



# Professional **HEAVY DUTY**

## GNH 18V-35

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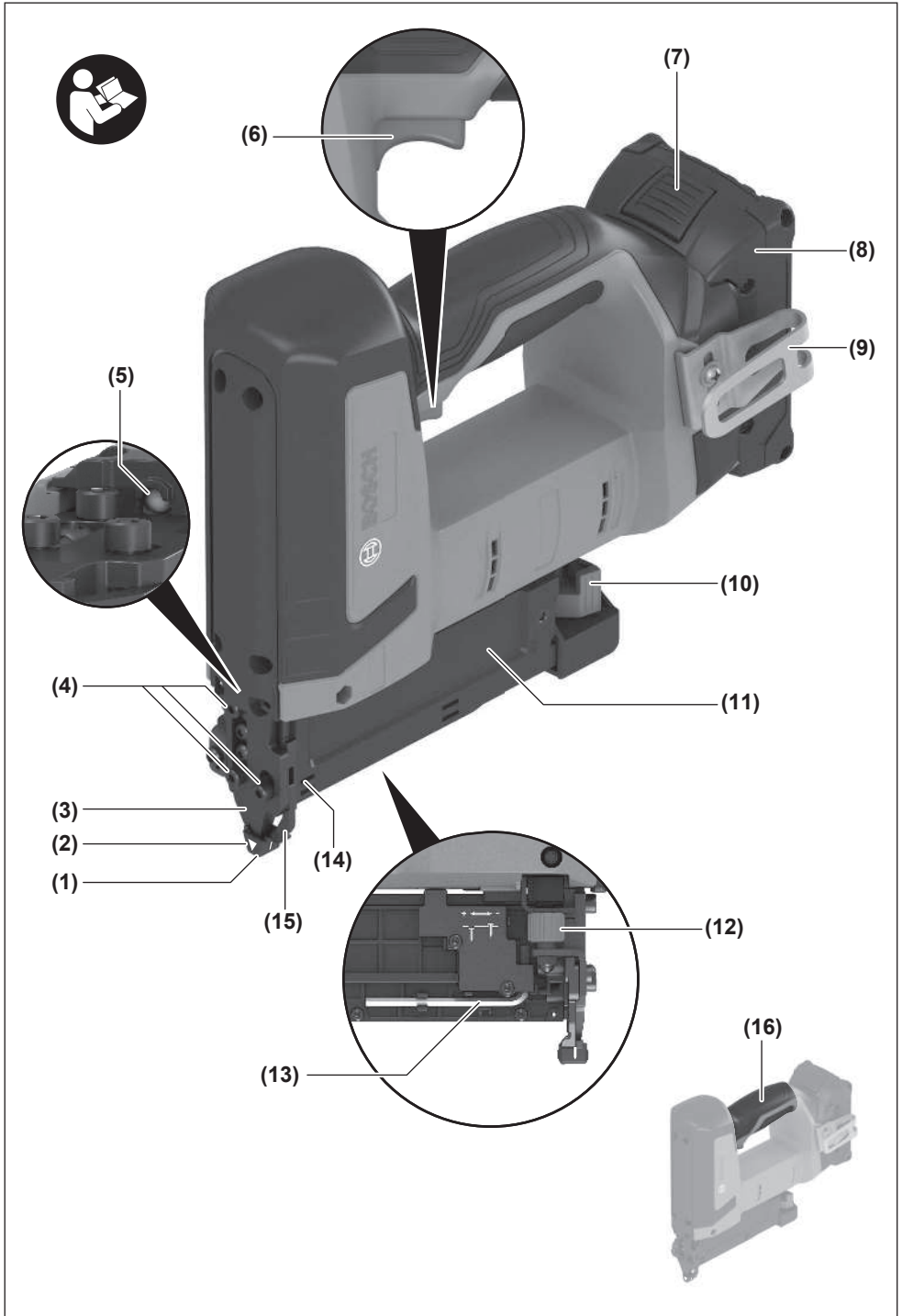


