



ENSTROM HELICOPTER CORPORATION

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SERVICE DIRECTIVE BULLETIN

Service Directive Bulletin No. 0061

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DATE: November 12, 1982

SUBJECT: Clutch Engagement Overcenter Lock Warning Light Installation

MODELS: F-28A, 280, F-28C, 280C, F-28F and 280F Helicopters

EFFECTIVITY: As noted in text

REFERENCE: Enstrom Service Information Letter Number 0080A, the latest revision.

To insure the operator that the clutch overcenter engaging mechanism is locked and overcenter, a warning light indicator must be installed, per this Service Directive Bulletin. This warning light system will allow the operator to observe at the time of engagement that the mechanism is properly locked overcenter prior to each flight.

NOTE: This system only indicates proper overcentering of the lock mechanism. It does not indicate proper belt tension or rigging of the belt drive system.

The clutch overcenter lock indicator system, Kit number 28-19035-3, must be installed at the owner's earliest convenience or before the next 50-hour inspection.

Installation can be made as follows, reference Figure 1. Change pivot hardware as noted on the aft side of assembly by removing the 28-13266-1 bolt and 28-13267-1 spacer and replacing them with a 28-13266-15 bolt and the 28-13267-11 spacer. Locate and drill two .171" diameter holes for mounting the switch bracket on the aft plate of overcenter mechanism. Install switch bracket assembly 28-19035-5 with two AN 525-8R6 screws and associated hardware as noted to the aft plate, reference Figure 1.

Reference Figure 2, remove instrument console shroud. Locate and punch a .640 diameter hole for warning light mounting in panel.

Install warning light (MS25331-6) into panel, install panel wiring per Figure 2, and attach placard 28-19037-11 as indicated. Attach terminal on wire number 62-2A to existing Buss at CB12 terminal #1 hot side. Attach terminal on ground wires 62-4 and 62-3A to terminal #12 on (T2) existing ground terminal at panel. Route wires number 62-1B and 62-3A through bottom cabin bay and pylon area as noted in Figure 3, and secure with cable ties as indicated.

Reference Figure 1, connect wire number 62-1B to existing wire wrist lock on switch wire number 62-1A. Connect wire number 62-3A to existing wire wrist lock on wire number 62-3B. Slide plastic tubing over wire and wrist lock connectors. Secure with cable ties. Wiring should be checked for security with cable ties as required.

Prior to adjusting the actuator switch position, the clutch actuator mechanism rigging should be checked per Enstrom Service Instruction Letter Number 0080A.

After the rigging check, the actuator switch bracket should be positioned to have it break contact as the pivot arm contacts the mechanism side plates. The clutch engagement mechanism should be cycled several times to assure correct switch position adjustment. With the warning light system functioning correctly, the red warning light should be on at all times when the clutch is disengaged and the master switch is on; it will only be extinguished when the clutch is locked overcenter.

Warning light system kits 28-19035-3 are available through your nearest Enstrom Service Center or Enstrom Helicopter Service Department. The kit consists of the following items:

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Quantity Required</u>
1	803-1710-0331-5	Light Test	1 ea
2	3028 3/32	Tubing Shrink Heat	12 inches
3	3003	Tubing Temflex 3/8 ID Clear	6 inches
4	28-19037-11	Placard Clutch Disengage	1 ea
5	28-19035-8	Wire Assembly	1 ea
6	28-19035-7	Wire Assembly	1 ea
7	28-19035-6	Wire Assembly	1 ea
8	28-19035-5	Switch Assembly	1 ea
9	28-13267-11	Spacer	1 ea
10	28-13266-15	Bolt	1 ea
11	1815	Lamp	1 ea
12	SST1M-MP	Cable Ties	30 ea
13	AN960-416L	Washer Plain	2 ea
14	AN364-428A	Nut Lock	1 ea
15	AN525-8R6	Screw	2 ea
16	AN340-832	Nut	2 ea
17	AN960-8L	Washer	2 ea
18	AN935-8	Lockwasher	2 ea

