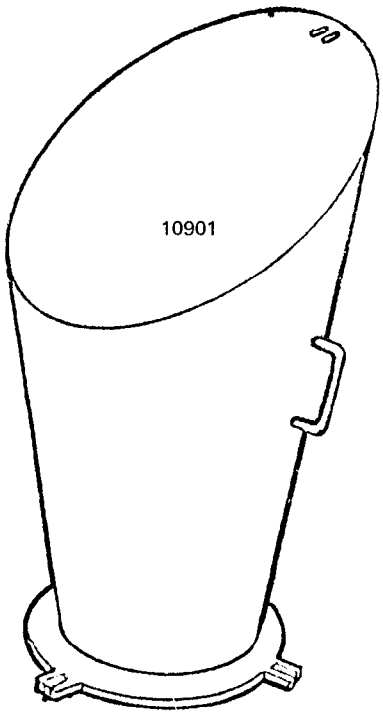
1 inch Wire Mesh is used with those Machines equipped to feed large aggregate. ¾ inch Wire Mesh is used for all other gunning materials.

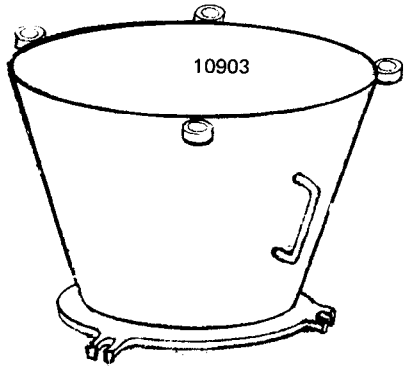
The Agitator serves the following purposes:
1. to lock the Wear Plate and Feed Bowl together and
2. to mix or re-mix a gunning material.

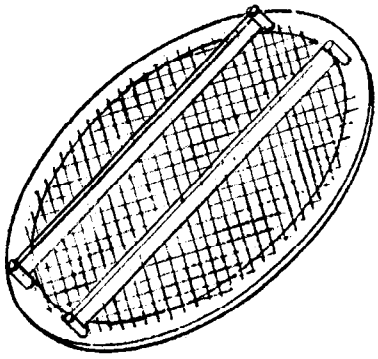
REED PART NO.	PART NAME AND DESCRIPTION
10900	Short Pre-Mix Hopper; preferred for low profile filling.
10901	Tall Pre-Mix Hopper; has more holding capacity.
10903	Flat Hopper; for bagged premixed materials; also recommended for use with Reedmate Predampeners.
10905	1 inch Mesh Screen; fits all but Flat Hoppers; for Large Aggregate Feed Systems.
10906	¾ inch Wire Mesh Screen; fits all but Flat Hoppers; for ½ inch aggregates and smaller.
10907	¾ inch Wire Mesh Screen; fits Flat Hopper only; for ½ inch aggregates and smaller.
10939	Bag Breaker Assembly; fits Flat Hopper only.
10810	Two Blade Agitator; for use with 10900 Short Hopper and 10903 Flat Hopper.
10811	Five Blade Agitator; for use with 10901 Tall Pre-Mix Hopper.

Turn to back of this sheet for line drawings of parts listed above.

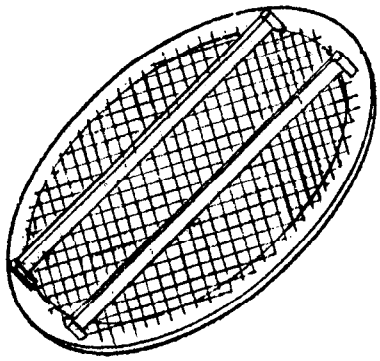








10905
OR
10906



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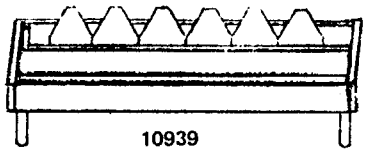

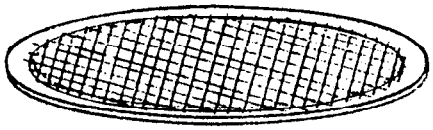

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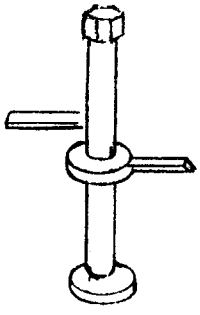

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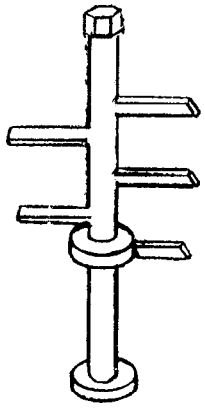

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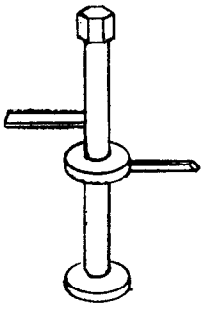
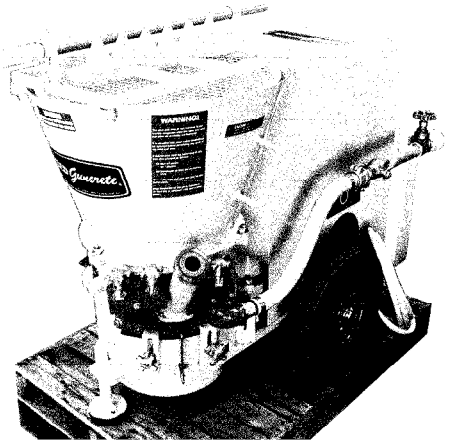


10810

Series 4 LOHE Reed Guncrete Machines are 3 Phase electric-powered models. Specify 3 or 5 horsepower and voltage and cycle requirements. On-Off Controls, Variable Speed Control, and Circuit Breakers are standard equipment. Electric Machines are usually set in a permanent location near a power source/work site and used for daily maintenance gunning as in ladle repair shops, blast furnace troughts, etc. A Tachometer Option is available for Electric Drive Reed Guncrete Machines.



LOHE (ELECTRIC DRIVE)
PERFORMANCE SPECIFICATIONS

Dry process production rates for Reed Guncrete Machines with 100 feet (30.48 meters) of material delivery hose and powered with 3 hp or 5 hp electric, 3 phase, motors.

Hose Size in. (cm)	Production Rates** Yd^3/hr (m^3/hr)	Clean Dry Air at 100 PSI (7.3 Kg/Cm^2) $Ft.^3/Min.$ ($M^3/Min.$)	Maximum Size of Aggregate in. (mm)	Number of Pockets Wear Plate and Feed Bowl Combination LOHE
¾ (1.9)	1-2 (.75–1.5)	90 (2.51)	1/8 (3.5)	30
1 (2.5)	2-4 (1.5–3.1)	125 (3.51)	1/4 (7.0)	21 or 30
1¼ (3.2)	4-6 (3.1–4.6)	175 (5.0)	3/8 (10.0)	20 or 21
1½ (3.8)	6-9 (4.6–6.9)	250 (7.0)	3/8 (10.0)	Standard 15 or 20
2 (5.1)	9-12 (6.9–9.2)	500 (14.0)	1/2 (13.0)	Standard 15
2 (5.1)	12-15 (9.2–11.5)	500 (14.0)	3/4 (19.0)	Large Aggregate 12 or 15
2½ (6.4)	12-15 (9.2–11.5)	600 (17.0)	3/4 (19.0)	Large Aggregate 12 or 15

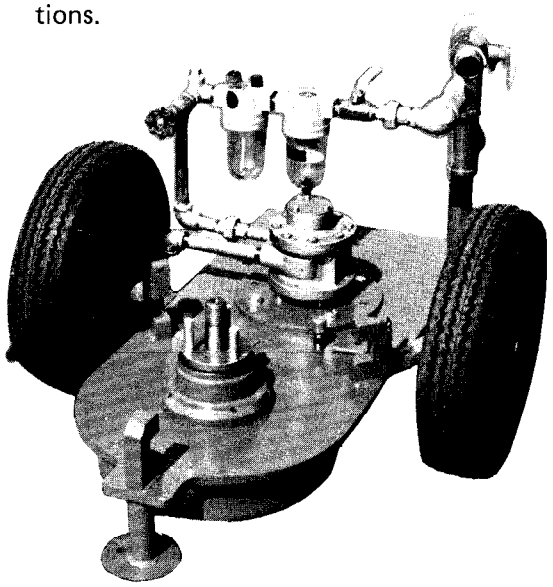
**Performance specifications are nominal. They are affected by factors such as mix design, type of aggregate, size of placing line, atmospheric conditions, etc. Specifications and design are subject to change without notice.

DRIVE/POWER OPTIONS: AIR MOTORS OR ELECTRIC

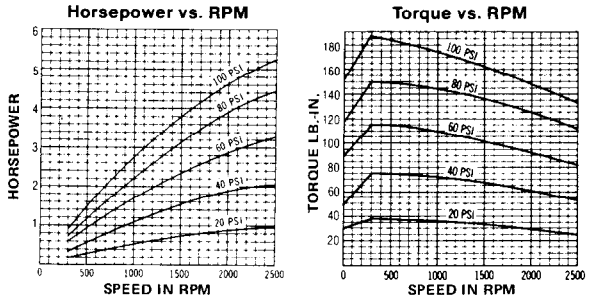
The operating principle of a Reed Guncrete Machine is that of metering a gunning material into an air conveying delivery hose. As air carries the material through the delivery hose, the rotating Wear Plate/Feed Bowl continuously delivers new material to the air injection system. A motor drive system is necessary to make the Wear Plate/Feed Bowl rotate.

Series 4 LOVA Guncrete Machines are air-powered models. Two air motor sizes are offered. Air Line Filters, Air Motor Lubricators, On-Off and Speed Control Valves are standard equipment. An air-powered Reed Machine is portable because it and the air supply can be readily moved from one job site to another.

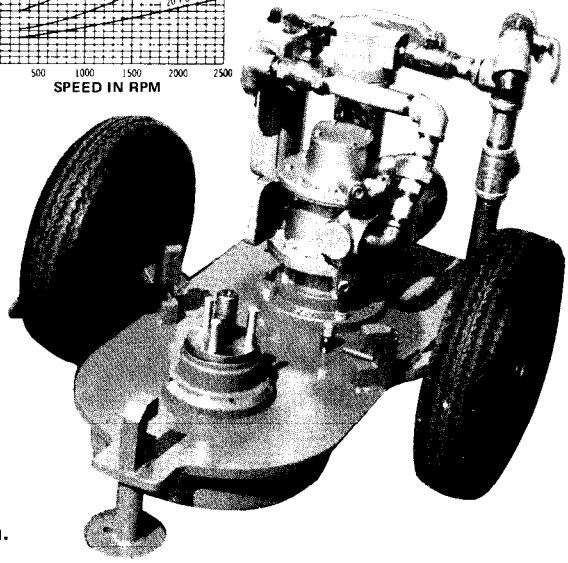
The Standard Air Motor, Model 8AM, is suitable for most general gunning applications.



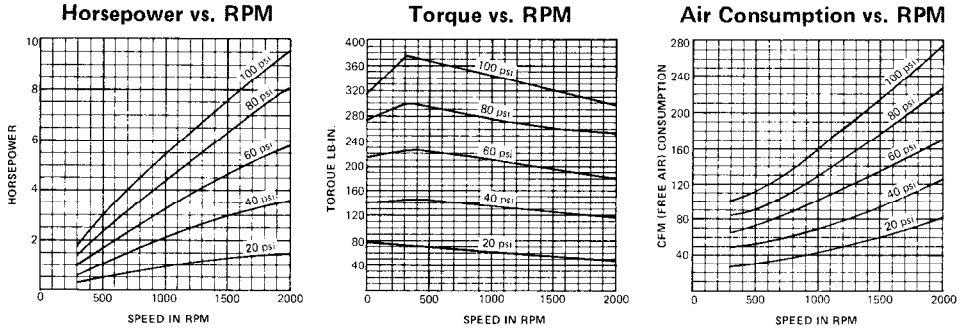
Air Motor Data:



The Large Air Motor, Model 16AM, develops the greater torque needed to meter high volumes of large aggregate or high density materials. It is recommended for Reed Guncrete Machines equipped with the Large Aggregate Feed System, for Machines equipped with the Thirty Blade Mixing Hopper System and for the Wet Feed Box System. It is also recommended for mixes with high wire fiber content.



Delivers up to 9 hp. Speed may be varied from 300 to 2000 rpm. Maximum recommended operating pressure 100 psi.



