#### 24-129 & 24-130 & 24-131

#### STRETCH KIT

WILL FIT YAMAHA® DRIVE® GAS (Years 13 - 15)

#### INSTALLATION INSTRUCTIONS



#### INCLUDED:

Thread locking adhesive Frame extensions (2) Side Floor Supports (2) Center Floor Support Shifter extension harness Key switch extension harness Reverse buzzer extension harness Brake switch extension harness Floor Mat Accelerator switch extension harness Extended brake cable Driver tail light extension harness Pass tail light extension harness Light kit power wire extensions Cup holder Seat frame closeouts (2)

Rear grab bar
Seat frame supports (2)
Rear Threshold
Front Threshold
Rear Trim Cover
Floor cover plate
Floor mat retainers (2)
Hardware Packs 1-7
Extended Shifter Cables
Extended Accelerator Cables
Extended Choke Cable
Shifter Mounting Plate
Choke/shifter cover plate
Seat Frame
Frame Extension Covers (2)

#### TOOLS NEEDED:

Mechanic's Tool set
Cordless Drill
Chalk line
Tape measure
Rivet Gun
Sawzall/Skilsaw
8-10" Sawzall bi-metal Blade
Floor jacks
Jack stands
Speed square
Marking pen
Drill Set
Needle nose pliers



Floor Mat



Cup holder



Side Floor Supports



Seat Frame Closeouts



Rear Grab Bar



Seat Frame Supports



Rear Threshold







Center Floor Support



Floor mat retainers



Rear Trim Cover

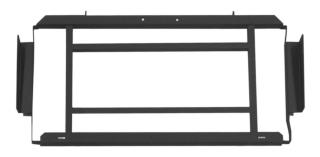
Floor cover plate



Frame extensions



Shifter/Choke Plate



Seat Frame



Engine Warning Light Extension Harness



**Shifter Harness** 



**Accelerator Cable** 



Choke Cable



Shifter Cable



Reverse buzzer Extension Harness



Accelerator switch extension harness



Driver tail light extension harness



Extended Brake Cable



Key switch extension harness



Passenger tail light extension harness



Light kit power wire extensions

We recommend professional installation. If you choose to not have this product installed by a professional, we highly recommend that you exercise caution, care, and patience when installing this product as it involves cutting your golf cart frame & electrical and mechanical connections.

Switch key to OFF position. It is not required to remove the battery but you do need to disconnect it. Disconnect the negative and then the positive.







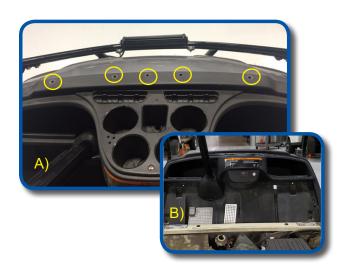


Detach canopy by removing 8 bolts in struts.

Remove factory floor mat, retain push rivets only. A new full mat is provided with your kit.



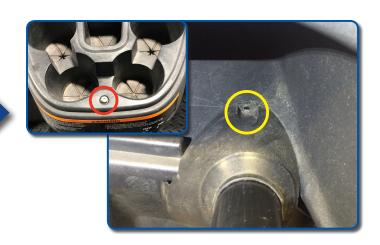






- A) Remove and retain upper rivets in front dash as shown.
- B) Remove lower rivets as well and retain all hardware.

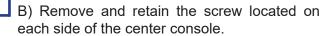
Use a 3mm allen head wrench to take out screw at front of cup holder. Lift up from same location to remove cup holder from dash and retain. Remove and retain rivet at column base cover and slide up column and out of way.

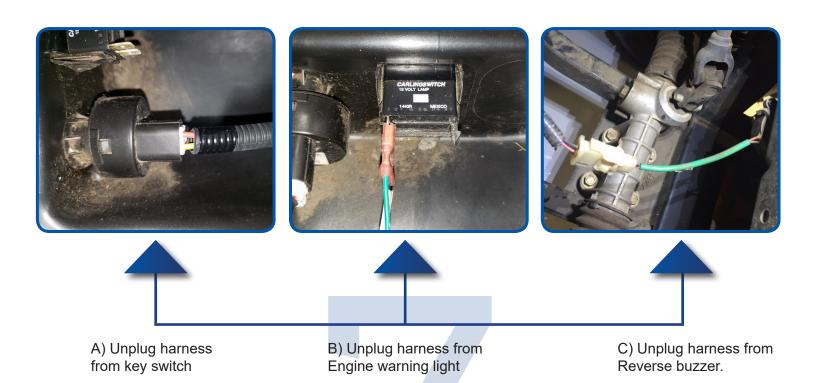






A) Remove and retain the two screws located under the cup holder mounting location.



