

POLARIS PRO DROP & ROLL BELT DRIVE KIT

TO INSTALL THIS KIT YOU WILL NEED TO REMOVE THE SIDE PANELS, BELT, SECONDARY CLUTCH, REAR SUSPENSION, TRACK, DRIVE AND JACK SHAFTS, RIGHT AND LEFT HAND KICK PLATES. YOU WILL NEED TO REMOVE THE OVER STRUCTURE BOLTS ON EACH SIDE OF THE TUNNEL. IT IS NOT NECESSARY TO REMOVE THE HOOD OR THE BELLYPAN FENDERS. YOU ALSO NEED TO REMOVE THE STOCK QUICK DRIVE BELT ASSEMBLY COMPLETELY. SAVE ALL NUTS AND BOLTS YOU REMOVE AS YOU WILL REUSE THEM DURING REASSEMBLY. WHEN REMOVEING THE BRAKE CALIPER FROM THE QUICK DRIVE BACKING PLATE, DO NOT LOOSEN THE BRAKE LINE. JUST REMOVE THE TWO MOUNTING BOLTS AND SET THE CALIPER A SIDE ON THE TUNNEL. YOU WILL NOT REUSE THE TWO STOCK MOUNTING BOLTS THAT YOU REMOVED FROM THE CALIPER. ALL OTHER BOLTS AND NUTS WILL BE REUSED. THE EASIEST WAY WE HAVE FOUND TO REMOVE THE QUICK DRIVE BACKING PLATE IS WITH A GOOD QUALITY HEAT GUN. YOU WILL NEED TO REMOVE ALL THE BOLTS AND NUTS BEFORE HEATING THE PLATE. WHEN HEATING THE PLATE, TRY TO HEAT THE ENTIRE SURFACE EVENLY AND THE GLUE WILL RELEASE WHEN THE PROPER TEMPERATURE IS REACHED. THE HEAT GUN IS ALSO A GOOD AID TO USE WHEN TRYING TO CLEAN THE RESIDUAL GLUE FROM THE CHASSIS. IT IS VERY IMPORTANT THAT ALL GLUE IS REMOVED BEFORE PROCEEDING WITH INSTALLING THE KIT. ONCE THE BACKING PLATE HAS BEEN REMOVED, YOU NEED TO REMOVE THE TUNNEL REINFORCEMENT PIECE ON THE RIGHT HAND SIDE THAT WAS BETWEEN THE TUNNEL AND BACKING PLATE.

THE FIRST STEP IN INSTALLING THIS KIT IS RELOCATING THE COOLANT BOTTLE. REMOVE THE RIVET HOLDING THE COOLANT BOTTLE TO THE OVER STRUCTURE. NEXT YOU WILL NEED TO DRILL A NEW 3/16" HOLE 3/4" HIGHER IN THE ALUMINIUM OVER STRUCTURE. MAKE SURE TO KEEP THE NEW HOLE IN LINE WITH THE EXISTING HOLE. ONCE THE NEW HOLE IS DRILLED, RIVET THE COOLANT BOTTLE BACK INTO PLACE WITH A LARGE HEAD 3/16" RIVET FROM THE KIT. YOU WILL HAVE TO REPOSITION THE HOSE BETWEEN THE COOLANT BOTTLE AND THE HEAT EXCHANGER TO GET THE BOTTLE TO LINE UP WITH THE NEW RIVET HOLE. MAKE SURE TO INSTALL THE HOSE CLAMPS SO THAT THEY ARE NOT RUBBING ON THE FUEL TANK, BRAKE LINE OR SPEED SENSOR WIRING.

THE NEXT STEP IS TO INSTALL THE LEFT HAND CHASSIS PLATE. START BY REMOVING THE TWO BOLTS THAT HOLD THE TORQUE STOP TO THE BULK HEAD. NEXT YOU NEED TO REMOVE THE THREE BOLTS THAT HELD THE DRIVE SHAFT BEARING MOUNT TO THE TUNNEL. DO NOT DESTROY THE KEEPERS ON THE BOLTS, AS YOU WILL REUSE THEM. YOU ALSO NEED TO DRILL OUT THE RIVETS AS SHOWN IN THE PICTURE BELOW.

NOW YOU CAN SLIDE THE REINFORCEMENT PLATE INTO PLACE. INSTALL THE TORQUE STOP BOLTS INTO THE HOLES LOOSELY. INSTALL THE OVER STRUCTURE BOLTS INTO PLACE LOOSELY.

