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› SHIMANO FDM313X6 Front Derailleur Instruction Manual

## SHIMANO FDM313X6

# SHIMANO FDM313X6 Front Derailleur Instruction Manual

Model: FDM313X6

## 1. PRODUCT OVERVIEW

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The SHIMANO FDM313X6 Front Derailleur is a high-quality bicycle component designed for reliable and precise gear shifting. Crafted from durable aluminum, this derailleur is built to withstand the rigors of cycling and ensure long-lasting performance. It is specifically designed for 7/8-speed drivetrains and is compatible with chainrings up to 48 teeth.



Figure 1: Main view of the SHIMANO FDM313X6 Front Derailleur.

## 2. KEY FEATURES

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- **Down Swing Design:** Provides efficient and smooth shifting performance.
- **7/8-Speed Compatibility:** Designed to work seamlessly with 7-speed and 8-speed bicycle drivetrains.
- **42/48 Teeth Chainring Support:** Accommodates chainrings with 42 or 48 teeth for versatile gearing options.
- **Durable Aluminum Construction:** Ensures robust performance and longevity.
- **Clamp-On Mount:** Easy and secure installation onto the bicycle frame.

## 3. SETUP AND INSTALLATION

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The SHIMANO FDM313X6 Front Derailleur features a clamp-on mounting system for straightforward installation. Proper installation is crucial for optimal performance and safety. Refer to the following steps and the product overview video for visual guidance.

1. **Prepare the Frame:** Ensure the seat tube area where the derailleur will be mounted is clean and free of debris.
2. **Position the Derailleur:** Place the derailleur clamp around the seat tube. The outer plate of the derailleur cage should be parallel to the largest chainring. The bottom of the outer plate should be 1-3mm above the teeth of the largest chainring.
3. **Secure the Clamp:** Tighten the clamp bolt securely, ensuring the derailleur does not rotate on the seat tube.
4. **Attach the Cable:** Route the derailleur cable through the appropriate guides on your frame and attach it

to the derailleur's cable fixing bolt. Ensure there is no slack in the cable.

#### 5. Adjust Limit Screws:

- **Low Limit (L) Screw:** Adjust this screw to prevent the chain from falling off the smallest chainring towards the frame.
- **High Limit (H) Screw:** Adjust this screw to prevent the chain from falling off the largest chainring towards the crank arm.

6. **Fine-Tune Shifting:** Use the barrel adjuster on your shifter or the derailleur (if present) to fine-tune cable tension for smooth and precise shifts across all chainrings.



Figure 2: Side view of the derailleur, showing the clamp mechanism.

Your browser does not support the video tag.

Video 1: Product Overview Video. This video provides a visual guide to the features and basic installation of the SHIMANO FDM313X6 Front Derailleur.

## 4. OPERATION

The SHIMANO FDM313X6 Front Derailleur works in conjunction with your front shifter to move the chain between the different chainrings on your crankset. To shift, operate your front shifter lever. For optimal performance, shift gears smoothly and avoid excessive force. Anticipate terrain changes and shift proactively to maintain a consistent cadence.



Figure 3: Front view of the derailleur, highlighting the cage design.

## 5. MAINTENANCE

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Regular maintenance will extend the life and performance of your front derailleur:

- **Cleaning:** Periodically clean the derailleur cage and pivots to remove dirt and grime. Use a degreaser if necessary, then rinse and dry thoroughly.
- **Lubrication:** Apply a small amount of bicycle-specific lubricant to the pivot points of the derailleur. Avoid over-lubricating, as this can attract more dirt.
- **Cable Inspection:** Check the derailleur cable for fraying or corrosion. Replace the cable if any damage is observed.
- **Limit Screw Check:** Occasionally verify that the limit screws are still correctly set to prevent over-shifting.
- **Tightness Check:** Ensure all bolts, especially the clamp bolt, are securely tightened.



Figure 4: Rear view of the derailleur, showing the pivot points for lubrication.

## 6. TROUBLESHOOTING

If you experience issues with your front derailleur, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Slow or difficult shifting	Insufficient cable tension, dirty cable/housing, stiff pivots	Increase cable tension with barrel adjuster, clean/replace cable and housing, lubricate pivots.
Chain rubs on derailleur cage	Incorrect limit screw adjustment, derailleur not parallel to chainrings, bent derailleur cage	Adjust H/L limit screws, realign derailleur, inspect for damage.
Chain falls off chainring	Incorrect limit screw adjustment (too loose)	Tighten H/L limit screws as appropriate.

## 7. SPECIFICATIONS

Specification	Value
Brand	SHIMANO
Model Name	CVD138 (Part Number: EFDM313X6)
Mounting Type	Clamp-On Mount
Number of Teeth (Max Chainring)	48
Speed Compatibility	7/8-speed
Material	Aluminum
Item Weight	295 Grams
Product Dimensions (LxWxH)	6.5" x 4.25" x 3.75"

## 8. WARRANTY AND SUPPORT

This SHIMANO FDM313X6 Front Derailleur comes with a **2 Year Manufacturer Warranty**. For warranty claims, technical support, or any other inquiries, please contact SHIMANO customer service or visit their official website. Keep your proof of purchase for warranty validation.

For additional resources and detailed technical information, you may visit the official SHIMANO website: [SHIMANO Store on Amazon](#)