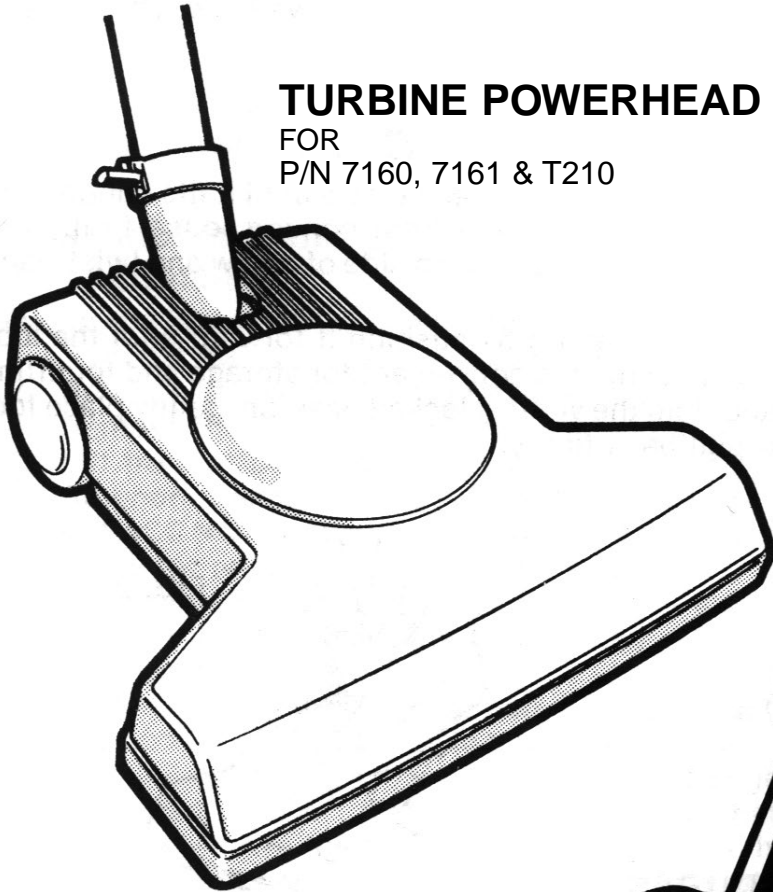


# INSTRUCTION MANUAL



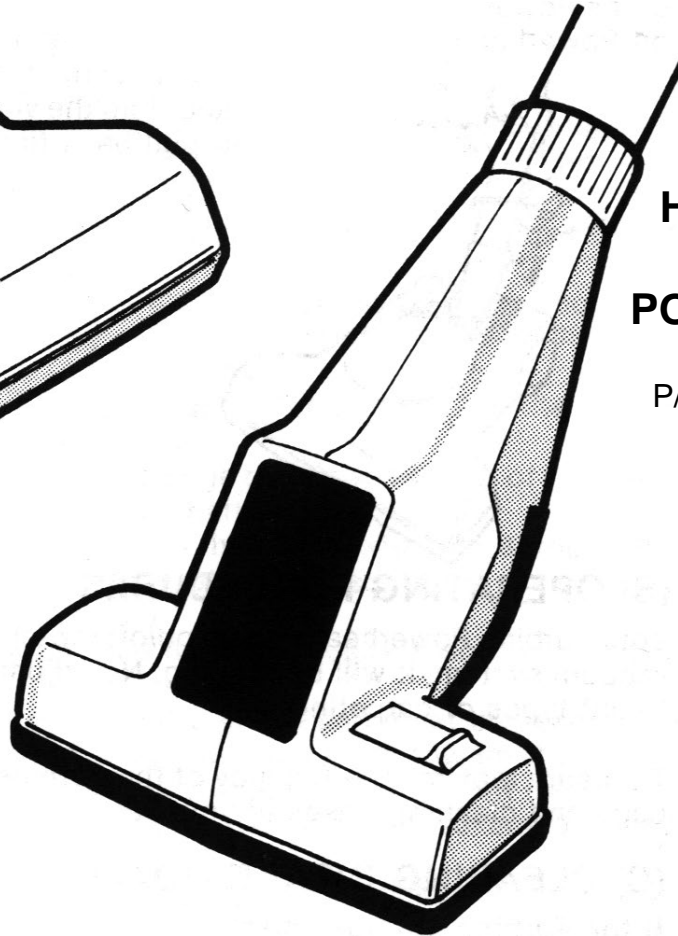
## TURBINE POWERHEAD

FOR  
P/N 7160, 7161 & T210



## HAND HELD TURBINE POWERHEAD

FOR  
P/N 6970g, 6971g  
& 6972g



These Turbine Powerheads have been carefully designed and manufactured for long life, reliable performance and convenient cleaning. They are designed to do most of the cleaning work for you. They move easily and do not require downward pressure for thorough cleaning.

