

# SECTION IX

## TRACK, DRIVE AND SUSPENSIONS

### Contents of this Section

|                                                                                           |                  |
|-------------------------------------------------------------------------------------------|------------------|
| Suspension Identification . . . . .                                                       | See Reverse Side |
| Track Tension and Drive Sprocket to Shaft Specifications . . . . .                        | 1                |
| General Specifications . . . . .                                                          | 1a – 1c          |
| Slide Rail Assembly – Charger, Charger SS, TX, Mustang, and Custom (Glass Rail) . . . . . | 2                |
| Type I Stamped Steel Slide Rail Assembly . . . . .                                        | 3                |
| Type II Stamped Steel Slide Rail Assembly (E Slot) . . . . .                              | 4                |
| Type II Stamped Steel Slide Rail Assembly (E Slot) Adjustments . . . . .                  | 5                |
| Type III Front Limiter Assembly Adjustments . . . . .                                     | 6                |
| Type III Stamped Steel Slide Rail Assembly (Strap Limiter) . . . . .                      | 7                |
| Type I Extruded Aluminum . . . . .                                                        | 8                |
| Type I Extruded Aluminum Adjustments . . . . .                                            | 9                |
| Type II Extruded Aluminum . . . . .                                                       | 10               |
| Type II Extruded Aluminum Adjustments . . . . .                                           | 11               |
| Type III Extruded Aluminum . . . . .                                                      | 12               |
| Type III Extruded Aluminum Adjustments . . . . .                                          | 13               |
| Type I Track Removal . . . . .                                                            | 14 – 15          |
| Types II and III Track Removal . . . . .                                                  | 16 – 17          |
| Hi-Fax and Rubber Track Clip Replacement . . . . .                                        | 18               |
| Direct Drive Track and Front Drive Shaft Removal and Installation . . . . .               | 18a – 18b        |
| Track Tension and Alignment . . . . .                                                     | 19               |
| Sprocket Installation . . . . .                                                           | 20               |
| Types IV, V, VI and VII Extruded Aluminum Adjustments . . . . .                           | 21               |
| Types IV and V Extruded Aluminum . . . . .                                                | 22               |
| Types VI and VII Extruded Aluminum . . . . .                                              | 23               |
| Type IX Extruded Aluminum Exploded View and Adjustments . . . . .                         | 23a              |
| Type VIII Extruded Aluminum Exploded View and Adjustments . . . . .                       | 24               |
| Type X Exploded View and Adjustments . . . . .                                            | 25               |
| Type XI Exploded View and Adjustments . . . . .                                           | 26               |
| Type XII Exploded View and Adjustments . . . . .                                          | 27               |

|                                                   |    |
|---------------------------------------------------|----|
| Type XIII Exploded View and Adjustments . . . . . | 28 |
| Type XIV Exploded View and Adjustments . . . . .  | 29 |
| Type XV Exploded View and Adjustments . . . . .   | 30 |
| Type XI and XV Tunnel Adjustments . . . . .       | 31 |
| Type XVI Exploded View and Adjustments . . . . .  | 32 |
| Type XVII Exploded View and Adjustments . . . . . | 33 |

## SUSPENSION IDENTIFICATION

|                                                                        |                                                                                                     |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Glass Rail                                                             | 1972 TX; 1972-1973 Charger, Charger SS, Mustang, and Custom                                         |
| Stamped Steel Type I                                                   | 1972-1978 Colt; 1972-1977 Colt SS<br>Shock Accessory on Some Models                                 |
| Stamped Steel Type II (E Slot)                                         | 1973-1974 TX; 1974 Custom II; 1975 TX with Rear Spring Tensioner; 1974-1977 Electra                 |
| Stamped Steel Type III (Front Limiter Strap and Rear Spring Tensioner) | 1978 S/S 340 and Cobra (Has Pivoting Front Limiter); 1979 Cobra; 1979-1980 Apollo; 1979-1981 Gemini |
| Extruded Aluminum Type I                                               | 1976 Starfire; 1976-1979 TX                                                                         |
| Extruded Aluminum Type II                                              | 1977-1978 TX-L                                                                                      |
| Extruded Aluminum Type III                                             | 1979 TX-C, TX-L, and Centurion                                                                      |
| Extruded Aluminum Type IV                                              | 1980 Galaxy and TX (Cleated Track)                                                                  |
| Extruded Aluminum Type V                                               | 1980-1981 Galaxy (Rubber Track)                                                                     |
| Extruded Aluminum Type VI                                              | 1980 Centurion; 1980-1982 TX-C and TX-L                                                             |
| Extruded Aluminum Type VII                                             | 1980-1983 Indy Models                                                                               |
| Extruded Aluminum Type VIII                                            | All Direct Drive Models and 1983 Gemini                                                             |
| Extruded Aluminum Type IX                                              | 1983-1986 Long Track Models                                                                         |
| Extruded Aluminum Type X                                               | 1984 Indy Models                                                                                    |
| Extruded Aluminum Type XI                                              | 1985 Indy Models                                                                                    |
| Extruded Aluminum Type XII                                             | 1985 SS                                                                                             |
| Extruded Aluminum Type XIII                                            | 1986-1987 Star, Sprint (ES)                                                                         |
| Extruded Aluminum Type XIV                                             | 1986 SS                                                                                             |
| Extruded Aluminum Type XV                                              | 1986-1987 Indy Models except 133 SKS                                                                |
| Extruded Aluminum Type XVI                                             | 1987 Star Trak and All 1987 Indy 133 SKS                                                            |
| Extruded Aluminum Type XVII                                            | 1987 Long Track (RLR)                                                                               |

Track Tension and Drive Sprocket to Shaft Specifications

TRACK TENSION SPECIFICATIONS

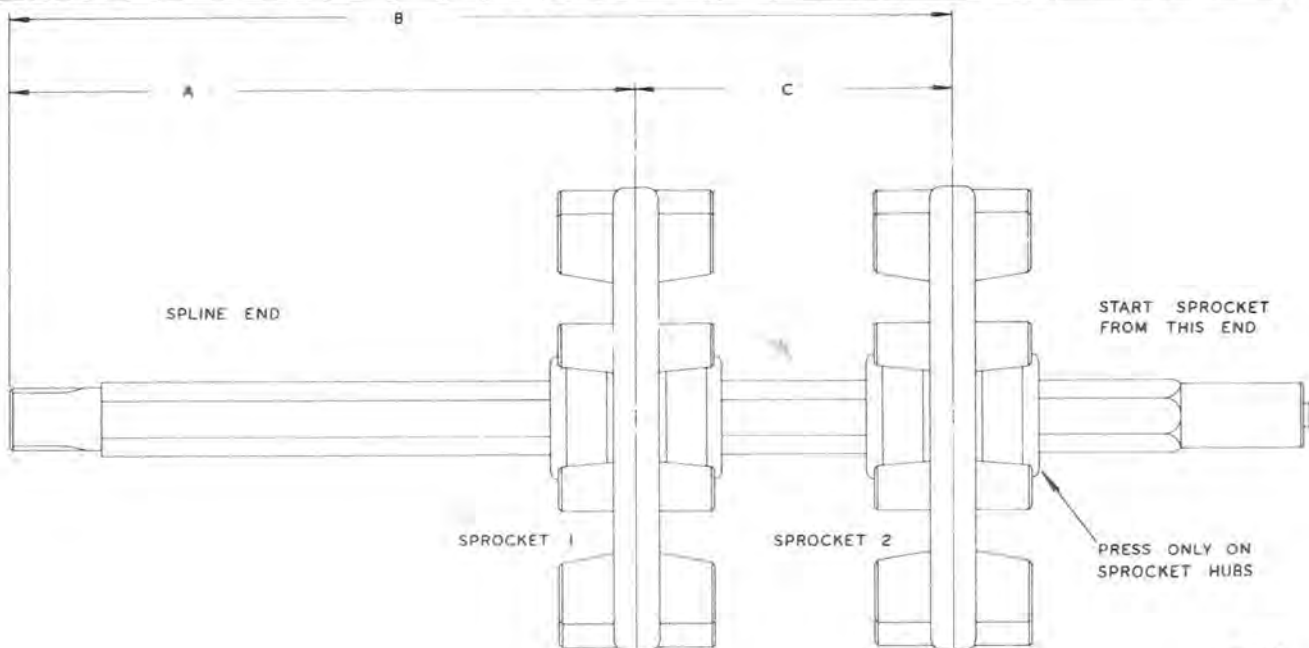
Refer to page IX - 19 for procedures.

| TYPE                                    | TOLERANCE<br>(With 10 Pound Down Weight)                                               |
|-----------------------------------------|----------------------------------------------------------------------------------------|
| Glass Rail                              | 1/2" between cleat and hi-fax                                                          |
| Stamped Steel Types I, II, and III      | 3/8" - 3/4" between cleat and hi-fax                                                   |
| Extruded Aluminum Types I and IV        | 1/2" between cleat and hi-fax                                                          |
| Extruded Aluminum Type II               | 1/8" - 1/4" between track clip and hi-fax                                              |
| Extruded Aluminum Types III, V thru XVI | 3/8" - 1/2" between track clip and hi-fax                                              |
| Extruded Aluminum Type IX and XVII      | 3/4" - 1" free hanging between track clip and hi-fax. Measured at rear of front hi-fax |

DRIVE SPROCKET TO SHAFT SPECIFICATIONS

Refer to page IX - 20 for procedures.

| MODEL                                     | DISTANCE A<br>(Spline End to Sprocket 1) | DISTANCE B<br>(Spline End to Sprocket 2) | DISTANCE C<br>Sprocket C.D. |
|-------------------------------------------|------------------------------------------|------------------------------------------|-----------------------------|
| Apollo, Gemini - Rubber                   | 6.07"                                    | 13.70"                                   | 7.63"                       |
| Galaxy - Cleated                          | 7.61"                                    | 15.61"                                   | 8.00"                       |
| Galaxy - Rubber                           | 9.19"                                    | 14.03"                                   | 4.84"                       |
| TX - Cleated                              | 7.00"                                    | 15.00"                                   | 8.00"                       |
| TX-C, TX-L, Centurion,<br>All Indy Models | 8.58"                                    | 13.42"                                   | 4.84"                       |
| Long Track, Star Trak                     | 8.53"                                    | 13.37"                                   | 4.84"                       |
| All Direct Drive<br>Models                | (Clutch End to Sprocket 1)<br>8.93"      | (Clutch End to Sprocket 2)<br>11.35"     | 4.84"                       |



# SUSPENSIONS

## General Specifications

1979

| Model     | Model Number                  | Suspension Type            | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Growers                 |
|-----------|-------------------------------|----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|-----------------------------|
| Gemini    | 0791025<br>0791026            | Stamped Steel Type III     | Growser Bar   | 15"         | 114.44"                | 42"                    | —                    | 5.68"                     | 6.12" Idler Dia.        | Molded Rubber on Track Belt |
| Apollo    | 0791138                       | Stamped Steel Type III     | Molded Rubber | 15"         | 114.85"                | 42"                    | 5.68"                | 6.38"                     | 6.25" Idler Dia.        | —                           |
| Cobra     | 0791838<br>0791843            | Stamped Steel Type III     | Growser Bar   | 15"         | 119.5"                 | 48.75"                 | —                    | 6.38"                     | 7.00" Idler Dia.        | Molded Rubber on Track Belt |
| TX        | 0790523<br>0790537<br>0790545 | Extruded Aluminum Type I   | Growser Bar   | 15"         | 114.44"                | 44.25"                 | —                    | 7.12"                     | 7.125" Idler Dia.       | Molded Rubber on Track Belt |
| TX-C      | 0790637                       | Extruded Aluminum Type III | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | —                           |
| TX-L      | 0790639                       | Extruded Aluminum Type III | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | —                           |
| Centurion | 0790653                       | Extruded Aluminum Type III | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | Steel Traction Studs        |

1980

| Model     | Model Number                  | Suspension Type            | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Growers                 |
|-----------|-------------------------------|----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|-----------------------------|
| Gemini    | 0801025<br>0801026            | Stamped Steel Type III     | Growser Bar   | 15"         | 114.44"                | 42"                    | —                    | 5.68"                     | 6.12" Idler Dia.        | Molded Rubber on Track Belt |
| Apollo    | 0801138<br>0801238            | Stamped Steel Type III     | Molded Rubber | 15"         | 114.85"                | 42"                    | 5.68"                | 6.38"                     | 6.25" Idler Dia.        | —                           |
| Galaxy    | 0801838<br>0801843<br>0801943 | Extruded Aluminum Type IV  | Growser Bar   | 15"         | 119.5"                 | 46"                    | —                    | 6.38"                     | 7.125" Idler Dia.       | Molded Rubber on Track Belt |
| Galaxy    | 0802043                       | Extruded Aluminum Type V   | Molded Rubber | 15"         | 120.96"                | 46"                    | 5.25"                | 6.88"                     | 7.06" Outside Dia.      | —                           |
| TX        | 0800537<br>0800545            | Extruded Aluminum Type IV  | Growser Bar   | 15"         | 119.5"                 | 46"                    | —                    | 6.38"                     | 7.125" Idler Dia.       | Molded Rubber on Track Belt |
| TX-C      | 0800637                       | Extruded Aluminum Type VI  | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | —                           |
| TX-L      | 0800639                       | Extruded Aluminum Type VI  | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | —                           |
| Centurion | 0800653                       | Extruded Aluminum Type VI  | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | Steel Traction Studs        |
| TX-L Indy | 0800739                       | Extruded Aluminum Type VII | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | —                           |

1981

| Model          | Model Number       | Suspension Type             | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Growers                  |
|----------------|--------------------|-----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|------------------------------|
| Gemini         | 0811025            | Stamped Steel Type III      | Growser Bar   | 15"         | 114.44"                | 42"                    | —                    | 5.68"                     | 6.12" Idler Dia.        | Molded Rubber on Track Belts |
| Gemini         | 0811225            | Stamped Steel Type III      | Molded Rubber | 15"         | 114.85"                | 42"                    | 5.68"                | 6.88"                     | 6.25" Idler Dia.        | —                            |
| Galaxy         | 0812143            | Extruded Aluminum Type V    | Molded Rubber | 15"         | 120.96"                | 46"                    | 5.25"                | 6.88"                     | 7.06" Outside Dia.      | —                            |
| Cutlass        | 0810938            | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 110"                   | 44.25"                 | 5.25"                | 6.38"                     | 3.69" Outside Dia.      | —                            |
| Cutlass SS     | 0811349<br>0811341 | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 110"                   | 44.25"                 | 5.25"                | 6.38"                     | 4.35" Outside Dia.      | —                            |
| TX-C           | 0810647            | Extruded Aluminum Type VI   | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | —                            |
| TX-L           | 0810639            | Extruded Aluminum Type VI   | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | —                            |
| TX-L Indy      | 0810739            | Extruded Aluminum Type VII  | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | —                            |
| Centurion Indy | 0810753            | Extruded Aluminum Type VII  | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | Steel Traction Studs         |

# SUSPENSIONS

## General Specifications

1  
9  
8  
2

| Model          | Model Number | Suspension Type             | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Growers          |
|----------------|--------------|-----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|----------------------|
| Cutlass SS     | 0821349      | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 110"                   | 44.25"                 | 5.25"                | 6.38"                     | 4.35" Outside Dia.      | ---                  |
| TX-C           | 0820647      | Extruded Aluminum Type VI   | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | ---                  |
| TX-L           | 0820639      | Extruded Aluminum Type VI   | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | ---                  |
| TX-L Indy      | 0820739      | Extruded Aluminum Type VII  | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | ---                  |
| Centurion Indy | 0820753      | Extruded Aluminum Type VII  | Molded Rubber | 15"         | 120.96"                | 47.5"                  | 5.25"                | 6.38"                     | 7.06" Outside Dia.      | Steel Traction Studs |

1  
9  
8  
3

| Model              | Model Number | Suspension Type             | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Studs           |
|--------------------|--------------|-----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|---------------------|
| Gemini             | 0831225      | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 116"                   | 46.5"                  | 5.25"                | 6.38"                     | 6.12"                   | Traction Studs Opt. |
| Star               | 0830925      | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 110"                   | 40.5"                  | 5.25"                | 6.38"                     | 3.69"                   | Cannot Be Used      |
| Sport              | 0830960      | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 110"                   | 40.5"                  | 5.25"                | 6.38"                     | 3.69"                   | Cannot Be Used      |
| SS                 | 0831349      | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 110"                   | 40.5"                  | 5.25"                | 6.38"                     | 4.35"                   | Cannot Be Used      |
| Indy Trail         | 0830743      | Extruded Aluminum Type VI   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.25"                | 6.38"                     | 7.06"                   | Traction Studs Opt. |
| Indy Cross Country | 0830739      | Extruded Aluminum Type VII  | Molded Rubber | 15"         | 121"                   | 49"                    | 5.25"                | 6.38"                     | 7.06"                   | Traction Studs Opt. |
| Indy 600           | 0830756      | Extruded Aluminum Type VII  | Molded Rubber | 15"         | 121"                   | 49"                    | 5.25"                | 6.38"                     | 7.06"                   | Traction Studs Std. |
| Long Track         | 0831449      | Extruded Aluminum Type IX   | Molded Rubber | 15"         | 148"                   | 59.5"                  | 5.25"                | 6.38"                     | 5.03"                   | Traction Studs Opt. |

1  
9  
8  
4

| Model      | Model Number | Suspension Type             | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Studs           |
|------------|--------------|-----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|---------------------|
| Star       | 0840927      | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 108"                   | 40.5"                  | 5.25"                | 6.38"                     | 3.01"                   | Cannot Be Used      |
| Star LT    | 0841427      | Extruded Aluminum Type IX   | Molded Rubber | 15"         | 148"                   | 59.5"                  | 5.25"                | 6.38"                     | 5.03"                   | Cannot Be Used      |
| SS         | 0841349      | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 110"                   | 40.5"                  | 5.25"                | 6.38"                     | 4.35"                   | Cannot Be Used      |
| Indy Trail | 0840743      | Extruded Aluminum Type X    | Molded Rubber | 15"         | 121"                   | 49"                    | 5.25"                | 6.38"                     | 7.06"                   | Traction Studs Opt. |
| Indy 600   | 0840757      | Extruded Aluminum Type X    | Molded Rubber | 15"         | 121"                   | 49"                    | 5.25"                | 6.38"                     | 7.06"                   | Traction Studs Std. |
| Long Track | 0841449      | Extruded Aluminum Type IX   | Molded Rubber | 15"         | 148"                   | 59.5"                  | 5.25"                | 6.38"                     | 5.03"                   | Traction Studs Opt. |