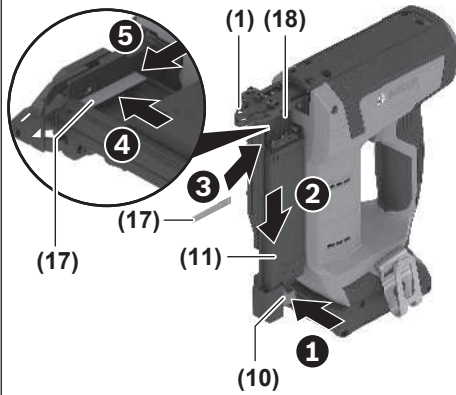
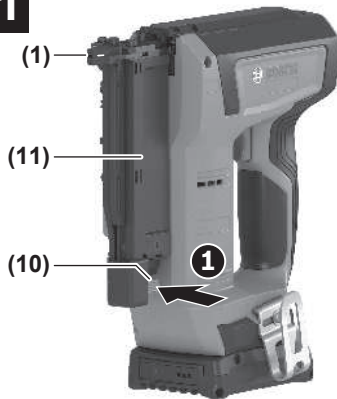
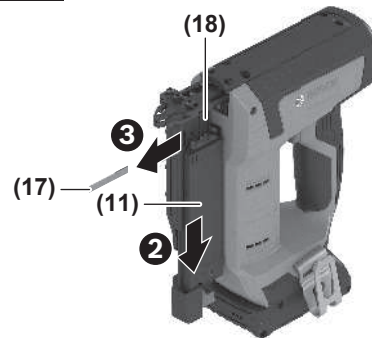
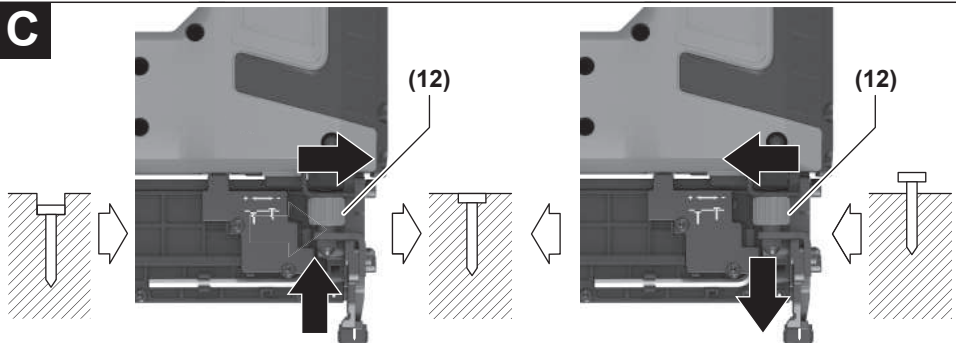
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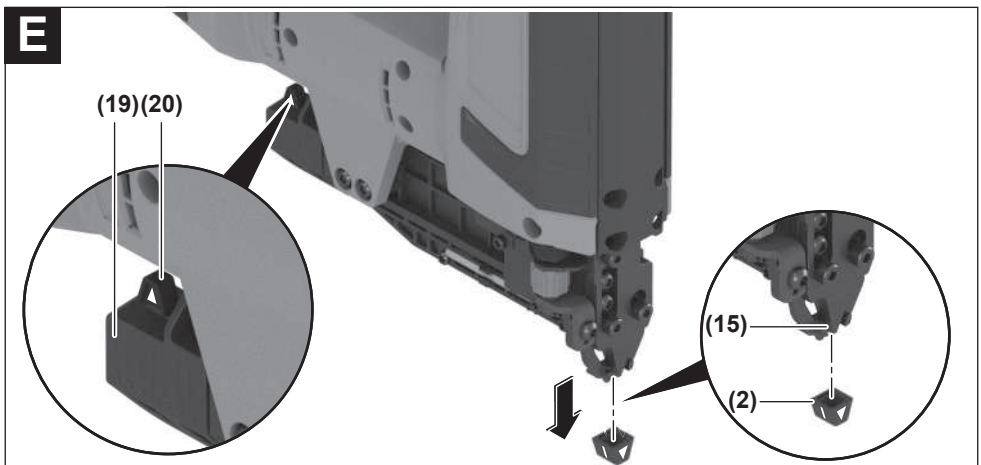
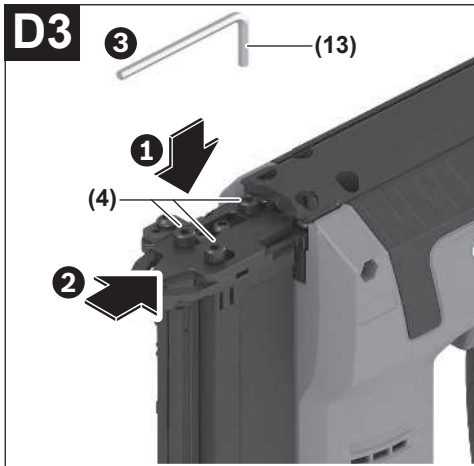
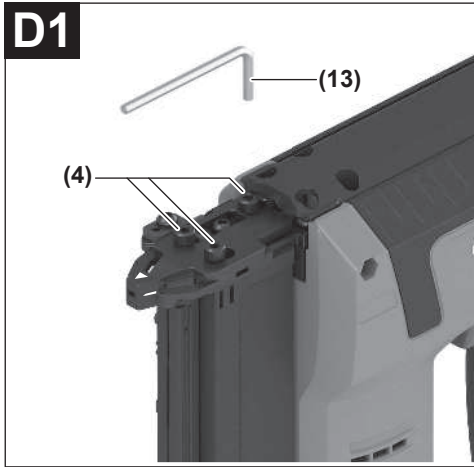


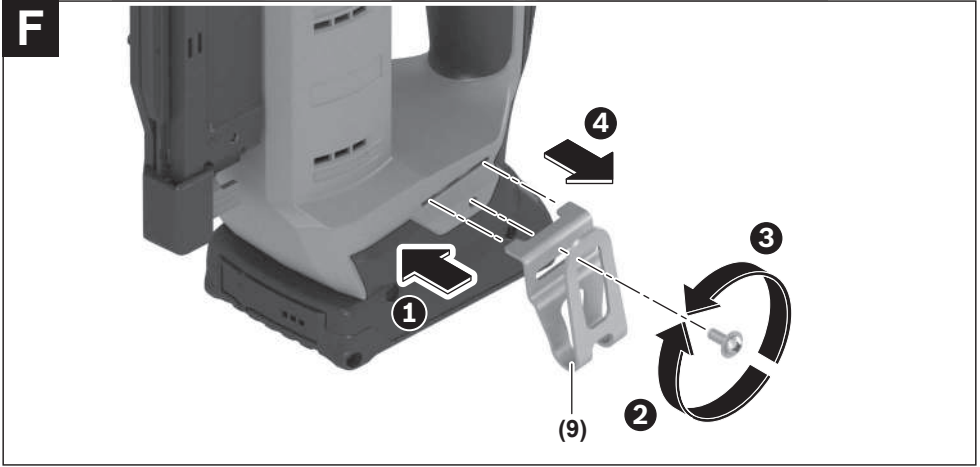
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# 한국어

## 안전 수칙

### 전동공구 일반 안전 수칙

**경고** 본 전동공구와 함께 제공된 모든 안전경고, 지시사항, 그림 및 사양을 숙지하십시오. 다음의 지시 사항을 준수하지 않으면 감전, 화재, 또는 심각한 부상을 초래할 수 있습니다.

**앞으로 참고할 수 있도록 이 안전수칙과 사용 설명서를 잘 보관하십시오.**

다음에서 사용되는 "전동공구"라는 개념은 전원에 연결하여 사용하는 (전선이 있는) 전동 기기나 배터리를 사용하는 (전선이 없는) 전동 기기를 의미합니다.

### 작업장 안전

▶ **작업장을 항상 깨끗이 하고 조명을 밝게 하십시오.** 작업장 환경이 어수선하거나 어두우면 사고를 초래할 수 있습니다.

▶ **가연성 유체, 가스 또는 분진이 있어 폭발 위험이 있는 환경에서 전동공구를 사용하지 마십시오.** 전동공구는 분진이나 증기에 접화하는 스파크를 일으킬 수 있습니다.

