



You *can* take it with you.

# INSTRUCTION MANUAL

## R20 - Fifth Wheel Hitch

*Plymouth MI*

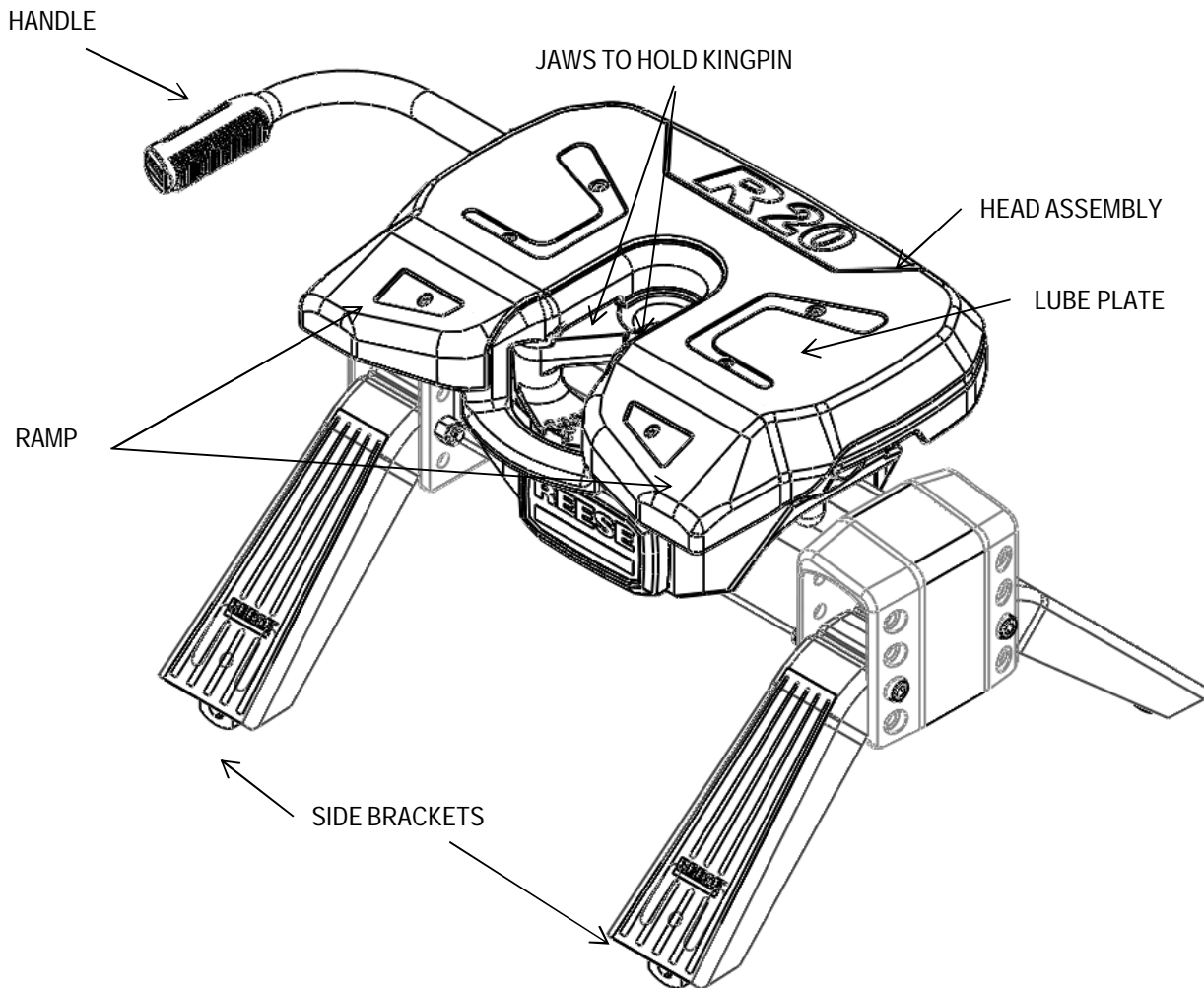
Product No.  
**30867**

### DEALER/INSTALLER:

- (1) Provide this Manual to end user.
- (2) Physically demonstrate hitching and unhitching procedures in this Manual to end user.
- (3) Have end user demonstrate that he/she understands procedures.

### END USER:

- (1) Read and follow this Manual every time you use hitch.
- (2) Save this Manual and Hitch Warning Hang Tag for future reference.
- (3) Pass on copies of Manual and Hitch Warning Hang Tag to any other user or owner of hitch.
- (4) Never remove hitch warning decals as shown on the cover of this manual. If damaged, contact Reese (1-888-521-0510 or [www.reeseprod.com](http://www.reeseprod.com)) for free replacement.



