

**SHOULDER INNOVATIONS, INC.
COMPENSATION COMMITTEE CHARTER**

(Effective as of July 30, 2025)

I. Purpose

The purpose of the Compensation Committee (the “Committee”) of the Board of Directors (the “Board”) of Shoulder Innovations, Inc. (the “Company”) is to oversee the discharge of the responsibilities of the Board relating to compensation of the Company’s executive officers and directors.

II. Composition

The Committee must consist of at least two directors, each of whom must satisfy the independence requirements of the New York Stock Exchange (the “NYSE”), except as otherwise permitted by applicable NYSE rules, and meet all other applicable independence standards for members of compensation committees, unless otherwise determined by the Board. Committee members must be appointed and may be removed from the Committee, with or without cause, by the Board. Unless a Chair is designated by the Board, the Committee may designate a Chair by majority vote of the full Committee membership.

III. Meetings, Procedures and Authority

The Committee has the authority to establish its own rules and procedures for notice and conduct of its meetings so long as they are not inconsistent with any provisions of the Company’s bylaws that are applicable to the Committee.

The Committee may, in its sole discretion, retain or obtain advice from compensation consultants, legal counsel or other advisers (independent or otherwise), provided that, preceding any such retention or advice, the Committee must take into consideration all factors, including any applicable factors under NYSE rules, relevant to the adviser’s independence from management. The Committee will be directly responsible for the appointment, compensation and oversight of any adviser it retains. The Company must provide for appropriate funding, as determined by the Committee, for payment of reasonable compensation to any adviser retained by the Committee.

In addition to the duties and responsibilities expressly delegated to the Committee in this Charter, the Committee may exercise any other powers and carry out any other responsibilities consistent with this Charter, the purposes of the Committee, the Company’s bylaws and applicable NYSE rules.

The Committee has the authority to conduct or authorize investigations into any matters within the scope of its responsibilities as it deems appropriate, including the authority to request any officer, employee or adviser of the Company to meet with the Committee or any advisers engaged by the Committee.

IV. Duties and Responsibilities

1. *CEO Evaluation and Compensation.* The Committee will review and approve the corporate goals and objectives with respect to the compensation of the Chief Executive Officer. The Committee will evaluate the Chief Executive Officer's performance in light of these goals and objectives and, based upon this evaluation (either alone or, if directed by the Board, in conjunction with a majority of the independent directors on the Board), will set the Chief Executive Officer's compensation.

2. *Other Executive Officer Evaluation and Compensation.* The Committee will oversee an evaluation of the executive officers other than the Chief Executive Officer and, after considering such evaluation, will review and set, or make recommendations to the Board regarding the compensation of such executive officers.

3. *Employment Agreements.* The Committee will review and approve any employment and severance agreements or arrangements for the Company's executive officers.

4. *Director Compensation.* The Committee will review and make recommendations to the Board regarding cash-based and equity-based director compensation.

5. *Incentive and Equity Compensation.* The Committee will review and approve or make recommendations to the Board regarding the Company's incentive compensation and equity-based plans and arrangements (the "Plans"). The Committee has full authority to administer the Plans (except to the extent the terms of a Plan require administration by the full Board), and to make grants of cash-based and equity-based awards under the Plans.

6. *Compensation Discussion and Analysis.* To the extent that the Company is required to include a "Compensation Discussion and Analysis" ("CD&A") in the Company's Annual Report on Form 10-K or annual proxy statement, the Committee will review and discuss with management the Company's CD&A and will consider whether it will recommend to the Board that the Company's CD&A be included in the appropriate filing.

7. *Clawback Policy.* The Committee will administer and oversee the Company's compliance with the compensation recovery policy required by applicable SEC and NYSE rules.

8. *Compensation Committee Report.* The Committee will prepare the annual Compensation Committee Report, to the extent required.

9. *Reports to the Board of Directors.* The Committee must report regularly to the Board regarding the activities of the Committee.

10. *Committee Self-Evaluation.* The Committee must annually perform an evaluation of the performance of the Committee.

11. *Review of this Charter.* The Committee must periodically review and reassess this Charter and submit any recommended changes to the Board for its consideration.

V. Delegation of Duties

In fulfilling its responsibilities, the Committee has the authority to delegate any or all of its responsibilities to a subcommittee of the Committee. To the extent permitted by applicable law and the Company's equity-based plans, the Committee may delegate to one or more executive officers of the Company the authority to grant equity-based awards to employees or independent contractors of the Company or any subsidiary of the Company who are not executive officers.