▶ **전동공구를 사용할 때 구경꾼이나 어린이 혹은 다른 사람이 작업장에 접근하지 못하게 하십시오.** 다른 사람이 주의를 산만하게 하면 기기에 대한 통제력을 잃기 쉽습니다.

### 전기에 관한 안전

▶ **전동공구를 비에 맞지 않게 하고 습기 있는 곳에 두지 마십시오.** 전동공구에 물이 들어가면 감전될 위험이 높습니다.

### 사용자 안전

▶ **신중하게 작업하며, 전동공구를 사용할 때 경솔하게 행동하지 마십시오.** 피로한 상태이거나 약물 복용 및 음주한 후에는 전동공구를 사용하지 마십시오. 전동공구를 사용할 때 잠시라도 주의가 산만해지면 중상을 입을 수 있습니다.

▶ **작업자 안전을 위한 장치를 사용하십시오.** 항상 보안경을 착용하십시오. 전동공구의 종류와 사용에 따라 먼지 보호 마스크, 미끄러지지 않는 안전화, 안전모 또는 귀마개 등의 안전한 복장을 하면 상해의 위험을 줄일 수 있습니다.

▶ **실수로 기기가 작동되지 않도록 주의하십시오.** 전동공구를 전원에 연결하거나 배터리를 끼우기 전에, 혹은 기기를 들거나 운반하기 전에, 전원 스위치가 꺼져 있는지 다시 확인하십시오. 전동공구를 운반할 때 전원 스위치가 손가락을 대거나 전원 스위치가 켜진 상태에서 전원을 연결하면 사고 위험이 높습니다.

▶ **전동공구를 사용하기 전에 조절하는 톨이나 키 등을 빼 놓으십시오.** 회전하는 부위에 있는 톨이나 키로 인해 상처를 입을 수 있습니다.

▶ **자신을 과신하지 마십시오.** 불안정한 자세를 피하고 항상 평형을 이룬 상태로 작업하십시오. 안정된 자세와 평행한 상태로 작업해야만이 의외의 상황에서도 전동공구를 안전하게 사용할 수 있습니다.

▶ **알맞은 작업복을 입으십시오.** 헐렁한 복장을 하거나 장신구를 착용하지 마십시오. 머리카락이 가동하는 기기 부위에 가까이 닿지 않도록 주의하십시오. 헐렁한 복장, 장신구 혹은 긴 머리는 가동 부위에 말려 사고를 초래할 수 있습니다.

▶ **분진 추출장치나 수거장치의 조립이 가능한 경우, 이 장치가 연결되어 있는지, 제대로 작동이 되는지 확인하십시오.** 이러한 분진 추출장치를 사용하면 분진으로 인한 사고 위험을 줄일 수 있습니다.

▶ **툴을 자주 사용한다고 해서 안주하는 일이 없게 하고 공구의 안전 수칙을 무시하지 않도록 하십시오.** 부주의하게 취급하여 순간적으로 심각한 부상을 입을 수 있습니다.

### 전동공구의 올바른 사용과 취급

▶ **기기를 과부하 상태에서 사용하지 마십시오.** 작동할 때 이에 적당한 전동공구를 사용하십시오.

알맞은 전동공구를 사용하면 지정된 성능 한도 내에서 더 효율적으로 안전하게 작업할 수 있습니다.

▶ **전원 스위치가 고장 난 전동공구를 사용하지 마십시오.** 전원 스위치가 작동되지 않는 전동공구는 위험하므로, 반드시 수리를 해야 합니다.

▶ **전동공구를 조정하거나 액세서리 부품 교환 혹은 공구를 보관할 때, 항상 전원 콘센트에서 플러그를 미리 빼어 놓거나 배터리를 분리하십시오.** 이러한 조치는 실수로 전동공구가 작동하게 되는 것을 예방합니다.

▶ **사용하지 않는 전동공구는 어린이 손이 닿지 않는 곳에 보관하고, 전동공구 사용에 익숙지 않거나 이 사용 설명서를 읽지 않은 사람이 기기를 사용해서는 안됩니다.** 경험이 없는 사람이 전동공구를 사용하면 위험합니다.

▶ **전동공구 및 액세서리를 조심스럽게 관리하십시오.** 가동 부위가 하자 없이 정상적인 기능을 하는지, 걸리는 부위가 있는지, 혹은 전동공구의 기능에 중요한 부품이 손상되지 않았는지 확인하십시오. 손상된 기기의 부품은 전동공구를 다시 사용하기 전에 반드시 수리를 맡기십시오. 제대로 관리하지 않은 전동공구의 경우 많은 사고를 유발합니다.

▶ **절단 공구를 날카롭고 깨끗하게 관리하십시오.** 날카로운 절단면이 있고 잘 관리된 절단공구는 걸리는 경우가 드물고 조절하기 더 쉽습니다.

▶ **전동공구, 액세서리, 장착하는 공구 등을 사용할 때, 이 지시 사항과 특별히 기종 별로 나와있는 사용 방법을 준수하십시오.** 이때 작업 조건과 실시하려는 작업 내용을 고려하십시오. 원래 사용 분야가 아닌 다른 작업에 전동공구를 사용할 경우 위험한 상황을 초래할 수 있습니다.

▶ **손잡이 및 잡는 면을 건조하게 유지하고, 오일 및 그리스가 묻어 있지 않도록 깨끗하게 하십시오.**

손잡이 또는 잡는 면이 미끄러우면 예상치 못한 상황에서 안전한 취급 및 제어가 어려워집니다.

