

AMERICAN METER COMPANY

INSTALLATION INSTRUCTIONS

HANDHOLE PLATE GEAR ASSEMBLY KITS

FOR AL-800, AL-1000, AL-1400, AL-2300, AL5000 METERS

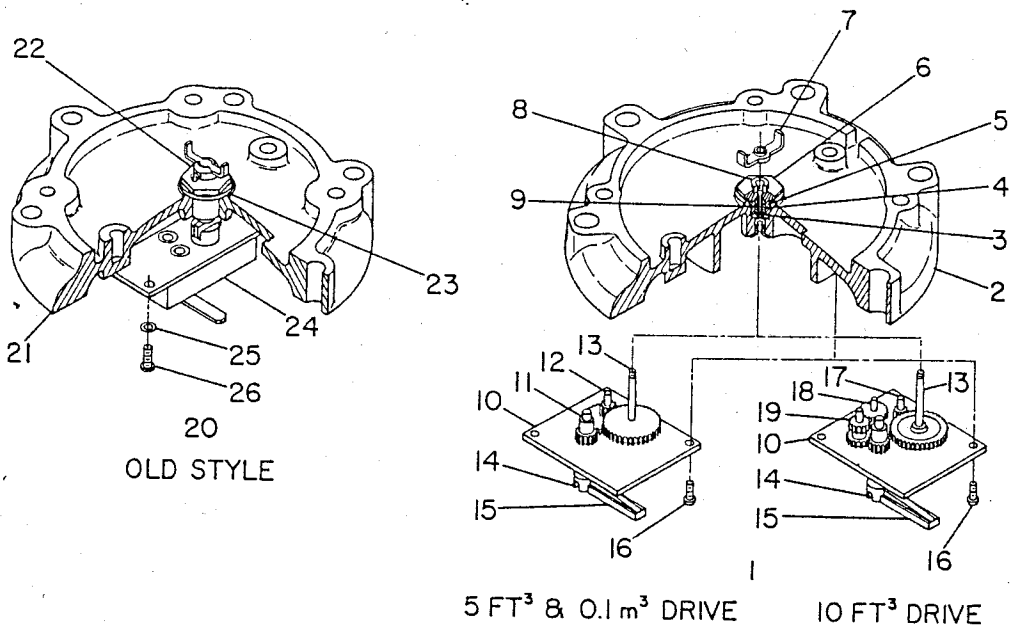
1. First remove the index, or other instrumentation, on top of the handhole plate by removing the (4) index base plate screws. Retain the (4) screws.
2. Remove the handhole plate from the meter by removing the (6) 3/8-16 hex head screws. Retain the (6) screws.
3. Turn the handhole plate over and remove the (2) #4-40 screws from the lower plate assembly. Retain the plate assembly and (2) screws. For AL 2300 and AL-5000 meters remove (3) #8-32 screws.
4. Next remove the Spirol Pin that holds the Initial Pinion to the Driving Bar. Discard the old Initial Pinion and spiral pin, but retain the Driving Bar.
5. Install the new Initial Pinion in the lower plate and secure the Driving Bar with the new Spirol Pin.
6. Next remove all intermediate pinions, (1) for 5 FT³ drive, (3) for 10 FT³ drive, from the Handhole Plate and discard.
7. The wriggler is threaded with loctite to the Output Pinion Shaft. To remove the Output Pinion Shaft, grasp the circumference of the gear with a vicegrip or channel locks, to prevent it from turning, and pry the wriggler loose with a small screw driver in the clockwise direction (left-handed thread).
8. Remove the wriggler from the shaft and retain.
9. Pull out the Output Pinion Shaft and discard.
10. Unscrew the brass cap from the Handhole Plate and retain cap.
11. Next, remove the bushing and retain.
12. Remove and discard the old teflon packing, ferrule and spring.
13. Fill the axle box cavity with grease using AMD6664.
14. Install the new Output Pinion Shaft into the Handhole Plate.

15. Assemble the ferrule onto the spring and the teflon packing into the ferrule.
16. Push the packing-ferrule-spring assembly, spring end first, onto the Output Shaft as far as it will go.
17. Reinstall the bushing and brass cap.
18. Add a drop of loctite to the Output Shaft and reinstall the wriggler.
19. Install all new intermediate pinions into the bushing, as shown in reference drawings, pages 3-6.
20. Fill Pinion and gear teeth with grease.
21. Install the new Initial Pinion into the stainless steel bushing. Align the lower plate so the clearance holes are over the threaded holes. Fasten the lower plate assembly to the Handhole Plate with the (2) #4-40 screws, or (3) #8-32 screws (for AL-2300 and AL-5000).
22. Check Handhole Plate Assembly for binds by turning the Driving Bar.
23. Examine the cork gasket for damage and replace if necessary.
24. Place Handhole Plate back onto top cover with the stamped label facing at the front of the meter.
25. Tighten the (6) 3/8-16 hex head screws securely.
26. Install the Index Box or Correcting Instrument on top of the handhole plate.

* Installation of Handhole Plate Gear Assembly is now complete.