LARGE AGGREGATE 15 POCKET 2½ INCH OR 2 INCH SYSTEM

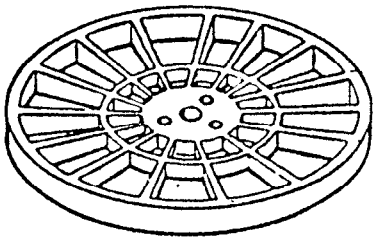
FOR SERIES 4 LOVA AND LOHE REED GUNCRETE MACHINES

Parts in this system are generally used for gunning large aggregate mixes (¾ inch rock), large grog refractories and wire fiber materials. 2½ inch and 2 inch I.D. material hoses are recommended for these applications. This system is suggested for installers who require unusually high production rates and/or encounter coarse aggregates as noted above. It is strongly recommended the the larger, more powerful air motor (16AM) be used with this system on the Series 4 LOVA Reed Guncrete Machine.

REED PART NO.	PART NAME AND DESCRIPTION
10803	Large Aggregate Feed Bowl; fifteen pocket; or
10804	Large Aggregate Feed Bowl; fifteen pocket; without dividers; for materials which have primarily large rock and low "fines" content.
10802	Steel Wear Plate; fifteen pocket, hardened and regrindable; used to cover and protect from wear, either of the Feed Bowls listed above.
10014	Narrow Rock Shear; strikes off materials entering the sealing system.
10922	Rock Cone; diverts large aggregates to the larger outer pockets of the Feed Bowl and Wear Plate.
10336	Rubber Wear Pad; expendable wear part, provides air seal to the rotary feed system; or
10337	Rubber Wear Pad; as above, but with steel boss in the rubber, to extend the life of the pad when gunning harsh rock mixes.
10953	Pad Backup Plate; transmits sealing pressure to the pads listed above.
10045 or alternate	2 inch solid casting Gooseneck; fits on Pad Backup Plate 10015. Material hose couples direct to threaded Gooseneck.
10046	2 inch Liner-Type Gooseneck; fits on Pad Backup Plate 10953 with two each 80268 and 80270 Screws; uses "cutoff" material hose 10958 as replaceable Gooseneck Liner.
11021/11033	2 inch Material Hose Coupling Half; connects Material Hose to 10046 or 10045 2 inch Gooseneck.
12087	2 inch to 2½ inch Threaded Adapter; to fit 2½ inch Material Hose Couplings to 10045 or 10046 2 inch Goosenecks.

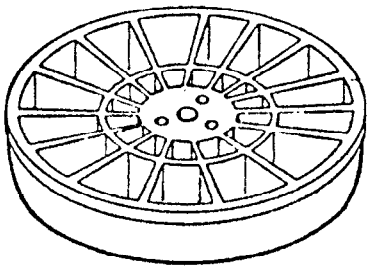
To Set up for smaller gunning projects, parts noted above can be removed and the Reed Guncrete Machine refitted with other interchangeable feed components matched to smaller materials, hoses and nozzles.

Turn to back of this sheet for line drawings of parts listed above.



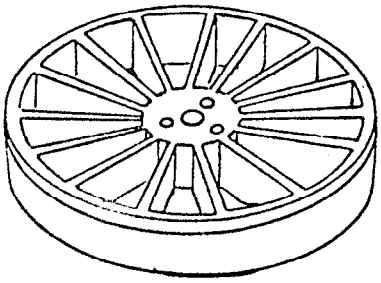
10802

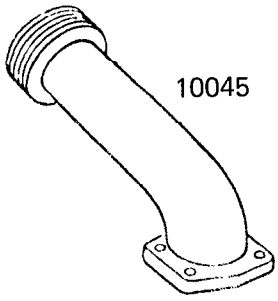
10803



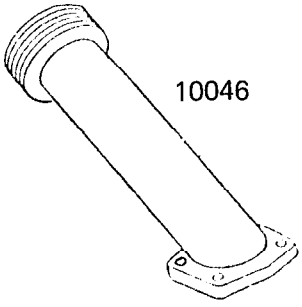
NOTE: In selecting wear plate/feed bowl combinations, be sure that both parts have matching number of pockets.

10804





10045



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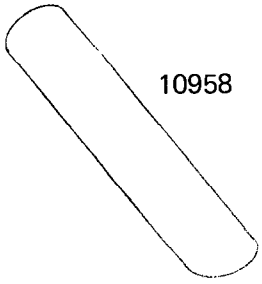

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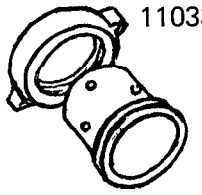
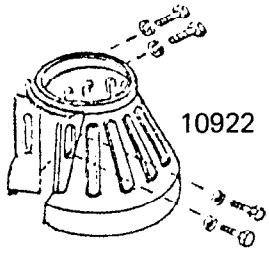


11033

11021



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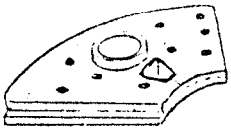
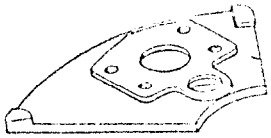
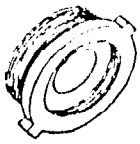


10336
or
10337



10953
OR
10015



12087

10014

FEED WHEEL/PAD HOUSING ASSEMBLY
FOR SERIES 4 LOVA AND LOHE REED GUNCRETE MACHINES

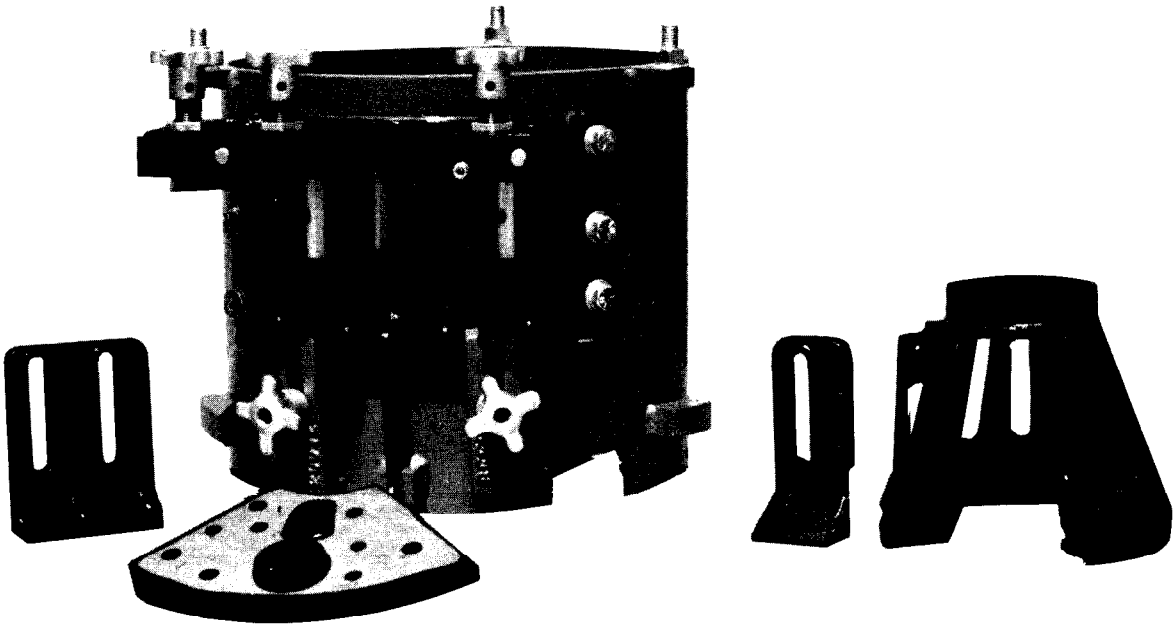
The Feed Wheel/Pad Housing Assembly locks onto the Base Plate Assembly to enclose the rotating Wear Plate/Feed Bowl. It is also the unit to which one of the four interchangeable Hoppers will be fastened.

The inside of the Feed Wheel Housing contains a Felt Seal Retainer Ring which holds a Felt Seal in place. After assembly this Felt Seal 10005 is pushed downward to close the small gap between the outer surface of the Wear Plate and the inside of the Feed Wheel Housing. This prevents leakage of material to points under the Feed Bowl.

The Pad Housing Assembly is mounted to the Feed Wheel Housing; it provides the means of applying the sealing pressure to the Rubber Wear Pad to the rotating Wear Plate/Feed Bowl.

The Pad Clamp Assembly holds the Rubber Wear Pad in place during operation.

The Rock Shear (and Cone, if used) is bolted to the Pad Housing Assembly. The Rock Shear strikes off material entering the sealing system. The Cone (if used) diverts oversized material to the larger outer pockets of the Wear Plate/ Feed Bowl.



BASE GEAR ASSEMBLY FOR SERIES 4 LOVA AND LOHE REED GUNCRETE MACHINES

The Base Gear Assembly is the "chassis" of the Reed Guncrete Machine. It includes the Base Plate itself, the Main Spindle Assembly, Sealed Spur Gear Transmission, the Gear Pan, a selected Motor Drive Unit (air or electric) and the Wheel/Tire Assemblies.

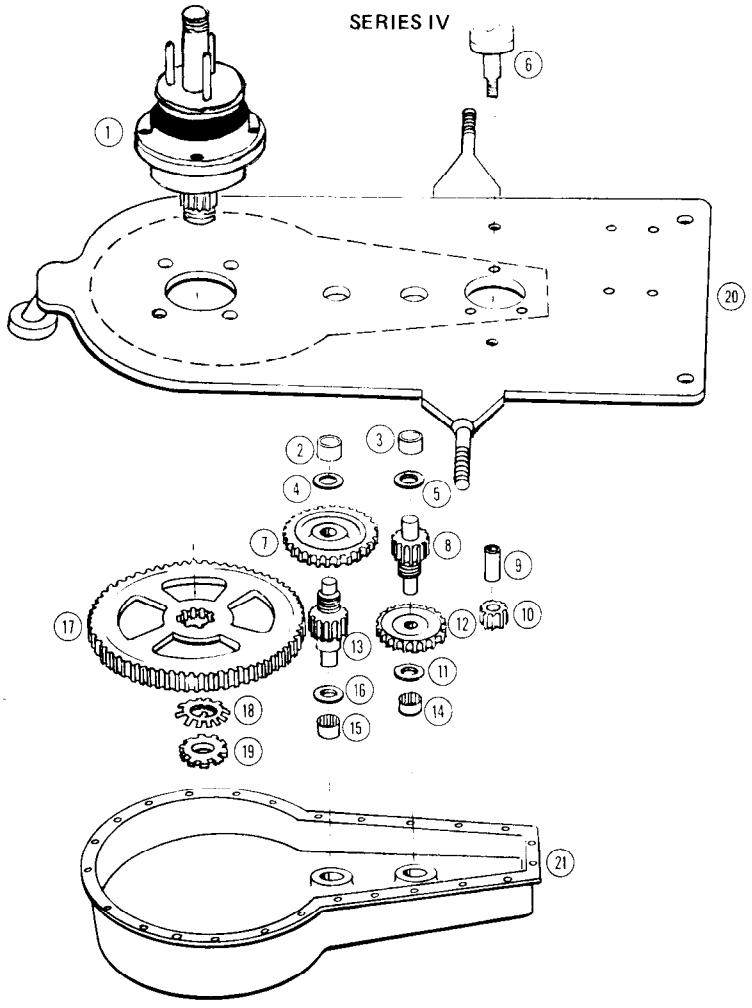
The Main Spindle Assembly supports the Wear Plate-Feed Bowl combination. Three 10728 Spindle Studs are threaded into the top of the Spindle Hub to align and drive the Wear Plate and Feed Bowl. An Agitator threads to the center shaft of the Spindle Hub and locks the Wear Plate/Feed Bowl/ Main Spindle Assembly together.

Wear Plates and Feed Bowls are designed to be reground after wear, and reused many times; resurfaced Plates and Bowls are thinner after a regrind, therefore the top elevation of the Wear Plate in relation to the Feed Wheel/Pad Housing Assembly will vary. The proper Riser Plate is placed between the top of the Spindle Hub and the bottom of the Feed Bowl to raise the Wear Plate/Feed Bowl combination. Riser Plates, used only as needed, are:

10825 Medium Riser Plate
10826 Thick Riser Plate
10827 Thin Riser Plate

A Rubber Spindle Gasket 10701 seals the rotating Spindle Hub on the Spindle Housing and prevents dirt from entering the Spindle Housing.

The Transmission Bearings, Gears and Motor Drive Shaft are completely enclosed by the lower Gear Pan Housing and lubricated with 90 weight gear oil. No moving parts are exposed. The sealed system is maintenance free; an oil change is recommended once yearly. In very cold climates, 50 weight gear oil is suitable.



