

CorkSport Performance

AXO-3-071-1X Rear Swaybar

Installation Instructions for the CorkSport Performance Rear Swaybar for the 2019+ Mazda 3,
2020+ Mazda CX-30

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INTRODUCTION

In this installation guide we have provided step by step instructions to install the CorkSport Performance Rear Swaybar.

Advisory:

- Working under the vehicle requires a safe and sturdy location for the vehicle to sit on jackstands.
- AWD vehicles that are extremely low and/or bagged will need to verify clearance from the top of the swaybar to all other components of the vehicle to ensure safe operation.
- AWD vehicles with lift kit will not be able to safely install the CorkSport rear swaybar.

TOOLS:



- Hydraulic Jack (1)
- Jack Stand (2)
- 3/8" Drive Ratchet (1)
- 10mm Socket-Short (1)
- 15mm Socket - Deep (1)
- 1/2" Torque Wrench (1)
- Wrench, 15mm (1)
- Small Needle Nose Pliers (1)
- Razor Knife (1)
- Scissors (1)
- Anti-Seize (1)

Step 1 — Getting Started

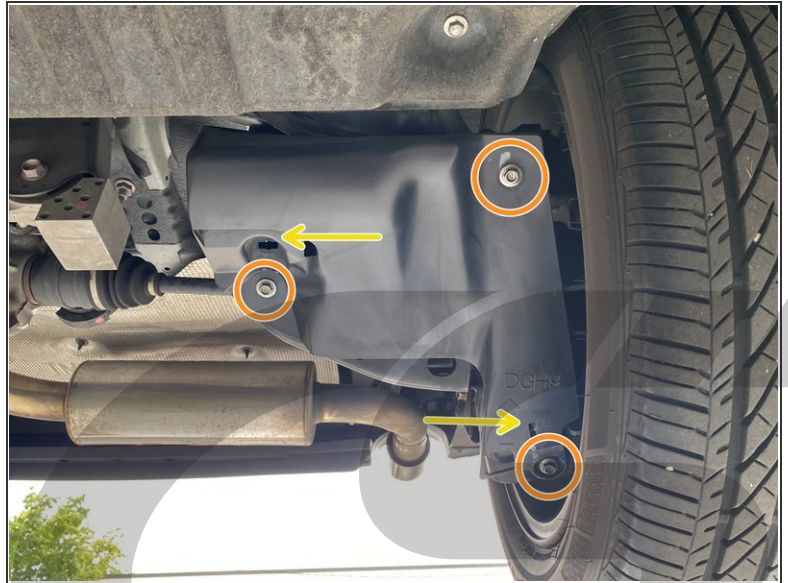
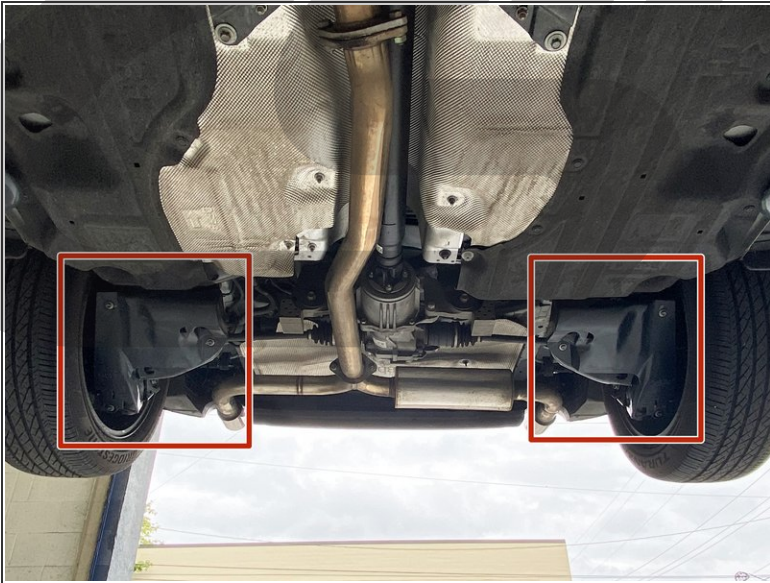


- First and foremost; **THANK YOU** for becoming a part of the CorkSport Family. We hope to bring you the highest level of Parts, Customer Service, & Support.

