

Hydra-Drill

ASSEMBLY INSTRUCTIONS HD55 / HD505EX • HD77 / HD707EX

LIST OF MATERIALS

- 1 CRADLE
- 1 TEE TOP
- 1 BASE
- 1 MOTOR MOUNT
- 1 SWIVEL BRACE
- 1 DRILL STEM GUIDE
- 2 STABILIZER BARS
- 2 CRADLE POLES
- 1 WINCH POLE
- 1 WINCH
- 1 CABLE
- 3 PULLEY ASSEMBLY
- 1 THROTTLE CABLE
- 1 BREAKOUT WRENCH

NUT AND BOLT BAG

- | | LOCATION TO BE USED |
|--|--|
| 1 3/8" X 2 1/4" BOLT & LOCK NUT | FOR BASE ASSEMBLY TO REAR POLE |
| 2 3/8" X 2" BOLTS & LOCK NUTS | FOR WINCH ASSEMBLY TO REAR POLE |
| 1 3/8" FLAT WASHER | FOR WINCH ASSEMBLY TO REAR POLE |
| 4 1/4" X 1 1/4" BOLTS & LOCK NUTS | FOR CRADLE ASSEMBLY TO HD55 ENGINE |
| 8 5/16" X 2" BOLTS & LOCK NUTS | FOR ENGINE CRADLE
TO HD77/707 MOTOR MOUNT |
| 3 1/2" X 2 1/2" BOLTS & LOCK NUTS | FOR CABLE PULLEYS CRADLE & TEE |
| 2 12-24 X 7/8" SELF TAPPING SCREWS | FOR THROTTLE CABLE TO REAR POLE |
| 1 5/16" X 3" CLEVIS PIN AND CLIP | FOR SWIVEL ATTACHMENT |
| 1 5/16" CABLE CLAMP | FOR CABLE AT TEE TOP |
| 1 1" X 6" PIPE NIPPLE | FOR SWIVEL TO SWIVEL BRACE |

ASSEMBLY INSTRUCTIONS (refer to diagram on other side)

- Step 1.** Align the tubing guides on the base with the tubing studs pointed upward. The front of base is where two studs are located, the rear is where the winch pole is located.
- Step 2.** Insert two front power mast poles through the tubing guides in cradle and in tubing studs in base.
- Step 3.** Insert winch pole in tubing stud in the base (NOTE: the rear). Make sure the winch holes line up with the right front pole (refer to illustration) and secure with 3/8" X 2 1/4" bolt & lock nut.
- Step 4.** Lay mast down and insert cradle with pulley hole on top and facing the front of power mast.
- Step 5.** Next insert round studs on tee top into 3 poles. Bolt in pulleys using two 2 1/2" X 2 1/2" bolts and locknuts. Install nylon pulley and bolt in engine mount.
- Step 6.** Bolt on the winch using the two 3/8" X 2" bolts and lock nuts. The top bolt must have a 3/8" flat washer, insert this bolt from the winch side and secure. The bottom bolt goes through the winch pole first, then secure.
- Step 7.** Refer to winch instructions and attach cable to winch drum. While the mast is still lying down feed the cable over the two top pulleys and down to the engine mount pulley and back up to the tee top. Loop the cable through the holes tee top bracket and secure it using the 5/16" cable clamp.
- Step 8.** Carefully stand the mast up.
- Step 9.** Refer to your operator's instruction & parts manual and service the engine and gear box.
- Step 10.** **FOR HD55/505EX ONLY:** Locate adaptor plate with four 5/16" bolt/nut and four 1/4" bolt/nut. Install left side first, then the right side. Align swivel brace and adaptor holes and insert 5/16" bolt. Next slide swivel up from the bottom with the brace facing the front. The hose hole should be pointing downward. Secure nut/bolt.
FOR HD77/707EX ONLY: Install the power head to the engine mount using eight 5/16" X 2" bolts, insure that the long part of the engine mount, the pull cord and the spark plug are facing the rear of the mast.
- Step 11.** **FOR HD55/505EX ONLY:** Mount the engine & gearbox onto motor mount using four 1/4" X 1" bolts. Be sure to locate pull crank in the rear. Spark plug should be facing the front. Engine will set at a 30° angle to the right side.
FOR HD77/707EX ONLY: Align engine mount as illustrated on back of this page with swivel brace on right side of cradle. Use four 5/16" X 1 1/2" bolts to secure.
- Step 12.** Attach the throttle cable to the engine (refer to the operator's instruction & parts manual). Attach the control end to the winch pole, make sure the throttle lever is aiming upward.
- Step 13.** Install the water swivel on the output shaft of the gearbox with 5/16" X 3" clevis pin and clip. Attach 1" X 6" pipe nipple into swivel brace hole and align to swivel water input. Tighten down, using sealant to insure no leaking.
- Step 14.** Place the drill stem guide between the cradle poles at base and stabilizer bars on the base of power mast.