GEAR TRAIN
COMPONENT PARTS
LOVA 8-4 & LOVA 16-4
No. 10049
LOHE-4 (Electric Drive)
No. 10050

1. Spindle Assembly
2. Pinion Bearing (2 required)
3. Pinion Bearing
4. Thrust Washer
5. Thrust Washer - Thin
6. Motor Shaft (reference only)
7. 6-Inch Gear
8. Pinion Shaft, 12P (21T)
9. Motor Gear Spacer (reference only) (8AM Motor) (16AM Motor)
10. Motor Drive Gear (reference only) (16AM Motor) (8AM Motor)
11. Thrust Washer
12. 5-Inch Gear
13. Pinion Shaft, 8P (14T)
14. Pinion Bearing
15. Pinion Bearing
16. Thrust Washer
17. Bull Gear
18. Lock Washer
19. Lock Nut
20. Base Plate (LOVA & LOHE)
21. Gear Pan Housing

STANDARD 15 POCKET 2 INCH OR 1½ INCH SYSTEM

Parts in this system are generally used for gunning mixes which have ½ inch or smaller aggregates. Most gunning materials, including refractories and wire fiber mixes are within this category. 2 inch and 1½ inch I.D. material hoses are recommended for this versatile high volume feed system. These parts fit Series 4 Reed Guncrete Machines, both LOVA air-powered (Large or Standard Air Motors) and LOHE Electric Models.

REED PART NO.	PART NAME AND DESCRIPTION
10801	Standard Fifteen Pocket Feed Bowl.
10800	Standard Fifteen Pocket Wear Plate; regrindable; used to cover and protect the Feed Bowl listed above from wear.
10013	Wide Rock Shear; strikes off materials entering the sealing system.
10338	Rubber Wear Pad; expendable wear part, provides air seal to the rotary feed system.
10954	Pad Backup Plate; transmits sealing pressure to the Pad listed above.
10046	2 inch Liner Type Gooseneck; fits to Pad Backup Plate with two each 80268 and 80270 Screws; uses "cutoff" Material Hose as replaceable Gooseneck Liner.
11021/11033	2 inch Material Hose Coupling Half; connects Material Hose to 10046 2 inch or 10045 2 inch Gooseneck.

OPTIONAL GOOSENECK PARTS

10016	Pad Packup Plate; fits 10338 Rubber Wear Pad and 10042 or 10044 1½ inch and 10045 2 inch Goosenecks with four 80270 Screws.
10042	1½ inch Liner Type Gooseneck; fits to 10016 Pad Backup Plate; uses "cutoff" material hose as replaceable Gooseneck Liner.
10044	1½ inch Gooseneck; non-liner type, hard casting; when Gooseneck wears, apply hardfacing electrode to restore worn surface of inside diameter.
10045	2 inch Gooseneck; non-liner type, hard casting; when Gooseneck wears, apply hardfacing electrode to restore worn surface of inside diameter.
11019/11037 or 11018/11037	1½ inch Material Hose Coupling Half; connects Material Hose to 10042, 1½ or 10044 1½ inch Goosenecks.

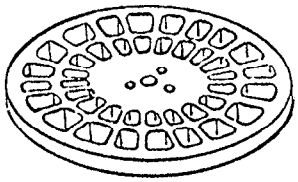
OPTIONAL FEED PARTS

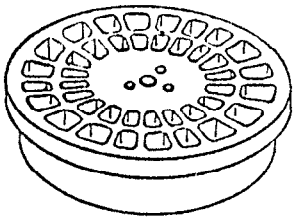
10936	Refractory Cone; diverts oversized particles to the large outer pockets of the Wear Plate and Feed Bowl.
10014	Narrow Rock Shear; must be used with 10936 Cone; strikes off materials entering the sealing system.

To set up for larger or smaller gunning projects, parts noted above can be removed and the Reed Guncrete Machine refitted with other interchangeable feed components matched to larger or smaller materials, hoses and nozzles.

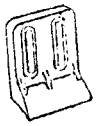
Turn to back of this sheet for line drawings of parts listed above.

10805
WEAR PLATE

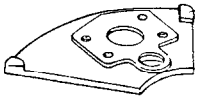




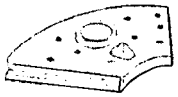
10806
FEED BOWL



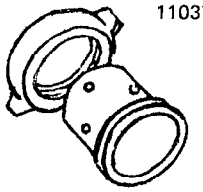
10013



10016

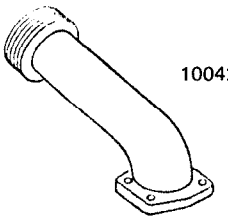


10338



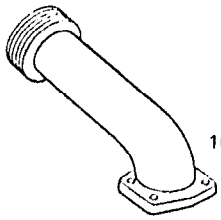
11037

11019
OR
11018

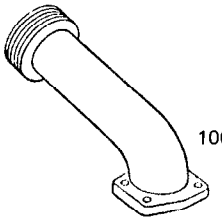


10042

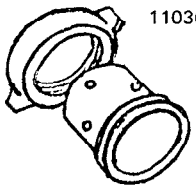
OPTIONAL GOOSENECK PARTS



10044



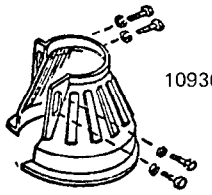
10043



11036

11023

OPTIONAL FEED PARTS



10936

10014

20 POCKET 1½ INCH OR 1¼ INCH SYSTEM

Parts in this system are generally used for gunning materials which contain 3/8 inch or smaller aggregates or short wire fiber. This system is most commonly used in steel mill, foundry and industrial applications where more accurate and lower volume placement of materials is needed. 1½ inch and 1¼ inch I.D. material hoses are recommended. These parts fit Series 4 Reed Guncrete Machines, both LOVA (Large or Standard Air Motors) and LOHE Electric Models.

REED PART NO.	PART NAME AND DESCRIPTION
10806	Twenty Pocket Feed Bowl;
10805	Twenty Pocket Wear Plate; hardened and regrindable; used to cover the Feed Bowl listed above and protect it from wear.
10013	Wide Rock Shear; strikes off materials entering the sealing system.
10338	Rubber Wear Pad; expendable wear part; provides air seal to the rotary feed system.
10016	Pad Backup Plate; transmits sealing pressure to the Pad listed above.
10042	1½ inch Liner Type Gooseneck; fits to 10016 Pad Backup Plate with four 80270 Screws; uses "cutoff" Material Hose as replaceable Gooseneck Liner.
11019/11037 or 11018/11037	1½ inch Material Hose Coupling Half; connects Material Hose to 10042 or 10044 1½ inch Gooseneck.

OPTIONAL GOOSENECK PARTS

10044	1½ inch Gooseneck; non-liner type, hard casting; fits to 10016 Pad Backup Plate with four 80270 Screws; when Gooseneck wears, apply hardfacing electrode to restore worn surface of inside diameter.
10043	1¼ inch Gooseneck; non-liner type, hard casting; fits to 10016 Pad Backup Plate with four 80270 Screws; when Gooseneck wears, apply hardfacing electrode to restore worn surface of inside diameter.
11023/11036	1¼ inch Material Hose Coupling Half; connects Material Hose to 10043 1¼ inch Gooseneck.

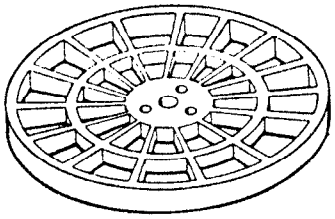
OPTIONAL FEED PARTS

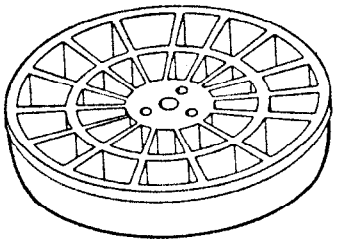
10936	Refractory Cone; diverts oversized particles to the larger outer pockets of the Wear Plate and Feed Bowl.
10014	Narrow Rock Shear; must be used with 10936 Cone; strikes off materials entering the sealing system.

To set up for larger or smaller gunning projects, parts noted above can be removed and the Reed Guncrete Machine refitted with other interchangeable feed components matched to larger or smaller materials, hoses and nozzles.

Turn to back of this sheet for line drawings of parts listed above.

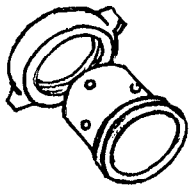
10800 WEAR PLATE





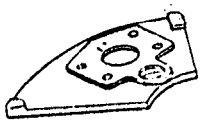
10801 FEED BOWL

11033

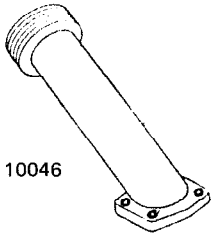


11021

10013



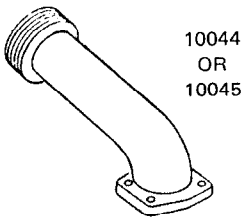
10954



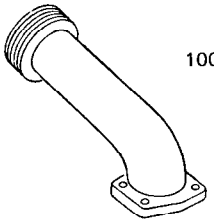
10046

10338

OPTIONAL GOOSENECK PARTS

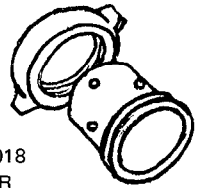


10044
OR
10045

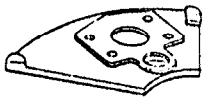


10042

11037

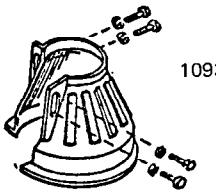


11018
OR
11019



10016

OPTIONAL FEED PARTS



10936

10014

21 POCKET 1¼ INCH OR 1 INCH SYSTEM
FOR SERIES 4 LOVA AND LOHE REED GUNCRETE MACHINES

Parts in this system are generally used for gunning low volumes of fine grained materials. Feed rate is slow and steady, allowing the nozzleman to gun very thin linings and other precision work. 1¼ inch and 1 inch I.D. material hoses are recommended. These parts fit Series 4 Reed Guncrete Machines, both LOVA (Large and Standard Air Motors) and LOHE Electric Models.

REED PART NO.	PART NAME AND DESCRIPTION
10808	Twenty-One Pocket Feed Bowl.
10807	Twenty-One Pocket Wear Plate; hardened and regrindable; used to cover and protect the Feed Bowl listed above from wear.
10013	Wide Rock Shear; strikes off materials entering the sealing system.
10339	Rubber Wear Pad; expendable wear part, provides air seal to the rotary feed system.
10016	Pad Backup Plate; transmits sealing pressure to the Pad listed above.
10043	1¼ inch Gooseneck; non-liner type, hard casting; fits to Pad Backup Plate with four 80270 Screws; when Gooseneck wears, apply hardfacing electrode to restore worn surface of inside diameter.
11023/11036	1¼ inch Material Hose Coupling Half; connects Material Hose to 10043 1¼ inch Gooseneck.

OPTIONAL GOOSENECK PARTS

12085	Adapter, for coupling 1 inch and ¾ inch Material Hose to 1¼ inch Gooseneck.
11030/11016	1¼ inch x 1 inch Hose Coupling parts to connect 1 inch Material Hose to 1¼ inch Gooseneck.

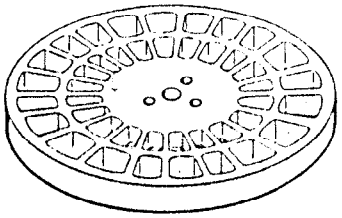
OPTIONAL FEED PARTS

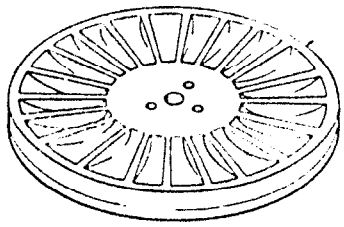
10936	Refractory Cone; diverts oversized particles to the larger outer pockets of the Wear Plate and Feed Bowl.
10014	Narrow Rock Shear; must be used with 10936 Cone; strikes off materials entering the sealing system.

To set up for larger or smaller gunning projects, parts noted above can be removed and the Reed Guncrete Machine refitted with other interchangeable feed components matched to larger or smaller materials, hoses and nozzles.

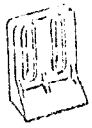
Turn to back of this sheet for line drawings of parts listed above.