How To Use These Instructions:

- The instruction format will relate colored marking in the image to the color dot in the text to the right of the image.
-  The vehicle used in these instructions was a 2021 CX-30 Turbo. Other models, FWD vehicles, and other years will be identical unless noted.
-  FWD vehicles have a different center bar design and install/clearances is shown in a few separated steps.

Step 2 — Removing the Torsion Beam Aero Covers Part 1



⚠️ Ensure the vehicle is parked on a level surface before proceeding.

- Start by lifting up the rear of the car using the hydraulic jack and jack stands.

⚠️ Be sure to reference your owners manual for jack points and the jack manufacturer's instructions for proper practices.

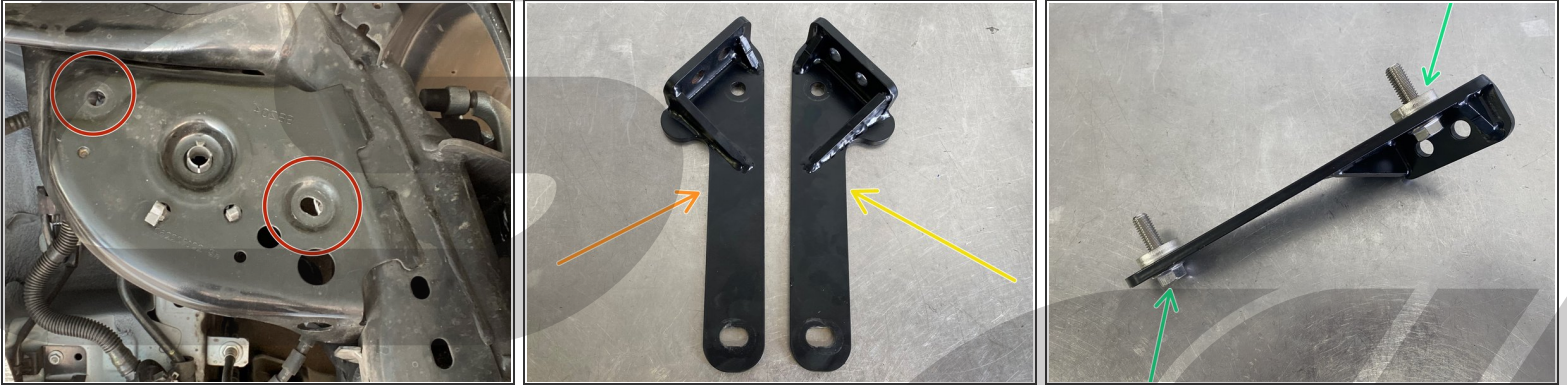
- Locate the torsion beam under the rear of the vehicle and the two plastic aero covers on the bottom.
- Using a 10mm socket and ratchet, remove **QTY(3)** bolts from **each** aero cover. Driver's side shown in the second image.
- There are two plastic clips that need to be released to remove each aero cover. Their locations are shown with the arrows in the second image. The next step has full details

Step 3 — Removing the Torsion Beam Aero Covers Part 2



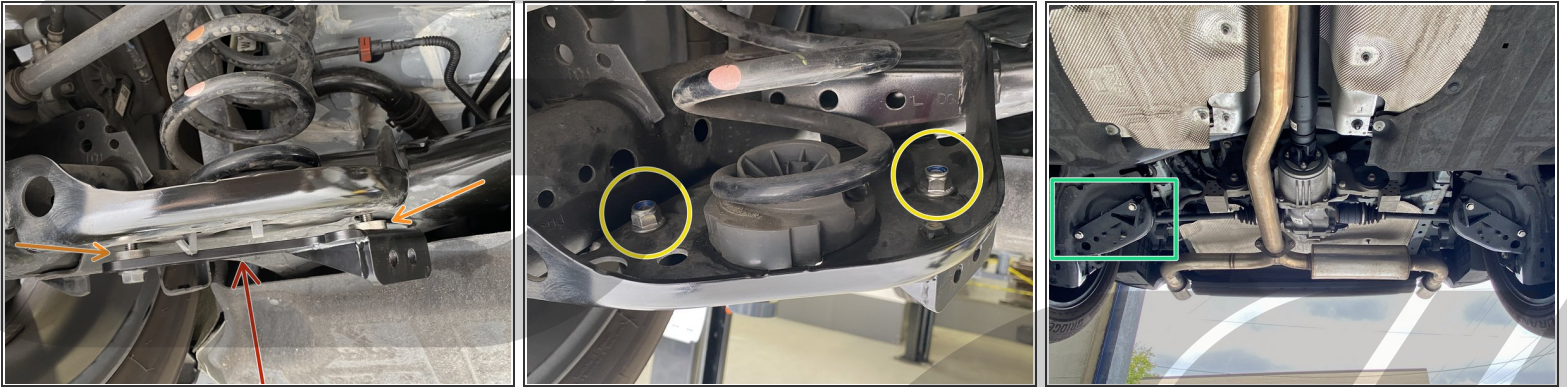
- Using your fingers or needle nose pliers, release the two plastic clips on each aero cover to remove the aero cover. Their locations are shown in the previous step and shown in more detail here:
 - One clip near the spring. Take note of this hole, it will be used as a mounting point for the swaybar bracket
 - One clip inside the torsion beam near the tire
- The aero covers will fall away once the clips are released, leaving the torsion beam exposed as shown.

