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- D-Level CMM's (Approved repair depots only)
- Service Bulletins
- Service Information Letters

GOODRICH
GOODRICH CORPORATION
2727 E. Imperial Highway, Brea, CA 92821

RESCUE HOIST SYSTEM

Part Numbers

44301-1-1 (EC-135) 44301-1-4 (EC-135)
44301-1-2 (EC-145) 44301-1-5 (EC-145)
44301-1-3 (EC-135) 44301-1-10 (EC-135)
44301-1-11 (EC-145) 44301-1-12 (EC-145)
44301-1-14 (EC-135)

Including Rescue Hoist Assembly Part Numbers

44301-10-2 (EC-135)
44301-10-4 (EC-145)
44301-10-5 (EC-135)
44301-10-6 (EC-135)
44301-10-7 (EC-145)
44301-10-10 (EC-135)
44301-10-11 (EC-135)

COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

1ST LEVEL (ORGANIZATIONAL LEVEL)

GOODRICH
SERVICE BULLETIN
Equipment/Furnishings - Change Connector Bracket - Product Improvement

1. **Planning Information**

A. Effectivity

This Service Bulletin is applicable to Rescue Hoists, part numbers 44301-10-8 and 44301-10-9. These Rescue Hoist Assemblies are manufactured by Goodrich Corporation, Sensors and Integrated Systems, Diamond Bar, California.

Table 1. Applicable Serial Numbers

| 44301-10-8 | | 44301-10-9 | |
|------------|-------|------------|-------|
| 00379 | 00357 | 00414 | 00448 |
| 00380 | 00358 | 00415 | 00453 |
| 00393 | 00359 | 00416 | 00454 |
| 00394 | 00360 | 00417 | 00455 |
| 00409 | 00371 | 00418 | 00456 |
| 00425 | 00372 | 00420 | 00457 |
| 00426 | 00374 | 00435 | 00460 |
| 00436 | 00375 | 00438 | 00461 |
| 00437 | 00407 | 00439 | 00462 |
| 00449 | 00408 | 00446 | 00463 |
| 00473 | 00413 | 00447 | 00472 |

B. Reason

To improve harness routing when the rescue hoist installed on boom assembly, part number 44307-500-1 for the EC-135, or part number 44307-500 for the EC-145.

C. Description

This service bulletin provides the instructions necessary to remove the cable cut harness connector bracket assembly, part number 42325-418 and install part number 42325-419.

D. Compliance

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Sensors & Integrated Systems
2727 E. Imperial Highway
Brea, CA 92821

SERVICE INFORMATION LETTER

Equipment/Furnishings - Cable Care and Conditioning

1. **Cable Construction**

The rescue hoist cables used on Goodrich hoist systems are designed and manufactured in accordance with MIL-DTL-83140. This standard defines a stainless-steel cable of type 19x7 construction, meaning that there are 19 strands of 7 wires which are wrapped in a specific way. Each strand consists of one center-wire with six wires wrapped around it. The cable itself is made with one center-strand (the core) with six strands wrapped around this strand (the inner layer) and twelve strands (the outer layer) which are then finally wrapped around the inner strands. The inner and outer layers are wrapped in opposite directions, one clockwise and the other counter-clockwise, forming a "non-rotating" (resists rotation under load) assembly. The finished cable contains 19 strands, each with seven wires, for a total of 133 wires. Because of this, the cable is a somewhat flexible construction, which can be deformed many ways during hoist operation.

2. **Lubrication**

During operation, reeling out and in of the cable, the inner layer moves along the length of the cable relative to the outer layer. When the cable is manufactured, it is lubricated with the dark-brown, honey-like oil, and requires scheduled re-lubrication during its entire life. To reduce friction between the layers, the cable and the rollers of the traction drive are lubricated with oil (Mil-L-23699, Mil-L-7808 or other equivalent lubricant), which is applied into and onto the cable. This re-lubrication is especially important after a cable wash and rinse (sea water application requirements) and during the 100 cycles/3 operational hours/1 month (whichever occurs first) check.

In warmer operating conditions, some of the lubricant may drain out of the cable and leak out of the bottom of the hoist assembly. This is to be considered a normal behavior and should not be misinterpreted as a leaking gearbox. This is a normal condition and does not affect cable function.