**For Installation Assistance or Technical Help, Call 1-888-521-0510**



**WARNING:**

**Failure to follow these instructions may result in death or serious injury!**

**INDEX**

1. GUIDELINES FOR MATCHING TOW VEHICLE AND TRAILER	P. 2
2. ASSEMBLY INSTRUCTIONS	P. 4
3. BEFORE EACH TRIP	P. 5
4. HITCHING PROCEDURE	P. 5
5. PULL TEST	P. 8
6. UNHITCHING PROCEDURE	P. 8
7. MAINTENANCE	P. 9
8. REESE FIVE YEAR LIMITED WARRANTY	P. 9

**GUIDELINES FOR MATCHING HITCH TRUCK AND TRAILER**



**WARNING:**

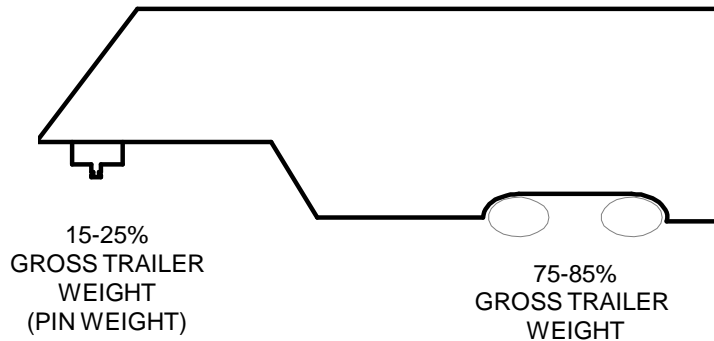
- Trailer and its contents together must not exceed truck, hitch and/or trailer tow ratings.
- Towing vehicle must have a manufacturer's rated towing capacity equal to or greater than the gross trailer weight (dry weight of the trailer plus payload of the trailer). (See Fig. 1)
- Gross weight of trailer must not exceed 20,000 pounds.
- King pin weight must not exceed 5,000 pounds (See Fig. 2). If in doubt have king pin weight measured by qualified facility.

**Fig. 1**



1. Reese hitches are designed for use with recreational fifth wheel trailers only. Hitch applications other than recreational fifth wheel trailers must be approved in writing by Reese's Engineering Department.
2. Use only a SAE 2-inch king pin with your Reese Fifth Wheel Hitch.
3. Approximately 15%-25% of trailer weight should be on hitch (Pin Weight). See Fig 2.

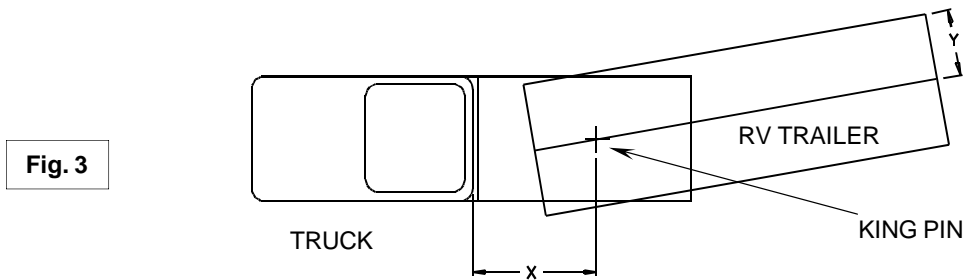
**Fig. 2**



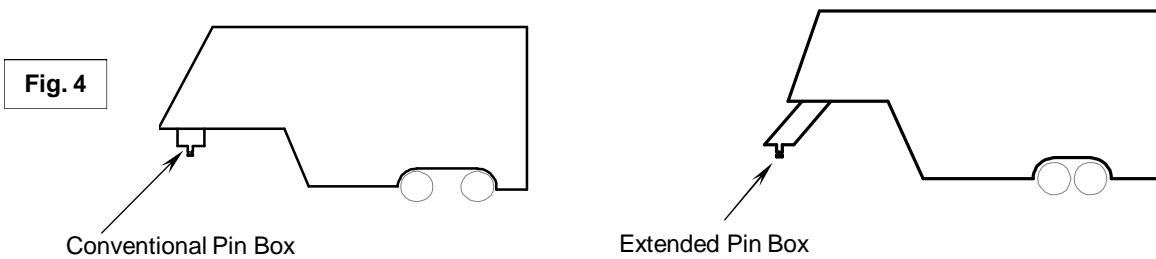
GROSS TRAILER WEIGHT

4. Trucks come in many different configurations. Reese hitches are designed for use in light trucks such as the Ford F-Series, the Chevy Silverado and the Dodge Ram. Reese recommends the use of long bed (8ft) light trucks for the best combination in truck - trailer turning clearance.

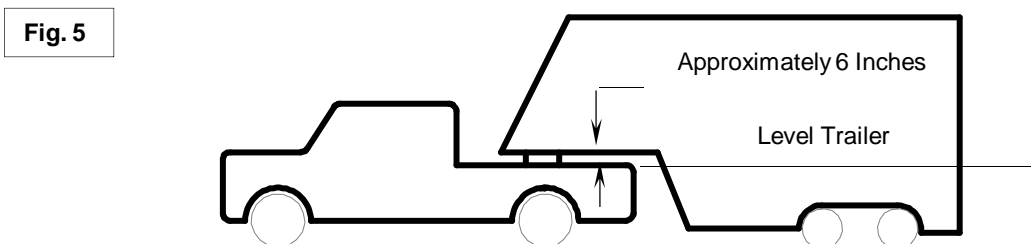
Rule of thumb: The distance from the back of the truck cab to the center of the rear truck axle ("X" in Fig. 3), should be approximately 4 inches greater than one-half the trailer width ("Y" in Fig.3)



5. If a short bed pickup (less than 8 ft. but longer than 6 ft.) is to be used for towing, Reese recommends the trailer be equipped with an extended pin box to help gain additional truck - trailer turning clearance (See trailer manufacturer for options) (See Fig. 4). It also may be helpful to add a Reese Slider for increased turning clearance for low speed, non-highway maneuvering.

