| SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS |  |  | SED BULLET | DATE |
| :---: | :---: | :---: | :---: | :---: |
| 1-3/4 H.P. D-HANDLE ROUTER |  |  | 54-37-0150 | Apr. 2010 |
| CATALOG NO. 5619-20/5619-29 | SERIAL | 280B | $58-01$ | $15$ |


| FIG. | PART NO. 02-04-0852 | DESCRIPTION OF PART Ball Bearing |
| :---: | :---: | :---: |
| * 2 | 02-04-2006 | Ball Bearing |
| 3 | 05-78-0305 | M5.5 x $6 \times 7 \mathrm{~mm}$ Pan Hd. Slt. T-15 |
| 4 | 06-82-5314 | $10-24 \times 1 / 2 "$ Slt. Pan Hd. Tapt. T-25 |
| 5 | 06-82-5514 | 1/4-20 x 1-1/2" Pan Hd. SIt. Tapt. T-30 |
| 6 | 06-82-5574 | 10-24 x 7/8" Pan Hd. Slt. Tapt. T-25 |
| 7 | 06-82-7212 | 4-20 x 1/4" Pan Hd. Slt. Plast. T-10 |
| 8 | 06-82-7270 | 8-16 $\times 5 / 8$ " Pan Hd. Slt. Plast. T-20 |
| 9 | 06-82-7455 | 8-16 x 2-3/8" Pan Hd. Slt. Plast. T-20 |
| 10 | 06-82-8865 | 10-32 x 7/16" Pan Hd. Tapt. Sems T-25 |
| 11 | 12-20-0205 | Service Nameplate Kit |
| 12 | 12-25-0335 | Nameplate |
| * 13 | 16-30-0011 | Armature |
| 14 | 18-30-1010 | Field |
| 15 | 22-16-0410 | Carbon Brush |
| 16 | 22-22-0165 | Brush Tube |
| 17 | 22-64-0815 | Cord Set Assembly |
| 18 | 44-76-0210 | Cord Protector |
| 19 | 23-16-0405 | Field Insulator |
| 20 | 22-64-0820 | Cord Set Assembly |
| 21 | 23-66-0168 | Switch Assembly |
| * 22 | 23-66-2280 | Rocker Switch |
| 23 | 23-74-0025 | Field Terminal |
| 24 | 23-74-0055 | Connector Terminal |
| 25 | 26-06-0100 | Base |
| 26 | 28-50-0105 | Motor Housing |
| 27 | 31-01-0025 | Depth Scale |
| 28 | 49-54-1045 | Sub Base |
| 29 | 31-15-0065 | Motor Cover |
| 30 | 31-17-0070 | Cord Clamp |
| 31 | 31-44-0130 | Knob Handle |
| 32 | 31-44-0140 | Right Handle Halve |
| 33 | 31-44-0145 | Left Handle Halve |
| * 34 | 31-50-0106 | Motor Frame |
| 35 | 40-50-0190 | Brush Spring |
| 36 | 40-50-4005 | Compression Spring |
| * 37 | 42-42-0126 | Release Button |
| * 38 | 43-98-0531 | Depth Knob |
| 39 | 44-10-0435 | Base Clamp Lever |
| 40 | 44-40-0095 | Collet Nut (2 supplied with tool) |
| 41 | 23-33-0065 | Receptacle Outlet |
| * 42 | 44-52-0681 | Grip |
| 43 | 44-60-0095 | Thru Pin |
| 44 | 44-66-0035 | Wear Plate |
| 45 | 45-08-0030 | Depth Shaft Assembly |
| * 46 | 45-10-0081 | Collet Shank (See reverse side for servicing) |
| * 47 | 23-94-0040 | Leadwire Assembly |
| 48 | 45-88-0045 | Washer |
| 49 | 45-88-0577 | Wave Spring Washer |
| 50 | 22-84-0380 | Fan Assembly |
| 51 | 48-66-0985 | 1/4" Collet |
| 51 | 48-66-1010 | 1/2" Collet |
| * 52 | 45-12-0015 | Dust Shield |
|  | 49-96-0365 | 1-1/8" Open End Wrench (Not Shown) |

## FIG. NOTES:

5,39 Clamping force for the base clamp lever (39) is adjusted with base clamp screw (5). Tighten the screw using 10-20 lbs. force to close the lever to the locked position. Motor unit must be in base when checking force.

16,34 When servicing the motor frame (34) and the brush tube (16) has to be removed, replace with a new brush tube.

25,36,37 To service the release button (37) and the compression spring (36) a long, thin tool like a flat blade screwdriver must be used. From the bottom of the base (25), insert the screwdriver into the cavity located under the release button. Press on the button detent to release.

39,43
Apply a thin coat of "L" grease, No. 49-08-4170, to the pivot surface areas of the base clamp lever (39). Apply a thin coat of grease to the surface of the thru pin (43).


## 45-10-0081 Collet Shank - removal / installation

## Removal of the Collet Shank from the Armature shaft...

Note: The Armature shaft has a 3/8" internal hex; The Collet Shank threads onto the Armature shaft.
Step 1 applied at the time of assembly, mild heat to the Collet Shank will soften Loctite ${ }^{\circledR}$ Threadlocker and will aide in the disassembly. Care should be taken with a heat gun, not to damage the seal of the Ball Bearing or Contamination Shield.

Step 2 to hold the Armature securely from turning, pass a 3/8" t-handle Hex Key through the Collet Shank and into the Armature's $3 / 8^{\prime \prime}$ internal hex.

Step 3 using the Router's standard equipment Forged 1-1/8" Open End Wrench on the external hex of the Collet Shank, turn the Collet Shank counter-clockwise $U$ to remove.

Installation of the Collet Shank to the Armature shaft...
torque specification of the Collet shank to the Armature shaft is $\mathbf{1 6 . 5} \mathbf{f t}$-lbs [vigorously hand-tight]...
Installation of the Collet Shank [45-10-0081] for a 5619-20,-29 Router can best be accomplished by using a 3/8" t-handle Hex Key, a 1-1/8" Crowfoot Wrench and a Torque Wrench.

Step 1 apply two drops of Loctite ${ }^{\circledR}$ 'Blue' $242^{\circledR}$ or 243 Oil Tolerant, Threadlocker or equivalent, $180^{\circ}$ apart, to threads of the Armature shaft before threading the Collect Shank onto the Armature... care should be taken not to get tread locking sealant on the ball bearing journal of the Armature shaft.

Step 2 pass a $3 / 8^{\prime \prime}$ t-handle Hex Key through the Collect Shank and into the Armature's $3 / 8^{\prime \prime}$ internal hex to hold the Armature securely from turning.

Step 3 using a 1-1/8" Crowfoot Wrench and a Torque Wrench combination turn the 1-1/8" hex of the Collet Shank in a clockwise $\circlearrowright$ direction until tight and the specified minimum of $\mathbf{1 6 . 5} \mathbf{f t}$-lbs of torque is reached.


## Collets

The collet must be attached to the collet nut before it is put into the collet shaft. Be sure that the size of the collet matches the size of the bit shank being used. If the wrong size bit shank is used, the collet may break. For attaching or detaching the collet nut to the collet, follow the illustrated instructions.
Attaching Collet to Collet Nut


To assemble, place the narrow end of the collet on an even surface. Take the nut and place it over the collet (Fig. 1).


Snap nut and collet together by firmly applying downward pressure into assembly with palm of hand (Fig. 3).


Position nut squarely over collet with the smaller opening of the nut facing up (Fig. 2).


To remove collet from nut, hold nut firmly with one hand and press the collet to one side with the other hand (Fig. 4).