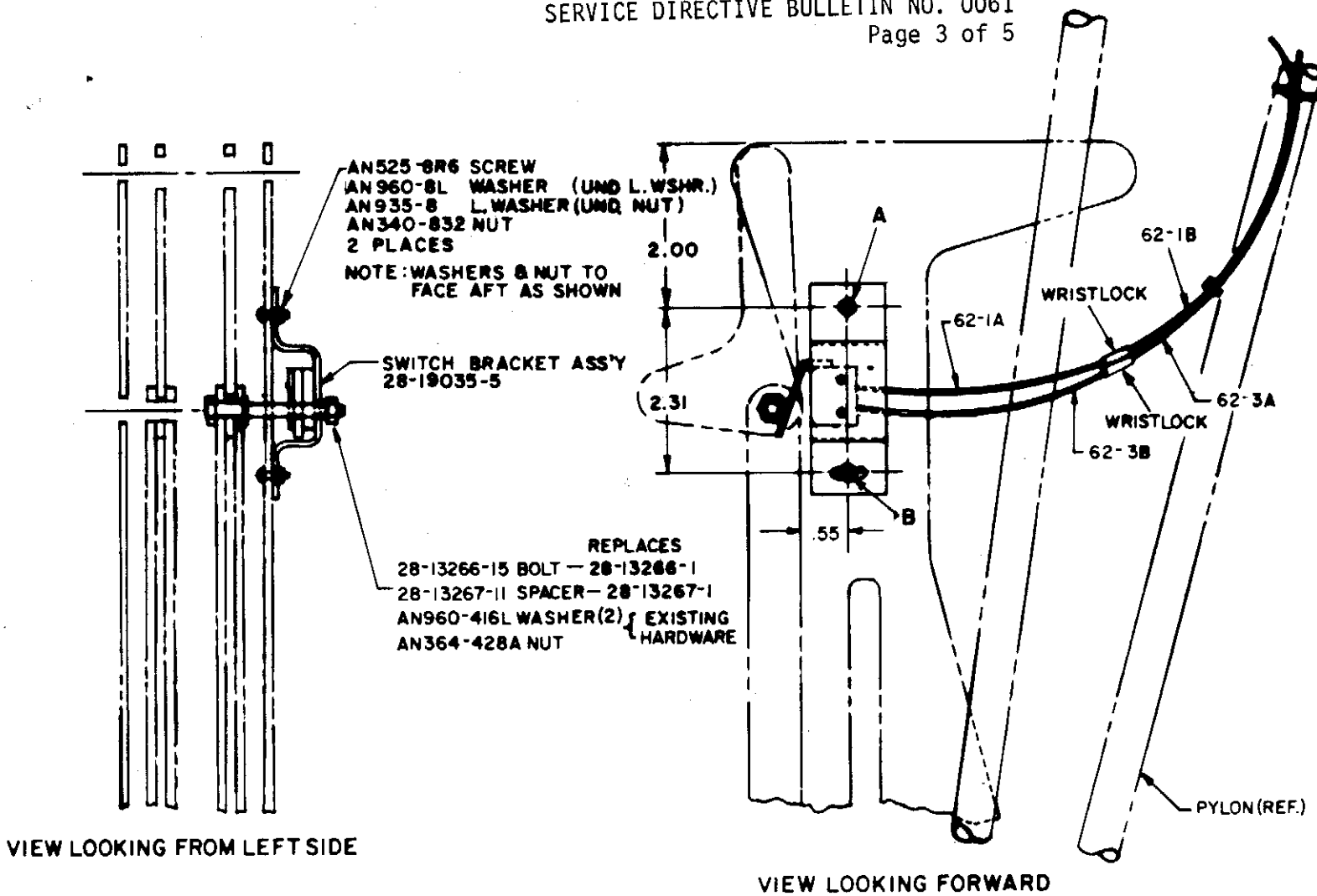


FIGURE 1