Handhole Plate Assemblies

Integral Handhole Plate Gearing Assembly Repair Kits			
Meter		Integral HHP PN	Kit PN
AL800/1000	5 FT ³	54871G001	54871K008
AL800/1000	10 FT ³	54871G003	54871K009
AL800/1000	0.1m ³	54871G006	54871K010

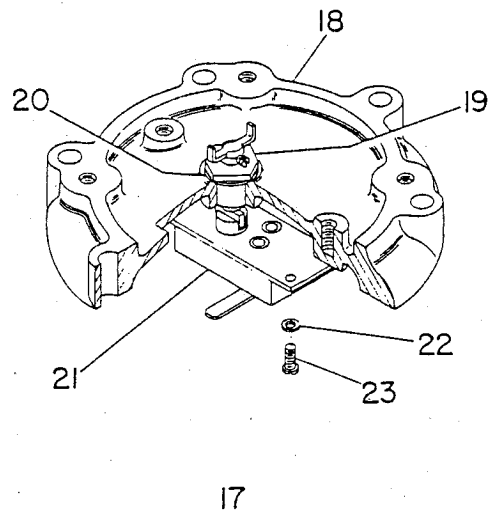
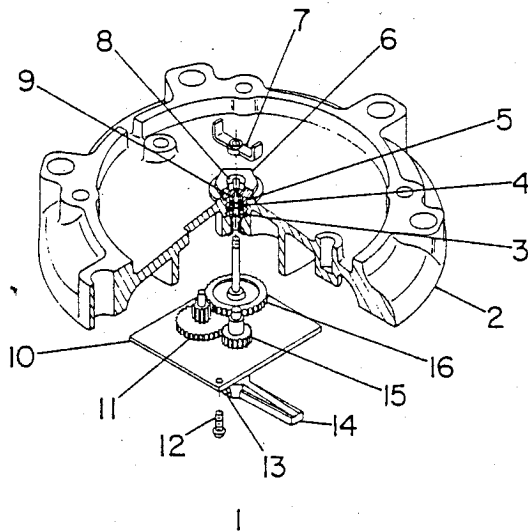


- 1 - Handle Plate Assembly (items 2-19)
- 2 - Handhole Plate
- 3 - Spring
- 4 - Ferrule
- 5 - Washer
- 6 - Cap
- 7 - Wriggler
- 8 - Bushing
- 9 - Packing
- 10 - Lower Assembly Plate
- 11 - Initial Pinion
- 12 - Spacer
- 13 - Output Pinion

- 13 - Output Pinion
- 14 - Spiral Pin
- 15 - Driving Bar
- 16 - Round Head Screw
- 17 - Pinion
- 18 - Pinion
- 19 - Pinion
- 20 - Handhole Plate Assy.
- 21 - Handhole Plate
- 22 - Axle Box Assembly
- 23 - Axle Box Washer
- 24 - Undergear Assembly
- 25 - Washer
- 26 - Round Head Screw

Handhole Plate Assemblies

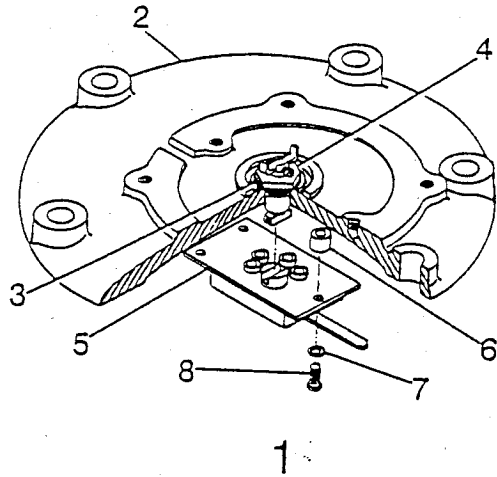
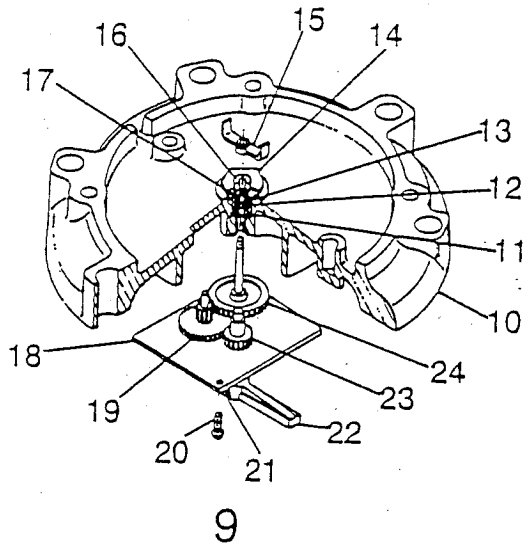
Integral Handhole Plate Gearing Assembly Repair Kits		
	Integral HHP PN	Kit PN
5 FT ³	54871G008	54871K011
10 FT ³	54871G009	54871K012
0.1m ³	54871G011	54871K013