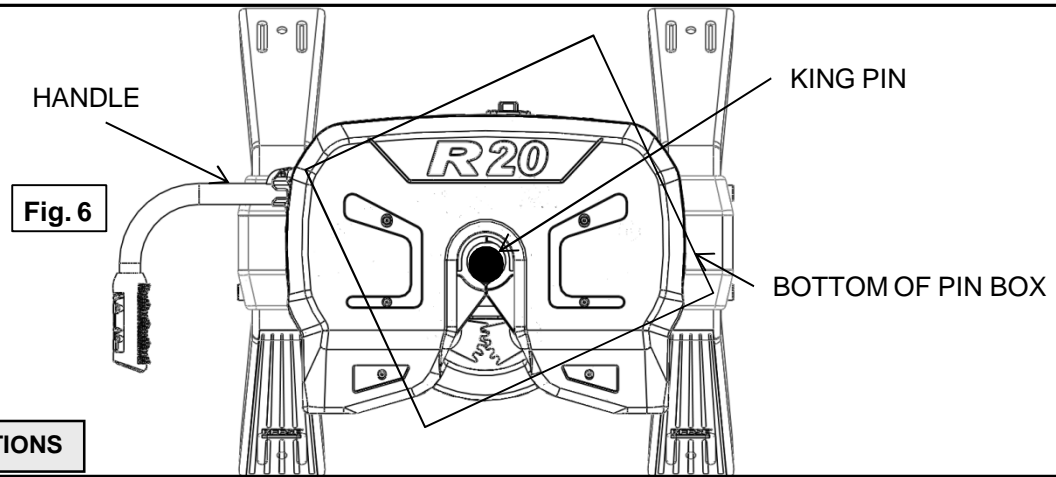


6. The height of the hitch and the pin box should be adjusted so the trailer is approximately level as it is towed. Allow approximately 6 inches clearance between the top of the pickup walls and the underside of the front of the trailer for pitch and roll of the trailer. (See Fig. 5). Allow more clearance between pickup walls and trailer for off road use.



**⚠ WARNING:**

**DO NOT** use this hitch for towing a trailer with a pin box that could come in contact with or interfere with the latch of the hitch handle when turning! (See Fig 6) If the pin box contacts the hitch handle or its latch when turning, the trailer may become unhitched.

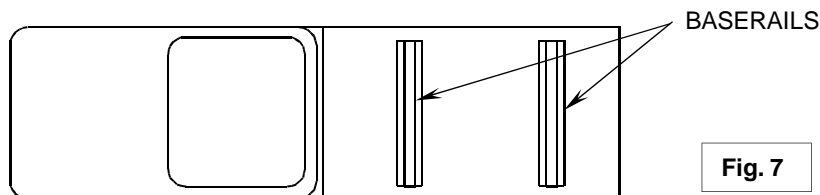


**ASSEMBLY INSTRUCTIONS**

**⚠ WARNING:**

- Connection for trailer wiring should be in the side of the truck bed between the driver's seat and the wheel well for the back truck axle
- Installation of connection rearward of the wheel well may result in user placing body between truck and trailer. **WHENEVER POSSIBLE, AVOID PUTTING BODY UNDER TRAILER OR BETWEEN TRUCK AND TRAILER!**
- If you need to place any part of your body under trailer or between truck and trailer:
  - All trailer tires **MUST** be blocked in front and behind each tire **AND**
  - Trailer landing gear **MUST** be resting on firm ground **AND**
  - Truck **MUST** be stationary, in park, with emergency brake on!

1. Reference Fig. 20 on back page. Number in parentheses refer to parts in Fig. 20.
2. R16 Fifth Wheel is contained in two cartons. Unpack and become familiar with parts on parts list. Base rail, brackets and hardware are in separate kits (Part no's. 30035, or 30095 or 30153) with separate installation instructions for Fifth Wheel Rail Mounting Kit.
3. Place two base rails across bed of truck (See Fig 7). Select one leg and place tabs through the middle rectangular slot in the base rails. Slip long pull pins through holes in base rails from the inside out as shown so the cotter pins are on the outside of the base rails. Repeat for other leg. Secure pull pins with the spring retaining pins.



4. Select cross member (8) and install on leg aligning holes for hitch height desired. (Lowest position 14" highest 18"). Install four ½-13x4.5" Socket Head Cap bolts (9), with the heads towards the outside as shown, and lock nuts (10).
5. Torque ½" nuts to 75 lb.ft.
6. Install base rails and mounting brackets as described in "Installation Instructions for 5<sup>th</sup> Wheel Rail Mounting Kit."