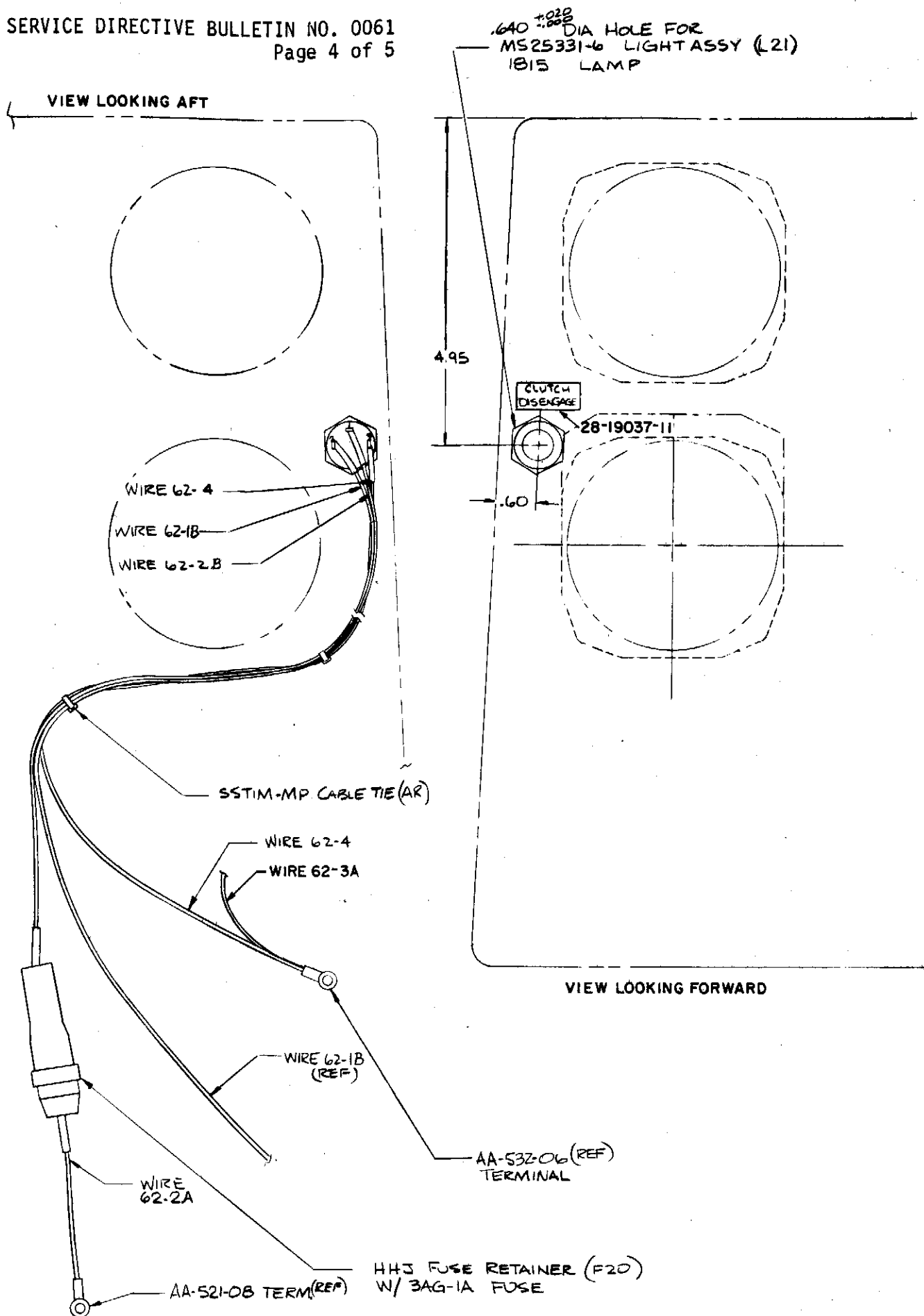


FIGURE 2