# SUSPENSIONS

## General Specifications

1  
9  
8  
5

| Model                   | Model Number       | Suspension Type             | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Studs            |
|-------------------------|--------------------|-----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|----------------------|
| Star                    | 0850927            | Extruded Aluminum Type VIII | Molded Rubber | 15"         | 108"                   | 40.5"                  | 5.625"               | 6.38"                     | 3.01"                   | Cannot Be Used       |
| SS                      | 0851349            | Extruded Aluminum Type XII  | Molded Rubber | 15"         | 120"                   | 45.25"                 | 5.625"               | 6.38"                     | 3.69"                   | Cannot Be Used       |
| Indy Trail              | 0850743            | Extruded Aluminum Type XI   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | *Traction Studs Opt. |
| Indy 400                | 0850759            | Extruded Aluminum Type XI   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | *Traction Studs Opt. |
| Indy 600<br>Indy 600 SE | 0850757<br>0850857 | Extruded Aluminum Type XI   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | *Traction Studs Std. |
| Long Track              | 0851449            | Extruded Aluminum Type IX   | Molded Rubber | 15"         | 148"                   | 59.5"                  | 5.625"               | 6.38"                     | 5.03"                   | Cannot Be Used       |

\*Requires addition of tunnel wear strips

1  
9  
8  
6

| Model                   | Model Number       | Suspension Type             | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Studs            |
|-------------------------|--------------------|-----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|----------------------|
| Star                    | 0860927            | Extruded Aluminum Type XIII | Molded Rubber | 15"         | 108"                   | 40.5"                  | 5.625"               | 6.38"                     | 3.01"                   | Cannot Be Used       |
| Sprint<br>Sprint (ES)   | 0860933<br>0860931 | Extruded Aluminum Type XIII | Molded Rubber | 15"         | 108"                   | 40.5"                  | 5.625"               | 6.38"                     | 3.69"                   | Cannot Be Used       |
| SS                      | 0861349            | Extruded Aluminum Type XIV  | Molded Rubber | 15"         | 120"                   | 45.25"                 | 5.625"               | 6.38"                     | 3.69"                   | Cannot Be Used       |
| Indy Trail              | 0860761            | Extruded Aluminum Type XV   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | *Traction Studs Opt. |
| Indy 400                | 0860759            | Extruded Aluminum Type XV   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | *Traction Studs Opt. |
| Indy 600<br>Indy 600 LE | 0860757<br>0860857 | Extruded Aluminum Type XV   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | *Traction Studs Opt. |
| Long Track              | 0861449            | Extruded Aluminum Type IX   | Molded Rubber | 15"         | 148"                   | 59.5"                  | 5.625"               | 6.38"                     | 5.03"                   | Cannot Be Used       |

\*Requires addition of tunnel wear strips

1  
9  
8  
7

| Model                             | Model Number       | Suspension Type             | Track Type    | Track Width | Track Length (Overall) | Track Length On Ground | Bogie Wheel Diameter | Rear Idler Wheel Diameter | Drive Sprocket Diameter | Ice Studs            |
|-----------------------------------|--------------------|-----------------------------|---------------|-------------|------------------------|------------------------|----------------------|---------------------------|-------------------------|----------------------|
| Star                              | 0870927            | Extruded Aluminum Type XIII | Molded Rubber | 15"         | 108"                   | 40.5"                  | 5.625"               | 6.38"                     | 3.01"                   | Cannot Be Used       |
| Star Trak                         | 0871027            | Extruded Aluminum Type XVI  | Molded Rubber | 15"         | 133"                   | 54.3"                  | 5.625"               | 6.38"                     | 5.45"                   | Cannot Be Used       |
| Sprint<br>Sprint (ES)             | 0870933<br>0870931 | Extruded Aluminum Type XIII | Molded Rubber | 15"         | 120"                   | 40.5"                  | 5.625"               | 6.38"                     | 3.69"                   | Cannot Be Used       |
| Indy Sport                        | 0870433            | Extruded Aluminum Type XV   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.625"               | 6.38"                     | 7.06"                   | Cannot Be Used       |
| Indy Trail                        | 0870761            | Extruded Aluminum Type XV   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | *Traction Studs Opt. |
| Indy 400                          | 0870759            | Extruded Aluminum Type XV   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | *Traction Studs Opt. |
| Indy Trail<br>Indy 400<br>133 SKS | 0870561<br>0870559 | Extruded Aluminum Type XVI  | Molded Rubber | 15"         | 133"                   | 54.3"                  | 5.350"               | 6.38"                     | 7.06"                   | Cannot Be Used       |
| Indy 600                          | 0870757            | Extruded Aluminum Type XV   | Molded Rubber | 15"         | 121"                   | 49"                    | 5.350"               | 6.38"                     | 7.06"                   | Traction Studs Opt.  |
| Long Track<br>(RLR)               | 0871449<br>0871549 | Extruded Aluminum Type XVII | Molded Rubber | 15"         | 148"                   | 59.5"                  | 5.625"               | 6.38"                     | 5.03"                   | Cannot Be Used       |

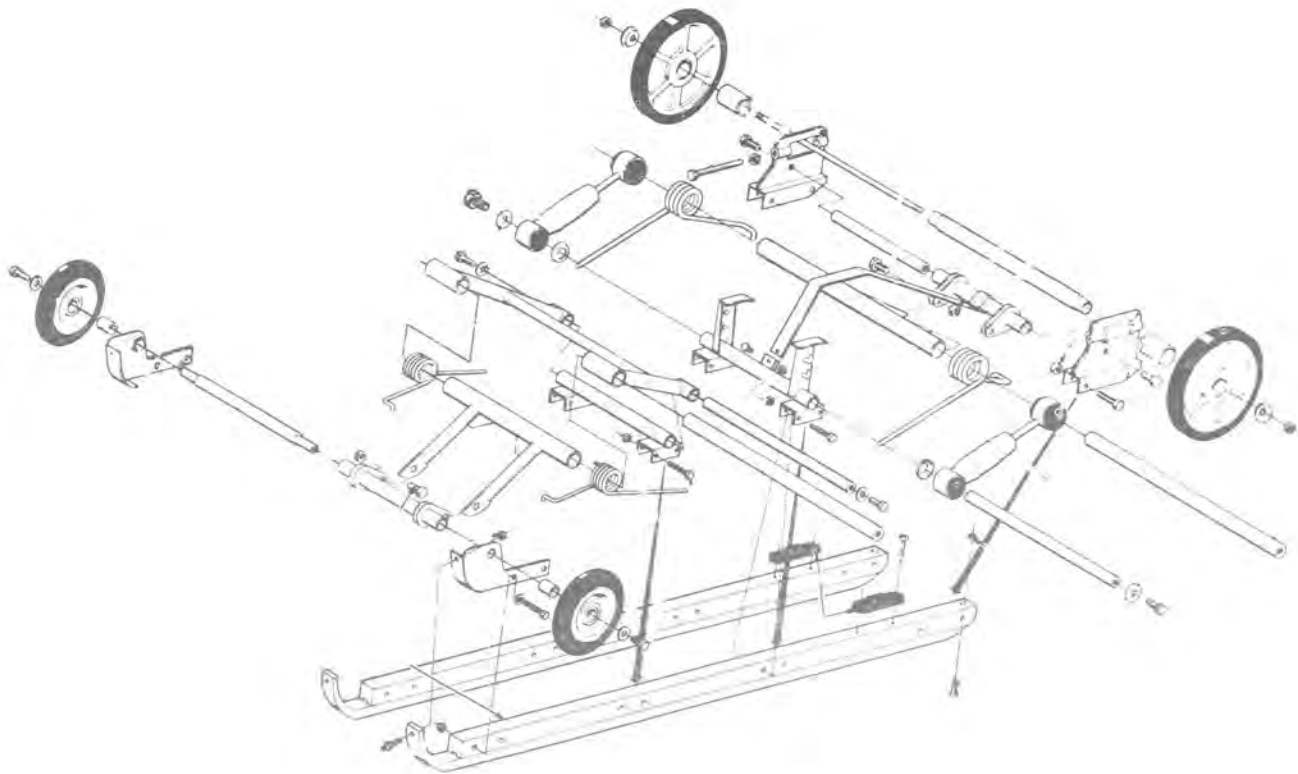
\*Requires addition of tunnel wear strips



## SUSPENSIONS

### Slide Rail Assembly – Charger, Charger SS, TX, Mustang, and Custom (Glass Rail)

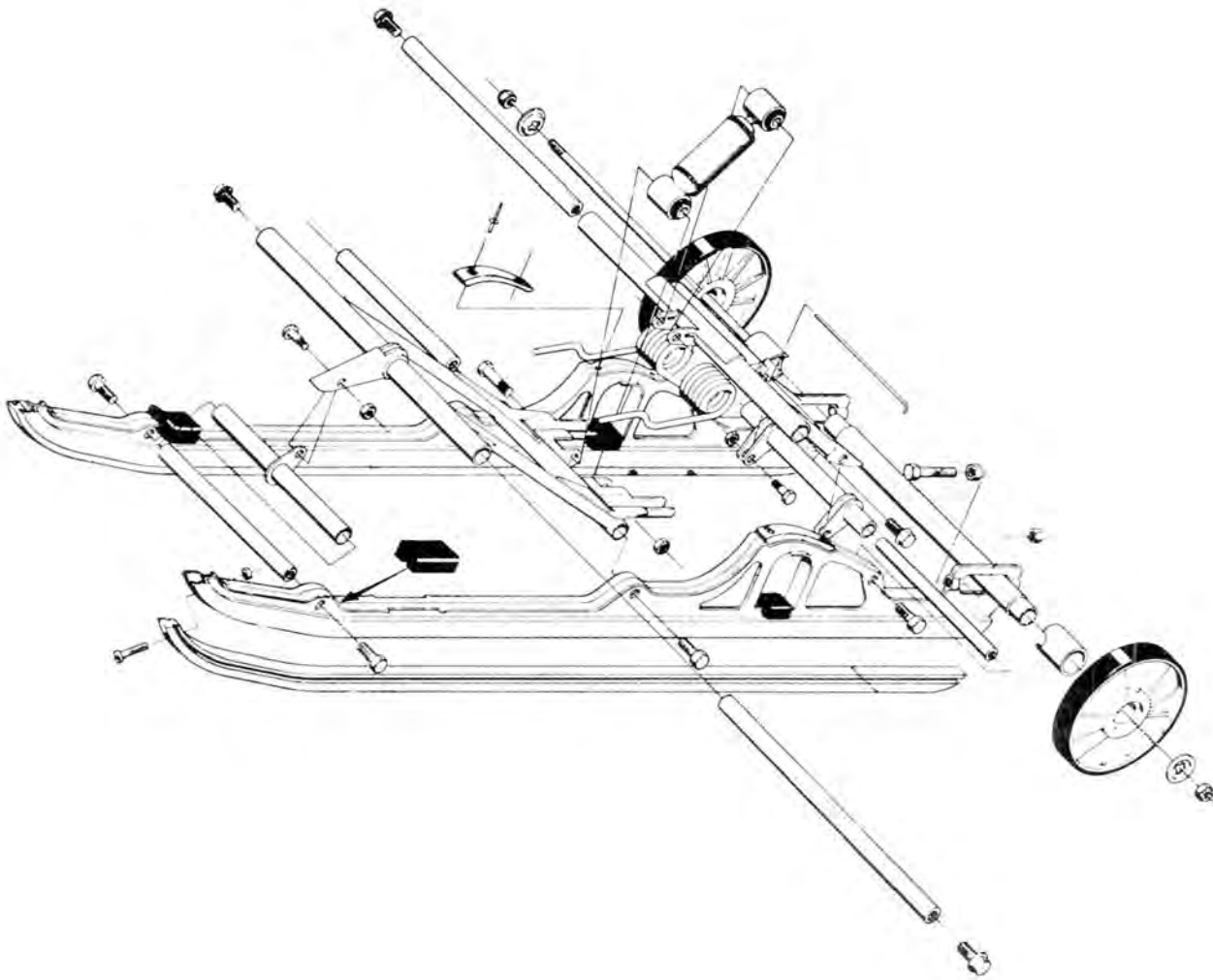
Rear spring adjustment is basically the only adjustment that can be administered to the suspension. This adjustment is for rider weight only. The highest spring position on the suspension would accommodate a heavy rider or when riding double. The lowest spring position would make a softer ride and would accommodate a lighter rider. Hi-fax should be replaced when no less than 1/8" is remaining at any given point. Failure to do so will result in severe damage to the fiberglass rail.



## SUSPENSIONS

### Type I Stamped Steel Slide Rail Assembly

Stamped steel Type I slide suspension without rider weight adjustments. Shock accessory on some applications.

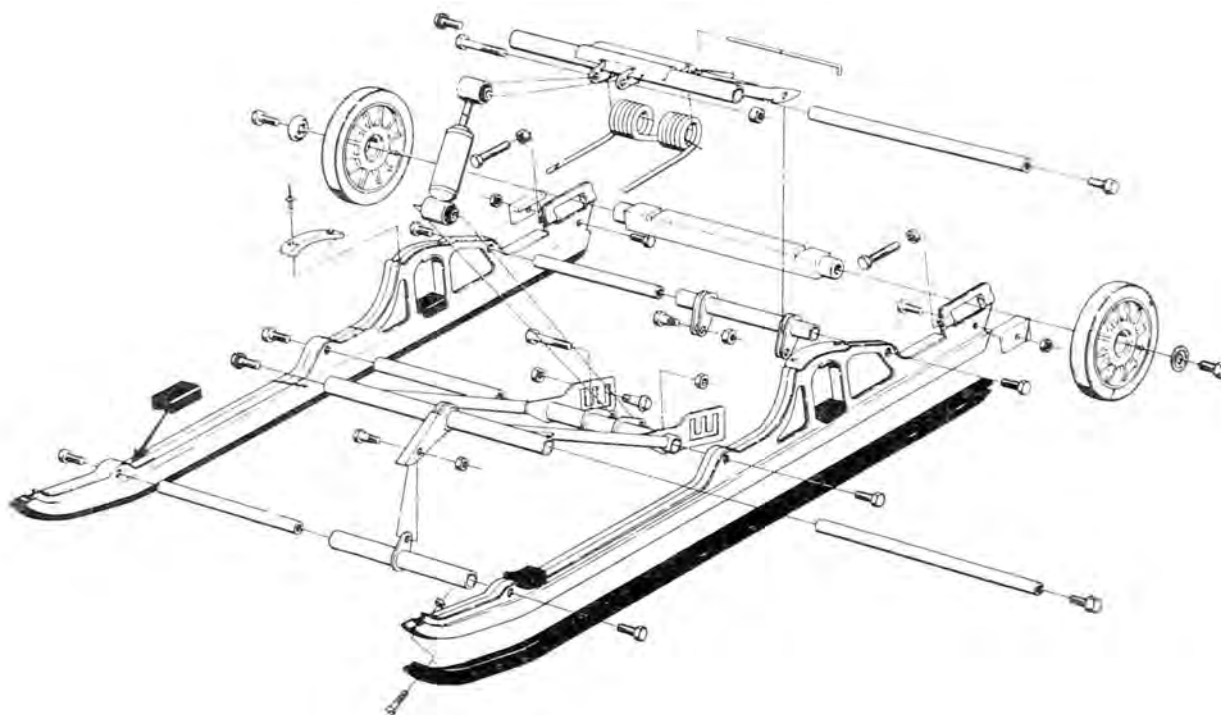


## SUSPENSIONS

### Type II Stamped Steel Slide Rail Assembly (E Slot)

This type suspension was introduced into the Polaris line in 1973 and was continued in the following models and years:

- 1973 TX
- 1974 Electra, Custom II, TX
- 1975 TX, Electra
- 1976 Electra
- 1977 Electra



## Type II Stamped Steel Slide Rail Assembly (E Slot) Adjustments

## ADJUSTMENTS

There are compensating spring adjustments for variations in driver weight and variations in machine performance (weight transfer to the track and ski pressure).

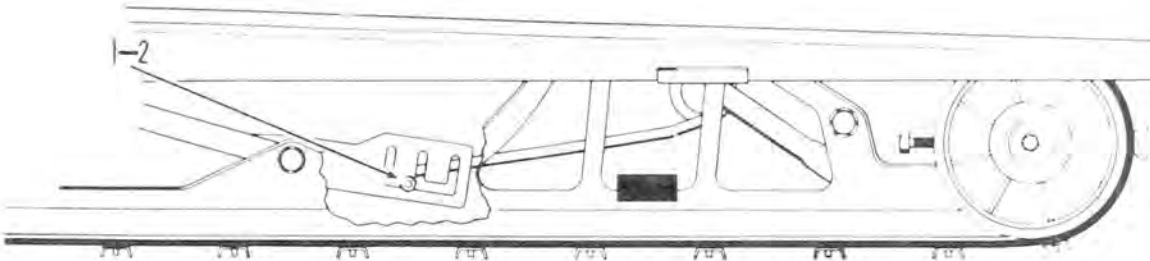
The two basic adjustments are:

1. HORIZONTAL – Variations in weight transfer to track and ski pressure.
2. VERTICAL – Adjustments according to weight of driver.

The farther forward the spring adjusting bolt is placed on the adjusting bracket, the more ski pressure will be obtained. Conversely, the least ski pressure will be obtained by placing the adjuster bolts in the back of the horizontal adjustment.

On the vertical adjustments (driver weight), the heavier a driver is, the higher he will place the adjuster bolts in the vertical adjustments.

Track Tension: Distance between the track and slide rail should be approximately  $3/8''$  to  $1/2''$  in the slack position.



