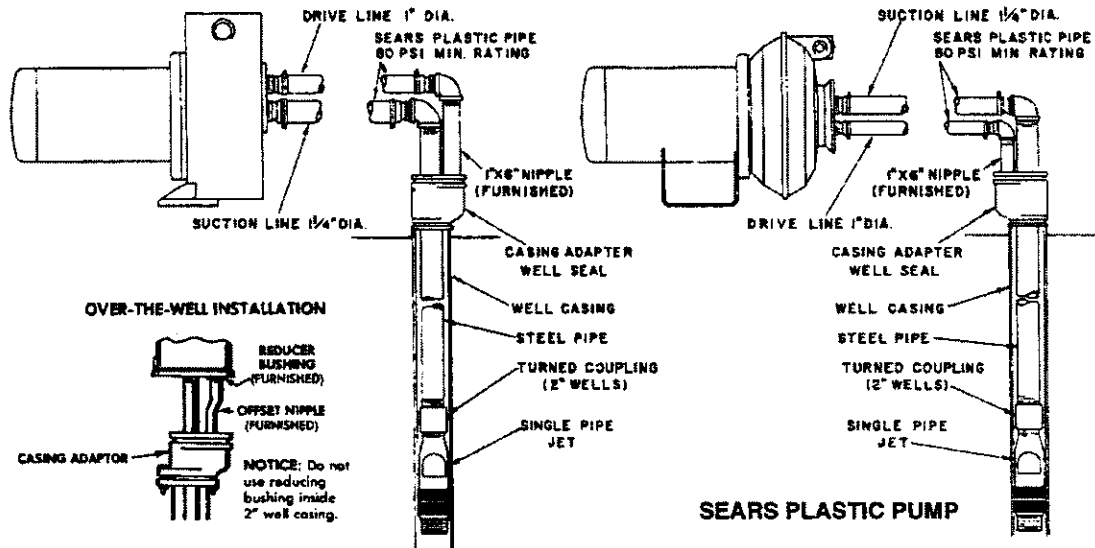


# INSTRUCTIONS FOR INSTALLATION OF VERTICAL CASING ADAPTERS FOR SINGLE PIPE JETS

In the past, Sears furnished horizontal casing adapters for horizontal pump installations. The vertical adapters now being furnished offer more installation flexibility as the following illustrations indicate.

## TYPICAL INSTALLATIONS



### SEARS CAST-IRON SERIES

In some cases, your pump owners manual may still show horizontal casing adapter installations. If so, disregard, and follow these instructions.

#### INSTALL JET

1. Presoak the leathers on the leather packer-type jet. This can be done by placing the jet in a pail of water until leathers are soft. For best results, soak overnight.
2. Connect the jet to the first length of suction pipe, 1-1/4" pipe for 2" and 3" casings.

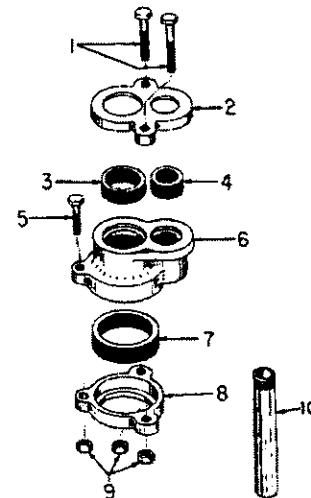
**CAUTION:** 2" casing sizes require special turned couplings. Do NOT use ordinary pipe couplings as you will restrict the flow of water, and reduce the pump capacity.

3. Lower the jet and pipe assembly into the well casing, adding additional lengths of pipe until proper depth is reached. Tighten each joint as lengths are added. Use pipe compound sparingly, and on male threads only.
4. After the correct depth is reached, move the jet up and down slightly to help seat the leathers. Water pressure will complete the sealing of the leathers against the casing wall. Be certain to leave sufficient pipe above the well casing to allow for installation of the casing adapter and hook-up of off-set piping. Support the suction pipe with a pipe clamp or other suitable device just above the casing. To check the foot valve for leakage, fill the pipes with water. The pipes should remain full.