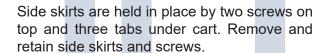


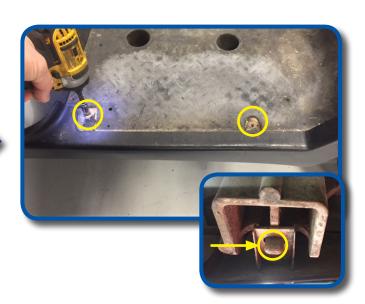


Disconnect any other accessories you may have. Such as light kits, volt meters, etc. There are rear light kit extensions included in this kit for Madjax or GTW Lights, you will need to unplug your light harness from the rear and pull harness to the front. Remove and retain dash.



- A) Remove and retain screw from each side of cowl located above side skirt.
- B) With cowl now loose enough, remove and retain rivet holding top portion of side skirt.





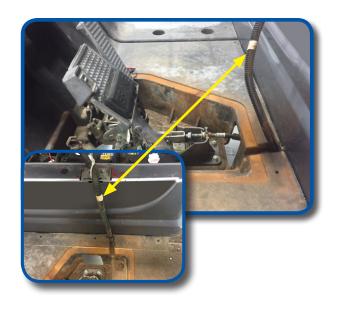


Remove and retain brake access cover.

Unplug accelerator switch from harness. If you have a light kit brake pad installed unplug it from the light harness.









Now that main harness is free pull it through brake access panel towards rear as shown.

Do NOT pull harness into battery box, instead zip tie harness to front seat hinge bracket as shown.

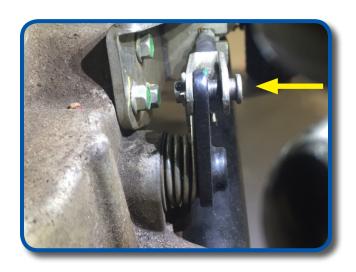
NOTE: To remove brake cable from brake assembly you will need to detach the rear first. This will give you enough slack to remove front.

Jack rear of cart up and remove passenger side tire.





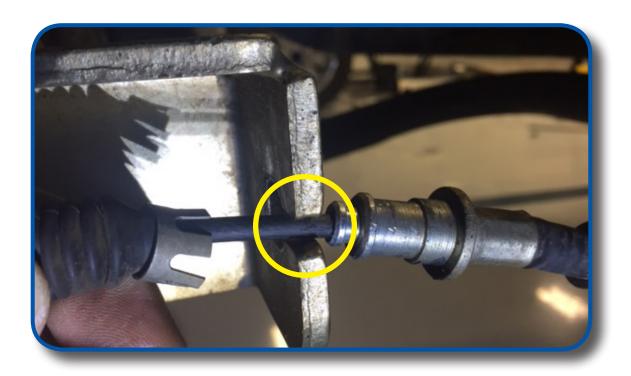
IF YOUR CART IS A 2015-2016 WITH DRUM BRAKES SEE "BRAKE CABLE REMOVAL" ADDENDUM AT THE END OF THESE INSTRUCTIONS.





Remove and retain cotter pin from rear mount. Remove clevis pin from clevis and brake lever





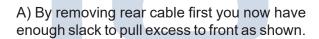
To remove brake cable use pliers or snap ring pliers if available and gently expand the retaining ring and slide cable through cable mount opening.

Now that rear of cable is removed loosen front nut with a 14mm wrench. Remove and retain cotter pin and clevis pin from brake pedal as shown. Removal of brake sleeve may be needed to accomplish this.

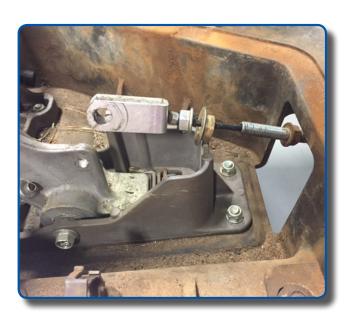






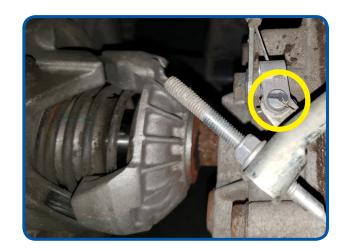


B) Push brake cable towards rear of cart and slide out of mount by way of slimmer bare cable. Remove cable from cart.

