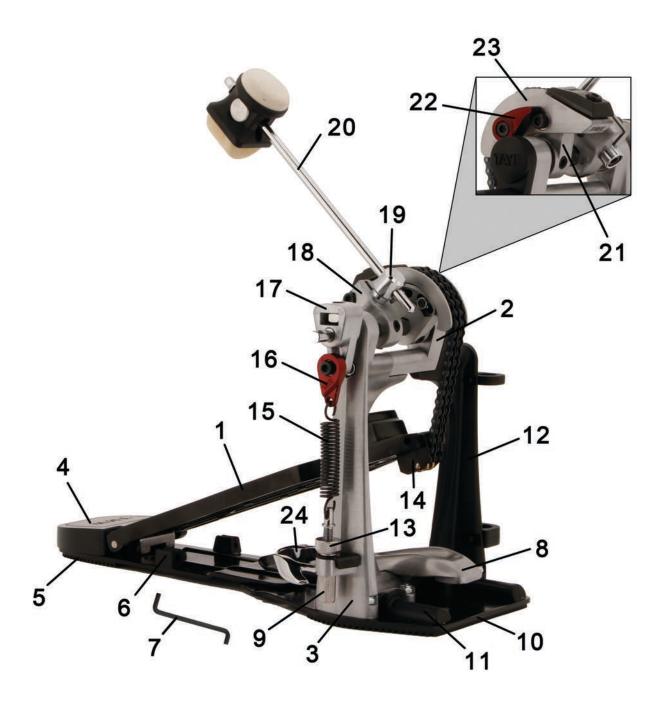
# TAYE METALWORKS

PRODUCT GUIDE





# Your MetalWorks Pedal



- 1. Footboard
- 2. Bearing Support
- 3. Tower
- 4. Heelplate
- 5. Rear Base Plate
- 6. Allen Wrench Holder
- o. Alien wichen Holde
- 7. Allen Wrench Tool
- 8. Hoop Clamp

- 9. Spring Tension Hex Nut
- 10. Front Base Plate
- 11. Hoop Support
- 12. Stick Caddy
- 13. Spring Tension Thumb Nut
- 14. Chain
- 15. Spring
- 16. Rocker Bearing Housing

- 17. Rocker
- 18. Beater Holder Clamp
- 19. Beater Holder
- 20. Beater
- 21. Cam Hub
- 22. Cam Lever
- 23. Cam Body
- 24. Base Plate Disconnect

# **Pedal Adjustments**

# Fully Adjustable Cam:

#### 1) Cam Profile Adjustment:

The cam assembly on the MetalWorks provides for the adjustment of the effective cam profile via a side mounted lever. The MetalWorks cam can be set up with an effective accelerating profile, a constant rate profile, or anywhere in between.

A cam with an accelerating profile causes the beater to rotate through its' path with an increasing velocity. This translates into a feel at the footboard that could be described as fast or punchy.



Fig. 1 - Cam Lever Adjustment

A constant rate cam profile yields a pedal that may feel more controllable as the beater action is directly related to the footboard travel.

The cam profile adjustment lever is located on the left hand side of the cam assembly. Rotating the lever forward (towards the drum head) increases the acceleration rate. When the lever is rotated all the way back (towards the drummer), the acceleration is zero and the velocity is constant.

To adjust the cam profile, loosen the two 5mm hex cap screws on the left hand side of the cam assembly, rotate the lever forward or back and tighten the screws. (See Fig. 1)

Caution: The lever rotation is limited between the head of the hex cap screw at the back and the lever stop on the cam body at the front. Incorrect assembly of the cam assembly outside this range will cause permanent damage to the assembly.

#### 2) Cam rotational adjustment:

The cam assembly on the MetalWorks also provides for the adjustment of the cam relative to the beater. Adjusting the beater position will affect the position of the cam relative to the drive chain. Subsequent adjustment of the cam body rotational position will maintain the optimal cam/chain positioning.



Fig. 2 - Cam body rotational adjustment

The cam body rotational position is adjusted using the same procedure as the cam profile adjustment. With the hex cap screws loosened, rotate the cam body about the cam hub to the desired position and tighten.

# Adjustable Base Plates:

The MetalWorks features a two piece base plate offering 25 mm of length adjustment. This feature can be used to adjust the angle of chain pull. Adjusting the angle of chain pull changes the feel of a pedal by changing the distance the footboard must travel for a given beater shaft rotation. A shallow chain angle increases the footboard travel and produces a lighter feel at the footboard. A steep chain angle results in a faster,



Fig. 3 - Base plate length adjustment

stiffer feel at the footboard. To adjust the length of the base plate, loosen the wing nut securing the front and rear plates, slide the rear plate fore or aft and tighten the wing nut (Fig. 3).

# Fully Adjustable Beater Assembly:

#### 1) Fore/aft adjustment:

The articulated beater assembly on the MetalWorks pedals permits the adjustment of the beater position relative to the shaft and the drumhead. This adjustment is used to (1) set a desired point-of-impact beater rod angle and (2) retain the chosen beater rod angle on a variety of different sized hoops. To adjust the fore/aft position of the beater shaft holder, loosen the 5mm hex cap screw located on the side of the articulated beater clamp, slide the holder to the preferred location and tighten (Fig. 4).



