16-A DRIVES
REPLACEMENT PARTS AND PROCEDURES

1. GENERAL

1.01 This section covers the information necessary for ordering parts to be used in the maintenance of 16-A drives. It also covers approved procedures for replacing these parts.

1.02 Part 2 of this section covers the piece part numbers and corresponding names of the parts which it is practicable to replace in the field in the maintenance of these drives. No attempt should be made to replace parts not designated. Part 2 also contains explanatory figures showing the different parts. This information is called "Piece Part Data".

1.03 Part 3 of this section covers the approved procedures for the replacement of the parts covered in Part 2. This information is called "Replacement Procedures".

---

2. PIECE PART DATA

2.01 The figures included in this part show the various piece parts in their proper relation to the other parts of the drive and the piece part numbers of the various parts together with their corresponding names.

2.02 When ordering piece parts for replacement purposes both the number and the name of the piece parts should be given. For example: Gear Housing per Detail 18277 of ES-212251.

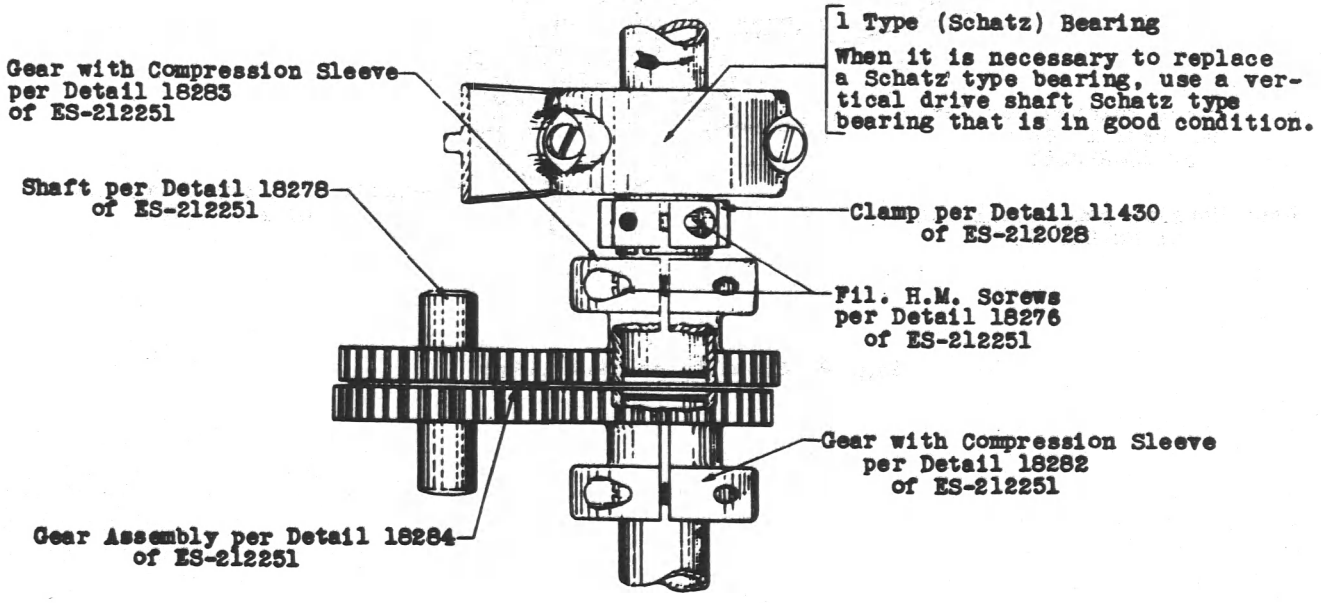

Fig. 1 - Gear Assembly of 16-A Drives

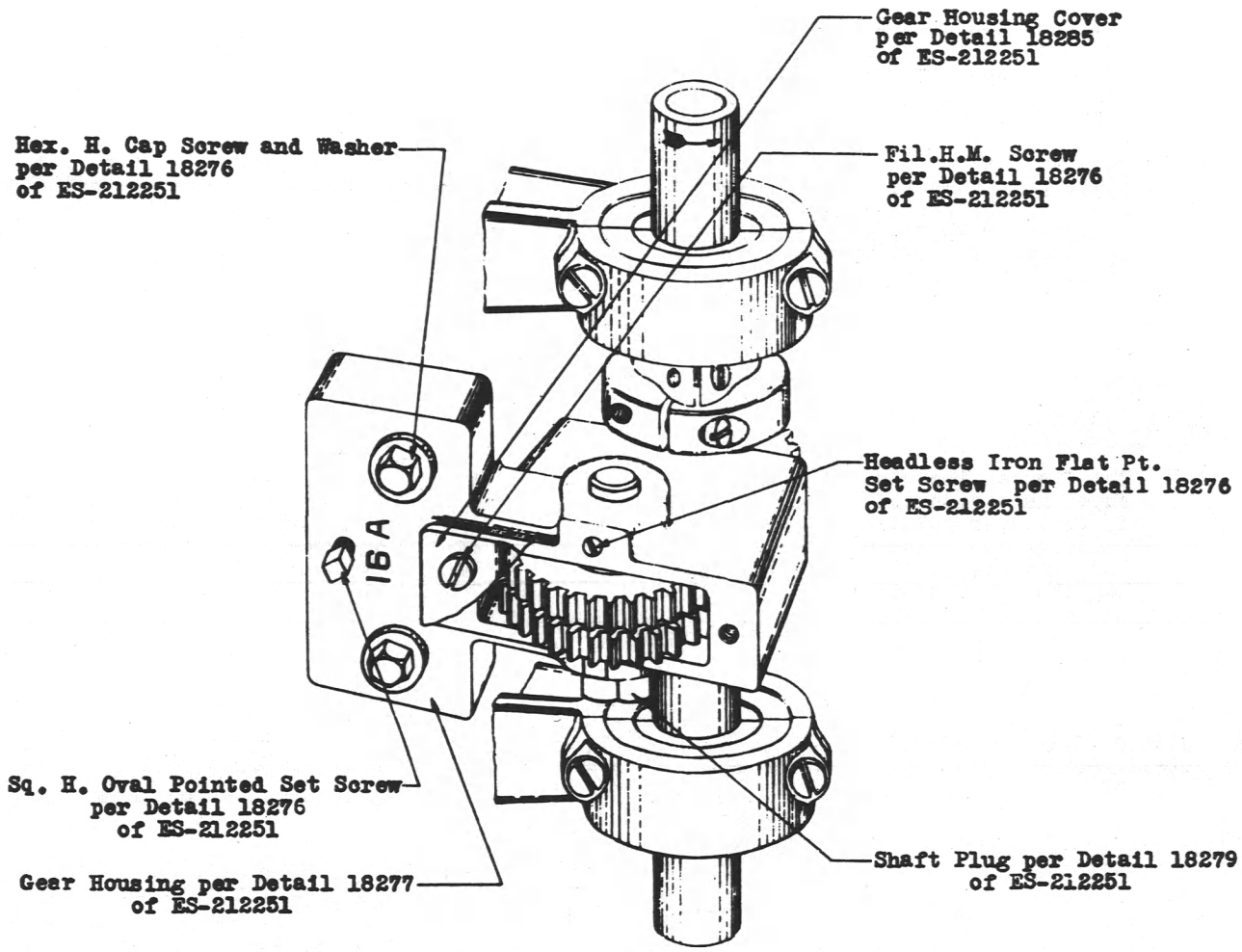

Fig. 2 Assembly of 16-A Drive

3. REPLACEMENT PROCEDURES

TOOLS

Code No.	Description
47	Wrench - 1/2" Hex. Socket
305	Wrench - 7/16" Hex. Socket Offset
-	Bell System Regular Screw-Driver 4" per A.T.&T. Company Drawing 46-X-34
-	Bell System Cabinet Screw-Driver 3-1/2" per A. T.& T. Company Drawing 46-X-40

3.001 Before stopping a drive to make any of the replacements specified herein, ascertain whether it is necessary to make any of the associated circuits busy. Circuits which are so affected should be made busy in the approved manner.

3.002 After making any replacements of parts, the drive shall be checked and, where necessary, readjusted to meet the requirements specified in Section 159-735-701 covering "Vertical Drive Shafts and Associated Apparatus" and Section 159-705-701 covering "16-A Drives".

3.003 Ir extensive repairs on the 16-A drive are necessary, it may be desirable to replace the drive with a 16-C drive.

3.01 VERTICAL DRIVE SHAFT GEARS