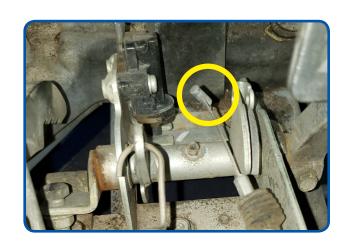




Remove cotter pin and clevis pin from accelerator cable at governor on the differential. Retain hardware.

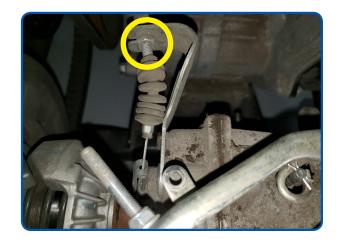


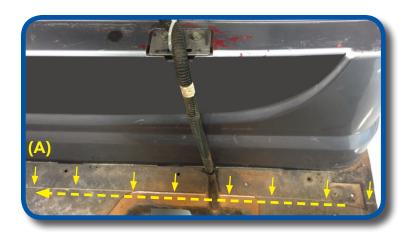
Pull enough slack at front of accelerator cable that you can disconnect it from the pedal. Rotate cable up and toward front of cart to detach it from pedal assembly. Loosen nuts on cable housing and pull cable out of the bracket. If your cart has a pin attaching the cable to the pedal remove and retain the cotter pin and remove cable.



Pull accelerator cable back into engine compartment. Loosen nuts holding cable to bracket on the differential and remove cable from cart. Retain hardware.











Make a cut line that is 2 1/8" off rear body. Use a chalk line or straight 6' level to ensure line is true. Notice the line is even with the rear indention for the brake access cover. (A) Be sure cut line is exactly as shown. Side skirts will be cut later.

Before cutting car check again for any hidden harnesses, LED light light strips, speaker wire, etc that can be damaged if cut.

Using a sawzall or skil saw cut plastic underbody only. Do **NOT** cut into frame until after STEP 26.





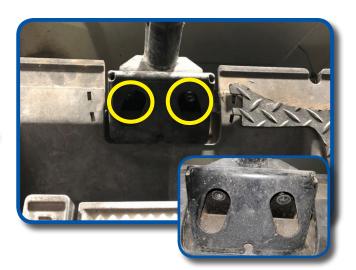




Detach front plastic floor by removing 10 bolts as shown using a 12mm socket. Retain hardware.

Remove four bolts attaching steering column to cowl frame. (Do not remove column from cart) Raise steering column and remove floor.





IMPORTANT: Before cutting frame place jack stands under front and rear of cart frame. Once frames are cut the weight of both ends of the now split cart will fall towards the cut. Placing a floor jack along the frame directly under the engine compartment will help to avoid pinching the cutting blade by adding tension.

Chock front and rear wheels to avoid roll after cut is made.





Using a speed square mark frame along cut plastic under the body as shown.

\*Cut pedal box brace flush with frame as shown. Cut frame.





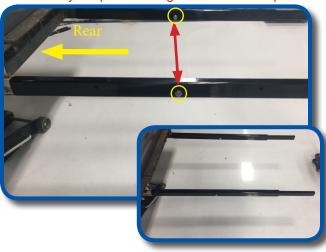


Once frame is cut roll front of car away from rear.



The frame extensions are identical but they are also directional. Insert the end of the extensions with no pre-drilled holes into the rear frame as shown. The center bolt hole in the extensions must be closer to the bottom.

\*\*\*Place a 8x55 bolt into center hole to ensure extension and cover stays in place during the next few steps.

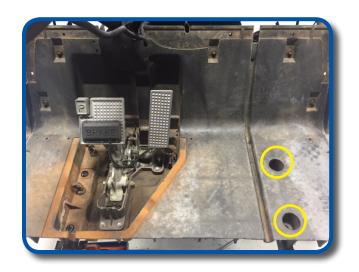




Using a 11/32" bit, drill out tapped holes in front frames to remove debris and allow extensions to fully insert into frame. Once holes are clear push the front half of the car onto the frame extensions.

Ensure frames are tight up against the extension cover. The holes inside of extensions are properly aligned. Then chock all four wheels to keep both ends in place. Using front frame holes as a guide drill through extensions and lower part of frame with a 11/32" bit as shown.

