

CVT And Cover Kit Assembly Instructions



Treker 4210/4410 ST Series

Manual No. 700-520M

Before You Start



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

IMPORTANT: Before you begin, read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

Your CVT And Cover Kit is exclusively designed for your Land Pride 4210ST & 4410ST Trekers. Please read these installation instructions and your vehicle Operator's Manual thoroughly before beginning. Especially read information relating to safety concerns. Also included in the Operator's Manual is important information on operation, adjustment, troubleshooting, and maintenance for this kit (some manual sections do not apply to all accessories).

A separate Parts Manual for replacement parts can be purchased from your dealer or available free of charge at www.landpride.com. Have model and serial numbers handy when placing an order.

Manual Part Numbers:

- Operator's Manual 700-108M
- Parts Manual 700-109P

General Information

These assembly instructions apply to the following CVT And Cover Kit Accessories listed below:

700-519A TREKER CVT/COVER KIT

Tools required:

- Safety glasses
- Work gloves
- Center punch
- Hammer
- Electric drill with 1/8" drill bit
- Extension cord (if required)
- Phillips screwdriver
- 3/16" hex socket wrench
- 11/32" box end or open end wrench
- 7/16" box end or open end wrench
- Two 1/2" box end or open end wrenches
- 9/16" box end or open end wrench
- 3/8" or 1/2" ratchet wrench with 3" extension and 3/4" socket
- Pop Rivet Gun
- T-27 Torx driver

Further Assistance

Your dealer wants you to be satisfied with your new CVT And Cover Kit. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss the matter with your dealership service manager making sure he is aware of any problems you may have and that he has had the opportunity to assist you.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem and request assistance.
3. For further assistance write to:

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060

E-mail address
lp servicedept@landpride.com

Assembly Instructions

A detailed listing of parts for this accessory kit is provided on page 6. Use the list as a checklist to inventory parts received. Please contact your local Land Pride dealer for any missing hardware.

Initial Preparations

The steps listed below must be followed before installing this kit:



CAUTION

Securely support cargo box in the up position to prevent injury when working under the cargo box.

1. Park vehicle on a level surface. **Don't work under or around a vehicle parked on an incline.**
2. Move gear shift lever to park, and chock front and back of any wheel to prevent vehicle from rolling.
3. Raise cargo box fully up and securely support it in the up position to prevent injury while working around the engine.
4. Turn ignition switch off and remove switch key.

Assembly Instructions

Left Side Panel Detachment

The fuse box on the left side panel can interfere with removing and assembling the CVT enclosure. It is simpler to detach the side panel from the frame than to detach the fuse box.

Refer to Figure 1:

1. Remove five 1/4" hex flange lock nuts (#3) and 1/4" Phillip head machine screws (#2). Allow the side panel to hang from its wiring harness.
2. Lift side panel (#1) with fuse box and wiring harness out of the way when removing and installing driveline components that interfere.

Removal of Exhaust Heat Shield

Refer to Figure 2:

1. Remove existing #8 x 1/2" hex screws (#3) and exhaust heat shield (#5). Save for reattachment.

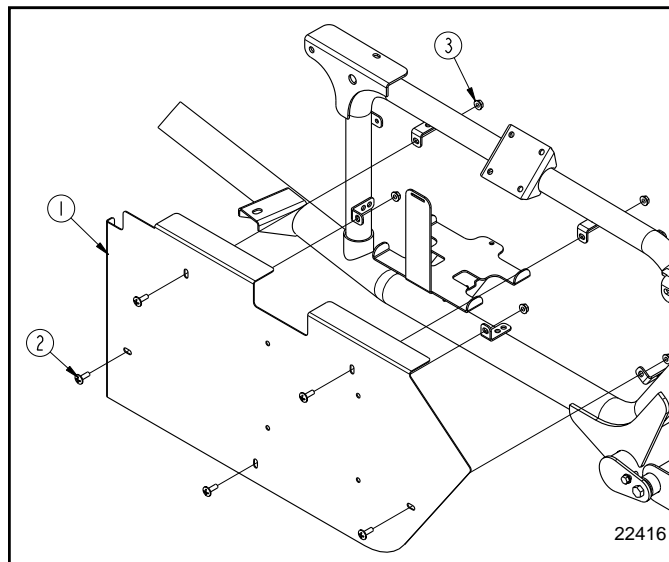
Removal of Air Hoses & Outer Enclosure

The following removed components will not be reused in assembly of the new CVT drive.