**⚠ WARNING**

**Base rails must be bolted through the floor of the pickup to the brackets that attach to the truck frame. DO NOT INSTALL BY FASTENING TO THE FLOOR OF THE PICKUP BOX ONLY. The floor alone is not strong enough to carry the loads imposed by the trailer.**

### BEFORE EACH TRIP:

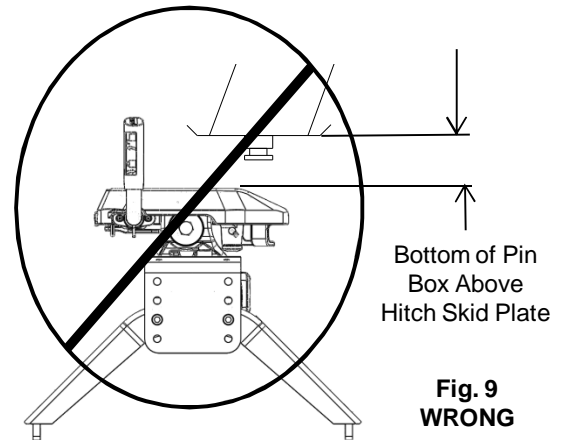
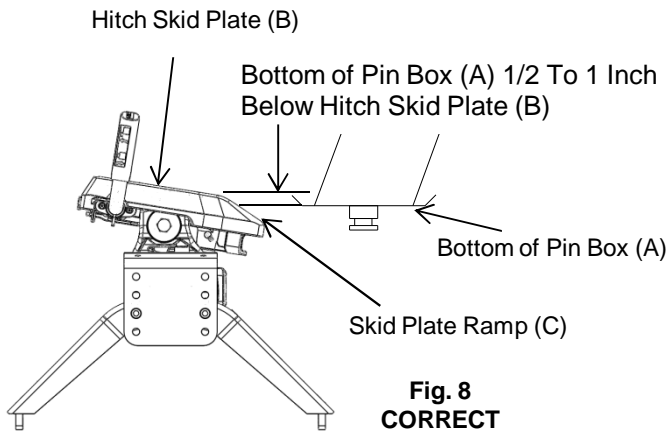
1. A plastic lube plate is supplied with the R20 (see figure on cover of Manual). Do not use automotive type chassis grease to provide the lubricated surface.
2. DO NOT USE A ROUND LUBE PLATE WITH THE R20. A PLASTIC LUBE PLATE IS STANDARD EQUIPMENT ON THE R20.
3. Before each trip or maneuver, operate the handle and check that the jaws open and close freely.
4. See that all hitch pins (#16 on Fig.20) are in place and the spring retaining pins (#17 on Fig.20) are installed.