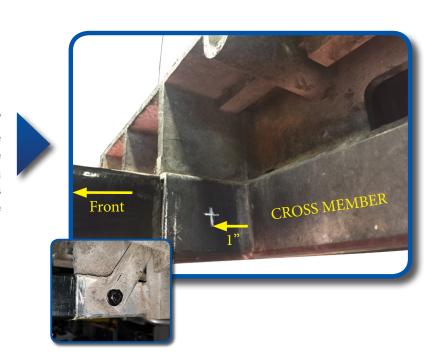






Reattach front floor board using retained hardware and four 8x75mm bolts from pack 1 using a 14mm socket and 13mm wrench. Use supplied fender washers for top of 8mm bolts. After floor is installed replace 4 bolts that mount the steering column.

To attach the rear end of the extensions you will need to drill two holes in the side of each frame. On the inside of the frame measure 1" foward of the cross member and a center line on the frame and drill a 5/16" hole through the frame and diagonal support. Secure with a 8x80mm bolt from Pack 7 and nuts/washers from Pack 1. Repeat on opposite side before drilling 2nd hole.

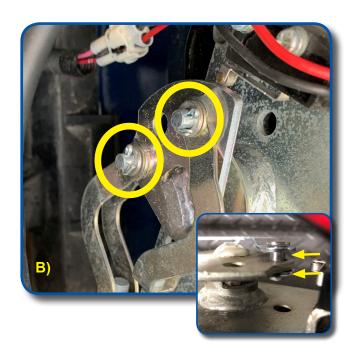




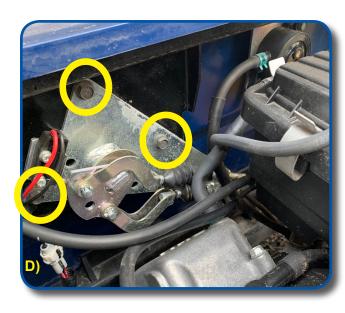
Next measure 1" towards rear of cart on opposite side of same cross member. Drill a 5/16" hole. Secure with 8x45mm hardware from Pack 1 repeat on opposite side.

- A) Unplug shifter microswitch.
   B) Remove pins from shifter cables in engine compartment.
   C) Loosen jam nuts securing cable then remove cable.
   Remove shifter assembly and retain hardware.





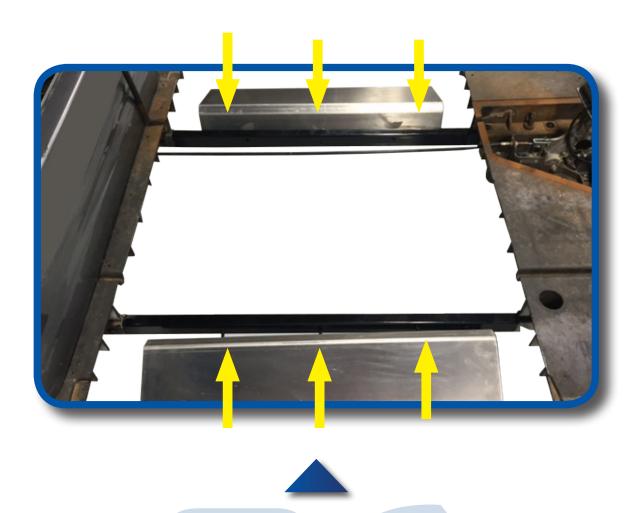




Remove nut attaching shifter cables to cart. Mark bellcrank and shifter shaft so it can be reassembled in the same position. Remove bellcrank from shaft. Pull cables out of mount and remove from cart.







Using the six 8x55mm bolts from Pack 2 attach the side supports to frame extensions. Do NOT push bolt all the way through the frame until next step.

With side supports hanging, slide center floor support between frame rails and push bolts from previous step through frame into center support. Do NOT tighten bolts until all hardware is in place.

NOTE: Make sure predrilled holes on top of center support are off set to the FRONT of the car.



Install supplied brake cable by attaching front mount first. Loosen front nut on mount and slide exposed cable in channel of brake bracket. Hand tighten nut until after rear is attached.

IF YOU HAVE A 2015 OR NEWER CART WITH DRUM BRAKES SEE "BRAKE CABLE INSTALLATION" ADDENDUM AT THE END OF THESE INSTRUCTIONS.



Slide exposed section of cable through slot in bracket and push retainer through mount. Attach clevis to brake lever using hardware retained in step 15.