## REAR SPRING ADJUSTMENT

1975 TX introduced this adjustment which is included on all Type III suspensions.

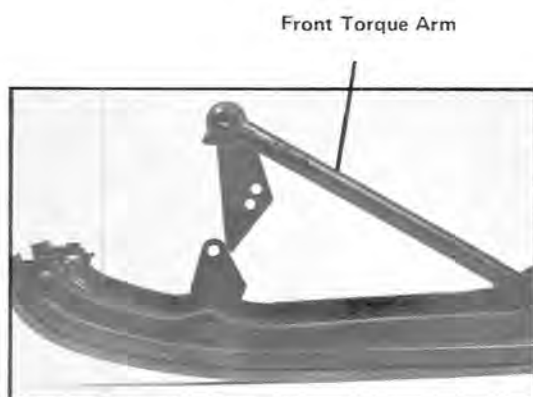
This adjustment is provided to enable the suspension to be adjusted for different passenger and driver weights, which in turn affects ski pressure and handling characteristics. Adjustment is accomplished by turning the cap screw (A). For a firmer ride and less ski to ground pressure, turn the cap screw counterclockwise. For a softer ride resulting in more ski to ground pressure, adjust the cap screw clockwise.



## SUSPENSIONS

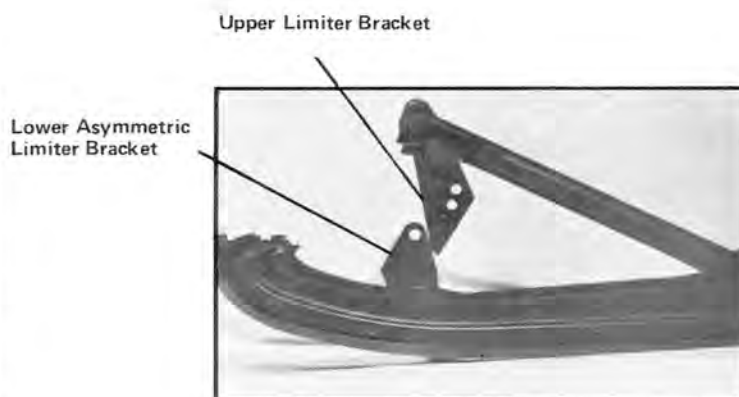
### Type III Front Limiter Assembly Adjustments

The torque arm limiter also may be adjusted to work in conjunction with the torque arm to further provide degrees of ski lift and weight transfer. The upper limiter bracket has an upper and a lower hole, while the bottom bracket is asymmetric and may be turned 180° for additional adjustment.



NORMAL POSITION

Lower asymmetric limiter in normal position.



REVERSED POSITION

Lower asymmetric limiter bracket turned 180° to reversed location.

### FRONT TORQUE ARM PIVOTING LIMITER ADJUSTMENT COMBINATIONS

The following are adjustment combinations with resulting ski pressure or lift characteristics.

| Lower Bracket Position | Upper Limiter Hole Position | Ski — Ground Pressure |
|------------------------|-----------------------------|-----------------------|
| Reversed               | Lower                       | Decreasing            |
| Reversed               | Upper                       | ↕                     |
| Normal                 | Lower                       | Increasing            |
| Normal                 | Upper                       |                       |

### FRONT TORQUE ARM STRAP LIMITER ADJUSTMENTS

| Ski — Ground Pressure |            |
|-----------------------|------------|
| Lengthen Strap        | Decreasing |
|                       | ↕          |
| Shorten Strap         | Increasing |

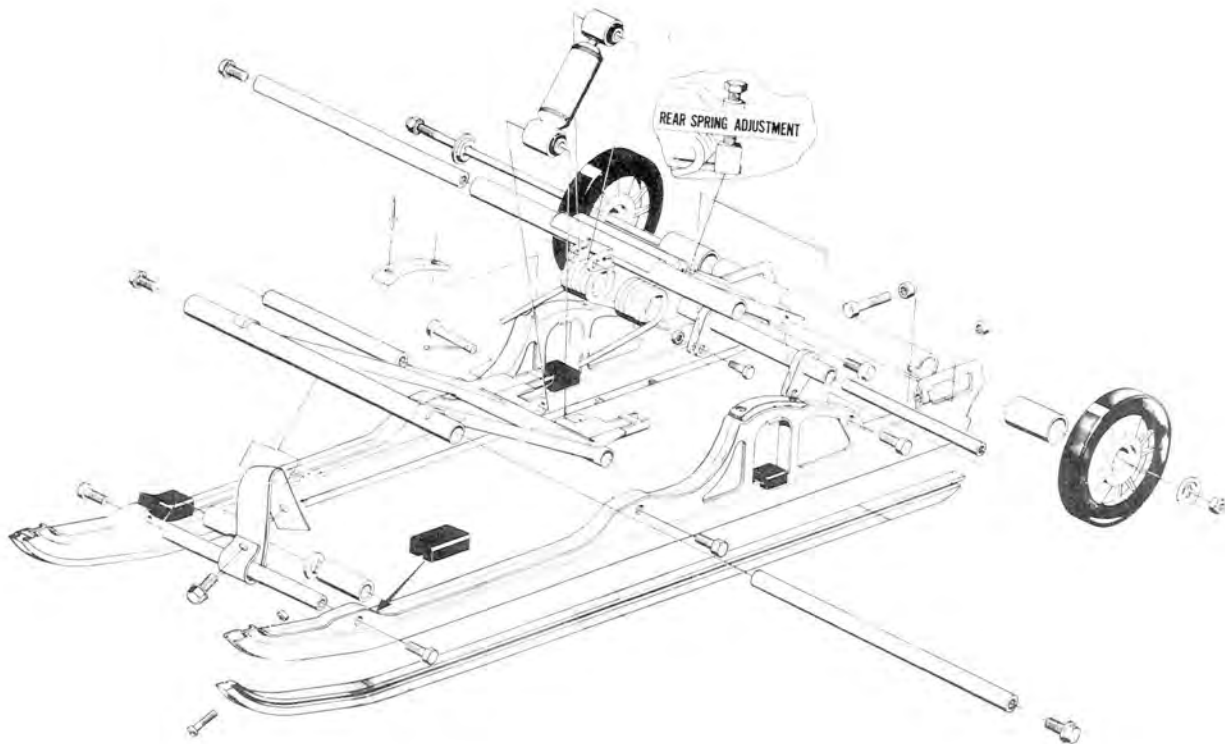
The limiter strap has a series of holes provided to vary its operating length and in turn affect the amount of ski pressure or lift during machine operation.

Setup Tip: In deep snow or hill climbing operation, less ski pressure is desirable.

## SUSPENSIONS

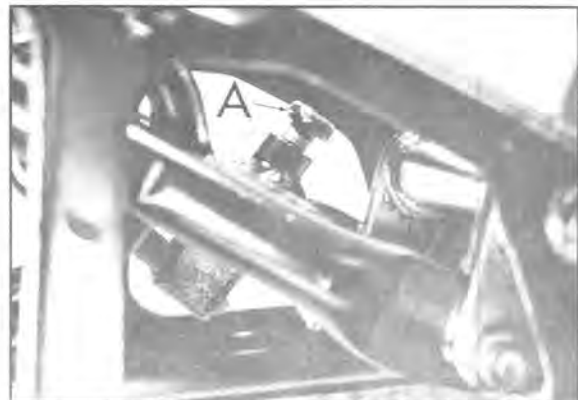
### Type III Stamped Steel Slide Rail Assembly

NOTE: Front limiter-adjustable belting with rear spring adjustment.



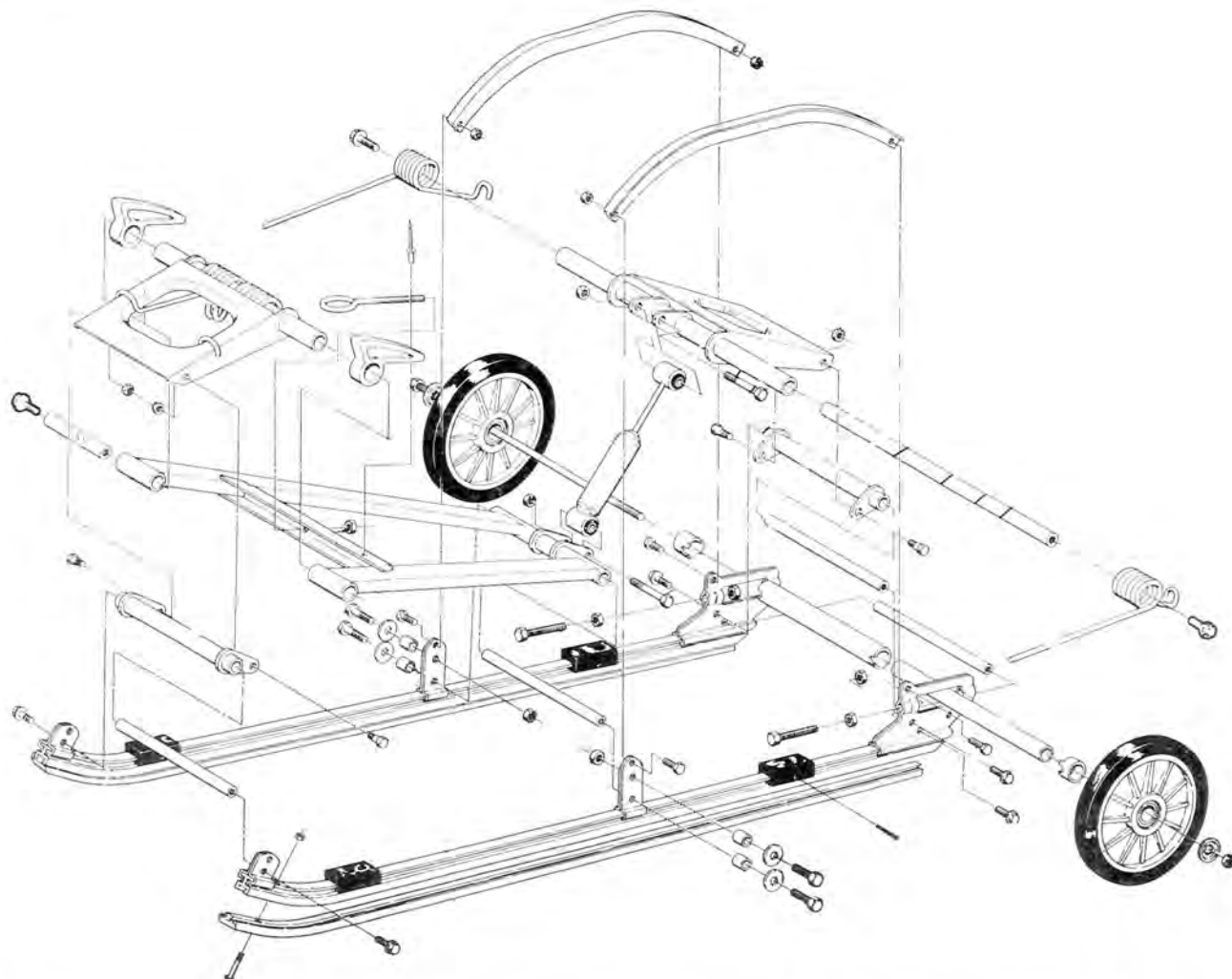
#### REAR SPRING ADJUSTMENT

This adjustment is provided to enable the suspension to be adjusted for different passenger and driver weights, which in turn affects ski pressure and handling characteristics. Adjustment is accomplished by turning the cap screw (A). For a firmer ride and less ski to ground pressure, turn the cap screw counterclockwise. For a softer ride resulting in more ski to ground pressure, adjust the cap screw clockwise.



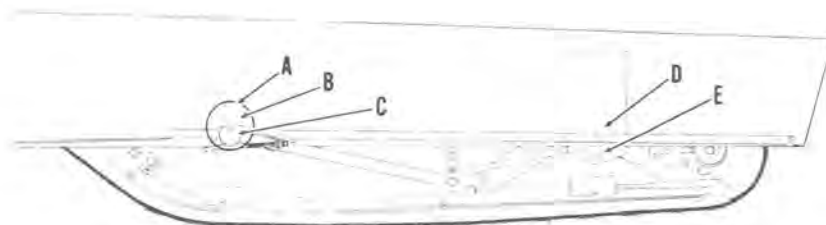
## SUSPENSIONS

### Type I Extruded Aluminum



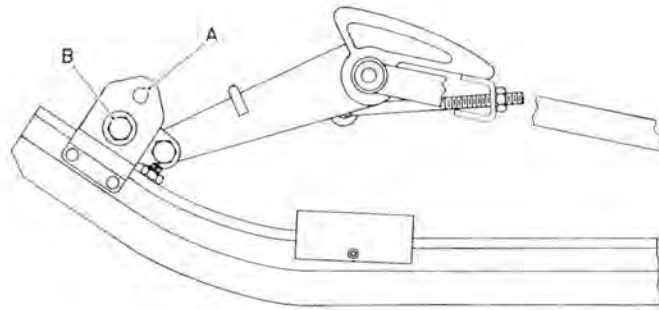
The locations of suspension mountings in the tunnel as shown in figure below are available to owners who wish to tailor their machines for individual riding or handling characteristics.

- A — High ski pressure normally not used.
- B — Less ski pressure than A, but more than C.
- C — Best suited for average conditions.
- D — Most normally used for general riding.
- E — Deep snow running and climbing.



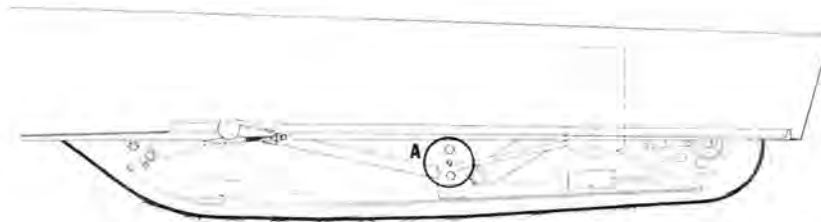
## Type I Extruded Aluminum Adjustments

## FRONT LIMITER PIVOT ARM



The front limiter pivot arm may be located in either the upper or lower slide rail bracket holes. The upper position (A) provides greater ski lift upon acceleration and is desirable for deep snow running and hill climbing. The lower hole position (B) provides more ski pressure for turning and maneuverability on hard packed surfaces.

## REAR SPRING ADJUSTMENTS



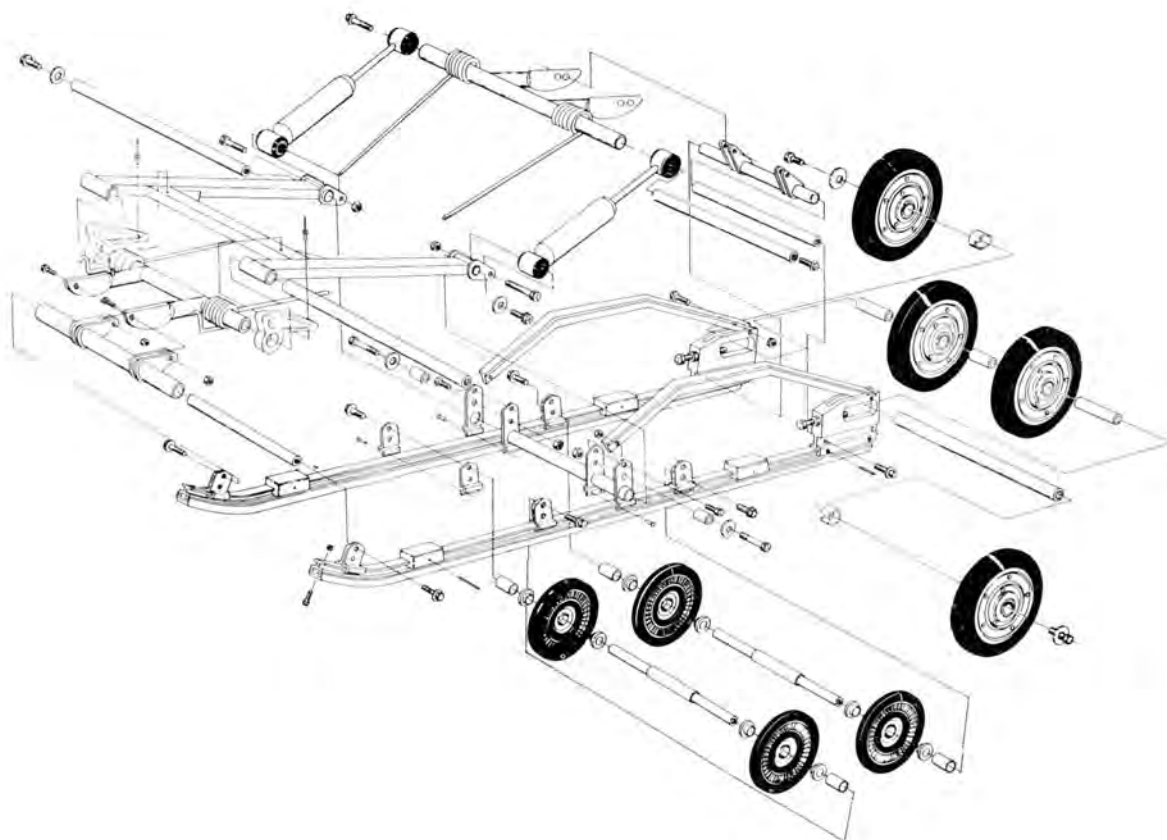
There are two adjustment positions (A) for the rear springs which are located in the center of the suspension on either side. Adjustment is accomplished by moving the spring leg from one shoulder bolt to another. The lower position is for normal riding qualities, while the upper is reserved for loads in excess of 190 pounds.

 Each spring should be located in the same position on either side.

**NOTE:** Front suspension torque arm spring adjustment is sufficiently adjusted before machine crating at the factory; increasing spring tension is not necessary.