10807 WEAR PLATE

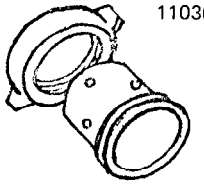




10808 FEED BOWL

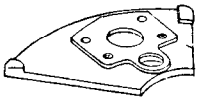


10013



11036

11023



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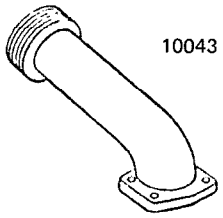
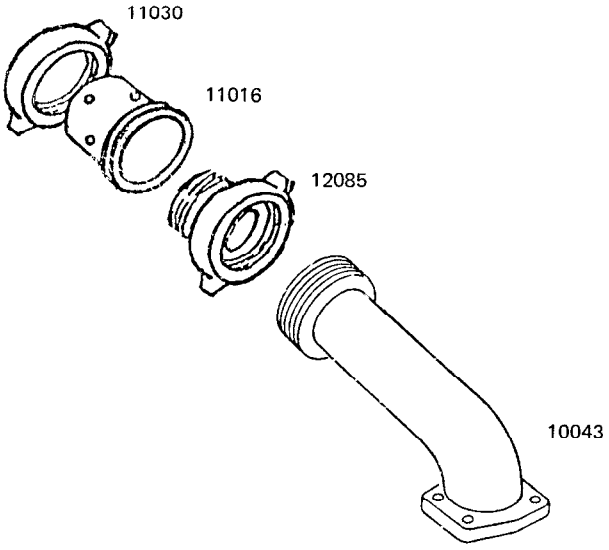


10043

10339

OPTIONAL GOOSENECK PARTS



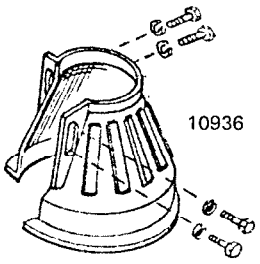
11030

11016

12085

10043

OPTIONAL FEED PARTS



10936

10014

30 POCKET 1 INCH OR ¾ INCH SYSTEM

Parts in this system are generally used for gunning very low volumes of fine grained materials, as in crack or joint filling. Small diameter 1 inch or ¾ inch hoses are recommended. These parts fit Series 4 Reed Guncrete Machines, both LOVA Air Powered (Large and Standard Air Motors) and LOHE Electric Models.

REED PART NO.	PART NAME AND DESCRIPTION
10809	Thirty Pocket Feed Bowl; hardened and regrindable; does not use a Wear Plate. Bowl is positioned on Main Spindle Assembly of Machine, using any other Feed Bowl (Large Aggregate-15, 20, or 21 Pocket) as a supporting platform underneath this Bowl.
10013	Wide Rock Shear; strikes off materials entering the sealing system.
10339	Rubber Wear Pad; expendable wear part, provides air seal to the rotary feed system.
60012	Pad Backup Plate; transmits sealing pressure to the Pad listed above.
10043	1¼ inch Gooseneck; non-liner type, hard casting; fits to Pad Backup Plate with four 80270 Screws; when Gooseneck wears, apply hardfacing electrode to restore worn surface of inside diameter.
12085	Adapter, for coupling 1 inch and ¾ inch Material Hose to 1¼ inch Gooseneck.
11030/11016	1¼ inch x 1 inch Hose Coupling parts to connect 1 inch Material Hose to 10043 1¼ inch Gooseneck.

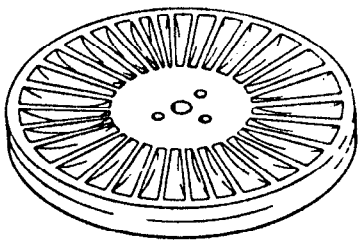
OPTIONAL GOOSENECK PARTS

11015/11030	1¼ inch x ¾ inch Hose Coupling parts; to connect ¾ inch Material Hose to 10043, 1¼ inch Gooseneck.

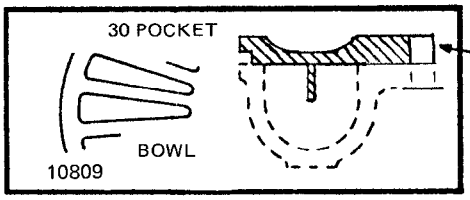
OPTIONAL FEED PARTS: None

To set up for larger gunning projects, parts noted above can be removed and the Reed Guncrete Machine refitted with other interchangeable feed components matched to larger materials, hoses and nozzles.

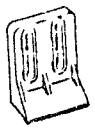
Turn to back of this sheet for line drawings of parts listed above.



NOTE: 30 POCKET FEED BOWL
NO WEAR PLATE REQUIRED



Shallow 30 Pocket Feed Bowl. Mounts directly on top of any existing Feed Bowl.



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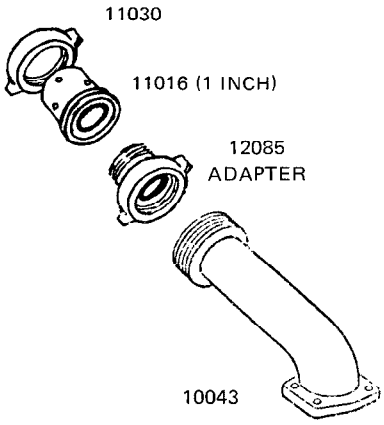
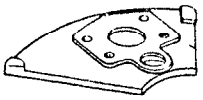
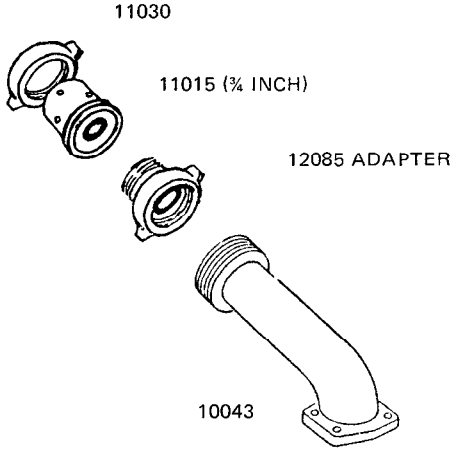




60012

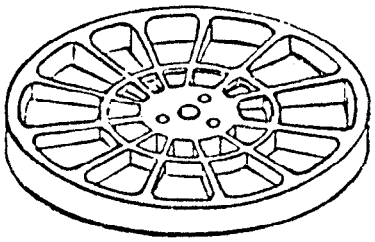
10339

GOOSENECK PARTS

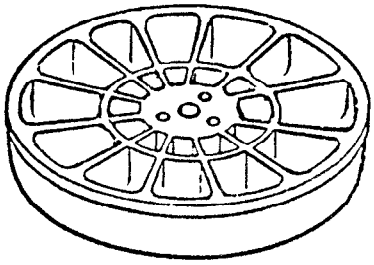


12 Pocket Wear Plate/Feed Bowl combinations for 2 inch and 2½ inch systems. Recommended for use with wet mixes and wire fibre mixes.

WEAR PLATE & FEED BOWL
WITH POCKET DIVIDERS



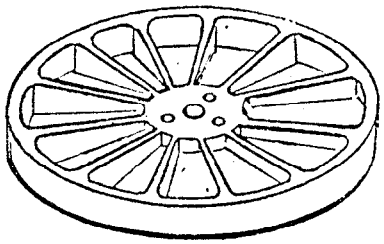
10796



10797

WEAR PLATE & FEED BOWL
WITH DIVIDERLESS POCKETS

10798



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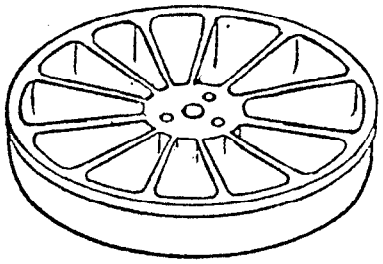
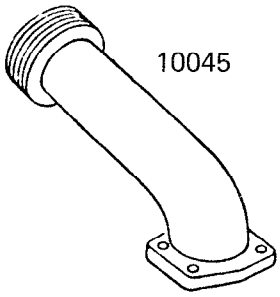


NOTE: In selecting wear plate/feed bowl combinations, be sure that both parts have matching number of pockets.



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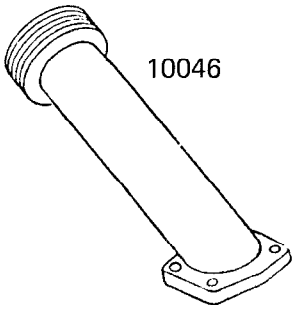

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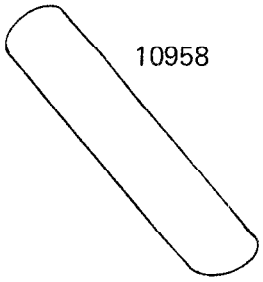

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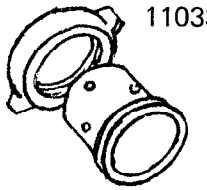
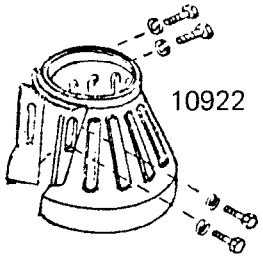


11033

11021



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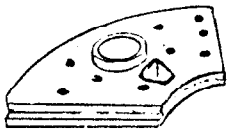

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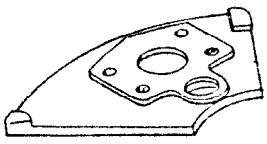
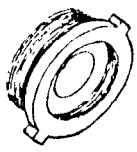


10015
OR
10953



12087

10014

SPECIAL 12 POCKET, 2 INCH OR 2½ INCH SYSTEM

FOR SERIES 4 LOVA AND LOHE REED GUNCRETE MACHINES

This new 12 pocket material feed system was developed for gunning of wet mixes, including wire fiber mixes and large aggregate (¾ inch rock). Use of 2 inch or 2½ inch I.D. hoses are recommended for this high volume system. It is further recommended that the Wear Plate/Feed bowl combinations with 12 pockets be used only with the larger more powerful air motor (16AM) on the Series 4 LOVA 16-4 Reed Guncrete Machines. These wear plates and feed bowls are recommended for use with the Reed "Wet Feed Box" system.

Note that this 12 pocket system is available in two (2) configurations. A standard divider type Wear Plate/Feed bowl combination (10796/10797), and a dividerless Wear Plate/Feed bowl combination (10798/10799). The use of either combination is dependent upon the characteristics of the mix design to be used.

REED PART NO.	PART NAME AND DESCRIPTION
10796	12 Pocket wear plate hardened steel, divider type regrindable. Used with the following divider type feed bowl.
10797	12 Pocket, high volume feed bowl for materials with large aggregate and or with wire fibers.
10798	12 Pocket wear plate, hardened steel, dividerless type. Used only with the following dividerless feed bowl.
10799	12 Pocket, high volume feed bowl, dividerless type, for materials with large aggregate and or with wire fibers.
10014	Narrow rock shear; strikes off materials entering the sealing system.
10922	Rock cone; diverts aggregate to the larger outer pockets of the wear plate feed bowl combination.
10336	Rubber wear pad; expendable wear part which provides air seal to the rotary feed system. Recommended for this system.
10015	Pad back-up plate, used with solid casting type Gooseneck 10045 on series 4 Reed Guncrete Machines.
10045	2 inch Gooseneck, solid casting type without liner for series 4 machines.
10046	2 inch Gooseneck, liner type, for series 4 machines. Uses 10953 pad back-up plate.
10958	2 inch Gooseneck liner for above gooseneck.
11021/11033	2 inch Material Hose Coupling Half; connects Material Hose to 10045 or 10046 2 inch Goosenecks.
12087	2 inch x 2½ inch Threaded Adapter; to fit 2½ inch Material Hose Couplings to 10045 or 10046 2 inch Goosenecks.

Turn to back of this sheet for line drawings of the parts listed above.