Now that rear mount is attached you can secure front mount. Loosen rear nut of mount all the way, this will give you enough slack in the cable to attach front cable mount to brake pedal.







Attach front mount holder using retained pin and clip and tighten both nuts as shown. Be sure to check brake adjustment. Press the pedal lightly with two fingers. It should travel 3/4" - 1" before resistance increases. Use adjusting nuts to change if neccesary.

Remove the two bolts shown on air filter housing. Remove two nuts under housing holding it to carburetor. Retain hardware. Remove air filter housing.





Disconnect choke cable from carburetor. Loosen phillips head screw and remove choke cable from carburetor. Retain hardware.

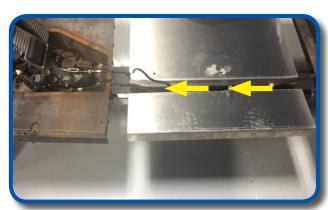


Remove plastic nut attaching choke cable to the body. Remove choke cable from cart. Retain hardware.



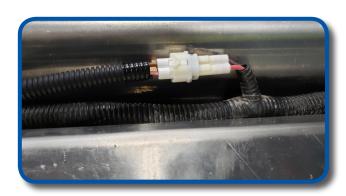
Run factory harness along driver side of frame extension and into brake access as shown. Secure to frame using supplied zip ties.





Plug in two pin Accelerator extension harness to factory harness and accelerator switch. Route extension harness through brake cable access hole and secure to main harness with zip ties.

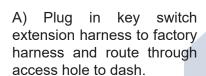


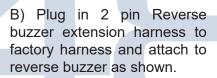








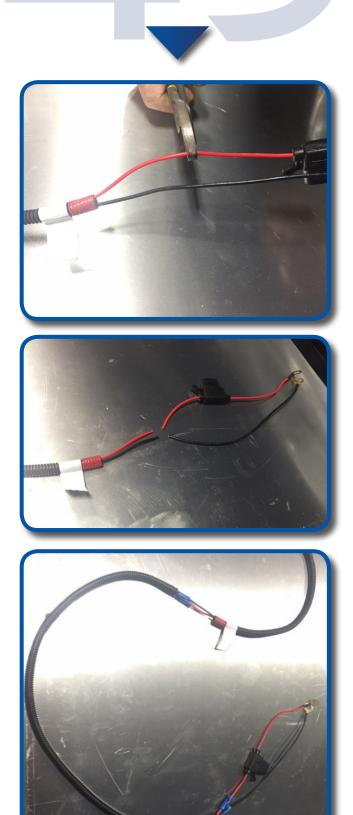




C) Plug in engine warning light extension harness and route to dash area.

If you are installing or have an existing Madjax or GTW light kit, run harness from front to back. Included in your kit is a 24" red and black 16ga wire loom extension for your light kit power feed. You will need to add this loom to your light kit harness so it will reach the proper 12V battery connections.

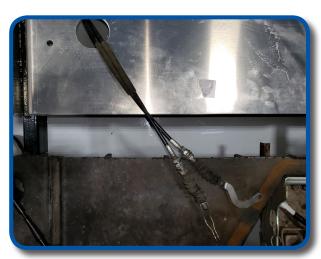
For your tail lights we have included tail light extension harnesses. The short red 3 pin harness is for the passenger side, white 3 pin harness is for the driver.



Route extended shifter cables through rear of engine compartment to shifter shaft on differential. Using hardware from step 47 install bell crank with new cables on differential. Use mark from step 47 to be sure bellcrank is in the same position.



Route shifter cables forward to hole in center floor support and secure them under cart using provided zip ties.



Plug shifter extension harness to cart harness connection in engine compartment.



Route shifter extension harness forward to hole in floor. Use supplied zip ties to secure harness and cables to frame.



Using retained hardware from step 21 install supplied accelerator cable to differential.



Route accelerator cable forward to pedal box and secure to drivers side frame using supplied zip ties.



Using hardware saved from step 20 attach clevis of accelerator cable to pedal. Use adjusting nuts to remove any slack.



Using hardware saved from step 45 attach supplied choke cable to carburetor.





Using hardware saved from step 43 reinstall air filter housing. Be sure to plug vacuum hose under air filter back on to fitting.



