



WARNING!
To reduce the risk of injury, always unplug tool before attaching or removing accessories or making adjustments. Use only specifically recommended accessories. Others may be hazardous.

Punch and Die Replacement (Fig. 1) (Cat. No. 6890)

Dies should be replaced about every third time the punch is changed, or as necessary. A plate wrench is provided with tool.

1. Unplug tool and place on a level surface.
2. Loosen collar with plate wrench. Remove collar and die support.
3. Punch Removal: Loosen the set screw with 2.5 mm allen wrench. Remove punch and discard.
4. Punch Installation: Align punch detent with set screw in punch holder. Tighten set screw securely to below the surface of the punch holder.
5. Die Removal: Remove cap screws and lockwashers with 2.5 mm allen wrench. Discard die.
6. Die Installation: Place die in position. Screw holes in die and die support will align when die is properly seated. Replace cap screws and lockwashers and tighten securely.
7. Position die support in desired direction of cut using locating pin. Replace collar and tighten securely.

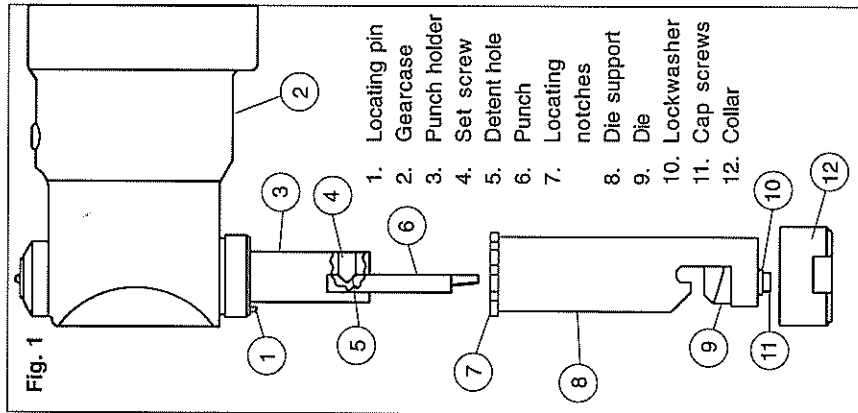


Fig. 1

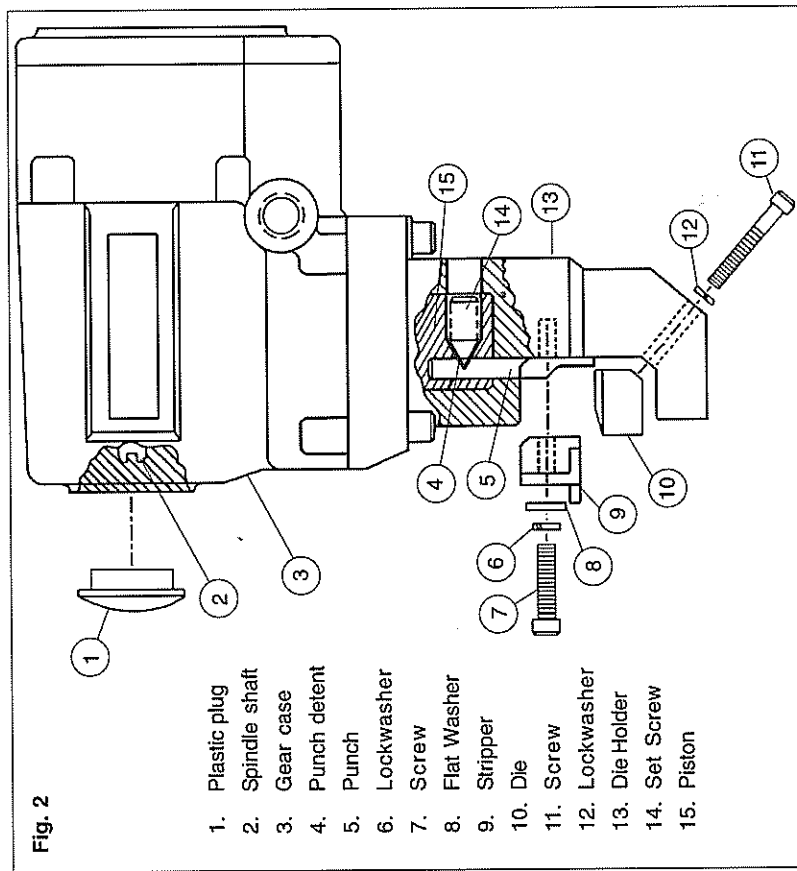


Fig. 2

Punch and Die Replacement (Fig. 2) (Cat. No. 6880)

Punch and die should be changed as a set. A 4 mm allen wrench is required to remove and tighten screws in punch, die and stripper.

