

Models 2001-130, Equinox, and 508-128 Sirens



Clutch Replacement Service Manual

Contents

Safety Messages	3
General Description	5
Introduction	5
Qualifications	5
Required Equipment.....	5
Clutch Replacement Kit Parts.....	6
Disassembling the Siren	7
Reassembling the Siren	8
Getting Service	13

Figures

Figure 1 Spring scale	5
Figure 2 Rubbing alcohol	6
Figure 3 Parts in replacement kit	6
Figure 4 Back of Model 2001-130 and Model 508-128	7
Figure 5 Collector ring access hole	7
Figure 6 Clutch band assembly	8
Figure 7 Clutch band assembly	8
Figure 8 Wire ties around four gauge wires	8
Figure 9 Aluminum tape	9
Figure 10 Placing aluminum tape on access hole	9
Figure 11 Drawing of Collector Ring and Clutch Band	10
Figure 12 Bolt and washer for clutch band	11
Figure 13 Diagram of clutch band assembly	11
Figure 14 Clutch band assembly	11
Figure 15 Attached clutch band	12
Figure 16 Spring scale attachment to siren	12
Figure 17 Back of sirens with covers	13
Figure 18 Template (not to scale)	14

Safety Messages

⚠ WARNING

It is important to follow all instructions shipped with this product. This device is to be installed by trained personnel who are thoroughly familiar with the country electric codes and will follow these guidelines as well as local codes.

Listed below are important safety instructions and precautions you should follow:

Important Notice

Federal Signal reserves the right to make changes to devices and specifications detailed in the manual at any time in order to improve reliability, function or design. The information in this manual has been carefully checked and is believed to be accurate; however, no responsibility is assumed for any inaccuracies.

Installation and Service

- Electrocutation or severe personal injury can occur when performing various installation and service functions such as making electrical connections, drilling holes, or lifting equipment. Therefore only experienced electricians should install this product in accordance with national, state and any other electrical codes having jurisdiction. Perform all work under the direction of the installation or service crew safety foreman.
- The sound output of sirens is capable of causing permanent hearing damage. To prevent excessive exposure, carefully plan siren placement, post warnings and restrict access to areas near the sirens. Sirens may be operated from remote control points. Whenever possible, disconnect all siren power including batteries before working near the siren.
- After installation or service, test the siren system to confirm that it is operating properly. Test the system regularly to confirm that it will be operational in an emergency.
- If future service personnel do not have these warnings and all other instructions shipped with the equipment to refer to, the siren system may not provide the intended audible warning and service personnel may be exposed to death, permanent hearing loss, or other bodily injury. File these instructions in a safe place and refer to them periodically. Give a copy of these instructions to new recruits and trainees. Also, give a copy to anyone who is going to service or repair the sirens.

Operation

Failure to understand the capabilities and limitations of your siren system could result in permanent hearing loss, other serious injuries or death to persons too close to the sirens when you activate them or to those you need to warn. Carefully read and thoroughly understand all safety notices in this manual and all operations-related-items in all instruction manuals shipped with equipment. Thoroughly discuss all contingency plans

Safety Messages

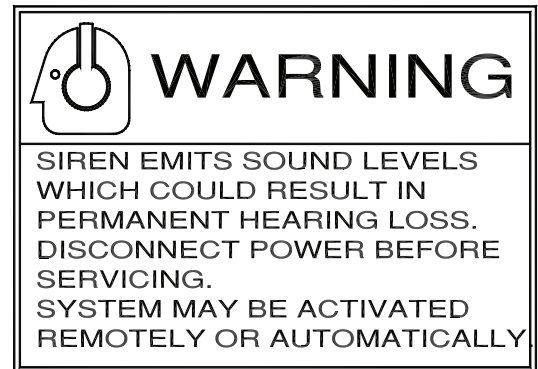
with those responsible for warning people in your community, company, or jurisdiction.

Read and understand the information contained in this manual before attempting to install or service the siren.

Pay careful attention to the following notices located on the equipment.



291184A



General Description

Introduction

This manual describes how to replace the clutch on the Models 2001-130, Equinox, and 508-128 sirens. This is done through disassembling the siren, replacing the clutch, and reassembling the siren. The pictures, shown in this manual, illustrate the Model 2001-130 and 508-128 Sirens. The Equinox Siren is very similar to the Model 2001-130 Siren.

Qualifications

You must be a properly trained technician or electrician in order to install this product.

Required Equipment

You need the following equipment.