### 충전 전동공구의 올바른 사용과 취급

- ▶ 배터리를 충전할 때 제조 회사가 추천하는 충전 기만을 사용하여 재충전해야 합니다. 특정 제품의 배터리를 위하여 제조된 충전기에 적합하지 않은 다른 배터리를 충전할 경우 화재 위험이 있습니다.
- ▶ 각 전동공구용으로 나와있는 배터리만을 사용하십시오. 다른 종류의 배터리를 사용하면 상해를 입거나 화재를 초래할 수 있습니다.
- ▶ 배터리를 사용하지 않을 때는, 각 공구를 자극할 수 있는 페이퍼 클립, 동전, 열쇠, 못, 나사 등 유사한 금속성 물체와 멀리하여 보관하십시오. 배터리 극 사이에 쇼트가 일어나 화상을 입거나 화재를 야기할 수 있습니다.
- ▶ 배터리를 잘못 사용하면 누수가 생길 수 있습니다. 누수가 생긴 배터리에 닿지 않도록 하십시오. 피부에 접촉하게 되었을 경우 즉시 물로 씻으십시오. 유체가 눈에 닿았을 경우 바로 의사와 상담하십시오. 배터리에서 나오는 유체는 피부에 자극을 주거나 화상을 입힐 수 있습니다.
- ▶ 손상된 배터리 또는 공구를 사용하지 마십시오. 손상되었거나 개조된 배터리는 예기치 못한 특성으로 인해 화재, 폭발 또는 부상의 위험을 초래할 수 있습니다.
- ▶ 배터리 또는 공구가 화기 또는 지나치게 높은 온도에 노출되지 않도록 하십시오. 화기 또는 130 °C 이상의 온도에 노출되면 폭발할 위험이 있습니다.
- ▶ 충전 지침을 준수하고 지침에 제시된 범위를 벗어난 온도에서 충전하지 마십시오. 제시된 범위를 벗어난 부적절한 온도에서 충전할 경우 배터리가 손상되어 화재 발생의 위험이 증가됩니다.

### 서비스

- ▶ 전동공구 수리는 반드시 전문 인력에게 맡기고, 수리 정비 시 보쉬 순정 부품만을 사용하십시오. 그렇게 함으로써 기기의 안전성을 오래 유지할 수 있습니다.
- ▶ 손상된 배터리는 절대 수리하지 마십시오. 배터리 수리는 제조사 또는 공인 서비스센터에서만 진행할 수 있습니다.

### 네일러 안전 경고사항

- ▶ 네일러 안에 항상 파스너가 들어 있다고 생각하십시오. 네일러를 부주의하게 다루면 의도치 않게 파스너가 발사되거나 부상을 입을 수 있습니다.
- ▶ 파스너를 설치하거나 제거할 때, 액세서리를 조정하거나 교체할 경우에는 공구를 전원에서 분리하십시오. 공구가 전원에 연결되어 있으면 끼인 못을 제거하는 과정 중에 돌발적으로 공구가 작동되어 부상을 입을 수 있습니다.
- ▶ 파스너를 취급할 때, 특히 파스너를 설치하거나 제거할 때 주의하십시오. 파스너의 끝부위가 날카로워 부상을 입을 수 있습니다.
- ▶ 네일러가 사용자 또는 근처에 있는 사람을 향하지 않게 하십시오. 돌발적인 작동으로 파스너가 발사되어 부상을 입을 수 있습니다.
- ▶ 네일러를 작동하지 않을 경우 및 작동 위치를 바꿀 경우에는 손가락을 트리거 가까이 두지 마십시오. 돌발적인 작동으로 파스너가 발사되어 부상을 입을 수 있습니다.
- ▶ 파스너가 숨겨진 배선에 접촉할 가능성이 있는 작업을 수행할 경우, 네일러의 절연된 손잡이 면만 잡으십시오. 파스너가 "전류가 흐르는" 전선에 접촉되면, 네일러의 노출된 금속 부품에 "전류가 흐르는" 상태로 만들어 작업자가 감전될 수 있습니다.
- ▶ 작동 시에는 네일러를 단단히 잡으십시오. 네일러가 제어되지 않은 상태로 반동을 일으키면 돌발적으로 작동되어 부상을 입을 수 있습니다.
- ▶ 손발을 비롯한 모든 신체 부위가 네일러의 발사 방향에서 멀리 떨어져 있도록 하십시오. 파스너가 가공물 및 가공물 뒤에 있는 물체를 관통하여 부상을 입을 수 있습니다.
- ▶ 네일러를 사용할 때 손발을 비롯한 모든 신체 부위가 파스너가 가공물을 통과할 수 있는 영역 가까이 있지 않도록 하십시오. 파스너가 빗나가면서 가공물을 벗어나 부상을 입을 수 있습니다.
- ▶ 네일러가 가공물에 확실하게 고정된 후에만 네일러를 작동하십시오. 네일러가 가공물에 닿지 않았다면, 파스너가 가공물에서 빗나가면서 부상을 입을 수 있습니다.
- ▶ 본 네일러를 전기 케이블을 고정하기 위한 용도로 사용하지 마십시오. 전기 케이블 설치용으로 고안되지 않았으며, 사용할 경우 전기 케이블의 절연 부위가 손상되어 감전 또는 화재를 일으킬 수 있습니다.
- ▶ 파스너가 네일러에 끼인 경우 네일러를 전원에서 분리하십시오. 네일러가 전원에 연결되어 있으면 끼인 파스너를 제거하는 과정 중에 돌발적으로 네일러가 작동되어 부상을 입을 수 있습니다.
- ▶ 끼인 파스너를 제거할 때 주의를 기울이십시오. 나커니즘이 압력을 받아 파스너가 강제로 풀려 나오면서 부상을 입을 수 있습니다.
- ▶ 보이지 않는 부위에 에너지 배선 및 배관 여부를 확인하려면 적당한 탐지기를 사용하거나 담당 전력 공급회사에 문의하십시오. 전선에 접하게 되면 화재나 전기 충격을 야기할 수 있습니다. 가스관을 손상시키면 폭발 위험이 있습니다. 수도관을 파손하게 되면 재산 피해를 야기할 수 있습니다.
- ▶ 배터리가 손상되었거나 잘못 사용될 경우 증기가 발생할 수 있습니다. 배터리에서 화재가 발생하거나 폭발할 수 있습니다. 작업장을 환기시키고, 필요한 경우 의사와 상담하십시오. 증기로 인해 호흡기가 자극될 수 있습니다.
- ▶ 배터리를 개조하거나 분해하지 마십시오. 단락이 발생할 위험이 있습니다.
- ▶ 못이나 스크류 드라이버 같은 뾰족한 물체 또는 외부에서 오는 충격 등으로 인해 축전지가 손상될 수 있습니다. 내부 단락이 발생하여 배터리가

타거나 연기가 발생하고, 폭발 또는 과열될 수 있습니다.