### HITCHING PROCEDURE:

**IMPORTANT: YOU ARE RESPONSIBLE FOR SAFE HITCHING AND UNHITCHING OPERATIONS. DO NOT RELY ON OTHERS TO PERFORM YOUR DUTIES. YOU MUST PERSONALLY MAKE SURE THE FOLLOWING STEPS ARE PERFORMED IN THE FOLLOWING ORDER!**

**⚠ WARNING:**  
**FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DEATH OR SERIOUS INJURY.**

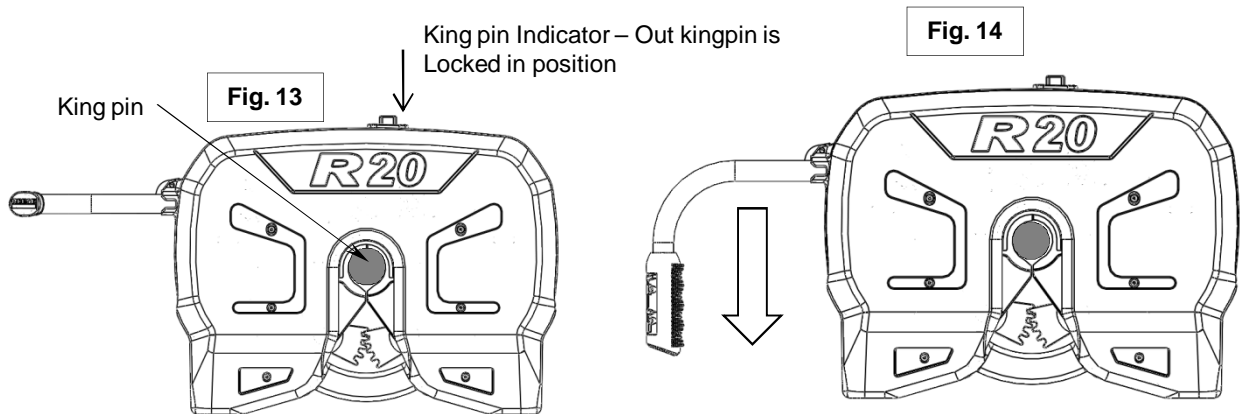
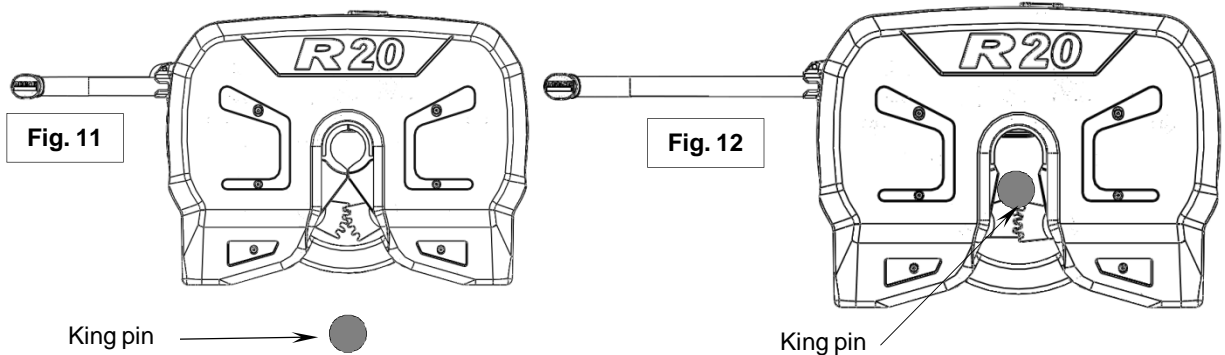
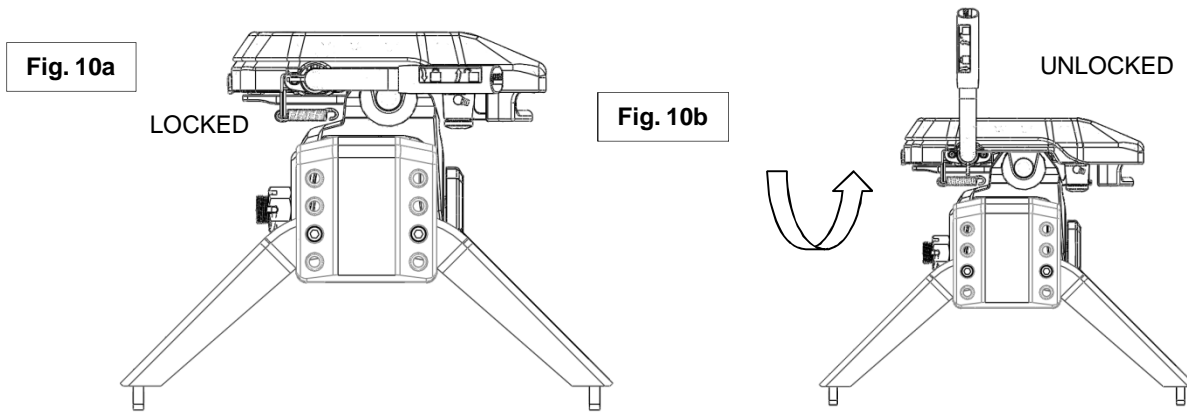
1. Place blocks (sometimes called "chocks") firmly against front and rear of each trailer wheel to prevent any possible forward or rearward motion. DO NOT REMOVE BLOCKS UNTIL EACH OF THE FOLLOWING STEPS AND THE PULL TEST HAVE BEEN COMPLETED. Lower tailgate if necessary.
2. Using trailer jacks, adjust trailer height following the directions in the trailer manual so that bottom of trailer pin ("A" in Fig. 6) is  $\frac{1}{2}$  to 1 inch below skid plate (See "B" in Fig. 8). During the hitching maneuver, the bottom of the trailer pin box should come in contact with the skid plate ramp ("C" in Fig. 8).