As with any tool with moving parts, caution must be exercised while using these Turbine Powerheads. Please read and save this Instruction Manual.

### SAFETY PRECAUTIONS

1. Keep hair, hands and feet away from rotating brush while the Turbine Power Head is running.
2. Remember that Turbine Powerheads operate whenever they are connected to a running vacuum. If children are present, make sure to turn vacuum system off when leaving Powerhead unit unattended.
3. Do not attempt to service or unclog tool while unit is running.
4. Avoid picking up water or spilled liquids with a Turbine Powerhead. The vacuum system is designed for dry pick-up only.

## INSTRUCTIONS FOR TURBINE POWERHEAD

### (A) ATTACHING THE TURBINE POWERHEAD

To attach your metal wand, simply twist into Powerhead elbow until it fits snugly. The built-in, locking mechanism will prevent the wand from coming loose from your Powerhead while in use. To detach wand, depress tab on side of elbow and twist wand free. (See Fig. 1)

The wand can be locked in an upright position by pushing it forward until the lock is engaged. (See Fig. 2). This locked position is convenient for storage and for lifting of the Powerhead. To release wand from the vertical locked position, gently place foot on Powerhead, grasp wand and pull back firmly.

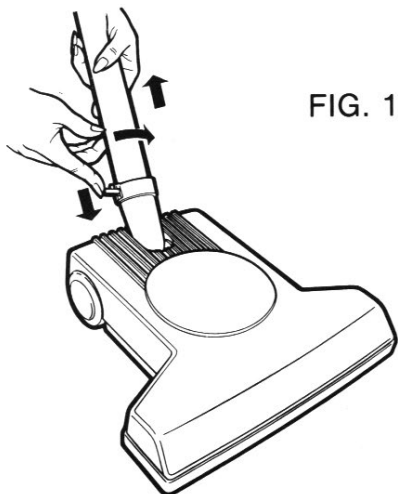


FIG. 1

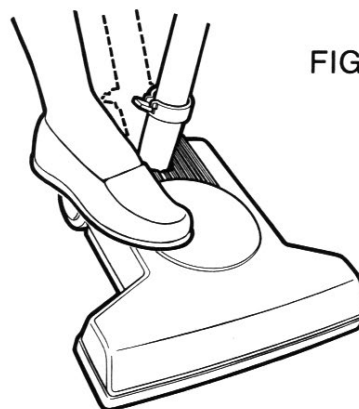


FIG. 2

### (B) OPERATING PROCEDURES

Your Turbine Powerhead has no on/off switch. Whenever it is attached to an operating vacuum system, it will be running. No adjustments to the tool are necessary for different types of carpeting.

To ensure maximum efficiency of the Turbine Powerhead, make sure that any filters, bags and cleaning hoses in your vacuum system are clean and free of blockage.

### (C) CLEARING INTAKE NOZZLE

If the Turbine or Intake nozzle become obstructed.

1. Turn off Vacuum System and disconnect the Powerhead from wand and hose.
2. Turn Powerhead over, and remove the clear belt cover, by first rotating the two latches counter clockwise until they align with the openings in the belt cover. Pull the belt cover away from the housing using the tab provided, then pull the belt cover out from under the baseplate. (see Fig. 3)
3. Remove debris from the intake or turbine. Rotate brush to ensure the system is clear. Ensure the special red coloured seal and mating surfaces are clean and free of any dirt particles, before re-assembling belt cover to unit.
4. To re-assemble the belt cover to the unit: insert the front of the belt cover under the base plate edge, and press the belt cover into the housing.
5. Check that a proper seal is made: **UNIT PERFORMANCE IS DEPENDENT ON A PROPER SEAL!**
6. Secure the belt cover in place by rotating the two latches clockwise to the locked position.

### (D) CLEANING BRUSH

Turn off vacuum system and disconnect Powerhead.

Threads, string, carpet fiber, fuzz, etc. occasionally may become wound around the beater brush. These should be removed by unwinding them by hand or carefully cutting with scissors or other cutting tool. Keeping the beater brush clean will maintain efficiency.