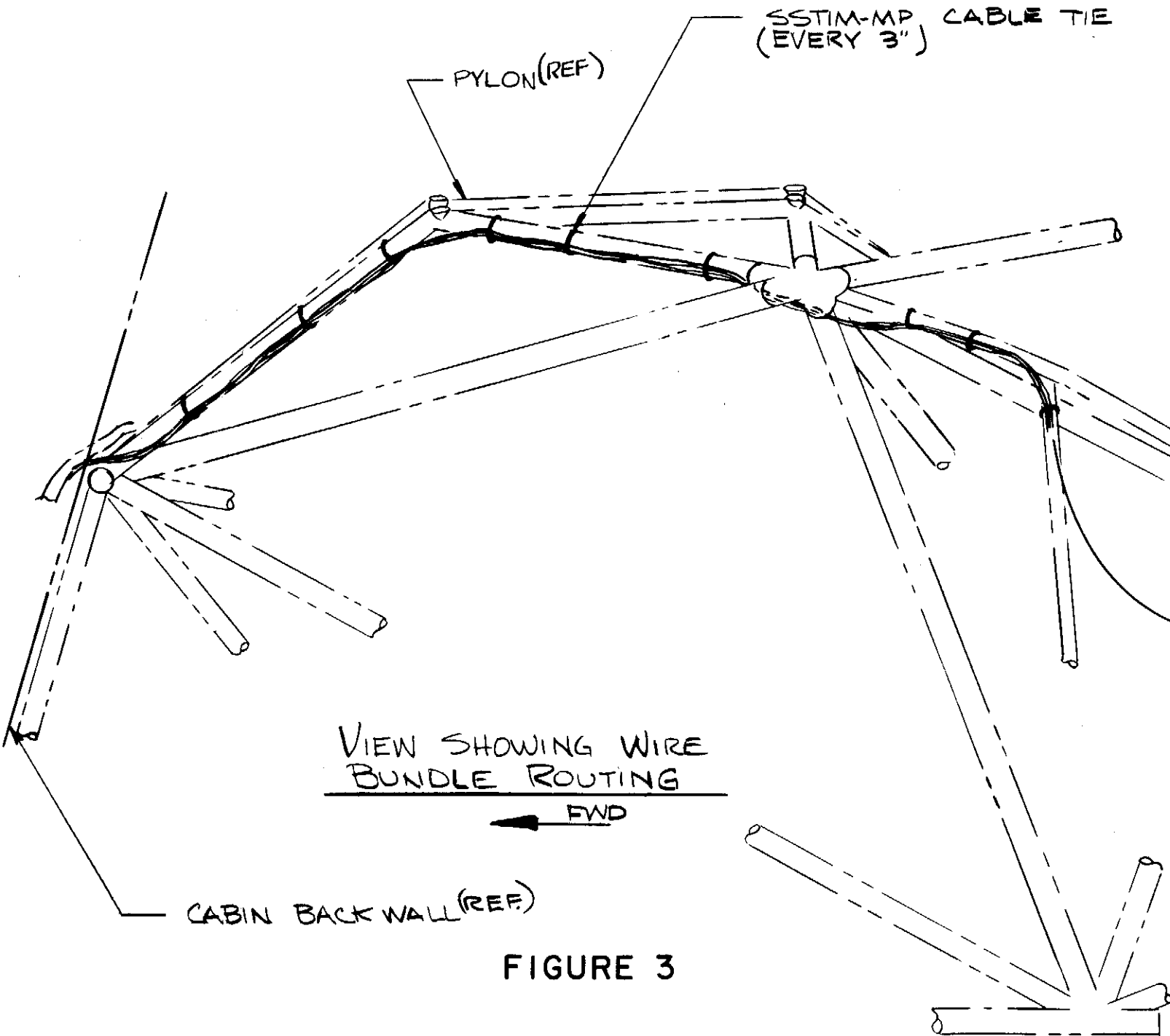


FIGURE 3