# OWNER'S MANUAL AND USER'S INSTRUCTIONS

## MODEL C-200 COUPLERS







## CONTENTS

WARNINGS	1
	1
HOW TO INSTALL THE COUPLER	2
TOWING REQUIREMENTS - EQUIPMENT	3
HOW TO ATTACH THE TRAILER	4
SAFETY CHECKS BEFORE TOWING	5
PERIODIC INSPECTION AND MAINTENANCE	7
TROUBLESHOOTING COUPLER PROBLEMS	8
DEFINITIONS	8
PARTS LIST INSIDE BACK COVE	ΞR
WARRANTYBACK COVE	ΞR

02/07

## WARNINGS

THROUGHOUT THIS MANUAL, THE FOLLOWING SIGNAL WORDS AND SYMBOLS ARE USED TO ALERT YOU TO POTENTIAL HAZARDS. OBEY ALL MESSAGES AND INSTRUCTIONS. FAILURE TO FOLLOW THESE MESSAGES AND INSTRUCTIONS MAY LEAD TO POSSIBLE INJURY OR DEATH.

# 





CAUTION

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION used without the alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

## INTRODUCTION

Your trailer is equipped with the Model C-200 coupler.



This coupler should only be installed on trailers with a Gross Vehicle Weight Rating (GVWR) of 20,000 lbs. or less.

This C-200 coupler is designed for use with a 2 5/16" hitch Ball. The hitch ball and tow vehicle must be rated to handle the actual Gross Vehicle Weight (GVW) of the trailer and load.

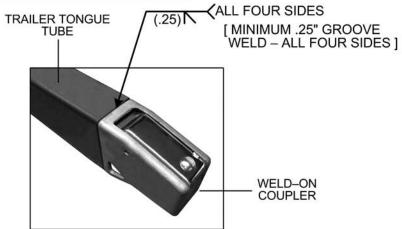
Read and familiarize yourself with this handbook. Also, review and understand the guidelines and requirements for towing published by the tow vehicle manufacturer and the trailer manufacturer.

Keep this handbook in your tow vehicle or with your trailer for future reference. Contact your dealer or our customer service department if additional information is desired.

You the user are responsible for the consequences of inadequate maintenance, deliberate misuse, alteration or damage to the actuator.

## HOW TO INSTALL THE COUPLER

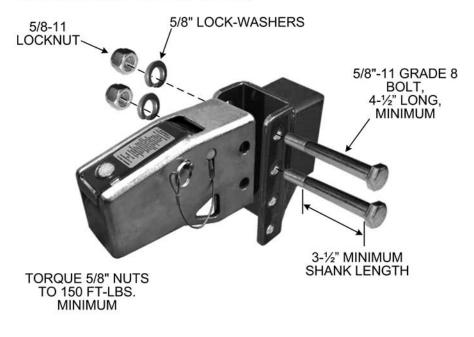
### FIGURE 1: WELD-ON STYLE C-200W



### NOTE:

TRAILER MANUFACTURER RESPONSIBLE FOR DETERMINING PROPER SIZE AND THICKNESS OF TONGUE TUBE TO MEET STRENGTH REQUIREMENTS TO MATCH TRAILER G.V.W.R.

### FIGURE 2: BOLT-ON STYLE C-200B



## **TOWING REQUIREMENTS - EQUIPMENT**



You must match the tow vehicle and trailer. Also make sure the hitch, hitch ball, and safety chain ratings match or are greater than the trailer Gross Vehicle Weight Rating.

#### TOW VEHICLE

Review the tow vehicle owner's manual and trailering guide for information on towing capacity, requirements for brakes, use of weight-distributing hitches and other towing recommendations. Make sure your vehicle combination complies with the Gross Combined Weight Rating (GCWR) limits specified by the tow vehicle manufacturer.

#### **BRAKE LAWS**

Brake laws vary from state to state. Be sure you understand and comply with regulations. Make sure your vehicle combination has adequate brakes and keep them properly adjusted and in good working condition. Brake laws usually set minimum standards. You may wish to consider a better braking capability depending on the tow vehicle, miles driven and towing terrain.

#### нітсн

The tow vehicle's hitch must have a rating equal to or greater than the trailer GVWR.