## **(E) REMOVING THE DRIVE BELT AND BRUSH**

**“It is recommended this procedure be performed by a Qualified Service Technician.”**

Should the drive belt or brush become clogged with debris or need replacing:

1. Turn off vacuum system and disconnect powerhead.
2. Remove belt cover as described in procedure C.
3. Remove the 3 screws securing the metal baseplate. (see Fig. 4)
4. Lift front of baseplate up from bumper, then pull baseplate free of unit.
5. Stubborn debris may now be easily removed from the brush area.
6. PLEASE NOTE: Correct brush and belt orientation; they must be re-installed correctly for proper function.
7. Slide the belt up off the end of the drive shaft.
8. Partially remove the bumper by lifting it free from the front and sides of the housing.
9. Lift the lower belt shroud, brush, belt and support assembly out of the housing, and remove the belt from the brush. Leave upper belt shroud installed in the housing, unless stubborn debris remains lodged below it.
10. (IF REPLACING BRUSH). Pull the right brush support (marked ‘R’) off the assembly and remove the brush from the shaft.
11. Slide replacement brush onto the shaft so the large recess at one end of the brush goes on first and fits over the 4 ribs on the shaft support.
12. Push the right shaft support (marked ‘R’) onto the shaft extending through the brush, and check that the brush spins freely when rotated.
13. Place the belt over one end, onto the brush.
14. Slide the brush/belt assembly back into the housing recesses so the supports seat properly into the housing. NOTE: The housing and supports are marked L and R and must be assembled accordingly. The ARROWS on the shaft supports must point toward the rear of the unit, when fitting a new belt. The supports can be rotated to point the arrows forward to increase belt tension after extensive use (typically several hundred hours of use).
15. Place the lower belt shroud into the housing, over top of the brush pulley, as shown in FIG. 4. Ensure that the top of the shroud cylindrical portion is flush with the upper housing screw boss.
16. Stretch the bumper around the housing, over the shaft supports and press the bumper into place.
17. Pull the belt gently up against the pulley teeth, and over the idler bearing. Twist the end of the belt 90° as illustrated on the lower housing and press the belt over the teeth of the drive shaft.

**NOTE: The brush will rotate in the wrong direction and belt damage may occur if the belt is twisted incorrectly.**

18. Tilt baseplate to the rear of brush area and insert the three tabs into the mating slots in the lower housing. Rotate the front of the base down so it seats into the groove in the bumper.
19. Replace the three screws, and tighten to secure the base.
20. Replace the belt cover as described in procedure ‘C’.