#### INSTALL CASING ADAPTER

1. Securely thread a 1" elbow onto the 1" x 6" nipple furnished.
2. Slide adapter over the 1-1/4" suction pipe and onto the well casing as far as it will go.
3. Securely thread 1-1/4" elbow onto the 1-1/4" suction pipe.
4. Slide the 1" nipple assembly into casing adapter drive hole as far as it will go. Be certain it extends through the rubber packing.
5. Position the 1-1/4" suction line with respect to the 1" drive line as shown in illustrations.
6. Tighten three (3) bolts to seal adapter to casing and piping to adapter.

### SEARS VERTICAL CASING ADAPTERS



#### REPAIR PARTS LIST

Key No.	2" Vertical Casing Adapter	3" Vertical Casing Adapter	Part Description
-	J216-13	-	2" Vertical Casing Adapter
-	--	J216-14	3" Vertical Casing Adapter
1	U30-282ZP	U30-282ZP	Machine Bolt 3/8-16 x 5" lg. (2 req'd.)
2	J16-19ZZP	J16-23ZZP	Upper Flange
3	J21-18	J21-18	Seal Ring - Suction Pipe
4	J21-19	J21-19	Seal Ring - Drive Pipe
5	U30-277ZP	U30-277ZP	Machine Bolt 3/8-16 x 2-1/2" lg.
6	J51-1ZZP	J51-3ZZP	Casing Adapter Body
7	J21-17	J21-21	Seal Ring - Lower
8	J16-20ZZP	J16-24ZZP	Lower Flange
9	U36-38ZP	U36-38ZP	Nut 3/8" Sq. Hd. (3 req'd.)
10*	U37-116GP	U37-116GP	1" x 6" TOE Nipple

\* Furnished with Jet Package.

## INSTRUCTIONS FOR SEARS ALL PURPOSE JETS

Extra nozzles and venturi tubes are furnished in this package. To obtain maximum pumping performance from your well, it may be necessary to change the nozzle and venturi.

The Jet, as shipped with your pump, is assembled for the deepest well pipe setting.

If you choose not to change the nozzle and venturi, the Jet will still operate satisfactory, however, the pump may not operate to its full capacity.

If you choose to change the nozzle and venturi, the chart below shows which nozzle and venturi to use for different pump models and well depths. BE SURE the pumping level in your well is within the depth limits stated in the chart for your pump model.

To remove venturi, place an open end wrench on the flats near the center of the venturi and turn counter-clockwise.

To remove nozzle, use a 5/8" socket wrench and turn counter-clockwise. Replace with correct nozzle and venturi and reassemble.

When installing plastic nozzle, care should be taken not to overtighten.

Tighten only hand tight until nozzle has a snug fit against the shoulder.

**DO NOT USE PIPE DOPE.**

**NOTE:** Extra nozzles and venturi may not be returned for credit.

### 2" SINGLE PIPE JETS

Pump Model Number	Can be used as Assembled for Depths of:	For Maximum Pumping Capacity on Shallower Settings - Change as follows:		
		Depths	Nozzle No.	Venturi No.
390.25110, 390.251101	30' to 80'	30' to 50'	#54	J32P-24
390.251180, 390.251181, 390.251182, 390.251183	30' to 70'	30' to 40'	#54	J32P-24
390.251900, 390.251901	30' to 90'	N/C	N/C	J32P-24
390.251980, 390.251981, 390.251982, 390.251983	30' to 80'	N/C	N/C	J32P-24
390.252200, 390.252201	30' to 110'	N/C	N/C	J32P-24
390.252280, 390.252281, 390.252282, 390.252283	30' to 90'	N/C	N/C	J32P-24
390.25310, 390.253150	40' to 120'	40'	N/C	J32P-24
390.25320, 390.253250, 390.253251	40' to 180'	40' to 90'	N/C	J32P-24
390.25330, 390.253350	40' to 240'	40' to 120'	N/C	J32P-24
390.251600	30' to 70'	30' to 50'	#54	J32P-24