### ⚠ WARNING:

Failure to follow this instruction may result in king pin being too high and coming to rest on top of closed jaws or not completely inside jaws. (See Fig. 9). This could result in trailer separating from hitch. Trailer separation may result in death or serious injury if anyone is under the trailer or between truck and trailer when separation occurs.

- Rotate hitch handle from locked position (see Fig. 10a) up to the unlocked position (See Fig 10b). This will unlock the jaw system. NOTE: Hitch jaws will not open and proper hitching cannot occur if handle is **NOT** pointed up.

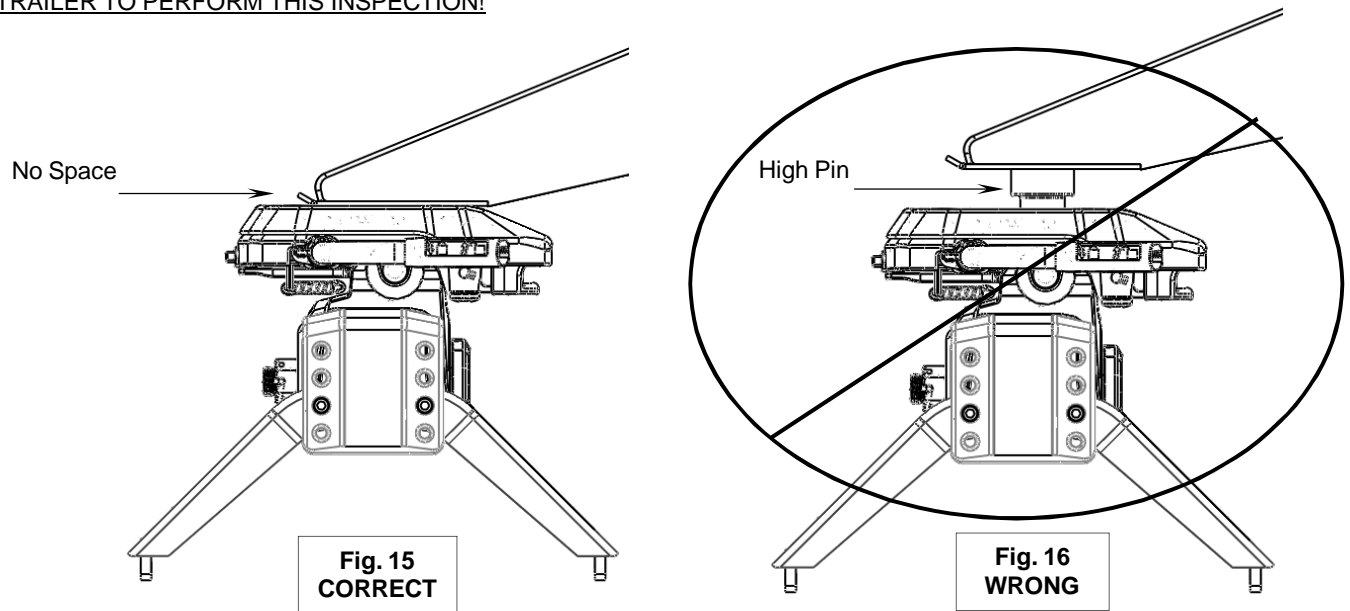


- With handle in the unlocked position (See Fig. 10b), back truck slowly into trailer. As the trailer king pin enters the hitch it will push the hitch jaws open and extend the handle (See Fig. 12). As king pin completely enters head, jaws will spring closed around king pin and handle will return to the closed position and king pin indicator will extend out from the head assembly (See Fig. 13).
- After king pin is latched rotate handle down to ensure jaws are locked around king pin (See Fig. 14).
- Use only the method described above for hitching.**

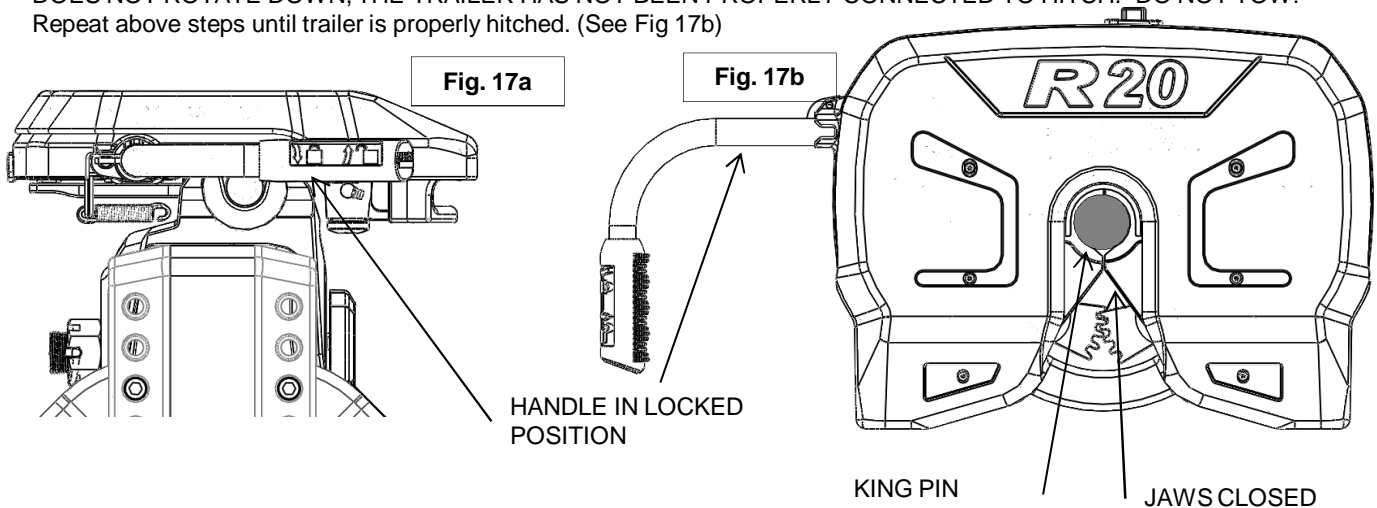
**⚠ WARNING:**

Do not attempt to hitch by using trailer jacks to lower trailer and king pin. This could result in king pin coming to rest on top of skid plate instead of within hitch opening where jaws are located. King pin could slide off hitch and trailer could drop, resulting in death or serious injury.

7. With all trailer wheels still firmly blocked, landing gear still resting on firm ground and supporting trailer weight, and truck stationary and in park with the emergency brake on: visually check that bottom of pin box is resting on top of the hitch. THERE SHOULD BE NO SPACE BETWEEN THESE SURFACES (See Fig 15). If space exists, (See Fig 16) trailer has not been properly hitched. **DO NOT TOW!** Instead, repeat above steps until trailer is properly hitched. **DO NOT PLACE BODY UNDER TRAILER TO PERFORM THIS INSPECTION!**



8. To ensure that the jaws are locked and closed, the handle must be rotated in the down position (See Fig 17a). IF HANDLE DOES NOT ROTATE DOWN, THE TRAILER HAS NOT BEEN PROPERLY CONNECTED TO HITCH. **DO NOT TOW!** Repeat above steps until trailer is properly hitched. (See Fig 17b)



9. With:
- All trailer wheels still firmly blocked in front and behind each tire, and
  - Truck stationary with the emergency brake on, and
  - Trailer landing gear still resting on firm ground and supporting trailer weight, and
  - Truck stationary and with emergency brake on:
10. Connect electrical cable between truck and trailer, connect breakaway switch cable from pin box to a permanent part of truck, and raise tailgate of truck.

**⚠ WARNING**

**•WHENEVER POSSIBLE, AVOID PUTTING BODY UNDER TRAILER OR BETWEEN TRUCK AND TRAILER.**

**•If you need to place any part of your body under trailer or between truck and trailer:**

- All trailer tires **MUST** be blocked in front and behind each tire **AND**
- Trailer landing gear **MUST** be resting on firm ground **AND**
- Truck **MUST** be stationary, in park, with emergency brake on!

