

### **Attenuator Upgrade Kits - Direct Seal Head to Body**

Purpose:	An Attenuator smooths out pulses and protects the HP water components from pressure spikes that occur while cycling your Ultra High Pressure Intensifier Pump. The Attenuator acts as a storage/buffering water receptacle providing smooth continuous water pressure to your cutting or cleaning device.	
	The current Attenuator utilizes a Seal between the Seal Head and Body to prevent water leakage due to pressure. Over time, this seal wears and begins to leak, requiring a full rebuild of the Attenuator.	
	Jet Edge has released a new, large 2-quart (1.9 Liter) Attenuator, replacing the prior design. The new design directly seals the Head to the Body and eliminates the Seal wear component thus extending the service life of the Attenuator. The larger, 2-quart Attenuator is the same design as the 1-quart Attenuator but is longer to increase its capacity.	
	Replacement Attenuator Kits are available.	
Systems:	All Jet Edge Intensifier Pumps with 2-quart Attenuator P/N 100097CERT. Contact Parts Sales if you're not sure which Attenuator was supplied with your Ultra High Pressure Intensifier Pump.	
Details:	The proper kit is determined by the model of your Intensifier Pump. See the reference chart on the following page to determine which kit is correct for your pump. Each kit includes a new Attenuator and other components needed to attach it to your Intensifier Pump. To view the component's list for each Attenuator, visit our e-Commerce store and enter the Kit Number into the search field. A full schematic with service procedures will be available for viewing.	
Benefit:	The new Attenuator does not have a separate seal, but rather the head seals directly to the body. An additional stud has been added for additional torquing. As a result, there is less relative movement between the heads and body and the attenuator does not require service to replace the seal.	
Order Now:	Call 1-800-JET-EDGE and ask for Parts Sales to learn more about this Technical Bulletin or visit our e-Commerce store to order your upgrade.	

Jet Edge Waterjet Systems





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UHP Intensifier Pump Model	Intensifier Top Level Assembly #	Attenuator Kit #
36-100	65347	111488
36-200	30291, 65329, 65493, 65564	111493
55-30A	65468	110151
55-30B	104009, 104962, 107016, 65355	110151
55-50A	101105	108590
55-50B	65378	108590
55-50C	103141, 104289, 104840	110159
60-50	104771, 105473, 106294, 106803, 106133	110159
60-50C	108114	110159
55-75A	101635	111485
55-75B	109387, 65507	111485
55-100B	102954	111485
55-100A	101344, 104507, 105628, 105906, 105993, 107436, 109341, 65554	111480
55-100B	103643, 104008, 107015, 65497	111480
55-100C	105911	111477
60-100	108596, 109693, 110496	111477
60-100A	108352, 108600	111477
60-100	109716	110998
60-100A	110958	110998
55-150	101718, 104143, 105263, 105421, 105870, 106210, 65310, 65563	111000
60-150A	106569, 107002, 107758, 110847, 110904	111149
60-150B	106570	111149
55-200	102686, 104274, 106189, 106732	111486
55-280 DS	105472, 106400	111496
60-280 DS	107873	111496



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Consult your Product and Operation Manuals for all applicable safety precautions before attempting to perform this Service Procedure. Failure to do so could result in damage to equipment, injury to yourself or others, or death.



Prior to service, perform proper shutdown of the machine. Place locks on services as necessary and de-energize. Refer to Intensifier pump manual for specifics of your machine.

The Attenuator is extremely heavy. Use proper lifting and rigging techniques to remove and replace.

#### **Procedure**

1. Remove UHP lines leading in and out of the Attenuator. It may be necessary to remove other high-pressure tubing to assist in the removal.

**Note** Some high-pressure lines may be re-used with the kit. Refer to the assembly drawings of the kit needed for your intensifier pump.

- 2. Remove the intensifier straps that hold down the Attenuator.
- Using proper lifting techniques and equipment, lift the Attenuator off machine.
- 4. Remove the existing saddles that the original Attenuator sat in.
- 5. Install new Attenuator saddles that are part of the Attenuator Upgrade Kit.

**Note** Based on the intensifier pump, the mounting holes for the saddles or the location of pass-through holes on the frame may need to be modified. Refer to assembly drawings for details.

6. Set the replacement Attenuator in machine on new installed saddles.

#### The Attenuator can be mounted in either direction.

**Note** A lubricant can be applied to the saddles where the attenuator sits to aid in alignment when replacing high pressure tubing.

7. Locate new high-pressure tubing and install to Attenuator. Use Precision Lubricant on all fittings and cone angles when installing tubing.

**Note** It may be necessary to adjust the Attenuator for optimal tubing installation. The Attenuator may not sit centered on saddles depending on intensifier pump.

- 8. Tighten high pressure tubing to attenuator, taking care not to rotate the Attenuator. Placing a wrench through the nuts on the Attenuator will aid in tightening high pressure fitting to attenuator.
- 9. Install any other tubing removed for replacement back on the machine, using precision lubricant as necessary. Tighten tubing.
- 10. Install new Attenuator clamps over the Attenuator and tighten.
- 11. Remove locks from machine and start the intensifier pump.



# **Service Procedure** Ref: Attenuator Upgrade Kits 21-06 SP

- 12. Perform a pressure check to verify there are no leaks on the system with a closed tool.
- 13. If no leaks are present, remove orifice/mount as necessary to flush high pressure system and remove any debris.

The machine is ready to be put back into service.