### 3" SINGLE PIPE JETS

Pump Model Number	Can be used as Assembled for Depths of:	For Maximum Pumping Capacity on Shallower Settings - Change as follows:		
		Depths	Nozzle No.	Venturi No.
390.25110, 251101	30' to 90'	30' to 60'	#51	J32P-24
390.251180, 390.251181, 390.251182, 390.251183	30' to 60'	30' to 40'	#51	J32P-24
390.251900, 390.251901	30' to 90'	30' to 60'	#51	J32P-24
390.251980, 390.251981, 390.251982, 390.251983	30' to 90'	30' to 60'	#51	J32P-24
390.252200, 390.252201	30' to 110'	30' to 70'	#53	J32P-22
390.252280, 390.252281, 390.252282, 390.252283	30' to 90'	30' to 70'	#53	J32P-22
390.25310, 390.253150	40' to 120'	40' to 60'	N/C	J32P-24
390.25320, 390.253250, 390.253251	40' to 210'	40' to 100'	N/C	J32P-24
390.25330, 390.253350	40' to 280'	40' to 120'	N/C	J32P-24
390.251600	30' to 80'	30' to 50'	#51	J32P-24

## INSTRUCTIONS FOR SEARS ALL PURPOSE JETS

Extra nozzles and venturi tubes are furnished in this package. To obtain maximum pumping performance from your well, it may be necessary to change the nozzle and venturi.

The Jet, as shipped with your pump, is assembled for the deepest well pipe setting.

If you choose not to change the nozzle and venturi, the Jet will still operate satisfactory, however, the pump may not operate to its full capacity.

If you choose to change the nozzle and venturi, the chart below shows which nozzle and venturi to use for different pump models and well depths. BE SURE the pumping level in your well is within the depth limits stated in the chart for your pump model.

To remove venturi, place an open end wrench on the flats near the center of the venturi and turn counter-clockwise.

To remove nozzle, use a 5/8" socket wrench and turn counter-clockwise. Replace with correct nozzle and venturi and reassemble.

When installing plastic nozzle, care should be taken not to overtighten.

Tighten only hand tight until nozzle has a snug fit against the shoulder.