▶ **본 배터리는 제조사 제품에만 사용하십시오.** 그 래야만 배터리 과부하의 위험을 방지할 수 있습니다.



배터리를 태양 광선 등 고열 에 장시간 노출되지 않도록 하고, 화기, 오염물질, 물기, 습기가 있는 곳에 두지 마십 시오. 폭발 및 단락의 위험이

있습니다.

**기호와 의미**

다음에 나와있는 기호는 귀하의 전동공구를 사용하 는 데 중요할 수 있습니다. 그러므로 기호와 그 의 미를 잘 기억해 두십시오. 기호를 제대로 이해하면 전동공구를 더욱 쉽고 안전하게 사용할 수 있습니 다.

**기호와 의미**



귀마개를 착용하십시오. 소음으로 인해 청각을 상실할 수 있습니다.



보안경을 착용하십시오.

**제품 및 성능 설명**



모든 안전 수칙과 지침을 숙지하십시오. 다음의 안전 수칙과 지침을 준수하지 않 으면 화재 위험이 있으며 감전 혹은 중 상을 입을 수 있습니다.

사용 설명서 앞 부분에 제시된 그림을 확인하십시오.

**규정에 따른 사용**

본 전동공구는 목재 소재의 못을 타정하는 용도로 사용됩니다.

(못, 클램프 등) 타정하는 요소는 "기술자료" 표에 명시된 것만 사용하십시오.

**지침:** 본 전동공구는 금속 또는 콘크리트로 된 못을 타정하는 데에는 적합하지 않습니다.

**제품의 주요 명칭**

제품의 주요 명칭에 표기되어 있는 번호는 전동공 구의 그림이 나와있는 면을 참고하십시오.

- (1) 발사구
- (2) 가공물 손상 방지 캡 1
- (3) 발사 통로 커버
- (4) 발사 통로를 열기/닫기 위한 나사
- (5) 작업 램프

- (6) 트리거
  - (7) 배터리 탈착 버튼
  - (8) 배터리
  - (9) 벨트 후크
  - (10) 매거진 개방 스위치
  - (11) 매거진 슬라이더
  - (12) 깊이 조절자 설정용 조정 휠
  - (13) 육각 키
  - (14) 리필 표시기의 표시창
  - (15) 안전 이음쇠
  - (16) 손잡이(절연된 손잡이 부위)
  - (17) 총못<sup>a)</sup>
  - (18) 매거진
  - (19) 가공물 손상 방지 캡 보관함
  - (20) 가공물 손상 방지 캡 2
- a) 본 액세서리는 기본 공급 사양에 포함되어 있지 않습니다.

**제품 사양**

충전 네일러		GNH 18V-35
제품 번호		3 601 D82 7..
정격 전압	V=	18
트리거 시스템		
- 안전 이음쇠를 이용한 단 발 작동		●
패스너		
- 타입		핀 PRO PN23 G
- 길이	mm	15 19 25 30 35
- 직경	mm	0.6
	ga	23
- 각도		0°
매거진 최대 용량		110
치수(배터리 미포함)		
- 높이	mm	214
- 너비	mm	81
- 길이(가공물 손상 방지 캡 포함)	mm	232
중량 <sup>A)</sup>	kg	1.7
충전 시 권장되는 주변 온 도	°C	0 ... +35
작동 시 <sup>B)</sup> 및 보관 시 허용 되는 주변 온도	°C	-20 ... +50
호환 가능한 배터리		GBA18V... GBA 18V...

**충전 네일러**

**GNH 18V-35**

	ProCORE18V... EXPERT18V... EXBA18V... CORE18V...
권장 배터리	GBA 18V... ≥ 2.0 Ah
권장하는 충전기	GAL18... GAL 18... GAL 36... GAL12V/18... GAL 12V/18... GAX 18... EXAL18...

A) 배터리 미포함(배터리 무게는 [www.bosch-professional.com](http://www.bosch-professional.com)에서 확인할 수 있습니다.)

B) 온도 < 0 °C일 때 출력 제한  
값은 제품별로 편차가 있을 수 있으며, 진행하는 작업 및 환경 조건에 따라 달라질 수 있습니다. 보다 자세한 정보는 [www.bosch-professional.com/wac](http://www.bosch-professional.com/wac)에서 확인할 수 있습니다.

**배터리**

▶ 전동공구에 각종 작업(예: 유지보수, 공구 교체 등)을 진행하기 전에 항상 배터리를 전동공구에서 분리하십시오. 실수로 전원 스위치가 작동하게 되면 부상을 입을 위험이 있습니다.

**Bosch**는 배터리 없이도 충전 전동공구를 판매합니다. 전동공구의 공급 사양에 배터리가 포함되어 있는지 여부는 포장에서 확인할 수 있습니다.

**배터리 충전하기**

▶ 기술자료에 기재되어 있는 충전기만 사용하십시오. 귀하의 전동공구에 사용된 리튬이온 배터리에 맞춰진 충전기들입니다.

**지침:** 리튬 이온 배터리는 국제 운송 규정에 따라 일부만 충전되에 출고됩니다. 배터리의 성능을 완전하게 보장하기 위해서는 처음 사용하기 전에 배터리를 완전히 충전하십시오.

**배터리 장착하기**

충전한 배터리는 배터리가 맞물려 고정될 때까지 배터리 홀더 쪽으로 미십시오.

**배터리 탈착하기**



배터리를 분리하려면 배터리 해제 버튼을 누른 상태에서 배터리를 당겨 빼내십시오. **무리하게 힘을 가하지 마십시오.**

배터리는 배터리 해제 버튼이 실수로 눌러져 배터리가 빠지는 것을 방지하기 위해 잠금장치가 이중으로 되어 있습니다. 전동공구에 배터리가 끼워져 있는 동안 배터리는 스프링으로 제 위치에 고정됩니다.

**배터리 충전상태 표시기**

지침: 모든 배터리 유형에 충전상태 표시기가 있는 것은 아닙니다.

배터리 충전상태 표시기에 있는 녹색 LED는 배터리의 충전 상태를 나타냅니다. 안전상의 이유로 전동공구가 멈춰 있는 경우에만 잔량상태 확인이 가능합니다.