#### **HITCH BALL**

The hitch ball must have a rating equal to or greater than the trailer GVWR. Use only a quality machined, or forged ball, with a smooth finish. The C-200 requires a 2 5/16" hitch ball with a rating equal to or greater than the trailer GVWR. The 2 5/16" ball must be within the limits of 2.282" - 2.312" diameter when measured in all directions. Hitch balls may be purchased from your dealer.

#### HITCH HEIGHT

For proper tow vehicle and trailer hookup and towing performance, the tow vehicle and trailer are to be level with respect to the ground after hitching up. If your trailer is not level, equipment is available to raise or lower the hitch ball. A weight equalizing hitch or load support suspension equipment may also be required to keep the tow vehicle level and to properly load each axle.

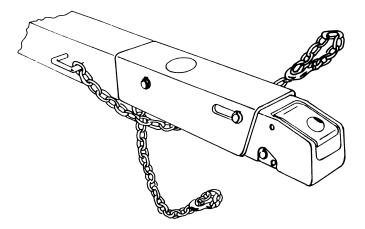
#### SAFETY CHAINS

Adequate safety chains must be used and conform to the Society of Automotive Engineers (SAE) J684 standard, "TRAILER COUPLING AND HITCHES - AUTOMOTIVE TYPE".



The strength rating of EACH length of safety chain must be equal to the trailer GVWR.

Make sure that your safety chains are fastened to the frame of the trailer and to the hitch or tow vehicle frame. Safety chains fastened directly to the hitch ball or to the bumper, are not acceptable and will not pass vehicle inspections. Connect safety chains using a crossed pattern under the tongue.



#### FIGURE 3: TYPICAL DOUBLE SAFETY CHAIN INSTALLATION

#### SWAY CONTROL DEVICES

Trailer sway control devices that restrict operation of the actuator MUST NOT be used. These devices can limit the how much the trailer brakes work.

### HOW TO ATTACH THE TRAILER

To connect the trailer to the tow vehicle, open the coupler mechanism (see instructions below) and if necessary, raise the trailer jack. Slowly back up the tow vehicle so that the hitch ball is under the coupler.



Do not move the trailer to the tow vehicle. When the trailer is moved without a tow vehicle, the brakes do not work.

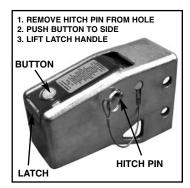
If the latch accidentally opens, the coupler could detach from the hitch ball. The hitch pin should fit easily into the hole (Figure 4). If it does not, the coupler latch is not completely closed. Every time the coupler is attached to the hitch ball, make sure the coupler completely covers the hitch ball and the lift handle will not open without pushing the push button to the side. If the hitch pin is damaged or lost, contact UFP for a free replacement pin.

#### TO OPEN THE COUPLER

Remove hitch pin from hole in the side of the coupler. Push button on top of handle to the side. While holding button to the side, raise handle by lifting front with two fingers. The coupler should unlatch easily. If not, the ball may be oversized or eggshaped, foreign matter could be lodged in coupler ball socket, or the coupler is pushing on the hitch ball. Check to make sure the wheel on the tongue jack is raised or that you are not parked downhill. Correct these conditions, then try to open the handle. Examples include tongue jack forcing front of trailer up or trailer pushing against tow vehicle. Correct as necessary.

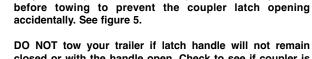
### TO CLOSE COUPLER

Place coupler over the ball, lower coupler and close handle. You will hear a "click". Handle should close with finger pressure. If handle will not close freely, ball is not fully inserted into socket, is oversized or eggshaped. DO NOT FORCE HANDLE. If necessary, replace ball with a quality unit that meets SAE specifications. Insert hitch pin into hole on side of coupler.



#### FIGURE 4: OPENING COUPLER





DO NOT tow your trailer if latch handle will not remain closed or with the handle open. Check to see if coupler is locked by lifting up on the handle without pushing the button to the side before towing. If the handle opens, the

You must install either the hitch pin (supplied) or a 3" span

coupler lock (1/4" or 5/16" shank) into the hitch pin hole

hitch ball is not the right size, oversized, or eggshaped, or the latch parts have been damaged. If the latch is damaged, contact UFP for replacement parts.