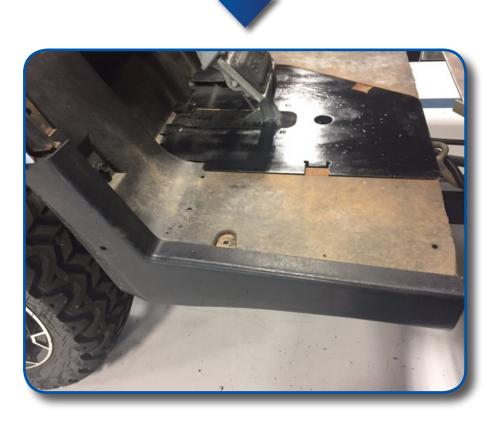
Route choke cable forward to hole in floor and secure with zip ties.

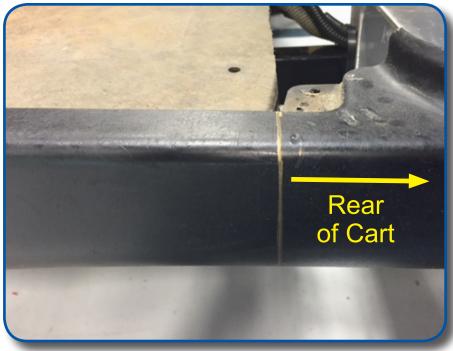


Once all of your harnesses are in place and secured you can reinstall your brake access cover.



Place OEM side skirts on and mark cut line of front underbody as shown using a speed square. Remove side skirt and carefully cut side skirt on marked line into two pieces. Reattach front and rear of side skirts using hardware retained from STEP 9.



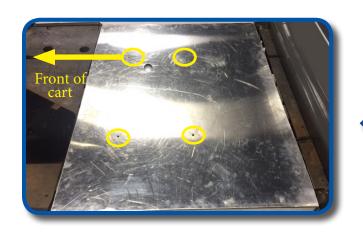


Reattach front dash using retained hardware from STEPS 4 through 8. Plug in extension harness for key switch and engine warning light. Install cup holder.

NOTE: Yamaha used two different connectors for the engine warning light, so your kit may have a different extension harness.







Temporarily pull cables and harnesses back through the access hole and under cart until Step 73. Place floor cover plate over stretch extension section with holes in cover lined up as shown.

NOTE: In order to keep floor holes lined up for next step, temporarily place bolts from Pack 4 into holes but do not tighten.

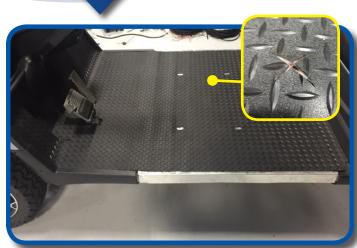
Using a 3/16" drill bit and 12 rivets from Pack 3 attach center and rear thresholds to floor cover plate and plastic under bodies as shown. Once thresholds are secured remove bolts from floor cover plate.



Lay new floor mat across floor board as shown. Secure front floor mat using hardware from STEP 3.

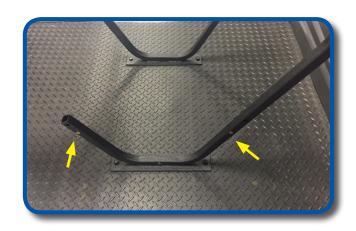
Cut X shaped slit for cables and harness over hole in floor plate.





Secure seat frame supports to floor board using four 8x35mm bolts and hardware from Pack 4. Do NOT tighten until after STEP 70. Brass nutserts should be facing outside of car as shown.









Attach seat frame to supports using four 8x45mm bolts and hardware from Pack 4. Tighten hardware.

Attach rear cup holder to seat frame using two 8x25mm bolts and hardware from Pack 4.









Attach seat frame closeouts to supports using six fine thread screws from Pack 5.

NOTE: Don't tighten until all three bolts are started.

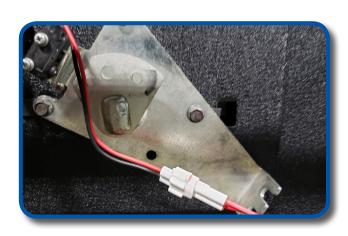
Install provided shifter plate to seat pod frame as shown. Using self drilling screws from hardware pack 7



Route choke and shifter cables and shifter harness extension up through floor via slit in mat from step 65.



Mount the shifter assembly to the shifter plate using hardware retained from step 35.



Mount the new shifter cables to the shifter assembly.



Using the clevis pins retained from step 35 attach the cable ends to the shifter.