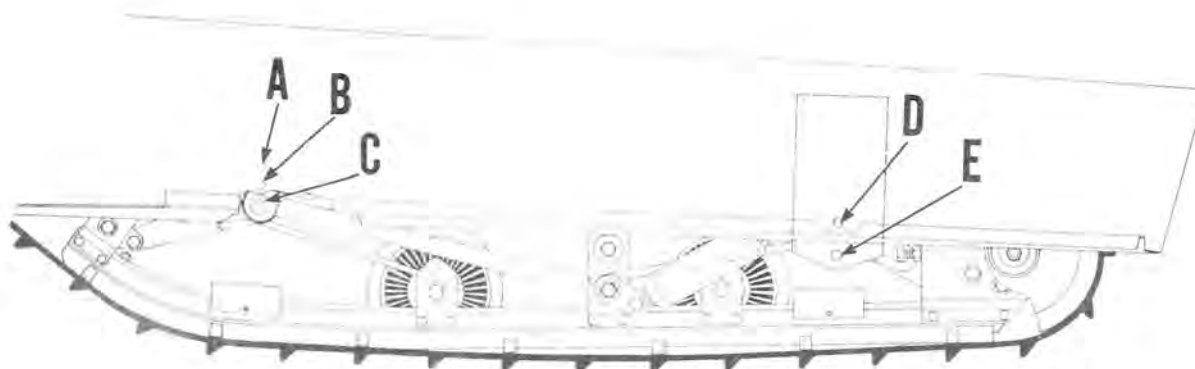
## SUSPENSIONS

### Type II Extruded Aluminum



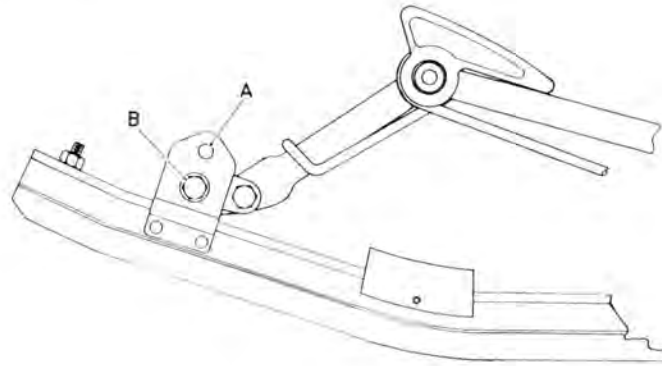
The locations of suspension mountings in the tunnel as shown in figure below are available to owners who wish to tailor their machines for individual riding or handling characteristics.

- A — High ski pressure normally not used.
- B — Less ski pressure than A, but more than C.
- C — Best suited for average conditions.
- D — Most normally used for general riding.
- E — Deep snow running and climbing.



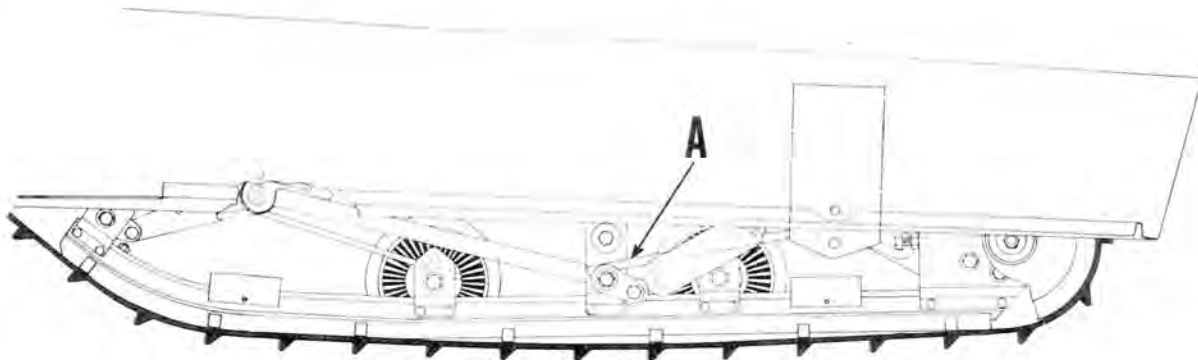
## Type II Extruded Aluminum Adjustments

## FRONT LIMITER PIVOT ARM



The front limiter pivot arm may be located in either the upper or lower slide rail bracket holes. The upper position (A) provides greater ski lift upon acceleration and is desirable for deep snow running and hill climbing. The lower hole position (B) provides more ski pressure for turning and maneuverability on hard packed surfaces.

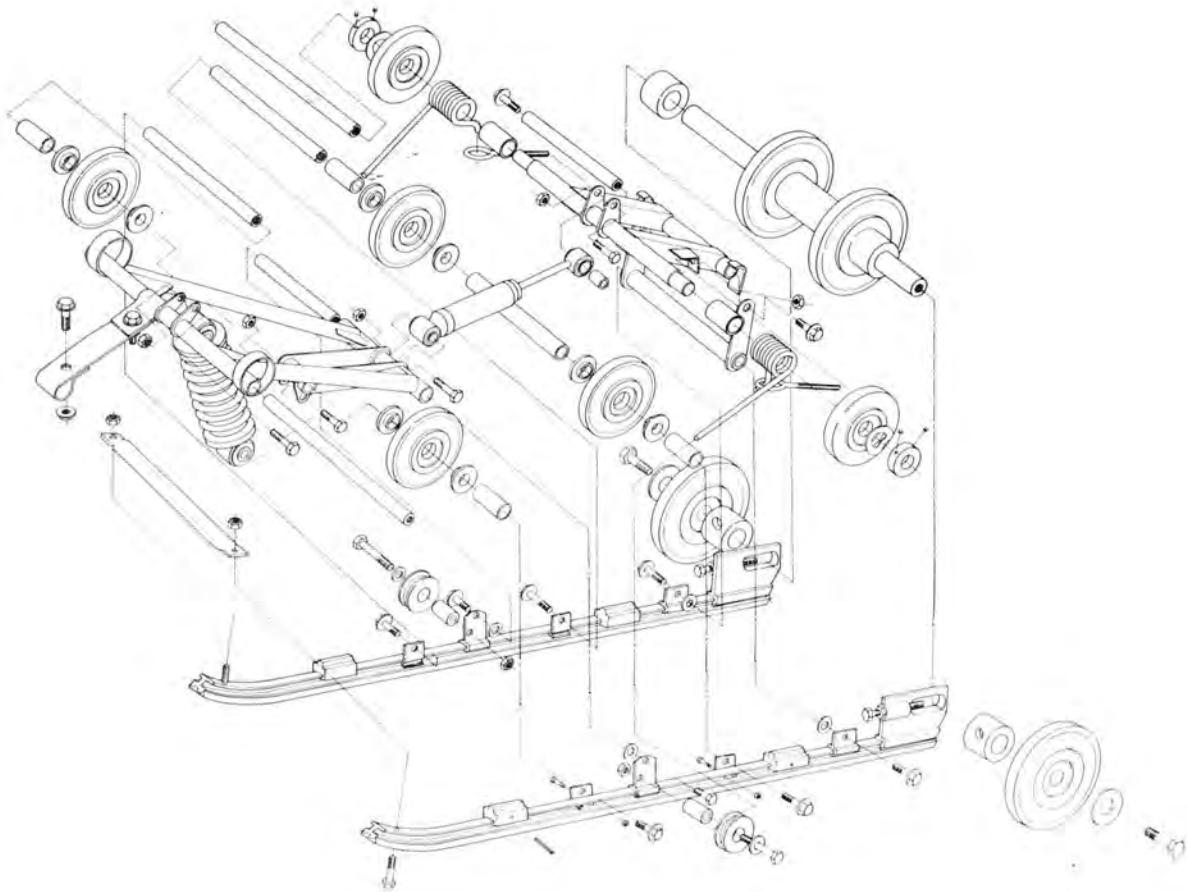
## REAR SPRING ADJUSTMENTS



Compensation for rider weight and terrain conditions may be made by moving the rear spring (A) in either the upper position resting on the shoulder bolt or in the lower setting between the shock absorber bracket and mount. The upper position provides a firmer ride and the lower may be used for lighter riders and general conditions.

## SUSPENSIONS

### Type III Extruded Aluminum



#### REAR SPRING ADJUSTMENT

Rear spring adjustment is primarily a control for rider comfort. A check for correct or recommended settings is as follows. Lift the rear of the machine to release all tolerance in the suspension. Adjust the preload with eyebolts (A) so there is approximately 1/2" – 1" drop from normal raised chassis height with the weight of the rider on the machine.



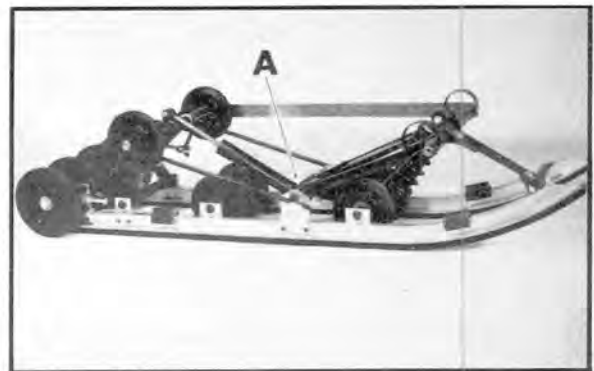
### FRONT SPRING AND LIMITER ADJUSTMENT

A high preload tension on the rear spring may cause an increase in ski pressure, especially while trail riding at a low speed. If ski pressure is too severe for this type of riding, increase the preload on the front shock spring by adjusting the cam. To increase ski pressure, limiter adjustment can also be changed. More ski pressure will result by shortening the travel of the limiter belt. Setting of the front limiter belt in the longest position will decrease ski pressure.

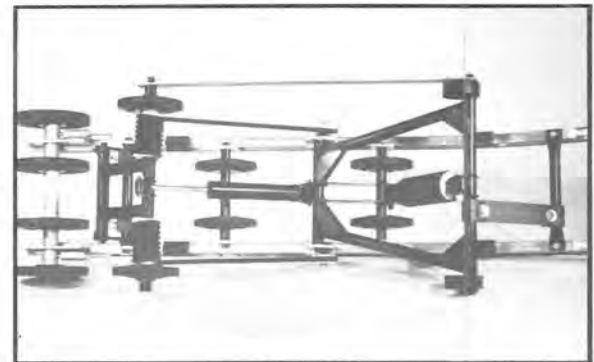


### REAR SHOCK POSITION

After all adjustments have been made and the ride seems to be a little firm, it is recommended to reposition the rear shock. To maintain the full travel of the rear suspension, move the shock to the higher mounting position (A). By repositioning the rear shock the usable shock angle is less, resulting in a softer ride.

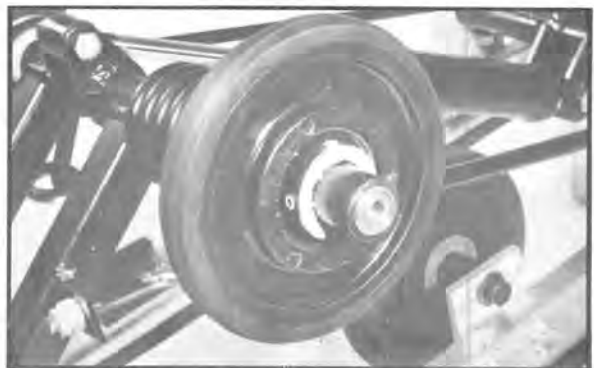


Because of the long travel incorporated into this suspension, pivot shaft movement is increased. To retard the chances of premature wear, lubrication fittings (5) have been provided. A low temperature high adhesion grease is recommended every 300 miles.



It is necessary to remove the lock collar retainer, wave washer, and idler wheel when replacing the rear suspension springs.

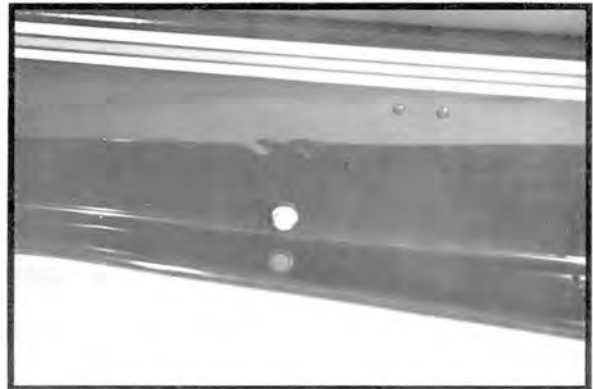
When reassembling, install the spring, idler wheel wave washer, and the lock collar retainer. An inward thrust of approximately 80 pounds must be applied and held on the lock collar when it is tightened. This thrust on the lock collar collapses the wave washer against the inner race of the bearing to keep it from turning.



## SUSPENSIONS

### Type I Track Removal

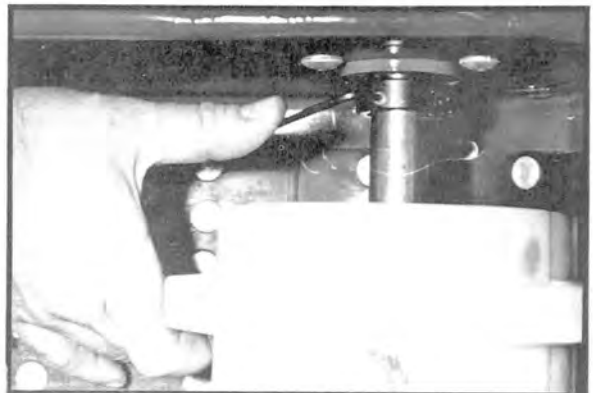
1. Remove the front and rear suspension bolts, then turn the machine on its side to remove the suspension.



2. Remove muffler. Remove three (3) cap screws that hold flangette and bearing in place on the right side of the machine.



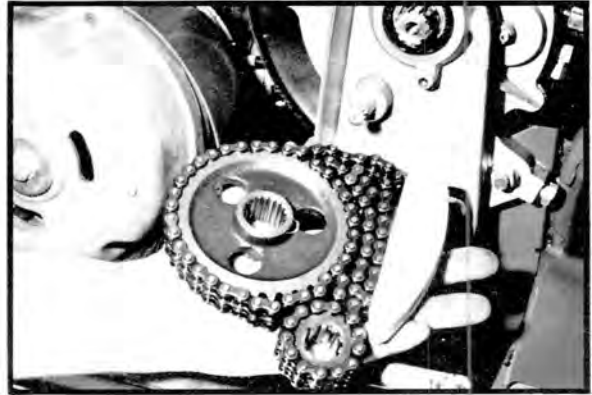
3. With the machine on its side, use an Allen wrench to loosen the set screw on the lock collar.



4. To loosen the lock collar, tap with a hammer and punch. Rotate the lock collar with the normal direction of rotation to loosen and against normal rotation to tighten.



5. Remove the chaincase cover. Remove top and bottom sprockets.



6. The drive shaft can now be removed by first pushing the drive sprocket end from the chaincase, then pull the shaft from the machine.

Reverse procedure for reassembly. When placing suspension into body weldment, bolt front suspension arm to body first, then the rear suspension arm.

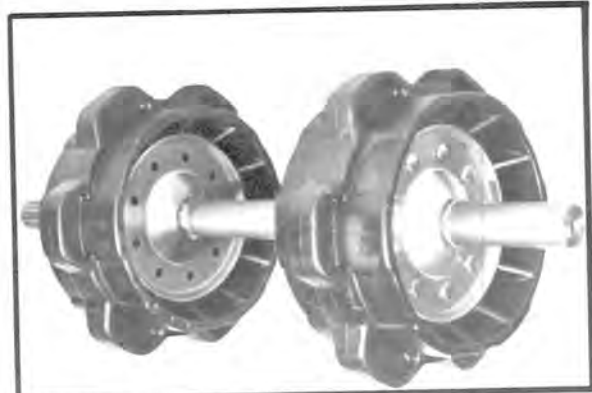


7. Removing sprocket from drive shaft weldment. First use a center punch and center punch rivet head as shown. Then use 1/4" drill and drill to a depth of 1/4". If rivet head does not come off, use hammer and chisel lightly.



8. Replace rivets (9 per sprocket) with bolts (PN 7511967), nuts (PN 7541906) and spacers (PN 5332417).

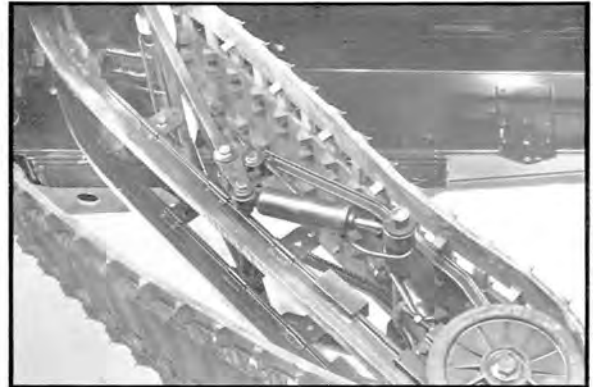
When replacing sprockets on drive shaft weldment, it is very important to index them. On a level surface two of the teeth on each drive sprocket must be resting equally against the surface. Rotate the sprocket assembly, inspecting to insure all teeth are synchronized. If not, it will be necessary to rotate the sprocket in the flanges until tooth alignment is achieved.



## SUSPENSIONS

### Types II and III Track Removal

1. Remove the front and rear suspension bolts, then turn the machine on its side to remove the suspension.



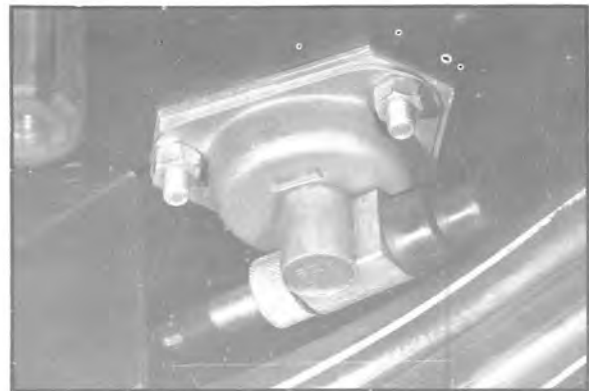
2. Using an Allen wrench, loosen the set screw on the lock collar.



3. Tap the lock collar with a hammer and punch to loosen it. Rotate the lock collar with the normal direction of rotation to loosen and against normal rotation to tighten.