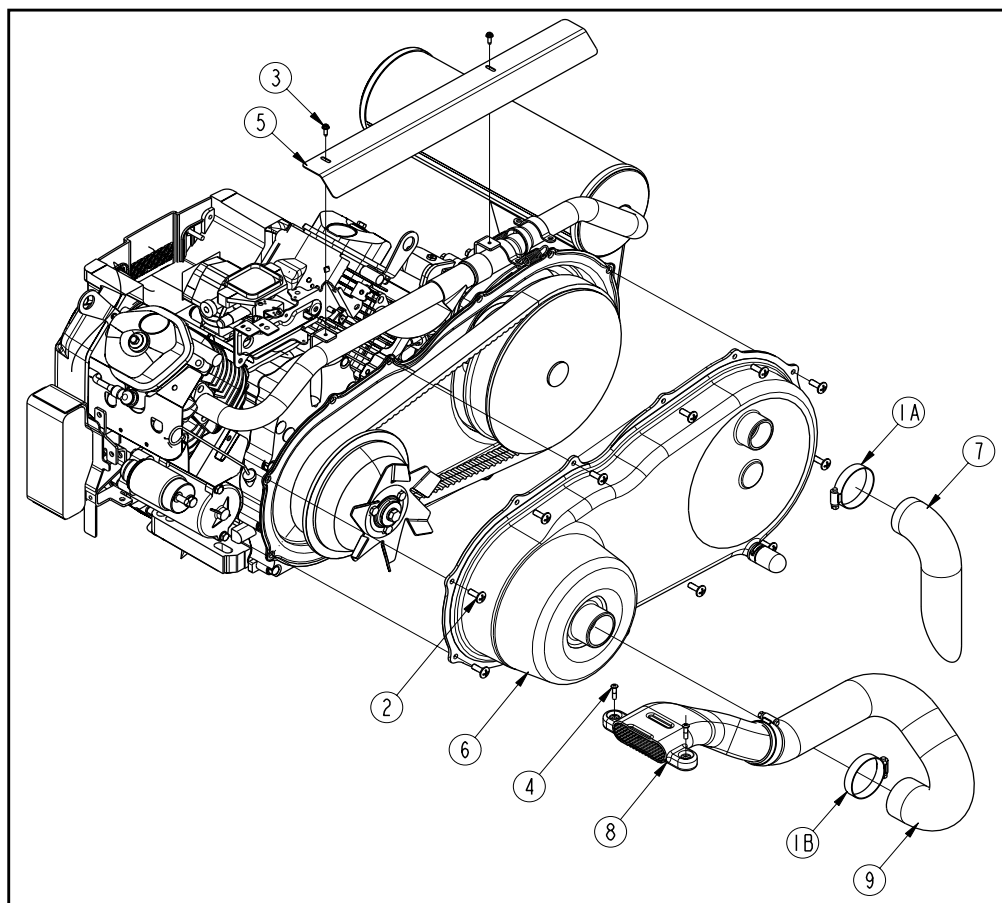
Refer to Figure 2:

1. Loosen hose clamp (#1A) and remove exhaust air hose (#7).

2. Loosen hose clamp (#1B). Remove 1/4" Phillips head self-tapping drive screws (#4), intake air hose (#9) and snorkel (#8).
3. Remove twelve 1/4" x 3/4" Phillips head screws (#2) and outer enclosure (#6).