Use the adjustment nuts on the cables to take out any slack. Check shifter operation.





Attach the choke cable to the shifter plate using the nut retained from Step 46.





NOTE: Be sure all cables and harnesses are secured and do not contact hot engine or exhaust components.

Attach grab bar and front seat lean back cushion to supports using four 6x50mm bolts from Pack 5 as shown. You can now tighten all hardware on front seat pod and install front seat bottom.



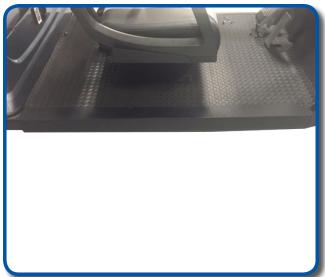
Using a 3/16" drill bit and 8 rivets from Pack 3 attach floor mat retainers as shown. Retainer should be tight up against rear body, start rivets at rear and work to front of car.

\*\*\*We suggest using a C-clamp to ensure floormat retainers and floor is tightly pressed together. Use a flat metal plate or piece of wood under clamp to avoid damaging the retainers\*\*\*

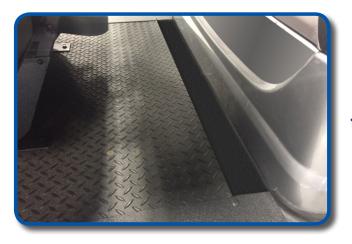








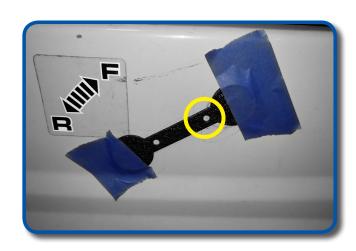






Once side floor mat retainers are attached, use a 3/16" drill bit and remaining rivets and attach rear floor mat retainer to finish floor board.

Place supplied cover over shifter and choke opening and temporarily attach with tape. Drill 3/16" holes using holes in plate as a guide. Use rivets from pack 3 to attach plate to body.







Extra plastic push rivets are provided with this kit to help secure floor mat to center floor cover. Use a 5/16" bit and drill in center of diamond plate pattern in desired locations to secure. **Before drilling ensure there are no wires that can be damaged on underside of floor plate.** 

Reconnect battery and test drive cart on a flat area with plenty of room for braking.





INSTALLATION COMPLETE

### HARDWARE PACK (DACROMET COATED)

#### Pack 1

- 4 8mm x 75mm Hex head bolts
- 2 8mm x 45mm Hex head bolts
- 2 8mm x 80mm Hex head bolts
- 12 8mm x 17mm Flat Washers
- 4 8mm x 25mm fender washers
- 8 8mm Nylock nuts

#### Pack 2

- 6 8mm x 55mm Hex Head Bolts
- 12 8mm x 17mm Flat Washers
- 6 8mm Nylock nuts

#### Pack 3

28 - 5mm x 20mm Black Rivets

#### Pack 4

- 4 8mm x 45mm Hex Head Bolts
- 4 8mm x 35mm Hex Head Bolts
- 2 8mm x 25mm Hex Head Bolts
- 20 8mm x 17mm Flat Washers
- 10 8mm Nylock Nuts

#### Pack 5

- 6 4mm x 15mm Fine thread screws
- 4 6mm x 50mm Hex Headbolts
- 4 6mm flat washers
- 4 6mm lock washers

#### Pack 6

10 - Plastic Rivets

#### Pack 7

6 - Self drilling screws

Shifter and Choke Cover Plate

- 3 Clip on nuts
- 2 8 x 80mm Bolts

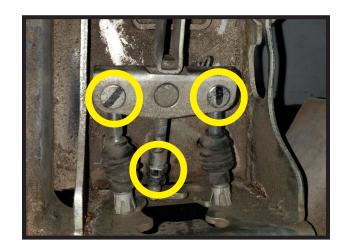
# BRAKE CABLE REMOVAL FOR 2015-2016 CARTS WITH DRUM BRAKES

#### INSTALLATION INSTRUCTIONS

We recommend professional installation. If you choose to not have this product installed by a professional, we highly recommend that you exercise caution, care, and patience when installing this product as it involves cutting the vehicle in half and an intricate installation process.

Loosen lock nut and adjustment nut at brake equalizer bracket. Remove clevis pins attaching brake cables to equalizer bracket.





Carefully remove retaining clips from cables and slide cables out of mount. Retain Hardware.