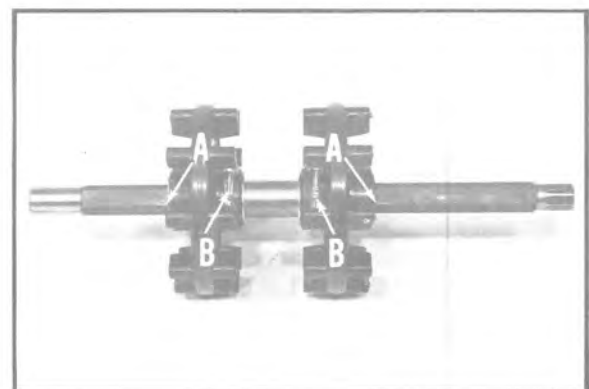
4. Remove the three (3) cap screws that hold the flangette and bearing in place on the left hand side of the machine.



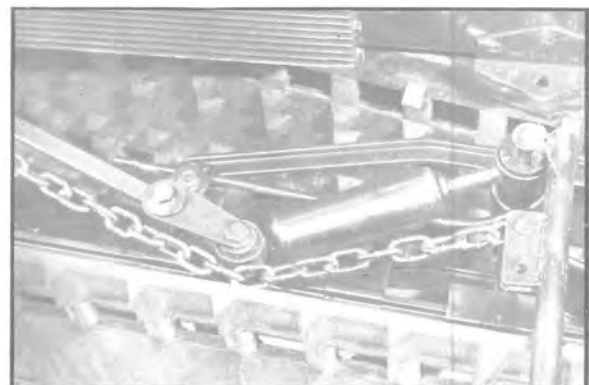
5. Remove the chaincase cover and remove the top and bottom sprockets. The drive shaft can now be removed from the sled by pulling the shaft first from the chaincase and then from the left side of the machine.



To remove the drive sprockets from the drive shaft, remove the outer snap rings (A) and washers. Loosen the spring clamps (B) and pull the sprockets from the shaft. When replacing the sprockets, it is very important to index the sprockets to ensure they are properly synchronized.



**SUSPENSION INSTALLATION — ALL MODELS**  
Install the front suspension bolts. Use the suspension tool (PN 2870354) to compress the rear torque arm to achieve proper alignment.



## SUSPENSIONS

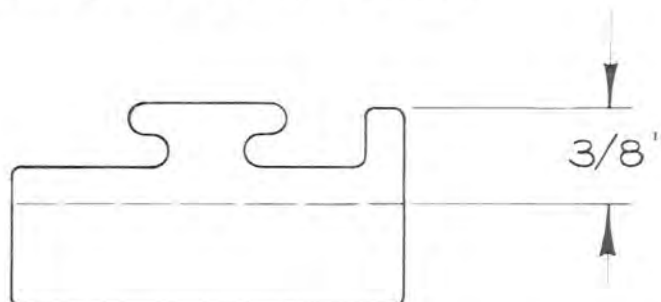
### Hi-Fax and Rubber Track Clip Replacement

#### HI-FAX REPLACEMENT

Slide rail material replacement on all Polaris models is similar. When any area of the slide rail material is worn to 1/8", it should be replaced. This will save on other vital components.

NOTE: The slide rail is designed to operate in conditions with adequate snow cover to provide sufficient lubrication. Excessive wear may be due to improper alignment or machine operation on surfaces without snow.

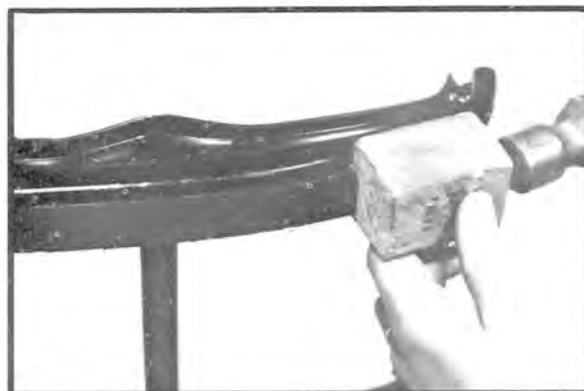
- Slide rail hi-fax thickness, replace when worn to 3/8" as shown.



1. Remove the suspension from the machine.
2. Remove the front hi-fax retaining bolt as shown.

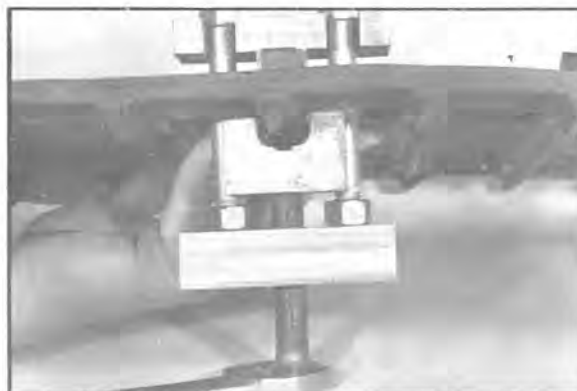


3. Use a block of wood and a hammer to drive the hi-fax rearward from the slide rail.
4. With the hi-fax material at room temperature, reinstall in the reverse procedure.



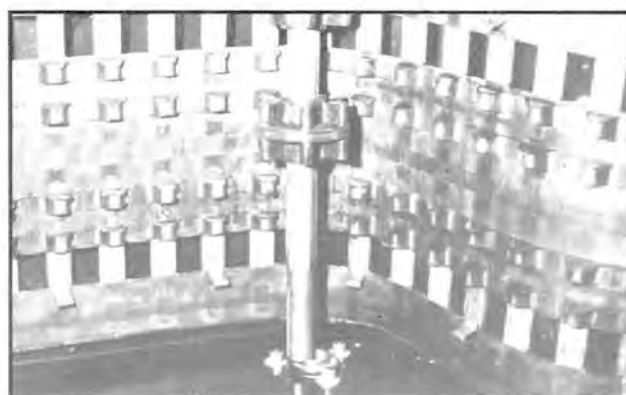
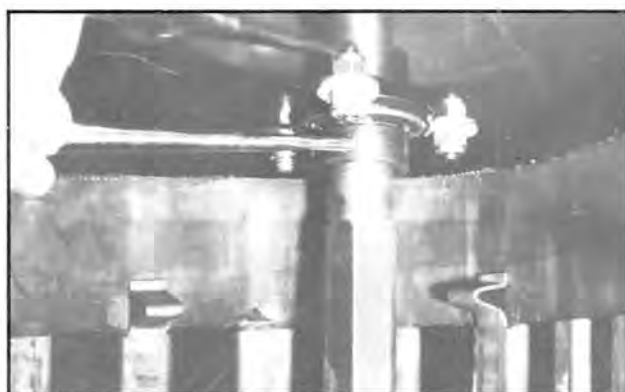
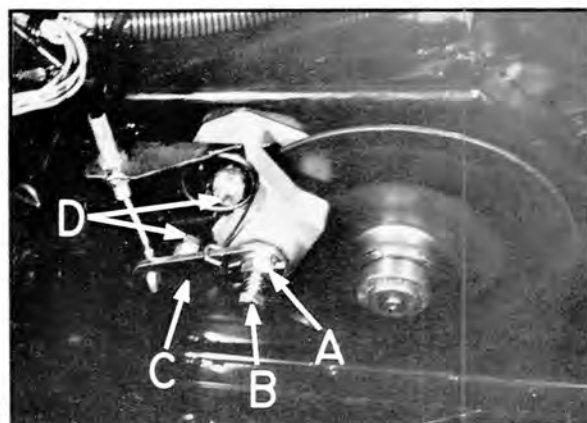
#### RUBBER TRACK CLIP REPLACEMENT

Install the replacement clip and clipping tool (PN 2870380) as shown. Tighten the drive bolt against the forming die until the clip is formed. The tool may be placed in a vice for ease of operation.



## Direct Drive Track and Front Drive Shaft Removal and Installation

1. Remove the drive belt, driven clutch, and driven clutch spacer washers.
2. Open the adjuster bolt jam nut locking tab (A). Loosen the jam nut and remove the adjuster bolt (B).
3. Remove the actuating lever (C) and return spring.
4. Remove the two brake caliper attaching nuts (D).
5. Remove the cable bracket and caliper assembly. Check cable condition at both ends — frayed or binding brake cables must be replaced.
6. Slide the brake disc off the front drive shaft and remove the half moon key.
7. Remove the four suspension mounting bolts and the suspension. For reassembly, note the placement of the two rear torque arm idler wheel thrust spacers.
8. Loosen the lock collar allen head set screw. With a punch and hammer, loosen the bearing lock collar located on the brake end of drive shaft.
9. Remove the three flange attaching bolts (A). NOTE: The stationary brake pad is attached with the longest of these three bolts.
10. Slide the drive shaft toward the brake side of chassis until the driven clutch end is free. Tilt the shaft and remove it from the brake end bearing. The track can now be removed.



## SUSPENSIONS

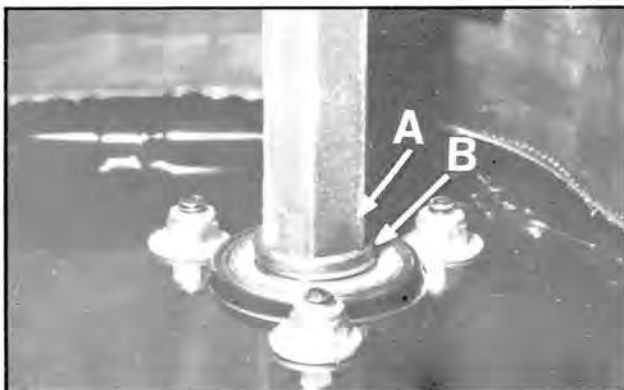
### Direct Drive Track and Front Drive Shaft Removal and Installation

11. Before reassembly check the drive shaft, drive shaft sprocket, and drive shaft bearings.
12. Reverse the above procedures for reassembly. Note that sprocket or drive shaft centering is controlled by the hex portion of drive shaft (A) being bottomed on the driven clutch side bearing (B).

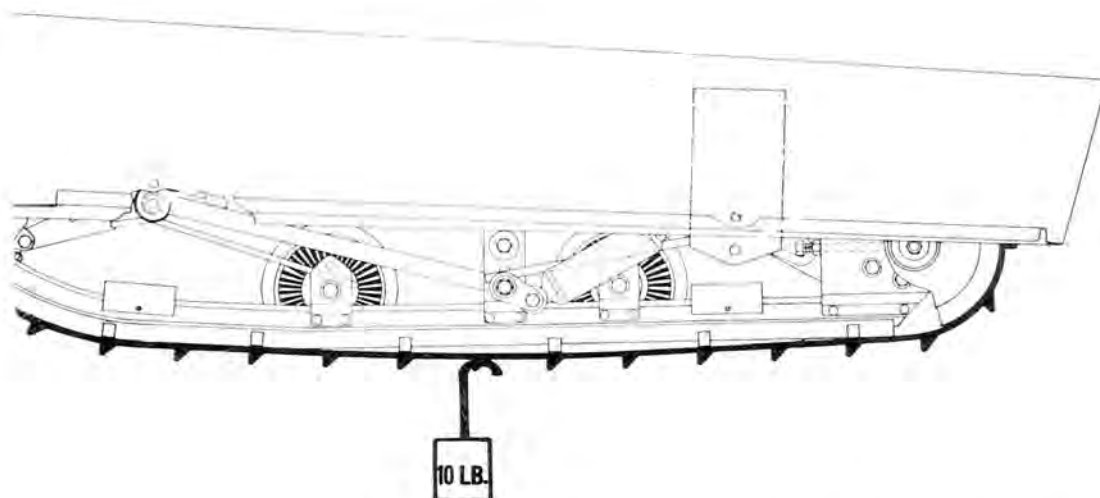


The driven clutch must be installed and torqued before the lock collar is tightened.

Refer to Section VIII for proper brake adjustments.



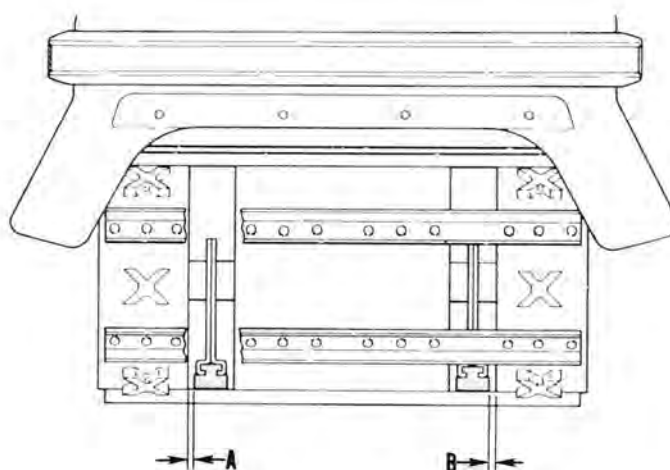
## TRACK TENSION – ALL MODELS



Track tension on all models and suspension types can be adjusted using the same procedure for all types and models. Check with a 10 pound down load on the track at a point approximately 16" ahead from the center of the rear idler wheel. Refer to track tension specifications on page IX – 1.

## TRACK ALIGNMENT – ALL MODELS

NOTE: It is necessary to loosen idler shaft nut prior to making adjustments and re-tighten after adjustments are made.



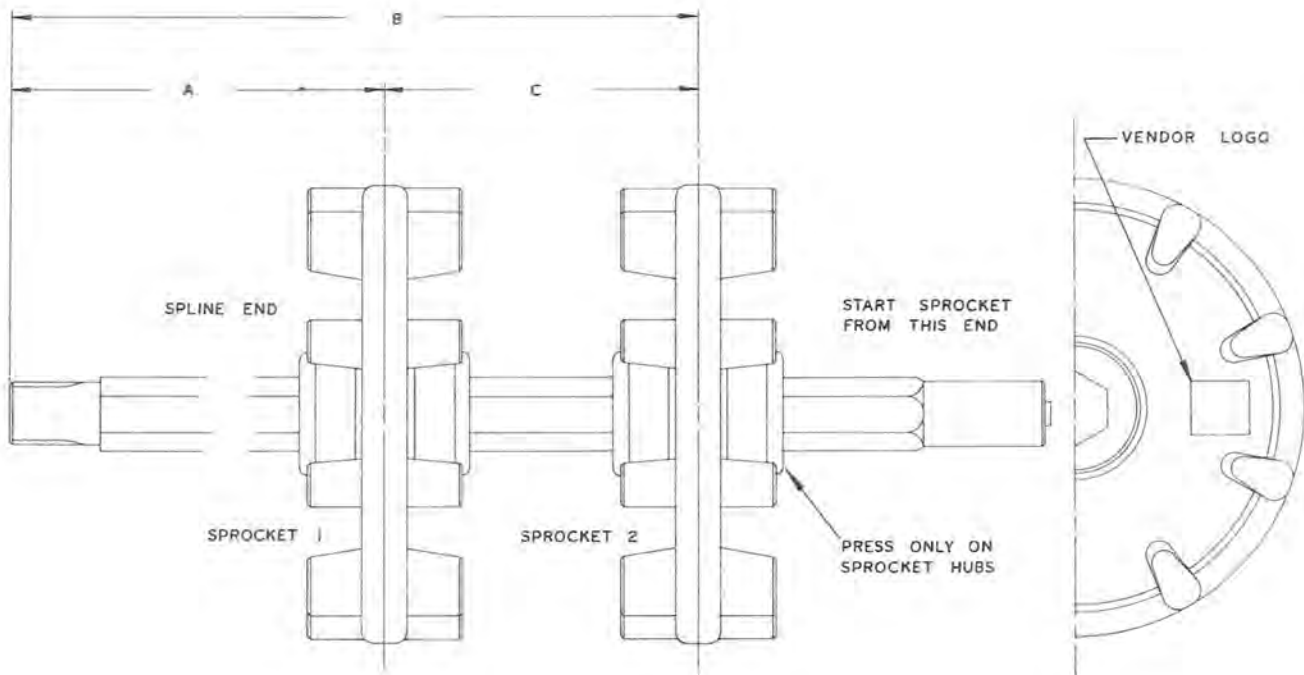
The rear of the machine should be suspended when aligning the track. Track alignment affects track tension. If the track runs to the left and is not properly tensioned, the left side should be tightened. Use the same procedure for the right side until the track is properly aligned and is correctly tensioned. Tolerances at points (A) and (B) should be as close to the same as possible.



**CAUTION:** WHEN PERFORMING CHECKS OR ADJUSTMENTS, STAY CLEAR OF ALL MOVING PARTS.

## SUSPENSIONS

### Sprocket Installation



### PROCEDURE

Due to the interference fit between the sprocket and shaft, it is important that the sprocket be pressed or held by the hub portion only.

The sprockets must be started opposite the spline end. This end has a smooth entry onto the hex of the shaft. This smooth entry will have a self-aligning effect as the sprockets move onto the hex portion of the shaft.

To ensure proper sprocket tooth alignment, be sure the vendor logos on the two sprockets are oriented in the same positions.

Refer to the front of this section for sprocket tooth center distance and placement. Measurements are given from spline end of shaft to center of sprocket tooth. Specifications are on page IX - 1.

## Types IV, V, VI, and VII Extruded Aluminum Adjustments

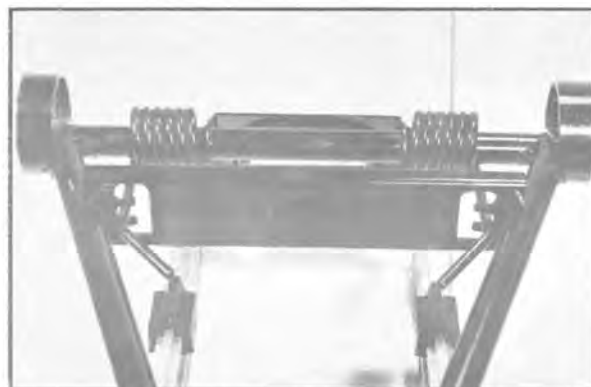
## REAR SPRING ADJUSTMENT — TYPES IV, V, VI, VII

Rear springs are adjusted primarily for rider(s) weight. Recommended setting is: Raise the rear of the machine to relieve the rear springs. Slowly lower the machine and measure the distance from the floor to a mark on the running board. Have the rider(s) carefully mount the machine. Adjust the eye bolts so there is approximately 1 1/2" drop as the rider(s) mounts.



