



Installation Instructions

Quarter Stick® Installation kit

Chrysler A727, A904, Ford C4, C5 C6, GM 2-Speed
Powerglide, TH250, TH350 & TH400
Catalog# 3730002

This kit includes the necessary brackets, levers and hardware required for the installation of the various the various Hurst Quarter Stick shifters (Cable not included). This is an overview of the general installation procedures. For more detailed instructions please refer to the instruction sheet provided with the specific shifter part number that you are working with. These can also be found on our website.

Note: All adjustments must be made with shifter and transmission in Neutral (N). All adjustments are critical and MUST be precise.

Do not mix components (all parts including cable must be Hurst components provided in kit).

If a shifter is removed and reinstalled, adjustments must be checked and re-adjusted.

Always check cable for freedom of motion before connecting at shifter and transmission arm.

Routing of cable should avoid sharp bends (permanent damage of cable will result.)

Failure to comply with any of the above may result in malfunction of shifter operation. Damage to cable due to sharp bending, kinking, or excessive heat is not covered by Warranty.

With shifter mounted in the desired location, direct eyelet end of shifter cable through shifter frame. Secure shifter cable to frame using cable clip, push clip down until it is firmly seated. Put shifter in neutral and slide cable eyelet over pin on shifter stick (see exploded view), install cotter pin through hole in shifter pin to hold cable in place.

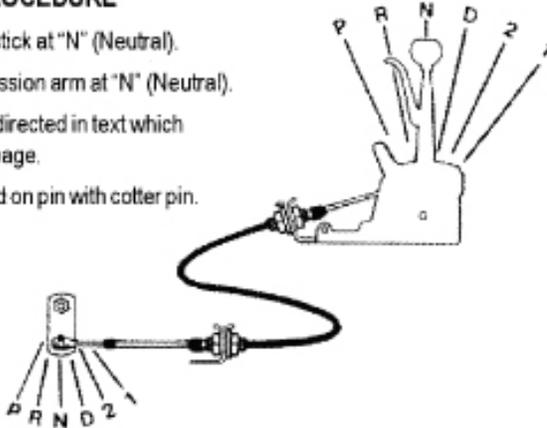
Remove stock transmission arm and install the proper Hurst transmission arm per the directions. Refer to the information provided below regarding the specifics required for various transmission types. Install the corresponding cable bracket per the illustration. Carefully route the shifter cable towards the cable bracket (avoid any sharp bends as cable can become permanently damaged). Insert cable eyelet through slot in mounting bracket and secure using cable clip, push clip down until it is firmly seated.

Thread cable pivot onto threaded end of cable. Make sure that the transmission is in neutral. Thread cable pivot in or out on the cable until it lines up directly with the hole in the transmission arm. Lock cable pivot in this position with the 10/32 nut supplied on the shifter cable. Insert cable pivot into hole in transmission arm. Carefully shift through each gear (up and down) and check for free entry of cable pivot into transmission arm at each gear position. Re-adjust if necessary to insure proper engagement in each gear. When satisfied with adjustment, secure cable pivot to transmission using supplied cotter pin.

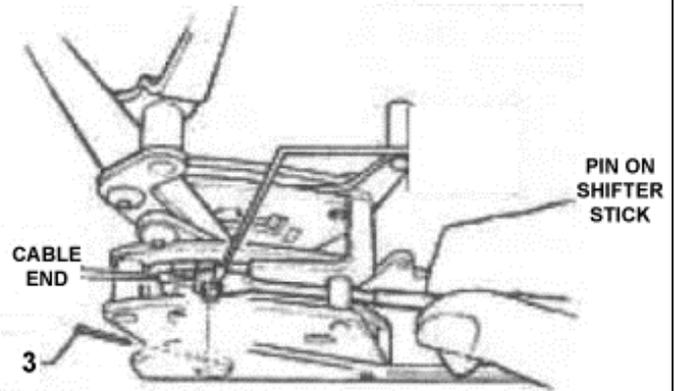
Route the shift cable in the transmission tunnel so as to avoid binding or kinking of the cable. Make sure that the cable is not too close to or in contact with the exhaust system. When you are satisfied with the routing, secure the cable to the chassis using the supplied cable clamps (#5). Drill a 1/4" hole in the tunnel or frame, fold clamp around cable and push the split end through the 1/4" hole. Push the pointed end into the split end until it snaps tight.

ALIGNMENT PROCEDURE

1. Position shifter stick at "N" (Neutral).
2. Position transmission arm at "N" (Neutral).
3. Adjust cable as directed in text which appears on this page.
4. Fasten cable end on pin with cotter pin.