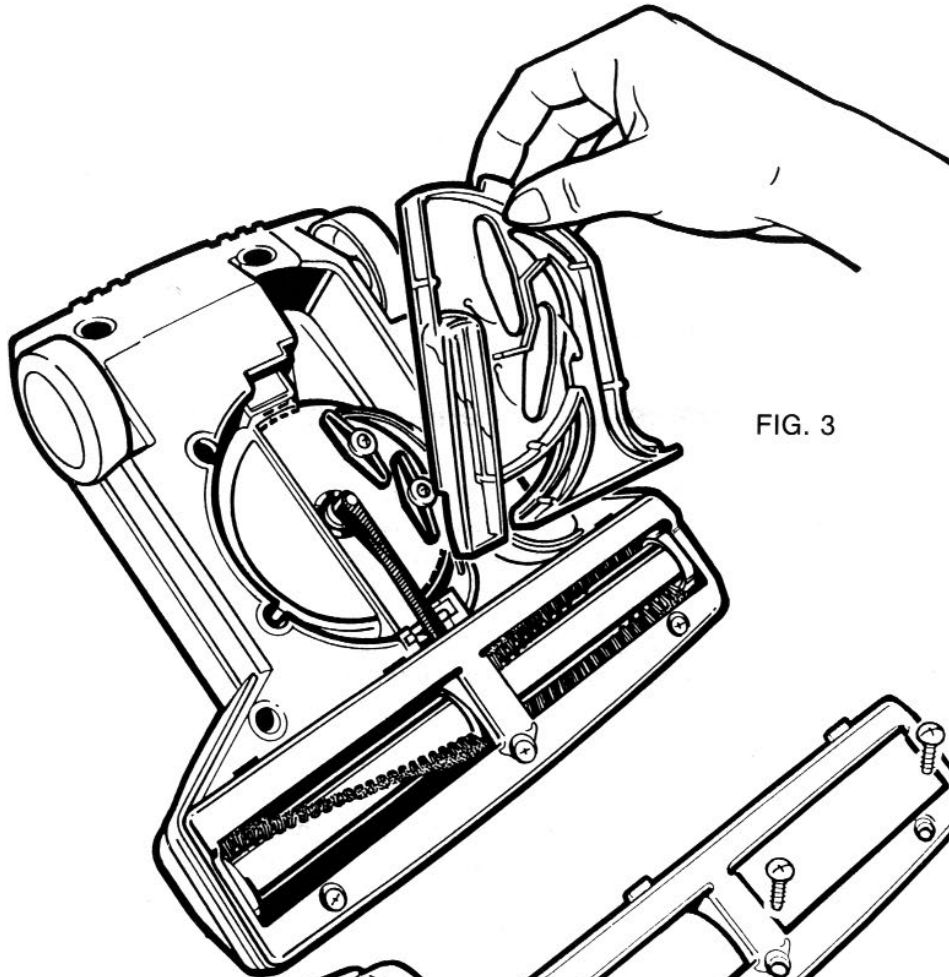


FIG. 3

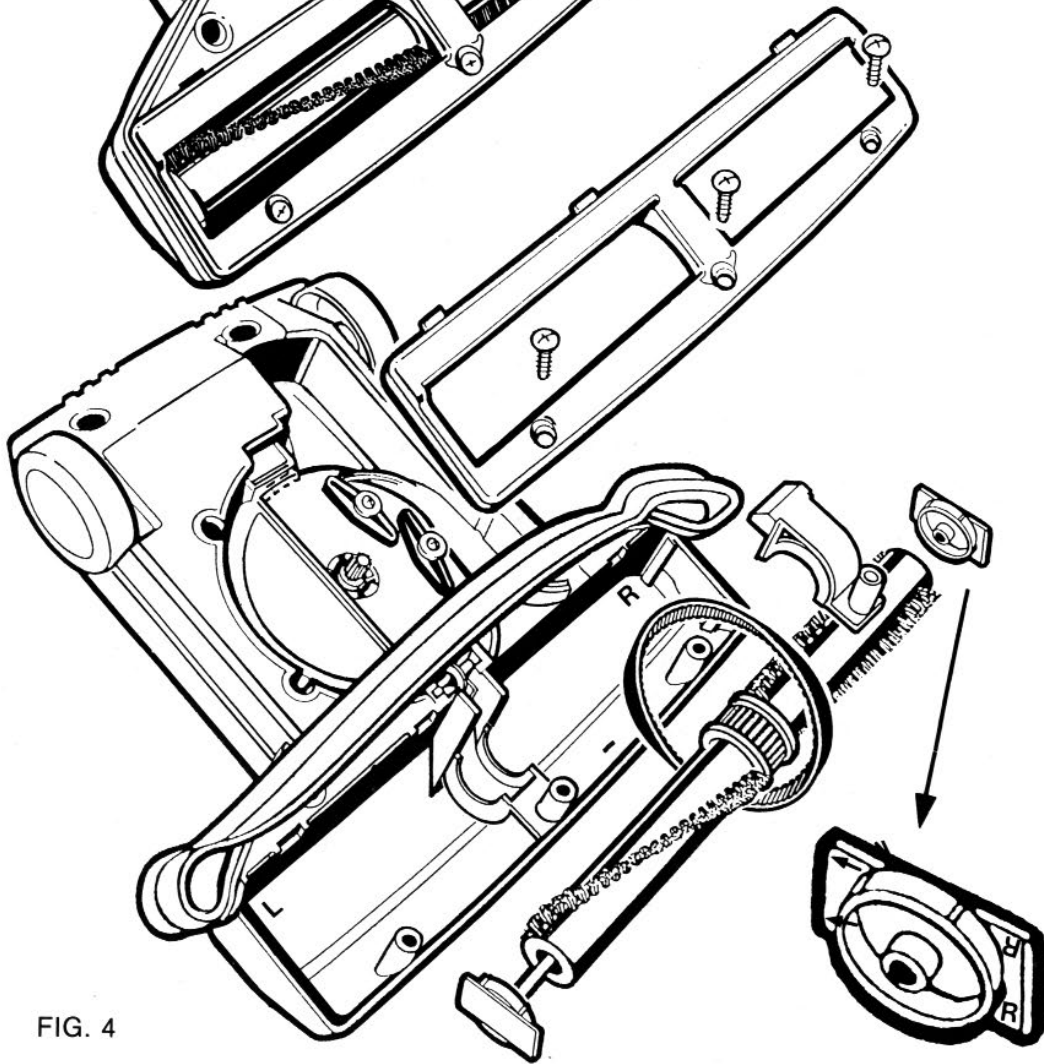


FIG. 4

## INSTRUCTIONS FOR HAND HELD TURBINE POWERHEAD

### (A) ATTACHING THE HAND HELD TURBINE POWERHEAD

To attach your metal wand and/or curved hose handle simply **twist** into hand brush neck until it fits snugly. (See Fig. 1). To detach wand or curved hose handle, simply hold neck of Hand Held Powerhead and pull apart with a twisting motion.