충전상태 표시기 버튼  또는 을 누르면, 충전상태가 표시됩니다. 배터리가 분리된 상태에서도 표시 가능합니다.

충전상태 표시기 버튼을 눌렀는데도 LED가 켜지지 않으면 배터리가 손상된 것이므로 교환해 주어야 합니다.

**배터리 유형 GBA 18V... | GBA18V...**



LED	용량
연속등 3× 녹색	60–100 %
연속등 2× 녹색	30–60 %
연속등 1× 녹색	5–30 %
점멸등 1× 녹색	0–5 %

**배터리 유형 ProCORE18V... | EXPERT18V... | EXBA18V... | CORE18V...**



LED	용량
연속등 5 × 녹색	80–100 %
연속등 4 × 녹색	60–80 %
연속등 3 × 녹색	40–60 %
연속등 2 × 녹색	20–40 %
연속등 1 × 녹색	5–20 %
점멸등 1 × 녹색	0–5 %

**올바른 배터리의 취급 방법**

배터리를 습기나 물이 있는 곳에 두지 마십시오. 배터리를 -20 °C 에서 50 °C 온도 범위에서만 저장하십시오. 예를 들면 배터리를 여름에 자동차 안에 두지 마십시오.

가끔 배터리의 통풍구를 부드럽고 깨끗한 마른 솔로 청소하십시오.

충전 후 작동 시간이 현저하게 짧아지면 배터리의 수명이 다한 것이므로 배터리를 교환해야 합니다. 폐기처리에 관련된 지시 사항을 준수하십시오.

**조립**

▶ 전동공구에 각종 작업(예: 유지보수, 공구 교체 등)을 진행하기 전에 항상 배터리를 전동공구에서 분리하십시오. 실수로 전원 스위치가 작동하게 되면 부상을 입을 위험이 있습니다.

- ▶ 전동공구는 항상 측면으로 누워 보관하고, 배터리에 위에 두지 마십시오. 사용하는 삽입공구 및 배터리 유형에 따라 전동공구가 넘어질 수 있습니다.

## 매거진 장착하기(그림 A1-A2 참조)

- ▶ 공구 설정을 적용거나 액세스리 교환 또는 전동공구를 분리하기 전에 배터리를 분리하십시오. 이러한 조치는 실수로 전동공구가 작동하게 되는 것을 예방합니다.

순정 Bosch 액세스리만 사용하십시오. 매거진, 발사구 및 발사 통로 등의 전동공구 정밀 부품은 Bosch의 클램프, 못 및 핀에 맞게 제조되었습니다. 타 제조사는 다른 강종과 치수를 사용합니다.

**참고 사항:** 타정하는 요소는 "기술자료" 표에 명시된 것만 사용하십시오.

허용되지 않는 타정 요소를 사용하면 전동공구가 손상되고 부상을 입을 수 있습니다.

매거진을 장착할 때는 항상 전동공구의 발사구 (1)가 사용자 자신 또는 타인을 향하지 않도록 주의하십시오.

- 매거진을 열려면 스위치 (10)를 누르십시오. 매거진 슬라이더 (11)가 빠져 나옵니다.
- 총못 (17)을 매거진 (18) 좌측 상부에 놓습니다.

**지침:** 매거진에는 같은 길이의 못만 장착하십시오. 다른 길이의 못을 삽입하기 전에 매거진에서 못을 제거하십시오.

**지침:** 전자 제어식 감시를 통해 못이 매거진에 있는지 인식됩니다. 매거진이 비어 있을 때 안전 이음쇠가 눌러짐, 타정 작업이 작동되지 않습니다. 이를 통해 무부하 상태에서 발사되지 않습니다.

- 매거진 (18)을 닫으려면 매거진 슬라이더 (11)를 매거진 (18)의 앞쪽까지 앞으로 당기십시오.

**지침:** 매거진 슬라이더는 큰 힘을 가하지 않고 (손가락 끝으로만) 되돌 수 있어야 합니다. 매거진 슬라이더가 끼이면, 못이 발사되지 않고, 발사 통로에 걸려 있거나(끼임 상태 참조) 못이 잘못된 각도로 발사되는 결과가 발생합니다.

## 작동

- ▶ 전동공구는 항상 측면으로 누워 보관하고, 배터리에 위에 두지 마십시오. 사용하는 삽입공구 및 배터리 유형에 따라 전동공구가 넘어질 수 있습니다.

### 트리거 시스템

#### 안전 이음쇠를 이용한 단발 작동

본 트리거 시스템의 경우 안전 이음쇠 (15)가 가공물에 단단히 설치되어야 합니다. 타정 요소는 트리거 (6)가 눌러야만 발사됩니다.

발사 후에는 트리거 (6)가 다음 작업 전에 다시 초기 위치로 옮겨지고 안전 이음쇠 (15)가 완전히 눌러 있는 경우 그 다음 타정 작업을 작동할 수 있습니다.

## 초기 작동

### 전원 켜기/끄기

배터리 (8)를 장착하면 전동공구를 작동할 수 있는 상태가 됩니다.

### 못 발사하기

- 먼저 발사구 (1) 또는 고무 처리된 가공물 손상 방지 램프 (2)을 안전 이음쇠 (15)가 완전히 눌러 때까지 가공물 위에 밀착시켜 올려 놓으십시오. 작업 램프 (5)가 켜집니다.
- 이어서 트리거 (6)를 짧게 누른 후 다시 트리거에서 손을 떼십시오. 이때 못이 발사됩니다.
- 다음 타정 작업을 위해 전동공구를 가공물에서 완전히 들어올린 후 원하는 다음 작업 위치에 다시 밀착시켜 올려 놓으십시오. 또는 안전 이음쇠 (15)를 누른 상태에서 트리거 (6)를 눌러 다른 못을 발사할 수도 있습니다.

## 사용 방법

작업하기 전에 항상 안전 장치 및 트리거 장치 기능에 이상이 없는지 및 모든 볼트와 너트가 단단히 고정되어 있는지 점검하십시오.

결함이 있거나 또는 작동 시 이상이 발견되는 전동공구는 즉시 전원 공급을 중단하고, 보쉬 고객 서비스 센터에 문의해 주십시오.