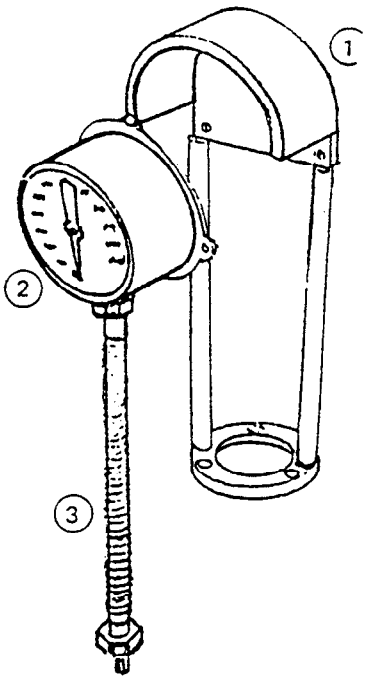
TACHOMETER OPTION

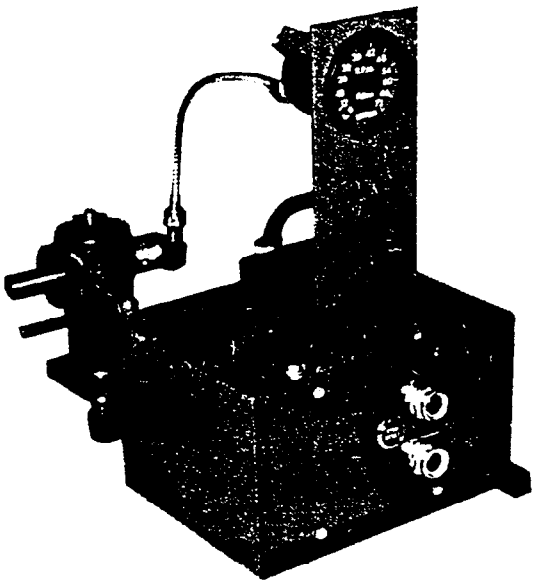
Tachometers are available for both air powered and electric powered Reed Guncrete Machines. This useful option insures accurate repeatability of the speed of rotation (RPM) of the material feed mechanism. This is of particular value and importance in maintaining the optimum production of critical mix designs through the machine.

Tachometer Assemblies, including mounting stands, drive motor adapters, connecting cables and hardware for Reed Series 4 LOVA Machines are as follows:

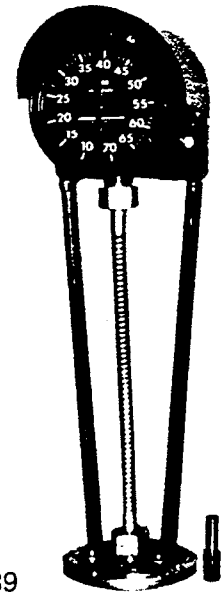
COMPLETE TACHOMETER ASSEMBLIES

Series 4 Reed Machines	Assembly No.	Drive Motor
LOVA 16-4	10229	Air
LOVA 8-4	10239	Air
LOHE (3 & 5 H.P.)	10368	Electric





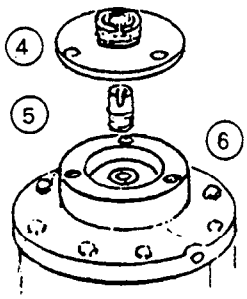
10368



Tachometer Assemblies

10229
&
10239

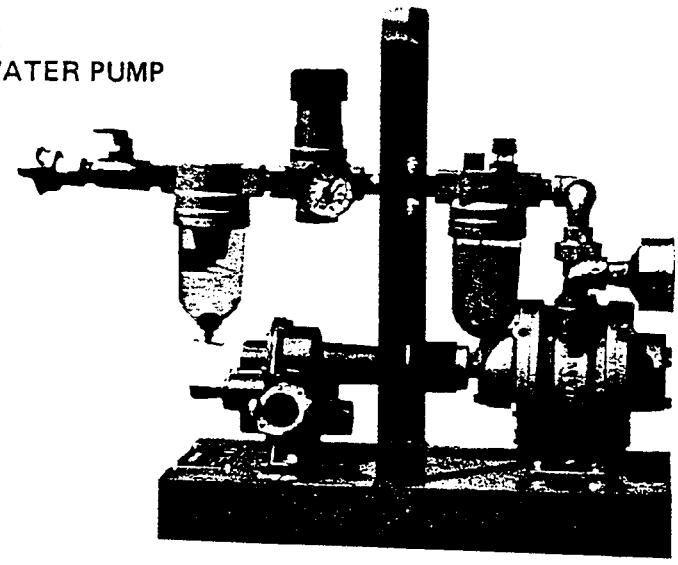
BREAKDOWN FOR NOS. 10229 & 10239



10229
&
10239

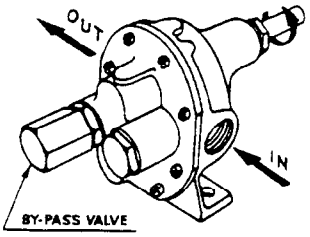
1. Tachometer Mounting Weldment		10007
2. Tachometer 75/1 Ratio		10012
3. Tachometer Flex Drive Shaft		10240
4. Adapter Plate	(8AM)	10244
	(16AM)	10245
5. Air Motor End Shaft Adapter Driver	(8AM)	10242
	(16AM)	10243
6. Air Motor Reference		

NO. 04025, AIR DRIVE
REED HI PRESSURE WATER PUMP



Pump:

Rotary Gear, positive displacement flow.
Maximum discharge pressure: 100 PSI
Maximum suction lift: 20 Ft.
Operating temperature range: –40°F to 400°F
Adjustable discharge pressure relief.
Pipe size: ¾ inch.



Complete Pump:

Weight: 68 lbs.
Cube: 1.5 Cu. Ft.

The by-pass valve is used to regulate and relieve discharge pressure.

To *increase pressure,* loosen locknut and turn by-pass adjusting screw *clockwise.*

Note: By-pass is factory set at 50 PSI.

Drive:

The Reed, No. 04025 pump is air motor driven and equipped with an air filter, air regulator, and air lubricator.

Maximum recommended operating pressure (air) is 100 PSI.

Air Lubricator: Use S.A.E. No. 10 detergent motor oil, one drop every 15 to 30 seconds.

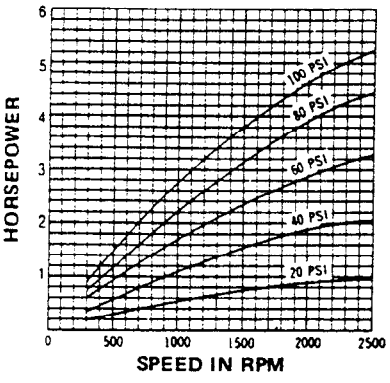
Capacity: Water 60°F

R.P.M.	FT. HD. / P.S.I.	0 / 0	46 / 20	92 / 40	138 / 60	184 / 80	231 / 100	290 / 125*	346 / 150*
400	G.P.M.	4.0	3.45	2.9	2.35	1.50	1.30	1.30	1.00
	H.P.	.20	.23	.30	.39	.55	.65	.70	.90
	MOTOR	1/4	1/4	1/3	1/2	1/2	3/4	3/4	1
600	G.P.M.	6.3	5.78	5.26	4.74	4.22	3.95	3.50	3.10
	H.P.	.25	.30	.40	.65	.75	.95	1.15	1.40
	MOTOR	1/4	1/3	1/2	3/4	3/4	1	1 1/2	1 1/2
800	G.P.M.	8.58	8.18	7.78	7.38	6.98	6.57	6.40	6.20
	H.P.	.30	.40	.58	.85	.93	1.15	1.40	1.70
	MOTOR	1/3	1/2	3/4	1	1	1 1/2	1 1/2	2
1000	G.P.M.	10.90	10.51	10.12	9.72	9.33	8.93	8.00	7.90
	H.P.	.40	.60	.70	.90	1.1	1.38	1.60	1.92
	MOTOR	1/2	3/4	3/4	1	1	1 1/2	2	2
1200	G.P.M.	13.33	12.94	12.55	12.16	11.76	11.37	11.20	11.10
	H.P.	.50	.70	.85	1.08	1.35	1.65	1.90	2.20
	MOTOR	1/2	3/4	1	1	1 1/2	2	2	3
1600	G.P.M.	18.17	17.79	17.41	17.03	16.65	16.28	16.10	16.00
	H.P.	.70	.91	1.20	1.50	1.80	2.14	2.50	2.90
	MOTOR	3/4	1	1 1/2	1 1/2	2	2	3	3
1725	G.P.M.	19.85	19.48	19.11	18.74	18.37	18.00	17.7	17.40
	H.P.	.80	1.10	1.42	1.85	2.18	2.65	3.00	3.60
	MOTOR	1	1	1 1/2	2	2 1/2	3	3	5

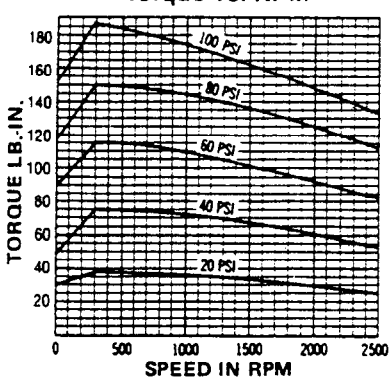
H.P. = ACTUAL HORSEPOWER
MOTOR = CONVENIENT FRACTIONAL SIZES
G.P.M. = GALLONS PER MINUTE
P.S.I. = LBS. PER SQUARE INCH PRESSURE
FT. HD. = EQUIVALENT PRESSURE IN FEET OF WATER
R.P.M. = REVOLUTIONS PER MINUTE
*CONSULT FACTORY FOR PRESSURES OVER 100 P.S.I.

Air Motor Data:

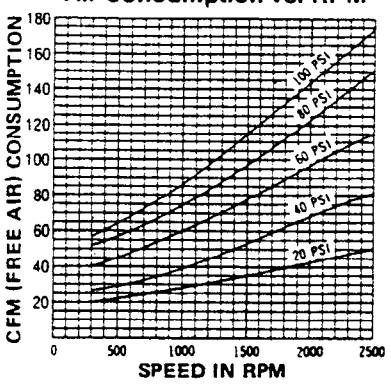
Horsepower vs. RPM



Torque vs. RPM



Air Consumption vs. RPM



Operational Note:

- Gear pumps are self priming however on initial, or dry start-up it is recommended that gears be wet.
- Service life of this pump will be increased if liquid pumped is clean and has lubricity valve.
- When possible, flush pump after each use.

For electric drive consult factory.

REED GUNCRETE MATERIAL HOSE

SELECTION CHART

TYPE	I.D.	O.D.	GENERAL DESCRIPTION
For gunning damp sand-cements, as in "Gunite" used primarily in pool construction and outside work.			
TTR	1½ inch	2½ Inch	Abrasion Resistant Non-marking Tan Cover, Red Stripe, "CWI" marked; Tan Live Gum Rubber Tube.
TTR	2 inch	3 Inch	
For gunning dry or damp sand-cements, large aggregates and wire fibers; most commonly used in heavy construction: dams, tunnels, subways.			
BTR	2 inch	3 Inch	Abrasion Resistant Non-Marking Tan Cover, Red Stripe, "CWI" marked; Black Loaded Gum Rubber Static Conducting Tube.
BTR	2½ inch	3½ Inch	
For gunning bagged "premixed" materials such as sand-cements, small aggregates and wire fiber mixes; generally used by the industrial, refractory and mining trades.			
BBW	¾ inch	1½ Inch	
BBW	1 inch	1-7/8 Inch	Abrasion Resistant Black Cover, Black Stripe, "CWI" marked; Black Loaded Gum Rubber Static Conducting Tube.
BBW	1¼ inch	2-5/32 Inch	
BBW	1½ inch	2-3/8 Inch	

Always use a material hose with an inside diameter at least three times larger than the size of the largest aggregate in the gunning mix.

When gunning bone dry products, use only BTR or BBW Material Hoses.

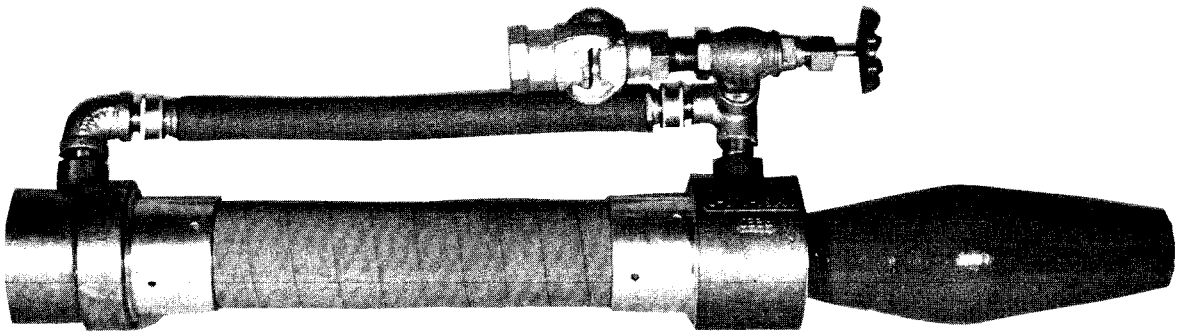
REED HYDRO-NOZZLE ASSEMBLIES 1½ INCH AND 2 INCH NOZZLES

A Hydro-Nozzle uses an extended chamber to confine the wetted material for a longer period of mixing time prior to placement. These Nozzle Assemblies use component Nozzle Parts of the same size as the basic Nozzle being used. Several variations are possible; we suggest using the Assembly which is most comfortable for your nozzleman to handle.
Two variations are offered:

1) Hose Extension

Insert a short (12 to 30 inch) length of Male-Female Coupled Material Hose between the Nozzle Body and the Nozzle Tip.