Step 4 — CorkSport Swaybar Bracket Pre-Installation



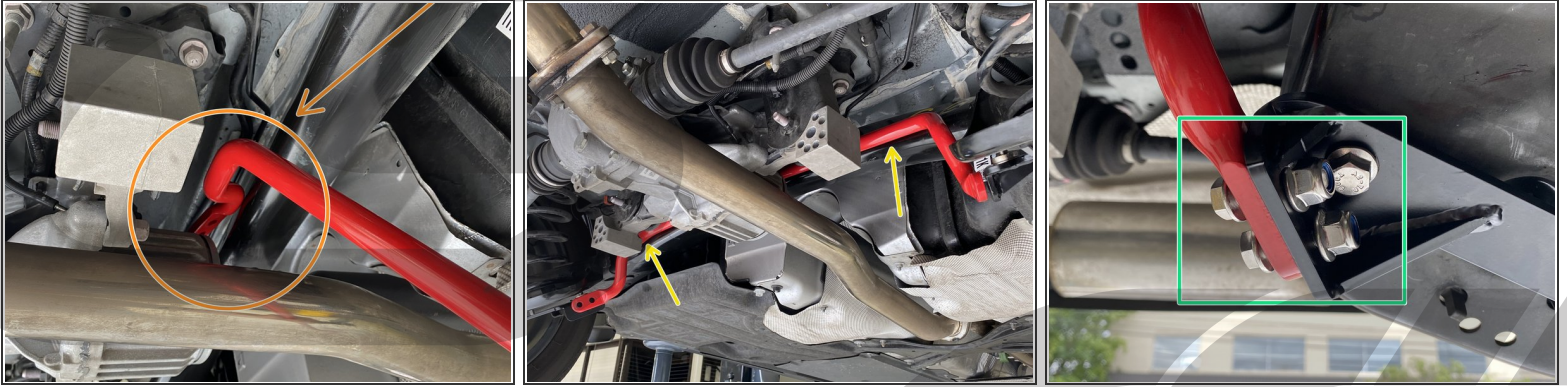
- The factory hole and slot in the torsion beam shown will be used to mount the CS swaybar brackets.
- The brackets are different for the driver (left) and passenger (right) sides of the vehicle:
 - Driver's Side Bracket
 - Passenger's Side Bracket
- When installing the bracket, ensure the bolts are positioned as shown and there is a supplied mounting spacer in between the bracket and the torsion beam as shown.

Step 5 — CorkSport Swaybar Bracket Installation



- Install the driver's side swaybar bracket onto the driver's side of the torsion beam using the hole and slot shown in the previous step
 - Note the spacers are installed between the bracket and torsion beam
- Apply a small amount of anti-seize to the threads of the bolts. Anti-seize allows for smooth installation and removal of stainless fasteners
- Install the nuts, but leave loose until a later step
- Repeat for passenger side swaybar bracket