Side Panel Removal
Figure 1



CVT Venting Removal
Figure 2

Assembly Instructions

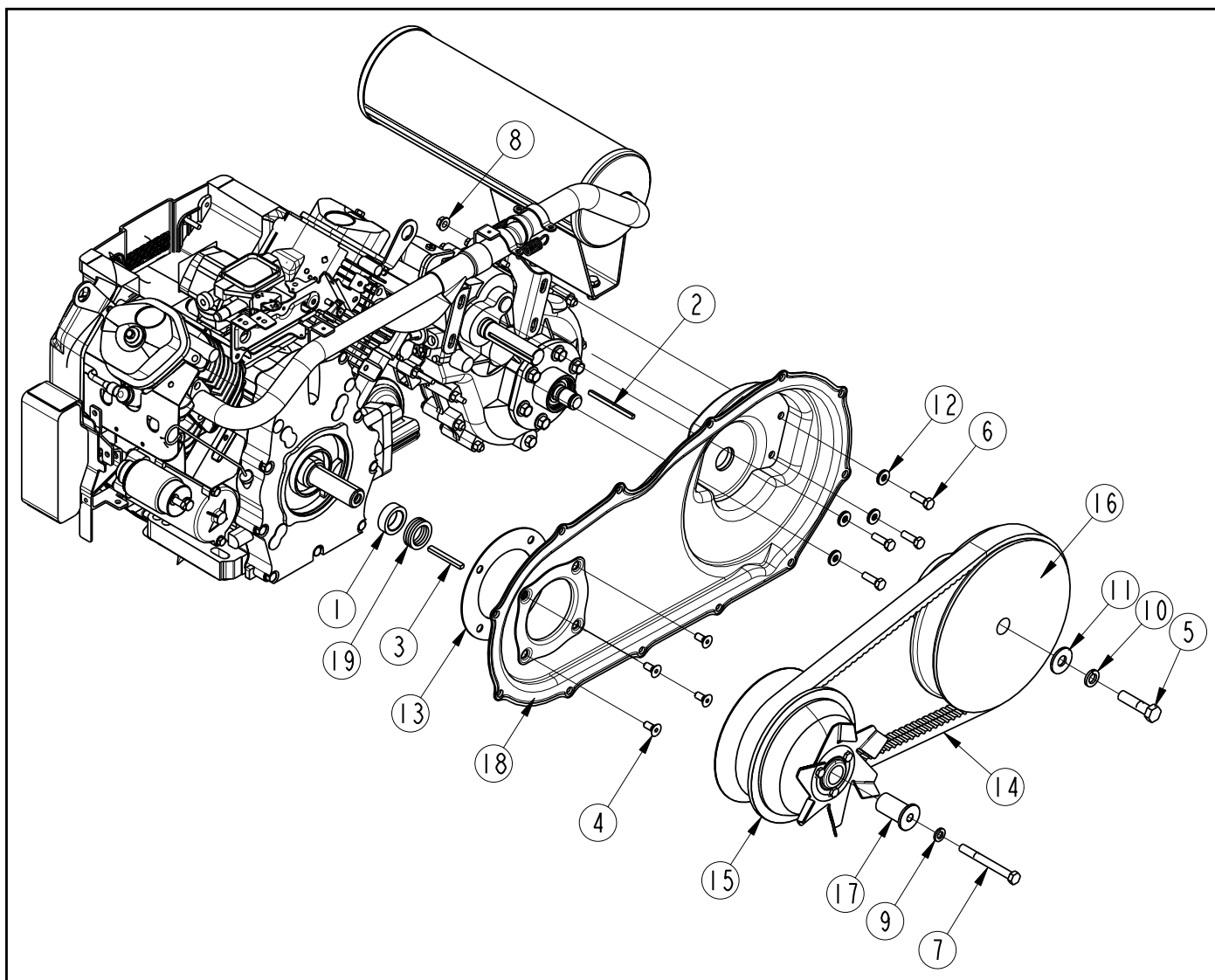
Removal of Pulleys & Inner Enclosure

The following removed components will not be reused in assembly of the new CVT drive.

Refer to Figure 3:

1. Remove 3/8" x 3 1/2" hex bolt (#7), lock washer (#9) and CVT adapter (#17) from CVT drive pulley (#15).
2. Remove 1/2" x 2" hex bolt (#5), lock washer (#10) and flat washer (#11) from CVT driven pulley (#16).
3. Remove CVT pulleys (#15 & #16) and CVT belt (#14).
4. Remove CVT spacer (#1), shims (#19) and 3/16" x 1/4" x 2 1/2" key (#3) from engine drive shaft.
5. Remove 3/16" sq. x 3" long key (#2) from trans-axle driven shaft.
6. Remove 5/16" x 3/4" hex socket screws (#4), 5/16" x 1" hex head bolts (#6), neoprene plated washers (#12) and flanged lock nuts (#8).
7. Remove inner enclosure (#18) and gasket (#13).

IMPORTANT: Pulley flanges will bend and nick easily if handled roughly. Always handle pulleys gently to prevent damage.



Pulley and belt Removal
Figure 3

Assembly Instructions

CVT Inner Enclosure Installation

Refer to Figure 4:

- Loosen engine mounting hardware.

NOTE: Clutch alignment tool (P/N 790-001A) may be purchased from your nearest Land Pride Dealer.