## PULL TEST

### **⚠ WARNING:**

Failure to perform this test may result in death or serious injury!

1. With:
  - All trailer wheels still firmly blocked, and
  - Trailer landing gear still resting on firm ground and supporting trailer weight, and
  - Truck stationary and with the emergency brake on:
  - Return to cab of truck and release truck's emergency brake. Apply trailer brakes. After making sure no one is between truck and trailer, try to pull trailer slowly forward with the truck. If the trailer is properly hitched, the wheel blocks and trailer brakes should keep the truck from moving forward.

NOTE: If trailer is not properly hitched, trailer will separate from hitch and truck will move forward leaving trailer behind. If the trailer landing gear is still resting on firm ground supporting the trailer weight and wheel blocked, trailer will not be able to drop or fall.

### **⚠ WARNING:**

Failure to keep wheels blocked and landing gear down could result in trailer suddenly moving or falling. This could result in death or serious injury!

2. After successfully performing above steps, fully raise trailer landing gear (see trailer manual).
3. Check and inspect all electrical circuits for proper operation. (Clearance lights, turn signals, stop lights, etc.).
4. Remove and store all trailer wheel blocks.

## UNHITCHING PROCEDURE:

### PERFORM THE FOLLOWING IN THIS ORDER:

1. Place blocks firmly against front and rear of each trailer wheel to prevent any possible forward or rearward motion.
2. Using trailer jacks, lower trailer landing gear following the directions in the Trailer Manual until feet of landing gear are resting on firm ground.
3. Make sure truck is in park with the emergency brake on.

### **⚠ WARNING:**

Trailers that are not stable or properly hitched can fall and kill you! To avoid death or serious injury:

- All trailer tires **MUST** be blocked in front and behind each tire **AND**
- Trailer landing gear **MUST** be resting on firm ground **AND**
- Truck **MUST** be stationary, in park, with emergency brake on!

4. Lower truck tail gate.
5. Disconnect power cable and breakaway switch cable between truck and trailer.
6. Rotate hitch handle up to the unlocked position (See Fig 18) and pull the handle towards you so that the king pin is no longer securely grasped by hitch jaws (See Fig 19). Trailer is now free from hitch and truck. If handle does not pull out, there is probably pressure against the jaws. To relieve this pressure, back the truck slightly. Reset truck emergency brake. Then pull hitch handle out completely.

Fig. 18

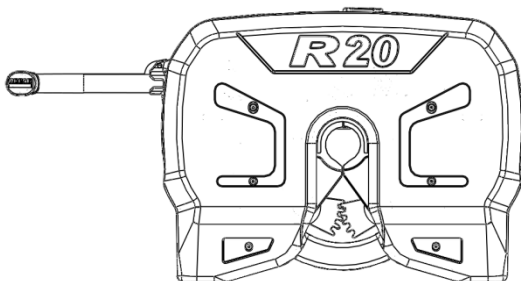
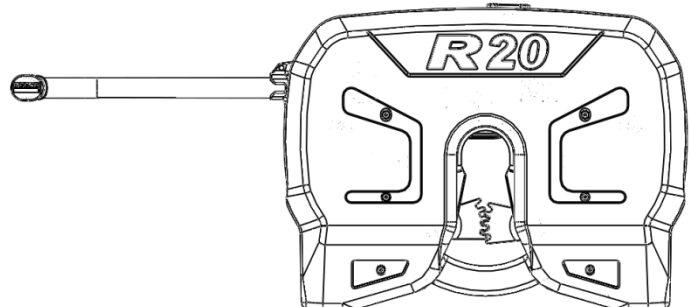


Fig. 19





7. AFTER MAKING CERTAIN NO ONE IS STANDING BETWEEN TRUCK AND TRAILER OR IN FRONT OF TRUCK, drive truck slowly away from trailer.

 **WARNING**

Whenever possible, avoid putting body under trailer or between truck and trailer. If you need to place any part of your body under trailer or between truck and trailer:

- All trailer tires **MUST** be blocked in front and behind each tire **AND**
- Trailer landing gear **MUST** be resting on firm ground **AND**
- Truck **MUST** be stationary, in park, with emergency brake on!

8. Close hitch jaws by pushing handle forward and rotating down.
9. KEEP WHEEL BLOCKS IN PLACE. This will keep trailer from moving unexpectedly

**MAINTENANCE:**

1. Recheck tightness of all hardware every 1000 miles of use.
2. See "Before each trip" section in this manual.

**LIMITED LIFETIME WARRANTY**

REESE warrants its 5th Wheels from date of purchase against defects in material and workmanship under normal use and service, ordinary wear and tear excepted, for limited lifetime of ownership to the original consumer purchaser when a REESE mounting kit is used.

Products used by professional hauler's are subject to REESE PRODUCTS' limited One (1) year warranty.