전동공구를 규정에 맞지 않게 개조하지 마십시오. 안전 이음쇠 등 전동공구의 어떠한 부품도 분리하거나 블로킹하지 마십시오.

부적절한 도구를 이용하여 "비상 수리"를 진행하는 일이 없도록 하십시오. 본 전동공구는 정기적으로 전문가를 통해 유지보수해야 합니다.

전동공구에 다음과 같은 경우로 인해 약해진 부분 및 손상된 부분이 생기지 않도록 하십시오.

- 타격 또는 각인한 경우,
- 제조회사로부터 허용되지 않은 개조 작업을 한 경우,
- 철재와 같이 딱딱한 소재로 구성된 지그에서 생산 작업을 진행한 경우,
- 높은 곳에서 바닥에 떨어지거나 바닥 위쪽을 통해 끼운 경우,
- 해머로 사용한 경우,
- 무리한 힘을 가한 경우.

가공물 아래쪽 또는 뒤쪽에 무엇이 있는지 확인하십시오. 벽, 천장 또는 바닥면 뒤쪽에 사람이 있는 경우에는 절대 못을 발사하지 마십시오. 못이 가공물을 관통하여 부상을 입힐 수 있습니다.

이미 타정 작업한 못에 못을 발사하는 일이 없도록 하십시오. 그러면 못이 변형되고, 못이 끼이거나 전동공구가 제어되지 않은 상태로 움직일 수 있습니다.

펀치 스탬프의 마모를 줄이려면, 무부하 상태에서 발사하는 일이 없도록 하십시오.

장시간 휴식할 때 또는 작업을 마치면 전동공구에서 배터리를 분리하고 매거진을 최대한 비워 두십시오.

시오. 접촉 요소가 활성화되지 않도록 전동공구를 평평한 표면에 두십시오.

**매거진 비우기(그림 B1-B2 참조)**

- 매거진을 열려면 스위치 (10) 를 누르십시오. 매거진 슬라이더 (11) 가 빠져 나옵니다.
- 전동공구를 회전시켜 총못 (17) 이 매거진 (18) 에서 미끄러져 나오도록 하십시오.
- 매거진 (18) 을 닫으려면 매거진 슬라이더 (11) 를 매거진 (18) 의 앞쪽까지 앞으로 당기십시오.

**깊이 조절자 설정하기(그림 C 참조)**

조정 휠 (12) 을 이용해 타정 깊이를 설정할 수 있습니다.

- 매거진 (18) 을 비우십시오.

- **못이 너무 깊히 타정된 경우:** 타정 깊이를 줄이려면, 조정 휠 (12) 을 "-" 방향으로 돌리십시오.



- **못이 충분히 깊게 타정되지 않은 경우:** 타정 깊이를 늘이려면, 조정 휠 (12) 을 "+" 방향으로 돌리십시오.



- 매거진을 다시 장착하십시오.
- 새로 설정한 타정 깊이를 시제품에 테스트해 보십시오. 필요에 따라 해당 작업 단계를 반복하십시오.

**끼임 풀기(그림 D1-D3 참조)**

개별 못이 발사 통로에 끼임 수 있습니다. 끼임 현상이 자주 발생하는 경우, 보쉬 고객센터 문의해 주십시오.

- 트리거 (6) 에서 손을 떼십시오.
- 전동공구에서 배터리 (8) 를 분리하십시오.
- 매거진 (18) 을 비우십시오.
- 육각키 (13) 를 사용하여 발사 통로를 열기/닫기 위한 나사 (4) 를 풀고 발사 통로 커버 (3) 를 밀고 들어 올려서 발사 통로를 열 수 있도록 제거하십시오.
- 끼인 못을 제거하십시오. 이를 위해 필요한 경우 플라이어를 사용하십시오.
- 발사 통로 커버 (3) 를 장착하고 전동공구 하우징의 앞쪽 끝까지 밀어 발사 통로를 닫으십시오.
- 육각키 (13) 를 사용하여 발사 통로를 열기/닫기 위한 나사 (4) 를 조이십시오.

**유지보수 계획**

매거진 (18) 을 청소하십시오. 작업 시 매거진에 쌓일 수 있는 대뺏밥을 제거하십시오. 압축공기를 이용해 주기적으로 전동공구를 청소하십시오.

- 매거진 (18) 을 다시 장착하십시오.

**가공물 손상 방지 캡 교체하기(그림 E 참조)**

안전 이음쇠 (15) 끝부분에 있는 가공물 손상 방지 캡 (2) 은 타정 작업 시 전동공구가 제대로 자리를 잡을 때까지 가공물을 보호해줍니다. 가공물 손상 방지 캡은 분리 및 교체 가능합니다.

- 트리거 (6) 에서 손을 떼십시오.
- 전동공구에서 배터리 (8) 를 분리하십시오.
- 매거진 (18) 을 비우십시오.
- 안전 이음쇠에서 가공물 손상 방지 캡을 당기십시오.
- 끝부분이 열려 있는 새로운 가공물 손상 방지 캡을 안전 이음쇠 위쪽으로 미십시오.

**참고 사항:** 좁은 공간에서 작업 시 활용할 수 있는 가공물 손상 방지 캡 (20) 은 매거진 (18) 아랫면에 보관할 수 있습니다. 가공물 손상 방지 캡을 교체한 후 다른 가공물 손상 방지 캡을 보관함 (19) 에 밀어 넣으십시오.

**운반 및 보관**

운반을 위해 전동공구에서 배터리를 분리하십시오. 작업장에서 전동공구를 운반할 경우에는 손잡이 (16) 를 잡고 트리거 (6) 가 작동되지 않은 상태에서 서만 운반하십시오.

전동공구는 항상 배터리에서 분리하여 건조하고 따뜻한 장소에 보관하십시오.

전동공구를 장시간 사용하지 않을 경우, 철재로 된 공구 부품을 오일층을 얇게 도포하십시오. 이를 통해 녹이 쌓이는 것을 방지할 수 있습니다.

**벨트 후크(그림 F 참조)**

벨트 후크 (9) 를 이용해 전동공구를 벨트에 매달아 놓을 수 있습니다. 그러면 두 손을 자유로이 사용할 수 있으며 어느 때나 이 전동공구를 사용할 수 있습니다.