Standard Technician's Tool Kit that includes the following:

- Two, 9/16 inch socket wrench
- 5/16 inch socket wrench
- Tape
- Spring scale (Figure 1)
- Rubbing alcohol (Figure 2)

Figure 1 Spring scale



General Description

Figure 2 Rubbing alcohol



Figure 3 Parts in replacement kit



Clutch Replacement Kit Parts

Quantity	Item Number	Description
2	150A146A	Wire Tie
1	R0000325	Alum. Tape
4	7011167A-08	Screw, Housing
4	7075A072	LK. Wash., Housing
2	8400B055	Drive Band
1	25500297	Service Manual, Clutch Replacement
1	8287A252	Carton
4	7000A346-08	Screw, Housing
2	7058A013	Locknut, 3/8-16 S.S.
1	7000A326-32	Screw, 3/8-16 x 2 in S.S.
1	7002A007-56	Screw, 3/8-16 x 3.5 in
1	8283A886C	Spring, Steel Die, 1.5 in x .75 in
2	7072A034	Flat Wash., 3/8 in Steel

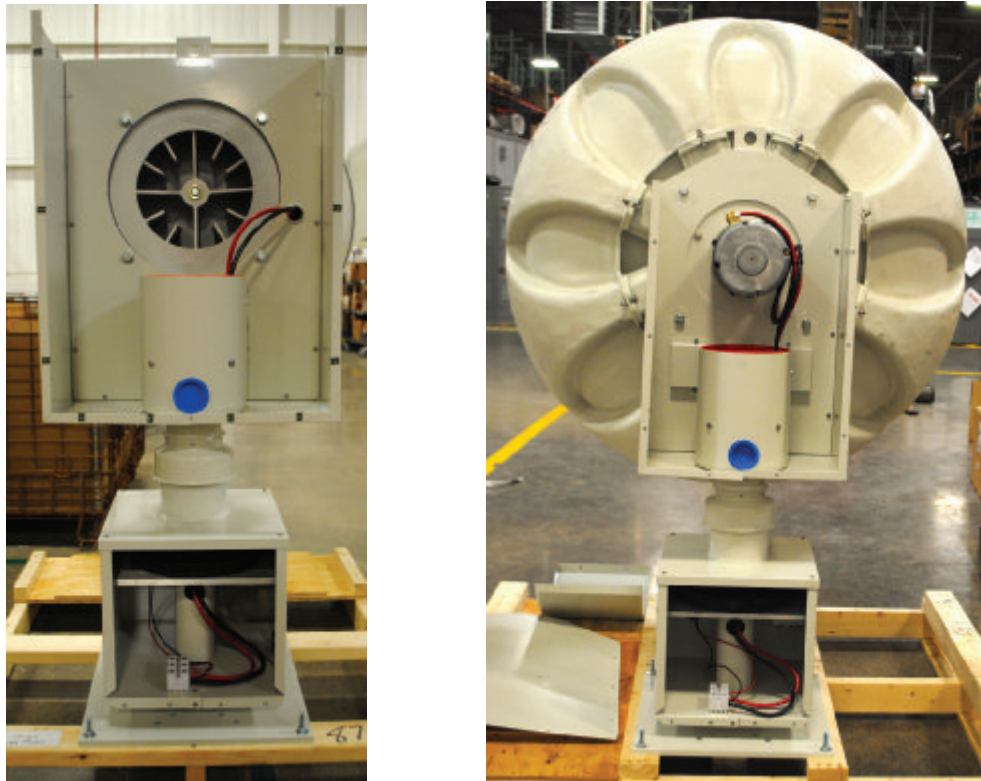
Disassembling the Siren

To disassemble the siren to replace the clutch, do the following:

1. Remove three access covers for the 2001-130 and Equinox and remove four covers for the Model 508-128. (Figure 4)

NOTE: Use a bag to collect screws.

Figure 4 Back of Model 2001-130 and Model 508-128



2. Remove blue plug from collector ring housing.
3. Remove collector ring assembly bolts and hold down hardware using 7/16 inch nut driver. Rotate siren to get access to the four 7/16 inch bolts holding the collector ring. (Figure 5)

Figure 5 Collector ring access hole



Reassembling the Siren

4. Remove the clutch band assembly by loosening the bolt with a 9/16 inch ratchet and wrench. Set aside where the assembly will not be damaged. (Figures 6 and 7)

Figure 6 Clutch band assembly

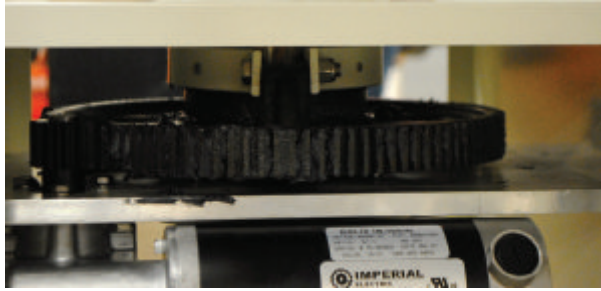


Figure 7 Clutch band assembly



Reassembling the Siren

To reassemble the siren, do the following:

5. Wrap nylon wire ties twice around each four gauge wires and place firmly against red cap. Remove excess wire ties. (Figure 8)

Figure 8 Wire ties around four gauge wires



6. Scrap off blue RTV from chopper tube access hole. Degrease surface with dry towel and alcohol, alcohol wipes, or degreaser.

