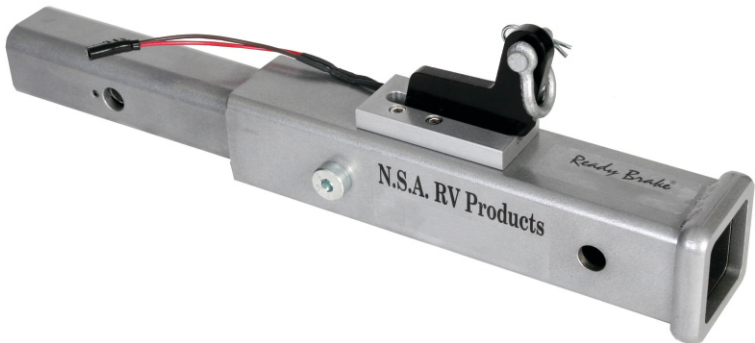




Ready Brake Supplemental Brake



Installation Instructions



Before you get started

To ensure that you get optimum results from your Ready Brake towed vehicle braking system, please read through these instructions entirely.

1. Your Ready Brake must be level with the tow bar on your towed vehicle. If your tow bar is more than two inches lower or higher than the Ready Brake mounting tube, your Ready Brake will not operate at maximum efficiency. Please call us if you need help in adapting your existing receiver hitch.
2. Your Ready Brake must be used only with vehicles being towed with all 4 wheels on the ground.
3. The loaded weight of your towed vehicle must not exceed the weight-rating on any of your towing accessories.
4. The tow bar is always hooked directly to the Ready Brake. **DO NOT** put any kind of drop between them.

Installing your Ready Brake

Make sure your receiver on motor home is clean and free from debris then place the Ready Brake into the receiver tube. Align the holes of the Ready Brake and your hitch's receiver tube. Use a standard 5/8" cross pin to secure the Ready Brake in the receiver. The actuator arm on the Ready Brake can travel 3 1/2" toward the bumper on the motor home. Allow for clearance. Most motor homes have a standard 6" deep receiver but some are shorter. In case of a shorter depth it is ok to cut 1" off the end of the 2" square tube of the Ready Brake to allow it to fit a shorter receiver.

Step 1. Drill a hole in the firewall where the internal cable conduit will be attached. Depress the brake pedal and mark a spot with chalk on the firewall or floorboard directly across from the depressed brake arm allowing for a straight pull between the brake pedal arm and the hole. (Fig. B)

****Please note:** Some vehicles have double wall or uni-body frame boxes at the point you need to run conduit through the floorboard (Ford-Windstar, Honda-CRV, Etc.). If so, you may be able to go 2-3" in either direction and find only one thickness of floorboard. The easiest way to hook the brake pedal to the aircraft cable is to remove the brake pedal pad (rubber part) and drill a small hole for the cable to go through at the bottom right side of the pedal. Drill a second hole near the brake arm. Pull the cable from the firewall through the hole at the bottom right side of the pedal and go across the face of the pedal and push it back through the pedal. Hook to the arm as described in step 1 then replace pedal pad.

Road Testing Your Ready Brake

You are now ready to "road test" the Ready Brake and make final adjustments that may be required. During the "road test" keep the following in mind:

- * The Ready Brake actuator arm should point towards the towed vehicle when moving down the road.
- * When the brakes of the motor home are applied, the actuator arm moves towards the motor home to actuate the towed vehicle's brake.
- * After a sudden or fast stop, the brakes may still be applied in the towed car. Just pull slightly forward and they will release.

Maintenance: (See back cover for list of parts)

Once a year take the four socket head cap screws (#6) out of the pivot block clamp (#16). Then pull the actuator arm(#7) out of the slot in lever. Now squirt some lithium grease for lubrication, then fill it and reassemble the Ready Brake.

Limited Lifetime Guarantee

N.S.A. RV Products, Inc. warrants to the original owner only that this product will be free from defects in material and workmanship upon original purchase.

The lifetime Guarantee on the Ready Brake unit covers the Ready Brake from front to back 100%, replacement to the original owner only. The lifetime guarantee does not cover any hardware, cables or any component of the DL-300 In-Dash Light Monitoring System. The guarantee also does not cover damage resulting from tamper, abuse, unreasonable use, mistreatment, negligence or accidental breakage.

