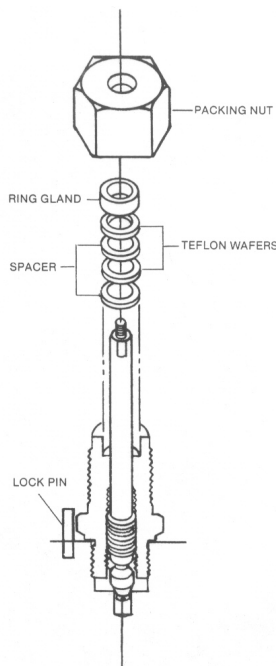


## Servicing the Air Control Valve

The DESCO Air Hat uses a Hoke Incorporated 2100 Series Needle Valve. This valve is rated to a maximum 6000 psi. The stem is sealed with a stack of alternating Teflon® wafers and Stainless Steel spacers. Replacement of the packing is simple and can be done in the field. All parts should be inspected for wear and damage. The packing can be compressed over time and it may show between the ring gland and stem and/or bonnet wall. Packing in this condition should be replaced. The other valve part that needs frequent attention is the valve stem. The valve handle and stem are vulnerable to being damaged due to the exposed position of the handle. If the valve stem is bent the handle will have a noticeable wobble. A bent valve stem should be replaced immediately.

### To Replace Packing



#### DISASSEMBLY

1. Unscrew hex nut from stem and remove handle.
2. Unscrew packing nut from housing and extract ring gland and packing (wafers & spacers).

Note:

It may be necessary to carefully pry parts loose from housing.

3. Thoroughly clean packing sealing surfaces (stem and housing) with acetone.

#### REASSEMBLY

1. Replace packing as illustrated in reverse order of disassembly. Note that the ring is the thicker washer and is assembled last.
2. With packing fully inserted in housing, replace packing nut and handle.
8. With valve in open position, secure handle with self locking hex nut.
9. With valve in closed position, tighten packing nut until snug.

### Valve Stem Replacement

1. Remove the air control valve from the helmet.
2. Follow the disassembly instructions for the packing above.
3. Remove the locking roll pin from the body.
4. Unscrew the bonnet from the body.
5. Inspect the body and seat for damage and clean parts.
6. Remove the old stem from the bonnet and inspect and clean the bonnet.
7. Install the new stem in the bonnet running it in completely. Pay attention to the “feel” of the thread as you turn the stem in. If there is any roughness or stoppage locate and correct the problem before you continue assembly.
8. Thread the bonnet into the body and tighten down (55-65 ft. lbs.)
9. Replace the locking roll pin in the body.

The air control valve is held in the helmet by a panel nut. This nut is Nickel coated Brass. The threads can be damaged by over tightening.