7. Place aluminum tape over access hole. (Figures 9 and 10)

Figure 9 Aluminum tape

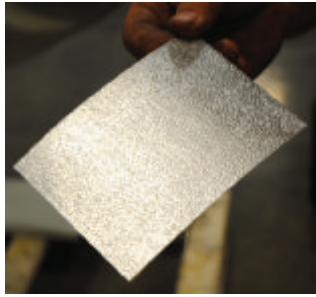
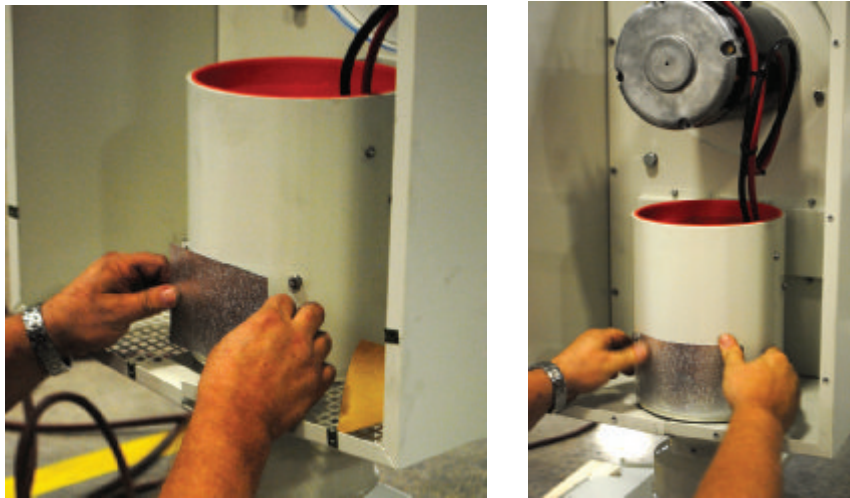


Figure 10 Placing aluminum tape on access hole



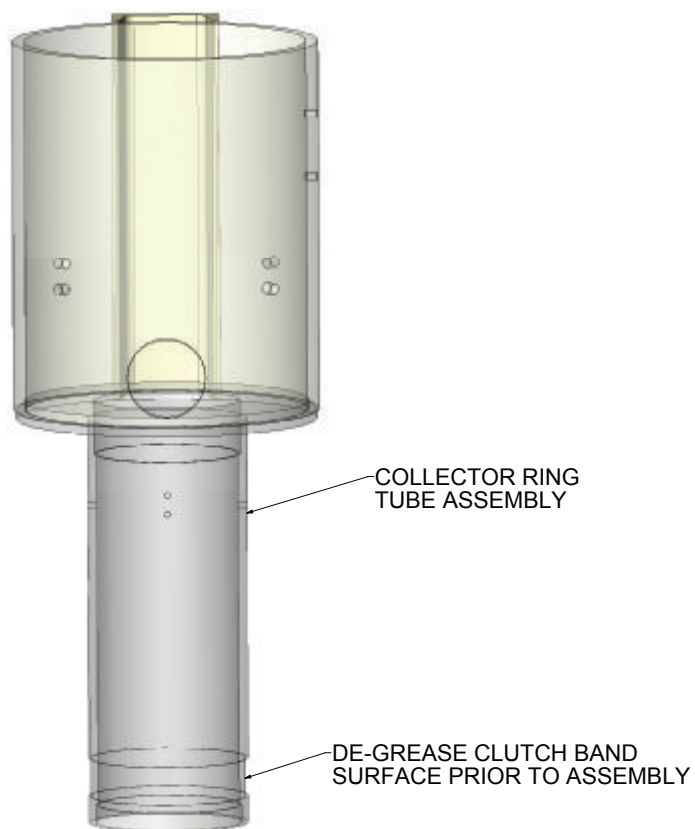
8. Rotate siren head to ensure no noticeable resistance to rotate siren.
9. Use Figure 18 as a guide to create a template. Use this template to cover the gear to eliminate gear grease from getting on clutch assembly.