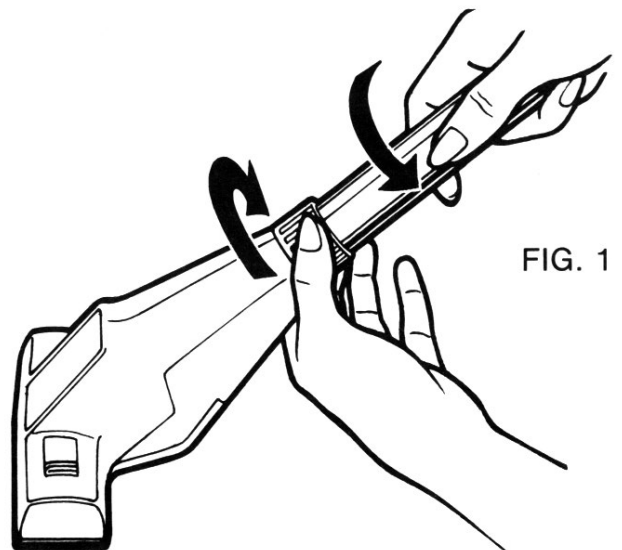


FIG. 1

### (B) OPERATING PROCEDURES

Your hand held Turbine Powerhead has no on/off switch. Whenever it is attached to an operating vacuum system, it will be running. There is only one adjustment for the Brush. A suction control valve is located on the top left side. Slide the control valve open to reduce suction for cleaning draperies. (See Fig. 2)

### (C) CLEANING BRUSH

Turn off vacuum system and disconnect Powerhead Brush.

Threads, string, carpet fiber, fuzz, etc. can wrap around the cleaning brush. These should be removed by unwinding them by hand or carefully cutting with scissors. (Note: Brown base plate should be removed to clean properly). Keeping the cleaning brush clean will maintain efficiency of the Powerhead Brush.