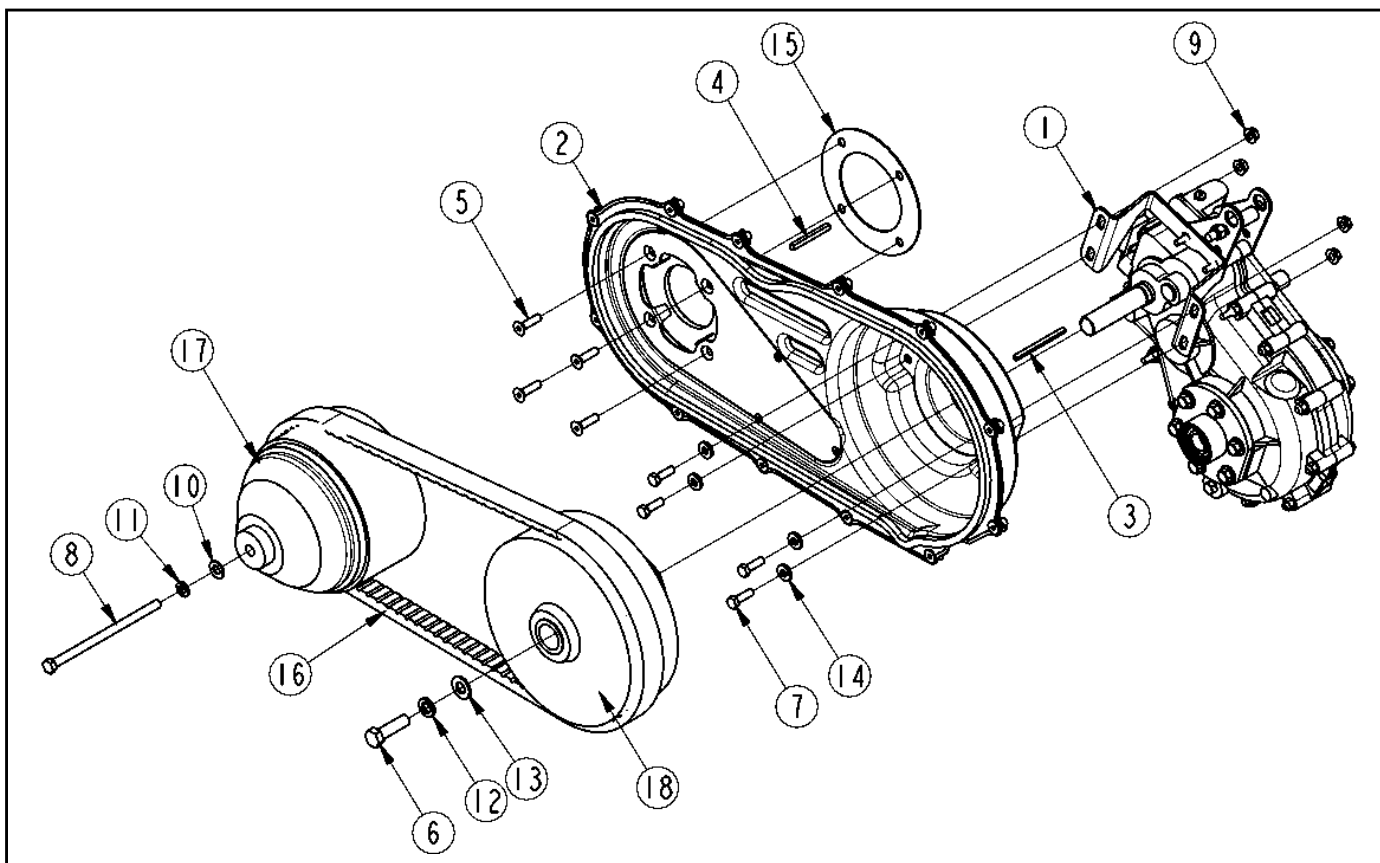
- Use clutch alignment tool to adjust engine shaft shoulder to offset 1.937" (1 15/16") out farther than trans-axle shaft shoulder. Add shims as needed to finalize offset distance.
- Make a dry run by installing pulleys and belt with no keys or shims.
 - Mount drive pulley (#17) onto the engine drive shaft.
 - Hang belt (#16) on drive pulley (#17).
 - Install belt (#16) on driven pulley (#18) and slide pulley onto trans-axle driven shaft.
 - Push both pulleys with installed belt back until they stop. Check belt alignment to make sure it is straight and aligned.
 - Add or remove shims from engine shaft if required.

NOTE: A thin layer of silicon can be added to the gasket to hold it against the engine block and in alignment with mounting holes.