10. Replace the clutch band assemblies with new supplied units. Degrease clutch band surface of pipe with rubbing alcohol. (Figure 11)

NOTICE

To achieve a 45 lb horn pull test, both the clutch band pads and the tube surface must be grease free.

Figure 11 Drawing of Collector Ring and Clutch Band



11. Attach clutch band. One side uses a bolt and lock nut, the other side uses a bolt, washer, spring, washer and lock nut. See Figure 13 for installation of clutch. (Figures 12, 13, 14, and 15)

Figure 12 Bolt and washer for clutch band



Figure 13 Diagram of clutch band assembly

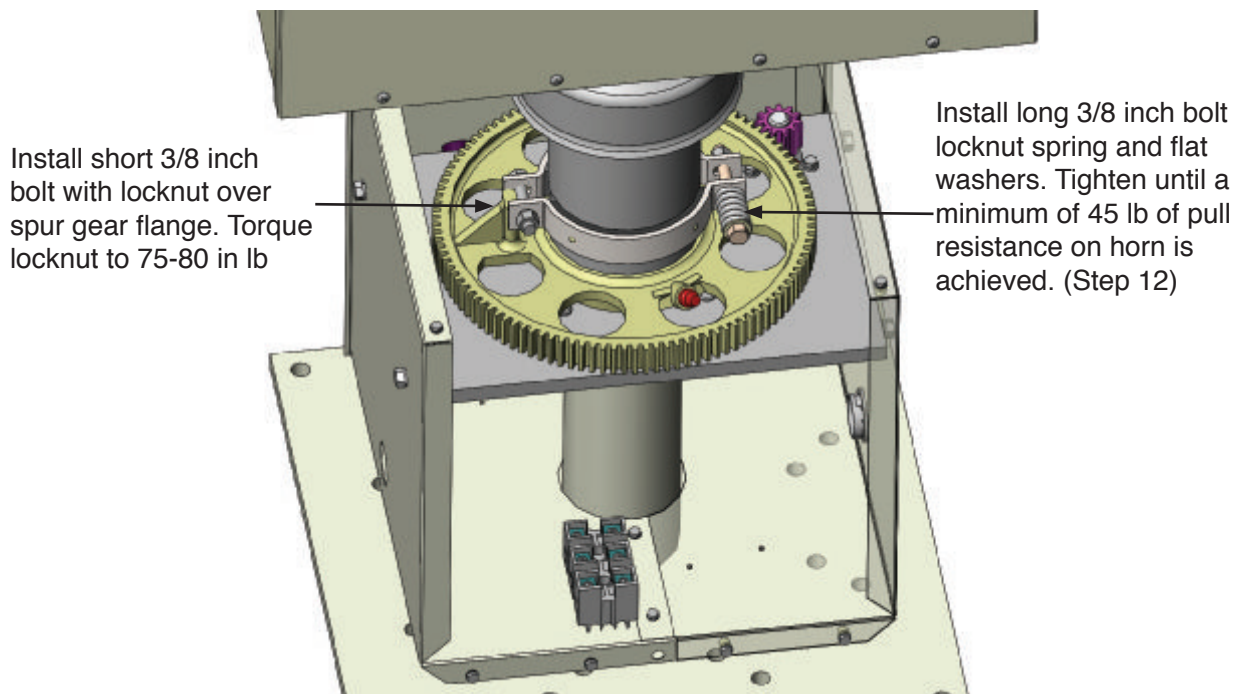
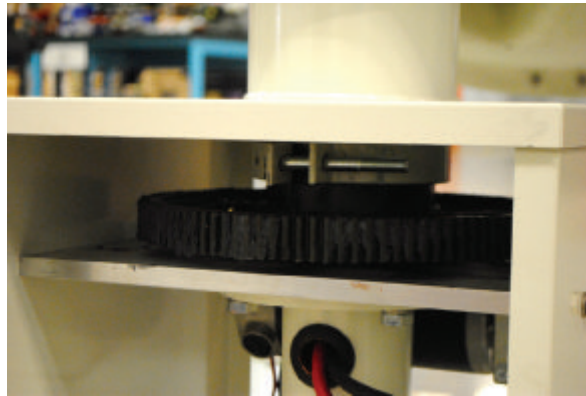


Figure 14 Clutch band assembly



Figure 15 Attached clutch band



12. Attach the hook of the spring scale to edge of horn as it is rotated. Tighten spring bolt until spring scale mounted to front of horn measures a minimum of 45 lb of pull resistance. (Figures 16)

NOTE: Pull the spring scale perpendicular to the siren head. Do not pull at an angle.