INSTALL THE TOP LEFT DRIVE SHAFT BOLT LOOSELY. WITH ALL THESE BOLTS INSTALLED, THE PLATE SHOULD BE LINED UP INTO PLACE WHERE IT IS SUPPOSED TO BE. IT SHOULD ALSO MATCH THE STOCK REINFORCEMENT PLATE ON THE TUNNEL. NOW TIGHTEN ALL BOLTS PREVIOUSLY INSTALLED. NEXT YOU NEED TO DRILL THE HOLES FOR THE OTHER THREE DRIVE SHAFT BEARING MOUNT BOLTS. THE EASIEST WAY TO MAKE THESE THREE HOLES IS TO DRILL A ROUND HOLE AND THEN USE A SQUARE FILE TO FILE OUT THE CORNERS TO MATCH THE SQUARE HOLES IN THE REINFORCEMENT PLATE. YOU WILL USE THE THREE STOCK BOLTS AND KEEPERS AND ONE BOLT AND NUT SUPPLIED IN THE KIT. THE NEW BOLT IN THE KIT WILL NOT USE A KEEPER AS THIS MAKES THE ASSEMBLY PROCESS EASIER. NEXT YOU WILL NEED TO DRILL THE HOLES INTO THE REINFORCEMENT PLATE FOR THE RIVETS THAT WERE REMOVED BEFORE INSTALLING THE REINFORCEMENT PLATE. THESE HOLES WILL BE DRILLED FROM INSIDE THE TUNNEL. THERE IS ALSO A RIVET HOLE IN FRONT OF THE TORQUE STOP THAT NEEDS TO BE DRILLED INTO THE CHASSIS. NOW IS A GOOD TIME TO MARK THE PART OF THE TUNNEL THAT NEEDS TO BE CUT OUT FOR THE DRIVESHAFT MOUNTING LOCATION. USE THE REINFORCEMENT PLATE AS A TEMPLATE TO MARK THE TUNNEL. ONCE ALL THE HOLES HAVE BEEN DRILLED AND THE TUNNEL HAS BEEN CUT OUT TO MATCH THE REINFORCEMENT PLATE, REMOVE THE REINFORCEMENT PLATE AND CLEAN ALL CHIPS AND BURRS FROM THE CHASSIS AND THE REINFORCEMENT PLATE. ONCE EVERYTHING IS CHIP AND BURR FREE, YOU CAN REINSTALL THE REINFORCEMENT PLATE AS DESCRIBED EARLIER. IT IS BEST TO INSTALL THE RIVETS WITH THE HEADS ON THE INSIDE OF THE TUNNEL SO THERE IS NO INTERFERENCE WITH THE TRACK. IT IS UP TO THE INSTALLER TO DECIDE WHETHER OR NOT TO GLUE THE REINFORCEMENT PLATE TO THE CHASSIS. THE KIT HAS BEEN TESTED WITHOUT THE USE OF GLUE AND IT FUNCTIONED PROPERLY.

NOW YOU CAN MOVE ONTO INSTALLING THE RIGHT HAND SIDE CHASSIS PLATE. THIS IS A GOOD TIME TO MAKE SURE ALL THE BONDING GLUE IS REMOVED FROM THE CHASSIS. THIS IS A VERY IMPORTANT STEP TO ENSURE THAT THE CHASSIS REINFORCEMENT PLATE FITS PROPERLY. NEXT YOU NEED TO REMOVE THE RIVETS AS SHOWN IN THE PICTURE.

NOW YOU CAN INSTALL THE CHASSIS REINFORCEMENT PLATE. THE BOLTS THAT ARE HOLDING THE COUPLING BLOCK TO THE REINFORCEMENT PLATE NEED TO BE LOOSE. INSTALL THE BOLT THROUGH THE CHASSIS INTO THE COUPLING BLOCK. THIS BOLT ALSO NEEDS TO BE LEFT LOOSE AT THIS TIME. NEXT INSTALL THE OVER STRUCTURE BOLTS AND INSTALL NUTS LOOSELY. NEXT INSTALL THE THREE BOLTS AND SPACERS THAT HOLD THE BELT TENSIONER BACKBONE TO THE CHASSIS. YOU ALSO NEED TO INSTALL THE TWO CARRIAGE BOLTS AND THE TWO BOLTS THAT ARE MOUNTED TO THE HOLDING PLATE THAT ARE LOCATED IN THE MIDDLE OF THE REINFORCEMENT PLATE. WITH THESE BOLTS INSTALLED, THE CHASSIS REINFORCEMENT PLATE SHOULD BE IN THE CORRECT POSITION. TIGHTEN ALL BOLTS PREVIOUSLY INSTALLED. THE TWO CARRIAGE BOLTS AND THE TWO BOLTS THAT ARE MOUNTED TO THE HOLDING PLATE WILL