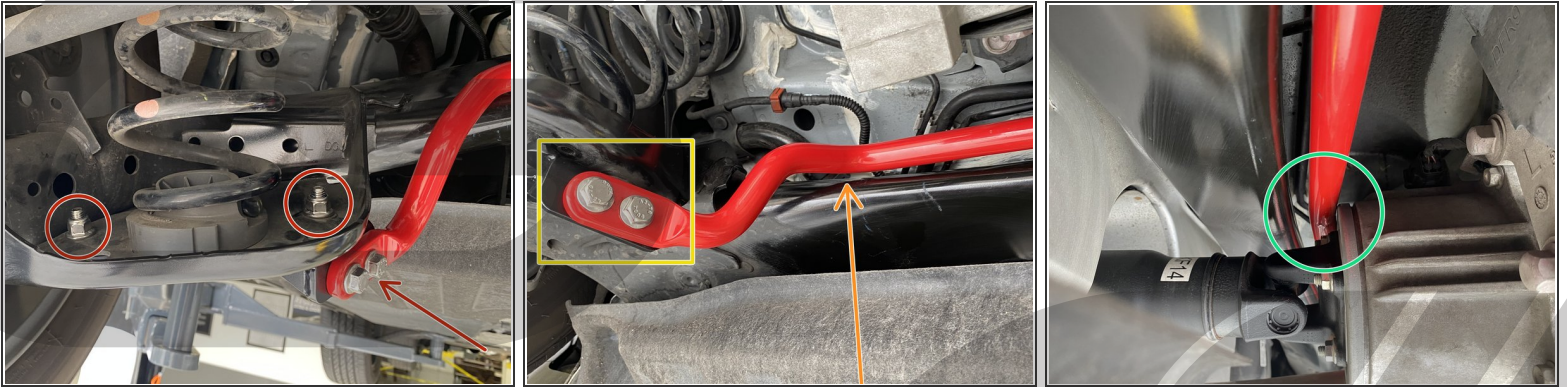
Step 6 — CorkSport AWD Swaybar Installation Part 1



⚠ If installing on a front wheel drive vehicle (**FWD**), please skip to **Step 9**.

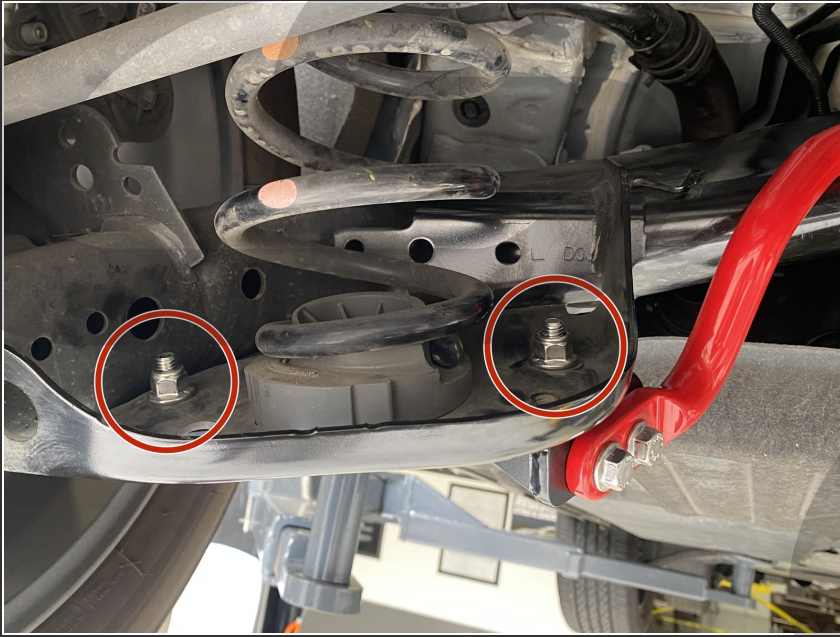
- Lift the CorkSport Swaybar into position, feeding it above the exhaust and driveshaft as shown.
 - Once in position it will sit on the differential/driveshaft as shown
- Loosely secure the swaybar to the brackets using the remaining supplied bolts and nuts. Use the orientation shown
 - Apply a small amount of anti-seize to the threads of the bolts before installing the nuts
- ⓘ **NOTE:** the mounting bolts for the bracket and the swaybar are very close to one another to keep the brackets compact. It is easiest to thread the bolt into the nut with the nut already in position