Figure 16 Spring scale attachment to siren



13. Replace all covers using hardware. (Figure 17)

Figure 17 Back of sirens with covers

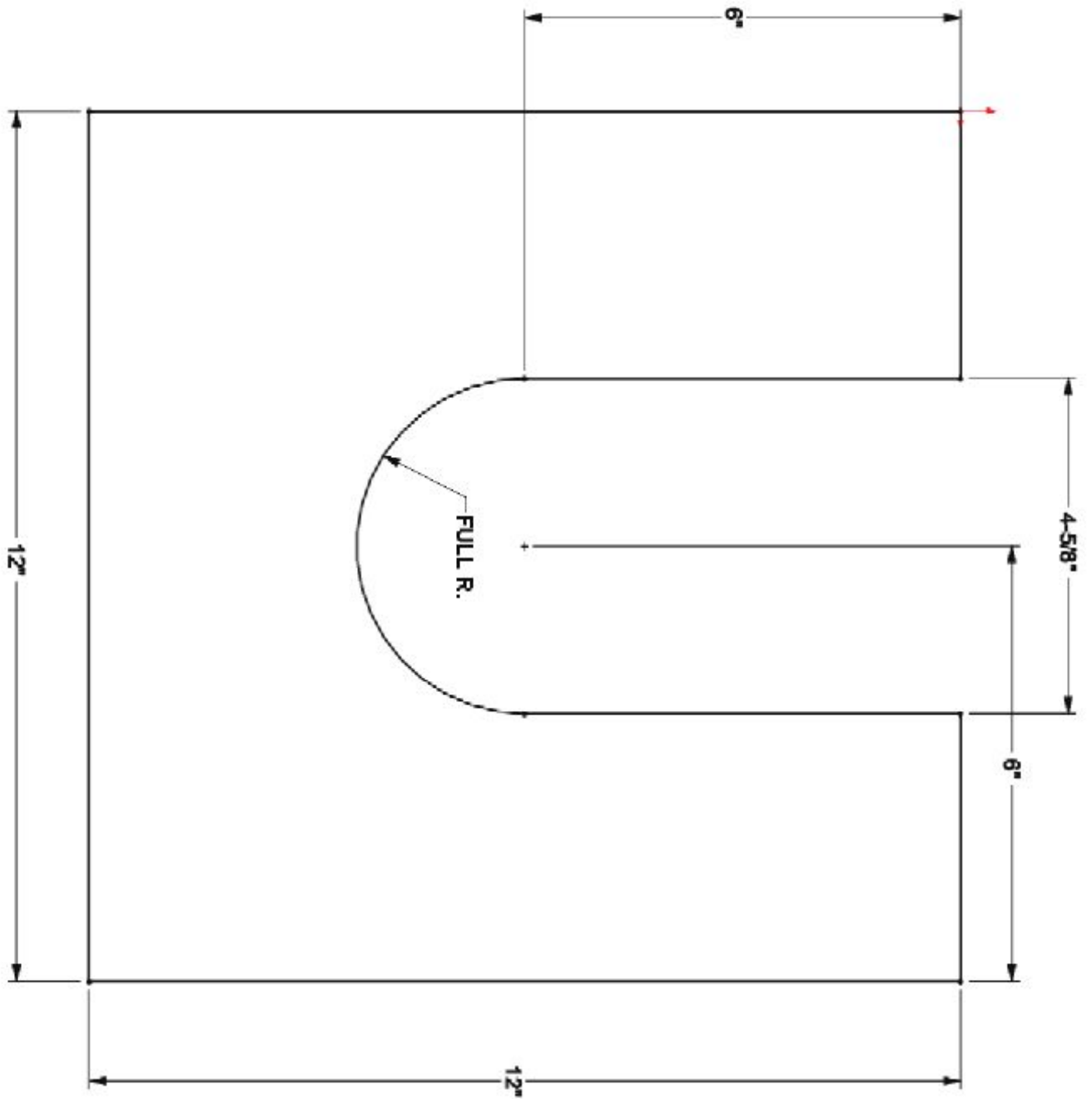


Review the Installation section of the siren you are working on. Visit <http://www.alertnotification.net/> for manuals. The required parts are listed in the manual and may change according to local code.

Getting Service

If you are experiencing any difficulties, contact Federal Signal Customer Care at: 800-548-7229 or 708-534-3400 extension 5822 or Technical Support at: 800-524-3021 or 708-534-3400 extension 7329 or through email at: techsupport@fedsig.com. For instruction manuals and information on related products, visit: <http://www.alertnotification.net/>

Figure 18 Template (not to scale)



Not to scale