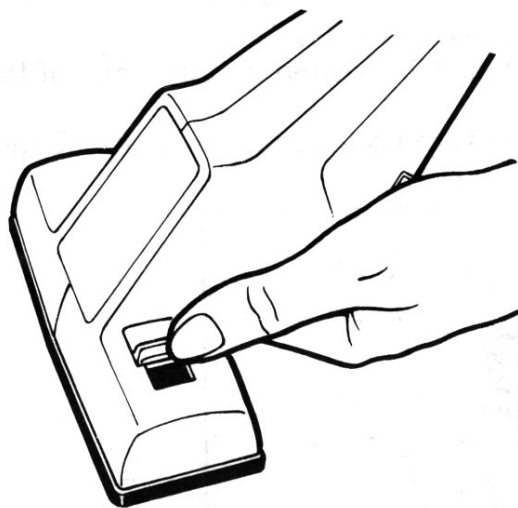


FIG. 2

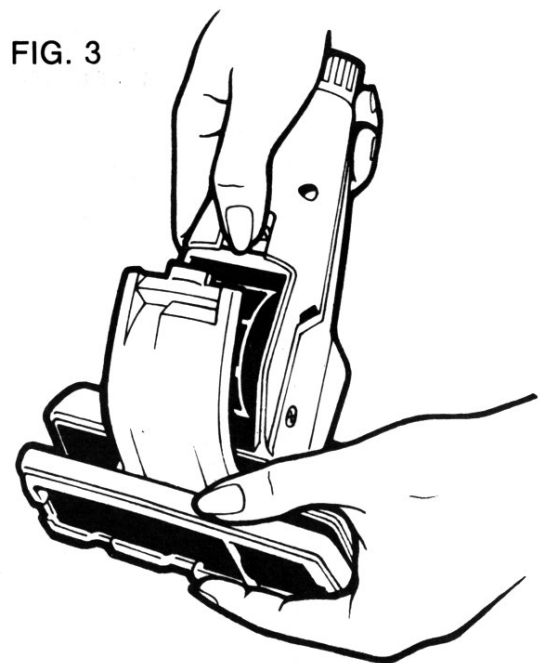


FIG. 3

### (D) CLEANING INTAKE NOZZLE

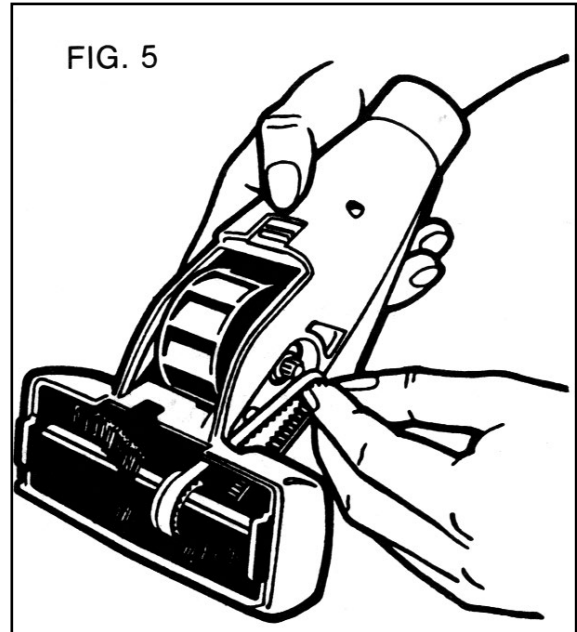
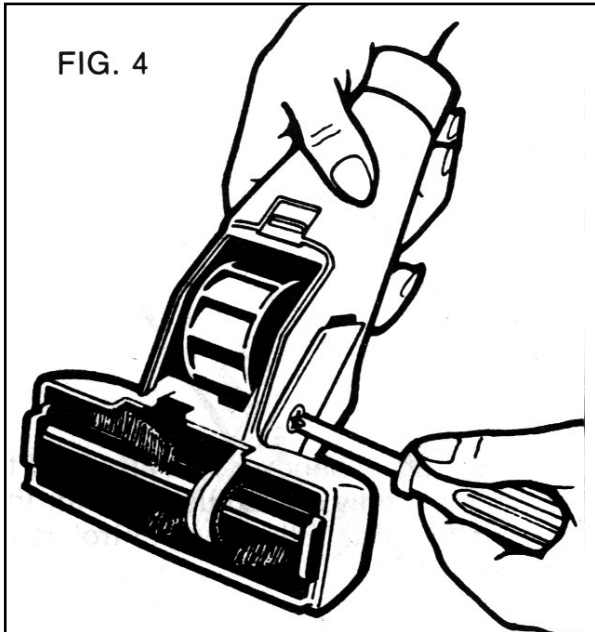
If turbine or intake nozzle become obstructed:

1. Turn off vacuum system and disconnect Powerhead.
2. Remove brown base plate by first sliding the base plate latch toward the back of the brush. Next, pull the rear of the plate away from the housing and slide forward to disengage front locking tabs. (See Fig. 3)
3. Remove debris from intake port and/or turbine.
4. Reassemble by inserting the tabs on the front of the base plate into the slots in the base housing, then secure the back of the brown base plate with the latch.

## (E) BELT REPLACEMENT

Remove brown base plate and belt cover (right side of Powerhead) by removing screw. (See Fig. 4). Next, remove belt from pulley (may help to turn cleaning brush backwards slightly.) (See Fig. 5).

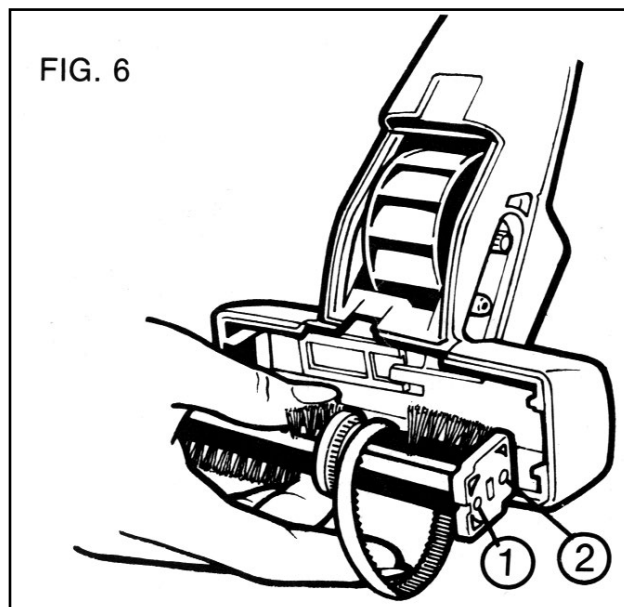
Pull belt and brush assembly out and replace belt. Before replacing base plate and belt cover, make sure a "2" is showing at both ends of brush assembly (this number is stamped right on the bearing housing.) (See Fig. 6). Make sure also that no brush bristles are caught between the belt and brush roll gear. If brush bristles are worn, see BRUSH ROLLER ADJUSTMENT.