IN NO EVENT WILL N.S.A. RV PRODUCTS, INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGE, RESULTING DIRECTLY FROM POSSESSION, MISUSE OR IMPROPER CARE OF THE READY BRAKE UNIT.

Returns

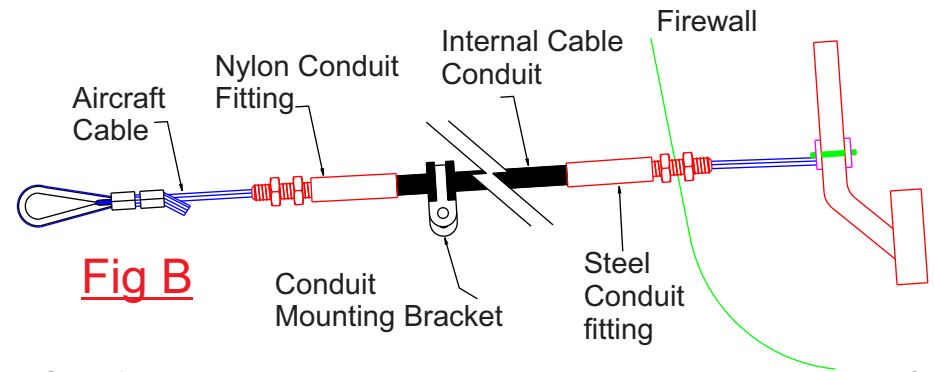
Anyone wishing to return merchandise must obtain authorization to do so.

- 1) 30 day money back return begins on date of purchase.
- 2) When the item is received our QC department will inspect and a refund amount will be determined and issued.
- 3) Shipping charges are non-refundable and we do not pay return shipping fees.
- 4) Late returns will be charged a 20% restocking fee.

Step 3. Adjust the wire sling assembly (Fig D) The adjustable sling assembly is used to connect the Ready Brake to the cable thimble on the towed vehicle.

- A. Using the spring clip (Fig. D#2) attach the adjustable end of the sling to the cable loop protruding from the front of your towed vehicle.
- B. Attach the fixed thimble (Fig. D #1) to the clevis on the black actuator arm of the Ready Brake.
- C. Take the slack out of the sling by pulling on the end of the cable. Tighten the sling until the cable in your towed vehicle is just about to be activated or leave about 2" of slack from the middle of the sling by pulling up or down.
- D. Tighten the four nuts on the cable clamps (Fig D # 3) so that the sling length is set. Make sure the clamp is against the aluminum sleeve and thimble. Brake lights should remain off.
- E. After the cable clamps have been tightened, make sure that the towed vehicle's brake lights remain off. If the lights are on, loosen the cable clamp and slacken the cable then re-tighten the cable clamps. When the adjustment is completed the brake lights should remain off.
- F. To see if you have properly installed the black cable conduit, start your car, push in the brake pedal and make sure at the front bumper the metal thimble moves in and out each time you depress the pedal. If it doesn't move you need to figure out where the bind is in the aircraft cable.

The DL-300 in dash light monitoring system that you received with the Ready Brake needs to be installed before road testing the Ready Brake. Read the instructions and install it now.



Step 2. Make sure there is no obstruction on the engine side of the firewall. Pull back the carpet and drill a 1/8" pilot hole allowing your drill bit to barely go through the firewall. If anything is interfering with this location drill another pilot hole. Remember to maintain as straight a line as possible.

Step 3. Install the Ready Brake conduit fitting. When you have no obstructions in the firewall, enlarge the hole for the steel conduit fitting using a 5/16" bit. Cut a small slit in the carpet where the hole is and slide the steel conduit fitting through the hole from the engine side of the firewall. Secure the steel conduit fitting with the nuts and washers provided. This should protrude through the firewall as little as possible into the car. (Fig B)

Tip: If the area where you have drilled the hole for the black cable conduit is congested, put a small dab of silicone (RTV) between the nut and the washer to keep the parts from falling off during installation.