- 1 - Handle Plate Assembly (items 2-16)
- 2 - Handhole Plate
- 3 - Spring
- 4 - Ferrule
- 5 - Washer
- 6 - Cap
- 7 - Wiggler
- 8 - Bushing
- 9 - Packing
- 10 - Lower Plate Assembly
- 11 - Intermediate Pinion
- 12 - Round Head Screw

- 13 - Spiral Pin
- 14 - Driving Bar
- 15 - Initial Pinion
- 16 - Output Shaft
- 17 - Handhole Plate Assembly
- 18 - Handhole Plate
- 19 - Box
- 20 - Washer
- 21 - Undergear Assembly
- 22 - Washer
- 23 - Round Head Screw

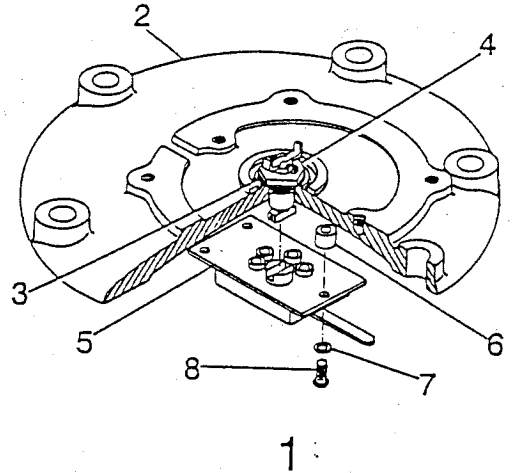
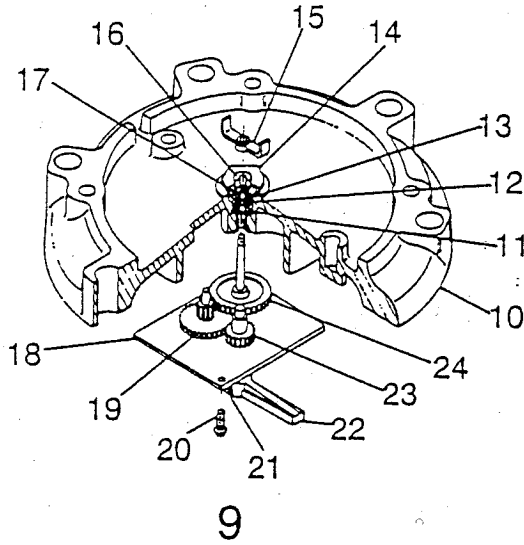
Handhole Plate Assemblies



- 1 - Handhole Plate Assembly (items 2-8)
 Old Style
- 2 - Handhole Plate
- 3 - Axle Box Washer
- 4 - Axle Box Assembly
- 5 - Undergear Assembly
- 6 - Spacer
- 7 - Washer
- 8 - Round Head Screw
- 9 - New Integral Handhole Plate assembly (9-24)
- 10 - Handhole plate
- 11 - Spring
- 12 - Ferrule
- 13 - Washer
- 14 - Cap
- 15 - Wriggler
- 16 - Bushing
- 17 - Teflon Packing
- 18 - Lower Plate Assembly
- 19 - Intermediate Pinion
- 20 - Round Head Screw
- 21 - Spirol Pin
- 22 - Driving Bar
- 23 - Initial Pinion
- 24 - Output Shaft

Integral Handhole Plate Gearing Assembly Repair Kits		
	Integral HHP PN	Kit PN
10 FT ³	54871G025	54871K014
100 FT ³	54871G026	54871K015
0.1m ³	54871G027	54871K016
1.0m ³	54871G028	54871K017

Handhole Plate Assemblies



- 1 - Handhole Plate Assembly (items 2-8)
Old Style
- 2 - Handhole Plate
- 3 - Axle Box Washer
- 4 - Axle Box Assembly
- 5 - Undergear Assembly
- 6 - Spacer
- 7 - Washer
- 8 - Round Head Screw
- 9 - New Integral Handhole Plate assembly (9-24)
- 10 - Handhole plate
- 11 - Spring
- 12 - Ferrule
- 13 - Washer
- 14 - Cap
- 15 - Wiggler
- 16 - Bushing
- 17 - Teflon Packing
- 18 - Lower Plate Assembly
- 19 - Intermediate Pinion
- 20 - Round Head Screw
- 21 - Spirol Pin
- 22 - Driving Bar
- 23 - Initial Pinion
- 24 - Output Shaft

Integral Handhole Plate Gearing Assembly Repair Kits		
	Integral HHP PN	Kit PN
10 FT ³	54871G029	54871K018
100 FT ³	54871G030	54871K019
1.0m ³	54871G031	54871K020

Caution

"As a knowledgeable user of American Meter's products, we are sure that you are aware that parts in the Company's meters and regulators contain or are coated with heavy metals such as cadmium, zinc, lead and chromium. Obviously, therefore, repair or refurbishment of this equipment should take into account the presence of these materials and should comply with all state and federal requirements concerning worker protection, proper disposal and safety, including protection against exposure to dust and fumes."