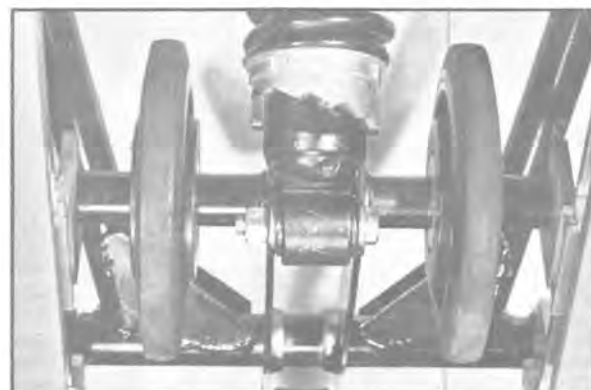
## FRONT SPRING ADJUSTMENT — TYPES IV, V

The front springs can be tailored for differing ski to ground pressure at low speeds. Raising the springs to the upper position will decrease ski to ground pressure. Front springs also affect high speed bumps. If the rider feels the front of the machine pitches severely upward while hitting bumps at high speeds, the springs should be in their softest positions (bottom slot).



## FRONT SPRING ADJUSTMENT — TYPES VI, VII

The front spring can be tailored for differing ski to ground pressure at low speeds. Adjustment is accomplished by rotating the shock cam preload setting. Higher preload setting will result in decreasing ski to ground pressure. The front spring also affects high speed bumps. If the rider feels the front of the machine pitches severely upward on high speed bumps, the cam should be adjusted to a softer position.



## LIMITER STRAP ADJUSTMENT — TYPES VI, VII

To increase ski to ground pressure and maintain front spring settings, the limiter strap can be adjusted. More ski pressure will result by shortening the limiter belt travel. A setting with the strap in its longest position will decrease ski to ground pressure.

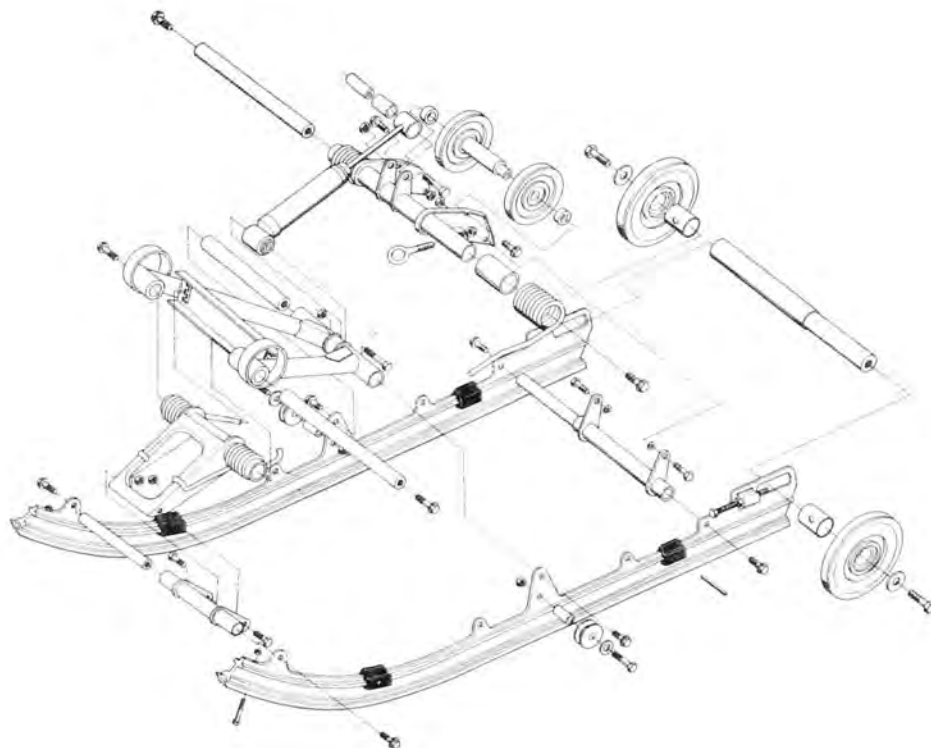
## REAR SHOCK ADJUSTMENT — TYPES VI, VII

After all adjustments have been made and the ride seems a little firm, it is recommended to reposition the rear shock. Repositioning the lower rear shock mounting to the upper position will result in a slightly softer ride.

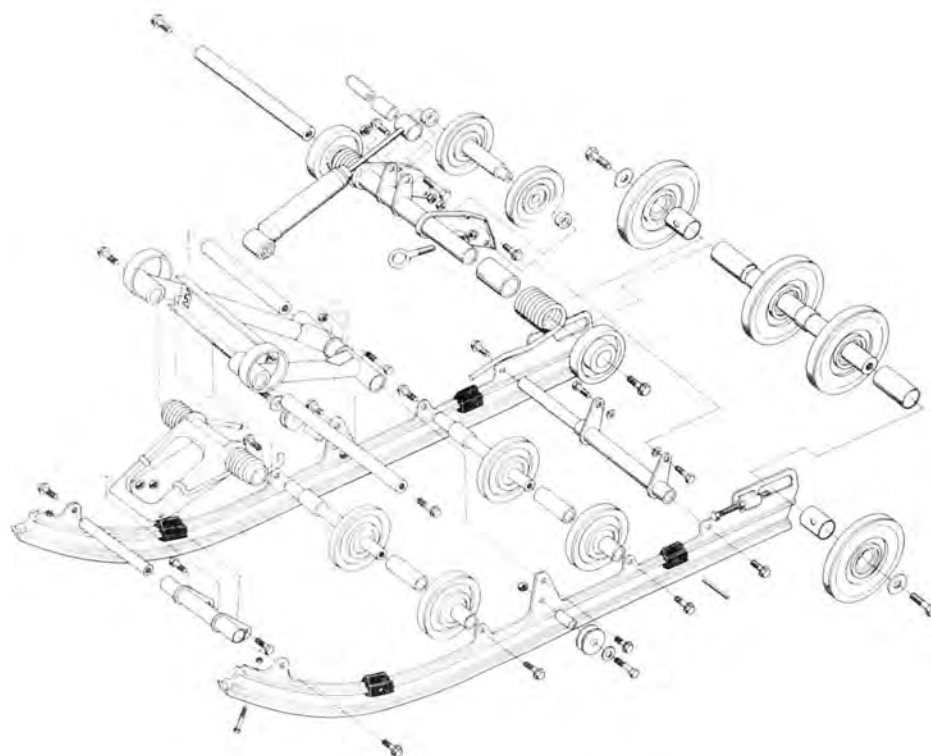


## SUSPENSIONS

### Types IV and V Extruded Aluminum

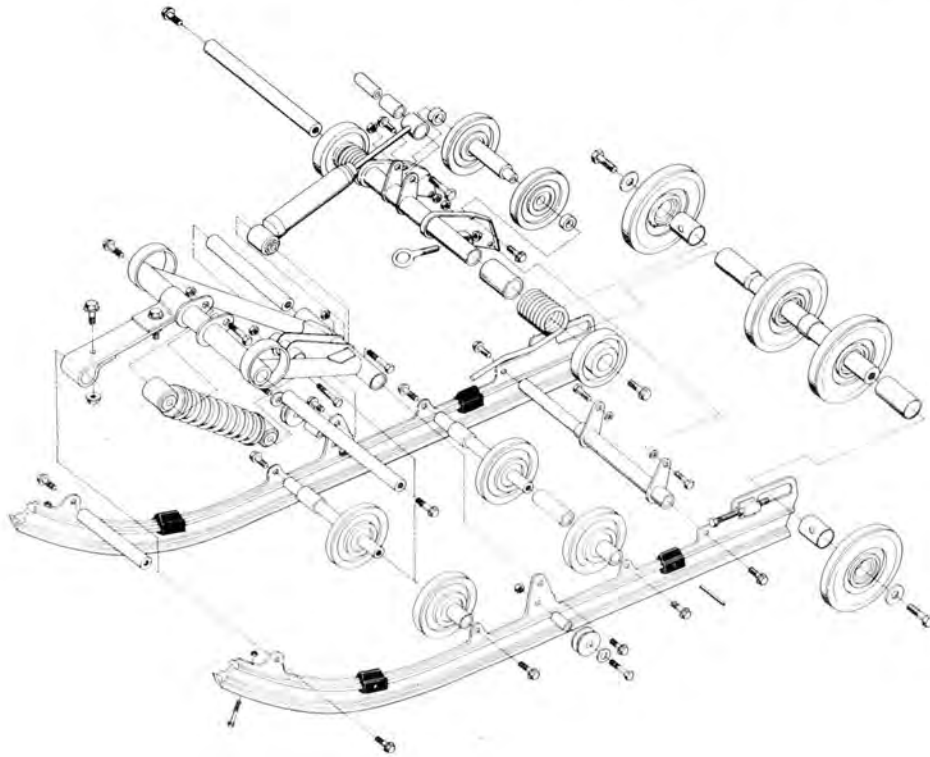


TYPE IV EXPLODED VIEW

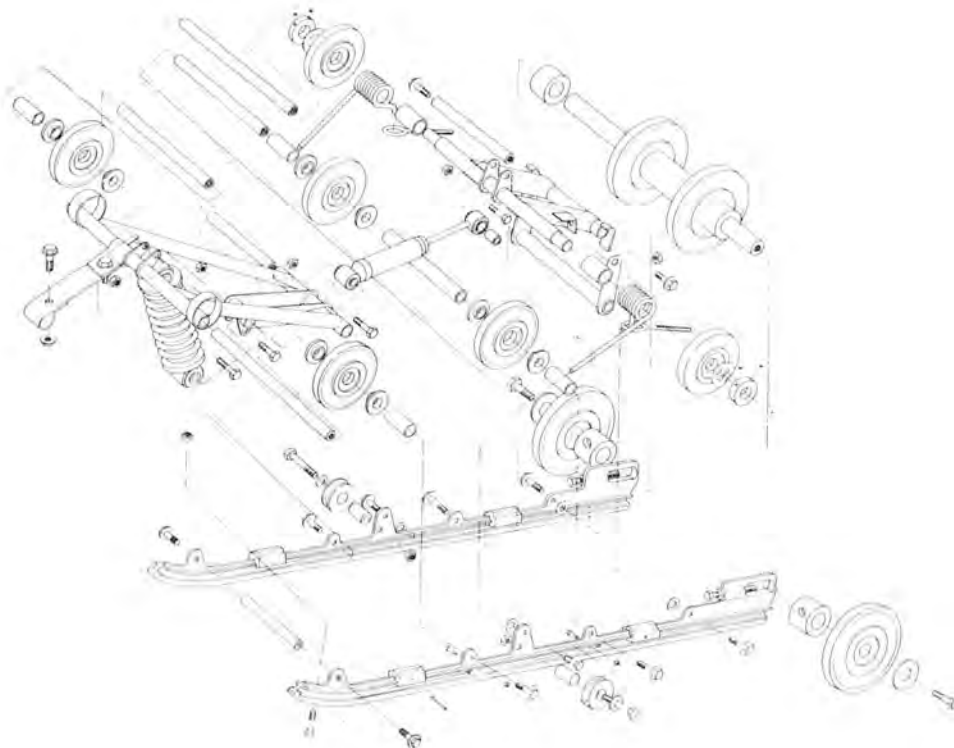


TYPE V EXPLODED VIEW

SUSPENSIONS  
Types VI and VII Extruded Aluminum



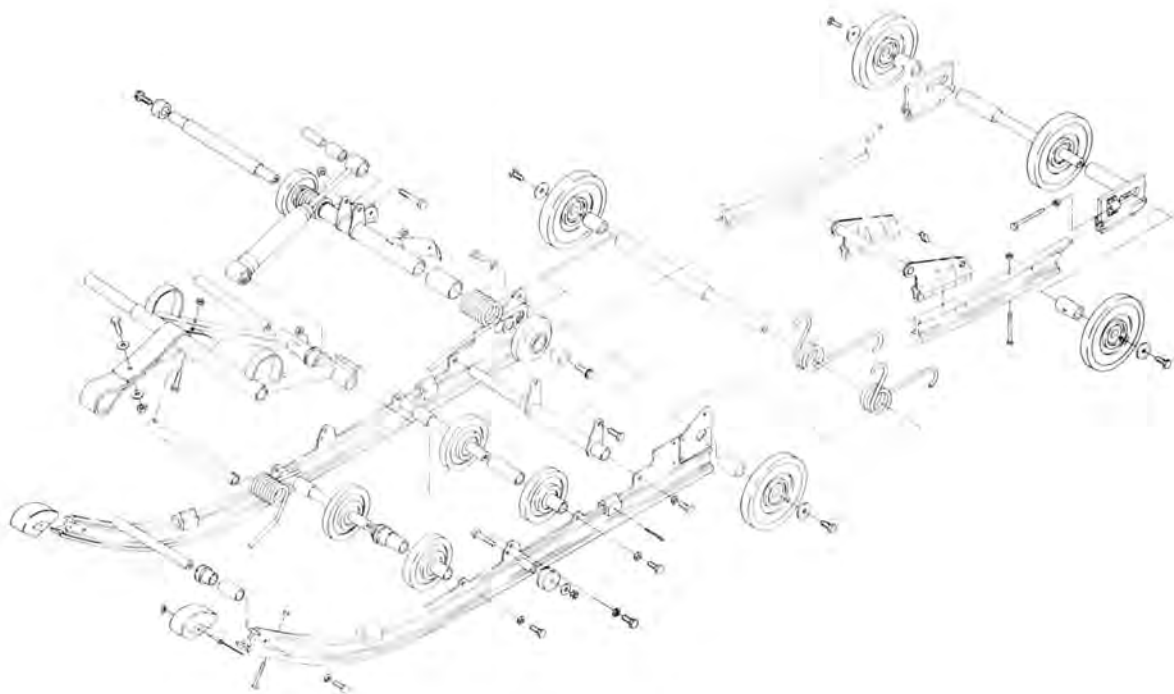
TYPE VI EXPLODED VIEW



TYPE VII EXPLODED VIEW

## SUSPENSIONS

### Type IX Extruded Aluminum Exploded View and Adjustments

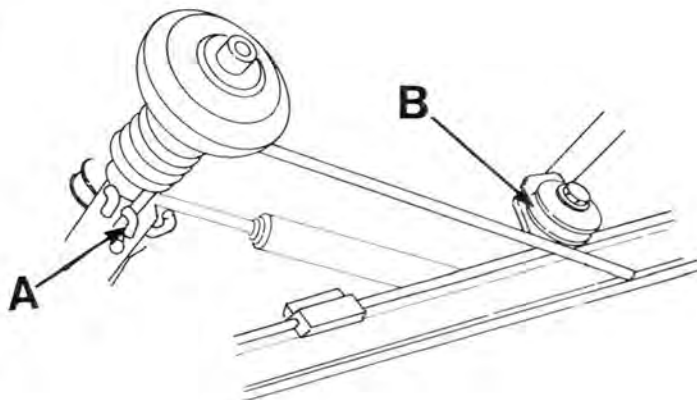


TYPE IX EXPLODED VIEW

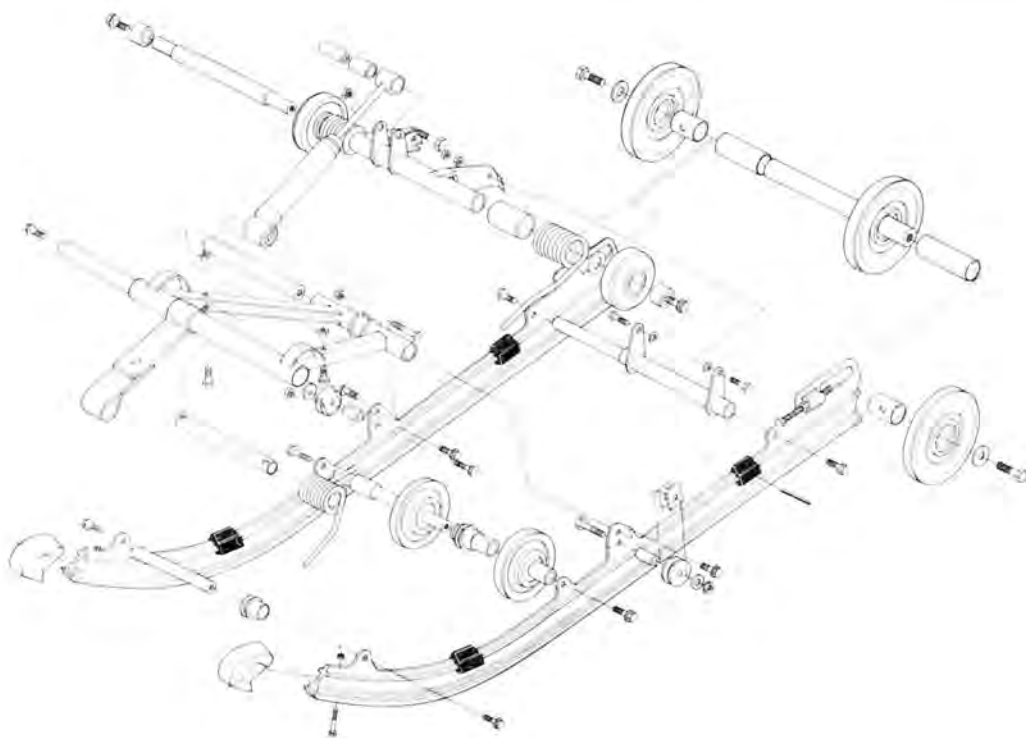
## ADJUSTMENTS

Rear springs are changed or adjusted primarily for different rider weight. Adjustment is accomplished by releasing the front leg from the carrier wheel (B), inserting screwdriver under spring leg (A), and either raising or lowering the short spring leg. Raising the spring leg will increase spring preload and lowering it will decrease preload setting.

The front torque arm limiter strap can also be altered for varying ski to ground pressure. Lengthening limiter strap will decrease ski to ground pressure. Shortening the strap will increase ski to ground pressure.