## (F) BRUSH ROLLER ADJUSTMENT

To adjust brush to compensate for bristle wear, remove brown base plate. Next, remove the belt cover by removing the screw. Finally, remove the belt from the pulley (it may help to turn cleaning brush backwards slightly). Pull the brush assembly out. Turn brush assembly over and reinsert so that number "1" is showing at both ends. (See Fig. 6).

**Note:** The brush roll comes from the factory with a "2" showing at both ends of the brush roll assembly. Before replacing base plate and belt cover, make sure no brush bristles are caught between the belt and the brush roller gear.



# TROUBLE SHOOTING TURBINE POWERHEADS

## CAUTION

Moving parts – disconnect from vacuum system before servicing unit

## PROBLEMS

- |                               |                         |
|-------------------------------|-------------------------|
| 1. TURBINE RUNS SLOW          | 3. BRUSH BOUNCES IN USE |
| 2. BRUSH MAKES KNOCKING NOISE | 4. BRUSH HARD TO PUSH   |

## POWERHEAD INSTRUCTION MANUAL

	<b>FLOOR BRUSH</b>	<b>HAND BRUSH</b>
1. CHECK BOTTOM PLATE	PAGE/PAR. 3/(E)	3/(C)(D)
2. CHECK BELT AND TENSION	PAGE/PAR. 3/(E)	3/(E)
3. CHECK BEATER BRUSH	PAGE/PAR. 3/(E)	4/(F)
4. CHECK ALL INTAKE AREAS FOR OBSTRUCTIONS AND BRUSH ROTATION DIRECTION	PAGE/PAR. 2/(C)	3/(D)

## CENTRAL VACUUM CLEANER SYSTEMS

### NON-BAG MODEL

1. CHECK DIRT RECEPTACLE
2. CHECK GUARD SCREEN
3. CHECK ALL FILTER SCREENS
4. CHECK HOSES FOR AIR LEAKS  
OR OBSTRUCTIONS