NEED TO BE CUT OFF FLUSH WITH THE END OF THE NUT FOR CLEARANCE PURPOSES. NOW YOU WILL NEED TO DRILL THE RIVET HOLES INTO THE REINFORCEMENT PLATE. THESE NEED TO BE DRILLED FROM THE INSIDE OF THE TUNNEL. THERE IS ALSO A RIVET HOLE IN THE FRONT OF THE REINFORCEMENT PLATE THAT NEEDS TO BE DRILLED INTO THE CHASSIS. ONCE ALL HOLES ARE DRILLED, YOU NEED TO REMOVE THE REINFORCEMENT PLATE AND CLEAN ALL FILINGS AND BURRS FROM THE PLATE AND THE TUNNEL. WHEN EVERYTHING IS CLEAN, YOU CAN REINSTALL THE REINFORCEMENT PLATE AND BACKBONE AS DESCRIBED EARLIER. JUST LIKE THE LEFT SIDE, IT IS BEST TO INSTALL THE RIVETS FROM THE INSIDE OF THE TUNNEL SO THAT THE RIVETS DO NOT INTERFERE WITH THE TRACK. ONCE AGAIN IT IS AT THE INSTALLERS DISCRETION WHETHER OR NOT TO GLUE THE REINFORCEMENT PLATE TO THE CHASSIS.

AFTER BOTH REINFORCEMENT PLATES ARE INSTALLED WITH ALL THE RIVETS AND BOLTS, YOU CAN NOW INSTALL THE RIGHT HAND SIDE JACKSHAFT BEARING AND BRAKE RELOCATION BRACKET. TO DO THIS, YOU WILL USE THE TWO OFFSET FLANGETTES AND ONE BALL BEARING SUPPLIED IN THE KIT. START BY PLACING THE BEARING AND FLANGETTES INTO PLACE ON THE INSIDE OF THE REINFORCEMENT PLATE. NEXT INSERT THE JACKSHAFT FROM THE LEFT HAND SIDE THROUGH THE BEARING YOU JUST SET INTO PLACE. INSTALL THE STOCK FLANGETTE ON THE LEFT HAND SIDE BEARING TO HOLD THE JACKSHAFT IN PLACE. NEXT INSTALL THE BRAKE RELOCATION BRACKET OVER THE JACKSHAFT AND ON THE INSIDE OF THE BEARING FLANGETTES. NOW YOU CAN INSTALL THE BOLTS THROUGH THE REINFORCEMENT PLATE, THE BEARING FLANGETTES, AND THE BRAKE RELOCATION BRACKET. YOU NEED TO USE FLANGED NUTS ON THE TOP AND FORWARD BOLTS. ON THE REAR BOLT, USE THE SUPPLIED FLANGLESS LOCK NUT TO KEEP THE NUT FROM CONTACTING THE TUNNEL WHEN TIGHTENING THE BOLT. NEXT YOU NEED TO INSTALL THE SPEED SENSOR. THE SENSOR IS INSTALLED BY SLIDING THE WIRE THROUGH THE SLOT IN THE BRACKET, AND THEN INSERT THE SENSOR BODY INTO THE MOUNTING HOLE. USE THE STOCK BOLT AND THE SUPPLIED LOCKNUT TO RETAIN THE SENSOR TO THE BRACKET. NEXT YOU WILL HAVE TO SLIGHTLY LOOSEN THE BRAKE LINE AT THE CALIPER SO YOU CAN ROTATE THE LINE ON THE CALIPER. IF YOU ONLY LOOSEN THE LINE ENOUGH TO ROTATE IT, YOU WILL NOT LOOSE ANY FLUID AND THE BRAKE WILL NOT HAVE TO BE BLED. SEE PICTURE BELOW FOR THE PROPER POSITION OF THE BRAKE LINE. AFTER THE LINE IS POSITIONED PROPERLY, INSTALL THE BRAKE DISC INTO THE CALIPER. THEN SLIDE THE DISC AND CALIPER INTO PLACE AS AN ASSEMBLY. USE THE TWO BOLTS SUPPLIED IN THE KIT TO MOUNT THE CALIPER TO THE BRAKE BRACKET. MAKE SURE TO PUT LOCTITE ON THE CALIPER BOLTS WHEN INSTALLING THEM. ONCE THE CALIPER IS ALL MOUNTED TO THE BRACKET, SQUEEZE THE BRAKE HANDLE TO TIGHTEN THE CALIPER ONTO THE BRAKE DISC. ONCE THE CALIPER IS TIGHT ON THE DISC, USE THE BRAKE LOCK TO HOLD PRESSURE ON THE BRAKE SYSTEM TO CHECK FOR ANY LEAKS.