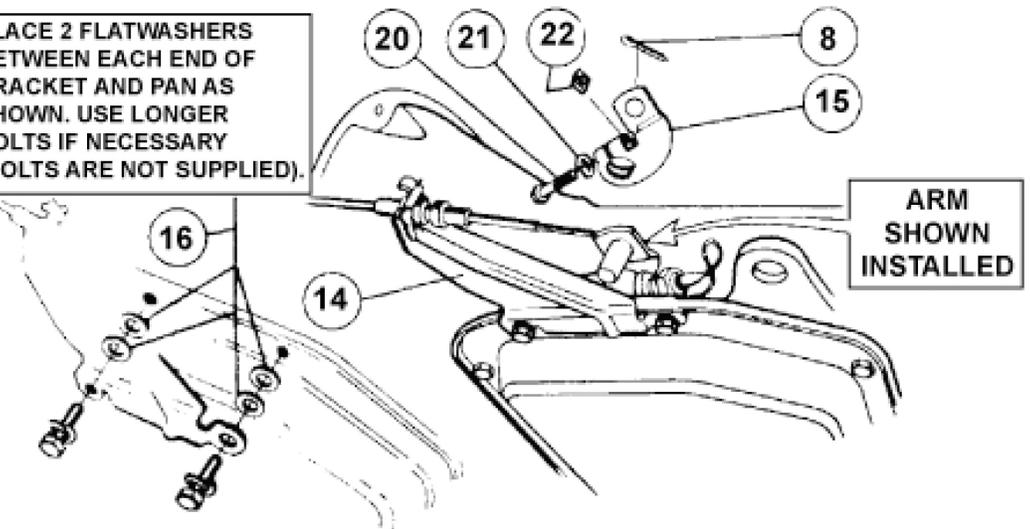


ATTACH CABLE END TO PIN ON SHIFTER STICK



CHRYSLER A727 & A904 TORQUEFLITE

PLACE 2 FLATWASHERS BETWEEN EACH END OF BRACKET AND PAN AS SHOWN. USE LONGER BOLTS IF NECESSARY (BOLTS ARE NOT SUPPLIED).

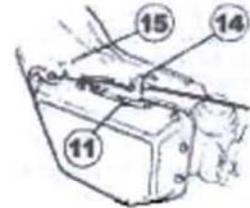
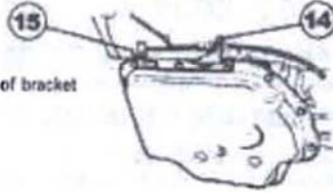


3 SPEED APPLICATIONS - TH350/400 TURBO-HYDRAMATIC

All turbo installations use this bracket (PT. 117 4778). Refer to drawings below for method of fastening.

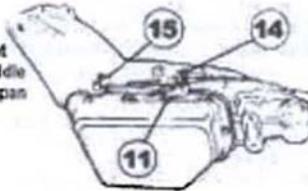


400 TURBO-HYDRAMATIC
Use stock bolts to fasten end holes of bracket to transmission.



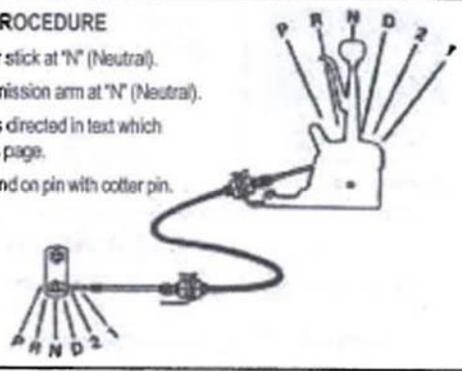
350 TURBO-HYDRAMATIC
Install with 5/16-18x3/4" socket head cap screw (#11) located at rear of center slot in bracket (bracket forward as far as possible). Use stock pan bolt in front slotted hole of bracket.

200 TURBO-HYDRAMATIC
Install bracket with 5/16-18 x 3/4" socket head cap screw (#11) located in the middle of the center slot in bracket. Use stock pan bolt in front slotted hole of bracket. Adjust in either direction for proper neutral alignment.



ALIGNMENT PROCEDURE

1. Position shifter stick at "N" (Neutral).
2. Position transmission arm at "N" (Neutral).
3. Adjust cable as directed in text which appears on this page.
4. Fasten cable end on pin with cotter pin.