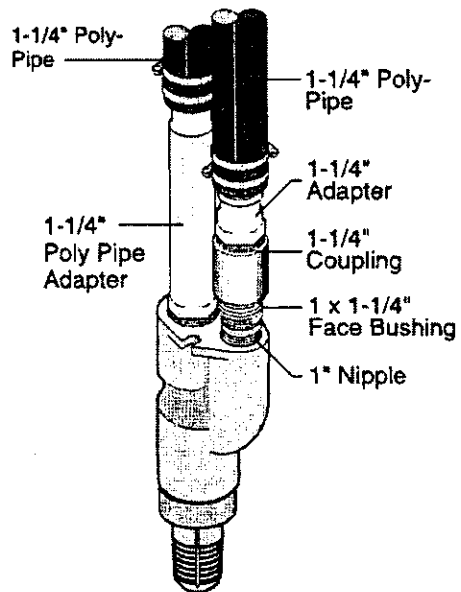
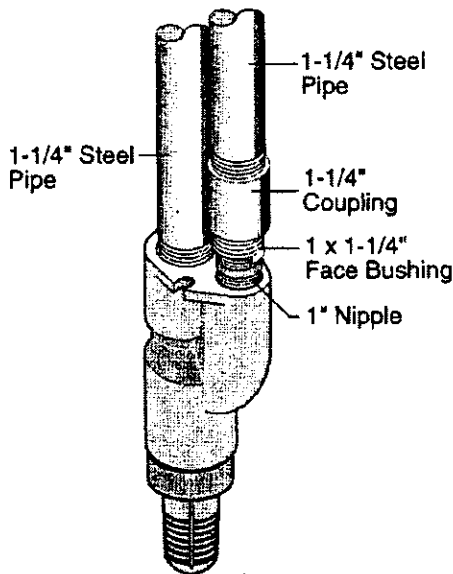
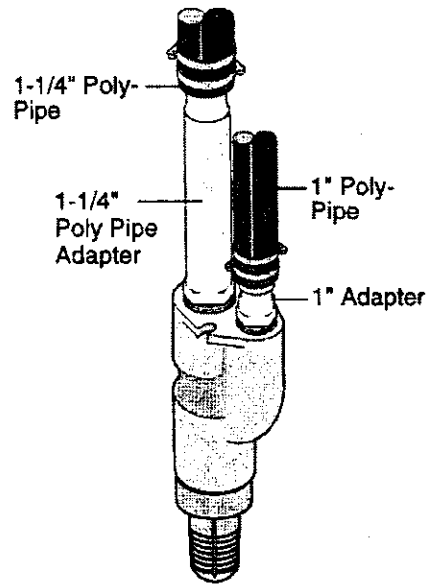
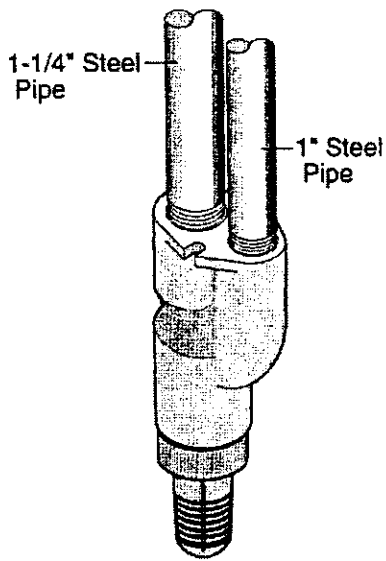
**DO NOT USE PIPE DOPE.**

NOTE: Extra nozzles and venturi may not be returned for credit.

### 4" DOUBLE PIPE JETS

Pump Model Number	Can be used as Assembled For Depths Of:	For Maximum Pumping Capacity On Shallower Settings - Change As Follows:		
		Depths	Nozzle No.	Venturi No.
390.25110	30' to 90'	30' to 60'	#51	J32P-24
390.25310 390.253150	40' to 120'	40' to 60'	NO CHANGE	J32P-24
390.25320 390.253250 390.253251	40' to 200'	40' to 100'	NO CHANGE	J32P-24
390.25330 390.253350	40' to 280'	40' to 120'	NO CHANGE	J32P-24
390.251600	30' to 80'	30' to 50'	#51	J32P-24
390.251900	30' to 90'	30' to 60'	#51	J32P-24
390.252200	30' to 110'	30' to 70'	#53	J32P-22
390.251101	30' to 90'	30' to 60'	#51	J32P-24
390.251901	30' to 90'	30' to 60'	#51	J32P-24
390.252201	30' to 110'	30' to 70'	#53	J32P-22
390.251180 390.251181 390.251182	30' to 60'	30' to 40'	#51	J32P-24
390.251980 390.251981 390.251982	30' to 90'	30' to 60'	#51	J32P-24
390.252280 390.252281 390.252282	30' to 90'	30' to 70'	#53	J32P-22

## INSTALLATION PROCEDURE FOR USING 4 INCH JETS



**IMPORTANT: Use pipe thread compound on male threads and tighten Venturi Adapter or Steel Pipe into Jet Body.**

### IN WELL PIPING SIZES – ALL INSTALLATIONS

HP		SUCTION	DRIVE
3/4	Multi-Stage Jet Pump Piping	1-1/4"	1"
1	Multi-Stage Jet Pump Piping	1-1/4"	1-1/4"
1-1/2	Multi-Stage Jet Pump Piping	1-1/4"	1-1/4"
All	Horizontal Jet Pumps	1-1/4"	1"

**For long horizontal runs of piping, consult your pump owner's manual for recommended piping size increase.**