## SAFETY CHECKS BEFORE TOWING

# 

FAILURE TO READ AND FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

#### COUPLER CONDITION

Check the coupler for damage, bent parts, and excessive wear. Replace parts if needed. Contact UFP for replacement parts. Check that the bolts that attach the coupler (if equipped) to the trailer are tight.



Check that the coupler (latch) handle closes (down) completely when the hitch ball is in the coupler. To make sure the coupler is secured to the hitch ball, look under the coupler and check. Also, while the

coupler is attached, raise the front of the trailer 2" to 4" with the tongue jack. If the coupler stays connected, it is secure. If coupler does not stay connected, try reattaching the coupler and check again. If coupler will not stay attached to hitch ball, or latch opens inadvertently, DO NOT TOW TRAILER – CONTACT UFP.

### REMEMBER TO LOWER TRAILER/RAISE JACK BEFORE TOWING.

Note: At times the coupler can push on the hitch ball when parked. Check to make sure the tongue jack is raised or that you are not parked downhill. Correct these conditions, then try to open the handle.



#### TONGUE WEIGHT

It is very important your trailer have 5% to 10% tongue weight when it is loaded and the tongue is level. For example, a trailer weighing 4,000 pounds

MUST have a tongue weight of at least 200 pounds. This will help reduce trailer from swaying from side to side ("fishtailing"). A scale can be used to find the tongue weight of the trailer.

Not having enough tongue weight can cause the trailer to sway from side to side and the coupler to rattle up and down as you go down the road. This is very important and if the tongue weight is not in the 5% to 10% range, you should move the cargo (gas tank, anchor, fishing tackle, cooler) from the back to the front or front to back to make sure the tongue weight is in the range. On some trailers, the axle or axles can be moved to change the tongue weight.



### SAFETY CHAINS

Make sure that your safety chains are secured to the tow vehicle per the instructions supplied by trailer manufacturer. SAE recommendations are listed in "Requirements-Equipment" section.



#### HITCH BALL

Make sure a hitch ball of proper size and correct load rating is used. A film of clean grease on the ball will extend coupler and ball life and stop squeaking. Wipe ball clean and renew film periodically.



# 



### TOW VEHICLE HITCH

The hitch on the tow vehicle must be of the proper load rating and in good condition. If hitch is of the receiver type, make sure receiver pull pin is in place and safety pin is installed.

#### TRAILER JACK

Trailer jack must be fully retracted and caster wheel removed (if necessary) before towing.

#### **ELECTRICAL WIRING**

Plug in connector and check signal, brake and running lights.

# 

If you are not skilled in the following procedures, we recommend you contact your dealer for this service. If you have any questions contact our customer service department at (760) 744-1610.

## PERIODIC INSPECTION AND MAINTENANCE

In order to ensure efficient operation, the following checkpoints should be observed annually or every 2000 miles, whichever occurs first.

- 1. Inspect tow hitch per tow hitch manufacturer's instructions for corrosion or damage. Repair or replace components as necessary.
- 2. Check for wear on hitch ball. Ball diameter must be in the range of 2.282" 2.312" when measured in all directions. If ball is worn, it is UNSAFE and must be replaced. It could cause separation of ball and coupler, or noisy and jerky trailer operation.
- 3. Check coupler latch operation for excessive wear and fit on ball. Check fit on ball as outlined in "Coupler" section of the "Safety Checks Before Towing" Section.



A loose fit may allow coupler portion of actuator and ball to separate.

4. Check coupler mechanism for smooth operation. If button is hard to push or latch handle does not open freely, lubricate points on coupler latch mechanism indicated by arrows in Figure 5.



ARROWS INDICATE WHERE LIGHT OIL OR GREASE NEEDS TO BE APPLIED ON THE COUPLER

#### FIGURE 5: COUPLER LUBRICATION POINTS

5. Check safety chains and attachment points for damage or wear. Repair or replace as necessary.

# **PROBLEM:** SQUEAKING, CLUNKING AND CLATTERING AT COUPLER

POSSIBLE CAUSE	REMEDY
Hitch ball requires lubrication.	Lubricate with conventional multipurpose lubricant or commercial lubricant made for hitch balls.
Loose hitch ball	Inspect hitch ball and tighten.
Loose hitch	Inspect hitch and repair.
Loose mounting bolts (if equipped)	Inspect coupler mounting bolts and tighten as necessary, (150 ft-lbs minimum).
A worn or too small hitch ball.	Replace hitch ball with a quality unit that meets SAE specifications.