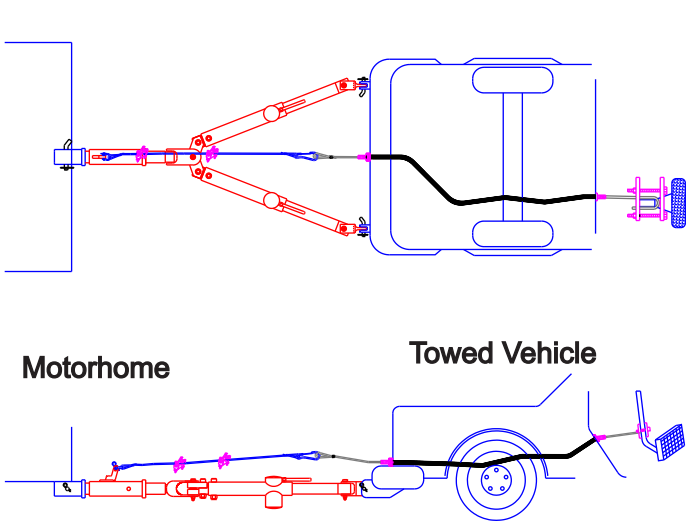
Step 4. Placement of the Ready Brake black internal cable conduit from firewall to the front end of your towed vehicle. Select a route that allows for each of the following:

- A. The conduit must not interfere with any moving parts of your towed vehicle.
- B. The conduit must clear all hot parts in your engine compartment.
- C. The conduit must not make any sharp bends that will result in crimping the cable wires inside of it. (6" radius or larger)
- D. The conduit must exit at the front of your towed vehicle.
- E. The black cable conduit needs to be anchored in many places along the route to the front of the towed vehicle, especially bends. Do this with a strong, thick zip tie (when being pulled, the cable will try to straighten the black conduit). Being secure is a **priority!**

Please Note: On overly congested engine compartments we like to come out of the firewall and immediately go down under the motor and come up by the front bumper. This seems to be the easiest route on most cars like a Honda-CRV.

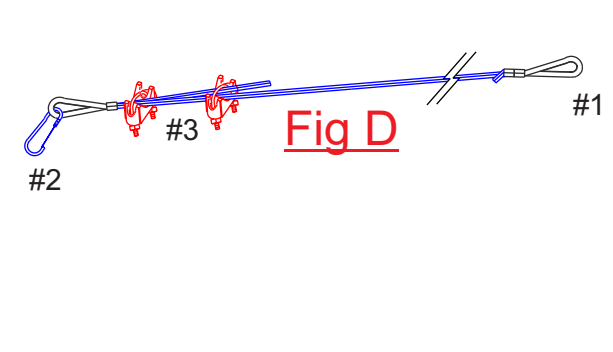
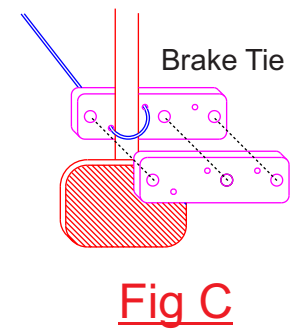
Step 5. At the front (near center) of your towed vehicle, select a location for securing the front end of the Ready Brake black internal cable conduit with the provided nylon fitting. In order to alleviate any slippage of the black conduit, we have added a white nylon fitting to be placed at the front of the towed vehicle.

- A. If the fitting can be mounted by pushing it through a 3/8" drilled hole in the bumper, baseplate mount or cross member, use the nylon nut that is supplied to hold the fitting in place. (EX #1)
The fitting may be mounted using the clamp as shown in (EX #2) by placing the clamp around the threaded part of the fitting instead of the nylon nut.
Please note: When possible we like to drill a 3/8" hole in the bottom right corner of the license plate and mount the white nylon fitting in that. This seems to work great.
- B. Cut the black conduit approximately 3/4" short of the place that you have selected to connect it at the front of the towed vehicle. (A cut off wheel, like a Dremel tool works well with this)
- C. Run about 12" of aircraft cable through the nylon fitting and into the black conduit to get started. (If you don't get it started in this manner it will be difficult to put it through the nylon fitting once the fitting is on the conduit)
- D. Push the nylon fitting over the cut end of the black conduit, then thread the cable through the black conduit.



