



12905 DiaLine Cutting Head

The **DiaLine Cutting Head** is normally used with diamond orifices for improved cutting performance and superior life. Ruby orifices are also available. A new feature of the DiaLine cutting head is that the diamond orifice and mixing chamber are replaceable. The **Nozzle Nut** provides an additional alignment to the nozzle and helps in the removal of the nozzle if it is broken.

Installing the DiaLine Head

NOTE: Always use AccuGoop on metal-to-metal mating surfaces such as threads and the orifice retainer-adapter contact area.

Make sure that the top of the head and bottom of the adapter are clean, washed out if necessary.

Apply a light coat of HP lubricant such as AccuGoop to the bottom face and threads of the adapter.

Installing the orifice:

Install the Orifice Retainer flat side down into the cutting head body. The top of the retainer has a slight conical shape and holds the jewel orifice. This side should still be visible after installing the orifice retainer.

NOTE: Installing the Orifice the wrong way will damage the orifice.

Thread the DiaLine head onto the bottom of the adapter and torque to seal.

Use 3/8" OD x 1/4" ID hose or tube for feeding abrasive into the head. Push the hose into the connector until it bottoms. The hose may feel tight and it may be necessary to put a light lubricant on the OD at its end.

Loosen the nozzle nut and slide the nozzle up until it bottoms-out in the abrasive body then re-tighten the nozzle nut.

Replacing the Mixing Chamber and Orifice

Removing the old orifice:

1. Remove the inlet connector and nozzle nut.
2. Block the inlet connector hole and blow air through the nozzle nut side of the abrasive body to force the old orifice out.

Removing the worn mixing chamber:

The Mixing Chamber may require replacement after extended use. When the hole through the mixing chamber exceeds **.090** it should be replaced.

1. Remove the inlet connector, nozzle nut, and collet from the abrasive body. Loosen the setscrew that holds the mixing chamber a few turns.
2. Push the orifice retainer and mixing chamber up through the top of the abrasive body with a .250 dia. pin.

Installing the new mixing chamber:

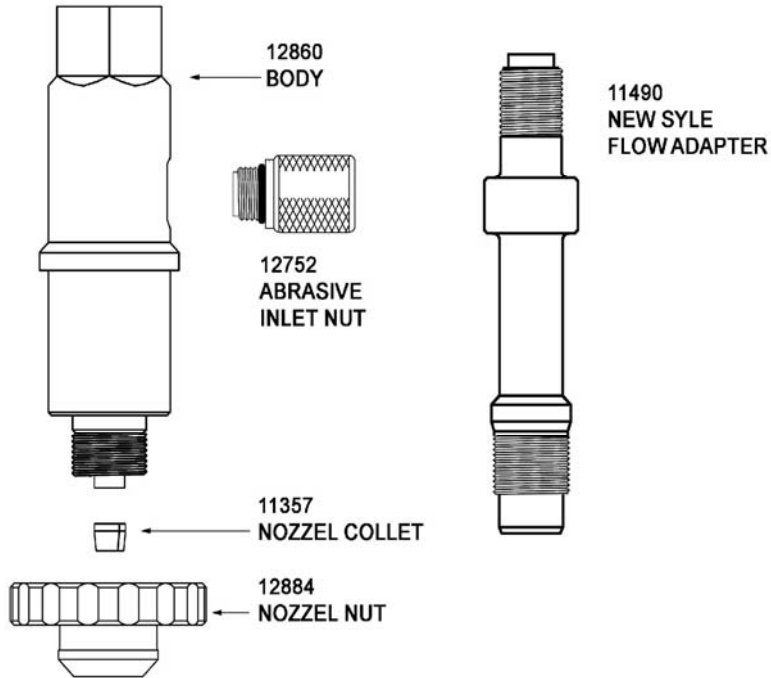
The mixing chamber must be installed with the top of the chamber flush to the top of the bore.

1. Place the orifice retainer in the bore with the cone side up and hold it down with a finger.
2. Slide the new mixing chamber into the body up from the **bottom** until it is touching the bottom of the orifice retainer and align the abrasive inlet hole of the chamber with the inlet hole of the abrasive body.
3. Tighten the set screw to secure the mixing chamber.
4. Reassemble the DiaLine head and thread the head back onto the adapter.

Filtration:

The **12533 Thimble Filter in-line filter**, (optional) is strongly recommended to protect the orifice from **larger** particulates in the water. The assembly threads into the valve body just above the head and helps to protect the orifice from any damage. If in-line filters are not used it is imperative that the high-pressure lines be purged after any work on the pump or HP plumbing.

DiaLine Adapters and Parts



12905 Dialine CUTING HEAD uses .281 X 4 Nozzles.
For use with the 11490 New style Flow Adapter.

Includes	
12747	Mixing Chamber
12836	#8-32 X .5 SST DP Set Screw
11679-012	-12 O-ring
Options	
.281 Roctec 100 Long Life Nozzles	
11219-030-40	.281 x .030 x 4.000
11219-040-40	.281 x .040 x 4.000
.281 Roctec 500 Long Life Nozzles	
11277-030-40	.281 x .030 x 4.000
11277-040-40	.281 x .040 x 4.000
AccuStream Dialine Orifice	
12835-xxx	Ruby Orifice
12749-xxx	Diamond Orifice

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