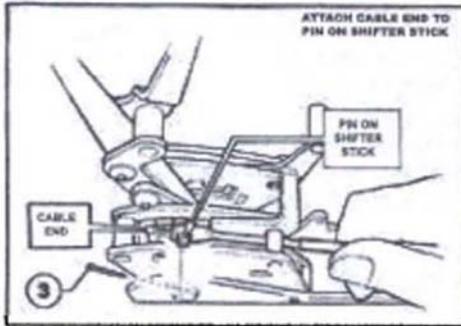


With shifter mounted in the desired location, direct eyelet end of shifter cable through shifter frame. Secure shifter cable to frame using cable clip (#4), push clip down until it is firmly seated. Put shifter in neutral and slide cable eyelet over pin on shifter stick (see exploded view), install cotter pin (#3) through hole in shifter pin to hold cable in place.

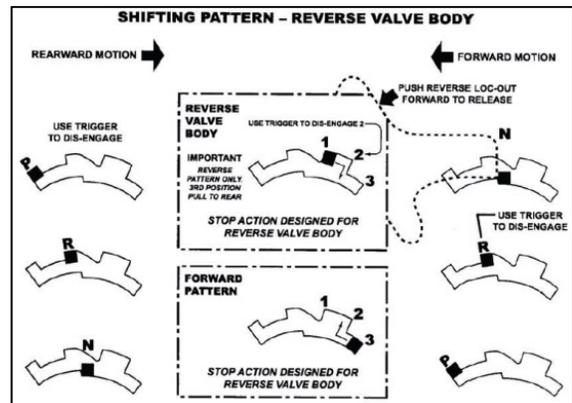
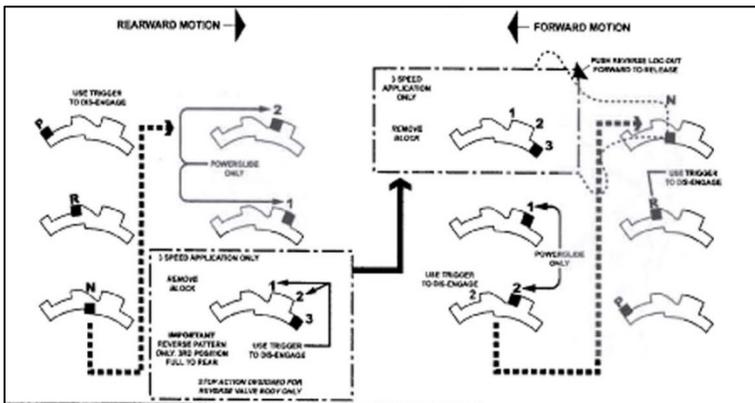
Remove stock transmission arm. Refer to the illustration for your transmission and install the proper Hurst transmission arm per the directions. Install the corresponding cable bracket per the illustration. Carefully route the shifter cable towards the cable bracket (avoid any sharp bends as cable can become permanently damaged). Insert cable eyelet through slot in mounting bracket and secure using cable clip (#4), push clip down until it is firmly seated.

Thread cable pivot (#8) onto threaded end of cable. Make sure that the transmission is in neutral (See illustration of shifter and transmission arm above). Thread cable pivot in or out on the cable until it lines up directly with the hole in the transmission arm. Lock cable pivot in this position with the 10/32 nut supplied on the shifter cable. Insert cable pivot into hole in transmission arm. Carefully shift through each gear (up and down) and check for free entry of cable pivot into transmission arm at each gear position. Re-adjust if necessary to insure proper engagement in each gear. When satisfied with adjustment, secure cable pivot to transmission using supplied cotter pin (#9).

Route cable in transmission tunnel so as to avoid binding or kinking of the cable. Make sure that the cable is not too close to or in contact with the exhaust system. When you are satisfied with the routing, secure the cable to the chassis using the supplied cable clamps (#5). Drill a 1/4" hole in the tunnel or frame, fold clamp around cable and push the split end through the 1/4" hole. Push the pointed end into the split end until it snaps tight.



SHIFTING PATTERNS



POWERGLIDE APPLICATIONS

WARNING!

IMPORTANT

Installation of Quarter Stick shifter on Powerglide transmission eliminates throttle pressure control linkage (kickdown valve).

Powerglide installation of the Hurst Quarter Sticks is for racetrack use only. Under no circumstances is this shifter to be used in a vehicle that is operated on public highways or streets. In no case shall Hurst Performance, Inc. be liable for any direct or consequential damages resulting from improper use of this unit.

Refer to Fig. 1. Use hacksaw to cut protruding part of transmission away to allow cable bracket installation. Clean all metal chips away from transmission before removing oil pan. Remove all stock linkage. Drain transmission fluid. Remove oil pan.