All screws, washers, lockwashers and plastic cap removed during servicing will be required for reassembly.

1. Unplug tool and place on a level surface.
2. Stripper Removal: Remove screws, flat washers, lockwashers and stripper.
3. Die Removal: Remove screws, lockwashers and die. Discard die.
4. Punch Removal: Remove plastic plug and insert screwdriver in slot at end of spindle shaft. Rotate shaft until punch retaining set screw is visible through hole in rear of die holder. Remove set screw and punch. Discard punch.

5. Punch Installation: To install new punch, align punch with "D" slot. The punch is to be inserted until it bottoms in hole. Replace set screw and tighten securely. Replace plastic cap in gear case.

6. Die Installation: To install new die, align screw holes in die with holes in die holder. Replace lockwashers and screws and tighten securely.

7. Stripper Installation: To replace stripper, align screw holes in stripper with holes in die holder. Replace lockwashers, flat washers and screws. Adjust stripper (refer to Stripper Adjustment under 'Operation'). Tighten screws securely.

If there are any problems with removal or installation of punch and die, contact your nearest MILWAUKEE service facility. Return tool and parts to that facility, if necessary.

Side Handle (Cat. No. 6880)

Unplug the tool before installing or removing the side handle. The side handle can be attached to either side of the gear case for right or left handed operation.

OPERATION



WARNING!

To reduce the risk of injury, keep hands and cord away from the bit and all moving parts.



WARNING!

To reduce the risk of injury, wear safety goggles or glasses with side shields. Unplug the tool before changing accessories or making adjustments.

Toggle Switch (Cat. No. 6880)

The tool is equipped with a toggle switch, located at the bottom of the motor housing. To start the tool, move the switch to the 'ON' position. To stop the tool, move the switch to the 'OFF' position. Make sure the switch is in the 'OFF' position before plugging the tool into an outlet.

Paddle Switch (Cat. No. 6890)

The tool is equipped with a momentary contact (deadman) paddle switch located at the bottom of the motor housing. To start the tool, grasp the motor housing and firmly squeeze the paddle. To stop the tool, release the paddle.

Cutting

Keep the tool at right angles to the surface of the workpiece. Use an even forward pressure to ensure efficient cutting. Cutting line should be lubricated before cutting. Place a few drops of oil on punch and die every 12-15 feet of cutting. If tool has difficulty cutting metal or leaves a rough edge, change punch and die (see "Tool Assembly").

Stripper Adjustment

To adjust stripper, use 4 mm allen wrench and loosen screws. Adjust stopper until it clears material being cut. If material vibrates or there is unnecessary movement during cutting, readjust stripper.

MAINTENANCE



WARNING!

To reduce the risk of injury, always unplug your tool before performing any maintenance. Never disassemble the tool or try to do any rewiring on the tool's electrical system. Contact a MILWAUKEE service facility for ALL repairs.

Cleaning

Clean dust and debris from vents. Keep the tool handles clean, dry and free of oil or grease. Use only mild soap and a damp cloth to clean your tool since certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include: gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around tools.



WARNING!

To reduce the risk of injury, electric shock and damage to the tool, never immerse your tool in liquid or allow a liquid to flow inside the tool.

Maintaining Tools

Keep your tool in good repair by adopting a regular maintenance program. Before use, examine the general condition of your tool. Inspect guards, switches, tool cord set and extension cord for damage. Check for loose screws, misalignment, binding of moving parts, improper mounting, broken parts and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, turn the tool off immediately and have the problem corrected before further use. Do not use a damaged tool. Tag damaged tools "DO NOT USE" until repaired (see "Repairs").

Under normal conditions, relubrication is not necessary until the motor brushes need to be replaced. After six months to one year, depending on use, return your tool to the nearest MILWAUKEE service facility for the following:

- Lubrication
- Brush inspection and replacement
- Mechanical inspection and cleaning (gears, spindles, bearings, housing, etc.)
- Electrical inspection (switch, cord, armature, etc.)
- Testing to assure proper mechanical and electrical operation

Repairs

If your tool is damaged, return the entire tool to the nearest service center listed on the back cover of this operator's manual.