3. **Birdcaging**

The Goodrich hoist is designed to maintain tension between the cable drum and the pay-out point at all times to ensure proper layering of the cable on the drum. Due to this, when the cable is reeled in without a load, the outer layer of the cable is massaged towards the hook end of the cable. During multiple no-/ low-load cycles, the outer strands will accumulate at the hook end of the cable creating loose wire strands. If not caught early, this may lead to birdcage damage to the cable, requiring replacement of the cable.

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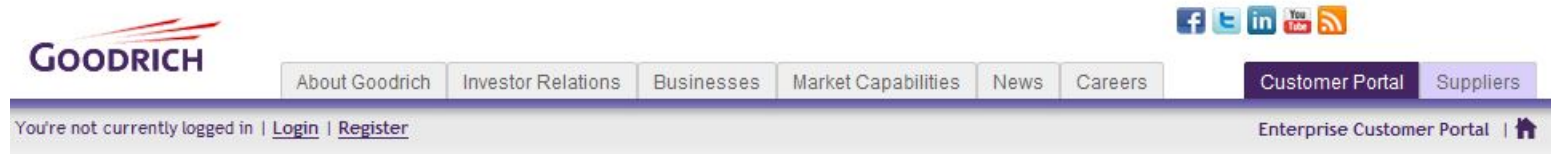
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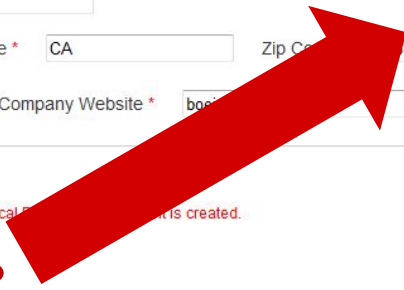
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| Document | |
|--|--|
| 25-00-38-1 Component Maintenance Manual (Sensors and Integrated Systems - CA) Price: \$0.00 Revision: Revision Date: 7/15/2009 <i>Rescue Hoist Assembly</i> | Details Edit |
| 25-60-06-3 Component Maintenance Manual (Sensors and Integrated Systems - CA) Price: \$500.00 Revision: 1 Revision Date: 4/9/2012 | Details Edit |
| 44316-12-101-01 Service Bulletin (Sensors and Integrated Systems - CA) Revision: 1 Revision Date: 3/26/2008 <i>Rescue Hoist Mod</i> | Details Edit |
| 44316-12-101-02 Service Bulletin (Sensors and Integrated Systems - CA) Revision: Revision Date: <i>Replace</i> | Details Edit |
| 44316-12-101-03 Service Bulletin (Sensors and Integrated Systems - CA) Revision: Revision Date: <i>Brake Assembly-dual Locking</i> | Details Edit |
| 44316-12-101-04 Service Bulletin (Sensors and Integrated Systems - CA) Revision: Revision Date: <i>Replace Fairing Mounting Screws</i> | Details Edit |
| 44316-12-101-06 Service Bulletin (Sensors and Integrated Systems - CA) Revision: Revision Date: <i>Hook Assembly</i> | Details Edit |

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Component Maintenance Manual: 25-00-38-1

| Document Information | |
|--|-------------------------------------|
| Business Unit: | Sensors and Integrated Systems - CA |
| Type: | Component Maintenance Manual |
| Name: | 25-00-38-1 |
| Subscription Length: | 12 Months |
| ATA Number: | 25-00-38-1 |
| Revision: | |
| Revision Date: | 7/15/2009 |
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Part Numbers

44316-12-101

Service Documents

The documents listed in the table below are applicable to Component Maintenance Manual 25-00-38-1 :

| Type | Name | Revision | Revision Date | |
|----------------------------|---------------|----------|---------------|-------------------------|
| Service Information Letter | 3HRL4CABLE-03 | | | Details |
| Service Information Letter | SIL-2012-01 | 1 | 3/26/2012 | Details |
| Service Information Letter | SIL-2012-02 | 1 | 4/9/2012 | Details |

Incorporated Documents

The documents listed in the table below have already been incorporated in Component Maintenance Manual 25-00-38-1 :

| Type | Name | Revision | Revision Date |
|------|------|----------|---------------|
|------|------|----------|---------------|

Note: Not all documents provide a list of incorporated documents.

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|--|--|
| 25-00-30-1 Component Maintenance Manual (Sensors and Integrated Systems - CA) Price: \$0.00 Revision: 5 Revision Date: 12/9/2011 <i>Rescue Hoist System</i> | Details Edit |

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