2) Double Water Ring



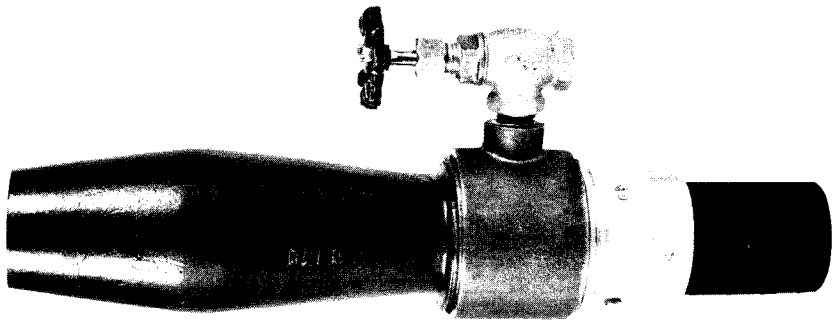
Use two Nozzle Bodies connected by a short (18 to 48 inch) length of Material Hose with a Male Hose End at each end. Each Nozzle Body should have its own Water Control Valve. This system usually requires the aid of a second person to help support the Nozzle Assembly.

REED NOZZLE ASSEMBLIES 1½ INCH FINE OR COARSE THREAD SERIES

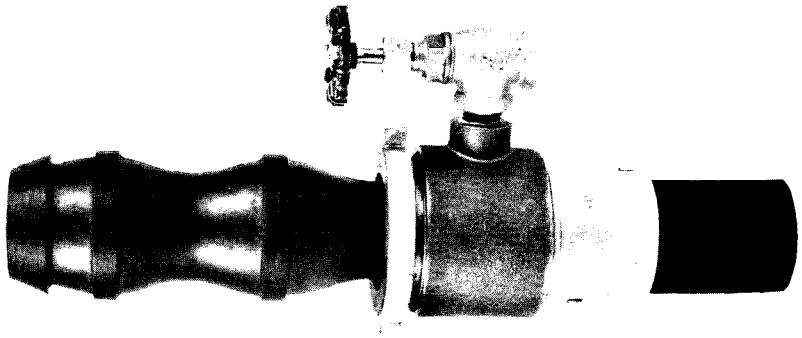
These Nozzles are used with 1½ inch I.D. material hose, to mix a gunning material with water and to direct the material into place.

The Standard Nozzle Body uses an Aluminum Nozzle Tip with a Gum Rubber Nozzle Tip Liner. A Double Bubble Rubber Tip is also available.

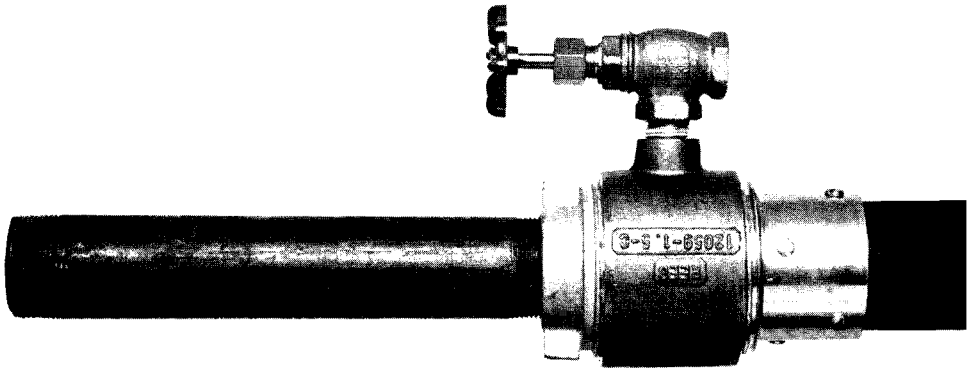
The Nozzle Tip and Liner can be removed and substituted with a Lance Adapter Bushing so that a Lance Pipe can be connected to the Nozzle; this system is used for "hot patch" gunning.



Complete Reed Standard Nozzle Assembly — No. 12076 - 1½ inch Fine Thread — No. 12010 – 1½ inch Coarse Thread



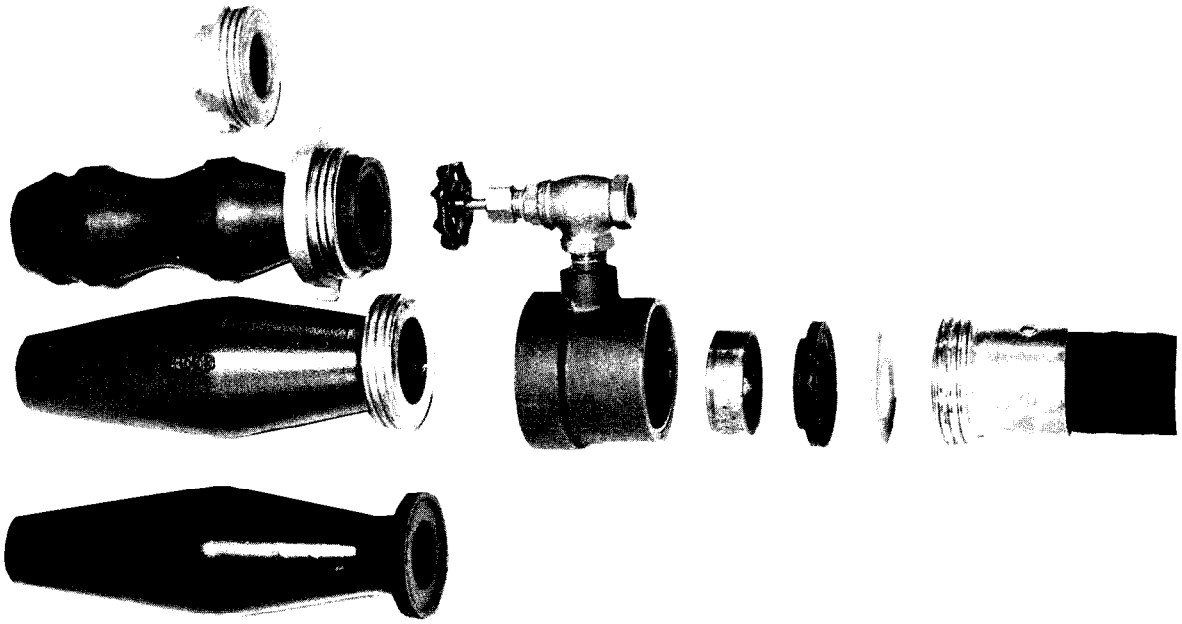
Complete Reed Double Bubble Nozzle Assembly — No. 12017 – 1½ inch Fine Thread — No. 12022 – 1½ inch Coarse Thread



Complete Reed Lance Adapter Nozzle Assembly — No. 11803 – 1½ inch Fine Thread — No. 11807 – 1½ inch Coarse Thread

Turn to back of this sheet for line drawings and part numbers of parts used to make up Nozzle Assemblies shown above.

PARTS USED TO MAKE UP 1¼ INCH FINE OR COARSE THREAD REED NOZZLE ASSEMBLIES



REED PART NO. FINE THREAD	REED PART NO. COARSE THREAD	DESCRIPTION
12080	12079	Aluminum Retainer Washer
12071	12069	Rubber Backup Washer
12065	12065	Brass Water Ring
12050	12050	Bronze Water Needle Valve/½ inch Nipple
12053	12058	Bronze Nozzle Body
12042	12042	Rubber Nozzle Tip Liner, Hamm Style
12030	12034	Aluminum Nozzle Tip, Hamm Style
12090	12091	Double Bubble Adapter Bushing
12047	12047	Double Bubble Rubber Nozzle Tip - 1¼ inch
12046	12046	Double Bubble Rubber Nozzle Tip - 1 inch
11815	11816	Lance Adapter Bushing - 1½ inch N.P.T.

Fine Thread 1¼ inch Reed Nozzles fit No. 11042 Reed Male Hose End (1¼ inch Fine)
Coarse Thread 1¼ inch Reed Nozzles fit No. 11048 Reed Male Hose End (1¼ inch Coarse)

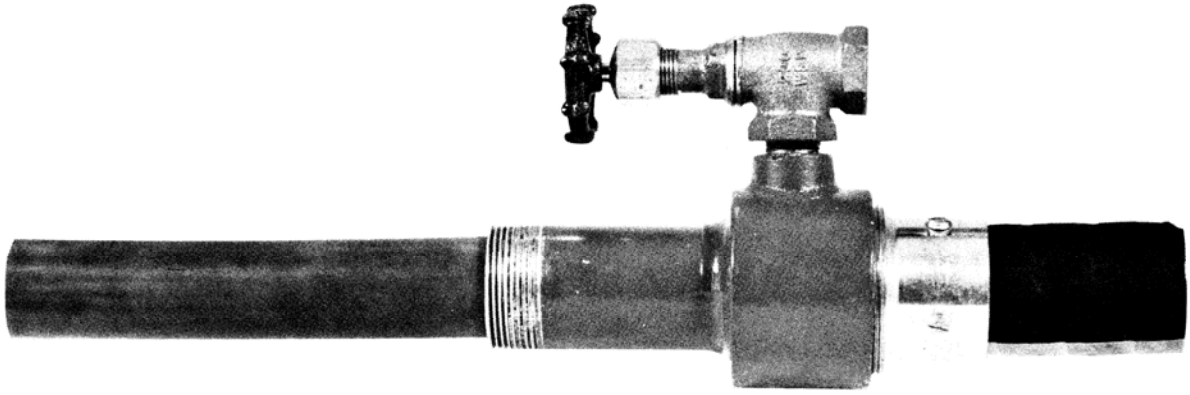
Refer to front of this sheet for Complete Nozzle Assembly information.

REED NOZZLE ASSEMBLIES ¾ INCH AND 1 INCH FINE THREAD SERIES

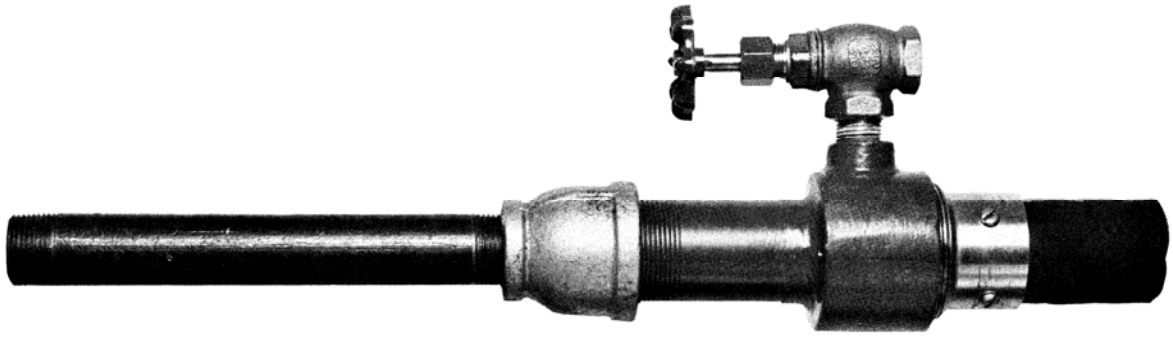
These Nozzles are used with ¾ inch and 1 inch I.D. material hose, to mix a gunning material with water and to direct the material into place.

The components of the Nozzles are interchangeable. The inside diameter of the long Gum Rubber Nozzle Liner distinguishes whether the Nozzle Assembly is ¾ inch or 1 inch.

The Aluminum Nozzle Body Tip can be threaded to fit a 1½ inch x ¾ inch or 1 inch pipe threaded Bell Reducer so that a Lance Pipe can be connected to the Nozzle; this system is used for "hot patch" gunning. To prepare a Nozzle for this application, the long Gum Rubber Nozzle Liner is trimmed short to fit inside the Bell Reducer.