M-1 To replace a vertical drive shaft gear, loosen the associated compression sleeve clamping screws with the 3-1/2" cabinet screw-driver.

M-2 In some cases, it will be possible to raise the slow speed vertical drive shaft enough to slip either the low speed or high speed gears off the shaft, in this case it will be necessary to loosen the clamp screws with the 3-1/2" cabinet screw-driver. In other cases it will be necessary to remove the drive shaft from the frame in order to remove either gear. Remove the defective gear from the rear of the frame and replace it with the new gear. Then securely tighten the compression sleeve clamping screw.

3.02 CLAMP

M-1 To replace the clamp that holds the Schatz type bearing sleeve in place, loosen and remove the clamp screws with a 3-1/2" cabinet screw-driver. Remove the upper vertical shaft gear as outlined in procedure 3.01 and at the same time slip the clamp from the upper vertical drive shaft. Place and secure the new clamp on the drive shaft and then replace and securely tighten the vertical shaft gear.

3.03 GEARS IN HOUSING GEAR HOUSING

M-1 Gears in Housing To replace a gear that is mounted in the gear housing, remove the gear housing cover screws with the 4" regular screw-driver, and remove the cover. Loosen and remove the bracket mounting screws with the No. 305 hexagonal socket wrench and remove the gear housing and the intermediate gears from the frame.

M-2 With the gear housing removed from the frame, remove the shaft plug with the No. 47 hexagonal socket wrench. Loosen the shaft set screw with the 3-1/2" cabinet screw-driver and remove the shaft from the housing. The intermediate gears may now be removed and if either gear is defective, replace the entire gear assembly.

M-3 Mount the gears in the housing, securely tighten the shaft plug, insert the shaft in the housing and securely tighten the set screw. Remount the housing on the frame and check the alignment of the gears.

M-4 Lubricate any gears that may have been replaced and remount the gear housing cover.

M-5 Gear Housing If the gear housing is defective, remove it from the frame, remove the gears and install them in the new housing as outlined above.

3.04 1 TYPE (SCHATZ) BEARING

M-1 Follow the procedures specified in Section 159-735-801 for other 1 type bearings when replacing a 1 Type (Schatz) Bearing.