REESE will replace FREE OF CHARGE any part which proves defective in material or workmanship when presented to any REESE dealer (consult local telephone directory) or REESE warehouse, or when returned to the factory, TRANSPORTATION CHARGES PREPAID, at the address below. THIS WARRANTY IS LIMITED TO DEFECTIVE PARTS REPLACEMENT ONLY. LABOR CHARGES AND/OR DAMAGE INCURRED IN INSTALLATION OR REPLACEMENT AS WELL AS INCIDENTAL AND CONSEQUENTIAL DAMAGES CONNECTED THEREWITH ARE EXCLUDED.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

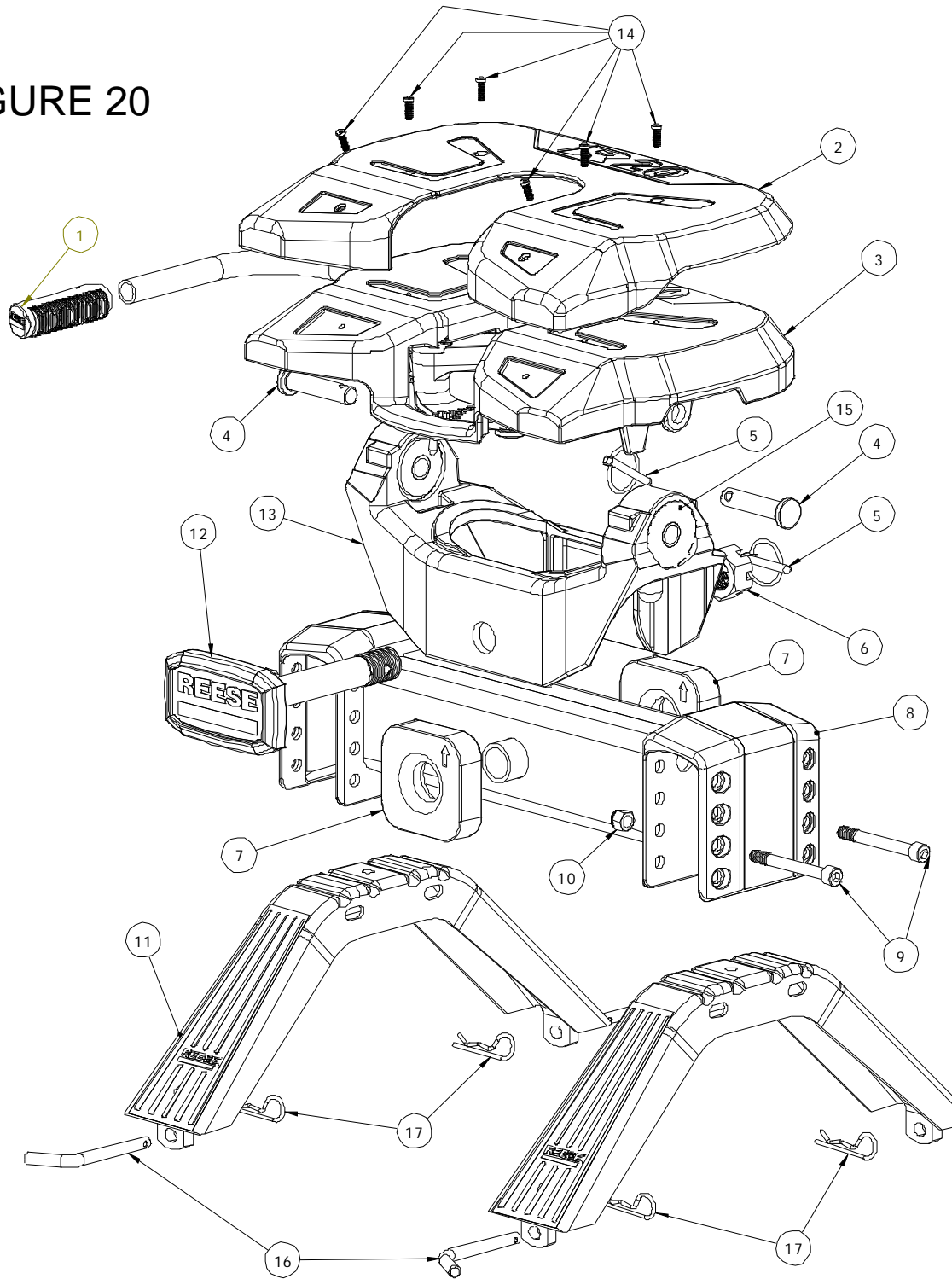
Any damage to the 5th Wheel as a result of misuse, abuse, neglect, accident, improper installation, or any use violative of the instruction furnished by us WILL VOID THE WARRANTY.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. In the event of a problem with warranty service or performance, you may be able to go to a small claims court, a state court, or a federal district court.

Cequent Performance Products  
47912 Halyard Drive  
Suite 100  
Plymouth, MI 48170

Cequent Performance Products  
2602 College Ave  
Goshen, IN 46528

FIGURE 20



ITEM NO	DESCRIPTION	PCS	ITEM NO	DESCRIPTION	PCS
1	HANDLE GRIP	(1)	10	1/2" LOCK NUT	(4)
2	LUBE PLATE	(1)	11	SIDE BRACKETS	(2)
3	HEAD PAN ASSEMBLY	(1)	12	PIVOT PIN	(1)
4	HEAD PIN	(2)	13	PIVOT BEAM	(1)
5	KLIK PIN	(3)	14	1/4"-20 SOCKET HEAD CAP SCREW	(6)
6	1 1/4" CASTLE NUT	(1)	15	HEAD ISOLATOR	(2)
7	SURGE ISOLATOR	(2)	16	PULL PIN	(4)
8	CROSS MEMBER	(1)	17	RETAINING CLIPS	(4)
9	1/2"-13 X 4.5" SOCKET HEAD CAP SCREW	(4)			