## Type VIII Extruded Aluminum Exploded View and Adjustments

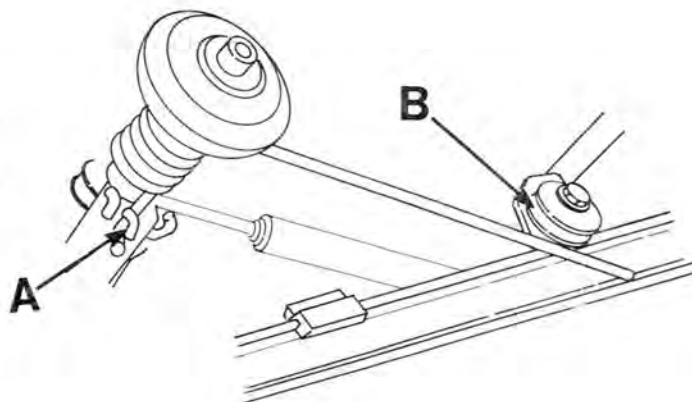


TYPE VIII EXPLODED VIEW

## ADJUSTMENTS

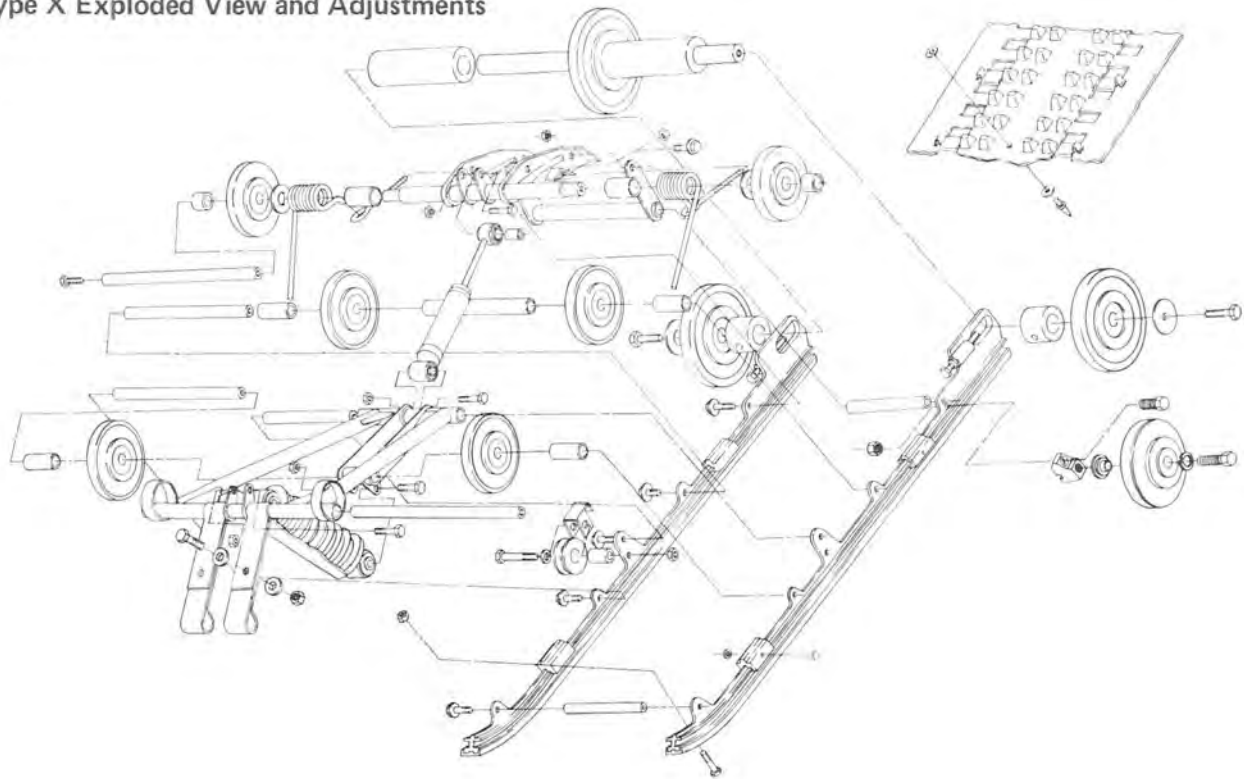
Rear springs are changed or adjusted primarily for different rider weight. Adjustment is accomplished by releasing the front leg from the carrier wheel (B), inserting screwdriver under spring leg (A), and either raising or lowering the short spring leg. Raising the spring leg will increase spring preload and lowering it will decrease preload setting.

The front torque arm limiter strap can also be altered for varying ski to ground pressure. Lengthening limiter strap will decrease ski to ground pressure. Shortening the strap will increase ski to ground pressure.



## SUSPENSIONS

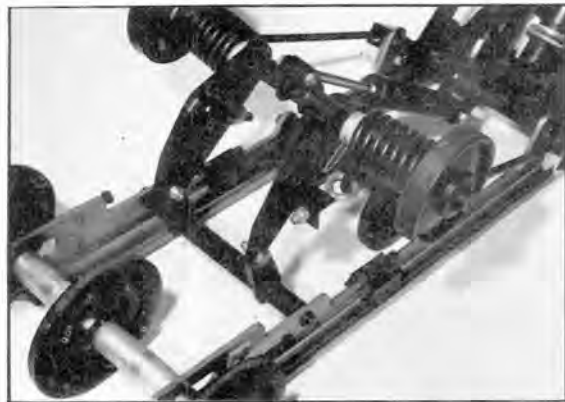
### Type X Exploded View and Adjustments



TYPE X EXPLODED VIEW

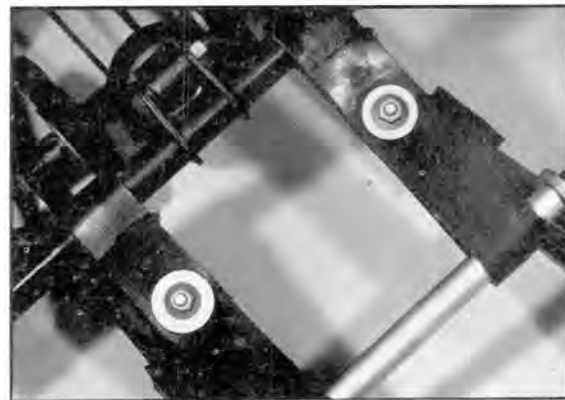
#### REAR SPRING ADJUSTMENT

Rear springs are adjusted primarily for rider(s) weight. Recommended setting is: Raise the rear of the machine to relieve the rear springs. Slowly lower the machine and measure the distance from the floor to a mark on the running board. Have the rider(s) carefully mount the machine. Adjust the eye bolts equally so there is approximately 1 1/2" drop as the rider(s) mounts.

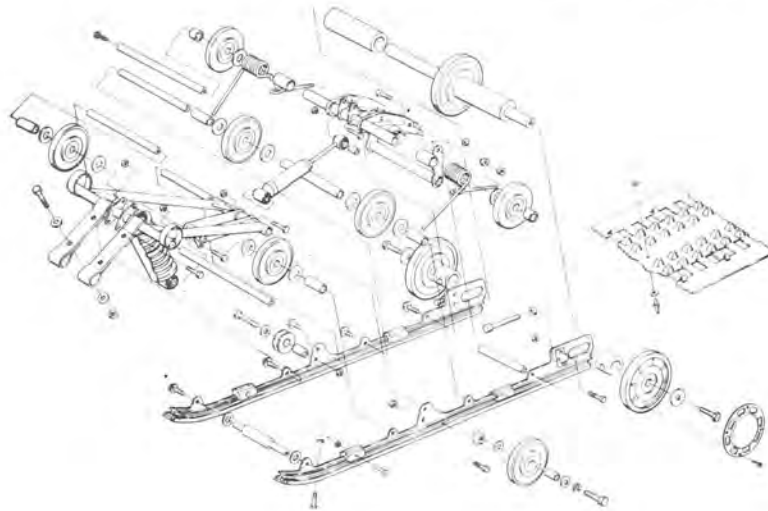


#### LIMITER STRAP ADJUSTMENT

The front torque arm limiter strap controls the amount of weight transfer or ski lift during operation. This in turn affects ski to ground pressure and steering response. To increase ski pressure, the limiter strap may be shortened by placing the bolt in the next hole. For deep snow operation and climbing it may be more desirable to lengthen the strap which will provide less ski pressure.



## Type XI Exploded View and Adjustments



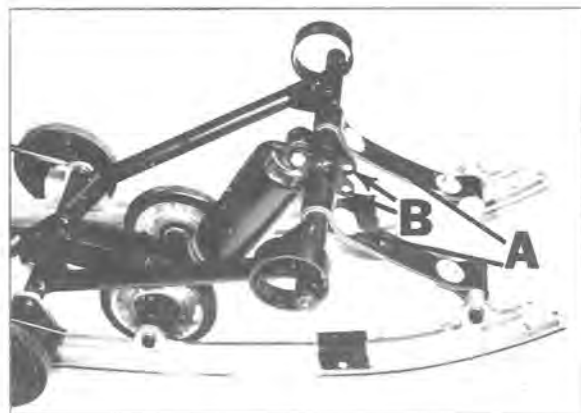
TYPE XI EXPLODED VIEW

## FRONT TORQUE ARM SPRING AND LIMITER STRAP ADJUSTMENTS

Ski pressure can be increased or decreased by the following adjustments. The front torque arm limiter straps (A) can be shortened to increase ski pressure. Also, the front torque arm shock assembly can be repositioned to either increase or decrease travel firmness.

In the photo, the shock and spring assembly are in its most firm position. If a less firm setting is desired the shock can be removed and mounted to the lower position (B).

On all suspension settings Polaris has setup the machines for average riding conditions and average rider weight. If you need further assistance with ride and handling please contact your dealer.

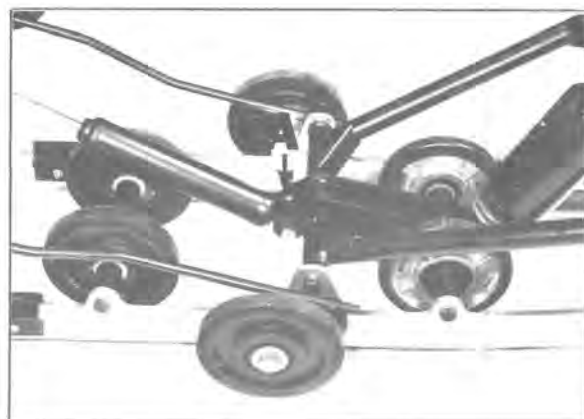


## REAR SHOCK ADJUSTMENT

If the ride seems a little firm after making the rear spring adjustments, the rear shock can be moved to the upper mounting hole (A). This will result in a softer ride.

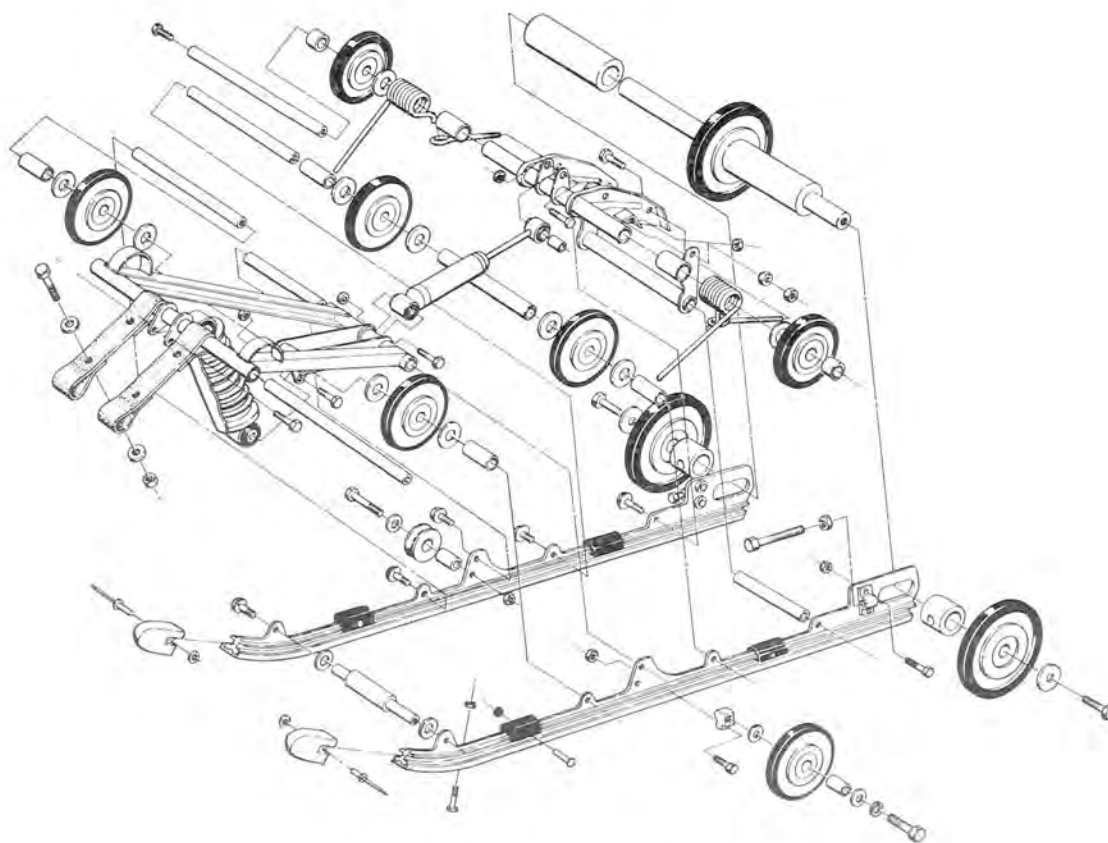
## REAR SPRING ADJUSTMENT

Rear springs are adjusted primarily for rider(s) weight. Recommended setting is: Raise the rear of the machine to relieve the rear springs. Slowly lower the machine and measure the distance from the floor to a mark on the running board. Have the rider(s) carefully mount the machine. Adjust the eye bolts equally so there is approximately 1 1/2" drop as the rider(s) mounts.



## SUSPENSIONS

### Type XII Exploded View and Adjustments



TYPE XII EXPLODED VIEW

### REAR SUSPENSION ADJUSTMENTS

#### Rear Torque Arm Springs

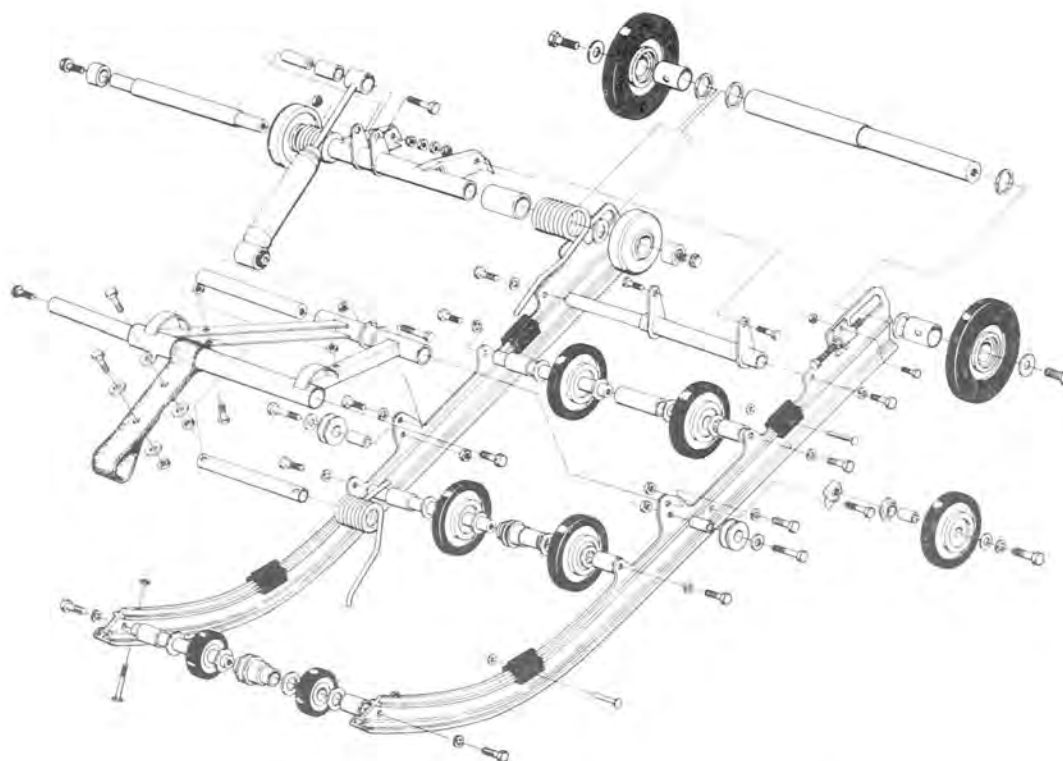
Rear spring adjustment is primarily a control for rider comfort. To check for the recommended settings, lift the rear of the machine to relieve the rear springs. Lower the machine and measure the distance between the ground and the running board. The rider(s) should then mount the snowmobile and measure the distance between the ground and the running board. The difference between the two readings should be approximately 1 1/2". If the difference is greater than 1 1/2" the rear spring (A) should be adjusted equally on both sides until the desired 1 1/2" drop is obtained.

Note: Rear spring settings will affect ski to ground pressure. If ski pressure is too light it may be desirable to tighten rear springs for an increase in ski to ground pressure.