**보수 정비 및 서비스**

**보수 정비 및 유지**

- ▶ 전동공구에 각종 작업(예: 유지보수, 공구 교체 등)을 진행하기 전에 항상 배터리를 전동공구에서 분리하십시오. 실수로 전원 스위치가 작동하게 되면 부상을 입을 위험이 있습니다.
- ▶ 안전하고 올바른 작동을 위하여 전동공구와 전동공구의 동공구를 항상 깨끗이 하십시오.

조치	이유	진행 작업
매거진 (18) 및 매거진 슬라이더 (11) 를 청소하십시오.	못의 끼임 현상이 방지됩니다.	- 매거진/매거진 슬라이더의 메커니즘을 압축공기를 이용해 불어 내십시오.

조치	이유	진행 작업
안전 이음쇠 (15) 가 정상적으로 작동되는지 확인하십시오.	작업 안전을 지키고 전동공구를 효율적으로 사용할 수 있게 해줍니다.	- 안전 이음쇠의 매커니즘을 압축 공기를 이용해 풀어내십시오.

## 문제 해결

문제	원인	해결 방법
전동공구를 작동할 수 있는 상태가 아닙니다.	배터리가 충전되지 않았거나 배터리에 결함이 있습니다.	- 배터리를 완전히 충전하거나 배터리를 교체하십시오.
	배터리가 제대로 끼워져 있지 않습니다.	- 배터리가 손잡이에 맞물려 고정되어 있는지 확인하십시오.
	배터리 온도가 너무 높거나 너무 낮습니다.	- 배터리가 (다시) 최적의 작동 온도에 이를 때까지 기다리십시오.
	배터리 접점 또는 모터에 오염물이 있거나 결함이 있습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
	매거진 (18) 이 비어 있습니다.	- 매거진을 다시 장착하십시오. (참조 „매거진 장착하기(그림 A1-A2 참조)“, 페이지 11)
	안전 이음쇠 (15) 가 구부러졌습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
	전자장치에 결함이 있습니다.	- 보쉬 고객 서비스센터에 연락하십시오.
전동공구를 작동할 수 있는 상태이지만, 뭇이 발사되지 않습니다.	다음과 같은 부품에 결함이 있을 수 있습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
	- 트리거 (6)	
	- 펀치 스탬프	
	- 모터 또는 변속기	
	- 전자장치	
	발사 매커니즘에 이물질이 쌓여 있습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
	발사구 (1) 또는 매거진 (18) 에 이물질이 쌓여 있습니다.	- 발사구 (1) 또는 매거진 (18) 을 청소하십시오.
	뭇이 발사 통로에 끼었습니다.	- 끼인 것을 푸십시오. (참조 „끼임 풀기(그림 D1-D3 참조)“, 페이지 12)
	매거진 슬라이더 (11) 거 걸렸거나 결함이 있습니다.	- 필요에 따라 매거진 슬라이더 (11) 를 청소하고, 매거진 (18) 에 오염물질이 없는지 확인하십시오.
		- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
매거진 슬라이더의 스프링이 너무 약하거나 결함이 있습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.	
사용한 타정 제품이 허용되지 않는 제품입니다.	- 순정 액세서리만 사용하십시오. (뭇, 클램프 등) 타정하는 요소는 "기술자료" 표에 명시된 것만 사용하십시오.	

문제	원인	해결 방법
	매거진 (18) 이 비어 있습니다.	- 매거진을 다시 장착하십시오. (참조 „매거진 장착하기(그림 A1-A2 참조)“, 페이지 11)
	트리거 (6) 및 안전 이음쇠 (15) 가 동시에 작동되었습니다.	- 타정 과정을 다시 진행하면서 이 때 올바른 순서를 확인하십시오.
못이 너무 깊이 타정되었습니다.	깊이 조절자가 너무 깊게 설정되어 있습니다.	- 깊이 조절자를 원하는 깊이로 설정하십시오. (참조 „깊이 조절자 설정하기(그림 C 참조)“, 페이지 12)
	버퍼가 마모되었습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
못이 타정된 깊이가 충분히 깊지 않습니다.	배터리가 충전되지 않았거나 배터리에 결함이 있습니다.	- 배터리를 완전히 충전하거나 배터리를 교체하십시오.
	타정 제품이 너무 깊니다.	- 순정 액세서리만 사용하십시오. (못, 클램프 등) 타정하는 요소는 "기술자료" 표에 명시된 것만 사용하십시오.
	깊이 조절자가 너무 높게 설정되어 있습니다.	- 깊이 조절자를 원하는 깊이로 설정하십시오. (참조 „깊이 조절자 설정하기(그림 C 참조)“, 페이지 12)
	가공물에 가해지는 압력이 너무 낮습니다.	- 전동공구를 사용하여 가공물에 더 많은 압력을 가하십시오.
	펀치 스탬프에 결함이 있습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
전동공구가 못을 건너뛴니다.	사용한 타정 제품이 허용되지 않는 제품입니다.	- 순정 액세서리만 사용하십시오. (못, 클램프 등) 타정하는 요소는 "기술자료" 표에 명시된 것만 사용하십시오.
	매거진 슬라이더의 스프링이 너무 약하거나 결함이 있습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
	펀치 스탬프에 결함이 있습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
못이 발사 통로에 너무 자주 끼입니다.	사용한 타정 제품이 허용되지 않는 제품입니다.	- 순정 액세서리만 사용하십시오. (못, 클램프 등) 타정하는 요소는 "기술자료" 표에 명시된 것만 사용하십시오.
		- 보쉬 고객 서비스센터에 연락하십시오.
	못이 노화되었고, 못 사이에 있는 접착제에 접착력이 없습니다.	- 새 총못을 사용하십시오.
타정된 못이 구부러졌습니다.	펀치 스탬프가 손상되었습니다.	- 보쉬 고객 서비스센터에 연락하십시오. 서비스 센터에서 부품을 교체하십시오.
	네일러가 허용되지 않는 소재(예: 콘크리트, 석재)에 사용되었습니다.	- 본 네일러는 허용되는 소재에만 사용하십시오. (참조 „규정에 따른 사용“, 페이지 9)

## AS 센터 및 사용 문의

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