## **COUPLER DEFINITIONS**

GROSS VEHICLE WEIGHT RATING (GVWR) - This rating is found on the trailer's identification plate. The rating includes the total weight of the trailer and all cargo that it is carrying.

COUPLER - The portion of the actuator that receives and secures the tow vehicle hitch ball during towing.

VEHICLE COMBINATION - The combination of the tow vehicle and the trailer.

HITCH - An apparatus attached under the rear of the tow vehicle that transfers the trailer's tongue and towing loads to the tow vehicle.

HITCH BALL - A round ball on a shank attached to the hitch of the tow vehicle used to connect the trailer to the tow vehicle.

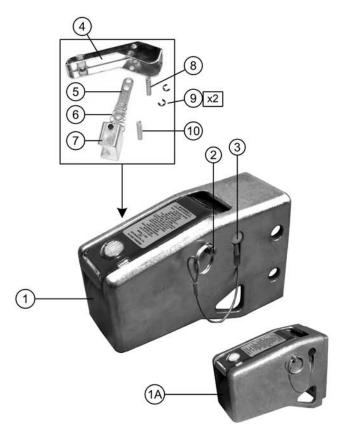
SAFETY CHAINS - An assembly, which provides a secondary means of connection between the rear of the towing vehicle and the front of the trailer.

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) J684 STANDARD - This SAE Standard includes couplings, hitches, and safety chains used in conjunction with all types of trailers or towed vehicles whose Gross Vehicle Weight Rating (GVWR) does not exceed 10,000 lbs.

TONGUE WEIGHT - A portion of the total trailer weight that is supported by the coupler.

LOAD RATING - The maximum load that a component or device can safely carry or support without failure.

## MODEL UFP C-200 PARTS BREAKDOWN



MODEL UFP C-200 ACTUAL PARTS LIST				
KEY NO.	PART NO.	PART NO.	Q'TY	
1	40550	COUPLER, BOLT ON, C-200B	1	
1A	40551	COUPLER, WELD ON, C-200W	1	
2	19041	LANYARD, HITCH PIN, SAFETY	1	
3	19042	BUTTON, SNAP, LANYARD	1	
4	19066	LATCH HANDLE W/ DEAD BOLT	1	
5	19067	LINK, BALL LOCK/LATCH	1	
6	19068	SPRING, LINK, LATCH HANDLE	1	
7	19069	BALL LOCK SUPPORT	1	
8	19070	PIN, LATCH HANDLE	1	
9	19071	CLIP, RETAINER, LATCH PIN	2	
10	19072	PIN, BALL LOCK SUPPORT	1	

#### FIVE YEAR LIMITED WARRANTY C-200 COUPLERS

The coupler is guaranteed against defects in materials and workmanship under normal use and service for a period of five years after the date of trailer purchase by the first owner.

#### Limitations of Coverage

This warranty does not cover:

Normal wear and tear, including corrosion.

Damage caused by accidents, overload, abuse, modification or improper use of product.

This warranty is limited to defective parts replacement only. Charges for installing replacement parts, damage incurred to other equipment as well as incidental or consequential damages connected therewith are excluded. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

#### **Repair or Replacement Procedure**

If a failure or defect occurs during the warranty period, promptly contact warrantor's (UFP) customer service department. Until such notice is received, warrantor will not be responsible for any repair or replacement costs. UFP, at its option, may require return of the component in question to the factory, transportation charges prepaid. UFP will replace, FREE OF CHARGE, either the entire actuator assembly or the part that proves defective, at its option. Any part found not to be defective will be returned freight collect with an explanation. Installation of parts and adjustment of brake systems MUST be performed by a skilled brake mechanic and service manual instructions must be followed.

#### Vehicle identification Number (VIN)

The VIN is a 17 digit number located on the trailer identification label. The label is located on the left side of the trailer. Be sure to include the VIN number in all communications with Warrantor.

#### Purchaser's Rights

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### Product improvement

UFP has a policy of continuous product improvement. We reserve the right to change or improve the design of our products without assuming an obligation to modify any product previously manufactured.



135 Sunshine Lane ★ San Marcos, CA 92069 (760) 744-1610 ★ Fax (760) 744-1616 ★ www.ufpnet.com