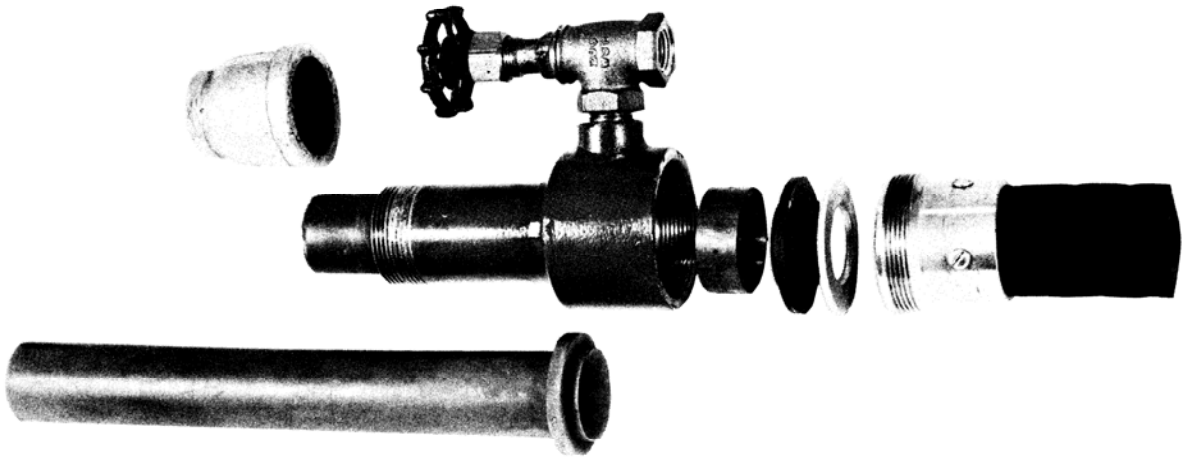
Complete Reed Nozzle Assembly — No. 12000 – ¾ inch — No. 12001 – 1 inch



Complete Reed Nozzle Assembly — No. 11800 – ¾ inch — No 11801 – 1 inch

Turn to back of this sheet for line drawings and part numbers of parts used to make up Nozzle Assemblies shown above.

PARTS USED TO MAKE UP ¾ INCH AND 1 INCH FINE THREAD REED NOZZLE ASSEMBLIES



REED PART NO.	DESCRIPTION
12080	Aluminum Retainer Washer
12070	Rubber Backup Washer
12064	Water Ring
11029	Water Needle Valve/½ inch Nipple
12052	Aluminum Nozzle Body
11813	Aluminum Nozzle Body with 1½ inch N.P. Threaded Tip
12040	Gum Rubber Nozzle Liner – ¾ inch
12041	Gum Rubber Nozzle Liner – 1 inch
11811	Bell Reducer – 1½ inch x ¾ inch N.P.T.
11810	Bell Reducer – 1½ inch x 1 inch N.P.T.

¾ inch and 1 inch Reed Nozzle Assemblies are Fine Thread Series;they fit only Reed Male Hose Ends

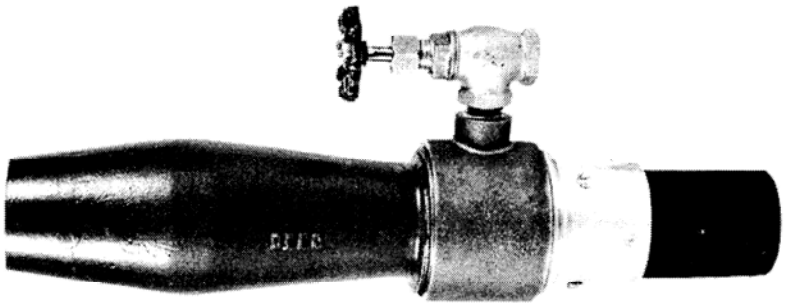
No. 11040 – ¾ inch Fine
No. 11041 – 1 inch Fine
No. 11042 – 1¼ inch Fine

REED NOZZLE ASSEMBLIES 1¼ INCH FINE OR COARSE THREAD SERIES

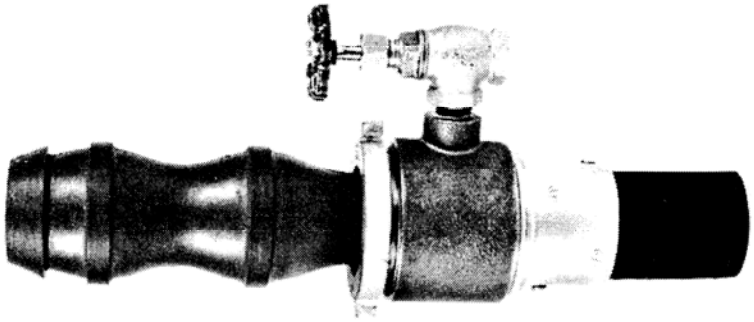
These Nozzles are used with 1¼ inch I.D. material hose, to mix a gunning material with water and to direct the material into place.

The Standard Nozzle Body uses an Aluminum Nozzle Tip with a Gum Rubber Nozzle Tip Liner. A Double Bubble Rubber Tip is also available.

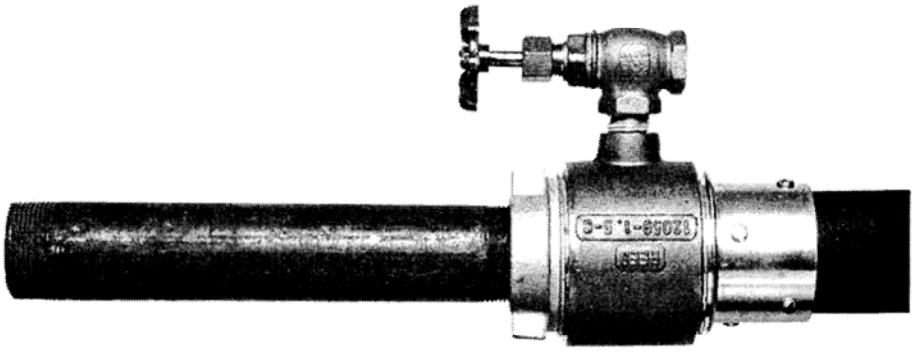
The Nozzle Tip and Liner can be removed and substituted with a Lance Adapter Bushing so that a Lance Pipe can be connected to the Nozzle; this system is used for "hot patch" gunning.



Complete Reed Standard Nozzle Assembly — No. 12002 - 1¼ inch Fine Thread — No. 12009 – 1¼ inch Coarse Thread



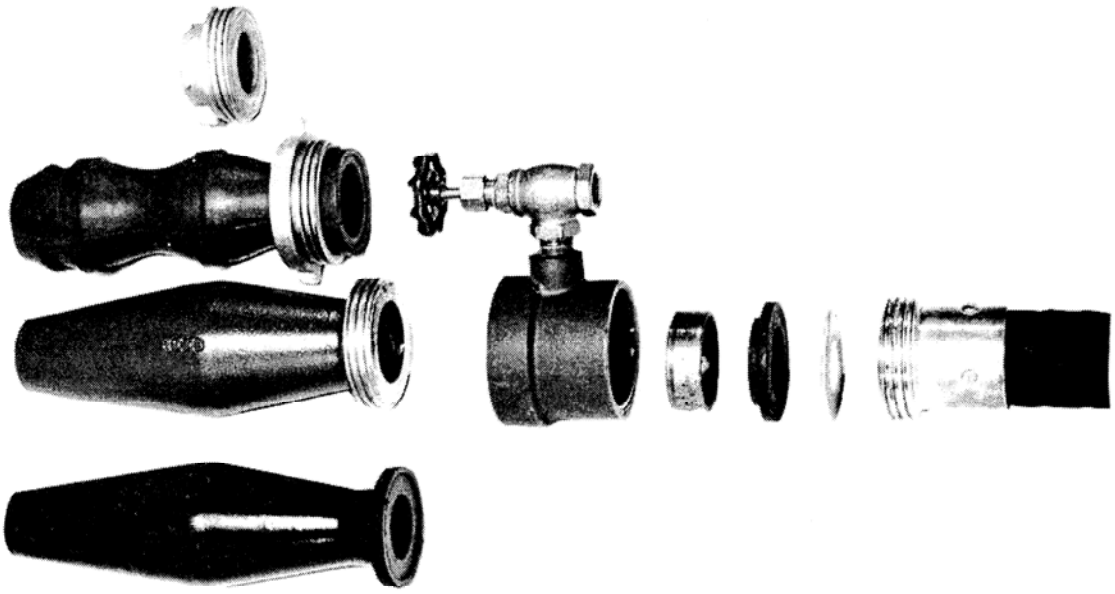
Complete Reed Double Bubble Nozzle Assembly — No. 12016 – 1¼ inch Fine Thread — No. 12021 – 1¼ inch Coarse Thread



Complete Reed Lance Adapter Nozzle Assembly — No. 11802 – 1¼ inch Fine Thread — No. 11806 – 1¼ inch Coarse Thread

Turn to back of this sheet for line drawings and part numbers of parts used to make up Nozzle Assemblies shown above.

PARTS USED TO MAKE UP 1¼ INCH FINE OR COARSE THREAD REED NOZZLE ASSEMBLIES



REED PART NO. FINE THREAD	REED PART NO. COARSE THREAD	DESCRIPTION
12080	12079	Aluminum Retainer Washer
12071	12069	Rubber Backup Washer
12065	12065	Brass Water Ring
12050	12050	Bronze Water Needle Valve/½ inch Nipple
12053	12058	Bronze Nozzle Body
12042	12042	Rubber Nozzle Tip Liner, Hamm Style
12030	12034	Aluminum Nozzle Tip, Hamm Style
12090	12091	Double Bubble Adapter Bushing
12047	12047	Double Bubble Rubber Nozzle Tip - 1¼ inch
12046	12046	Double Bubble Rubber Nozzle Tip - 1 inch
11815	11816	Lance Adapter Bushing - 1½ inch N.P.T.

Fine Thread 1¼ inch Reed Nozzles fit No. 11042 Reed Male Hose End (1¼ inch Fine)
Coarse Thread 1¼ inch Reed Nozzles fit No. 11048 Reed Male Hose End (1¼ inch Coarse)

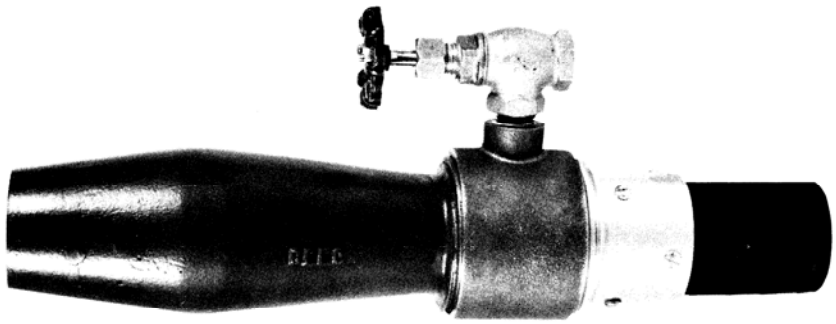
Refer to front of this sheet for Complete Nozzle Assembly information.

REED NOZZLE ASSEMBLIES 1½ INCH FINE OR COARSE THREAD SERIES

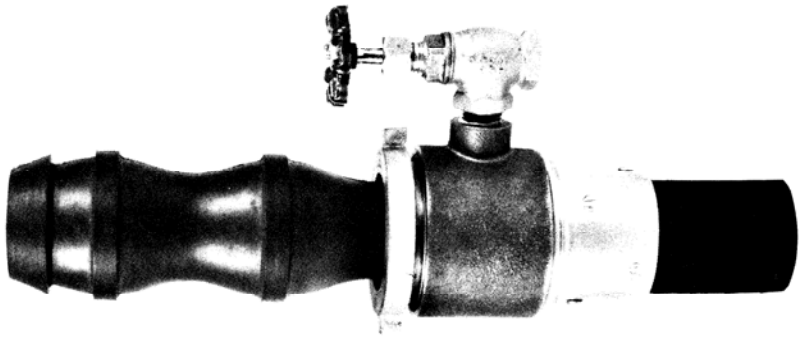
These Nozzles are used with 1½ inch I.D. material hose, to mix a gunning material with water and to direct the material into place.

The Standard Nozzle Body uses an Aluminum Nozzle Tip with a Gum Rubber Nozzle Tip Liner. A Double Bubble Rubber Tip is also available.