Step 7 — CorkSport AWD Swaybar Installation Part 2



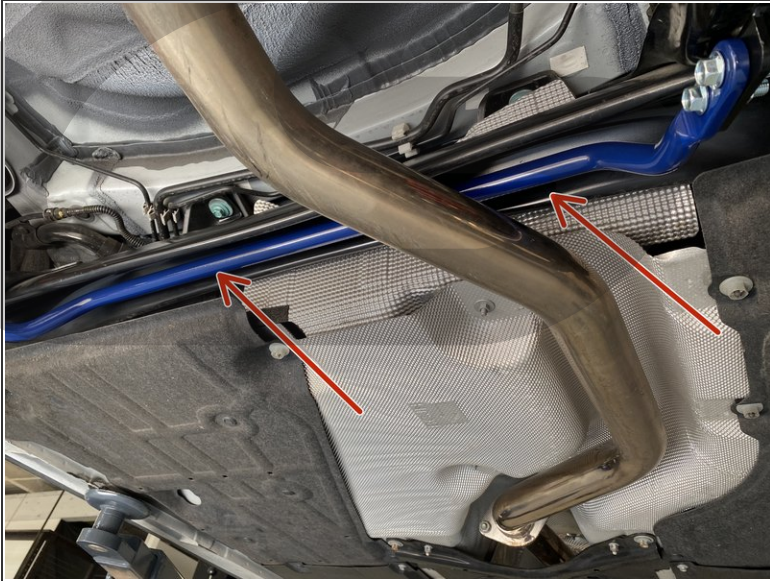
- Next, tighten all hardware until almost snug, so you still have adjustability.
- Adjust the swaybar until you have a slight gap between the bar and torsion beam in the area shown. Only ~1/8"-1/4" of gap is required
- ⓘ NOTE: Due to minor manufacturing variance of the torsion beams and swaybars, some end up closer in fitment than shown. That is OK the swaybar travels with the torsion beam and will not cause damage or noise if it does touch
- Once happy with your adjustment, tighten the ends of the swaybar to the brackets with a 15mm socket and wrench.
- **Torque the two bolts on each side to 30-35ft-lbs.**
- ⓘ NOTE: The you will only be able to grab the close together hardware with the open end of a wrench in a specific orientation. Do not panic if it does not seem to fit at first!
- ⓘ NOTE: The swaybar will be very close or will be slightly touching the differential and/or driveshaft as shown in Image 3. **This is OK.** The only time the suspension is at this position is when the car is jacked in the air or if you are jumping your vehicle.

Step 8 — CorkSport AWD Swaybar Installation Part 3



- Finally, tighten bolts that attach the swaybar brackets to the torsion beam with a 15mm socket and ratchet
- **Torque the two bolts on each side to 30-35ft-lbs.**

Step 9 — CorkSport FWD Swaybar Installation Part 1



⚠ If installing on an all wheel drive vehicle (**AWD**), please skip to **Step 11**.

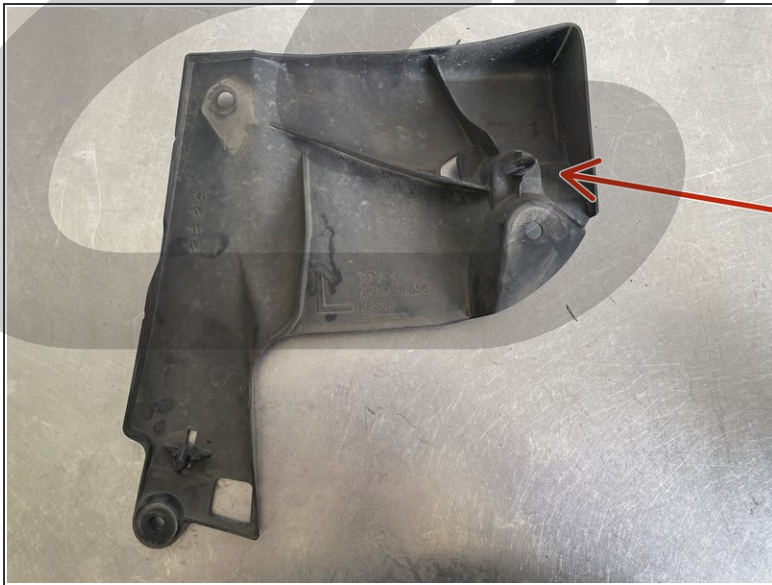
- Lift the CorkSport Swaybar into position, feeding it above the exhaust and into the open gap at the bottom of the torsion beam as shown.
- ⓘ Hold it in position so it does not fall
- Loosely secure the swaybar to the brackets using the remaining supplied bolts and nuts. Use the orientation shown
- ⓘ **NOTE:** the mounting bolts for the bracket and the swaybar are very close to one another to keep the brackets compact. It is easiest to thread the bolt into the nut with the nut already in position

