## PRECISION PERFORMANCE PRODUCTS

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## KWIK SHIFT I

(MANUAL & POWERSHIFT MODELS)
INSTALLATION AND OPERATION INSTRUCTIONS

YOUR **KWIK-SHIFT I** IS CONSTRUCTED OF THE FINEST MATERIALS AND WORKMANSHIP, HOWEVER HERE ARE SOME THINGS TO CONSIDER DURING INSTALLATION AND OPERATION.

**OPERATION:** LEAVING NEUTRAL TO FORWARD POSITIONS, PUSH BUTTON OR LEVER AND MOVE HANDLE TO 1st. GEAR POSITION WHEN MOVING TO REVERSE OR PARK POSITIONS. (ONE HAND OPERATED REVERSE LOCKOUT) SQUEEZE LEVER DEPRESS TOP BUTTON AT THE SAME TIME, THIS WILL ALLOW YOU TO MOVE TO THIS AREA.

TRANS-BRAKE OPERATION: WHEN IN 1<sup>st</sup>. GEAR OR REVERSE POSITION, DEPRESS BUTTON ON TOP OF HANDLE AND SQUEEZE THE LEVER. WHILE IN THIS POSITION THE TRANS-BRAKE WILL BE ACTIVATED, RELEASING THE LEVER WILL IMMEDIATELY RELEASE THE TRANS-BRAKE. NOTE: PROFLITE AND PROHYDRO SHIFTERS WITH THE EXTRA SAFETY NEUTRAL DO NOT HAVE THE TRANS-BRAKE FEATURE AND NO BLUE WIRE.

**ENGINE STARTING POSITIONS:** WHEN THE STARTER IS WIRED THROUGH THE SHIFTER IT WILL ALLOW STARTING IN **NEUTRAL** OR **PARK** POSITIONS ONLY. NOTE: THE **PROFLITE** WILL START IN PARK AND SAFETY NEUTRAL, THE **PROHYDRO** WILL START IN PARK, THE NEXT NEUTRAL AND SAFETY NEUTRAL.

PRECISION PERFORMANCE PRODUCTS CABLES: DETERMINE THE OPTIMUM CABLE LENGTH (MEASURING THE CABLE OVERALL) THAT PROVIDES A MINIMUM NUMBER OF BENDS AND GENTLE (10" MINIMUM) RADIUS, THEN SELECT FROM THE FOLLOWING: #603—3 FT. LG. #604— 4 FT. LG. #605—5 FT. LG. #606—6 FT. LG. #607—7 FT. LG. #608—8 FT. LG. #609—9 FT. LG. #610--10 FT. LG. #611—11 FT. LG. #612—12 FT. LG. #613—13 FT. LG.

FOR TRANSMISSION CABLE CONNECTION COMPONENTS OR SHIFTER ACCESSORIES, CONSULT OUR WEBSITE (<a href="https://www.precisionperformance.com">www.precisionperformance.com</a>) OR CALL.

MOUNTING: SIDE MOUNTING IS POSSIBLE IF A ROLL BAR OR CHASSIS IS CONVENIENT. HOWEVER, FLOOR MOUNTING BRACKETS, PPP #601 MAY BE MORE PRACTICAL IN OTHER APPLICATIONS, CHECK FOR CABLE CLEARANCE FROM SHIFTER BEFORE MOUNTING. AVOID SHARP BENDS IN THE CABLE THAT CAN CAUSE BINDING DURING OPERATION. DISSEMBLING THE SIDE PLATES AND TURNING THEM IN THE OPPOSITE DIRECTION CAN ACCOMPLISH CABLE EXIT TO THE FRONT OR TO THE REAR. THIS OPTION IS ONLY AVAILABLE ON THE MANUAL MODELS AND NOT ON THE POWERSHIFT. NOTE: UNDER NO CIRCUMSTANCES DO NOT DISASSEMBLE THE HANDLE.

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**ELECTRICAL CONNECTION:** FIG. 1 (A) <u>RED WIRE</u> + 12 VOLT INPUT TO SHIFTER, THE <u>WHITE</u> <u>WIRE</u>, WHEN SHIFTER IS IN NEUTRAL OR PARK, PROVIDES POWER TO STARTER SWITCH (OTHER SIDE OF SWITCH CONNECTS TO STARTER SOLENOID), <u>BLUE WIRE</u> (NOT AVAILABLE IN *PROHYDRO* AND *PROFLITE* SHIFTERS) PROVIDES POWER TO ENGAGE TRANS-BRAKE SOLENOID WHEN SHIFTER IS IN 1ST. GEAR AND REVERSE POSITION WITH LEVER AND TOP BUTTON DEPRESSED. SEE ELECTRICAL SCHEMATIC SHEET FOR MORE DETAILS.

**POWER SHIFT (AIR SHIFTER):** FIG 1 (B) IN MOST APPLICATIONS, A MINIMUM OF 90 LBS TO MAX. OF 130 LBS. OF PRESSURE IS RECOMMEND OF CO2 GAS TO ACTIVATE THE SHIFTER. TO CONNECT THE CYLINDER, SIMPLY PUSH THE 1/4" DIA. POLY FLOW HOSE FIRMLY IN THE FITTING UNTIL IT STOPS. TO REMOVE THE TUBING, PUSH IN THE METAL RING ON THE FITTING, AND THEN WITHDRAW THE TUBING.

FLOOR MOUNTING BRACKETS #601 (OPTIONAL): THE MOUNTING BRACKETS COME IN RIGHT AND LEFT HAND PAIRS THAT MOUNT ON THE OUTSIDE OF THE SHIFTER AND UNDER THE CABLE MOUNTING BRACKET AS SHOWN IN (FIG. 1). MAKE SURE THAT THE LOWER FLANGES ARE FLAT WITH THE STEEPER ANGLE ON THE BOTTOM. INSTALL THE 1/4 X 1 1/8 LONG BOLT IN LOCATION (E) AND THE 1/4 X 1 1/4 LONG BUTTON HEAD BOLT IN THE POSITION (C) INSPECT AND PROVIDE CLEARANCE IF NECESSARY BETWEEN THE FLOOR MOUNTS AND THE AIR CYLINDER ON THE POWERSHIFT MODELS.

CABLE INSTALLATION: MOVE LEVER BETWEEN PARK AND REVERSE POSITIONS INTO THE HALF NOTCH IN THE GATE, AS SHOWN IN (FIG. 1) NOW THE 1/4" DIAMETER HOLE (G) IN THE RIGHT SIDE PLATE WILL BE ALIGNED WITH THE HOLE IN THE HANDLE. THE END OF THE CABLE WITH THE EYE CAN NOW BE INSERTED INTO THE HANDLE AND THE SHORT 1/4" PIN IS INSTALLED THROUGH THE HOLE, ATTACHING THE CABLE TO HANDLE, THEN SECURE THE CABLE HOUSING BY INSTALLING THE 1/4" BOLT THROUGH THE BRACKET (F) ATTACHED TO THE CABLE HOUSING, AND INTO THE THREADED HOLE ON THE SHIFTER.

CABLE ADJUSTMENT: AFTER ATTACHING THE CABLE, CHECK FOR FULL TRAVEL FROM PARK TO OPPOSITE POSITION OF GATE PATTERN ON SHIFTER. AS A FINAL ADJUSTMENT VERIFY THAT WHILE IN SECOND GEAR POSITION, THE SHIFTER ROLLER IS IN THE CENTER OF THE GATE CANNEL. THIS IS ACCOMPLISHED WITH THE TWO NUTS ON THE CABLE HOUSING AND THE CABLE TRUNNION AT THE TRANSMISSION LEVER.