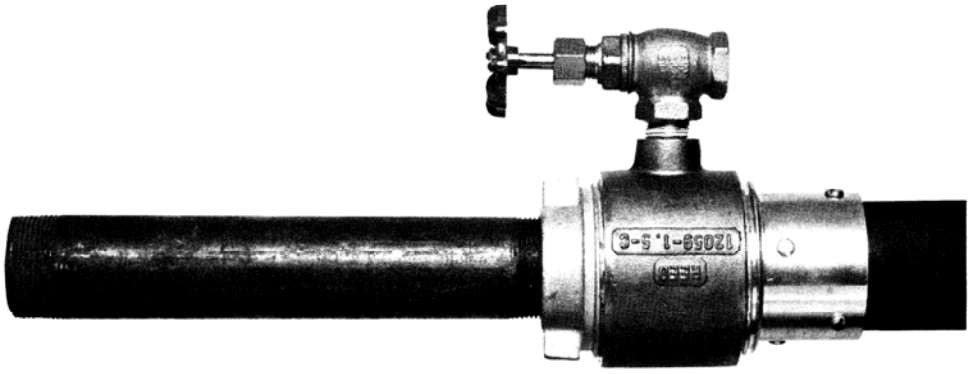
The Nozzle Tip and Liner can be removed and substituted with a Lance Adapter Bushing so that a Lance Pipe can be connected to the Nozzle; this system is used for "hot patch" gunning.



Complete Reed Standard Nozzle Assembly — No. 12076 - 1½ inch Fine Thread — No. 12010 — 1½ inch Coarse Thread



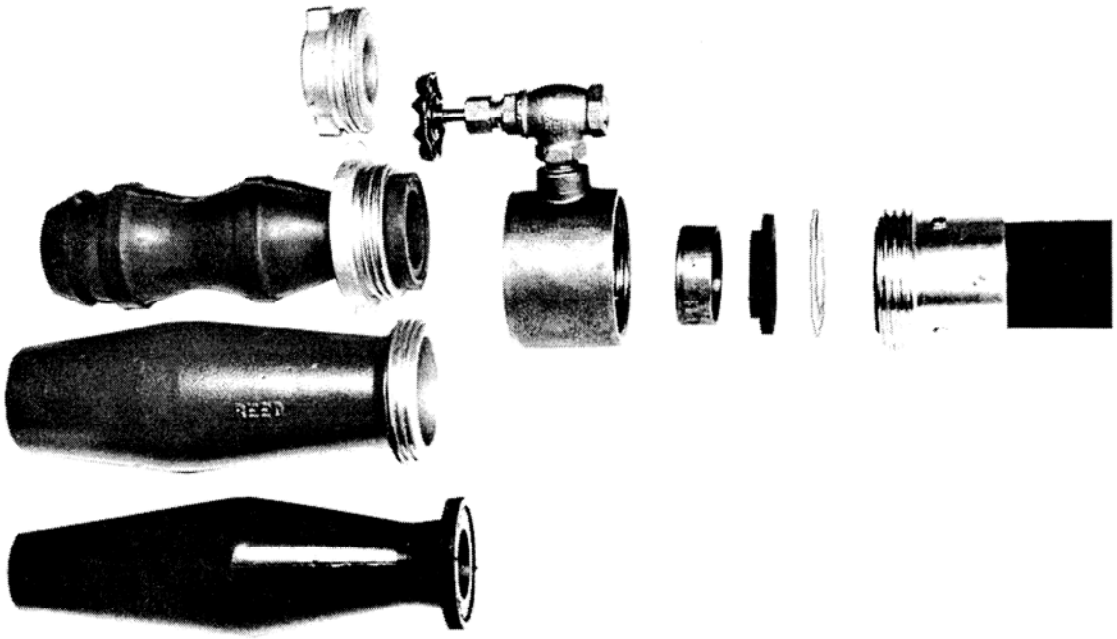
Complete Reed Double Bubble Nozzle Assembly — No. 12017 — 1½ inch Fine Thread — No. 12022 — 1½ inch Coarse Thread



Complete Reed Lance Adapter Nozzle Assembly — No. 11803 — 1½ inch Fine Thread — No. 11807 — 1½ inch Coarse Thread

Turn to back of this sheet for line drawings and part numbers of parts used to make up Nozzle Assemblies shown above.

PARTS USED TO MAKE UP 1½ INCH FINE OR COARSE THREAD REED NOZZLE ASSEMBLIES



REED PART NO. FINE THREAD	REED PART NO. COARSE THREAD	DESCRIPTION
12081	40076	Aluminum Retainer Washer
12072	12073	Rubber Backup Washer
12065	12065	Water Ring
11029	11029	Water Needle Valve/½ inch Nipple
12054	12059	Nozzle Body
12043	12043	Rubber Nozzle Tip Liner, Hamm Style
12031	12035	Aluminum Nozzle Tip, Hamm Style
12090	12091	Double Bubble Adapter Bushing
12047 -OR- 12046	12047 -OR- 12046	Double Bubble Rubber Nozzle Tip(1¼ inch outlet hole) Double Bubble Rubber Nozzle Tip(1 inch outlet hole)
11815	11816	Lance Adapter Bushing - 1½ inch N.P.T.

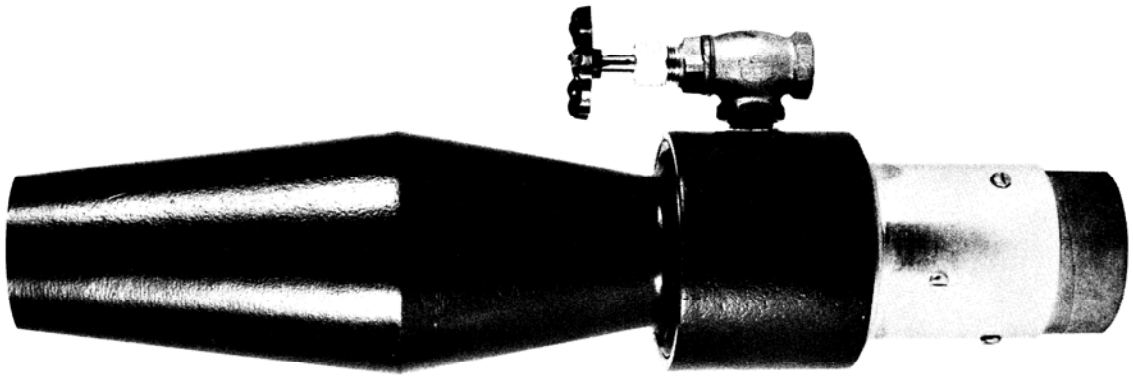
Fine thread 1½ inch Reed Nozzles fit No. 11043 Reed Male Hose End (1½ inch Fine)
No. 11044 Reed Male Hose End (1½ inch Fine)

Coarse thread 1½ inch Reed Nozzles fit No. 11049 Reed Male Hose End (1½ inch Coarse)
No. 11050 Reed Male Hose End (1½ inch Coarse)

Refer to front of this sheet for Complete Nozzle Assembly information.

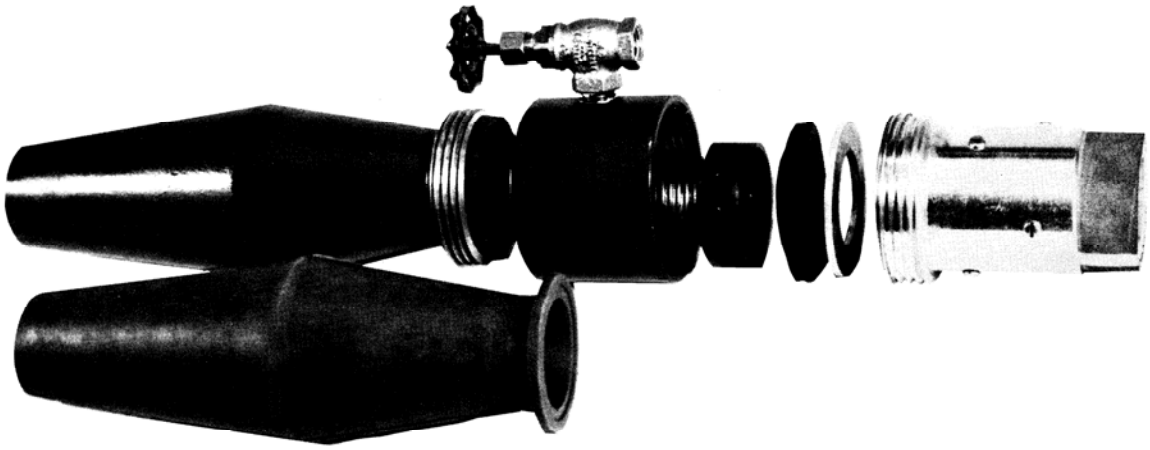
REED NOZZLE ASSEMBLIES 2 INCH AND 2½ INCH COARSE THREAD SERIES

These Nozzles are used with 2 inch and 2½ inch I.D. material hose, to mix a gunning material with water and to direct the material into place.



Complete Reed Standard Nozzle Assembly	No. 12005 – 2 inch Coarse Thread	No. 12006 – 2½ inch Coarse Thread

Parts Used to Make up 2 inch and 2½ inch Nozzle Assemblies



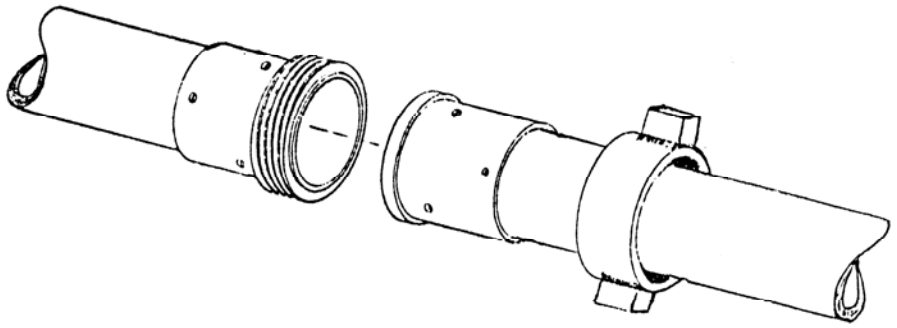
REED PART NO. 2 inch COARSE THREAD	REED PART NO. 2½ inch COARSE THREAD	DESCRIPTION
12083	12084	Aluminum Retainer Washer
12074	12075	Rubber Backup Washer
12066	12067	Water Ring
11029	11029	Water Valve/½ inch Nipple
12056	12057	Aluminum Nozzle Body
12044	12045	Rubber Nozzle Tip Liner, Hamm Style
12032	12033	Aluminum Nozzle Tip, Hamm Style

Coarse Thread 2 inch Reed Nozzles fit No. 11046 Reed Male Hose End (2 inch Coarse)
Coarse Thread 2½ inch Reed Nozzles fit No. 11047 Reed Male Hose End (2½ inch Coarse)

2 Inch Reed Coarse Thread is sometimes referred to as "Ridley" Thread.
Fine Thread Couplings are not offered in 2 inch and 2½ inch Nozzle Assemblies.

MATERIAL HOSE COUPLING ASSEMBLY OPTIONS – REED

All Reed Material Hose Couplings are "Wing Nut" Style. They consist of a Threaded Male End, a Flanged End, and a Threaded Female Wing Nut.



THREADED MALE HOSE END

THREADED FEMALE WING NUT AND FLANGED HOSE END

SIZE	PART NO. COMPLETE ASSEMBLY	FITS HOSE I.D. x O.D. inch x inch	FITS GOOSNECK* PART NUMBERS AND SIZE	THREAD	TYPE
¾ Inch	11000	¾ x 1½ Inch	60006, 1¼ Inch	Fine	Steel
1 Inch	11001	1 x 1-7/8 Inch	60006, 1¼ Inch	Fine	Steel
1¼ Inch	11002	1¼ x 2-5/32 Inch	60006, 1¼ Inch	Fine	Steel
1¼ Inch	11010	1¼ x 2-5/32 Inch	10043, 60005, 1¼ Inch	Coarse	Steel
1½ Inch	11003	1½ x 2½ Inch	60004, 1½ Inch	Fine	Steel
1½ Inch	11004	1½ x 2-3/8 Inch	60004, 1½ Inch	Fine	Steel
1½ Inch	11011	1½ x 2½ Inch	10042, 60003, 10044, 1½ Inch	Coarse	Steel
1½ Inch	11012	1½ x 2-3/8 Inch	10042, 60003 10044, 1½ Inch	Coarse	Steel
2 Inch	11006	2 x 3 Inch	10045, 10046, 2 Inch 60000, 60001, 2 Inch	Coarse	Aluminum
2½ Inch	11007	2½ x 3½ Inch	12087, Adapter to 2 Inch Above	Coarse	Aluminum

* 10000 Series Part Numbers refer to Series 4 Reed Guncrete Machines.
* 60000 Series Part Numbers refer to Series 3 Reed Guncrete Machines.

**This Coupling Assembly is generally used as a weldment, for making special connections to pipe thread or victaulic style couplings.

NOTE: Coarse Threads are Standard with all Series 4 Reed Machines.

HYDRO NOZZLE (5.5 FEET)

Available in 1.5"
Double Bubble (12078) complete assembly
or
Hamm (12036) complete assembly