Remove and retain clevis pins from brake assemblies behind both rear wheels.





Remove and retain E-Clips and slide cables out of mounting brackets. Retain hardware. Remove brake cables from cart. Return to Drive Stretch Gas Instructions Step 19.





# INSTALLATION COMPLETE

# BRAKE CABLE INSTALLATION FOR 2015-2016 CARTS WITH DRUM BRAKES

#### INSTALLATION INSTRUCTIONS

We recommend professional installation. If you choose to not have this product installed by a professional, we highly recommend that you exercise caution, care, and patience when installing this product as it involves cutting the vehicle in half and an intricate installation process.

Push brake cables through holes in mounting brackets behind both rear wheels and secure with retained E-Clips.





Using retained hardware install clevis pins and cotter pins.





Run-cables forward to pedal assembly. Secure with supplied zipties.





Push cables into pedal assembly bracket until retaining clips snap into place.





Using retained hardware connect cables to equalizer bracket.





Using adjustment nut on the bracket remove all slack from the brake cables.





Using 2 fingers apply light pressure to brake pedal. It should move 3/4" - 1" before added resistance is felt. Adjust if needed.

Proceed to step 42 of stretch kit instructions.





## INSTALLATION COMPLETE

# **24-024 YAMAHA DRIVE STRETCH KIT** PAGE 1 OF 2 **WARRANTY PARTS EXPLODED VIEW DIAGRAM** (See Page 2 for Warranty Part Number Chart) 31 8 11 10

Date Issued: 9/18/19

## **24-024 YAMAHA DRIVE GAS STRETCH KIT**

#### WARRANTY PARTS EXPLODED VIEW DIAGRAM

See Page 1 for Exploded View Diagram

ITEM#	PESCRIPTION	DART#	OTV
	DESCRIPTION Seet Frame	PART #	QTY
2	Seat Frame	W24-21-1	1
	Seat Support Bracket (Driver Side)	W24-21-2	1
3	Seat Support Bracket (Pass Side)	W24-21-3	-
4	Seat Frame Closeout	W24-21-4	1
5	Cup Holder	W17-99-4	
6	Grab Bar	W24-21-5	1
7	Floor Mat Retainer (Driver Side)	W24-21-6	1
8	Floor Mat Retainer (Pass Side)	W24-21-7	1
9	Diamond Plate Floor Mat	N/A	1
10	Front Threshold	W24-21-8	1
11	Rear Threshold	W24-21-9	1
12	Floor Cover Plate	N/A N/A	1
13 14	Center Floor Support		2
	Side Floor Support	N/A	_
15	Frame Extension Cover	N/A	2
16	Frame Extension	N/A W24-21-15	2
17	Key Switch Extension Harness		1
18	Brake Switch Extension Harness	W24-21-16	1
19	Accelerator Switch Ext Harness	W24-21-17	1
20	Forward/Reverse Switch Ext Harness	W24-21-18	1
21	Reverse Buzzer Switch Ext Harness	W24-21-19	1
22	Light Kit Extension Harness	W24-21-20	1
23	Brake Cable	W24-21-21	1
24	Hardware Pack-1	W24-21-22	1
	M8x75 Hex Head Bolts		4
	M8 Fender Washers		4
	M8 Flat Washers		12
	M8 Nylock Nuts		8
	M8x45 Hex Head Bolts		4
25	Hardware Pack-2	W24-21-23	1
	M8x55 Hex Head Bolts		6
	M8 Flat Washers		12
	M8 Nylock Nuts	14104 04 04	6
26	Hardware Pack-3	W24-21-24	1
0.7	M5x20 Rivets	W04 04 05	12
27	Hardware Pack-4	W24-21-25	1
	M8x45 Hex Head Bolts		4
	M8x35 Hex Head Bolts		4
	M8x25 Hex Head Bolts		2
	M8 Flat Washers		20
- 00	M8 Nylock Nuts	W04 04 00	10
28	Hardware Pack-5	W24-21-26	1
	M6x50 Hex Head Bolts		4
	M4x15 Fine Thread Screws		6
	M6 Lock Washers		4
20	M6 Flat Washers	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4
29	Hardware Pack-6	W24-21-27	8
20	Self Tapping #2 Phillips Screws (1")		10
30	Zip Ties (Included in Box)	W04 04 40	
31	Rear Trim Floor Mat Retainer	W24-21-10	1
32	Shifter Mount Plate	W24-024-1	1