IMPORTANT

DO NOT ALLOW FOREIGN MATTER (DIRT, METAL CHIPS, ETC) TO ENTER TRANSMISSION OR CONTAMINATE ANY INTERNAL PARTS. IF NECESSARY, WASH PARTS IN SOLVENT AND BLOW THEM DRY WITH COMPRESSED AIR.

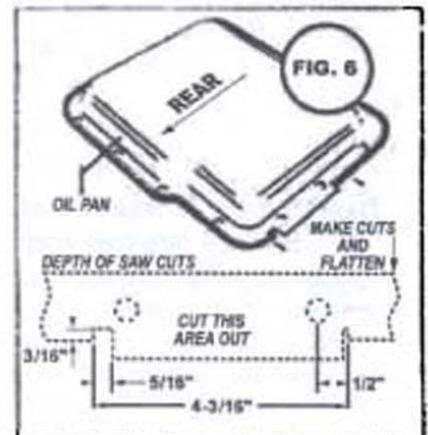
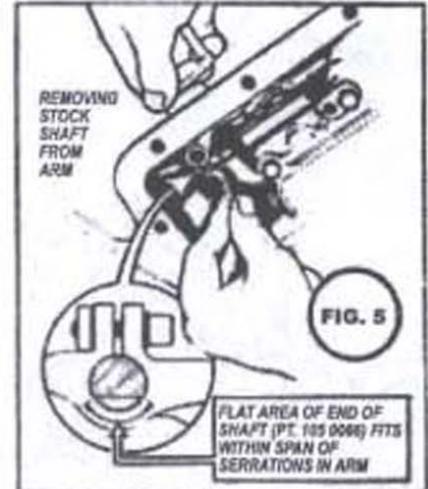
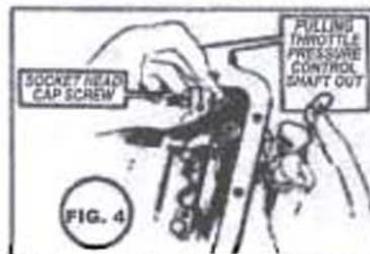
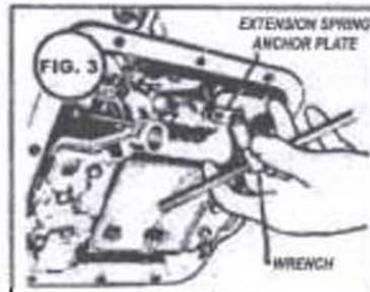
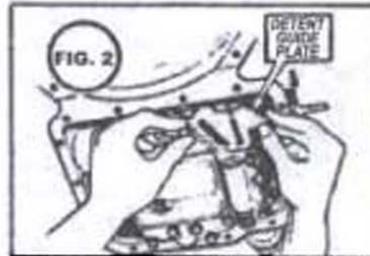
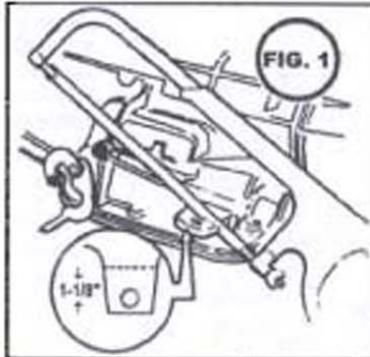
Refer to Fig. 2. Remove two screws that fasten detent guide plate over internal end of control linkage. Remove guide plate.

Refer to Fig. 3. Loosen screw that fastens the extension spring anchor plate to release tension on the detent roller.

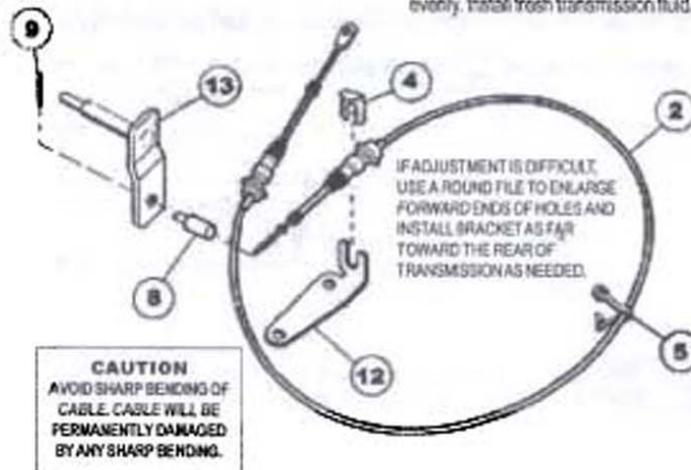
Refer to Fig. 4. Loosen socket head cap screw that fastens the throttle pressure actuator (transmissions that have throttle pressure control). NOTE: Installation of the solid control shaft supplied with this kit (Pt. 105 0084) in Powerglide transmission eliminates throttle pressure control. See warning on page 3 of this instruction sheet. Grasp the actuator and pull the throttle pressure control shaft out of transmission control shaft. Stock transmission control shaft is now ready for removal.