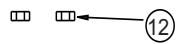
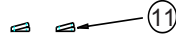
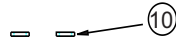
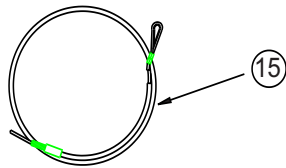
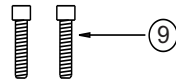
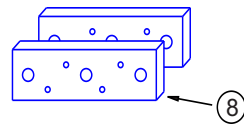
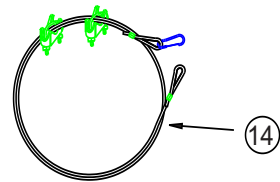
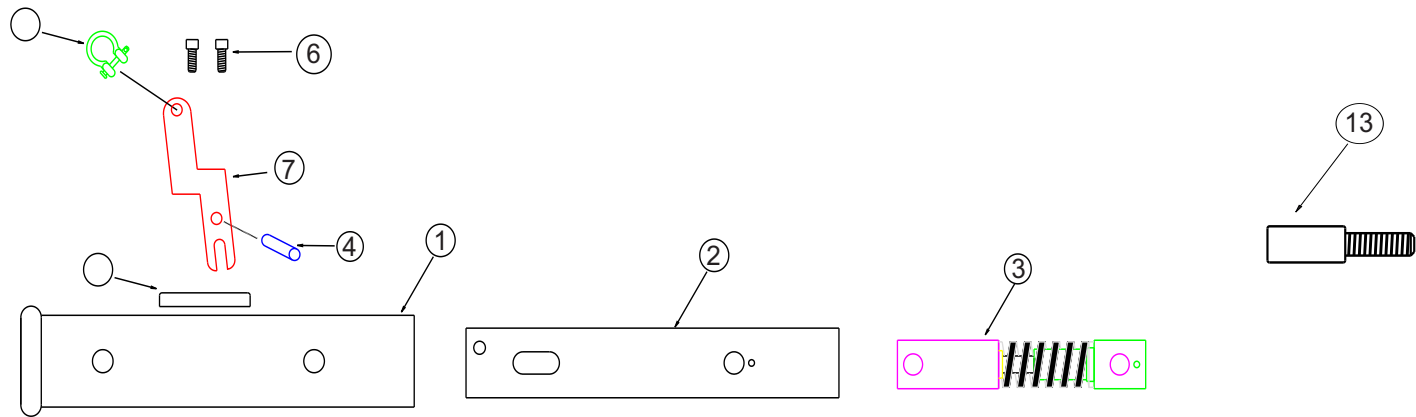
Step 6. Attaching the aircraft cable to your towed vehicle's brake pedal.

- A. Place the black brake tie on the bottom of the brake pedal arm. Thread the aircraft cable through the small hole of the bottom piece of the brake tie. Loop it around the brake pedal arm then back through the second small hole on the right. (Fig C)
- B. Put the top piece of the brake tie on the front of the brake arm.
- C. Using the 1/4" x 2 1/4" cap screw, nuts and lock washers, lock the brake tie tightly around the brake pedal arm (Fig C). Keep in mind if you are working on a vehicle with adjustable pedals to place pedals in highest position. Always tow with pedals in the highest position.
- D. Trim excess aircraft cable from the bottom of the brake tie.
Please Note: The brake tie and cap screws provided fit the brake arm on most vehicles.



Adjusting The Ready Brake

- Step 1. Prepare your motor home and towed vehicle for towing.**
 - A. Attach and lock the tow bar to the Ready Brake. Never put more than 6" of tow bar head in the RB receiver.
 - B. Hook the tow vehicle to the motor home as normal. Make sure the vehicles are aligned straight (IMPORTANT) And the tow bar, chains, lights, etc... are connected properly.
- Step 2. Make sure your towed vehicle's brakes are in an idle position.**
Do not apply pressure to the towed vehicle's brake pedal when you are adjusting the aircraft cable sling that drapes across the tow bar.



Ref#	Qty	Description
1	1	Ready Brake Body Outside
2	1	Ready Brake Body Inside
3	1	Shock & Spring Assembly
4	1	3/8 X 1 Dowel Pin
5	1	Actuator Arm Clevis
6	4	1/4-20x1" Socket Head Cap Screw
7	1	Actuator Arm
8	1	Brake Tie
9	2	1/4-20 x 2 1/4" Socket Head Cap Screw
10	2	Washer
11	2	Split Lock Washer
12	2	Nut
13	1	Nylon Fitting & Nut
14	1	Sling
15	1	Cable Conduit & S.S. Cable W/ Thimble
16	1	Pivot Block Clamp