Fig. 4 - Beater fore/aft adjustment

# 2) Tilt adjustment:

The articulated beater assembly on the MetalWorks pedals permits the position of the beater to be rotated side to side. This feature is used to (1) center or offset the beater relative to the center of the drum and (2) match the offset of both beaters in a double pedal set-up. The tilt is adjusted in the same way as the fore/aft adjustment (Fig 5).

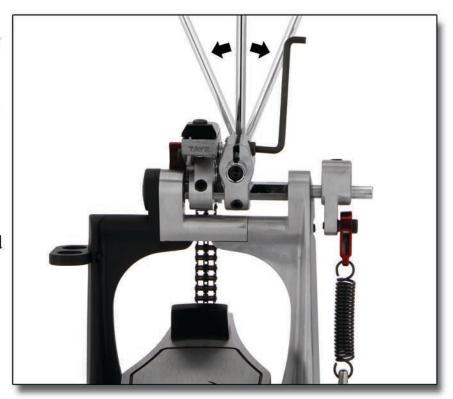


Fig. 5 - Beater tilt adjustment

#### 3) Rod length adjustment:

The MetalWorks comes standard with a longer than average rod to provide a wide range of beater height adjustment. Changes to the height of the beater affect the feel of a pedal by (1) changing the rotational inertia about the driveshaft and (2) changing the point at which the beater hits the bass drum.

Much like a long drumstick versus a short one, an increased beater height provides a more powerful feel at the footboard with a somewhat slower feeling action. A shorter beater rod will have a lighter feel and faster action.

Equally important is the location of impact on the drum. Generally, a bass drum will produce the best sound when hit at or near the center. The beater height can be adjusted to accomplish this for a range of drum sizes at the expense of a certain amount of feel. To adjust the height of the beater on the MetalWorks pedals, loosen the 5mm hex cap screw located at the back of the beater rod holder (Fig 6). Adjust beater height and tighten.



Fig 6. - Rod Length Adjustment

# 4) Beater Position Adjustment:

The beater position on the Metal-Works is infinitely adjustable. To adjust the position of the beater, loosen the 8mm set screw located on the top face of the rocker (Fig. 7). Rotate the beater to position and tighten securely. See Cam rotational adjustment about optimizing the cam location after the beater position has been changed.



Fig 7. - Beater Position Adjustment

# Rocker spring tension adjustment:

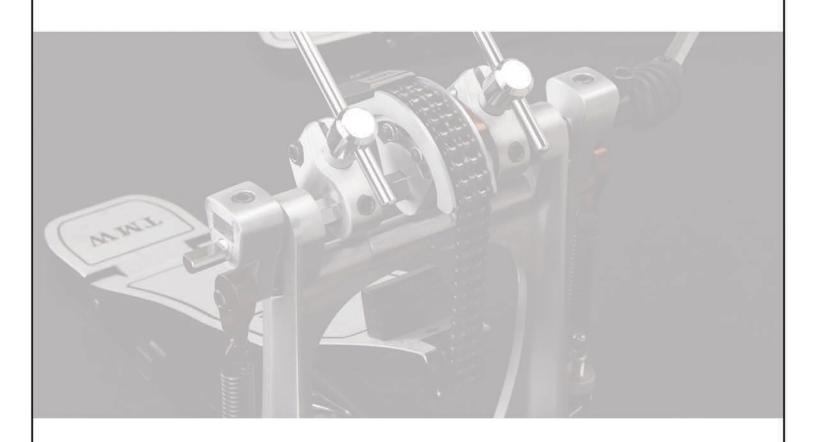
MetalWorks pedals are supplied with a medium weight spring that will be appropriate for most playing styles. We also offer an alternate heavy spring as an optional accessory upgrade. The spring preload adjustment on a pedal alters the rate of return of the beater as well as the footboard resistance to motion. The MetalWorks has a range of adjustability with the medium weight spring from full soft (almost no spring tension-low resistance/soft return) to medium hard (high tension-higher resistance/fast return).

### Hoop clamp adjustment:

MetalWorks pedals come equipped with a lever actuated hoop clamp. To clamp the pedal to the bass drum hoop, place drum between the clamp and the two hoop supports and tighten the wing-screw located on the right-hand side of the pedal, underneath the footboard.

#### Conclusion:

We've designed the MetalWorks with a multitude of adjustment to be able to customize a feel that is specifically right for you. There is no one right way to set up your Taye MetalWorks pedal, the adjustment settings you use in combination are entirely up to you. Experiment with different settings until you find a feel that works perfect for your feet!





13924 Mountain Ave. Chino, Ca 91710

T: 909.628.9589 F: 909.628.1799 E: info@tayedrums.com

www.tayedrums.com www.facebook.com/taye.drums www.myspace.com/usatayedrums