NOW YOU CAN INSTALL THE ROUND FLANGETTES AND BALL BEARING FROM THE KIT ON THE INSIDE OF THE RIGHT HAND REINFORCEMENT PLATE FOR THE DRIVESHAFT. IT IS BEST TO LEAVE THE FLANGETTE BOLTS LOOSE UNTIL THE DRIVESHAFT HAS BEEN INSTALLED FOR ALIGNMENT PURPOSES. AFTER THE DRIVESHAFT HAS BEEN INSTALLED AND THE LEFT HAND BEARING MOUNT ASSEMBLED, THEN YOU CAN TIGHTEN THE ROUND FLANGETTE BOLTS. THE TRIANGLE FLANGETTE IS TO BE INSTALLED ON THE LEFT HAND DRIVESHAFT BEARING BEHIND THE BEARING MOUNT PLATE.

WHEN INSTALLING THE PULLEY PROTECTOR CUP, THE TEE NUTS THAT ARE PRESSED INTO THE PLASTIC CUP ARE ALSO ALIGNMENT DOWELS. THE TEE NUTS WILL PROTRUDE INTO THE REINFORCEMENT PLATE. THE CUP IS MOUNTED BY THE TWO TEE NUTS, THE BOLT INTO THE BOTTOM OF THE COUPLING BLOCK, AND THE THREE RIVETS INTO THE RUNNING BOARD. THE BOLT INTO THE COUPLING BLOCK IS INSTALLED THROUGH THE CUP AND BELLYPAN. YOU WILL ALSO HAVE TO TRIM THE BELLYPAN TO FIT AROUND THE CUP. USE THE PREDRILLED RIVET HOLES IN THE PROTETOR CUP TO RIVET THE BELLYPAN TO THE CUP.

WHEN INSTALLING THE BELT DRIVE PULLEYS, MAKE SURE TO PUT LOCTITE ON THE PULLEY RETAINING BOLTS. IT IS VERY IMPORTANT THAT THESE TWO BOLTS ARE PROPERLY TORQUED AS PER THE POLARIS TORQUE SPECIFACATIONS. THIS SPECIFACATION DEPENDS ON WHAT BOLTS AND THE YEAR OF THE MACHINE. THE BELT DRIVE IN THIS KIT IS DESIGNED TO RUN THE BELT MUCH LOOSER THAN THE STOCK BELT. IT IS IMPORTANT THAT YOU FOLLOW THE GUIDE LINES ON BELT TENSION. THE BELT TENSION SHOULD BE SET AT 3/8" TO 1/2" DEFLECTION WHEN THE BELT AND PULLEYS ARE COLD. WHEN THE BELT AND PULLEYS ARE AT OPERATING TEMPERATURE, THE DEFLECTION SHOULD BE SET TO 1/4" TO 3/8". THE BELT TENSION SHOULD BE SET DURING ASSEMBLY, AND THEN IT WILL NEED TO BE CHECKED AFTER A COUPLE MILES ARE PUT ON THE MACHINE. ONCE YOU GET THE TENSION SET, IT SHOULD STAY SET PROPERLY.

THE TESTING WE HAVE DONE WITH THIS KIT, MOVING THE SUSPENSION FROM THE STOCK MOUNTING POSITION WILL CHANGE HOW THE CHASSIS HANDLES AND FEELS. JUST KEEP IN MIND THAT BY NOT MOVING THE SUSPENSION, IT IS A MUST TO TRIM THE TIPS OF THE RAILS AND RUN AN ANTI STAB KIT ON THE RAIL TIPS. HOW MUCH YOU WILL HAVE TO TRIM THE RAILS WILL DEPEND ON WHAT DRIVERS YOU ARE RUNNING.