Step 10 — CorkSport FWD Swaybar Installation Part 2



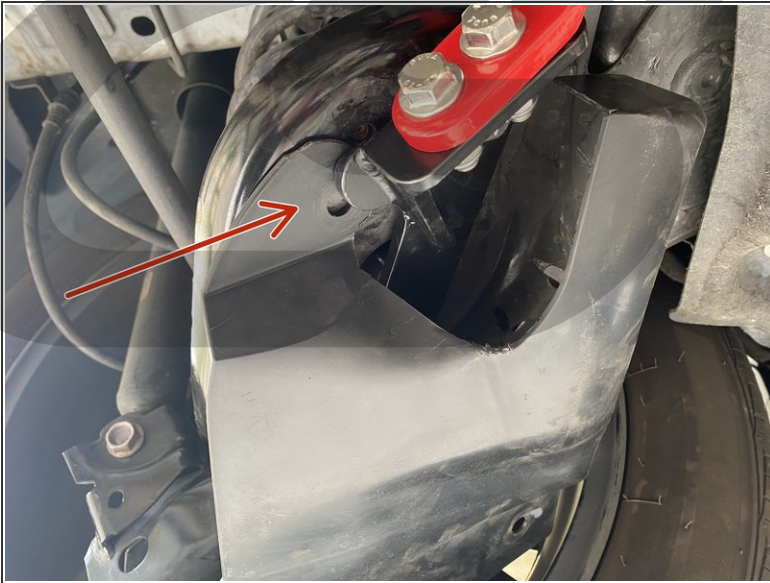
- Next, tighten all hardware until almost snug, so you still have adjustability.
- Adjust the swaybar until the bar is centered within the torsion beam and there are good gaps all around.
- Once happy with your adjustment, tighten the ends of the swaybar to the brackets with a 15mm socket and wrench.
 - **Torque the two bolts on each side to 30-35ft-lbs.**
- ⓘ NOTE: The you will only be able to grab the close together hardware with the open end of a wrench in a specific orientation. Do not panic if it does not seem to fit at first!
- Finally, tighten bolts that attach the swaybar brackets to the torsion beam with a 15mm socket and ratchet
 - **Torque the two bolts on each side to 30-35ft-lbs.**

Step 11 — Optional: Aero Cover Trimming



- i** In order to reinstall the aero covers removed earlier, they must be trimmed to clear the new swaybar. They are not necessary to reinstall, so if you would prefer to not trim them, your install is completed and you can skip to **Step 13** for final notes.
- Using scissors, a sharp razor knife, or even a Dremel tool, trim the aero covers to clear the new swaybar.
- i** Shown is a CX-30 AWD aero cover, the Mazda 3 units will be slightly different but the idea is the same
- i** We recommend going slowly and test fitting multiple times to ensure you have removed enough material
- Retain the area around the mounting point circled. While this mounting point is covered by the brackets and cannot be used, the aero cover can be tucked above the bracket to add extra stability as shown in the next step

Step 12 — Optional: Aero Cover Reinstallation




- Once happy with fitment, slide the mounting point discussed in the previous step in between the CS bracket and the torsion beam as shown
- Secure the aero covers with two of the OEM bolts removed earlier. Tighten until snug with a 10mm socket and ratchet

Step 13 — Installation Complete



- This completes your installation of the CorkSport Performance Rear Swaybar!
- ⓘ Listen for any strange noises upon first drive. If any are present, inspect the swaybar and ensure that it is tight

 If you drive a very low and/or bagged AWD vehicle, now is the time to check for clearance from



the top of the swaybar to all other components of the vehicle to ensure safe operation

- Contact us with any questions or concerns at sales@corksport.com or (360) 260-2675.
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- Share your experience using #CorkSport on Instagram, Facebook, and Twitter.