## SUSPENSIONS

### Type XIII Exploded View and Adjustments

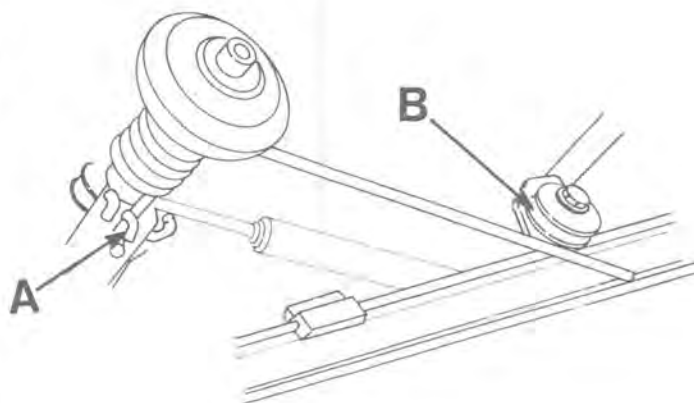


TYPE XIII EXPLODED VIEW

#### ADJUSTMENTS

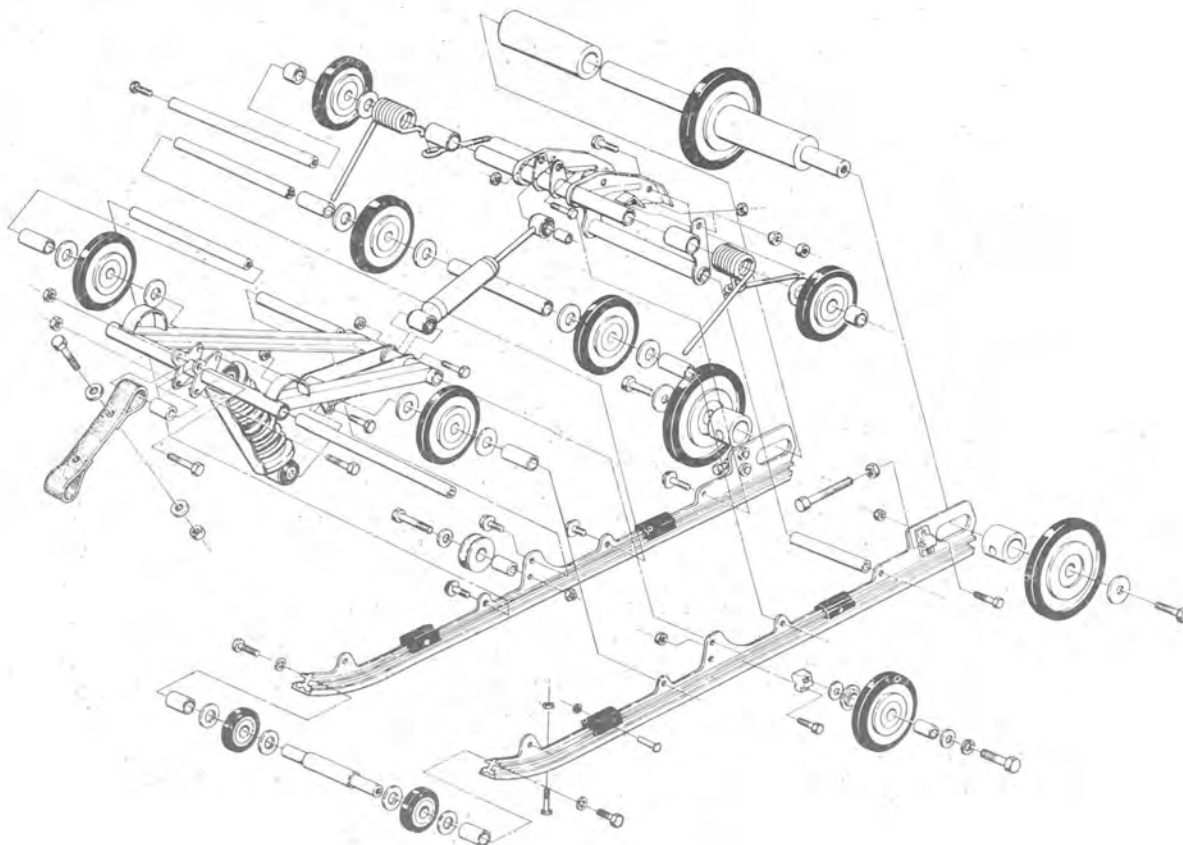
Rear springs are changed or adjusted primarily for different rider weight. Adjustment is accomplished by releasing the front leg from the carrier wheel (B), inserting screwdriver under spring leg (A), and either raising or lowering the short spring leg. Raising the spring leg will increase spring preload and lowering it will decrease preload setting.

The front torque arm limiter strap can also be altered for varying ski to ground pressure. Lengthening limiter strap will decrease ski to ground pressure. Shortening the strap will increase ski to ground pressure.



## SUSPENSIONS

### Type XIV Exploded View and Adjustments



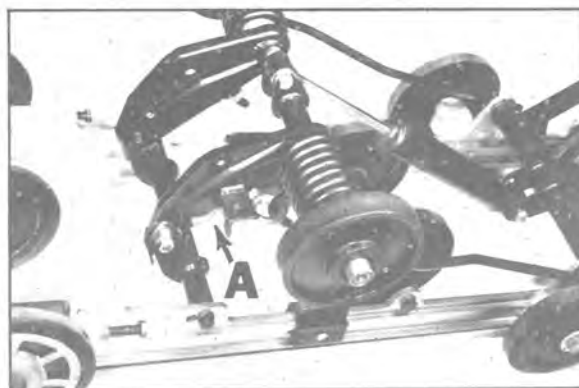
TYPE XIV EXPLODED VIEW

### REAR SUSPENSION ADJUSTMENTS

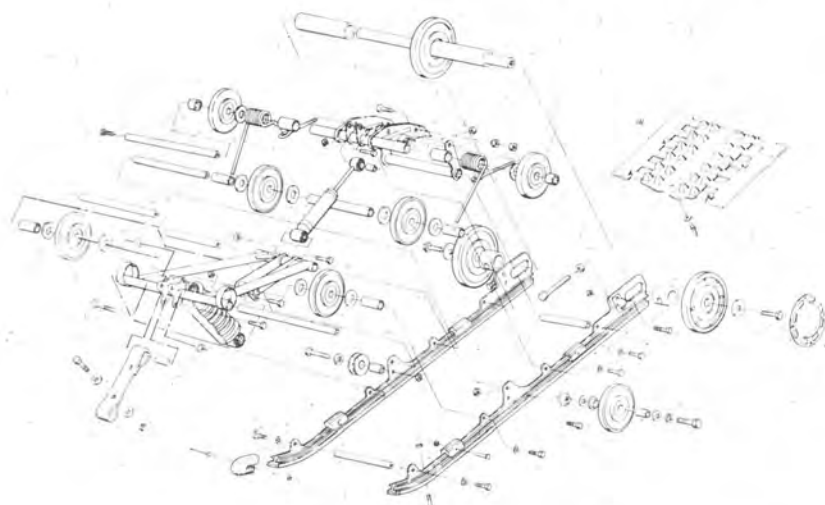
#### Rear Torque Arm Springs

Rear spring adjustment is primarily a control for rider comfort. To check for the recommended settings, lift the rear of the machine to relieve the rear springs. Lower the machine and measure the distance between the ground and the running board. The rider(s) should then mount the snowmobile and measure the distance between the ground and the running board. The difference between the two readings should be approximately 1 1/2". If the difference is greater than 1 1/2" the rear spring (A) should be adjusted equally on both sides until the desired 1 1/2" drop is obtained.

Note: Rear spring settings will affect ski to ground pressure. If ski pressure is too light it may be desirable to tighten rear springs for an increase in ski to ground pressure.



## Type XV Exploded View and Adjustments



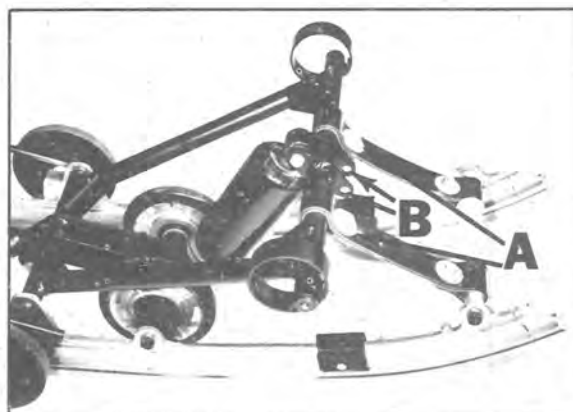
TYPE XV EXPLODED VIEW

## FRONT TORQUE ARM SPRING AND LIMITER STRAP ADJUSTMENTS

Ski pressure can be increased or decreased by the following adjustments. The front torque arm limiter straps (A) can be shortened to increase ski pressure. Also, the front torque arm shock assembly can be repositioned to either increase or decrease travel firmness.

In the photo, the shock and spring assembly are in its most firm position. If a less firm setting is desired the shock can be removed and mounted to the lower position (B).

On all suspension settings Polaris has setup the machines for average riding conditions and average rider weight. If you need further assistance with ride and handling please contact your dealer.

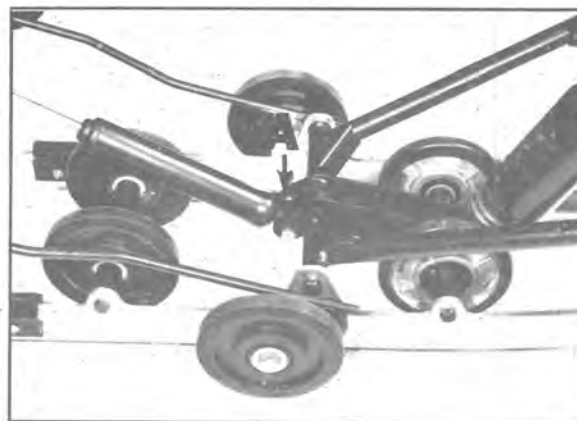


## REAR SHOCK ADJUSTMENT

If the ride seems a little firm after making the rear spring adjustments, the rear shock can be moved to the upper mounting hole (A). This will result in a softer ride.

## REAR SPRING ADJUSTMENT

Rear springs are adjusted primarily for rider(s) weight. Recommended setting is: Raise the rear of the machine to relieve the rear springs. Slowly lower the machine and measure the distance from the floor to a mark on the running board. Have the rider(s) carefully mount the machine. Adjust the eye bolts equally so there is approximately 1 1/2" drop as the rider(s) mounts.



## SUSPENSIONS

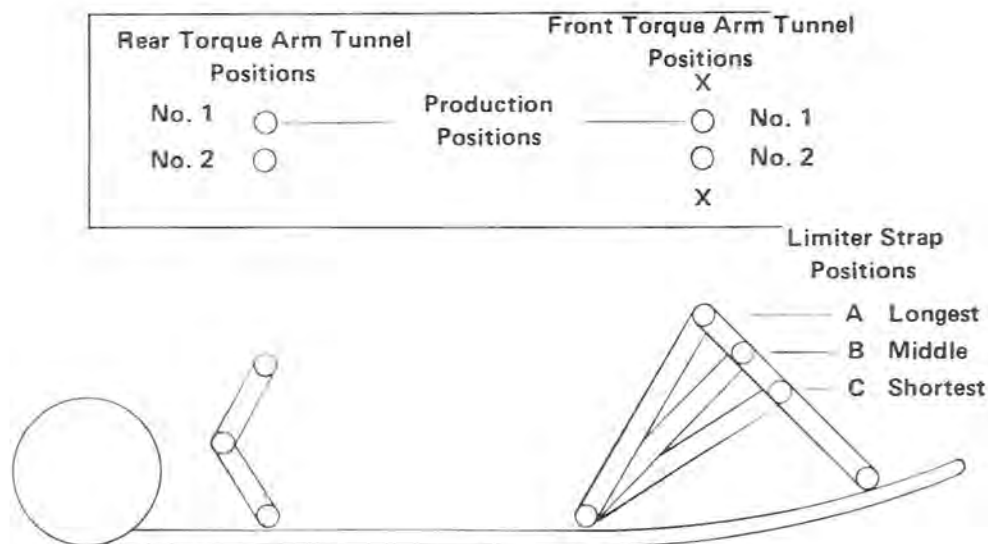
### Type XI and XV Tunnel Adjustments

#### REAR SUSPENSION/TUNNEL LOCATION ADJUSTMENT GUIDELINES

The following chart shows the various possible suspension locations and front limiter strap adjustments.

These adjustments are offered to help each individual setup for preferred handling and various snow conditions.

The front torque arm mounting pad in the tunnel has four (4) locations. The illustration shows the standard and optional locations that may be used. The X positions should never be used as severe track damage may result.



| Rear Torque Arm<br>Tunnel Location | Front Torque Arm<br>Tunnel Location | Limiter Strap<br>Position | Mounting<br>Condition |              |
|------------------------------------|-------------------------------------|---------------------------|-----------------------|--------------|
|                                    |                                     |                           | <u>Go</u>             | <u>No Go</u> |
| 1                                  | 1                                   | A, B, C                   | X                     |              |
| 1                                  | 2                                   | A, B                      |                       | X            |
| 1                                  | 2                                   | C                         | X                     |              |
| 2                                  | 1                                   | A, B, C                   | X                     |              |
| 2                                  | 2                                   | A                         |                       | X            |
| 2                                  | 2                                   | B, C                      | X                     |              |

## Type XVI Exploded View and Adjustments



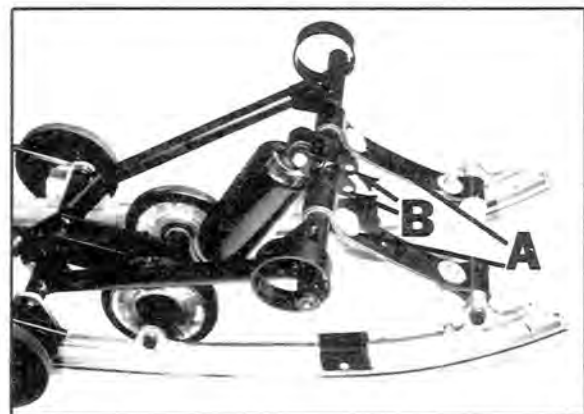
TYPE XVI EXPLODED VIEW

## FRONT TORQUE ARM SPRING AND LIMITER STRAP ADJUSTMENTS

Ski pressure can be increased or decreased by the following adjustments. The front torque arm limiter straps (A) can be shortened to increase ski pressure. Also, the front torque arm shock assembly can be repositioned to either increase or decrease travel firmness.

In the photo, the shock and spring assembly are in its most firm position. If a less firm setting is desired the shock can be removed and mounted to the lower position (B).

On all suspension settings Polaris has setup the machines for average riding conditions and average rider weight. If you need further assistance with ride and handling please contact your dealer.

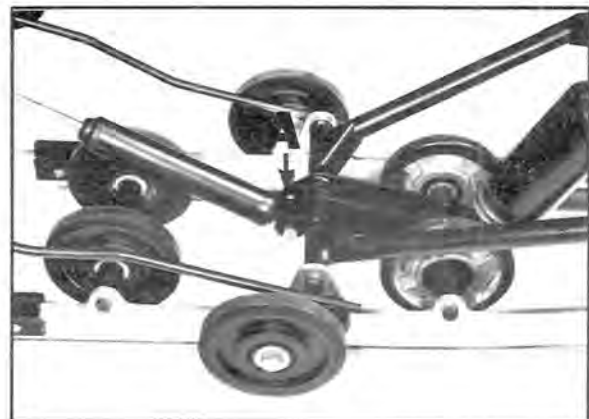


## REAR SHOCK ADJUSTMENT

If the ride seems a little firm after making the rear spring adjustments, the rear shock can be moved to the upper mounting hole (A). This will result in a softer ride.

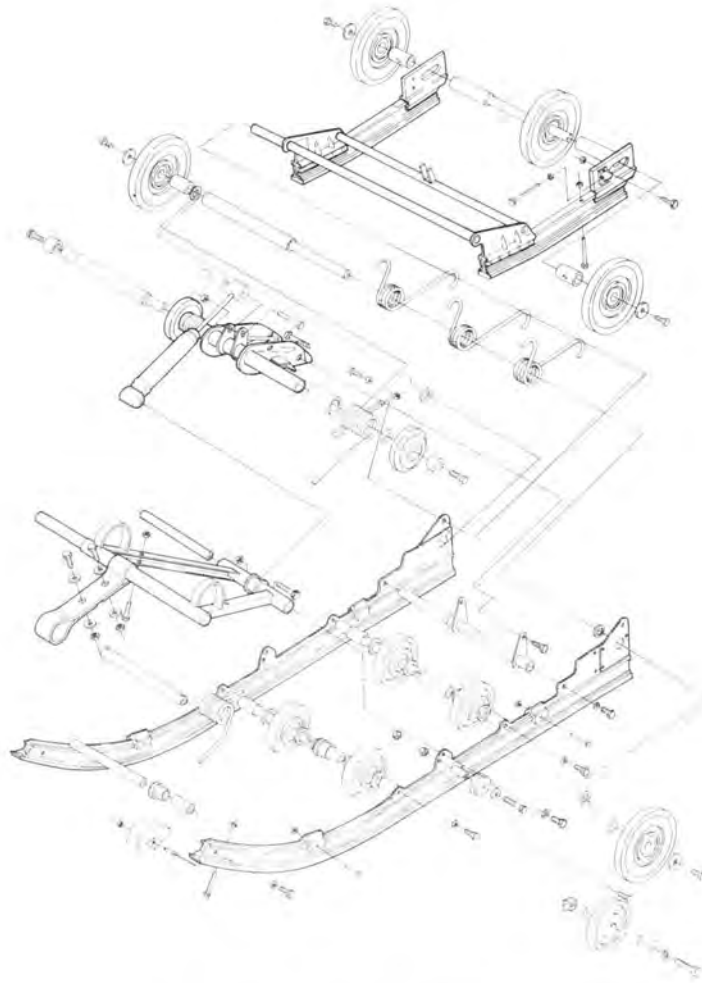
## REAR SPRING ADJUSTMENT

Rear springs are adjusted primarily for rider(s) weight. Recommended setting is: Raise the rear of the machine to relieve the rear springs. Slowly lower the machine and measure the distance from the floor to a mark on the running board. Have the rider(s) carefully mount the machine. Adjust the eye bolts equally so there is approximately 1 1/2" drop as the rider(s) mounts. Adjust springs so there is equal tension on the long leg of each spring.



## SUSPENSIONS

### Type XVII Extruded Aluminum Exploded View and Adjustments



TYPE XVII EXPLODED VIEW

#### ADJUSTMENTS

Compensating adjustments for heavy or light drivers or cargo loads can be made adjusting the rear spring eyebolt length. Rear spring settings also affect ski to ground pressure. Increasing spring tension likewise increases ski pressure. Adjust spring tension so there is equal tension on the long leg of each spring.

The front torque arm limiter strap can also be altered for varying ski to ground pressure. Lengthening limiter strap will decrease ski to ground pressure. Shortening the strap will increase ski to ground pressure.