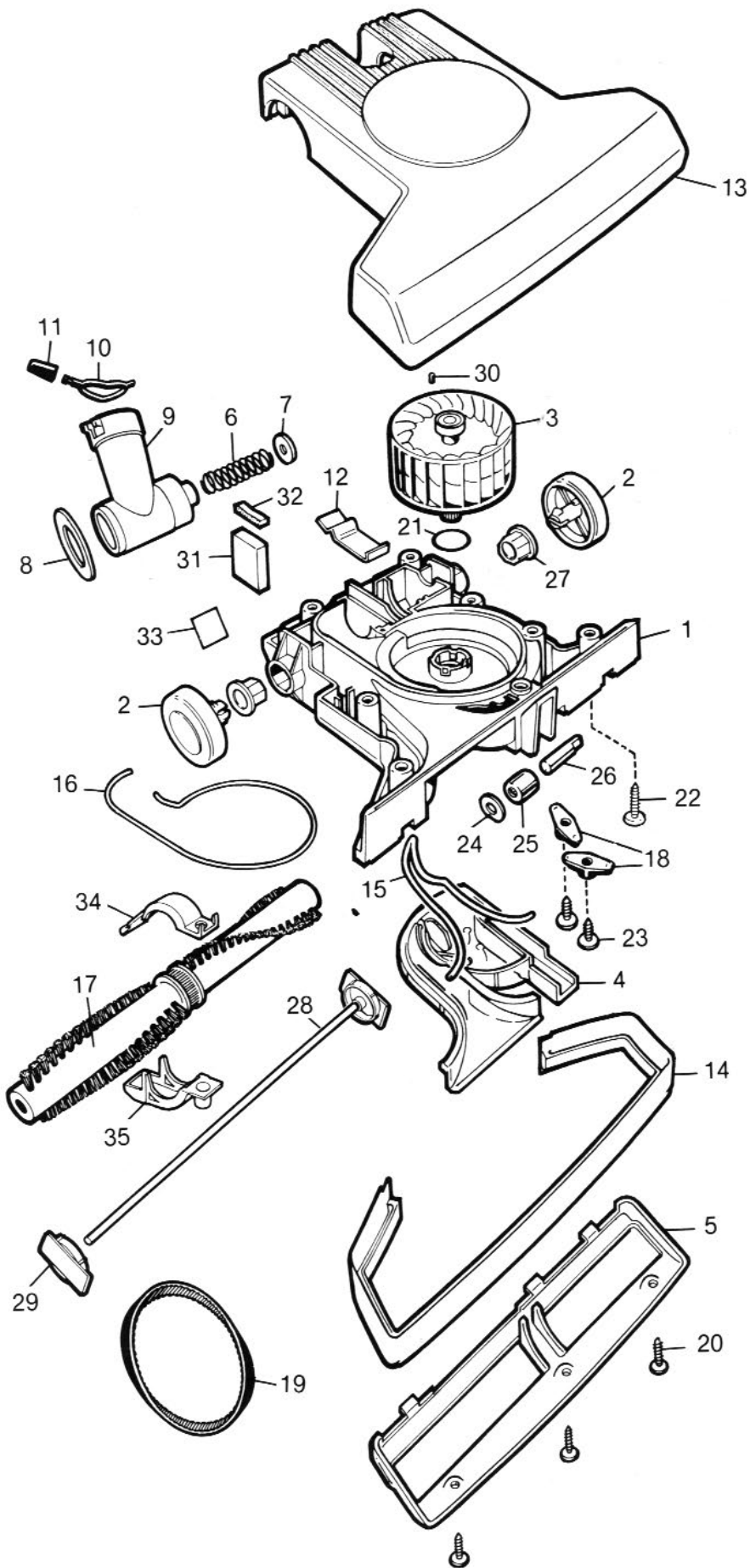
### BAG MODEL

1. CHECK PAPER BAG
2. CHECK CLOTH BAG
3. CHECK AIR FILTERS
4. CHECK HOSES FOR AIR  
LEAKS OR OBSTRUCTIONS

## READ OPERATION MANUAL PROCEDURES

<b>Turbine Powerhead</b>		<b>Part Number</b>		
<b>Item</b>	<b>Part Description</b>	<b>7160</b>	<b>7161</b>	<b>T210</b>
1	Lower Housing	7211-01	SAME	7211-02
2	Wheel (2)	7212-01	SAME	7212-02
3	SA Turbine	7213	SAME	SAME
4	Belt Cover	7214	SAME	SAME
5	Base Plate	7215	SAME	SAME
6	Compr. Spring	5958	SAME	SAME
7	Washer	5974	SAME	SAME
8	Washer, Elbow Seal	5971	SAME	SAME
9	Elbow	7216-01	SAME	7216-02
10	Spring, Wand	5966	SAME	SAME
11	Retainer/Cap	7217-01	SAME	7217-02
12	Spring, Latch	7218	SAME	SAME
13	SA Tophousing	7219	7220	7221
14	Bumper	7222-01	SAME	7222-02
15	Seal (Large)	7223	SAME	SAME
16	Seal (Small)	7224	SAME	SAME
17	SA Brush	7330	SAME	SAME
18	T Latch (2)	7226	SAME	SAME
19	Belt	7227	SAME	SAME
20	Screw Base (3)	7228	SAME	SAME
21	O-Ring	7229	SAME	SAME
22	Screw (9)	5944	SAME	SAME
23	Screw, T Latch (2)	7230	SAME	SAME
24	D-Washer	7231	SAME	SAME
25	Bearing, Needle	7234	SAME	SAME
26	Idler Shaft	7233	SAME	SAME
27	Sleeve, Flange (2)	7232	SAME	SAME
28	SA Shaft Supt	7235	SAME	SAME
29	RT Shaft Supt	7236	SAME	SAME
30	Rubber Plug	7237	SAME	SAME
31	Ballast WT (2)	7238	SAME	SAME
32	Foam Pad (2)	7239	SAME	SAME
33	Caution Label	7240	SAME	SAME
34	Shroud, Belt, Upper	7331	SAME	SAME
35	Shroud, Belt, Lower	7332	SAME	SAME
	Instr. Manual	HVS-825	SAME	SAME





## HAND HELD TURBINE POWERHEAD

Item No.	Description	
1	Swivel	6321-1
2	Sub Assembly Turbine and Shaft	6322
3	Belt	6323
4	Swivel Seal (2 req.)	6324
5	Latch Spring	6325
6	Latch	6326-1
7	Housing, Assy. Half	6780-1
8	Label	7054
9	Slide Valve	6328-1
10	Sub Assy. Housing, Half/Belt Side	6757-1
11	Belt Cover	6330-1
12	Screw 6-19x.750 (3 req.)	6331
13	Brush Assembly	6332
14	Base Plate with Basket and Bumper	6755
15	Basket (Avail. only with #6755)	6334
16	Bumper	6335
17	Screw 6-19x1.2 (1 req.)	6336
18	Caution Label	6304
19	Screw 6-19x.500 (1 req.)	6339
20	Rubber Plug	6340