- Install gasket (#15) over engine drive shaft. Make certain gasket holes are in alignment with mounting holes on engine block.
- Place CVT inner enclosure (#2) over trans-axle driven shaft and engine driven shaft.
- Secure enclosure to engine block with four 5/16" x 1 1/4" hex socket screws (#5) with loctite applied to threads. Draw hex socket screws up snug; do not tighten.

IMPORTANT: Neoprene on washers (#14) in step 7 is placed against the inner enclosure.

- Secure CVT inner enclosure to trans-axle shaft with four 5/16"-18 x 1" GR5 hex bolts (#7), neoprene plated washers (#14) and hex lock nuts (#9). Draw nuts up snug; do not tighten.
- Center CVT inner enclosure over trans-axle driven shaft. Make sure enclosure clears axle shaft and tighten lock nuts (#9) to 17 ft.lbs. of torque.
- Tighten hex socket screws (#5) to 20 to 25 in-lbs. of torque.



Inner CVT Shield, Pulleys & Belt Installation
Figure 4

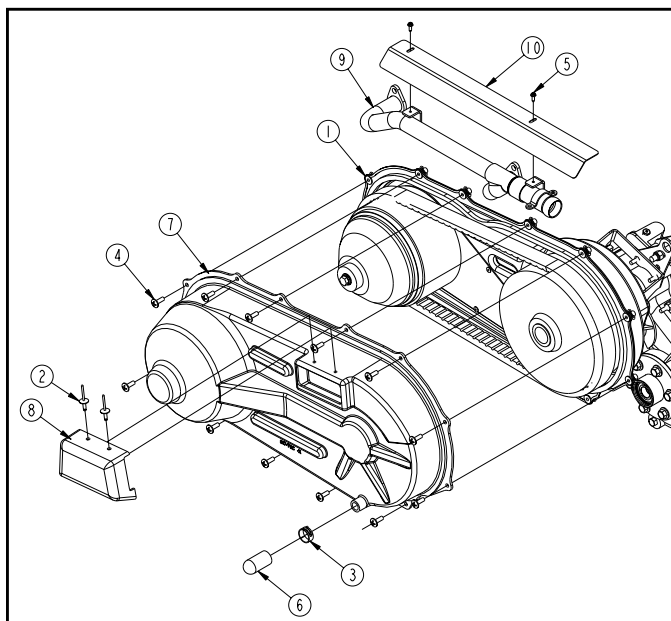
Assembly Instructions

Assembly of CVT Pulley and Belt

Refer to Figure 4:

IMPORTANT: Pulley flanges will bend and nick easily if handled roughly. Always handle pulleys gently to prevent damage.

1. Make a dry run by installing driven pulley (#18) onto trans-axle input shaft until it stops and then spin pulley by hand to verify it does not catch on any objects while rotating. Remove pulley.
2. Make certain shims in step 3e on page 4 are still on the engine shaft.
3. Apply anti-seize to engine drive shaft and install 3/16" x 1/4" x 2 1/4" long key (#4).
4. Slide drive pulley (#17) onto engine drive shaft and hang belt (#16) on drive pulley (#17).
5. Apply anti-seize to trans-axle input shaft and install 3/16" sq. x 3" long key (#3).
6. Install belt (#16) on driven pulley (#18) and slide pulley onto trans-axle driven shaft.
7. Push both pulleys with installed belt back until they stop. Recheck belt alignment.
8. Secure drive pulley (#17) with 3/8"-24 x 6 1/2" GR5 hex bolt (#8), 3/8" lock washer (#11) and flat washer (#10). Torque hex bolt to 35 ft. lbs.
9. Secure driven pulley (#18) with 1/2"-20 x 1 3/4" hex bolt (#6), 1/2" lock washer (#12) and 1/2" flat washer (#13). Torque hex bolt to 85 ft. lbs.



Outer CVT Enclosure Installation
Figure 5

Assembly of CVT Outer Enclosure

Refer to Figure 5:

1. Being careful not to scratch gasket edge of outer enclosure (#7), mate enclosure with inner enclosure

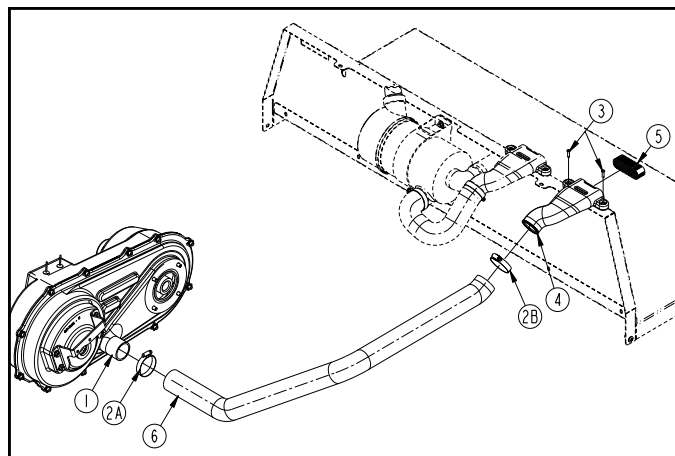
and secure with twelve 1/4"-20 x 3/4" screws (#4). Do not tighten until all screws are installed. Tighten each screw to 5.6 ft-lbs. of torque.

2. Install drain cap (#6) over drain nozzle and secure with 1" spring clamp (#3).
3. Install CVT diverter outlet (#8) to outer enclosure with two 3/16" pop rivets (#2).
4. Install exhaust heat shield (#10) to exhaust pipe. Secure with existing #8 x 1/2" hex screws (#5) and tighten.

Assembly of CVT Venting

Refer to Figure 6:

1. Slip worm drive hose clamp (#2A) over bottom end of air intake hose (#6). Do not tighten. Install air intake hose over CVT inner enclosure opening (#1).
1. Slip second worm drive hose clamp (#2B) over top end of air intake hose (#6). Do not tighten.
2. Insert snorkel (#4) into open end of air intake hose (#6) and position snorkel on top of Treker firewall panel as shown.
3. Mark hole locations for mounting snorkel and pre drill two 1/8" diameter holes in fire wall panel flange.
4. Secure snorkel to firewall panel by driving two #10 x 3/4" hex head self-tapping drive screws (#4) into the panel's flange.
5. Position worm drive clamps (#2A & #2B) approximately 1/8" from each end of air intake hose and tighten.
6. Insert air intake filter (#5) into snorkel (#4).



CVT Venting Installation
Figure 6

Final Assembly

Refer to Figure 1 on page 2:

1. Reattach side panel (#1) with five 1/4" Phillip head machine screws (#2) and 1/4" hex flange lock nuts (#3). Tighten lock nuts to 6 ft. lbs. of torque.
2. Remove blocking supporting Treker bed in the up position and lower the bed.

Kit No. 700-519A**Treker CVT/Cover Kit**

Qty.	Part No.	Part Description
1	700-112A	CVT SHIM KIT TREKER / ATR
1	700-503S	ASSEMBLY, CVT INNER COVER
1	700-520M	CVT/COVER UPDATE MANUAL
1	710-097D	KEY 3/16" x 3"
2	800-219C	RIVET POP 3/16" .251"-.375" LF
1	800-235C	SPRING CLAMP 1" OD HOSE
1	800-259C	CLAMP WORM DRIVE #36SS (1.81-2.75)
1	800-350C	KEY .187" x .247" x 2.25" LG
12	801-180C	TTHMS 1/4"-20 x 3/4"
2	801-199C	SCR SELF TAP #10 x 3/4"
4	801-215C	HSFHCS 5/16"-24 x 1 1/4", BLK
1	802-329C	HHCS 1/2"-20 x 1 3/4" GR5
4	802-738C	HHCS 5/16"-18 x 1" GR5 YELLOW DIE
1	802-823C	HHCS 3/8" -24 x 6 1/2" GR5 PLT
4	803-177C	NUT HEX FLG TOP LK 5/16" -18 YLW
1	804-012C	WASHER FLAT 3/8" SAE PLT
1	804-013C	WASHER LOCK SPRING 3/8" PLT
1	804-015C	WASHER LOCK SPRING 1/2" PLT
1	804-016C	WASHER FLAT 1/2" SAE PLT
1	804-135C	WASHER FLAT 5/16" NEOPRENE PLT
1	816-470C	SEAL, CVT TO ENGINE
1	816-546C	BELT, CVT -LP3
1	817-621C	CAP, DRAIN 7/8" OD PORT
1	817-711C	ENCLOSURE, CVT OUTER
1	817-712C	OUTLET DIVERTER, CVT
1	826-523C	DRIVER, POWERBLOCK - LP3
1	826-525C	DRIVEN, CVTECH POWERBLOCK-LP3
1	840-266C	SNORKEL AIR INTAKE
1	840-268C	FILTER, AIR INTAKE
1	840-323C	HOSE, CVT AIR INTAKE



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