Refer to Fig. 5. The flat area on the end of the solid control shaft (Pt. 105 0084) fits within the span of the serrations in the detent plate.

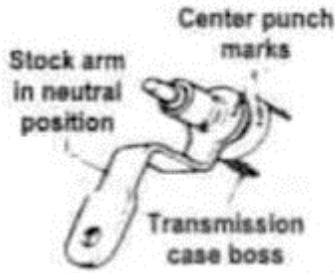
The drawing in Fig. 5 explains this. Loosen socket head cap screw that fastens detent plate to control shaft. Grasp detent plate carefully to keep it in position as you withdraw original shaft and replace it with the solid shaft (Pt. 105 0084). Detent plate is linked to PARK lock actuator plunger. Take care to keep this assembly in position while exchange of control shafts is accomplished. You must hold detent plate in position with one hand while you remove original shaft and install the solid one. Stud pin in detent plate must engage the groove in the manual valve. Tighten socket head cap screw to fasten detent plate to control shaft. Align detent roller with detent plate, then tighten anchor plate screw to restore tension to extension spring. Replace detent guide plate. Rotate detent plate through full travel to ensure correct assembly (P-R-N-D-L).



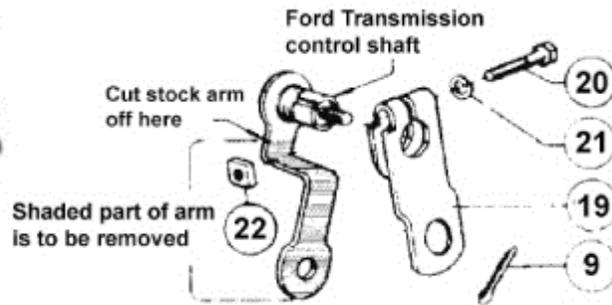
Refer to Fig. 6. Make cuts with hacksaw. Break away small length between cuts as seen in Fig. 6. Flatten lip of flange between the extreme cuts with ball peen hammer as shown in photograph. Inspect reworked area of oil pan flange. Gasket mating surface and areas around bolt holes must be flat. Use ball peen hammer to peen flange flat (with pan properly supported on anvil, etc). Clean pan thoroughly in solvent. Install oil pan with new gasket. Cable bracket is installed with pan bolts. Tighten all bolts evenly. Install fresh transmission fluid.



FORD INSTALLATIONS

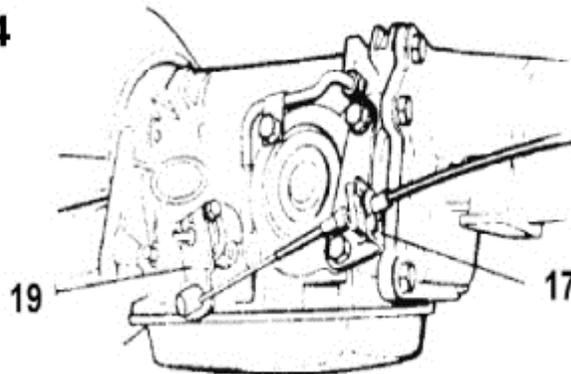


MODIFICATION OF STOCK FORD ARM AND INSTALLATION OF HURST ARM

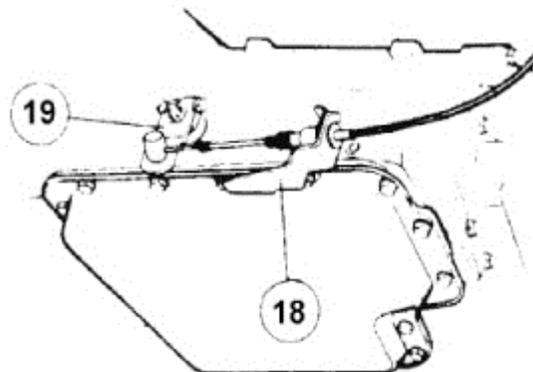


Cut shaded part of stock arm off. Install Hurst arm on shaft loosely using the supplied hardware. Do not tighten at this time. Follow the adjustment procedure outlined in the body of the instruction sheet.

FORD C-4



FORD C-6



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